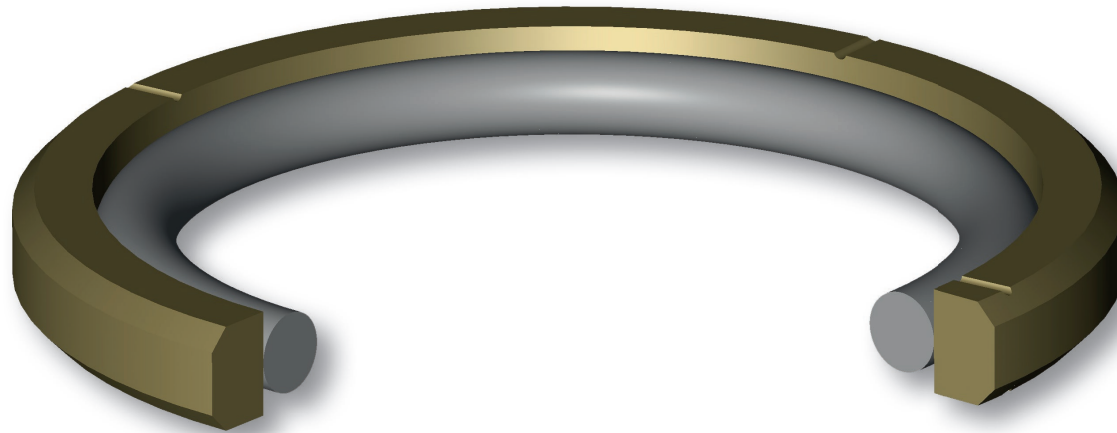


YB



YB

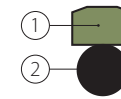
The piston seal type Aston Seals YB is composed of:

- A dynamic seal element which assures exceptional low friction and high speed performance, high compatibility with nearly all media due to the chemical resistance which exceeds that of all other thermoplastics and elastomers. Side grooves ensure that pressure loads the energizing O-Ring in all work conditions
- A standard size O-Ring with low permanent deformation as energizing component on the static side
- Low static and dynamic friction
- High speed allowed

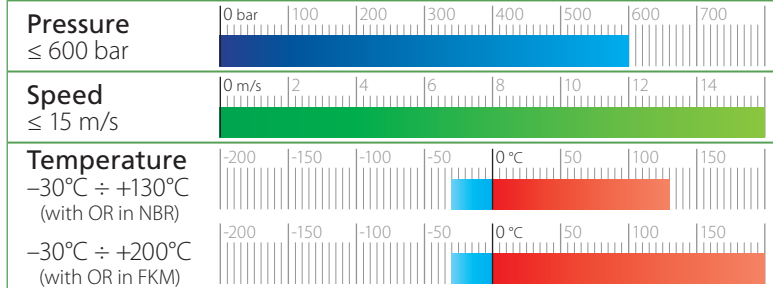
- No tendency of stick-slip
- Space-saving construction and simple groove design
- High compatibility with nearly all fluids (with the right choice of O-Ring material)
- High resistance against extrusion
- High temperature resistance

MATERIAL

- ① **Type** Polytetrafluoroethylene PTFE + Bronze
Designation SEALFLON + Bronze
 ⇒ It can be provided with different fillers according to applications
- ② **Type** Nitril Rubber NBR
Designation RUBSEAL 70
Hardness 70 °ShA
 ⇒ It can be provided with different materials according to working conditions



FIELD OF APPLICATION



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

SURFACE ROUGHNESS

Dynamic surface Ra ≤ 0.3 μm Rt ≤ 2.5 μm
Static surface Ra ≤ 1.6 μm Rt ≤ 6.3 μm

GAP DIMENSION "g"

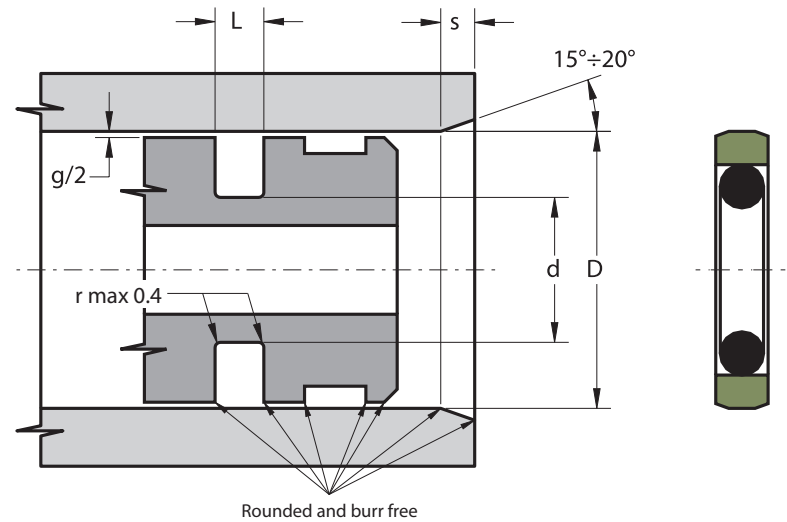
The largest gap dimension [mm] appearing in operation on the non-pressurised side:

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 ⇒ $g_{max} = H8/f8$			

NB: for the Gap calculation, it is necessary to consider the elastic deformation of metal elements under pressure loads.

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.

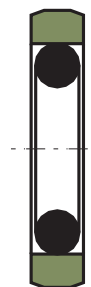
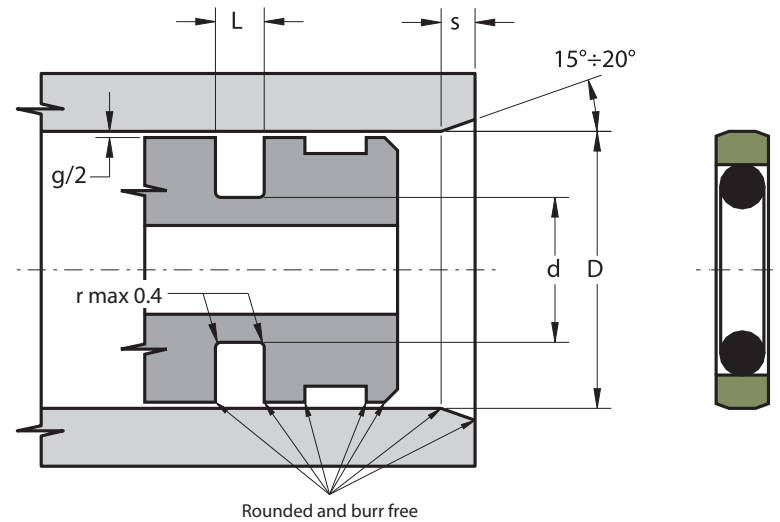
The above data are maximum values, they may be maintained for short periods and can not be used at the same time simultaneously.



Part.	D ^{H9}	d ^{h9}	L ^{+0.2}	S	OR
YB 8 3.1 2.2	8	3.1	2.2	2.0	006
YB 10 5.1 2.2	10	5.1	2.2	2.0	008
YB 12 7.1 2.2	12	7.1	2.2	2.0	610
YB 15 7.5 3.2	15	7.5	3.2	2.5	108
YB 16 8.5 3.2	16	8.5	3.2	2.5	109
YB 18 10.5 3.2	18	10.5	3.2	2.5	110
YB 20 12.5 3.2	20	12.5	3.2	2.5	614
YB 22 14.5 3.2	22	14.5	3.2	2.5	113
YB 24 16.5 3.2	24	16.5	3.2	2.5	809
YB 25 17.5 3.2	25	17.5	3.2	2.5	115
YB 28 20.5 3.2	28	20.5	3.2	2.5	117
YB 30 22.5 3.2	30	22.5	3.2	2.5	118
YB 32 24.5 3.2	32	24.5	3.2	2.5	119
YB 35 27.5 3.2	35	27.5	3.2	2.5	121
YB 36 28.5 3.2	36	28.5	3.2	2.5	122
YB 38 30.5 3.2	38	30.5	3.2	2.5	123
YB 39 31.5 3.2	39	31.5	3.2	2.5	124
YB 40 29 4.2	40	29.0	4.2	3.5	216
YB 42 31 4.2	42	31.0	4.2	3.5	217
YB 45 34 4.2	45	34.0	4.2	3.5	219
YB 48 37 4.2	48	37.0	4.2	3.5	221
YB 50 39 4.2	50	39.0	4.2	3.5	222
YB 52 41 4.2	52	41.0	4.2	3.5	223
YB 55 44 4.2	55	44.0	4.2	3.5	224

Part.	D ^{H9}	d ^{h9}	L ^{+0.2}	S	OR
YB 57 46 4.2	57	46.0	4.2	3.5	827
YB 60 49 4.2	60	49.0	4.2	3.5	225
YB 62 51 4.2	62	51.0	4.2	3.5	226
YB 63 52 4.2	63	52.0	4.2	3.5	226
YB 64 53 4.2	64	53.0	4.2	3.5	226
YB 65 54 4.2	65	54.0	4.2	3.5	227
YB 70 59 4.2	70	59.0	4.2	3.5	228
YB 75 64 4.2	75	64.0	4.2	3.5	230
YB 80 64.5 6.3	80	64.5	6.3	5.0	333
YB 85 69.5 6.3	85	69.5	6.3	5.0	335
YB 89 73.5 6.3	89	73.5	6.3	5.0	336
YB 90 74.5 6.3	90	74.5	6.3	5.0	336
YB 95 79.5 6.3	95	79.5	6.3	5.0	338
YB 100 84.5 6.3	100	84.5	6.3	5.0	339
YB 105 89.5 6.3	105	89.5	6.3	5.0	341
YB 110 94.5 6.3	110	94.5	6.3	5.0	343
YB 115 99.5 6.3	115	99.5	6.3	5.0	344
YB 120 104.5 6.3	120	104.5	6.3	5.0	346
YB 125 109.5 6.3	125	109.5	6.3	5.0	347
YB 130 114.5 6.3	130	114.5	6.3	5.0	349
YB 132 116.5 6.3	132	116.5	6.3	5.0	350
YB 133 112 8.1	133	112.0	8.1	6.5	425
YB 135 114 8.1	135	114.0	8.1	6.5	425
YB 140 119 8.1	140	119.0	8.1	6.5	426

Part.	D ^{H9}	d ^{h9}	L ^{+0.2}	S	OR
YB 145 124 8.1	145	124.0	8.1	6.5	428
YB 150 129 8.1	150	129.0	8.1	6.5	429
YB 154 133 8.1	154	133.0	8.1	6.5	431
YB 155 134 8.1	155	134.0	8.1	6.5	431
YB 160 139 8.1	160	139.0	8.1	6.5	433
YB 165 144 8.1	165	144.0	8.1	6.5	434
YB 170 149 8.1	170	149.0	8.1	6.5	436
YB 175 154 8.1	175	154.0	8.1	6.5	437
YB 180 159 8.1	180	159.0	8.1	6.5	438
YB 185 164 8.1	185	164.0	8.1	6.5	874
YB 190 169 8.1	190	169.0	8.1	6.5	439
YB 200 179 8.1	200	179.0	8.1	6.5	441
YB 210 189 8.1	210	189.0	8.1	6.5	882
YB 220 199 8.1	220	199.0	8.1	6.5	444
YB 230 209 8.1	230	209.0	8.1	6.5	445
YB 240 219 8.1	240	219.0	8.1	6.5	446
YB 250 229 8.1	250	229.0	8.1	6.5	447
YB 260 239 8.1	260	239.0	8.1	6.5	447
YB 270 249 8.1	270	249.0	8.1	6.5	680
YB 280 259 8.1	280	259.0	8.1	6.5	449
YB 290 269 8.1	290	269.0	8.1	6.5	450
YB 300 279 8.1	300	279.0	8.1	6.5	451
YB 310 289 8.1	310	289.0	8.1	6.5	451
YB 320 299 8.1	320	299.0	8.1	6.5	452



Part.	D ^{H9}	d ^{h9}	L ^{+0.2}	S	OR
YB 330 305.5 8.1	330	305.5	8.1	6.5	453
YB 340 315.5 8.1	340	315.5	8.1	6.5	453
YB 350 325.5 8.1	350	325.5	8.1	6.5	454
YB 360 335.5 8.1	360	335.5	8.1	6.5	455
YB 370 345.5 8.1	370	345.5	8.1	6.5	456
YB 380 355.5 8.1	380	355.5	8.1	6.5	457
YB 390 365.5 8.1	390	365.5	8.1	6.5	457
YB 400 375.5 8.1	400	375.5	8.1	6.5	458
YB 410 385.5 8.1	410	385.5	8.1	6.5	459
YB 420 395.5 8.1	420	395.5	8.1	6.5	460
YB 430 405.5 8.1	430	405.5	8.1	6.5	461
YB 440 415.5 8.1	440	415.5	8.1	6.5	461
YB 450 425.5 8.1	450	425.5	8.1	6.5	462
YB 460 435.5 8.1	460	435.5	8.1	6.5	463
YB 470 445.5 8.1	470	445.5	8.1	6.5	464
YB 480 455.5 8.1	480	455.5	8.1	6.5	464
YB 490 465.5 8.1	490	465.5	8.1	6.5	465
YB 500 475.5 8.1	500	475.5	8.1	6.5	466

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				
15 ÷ 39.9	8 ÷ 14.9		D - 4.9	2.2	2.0	1.78
40 ÷ 79.9	15 ÷ 39.9		D - 7.5	3.2	2.5	2.62
80 ÷ 132.9	40 ÷ 79.9	15 ÷ 39.9	D - 11.0	4.2	3.5	3.53
133 ÷ 329.9	80 ÷ 132.9	40 ÷ 79.9	D - 15.5	6.3	5.0	5.34
330 ÷ 669.9	133 ÷ 329.9	80 ÷ 132.9	D - 21.0	8.1	6.5	6.99
670 ÷ 999.9	330 ÷ 669.9	133 ÷ 329.9	D - 24.5	8.1	6.5	6.99
	670 ÷ 999.9	330 ÷ 669.9	D - 28.0	9.5	7.5	8.40
	> 1000		D - 38.0	13.8	10.0	12.0

