

## 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, $2 \times 2$ segments
9. Stationary design with multiple springs

## Technical Features

1. 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.
6. 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
8. 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


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 |

Typical Industrial Applications
Agitators
Chemical Industry
Centrifugal pumps
Conveying pulp with stock pumps Cooling water pumps for energy generation
Conveying timber to refiners with pumping screws
Circulation of pulp-and-water mixtures in storage
vessels
Displacement pumps
Process industry
Petrochemical Industry
Power Plant Technology
Pulp and paper industry
Pump stations for waste water treatment

## Performance Capabilities

Shaft diameter: $d_{1}=$ Upto... 150 mm (Upto... 6.000")
Pressure: $\mathrm{p}_{1}=10$ bar ( 145 PSI )
Temperature: $\mathrm{t}=-40^{\circ} \mathrm{C} \ldots+150^{\circ} \mathrm{C}$
$\left(-40^{\circ} \mathrm{F} \ldots+300^{\circ} \mathrm{F}\right)$,
above $80^{\circ} \mathrm{C}\left(175^{\circ} \mathrm{F}\right)$ flush is recommended Speed $=10 \mathrm{~m} / \mathrm{s}(33 \mathrm{ft} / \mathrm{s})$
Axial movement: $\pm 1.5 \mathrm{~mm}$ ( $1 / 16^{\prime \prime}$ )
Radial movement: $\pm 0.8 \mathrm{~mm}$ (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)


Dimensions
Dimensions in inch

| $\mathrm{d}_{\text {w }}$ | $\mathrm{d}_{1}$ | $\mathrm{d}_{2}$ | $\mathrm{d}_{\mathrm{a}}$ | a | s | $\mathrm{I}_{1}$ | $\mathrm{I}_{2}$ | $\mathrm{I}_{3}$ | $\mathrm{I}_{4}$ | $\mathrm{I}_{5}$ | X |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2.000 | 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 |
| 2.375 | 3.504 | 3.976 | 5.866 | 4.134 | 0.689 | 2.520 | 2.441 | 1.181 | 1.811 | 0.118 | 3/8 NPT |
| 2.500 | 3.642 | 4.114 | 6.181 | 4.272 | 0.689 | 2.520 | 2.441 | 1.181 | 1.811 | 0.118 | 3/8 NPT |
| 2.750 | 3.858 | 4.449 | 6.929 | 4.646 | 0.787 | 2.520 | 2.441 | 1.181 | 1.811 | 0.118 | 3/8 NPT |
| 3.000 | 4.094 | 4.803 | 7.638 | 5.000 | 0.787 | 2.559 | 2.480 | 1.339 | 1.850 | 0.118 | 3/8 NPT |
| 3.250 | 4.331 | 5.197 | 7.520 | 5.315 | 0.787 | 2.559 | 2.480 | 1.220 | 1.850 | 0.118 | 3/8 NPT |
| 3.500 | 4.764 | 5.512 | 7.992 | 5.709 | 0.866 | 2.854 | 2.776 | 1.240 | 1.988 | 0.118 | 1/2 NPT |
| 3.750 | 4.921 | 5.630 | 8.110 | 5.827 | 0.866 | 2.854 | 2.776 | 1.240 | 1.988 | 0.118 | 1/2 NPT |
| 4.000 | 5.157 | 5.906 | 8.504 | 6.102 | 0.866 | 2.854 | 2.776 | 1.240 | 1.988 | 0.118 | 1/2 NPT |
| 4.250 | 5.591 | 6.496 | 9.055 | 6.693 | 0.866 | 2.854 | 2.776 | 1.240 | 1.988 | 0.118 | 1/2 NPT |
| 4.500 | 5.984 | 6.890 | 9.449 | 7.087 | 0.866 | 2.854 | 2.776 | 1.240 | 1.988 | 0.118 | 1/2 NPT |
| 4.750 | 5.984 | 6.890 | 9.449 | 7.087 | 0.866 | 2.854 | 2.776 | 1.240 | 1.988 | 0.118 | 1/2 NPT |
| 5.000 | 6.378 | 7.283 | 10.551 | 7.480 | 1.024 | 3.524 | 3.445 | 1.713 | 2.461 | 0.157 | 1/2 NPT |
| 5.500 | 6.890 | 7.874 | 11.929 | 8.071 | 1.024 | 3.524 | 3.445 | 1.713 | 2.461 | 0.157 | 1/2 NPT |
| 6.000 | 7.402 | 8.465 | 12.126 | 8.661 | 1.024 | 3.524 | 3.445 | 1.713 | 2.461 | 0.157 | 1/2 NPT |

Dimensions in millimeter

| $\mathrm{d}_{\text {w }}$ | $\mathrm{d}_{1}$ | $\mathrm{d}_{2}$ | $\mathrm{d}_{\mathrm{a}}$ | a | s | $I_{1}$ | $\mathrm{I}_{2}$ | $\mathrm{I}_{3}$ | $\mathrm{I}_{4}$ | $\mathrm{I}_{5}$ | 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 | 110 | 132 | 191 | 135 | 20 | 65 | 63 | 31 | 47 | 3 | 3/8 NPT |
| 90 | 121 | 140 | 203 | 145 | 22 | 72.5 | 70.5 | 31.5 | 50.5 | 3 | 1/2 NPT |
| 100 | 131 | 150 | 216 | 155 | 22 | 72.5 | 70.5 | 31.5 | 50.5 | 3 | $1 / 2$ NPT |
| 110 | 142 | 165 | 230 | 170 | 22 | 72.5 | 70.5 | 31.5 | 50.5 | 3 | 1/2 NPT |
| 120 | 152 | 175 | 240 | 180 | 22 | 72.5 | 70.5 | 31.5 | 50.5 | 3 | 1/2 NPT |
| 125 | 162 | 185 | 268 | 190 | 26 | 89.5 | 87.5 | 43.5 | 62.5 | 4 | 1/2 NPT |
| 140 | 175 | 200 | 303 | 205 | 26 | 89.5 | 87.5 | 43.5 | 62 | 4 | 1/2 NPT |
| 150 | 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.

