ROEMHELD
HILMA - STARK

## 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

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 support plunger locks hydraulically. After the system has been unclamped, the support plunger returns to the 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.


## 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 side | at the bottom |
| :---: | :---: | :---: | :---: |
| Bolt Ø | [mm] | 40 | 40 |
| Stroke ${ }_{-0.2}^{+0.4}$ | [mm] | 18 | 18 |
| Adm. load force | [ kN ] | 48 | 48 |
| Oil volume/stroke | [ $\mathrm{cm}^{3}$ ] | 5.7 | 5.7 |
| Max. flow rate [cm | [ $\mathrm{cm}^{3} / \mathrm{s}$ ] | 70 | 70 |
| Recom. mini. pressure | [ [bar] | 100 | 100 |
| Plunger contact force | [ N ] | (60 | 100)* |
| a $\begin{aligned} & \text { +1.2 } \\ & -0.9\end{aligned}$ | [mm] | 125 | 130.5 |
| b | [mm] | 111 | 116.5 |
| c | [mm] | 22 | 26.5 |
| d | [mm] | 85 | 85 |
| e | [mm] | 68 | 68 |
| $\varnothing f$ | [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 |
| I | [mm] | 54 | 54 |
| $\varnothing$ m | [mm] | M78x2 | M78x2 |
| n | [mm] | M12 | M12 |
| $\bigcirc$ | [mm] | 12 | 12 |
| p | [mm] | 36 | 36 |
| Weight | [kg] | 4.2 | 4.2 |
| Part no. |  | 1911022 | 1912022 |

* stroke-dependent


## Accessory

Capstan nut
Part no.
35220073522007


