

V851-E Dual Seals

Standard Mechanical Seals - Pusher Seals



Product Description

1. Dual seal configuration
2. Unbalanced design
3. Independent of direction of rotation
4. For plain shafts
5. Multiple or wave springs rotary construction
6. Pumping device available for increased efficiency in circulation (U740F-D)
7. Sealing with FEP & Spring energized PTFE seals also available on request

Technical Features

1. Versatile torque transmission available
2. Pumping screw for media with higher viscosity also available
3. Capable of self-cleaning
4. Short installation length available on request
5. Can be employed for low solids content
6. Multifaceted application usage
7. EN 12756 (For connection dimensions d_1 upto 100 mm)

Typical Industrial Applications

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

Performance Capabilities

Sizes: d_1 = Upto 200 mm (Upto 7.875")
Pressure: p_1 = 25 bar (363 PSI)
Temperature: t = -50 °C ... +220 °C
(-58 °F ... +428 °F)
Speed = 20 m/s (66 ft/s)
Permissible axial movement:
 d_1 upto 100 mm: ± 0.5 mm
 d_1 from 100 mm: ± 2.0 mm

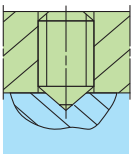
Standards

EN 12756

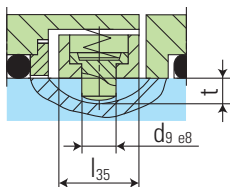
Materials

Seal face: Special cast CrMo steel (S),
Silicon carbide (Q1, Q2)
Seat G9 : Carbon graphite antimony
impregnated (A), Carbon graphite resin
impregnated (B), Silicon carbide (Q1*, Q2*)
Seat G4 : Silicon carbide (Q1*, Q2*)
Seat G6 : Silicon carbide (Q1*, Q2*)
Seat G13 : Carbon graphite antimony
impregnated (A), Carbon graphite resin impregnated (B)
* Cannot be combined with seal face made of S

Torque Transmissions

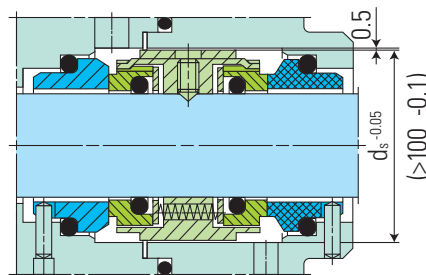


$d_1 > 100$ mm (4.000")
Torque transmission by
4 set screws with cone
point. Offset: 90°



Spring loaded drive
pin
(U740-D22)

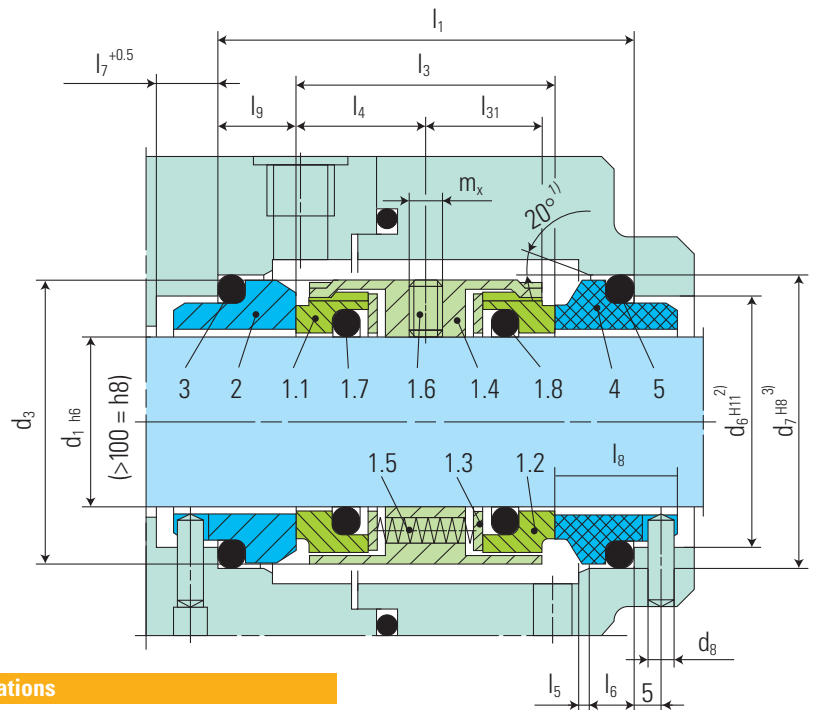
Design Variations



U740F-D

Dimensions, items and descriptions as for U740-D, but
with pumping screw (Item no. 1.4).
Dependent on direction of rotation.
Viscosity $\leq$ ISOVG10).

1) $d_1 > 100$ mm: 30°
2) $d_1 > 100$ mm: +0.1
3) $d_1 > 100$ mm: H7

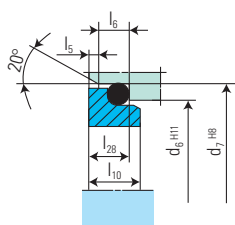


Note: The item numbers as depicted above are based on our technical
experience and knowledge and are placed in the chronological order of their
assembly procedure.

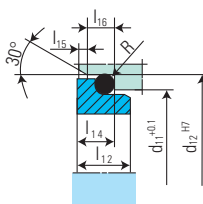
Item	Part no.	Description
1.1	472.1	Seal face
1.2	472.2	Seal face
1.3	474	Thrust ring
1.4	485	Drive collar
1.5	477	Spring
1.6	904	Set screw
1.7	412.1	O-ring
1.8	412.2	O-ring
2	475.1	Seat (G9)
3	412.3	O-ring
4	475.2	Seat (G9)
5	412.4	O-ring
DIN 24250		



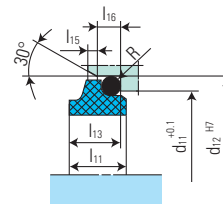
Stationary Seats



G6
(EN 12756)



G4



G13

Dimensional Data

Dimensions in millimeter

d1	d3	d6	d7	d8	d9	d11	d12	d5	l1	l3	l4	l5	l6	l7	l8	l9	l10	l11	l12	l13	l14	l15	l16	l28	l31	l35	mx	t	R
18	33	27.0	33.0	3	4	24.0	30.0	-	61.0	38	19.0	2.0	5	9	19.5	11.5	8.5	12.5	9.0	10.0	8.0	1.5	5	7.5	17.0	15	M5	3.5	1.5
20	35	29.0	35.0	3	4	29.5	35.0	-	61.0	38	19.0	2.0	5	9	19.5	11.5	8.5	12.5	8.5	9.5	7.5	1.5	5	7.5	17.0	15	M5	3.5	1.5
22	37	31.0	37.0	3	4	29.5	35.0	42	61.0	38	19.0	2.0	5	9	19.5	11.5	8.5	12.5	8.5	9.5	7.5	1.5	5	7.5	17.0	15	M5	3.5	1.5
24	39	33.0	39.0	3	4	32.0	38.0	44	61.0	38	19.0	2.0	5	9	19.5	11.5	8.5	12.5	8.5	9.5	7.5	1.5	5	7.5	17.0	15	M5	3.5	1.5
25	40	34.0	40.0	3	4	32.0	38.0	45	61.0	38	19.0	2.0	5	9	19.5	11.5	8.5	12.5	8.5	9.5	7.5	1.5	5	7.5	17.0	15	M5	3.5	1.5
28	43	37.0	43.0	3	4	36.0	42.0	47	62.0	39	19.5	2.0	5	9	19.5	11.5	8.5	14.0	10.0	11.0	9.0	1.5	5	7.5	17.5	15	M6	3.5	1.5
30	45	39.0	45.0	3	4	39.2	45.0	49	62.0	39	19.5	2.0	5	9	19.5	11.5	8.5	14.0	11.5	11.0	10.5	1.5	5	7.5	17.5	15	M6	3.5	1.5
32	47	42.0	48.0	3	4	42.2	48.0	51	62.0	39	19.5	2.0	5	9	19.5	11.5	8.5	14.0	11.5	11.0	10.5	1.5	5	7.5	17.5	15	M6	3.5	1.5
33	48	42.0	48.0	3	4	44.2	50.0	51	62.0	39	19.5	2.0	5	9	19.5	11.5	8.5	14.5	12.0	11.5	10.5	1.5	5	7.5	17.5	15	M6	3.5	1.5
35	50	44.0	50.0	3	4	46.2	52.0	54	62.0	39	19.5	2.0	5	9	19.5	11.5	8.5	14.5	12.0	11.5	11.0	1.5	5	7.5	17.5	15	M6	3.5	1.5
38	55	49.0	56.0	4	4	49.2	55.0	59	69.0	41	20.5	2.0	6	9	22.0	14.0	10.0	14.5	11.3	11.5	10.3	1.5	5	9.0	18.5	15	M6	3.5	1.5
40	57	51.0	58.0	4	4	52.2	58.0	61	70.0	42	21.0	2.0	6	9	22.0	14.0	10.0	14.5	11.8	11.5	10.8	1.5	5	9.0	19.0	15	M6	3.5	1.5
43	60	54.0	61.0	4	4	53.3	62.0	65	70.0	42	21.0	2.0	6	9	22.0	14.0	10.0	17.0	13.2	14.3	12.0	2.0	6	9.0	19.0	15	M6	3.5	2.5
45	62	56.0	63.0	4	4	55.3	64.0	66	70.0	42	21.0	2.0	6	9	22.0	14.0	10.0	17.0	12.8	14.3	11.6	2.0	6	9.0	19.0	15	M6	3.5	2.5
48	65	59.0	66.0	4	4	59.7	68.4	69	70.0	42	21.0	2.0	6	9	22.0	14.0	10.0	17.0	12.8	14.3	11.6	2.0	6	9.0	19.0	15	M6	3.5	2.5
50	67	62.0	70.0	4	4	60.8	69.3	71	73.0	43	21.5	2.5	6	9	23.0	15.0	10.5	17.0	12.8	14.3	11.6	2.0	6	9.5	19.5	15	M6	3.5	2.5
53	70	65.0	73.0	4	4	63.8	72.3	75	73.0	43	21.5	2.5	6	9	23.0	15.0	12.0	17.0	13.5	14.3	12.3	2.0	6	11.0	19.5	15	M6	3.5	2.5
55	72	67.0	75.0	4	4	66.5	75.4	76	73.0	43	21.5	2.5	6	9	23.0	15.0	12.0	18.0	14.5	15.3	13.3	2.0	6	11.0	19.5	15	M8	3.5	2.5
58	79	70.0	78.0	4	5	69.5	78.4	83	86.0	56	28.0	2.5	6	9	23.0	15.0	12.0	18.0	14.5	15.3	13.3	2.0	6	11.0	23.5	19	M8	3.5	2.5
60	81	72.0	80.0	4	5	71.5	80.4	85	86.0	56	28.0	2.5	6	9	23.0	15.0	12.0	18.0	14.5	15.3	13.3	2.0	6	11.0	23.5	19	M8	3.5	2.5
63	84	75.0	83.0	4	5	74.5	83.4	88	85.0	55	27.5	2.5	6	9	23.0	15.0	12.0	18.0	14.2	15.3	13.3	2.0	6	11.0	24.5	19	M8	3.5	2.5
65	86	77.0	85.0	4	5	76.5	85.4	95	85.0	55	27.5	2.5	6	9	23.0	15.0	12.0	18.0	14.2	15.3	13.0	2.0	6	11.0	24.5	19	M8	3.5	2.5
68	89	81.0	90.0	4	5	82.7	91.5	93	91.0	55	27.5	2.5	7	9	26.0	18.0	12.5	19.0	14.9	16.0	13.7	2.0	6	11.3	24.5	19	M8	3.5	2.5
70	91	83.0	92.0	4	5	83.0	92.0	95	92.0	56	28.0	2.5	7	9	26.0	18.0	12.5	18.0	14.2	15.3	13.0	2.0	6	11.3	23.5	19	M8	3.5	2.5
75	99	88.0	97.0	4	5	90.2	99.0	105	92.0	56	28.0	2.5	7	9	26.0	18.0	12.5	18.0	15.2	15.3	14.0	2.0	6	11.3	25.5	19	M8	3.5	2.5
80	104	95.0	105.0	4	5	95.2	104.0	109	92.5	56	28.0	3.0	7	9	26.2	18.2	13.0	19.0	16.2	16.3	15.0	2.0	6	12.0	25.5	19	M8	3.5	2.5
85	109	100.0	110.0	4	5	100.2	109.0	114	92.5	56	28.0	3.0	7	9	26.2	18.2	15.0	19.0	16.0	16.3	14.8	2.0	6	14.0	25.0	19	M8	3.5	2.5
90	114	105.0	115.0	4	5	105.2	114.0	119	92.5	56	28.0	3.0	7	9	26.2	18.2	15.0	19.0	16.0	16.3	14.8	2.0	6	14.0	25.5	19	M8	3.5	2.5
95	119	110.0	120.0	4	5	111.6	120.3	124	90.5	56	28.0	3.0	7	9	25.2	17.2	15.0	20.0	17.0	17.3	15.8	2.0	6	14.0	25.0	19	M8	3.5	2.5
100	124	115.0	125.0	4	5	114.5	123.3	129	90.5	56	28.0	3.0	7	9	25.2	17.2	15.0	20.0	17.0	17.3	15.8	2.0	6	14.0	25.0	19	M8	3.5	2.5
105	138	122.2	134.3	5	7	-	-	143	108.0	68	34.0	2.0	10	-	30.0	20.0	-	-	-	-	-	-	-	-	30.5	22	M8	3.5	-
110	143	128.2	140.3	5	7	-	-	148	110.0	70	35.0	2.0	10	-	30.0	20.0	-	-	-	-	-	-	-	-	31.5	22	M8	3.5	-
115	148	136.2	148.3	5	7	-	-	153	110.0	70	35.0	2.0	10	-	30.0	20.0	-	-	-	-	-	-	-	-	31.5	22	M8	3.5	-
120	153	138.2	150.3	5	7	-	-	158	110.0	70	35.0	2.0	10	-	30.0	20.0	-	-	-	-	-	-	-	-	31.5	22	M8	3.5	-
125	158	142.2	154.3	5	7	-	-	163	110.0	70	35.0	2.0	10	-	30.0	20.0	-	-	-	-	-	-	-	-	31.5	22	M8	3.5	-
130	163	146.2	158.3	5	7	-	-	168	110.0	70	35.0	2.0	10	-	30.0	20.0	-	-	-	-	-	-	-	-	31.5	22	M8	3.5	-
135	168	152.2	164.3	5	7	-	-	173	110.0	70	35.0	2.0	10	-	30.0	20.0	-	-	-	-	-	-	-	-	31.5	22	M8	3.5	-
140	173	156.2	168.3	5	7	-	-	178	110.0	70	35.0	2.0	10	-	30.0	20.0	-	-	-	-	-	-	-	-	31.5	22	M8	3.5	-
145	178	161.2	173.3	5	7	-	-	183	110.0	70	35.0	2.0	10	-	30.0	20.0	-	-	-	-	-	-	-	-	31.5	22	M8	3.5	-
150	183	168.2	180.3	5	7	-	-	188	114.0	70	35.0	2.0	10	-	32.0	22.0	-	-	-	-	-	-	-	-	31.5	22	M8	3.5	-
155	191	173.2	185.3	5	7	-	-	196	127.0	79	39.5	2.0	12	-	34.0	24.0	-	-	-	-	-	-	-	-	35.5	22	M8	3.5	-
160	196	178.2	190.3	5	7	-	-	201	127.0	79	39.5	2.0	12	-	34.0	24.0	-	-	-	-	-	-	-	-	35.5	22	M8	3.5	-
165	201	183.2	195.3	5	7	-	-	206	127.0	79	39.5	2.0	12	-	34.0	24.0	-	-	-	-	-	-	-	-	35.5	22	M8	3.5	-
170	206	188.2	200.3	5	7	-	-	211	127.0	79	39.5	2.0	12	-	34.0	24.0	-	-	-	-	-	-	-	-	35.5	22	M8	3.5	-
175	211	193.2	205.3	5	7	-	-	216	127.0	79	39.5	2.0	12	-	34.0	24.0	-	-	-	-	-	-	-	-	35.5	22	M8	3.5	-
180	216	207.5	219.3	5	7	-	-	221	135.0	79	39.5	2.0	12	-	38.0	28.0	-	-	-	-	-	-	-	-	35.5	22	M8	3.5	-
185	221	212.5	224.3	5	7	-	-	226	135.0	79	39.5	2.0	12	-	38.0	28.0	-	-	-	-	-	-	-	-	35.5	22	M8	3.5	-
190	226	217.5	229.3	5	7	-	-	231	135.0	79	39.5	2.0	12	-	38.0	28.0	-	-	-	-	-	-	-	-	35.5	22	M8	3.5	-
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	-	38.0	28.0	-	-	-	-	-	-	-	-	35.5	22	M8	3.5	-

d₁ > 200 on request