

Hollow plunger cylinders *Application & selection*

Shown: MRH-120, HCS-20, HCS-80

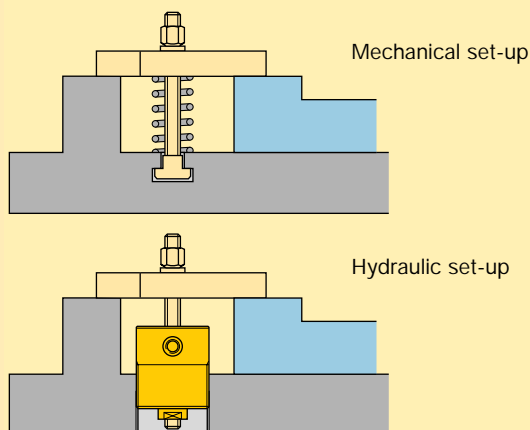


Swing cylinders
Work supports

Linear cylinders

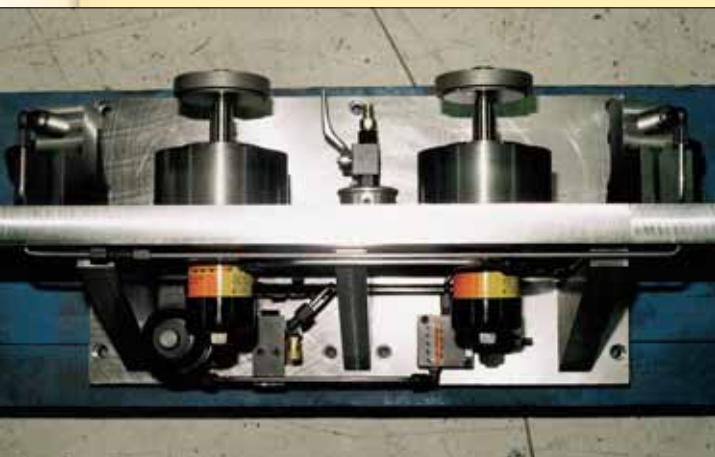
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▶ These cylinders are regularly used for upgrading mechanical clamping to faster and easier hydraulic clamping. Other typical applications include production pressing, punching and crimping operations.



Traditional mechanical elements in a clamping fixture are replaced by a hollow plunger hydraulic cylinder.

■ Two Enerpac MRH-120 hollow cylinders mounted at the back side of a fixture.



For high force push & pull applications on and around the fixture

- Load can be attached to either end of the cylinder, providing a choice of push or pull actions - both realizing full cylinder capacity
- Very high cylinder capacities contained within small dimensions allow compact fixture designs
- Spring return operation allows for easy unloading of the workpiece
- Threaded collars and base mounting holes allow mounting flexibility, including table-top surfaces and T-slots
- Nickel-plated plungers, plunger wipers and internal venting prevent corrosion and support longer operation life on all HCS models

Product selection

Cylinder capacity ¹⁾	Stroke	Center hole diameter	Model number	Effective area	Oil capacity	Maximum operating pressure
kN	mm	mm		cm ²	cm ³	bar
17,8	7,9	13,5	MRH-20	8,58	6,72	210
21,5	9,9	10,9	HCS-20	6,19	6,23	350
56,3	11,9	13,0	HCS-50	16,26	19,50	350
61,4	7,9	19,6	MRH-120	17,81	14,09	350
83,7	14,0	17,0	HCS-80	23,42	32,61	350
113,4	16,0	21,1	HCS-110	32,65	52,27	350

¹⁾ At maximum operating pressure.

Note: Seal material Buna-N, Polyurethane, Teflon.

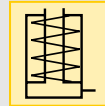


Force: 17,8 - 113,4 kN

Stroke: 7,9 - 16,0 mm

Pressure: 55 - 350 bar

- E** Garras de empuje oblicuo
- F** Vérins a piston creux
- D** Hohlkolbenzylinder



Options

Flange nuts

72 ▶



Power sources

74 ▶



Gauges

106 ▶



Fittings

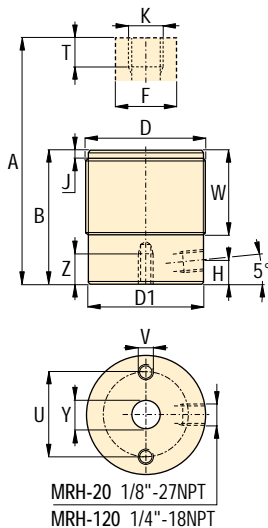
110 ▶



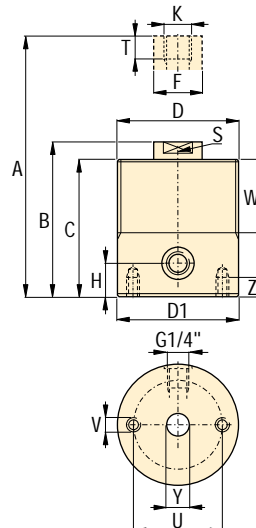
Important

Use DIN12.9 (Grade 8) bolt quality or better for pulling.
Use DIN10.9 (Grade B7) threaded rod quality or better for pulling applications.

MWH-20, 120



HCS models



Product dimensions in mm

Model number	A	B	C	D Ø	D1 Ø	F Ø	H	J	K Ø	S	T	U Ø	V Ø	W	Y Ø	Z	⚖ kg
MRH-20	60,5	52,3	-	M48 x 1,5	45,5	25,4	7,1	3,0	13,0	-	22,4	35,1	M6 x 1,0	38,1	12,7	6,4	0,6
HCS-20	84,1	74,2	66,0	M58 x 1,5	57,9	16,0	10,9	-	M10 x 1,5	14,0	25,9	39,9	M6 x 1,0	39,9	10,9	9,9	1,1
HCS-50	96,0	84,1	74,9	M65 x 1,5	65,0	27,9	14,0	-	M12 x 1,75	22,1	24,4	45,0	M8 x 1,25	45,0	13,0	11,9	1,5
MRH-120	63,5	55,6	-	M70 x 1,5	69,9	35,1	9,9	4,8	M18 x 1,5	-	16,0	50,8	M6 x 1,0	30,2	19,6	6,4	1,4
HCS-80	109,0	95,0	85,1	M75 x 1,5	74,9	32,0	17,0	-	M16 x 2,0	23,9	32,5	54,9	M8 x 1,25	50,0	17,0	11,9	2,3
HCS-110	119,9	103,9	93,0	M90 x 2,0	89,9	39,9	19,1	-	M20 x 2,5	32,0	36,3	65,0	M10 x 1,5	59,9	21,1	15,0	3,6