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PNEUMATIC SEAL

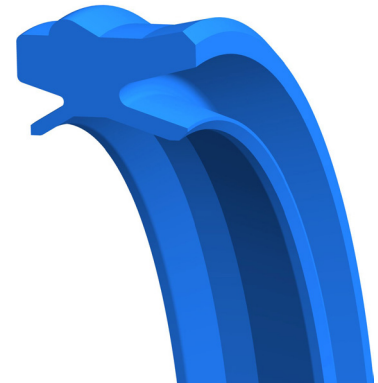
*Single-Acting
Polyurethane
Combined Rod Seal and Wiper*

DESIGN

The Hallite 851 high-performance rod seal and wiper combination is designed specifically for pneumatic applications and to give significant improvements in cylinder performance in low lube air conditions and be used in long and short stroke applications.

The Hallite 851 is manufactured in Hythane® 181, Hallite's high-performance polyurethane, for easy installation, excellent low temperature performance, and long service life.

The material combined with the design of the dynamic sealing lip offers low friction, significantly less than that of a rubber seal, and an ultra-long life.



FEATURES

- Combined rod seal and wiper
- Ultra-long life
- Effective seal
- Low friction
- Hard wearing
- Excellent temperature range
- Easy to install

MATERIALS

As standard, this product comes in the following material. Contact your local Hallite technical team if you would like to find out if this profile can be made in a custom material to suit your application. For further material details, please refer to the Hallite Material Table.

MATERIAL OPTIONS	Name	Type	Color
Standard	Hythane® 181	TPU-EU	Blue

TECHNICAL DETAILS

OPERATING CONDITIONS	METRIC	INCH
Maximum Speed	0.1 m/sec	0.3 ft/sec
Temperature Range	-45°C +80°C	-50°F +180°F
Maximum Pressure	10 bar	150 psi

NOTE

Not designed for scraping ice

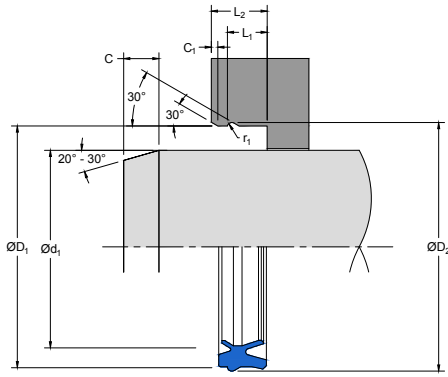
NOTE

Data given are maximum values and can apply depending on specific application. Maximum ratings of temperature, pressure, or operating speeds are dependent on fluid medium, surface, gap value, and other variables such as dynamic or static service. Maximum values are not intended for use together at the same time, e.g. max temperature and max pressure. Please contact your Hallite technical representative for application support.

SURFACE ROUGHNESS	μmRa	μmRz	μmRt	μinRa	μinRz	μinRt
Dynamic Sealing Face $\varnothing d_1$	0.1 - 0.4	1.6 max	4 max	4 - 16	63 max	157 max
Static Sealing Face $\varnothing D_1$	1.6 max	6.3 max	10 max	63 max	250 max	394 max
Static Housing Faces L_1	3.2 max	10 max	16 max	125 max	394 max	630 max

CHAMFERS & RADII		
Rod Diameter $\varnothing d$, mm	≤ 20	> 20
Min Chamfer C mm	3.50	3.50
Min Chamfer C_1 , mm	1.50	2.00
Max Fillet Rad r_1 , mm	1.10	1.40

TOLERANCES	$\varnothing d_1$	$\varnothing D_1$	$\varnothing D_2$	L_1	L_2
mm	f9	H10	± 0.10	+0.25 -0	+0.50 -0



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PART NUMBER RANGE

METRIC								
Ød ₁	TOL f9	ØD ₁	TOL H10	ØD ₂	TOL	L ₁ +0.25 -0	L ₂ +0.50 -0	PART No.
12.00	-0.016 -0.059	22.00	+0.08 0.00	24.00	+0.10 -0.10	8.80	13.00	4442000
16.00	-0.016 -0.059	26.00	+0.08 0.00	28.00	+0.10 -0.10	8.80	13.00	4453900
20.00	-0.020 -0.072	30.00	+0.08 0.00	32.00	+0.10 -0.10	8.80	13.00	4404700
25.00	-0.020 -0.072	35.00	+0.10 0.00	37.50	+0.10 -0.10	9.40	14.00	4427600