

# XB

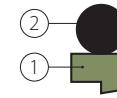


The rod seal type Aston Seals XB is composed of:

- 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



## MATERIAL

<b>① Type</b>	Polytetrafluoroethylene PTFE + Bronze
<b>Designation</b>	SEALFLON + Bronze
⇒ It can be provided with different fillers according to applications	

<b>② Type</b>	Nitril Rubber NBR
<b>Designation</b>	RUBSEAL 70
<b>Hardness</b>	70 °ShA
⇒ It can be provided with different materials according to working conditions	

## FIELD OF APPLICATION



<b>Fluids</b>	High compatibility with nearly all fluids (with the right choice of O-Ring material)							
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## SURFACE ROUGHNESS

<b>Dynamic surface</b>	$R_a \leq 0.3 \mu\text{m}$	$R_t \leq 2.5 \mu\text{m}$
<b>Static surface</b>	$R_a \leq 1.6 \mu\text{m}$	$R_t \leq 6.3 \mu\text{m}$

## GAP DIMENSION "g"

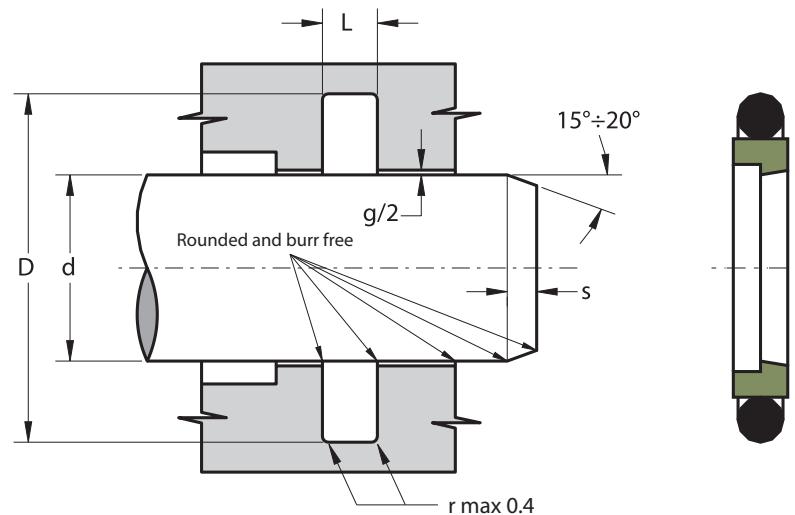
The largest gap dimension [mm] appearing in operation on the non-pressurised side:

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 ⇒ $g_{max} = H8/f8$			

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

The above data are maximum values, they may be maintained for short periods and can not be used at the same time simultaneously.

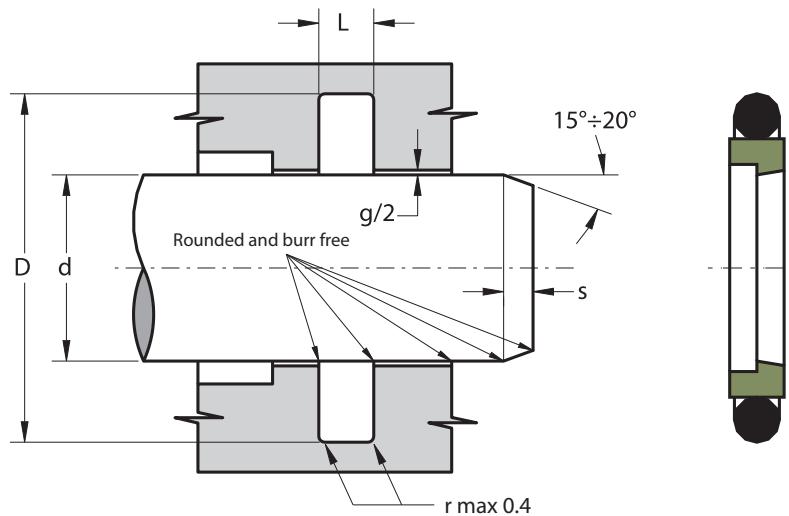
XB



Part.	$d^{h9}$	$D^{H10}$	$L^{+0.2}$	S	OR
<b>XB 4 8.9 2.2</b>	4	8.9	2.2	2.0	009
<b>XB 5 9.9 2.2</b>	5	9.9	2.2	2.0	010
<b>XB 7 11.9 2.2</b>	7	11.9	2.2	2.0	012
<b>XB 8 15.3 3.2</b>	8	15.3	3.2	2.5	111
<b>XB 10 17.3 3.2</b>	10	17.3	3.2	2.5	112
<b>XB 12 19.3 3.2</b>	12	19.3	3.2	2.5	114
<b>XB 14 21.3 3.2</b>	14	21.3	3.2	2.5	115
<b>XB 15 22.3 3.2</b>	15	22.3	3.2	2.5	116
<b>XB 16 23.3 3.2</b>	16	23.3	3.2	2.5	116
<b>XB 17 24.3 3.2</b>	17	24.3	3.2	2.5	117
<b>XB 18 25.3 3.2</b>	18	25.3	3.2	2.5	117
<b>XB 20 30.7 4.2</b>	20	30.7	4.2	3.5	214
<b>XB 22 32.7 4.2</b>	22	32.7	4.2	3.5	215
<b>XB 24 34.7 4.2</b>	24	34.7	4.2	3.5	216
<b>XB 25 35.7 4.2</b>	25	35.7	4.2	3.5	217
<b>XB 26 36.7 4.2</b>	26	36.7	4.2	3.5	217
<b>XB 28 38.7 4.2</b>	28	38.7	4.2	3.5	219
<b>XB 30 40.7 4.2</b>	30	40.7	4.2	3.5	220
<b>XB 32 42.7 4.2</b>	32	42.7	4.2	3.5	221
<b>XB 35 45.7 4.2</b>	35	45.7	4.2	3.5	222
<b>XB 36 46.7 4.2</b>	36	46.7	4.2	3.5	223
<b>XB 37 47.7 4.2</b>	37	47.7	4.2	3.5	223
<b>XB 38 53.1 6.3</b>	38	53.1	6.3	5.0	327
<b>XB 40 55.1 6.3</b>	40	55.1	6.3	5.0	327

Part.	$d^{h9}$	$D^{H10}$	$L^{+0.2}$	S	OR
<b>XB 42 57.1 6.3</b>	42	57.1	6.3	5.0	328
<b>XB 45 60.1 6.3</b>	45	60.1	6.3	5.0	329
<b>XB 48 63.1 6.3</b>	48	63.1	6.3	5.0	330
<b>XB 50 65.1 6.3</b>	50	65.1	6.3	5.0	331
<b>XB 52 67.1 6.3</b>	52	67.1	6.3	5.0	331
<b>XB 55 70.1 6.3</b>	55	70.1	6.3	5.0	332
<b>XB 58 73.1 6.3</b>	58	73.1	6.3	5.0	333
<b>XB 60 75.1 6.3</b>	60	75.1	6.3	5.0	334
<b>XB 65 80.1 6.3</b>	65	80.1	6.3	5.0	335
<b>XB 70 85.1 6.3</b>	70	85.1	6.3	5.0	337
<b>XB 75 90.1 6.3</b>	75	90.1	6.3	5.0	339
<b>XB 80 95.1 6.3</b>	80	95.1	6.3	5.0	340
<b>XB 85 100.1 6.3</b>	85	100.1	6.3	5.0	342
<b>XB 90 105.1 6.3</b>	90	105.1	6.3	5.0	343
<b>XB 95 110.1 6.3</b>	95	110.1	6.3	5.0	345
<b>XB 100 115.1 6.3</b>	100	115.1	6.3	5.0	346
<b>XB 110 125.1 6.3</b>	110	125.1	6.3	5.0	350
<b>XB 120 135.1 6.3</b>	120	135.1	6.3	5.0	353
<b>XB 125 140.1 6.3</b>	125	140.1	6.3	5.0	354
<b>XB 130 145.1 6.3</b>	130	145.1	6.3	5.0	356
<b>XB 140 155.1 6.3</b>	140	155.1	6.3	5.0	359
<b>XB 150 165.1 6.3</b>	150	165.1	6.3	5.0	361
<b>XB 155 170.1 6.3</b>	155	160.1	6.3	5.0	362
<b>XB 160 175.1 6.3</b>	160	175.1	6.3	5.0	363

Part.	$d^{h9}$	$D^{H10}$	$L^{+0.2}$	S	OR
<b>XB 170 185.1 6.3</b>	170	185.1	6.3	5.0	365
<b>XB 175 190.1 6.3</b>	175	190.1	6.3	5.0	366
<b>XB 180 195.1 6.3</b>	180	195.1	6.3	5.0	366
<b>XB 185 200.1 6.3</b>	185	200.1	6.3	5.0	367
<b>XB 190 205.1 6.3</b>	190	205.1	6.3	5.0	368
<b>XB 195 210.1 6.3</b>	195	210.1	6.3	5.0	368
<b>XB 200 220.5 8.1</b>	200	220.5	8.1	6.5	445
<b>XB 210 230.5 8.1</b>	210	230.5	8.1	6.5	446
<b>XB 220 240.5 8.1</b>	220	240.5	8.1	6.5	447
<b>XB 225 245.5 8.1</b>	225	245.5	8.1	6.5	447
<b>XB 230 250.5 8.1</b>	230	250.5	8.1	6.5	678
<b>XB 240 260.5 8.1</b>	240	260.5	8.1	6.5	448
<b>XB 250 270.5 8.1</b>	250	270.5	8.1	6.5	449
<b>XB 260 284.0 8.1</b>	260	284.0	8.1	6.5	450
<b>XB 270 294.0 8.1</b>	270	294.0	8.1	6.5	451
<b>XB 280 304.0 8.1</b>	280	304.0	8.1	6.5	452
<b>XB 290 314.0 8.1</b>	290	314.0	8.1	6.5	453
<b>XB 300 324.0 8.1</b>	300	324.0	8.1	6.5	454
<b>XB 310 334.0 8.1</b>	310	334.0	8.1	6.5	454
<b>XB 320 344.0 8.1</b>	320	344.0	8.1	6.5	455
<b>XB 330 354.0 8.1</b>	330	354.0	8.1	6.5	456
<b>XB 340 364.0 8.1</b>	340	364.0	8.1	6.5	457
<b>XB 350 374.0 8.1</b>	350	374.0	8.1	6.5	458
<b>XB 360 384.0 8.1</b>	360	384.0	8.1	6.5	458



Part.	$d^{h9}$	$D^{H10}$	$L^{+0.2}$	S	OR
<b>XB 370 394.0 8.1</b>	370	394.0	8.1	6.5	459
<b>XB 380 404.0 8.1</b>	380	404.0	8.1	6.5	460
<b>XB 390 414.0 8.1</b>	390	414.0	8.1	6.5	461
<b>XB 400 424.0 8.1</b>	400	424.0	8.1	6.5	461
<b>XB 420 444.0 8.1</b>	420	444.0	8.1	6.5	463
<b>XB 440 464.0 8.1</b>	440	464.0	8.1	6.5	464
<b>XB 450 474.0 8.1</b>	450	474.0	8.1	6.5	465
<b>XB 460 484.0 8.1</b>	460	484.0	8.1	6.5	466
<b>XB 480 504.0 8.1</b>	480	504.0	8.1	6.5	468
<b>XB 500 524.0 8.1</b>	500	524.0	8.1	6.5	469

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

d			D	L	S	S. OR
Light series	Standard series	Heavy series				
8 ÷ 18.9	<b>3 ÷ 7.9</b>		d + 4.90	2.2	2.0	1.78
19 ÷ 37.9	<b>8 ÷ 18.9</b>		d + 7.30	3.2	2.5	2.62
38 ÷ 199.9	<b>19 ÷ 37.9</b>	8 ÷ 18.9	d + 10.7	4.2	3.5	3.53
200 ÷ 255.9	<b>38 ÷ 199.9</b>	19 ÷ 37.9	d + 15.1	6.3	5.0	5.34
256 ÷ 649.9	<b>200 ÷ 255.9</b>	38 ÷ 199.9	d + 20.5	8.1	6.5	6.99
650 ÷ 999.9	<b>256 ÷ 649.9</b>	200 ÷ 255.9	d + 24.0	8.1	6.5	6.99
	<b>650 ÷ 999.9</b>	256 ÷ 649.9	d + 27.3	9.5	7.5	8.40
> 1000			d + 38.0	13.8	10.0	12.0