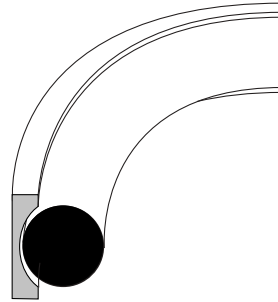


Piston Seals (Double Acting)

SP-11-8401

(Metric & Imperial Size)

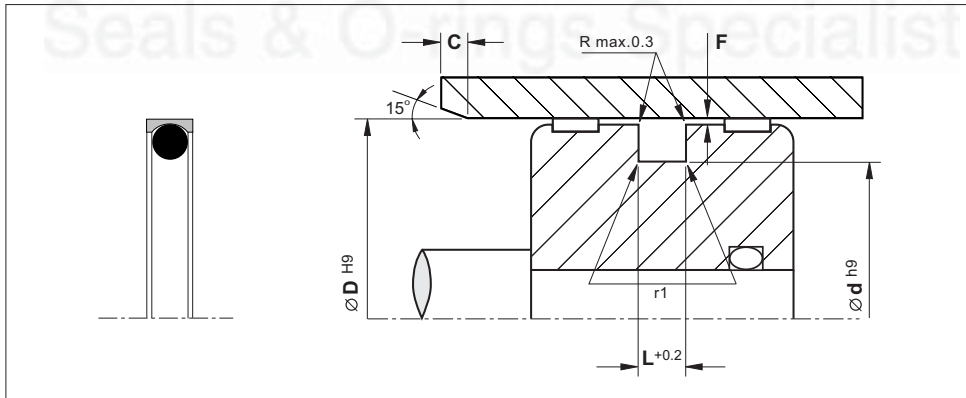


SP-11-8401

Material	Pressure (Bar)	Temp. (°C)	Speed (m/s)
PTFE - O Ring	350	-40 +200	15

- Compact groove dimensions and simple installation.
- Low friction without stick-slip.
- Resistance against wear and extrusion

Installation Recommendation



Surface roughness	Ra	Rt	Chamfers	
Sliding surface	≤ 0.3 µm	≤ 4 µm	D	C
Surface of housing	≤ 1.8 µm	≤ 10 µm	< 50	3.0
Sides of housing	≤ 3.0 µm	≤ 16 µm	50-140	4.0
			140-200	6.0
			200-310	8.0

PTFE Seal - 8401



Installation Dimensions

Series No.	Bore Dia. D		Groove Dia.	Groove Width.	Radius	Radial Clearance F max.*				O-Ring Cross-Section
	Standard Range	Extended Range	d	L	r1	20 Bar	100 Bar	200 Bar	350 Bar	
A	5 - 13.9	5 - 139.9	D - 2.9	2.4	0.4	0.10	0.10	0.08	0.05	1.78
B	14 - 24.9	8 - 259.9	D - 4.5	3.6	0.4	0.15	0.15	0.10	0.07	2.62
C	25 - 45.9	12 - 469.9	D - 6.2	4.8	0.6	0.25	0.20	0.15	0.08	3.53
D	46 - 124.9	20 - 669.9	D - 9.4	7.1	0.8	0.35	0.25	0.20	0.10	5.33
E	125 - 669.9	80 - 999.9	D - 12.2	9.5	0.8	0.50	0.30	0.25	0.15	7.00
F	670 - 999.9	125 - 999.9	D - 15.0	10.0	1.0	0.60	0.40	0.30	0.20	8.40

(Metric & Imperial Size)

Bore Dia.	Groove Dia.	Groove Width	O-Ring No.	Reference (For order processing)
D	d	L		
8.0	5.1	2.4	008	SP-11-8401-0080
10.0	7.1	2.4	010	SP-11-8401-0100
12.0	9.1	2.4	011	SP-11-8401-0120
15.0	10.5	3.6	110	SP-11-8401-0150
16.0	11.5	3.6	111	SP-11-8401-0160
18.0	13.5	3.6	112	SP-11-8401-0180
20.0	15.5	3.6	114	SP-11-8401-0200
22.0	17.5	3.6	115	SP-11-8401-0220
24.0	19.5	3.6	116	SP-11-8401-0240
25.0	18.8	4.8	209	SP-11-8401-0250
25.4	19.2	4.8	210	SP-11-8401-0254
28.0	21.8	4.8	212	SP-11-8401-0280
30.0	23.8	4.8	213	SP-11-8401-0300
32.0	25.8	4.8	214	SP-11-8401-0320
35.0	28.8	4.8	216	SP-11-8401-0350
40.0	33.8	4.8	219	SP-11-8401-0400
42.0	35.8	4.8	220	SP-11-8401-0420
45.0	38.8	4.8	222	SP-11-8401-0450
48.0	38.6	7.1	325	SP-11-8401-0480
50.0	40.6	7.1	326	SP-11-8401-0500
50.8	41.4	7.1	326	SP-11-8401-0508
52.0	42.6	7.1	326	SP-11-8401-0520
55.0	45.6	7.1	327	SP-11-8401-0550
60.0	50.6	7.1	329	SP-11-8401-0600
63.0	53.6	7.1	330	SP-11-8401-0630
65.0	55.6	7.1	330	SP-11-8401-0650
70.0	60.6	7.1	332	SP-11-8401-0700
75.0	65.6	7.1	333	SP-11-8401-0750
80.0	70.6	7.1	335	SP-11-8401-0800
85.0	75.6	7.1	337	SP-11-8401-0850

(Metric & Imperial Size)

Bore Dia.	Groove Dia.	Groove Width	O-Ring No.	Reference (For order processing)
D	d	L		
90.0	80.6	7.1	338	SP-11-8401-0900
95.0	85.6	7.1	340	SP-11-8401-0950
100.0	90.6	7.1	341	SP-11-8401-1000
105.0	95.6	7.1	343	SP-11-8401-1050
110.0	100.6	7.1	344	SP-11-8401-1100
115.0	105.6	7.1	346	SP-11-8401-1150
120.0	110.6	7.1	348	SP-11-8401-1200
125.0	112.8	9.5	425	SP-11-8401-1250
130.0	117.8	9.5	426	SP-11-8401-1300
135.0	122.8	9.5	427	SP-11-8401-1350
140.0	127.8	9.5	429	SP-11-8401-1400
145.0	132.8	9.5	430	SP-11-8401-1450
150.0	137.8	9.5	432	SP-11-8401-1500
155.0	142.8	9.5	433	SP-11-8401-1550
160.0	147.8	9.5	435	SP-11-8401-1600
165.0	152.8	9.5	437	SP-11-8401-1650
170.0	157.8	9.5	437	SP-11-8401-1700
175.0	162.8	9.5	438	SP-11-8401-1750
180.0	167.8	9.5	439	SP-11-8401-1800
190.0	177.8	9.5	441	SP-11-8401-1900
200.0	187.8	9.5	442	SP-11-8401-2000
210.0	197.8	9.5	444	SP-11-8401-2100
220.0	207.8	9.5	445	SP-11-8401-2200
230.0	217.8	9.5	446	SP-11-8401-2300
240.0	227.8	9.5	447	SP-11-8401-2400
250.0	237.8	9.5	447	SP-11-8401-2500
260.0	272.2	9.5	450	SP-11-8401-2600
270.0	257.8	9.5	449	SP-11-8401-2700
280.0	267.8	9.5	450	SP-11-8401-2800
300.0	287.8	9.5	451	SP-11-8401-3000

Select the material of seal ring and o-ring from Compounds for Fluid Technology (page 8)

Order No. SP-11 - 840 1 - 0080

Seal ring material code _____

Seal profile _____

O ring material code _____

Bore diameter x 10 _____