

YH
Universal cylinders

Double-acting with hydraulic return, capacity 5 - 200 t

These extremely robust double-acting cylinders are especially designed for universal heavy-duty lifting and positioning applications as well as for industrial production and assembly jobs. The cylinders offer high pushing and pulling forces. The double-acting design assures a high piston retraction speed.

Major areas of application are bridge building and civil engineering, off-shore, ship building, etc. They can also be used as power source in frame presses, stamping fixtures and other industrial uses where high pushing and pulling forces are required.

Features

- Yale ChroMo-Design.
- Operating pressure max. 700 bar.
- Double-acting with hydraulic return.
- Long bronze piston guidings.
- Piston strokes from 30 up to 500 mm.
- Cylinder body and piston are made from solid chromium-molybdenum steel and heat-treated.
- Hard-chromium plated piston with replaceable, heat-treated saddle.
- Metric mounting threads on cylinder housing, in the bottom of the cylinder body and in the piston rod.
- Stop ring can bear full capacity (pressure) and is fitted with dirt wiper.
- Interchangeable hardened saddle.
- Dirt wiper protects against dirt.
- Oil port thread 3/8 NPT.
- Incl. 2 female coupler halves CFY-1.
- From YH-30/200 with carrying handle.
- From YH-50/350 with 2 lifting rings.

INFO

For cylinders series YH accessories please see pages 382 - 383.

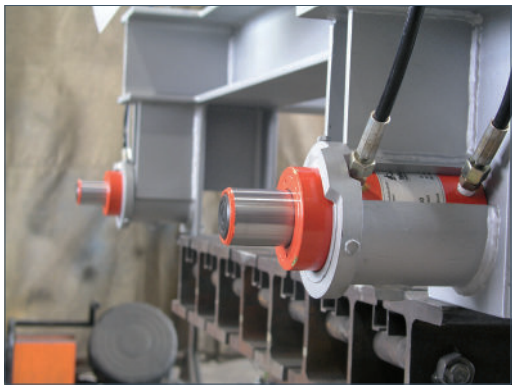
Selection charts “cylinder/hand pumps” can be found on pages 438 - 439.

Travel-speed charts are supplied on pages 440 - 441.

Technical data YH

Cylinder size t	Model	Art.-No.	Capacity push kN	Capacity pull kN	Stroke mm	Effective plunger area push cm^2	Effective plunger area pull cm^2	Oil volume max. cm^3	Closed height mm	Cylinder outside diameter mm	Weight kg
5	**YH-5/30**	N11200038	50	22	30	7.2	3.1	21	160	55	2.5
5	**YH-5/80**	N11200039	50	22	80	7.2	3.1	57	210	55	3.3
5	**YH-5/150**	N11200040	50	22	150	7.2	3.1	106	280	55	4.4
10	**YH-10/30**	N11200041	100	45	30	14.3	6.4	44	175	67	4.0
10	**YH-10/80**	N11200042	100	45	80	14.3	6.4	116	225	67	5.0
10	**YH-10/150**	N11200043	100	45	150	14.3	6.4	218	295	67	6.7
10	**YH-10/250**	N11200044	100	45	250	14.3	6.4	363	395	67	9.0
20	**YH-20/50**	N11200045	200	100	50	28.6	14.3	142	195	85	7.0
20	**YH-20/150**	N11200046	200	100	150	28.6	14.3	424	310	85	11.0
20	**YH-20/250**	N11200047	200	100	250	28.6	14.3	707	410	85	14.0
30	**YH-30/200**	N11200048	300	140	200	42.9	20.0	884	355	102	19.0
30	**YH-30/350**	N11200049	300	140	350	42.9	20.0	1547	510	102	27.0
50	**YH-50/150**	N11200050	500	220	150	71.5	31.5	1064	325	125	27.0
50	**YH-50/350**	N11200051	500	220	350	71.5	31.5	2481	525	125	42.0
50	**YH-50/500**	N11200052	500	220	500	71.5	31.5	3544	685	125	52.0
70	**YH-70/150**	N11200053	700	330	150	100.0	47.2	1478	335	146	37.0
70	**YH-70/350**	N11200054	700	330	350	100.0	47.2	3449	540	146	56.0
100	**YH-100/50**	N11200055	1000	450	50	143.0	64.4	716	265	180	49.0
100	**YH-100/150**	N11200056	1000	450	150	143.0	64.4	2148	365	180	64.0
100	**YH-100/350**	N11200057	1000	450	350	143.0	64.4	5010	565	180	94.0
100	**YH-100/500**	N11200058	1000	450	500	143.0	64.4	7157	725	180	118.0
200	**YH-200/150**	N11200059	2000	900	150	286.0	128.7	4253	410	250	137.0
200	**YH-200/350**	N11200060	2000	900	350	286.0	128.7	9924	620	250	198.0
200	**YH-200/500**	N11200061	2000	900	500	286.0	128.7	14177	780	250	244.0

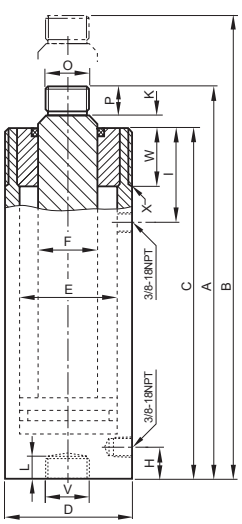




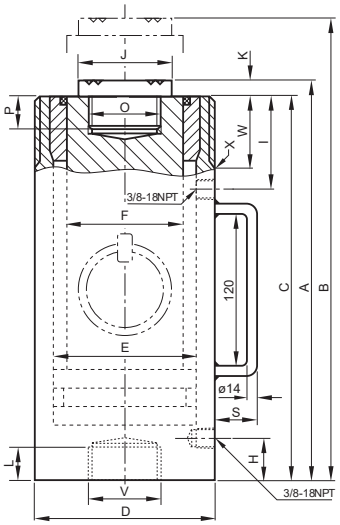
Dimensions YH

Model	YH-5/30	YH-5/80	YH-5/150	YH-10/30	YH-10/80	YH-10/150	YH-10/250	YH-20/50	YH-20/150	YH-20/250	YH-30/200	YH-30/350
A, mm	160	210	280	175	225	295	395	195	310	410	355	510
B, mm	190	290	430	205	305	445	645	245	460	660	555	860
C, mm	138	188	258	150	200	270	370	167	282	382	345	500
D, mm	55	55	55	67	67	67	67	85	85	85	102	102
E, mm	30	30	30	43	43	43	43	60	60	60	75	75
F, mm	22.4	22.4	22.4	32	32	32	32	42	42	42	55	55
H, mm	31	31	31	35	35	35	35	22	37	37	46	46
I, mm	44	44	44	50	50	50	50	59	59	59	64	64
J, mm	–	–	–	–	–	–	–	–	–	–	50	50
K, mm	4	4	4	5	5	5	5	5	5	5	10	10
L, mm	17	17	17	20	20	20	20	–	22	22	28	28
O, mm	M18 x 1.5	M18 x 1.5	M18 x 1.5	M27 x 2	M27 x 2	M27 x 2	M27 x 2	M36 x 2	M36 x 2	M36 x 2	M36 x 2	M36 x 2
P, mm	18	18	18	20	20	20	20	23	23	23	28	28
S, mm	–	–	–	–	–	–	–	–	–	–	51	51
U, mm	–	–	–	–	–	–	–	–	–	–	–	–
V, mm	M27 x 2	M27 x 2	M27 x 2	M36 x 2	M36 x 2	M36 x 2	M36 x 2	–	M45 x 2	M45 x 2	M36 x 2	M36 x 2
W, mm	27	27	27	33	33	33	33	40	40	40	45	45
X, mm	M55 x 1.5	M55 x 1.5	M55 x 1.5	M67 x 1.5	M67 x 1.5	M67 x 1.5	M67 x 1.5	M85 x 2	M85 x 2	M85 x 2	M102 x 2	M102 x 2

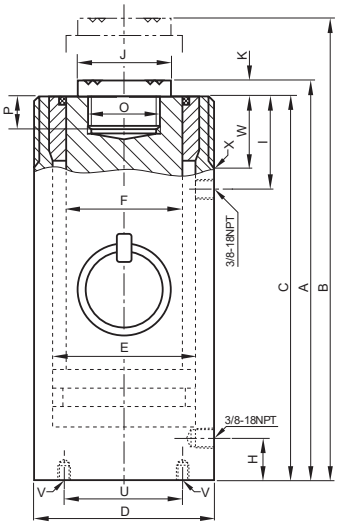
Model	YH-50/150	YH-50/350	YH-50/500	YH-70/150	YH-70/350	YH-100/50	YH-100/150	YH-100/350	YH-100/500	YH-200/150	YH-200/350	YH-200/500
A, mm	325	525	685	335	540	265	365	565	725	410	620	780
B, mm	475	875	1.185	485	890	315	515	915	1.225	560	970	1.280
C, mm	313	513	673	321	526	250	350	550	710	391	601	761
D, mm	125	125	125	146	146	180	180	180	180	250	250	250
E, mm	95	95	95	112	112	135	135	135	135	190	190	190
F, mm	70	70	70	80	80	100	100	100	100	140	140	140
H, mm	55	55	55	58	58	66	66	66	66	80	80	80
I, mm	70	70	70	79	79	90	90	90	95	105	105	105
J, mm	65	65	65	75	75	90	90	90	90	127	127	127
K, mm	12	12	12	14	14	15	15	15	15	19	19	19
L, mm	31	31	31	35	35	–	–	–	–	–	–	–
O, mm	M45 x 2	M45 x 2	M45 x 2	M50 x 3	M50 x 3	M65 x 3	M65 x 3	M65 x 3	M65 x 3	M90 x 3	M90 x 3	M90 x 3
P, mm	31	31	31	35	35	40	40	40	40	55	55	55
S, mm	51	24	24	24	24	24	24	30	30	30	30	30
U, mm	–	–	–	–	–	110	110	110	110	160	160	160
V, mm	M45 x 2	M45 x 2	M45 x 2	M50 x 3	M50 x 3	4 x M12	4 x M12	4 x M12	4 x M12	4 x M16	4 x M16	4 x M16
W, mm	50	50	50	60	60	70	70	70	70	80	80	80
X, mm	M125 x 2	M125 x 2	M125 x 2	M146 x 3	M146 x 3	M180 x 3	M180 x 3	M180 x 3	M180 x 3	M250 x 4	M250 x 4	M250 x 4



YH-5/30 up to YH 20/250



YH-30/200 up to YH 70/350



YH-100/50 up to YH 200/500