Forseal FOI made of PTFE

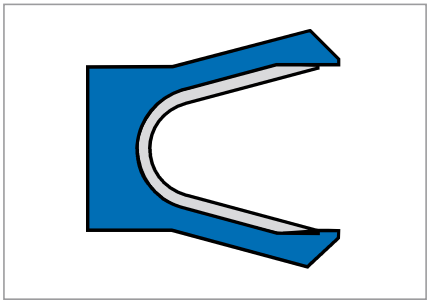


Fig. 1 Forseal FOI made of PTFE

Product description

Single acting, U-ring type PTFE seal with metal tension spring.

Product advantages

Axially moving rod seal, interchangeable for O-ring housings (ARP568, MIL-P-5514)

- Extremely media and temperature resistant
- Good dry running properties
- Low static and dynamic friction values.

Application

Hot water valves, accumulators, hydraulic and pneumatic cylinders as well as applications in food processing, medical and chemical technology.

Design notes

Beside the default dimensions, all special dimensions considering the U-ring profiles are available on request without surcharge for the tool.
Dimensions available from Ø 5 mm (rod) to approx. 2000 mm. In general, installation is only possible in split, axially accessible grooves. Installation in half-open grooves possible in exceptional cases. → Technical Manual.

Material

Material	Code	Tension spring
Carbon-filled PTFE	PTFE 10/F56110	Standard stainless steel (part no. 1.4310)

Operating conditions

Material	PTFE 10/F56110 + 1.4310
	Temperature range in °C
Hydraulic fluids, oil, water, steam, air, solvents, pharmaceutical goods, foodstuffs or all media that do not attack PTFE and stainless steel	–200 ... +260
Pressure p in MPa	30
Running speed v in m/s	15

Material	PTFE 10/F56110 +spring Hastelloy C276 (Not available ex-works)
	Temperature range in °C
Aggressive acids and alkalis	–200 ... +260
Pressure p in MPa	30
Running speed v in m/s	15

Rotary and pivoting motions possible. No rotation. → Technical Manual.

Surface quality

Sealing surfaces, dynamic/static: → Fig. 2
Lead-in chamfers: R_a <1,6 µm
Sides of groove: R_a <2,5 µm

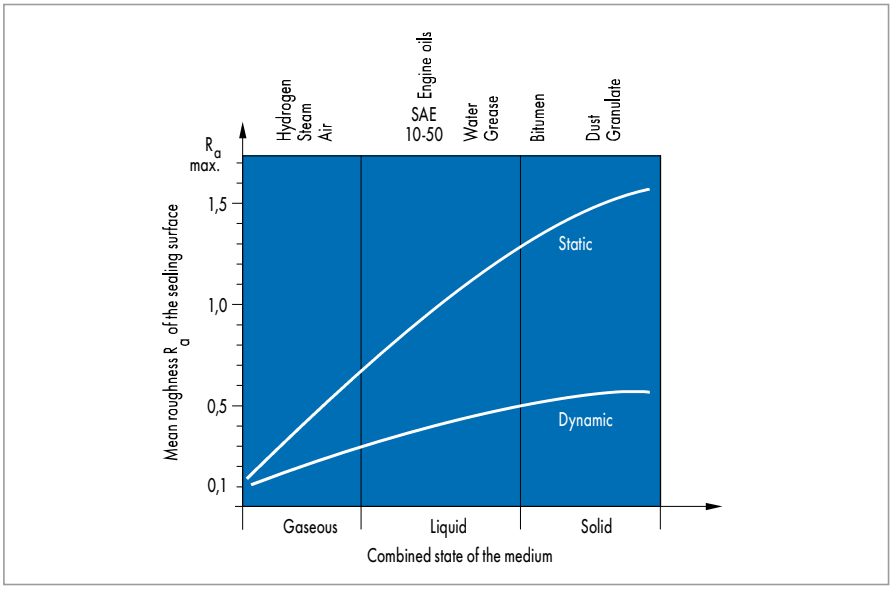
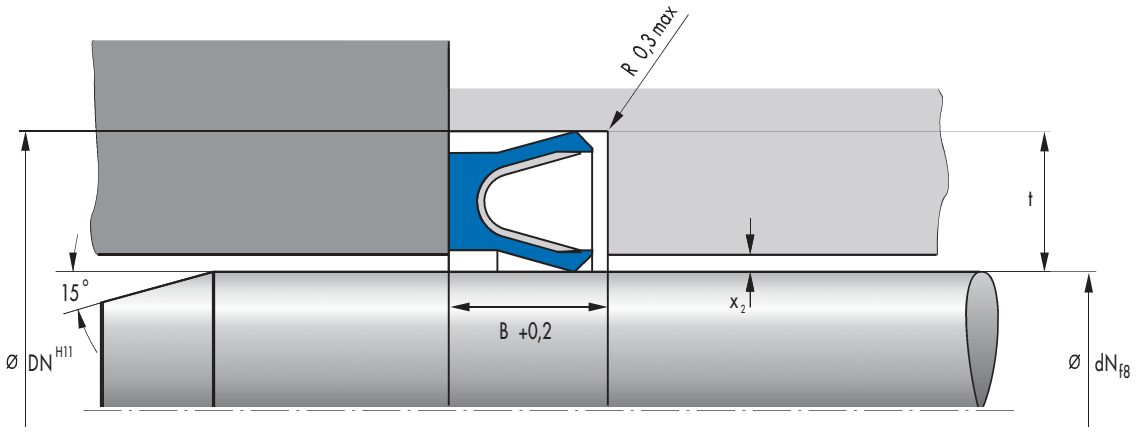


Fig. 2 Surface recommendation for sealing surfaces

Article list



d_N	D_N	h	t	$x_{2\ max}$	Interchangeable for O-Ring	B+0,2	Material	Article No.	
5	7,9	2,1	1,45	0,07	1,78	2,4	PTFE F56110	422362	●
6	8,9	2,1	1,45	0,07	1,78	2,4	PTFE F56110	469398	●
8	10,9	2,1	1,45	0,07	1,78	2,4	PTFE F56110	435977	●
10	12,9	2,1	1,45	0,07	1,78	2,4	PTFE F56110	435975	●
10	14,5	3,2	2,25	0,08	2,62	2,4	PTFE F56110	366345	●
12	16,5	3,2	2,25	0,08	2,62	3,6	PTFE F56110	164660	●
14	18,5	3,2	2,25	0,08	2,62	3,6	PTFE F56110	366346	●
16	20,5	3,2	2,25	0,08	2,62	3,6	PTFE F56110	422359	●
18	22,5	3,2	2,25	0,08	2,62	3,6	PTFE F56110	365876	●
20	24,5	3,2	2,25	0,08	2,62	3,6	PTFE F56110	366348	●
22	28,2	4,3	3,1	0,1	3,53	4,8	PTFE F56110	422373	●
25	31,2	4,3	3,1	0,1	3,53	4,8	PTFE F56110	366349	●
28	34,2	4,3	3,1	0,1	3,53	4,8	PTFE F56110	366350	●
28	34,2	4,3	3,1	0,1	3,53	4,8	PTFE F56110	49029924	○
30	36,2	4,3	3,1	0,1	3,53	4,8	PTFE F56110	366351	●
32	38,2	4,3	3,1	0,1	3,53	4,8	PTFE F56110	366352	●
36	42,2	4,3	3,1	0,1	3,53	4,8	PTFE F56110	366353	●
40	46,2	4,3	3,1	0,1	3,53	4,8	PTFE F56110	366354	●
45	54,4	6,6	4,7	0,12	5,33	7,1	PTFE F56110	366355	●
48	57,4	6,6	4,7	0,12	5,33	7,1	PTFE F56110	389790	○
50	59,4	6,6	4,7	0,12	5,33	7,1	PTFE F56110	366356	●
55	64,4	6,6	4,7	0,12	5,33	7,1	PTFE F56110	379672	○
56	65,4	6,6	4,7	0,12	5,33	7,1	PTFE F56110	434452	●
60	69,4	6,6	4,7	0,12	5,33	7,1	PTFE F56110	366357	●
63	72,4	6,6	4,7	0,12	5,33	7,1	PTFE F56110	366358	●
63	72,4	6,6	4,7	0,12	5,33	7,1	PTFE F56110	433995	○
65	74,4	6,6	4,7	0,12	5,33	7,1	PTFE F56110	382322	●
70	79,4	6,6	4,7	0,12	5,33	7,1	PTFE F56110	366359	●
72	81,4	6,6	4,7	0,12	5,33	7,1	PTFE F56110	433998	○
80	89,4	6,6	4,7	0,12	5,33	7,1	PTFE F56110	366360	●
90	99,4	6,6	4,7	0,12	5,33	7,1	PTFE F56110	162680	○
90	99,4	6,6	4,7	0,12	5,33	7,1	PTFE F56110	386511	●
100	109,4	6,6	4,7	0,12	5,33	7,1	PTFE F56110	366361	●
125	137,2	9	6,1	0,15	7	9,5	PTFE F56110	160404	●

● Available from stock ○ On request: Tool is available, delivery at short notice