

DESCRIPTION

Double acting rod seal

MATERIAL ON DYNAMIC SURFACE

Type: Polytetrafluoroethylene + Bronze

Designation: SEALFLO + Bronze

⇒ it can be provided with different fillers according to applications

MATERIAL ON STATIC SURFACE

Type: Nitril Rubber NBR

Designation: RUBSEAL 70

Hardness: 70 °ShA

⇒ it can be provided with different materials according to working conditions

MAIN FEATURES

The rod seal type XAB is composed of:

- A dynamic seal element which assures exceptional low friction and high speed performance, as well as high compatibility with nearly all media due to the chemical resistance which exceeds that of all other thermoplastics and elastomers.
- A standard size O-Ring with low permanent deformation as energizing component on the static side
- Low static and dynamic friction
- High speed allowed
- No tendency of stick-slip
- Space-saving construction and simple groove design
- High compatibility with nearly all fluids (with the right choice of O-Ring material)
- High resistance against extrusion
- High temperature resistance

FIELD OF APPLICATION

Pressure ≤ 600 bar

Speed ≤ 15 m/s

Temperature $-30^{\circ}\text{C} \div +130^{\circ}\text{C}$ (with OR in NBR)

$-30^{\circ}\text{C} \div +200^{\circ}\text{C}$ (with OR in FKM)

Fluids High compatibility with nearly all fluids
(with the right choice of O-Ring material)

SURFACE ROUGHNESS

Dynamic surface $\text{Ra} \leq 0.3 \mu\text{m}$ $\text{Rt} \leq 2.5 \mu\text{m}$

Static surface $\text{Ra} \leq 1.6 \mu\text{m}$ $\text{Rt} \leq 6.3 \mu\text{m}$

GAP DIMENSION "g"

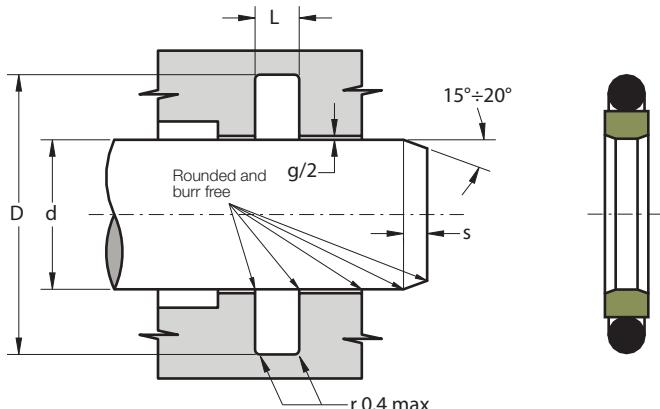
The largest gap dimension [mm] appearing in operation on the non-presurised side:

L	100 BAR	200 BAR	400 BAR
2.2	0.60	0.40	0.30
3.2	0.80	0.50	0.30
4.2	0.80	0.50	0.40
6.3	1.00	0.60	0.40
8.1	1.20	0.70	0.50
9.5	1.40	1.00	0.60
13.8	2.00	1.40	1.20
> 400 bar ⇒ $g_{\max} = H/8$			

LEAD-IN CHAMFERS

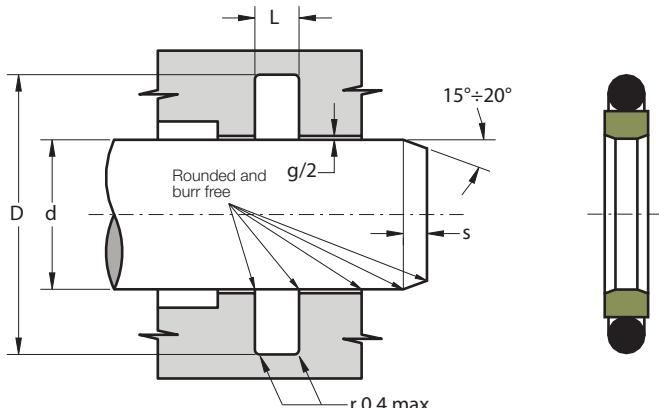
L	S	L	S
2.2	2.0	8.1	6.5
3.2	2.5	9.5	7.5
4.2	3.5	13.8	10.0
6.3	5.0		

- to avoid damaging the seal during installation, housing must have rounded chamfers. Sharp edges and burrs within the installation area of the seal must be removed



Part.	d^{h9}	D^{H10}	L^{+0.2}	OR
XAB 4 8.9 2.2	4	8.9	2.2	010
XAB 5 9.9 2.2	5	9.9	2.2	010
XAB 7 11.9 2.2	7	11.9	2.2	012
XAB 8 15.3 3.2	8	15.3	3.2	111
XAB 10 17.3 3.2	10	17.3	3.2	112
XAB 12 19.3 3.2	12	19.3	3.2	114
XAB 14 21.3 3.2	14	21.3	3.2	115
XAB 15 22.3 3.2	15	22.3	3.2	116
XAB 16 23.3 3.2	16	23.3	3.2	116
XAB 17 24.3 3.2	17	24.3	3.2	117
XAB 18 25.3 3.2	18	25.3	3.2	117
XAB 20 30.7 4.2	20	30.7	4.2	214
XAB 22 32.7 4.2	22	32.7	4.2	215
XAB 24 34.7 4.2	24	34.7	4.2	216
XAB 25 35.7 4.2	25	35.7	4.2	217
XAB 26 36.7 4.2	26	36.7	4.2	218
XAB 28 38.7 4.2	28	38.7	4.2	219
XAB 30 40.7 4.2	30	40.7	4.2	220
XAB 32 42.7 4.2	32	42.7	4.2	221
XAB 35 45.7 4.2	35	45.7	4.2	222
XAB 36 46.7 4.2	36	46.7	4.2	223
XAB 37 47.7 4.2	37	47.7	4.2	223
XAB 38 53.1 6.3	38	53.1	6.3	327
XAB 40 55.1 6.3	40	55.1	6.3	327

Part.	d^{h9}	D^{H10}	L^{+0.2}	OR
XAB 42 57.1 6.3	42	57.1	6.3	328
XAB 45 60.1 6.3	45	60.1	6.3	329
XAB 48 63.1 6.3	48	63.1	6.3	330
XAB 50 65.1 6.3	50	65.1	6.3	331
XAB 52 67.1 6.3	52	67.1	6.3	331
XAB 55 70.1 6.3	55	70.1	6.3	332
XAB 58 73.1 6.3	58	73.1	6.3	333
XAB 60 75.1 6.3	60	75.1	6.3	334
XAB 65 80.1 6.3	65	80.1	6.3	335
XAB 70 85.1 6.3	70	85.1	6.3	337
XAB 75 90.1 6.3	75	90.1	6.3	339
XAB 80 95.1 6.3	80	95.1	6.3	340
XAB 85 100.1 6.3	85	100.1	6.3	342
XAB 90 105.1 6.3	90	105.1	6.3	343
XAB 95 110.1 6.3	95	110.1	6.3	345
XAB 100 115.1 6.3	100	115.1	6.3	346
XAB 110 125.1 6.3	110	125.1	6.3	350
XAB 120 135.1 6.3	120	135.1	6.3	353
XAB 125 140.1 6.3	125	140.1	6.3	354
XAB 130 145.1 6.3	130	145.1	6.3	356
XAB 140 155.1 6.3	140	155.1	6.3	359
XAB 150 165.1 6.3	150	165.1	6.3	361
XAB 155 170.1 6.3	155	170.1	6.3	362
XAB 160 175.1 6.3	160	175.1	6.3	363
XAB 170 185.1 6.3	170	185.1	6.3	365
XAB 175 190.1 6.3	175	190.1	6.3	366
XAB 180 195.1 6.3	180	195.1	6.3	366
XAB 185 200.1 6.3	185	200.1	6.3	367
XAB 190 205.1 6.3	190	205.1	6.3	368
XAB 195 210.1 6.3	195	210.1	6.3	368
XAB 200 220.5 8.1	200	220.5	8.1	674
XAB 210 230.5 8.1	210	230.5	8.1	446
XAB 220 240.5 8.1	220	240.5	8.1	447
XAB 225 245.5 8.1	225	245.5	8.1	447
XAB 230 250.5 8.1	230	250.5	8.1	678
XAB 240 260.5 8.1	240	260.5	8.1	448
XAB 250 270.5 8.1	250	270.5	8.1	449
XAB 260 284.0 8.1	260	284.0	8.1	450
XAB 270 294.0 8.1	270	294.0	8.1	451
XAB 280 304.0 8.1	280	304.0	8.1	452



Part.	d ^{h9}	D ^{H10}	L ^{+0.2}	OR
XAB 290 314.0 8.1	290	314.0	8.1	453
XAB 300 324.0 8.1	300	324.0	8.1	454
XAB 310 334.0 8.1	310	334.0	8.1	454
XAB 320 344.0 8.1	320	344.0	8.1	455
XAB 330 354.0 8.1	330	354.0	8.1	456
XAB 340 364.0 8.1	340	364.0	8.1	457
XAB 350 374.0 8.1	350	374.0	8.1	458
XAB 360 384.0 8.1	360	384.0	8.1	458
XAB 370 394.0 8.1	370	394.0	8.1	459
XAB 380 404.0 8.1	380	404.0	8.1	460
XAB 390 414.0 8.1	390	414.0	8.1	461
XAB 400 424.0 8.1	400	424.0	8.1	461
XAB 420 444.0 8.1	420	444.0	8.1	463
XAB 440 464.0 8.1	440	464.0	8.1	464
XAB 450 474.0 8.1	450	474.0	8.1	465
XAB 460 484.0 8.1	460	484.0	8.1	466
XAB 480 504.0 8.1	480	504.0	8.1	468
XAB 500 524.0 8.1	500	524.0	8.1	469

Other sizes not present in the above table can be provided in accordance to the following scheme:

d			D	L	S. OR
Light series	Standard series	Heavy series			
8 ÷ 18.9	3 ÷ 7.9		d + 4.90	2.2	1.78
19 ÷ 37.9	8 ÷ 18.9		d + 7.30	3.2	2.62
38 ÷ 199.9	19 ÷ 37.9	8 ÷ 18.9	d + 10.7	4.2	3.53
200 ÷ 255.9	38 ÷ 199.9	19 ÷ 37.9	d + 15.1	6.3	5.34
256 ÷ 649.9	200 ÷ 255.9	38 ÷ 199.9	d + 20.5	8.1	6.99
650 ÷ 999.9	256 ÷ 649.9	200 ÷ 255.9	d + 24.0	8.1	6.99
	650 ÷ 999.9	256 ÷ 649.9	d + 27.3	9.5	8.40
	> 1000		d + 38.0	13.8	12.0