

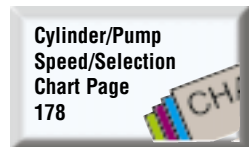
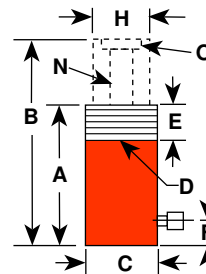
# Center Hole Cylinders (RH Series)

## Single-Acting, Spring-Return — 10-100 Ton Capacity

Ideal for pulling and tensioning of cables, anchor bolts, forcing screws, etc.



- Interchangeable piston head inserts (see page 161) provide versatility of application
- Cylinders comply with ASME B30.1 standard.
- Withstands full “dead-end” loads.
- Corrosion resistant standpipe has “Power Tech” surface treatment (see page 176).
- Aluminum cylinder body and piston rod are featured on the RHA306 cylinder. Nearly half the weight of a steel cylinder of comparable capacity!
- All cylinders except RH120 are furnished with a 9796 3/8" NPT female half coupler.



### ORDERING INFORMATION

See current price list for shipping weights

Cylinder Cap. (tons)	Stroke (mm)	Order No.	Oil Cap. (cu. cm.)	A	B	C	D	E	F	H	N	O	Mounting Holes and Bolt Circle (mm)	Cylinder Effective Area (sq. cm.)	Internal Press. at Cap. (bar)	Metric Tons at 700 bar	Prod. Wt. (kg)
				Re-tracted Height (mm)	Ex-tended Height (mm)	Outside Dia. (mm)	Collar Thread (mm)	Collar Thread Length (mm)	Base to Port (mm)	Piston Rod Dia. (mm)	Center Hole Dia. (mm)	Insert Thread Size (in.)					
10	63.5	RH102	90.5	134.9	198.4	76.2	None	None	25.4	52.4	19.4	1 1/4-12	1/4-20 x 60.3	14.3	624	10.0	4.1
10	203.2	RH108	290.0	287.3	490.5	76.2	None	None	25.4	52.4	19.4	1 1/4-12	1/4-20 x 60.3	14.3	624	10.0	8.5
12	7.9	RH120**	14.3	55.6	63.5	69.9	2 1/2-16	31.8	9.5	34.9	17.5	3/4-16	5/16-18 x 50.8	17.8	599	12.5	1.4
12	41.3	RH121	73.6	122.2	163.5	69.9	2 1/2-16	31.8	25.4	34.9	20.2	None	None	17.8	599	12.5	3
12	41.3	RH121T**	73.6	122.2	163.5	69.9	2 1/2-16	31.8	25.4	34.9	17.5	3/4-16	None	17.8	599	12.5	3
12	76.2	RH123	136.0	184.2	260.4	69.9	2 1/2-16	20.6	25.4	34.9	20.6	None	None	17.8	599	12.5	4.0
20	50.8	RH202	155.0	155.6	206.4	98.4	3 1/2-12	38.1	25.4	54.0	27.4	1 1/8-16	3/8-16 x 82.6	30.4	583	21.4	9.1
20	76.2	RH203	192.9	154.0	230.2	101.6	None	None	25.4	69.9	26.6	2 1/4-12	3/8-16 x 82.6	25.3	702	17.8	7.3
20	152.4	RH206	465.0	308.0	460.4	98.4	3 1/2-12	38.1	25.4	54.0	27.4	1 1/8-16	3/8-16 x 82.6	30.4	583	21.4	13.7
30	63.5	RH302	260.0	158.8	222.3	120.7	4 1/2-12	38.1	29.4	82.6	32.9	2 1/2-12	7/16-20 x 92.1	40.9	652	28.8	11.6
30	149.2	RHA306	624.9	283.4	432.6	130.2	None	None	31.8	82.6	32.5	2 3/8-8	None	40.9	652	28.8	9.9
30	152.4	RH306	624.9	247.7	400.1	120.7	4 1/2-12	38.1	29.4	82.6	32.5	2 1/2-12	7/16-20 x 92.1	40.9	652	28.8	17.7
50	76.2	RH503	534.3	181.0	257.2	152.4	6-12	50.8	31.8	104.8	42.5	3 1/2-12	5/8-18 x 120.7	70.0	634	49.3	21.2
60	76.2	RH603*	606.8	235.0	311.2	158.8	6 1/2-12	63.5	25.4	91.3	54.0	3-12	1/2-13 x 130.2	79.4	672	55.9	27.2
60	152.4	RH606*	1,211.3	311.2	463.6	158.8	6 1/2-12	63.5	25.4	91.3	54.0	3-12	1/2-13 x 130.2	79.4	672	55.9	35.4
100	76.2	RH1003*	1,013.5	254.0	330.2	212.7	None	None	31.8	127.0	79.4	4 1/2-12	None	133.0	668	93.5	52.2

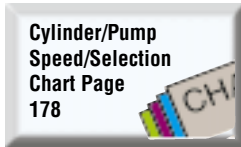
\*These cylinders supplied with carrying handles.

\*\* RH120 and RH121T do not have an internal threaded insert, but do have a 3/4-16 internal thread. The RH120 inlet port is 1/4" NPTF.

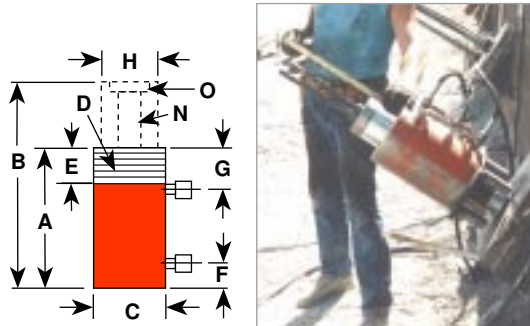
Aluminum

# Center Hole Cylinders (RH Series) Double-Acting, Hydraulic-Return — 30-200 Ton Capacity

Ideal for pulling & tensioning of cables, anchor bolts, forcing screws, etc.



- Built-in safety feature prevents over-pressurization of the retract circuit.
- Cylinders withstand full “dead-end” loads; comply with ASME B30.1 standard.
- Interchangeable piston head inserts (see page 161) provide versatility of application.
- Plated piston rod resists wear; superior packings provide high cycle life without leakage.
- Corrosion-resistant standpipe has “Power Tech” surface treatment (see page 176).
- Each cylinder has two 9796 3/8" NPTF female half couplers. The 60 ton thru 200 ton models are equipped with removable carrying handles.



## ORDERING INFORMATION

See current price list for shipping weights

Cyl. Cap. (tons)	Stroke (mm)	Order No.	Oil Cap. (cu. cm.)		A Re-tracted Height (mm)	B Ex-tended Height (mm)	C Outside Dia. (mm)	D Collar Thread (in.)	E Collar Thread Length (mm)	F Base to Port (mm)	G Cylinder Top to Port (mm)	H Piston Rod Dia. (mm)	N Center Hole Dia. (mm)	O Insert Thread Size (mm)	Mounting Holes and Bolt Circle (mm)	Cylinder Effective Area (sq. cm.)		Internal Pressure at Cap. (bar)		Metric Tons at 700 bar		Prod. Wt. (kg)
			Push	Pull												Push	Pull	Push	Pull	Push	Pull	
30	15	RH303	288.6	167.3	179.4	255.6	120.7	None	None	25.4	41.3	63.5	32.5	2-12	1/16 x 92.1	38.0	21.8	703	612	26.8	15.3	13.5
30	15	RH306D	579.6	332.6	281.0	433.4	120.7	None	None	25.4	41.3	63.5	32.5	2-12	3/16 x 92.1	38.0	21.8	703	612	26.8	15.3	20.4
30	20	RH3010	1,082.4	672.4	438.2	695.3	114.3	4 1/2-12	41.28	44.5	81.0	60.3	33.3	1 1/2-16	None	42.2	26.1	632	682	29.7	18.3	27.7
60	25	RHA604D	806.9	337.8	241.3	342.9	177.8	None	None	39.7	57.2	101.6	54.0	3-12	1/8 x 130.2	79.4	33.2	672	669	55.8	25.1	16.2
60	25	RH605*	1,009.4	422.6	241.3	368.3	165.9	None	None	25.4	44.5	101.6	54.0	3-12	1/8 x 130.2	79.4	33.2	672	669	55.8	25.1	33.1
60	40	RH6010*	2,181.2	1,426.8	458.8	716.0	158.8	6 1/2-12	47.63	54.0	81.8	92.1	54.4	3-16	None	84.8	55.4	639	642	59.6	38.9	54.5
100	45	RH1001*	526.4	232.9	165.1	203.2	212.7	None	None	31.8	58.7	127.0	79.8	4-16	3/16 x 177.8	138.0	60.8	644	658	97.0	42.7	38.6
100	50	RH1006*	1,971.3	1,075.8	314.3	466.7	184.2	None	None	37.3	59.1	111.1	52.4	None	1/8 x 139.7	129.2	70.5	688	630	90.8	49.6	43.1
100	45	RH10010*	3,552.2	1,566.2	495.3	752.5	215.9	8 1/2-12	57.15	63.5	91.7	139.7	79.8	4 1/2-12	None	138.0	60.8	644	658	97.0	42.7	109.0
150	70	RH1505*	2,474.8	1,207.0	311.2†	438.2	215.9	None	None	37.3	68.3	139.7	65.1	None	None	194.1	94.8	685	656	136.9	66.8	67.2
150	75	RH1508*	3,929.4	2,086.1	349.3	552.5	247.7	None	None	39.3	61.1	152.4	80.2	5-12	None	193.2	102.6	690	650	135.9	72.1	103.1
200	75	RH2008*	5,307.0	2,092.6	408.0	611.2	273.1	None	None	57.2	81.8	190.5	103.2	6-12	1/4 x 198.1	260.9	102.9	681	648	183.5	72.4	142.0

\* These cylinders supplied with carrying handles.  
† Measured with 19 mm high serrated insert installed.

# Center Hole Power-Twin® Cylinders (RT Series)

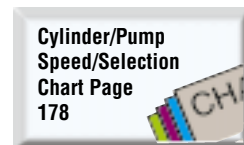
## Single- Acting, Spring-Return & Double-Acting — 17½-100 Ton Capacity

CYLINDERS

Ideal for pulling and pressing applications.



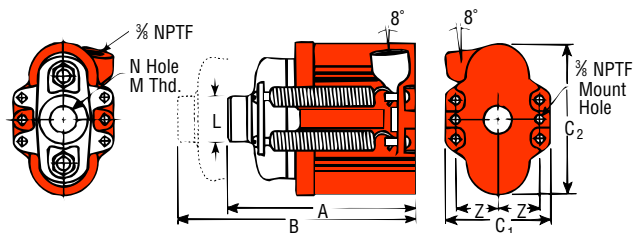
- A proven design; used throughout industry for over 40 years.
- Cylinders fully comply with ASME B30.1 standard.
- Cylinders will withstand full “dead-end” loads.
- Twin-cylinder design permits compact size; ideal for applications in which space is limited.
- Basic head allows you to change from a tapped hole to a plain hole by simply changing the head insert. (See page 161)
- Pistons have “Power Tech” surface treatment for corrosion and abrasion resistance. See page 176.



### ORDERING INFORMATION

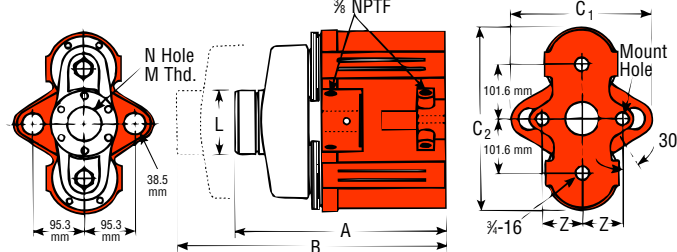
See current price list for shipping weights

#### Single-Acting, Spring-Return Cylinders



Dimensions for reference only.

#### Double-Acting Cylinder (RT1004)



Cylinder Capacity (Tons)	Stroke (mm)	Order No.	Oil Cap. (cu. cm.)		A	B	C1	C2	L	M	N	Z	Mounting Hole (mm)	Cyl. Eff. Area (sq. cm.)	Int. Press. at Cap. (bar)	Metric Tons at 700 bar	Prod. Wt. (kg)
			Push	Return	Retracted Height (mm)	Extended Height (mm)	Outside Dia. (mm)	Outside Dia. (mm)	Load Cap Dia. (mm)	Load Cap Thread (in.)	Center Hole Dia. (mm)	Mounting Hole Location (mm)					
17½	50.8	RT172	115.8	—	174.6	225.4	95.3	146.1	44.5	1"–8	27.0	38.1	8.7	22.8	683	16.1	6.6
30	63.5	RT302	257.5	—	214.3	277.8	108.0	190.5	57.2	1¼"–7	32.9	46.0	11.9	40.5	658	28.5	12.8
50	76.2	RT503	482.2	—	268.3	344.5	149.2	238.1	73.0	1½"–5½	42.5	60.3	16.7	63.3	702	44.5	25.4
100	123.8**	RT1004	1,582.6	1,036.5	384.2	508.0	266.7	336.6	120.7	2½"–8	65.1	73.0	19.8	124.1*	716	87.3	72.6

\* Push side only.

\*\* The RT1004 has a bypass when full stroke is reached, preventing over-pressurization of the cylinder.

NOTE: Each cylinder complete with threaded cylinder head insert, cylinder half coupler and cylinder attaching screws.