

DuraJack™

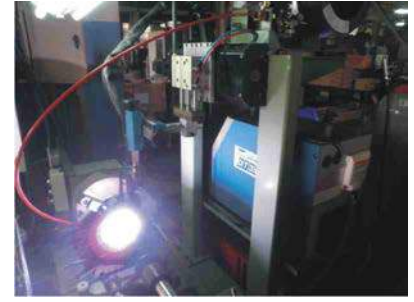
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ABOUT DuraJack

- ◆ Our corporate office provides full engineering design, technical service and marketing, tailored to meet customer's needs.
- ◆ DuraJack uses the latest CNC technology to manufacture all hydraulic products to its highest standard.
- ◆ All DuraJack hydraulic products comply fully to ASME 30.1 standards.

CYLINDERS

DS10-25 - DS200-150	01
DAC202 - DAC1506	02
DLP602 - DLP5002	02
DC50 - DC10010	03
DD1010 - DD50048	04
DH307 - DH1508	05
DDH307 - DDH1508	05
DCS101 - DCS2503	06
DSM50 - DSM1500	06
DLSG502 - DLSG80012	07
DLSG10002 - DLSG100012	07
DLRG502 - DLRG80012	08
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PUMPS

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PULLERS

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Cylinders

DS Single-Acting General Cylinders



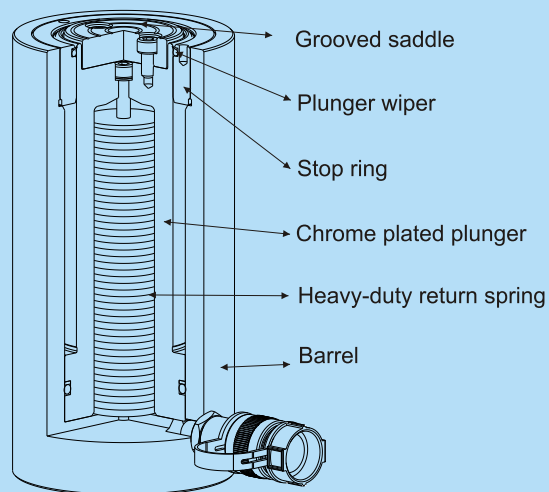
Capacity: 10-200 tons



Stroke: 1.0-5.9 inches



Max. Operating Pressure: 10000 psi



Model Number	Cylinder Capacity tons(kN)	Eff. Area in ²	Stroke (in)	Collapsed Height (in)
DS10-25	10 (101)	2.24	0.98	3.15
DS10-50			1.97	5.12
DS10-75			2.95	6.10
DS10-100			3.94	7.09
DS10-125			4.92	8.07
DS10-150			5.91	9.06
DS20-25			20 (198)	4.37
DS20-50	1.97	5.31		
DS20-75	2.95	6.30		
DS20-100	3.94	7.28		
DS20-125	4.92	8.27		
DS20-150	5.91	9.25		
DS30-25	30 (294)	6.51	0.98	3.35
DS30-40			1.57	3.35
DS30-50			1.97	5.71
DS30-75			2.95	6.69
DS30-100			3.94	7.68
DS30-125			4.92	8.66
DS30-150	5.91	9.65		
DS30-55	30(269)	5.96	2.17	4.13

Model Number	Cylinder Capacity tons(kN)	Eff. Area in ²	Stroke (in)	Collapsed Height (in)
DS50-25	50 (498)	11.04	0.98	3.74
DS50-35			1.38	3.35
DS50-50			1.97	4.72
DS50-50B			1.97	4.13
DS50-75			2.95	7.48
DS50-100			3.94	8.46
DS50-125			4.92	9.45
DS50-150	5.91	10.43		
DS100-25	100 (933)	20.66	0.98	3.94
DS100-50			1.97	6.30
DS100-100			3.94	8.03
DS100-125			4.92	9.25
DS100-150			5.91	10.24
DS150-50	150 (1407)	31.16	1.97	7.87
DS150-100			3.94	9.84
DS150-150			5.91	11.81
DS200-50	200 (1984)	43.92	1.97	7.87
DS200-100			3.94	9.84
DS200-150			5.91	11.81

- ◆ Hard chrome plated plunger and inner of barrel resists wear and corrosion, it also be more closed and extending cylinder life.
- ◆ Designed for use in all positions.
- ◆ DQC-3/8UF coupler and dust cap are included on all models.

DAC Single-Acting Aluminum Cylinders



Capacity: 20-150 tons



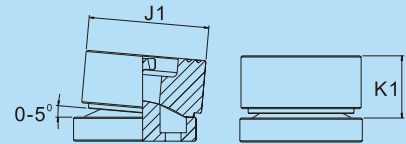
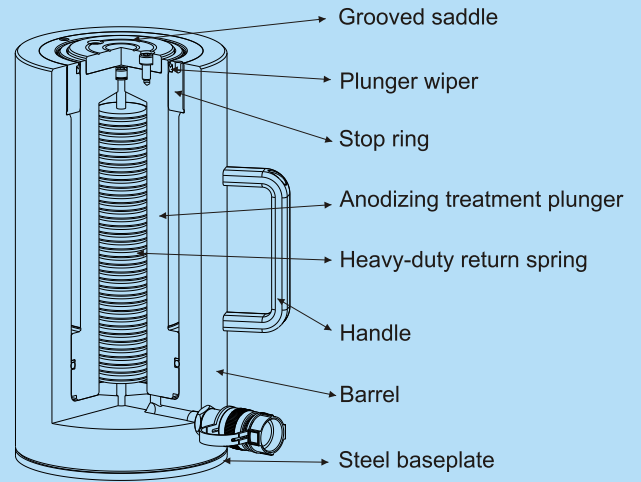
Stroke: 2.0-7.9 inches



Max. Operating Pressure: 10000 psi

- ◆ Lightweight, aluminum design for maximum portability.
- ◆ 7075-T6 Aluminum alloy components for maximum strength and minimum weight.

Model Number	Cylinder Capacity tons(kN)	Eff. Area in ²	Stroke (in)	Collapsed Height (in)
DAC-202	20 (218)	4.83	1.97	6.85
DAC-204			3.94	8.82
DAC-206			5.91	10.79
DAC-302	30 (309)	6.84	1.97	7.13
DAC-304			3.94	9.09
DAC-306			5.91	11.06
DAC-502	50 (496)	10.98	1.97	7.32
DAC-504			3.94	9.29
DAC-506			5.91	11.26
DAC-1004	100 (1002)	22.14	3.94	10.67
DAC-1006			5.91	12.64
DAC-1008			7.87	14.61
DAC-1506	150(1589)	35.13	5.91	13.50



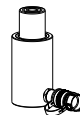
Optional Bolt Tilt Saddle Dimensions (in)			
Cylinder Model/Cap. (ton)	Model Number	Saddle Diameter J1	Saddle Protrusion from Base K1
DAC-50	XKCATDAC-50	1.97	1.0
DAC-100	XKCATDAC-100	3.59	1.3
DAC-150	XKCATDAC-150	4.65	1.5

DLP Single-Acting Load Return with Lock Ring Cylinders

Model Number	Cylinder Capacity tons(kN)	Eff. Area in ²	Stroke (in)	Coll. Ht. (in)	Lock Nut Height (in)
DLP-602	60 (606)	13.40	1.97	4.92	1.1
DLP-1002	100 (1027)	22.73	1.97	5.39	1.2
DLP-1602	160 (1619)	35.89	1.77	5.83	1.6
DLP-2002	200 (1999)	44.29	1.77	6.10	1.7
DLP-2502	260 (2567)	56.88	1.77	6.26	1.7
DLP-4002	400 (3916)	86.75	1.77	7.01	2.2
DLP-5002	520 (5114)	113.29	1.77	7.56	2.4



Capacity: 60-520 tons

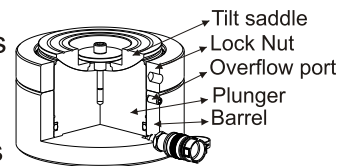


Stroke: 1.8-2.0 inches



Max. Operating Pressure: 10000 psi

- ◆ Flat design for use in confined area.
- ◆ Safety lock ring for mechanical load holding.



DC Single-Acting Spring Return Collar Thread Cylinders



Capacity: 5-100 tons

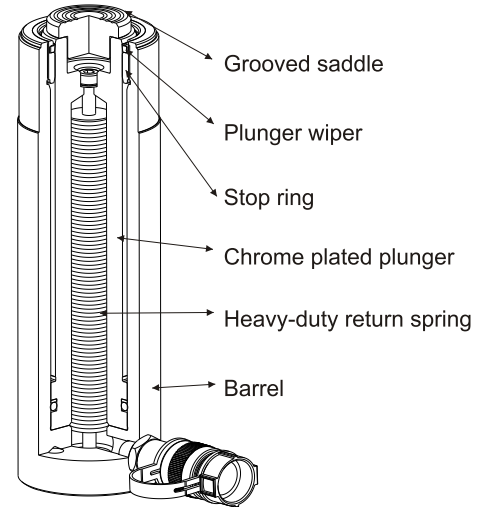


Stroke: 0.6-14.3 inches



Max. Operating Pressure: 10000psi

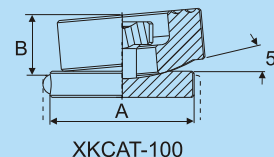
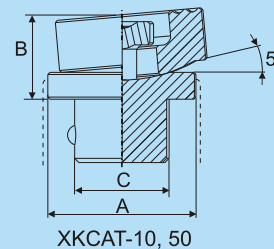
- ◆ Equip with collar threads and base holes (on most model), for greater flexibility in mounting onto fixture.
- ◆ Equip with inner plunger threads (5 tons to 33 tons) for greater flexibility in designing fixture or mould.



Model Number	Cylinder Capacity tons(kN)	Eff. Area in ²	Stroke (in)	Collapsed Height (in)
DC-50	5 (45)	0.99	0.63	1.63
DC-51			1.00	4.33
DC-53			3.00	6.50
DC-55			5.00	8.50
DC-57			7.00	10.75
DC-59			9.13	12.75
DC-101	10 (101)	2.24	1.00	3.53
DC-102			2.13	4.78
DC-104			4.13	6.75
DC-106			6.13	9.75
DC-108			8.00	11.75
DC-1010			10.13	13.75
DC-1012	12.00	15.75		
DC-1014	14.00	17.75		
DC-151	15 (142)	3.14	1.00	4.88
DC-152			2.00	5.88
DC-154			4.00	7.88
DC-156			6.00	10.69
DC-158			8.00	12.69
DC-1510			10.00	14.69
DC-1512	12.00	16.69		
DC-1514	14.00	18.69		

Model Number	Cylinder Capacity tons(kN)	Eff. Area in ²	Stroke (in)	Collapsed Height (in)
DC-251	25 (232)	5.16	1.00	5.50
DC-252			2.00	6.50
DC-254			4.00	8.50
DC-256			6.25	10.75
DC-258			8.25	12.75
DC-2510			10.25	14.75
DC-2512	12.25	16.75		
DC-2514	14.25	18.75		
DC-308	30(295)	6.48	8.25	15.25
DC-502	50 (498)	11.03	2.00	6.94
DC-504			4.00	8.94
DC-506			6.25	11.13
DC-5013			13.25	18.13
DC-756	75 (718)	15.90	6.13	11.25
DC-7513	13.13	19.38		
DC-1006	100 (933)	20.63	6.63	14.06
DC-10010	10.25	17.69		

Optional Saddle Dimensions (in)				
Cylinder Model/Cap. (ton)	Model Number Type : Tilt			
		A	B	C
DC-10 , DC-15 Except DC-101	XKCAT-10	1.38	0.79	0.87
DC-25 , DC-30	XKCAT-50	1.97	0.83	1.38
DC-50 , DC-75 DC-100	XKCAT-100	2.80	0.94	-



DD Double-Acting Collar Thread Cylinders



Capacity: 10-520 tons

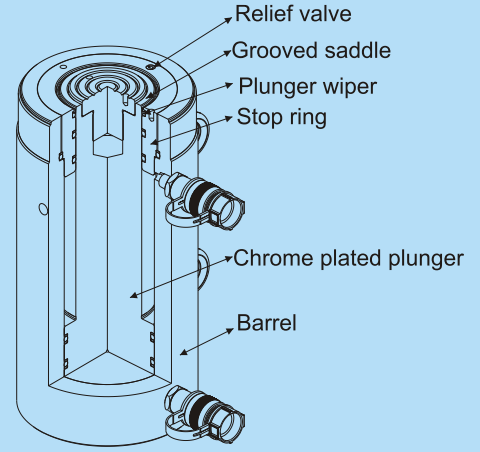


Stroke: 2.2-48.0 inches



Max. Operating Pressure: 10000psi

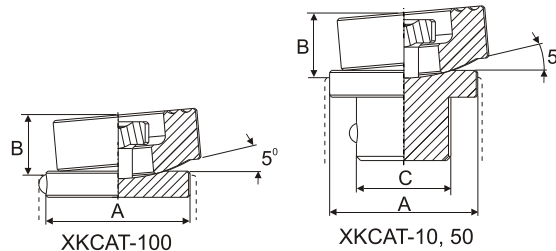
- ◆ Relief valves protect against over pressurizing.
- ◆ Double-acting design allows for both pull and push forces



Model Number	Max. Cylinder Capacity		Eff. Area		Stroke (in)	Coll. Ht. (in)
	Push	Pull	Push	Pull		
	tons (kN)		in ²			
DD-1010	10 (101)	3 (33)	2.23	0.80	10.00	16.12
DD-1012					12.00	18.00
DD-308	30 (295)	13 (133)	6.50	2.99	8.25	15.25
DD-3014					14.50	21.63
DD-506	50 (498)	15 (150)	11.07	3.41	6.13	13.06
DD-5013					13.13	20.03
DD-5020					20.13	28.88
DD-756	75 (718)	20 (220)	15.92	4.89	6.13	13.69
DD-7513					13.13	20.69
DD-1006	95 (933)	43 (435)	20.65	9.59	6.63	14.06
DD-10013					13.13	20.63
DD-10018					18.13	27.06
DD-1502	140 (1386)	66 (668)	30.69	14.78	2.25	7.72
DD-1506					6.13	15.19
DD-15013					13.13	22.20
DD-15032					32.13	43.94
DD-2006	200 (1995)	101 (1017)	44.21	22.52	6.00	16.94
DD-20013					13.00	23.94
DD-20018					18.00	30.13
DD-20024					24.00	36.13
DD-20036					36.00	48.13
DD-20048					48.00	60.13

Model Number	Max. Cylinder Capacity		Eff. Area		Stroke (in)	Coll. Ht. (in)
	Push	Pull	Push	Pull		
	tons (kN)		in ²			
DD-3006	325 (3201)	170 (1703)	70.93	38.00	6.00	19.13
DD-30012					12.00	25.13
DD-30018					18.00	31.13
DD-30024					24.00	37.13
DD-30036					36.00	49.13
DD-30048					48.00	61.13
DD-4006	400 (4292)	230 (2297)	95.09	51.00	6.00	21.19
DD-40012					12.00	27.19
DD-40018					18.00	33.19
DD-40024					24.00	39.19
DD-40036					36.00	51.19
DD-40048					48.00	63.19
DD-5006	520 (5108)	284 (2838)	113.15	63.00	6.00	22.75
DD-50012					12.00	28.75
DD-50018					18.00	34.75
DD-50024					24.00	40.75
DD-50036					36.00	52.75
DD-50048					48.00	64.75

Optional Tilt Saddle Dimensions (in)				
Cylinder Model/Cap. (ton)	Model Number Type : Tilt	A	B	C
		DD-1010 · 1012	XKCAT-10	1.38
DD-308 · 3014	XKCAT-50	1.97	0.83	1.38
DD-506 · 5013 5020 · 756 7513	XKCAT-100	2.80	0.94	—



DD-Series up to 75 tons have plunger thread for installation of XKCAT-Series tilt saddles.

DH Single-Acting Hollow Plunger Cylinders



Capacity: 13-95 tons



Stroke: 0.3-6.1 inches



Max. Operating Pressure: 10000 psi

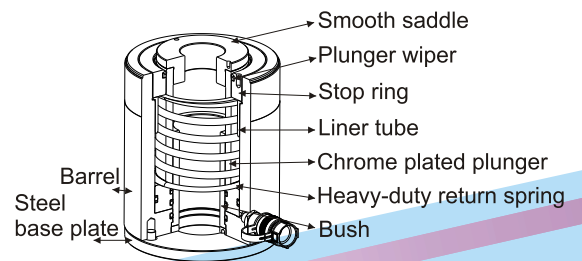
- ◆ Hollow plunger design allows for pulling and pushing application.
- ◆ Low profile and longer strokes fit in the tightest space.
- ◆ Collar threads for easy fixturing and all collar threads have a cap for protection.

Model Number	Cylinder Capacity tons(kN)	Eff. Area in ²	Stroke (in)	Collapsed Height (in)	Center Hole Diam. (in)
DH-120	13 (125)	2.77	0.31	2.19	0.8
DH-121			1.63	4.75	0.8
DH-1211			1.63	4.75	0.8
DH-123			3.00	7.25	0.8
DH-202	20 (215)	4.74	2.00	6.38	1.1
DH-204			4.01	9.54	1.1
DH-206			6.10	12.05	1.1
DH-302	30 (326)	7.22	2.50	7.03	1.3
DH-304			4.01	9.19	1.3
DH-306			6.13	13.00	1.3
DH-603			3.00	9.75	2.1
DH-606	60 (576)	12.74	6.00	12.75	2.1
DH-1003	95 (931)	20.63	3.00	10.00	3.1

Optional Heat Treated Hollow Saddles

Cylinder Model/Cap. (ton)	Model Number	Saddle Dimension		
		A (in)	B (in)	C (in)
DH-202,206	XKHCH-20	2.1	1"-8	0.4
DH-302,306	XKHCH-30	2.5	1-1/4"-7	0.4
DH-603,606	XKHCH-60	3.6	1-5/8"-5-1/2	0.5
DH-1003	XKHCH-100	5.0	2-1/2"-8	0.5

※ Smooth hollow saddles are standard on all DH series.
(12ton models are not equipped with saddles.)



DDH Double-Acting Hollow Plunger Cylinders



Capacity: 30-145 tons

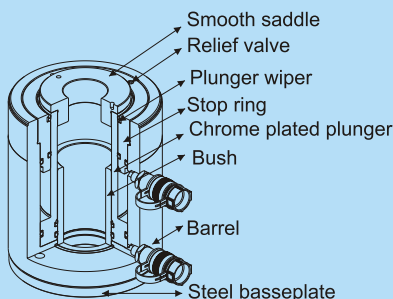


Stroke: 1.5-10.2 inches



Max. Operating Pressure: 10000 psi

- ◆ Hollow plunger design allows for both pull and push forces.
- ◆ Collar threads for easy fixturing (Except DDH-1001 & DDH-1508) and all collar threads have a cap for protection.



Optional Heat Treated Hollow Saddles				
Cylinder Model/Cap. (ton)	Model Number	Saddle Dimension		
		A (in)	B (in)	C (in)
DDH-307, 3010	XKHCH-30	2.5	1-1/4"-7	0.4
DDH-603, 606, 6010	XKHCH-60	3.6	1-5/8"-5-1/2	0.5
DDH-1001, 1003, 1006, 10010	XKHCH-100	5.0	2-1/2"-8	0.5

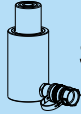
※ Smooth hollow saddles are standard on all DDH series.

Model Number	Max. Cylinder Capacity		Eff. Area		Stroke (in)	Coll. Ht. (in)	Center Hole Diam. (in)
	Push	Pull	Push	Pull			
	tons (kN)		in ²				
DDH-307	30	21	7.22	4.71	7.00	13.00	1.3
DDH-3010	(326)	(213)			10.13	17.00	1.3
DDH-603	60	38	12.75	8.38	3.50	9.75	2.1
DDH-606	(576)	(380)			6.50	12.75	2.1
DDH-6010					10.12	17.25	2.1
DDH-1001					1.50	6.50	3.1
DDH-1003	95	61	20.63	13.54	3.00	10.00	3.1
DDH-1006	(931)	(612)			6.00	13.50	3.1
DDH-10010					10.13	18.13	3.1
DDH-1508	145 (1429)	72(718)	31.62	15.91	8.00	13.75	3.1

DCS Single-Acting Low Height Cylinders



Capacity: 10-250 tons



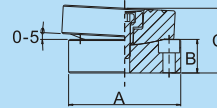
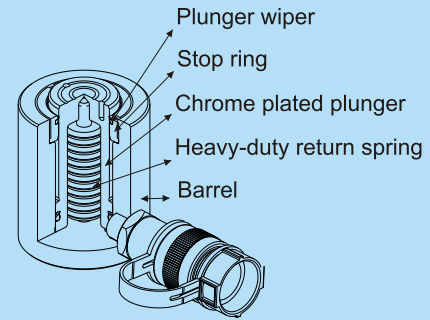
Stroke: 1.5-3.0 inches



Max. Operating Pressure: 10000 psi

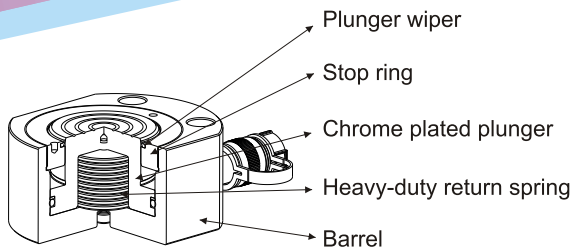
◆ Lightweight, low profile design for use in confined spaces , but stroke higher than DSM.

Model Number	Cylinder Capacity tons(kN)	Eff. Area in ²	Stroke (in)	Collapsed Height (in)
DCS-101	10 (101)	2.24	1.50	3.47
DCS-201	20 (201)	4.43	1.75	3.88
DCS-302	30 (295)	6.48	2.44	4.63
DCS-502	45 (435)	9.62	2.38	4.81
DCS-1002	90 (887)	19.63	2.25	5.56
DCS-2503	250 (2309)	50.24	3.00	5.56



Optional Bolt Tilt Saddle Dimensions (in)				
Cylinder Model/Cap. ton(kN)	Model Number	A	B	*C
DCS-101	XKCATDCS-10	1.4	0.4	0.8
DCS-201,302,502	XKCATDCS-20	2.0	0.6	1.1
DCS-1002	XKCATDCS-100	2.8	0.7	1.4

*C dimension equals saddle protrusion from plunger. Mounting screws are included.



DSM Single-Acting Low Height, Flat Cylinders



Capacity: 5-150 tons



Stroke: 0.2-0.6 inches



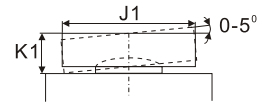
Max. Operating Pressure: 10000psi

Model Number	Cylinder Capacity tons(kN)	Eff. Area in ²	Stroke (in)	Collapsed Height (in)
DSM-50	5 (45)	0.99	0.25	1.28
DSM-100	10 (101)	2.24	0.44	1.69
DSM-200	20 (201)	4.43	0.44	2.03
DSM-300	30 (295)	6.48	0.50	2.31
DSM-500	45 (435)	9.62	0.63	2.63
DSM-750	75 (718)	15.90	0.63	3.13
DSM-1000	90 (887)	19.63	0.63	3.38
DSM-1500	150 (1386)	30.66	0.63	3.94

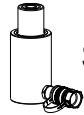


Model Number	Cylinder Model	Cylinder Height (in)	Weight (lb)
DXKSM5-6	DSM-50	1.25	0.2
DXKSM5-12			0.4
DXKSM5-25			1.1
DXKSM5-31			1.3
DXKSM10-9	DSM-100	1.69	0.7
DXKSM10-20			1.5
DXKSM10-39			3.1
DXKSM20-9	DSM-200	2.00	1.3
DXKSM20-20			2.4
DXKSM20-39			4.8
DXKSM30-9	DSM-300	2.28	1.8
DXKSM30-20			3.5
DXKSM30-39			7.0

DLSG Single-Acting, Load Return High Tonnage Cylinders



Capacity: 50-1000 tons

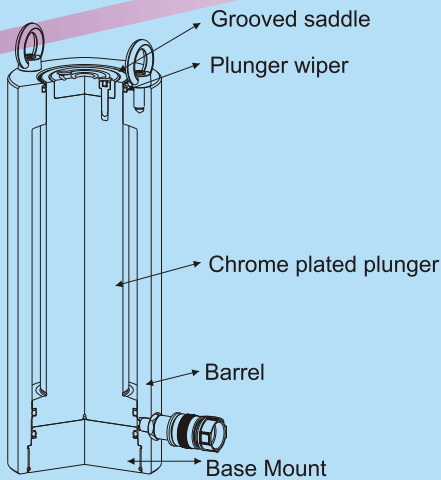


Stroke: 2.0-11.8 inches



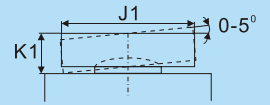
Max. Operating Pressure:
10000 psi

◆ Base mounting holes standard on all models.

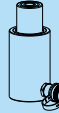


Model Number	Cylinder Capacity tons(kN)	Eff. Area in ²	Stroke (in)	Collapsed Height (in)	Opt Tilt Saddle	
					J1 (in)	K1 (in)
DLSG-502	50 (539)	11.83	1.97	6.38	2.0	0.9
DLSG-504			3.94	8.35		
DLSG-506			5.91	10.31		
DLSG-508			7.87	12.28		
DLSG-5010			9.84	14.25		
DLSG-5012			11.81	16.22		
DLSG-1002	100 (929)	20.59	1.97	7.16	2.9	1.1
DLSG-1004			3.93	9.13		
DLSG-1006			5.91	11.09		
DLSG-1008			7.87	13.06		
DLSG-10010			9.84	15.03		
DLSG-10012			11.81	17.00		
DLSG-1502	150 (1390)	30.78	1.97	7.72	3.6	1.2
DLSG-1504			3.94	9.69		
DLSG-1506			5.91	11.65		
DLSG-1508			7.87	13.62		
DLSG-15010			9.84	15.59		
DLSG-15012			11.81	17.56		
DLSG-2002	200 (1861)	41.18	1.97	8.50	4.4	1.4
DLSG-2006			5.91	12.44		
DLSG-20012			11.81	18.35		
DLSG-2502	250 (2565)	56.75	1.97	9.25	5.7	1.8
DLSG-2506			5.91	13.19		
DLSG-25012			11.81	19.09		
DLSG-3002	300 (3193)	70.74	1.97	12.28	6.3	2.4
DLSG-3006			5.91	16.22		
DLSG-30012			11.81	22.13		
DLSG-4002	400 (3919)	86.75	1.97	14.74	7.6	2.0
DLSG-4006			5.91	18.68		
DLSG-40012			11.81	24.59		
DLSG-5002	500 (5114)	113.29	1.97	16.50	9.0	2.5
DLSG-5006			5.91	20.43		
DLSG-50012			11.81	26.34		
DLSG-6002	600 (5987)	132.53	1.97	16.89	9.5	3.0
DLSG-6006			5.91	20.83		
DLSG-60012			11.81	26.73		
DLSG-8002	800 (8234)	182.41	1.97	18.66	11.3	3.0
DLSG-8006			5.91	22.60		
DLSG-80012			11.81	28.50		
Equipped Tilt Saddle						
DLSG-10002	1000 (10260)	227.24	1.97	22.20	12.2	3.7
DLSG-10006			5.91	26.14		
DLSG-100012			11.81	32.05		

DLRG Double-Acting High Tonnage Cylinders



Capacity:
50-1600 tons

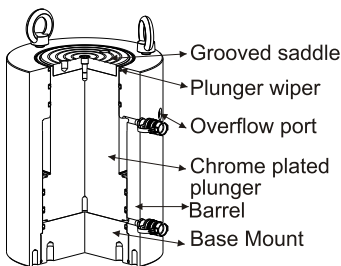


Stroke:
2.0-11.8 inches



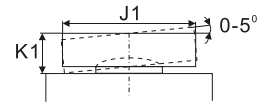
Max. Operating Pressure:
10000 psi

- ◆ Base mounting holes standard on all models.
- ◆ Double-acting, for push and pull.



Model Number	Max. Cylinder Capacity		Eff. Area		Stroke (in)	Coll. Ht. (in)	Opt Tilt Saddle	
	Push	Pull	Push	Pull			J1 (in)	K1 (in)
	tons (kN)		in ²					
DLRG-502	50 (539)	27 (269)	11.83	5.84	1.97	6.38	2.0	0.9
DLRG-504					3.94	8.35		
DLRG-506					5.91	10.31		
DLRG-508					7.87	12.28		
DLRG-5010					9.84	14.25		
DLRG-5012					11.81	16.22		
DLRG-1002	100 (929)	43 (433)	20.59	9.59	1.97	7.16	2.9	1.1
DLRG-1004					3.94	9.13		
DLRG-1006					5.91	11.09		
DLRG-1008					7.87	13.06		
DLRG-10010					9.84	15.03		
DLRG-10012					11.81	17.00		
DLRG-1502	150 (1390)	67 (675)	30.78	14.96	1.97	7.72	3.6	1.2
DLRG-1504					3.94	9.69		
DLRG-1506					5.91	11.65		
DLRG-1508					7.87	13.62		
DLRG-15010					9.84	15.59		
DLRG-15012					11.81	17.56		
DLRG-2002	200 (1861)	89 (889)	41.18	19.69	1.97	8.50	4.4	1.4
DLRG-2006					5.91	12.44		
DLRG-20012					11.81	18.35		
DLRG-2502	250 (2565)	105 (1068)	56.75	23.65	1.97	9.25	5.7	1.8
DLRG-2506					5.91	13.19		
DLRG-25012					11.81	19.09		
DLRG-3002	300 (3193)	105 (1060)	70.74	23.47	1.97	12.28	6.3	2.4
DLRG-3006					5.91	16.22		
DLRG-30012					11.81	22.13		
DLRG-4002	400 (3919)	135 (1354)	86.75	29.99	1.97	14.74	7.6	2.0
DLRG-4006					5.91	18.68		
DLRG-40012					11.81	24.59		
DLRG-5002	500 (5114)	173 (1733)	113.29	38.38	1.97	16.50	9.0	2.5
DLRG-5006					5.91	20.43		
DLRG-50012					11.81	26.43		
DLRG-6002	600 (5987)	205 (2068)	132.53	45.79	1.97	16.89	9.5	3.0
DLRG-6006					5.91	20.83		
DLRG-60012					11.81	26.73		
DLRG-8002	800 (8234)	270 (2709)	182.41	59.99	1.97	18.66	11.3	3.0
DLRG-8006					5.91	22.60		
DLRG-80012					11.81	28.50		
Equipped Tilt Saddle								
DLRG-10002	1000 (10260)	380 (3792)	227.24	83.96	1.97	22.20	12.2	3.7
DLRG-10006					5.91	26.14		
DLRG-100012					11.81	32.05		
DLRG-16006	1600 (16024)	490 (4891)	354.81	108.39	6.10	32.48	15.1	4.9

DLL Single-Acting, Load Return High Tonnage Cylinders



Capacity: 50-1000 tons

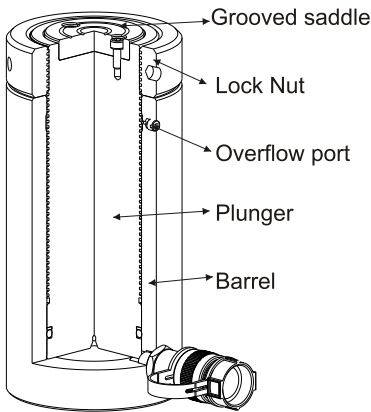


Stroke: 2.0-11.8 inches



Max. Operating Pressure:

10000 psi

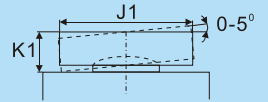


DLL
High Tonnage,
Lock Nut Cylinders

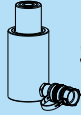
Model Number	Cylinder Capacity tons(kN)	Eff. Area in ²	Stroke (in)	Coll. Ht. (in)	Luck Nut Ht. (in)	Opt Tilt Saddle	
						J1 (in)	K1 (in)
DLL-502	50 (496)	10.99	1.97	6.46	1.4	2.8	0.9
DLL-504			3.94	8.43			
DLL-506			5.91	10.39			
DLL-508			7.87	12.36			
DLL-5010			9.84	14.33			
DLL-5012			11.81	16.30			
DLL-1002	100 (929)	20.57	1.97	7.36	1.7	2.8	0.9
DLL-1004			3.94	9.33			
DLL-1006			5.91	11.30			
DLL-1008			7.87	13.27			
DLL-10010			9.84	15.24			
DLL-10012			11.81	17.20			
DLL-1502	150 (1390)	30.78	1.97	8.23	1.7	5.1	0.8
DLL-1504			3.94	10.20			
DLL-1506			5.91	12.17			
DLL-1508			7.87	14.13			
DLL-15010			9.84	16.10			
DLL-15012			11.81	18.07			
DLL-2002	200 (1859)	41.17	1.97	9.57	2.0	5.1	0.8
DLL-2006			5.91	13.50			
DLL-20012			11.81	19.41			
DLL-2502	250 (2562)	56.75	1.97	9.80	2.2	5.9	0.8
DLL-2506			5.91	13.74			
DLL-25012			11.81	19.65			
DLL-3002	300 (3193)	70.71	1.97	11.61	2.4	7.7	3.0
DLL-3006			5.91	15.55			
DLL-30012			11.81	21.46			
DLL-4002	400 (3919)	86.79	1.97	13.19	2.8	8.9	3.3
DLL-4006			5.91	17.13			
DLL-40012			11.81	23.03			
DLL-5002	500 (5118)	113.25	1.97	14.76	3.1	9.8	3.6
DLL-5006			5.91	18.70			
DLL-50012			11.81	24.61			
DLL-6002	600 (5983)	132.57	1.97	15.55	3.3	10.8	3.8
DLL-6006			5.91	19.49			
DLL-60012			11.81	25.36			
DLL-8002	800 (8238)	182.42	1.97	17.91	3.9	12.6	4.8
DLL-8006			5.91	21.85			
DLL-80012			11.81	27.76			
DLL-10002	1000 (10260)	227.30	1.97	19.49	4.3	14.2	5.4
DLL-10006			5.91	23.43			
DLL-100012			11.81	29.33			

DLS

Single-Acting, Load Return High Tonnage Cylinders



Capacity: 50-1000 tons

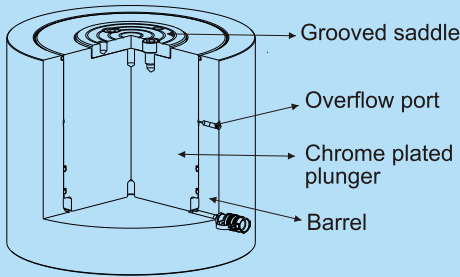


Stroke: 2.0-11.8 inches



Max. Operating Pressure:

10000 psi



**DLS
High Tonnage Cylinders**

Model Number	Cylinder Capacity tons(kN)	Eff. Area in ²	Stroke (in)	Collapsed Height (in)	Opt Tilt Saddle	
					J1 (in)	K1 (in)
DLS-502	50 (496)	10.99	1.97	5.04	2.8	0.9
DLS-504			3.94	7.01		
DLS-506			5.91	8.98		
DLS-508			7.87	10.94		
DLS-5010			9.84	12.87		
DLS-5012			11.81	14.88		
DLS-1002	100 (929)	20.57	1.97	5.63	2.8	0.9
DLS-1004			3.93	7.60		
DLS-1006			5.91	9.57		
DLS-1008			7.87	11.54		
DLS-10010			9.84	13.50		
DLS-10012			11.81	15.43		
DLS-1502	150 (1390)	30.78	1.97	6.50	5.1	0.8
DLS-1504			3.94	8.46		
DLS-1506			5.91	10.43		
DLS-1508			7.87	12.40		
DLS-15010			9.84	14.37		
DLS-15012			11.81	16.30		
DLS-2002	200 (1859)	41.16	1.97	7.60	5.1	0.8
DLS-2006			5.91	11.54		
DLS-20012			11.81	17.44		
DLS-2502	250 (2562)	56.75	1.97	7.60	5.9	0.8
DLS-2506			5.91	11.54		
DLS-25012			11.81	17.44		
DLS-3002	300 (3193)	70.70	1.97	9.25	7.7	3.0
DLS-3006			5.91	13.19		
DLS-30012			11.81	19.09		
DLS-4002	400 (3919)	86.77	1.97	10.43	8.9	3.3
DLS-4006			5.91	14.37		
DLS-40012			11.81	20.28		
DLS-5002	500 (5118)	113.29	1.97	11.61	9.8	3.6
DLS-5006			5.91	15.55		
DLS-50012			11.81	21.46		
DLS-6002	600 (5983)	132.56	1.97	12.20	10.8	3.8
DLS-6006			5.91	16.14		
DLS-60012			11.81	22.05		
DLS-8002	800 (8238)	182.50	1.97	13.98	12.6	4.8
DLS-8006			5.91	17.91		
DLS-80012			11.81	23.82		
DLS-10002	1000 (10260)	227.24	1.97	15.16	14.2	5.4
DLS10006			5.91	19.09		
DLS100012			11.81	25.00		

Pumps

◆ Durable glass-filled nylon



Two-Speed Hand Pump



◆ Steel

Model Number	Pump Type	Usable Oil Capacity (in ³)	Pressure Rating		Oil Displacement per Stroke	
			1 st stage (psi)	2 nd stage (psi)	1 st stage (in ³)	2 nd stage (in ³)
DP-392	Two-Speed	55	189	10000	0.69	0.15
DP-462		453	200	10000	7.69	0.29
DP-464		453	200	10000	7.69	0.29

- ◆ Internal pressure relief valve for overload protection.
- ◆ Non-conductive fiberglass handle for operator safety.

DP Steel Hand Pump

Model Number	Pump Type	Usable Oil Capacity (in ³)	Pressure Rating		Oil Displacement per Stroke	
			1 st stage (psi)	2 nd stage (psi)	1 st stage (in ³)	2 nd stage (in ³)
DP-4	S/S	24	-	10000	-	0.08
DP-9	Two-Speed	55	203	10000	0.76	0.17
DP-12		73	203	10000	0.76	0.17
DP-20		134	203	10000	0.88	0.17
DP-30		183	203	10000	0.88	0.17



DPHW

Water / Hydraulic Manual Pump



Model Number	Pressure Rating psi / (bar)	Output Flow Rate (in ³ / stroke)	Water Capacity (in ³)	Weight (lbs)
DPHW-900	10000/ 700	0.14	55	12.6

DPHP

Special Application Pump Head



Model Number	Pressure Rating psi / (bar)	Volume (in ³ / stroke)	Max. Handle Eff. (lbf)	Weight (lbs)
DPHP-50	750/ 50	4.6	79	11
DPHP-70	1000/ 70	2.1	106	11
DPHP-210	3000/ 210	1.3	119	8.8
DPHP-450	6500/ 450	0.6	119	8.8
DPHP-700	10000/ 700	0.3	119	8.8

DPHA Aluminum Hand Pump



- ◆ All Aluminum Alloy construction and hand size release knobs that with anti-losing mechanism are truly suitable to industrial requirement and your daily work.
- ◆ All Aluminum Alloy construction and hand size release knobs that with anti-losing mechanism are truly suitable to industrial requirement and your daily work.

Model Number	Pump Type	Usable Oil Capacity (in ³)	Pressure Rating		Oil Displacement per Stroke		Piston Stroke (in)	Wt. (Oil) (lb)
			1 st stage	2 nd stage	1 st stage	2 nd stage		
			(psi)		(in ³)			
DPHA-500	Two-Speed	31	200	10000	0.38	0.10	0.79	9.9
DPHA-750		46	200	10000	0.76	0.17	0.83	12.3
DPHA-1500		92	200	10000	0.76	0.17	0.83	11.0

DPA-6 Air Hydraulic Pump

Model Number	Usable Oil capacity (in ³)	Pressure Rating psi / (bar)	Air Pressure Range (kgf/cm ²)	Output Flow Rate (in ³ / stroke)	
				0bar	700bar
DPA-6	110	10000/ 700	6-10	57	7.3



DPAT, DPAQ & DHTP

Portable Air Pump



DPAT series



DPAQ series



Steel Frame

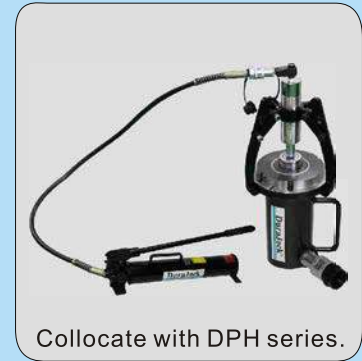


Standard Type

DPTP series

Description	Model Number	Output Oil (in ³ / per stroke)	Work Press. (psi)
Portable	DPAT-130-700	0.15	10000
Portable	DPAT-130-700-4K	0.15	10000
Steel Frame	DPAQ-130-700F	0.15	10000
Steel Frame	DPAQ-180-700F	0.58	10000
Standard Type	DHTP-130-300L	0.39	4350
Steel Frame	DHTP-130-300F	0.39	4350
Steel Frame	DHTP-130-700F	0.15	10000

Pullers



Model Number	Capacity ton (kN)	Stroke (in)	Max. Reach (in)	Max. Spread (in)
DPM-600	6 (563)	2.8	9.6	13.0
DPM-800	8 (793)	3.3	9.1	13.8
DPM-1200	12 (1011)	3.3	10.2	14.8
DPM-2000	20 (1978)	4.4	13.8	20.5
DPM-3000	30 (2940)	4.4	17.1	21.7

Model Number	Capacity ton (kN)	Stroke (in)	Max. Reach (in)	Max. Spread (in)
DPR-600	6 (563)	2.8	9.6	13.0
DPR-800	8 (793)	3.3	9.1	13.8
DPR-1200	12 (1011)	3.3	10.2	14.8
DPR-2000	20 (1978)	4.4	13.8	20.5
DPR-3000	30 (2940)	4.4	17.1	21.7
DPR-5000	50 (4985)	5.6	25.0	39.4

- ◆ Forged with high strength alloy steel.
- ◆ Extended plunger for easy to work.

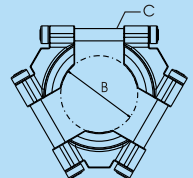
Optional

SK3

Universal Bearing Attachments



DBA Universal Bearing Attachments



Model No.	Cap. ton (kN)	Stroke (in)	Max. Reach (in)	Spread (in)		Wt. (lb)	Suitable bear attachments
				A	B		
DPM-610	6 (563)	2.8	10.6	3.1	7.1	16	
DPM-810	8 (793)	3.3	10.6	4.3	8.7	28	
DPM-1210	12 (1011)	3.3	15.0	5.7	11.4	48	

Model No.	Spread (mm)	Bolt (mm)	Wt. (kg)
DBA-9000	30-50	3/8"-24T-L120mm	0.6
DBA-9005	50-75	1/2"-20T-L135mm	1.5
DBA-9015	75-150	5/8"-18T-L230mm	2.5
DBA-9025	105-150	3/4"-16T-L275mm	5.2
DBA-9035	150-200	1"-12T-L350mm	10.6

Model No.	Cap. ton (kN)	Stroke (in)	Max. Reach (in)	Spread (in)		Wt. (lb)	Suitable bear attachments
				A	B		
DPR-610	6 (563)	2.8	10.6	3.1	7.1	13.9	
DPR-810	8 (793)	3.3	10.6	4.3	8.7	26.2	
DPR-1210	12 (1011)	3.3	15.0	5.7	11.4	46.0	

Model No.	Spread (mm)	Bolt (mm)	Wt. (kg)
SK3-50	φ 13.5-50.5	M10*P1.25-L32mm	0.5
SK3-100	φ 26.3-100	M16*P2-L64mm	2.5
SK3-160	φ 49-160	M22*P2.5-L96mm	6.1

DPM Hydraulic Pullers-Optional

DPM-__20 TYP. is meaning to opt jaws assembly and bearing assembly

Model Number	Cylinder Model Number	Jaws Assembly Model Number	Bearing Assembly Model Number	Press Assembly Model Number
DPM-620				
DPM-820				
DPM-1220				

DPR Hydraulic Pullers-Optional

DPR-__20 TYP. is meaning to opt jaws assembly and bearing assembly

Model Number	Cylinder Model Number	Jaws Assembly Model Number	Bearing Assembly Model Number	Press Assembly Model Number
DPR-620				
DPR-820				
DPR-1220				

Key to measurements

LENGTH

mm	× 0.03937 = in	× 25.4 = mm
cm	× 0.3937 = in	× 2.54 = cm
m	× 3.28 = foot	× 0.305 = m

AREA

mm ²	× 0.00155 = in ²	× 645 = mm ²
cm ²	× 0.155 = in ²	× 6.45 = cm ²
m ²	× 10.8 = foot ²	× 0.0929 = m ²

VOLUME

cm ³	× 0.061 = in ³	× 16.4 = cm ³
liter(L)	× 61 = in ³	× 0.016 = L
Milliliter(mL)	× 0.034 = oz-liq	× 29.6 = mL = cm ³
liter(L)	× 1.06 = quart	× 0.946 = L
liter(L)	× 0.26 = gallon	× 3.79 = L

MASS

g	× 0.035 = ounce	× 28.3 = g
kg	× 2.2 = pound	× 0.454 = kg
metric ton(t)	× 1.1 = ton(short)	× 0.907 = t
metric ton(t)	× 9.8 = kN	× 0.102 = metric(t)

FORCE

newton(N)	× 0.225 = pound	× 4.45 = N
kilonewton(kN)	× 225 = pound	× 0.00445 = kN

TORQUE

newton Meter(N.m)	× 8.9 = lbf.in	× 0.113 = N.m
newton Meter(N.m)	× 0.74 = lbf.ft	× 1.36 = N.m

PRESSURE (Pa = N/m²)

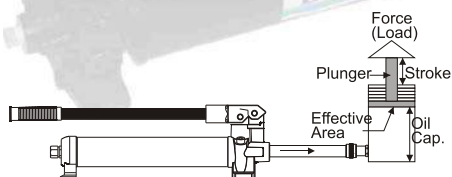
kilopascal(kPa)	× 0.145 = p.s.i	× 6.89 = kPa
kgf/cm ²	× 14.23 = p.s.i	× 0.07 = kgf/cm ²
Bar	× 14.5 = p.s.i	× 0.0689 = bar
Bar	× 1.02 = kgf/cm ²	× 0.981 = bar

POWER (w = J/s)

kw	× 1.34 = hp	× 0.746 = kW
watt(W)	× 0.74 = ft.lbf/s	× 1.36 = W

- ※ Cylinder Oil Cap.=Cylinder Effective Area x Cylinder Stroke
- ※ Force=Hydraulic Working Pressure x Cylinder Effective Area

© Most cylinder capacity in this catalog are ton(short).



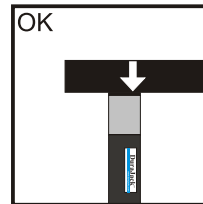
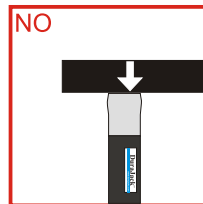
Require usable oil capacity = 2 X oil capacity (Cyl. or tool)

Flow = is created by the pump

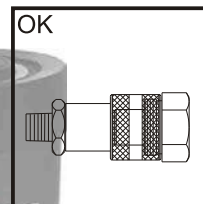
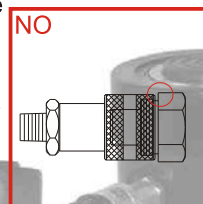
Pressure = is created by resistance to flow.
This resistance is usually the result of a load.

80% Manufacturer's rating of load and stroke are maximum safe limits. Best using situation is 80% of these ratings!

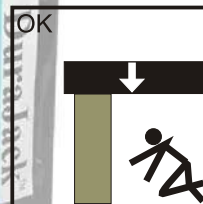
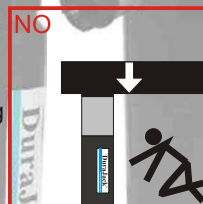
Don't use cylinder without saddle. This will cause plunger to "mushroom". Saddle distribute load evenly on the plunger.



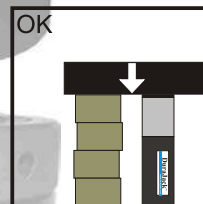
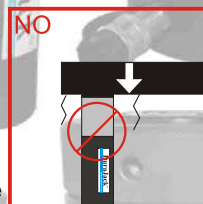
When making connections with quick couplers, make sure the couplings are fully engaged. Threaded connections such as fittings, gauges, etc. must be securely tightened and leak free. Never use excessive tightening force that may distort the fittings or strip the thread profile.



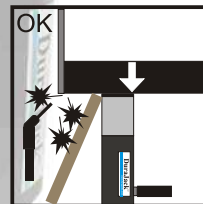
As with jacks, never place any part of your body under the load. Load must be on cribbing before venturing under.



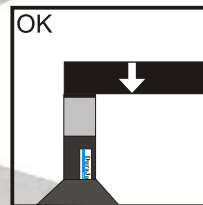
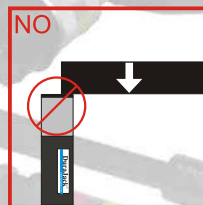
Place blocking or cribbing under the loads as you raise it. Each time you raise it higher, insert more blocking. Position yourself in a manner that will keep you clear of the load, and will not allow your hands or other body part between the load and the cribbing.



Weld splatter will damage plunger rods and hose. Hydraulic fluid can ignite if vaporized or exposed to high temperatures.



The load must be centered on the ram, or equally distributed on multiple rams. Off center loading can result in the ram slipping out and loss of the load.



$$\text{Force (metric tons)} = \frac{\text{Cyl. Eff. Area (cm}^2\text{)} \times \text{Working pressure (Hydraulic Pump) (bar/ kgf/cm}^2\text{)}}{1000\text{kg}}$$

$$\text{Extended Height (in)} = \text{Cyl. Stroke (in)} + \text{Cyl. Collapsed height (in)}$$

$$\text{Cyl. oil Cap. (in}^3\text{)} = \text{Cyl. Eff. Area (in}^2\text{)} \times \text{Cyl. Stroke (in)}$$

$$\text{Usable oil (system) (in}^3\text{)} = \text{Cyl. Oil Cap. (in}^3\text{)} \times \text{Quantity of Cyl. In system}$$

$$\text{Speed (Cyl. Plg.) (Sec/in)} = \frac{\text{Cyl. Eff. Area (in}^2\text{)}}{\text{Pump flow per minute (in}^3\text{/min)}} \times 60\text{sec}$$



Your Local Distributor: