PENINSULAR® CYLINDER CO.

Hydraulic Cylinders

Hydraulic Cylinders

Peninsular Hydraulic Cylinders incorporate state-of-the-art design features that are fabricated to very strict tolerance specifications from the highest quality materials available. The result is reliable and trouble-free operation under the most demanding conditions.

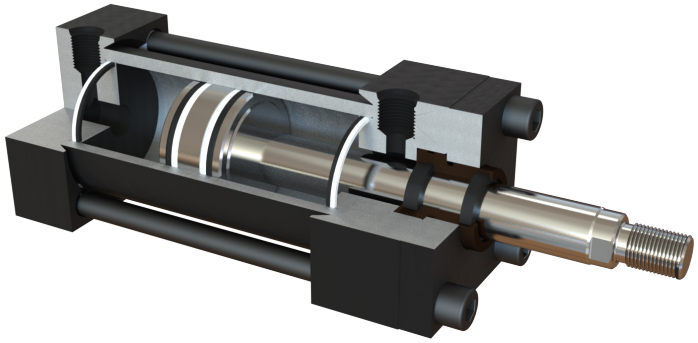
Operation

Double-acting cylinders have two ports - one in the head and one in the end cap. Directing pressurized fluid to the end cap will cause the rod to extend. Directing pressurized fluid to the head will cause the rod to retract.

Click on the thumbnail or go to https://www.automationdirect.com/VID-HY-0001 for a short introduction on Peninsular Hydraulic Cylinders.

Features

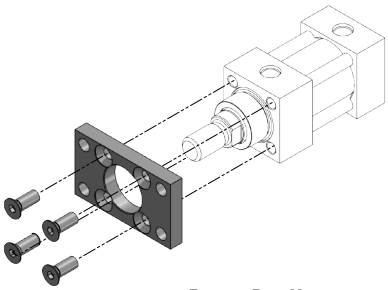
- Interchangeable with other popular brands of NFPA cylinders
- Available bore sizes: 1-1/2", 2", 2-1/2", 3-1/4", 4"
- Wide selection of stroke lengths
- All models are double-acting
- Head and end caps drilled for mounting on 1-1/2", 2" and 2-1/2" bores
- Ductile iron rod bearing
- 3000 psi working pressure
- Made in the USA
- All models are typically available for same-day shipment
- Temperature range is −20° F to 200° F



Mounting Options and Accessories

Front or Rear Flange Mount

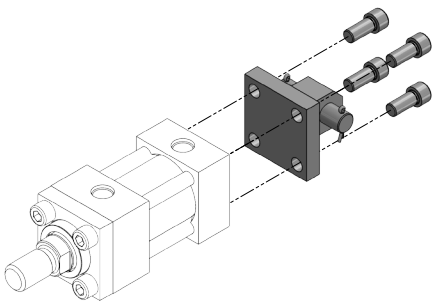
For Front or Rear Flange mounting, use the Flange Mount Kit. Use the drawing below for installation reference. **NOTE: Refer to derating table on Accessories Page for new rated pressure.**



Front or Rear Mount

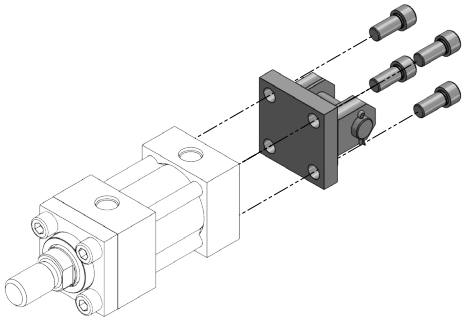
Rear Pivot Eye Mount

For Rear Pivot Eye Mounting, use the Rear Pivot Eye Kit. Use the drawing below for installation reference.



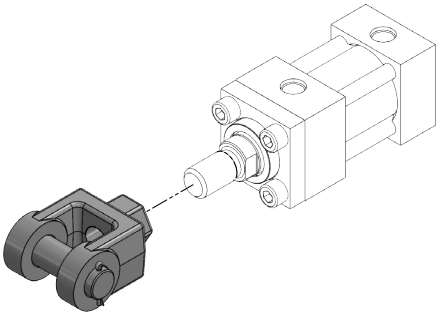
Rear Clevis Mount

For Rear Clevis mounting, use the Rear Clevis Mount Kit. Use the drawing below for installation reference.



Rod Clevis Mount

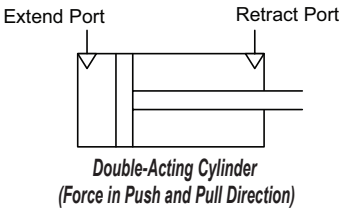
For Rod Clevis mounting, use the Rod Clevis Mount Kit. Use the drawing below for installation reference.



PENINSULAR® CYLINDER CO.

Hydraulic Cylinders

Cylinder Forces



Double-Acting Cylinder (Force in Push and Pull Direction)

- Cylinder force is calculated by multiplying the fluid pressure times the net piston area. Use the tables below to estimate the cylinder force.
- To increase the operating life of cylinders and other components, use the lowest system pressure (with an adequate safety margin) that will provide the needed force for your application.
- Any side load on the piston rod will reduce service life. Make every effort in machine design to minimize side loads.

PUSH - Extend Stroke - Cylinder Forces in Pounds

Cylinder Bore Size (in)	Hydraulic Working Line Pressure (PSI)							
	500	750	1000	1250	1500	2000	2500	3000
1-1/2	884	1325	1767	2209	2651	3534	4418	5301
2	1571	2356	3142	3927	4712	6283	7854	9425
2-1/2	2454	3682	4909	6136	7363	9818	12272	14726
3-1/4	4148	6222	8296	10370	12444	16592	20739	24887
4	6283	9425	12566	15708	18850	25133	31416	37699

PULL - Retract Stroke - Cylinder Forces in Pounds

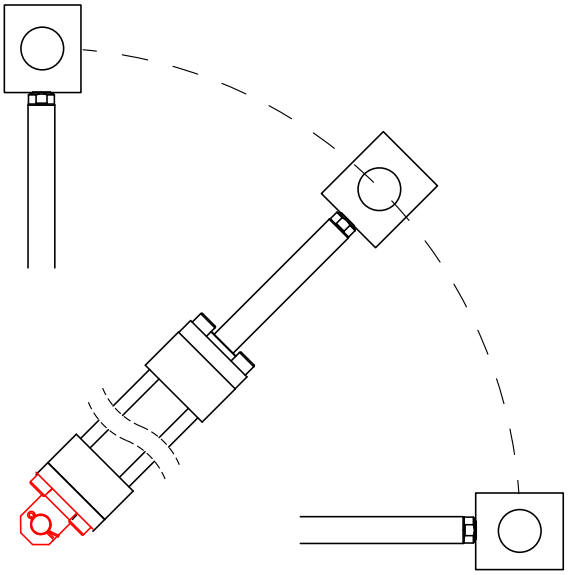
Cylinder Bore Size (in)	Cylinder Rod Diameter (in)	Hydraulic Working Line Pressure (PSI)							
		500	750	1000	1250	1500	2000	2500	3000
1-1/2	5/8	730	1095	1460	1825	2191	2921	3651	4381
	1	491	736	982	1227	1473	1964	2454	2945
2	1	1178	1767	2356	2945	3534	4712	5891	7069
	1-3/8	828	1243	1657	2071	2485	3313	4142	4970
2-1/2	1	2062	3093	4123	5154	6185	8247	10308	12370
	1-3/8	1712	2568	3424	4280	5136	6848	8560	10272
3-1/4	1-3/8	3405	5108	6811	8514	10216	13622	17027	20433
	1-3/4	2945	4418	5891	7363	8836	11781	14726	17672
4	1-3/4	5081	7621	10161	12701	15242	20322	25403	30483
	2	4712	7069	9425	11781	14137	18850	23562	28274

PENINSULAR® CYLINDER CO.

Hydraulic Cylinders

Piston Rod Sizing

- For proper use find the appropriate table for mounting configuration and read maximum allowable thrust at application bore and stroke. Select Rod Diameter to exceed design loads.



Clevis-to-Clevis Mount

Clevis-to-Clevis Mount (MP2 & MP4)															
Cylinder Bore Size (in)	*Cylinder Rod Diameter (in)*	*Maximum Thrust at Stroke (in) (pressure is 3000 psi or less as required)*													
		1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*10*	*12*	*14*	*16*	*20*	*24*
1-1/2	*5/8*	4925	4675	4425	4175	3920	3653	3387	3120	2587	2140	1740	1360	870	601
	1	5301	5301	5301	5301	5301	5301	5301	5301	5301	5301	5301	5301	5301	5125
2	*1*	9425	9425	9425	9425	9425	9425	9425	9425	9425	9425	8700	7875	5937	4937
	1-3/8	9425	9425	9425	9425	9425	9425	9425	9425	9425	9425	9425	9425	9425	9425
2-1/2	*1*	14726	14726	14726	14726	14726	12000	11810	11310	10310	9448	8648	7810	5905	4905
	1-3/8	14726	14726	14726	14726	14726	14726	14726	14726	14726	14726	14726	14726	14726	14726
3-1/4	*1-3/8*	24887	24887	24887	24887	24887	24887	24887	24887	24887	24887	24887	19333	16666	14285
	1-3/4	24887	24887	24887	24887	24887	24887	24887	24887	24887	24887	24887	24887	24887	24887
4	*1-3/4*	37699	37699	37699	37699	37699	37699	37699	37699	37699	37699	37699	37500	33863	30227
	2	37699	37699	37699	37699	37699	37699	37699	37699	37699	37699	37699	37699	37699	37699

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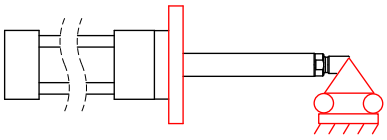
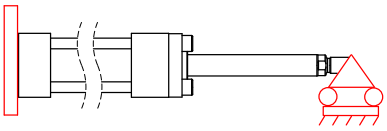
Hydraulic Cylinders

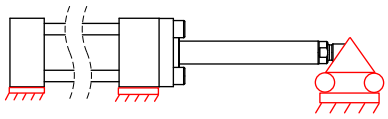
Piston Rod Sizing Cont.



Front Mount Supported

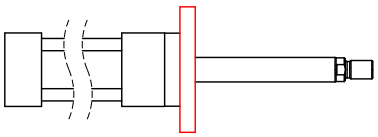


Rear Mount Supported

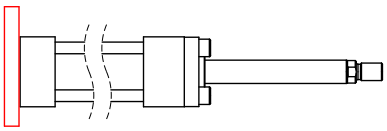


Side Mount Supported

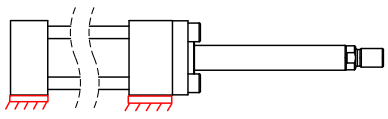
Side or Flange Mount (supported) (MS4, MF1 or MF2)															
Cylinder Bore Size (in)	Cylinder Rod Diameter (in)	Maximum Thrust at Stroke (in) (pressure is 3000 psi or less as required)													
		1	2	3	4	5	6	7	8	10	12	14	16	20	24
1-1/2	5/8	5301	5301	5301	5301	5301	5301	5301	5301	4750	4250	3733	3200	2200	1400
	1	5301	5301	5301	5301	5301	5301	5301	5301	5301	5301	5301	5301	5301	5301
2	1	9425	9425	9425	9425	9425	9425	9425	9425	9425	9425	9425	9425	9425	9000
	1-3/8	9425	9425	9425	9425	9425	9425	9425	9425	9425	9425	9425	9425	9425	9425
2-1/2	1	14726	14726	14726	14726	14726	14726	14726	14726	14726	14726	14726	14726	10500	8800
	1-3/8	14726	14726	14726	14726	14726	14726	14726	14726	14726	14726	14726	14726	14726	14726
3-1/4	1-3/8	24887	24887	24887	24887	24887	24887	24887	24887	24887	24887	24887	24887	24887	24887
	1-3/4	24887	24887	24887	24887	24887	24887	24887	24887	24887	24887	24887	24887	24887	24887
4	1-3/4	37699	37699	37699	37699	37699	37699	37699	37699	37699	37699	37699	37699	37699	37699
	2	37699	37699	37699	37699	37699	37699	37699	37699	37699	37699	37699	37699	37699	37699



Front Mount Unsupported



Rear Mount Unsupported



Side Mount Unsupported

Side or Flange Mount (unsupported) (MS4, MF1 or MF2)															
Cylinder Bore Size (in)	Cylinder Rod Diameter (in)	Maximum Thrust at Stroke (in) (pressure is 3000 psi or less as required)													
		1	2	3	4	5	6	7	8	10	12	14	16	20	24
1-1/2	5/8	5301	5301	4250	3200	2200	1400	900	580	325	200	120	N/A*	N/A*	N/A*
	1	5301	5301	5301	5301	5301	5301	5301	5301	3466	1800	1228	850	460	231
2	1	9425	9425	9425	9425	9425	8800	7000	5500	3466	1800	1228	850	460	231
	1-3/8	9425	9425	9425	9425	9425	9425	9425	9425	9425	8800	6000	3800	1971	1276
2-1/2	1	14726	14726	14726	14726	10500	8800	7000	5500	3466	1800	1228	850	460	231
	1-3/8	14726	14726	14726	14726	14726	14726	14726	14726	12571	8800	6000	3800	1971	1276
3-1/4	1-3/8	24887	24887	24887	24887	24887	24887	20000	17333	12571	8800	6000	3800	1971	1276
	1-3/4	24887	24887	24887	24887	24887	24887	24887	24887	24887	23076	16800	12500	6666	3822
4	1-3/4	37699	37699	37699	37699	37699	37699	36470	34117	29230	23076	16800	12500	6666	3822
	2	37699	37699	37699	37699	37699	37699	37699	37699	37699	35833	29230	23076	13777	7333

** These sizes must be supported for use.*

PENINSULAR® CYLINDER CO.

Hydraulic Cylinders – 1-1/2 inch Bore

1-1/2 in. Bore, Double-acting, Tapped End Caps

Peninsular hydraulic cylinders, NFPA interchangeable cylinder, 1-1/2" bore, 5/8" diameter piston rod (1" oversized rod available), 7/16"-20 (3/4"-16 for oversize) male threaded end, SAE -8 ports, double acting, tapped end caps and one side for mount; flange, pivot and clevis mount options available.

- Heavy wall seamless D.O.M. steel material (1020 to 1026). Precision honed to 10/15 micro inch finish cylinder body.
- Square, precision-machined carbon steel end caps ±0.002 all sides
- Piston rod: 100,000 psi minimum yield strength induction hardened and chrome plated steel with core hardness of Rc 28-34. Case hardened to Rc 50-55. Rod is hard chrome-plated and polished to 12/15 micro inch finish. Solid male threads contain a radiused undercut

1-1/2 in bore, double acting, tapped end caps

Part Number with Standard Ø5/8" Rod	Price	Drawing Link	Weight (lb)	Stroke Length (in)	Part Number with Oversize Ø1.0" Rod	Price	Drawing Link	Weight (lb)	Stroke Length (in)
HP16150A1S	$437.00	PDF	8	1	HP16150B1S	$512.00	PDF	8	1
HP16150A2S	$443.00	PDF	9	2	HP16150B2S	$519.00	PDF	9	2
HP16150A3S	$449.00	PDF	10	3	HP16150B3S	$526.00	PDF	10	3
HP16150A4S	$447.00	PDF	11	4	HP16150B4S	$524.00	PDF	11	4
HP16150A5S	$453.00	PDF	12	5	HP16150B5S	$531.00	PDF	12	5
HP16150A6S	$459.00	PDF	13	6	HP16150B6S	$539.00	PDF	13	6
HP16150A8S	$471.00	PDF	15	8	HP16150B8S	$553.00	PDF	15	8
HP16150A10S	$483.00	PDF	17	10	HP16150B10S	$567.00	PDF	17	10
HP16150A12S	$496.00	PDF	19	12	HP16150B12S	$581.00	PDF	19	12
HP16150A14S	$499.00	PDF	21	14	HP16150B14S	$585.00	PDF	21	14
HP16150A16S	$511.00	PDF	23	16	HP16150B16S	$599.00	PDF	23	16
HP16150A20S	$534.00	PDF	27	20	HP16150B20S	$626.00	PDF	27	20
HP16150A24S	$559.00	PDF	31	24	HP16150B24S	$655.00	PDF	31	24

Specifications

1.77 sq. in. piston area	3000 PSI Rating, 5000 PSI Non-Shock
Buna-N Nitrile O-Rings are seated into grooves in both the head end and cap end covers. O-Rings are backed up with Teflon® rings which effectively prevent O-Ring extrusion under pressure	Recommended fluids include: Transmission fluid (ATF) Petroleum based oil HWBF (95-5) Water glycol Water/oil emulsions
Temperature range -20°F to 200°F (-28 to 94°C)	See table for PUSH (Extended) / PULL (Retracted) cylinder forces.
See table for cylinder rod force limitations.	
Filtration: Oil cleanliness, measured against ISO Cleanliness Code 4406 15/12/10 microns or better	

Mounting Accessories

	Part No.	
Style	Ø5/8" Rod	Ø1.0" Rod
Mounting Plates	HDM-1201	HDM-1202
Rear Pivot Eye	HM21150-6	
Rear Clevis Bracket	HM24150-6	

***Mounting Plate (Rectangular Flange) Pressure Derating**

Cylinder Bore Size (in)	Cylinder Rod Diameter (in)	Max Pressure (PSI)
1-1/2	5/8	2500
	1	1500

Rod Accessories

	Part No.	
Style	Ø5/8" Rod	Ø1.0" Rod
Rod Clevis	C1150-86	C1200-86

PENINSULAR® CYLINDER CO.

Hydraulic Cylinders – 2 inch Bore

2 in. Bore, Double-acting, Tapped End Caps

Peninsular hydraulic cylinders, NFPA interchangeable cylinder, 2" bore, 1" diameter piston rod (1-3/8" oversized rod available), 3/4"-16 (1"-14 for oversize) male threaded end, SAE -8 ports, double acting, tapped end caps and one side for mount, flange, pivot and clevis mount options available.

- Heavy wall seamless D.O.M. steel material (1020 to 1026). Precision honed to 10/15 micro inch finish cylinder body.
- Square, precision-machined carbon steel end caps ±0.002 all sides
- Piston rod: 100,000 psi minimum yield strength induction hardened and chrome plated steel with core hardness of Rc 28-34. Case hardened to Rc 50-55. Rod is hard chrome-plated and polished to 12/15 micro inch finish. Solid male threads contain a radiused undercut

2 in bore, double acting, tapped end caps

Part Number with Standard Ø1.0" Rod	Price	Drawing Link	Weight (lb)	Stroke Length (in)	Part Number with Oversize Ø1-3/8" Rod	Price	Drawing Link	Weight (lb)	Stroke Length (in)
HP16200A1S	$519.00	PDF	13	1	HP16200B1S	$587.00	PDF	13	1
HP16200A2S	$526.00	PDF	14	2	HP16200B2S	$598.00	PDF	14	2
HP16200A3S	$533.00	PDF	15	3	HP16200B3S	$609.00	PDF	15	3
HP16200A4S	$531.00	PDF	16	4	HP16200B4S	$610.00	PDF	16	4
HP16200A5S	$539.00	PDF	17	5	HP16200B5S	$621.00	PDF	17	5
HP16200A6S	$553.00	PDF	18	6	HP16200B6S	$632.00	PDF	18	6
HP16200A8S	$567.00	PDF	20	8	HP16200B8S	$655.00	PDF	20	8
HP16200A10S	$581.00	PDF	22	10	HP16200B10S	$676.00	PDF	22	10
HP16200A12S	$595.00	PDF	24	12	HP16200B12S	$699.00	PDF	24	12
HP16200A14S	$599.00	PDF	26	14	HP16200B14S	$709.00	PDF	26	14
HP16200A16S	$626.00	PDF	28	16	HP16200B16S	$730.00	PDF	28	16
HP16200A20S	$655.00	PDF	32	20	HP16200B20S	$774.00	PDF	32	20
HP16200A24S	$682.00	PDF	36	24	HP16200B24S	$818.00	PDF	36	24

Specifications

3.14 sq. in. piston area	3000 PSI Rating, 5000 PSI Non-Shock
Buna-N Nitrile O-Rings are seated into grooves in both the head end and cap end covers. O-Rings are backed up with Teflon® rings which effectively prevent O-Ring extrusion under pressure	Recommended fluids include: Transmission fluid (ATF) Petroleum based oil HWBF (95-5) Water glycol Water/oil emulsions
Temperature range -20°F to 200°F (-28 to 94°C)	See table for PUSH (Extended) / PULL (Retracted) cylinder forces.
See table for cylinder rod force limitations.	
Filtration: Oil cleanliness, measured against ISO Cleanliness Code 4406 15/12/10 microns or better	

Mounting Accessories

	Part No.	
Style	Ø1" Rod	Ø1-3/8" Rod
Mounting Plates	HDM-1203	HDM-1204
Rear Pivot Eye	HM21200-6	
Rear Clevis Bracket	HM24200-6	

***Mounting Plate (Rectangular Flange) Pressure Derating**

Cylinder Bore Size (in)	Cylinder Rod Diameter (in)	Max Pressure (PSI)
2	1	2500
	1-3/8	1500

Rod Accessories

	Part No.	
Style	Ø1" Rod	Ø1-3/8" Rod
Rod Clevis	C1200-86	C1400-86

PENINSULAR® CYLINDER CO.

Hydraulic Cylinders – 2-1/2 inch Bore

2-1/2 in. Bore, Double-acting, Tapped End Caps

Peninsular hydraulic cylinders, NFPA interchangeable cylinder, 2-1/2" bore, 1" diameter piston rod (1-3/8" oversized rod available), 3/4"-16 (1"-14 for oversize) male threaded end, SAE -8 ports, double acting, tapped end caps and one side for mount, flange, pivot and clevis mount options available.

- Heavy wall seamless D.O.M. steel material (1020 to 1026). Precision honed to 10/15 micro inch finish cylinder body.
- Square, precision-machined carbon steel end caps ±0.002 all sides
- Piston rod: 100,000 psi minimum yield strength induction hardened and chrome plated steel with core hardness of Rc 28-34. Case hardened to Rc 50-55. Rod is hard chrome-plated and polished to 12/15 micro inch finish. Solid male threads contain a radiused undercut

2-1/2 in bore, double acting, tapped end caps

Part Number with Standard Ø1.0" Rod	Price	Drawing Link	Weight (lb)	Stroke Length (in)	Part Number with Oversize Ø1-3/8" Rod	Price	Drawing Link	Weight (lb)	Stroke Length (in)
HP16250A1S	$564.00	PDF	17	1	HP16250B1S	$664.00	PDF	19	1
HP16250A2S	$573.00	PDF	18	2	HP16250B2S	$675.00	PDF	21	2
HP16250A3S	$582.00	PDF	19	3	HP16250B3S	$687.00	PDF	23	3
HP16250A4S	$582.00	PDF	20	4	HP16250B4S	$687.00	PDF	25	4
HP16250A5S	$592.00	PDF	21	5	HP16250B5S	$699.00	PDF	27	5
HP16250A6S	$601.00	PDF	22	6	HP16250B6S	$710.00	PDF	29	6
HP16250A8S	$619.00	PDF	24	8	HP16250B8S	$732.00	PDF	33	8
HP16250A10S	$639.00	PDF	26	10	HP16250B10S	$756.00	PDF	37	10
HP16250A12S	$657.00	PDF	28	12	HP16250B12S	$778.00	PDF	41	12
HP16250A14S	$664.00	PDF	30	14	HP16250B14S	$787.00	PDF	45	14
HP16250A16S	$682.00	PDF	32	16	HP16250B16S	$825.00	PDF	49	16
HP16250A20S	$719.00	PDF	36	20	HP16250B20S	$870.00	PDF	57	20
HP16250A24S	$756.00	PDF	40	24	HP16250B24S	$915.00	PDF	65	24

Specifications

4.91 sq. in. piston area	3000 PSI Rating, 5000 PSI Non-Shock
Buna-N Nitrile O-Rings are seated into grooves in both the head end and cap end covers. O-Rings are backed up with Teflon® rings which effectively prevent O-Ring extrusion under pressure	Recommended fluids include: Transmission fluid (ATF) Petroleum based oil HWBF (95-5) Water glycol Water/oil emulsions
Temperature range -20°F to 200°F (-28 to 94°C)	See table for PUSH (Extended) / PULL (Retracted) cylinder forces.
See table for cylinder rod force limitations.	
Filtration: Oil cleanliness, measured against ISO Cleanliness Code 4406 15/12/10 microns or better	

Mounting Accessories

	Part No.	
Style	Ø1" Rod	Ø1-3/8" Rod
Mounting Plates	HDM-1205	HDM-1206
Rear Pivot Eye	HM21250-6	
Rear Clevis Bracket	HM24250-6	

*Mounting Plate (Rectangular Flange) Pressure Derating

Cylinder Bore Size (in)	Cylinder Rod Diameter (in)	Max Pressure (PSI)
2-1/2	1	2500
	1-3/8	1900

Rod Accessories

	Part No.	
Style	Ø1.0" Rod	Ø1-3/8" Rod
Rod Clevis	C1200-86	C1400-86

Hydraulic Cylinders – 3-1/4 inch Bore

PENINSULAR® CYLINDER CO.

3-1/4 in. Bore, Double-acting, Tapped End Caps

Peninsular hydraulic cylinders, NFPA interchangeable cylinder, 3-1/4" bore, 1-3/8" diameter piston rod (1-3/4" oversized rod available), 1"-14 (1 1/4"-12 for oversize) male threaded end, SAE -12 ports, double acting, flange, pivot and clevis mount options available.

- Heavy wall seamless D.O.M. steel material (1020 to 1026). Precision honed to 10/15 micro inch finish cylinder body.
- Square, precision-machined carbon steel end caps ±0.002 all sides
- Piston rod: 100,000 psi minimum yield strength induction hardened and chrome plated steel with core hardness of Rc 28-34. Case hardened to Rc 50-55. Rod is hard chrome-plated and polished to 12/15 micro inch finish. Solid male threads contain a radiused undercut

3-1/4 in bore, double acting, tapped end caps

Part Number with Standard Ø1-3/8" Rod	Price	Drawing Link	Weight (lb)	Stroke Length (in)	Part Number with Oversize Ø1-3/4" Rod	Price	Drawing Link	Weight (lb)	Stroke Length (in)
HP0325A1S	$616.00	PDF	35	1	HP0325B1S	$736.00	PDF	37	1
HP0325A2S	$632.00	PDF	37	2	HP0325B2S	$754.00	PDF	40	2
HP0325A3S	$649.00	PDF	39	3	HP0325B3S	$771.00	PDF	43	3
HP0325A4S	$653.00	PDF	41	4	HP0325B4S	$774.00	PDF	46	4
HP0325A5S	$668.00	PDF	43	5	HP0325B5S	$791.00	PDF	49	5
HP0325A6S	$703.00	PDF	45	6	HP0325B6S	$826.00	PDF	53	6
HP0325A8S	$734.00	PDF	49	8	HP0325B8S	$860.00	PDF	59	8
HP0325A10S	$765.00	PDF	53	10	HP0325B10S	$893.00	PDF	65	10
HP0325A12S	$797.00	PDF	57	12	HP0325B12S	$926.00	PDF	71	12
HP0325A14S	$814.00	PDF	61	14	HP0325B14S	$944.00	PDF	77	14
HP0325A16S	$845.00	PDF	65	16	HP0325B16S	$976.00	PDF	83	16
HP0325A20S	$906.00	PDF	73	20	HP0325B20S	$1,041.00	PDF	95	20
HP0325A24S	$967.00	PDF	81	24	HP0325B24S	$1,107.00	PDF	107	24

Specifications

8.3 sq. in. piston area	3000 PSI Rating, 5000 PSI Non-Shock
Buna-N Nitrile O-Rings are seated into grooves in both the head end and cap end covers. O-Rings are backed up with Teflon® rings which effectively prevent O-Ring extrusion under pressure	Recommended fluids include: Transmission fluid (ATF) Petroleum based oil HWBF (95-5) Water glycol Water/oil emulsions
Temperature range -20°F to 200°F (-28 to 94°C)	See table for PUSH (Extended) / PULL (Retracted) cylinder forces.
See table for cylinder rod force limitations.	
Filtration: Oil cleanliness, measured against ISO Cleanliness Code 4406 15/12/10 microns or better	

Mounting Accessories

	Part No.	
Style	Ø1-3/8" Rod	Ø1-3/4" Rod
Mounting Plates	HDM-1207	HDM-1208
Rear Pivot Eye	HM21325-6	
Rear Clevis Bracket	HM24325-6	

***Mounting Plate (Rectangular Flange) Pressure Derating**

Cylinder Bore Size (in)	Cylinder Rod Diameter (in)	Max Pressure (PSI)
3-1/4	1-3/8	2500
	1-3/4	2100

Rod Accessories

	Part No.	
Style	Ø1-3/8" Rod	Ø1-3/4" Rod
Rod Clevis	C1400-86	C1600-86

PENINSULAR® CYLINDER CO.

Hydraulic Cylinders – 4 inch Bore

4 in. Bore, Double-acting, Tapped End Caps

Peninsular hydraulic cylinders, NFPA interchangeable cylinder, 4" bore, 1-3/4" diameter piston rod (2" oversized rod available), 1 1/4"-12 (1 1/2"-12 for oversize) male threaded end, SAE -12 ports, double acting, flange, pivot and clevis mount options available.

- Heavy wall seamless D.O.M. steel material (1020 to 1026). Precision honed to 10/15 micro inch finish cylinder body.
- Square, precision-machined carbon steel end caps ±0.002 all sides
- Piston rod: 100,000 psi minimum yield strength induction hardened and chrome plated steel with core hardness of Rc 28-34. Case hardened to Rc 50-55. Rod is hard chrome-plated and polished to 12/15 micro inch finish. Solid male threads contain a radiused undercut

4 in bore, double acting, tapped end caps

Part Number with Standard Ø1-3/4" Rod	Price	Drawing Link	Weight (lb)	Stroke Length (in)	Part Number with Oversize Ø2.0" Rod	Price	Drawing Link	Weight (lb)	Stroke Length (in)
HP0400A1S	$778.00	PDF	47	1	HP0400B1S	$924.00	PDF	48	1
HP0400A2S	$795.00	PDF	50	2	HP0400B2S	$941.00	PDF	51	2
HP0400A3S	$812.00	PDF	53	3	HP0400B3S	$960.00	PDF	54	3
HP0400A4S	$815.00	PDF	56	4	HP0400B4S	$961.00	PDF	57	4
HP0400A5S	$831.00	PDF	59	5	HP0400B5S	$978.00	PDF	60	5
HP0400A6S	$848.00	PDF	62	6	HP0400B6S	$997.00	PDF	63	6
HP0400A8S	$881.00	PDF	68	8	HP0400B8S	$1,031.00	PDF	69	8
HP0400A10S	$914.00	PDF	74	10	HP0400B10S	$1,067.00	PDF	75	10
HP0400A12S	$948.00	PDF	80	12	HP0400B12S	$1,102.00	PDF	81	12
HP0400A14S	$964.00	PDF	86	14	HP0400B14S	$1,118.00	PDF	87	14
HP0400A16S	$997.00	PDF	92	16	HP0400B16S	$1,153.00	PDF	93	16
HP0400A20S	$1,062.00	PDF	104	20	HP0400B20S	$1,222.00	PDF	105	20
HP0400A24S	$1,127.00	PDF	116	24	HP0400B24S	$1,291.00	PDF	117	24

Specifications

12.57 sq. in. piston area	3000 PSI Rating, 5000 PSI Non-Shock
Buna-N Nitrile O-Rings are seated into grooves in both the head end and cap end covers. O-Rings are backed up with Teflon® rings which effectively prevent O-Ring extrusion under pressure	Recommended fluids include: Transmission fluid (ATF) Petroleum based oil HWBF (95-5) Water glycol Water/oil emulsions
Temperature range -20°F to 200°F (-28 to 94°C)	See table for PUSH (Extended) / PULL (Retracted) cylinder forces.
See table for cylinder rod force limitations.	
Filtration: Oil cleanliness, measured against ISO Cleanliness Code 4406 15/12/10 microns or better	

Mounting Accessories

	Part No.	
Style	Ø1-3/4" Rod	Ø2.0" Rod
Mounting Plates	HM4400A	HM4400B
Rear Pivot Eye	HM21400-6	
Rear Clevis Bracket	HM24400-6	

***Mounting Plate (Rectangular Flange) Pressure Derating**

Cylinder Bore Size (in)	Cylinder Rod Diameter (in)	Max Pressure (PSI)
4	1-3/4	2500
	2	1800

Rod Accessories

	Part No.	
Style	Ø1-3/4" Rod	Ø2.0" Rod
Rod Clevis	C1600-86	C1800-86

PENINSULAR® CYLINDER CO.

Hydraulic Cylinders Accessories

Mounting Plates

Hydraulic Cylinder Mounting Plates*					
Part Number	Description	Pcs/Pkg	Wt (lb)	Price	Drawing Link
HDM-1201	Peninsular flange mount plate, steel. For use with 1-1/2in bore x 5/8in rod hydraulic NFPA cylinders. Mounting hardware included.	1	1	$22.00	PDF
HDM-1202	Peninsular flange mount plate, steel. For use with 1-1/2in bore x 1in rod hydraulic NFPA cylinders. Mounting hardware included.	1	1	$22.00	PDF
HDM-1203	Peninsular flange mount plate, steel. For use with 2in bore x 1in rod hydraulic NFPA cylinders. Mounting hardware included.	1	2	$45.00	PDF
HDM-1204	Peninsular flange mount plate, steel. For use with 2in bore x 1-3/8in rod hydraulic NFPA cylinders. Mounting hardware included.	1	2	$45.00	PDF
HDM-1205	Peninsular flange mount plate, steel. For use with 2-1/2in bore x 1in rod hydraulic NFPA cylinders. Mounting hardware included.	1	3	$44.00	PDF
HDM-1206	Peninsular flange mount plate, steel. For use with 2-1/2in bore x 1-3/8in rod hydraulic NFPA cylinders. Mounting hardware included.	1	3	$44.00	PDF
HDM-1207	Peninsular flange mount plate, steel. For use with 3-1/4in bore x 1-3/8in rod hydraulic NFPA cylinders. Mounting hardware included.	1	5.5	$65.00	PDF
HDM-1208	Peninsular flange mount plate, steel. For use with 3-1/4in bore x 1-3/4in rod hydraulic NFPA cylinders. Mounting hardware included.	1	5.5	$65.00	PDF
HM4400A	Peninsular flange mount plate, steel. For use with 4in bore x 1-3/4in rod hydraulic NFPA cylinders. Mounting hardware included.	1	8	$150.00	PDF
HM4400B	Peninsular flange mount plate, steel. For use with 4in bore x 2in rod hydraulic NFPA cylinders. Mounting hardware included.	1	8	$150.00	PDF

*Mounting Plate (Rectangular Flange) Pressure Derating		
Cylinder Bore Size (in)	Cylinder Rod Diameter (in)	Max Pressure (PSI)
1-1/2	5/8	2500
	1	1500
2	1	2500
	1-3/8	1500
2-1/2	1	2500
	1-3/8	1900
3-1/4	1-3/8	2500
	1-3/4	2100
4	1-3/4	2500
	2	1800

Rear Pivot Eye

Hydraulic Cylinder Rear Pivot Eye					
Part Number	Description	Pcs/Pkg	Wt (lb)	Price	Drawing Link
HM21150-6	Peninsular rear pivot eye, steel. For use with 1-1/2in bore hydraulic NFPA cylinders. Mounting hardware included.	1	1.5	$28.50	PDF
HM21200-6	Peninsular rear pivot eye, steel. For use with 2in bore hydraulic NFPA cylinders. Mounting hardware included.	1	3	$48.50	PDF
HM21250-6	Peninsular rear pivot eye, steel. For use with 2-1/2in bore hydraulic NFPA cylinders. Mounting hardware included.	1	3.5	$71.00	PDF
HM21325-6	Peninsular rear pivot eye, steel. For use with 3-1/4in bore hydraulic NFPA cylinders. Mounting hardware included.	1	8	$74.00	PDF
HM21400-6	Peninsular rear pivot eye, steel. For use with 4in bore hydraulic NFPA cylinders. Mounting hardware included.	1	13.5	$200.00	PDF

Hydraulic Cylinders Accessories

Rear Clevis Bracket

Note: Comes with pivot pin installed.

Hydraulic Cylinder Rear Clevis Bracket					
Part Number	***Description***	***Pcs/ Pkg***	***Wt (lb)***	***Price***	***Drawing Link***
HM24150-6	Peninsular cylinder rear clevis bracket, steel. For use with 1-1/2in bore hydraulic NFPA cylinders. Mounting hardware included.	1	1.5	$38.00	PDF
HM24200-6	Peninsular cylinder rear clevis bracket, steel. For use with 2in bore hydraulic NFPA cylinders. Mounting hardware included.	1	3	$70.00	PDF
HM24250-6	Peninsular cylinder rear clevis bracket, steel. For use with 2-1/2in bore hydraulic NFPA cylinders. Mounting hardware included.	1	3.5	$95.00	PDF
HM24325-6	Peninsular cylinder rear clevis bracket, steel. For use with 3-1/4in bore hydraulic NFPA cylinders. Mounting hardware included.	1	7.5	$159.00	PDF
HM24400-6	Peninsular cylinder rear clevis bracket, steel. For use with 4in bore hydraulic NFPA cylinders. Mounting hardware included.	1	12	$239.00	PDF

Rod Clevis

Note: Comes with Pivot Pin installed.

Hydraulic Cylinder Rod Clevis					
Part Number	***Description***	***Pcs/Pkg***	***Wt (lb)***	***Price***	***Drawing Link***
C1150-86	Peninsular rod clevis, 7/16-20 UNF thread, steel. For use with 5/8in rod hydraulic NFPA cylinders. 1/2in clevis pin included.	1	0.5	$15.50	PDF
C1200-86	Peninsular rod clevis, 3/4-16 UNF thread, steel. For use with 1in rod hydraulic NFPA cylinders. 3/4in clevis pin included.	1	1.6	$25.00	PDF
C1400-86	Peninsular rod clevis, 1-14 UNS thread, steel. For use with 1-3/8in rod hydraulic NFPA cylinders. 1in clevis pin included.	1	4.2	$46.00	PDF
C1600-86	Peninsular rod clevis, 1-1/4-12 UNF thread, steel. For use with 1-3/4in rod hydraulic NFPA cylinders. 1-3/8in clevis pin included.	1	18	$73.00	PDF
C1800-86	Peninsular rod clevis, 1-1/2-12 UNF thread, steel. For use with 2in rod hydraulic NFPA cylinders. 1-3/4in clevis pin included.	1	25	$113.00	PDF