

# AIPI



## HYDRAULIC TOOLS EQUIPMENT

LIFT YOUR BUSINESS

# AIFI DEDICATED TO EXCELLENCE

## Hydraulic Tools Equipment

Our hydraulic tools and equipments deliver reliable and safe performance. That includes, hydraulic cylinders, hydraulic pumps, hydraulic heavy lifting solutions, etc. Our products are widely used in industry field of steel, shipbuilding, power plants, chemical, metallurgic, construction and many others. AIFI offers one year warranty for all products range.

## "Cost effective hydraulic tools & equipment solutions offered quality products & services."

### ABOUT US

Based in Montreal, Canada, The ACUTUS Industrial Power Inc. (AIFI) company was founded by a group of experienced people with a strong belief for values and a determined commitment for excellence, Our goal is to be a market leader in high pressure hydraulic equipments.

AIFI manufacture products to provide with the most extensive line of products and accessories to make work safer and easier to perform while increasing productivity.

### PRODUCT FAMILY

AIFI listens and responds to customers' demands for reliable, quality products as below:

- Hydraulic Pumps
- Hydraulic Parts & Accessories
- Cylinders

### RESPONSIBILITY

Simplify people's live.

We feel responsible for our environment and society.

We look after our employees, their families, their communities and accept responsibility for present and future generation. In all development activities and considerations, our focus is on people.

### SUPPORT RESOURCES

We care about customers, so our qualified Customer Service Representatives will take care of their requirements, whether administrative or technical in coordination with various department for incomparable customer experience.

Our engineering R&D department will develop new tools as well as improving existing ones with new materials, new design, etc., for custom-ers' demands.

### SAFETY

Safety is one of our top priorities. We strive to meet or exceed the highest health, safety, security, environmental and quality standards for our products and solutions to ensure as much our employees as our customers and end users of our products at all.

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# Hydraulic Cylinder Summary

AIP offers full range of popular Hydraulic Cylinder Reservoirs including jacking, pushing, pulling, supporting, etc., and also provides the maximum loading capability & various cylinder stroke to meet your specific requirement.

- ① Hard saddle: standard heavy load, heat treatment with groove load. The saddle helps stabilize the load and extend cylinder life.
- ② Guide cover: absorb offset load to prevent piston rod from being pushed out.
- ③ Dustproof sealing ring: it can reduce contamination and prolong cylinder life.
- ④ Piston rod: electroplated piston rod prevents scratch and corrosion.
- ⑤ Guide ring: absorb offset load and reduce cylinder wear.
- ⑥ Spring return: heavy duty steel spring makes faster retraction on a single acting cylinder.



# SRC SERIES

## Single-Acting Cylinders



Capacity: 25-100 tons

Stroke: 1.0-14.25 inch

Max. Pressure: 10,000 psi

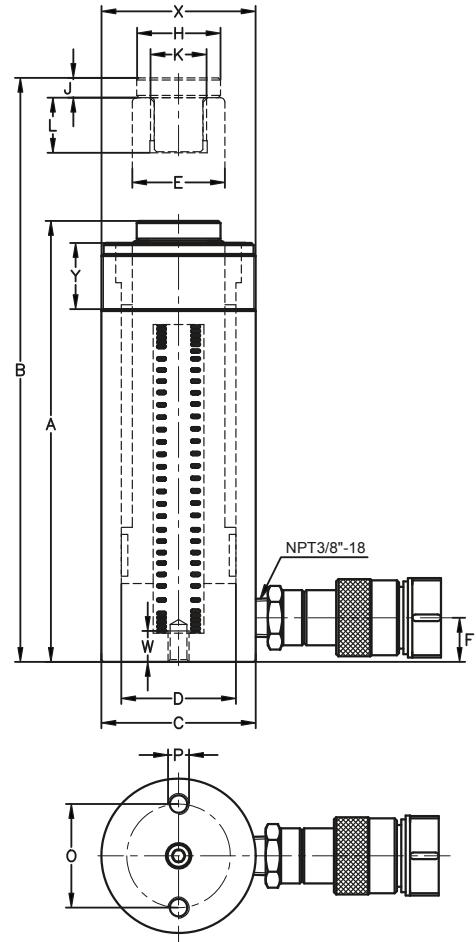
### Pump Selection

Selection appropriate pumps for offer optimum combination. For details, please refer to the section "hydraulic pumps".



## Features

- Single-acting, high strength spring return, easy to use.
- The exclusive guide Ring is designed absorbs eccentric loading without galling cylinder parts, reduces wear and extending life.
- Special painted surface to increase corrosion resistance.
- Easy fixturing with collar threads, plunger threads and base mounting holes.
- All models include NPT3/8" quick coupling and dust cap.
- Removable hardened grooved saddles.
- Customizable with special requirement.



## Quick Selection Chart

Cylinder Capacity	Stroke	Model Number	Cylinder Effective Area	Oil Capacity	Collapsed Height	Weight
					A	
ton (max.)	(inch)		(inch <sup>2</sup> )	(inch <sup>3</sup> )	(inch)	(lbs)
25 (23.2)	1.00	SRC25-26	33.2	5.2	5.47	13
	2.00	SRC25-50	33.2	10.1	6.50	15
	4.00	SRC25-102	33.2	20.6	8.46	18
	6.25	SRC25-158	33.2	32.0	10.75	22
	8.25	SRC25-210	33.2	42.5	12.72	26
	10.25	SRC25-261	33.2	52.8	14.72	31
	12.25	SRC25-311	33.2	62.9	16.73	33
	14.25	SRC25-362	33.2	73.3	18.74	37
50 (49.8)	2.00	SRC50-51	70.8	22.0	6.93	33
	4.00	SRC50-101	70.8	43.7	8.94	42
	6.25	SRC50-159	70.8	68.7	11.10	51
	13.25	SRC50-337	70.8	145.7	18.11	82
75 (71.8)	6.13	SRC75-156	103.8	98.9	11.22	73
	13.13	SRC75-333	103.8	221.0	19.37	119
95 (93.3)	6.63	SRC100-168	132.7	136.0	14.06	130
	10.25	SRC100-260	132.7	210.5	17.68	159

## Installation Reference Datasheet

Cylinder Capacity	Stroke	Model Number	Base to Advance Port	Base Mounting Holes			Collar Thread	Collar Thread Length
				Bolt Circle	Thread	Thd. Depth		
			F	O	P	W	X	Y
ton (max.)	(inch)		(inch)	(inch)		(inch)		(inch)
25 (23.2)	1.00	SRC25-26	0.98	2.28	½" - 13UN	0.75	3½" - 12	1.93
	2.00	SRC25-50	0.98	2.28	½" - 13UN	0.75	3½" - 12	1.93
	4.00	SRC25-102	0.98	2.28	½" - 13UN	0.75	3½" - 12	1.93
	6.25	SRC25-158	0.98	2.28	½" - 13UN	0.75	3½" - 12	1.93
	8.25	SRC25-210	0.98	2.28	½" - 13UN	0.75	3½" - 12	1.93
	10.25	SRC25-261	0.98	2.28	½" - 13UN	0.75	3½" - 12	1.93
	12.25	SRC25-311	0.98	2.24	½" - 13UN	0.75	3½" - 12	1.93
	14.25	SRC25-362	0.98	2.24	½" - 13UN	0.75	3½" - 12	1.93
50 (49.8)	2.00	SRC50-51	1.30	3.74	½" - 14UN	0.70	5" - 12	2.17
	4.00	SRC50-101	1.30	3.74	½" - 13UN	0.70	5" - 12	2.17
	6.25	SRC50-159	1.30	3.74	½" - 13UN	0.70	5" - 12	2.17
	13.25	SRC50-337	1.30	3.74	½" - 13UN	0.75	5" - 12	2.17
75 (71.8)	6.13	SRC75-156	1.60	4.33	½" - 13UN	0.60	5¾" - 12	1.73
	13.13	SRC75-333	1.60	4.33	½" - 13UN	0.60	5¾" - 12	1.73
95 (93.3)	6.63	SRC100-168	1.60	5.47	¾" - 10UN	0.98	6¾" - 12	1.73
	10.25	SRC100-260	1.60	5.47	¾" - 10UN	0.98	6¾" - 12	1.73

# DRC SERIES

## Double-Acting High Tonnage Cylinders



Capacity: 50-800 tons

Stroke: 1.97-11.81 inch

Max. Pressure: 10,000 psi

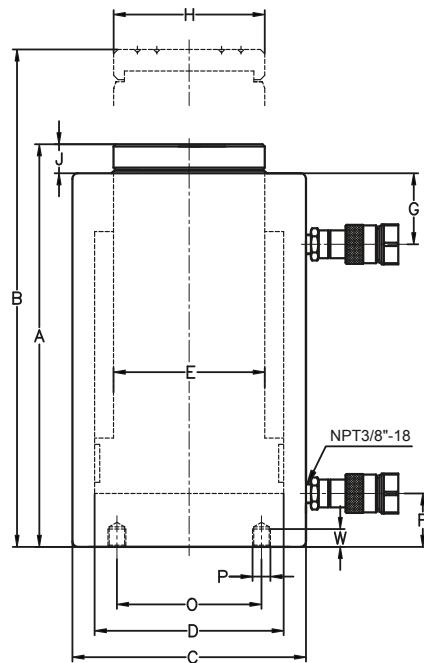
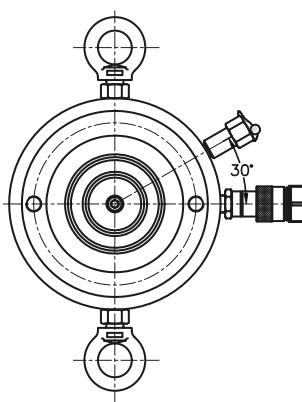
### Pump Selection

Selection appropriate pumps for offer optimum combination. For details, please refer to the section "hydraulic pumps".



### Flow control one-way check valve

To prevent the hydraulic cylinder from retracting in an instant and realize jacking at any position, a flow control one-way check valve can be selected to realize self-locking.



## Features

- Double acting, for positive retraction.
- Hard chrome plated high quality steel plungers.
- Plunger wiper reduces contamination, extending cylinder life.
- The exclusive guide Ring is designed absorbs eccentric loading without galling cylinder parts, reduces wear and extending life.
- Built-in safety valve prevents accidental over-pressurization.
- Special painted surface to increase corrosion resistance. Easy fixturing with base mounting holes.
- All model include quick couplings (NPT3/8"-18) and dust-proof cap.
- Removable hardened saddles protect plunger during lifting and pressing.

## Quick Selection Chart

Cylinder Capacity	Stroke	Model Number	Max. Cylinder Capacity		Oil Capacity		Cylinder effective Area		Collapsed Height	Extend Height	Outside Dia.	Cylinder Bore Dia.	Plunger Dia.	Weight
			Advance	Retract	Advance	Retract	Advance	Retract						
			(ton)	(inch)	(ton)	(inch <sup>3</sup> )	in 2		(inch)	(inch)	(inch)	(inch)	(inch)	(lbs)
50	1.97	DRC50-50	55	25.5	24.0	12.2	12.09	6.2	7.40	9.37	5.50	3.94	2.76	47
	3.94	DRC50-100	55	25.5	47.8	24.4	12.09	6.2	9.37	13.30	5.50	3.94	2.76	57
	5.91	DRC50-150	55	25.5	71.8	36.6	12.09	6.2	11.34	17.24	5.50	3.94	2.76	68
	7.87	DRC50-200	55	25.5	95.7	48.8	12.09	6.2	13.30	21.18	5.50	3.94	2.76	77
	9.84	DRC50-250	55	25.5	119.6	61.0	12.09	6.2	15.27	25.12	5.50	3.94	2.76	88
	11.81	DRC50-300	55	25.5	143.5	73.2	12.09	6.2	17.24	29.06	5.50	3.94	2.76	97
100	1.97	DRC100-50	107.7	49	47.0	23.0	23.71	11.62	8.50	10.47	7.40	5.50	3.94	93
	3.94	DRC100-100	107.7	49	94.0	46.0	23.71	11.62	10.47	14.40	7.40	5.50	3.94	108
	5.91	DRC100-150	107.7	49	141.0	69.0	23.71	11.62	12.44	18.35	7.40	5.50	3.94	123
	7.87	DRC100-200	107.7	49	188.0	92.0	23.71	11.62	14.40	22.28	7.40	5.50	3.94	139
	9.84	DRC100-250	107.7	49	235.0	115.0	23.71	11.62	16.38	26.22	7.40	5.50	3.94	147
	11.81	DRC100-300	107.7	49	282.0	138.0	23.71	11.62	18.35	30.16	7.40	5.50	3.94	154
150	1.97	DRC150-50	158.8	79.7	69.2	34.5	35.03	17.51	8.90	10.87	8.98	6.70	4.72	146
	3.94	DRC150-100	158.8	79.7	138.5	69.0	35.03	17.51	10.87	14.80	8.98	6.70	4.72	172
	5.91	DRC150-150	158.8	79.7	207.7	103.5	35.03	17.51	12.83	18.74	8.98	6.70	4.72	198
	7.87	DRC150-200	158.8	79.7	277.0	137.9	35.03	17.51	14.80	22.68	8.98	6.70	4.72	225
	9.84	DRC150-250	158.8	79.7	346.2	172.4	35.03	17.51	16.77	26.62	8.98	6.70	4.72	251
	11.81	DRC150-300	158.8	79.7	415.3	206.9	35.03	17.51	18.74	30.55	8.98	6.70	4.72	278
200	3.94	DRC200-100	219.8	87.5	191.7	83.8	48.67	21.24	11.65	15.59	10.55	7.87	5.90	213
	5.91	DRC200-150	219.8	87.5	287.5	125.8	48.67	21.24	13.62	19.53	10.55	7.87	5.90	267
	7.87	DRC200-200	219.8	87.5	383.4	167.7	48.67	21.24	15.59	23.46	10.55	7.87	5.90	291
	11.81	DRC200-300	219.8	87.5	575.0	251.5	48.67	21.24	19.53	31.34	10.55	7.87	5.90	342
300	3.94	DRC300-100	344.3	165.4	299.4	144.2	75.95	36.58	12.87	16.80	12.60	9.84	7.09	397
	7.87	DRC300-200	344.3	165.4	598.8	288.4	75.95	36.58	16.80	24.69	12.60	9.84	7.09	485
	11.81	DRC300-300	344.3	165.4	898.0	432.6	75.95	36.58	20.75	32.56	12.60	9.84	7.09	573
400	3.94	DRC400-100	430.8	165	375.5	143.7	95.32	48.51	13.98	17.90	14.57	11.02	8.27	562
	7.87	DRC400-200	430.8	165	751.0	287.4	95.32	48.51	17.90	25.79	14.57	11.02	8.27	683
	11.81	DRC400-300	430.8	165	1126.6	431.0	95.32	48.51	21.85	33.66	14.57	11.02	8.27	827
500	3.94	DRC500-100	511.4	194.8	490.5	191.2	124.47	62.15	14.76	18.70	16.54	12.60	9.84	719
	7.87	DRC500-200	511.4	194.8	981.0	382.4	124.47	62.15	18.70	26.57	16.54	12.60	9.84	794
	11.81	DRC500-300	511.4	194.8	1471.5	573.6	124.47	62.15	22.64	34.45	16.54	12.60	9.84	1019
600	3.94	DRC600-100	630	248.8	620.9	245.3	157.64	78.82	17.17	21.10	19.70	14.17	11.02	1195
	7.87	DRC600-200	630	248.8	1241.7	490.5	157.64	78.82	21.10	28.98	19.70	14.17	11.02	1398
	11.81	DRC600-300	630	248.8	1862.6	735.8	157.64	78.82	25.04	36.85	19.70	14.17	11.02	1601
800	3.94	DRC800-100	879	288	766.8	276.0	194.68	97.34	18.78	22.72	21.65	15.75	12.60	1755
	7.87	DRC800-200	879	288	1533.7	552.0	194.68	97.34	22.72	30.59	21.65	15.75	12.60	2081
	11.81	DRC800-300	879	288	2300.5	827.8	194.68	97.34	26.65	38.46	21.65	15.75	12.60	2407

## Installation Reference Datasheet

Cylinder Capacity (ton)	Stroke (inch)	Model Number	Base to Advance Port	Top to Return Port	Saddle Dia.	Saddle Protrusion from Plunger	Base Mounting hole		
			F (inch)	G (inch)	H (inch)	J (inch)	O (inch)	P (inch)	W (inch)
50	1.97	DRC50-50	1.60	1.60	2.76	0.94	2.76	4-M16	0.50
	3.94	DRC50-100	1.60	1.60	2.76	0.94	2.76	4-M16	0.50
	5.91	DRC50-150	1.60	1.60	2.76	0.94	2.76	4-M16	0.50
	7.87	DRC50-200	1.60	1.60	2.76	0.94	2.76	4-M16	0.50
	9.84	DRC50-250	1.60	1.60	2.76	0.94	2.76	4-M16	0.50
	11.81	DRC50-300	1.60	1.60	2.76	0.94	2.76	4-M16	0.50
100	1.97	DRC100-50	2.13	2.13	3.94	0.94	3.94	4-M20	0.63
	3.94	DRC100-100	2.13	2.13	3.94	0.94	3.94	4-M20	0.63
	5.91	DRC100-150	2.13	2.13	3.94	0.94	3.94	4-M20	0.63
	7.87	DRC100-200	2.13	2.13	3.94	0.94	3.94	4-M20	0.63
	9.84	DRC100-250	2.13	2.13	3.94	0.94	3.94	4-M20	0.63
	11.81	DRC100-300	2.13	2.13	3.94	0.94	3.94	4-M20	0.63
150	1.97	DRC150-50	2.28	2.28	4.72	0.94	5.12	4-M20	0.63
	3.94	DRC150-100	2.28	2.28	4.72	0.94	5.12	4-M20	0.63
	5.91	DRC150-150	2.28	2.28	4.72	0.94	5.12	4-M20	0.63
	7.87	DRC150-200	2.28	2.28	4.72	0.94	5.12	4-M20	0.63
	9.84	DRC150-250	2.28	2.28	4.72	0.94	5.12	4-M20	0.63
	11.81	DRC150-300	2.28	2.28	4.72	0.94	5.12	4-M20	0.63
200	3.94	DRC200-100	2.52	2.68	5.90	1.14	6.30	4-M24	0.94
	5.91	DRC200-150	2.52	2.68	5.90	1.14	6.30	4-M24	0.94
	7.87	DRC200-200	2.52	2.68	5.90	1.14	6.30	4-M24	0.94
	11.81	DRC200-300	2.52	2.68	5.90	1.14	6.30	4-M24	0.94
300	3.94	DRC300-100	2.90	3.00	7.09	1.38	8.66	4-M24	0.94
	7.87	DRC300-200	2.90	3.00	7.09	1.38	8.66	4-M24	0.94
	11.81	DRC300-300	2.90	3.00	7.09	1.38	8.66	4-M24	0.94
400	3.94	DRC400-100	3.27	3.27	8.27	1.38	9.45	4-M24	0.94
	7.87	DRC400-200	3.27	3.27	8.27	1.38	9.45	4-M24	0.94
	11.81	DRC400-300	3.27	3.27	8.27	1.38	9.45	4-M24	0.94
500	3.94	DRC500-100	3.66	3.66	9.69	1.38	11.02	4-M24	0.94
	7.87	DRC500-200	3.66	3.66	9.69	1.38	11.02	4-M24	0.94
	11.81	DRC500-300	3.66	3.66	9.69	1.38	11.02	4-M24	0.94
600	3.94	DRC600-100	4.45	4.53	11.02	1.57	11.81	4-M24	0.94
	7.87	DRC600-200	4.45	4.53	11.02	1.57	11.81	4-M24	0.94
	11.81	DRC600-300	4.45	4.53	11.02	1.57	11.81	4-M24	0.94
800	3.94	DRC800-100	4.45	4.45	12.60	2.24	14.96	4-M24	0.94
	7.87	DRC800-200	4.45	4.45	12.60	2.24	14.96	4-M24	0.94
	11.81	DRC800-300	4.45	4.45	12.60	2.24	14.96	4-M24	0.94

# SLC SERIES

## Single-Acting Low Profile Cylinders



Capacity: 10-150 tons

Stroke: 1.5-3.15 inch

Max. Pressure: 10,000 psi

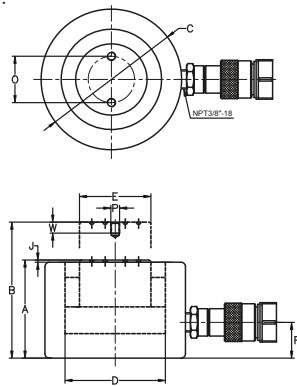
### Pump Selection

Selection appropriate pumps for offer optimum combination. For details, please refer to the section "hydraulic pumps".



## Features

- Low profile design, fit in narrow application area.
- No saddle required with grooved plunger end.
- Two plunger threads on grooved plunger end for particular needs.
- Single-acting, spring return.
- Special painted surface to increase corrosion resistance.
- Easy carrying with handles on some models (Capacity over 50tons).
- All models include quick coupling and dust cap.



## Mounting Hole Dimensions

Model Number	Bolt Circle	Thread	Thread Depth
	O	P	W
	(inch)		(inch)
SLC10-38	1.02	M4	0.30
SLC20-45	1.54	M5	0.30
SLC30-64	1.54	M5	0.30
SLC50-60	1.54	M5	0.30
SLC75-50	2.17	M8	0.40
SLC100-57	2.17	M8	0.40
SLC150-51	2.17	M8	0.40
SLC150-80	2.17	M8	0.40

Cylinder Capacity	Stroke	Model Number	Oil Capacity (inch³)	Collapsed Height	Cylinder effective Area	Extend Height	Outside Dia.	Cylinder Bore Dia.	Plunger Dia.	Base to Advance Port	Saddle Protrusion from Plunger	Weight (lbs)
				A (inch)	in 2 (inch)	B (inch)	C (inch)	D (inch)	E (inch)	F (inch)	J (inch)	
10 (10.1)	1.5	SLC10-38	3.7	3.46	2.33	4.96	3.07	1.77	1.38	0.75	0.08	9
20 (20.1)	1.75	SLC20-45	8.5	3.82	4.8	5.59	3.78	2.48	1.97	0.75	0.08	15
30 (29.5)	2.52	SLC30-64	17.7	4.61	6.98	7.13	4.29	3	2.36	0.75	0.08	22
50 (54.9)	1.97	SLC50-60	28.7	4.57	12.09	6.54	4.76	3.95	3.15	0.83	0.08	42
75 (71.8)	1.97	SLC75-50	35.6	4.57	17.98	6.54	6.1	4.8	3.94	0.83	0.08	49
100 (88.7)	2.25	SLC100-57	53.5	5.55	23.72	7.8	7	5.5	4.4	1.22	0.08	54
150 (138.6)	2.01	SLC150-51	72.3	5.55	35.96	7.56	8.46	6.7	5.7	1.1	0.08	93
150 (138.6)	3.15	SLC150-80	113.5	6.7	35.96	9.84	8.46	6.7	5.7	1.1	0.08	110

# SFC SERIES

## Single-Acting Low Flat Cylinders



Capacity: 10-150 tons

Stroke: 0.44-0.63 inch

Max. Pressure: 10,000 psi

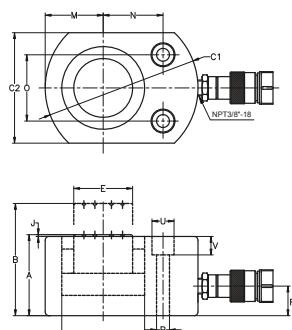
### Pump Selection

Selection appropriate pumps for offer optimum combination. For details, please refer to the section "hydraulic pumps".



## Features

- Flat design used in confined spaces.
- Single-acting, spring return.
- No saddle required with grooved plunger end.
- Two plunger threads on grooved plunger end for particular needs.
- Special painted surface to increase corrosion resistance.
- Easy carrying with handles on some models (Capacity over 75tons).
- All models include quick coupling and dust cap.



## Mounting Hole Dimensions

Model Number	Bolt Circle	Hole Dia.	Counter Bore Dia.	Counter Bore Depth
	O	P	U	V
	(inch)		(inch)	
SFC10-11	1.45	0.28	0.42	0.3
SFC20-12	1.95	0.4	0.6	0.4
SFC30-13	2.05	0.4	0.63	0.44
SFC50-16	2.62	0.43	0.75	0.5
SFC75-16	3	0.53	0.8	0.56
SFC100-16	3	0.53	0.8	0.56
SFC150-16	4.62	0.53	0.8	0.56

Cylinder Capacity	Stroke	Model Number	Oil Capacity	Collapsed Height	Cylinder effective Area	Extend Height	Outside Dia.	Cylinder Bore Dia.	Plunger Dia.	Base to Advance Port	Saddle Protrusion from Plunger	Plunger to Base	Plunger to Mounting Hole	Weight
				A	in 2	B	C1 x C2	D	E					
				(ton)	(inch)	(inch³)	(inch)	(inch)	(inch)					(lbs)
10 (10.1)	0.44	SFC10-11	1.1	1.73	2.33	2.17	3.27 x 2.36	1.77	1.38	0.9	0.04	1.25	1.34	3
20 (20.1)	0.44	SFC20-12	2.3	2.05	4.8	2.52	4.02 x 3.15	2.48	1.97	0.9	0.04	1.6	1.54	5
30 (29.5)	0.5	SFC30-13	3.6	2.28	6.98	2.8	4.61 x 3.82	3	2.36	0.9	0.04	1.9	1.85	9
50 (54.9)	0.63	SFC50-16	7.6	2.64	12.09	3.27	5.91 x 4.92	3.95	3.15	0.9	0.04	2.48	2.36	16
75 (71.8)	0.63	SFC75-16	11.4	3.1	17.98	3.78	6.97 x 5.98	4.8	3.95	0.83	0.04	3	2.87	28
100 (88.7)	0.63	SFC100-16	15	3.43	23.72	4.06	7.99 x 7.05	5.5	4.4	0.9	0.04	3.52	3.31	34
150 (138.6)	0.63	SFC150-16	22.6	3.86	35.96	4.5	9.29 x 8.35	6.7	5.7	0.98	0.08	4.17	3.62	63

# SHT SERIES

## Single-Acting High Tonnage Cylinders



Capacity: 50-800 tons

Stroke: 1.97-11.81 inch

Max. Pressure: 10,000 psi

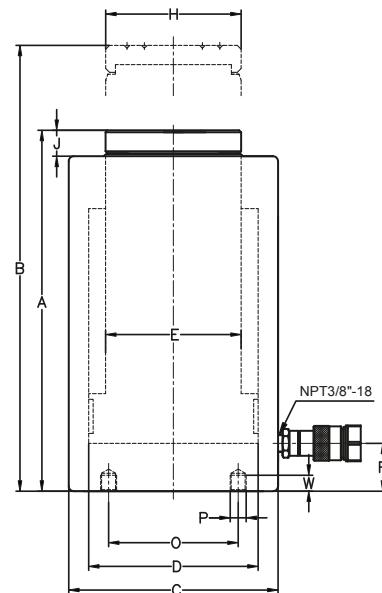
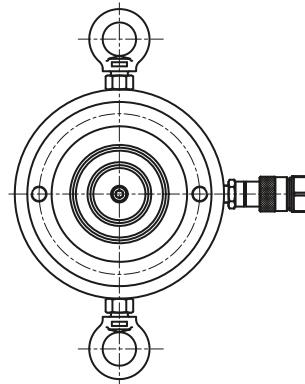
### Pump Selection

Selection appropriate pumps for offer optimum combination. For details, please refer to the section "hydraulic pumps".



## Features

- Single acting, load return.
- Hard chrome plated high quality steel plungers.
- Plunger wiper reduces contamination, extending cylinder life.
- The exclusive guide ring is designed absorbs eccentric loading without galling cylinder parts, reduces wear and extending life.
- Special painted surface to increase corrosion resistance.
- Easy fixturing with base mounting holes.
- All models include quick couplings (NPT3/8"-18) and dust-proof cap.
- Removable hardened saddles protect plunger during lifting and pressing.



## Quick Selection Chart

Cylinder Capacity	Stroke	Model Number	Cylinder Effective Area (inch <sup>2</sup> )	Oil Capacity (inch <sup>2</sup> )	Collapsed Height	Extend Height
					A (inch <sup>2</sup> )	B (inch <sup>2</sup> )
ton (max)	(inch)					
50 (55)	1.97	SHT50-50	12.17	23.9	6.77	9.37
	3.94	SHT50-100	12.17	47.8	8.74	13.30
	5.91	SHT50-150	12.17	71.8	10.71	17.24
	7.87	SHT50-200	12.17	95.7	12.68	21.18
	11.81	SHT50-300	12.17	143.5	16.61	29.06
100 (107.7)	1.97	SHT100-50	23.85	47	7.76	10.47
	3.94	SHT100-100	23.85	94	10.76	14.40
	5.91	SHT100-150	23.85	141	13.76	18.35
	7.87	SHT100-200	23.85	188	16.76	22.28
	11.81	SHT100-300	23.85	281.9	17.6	30.16
150 (158.8)	1.97	SHT150-50	35.17	69.2	8.13	10.87
	3.94	SHT150-100	35.17	138.5	10.08	14.80
	5.91	SHT150-150	35.17	207.7	12.05	18.74
	7.87	SHT150-200	35.17	276.9	14.02	22.68
	11.81	SHT150-300	35.17	415.3	17.95	30.55
200 (219.8)	1.97	SHT200-50	48.67	95.8	8.9	11.65
	5.91	SHT200-150	48.67	287.5	14.9	19.53
	11.81	SHT200-300	48.67	575	19.53	31.34
300 (343.4)	1.97	SHT300-50	76.4	149.7	10.90	12.87
	5.91	SHT300-150	76.4	449.1	14.84	20.75
	11.81	SHT300-300	76.4	898.1	20.75	32.56
400 (430.8)	1.97	SHT400-50	95.40	187.8	12.00	13.98
	5.91	SHT400-150	95.40	563.3	15.94	21.85
	11.81	SHT400-300	95.40	1126.6	21.85	33.66
500 (511.4)	1.97	SHT500-50	124.60	245.3	12.80	14.76
	5.91	SHT500-150	124.60	735.8	16.73	22.64
	11.81	SHT500-300	124.60	1471.5	22.64	34.45
600 (630)	1.97	SHT600-50	157.70	310.4	15.20	17.17
	5.91	SHT600-150	157.70	931.3	19.13	25.04
	11.81	SHT600-300	157.70	1862.6	25.04	36.85
800 (879)	1.97	SHT800-50	194.68	383.2	16.80	18.78
	5.91	SHT800-150	194.68	1149.7	20.75	26.65
	11.81	SHT800-300	194.68	2300.5	26.65	38.46

## Installation Reference Datasheet

Model Number	Outside Dia.	Cylinder Bore Dia.	Plunger Dia.	Base to Advance Port	Saddle Dia. (inch)	Saddle Protrusion from Plunger	Base Mounting Holes			Weight (lbs)
	C (inch)	D (inch)	E (inch)	F (inch)	H (inch)	J (inch)	O (inch)	P	W (inch)	
SHT50-50	5.5	3.94	2.76	1.6	2.76	0.94	2.76	4-M16	0.51	47
SHT50-100	5.5	3.94	2.76	1.6	2.76	0.94	2.76	4-M16	0.51	57
SHT50-150	5.5	3.94	2.76	1.6	2.76	0.94	2.76	4-M16	0.51	68
SHT50-200	5.5	3.94	2.76	1.6	2.76	0.94	2.76	4-M16	0.51	77
SHT50-300	5.5	3.94	2.76	1.6	2.76	0.94	2.76	4-M16	0.51	97
SHT100-50	7.4	5.5	3.94	2.13	3.94	0.94	3.94	4-M20	0.63	93
SHT100-100	7.4	5.5	3.94	2.13	3.94	0.94	3.94	4-M20	0.63	108
SHT100-150	7.4	5.5	3.94	2.13	3.94	0.94	3.94	4-M20	0.63	123
SHT100-200	7.4	5.5	3.94	2.13	3.94	0.94	3.94	4-M20	0.63	139
SHT100-300	7.4	5.5	3.94	2.13	3.94	0.94	3.94	4-M20	0.63	154
SHT150-50	8.98	6.7	4.72	2.28	4.72	0.94	5.12	4-M20	0.63	97
SHT150-100	8.98	6.7	4.72	2.28	4.72	0.94	5.12	4-M20	0.63	126
SHT150-150	8.98	6.7	4.72	2.28	4.72	0.94	5.12	4-M20	0.63	154
SHT150-200	8.98	6.7	4.72	2.28	4.72	0.94	5.12	4-M20	0.63	183
SHT150-300	8.98	6.7	4.72	2.28	4.72	0.94	5.12	4-M20	0.63	240
SHT200-50	10.55	7.87	5.91	2.52	5.9	1.14	6.3	4-M24	0.63	185
SHT200-150	10.55	7.87	5.91	2.52	5.9	1.14	6.3	4-M24	0.63	260
SHT200-300	10.55	7.87	5.91	2.52	5.9	1.14	6.3	4-M24	0.63	335
SHT300-50	12.6	9.84	7.09	2.9	7.09	1.38	8.66	4-M24	0.63	342
SHT300-150	12.6	9.84	7.09	2.9	7.09	1.38	8.66	4-M24	0.63	430
SHT300-300	12.6	9.84	7.09	2.9	7.09	1.38	8.66	4-M24	0.63	562
SHT400-50	14.57	11.02	8.27	3.27	8.27	1.38	9.45	4-M24	0.94	529
SHT400-150	14.57	11.02	8.27	3.27	8.27	1.38	9.45	4-M24	0.94	683
SHT400-300	14.57	11.02	8.27	3.27	8.27	1.38	9.45	4-M24	0.94	915
SHT500-50	16.54	12.6	9.45	3.66	9.45	1.38	11.02	4-M24	0.94	628
SHT500-150	16.54	12.6	9.45	3.66	9.45	1.38	11.02	4-M24	0.94	778
SHT500-300	16.54	12.6	9.45	3.66	9.45	1.38	11.02	4-M24	0.94	1003
SHT600-50	19.7	14.17	11.02	4.45	11.02	1.57	11.81	4-M24	0.94	1074
SHT600-150	19.7	14.17	11.02	4.45	11.02	1.57	11.81	4-M24	0.94	1276
SHT600-300	19.7	14.17	11.02	4.45	11.02	1.57	11.81	4-M24	0.94	1581
SHT800-50	21.65	15.75	12.6	4.45	12.6	2.24	14.96	4-M24	0.94	1570
SHT800-150	21.65	15.75	12.6	4.45	12.6	2.24	14.96	4-M24	0.94	1896
SHT800-300	21.65	15.75	12.6	4.45	12.6	2.24	14.96	4-M24	0.94	2385

# SLL SERIES

## Single-Acting Low Profile Lock-Nut Cylinders



Capacity: 60-520 tons

Stroke: 1.77-1.97 inch

Max. Pressure: 10,000 psi

### Pump Selection

Selection appropriate pumps for offer optimum combination. For details, please refer to the section "hydraulic pumps".

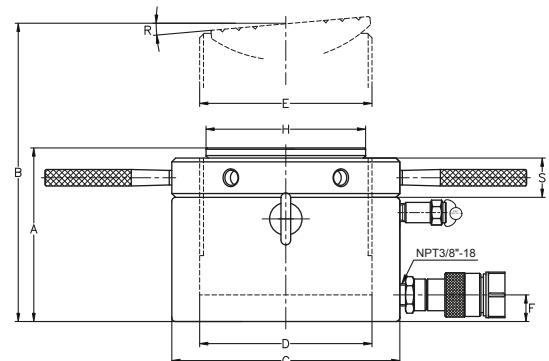


### Features

- Single-acting, load return.
- Low profile design, fit in narrow application area.
- Special painted surface to increase corrosion resistance.
- Lock nut ensure the safety of long time load holding.
- All models include quick couplings (NPT3/8"-18) and dust-proof cap.
- Overflow port function could limit the stroke.
- Removable hardened grooved saddles.

### Integrated Tilt Saddles

ALL SLL-Series cylinders include integral tilt saddles with maximum tilt angles up to 5°.



Cylinder Capacity (ton)	Stroke (inch)	Model Number	Cylinder Effective Area	Oil Capacity (inch³)	Collapsed Height	Extend Height	Outside Dia.	Cylinder Bore Dia.	Plunger Dia. Thread	Base to Advance Port	Saddle Dia.	Saddle Max. Tilt Angle	Lock Nut Height	Weight (lbs)
			A		B	C	D	E	F	H	R	S		
			(inch)		(inch)	(inch)	(inch)	(inch)	(mm)	(inch)	(inch)	(inch)	(inch)	
60(60.6)	1.97	SLL60-50	13.67	26.36	4.92	6.89	5.51	4.17	Tr104x4	0.75	3.78	4°	1.10	33
100(102.7)	1.97	SLL100-50	22.83	44.79	5.51	7.36	7.09	5.39	Tr13x6	0.83	4.96	4°	1.22	60
160(161.9)	1.97	SLL160-50	35.99	63.46	5.83	7.6	8.62	6.3	Tr17x6	1.18	6.3	4°	1.57	100
200(199.9)	1.97	SLL200-50	44.72	78.42	6.1	7.87	9.45	7.09	Tr19x6	1.18	7.09	4°	1.69	126
260(256.7)	1.97	SLL260-50	58.06	100.69	6.26	10.38	10.83	8.5	Tr215x6	1.18	7.87	4°	1.73	163
400(391.6)	1.97	SLL400-50	89.64	153.6	7.01	8.78	13.19	10.83	Tr266x6	1.57	9.88	4°	2.17	295
520(511.4)	1.97	SLL500-50	113.18	194.68	7.56	9.33	15.75	12.01	Tr304x6	1.89	11.81	3°	2.44	414

# SHTL SERIES

## Single-Acting High Tonnage Lock-Nut Cylinders



Capacity: 50-800 tons

Stroke: 1.97-11.81 inch

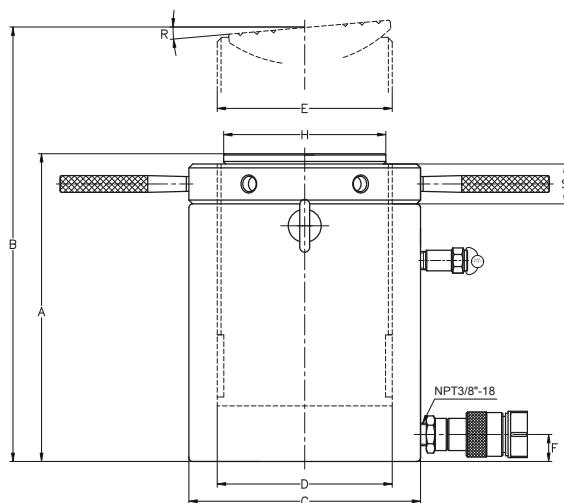
Max. Pressure: 10,000 psi

### Standard Features

- Lock nut ensure the safety of long time load holding.
- Top and side mounted lifting eyes.
- Overflow port function could limit the stroke.
- QCS-A-NPT3/8 coupler and dustcap.

## Features

- Single acting, loads return.
- Special painted surface to increase corrosion resistance.
- Lock nut ensure the safety of long time load holding.
- All models include quick couplings (NPT3/8"-18) and dust-proof cap.
- Overflow port function could limit the stroke.
- The exclusive guide ring is designed absorbs eccentric loading without galling cylinder parts, reduces wear and extending life.
- Removable hardened saddles protect plunger during lifting and pressing.



### Pump Selection

Selection appropriate pumps for offer optimum combination. For details, please refer to the section "hydraulic pumps".



### Low Profile Lock-Nut Cylinders

When low height with high force is required, pancake cylinders with lock nut offer the solution to lift the first few centimetres.

### Integrated Tilt Saddles

ALL SLL-Series cylinders include integral tilt saddles with maximum tilt angles up to 5°.



Cylinder Capacity	Stroke	Model Number	Cylinder Effective Area	Oil Capacity	Collapsed Height	Extend Height	Outside Dia.	Cylinder Bore Dia.	Plunger Dia. (Thread)	Base to Advance Port	Saddle Dia.	Saddle Max. Tilt Angle	Lock Nut Height	Weight
					A	B	C	D	E	F	H	R	S	
(ton)	(inch)		(inch <sup>2</sup> )	(inch <sup>3</sup> )	(inch)	(inch)	(inch)	(mm)	(inch)	(inch)	(inch)	(inch)	(inch)	(lbs)
50	1.97	SHTL50-50	12.17	23.9	5.56	8.27	5.51	3.94	Tr99x4	0.94	3.54	5°	1.18	40
50	3.94	SHTL50-100	12.17	47.8	6.38	11.6	6.3	3.94	Tr99x4	0.94	3.54	5°	1.18	55
50	5.91	SHTL50-150	12.17	71.8	8.15	14.36	7.48	3.94	Tr99x4	0.94	3.54	5°	1.18	73
50	7.87	SHTL50-200	12.17	95.7	9.92	17.12	8.66	3.94	Tr99x4	0.94	3.54	5°	1.18	90
50	11.81	SHTL50-300	12.17	143.5	13.15	23.06	10.55	3.94	Tr99x4	0.94	3.54	5°	1.18	117
100	1.97	SHTL100-50	23.85	47	6.1	9.41	6.3	5.51	Tr13x6	1.02	5.12	5°	1.57	75
100	3.94	SHTL100-100	23.85	94	8.39	15.49	7.48	5.51	Tr13x6	1.02	5.12	5°	1.57	110
100	5.91	SHTL100-150	23.85	141	10.39	20.63	8.66	5.51	Tr13x6	1.02	5.12	5°	1.57	134
100	7.87	SHTL100-200	23.85	188	12.39	25.76	9.84	5.51	Tr13x6	1.02	5.12	5°	1.57	161
100	11.81	SHTL100-300	23.85	281.9	16.14	35.1	12.6	5.51	Tr13x6	1.02	5.12	5°	1.57	205
150	1.97	SHTL150-50	35.17	69.2	7.1	10.56	7.48	6.7	Tr15x6	1.38	6.3	5°	1.5	123
150	3.94	SHTL150-100	35.17	138.5	10.14	18.36	9.06	6.7	Tr15x6	1.38	6.3	5°	1.5	154
150	5.91	SHTL150-150	35.17	207.7	12.05	23.18	10.63	6.7	Tr15x6	1.38	6.3	5°	1.5	183
150	7.87	SHTL150-200	35.17	276.9	14.02	28.3	11.81	6.7	Tr15x6	1.38	6.3	5°	1.5	214
150	11.81	SHTL150-300	35.17	415.3	17.95	37.26	14.57	6.7	Tr15x6	1.38	6.3	5°	1.5	273
200	1.97	SHTL200-50	48.67	97.3	7.36	10.89	7.48	7.48	Tr17x6	1.38	6.3	5°	1.5	205
200	5.91	SHTL200-150	48.67	287.5	13.5	22.1	10.55	7.48	Tr17x6	1.38	6.3	5°	1.5	289
200	11.81	SHTL200-300	48.67	575	19	32.4	14.96	7.48	Tr17x6	1.38	6.3	5°	1.5	417
300	1.97	SHTL300-50	76.04	149.4	10.2	15.76	9.06	9.06	Tr24x6	1.38	8.66	5°	2.36	395
300	5.91	SHTL300-150	76.04	448.1	15.5	26.5	12.6	9.06	Tr24x6	1.38	8.66	5°	2.36	529
300	11.81	SHTL300-300	76.04	898.1	21.46	37.46	19.29	9.06	Tr24x6	1.38	8.66	5°	2.36	730
400	1.97	SHTL400-50	95.4	187.8	11.6	17.78	10.55	11.02	Tr27x6	2.76	10.08	5°	2.36	586
400	5.91	SHTL400-150	95.4	563.3	18	27.78	14.57	11.02	Tr27x6	2.76	10.08	5°	2.36	761
400	11.81	SHTL400-300	95.4	1129	21.85	35.46	20.08	11.02	Tr27x6	2.76	10.08	5°	2.36	1023
500	1.97	SHTL500-50	124.6	245.3	12.4	16.4	14.17	12.6	Tr35x6	3.15	12.05	5°	3.15	789
500	5.91	SHTL500-150	124.6	735.8	20.4	32.4	18.11	12.6	Tr35x6	3.15	12.05	5°	3.15	1001
500	11.81	SHTL500-300	124.6	1471.5	25.15	41.26	21.65	12.6	Tr35x6	3.15	12.05	5°	3.15	1316
600	1.97	SHTL600-50	157.7	310	15.2	20.2	16.54	14.17	Tr35x6	3.15	12.05	5°	3.15	1080
600	5.91	SHTL600-150	157.7	930	25.2	40.2	19.69	14.17	Tr35x6	3.15	12.05	5°	3.15	1354
600	11.81	SHTL600-300	157.7	1862.6	31.15	51.85	25.15	14.17	Tr35x6	3.15	12.05	5°	3.15	1764
800	1.97	SHTL800-50	194.68	383.6	16.3	21.75	18.11	15.75	Tr39x6	3.94	15.75	5°	3.15	1858
800	5.91	SHTL800-150	194.68	1149.6	26.3	40.75	21.65	15.75	Tr39x6	3.94	15.75	5°	3.15	2266
800	11.81	SHTL800-300	194.68	2300.5	37.46	56.15	29.45	15.75	Tr39x6	3.94	15.75	5°	3.15	2879

# SHC SERIES

## Single-Acting Hollow Cylinders



### Features

- Single-acting, high strength spring return, easy to use.
- Hollow plunger design allows for both pull and push forces.
- Dual dust-proof ring structure remains cylinder internal cleaning.
- The exclusive guide ring is designed absorbs eccentric loading without galling cylinder parts, reduces wear and extending life.
- Special painted surface to increase corrosion resistance.
- Easy fixturing with collar threads, plunger threads and base mounting holes.
- All models include quick couplings ( NPT3/8"-18 ) and dust-proof cap.
- Floating center tube is designed to increase product life.

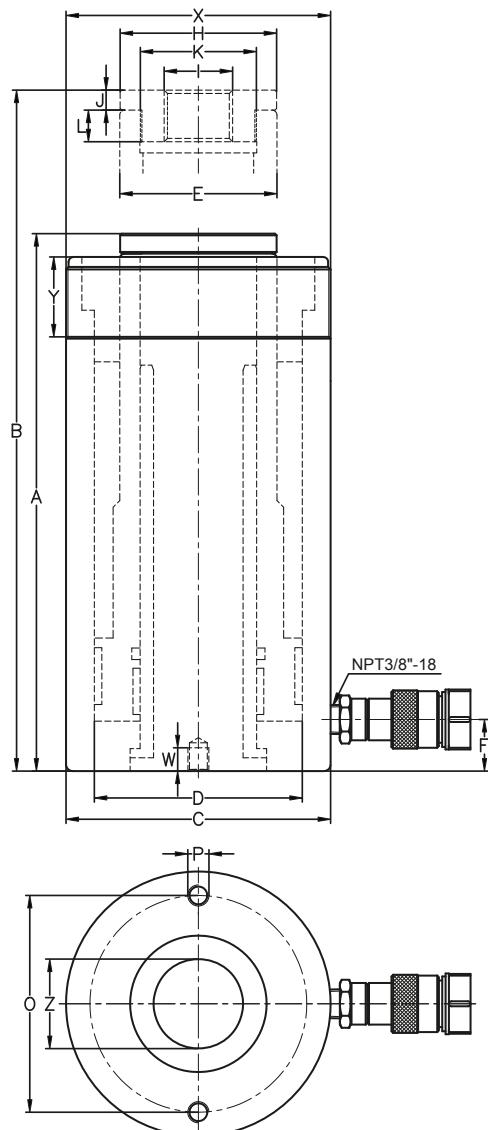
Capacity: 13-100 tons

Stroke: 1.65-6.1 inch

Max. Pressure: 10,000 psi

### Pump Selection

Selection appropriate pumps for offer optimum combination. For details, please refer to the section "hydraulic pumps".



**Saddle**

ALL SHC-Series cylinders are equipped with smooth saddles.

**Quick Selection Chart**

Cylinder Capacity	Stroke	Model Number	Oil Capacity (inch³)	Collapsed Height	Cylinder effective Area	Extended Height	Outside Dia.	Cylinder Bore Dia.	Plunger Dia.	Weight (lbs)
				A (inch)	in 2 (inch)	B (inch)	C (inch)	D (inch)	E (inch)	
ton (Max.)	(inch)									
13 (12.5)	1.65	SHC130-42	4.6	5.12	2,79	6.77	3.00	2.17	1.40	7
	3.00	SHC130-76	8.4	7.24	2,79	10.24	3.00	2.17	1.40	11
20 (21.5)	1.93	SHC200-49	10.6	6.38	5,11	8.30	3.94	3.00	2.15	18
	6.10	SHC200-155	33.6	12.05	5,11	18.15	3.94	3.00	2.15	33
30 (32.6)	2.52	SHC300-64	18.7	7.10	7,44	9.60	4.53	3.54	2.54	25
	6.10	SHC300-155	45.4	13.00	7,44	19.10	4.53	3.54	2.54	47
60 (57.6)	3.00	SHC600-76	39.1	9.72	13,02	12.72	6.26	4.92	3.72	62
	6.00	SHC600-153	78.6	12.72	13,02	18.74	6.26	4.92	3.72	78
95 (93.1)	3.00	SHC1000-76	62.7	10.00	20,92	13.00	8.35	6.50	4.92	140

**Installation Reference Datasheet**

Model Number	Base to Advance Port	Saddle Dia.	Saddle Protr. from Plgr.	Saddle Internal Thread	Plunger Internal Thread	Plunger Thread Length	Base Mounting Holes			Collar Thread	Collar Thread Length	Center Hole Dia				
							Bolt Circle	Thread	Thd. Depth							
							F (inch)	H (inch)	I (inch)	J	K	L (inch)	O (inch)	P	W (inch)	X (inch)
SHC130-42	0.80	\	\	\	¾"-16UN	0.63	2.00	5/16"-18UNC	0.35	2½-16	1.18	0.77				
SHC130-76	0.80	\	\	\	\	2.00	5/16"-18UNC	0.35	2½-16	1.18	0.77					
SHC200-49	0.90	2.13	0.35	1"-8	1⅓"-16UN	0.75	3.25	¾"-16UNC	0.37	3½-16	1.50	1.06				
SHC200-155	0.90	2.13	0.35	1"-8	1⅓"-16UN	0.75	3.25	¾"-16UNC	0.37	3½-16	1.50	1.06				
SHC300-64	0.98	2.52	0.35	1¼"-7	1⅓"-16UN	0.87	3.63	¾"-16UNC	0.55	4½-12	1.65	1.30				
SHC300-155	0.98	2.52	0.35	1¼"-7	1⅓"-16UN	0.87	3.63	¾"-16UNC	0.55	4½-12	1.65	1.30				
SHC600-76	1.22	3.7	0.47	1⅛"-5½"	2¾"-16UN	0.75	5.13	½"-13UNC	0.55	4½-16	1.90	2.12				
SHC600-153	1.22	3.7	0.47	1⅔"-5⅓"	2¾"-16UN	0.75	5.13	½"-13UNC	0.55	4½-16	1.90	2.12				
SHC1000-76	1.34	4.92	0.47	2½"-8	4"-16UN	0.98	7.00	5/8"-11UNC	0.75	8½"-12	2.36	3.10				

# DHC SERIES

## Double-Acting Hollow Cylinders



Capacity: 30-150 tons

Stroke: 7.0-10.13 inch

Max. Pressure: 10,000 psi

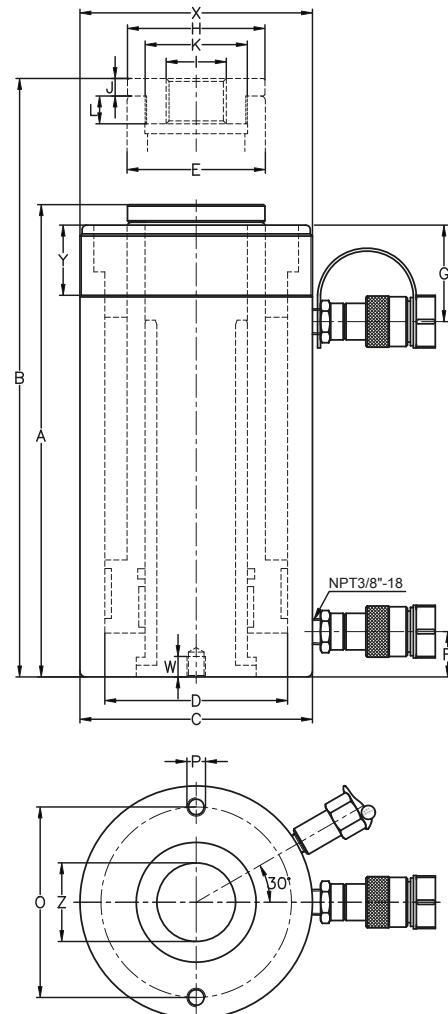
### Pump Selection

Selection appropriate pumps for offer optimum combination. For details, please refer to the section "hydraulic pumps".



## Features

- Double-acting cylinder version for fast retraction.
- Hollow plunger cylinders allows for both,pull and push forces.
- Dual dust-proof ring structure remains cylinder internal cleaning.
- The exclusive guide ring is designed absorbs eccentric loading without galling cylinder parts,reduces wear and extending life.
- Built-in safety valve prevents accidental over-pressurization.
- Special painted surface to increase corrosion resistance.
- Easy fixturing with collar threads,plunger threads and base mounting holes.
- All model include quick couplings (NPT3/8"-18) and dust-proof cap.
- Floating center tube is designed to increase product life.



## Quick Selection Chart

Cylinder Capacity	Stroke	Model Number	Max. Cylinder Capacity		Oil Capacity		Cylinder effective Area		Collapsed Height	Extend Height	Outside Dia.	Cylinder Bore Dia.	Plunger Dia.	Weight
			Advance	Retract	Advance	Retract								
			(ton)	(inch)	(ton)	(inch³)	in 2	(inch)	(inch)	(inch)	(inch)	(inch)	(inch)	(lbs)
ton (Max.)	(inch)													
30	7.00	DHC300-178	33.5	21.5	52.2	33.6	7.44	4.65	13.00	20.00	4.53	3.54	2.54	46
	10.13	DHC300-258	33.5	21.5	75.7	48.7	7.44	4.65	16.97	27.13	4.53	3.54	2.54	60
60	3.50	DHC600-89	59.0	36.8	45.7	28.6	13.02	8.06	9.72	13.23	6.26	4.92	3.72	62
	6.54	DHC600-166	59.0	36.8	85.3	53.3	13.02	8.06	12.72	19.25	6.26	4.92	3.72	77
	10.13	DHC600-257	59.0	36.8	132.0	82.5	13.02	8.06	17.24	27.36	6.26	4.92	3.72	99
95	1.50	DHC1000-38	94.7	63.7	31.4	21.2	20.92	14.1	6.50	8.00	8.35	6.50	4.92	73
	3.00	DHC1000-76	94.7	63.7	62.7	42.2	20.92	14.1	10.00	13.00	8.35	6.50	4.92	134
	6.00	DHC1000-153	94.7	63.7	126.3	85.1	20.92	14.1	13.46	19.50	8.35	6.50	4.92	174
	10.13	DHC1000-257	94.7	63.7	212.2	142.9	20.92	14.1	18.4	28.23	8.35	6.50	4.92	234
145	8.00	DHC1500-203	144.5	75.8	255.8	134.1	31.93	16.74	14.13	22.13	7.48	5.9	5.9	245

- DHC1000-38 and DHC1500-203 cylinder have no collar thread.
- DHC1500-203 cylinder has no saddle internal thread and no base mounting hole.

## Installation Reference Datasheet

Model Number	Base to Advance Port	Top to Return Port	Saddle Dia.	Saddle Internal Thread	Saddle Protr. from Plgr.	Plunger Internal Thread	Plunger Thread Length	Base Mounting Holes			Collar Thread	Collar Thread Length	Center Hole Dia
								Bolt Circle	Thread	Thd. Depth			
	F	G	H	I	J	K	L	O	P	W	X	Y	Z
	(inch)	(inch)	(inch)		(inch)		(inch)	(inch)		(inch)	(inch)	(inch)	(inch)
DHC300-178	0.98	2.36	2.52	1 $\frac{1}{4}$ "-7	0.35	1 $\frac{13}{16}$ "-16UN	0.87	3.63	$\frac{3}{8}$ "-16UNC	0.62	4 $\frac{1}{2}$ "-12	1.65	1.30
DHC300-258	0.98	2.52	2.52	1 $\frac{1}{4}$ "-7	0.35	1 $\frac{13}{16}$ "-16UN	0.87	3.63	$\frac{3}{8}$ "-16UNC	0.62	4 $\frac{1}{2}$ "-12	1.65	1.30
DHC600-89	1.22	2.60	3.70	1 $\frac{5}{8}$ "-5 $\frac{1}{2}$ "	0.47	2 $\frac{3}{4}$ "-16UN	0.75	5.13	$\frac{1}{2}$ "-13UNC	0.55	6 $\frac{1}{4}$ "-12	1.90	2.12
DHC600-166	1.22	2.60	3.70	1 $\frac{5}{8}$ "-5 $\frac{1}{2}$ "	0.47	2 $\frac{3}{4}$ "-16UN	0.75	5.13	$\frac{1}{2}$ "-13UNC	0.55	6 $\frac{1}{4}$ "-12	1.90	2.12
DHC600-257	1.22	2.60	3.70	1 $\frac{5}{8}$ "-5 $\frac{1}{2}$ "	0.47	2 $\frac{3}{4}$ "-16UN	0.75	5.13	$\frac{1}{2}$ "-13UNC	0.55	6 $\frac{1}{4}$ "-12	1.90	2.12
DHC1000-38	1.34	1.77	4.92	2 $\frac{1}{2}$ "-8	0.47	4"-16UN	0.98	7.00	$\frac{5}{8}$ "-11UNC	0.75	\	\	3.10
DHC1000-76	1.34	3.35	4.92	2 $\frac{1}{2}$ "-8	0.47	4"-16UN	0.98	7.00	$\frac{5}{8}$ "-11UNC	0.75	8 $\frac{3}{8}$ "-12	2.36	3.10
DHC1000-153	1.34	3.35	4.92	2 $\frac{1}{2}$ "-8	0.47	4"-16UN	0.98	7.00	$\frac{5}{8}$ "-11UNC	0.75	8 $\frac{3}{8}$ "-12	2.36	3.10
DHC1000-257	1.34	3.35	4.92	2 $\frac{1}{2}$ "-8	0.47	4"-16UN	0.98	7.00	$\frac{5}{8}$ "-11UNC	0.75	8 $\frac{3}{8}$ "-12	2.36	3.10
DHC1500-203	1.50	2.36	5.00	\	0.50	4 $\frac{1}{4}$ "-12UN	0.98	\	\	\	\	\	3.10

- If you have any difficulty or questions in the installing process, please contact us directly.

# Cylinder Selection

## How to choice the hydraulic cylinder and attachment

- Step 1: Choice the hydraulic syliner suitable for the working situation;  
 Step 2: Choice the hydraulic pump suitable for the cylinder and the working situation;  
 Step 3: Choice the hydraulic attachment.

### Hydraulic Pump

Matching suitable hydraulic pump.  
 For details, please refer to the section "hydraulic pumps".

## How to choice the hydraulic cylinder's condition

- The stress of cylinder(the rated pressure of cylinder is 20% more than actual loading capacity: Cylinder force (lbs) = Active area of cylinder ( $\text{in}^2$ ) X Hydraulic pump Pressure (psi)).
- Height and stroke of cylinder requirement: Choice the correct height and stroke of cylinder according to the working situation.
- Which way of the cylinder use for: Single-action only use for jack up, double-action can use for jack up and pull back.
- Whether need several cylinders are used together: Make sure the point quantity of jack up.
- Make sure the fuel capacity of hydraulic cylinder:
- Fuel capacity ( $\text{in}^3$ ) = The active area of cylinder X the stroke of cylinder (in).
- Whether need the steel stick or cable through off the hydraulic cylinder: Choice the Hollow hydraulic cylinder (SHC,DHC seris).
- Whether need working at narrow space: Choice the low flat hydraulic cylinder (SLC,SFC,SLL series).
- Whether need control with jack up and pull back: Double-acting series cylinders with hydraulic check valve.
- Whether need keep the loading with long time: Choice lock-nut hydraulic cylinder.
- Whether need hydraulic cylinder with partial load work: Choice Tiltable saddle.

### Selection Pump

HP series Handle Pump	EPC4 Series Portable Electric Pumps	EPC Series Electric Pump
		
<b>Available power choice:</b> Handle: Suitable for single-acting hydraulic cylinder, working situation-Non- high-speed operation Electric: Achieve fast jacking. Pneumatic: Without electronic control system, suitable for special working situation of safty needs. <b>Portable type:</b> Choice the compact tool pump. <b>Oil capacity:</b> Make sure the oil tank capacity. <b>Voltage and power of electric pump:</b> Choice the powers' voltage, Frequency and motor power.		<ul style="list-style-type: none"> <li>Make sure the quantity and length of soft hose;</li> <li>Matching the pressure Gage;</li> <li>Matching the pressure Gage Adaptors;</li> <li>Matching Manifolds;(use for the big capacity electric pump)</li> </ul>

Pump Types	Series		Page
Pump Overview Summary			
Lightweight Hand Pumps	HP		P.25
Steel Hand Pumps	HP		P.26
Electric Hydraulic Pumps	EPC		P.27

## Hydraulic Pumps Summary

AIFI hydraulic manufactures a wide range of featuring manual, electric and Pneumatic pumps with a variety of reservoirs and valves configuration, providing the optimum cylinders and tools performance for almost any industrial application.

## Hydraulic pump selection

Step 1: Select a series of hydraulic pumps with adequate oil output and reservoir capacity.

Step 2: Select the applicable model of control valve matching the selected pump station.

The valve should be able to meet the requirement of the cylinder, Pump and operating conditions.

# HP SERIES

## Lightweight Hand Pumps



Reservoir Capacity: 87.9-357.6 inch<sup>3</sup>

Flow at Rated Pressure: 0.15 inch<sup>3</sup>/stroke

Max. Pressure: 10.000-21.750psi

## Features

- Made of aluminum titanium alloy, light weight, high strength, corrosion and impact resistance to various harsh environments.
- Two speed operation, build-in high and low pressure automatic switch valve. Providing greater flow at low pressure to save operation time and increase the work efficiency.
- Build-in safety valve inside to provides safe dual-protection.
- Pressure regulating valve can readjust working pressure.
- The unique press rod mechanism is more easy to operate.
- Better protability with the handle.

Model Number	Pump Type	Used with Cylinder	Usable Oil Capacity (inch <sup>3</sup> )	Pressure Rating (psi)		Output Oil Volume Each Stroke (inch <sup>3</sup> )		Handle Force (lbs)	Over Dimension Model (inch)			Output Adapter	Weight (lbs)
				1st stage	2nd stage	1st stage	2nd stage		A	B	C		
HP7-1	Double Speed	Single Acting	87.9	360	10000	1.95	0.15	65	22.72	4.72	6.70	NPT3/8"	14
HP7-3			197.7	360	10000	1.95	0.15		22.91	7.87	6.70		22
HP7-4			357.6	360	10000	1.95	0.15		26.26	9.84	6.77		32
HP16-1			87.9	220	21750	1.95	0.15	80	22.72	4.72	6.70	G1/4"	14
HP16-3			197.7	220	21750	1.95	0.15		22.91	7.87	6.70		22

# HP SERIES

## Steel Hand Pumps



Reservoir Capacity: 40-457.7 inch<sup>3</sup>

Flow at Rated Pressure: 0.15-0.3 inch<sup>3</sup>/stroke

Max. Pressure: 10.000psi

## Features

- Durable stainless steel structure.
- Two-speed operation, build-in automatic pressure valve to provide greater flow at low pressure, saving operation time and increasing the work efficiency.
- Build-in safety valve provides dual-protection of safety.
- Pressure regulating valve can readjust working pressure.
- The unique press rod mechanism for easy operating.
- Integral three-position four-way valve on HP7-2D for double-acting hydraulic cylinders.

Model Number	Pump Type	Used with Cylinder	Usable Oil Capacity	Pressure Rating (psi)		Output Oil Volume Each Stroke (inch <sup>3</sup> )		Handle Force (lbs)	Output Adapter	Weight (lbs)
			(inch <sup>3</sup> )	1st stage	2nd stage	1st stage	2nd stage			
HP7-0.7	Double Speed	Single-Acting	40	360	10000	0.92	0.16	65	NPT3/8"	12
HP7-2D		Double-Acting	134.3	360	10000	0.98	0.15			18
HP7-8		Single-Acting	457.7	200	10000	7.7	0.3			60

# EPC SERIES

## Electric Pumps



## Features

- Electric pump motor with light weight aluminum housing, and integrated heat sink for easy cooling.
- Two-speed design reduces cycle times for improved productivity.
- Built-in safety valve to prevent overloading.
- Externally adjustable relief valve allows control of operating pressure without opening the pump.
- Protection circuit is designed to avoid current overload, prevent the damage to pump motor.
- High strength molded shroud protects the electrical components-class motor from contamination and damage. Easy to carry and lift.
- Equipped with liquid level temperature display.
- Compatible with middle power and small size (double- acting & single-acting) cylinders or hydraulic tools .

### Applications

Systems matches large hydraulic cylinders and other hydraulic tools of single and double action.



### Applications

System matches single and double action small size hydraulic cylinders and other small hydraulic tools.



	Oil Flow (inch³/min)		Pressure (psi)		Power (hp)	Weight (lbs)	Dimensions L x W x H (inch)
	High Pressure	Low Pressure	High Pressure	Low Pressure			
EPC4	13,4	183	10 000	1000	0,5	37	14 x 8 x 16
EPC8	48,8	458	10 000	1000	1,5	90	20 x 13 x 22
EPC10	61	458	10 000	1000	2	101	22 x 15 x 24
EPC15	92	488	10 000	10000	3	143	24 x 21 x 31
EPC25	134	568	10 000	1000	4	146	24 x 21 x 31

\*Gauge is not included with the pump

\*Roll cage is included

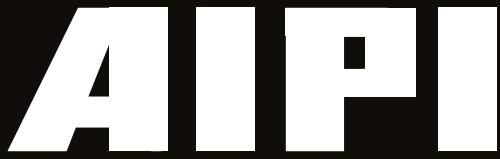
# CUSTOM BUILD YOUR EPC SERIES PUMP FOR BEST FIT YOUR APPLICATION

Select step by step 1 to 6

This is how a EPC Pump model number is built up:



EPC	10	1	5	VM	43M
1- Product type	2- Pump serie	3- Motor Voltage	4- Reservoir size	5- Pump type	6- Valve type
1- Product type	EPC				
	Electric pump, 10 000 PSI				
2- Pump Series	4	8	10	15	25
	0,5 HP	1,5 HP	2 HP	3 HP	4 HP
	↓	↓	↓	↓	↓
3- Motor Voltage	1	1	1	2	2
	115 V (1Ph)	115 V (1Ph)	115 V (1Ph)	220 V (1Ph)	220 V (1Ph)
	2	2	2	5	5
	220 V (1Ph)	220 V (1Ph)	550 V (3Ph)	550 V (3Ph)	
	↓	↓	↓	↓	↓
3- Motor Voltage	1	1	1	2	2
	115 V (1Ph)	115 V (1Ph)	115 V (1Ph)	220 V (1Ph)	220 V (1Ph)
	2	2	2	5	5
	220 V (1Ph)	220 V (1Ph)	550 V (3Ph)	550 V (3Ph)	
	↓	↓	↓	↓	↓
4 - Reservoir size	1	2	5	10	10
	1 Gallon	2,5 gallons	5 gallons	10 gallons	10 gallons
	5	10	15	15	15
	5 gallons	10 gallons	15 gallons	15 gallons	
			20	20	
			20 gallons	20 gallons	
	↓	↓	↓	↓	↓
5-Pump type	VM	VM	VM	VM	VM
	Manuel	Manuel	Manuel	Manuel	Manuel
	VE	VE	VE	VE	VE
	Stolenold	Stolenold	Stolenold	Stolenold	Stolenold
	VMJ	VMJ	VMJ	VMJ	VMJ
	Jog remote				
	↓	↓	↓	↓	↓
6 - Valve type	33M	33M	33M	33M	33M
	3 way-3 pos. tandem center				
	43M	43M	43M	43M	43M
	4 way- 3 Pos. tandem center				
	33ML	33ML	33ML	33ML	33ML
	3 way- 3 Pos. locking center				
	43ML	43ML	43ML	43ML	43ML
	4 way- 3 Pos. locking center				



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