



L4594

CYLINDERS

Material

Graphite carbon piston.
Annealed borosilicate glass cylinder.
Precision fire-polished bore.
Stainless steel piston rod (AISI 304) or Aluminium 2024-T4.
Shock resistant rubber case.

Technical Notes

Piston area = 0.309 in² (199.20mm²)
Pressure range = full vacuum - 100 psi (0.69 MPa)
Force factor:
Piston area x pressure = output force.
Max force = 137.45N (at 0.69 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:
Mounting hole:
Rectangular: 0.312" x 0.375" (8mm x 10mm)

Round: 0.375" (10mm)
Suggested mounting bracket thickness = 0.060" - 0.125" (1.52mm - 3.18mm).
Mounting nut torque:
Head = 4-8 in-lb (0.45-0.90Nm).
Rod end = 2-5 in-lb (0.23-0.56 Nm).
Fitting = 12 in-lb max.

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

Important Notes

Stainless steel piston rod not for use above 35 psi.

Order No.	Stroke	Rod end linkage	Piston type	Bore dia.	Leak at 50 psi max. SL/min	Leak at 100 psi max. SL/min	Body length
L4594.A0500	0,5"	1/8 Ball	Stainless	0,627"	-	-	1,255"
L4594.A1000	1,0"	1/8 Ball	Stainless	0,627"	-	-	1,755"
L4594.A1500	1,5"	1/8 Ball	Stainless	0,627"	-	-	2,255"
L4594.A2000	2,0"	1/8 Ball	Stainless	0,627"	-	-	2,755"
L4594.A3000	3,0"	1/8 Ball	Stainless	0,627"	-	-	3,755"
L4594.A4000	4,0"	1/8 Ball	Stainless	0,627"	-	-	4,755"
L4594.A5000	5,0"	1/8 Ball	Stainless	0,627"	-	-	5,755"
L4594.A6000	6,0"	1/8 Ball	Stainless	0,627"	-	-	6,755"
L4594.B0500	0,5"	Loop	Stainless	0,627"	-	-	1,255"
L4594.B1000	1,0"	Loop	Stainless	0,627"	-	-	1,755"
L4594.B1500	1,5"	Loop	Stainless	0,627"	-	-	2,255"
L4594.B2000	2,0"	Loop	Stainless	0,627"	-	-	2,755"
L4594.B3000	3,0"	Loop	Stainless	0,627"	-	-	3,755"
L4594.B4000	4,0"	Loop	Stainless	0,627"	-	-	4,755"
L4594.B5000	5,0"	Loop	Stainless	0,627"	-	-	5,755"
L4594.B6000	6,0"	Loop	Stainless	0,627"	-	-	6,755"
L4594.E0500	0,5"	1/4 Ball	Aluminium	0,627"	0.74	2.78	1,300"
L4594.E1000	1,0"	1/4 Ball	Aluminium	0,627"	0.74	2.78	1,800"
L4594.E1500	1,5"	1/4 Ball	Aluminium	0,627"	0.74	2.78	2,300"
L4594.E2000	2,0"	1/4 Ball	Aluminium	0,627"	0.74	2.78	2,800"
L4594.E3000	3,0"	1/4 Ball	Aluminium	0,627"	0.74	2.78	3,800"
L4594.E4000	4,0"	1/4 Ball	Aluminium	0,627"	0.74	2.78	4,800"



Order No.	Stroke	Rod end linkage	Piston type	Bore dia.	Leak at 50 psi max. SL/min	Leak at 100 psi max. SL/min	Body length
L4594.E5000	5,0"	1/4 Ball	Aluminium	0,627"	0.74	2.78	5,800"
L4594.E6000	6,0"	1/4 Ball	Aluminium	0,627"	0.74	2.78	6,800"