

How to order and Specify

Ordering Example: Low Pressure Hydraulic Cylinder — All Steel Construction for Light or Medium Duty Applications

Cap fixed clevis, 2 1/2" bore x 12" stroke, 1.38" rod with 1"-14 x 1.62 NFPA short male threads. Front and rear end caps have SAE ports at *end cap side location 1*, cushions at *end cap side location 2* and nothing at *end cap side location 3 and 4*. Viton seals are required.



A Cylinder Model: Specify LH in this position.

- 1 1/2" bore through 6" bore.
- D.O.M. Seamless steel tube, precision honed and hard chrome plated ID with thicker wall for maximum strength. (Std.)
- Larger diameter tie rods than industry standards for maximum strength. (Std.)
- Removable, self-aligning, bearing cartridge. (Std.)
- Nitrile O-Ring Seal with Teflon backup ring on O.D. of rod cartridge. (Std.)
- Longer lasting improved sealing system. (Std.)
- Precision machined steel cylinder heads. (Std.)
- Pre-loaded piston seals prevents oil bypass. (Std.)
- 100,000 PSI yield, "IHCP" chrome plated piston rod. (Std.)
- Adjustable cushions with captive screw. (Cushions are optional)
- Air bleed system. (Optional)
- Rod cartridge drain back system. (Optional)
- "Slip Tuff" coated rod cartridge for severe side loaded applications. (Optional)

B Specify Cylinder Mounting Style: See inside for illustrations.

<p>LH 0 No Mount (MX0)</p> <p>LH 1 Foot Side Lugs (MS2)</p> <p>LH 2 Head Trunnion (MT1)</p> <p>LH 3 Cap Fixed Clevis (MP1)</p> <p>LH 4 Head Rectangular Flange (MF1)</p> <p>LH 5 Cap Rectangular Flange (MF2)</p> <p>LH 6 Intermediate Trunnion (MT4) <i>(See XI note on back page)</i></p> <p>LH 7 Cap Trunnion (MT2)</p> <p>LH 8 Head Tie Rod Extended (MX3)</p> <p>LH 11 Cap Tie Rod Extended (MX2)</p> <p>LH 12 Head & Cap Tie Rod Extended (MX1)</p>	<p>LH 13 End Angles (MS1)</p> <p>LH 14 End Lugs (MS7)</p> <p>LH 15 Centerline Lugs (MS3)</p> <p>LH 16 Side Tapped (MS4)</p> <p>LH 17 Head Square Flange (MF5)</p> <p>LH 18 Cap Square Flange (MF6)</p> <p>LH 21 Cap Detachable Eye (MP4)</p> <p>LH 22 Cap Fixed Spherical Eye (MP5)</p> <p>LH 24 Cap Detachable Clevis (MP2)</p> <p>LH 25 Cap Fixed Eye (MP3)</p> <p>LH 27 Cap Detachable Clevis <i>(Equals MP1 envelope dimensions)</i></p>
--	---

C Specify Cylinder Bore

<p>150 = 1 1/2" bore</p> <p>200 = 2" bore</p> <p>250 = 2 1/2" bore</p> <p>325 = 3 1/4" bore</p>	<p>400 = 4" bore</p> <p>500 = 5" bore</p> <p>600 = 6" bore</p>
---	---

D Specify Stroke Length

Peninsular LH Cylinders can be ordered in 1/4" increments with stroke lengths from 1/2" to over 15 feet.

For Stop Spool (Stop Tube) applications, contact Peninsular to determine call out for correct stroke length to specify.

E Specify Piston Rod Diameter and Rod Threads: See Rod Chart on next page.

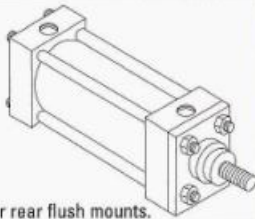
F-G Specify Plumbing Configuration for Front End Cap (F) and Rear End Cap (G)

- A** = Hydraulic Supply Port - NPTF Threads.
- T** = Hydraulic Supply Port - SAE Straight 'O' Ring Threads.
- C** = Cushion Adjustment Screw.
- M** = Proximity Switch Ready Heads only, no switch mounted to the cylinder end cap.
- N** = Nothing. (No port, cushion or prox.)
- S** = Proximity Switch to be in-port mounted to the cylinder end cap by Peninsular (complete position **H**).



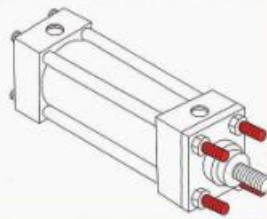
NFPA Mounting Styles

LH 0
No Mount
(MX0)

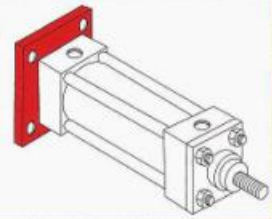


Adaptable for front or rear flush mounts.

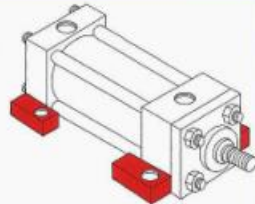
LH 8
Head
Tie Rod
Extended
(MX3)



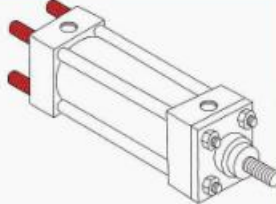
LH 18
Cap Square
Flange
(MF6)



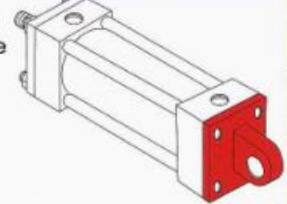
LH 1
Foot Side
Lugs
(MS2)



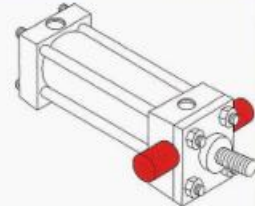
LH 11
Cap
Tie Rod
Extended
(MX2)



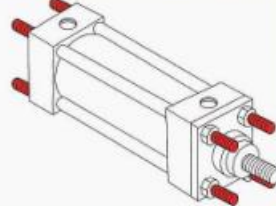
LH 21
Cap
Detachable
Eye
(MP4)



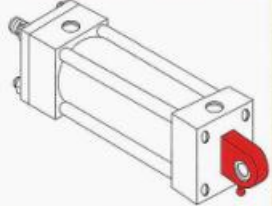
LH 2
Head
Trunnion
(MT1)



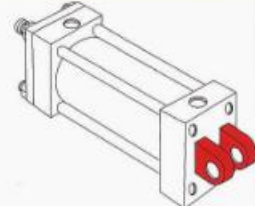
LH 12
Head and
Cap
Tie Rod
Extended
(MX1)



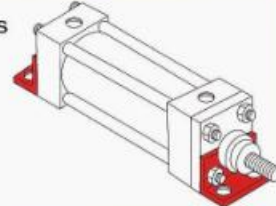
LH 22
Cap Fixed
Spherical
Eye
(MP5)



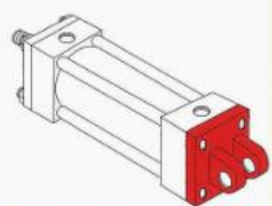
LH 3
Cap Fixed
Clevis
(MP1)



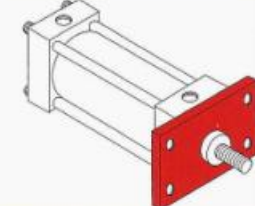
LH 13
End Angles
(MS1)



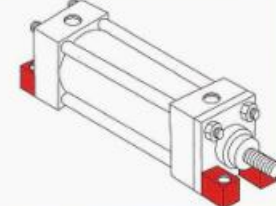
LH 24
Cap
Detachable
Clevis
(MP2)



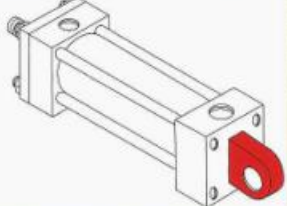
LH 4
Head
Rectangular
Flange
(MF1)



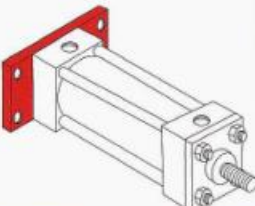
LH 14
End Lugs
(MS7)



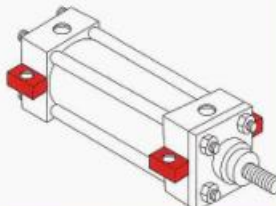
LH 25
Cap-Fixed
Eye
(MP3)



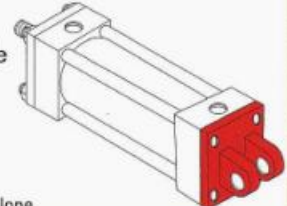
LH 5
Cap
Rectangular
Flange
(MF2)



LH 15
Centerline
Lugs
(MS3)

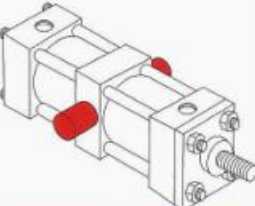


LH 27
Cap
Detachable
Clevis

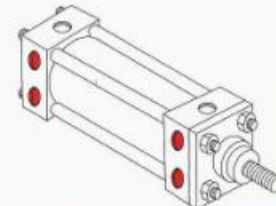


Equals MP1 envelope.

LH 6
Intermediate
Trunnion
(MT4)

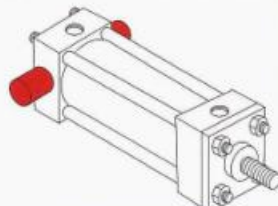


LH 16
Side
Tapped
(MS4)

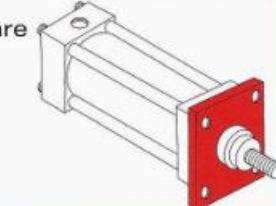


*See note

LH 7
Cap
Trunnion
(MT2)



LH 17
Head Square
Flange
(MF5)



Note: Specify XI dimension at position "J" when ordering an intermediate trunnion cylinder (LH 6). In the absence of an XI dimension, Peninsular will center the intermediate trunnion between the two end caps.

H Proximity Switches: If required, identify the required proximity switch to be affixed to cylinder head(s).
 If a switch is not supplied with the cylinder, specify 0 (zero) in this position.

LPR Namco Low-Profile Rotatable Mini-Connector **X-B11** Balluff Switch Mini-Connector
 T-11 Turck Mini-Connector **O** None

Optional Proximity Switch Capability

Allows for NON-CONTACT piston position sensing at near end of stroke. Precision machined cylinder heads and piston cushions allow for in-port mounting of "RF inductive" proximity switches. Self-contained switch probe not subject to contamination. Peninsular's design provides consistent, reliable, repeatable stroke-to-go and eliminates the design and construction of brackets necessary to mount external mechanical limit switches.

(If proximity switch cords are required, contact Peninsular.)

Contact Peninsular for probe lengths and stroke-to-go distances for each cylinder bore.

J Specify Optional Features with Slash Mark and Alpha Character(s)

/C Air Bleed /L ... Lubricated Trunnion Pins /X Extended Key /O ... Other options (describe)
 /D Drain Back /N Stop Tube* /XI . Specify XI Dimension (LH6) * Specify Length
 /E Extended Piston Rod* /P Oversize Ports (Specify) /Y Double Rod End
 /F Bronze Rod Cartridge /R Threaded Stud Rod End /Z "Slip Tuff" Coated
 /H Rod Boot Cover /S Scraper Ring Rod Cartridge
 /I Cast Iron Piston Rings /V Viton Seals

E Specify Piston Rod Diameter and Rod Threads

First letter denotes
Rod Diameter, specify:

- A = (Standard Rod Diameter)
- B = (Larger Rod Diameter)
- C = (Oversized Rod Diameter)
- D = (Oversized Rod Diameter)

Second letter denotes
Rod Threads, specify:

- M = (External NFPA Short Male)
- F = (NFPA Short Female)
- D = (NFPA Full Male)
- I = (NFPA Intermediate Male)
- A = (NFPA Long Male)
- S = (Spooled Rod End — contact Peninsular for dimensional information)
- X = (Other Rod Ends — please specify)

- Larger rod diameters are available up through 4.00" diameter. Contact Peninsular.
- Other rod threads and rod ends are available. Contact Peninsular.

Bore Size	Rod Diameter	Rod Threads				
		Short Male Specify "M"	Short Female Specify "F"	Full Male Specify "D"	Intermediate Male Specify "I"	Long Male Specify "A"
1.50	A = 0.62	7/16"-20 x 0.75	7/16"-20 x 0.75	5/8"-18 x 0.75	1/2"-20 x 0.75	1/2"-20 x 1.12
	B = 1.00	3/4"-16 x 1.12	3/4"-16 x 1.12	1"-14 x 1.12	7/8"-14 x 1.12	7/8"-14 x 1.87
	C = 1.38	1"-14 x 1.62	1"-14 x 1.62	1-3/8"-12 x 1.62	1-1/4"-12 x 1.62	1-1/4"-12 x 2.50
2.00	A = 0.62	7/16"-20 x 0.75	7/16"-20 x 0.75	5/8"-18 x 0.75	1/2"-20 x 0.75	1/2"-20 x 1.12
	B = 1.00	3/4"-16 x 1.12	3/4"-16 x 1.12	1"-14 x 1.12	7/8"-14 x 1.12	7/8"-14 x 1.87
	C = 1.38	1"-14 x 1.62	1"-14 x 1.62	1-3/8"-12 x 1.62	1-1/4"-12 x 1.62	1-1/4"-12 x 2.50
	D = 1.75	1-1/4"-12 x 2.00	1-1/4"-12 x 2.00	1-3/4"-12 x 2.00	1-1/2"-12 x 2.00	1-1/2"-12 x 3.00
2.50	A = 0.62	7/16"-20 x 0.75	7/16"-20 x 0.75	5/8"-18 x 0.75	1/2"-20 x 0.75	1/2"-20 x 1.12
	B = 1.00	3/4"-16 x 1.12	3/4"-16 x 1.12	1"-14 x 1.12	7/8"-14 x 1.12	7/8"-14 x 1.87
	C = 1.38	1"-14 x 1.62	1"-14 x 1.62	1-3/8"-12 x 1.62	1-1/4"-12 x 1.62	1-1/4"-12 x 2.50
	D = 1.75	1-1/4"-12 x 2.00	1-1/4"-12 x 2.00	1-3/4"-12 x 2.00	1-1/2"-12 x 2.00	1-1/2"-12 x 3.00
3.25	A = 1.00	3/4"-16 x 1.12	3/4"-16 x 1.12	1"-14 x 1.12	7/8"-14 x 1.12	7/8"-14 x 1.87
	B = 1.38	1"-14 x 1.62	1"-14 x 1.62	1-3/8"-12 x 1.62	1-1/4"-12 x 1.62	1-1/4"-12 x 2.50
	C = 1.75	1-1/4"-12 x 2.00	1-1/4"-12 x 2.00	1-3/4"-12 x 2.00	1-1/2"-12 x 2.00	1-1/2"-12 x 3.00
	D = 2.00	1-1/2"-12 x 2.25	1-1/2"-12 x 2.25	2"-12 x 2.25	1-3/4"-12 x 2.25	1-3/4"-12 x 3.50
4.00	A = 1.00	3/4"-16 x 1.12	3/4"-16 x 1.12	1"-14 x 1.12	7/8"-14 x 1.12	7/8"-14 x 1.87
	B = 1.38	1"-14 x 1.62	1"-14 x 1.62	1-3/8"-12 x 1.62	1-1/4"-12 x 1.62	1-1/4"-12 x 2.50
	C = 1.75	1-1/4"-12 x 2.00	1-1/4"-12 x 2.00	1-3/4"-12 x 2.00	1-1/2"-12 x 2.00	1-1/2"-12 x 3.00
	D = 2.00	1-1/2"-12 x 2.25	1-1/2"-12 x 2.25	2"-12 x 2.25	1-3/4"-12 x 2.25	1-3/4"-12 x 3.50
	E = 2.50	1-7/8"-12 x 3.00	1-7/8"-12 x 3.00	2-1/2"-12 x 3.00	2-1/4"-12 x 3.00	2-1/4"-12 x 4.50
5.00	A = 1.00	3/4"-16 x 1.12	3/4"-16 x 1.12	1"-14 x 1.12	7/8"-14 x 1.12	7/8"-14 x 1.87
	B = 1.38	1"-14 x 1.62	1"-14 x 1.62	1-3/8"-12 x 1.62	1-1/4"-12 x 1.62	1-1/4"-12 x 2.50
	C = 1.75	1-1/4"-12 x 2.00	1-1/4"-12 x 2.00	1-3/4"-12 x 2.00	1-1/2"-12 x 2.00	1-1/2"-12 x 3.00
	D = 2.00	1-1/2"-12 x 2.25	1-1/2"-12 x 2.25	2"-12 x 2.25	1-3/4"-12 x 2.25	1-3/4"-12 x 3.50
	E = 2.50	1-7/8"-12 x 3.00	1-7/8"-12 x 3.00	2-1/2"-12 x 3.00	2-1/4"-12 x 3.00	2-1/4"-12 x 4.50
6.00	A = 1.38	1"-14 x 1.62	1"-14 x 1.62	1-3/8"-12 x 1.62	1-1/4"-12 x 1.62	1-1/4"-12 x 2.50
	B = 1.75	1-1/4"-12 x 2.00	1-1/4"-12 x 2.00	1-3/4"-12 x 2.00	1-1/2"-12 x 2.00	1-1/2"-12 x 3.00
	C = 2.00	1-1/2"-12 x 2.25	1-1/2"-12 x 2.25	2"-12 x 2.25	1-3/4"-12 x 2.25	1-3/4"-12 x 3.50
	D = 2.50	1-7/8"-12 x 3.00	1-7/8"-12 x 3.00	2-1/2"-12 x 3.00	2-1/4"-12 x 3.00	2-1/4"-12 x 4.50
	E = 3.00	2-1/4"-12 x 3.50	2-1/4"-12 x 3.50	3"-12 x 3.50	2-3/4"-12 x 3.50	2-3/4"-12 x 5.50

