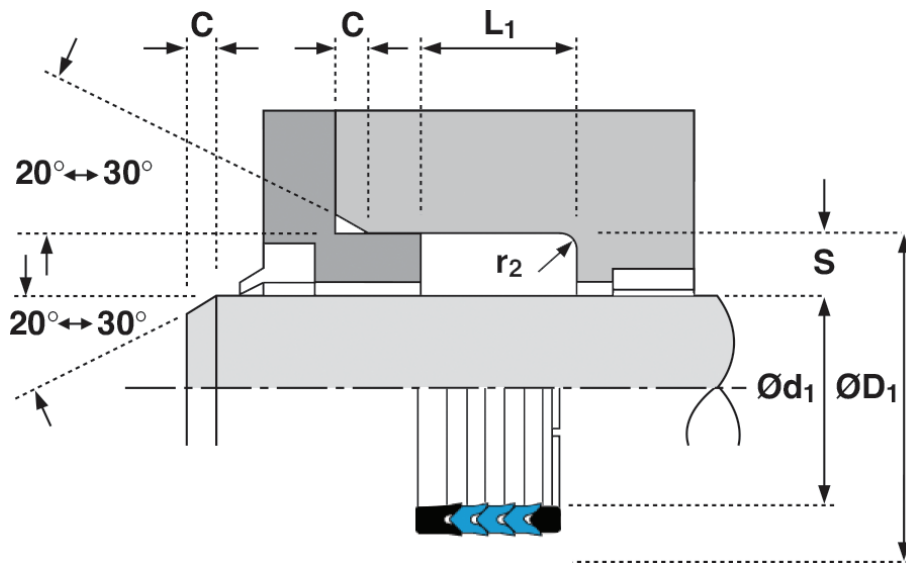




VP10-12R



Technical Details

Operating conditions	Metric	Inch
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

	100	175	250	400
Pressure bar				
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 Ød ₁	0.1 - 0.4	4 max	4 - 16	5 - 18
Static sealing face Rod ØD ₁	1.6 max	10 max	63 max	70 max
Dynamic sealing surface Piston Ød ₁	0.1 - 0.4	4 max	4 - 16	5 - 18
Static sealing face Piston ØD 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

	5.0	7.5	10.0	12.5	15.0
Groove section S mm					
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

	Ød ₁	ØD 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

VP10-12R vee packer seal is normally used in multiples in a set with male and female adaptors. The parts are 'stacked' together and are lubricated liberally with clean operating fluid prior to assembly.

VP10-12R must be axially pre-loaded by the housing. This preload works through the male adaptor on the pressure side, exerting a hinging action, forcing the sealing lips apart to ensure a low pressure seal. As pressure and hinging action increases, it increases the effectiveness of the seal even where severe vibration may occur.