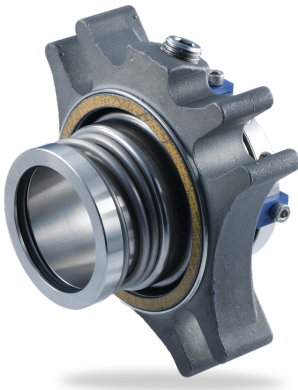


RELY ON EXCELLENCE

## Unitex

Mechanical seals | Mechanical seals for pumps | Standard cartridge seals



### Features

- Single cartridge seal
- Elastomer bellows
- Unbalanced
- Independent of direction of rotation
- Rotating spring
- Bellows and spring free from torsion
- Metric and inch sizes available

### Advantages

- Straightforward and easy installation
- Fits into any installation space due to smallest outer diameter
- Important material certifications available
- Universal application opportunities (standardization)
- No modifications of the pump's installation chamber necessary
- Economical cartridge solution
- Comes with flush connection acc. to API 682, [Plan 11](#) for seal chamber cleaning and cooling

### Operating range

Shaft diameter:  
 $d_N = 25 \dots 75 \text{ mm (1" ... 2.625")}$   
 Pressure:  $p_1 = 12 \text{ bar (174 PSI)}$   
 Temperature:  
 $t = -20 \text{ °C ... } 140 \text{ °C (-4 °F ... } 284 \text{ °F)}$   
 Sliding velocity:  $v_g = 10 \text{ m/s (33 ft/s)}$   
 Axial movement:  $\pm 0,5 \text{ mm}$

### Materials

Seal face: Carbon graphite resin impregnated (B), Silicon carbide (Q1)  
 Seat: Silicon carbide (Q1)  
 Secondary seals: FKM (V), EPDM (E)  
 Metal parts: CrNiMo steel (G), CrNiMo cast steel (G)

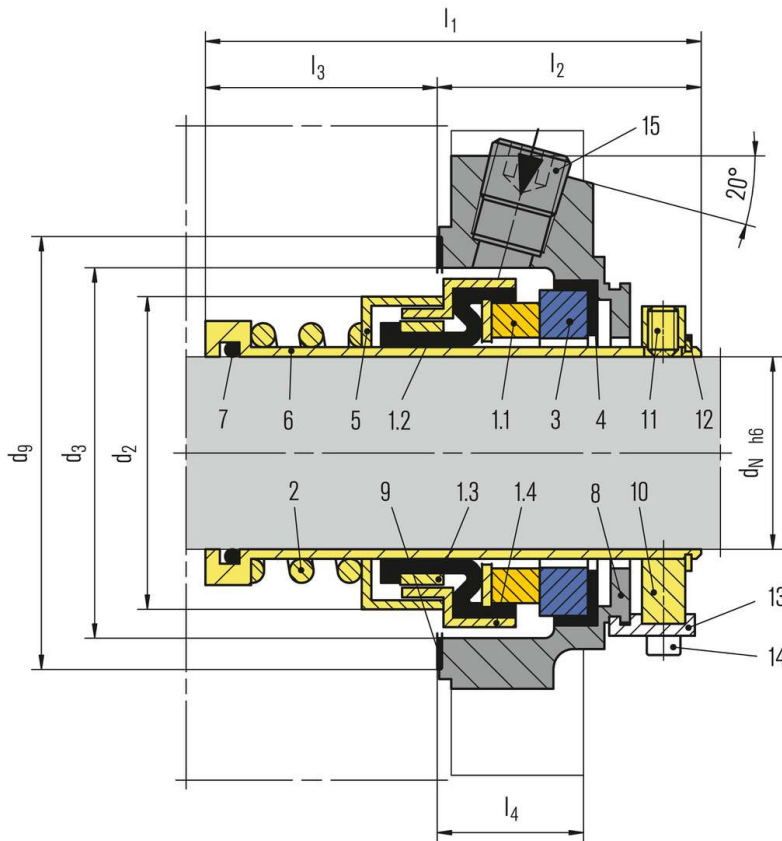
### Standards and approvals

- FDA
- KTW
- WRAS
- W270
- NSF
- ACS

### Recommended applications

- Chemical industry
- Pulp and paper industry
- Water and waste water technology
- Sewage water
- Cold and hot water
- Cooling fluids
- Beverages
- Diluted lyes and acids
- Suspensions with low solids content
- Circulating pumps
- Water and waste water pumps
- Production of pressure oils for bio diesel fuels

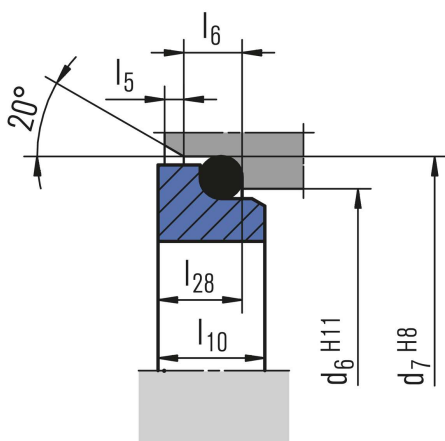
## RELY ON EXCELLENCE



### Item Description

- |     |                         |
|-----|-------------------------|
| 1   | Bellows unit            |
| 1.1 | Seal face               |
| 1.2 | Bellows                 |
| 1.3 | Drive collar            |
| 1.4 | L-ring (spring collar)  |
| 2   | Spring                  |
| 3   | Seat (G60)              |
| 4   | O-Ring or corner sleeve |
| 5   | Spacer ring             |
| 6   | Shaft sleeve            |
| 7   | O-ring                  |
| 8   | Cover                   |
| 9   | Gasket                  |
| 10  | Drive collar            |
| 11  | Set screw               |
| 12  | Snap ring               |
| 13  | Assembly fixture        |
| 14  | Socket head screw       |
| 15  | Screw plug              |

## Seat alternatives

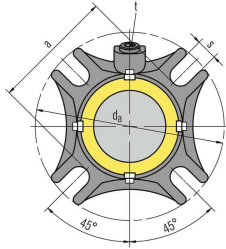


G6 (EN 12756)

## RELY ON EXCELLENCE

### Installation, details, options

#### Seal cover



### Dimensions

$d_N$	$d_2$	$d_3 \text{ min}$	$d_3 \text{ max}$	$d_9$	$d_a$	$a$	$s$	$l_1$	$l_2$	$l_3$	$l_4$	$t$
1.000	1.512	1.634	2.000	2.362	4.134	2.440	0.520	2.579	1.614	0.965	0.906	1/4 NPT
1.125	1.669	1.750	2.050	2.362	4.134	2.441	0.520	2.677	1.634	1.043	0.906	1/4 NPT
1.250	1.772	1.890	2.250	2.559	4.331	2.638	0.520	2.736	1.654	1.083	0.906	1/4 NPT
1.375	1.933	2.000	2.420	2.677	4.213	2.756	0.520	2.854	1.732	1.122	1.024	1/4 NPT
1.500	2.020	2.146	2.625	2.874	4.843	2.950	0.579	2.854	1.732	1.122	1.024	1/4 NPT
1.750	2.354	2.480	2.812	3.110	5.118	3.230	0.559	3.012	1.752	1.260	1.024	1/4 NPT
1.875	2.433	2.559	2.940	3.228	5.118	3.307	0.559	3.071	1.772	1.299	1.024	1/4 NPT
2.000	2.551	2.677	3.190	3.346	5.827	3.430	0.579	3.169	1.850	1.319	1.102	3/8 NPT
2.125	2.795	2.875	3.437	3.740	5.512	3.820	0.689	3.287	1.850	1.437	1.102	3/8 NPT
2.250	2.874	2.992	3.560	3.780	6.181	3.858	0.689	3.287	1.850	1.437	1.102	3/8 NPT
2.375	3.012	3.110	3.590	3.937	6.181	4.020	0.689	3.366	1.850	1.516	1.102	3/8 NPT
2.500	3.209	3.287	3.800	4.173	6.693	4.252	0.689	3.465	1.909	1.555	1.102	3/8 NPT
2.625	3.268	3.374	3.937	4.252	6.378	4.331	0.689	3.465	1.909	1.555	1.102	3/8 NPT

Dimensions in inch

## RELY ON EXCELLENCE

### Dimensions

d <sub>N</sub>	d <sub>2</sub>	d <sub>3</sub> min	d <sub>3</sub> max	d <sub>9</sub>	d <sub>a</sub>	a	s	l <sub>1</sub>	l <sub>2</sub>	l <sub>3</sub>	l <sub>4</sub>	t
25	38.4	41.5	51.0	60	105	62	13.2	65.5	41.0	24.5	23	1/4 NPT
28	42.4	44.5	52.0	60	105	62	13.2	68.0	41.5	26.5	23	1/4 NPT
30	42.4	45.5	56.0	63	105	67	13.2	68.0	41.5	26.5	23	1/4 NPT
33	45.0	48.0	57.0	65	110	67	13.2	69.5	42.0	27.5	23	1/4 NPT
35	49.1	50.8	61.5	68	107	70	13.2	72.5	44.0	28.5	26	1/4 NPT
38	51.3	54.5	66.0	73	123	75	14.7	72.5	44.0	28.5	26	1/4 NPT
40	54.3	57.5	68.0	75	123	77	14.7	75.5	44.5	31.0	26	1/4 NPT
43	56.3	59.5	70.5	78	133	80	14.7	76.5	44.5	32.0	26	1/4 NPT
45	59.8	63.0	73.0	79	130	82	14.2	76.5	44.5	32.0	26	1/4 NPT
48	61.8	65.0	75.0	82	130	84	14.2	78.0	45.0	33.0	26	1/4 NPT
50	64.8	68.0	78.0	85	148	87	14.7	80.5	47.0	33.5	28	3/8 NPT
53	66.8	70.0	87.0	95	148	97	17.5	81.5	47.0	34.5	28	3/8 NPT
55	71.0	73.0	83.0	90	148	92	17.5	83.5	47.0	36.5	28	3/8 NPT
60	76.5	79.0	91.0	100	157	102	17.5	85.5	47.0	38.5	28	3/8 NPT
65	83.0	85.7	98.5	108	162	110	17.5	88.0	48.5	39.5	28	3/8 NPT
70	88.0	94.0	108.0	116	178	118	17.5	92.0	48.5	43.5	28	3/8 NPT
75	93.4	98.4	118.0	125	190	127	17.5	93.5	49.0	44.5	28	3/8 NPT

Dimensions in millimeter