

# 80

## SWIVEL SEAL

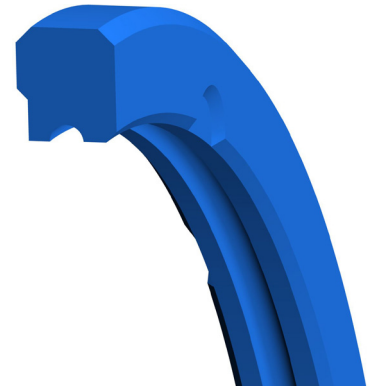
*Double-Acting  
Polyurethane, Rod Sealing  
for Rotary Pressure Applications*

### DESIGN

The Hallite 80 double-acting swivel seal, or rotary pressure seal, is designed specifically for use in hydraulic swivel joints with an internal rotating rod, particularly in housings to Asian design. This design is a one-piece seal that can replace the two part seals typically used in this application.

The Hallite 80 has a moulded groove in the dynamic face to improve sealing against the surface while trapping lubrication and reducing the surface contact area and thereby reducing running friction. Special pressure activation grooves are incorporated into design of the seal to enable an immediate seal of the joint.

The Hallite 80 is manufactured in Hythane® 181, Hallite's high-performance polyurethane, for easy installation, excellent low temperature performance, and long service life.



### FEATURES

- One part seal to replace two part seals
- No relative rotation of the seal parts in the groove
- Instant sealing
- Hard wearing
- Excellent service 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	Colour
Standard	Hythane® 181	TPE	Blue



## TECHNICAL DETAILS

OPERATING CONDITIONS	METRIC	INCH
Maximum Speed	0.1 m/sec	0.3 ft/sec
Temperature Range	-30°C +80°C	-22°F +76°F
Maximum Pressure	350 bar	5000 psi

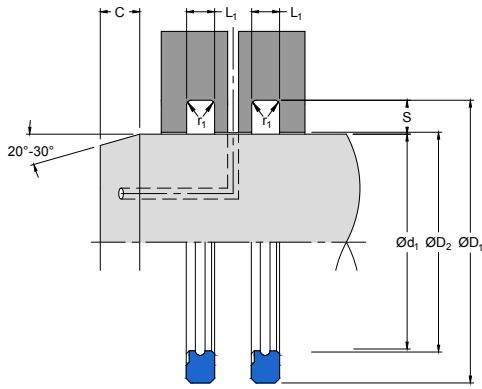
### NOTE

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	$\mu\text{mRa}$	$\mu\text{mRz}$	$\mu\text{mRt}$	$\mu\text{inRa}$	$\mu\text{inRz}$	$\mu\text{inRt}$
Dynamic Sealing Face $\text{ØD}_1$	0.1 - 0.4	1.6 max	4 max	4 - 16	63 max	157 max
Static Sealing Face $\text{Ød}_1$	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

RADII	
Min Chamfer C mm	2.40
Max Fillet Rad $r_1$ mm	0.40

TOLERANCES	$\text{Ød}_1$	$\text{ØD}_1$	$\text{ØD}_2$	$L_1$
mm	f8	H10	H8	+0.30 -0



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### PART NUMBER RANGE

METRIC					
$\text{Ø}d_1$	TOL f8	$\text{Ø}D_1$	TOL H10	$L_1$ +0.30-0	PART No.
57.20	-0.03 -0.08	70.00	+0.12 0.00	7.50	4869000
80.00	-0.03 -0.08	90.00	+0.14 0.00	5.00	4563000
90.00	-0.04 -0.09	100.00	+0.14 0.00	5.00	4563100
100.00	-0.04 -0.09	110.00	+0.14 0.00	5.00	4563200
125.00	-0.04 -0.11	135.40	+0.16 0.00	5.00	4578800