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## **NEW PRODUCTS**



|           | 1"- 3" EVX ON/OFF ELECTRIC VALVES                       |            |              |                         |     |  |
|-----------|---|------------|--------------|-------------------------|-----|--|
| PART NO   | DESCRIPTION   | MAX<br>PSI | PIPE<br>SIZE | OPENING<br>THRU<br>BALL | QTY |  |
| EVX100    | 1" FULL PORT ELECTRIC VALVE                             | 300        | 1"           | 1"                      | 1   |  |
| EVX125    | 11/4" STANDARD PORT ELECTRIC VALVE                      | 300        | 11/4"        | 1"                      | 1   |  |
| EVX150    | 1½" FULL PORT ELECTRIC VALVE                            | 300        | 1½"          | 11/2"                   | 1   |  |
| EVX200    | 2" STANDARD PORT ELECTRIC VALVE                         | 300        | 2"           | 11/2"                   | 1   |  |
| EVX220    | 2" FULL PORT ELECTRIC VALVE                             | 250        | 2"           | 2"                      | 1   |  |
| EVX300    | 3" FULL PORT ELECTRIC VALVE                             | 150        | 3"           | 3"                      | 1   |  |
| MEVX100   | 1" FULL PORT MANIFOLD ELECTRIC VALVE                    | 300        | 1"           | 1"                      | 1   |  |
| MEVX200   | 2" STANDARD PORT MANIFOLD<br>ELECTRIC VALVE             | 300        | 2"           | 11/2"                   | 1   |  |
| MEVX220   | 2" FULL PORT MANIFOLD ELECTRIC VALVE                    | 250        | 2"           | 2"                      | 1   |  |
| MEVX300   | 3" FULL PORT MANIFOLD ELECTRIC VALVE                    | 150        | 3"           | 3"                      | 1   |  |
| MEVX100BL | 1" FULL PORT MANIFOLD BOTTOM<br>LOAD ELECTRIC VALVE     | 300        | 1"           | 1"                      | 1   |  |
| MEVX200BL | 2" STANDARD PORT MANIFOLD<br>BOTTOM LOAD ELECTRIC VALVE | 250        | 2"           | 11/2"                   | 1   |  |
| MEVX220BL | 2" FULL PORT MANIFOLD BOTTOM<br>LOAD ELECTRIC VALVE     | 125        | 2"           | 2"                      | 1   |  |
| MEVX300BL | 3" FULL PORT MANIFOLD BOTTOM<br>LOAD ELECTRIC VALVE     | 200        | 3"           | 3"                      | 1   |  |
| MEVX100SL | 1" FULL PORT MANIFOLD SIDE LOAD<br>ELECTRIC VALVE       | 300        | 1"           | 1"                      | 1   |  |
| MEVX200SL | 2" STANDARD PORT MANIFOLD SIDE<br>LOAD ELECTRIC VALVE   | 250        | 2"           | 11/2"                   | 1   |  |
| MEVX220SL | 2" FULL PORT MANIFOLD SIDE LOAD ELECTRIC VALVE          | 125        | 2"           | 2"                      | 1   |  |

| 1"- 3" EVX REGULATING ELECTRIC VALVES |   |            |              |                         |     |
|---------------------------------------|---|------------|--------------|-------------------------|-----|
| PART NO                               | DESCRIPTION                                 | MAX<br>PSI | PIPE<br>SIZE | OPENING<br>THRU<br>BALL | QTY |
| EVXR100                               | 1" FULL PORT REGULATING ELECTRIC VALVE      | 300        | 1"           | 1"                      | 1   |
| EVXR125                               | 11/4" STANDARD PORT ELECTRIC VALVE          | 300        | 11/4"        | 1"                      | 1   |
| EVXR150                               | 1½" FULL PORT ELECTRIC VALVE                | 300        | 1½"          | 1½"                     | 1   |
| EVXR200                               | 2" STANDARD PORT ELECTRIC VALVE             | 300        | 2"           | 1½"                     | 1   |
| EVXR220                               | 2" FULL PORT ELECTRIC VALVE                 | 250        | 2"           | 2"                      | 1   |
| EVXR300                               | 3" FULL PORT ELECTRIC VALVE                 | 150        | 3"           | 3"                      | 1   |
| MEVXR100                              | 1" FULL PORT MANIFOLD ELECTRIC VALVE        | 300        | 1"           | 1"                      | 1   |
| MEVXR200                              | 2" STANDARD PORT MANIFOLD<br>ELECTRIC VALVE | 300        | 2"           | 11/2"                   | 1   |
| MEVXR220                              | 2" FULL PORT MANIFOLD ELECTRIC VALVE        | 250        | 2"           | 2"                      | 1   |
| MEVXR300                              | 3" FULL PORT MANIFOLD ELECTRIC VALVE        | 150        | 3"           | 3"                      | 1   |

Note: Other configurations available. Contact Banjo for additional part number information and availability.

#### **EVX® ELECTRIC VALVES**

#### **ACTUATOR FEATURES**

- Up to 35% smaller actuator/ valve
- Many communication protocols including On/Off, regulating, CAN/ISO BUS and PWM pulse-width modulation.
- Bluetooth®\* or wired communications.
- Diagnostic options include cycle counts, voltage and temperature.
- 12V DC standard. 24-volt available.
- IP68 waterproof
- -20 to 150F (-29 to 65C) operating
- -67 to 221F (-55 to 105C) storage
- Actuator rated to 500,000 cycles
- 100G's shock rating

#### **VALVE FEATURES**

- Proprietary polypropylene formulation ensures durability and enables injection molding to precision tolerances
- Welded construction supports sleek, compact valve design while eliminating a leak point
- Valve rated to 50,000 cycles leak-free
- Hollow stainless steel ball lessens weight and maintains valve performance
- Polypropylene balls available.
- Bottom-located threaded inserts provide versatile mounting solution
- Female NPT and manifold flange connections offer plumbing options
- Banks of 1" & 2" EVX units available.

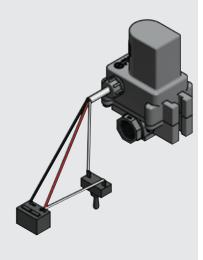
\*The Bluetooth® word mark and logos are registered trademarks owned by Bluetooth SIG, Inc.



## **NEW PRODUCTS**

#### 1" MANIFOLD LEV

- The new MLEV100A LEV utilizes a larger, higher torque motor to power through thick liquids and demanding applications.
- Stainless steel ball handles abrasive and corrosive liquids and increases product cycle life. Reinforced nylon stem more than triples the strength of the standard 1" LEV.
- Fiberglass reinforced polypropylene
- TFM seats
- EPDM seals
- 12-volt DC operated
- Internally fused/automatic reset
- Stationary current draw: less than 0.04 amps
- Rotating current draw: less than 0.40 amps
- Stall current: 0.75 amps
- 1/3 second response time
- Integrated mounting slot
- 3 wire configuration





| 1" ON/OFF ELECTRIC VALVES |  |            |              |                         |     |
|---------------------------|--|------------|--------------|-------------------------|-----|
| PART NO                   | DESCRIPTION  | MAX<br>PSI | PIPE<br>SIZE | OPENING<br>THRU<br>BALL | QTY |
| MLEV100A                  | 1" MANIFOLD ELECTRIC VALVE WITH<br>HIGHER TOROUF MOTOR SS BALL | 300        | 1"           | 1/2"                    | 1   |

## **NEW PRODUCTS**

3" POLYPROPYLENE MANIFOLD WET SEAL PUMP ONLYS

### **FEATURES**

- Run dry capability
- Double seal contained in ethylene glycol reservoir. Carbon & ceramic seal faces with stainless steel cup and spring with EPDM rubber.
- Pump only, no engine.
- V-shaped for quicker priming
- Engine warranty service available at authorized dealers



WARNING! DO NOT USE WITH FLAMMABLE LIQUIDS



### 3" POLY MANIFOLD WET SEAL PUMP ONLYS

| PART NO  | DESCRIPTION   | HP  | QTY |
|----------|---|-----|-----|
| M300POW  | 3" POLY MANIFOLD WET SEAL PUMP ONLY                 | N/A | 1   |
| M300POW6 | 3" POLY MANIFOLD WET SEAL PUMP ONLY FOR ¾"<br>SHAFT | N/A | 1   |

### 1/4" -1" POLY MICRO VALVES

### **FEATURES**

- 90° rotating handle
- 90° locking, rotating handle (with asterisk \*)
- Precision molded polypropylene is reinforced with fiberglass for additional strength.
- Standard FKM seats and O-Rings



The brand "**John Guest**" is a registered trademark of John Guest International Limited.



|            | MICRO VALVES                        |            |                |                         |     |  |
|------------|-------------------------------------|------------|----------------|-------------------------|-----|--|
| PART NO    | DESCRIPTION                         | MAX<br>PSI | THREAD<br>SIZE | OPENING<br>THRU<br>BALL | QTY |  |
| LV025V     | 1/4" FEMALE NPT MICRO VALVE         | 300        | 1/4"           | 3/8"                    | 1   |  |
| LV038V     | 3/8" FEMALE NPT MICRO VALVE         | 300        | 3/8"           | 3/8"                    | 1   |  |
| LV050V     | ½" FEMALE NPT MICRO VALVE           | 300        | 1/2"           | 15/32"                  | 1   |  |
| LV050SLV   | ½" SIDE LOAD MICRO VALVE            | 300        | 1/2"           | 1/2"                    | 1   |  |
| LV050SLLV* | ½" SIDE LOAD LOCKING<br>MICRO VALVE | 300        | 1/2"           | 15/32"                  | 1   |  |



| MICRO VALVES |                            |            |                |                 |     |
|--------------|----------------------------|------------|----------------|-----------------|-----|
| PART NO      | DESCRIPTION                | MAX<br>PSI | THREAD<br>SIZE | OPENING<br>THRU | QTY |
| LVHB025V     | 1/4" HOSE BARB MICRO VALVE | 300        | 1/4"           | 3/8"            | 1   |
| LVHB038V     | 3/8" HOSE BARB MICRO VALVE | 300        | 3/8"           | 3/8"            | 1   |
| LVHB050V     | ½" HOSE BARB MICRO VALVE   | 300        | 1/2"           | 3/8"            | 1   |
| LVHB075V     | 3/4" HOSE BARB MICRO VALVE | 300        | 3/4"           | 15/32"          | 1   |



|               | MICRO VALVES                                       |            |                |                         |     |
|---------------|--|------------|----------------|-------------------------|-----|
| PART NO       | DESCRIPTION  | MAX<br>PSI | THREAD<br>SIZE | OPENING<br>THRU<br>BALL | QTY |
| LV025MTV      | 1/4" FEMALE X MALE NPT MICRO VALVE                 | 300        | 1/4"           | 3/8"                    | 1   |
| LV038MTV      | %"FEMALE X MALENPT MICRO VALVE                     | 300        | 3/8"           | 3/8"                    | 1   |
| LV038050MTV   | 3/8" FEMALE X 1/2" MALE NPT<br>MICRO VALVE         | 300        | 3/8" x 1/2"    | 3/8"                    | 1   |
| LV038050MTLV* | 3/8" FEMALE X 1/2" MALE NPT<br>LOCKING MICRO VALVE | 300        | 3/8" x 1/2"    | 3/8"                    | 1   |
| LV050MTV      | 1/2" FEMALE X MALE NPT MICRO VALVE                 | 300        | 1/2"           | 15/32"                  | 1   |
| LV050100MTV   | 1/2" FEMALE X 1" MALE NPT MICRO<br>VALVE           | 300        | 1/2"           | 15/32"                  | 1   |
| LV050100MTLV* | 1/2" FEMALE X 1" MALE NPT<br>LOCKING MICRO VALVE   | 300        | ½" x 1"        | 15/32"                  | 1   |



|               | MICRO VALVES  |            |                |                         |     |  |  |
|---------------|---|------------|----------------|-------------------------|-----|--|--|
| PART NO       | DESCRIPTION   | MAX<br>PSI | THREAD<br>SIZE | OPENING<br>THRU<br>BALL | QTY |  |  |
| LVHB038050MTV | 3/8"HOSE BARB X 1/2" MALE NPT<br>MICRO VALVE          | 300        | 1/2"           | 3/8"                    | 1   |  |  |
| LVHB075MTV    | 3/4" HOSE BARB X 3/4" MALE NPT<br>MICRO VALVE         | 300        | 3/4"           | 1/2"                    | 1   |  |  |
| LVHB075MTLV*  | 3/4" HOSE BARB X 3/4" MALE NPT<br>LOCKING MICRO VALVE | 300        | 3/4"           | 15/32"                  | 1   |  |  |
| LVHB075100MTV | 3/4" HOSE BARB X 1" MALE NPT<br>MICRO VALVE           | 300        | 1"             | 15/32"                  | 1   |  |  |
| LVHB075MTLV*  | 3/4" HOSE BARB X 3/4" MALE NPT<br>LOCKING MICRO VALVE | 300        | 3/4"           | 15/32"                  | 1   |  |  |



| MICRO VALVES  |  |     |      |      |   |
|---|--|-----|------|------|---|
| PART NO DESCRIPTION MAX THREAD OPENING THRU SIZE SALL |  |     |      |      |   |
| LVPL038MPTV   | 38" FEMALE PUSH LOCK X 38" NPT MICRO VALVE FKM | 150 | 3/8" | 3/8" | 1 |
| LVPL038025MPTV  | %" FEMALE PUSH LOCK X 1/4" NPT MICRO VALVE FKM | 150 | 1/4" | 3/8" | 1 |



|          | MICRO VALVES                      |            |                |                         |     |
|----------|-----------------------------------|------------|----------------|-------------------------|-----|
| PART NO  | DESCRIPTION                       | MAX<br>PSI | THREAD<br>SIZE | OPENING<br>THRU<br>BALL | QTY |
| LVPL025V | 1/4" FEMALE PUSH LOCK MICRO VALVE | 150        | 1/4"           | 3/8"                    | 1   |
| LVPL038V | 3/8" FEMALE PUSH LOCK MICRO VALVE | 150        | 3/8"           | 3/8"                    | 1   |
| LVPL050V | ½" FEMALE PUSH LOCK MICRO VALVE   | 150        | 1/2"           | 15/32"                  | 1   |

#### 1/2" - 2" 4 BOLTED VALVES

#### **FEATURES**

- FKM seals.
- Precision molded polypropylene is reinforced
- Ball is diamond turned, after molding, to make it spherically perfect, which provides precise contact
- PTFE self-lubricating stem stick or bind.
- Stainless steel bolts.

- Ball
- Thrust washer

- with fiberglass for additional strength.
- Self-aligning ball moves freely against the PTFE seats for smooth operation. The valve opens and closes with very little pressure on the handle.
- between ball and seats.
- bushings and seats cannot

#### REPAIR KIT INCLUDES:

- Body gasket
- Ball seats
- Upper stem bushing
- Stem o-ring



V100FP

PART NO

V050

V075

V100

V100FP

V125

V125FP

V150

V200



V125

DESCRIPTION

1/2" FULL PORT VALVE

3/4" FULL PORT VALVE

1" STANDARD PORT VALVE

1" FULL PORT VALVE

11/4" STANDARD PORT VALVE

11/4" FULL PORT VALVE

1½" FULL PORT VALVE

2" STANDARD PORT VALVE

**4 BOLTED VALVES** 

MAX

300

300

225

300

300

225

225



REPLACEMENT REPAIR HANDLE KIT

V07200

V07200

V07200

V10200

V10200

V20200

V20200

V20200

V10153A

V10153A

V10153A

V10153A

V10153A

V20153

V20153

V20153

V200

QTY

24/box

24/box

24/box

24/box

24/box

24/box

24/box

24/box

OPENING

THRU

3/4"

3/4"

3/4"

1"

1"

1½"

11/2"

11/2"

PIPE

SIZE

1/2"

3/4"

1"

1"

11/4"

11/4"

11/2"

2"



| VALVE ACCESSORIES |                             |                    |     |  |  |
|-------------------|-----------------------------|--------------------|-----|--|--|
| PART NO           | DESCRIPTION                 | FITS VALVES        | QTY |  |  |
| VL20153           | LOCKING DEVICE              | V125, V150, V200   | 1   |  |  |
| V10270            | STRAIGHT MOUNTING BRACKET   | V100FP, V125       | 1   |  |  |
| V10271            | 90° MOUNTING BRACKET        | V100FP, V125       | 1   |  |  |
| V25270            | STRAIGHT MOUNTING BRACKET   | V125FP, V150, V200 | 1   |  |  |
| V25271            | 90° MOUNTING BRACKET        | V125FP, V150, V200 | 1   |  |  |
| V10153138         | 1" X 1%" HANDLE OFFSET      | V100FP, V125       | 1   |  |  |
| V20153138         | 2" FP X 13/8" HANDLE OFFSET | V125FP, V150, V200 | 1   |  |  |
| V25153138         | 2" FP X 1%" HANDLE OFFSET   | V200FP             | 1   |  |  |

#### **VALVE ACCESSORIES**

- 304 stainless steel construction
- Installs under valve handle
- Comes complete with handle and locking device
- Padlock not included

#### 2"-4" 6 BOLTED VALVES

#### **FEATURES**

- FKM seals.
- Precision molded polypropylene is reinforced with fiberglass for additional strength.
- Self-aligning ball moves freely against the PTFE seats for smooth operation. The valve opens and closes with very little pressure on the handle.
- Ball is diamond turned, after molding, to make it spherically perfect, which provides precise contact between ball and seats
- PTFE self-lubricating stem bushings and seats cannot stick or bind.
- Stainless steel bolts.

#### **REPAIR KIT INCLUDES:**

- Ball
- Body gasket
- Thrust washer
- Ball seats
- Upper stem bushing
- Stem o-ring



|           | 6 BOLTED VALVES                 |            |              |                         |       |                       |               |  |  |  |  |  |
|-----------|---------------------------------|------------|--------------|-------------------------|-------|-----------------------|---------------|--|--|--|--|--|
| PART NO   | DESCRIPTION                     | MAX<br>PSI | PIPE<br>SIZE | OPENING<br>THRU<br>BALL | QTY   | REPLACEMENT<br>HANDLE | REPAIR<br>KIT |  |  |  |  |  |
| V200FP    | 2" FULL PORT VALVE              | 225        | 2"           | 2"                      | 8/box | V25153                | V25200        |  |  |  |  |  |
| VFMT200FP | 2" FULL PORT VALVE W/ F ADAPTER | 225        | 2"           | 2"                      | 6/box | V25153                | V25200        |  |  |  |  |  |
| V300      | 3" STANDARD PORT VALVE          | 225        | 3"           | 2½"                     | 8/box | V25153                | V30200        |  |  |  |  |  |
| V300FP    | 3" FULL PORT VALVE              | 200        | 3"           | 3"                      | 6/box | V25153                | V35200        |  |  |  |  |  |
| V400      | 4" STANDARD PORT VALVE          | 100        | 4"           | 31/2"                   | 4/box | V25153                | V40200        |  |  |  |  |  |

#### **VALVE ACCESSORIES**

- Stainless steel hardware
- Locks in open and closed positions
- Locking handle replaces standard handle (sold separately)
- Padlock not included







| VALVE ACCESSORIES |                           |   |     |  |  |  |  |  |  |  |
|-------------------|---------------------------|---|-----|--|--|--|--|--|--|--|
| PART NO           | DESCRIPTION               | FITS VALVES   | QTY |  |  |  |  |  |  |  |
| VL25153           | LOCKING HANDLE            | V200FP, V300, V300FP, V400,<br>VFMT200FP, VFMT200FPSH | 1   |  |  |  |  |  |  |  |
| V25270            | STRAIGHT MOUNTING BRACKET | V200FP, V300, V300FP, V400,<br>VFMT200FP, VFMT200FPSH | 1   |  |  |  |  |  |  |  |
| V25271            | 90° MOUNTING BRACKET      | V200FP, V300, V300FP, V400, VFMT200FP, VFMT200FPSH    | 1   |  |  |  |  |  |  |  |



|           | 4 BOLTED FULL PORT VALVES                     |            |              |                         |       |                       |               |  |  |  |  |
|-----------|---|------------|--------------|-------------------------|-------|-----------------------|---------------|--|--|--|--|
| PART NO   | DESCRIPTION                                   | MAX<br>PSI | PIPE<br>SIZE | OPENING<br>THRU<br>BALL | QTY   | REPLACEMENT<br>HANDLE | REPAIR<br>KIT |  |  |  |  |
| VFMT204FP | 2" FULL PORT VALVE MALE NPT X<br>MALE ADAPTER | 150        | 2"           | 2"                      | 6/box | V25153                | V25200        |  |  |  |  |
| V204FP    | 2" FULL PORT VALVE                            | 150        | 2"           | 2"                      | 8/box | V25153                | V25200        |  |  |  |  |





VSMT200FPAF

|             | FULL PORT ANSI FLANGE BOLTED VALVES                           |            |              |                         |       |                       |               |  |  |  |  |
|-------------|---|------------|--------------|-------------------------|-------|-----------------------|---------------|--|--|--|--|
| PART NO     | DESCRIPTION   | MAX<br>PSI | PIPE<br>SIZE | OPENING<br>THRU<br>BALL | QTY   | REPLACEMENT<br>HANDLE | REPAIR<br>KIT |  |  |  |  |
| VSF200FPAF  | SF200FPAF 2" FULL PORT VALVE MALE ADAPTER<br>X 2" ANSI FLANGE |            | 2"           | 2"                      | 6/box | V25153SH              | VS25200       |  |  |  |  |
| VSMT200FPAF | 2" FULL PORT VALVE X 2" ANSI<br>FLANGE                        | 200        | 2"           | 2"                      | 6/box | V25153SH              | VS25200       |  |  |  |  |

# 2" FULL PORT 4 BOLTED BALL VALVES

#### **FEATURES**

- FKM seals
- Stainless steel bolts
- PTFE self-lubricating stem bushings and seats cannot stick or bind
- Precision molded in fiberglass reinforced polypropylene
- Self-aligning ball moves freely against the PTFE seats for smoother operation
- Valve opens and closes with very little pressure on the handle
- Ball is diamond turned after molding to make it spherically perfect, which provides precise contact between ball and seats

#### **REPAIR KIT INCLUDES:**

- Ball
- Body gasket
- Thrust washer
- Ball seats
- Upper stem bushing
- Stem o-ring

## 2" FULL PORT ANSI FLANGE BOLTED BALL VALVES

#### **FEATURES**

- 100% PTFE seats
- FKM seals
- Glass-filled polypropylene
- Unique compact design
- Lightweight
- Gaskets featured on page 73

- Ball
- Body gasket
- Thrust washer
- Ball seats
- Upper stem bushing
- Stem o-ring



# 2" STANDARD PORT STUBBY BALL VALVES

## **FEATURES**

- Stainless steel bolts
- Glass reinforced polypropylene
- Multiple design options
- Unique patented compact design
- Lightweight
- All PTFE seals

- Ball
- Body gasket
- Thrust washer
- Ball seats
- Upper stem bushing
- Stem o-ring



| 2" STANDARD PORT STUBBY VALVES |                                 |            |              |                         |        |                       |               |  |  |  |  |  |
|--------------------------------|---------------------------------|------------|--------------|-------------------------|--------|-----------------------|---------------|--|--|--|--|--|
| PART NO                        | DESCRIPTION                     | MAX<br>PSI | PIPE<br>SIZE | OPENING<br>THRU<br>BALL | QTY    | REPLACEMENT<br>HANDLE | REPAIR<br>KIT |  |  |  |  |  |
| VSF200                         | 2" MALE ADAPTER X 2" FEMALE NPT | 100        | 2"           | 1½"                     | 24/box | VS20152SH             | VS20200       |  |  |  |  |  |
| VSMT200                        | 2" MALE NPT X 2" FEMALE NPT     | 100        | 2"           | 11/2"                   | 24/box | VS20152SH             | VS20200       |  |  |  |  |  |
| VSFMT200                       | 2" MALE ADAPTER X 2" MALE NPT   | 225        | 2"           | 1½"                     | 24/box | VS20152SH             | VS20200       |  |  |  |  |  |
| VSFHB200                       | 2" MALE ADAPTER X 2" HOSE BARB  | 100        | 2"           | 1½"                     | 24/box | VS20152SH             | VS20200       |  |  |  |  |  |

## **VALVES**

# 2" FULL PORT STUBBY BALL VALVES

## **FEATURES**

- Stainless steel bolts
- 100% PTFE ball seats
- Glass reinforced polypropylene
- Unique patented compact design
- Lightweight
- FKM body seals

- Ball
- Body gasket
- Thrust washer
- Ball seats
- Upper stem bushing
- Stem o-ring











VSFMT204HSFP

| 2" FULL PORT STUBBY VALVES |   |            |              |                         |        |                       |               |  |  |  |  |
|----------------------------|---|------------|--------------|-------------------------|--------|-----------------------|---------------|--|--|--|--|
| PART NO                    | DESCRIPTION   | MAX<br>PSI | PIPE<br>SIZE | OPENING<br>THRU<br>BALL | QTY    | REPLACEMENT<br>HANDLE | REPAIR<br>KIT |  |  |  |  |
| VSMT204FP                  | VSMT204FP 2" MALE NPT X 2" FEMALE NPT                         |            | 2"           | 2"                      | 18/BOX | VS25153               | VS25200       |  |  |  |  |
| VSF204FP                   | 2" MALE ADAPTER X 2" FEMALE NPT                               | 100        | 2"           | 2"                      | 18/BOX | VS25153               | VS25200       |  |  |  |  |
| VS204FP                    | 2" FEMALE NPT X 2" FEMALE NPT                                 | 225        | 2"           | 2"                      | 18/BOX | VS25153               | VS25200       |  |  |  |  |
| VSFMT204FP                 | 2" MALE ADAPTER X 2" MALE NPT                                 | 150        | 2"           | 2"                      | 18/BOX | VS25153               | VS25200       |  |  |  |  |
| VSFMT204HSFP               | 2" FP MALE ADAPTER X 2" MALE NPT<br>W/ SS BALL, STEM & HANDLE | 150        | 2"           | 2"                      | 18/BOX | VS25153SS             | VSSH25200     |  |  |  |  |

# 3" STANDARD PORT STUBBY BALL VALVES

#### **FEATURES**

- Stainless steel bolts
- Glass reinforced polypropylene
- FKM body seals
- Unique patented compact design
- Lightweight
- All PTFE seals

#### **REPAIR KIT INCLUDES:**

- Ball
- Body gasket
- Thrust washer
- Ball seats
- Upper stem bushing
- Stem o-ring



| 3" STANDARD PORT STUBBY VALVES |            |              |                 |     |                       |                       |   |  |  |  |  |
|--------------------------------|------------|--------------|-----------------|-----|-----------------------|-----------------------|---|--|--|--|--|
| PTION                          | MAX<br>PSI | PIPE<br>SIZE | OPENING<br>THRU | QTY | REPLACEMENT<br>HANDLE | REPLACEMENT<br>HANDLE | R |  |  |  |  |

| PART NO  | DESCRIPTION                     | MAX<br>PSI | PIPE<br>SIZE | OPENING<br>THRU<br>BALL | QTY   | REPLACEMENT<br>HANDLE<br>STRAIGHT | REPLACEMENT<br>HANDLE<br>SHORT | REPAIR<br>KIT |
|----------|---------------------------------|------------|--------------|-------------------------|-------|-----------------------------------|--------------------------------|---------------|
| VSF300   | 3" FEMALE NPT X 3" MALE ADAPTER | 100        | 3"           | 21/2"                   | 6/box | V25153                            | V25153SH                       | VS30200       |
| VSMT300  | 3" FEMALE NPT X 3" MALE NPT     | 100        | 3"           | 21/2"                   | 6/box | V25153                            | V25153SH                       | VS30200       |
| VSFMT300 | 3" MALE NPT X 3" MALE ADAPTER   | 225        | 3"           | 21/2"                   | 6/box | V25153                            | V25153SH                       | VS30200       |

# 3" FULL PORT STUBBY BALL VALVES

## **FEATURES**

- Stainless steel bolts
- Glass reinforced polypropylene
- FKM body seals
- Unique patented compact design
- Lightweight
- All PTFE ball seats

- Ball
- Body gasket
- Thrust washer
- Ball seats
- · Upper stem bushing
- Stem o-ring



|   | 3" FULL PORT STUBBY VALVES  |     |    |    |       |           |           |  |  |  |  |
|---|---|-----|----|----|-------|-----------|-----------|--|--|--|--|
| PART NO DESCRIPTION MAX PIPE SIZE OPENING THRU BALL QTY REPLACEMENT REINANDLE |   |     |    |    |       |           |           |  |  |  |  |
| VSFMT300FP  | 3" FULL PORT MALE ADAPTER X 3"<br>MALE NPT                          | 100 | 3" | 3" | 6/box | V25153    | VS35200   |  |  |  |  |
| VSFMT300HSFP  | 3" FULL PORT MALE ADAPTER X 3"<br>MALE NPT W/SS BALL, STEM & HANDLE | 100 | 3" | 3" | 6/box | VS30153SS | VSSH35200 |  |  |  |  |

# V100BL





**V200BL** 

#### 3 WAY BOTTOM LOAD VALVES OPFNING REPLACEMENT HANDLE PIPE **HANDLE** REPAIR MAX PART NO DESCRIPTION QTY THRU SIZE PSI TYPE KIT BALL V075BL 3/4" 3-WAY BOTTOM LOAD VALVE 200 3/4" 1" 18/box Т V10353TB V10300SL Т V100BL 1" 3-WAY BOTTOM LOAD VALVE 225 1" 1" 18/box V10353TB V10300SL V125BL 300 11/4" 12/box Т V20353TB V15300SL 11/4" 3-WAY BOTTOM LOAD VALVE 11/2" V150BL 11/2" 3-WAY BOTTOM LOAD VALVE 225 11/2" 11/2" 12/box Т V20353TB V15300SL V200BL 2" 3-WAY BOTTOM LOAD VALVE 2" 2" 8/box STRAIGHT V25353B V25200BL

# 3 WAY BOTTOM LOAD BALL VALVES

#### **FEATURES**

- Stainless steel bolts
- Precision molded in fiberglass reinforced polypropylene for additional strength
- Self-aligning ball moves freely against the PTFE seats for smooth operation
- Ball is diamond turned after molding to make it spherically perfect, which provides precise contact between ball and seats
- PTFE self-lubricating stem bushings and seats
- FKM body seals
- Directional flow, right or left.
   Valve can be turned off to stop flow





#### 3 WAY SIDE LOAD VALVES **OPENING** REPLACEMENT HANDLE REPAIR KIT HANDLE TYPE MAX PSI PIPE PART NO DESCRIPTION THRU QTY **BALL** V075SL 3/4" STRAIGHT V10153A V10300SL 3/4" 3-WAY SIDE LOAD VALVE 200 1" 18/box V100SL 1" 3-WAY SIDE LOAD VALVE 200 1" 1" 18/box **STRAIGHT** V10153A V10300SL V125SL 11/4" 3-WAY SIDE LOAD VALVE 11/4" V15300SL 300 11/2" 12/box Τ V20353TS V150SL 11/2" 3-WAY SIDE LOAD VALVE 225 11/2" 1½" Т V20353TS V15300SL 12/box V200SL 2" 3-WAY SIDE LOAD VALVE 225 2" 2" **STRAIGHT** V25153SH V25200BL 8/box

# 3 WAY SIDE LOAD BALL VALVES

- Stainless steel bolts
- Precision molded in fiberglass reinforced polypropylene for additional strength
- Self-aligning ball moves freely against the PTFE seats for smooth operation
- Ball is diamond turned after molding to make it spherically perfect, which provides precise contact between ball and seats
- PTFE self-lubricating stem bushings and seats
- FKM body seals
- Directional flow, right or left.
   Valve cannot be turned off to stop flow

### 11/2" - 2" NOZZLE VALVES

#### **FEATURES**

- Lightweight hose end valve for convenient transfer of liquids into drums, tanks etc
- Angled end flange with 8" long polypropylene fill spout
- · All stainless steel bolts

#### **REPAIR KIT INCLUDES:**

- Ball
- Body gasket
- Thrust washer
- Ball seats
- · Upper stem bushing
- Stem o-ring



|         | 1½"-2" NOZZLE VALVES              |            |              |       |     |        |                       |               |  |  |  |  |
|---------|-----------------------------------|------------|--------------|-------|-----|--------|-----------------------|---------------|--|--|--|--|
| PART NO | DESCRIPTION                       | MAX<br>PSI | PIPE<br>SIZE |       |     | QTY    | REPLACEMENT<br>HANDLE | REPAIR<br>KIT |  |  |  |  |
| VA150   | 1½" NOZZLE VALVE WITH 90° ELBOW   | 225        | 1½" x 8"     | 11/2" | 1½" | 12/box | V20152                | V20200        |  |  |  |  |
| VA200   | 2" NOZZLE VALVE WITH 90° ELBOW    | 200        | 2" x 8"      | 11/2" | 2"  | 12/box | V20152                | V20200        |  |  |  |  |
| VA200FP | 2" FP NOZZLE VALVE WITH 90° ELBOW | 225        | 2" x 8"      | 2"    | 2"  | 6/box  | V25152                | V25200        |  |  |  |  |

## 1" DISPENSING NOZZLES

## **FEATURES**

- · Glass reinforced polypropylene
- 304 stainless steel handle, spring and pin
- FKM rubber parts only
- · Resists corrosion

#### **REPAIR KIT INCLUDES:**

- Ball
- Body gasket
- Thrust washer
- Ball seats
- Upper stem bushing
- · Stem o-ring



VN100 V10161

| 1" DISPENSING NOZZLE |  |            |              |                         |               |     |                       |               |
|----------------------|--|------------|--------------|-------------------------|---------------|-----|-----------------------|---------------|
| PART NO DESCRIPTION  |  | MAX<br>PSI | PIPE<br>SIZE | OPENING<br>THRU<br>BALL | FEMALE<br>NPT | QTY | REPLACEMENT<br>HANDLE | REPAIR<br>KIT |
| VN100                | 1" DISPENSING NOZZLE   | 150        | 1"           | N/A                     | 1"            | 1   | VN10253               | VN10200       |
| V10161               | 1" NOZZLE PIPE FOR USE WITH V100,<br>V100FP UV100FP SUV100FP | N/A        | 1"           | N/A                     | 1"            | 1   |                       |               |



MSUV100FP

SUV125FP

|           | 1/2"-2" SINGLE UNION SPINWEL                         | D VA       | LVES         |                         |     |
|-----------|--|------------|--------------|-------------------------|-----|
| PART NO   | DESCRIPTION  | MAX<br>PSI | PIPE<br>SIZE | OPENING<br>THRU<br>BALL | QTY |
| SUV050FP  | ½" FULL PORT SINGLE UNION SPINWELD VALVE             | 300        | 1/2"         | 1/2"                    | 1   |
| SUV075FP  | 3/4" FULL PORT SINGLE UNION SPINWELD VALVE           | 300        | 3/4"         | 3/4"                    | 1   |
| SUV100FP  | 1" FULL PORT SINGLE UNION SPINWELD VALVE             | 300        | 1"           | 1"                      | 1   |
| SUV125FP  | 11/4" FULL PORT SINGLE UNION SPINWELD VALVE          | 300        | 11/4"        | 11/4"                   | 1   |
| SUV150FP  | 1½" FULL PORT SINGLE UNION SPINWELD VALVE            | 300        | 1½"          | 11/2"                   | 1   |
| SUV200FP  | 2" FULL PORT SINGLE UNION SPINWELD VALVE             | 200        | 2"           | 2"                      | 1   |
| MSUV100FP | 1" MANIFOLD FULL PORT SINGLE UNION<br>SPINWELD VALVE | 300        |              | 1"                      | 1   |

## ½" - 2" SINGLE UNION SPINWELD VALVES

#### **FEATURES**

- Precision molded in glass reinforced polypropylene for strength and chemical resistance
- PTFE seats for smooth and proper sealing characteristics
- EPDM O-rings to handle most fertilizers and many chemicals
- Double O-rings in stem area for extra sealing protection
- Interlocking body and end plate to allow easy thread connection when installing valves



| 1/2"-2" SINGLE UNION VALVES |                                    |            |              |                         |     |  |
|-----------------------------|------------------------------------|------------|--------------|-------------------------|-----|--|
| PART NO                     | DESCRIPTION                        | MAX<br>PSI | PIPE<br>SIZE | OPENING<br>THRU<br>BALL | QTY |  |
| UV050FP                     | ½" FULL PORT SINGLE UNION VALVE    | 300        | 1/2"         | 3/4"                    | 1   |  |
| UV075FP                     | 3/4" FULL PORT SINGLE UNION VALVE  | 300        | 3/4"         | 3/4"                    | 1   |  |
| UV100FP                     | 1" FULL PORT SINGLE UNION VALVE    | 300        | 1"           | 1"                      | 1   |  |
| UV125FP                     | 11/4" FULL PORT SINGLE UNION VALVE | 225        | 11/4"        | 11/4"                   | 1   |  |
| UV150FP                     | 1½" FULL PORT SINGLE UNION VALVE   | 200        | 1½"          | 1½"                     | 1   |  |
| UV200FP                     | 2" FULL PORT SINGLE UNION VALVE    | 300        | 2"           | 2"                      | 1   |  |

#### 1/2" - 2" SINGLE UNION VALVES

- Precision molded in glass reinforced polypropylene for strength and chemical resistance
- PTFE seats for smooth and proper sealing characteristics
- Double O-rings in stem area for extra sealing protection
- Interlocking body and end plate to allow easy thread connection when installing valves



#### 1/2" - 3" CHECK VALVES

#### **FEATURES**

- · One piece construction
- · Glass reinforced polypropylene
- 316 stainless steel springs
- EPDM gasket



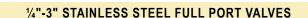


| 1/2"-3" CHECK VALVES |   |                         |            |              |     |  |  |  |
|----------------------|---|-------------------------|------------|--------------|-----|--|--|--|
| PART NO              | DESCRIPTION                             | OPENING<br>PRESSURE PSI | MAX<br>PSI | PIPE<br>SIZE | QTY |  |  |  |
| CV050                | ½" CHECK VALVE                          | 6-7                     | 300        | 1/2"         | 1   |  |  |  |
| CV100MT              | 1" MALE X FEMALE NPT CHECK VALVE        | 1                       | 300        | 1"           | 1   |  |  |  |
| CV100                | 1" CHECK VALVE                          | 1                       | 300        | 1"           | 1   |  |  |  |
| CV221                | 2" FULL PORT CHECK VALVE                | >0.5                    | 300        | 2"           | 1   |  |  |  |
| CV300                | 3" FULL PORT CHECK VALVE W/ 5 LB SPRING | 1.5                     | 300        | 3"           | 1   |  |  |  |
| CV301                | 3" FULL PORT CHECK VALVE W/½ LB SPRING  | >0.5                    | 300        | 3"           | 1   |  |  |  |

# 1/4" - 3" STAINLESS STEEL FULL PORT VALVES

#### **FEATURES**

- 316 stainless steel
- · Blow out proof stem
- All valves 100% tested by air, under water at 100 PSI in open and closed positions
- Latch locking handle performs in both open and closed positions
- Mounting pad
- PTFE seals and seats



| PART NO | DESCRIPTION             | MAX<br>PSI | PIPE<br>SIZE | OPENING<br>THRU<br>BALL | QTY | REPAIR<br>KIT |
|---------|-------------------------|------------|--------------|-------------------------|-----|---------------|
| VSS025  | 1/4" SS FULL PORT VALVE | 1000       | 1/4"         | 1/4"                    | 1   | VSS02500      |
| VSS038  | 3/8" SS FULL PORT VALVE | 1000       | 3/8"         | 3/8"                    | 1   | VSS02500      |
| VSS050  | ½" SS FULL PORT VALVE   | 1000       | 1/2"         | 1/2"                    | 1   | VSS05200      |
| VSS075  | 3/4" SS FULL PORT VALVE | 1000       | 3/4"         | 3/4"                    | 1   | VSS07200      |
| VSS100  | 1" SS FULL PORT VALVE   | 1000       | 1"           | 1"                      | 1   | VSS10200      |
| VSS150  | 1½" SS FULL PORT VALVE  | 1000       | 1½"          | 1½"                     | 1   | VSS15200      |
| VSS200  | 2" SS FULL PORT VALVE   | 1000       | 2"           | 2"                      | 1   | VSS25200      |
| VSS300  | 3" SS FULL PORT VALVE   | 1000       | 3"           | 3"                      | 1   | VSS35200      |

#### 3/4" - 1" PINCH VALVES

- Open position allows full unobstructed flow of 50-60 GPM
- Air pressure collapses the internal rubber sleeve to provide positive shut off
- Standard EPDM rubber bladder seal and FKM available
- Female NPT threads
- ATTENTION: Normally an open valve and has a maximum liquid pressure of 70 PSI. Pressure differential = pressure it takes to close valve



| 3/4"-1" PINCH VALVES |                                       |        |            |              |                          |     |  |  |
|----------------------|---------------------------------------|--------|------------|--------------|--------------------------|-----|--|--|
| PART NO              | DESCRIPTION                           | GASKET | MAX<br>PSI | PIPE<br>SIZE | PRESSURE<br>DIFFERENTIAL | QTY |  |  |
| PV075                | 3/4" X 3/4" PINCH VALVE               | EPDM   | 300        | 3/4"         | 15 TO 20 PSI             | 1   |  |  |
| PV100                | 1" X 1" PINCH VALVE                   | EPDM   | 300        | 1"           | 15 TO 20 PSI             | 1   |  |  |
| PV100V               | 1" X 1" PINCH VALVE                   | FKM    | 300        | 1"           | 15 TO 20 PSI             | 1   |  |  |
| PV100-075            | 1" X ¾" PINCH VALVE                   | EPDM   | 300        | 1" X ¾"      | 15 TO 20 PSI             | 1   |  |  |
| PV100-075V           | 1" X 3/4" PINCH VALVE                 | FKM    | 300        | 1" X ¾"      | 15 TO 20 PSI             | 1   |  |  |
| PV100-075B           | 1" X ¾" FEMALE COUPLER PINCH<br>VALVE | EPDM   | 300        | 1" X ¾"      | 15 TO 20 PSI             | 1   |  |  |
| PV10265              | BLADDER                               | EPDM   | N/A        |              |                          | 1   |  |  |
| PV10265V             | BLADDER                               | FKM    | N/A        |              |                          | 1   |  |  |





#### **SMALLER**

• EVX 2" full port and 3" models are over 35% smaller than the average competitive valve. The 1½", 2" full port and 3" models are also substantially lighter than the average competitive valve.

#### **SMARTER**

 EVX offers the latest communication protocols ranging from direct control to CAN/ISO BUS to Bluetooth®' wireless technology, while diagnostic options measure and report voltage, temperature, and cycle count to warn of concerns before they become problems.

#### **TOUGHER**

Setting the new standard for electric valve toughness, EVX passes 52 separate durability torture tests including mechanical shock, vibration, extreme temperature, rain/ shine, operating pressure, and rigorous longevity tests.

SMALLER / SMARTER / TOUGHER

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#### 1" - 11/2" EVX SERIES

#### **FEATURES**

- 12-volt DC operated
- 24-volt available
- Open/closed indicator
- ON/OFF has ¾ sec response
- Regulating has 4 sec response
- Open / Close verification available
- IP68 waterproof
- -20 to 150F (-29 to 65C) operating
- -67 to 221F (-55 to 105C) storage
- Actuator rated to 500,000 cycles
- Valve rated to 50,000 cycles leak-free
- 100G's shock rating

#### **MATERIALS**

- 316 stainless steel ball & stem
- · Poly ball available
- Stainless steel hardware
- Fiberglass reinforced polypropylene
- PTFE seats
- FKM stem seals

#### ON/OFF

- Red = +12V DC
- Black = Ground
- White = +12VDC (Open) 0VDC (Close)

- Red = +12V DC (Open)
- White = Ground (Open)
- Black = +12V DC (Close)
- Green = Ground (Close)



| 1       | 1" - 11/2" EVX ON/OFF ELECTRIC VALVES |            |              |                         |     |  |  |  |  |
|---------|---------------------------------------|------------|--------------|-------------------------|-----|--|--|--|--|
| PART NO | DESCRIPTION                           | MAX<br>PSI | PIPE<br>SIZE | OPENING<br>THRU<br>BALL | QTY |  |  |  |  |
| EVX100  | 1" FULL PORT ELECTRIC VALVE           | 300        | 1"           | 1"                      | 1   |  |  |  |  |
| EVX125  | 1¼" STANDARD PORT ELECTRIC<br>VALVE   | 300        | 11/4"        | 1"                      | 1   |  |  |  |  |
| EVX150  | 1½" FULL PORT ELECTRIC VALVE          | 300        | 1½"          | 1½"                     | 1   |  |  |  |  |

| 1" - 1½" EVX REGULATING VALVES |                                  |            |              |                         |     |  |  |  |  |
|--------------------------------|----------------------------------|------------|--------------|-------------------------|-----|--|--|--|--|
| PART NO                        | DESCRIPTION                      | MAX<br>PSI | PIPE<br>SIZE | OPENING<br>THRU<br>BALL | QTY |  |  |  |  |
| EVXR100                        | 1" FULL PORT ELECTRIC VALVE      | 300        | 1"           | 1"                      | 1   |  |  |  |  |
| EVXR125                        | 1¼" STANDARD PORT ELECTRIC VALVE | 300        | 11/4"        | 1"                      | 1   |  |  |  |  |
| EVXR150                        | 1½" FULL PORT ELECTRIC VALVE     | 300        | 1½"          | 1½"                     | 1   |  |  |  |  |



#### 2" EVX ON/OFF ELECTRIC VALVES OPENING MAX PIPE PART NO DESCRIPTION THRU BALL QTY PSI SIZE EVX200 2" STANDARD PORT ELECTRIC VALVE 300 2" 11/2" 1 EVX220 2" FULL PORT ELECTRIC VALVE 2" 250 2" 1

| 2       | 2" EVX REGULATING ELECTRIC VALVES |            |              |                         |     |  |  |  |
|---------|-----------------------------------|------------|--------------|-------------------------|-----|--|--|--|
| PART NO | DESCRIPTION                       | MAX<br>PSI | PIPE<br>SIZE | OPENING<br>THRU<br>BALL | QTY |  |  |  |
| EVXR200 | 2" STANDARD PORT ELECTRIC VALVE   | 300        | 2"           | 11/2"                   | 1   |  |  |  |
| EVXR220 | 2" FULL PORT ELECTRIC VALVE       | 250        | 2"           | 2"                      | 1   |  |  |  |

#### 2" EVX SERIES

#### **FEATURES**

- 12-volt DC operated
- 24-volt available
- Open/closed indicator
- ON/OFF has 1½ second response
- Regulating has 4 second response
- Open / Close verification available
- IP68 waterproof
- -20 to 150F (-29 to 65C) operating
- -67 to 221F (-55 to 105C) storage
- Actuator rated to 500,000 cycles
- Valve rated to 50,000 cycles leak-free
- 100G's shock rating

#### **MATERIALS**

- 316 stainless steel ball & stem
- Poly ball available
- Stainless steel hardware
- Fiberglass reinforced polypropylene
- PTFE seats
- FKM stem seals

#### ON/OFF

- Red = +12V DC
- Black = Ground
- White = +12VDC (Open) 0VDC (Close)

- Red = +12V DC (Open)
- White = Ground (Open)
- Black = +12V DC (Close)
- Green = Ground (Close)

#### 3" EVX SERIES

#### **FEATURES**

- 12-volt DC operated
- 24-volt available
- Open/closed indicator
- ON/OFF has 3 second response
- Regulating has 4 second response
- Open / Close verification available
- IP68 waterproof
- -20 to 150F (-29 to 65C) operating
- -67 to 221F (-55 to 105C) storage
- Actuator rated to 500,000 cycles
- Valve rated to 50,000 cycles leak-free
- 100G's shock rating

#### **MATERIALS**

- 316 stainless steel ball & stem
- Poly ball available
- · Stainless steel hardware
- Fiberglass reinforced polypropylene
- Zinc alloy lower actuator housing
- PTFE seats
- FKM stem seals

#### ON/OFF

- Red = +12V DC
- Black = Ground
- White = +12VDC (Open) 0VDC (Close)

- Red = +12V DC (Open)
- White = Ground (Open)
- Black = +12V DC (Close)
- Green = Ground (Close)



|         | 3" EVX ON/OFF ELECTRIC VALVES                            |     |    |    |   |  |  |  |
|---------|--|-----|----|----|---|--|--|--|
| PART NO | PART NO DESCRIPTION MAX PIPE THRU SIZE OPENING THRU BALL |     |    |    |   |  |  |  |
| EVX300  | 3" FULL PORT ELECTRIC VALVE                              | 150 | 3" | 3" | 1 |  |  |  |

| 3       | 3" EVX REGULATING ELECTRIC VALVES          |     |    |    |   |  |  |  |
|---------|--|-----|----|----|---|--|--|--|
| PART NO | PART NO DESCRIPTION MAX PIPE THRU QTY BALL |     |    |    |   |  |  |  |
| EVXR300 | 3" FULL PORT ELECTRIC VALVE                | 150 | 3" | 3" | 1 |  |  |  |

### 3/8" - 1/2" LEV SERIES

- 12 Volt DC
- Stationary current draw: less than 0.04 amps
- Rotating current draw: less than 0.40 amps
- Stall current: 0.75 amps
- Response time: 1/3 second open to close
- TFM seats
- EPDM seals
- Fiberglass reinforced polypropylene
- Integrated mounting slot
- Standard 3 wire configuration

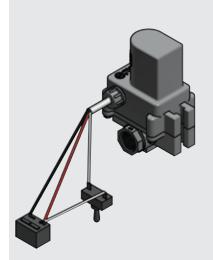


| 3/8"-1/2" ON/OFF ELECTRIC VALVES       |                               |     |      |                     |   |  |  |  |
|--|-------------------------------|-----|------|---------------------|---|--|--|--|
| PART NO DESCRIPTION MAX PIPE THRU BALL |                               |     |      |                     |   |  |  |  |
| LEV038                                 | 3/8" FULL PORT ELECTRIC VALVE | 300 | 3/8" | 3/8"                | 1 |  |  |  |
| LEV050                                 | ½" ELECTRIC VALVE             | 300 | 1/2" | 15 <sub>/32</sub> " | 1 |  |  |  |



LEV038PL

| %" ELECTRIC VALVES W/ PUSH LOCK            |   |     |      |      |   |  |  |
|--|---|-----|------|------|---|--|--|
| PART NO DESCRIPTION MAX PIPE THRU QTY BALL |   |     |      |      |   |  |  |
| LEV038PL                                   | %" FULL PORT ELECTRIC VALVE W/<br>PUSH LOCK | 150 | 3/8" | 3/8" | 1 |  |  |



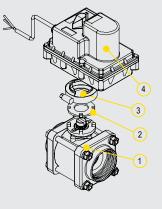


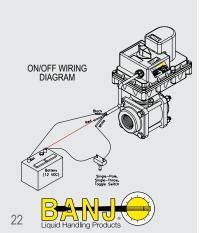
#### 3/4"-3" THREADED

#### **FEATURES**

- 316 stainless steel ball & stem
- · Stainless steel hardware
- Fiberglass reinforced polypropylene
- PTFE seats
- EPDM O-rings (¾"-2") FKM O-rings (3")
- 12-volt DC operated
- 24-volt available in most models
- Easily repairable
- Open/closed indicator
- ¾ second response time (¾"-1¼")
- 1¼ second response time (1½"-2")
- 3 second response time (3")

- Stem with Seals
- Gasket
- Body O-Rings
- Ball Seats







| 3/4"-3" ON/OFF ELECTRIC VALVES |                                    |     |       |     |   |  |  |  |
|--------------------------------|------------------------------------|-----|-------|-----|---|--|--|--|
| PART NO                        | PART NO DESCRIPTION MAX PIPE SIZE  |     |       |     |   |  |  |  |
| EV075                          | 3/4" FULL PORT ELECTRIC VALVE      | 300 | 3/4"  | 1"  | 1 |  |  |  |
| EV100FP                        | 1" FULL PORT ELECTRIC VALVE        | 300 | 1"    | 1"  | 1 |  |  |  |
| EV125                          | 11/4" ELECTRIC VALVE               | 300 | 11/4" | 1"  | 1 |  |  |  |
| EV150                          | 1½" ELECTRIC VALVE                 | 300 | 1½"   | 1½" | 1 |  |  |  |
| EV200                          | 2" ELECTRIC VALVE                  | 300 | 2"    | 1½" | 1 |  |  |  |
| EV204FP                        | 2" FULL PORT ELECTRIC VALVE        | 225 | 2"    | 2"  | 1 |  |  |  |
| EV300FP                        | 3" FULL PORT ELECTRIC VALVE 3 WIRE | 200 | 3"    | 3"  | 1 |  |  |  |

| REPLACEMENT PARTS |           |  |     |  |  |
|-------------------|-----------|--|-----|--|--|
| ITEM              | PART NO   | DESCRIPTION                                | QTY |  |  |
| 1                 | EV075XR1  | 3/4" FULL PORT ELECTRIC VALVE SUB ASSEMBLY | 1   |  |  |
| 1                 | EV100XR1  | 1" ELECTRIC VALVE SUB ASSEMBLY             | 1   |  |  |
| 1                 | EV125XR1  | 11/4" ELECTRIC VALVE SUB ASSEMBLY          | 1   |  |  |
| 1                 | EV150XR1  | 1½" FULL PORT ELECTRIC VALVE SUB ASSEMBLY  | 1   |  |  |
| 1                 | EV200XR1  | 2" ELECTRIC VALVE SUB ASSEMBLY             | 1   |  |  |
| 1                 | EV300XR1A | 3" ELECTRIC VALVE ONLY                     | 1   |  |  |
| 2                 | MVE004    | ELECTRIC VALVE FLANGE GASKET               | 1   |  |  |
| 3                 | FC100     | 1" FLANGE CLAMP                            | 1   |  |  |
| 4                 | EV3300    | 3/4 SECOND 3 WIRE MOTOR ASSEMBLY           | 1   |  |  |
| 4                 | EV4300    | 11/4 SECOND 3 WIRE MOTOR ASSEMBLY          | 1   |  |  |
| 4                 | VE5630    | 3 SECOND, 12 VDC MOTOR (EV300FP)           | 1   |  |  |
| KIT               | EV10210   | REPAIR KIT                                 | 1   |  |  |
| KIT               | EV20210   | REPAIR KIT                                 | 1   |  |  |
| KIT               | EV35210   | REPAIR KIT                                 | 1   |  |  |



| 3/4"-2" REGULATING ELECTRIC VALVES |                               |            |              |                         |     |  |  |
|------------------------------------|-------------------------------|------------|--------------|-------------------------|-----|--|--|
| PART NO                            | DESCRIPTION                   | MAX<br>PSI | PIPE<br>SIZE | OPENING<br>THRU<br>BALL | QTY |  |  |
| EVR075                             | 3/4" FULL PORT ELECTRIC VALVE | 300        | 3/4"         | 1"                      | 1   |  |  |
| EVR100FP                           | 1" FULL PORT ELECTRIC VALVE   | 300        | 1"           | 1"                      | 1   |  |  |
| EVR204FP                           | 2" FULL PORT ELECTRIC VALVE   | 225        | 2"           | 2"                      | 1   |  |  |

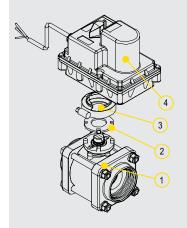
|      | REPLACEMENT PARTS |   |     |  |  |  |  |
|------|-------------------|---|-----|--|--|--|--|
| ITEM | PART NO           | DESCRIPTION                                       | QTY |  |  |  |  |
| 1    | EV075XR1          | 3/4" FULL PORT ELECTRIC VALVE SUB ASSEMBLY        | 1   |  |  |  |  |
| 1    | EV100XR1          | 1" ELECTRIC VALVE SUB ASSEMBLY                    | 1   |  |  |  |  |
| 1    | EV204XR1          | 2" ELECTRIC VALVE SUB ASSEMBLY                    | 1   |  |  |  |  |
| 2    | MVE004            | ELECTRIC VALVE FLANGE GASKET                      | 1   |  |  |  |  |
| 3    | FC100             | 1" FLANGE CLAMP                                   | 1   |  |  |  |  |
| 4    | EVR3300           | REGULATING 4 WIRE, 4 SECOND FOR EVR075 & EVR100FP | 1   |  |  |  |  |
| 4    | EVR4300           | REGULATING 4 WIRE, 4 SECOND FOR EVR204FP          | 1   |  |  |  |  |
| KIT  | EV10210           | REPAIR KIT FOR EVR075 & EVR100FP                  | 1   |  |  |  |  |
| KIT  | EV25210           | REPAIR KIT FOR EVR204FP                           | 1   |  |  |  |  |

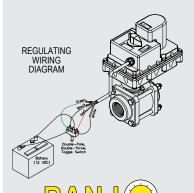
### 3/4"-2" REGULATING

#### **FEATURES**

- 316 stainless steel ball & stem
- Stainless steel hardware
- Fiberglass reinforced polypropylene
- PTFE seats
- EPDM O-rings
- 12-volt DC operated
- 24-volt available in most models
- Easily repairable
- Open/closed indicator
- 4 second response (¾"-2")
- Directional flow right or left and cannot be turned off

- Stem with Seals
- Gasket
- Body O-Rings
- Ball Seats



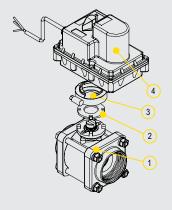


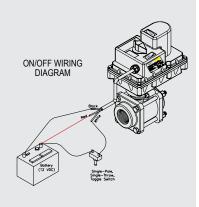
### 3/4" - 2" 3 WAY

- 316 stainless steel ball & stem
- Stainless steel hardware
- Fiberglass reinforced polypropylene
- PTFE seats
- 12-volt DC operated
- Easily repairable
- Open/closed indicator
- 11/4 second response time(1"-2")
- ¾ second response time (¾")



- Stem with Seals
- Gasket
- Body O-Rings
- Ball Seats







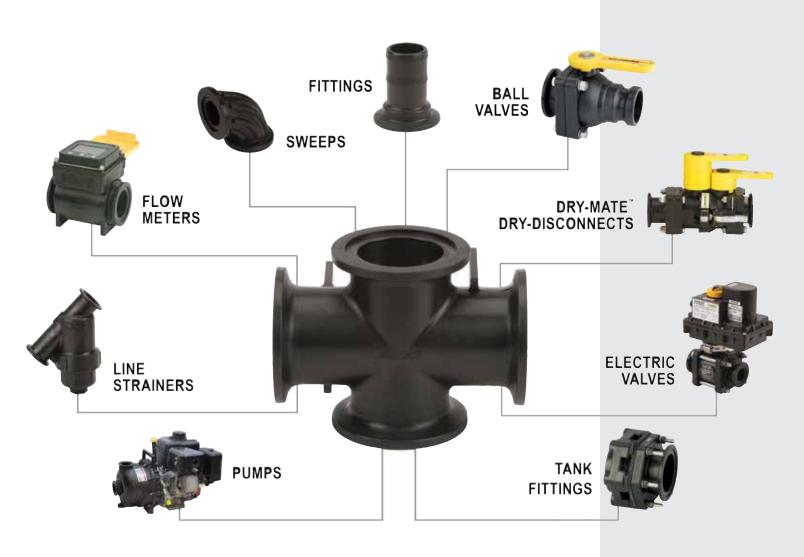
| 3/4"-2" ON/OFF BOTTOM LOAD ELECTRIC VALVES |  |            |              |                         |     |  |  |
|--|--|------------|--------------|-------------------------|-----|--|--|
| PART NO                                    | DESCRIPTION  | MAX<br>PSI | PIPE<br>SIZE | OPENING<br>THRU<br>BALL | QTY |  |  |
| EV075BL                                    | $^3\!$ | 300        | 3/4"         | 1"                      | 1   |  |  |
| EV100BL                                    | 1" BOTTOM LOAD ELECTRIC VALVE  | 300        | 1"           | 1"                      | 1   |  |  |
| EV204BLFP                                  | 2" FP BOTTOM LOAD ELECTRIC VALVE   | 200        | 2"           | 2"                      | 1   |  |  |

| 3/4"-2" ON/OFF SIDE LOAD ELECTRIC VALVES |   |            |              |                         |     |  |
|--|---|------------|--------------|-------------------------|-----|--|
| PART NO                                  | DESCRIPTION                             | MAX<br>PSI | PIPE<br>SIZE | OPENING<br>THRU<br>BALL | QTY |  |
| EV075SL                                  | 3/4" FULL PORT SIDE LOAD ELECTRIC VALVE | 300        | 3/4"         | 1"                      | 1   |  |
| EV100SL                                  | 1" SIDE LOAD ELECTRIC VALVE             | 300        | 1"           | 1"                      | 1   |  |
| EV150SL                                  | 1½" SIDE LOAD ELECTRIC VALVE            | 300        | 1½"          | 1½"                     | 1   |  |
| EV200SL                                  | 2" SIDE LOAD ELECTRIC VALVE             | 300        | 2"           | 1½"                     | 1   |  |
| EV204SLFP                                | 2" FP SIDE LOAD ELECTRIC VALVE          | 150        | 2"           | 2"                      | 1   |  |

|      | REPLACEMENT PARTS |  |     |  |  |  |
|------|-------------------|--|-----|--|--|--|
| ITEM | PART NO           | DESCRIPTION                                  | QTY |  |  |  |
| 1    | EV075BLXR1        | 3/4" ELECTRIC VALVE SUB ASSEMBLY             | 1   |  |  |  |
| 1    | EV100BLXR1        | 1" ELECTRIC VALVE SUB ASSEMBLY               | 1   |  |  |  |
| 1    | EV204BLXR1        | 2" FULL PORT ELECTRIC VALVE SUB ASSEMBLY     | 1   |  |  |  |
| 1    | EV075SLXR1        | 3/4" ELECTRIC VALVE SUB ASSEMBLY             | 1   |  |  |  |
| 1    | EV100SLXR1        | 1" ELECTRIC VALVE SUB ASSEMBLY               | 1   |  |  |  |
| 1    | EV150SLXR1        | 1½" ELECTRIC VALVE SUB ASSEMBLY              | 1   |  |  |  |
| 1    | EV200SLXR1        | 2" ELECTRIC VALVE SUB ASSEMBLY               | 1   |  |  |  |
| 1    | EV204SLXR1        | 2" FULL PORT ELECTRIC VALVE SUB ASSEMBLY     | 1   |  |  |  |
| 2    | MVE004            | ELECTRIC VALVE FLANGE GASKET                 | 1   |  |  |  |
| 3    | FC100             | 1" FLANGE CLAMP                              | 1   |  |  |  |
| 4    | EV3300            | 3/4 SECOND 3 WIRE MOTOR ASSEMBLY (3/"-1")    | 1   |  |  |  |
| 4    | EV4300            | 11/4 SECOND 3 WIRE MOTOR ASSEMBLY (11/2"-2") | 1   |  |  |  |
| KIT  | EV10210           | REPAIR KIT (¾"-1")                           | 1   |  |  |  |
| KIT  | EV20210           | REPAIR KIT (11/2"-2")                        | 1   |  |  |  |
| KIT  | EV25210           | REPAIR KIT (2"FP)                            | 1   |  |  |  |

NO THREADS. NO SWEAT.

#### FLANGE CONNECTIONS FOR EVERY PRODUCT





Flange connections utilize clamps instead of threads, facilitating quick and easy assembly and disassembly while ensuring a leak-proof system. Threaded pipe needs tape or sealant, and the slightest imperfection in the pipe or seal can cause a leak. With properly installed flange connections, you won't worry about connection leaks or wait for sealant to cure.

## SAVE TIME. SAVE MONEY.

Time spent unthreading systems and repairing leaks from faulty connections is unproductive and ultimately hits your pocketbook. Banjo's manifold flange systems get you back in the field and out of the shop in no time.

## >> GET RIGHT TO THE SOURCE

With Banjo manifold flange connections, the days of spending hours unhooking entire systems of valves and fittings are over. You can directly isolate and replace the problematic part or replumb sections without disassembling the whole system.



#### 1" MEVX SERIES

#### **FEATURES**

- 12-volt DC operated
- 24-volt available
- Open/closed indicator
- ON/OFF has ¾ second response
- Regulating has 4 second response
- Open / Close verification available
- IP68 waterproof
- -20 to 150F (-29 to 65C) operating
- -67 to 221F (-55 to 105C) storage
- Actuator rated to 500,000 cycles
- Valve rated to 50,000 cycles leak-free
- 100G's shock rating

#### **MATERIALS**

- 316 stainless steel ball & stem
- · Poly ball available
- Stainless steel hardware
- Fiberglass reinforced polypropylene
- PTFE seats
- FKM stem seals

#### ON/OFF

- Red = +12V DC
- Black = Ground
- White = +12VDC (Open) 0VDC (Close)

#### **4 WIRE REGULATING**

- Red = +12V DC (Open)
- White = Ground (Open)
- Black = +12V DC (Close)
- Green = Ground (Close)



| 1" MEVX ON/OFF ELECTRIC VALVES |                             |            |              |                         |     |  |
|--------------------------------|-----------------------------|------------|--------------|-------------------------|-----|--|
| PART NO                        | DESCRIPTION                 | MAX<br>PSI | PIPE<br>SIZE | OPENING<br>THRU<br>BALL | QTY |  |
| MEVX100                        | 1" FULL PORT ELECTRIC VALVE | 300        | 1"           | 1"                      | 1   |  |

| 1" MEVX REGULATING ELECTRIC VALVES |                             |            |              |                         |     |  |
|------------------------------------|-----------------------------|------------|--------------|-------------------------|-----|--|
| PART NO                            | DESCRIPTION                 | MAX<br>PSI | PIPE<br>SIZE | OPENING<br>THRU<br>BALL | QTY |  |
| MEVXR100                           | 1" FULL PORT ELECTRIC VALVE | 300        | 1"           | 1"                      | 1   |  |

Note: 1" MANIFOLD BANK VALVE ASSEMBLIES AVAILABLE





| 2" MEVX ON/OFF ELECTRIC VALVES |                                 |            |              |                         |     |  |
|--------------------------------|---------------------------------|------------|--------------|-------------------------|-----|--|
| PART NO                        | DESCRIPTION                     | MAX<br>PSI | PIPE<br>SIZE | OPENING<br>THRU<br>BALL | QTY |  |
| MEVX200                        | 2" STANDARD PORT ELECTRIC VALVE | 300        | 2"           | 11/2"                   | 1   |  |
| MEVX220                        | 2" FULL PORT ELECTRIC VALVE     | 250        | 2"           | 2"                      | 1   |  |

| 2" MEVX REGULATING ELECTRIC VALVES |                                 |            |              |                         |     |  |
|------------------------------------|---------------------------------|------------|--------------|-------------------------|-----|--|
| PART NO                            | DESCRIPTION                     | MAX<br>PSI | PIPE<br>SIZE | OPENING<br>THRU<br>BALL | QTY |  |
| MEVXR200                           | 2" STANDARD PORT ELECTRIC VALVE | 300        | 2"           | 11/2"                   | 1   |  |
| MEVXR220                           | 2" FULL PORT ELECTRIC VALVE     | 250        | 2"           | 2"                      | 1   |  |

Note: 2" MANIFOLD BANK VALVE ASSEMBLIES AVAILABLE

#### 2" MEVX SERIES

#### **FEATURES**

- 12-volt DC operated
- 24-volt available
- Open/closed indicator
- ON/OFF has 1½ second response
- Regulating has 4 second response
- Open / Close verification available
- IP68 waterproof
- -20 to 150F (-29 to 65C) operating
- -67 to 221F (-55 to 105C) storage
- Actuator rated to 500,000 cycles
- Valve rated to 50,000 cycles leak-free
- 100G's shock rating

#### **MATERIALS**

- 316 stainless steel ball & stem
- Poly ball available
- Stainless steel hardware
- Fiberglass reinforced polypropylene
- PTFE seats
- FKM stem seals

#### ON/OFF

- Red = +12V DC
- Black = Ground
- White = +12VDC (Open) 0VDC (Close)

- Red = +12V DC (Open)
- White = Ground (Open)
- Black = +12V DC (Close)
- Green = Ground (Close)



#### 3" MEVX SERIES

#### **FEATURES**

- 12-volt DC operated
- 24-volt available
- Open/closed indicator
- ON/OFF has 3 second response
- Regulating has 4 second response
- Open / Close verification available
- IP68 waterproof
- -20 to 150F (-29 to 65C) operating
- -67 to 221F (-55 to 105C) storage
- Actuator rated to 500,000 cycles
- Valve rated to 50,000 cycles leak-free
- 100G's shock rating

#### **MATERIALS**

- 316 stainless steel ball & stem
- Poly ball available
- Stainless steel hardware
- Fiberglass reinforced polypropylene
- Zinc alloy lower actuator housing
- PTFE seats
- FKM stem seals

#### ON/OFF

- Red = +12V DC
- Black = Ground
- White = +12VDC (Open) 0VDC (Close)

- Red = +12V DC (Open)
- White = Ground (Open)
- Black = +12V DC (Close)
- Green = Ground (Close)



| 3" MEVX ON/OFF ELECTRIC VALVES |                             |            |              |                         |     |  |
|--------------------------------|-----------------------------|------------|--------------|-------------------------|-----|--|
| PART NO                        | DESCRIPTION                 | MAX<br>PSI | PIPE<br>SIZE | OPENING<br>THRU<br>BALL | QTY |  |
| MEVX300                        | 3" FULL PORT ELECTRIC VALVE | 150        | 3"           | 3"                      | 1   |  |

| 3" MEVX REGULATING ELECTRIC VALVES |                             |            |              |                         |     |  |
|------------------------------------|-----------------------------|------------|--------------|-------------------------|-----|--|
| PART NO                            | DESCRIPTION                 | MAX<br>PSI | PIPE<br>SIZE | OPENING<br>THRU<br>BALL | QTY |  |
| MEVXR300                           | 3" FULL PORT ELECTRIC VALVE | 150        | 3"           | 3"                      | 1   |  |





|           | 1"-3" MEVX BOTTOM LOAD ELECTRIC VALVES               |            |              |                         |     |  |  |  |  |  |  |
|-----------|--|------------|--------------|-------------------------|-----|--|--|--|--|--|--|
| PART NO   | DESCRIPTION  | MAX<br>PSI | PIPE<br>SIZE | OPENING<br>THRU<br>BALL | QTY |  |  |  |  |  |  |
| MEVX100BL | 1" FULL PORT MANIFOLD BOTTOM LOAD ELECTRIC VALVE     | 300        | 1"           | 1"                      | 1   |  |  |  |  |  |  |
| MEVX200BL | 2" STANDARD PORT MANIFOLD BOTTOM LOAD ELECTRIC VALVE | 250        | 2"           | 1½"                     | 1   |  |  |  |  |  |  |
| MEVX220BL | 2" FULL PORT MANIFOLD BOTTOM LOAD ELECTRIC VALVE     | 125        | 2"           | 2"                      | 1   |  |  |  |  |  |  |
| MEVX300BL | 3" FULL PORT MANIFOLD BOTTOM LOAD ELECTRIC VALVE     | 200        | 3"           | 3"                      | 1   |  |  |  |  |  |  |

|           | 1"-2" MEVX SIDE LOAD ELECTRIC VALVES               |              |                         |       |   |  |  |  |  |  |
|-----------|--|--------------|-------------------------|-------|---|--|--|--|--|--|
| PART NO   | MAX<br>PSI   | PIPE<br>SIZE | OPENING<br>THRU<br>BALL | QTY   |   |  |  |  |  |  |
| MEVX100SL | 1" FULL PORT MANIFOLD SIDE LOAD ELECTRIC VALVE     | 300          | 1"                      | 1"    | 1 |  |  |  |  |  |
| MEVX200SL | 2" STANDARD PORT MANIFOLD SIDE LOAD ELECTRIC VALVE | 250          | 2"                      | 11/2" | 1 |  |  |  |  |  |
| MEVX220SL | 2" FULL PORT MANIFOLD SIDE LOAD ELECTRIC VALVE     | 125          | 2"                      | 2"    | 1 |  |  |  |  |  |

## 1"- 3" MEVX SERIES BOTTOM & SIDE LOAD VALVES

#### **FEATURES**

- 12-volt DC operated
- 24-volt available
- Open/closed indicator
- ON/OFF 1" has ¾ second response
- ON/OFF 2" has 1½ second response
- ON/OFF 3" has 3 second response
- Open / Close verification available
- IP68 waterproof
- -20 to 150F (-29 to 65C) operating
- -67 to 221F (-55 to 105C) storage
- Actuator rated to 500,000 cycles
- Valve rated to 50,000 cycles leak-free
- 100G's shock rating

#### **MATERIALS**

- 316 stainless steel ball & stem
- · Poly ball available
- Stainless steel hardware
- Fiberglass reinforced polypropylene
- Zinc alloy lower actuator housing (3" only)
- PTFE seats
- FKM stem seals

#### ON/OFF

- Red = +12V DC
- Black = Ground
- White = +12VDC (Open) 0VDC (Close)

- Red = +12V DC (Open)
- White = Ground (Open)
- Black = +12V DC (Close)
- Green = Ground (Close)



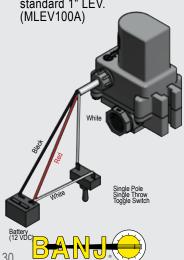
# 1" ELECTRIC MANIFOLD VALVE ASSEMBLIES

#### **FEATURES**

- Fiberglass reinforced polypropylene
- PTFE seats
- 12-volt DC operated
- Internally fused/automatic reset
- Open/closed indicator

# 1" ELECTRIC MANIFOLD VALVE

- Fiberglass reinforced polypropylene
- TFM seats
- EPDM seals
- 12-volt DC operated
- Internally fused/automatic reset
- Stationary current draw: less than 0.04 amps
- Rotating current draw: less than 0.40 amps
- Stall current: 0.75 amps
- ½ second response time
- Integrated mounting slot
- 3 wire configuration
- Higher torque motor to power through thick liquids and demanding applications. (MLEV100A)
- Stainless steel ball (MLEV100A)
- Reinforced nylon stem more than triples the strength of the standard 1" LEV.





| 1" MANIFOLD VALVE ASSEMBLIES |                                   |         |                 |     |  |  |  |  |  |  |
|------------------------------|-----------------------------------|---------|-----------------|-----|--|--|--|--|--|--|
| PART NO                      | DESCRIPTION                       | MAX PSI | PIPE<br>SIZE    | QTY |  |  |  |  |  |  |
| MEV102CF                     | 1" MANIFOLD 2 BANK VALVE ASSEMBLY | 300     | 2" IN<br>1" OUT | 1   |  |  |  |  |  |  |
| MEV103CF                     | 1" MANIFOLD 3 BANK VALVE ASSEMBLY | 300     | 2" IN<br>1" OUT | 1   |  |  |  |  |  |  |
| MEV104CF                     | 1" MANIFOLD 4 BANK VALVE ASSEMBLY | 300     | 2" IN<br>1" OUT | 1   |  |  |  |  |  |  |
| MEV105CF                     | 1" MANIFOLD 5 BANK VALVE ASSEMBLY | 300     | 2" IN<br>1" OUT | 1   |  |  |  |  |  |  |



| 1" ON/OFF ELECTRIC VALVES                          |  |     |    |      |   |  |  |  |  |  |
|--|--|-----|----|------|---|--|--|--|--|--|
| PART NO DESCRIPTION MAX PIPE SIZE OPENIN THRU BALL |  |     |    |      |   |  |  |  |  |  |
| MLEV100  | 1" MANIFOLD ELECTRIC VALVE                                   | 300 | 1" | 1/2" | 1 |  |  |  |  |  |
| MLEV100A   | 1" MANIFOLD ELECTRIC VALVE WITH HIGHER TORQUE MOTOR. SS BALL | 300 | 1" | 1/2" | 1 |  |  |  |  |  |



#### 1"-3" ON/OFF ELECTRIC MANIFOLD VALVES OPENING THRU BALL MAX PART NO DESCRIPTION QTY PSI SIZE MEV100CF 1" FULL PORT MANIFOLD ELECTRIC VALVE 300 1" 1 2" STANDARD PORT MANIFOLD ELECTRIC VALVE MEV200CF 300 2" 11/2" 1 MEV220CF 2" FULL PORT MANIFOLD ELECTRIC VALVE 225 2" 2" 1 3" FULL PORT MANIFOLD ELECTRIC VALVE MEV300CF 200 3" 3"

| 1"-                 | 1"-2" REGULATING ELECTRIC MANIFOLD VALVES |     |              |                         |     |  |  |  |  |  |  |
|---------------------|---|-----|--------------|-------------------------|-----|--|--|--|--|--|--|
| PART NO DESCRIPTION |   |     | PIPE<br>SIZE | OPENING<br>THRU<br>BALL | QTY |  |  |  |  |  |  |
| MEVR100CF           | 1" FULL PORT MANIFOLD ELECTRIC VALVE      | 300 | 1"           | 1"                      | 1   |  |  |  |  |  |  |
| MEVR200CF           | 2" STANDARD PORT MANIFOLD ELECTRIC VALVE  | 300 | 2"           | 1½"                     | 1   |  |  |  |  |  |  |
| MEVR220CF           | 2" FULL PORT MANIFOLD ELECTRIC VALVE      | 225 | 2"           | 2"                      | 1   |  |  |  |  |  |  |

| REPLACEMENT PARTS |            |  |     |  |  |  |  |  |  |
|-------------------|------------|--|-----|--|--|--|--|--|--|
| ITEM              | PART NO    | DESCRIPTION                              | QTY |  |  |  |  |  |  |
| 1                 | MEV100XR1  | 1" FULL PORT ELECTRIC VALVE SUB ASSEMBLY | 1   |  |  |  |  |  |  |
| 1                 | MEV200XR1  | 2" ELECTRIC VALVE SUB ASSEMBLY           | 1   |  |  |  |  |  |  |
| 1                 | MEV220XR1  | 2" FULL PORT ELECTRIC VALVE SUB ASSEMBLY | 1   |  |  |  |  |  |  |
| 1                 | MEV300XR1A | 3" ELECTRIC MANIFOLD VALVE ONLY          | 1   |  |  |  |  |  |  |
| 2                 | MVE004     | ELECTRIC VALVE FLANGE GASKET             | 1   |  |  |  |  |  |  |
| 3                 | FC100      | 1" FLANGE CLAMP                          | 1   |  |  |  |  |  |  |
| 4                 | EV3300     | 3/4 SECOND 3 WIRE MOTOR ASSEMBLY FOR1"   | 1   |  |  |  |  |  |  |
| 4                 | EV4300     | 11/4 SECOND 3 WIRE MOTOR ASSEMBLY FOR 2" | 1   |  |  |  |  |  |  |
| 4                 | VE5630     | 2 SECOND 12 VDC MOTOR                    | 1   |  |  |  |  |  |  |
| 4                 | EVR3300    | REGULATING 4 WIRE, 4 SECOND FOR 1"       | 1   |  |  |  |  |  |  |
| 4                 | EVR4300    | REGULATING 4 WIRE, 4 SECOND FOR 2"       | 1   |  |  |  |  |  |  |
| KIT               | EV10210    | REPAIR KIT FOR 1"                        | 1   |  |  |  |  |  |  |
| KIT               | EV20210    | REPAIR KIT FOR 2                         | 1   |  |  |  |  |  |  |
| KIT               | EV25210    | REPAIR KIT FOR 2" FULL PORT              | 1   |  |  |  |  |  |  |
| KIT               | MV225200   | REPAIR KIT FOR 2" FULL PORT 5 WAY        | 1   |  |  |  |  |  |  |
| KIT               | EV35210    | REPAIR KIT FOR 3" FULL PORT              | 1   |  |  |  |  |  |  |

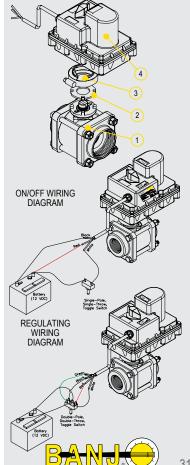
Note: 2 wire regulating and other response times available. Contact our sales team for part number and availability of valves.

### 1"- 3" ELECTRIC MANIFOLD **VALVES**

#### **FEATURES**

- 316 stainless steel ball & stem
- Stainless steel hardware
- Fiberglass reinforced polypropylene
- PTFE seats
- **EPDM O-rings**
- 12-volt DC operated
- 24-volt available in most models
- Easily repairable
- Open/closed indicator
- ON/OFF has 3/4 second response (1")
- ON/OFF has 11/4 second response (2")
- ON/OFF has 3 second response (3")
- Regulating has 4 second response

- Stem with Seals
- Gasket
- Body O-Ring
- **Ball Seals**



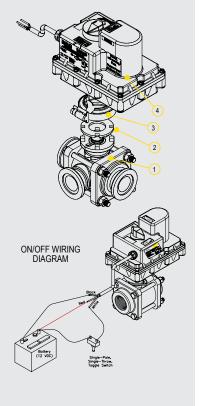
### 1"- 2" ELECTRIC MANIFOLD 3 WAY SIDE & BOTTOM LOAD VALVES

#### **FEATURES**

- 316 stainless steel ball & stem
- Stainless steel hardware
- Fiberglass reinforced polypropylene
- PTFE seats
- 12-volt DC operated
- Open/closed indicator
- ¾ second response for 1" On/Off
- 11/4 second response for 2" On/Off
- Directional flow right or left and cannot be turned off
- Regulating valve not available in this configuration (Bottom Load)

#### **REPAIR KIT INCLUDES:**

- Stem with Seals
- Gasket
- Body O-Ring
- Ball Seals





## 1"-2" ON/OFF SIDE LOAD ELECTRIC MANIFOLD VALVES

| PART NO    | DESCRIPTION  | MAX<br>PSI | PIPE<br>SIZE | OPENING<br>THRU<br>BALL | QTY |
|------------|--|------------|--------------|-------------------------|-----|
| MEV100SLCF | 1" FULL PORT MANIFOLD SIDE LOAD ELECTRIC VALVE     | 300        | 1"           | 1"                      | 1   |
| MEV200SLCF | 2" STANDARD PORT MANIFOLD SIDE LOAD ELECTRIC VALVE | 300        | 2"           | 11/2"                   | 1   |
| MEV220SLCF | 2" FULL PORT MANIFOLD SIDE LOAD ELECTRIC VALVE     | 150        | 2"           | 2"                      | 1   |

### 1"-2" ON/OFF BOTTOM LOAD ELECTRIC MANIFOLD VALVES

| PART NO    | DESCRIPTION  | MAX<br>PSI | PIPE<br>SIZE | OPENING<br>THRU<br>BALL | QTY |
|------------|--|------------|--------------|-------------------------|-----|
| MEV100BLCF | 1" FULL PORT MANIFOLD BOTTOM LOAD ELECTRIC VALVE     | 300        | 1"           | 1"                      | 1   |
| MEV200BLCF | 2" STANDARD PORT MANIFOLD BOTTOM LOAD ELECTRIC VALVE | 300        | 2"           | 1½"                     | 1   |
| MEV220BLCF | 2" FULL PORT MANIFOLD BOTTOM LOAD ELECTRIC VALVE     | 150        | 2"           | 2"                      | 1   |

|      | REPLACEMENT PARTS |   |     |  |  |  |  |  |  |
|------|-------------------|---|-----|--|--|--|--|--|--|
| ITEM | PART NO           | DESCRIPTION                                       | QTY |  |  |  |  |  |  |
| 1    | MEV100SLXR1       | 1" FULL PORT MANIFOLD ELECTRIC VALVE SUB ASSEMBLY | 1   |  |  |  |  |  |  |
| 1    | MEV200SLXR1       | 2" MANIFOLD ELECTRIC VALVE SUB ASSEMBLY           | 1   |  |  |  |  |  |  |
| 1    | MEV220SLXR1       | 2" FULL PORT MANIFOLD ELECTRIC VALVE SUB ASSEMBLY | 1   |  |  |  |  |  |  |
| 1    | MEV100BLXR1       | 1" FULL PORT MANIFOLD ELECTRIC VALVE SUB ASSEMBLY | 1   |  |  |  |  |  |  |
| 1    | MEV200BLXR1       | 2" MANIFOLD ELECTRIC VALVE SUB ASSEMBLY           | 1   |  |  |  |  |  |  |
| 1    | MEV220BLXR1       | 2" FULL PORT MANIFOLD ELECTRIC VALVE SUB ASSEMBLY | 1   |  |  |  |  |  |  |
| 2    | MVE004            | ELECTRIC VALVE FLANGE GASKET                      | 1   |  |  |  |  |  |  |
| 3    | FC100             | 1" FLANGE CLAMP                                   | 1   |  |  |  |  |  |  |
| 4    | EV3300            | 3/4 SECOND 3 WIRE MOTOR ASSEMBLY                  | 1   |  |  |  |  |  |  |
| 4    | EV4300            | 11/4 SECOND 3 WIRE MOTOR ASSEMBLY                 | 1   |  |  |  |  |  |  |
| KIT  | EV10210           | REPAIR KIT (1")                                   | 1   |  |  |  |  |  |  |
| KIT  | EV20210           | REPAIR KIT (2")                                   | 1   |  |  |  |  |  |  |
| KIT  | EV25210           | REPAIR KIT (2" FULL PORT)                         | 1   |  |  |  |  |  |  |



| MANIFOLD 4 & 6 BOLTED VALVES |                                 |            |              |                         |        |                       |               |  |  |  |  |  |
|------------------------------|---------------------------------|------------|--------------|-------------------------|--------|-----------------------|---------------|--|--|--|--|--|
| PART NO                      | DESCRIPTION                     | MAX<br>PSI | PIPE<br>SIZE | OPENING<br>THRU<br>BALL | QTY    | REPLACEMENT<br>HANDLE | REPAIR<br>KIT |  |  |  |  |  |
| MV100CF                      | 1" FULL PORT MANIFOLD VALVE     | 300        | 1"           | 1"                      | 24/box | V10153A               | V10200        |  |  |  |  |  |
| MV200CF                      | 2" STANDARD PORT MANIFOLD VALVE | 225        | 2"           | 11/2"                   | 12/box | V20153                | V20200        |  |  |  |  |  |
| MV220CF                      | 2" FULL PORT MANIFOLD VALVE     | 300        | 2"           | 2"                      | 8/box  | V25153                | V25200        |  |  |  |  |  |
| MV300                        | 3" STANDARD PORT MANIFOLD VALVE | 150        | 3"           | 21/2"                   | 6/box  | V25153                | V30200        |  |  |  |  |  |
| MV300CF                      | 3" FULL PORT MANIFOLD VALVE     | 200        | 3"           | 3"                      | 6/box  | V25153                | V35200        |  |  |  |  |  |



| MANIFOLD BOLTED 5 WAY VALVE |                                   |            |              |                         |     |               |  |  |  |  |
|-----------------------------|-----------------------------------|------------|--------------|-------------------------|-----|---------------|--|--|--|--|
| PART NO                     | DESCRIPTION                       | MAX<br>PSI | PIPE<br>SIZE | OPENING<br>THRU<br>BALL | QTY | REPAIR<br>KIT |  |  |  |  |
| MV225CF                     | 2" FULL PORT MANIFOLD 5 WAY VALVE | 100        | 2"           | 2"                      | 1   | MV225200      |  |  |  |  |

#### 1" - 3" 4 & 6 BOLTED VALVES

#### **FEATURES**

- FKM seals.
- Precision molded polypropylene is reinforced with fiberglass for additional strength
- Self-aligning ball moves freely against the PTFE seats for smooth operation. The valve opens and closes with very little pressure on the handle
- Ball is diamond turned, after molding, to make it spherically perfect, which provides precise contact between ball and seats.
- PTFE self-lubricating stem bushings and seats cannot stick or bind
- Stainless steel bolts

#### **REPAIR KIT INCLUDES:**

- Ball
- Body gasket
- Thrust washer
- Ball seats
- Upper stem bushing
- Stem o-ring

### 2" BOLTED 5 WAY VALVE

- FKM seals
- Precision molded polypropylene is reinforced with fiberglass for additional strength
- Self-aligning ball moves freely against the PTFE seats for smooth operation. The valve opens and closes with very little pressure on the handle
- Ball is diamond turned, after molding, to make it spherically perfect, which provides precise contact between ball and seats.
- PTFE self-lubricating stem bushings and seats cannot stick or bind
- Stainless steel bolts



#### 2" STUBBY VALVES

#### **FEATURES**

- Precision molded polypropylene is reinforced with fiberglass for additional strength.
- Self-aligning ball moves freely against the PTFE seats for smooth operation. The valve opens and closes with very little pressure on the handle.
- Ball is diamond turned, after molding, to make it spherically perfect, which provides precise contact between ball and seats.
- PTFE self-lubricating stem bushings and seats cannot stick or bind.
- Stainless steel bolts.
- Standard size has TFE seals and Full Port size has FKM seals

- Ball
- Body gasket
- Thrust washer
- Ball seats
- Upper stem bushing
- Stem o-ring









MVS220FP







MVS220CF

MVSMT220FP

| 2" MANIFOLD STUBBY VALVES |   |            |              |                         |        |                       |               |  |  |  |  |  |
|---------------------------|---|------------|--------------|-------------------------|--------|-----------------------|---------------|--|--|--|--|--|
| PART NO                   | DESCRIPTION   | MAX<br>PSI | PIPE<br>SIZE | OPENING<br>THRU<br>BALL | QTY    | REPLACEMENT<br>HANDLE | REPAIR<br>KIT |  |  |  |  |  |
| VSMT200CF                 | 2" STANDARD PORT MANIFOLD VALVE FLANGE X MALE NPT W/TFE SEALS     | 150        | 2"           | 1½"                     | 24/box | VS20152SH             | VS20200       |  |  |  |  |  |
| VSF200CF                  | 2" STANDARD PORT MANIFOLD VALVE FLANGE X MALE ADAPTER W/TFE SEALS | 100        | 2"           | 1½"                     | 24/box | VS20152SH             | VS20200       |  |  |  |  |  |
| MVS220FP                  | 2" FULL PORT MANIFOLD VALVE<br>FLANGE X FEMALE NPT W/FKM SEALS    | 300        | 2"           | 2"                      | 18/box | VS25153               | VS25200       |  |  |  |  |  |
| MVSF220FP                 | 2" FULL PORT MANIFOLD VALVE<br>FLANGE X MALE ADAPTER W/FKM SEALS  | 150        | 2"           | 2"                      | 18/box | VS25153               | VS25200       |  |  |  |  |  |
| MVS220CF                  | 2" FULL PORT MANIFOLD VALVE<br>FLANGE X FLANGE W/FKM SEALS        | 150        | 2"           | 2"                      | 18/box | VS25153               | VS25200       |  |  |  |  |  |
| MVSMT220FP                | 2" FULL PORT MANIFOLD VALVE<br>FLANGE X MALE NPT W/FKM SEALS      | 225        | 2"           | 2"                      | 18/box | VS25153               | VS25200       |  |  |  |  |  |

# MVS220HSFP MVSF220HSFP MVSMT220HSFP

#### 2" FULL PORT MANIFOLD STUBBY VALVES WITH SS OPENING THRU REPLACEMENT HANDLE REPAIR PART NO DESCRIPTION QTY SIZE BALL 2" FULL PORT MANIFOLD STUBBY VALVE FLANGE X FLANGE WITH SS BALL, STEM & HANDLE MVS220HSFP 200 2" VS25153SS VSSH25200 2" FULL PORT MANIFOLD STUBBY VALVE FLANGE X MALE ADAPTER WITH SS BALL, STEM & HANDLE MVSF220HSFP 2" 150 1 VS25153SS VSSH25200 2" FULL PORT MANIFOLD STUBBY VALVE MALE NPT X FLANGE WITH SS BALL, STEM & HANDLE MVSMT220HSFP 200 2" 2" VS25153SS VSSH25200 1

| 2" FULL PORT MANIFOLD STUBBY STAINLESS STEEL VALVE |   |            |              |                      |     |                       |               |  |  |
|--|---|------------|--------------|----------------------|-----|-----------------------|---------------|--|--|
| PART NO  | DESCRIPTION   | MAX<br>PSI | PIPE<br>SIZE | OPENING<br>THRU BALL | QTY | REPLACEMENT<br>HANDLE | REPAIR<br>KIT |  |  |
| VSFMT220SS   | 2" FULL PORT MANIFOLD STUBBY SS VALVE<br>MALE THREAD X MALE ADAPTER | 150        | 2"           | 2"                   | 1   | VSS20153              | VSS25200      |  |  |

VSFMT220SS

# 2" FP STUBBY VALVES WITH STAINLESS STEEL

#### **FEATURES**

- Precision molded polypropylene is reinforced with fiberglass for additional strength.
- Self-aligning ball moves freely against the PTFE seats for smooth operation. The valve opens and closes with very little pressure on the handle.
- Stainless steel bolts
- Compact design
- FKM seals

#### **REPAIR KIT INCLUDES:**

- Ball
- Body gasket
- Thrust washer
- Ball seats
- Upper stem bushing
- Stem o-ring

#### 2" FP STUBBY STAINLESS STEEL VALVE

- PTFE seals, no elastomers
- Self-aligning ball moves freely against the PTFE seats for smooth operation. The valve opens and closes with very little pressure on the handle
- PTFE self-lubricating stem bushings and seats cannot stick or bind



#### **3" STUBBY VALVES**

#### **FEATURES**

- FKM seals.
- Precision molded polypropylene is reinforced with fiberglass for additional strength.
- Self-aligning ball moves freely against the PTFE seats for smooth operation. The valve opens and closes with very little pressure on the handle.
- Ball is diamond turned, after molding, to make it spherically perfect, which provides precise contact between ball and seats.
- PTFE self-lubricating stem bushings and seats cannot stick or bind.
- Stainless steel bolts.

- Ball
- Body gasket
- Thrust washer
- Ball seats
- Upper stem bushing
- Stem o-ring



| 3" MANIFOLD STUBBY VALVES |  |            |              |                      |       |                       |               |  |  |  |  |
|---------------------------|--|------------|--------------|----------------------|-------|-----------------------|---------------|--|--|--|--|
| PART NO                   | DESCRIPTION  | MAX<br>PSI | PIPE<br>SIZE | OPENING<br>THRU BALL | QTY   | REPLACEMENT<br>HANDLE | REPAIR<br>KIT |  |  |  |  |
| MVSF300                   | 3" STANDARD PORT MANIFOLD VALVE<br>FLANGE X MALE ADAPTER | 100        | 3"           | 21/2"                | 6/box | V25153                | VS30200       |  |  |  |  |
| MVSF300FP                 | 3" FULL PORT MANIFOLD VALVE<br>FLANGE X MALE ADAPTER     | 100        | 3"           | 3"                   | 6/box | V25153                | VS35200       |  |  |  |  |
| MVSMT300                  | 3" STANDARD PORT MANIFOLD VALVE<br>FLANGE X MALE NPT     | 225        | 3"           | 21/2"                | 8/box | V25153                | VS30200       |  |  |  |  |
| MVS300CF                  | 3" STANDARD PORT MANIFOLD VALVE<br>FLANGE X FLANGE       | 200        | 3"           | 21/2"                | 6/box | V25153                | VS30200       |  |  |  |  |
| MVS300CFFP                | 3" FULL PORT MANIFOLD VALVE<br>FLANGE X FLANGE           | 150        | 3"           | 3"                   | 6/box | V25153                | VS35200       |  |  |  |  |

# MVS300HSFP MVSF300HSFP



#### 3" FULL PORT MANIFOLD STUBBY VALVES WITH SS MAX PSI PIPE SIZE OPENING THRU BALL REPLACEMENT HANDLE REPAIR PART NO DESCRIPTION QTY KIT 3" FULL PORT MANIFOLD STUBBY VALVE FLANGE X FLANGE WITH SS BALL, STEM & HANDLE MVS300HSFP 100 3" 3" VS30153SS VSSH35200 1 3" FULL PORT MANIFOLD STUBBY VALVE FLANGE X MALE ADAPTER WITH SS BALL, STEM & HANDLE MVSF300HSFP 100 3" 3" VS30153SS VSSH35200 3" FULL PORT MANIFOLD STUBBY VALVE MALE NPT X FLANGE WITH SS BALL, STEM & HANDLE MVSMT300HSFP 200 3" 1 VS30153SS VSSH35200

# 3" FP STUBBY VALVES WITH STAINLESS STEEL

#### **FEATURES**

- Precision molded polypropylene is reinforced with fiberglass for additional strength.
- Self-aligning ball moves freely against the PTFE seats for smooth operation. The valve opens and closes with very little pressure on the handle.
- Ball is diamond turned, after molding, to make it spherically perfect, which provides precise contact between ball and seats.
- Stainless steel bolts
- Compact design
- FKM seals

- Ball
- Body gasket
- Thrust washer
- Ball seats
- Upper stem bushing
- Stem o-ring

# 3 WAY BOTTOM LOAD BALL VALVES

#### **FEATURES**

- Stainless steel bolts
- Precision molded in fiberglass reinforced polypropylene for additional strength
- Self-aligning ball moves freely against the PTFE seats for smooth operation
- Ball is diamond turned after molding to make it spherically perfect, which provides precise contact between ball and seats
- PTFE self-lubricating stem bushings and seats
- FKM body seals
- Directional flow, right or left.
   Valve can be turned off to stop flow

#### **REPAIR KIT INCLUDES:**

- Ball
- Body gasket
- Thrust washer
- Ball seats
- Upper stem bushing
- Stem o-ring

# MV100BL MV220BL MV220BL MV300BL MV300BL

|         | 3 WAY BOTTOM LOAD MANIFOLD VALVES      |            |              |                         |        |                |                       |               |  |  |
|---------|--|------------|--------------|-------------------------|--------|----------------|-----------------------|---------------|--|--|
| PART NO | DESCRIPTION                            | MAX<br>PSI | PIPE<br>SIZE | OPENING<br>THRU<br>BALL | QTY    | HANDLE<br>TYPE | REPLACEMENT<br>HANDLE | REPAIR<br>KIT |  |  |
| MV100BL | 1" 3-WAY BOTTOM LOAD MANIFOLD VALVE    | 300        | 1"           | 1"                      | 18/box | Т              | V10353TB              | MV10300SL     |  |  |
| MV200BL | 2" 3-WAY BOTTOM LOAD MANIFOLD VALVE    | 225        | 2"           | 11/2"                   | 12/box | Т              | V20353TB              | MV10300SL     |  |  |
| MV220BL | 2" FP 3-WAY BOTTOM LOAD MANIFOLD VALVE | 150        | 2"           | 2"                      | 8/box  | STRAIGHT       | V25353B               | V25200BL      |  |  |
| MV300BL | 3" FP 3-WAY BOTTOM LOAD MANIFOLD VALVE | 150        | 3"           | 3"                      | 4/box  | STRAIGHT       | V25353B               | V35200BL      |  |  |

# 3 WAY SIDE LOAD BALL VALVES

- Stainless steel bolts
- Precision molded in fiberglass reinforced polypropylene for additional strength
- Self-aligning ball moves freely against the PTFE seats for smooth operation
- Ball is diamond turned after molding to make it spherically perfect, which provides precise contact between ball and seats
- PTFE self-lubricating stem bushings and seats
- FKM body seals
- Directional flow, right or left.
   Valve cannot be turned off to stop flow



|         | 3 WAY SIDE LOAD MANIFOLD VALVES             |            |              |                         |        |                |                       |               |  |  |
|---------|---|------------|--------------|-------------------------|--------|----------------|-----------------------|---------------|--|--|
| PART NO | DESCRIPTION                                 | MAX<br>PSI | PIPE<br>SIZE | OPENING<br>THRU<br>BALL | QTY    | HANDLE<br>TYPE | REPLACEMENT<br>HANDLE | REPAIR<br>KIT |  |  |
| MV100SL | 1" 3-WAY SIDE LOAD MANIFOLD VALVE           | 300        | 1"           | 1"                      | 18/box | Т              | V20353TS              | MV10300SL     |  |  |
| MV200SL | 2" 3-WAY SIDE LOAD MANIFOLD VALVE           | 225        | 2"           | 1½"                     | 10/box | STRAIGHT       | V20153SH              | MV10300SL     |  |  |
| MV220SL | 2" 3-WAY SIDE LOAD FULL PORT MANIFOLD VALVE | 100        | 2"           | 2"                      | 8/box  | STRAIGHT       | V25153SH              | V25200BL      |  |  |



#### MANIFOLD PRESSURE SPIKE VALVES CRACKING QTY PART NO DESCRIPTION PRESSURE MPRV100-050 1" X $\frac{1}{2}$ " MANIFOLD PRESSURE SPIKE VALVE 50 MPRV100-075 1" X 3/4" MANIFOLD PRESSURE SPIKE VALVE 75 1 1 MPRV100-100 1" X 1" MANIFOLD PRESSURE SPIKE VALVE 100 MPRV100-125 1" X 11/4" MANIFOLD PRESSURE SPIKE VALVE 125 1 MPRV100-150 1" X 11/2" MANIFOLD PRESSURE SPIKE VALVE 150 1

|          | MANIFOLD DRY DISCONNECTS                   |            |              |                         |     |                       |               |  |  |
|----------|--|------------|--------------|-------------------------|-----|-----------------------|---------------|--|--|
| PART NO  | DESCRIPTION                                | MAX<br>PSI | PIPE<br>SIZE | OPENING<br>THRU<br>BALL | QTY | REPLACEMENT<br>HANDLE | REPAIR<br>KIT |  |  |
| DM200ACF | 2" MALE MANIFOLD DRY-MATE WITH FKM SEALS   | 100        | 2"           | 1½"                     | 1   | DM20153M              | DM20200A      |  |  |
| DM200DCF | 2" FEMALE MANIFOLD DRY-MATE WITH FKM SEALS | 100        | 2"           | 1½"                     | 1   | DM20153F              | DM20200D      |  |  |
| DM300ACF | 3" MALE MANIFOLD DRY-MATE WITH FKM SEALS   | 150        | 3"           | 3"                      | 1   | DM35153M              | DM35200       |  |  |
| DM300DCF | 3" FEMALE MANIFOLD DRY-MATE WITH FKM SEALS | 150        | 3"           | 3"                      | 1   | DM35153F              | DM35200       |  |  |

Note: Male and female sold separately

#### PRESSURE SPIKE VALVES

#### **FEATURES**

- FKM seals.
- Precision molded polypropylene is reinforced with fiberglass for additional strength.
- 360° orientation
- Preset pressure spring

# DRY-MATE™ DRY-DISCONNECTS

#### **FEATURES**

- Easy to use
- Minimal fluid spillage
- Reduces risk of exposure
- Wide range of chemical resistance
- When properly installed and operated, the assembly will not accidentally separate while fluid is flowing; preventing costly mishaps.
- Spillage data:2"=4ml, 3"=15ml

- Face seal
- Ball
- Seats
- Body gasket
- Thrust bearings
- Stem bushings



#### **BOOM NOZZLE PIPE ADAPTER**

#### **FEATURES**

- Eliminates having to thread pipe
- Quick and easy assembly
- No welding necessary
- 360° orientation







M100PA

M100PAC

M100PAT

| BOOM NOZZLE PIPE ADAPTER |                             |         |     |  |  |  |
|--------------------------|-----------------------------|---------|-----|--|--|--|
| PART NO                  | DESCRIPTION                 | MAX PSI | QTY |  |  |  |
| M100PA                   | 1" FLANGED PIPE ADAPTER     | 300     | 1   |  |  |  |
| M100PAC                  | 1" FLANGED PIPE ADAPTER CAP | 300     | 1   |  |  |  |
| M100PAT                  | 1" FLANGED PIPE ADAPTER TEE | 300     | 1   |  |  |  |

#### **INDUCTORS**

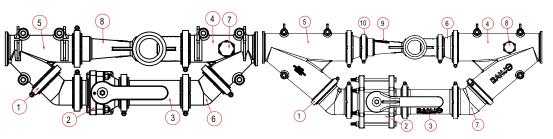
- Threaded or manifold ends
- Glass reinforced polypropylene
- Designed for use with a volume pump. Typical volumes (80-240 US GPM) and pressures (26-52 PSI) should be used to operate the inductor.



|         | MANIFOLD INDUCTORS                 |                     |                |                                |     |  |  |
|---------|------------------------------------|---------------------|----------------|--------------------------------|-----|--|--|
| PART NO | DESCRIPTION                        | PRESSURE<br>AT PUMP | VOLUME<br>DRAW | OPENING<br>SIZE                | QTY |  |  |
| HV200   | 2" MPT INDUCTOR                    | 225                 | 49 GPM         | <sup>7</sup> / <sub>16</sub> " | 1   |  |  |
| MHV200  | 2" MANIFOLD INDUCTOR WITH 1½" PORT | 300                 | 37 GPM         | <sup>5</sup> / <sub>16</sub> " | 1   |  |  |
| MHV220A | 2" FULL PORT MANIFOLD INDUCTOR     | 225                 | 49 GPM         | <sup>9</sup> / <sub>16</sub> " | 1   |  |  |



|         | MANIFOLD INDUCTOR SYSTEMS                                       |            |     |  |  |  |  |
|---------|---|------------|-----|--|--|--|--|
| PART NO | DESCRIPTION   | MAX<br>PSI | QTY |  |  |  |  |
| MIS220  | 2" FULL PORT MANIFOLD INDUCTOR SYSTEM FLANGE X FLANGE ASSEMBLED | 225        | 1   |  |  |  |  |
| MIS300  | 3" FULL PORT MANIFOLD INDUCTOR SYSTEM FLANGE X FLANGE ASSEMBLED | 150        | 1   |  |  |  |  |



|      | MANIFOLD INDUCTORS |  |        |  |  |  |
|------|--------------------|--|--------|--|--|--|
| ITEM | PART NO            | DESCRIPTION                                    | QTY    |  |  |  |
| 1    | FC220              | 220 SERIES WORM SCREW CLAMP                    | 10/BAG |  |  |  |
| 2    | MVS220CF           | 2" FP FLANGE X 2" FP FLANGE                    | 1      |  |  |  |
| 3    | M220CPG6           | 2" X 2" FULL PORT FLANGE X 6"                  | 1      |  |  |  |
| 4    | M220YG45           | 2" FULL PORT 45° Y FLANGE W/ ¾"<br>GAUGE PORT* | 1      |  |  |  |
| 5    | M220Y45            | 2" FULL PORT 45° Y FLANGE                      | 1      |  |  |  |
| 6    | M220CPG45          | 2" FULL PORT 45° COUPLING                      | 2      |  |  |  |
| 7    | PLUG075            | 3/4" PIPE PLUG                                 | 1      |  |  |  |
| 8    | MHV220A            | 2" FULL PORT POLY VENTURI                      | 1      |  |  |  |
| N/S  | M221G              | 2" FULL PORT EPDM MANIFOLD GASKET<br>WITH RIB  | 7      |  |  |  |

\*Note: Gauge not included.

|      | MANIFOLD INDUCTORS |   |     |  |  |  |
|------|--------------------|---|-----|--|--|--|
| ITEM | PART NO            | DESCRIPTION                                   | QTY |  |  |  |
| 1    | FC300              | 300 SERIES WORM SCREW CLAMP                   | 7   |  |  |  |
| 2    | MV301CF            | 3" FP FLANGE X 3" FP FLANGE                   | 1   |  |  |  |
| 3    | M300CPG7           | 3" X 3" FULL PORT FLANGE X 7"                 | 1   |  |  |  |
| 4    | M300YG45           | 3" FULL PORT 45° Y FLANGE W/ ¾" GAUGE PORT*   | 1   |  |  |  |
| 5    | M300Y45            | 3" FULL PORT 45° Y FLANGE                     | 1   |  |  |  |
| 6    | M300220CPG         | 3" X 2" FULL PORT REDUCER FLANGE              | 1   |  |  |  |
| 7    | M300CPG45          | 3" FULL PORT 45° COUPLING                     | 2   |  |  |  |
| 8    | PLUG075            | ¾" PIPE PLUG                                  | 1   |  |  |  |
| 9    | MHV220A            | 2" FULL PORT POLY VENTURI                     | 1   |  |  |  |
| 10   | FC220              | 220 SERIES WORM SCREW CLAMP                   | 3   |  |  |  |
| N/S  | M221G              | 2" FULL PORT EPDM MANIFOLD GASKET<br>WITH RIB | 2   |  |  |  |
| N/S  | M301G              | 3" EPDM MANIFOLD GASKET WITH RIB              | 7   |  |  |  |

#### **INDUCTOR SYSTEMS**

- Installed after pump; suction completely empties inductor tank
- Keeps pump free of chemicals
- Easy assembly/installation with manifold connections found on pages 43-49.
- Choose your connections and valve
- Tank for illustration purposes only, not included



#### **FLOW METERS**

- Displays overall total volume and batch total volume
- Flow rate allows for Gallons or Liters per minute
- The display reads 6 digits for rate, 8 digits for total and 1 decimal place reading in tenths
- Magnetic style meter with stainless steel electrodes
- Self calibrating meter
- Measures water and most conductive liquids
- Easy to change six (6) AA batteries
- No moving parts to fail during use
- Glass-reinforced polypropylene
- Temperature range from 0°F to 150°F
- ±1% of reading (between 10% and 100% of maximum flow)
- ±3% of reading (between cutoff and 10% of maximum flow)
- There are 3 photoeyes located on the face of the flow meter. These are not push buttons; to activate you must hold your finger over the photoeye for 2-4 seconds
- Flow meters will not read petroleum based liquids
- It is recommended to have at least 10X the diameter of straight pipe before and after the flow meter



|         | FLOW METERS                        |            |         |     |
|---------|------------------------------------|------------|---------|-----|
| PART NO | DESCRIPTION                        | MAX<br>PSI | GPM     | QTY |
| FM100   | 1" FULL PORT FEMALE NPT FLOW METER | 200        | 110 GPM | 1   |
| MFM100  | 1" FULL PORT MANIFOLD FLOW METER   | 200        | 110 GPM | 1   |
| MFM220  | 2" FULL PORT MANIFOLD FLOW METER   | 200        | 300 GPM | 1   |
| MFM300  | 3" FULL PORT FLOW METER            | 200        | 670 GPM | 1   |



|                 | SWEEPS   |            |     |
|-----------------|--|------------|-----|
| PART NO         | DESCRIPTION  | MAX<br>PSI | QTY |
| M100125BRBSWP90 | 1" FLANGE X 11/4" HOSE SHANK SWEEP                           | 300        | 1   |
| M100BRBSWP90    | 1" FLANGE X HOSE SHANK SWEEP                                 | 300        | 1   |
| M100BRBSWPG90   | 1" FULL PORT FLANGE X 1" HOSE SHANK SWEEP W/ 1/4" GAUGE PORT | 300        | 1   |
| M100SWP90       | 1" FLANGE X FLANGE SWEEP                                     | 300        | 1   |
| M100SWPG90      | 1" FLANGE X FLANGE SWEEP W/ 1/4" GAUGE PORT                  | 300        | 1   |
| M200SWP90       | 2" FLANGE X FLANGE SWEEP                                     | 300        | 1   |
| M220200SWP90    | 2" FULL PORT FLANGE X 2" FLANGE SWEEP                        | 300        | 1   |
| M220ASWP90      | 2" FULL PORT FLANGE X MALE ADAPTER SWEEP                     | 200        | 1   |
| M220BRBSWP90    | 2" FULL PORT FLANGE X HOSE SHANK SWEEP                       | 300        | 1   |
| M220MPTSWP90    | 2" FULL PORT FLANGE X MALE NPT THREAD SWEEP                  | 300        | 1   |
| M220SWP90       | 2" FULL PORT FLANGE X FLANGE SWEEP                           | 300        | 1   |
| M220SWPG90      | 2" FULL PORT FLANGE X FLANGE SWEEP W/ ¼" GAUGE PORT          | 300        | 1   |
| M300ASWP90      | 3" FLANGE X MALE ADAPTER SWEEP                               | 100        | 1   |
| M300BRBSWP90    | 3" FLANGE X HOSE SHANK SWEEP                                 | 225        | 1   |
| M300MPTSWP90    | 3" FLANGE X MALE NPT THREAD SWEEP                            | 200        | 1   |
| M300SWP90       | 3" FLANGE X FLANGE SWEEP                                     | 200        | 1   |
| M300SWPG90      | 3" FLANGE X FLANGE SWEEP W/ 1/4" GAUGE PORT                  | 200        | 1   |
| M300220SWP90    | 3" FULL PORT FLANGE X 2" FULL PORT FLANGE SWEEP              | 300        | 1   |

#### **SWEEPS**

- Direct replacement for standard 90° flanged couplings
- Positive seals
- Quick and easy assembly
- Easy on/off hose connections
- 360° orientation
- Improved flow for max GPM

#### **FITTINGS**

- Quick and easy assembly
- Positive seals
- Easy on/off hose connections
- 360° orientation
- Where noted, parts must be ordered in bag quantities.















| SWIVEL  |                                     |     |     |  |  |  |
|---------|-------------------------------------|-----|-----|--|--|--|
| PART NO | PART NO DESCRIPTION                 |     | QTY |  |  |  |
| MSW220  | 2" FULL PORT MANIFOLD FLANGE SWIVEL | 200 | 1   |  |  |  |

|         | CHECK VALVES  |                         |            |     |  |  |  |
|---------|---|-------------------------|------------|-----|--|--|--|
| PART NO | DESCRIPTION   | OPENING<br>PRESSURE PSI | MAX<br>PSI | QTY |  |  |  |
| MCV100  | 1" FLANGED CHECK VALVE                                  | 1                       | 300        | 1   |  |  |  |
| MCV200  | 2" FLANGED CHECK VALVE                                  | 0.5                     | 300        | 1   |  |  |  |
| MCV221  | 2" FULL PORT FLANGED CHECK VALVE                        | >0.5                    | 200        | 1   |  |  |  |
| MCV300  | 3" FLANGED CHECK VALVE W/5 LB SPRING                    | 1.5                     | 200        | 1   |  |  |  |
| MCV301  | 3" FLANGED CHECK VALVE W/ $^{\prime\prime}_2$ LB SPRING | >0.5                    | 200        | 1   |  |  |  |

| PVC GLUE SOCKET |   |            |     |
|-----------------|---|------------|-----|
| PART NO         | DESCRIPTION   | MAX<br>PSI | QTY |
| M101GSA         | 1" FLANGE X 1" PVC GLUE SOCKET FITTING              | 300        | 1   |
| M221GSA         | 2" FULL PORT FLANGE X 2" PVC GLUE<br>SOCKET FITTING | 300        | 1   |
| M301GSA         | 3" FULL PORT FLANGE X 3" PVC GLUE<br>SOCKET FITTING | 300        | 1   |

| 316 SS SOCKET WELD |   |            |     |
|--------------------|---|------------|-----|
| PART NO            | DESCRIPTION   | MAX<br>PSI | QTY |
| M100SWFSS          | 1" FLANGE X 1" SOCKET WELD FITTING                    | 300        | 1   |
| M104SWFSS          | 1" FLANGE X 1" SOCKET WELD FITTINGS X 4"              | 300        | 1   |
| M200SWFSS          | 2" FLANGE X 2" SOCKET WELD FITTING                    | 300        | 1   |
| M220SWFSS          | 2" FULL PORT FLANGE X 2" SOCKET WELD FITTING          | 300        | 1   |
| M220375SWFSS       | 2" FULL PORT FLANGE X 2" SOCKET WELD<br>FITTING X 3¾" | 300        | 1   |
| M300SWFSS          | 3" FLANGE X 3" SOCKET WELD FITTING                    | 300        | 1   |
| M300375SWFSS       | 3" FLANGE X 3" SOCKET WELD FITTING X 3¾"              | 300        | 1   |

|           | COUPLINGS   |            |        |
|-----------|---|------------|--------|
| PART NO   | DESCRIPTION   | MAX<br>PSI | QTY    |
| M100CPG   | 1" X 1" FLANGE X 21/4" LONG                                       | 300        | 10/BAG |
| M200CPG   | 2" X 2" FLANGE X 4½" LONG   | 300        | 10/BAG |
| M220CPG   | 2" X 2" FULL PORT FLANGE X 2 <sup>31</sup> / <sub>32</sub> " LONG | 300        | 10/BAG |
| M220CPG3G | 2" X 2" FULL PORT FLANGE X 3" LONG WITH 1/2" GAUGE PORT           | 225        | 1      |
| M220CPG6  | 2" X 2" FULL PORT FLANGE X 6" LONG                                | 300        | 1      |
| M300CPG   | 3" X 3" FULL PORT FLANGE X 4" LONG                                | 200        | 1      |
| M300CPG7  | 3" X 3" FULL PORT FLANGE X 7" LONG                                | 225        | 1      |
| M300CPG12 | 3" X 3" FULL PORT FLANGE X 12" LONG                               | 150        | 1      |

|           | 45° COUPLINGS                |            |        |
|-----------|------------------------------|------------|--------|
| PART NO   | DESCRIPTION                  | MAX<br>PSI | QTY    |
| M100CPG45 | 1" X 1" 45° FLANGE           | 300        | 10/BAG |
| M200CPG45 | 2" X 2" 45° FLANGE           | 300        | 10/BAG |
| M220CPG45 | 2" X 2" FULL PORT 45° FLANGE | 225        | 10/BAG |
| M300CPG45 | 3" X 3" FULL PORT 45° FLANGE | 225        | 1      |







| 45° Y FLANGED COUPLINGS |  |            |     |
|-------------------------|--|------------|-----|
| PART NO                 | DESCRIPTION                                | MAX<br>PSI | QTY |
| M200YG45                | 2" FULL PORT 45° Y FLANGE                  | 300        | 1   |
| M220Y45                 | 2" FULL PORT 45° Y FLANGE                  | 300        | 1   |
| M220YG45                | 2" FULL PORT 45° Y FLANGE W/ ¾" GAUGE PORT | 225        | 1   |
| M300Y45                 | 3" FULL PORT 45° Y FLANGE                  | 200        | 1   |
| M300YG45                | 3" FULL PORT 45° Y FLANGE W/ ¾" GAUGE PORT | 200        | 1   |



| 3" MANIFOLD WYE |  |            |     |
|-----------------|--|------------|-----|
| PART NO         | DESCRIPTION  | MAX<br>PSI | QTY |
| M300220WYCG     | M300 X M220 X M220 X M220 FULL PORT FLANGE<br>WYE W/ 1/4" GAUGE PORT | 300        | 1   |



|            | REDUCER COUPLINGS                |            |        |
|------------|----------------------------------|------------|--------|
| PART NO    | DESCRIPTION                      | MAX<br>PSI | QTY    |
| M200100CPG | 2" X 1" REDUCER FLANGE           | 300        | 10/BAG |
| M220100CPG | 2" FULL PORT X 1" REDUCER FLANGE | 225        | 10/BAG |
| M220200CPG | 2" FULL PORT X 2" REDUCER FLANGE | 225        | 10/BAG |
| M300200CPG | 3" X 2" REDUCER FLANGE           | 225        | 1      |
| M300220CPG | 3" X 2" FULL PORT REDUCER FLANGE | 225        | 1      |



|            | TEES                                      |            |        |
|------------|---|------------|--------|
| PART NO    | DESCRIPTION                               | MAX<br>PSI | QTY    |
| M100TEE    | 1" FLANGED TEE                            | 300        | 10/BAG |
| M101TEE    | 1" FLANGED TEE LONG                       | 300        | 10/BAG |
| M200100TEE | 2" X 1" FLANGED TEE                       | 300        | 1      |
| M200TEE    | 2" FLANGED TEE                            | 300        | 1      |
| M220100TEE | 2" FULL PORT FLANGED TEE X 1" FLANGED TEE | 225        | 1      |
| M220200TEE | 2" FULL PORT FLANGED TEE X 2" FLANGED TEE | 300        | 1      |
| M220TEE    | 2" FULL PORT FLANGED TEE                  | 225        | 1      |
| M300TEE    | 3" FLANGED TEE                            | 225        | 1      |



|         | U BOLTS                    |            |     |
|---------|----------------------------|------------|-----|
| PART NO | DESCRIPTION                | MAX<br>PSI | QTY |
| UB100   | 100 SERIES MOUNTING U BOLT | N/A        | 1   |
| UB202   | 2 SERIES MOUNTING U BOLT   | N/A        | 1   |
| UB220   | 220 SERIES MOUNTING U BOLT | N/A        | 1   |

#### **FITTINGS**

- Quick and easy assembly
- Positive seals
- Easy on/off hose connections
- 360° orientation
- Where noted, parts must be ordered in bag quantities



#### **FITTINGS**

- Quick and easy assembly
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- Where noted, parts must be ordered in bag quantities.



| SS BUTT WELD ADAPTER |   |            |     |
|----------------------|---|------------|-----|
| PART NO              | DESCRIPTION                                       | MAX<br>PSI | QTY |
| M220BWASS            | 2" FULL PORT STAINLESS STEEL<br>BUTT WELD ADAPTER | 300        | 1   |



| FEMALE NPT THREAD |  |            |        |
|-------------------|--|------------|--------|
| PART NO           | DESCRIPTION                            | MAX<br>PSI | QTY    |
| M100050FPT        | 1" FLANGE X ½" FEMALE THREAD           | 300        | 10/BAG |
| M100075FPT        | 1" FLANGE X ¾" FEMALE THREAD           | 300        | 10/BAG |
| M100FPT           | 1" FLANGE X 1" FEMALE THREAD           | 300        | 10/BAG |
| M200FPT           | 2" FLANGE X 2" FEMALE THREAD           | 300        | 10/BAG |
| M200150FPT        | 2" FLANGE X 1½" FEMALE THREAD          | 300        | 1      |
| M220FPT           | 2" FULL PORT FLANGE X 2" FEMALE THREAD | 300        | 10/BAG |
| M300FPT           | 3" FLANGE X 3" FEMALE THREAD           | 200        | 1      |



| MALE THREAD |                                      |            |        |
|-------------|--------------------------------------|------------|--------|
| PART NO     | DESCRIPTION                          | MAX<br>PSI | QTY    |
| M100075MPT  | 1" FLANGE X ¾" MALE THREAD           | 300        | 10/BAG |
| M100MPT     | 1" FLANGE X 1" MALE THREAD           | 300        | 10/BAG |
| M100125MPT  | 1" FLANGE X 11/4" MALE THREAD        | 300        | 10/BAG |
| M200125MPT  | 2" FLANGE X 11/4" MALE THREAD        | 300        | 10/BAG |
| M200150MPT  | 2" FLANGE X 1½" MALE THREAD          | 300        | 10/BAG |
| M200MPT     | 2" FLANGE X 2" MALE THREAD           | 300        | 10/BAG |
| M220MPT     | 2" FULL PORT FLANGE X 2" MALE THREAD | 300        | 10/BAG |
| M300MPT     | 3" FLANGE X 3" MALE THREAD           | 300        | 1      |



| 316 SS MALE THREAD |                                       |            |     |
|--------------------|---------------------------------------|------------|-----|
| PART NO            | DESCRIPTION                           | MAX<br>PSI | QTY |
| M100MPTSS          | 1" FLANGE X 1" MALE THREAD            | 300        | 1   |
| M200125MPTSS       | 2" FLANGE X 11/4" MALE THREAD         | 300        | 1   |
| M200150MPTSS       | 2" FLANGE X 1½" MALE THREAD           | 300        | 1   |
| M200MPTSS          | 2" FLANGE X 2" MALE THREAD            | 300        | 1   |
| M220150MPTSS       | 2" FULL PORT FLANGE X 1½" MALE THREAD | 300        | 1   |
| M220MPTSS          | 2" FULL PORT FLANGE X 2" MALE THREAD  | 300        | 1   |
| M300220MPTSS       | 3" FLANGE X 2" FULL PORT MALE THREAD  | 300        | 1   |
| M300MPTSS          | 3" FLANGE X 3" MALE THREAD            | 300        | 1   |













|            | PLUGS                                  |            |        |
|------------|--|------------|--------|
| PART NO    | DESCRIPTION                            | MAX<br>PSI | QTY    |
| M100PLG    | 1" FLANGE PLUG                         | 300        | 10/BAG |
| M200PLG    | 2" FLANGE PLUG                         | 300        | 10/BAG |
| M220PLG    | 2" FULL PORT FLANGE PLUG               | 300        | 10/BAG |
| M300PLG    | 3" FULL PORT FLANGE PLUG               | 225        | 10/BAG |
| M100PLG025 | 1" FLANGE PLUG WITH 1/4" FPT           | 300        | 10/BAG |
| M100PLG050 | 1" FLANGE PLUG WITH ½" FPT             | 300        | 10/BAG |
| M200PLG025 | 2" FLANGE PLUG WITH 1/4" FPT           | 225        | 10/BAG |
| M200PLG038 | 2" FLANGE PLUG WITH %" FPT             | 300        | 10/BAG |
| M200PLG050 | 2" FLANGE PLUG WITH ½" FPT             | 225        | 10/BAG |
| M200PLG075 | 2" FLANGE PLUG WITH ¾" FPT             | 225        | 10/BAG |
| M200PLG100 | 2" FLANGE PLUG WITH 1" FPT             | 225        | 10/BAG |
| M220PLG038 | 2" FULL PORT FLANGE PLUG WITH %" FPT   | 150        | 10/BAG |
| M220PLG075 | 2" FULL PORT FLANGE PLUG WITH 3/4" FPT | 225        | 10/BAG |
| M300PLG075 | 3" FLANGE PLUG WITH ¾" FPT             | 200        | 10/BAG |
| M300PLG100 | 3" FLANGE PLUG WITH 1" FPT             | 200        | 1      |

| FEMALE COUPLER |   |            |     |
|----------------|---|------------|-----|
| PART NO        | DESCRIPTION   | MAX<br>PSI | QTY |
| M220D          | 2" FULL PORT FLANGE X 2" FEMALE COUPLER             | 225        | 1   |
| M303D          | 3" FULL PORT FLANGE X 3" FEMALE COUPLER WITH 3 ARMS | 225        | 1   |

| MALE ADAPTER |                                       |            |        |
|--------------|---------------------------------------|------------|--------|
| PART NO      | DESCRIPTION                           | MAX<br>PSI | QTY    |
| M100A        | 1" FLANGE X 1" MALE ADAPTER           | 300        | 10/BAG |
| M200A        | 2" FLANGE X 2" MALE ADAPTER           | 300        | 10/BAG |
| M220A        | 2" FULL PORT FLANGE X 2" MALE ADAPTER | 225        | 10/BAG |
| M300A        | 3" FULL PORT FLANGE X 3" MALE ADAPTER | 100        | 1      |

|         | CROSS                      |            |        |
|---------|----------------------------|------------|--------|
| PART NO | DESCRIPTION                | MAX<br>PSI | QTY    |
| M100CR  | 1" FLANGED CROSS           | 300        | 10/BAG |
| M200CR  | 2" FLANGED CROSS           | 300        | 1      |
| M220CR  | 2" FULL PORT FLANGED CROSS | 200        | 1      |
| M300CR  | 3" FLANGED CROSS           | 125        | 1      |

| MANIFOLD ANSI FLANGE |                                     |         |     |
|----------------------|-------------------------------------|---------|-----|
| PART NO              | DESCRIPTION                         | MAX PSI | QTY |
| MAF220               | 2" FP MANIFOLD FLANGE X ANSI FLANGE | 150     | 1   |
| MAF300               | 3" FP MANIFOLD FLANGE X ANSI FLANGE | 150     | 1   |

#### **FITTINGS**

- Quick and easy assembly
- Positive seals
- Easy on/off hose connections
- 360° orientation
- Where noted, parts must be ordered in bag quantities

#### **FITTINGS**

- Quick and easy assembly
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| HOSE BARB  |                                       |            |        |
|------------|---------------------------------------|------------|--------|
| PART NO    | DESCRIPTION                           | MAX<br>PSI | QTY    |
| M100075BRB | 1" FLANGE X ¾" HOSE BARB              | 300        | 10/BAG |
| M100BRB    | 1" FLANGE X 1" HOSE BARB              | 300        | 10/BAG |
| M100125BRB | 1" FLANGE X 11/4" HOSE BARB           | 300        | 10/BAG |
| M200100BRB | 2" FLANGE X 1" HOSE BARB              | 300        | 10/BAG |
| M200125BRB | 2" FLANGE X 11/4" HOSE BARB           | 300        | 10/BAG |
| M200150BRB | 2" FLANGE X 1½" HOSE BARB             | 300        | 10/BAG |
| M200BRB    | 2" FLANGE X 2" HOSE BARB              | 300        | 10/BAG |
| M220100BRB | 2" FULL PORT FLANGE X 1" HOSE BARB    | 300        | 10/BAG |
| M220125BRB | 2" FULL PORT FLANGE X 11/4" HOSE BARB | 300        | 10/BAG |
| M220150BRB | 2" FULL PORT FLANGE X 11/2" HOSE BARB | 300        | 10/BAG |
| M220BRB    | 2" FULL PORT FLANGE X 2" HOSE BARB    | 300        | 10/BAG |
| M300220BRB | 3" FLANGE X 2" FULL PORT HOSE BARB    | 125        | 1      |
| M300BRB    | 3" FLANGE X 3" HOSE BARB              | 200        | 1      |



| 90° HOSE BARB ELBOW |   |            |        |
|---------------------|---|------------|--------|
| PART NO             | DESCRIPTION                             | MAX<br>PSI | QTY    |
| M100075BRB90        | 1" FLANGE X ¾" 90° HOSE BARB            | 300        | 10/BAG |
| M100BRB90           | 1" FLANGE X 1" 90° HOSE BARB            | 300        | 10/BAG |
| M100125BRB90        | 1" FLANGE X 11/4" 90° HOSE BARB         | 300        | 10/BAG |
| M100150BRB90        | 1" FLANGE X 1½" 90° HOSE BARB           | 300        | 10/BAG |
| M200100BRB90        | 2" FLANGE X 1" 90° HOSE BARB            | 300        | 10/BAG |
| M200125BRB90        | 2" FLANGE X 11/4" 90° HOSE BARB         | 300        | 10/BAG |
| M200150BRB90        | 2" FLANGE X 1½" 90° HOSE BARB           | 300        | 10/BAG |
| M200BRB90           | 2" FLANGE X 2" 90° HOSE BARB            | 300        | 1      |
| M220150BRB90        | 2" FULL PORT FLANGE X 1½" 90° HOSE BARB | 300        | 1      |
| M220BRB90           | 2" FULL PORT FLANGE X 2" 90° HOSE BARB  | 300        | 1      |
| M300220BRB90        | 3" FLANGE X 2" 90° FULL PORT HOSE BARB  | 300        | 1      |
| M300BRB90           | 3" FLANGE X 3" 90° HOSE BARB            | 150        | 1      |



|              | 45° HOSE BARB ELBOW                             |            |        |
|--------------|---|------------|--------|
| PART NO      | DESCRIPTION                                     | MAX<br>PSI | QTY    |
| M100BRB45    | 1" FLANGE X 1" 45° HOSE BARB ELBOW              | 300        | 10/BAG |
| M200BRB45    | 2" FLANGE X 2" 45° HOSE BARB ELBOW              | 300        | 1      |
| M200150BRB45 | 2" FLANGE X 1½" 45° HOSE BARB ELBOW             | 300        | 10/BAG |
| M220BRB45    | 2" FULL PORT FLANGE X 2" 45° HOSE BARB<br>ELBOW | 300        | 10/BAG |
| M300BRB45    | 3" FLANGE X 3" 45° HOSE BARB ELBOW              | 150        | 1      |



| HOSE BARB TEE |   |            |        |
|---------------|---|------------|--------|
| PART NO       | DESCRIPTION                             | MAX<br>PSI | QTY    |
| M100100HBT    | 1" FLANGE X 1" HOSE BARB TEE            | 300        | 10/BAG |
| M100125HBT    | 1" FLANGE X 11/4" HOSE BARB TEE         | 300        | 10/BAG |
| M220150HBT    | 2" FULL PORT FLANGE X 1½" HOSE BARB TEE | 300        | 1      |
| M220200HBT    | 2" FULL PORT FLANGE X 2" HOSE BARB TEE  | 300        | 1      |
| M300200HBT    | 3" FLANGE X 2" HOSE BARB TEE            | 200        | 1      |
| M300300HBT    | 3" FLANGE X 3" HOSE BARB TEE            | 150        | 1      |

















# BOLTED FLANGE CLAMPS PART NO DESCRIPTION TORQUE QTY FC220B 2" FULL PORT BOLTED FLANGE CLAMP 150 IN/LBS 1 FC300B 3" BOLTED FLANGE CLAMP 150 IN/LBS 1

| T-BOLT FLANGE CLAMPS          |  |            |        |
|-------------------------------|--|------------|--------|
| PART NO DESCRIPTION TORQUE QT |  |            |        |
| FC220TB                       | 2" FULL PORT HI-TORQUE T-BOLT FLANGE CLAMP | 100 IN/LBS | 10/BAG |
| FC300TB                       | 3" FULL PORT HI-TORQUE T-BOLT FLANGE CLAMP | 100 IN/LBS | 10/BAG |

|         | FLANGE CLAMPS               |               |        |
|---------|-----------------------------|---------------|--------|
| PART NO | DESCRIPTION                 | TORQUE        | QTY    |
| FC100   | 100 SERIES WORM SCREW CLAMP | 50-60 IN/LBS  | 10/BAG |
| FC200   | 200 SERIES WORM SCREW CLAMP | 90-100 IN/LBS | 10/BAG |
| FC220   | 220 SERIES WORM SCREW CLAMP | 90-100 IN/LBS | 10/BAG |
| FC300   | 300 SERIES WORM SCREW CLAMP | 90-100 IN/LBS | 10/BAG |

| GASKETS |   |                    |     |
|---------|---|--------------------|-----|
| PART NO | DESCRIPTION                                   | GASKET<br>MATERIAL | QTY |
| M100G   | 100 SERIES MANIFOLD GASKET                    | EPDM               | 1   |
| M101G   | 100 SERIES MANIFOLD GASKET WITH RIB           | EPDM               | 1   |
| M100GV  | 100 SERIES GASKET                             | FKM                | 1   |
| 150G    | 200 SERIES GASKET                             | EPDM               | 1   |
| 150GV   | 200 SERIES GASKET                             | FKM                | 1   |
| 200G    | 220 SERIES FULL PORT GASKET                   | EPDM               | 1   |
| 200GV   | 220 SERIES FULL PORT GASKET                   | FKM                | 1   |
| M201G   | 200 SERIES MANIFOLD GASKET WITH RIB           | EPDM               | 1   |
| M221G   | 220 SERIES FULL PORT MANIFOLD GASKET WITH RIB | EPDM               | 1   |
| 300G    | 300 SERIES GASKET                             | EPDM               | 1   |
| 300GV   | 300 SERIES GASKET                             | FKM                | 1   |
| M301G   | 300 SERIES MANIFOLD GASKET WITH RIB           | EPDM               | 1   |

| MINI T STRAINERS |                                      |            |     |
|------------------|--------------------------------------|------------|-----|
| PART NO          | DESCRIPTION                          | MAX<br>PSI | QTY |
| MLSTM100-50      | 1" MANIFOLD MINI T STRAINER 50 MESH  | 300        | 1   |
| MLSTM100-80      | 1" MANIFOLD MINI T STRAINER 80 MESH  | 300        | 1   |
| MLSTM100-100     | 1" MANIFOLD MINI T STRAINER 100 MESH | 300        | 1   |

|               | MINI T STRAINERS W/CLEAR BOWLS                          |     |   |  |  |
|---------------|---|-----|---|--|--|
| PART NO       | PART NO DESCRIPTION                                     |     |   |  |  |
| MLSTM100-30C  | 1" MANIFOLD MINI T STRAINER 30 MESH<br>WITH CLEAR BOWL  | 300 | 1 |  |  |
| MLSTM100-50C  | 1" MANIFOLD MINI T STRAINER 50 MESH<br>WITH CLEAR BOWL  | 300 | 1 |  |  |
| MLSTM100-80C  | 1" MANIFOLD MINI T STRAINER 80 MESH<br>WITH CLEAR BOWL  | 300 | 1 |  |  |
| MLSTM100-100C | 1" MANIFOLD MINI T STRAINER 100 MESH<br>WITH CLEAR BOWL | 300 | 1 |  |  |

#### **FITTINGS**

#### **FEATURES**

- Quick and easy assembly
- Positive seals
- Easy on/off hose connections
- 360° orientation
- Where noted, parts must be ordered in bag quantities

#### **MINI T LINE STRAINERS**

- Heavy duty glass reinforced polypropylene
- Clear bowl made of polycarbonate
- Black bowl made of polypropylene
- Polypropylene ribbed 316 stainless steel screens
- EPDM gaskets standard
- Convenient color coded screens for easy mesh size identification.



#### 1"-2" T LINE STRAINERS

#### **FEATURES**

- EPDM gaskets
- Poly ribbed 316 stainless steel screens



| 1" MANIFOLD T LINE STRAINERS |  |         |     |
|------------------------------|--|---------|-----|
| PART NO                      | DESCRIPTION                              | MAX PSI | QTY |
| MLST100-16                   | 1" MANIFOLD T STRAINER W/16 MESH SCREEN  | 300     | 1   |
| MLST100-30                   | 1" MANIFOLD T STRAINER W/30 MESH SCREEN  | 300     | 1   |
| MLST100-50                   | 1" MANIFOLD T STRAINER W/50 MESH SCREEN  | 300     | 1   |
| MLST100-80                   | 1" MANIFOLD T STRAINER W/80 MESH SCREEN  | 300     | 1   |
| MLST100-100                  | 1" MANIFOLD T STRAINER W/100 MESH SCREEN | 300     | 1   |

|             | 2" MANIFOLD T LINE STRAINERS                                | 3       |     |
|-------------|---|---------|-----|
| PART NO     | DESCRIPTION   | MAX PSI | QTY |
| MLST150-16  | 2" MANIFOLD T STRAINER W/16 MESH SCREEN                     | 225     | 1   |
| MLST150-30  | 2" MANIFOLD T STRAINER W/30 MESH SCREEN                     | 225     | 1   |
| MLST150-50  | 2" MANIFOLD T STRAINER W/50 MESH SCREEN                     | 225     | 1   |
| MLST150-80  | 2" MANIFOLD T STRAINER W/80 MESH SCREEN                     | 225     | 1   |
| MLST150-80V | 2" MANIFOLD T STRAINER W/80 MESH SCREEN<br>WITH FKM GASKETS | 225     | 1   |
| MLST150-100 | 2" MANIFOLD T STRAINER W/100 MESH SCREEN                    | 225     | 1   |

#### 1"-2" Y LINE STRAINERS

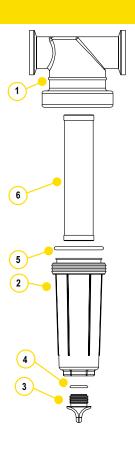
- EPDM gaskets
- Poly ribbed 316 stainless steel screens



| 1" MANIFOLD Y LINE STRAINERS |   |         |     |
|------------------------------|---|---------|-----|
| PART NO                      | DESCRIPTION                             | MAX PSI | QTY |
| MLS100-20                    | 1" MANIFOLD Y STRAINER W/20 MESH SCREEN | 225     | 1   |
| MLS100-40                    | 1" MANIFOLD Y STRAINER W/40 MESH SCREEN | 225     | 1   |
| MLS100-80                    | 1" MANIFOLD Y STRAINER W/80 MESH SCREEN | 225     | 1   |



| 2" MANIFOLD Y LINE STRAINERS |   |         |     |  |
|------------------------------|---|---------|-----|--|
| PART NO                      | DESCRIPTION   | MAX PSI | QTY |  |
| MLS200-06                    | 2" MANIFOLD Y STRAINER W/6 MESH SCREEN                        | 225     | 1   |  |
| MLS200-12                    | 2" MANIFOLD Y STRAINER W/12 MESH SCREEN                       | 225     | 1   |  |
| MLS200-20                    | 2" MANIFOLD Y STRAINER W/20 MESH SCREEN                       | 225     | 1   |  |
| MLS200-30                    | 2" MANIFOLD Y STRAINER W/30 MESH SCREEN                       | 225     | 1   |  |
| MLS200-50                    | 2" MANIFOLD Y STRAINER W/50 MESH SCREEN                       | 225     | 1   |  |
| MLS200-50M                   | 2" MANIFOLD Y STRAINER W/MOUNTING BRACKET<br>W/50 MESH SCREEN | 225     | 1   |  |
| MLS200-80                    | 2" MANIFOLD Y STRAINER W/80 MESH SCREEN                       | 225     | 1   |  |

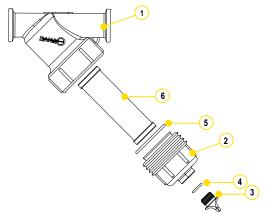


| REPLACEMENT PARTS 1" |            |                               |     |
|----------------------|------------|-------------------------------|-----|
| ITEM                 | PART NO    | DESCRIPTION                   | QTY |
| 1                    | MLST100-H  | 1" T BODY                     | 1   |
| 2                    | LST100-B   | 1" T BOWL, DRAIN PLUG, O-RING | 1   |
| 3                    | 12777      | ½" PLUG                       | 1   |
| 4                    | UV15163    | O-RING                        | 1   |
| 5                    | LST100-G   | 1" EPDM GASKET                | 1   |
| 5                    | LST100-GV  | 1" FKM GASKET                 | 1   |
| 6                    | LST116     | 16 MESH SCREEN                | 1   |
| 6                    | LST130     | 30 MESH SCREEN                | 1   |
| 6                    | LST150     | 50 MESH SCREEN                | 1   |
| 6                    | LST180     | 80 MESH SCREEN                | 1   |
| 6                    | LST1100    | 100 MESH SCREEN               | 1   |
| KIT                  | MLST100-HB | KIT INCLUDES ITEMS 1-5        | 1   |
|                      |            |                               |     |

|      | REPLACEMENT PARTS 2" |                                |     |  |  |
|------|----------------------|--------------------------------|-----|--|--|
| ITEM | PART NO              | DESCRIPTION                    | QTY |  |  |
| 1    | MLST150-H            | 1½" T BODY                     | 1   |  |  |
| 2    | LST150-B             | 1½" T BOWL, DRAIN PLUG, O-RING | 1   |  |  |
| 3    | LSQ200-PL            | 1½" PLUG                       | 1   |  |  |
| 4    | LSQ200-R             | O-RING                         | 1   |  |  |
| 5    | LST150-G             | 1½" EPDM GASKET                | 1   |  |  |
| 5    | LST150-GV            | 1½" FKM GASKET                 | 1   |  |  |
| 6    | LST1516              | 16 MESH SCREEN                 | 1   |  |  |
| 6    | LST1530              | 30 MESH SCREEN                 | 1   |  |  |
| 6    | LST1550              | 50 MESH SCREEN                 | 1   |  |  |
| 6    | LST1580              | 80 MESH SCREEN                 | 1   |  |  |
| 6    | LST15100             | 100 MESH SCREEN                | 1   |  |  |
| KIT  | MLST150-HB           | KIT INCLUDES ITEMS 1-5         | 1   |  |  |

#### T LINE STRAINERS

| S         | SCREENS       |  |  |
|-----------|---------------|--|--|
| MESH SIZE | RIB COLOR     |  |  |
| 16 MESH   | BROWN RED     |  |  |
| 30 MESH   | FLAME RED     |  |  |
| 50 MESH   | GENTIAN BLUE  |  |  |
| 80 MESH   | ZINC YELLOW   |  |  |
| 100 MESH  | TRAFFIC GREEN |  |  |



| REPLACEMENT PARTS 1" |          |                               |     |
|----------------------|----------|-------------------------------|-----|
| ITEM                 | PART NO  | DESCRIPTION                   | QTY |
| 1                    | MLS100B  | 1" Y BODY                     | 1   |
| 2                    | LS100-C1 | 1" Y BOWL, DRAIN PLUG, O-RING | 1   |
| 3                    | 12777    | ½" PLUG                       | 1   |
| 4                    | UV15163  | O-RING                        | 1   |
| 5                    | LS100-G  | 1" EPDM GASKET                | 1   |
| 6                    | LS120    | 20 MESH SCREEN                | 1   |
| 6                    | LS140    | 40 MESH SCREEN                | 1   |
| 6                    | LS180    | 80 MESH SCREEN                | 1   |
| KIT                  | MLS100BC | KIT INCLUDES ITEMS 1-5        | 1   |

| REPLACEMENT PARTS 2" |           |                               |     |
|----------------------|-----------|-------------------------------|-----|
| ITEM                 | PART NO   | DESCRIPTION                   | QTY |
| 1                    | MLS200B   | 2" Y BODY                     | 1   |
| 2                    | LS150-C   | 2" Y BOWL, DRAIN PLUG, O-RING | 1   |
| 3                    | LSQ200-PL | 2" PLUG                       | 1   |
| 4                    | LSQ200-R  | O-RING                        | 1   |
| 5                    | LS150-G   | 2" EPDM GASKET                | 1   |
| 5                    | LS150-GV  | 2" FKM GASKET                 | 1   |
| 6                    | LS206     | 6 MESH SCREEN                 | 1   |
| 6                    | LS212     | 12 MESH SCREEN                | 1   |
| 6                    | LS220     | 20 MESH SCREEN                | 1   |
| 6                    | LS230     | 30 MESH SCREEN                | 1   |
| 6                    | LS250     | 50 MESH SCREEN                | 1   |
| 6                    | LS280     | 80 MESH SCREEN                | 1   |
| 6                    | LS2120    | 120 MESH SCREEN               | 1   |
| KIT                  | MLS200BC  | KIT INCLUDES ITEMS 1-5        | 1   |

#### Y LINE STRAINERS

| SCREENS   |               |  |  |  |
|-----------|---------------|--|--|--|
| MESH SIZE | RIB COLOR     |  |  |  |
| 6 MESH    | WHITE         |  |  |  |
| 12 MESH   | BLACK         |  |  |  |
| 20 MESH   | BEIGE         |  |  |  |
| 30 MESH   | FLAME RED     |  |  |  |
| 40 MESH   | BROWN         |  |  |  |
| 50 MESH   | GENTIAN BLUE  |  |  |  |
| 80 MESH   | ZINC YELLOW   |  |  |  |
| 100 MESH  | TRAFFIC GREEN |  |  |  |
| 120 MESH  | BLACK         |  |  |  |
|           |               |  |  |  |



# 2" FULL PORT Y LINE STRAINERS

#### **FEATURES**

- EPDM gaskets
- 316 stainless steel screens

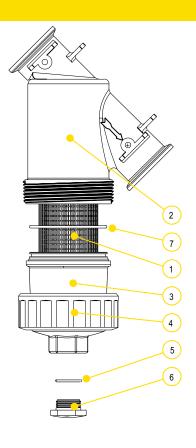


#### **3" Y LINE STRAINERS**

- · EPDM gaskets
- 304 stainless steel screens
- Must use on suction side or non-pressure side in all applications



| 3" MANIFOLD Y LINE STRAINERS |   |         |     |  |
|------------------------------|---|---------|-----|--|
| PART NO                      | DESCRIPTION                             | MAX PSI | QTY |  |
| MLS300-08                    | 3" MANIFOLD Y STRAINER W/8 MESH SCREEN  | 100     | 1   |  |
| MLS300-12                    | 3" MANIFOLD Y STRAINER W/12 MESH SCREEN | 100     | 1   |  |
| MLS300-20                    | 3" MANIFOLD Y STRAINER W/20 MESH SCREEN | 100     | 1   |  |
| MLS300-50                    | 3" MANIFOLD Y STRAINER W/50 MESH SCREEN | 100     | 1   |  |

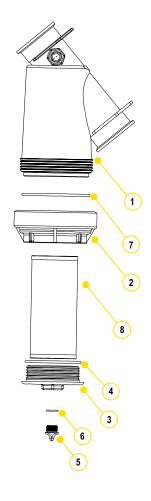


|      | REPI      | ACEMENT PARTS 2"              |     |
|------|-----------|-------------------------------|-----|
| ITEM | PART NO   | DESCRIPTION                   | QTY |
| 1    | LST204SS  | 4 SS MESH SCREEN              | 1   |
| 1    | LST206SS  | 6 SS MESH SCREEN              | 1   |
| 1    | LST208SS  | 8 SS MESH SCREEN              | 1   |
| 1    | LST210SS  | 10 SS MESH SCREEN             | 1   |
| 1    | LST216SS  | 16 SS MESH SCREEN             | 1   |
| 1    | LST230SS  | 30 SS MESH SCREEN             | 1   |
| 1    | LST250SS  | 50 SS MESH SCREEN             | 1   |
| 1    | MLS250SS  | 50 SS MESH PERFORATED SCREEN  | 1   |
| 1    | LST280SS  | 80 SS MESH SCREEN             | 1   |
| 1    | MLS280SS  | 80 SS MESH PERFORATED SCREEN  | 1   |
| 1    | LST2100SS | 100 SS MESH SCREEN            | 1   |
| 1    | MLS2100SS | 100 SS MESH PERFORATED SCREEN | 1   |
| 2    | MLS222B   | 2" FLANGED Y STRAINER BODY    | 1   |
| 3    | MLS220C1  | 2" FLANGED Y STRAINER CAP     | 1   |
| 4    | MLS220R1  | 2" FLANGED Y STRAINER RING    | 1   |
| 5    | LSQ200-R  | 2" PLUG GASKET                | 1   |
| 6    | LSQ200-PL | 2" PLUG                       | 1   |
| 7    | MLS220G1  | 2" BODY GASKET                | 1   |
| 2-7  | MLS222BC  | STRAINER WITHOUT SCREEN       | 1   |

# 2" FULL PORT Y LINE STRAINERS

#### **FEATURES**

- EPDM gaskets
- 316 stainless steel screens



|      | REPLACEMENT PARTS 3" |                            |     |  |  |
|------|----------------------|----------------------------|-----|--|--|
| ITEM | PART NO              | DESCRIPTION                | QTY |  |  |
| 1    | MLS300B              | 3" FLANGED Y STRAINER BODY | 1   |  |  |
| 2    | MLS300CAP            | 3" FLANGED Y STRAINER CAP  | 1   |  |  |
| 3    | LS300EC              | 3" END CAP                 | 1   |  |  |
| 4    | MLS300ECG            | 3" EPDM END CAP GASKET     | 1   |  |  |
| 4    | MLS300ECGV           | 3" FKMEND CAP GASKET       | 1   |  |  |
| 5    | 13777                | ¾" PLUG                    | 1   |  |  |
| 6    | 13778                | O-RING                     | 1   |  |  |
| 7    | MLS300G              | 3" EPDM CAP GASKET         | 1   |  |  |
| 7    | MLS300GV             | 3" FKM CAP GASKET          | 1   |  |  |
| 8    | LS304                | 4 SS MESH SCREEN           | 1   |  |  |
| 8    | LS308                | 8 SS MESH SCREEN           | 1   |  |  |
| 8    | LS312                | 12 SS MESH SCREEN          | 1   |  |  |
| 8    | LS320                | 20 SS MESH SCREEN          | 1   |  |  |
| 8    | LS350                | 50 SS MESH SCREEN          | 1   |  |  |
| 1-7  | MLS300BC             | STRAINER WITHOUT SCREEN    | 1   |  |  |

#### **3" Y LINE STRAINERS**

- EPDM gaskets
- 304 stainless steel screens
- Must use on suction side or non-pressure side in all applications

# BOTTOM DRAIN BOLTED TANK FITTINGS

#### **FEATURES**

- Stainless steel bolts
- Bolt head plugs sealed ultrasonically
- Glass reinforced polypropylene
- EDPM standard
- FKM available



|          | BOTTOM DRAIN BOLTED TANK FITTINGS           |         |     |  |  |
|----------|---|---------|-----|--|--|
| PART NO  | DESCRIPTION                                 | MAX PSI | QTY |  |  |
| MBF100BD | 1" FLANGE X 1" EPDM FEMALE THREAD           | 150     | 27  |  |  |
| MBF200BD | 2" FLANGE X 2" EPDM FEMALE THREAD           | 150     | 25  |  |  |
| MBF220BD | 2" FULL PORT FLANGE X 2" EPDM FEMALE THREAD | 150     | 27  |  |  |
| MBF300BD | 3" FLANGE X 3" EPDM FEMALE THREAD           | 150     | 16  |  |  |

#### BOTTOM DRAIN BULKHEAD FITTINGS

#### **FEATURES**

- Bolt head plugs sealed ultrasonically
- Glass reinforced polypropylene
- EDPM standard
- Groove allows more drainage
- · Gasket not included



|          | BOTTOM DRAIN BULKHEAD FITTINGS            |       |     |   |  |  |
|----------|---|-------|-----|---|--|--|
| PART NO  | PART NO DESCRIPTION HOLE SIZE MAX PSI QTY |       |     |   |  |  |
| MTF220BD | 2" FULL PORT FLANGE X 2" EPDM FLANGE      | 31/4" | 300 | 1 |  |  |
| MTF300BD | 3" FLANGE X 3" EPDM FLANGE                | 4½"   | 200 | 1 |  |  |

#### **BOLTED TANK FITTINGS**

- · Stainless steel bolts
- Bolt head plugs sealed ultrasonically
- Glass reinforced polypropylene
- EDPM standard
- FKM available

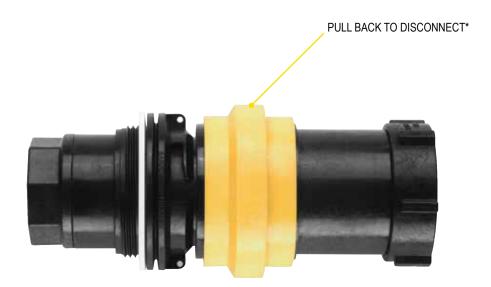




| BOLTED TANK FITTINGS |   |         |     |  |
|----------------------|---|---------|-----|--|
| PART NO              | DESCRIPTION                                 | MAX PSI | QTY |  |
| MBF100               | 1" FLANGE X 1" EPDM FEMALE THREAD           | 150     | 27  |  |
| MBF200               | 2" FLANGE X 2" EPDM FEMALE THREAD           | 150     | 27  |  |
| MBF220               | 2" FULL PORT FLANGE X 2" EPDM FEMALE THREAD | 150     | 27  |  |
| MBF300               | 3" FLANGE X 3" EPDM FEMALE THREAD           | 150     | 27  |  |

# **DRY-MATES**

# DPCF100 DPCMT100



|          | DRY POPPET COUPLINGS   |         |     |
|----------|--|---------|-----|
| PART NO  | DESCRIPTION  | MAX PSI | QTY |
| DPCF100  | FEMALE DRY POPPET COUPLER, 1" FEMALE NPT THREADS<br>W/ FKM SEALS                       | 100     | 1   |
| DPCM100  | MALE DRY POPPET ADAPTER, 1" FEMALE NPT THREADS<br>W/ FKM SEALS                         | 150     | 1   |
| DPCMT100 | MALE DRY POPPET ADAPTER, W/1" MALE THREADED BODY 2"<br>FEMALE NPT THREADS W/ FKM SEALS | 150     | 1   |

\*Note: Male adapter and female coupler shown coupled together but sold separately.

#### **DRY POPPET COUPLINGS**

#### **FEATURES**

- Lightweight
- Minimal fluid spillage
- Easy to use
- Economical
- Reduces risk of exposure
- Wide range of chemical resistance
- Maximum operating temperature 150° F
- 30 GPM maximum flow
- Precision molded in polypropylene
- 1" female NPT threads

#### **APPLICATIONS**

- Agriculture
- Industrial
- Pharmaceutical
- Chemical processing



#### 11/2" POLY DRY-MATES

#### **FEATURES**

- Lightweight
- · Easy to use
- Economical
- Reduces risk of exposure
- Wide range of chemical resistance
- Unrestricted 1½" flow
- Patented double ball design with cam lever connection
- When properly installed and operated, the assembly will not accidentally separate while fluid is flowing; preventing costly mishaps
- Spillage data: 1½" = 2ml

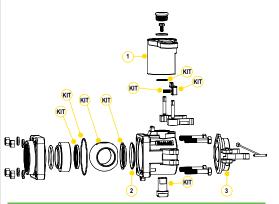


- Ball
- Body gasket
- Thrust washer
- Ball seats
- Upper stem bushing
- Stem o-ring

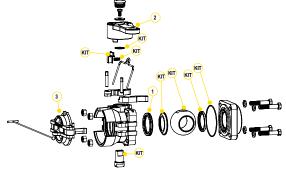


| 1½" POLY MALE DRY-MATE |                                 |            |              |                      |     |
|------------------------|---------------------------------|------------|--------------|----------------------|-----|
| PART NO                | DESCRIPTION                     | MAX<br>PSI | PIPE<br>SIZE | OPENING<br>THRU BALL | QTY |
| DM150A                 | 1½" MALE X FPT NPT W/FKM SEALS  | 100        | 1½"          | 11/2"                | 1   |
| DM150AE                | 1½" MALE X FPT NPT W/EPDM SEALS | 100        | 1½"          | 1½"                  | 1   |
| DM150AB                | 1½" MALE X FPT BSP W/FKM SEALS  | 100        | 11/2"        | 1½"                  | 1   |

| 1½" POLY FEMALE DRY-MATE |                                  |            |              |                      |     |
|--------------------------|----------------------------------|------------|--------------|----------------------|-----|
| PART NO                  | DESCRIPTION                      | MAX<br>PSI | PIPE<br>SIZE | OPENING<br>THRU BALL | QTY |
| DM150D                   | 1½" FEMALE X FPT NPT W/FKM SEALS | 100        | 1½"          | 11/2"                | 1   |
| DM150DE                  | 1½" FEMALE NPT W/EPDM SEALS      | 100        | 1½"          | 11/2"                | 1   |
| DM150DB                  | 1½" FEMALE X FPT BSP W/FKM SEALS | 100        | 1½"          | 11/2"                | 1   |



| REPLACEMENT PARTS MALE |                          |                       |   |  |  |
|------------------------|--------------------------|-----------------------|---|--|--|
| ITEM                   | ITEM PART NO DESCRIPTION |                       |   |  |  |
| 1                      | DM20153M                 | MALE HANDLE           | 1 |  |  |
| 1                      | DB20153M                 | LOW PROFILE HANDLE    | 1 |  |  |
| 2                      | DB20290                  | FKM FACE SEAL         | 1 |  |  |
| 2                      | DB20295                  | EPDM FACE SEAL        | 1 |  |  |
| 2                      | DM20296                  | KALREZ® FACE SEAL     | 1 |  |  |
| 3                      | DM200CAP                 | DUST CAP              | 1 |  |  |
| KIT                    | DM20200A                 | REPAIR KIT FOR DM150A | 1 |  |  |



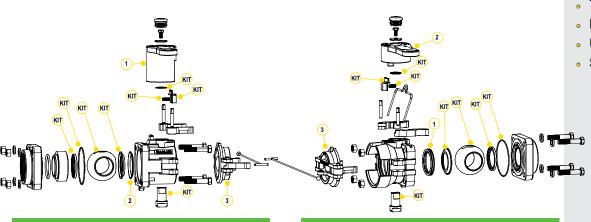
| ITEM | PART NO  | DESCRIPTION           | QTY |
|------|----------|-----------------------|-----|
| 1    | DM20294A | FKM FACE SEAL         | 1   |
| 1    | DB20295  | EPDM FACE SEAL        | 1   |
| 1    | DM20296  | KALREZ® FACE SEAL     | 1   |
| 2    | DM20153F | FEMALE HANDLE         | 1   |
| 3    | DM200PL  | DUST PLUG             | 1   |
| KIT  | DM20200D | REPAIR KIT FOR DM150D | 1   |



FIBERGLASS REINFORCED POLYPROPYLENE

| 2" POLY MALE DRY-MATE |   |     |    |                      |     |  |
|-----------------------|---|-----|----|----------------------|-----|--|
| PART NO               | ART NO DESCRIPTION                                      |     |    | OPENING<br>THRU BALL | QTY |  |
| DM200A                | 2" MALE X FPT NPT W/FKM SEALS                           | 100 | 2" | 1½"                  | 1   |  |
| DM200AB               | 2" MALE X FPT BSP W/FKM SEALS                           | 100 | 2" | 1½"                  | 1   |  |
| DM200AE               | 2" MALE X FPT NPT W/EPDM SEALS                          | 100 | 2" | 1½"                  | 1   |  |
| DM200AT               | 2" MALE X FPT NPT W/ KALREZ® SEALS                      | 100 | 2" | 1½"                  | 1   |  |
| DMMT201A              | 2" MALE X MALE NPT W/LOW PROFILE HANDLE                 | 100 | 2" | 1½"                  | 1   |  |
| DMMT201AE             | 2" MALE X MALE NPT W/LOW PROFILE HANDLE<br>W/EDPM SEALS | 100 | 2" | 1½"                  | 1   |  |

|         | 2" POLY FEMALE DRY-MATE               |              |                      |       |   |  |  |
|---------|---------------------------------------|--------------|----------------------|-------|---|--|--|
| PART NO | DESCRIPTION                           | PIPE<br>SIZE | OPENING<br>THRU BALL | QTY   |   |  |  |
| DM200D  | 2" FEMALE X FPT NPT W/FKM SEALS       | 100          | 2"                   | 11/2" | 1 |  |  |
| DM200DB | 2" FEMALE X FPT BSP W/FKM SEALS       |              | 2"                   | 11/2" | 1 |  |  |
| DM200DE | 2" FEMALE W/EPDM SEALS                |              | 2"                   | 11/2" | 1 |  |  |
| DM200DT | 2" FEMALE W/KALREZ <sup>®</sup> SEALS | 100          | 2"                   | 1½"   | 1 |  |  |



|      | REPLACEMENT PARTS MALE |                       |     |  |  |  |  |  |
|------|------------------------|-----------------------|-----|--|--|--|--|--|
| ITEM | PART NO                | DESCRIPTION           | QTY |  |  |  |  |  |
| 1    | DM20153M               | MALE HANDLE           | 1   |  |  |  |  |  |
| 1    | DB20153M               | LOW PROFILE HANDLE    | 1   |  |  |  |  |  |
| 2    | DB20290                | FKM FACE SEAL         | 1   |  |  |  |  |  |
| 2    | DB20295                | EPDM FACE SEAL        | 1   |  |  |  |  |  |
| 2    | DM20296                | KALREZ® FACE SEAL     | 1   |  |  |  |  |  |
| 3    | DM200CAP               | DUST CAP              | 1   |  |  |  |  |  |
| KIT  | DM20200A               | REPAIR KIT FOR DM200A | 1   |  |  |  |  |  |

| ITEM | PART NO  | DESCRIPTION           | QTY |
|------|----------|-----------------------|-----|
| 1    | DM20294A | FKM FACE SEAL         | 1   |
| 1    | DB20295  | EPDM FACE SEAL        | 1   |
| 1    | DM20296  | KALREZ® FACE SEAL     | 1   |
| 2    | DM20153F | FEMALE HANDLE         | 1   |
| 3    | DM200PL  | DUST PLUG             | 1   |
| KIT  | DM20200D | REPAIR KIT FOR DM200D | 1   |

#### 2" POLY DRY-MATES

#### **FEATURES**

- Lightweight
- Easy to use
- Economical
- Reduces risk of exposure
- Wide range of chemical resistance
- Unrestricted 1½" flow
- Patented double ball design with cam lever connection
- When properly installed and operated, the assembly will not accidentally separate while fluid is flowing; preventing costly mishaps
- Spillage data: 2" = 2.6ml



- Ball
- Body gasket
- Thrust washer
- Ball seats
- Upper stem bushing
- Stem o-ring

# 2" FULL PORT POLY DRY-MATES

#### **FEATURES**

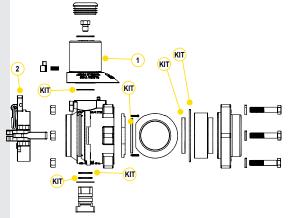
- Lightweight
- Easy to use
- Economical
- · Reduces risk of exposure
- Wide range of chemical resistance
- Unrestricted 2" flow
- Patented double ball design with cam lever connection
- When properly installed and operated, the assembly will not accidentally separate while fluid is flowing; preventing costly mishaps
- Spillage data: 2" FP = 3.6ml

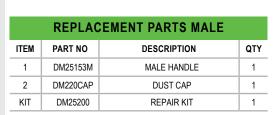


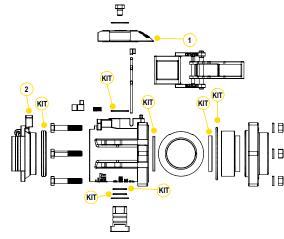
- Body gasket
- Thrust washer
- Ball seats
- Upper stem bushing
- Stem o-ring
- Face seal



| 2" FULL PORT POLY DRY-MATES |                                     |     |              |                      |     |  |
|-----------------------------|-------------------------------------|-----|--------------|----------------------|-----|--|
| PART NO DESCRIPTION         |                                     |     | PIPE<br>SIZE | OPENING<br>THRU BALL | QTY |  |
| DM220D                      | 20D 2" FEMALE X FPT NPT W/FKM SEALS |     | 2"           | 2"                   | 1   |  |
| DM220A                      | 2" MALE X FPT W/FKM SEALS           | 225 | 2"           | 2"                   | 1   |  |







|      | REPLACEMENT PARTS FEMALE |               |     |  |  |  |  |
|------|--------------------------|---------------|-----|--|--|--|--|
| ITEM | PART NO                  | DESCRIPTION   | QTY |  |  |  |  |
| 1    | DM25153F                 | FEMALE HANDLE | 1   |  |  |  |  |
| 2    | DM221PL                  | DUST PLUG     | 1   |  |  |  |  |
| KIT  | DM25200                  | REPAIR KIT    | 1   |  |  |  |  |



| DM300DFP |
|----------|
|----------|

DM300AFP

|          | 3" FULL PORT POLY DRY-MATES                          |            |              |                      |     |  |  |
|----------|--|------------|--------------|----------------------|-----|--|--|
| PART NO  | DESCRIPTION  | MAX<br>PSI | PIPE<br>SIZE | OPENING<br>THRU BALL | QTY |  |  |
| DM300AFP | 3" FP MALE X 3" FEMALE NPT THREADS W/ FKM<br>SEALS   |            | 3"           | 3"                   | 1   |  |  |
| DM300DFP | 3" FP FEMALE X 3" FEMALE NPT THREADS W/<br>FKM SEALS | 150        | 3"           | 3"                   | 1   |  |  |

#### 3" FULL PORT POLY **DRY-MATES**

#### **FEATURES**

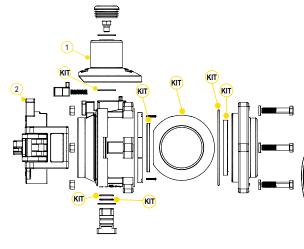
- Lightweight
- Easy to use
- Economical
- Reduces risk of exposure
- Wide range of chemical resistance
- Unrestricted 3" flow
- Patented double ball design with cam lever connection
- When properly installed and operated, the assembly will not accidentally separate while fluid is flowing; preventing costly mishaps
- Spillage data: 3" = 20ml



#### **REPAIR KIT INCLUDES:**

- Ball
- Body gasket
- Thrust washer
- Ball seats
- Upper stem bushing
- Stem o-ring

Face seal





|      | REPLACEMENT PARTS FEMALE |               |     |  |  |  |  |  |
|------|--------------------------|---------------|-----|--|--|--|--|--|
| ITEM | PART NO                  | DESCRIPTION   | QTY |  |  |  |  |  |
| 1    | DM35294                  | FACE SEAL FKM | 1   |  |  |  |  |  |
| 2    | DM35153F                 | FEMALE HANDLE | 1   |  |  |  |  |  |
| 3    | DM300PL                  | DUST PLUG     | 1   |  |  |  |  |  |
| KIT  | DM35200                  | REPAIR KIT    | 1   |  |  |  |  |  |

# 1" FULL PORT STAINLESS STEEL DRY-MATES

#### **FEATURES**

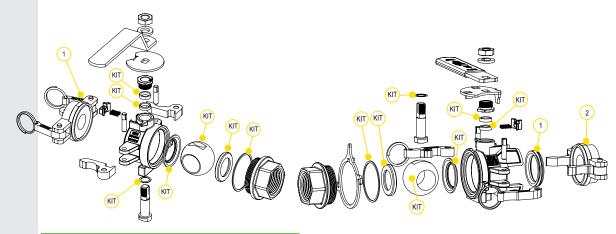
- 316 stainless steel construction
- Unrestricted 1" flow
- Patented double ball design with cam lever connection
- 300°F maximum operating temperature
- 100% PTFE ball seats
- When properly installed and operated, the assembly will not accidentally separate while fluid is flowing; preventing costly mishaps
- Spillage data: 1" FP = 1.7ml



- Ball
- Body gasket
- Thrust washer
- Ball seats
- Upper stem bushing
- Stem o-ring
- Face seal



| 1" FULL PORT STAINLESS STEEL DRY-MATE |   |     |    |                      |     |  |  |
|---------------------------------------|---|-----|----|----------------------|-----|--|--|
| PART NO                               | T NO DESCRIPTION                            |     |    | OPENING<br>THRU BALL | QTY |  |  |
| DM100ASS                              | 1" MALE X FPT NPT W/ PTFE SEALS             | 150 | 1" | 1"                   | 1   |  |  |
| DM100ABSS                             | 1" MALE X FPT BSP W/ PTFE SEALS             | 150 | 1" | 1"                   | 1   |  |  |
| DM100DSS                              | SS 1" FEMALE X FPT NPT W/ FKM SEALS         |     | 1" | 1"                   | 1   |  |  |
| DM100DSSE                             | DM100DSSE 1" FEMALE X FPT NPT W/ EPDM SEALS |     | 1" | 1"                   | 1   |  |  |
| DM100DBSS                             | DM100DBSS 1" FEMALE X FPT BSP W/ FKM SEALS  |     | 1" | 1"                   | 1   |  |  |
| DM100DBSST                            | 1" FEMALE X FPT BSP W/ KALREZ® SEALS        | 150 | 1" | 1"                   | 1   |  |  |



| REPLACEMENT PARTS MALE |          |             |     |  |  |  |
|------------------------|----------|-------------|-----|--|--|--|
| ITEM                   | PART NO  | DESCRIPTION | QTY |  |  |  |
| 1                      | DM100CAP | DUST CAP    | 1   |  |  |  |
| KIT                    | DM101SS  | REPAIR KIT  | 1   |  |  |  |

|      | REPLACE  | EMENT PARTS FEMALE |     |
|------|----------|--------------------|-----|
| ITEM | PART NO  | DESCRIPTION        | QTY |
| 1    | DM10294A | FKM FACE SEAL      | 1   |
| 1    | DM10295A | EPDM FACE SEAL     | 1   |
| 1    | DM10296  | KALREZ® FACE SEAL  | 1   |
| 2    | DM100PL  | POLY PLUG          | 1   |
| KIT  | DM102SSV | FKM REPAIR KIT     | 1   |
| KIT  | DM102SSE | EPDM REPAIR KIT    | 1   |
| KIT  | DM102SST | KALREZ® REPAIR KIT | 1   |

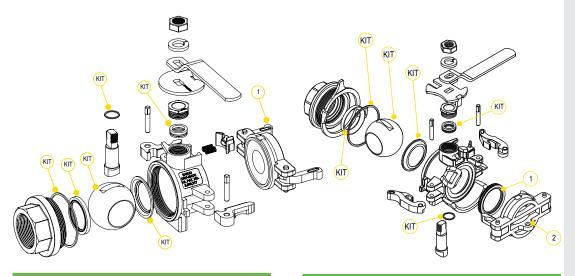
# **DRY-MATES**



#### DM150ASS

DM150DSS

| 1½" FULL PORT STAINLESS STEEL DRY-MATE |                                    |            |              |                      |     |
|--|------------------------------------|------------|--------------|----------------------|-----|
| PART NO                                | DESCRIPTION                        | MAX<br>PSI | PIPE<br>SIZE | OPENING<br>THRU BALL | QTY |
| DM150ASS                               | 1½" MALE X FPT NPT W/ PTFE SEALS   | 150        | 1½"          | 1½"                  | 1   |
| DM150ABSS                              | 1½" MALE X FPT BSP W/ PTFE SEALS   | 150        | 1½"          | 1½"                  | 1   |
| DM150DSS                               | 1½" FEMALE X FPT NPT W/ FKM SEALS  | 150        | 1½"          | 1½"                  | 1   |
| DM150DSSE                              | 1½" FEMALE X FPT NPT W/ EPDM SEALS | 150        | 1½"          | 1½"                  | 1   |
| DM150DBSS                              | 1½" FEMALE X FPT BSP W/ FKM SEALS  | 150        | 1½"          | 1½"                  | 1   |
| DM150DBSSE                             | 1½" FEMALE X FPT BSP W/ EPDM SEALS | 150        | 1½"          | 1½"                  | 1   |



|      | REPLACEMENT PARTS MALE |             |     |  |  |
|------|------------------------|-------------|-----|--|--|
| ITEM | PART NO                | DESCRIPTION | QTY |  |  |
| 1    | DM200ACAP              | DUST CAP    | 1   |  |  |
| KIT  | DM201SS                | REPAIR KIT  | 1   |  |  |

|      | REPLACEMENT PARTS FEMALE |                    |     |  |  |
|------|--------------------------|--------------------|-----|--|--|
| ITEM | PART NO                  | DESCRIPTION        | QTY |  |  |
| 1    | DM20294A                 | FKM FACE SEAL      | 1   |  |  |
| 1    | DB20295                  | EPDM FACE SEAL     | 1   |  |  |
| 1    | DM20296                  | KALREZ® FACE SEAL  | 1   |  |  |
| 2    | DM200APL                 | DUST PLUG          | 1   |  |  |
| KIT  | DM202SSV                 | FKM REPAIR KIT     | 1   |  |  |
| KIT  | DM202SSE                 | EPDM REPAIR KIT    | 1   |  |  |
| KIT  | DM202SST                 | KALREZ® REPAIR KIT | 1   |  |  |

# 11/2" FULL PORT STAINLESS STEEL DRY-MATES

#### **FEATURES**

- 316 stainless steel construction
- Unrestricted 1½" flow
- Patented double ball design with cam lever connection
- 300°F maximum operating temperature
- 100% PTFE ball seats
- When properly installed and operated, the assembly will not accidentally separate while fluid is flowing; preventing costly mishaps
- Spillage data: 11/2" FP = 3ml



- Ball
- Body gasket
- Thrust washer
- Ball seats
- Upper stem bushing
- Stem o-ring
- Face seal

# 2" STAINLESS STEEL DRY-MATES

#### **FEATURES**

- 316 stainless steel construction
- Patented double ball design with cam lever connection
- 300°F maximum operating temperature
- 100% PTFE ball seats
- When properly installed and operated, the assembly will not accidentally separate while fluid is flowing; preventing costly mishaps
- Spillage data: 2" = 3.6ml

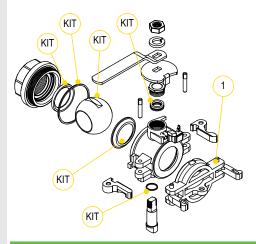




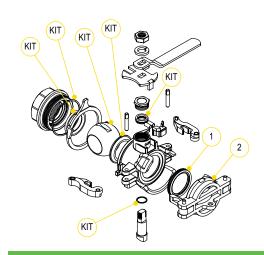
| 2" STANDARD PORT STAINLESS STEEL DRY-MATE |                                      |            |              |                      |     |  |
|---|--------------------------------------|------------|--------------|----------------------|-----|--|
| PART NO                                   | DESCRIPTION                          | MAX<br>PSI | PIPE<br>SIZE | OPENING<br>THRU BALL | QTY |  |
| DM200ASS                                  | 2" MALE X FPT NPT W/ PTFE SEALS      | 300        | 2"           | 1½"                  | 1   |  |
| DM200ABSS                                 | 2" MALE X FPT BSP W/ PTFE SEALS      | 150        | 2"           | 1½"                  | 1   |  |
| DM200DSS                                  | 2" FEMALE X FPT NPT W/ FKM SEALS     | 300        | 2"           | 1½"                  | 1   |  |
| DM200DSSE                                 | 2" FEMALE X FPT NPT W/ EPDM SEALS    | 150        | 2"           | 1½"                  | 1   |  |
| DM200DSST                                 | 2" FEMALE X FPT NPT W/ KALREZ® SEALS | 150        | 2"           | 1½"                  | 1   |  |
| DM200DBSS                                 | 2" FEMALE X FPT BSP W/ FKM SEALS     | 150        | 2"           | 1½"                  | 1   |  |
| DM200DBSSE                                | 2" FEMALE X FPT BSP W/ EPDM SEALS    | 150        | 2"           | 11/2"                | 1   |  |



- Ball
- Body gasket
- Thrust washer
- Ball seats
- Upper stem bushing
- Stem o-ring
- Face seal



|      | REPLACEMENT PARTS MALE |             |     |  |  |
|------|------------------------|-------------|-----|--|--|
| ITEM | PART NO                | DESCRIPTION | QTY |  |  |
| 1    | DM200ACAP              | DUST CAP    | 1   |  |  |
| KIT  | DM201SS                | REPAIR KIT  | 1   |  |  |



|      | REPLACEMENT PARTS FEMALE |                    |     |  |  |
|------|--------------------------|--------------------|-----|--|--|
| ITEM | PART NO                  | DESCRIPTION        | QTY |  |  |
| 1    | DM20294A                 | FKM FACE SEAL      | 1   |  |  |
| 1    | DB20295                  | EPDM FACE SEAL     | 1   |  |  |
| 1    | DM20296                  | KALREZ® FACE SEAL  | 1   |  |  |
| 2    | DM200APL                 | POLY PLUG          | 1   |  |  |
| KIT  | DM202SSV                 | FKM REPAIR KIT     | 1   |  |  |
| KIT  | DM202SSE                 | EPDM REPAIR KIT    | 1   |  |  |
| KIT  | DM202SST                 | KALREZ® REPAIR KIT | 1   |  |  |

#### 2" FULL PORT STAINLESS STEEL DRY-MATES

#### **FEATURES**

- 316 stainless steel construction
- Unrestricted 2" flow
- Patented double ball design with cam lever connection
- 300°F maximum operating temperature
- 100% PTFE ball seats
- When properly installed and operated, the assembly will not accidentally separate while fluid is flowing; preventing costly mishaps
- Spillage data: 2" FP = 3.8ml



- Body gasket
- Thrust washer
- Ball seats
- Upper stem bushing
- Stem o-ring

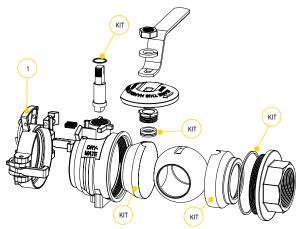




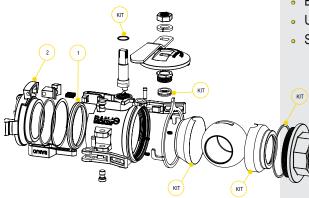


DM220DSS

| 2" FULL PORT STAINLESS STEEL DRY-MATE |  |            |              |                      |     |  |
|---------------------------------------|--|------------|--------------|----------------------|-----|--|
| PART NO                               | DESCRIPTION                                | MAX<br>PSI | PIPE<br>SIZE | OPENING<br>THRU BALL | QTY |  |
| DM220ASS                              | 2" FULL PORT MALE X FPT NPT W/ PTFE SEALS  | 300        | 2"           | 2"                   | 1   |  |
| DM220ABSS                             | 2" FULL PORT MALE X FPT BSP W/ PTFE SEALS  | 300        | 2"           | 2"                   | 1   |  |
| DM220DSS                              | 2" FULL PORT FEMALE X FPT NPT W/ FKM SEALS | 300        | 2"           | 2"                   | 1   |  |
| DM220DBSS                             | 2" FULL PORT FEMALE X FPT BSP W/ FKM SEALS | 300        | 2"           | 2"                   | 1   |  |







| REPLACEMENT PARTS FEMALE |          |                   |     |  |
|--------------------------|----------|-------------------|-----|--|
| ITEM                     | PART NO  | DESCRIPTION       | QTY |  |
| 1                        | DM25294  | FKM FACE SEAL     | 1   |  |
| 1                        | DM25294E | EPDM FACE SEAL    | 1   |  |
| 1                        | DM25294T | KALREZ® FACE SEAL | 1   |  |
| 2                        | DM220PL  | DUST PLUG         | 1   |  |
| KIT                      | DM222SS  | REPAIR KIT        | 1   |  |

# CLOSED TRANSFER SYSTEM ADAPTERS

#### **FEATURES**

 Allows to safely and properly flush chemical containers



| CLOSED TRANSFER SYSTEM ADAPTERS |                                    |            |              |     |  |
|---------------------------------|------------------------------------|------------|--------------|-----|--|
| PART NO                         | DESCRIPTION                        | MAX<br>PSI | PIPE<br>SIZE | QTY |  |
| CTS200AR                        | CLOSED MIX BOTTLE ADAPTER          | 40         | 63 MM BTL    | 1   |  |
| CTS200D                         | TANK ADAPTER W/2" MALE NPT THREADS | 40         | 2"           | 1   |  |



|             | SPINWELD BALL VALVE                                   |                    |                     |                  |              |            |        |  |
|-------------|---|--------------------|---------------------|------------------|--------------|------------|--------|--|
| PART NO     | DESCRIPTION   | GASKET<br>MATERIAL | COLLAR<br>FITS      | COLLAR<br>NUMBER | COLLAR<br>ID | MAX<br>PSI | QTY    |  |
| W230237     | 2" POLY SPINWELD VALVE W/NPT OUTLET & CAP & FOIL SEAL | FKM                | MAUSER®             | V22283 C & D     | 21/4"        | 20         | 24/BOX |  |
| W230238     | 2" POLY SPINWELD VALVE W/QDC OUTLET & CAP & FOIL SEAL | FKM                | MAUSER®             | V22283 C & D     | 21/4"        | 20         | 24/BOX |  |
| W230239     | 2" POLY SPINWELD VALVE W/NPT OUTLET & CAP & FOIL SEAL | EPDM               | MAUSER®             | V22283 C & D     | 21/4"        | 20         | 24/BOX |  |
| W230240     | 2" POLY SPINWELD VALVE W/QDC OUTLET & CAP & FOIL SEAL | EPDM               | MAUSER®             | V22283 C & D     | 21/4"        | 20         | 24/BOX |  |
| WSF210FSA   | 2" POLY SPINWELD VALVE W/QDC OUTLET, FOIL SEAL & CAP  | SANTOPRENE         | SCHUTZ <sup>®</sup> | V20280 A & B     | 2¾"          | 50         | 24/BOX |  |
| WSF210FSAV  | 2" POLY SPINWELD VALVE W/QDC OUTLET, FOIL SEAL & CAP  | FKM                | SCHUTZ®             | V20280 A & B     | 23/4"        | 50         | 24/BOX |  |
| WSMT210FSA  | 2" POLY SPINWELD VALVE W/NPT OUTLET, FOIL SEAL & CAP  | SANTOPRENE         | SCHUTZ®             | V20280 A & B     | 2¾"          | 225        | 24/BOX |  |
| WSMT210FSAV | 2" POLY SPINWELD VALVE W/NPT OUTLET, FOIL SEAL & CAP  | FKM                | SCHUTZ®             | V20280 A & B     | 23/4"        | 225        | 24/BOX |  |

#### **SPIN WELD BALL VALVES**

- PTFE seats
- FKM stem o-rings
- Precision molded polypropylene is reinforced with fiberglass for additional strength
- Zinc alloy collar
- FKM, EPDM and Santoprene collar gaskets available
- Handles close in either direction
- For faster shipping, order in box quantities

# FDA UNION VALVE AND ADAPTERS

- Precision molded in glass reinforced polypropylene for strength and chemical resistance
- PTFE seats or smooth operation and proper sealing characteristics
- Double EPDM o-rings in stem area for extra sealing protection
- Interlocking body and end plate to allow easy thread connection when installing valves





UV204FPFD

| UNION VALVE AND ADAPTERS |                               |            |     |  |  |
|--------------------------|-------------------------------|------------|-----|--|--|
| PART NO                  | DESCRIPTION                   | MAX<br>PSI | QTY |  |  |
| MBP200                   | 2" BUTTRESS X 2" NPT ASSEMBLY | 200        | 1   |  |  |
| NIP2101                  | 2" NPT X BSP NIPPLE           | 300        | 1   |  |  |
| UV204FPFD                | 2" FDA UNION VALVE WITH EPDM  | 225        | 1   |  |  |



| IBC SOLID TANK LIDS |                            |            |     |  |  |
|---------------------|----------------------------|------------|-----|--|--|
| PART NO             | DESCRIPTION                | GASKET     | QTY |  |  |
| TL650S              | 6" SOLID TANK LID W/GASKET | SANTOPRENE | 1   |  |  |
| TL650E              | 6" SOLID TANK LID W/GASKET | EPDM       | 1   |  |  |



| IBC TANK LID WITH UNVENTED PLUG |   |            |   |  |  |
|---------------------------------|---|------------|---|--|--|
| PART NO                         | PART NO DESCRIPTION GASKET                  |            |   |  |  |
| TL651S                          | 6" TANK LID W/ UNVENTED<br>2" PLUG W/GASKET | SANTOPRENE | 1 |  |  |



| IBC TANK LIDS WITH VENTED PLUG |   |            |   |  |  |
|--------------------------------|---|------------|---|--|--|
| PART NO                        | PART NO DESCRIPTION GASKET                |            |   |  |  |
| TL652S                         | 6" TANK LID W/ VENTED 2" PLUG<br>W/GASKET | SANTOPRENE | 1 |  |  |
| TL652E                         | 6" TANK LID VENTED 2" PLUG<br>W/GASKET    | EPDM       | 1 |  |  |



| TANK LID FOR SPRAY TANKS      |                    |     |   |  |
|-------------------------------|--------------------|-----|---|--|
| PART NO DESCRIPTION GASKET QT |                    |     |   |  |
| TL600C                        | 6" VENTED TANK LID | N/A | 1 |  |



| VENTED TANK LIDS |  |        |     |  |
|------------------|--|--------|-----|--|
| PART NO          | DESCRIPTION  | GASKET | QTY |  |
| TLVA10           | 10" VENTED TANK LID & RING<br>ASSEMBLY (NEW STYLE) | N/A    | 1   |  |
| TLA10            | 10" VENTED TANK LID & RING<br>ASSEMBLY (OLD STYLE) | N/A    | 1   |  |
| TLV10R           | 10" VENTED TANK LID ASSEMBLY<br>W/O RING           | N/A    | 1   |  |
| TLV2             | CENTER VENT  | N/A    | 1   |  |



|         | SIPHON TUBES        |     |
|---------|---------------------|-----|
| PART NO | DESCRIPTION         | QTY |
| ST200   | 2" POLY SIPHON TUBE | 1   |
| ST300   | 3" POLY SIPHON TUBE | 1   |

#### **TANK LIDS**

#### **FEATURES**

- Maximum air flow through vent channels
- Airflow equivalent to a 3" hole
- No secondary venting needed
- Baffled vents
- Center vent goes in underside of lid
- NPT Threads

#### **SIPHON TUBES**

- Full flow size
- Long length
- Male NPT threads
- Made of polypropylene



# POLYPROPYLENE ACCESSORIES

#### **FEATURES**

• Glass reinforced polypropylene





|         | BUTTRESS BY MALE ADAPTER                   |            |     |     |
|---------|--|------------|-----|-----|
| PART NO | DESCRIPTION                                | GASKET     | PSI | QTY |
| TA283   | 2" BUTTRESS X 2" MALE NPT THREADS W/GASKET | SANTOPRENE | 300 | 1   |
| TA283QD | 2" BUTTRESS X 2" MALE ADAPTER QDC W GASKET | SANTOPRENE | 150 | 1   |





|         | CAPS                       |     |     |
|---------|----------------------------|-----|-----|
| PART NO | DESCRIPTION                | PSI | QTY |
| 201FPT  | 2" FEMALE NPT CAP - BLACK  | 20  | 1   |
| 211FPT  | 2" FEMALE NPT CAP - YELLOW | 20  | 1   |







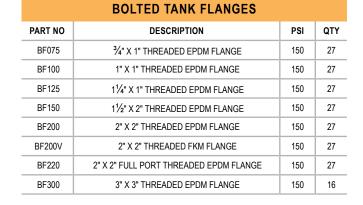
| BUNG PLUGS |  |     |
|------------|--|-----|
| PART NO    | DESCRIPTION                              | QTY |
| 231MPT     | 2" MPT SOLID BUNG W/ EPDM GASKET         | 1   |
| 231MPTBN   | 2" MPT SOLID BUNG W/ BUNA NITRILE GASKET | 1   |
| TL6531     | 2" VENTED PLUG W/ EPDM GASKET            | 1   |



|          | DUST CAPS & LANYARD                        |     |     |
|----------|--|-----|-----|
| PART NO  | DESCRIPTION                                | PSI | QTY |
| 200CAP   | 2" CAM LEVER DUST CAP                      | 200 | 1   |
| 200CAPSH | 2" CAM LEVER DUST CAP WITH SHORT ARMS      | 200 | 1   |
| 201CAPSH | 2" CAM LEVER DUST CAP W/SHORT ARMS & RINGS | 200 | 1   |
| 202CAP   | 2" CAM LEVER DUST CAP                      | 20  | 1   |
| V20207   | 11" POLYURETHANE LANYARD                   | N/A | 1   |



BF150



#### **BOLTED TANK FLANGES**

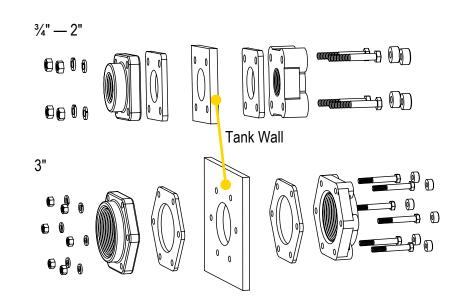
- Stainless steel bolts
- Bolt head plugs ultrasonically sealed
- Glass reinforced polypropylene
- EPDM gaskets standard and FKM available
- WARNING: Do not tighten tank flange bolts more than 12 ft pounds



BF300



|         | BOLTED TANK FLANGE GASKETS | 3   |     |
|---------|----------------------------|-----|-----|
| PART NO | DESCRIPTION                | PSI | QTY |
| BF100GE | 1" EPDM GASKET             | N/A | 1   |
| BF200GE | 1½" & 2" EPDM GASKET       | N/A | 1   |
| BF200GV | 1½" & 2" FKM GASKET        | N/A | 1   |
| BF220GE | 2" FULL PORT EPDM GASKET   | N/A | 1   |
| BF220GV | 2" FULL PORT FKM GASKET    | N/A | 1   |
| BF300GE | 3" EPDM GASKET             | N/A | 1   |
| BF300GV | 3" FKM GASKET              | N/A | 1   |



# BOLTED BOTTOM DRAIN TANK FLANGES

- · Stainless steel bolts
- Bolt head plugs ultrasonically sealed
- Glass reinforced polypropylene
- EPDM gaskets standard and FKM available
- Allows 100% rinse free
- No sediment build up
- Excellent for avoiding herbicide cross contamination
- Fits most cone bottom and chemical inductor tanks, 30 gallons and larger.
- For faster shipping, order in box quantities





|         | BOLTED TANK FLANGES                                     |         |     |
|---------|---|---------|-----|
| PART NO | DESCRIPTION   | MAX PSI | QTY |
| BF075BD | 3/4" X 1" THREADED POLY FLANGE W/ EPDM GASKET           | 150     | 27  |
| BF100BD | 1" X 1" THREADED POLY FLANGE W/EPDM GASKET              | 150     | 27  |
| BF150BD | 1½" X 2" THREADED POLY FLANGE W/EPDM GASKET             | 150     | 27  |
| BF200BD | 2" X 2" THREADED POLY FLANGE W/EPDM GASKET              | 150     | 27  |
| BF220BD | 2" X 2" FULL PORT THREADED POLY FLANGE<br>W/EPDM GASKET | 150     | 27  |
| BF300BD | 3" X 3" THREADED POLY FLANGE W/EPDM GASKET              | 150     | 16  |



|          | BOLTED TANK FLANGE GASKET                                | S       |     |
|----------|--|---------|-----|
| PART NO  | DESCRIPTION  | MAX PSI | QTY |
| BF100GE  | $\frac{3}{4}$ ", 1" & 1 $\frac{1}{4}$ " EPDM GASKET      | N/A     | 1   |
| BF100GRE | $\frac{3}{4}$ ", 1" & 1 $\frac{1}{4}$ " FOOT EPDM GASKET | N/A     | 1   |
| BF100GRV | $\frac{3}{4}$ ", 1" & 1 $\frac{1}{4}$ " FOOT FKM GASKET  | N/A     | 1   |
| BF200GE  | 1½" & 2" EPDM GASKET                                     | N/A     | 1   |
| BF200GV  | 1½" & 2" FKM GASKET                                      | N/A     | 1   |
| BF200GFV | 1½" & 2" STD. PORT, 2" FULL PORT FOOT FKM<br>GASKET      | N/A     | 1   |
| BF220GE  | 2" FULL PORT EPDM GASKET                                 | N/A     | 1   |
| BF220GV  | 2" FULL PORT FKM GASKET                                  | N/A     | 1   |
| BF300GE  | 3" EPDM GASKET   | N/A     | 1   |
| BF300GV  | 3" FKM GASKET  | N/A     | 1   |
| BF300GFE | 3" FOOT EPDM GASKET                                      | N/A     | 1   |
| BF300GFV | 3" FOOT FKM GASKET                                       | N/A     | 1   |

#### **BULKHEAD TANK FITTINGS**



| POLY BULKHEAD FITTINGS |                                       |              |            |        |  |
|------------------------|---------------------------------------|--------------|------------|--------|--|
| PART NO                | DESCRIPTION                           | HOLE<br>SIZE | MAX<br>PSI | QTY    |  |
| TF050                  | ½" POLY BULKHEAD EPDM TANK FITTING    | 15/8"        | 300        | 10/BAG |  |
| TF075                  | 3/4" POLY BULKHEAD EPDM TANK FITTING  | 15/8"        | 300        | 10/BAG |  |
| TF075V                 | 3/4" POLY BULKHEAD FKM TANK FITTING   | 15/8"        | 300        | 1      |  |
| TF100                  | 1" POLY BULKHEAD EPDM TANK FITTING    | 21/4"        | 300        | 10/BAG |  |
| TF125                  | 11/4" POLY BULKHEAD EPDM TANK FITTING | 21/4"        | 300        | 1      |  |
| TF150                  | 1½" POLY BULKHEAD EPDM TANK FITTING   | 3"           | 300        | 1      |  |
| TF200                  | 2" POLY BULKHEAD EPDM TANK FITTING    | 3"           | 300        | 1      |  |
| TF200V                 | 2" POLY BULKHEAD FKM TANK FITTING     | 3"           | 300        | 1      |  |
| TF220                  | 2" POLY BULKHEAD EPDM TANK FITTING    | 31/4"        | 300        | 1      |  |
| TF300                  | 3" POLY BULKHEAD EPDM TANK FITTING    | 4½"          | 300        | 1      |  |
| TF400                  | 4" POLY BULKHEAD EPDM TANK FITTING    | 53/4"        | 225        | 1      |  |



- Double sided female NPT threads
- Available with EPDM or FKM gasket
- Where noted, parts must be ordered in bag quantities



| 316 STAINLESS STEEL BULKHEAD FITTINGS |                                |              |            |     |  |
|---------------------------------------|--------------------------------|--------------|------------|-----|--|
| PART NO                               | DESCRIPTION                    | HOLE<br>SIZE | MAX<br>PSI | QTY |  |
| TF038SS                               | 3/8" SS BULKHEAD TANK FITTING  | 1"           | 300        | 1   |  |
| TF050SS                               | ½" SS BULKHEAD TANK FITTING    | 13//8"       | 300        | 1   |  |
| TF075SS                               | 3/4" SS BULKHEAD TANK FITTING  | 15⁄8"        | 300        | 1   |  |
| TF100SS                               | 1" SS BULKHEAD TANK FITTING    | 21/4"        | 300        | 1   |  |
| TF125SS                               | 11/4" SS BULKHEAD TANK FITTING | 21/4"        | 300        | 1   |  |
| TF150SS                               | 1½" SS BULKHEAD TANK FITTING   | 3"           | 300        | 1   |  |
| TF200SS                               | 2" SS BULKHEAD TANK FITTING    | 3"           | 300        | 1   |  |
| TF220SS                               | 2" SS BULKHEAD TANK FITTING    | 31/4"        | 300        | 1   |  |
| TF300SS                               | 3" SS BULKHEAD TANK FITTING    | 43/8"        | 300        | 1   |  |

| BULKHEAD GASKETS |                                      |              |               |                   |     |
|------------------|--------------------------------------|--------------|---------------|-------------------|-----|
| PART NO          | DESCRIPTION                          | HOLE<br>SIZE | FITS POLY     | FITS<br>SS        | QTY |
| 100G             | 3/8" Poly Bulkhead EPDM Gasket       | 1"           |               | TF038SS           | 1   |
| 100GV            | 3/8" Poly Bulkhead FKM Gasket        | 1"           |               | TF038SS           | 1   |
| TF138GV          | ½" Poly Bulkhead FKM Gasket          | 13/8"        |               | TF050SS           | 1   |
| 150G             | ½" & ¾" Poly Bulkhead EPDM Gasket    | 15⁄8"        | TF050 & TF075 | TF075SS           | 1   |
| 150GV            | ½" & ¾" Poly Bulkhead FKM Gasket     | 15⁄8"        | TF050 & TF075 | TF075SS           | 1   |
| TF100G           | 1" & 11/4" Poly Bulkhead EPDM Gasket | 21/4"        | TF100 & TF125 | TF100SS & TF125SS | 1   |
| TF100GV          | 1" & 11/4" Poly Bulkhead FKM Gasket  | 21/4"        | TF100 & TF125 | TF100SS & TF125SS | 1   |
| 300G             | 1½" & 2" Poly Bulkhead EPDM Gasket   | 3"           | TF200 & TF150 | TF200SS & TF150SS | 1   |
| 300GV            | 1½" & 2" Poly Bulkhead FKM Gasket    | 3"           | TF200 & TF150 | TF200SS & TF150SS | 1   |
| TF220G           | 2" Poly Bulkhead EPDM Gasket         | 31/4"        | TF220         | TF220SS           | 1   |
| TF220GV          | 2" Poly Bulkhead FKM Gasket          | 31/4"        | TF220         | TF220SS           | 1   |
| TF300G           | 3" Poly Bulkhead EPDM Gasket         | 41/2"        | TF300         | TF300SS           | 1   |
| TF300GV          | 3" Poly Bulkhead FKM Gasket          | 41/2"        | TF300         | TF300SS           | 1   |
| TF400G           | 4" Poly Bulkhead EPDM Gasket         | 53/4"        | TF400         |                   | 1   |
| TF400GV          | 4" Poly Bulkhead FKM Gasket          | 53/4"        | TF400         |                   | 1   |

#### **ANTI VORTEX VENT CAPS**

#### **FEATURES**

- Male NPT
- Glass reinforced polypropylene
- 304 stainless steel screen

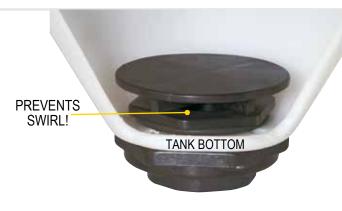


| ANTI VORTEX VENT CAPS |   |              |              |              |     |
|-----------------------|---|--------------|--------------|--------------|-----|
| PART NO               | DESCRIPTION                                 | BORE<br>SIZE | BORE<br>AREA | VENT<br>AREA | QTY |
| VC200                 | 2" ANTI VORTEX VENT CAP WITHOUT SCREEN      | 2"           | 3.1 SQ IN    | 3.9 SQ IN    | 1   |
| VC230                 | 2" ANTI VORTEX VENT CAP W/12 MESH SS SCREEN | 2"           | 3.1 SQ IN    | 3.9 SQ IN    | 1   |
| VC300                 | 3" ANTI VORTEX VENT CAP WITHOUT SCREEN      | 3"           | 7 SQ IN      | 9 SQ IN      | 1   |
| VC330                 | 3" ANTI VORTEX VENT CAP W/10 MESH SS SCREEN | 3"           | 7 SQ IN      | 9 SQ IN      | 1   |

#### **ANTI VORTEX TANK FLANGES**

- Standard with FKM
- Prevents swirl in bottom of tank





| ANTI VORTEX TANK FLANGES |                                |              |     |  |
|--------------------------|--------------------------------|--------------|-----|--|
| PART NO                  | DESCRIPTION                    | HOLE<br>SIZE | QTY |  |
| TF100AV                  | 1" ANTI VORTEX TANK FLANGES    | 21/4"        | 1   |  |
| TF125AV                  | 11/4" ANTI VORTEX TANK FLANGES | 21/4"        | 1   |  |
| TF150AV                  | 1½" ANTI VORTEX TANK FLANGES   | 3"           | 1   |  |
| TF200AV                  | 2" ANTI VORTEX TANK FLANGES    | 3"           | 1   |  |

# IBC/TANK ACCESSORIES



| THREADED ANSI FLANGES |                                 |     |  |  |  |
|-----------------------|---------------------------------|-----|--|--|--|
| PART NO               | DESCRIPTION                     | QTY |  |  |  |
| AF100                 | 1" FEMALE THREADED ANSI FLANGE  | 1   |  |  |  |
| AF150                 | 1½" FEMALE THREADED ANSI FLANGE | 1   |  |  |  |
| AF200                 | 2" FEMALE THREADED ANSI FLANGE  | 1   |  |  |  |
| AF300                 | 3" FEMALE THREADED ANSI FLANGE  | 1   |  |  |  |
| AF400                 | 4" FEMALE THREADED ANSI FLANGE  | 1   |  |  |  |

### **ANSI FLANGES**

- Glass reinforced polypropylene
- Heavy duty



| BLIND ANSI FLANGES  |                      |   |  |  |  |  |
|---------------------|----------------------|---|--|--|--|--|
| PART NO DESCRIPTION |                      |   |  |  |  |  |
| AFB200              | 2" BLIND ANSI FLANGE | 1 |  |  |  |  |
| AFB300              | 3" BLIND ANSI FLANGE | 1 |  |  |  |  |
| AFB400              | 4" BLIND ANSI FLANGE | 1 |  |  |  |  |





| ANSI FLANGE GASKETS |                             |     |  |  |  |  |
|---------------------|-----------------------------|-----|--|--|--|--|
| PART NO             | DESCRIPTION                 | QTY |  |  |  |  |
| AF100G              | 1" ANSI FLANGE EPDM GASKET  | 1   |  |  |  |  |
| AF100GV             | 1" ANSI FLANGE FKM GASKET   | 1   |  |  |  |  |
| AF150G              | 1½" ANSI FLANGE EPDM GASKET | 1   |  |  |  |  |
| AF150GV             | 1½" ANSI FLANGE FKM GASKET  | 1   |  |  |  |  |
| AF200G              | 2" ANSI FLANGE EPDM GASKET  | 1   |  |  |  |  |
| AF200GV             | 2" ANSI FLANGE FKM GASKET   | 1   |  |  |  |  |
| AF300G              | 3" ANSI FLANGE EPDM GASKET  | 1   |  |  |  |  |
| AF300GV             | 3" ANSI FLANGE FKM GASKET   | 1   |  |  |  |  |
| AF400G              | 4" ANSI FLANGE EPDM GASKET  | 1   |  |  |  |  |
| AF400GV             | 4" ANSI FLANGE FKM GASKET   | 1   |  |  |  |  |

### 3/4"-3" STAINLESS STEEL

### **FEATURES**

- Tough 316 stainless steel to ensure durability
- Chemical resistant to protect against corrosion
- Precision made casting assures uniformity and proper fit
- Versatile to interchange with all types of cam lever couplings
- Smooth operation makes connections quick and easy
- Standard with Buna "N" gaskets and FKM available





| STAINLESS STEEL CAM LEVER COUPLINGS |                                |           |           |           |           |           |  |  |  |
|-------------------------------------|--------------------------------|-----------|-----------|-----------|-----------|-----------|--|--|--|
| ITEM                                | DESCRIPTION                    | 3/4"      | 1"        | 1½"       | 2"        | 3"        |  |  |  |
| Α                                   | MALE ADAPTER X FEMALE THREAD   | 075ASS    | 100ASS    | 150ASS    | 200ASS    | 300ASS    |  |  |  |
| В                                   | FEMALE COUPLER X MALE THREAD   | 075BSS    | 100BSS    | 150BSS    | 200BSS    | 300BSS    |  |  |  |
| С                                   | FEMALE COUPLER X HOSE SHANK    | 075CSS    | 100CSS    | 150CSS    | 200CSS    | 300CSS    |  |  |  |
| D                                   | FEMALE COUPLER X FEMALE THREAD | 075DSS    | 100DSS    | 150DSS    | 200DSS    | 300DSS    |  |  |  |
| Е                                   | MALE ADAPTER X HOSE SHANK      | 075ESS    | 100ESS    | 150ESS    | 200ESS    | 300ESS    |  |  |  |
| F                                   | MALE ADAPTER X MALE THREAD     | 075FSS    | 100FSS    | 150FSS    | 200FSS    | 300FSS    |  |  |  |
| PL                                  | PLUG FOR FEMALE COUPLER        | 075PL/SS  | 100PL/SS  | 150PL/SS  | 200PL/SS  | 300PL/SS  |  |  |  |
| CAP                                 | CAP FOR MALE ADAPTER           | 075CAP/SS | 100CAP/SS | 150CAP/SS | 200CAP/SS | 300CAP/SS |  |  |  |

| 3/4" SERIES STAINLESS STEEL CAM LEVER COUPLINGS |  |            |        |     |  |  |  |
|---|--|------------|--------|-----|--|--|--|
| PART NO   | DESCRIPTION                              | MAX<br>PSI | GASKET | QTY |  |  |  |
| 075ASS  | ¾" MALE ADAPTER X ¾" FEMALE THREAD       | 300        | N/A    | 1   |  |  |  |
| 075BSS  | 3/4" FEMALE COUPLER X 3/4" MALE THREAD   | 300        | BUNA   | 1   |  |  |  |
| 075CSS  | 3/4" FEMALE COUPLER X 3/4" HOSE SHANK    | 300        | BUNA   | 1   |  |  |  |
| 075DSS  | 3/4" FEMALE COUPLER X 3/4" FEMALE THREAD | 300        | BUNA   | 1   |  |  |  |
| 075ESS  | ¾" MALE ADAPTER X ¾" HOSE SHANK          | 300        | N/A    | 1   |  |  |  |
| 075FSS  | ¾" MALE ADAPTER X ¾" MALE THREAD         | 300        | N/A    | 1   |  |  |  |
| 075CAP/SS                                       | ¾" CAP X MALE ADAPTER                    | 300        | BUNA   | 1   |  |  |  |
| 075PL/SS  | 3/4" PLUG X FEMALE COUPLER               | 300        | N/A    | 1   |  |  |  |

| 1" SERIES STAINLESS STEEL CAM LEVER COUPLINGS |                                      |            |        |     |  |  |  |  |
|---|--------------------------------------|------------|--------|-----|--|--|--|--|
| PART NO                                       | DESCRIPTION                          | MAX<br>PSI | GASKET | QTY |  |  |  |  |
| 100ASS  | 1" MALE ADAPTER X 1" FEMALE THREAD   | 300        | N/A    | 1   |  |  |  |  |
| 100BSS  | 1" FEMALE COUPLER X 1" MALE THREAD   | 300        | BUNA   | 1   |  |  |  |  |
| 100CSS  | 1" FEMALE COUPLER X 1" HOSE SHANK    | 300        | BUNA   | 1   |  |  |  |  |
| 100DSS  | 1" FEMALE COUPLER X 1" FEMALE THREAD | 300        | BUNA   | 1   |  |  |  |  |
| 100ESS  | 1" MALE ADAPTER X 1" HOSE SHANK      | 300        | N/A    | 1   |  |  |  |  |
| 100FSS  | 1" MALE ADAPTER X 1" MALE THREAD     | 300        | N/A    | 1   |  |  |  |  |
| 100CAP/SS                                     | 1" CAP X MALE ADAPTER                | 300        | BUNA   | 1   |  |  |  |  |
| 100PL/SS                                      | 1" PLUG X FEMALE COUPLER             | 300        | N/A    | 1   |  |  |  |  |

| 1½" SERIES STAINLESS STEEL CAM LEVER COUPLINGS |  |            |        |     |  |  |  |
|--|--|------------|--------|-----|--|--|--|
| PART NO  | DESCRIPTION                            | MAX<br>PSI | GASKET | QTY |  |  |  |
| 150ASS   | 1½" MALE ADAPTER X 1½" FEMALE THREAD   | 300        | N/A    | 1   |  |  |  |
| 150BSS   | 1½" FEMALE COUPLER X 1½" MALE THREAD   | 300        | BUNA   | 1   |  |  |  |
| 150CSS   | 1½" FEMALE COUPLER X 1½" HOSE SHANK    | 300        | BUNA   | 1   |  |  |  |
| 150DSS   | 1½" FEMALE COUPLER X 1½" FEMALE THREAD | 300        | BUNA   | 1   |  |  |  |
| 150ESS   | 1½" MALE ADAPTER X 1½" HOSE SHANK      | 300        | N/A    | 1   |  |  |  |
| 150FSS   | 1½" MALE ADAPTER X 1½" MALE THREAD     | 300        | N/A    | 1   |  |  |  |
| 150CAP/SS                                      | 1½" CAP X MALE ADAPTER                 | 300        | BUNA   | 1   |  |  |  |
| 150PL/SS                                       | 1½" PLUG X FEMALE COUPLER              | 300        | N/A    | 1   |  |  |  |

| 2" SERIES STAINLESS STEEL CAM LEVER COUPLINGS |                                      |            |        |     |  |  |  |
|---|--------------------------------------|------------|--------|-----|--|--|--|
| PART NO                                       | DESCRIPTION                          | MAX<br>PSI | GASKET | QTY |  |  |  |
| 200ASS  | 2" MALE ADAPTER X 2" FEMALE THREAD   | 300        | N/A    | 1   |  |  |  |
| 200BSS  | 2" FEMALE COUPLER X 2" MALE THREAD   | 300        | BUNA   | 1   |  |  |  |
| 200CSS  | 2" FEMALE COUPLER X 2" HOSE SHANK    | 300        | BUNA   | 1   |  |  |  |
| 200DSS  | 2" FEMALE COUPLER X 2" FEMALE THREAD | 300        | BUNA   | 1   |  |  |  |
| 200ESS  | 2" MALE ADAPTER X 2" HOSE SHANK      | 300        | N/A    | 1   |  |  |  |
| 200FSS  | 2" MALE ADAPTER X 2" MALE THREAD     | 300        | N/A    | 1   |  |  |  |
| 200CAP/SS                                     | 2" CAP X MALE ADAPTER                | 300        | BUNA   | 1   |  |  |  |
| 200PL/SS                                      | 2" PLUG X FEMALE COUPLER             | 300        | N/A    | 1   |  |  |  |

| 3" SE     | 3" SERIES STAINLESS STEEL CAM LEVER COUPLINGS |            |        |     |  |  |  |  |
|-----------|---|------------|--------|-----|--|--|--|--|
| PART NO   | DESCRIPTION                                   | MAX<br>PSI | GASKET | QTY |  |  |  |  |
| 300ASS    | 3" MALE ADAPTER X 3" FEMALE THREAD            | 300        | N/A    | 1   |  |  |  |  |
| 300BSS    | 3" FEMALE COUPLER X 3" MALE THREAD            | 300        | BUNA   | 1   |  |  |  |  |
| 300CSS    | 3" FEMALE COUPLER X 3" HOSE SHANK             | 300        | BUNA   | 1   |  |  |  |  |
| 300DSS    | 3" FEMALE COUPLER X 3" FEMALE THREAD          | 300        | BUNA   | 1   |  |  |  |  |
| 300ESS    | 3" MALE ADAPTER X 3" HOSE SHANK               | 300        | N/A    | 1   |  |  |  |  |
| 300FSS    | 3" MALE ADAPTER X 3" MALE THREAD              | 300        | N/A    | 1   |  |  |  |  |
| 300CAP/SS | 3" CAP X MALE ADAPTER                         | 300        | BUNA   | 1   |  |  |  |  |
| 300PL/SS  | 3" PLUG X FEMALE COUPLER                      | 300        | N/A    | 1   |  |  |  |  |

| REPLACEMENT PARTS |                                |     |  |  |  |  |
|-------------------|--------------------------------|-----|--|--|--|--|
| PART NO           | DESCRIPTION                    | QTY |  |  |  |  |
| 100RING           | RING FITS 3/4" & 1"            | 1   |  |  |  |  |
| 150RING           | RING FITS 1½", 2", 3", 4"      | 1   |  |  |  |  |
| 300K6             | CAM ARM WITH RING FITS 3" & 4" | 1   |  |  |  |  |
| 75GV              | 3/4" FKM GASKET                | 1   |  |  |  |  |
| 100GV             | 1" FKM GASKET                  | 1   |  |  |  |  |
| 150GV             | 1½" FKM GASKET                 | 1   |  |  |  |  |
| 200GB             | 2" BUNA GASKET                 | 1   |  |  |  |  |
| 200GV             | 2" FKM GASKET                  | 1   |  |  |  |  |
| 300GV             | 3" FKM GASKET                  | 1   |  |  |  |  |
| 400GV             | 4" FKM GASKET                  | 1   |  |  |  |  |

### 3/4"-3" STAINLESS STEEL

### **FEATURES**

- Tough 316 stainless steel to ensure durability
- Chemical resistant to protect against corrosion
- Precision made casting assures uniformity and proper fit
- Versatile to interchange with all types of cam lever couplings
- Smooth operation makes connections quick and easy
- Standard with Buna "N" gaskets and FKM available





### 1/4"-4" POLYPROPYLENE

### **FEATURES**

- Stainless steel rings, arms and pins
- Versatile interchangeable with all types of cam lever couplings
- Precision molded ensures a uniform and accurate fit
- Durable polypropylene is glass reinforced for rugged strength
- Smooth operating finger rings are designed for easy opening of cam levers
- Economical and superior in performance
- Standard with EPDM gaskets, FKM gaskets can be ordered separately on page 79
- Where noted, parts must be ordered in bag quantities
- ¼" and ½" series couplings interchange with ¾" size couplings. Coupling ends are ¾" size.
- 1¼" series couplings interchange with 1" size couplings. Coupling ends are 1" size.
- 1½" x 1¼" couplings interchange with 1½" size couplings. Coupling ends are 1½" size.





|       | POLYPROPYLENE CAM LEVER COUPLINGS |        |        |        |           |           |           |        |        |        |        |              |                    |
|-------|-----------------------------------|--------|--------|--------|-----------|-----------|-----------|--------|--------|--------|--------|--------------|--------------------|
| ITEM  | DESCRIPTION                       | 1/4"   | 1/2"   | 3/4"   | 1"        | 11/4"     | 1½" x 1¼" | 11/2"  | 2"     | 21/2"  | 3"     | 3"<br>3 ARMS | 4"<br>3 ARMS       |
| Α     | MALE ADAPTER X FEMALE THREAD      | 75A1/4 | 75A1/2 | 75A3/4 | 100A      | 125A      | 150125A   | 150A   | 200A   |        | 300A   |              | 400A               |
| В     | FEMALE COUPLER X MALE THREAD      |        | 75B1/2 | 75B3/4 | 100B      | 125B      | 150125B   | 150B   | 200B   |        | 300B   | 303B         | 400B               |
| С     | FEMALE COUPLER X HOSE SHANK       |        | 050C   | 075C   | 100C      | 125C      | 150125C   | 150C   | 200C   |        | 300C   | 303C         | 400C               |
| D     | FEMALE COUPLER X FEMALE THREAD    |        | 050D   | 075D   | 100D      | 125D      | 150125D   | 150D   | 200D   |        | 300D   |              | 400D               |
| E     | MALE ADAPTER X HOSE SHANK         |        | 050E   | 075E   | 100E      | 125E      | 150125E   | 150E   | 200E   |        | 300E   |              | 400E               |
| F     | MALE ADAPTER X MALE THREAD        |        | 050F   | 075F   | 100F      | 125F      | 150125F   | 150F   | 200F   |        | 300F   |              | 400F               |
| PL    | PLUG FOR FEMALE COUPLER           |        | 75PL   | 75PL   | 100125PL  | 100125PL  | 150PL     | 150PL  | 200PL  | 250PL  | 300PL  |              | 400PL              |
| CAP   | CAP FOR MALE ADAPTER              |        | 075CAP | 075CAP | 100125CAP | 100125CAP | 150CAP    | 150CAP | 200CAP | 250CAP | 300CAP |              | 400CAP<br>(2 arms) |
| CAPSH | CAP WITH SHORT ARMS               |        |        |        |           |           | 200CAPSH  |        |        |        |        |              |                    |

| 1/4" SERIES POLY CAM LEVER COUPLINGS |  |            |        |        |  |  |  |
|--------------------------------------|--|------------|--------|--------|--|--|--|
| PART NO                              | DESCRIPTION                            | MAX<br>PSI | GASKET | QTY    |  |  |  |
| 75A1/4                               | 3/4" MALE ADAPTER X 1/4" FEMALE THREAD | 300        | N/A    | 10/BAG |  |  |  |

| ½" SERIES POLY CAM LEVER COUPLINGS |  |            |        |        |  |
|------------------------------------|--|------------|--------|--------|--|
| PART NO                            | DESCRIPTION  | MAX<br>PSI | GASKET | QTY    |  |
| 75A1/2                             | ¾" MALE ADAPTER X ½" FEMALE THREAD   | 225        | N/A    | 10/BAG |  |
| 75B1/2                             | ¾" FEMALE COUPLER X ½" MALE THREAD   | 300        | EPDM   | 10/BAG |  |
| 050C                               | ¾" FEMALE COUPLER X ½" HOSE SHANK  | 300        | EPDM   | 10/BAG |  |
| 050D                               | <sup>3</sup> ∕ <sub>4</sub> " FEMALE COUPLER X <sup>1</sup> ⁄ <sub>2</sub> " FEMALE THREAD | 300        | EPDM   | 10/BAG |  |
| 050E                               | 3∕4" MALE ADAPTER X 1⁄2" HOSE SHANK  | 300        | N/A    | 10/BAG |  |
| 050F                               | ¾" MALE ADAPTER X ½" MALE THREAD   | 300        | N/A    | 10/BAG |  |
| 075CAP                             | 3/4" CAP X MALE ADAPTER  | 300        | EPDM   | 10/BAG |  |
| 75PL                               | 3/4" PLUG X FEMALE COUPLER   | 300        | N/A    | 10/BAG |  |

|         | 3/4" SERIES POLY CAM LEVER COUPLINGS     |            |        |        |  |  |
|---------|--|------------|--------|--------|--|--|
| PART NO | DESCRIPTION                              | MAX<br>PSI | GASKET | QTY    |  |  |
| 75A3/4  | ¾" MALE ADAPTER X ¾" FEMALE THREAD       | 225        | N/A    | 10/BAG |  |  |
| 75B3/4  | 3/4" FEMALE COUPLER X 3/4" MALE THREAD   | 300        | EPDM   | 10/BAG |  |  |
| 075C    | 3/4" FEMALE COUPLER X 3/4" HOSE SHANK    | 300        | EPDM   | 10/BAG |  |  |
| 075D    | 3/4" FEMALE COUPLER X 3/4" FEMALE THREAD | 300        | EPDM   | 10/BAG |  |  |
| 075E    | 3/4" MALE ADAPTER X 3/4" HOSE SHANK      | 300        | N/A    | 10/BAG |  |  |
| 075F    | 3/4" MALE ADAPTER X 3/4" MALE THREAD     | 300        | N/A    | 10/BAG |  |  |
| 075CAP  | 3/4" CAP X MALE ADAPTER                  | 300        | EPDM   | 10/BAG |  |  |
| 75PL    | 3/4" PLUG X FEMALE COUPLER               | 300        | N/A    | 10/BAG |  |  |

| 1" SERIES POLY CAM LEVER COUPLINGS |                                      |            |        |        |
|------------------------------------|--------------------------------------|------------|--------|--------|
| PART NO                            | DESCRIPTION                          | MAX<br>PSI | GASKET | QTY    |
| 100A                               | 1" MALE ADAPTER X 1" FEMALE THREAD   | 300        | N/A    | 10/BAG |
| 100B                               | 1" FEMALE COUPLER X 1" MALE THREAD   | 300        | EPDM   | 10/BAG |
| 100C                               | 1" FEMALE COUPLER X 1" HOSE SHANK    | 300        | EPDM   | 10/BAG |
| 100D                               | 1" FEMALE COUPLER X 1" FEMALE THREAD | 300        | EPDM   | 10/BAG |
| 100E                               | 1" MALE ADAPTER X 1" HOSE SHANK      | 300        | N/A    | 10/BAG |
| 100F                               | 1" MALE ADAPTER X 1" MALE THREAD     | 300        | N/A    | 10/BAG |
| 100125CAP                          | 1" CAP X MALE ADAPTER                | 300        | EPDM   | 10/BAG |
| 100125PL                           | 1" PLUG X FEMALE COUPLER             | 300        | N/A    | 10/BAG |

| 11/4" SERIES POLY CAM LEVER COUPLINGS |   |            |        |        |  |
|---------------------------------------|---|------------|--------|--------|--|
| PART NO                               | DESCRIPTION                             | MAX<br>PSI | GASKET | QTY    |  |
| 125A                                  | 1" MALE ADAPTER X 11/4" FEMALE THREAD   | 300        | N/A    | 10/BAG |  |
| 125B                                  | 1" FEMALE COUPLER X 11/4" MALE THREAD   | 300        | EPDM   | 10/BAG |  |
| 125C                                  | 1" FEMALE COUPLER X 11/4" HOSE SHANK    | 300        | EPDM   | 10/BAG |  |
| 125D                                  | 1" FEMALE COUPLER X 11/4" FEMALE THREAD | 300        | EPDM   | 10/BAG |  |
| 125E                                  | 1" MALE ADAPTER X 11/4" HOSE SHANK      | 300        | N/A    | 10/BAG |  |
| 125F                                  | 1" MALE ADAPTER X 11/4" MALE THREAD     | 300        | N/A    | 10/BAG |  |
| 100125CAP                             | 1" CAP X MALE ADAPTER                   | 300        | EPDM   | 10/BAG |  |
| 100125PL                              | 1" PLUG X FEMALE COUPLER                | 300        | N/A    | 10/BAG |  |

| 1½" X 1¼" SERIES POLY CAM LEVER COUPLINGS |  |            |        |        |
|---|--|------------|--------|--------|
| PART NO                                   | DESCRIPTION  | MAX<br>PSI | GASKET | QTY    |
| 150125A                                   | $1\frac{1}{2}$ " MALE ADAPTER X $1\frac{1}{4}$ " FEMALE THREAD | 225        | N/A    | 10/BAG |
| 150125B                                   | 1½" FEMALE COUPLER X 1¼" MALE THREAD                           | 300        | EPDM   | 1      |
| 150125C                                   | 1½" FEMALE COUPLER X 1¼" HOSE SHANK                            | 300        | EPDM   | 1      |
| 150125D                                   | 1½" FEMALE COUPLER X 1¼" FEMALE THREAD                         | 300        | EPDM   | 1      |
| 150125E                                   | 1½" MALE ADAPTER X 1¼" HOSE SHANK                              | 225        | EPDM   | 10/BAG |
| 150125F                                   | 1½" MALE ADAPTER X 1¼" MALE THREAD                             | 300        | N/A    | 10/BAG |
| 150CAP                                    | 1½" CAP X MALE ADAPTER   | 300        | EPDM   | 1      |
| 150PL                                     | 1½" PLUG X FEMALE COUPLER                                      | 225        | N/A    | 10/BAG |

| 1½" SERIES POLY CAM LEVER COUPLINGS |  |            |        |        |
|-------------------------------------|--|------------|--------|--------|
| PART NO                             | DESCRIPTION                            | MAX<br>PSI | GASKET | QTY    |
| 150A                                | 1½" MALE ADAPTER X 1½" FEMALE THREAD   | 225        | N/A    | 10/BAG |
| 150B                                | 1½" FEMALE COUPLER X 1½" MALE THREAD   | 300        | EPDM   | 1      |
| 150C                                | 1½" FEMALE COUPLER X 1½" HOSE SHANK    | 300        | EPDM   | 1      |
| 150D                                | 1½" FEMALE COUPLER X 1½" FEMALE THREAD | 300        | EPDM   | 1      |
| 150E                                | 1½" MALE ADAPTER X 1½" HOSE SHANK      | 200        | N/A    | 10/BAG |
| 150F                                | 1½" MALE ADAPTER X 1½" MALE THREAD     | 300        | N/A    | 10/BAG |
| 150CAP                              | 1½" CAP X MALE ADAPTER                 | 300        | EPDM   | 1      |
| 150PL                               | 1½" PLUG X FEMALE COUPLER              | 225        | N/A    | 10/BAG |

### 1/4"-4" POLYPROPYLENE

#### **FEATURES**

- Stainless steel rings, arms and pins
- Versatile interchangeable with all types of cam lever couplings
- Precision molded ensures a uniform and accurate fit
- Durable polypropylene is glass reinforced for rugged strength
- Smooth operating finger rings are designed for easy opening of cam levers
- Economical and superior in performance
- Standard with EPDM gaskets, FKM gaskets can be ordered separately on page 79
- Where noted, parts must be ordered in bag quantities
- ¼",¾" and ½" series couplings interchange with ¾" size couplings. Coupling ends are ¾" size.
- 1¼" series couplings interchange with 1" size couplings. Coupling ends are 1" size.
- 1½" x 1¼" couplings interchange with 1½" size couplings. Coupling ends are 1½" size.





### 1/4"-4" POLYPROPYLENE

### **FEATURES**

- Stainless steel rings, arms and pins
- Versatile interchangeable with all types of cam lever couplings
- Precision molded ensures a uniform and accurate fit
- Durable polypropylene is glass reinforced for rugged strength
- Smooth operating finger rings are designed for easy opening of cam levers
- Economical and superior in performance
- Standard with EPDM gaskets, FKM also available
- Where noted, parts must be ordered in bag quantities
- ¼",¾" and ½" series couplings interchange with ¾" size couplings. Coupling ends are ¾" size.
- 1¼" series couplings interchange with 1" size couplings. Coupling ends are 1" size.
- 1½" x 1¼" couplings interchange with 1½" size couplings. Coupling ends are 1½" size.





| 2" SERIES POLY CAM LEVER COUPLINGS |   |            |        |        |  |
|------------------------------------|---|------------|--------|--------|--|
| PART NO                            | DESCRIPTION                                 | MAX<br>PSI | GASKET | QTY    |  |
| 200A                               | 2" MALE ADAPTER X 2" FEMALE THREAD          | 225        | N/A    | 10/BAG |  |
| 200B                               | 2" FEMALE COUPLER X 2" MALE THREAD          | 225        | EPDM   | 1      |  |
| 201B                               | 2" FEMALE COUPLER X 2" EXTENDED MALE THREAD | 200        | EPDM   | 1      |  |
| 200C                               | 2" FEMALE COUPLER X 2" HOSE SHANK           | 225        | EPDM   | 1      |  |
| 200D                               | 2" FEMALE COUPLER X 2" FEMALE THREAD        | 200        | EPDM   | 1      |  |
| 200E                               | 2" MALE ADAPTER X 2" HOSE SHANK             | 200        | N/A    | 10/BAG |  |
| 200F                               | 2" MALE ADAPTER X 2" MALE THREAD            | 300        | N/A    | 10/BAG |  |
| 200CAP                             | 2" CAP X MALE ADAPTER                       | 200        | EPDM   | 1      |  |
| 200CAPSH                           | 2" CAP X MALE ADAPTER W/SHORT ARMS          | 200        | EPDM   | 1      |  |
| 200PL                              | 2" PLUG X FEMALE COUPLER                    | 225        | N/A    | 10/BAG |  |

| 2" X 1½" SERIES POLY CAM LEVER COUPLINGS |                                    |            |        |     |
|--|------------------------------------|------------|--------|-----|
| PART NO                                  | DESCRIPTION                        | MAX<br>PSI | GASKET | QTY |
| 200150C                                  | 2" FEMALE COUPLER X 1½" HOSE SHANK | 300        | EPDM   | 1   |

| 2½" SERIES POLY CAM LEVER COUPLINGS |                           |            |        |     |  |
|-------------------------------------|---------------------------|------------|--------|-----|--|
| PART NO                             | DESCRIPTION               | MAX<br>PSI | GASKET | QTY |  |
| 250CAP                              | 2½" CAP X MALE ADAPTER    | 300        | EPDM   | 1   |  |
| 250PL                               | 2½" PLUG X FEMALE COUPLER | 300        | N/A    | 1   |  |



| 3" SERIES POLY CAM LEVER COUPLINGS |   |            |        |     |
|------------------------------------|---|------------|--------|-----|
| PART NO                            | DESCRIPTION                                   | MAX<br>PSI | GASKET | QTY |
| 300A                               | 3" MALE ADAPTER X 3" FEMALE THREAD            | 100        | N/A    | 1   |
| 300B                               | 3" FEMALE COUPLER X 3" MALE THREAD            | 150        | EPDM   | 1   |
| 303B                               | 3" FEMALE COUPLER X 3" EXTENDED MALE THREAD   | 200        | EPDM   | 1   |
| 303B200A                           | 3" FEMALE COUPLER W/ 3 ARMS X 2" MALE ADAPTER | 200        | EPDM   | 1   |
| 300C                               | 3" FEMALE COUPLER X 3" HOSE SHANK             | 200        | EPDM   | 1   |
| 303C                               | 3" FEMALE COUPLER W/ 3 ARMS X 3" HOSE SHANK   | 200        | EPDM   | 1   |
| 300D                               | 3" FEMALE COUPLER X 3" FEMALE THREAD          | 200        | EPDM   | 1   |
| 300E                               | 3" MALE ADAPTER X 3" HOSE SHANK               | 150        | N/A    | 1   |
| 300F                               | 3" MALE ADAPTER X 3" MALE THREAD              | 100        | N/A    | 1   |
| 300CAP                             | 3" CAP X MALE ADAPTER                         | 100        | EPDM   | 1   |
| 300PL                              | 3" PLUG X FEMALE COUPLER                      | 150        | N/A    | 1   |

| 4" SERIES POLY CAM LEVER COUPLINGS |                                      |            |        |     |
|------------------------------------|--------------------------------------|------------|--------|-----|
| PART NO                            | DESCRIPTION                          | MAX<br>PSI | GASKET | QTY |
| 400A                               | 4" MALE ADAPTER X 4" FEMALE THREAD   | 75         | N/A    | 1   |
| 400B                               | 4" FEMALE COUPLER X 4" MALE THREAD   | 150        | EPDM   | 1   |
| 400C                               | 4" FEMALE COUPLER X 4" HOSE SHANK    | 150        | EPDM   | 1   |
| 400D                               | 4" FEMALE COUPLER X 4" FEMALE THREAD | 100        | EPDM   | 1   |
| 400E                               | 4" MALE ADAPTER X 4" HOSE SHANK      | 50         | N/A    | 1   |
| 400F                               | 4" MALE ADAPTER X 4" MALE THREAD     | 75         | N/A    | 1   |
| 400CAP                             | 4" CAP X MALE ADAPTER (W/2 ARMS)     | 100        | EPDM   | 1   |
| 400PL                              | 4" PLUG X FEMALE COUPLER             | 75         | N/A    | 1   |



# EASY ACTION LOCKING LEVER!



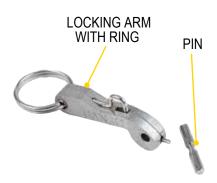
| 1½"- 2  | 1½"- 2" SERIES LOCKING POLY CAM LEVER COUPLINGS |            |        |     |  |
|---------|---|------------|--------|-----|--|
| PART NO | DESCRIPTION                                     | MAX<br>PSI | GASKET | QTY |  |
| L150B   | 1½" FEMALE COUPLER X 1½" MALE THREAD            | 300        | EPDM   | 1   |  |
| L150C   | 1½" FEMALE COUPLER X 1½" HOSE SHANK             | 300        | EPDM   | 1   |  |
| L150D   | 1½" FEMALE COUPLER X 1½" FEMALE THREAD          | 300        | EPDM   | 1   |  |
| L150CAP | 1½" CAP X MALE ADAPTER                          | 300        | EPDM   | 1   |  |
| L200B   | 2" FEMALE COUPLER X 2" MALE THREAD              | 225        | EPDM   | 1   |  |
| L200C   | 2" FEMALE COUPLER X 2" HOSE SHANK               | 225        | EPDM   | 1   |  |
| L200D   | 2" FEMALE COUPLER X 2" FEMALE THREAD            | 200        | EPDM   | 1   |  |
| L200CAP | 2" CAP X MALE ADAPTER                           | 200        | EPDM   | 1   |  |



|          | SPOOL ADAPTERS                    |            |        |     |  |
|----------|-----------------------------------|------------|--------|-----|--|
| PART NO  | DESCRIPTION                       | MAX<br>PSI | GASKET | QTY |  |
| 200FF    | 2" MALE ADAPTER X 2" MALE ADAPTER | 150        | N/A    | 1   |  |
| 300F200F | 3" MALE ADAPTER X 2" MALE ADAPTER | 75         | N/A    | 1   |  |
| 300FF    | 3" MALE ADAPTER X 3" MALE ADAPTER | 75         | N/A    | 1   |  |







|           | REPLACEMENT PARTS                            |     |
|-----------|--|-----|
| PART NO   | DESCRIPTION                                  | QTY |
| 100RING   | RING FITS 3/4" & 1"                          | 1   |
| 150RING   | RING FITS 11/2", 2", 3", 4"                  | 1   |
| 150(200)K | 11/2", 2" SS CAM ARM W/RING                  | 1   |
| 300K      | 3" SS CAM ARM WITH RING                      | 1   |
| V20207    | 11" LANYARD                                  | 1   |
| 75SHM     | ¾" SHIM                                      | 1   |
| 100SHM    | 1" SHIM                                      | 1   |
| 150SHM    | 1½" SHIM                                     | 1   |
| 200SHM    | 2" SHIM                                      | 1   |
| 300SHM    | 3" SHIM                                      | 1   |
| 400SHM    | 4" SHIM                                      | 1   |
| 75G       | 1∕2" & ³⁄4" EPDM GASKET                      | 1   |
| 75GV      | $\frac{1}{2}$ " & $\frac{3}{4}$ " FKM GASKET | 1   |
| 100G      | 1" & 11/4" EPDM GASKET                       | 1   |
| 100GV     | 1" & 11/4" FKM GASKET                        | 1   |
| 150G      | 1½" EPDM GASKET                              | 1   |
| 150GV     | 1½" FKM GASKET                               | 1   |
| 200G      | 2" EPDM GASKET                               | 1   |
| 200GV     | 2" FKM GASKET                                | 1   |
| 300G      | 3" EPDM GASKET                               | 1   |
| 300GV     | 3" FKM GASKET                                | 1   |
| 400G      | 4" EPDM GASKET                               | 1   |
| 400GV     | 4" FKM GASKET                                | 1   |
| 200KL     | 2" LOCKING CAM ARM WITH RING FITS 11/2" & 2" | 1   |
| 200PKL    | 2" COUPLING PIN FITS 11/2" & 2"              | 1   |

### 1/4"-4" POLYPROPYLENE

### **FEATURES**

- Chemical resistant to protect against corrosion
- Versatile to interchange with all types of cam lever couplings
- Smooth operation makes connections quick and easy
- Where noted, parts must be ordered in bag quantities
- Locking cam arm lever is not intended to be used as a security device or prevent unauthorized opening of coupling assembly.



# 1½"-2" 90° & 45° POLYPROPYLENE

### **FEATURES**

- Precision molded in polypropylene, reinforced with fiberglass for strength
- Stainless steel rings, arms and pins resist corrosion
- 90° angle couplings and adapters will reduce the number of elbows and other pipe fittings used in plumbing applications















|         | 1½" 90° POLY CAM LEVER COUPLINGS           |            |        |     |  |
|---------|--|------------|--------|-----|--|
| PART NO | DESCRIPTION                                | MAX<br>PSI | GASKET | QTY |  |
| 150A90  | 1½" 90° MALE ADAPTER X 1½" FEMALE THREAD   | 225        | N/A    | 1   |  |
| 150C90  | 1½" 90° FEMALE COUPLER X 1½" HOSE SHANK    | 225        | EPDM   | 1   |  |
| 150D90  | 1½" 90° FEMALE COUPLER X 1½" FEMALE THREAD | 300        | EPDM   | 1   |  |
| 150F90  | 1½" 90° MALE ADAPTER X 1½" MALE THREAD     | 300        | N/A    | 1   |  |

| 2" 90° SERIES POLY CAM LEVER COUPLINGS |  |            |        |     |
|--|--|------------|--------|-----|
| PART NO                                | DESCRIPTION                              | MAX<br>PSI | GASKET | QTY |
| 200A90                                 | 2" 90° MALE ADAPTER X 2" FEMALE THREAD   | 225        | N/A    | 1   |
| 200B90                                 | 2" 90° FEMALE COUPLER X 2" MALE THREAD   | 225        | EPDM   | 1   |
| 200C90                                 | 2" 90° FEMALE COUPLER X 2" HOSE SHANK    | 225        | EPDM   | 1   |
| 200D90                                 | 2" 90° FEMALE COUPLER X 2" FEMALE THREAD | 200        | EPDM   | 1   |
| 200F90                                 | 2" 90° MALE ADAPTER X 2" MALE THREAD     | 225        | N/A    | 1   |

| 2" 45° POLY CAM LEVER COUPLINGS |                                      |            |        |     |
|---------------------------------|--------------------------------------|------------|--------|-----|
| PART NO                         | DESCRIPTION                          | MAX<br>PSI | GASKET | QTY |
| 200F45                          | 2" 45° MALE ADAPTER X 2" MALE THREAD | 225        | N/A    | 1   |



### **GARDEN HOSE FITTINGS**

### **FEATURES**

- Same construction and design that farmers use for their heavy spraying applications.
- Rugged, secure quick-connect cam arms
- Heavy-duty thick wall reinforced polypropylene
- Proven, leak-free construction
- Full flow design



3/4" ADAPTER X 3/4" GARDEN HOSE MALE THREAD

3/4" FEMALE NPT X 3/4" GARDEN HOSE MALE THREAD

 $^3\!\!4$ " MALE NPT X  $^3\!\!4$ " GARDEN HOSE MALE THREAD

3/4" GARDEN HOSE FITTING GASKET

300

300

300

300

N/A

10/BAG

10/BAG

10/BAG

10/BAG

1

GHMT075F

GHFT075MPT

GHMT075FPT

GHMT075MPT

GHFT075G



|         | GARDEN HOSE NOZZLE            |            |     |
|---------|-------------------------------|------------|-----|
| PART NO | DESCRIPTION                   | MAX<br>PSI | QTY |
| GHN075  | 3/4" GARDEN HOSE SPRAY NOZZLE | N/A        | 1   |

### **GARDEN HOSE NOZZLE**

- Heavy duty machined aluminum construction stands up to hard use
- Comfort grip soft rubber
- Resists dents, mars and scratches; protects any surface that comes in contact with nozzle
- Aluminum hose connection provides a tight fit, will not rust
- Multiple spray pattern adjusts from a powerful jet stream to a gentle fan spray. Ideal for all your spraying needs.
- Stainless steel spray cap for precise spray patterns



### **SUPER CLAMPS**

### **FEATURES**

- Stainless steel construction
- 304 stainless steel bolt with 316 stainless steel nut to prevent seizing
- 360° sealing surface
- Ideal for high torque applications
- Strong, positive connections where ordinary hose clamps fail
- T-bolt design
- 3 spot welds for extra strength
- Sold in bags of 10 only
- Torque specifications: working torque 50-80 inch pounds, maximum torque 125 inch pounds
- Please note new Min-Max Diameter measurements.



|         | SUPER CLAMPS            |                     |               |        |  |  |
|---------|-------------------------|---------------------|---------------|--------|--|--|
| PART NO | DESCRIPTION             | MIN-MAX<br>DIAMETER | MAX<br>TORQUE | QTY    |  |  |
| TC120   | 1" T-BOLT HOSE CLAMP    | 1.18"-1.34"         | 75 IN-LBS     | 10/BAG |  |  |
| TC130   | 11/4" T-BOLT HOSE CLAMP | 1.34"-1.50"         | 75 IN-LBS     | 10/BAG |  |  |
| TC150   | 1½" T-BOLT HOSE CLAMP   | 1.50"-1.62"         | 75 IN-LBS     | 10/BAG |  |  |
| TC162   | 11/4" T-BOLT HOSE CLAMP | 1.62"-1.87"         | 75 IN-LBS     | 10/BAG |  |  |
| TC181   | 1½" T-BOLT HOSE CLAMP   | 1.84"-2.12"         | 75 IN-LBS     | 10/BAG |  |  |
| TC193   | 1½" T-BOLT HOSE CLAMP   | 1.93"-2.24"         | 75 IN-LBS     | 10/BAG |  |  |
| TC206   | 2" T-BOLT HOSE CLAMP    | 2.17"-2.48"         | 75 IN-LBS     | 10/BAG |  |  |
| TC218   | 2" T-BOLT HOSE CLAMP    | 2.18"-2.52"         | 75 IN-LBS     | 10/BAG |  |  |
| TC224   | 2" T-BOLT HOSE CLAMP    | 2.24"-2.58"         | 75 IN-LBS     | 10/BAG |  |  |
| TC231   | 2" T-BOLT HOSE CLAMP    | 2.31"-2.65"         | 75 IN-LBS     | 10/BAG |  |  |
| TC250   | 2" T-BOLT HOSE CLAMP    | 2.50"-2.81"         | 75 IN-LBS     | 10/BAG |  |  |
| TC287   | 2" T-BOLT HOSE CLAMP    | 2.83"-3.21"         | 75 IN-LBS     | 10/BAG |  |  |
| TC312   | 3" T-BOLT HOSE CLAMP    | 3.24"-3.58"         | 75 IN-LBS     | 10/BAG |  |  |
| TC331   | 3" T-BOLT HOSE CLAMP    | 3.27"-3.65"         | 75 IN-LBS     | 10/BAG |  |  |
| TC343   | 3" T-BOLT HOSE CLAMP    | 3.39"-3.77"         | 75 IN-LBS     | 10/BAG |  |  |
| TC425   | 4" T-BOLT HOSE CLAMP    | 4.21"-4.59"         | 75 IN-LBS     | 10/BAG |  |  |
| TC438   | 4" T-BOLT HOSE CLAMP    | 4.28"-4.69"         | 125 IN-LBS    | 10/BAG |  |  |
| TC456   | 4" T-BOLT HOSE CLAMP    | 4.46"-4.87"         | 125 IN-LBS    | 10/BAG |  |  |

### TWO BARREL CLAMPS

- Perfect for tight, hard to reach spaces
- Minimizes parts that protrude by tightening together versus tightening away from
- Deep socket tools not required
- 300 stainless steel construction





|         | TWO BARREL CLAMPS                        |                     |               |     |  |
|---------|--|---------------------|---------------|-----|--|
| PART NO | DESCRIPTION                              | MIN-MAX<br>DIAMETER | MAX<br>TORQUE | QTY |  |
| BC090   | 3/4"300 SS FLOATING BRIDGE W/LOCK WASHER | 0.91"-0.98"         | 75 IN-LBS     | 1   |  |
| BC114   | 1" 300 SS FLOATING BRIDGE W/LOCK WASHER  | 1.14"-1.22"         | 75 IN-LBS     | 1   |  |



|           | NIPPLES                 |            |        |
|-----------|-------------------------|------------|--------|
| PART NO   | DESCRIPTION             | MAX<br>PSI | QTY    |
| NIP025-SH | 1/4" SHORT POLY NIPPLE  | 300        | 10/BAG |
| NIP038-SH | 3/8" SHORT POLY NIPPLE  | 300        | 10/BAG |
| NIP050-SH | ½" SHORT POLY NIPPLE    | 300        | 10/BAG |
| NIP050-3  | ½" X 3" POLY NIPPLE     | 300        | 10/BAG |
| NIP075-SH | 3/4" SHORT POLY NIPPLE  | 300        | 10/BAG |
| NIP075-4  | 3/4" X 4" POLY NIPPLE   | 300        | 10/BAG |
| NIP075-6  | 3/4" X 6" POLY NIPPLE   | 300        | 10/BAG |
| NIP100-SH | 1" SHORT POLY NIPPLE    | 300        | 10/BAG |
| NIP100-4  | 1" X 4" POLY NIPPLE     | 300        | 10/BAG |
| NIP100-6  | 1" X 6" POLY NIPPLE     | 300        | 10/BAG |
| NIP125-SH | 11/4" SHORT POLY NIPPLE | 300        | 10/BAG |
| NIP125-4  | 11/4" X 4" POLY NIPPLE  | 300        | 10/BAG |
| NIP125-6  | 11/4" X 6" POLY NIPPLE  | 300        | 10/BAG |
| NIP150-SH | 1½" SHORT POLY NIPPLE   | 300        | 10/BAG |
| NIP150-3  | 1½" X 3" POLY NIPPLE    | 300        | 10/BAG |
| NIP150-4  | 1½" X 4" POLY NIPPLE    | 300        | 10/BAG |
| NIP150-5  | 1½" X 5" POLY NIPPLE    | 300        | 10/BAG |
| NIP150-6  | 1½" X 6" POLY NIPPLE    | 300        | 10/BAG |
| NIP200-SH | 2" SHORT POLY NIPPLE    | 300        | 10/BAG |
| NIP200-4  | 2" X 4" POLY NIPPLE     | 300        | 10/BAG |
| NIP200-6  | 2" X 6" POLY NIPPLE     | 300        | 10/BAG |
| NIP300-SH | 3" SHORT POLY NIPPLE    | 300        | 1      |
| NIP300-4  | 3" X 4" POLY NIPPLE     | 300        | 1      |
| NIP300-6  | 3" X 6" POLY NIPPLE     | 300        | 1      |
| NIP400-SH | 4" SHORT POLY NIPPLE    | 300        | 1      |



|           | REDUCING NIPPLES                  |            |        |
|-----------|-----------------------------------|------------|--------|
| PART NO   | DESCRIPTION                       | MAX<br>PSI | QTY    |
| RN050-038 | 1/2" X 3/8" POLY REDUCING NIPPLE  | 300        | 10/BAG |
| RN075-050 | 3/4" X 1/2" POLY REDUCING NIPPLE  | 300        | 10/BAG |
| RN100-050 | 1" X ½" POLY REDUCING NIPPLE      | 300        | 10/BAG |
| RN100-075 | 1" X ¾" POLY REDUCING NIPPLE      | 300        | 10/BAG |
| RN125-075 | 11/4" X 3/4" POLY REDUCING NIPPLE | 300        | 10/BAG |
| RN125-100 | 11/4" X 1" POLY REDUCING NIPPLE   | 300        | 10/BAG |
| RN150-100 | 1½" X 1" POLY REDUCING NIPPLE     | 300        | 10/BAG |
| RN150-125 | 1½" X1¼" POLY REDUCING NIPPLE     | 300        | 10/BAG |
| RN200-125 | 2" X 11/4" POLY REDUCING NIPPLE   | 300        | 10/BAG |
| RN200-150 | 2" X 1½" POLY REDUCING NIPPLE     | 300        | 10/BAG |
| RN300-200 | 3" X 2" POLY REDUCING NIPPLE      | 300        | 1      |



|         | PIPE COUPLINGS           |            |        |
|---------|--------------------------|------------|--------|
| PART NO | DESCRIPTION              | MAX<br>PSI | QTY    |
| CPLG025 | 1/4" POLY PIPE COUPLING  | 300        | 10/BAG |
| CPLG038 | 3/8" POLY PIPE COUPLING  | 300        | 10/BAG |
| CPLG050 | ½" POLY PIPE COUPLING    | 300        | 10/BAG |
| CPLG075 | 3/4" POLY PIPE COUPLING  | 300        | 10/BAG |
| CPLG100 | 1" POLY PIPE COUPLING    | 300        | 10/BAG |
| CPLG125 | 11/4" POLY PIPE COUPLING | 300        | 10/BAG |
| CPLG150 | 1½" POLY PIPE COUPLING   | 300        | 10/BAG |
| CPLG200 | 2" POLY PIPE COUPLING    | 300        | 10/BAG |
| CPLG300 | 3" POLY PIPE COUPLING    | 225        | 1      |

# RE

RB400-300

#### REDUCING COUPLINGS MAX PART NO QTY DESCRIPTION RC100-075 1" X 3/4" POLY REDUCING COUPLING 10/BAG 10/BAG RC150-100 11/2" X 1" POLY REDUCING COUPLING RC150-125 1½" X1¼" POLY REDUCING COUPLING 300 10/BAG RC200-050 2" X 1/2" POLY REDUCING COUPLING 10/BAG RC200-100 2" X 1" POLY REDUCING COUPLING 10/BAG RC200-125 2" X 11/4" POLY REDUCING COUPLING 10/BAG RC200-150 2" X 11/2" POLY REDUCING COUPLING 10/BAG 3" X 2" POLY REDUCING COUPLING RC300-200 1

| THE REAL PROPERTY. | 7                                     |            |        |
|--------------------|---------------------------------------|------------|--------|
|                    | REDUCING BUSHINGS                     |            |        |
| PART NO            | DESCRIPTION                           | MAX<br>PSI | QTY    |
| RB038-025          | 3/8" MPT X 1/4" FPT REDUCING BUSHING  | 300        | 10/BAG |
| RB050-025          | 1/2" MPT X 1/4" FPT REDUCING BUSHING  | 300        | 10/BAG |
| RB050-038          | ½" MPT X 3/8" FPT REDUCING BUSHING    | 300        | 10/BAG |
| RB075-025          | 3/4" MPT X 1/4" FPT REDUCING BUSHING  | 300        | 10/BAG |
| RB075-038          | 3/4" MPT X 3/8" FPT REDUCING BUSHING  | 300        | 10/BAG |
| RB075-050          | 3/4" MPT X 1/2" FPT REDUCING BUSHING  | 300        | 10/BAG |
| RB100-025          | 1" MPT X 1/4" FPT REDUCING BUSHING    | 300        | 10/BAG |
| RB100-050          | 1" MPT X ½" FPT REDUCING BUSHING      | 300        | 10/BAG |
| RB100-075          | 1" MPT X 3/4" FPT REDUCING BUSHING    | 300        | 10/BAG |
| RB125-038          | 11/4" MPT X 3/8" FPT REDUCING BUSHING | 300        | 10/BAG |
| RB125-075          | 11/4" MPT X 3/4" FPT REDUCING BUSHING | 300        | 10/BAG |
| RB125-100          | 11/4" MPT X 1" FPT REDUCING BUSHING   | 300        | 10/BAG |
| RB150-075          | 1½" MPT X ¾" FPT REDUCING BUSHING     | 300        | 10/BAG |
| RB150-100          | 1½" MPT X 1" FPT REDUCING BUSHING     | 300        | 10/BAG |
| RB150-125          | 1½" MPT X1¼" FPT REDUCING BUSHING     | 300        | 10/BAG |
| RB200-075          | 2" MPT X 3/4" FPT REDUCING BUSHING    | 300        | 10/BAG |
| RB200-100          | 2" MPT X 1" FPT REDUCING BUSHING      | 300        | 10/BAG |
| RB200-125          | 2" MPT X 11/4" FPT REDUCING BUSHING   | 300        | 10/BAG |
| RB200-150          | 2" MPT X 1½" FPT REDUCING BUSHING     | 300        | 10/BAG |
| RB300-150          | 3" MPT X 1½" FPT REDUCING BUSHING     | 300        | 1      |
| RB300-200          | 3" MPT X 2" FPT REDUCING BUSHING      | 300        | 1      |

4" MPT X 3" FPT REDUCING BUSHING

300

1

### PIPE FITTINGS

- Glass reinforced polypropylene
- Heavy duty (Schedule 80)
- Lightweight with excellent strength
- NPT threads
- Excellent chemical resistance
- Where noted, parts must be ordered in bag quantities

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| PIPE CAPS |                     |            |        |
|-----------|---------------------|------------|--------|
| PART NO   | DESCRIPTION         | MAX<br>PSI | QTY    |
| CAP025    | 1/4" POLY PIPE CAP  | 300        | 10/BAG |
| CAP038    | 3/8" POLY PIPE CAP  | 300        | 10/BAG |
| CAP050    | ½" POLY PIPE CAP    | 300        | 10/BAG |
| CAP075    | 3/4" POLY PIPE CAP  | 300        | 10/BAG |
| CAP100    | 1" POLY PIPE CAP    | 300        | 10/BAG |
| CAP125    | 11/4" POLY PIPE CAP | 300        | 10/BAG |
| CAP150    | 1½" POLY PIPE CAP   | 300        | 10/BAG |
| CAP200    | 2" POLY PIPE CAP    | 300        | 10/BAG |
| CAP300    | 3" POLY PIPE CAP    | 300        | 1      |



|         | CROSSES          |            |        |
|---------|------------------|------------|--------|
| PART NO | DESCRIPTION      | MAX<br>PSI | QTY    |
| CR025   | 1/4" POLY CROSS  | 300        | 10/BAG |
| CR038   | 3/8" POLY CROSS  | 300        | 10/BAG |
| CR050   | ½" POLY CROSS    | 300        | 5/BAG  |
| CR075   | 3/4" POLY CROSS  | 300        | 5/BAG  |
| CR100   | 1" POLY CROSS    | 300        | 5/BAG  |
| CR125   | 11/4" POLY CROSS | 300        | 1      |
| CR150   | 1½" POLY CROSS   | 300        | 1      |
| CR200   | 2" POLY CROSS    | 300        | 1      |



|         | PIPE PLUGS          |            |        |
|---------|---------------------|------------|--------|
| PART NO | DESCRIPTION         | MAX<br>PSI | QTY    |
| PLUG025 | 1/4" POLY PIPE PLUG | 300        | 10/BAG |
| PLUG038 | 3/8" POLY PIPE PLUG | 300        | 10/BAG |
| PLUG050 | ½" POLY PIPE PLUG   | 300        | 10/BAG |
| PLUG075 | 3/4" POLY PIPE PLUG | 300        | 10/BAG |
| PLUG100 | 1" POLY PIPE PLUG   | 300        | 10/BAG |
| PLUG125 | 1¼" POLY PIPE PLUG  | 300        | 10/BAG |
| PLUG150 | 1½" POLY PIPE PLUG  | 300        | 10/BAG |
| PLUG200 | 2" POLY PIPE PLUG   | 300        | 10/BAG |
| PLUG300 | 3" POLY PIPE PLUG   | 300        | 1      |



|         | TEES           |            |        |
|---------|----------------|------------|--------|
| PART NO | DESCRIPTION    | MAX<br>PSI | QTY    |
| TEE025  | 1/4" POLY TEE  | 300        | 10/BAG |
| TEE038  | 3%" POLY TEE   | 300        | 10/BAG |
| TEE050  | ½" POLY TEE    | 300        | 10/BAG |
| TEE075  | 3/4" POLY TEE  | 300        | 10/BAG |
| TEE100  | 1" POLY TEE    | 300        | 10/BAG |
| TEE125  | 11/4" POLY TEE | 300        | 10/BAG |
| TEE150  | 1½" POLY TEE   | 300        | 1      |
| TEE200  | 2" POLY TEE    | 300        | 1      |
| TEE300  | 3" POLY TEE    | 225        | 1      |



|           | HOSE BARB CROSS         |            |     |
|-----------|-------------------------|------------|-----|
| PART NO   | DESCRIPTION             | MAX<br>PSI | QTY |
| HBC050075 | ½" X ¾" HOSE BARB CROSS | 300        | 1   |



| GAUGE PORT TEE                      |  |   |  |
|-------------------------------------|--|---|--|
| DESCRIPTION                         | MAX<br>PSI                                       | QTY   |  |
| 3/4" POLY TEE W/ 1/4" FEMALE THREAD | 300  | 10/BAG  |  |
| 1" POLY TEE W/ 1/4" FEMALE THREAD   | 300  | 10/BAG  |  |
|                                     | DESCRIPTION  3/4" POLY TEE W/ 1/4" FEMALE THREAD | DESCRIPTION MAX PSI 3/4" POLY TEE W/ 1/4" FEMALE THREAD 300 |  |



| 90° ELBOWS |                      |            |        |
|------------|----------------------|------------|--------|
| PART NO    | DESCRIPTION          | MAX<br>PSI | QTY    |
| EL025-90   | 1/4" 90° POLY ELBOW  | 300        | 10/BAG |
| EL038-90   | 3/8" 90° POLY ELBOW  | 300        | 10/BAG |
| EL050-90   | ½" 90° POLY ELBOW    | 300        | 10/BAG |
| EL075-90   | 3/4" 90° POLY ELBOW  | 300        | 10/BAG |
| EL100-90   | 1" 90° POLY ELBOW    | 300        | 10/BAG |
| EL125-90   | 11/4" 90° POLY ELBOW | 300        | 10/BAG |
| EL150-90   | 1½" 90° POLY ELBOW   | 300        | 10/BAG |
| EL200-90   | 2" 90° POLY ELBOW    | 300        | 1      |
| EL300-90   | 3" 90° POLY ELBOW    | 300        | 1      |



|          | 45° STREET ELBOWS           |            |        |
|----------|-----------------------------|------------|--------|
| PART NO  | DESCRIPTION                 | MAX<br>PSI | QTY    |
| SL075-45 | 3/4" 45° POLY STREET ELBOW  | 300        | 10/BAG |
| SL100-45 | 1" 45° POLY STREET ELBOW    | 300        | 10/BAG |
| SL125-45 | 11/4" 45° POLY STREET ELBOW | 300        | 10/BAG |
| SL150-45 | 1½" 45° POLY STREET ELBOW   | 300        | 10/BAG |
| SL200-45 | 2" 45° POLY STREET ELBOW    | 225        | 10/BAG |
| SL300-45 | 3" 45° POLY STREET ELBOW    | 300        | 1      |



| 90° HOSE BARB ELBOW |                                     |            |        |
|---------------------|-------------------------------------|------------|--------|
| PART NO             | DESCRIPTION                         | MAX<br>PSI | QTY    |
| HBB20012590         | 2" X 11/4" 90° POLY HOSE BARB ELBOW | 300        | 10/BAG |



|          | 45° ELBOW         |            |        |
|----------|-------------------|------------|--------|
| PART NO  | DESCRIPTION       | MAX<br>PSI | QTY    |
| EL100-45 | 1" 45° POLY ELBOW | 300        | 10/BAG |



| 90° STREET ELBOWS |                             |            |        |
|-------------------|-----------------------------|------------|--------|
| PART NO           | DESCRIPTION                 | MAX<br>PSI | QTY    |
| SL025-90          | 1/4" 90° POLY STREET ELBOW  | 300        | 10/BAG |
| SL038-90          | 3/8" 90° POLY STREET ELBOW  | 300        | 10/BAG |
| SL050-90          | ½" 90° POLY STREET ELBOW    | 300        | 10/BAG |
| SL075-90          | 3/4" 90° POLY STREET ELBOW  | 300        | 10/BAG |
| SL100-90          | 1" 90° POLY STREET ELBOW    | 300        | 10/BAG |
| SL125-90          | 11/4" 90° POLY STREET ELBOW | 300        | 10/BAG |
| SL150-90          | 1½" 90° POLY STREET ELBOW   | 300        | 10/BAG |
| SL200-90          | 2" 90° POLY STREET ELBOW    | 300        | 10/BAG |
| SL300-90          | 3" 90° POLY STREET ELBOW    | 300        | 1      |



| 90° HOSE BARB ELBOW |                                   |            |        |
|---------------------|-----------------------------------|------------|--------|
| PART NO             | DESCRIPTION                       | MAX<br>PSI | QTY    |
| HBEL100-90          | 1" 90° POLY HOSE BARB ELBOW       | 300        | 10/BAG |
| HBEL150/100-90      | 1½" X 1" 90° POLY HOSE BARB ELBOW | 300        | 1      |

### PIPE FITTINGS

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### **HOSE BARBS**

- Glass reinforced polypropylene
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| STRAIGHT HOSE BARBS |                                     |            |        |
|---------------------|-------------------------------------|------------|--------|
| PART NO             | DESCRIPTION                         | MAX<br>PSI | QTY    |
| HB025               | 1/4" MALE THREAD X 1/4" HOSE BARB   | 300        | 10/BAG |
| HB025-038           | 1/4" MALE THREAD X 3/8" HOSE BARB   | 300        | 10/BAG |
| HB025-050           | 1/4" MALE THREAD X 1/2" HOSE BARB   | 300        | 10/BAG |
| HB038               | 3%" MALE THREAD X 3%" HOSE BARB     | 300        | 10/BAG |
| HB038-050           | 3/8" MALE THREAD X 1/2" HOSE BARB   | 300        | 10/BAG |
| HB050-025           | ½" MALE THREAD X ¼" HOSE BARB       | 300        | 10/BAG |
| HB050-038           | ½" MALE THREAD X ¾" HOSE BARB       | 300        | 10/BAG |
| HB050               | ½" MALE THREAD X ½" HOSE BARB       | 300        | 10/BAG |
| HB050-075           | ½" MALE THREAD X ¾" HOSE BARB       | 300        | 10/BAG |
| HB075-038           | 3/4" MALE THREAD X 3/8" HOSE BARB   | 300        | 10/BAG |
| HB075-050           | 3/4" MALE THREAD X 1/2" HOSE BARB   | 300        | 10/BAG |
| HB075-058           | 3/4" MALE THREAD X 5/8" HOSE BARB   | 300        | 10/BAG |
| HB075               | 3/4" MALE THREAD X 3/4" HOSE BARB   | 300        | 10/BAG |
| HB075-100           | 3/4" MALE THREAD X 1" HOSE BARB     | 300        | 10/BAG |
| HB100-075           | 1" MALE THREAD X ¾" HOSE BARB       | 300        | 10/BAG |
| HB100               | 1" MALE THREAD X 1" HOSE BARB       | 300        | 10/BAG |
| HB100-125           | 1" MALE THREAD X 11/4" HOSE BARB    | 300        | 10/BAG |
| HB125-075           | 11/4" MALE THREAD X 3/4" HOSE BARB  | 300        | 10/BAG |
| HB125-100           | 11/4" MALE THREAD X 1" HOSE BARB    | 300        | 10/BAG |
| HB125               | 11/4" MALE THREAD X 11/4" HOSE BARB | 300        | 10/BAG |
| HB125-150           | 11/4" MALE THREAD X 11/2" HOSE BARB | 300        | 10/BAG |
| HB150-100           | 1½" MALE THREAD X 1" HOSE BARB      | 300        | 10/BAG |
| HB150-125           | 1½" MALE THREAD X 1¼" HOSE BARB     | 300        | 10/BAG |
| HB150               | 1½" MALE THREAD X 1½" HOSE BARB     | 300        | 10/BAG |
| HB150-200           | 1½" MALE THREAD X 2" HOSE BARB      | 300        | 10/BAG |
| HB200-150           | 2" MALE THREAD X 1½" HOSE BARB      | 300        | 10/BAG |
| HB200               | 2" MALE THREAD X 2" HOSE BARB       | 300        | 10/BAG |
| HB300               | 3" MALE THREAD X 3" HOSE BARB       | 225        | 1      |
| HB400               | 4" MALE THREAD X 4" HOSE BARB       | 150        | 1      |



|              | 90° HOSE BARBS  |            |        |  |
|--------------|---|------------|--------|--|
| PART NO      | DESCRIPTION   | MAX<br>PSI | QTY    |  |
| HB025-90     | 1/4" MALE THREAD X 1/4" 90° HOSE BARB   | 300        | 10/BAG |  |
| HB025/038-90 | 1/4" MALE THREAD X 3%" 90° HOSE BARB  | 300        | 10/BAG |  |
| HB025/050-90 | 1/4" MALE THREAD X 1/2" 90° HOSE BARB   | 300        | 10/BAG |  |
| HB038-90     | <sup>3</sup> ⁄ <sub>8</sub> " MALE THREAD X <sup>3</sup> ⁄ <sub>8</sub> " 90° HOSE BARB | 300        | 10/BAG |  |
| HB050/038-90 | ½" MALE THREAD X ¾" 90° HOSE BARB   | 300        | 10/BAG |  |
| HB050-90     | ½" MALE THREAD X ½" 90° HOSE BARB   | 300        | 10/BAG |  |
| HB050/075-90 | ½" MALE THREAD X ¾" 90° HOSE BARB   | 300        | 10/BAG |  |
| HB075/050-90 | <sup>3</sup> ⁄ <sub>4</sub> " MALE THREAD X <sup>1</sup> ⁄ <sub>2</sub> " 90° HOSE BARB | 300        | 10/BAG |  |
| HB075-90     | 3/4" MALE THREAD X 3/4" 90° HOSE BARB   | 300        | 10/BAG |  |
| HB075/100-90 | 3/4" MALE THREAD X 1" 90° HOSE BARB   | 300        | 10/BAG |  |
| HB100/075-90 | 1" MALE THREAD X ¾" 90° HOSE BARB   | 300        | 10/BAG |  |
| HB100-90     | 1" MALE THREAD X 1" 90° HOSE BARB   | 300        | 10/BAG |  |
| HB100/125-90 | 1" MALE THREAD X 11/4" 90° HOSE BARB  | 300        | 10/BAG |  |
| HB125/100-90 | 11/4" MALE THREAD X 1" 90° HOSE BARB  | 300        | 10/BAG |  |
| HB125-90     | 11/4" MALE THREAD X 11/4" 90° HOSE BARB   | 300        | 10/BAG |  |
| HB125/150-90 | 11/4" MALE THREAD X 11/2" 90° HOSE BARB   | 300        | 10/BAG |  |
| HB150/125-90 | 1½" MALE THREAD X 1¼" 90° HOSE BARB   | 300        | 10/BAG |  |
| HB150-90     | 1½" MALE THREAD X 1½" 90° HOSE BARB   | 300        | 10/BAG |  |
| HB200/150-90 | 2" MALE THREAD X 1½" 90° HOSE BARB  | 300        | 10/BAG |  |
| HB200-90     | 2" MALE THREAD X 2" 90° HOSE BARB   | 300        | 10/BAG |  |
| HB300-90     | 3" MALE THREAD X 3" 90° HOSE BARB   | 225        | 1      |  |



| 316 STAINLESS STEEL HOSE BARBS |  |            |     |  |
|--------------------------------|--|------------|-----|--|
| PART NO                        | DESCRIPTION  | MAX<br>PSI | QTY |  |
| HB025SS                        | $\frac{1}{4}$ " MALE THREAD X $\frac{1}{4}$ " HOSE SHANK                           | 300        | 1   |  |
| HB025-038SS                    | $^{1}\!\!\!/_{4}$ " MALE THREAD X $^{3}\!\!\!/_{8}$ " HOSE SHANK                   | 300        | 1   |  |
| HB025-050SS                    | $\frac{1}{4}$ " MALE THREAD X $\frac{1}{2}$ " HOSE SHANK                           | 300        | 1   |  |
| HB038SS                        | $ m ^3\!\! /\!\! /^{\prime}$ MALE THREAD X $ m ^3\!\! /\!\! /^{\prime}$ HOSE SHANK | 300        | 1   |  |
| HB038-050SS                    | $^3\!\!$ 8" MALE THREAD X $^1\!\!$ 2" HOSE SHANK                                   | 300        | 1   |  |
| HB050SS                        | $\frac{1}{2}$ " MALE THREAD X $\frac{1}{2}$ " HOSE SHANK                           | 300        | 1   |  |
| HB050-058SS                    | $\frac{1}{2}$ " MALE THREAD X $\frac{5}{8}$ " HOSE SHANK                           | 300        | 1   |  |
| HB050-075SS                    | ½" MALE THREAD X ¾" HOSE SHANK   | 300        | 1   |  |
| HB075-050SS                    | $^{3}\!\!4$ " MALE THREAD X $^{1}\!\!/_{2}$ " HOSE SHANK                           | 300        | 1   |  |
| HB075SS                        | $^3\!\!4$ " MALE THREAD X $^3\!\!4$ " HOSE SHANK                                   | 300        | 1   |  |
| HB075-100SS                    | 3/4" MALE THREAD X 1" HOSE SHANK   | 300        | 1   |  |
| HB100-075SS                    | 1" MALE THREAD X 3/4" HOSE SHANK   | 300        | 1   |  |
| HB100SS                        | 1" MALE THREAD X 1" HOSE SHANK   | 300        | 1   |  |
| HB125SS                        | 11/4" MALE THREAD X 11/4" HOSE SHANK   | 300        | 1   |  |
| HB150SS                        | 1½" MALE THREAD X 1½" HOSE SHANK   | 300        | 1   |  |
| HB200SS                        | 2" MALE THREAD X 2" HOSE SHANK   | 300        | 1   |  |
| HB300SS                        | 3" MALE THREAD X 3" HOSE SHANK   | 300        | 1   |  |



| FEMALE HOSE BARBS |                                    |            |        |
|-------------------|------------------------------------|------------|--------|
| PART NO           | DESCRIPTION                        | MAX<br>PSI | QTY    |
| HBF075            | 3/4" FEMALE THREAD                 | 300        | 10/BAG |
| HBF075-100        | 3/4" FEMALE THREAD X 1" HOSE SHANK | 300        | 10/BAG |
| HBF100            | 1" FEMALE THREAD X 1" HOSE SHANK   | 300        | 10/BAG |



|            | HOSE BARB TEES  |            |        |
|------------|---|------------|--------|
| PART NO    | DESCRIPTION   | MAX<br>PSI | QTY    |
| HBT025     | 1/4" HOSE BARB TEE  | 300        | 10/BAG |
| HBT038     | 3%" HOSE BARB TEE   | 300        | 10/BAG |
| HBT050     | 1∕2" HOSE BARB TEE  | 300        | 10/BAG |
| HBT050-075 | 1½" X 1½" X ¾" HOSE BARB TEE  | 300        | 10/BAG |
| HBT075-050 | $\frac{3}{4}$ " $\times$ $\frac{3}{4}$ " $\times$ $\frac{1}{2}$ " HOSE BARB TEE | 300        | 10/BAG |
| HBT075     | 3/4" HOSE BARB TEE  | 300        | 10/BAG |
| HBT075-100 | 3/4" X 3/4" X 1" HOSE BARB TEE  | 300        | 10/BAG |
| HBT100-075 | 1" X 1" X 3/4" HOSE BARB TEE  | 300        | 10/BAG |
| HBT100     | 1" HOSE BARB TEE  | 300        | 10/BAG |
| HBT200     | 2" HOSE BARB TEE  | 300        | 1      |
| HBT300     | 3" HOSE BARB TEE  | 300        | 1      |



| HOSE BARB THREADED TEES |   |            |        |  |
|-------------------------|---|------------|--------|--|
| PART NO                 | DESCRIPTION   | MAX<br>PSI | QTY    |  |
| HBT100-100              | 1"HOSE BARB X 1"HOSE BARB X 1"<br>MALE THREAD HOSE BARB TEE     | 300        | 10/BAG |  |
| HBT150-100              | 1½" HOSE BARB X 1½" HOSE BARB<br>X 1" MALE THREAD HOSE BARB TEE | 300        | 1      |  |
| HBT150-150              | 1½" HOSE BARB X 1½" HOSE BARB                                   | 300        | 1      |  |



| SS           | SS HOSE BARB THREADED TEES                           |            |     |  |  |
|--------------|--|------------|-----|--|--|
| PART NO      | DESCRIPTION  | MAX<br>PSI | QTY |  |  |
| HBT075-050SS | 3/4" HOSE BARB X 3/4" HOSE BARB X 1/2" HOSE BARB TEE | 150        | 1   |  |  |



|         | HOSE MENDERS            |            |        |
|---------|-------------------------|------------|--------|
| PART NO | DESCRIPTION             | MAX<br>PSI | QTY    |
| HM025   | 1/4" X 1/4" HOSE BARB   | 300        | 10/BAG |
| HM038   | 3/8" X 3/8" HOSE BARB   | 300        | 10/BAG |
| HM050   | ½" X ½" HOSE BARB       | 300        | 10/BAG |
| HM075   | 3/4" X 3/4" HOSE BARB   | 300        | 10/BAG |
| HM100   | 1" X 1" HOSE BARB       | 300        | 10/BAG |
| HM125   | 11/4" X 11/4" HOSE BARB | 300        | 10/BAG |
| HM150   | 1½" X 1½" HOSE BARB     | 300        | 10/BAG |
| HM200   | 2" X 2" HOSE BARB       | 300        | 10/BAG |
| HM300   | 3" X 3" HOSE BARB       | 300        | 1      |





| SWIVELS |   |            |     |
|---------|---|------------|-----|
| PART NO | DESCRIPTION                                       | MAX<br>PSI | QTY |
| SW100   | 1" MALE X 1" FEMALE SWIVEL                        | 300        | 1   |
| SW150   | 1½" MALE X 1½" FEMALE SWIVEL                      | 300        | 1   |
| SW220   | 2" FULL PORT MALE X 2" FULL PORT<br>FEMALE SWIVEL | 150        | 1   |



| PART NO   | DESCRIPTION   | MAX<br>PSI | QTY |
|-----------|---|------------|-----|
| TM075/050 | 8 STATION MANIFOLD 3/4" INLET X<br>1/2" OUTLET, 1/4" GAUGE PORT | 225        | 1   |

#### **PIPE FITTINGS**

#### **FEATURES**

- Glass reinforced polypropylene
- Heavy duty (Schedule 80)
- Lightweight with excellent strength
- NPT threads
- Excellent chemical resistance
- Where noted, parts must be ordered in bag quantities

Recommended procedure for sealing pipe threads:

We DO NOT recommend using pipe tape. Pipe tape enlarges the outside diameter of the male thread and may cause the female thread to split. We recommend using a pipe thread sealant. Use on clean tapered threads. Apply a thick even coat on male threads using brush applicator. For pipe diameters smaller than 1½" apply to male threads only. For 1½" and larger sizes apply to both male and female threads. Avoid applying excessive amounts. Hand tighten joints and then torque another ½ to ¾ turn until threads seal.





| PIPE SEALANT |   |     |
|--------------|---|-----|
| PART NO      | DESCRIPTION   | QTY |
| RS21         | RECTORSEAL® NO. 21™ (8 OZ W/ BRUSH IN CAP-24/CASE)  | 1   |
| RSTB         | RECTORSEAL® TRU-BLU™ (8 OZ W/ BRUSH IN CAP-24/CASE) | 1   |

### PIPE SEALANT

- RectorSeal® No. 21™ is slow drying, soft set multi-purpose sealant designed for use where black is preferred. 8 oz can with brush in the cap. Conforms to TT-S-1732.
- RectorSeal® Tru-Blu™ is fast drying, flexible set designed for high vibration environments. Teflon™has been added to enhance thread lubrication during assembly and break out. Conforms to TT-S-1732.
   \*DuPont Registered Trademark



### **MINI T STRAINERS**

- Heavy duty glass reinforced polypropylene
- Clear bowl made of polycarbonate
- Black bowl made of polypropylene
- Polypropylene ribbed 316 stainless steel screens
- EPDM gaskets
- Convenient color coded screens for easy mesh size identification (Refer to chart on next page)

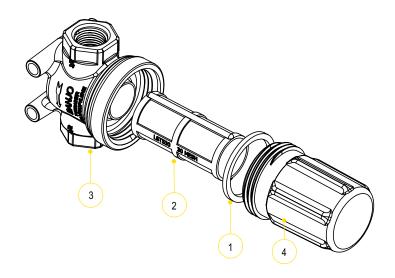


| MINI T STRAINERS W/CLEAR BOWLS |   |            |     |
|--------------------------------|---|------------|-----|
| PART NO                        | DESCRIPTION                                       | MAX<br>PSI | QTY |
| LSTM050-30C                    | 1/2" X 1/2" CLEAR BOWL STRAINER W/30 MESH SCREEN  | 100        | 1   |
| LSTM050-50C                    | 1/2" X 1/2" CLEAR BOWL STRAINER W/50 MESH SCREEN  | 100        | 1   |
| LSTM050-80C                    | 1/2" X 1/2" CLEAR BOWL STRAINER W/80 MESH SCREEN  | 100        | 1   |
| LSTM050-100C                   | 1/2" X 1/2" CLEAR BOWL STRAINER W/100 MESH SCREEN | 100        | 1   |
| LSTM075-30C                    | 3/4" X 3/4" CLEAR BOWL STRAINER W/30 MESH SCREEN  | 100        | 1   |
| LSTM075-50C                    | 3/4" X 3/4" CLEAR BOWL STRAINER W/50 MESH SCREEN  | 100        | 1   |
| LSTM075-80C                    | 3/4" X 3/4" CLEAR BOWL STRAINER W/80 MESH SCREEN  | 100        | 1   |
| LSTM075-100C                   | 3/4" X 3/4" CLEAR BOWL STRAINER W/100 MESH SCREEN | 100        | 1   |



| MINI T STRAINERS W/BLACK BOWLS |   |            |     |  |
|--------------------------------|---|------------|-----|--|
| PART NO                        | DESCRIPTION                                       | MAX<br>PSI | QTY |  |
| LSTM050-30                     | 1/2" X 1/2" BLACK BOWL STRAINER W/30 MESH SCREEN  | 200        | 1   |  |
| LSTM050-50                     | 1/2" X 1/2" BLACK BOWL STRAINER W/50 MESH SCREEN  | 200        | 1   |  |
| LSTM050-80                     | 1/2" X 1/2" BLACK BOWL STRAINER W/80 MESH SCREEN  | 200        | 1   |  |
| LSTM050-100                    | 1/2" X 1/2" BLACK BOWL STRAINER W/100 MESH SCREEN | 200        | 1   |  |
| LSTM075-30                     | 3/4" X 3/4" BLACK BOWL STRAINER W/30 MESH SCREEN  | 200        | 1   |  |
| LSTM075-50                     | 3/4" X 3/4" BLACK BOWL STRAINER W/50 MESH SCREEN  | 200        | 1   |  |
| LSTM075-80                     | 3/4" X 3/4" BLACK BOWL STRAINER W/80 MESH SCREEN  | 200        | 1   |  |
| LSTM075-100                    | 3/4" X 3/4" BLACK BOWL STRAINER W/100 MESH SCREEN | 200        | 1   |  |

### MINI T STRAINERS



| SCREENS   |               |  |  |
|-----------|---------------|--|--|
| MESH SIZE | RIB COLOR     |  |  |
| 30 MESH   | FLAME RED     |  |  |
| 50 MESH   | GENTIAN BLUE  |  |  |
| 80 MESH   | ZINC YELLOW   |  |  |
| 100 MESH  | TRAFFIC GREEN |  |  |

|      | REPLACEMENT PARTS |                    |     |  |  |  |
|------|-------------------|--------------------|-----|--|--|--|
| ITEM | PART NO           | DESCRIPTION        | QTY |  |  |  |
| 1    | LSTM050G          | EPDM GASKET        | 1   |  |  |  |
| 2    | LST530            | 30 MESH SCREEN     | 1   |  |  |  |
| 2    | LST550            | 50 MESH SCREEN     | 1   |  |  |  |
| 2    | LST580            | 80 MESH SCREEN     | 1   |  |  |  |
| 2    | LST5100           | 100 MESH SCREEN    | 1   |  |  |  |
| 3    | LSTM050H          | ½" STRAINER HEAD   | 1   |  |  |  |
| 3    | LSTM075H          | 3/4" STRAINER HEAD | 1   |  |  |  |
| 4    | LSTM050BC         | CLEAR BOWL         | 1   |  |  |  |
| 4    | LSTM050B          | BLACK BOWL         | 1   |  |  |  |

| 074            |         |         |         |          |
|----------------|---------|---------|---------|----------|
| SIAN           | NDARD   | MESH    | ES & D  | AIA      |
|                | 30 MESH | 50 MESH | 80 MESH | 100 MESH |
| MICRONS        | 595     | 297     | 177     | 149      |
| WIRE DIAMETER  | .012    | .009    | .0055   | .0045    |
| OPENING        | .021    | .011    | .007    | .005     |
| % OPEN<br>AREA | 40.8    | 30.3    | 31.4    | 30.3     |

### **3/4"-11/2" T STRAINERS**

- Heavy duty glass reinforced polypropylene
- · Clean out plug
- Polypropylene ribbed 316 stainless steel screens
- EPDM gaskets standard, FKM available
- Convenient color coded screens for easy mesh size identification (Refer to chart on next page)

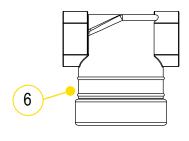


|            | ¾"-1" T STRAINERS                           |            |     |
|------------|---|------------|-----|
| PART NO    | DESCRIPTION                                 | MAX<br>PSI | QTY |
| LST075-16  | 3/4" X 3/4" T STRAINER W/16 MESH SS SCREEN  | 300        | 1   |
| LST075-30  | 3/4" X 3/4" T STRAINER W/30 MESH SS SCREEN  | 300        | 1   |
| LST075-50  | 3/4" X 3/4" T STRAINER W/50 MESH SS SCREEN  | 300        | 1   |
| LST075-80  | 3/4" X 3/4" T STRAINER W/80 MESH SS SCREEN  | 300        | 1   |
| LST075-100 | 3/4" X 3/4" T STRAINER W/100 MESH SS SCREEN | 300        | 1   |
| LST100-16  | 1" X 1" T STRAINER W/16 MESH SS SCREEN      | 300        | 1   |
| LST100-30  | 1" X 1" T STRAINER W/30 MESH SS SCREEN      | 300        | 1   |
| LST100-50  | 1" X 1" T STRAINER W/50 MESH SS SCREEN      | 300        | 1   |
| LST100-80  | 1" X 1" T STRAINER W/80 MESH SS SCREEN      | 300        | 1   |
| LST100-100 | 1" X 1" T STRAINER W/100 MESH SS SCREEN     | 300        | 1   |

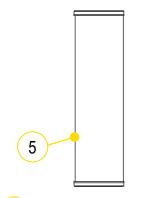


|            | 11/4"-11/2" T STRAINERS  |            |     |
|------------|--|------------|-----|
| PART NO    | DESCRIPTION  | MAX<br>PSI | QTY |
| LST125-16  | 11/4" X 11/4" T STRAINER W/16 MESH SS SCREEN                       | 300        | 1   |
| LST125-30  | 11/4" X 11/4" T STRAINER W/30 MESH SS SCREEN                       | 300        | 1   |
| LST125-50  | 11/4" X 11/4" T STRAINER W/50 MESH SS SCREEN                       | 300        | 1   |
| LST125-80  | 11/4" X 11/4" T STRAINER W/80 MESH SS SCREEN                       | 300        | 1   |
| LST125-100 | 11/4" X 11/4" T STRAINER W/100 MESH SS SCREEN                      | 300        | 1   |
| LST150-16  | 11/2" X 11/2" T STRAINER W/16 MESH SS SCREEN                       | 300        | 1   |
| LST150-30  | 11/2" X 11/2" T STRAINER W/30 MESH SS SCREEN                       | 300        | 1   |
| LST150-50  | $1\frac{1}{2}$ " X $1\frac{1}{2}$ " T STRAINER W/50 MESH SS SCREEN | 300        | 1   |
| LST150-80  | $1\frac{1}{2}$ " X $1\frac{1}{2}$ " T STRAINER W/80 MESH SS SCREEN | 300        | 1   |
| LST150-100 | 1½" X 1½" T STRAINER W/100 MESH SS SCREEN                          | 300        | 1   |

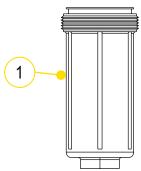
### 3/4"-11/2" T STRAINERS

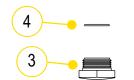












| REPLACEMENT PARTS |           |  |     |  |
|-------------------|-----------|--|-----|--|
| ITEM              | PART NO   | DESCRIPTION                              | QTY |  |
| 1                 | LST150-B  | 11/4" & 11/2" BOWL (CONTAINS #1, #3, #4) | 1   |  |
| 2                 | LST150-G  | 11/4" & 11/2" EPDM GASKET                | 1   |  |
| 2                 | LST150-GV | 11⁄4" & 11⁄2" FKM GASKET                 | 1   |  |
| 3                 | LSQ200-PL | 1" CLEAN OUT PLUG                        | 1   |  |
| 4                 | LSQ200-R  | EPDM O-RING FOR CLEAN OUT PLUG           | 1   |  |
| 5                 | LST1516   | 16 MESH SCREEN                           | 1   |  |
| 5                 | LST1530   | 30 MESH SCREEN                           | 1   |  |
| 5                 | LST1550   | 50 MESH SCREEN                           | 1   |  |
| 5                 | LST1580   | 80 MESH SCREEN                           | 1   |  |
| 5                 | LST15100  | 100 MESH SCREEN                          | 1   |  |
| 6                 | LST125-H  | 1¼" STRAINER HEAD                        | 1   |  |
| 6                 | LST150-H  | 1½" STRAINER HEAD                        | 1   |  |
| N/S               | LST125-HB | 11/4" STRAINER HEAD, BOWL & GASKET       | 1   |  |
| N/S               | LST150-HB | 1½" STRAINER HEAD, BOWL & GASKET         | 1   |  |

| STANDARD MESHES & DATA                   |                                 |   |   |   |  |  |  |
|--|---------------------------------|---|---|---|--|--|--|
| 16 MESH 30 MESH 50 MESH 80 MESH 100 MESH |                                 |   |   |   |  |  |  |
| 1190                                     | 595                             | 297   | 177   | 149   |  |  |  |
| .018                                     | .012                            | .009  | .0055   | .0045   |  |  |  |
| .044                                     | .021                            | .011  | .007  | .005  |  |  |  |
| 50.7                                     | 40.8                            | 30.3  | 31.4  | 30.3  |  |  |  |
|  | 16 MESH<br>1190<br>.018<br>.044 | 16 MESH 30 MESH<br>1190 595<br>.018 .012<br>.044 .021 | 16 MESH 30 MESH 50 MESH<br>1190 595 297<br>.018 .012 .009<br>.044 .021 .011 | 16 MESH     30 MESH     50 MESH     80 MESH       1190     595     297     177       .018     .012     .009     .0055       .044     .021     .011     .007 |  |  |  |

| SCREENS             |               |  |  |
|---------------------|---------------|--|--|
| MESH SIZE RIB COLOR |               |  |  |
| 16 MESH             | BROWN RED     |  |  |
| 30 MESH             | FLAME RED     |  |  |
| 50 MESH             | GENTIAN BLUE  |  |  |
| 80 MESH             | ZINC YELLOW   |  |  |
| 100 MESH            | TRAFFIC GREEN |  |  |

# 2" T STRAINERS POLY/STAINLESS COMBO

### **FEATURES**

- Heavy duty glass reinforced polypropylene bowl
- 316 stainless steel head
- Clean out plug
- 316 stainless steel screens
- FKM gaskets



| 2           | 2" T STRAINERS POLY/SS COMBO                                 |            |     |  |  |
|-------------|--|------------|-----|--|--|
| PART NO     | DESCRIPTION  | MAX<br>PSI | QTY |  |  |
| LST200-10SS | 2" X 2" T STRAINER (SS HEAD & POLY BODY)<br>W/10 MESH SCREEN | 300        | 1   |  |  |
| LST200-16SS | 2" X 2" T STRAINER (SS HEAD & POLY BODY)<br>W/16 MESH SCREEN | 300        | 1   |  |  |
| LST200-30SS | 2" X 2" T STRAINER (SS HEAD & POLY BODY)<br>W/30 MESH SCREEN | 300        | 1   |  |  |
| LST200-50SS | 2" X 2" T STRAINER (SS HEAD & POLY BODY)<br>W/50 MESH SCREEN | 300        | 1   |  |  |
| LST200-80SS | 2" X 2" T STRAINER (SS HEAD & POLY BODY)<br>W/80 MESH SCREEN | 300        | 1   |  |  |

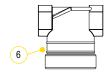
### LSQ STRAINERS

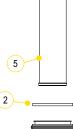
- Precision molded in glass reinforced polypropylene
- Cam lever configuration for easy access for cleaning and servicing
- ¾" plug in cam lever cap for attaching ball valve for draining or back flushing
- Poly ribbed 316 stainless steel screen
- EPDM lathe cut gasket
- FKM gaskets available
- For faster shipping, order in box quantities
- Convenient color coded screens for easy mesh size identification (Refer to chart on next page)



|            | 1½" LSQ STRAINERS                           |            |       |
|------------|---|------------|-------|
| PART NO    | DESCRIPTION                                 | MAX<br>PSI | QTY   |
| LSQ150-06  | 1½" X 1½" LSQ STRAINER W/6 MESH SCREEN      | 100        | 6/BOX |
| LSQ150-12  | 1½" X 1½" LSQ STRAINER W/12 MESH SCREEN     | 100        | 6/BOX |
| LSQ150-20  | 11/2" X 11/2" LSQ STRAINER W/20 MESH SCREEN | 100        | 6/BOX |
| LSQ150-30  | 11/2" X 11/2" LSQ STRAINER W/30 MESH SCREEN | 100        | 6/BOX |
| LSQ150-50  | 11/2" X 11/2" LSQ STRAINER W/50 MESH SCREEN | 100        | 6/BOX |
| LSQ150-80  | 1½" X 1½" LSQ STRAINER W/80 MESH SCREEN     | 100        | 6/BOX |
| LSQ150-120 | 1½" X 1½" LSQ STRAINER W/120 MESH SCREEN    | 100        | 6/BOX |

|            | 2" LSQ STRAINERS                       |            |       |
|------------|--|------------|-------|
| PART NO    | DESCRIPTION                            | MAX<br>PSI | QTY   |
| LSQ200-06  | 2" X 2" LSQ STRAINER W/6 MESH SCREEN   | 100        | 6/BOX |
| LSQ200-12  | 2" X 2" LSQ STRAINER W/12 MESH SCREEN  | 100        | 6/BOX |
| LSQ200-20  | 2" X 2" LSQ STRAINER W/20 MESH SCREEN  | 100        | 6/BOX |
| LSQ200-30  | 2" X 2" LSQ STRAINER W/30 MESH SCREEN  | 100        | 6/BOX |
| LSQ200-50  | 2" X 2" LSQ STRAINER W/50 MESH SCREEN  | 100        | 6/BOX |
| LSQ200-80  | 2" X 2" LSQ STRAINER W/80 MESH SCREEN  | 100        | 6/BOX |
| LSQ200-120 | 2" X 2" LSQ STRAINER W/120 MESH SCREEN | 100        | 6/BOX |



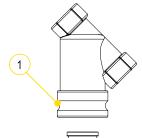


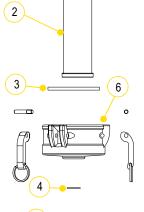




#### **REPLACEMENT PARTS** ITEM PART NO DESCRIPTION QTY 2" POLY BOWL (CONTAINS #1, #3, #4) LST200-B 1 1 2 LST200-GV 2" FKM GASKET 1 3 LSQ200-PL 1" CLEAN OUT PLUG 1 4 LSQ200-RV FKM O-RING FOR CLEAN OUT PLUG 1 5 LST204SS 4 MESH SS SCREEN 1 5 LST206SS 6 MESH SS SCREEN 1 5 LST208SS 8 MESH SS SCREEN 5 LST210SS 10 MESH SS SCREEN LST216SS 5 16 MESH SS SCREEN 5 LST230SS 30 MESH SS SCREEN 5 LST250SS 50 MESH SS SCREEN LST280SS 80 MESH SS SCREEN 5 6 LST200-HSS 2" SS HEAD 1 N/S LST200-HBSS 2" SS HEAD, POLY BOWL & GASKET 1

# 2" T STRAINERS POLY/STAINLESS COMBO





|      |           | REPLACEMENT PARTS      |     |
|------|-----------|------------------------|-----|
| ITEM | PART NO   | DESCRIPTION            | QTY |
| 1    | LSQ150-B  | 1½" LSQ BODY           | 1   |
| 1    | LSQ200-B  | 2" LSQ BODY            | 1   |
| 2    | LS206     | 6 MESH SCREEN          | 1   |
| 2    | LS212     | 12 MESH SCREEN         | 1   |
| 2    | LS220     | 20 MESH SCREEN         | 1   |
| 2    | LS230     | 30 MESH SCREEN         | 1   |
| 2    | LS250     | 50 MESH SCREEN         | 1   |
| 2    | LS280     | 80 MESH SCREEN         | 1   |
| 2    | LS2120    | 120 MESH SCREEN        | 1   |
| 3    | LSQ200-G  | 2" EPDM GASKET         | 1   |
| 3    | LSQ200-GV | 2" FKM GASKET          | 1   |
| 4    | LSQ200R1  | O-RING                 | 1   |
| 5    | PLUG075S  | ¾" CLEAN OUT PLUG      | 1   |
| 6    | LSQ200-C  | 2" CAP (CONTAINS #3-6) | 1   |

|                | STANDARD MESHES & DATA  |      |      |      |      |      |      |      |       |       |       |  |
|----------------|---|------|------|------|------|------|------|------|-------|-------|-------|--|
|                | 6 MESH 8 MESH 10 MESH 12 MESH 16 MESH 20 MESH 30 MESH 50 MESH 80 MESH 100 MESH 120 MESH |      |      |      |      |      |      |      |       |       |       |  |
| MICRONS        | 3360  | 2380 | 2000 | 1680 | 1190 | 841  | 595  | 297  | 177   | 149   | 125   |  |
| WIRE DIAMETER  | .035  | .028 | .025 | .023 | .018 | .016 | .012 | .009 | .0055 | .0045 | .0037 |  |
| OPENING        | .132  | .097 | .075 | .060 | .044 | .034 | .021 | .011 | .007  | .005  | .0046 |  |
| % OPEN<br>AREA | 62.7  | 60.2 | 56.3 | 51.8 | 50.7 | 46.2 | 40.8 | 30.3 | 31.4  | 30.3  | 30.5  |  |

### LSQ STRAINERS

| SCREENS   |              |  |  |  |  |  |
|-----------|--------------|--|--|--|--|--|
| MESH SIZE | RIB COLOR    |  |  |  |  |  |
| 6 MESH    | WHITE        |  |  |  |  |  |
| 12 MESH   | BLACK        |  |  |  |  |  |
| 20 MESH   | BEIGE        |  |  |  |  |  |
| 30 MESH   | FLAME RED    |  |  |  |  |  |
| 50 MESH   | GENTIAN BLUE |  |  |  |  |  |
| 80 MESH   | ZINC YELLOW  |  |  |  |  |  |
| 120 MESH  | BLACK        |  |  |  |  |  |

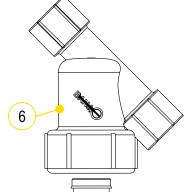


### 1/2"-11/4" Y STRAINERS

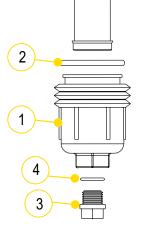
- Heavy duty glass reinforced polypropylene
- Corrosion resistant
- Easy grip end cap
- Heavy duty end cap threads
- Clean out plug
- Polypropylene ribbed 316 stainless steel screens
- EPDM gaskets
- Convenient color coded screens for easy mesh size identification (Refer to chart on next page)







| REPLACEMENT PARTS |           |   |     |  |  |  |  |  |
|-------------------|-----------|---|-----|--|--|--|--|--|
| ITEM              | PART NO   | DESCRIPTION                             | QTY |  |  |  |  |  |
| 1                 | LS075-C1  | 1/2"-3/4" END CAP (CONTAINS #1, #3, #4) | 1   |  |  |  |  |  |
| 2                 | LS075-G   | ½"-¾" O-RING                            | 1   |  |  |  |  |  |
| 3                 | 12723     | 1/4" DRAIN PLUG (FITS 1/2"-3/4")        | 1   |  |  |  |  |  |
| 4                 | 12724     | ½"-¾" EPDM O-RING FOR DRAIN PLUG        | 1   |  |  |  |  |  |
| 5                 | LS720     | ½"-¾" 20 MESH SCREEN                    | 1   |  |  |  |  |  |
| 5                 | LS740     | ½"-¾" 40 MESH SCREEN                    | 1   |  |  |  |  |  |
| 5                 | LS760     | ½"-¾" 60 MESH SCREEN                    | 1   |  |  |  |  |  |
| 5                 | LS780     | ½"-¾" 80 MESH SCREEN                    | 1   |  |  |  |  |  |
| 6                 | LS050-B   | ½" Y BODY                               | 1   |  |  |  |  |  |
| 6                 | LS075-B   | 3/4" Y BODY                             | 1   |  |  |  |  |  |
| N/S               | LS050B/C1 | ½" Y BODY, CAP & GASKET                 | 1   |  |  |  |  |  |
| N/S               | LS075B/C1 | 3/4" Y BODY, CAP & GASKET               | 1   |  |  |  |  |  |



5

| REPLACEMENT PARTS |           |  |     |  |  |  |  |
|-------------------|-----------|--|-----|--|--|--|--|
| ITEM              | PART NO   | DESCRIPTION                            | QTY |  |  |  |  |
| 1                 | LS100-C1  | 1"-11/4" END CAP (CONTAINS #1, #3, #4) | 1   |  |  |  |  |
| 2                 | LS100-G   | 1"-11/4" O-RING                        | 1   |  |  |  |  |
| 2                 | LS100-GV  | 1"-11/4" FKM GASKET                    | 1   |  |  |  |  |
| 3                 | 12777     | ½" PLUG (FITS 1"-1¼")                  | 1   |  |  |  |  |
| 5                 | LS120     | 1"-11/4" 20 MESH SCREEN                | 1   |  |  |  |  |
| 5                 | LS140     | 1"-11/4" 40 MESH SCREEN                | 1   |  |  |  |  |
| 5                 | LS180     | 1"-11/4" 80 MESH SCREEN                | 1   |  |  |  |  |
| 6                 | LS100-B   | 1" Y BODY                              | 1   |  |  |  |  |
| 6                 | LS125-B   | 11/4" Y BODY                           | 1   |  |  |  |  |
| N/S               | LS100B/C1 | 1" Y BODY, CAP & GASKET                | 1   |  |  |  |  |
| N/S               | LS125B/C1 | 1¼" Y BODY, CAP & GASKET               | 1   |  |  |  |  |

| STANDARD MESHES & DATA |        |        |         |         |         |         |         |         |         |          |          |
|------------------------|--------|--------|---------|---------|---------|---------|---------|---------|---------|----------|----------|
|                        | 6 MESH | 8 MESH | 10 MESH | 12 MESH | 16 MESH | 20 MESH | 30 MESH | 50 MESH | 80 MESH | 100 MESH | 120 MESH |
| MICRONS                | 3360   | 2380   | 2000    | 1680    | 1190    | 841     | 595     | 297     | 177     | 149      | 125      |
| WIRE DIAMETER          | .035   | .028   | .025    | .023    | .018    | .016    | .012    | .009    | .0055   | .0045    | .0037    |
| OPENING                | .132   | .097   | .075    | .060    | .044    | .034    | .021    | .011    | .007    | .005     | .0046    |
| % OPEN<br>AREA         | 62.7   | 60.2   | 56.3    | 51.8    | 50.7    | 46.2    | 40.8    | 30.3    | 31.4    | 30.3     | 30.5     |

### 1/2"-11/4" Y STRAINERS

| SCREENS   |               |  |  |  |  |  |
|-----------|---------------|--|--|--|--|--|
| MESH SIZE | RIB COLOR     |  |  |  |  |  |
| 6 MESH    | WHITE         |  |  |  |  |  |
| 12 MESH   | BLACK         |  |  |  |  |  |
| 20 MESH   | BEIGE         |  |  |  |  |  |
| 30 MESH   | FLAME RED     |  |  |  |  |  |
| 40 MESH   | BROWN         |  |  |  |  |  |
| 50 MESH   | GENTIAN BLUE  |  |  |  |  |  |
| 60 MESH   | GENTIAN BLUE  |  |  |  |  |  |
| 80 MESH   | ZINC YELLOW   |  |  |  |  |  |
| 100 MESH  | TRAFFIC GREEN |  |  |  |  |  |
| 120 MESH  | BLACK         |  |  |  |  |  |

### 11/2"-2" Y STRAINERS

- Heavy duty glass reinforced polypropylene
- Corrosion resistant
- Easy grip end cap
- Heavy duty end cap threads
- Clean out plug
- Polypropylene ribbed 316 stainless steel screens
- EPDM gaskets
- Convenient color coded screens for easy mesh size identification (Refer to chart on next page)

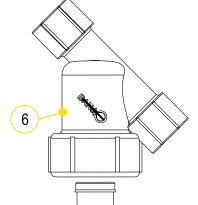


| 1½" Y STRAINERS |   |            |     |  |  |  |  |  |
|-----------------|---|------------|-----|--|--|--|--|--|
| PART NO         | DESCRIPTION                               | MAX<br>PSI | QTY |  |  |  |  |  |
| LS150-06        | 1½" X 1½" Y STRAINER W/6 MESH SS SCREEN   | 150        | 1   |  |  |  |  |  |
| LS150-12        | 1½" X 1½" Y STRAINER W/12 MESH SS SCREEN  | 150        | 1   |  |  |  |  |  |
| LS150-20        | 1½" X 1½" Y STRAINER W/20 MESH SS SCREEN  | 150        | 1   |  |  |  |  |  |
| LS150-30        | 1½" X 1½" Y STRAINER W/30 MESH SS SCREEN  | 150        | 1   |  |  |  |  |  |
| LS150-50        | 1½" X 1½" Y STRAINER W/50 MESH SS SCREEN  | 150        | 1   |  |  |  |  |  |
| LS150-80        | 1½" X 1½" Y STRAINER W/80 MESH SS SCREEN  | 150        | 1   |  |  |  |  |  |
| LS150-120       | 1½" X 1½" Y STRAINER W/120 MESH SS SCREEN | 150        | 1   |  |  |  |  |  |



| 2" Y STRAINERS |  |            |     |  |  |  |  |  |
|----------------|--|------------|-----|--|--|--|--|--|
| PART NO        | DESCRIPTION  | MAX<br>PSI | QTY |  |  |  |  |  |
| LS200-06       | 2" X 2" Y STRAINER W/6 MESH POLY RIBBED SS SCREEN      | 150        | 1   |  |  |  |  |  |
| LS200-12       | 2" X 2" Y STRAINER W/12 MESH POLY RIBBED SS SCREEN     | 150        | 1   |  |  |  |  |  |
| LS200-20       | 2" X 2" Y STRAINER W/20 MESH POLY RIBBED SS SCREEN     | 150        | 1   |  |  |  |  |  |
| LS200-30       | 2" X 2" Y STRAINER W/30 MESH POLY RIBBED<br>SS SCREEN  | 150        | 1   |  |  |  |  |  |
| LS200-50       | 2" X 2" Y STRAINER W/50 MESH POLY RIBBED SS SCREEN     | 150        | 1   |  |  |  |  |  |
| LS200-80       | 2" X 2" Y STRAINER W/80 MESH POLY RIBBED SS SCREEN     | 150        | 1   |  |  |  |  |  |
| LS200-100      | 2" X 2" Y STRAINER W/100 MESH POLY RIBBED<br>SS SCREEN | 150        | 1   |  |  |  |  |  |
| LS200-120      | 2" X 2" Y STRAINER W/120 MESH POLY RIBBED<br>SS SCREEN | 150        | 1   |  |  |  |  |  |

### 11/2"-2" Y STRAINERS



5

2

|      |           | REPLACEMENT PARTS                      |     |
|------|-----------|--|-----|
| ITEM | PART NO   | DESCRIPTION                            | QTY |
| 1    | LS150-C   | 1½" - 2" END CAP (CONTAINS #1, #3, #4) | 1   |
| 2    | LS150-G   | 1½"-2" O-RING                          | 1   |
| 2    | LS150-GV  | 1½"-2" FKM GASKET                      | 1   |
| 3    | LSQ200-PL | 1" DRAIN PLUG (FITS 1½" - 2")          | 1   |
| 4    | LSQ200-RV | 1½"-2" FKM O-RING FOR DRAIN PLUG       | 1   |
| 5    | LS206     | 1½"-2" 6 MESH SCREEN                   | 1   |
| 5    | LS212     | 1½"-2" 12 MESH SCREEN                  | 1   |
| 5    | LS220     | 1½"-2" 20 MESH SCREEN                  | 1   |
| 5    | LS230     | 1½"-2" 30 MESH SCREEN                  | 1   |
| 5    | LS250     | 1½"-2" 50 MESH SCREEN                  | 1   |
| 5    | LS280     | 1½"-2" 80 MESH SCREEN                  | 1   |
| 5    | LS2100    | 1½"-2" 100 MESH SCREEN                 | 1   |
| 5    | LS2120    | 1½"-2" 120 MESH SCREEN                 | 1   |
| 5    | LS212P    | 1½"-2" 12 MESH ALL POLY SCREEN         | 1   |
| 5    | LS220P    | 1½"-2" 20 MESH ALL POLY SCREEN         | 1   |
| 5    | LS250P    | 1½"-2" 50 MESH ALL POLY SCREEN         | 1   |
| 6    | LS150-B   | 1½" Y BODY                             | 1   |
| 6    | LS200-B   | 2" Y BODY                              | 1   |
| N/S  | LS150B/C  | 1½" Y BODY, CAP & GASKET               | 1   |
| N/S  | LS200B/C  | 2" Y BODY, CAP & GASKET                | 1   |

| SCREENS   |               |  |  |  |  |  |
|-----------|---------------|--|--|--|--|--|
| MESH SIZE | RIB COLOR     |  |  |  |  |  |
| 6 MESH    | WHITE         |  |  |  |  |  |
| 12 MESH   | BLACK         |  |  |  |  |  |
| 20 MESH   | BEIGE         |  |  |  |  |  |
| 30 MESH   | FLAME RED     |  |  |  |  |  |
| 40 MESH   | BROWN         |  |  |  |  |  |
| 50 MESH   | GENTIAN BLUE  |  |  |  |  |  |
| 80 MESH   | ZINC YELLOW   |  |  |  |  |  |
| 100 MESH  | TRAFFIC GREEN |  |  |  |  |  |
| 120 MESH  | BLACK         |  |  |  |  |  |

|                | STANDARD MESHES & DATA |        |         |         |         |         |         |          |          |  |  |
|----------------|------------------------|--------|---------|---------|---------|---------|---------|----------|----------|--|--|
|                | 6 MESH                 | 8 MESH | 12 MESH | 20 MESH | 30 MESH | 50 MESH | 80 MESH | 100 MESH | 120 MESH |  |  |
| MICRONS        | 3360                   | 2380   | 1680    | 841     | 595     | 297     | 177     | 149      | 125      |  |  |
| WIRE DIAMETER  | .035                   | .028   | .023    | .016    | .012    | .009    | .0055   | .0045    | .0037    |  |  |
| OPENING        | .132                   | .097   | .060    | .034    | .021    | .011    | .007    | .005     | .0046    |  |  |
| % OPEN<br>AREA | 62.7                   | 60.2   | 51.8    | 46.2    | 40.8    | 30.3    | 31.4    | 30.3     | 30.5     |  |  |

### **3" Y STRAINERS**

### **FEATURES**

- Heavy duty glass reinforced polypropylene
- Corrosion resistant
- High volume
- Heavy duty end cap threads
- 1/2" clean out plug
- 304 stainless steel screens
- EPDM gaskets
- Warning: to be used on suction side or non-pressure side in all applications



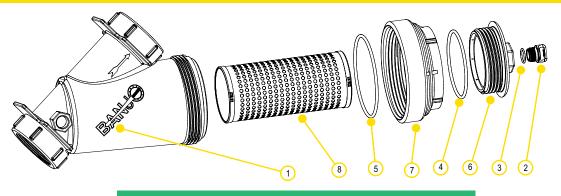
|           | 3" Y STRAINERS                      |            |       |
|-----------|-------------------------------------|------------|-------|
| PART NO   | DESCRIPTION                         | MAX<br>PSI | QTY   |
| LSM300-04 | 3" X 3" Y STRAINER W/4 MESH SCREEN  | 75         | 2/BOX |
| LSM300-08 | 3" X 3" Y STRAINER W/8 MESH SCREEN  | 75         | 2/BOX |
| LSM300-12 | 3" X 3" Y STRAINER W/12 MESH SCREEN | 75         | 2/BOX |
| LSM300-20 | 3" X 3" Y STRAINER W/20 MESH SCREEN | 75         | 2/BOX |
| LSM300-50 | 3" X 3" Y STRAINER W/50 MESH SCREEN | 75         | 2/BOX |

# 3" Y STAINLESS STEEL STRAINERS

- Heavy duty stainless steel
- Corrosion resistant
- High volume
- Heavy duty end cap threads
- 1/2" clean out plug
- 304 stainless steel screens
- EPDM gaskets standard, FKM available
- Warning: to be used on suction side or non-pressure side in all applications



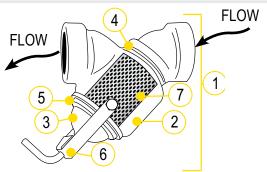
| 3" Y STRAINERS |                           |     |  |
|----------------|---------------------------|-----|--|
| PART NO        | DESCRIPTION               | QTY |  |
| LSS300-BC      | 3" SS BODY, CAP & GASKETS | 1   |  |
| LSS300-B       | 3" SS BODY                | 1   |  |
| LSS300-C       | 3" SS CAP                 | 1   |  |
| LSS300-S       | EPDM SCREEN SEAL          | 1   |  |
| LSS300-SV      | FKM SCREEN SEAL           | 1   |  |
| LSS300-G       | EPDM CAP GASKET           | 1   |  |
| LSS300-GV      | FKM CAP GASKET            | 1   |  |



| REPLACEMENT PARTS |            |                                     |     |  |
|-------------------|------------|-------------------------------------|-----|--|
| ITEM              | PART NO    | DESCRIPTION                         | QTY |  |
| 1                 | MLS300B1   | 3" BODY                             | 1   |  |
| 2                 | 13777      | 3⁄4" PLUG                           | 1   |  |
| 3                 | 13778      | O-RING                              | 1   |  |
| 4                 | MLS300ECG  | EPDM END CAP GASKET                 | 1   |  |
| 4                 | MLS300ECGV | FKM CAP GASKET                      | 1   |  |
| 5                 | MLS300G    | EPDM CAP GASKET                     | 1   |  |
| 5                 | MLS300GV   | FKM CAP GASKET                      | 1   |  |
| 6                 | LS300EC    | END CAP ONLY (PLUG SOLD SEPARATELY) | 1   |  |
| 7                 | MLS300CAP  | 3" CAP                              | 1   |  |
| 8                 | LS304      | 4 MESH SCREEN                       | 1   |  |
| 8                 | LS308      | 8 MESH SCREEN                       | 1   |  |
| 8                 | LS312      | 12 MESH SCREEN                      | 1   |  |
| 8                 | LS320      | 20 MESH SCREEN                      | 1   |  |
| 8                 | LS350      | 50 MESH SCREEN                      | 1   |  |

### **3" Y STRAINERS**

• 304 stainless steel screens



|      | <del></del>       |                           |     |  |  |
|------|-------------------|---------------------------|-----|--|--|
|      | REPLACEMENT PARTS |                           |     |  |  |
| ITEM | PART NO           | DESCRIPTION               | QTY |  |  |
| 1    | LSS300-BC         | 3" SS BODY, CAP & GASKETS | 1   |  |  |
| 2    | LSS300-B          | 3" SS BODY                | 1   |  |  |
| 3    | LSS300-C          | 3" SS CAP                 | 1   |  |  |
| 4    | LSS300-S          | EPDM SCREEN SEAL          | 1   |  |  |
| 4    | LSS300-SV         | FKM SCREEN SEAL           | 1   |  |  |
| 5    | LSS300-G          | EPDM CAP GASKET           | 1   |  |  |
| 5    | LSS300-GV         | FKM CAP GASKET            | 1   |  |  |
| 6    | LSS300-H          | HANDLE/CLAMP ASSEMBLY     | 1   |  |  |
| 7    | LSS306            | 6 MESH SS SCREEN          | 1   |  |  |
| 7    | LSS308            | 8 MESH SS SCREEN          | 1   |  |  |
| 7    | LSS312            | 12 MESH SS SCREEN         | 1   |  |  |
| 7    | LSS320            | 20 MESH SS SCREEN         | 1   |  |  |
| 7    | LSS330            | 30 MESH SS SCREEN         | 1   |  |  |
| 7    | LSS350            | 50 MESH SS SCREEN         | 1   |  |  |
|      |                   |                           |     |  |  |

# **3" Y STAINLESS STEEL STRAINERS**

• 304 stainless steel screens



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ROLL CAGES
SUCTION BASKET STRAINERS
BASE PLATES

2" POLY PUMPS PAGES 102 - 115 GAS ENGINE PUMPS
PUMP ONLY/ BEARING PEDESTAL
WET SEAL WITH GAS ENGINE
ELECTRIC MOTOR DRIVEN
HYDRAULIC MOTOR DRIVEN
MANIFOLD

3" POLY PUMPS PAGES 116- 125 GAS ENGINE PUMPS
PUMP ONLY/ BEARING PEDESTAL
MANIFOLD
HYDRAULIC MOTOR DRIVEN
WET SEAL WITH GAS ENGINE

1½" & 2" CAST IRON PUMPS PAGES 126 - 133

GAS ENGINE PUMPS
PUMP ONLY/ BEARING PEDESTAL
WET SEALS
ELECTRIC MOTOR DRIVEN
HYDRAULIC MOTOR DRIVEN

2" CAST IRON 222 SERIES PUMPS PAGES 134 - 139 GAS ENGINE PUMPS
PUMP ONLY/ BEARING PEDESTAL
HYDRAULIC MOTOR DRIVEN
ELECTRIC MOTOR DRIVEN
MANIFOLD WET SEAL

3" CAST IRON PUMPS PAGES 140 - 145 GAS ENGINE PUMPS
PUMP ONLY/ BEARING PEDESTAL
WET SEALS
HYDRAULIC MOTOR DRIVEN

3" CAST IRON 333 SERIES PUMPS PAGES 146 - 147

GAS ENGINE PUMPS
PUMP ONLY/ BEARING PEDESTAL
ELECTRIC MOTOR DRIVEN

3" CAST IRON MANIFOLD WET SEAL M332 SERIES PUMPS PAGES 148 - 151 GAS ENGINE PUMPS
PUMP ONLY/ BEARING PEDESTAL
ELECTRIC MOTOR DRIVEN
HYDRAULIC MOTOR DRIVEN

4" CAST IRON 444 SERIES PUMPS PAGES 152 - 153

GAS ENGINE PUMPS
PUMP ONLY

2" & 3" STAINLESS STEEL PUMPS PAGES 154- 161 GAS ENGINE PUMPS
PUMP ONLY/ BEARING PEDESTAL
ELECTRIC MOTOR DRIVEN
HYDRAULIC MOTOR DRIVEN

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|         | PUMP ROLL CAGES   |     |  |
|---------|-------------------|-----|--|
| PART NO | DESCRIPTION       | QTY |  |
| PRC200  | 2" PUMP ROLL CAGE | 1   |  |

### **ROLL CAGE**

### **FEATURES**

- Made of steel tube construction for stability
- Powder coated finish for durability
- Fits all 2" polypropylene pumps
- Unassembled





|         | SUCTION BASKET STRAINERS     |     |
|---------|------------------------------|-----|
| PART NO | DESCRIPTION                  | QTY |
| 200SBS  | 2" FEMALE THREAD POLY BASKET | 1   |
| 300SBS  | 3" FEMALE THREAD POLY BASKET | 1   |

### **SUCTION BASKET STRAINERS**

### **FEATURES**

- Made of polyethylene
- Prevents plugging and damage to pump while suctioning from streams or ponds.

|         | BASE PLATE ASSEMBLY   |     |  |  |
|---------|---|-----|--|--|
| PART NO | DESCRIPTION   | QTY |  |  |
| 18700   | BASE PLATE ASSEMBLY INCLUDES<br>PLATE, COUPLING GUARD, BOLT BAG AND SHIMS | 1   |  |  |

### **BASE PLATE ASSEMBLY**

### **FEATURES**

 Universal fit for 1½", 2" and 3" polypropylene or cast iron pumps



### 2" POLY PUMPS

### **FEATURES**

- Precision molded construction
- Lightweight
- Corrosion resistant
- · Superior design
- Low maintenance
- EPDM standard, FKM available
- Engine warranty service available at authorized Briggs & Stratton® and Honda® dealers



| 2" POLY PUMPS W/GAS ENGINES |   |     |     |  |
|-----------------------------|---|-----|-----|--|
| PART NO                     | DESCRIPTION   | HP  | QTY |  |
| 200PH-5                     | 2" POLY PUMP W/5.5 HP HONDA® ENGINE   | 5.5 | 1   |  |
| 200PH-5E                    | 2" POLY PUMP W/5.5 HP HONDA® ENGINE W/<br>ELECTRIC START                          | 5.5 | 1   |  |
| 200PH-5V                    | 2" POLY PUMP W/5.5 HP HONDA® ENGINE<br>W/FKM & 316 SS SEAL                        | 5.5 | 1   |  |
| 200PH6                      | 2" POLY PUMP W/6.5 HP HONDA® ENGINE   | 6.5 | 1   |  |
| 200P6PRO                    | 2" POLY PUMP W/6.5 HP BRIGGS & STRATTON®<br>ENGINE PRO SERIES                     | 6.5 | 1   |  |
| 200P6PROE                   | 2" POLY PUMP W/6.5 HP BRIGGS & STRATTON®<br>ENGINE PRO SERIES W/ELECTRIC START    | 6.5 | 1   |  |
| 200P6PROV                   | 2" POLY PUMP W/6.5 HP BRIGGS & STRATTON®<br>ENGINE PRO SERIES W/FKM & 316 SS SEAL | 6.5 | 1   |  |



WARNING! DO NOT RUN PUMP DRY, RESTRICT OR REDUCE PORT SIZES OR DEAD HEAD PUMP



WARNING! DO NOT USE WITH FLAMMABLE LIQUIDS



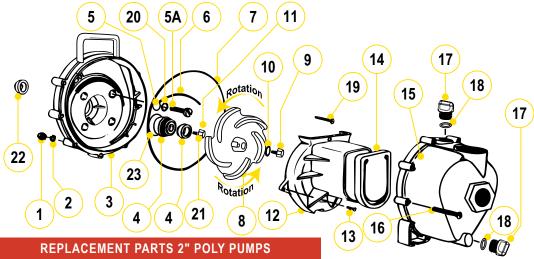
| 2" POLY PUMP BEARING PEDESTALS |   |     |     |  |
|--------------------------------|---|-----|-----|--|
| PART NO                        | DESCRIPTION   | HP  | QTY |  |
| 200PB                          | 2" POLY BEARING PEDESTAL W/ ¾" SHAFT & 3<br>VANE IMPELLER                     | N/A | 1   |  |
| 200PB-V                        | 2" POLY BEARING PEDESTAL W/ ¾" SHAFT & 3<br>VANE IMPELLER W/FKM & 316 SS SEAL | N/A | 1   |  |
| 205PB                          | 2" POLY BEARING PEDESTAL W/ ¾" SHAFT & 5<br>VANE IMPELLER                     | N/A | 1   |  |
| 205PB-V                        | 2" POLY BEARING PEDESTAL W/ ¾" SHAFT & 5<br>VANE IMPELLER W/FKM & 316 SS SEAL | N/A | 1   |  |



|         | 2" POLY PUMP ONLYS  |     |     |  |
|---------|---|-----|-----|--|
| PART NO | DESCRIPTION   | HP  | QTY |  |
| 200PO   | 2" POLY PUMP ONLY* W/ 3 VANE IMPELLER                         | N/A | 1   |  |
| 200PO-V | 2" POLY PUMP ONLY* W/3 VANE IMPELLER W/<br>FKM & 316 SS SEAL  | N/A | 1   |  |
| 205PO   | 2" POLY PUMP ONLY* W/ 5 VANE IMPELLER                         | N/A | 1   |  |
| 205PO-V | 2" POLY PUMP ONLY* W/ 5 VANE IMPELLER W/<br>FKM & 316 SS SEAL | N/A | 1   |  |

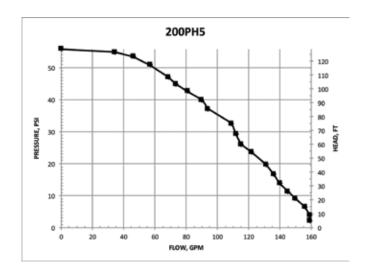
Note: Requires 3/4" shaft on motor

2" POLY PUMPS



| REPLACEMENT PARTS 2" POLY PUMPS |          |  |     |
|---------------------------------|----------|--|-----|
| ITEM                            | PART NO  | DESCRIPTION  | QTY |
| 1                               | V07019   | SS BODY NUTS   | 10  |
| 2                               | V07018   | SS LOCK WASHERS  | 10  |
| 3                               | 12703A   | POLY PUMP REAR BRACKET   | 1   |
| 4                               | 12713    | SEAL ASSEMBLY  | 1   |
| 4                               | 12713V   | FKM SEAL ASSEMBLY  | 1   |
| 5                               | 12717    | O-RING FOR SCREW HEAD  | 4   |
| 5                               | 12717V   | FKM O-RING FOR SCREW HEAD  | 4   |
| 5A                              | 12715A   | SS BRACKET SCREWS  | 4   |
| 6                               | 12754    | O-RING SEGMENT   | 1   |
| 6                               | 12754V   | FKM O-RING SEGMENT   | 1   |
| 7                               | 12719A   | BODY O-RING  | 1   |
| 7                               | 12719AV  | FKM BODY O-RING  | 1   |
| 8                               | 12772    | 5 VANE IMPELLER  | 1   |
| 8                               | 12771A   | 3 VANE IMPELLER  | 1   |
| 9                               | 12765A   | SS IMPELLER BOLT   | 1   |
| 10                              | A204     | O-RING   | 1   |
| 10                              | A204V    | FKM O-RING   | 1   |
| 11                              | 12775A   | IMPELLER HEX NUT   | 1   |
| 12                              | 12702A   | POLY PUMP VOLUTE   | 1   |
| 13                              | 12725    | SS VOLUTE SCREWS   | 2   |
| 14                              | 12705    | POLY PUMP CHECK VALVE  | 1   |
| 14                              | 12705V   | FKM CHECK VALVE  | 1   |
| 15                              | 12712A   | BODY ASSEMBLY  | 1   |
| 16                              | 12720    | SS BODY SCREWS   | 10  |
| 17                              | 12777    | ½" PLUG  | 2   |
| 18                              | UV15163  | PRIME/DRAIN PLUG O-RING  | 2   |
| 18                              | UV15163V | FKM PRIME/DRAIN PLUG O-RING  | 2   |
| 19                              | 12900    | SS UPPER VOLUTE SCREW  | 1   |
| 20                              | 12901    | SS REAR BRACKET WASHER   | 4   |
| 21                              | 12902A   | IMPELLER KEY   | 1   |
| 22                              | 12716    | POLY PUMP SLINGER  | 1   |
| 23                              | 12710    | O-RING FOR SEAL ASSEMBLY   | 1   |
| 23                              | 12710V   | FKM O-RING FOR SEAL ASSEMBLY   | 1   |
| N/S                             | 12882A   | BEARING PEDESTAL   | 1   |
| N/S                             | 12099    | <sup>7</sup> ∕₁6"-14 X 1.25" HHCS  | 1   |
| KIT                             | 12000A   | 5 VANE IMPELLER REPAIR KIT<br>(ITEMS 4-8, 10, 14, 18, 22, 23 & 12099)<br>5 VANE FKM IMPELLER REPAIR KIT                        | 1   |
| KIT                             | 12000AV  | (ITEMS 4-8 10 14 18 22 23 & 12099)   | 1   |
| KIT                             | 12999A   | PUMP SEAL/O-RING KIT<br>(ITEMS 5-7, 10, 18, 22, 23 & 12099)  | 1   |
| KIT                             | 12999AV  | PUMP SEAL/O-RING KIT<br>(ITEMS 5-7, 10, 18, 22, 23 & 12099)<br>FKM PUMP SEAL/O-RING KIT<br>(ITEMS 5-7, 10, 18, 22, 23 & 12099) | 1   |

| KITS 2" POLY PUMPS |               |             |  |  |
|--------------------|---------------|-------------|--|--|
| PART NO            | REPAIR KIT NO | SEAL KIT NO |  |  |
| 200PH-5            | 12000A        | 12999A      |  |  |
| 200PH-5E           | 12000A        | 12999A      |  |  |
| 200PH-5V           | 12000AV       | 12999AV     |  |  |
| 200PH6             | 12000A        | 12999A      |  |  |
| 200P6PRO           | 12000A        | 12999A      |  |  |
| 200P6PROE          | 12000A        | 12999A      |  |  |
| 200P6PROV          | 12000AV       | 12999AV     |  |  |
| 200PB              | 12003A        | 12999A      |  |  |
| 200PB-V            | 12003AV       | 12999AV     |  |  |
| 205PB              | 12000A        | 12999A      |  |  |
| 205PB-V            | 12000AV       | 12999AV     |  |  |
| 200PO              | 12003A        | 12999A      |  |  |
| 200PO-V            | 12003AV       | 12999AV     |  |  |
| 205PO              | 12000A        | 12999A      |  |  |
| 205PO-V            | 12000AV       | 12999AV     |  |  |



### 2" POLY WET SEAL PUMPS

### **FEATURES**

- · Run dry capability
- Double seal contained in ethylene glycol reservoir. Carbon ceramic seal faces with stainless steel cup and spring with EPDM rubber.
- Pump end separated from engine
- V-shaped for quicker priming
- Engine warranty service available at authorized Briggs & Stratton® and Honda® dealers



WARNING! DO NOT USE WITH FLAMMABLE LIQUIDS



### 2" POLY WET SEAL PUMPS W/GAS ENGINES

| PART NO   | DESCRIPTION   | HP  | QTY |
|-----------|---|-----|-----|
| 200PH5W   | 2" POLY WET SEAL PUMP W/5.5 HP HONDA®<br>ENGINE                         | 5.5 | 1   |
| 200P6PROW | 2" POLY WET =SEAL PUMP W/6.5 HP BRIGGS &<br>STRATTON® ENGINE PRO SERIES | 6.5 | 1   |



### 2" POLY WET SEAL BEARING PEDESTAL

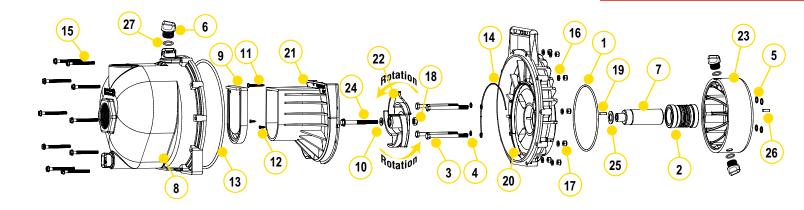
| PART NO | DESCRIPTION  | НР  | QTY |
|---------|--|-----|-----|
| 200PBW  | 2" POLY WET SEAL BEARING PEDESTAL W/ 3/4"<br>SHAFT & 5 VANE IMPELLER | N/A | 1   |



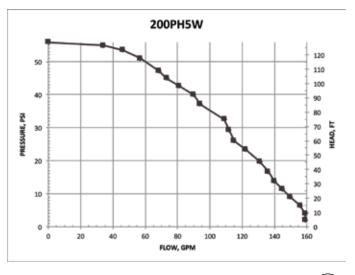
| 2" |  |  |  |  |  |  |
|----|--|--|--|--|--|--|
|    |  |  |  |  |  |  |
|    |  |  |  |  |  |  |

| PART NO | DESCRIPTION   | HP  | QTY |
|---------|---|-----|-----|
| 205POWV | 2" POLY WET SEAL PUMP ONLY, 5 VANE<br>IMPELLER WITH FKM SEALS | N/A | 1   |

2" POLY WET SEAL PUMPS



|      | REPLA   | CEMENT PARTS 2" POLY PUMPS                                   |     |
|------|---------|--|-----|
| ITEM | PART NO | DESCRIPTION  | QTY |
| 1    | 13719   | O-RING   | 1   |
| 2    | 15035E  | EPDM MECHANICAL SEAL ASSEMBLY                                | 1   |
| 3    | 13034   | 5∕16" -24 X 3 3⁄4" HHCS                                      | 4   |
| 4    | 12717   | O-RING FOR BRACKET SCREW                                     | 4   |
| 5    | 12709   | O-RING   | 4   |
| 6    | 12777   | ½" PLUG  | 4   |
| 7    | 12155   | ADAPTER SHAFT  | 1   |
| 8    | 12712A  | BODY ASSEMBLY  | 1   |
| 9    | 12705   | CHECK VALVE  | 1   |
| 10   | A204    | IMPELLER BOLT GASKET   | 1   |
| 11   | 12900   | #10 X 11/2" PPH SMS  | 1   |
| 12   | 12725   | #6 X ½" PPH SMS  | 2   |
| 13   | 12719A  | BODY O-RING  | 1   |
| 14   | 12754   | O-RING SEGMENT   | 1   |
| 15   | 12720   | 1/4" - 20 X 21/2" SL IND HWHS                                | 10  |
| 16   | V07018  | 1/4" LOCK WASHER   | 10  |
| 17   | V07019  | 1/4" - 20 HEX NUT  | 10  |
| 18   | 12775A  | <sup>7</sup> ∕16" - 14 HEX NUT                               | 1   |
| 19   | 12902A  | <sup>3</sup> ∕16" SQ. X <sup>5</sup> ⁄8" KEY                 | 2   |
| 20   | 12707W  | WET SEAL REAR BRACKET  | 1   |
| 21   | 12702A  | VOLUTE   | 1   |
| 22   | 12772   | 5 VANE IMPELLER  | 1   |
| 23   | 12202W  | WET SEAL RESERVOIR   | 1   |
| 24   | 12766   | <sup>5</sup> /16" - 24 X 3 <sup>1</sup> / <sub>4</sub> " HFS | 1   |
| 25   | CV10175 | GASKET   | 1   |
| 26   | 12902A  | 1/4" SQ. 3/4" KEY STOCK                                      | 1   |
| 27   | UV15163 | O-RING FOR DRAIN PLUG  | 4   |



# 2" POLY PUMPS WITH ELECTRIC MOTORS

### **FEATURES**

- Additional drive unit protection with added 1" spacer for ultimate protection
- The "Super Slinger" included for even more drive unit protection (not shown)



| 2" POLY PUMPS W/ELECTRIC MOTORS |   |     |     |  |  |  |
|---------------------------------|---|-----|-----|--|--|--|
| PART NO                         | DESCRIPTION   | HP  | QTY |  |  |  |
| 234PPE5                         | 2" POLY PUMP W/5.0 HP THREE PHASE<br>ELECTRIC MOTOR W/ EPDM ELASTOMERS  | 5.0 | 1   |  |  |  |
| 234PPE5V                        | 2" POLY PUMP W/5.0 HP THREE PHASE<br>ELECTRIC MOTOR W/FKM ELASTOMERS    | 5.0 | 1   |  |  |  |
| 234PPE51                        | 2" POLY PUMP W/5.0 HP SINGLE PHASE<br>ELECTRIC MOTOR W/ EPDM ELASTOMERS | 5.0 | 1   |  |  |  |
| 234PPE51V                       | 2" POLY PUMP W/5.0 HP SINGLE PHASE<br>ELECTRIC MOTOR W/FKM ELASTOMERS   | 5.0 | 1   |  |  |  |



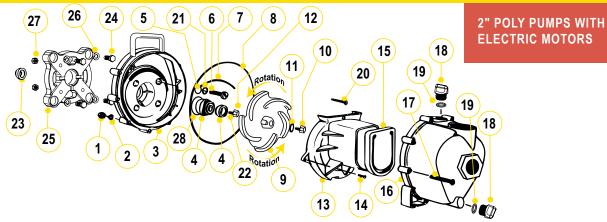
WARNING! DO NOT RUN PUMP DRY, RESTRICT OR REDUCE PORT SIZES OR DEAD HEAD PUMP



WARNING! DO NOT USE WITH FLAMMABLE LIQUIDS



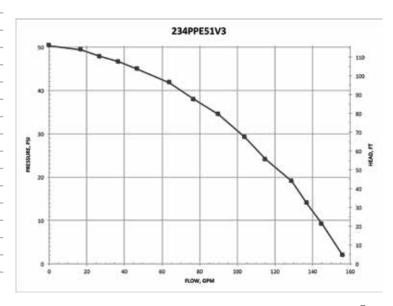
| 2" POLY PUMPS FOR 56C FACED MOTORS |                                  |     |     |  |  |
|------------------------------------|----------------------------------|-----|-----|--|--|
| PART NO                            | DESCRIPTION                      | HP  | QTY |  |  |
| 200PEO                             | 2" POLY PUMP W/ 56C FACE ADAPTER | N/A | 1   |  |  |



|      | REPLA    | CEMENT PARTS 2" POLY PUMPS        |     |
|------|----------|-----------------------------------|-----|
| ITEM | PART NO  | DESCRIPTION                       | QTY |
| 1    | V07019   | SS BODY NUTS                      | 10  |
| 2    | V07018   | SS LOCK WASHERS                   | 10  |
| 3    | 12703A   | POLY PUMP REAR BRACKET            | 1   |
| 4    | 12713    | SEAL ASSEMBLY EPDM                | 1   |
| 4    | 12713V   | SEAL ASSEMBLY FKM                 | 1   |
| 5    | 12717    | SCREW HEADS O-RING EPDM           | 4   |
| 5    | 12717V   | SCREW HEADS O-RING FKM            | 4   |
| 6    | BF107    | SS BRACKET SCREWS                 | 4   |
| 7    | 12754    | O-RING SEGMENT EPDM               | 1   |
| 7    | 12754V   | O-RING SEGMENT FKM                | 1   |
| 8    | 12719A   | BODY O-RING EPDM                  | 1   |
| 8    | 12719AV  | BODY O-RING FKM                   | 1   |
| 9    | 12772    | 5 VANE IMPELLER                   | 1   |
| 10   | 12765A   | SS IMPELLER BOLT                  | 1   |
| 11   | A204     | O-RING                            | 1   |
| 11   | A204V    | FKM O-RING                        | 1   |
| 12   | 12775A   | IMPELLER HEX NUT                  | 1   |
| 13   | 12702A   | POLY PUMP VOLUTE                  | 1   |
| 14   | 12725    | SS VOLUTE SCREWS                  | 2   |
| 15   | 12705    | POLY PUMP CHECK VALVE EPDM        | 1   |
| 15   | 12705V   | POLY PUMP CHECK VALVE FKM         | 1   |
| 16   | 12712A   | BODY ASSEMBLY EPDM                | 1   |
| 16   | 12712AV  | BODY ASSEMBLY FKM                 | 1   |
| 17   | 12720    | SS BODY SCREWS                    | 10  |
| 18   | 12777    | ½" PLUG                           | 2   |
| 19   | UV15163  | PRIME/DRAIN PLUG O-RING           | 2   |
| 19   | UV15163V | FKM PRIME/DRAIN PLUG O-RING       | 2   |
| 20   | 12900    | SS UPPER VOLUTE SCREW             | 1   |
| 21   | 12901    | SS REAR BRACKET WASHER            | 4   |
| 22   | 12902A   | IMPELLER KEY                      | 1   |
| 23   | 12716    | PUMP SLINGER                      | 1   |
| 24   | 17704    | 3/8"-16 X 1.25" HHCS              | 8   |
| 25   | 12046    | 56C FRAME ADAPTER                 | 1   |
| 26   | V20018   | LOCK WASHER FOR 56C FRAME ADAPTER | 8   |
| 27   | V10119   | NUT FOR 56C FRAME ADAPTER         | 4   |
| 28   | 12710    | O-RING FOR SEAL ASSEMBLY          | 1   |
| 28   | 12710V   | FKM O-RING FOR SEAL ASSEMBLY      | 1   |

| REPLACEMENT PARTS 2" POLY PUMPS |         |   |     |  |  |
|---------------------------------|---------|---|-----|--|--|
| ITEM                            | PART NO | DESCRIPTION   | QTY |  |  |
| N/S                             | 17701   | BASE PLATE  | 1   |  |  |
| N/S                             | 12099   | <sup>7</sup> ∕16"-14 X 1.25" HHCS   | 1   |  |  |
| N/S                             | 12052   | 56C FRAME ADAPTER SHAFT FOR 200PEO  | 1   |  |  |
| KIT                             | 12756   | 56C FRAME ADAPTER KIT (ITEMS 6, 22, 24-27, 12052, 12053, 15751, 15752)          | 1   |  |  |
| KIT                             | 12000A  | 5 VANE IMPELLER REPAIR KIT<br>(ITEMS 4, 5, 7, 8, 9, 11, 15, 19, 23 & 12099)     | 1   |  |  |
| KIT                             | 12000AV | 5 VANE FKM IMPELLER REPAIR KIT<br>(ITEMS 4, 5, 7, 8, 9, 11, 15, 19, 23 & 12099) | 1   |  |  |
| KIT                             | 12999A  | PUMP SEAL/O-RING KIT<br>(ITEMS 4, 5, 7, 8, 11, 19, 23)                          | 1   |  |  |
| KIT                             | 12999AV | FKM PUMP SEAL/O-RING K/T<br>(ITEMS 4, 5, 7, 8, 11, 19, 23)                      | 1   |  |  |

| KITS 2" POLY PUMPS |               |             |                   |  |  |  |  |
|--------------------|---------------|-------------|-------------------|--|--|--|--|
| PART NO            | REPAIR KIT NO | SEAL KIT NO | FRAME ADAPTER KIT |  |  |  |  |
| 234PPE5            | 12000A        | 12999A      | 12756             |  |  |  |  |
| 234PPE5V           | 12000AV       | 12999AV     | 12756             |  |  |  |  |
| 234PPE51           | 12000A        | 12999A      | 12756             |  |  |  |  |
| 234PPE51V          | 12000AV       | 12999AV     | 12756             |  |  |  |  |
| 200PEO             | 12003A        | 12999A      | 12756             |  |  |  |  |



# 2" POLY PUMPS WITH HYDRAULIC MOTORS

#### **FEATURES**

- Precision molded construction
- Lightweight
- Corrosion resistant
- Low maintenance
- Hydraulic fluid capacity is minimum 6 gallons and maximum 10 gallons
- Open or closed system
- 3600 R.P.M.
- Recommendation to use the motor spool control valve or a suitable equivalent. The lack of such a valve in this circuit may cause failure to the hydraulic motor.



| 2" POLY PUMPS W/HYDRAULIC MOTORS |   |      |   |  |  |
|----------------------------------|---|------|---|--|--|
| PART NO                          | PART NO DESCRIPTION                           |      |   |  |  |
| 200PHA                           | 2" POLY PUMP WITHOUT HYDRAULIC MOTOR          | N/A  | 1 |  |  |
| 200PHY                           | 2" POLY PUMP W/12 HP HYDRAULIC MOTOR          | 12.0 | 1 |  |  |
| 200PHYW                          | 2" POLY WET SEAL PUMP W/12 HP HYDRAULIC MOTOR | 12.0 | 1 |  |  |

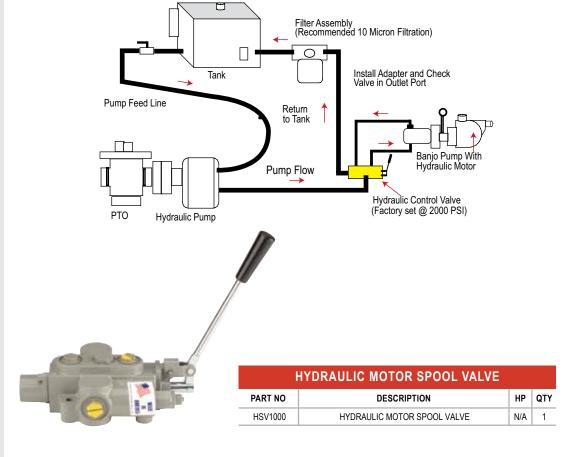


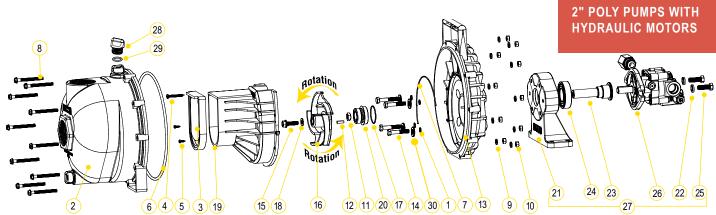
WARNING! DO NOT RUN PUMP DRY, RESTRICT OR REDUCE PORT SIZES OR DEAD HEAD PUMP



WARNING! DO NOT USE WITH FLAMMABLE LIQUIDS

### SPOOL VALVE ASSEMBLY DIAGRAM





|      | (2)     | 6 4 3 3 19 15 16   | 10  |
|------|---------|--|-----|
|      | REPLA   | CEMENT PARTS 2" POLY PUMPS   |     |
| ITEM | PART NO | DESCRIPTION  | QTY |
| 1    | 12717   | O-RING FOR SCREW HEADS   | 4   |
| 2    | 12712A  | BODY ASSEMBLY  | 1   |
| 3    | 12705   | CHECK VALVE  | 1   |
| 4    | 12900   | SS UPPER VOLUTE SCREW  | 1   |
| 5    | 12725   | SS VOLUTE SCREWS   | 2   |
| 6    | 12719A  | BODY O-RING  | 1   |
| 7    | 12754   | O-RING SEGMENT   | 1   |
| 8    | 12720   | SS BODY SCREWS   | 10  |
| 9    | V07018  | SS LOCK WASHERS  | 10  |
| 10   | V07019  | SS BODY NUTS   | 10  |
| 11   | 12775A  | IMPELLER HEX NUT   | 1   |
| 12   | 12902A  | IMPELLER KEY   | 1   |
| 13   | 12703A  | POLY PUMP REAR BRACKET   | 1   |
| 14   | 12715A  | 5/16"-24 X 1.75" HHCS  | 4   |
| 15   | 12765A  | SS IMPELLER BOLT   | 1   |
| 16   | 12772   | 5 VANE IMPELLER  | 1   |
| 17   | 12710   | O-RING FOR SEAL ASSEMBLY   | 1   |
| 18   | A204    | O-RING   | 1   |
| 19   | 12702A  | POLY PUMP VOLUTE   | 1   |
| 20   | 12713   | MECHANICAL SEAL ASSEMBLY   | 1   |
| 21   | 12049E  | HYDRAULIC PEDESTAL HOUSING   | 1   |
| 22   | V20018  | 3/8" LOCK WASHER   | 2   |
| 23   | 12055E  | ADAPTER SHAFT  | 1   |
| 24   | 17056E  | BEARING  | 1   |
| 25   | 18010SS | 3/8"-16 X 1.25" HHCS   | 2   |
| 26   | HY1013  | HYDRAULIC MOTOR  | 1   |
| 27   | 12600B  | COMPLETE HYDRAULIC ASSEMBLY  | 1   |
| 28   | 12777   | ½" PLUG  | 2   |
| 29   | UV15163 | O-RING FOR PLUG  | 2   |
| 30   | 12901   | WASHER (200PHA & 200PHY)   | 4   |
| N/S  | HY1003  | HYDRAULIC MOTOR SEAL KIT   | 1   |
| KIT  | 12000A  | 5 VANE IMPELLER REPAIR KIT<br>(ITEMS 1, 3, 6, 7, 16-18, 20, 12099)   | 1   |
| KIT  | 12999A  | 5 VANE IMPELLER REPAIR KIT<br>(ITEMS 1, 3, 6, 7, 16-18, 20, 12099)<br>PUMP SEAL/O-RING KIT<br>(ITEMS 1, 6, 7, 17, 20, 29, 12099) | 1   |
|      |         | (  |     |

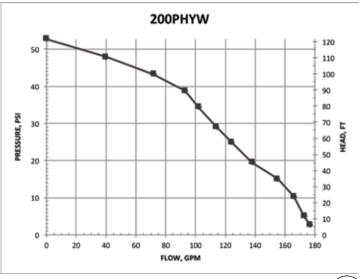
| KITS 2" POLY PUMPS |                       |                     |                             |  |
|--------------------|-----------------------|---------------------|-----------------------------|--|
| PART NO            | EPDM REPAIR<br>KIT NO | EPDM SEAL<br>KIT NO | HYDRAULIC MOTOR<br>SEAL KIT |  |
| 200PHA             | 12000A                | 12999A              | N/A                         |  |
| 200PHY             | 12000A                | 12999A              | HY1003                      |  |

| HYDRAULI  | C MOTOR DATA   |  |  |
|---|--|--|--|
| U.S. GALLONS/REV.   | 0.0025   |  |  |
| CUBIC INCHES/REV.   | 0.580  |  |  |
| LITERS/REV.   | 0.0097   |  |  |
| MAX HYDRAULIC PRESSURE  | 2000 PSI   |  |  |
| MIN HYDRAULIC PRESSURE  | 200 PSI  |  |  |
| INLET PORT  | SAE 10 (7/8-14 UNF-2B)   |  |  |
| OUTLET PORT   | SAE 10 (7/8-14 UNF-2B)   |  |  |
| MINIMUM GPM REQUIRED  | 6 GPM 2400 RPM   |  |  |
| MAXIMUM GPM REQUIRED  | 10 GPM 4000 RPM  |  |  |
| IDEAL GPM REQUIRED  | 9 GPM 3600 RPM   |  |  |
| CONNECT   | ION INFORMATION  |  |  |
| INLET   | "A" PORT   |  |  |
| OUTLET  | "B" PORT   |  |  |
| SUPPLIED CHECK VALVE IS TO ENSURE I<br>CHECK VALVE IN OUTLET PORT (MARK | PROPER ROTATION OF THE BANJO PUMP. PLACE<br>(ED "B") FOR PROPER RIGHT HAND ROTATION. |  |  |
| SPOOL VALVE INFORMATION   |  |  |  |

SPOOL VALVE INFORMATION

REQUIRED OUTLET FLOW MIN 6 GPM / MAX 10 GPM

REQUIRED SYSTEM PRESSURE MIN 600 PSI / MAX 3000 PSI



# 2" POLY MANIFOLD PUMPS WITH GAS ENGINES

### **FEATURES**

- Precision molded construction
- Lightweight
- Corrosion resistant
- Low maintenance
- See pages 43-49 on manifold fittings for easy plumbing.



| 2" PC     | 2" POLY MANIFOLD PUMPS W/GAS ENGINES                                 |     |     |  |  |
|-----------|--|-----|-----|--|--|
| PART NO   | DESCRIPTION  | HP  | QTY |  |  |
| M220PH5   | 2" POLY MANIFOLD PUMP W/5.5 HP HONDA® ENGINE                         | 5.5 | 1   |  |  |
| M220PH5E  | 2" POLY MANIFOLD PUMP W/5.5 HP HONDA® ENGINE W/<br>ELECTRIC START    | 5.5 | 1   |  |  |
| M220PH6   | 2" FP MANIFOLD PUMP W/6.5 HP HONDA® ENGINE                           | 6.5 | 1   |  |  |
| M220P6PRO | 2" FP MANIFOLD PUMP W/6.5 HP BRIGGS & STRATTON®<br>PRO SERIES ENGINE | 6.5 | 1   |  |  |



WARNING! DO NOT RUN PUMP DRY, RESTRICT OR REDUCE PORT SIZES OR DEAD HEAD PUMP



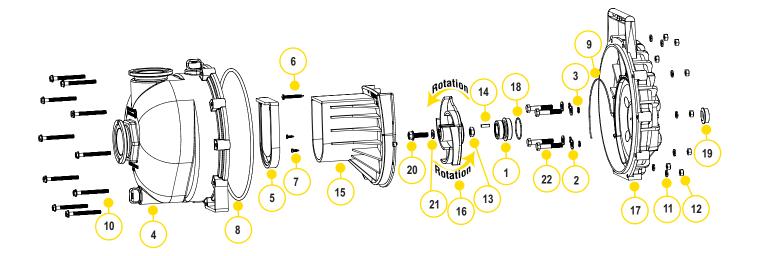


| 2" F    | 2" POLY MANIFOLD BEARING PEDESTAL                                   |     |     |  |
|---------|---|-----|-----|--|
| PART NO | DESCRIPTION   | HP  | QTY |  |
| M220PB  | 2" POLY MANIFOLD BEARING PEDESTAL W/ $\%$ " SHAFT & 3 VANE IMPELLER | N/A | 1   |  |



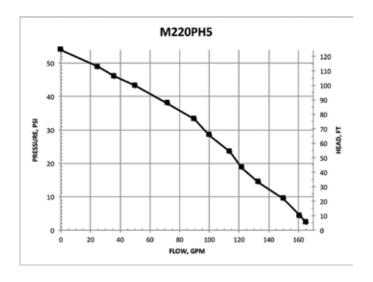
|         | 2" POLY MANIFOLD PUMP ONLY                               |     |     |
|---------|--|-----|-----|
| PART NO | DESCRIPTION  | HP  | QTY |
| M225PO  | 2" POLY MANIFOLD PUMP ONLY W/ ¾" SHAFT & 5 VANE IMPELLER | N/A | 1   |

2" POLY MANIFOLD PUMPS WITH GAS ENGINES



|      | REPLACEMENT PARTS 2" POLY PUMPS |  |     |  |  |
|------|---------------------------------|--|-----|--|--|
| ITEM | PART NO                         | DESCRIPTION  | QTY |  |  |
| 1    | 12713                           | MECHANICAL SEAL ASSEMBLY   | 1   |  |  |
| 2    | 12901                           | SS REAR BRACKET WASHER   | 4   |  |  |
| 3    | 12717                           | O-RING FOR SCREW HEAD  | 4   |  |  |
| 4    | M12712                          | 2" FP MANIFOLD PUMP BODY ASSEMBLY                                    | 1   |  |  |
| 5    | 12705                           | POLY PUMP CHECK VALVE  | 1   |  |  |
| 6    | 12900                           | SS UPPER VOLUTE SCREW  | 1   |  |  |
| 7    | 12725                           | SS VOLUTE SCREWS   | 2   |  |  |
| 8    | 12719A                          | BODY O-RING  | 1   |  |  |
| 9    | 12754                           | O-RING SEGMENT   | 1   |  |  |
| 10   | 12720                           | SS BODY SCREWS   | 10  |  |  |
| 11   | V07018                          | SS LOCK WASHERS  | 10  |  |  |
| 12   | V07019                          | SS BODY NUTS   | 10  |  |  |
| 13   | 12775A                          | IMPELLER HEX NUT   | 1   |  |  |
| 14   | 12902A                          | IMPELLER KEY   | 1   |  |  |
| 15   | 12702A                          | POLY PUMP VOLUTE   | 1   |  |  |
| 16   | 12772                           | 5 VANE IMPELLER  | 1   |  |  |
| 16   | 12771A                          | 3 VANE IMPELLER  | 1   |  |  |
| 17   | 12703A                          | POLY PUMP REAR BRACKET   | 1   |  |  |
| 18   | 12710                           | O-RING FOR SEAL ASSEMBLY   | 1   |  |  |
| 19   | 12716                           | POLY PUMP SLINGER  | 1   |  |  |
| 20   | 12765A                          | SS IMPELLER BOLT   | 1   |  |  |
| 21   | A204                            | O-RING   | 1   |  |  |
| 22   | 12715A                          | SS BRACKET SCREWS  | 4   |  |  |
| KIT  | 12000A                          | 5 VANE IMPELLER REPAIR KIT<br>(ITEMS 2,4,7,8,17,19,21,30, 12099)     | 1   |  |  |
| KIT  | 12000AV                         | 5 VANE FKM IMPELLER REPAIR KÍT<br>(ITEMS 2.4.7.8.17.19.21.30. 12099) | 1   |  |  |
| KIT  | 12999A                          | PUMP SEAL/O-RING KIT<br>(ITEMS 2.4.7.8.17.19.21.30. 12099)           | 1   |  |  |
| KIT  | 12999AV                         | FKM PUMP SEAL/O-RING KIT<br>(ITEMS 4-7,8,10,18, 23 & 12099)          | 1   |  |  |

| KITS 2" POLY PUMPS |                       |                      |                     |                    |  |
|--------------------|-----------------------|----------------------|---------------------|--------------------|--|
| PART NO            | EPDM REPAIR<br>KIT NO | FKM REPAIR<br>KIT NO | EPDM SEAL<br>KIT NO | FKM SEAL<br>KIT NO |  |
| M220PH5            | 12000A                | 12000AV              | 12999A              | 12999AV            |  |
| M220PH5E           | 12000A                | 12000AV              | 12999A              | 12999AV            |  |
| M220PH6            | 12000A                | 12000AV              | 12999A              | 12999AV            |  |
| M220P6PRO          | 12000A                | 12000AV              | 12999A              | 12999AV            |  |
| M220P6PROE         | 12000A                | 12000AV              | 12999A              | 12999AV            |  |
| M220PB             | 12003A                | 12003AV              | 12999A              | 12999AV            |  |
| M220PO             | 12003A                | 12003AV              | 12999A              | 12999AV            |  |



# 2" POLY MANIFOLD WET SEAL PUMPS

### **FEATURES**

- Run dry capability
- Double seal contained in ethylene glycol reservoir.
   Carbon ceramic seal faces with stainless steel cup and spring with EPDM rubber
- Pump end separated from engine
- Large weep holes between pump and engine
- V-shaped for quicker priming
- See pages 43-49 on manifold fittings for easy plumbing.



### 2" POLY MANIFOLD WET SEAL PUMPS W/GAS ENGINES

| PART NO    | DESCRIPTION  | HP  | QTY |
|------------|--|-----|-----|
| M220PH5W   | 2" POLY MANIFOLD WET SEAL PUMP W/5.5 HP HONDA® ENGINE                        | 5.5 | 1   |
| M220P6PROW | 2" POLY MANIFOLD WET SEAL PUMP W/6.5 HP BRIGGS & STRATTON® ENGINE PRO SERIES | 6.5 | 1   |



WARNING! DO NOT RUN PUMP DRY, RESTRICT OR REDUCE PORT SIZES OR DEAD HEAD PUMP

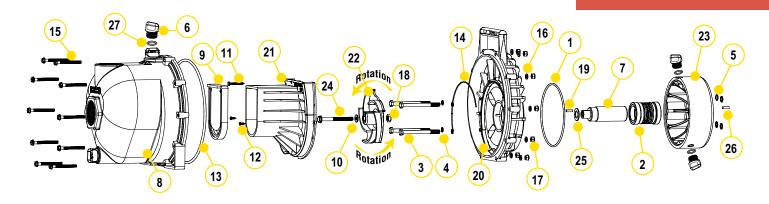




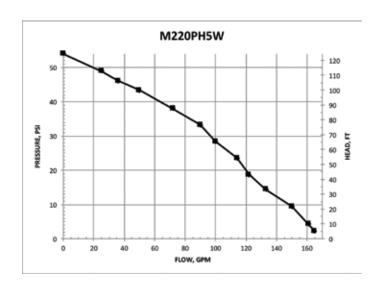
| 2" POLY MANIFOLD WET SEAL BEARING PEDESTAL |
|--|
|--|

| PART NO | DESCRIPTION   | HP  | QTY |
|---------|---|-----|-----|
| M220PBW | 2" POLY MANIFOLD WET SEAL BEARING PEDESTAL W/<br>3/4" SHAFT & 5 VANE IMPELLER | N/A | 1   |
|         |   |     |     |

2" POLY MANIFOLD WET SEAL PUMPS



| REPLACEMENT PARTS 2" POLY PUMPS |         |   |     |
|---------------------------------|---------|---|-----|
| ITEM                            | PART NO | DESCRIPTION                                     | QTY |
| 1                               | 13719   | O-RING  | 1   |
| 2                               | 15035E  | EPDM MECHANICAL SEAL ASSEMBLY                   | 1   |
| 3                               | 13034   | 5/16" -24 X 3 3/4" HHCS                         | 4   |
| 4                               | 12717   | O-RING FOR BRACKET SCREW                        | 4   |
| 5                               | 12709   | O-RING  | 4   |
| 6                               | 12777   | ½" PLUG   | 4   |
| 7                               | 12155   | ADAPTER SHAFT                                   | 1   |
| 8                               | M12712  | 2" FP MANIFOLD PUMP BODY ASSEMBLY               | 1   |
| 9                               | 12705   | CHECK VALVE                                     | 1   |
| 10                              | A204    | IMPELLER BOLT GASKET                            | 1   |
| 11                              | 12900   | #10 X 11/2" PPH SMS                             | 1   |
| 12                              | 12725   | #6 X ½" PPH SMS                                 | 2   |
| 13                              | 12719A  | BODY O-RING                                     | 1   |
| 14                              | 12754   | O-RING SEGMENT                                  | 1   |
| 15                              | 12720   | 1/4" - 20 X 21/2" SL IND HWHS                   | 10  |
| 16                              | V07018  | 1/4" LOCK WASHER                                | 10  |
| 17                              | V07019  | 1/4" - 20 HEX NUT                               | 10  |
| 18                              | 12775A  | <sup>7</sup> ∕16" - 14 HEX NUT                  | 1   |
| 19                              | 12902A  | ³⁄₁6" SQ. X 5⁄8" KEY                            | 2   |
| 20                              | 12707W  | WET SEAL REAR BRACKET                           | 1   |
| 21                              | 12702A  | VOLUTE  | 1   |
| 22                              | 12772   | 5 VANE IMPELLER                                 | 1   |
| 23                              | 12202W  | WET SEAL RESERVOIR                              | 1   |
| 24                              | 12766   | <sup>5</sup> ∕₁6" - 24 X 3 <sup>1</sup> ∕₄" HFS | 1   |
| 25                              | CV10175 | GASKET  | 1   |
| 26                              | 12902A  | 1/4" SQ. 3/4" KEY STOCK                         | 1   |
| 27                              | UV15163 | O-RING FOR DRAIN PLUG                           | 4   |



2" POLYPROPYLENE MANIFOLD WET SEAL PUMPS WITH HYDRAULIC MOTORS

#### **FEATURES**

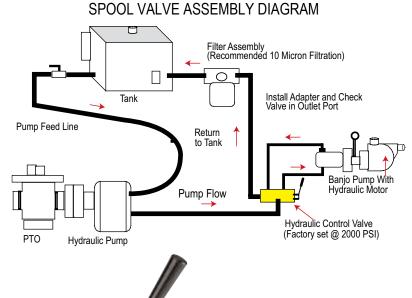
- Run dry capability
- Double seal contained in ethylene glycol reservoir.
   Carbon ceramic seal faces with stainless steel cup and spring with EPDM rubber
- Pump end separated from engine
- V-shaped for quicker priming
- See pages 43-49 on manifold fittings for easy plumbing.



| POLY MANI | FOLD WET SEAL | PUMPS W/HY | DRAULIC MOTOR | ? |
|-----------|---------------|------------|---------------|---|
|           |               |            |               |   |

| PART NO  | DESCRIPTION  | НР | QTY |
|----------|--|----|-----|
| M220PHYW | 2" MANIFOLD POLY WET SEAL PUMP<br>W/ HYDRAULIC MOTOR | 12 | 1   |

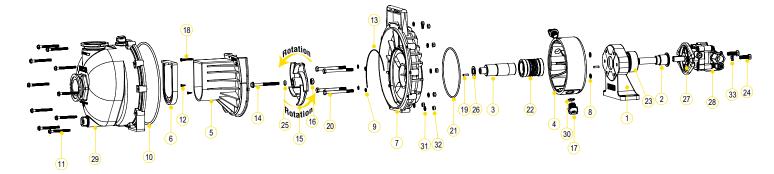






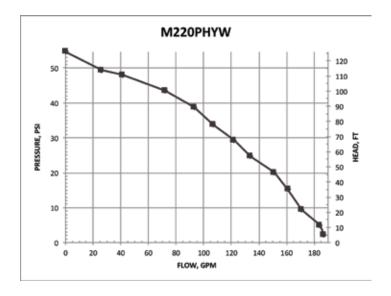
| HYDRAULIC MUTUR SPOUL VALVE |                             |     |     |  |
|-----------------------------|-----------------------------|-----|-----|--|
| PART NO                     | DESCRIPTION                 | HP  | QTY |  |
| HSV1000                     | HYDRAULIC MOTOR SPOOL VALVE | N/A | 1   |  |

2" POLYPROPYLENE MANIFOLD WET SEAL PUMPS WITH HYDRAULIC MOTORS



| REPLACEMENT PARTS 2" POLY PUMPS |         |                                      |     |
|---------------------------------|---------|--------------------------------------|-----|
| ITEM                            | PART NO | DESCRIPTION                          | QTY |
| 1                               | 12049E  | HYDRAULIC PEDESTAL HOUSING           | 1   |
| 2                               | 12055E  | HYDRAULIC ADAPTER SHAFT              | 1   |
| 3                               | 12155   | ADAPTER SHAFT                        | 1   |
| 4                               | 12202W  | WET SEAL RESERVOIR                   | 1   |
| 5                               | 12702A  | VOLUTE                               | 1   |
| 6                               | 12705   | CHECK VALVE                          | 1   |
| 7                               | 12707W  | REAR BRACKET                         | 1   |
| 8                               | 12709   | O-RING                               | 4   |
| 9                               | 12717   | O-RING FOR SCREW HEADS               | 4   |
| 10                              | 12719A  | O-RING                               | 1   |
| 11                              | 12720   | SS BODY SCREWS                       | 10  |
| 12                              | 12725   | SS VOLUTE SCREWS                     | 2   |
| 13                              | 12754   | O-RING SEGMENT                       | 1   |
| 14                              | 12766   | 5/16" - 24 X 31/4" HFS               | 1   |
| 15                              | 12772   | IMPELLER                             | 1   |
| 16                              | 12775A  | IMPELLER HEX NUT                     | 1   |
| 17                              | 12777   | ½" PLUG                              | 2   |
| 18                              | 12900   | SS UPPER VOLUTE SCREW                | 1   |
| 19                              | 12902A  | IMPELLER KEY                         | 2   |
| 20                              | 13034   | 5/16" -24 X 3 3/4" HHCS              | 4   |
| 21                              | 13719   | O-RING                               | 1   |
| 22                              | 15035   | MECHANICAL SEAL ASSEMBLY             | 1   |
| 23                              | 17056E  | BEARING                              | 1   |
| 24                              | 18010SS | 3/8"-16 X 1.25" HHCS                 | 2   |
| 25                              | A204    | O-RING                               | 1   |
| 26                              | CV10175 | GASKET                               | 1   |
| 27                              | HY10131 | MGG20025BC1D3 GRESEN HYDRAULIC MOTOR | 1   |
| 28                              | HY10132 | HYDRAULIC CHECK VALVE                | 1   |
| 29                              | M12712  | 2" FP MANIFOLD PUMP BODY ASSEMBLY    | 1   |
| 30                              | UV15163 | O-RING                               | 2   |
| 31                              | V07018  | SS LOCK WASHERS                      | 10  |
| 32                              | V07019  | SS BODY NUTS                         | 10  |
| 33                              | V20018  | 3/8" LOCK WASHER                     | 2   |

| INVERABLE MOTOR DATA  |  |  |  |
|---|--|--|--|
| HYDRAULI  | C MOTOR DATA   |  |  |
| U.S. GALLONS/REV.   | 0.0025   |  |  |
| CUBIC INCHES/REV.   | 0.580  |  |  |
| LITERS/REV.   | 0.0097   |  |  |
| MAX HYDRAULIC PRESSURE  | 2000 PSI   |  |  |
| MIN HYDRAULIC PRESSURE  | 200 PSI  |  |  |
| INLET PORT  | SAE 10 (7/8-14 UNF-2B)   |  |  |
| OUTLET PORT   | SAE 10 (7/8-14 UNF-2B)   |  |  |
| MINIMUM GPM REQUIRED  | 6 GPM 2400 RPM   |  |  |
| MAXIMUM GPM REQUIRED  | 10 GPM 4000 RPM  |  |  |
| IDEAL GPM REQUIRED  | 9 GPM 3600 RPM   |  |  |
| CONNECT   | ION INFORMATION  |  |  |
| INLET   | "A" PORT   |  |  |
| OUTLET  | "B" PORT   |  |  |
| SUPPLIED CHECK VALVE IS TO ENSURE I<br>CHECK VALVE IN OUTLET PORT (MARK | PROPER ROTATION OF THE BANJO PUMP. PLACE<br>(ED "B") FOR PROPER RIGHT HAND ROTATION. |  |  |
| SPOOL VALVE INFORMATION   |  |  |  |
| REQUIRED OUTLET FLOW  | MIN 6 GPM / MAX 10 GPM   |  |  |
| REQUIRED SYSTEM PRESSURE  | MIN 600 PSI / MAX 3000 PSI   |  |  |



### **3" POLY PUMPS**

### **FEATURES**

- Pump end separated from engine
- Large weep holes between pump and engine
- V-shaped for quicker priming
- Pump only comes unassembled



| 3" POLY PUMPS W/GAS ENGINES |   |     |     |  |
|-----------------------------|---|-----|-----|--|
| PART NO                     | DESCRIPTION   | HP  | QTY |  |
| 300PH-6                     | 3" POLY PUMP W/6.5 HP HONDA® ENGINE   | 6.5 | 1   |  |
| 300P11PRO                   | 3" POLY PUMP W/11 HP BRIGGS & STRATTON® ENGINE<br>PRO SERIES W/ELECTRIC START & PULL ROPE | 11  | 1   |  |



WARNING! DO NOT RUN PUMP DRY, RESTRICT OR REDUCE PORT SIZES OR DEAD HEAD PUMP

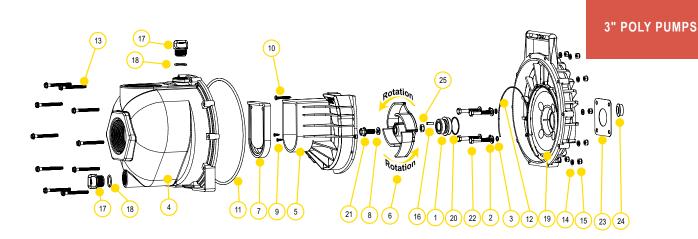




| 3" POLY BEARING PEDESTAL |  |     |     |
|--------------------------|--|-----|-----|
| PART NO                  | DESCRIPTION  | HP  | QTY |
| 300PB                    | 3" POLY BEARING PEDESTAL W/ ¾" SHAFT & 4 VANE IMPELLER | N/A | 1   |

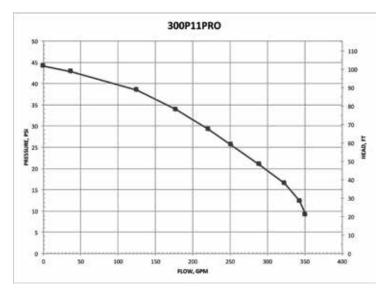


| 3" POLY PUMP ONLY   |   |     |     |
|---------------------|---|-----|-----|
| PART NO DESCRIPTION |   | HP  | QTY |
| 300PO               | 3" POLY PUMP ONLY W/ ¾" SHAFT & 4 VANE IMPELLER | N/A | 1   |



| REPLACEMENT PARTS 3" POLY PUMPS |         |   |     |
|---------------------------------|---------|---|-----|
| ITEM                            | PART NO | DESCRIPTION   | QTY |
| 1                               | 12713   | SEAL ASSEMBLY   | 1   |
| 2                               | 12901   | SS REAR BRACKET WASHER  | 4   |
| 3                               | 12717   | O-RING FOR SCREW HEAD   | 4   |
| 4                               | 13712   | BODY ASSEMBLY   | 1   |
| 5                               | 13702   | POLY PUMP VOLUTE  | 1   |
| 6                               | 13771   | 4 VANE TRIMMED IMPELLER<br>(300PH-6, 300PB & 300PO)                         | 1   |
| 6                               | 13772   | 4 VANE IMPELLER (300P11PRO)   | 1   |
| 7                               | 12705   | CHECK VALVE   | 1   |
| 8                               | A204    | O-RING  | 1   |
| 9                               | 12900   | SS UPPER VOLUTE SCREW   | 4   |
| 10                              | 12725   | SS VOLUTE SCREWS  | 2   |
| 11                              | 12719A  | BODY O-RING   | 1   |
| 12                              | 12754   | O-RING SEGMENT  | 1   |
| 13                              | 12720   | SS BODY SCREWS  | 10  |
| 14                              | V07018  | SS LOCK WASHERS   | 10  |
| 15                              | V07019  | SS BODY NUTS  | 10  |
| 16                              | 12902A  | IMPELLER KEY  | 1   |
| 17                              | 13777   | ¾" PLUG   | 2   |
| 18                              | 13778   | O-RING  | 2   |
| 19                              | 12703A  | POLY PUMP REAR BRACKET  | 1   |
| 20                              | 12710   | O-RING FOR SEAL ASSEMBLY  | 1   |
| 21                              | 12765A  | SS IMPELLER BOLT 5/16 X 24 X 1.12 (300PH-6)                                 | 1   |
| 21                              | 13765   | SS IMPELLER BOLT <sup>3</sup> % X 24 X 1.75 (300P11PRO)                     | 1   |
| 22                              | 12715A  | SS BRACKET SCREWS   | 4   |
| 23                              | 15751   | REAR BRACKET SHIM   | 1   |
| 24                              | 12716   | POLY PUMP SLINGER   | 1   |
| 25                              | 12775A  | IMPELLER HEX NUT  | 1   |
| N/S                             | 12882A  | BEARING PEDESTAL  | 1   |
| N/S                             | 12099   | <sup>7</sup> ∕16"-14 X 1.25" HHCS   | 1   |
| N/S                             | 13000   | 4 VANE IMPELLER REPAIR KIT<br>(ITEMS 1, 3, 6-8, 11, 12, 18, 20, 24 & 12099) | 1   |
| N/S                             | 13999   | PUMP SEAL/O-RING KIT<br>(ITEMS 1, 3, 8, 11, 12, 18, 20, 24 & 12099)         | 1   |

| KITS 3" POLY PUMPS         |       |       |  |
|----------------------------|-------|-------|--|
| PART NO EPDM REPAIR EPDM S |       |       |  |
| 300PH-6                    | 13000 | 13999 |  |
| 300P11PRO                  | N/A   | 13999 |  |
| 300PB                      | 13000 | 13999 |  |
| 300PO                      | 13000 | 13999 |  |



### **3" POLY MANIFOLD PUMPS**

### **FEATURES**

- Pump end separated from engine
- Large weep holes between pump and engine
- V-shaped for quicker priming
- Pump only comes unassembled
- See pages 43-49 on manifold fittings for easy plumbing.



| 3" POLY MANIFOLD PUMPS W/GAS ENGINES |  |     |   |  |
|--------------------------------------|--|-----|---|--|
| PART NO                              | PART NO DESCRIPTION  |     |   |  |
| M300PH6                              | 3" POLY MANIFOLD PUMP W/6.5 HP HONDA® ENGINE                       | 6.5 | 1 |  |
| M300P11PRO                           | 3" POLY MANIFOLD PUMP W/11 HP BRIGGS & STRATTON® PRO SERIES ENGINE | 11  | 1 |  |



WARNING! DO NOT RUN PUMP DRY, RESTRICT OR REDUCE PORT SIZES OR DEAD HEAD PUMP



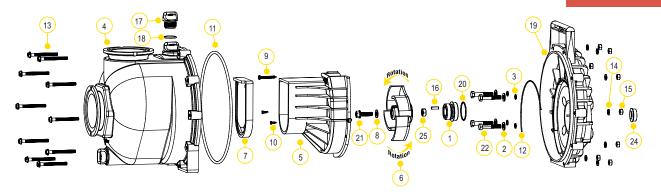


| 3" POLY MANIFOLD BEARING PEDESTAL |   |     |     |
|-----------------------------------|---|-----|-----|
| PART NO                           | DESCRIPTION   | HP  | QTY |
| M300PB                            | 3" POLY MANIFOLD BEARING PEDESTAL W/ ¾" SHAFT & 4 VANE IMPELLER | N/A | 1   |



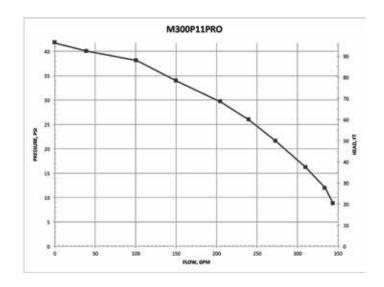
| 3" POLY MANIFOLD PUMP ONLY |  |     |     |  |
|----------------------------|--|-----|-----|--|
| PART NO                    | DESCRIPTION  | HP  | QTY |  |
| M300PO                     | 3" POLY MANIFOLD PUMP ONLY W/ ¾" SHAFT & 4 VANE IMPELLER | N/A | 1   |  |

**3" POLY MANIFOLD PUMPS** 



| REI  | REPLACEMENT PARTS 3" POLY MANIFOLD PUMPS |   |     |  |  |  |
|------|--|---|-----|--|--|--|
| ITEM | PART NO                                  | DESCRIPTION   | QTY |  |  |  |
| 1    | 12713                                    | SEAL ASSEMBLY   | 1   |  |  |  |
| 2    | 12901                                    | SS REAR BRACKET WASHER  | 4   |  |  |  |
| 3    | 12717                                    | O-RING FOR SCREW HEAD   | 4   |  |  |  |
| 4    | M13712                                   | MANIFOLD BODY ASSEMBLY  | 1   |  |  |  |
| 5    | 13702                                    | POLY PUMP VOLUTE  | 1   |  |  |  |
| 6    | 13771                                    | 4 VANE TRIMMED IMPELLER (M300PH-6, M300PB & M300PO)                         | 1   |  |  |  |
| 6    | 13772                                    | 4 VANE IMPELLER (M300P11PRO)  | 1   |  |  |  |
| 7    | 12705                                    | CHECK VALVE   | 1   |  |  |  |
| 8    | A204                                     | O-RING  | 1   |  |  |  |
| 9    | 12900                                    | SS UPPER VOLUTE SCREW   | 4   |  |  |  |
| 10   | 12725                                    | SS VOLUTE SCREWS  | 2   |  |  |  |
| 11   | 12719A                                   | BODY O-RING   | 1   |  |  |  |
| 12   | 12754                                    | O-RING SEGMENT  | 10  |  |  |  |
| 13   | 12720                                    | SS BODY SCREWS  | 10  |  |  |  |
| 14   | V07018                                   | SS LOCK WASHERS   | 10  |  |  |  |
| 15   | V07019                                   | SS BODY NUTS  | 1   |  |  |  |
| 16   | 12902A                                   | IMPELLER KEY  | 2   |  |  |  |
| 17   | 13777                                    | ¾" PLUG   | 2   |  |  |  |
| 18   | 13778                                    | O-RING  | 1   |  |  |  |
| 19   | 12703A                                   | POLY PUMP REAR BRACKET  | 1   |  |  |  |
| 20   | 12710                                    | O-RING FOR SEAL ASSEMBLY  | 1   |  |  |  |
| 21   | 12765A                                   | SS IMPELLER BOLT 5/16 X 24 X 1.12 (-6)                                      | 1   |  |  |  |
| 21   | 13765                                    | SS IMPELLER BOLT 3/8 X 24 X 1.75 (M300P11PRO)                               | 1   |  |  |  |
| 22   | 12715A                                   | SS BRACKET SCREWS   | 4   |  |  |  |
| 23   | 15751                                    | REAR BRACKET SHIM   | 1   |  |  |  |
| 24   | 12716                                    | POLY PUMP SLINGER   | 1   |  |  |  |
| 25   | 12775A                                   | IMPELLER HEX NUT  | 1   |  |  |  |
| N/S  | 12882A                                   | BEARING PEDESTAL  | 1   |  |  |  |
| N/S  | 12099                                    | <sup>7</sup> ∕16"-14 X 1.25" HHCS   | 1   |  |  |  |
| N/S  | 13000                                    | 4 VANE IMPELLER REPAIR KIT<br>(ITEMS 1, 3, 6-8, 11, 12, 18, 20, 24 & 12099) | 1   |  |  |  |
| N/S  | 13999                                    | PUMP SEAL/Ó-RÍNG KIT<br>(ITEMS 1, 3, 8, 11, 12, 18, 20, 24 & 12099)         | 1   |  |  |  |

| KITS 3" POLY PUMPS |                       |                     |  |  |
|--------------------|-----------------------|---------------------|--|--|
| PART NO            | EPDM REPAIR<br>KIT NO | EPDM SEAL<br>KIT NO |  |  |
| M300PH6            | 13000                 | 13999               |  |  |
| M300P6PRO          | 13000                 | 13999               |  |  |
| M300P11PRO         | N/A                   | 13999               |  |  |
| M300PB             | 13000                 | 13999               |  |  |



# 3" POLY PUMPS WITH HYDRAULIC MOTORS

#### **FEATURES**

- Precision molded construction
- Lightweight
- Corrosion resistant
- Low maintenance
- Hydraulic fluid capacity is minimum 6 gallons and maximum 10 gallons
- · Open or closed system
- 3600 R.P.M.
- Recommendation to use the motor spool control valve or a suitable equivalent. The lack of such a valve in this circuit may cause failure to the hydraulic motor.

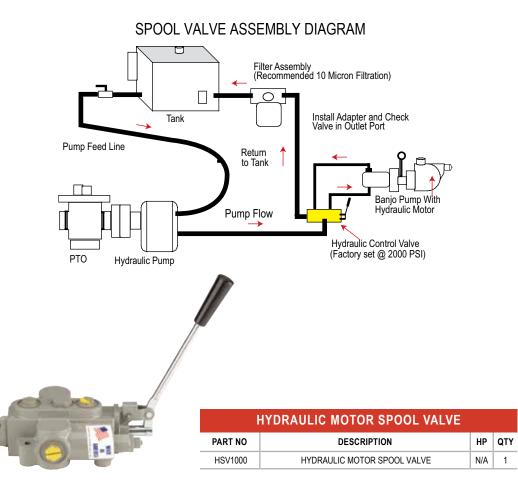


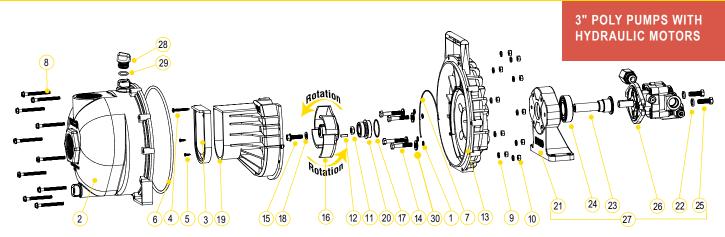
| 3" POLY PUMPS W/HYDRAULIC MOTORS |   |      |     |  |  |
|----------------------------------|---|------|-----|--|--|
| PART NO                          | DESCRIPTION                                   | HP   | QTY |  |  |
| 300PHY                           | 3" POLY PUMP W/12 HP HYDRAULIC MOTOR          | 12.0 | 1   |  |  |
| 300PHYW                          | 3" POLY WET SEAL PUMP W/12 HP HYDRAULIC MOTOR | 12.0 | 1   |  |  |



WARNING! DO NOT RUN PUMP DRY, RESTRICT OR REDUCE PORT SIZES OR DEAD HEAD PUMP



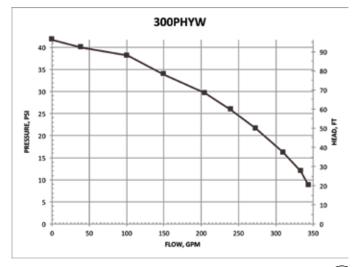




|      | REPLACEMENT PARTS 3" POLY PUMPS |   |     |  |  |  |
|------|---------------------------------|---|-----|--|--|--|
| ITEM | PART NO                         | DESCRIPTION   | QTY |  |  |  |
| 1    | 12717                           | O-RING FOR SCREW HEADS  | 4   |  |  |  |
| 2    | 13712                           | BODY ASSEMBLY   | 1   |  |  |  |
| 3    | 12705                           | CHECK VALVE   | 1   |  |  |  |
| 4    | 12900                           | SS UPPER VOLUTE SCREW   | 4   |  |  |  |
| 5    | 12725                           | SS VOLUTE SCREWS  | 2   |  |  |  |
| 6    | 12719A                          | BODY O-RING   | 1   |  |  |  |
| 7    | 12754                           | O-RING SEGMENT  | 1   |  |  |  |
| 8    | 12720                           | SS BODY SCREWS  | 10  |  |  |  |
| 9    | V07018                          | SS LOCK WASHERS   | 10  |  |  |  |
| 10   | V07019                          | SS BODY NUTS  | 10  |  |  |  |
| 11   | 12775A                          | IMPELLER HEX NUT  | 1   |  |  |  |
| 12   | 12902A                          | IMPELLER KEY  | 1   |  |  |  |
| 13   | 12703A                          | POLY PUMP REAR BRACKET  | 1   |  |  |  |
| 14   | 12715A                          | 5/16"-24 X 1.75" HHCS   | 4   |  |  |  |
| 15   | 12765A                          | SS IMPELLER BOLT  | 1   |  |  |  |
| 16   | 13772                           | TRIMMED 4 VANE IMPELLER   | 1   |  |  |  |
| 17   | 12710                           | O-RING FOR SEAL ASSEMBLY  | 1   |  |  |  |
| 18   | A204                            | O-RING  | 1   |  |  |  |
| 19   | 13702                           | POLY PUMP VOLUTE  | 1   |  |  |  |
| 20   | 12713                           | MECHANICAL SEAL ASSEMBLY  | 1   |  |  |  |
| 21   | 12049E                          | HYDRAULIC PEDESTAL HOUSING (MUST ORDER<br>17056E & 12055E)  | 1   |  |  |  |
| 22   | V20018                          | 3/8" LOCK WASHER  | 2   |  |  |  |
| 23   | 12055E                          | ADAPTER SHAFT   | 1   |  |  |  |
| 24   | 17056E                          | BEARING   | 1   |  |  |  |
| 25   | 18010SS                         | $^3$ /8" - 16 X 1 $^1$ /8" SS CAP SCREW HXHD  | 2   |  |  |  |
| 26   | HY10131                         | HYDRAULIC MOTOR   | 1   |  |  |  |
| 27   | 12600B                          | COMPLETE HYDRAULIC ASSEMBLY   | 1   |  |  |  |
| 28   | 13777                           | ¾" PLUG   | 2   |  |  |  |
| 29   | 13778                           | O-RING  | 2   |  |  |  |
| 30   | 12901                           | SS REAR BRACKET WASHER (300PHY)   | 4   |  |  |  |
| N/S  | HY1003                          | HYDRAULIC MOTOR SEAL KIT  | 1   |  |  |  |
| KIT  | 13000                           | 4 VANE IMPELLER REPAIR KIT<br>(ITEMS 2,4,7-8,16-19, 21, 30, 12099)<br>PUMP SEAL/O-RING KIT<br>(ITEMS 2,4,7-8,16,18,19, 21, 30, 12099) | 1   |  |  |  |
| KIT  | 13999                           | PUMP SEAL/O-RING KIT<br>(ITEMS 2.4.7-8.16.18.19213012099)   | 1   |  |  |  |

| KITS 3" POLY PUMPS |                       |                     |                             |  |  |
|--------------------|-----------------------|---------------------|-----------------------------|--|--|
| PART NO            | EPDM REPAIR<br>KIT NO | EPDM SEAL<br>KIT NO | HYDRAULIC MOTOR<br>SEAL KIT |  |  |
| 300PHY             | 13000                 | 13999               | HY1003                      |  |  |

| HYDRAULIC MOTOR DATA  |   |  |  |  |  |  |
|---|---|--|--|--|--|--|
| U.S. GALLONS/REV.   | 0.0025  |  |  |  |  |  |
| CUBIC INCHES/REV.   | 0.580   |  |  |  |  |  |
| LITERS/REV.   | 0.0097  |  |  |  |  |  |
| MAX HYDRAULIC PRESSURE  | 2000 PSI  |  |  |  |  |  |
| MIN HYDRAULIC PRESSURE  | 200 PSI   |  |  |  |  |  |
| INLET PORT  | SAE 10 (7/8-14 UNF-2B)  |  |  |  |  |  |
| OUTLET PORT   | SAE 10 (7/8-14 UNF-2B)  |  |  |  |  |  |
| MINIMUM GPM REQUIRED  | 6 GPM 2400 RPM  |  |  |  |  |  |
| MAXIMUM GPM REQUIRED  | 10 GPM 4000 RPM   |  |  |  |  |  |
| IDEAL GPM REQUIRED  | 9 GPM 3600 RPM  |  |  |  |  |  |
| CONNECT   | ON INFORMATION  |  |  |  |  |  |
| INLET   | "A" PORT  |  |  |  |  |  |
| OUTLET  | "B" PORT  |  |  |  |  |  |
| SUPPLIED CHECK VALVE IS TO ENSURE F<br>CHECK VALVE IN OUTLET PORT (MARK | PROPER ROTATION OF THE BANJO PUMP. PLACE (ED "B") FOR PROPER RIGHT HAND ROTATION. |  |  |  |  |  |
|   | LVE INFORMATION   |  |  |  |  |  |
| REQUIRED OUTLET FLOW  | MIN 6 GPM / MAX 10 GPM  |  |  |  |  |  |
| REQUIRED SYSTEM PRESSURE  | MIN 600 PSI / MAX 3000 PSI  |  |  |  |  |  |



### **3" POLY WET SEAL PUMPS**

### **FEATURES**

- Run dry capability
- Double seal contained in ethylene glycol reservoir. Carbon ceramic seal faces with stainless steel cup and spring with EPDM rubber.
- V-shaped for quicker priming
- Engine warranty service available at authorized Briggs & Stratton® and Honda® dealers
- Due to weight and size of pumps, Banjo ships these by truck only.



### 3" POLY WET SEAL PUMPS W/GAS ENGINES

| PART NO    | DESCRIPTION   | HP  | QTY |
|------------|---|-----|-----|
| 300PH6W    | 3" POLY WET SEAL PUMP W/6.0 HP HONDA®<br>ENGINE   | 6.0 | 1   |
| 300P11PROW | 3" POLY WET SEAL PUMP W/11 HP BRIGGS &<br>STRATTON® ENGINE PRO SERIES W/ELECTRIC<br>START & PULL ROPE | 11  | 1   |
| 300PH13W   | 3" POLY WET SEAL PUMP W/13 HP HONDA®<br>ENGINE W/ELECTRIC START & PULL ROPE                           | 13  | 1   |





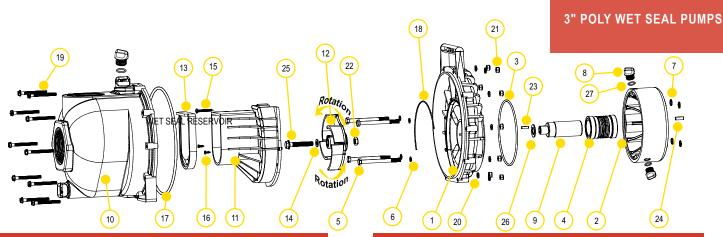
| 3" POLY WET SEAL BEARING PEDESTAL |  |     |     |  |  |
|-----------------------------------|--|-----|-----|--|--|
| PART NO                           | DESCRIPTION  | HP  | QTY |  |  |
| 300PBW                            | 3" POLY WET SEAL BEARING PEDESTAL W/ 3/4"<br>SHAFT & 4 VANE IMPELLER | N/A | 1   |  |  |



| 3" POLY WET SEAL PUMP ONLY |   |     |     |  |  |
|----------------------------|---|-----|-----|--|--|
| PART NO                    | DESCRIPTION                             | HP  | QTY |  |  |
| 300POW                     | 3" POLY WET SEAL PUMP ONLY FOR 1" SHAFT | N/A | 1   |  |  |
| 300POW6                    | 3" POLY WET SEAL PUMP ONLY FOR ¾" SHAFT | N/A | 1   |  |  |

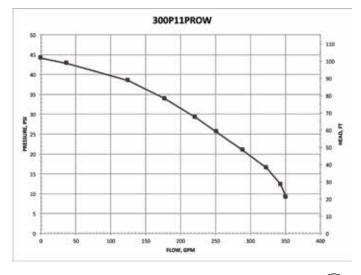


| 3" POLY WET SEAL PUMP ONLY W/FKM SEALS |         |  |     |     |  |
|--|---------|--|-----|-----|--|
|  | PART NO | DESCRIPTION  | HP  | QTY |  |
|  | 301POWV | 3" POLY WET SEAL PUMP ONLY FOR 1" SHAFT & 4 VANE IMPELLER, FKM SEALS | N/A | 1   |  |



|      |         | 10       | $\odot$                 |                          |              |      |
|------|---------|----------|-------------------------|--------------------------|--------------|------|
|      | REPLA   | CEMENT   | PARTS                   | 3" PO                    | LY PUMPS     |      |
| ITEM | PART NO |          | DESC                    | RIPTION                  |              | QTY  |
| 1    | 12703AW |          | WET SEAL REAR BRACKET   |                          |              | 1    |
| 2    | 12201W  |          | WET SEA                 | L RESER\                 | /OIR         | 1    |
| 2    | 12202W  | WE       | T SEAL RES              | ERVOIR (                 | 300POW6)     | 1    |
| 3    | 13719   |          | 0                       | -RING                    |              | 1    |
| 3    | 13719V  |          | FKM O-RI                | NG (301PC                | DWV)         | 1    |
| 4    | 15035E  | EPDI     | M MECHANIC              | CAL SEAL                 | ASSEMBLY     | 1    |
| 4    | 15035   | MECHA    | NICAL SEAL              | . ASSEMB                 | LY (301POWV) | 1    |
| 5    | 13034   |          | <sup>5</sup> ⁄16" -24 2 | X 3 3⁄4" HH              | CS           | 4    |
| 6    | 12717   | С        | -RING FOR               | BRACKET                  | SCREW        | 4    |
| 6    | 12717V  | FKM O-RI | NG FOR BRA              | ACKET SC                 | REW (301POWV | ′) 4 |
| 7    | 12709   |          | 0                       | -RING                    |              | 4    |
| 7    | 12709V  |          | FKM O-RI                | NG (301PC                | DWV)         | 4    |
| 8    | 12777   |          | 1/2'                    | " PLUG                   |              | 4    |
| 9    | 13055   | ADAPT    | ER SHAFT (              | 300PH6W                  | & 300PH13W)  | 1    |
| 9    | 13155M  | ADAPTE   | R SHAFT (30             | 00P11PRC                 | W &301POWV)  | 1    |
| 9    | 12155   |          | ADAPTER S               | HAFT (300                | PH6W)        | 1    |
| 10   | 13712   |          | BODY                    | ASSEMBL                  | Y            | 1    |
| 10   | 13712   | FK       | M BODY ASS              | SEMBLY (3                | 301POWV)     | 1    |
| 11   | 13702   |          | V                       | OLUTE                    |              | 1    |
| 12   | 13772   |          | 4 VANE                  | IMPELLE                  | R            | 1    |
| 12   | 13771   | TI       | RIMMED IMP              | ELLER (30                | 00POW6)      | 1    |
| 13   | 12705   |          | CHE                     | CK VALVE                 |              | 1    |
| 13   | 12705V  | F        | KM CHECK \              | /ALVE (30                | 1POWV)       | 1    |
| 14   | A204    |          | IMPELLER                | BOLT GA                  | SKET         | 1    |
| 14   | A204V   | FKM IN   | IPELLER BO              | LT GASKE                 | T (301POWV)  | 1    |
| 15   | 12900   |          | #10 X 1                 | ∕2" PPH SI               | MS           | 1    |
| 16   | 12725   |          | #6 X ½                  | " PPH SM                 | S            | 2    |
| 17   | 13719   |          | BOD                     | y o-ring                 |              | 1    |
| 17   | 13719V  | F        | KM BODY O               | -RING (30                | 1POWV)       | 1    |
| 18   | 12754   |          | O-RING                  | SEGMEN                   | IT           | 1    |
| 18   | 12754V  | FKI      | M O-RING SE             | GMENT (                  | 301POWV)     | 1    |
| 19   | 12720   |          | 1⁄4" - 20 X 21⁄2        | ⁄2" SL IND               | HWHS         | 10   |
| 20   | V07018  |          | 1⁄4" LOC                | CK WASHE                 | R            | 10   |
| 21   | V07019  |          | 1/4" - 2                | 0 HEX NU                 | Т            | 10   |
| 22   | 12775A  |          | <sup>7</sup> ⁄16" - 1   | 4 HEX NU                 | Т            | 1    |
| 23   | 12902A  |          | <sup>3</sup> /16" SC    | ). X <sup>5</sup> ⁄8" KE | Y            | 2    |
| 24   | 16901   |          | 1⁄4" SQ                 | UARE KE                  | Y            | 1    |
| 25   | 13766   |          | 3%-24 Z                 | X 2¼" HFS                | 3            | 1    |
| 25   | BM1070  | M1       | 0-1.5 X 70 MI           | M HHCS (3                | 301POWV)     | 1    |

| REPLACEMENT PARTS 3" POLY PUMPS |          |                                     |     |  |
|---------------------------------|----------|-------------------------------------|-----|--|
| ITEM                            | PART NO  | DESCRIPTION                         | QTY |  |
| 26                              | CV10175  | GASKET                              | 1   |  |
| 26                              | CV10175V | FKM GASKET (301POWV)                | 1   |  |
| 27                              | UV15163  | O-RING FOR DRAIN PLUG               | 4   |  |
| 27                              | UV15163V | FKM O-RING FOR DRAIN PLUG (301POWV) | 4   |  |



# 3" POLY MANIFOLD WET SEAL PUMPS

### **FEATURES**

- Run dry capability
- Double seal contained in ethylene glycol reservoir.
   Carbon ceramic seal faces with stainless steel cup and spring with EPDM rubber
- Pump end separated from engine
- V-shaped for quicker priming
- Engine warranty service available at authorized dealers
- See pages 43-49 on manifold fittings for easy plumbing.



### 3" POLY MANIFOLD WET SEAL PUMPS W/GAS ENGINES

| PART NO  | DESCRIPTION   | HP  | QTY |
|----------|---|-----|-----|
| M300PH6W | 3" POLY MANIFOLD WET SEAL PUMP W/6.0 HP HONDA® ENGINE | 6.0 | 1   |



### 3" POLY MANIFOLD WET SEAL BEARING PEDESTAL

| PART NO | DESCRIPTION   | HP  | QTY |
|---------|---|-----|-----|
| M300PBW | 3" POLY MANIFOLD WET SEAL BEARING PEDESTAL W/<br>3/4" SHAFT & 4 VANE IMPELLER | N/A | 1   |

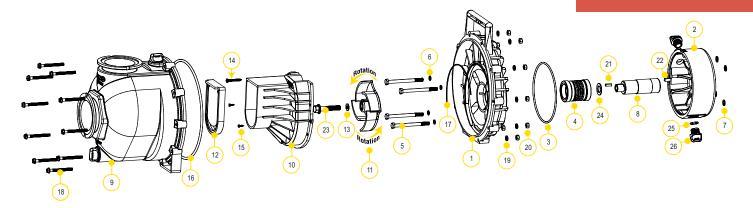




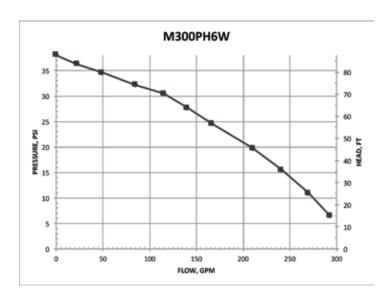
| 3" PO   | B" POLY MANIFOLD WET SEAL PUMP ONL |    |   |
|---------|------------------------------------|----|---|
| PART NO | DESCRIPTION                        | НР | 0 |

| PART NO  | DESCRIPTION   | HP  | QIY |
|----------|---|-----|-----|
| M300POW  | 3" POLY MANIFOLD WET SEAL PUMP ONLY                 | N/A | 1   |
| M300POW6 | 3" POLY MANIFOLD WET SEAL PUMP ONLY FOR ¾"<br>SHAFT | N/A | 1   |

3" POLY MANIFOLD WET SEAL PUMPS



| REPLACEMENT PARTS 3" POLY PUMPS |         |  |     |
|---------------------------------|---------|--|-----|
| ITEM                            | PART NO | DESCRIPTION  | QTY |
| 1                               | 12707W  | WET SEAL REAR BRACKET FOR 6 HP HONDA®<br>ENGINE & BEARING PEDESTAL | 1   |
| 2                               | 12202W  | WET SEAL RESERVOIR FOR 6 HP HONDA® ENGINE<br>& BEARING PEDESTAL    | 1   |
| 3                               | 13719   | O-RING   | 1   |
| 4                               | 15035E  | MECHANICAL SEAL ASSEMBLY EPDM                                      | 1   |
| 5                               | 13034   | <sup>5</sup> /16" - 24 X 3 <sup>3</sup> / <sub>4</sub> " HHCS      | 4   |
| 6                               | 12717   | O-RING FOR BRACKET SCREW   | 4   |
| 7                               | 12709   | O-RING   | 4   |
| 8                               | 12155   | ADAPTER SHAFT FOR 6 HP HONDA®<br>ENGINE & BEARING PEDESTAL         | 1   |
| 9                               | M13712  | MANIFOLD BODY ASSEMBLY   | 1   |
| 10                              | 13702   | VOLUTE   | 1   |
| 11                              | 13772   | 4 VANE IMPELLER  | 1   |
| 12                              | 12705   | CHECK VALVE  | 1   |
| 13                              | A204    | O-RING   | 1   |
| 14                              | 12900   | #10 X 1½" PPH SMS 18-8 SS  | 1   |
| 15                              | 12725   | #6 X ½" PPH SMS 18-8 SS  | 1   |
| 16                              | 12719A  | BODY O-RING  | 1   |
| 17                              | 12754   | O-RING SEGMENT   | 1   |
| 18                              | 12720   | 1/4" - 20 X 21/2" SL IND HWHS                                      | 10  |
| 19                              | V07018  | 1/4" LOCK WASHER   | 10  |
| 20                              | V07019  | 1/4" - 20 HEX NUT  | 10  |
| 21                              | 12902A  | ³⁄₁6" SQ. X 5⁄8" KEY   | 1   |
| 22                              | 16901   | 1/4" SQ. 3/4" KEY STOCK  | 1   |
| 23                              | 12766   | 5/16"-24 X 31/4" HFS FOR 6 HP HONDA® ENGINE & BEARING PEDESTAL     | 1   |
| 24                              | CV10175 | GASKET   | 1   |
| 25                              | UV15163 | O-RING   | 2   |
| 26                              | 12777   | ½" PLUG  | 2   |



#### 11/2" - 2" CAST IRON PUMPS

#### **FEATURES**

- Cast iron construction for rugged dependable service
- Stainless steel shaft sleeve to protect engine shaft
- Carbon ceramic seal with stainless steel cup and spring with FKM rubber
- Replaceable inlet and outlet flanges
- Dynamically balanced impeller
- Pump only packs complete and ready for attachment to gasoline engine
- Pedestal pump for long coupling to electric motor
- Recommendation for 5/8" shaft: 56C frame size, 3 HP, 3450 RPM & 5" max impeller for close coupling to electric motors
- Recommendation for ½" shaft: 145TC frame size, 3 HP, 3450 RPM & 5" max impeller for close coupling to electric motors
- Engine warranty service available at authorized dealers



WARNING! DO NOT RUN PUMP DRY, RESTRICT OR REDUCE PORT SIZES OR DEAD HEAD PUMP





| 2         | " CAST IRON PUMP W/GAS ENGINES                                     |     |     |
|-----------|--|-----|-----|
| PART NO   | DESCRIPTION  | HP  | QTY |
| 200PI-3   | 2" CAST IRON PUMP W/3.5 HP BRIGGS & STRATTON®<br>ENGINE            | 3.5 | 1   |
| 200PI6PRO | 2" CAST IRON PUMP W/6.5 HP BRIGGS & STRATTON®<br>ENGINE PRO SERIES | 6.5 | 1   |
| 200PIH-5  | 2" CAST IRON PUMP W/5.5 HP HONDA® ENGINE                           | 5.5 | 1   |
| 200PIH5E  | 2" CAST IRON PUMP W/5.5 HP HONDA® ENGINE W/<br>ELECTRIC START      | 5.5 | 1   |



| 2" CAST IRON PUMP ONLY |   |     |     |
|------------------------|---|-----|-----|
| PART NO                | DESCRIPTION                                 | HP  | QTY |
| 200POI                 | 2" CAST IRON PUMP ONLY W/ 3/4" SHAFT SLEEVE | N/A | 1   |

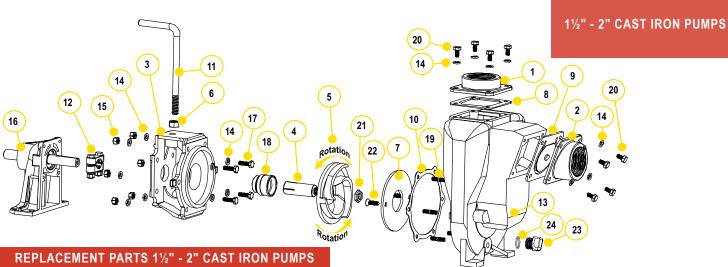


|                 | 1½" CAST IRON C-FLANGE PUMPS                                      |     |     |
|-----------------|---|-----|-----|
| PART NO         | DESCRIPTION   | HP  | QTY |
| 150POICF5/8-4.1 | 1½" CAST IRON C-FLANGE PUMP W/ 5%" SHAFT SLEEVE<br>& 4.1 IMPELLER | N/A | 1   |
|                 |   |     |     |

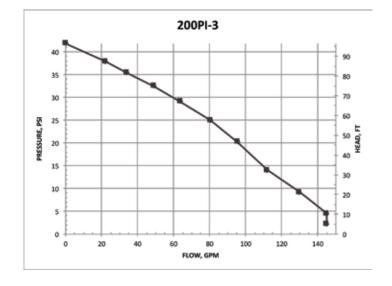
| 2" CAST IRON C-FLANGE PUMPS |   |     |     |  |
|-----------------------------|---|-----|-----|--|
| PART NO                     | DESCRIPTION                                     | HP  | QTY |  |
| 200POICF5/8                 | 2" CAST IRON C-FLANGE PUMP W/ 5%" SHAFT SLEEVE  | N/A | 1   |  |
| 200POICF7/8                 | 2" CAST IRON C-FLANGE PUMP W/ 1/8" SHAFT SLEEVE | N/A | 1   |  |
|                             |   |     |     |  |



|         | 2" CAST IRON BEARING PEDESTAL                         |     |     |
|---------|---|-----|-----|
| PART NO | DESCRIPTION   | НР  | QTY |
| 200PBI  | 2" CAST IRON BEARING PEDESTAL W/ ¾" STRAIGHT<br>SHAFT | N/A | 1   |



| REPLACEMENT PARTS 1½" - 2" CAST IRON PUMPS |           |   |     |  |
|--|-----------|---|-----|--|
| ITEM                                       | PART NO   | DESCRIPTION                                       | QTY |  |
| 1  | 17001     | 1½" NPT OUTLET FLANGE                             | 1   |  |
| 1  | 17000     | 2" NPT OUTLET FLANGE                              | 1   |  |
| 2  | 17003     | 1½" NPT INLET FLANGE                              | 1   |  |
| 2  | 17002     | 2" NPT INLET FLANGE                               | 1   |  |
| 3  | 17004     | ADAPTER FOR GAS ENGINE                            | 1   |  |
| 3  | 17046     | C-FACE ADAPTER                                    | 1   |  |
| 4  | 17005     | 5/8" SLEEVE DRIVE FOR ELECTRIC MOTOR              | 1   |  |
| 4*   | 17006     | 3/4" SLEEVE DRIVE                                 | 1   |  |
| 4  | 17007     | 7/8" SLEEVE DRIVE FOR ELECTRIC MOTOR              | 1   |  |
| 5*   | 17008     | 5" IMPELLER                                       | 1   |  |
| 5  | 17008-4.6 | 4.6" TRIMMED IMPELLER                             | 1   |  |
| 5  | 17008-4.1 | 4.1" TRIMMED IMPELLER                             | 1   |  |
| 6  | 17010     | ½" HEX NUT  | 1   |  |
| 7*   | 17011     | WEAR PLATE  | 1   |  |
| 8  | 17013     | EPDM GASKET                                       | 1   |  |
| 9  | 17016     | CHECK VALVE ASSEMBLY                              | 1   |  |
| 10*  | 17018     | GASKET ADAPTER                                    | 1   |  |
| 11   | 15022     | HANDLE  | 1   |  |
| 12   | 17023     | 5/8" CLAMP FOR 3/4" SHAFT ASSEMBLY (OLD STYLE)    | 1   |  |
| 12   | 17123     | 5/8" CLAMP FOR 3/4" SHAFT ASSEMBLY (KEYED)        | 1   |  |
| 12   | 17024     | 7/8" CLAMP FOR SHAFT ASSEMBLY                     | 1   |  |
| 13   | 17026     | PUMP HOUSING                                      | 1   |  |
| 14   | V10118    | 5/16" LOCK WASHER                                 | 18  |  |
| 15   | V10119    | 5/16" - 18 SS HEX NUT                             | 6   |  |
| N/S  | 12884     | INTERNAL RETAINING CLIP FOR PEDESTAL              | 1   |  |
| N/S  | 12883B    | BEARINGS  | 2   |  |
| 16   | 12882A    | COMPLETE PEDESTAL ASSEMBLY                        | 1   |  |
| 17   | 17040     | 5∕16" -24 X 1.00" CAP SCREW                       | 4   |  |
| 18   | 17028     | EPDM SEAL ASSEMBLY                                | 1   |  |
| 18*  | 17035     | FKM SEAL ASSEMBLY                                 | 1   |  |
| 18   | 17035SD   | SEVERE DUTY SEAL                                  | 1   |  |
| 19   | 17042     | STUD  | 6   |  |
| 20   | 17019     | <sup>5</sup> /16"-18 X <sup>3</sup> /4" CAP SCREW | 8   |  |
| 21   | 17009B    | 5⁄8" IMPELLER NUT                                 | 1   |  |
| 22   | 17130     | 5/16-18 X 1.00" FHSCS, 18-8 SS                    | 2   |  |
| 23   | 12777     | ½" PLUG   | 1   |  |
| 24   | UV15163   | O-RING  | 1   |  |
| N/S  | 17033     | Z RAILS (PAIR)                                    | 1   |  |
| N/S  | 17100     | REPAIR KIT (CONSISTS OF ITEMS 4*, 5*, 7,10,18*)   | 1   |  |



# 2" CAST IRON WET SEAL PUMPS

#### **FEATURES**

- Cast iron construction for rugged dependable service
- Stainless steel hardware
- FKM double seal contained in glycol reservoir
- Replaceable inlet and outlet flanges
- Dynamically balanced impeller
- Pump only packs complete and ready for attachment to gasoline engine
- Pedestal pump for long coupling to electric motor
- Due to weight and size of pumps, Banjo ships these by truck only.



| 2" CAST IRON WET SEAL PUMPS W/GAS ENGINES |  |     |     |  |
|---|--|-----|-----|--|
| PART NO                                   | DESCRIPTION  | HP  | QTY |  |
| 201PIH5W                                  | 2" CAST IRON WET SEAL PUMP W/5.5 HP HONDA®<br>ENGINE | 5.5 | 1   |  |



| 2" CAST IRON WET SEAL PUMP ONLY |                                 |     |     |  |
|---------------------------------|---------------------------------|-----|-----|--|
| PART NO                         | DESCRIPTION                     | HP  | QTY |  |
| 201POIW                         | 2" CAST IRON WET SEAL PUMP ONLY | N/A | 1   |  |

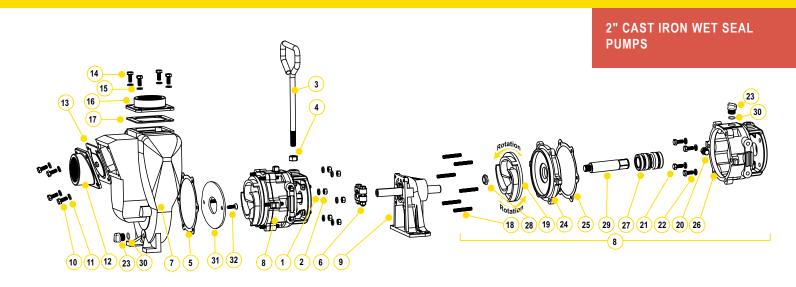


WARNING! DO NOT RUN PUMP DRY, RESTRICT OR REDUCE PORT SIZES OR DEAD HEAD PUMP

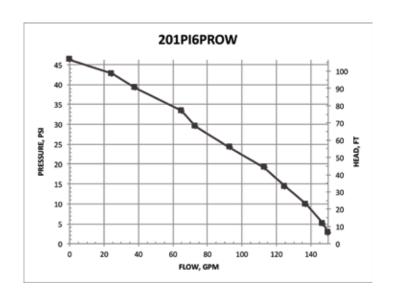




| 2" CAST IRON WET SEAL PUMP BEARING PEDESTAL |   |     |     |
|---|---|-----|-----|
| PART NO                                     | DESCRIPTION   | HP  | QTY |
| 201PBIW                                     | 2" CAST IRON WET SEAL PUMP WITH<br>BEARING PEDESTAL | N/A | 1   |



|      | REPLACE | MENT PARTS 2" CAST IRON PUMPS  | 8   |
|------|---------|--|-----|
| ITEM | PART NO | DESCRIPTION  | QTY |
| 1    | V10118  | <sup>5</sup> ∕16" LOCK WASHER  | 6   |
| 2    | V10119  | 5∕16" -18 HEX NUT  | 6   |
| 3    | 15022   | HANDLE   | 1   |
| 4    | 17010   | ½" HEX NUT   | 1   |
| 5    | 17018   | GASKET ADAPTER   | 1   |
| 6    | 17123   | 5/8" CLAMP, 3/4" SHAFT ASSEMBLY KEYED                                  | 1   |
| 7    | 17226   | PUMP HOUSING   | 1   |
| 8    | 17200A  | WET SEAL ASSEMBLY  | 1   |
| 9    | 12882A  | BEARING PEDESTAL   | 1   |
| 10   | 17019   | <sup>5</sup> / <sub>16</sub> "-18 X <sup>3</sup> / <sub>4</sub> " HHCS | 4   |
| 11   | V10118  | 5/16" LOCK WASHER  | 4   |
| 12   | 17002   | 2" NPT INLET FLANGE  | 1   |
| 13   | 17016   | EPDM CHECK VALVE GASKET ASSEMBLY                                       | 1   |
| 14   | 17019   | 5∕16" -18 X 3⁄4" HHCS  | 4   |
| 15   | V10118  | 5∕16" LOCK WASHER  | 4   |
| 16   | 17000   | 2" NPT OUTLET FLANGE   | 1   |
| 17   | 17013   | EPDM OUTLET GASKET   | 1   |
| 18   | 17242   | HOUSING STUD   | 6   |
| 19   | 17208   | IMPELLER   | 1   |
| 20   | 17032   | PIPE PLUG  | 1   |
| 21   | 17019   | <sup>5</sup> ∕ <sub>16</sub> "-18 X <sup>3</sup> ⁄₄" CAP SCREW         | 4   |
| 22   | V10118  | 5/16" LOCK WASHER  | 4   |
| 23   | 12777   | ½" PLUG  | 2   |
| 24   | 17202   | COVER PLATE  | 1   |
| 25   | 17018   | GASKET ADAPTER   | 1   |
| 26   | 17201A  | RESERVOIR  | 1   |
| 27   | 17235   | FKM MECHANICAL SEAL ASSEMBLY   | 1   |
| 28   | 17009B  | 5/8" IMPELLER NUT  | 1   |
| 29   | 17206A  | ADAPTER SHAFT  | 1   |
| 30   | UV15163 | O-RING   | 2   |
| 31   | 17011   | Wear Plate   | 1   |
| 32   | 17130   | 5/16-18 X 1.00" FHSCS, 18-8 SS   | 2   |



# 2" CAST IRON PUMPS WITH ELECTRIC MOTORS

#### **FEATURES**

- Cast iron construction for rugged dependable service
- Stainless steel shaft sleeve to protect engine shaft
- Carbon ceramic seal with stainless steel cup and spring with FKM rubber
- Replaceable inlet and outlet flanges
- Dynamically balanced impeller
- Pump only packs complete and ready for attachment to gasoline engine
- Due to weight and size of pumps, Banjo ships these by truck only.
- Motor warranty service available at authorized dealers
- Motor features include pressure cast aluminum end plates with ribbed design for rigidity, heavy gauge steel frame, 230 volt, with inverter spike resistance magnet wire



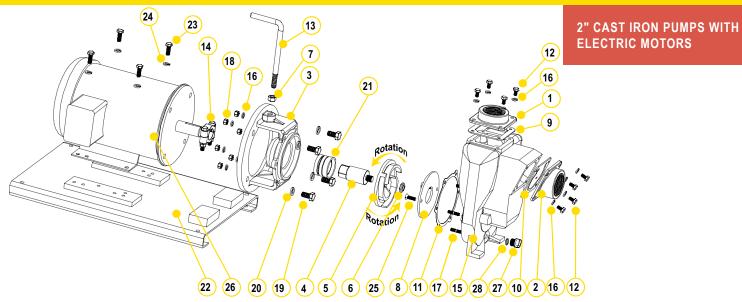
WARNING! DO NOT RUN PUMP DRY, RESTRICT OR REDUCE PORT SIZES OR DEAD HEAD PUMP



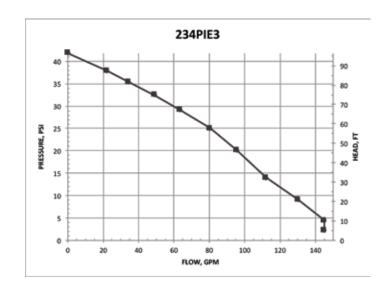


| 2" CAST IRON PUMPS W/ELECTRIC MOTORS |  |     |     |
|--------------------------------------|--|-----|-----|
| PART NO                              | DESCRIPTION  | HP  | QTY |
| 234PIE5                              | 2" CAST IRON PUMP W/5.0 HP THREE PHASE ELECTRIC MOTOR  | 5.0 | 1   |
| 234PIE51                             | 2" CAST IRON PUMP W/5.0 HP SINGLE PHASE ELECTRIC MOTOR | 5.0 | 1   |

| 2" CAST IRON PUMP ONLY |   |     |     |
|------------------------|---|-----|-----|
| PART NO                | DESCRIPTION   | HP  | QTY |
| 234POI                 | 2" CAST IRON WET SEAL PUMP ONLY W 184TC FRAME ADAPTER | N/A | 1   |



| ı    | REPLACE | MENT PARTS 2" CAST IRON PUMPS  | 8   |
|------|---------|--------------------------------|-----|
| ITEM | PART NO | DESCRIPTION                    | QTY |
| 1    | 17000   | 2" NPT OUTLET FLANGE           | 1   |
| 2    | 17002   | 2" NPT INLET FLANGE            | 1   |
| 3    | 17046   | C-FACE ADAPTER (234PIE3)       | 1   |
| 3    | 17446   | C-FACE ADAPTER                 | 1   |
| 4    | 17007   | IMPELLER SHAFT (234PIE3)       | 1   |
| 4    | 17406   | IMPELLER SHAFT                 | 1   |
| 5    | 17008   | IMPELLER (234PIE3)             | 1   |
| 5    | 17408   | IMPELLER                       | 1   |
| 6    | 17009B  | 5/8" IMPELLER NUT              | 1   |
| 7    | 17010   | ½" HEX NUT                     | 1   |
| 8    | 17011   | WEAR PLATE                     | 1   |
| 9    | 17013   | OUTLET GASKET                  | 1   |
| 10   | 17016   | GASKET & CHECK VALVE           | 1   |
| 11   | 17018   | GASKET ADAPTER                 | 1   |
| 12   | 17019   | BOLT                           | 8   |
| 13   | 15022   | HANDLE                         | 1   |
| 14   | 17024   | CLAMP ASSEMBLY W/KEY (234PIE3) | 1   |
| 14   | 18129   | CLAMP ASSEMBLY W/KEY           | 1   |
| 15   | 17026   | PUMP HOUSING                   | 1   |
| 16   | V10118  | 5∕16" LOCK WASHER              | 20  |
| 17   | 17042   | HOUSING STUD                   | 6   |
| 18   | V10119  | HEX NUT                        | 8   |
| 19   | 17449   | BOLT                           | 4   |
| 20   | 18058   | WASHER                         | 4   |
| 21   | 17035   | SEAL ASSEMBLY (234PIE3)        | 1   |
| 21   | 18025   | SEAL ASSEMBLY                  | 1   |
| 22   | 17701   | BASE PLATE ASSEMBLY            | 1   |
| 23   | 17704   | BOLT                           | 4   |
| 24   | V20018  | 3/8" LOCK WASHER               | 4   |
| 25   | 17130   | 5/16-18 X 1.00" FHSCS, 18-8 SS | 2   |
| 26   | BEM5    | ELECTRIC MOTOR                 | 1   |
| 27   | 12777   | ½" PLUG                        | 1   |
| 28   | UV15163 | O-RING FOR DRAIN PLUG          | 1   |



# 2" CAST IRON PUMPS WITH HYDRAULIC MOTORS

#### **FEATURES**

- Cast iron construction for rugged dependable service
- Stainless steel hardware
- Replaceable inlet and outlet flanges
- · Dynamically balanced impeller
- Hydraulic fluid capacity is minimum 6 gallons and maximum 10 gallons
- · Open or closed system
- 12 HP motor
- Recommendation to use the motor spool control valve or a suitable equivalent. The lack of such a valve in this circuit may cause failure to the hydraulic motor.



### 2" CAST IRON PUMPS WITH/WITHOUT HYDRAULIC MOTORS

| PART NO | DESCRIPTION                                    | HP  | QTY |
|---------|--|-----|-----|
| 200PIHA | 2" CAST IRON PUMP ONLY WITHOUT HYDRAULIC MOTOR | N/A | 1   |
| 200PIHY | 2" CAST IRON PUMP ONLY WITH HYDRAULIC MOTOR    | 12  | 1   |

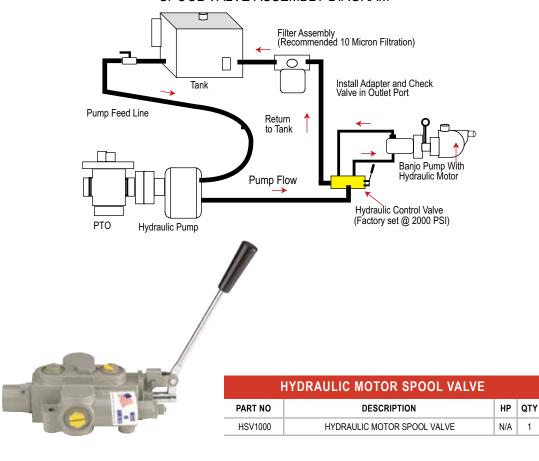


WARNING! DO NOT RUN PUMP DRY, RESTRICT OR REDUCE PORT SIZES OR DEAD HEAD PUMP

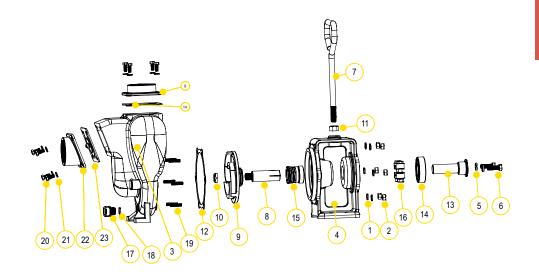


WARNING! DO NOT USE WITH FLAMMABLE LIQUIDS

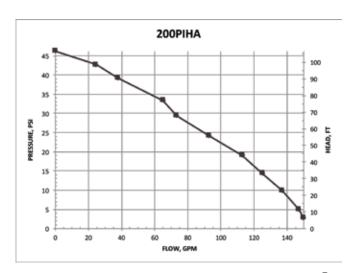
### SPOOL VALVE ASSEMBLY DIAGRAM



2" CAST IRON PUMPS WITH HYDRAULIC MOTORS



|      | REPLACE | MENT PARTS 2" CAST IRON PUMP          | S   |
|------|---------|---------------------------------------|-----|
| ITEM | PART NO | DESCRIPTION                           | QTY |
| 1    | V10118  | 5/16" SPLIT LOCK WASHER               | 6   |
| 2    | V10119  | 5/16"-18 HEX NUT                      | 6   |
| 3    | 17026   | PUMP HOUSING                          | 1   |
| 4    | 17049A  | HYDRAULIC ADAPTER                     | 1   |
| 5    | V20018  | 3/8" LOCK WASHER                      | 2   |
| 6    | 18010SS | 3/8"-16 X 1.25" HHCS                  | 2   |
| 7    | 15022   | HANDLE                                | 1   |
| 8    | 17007   | 7/8" SLEEVE DRIVE FOR HYDRAULIC MOTOR | 1   |
| 9    | 17008   | 5" IMPELLER                           | 1   |
| 10   | 17009B  | 5/8" IMPELLER NUT                     | 1   |
| 11   | 17010   | ½" HEX NUT - 13UNF-RH                 | 1   |
| 12   | 17018   | GASKET ADAPTER                        | 1   |
| 13   | 17055A  | HYDRAULIC ADAPTER SHAFT               | 1   |
| 14   | 17056   | SKF 6206-2RS1 BEARING                 | 1   |
| 15   | 17035   | FKM SEAL ASSEMBLY                     | 1   |
| 16   | 17024   | <sup>7</sup> ∕8" CLAMP, NO KEY        | 1   |
| 17   | 12777   | ½" PLUG                               | 1   |
| 18   | UV15163 | O-RING                                | 1   |



## 2" 222 SERIES CAST IRON PUMPS

#### **FEATURES**

- Cast iron construction for rugged dependable service
- Carbon ceramic seal with stainless steel cup and spring with FKM rubber
- Replaceable inlet and outlet flanges
- Dynamically balanced impeller
- Heavy duty slinger seal on motor shaft
- Large weep holes between pump end and engine
- Pump only packs complete and ready for attachment to gasoline engine
- Pedestal pump for long coupling to electric motor
- Recommendation for ¾" shaft: 5 HP, 3600 RPM
- Recommendation for 225POI: use with 10 pound per gallon material or more
- Due to weight and size of pumps, Banjo ships these by truck only.
- Engine warranty service available at authorized dealers



WARNING! DO NOT RUN PUMP DRY, RESTRICT OR REDUCE PORT SIZES OR DEAD HEAD PUMP





| 222 SERIES CAST IRON PUMPS W/GAS ENGINES |  |     |     |
|--|--|-----|-----|
| PART NO                                  | DESCRIPTION  | HP  | QTY |
| 222PIH5                                  | 2" CAST IRON PUMP W/5.5 HP HONDA® ENGINE                           | 5.5 | 1   |
| 222PIH6                                  | 2" CAST IRON PUMP W/6.5 HP HONDA® ENGINE                           | 6.5 | 1   |
| 222PIH5E                                 | 2" CAST IRON PUMP W/5.5 HP HONDA® ENGINE W/<br>ELECTRIC START      | 5.5 | 1   |
| 222PI6PRO                                | 2" CAST IRON PUMP W/6.5 HP BRIGGS & STRATTON®<br>ENGINE PRO SERIES | 6.5 | 1   |



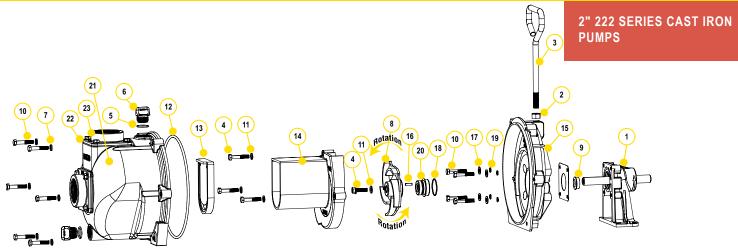
| 222 SERIES CAST IRON PUMP ONLYS |   |     |     |  |
|---------------------------------|---|-----|-----|--|
| PART NO                         | DESCRIPTION                             | HP  | QTY |  |
| 222POI                          | 2" CAST IRON PUMP ONLY W/ FULL IMPELLER | N/A | 1   |  |



| 222 SERIES CAST IRON BEARING PEDESTAL |  |     |     |
|---------------------------------------|--|-----|-----|
| PART NO                               | DESCRIPTION  | HP  | QTY |
| 222PBI                                | 2" CAST IRON BEARING PEDESTAL W/ ¾" STRAIGHT KEYED SHAFT | N/A | 1   |

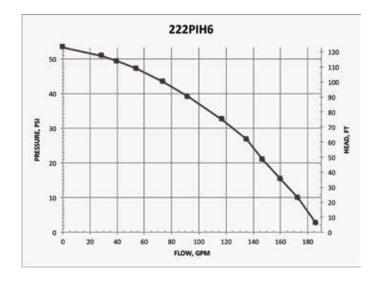


| 222 8   | SERIES CAST IRON HYDRAULIC PUMF           | S  |     |
|---------|---|----|-----|
| PART NO | DESCRIPTION                               | HP | QTY |
| 222PIHY | 2" CAST IRON PUMP W/12 HP HYDRAULIC MOTOR | 12 | 1   |



| REPLACEMENT PARTS 2" CAST IRON PUMPS |         |  |        |
|--------------------------------------|---------|--|--------|
| ITEM                                 | PART NO | DESCRIPTION  | QTY    |
| 1                                    | 12882A  | BEARING PEDESTAL ASSEMBLY                                      | 1      |
| 1                                    | 12600B  | HYDRAULIC PEDESTAL ASSEMBLY                                    | 1      |
| 2                                    | 17010   | ½" JAM NUT   | 1      |
| 3                                    | 15022   | HANDLE   | 1      |
| 4                                    | 12765A  | 5/16" - 24 X 1.12 IMPELLER BOLT                                | 1      |
| 5                                    | 13778   | O-RING   | 2      |
| 6                                    | 13777   | ¾" PLUG  | 2      |
| 7                                    | V10118  | 5/16" LOCK WASHER  | 9      |
| 8                                    | 15772   | 5 VANE IMPELLER  | 1      |
| 9                                    | 12716   | PUMP SLINGER   | 1      |
| 10                                   | 12715A  | 5∕16" - 24 X 1.75 HHCS   | 13     |
| 11                                   | A204    | O-RING   | 1      |
| 12                                   | 12719A  | BODY O-RING  | 1      |
| 13                                   | 12705   | CHECK VALVE  | 1      |
| 14                                   | 15702   | VOLUTE   | 1      |
| 15                                   | 15703   | REAR BRACKET   | 1      |
| 16                                   | 12902A  | <sup>3</sup> ∕16" SQ X <sup>5</sup> ⁄8" KEY                    | 1      |
| 17                                   | 12901   | 5∕16" FLAT WASHER  | 4      |
| 18                                   | 12710   | O-RING   | 1      |
| 19                                   | 12717   | O-RING   | 4      |
| 20                                   | 12713V  | SEAL ASSEMBLY  | 1      |
| 20                                   | 12713SD | SEVERE DUTY SEAL   | 1      |
| 21                                   | 15712   | BODY   | 1      |
| 22                                   | 17013   | FLANGE GASKET  | 2      |
| 23                                   | 17000   | 2" NPT THREADED FLANGE   | 2      |
| 24                                   | 17019   | 5∕16" - 18 X 0.75 HHCS   | 8      |
| 25                                   | V10118  | 5/16" LOCK WASHER  | 8      |
| N/S                                  | 12099   | <sup>7</sup> ∕16"-14 X 1.25" HHCS                              | 1      |
| N/S                                  | 15751   | BRACKET SHIM   | 1      |
| N/S                                  | 15752   | IMPELLER SHIM  | 1      |
| N/S                                  | 17033   | Z-RAILS  | 1 PAIR |
| N/S                                  | 17034   | 5/16" - 18 X 13/4" ZINC PLATED                                 | 4      |
| N/S                                  | V10119  | <sup>5</sup> ∕16" -18 HEX NUT                                  | 4      |
| N/S                                  | V10118  | 5/16" LOCK WASHER  | 4      |
| N/S                                  | 15000   | REPAIR KIT<br>(ITEMS 5, 8, 11-12, 18-20, 12099, 15751 & 15752) | 1      |
| N/S                                  | 15000V  | FKM REPAIR KIT   | 1      |
| N/S                                  | 15999   | SEAL KIT<br>(ITEMS 5, 11-12, 18-20, 12099, 15751 & 15752)      | 1      |
| N/S                                  | 15999V  | FKM SEAL KIT   | 1      |

| KITS 222 CAST IRON PUMPS |                       |                      |                     |                    |  |
|--------------------------|-----------------------|----------------------|---------------------|--------------------|--|
| PART NO                  | EPDM REPAIR<br>KIT NO | FKM REPAIR<br>KIT NO | EPDM SEAL<br>KIT NO | FKM SEAL<br>KIT NO |  |
| 222PIH5                  | 15000                 | 15000V               | 15999               | 15999V             |  |
| 222PIH6                  | 15000                 | 15000V               | 15999               | 15999V             |  |
| 222PIH5E                 | 15000                 | 15000V               | 15999               | 15999V             |  |
| 222PI6PRO                | 15000                 | 15000V               | 15999               | 15999V             |  |
| 222POI                   | 15000                 | 15000V               | 15999               | 15999V             |  |
| 225POI                   | 15000                 | 15000V               | 15999               | 15999V             |  |
| 222PBI                   | 15000                 | 15000V               | 15999               | 15999V             |  |
| 222PIHY                  | 15000                 | 15000V               | 15999               | 15999V             |  |



### 2" 222 SERIES CAST IRON PUMPS WITH ELECTRIC MOTORS

#### **FEATURES**

- Cast iron construction for rugged dependable service
- Carbon ceramic seal with stainless steel cup and spring with FKM rubber
- Replaceable inlet and outlet flanges
- Dynamically balanced impeller
- Heavy duty slinger seal on motor shaft
- Large weep holes between pump end and engine
- Motor features include pressure cast aluminum end plates with ribbed design for rigidity, heavy gauge steel frame, 230 volt, with inverter spike resistance magnet wire
- Due to weight and size of pumps, Banjo ships these by truck only.



WARNING! DO NOT RUN PUMP DRY, RESTRICT OR REDUCE PORT SIZES OR DEAD HEAD PUMP

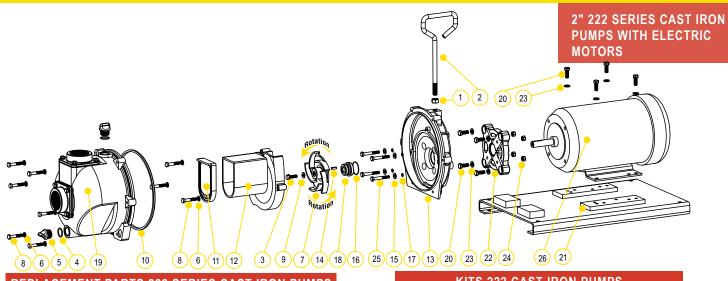


WARNING! DO NOT USE WITH FLAMMABLE LIQUIDS



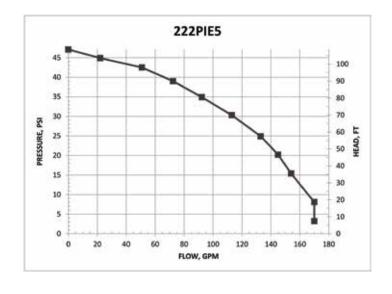
### 222 SERIES CAST IRON PUMPS W/ELECTRIC MOTORS

| PART NO  | DESCRIPTION   | HP  | QTY |
|----------|---|-----|-----|
| 222PIE5  | 2" CAST IRON PUMP W/5.0 HP THREE PHASE ELECTRIC MOTOR     | 5.0 | 1   |
| 222PIE51 | 2" CAST IRON PUMP W/5.0 HP SINGLE PHASE<br>ELECTRIC MOTOR | 5.0 | 1   |



| 8    | 6) (5) (4) (1) | 9) (10) (8) (11) (12) (3) (3)   |      |
|------|----------------|---|------|
| REPL | ACEMENT        | PARTS 222 SERIES CAST IRON P  | UMPS |
| ITEM | PART NO        | DESCRIPTION   | QTY  |
| 1    | 17010          | ½" JAM NUT  | 1    |
| 2    | 15022          | HANDLE  | 1    |
| 3    | 12765A         | 5/16" - 24 X 1.12 IMPELLER BOLT   | 1    |
| 4    | 13778          | O-RING  | 2    |
| 5    | 13777          | ¾" PLUG   | 2    |
| 6    | V10118         | 5/16" LOCK WASHER   | 9    |
| 7    | 15772          | 5 VANE IMPELLER   | 1    |
| 8    | 12715A         | 5/16" - 24 X 1.75 HHCS  | 13   |
| 9    | A204           | O-RING  | 1    |
| 10   | 12719A         | BODY O-RING   | 1    |
| 11   | 12705          | CHECK VALVE   | 1    |
| 12   | 15702          | VOLUTE  | 1    |
| 13   | 15703          | REAR BRACKET  | 1    |
| 14   | 12902A         | <sup>3</sup> /16" SQ. X <sup>5</sup> /8" KEY                                | 1    |
| 15   | 12901          | 5/16" FLAT WASHER   | 1    |
| 16   | 12710          | O-RING  | 4    |
| 17   | 12717          | O-RING  | 1    |
| 18   | 12713V         | SEAL ASSEMBLY   | 4    |
| 18   | 12713SD        | SEVERE DUTY SEAL  | 1    |
| 19   | 15712          | BODY  | 1    |
| 20   | 17704          | <sup>3</sup> /16" - 16 X 1.25 HHCS BOLT                                     | 8    |
| 21   | 17701          | C-FACED BASE PLATE  | 1    |
| 22   | 12046          | 56C ADAPTER   | 1    |
| 23   | V20018         | 3/8" LOCK WASHER  | 8    |
| 24   | V20019         | $rac{3}{8}$ " 16 SS HEX NUT  | 4    |
| 25   | BF107          | 5/16" - 18 X 21/4" HHCS BOLT  | 4    |
| 26   | BEM5-182CZ     | 5 HP 3450 RPM THREE PHASE MOTOR   | 1    |
| 26   | BEM51-182CZ    | 5 HP 3450 RPM SINGLE PHASE MOTOR  | 1    |
| N/S  | 12099          | <sup>7</sup> ∕₁6"-14 X 1.25" HHCS   | 1    |
| N/S  | 15751          | BRACKET SHIM  | 1    |
| N/S  | 15752          | IMPELLER SHIM   | 1    |
| N/S  | 12756          | ADAPTER KIT<br>(ITEMS 14, 20, 22, 23, 12052, 12053, 15751, 15752,<br>17029) | 1    |
| N/S  | 15000          | REPAIR KIT<br>(ITEMS 4,7,9-11,14,16-18,12099,15751 & 15752)                 | 1    |
| N/S  | 15000V         | FKM REPAIR KIT  | 1    |
| N/S  | 15999          | SEAL KIT<br>(ITEMS 4, 9-11, 14,16-18,12099,15751 & 15752)                   | 1    |
| N/S  | 15999V         | FKM SEAL KIT  | 1    |

| ı        | KITS 222 C            | AST IRON             | PUMPS               |                   |
|----------|-----------------------|----------------------|---------------------|-------------------|
| PART NO  | EPDM REPAIR<br>KIT NO | FKM REPAIR<br>KIT NO | EPDM SEAL<br>KIT NO | ADAPTER<br>KIT NO |
| 222PIE5  | 15000                 | 15000V               | 15999               | 12756             |
| 222PIE51 | 15000                 | 15000V               | 15999               | 12756             |



# 2" M222 SERIES CAST IRON MANIFOLD WET SEAL <u>PUMPS</u>

#### **FEATURES**

- · Run dry capability
- Cast iron construction for rugged dependable service
- Carbon ceramic seal with stainless steel cup and spring with EPDM rubber
- Replaceable inlet and outlet flanges
- Dynamically balanced impeller
- Heavy duty slinger seal on motor shaft
- Large weep holes between pump end and engine
- Due to weight and size of pumps, Banjo ships these by truck only.
- Engine warranty service available at authorized dealers
- See pages 43-49 on manifold fittings for easy plumbing.



WARNING! DO NOT USE WITH FLAMMABLE LIQUIDS



| MANA CEDIEC CACTIDON WET CEAL DUMPS WICAS ENGINES  |
|--|
| M222 SERIES CAST IRON WET SEAL PUMPS W/GAS ENGINES |
|  |

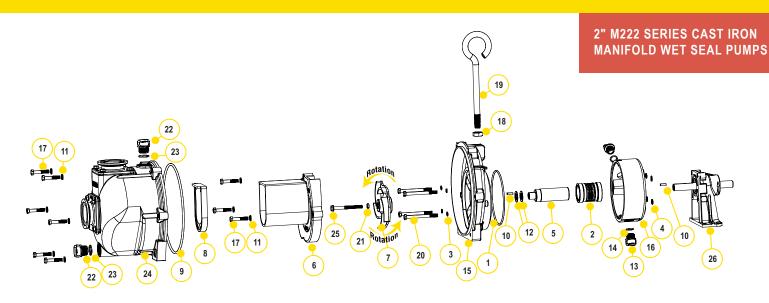
| PART NO   | DESCRIPTION  | HP  | QTY |
|-----------|--|-----|-----|
| M222PIH6W | 2" MANIFOLD CAST IRON WET SEAL PUMP W/ 6.5 HP<br>HONDA® ENGINE | 6.5 | 1   |

### M222 SERIES CAST IRON WET SEAL PUMPS W/ELECTRIC MOTORS

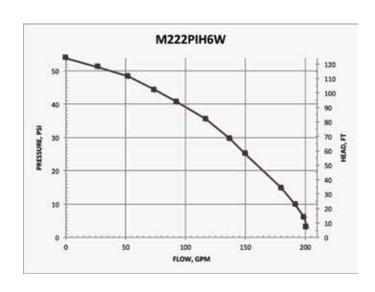
| PART NO    | DESCRIPTION  | HP  | QTY |
|------------|--|-----|-----|
| M222PIE5W  | 2" MANIFOLD CAST IRON PUMP W/5.0 HP THREE<br>PHASE ELECTRIC MOTOR  | 5.0 | 1   |
| M222PIE51W | 2" MANIFOLD CAST IRON PUMP W/5.0 HP SINGLE<br>PHASE ELECTRIC MOTOR | 5.0 | 1   |

| M222 SERIES CAST IRON WET SEAL PUMP ON |   |
|--|---|
|  | v |

| PART NO  | DESCRIPTION                              | HP  | QTY |
|----------|--|-----|-----|
| M222POIW | 2" MANIFOLD CAST IRON WET SEAL PUMP ONLY | N/A | 1   |



| REPL | ACEMENT | PARTS M222 SERIES CAST IRON   | PUMPS |
|------|---------|-------------------------------|-------|
| ITEM | PART NO | DESCRIPTION                   | QTY   |
| 1    | 13719   | O-RING                        | 1     |
| 2    | 15035E  | EPDM MECHANICAL SEAL ASSEMBLY | 1     |
| 3    | 12717   | O-RING FOR BRACKET SCREW      | 4     |
| 4    | 12709   | O-RING                        | 4     |
| 5    | 15055   | ADAPTER SHAFT                 | 1     |
| 6    | 15702   | VOLUTE                        | 1     |
| 7    | 15772   | 5 VANE IMPELLER               | 1     |
| 8    | 12705   | CHECK VALVE                   | 1     |
| 9    | 12719A  | BODY O-RING                   | 1     |
| 10   | 12902A  | IMPELLER KEY                  | 2     |
| 11   | V10118  | 5/16" LOCK WASHER             | 9     |
| 12   | CV10175 | GASKET                        | 2     |
| 13   | 12777   | ½" PLUG                       | 2     |
| 14   | UV15163 | O-RING                        | 2     |
| 15   | 15703W  | REAR BRACKET                  | 1     |
| 16   | 15201W  | WET SEAL RESERVOIR            | 1     |
| 17   | 12715A  | 5∕16"- 24 X 1¾" HHCS          | 9     |
| 18   | 18034   | %"-11 JAM NUT                 | 1     |
| 19   | 18033   | PUMP HANDLE                   | 1     |
| 20   | V10117  | 5∕16" - 18 X 31⁄2" HFS        | 4     |
| 21   | A204    | O-RING                        | 1     |
| 22   | 13777   | ¾" PLUG                       | 2     |
| 23   | 13778   | O-RING                        | 2     |
| 24   | M15712  | PUMP BODY                     | 1     |
| 25   | 12766   | 5∕16" - 24 X 31⁄4" HFS        | 1     |
| 26   | 12882A  | BEARING PEDESTAL              | 1     |



#### 3" CAST IRON PUMPS

#### **FEATURES**

- Cast iron construction for rugged dependable service
- Stainless steel shaft sleeve to protect engine shaft
- Carbon ceramic seal with stainless steel cup and spring with FKM rubber
- Replaceable inlet and outlet flanges
- Dynamically balanced impeller
- Pump only packs complete and ready for attachment to gasoline engine
- Bearing pedestal pump for long coupling to electric motor
- Recommendation for 1" shaft: 184TC frame size, 7½ HP, 3450 RPM for close coupling to electric motors
- Engine warranty service available at authorized dealers
- Due to weight and size of pumps, Banjo ships these by truck only.



WARNING! DO NOT RUN PUMP DRY, RESTRICT OR REDUCE PORT SIZES OR DEAD HEAD PUMP





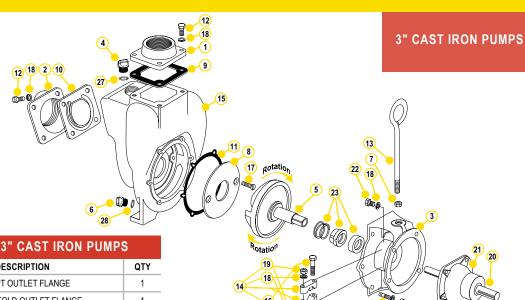
| 3" CAST IRON PUMP W/GAS ENGINES |   |    |     |
|---------------------------------|---|----|-----|
| PART NO                         | DESCRIPTION   | HP | QTY |
| 300PIH-8                        | 3" CAST IRON PUMP W/8 HP HONDA® ENGINE<br>W/ELECTRIC START & PULL ROPE  | 8  | 1   |
| 300PIH13                        | 3" CAST IRON PUMP W/13 HP HONDA® ENGINE<br>W/ELECTRIC START & PULL ROPE | 13 | 1   |



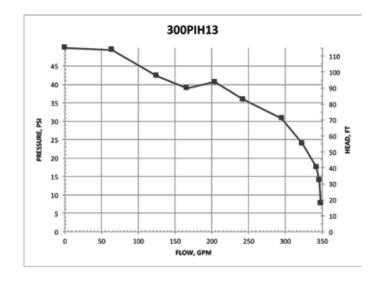
| 3" CAST IRON PUMP ONLY |   |     |     |
|------------------------|---|-----|-----|
| PART NO                | DESCRIPTION                               | HP  | QTY |
| 300POI                 | 3" CAST IRON PUMP ONLY W/ 1" SHAFT SLEEVE | N/A | 1   |



| 3" CAST IRON BEARING PEDESTAL |   |     |     |  |
|-------------------------------|---|-----|-----|--|
| PART NO                       | DESCRIPTION   | HP  | QTY |  |
| 300PBI                        | 3" CAST IRON BEARING PEDESTAL W/ 1" STRAIGHT<br>SHAFT | N/A | 1   |  |



|      |             | 6 28   |     |
|------|-------------|--|-----|
|      | DEDLACE     | MENT PARTS 3" CAST IRON PUMPS                          | •   |
| ITEM | PART NO     | MENT PARTS 3" CAST IRON PUMPS  DESCRIPTION             | QTY |
| 1    | 18008       | 3" NPT OUTLET FLANGE                                   | 1   |
| 1    | M18008      | 3" MANIFOLD OUTLET FLANGE                              | 1   |
| 2    | 18012       | 3" NPT INLET FLANGE                                    | 1   |
| 2    | M18012      | 3" MANIFOLD INLET FLANGE                               | 1   |
| 3    | 18026       | ADAPTER FOR GAS ENGINE & BEARING PEDESTAL              | 1   |
| 3    | 18048       | C-FLANGE ADAPTER                                       | 1   |
| 3    | 18049       | HYDRAULIC MOTOR ADAPTER                                | 1   |
| N/S  | 18055       | HYDRAULIC ADAPTER SHAFT                                | 1   |
| 4    | 13777       | 3/4" PLUG  | 1   |
| 5*   | 18023       | 1" IMPELLER & DRIVE SHAFT FOR GAS ENGINE               | 1   |
| 5    | 18023-1.125 | 11/6" IMPELLER & DRIVE SHAFT FOR ELECTRIC MOTOR        | 1   |
| 6    | 12777       | ½" PLUG  | 1   |
| 7    | 18034       | 5∕8" SS JAM NUT  | 1   |
| 8    | 18004       | WEAR PLATE   | 1   |
| 9    | 18009       | EPDM OUTLET GASKET                                     | 1   |
| 10   | 18013       | GASKET CHECK VALVE ASSEMBLY                            | 1   |
| 11   | 18021       | ADAPTER GASKET   | 1   |
| 12   | 18010SS     | 3/8" - 16 X 11/8" SS CAP SCREW HXHD                    | 8   |
| 13   | 18033       | HANDLE   | 1   |
| 14   | 18029       | CLAMP ASSEMBLY (OLD STYLE)                             | 1   |
| 14   | 18129       | CLAMP ASSEMBLY (NEW STYLE)                             | 1   |
| 15   | 18001       | PUMP HOUSING   | 1   |
| 16   | 18030       | <sup>3</sup> /8" -24 X 2½" BOLT                        | 2   |
| 17   | 18106       | WEAR PLATE FLAT HEAD SCREW                             | 2   |
| 18   | V20018      | 3/8" LOCK WASHER                                       | 8   |
| 19   | 18032       | 3/8" X 24 SS HEX NUT                                   | 2   |
| 20   | 18504       | 1" SHAFT   | 1   |
| 21   | 18500       | BEARING PEDESTAL                                       | 1   |
| N/S  | 18502       | BEARING SKF 66306-2RS1/C3                              | 2   |
| 22   | 17704       | BOLT   | 4   |
| 23*  | 18025       | FKM SEAL ASSEMBLY                                      | 1   |
| 23   | 18025SD     | SEVERE DUTY SEAL                                       | 1   |
| 24   | V20019      | 3/8" 16 SS HEX NUT                                     | 6   |
| 25   | V20018      | 3/8" SS LOCK WASHER                                    | 6   |
| 26   | 18218       | <sup>3</sup> /8" -16 X 24 X 2 <sup>1</sup> /8" SS STUD | 6   |
| 27   | 13778       | O-RING   | 1   |
| 28   | UV15163     | O-RING   | 1   |
| N/S  | 18035       | Z-RAIL MOUNTING BRACKET (PAIR)                         | 1   |
| N/S  | 18100       | REPAIR KIT (CONSIST OF ITEMS 5*, 8,11,17, 23*)         | 1   |



# **3" CAST IRON WET SEAL PUMPS**

#### **FEATURES**

- Cast iron construction for rugged dependable service
- Run dry capability
- Stainless steel hardware
- Double seal contained in ethylene glycol reservoir
- Replaceable inlet and outlet flanges
- Dynamically balanced impeller
- Pump only packs complete and ready for attachment to gasoline engine
- Pedestal pump for long coupling to electric motor
- Due to weight and size of pumps, Banjo ships these by truck only.



| 3" CAST IRON WET SEAL PUMPS W/GAS ENGINES |   |    |     |
|---|---|----|-----|
| PART NO                                   | DESCRIPTION   | HP | QTY |
| 301PIH13W                                 | 3" CAST IRON WET SEAL PUMP W/13 HP HONDA®<br>ENGINE W/ ELECTRIC START & PULL ROPE | 13 | 1   |



WARNING! DO NOT USE WITH FLAMMABLE LIQUIDS

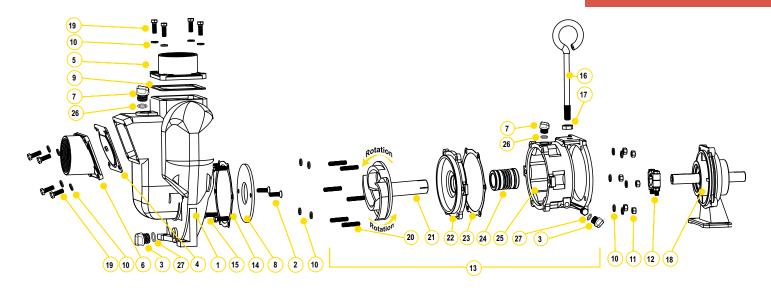


| 3" CAST IRON WET SEAL PUMP ONLY |                                 |     |     |
|---------------------------------|---------------------------------|-----|-----|
| PART NO                         | DESCRIPTION                     | HP  | QTY |
| 301POIW                         | 3" CAST IRON WET SEAL PUMP ONLY | N/A | 1   |

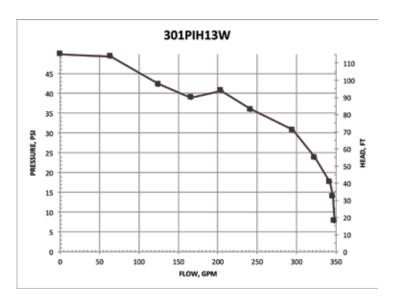


| 3" CAST IRON WET SEAL PUMP BEARING PEDESTAL |   |     |     |
|---|---|-----|-----|
| PART NO                                     | DESCRIPTION   | HP  | QTY |
| 301PBIW                                     | 3" CAST IRON WET SEAL PUMP WITH BEARING<br>PEDESTAL | N/A | 1   |

**3" CAST IRON WET SEAL PUMPS** 



| REPLACEMENT PARTS 3" CAST IRON PUMPS |         |   |     |  |  |
|--------------------------------------|---------|---|-----|--|--|
| ITEM                                 | PART NO | DESCRIPTION   | QTY |  |  |
| 1                                    | 18001   | PUMP HOUSING  | 1   |  |  |
| 2                                    | 18106   | FLAT HEAD SOCKET CAP SCREW  | 2   |  |  |
| 3                                    | 12777   | ½" PLUG   | 2   |  |  |
| 4                                    | 18013   | INLET/CHECK EPDM GASKET   | 1   |  |  |
| 5                                    | 18008   | 3" NPT OUTLET FLANGE  | 1   |  |  |
| 6                                    | 18012   | 3" NPT INLET FLANGE   | 1   |  |  |
| 7                                    | 13777   | ¾" PLUG   | 2   |  |  |
| 8                                    | 18004   | WEAR PLATE  | 1   |  |  |
| 9                                    | 18009   | EPDM OUTLET GASKET  | 1   |  |  |
| 10                                   | V20018  | 3/8" LOCK WASHER  | 18  |  |  |
| 11                                   | V20019  | 3/8" 16 SS HEX NUT  | 6   |  |  |
| 12                                   | 18129   | CLAMP ASSEMBLY KEYED  | 1   |  |  |
| 13                                   | 18200A  | WET SEAL ASSEMBLY   | 1   |  |  |
| 14                                   | 18021   | ADAPTER GASKET  | 1   |  |  |
| 15                                   | 17704   | 3/8" -16 X 11/4" HHCS   | 4   |  |  |
| 16                                   | 18033   | HANDLE  | 1   |  |  |
| 17                                   | 18034   | 5⁄8" -11 JAM NUT  | 1   |  |  |
| 18                                   | 18500   | BEARING PEDESTAL  | 1   |  |  |
| 19                                   | 18010SS | <sup>3</sup> / <sub>8</sub> " - 16 X 1 <sup>1</sup> / <sub>8</sub> " HHCS | 8   |  |  |
| 20                                   | 18218   | 3/8" -16 X 24 X 21/8" SS STUD   | 6   |  |  |
| 21                                   | 18206   | IMPELLER  | 1   |  |  |
| 22                                   | 18202A  | COVER PLATE   | 1   |  |  |
| 23                                   | 18021   | ADAPTER GASKET  | 1   |  |  |
| 24                                   | 15035E  | EPDM MECHANICAL SEAL ASSEMBLY   | 1   |  |  |
| 25                                   | 18203A  | WET SEAL RESERVOIR  | 1   |  |  |
| 26                                   | 13778   | O-RING  | 2   |  |  |
| 27                                   | UV15163 | O-RING  | 2   |  |  |



# 3" CAST IRON PUMPS WITH HYDRAULIC MOTORS

#### **FEATURES**

- Cast iron construction for rugged dependable service
- Stainless steel hardware
- Replaceable inlet and outlet flanges
- Dynamically balanced impeller
- Hydraulic fluid capacity is minimum 9 gallons and maximum 13 gallons
- Open or closed system
- 21 HP motor
- Recommendation to use the motor spool control valve or a suitable equivalent. The lack of such a valve in this circuit may cause failure to the hydraulic motor.



| 3"      | 3" CAST IRON PUMPS W/ HYDRAULIC MOTORS     |    |     |  |  |
|---------|--|----|-----|--|--|
| PART NO | DESCRIPTION                                | HP | QTY |  |  |
| 300PIHY | 3" CAST IRON PUMP W/ 21 HP HYDRAULIC MOTOR | 21 | 1   |  |  |

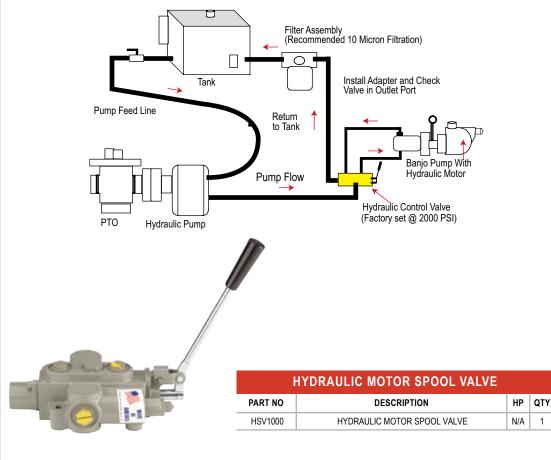


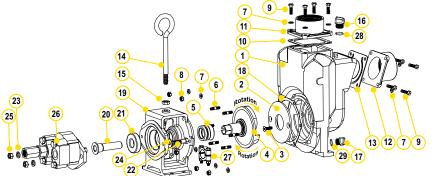
WARNING! DO NOT RUN PUMP DRY, RESTRICT OR REDUCE PORT SIZES OR DEAD HEAD PUMP



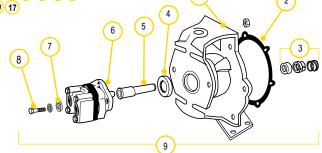
WARNING! DO NOT USE WITH FLAMMABLE LIQUIDS

### SPOOL VALVE ASSEMBLY DIAGRAM





3" CAST IRON PUMPS WITH HYDRAULIC MOTORS



|      | REPLACE | MENT PART 3" CAST IRON PUMPS   |     |
|------|---------|--|-----|
| ITEM | PART NO | DESCRIPTION  | QTY |
| 1    | 18001   | PUMP HOUSING   | 1   |
| 2    | 18004   | WEAR PLATE   | 1   |
| 3    | 18106   | <sup>3</sup> / <sub>8</sub> " - 16 X 1.25" HHCS                                  | 2   |
| 4    | 18023   | IMPELLER & DRIVE SHAFT   | 1   |
| 5    | 18025   | FKM MECHANICAL SEAL  | 1   |
| 5    | 18025SD | SEVERE DUTY SEAL   | 1   |
| 6    | 18218   | <sup>3</sup> / <sub>8</sub> " -16 X 24 X 2 <sup>1</sup> / <sub>8</sub> " SS STUD | 6   |
| 7    | V20018  | 3/8" LOCK WASHER   | 14  |
| 8    | V20019  | 3/8" 16 SS HEX NUT   | 6   |
| 9    | 18010SS | 3/8" - 16 X 1.25" HHCS   | 8   |
| 10   | 18009   | EPDM OUTLET GASKET   | 1   |
| 11   | 18008   | 3" NPT OUTLET FLANGE   | 1   |
| 12   | 18012   | 3" NPT INLET FLANGE  | 1   |
| 13   | 18013   | INLET/CHECK EPDM GASKET  | 1   |
| 14   | 18033   | HANDLE   | 1   |
| 15   | 18034   | 5∕8" -11 HEX NUT   | 1   |
| 16   | 13777   | ¾" PLUG  | 1   |
| 17   | 12777   | ½" PLUG  | 1   |
| 18   | 18021   | ADAPTER GASKET   | 1   |
| 19   | 18049   | HYDRAULIC MOTOR ADAPTER  | 1   |
| 20   | 18055   | HYDRAULIC ADAPTER SHAFT  | 1   |
| 21   | 18502   | BEARING SKF 66306-2RS1/C3  | 1   |
| 22   | 18056   | ½" -13 X 2" HHCS   | 2   |
| 23   | 18058   | ½" SPLIT WASHER  | 2   |
| 24   | 18059   | ½" FLAT WASHER   | 2   |
| 25   | 17010   | ½" - 13 HEX NUT  | 2   |
| 26   | HY1012  | UM16-45A-HX HYDRAULIC MOTOR ASSEMBLY   | 1   |
| 27   | 18029   | CLAMP ASSEMBLY UNKEYED   | 1   |
| 28   | 13778   | O-RING   | 1   |
| 29   | UV15163 | O-RING   | 1   |
| KIT  | 18100   | REPAIR KIT (CONSIST OF 2, 3, 4, 5, 18)   | 1   |

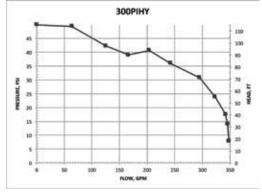
| RE   | REPLACEMENT PARTS 3" HYDRAULIC ADAPTER |                                  |     |  |  |
|------|--|----------------------------------|-----|--|--|
| ITEM | PART NO                                | DESCRIPTION                      | QTY |  |  |
| 1    | 18049                                  | C-FACE HYDRAULIC MOTOR ADAPTER   | 1   |  |  |
| 2    | 18021                                  | GASKET ADAPTER                   | 1   |  |  |
| 3    | 18025                                  | SEAL ASSEMBLY                    | 1   |  |  |
| 4    | 18502                                  | SKF 63306-2RS1/C3 BEARING        | 1   |  |  |
| 5    | 18055                                  | HYDRAULIC ADAPTER SHAFT SLEEVE   | 1   |  |  |
| 6    | HY1012                                 | TYRONE®UM16 HYDRAULIC MOTOR      | 1   |  |  |
| 7    | 18059                                  | ½" FLAT WASHER                   | 2   |  |  |
| 8    | 18058                                  | ½" SPLIT LOCK WASHER             | 2   |  |  |
| 9    | 18056                                  | ½" - 13" X 2" HHCS BOLT          | 2   |  |  |
| 10   | 17010                                  | ½" HEX NUT                       | 2   |  |  |
| 11   | 18600                                  | HYDRAULIC MOTOR ADAPTER ASSEMBLY | 1   |  |  |
| KIT  | HY1001                                 | REPAIR KIT                       | 1   |  |  |

| HYDRAULIC MOTOR DATA   |                 |  |  |  |
|------------------------|-----------------|--|--|--|
| U.S. GALLONS/REV.      | 0.0038          |  |  |  |
| CUBIC INCHES/REV.      | 0.878           |  |  |  |
| LITERS/REV.            | 0.0144          |  |  |  |
| MAX HYDRAULIC PRESSURE | 3000 PSI        |  |  |  |
| MIN HYDRAULIC PRESSURE | 600 PSI         |  |  |  |
| INLET PORT             | 1-1/16-12UN-2B  |  |  |  |
| OUTLET PORT            | 1-5/16-12UN-2B  |  |  |  |
| MINIMUM GPM REQUIRED   | 9 GPM 2370 RPM  |  |  |  |
| MAXIMUM GPM REQUIRED   | 13 GPM 3450 RPM |  |  |  |
| IDEAL GPM REQUIRED     | 9 GPM 3600 RPM  |  |  |  |
| OCHUPATION INFORMATION |                 |  |  |  |

| 7   | IDEAL GPM REQUIRED | 9 GPM 3600 RPM                           |
|-----|--------------------|--|
|     | CONNEC             | TION INFORMATION                         |
| 110 | INLET              | "A" PORT                                 |
| 100 | OUTLET             | "B" PORT                                 |
| 80  |                    | PROPER ROTATION OF THE BANJO PUMP. PLACE |

SUPPLIED CHECK VALVE IS TO ENSURE PROPER ROLLION OF THE BANAU PUMP PLAVE CHECK VALVE IN OUTLET PORT (MARKED "8") FOR PROPER RIGHT HAND ROTATION. IT IS RECOMMENDED THAT A MINIMUM "2" INLET LINE & A MINIMUM 1" OUTLET LINE BE USED. THE OUTLET PORT MUST BE CONNECTED DIRECTLY BACK TO THE HYDRAULIC FLUID RESERVOIR, NOT TO ANY VALVING, REGULATORS OR FLOW DIVERTERS. THE OUTLET PORT/RETURN LINE BACK PRESSURE MUST NOT EXCEED 250 PSI.

| SPOOL VALVE INFORMATION  |                            |  |  |
|--------------------------|----------------------------|--|--|
| REQUIRED OUTLET FLOW     | MIN 9 GPM / MAX 13 GPM     |  |  |
| REQUIRED SYSTEM PRESSURE | MIN 600 PSI / MAX 3000 PSI |  |  |



### 3" 333 SERIES CAST IRON PUMPS

#### **FEATURES**

- Cast iron construction for rugged dependable service
- Carbon ceramic seal with stainless steel cup and spring with FKM rubber
- Replaceable inlet and outlet flanges
- Dynamically balanced impeller
- Heavy duty slinger seal on motor shaft
- Large weep holes between pump end and engine
- Pedestal pump for long coupling to electric motor
- Recommendation for ¾" shaft: 5 HP, 3600 RPM
- Due to weight and size of pumps, Banjo ships these by truck only.
- Engine warranty service available at authorized dealers



| 333 SE   | 333 SERIES CAST IRON PUMPS W/GAS ENGINES                                 |    |     |  |  |
|----------|--|----|-----|--|--|
| PART NO  | DESCRIPTION  | HP | QTY |  |  |
| 333PIH13 | 3" CAST IRON PUMP W/13 HP HONDA® ENGINE W/<br>ELECTRIC START & PULL ROPE | 13 | 1   |  |  |
|          |  |    |     |  |  |



| 333 SERIES CAST IRON PUMP ONLYS |  |     |     |  |  |
|---------------------------------|--|-----|-----|--|--|
| PART NO                         | DESCRIPTION  | HP  | QTY |  |  |
| 333POI                          | 3" CAST IRON PUMP ONLY W/1" SHAFT & 5 VANE<br>IMPELLER UNASSEMBLED                 | N/A | 1   |  |  |
| 333POICF                        | 3" CAST IRON PUMP ONLY W/13/8" SHAFT & 5 VANE IMPELLER UNASSEMBLED FOR 215TC FRAME | N/A | 1   |  |  |



| 333 SERIES CAST IRON BEARING PEDESTAL |   |     |     |  |
|---------------------------------------|---|-----|-----|--|
| PART NO                               | DESCRIPTION                               | НР  | QTY |  |
| 333PBI                                | 3" CAST IRON BEARING PEDESTAL W/ 1" SHAFT | N/A | 1   |  |



WARNING! DO NOT RUN PUMP DRY, RESTRICT OR REDUCE PORT SIZES OR DEAD HEAD PUMP

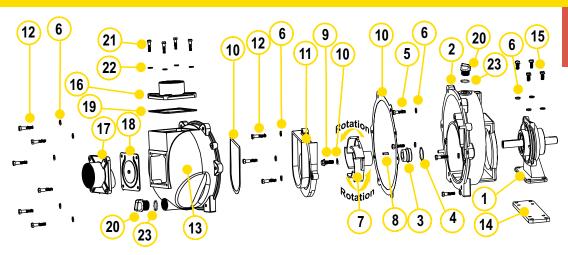


WARNING! DO NOT USE WITH FLAMMABLE LIQUIDS



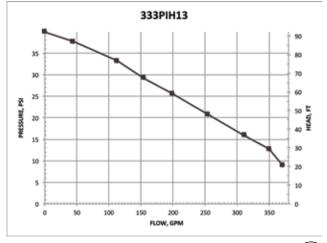
| 333 8    | 333 SERIES CAST IRON HYDRAULIC PUMPS                    |    |     |  |  |  |
|----------|---|----|-----|--|--|--|
| PART NO  | DESCRIPTION   | HP | QTY |  |  |  |
| 333PIE15 | 3" CAST IRON PUMP W/15 HP THREE PHASE<br>ELECTRIC MOTOR | 15 | 1   |  |  |  |

3" 333 SERIES CAST IRON PUMPS



|      | REPLACE  | MENT PARTS 3" CAST IRON PUMF            | S   |
|------|----------|---|-----|
| ITEM | PART NO  | DESCRIPTION                             | QTY |
| N/S  | 16099    | IMPELLER REMOVAL BOLT                   | 1   |
| 1    | 18500    | BEARING PEDESTAL (333PBI)               | 1   |
| 2    | 16704    | REAR BRACKET                            | 1   |
| 3    | 16713    | MECHANICAL SEAL                         | 1   |
| 4    | 16710    | O-RING                                  | 1   |
| 5    | 17704    | 3/8" - 16 X 1.25" SS CAP SCREW (333PBI) | 4   |
| 6    | V20018   | 3/8" SS LOCK WASHER                     | 17  |
| 7    | 16773    | 3" IMPELLER (333PBI)                    | 1   |
| 7    | 16774    | 3" IMPELLER (333PIH13 & 333POI)         | 1   |
| 8    | 16901    | 1/4" SQ. 3/4" KEY STOCK                 | 1   |
| 9    | 16765    | IMPELLER BOLT (333PBI)                  | 1   |
| 9    | 13765    | IMPELLER BOLT (333PPIH13)               | 1   |
| 10   | 16019    | GASKET SET                              | 1   |
| 11   | 16702    | VOLUTE                                  | 1   |
| 12   | V20011SS | 3/8" - 16 X 1.75" SS BOLT               | 9   |
| 13   | 16733    | BODY                                    | 1   |
| 14   | 18511    | ADAPTER PLATE (333PBI)                  | 1   |
| 15   | 18512    | 3/8" - 16 X 0.875" SS HHCS (333PBI)     | 4   |
| N/S  | 16751    | BRACKET SHIM SET                        | 1   |
| N/S  | 16752    | IMPELLER SHIM                           | 1   |
| N/S  | 18033    | HANDLE                                  | 1   |
| N/S  | 18034    | 5/8" SS JAM NUT                         | 1   |
| 16   | 16001    | 3" NPT OUTLET FLANGE                    | 1   |
| 17   | 16003    | 3" NPT INLET FLANGE                     | 1   |
| 18   | 16706    | FKM INLET GASKET W/ CHECK               | 1   |
| 19   | 16011    | FKM OUTLET GASKET                       | 1   |
| 20   | 13777    | ¾" PLUG                                 | 2   |
| 21   | 18027    | 3/8" - 16 X 1.50" HHCS (333PIH13)       | 8   |
| 22   | V20018   | 3/8" SS LOCK WASHER                     | 8   |
| 23   | 13778    | O-RING                                  | 2   |

| REPLACEMENT PARTS 333PIE15 |          |                               |     |  |  |
|----------------------------|----------|-------------------------------|-----|--|--|
| ITEM                       | PART NO  | DESCRIPTION                   | QTY |  |  |
| N/S                        | 16099    | IMPELLER REMOVAL BOLT         | 1   |  |  |
| 2                          | 16704A   | REAR BRACKET W/C-FACE ADAPTER | 1   |  |  |
| 3                          | 15025    | MECHANICAL SEAL               | 1   |  |  |
| 6                          | V20018   | 3/8" SS LOCK WASHER           | 8   |  |  |
| 7                          | 16774A   | 3" IMPELLER - 5 VANE          | 1   |  |  |
| 8                          | 17901    | 1/4" SQ. 3/4" KEY STOCK       | 1   |  |  |
| 9                          | 16765    | 7/16-20 11/4" HFS             | 1   |  |  |
| 10                         | 16019    | GASKET SET                    | 1   |  |  |
| 11                         | 16702    | VOLUTE                        | 1   |  |  |
| 12                         | V20011SS | 3/8" - 16 X 1.75" SS BOLT     | 9   |  |  |
| 13                         | 16733    | BODY                          | 1   |  |  |
| N/S                        | 16751    | BRACKET SHIM SET              | 1   |  |  |
| N/S                        | 16752    | IMPELLER SHIM                 | 1   |  |  |
| N/S                        | 18033    | HANDLE                        | 1   |  |  |
| N/S                        | 18034    | 5/8" SS JAM NUT               | 1   |  |  |
| 16                         | 16001    | OUTLET FLANGE                 | 1   |  |  |
| 17                         | 16003    | INLET FLANGE                  | 1   |  |  |
| 18                         | 16706    | FKM INLET GASKET W/ CHECK     | 1   |  |  |
| 19                         | 16011    | FKM OUTLET GASKET             | 1   |  |  |
| 20                         | 13777    | ¾" PLUG                       | 2   |  |  |
| 21                         | 18027    | 3/8" - 16 X 1.50" HHCS        | 8   |  |  |
| 22                         | V20018   | 3/8" SS LOCK WASHER           | 4   |  |  |
| 23                         | 13778    | O-RING                        | 2   |  |  |



## 3" M332 SERIES CAST IRON MANIFOLD WET SEAL PUMPS

#### **FEATURES**

- Run dry capability
- Cast iron construction for rugged dependable service
- Carbon ceramic seal with stainless steel cup and spring with EPDM rubber
- Replaceable inlet and outlet flanges
- Dynamically balanced impeller
- Heavy duty slinger seal on motor shaft
- Due to weight and size of pumps, Banjo ships these by truck only.
- Engine warranty service available at authorized dealers
- See pages 43-49 on manifold fittings for easy plumbing.



WARNING! DO NOT USE WITH FLAMMABLE LIQUIDS



#### M332 SERIES CAST IRON WET SEAL PUMPS W/GAS ENGINES

| PART NO    | DESCRIPTION   | HP | QTY |
|------------|---|----|-----|
| M332PIH13W | 3" MANIFOLD CAST IRON WET SEAL PUMP W/13 HP<br>HONDA® ENGINE W/ELECTRIC START & PULL ROPE | 13 | 1   |



#### M332 SERIES CAST IRON WET SEAL PUMPS W/ELECTRIC MOTORS

| PART NO     | DESCRIPTION   | HP | QTY |
|-------------|---|----|-----|
| M332PIE10W  | 3" MANIFOLD CAST IRON WET SEAL PUMP<br>W/10HP THREE PHASE ELECTRIC MOTOR  | 10 | 1   |
| M332PIE101W | 3" MANIFOLD CAST IRON WET SEAL PUMP W/10HP<br>SINGLE PHASE ELECTRIC MOTOR | 10 | 1   |

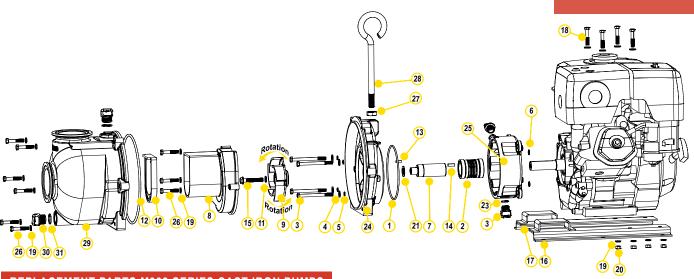
#### M332 SERIES CAST IRON WET SEAL BEARING PEDESTAL PUMPS

| PART NO  | DESCRIPTION  | HP  | QTY |
|----------|--|-----|-----|
| M332PBIW | 2" MANIFOLD CAST IRON WET SEAL PUMP W/ BEARING<br>PEDESTAL W/ 3/4" SHAFT | N/A | 1   |

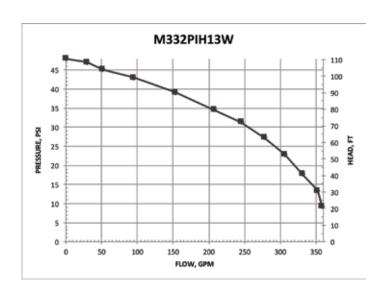
| M3:  | 32 SERIES CAST IRON WET SEAL PUMP ONLY | 1  |  |
|------|--|----|--|
| T NO | DESCRIPTION                            | ШΒ |  |

| PART NO  | DESCRIPTION                              | HP  | QTY |
|----------|--|-----|-----|
| M332POIW | 3" MANIFOLD CAST IRON WET SEAL PUMP ONLY | N/A | 1   |

2" M332 SERIES CAST IRON MANIFOLD WET SEAL PUMPS



| REPL | ACEMENT | PARTS M332 SERIES CAST IRON P | JMPS |
|------|---------|-------------------------------|------|
| ITEM | PART NO | DESCRIPTION                   | QTY  |
| 1    | 13719   | O-RING                        | 1    |
| 2    | 15035E  | EPDM MECHANICAL SEAL ASSEMBLY | 1    |
| 3    | 13034   | 5/16" - 24 X 3¾" HHCS         | 1    |
| 4    | 12901   | 5∕16" FLAT WASHER             | 4    |
| 5    | 12717   | O-RING FOR BRACKET SCREW      | 8    |
| 6    | 12709   | O-RING                        | 4    |
| 7    | 13055   | ADAPTER SHAFT                 | 4    |
| 8    | 19702   | VOLUTE                        | 1    |
| 9    | 19772SS | 5 VANE IMPELLER               | 1    |
| 9    | 15772   | IMPELLER (M332PBIW)           | 1    |
| 10   | 12705   | CHECK VALVE                   | 1    |
| 11   | A204    | O-RING                        | 1    |
| 12   | 12719A  | BODY O-RING                   | 1    |
| 13   | 12902A  | IMPELLER KEY                  | 1    |
| 14   | 16901   | 1/4" SQ X 3/4" KEY STOCK      | 1    |
| 15   | 13766   | ³⁄8" - 24 X 21∕4" HFS         | 1    |
| 16   | 18135B  | Z-RAIL                        | 1    |
| 17   | 18135A  | Z-RAIL                        | 1    |
| 18   | 17029   | 5/16" - 18 X 13/4" HHCS       | 4    |
| 19   | V10118  | 5/16" LOCK WASHER             | 13   |
| 20   | V10119  | 5/16" HEX NUT                 | 4    |
| 21   | CV10175 | GASKET                        | 2    |
| 22   | 12777   | ½" PLUG                       | 2    |
| 23   | UV15163 | O-RING                        | 2    |
| 24   | 19703W  | REAR BRACKET                  | 1    |
| 25   | 19201W  | WET SEAL RESERVOIR            | 1    |
| 26   | 12715A  | 5/16"- 24 X 13/4" HHCS        | 9    |
| 27   | 18034   | 5⁄8"-11 JAM NUT               | 1    |
| 28   | 18033   | PUMP HANDLE                   | 1    |
| 29   | M19712X | PUMP BODY                     | 1    |
| 30   | 13777   | ¾" PLUG                       | 2    |
| 31   | 13778   | O-RING                        | 2    |



3" M332 SERIES CAST IRON MANIFOLD WET SEAL PUMPS WITH HYDRAULIC MOTORS

#### **FEATURES**

- Run dry capability
- Cast iron construction for rugged dependable service
- Carbon ceramic seal with stainless steel cup and spring with EPDM rubber
- Replaceable inlet and outlet flanges
- Dynamically balanced impeller
- Heavy duty slinger seal on motor shaft
- Hydraulic fluid capacity is minimum 9 gallons and maximum 13 gallons
- Open or closed system
- 3600 R.P.M.
- Recommendation to use the motor spool control valve or a suitable equivalent. The lack of such a valve in this circuit may cause failure to the hydraulic motor.
- See pages 43-49 on manifold fittings for easy plumbing.

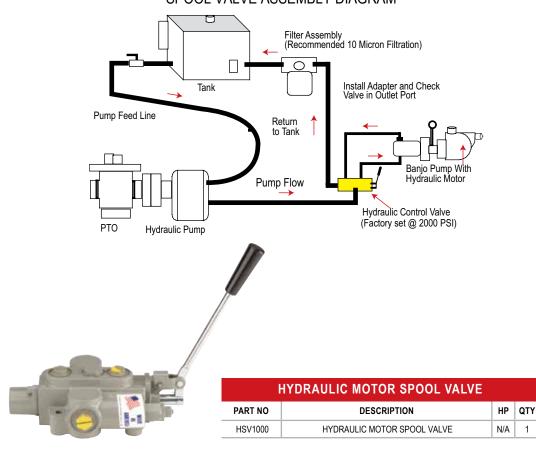


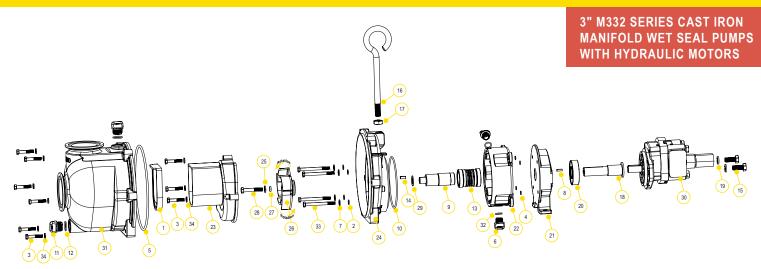
WARNING! DO NOT USE WITH FLAMMABLE LIQUIDS



| M332 SERIES CAST IRON MANIFOLD<br>WET SEAL PUMPS W/WO HYDRAULIC MOTOR |   |    |     |
|---|---|----|-----|
| PART NO   | DESCRIPTION   | HP | QTY |
| M332PIHYW   | 3" MANIFOLD CAST IRON WET SEAL PUMP<br>W/ HYDRAULIC MOTOR | 21 | 1   |

#### SPOOL VALVE ASSEMBLY DIAGRAM



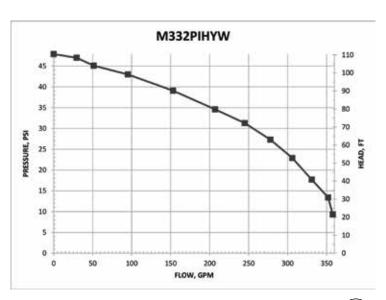


| REPL | ACEMENT | PARTS M332 SERIES CAST IRON P | UMPS |
|------|---------|-------------------------------|------|
| ITEM | PART NO | DESCRIPTION                   | QTY  |
| 1    | 12705   | CHECK VALVE                   | 1    |
| 2    | 12709   | O-RING                        | 4    |
| 3    | 12715A  | SS BRACKET SCREWS-            | 9    |
| 4    | 12717   | O-RING FOR SCREW HEAD         | 4    |
| 5    | 12719A  | BODY O-RING                   | 1    |
| 6    | 12777   | ½" PLUG                       | 2    |
| 7    | 12901   | SS REAR BRACKET WASHER        | 4    |
| 8    | 12902A  | IMPELLER KEY                  | 1    |
| 9    | 13055   | ADAPTER SHAFT                 | 1    |
| 10   | 13719   | O-RING                        | 1    |
| 11   | 13777   | ¾" PLUG                       | 2    |
| 12   | 13778   | O-RING                        | 2    |
| 13   | 15035E  | EPDM MECHANICAL SEAL ASSEMBLY | 1    |
| 14   | 16901   | 1/4" SQ. 3/4" KEY STOCK       | 1    |
| 15   | 17449   | BOLT                          | 2    |
| 16   | 18033   | HANDLE                        | 1    |
| 17   | 18034   | ⁵∕8" SS JAM NUT               | 1    |
| 18   | 18055H  | HYDRAULIC MOTOR ADAPTER SHAFT | 1    |
| 19   | 18058   | ½" SPLIT LOCK WASHER          | 2    |
| 20   | 18502   | SKF 63306-2RS1/C3 BEARING     | 1    |
| 21   | 19001H  | RESERVOIR BACKING PLATE       | 1    |
| 22   | 19201W  | WET SEAL RESERVOIR            | 1    |
| 23   | 19702   | VOLUTE                        | 1    |
| 24   | 19703W  | REAR BRACKET                  | 1    |
| 25   | 19766   | %" FLAT WASHER                | 1    |
| 26   | 19772SS | 5 VANE IMPELLER               | 1    |
| 27   | A204    | O-RING                        | 1    |
| 28   | BF207   | %" - 16 X 21/4" HHCS          | 1    |
| 29   | CV10175 | GASKET                        | 1    |
| 30   | HY1012  | TYRONE®UM16 HYDRAULIC MOTOR   | 1    |
| 31   | M19712X | PUMP BODY                     | 1    |
| 32   | UV15163 | PRIME/DRAIN PLUG O-RING       | 2    |
| 33   | V10118  | 5√16" SS LOCK WASHER          | 4    |
| 34   | V10117  | 5/16" X 31/2" SS BODY BOLT    | 9    |

| HYDRAULIC MOTOR DATA   |                 |  |  |
|------------------------|-----------------|--|--|
| U.S. GALLONS/REV.      | 0.0038          |  |  |
| CUBIC INCHES/REV.      | 0.878           |  |  |
| LITERS/REV.            | 0.0144          |  |  |
| MAX HYDRAULIC PRESSURE | 3000 PSI        |  |  |
| MIN HYDRAULIC PRESSURE | 600 PSI         |  |  |
| INLET PORT             | 1-1/16-12UN-2B  |  |  |
| OUTLET PORT            | 1-5/16-12UN-2B  |  |  |
| MINIMUM GPM REQUIRED   | 9 GPM 2370 RPM  |  |  |
| MAXIMUM GPM REQUIRED   | 13 GPM 3450 RPM |  |  |
| IDEAL GPM REQUIRED     | 9 GPM 3600 RPM  |  |  |
| CONNECTION INFORMATION |                 |  |  |
| INLET                  | "A" PORT        |  |  |
| OUTLET                 | "R" PORT        |  |  |

SUPPLIED CHECK VALVE IS TO ENSURE PROPER ROTATION OF THE BANJO PUMP. PLACE CHECK VALVE IN OUTLET PORT (MARKED 'B') FOR PROPER RIGHT HAND ROTATION. IT IS RECOMMENDED THAT A MINIMUM 3'' INLET LINE & A MINIMUM 1" OUTLET LINE BE USED. THE OUTLET PORT MUST BE CONNECTED DIRECTLY BACK TO THE HYDRAULIC FLUID RESERVOIR & NOT TO ANY VALVING, REGULATORS OR FLOW DIVERTERS. THE OUTLET PORT/RETURN LINE BACK PRESSURE MUST NOT EXCEED 250 PSI.

| SPOOL VALVE INFORMATION  |                            |  |  |
|--------------------------|----------------------------|--|--|
| REQUIRED OUTLET FLOW     | MIN 9 GPM / MAX 13 GPM     |  |  |
| REQUIRED SYSTEM PRESSURE | MIN 600 PSI / MAX 3000 PSI |  |  |



## 4" 444 SERIES CAST IRON PUMPS

#### **FEATURES**

- Cast iron construction for rugged dependable service
- Carbon ceramic seal with stainless steel cup and spring with FKM rubber
- Replaceable inlet and outlet flanges
- · Dynamically balanced impeller
- Heavy duty slinger seal on motor shaft
- Large weep holes between pump end and engine
- Recommendation for 444POI: use with 10 pound per gallon material or more
- Due to weight and size of pumps, Banjo ships these by truck only.
- Engine warranty service available at authorized dealers



| 444 SERIES CAST IRON PUMPS W/GAS ENGINES |   |    | ;   |
|--|---|----|-----|
| PART NO                                  | DESCRIPTION                             | HP | QTY |
| 444PIH24                                 | 4" CAST IRON PUMP W/24 HP HONDA® ENGINE | 24 | 1   |



| 444 SERIES CAST IRON PUMP ONLYS |  |     |     |
|---------------------------------|--|-----|-----|
| PART NO                         | DESCRIPTION  | HP  | QTY |
| 444POI                          | 4" CAST IRON PUMP ONLY W/ 11/8" X 31/2" SHAFT &<br>6 VANE IMPELLER UNASSEMBLED | N/A | 1   |

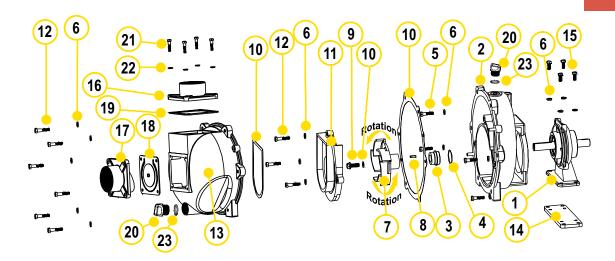


WARNING! DO NOT RUN PUMP DRY, RESTRICT OR REDUCE PORT SIZES OR DEAD HEAD PUMP

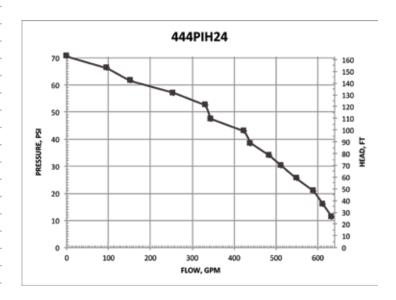


WARNING! DO NOT USE WITH FLAMMABLE LIQUIDS

4" 444 SERIES CAST IRON PUMPS



|      | REPLACE  | MENT PARTS 4" CAST IRON PUMPS  | 5   |
|------|----------|--------------------------------|-----|
| ITEM | PART NO  | DESCRIPTION                    | QTY |
| 2    | 16707    | REAR BRACKET                   | 1   |
| 3    | 18435    | MECHANICAL SEAL                | 1   |
| 4    | V10264   | O-RING                         | 1   |
| 5    | 17704    | 3/8" - 16 X 1.25" SS CAP SCREW | 4   |
| 6    | V20018   | ¾" SS LOCK WASHER              | 13  |
| 7    | 16775    | 4" IMPELLER                    | 1   |
| 8    | 16901    | 1/4" SQ. 3/4" KEY STOCK        | 1   |
| 9    | 16765    | IMPELLER BOLT                  | 1   |
| 10   | 16019    | GASKET SET                     | 1   |
| 11   | 16702    | VOLUTE                         | 1   |
| 12   | V20011SS | 3/8" - 16 X 1.75" SS BOLT      | 9   |
| 13   | 16712    | BODY                           | 1   |
| 16   | 16000    | 4" NPT OUTLET FLANG4E          | 1   |
| 17   | 16002    | 4" NPT INLET FLANGE            | 1   |
| 18   | 16706    | INLET GASKET W/ CHECK          | 1   |
| 19   | 16011    | OUTLET GASKET                  | 1   |
| 20   | 13777    | ¾" PLUG                        | 2   |
| 21   | 18027    | 3∕8" - 16 X 1.50" HHCS         | 8   |
| 22   | V20018   | %" SS LOCK WASHER              | 8   |
| 23   | 13778    | O-RING                         | 2   |
| N/S  | 16099    | IMPELLER REMOVAL BOLT          | 1   |
| N/S  | 16751    | BRACKET SHIM SET               | 1   |
| N/S  | 16752    | IMPELLER SHIM                  | 1   |
| N/S  | 18033    | HANDLE                         | 1   |
| N/S  | 18034    | 5%" SS JAM NUT                 | 1   |



#### 2" STAINLESS STEEL PUMPS

#### **FEATURES**

- 316 stainless steel housing and wettable internal components including impeller, sleeve, wear plate and fasteners
- Carbon ceramic seal with 316 stainless steel cup and spring with FKM elastomer
- Replaceable inlet and outlet flanges
- Dynamically balanced impeller
- Pump only packs complete and ready for attachment to gasoline engine
- Pedestal pump for long coupling to electric motor
- Recommendation for 5/8" shaft: 56C frame size, 3 HP, 3450 RPM & 5" max impeller for close coupling to electric motors
- Recommendation for ½" shaft: 145TC frame size, 3 HP, 3450 RPM & 5" max impeller for close coupling to electric motors
- Engine warranty service available at authorized dealers
- Due to weight and size of pumps, Banjo ships these by truck only.



WARNING! DO NOT RUN PUMP DRY, RESTRICT OR REDUCE PORT SIZES OR DEAD HEAD PUMP



WARNING! DO NOT USE WITH FLAMMABLE LIQUIDS





| 2" STAINLESS STEEL PUMPS W/GAS ENGINES |  |     |     |
|--|--|-----|-----|
| PART NO                                | DESCRIPTION  | HP  | QTY |
| 200PH5-SS                              | 2" SS PUMP W/5.5 HP HONDA® ENGINE W/ PULL ROPE<br>ONLY | 5.5 | 1   |

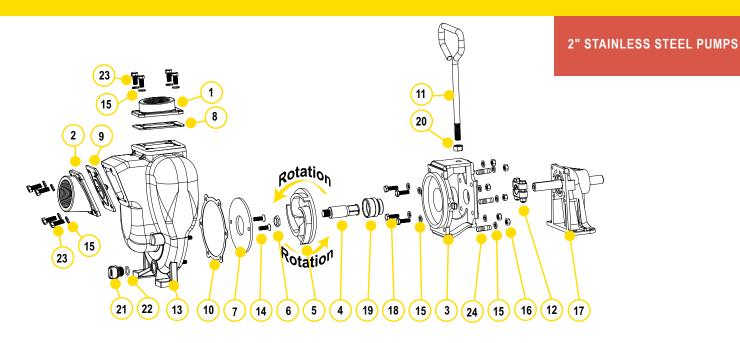


| 2" STAINLESS STEEL PUMP ONLY |                                    |     |     |
|------------------------------|------------------------------------|-----|-----|
| PART NO                      | DESCRIPTION                        | HP  | QTY |
| 200PO-SS                     | 2" SS PUMP ONLY W/ ¾" SHAFT SLEEVE | N/A | 1   |



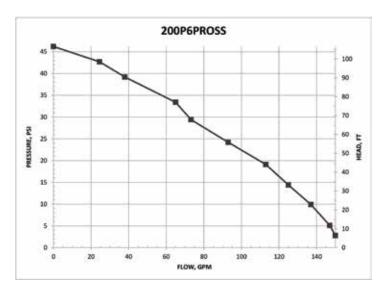
| 2" STAINLESS STEEL C-FACE PUMPS                   |   |   |  |
|---|---|---|--|
| DESCRIPTION                                       | HP  | QTY   |  |
| 2" SS C-FACE PUMP W/ $\frac{5}{8}$ " SHAFT SLEEVE | N/A   | 1   |  |
| 2" SS C-FACE PUMP W/ $\frac{7}{8}$ " SHAFT SLEEVE | N/A   | 1   |  |
|   | DESCRIPTION 2" SS C-FACE PUMP W/ 5%" SHAFT SLEEVE | DESCRIPTION HP 2" SS C-FACE PUMP W/ %" SHAFT SLEEVE N/A |  |

| 2" STAINLESS STEEL BEARING PEDESTAL                       |  |    |     |
|---|--|----|-----|
| PART NO DESCRIPTION                                       |  | HP | QTY |
| 200PB-SS 2" SS BEARING PEDESTAL W/ ¾" STRAIGHT SHAFT* N/A |  | 1  |     |



| REPLACEMENT I |             | T PARTS 2" STAINLESS STEEL PU                     | MPS |
|---------------|-------------|---|-----|
| ITEM          | PART NO     | DESCRIPTION                                       | QTY |
| 1             | 17000SS     | 2" NPT SS OUTLET FLANGE                           | 1   |
| 2             | 17002SS     | 2" NPT SS INLET FLANGE                            | 1   |
| 3             | 17004SS     | SS ADAPTER FOR GAS ENGINE                         | 1   |
| 3             | 17046SS     | CF ADAPTER FOR ELECTRIC MOTOR                     | 1   |
| 4             | 17005       | 5/8" SS SLEEVE DRIVE                              | 1   |
| 4             | 17006       | 3/4" SS SLEEVE DRIVE                              | 1   |
| 4             | 17007       | 7/8" SS SLEEVE DRIVE                              | 1   |
| 5             | 17008SS     | SS IMPELLER                                       | 1   |
| 5             | 17008-4.1SS | 4.1" SS IMPELLER                                  | 1   |
| 5             | 17008-4.6SS | 4.6" SS IMPELLER                                  | 1   |
| 6             | 17009B      | 5/8" IMPELLER NUT                                 | 1   |
| 7             | 17011SS     | SS WEAR PLATE                                     | 1   |
| 8             | 17014       | FKM OUTLET GASKET                                 | 1   |
| 9             | 17017       | FKM CHECK VALVE ASSEMBLY GASKET                   | 1   |
| 10            | 17018       | ADAPTER GASKET                                    | 1   |
| 11            | 15022       | HANDLE  | 1   |
| 12            | 17023       | 5/8" CLAMP, 3/4" SS SHAFT (OLD STYLE)             | 1   |
| 12            | 17123       | 5/8" CLAMP, 3/√" SS SHAFT (KEYED CLAMP)           | 1   |
| 12            | 17024       | <sup>7</sup> /8" CLAMP, <sup>3</sup> ⁄4" SS SHAFT | 1   |
| 13            | 17026SS     | SS PUMP HOUSING                                   | 1   |
| 14            | 17130SS     | 5/16-18 X 1.00" FHSCS, 316 SS                     | 2   |
| 15            | V10118      | 5∕16" LOCK WASHER                                 | 18  |
| 16            | V10119      | 5/16" -18 SS HEX NUT                              | 6   |
| 17            | 12882A      | BEARING PEDESTAL ASSEMBLY W/ 3/4" SHAFT           | 1   |
| 18            | 17040       | BOLT  | 4   |
| 19            | 17035SS     | FKM SS SEAL ASSEMBLY                              | 1   |
| 20            | 17010       | ½" - 24 X 1" HHCS                                 | 1   |
| 21            | 12777SS     | 1/2" STAINLESS STEEL PLUG                         | 1   |
| 22            | UV15163V    | O-RING FKM  | 1   |
| 23            | 17019       | 5∕16" - 18 X 3⁄4" CAP SCREW                       | 8   |
| 24            | 17042       | STUD  | 6   |
| KIT           | 17100SS     | PUMP REPAIR KIT(CONSISTS OF 4,5,7,10,14,19)       | 1   |

| KITS 2" STAINLESS STEEL PUMPS |                   |                 |
|-------------------------------|-------------------|-----------------|
| PART NO                       | FKM REPAIR KIT NO | FKM SEAL KIT NO |
| 200PH5-SS                     | 17100SS           | 17035SS         |
| 200PB-SS                      | 17100SS           | 17035SS         |
| 200PO-SS                      | 17100SS           | 17035SS         |



## 2" STAINLESS STEEL PUMPS WITH ELECTRIC MOTORS

#### **FEATURES**

- Stainless steel construction for rugged dependable service
- Stainless steel shaft sleeve to protect engine shaft
- Replaceable inlet and outlet flanges
- Dynamically balanced impeller
- Due to weight and size of pumps, Banjo ships these by truck only.
- Motor warranty service available at authorized dealers
- Motor features include pressure cast aluminum end plates with ribbed design for rigidity, heavy gauge steel frame, 230 volt, with inverter spike resistance magnet wire



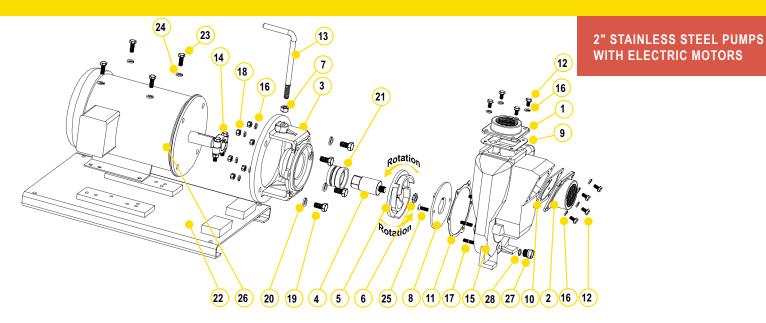
| 2" STAINLESS STEEL PUMPS W/ELECTRIC MOTORS |   |     |     |  |
|--|---|-----|-----|--|
| PART NO                                    | DESCRIPTION   | HP  | QTY |  |
| 234PE5SS                                   | 2" STAINLESS STEEL PUMP W/5.0 HP THREE PHASE<br>ELECTRIC MOTOR  | 5.0 | 1   |  |
| 234PE51SS                                  | 2" STAINLESS STEEL PUMP W/5.0 HP SINGLE PHASE<br>ELECTRIC MOTOR | 5.0 | 1   |  |



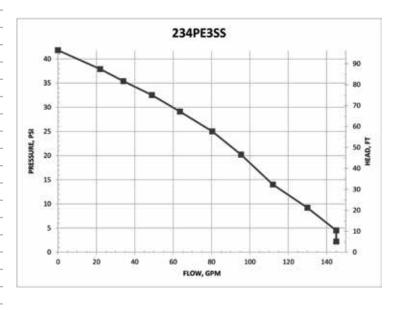
WARNING! DO NOT RUN PUMP DRY, RESTRICT OR REDUCE PORT SIZES OR DEAD HEAD PUMP



WARNING! DO NOT USE WITH FLAMMABLE LIQUIDS



| REPLACEMENT PARTS 2" STAINLESS STEEL PUMP |          |                                       | MPS |
|---|----------|---------------------------------------|-----|
| ITEM                                      | PART NO  | DESCRIPTION                           | QTY |
| 1   | 17000SS  | 2" NPT OUTLET FLANGE                  | 1   |
| 2   | 17002SS  | 2" NPT INLET FLANGE                   | 1   |
| 3   | 17046SS  | C-FACE ADAPTER (234PE3SS)             | 1   |
| 3   | 17446SS  | C-FACE ADAPTER (234PE5SS & 234PE51SS) | 1   |
| 4   | 17007    | IMPELLER SHAFT (234PE3SS)             | 1   |
| 4   | 17406    | IMPELLER SHAFT (234PE5SS & 234PE51SS) | 1   |
| 5   | 17008SS  | IMPELLER                              | 1   |
| 6   | 17009B   | 5/8" IMPELLER NUT                     | 1   |
| 7   | 17010    | ½" HEX NUT                            | 1   |
| 8   | 17011SS  | WEAR PLATE                            | 1   |
| 9   | 17014    | FKM OUTLET GASKET                     | 1   |
| 10  | 17017    | FKM GASKET & CHECK VALVE              | 1   |
| 11  | 17018    | ADAPTER GASKET                        | 1   |
| 12  | 17019    | BOLT                                  | 8   |
| 13  | 15022    | HANDLE                                | 1   |
| 14  | 17024    | CLAMP ASSEMBLY W/KEY (234PE3SS)       | 1   |
| 15  | 17026SS  | PUMP HOUSING                          | 1   |
| 15  | 17026SS  | PUMP HOUSING (234PE5SS & 234PE51SS)   | 1   |
| 16  | V10118   | 5∕16" LOCK WASHER                     | 20  |
| 17  | 17042    | HOUSING STUD                          | 6   |
| 18  | V10119   | HEX NUT                               | 8   |
| 19  | 17449    | BOLT                                  | 4   |
| 20  | 18058    | WASHER                                | 4   |
| 21  | 17035SS  | SEAL ASSEMBLY (234PE3SS)              | 1   |
| 21  | 18025SS  | SEAL ASSEMBLY (234PE5SS & 234PE51SS)  | 1   |
| 22  | 17701    | BASE PLATE ASSEMBLY                   | 1   |
| 23  | 17704    | BOLT                                  | 4   |
| 24  | V20018   | 3/8" LOCK WASHER                      | 4   |
| 25  | 17130SS  | 5/16-18 X 1.00" FHSCS, 316 SS         | 2   |
| 26  | BEM5     | ELECTRIC MOTOR                        | 1   |
| 27  | 12777SS  | ½" STAINLESS STEEL PLUG               | 1   |
| 28  | UV15163V | FKM O-RING                            | 1   |



## 2" STAINLESS STEEL PUMPS WITH HYDRAULIC MOTORS

#### **FEATURES**

- Cast iron construction for rugged dependable service
- · Stainless steel hardware
- Replaceable inlet and outlet flanges
- · Dynamically balanced impeller
- Hydraulic fluid capacity is minimum 6 gallons and maximum 10 gallons
- · Open or closed system
- 12 HP motor
- Recommendation to use the motor spool control valve or a suitable equivalent. The lack of such a valve in this circuit may cause failure to the hydraulic motor.



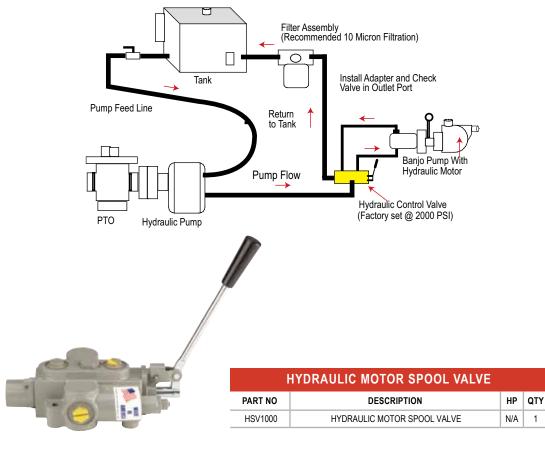
| 2" STAINLESS STEEL PUMPS W/ HYDRAULIC MOTORS |  |     |   |
|--|--|-----|---|
| PART NO DESCRIPTION HP                       |  | QTY |   |
| 200PHYSS                                     | 2" STAINLESS STEEL PUMP W/ 12 HP HYDRAULIC MOTOR | 12  | 1 |

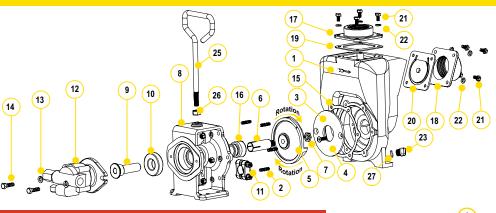
WARNING! DO NOT RUN PUMP DRY, RESTRICT OR REDUCE PORT SIZES OR DEAD HEAD PUMP



WARNING! DO NOT USE WITH FLAMMABLE LIQUIDS

#### SPOOL VALVE ASSEMBLY DIAGRAM





2" STAINLESS STEEL PUMPS WITH HYDRAULIC MOTORS

| REP  | REPLACEMENT PARTS 2" STAINLESS STEEL PUMPS |              |     |
|------|--|--------------|-----|
| ITEM | PART NO                                    | DESCRIPTION  | QTY |
| 1    | 17026SS                                    | PUMP HOUSING | 1   |

PUMP HOUSING STUD 2 17042 6 3 17011SS WEAR PLATE 4 17130SS 5/16-18 X 1.00" FHSCS, 316 SS 2 5 17008SS 5" IMPELLER 6 17007 7/8" SLEEVE DRIVE FOR ELECTRIC MOTOR 7 17009B 5/8" IMPELLER NUT 17049ASS HYDRAULIC ADAPTER 9 17055A HYDRAULIC ADAPTER SHAFT 10 17056 SKF 6206-2RS1 BEARING 11 17024 7/8" CLAMP, NO KEY 12 HY1013 MGG20025BC1D3 HYDRAULIC MOTOR ASSEMBLY 13 V20018 3/8" LOCK WASHER 2 14 18010SS 3/8" - 16 X 1.25" HHHCS 2 17018 GASKET ADAPTER 15 16 17035SS FKM SEAL ASSEMBLY 17 17000SS 2" NPT OUTLET FLANGE 17002SS 2" NPT INLET FLANGE 18 17014 FKM GASKET 19 17017 20 GASKET CHECK VALVE ASSEMBLY 5/16" -18 X 0.75" CAP SCREW 21 17019 8 V10118 5/16" SPLIT LOCK WASHER 22 14 23 12777SS 1/2" STAINLESS STEEL PLUG V10119 24 5/16"-18 HEX NUT 6 15022 25 HANDLE 17010 ½" HEX NUT -13UNF-RH 26 1

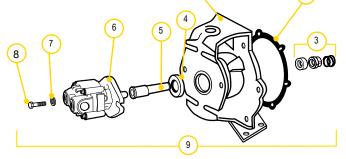
| REPLACEMENT PARTS 2" HYDRAULIC ADAPTER |          |                                  |     |
|--|----------|----------------------------------|-----|
| ITEM                                   | PART NO  | DESCRIPTION                      | QTY |
| 1                                      | 17049ASS | SS HYDRAULIC MOTOR ADAPTER       | 1   |
| 2                                      | 17018    | GASKET ADAPTER                   | 1   |
| 3                                      | 17035SS  | SEAL ASSEMBLY                    | 1   |
| N/S                                    | 17007    | <sup>7</sup> /8" SS SHAFT SLEEVE | 1   |
| 4                                      | 17056    | SKF 6206-2RS1 BEARING            | 1   |
| 5                                      | 17055A   | HYDRAULIC ADAPTER SHAFT          | 1   |
| 6                                      | HY1013   | GRESEN® HYDRAULIC MOTOR          | 1   |
| 7                                      | V20018   | LOCK WASHER                      | 2   |
| 8                                      | 18010SS  | BOLT                             | 2   |

O-RING FKM

1

27

UV15163V

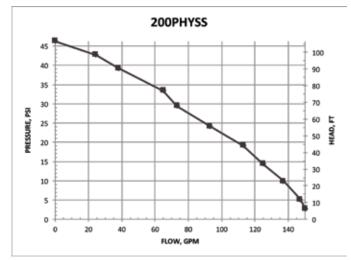


| HYDRAULIC MOTOR DATA   |                        |  |  |
|------------------------|------------------------|--|--|
| U.S. GALLONS/REV.      | 0.0025                 |  |  |
| CUBIC INCHES/REV.      | 0.580                  |  |  |
| LITERS/REV.            | 0.0097                 |  |  |
| MAX HYDRAULIC PRESSURE | 2000 PSI               |  |  |
| MIN HYDRAULIC PRESSURE | 200 PSI                |  |  |
| INLET PORT             | SAE 10 (7/8-14 UNF-2B) |  |  |
| OUTLET PORT            | SAE 10 (7/8-14 UNF-2B) |  |  |
| MINIMUM GPM REQUIRED   | 6 GPM 2400 RPM         |  |  |
| MAXIMUM GPM REQUIRED   | 10 GPM 4000 RPM        |  |  |
| IDEAL GPM REQUIRED     | 9 GPM 3600 RPM         |  |  |
| CONNECTION INFORMATION |                        |  |  |

| CONNECTION INFORMATION   |          |  |  |  |
|--|----------|--|--|--|
| INLET  | "A" PORT |  |  |  |
| OUTLET   | "B" PORT |  |  |  |
| CURRULER OUTCOM VALVE IN TO ENQUIRE PROPER POTATION OF THE RANGO RUMP. BLACE |          |  |  |  |

SUPPLIED CHECK VALVE IS TO ENSURE PROPER ROTATION OF THE BANJO PUMP. PLACE CHECK VALVE IN OUTLET PORT (MARKED "B") FOR PROPER RIGHT HAND ROTATION.

| ,                        | , |
|--------------------------|---|
| SPOOL VA                 | ALVE INFORMATION                        |
| REQUIRED OUTLET FLOW     | MIN 6 GPM / MAX 10 GPM                  |
| REQUIRED SYSTEM PRESSURE | MIN 500 PSI / MAX 2000 PSI              |
|                          |   |



#### 3" STAINLESS STEEL PUMPS

#### **FEATURES**

- 316 stainless steel housing and wettable internal components including impeller, sleeve, wear plate and fasteners
- Carbon ceramic seal with 316 stainless steel cup and spring with FKM elastomer
- Replaceable inlet and outlet flanges
- Dynamically balanced impeller
- Pump only packs complete and ready for attachment to gasoline engine
- Pedestal pump for long coupling to electric motor
- Recommendation for <sup>5</sup>/<sub>8</sub>" shaft: 56C frame size, 3 HP, 3450 RPM & 5" max impeller for close coupling to electric motors
- Recommendation for ¾" shaft: 145TC frame size, 3 HP, 3450 RPM & 5" max impeller for close coupling to electric motors
- Engine warranty service available at authorized dealers
- Due to weight and size of pumps, Banjo ships these by truck only.



WARNING! DO NOT RUN PUMP DRY, RESTRICT OR REDUCE PORT SIZES OR DEAD HEAD PUMP



WARNING! DO NOT USE WITH FLAMMABLE LIQUIDS





| 3" STAINLESS STEEL PUMPS W/GAS ENGINES |  |    |     |  |  |
|--|--|----|-----|--|--|
| PART NO                                | DESCRIPTION  | HP | QTY |  |  |
| 300PH13SS                              | 3" SS PUMP W/13 HP HONDA® ENGINE W/ELECTRIC<br>START & PULL ROPE | 13 | 1   |  |  |



| 3" STAINLESS STEEL PUMP ONLY       |             |                |  |  |
|------------------------------------|-------------|----------------|--|--|
| DESCRIPTION                        | HP          | QTY            |  |  |
| 3" SS PUMP ONLY W/ 1" SHAFT SLEEVE | N/A         | 1              |  |  |
|                                    | DESCRIPTION | DESCRIPTION HP |  |  |



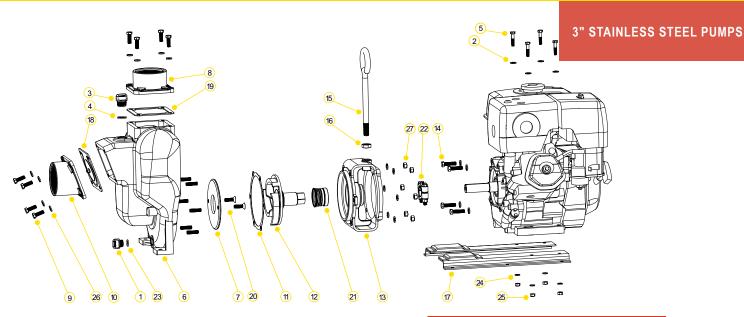




| 3" STAINLESS STEEL BEARING PEDESTAL |   |     |   |  |  |
|-------------------------------------|---|-----|---|--|--|
| PART NO                             | HP  | QTY |   |  |  |
| 300PB-SS                            | 3" SS BEARING PEDESTAL W/ 1" STRAIGHT SHAFT | N/A | 1 |  |  |

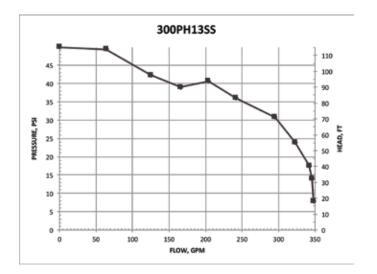


| 3" STAINLESS STEEL PUMPS W/ HYDRAULIC MOTOR |  |    |   |  |
|---|--|----|---|--|
| PART NO DESCRIPTION HP QT                   |  |    |   |  |
| 300PHYSS                                    | 3" STAINLESS STEEL PUMP W/ 12 HP HYDRAULIC MOTOR | 12 | 1 |  |



| REPLACEMENT PARTS 3" STAINLESS STEEL PUMPS |               |   |     |  |
|--|---------------|---|-----|--|
| ITEM                                       | PART NO       | DESCRIPTION   | QTY |  |
| 1  | 12777SS       | 1/2" STAINLESS STEEL PLUG                                       | 1   |  |
| 2  | 12901         | SS REAR BRACKET WASHER  | 4   |  |
| 3  | 13777SS       | 3/4" STAINLESS STEEL PLUG                                       | 1   |  |
| 4  | 13778V        | O-RING FKM  | 1   |  |
| 5  | 17034         | 5/16" - 18 X 13/4" ZINC PLATED                                  | 4   |  |
| 6  | 18001SS       | SS PUMP HOUSING   | 1   |  |
| 7  | 18004SS       | SS WEAR PLATE   | 1   |  |
| 8  | 18008SS       | 2" NPT OUTLET FLANGE  | 1   |  |
| 9  | 18010SS       | %" - 16 X 11/4 8" SS CAP SCREW HXHD                             | 8   |  |
| 10   | 18012SS       | 2" NPT INLET FLANGE   | 1   |  |
| 11   | 18021         | ADAPTER GASKET  | 1   |  |
| 12   | 18023SS       | 1" SS IMPELLER & DRIVE SHAFT FOR GAS ENGINE                     | 1   |  |
| 12   | 18023-1.125SS | 11/6" SS IMPELLER & DRIVE SHAFT FOR ELECTRIC MOTOR (300PO-SSCF) | 1   |  |
| 13   | 18026SS       | ADAPTER FOR GAS ENGINE  | 1   |  |
| 13   | 18048SS       | ADAPTER FOR ELECTRIC MOTOR (300PO-SSCF)                         | 1   |  |
| 14   | 18027         | %" -16 X 1½" HHCS   | 4   |  |
| 15   | 18033         | HANDLE  | 1   |  |
| 16   | 18034         | %" SS JAM NUT   | 1   |  |
| 17   | 18035         | Z RAILS   | 1   |  |
| 18   | 18042         | FKM GASKET CHECKVALVE<br>ASSEMBLY                               | 1   |  |
| 19   | 18044         | FKM OUTLET GASKET   | 1   |  |
| 20   | 18106SS       | WEAR PLATE FLAT HEAD SCREW                                      | 2   |  |
| 21   | 18125SS       | FKM SEAL ASSEMBLY   | 1   |  |
| 22   | 18129         | CLAMP ASSEMBLY  | 1   |  |
| 23   | UV15163V      | O-RING FKM  | 1   |  |
| 24   | V10118        | <sup>5</sup> ∕16" LOCK WASHER                                   | 4   |  |
| 25   | V10119        | 5∕16" - 18 SS HEX NUT   | 4   |  |
| 26   | V20018        | %" SS LOCK WASHER   | 18  |  |
|  |               |   |     |  |

| KITS 3" STAINLESS STEEL PUMPS |                   |                 |  |  |  |
|-------------------------------|-------------------|-----------------|--|--|--|
| PART NO                       | FKM REPAIR KIT NO | FKM SEAL KIT NO |  |  |  |
| 300PH13SS                     | 18100SS           | 18025SS         |  |  |  |
| 300PB-SS                      | 18100SS           | 18025SS         |  |  |  |
| 300PO-SS                      | 18100SS           | 18025SS         |  |  |  |



Note: Please see repair parts list for 300PHYSS on our website.

%" 16 SS HEX NUT
REPAIR KIT(CONSIST OF ITEMS 7,11,12, 20 & 21)

V20019

18100SS

27

KIT

#### **ENGINE/MOTOR REFERENCE**

- Engine warranty service contact information:
- Briggs and Stratton<sup>®</sup> phone: 414-259-5262 www.briggsandstratton.com
- Honda® phone: 800-426-7701 www.honda.com

| BRIGGS & STRATTON® ENGINES                    |                                   |                                     |                                     |                                   |                                     |  |  |  |
|---|-----------------------------------|-------------------------------------|-------------------------------------|-----------------------------------|-------------------------------------|--|--|--|
| BANJO PART NO E3 E6.5PRO E6.5PROE E11PROE E23 |                                   |                                     |                                     |                                   |                                     |  |  |  |
| MANUFACTURER                                  | BRIGGS & STRATTON®                | BRIGGS & STRATTON®                  | BRIGGS & STRATTON®                  | BRIGGS & STRATTON®                | BRIGGS & STRATTON®                  |  |  |  |
| MODEL NO                                      | 083132-1110-F1                    | 130G32-0122-F1                      | 130G37-0136-F1                      | 19N137-0076-F1                    | 386447-3048-G1                      |  |  |  |
| RATED HP                                      | 3.5 HP @ 3600 RPM                 | 6.5 HP @ 3600                       | 6.5 HP @ 3600 RPM                   | 11 HP @ 3600                      | 23.0 HP @ 3600 RPM                  |  |  |  |
| RATED TORQUE                                  | 4.9 FT-LBS @ 2800 RPM             | 9 FT-LBS @ 2800 RPM                 |                                     | 15.50 FT-LBS @ 2800 RPM           |                                     |  |  |  |
| SHAFT SIZE                                    | 3⁄4" DIAMETER W/ 3∕16"<br>KEY WAY | 3/4" DIAMETER W/ 3/16"<br>KEY WAY   | 3/4" X 2 27/64", 3/16"<br>KEY WAY   | 3/4" DIAMETER W/ 3/16"<br>KEY WAY | 11/8" X 4",1/4"<br>KEY WAY          |  |  |  |
| SHAFT ID THREAD                               | <sup>5</sup> /16"-24 UNF 2B       | <sup>5</sup> /16"-24 UNF 2B         | 5/16"-24 UNF                        | <sup>5</sup> /16"-24 UNF 2B       | 3/8" - 24 UNF                       |  |  |  |
| ENGINE OIL REQUIRED                           | SYNTHETIC 5W30                    | ABOVE 40°F: 30W<br>BELOW 40°F: 5W30 | ABOVE 40°F: 30W<br>BELOW 40°F: 5W30 | SYNTHETIC 10W30                   | ABOVE 40°F: 30W<br>BELOW 40°F: 5W30 |  |  |  |
| ENGINE OIL CAPACITY                           | 21 OZ                             | 20 OZ                               | 20.0 OZ                             | 28 OZ                             | 48.0 OZ                             |  |  |  |
| FUEL REQUIRED                                 | 77                                | 77                                  | 87                                  | 77                                | 87                                  |  |  |  |
| FUEL TANK CAPACITY                            | .50 GALLON                        | 1 GALLON                            | 0.825                               | 1 GALLON                          | N/A                                 |  |  |  |
| OIL ALERT                                     | N                                 | N                                   | Y                                   | N                                 | N                                   |  |  |  |
| ELECTRIC START                                | N                                 | N                                   | Υ                                   | N                                 | Y                                   |  |  |  |
| OVER HEAD VALVE                               | N                                 | N                                   | Y                                   | N                                 | Υ                                   |  |  |  |

| HONDA® ENGINES  |                                   |                                   |                                   |                                |                                |                              |
|---|-----------------------------------|-----------------------------------|-----------------------------------|--------------------------------|--------------------------------|------------------------------|
| BANJO PART NO         E5H         E5HE         E6H         E8H         E13H         E24 |                                   |                                   |                                   |                                |                                |                              |
| MANUFACTURER  | HONDA®                            | HONDA®                            | HONDA®                            | HONDA®                         | HONDA®                         | HONDA®                       |
| MODEL NO  | GX160                             | GX160                             | GX200                             | GX240                          | GX390                          | GX690RHTAF                   |
| RATED HP  | 5.4 HP @ 3600                     | 5.4 HP @ 3600                     | 6.4 HP @ 3600                     | 8.0 HP @ 3600                  | 13.0 HP @ 3600                 | 22.1 HP @ 3600 RPM           |
| RATED TORQUE  | 8.0 FT-LBS @ 2500 RPM             | 8.0 FT-LBS @ 2500 RPM             | 7.76 FT-LBS @ 2600<br>RPM         | 12.3 FT-LBS @ 2500 RPM         | 19.5 FT-LBS @ 2500<br>RPM      | 35.6 FT-LB @ 2500 RPM        |
| SHAFT SIZE  | 3/4" DIAMETER W/ 3/16"<br>KEY WAY | 3/4" DIAMETER W/ 3/16"<br>KEY WAY | 3/4" DIAMETER W/ 3/16"<br>KEY WAY | 1" DIAMETER W/ 1/4" KEY<br>WAY | 1" DIAMETER W/ 1/4"<br>KEY WAY | 1 1/8" X 4", 1/4"<br>KEY WAY |
| SHAFT ID THREAD   | <sup>5</sup> /16"-24 UNF 2B       | <sup>5</sup> /16"-24 UNF 2B       | <sup>5</sup> /16"-24 UNF 2B       | 3/8"-24 UNF 2B                 | 3/8"-24 UNF 2B                 | 7/16" - 20 UNF-2B            |
| ENGINE OIL REQUIRED   | 10W30                             | 10W30                             | 10W30                             | 10W30                          | 10W30                          | 10W30                        |
| ENGINE OIL CAPACITY   | .63 QT                            | .63 QT                            | .63 QT                            | 1.16 QT                        | 1.16 QT                        | 2.1 QT                       |
| FUEL REQUIRED   | 86                                | 86                                | 86                                | 86                             | 86                             | 86                           |
| FUEL TANK CAPACITY  | .95 GALLON                        | .95 GALLON                        | .95 GALLON                        | 1.59 GALLON                    | 1.72 GALLON                    | N/A                          |
| OIL ALERT   | Υ                                 | Y                                 | Υ                                 | Y                              | Y                              | Y                            |
| ELECTRIC START  | N                                 | Y                                 | N                                 | Y                              | Y                              | Y                            |
| OVER HEAD VALVE   | Y                                 | Y                                 | Y                                 | Y                              | Y                              | Y                            |

| ELECTRIC MOTORS |          |                    |  |  |
|-----------------|----------|--------------------|--|--|
| BANJO PART NO   | BEM5     | BEM15              |  |  |
| MANUFACTURER    | BALDOR®  | MARATHON®          |  |  |
| MODEL NO        | CEM3613T | 215TTFW14010       |  |  |
| RATED HP        | 5 HP     | 15 HP              |  |  |
| SHAFT SIZE      | 11/8"    | 1 <sup>3</sup> /8" |  |  |
| DESCRIPTION     | TEFC     | TEFC               |  |  |
| PHASE           | 3        | 3                  |  |  |
| RPM @ 60 HZ     | 3450     | 3450               |  |  |
| NEMA FRAME SIZE | 184TC    | 215TC              |  |  |
| VOLTAGE         | 230/460  | 208-230/460        |  |  |
| EFF@FULL LOAD   | 88.5     | 88.5               |  |  |

#### **BRITISH PIPE THREAD**

|            | BRITISH PIPE THREAD   |         |
|------------|---|---------|
| PART NO    | DESCRIPTION   | PAGE NO |
| DM100ABSS  | 1" STAINLESS STEEL MALE DRY MATE WITH BSP & ALL PTFE SEALS      | 60      |
| DM100DBSS  | 1" STAINLESS STEEL FEMALE DRY MATE WITH BSP & FKM FACE SEAL     | 60      |
| DM150AB    | 1½" POLY MALE DRY MATE WITH BSP & FKM FACE SEAL                 | 56      |
| DM150ABSS  | 11/2" STAINLESS STEEL MALE DRY MATE WITH BSP & ALL PTFE SEALS   | 61      |
| DM150DB    | 1½" POLY FEMALE DRY MATE WITH BSP                               | 56      |
| DM150DBSS  | 1½" STAINLESS STEEL FEMALE DRY MATE WITH BSP & FKM FACE SEAL    | 61      |
| DM150DBSSE | 11/2" STAINLESS STEEL FEMALE DRY MATE WITH BSP & EPDM FACE SEAL | 61      |
| DM200AB    | 2" POLY MALE DRY MATE WITH BSP & FKM FACE SEAL                  | 57      |
| DM200ABSS  | 2" STAINLESS STEEL MALE DRY MATE WITH BSP                       | 62      |
| DM200DB    | 2" POLY FEMALE DRY MATE WITH BSP & FKM FACE SEAL                | 57      |
| DM200DBSS  | 2" STAINLESS STEEL FEMALE DRY MATE WITH BSP & FKM FACE SEAL     | 62      |
| DM200DBSSE | 2" STAINLESS STEEL FEMALE DRY MATE WITH BSP & EPDM FACE SEAL    | 62      |
| DM220ABSS  | 2" MALE X BSP THREADS W/PTFE SEALS                              | 63      |
| DM220DBSS  | 2" FP FEMALE X BSP THREADS                                      | 63      |
| NIP2101    | 2" NPT X BSP-WHITE  | 66      |

**Note:** Check out our full list of available BSP products on our website: banjocorp.com/banjo/salessheets

| DARTAIO | DA OF (0)  | WEIGHT | DARTNO         | DA 05 (0)   | WEIGHT | DARTAIO        | DA 05 (0)                                      | WEIGHT |
|---------|--|--------|----------------|---|--------|----------------|--|--------|
| PART NO | PAGE(S)  | WEIGHT | PART NO        | PAGE(S)   | WEIGHT | PART NO        | ` '  | WEIGHT |
| 12052   | 107  | 0.5    | 15752          | 135, 137  | 0.002  | 17042          | 127, 131, 155, 157, 159                        | 0.03   |
| 12099   | 103, 107, 117, 119, 135, 137   | 0.066  | 15772          | 135, 137, 139, 149                                  | 1.75   | 17046          | 127, 131                                       | 7.4    |
| 12155   | 105, 113, 115, 123, 125<br>103, 105, 107, 109, 111, 113, 115, 117,           | 1.186  | 15999          | 135, 137  | 0.282  | 17056          | 121, 133, 159                                  | 0.43   |
| 12705   | 119, 121, 123, 125, 135, 137, 139,   | 0.258  | 16000          | 153   | 6.424  | 17100          | 127  | 4      |
| 40700   | 149, 151   | 0.004  | 16001          | 147   | 4.808  | 17123          | 127, 129, 155                                  | 0.32   |
| 12709   | 105, 113, 115, 123, 125, 139, 149, 151                                       | 0.001  | 16002          | 153   | 5.59   | 17130          | 127, 129, 131                                  | 0.03   |
| 12710   | 103, 107, 109, 111, 117, 119, 121,<br>135, 137                               | 0.01   | 16003          |   | 5.688  | 17202          | 129  | 3.82   |
| 12713   | 103, 107, 109, 111, 117, 119, 121  | 0.11   | 16011          | 147, 153  | 0.098  | 17208          | 129  | 2      |
| 12716   | ' ' ' ' '  | 0.02   | 16019          | 147, 153  | 0.068  | 17226          | 129  | 25.21  |
|         | 103, 107, 111, 117, 119, 135<br>103, 105, 107, 109, 111, 113, 115, 117,      |        | 16099<br>16702 | 147, 153<br>147, 153                                | 0.25   | 17235<br>17242 | 129  | 0.35   |
| 12717   | 119, 121, 123, 125, 135, 137, 149, 151                                       | 0.001  | 16704          | 147, 155  | 41.5   | 17426          | 131, 157                                       | 0.25   |
| 12720   | 103, 105, 107, 109, 111, 113, 115, 117, 119, 121, 123, 125                   | 0.032  | 16706          | 147, 153  | 0.77   | 17408          | 131  | 2      |
| 12723   | 95   | 0.006  | 16707          | 153   | 42     | 17446          | 131  | 18     |
|         | -  |        | 16710          | 147   | 0.01   | 17449          | 131, 151, 157                                  | 0.125  |
| 12724   | 95<br>103, 105, 107, 109, 111, 113, 115, 117,                                | 0.001  | 16712          | 153   | 58     | 17701          | 107, 131, 137, 157                             | 29.5   |
| 12725   | 119, 121, 123, 125   | 0.002  | 16713          | 147   | 0.2    | 17704          | 107, 131, 137, 141, 143, 147, 153, 157         | -      |
| 12754   | 103, 105, 107, 109, 111, 113, 115, 117, 119, 121, 123, 125                   | 0.002  | 16733          | 147   | 55     | 17901          | 147  | 0.1    |
| 10756   |  | 1 420  | 16751          | 147, 153  | 0.024  | 18001          | 141, 143, 145                                  | 65.65  |
| 12756   | 107, 137   | 1.438  | 16752          | 147, 153  | 0.02   | 18004          | 141, 143, 145                                  | 1.53   |
| 12766   | 105, 113, 115, 125, 139  | 0.076  | 16765          | 147, 153  | 0.07   | 18008          | 141, 143, 145                                  | 3.5    |
| 12772   | 103, 105, 107, 109, 111, 113, 115<br>103, 105, 107, 109, 113, 115, 123, 125, | 0.2    | 16773          | 147   | 4.452  | 18009          | 141, 143, 145                                  | 0.03   |
| 12777   | 127, 129, 131, 133, 139, 141, 143,   | 0.012  | 16774          | 147   | 2.75   | 18012          | 141, 143, 145                                  | 3.15   |
| 12884   | 145, 149, 151, 51, 91, 95<br>127   | 0.01   | 16775          | 153   | 0.03   | 18013          | 141, 143, 145                                  | 0.5    |
|         | 103, 105, 107, 109, 111, 113, 115, 117,                                      |        | 16901          | 123, 125, 147, 149, 151, 153                        | 0.03   | 18021          | 141, 143, 145, 161                             | 0.21   |
| 12900   | 119, 121, 123, 125   | 0.000  | 17000          | 127, 129, 131, 135                                  | 1.47   | 18023          | 141, 145                                       | 4.35   |
| 12901   | 103, 107, 109, 111, 117, 119, 121, 135, 137, 149, 151, 161                   | 0.004  | 17001          | 127   | 1.38   | 18025          | 131, 141, 145                                  | 0.39   |
| 13000   | 117, 119, 121  | 0.738  | 17002          | 127, 129, 131                                       | 2.01   | 18026          | 141  | 9.6    |
| 13034   | 105. 113. 115. 123. 125. 149   | N/A    | 17003          | 127   | 1.7    | 18027          | 147, 153, 161                                  | 0.056  |
| 13055   | 123, 149, 151  | 0.674  | 17004          | 127   | 6.5    | 18029          | 141, 145                                       | 0.63   |
| 13702   | 117, 119, 121, 123, 125  | 1.424  | 17005          | 127, 155  | 0.35   | 18030          | 141  | 0.07   |
| 13712   | 117, 121, 123  | 4.018  | 17006          | 127, 155  | 0.25   | 18032          | 141  | 0.03   |
| 13719   | 105, 113, 115, 123, 125, 139, 149, 151                                       | 0.012  | 17007          | 127, 131, 133, 155, 157, 159                        | 0.24   | 18033          | 139, 141, 143, 145, 147, 149, 151,             | 1.25   |
| 13765   | 117, 119, 147  | 0.05   | 17008          | 127, 131, 133                                       | 2      |                | 153, 161<br>139, 141, 143, 145, 147, 149, 151, |        |
| 13766   | 123, 149   | 0.084  | 17010          | 127, 129, 131, 133, 135, 137, 145,<br>155, 157, 159 | 0.04   | 18034          | 153, 161                                       | 0.048  |
| 13771   | 117, 119, 121, 123   | 0.204  | 17011          | 127, 129, 131                                       | 0.85   | 18035          | 141, 161                                       | 2.75   |
| 13772   | 117, 119, 123, 125   | 0.218  | 17013          | 127, 129, 131, 135                                  | 0.03   | 18042          | 161  | 0.5    |
| 13777   | 117, 119, 121, 135, 137, 139, 141, 143, 145, 147, 149, 151, 153, 53, 99      | 0.024  | 17014          | 155, 157, 159                                       | 0.03   | 18044          | 161  | 0.02   |
| 40770   | 117, 119, 121, 135, 137, 139, 141, 143,                                      | 0.000  | 17016          | 127, 129, 131                                       | 0.03   | 18048          | 141  | 14     |
| 13778   | 145, 147, 149, 151, 153, 53, 99  | 0.002  | 17017          | 155, 157, 159                                       | 0.25   | 18049          | 141, 145                                       | 20.6   |
| 13778   | 117, 119, 121, 135, 137, 139, 141, 143, 145, 147, 149, 151, 153, 53, 99      | 0.002  | 17018          | 127, 129, 131, 133, 155, 157, 159                   | 0.01   | 18055          | 141, 145                                       | 0.75   |
| 13999   | 117, 119, 121  | 0.266  | 17019          | 127, 129, 131, 135, 155, 157, 159                   | 0.02   | 18056          | 145  | 0.1    |
| 15000   | 135, 137   | 2.244  | 17023          | 127, 155  | 0.32   | 18058          | 131, 145, 151, 157                             | 0.012  |
| 15022   | 127, 129, 131, 133, 135, 137, 155,<br>157, 159                               | 1.124  | 17024          | 127, 131, 133, 155, 157, 159                        | 0.32   | 18059          | 145  | 0.026  |
| 15025   | 147  | 0.35   | 17026          | 127, 131, 133                                       | 24     | 18100          | 141, 145                                       | 7.2    |
|         |  |        | 17028          | 127   | 0.16   | 18106          | 141, 143, 145                                  | 0.07   |
| 15035   | 115, 123   | 0.35   | 17029          | 149   | 0.044  | 18129          | 131, 141, 143, 161                             | 0.57   |
| 15055   | 139  | 0.75   | 17032          | 129   | 0.04   | 18206          | 143  | 1.5    |
| 15702   | 135, 137, 139  | 9.086  | 17033          | 127, 135  | 1.5    | 18218          | 141, 143, 145                                  | 0.04   |
| 15703   | 135, 137   | 14.978 | 17034          | 135, 161  | 0.02   | 18435          | 153  | 1      |
| 15712   | 135, 137   | 26.082 | 17035          | 127, 131, 133                                       | 0.18   | 18500          | 141, 143, 147                                  | 13     |
| 15751   | 117, 119, 135, 137   | 0.014  | 17040          | 127, 155  | 0.03   | 18502          | 141, 145, 151                                  | 3.4    |

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| 18504     | 141                     | 1.82   | 125C      | 77  | 0.29   | 150C90          | 80   | 0.62   |
| 18511     | 147                     | 3.404  | 125D      | 77  | 0.31   | 150CAP          | 77   | 0.54   |
| 18512     | 147                     | 0.036  | 125E      | 77  | 0.11   | 150CAP/SS       | 75   | 1.28   |
| 18600     | 145                     | N/A    | 125F      | 77  | 0.98   | 150CSS          | 75   | 1.54   |
| 18700     | 101                     | 3      | 12600B    | 109, 121, 135   | 14     | 150D            | 77   | 0.59   |
| 19702     | 149, 151                | 9.01   | 12702A    | 103, 105, 107, 109, 111, 113, 115                     | 1.13   | 150D90          | 80   | 0.65   |
| 19766     | 151                     | 0.1    | 12703A    | 103, 107, 109, 111, 117, 119, 121                     | 2.07   | 150DSS          | 75   | 1.55   |
| 050C      | 76                      | 0.14   | 12703AW   | 123   | 2.792  | 150E            | 77   | 0.21   |
| 050D      | 76                      | 0.16   | 12705V    | 103, 107, 123   | 0.24   | 150ESS          | 75   | 1.23   |
| 050E      | 76                      | 0.05   | 12707W    | 105, 113, 115, 125                                    | 2.788  | 150F            | 77   | 0.21   |
| 050F      | 76                      | 0.06   | 12709V    | 123   | 0.01   | 150F90          | 80   | 0.27   |
| 075ASS    | 74                      | 0.27   | 12710V    | 103, 107  | 0.01   | 150FSS          | 75   | 1.41   |
| 075BSS    | 74                      | 0.49   | 12712A    | 103, 105, 107, 109                                    | 3.25   | 150G            | 49, 71, 79                                     | 0.015  |
| 075C      | 77                      | 0.15   | 12712AV   | 107   | 3.25   | 150GV           | 49, 71, 75, 79                                 | 0.3    |
| 075CAP    | 76, 77, 78              | 0.13   | 12713SD   | 135, 137  | 0.1    | 150PL           | 77   | 0.16   |
| 075CAP/SS | 74                      | 0.49   | 12713V    | 103, 107, 135, 137                                    | 0.12   | 150PL/SS        | 75   | 0.76   |
| 075CSS    | 74                      | 0.54   | 12715A    | 103, 109, 111, 117, 119, 121, 135, 137, 139, 149, 151 | 0.046  | 150POICF5/8-4.1 | 126  | 47     |
| 075D      | 77                      | 0.15   | 12717V    | 103, 107, 123   | 0.01   | 150RING         | 75, 79   | 0.026  |
| 075DSS    | 74                      | 0.5    |           | 103, 105, 107, 109, 111, 113, 115, 117,               |        | 150SHM          | 79   | 0.01   |
| 075E      | 77                      | 0.06   | 12719A    | 119, 121, 125, 135, 137, 139, 149, 151                | 0.046  | 15201W          | 139  | 8.895  |
| 075ESS    | 74                      | 0.42   | 12719AV   | 103, 107  | 0.05   | 15703W          | 139  | 18.428 |
| 075F      | 77                      | 0.06   | 12754V    | 103, 107, 123   | 0.01   | 15999V          | 135, 137                                       | 0.288  |
| 075FSS    | 74                      | 0.37   | 12765A    | 103, 107, 109, 111, 117, 119, 121,<br>135, 137        | 0.05   | 16704A          | 147  | 41.5   |
| 075PL/SS  | 74                      | 0.17   | 12771A    | 103, 111  | 0.23   | 16773A          | 147  | 3      |
| 100125CAP | 77                      | 0.27   | 12775A    | 103, 105, 107, 109, 111, 113, 115, 117,               | 0.014  | 17000SS         | 155, 157, 159                                  | 1.58   |
| 100125PL  | 77                      | 0.06   |           | 119, 121, 123   |        | 17002SS         | 155, 157, 159                                  | 2.038  |
| 100A      | 77                      | 0.09   | 12777SS   | 155, 157, 159, 161                                    | 0.14   | 17004SS         | 155  | 6.954  |
| 100ASS    | 74                      | 0.32   | 12882A    | 103, 117, 119, 127, 129, 135, 139, 155                |        | 17008-4.1       | 127  | 1.534  |
| 100B      | 77                      | 0.29   | 12883B    | 127<br>103, 105, 107, 109, 111, 113, 115, 117,        | 0.146  | 17008-4.1SS     | 155  | 2      |
| 100BSS    | 74                      | 0.71   | 12902A    | 119, 121, 123, 125, 135, 137, 139,                    | 0.006  | 17008-4.6       | 127  | 1.68   |
| 100C      | 77                      | 0.27   | 120004    | 149, 151  | 0.25   | 17008-4.6SS     | 155  | 1.956  |
| 100CAP/SS | 74                      | 0.66   | 12999A    | 103, 107, 109, 111                                    | 0.25   | 17008SS         | 155, 157, 159                                  | 2      |
| 100CSS    | 74                      | 0.73   | 12999AV   | 103, 107, 111   | 0.32   | 17009B          | 127, 129, 131, 133, 155, 157, 159              | 0.022  |
| 100D      | 77                      | 0.31   | 13155M    | 123   | 0.62   | 17011SS         | 155, 157, 159                                  | 0.888  |
| 100DSS    | 74                      | 0.75   | 13719V    | 123   | 0.02   | 17026SS         | 155, 157, 159                                  | 32     |
| 100E      | 77                      | 0.1    | 13777SS   | 161   | 0.21   | 17035SD         | 127  | 0.13   |
| 100ESS    | 74                      | 0.58   | 13778V    | 161   | 0.002  | 17035SS         | 155, 157, 159                                  | 0.18   |
| 100F      | 77                      | 0.11   | 150(200)K | 79  | 0.134  | 17046SS         | 155, 157                                       | 8.804  |
| 100FSS    | 74                      | 0.58   | 15000V    | 135, 137  | 2.364  | 17049A          | 133  | 10.738 |
| 100G      | 71, 79                  | 0.2    | 150125A   | 77  | 0.197  | 17049ASS        | 159  | 12.75  |
| 100GV     | 71, 75, 79              | 0.2    | 150125B   | 77  | 0.26   | 17055A          | 133, 159                                       | 1.75   |
| 100PL/SS  | 74                      | 0.27   | 150125C   | 77, 78  | 0.568  | 17056E          | 109, 115                                       | 2      |
| 100RING   | 75, 79                  | 0.012  | 150125D   | 77  | 0.31   | 17100SS         | 155  | 3.384  |
| 100SHM    | 79                      | 0.01   | 150125E   | 77  | 0.16   | 17130SS         | 155, 157, 159                                  | 0.02   |
| 12000A    | 103, 107, 109, 111      | 0.75   | 150125F   | 77  | 0.18   | 17200A          | 129  | 20.6   |
| 12000AV   | 103, 107, 111           | 0.9    | 15035E    | 105, 113, 123, 125, 139, 143, 149, 151                | 0.386  | 17201A          | 129  | 8.736  |
| 12049E    | 109, 115, 121           | 8.118  | 150A      | 77  | 0.18   | 17206A          | 129  | 0.628  |
| 12055E    | 109, 115                | 0.566  | 150A90    | 80  | 0.24   | 17446SS         | 157  | 10.818 |
| 12201W    | 123                     | 1.458  | 150ASS    | 75  | 0.75   | 18001SS         | 161  | 57.5   |
| 12202W    | 105, 113, 115, 123, 125 | 1.464  | 150B      | 77  | 0.57   | 18004SS         | 161  | 1.616  |
| 125A      | 77                      | 0.098  | 150BSS    | 75  | 1.38   | 18008SS         | 161  | 3.976  |
| 125B      | 77                      | 0.3    | 150C      | 77  | 0.57   | 18010SS         | 109, 115, 121, 133, 141, 143, 145,<br>159, 161 | 0.044  |

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| 18012SS        | 161        | 4.298  | 200PB-SS       | 154     | 52     | 222PIH6        | 134            | 110    |
| 18023-1.125    | 141        | 4.322  | 200PB-V        | 102     | 18     | 222PIHY        | 134            | 75     |
| 18023-1.125SS  | 161        | 4.348  | 200PBI         | 126     | 48     | 222POI         | 134            | 60     |
| 18023SS        | 161        | 4.32   | 200PBW         | 104     | 22     | 231MPT         | 68             | 0.074  |
| 18025SD        | 141, 145   | 0.32   | 200PEO         | 106     | 9.35   | 231MPTBN       | 68             | 0.08   |
| 18025SS        | 157        | 0.25   | 200PH-5        | 102     | 51     | 234PE51SS      | 156            | 180    |
| 18026SS        | 161        | 10.11  | 200PH-5E       | 102     | 56     | 234PE5SS       | 156            | 168    |
| 18055H         | 151        | 0.75   | 200PH-5V       | 102     | 48     | 234PIE5        | 130            | 160    |
| 18100SS        | 161        | 7.5    | 200PH5-SS      | 154     | 105    | 234PIE51       | 130            | 200    |
| 18106SS        | 161        | 0.04   | 200PH5W        | 104     | 53     | 234POI         | 130            | 54     |
| 18125SS        | 161        | 0.25   | 200PH6         | 102     | 51.2   | 234PPE5        | 106            | 135    |
| 18135A         | 149        | 1.982  | 200PHA         | 108     | 25     | 234PPE51       | 106            | 142.8  |
| 18135B         | 149        | 1.986  | 200PHY         | 108     | 21.308 | 234PPE51V      | 106            | 145    |
| 18200A         | 143        | 31.6   | 200PHYSS       | 158     | 52     | 234PPE5V       | 106            | 123    |
| 18202A         | 143        | 4.918  | 200PHYW        | 108     | N/A    | 250CAP         | 78             | 0.68   |
| 18203A         | 143        | 4.92   | 200PI-3        | 126     | 81     | 250PL          | 78             | 0.42   |
| 19001H         | 151        | 10.7   | 200PI6PRO      | 126     | 81.5   | 300A           | 78             | 0.48   |
| 19201W         | 149, 151   | 10.7   | 200PIH-5       | 126     | 81.5   | 300ASS         | 75             | 1.91   |
| 19703W         | 149, 151   | 17.006 | 200PIH5E       | 126     | 82     | 300B           | 78             | 1.17   |
| 19772SS        | 149, 151   | N/A    | 200PIHA        | 132     | 50     | 300BSS         | 75             | 3.3    |
| 200150C        | 78         | 0.66   | 200PKL         | 79      | 0.02   | 300C           | 78             | 1.4    |
| 200130C        | 78         |        | 200PL          | 78      | 0.02   | 300CAP         | 78             | 1.07   |
| 200A<br>200A90 | 80         | 0.3    | 200PL/SS       | 75      | 0.21   | 300CAP/SS      | 75             | 3.61   |
|                |            |        | 200PD<br>200PO | 102     | 7.286  | 300CSS         | 75             | 5.06   |
| 200ASS<br>200B | 75         | 0.99   | 200PO-SS       | 154     | 47     | 300C33<br>300D | 78             | 1.19   |
|                | 78         | 0.64   |                |         | -      |                |                | +      |
| 200B90         | 80         | 0.948  | 200PO-V        | 102     | 10     | 300DSS         | 75             | 4.54   |
| 200BSS         | 75         | 1.85   | 200POI         | 126     | 52.5   | 300E           | 78             | 0.78   |
| 200C           | 78         | 0.69   | 200POICF5/8    | 126     | 47     | 300ESS         | 75             | 4.62   |
| 200C90         | 80         | 0.78   | 200POICF7/8    | 126     | 47     | 300F           | 78             | 0.57   |
| 200CAP         | 68, 78     | 0.6    | 200POSSCF5/8   | 154     | 47     | 300F200F       | 79             | 0.606  |
| 200CAP/SS      | 75         | 1.69   | 200POSSCF7/8   | 154     | 90     | 300FF          | 79             | 0.638  |
| 200CAPSH       | 68, 78     | 0.52   | 200SBS         | 101     | N/A    | 300FSS         | 75             | 3.81   |
| 200CSS         | 75         | 1.494  | 200SHM         | 79      | 0.01   | 300G           | 49, 71, 79     | 0.04   |
| 200D           | 78         | 0.66   | 201B           | 78      | 0.71   | 300GV          | 49, 71, 75, 79 | 0.06   |
| 200D90         | 80         | 0.88   | 201CAPSH       | 68      | 0.566  | 300K           | 79             | 0.23   |
| 200DSS         | 75         | 1.278  | 201FPT         | 68      | 0.04   | 300K6          | 75             | 0.23   |
| 200E           | 78         | 0.32   | 201PBIW        | 128     | 58     | 300P11PRO      | 116            | 81     |
| 200ESS         | 75         | 2.06   | 201PIH5W       | 128     | 94     | 300P11PROW     | 122            | 67     |
| 200F           | 78         | 0.31   | 201POIW        | 128     | 59     | 300PB          | 116            | 20     |
| 200F45         | 80         | 0.34   | 202CAP         | 68      | 0.34   | 300PB-SS       | 160            | 99     |
| 200F90         | 80         | 0.42   | 205PB          | 102     | 16     | 300PBI         | 140            | 125    |
| 200FF          | 79         | 0.34   | 205PB-V        | 102     | 16     | 300PBW         | 122            | 26     |
| 200FSS         | 75         | 1.55   | 205PO          | 102     | 9      | 300PH-6        | 116            | 50     |
| 200G           | 49, 79     | 0.02   | 205PO-V        | 102     | 9      | 300PH13SS      | 160            | 150    |
| 200GB          | 75         | 0.02   | 205POWV        | 104     | N/A    | 300PH13W       | 122            | 103    |
| 200GV          | 49, 75, 79 | 0.03   | 211FPT         | 68      | 0.03   | 300PH6W        | 122            | 56     |
| 200KL          | 79         | 0.18   | 222PBI         | 134     | 70     | 300PHY         | 120            | 26     |
| 200P6PRO       | 102        | 50     | 222PI6PRO      | 134     | 100    | 300PHYSS       | 160            | 140    |
| 200P6PROE      | 102        | N/A    | 222PIE5        | 136     | 180    | 300PHYW        | 120            | N/A    |
| 200P6PROV      | 102        | 51     | 222PIE51       | 136     | 190    | 300PIH-8       | 140            | 166    |
| 200P6PROW      | 104        | 48     | 222PIH5        | 134     | 82     | 300PIH13       | 140            | 176    |
| 200PB          | 102        | 15.786 | 222PIH5E       | 134     | 110    | 300PIHY        | 144            | 140    |

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| 300PL        | 78   | 0.43   | AF150GV     | 73       | 0.08   | CAP100              | 84                                     | 0.09   |
| 300PL/SS     | 75   | 1.98   | AF200       | 73       | 0.654  | CAP125              | 84                                     | 0.13   |
| 300PO        | 116  | 12     | AF200G      | 73       | 0.17   | CAP150              | 84                                     | 0.12   |
| 300PO-SS     | 160  | 115    | AF200GV     | 73       | 0.17   | CAP200              | 84                                     | 0.25   |
| 300PO-SSCF   | 160  | 97     | AF300       | 73       | 1.17   | CAP300              | 84                                     | 0.57   |
| 300POI       | 140  | 106    | AF300G      | 73       | 0.17   | CPLG025             | 83                                     | 0.03   |
| 300POW       | 122  | N/A    | AF300GV     | 73       | 0.17   | CPLG038             | 83                                     | 0.026  |
| 300POW6      | 122  | N/A    | AF400       | 73       | 1.54   | CPLG050             | 83                                     | 0.09   |
| 300SBS       | 101  | 0.25   | AF400G      | 73       | 0.45   | CPLG075             | 83                                     | 0.11   |
| 300SHM       | 79   | 0.01   | AF400GV     | 73       | 0.45   | CPLG100             | 83                                     | 0.13   |
| 301PBIW      | 142  | 135    | AFB200      | 73       | 0.69   | CPLG125             | 83                                     | 0.19   |
| 301PIH13W    | 142  | 218    | AED200      | 70       | 4.20   | CPLG150             | 83                                     | 0.3    |
| 301POIW      | 142  | 130    | AFB300      | 73       | 1.38   | CPLG200             | 83                                     | 0.34   |
| 301POWV      | 122  | N/A    | AFB400      | 73       | 1.95   | CPLG300             | 83                                     | 0.82   |
| 303B         | 78   | 1.634  | BC090       | 82       | 0.06   | CR025               | 84                                     | 0.04   |
| 303B200A     | 78   | 1.554  | BC114       | 82       | 0.05   | CR038               | 84                                     | 0.05   |
| 303C         | 78   | 1.74   | BEM5        | 131, 157 | 95     | CR050               | 84                                     | 0.13   |
| 333PBI       | 146  | 185    | BEM5-182CZ  | 137      | 95     | CR075               | 84                                     | 0.35   |
| 333PIE15     | 146  | 242    | BEM51-182CZ | 137      | 95     | CR100               | 84                                     | 0.27   |
| 333PIH13     | 146  | 285    | BF075       | 69       | 0.82   | CR125               | 84                                     | 0.72   |
| 333POI       | 146  | 90     |             |          |        | CR150               | 84                                     | 0.74   |
| 333POICF     | 146  | 190    | BF075BD     | 70       | 0.88   | CR200               | 84                                     | 0.75   |
| 400A         | 78   | 1.31   | BF100       | 69       | 0.82   | CTS200AR            | 64                                     | 0.65   |
| 400B         | 78   | 2.03   | BF100BD     | 70       | 0.9    | CTS200D             | 64                                     | 0.85   |
| 400C         | 78   | 2.39   | BF100GE     | 69, 70   | 0.07   | CV050               | 16                                     | 0.27   |
| 400CAP       | 78   | 1.44   | BF100GRE    | 70       | 0.01   | CV100               | 16                                     | 0.222  |
| 400D         | 78   | 2.07   | BF100GRV    | 70       | 0.01   | CV100MT             | 16                                     | 0.222  |
| 400E         | 78   | 2.07   | BF107       | 107, 137 | 0.1    | CV100W1             | 105, 113, 115, 123, 125, 139, 149, 151 | 0.17   |
| 400E<br>400F | 78   | 1.47   | BF125       | 69       | 0.82   | CV10175<br>CV10175V | 123                                    |        |
|              | 79   |        | BF150       | 69       | 1.26   |                     |  | N/A    |
| 400G         |  | 0.06   | BF150BD     | 70       | 1.32   | CV221               | 16                                     | 1      |
| 400GV        | 75, 79   | 0.19   | BF200       | 69       | 1.07   | CV300               | 16                                     | 1.45   |
| 400PL        | 78   | 1.11   | BF200BD     | 70       | 1.2    | CV301               | 16                                     | N/A    |
| 400SHM       | 79   | 0.01   | BF200GE     | 69, 70   | 0.05   | DB20153M            | 56, 57                                 | 0.5    |
| 444PIH24     | 152  | 345    | BF200GFV    | 70       | 0.05   | DB20290             | 56, 57                                 | 0.004  |
| 444POI       | 152  | 120    | BF200GV     | 69, 70   | 0.05   | DM100ABSS           | 60                                     | 3.5    |
| 75A1/2       | 76   | 0.07   | BF200V      | 69       | 1.07   | DM100ASS            | 60                                     | 3.5    |
| 75A1/4       | 76   | 0.08   | BF207       | 151      | 0.125  | DM100CAP            | 60                                     | 0.19   |
| 75A3/4       | 77   | 0.05   | BF220       | 69       | 1.45   | DM100DBSS           | 60                                     | 3.75   |
| 75B1/2       | 76   | 0.14   | BF220BD     | 70       | 1.5    | DM100DBSST          | 60                                     | 3.75   |
| 75B3/4       | 77   | 0.14   | BF220GE     | 69, 70   | 0.154  | DM100DSS            | 60                                     | 3.75   |
| 75G          | 79   | 0.1    | BF220GV     | 69, 70   | 0.08   | DM100DSSE           | 60                                     | 3.75   |
| 75GV         | 75, 79   | 0.1    | BF300       | 69       | 2.264  | DM100PL             | 60                                     | 0.234  |
| 75PL         | 76, 77, 78                                     | 0.05   | BF300BD     | 70       | 2.42   | DM101SS             | 60                                     | 0.346  |
| 75SHM        | 79   | 0.01   | BF300GE     | 69, 70   | 0.2    | DM10294A            | 60                                     | 0.01   |
| A204         | 103, 105, 107, 109, 111, 113, 115, 117,        | NI/A   | BF300GFE    | 70       | 0.02   | DM10295A            | 60                                     | 0.006  |
| A204         | 119, 121, 123, 125, 135, 137, 139,<br>149, 151 | N/A    | BF300GFV    | 70       | 0.02   | DM10296             | 60                                     | 0.1    |
| A204V        | 103, 107, 123                                  | N/A    | BF300GV     | 69, 70   | 0.02   | DM102SSE            | 60                                     | 0.384  |
| AF100        | 73   | 0.3    | BM1070      | 123      | N/A    | DM102SST            | 60                                     | 0.125  |
| AF100G       | 73   | 0.06   | CAP025      | 84       | 0.03   | DM102SSV            | 60                                     | 0.386  |
| AF100GV      | 73   | 0.06   |             |          | _      | DM150A              | 56                                     | 2.64   |
| AF150        | 73   | 0.43   | CAP038      | 84       | 0.03   | DM150AB             | 56                                     | 2.2    |
| AF150G       | 73   | 0.08   | CAP050      | 84       | 0.06   | DM150ABSS           | 61                                     | 6.3    |
|              | 1  |        | CAP075      | 84       | 0.052  | J 1007 ID00         | 1 01                                   | J 0.0  |

| PART NO    | PAGE(S)        | WEIGHT | PART NO    | PAGE(S)            | WEIGHT | PART NO    | PAGE(S)                | WEIGHT |
|------------|----------------|--------|------------|--------------------|--------|------------|------------------------|--------|
| DM150AE    | 56             | 2.75   | DM25153M   | 58                 | N/A    | EV200SLXR1 | 24                     | 5      |
| DM150ASS   | 61             | 6.35   | DM25200    | 58                 | N/A    | EV200XR1   | 22                     | 5      |
| DM150D     | 56             | 2.64   | DM25294    | 63                 | N/A    | EV20210    | 22, 24, 31, 32         | 0.246  |
| DM150DB    | 56             | 2.2    | DM25294E   | 63                 | N/A    | EV204BLFP  | 24                     | 8.06   |
| DM150DBSS  | 61             | 6.9    | DM25294T   | 63                 | 0.048  | EV204BLXR1 | 24                     | 6      |
| DM150DBSSE | 61             | 6.9    | DM300ACF   | 39                 | 7.72   | EV204FP    | 22                     | 6.72   |
| DM150DE    | 56             | 2.82   | DM300AFP   | 59                 | 4.8    | EV204SLFP  | 24                     | 7.66   |
| DM150DSS   | 61             | 6.9    | DM300CAP   | 59                 | 2.82   | EV204SLXR1 | 24                     | 6      |
| DM150DSSE  | 61             | 6.9    | DM300DCF   | 39                 | 8.4    | EV204XR1   | 23                     | 5      |
| DM200A     | 57             | 3.007  | DM300DFP   | 59                 | 8.4    | EV25210    | 23, 24, 31, 32         | 0.352  |
| DM200AB    | 57             | 2.2    | DM300PL    | 59                 | 1      | EV300FP    | 22                     | 12     |
| DM200ABSS  | 62             | 5.768  | DM35153F   | 39, 59             | 0.466  | EV300XR1A  | 22                     | N/A    |
| DM200ACAP  | 61, 62         | 1      | DM35153M   | 39, 60             | 0.662  | EV3300     | 22, 24, 31, 32         | 2.88   |
| DM200ACF   | 39             | 3.15   | DM35200    | 39, 61             | N/A    | EV35210    | 22, 31                 | N/A    |
| DM200AE    | 57             | 2.75   | DB20295    | 56, 57, 61, 62     | N/A    | EV4300     | 22, 24, 31, 32         | 3.305  |
| DM200APL   | 61, 62         | 0.49   | DM35294    | 59                 | 0.086  | EVR075     | 23                     | 4.5    |
| DM200ASS   | 62             | 6.2    | DMMT201A   | 57                 | 2.5    | EVR100FP   | 23                     | 4.5    |
| DM200AT    | 57             | 2.2    | DMMT201AE  | 57                 | 2.5    | EVR204FP   | 23                     | 7      |
| DM200CAP   | 56, 57         | 0.38   | DPCF100    | 55                 | 0.5    | EVR3300    | 23, 31                 | N/A    |
| DM200CAF   | 57             | 2.75   | DPCM100    | 55                 | 0.25   | EVR4300    | 23, 31                 | N/A    |
| DM200DB    | 57             | 2.73   | DPCMT100   | 55                 | 0.23   | EVX100     | 18, 3                  | 3.96   |
|            |                | _      |            |                    | _      |            |                        |        |
| DM200DBSS  | 62             | 6.9    | EL025-90   | 85                 | 0.016  | EVX125     | 18, 3                  | 3.88   |
| DM200DBSSE | 62             | 6.9    | EL038-90   | 85                 | 0.04   | EVX150     | 18, 3                  | 4.45   |
| DM200DCF   | 39             | 2.75   | EL050-90   | 85                 | 0.07   | EVX200     | 19, 27, 3              | 4.92   |
| DM200DE    | 57             | 3      | EL075-90   | 85                 | 0.1    | EVX220     | 19, 27, 3              | 4.92   |
| DM200DSS   | 62             | 6.9    | EL100-45   | 85                 | 0.14   | EVX300     | 20, 3                  | 9.12   |
| DM200DSSE  | 62             | 6.9    | EL100-90   | 85                 | 0.15   | EVXR100    | 18, 3                  | 4.02   |
| DM200DSST  | 62             | 6.9    | EL125-90   | 85                 | 0.22   | EVXR125    | 18, 3                  | 3.98   |
| DM200DT    | 57             | 2.75   | EL150-90   | 85                 | 0.33   | EVXR150    | 18, 3                  | 4.51   |
| DM200PL    | 56, 57         | 0.49   | EL200-90   | 85                 | 0.44   | EVXR200    | 19, 3                  | 4.39   |
| DM20153F   | 39, 56, 57     | 0.252  | EL300-90   | 85                 | 1.21   | EVXR220    | 19, 3                  | 4.98   |
| DM20153M   | 39, 56, 57     | 0.412  | EV075      | 22                 | 4.94   | EVXR300    | 20, 3                  | N/A    |
| DM201SS    | 61, 62         | 1.158  | EV075BL    | 24                 | 4.96   | FC100      | 22, 23, 24, 31, 32, 49 | 0.25   |
| DM20200A   | 39, 56, 57     | 0.242  | EV075BLXR1 | 24                 | 4.2    | FC200      | 49                     | 0.23   |
| DM20200D   | 39, 56, 57     | 0.254  | EV075SL    | 24                 | 4.94   | FC220      | 41, 49                 | 0.25   |
| DM20294A   | 56, 57, 61, 62 | 0.016  | EV075SLXR1 | 24                 | 4.2    | FC220B     | 49                     | 1.364  |
| DM20296    | 56, 57, 61, 62 | 0.125  | EV075XR1   | 22, 23             | 4.2    | FC220TB    | 49                     | 0.43   |
| DM202SSE   | 61, 62         | 1.25   | EV100BL    | 24                 | 4.5    | FC300      | 41, 49                 | 0.34   |
| DM202SST   | 61, 62         | 1.3    | EV100BLXR1 | 24                 | 4.2    | FC300B     | 49                     | 1.76   |
| DM202SSV   | 61, 62         | 1.32   | EV100FP    | 22                 | 4.2    | FC300TB    | 49                     | 0.52   |
| DM220A     | 58             | 4.3    | EV100SL    | 24                 | 4.5    | FM100      | 42                     | 2.75   |
| DM220ABSS  | 63             | 0.43   | EV100SLXR1 | 24                 | 4.2    | GHFT075A   | 81                     | 0.06   |
| DM220ASS   | 63             | 7.8    | EV100XR1   | 22, 23             | 4.2    | GHFT075D   | 81                     | 0.17   |
| DM220CAP   | 58, 63         | 1      | EV10210    | 22, 23, 24, 31, 32 | 0.23   | GHFT075G   | 81                     | N/A    |
| DM220D     | 58             | N/A    | EV125      | 22                 | 4.88   | GHFT075MPT | 81                     | 0.04   |
| DM220DBSS  | 63             | 7      | EV125XR1   | 22                 | 1.39   | GHMT075B   | 81                     | 0.14   |
| DM220DSS   | 63             | 9.8    | EV150      | 22                 | 6.36   | GHMT075F   | 81                     | 0.05   |
| DM220PL    | 63             | 1      | EV150SL    | 24                 | 6.48   | GHMT075FPT | 81                     | 0.04   |
| DM221PL    | 58             | N/A    | EV150SLXR1 | 24                 | 5      | GHMT075MPT | 81                     | 0.04   |
| DM221SS    | 63             | 0.206  | EV150XR1   | 22                 | 5      | GHN075     | 81                     | 0.6    |
| DM222SS    | 63             | 0.216  | EV200      | 22                 | 6.41   | HB025      | 86                     | 0.01   |
| DM25153F   | 58             | N/A    | EV200SL    | 24                 | 7      | HB025-038  | 86                     | 0.012  |
|            |                |        |            |                    |        |            |                        |        |

| H802-9385    66  |              |     |       |              |     |      |          |     |        |
|--|--------------|-----|-------|--------------|-----|------|----------|-----|--------|
| MB022-5005   86  | PART NO      | ` , |       | PART NO      |     |      | PART NO  | . , | WEIGHT |
| HENDERS   BE   | HB025-038SS  |     | 0.07  | HB150-200    | 86  | 0.19 | L150B    | 79  | 0.58   |
| PRISCES-800   88   | HB025-050    | 86  | 0.48  | HB150-90     | 86  | 0.23 | L150C    | 79  | 0.58   |
| HERDONS   HERDON    | HB025-050SS  | 86  | 0.07  | HB150/125-90 | 86  | 0.16 | L150CAP  | 79  | 0.55   |
| H80025558 80   | HB025-90     | 86  | 0.01  | HB150SS      | 86  | 0.68 | L150D    | 79  | 0.6    |
| HeB028SS   | HB025/038-90 | 86  | 0.01  | HB200        | 86  | 0.2  | L200B    | 79  | 0.64   |
| He008   66   | HB025/050-90 | 86  | 0.022 | HB200-150    | 86  | 0.18 | L200C    | 79  | 0.7    |
| H8058-000S  66   | HB025SS      | 86  | 0.04  | HB200-90     | 86  | 0.33 | L200CAP  | 79  | 0.62   |
| H8038-6508S   66   | HB038        | 86  | 0.01  | HB200/150-90 | 86  | 0.22 | L200D    | 79  | 0.736  |
| H8038 90   86  | HB038-050    | 86  | 0.02  | HB200SS      | 86  | 1.13 | LEV038   | 21  | 0.55   |
| HB008 80   86  | HB038-050SS  | 86  | 0.1   | HB300        | 86  | 0.7  | LEV038PL | 21  | 0.08   |
| HB038SS  | HB038-90     | 86  | 0.02  | HB300-90     | 86  | 1.05 | LEV050   | 21  | 0.6    |
| H8060  | HB038SS      |     | 0.09  | HB300SS      | 86  | _    |          |     | 0.35   |
| H8869-025  | HB050        |     |       |              | 86  |      |          |     | 0.35   |
| MB050-038  |              |     |       |              |     | _    |          |     | 0.37   |
| HB050-058SS  |              |     |       |              |     | _    |          |     | 0.22   |
| HB050-0755   |              |     |       |              |     | _    |          |     | 0.298  |
| HB050-075SS  |              |     |       |              |     |      |          |     |        |
| HB050-00   |              |     |       |              |     | _    |          |     | 0.33   |
| HB050018-90   86   |              |     |       |              |     | _    |          |     | 0.35   |
| HB0501075-90   |              |     |       |              |     |      |          |     | 0.194  |
| HB050SS  |              |     |       |              |     | -    |          |     | 0.086  |
| HB075   86   |              |     |       |              |     |      |          |     | 0.004  |
| HB075-038  |              |     |       |              |     | _    |          |     | 0.004  |
| HB075-0505   B6  |              |     |       |              |     | _    |          |     | 0.91   |
| HB075-050SS  |              |     |       |              |     | _    |          |     | _      |
| HB075-058   86   |              |     |       |              |     | _    |          |     | 0.96   |
| HB075-100  |              |     |       |              |     | _    |          |     | 0.636  |
| HB075-100SS  |              |     |       |              |     | _    |          |     | 0.030  |
| HB075-90   |              |     | _     |              |     | _    |          |     | _      |
| HB075/050-90   |              |     |       |              |     |      |          |     | _      |
| HB075/100-90   86  |              |     |       |              |     | _    |          |     | _      |
| HB075SS   86   |              |     |       |              |     |      |          |     | _      |
| HB100  |              |     |       |              |     |      |          |     | _      |
| HB100-075   86   0.06   HBT300   87   1.15   LS125-80   94   0.9   HB100-075SS   86   0.3   HM025   87   0.03   LS125-B   95   0.59   HB100-125   86   0.08   HM038   87   0.03   LS125-B   95   0.820   HB100-90   86   0.07   HM050   87   0.01   LS140   51,95   0.07   HB100/075-90   86   0.06   HM075   87   0.026   LS150-06   96   2.42   HB100/125-90   86   0.1   HM100   87   0.04   LS150-12   96   2.42   HB100SS   86   0.3   HM125   87   0.07   LS150-120   96   2.5   HB125   86   0.1   HM150   87   0.08   LS150-20   96   2.42   HB125-075   86   0.08   HM200   87   0.02   LS150-30   96   2.5   HB125-100   86   0.09   HM300   87   0.22   LS150-30   96   2.5   HB125-150   86   0.1   HSV1000   108, 114, 120, 132, 144, 150, 158   11   LS150-B   97   1.406   HB125/100-90   86   0.09   HY1001   145   1.5   LS150-C   51, 97   0.03   HB125SS   86   0.5   HY1012   145, 151   13.2   LS150-G   51, 97   0.03   HB125SS   86   0.13   HY1013   109, 121, 159   4.5   LS150B/C   97   1.91   HB150-100   86   0.09   HY10131   115   N/A   LS180   51, 95   2.12   HB150-100   86   0.09   HY10131   115   N/A   LS180   51, 95   2.12   HB150-100   86   0.09   HY10131   115   N/A   LS180   51, 95   2.12   HB150-100   86   0.09   HY10131   115   N/A   LS180   51, 95   2.12   HB150-100   86   0.09   HY10131   115   N/A   LS180   51, 95   2.12   HB150-100   86   0.09   HY10131   115   N/A   LS180   51, 95   2.12   HB150-100   86   0.09   HY10131   115   N/A   LS180   51, 95   2.12   HB150-100   86   0.09   HY10131   115   N/A   LS180   51, 95   2.12   HB150-100   86   0.09   HY10131   115   N/A   LS180   51, 95   2.12   HB150-100   86   0.09   HY10131   115   N/A   LS180   51, 95   2.12   HB150-100   86   0.09   HY10131   115   N/A   LS180   51, 95   2.12   HB150-100   86   0.09   HY10131   115   N/A   LS180   51, 95   2.12   HB150-100   86   0.09   HY10131   115   N/A   LS180   51, 95   2.12   HB150-100   86   0.09   HY10131   115   N/A   LS180   51, 95   2.12   HB150-100   86   0.09   HY10131   115   N/A   LS180   51, 95   2.12   HB150-10 |              |     |       |              |     | _    |          |     | _      |
| HB100-075SS   86   |              |     |       |              |     | _    |          |     | _      |
| HB100-125   86   0.08   HM038   87   0.03   LS125B/C1   95   0.824     HB100-90   86   0.07   HM050   87   0.01   LS140   51,95   0.07     HB100/075-90   86   0.06   HM075   87   0.026   LS150-06   96   2.42     HB100/125-90   86   0.1   HM100   87   0.04   LS150-12   96   2.42     HB100SS   86   0.3   HM125   87   0.07   LS150-120   96   2.5     HB125   86   0.1   HM150   87   0.08   LS150-20   96   2.42     HB125-075   86   0.08   HM200   87   0.02   LS150-30   96   2.5     HB125-100   86   0.09   HM300   87   0.22   LS150-30   96   2.5     HB125-150   86   0.1   HSV1000   108, 114, 120, 132, 144, 150, 158   11   LS150-80   96   2.5     HB125-90   86   0.11   HV200   40   0.58   LS150-B   97   1.400     HB125/100-90   86   0.09   HY1001   145   1.5   LS150-G   51, 97   0.03     HB125SS   86   0.5   HY1012   145, 151   13.2   LS150-GV   51, 97   0.03     HB150-100   86   0.09   HY1013   109, 121, 159   4.5   LS150B/C   97   1.91     HB150-100   86   0.09   HY1013   109, 121, 159   4.5   LS150B/C   97   1.91     HB150-100   86   0.09   HY1013   115   N/A   LS180   51, 95   2.12     HB150-100   86   0.09   HY1013   115   N/A   LS180   51, 95   2.12     HB150-100   86   0.09   HY10131   115   N/A   LS180   51, 95   2.12     HB150-100   86   0.09   HY10131   115   N/A   LS180   51, 95   2.12     HB150-100   86   0.09   HY10131   115   N/A   LS180   51, 95   2.12     HB150-100   86   0.09   HY10131   115   N/A   LS180   51, 95   2.12     HB150-100   86   0.09   HY10131   115   N/A   LS180   51, 95   2.12     HB150-100   86   0.09   HY10131   115   N/A   LS180   51, 95   2.12     HB150-100   86   0.09   HY10131   115   N/A   LS180   51, 95   2.12     HB150-100   86   0.09   HY10131   115   N/A   LS180   51, 95   2.12     HB150-100   86   0.09   HY10131   115   N/A   LS180   51, 95   2.12     HB150-100   86   0.09   HY10131   115   N/A   LS180   51, 95   2.12     HB150-100   86   0.09   HY10131   115   N/A   LS180   51, 95   2.12     HB150-100   86   0.09   HY10131   115   N/A   LS180   51, 95   2.12     HB150-100  |              |     |       |              |     | _    |          |     | _      |
| HB100-90   86   0.07   HM050   87   0.01   LS140   51,95   0.07     HB100/075-90   86   0.06   HM075   87   0.026   LS150-06   96   2.42     HB100/125-90   86   0.1   HM100   87   0.04   LS150-12   96   2.42     HB100SS   86   0.3   HM125   87   0.07   LS150-120   96   2.5     HB125   86   0.1   HM150   87   0.08   LS150-20   96   2.42     HB125-075   86   0.08   HM200   87   0.22   LS150-30   96   2.5     HB125-100   86   0.09   HM300   87   0.73   LS150-50   96   2.5     HB125-150   86   0.1   HSV1000   108,114,120,132,144,150,158   11   LS150-80   96   2.5     HB125-90   86   0.11   HV200   40   0.58   LS150-B   97   1.40     HB125/100-90   86   0.09   HY1001   145   1.5   LS150-C   51,97   0.57     HB125SS   86   0.5   HY1012   145,151   13.2   LS150-G   51,97   0.03     HB150-100   86   0.09   HY1013   109,121   1.5   LS150-G   97   1.91     HB150-100   86   0.09   HY1013   109,121,159   4.5   LS150-B/C   97   1.91     HB150-100   86   0.09   HY1013   115   N/A   LS180   51,95   2.12     HB150-100   86   0.09   HY10131   115   N/A   LS180   51,95   2.12     HB150-100   86   0.09   HY10131   115   N/A   LS180   51,95   2.12  |              |     |       |              |     | _    |          |     | _      |
| HB100/075-90         86         0.06         HM075         87         0.026         LS150-06         96         2.42           HB100/125-90         86         0.1         HM100         87         0.04         LS150-12         96         2.42           HB100SS         86         0.3         HM125         87         0.07         LS150-120         96         2.5           HB125         86         0.1         HM150         87         0.08         LS150-20         96         2.42           HB125-075         86         0.08         HM200         87         0.22         LS150-30         96         2.5           HB125-100         86         0.09         HM300         87         0.73         LS150-50         96         2.5           HB125-150         86         0.1         HSV1000         108, 114, 120, 132, 144, 150, 158         11         LS150-80         96         2.5           HB125-90         86         0.1         HV200         40         0.58         LS150-B         97         1.40           HB125/100-90         86         0.09         HY1001         145         1.5         LS150-G         51, 97         0.57           HB125  |              |     |       |              |     |      |          |     | _      |
| HB100/125-90         86         0.1         HM100         87         0.04         LS150-12         96         2.42           HB100SS         86         0.3         HM125         87         0.07         LS150-120         96         2.5           HB125         86         0.1         HM150         87         0.08         LS150-20         96         2.42           HB125-075         86         0.08         HM200         87         0.22         LS150-30         96         2.5           HB125-100         86         0.09         HM300         87         0.73         LS150-50         96         2.5           HB125-150         86         0.1         HSV1000         108, 114, 120, 132, 144, 150, 158         11         LS150-80         96         2.5           HB125-90         86         0.11         HV200         40         0.58         LS150-B         97         1.40           HB125/100-90         86         0.09         HY1001         145         1.5         LS150-C         51, 97         0.576           HB125/150-90         86         0.09         HY1003         109, 121         1.5         LS150-G         51, 97         0.03  |              |     |       |              |     | -    |          |     | _      |
| HB100SS         86         0.3         HM125         87         0.07         LS150-120         96         2.5           HB125         86         0.1         HM150         87         0.08         LS150-20         96         2.42           HB125-075         86         0.08         HM200         87         0.22         LS150-30         96         2.5           HB125-100         86         0.09         HM300         87         0.73         LS150-50         96         2.5           HB125-150         86         0.1         HSV1000         108, 114, 120, 132, 144, 150, 158         11         LS150-80         96         2.5           HB125-90         86         0.11         HV200         40         0.58         LS150-B         97         1.404           HB125/100-90         86         0.09         HY1001         145         1.5         LS150-C         51, 97         0.576           HB125/150-90         86         0.09         HY1003         109, 121         1.5         LS150-G         51, 97         0.03           HB125SS         86         0.5         HY1012         145, 151         13.2         LS150-GV         51, 97         0.03   |              |     |       |              |     | _    |          |     | _      |
| HB125         86         0.1         HM150         87         0.08         LS150-20         96         2.42           HB125-075         86         0.08         HM200         87         0.22         LS150-30         96         2.5           HB125-100         86         0.09         HM300         87         0.73         LS150-50         96         2.5           HB125-150         86         0.1         HSV1000         108, 114, 120, 132, 144, 150, 158         11         LS150-80         96         2.5           HB125-90         86         0.11         HV200         40         0.58         LS150-8         97         1.404           HB125/100-90         86         0.09         HY1001         145         1.5         LS150-C         51, 97         0.576           HB125/150-90         86         0.09         HY1003         109, 121         1.5         LS150-G         51, 97         0.03           HB125SS         86         0.5         HY1012         145, 151         13.2         LS150-GV         51, 97         0.03           HB150         86         0.13         HY1013         109, 121, 159         4.5         LS150B/C         97         1.91   |              |     |       |              |     | _    |          |     | _      |
| HB125-075         86         0.08         HM200         87         0.22         LS150-30         96         2.5           HB125-100         86         0.09         HM300         87         0.73         LS150-50         96         2.5           HB125-150         86         0.1         HSV1000         108, 114, 120, 132, 144, 150, 158         11         LS150-80         96         2.5           HB125-90         86         0.11         HV200         40         0.58         LS150-B         97         1.40           HB125/100-90         86         0.09         HY1001         145         1.5         LS150-C         51, 97         0.576           HB125/150-90         86         0.09         HY1003         109, 121         1.5         LS150-G         51, 97         0.03           HB125SS         86         0.5         HY1012         145, 151         13.2         LS150-GV         51, 97         0.03           HB150         86         0.13         HY1013         109, 121, 159         4.5         LS150B/C         97         1.91           HB150-100         86         0.09         HY10131         115         N/A         LS180         51, 95         2.12  |              |     |       |              |     | _    |          |     | _      |
| HB125-100         86         0.09         HM300         87         0.73         LS150-50         96         2.5           HB125-150         86         0.1         HSV1000         108, 114, 120, 132, 144, 150, 158         11         LS150-80         96         2.5           HB125-90         86         0.11         HV200         40         0.58         LS150-B         97         1.404           HB125/100-90         86         0.09         HY1001         145         1.5         LS150-C         51, 97         0.576           HB125/150-90         86         0.09         HY1003         109, 121         1.5         LS150-G         51, 97         0.03           HB125SS         86         0.5         HY1012         145, 151         13.2         LS150-GV         51, 97         0.03           HB150         86         0.13         HY1013         109, 121, 159         4.5         LS150B/C         97         1.91           HB150-100         86         0.09         HY10131         115         N/A         LS180         51, 95         2.12   |              |     |       |              |     |      |          |     | _      |
| HB125-150         86         0.1         HSV1000         108, 114, 120, 132, 144, 150, 158         11         LS150-80         96         2.5           HB125-90         86         0.11         HV200         40         0.58         LS150-B         97         1.404           HB125/100-90         86         0.09         HY1001         145         1.5         LS150-C         51, 97         0.576           HB125/150-90         86         0.09         HY1003         109, 121         1.5         LS150-G         51, 97         0.03           HB125SS         86         0.5         HY1012         145, 151         13.2         LS150-GV         51, 97         0.03           HB150         86         0.13         HY1013         109, 121, 159         4.5         LS150B/C         97         1.91           HB150-100         86         0.09         HY10131         115         N/A         LS180         51, 95         2.12   |              |     |       |              |     | _    |          |     | _      |
| HB125-90         86         0.11         HV200         40         0.58         LS150-B         97         1.404           HB125/100-90         86         0.09         HY1001         145         1.5         LS150-C         51, 97         0.576           HB125/150-90         86         0.09         HY1003         109, 121         1.5         LS150-G         51, 97         0.03           HB125SS         86         0.5         HY1012         145, 151         13.2         LS150-GV         51, 97         0.03           HB150         86         0.13         HY1013         109, 121, 159         4.5         LS150B/C         97         1.91           HB150-100         86         0.09         HY10131         115         N/A         LS180         51, 95         2.12   |              |     |       |              |     |      |          |     | _      |
| HB125/100-90         86         0.09         HY1001         145         1.5         LS150-C         51, 97         0.576           HB125/150-90         86         0.09         HY1003         109, 121         1.5         LS150-G         51, 97         0.03           HB125SS         86         0.5         HY1012         145, 151         13.2         LS150-GV         51, 97         0.03           HB150         86         0.13         HY1013         109, 121, 159         4.5         LS150B/C         97         1.91           HB150-100         86         0.09         HY10131         115         N/A         LS180         51, 95         2.12   |              |     |       |              |     |      |          |     | _      |
| HB125/150-90         86         0.09         HY1003         109, 121         1.5         LS150-G         51, 97         0.03           HB125SS         86         0.5         HY1012         145, 151         13.2         LS150-GV         51, 97         0.03           HB150         86         0.13         HY1013         109, 121, 159         4.5         LS150B/C         97         1.91           HB150-100         86         0.09         HY10131         115         N/A         LS180         51, 95         2.12  |              |     |       |              |     |      |          |     | 1.404  |
| HB125SS         86         0.5         HY1012         145, 151         13.2         LS150-GV         51, 97         0.03           HB150         86         0.13         HY1013         109, 121, 159         4.5         LS150B/C         97         1.91           HB150-100         86         0.09         HY10131         115         N/A         LS180         51, 95         2.12   |              |     |       |              |     |      |          |     | 0.576  |
| HB150         86         0.13         HY1013         109, 121, 159         4.5         LS150B/C         97         1.91           HB150-100         86         0.09         HY10131         115         N/A         LS180         51, 95         2.12  |              |     |       |              | · · | _    |          |     | 0.03   |
| HB150-100 86 0.09 HY10131 115 N/A LS180 51, 95 2.12  |              |     |       |              | · · | _    |          |     | 0.03   |
|  |              |     |       |              |     |      |          |     | 1.91   |
| HB150-125   86   0.1 HY10132   115   N/A LS200-06   96   2.5   |              |     | 0.09  |              |     | N/A  |          |     | 2.12   |
|  | HB150-125    | 86  | 0.1   | HY10132      | 115 | N/A  | LS200-06 | 96  | 2.5    |

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| LS200-12   | 96         | 2.33   | LSQ200-GV  | 93                 | 0.162  | LST150-B     | 51, 91  | 0.22   |
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| LS200-30   | 96         | 2.42   | LSQ200-RV  | 93, 97             | 0.004  | LST150-H     | 91      | 1.122  |
| LS200-50   | 96         | 2.42   | LSQ200R1   | 93                 | 0.002  | LST150-HB    | 91      | 1.794  |
| LS200-80   | 96         | 2.42   | LSS300-B   | 98, 99             | 23.902 | LST15100     | 51, 91  | 0.27   |
| LS200-B    | 97         | 1.254  | LSS300-BC  | 98, 99             | 23.88  | LST1516      | 51, 91  | 0.196  |
| LS200B/C   | 97         | 2      | LSS300-C   | 98, 99             | 2.91   | LST1530      | 51, 91  | 0.17   |
| LS206      | 51, 93, 97 | 0.3    | LSS300-G   | 98, 99             | 0.1    | LST1550      | 51, 91  | 0.15   |
| LS2100     | 97         | 0.09   | LSS300-GV  | 98, 99             | 0.044  | LST1580      | 51, 91  | 0.1    |
| LS212      | 51, 93, 97 | 0.29   | LSS300-H   | 99                 | 1.724  | LST180       | 51, 91  | 0.07   |
| LS2120     | 51, 93, 97 | 0.08   | LSS300-S   | 98, 99             | 0.032  | LST200-10SS  | 92      | 16     |
| LS212P     | 97         | 0.134  | LSS300-SV  | 98, 99             | 0.05   | LST200-16SS  | 92      | 16     |
| LS220      | 51, 93, 97 | 0.2    | LSS306     | 99                 | 0.198  | LST200-30SS  | 92      | 16     |
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| LS230      | 51, 93, 97 | 0.188  | LSS312     | 99                 | 0.37   | LST200-80SS  | 92      | 16     |
| LS250      | 51, 93, 97 | 0.13   | LSS320     | 99                 | 0.4    | LST200-B     | 93      | 1.946  |
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| LS280      | 51, 93, 97 | 0.110  | LSS350     | 99                 | 0.366  | LST200-HBSS  | 93      | 0.35   |
| LS300EC    | 53, 99     | 0.626  | LST075-100 | 90                 | 0.83   | LST200-HSS   | 93      | 1.614  |
| LS300LC    | 53, 99     | 0.598  |            | 90                 |        | LST204SS     | 53, 93  | 0.416  |
| LS308      |            | _      | LST075-16  | 90                 | 0.824  |              |         |        |
|            | 53, 99     | 1.106  | LST075-30  |                    | 0.84   | LST206SS     | 53, 93  | 0.382  |
| LS312      | 53, 99     | 4.31   | LST075-50  | 90                 | 0.84   | LST208SS     | 53, 93  | 0.326  |
| LS320      | 53, 99     | 1.03   | LST075-80  | 90                 | 0.83   | LST2100SS    | 53      | 0.45   |
| LS350      | 53, 99     | 0.92   | LST075-H   | 91                 | 0.518  | LST210SS     | 53, 93  | 0.48   |
| LS720      | 95         | 0.04   | LST075-HB  | 91                 | 0.738  | LST216SS     | 53, 93  | 0.27   |
| LS740      | 95         | 0.04   | LST100-100 | 90                 | 0.76   | LST230SS     | 53, 93  | 0.49   |
| LS760      | 95         | 0.022  | LST100-16  | 90                 | 0.78   | LST250SS     | 53, 93  | 0.49   |
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| LSQ150-06  | 92         | 4.17   | LST100-H   | 91                 | 0.474  | LSTM050-100C | 88      | 0.314  |
| LSQ150-12  | 92         | 4.17   | LST100-HB  | 91                 | 2.25   | LSTM050-30   | 88      | 0.76   |
| LSQ150-120 | 92         | 4.17   | LST1100    | 51, 91             | 0.07   | LSTM050-30C  | 88      | 0.324  |
| LSQ150-20  | 92         | 4.17   | LST116     | 51, 91             | 0.084  | LSTM050-50   | 88      | 0.3    |
| LSQ150-30  | 92         | 4.17   | LST125-100 | 90                 | 2.26   | LSTM050-50C  | 88      | 0.76   |
| LSQ150-50  | 92         | 4.17   | LST125-16  | 90                 | 2.032  | LSTM050-80   | 88      | 0.76   |
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| LSQ150-B   | 93         | 1.966  | LST125-50  | 90                 | 2.24   | LSTM050B     | 89      | 0.098  |
| LSQ200-06  | 92         | 4.17   | LST125-80  | 90                 | 2.18   | LSTM050BC    | 89      | N/A    |
| LSQ200-12  | 92         | 4.17   | LST125-H   | 91                 | 1.19   | LSTM050G     | 89      | 0.02   |
| LSQ200-120 | 92         | 4.17   | LST125-HB  | 91                 | 1.846  | LSTM050H     | 89      | 0.174  |
| LSQ200-20  | 92         | 4.17   | LST130     | 51, 91             | 0.07   | LSTM075-100  | 88      | 0.76   |
| LSQ200-30  | 92         | 4.17   | LST150     | 51, 91             | 0.07   | LSTM075-100C | 88      | 0.3    |
| LSQ200-50  | 92         | 4.17   | LST150-100 | 90                 | 1.9    | LSTM075-30   | 88      | 0.76   |
| LSQ200-80  | 92         | 4.17   | LST150-16  | 90                 | 1.982  | LSTM075-30C  | 88      | 0.31   |
| LSQ200-B   | 93         | 1.818  | LST150-30  | 90                 | 2.12   | LSTM075-50   | 88      | 0.288  |
| LSQ200-C   | 93         | 1.74   | LST150-50  | 90                 | 2.15   | LSTM075-50C  | 88      | 0.308  |
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| LV025MTV        | 6       | 0.06   | M100PA       | 40            | 0.25   | M200SWFSS    | 44      | 0.68   |
| LV025V          | 6       | 0.054  | M100PAC      | 40            | 0.32   | M200SWP90    | 43      | 0.38   |
| LV038050MTLV    | 6       | 0.07   | M100PAT      | 40            | 0.65   | M200TEE      | 45      | 0.6    |
| LV038050MTV     | 6       | 0.058  | M100PLG      | 47            | 0.05   | M200YG45     | 45      | 1.3    |
| LV038MTV        | 6       | 0.07   | M100PLG025   | 47            | 0.04   | M201G        | 49      | 0.05   |
| LV038V          | 6       | 0.07   | M100PLG050   | 47            | 0.04   | M220100BRB   | 48      | 0.15   |
| LV050100MTLV    | 6       | 0.125  | M100SWFSS    | 44            | 0.32   | M220100CPG   | 45      | 0.15   |
| LV050100MTV     | 6       | 0.11   | M100SWP90    | 43            | 0.13   | M220100TEE   | 45      | 0.4    |
| LV050MTV        | 6       | 0.096  | M100SWPG90   | 43            | 0.13   | M220125BRB   | 48      | 0.16   |
| LV050SLLV       | 6       | 0.12   | M100TEE      | 45            | 0.2    | M220150BRB   | 48      | 0.16   |
| LV050SLV        | 6       | 0.08   | M101G        | 49            | 0.006  | M220150BRB90 | 48      | 0.21   |
| LV050V          | 6       | 0.084  | M101GSA      | 44            | 0.07   | M220150MPTSS | 46      | 0.65   |
| LVHB025V        | 6       | 0.06   | M101TEE      | 45            | 0.23   | M220200CPG   | 45      | 0.2    |
| LVHB038050MTV   | 6       | 0.064  | M104SWFSS    | 44            | 0.7    | M220200HBT   | 48      | 0.4    |
| LVHB038V        | 6       | 0.06   | M12712       | 111, 113, 115 | N/A    | M220200SWP90 | 43      | 0.364  |
| LVHB050V        | 6       | 0.06   | M13712       | 119, 125      | 4.588  | M220200TEE   | 45      | 0.6    |
| LVHB075100MTV   | 6       | 0.13   | M15712       | 139           | N/A    | M220375SWFSS | 44      | 1.35   |
| LVHB075MTLV     | 6       | 0.07   | M18008       | 141           | 3.368  | M220A        | 47      | 0.2    |
| LVHB075MTV      | 6       | 0.13   | M18012       | 141           | 3.578  | M220ASWP90   | 43      | 0.4    |
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| LVPL025V        | 6       | 0.06   | M200100BRB   | 48            | 0.15   | M220BRB45    | 48      | 0.22   |
| LVPL038025MPTV  | 6       | N/A    | M200100BRB90 | 48            | 0.16   | M220BRB90    | 48      | 0.3    |
| LVPL038MPTV     | 6       | N/A    | M200100CPG   | 45            | 0.16   | M220BRBSWP90 | 43      | 0.4    |
| LVPL038V        | 6       | 0.06   | M200100TEE   | 45            | 0.52   | M220BWASS    | 46      | 0.5    |
| LVPL050V        | 6       | 0.06   | M200125BRB   | 48            | 0.16   | M220CPG      | 44      | 0.21   |
| M100050FPT      | 46      | 0.06   | M200125BRB90 | 48            | 0.21   | M220CPG3G    | 44      | 0.2    |
| M100075BRB      | 48      | 0.06   | M200125MPT   | 46            | 0.2    | M220CPG45    | 41, 44  | 0.24   |
| M100075BRB90    | 48      | 0.06   | M200125MPTSS | 46            | 0.2    | M220CPG6     | 41, 44  | 0.27   |
| M100075FPT      | 46      | 0.05   | M200150BRB   | 48            | 0.17   | M220CPG90    | 45      | 0.34   |
| M100075MPT      | 46      | 0.052  | M200150BRB45 | 48            | 0.17   | M220CR       | 47      | 0.58   |
| M100100HBT      | 48      | 0.09   | M200150BRB90 | 48            | 0.21   | M220D        | 47      | 0.73   |
| M100125BRB      | 48      | 0.08   | M200150FPT   | 46            | N/A    | M220FPT      | 46      | 0.26   |
| M100125BRB90    | 48      | 0.11   | M200150MPT   | 46            | 0.23   | M220MPT      | 46      | 0.21   |
| M100125BRBSWP90 | 43      | 0.15   | M200150MPTSS | 46            | 0.23   | M220MPTSS    | 46      | 0.62   |
| M100125HBT      | 48      | 0.17   | M200A        | 47            | 0.24   | M220MPTSWP90 | 43      | 0.3    |
| M100125MPT      | 46      | 0.114  | M200BRB      | 48            | 0.24   | M220P6PRO    | 110     | 51     |
| M100150BRB90    | 48      | 0.17   | M200BRB45    | 48            | 0.26   | M220P6PROW   | 112     | 47.4   |
| M100A           | 47      | 0.07   | M200BRB90    | 48            | 0.34   | M220PB       | 110     | N/A    |
| M100BRB         | 48      | 0.066  | M200CPG      | 44            | 0.43   | M220PBW      | 112     | 19     |
| M100BRB45       | 48      | 0.074  | M200CPG45    | 44            | 0.31   | M220PH5      | 110     | 55     |
| M100BRB90       | 48      | 0.08   | M200CPG90    | 45            | 0.62   | M220PH5E     | 110     | 58     |
| M100BRBSWP90    | 43      | 0.15   | M200CPG90SH  | 45            | 0.44   | M220PH5W     | 112     | 55     |
| M100BRBSWPG90   | 43      | 0.15   | M200CR       | 47            | 0.69   | M220PH6      | 110     | 55     |
| M100CPG         | 44      | 0.09   | M200FPT      | 46            | 0.29   | M220PHYW     | 114     | N/A    |
| M100CPG45       | 44      | 0.09   | M200MPT      | 46            | 0.26   | M220PLG      | 47      | 0.12   |
| M100CPG90       | 45      | 0.14   | M200MPTSS    | 46            | 0.81   | M220PLG038   | 47      | N/A    |
| M100CR          | 47      | 0.24   | M200PLG      | 47            | 0.12   | M220PLG075   | 47      | 0.11   |
| M100FPT         | 46      | 0.09   | M200PLG025   | 47            | 0.084  | M220PO       | 110     | 8.372  |
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| M222PIE5W         | 138     | 200    | MAF220      | 47      | N/A    | MEVX220SL  | 29, 3    | N/A    |
| M222PIH6W         | 138     | 115    | MAF300      | 47      | N/A    | MEVX300    | 28, 3    | 8.8    |
| M300200CPG        | 45      | 0.26   | MBF100      | 54      | 0.9    | MEVX300BL  | 29, 3    | N/A    |
| M300200HBT        | 48      | 0.8    | MBF100BD    | 54      | 0.948  | MEVXR100   | 26, 3    | N/A    |
| M300220BRB        | 48      | 0.27   | MBF200      | 54      | 1.37   | MEVXR200   | 27, 3    | N/A    |
| M300220BRB90      | 48      | 0.404  | MBF200BD    | 54      | 1.44   | MEVXR220   | 27, 3    | N/A    |
| M300220CPG        | 41, 45  | 0.24   | MBF220      | 54      | 1.62   | MEVXR300   | 28, 3    | N/A    |
| M300220MPTSS      | 46      | 1.332  | MBF220BD    | 54      | 1.62   | MFM100     | 42       | 2.75   |
| M300220SWP90      | 43      | 0.58   | MBF300      | 54      | 2.34   | MFM220     | 42       | 2.75   |
| M300300HBT        | 48      | 1.028  | MBF300BD    | 54      | 2.5    | MFM300     | 42       | 5.4    |
| M300375SWFSS      | 44      | 3.2    | MBP200      | 66      | 0.26   | MHV200     | 40       | 0.57   |
| M300A             | 47      | 0.35   | MCV100      | 44      | 0.154  | MHV220A    | 40, 41   | 0.8    |
| M300ASWP90        | 43      | 0.8    | MCV200      | 44      | 0.45   | MIS220     | 41       | 20     |
| M300BRB           | 48      | 0.49   | MCV221      | 44      | 0.5    | MIS300     | 41       | 23     |
| M300BRB45         | 48      | 0.51   | MCV300      | 44      | 1.224  | MLEV100    | 30, 4    | 0.65   |
| M300BRB90         | 48      | 0.78   | MCV300      | 44      | N/A    | MLS100-20  | 50       | 0.98   |
| M300BRBSWP90      | 43      | 1.24   | MEV100BLCF  | 32      | 4.59   | MLS100-20  | 50       | 0.964  |
| M300CPG           | 44      | 0.41   | MEV100BLXR1 | 32      | 1.75   | MLS100-40  | 50       | 0.88   |
| M300CPG12         | 44      | 1      | MEV100CF    | 31      | 4.228  | MLS100-00  | 51       | 0.664  |
| M300CPG12         | 41, 44  | 0.49   | MEV100SLCF  | 32      | 4.62   | MLS100BC   | 51       | 0.896  |
| M300CPG43         | 41, 44  | 0.43   | MEV100SLXR1 | 32      | 2.85   | MLS200-06  | 50       | 2.25   |
| M300CPG90         | 45      | 0.75   | MEV1003LXK1 | 31      | 1.465  | MLS200-00  | 50       | 2.25   |
|                   |         |        |             | 30      | -      |            |          | -      |
| M300CR<br>M300FPT | 47      | 1.18   | MEV102CF    | 30      | 11.16  | MLS200-20  | 50<br>50 | 2.15   |
|                   | 46      | 0.5    | MEV103CF    |         | 17.16  | MLS200-30  |          | 2.15   |
| M300MPT           | 46      | 0.44   | MEV104CF    | 30      | 22.32  | MLS200-50  | 50       | 3.9    |
| M300MPTSS         | 46      | 1.85   | MEV105CF    | 30      | 27.9   | MLS200-50M | 50       | 2.42   |
| M300MPTSWP90      |         | 0.63   | MEV200BLCF  | 32      | 6.38   | MLS200-80  | 50       | 2.15   |
| M300P11PRO        | 118     | 81     | MEV200BLXR1 | 32      | 2.4    | MLS200B    | 51       | 1.554  |
| M300PB            | 118     | 20     | MEV200CF    | 31      | 5.75   | MLS200BC   | 51       | 2.07   |
| M300PBW           | 124     | 24     | MEV200SLCF  | 32      | 6.5    | MLS2100SS  | 53       | 0.54   |
| M300PH6           | 118     | 45.4   | MEV200SLXR1 | 32      | 2.4    | MLS220C1   | 53       | 0.82   |
| M300PH6W          | 124     | 49     | MEV200XR1   | 31      | 2      | MLS220G1   | 53       | 0.008  |
| M300PLG           | 47      | 0.25   | MEV220BLCF  | 32      | 8.05   | MLS220R1   | 53       | 0.42   |
| M300PLG075        | 47      | 0.23   | MEV220BLXR1 | 32      | 3      | MLS222-04  | 52       | 3.82   |
| M300PLG100        | 47      | 0.248  | MEV220CF    | 31      | 7      | MLS222-08  | 52       | 3.82   |
| M300PO            | 118     | 9.792  | MEV220SLCF  | 32      | 8.13   | MLS222-10  | 52       | 3.5    |
| M222POIW          | 138     | N/A    | MEV220SLXR1 | 32      | 3      | MLS222-100 | 52       | 3.7    |
| M300SWFSS         | 44      | 1.46   | MEV220XR1   | 31      | 2.8    | MLS222-16  | 52       | 3.7    |
| M300SWP90         | 43      | 0.7    | MEV300CF    | 31      | 13.396 | MLS222-30  | 52       | 3.75   |
| M300SWPG90        | 43      | 0.75   | MEV300XR1A  | 31      | N/A    | MLS222-50  | 52       | 3.75   |
| M300TEE           | 45      | 1.15   | MEVR100CF   | 31      | 4.45   | MLS222-80  | 52       | 3.7    |
| M300Y45           | 41, 45  | 3.38   | MEVR200CF   | 31      | 6.48   | MLS222B    | 53       | 2.168  |
| M300YG45          | 41, 45  | 3.258  | MEVR220CF   | 31      | 6.736  | MLS222BC   | 53       | 3.25   |
| M301G             | 41, 49  | 0.03   | MEVX100     | 26, 3   | 3.78   | MLEV100A   | 30       | N/A    |

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| MLS250SS           | 53      | 0.6    | MV220BL      | 38                 | 4.63   | PLUG038     | 84      | 0.02   |
| MLS280SS           | 53      | 0.57   | MV220CF      | 33                 | 2.798  | PLUG050     | 84      | 0.02   |
| MLS300-08          | 52      | 8      | MV220SL      | 38                 | 2.75   | PLUG075     | 41, 84  | 0.04   |
| MLS300-12          | 52      | 8      | MV225200     | 31                 | N/A    | PLUG075S    | 93      | 0.032  |
| MLS300-20          | 52      | 8      | MV225CF      | 33                 | 7.3    | PLUG100     | 84      | 0.06   |
| MLS300-50          | 52      | 8.44   | MV300        | 33                 | 3.9    | PLUG125     | 84      | 0.09   |
| MLS300B            | 53      | 4.964  | MV300BL      | 38                 | 6.68   | PLUG150     | 84      | 0.1    |
| MLS300B1           | 99      | 5.342  | MV300CF      | 33                 | 5.866  | PLUG200     | 84      | 0.152  |
| MLS300BC           | 53      | N/A    | MV301CF      | 41                 | 6      | PLUG300     | 84      | 0.444  |
| MLS300CAP          | 53, 99  | 1.36   | MVE004       | 22, 23, 24, 31, 32 | 0.1    | PRC200      | 101     | N/A    |
| MLS300ECG          | 53, 99  | 0.024  | MVS220CF     | 34, 41             | 1.744  | PV075       | 16      | 0.53   |
| MLS300ECGV         | 53, 99  | 0.04   | MVS220FP     | 34                 | 1.804  | PV100       | 16      | 0.52   |
| MLS300G            | 53, 99  | 0.03   | MVS220HSFP   | 35                 | 2.88   | PV100-075   | 16      | 0.64   |
| MLS300GV           | 53, 99  | 0.05   | MVS300CF     | 36                 | 3.046  | PV100-075B  | 16      | 0.648  |
| MLST100-100        | 50      | 0.75   | MVS300CFFP   | 36                 | 3.75   | PV100-075V  | 16      | 0.35   |
| MLST100-16         | 50      | 0.75   | MVS300HSFP   | 37                 | 6.32   | PV100V      | 16      | 0.56   |
| MLST100-30         | 50      | 0.75   | MVSF220FP    | 34                 | 1.78   | PV10265     | 16      | 0.07   |
| MLST100-50         | 50      | 0.75   | MVSF220HSFP  | 35                 | 2.9    | PV10265V    | 16      | 0.2    |
| MLST100-80         | 50      | 0.75   | MVSF300      | 36                 | 3.29   | RB038-025   | 83      | 0.01   |
| MLST100-H          | 51      | 0.48   | MVSF300FP    | 36                 | 4      | RB050-025   | 83      | 0.02   |
| MLST100-HB         | 51      | 0.63   | MVSF300HSFP  | 37                 | 6.42   | RB050-038   | 83      | 0.01   |
| MLST150-100        | 50      | 2      | MVSMT220FP   | 34                 | 1.75   | RB075-025   | 83      | 0.04   |
| MLST150-16         | 50      | 2      | MVSMT220HSFP | 35                 | 2.94   | RB075-038   | 83      | 0.03   |
| MLST150-30         | 50      | 2      | MVSMT300     | 36                 | 3.192  | RB075-050   | 83      | 0.03   |
| MLST150-50         | 50      | 2      | MVSMT300HSFP | 37                 | 6.44   | RB100-025   | 83      | 0.07   |
| MLST150-80         | 50      | 2      | NIP025-SH    | 83                 | 0.01   | RB100-050   | 83      | 0.05   |
| MLST150-80V        | 50      | 2      | NIP038-SH    | 83                 | 0.02   | RB100-075   | 83      | 0.04   |
| MLST150-H          | 51      | 1.258  | NIP050-3     | 83                 | 0.04   | RB125-038   | 83      | 0.1    |
| MLST150-HB         | 51      | 1.75   | NIP050-SH    | 83                 | 0.02   | RB125-075   | 83      | 0.09   |
| MLSTM100-100       | 49      | 0.34   | NIP075-4     | 83                 | 0.074  | RB125-100   | 83      | 0.06   |
| MLSTM100-100C      | 49      | 0.34   | NIP075-6     | 83                 | 0.12   | RB150-075   | 83      | 0.12   |
| MLSTM100-30C       | 49      | 0.33   | NIP075-SH    | 83                 | 0.03   | RB150-100   | 83      | 0.1    |
| MLSTM100-50        | 49      | 0.33   | NIP100-4     | 83                 | 0.09   | RB150-125   | 83      | 0.1    |
| MLSTM100-50C       | 49      | 0.33   | NIP100-6     | 83                 | 0.14   | RB200-075   | 83      | 0.18   |
| MLSTM100-80        | 49      | 0.34   | NIP100-SH    | 83                 | 0.038  | RB200-100   | 83      | 0.17   |
| MLSTM100-80C       | 49      | 0.34   | NIP125-4     | 83                 | 0.136  | RB200-125   | 83      | 0.14   |
| MPRV100-050        | 39      | 1.506  | NIP125-6     | 83                 | 0.22   | RB200-150   | 83      | 0.12   |
| MPRV100-075        | 39      | 1.45   | NIP125-SH    | 83                 | 0.06   | RB300-150   | 83      | 0.51   |
| MPRV100-100        | 39      | 1.5    | NIP150-3     | 83                 | 0.14   | RB300-200   | 83      | 0.5    |
| MPRV100-125        | 39      | 1.54   | NIP150-4     | 83                 | 0.22   | RB400-300   | 83      | 1      |
| MPRV100-150        | 39      | 1.514  | NIP150-5     | 83                 | 0.26   | RC100-075   | 83      | 0.15   |
| MSUV100FP          | 15      | 0.46   | NIP150-6     | 83                 | 0.34   | RC150-100   | 83      | 0.2    |
| MSW220             | 44      | 0.4    | NIP150-SH    | 83                 | 0.12   | RC150-125   | 83      | 0.206  |
| MTF220BD           | 54      | 0.75   | NIP200-4     | 83                 | 0.25   | RC200-050   | 83      | 0.28   |
| MTF300BD           | 54      | 2.092  | NIP200-6     | 83                 | 0.38   | RC200-100   | 83      | 0.26   |
| MV100BL            | 38      | 1.2    | NIP200-SH    | 83                 | 0.14   | RC200-125   | 83      | 0.26   |
| MV100CF            | 33      | 0.75   | NIP2101      | 66                 | 0.14   | RC200-123   | 83      | 0.26   |
| MV100SL            | 38      | 1.13   | NIP300-4     | 83                 | 0.43   | RC300-200   | 83      | 0.62   |
| MV10300SL          | 13      | 0.245  | NIP300-6     | 83                 | 0.43   | RN050-200   | 83      | 0.02   |
| MV200BL            | 38      | 2      | NIP300-SH    | 83                 | 0.7    | RN075-050   | 83      | 0.010  |
| MV200BE<br>MV200CF | 33      | 2.024  | NIP400-SH    | 83                 | 1.56   | RN100-050   | 83      | 0.05   |
| MV200CF<br>MV200SL | 38      | 2.024  | PLUG025      | 84                 | 0.03   | RN100-050   | 83      | 0.06   |
| IVIVZUUOL          | J0      |        | 1 200020     | U- <del>1</del>    | 0.00   | 1411100-073 | 00      | 0.00   |

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| RN125-075 | 83      | 0.086  | TC425   | 82      | 0.18   | TL652S         | 67  | 0.63   |
| RN125-100 | 83      | 0.08   | TC438   | 82      | 0.36   | TL6531         | 68  | 0.084  |
| RN150-100 | 83      | 0.122  | TC456   | 82      | 0.38   | TLA10          | 67  | 2.518  |
| RN150-125 | 83      | 0.14   | TEE025  | 84      | 0.02   | TLV10R         | 67  | 1.644  |
| RN200-125 | 83      | 0.16   | TEE038  | 84      | 0.05   | TLV2           | 67  | 0.06   |
| RN200-150 | 83      | 0.17   | TEE050  | 84      | 0.1    | TLVA10         | 67  | 2.25   |
| RN300-200 | 83      | 0.36   | TEE075  | 84      | 0.14   | TM075/050      | 87  | 0.16   |
| RS21      | 87      | 0.756  | TEE100  | 84      | 0.21   | UB100          | 45  | 0.24   |
| RSTB      | 87      | 0.704  | TEE125  | 84      | 0.32   | UB202          | 45  | 0.26   |
| SL025-90  | 85      | 0.02   | TEE150  | 84      | 0.45   | UB220          | 45  | 0.32   |
| SL038-90  | 85      | 0.03   | TEE200  | 84      | 0.6    | UV050FP        | 15  | 0.25   |
| SL050-90  | 85      | 0.06   | TEE300  | 84      | 1.58   | UV075FP        | 15  | 0.25   |
| SL075-45  | 85      | 0.07   | TEG075  | 84      | 0.14   | UV100FP        | 15  | 0.37   |
| SL075-90  | 85      | 0.08   | TEG100  | 84      | 0.22   | UV125FP        | 15  | 1      |
| SL100-45  | 85      | 0.1    | TF038SS | 71      | 0.25   | UV150FP        | 15  | 1      |
| SL100-90  | 85      | 0.13   | TF050   | 71      | 0.25   |                | 103, 105, 107, 109, 113, 115, 123, 125,                     | ,      |
| SL125-45  | 85      | 0.14   | TF050SS | 71      | 0.8    | UV15163        | 127, 129, 131, 133, 139, 141, 143,<br>145, 149, 151, 51, 91 | 0.002  |
| SL125-90  | 85      | 0.14   | TF075   | 71      | 0.2    | UV15163V       | 103, 107, 123, 155, 157, 159, 161                           | 0.002  |
| SL150-45  | 85      | 0.22   | TF075SS | 71      | 1.15   | UV200FP        | 15  | 1.5    |
| SL150-90  | 85      | 0.25   | TF075V  | 71      | 0.22   | UV204FPFD      | 66  | 1.58   |
| SL200-45  | 85      | 0.34   | TF100   | 71      | 0.35   | V050           | 7   | 0.75   |
| SL200-90  | 85      | 0.41   | TF100AV | 72      | 0.44   | V07018         | 103, 105, 107, 109, 111, 113, 115, 117, 119, 121, 123, 125  | 0.1    |
| SL300-45  | 85      | 0.85   | TF100G  | 71      | N/A    | V07019         | 103, 105, 107, 109, 111, 113, 115, 117,                     | 0.008  |
| SL300-90  | 85      | 1.05   | TF100GV | 71      | N/A    |                | 119, 121, 123, 125<br>7                                     |        |
| ST200     | 67      | 0.77   | TF100SS | 71      | 2.85   | V07200<br>V075 | 7   | 0.066  |
| ST300     | 67      | 1.27   | TF125   | 71      | 0.35   | V075<br>V075BL | 13  |        |
| SUV050FP  | 15      | 0.25   | TF125AV | 72      | 0.386  |                |   | 1.35   |
| SUV075FP  | 15      | 0.4    | TF125SS | 71      | 1.92   | V075SL         | 13  | 1.35   |
| SUV100FP  | 15      | 0.4    | TF138GV | 71      | 0.1    | V100           | 13  | 0.682  |
| SUV125FP  | 15      | 0.88   | TF150   | 71      | 0.63   | V100BL         |   | 1.25   |
| SUV150FP  | 15      | 0.88   | TF150AV | 72      | 0.68   | V100FP         | 7 13  | 1.16   |
| SUV200FP  | 15      | 1.45   | TF150SS | 71      | 4.88   | V100SL         |   | 1.31   |
| SW100     | 87      | 0.16   | TF200   | 71      | 0.55   | V10117         | 139, 151<br>127, 129, 131, 133, 135, 137, 139,              | 0.1    |
| SW150     | 87      | 0.36   | TF200AV | 72      | 0.596  | V10118         | 149, 151, 155, 157, 159, 161                                | 0.004  |
| SW220     | 87      | 0.52   | TF200SS | 71      | 3.6    | V10119         | 107, 127, 129, 131, 133, 135, 149,<br>155, 157, 159, 161    | 0.1    |
| TA283     | 68      | 0.2    | TF200V  | 71      | 0.56   | V10153138      | 7   | 0.07   |
| TA283QD   | 68      | 0.3    | TF220   | 71      | 0.82   | V10153A        | 7, 13, 33   | 0.064  |
| TC120     | 82      | 0.1    | TF220G  | 71      | 0.038  | V10161         | 14  | 0.18   |
| TC130     | 82      | 0.1    | TF220GV | 71      | 0.062  | V10200         | 7, 33   | 0.12   |
| TC150     | 82      | 0.11   | TF220SS | 71      | 5.27   |                |   |        |
| TC162     | 82      | 0.12   | TF300   | 71      | 2      | V10264         | 153   | 0.002  |
| TC181     | 82      | 0.12   | TF300G  | 71      | 0.094  | V10270         | 7   | 0.138  |
| TC193     | 82      | 0.14   | TF300GV | 71      | 0.034  | V10271         | 7   | 0.14   |
| TC206     | 82      | 0.12   | TF300SS |         | _      | V10300SL       | 13  | N/A    |
| TC206     | 82      | 0.14   | TF400   | 71      | 7.9    | V10353TB       | 13, 38  | 0.08   |
| TC216     | 82      | 0.13   | TF400G  | 71      | _      | V125           | 7   | 1.25   |
| TC224     | 82      | 0.14   | TF400GV | 71      | 0.752  | V125BL         | 13  | 2.126  |
| TC251     | 82      | 0.15   | TL600C  | 67      | 0.752  | V125FP         | 7   | 1.91   |
| TC250     | 82      | 0.16   | TL650E  | 67      | 0.46   | V125SL         | 13  | 2.07   |
|           |         |        |         | 67      | -      | V150           | 7   | 1.87   |
| TC312     | 82      | 0.16   | TL650S  |         | 0.5    | V150BL         | 13  | 2      |
| TC331     | 82      | 0.17   | TL651S  | 67      | 0.7    | V150SL         | 13  | 2      |
| TC343     | 82      | 0.17   | TL652E  | 67      | 0.64   | V15300SL       | 13  | 0.43   |

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| V200             | 7   | 1.88   |
| V20011SS         | 147, 153  | 0.064  |
| V20018           | 107, 109, 115, 121, 131, 133, 137, 141, 143, 145, 147, 153, 157, 159, 161 | 0.004  |
| V20019           | 137, 141, 143, 145, 161   | 0.016  |
| V200BL           | 13  | 2.8    |
| V200FP           | 8   | 3.25   |
| V200SL           | 13  | 2.75   |
| V20153           | 7, 33   | 0.2    |
| V20153138        | 7   | 0.176  |
| V20100100        | 7,14, 33  | 0.206  |
| V20200<br>V20207 |   | 0.006  |
|                  | 68, 79  |        |
| V20353TB         | 13, 38  | 0.148  |
| V20353TS         | 13, 39  | 0.07   |
| V204FP           | 9   | 2.74   |
| V25153           | 8, 9, 12, 33, 36  | 0.294  |
| V25153138        | 7   | 0.16   |
| V25153SH         | 9, 12, 13, 38   | 0.125  |
| V25200           | 8, 9, 14, 33  | 0.43   |
| V25200BL         | 13, 38  | N/A    |
| V25270           | 7, 8  | 0.194  |
| V25271           | 7, 8  | 0.356  |
| V25353B          | 13, 38  | 0.25   |
| V300             | 8   | 3.75   |
| V300FP           | 8   | 5.67   |
| V30200           | 8, 33   | 0.59   |
| V35200           | 8, 33   | 1.42   |
| V400             | 8   | 8.5    |
| V40200           | 8   | 4.2    |
| VA150            | 14  | 2.592  |
| VA200            | 14  | 2.8    |
| VA200FP          | 14  | 3.958  |
| VC200            | 72  | 0.17   |
|                  | <u> </u>  |        |
| VC230            | 72  | 0.26   |
| VC300            | 72  | 0.54   |
| VC330            | 72  | 0.68   |
| VE5630           | 22, 31  | N/A    |
| VFMT200FP        | 8   | 3.368  |
| VFMT204FP        | 9   | 3.33   |
| VL20153          | 7   | 0.35   |
| VL25153          | 8   | 0.41   |
| VN100            | 14  | 0.712  |
| VN10200          | 14  | 0.06   |
| VN10253          | 14  | N/A    |
| VS20152SH        | 10, 34  | 0.08   |
| VS20200          | 10, 34  | 0.158  |
| VS204FP          | 11  | 1.834  |
| VS25153          | 11, 34  | 0.2    |
| VS25153SS        | 11, 35,   | N/A    |
| VS25200          | 9, 11, 34   | N/A    |

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| VSF200                   | 10       | 1.25   |
| VSF200CF                 | 34       | 1.49   |
| VSF200FPAF               | 9        | 3.05   |
| VSF204FP                 | 11       | 1.82   |
| VSF300                   | 12       | 3.424  |
| VSFHB200                 | 10       | 1.52   |
| VSFMT200                 | 10, 12   | 1.562  |
| VSFMT204FP               | 11       | 1.862  |
| VSFMT204HSFP             | 11       | 2.95   |
| VSFMT300FP               | 12       | 4.29   |
| VSFMT300HSFP             | 12       | 6.63   |
| VSMT200                  | 10, 12   | 1.35   |
| VSMT200CF                | 34       | 1.432  |
| VSMT200FPAF              | 9        | 2.958  |
| VSMT204FP                | 11       | 1.874  |
| VSS025                   | 16       | 0.634  |
| VSS038                   | 16       | 0.59   |
| VSS050                   | 16       | 0.7    |
| VSS075                   | 16       | 1.298  |
| VSS100                   | 16       | 2.094  |
| VSS150                   | 16       | 3.996  |
| VSS200                   | 16       | 6.808  |
| VSS300                   | 16       | 18.43  |
| VSSH25200                | 11, 35   | N/A    |
| W230237                  | 65       | 1.07   |
| W230238                  | 65       | 1.17   |
| W230230                  | 65       | 1.07   |
| W230240                  | 65       | 1.1    |
| WSF210FSA                | 65       | 1.2    |
| WSF210FSAV               | 65       | 1      |
| WSMT210FSA               | 65       | 1.07   |
| WSMT210FSAV              | 65       | 1.07   |
| VSFMT204FP               | 11       | 1.85   |
| VSFMT204HSFP             | 11       | 2      |
| VSFMT300FP               | 12       | 4.29   |
| VSFMT300HSFP             | 12       | 6.63   |
| VSMT200                  | 10, 12   | 1.35   |
| VSMT200CF                | 34       | 1.45   |
| VSMT2000FPAF             | 9        | 3      |
| VSMT200FFAI<br>VSMT204FP | 11       | 1.85   |
| VSS025                   | 16       | 0.64   |
| VSS038                   | 16       |        |
|                          |          | 0.59   |
| VSS050                   | 16       | 0.71   |
| VSS075<br>VSS100         | 16<br>16 | 2.18   |
|                          |          |        |
| VSS150                   | 16       | 3.97   |
| VSS200                   | 16       | 6.91   |
| VSS300                   | 16       | 22.6   |
| W230237                  | 65       | 1.07   |
| W230238                  | 65       | 1.17   |
| W230239                  | 65       | 1.07   |
| W230240                  | 65       | 1.1    |

| GHT | PART NO     | PAGE(S) | WEIGHT |
|-----|-------------|---------|--------|
| 25  | WSF210FSA   | 65      | 1.2    |
| 49  | WSF210FSAV  | 65      | 1      |
| 05  | WSMT210FSA  | 65      | 1.07   |
| 82  | WSMT210FSAV | 65      | 1      |
|     |             |         |        |

