

TQY Single Seals

Split Seals



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

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

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

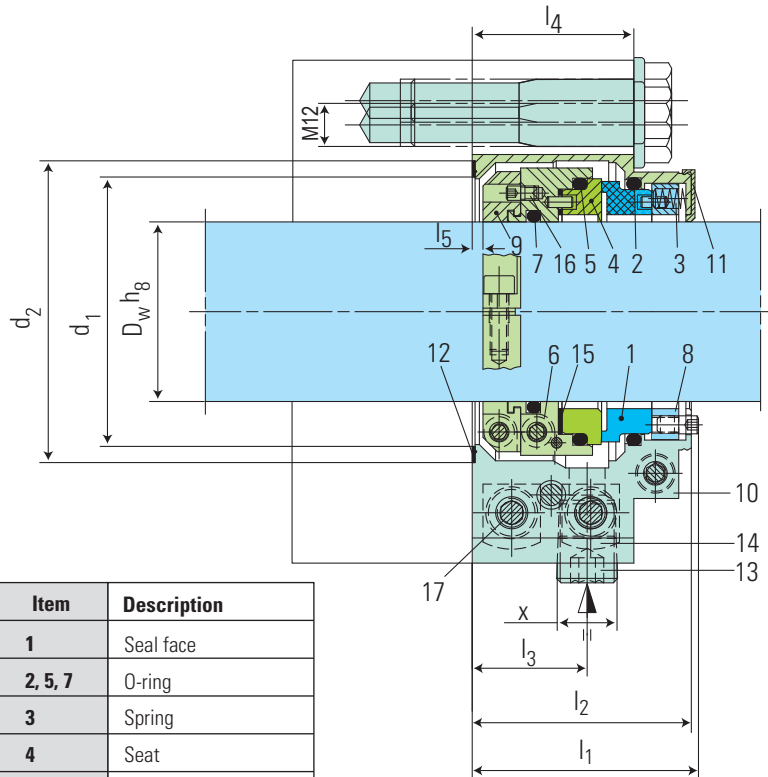
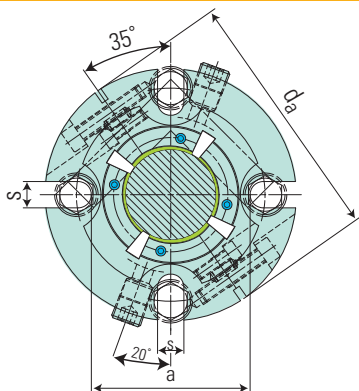
Materials

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)

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")

Installation, Details, Option



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

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.



Dimensional Data

Dimensions in inch

d _w	d ₁	d ₂	d _a	a	s	l ₁	l ₂	l ₃	l ₄	l 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

dw	d1	d2	da	a	s	l1	l2	l3	l4	l5	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.