



## Technical Details

## Metric

## Inch

## DESIGN

Operating conditions		
Maximum speed	4.0 m/sec	12.0 ft/sec
Temperature range	-30°C + 100°C	-22°F + 212°F
Maximum pressure	350 Bar	5000 p.s.i

## Maximum extrusion gap

Pressure bar	100	160	250	350
Maximum gap mm	0.6	0.5	0.45	0.35
Pressure p.s.i	1500	2400	3750	5250
Max Gap in	0.024	0.020	0.018	0.014

## Surface roughness

	µmRa	µmRt	µinCLA	µinRMS
Dynamic sealing surface	0.1 - 0.4	4 max	4 - 16	5 - 18
Static sealing face	1.6 max	10 max	63 max	70 max
Static Housing faces	3.2 max	16 max	125 max	140 max

GS9D is a compact seal design with low friction seal for light to medium duty hydraulic cylinders. It comprised with a glide ring, strengthened with additives to resist creep, which pre loaded by an O-ring to be effective for the operating range recommended.

As the pressure rises, the O-ring deforms and compresses glide ring against the tube wall increasing the sealing force and the effectiveness of the seal. Only the glide ring is in contact with the sliding surface, friction is very low and stick-slip movement is eliminated.

## FEATURES

- Low stick/slip
- High maximum speed
- Compact seal design

## MATERIAL

Seal design comes in a variety of materials and sizes. For more information, please refer to MSDS data-sheet..

## APPLICATIONS

The seal can be considered for use in light to medium duty hydraulic cylinder applications.

## Chamfers & Radii

Groove section ≤ Smm	3.75	5.50	7.75	10.50	12.25
Min chamfer C mm	2.00	2.50	5.00	7.50	10.00
Max fillet rad r <sub>1</sub> mm	0.40	0.80	1.20	1.60	2.00
Groove section ≤ Smm	0.147	0.216	0.305	0.413	0.483
Min Chamfer C in	0.093	0.125	0.156	0.187	0.305
Max fillet Rad r <sub>1</sub> in	0.016	0.016	0.032	0.032	0.032

## Tolerances

	Ød	ØD	Lmm
mm	H9	h9	+0.2- 0
in	H9	h9	+0.008 - 0