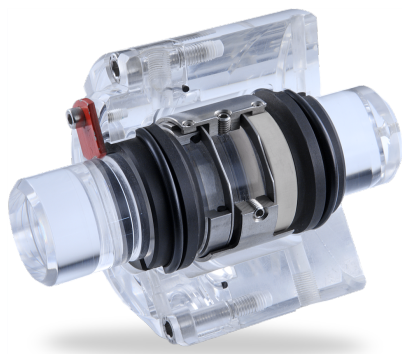


RELY ON EXCELLENCE

## M74-D

Mechanical seals | Mechanical seals for pumps | Pusher seals



### Features

- For plain shafts
- Dual seal
- Unbalanced
- Rotating multiple springs
- Independent of direction of rotation
- Seal concept based on the M7 range
- Variant with pumping screw available (M74F-D)

### Advantages

- Efficient stock keeping due to easily interchangeable faces
- Extended selection of materials
- Flexibility in torque transmissions
- EN 12756 (For connection dimensions  $d_1$  up to 100 mm (3.94"))

### Operating range

Shaft diameter:  
 $d_1 = 18 \dots 200 \text{ mm (0.71" ... 7.87")}$   
 Pressure:  
 $p_1 = 25 \text{ bar (363 PSI)}$   
 Temperature:  
 $t = -50 \text{ °C ... 220 °C}$   
 $(-58 \text{ °F ... 428 °F})$   
 Sliding velocity:  
 $vg = 20 \text{ m/s (66 ft/s)}$   
 Axial movement:  
 $d_1 \text{ up to } 100 \text{ mm: } \pm 0.5 \text{ mm}$   
 $d_1 \text{ from } 100 \text{ mm: } \pm 2.0 \text{ mm}$

### Materials

Seal face: Silicon carbide (Q1)  
 Seat G9: Carbon graphite antimony impregnated (A), Carbon graphite resin impregnated (B), Silicon carbide (Q1)  
 Seat G4, G6 (Q1, Q2), Seat G13 (A, B)

Secondary seals: EPDM (E), FKM (V), FFKM (K)  
 Springs: CrNiMo steel (G)  
 Metal parts: CrNiMo steel (G), Duplex (G1)

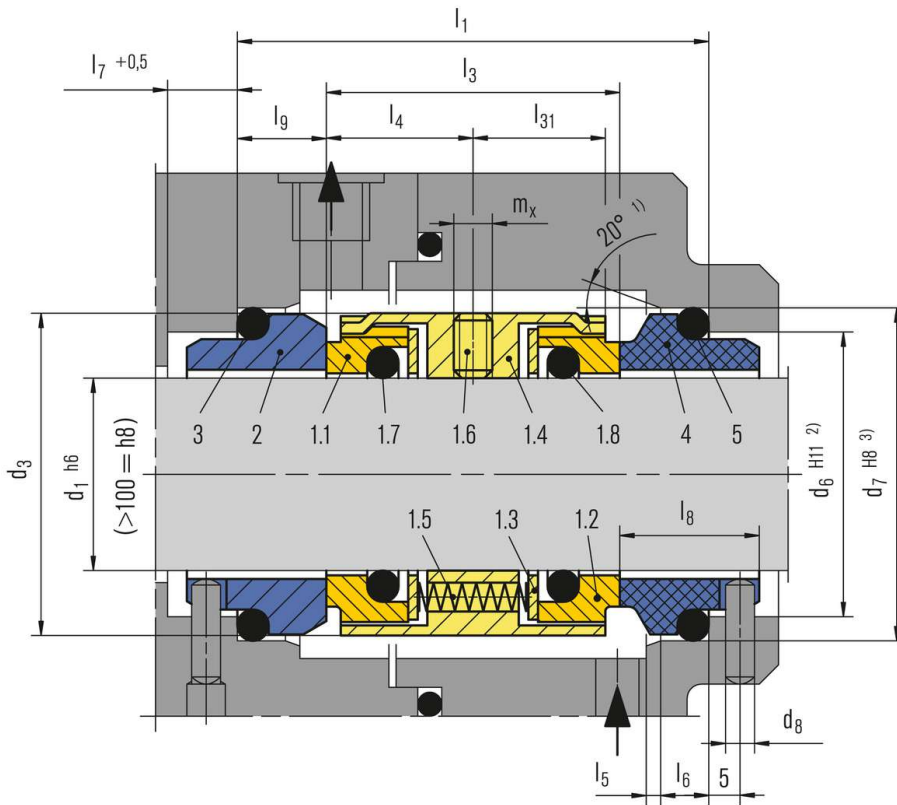
### Standards and approvals

- EN 12756

### Recommended applications

- Chemical industry
  - Process industry
  - Pulp and paper industry
  - Low solids content and low abrasive media
  - Toxic and hazardous media
  - Media with poor lubrication properties
  - Adhesives
- Chemical standard pumps

## RELY ON EXCELLENCE



### Item Part no. to Description DIN 24250

Item	Part no.	Description
1.1	472.1	Seal face
1.2	472.2	Seal face
1.3	474	Thrust ring
1.4	485	Drive collar
1.5	477	Spring
1.6	904	Set screw
1.7	412.1	O-Ring
1.8	412.2	O-Ring
2	475.1	Seat (G9)
3	412.3	O-Ring
4	475.2	Seat (G9)
5	412.4	O-Ring

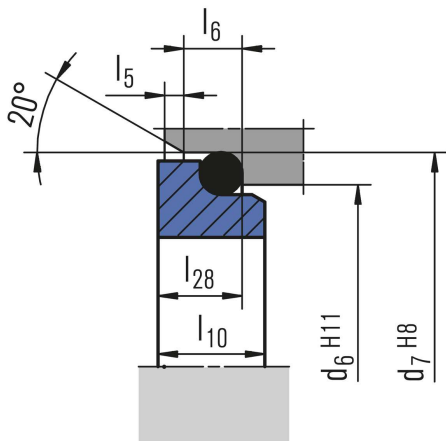
1)  $d_1 > 100$  mm:  $30^\circ$

2)  $d_1 > 100$  mm:  $+0.1$

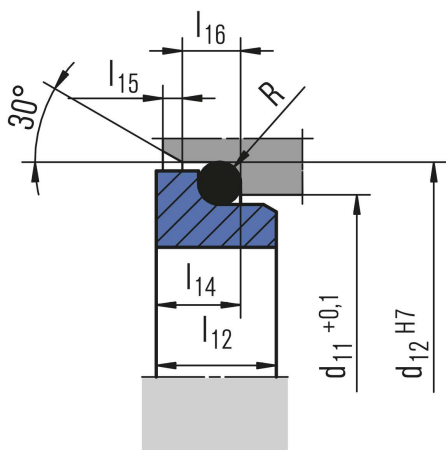
3)  $d_1 > 100$  mm: H7

RELY ON EXCELLENCE

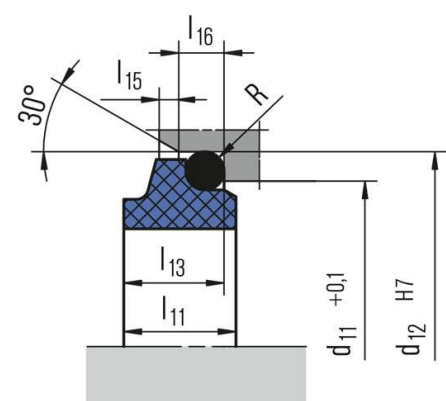
## Seat alternatives



G6 (EN 12756)



G4

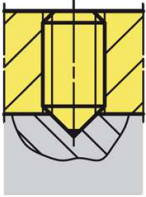


G13

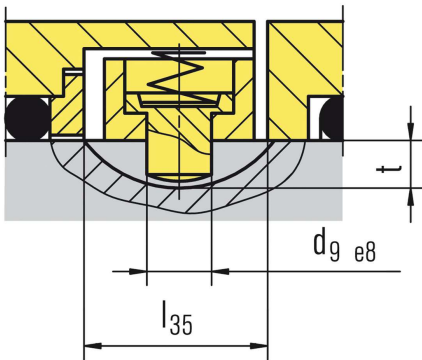
## RELY ON EXCELLENCE

### Torque transmissions

$d_1 > 100 \text{ mm (3.94")}$  Torque transmission by 4 set screws with cone point. Offset:  $90^\circ$

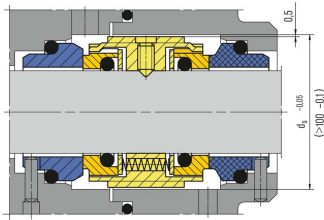


Spring loaded drive pin  
(M74-D22)



## RELY ON EXCELLENCE

### Product variants



#### M74F-D

Dimensions, items and descriptions as for M74-D, but with pumping screw.

Dependent on direction of rotation. Viscosity  $\leq$  ISO VG10).



## RELY ON EXCELLENCE

d <sub>1</sub>	d <sub>3</sub>	d <sub>6</sub>	d <sub>7</sub>	d <sub>8</sub>	d <sub>9</sub>	d <sub>11</sub>	d <sub>12</sub>	d <sub>s</sub>	l <sub>1</sub>	l <sub>3</sub>	l <sub>4</sub>	l <sub>5</sub>	l <sub>6</sub>	l <sub>7</sub>	l <sub>8</sub>	l <sub>9</sub>	l <sub>10</sub>	l <sub>11</sub>	l <sub>12</sub>	l <sub>13</sub>	l <sub>14</sub>	l <sub>15</sub>	l <sub>16</sub>	l <sub>20</sub>	l <sub>31</sub>	l <sub>35</sub>	m <sub>x</sub>	t	R	
195	231	222.5	234.3	5	7	-	-	236	135.0	79	39.5	2.0	12	-	38.0	28.0	-	-	-	-	-	-	-	-	-	35.5	22	M8	3.5	-
200	236	227.5	239.3	5	7	-	-	241	135.0	79	39.5	2.0	12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Dimensions in millimeter