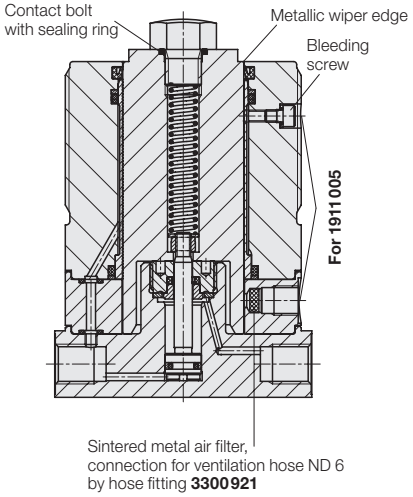
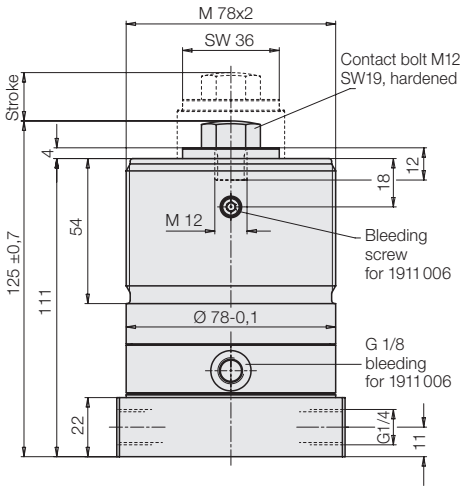
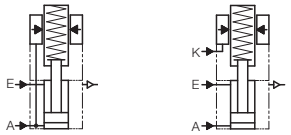
Work Supports

Extending hydraulically – contact by spring force, double acting, max. operating pressure 500 bar

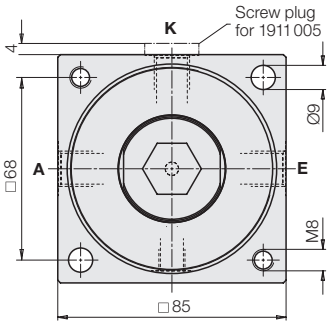


Dimension drawing for 1911006





A = Extending + Locking E = Retracting	A = Extending E = Retracting K = Locking
Part no.	
1911005	**1911006**



Application

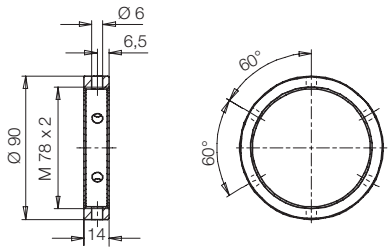
Hydraulic work supports are used to provide a self-adjusting rest for the workpiece during the machining operations. They compensate the workpiece surface irregularities, also deflection and vibration under machining loads.
It is recommended to use double-acting elements if applied in larger hydraulic clamping fixtures with long lines, especially if the return oil is cycled and has to return in a predetermined time.

Description

This hydraulic work support contains a double-acting sliding cylinder. The support plunger is retracted in off-position.
When pressurised at “A”, the piston pushes the support plunger against the inserted workpiece by means of spring force. As soon as the piston has touched the internal stop, the pressure rises and the support plunger is hydraulically locked.
With type 1911006, it is possible to effect locking separately through port "K".
For unclamping, port “A” is depressurised and port “E” is pressurised. The locking is released so that the hydraulic piston can pull back the support plunger to the off-position.
The internal part of the work support is protected against dust and swarf by a sintered metal air filter.

Accessories

Capstan nut
Part no. **3522007**



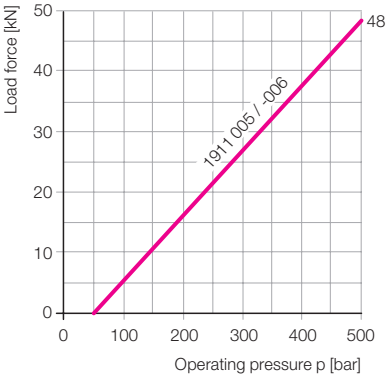
Bolt Ø		[mm]	40
Stroke		[mm]	18 $^{+0.7}_{-0.6}$
Adm. load force	100 bar	[kN]	5
	500 bar	[kN]	48
Plunger contact force		[N]	50 – 100
Recom. mini. pressure supporting		[bar]	100
Recom. mini. pressure retracting		[bar]	20
Oil volume/stroke		[cm³]	2
Max. flow rate		[cm³/s]	25
Weight		[kg]	4.1

Important notes

If there is any danger of fluids being sucked into the filter, a vent hose has to be connected.
The contact bolt must only be removed if it is replaced by another contact bolt with 12 mm thread length.
Spring force should not be used to lift workpieces.
Contact bolts and extensions with large weight can influence the function of this component.
Work supports are not suitable to compensate side loads.
Work supports must only be operated with a sealed contact bolt.
In dry machining applications, with minimum quantity lubrication or in case of accumulation of very small swarf, there can be a swarf holdup in the area of the metallic wiper edge.
Remedy: Regular cleaning.

Operating conditions, tolerances and other data see data sheet A 0.100.

Admissible load F as a function of the operating pressure p



Max. elastic deformations s as a function of support force F