

Product Description

- 1. Single seal in split configuration
- 2. Balanced design
- 3. Independent of direction of rotation
- 4. For plain shafts
- 5. Semi-cartridge construction
- 6. Built-in flushing connections
- 7. Designed with external pressurization
- 8. Factory assembled fully split single seal, 2 x 2 segments
- 9. Stationary design with multiple springs

Technical Features

- Economical to assemble as the complete dismantling of the equipment is not necessary to install the seal
- 2. Reduces down time due to ease in installation
- 3. Rugged seal construction
- 4. Distortion of the seat is avoided by mechanical
- decoupling of the clamping ring

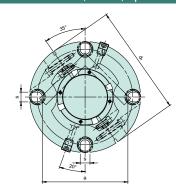
 5. Ease in installation and no modifications are required because the seal is located outside of the stuffing box.
- Due to the stationary design and the elastic seat mounting a high tolerance of shaft deflections can be accommodated
- 7. Low leakage is achieved by the elimination of secondary seals which eliminates leakage paths between split components
- Shaft is protected by uniform torque transmission through the clamping ring which prevents damage caused by set screws.
- 9. Springs are product protected to avoid contamination and clogging

16542311 σ^2 φ ۵ 12 9 10 14 13

Note: The item numbers as depicted above are based on our technical experience and knowledge and are placed in the chronological order of their assembly procedure

| Item | Description | | | | | |
|---------|-------------------|--|--|--|--|--|
| 1 | Seal face | | | | | |
| 2, 5, 7 | O-ring | | | | | |
| 3 | Spring | | | | | |
| 4 | Seat | | | | | |
| 6 | Driver | | | | | |
| 8 | Thrust ring | | | | | |
| 9 | Clamp collar | | | | | |
| 10 | Housing | | | | | |
| 11 | Assembly fixture | | | | | |
| 12, 15 | Gasket | | | | | |
| 13 | Head screw plug | | | | | |
| 14 | Mounting plate | | | | | |
| 16 | Set screw | | | | | |
| 17 | Socket head screw | | | | | |

Installation, Details, Option



Typical Industrial Applications Shipbuilding

Stern tubes

Water turbines

Waste water treatment

Agitators & mixers Centrifugal pumps Chemical

Cooling water

Defibrators Petrochemical

Power plant technology

Pulp & paper Refiners

Sea water desalination

| Performance Capabilities | | | | | | |
|--------------------------|--|--|--|--|--|--|
| Shaft diameter | d ₁ = Upto 150mm (Upto 6.000") | | | | | |
| Pressure | p ₁ = 10 bar (145 PSI) | | | | | |
| Temperature | t = -40 °C+150 °C (-40°F +300 °F),\ above 80 °C (175 °F) flush is recommended | | | | | |
| Speed | 10 m/s (33 ft/s) | | | | | |

Axial Movement

± 1.5 mm (1/16")

Radial Movement

± 0.8 mm (1/32")

| Materials | | | | | | | |
|-----------------|--|--|--|--|--|--|--|
| Seal face | Carbon graphite antimony impregnated (A), Silicon carbide (Q2) | | | | | | |
| Seat | Silicon carbide (Q2) | | | | | | |
| Secondary seals | FKM (V), EPDM (E), NBR (P) | | | | | | |
| Springs | CrNiMo steel (G) | | | | | | |
| Metal parts | CrNiMo steel (G) | | | | | | |



| | | | | | | Dimen | sions | | | | | |
|-------|----------------|----------------|----------------|------------|------------|----------|----------------|----------------|----------------|----------------|----------------|--------------------|
| Dimen | sions in i | nch | | | | | | | | | | |
| c | l _w | d_1 | d ₂ | da | a | s | l ₁ | l ₂ | I ₃ | I ₄ | I ₅ | X |
| 2.0 | 000 | 2.953 | 3.307 | 5.433 | 3.456 | 0.591 | 2.480 | 2.402 | 1.181 | 1.772 | 0.118 | 3/8 NPT |
| 2. | 125 | 3.110 | 3.465 | 5.787 | 3.622 | 0.591 | 2.480 | 2.402 | 1.142 | 1.772 | 0.118 | 3/8 NPT |
| 2.3 | 375 | 3.504 | 3.976 | 5.866 | 4.134 | 0.689 | 2.520 | 2.441 | 1.181 | 1.811 | 0.118 | 3/8 NPT |
| 2.5 | 500 | 3.642 | 4.114 | 6.181 | 4.272 | 0.689 | 2.520 | 2.441 | 1.181 | 1.811 | 0.118 | 3/8 NPT |
| | 750 | 3.858 | 4.449 | 6.929 | 4.646 | 0.787 | 2.520 | 2.441 | 1.181 | 1.811 | 0.118 | 3/8 NPT |
| | 000 | 4.094 | 4.803 | 7.638 | 5.000 | 0.787 | 2.559 | 2.480 | 1.339 | 1.850 | 0.118 | 3/8 NPT |
| | 250 | 4.331 | 5.197 | 7.520 | 5.315 | 0.787 | 2.559 | 2.480 | 1.220 | 1.850 | 0.118 | 3/8 NPT |
| | 500 | 4.764 | 5.512 | 7.992 | 5.709 | 0.866 | 2.854 | 2.776 | 1.240 | 1.988 | 0.118 | 1/2 NPT |
| | 750 | 4.921 | 5.630 | 8.110 | 5.827 | 0.866 | 2.854 | 2.776 | 1.240 | 1.988 | 0.118 | 1/2 NPT |
| | 000 | 5.157 | 5.906 | 8.504 | 6.102 | 0.866 | 2.854 | 2.776 | 1.240 | 1.988 | 0.118 | 1/2 NPT |
| | 250 | 5.591 | 6.496 | 9.055 | 6.693 | 0.866 | 2.854 | 2.776 | 1.240 | 1.988 | 0.118 | 1/2 NPT |
| | 500 | 5.984 | 6.890 | 9.449 | 7.087 | 0.866 | 2.854 | 2.776 | 1.240 | 1.988 | 0.118 | 1/2 NPT |
| | 750 | 5.984 | 6.890 | 9.449 | 7.087 | 0.866 | 2.854 | 2.776 | 1.240 | 1.988 | 0.118 | 1/2 NPT |
| | 000 | 6.378 | 7.283 | 10.551 | 7.480 | 1.024 | 3.524 | 3.445 | 1.713 | 2.461 | 0.110 | 1/2 NPT |
| | | | | | | | 3.524 | | | | | |
| | 500 | 6.890 | 7.874 | 11.929 | 8.071 | 1.024 | 3.524 | 3.445 | 1.713 | 2.461 | 0.157 | 1/2 NPT |
| 6.0 | 000 | 7.402 | 8.465 | 12.126 | 8.661 | 1.024 | 3.324 | 3.445 | 1.713 | 2.461 | 0.157 | 1/2 NPT |
| Dimen | sions in 1 | millimeter | | | | | | | | | | |
| d | l _w | d ₁ | d_2 | d_a | а | S | I ₁ | I ₂ | I_3 | I ₄ | I ₅ | X |
| | 50 | 75 | 84 | 138 | 88 | 15 | 63 | 61 | 30 | 45 | 3 | 3/8 NPT |
| | 60 | 89 | 101 | 149 | 105 | 17,5 | 64 | 62 | 30 | 46 | 3 | 3/8 NPT |
| | 70 | 98 | 113 | 176 | 118 | 20 | 64 | 62 | 30 | 46 | 3 | 3/8 NPT |
| | 80 90 | 110 121 | 132 140 | 191 203 | 135 145 | 20 22 | 65 72.5 | 63 70.5 | 31 31.5 | 47 50.5 | 3 3 | 3/8 NPT 1/2 NPT |
| | 90 | 131 | 150 | 216 | 155 | 22 | 72.5 | 70.5 | 31.5 | 50.5 | 3 | 1/2 NPT |
| | 10 | 142 | 165 | 230 | 170 | 22 | 72.5 | 70.5 | 31.5 | 50.5 | 3 | 1/2 NPT |
| | 20 | 152 | 175 | 240 | 180 | 22 | 72.5 | 70.5 | 32.5 | 50.5 | 3 | 1/2 NPT |
| | 25 | 162 | 185 | 268 | 190 | 26 | 89.5 | 87.5 | 43.5 | 62.5 | 4 | 1/2 NPT |
| | 40 | 175 | 200 | 303 | 205 | 26 | 89.5 | 87.5 | 43.5 | 62 | 4 | 1/2 NPT |
| 1 | 50 | 188 | 215 | 308 | 220 | 26 | 89.5 | 87.5 | 43.5 | 62.5 | 4 | 1/2 NPT |

Note: Additional technical & dimensional information will be provided on request.

The specifications, drawings, images etc included in this catalogue are intended to be generic and must be interpreted as equivalent or functionally equivalent, more specifically the performance capabilities mentioned in this catalogue is based on optimum values, however the performance of the product is dependent on size, material of construction, media, pressure, temperature, sliding velocity etc and it shall vary from size to size or application to application. Customers are requested to consult with Sealmatic before employing the product from this catalogue for any application.