

SHTB



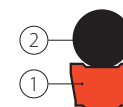
The Aston Seals SHTB is the optimal solution for industrial hydraulic applications. It can be used in the same housing normally destined to PTFE seal of which has similar technical and dimensional characteristics but, compared to it, better sealing capabilities, greater ease of installation and a lower cost.

The SHTB, composed of a high resistance polymer element on the dynamic side and an O-Ring as energizing component on the static side.

- Good sealing performance
- Low cost compared to the corresponding PTFE seal
- Easy installation

- Low friction and no tendency of stick-slip
- Returns to the size immediately after assembly
- Simple groove design and space-saving construction
- Excellent wear-resistance
- High resistance against extrusion
- Extended service life
- Good temperature resistance

MATERIAL



① Type	Thermoplastic polyester resin
Designation	SEALITE 55
Hardness	55 °ShD
② Type	Nitril Rubber NBR
Designation	RUBSEAL 70
Hardness	70 °ShA

FIELD OF APPLICATION

Pressure ≤ 500 bar	0 bar 100 200 300 400 500 600 700
Speed ≤ 0.5 m/s (100°C)	0 m/s 2 4 6 8 10 12 14
≤ 1 m/s (80°C)	0 m/s 2 4 6 8 10 12 14
Temperature -30°C ÷ +100°C	-200 -150 -100 -50 0 °C 50 100 150
Fluids	Hydraulic oils (mineral oil based) For other fluids contact our technical department

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 appearing in operation on the non-pressurised side:

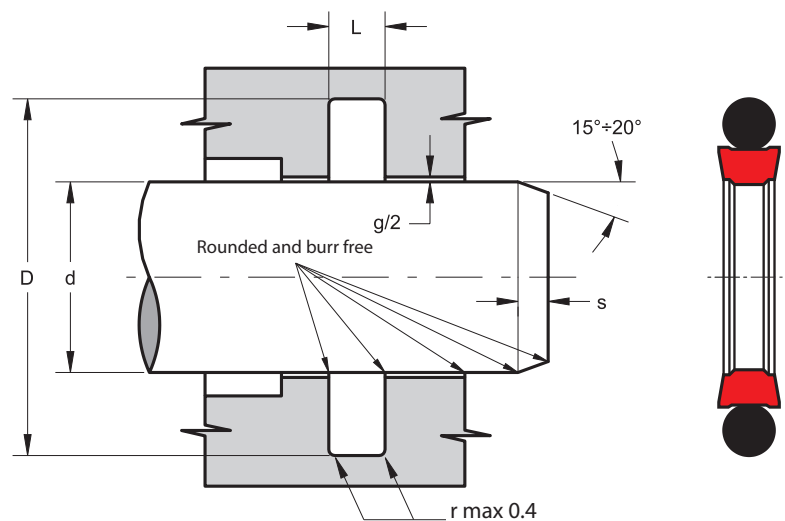
L	100 bar	200 bar	300 bar	400 bar
2.2	0.70	0.45	0.35	0.30
3.2	0.80	0.50	0.40	0.30
4.2	0.80	0.50	0.40	0.35
6.3	0.90	0.55	0.45	0.35
8.1	1.10	0.70	0.50	0.40

$$> 400 \text{ bar} \Rightarrow g_{\max} = H8/f8$$

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.

SHTB



Part.	d ^{h9}	D ^{H10}	L ^{+0.2}	S	OR
SHTB 30 40.7 4.2	30	40.7	4.2	3.5	220
SHTB 40 47.3 3.2	40	47.3	3.2	2.5	131
SHTB 45 55.7 4.2	45	55.7	4.2	3.5	830
SHTB 50 65.1 6.3	50	65.1	6.3	5.0	330
SHTB 55 70.1 6.3	55	70.1	6.3	5.0	332
SHTB 60 70.7 4.2	60	70.7	4.2	3.5	839
SHTB 65 80.1 6.3	65	80.1	6.3	5.0	335
SHTB 70 85.1 6.3	70	85.1	6.3	5.0	337
SHTB 75 90.1 6.3	75	90.1	6.3	5.0	339
SHTB 80 95.1 6.3	80	95.1	6.3	5.0	340