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Hydraulic cylinders with Yale Chro-Mo-Design

Yale hydraulic tools are designed for professional operation. A tool is only as good as its basic material. Therefore, our cylinders are manufactured from high quality chromium-molybdenum steel and are heat-treated.

Double bronze bearings

Practice has shown that hydraulic cylinders used as a tool in workshops or on construction sites are frequently subjected to eccentric loading. Yale hydraulic cylinders are provided with double bronze bearings on the plunger, which minimizes friction between plunger and body during lateral loading.

Hard chromium-plated piston

Offers excellent protection against mechanical damage and corrosion. Excellent sliding characteristics in conjunction with the upper bronze bearing in the stop ring.

Metric mounting threads and standard parts

To facilitate the installation of hydraulic cylinders in jigs and fixtures and auxiliary structures. The metric standard throughout the entire series simplifies service operations and repairs. Cylinders carry the full load even under maximum operating pressure.

Stop ring carries full pressure

As a safety factor the stop ring on all Yale hydraulic cylinders carries the full load even under maximum operating pressure.

Delivered ready to use

Yale Hydraulic cylinders are delivered ready to use incl. female coupler half, hardened saddle and mounting threads; larger cylinders come with carrying handle or transportation lugs. This also applies to customised combinations which are always supplied fully assembled.

Hardened alloy steel saddle

Metric mounting threads in cylinder base, plunger and cylinder collar (depending on series)

Two bronze bearings minimize friction even in cases of eccentric loading

INFO



Dirt wiper protects against dirt

Stop ring prevents over-stroking of the piston up to full operating pressure

Hard chromium-plated plunger

Piston and ...

... cylinder housing are made from chromium-molybdenum steel and are heat-treated.

Female coupler half CFY-1 (incl. dust cap)



Universal cylinder model YS

Single-acting with spring return, capacity 5 - 100 t

Robust construction with long guides allows the units to withstand abuse and better tolerate eccentric and side loading, yet is convenient to use with only one quick-release coupler hose connection and a spring return.

Universal cylinders are designed for all jobs where high forces but compact dimensions are required: e.g. straightening steel constructions, removing parts like shafts, axles, lifting, positioning, weighing, supporting, testing as well as for all general assembly and repair applications. Due to the various mounting threads the cylinders can easily be installed in clamping devices, welding fixtures, frame presses etc.

Features

- Yale ChroMo-Design.
- Operating pressure max. 700 bar.
- Single-acting with spring return.
- Robust design with long piston bearings to withstand eccentric loading.
- 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 collar, in the base and piston rod (5 to 30t).
- 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. female coupler half model CFY-1.
- Model YS-50/100 and YS-50/160 with carrying handle.
- Models YS-50/320 up to YS-100/200 with lifting rings.



INFO

Selection charts "cylinder/hand pumps" can be found on pages 405-407!

Travel-speed charts are supplied on pages 408-409.

Technical data model YS

Cylinder size t	Model	EAN-No. 4025092*	Capacity kN	Stroke mm	Effective plunger area cm ²	Oil volume max. cm ³	Closed height mm	Cylinder outside diameter mm	Weight kg
5	YS-5/15	*150002	50	15	7.2	11	45	41	0.9
5	YS-5/25	*150019	50	25	7.2	18	97	42	1.0
5	YS-5/75	*150026	50	75	7.2	53	157	42	1.5
5	YS-5/127	*150033	50	127	7.2	90	214	42	2.0
5	YS-5/180	*150040	50	180	7.2	127	267	42	2.4
10	YS-10/25	*150057	100	25	14.3	37	90	57	1.6
10	YS-10/50	*150064	100	50	14.3	73	125	57	2.1
10	YS-10/100	*150071	100	100	14.3	146	178	57	2.8
10	YS-10/150	*150088	100	150	14.3	218	250	57	4.1
10	YS-10/200	*150095	100	200	14.3	291	300	57	4.7
10	YS-10/250	*150101	100	250	14.3	363	352	57	5.5
10	YS-10/300	*150118	100	300	14.3	436	407	57	6.3
15	YS-15/25	*150125	150	25	21.5	53	110	67	2.7
15	YS-15/50	*150132	150	50	21.5	106	140	67	3.3
15	YS-15/100	*150149	150	100	21.5	213	190	67	4.3
15	YS-15/150	*150156	150	150	21.5	319	260	67	5.8
15	YS-15/200	*150163	150	200	21.5	425	310	67	7.0
15	YS-15/250	*150170	150	250	21.5	531	365	67	8.0
15	YS-15/300	*150187	150	300	21.5	637	420	67	9.0
15	YS-15/350	*150194	150	350	21.5	744	472	67	10.0
23	YS-23/25	*150200	230	25	32.9	83	116	85	5.0
23	YS-23/50	*150217	230	50	32.9	166	150	85	6.0
23	YS-23/100	*150224	230	100	32.9	332	202	85	7.5
23	YS-23/160	*150231	230	160	32.9	531	277	85	10.0
23	YS-23/210	*150248	230	210	32.9	697	330	85	12.0
23	YS-23/250	*150255	230	250	32.9	830	376	85	13.5
23	YS-23/300	*150262	230	300	32.9	996	428	85	15.0
23	YS-23/345	*150279	230	345	32.9	1145	477	85	16.5
30	YS-30/125	*150286	300	125	42.9	552	245	102	13.0
30	YS-30/200	*150293	300	200	42.9	884	325	102	17.0
50	YS-50/50	*150309	500	50	71.5	355	170	125	15.0
50	YS-50/100	*150316	500	100	71.5	709	220	125	19.0
50	YS-50/160	*150323	500	160	71.5	1135	285	125	24.0
50	YS-50/320	*150330	500	320	71.5	2269	460	125	37.0
70	YS-70/150	*150347	700	150	100.0	1478	285	146	32.0
70	YS-70/330	*150354	700	330	100.0	3252	490	146	52.0
100	YS-100/100	*150378	1000	100	143.0	1432	275	180	43.0
100	YS-100/200	*150361	1000	200	143.0	2863	375	180	64.0



Accessories for cylinders series YS like lifting claws, piston plates, extension tubes, support plates and threaded flanges are also available on request



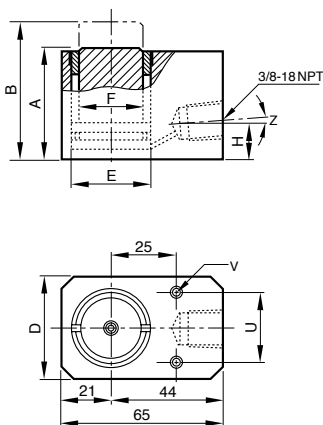
Support plates are available as accessories



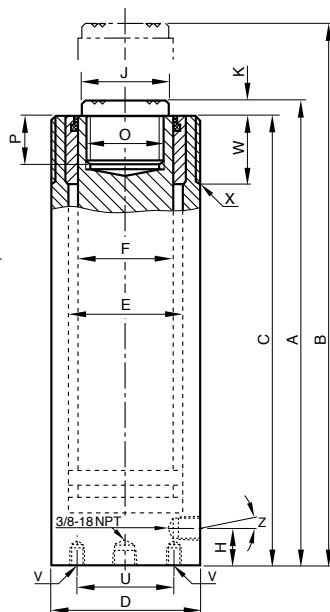
Threaded flanges are available as accessories

Dimensions model YS

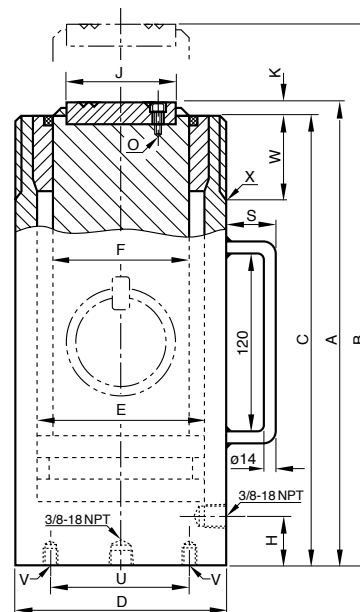
Model	YS-50/50	YS-50/100	YS-50/160	YS-50/320	YS-70/150	YS-70/330	YS-100/100	YS-100/200
A, mm	170	220	285	460	285	490	275	375
B, mm	220	320	445	780	435	820	375	575
C, mm	165	215	280	455	280	485	270	370
D, mm	125	125	125	125	146	146	180	180
E, mm	95	95	95	95	112	112	135	135
F, mm	85	85	85	85	95	95	115	115
H, mm	29	29	29	29	30	30	60	60
J, mm	70	70	70	70	80	80	100	100
K, mm	5	5	5	5	5	5	5	5
O, mm	4xM8	4xM8	4xM8	4xM8	4xM8	4xM8	4xM10	4xM10
P, mm	-	-	-	-	-	-	-	-
S, mm	-	51	51	24	24	24	24	24
U, mm	95	95	95	95	110	110	145	145
V, mm	4xM12	4xM12	4xM12	4xM12	4xM12	4xM12	4xM12	4xM12
W, mm	50	50	50	50	60	60	70	70
X, mm	M125x2	M125x2	M125x2	M125x2	M146x3	M146x3	M180x3	M180x3
Z, °	-	-	-	-	-	-	-	-



Model YS-5/15



Model YS-5/25 up to YS-30/200



Model YS-50/50 up to YS-100/200

INFO

Subject to changes.