

No. 6989M

Screw-in coupling mechanism



Order no.	Article no.	for coupling under pressure	for pressure-free coupling	Thread [A]	Nominal bore [NW]	max. operating pressure [bar]	Min. coupling force * (N)	Md [Nm]	Weight [g]
324491	6989M-05-001	●	-	M20x1,5	3	350	94	15	40
324517	6989M-06-002	-	●	M20x1,5	3	350	94	15	40
164970	6989M-10-001	●	-	M24x1,5	5	500	98	20	72
164996	6989M-20-002	-	●	M24x1,5	5	500	98	20	72

* At 0 bar

Design:

Cylinder body and internal parts made of stainless steel. Seals from NBR, Viton, POM and PU.

Application:

Couplings are used for the leakage-free connection of hydraulic oil supplies. The coupling elements are installed in a body. The sealing between coupling mechanism and nipple is axial, and installed in the coupling mechanism. If the seal is worn, it can be replaced. The coupling mechanism must always be used in combination with a nipple of the same system. Depending on the version, the couplings can be connected and disconnected at the maximum working pressure. When installed in a tank line, a coupling nipple with pressure relief must be selected. This limits the pressure that can be built up in the uncoupled state (for example due to internal leakage of the clamping elements) to approx 5 bar. When the two parts of the coupling are engaged, the pressure relief is no longer active.

Features:

For connection, the coupling mechanism and nipple must be axially aligned. The bodies of the two parts must be guided when the axial sealing surfaces are ca. 2-3 mm apart. The radial position tolerance must not be exceeded. The separating force due to hydraulic pressure is given by the formula NW3: $F [N] = 9,4 \times p [\text{bar}]$, NW5: $F [N] = 15,4 \times p [\text{bar}]$. This separating force must be countered by some external, mechanical means. The coupling mechanism must seal at the bottom of the hole in which it is installed. The mounting hole must be machined to the specified accuracy and surface finish.

Note:

The axial sealing surfaces on the front must be protected from soiling. Because the coupling elements have smooth, uninterrupted sealing surfaces, the danger of them being soiled is reduced, and the ease with which the user can clean them before the coupling process is increased. Good results can be achieved by washing them off and blowing clean with compressed air.

Positioning tolerance in axial direction for all coupling elements: +0.5 mm.

Positioning tolerance in radial direction for coupling units: +/- 0.3 mm.

Permitted angle tolerance: +/- 1°.

Diagrams: coupling force and flow resistance, see under 6989N.

Installation tool for sealing ring:

Size 05 and 06 order no. 551864 / size 10 and 20 order no. 551865

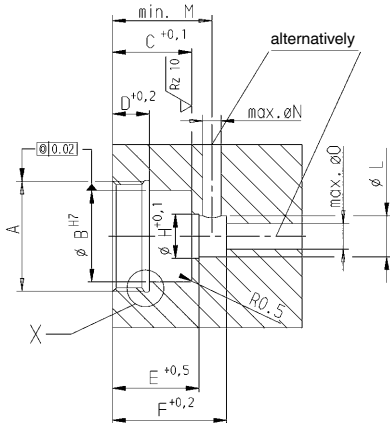
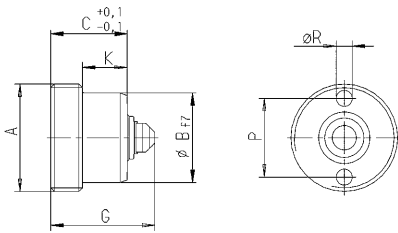
Screw-in tool:

Size 05 and 06 order no. 552759 / Size 10 and 20 order no. 552760

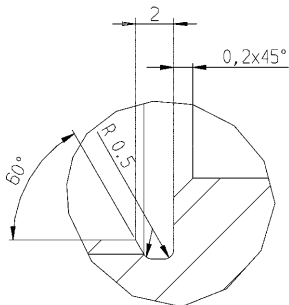
On request:

Other sizes available on request.

Installation dimensions:



detail X



Dimensions:

Order no.	Article no.	dia. B	C	D	E	F	G	dia. H	K	dia. L	M	N	dia. O	P	ØR
324491	6989M-05-001	18	21,5	10	23,5	31	29	12	12,5	11,2	28	5	7	15,5	2 x 2,6
324517	6989M-06-002	18	21,5	10	23,5	31	29	12	12,5	11,2	28	5	7	15,5	2 x 2,6
164970	6989M-10-001	22	21,5	10	23,5	31	29	12	12,5	11,2	28	5	7	18,5	4 x 2,8
164996	6989M-20-002	22	21,5	10	23,5	31	29	12	12,5	11,2	28	5	7	18,5	4 x 2,8



Subject to technical alterations.

