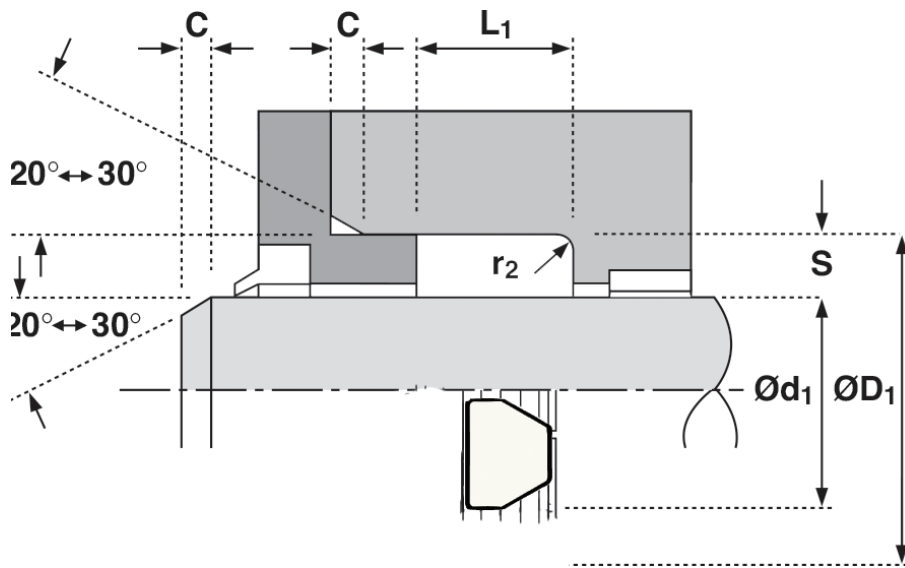


VP31



Technical Details

Metric

Inch

Operating conditions		
Maximum speed	0.5 m/sec	1.5 ft/sec
Temperature range	-30°C + 100°C	-22°F + 212°F
Maximum pressure	400 Bar	6000 p.s.i

Maximum extrusion gap

Pressure bar	100	175	250	400
Maximum gap mm	0.45	0.4	0.3	0.2
Pressure p.s.i	1500	2250	3500	6000
Maximum gap in	0.018	0.015	0.010	0.007

Surface roughness

	µmRa	µmRt	µinCLA	µinRMS
Dynamic sealing surface Rod $\varnothing d_1$	0.1 - 0.4	4 max	4 - 16	5 - 18
Static sealing face Rod $\varnothing D_1$	1.6 max	10 max	63 max	70 max
Dynamic sealing surface Piston $\varnothing d_1$	0.1 - 0.4	4 max	4 - 16	5 - 18
Static sealing face Piston $\varnothing D_1$	1.6 max	10 max	63 max	70 max
Static housing faces L_1	3.2 max	16 max	125 max	140 max

Chamfers & Radii

Groove section S mm	5.0	7.5	10.0	12.5	15.0
Min chamfer C mm	3.0	5.0	6.5	7.0	7.5
Max fillet rad r_1 mm	0.5	0.8	0.8	0.8	0.8
Groove section S in	0.187	0.250	0.312	0.375	0.500
Min chamfer C in	0.093	0.125	0.156	0.187	0.250
Max fillet rad r_1 in	0.020	0.031	0.031	0.031	0.031

Tolerances

	$\varnothing d_1$	$\varnothing D_1$	L_1 mm	L_1 in
Rod	f9	Js11	+0.75 - 0.0	+0.030 - 0
Piston	js11	H9	+0.75 - 0.0	+0.030 - 0

DESIGN

VP31 is a male top adaptor made from hard plastic. It is also commonly known as a header ring. The main function of the male adaptor is to push the top part of the vee packer set. Additionally, the positive shape of VP31 enables the vee packer seal set to spread, making it suitable for high pressure operations and also extending its seal life.