



L4590

CYLINDERS

Material

Graphite carbon piston.
Annealed borosilicate glass cylinder.
Precision fire-polished bore.
Stainless steel piston rod (AISI 304).
Shock resistant rubber case.

Technical Notes

Piston area = 0.038 in² (24.54mm²)
Pressure range = full vacuum - 125 psi (0.86 MPa)
Force factor:
Piston area x pressure = output force.

Max force = 21.13N (at 0.86 MPa)
Minimum pressure differential required for actuation = 0.05 psi (345 Pa)
Friction coefficient = 0.2
Force without side load typically 0.5% - 1.5% of load.
Operating temperature range: -55°C to 150°C.
If operating at temperatures about +70°C, please advise when placing order.

Mounting data:

Suggested mounting bracket thickness = 0.050" - 0.100" (1.27mm - 2.54mm).
Mounting nut torque:
Head = 2-4 in-lb (0.23-0.45 Nm).
Rod end = 1-3 in-lb (0.11-0.34 Nm).

*Full stroke is obtained with customer held mounting tolerance of ±0.015" (0.038mm).

Important Notes

Please see technical pages for information on end linkages.

Order No.	Stroke	Rod end linkage	Bore dia.	Leak at 65psi max. SL/min	Leak at 125 psi max. SL/min	Body length
L4590.A0500	0,5"	Pin	0,22"	0.19	0.57	0,916"
L4590.A1000	1,0"	Pin	0,22"	0.19	0.57	1,416"
L4590.A1500	1,5"	Pin	0,22"	0.19	0.57	1,916"
L4590.A2000	2,0"	Pin	0,22"	0.19	0.57	2,416"
L4590.B0500	0,5"	Loop	0,22"	0.19	0.57	0,916"
L4590.B1000	1,0"	Loop	0,22"	0.19	0.57	1,416"
L4590.B1500	1,5"	Loop	0,22"	0.19	0.57	1,916"
L4590.B2000	2,0"	Loop	0,22"	0.19	0.57	2,416"