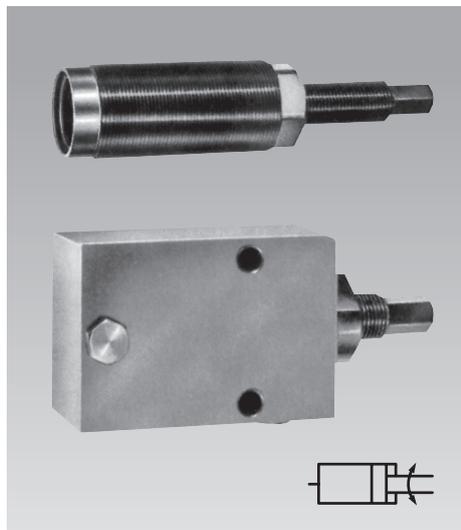


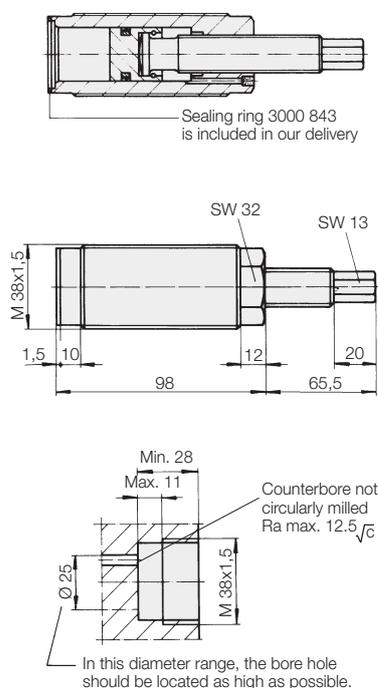


Screw Pumps

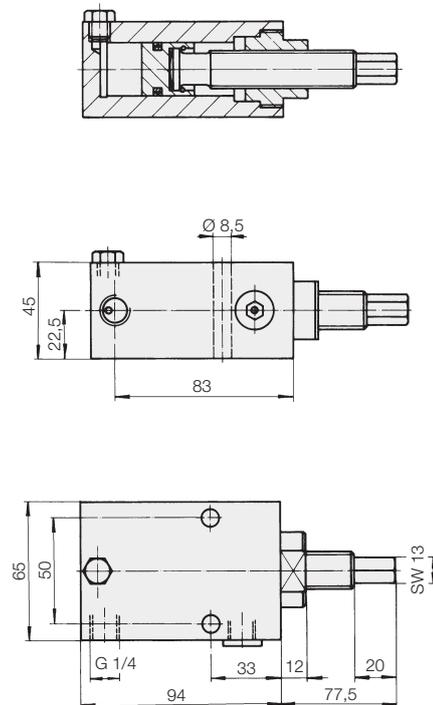
Max. operating pressure 500 bar



Threaded-body type



Block type



Application

Screw pumps are suitable as a pressure generator for small clamping fixtures, which must be independent of an external oil supply.

Important notes

Together with a clamping element, a closed system is created in which the following must be observed:

The connected clamping elements must be hermetically sealed in the starting position and under static pressure, which is the case with all Römheld clamping elements.

Due to clamping cylinder leakage during movement and oil compressibility (1% at a pressure increase of 140 bar), only about 60–70% of the operating volume of the screw pump should be used.

Air in the oil increases compressibility considerably and leads to a drop in pressure. Therefore, the system must be completely bled. A bleeding screw at the highest point is absolutely necessary. Hydraulic oil is also refilled there after turning back the pump. Lines and drilled channels are to be arranged such that air pockets do not form. The clamping force can only be measured accurately using a pressure gauge, as no direct-acting pressure relief valve can be installed in a closed system.

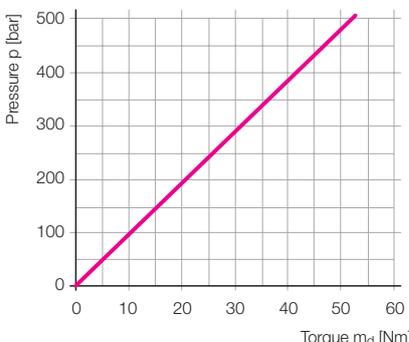
It is possible to limit the torque when tightening the screw spindle, e.g., using a precision pneumatic torquing wrench. Nevertheless, a pressure gauge is required for calibration and monitoring.

If possible, an electro-hydraulic pressure switch can also be used, or a sensor pin preloaded with Belleville springs, which is queried by limit switches in the individual processing stations.

Part no. 8819 101

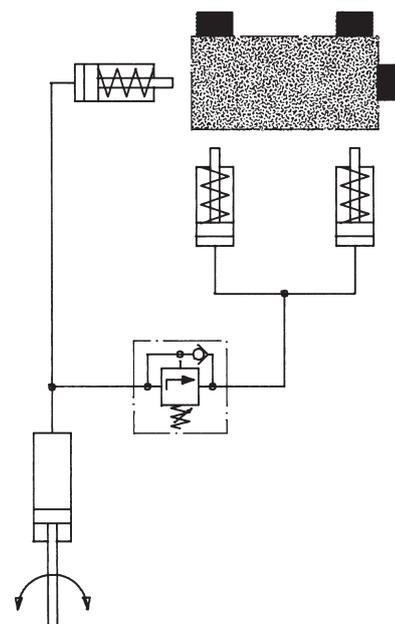
Technical characteristics

Piston Ø	[mm]	25
Stroke	[mm]	43
Operating volume	[cm ³]	21
Operating volume/revolution	[cm ³]	0.98
Tightening torque of the threaded-body type	[Nm]	80
Mounting position		Horizontal, as shown above

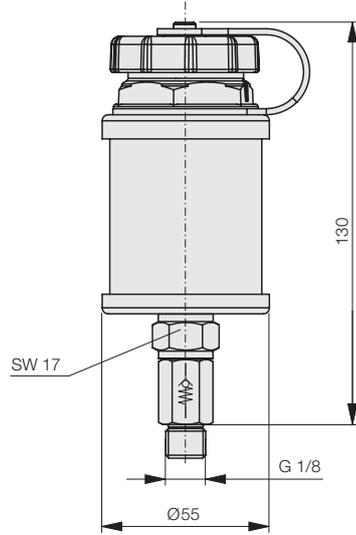


Part no. 8819 001

Hydraulic circuit diagram



Filling tank with filling valve



Technical characteristics

Max. filling quantity	[ccm]	90
Glass material		Polyacrylic
Seal		FKM
Tightening torque suction valve	[Nm]	20
Tightening torque filling tank	[Nm]	15
Part no.		0881976

Important note

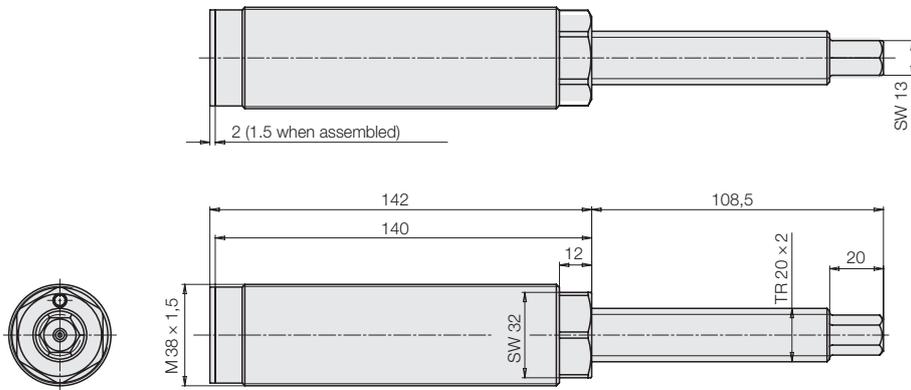
for operation with a filling valve

When unclamping, care must be taken to ensure that no vacuum is created in the oil channel. Therefore, the connected single-acting cylinders must either be equipped with a spring return or have a sufficiently large load applied to the cylinder. Otherwise, there is a risk that too much oil will be drawn back in and the cylinders will no longer return completely.

Special variants for greater operating volume

such as **8819818** are available on request.

Contact us!



Technical characteristics

Max. operating pressure	[bar]	500
Stroke	[mm]	86
Operating volume	[cm ³]	42
Operating volume/revolution	[cm ³]	0.98
Tightening torque of the threaded-body type	[Nm]	80
Mounting position		Horizontal, as shown