A Gardner Denver Product

**OBERDORFER PUMPS** 

# POSITIVE DISPLACEMENT ROTARY BALL PUMPS



#### **SPECIFICATIONS**

| MODEL  | SIZE IN   | CAP. GPM | MAX. RPM | WEIGHT LBS. |
|--------|-----------|----------|----------|-------------|
| RB1415 | 1 1/2"    | 60       | 500      | 63          |
| RB1420 | 2"        | 90       | 750      | 65          |
| RB1421 | 2"        | 120      | 600      | 87          |
| RB1425 | 2 1/2"    | 150      | 750      | 97          |
| RB1430 | 3" Flange | 300      | 600      | 198         |

#### EXTENSIVE VISCOSITY RANGE -30 TO 1,000,000 SSU

RB 1400 Series Rotary Ball Pumps have unique, large cavity rotors which are ideal for high viscosity fluids. Low rotor speeds allow easy fluid entry and low shear operation. The non-meshing rotor means that fluids with large particles can be pumped without damage to the fluid or the pump.

LOW DOWNTIME, MAINTENANCE COSTS

The performance of a positive displacement pump depends

upon maintaining the tolerances of the pumping mechanism.

pump. The large rotor cavities allow the RB 1400 Series pump

to operate at lower rpms. These features combine to preserve

Operating speed attacks these tolerances. The floating RB

1400 Series rotor minimizes metal to metal contact in the

the pump's original tolerances. Thus, the RB 1400 Series

pump will run slower and longer and require less ongoing

### FEATURES

- · Optional pressure relief valve
- Cast iron and bronze construction
- · Outboard ball bearing supports main shaft
- · 25 inch Hg Suction Capacity
- · Low maintenance with floating rotor
- Flow range: 5 to 300 U.S. GPM
- Pressure Range: 200 PSIG
- Multiple Ports: 2 or 4
- Hydraulic motor mount optional
- PTO Sizes: 1 inch through 3 inch
- · Packing: Graphite or Teflon
- Mechanical Seal: Buna N or Viton

#### **APPLICATIONS**

- Diesel fuel
- · Adhesives, glues, resins, latex
- · Paint, ink, varnish, coatings
- · Pastes, putty, caulking compounds
- · Fats, tallow, meat by-products
- · Soaps, detergents
- Sugar syrups, molasses
- · Grease, heavy oil
- · Asphalt, tar, pitch
- · Petroleum products

#### LESS COST, MORE PERFORMANCE

maintenance

The RB 1400 Series has four large pumping chambers. These individual chambers are positioned so that incoming fluids flow directly to the heart of the rotor. Since fluids enter and exit the rotor cavities with less friction and less shear, the RB 1400 Series pump displaces more product with greater efficiency than other designs. Gallon for gallon, RB 1400 Series pumps will normally deliver more product at the same speed and require less horsepower than other positive displacement pumps. MODEL RB1400 SERIES



## POSITIVE DISPLACEMENT ROTARY BALL PUMPS

#### **RB1400 SERIES**

|                   |           | 1                 | 2                 | 2              | 3                   |        | 3               |       | 4                  |                  | 5               |           |       | 6            |           | 7                  |
|-------------------|-----------|-------------------|-------------------|----------------|---------------------|--------|-----------------|-------|--------------------|------------------|-----------------|-----------|-------|--------------|-----------|--------------------|
|                   |           |                   | Relief Valve      |                | Packing             |        | Mechanical Seal |       | Number of Ports    |                  | Sleeve Bearings |           |       | Rotor Option |           | Hydraulic<br>Motor |
| Flow GPM @200 SSU | Port Size | OP Part<br>Number | Without<br>Relief | With<br>Relief | Packing<br>Graphite | Teflon | Buna            | Viton | 2 Port<br>Standard | 4 Port<br>Option | Bronze          | Cast Iron | Ryton | Bronze       | Cast Iron | Adapter            |
| 60 GPM @ 500 RPM  | 1 1/2"    | RB1415-           | Ν                 | R              | G                   | Т      | В               | V     | 2                  | 4                | В               | С         | R     | В            | С         | Н                  |
| 90 GPM @ 750 RPM  | 2         | RB1420-           | Ν                 | R              | G                   | Т      | В               | V     | 2                  | 4                | В               | С         | R     | В            | С         | Н                  |
| 120 GPM @ 600 RPM | 2         | RB1421-           | N                 | R              | G                   | Т      | В               | V     | 2                  | 4                | В               | С         | R     | В            | С         | Н                  |
| 150 GPM @ 750 RPM | 2 1/2     | RB1425-           | N                 | R              | G                   | Т      | В               | V     | 2                  | 4                | В               | С         | R     | В            | С         | Н                  |
| 300GPM @ 600 RPM  | 3         | RB1430-           | Ν                 | R              | G                   | Т      | В               | V     | 2                  | 4                | В               | С         | R     | В            | С         | Н                  |

#### **RB SERIES SIGNIFICANT NUMBERING SYSTEM**

| Relief Valve | Packing      | Mechanical Seal | Number of Ports | Bearing Material | Rotor Material | Hydraulic Motor Adapter |
|--------------|--------------|-----------------|-----------------|------------------|----------------|-------------------------|
|              |              |                 |                 |                  |                |                         |
| With = R     | Graphite = G | Buna N = B      | 2 or 4          | Bronze = B       | Bronze = B     | н                       |
| Without = N  | Teflon = T   | Viton = V       | 2014            | Cast Iron = C    | Cast Iron = C  |                         |
|              |              |                 |                 | Ryton = R        |                |                         |

Standard Material of Construction

Body: Cast Iron Relief Valve: Bronze Rotor and Sleeve Bearings: Bronze Graphite Packing or Buna N Mechanical Seal

| 1                  | 2         | 3         | 4  | 5                    | 6                 |                    | 7        | 8                                 | 9               |
|--------------------|-----------|-----------|--|----------------------|-------------------|--------------------|----------|-----------------------------------|-----------------|
|                    |           |           | Standard Construction                    | Adder                | Adder Adder Viton |                    | Adder    | Adder Cast Iron                   | Adder Hydraulic |
| Flow GPM @ 200 SSU | Port Size | Pump Size | Graphite Packing or<br>Buna N Mechanical | With Relief<br>Valve | Teflon Packing    | Mechanical Type 21 | 4 Port   | Bearings, Rotor &<br>Relief Value | Motor Adapter   |
| 60 GPM @ 500 RPM   | 1 1/2"    | RB1415-   | \$1524                                   | \$178                | \$62              | \$125              | \$82     | \$379                             | \$146           |
| 90 GPM @ 750 RPM   | 2"        | RB1420-   | \$1560                                   | \$185                | \$62              | \$125              | \$82     | \$379                             | \$146           |
| 120 GPM @ 600 RPM  | 2"        | RB1421-   | \$2145                                   | \$160                | \$82              | \$234              | \$90     | \$479                             | \$218           |
| 150 GPM @ 750 RPM  | 2 1/2"    | RB1425-   | \$2228                                   | \$115                | \$82              | \$234              | Standard | \$479                             | \$218           |
| 300 GPM @ 600 RPM  | 3"        | RB1430-   | \$3811                                   | \$316                | \$100             | \$347              | \$125    | \$541                             | \$235           |