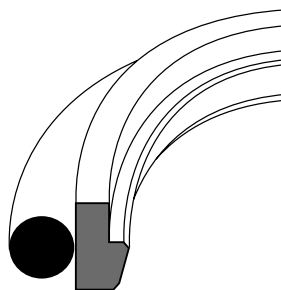


Rod Seals

SP-55-171

(Metric Size)

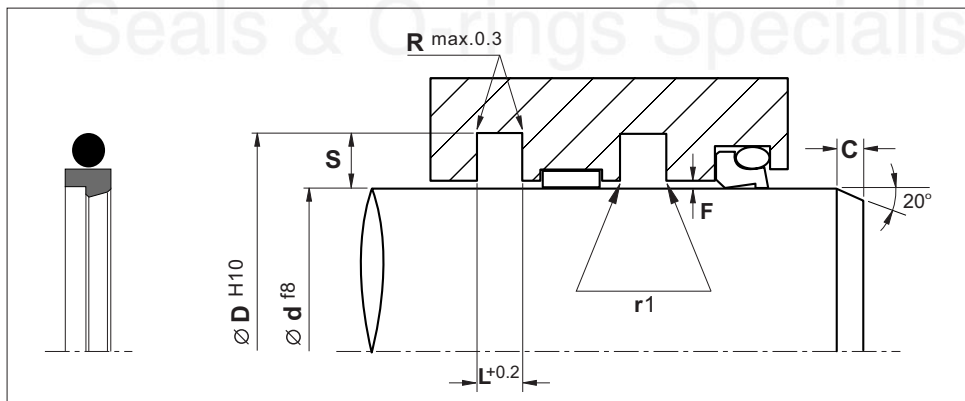


SP-55-171

Material	Pressure (Bar)	Temp. (°C)	Speed (m/s)
PTFE+Bronze - O Ring	400	-40 +200	15

- Excellent anti-friction characteristics.
- No stick-slip effect during start up.
- Long service life.
- Simple groove configuration.

Installation Recommendation



Surface roughness	Ra	Rt	Chamfers	
			S	C
Sliding surface	≤ 0.3 μm	≤ 4 μm	< 3.75	2.0
Surface of housing	≤ 1.8 μm	≤ 10 μm	5.50	3.0
Sides of housing	≤ 3.0 μm	≤ 16 μm	7.75	4.0
			10.50	5.5
			12.25	7.0

# PTFE Seal - 171



## Installation Dimensions

Series No.	Rod Dia.			Groove Dia. D	Groove Width. L	Radius r1	Radial Clearance F max.*			O-Ring Cross-Section
	Standard Application	Light Application	Heavy-Duty Application				100 Bar	200 Bar	400 Bar	
A	3 - 7.9	8 - 18.9	-	d + 4.9	2.2	0.4	0.30	0.20	0.15	1.78
B	8 - 18.9	19 - 37.9	-	d + 7.3	3.2	0.6	0.40	0.25	0.15	2.62
C	19 - 37.9	38 - 199.9	8 - 18.9	d + 10.7	4.2	1.0	0.40	0.25	0.20	3.53
D	38 - 199.9	200 - 255.9	19 - 37.9	d + 15.1	6.3	1.3	0.50	0.30	0.20	5.33
E	200 - 255.9	256 - 649.9	38 - 199.9	d + 20.5	8.1	1.8	0.60	0.35	0.25	7.00
F	256 - 649.9	650 - 999.9	200 - 255.9	d + 24.0	8.1	1.8	0.60	0.35	0.25	7.00
G	650 - 999.9	≥ 1000	256 - 649.9	d + 27.3	9.5	2.5	0.70	0.50	0.30	8.40
H	≥ 1000	-	650 - 999.9	d + 38.0	13.8	3.0	1.00	0.70	0.60	12.00

## (Metric Size)

Rod Dia. d	Groove Dia. D	Groove Width. L	O-RING No.	Reference (For order processing)	Reference	Reference
4.0	8.9	2.2	010	SP-55-171-0040	S55013-0040	ER-39-710-4
5.0	9.9	2.2	011	SP-55-171-0050	S55013-0050	ER-39-710-5
6.0	10.9	2.2	011	SP-55-171-0060	S55013-0060	ER-39-710-6
7.0	11.9	2.2	012	SP-55-171-0070	S55013-0070	ER-39-710-7
8.0	12.9	2.2	012	SP-55-171-0080A	S55015-0080	ER-39-711-8
8.0	15.3	3.2	111	SP-55-171-0080	S55013-0080	ER-39-710-8
10.0	14.9	2.2	013	SP-55-171-0100A	S55015-0100	ER-39-711-10
10.0	17.3	3.2	113	SP-55-171-0100	S55013-0100	ER-39-710-10
12.0	16.9	2.2	015	SP-55-171-0120A	S55015-0120	ER-39-711-12
12.0	19.3	3.2	114	SP-55-171-0120	S55013-0120	ER-39-710-12
14.0	18.9	2.2	016	SP-55-171-0140A	S55015-0140	ER-39-711-14
14.0	21.3	3.2	115	SP-55-171-0140	S55013-0140	ER-39-710-14
15.0	19.9	2.2	016	SP-55-171-0150A	S55015-0150	ER-39-711-15
15.0	22.3	3.2	116	SP-55-171-0150	S55013-0150	ER-39-710-15
16.0	20.9	2.2	017	SP-55-171-0160A	S55015-0160	ER-39-711-16
16.0	23.3	3.2	116	SP-55-171-0160	S55013-0160	ER-39-710-16
18.0	22.9	2.2	018	SP-55-171-0180A	S55015-0180	ER-39-711-18
18.0	25.3	3.2	118	SP-55-171-0180	S55013-0180	ER-39-710-18
20.0	27.3	3.2	118	SP-55-171-0200B	S55015-0200	ER-39-711-20
20.0	30.7	4.2	214	SP-55-171-0200	S55013-0200	ER-39-710-20
22.0	29.3	3.2	120	SP-55-171-0220B	S55015-0220	ER-39-711-22
22.0	32.7	4.2	215	SP-55-171-0220	S55013-0220	ER-39-710-22
25.0	32.3	3.2	122	SP-55-171-0250B	S55015-0250	ER-39-711-25
25.0	35.7	4.2	217	SP-55-171-0250	S55013-0250	ER-39-710-25
28.0	35.3	3.2	124	SP-55-171-0280B	S55015-0280	ER-39-711-28

(Metric Size)

Rod Dia.	Groove Dia.	Groove Width.	O-RING No.	Reference (For order processing)	Reference	Reference
d	D	L				
28.0	38.7	4.2	219	SP-55-171-0280	S55013-0280	ER-39-710-28
30.0	37.3	3.2	125	SP-55-171-0300B	S55015-0300	ER-39-711-30
30.0	40.7	4.2	220	SP-55-171-0300	S55013-0300	ER-39-710-30
32.0	39.3	3.2	126	SP-55-171-0320B	S55015-0320	ER-39-711-32
32.0	42.7	4.2	221	SP-55-171-0320	S55013-0320	ER-39-710-32
35.0	42.3	3.2	128	SP-55-171-0350B	S55015-0350	ER-39-711-35
35.0	45.7	4.2	222	SP-55-171-0350	S55013-0350	ER-39-710-35
36.0	43.3	3.2	129	SP-55-171-0360B	S55015-0360	ER-39-711-36
36.0	46.7	4.2	223	SP-55-171-0360	S55013-0360	ER-39-710-36
38.0	48.7	4.2	223	SP-55-171-0380C	S55015-0380	ER-39-711-38
38.0	53.1	6.3	327	SP-55-171-0380	S55013-0380	ER-39-710-38
40.0	50.7	4.2	224	SP-55-171-0400C	S55015-0400	ER-39-711-40
40.0	55.1	6.3	328	SP-55-171-0400	S55013-0400	ER-39-710-40
42.0	52.7	4.2	225	SP-55-171-0420C	S55015-0420	ER-39-711-42
42.0	57.1	6.3	328	SP-55-171-0420	S55013-0420	ER-39-710-42
45.0	55.7	4.2	226	SP-55-171-0450C	S55015-0450	ER-39-711-45
45.0	60.1	6.3	329	SP-55-171-0450	S55013-0450	ER-39-710-45
50.0	60.7	4.2	227	SP-55-171-0500C	S55015-0500	ER-39-711-50
50.0	65.1	6.3	331	SP-55-171-0500	S55013-0500	ER-39-710-50
55.0	65.7	4.2	229	SP-55-171-0550C	S55015-0550	ER-39-711-55
55.0	70.1	6.3	332	SP-55-171-0550	S55013-0550	ER-39-710-55
56.0	66.7	4.2	229	SP-55-171-0560C	S55015-0560	ER-39-711-56
56.0	71.1	6.3	333	SP-55-171-0560	S55013-0560	ER-39-710-56
60.0	70.7	4.2	230	SP-55-171-0600C	S55015-0600	ER-39-711-60
60.0	75.1	6.3	334	SP-55-171-0600	S55013-0600	ER-39-710-60
63.0	78.1	6.3	335	SP-55-171-0630	S55013-0630	ER-39-710-63
65.0	80.1	6.3	336	SP-55-171-0650	S55013-0650	ER-39-710-65
70.0	85.1	6.3	337	SP-55-171-0700	S55013-0700	ER-39-710-70
75.0	90.1	6.3	339	SP-55-171-0750	S55013-0750	ER-39-710-75
80.0	95.1	6.3	340	SP-55-171-0800	S55013-0800	ER-39-710-80
85.0	100.1	6.3	342	SP-55-171-0850	S55013-0850	ER-39-710-85
90.0	105.1	6.3	344	SP-55-171-0900	S55013-0900	ER-39-710-90
95.0	110.1	6.3	345	SP-55-171-0950	S55013-0950	ER-39-710-95
100.0	115.1	6.3	347	SP-55-171-1000	S55013-1000	ER-39-710-100
105.0	120.1	6.3	348	SP-55-171-1050	S55013-1050	ER-39-710-105
110.0	125.1	6.3	350	SP-55-171-1100	S55013-1100	ER-39-710-110
115.0	130.1	6.3	351	SP-55-171-1150	S55013-1150	ER-39-710-115
120.0	135.1	6.3	353	SP-55-171-1200	S55013-1200	ER-39-710-120
125.0	140.1	6.3	355	SP-55-171-1250	S55013-1250	ER-39-710-125
130.0	145.1	6.3	356	SP-55-171-1300	S55013-1300	ER-39-710-130

# PTFE Seal - 171



(Metric Size)

Rod Dia.	Groove Dia.	Groove Width.	O-RING No.	Reference (For order processing)	Reference	Reference
d	D	L				
135.0	150.1	6.3	358	SP-55-171-1350	S55013-1350	ER-39-710-135
140.0	155.1	6.3	359	SP-55-171-1400	S55013-1400	ER-39-710-140
150.0	165.1	6.3	362	SP-55-171-1500	S55013-1500	ER-39-710-150
160.0	175.1	6.3	363	SP-55-171-1600	S55013-1600	ER-39-710-160
170.0	185.1	6.3	365	SP-55-171-1700	S55013-1700	ER-39-710-170
180.0	195.1	6.3	366	SP-55-171-1800	S55013-1800	ER-39-710-180
190.0	205.1	6.3	368	SP-55-171-1900	S55013-1900	ER-39-710-190
195.0	210.1	6.3	369	SP-55-171-1950	S55013-1950	ER-39-710-195
200.0	220.5	8.1	445	SP-55-171-2000	S55013-2000	ER-39-710-200
210.0	230.5	8.1	446	SP-55-171-2100	S55013-2100	ER-39-710-210
220.0	240.5	8.1	447	SP-55-171-2200	S55013-2200	ER-39-710-220
225.0	245.5	8.1	447	SP-55-171-2250	S55013-2250	ER-39-710-225
230.0	250.5	8.1	448	SP-55-171-2300	S55013-2300	ER-39-710-230
240.0	260.5	8.1	449	SP-55-171-2400	S55013-2400	ER-39-710-240
250.0	270.5	8.1	449	SP-55-171-2500	S55013-2500	ER-39-710-250
260.0	284.0	8.1	450	SP-55-171-2600	S55013-2600	ER-39-710-260
270.0	294.0	8.1	451	SP-55-171-2700	S55013-2700	ER-39-710-270
280.0	304.0	8.1	452	SP-55-171-2800	S55013-2800	ER-39-710-280
290.0	314.0	8.1	453	SP-55-171-2900	S55013-2900	ER-39-710-290
300.0	324.0	8.1	454	SP-55-171-3000	S55013-3000	ER-39-710-300
310.0	334.0	8.1	454	SP-55-171-3100	S55013-3100	ER-39-710-310
320.0	344.0	8.1	455	SP-55-171-3200	S55013-3200	ER-39-710-320
330.0	354.0	8.1	456	SP-55-171-3300	S55013-3300	ER-39-710-330
340.0	364.0	8.1	457	SP-55-171-3400	S55013-3400	ER-39-710-340
350.0	374.0	8.1	458	SP-55-171-3500	S55013-3500	ER-39-710-350
360.0	384.0	8.1	458	SP-55-171-3600	S55013-3600	ER-39-710-360
370.0	394.0	8.1	459	SP-55-171-3700	S55013-3700	ER-39-710-370
380.0	404.0	8.1	460	SP-55-171-3800	S55013-3800	ER-39-710-380
390.0	414.0	8.1	461	SP-55-171-3900	S55013-3900	ER-39-710-390
400.0	424.0	8.1	461	SP-55-171-4000	S55013-4000	ER-39-710-400
410.0	434.0	8.1	462	SP-55-171-4100	S55013-4100	ER-39-710-410
420.0	444.0	8.1	463	SP-55-171-4200	S55013-4200	ER-39-710-420
430.0	454.0	8.1	464	SP-55-171-4300	S55013-4300	ER-39-710-430
440.0	464.0	8.1	464	SP-55-171-4400	S55013-4400	ER-39-710-440
450.0	474.0	8.1	465	SP-55-171-4500	S55013-4500	ER-39-710-450
460.0	484.0	8.1	466	SP-55-171-4600	S55013-4600	ER-39-710-460
470.0	494.0	8.1	467	SP-55-171-4700	S55013-4700	ER-39-710-470
480.0	504.0	8.1	468	SP-55-171-4800	S55013-4800	ER-39-710-480
490.0	514.0	8.1	469	SP-55-171-4900	S55013-4900	ER-39-710-490
500.0	524.0	8.1	469	SP-55-171-5000	S55013-5000	ER-39-710-500

**(Metric Size)**

Rod Dia.	Groove Dia.	Groove Width.	O-RING No.	Reference (For order processing)	Reference	Reference
d	D	L				
510.0	534.0	8.1	469	SP-55-171-5100	S55013-5100	ER-39-710-510
520.0	544.0	8.1	470	SP-55-171-5200	S55013-5200	ER-39-710-520
530.0	554.0	8.1	470	SP-55-171-5300	S55013-5300	ER-39-710-530
540.0	564.0	8.1	471	SP-55-171-5400	S55013-5400	ER-39-710-540
550.0	574.0	8.1	471	SP-55-171-5500	S55013-5500	ER-39-710-550
560.0	584.0	8.1	471	SP-55-171-5600	S55013-5600	ER-39-710-560
570.0	594.0	8.1	472	SP-55-171-5700	S55013-5700	ER-39-710-570
580.0	604.0	8.1	472	SP-55-171-5800	S55013-5800	ER-39-710-580
590.0	614.0	8.1	473	SP-55-171-5900	S55013-5900	ER-39-710-590
600.0	624.0	8.1	473	SP-55-171-6000	S55013-6000	ER-39-710-600
610.0	634.0	8.1	473	SP-55-171-6100	S55013-6100	ER-39-710-610
620.0	644.0	8.1	474	SP-55-171-6200	S55013-6200	ER-39-710-620
630.0	654.0	8.1	474	SP-55-171-6300	S55013-6300	ER-39-710-630
640.0	664.0	8.1	475	SP-55-171-6400	S55013-6400	ER-39-710-640
650.0	677.3	9.5	665 * 8.4	SP-55-171-6500	S55013-6500	ER-39-710-650
660.0	687.3	9.5	675 * 8.4	SP-55-171-6600	S55013-6600	ER-39-710-660
670.0	697.3	9.5	685 * 8.4	SP-55-171-6700	S55013-6700	ER-39-710-670
680.0	707.3	9.5	695 * 8.4	SP-55-171-6800	S55013-6800	ER-39-710-680
690.0	717.3	9.5	705 * 8.4	SP-55-171-6900	S55013-6900	ER-39-710-690
700.0	727.3	9.5	715 * 8.4	SP-55-171-7000	S55013-7000	ER-39-710-700
710.0	737.3	9.5	725 * 8.4	SP-55-171-7100	S55013-7100	ER-39-710-710

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

<b>Order No.</b>	SP-55 - 17 1 - 0040
<b>Seal ring material code</b> _____	
<b>Seal profile</b> _____	
<b>O ring material code</b> _____	
<b>Rod diameter x 10</b> _____	