

S2A



The function of the Aston Seals S2A wiper ring is to prevent introduction of dust, dirt and foreign matter into the system. This wiper can carry out good sealing action if used in conjunction with a rod seal with hydrodynamic back-pumping function. It is composed of:

- A dynamic element with a special wiper lip which produces a very effective cleaning action, prevents the development of scores, protects the guiding parts and extends the service life of the axial moving rod seals. The material used to produce this wiper 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

- A standard size O-Ring with low permanent deformation as an energizing component on the static side which keeps the pressure of the wiper lip against the sliding surface and can compensate any deflections of the rod.
- 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 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

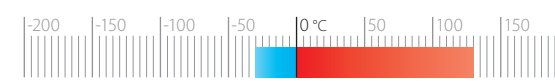
⇒ It can be provided with different materials according to working conditions

FIELD OF APPLICATION

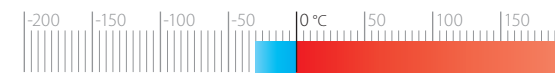
Speed
 $\leq 15 \text{ m/s}$



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
Static surface

Suitable for rod seal system
 $R_a \leq 1.6 \mu\text{m}$ $R_t \leq 6.3 \mu\text{m}$

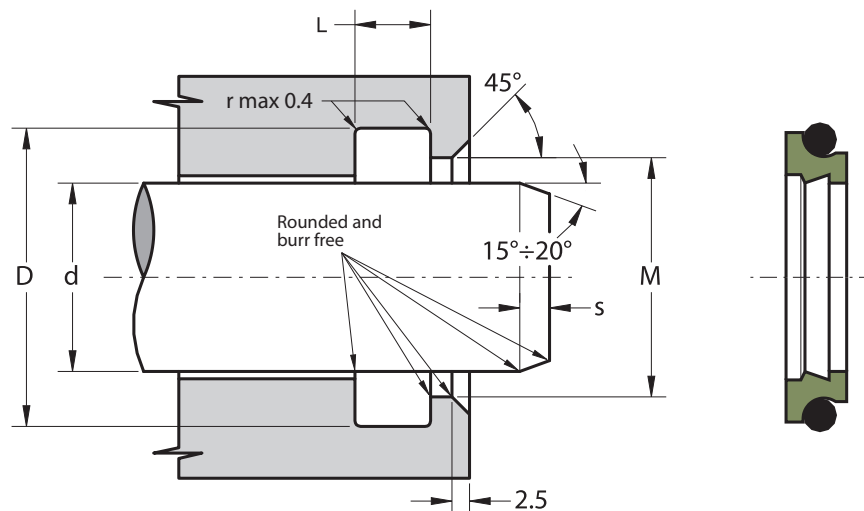
LEAD-IN CHAMFERS

L	S	L	S
3.7	2.0	8.4	6.5
5.0	2.5	11.0	7.5
6.0	3.5	14.0	10.0

Sharp edges and burrs within the installation area 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.

S2A



Part.	d ^{f8}	D ^{H9}	L ^{+0.2}	M ^{±0.1}	OR
S2A 8 12.8 3.7	8	12.8	3.7	9.0	012
S2A 10 14.8 3.7	10	14.8	3.7	11.0	013
S2A 12 18.8 5	12	18.8	5.0	13.5	113
S2A 14 20.8 5	14	20.8	5.0	15.5	114
S2A 15 21.8 5	15	21.8	5.0	16.5	115
S2A 16 22.8 5	16	22.8	5.0	17.5	116
S2A 18 24.8 5	18	24.8	5.0	19.5	117
S2A 20 26.8 5	20	26.8	5.0	21.5	118
S2A 24 30.8 5	24	30.8	5.0	25.5	120
S2A 25 31.8 5	25	31.8	5.0	26.5	121
S2A 28 34.8 5	28	34.8	5.0	29.5	123
S2A 30 36.8 5	30	36.8	5.0	31.5	124
S2A 32 38.8 5	32	38.8	5.0	33.5	126
S2A 35 41.8 5	35	41.8	5.0	36.5	127
S2A 40 46.8 5	40	46.8	5.0	41.5	131
S2A 42 48.8 5	42	48.8	5.0	43.5	132
S2A 45 51.8 5	45	51.8	5.0	46.5	134
S2A 50 56.8 5	50	56.8	5.0	51.5	137
S2A 55 61.8 5	55	61.8	5.0	56.5	140

Part.	d ^{f8}	D ^{H9}	L ^{+0.2}	M ^{±0.1}	OR
S2A 56 62.8 5	56	62.8	5.0	57.5	141
S2A 60 66.8 5	60	66.8	5.0	61.5	143
S2A 65 73.8 6	65	73.8	6.0	67.0	231
S2A 70 78.8 6	70	78.8	6.0	72.0	233
S2A 75 83.8 6	75	83.8	6.0	77.0	234
S2A 80 88.8 6	80	88.8	6.0	82.0	236
S2A 85 93.8 6	85	93.8	6.0	87.0	237
S2A 90 98.8 6	90	98.8	6.0	92.0	239
S2A 95 103.8 6	95	103.8	6.0	97.0	241
S2A 100 108.8 6	100	108.8	6.0	102.0	242
S2A 110 118.8 6	110	118.8	6.0	112.0	245
S2A 120 128.8 6	120	128.8	6.0	122.0	249
S2A 125 133.8 6	125	133.8	6.0	127.0	250
S2A 130 138.8 6	130	138.8	6.0	132.0	252
S2A 140 148.8 6	140	148.8	6.0	142.0	255
S2A 160 168.8 6	160	168.8	6.0	162.0	260
S2A 170 178.8 6	170	178.8	6.0	172.0	261
S2A 180 188.8 6	180	188.8	6.0	182.0	263
S2A 200 208.8 6	200	208.8	6.0	202.0	266

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

d	D	M	L	S. OR
4 ÷ 11.9	d + 4.8	d + 1.0	3.7	1.78
12 ÷ 64.9	d + 6.8	d + 1.5	5.0	2.62
65 ÷ 250.9	d + 8.8	d + 2.0	6.0	3.53
251 ÷ 420.9	d + 12.2	d + 2.5	8.4	5.34
421 ÷ 650.9	d + 16.0	d + 2.5	11.0	6.99
651 ÷ 999.9	d + 20.0	d + 2.5	14.0	8.40