

## Design

The Hallite 335 is an O-ring energised double lip wiper, which is designed to exclude dirt from entering the cylinder and to collect traces of fluid passing the rod seal.

The standard design is made from bronze filled PTFE, activated by an NBR O-ring.

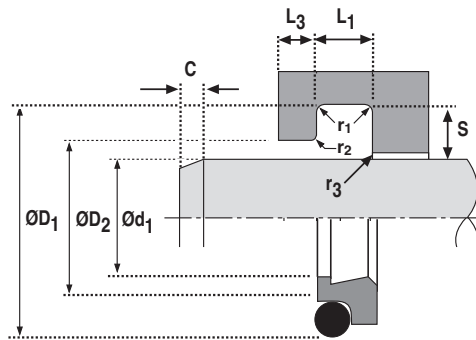
A number of other material options can be provided to extend operating conditions. Please ensure that the correct part number is specified for the material option as indicated.

The housing sizes listed meet ISO6195D.

**NB:** A vent between the seal and wiper is recommended to avoid a pressure trap

Features	
• Protects primary seal from contamination	
• Extends seal life	
• Low friction no stick-slip	
• High strength machined PTFE wiper	
• Wide range of materials and dimensions available for special applications	

Material	
Face Material - O Ring	
<b>Standard material</b>	
PTFE/Bronze – NBR	20
<b>Material options:</b>	
PTFE/Bronze – FKM	21
PTFE/Glass – NBR	10
PTFE/Glass – FKM	11



## Technical details

### Operating conditions

	Metric	Inch
Maximum Speed	5.0 m/sec	15.0 ft/sec
Temperature Range	-30°C +100°C	-22°F +212°F

### Surface roughness

	Metric		Inch	
	µmRa	µmRt	µinCLA	µinRMS
Dynamic Sealing Face Ød <sub>1</sub>	0.1 < > 0.4	4 max	4 < > 16	5 < > 18
Static Sealing Face ØD <sub>1</sub> ØD <sub>2</sub>	1.6 max	10 max	63 max	70 max
Static Housing Faces L <sub>1</sub>	3.2 max	16 max	125 max	140 max

### Chamfers & Radii

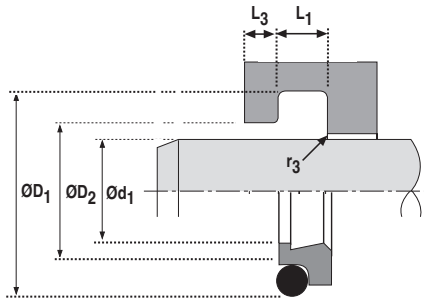
	Metric		Inch	
Groove Section ≤ S mm	3.4	4.4	6.1	8.0
Min Chamfer C mm	2.0	2.0	2.5	4.0
Max Fillet Rad r <sub>1</sub> mm	0.5	0.5	0.5	0.5
Max Fillet Rad r <sub>2</sub> mm	0.5	0.5	0.5	0.5

### Tolerances

	Ød <sub>1</sub>	ØD <sub>1</sub>	ØD <sub>2</sub>	L <sub>1</sub>
mm	f9	H9	H11	+0.2 -0



wipers



$\text{Ød}_1$ f9	$\text{ØD}_1$ H11	$L_1$ +0.2	$\text{ØD}_2$ H11	$L_3$ min	$r_3$ max	PART No.
20	26.80	5.00	21.50	2.00	0.80	87151_*
22	28.80	5.00	23.50	2.00	0.80	87152_*
25	31.80	5.00	26.50	2.00	0.80	87153_*
28	34.80	5.00	29.50	2.00	0.80	87154_*
32	38.80	5.00	33.50	2.00	0.80	87156_
36	42.80	5.00	37.50	2.00	0.80	87157_
40	46.80	5.00	41.50	2.00	0.80	87158_
40	48.80	6.30	41.50	3.00	0.80	87159_
45	51.80	5.00	46.50	2.00	0.80	87160_
45	53.80	6.30	46.50	3.00	0.80	87161_
50	56.80	5.00	51.50	2.00	0.80	87162_
50	58.80	6.30	51.50	3.00	0.80	87163_
56	62.80	5.00	57.50	2.00	0.80	87164_
56	64.80	6.30	57.50	3.00	0.80	87165_
63	69.80	5.00	64.50	2.00	0.80	87166_
63	71.80	6.30	64.50	3.00	0.80	87167_
70	78.80	6.30	71.50	3.00	1.00	87168_
70	82.20	8.10	72.00	4.00	1.00	87169_
80	88.80	6.30	81.50	3.00	1.00	87170_

$\text{Ød}_1$ f9	$\text{ØD}_1$ H11	$L_1$ +0.2	$\text{ØD}_2$ H11	$L_3$ min	$r_3$ max	PART No.
80	92.20	8.10	82.00	4.00	1.00	87171_
90	98.80	6.30	91.50	3.00	1.00	87172_
90	102.20	8.10	92.00	4.00	1.00	87173_
100	108.80	6.30	101.50	3.00	1.00	87174_
100	112.20	8.10	102.00	4.00	1.00	87175_
110	118.80	6.30	111.50	3.00	1.00	87176_
110	122.20	8.10	112.00	4.00	1.00	87177_
125	133.80	6.30	126.50	3.00	1.00	87178_
125	137.20	8.10	127.00	4.00	1.00	87179_
140	152.20	8.10	142.00	4.00	1.00	87180_
140	156.00	9.50	142.50	5.00	1.50	87181_
160	172.20	8.10	162.00	4.00	1.00	87182_
160	176.00	9.50	162.50	5.00	1.50	87183_
180	192.20	8.10	182.00	4.00	1.00	87184_
180	196.00	9.50	182.50	5.00	1.50	87185_
200	212.20	8.10	202.00	4.00	1.00	87186_
200	216.00	9.50	202.50	5.00	1.50	87187_
220	232.20	8.10	222.00	4.00	1.00	87188_
220	236.00	9.50	222.50	5.00	1.50	87189_

\* split housings recommended