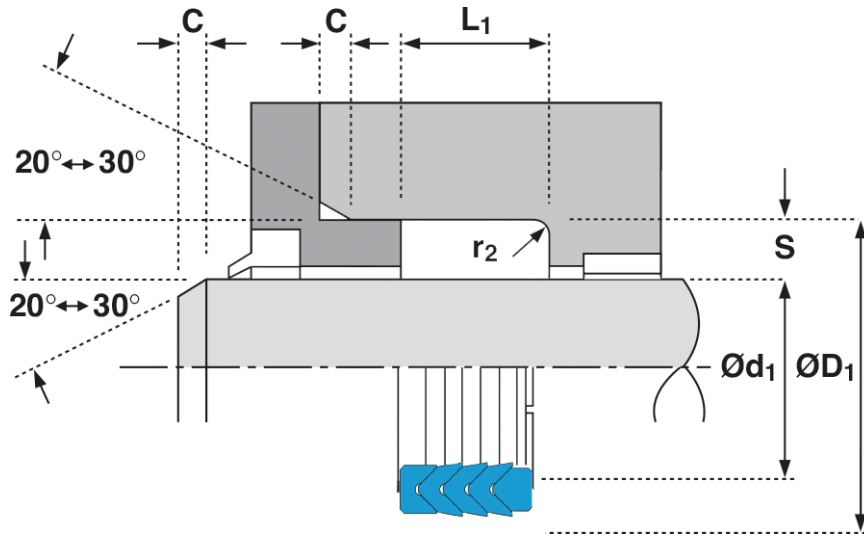




# VP10-12



## Technical Details

### Metric

### Inch

<b>Operating conditions</b>		
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 Ød <sub>1</sub>	0.1 - 0.4	4 max	4 - 16	5 - 18
Static sealing face Rod ØD <sub>1</sub>	1.6 max	10 max	63 max	70 max
Dynamic sealing surface Piston Ød <sub>1</sub>	0.1 - 0.4	4 max	4 - 16	5 - 18
Static sealing face Piston ØD <sub>1</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

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 <sub>1</sub> 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 <sub>1</sub> in	0.020	0.031	0.031	0.031	0.031

## Tolerances

	Ød <sub>1</sub>	ØD <sub>1</sub>	L <sub>1</sub> mm	L <sub>1</sub> in
Rod	f9	Js11	+0.75 - 0.0	+0.030 - 0
Piston	js11	H9	+0.75 - 0.0	+0.030 - 0

## DESIGN

VP10-12 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.

VP10-12 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.