

Work Supports

Extending hydraulically - contact by spring force, single acting with spring return, max. operating pressure 500 bar



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.

Description

With the 1910 range the support plunger is retracted in off-position. When pressurised the support plunger moves against the inserted workpiece by means of spring force.

With increasing oil pressure, the plunger locks hydraulically. After the system has been unclamped, the support plunger returns to off-position. The support plunger is provided with female thread to enable the use of threaded pieces for height adjustment. Oil supply can alternatively be effected from the side or from below.

The internal part of the work support is protected against dust and swarf by a sintered metal air filter.

Important notes!

If there is any danger of fluids being sucked into the filter, a vent hose has to be connected.

Spring force should not be used to lift workpieces

Contact bolts and extensions with large weight can influence the functions of this component.

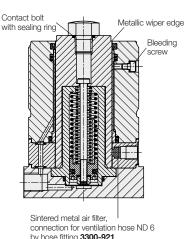
Work supports are not suitable to compensate side loads.

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.

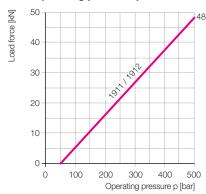
Operating conditions, tolerances and other data see data sheet A 0.100.



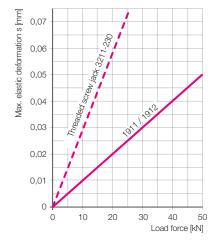
connection for ventilation hose ND 6 by hose fitting **3300-921**

р Contact bolt M12 SW19, hardened Bleeding screw Ø78 - 0,1 G1/8 bleeding 1911-022 G1/4 connection 1912-022 with counterbore Ø19 x 0.2+0.2 deep

Admissible load F as a function of the operating pressure p



Max. elastic deformations s as a function of support force F max. operating pressure 500 bar



Connection		at the	at the
		side	bottom
Bolt Ø:	[mm]	40	40
Stroke +0.4 -0.2	[mm]	18	18
Adm. load force	[kN]	48	48
Oil volume/stroke	[cm ³]	5.7	5.7
Max. flow rate	[cm ³ /s]	70	70
Min. oil pressure	[bar]	100	100
Plunger contact fo	rce [N]	(60 -	- 100) *
a +1.2 -0.9	[mm]	125	130.5
b	[mm]	111	116.5
С	[mm]	22	26.5
d	[mm]	85	85
е	[mm]	68	68
Øf	[mm]	8.8	8.8
g	[mm]	M 8	M 8
h	[mm]	11	-
i		G 1/4	G 1/4
k	[mm]	-	42.5
	[mm]	54	54
Øm	[mm]	M78x2	M78x2
n	[mm]	M12	M12
0	[mm]	12	12
р	[mm]	36	36
Weight	[kg]	4.2	4.2
Part no.		1911-022	1912-022

* stroke-dependent

Accessory

Capstan nut Part no. 3522-007 3522-007 Ø6 78 x 2 06 Ø