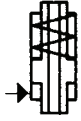


No. 6921

Hollow Rod Cylinder

single acting, spring return,
max. operating pressure 400 bar.



Order no.	Article no.	push-pull force at 100 bar [kN]	push-pull force at 400 bar [kN]	Stroke H [mm]	Vol. [cm ³]	effective piston area [cm ²]	Spring force min. [N]	Weight [g]
63768	6921-70x6	17,8	71	6	11	18,5	700	1675
63149	6921-100x10	24,4	101	10	26	25,9	1500	4800

Design:

Cylinder barrel from steel, burnished. Piston and piston rod case hardened and ground. Retraction by disc springs. 1 wiper. Piston rod with internal thread and two flats (size 70 x 6) or hexagon (size 100 x 10). Built-in sintered bronze filter. Oil supply via threaded port.

Application:

When workpieces are clamped onto a machine tool table, the hollow rod cylinder can be screwed onto the clamp bolt and be joined to the clamp by the two threads in the body. Also suitable for holding and clamping devices directly on a machine tool table. The hollow rod cylinder is designed for use in combination with tempered bolts of material grade 8.8 for size 100x10 and material grade 12.9 for the size 70x6. In case bolts of material grade 8.8 and grade 10.9 are used the pressure has to be reduced for size 70x6 for continuous operation (see diagramme).

Features:

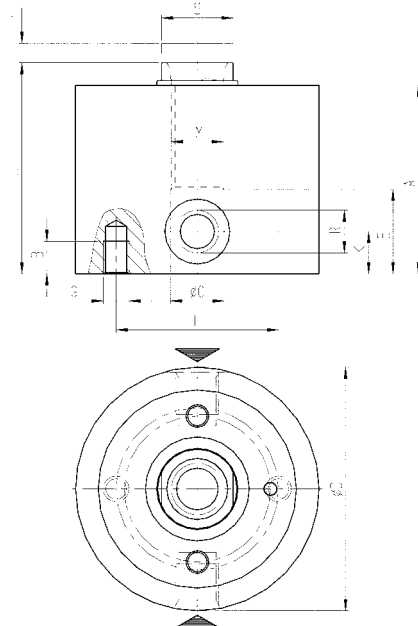
Protected against contamination and chips by a wiper. High forces in a small design.

Note:

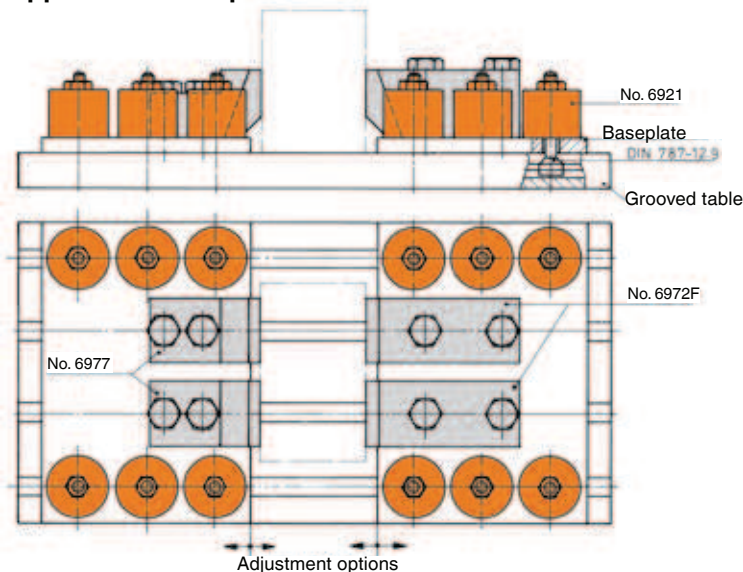
For single acting cylinders there is risk of sucking in coolant during the return stroke. In this case the cylinders have to be protected against the direct effect of coolant. The built in sinter metal breather should be protected.

Dimensions:

Order no.	Article no.	Piston dia. [mm]	A	B	dia. C	dia. D	E	F	G	K	L	M	R	S
63768	6921-70x6	55	58	10	16,5	75	26	50	M8	13	65	M16	G1/4	SW22
63149	6921-100x10	70	85	10	25,0	100	56	70	M10	16	97	M24	G1/4	SW36



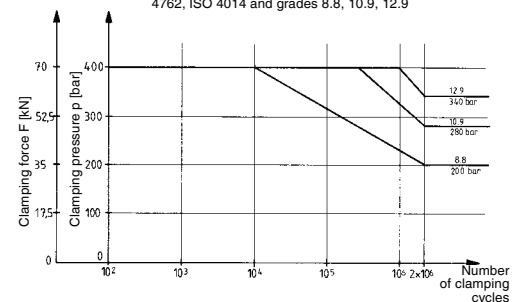
Application examples:



The shown hydraulic clamping device shows casts of several sizes that are clamped by hydraulic pulldown clamp no. 6972F and pull-down counterpart no. 6977. To obtain an efficient means of adjustment, 2 base plates are each equipped with 6 hydraulic nuts no. 6921 which are connected to the grooved table via bolts for T-nut according to DIN 787. The adjustment of the base plate and the clamping of the workpiece can be performed independently by a pump unit with 2 clamping circuits.

Diagram for size 70x6:

Longterm reliability diagram for clamping bolts M 16 according to DIN 787, ISO 4762, ISO 4014 and grades 8.8, 10.9, 12.9



Subject to technical alterations.