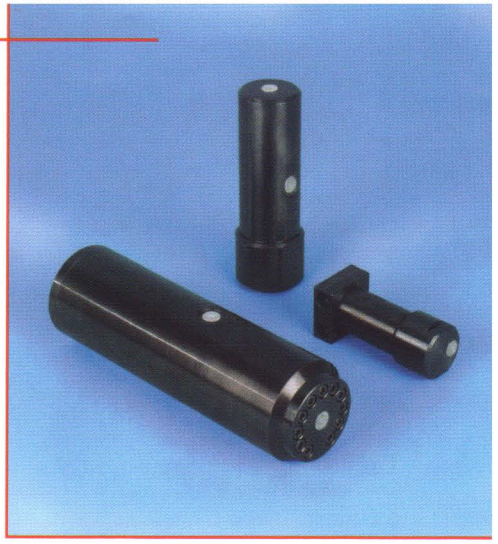
2 KOSTYRKA® Oil-Oil Pressure Intensifier
1450 series



The special feature of the 1450 series Oil-Oil Pressure Intensifiers is the automatic refill function. Any small loss of oil in the high-pressure part of the system is automatically compensated from the feed line via a suction valve. A refill container requiring continuous monitoring is not required.

Note: Absolute cleanliness of the oil is essential! Contamination of the pressure medium (suspended matter, paint particles, adhesive residue, chips or similar) may lead to malfunction of the built-in suction valve!

Note: The supply pipes should always be as short as possible, since the system is subject to a volume compression of approximately 0.7% for each 100 bar (1,450 psi.) pressure rise. At 400 bar (5,800 psi.), for example, this equates to almost 3% of the effective high pressure oil volume (oil quantity within the ring space around a clamping sleeve, in the feeding bores and within the pipes or hoses and threaded joints)! If flexible hoses are used, their elastic expansion (volume increase) under pressure also has to be considered.

2.1 Technological data and dimensions, series

Type	Transmission ratio	Displacement volume	Working pressure	Working liquid	Mounting position
1450.02	1:4	4 ml	max. 100 bar (1,450 psi.) on the low-pressure side	Hydraulic oil with a viscosity up to 32 mm²/s (32 cSt) at 40°C	any
1450.04	1:4	15 ml			
1450.14	1:4	23 ml			
1450.15	1:4	74 ml			
1450.16	1:2,2	65 ml			
1450.17	1:2,25	125 ml			

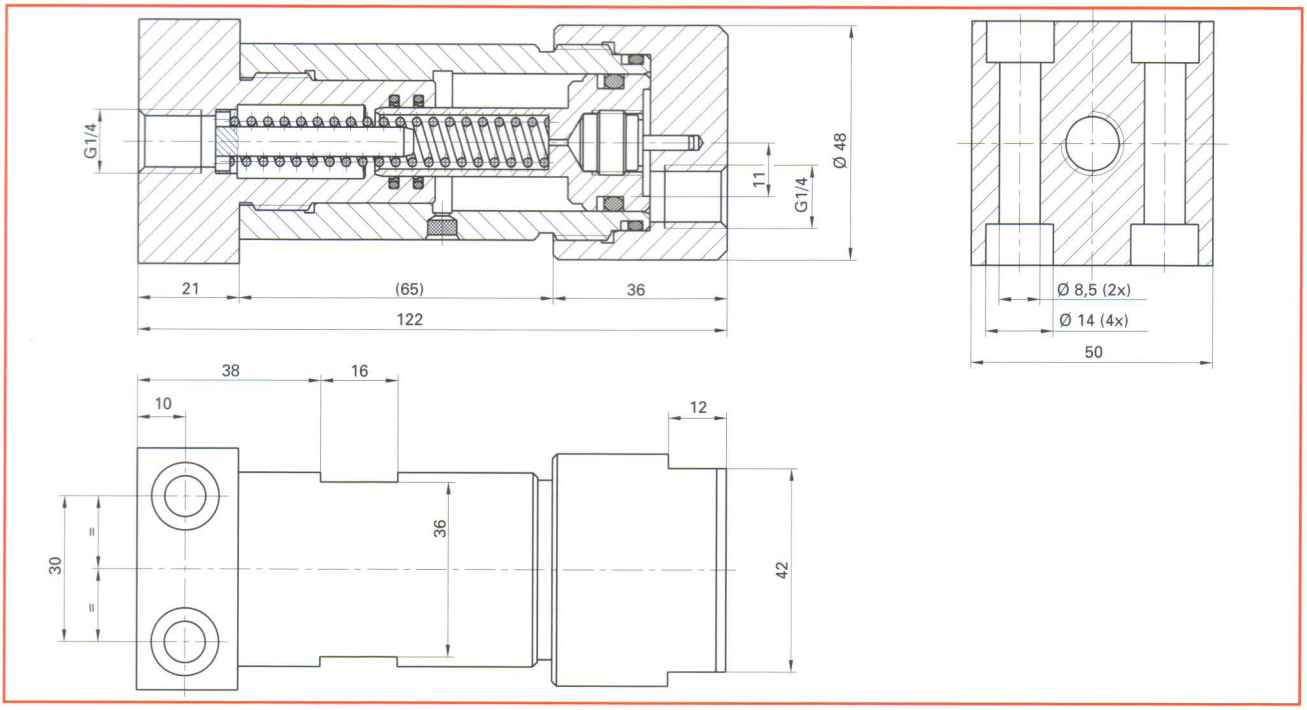
Subject to alteration

Dimensions type 1450.02

If small pressure oil quantities are required (for example for clamping of individual clamping sleeves), the use of the "miniature" pressure intensifier (type 1450.02) is advantageous. Due to its small dimensions, it can be mounted directly at the point of installation of the consumers.

The pressure intensifier type 1450.02 is supplied single-acting (with built-in return spring).

Note: Due to the relatively small displacement volume, particularly thorough venting of the high-pressure space and short supply pipes are required. Rigid connections between the intensifier and the oil chamber are recommended.



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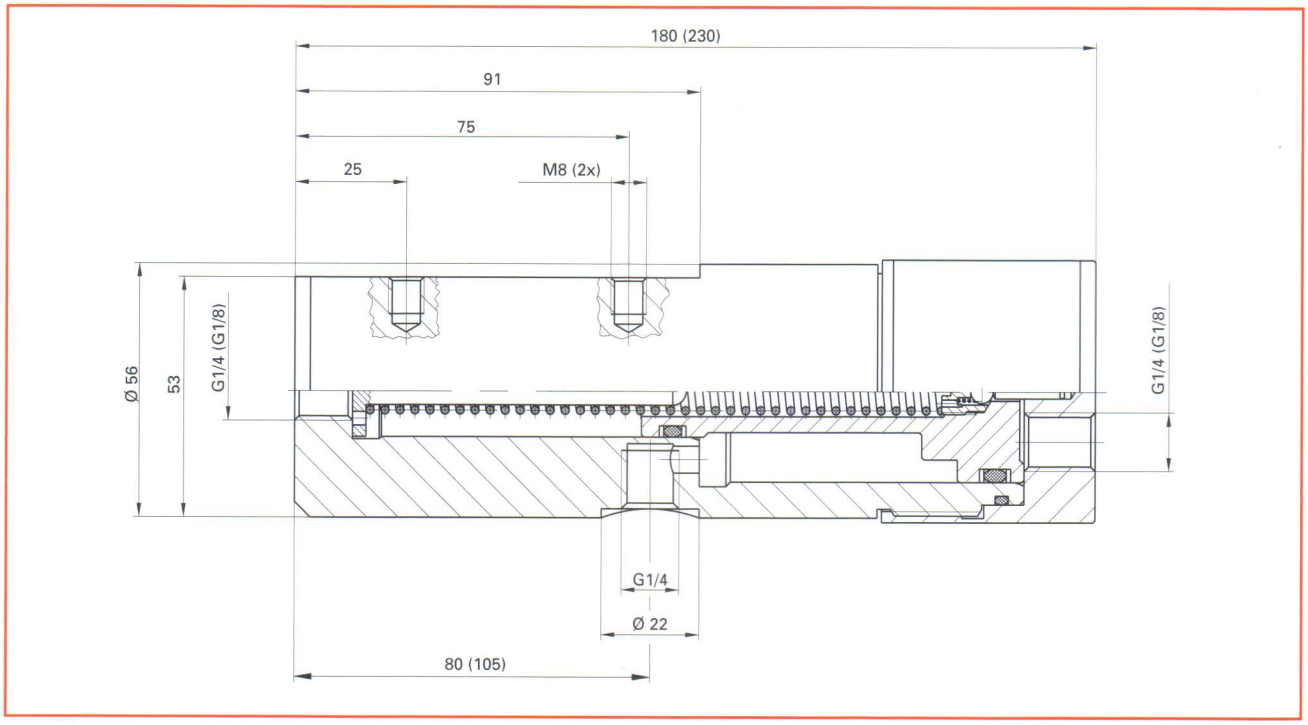
Dimensions types 1450.04 and 1450.14

The values in brackets refer to the dimensions of type 1450.14

The pressure intensifier type 1450.04 is also supplied single-acting (with built-in return spring). For accelerating the return stroke, for example in systems with very long supply or pressure lines, the piston may be returned hydraulically via an additional connection.

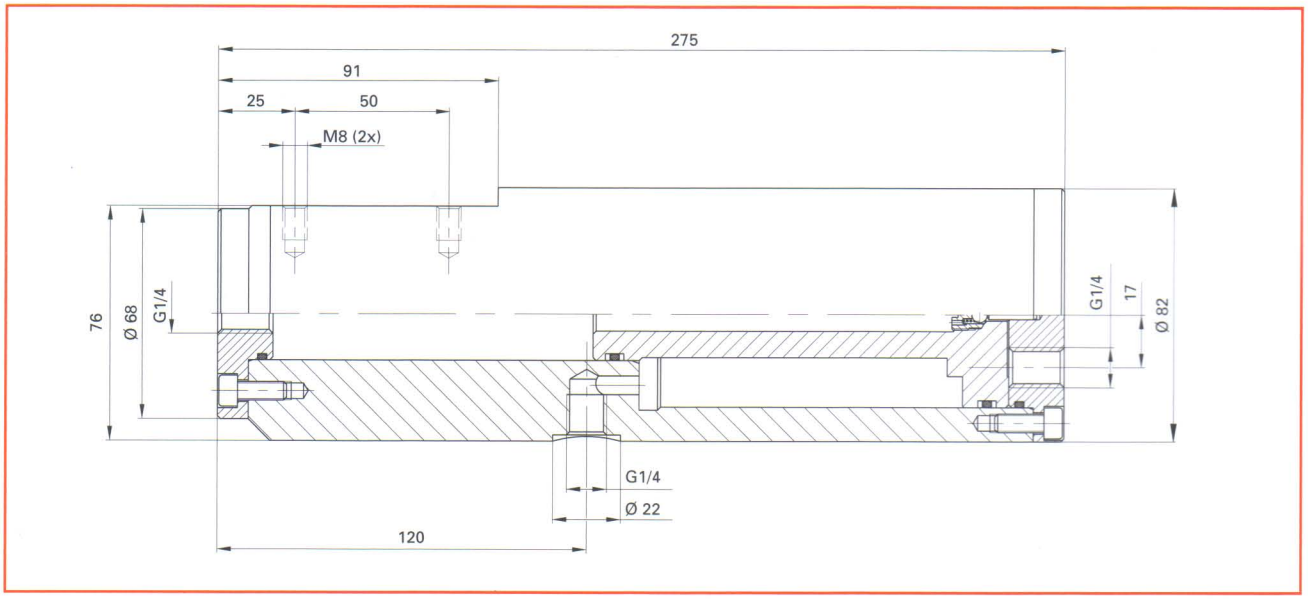
Note: The type 1450.14 Oil-Oil Pressure Intensifiers are only supplied as double-acting versions (without piston return spring).



Dimensions types 1450.15 and 1450.17

The pressure intensifiers 1450.15 and 1450.17 are largely identical to types 1450.04 and 1450.14, but have significantly larger displacement volumes. These pressure intensifiers enable the use of a significantly larger number of clamping sleeves, clamping strips or clamping discs to be operated simultaneously.

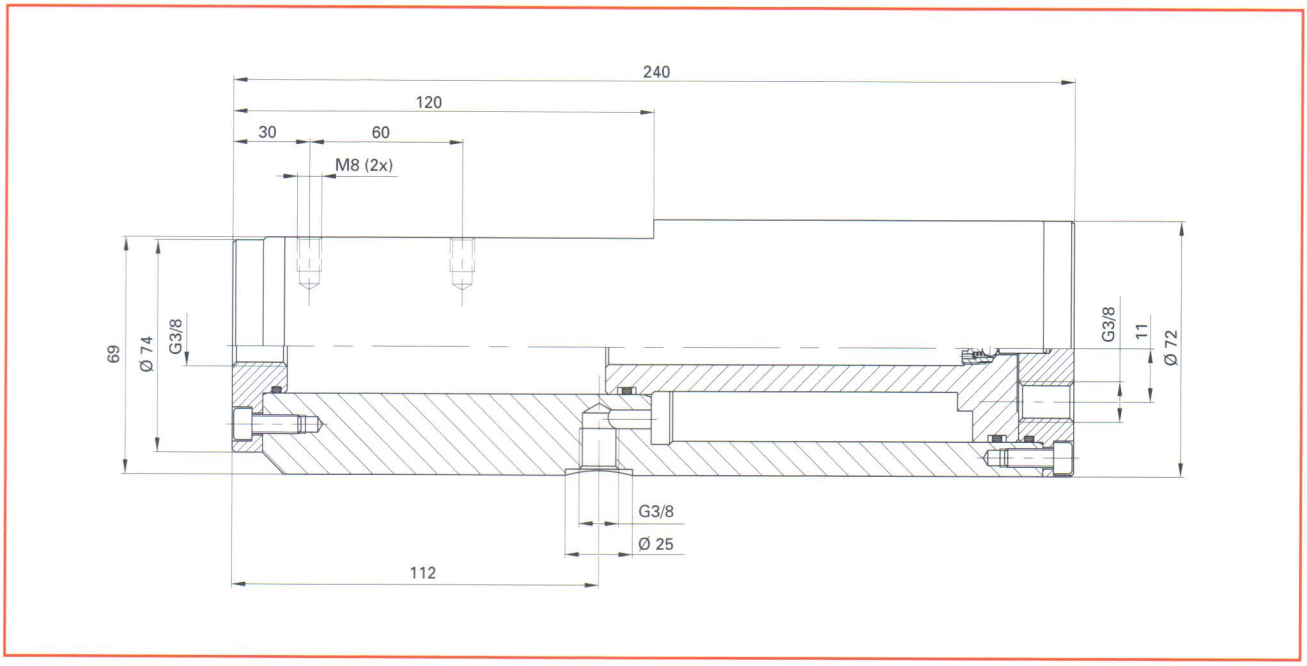
The Oil-Oil Pressure Intensifier types 1450.15 and 1450.17 are only supplied as double-acting versions (without piston return spring).



Dimensions type 1450.16

In addition to higher displacement volume, the Oil-Oil Pressure Intensifier type 1450.16 is characterized by a lower transmission ratio. This small, maintenance-free pressure unit is quite adequate for many applications.

The type 1450.16 pressure intensifiers are also supplied as double-acting versions (without piston return spring).



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