

# CBR

A rotating metal bellows provides reliable sealing without shaft packing hang-up or fretting in general service and ANSI chemical pumps. Designed to handle all ranges of corrosive applications with different base metallurgies available.

Centroid Loaded Face Attachment improves seal life by preventing face distortion that is caused by pressure and temperature.

### **Features/Benefits**

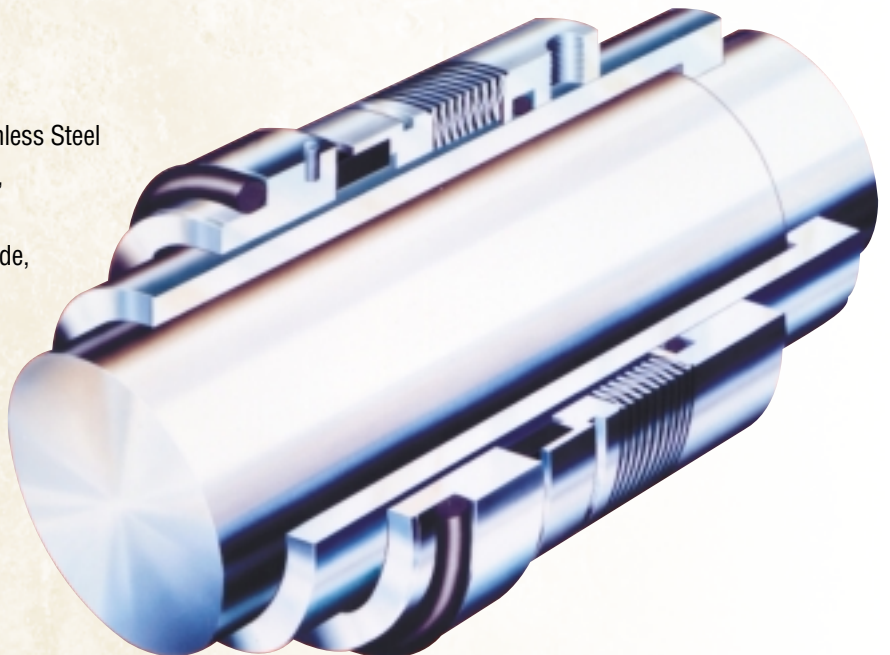
- Rotating bellows design provides best centrifugal force action to keep particles from setting between the bellows convolutions.
- Slim cross section allows the CBR to fit into 5/16" stuffing boxes.
- No dynamic gaskets eliminate shaft packing fretting and seal face hang-up.
- Centroid loading face attachment prevents distortion caused by different thermal expansion rates of the face and holder materials.
- Built-in hydraulic balancing lowers heat generation and energy consumption.
- Easy to repair at any Flowserve authorized serve center.

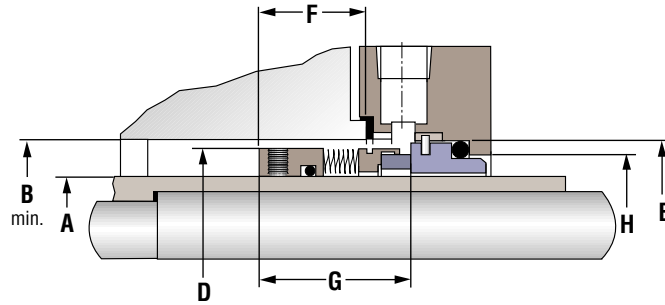
### **Materials of Construction**

- Bellows: AM-350, Hastelloy C, 20 Stainless Steel
- Rotating Face: Carbon, Silicon Carbide, Tungsten Carbide
- Stationary Seat: Ceramic, Silicon Carbide, Tungsten Carbide

### **Operating Parameters**

- Maximum Pressure: 300 psig
- Maximum Temperature: up to 400°F
- Surface Speeds: up to 75 ft/sec.
- Shaft Sizes: .750 through 5.500"





**Dimensional Data**

| A     | B     | D     | E     | F    | G    | H     |
|-------|-------|-------|-------|------|------|-------|
| .750  | 1.375 | 1.312 | 1.375 | 1.00 | 1.38 | 1.140 |
| .875  | 1.500 | 1.437 | 1.500 | 1.00 | 1.38 | 1.265 |
| 1.000 | 1.625 | 1.562 | 1.625 | 1.00 | 1.38 | 1.390 |
| 1.125 | 1.750 | 1.687 | 1.750 | 1.00 | 1.38 | 1.515 |
| 1.250 | 1.875 | 1.812 | 1.875 | 1.00 | 1.38 | 1.640 |
| 1.375 | 2.000 | 1.937 | 2.000 | 1.19 | 1.56 | 1.765 |
| 1.500 | 2.125 | 2.062 | 2.125 | 1.19 | 1.56 | 1.890 |
| 1.625 | 2.250 | 2.187 | 2.375 | 1.19 | 1.56 | 2.015 |
| 1.750 | 2.375 | 2.312 | 2.500 | 1.19 | 1.56 | 2.140 |
| 1.875 | 2.500 | 2.437 | 2.625 | 1.19 | 1.56 | 2.265 |
| 2.000 | 2.625 | 2.562 | 2.750 | 1.19 | 1.56 | 2.390 |
| 2.125 | 2.750 | 2.687 | 2.875 | 1.19 | 1.56 | 2.515 |
| 2.250 | 2.875 | 2.812 | 3.000 | 1.19 | 1.56 | 2.640 |
| 2.375 | 3.000 | 2.937 | 3.125 | 1.19 | 1.56 | 2.765 |
| 2.500 | 3.250 | 3.187 | 3.375 | 1.38 | 1.75 | 3.015 |
| 2.625 | 3.375 | 3.312 | 3.500 | 1.38 | 1.75 | 3.140 |
| 2.750 | 3.500 | 3.437 | 3.625 | 1.38 | 1.75 | 3.265 |
| 2.875 | 3.687 | 3.625 | 3.750 | 1.38 | 1.75 | 3.390 |
| 3.000 | 3.812 | 3.750 | 3.875 | 1.38 | 1.75 | 3.515 |
| 3.125 | 3.937 | 3.875 | 4.125 | 1.38 | 1.75 | 3.765 |
| 3.250 | 4.062 | 4.000 | 4.250 | 1.38 | 1.75 | 3.890 |
| 3.375 | 4.187 | 4.125 | 4.375 | 1.38 | 1.75 | 4.015 |
| 3.500 | 4.312 | 4.250 | 4.500 | 1.50 | 1.88 | 4.140 |
| 3.625 | 4.437 | 4.375 | 4.625 | 1.50 | 1.88 | 4.265 |
| 3.750 | 4.562 | 4.500 | 4.750 | 1.50 | 1.88 | 4.390 |
| 3.875 | 4.687 | 4.625 | 4.875 | 1.50 | 1.88 | 4.515 |
| 4.000 | 4.812 | 4.750 | 5.125 | 1.50 | 1.88 | 4.640 |
| 4.125 | 4.937 | 4.875 | 5.250 | 1.50 | 1.88 | 4.765 |
| 4.750 | 5.562 | 6.000 | 5.875 | 1.50 | 1.88 | 5.390 |
| 5.000 | 5.937 | 6.375 | 6.125 | 1.62 | 2.00 | 5.640 |
| 5.500 | 6.562 | 7.000 | 6.750 | 1.62 | 2.25 | 6.265 |

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**Primary Worldwide Flow Solutions Division Locations**

*Licenseses, authorized agents, and affiliated companies located worldwide.*

**United States**

Kalamazoo, MI  
Phone 269-381-2650  
Fax 269-382-8726

**Canada**

Edmonton, Alberta  
Phone 708-464-1188  
Fax 708-464-1801

Scarborough, Ontario  
Phone 416-292-2877  
Fax 416-292-5190

**Netherlands**

Roosendaal  
Phone 31-165-581400  
Fax 31-165-552622

**Argentina**

Buenos Aires  
Phone 54-11-4709-6800  
Fax 54-11-4709-6800 ext 123

**Australia**

Marayong NSW  
Phone 61-2-8822-7100  
Fax 61-2-9679-7511

**Singapore**

Phone 65-6-8465100  
Fax 65-6-7471963

**Mexico**

Tlaxcala  
Phone 52-2-461-6791  
Fax 52-2-461-6847

**Brazil**

Sao Paulo  
Phone 55-11-4231-6300  
Fax 55-11-4231-6326

**Japan**

Osaka  
Phone 81-72-885-5571  
Fax 81-72-885-5575

**Germany**

Dortmund  
Phone 49-231-6964-0  
Fax 49-231-6964-248