

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.

End Cap Side Locations: **1 2 3 4** **1 2 3 4**

LH 3 250 x 12 CM - TCNN - TCNN - Q/V

Position No: **A B C D E F G H J**

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.

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

C Specify Cylinder Bore

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

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) 	LH 8 Head Tie Rod Extended (MX3) 	LH 18 Cap Square Flange (MF6)
Adaptable for front or rear flush mounts.		
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 (MP1 envelope) 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
/H Rod Boot Cover /S Scraper Ring /Z "Slip Tuff" Coated 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	
	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	
2.00	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	
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	
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	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	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	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	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	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	



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