



INFO

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

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

YCS Hollow cylinders

Single-acting with spring return, capacity 12 - 93 t

Due to the centre hole design a threaded rod can be placed through the hollow cylinders so that extremely high pulling forces can be achieved.

Hollow cylinders are used as the power component within hydraulic puller sets, for prestressing anker bolts, removing axles, shafts, bushings, extracting tubes, as well as for heavy-duty pulling applications.

Features

- Yale ChroMo-Design.
- Operating pressure max. 700 bar.
- Single-acting with spring return.
- With large centre hole diameter.
- 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 at cylinder body and inside of piston.
- Stop ring prevents overtravel of the piston up to full operating pressure.
- Interchangeable hardened saddle.
- With inner and outer dirt wipers.
- Oil port thread 3/8 NPT.
- Incl. female coupler half CFY-1.
- From YCS-21/150 with carrying handle.
- From YCS-57/70 with two lifting rings.



Function principal of the hollow cylinders

In connection with threaded rods hollow cylinders can produce extremely high forces which are helpful for various repair or assembly applications like removing press-fitted parts, prestressing anchors etc.

In addition, hollow cylinders are used as power source in puller sets and test rigs. By the use of long threaded rods and by readjusting the nut larger distances can be pulled even when using short cylinder strokes.

Technical data YCS

Cylinder size	Model	Art.-No.	Capacity	Stroke	Effective plunger area	Oil volume max.	Closed height	Centre hole diameter	Cylinder outside diameter	Weight
t			kN	mm	cm ²	cm ³	mm	mm	mm	kg
12	YCS-12/40	N11400070	120	40	17.2	71	142	20	70	3.5
12	YCS-12/75	N11400071	120	75	17.2	132	195	20	70	4.5
21	YCS-21/50	N11400072	214	50	30.5	153	173	27	100	8.5
21	YCS-21/150	N11400073	214	150	30.5	458	335	27	100	15.0
33	YCS-33/60	N11400074	335	60	47.9	287	193	33	114	12.0
33	YCS-33/150	N11400075	335	150	47.9	716	343	33	114	21.0
57	YCS-57/70	N11400076	567	70	81.0	562	242	42	150	25.0
62	YCS-62/150	N11400077	618	150	88.3	1330	335	55	163	38.0
93	YCS-93/75	N11400078	930	75	133	990	280	80	214	55.0

Dimensions YCS

Model	YCS-12/40	YCS-12/75	YCS-21/50	YCS-21/150	YCS-33/60	YCS-33/150	YCS-57/70	YCS-62/150	YCS-93/75
A, mm	135	188	163	325	183	333	230	323	265
B, mm	175	263	213	475	243	483	300	473	340
C, mm	20	20	27	27	33	33	42	55	80
D, mm	70	70	100	100	114	114	150	163	214
E, mm	55	55	73	73	90	90	118	130	170
F, mm	40	40	53	53	65	65	90	100	136
J, mm	38	38	50	50	62	62	85	96	132
K, mm	3	3	3	3	3	3	3	3	5
M, mm	-	-	-	120	-	120	-	-	-
O, mm	M30 x 1.5	M30 x 1.5	M40 x 1.5	M40 x 1.5	M48 x 1.5	M48 x 1.5	M65 x 2	M78 x 2	M115 x 2
P, mm	20	20	25	25	30	30	35	40	45
R, mm	4	4	5	5	5	5	5	5	-
S, mm	-	-	-	51	-	51	24	24	24
T, mm	-	-	-	-	-	-	155	200	170
U, mm	58	58	82	82	92	92	120	135	180
V, mm	2 x M8	2 x M8	2 x M10	2 x M10	4 x M10	4 x M10	4 x M12	4 x M12	4 x M16
W, mm	30	30	35	35	40	40	50	60	-
X, mm	M70 x 2	M70 x 2	M100 x 2	M100 x 2	M110 x 2	M110 x 2	M150 x 3	M160 x 3	-
Y, mm	7	7	10	10	10	10	12	12	15

