



Double Acting Cylinders

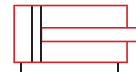
HD Series - General Purpose



HD20013



HD3008



Capacity:

10 - 500 Tons

Stroke:

5.90 - 24.00 Inches

Pressure:

10,000 psi

Min. - Max. Height:


10.56 - 60.13 Inches



- Rod wiper seals out dirt and contamination
- High strength steel construction from gun drilled solid bar
- High flow 3/8" NPTF female couplers
- One piece high grade alloy bearing for side load protection and long life
- Ideal for pushing and pulling
- Maximum working pressure: 10,000 psi / 700 bar
- Threaded cylinders, removable saddle, thicker cylinder walls
- Retract under hydraulic power for faster operation



Safety Practices
Good industry practice recommends not exceeding 80% of maximum rated capacities of all our products.



Clevis and Tangs
Install a clevis or a tang to your double acting cylinder for a pulling application.

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HD cylinders can be used in pushing and pulling applications. In this photo, we see a HD2506 HD cylinder set up for a pull application using a Rod Clevis cylinder accessory



Relief Valve

All double acting cylinders are equipped with a pressure relief valve located next to the retract port. These pressure relief valves help prevent cylinder over pressurization on the return port side of the cylinder.



With a variety of tonnage and sizes, you can apply our cylinders to a large variety of applications. Custom tonnages and stroke lengths are available upon request.

Quick Selection Guide

Cylinder Capacity (tons)	Stroke (in)	Model Number	Collapsed Height (in)	Oil Capacity		Weight (lbs)
				Push (in ³)	Pull (in ³)	
10	10.04	HD1010	16.12	22.41	7.47	26.7
	11.97	HD1012	18.03	26.71	8.90	30.0
25	5.90	HD2506	10.56	30.35	15.81	24.8
30	8.15	HD3008	15.31	52.93	26.02	43.0
	14.49	HD3014	21.65	94.09	46.26	60.6
55	6.18	HD5506 [†]	13.03	67.93	19.74	70.5
	13.19	HD5513 [†]	20.04	144.94	42.11	104.0
	20.12	HD5520 [†]	28.86	221.09	64.24	146.2
75	6.10	HD7506 [†]	13.70	98.10	31.21	93.7
	13.11	HD7513 [†]	20.71	210.93	67.06	136.8
100	6.57	HD10006 [†]	14.06	135.23	62.98	138.6
	10.13	HD10010 [†]	17.67	208.30	97.10	169.2
	13.11	HD10013 [†]	20.63	269.66	125.58	193.6
	18.15	HD10018 [†]	27.05	373.31	173.86	248.3
200	6.00	HD20006	16.94	265.28	135.00	325.0
	13.00	HD20013	23.94	574.78	293.00	440.0
	24.02	HD20024	36.13	1061.00	528.00	616.0
300	6.00	HD30006	19.13	425.56	228.00	441.0
500	6.00	HD50006	22.75	678.92	378.00	953.0

See pages (pg.14-15) for detailed specifications.



Related Product: Gauges

Reduce the risk of overloading your product by using a gauge. A variety of graduations and types to suit any need.

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Cylinder Accessories

See the assortment of accessories designed to work with our products.

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Combo Kits

Most cylinders are available in easy to order kits: Cylinder, Gauge, Couplers, Hose and Pump.

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Safety Instructions

Visit our DO'S and DON'TS section to review the best methods of operation. Always be prepared.

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High-Flow Couplers

High-Flow Coupler: CH38F is included on all models (except where specified).

HUD Series – Aluminum Cylinders

Aluminum cylinders make a great lightweight alternative being up to 60% lighter than comparable steel models.

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Double Acting Cylinders

HD Series - General Purpose


Cylinder Accessories
See the assortment of accessories designed to work with our products. *pg 34*



Related Product: Gauges
Reduce the risk of overloading your product by using a gauge. A variety of graduations and types to suit any need. *pg 69*



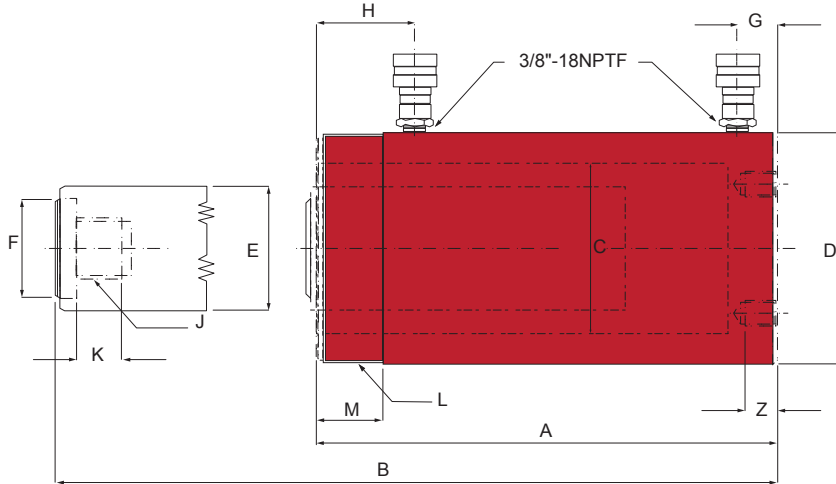
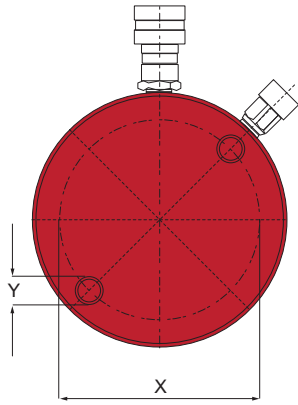
Combo Kits
Most cylinders are available in easy to order kits: Cylinder, Gauge, Couplers, Hose and Pump. *pg 64*



Safety Instructions
Visit our DO'S and DON'TS section to review the best methods of operation. Always be prepared. *pg 92*




Cylinder Capacity (tons)	Stroke (in)	Model Number	Maximum Cylinder Capacity		Cylinder Effective Area		Oil Capacity		Weight (lbs)	Collapsed Height A (in)	Extended Height B (in)	Cylinder Bore Dia. C (in)
			Push (ton)	Pull (ton)	Push (in ²)	Pull (in ²)	Push (in ³)	Pull (in ³)				
10	10.04	HD1010	11.40	3.80	2.24	0.74	22.41	7.47	26.7	16.12	26.19	1.69
	11.97	HD1012	11.40	3.80	2.24	0.74	26.71	8.90	30.0	18.03	30.00	1.69
25	5.90	HD2506	25.70	13.39	5.14	2.68	30.35	15.81	24.8	10.56	16.46	2.56
	8.15	HD3008	32.90	16.20	6.49	3.19	52.93	26.02	43.0	15.31	23.46	2.87
30	14.49	HD3014	32.90	16.20	6.49	3.19	94.09	46.26	60.6	21.65	36.14	2.87
	6.18	HD5506*	55.70	16.20	10.99	3.19	67.93	19.74	70.5	13.03	19.21	3.74
55	13.19	HD5513*	55.70	16.20	10.99	3.19	144.94	42.11	104.0	20.04	33.23	3.74
	20.12	HD5520*	55.70	16.20	10.99	3.19	221.09	64.24	146.2	28.86	49.98	3.74
75	6.10	HD7506*	81.70	25.90	16.09	5.12	98.10	31.21	93.7	13.70	19.80	4.53
	13.11	HD7513*	81.70	25.90	16.09	5.12	210.93	67.06	136.8	20.71	33.82	4.53
100	6.57	HD10006*	104.40	48.60	20.57	9.58	135.23	62.98	138.6	14.06	20.63	5.12
	10.13	HD10010*	104.40	48.60	20.57	9.58	208.30	97.10	169.2	17.67	27.80	5.12
	13.11	HD10013*	104.40	48.60	20.57	9.58	269.66	125.58	193.6	20.63	33.74	5.12
	18.15	HD10018*	104.40	48.60	20.57	9.58	373.31	173.86	248.3	27.05	45.20	5.12
200	6.57	HD20006	221.00	112.50	44.21	22.50	265.28	135.00	325.0	16.94	22.94	7.50
	13.11	HD20013	221.00	112.50	44.21	22.50	574.78	293.00	440.0	23.94	36.94	7.50
	24.00	HD20024	221.00	112.50	44.21	22.50	1061.00	528.00	616.0	36.13	60.13	7.50
300	6.57	HD30006	354.60	190.00	70.93	38.00	425.56	228.00	441.0	19.13	25.13	9.50
500	6.57	HD50006	565.70	315.00	113.15	63.00	678.92	378.00	953.0	22.75	28.75	12.00



HD Series

80%

Safety Practices
Good industry practice recommends not exceeding 80% of maximum rated capacities of all our products.

Relief Valve
All double acting cylinders are equipped with a pressure relief valve located next to the retract port. These pressure relief valves help prevent cylinder over pressurization on the return port side of the cylinder.

High-Flow Couplers
High-Flow Coupler: CH38F is included on all models (except where specified).

Model Number	Outside Dia. D (in)	Rod Dia. E (in)	Saddle Dia. F (in)	Base to Adv. Port G (in)	Top to Return Port H (in)	Rod Internal Thread J (in)	Rod Thread Length K (in)	Collar Thread L (in)	Collar Thread Length M (in)	Base Mounting Hole		
										Bolt Circle X (in)	Thread Y (in)	Thread Depth Z (in)
HD1010	2.87	1.38	1.38	1.42	2.09	1"-8	0.98	2¼"-14	1.02	1.30	⅝"-18	0.60
HD1012	2.87	1.37	1.38	1.42	2.09	1"-8	0.98	2¼"-14	1.02	1.30	⅝"-18	0.60
HD2506	3.62	1.77	1.50	0.98	1.93	1"-8	1.18	3⅝"-12	0.98	2.30	½"-13	0.70
HD3008	3.98	2.13	1.97	1.65	2.91	1½"-16	0.98	3⅝"-12	1.93	2.20	½"-13	0.70
HD3014	3.98	2.13	1.97	1.65	2.91	1½"-16	0.98	3⅝"-12	1.93	2.20	½"-13	0.70
HD5506*	5.00	3.14	2.76	1.14	2.87	1"-12	0.98	5"-12	1.73	3.70	½"-13	0.70
HD5513*	5.00	3.14	2.76	1.14	2.87	1"-12	0.98	5"-12	1.73	3.70	½"-13	0.70
HD5520*	5.00	3.14	2.76	1.14	2.87	1"-12	0.98	5"-12	1.73	3.70	½"-13	0.70
HD7506*	5.75	3.75	2.76	1.18	2.80	1"-12	1.50	5¾"-12	1.50	4.00	¾"-10	0.90
HD7513*	5.75	3.75	2.76	1.18	2.80	1"-12	1.50	5¾"-12	1.50	4.00	¾"-10	0.90
HD10006*	6.97	3.75	2.95	1.22	2.95	1¾"-12	1.38	6⅞"-12	1.97	5.47	¾"-10	0.98
HD10010*	6.97	3.74	2.95	1.22	2.95	1¾"-12	1.50	6⅞"-12	2.01	5.50	¾"-10	0.98
HD10013*	6.97	3.75	2.95	1.22	2.95	1¾"-12	1.38	6⅞"-12	1.97	5.47	¾"-10	0.98
HD10018*	6.97	3.75	2.95	1.50	2.95	1¾"-12	1.38	6⅞"-12	1.97	5.47	¾"-10	0.98
HD20006	9.75	5.25	5.25	2.25	3.81	-	-	-	-	5.00	1-8	1.00
HD20013	9.75	5.25	5.25	2.25	3.81	2½"-12	2.50	9¾"-12	2.13	5.00	1-8	1.00
HD20024	9.75	5.25	5.25	3.38	4.00	2½"-12	2.50	9¾"-12	2.13	5.00	1-8	1.00
HD30006	12.25	6.50	6.50	3.50	4.50	2½"-12	3.25	12¼"-12	2.31	6.25	1¼-7	1.75
HD50006	15.63	8.00	8.00	4.75	6.00	3¼"-12	4.25	15⅝"-8	3.13	8.00	1¼-5	2.12

* 55-100 ton cylinders are equipped with carrying handles.