



# BVA<sup>®</sup>

## HYDRAULICS



# BUILT TO LAST

## 2010



**4 Single Acting Cylinders**



**6 Aluminium Cylinders**



**7 Lock-Nut Cylinders**



**8 Flat Body Cylinders**



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**10 Low Profile Cylinders**



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**16 Double Acting Cylinders**



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**18 Hydraulic Hand Pumps**



**19 Hydraulic Hand Pumps (Manual Control Valve)**



**20 Air Hydraulic Pumps**



**21 Rotary Air Pumps**



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**23 Electric Pumps With Solenoid Valve**



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**Pumps/Cylinders:  
Operation  
& Speed Charts**

**25 Mini Jacks  
Toe Jacks &  
Spreaders**



**26 Presses**



**27 Electrical Presses**



**28 Cutters**



**29 Hydraulic Accesories & Hoses**



**30 Manifolds, Gauges & Fittings**



**31 Valves**



**32 Pump Mounted Manifold Block & Remote Valves**



**33 Cylinder Accesories**



**34 Fittings**





# Single Acting Cylinders

- Heavy Duty Return Spring for quicker retraction.
- Solid steel cylinder body

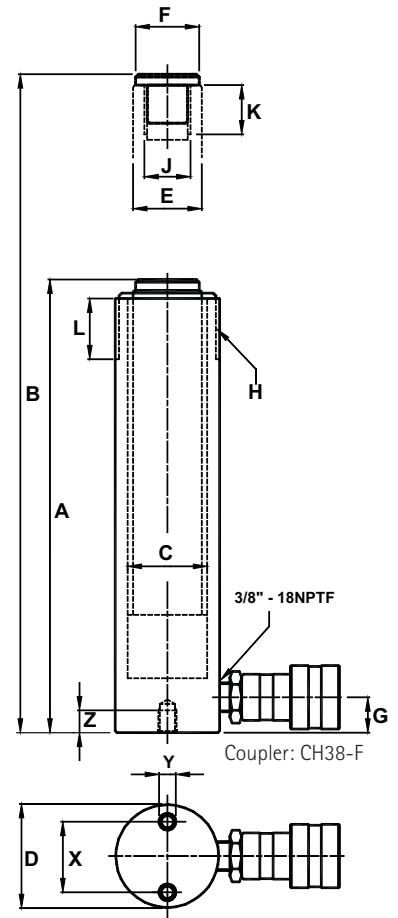
Model Number	Stroke (mm)	A	B	Oil Capacity (cc)	Weight (Kg)
		Min. Height (mm)	Max. Height (mm)		
<b>CYLINDER CAPACITY: 5 TON = 45 kN</b>					
H0501	26	116	142	16	1.4
H0503	78	169	247	50	1.6
H0505	129	221	350	83	2.1
H0507	180	272	452	116	2.3
H0509	231	323	554	149	2.5
<b>CYLINDER CAPACITY: 10 TON = 101 kN</b>					
H1001	25	92	117	36	1.8
H1002	51	123	174	73	2.3
H1004	102	174	276	147	3.1
H1006	151	250	401	218	4.3
H1008	202	301	503	291	5.4
H1010	253	352	605	365	6.4
H1012	305	403	707	438	6.8
H1014	356	450	806	514	7.5
<b>CYLINDER CAPACITY: 15 TON = 142 kN</b>					
H1501	25	124	149	51	3.3
H1502	51	149	200	103	3.9
H1504	101	200	301	204	5.1
H1506	152	270	422	308	7.0
H1508	203	321	524	411	8.0
H1510	254	372	626	515	9.3
H1512	305	423	728	618	10.9
H1514	356	474	830	721	11.8
H1516	407	529	936	824	12.8
<b>CYLINDER CAPACITY: 25 TON = 232 kN</b>					
H2501	26	143	169	86	6.1
H2502	51	168	219	169	6.6
H2504	102	219	321	338	8.7
H2506	155	272	427	514	10.5
H2508	206	323	529	683	12.3
H2510	257	374	631	852	14.0
H2512	310	426	736	1028	15.3
H2514	362	476	838	1201	17.7
<b>CYLINDER CAPACITY: 30 TON = 287 kN</b>					
H3008	210	387	599	879	18.5
<b>CYLINDER CAPACITY: 50 TON = 496 kN</b>					
H5502	51	176	227	361	15.5
H5504	101	227	328	715	19.3
<b>CYLINDER CAPACITY: 50 TON = 496 kN (INCL. 2 CARRY HANDLES)</b>					
H5506	158	283	441	1119	23.5
H5510	260	384	644	1845	34.0
H5513	337	461	798	2388	36.8
<b>CYLINDER CAPACITY: 75 TON = 726 kN (INCL. 2 CARRY HANDLES)</b>					
H7506	156	285	441	1620	30.6
H7513	333	492	825	3458	52.4
<b>CYLINDER CAPACITY: 100 TON = 928 kN (INCL. 2 CARRY HANDLES)</b>					
H10006	168	357	525	2229	52.4
H10010	260	449	709	3451	68.7
H10002	51	219	270	677	31.5

High Tonnage Cylinders we can offer up to 1000 Ton on Special Request!





SINGLE ACTING CYLINDERS



Model Number	Capacity kN	Cylinder Effective Area (cm <sup>2</sup> )	C	D	E	F	G	H	L	J	K	Base Mounting Hole		
			Bore Ø (mm)	Outside Ø (mm)	Plunger Ø (mm)	Saddle Ø (mm)	Collar Base to Inlet Port (mm)	Plunger Collar Thread	Plunger Thread Length (mm)	Internal Length	Thread Length (mm)	Bolt Circle (mm)	Thread	Thread Depth (mm)
5 Ton	45	6.4	29	38	25	25	20	1 1/2"-16	28	3/4"-16UNF	16	25	1/4"-20UNC	14
H1001	101	14.5	43	57	38	N/A	20	2 1/4"-14	29	10-24UNC	6	40	5/16"-18UNC	14
10 Ton	101	14.5	43	57	38	35	20	2 1/4"-14	29	1"-8UNC	20	40	5/16"-18UNC	14
15 Ton	142	20.3	51	70	41	38	25	2 3/4"-16	30	1"-8UNC	25	48	3/8"-16UNC	13
25 Ton	232	33.2	65	85	57	50	25	3 5/16"-12	49	1 1/2"-16	30	59	1/2"-13UNC	19
30 Ton	287	41.9	73	102	57	50	50	3 5/16"-12	49	1 1/2"-16	30	N/A	N/A	N/A
50 Ton	496	70.8	95	127	80	70	31	5"-12	55	N/A	N/A	95	1/2"-13UCN	19
75 Ton	726	103.9	115	147	95	70	30	5 3/4"-12	44	N/A	N/A	N/A	N/A	N/A
100 Ton	928	132.7	130	177	105	70	40	6 7/8"-12	44	N/A	N/A	140	3/4"-10UNC	25
H10002	928	132.7	130	159	105	70	38	6 7/8"-12	56.9	N/A	N/A	140	3/4"-10UNC	25

Accessories



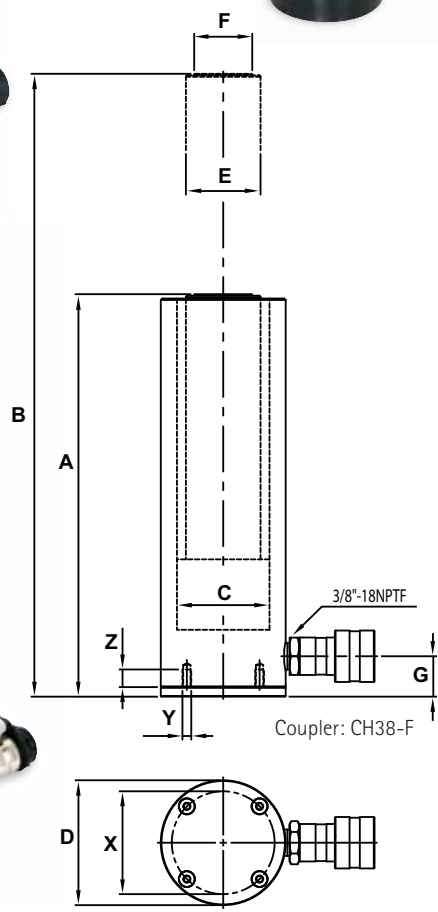


# Aluminium Cylinders

- Heavy Duty Return Spring for quicker retraction.
- Light weight for easy handling.
- Hard anodized surface.



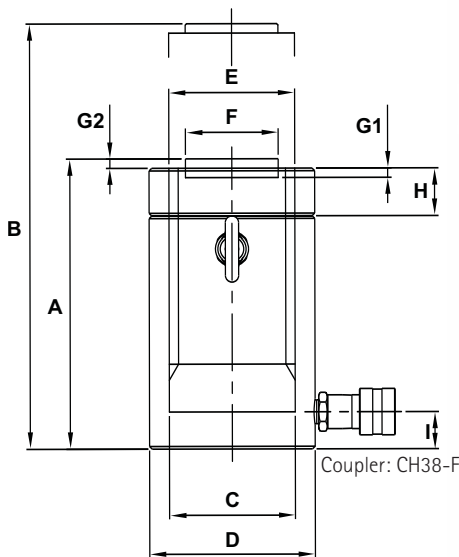
Model Number	Stroke (mm)	A	B	Oil Capacity (cc)	Weight (Kg)
		Min. Height (mm)	Max. Height (mm)		
<b>CYLINDER CAPACITY: 20 Ton = 218 kN</b>					
HU2002	50	174	224	155	3.0
HU2004	100	224	324	311	3.7
HU2006	150	274	424	467	4.4
<b>CYLINDER CAPACITY: 30 Ton = 309 kN</b>					
HU3002	50	181	231	220	4.7
HU3004	100	231	331	441	5.4
HU3006	150	281	431	662	6.1
<b>CYLINDER CAPACITY: 50 Ton = 496 kN</b>					
HU5502	50	186	236	354	8.9
HU5504	100	236	336	708	10.3
HU5506	150	286	436	1063	11.6
HU5508	200	336	536	1417	12.9
HU5510	250	386	636	1772	14.2
<b>CYLINDER CAPACITY: 100 Ton = 929 kN</b>					
HU10004	100	271	371	1327	19.8
HU10006	150	321	471	1990	22.1
HU10008	200	371	571	2654	24.4
<b>CYLINDER CAPACITY: 150 Ton = 1589 kN</b>					
HU15006	150	343	493	3404	33.5



Model Number	Capacity (kN)	Cylinder Effective Area (cm <sup>2</sup> )	C	D	E	F	G	Base Mounting Hole		
			Bore Ø (mm)	Outside Ø (mm)	Plunger Ø (mm)	Saddle Ø (mm)	Collar Base to Inlet Port (mm)	Bolt Circle (mm)	Thread	Thread Depth (mm)
20 Ton	218	31.17	63	85	50.8	39.5	27.5	70	M6	12
30 Ton	309	44.18	75	100	60	39.5	33.5	80	M6	12
50 Ton	496	70.88	95	130	80	70	30.5	110	M6	12
100 Ton	929	132.73	130	180	109.9	70	46.5	160	M6	12
150 Ton	1589	226.98	170	230	140	113	51.5	200	M6	12

# Lock-nut Cylinders

- Can support the load for a long period.
- The lock nut can be screwed wherever the operator wants and this ensures it is absolute safety to work under the load.
- Ram and the housing inside of cylinder are nickel plated to prevent rust and corrosion.
- Two overflow ports in the support rings to avoid the ram overextend.
- Yellow warning line in the ram to help alerting to the operator that the stroke limit is reached.
- Maximum working pressure: 700 bar (10,000 psi).



Model Number	Stroke (mm)	A		Oil Capacity (cc)	Weight (Kg)
		Min. Height (mm)	Max. Height (mm)		
<b>CYLINDER CAPACITY: 50 TON = 496 kN (INCL. 2 LIFTING EYES)</b>					
HLN5502	50	164	214	354	15.4
HLN5504	100	214	314	709	20.2
HLN5506	150	264	414	1063	25.0
HLN5508	200	314	514	1418	29.9
HLN5510	250	364	614	1772	34.7
HLN5512	300	414	714	2127	39.5
<b>CYLINDER CAPACITY: 95 TON = 929 kN (INCL. 2 LIFTING EYES)</b>					
HLN10002	50	187	237	663	30.5
HLN10004	100	237	337	1327	38.9
HLN10006	150	287	437	1990	47.3
HLN10008	200	337	537	2654	55.6
HLN10010	250	387	637	3317	64.0
HLN10012	300	437	737	3981	72.4

High Tonnage Cylinders we can offer up to 1000 Ton on Special Request!

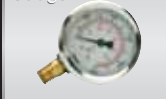
Model Number	Capacity kN	Cylinder Effective Area (cm <sup>2</sup> )	C	D	E	F	G (=G1+G2)	G1	G2	H	I
			Bore Ø (mm)	Outside Ø (mm)	Plunger Ø (mm)	Saddle Ø (mm)	Plunger Saddle Depth (mm)	Plunger Saddle Depth (mm)	Plunger Saddle Depth (mm)	Lock Nut Length (mm)	Base to Inlet Port (mm)
50 Ton	496	70.9	95	125	Tw95-6N	70	15	13	2	36	28
100 Ton	929	132.7	130	165	Tw130-4N	70	15	13	2	45	28

## Accessories

Hose



Gauge



Hand Pump



Air Pump





FLAT BODY CYLINDERS

## Flat Body Cylinders

- Body made of high quality solid steel.
- Extremely low design for use in narrow areas where standard cylinders will not fit.
- Maximum working pressure: 700 bar (10,000 psi).



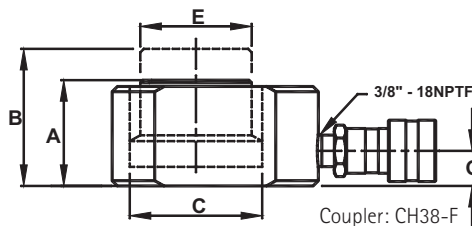
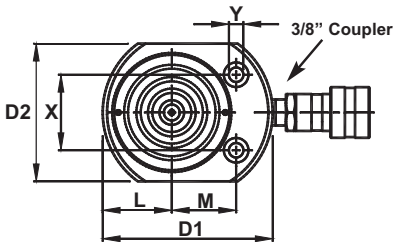
HF0503  
Coupler: CR38-F

### Incl. 1 Carry Handle

- 75, 100 and 150 Ton Flat Body Cylinders are provided with a Carry Handle.



Model Number	Stroke (mm)	A	B	Oil Capacity (cc)	Weight (Kg)
		Min. Height (mm)	Max. Height (mm)		
<b>CYLINDER CAPACITY: 5 TON = 49 kN</b>					
HF0500	16	41	57	11	0.9
<b>CYLINDER CAPACITY: 5 TON = 49 kN 3/8" COUPLER REGULAR FLOW</b>					
HF0503	6	32	38	4	0.6
<b>CYLINDER CAPACITY: 10 TON = 104 kN</b>					
HF1005	11	43	54	16	1.5
<b>CYLINDER CAPACITY: 20 TON = 194 kN</b>					
HF2005	11	51	62	31	2.7
<b>CYLINDER CAPACITY: 30 TON = 287 kN</b>					
HF3005	13	59	71	54	4.4
<b>CYLINDER CAPACITY: 50 TON = 445 kN</b>					
HF5006	16	67	83	101	6.7
<b>CYLINDER CAPACITY: 75 TON = 727 kN (INCL. HANDLE)</b>					
HF7506	16	79	95	166	11.5
<b>CYLINDER CAPACITY: 100 TON = 887 kN (INCL. HANDLE)</b>					
HF10006	16	85	101	202	14.3
<b>CYLINDER CAPACITY: 150 TON 1385 kN (INCL. HANDLE)</b>					
HF15006	16	100	116	316	24.2



Coupler: CH38-F (Except HF0503 Coupler: CR38-F)

Model Number	Capacity kN	Cylinder Effective Area (cm <sup>2</sup> )	C	D1 x D2	E	G	L	M	Cylinder Mounting Hole Dimensions			
									Cylinder Bore Ø (mm)	Outside Dim. (mm)	Plunger Ø (mm)	Base to Port (mm)
HF0500	49	7.1	30	60 x 40	25	19	20	22	28	5	10	6
HF0503	49	7.1	30	61 x 41	25	18	20	22	28	5	10	6
HF1005	104	15.2	44	84 x 56	38	20	28	34	37	7	10	10
HF2005	194	28.3	60	102 x 76	51	19	39	40	49	10	15	10
HF3005	287	41.9	73	117 x 97	64	20	48	45	52	10	16	11
HF5006	445	63.6	90	140 x 114	70	20	57	54	67	11	19	13
HF7506	727	103.9	115	165 x 140	90	20	70	67	76	13	21	14
HF10006	887	126.7	127	177 x 152	90	20	76	75	76	13	21	14
HF15006	1385	197.9	158	215 x 190	118	24	95	83	117	13	21	14

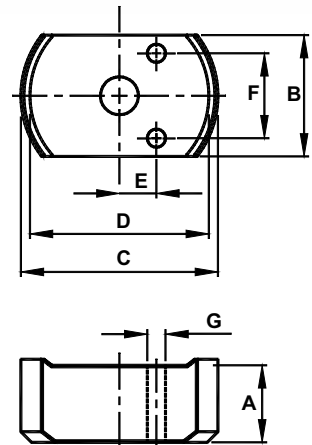


# Flat Body Cylinder Kits

- Magnetic adapters in various heights.
- Carrying case.
- Perfect for narrow areas needing a little height boost.



HF0503



Model Number	Cylinder Model	Capacity kN	Stroke (mm)	Oil Capacity (cc)	Min. Height (mm)	Adapter	Adapter Dimensions (mm)							Weight (kg)
							A	B	C	D	E	F	G	
<b>CYLINDER CAPACITY: 5 TON = 49 kN</b>														
HF0503B	HF0503	49	6	4	32	I	6	41	65	59	12	28	6	2.6
						II	13							
						III	25							
						IV	32							
<b>CYLINDER CAPACITY: 10 TON = 104 kN</b>														
HF1005B	HF1005	104	11	16	43	I	10	56	90	82	21	37	7	3.9
						II	20				N/A			
						III	40							
<b>CYLINDER CAPACITY: 20 TON = 194 kN</b>														
HF2005B	HF2005	194	11	31	51	I	10	76	108	100	27	49	10	7.0
						II	20				N/A			
						III	40							
<b>CYLINDER CAPACITY: 30 TON = 287 kN</b>														
HF3005B	HF3005	287	13	54	59	I	10	95	121	113	34	52	10	9.4
						II	20				N/A			
						III	40							

## Accessories

Fitting



Hose



Gauge



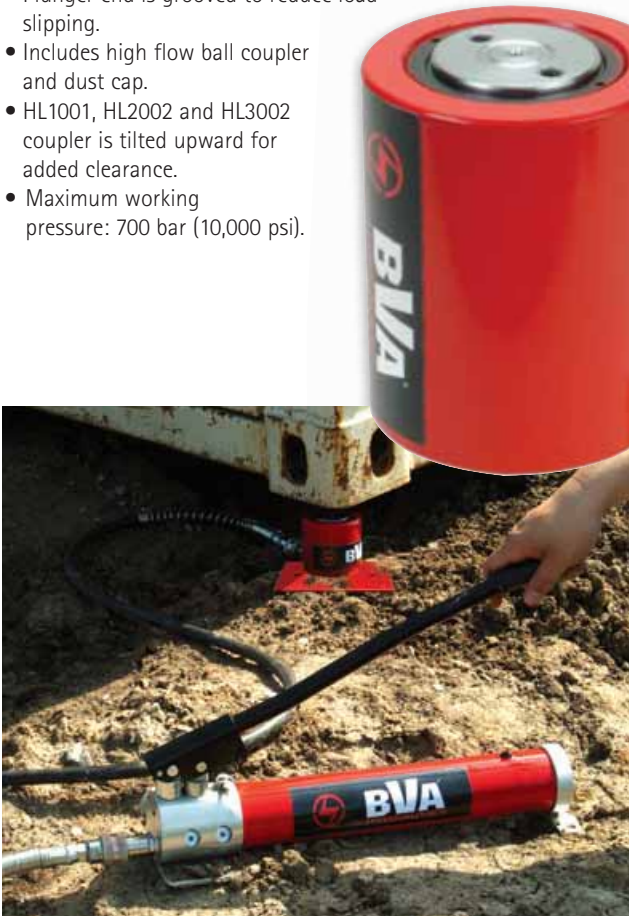
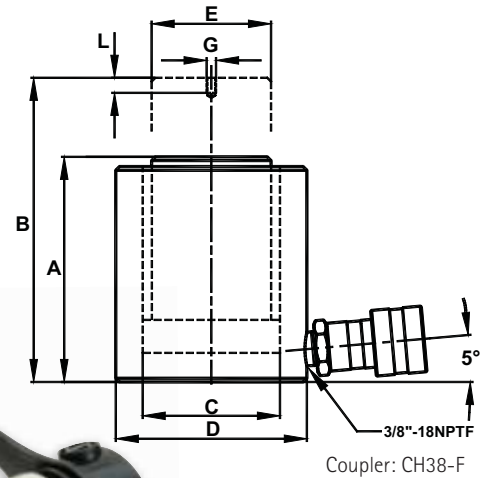
Hand Pump





# Low Profile Cylinders

- Compact design for use in confined spaces.
- Plunger wiper reduces contamination and extends the cylinder-life.
- Special designed return spring ensures a quick retraction and extends the life of the spring.
- Industrial hard chrome plated ram helps prevent scratching and corrosion.
- Plunger end is grooved to reduce load slipping.
- Includes high flow ball coupler and dust cap.
- HL1001, HL2002 and HL3002 coupler is tilted upward for added clearance.
- Maximum working pressure: 700 bar (10,000 psi).



Model Number	Stroke (mm)	A	B	Oil Capacity (cc)	Weight (Kg)
		Min. Height (mm)	Max. Height (mm)		
<b>CYLINDER CAPACITY: 10 TON = 106 kN</b>					
HL1001	38.0	88	126	58	2.6
<b>CYLINDER CAPACITY: 20 TON = 198 kN</b>					
HL2002	44.5	99	144	126	5.0
<b>CYLINDER CAPACITY: 30 TON = 293 kN</b>					
HL3002	62.0	117	179	259	6.8
<b>CYLINDER CAPACITY: 45 TON = 445 kN</b>					
HL5002	60.0	122	182	381	9.9
<b>CYLINDER CAPACITY: 90 TON = 887 kN</b>					
HL10002	57.0	141	198	722	20.6

Model Number	Capacity kN	Cylinder Effective Area (cm <sup>2</sup> )	C	D	E	G	L	M
			Cylinder Bore Ø (mm)	Outside Ø (mm)	Plunger Ø (mm)	Thread (mm)	Thread Depth (mm)	Bolt Circle (mm)
HL1001	106	15.2	44	70	38	M4	8	26
HL2002	198	28.3	60	92	51	M5	8	40
HL3002	293	41.8	73	102	63	M5	8	40
HL5002	445	63.6	90	124	70	M5	8	40
HL10002	887	126.7	127	165	90	M8	10	56



# Low Profile Cylinder Kit

- Press truck wheel from nave with the mini-press
- Fits between chassis and wheel



MINI PRESS



**AN APPLICATION:  
PRESS TRUCK WHEEL  
FROM NAVE WITH THE  
MINI-PRESS.**

**Fits between  
chassis and wheel.**

HL-1001-D



**MINI-PRESS HL1001**  
Capacity: 10 TON  
Minimum Height: 88mm  
Stroke: 38mm

### ADAPTERS



3 aluminium adapters:  
25mm, 50mm en 75mm.

*Always USE Metal end-part  
EXCEPT with  
aluminium wheel-rim.*



Metal end-part.  
Height 10mm.



10mm + 88mm  
(98mm)



10mm + 25mm + 88mm  
(123mm)



10mm + 50mm + 88mm  
(148mm)



10mm + 75mm + 88mm  
(172mm)



10mm + 25mm + 75mm + 88mm  
(198mm)



10mm + 50mm + 75mm + 88mm  
(223mm)



10mm + 25mm + 50mm + 75mm + 88mm  
(248mm)

Model Number	Capacity kN	Cylinder Effective Area (cm <sup>2</sup> )	Internal Pressure at Capacity (bar)	C	D	E	G	L	M
				Cylinder Bore Ø (mm)	Outside Ø (mm)	Plunger Ø (mm)	Thread (mm)	Thread Depth (mm)	Bolt Circle (mm)
<b>CYLINDER CAPACITY: 10 TON = 106 kN</b>									
HL1001	106	15	587	44	70	38	M4	8	26

## Accessories

Fitting



Hose



Gauge



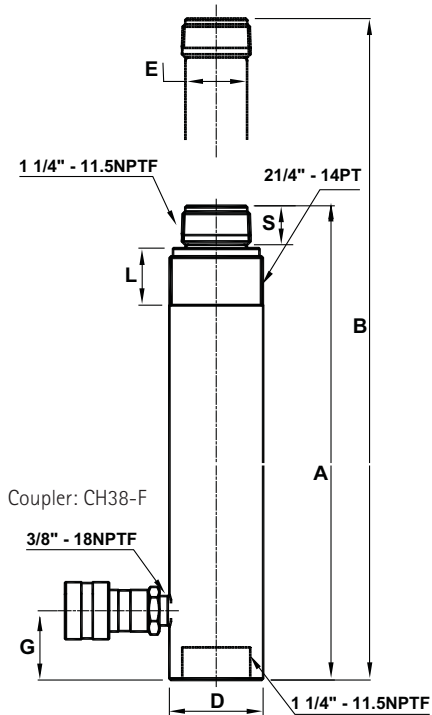
Hand Pump





## Threaded Cylinders

- High quality threaded single acting cylinders.
- Removable threaded plunger adapter allows for the use of a variety of threaded attachments.
- Used to attach accessories to rod end and base.
- Maximum working pressure: 700 bar (10,000 psi).



Model Number	Stroke (mm)	A	B	Oil Capacity (cc)	Weight (Kg)
		Min. Height (mm)	Max. Height (mm)		
<b>CYLINDER CAPACITY: 10 Ton = 101 kN</b>					
HT1006	151	291	442	217	4.8
HT1010	253	392	646	365	6.4

**High Tonnage Cylinders  
we can offer up to  
100 Ton  
on Special Request!**

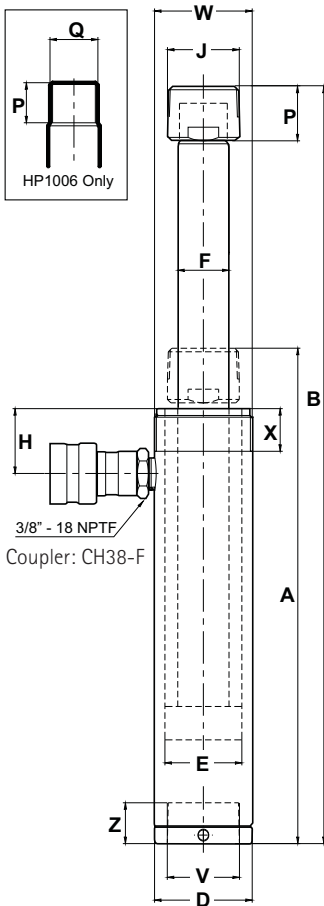
Model Number	Capacity kN	Cylinder Effective Area (cm <sup>2</sup> )	D	E	G	L	S
			Outside Ø (mm)	Plunger Ø (mm)	Base to Inlet Port (mm)	Collar Thread Length (mm)	Saddle Height (mm)
10 Ton	101	14.4	57	38	42	29	27



PULL CYLINDERS

# Pull Cylinders

- High strength steel construction.
- Guide ring is designed to help protect against side-load damage.
- High lifecycle polyurethane seal.
- External plunger threads.
- Internal base thread for easy fixation.



HP1006  
(Optional: Clevis CP10)



HP0205



HP0505

**High Tonnage Cylinders we can offer up to 60 Ton on Special Request!**

Model Number	Stroke (mm)	A	B	Oil Capacity (cc)	Weight (Kg)
		Min. Height (mm)	Max. Height (mm)		
<b>CYLINDER CAPACITY: 2.5 TON = 25 kN</b>					
HP0205	127	267	394	45	2.9
<b>CYLINDER CAPACITY: 5 TON = 51 kN</b>					
HP0505	141	303	444	103	4.2
<b>CYLINDER CAPACITY: 10 TON = 110 kN</b>					
HP1006	151	299	450	237	9.5

Model Number	Capacity kN	Cylinder Effective Area (cm <sup>2</sup> )	D	E	F	H	J	P	Q	Base Mounting Hole			
			Outside Ø (mm)	Cylinder Bore Ø (mm)	Plunger Ø (mm)	Top to Inlet Port (mm)	Saddle Ø (mm)	Plunger Thread Length (mm)	Plunger Outside Thread (mm)	Base Mounting Hole (mm)	Counter Bore Ø (mm)	Collar Thread Length (mm)	Collar Thread Length (mm)
HP0205	25	3.6	48	28	19	42	3/4"-14NPTF	28	M16x1.5	3/4"-14NPTF	1 1/2"-16UN	24	18
HP0505	51	7.4	57	42	30	38	1 1/4"-11.5NPTF	32	M28x1.5	1 1/4"-11.5NPTF	2 1/4"-14UN	25	24
HP1006	110	15.7	85	55	32	38	-	26	M30x2	M30x2	M85x2	25	25

## Accessories

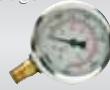
Saddles



Hose



Gauge



Hand Pumps



Air Pump





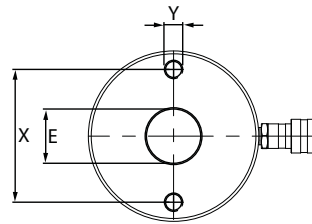
HOLLOW CYLINDERS

# Hollow Cylinders

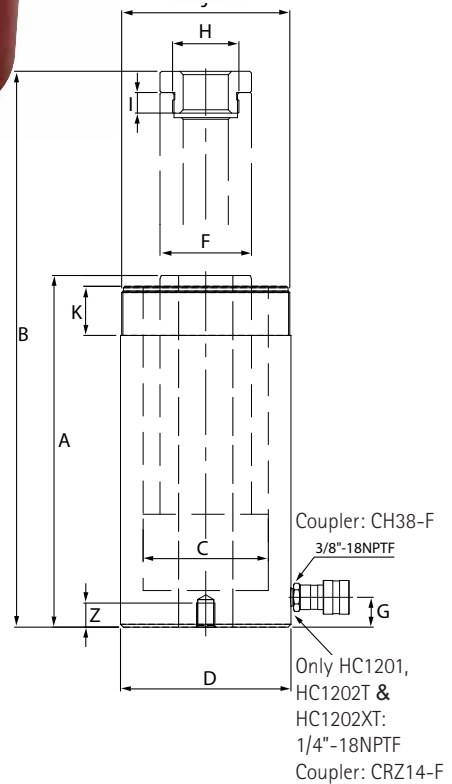
- Heavy Duty return spring for quicker retraction.
- Dual Plunger wipers help prevent contamination.
- Collar thread for easy fixation.
- High flow coupler with dust cap.



Model Number	Stroke (mm)	A		Oil Capacity (cc)	Weight (Kg)
		Min. Height (mm)	Max. Height (mm)		
<b>CYLINDER CAPACITY: 12 TON = 132 kN</b>					
HC1201T	7.8	60	67	15	1.5
HC1202XT	41	120	161	77	2.8
HC1202T	41	120	161	77	2.8
HC1203XT	76	184	260	143	3.9
<b>CYLINDER CAPACITY: 20 TON = 221 kN</b>					
HC2002T	51	162	213	161	7.2
HC2006T	154	306	460	487	13.4
<b>CYLINDER CAPACITY: 30 TON = 286 kN</b>					
HC3002T	64	179	243	260	10.4
HC3006T	155	330	486	633	19.5
<b>CYLINDER CAPACITY: 60 TON = 589 kN (INCL. 2 CARRY HANDLES)</b>					
HC6003T	76	248	324	641	29.8
HC6006T	152	324	476	1282	36.8
<b>CYLINDER CAPACITY: 100 TON = 1000 kN (INCL. 2 CARRY HANDLES)</b>					
HC10003T	76	254	330	1087	51.4



**High Tonnage Cylinders we can offer up to 1000 Ton on Special Request!**

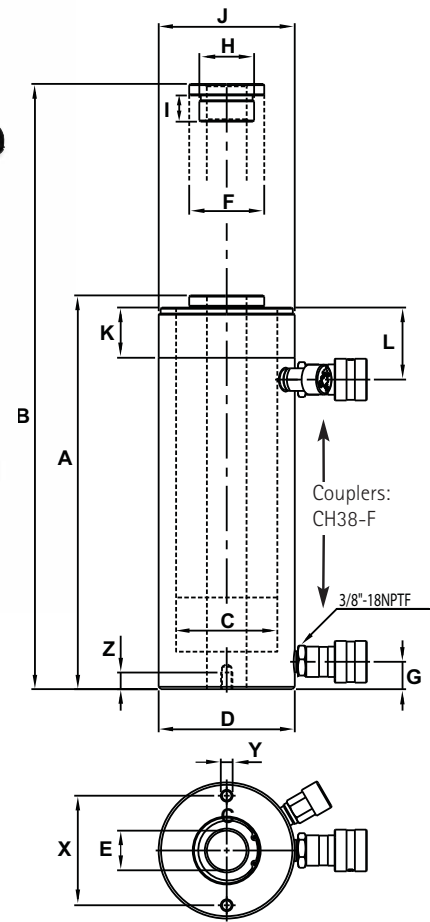


Capacity kN	Cylinder Effective Area (cm²)	Cylinder Bore Ø (mm)	C	D	Plunger					Collar Thread		Base Mounting Hole			
					E	F	G	H	I	J	K	X	Y	Z	
					I.D. (mm)	O.D. (mm)	Base to Inlet Port (mm)	Internal Thread (mm)	Internal Thread Lgth (mm)	Ø (mm)	Lgth. (mm)	Bolt Circle (mm)	Thread (mm)	Thread Depth (mm)	
<b>CYLINDER CAPACITY: 12 TON = 132 kN (COUPLER: CRZ14-F)</b>															
12 Ton	132	18.8	55	70	19	35	15	3/4"-16UN	16	2 3/4"-16	30	50.8	5/16"-18UNC	9	
<b>CYLINDER CAPACITY: 12 TON = 132 kN (COUPLER: CH38-F)</b>															
12 Ton	132	18.8	55	70	19	35	19	3/4"-16UN	16	2 3/4"-16	30	50.8	5/16"-18UNC	9	
<b>CYLINDER CAPACITY: 20 TON = 221 kN</b>															
20 Ton	221	31.6	75	99	27	54	19	1 9/16"-16UN	10	3 7/8"-12	38	82.5	3/8"-16UNC	9	
<b>CYLINDER CAPACITY: 30 TON = 286 kN</b>															
30 Ton	286	40.8	85	114	33	63	23	1 13/16"-16UN	17	4 1/2"-12	42	92	3/8"-16UNC	14	
<b>CYLINDER CAPACITY: 60 TON = 589 kN (INCL. 2 CARRY HANDLES)</b>															
60 Ton	589	84.2	125	158	54	93	27	2 3/4"-16UN	17	6 1/4"-12	48	130	1/2"-13UNC	14	
<b>CYLINDER CAPACITY: 100 TON = 1000 kN (INCL. 2 CARRY HANDLES)</b>															
100 Ton	1000	142.8	165	213	79	125	27	4"-16UN	21	8 3/8"-12	60	178	5/8"-11UNC	19	

# Double Acting Hollow Cylinders

- Dual Plunger wipers help prevent contamination.
- Collar thread for easy fixation.
- High flow coupler with dust cap.

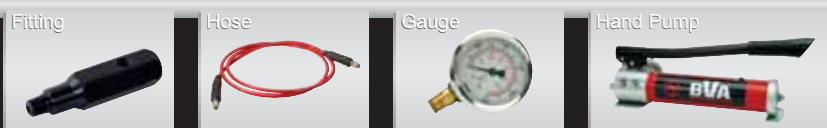
High Tonnage Cylinders we can offer up to 1000 Ton on Special Request!



Model Number	Stroke (mm)	A (mm)		B (mm)		Oil Capacity (cc)		Weight (Kg)
		Min. Height	Max. Height	Push	Pull			
<b>CYLINDER CAPACITY: PUSH 30 TON &amp; PULL 18 TON</b>								
HDC3007	177	331	508	725	455	19.5		
HDC3010	257	432	689	1049	658	24.9		
<b>CYLINDER CAPACITY: PUSH 60 TON &amp; PULL 40 TON</b>								
HDC6003	89	248	337	641	428	29.8		
HDC6006	165	324	489	1282	856	36.8		
HDC6010	257	438	695	2164	1444	31.2		
<b>CYLINDER CAPACITY: PUSH 100 TON &amp; PULL 65 TON</b>								
HDC10001	38	165	203	544	347	28.8		
HDC10003	76	254	330	1087	693	51.4		
HDC10006	152	343	495	2178	1388	69.6		
HDC10010	257	461	718	3678	2345	96.8		

Capacity	Cylinder Effective Area		Cylinder Bore Ø (mm)	D O.D. (mm)	E I.D. (mm)	F O.D. (mm)	G Base to Inlet Port (mm)	Plunger		Collar Thread		Base Mounting Hole				
	Push (kN)	Pull (kN)						Push (cm²)	Pull (cm²)	Internal Thread (mm)	Internal Thread Lgth (mm)	Ø (mm)	Lgth. (mm)	Bolt Circle (mm)	Thread (mm)	Thread Depth (mm)
	Push (kN)	Pull (kN)	Push (cm²)	Pull (cm²)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	
30 Ton	286	179	41	26	85	114	33	63	23	1 13/16"-16UN	17	4 1/2"-12	42.2	92	3/8"-16UNC	14
60 Ton	589	394	84	56	125	159	54	92	27	2 3/4"-16UN	17	6 1/4"-12	48.5	130	1/2"-12UNC	14
100 Ton	1001	638	143	91	165	213	79	125	27	4"-16UN	21	8 3/8"-12	60.5	178	5/8"-11UNC	19

## Cylinder Accessories





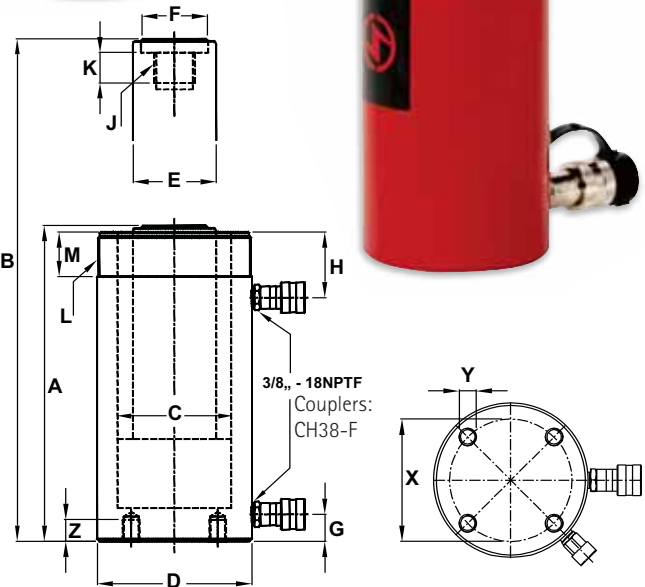
## Double Acting Cylinders

- Internal plunger threads.
- Plunger wiper reduces contamination and extends the cylinder-life.
- High strength steel construction from gun drilled solid bar.
- High flow 3/8"-18NPTF couplers.
- Collar thread protectors.
- One piece high grade alloy bearing for side load protection and long life.
- Polyurethane cup seal provides for optimum performance.
- Industrial hard chrome plated ram helps prevent rust and corrosion.
- Maximum working pressure: 700 bar (10,000 psi).



**High Tonnage Cylinders we can offer up to 1000 Ton on Special Request!**

Model Number	Stroke (mm)	Oil Capacity		Weight (Kg)		
		Min. Height (mm)	Max. Height (mm)		Push (cc)	Pull (cc)
<b>CYLINDER CAPACITY: PUSH 10 TON &amp; PULL 3.4 TON</b>						
HD1010	255	410	665	367	122	12.1
HD1012	304	458	762	437	145	13.6
<b>CYLINDER CAPACITY: PUSH 30 TON &amp; PULL 15 TON</b>						
HD3008	207	389	596	867	426	19.5
HD3014	368	550	918	1541	758	27.5
<b>CYLINDER CAPACITY: PUSH 50 TON &amp; PULL 15 TON</b>						
HD5506	157	331	488	1113	323	29.4
HD5513	335	509	844	2375	690	44.6
HD5520	511	733	1244	3623	1052	63.7
<b>CYLINDER CAPACITY: PUSH 75 TON &amp; PULL 24 TON (INCL. 2 CARRY HANDLES)</b>						
HD7506	155	348	503	1608	511	39.9
HD7513	333	526	859	3456	1098	59.6
<b>CYLINDER CAPACITY: PUSH 95 TON &amp; PULL 44 TON (INCL. 2 CARRY HANDLES)</b>						
HD10006	167	357	524	2216	1032	60.1
HD10013	333	524	857	4418	2057	85.2
HD10018	461	687	1148	6117	2849	110.0



Capacity	Cylinder Effective Area		Cylinder Bore Ø (mm)	O.D. (mm)	I.D. (mm)	O.D. (mm)	Plunger				Collar Thread (mm)	Collar Thread Lgth (mm)	Base Mounting Bolt Circle (mm)	Mounting Hole Thread (mm)	Hole Thread Depth (mm)		
	Push (kN)	Pull (kN)					Push (cm²)	Pull (cm²)	Base to Inlet Port (mm)	Internal Thread (mm)						Internal Thread Lgth (mm)	Thread Ø (mm)
	10 Ton	30 Ton					50 Ton	75 Ton	100 Ton								
10 Ton	101	34	14	4	43	73	35	35	36	53	1"-8	25	2 1/4-14	26	-	-	-
30 Ton	293	144	41	20	73	101	54	50	42	74	1 1/2-16	25	3 5/16"-12	49	-	-	-
50 Ton	496	144	70	20	95	127	79	70	29	73	1"-12	25	5"-12	44	-	-	-
75 Ton	726	231	103	33	115	146	95	70	30	71	1"-12	38	5 3/4"-12	38	-	-	-
100 Ton	928	433	132	61	130	177	95	75	31	75	1 3/4"-12	35	6 7/8"-12	50	139	3/4"-10	25.0

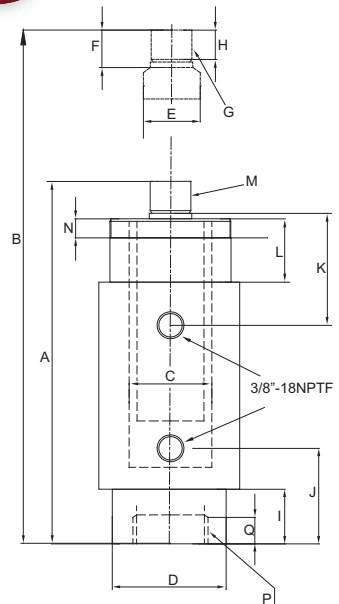




HIGH PRECISION CYLINDERS

# High Precision Double Acting Cylinders

- Ideal for pushing and pulling applications.
- The best choice for production applications.
- High strength steel construction.
- One piece high grade alloy bearing for side load protection and longer life.
- Polyurethane cup seal helps provide for optimum performance.
- External plunger threads.
- Internal base threads.
- Used for pulling and pushing applications.
- Maximum working pressure: 700 bar (10,000 psi).



Model Number	Stroke (mm)	A		B		Oil Capacity		Weight (Kg)
		Min. Height (mm)	Max. Height (mm)	Push (cc)	Pull (cc)			
<b>CYLINDER CAPACITY: PUSH 8 TON &amp; PULL 4.5 TON</b>								
HPD0906	155	350	505	175	99	6.6		
HPD0910	257	452	709	291	165	8.4		
<b>CYLINDER CAPACITY: PUSH 15 TON &amp; PULL 7.1 TON</b>								
HPD1606	159	389	548	322	160	10.0		
HPD1610	260	490	750	527	262	12.8		

	Max. Cylinder Capacity		Cylinder Effective Area		C Bore Ø (mm)	D Cylinder Outside Ø (mm)	E Plunger			J Base to Adv. Port (mm)	K Top to Return Port (mm)	L Collar			P Int. Base Thread	Q Int. Base Thread Length (mm)	
							Ø (mm)	Protrusion (mm)	Thread			Tread Lgth (mm)	Lgth (mm)	Thread (mm)			Thread Lgth (mm)
	Push (kN)	Pull (kN)	Push (cm²)	Pull (cm²)													
<b>8 Ton</b>	79	45	11.3	6.4	38	64	25	25	3/4"-16N	19	56	56	38	2"-12N	15	111/16"-18N	35
<b>15 Ton</b>	142	71	20.3	10.8	50	76	36	28	11/8"-12N	25	73	73	54	2 5/8"-16N	25	2 3/16"-16N	41

## Cylinder Accessories

Fitting



Hose



Gauge



Hand Pump





# Hydraulic Hand Pumps

- P350, P1000, P2001, P4301 and P8701 feature two-speed operation which reduces operator fatigue.
- Internal pressure relief valve for over load protection.
- External load release valve for Single Acting Cylinder usage.
- Large oil capacities to power a wide range of cylinders and tools.
- Models P350 and P1000 are constructed of high strength lightweight aluminium alloy for easy handling.
- Maximum working pressure: 10,000 psi / 700 bar.

## Aluminium Reservoir The Ultra Light Weight

*P350 and P1000 hand pumps are aluminium and the preferred choice when portability is important.*



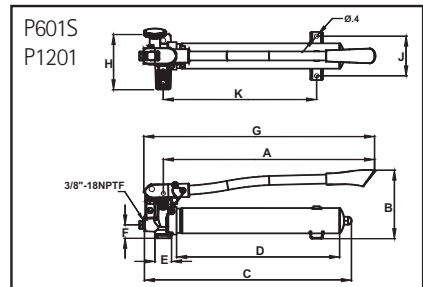
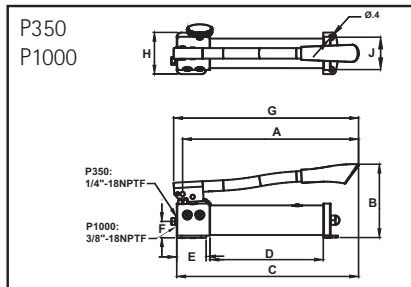
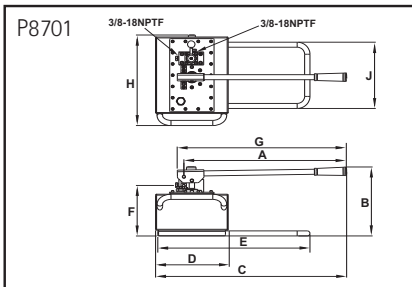
P350



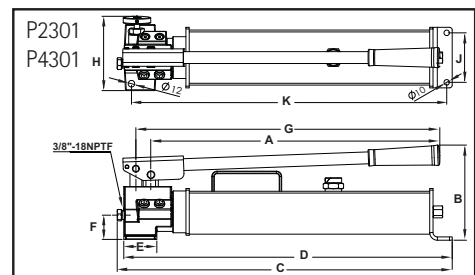
P2301



P601S



Model Number	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)	H (mm)	J (mm)	K (mm)
P601S	482	160	496	374	40	32	553	132	95	369
P350	344	141	367	227	60	34	362	85	65	-
P1000	552	161	585	377	92	32	576	120	100	430
P2301	525	173	609	597	60	44	552	135	90	573
P4301	525	195	581	569	60	44	552	135	95	545
P8701	655	295	771	293	614	210	684	387	284	-



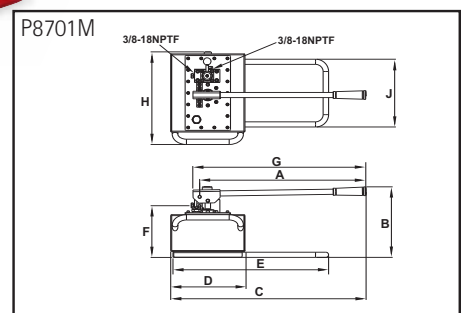
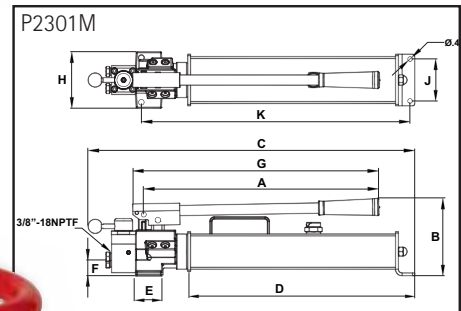
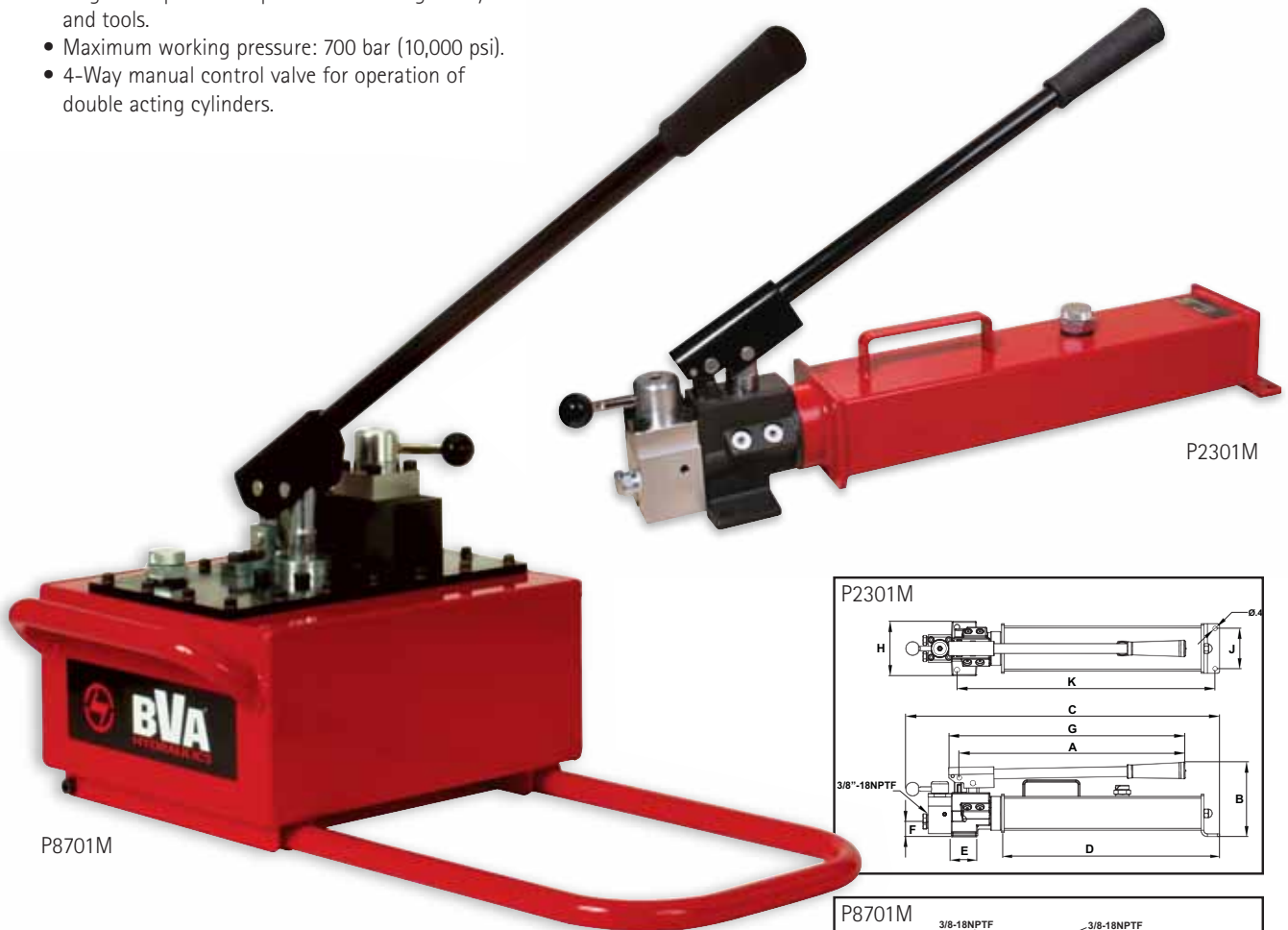
Model Number	Stage:	Usable Oil Capacity	Pressure Rating		Oil Displacement per Stroke		Max. Operating Force (N)	Piston Stroke (mm)	Oil Outlet Port	Weight (kg)
			1 <sup>st</sup> Stage (bar)	2 <sup>nd</sup> Stage (bar)	1 <sup>st</sup> Stage (cc)	2 <sup>nd</sup> Stage (cc)				
P601S	Single	600	-	700	-	2.46	486	20.0	3/8"-18NPTF	5.9
P350	Two	350	14	700	3.3	0.82	363	10.5	1/4"-18NPTF	3.0
P1000	Two	1000	14	700	13.2	2.30	441	20.7	3/8"-18NPTF	6.2
P2301	Two	2100	14	700	13.2	2.30	441	20.7	3/8"-18NPTF	12.6
P4301	Two	4100	14	700	13.2	2.30	441	20.7	3/8"-18NPTF	17.0
P8701	Two	7800	20	700	119.8	4.73	637	42.5	3/8"-18NPTF	35.0

HAND PUMPS



## Hydraulic Hand Pumps (Manual Control Valve)

- Internal pressure relief valve for over load protection.
- Large oil capacities to power a wide range of cylinders and tools.
- Maximum working pressure: 700 bar (10,000 psi).
- 4-Way manual control valve for operation of double acting cylinders.



Model Number	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)	H (mm)	J (mm)	K (mm)
P2301M	502	169	602	467	60	44	526	120	90	573
P8701M	655	295	771	293	614	210	684	387	284	-

Model Number	Stage	Usable Oil Capacity c.c.	Pressure Rating		Oil Displacement per Stroke		Max. Operating Force (N)	Piston Stroke (mm)	Oil Outlet Port	Weight (kg)
			1 <sup>st</sup> Stage (bar)	2 <sup>nd</sup> Stage (bar)	1 <sup>st</sup> Stage (cc)	2 <sup>nd</sup> Stage (cc)				
P2301M	Two Speed	2100	14	700	13.2	2.30	440	20.7	3/8"-18NPTF	14.6
P8701M	Two Speed	7800	20	700	119.8	4.73	650	42.5	3/8"-18NPTF	35.2

### Accessories



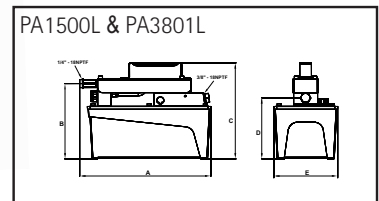
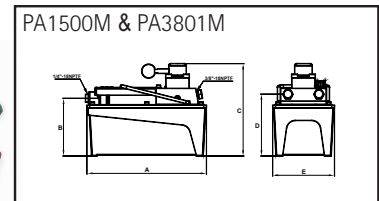
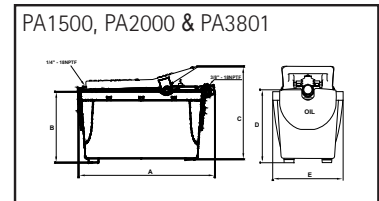
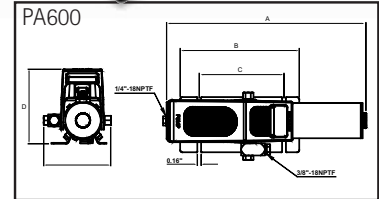


## Air Hydraulic Pumps

- High Strength reinforced alloy aluminium reservoir is lightweight and corrosion resistant.
- Internal pressure relief valve for over load protection.
- Suggested air pressure range: 114-700 psi / 8-14 bar.
- Designed to be used with single acting cylinders.
- PA1500M and PA3801M are designed to be used with double acting cylinders.
- Dust cover protection for the release control valve.
- Dual stage release valve.
- Model PA2000 features high pressure, high flow performance.
- Maximum working pressure: 700 bar (10,000 psi).
- PA600H same as PA600, but with Hand Operation

PA600 & PA600H

- Pump can work in any position.
- Mounting plate allows for the pump to be securely fastened.
- Hydraulic Port swivels for easy connection.



PA1500



PA1500M



PA1500L

Pressure Rating (BAR)	Air Pressure Range (BAR)	Air Input Port	Oil Outlet Port
700	8 -14	1/4"-18NPTF	3/8"-18NPTF

Model Number	Oil Capacity cc	Output Flow Rate (L/min)		Dimensions (mm)					Weight (kg)	
		No Load	Load	A	B	C	D	E		
<b>PUMPS FOR USE WITH SINGLE ACTING CYLINDERS</b>										
PA600	600	1.00	0.15	426	250	178	156	142	6.4	
PA600H	600	1.00	0.15	426	250	178	114	146	5.7	
PA1500	1500	1.07	0.18	267	126	185	131	136	8.2	
PA2000	2000	1.00	0.15	294	149	207	157	152	9.1	
PA3801	3800	1.00	0.15	321	129	187	133	187	12.3	
PA7550	7550	1.00	0.15	321	153	211	156	214	17.4	
PA1500L	1500	0.90	0.16	279	160	204	130	136	8.8	
PA3801L	3800	0.90	0.16	321	163	207	132	187	13.8	

<b>PUMPS FOR USE WITH DOUBLE ACTING CYLINDERS</b>										
PA1500M	1500	1.07	0.15	267	127	202	135	136	8.7	
PA3801M	3800	1.00	0.18	321	129	205	138	187	13.5	

PA600H: With Hand Operation. PA1500L: With Remote Control. PA1500M & PA3801M: With Valve.

### Remote Control

PA1500L comes with a remote control that extends 12 feet. The remote control offers easy 2 button operation for precision advanced, hold and retract functions.

