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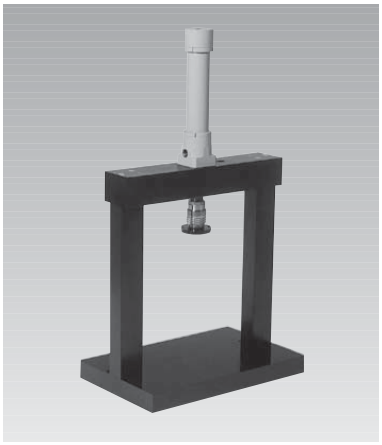
Issue 9-07 E

P 6.602

Press-In Devices 25 -100 kN
closed O-type frame design with hydro-cylinder



Application
The hydraulic press-in devices are preferentially used for rationalisation of power-operated processes such as jointing, pressing-in, jolting, deforming, riveting, etc. In addition, rigid and closed press-in frames are frequently required.

Description
The design of the press-in fixtures is based on a base plate with concentric location hole, Ø 50 mm – H7 and a drilling pattern freely selectable by the customer, in which the workpiece fixture can be adjusted and fixed. The axis of the hydro-cylinder in the crosshead is concentrically aligned to the centre of the base plate. By means of precisely manufactured components the course parallel to the axis is guaranteed when operating the hydro-cylinder. The O-type frame design excels particularly by its rigid characteristics. The press-in devices meet the general standards of quality in the fixture construction.

Quick-change tooling system
The quick-change tooling system connected to the piston rod of the hydro-cylinder offers the possiblity to change to other press-in contact pieces within a very short time.

Uncoupling of the quick-change tooling system is made by lifting of the exterior sleeve only. The contact piece can be detached and changed. After release of the exterior sleeve the quick-change tooling system engages automatically and locates the contact piece in a defined position. In unloaded mode the contact pieces are self-centering. During pressing-in the forces are compensated by the contact pieces and introduced to a spherical surface support, thereby they can allign themselves parallel to the centre line and compensate the elastic deformation of the components. A gentle press-in operation without lateral forces on the workpieces is realised.

Advantages
- High flexibility in the operative range
- Multiple possibilities of application
- Improved ergonomics
- Simple integration in the working place
- Quality assurance in the range of application
- Short amortisation time
- Closed force-loop
- Defined force ratios
- Light component load

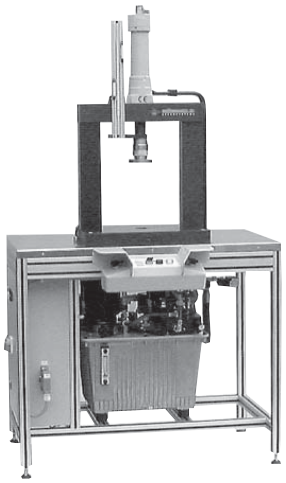
Industry/applications (selection)
- Drive technology, gear box assembly
- Couplings, cardan shafts
- Compressors, pumps, hydraulic elements
- Industrial fittings
- Material handling technologoy
- Automotive industry and their suppliers
- Machine tool building
- Building and agricultural machines
- Electronics

Application and installation instructions
The CE machine tool guide lines have to be met. It has particularly to be considered that the requirements relevant for safety are met. These are for example the two-hand operation of the hydro-cylinder, protection caps in front of the working area, intrinsically safe version of the workpiece fixture to be located in the working area.

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

Hydro-cylinder as per data sheet B 1.282

Electro-hydraulic drive units
For oil supply electro-hydraulic drive units with two-hand operating panel as per data sheet M 6.6065 or power units as per data sheet D 8.013 or D 8.018 with automatic press-in control are advantageously used.



Application example with closed press-in frame and quick-change tooling system as per data sheet M 6.6055.

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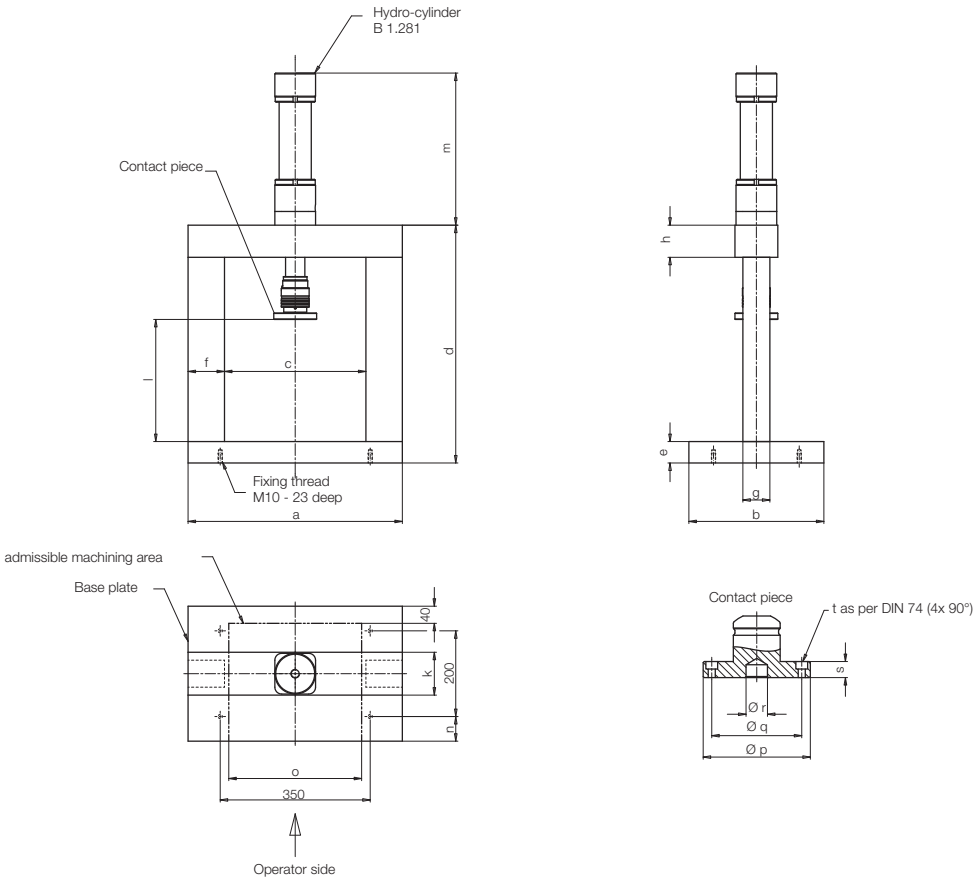
Technical characteristics



Press-in device		6602-30X-XXX	6602-35X-XXX	6602-40X-XXX	6602-45X-XXX	6602-50X-XXX	6602-55X-XXX	6602-60X-XXX	6602-65X-XXX
Max. press force	[kN]	25	25	40	40	63	63	100	100
a	[mm]	400	500	400	500	500	630	630	800
b	[mm]	250	315	250	315	315	400	400	500
c	[mm]	250	350	250	350	330	460	430	600
d = des. clear height +	[mm]	208	230	208	230	270	303	303	345
e	[mm]	40	50	40	50	50	63	63	80
f	[mm]	75	75	75	75	85	85	100	100
g	[mm]	55	55	55	55	63	63	75	75
h	[mm]	63	75	63	75	75	95	95	120
k	[mm]	85	100	85	100	100	125	125	160
l = clear height	[mm]	as per customer's specifications, see code for part-nos.							
m = des. stroke +	[mm]	87	87	92	92	105	105	126	126
n	[mm]	25	57,5	25	57,5	57,5	100	100	100
o = machining area	[mm]	250	330	250	330	330	330	330	330
p	[mm]	60	60	60	60	100	100	100	100
q	[mm]	40	40	40	40	84	84	84	84
r	[mm]	12 H7x6	12 H7x6	12 H7x6	12 H7x6	20 H7x10	20 H7x10	20 H7x10	20 H7x10
s	[mm]	10	10	10	0	15	15	15	15
t		Jm5	Jm5	Jm5	Jm5	Km6	Km6	Km6	Km6
Hydraulic port		G 1/4	G 1/4	G 1/2	G 1/2	G 1/2	G 1/2	G 1/2	G 1/2
Contact piece		**6604-161**	**6604-161**	**6604-161**	**6604-161**	**6604-166**	**6604-166**	**6604-166**	**6604-166**

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Code for part numbers

Code for part numbers

6602-XX X - XXX

30 = 25 kN pressure force, 250 mm clear width
35 = 25 kN pressure force, 350 mm clear width
40 = 40 kN pressure force, 250 mm clear width
45 = 40 kN pressure force, 350 mm clear width
50 = 63 kN pressure force, 330 mm clear width
55 = 63 kN pressure force, 460 mm clear width
60 = 100 kN pressure force, 430 mm clear width
65 = 100 kN pressure force, 600 mm clear width

0 = 100 mm cylinder stroke
1 = 160 mm cylinder stroke
2 = 200 mm cylinder stroke
3 = 250 mm cylinder stroke
4 = 320 mm cylinder stroke
5 = 400 mm cylinder stroke
6 = 500 mm cylinder stroke

XXX = Clear height (dimension l) in mm, Range of height: 0 - 800 mm.
Note: The clear height must be bigger than the cylinder stroke!

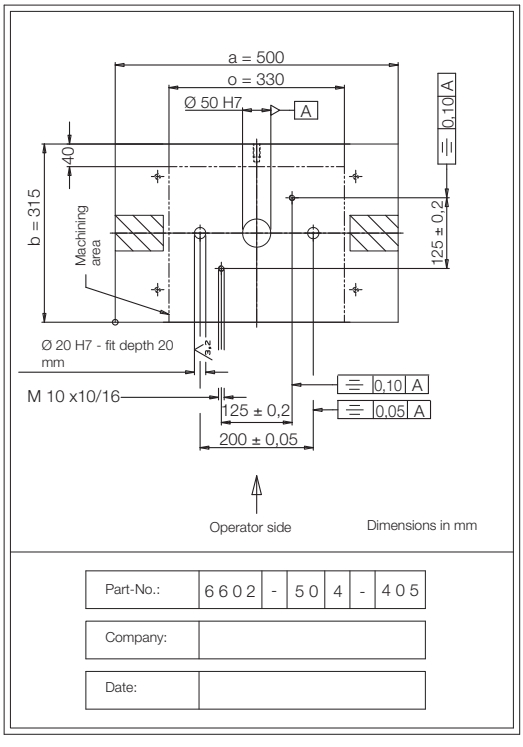
Drilling pattern

Please indicate the desired drilling pattern with complete dimensions of shape and position in the following cartoon on page 4 and join this information to your order. Please consider that machining is only admissible **within the indicated machining area**:

- max. diameter of bore holes : 75 mm
- max. diameter of internal threads: : M 16
- max. bore quality as per DIN 7151 : 7
- max. admissible number of bore holes : 4
- max. number of internal threads : 6
- min. admissible tolerance of length : ± 0.02mm

Example of ordering:

Press-in device with:
- 63 kN pressure force
- 330 mm clear width
- 320 mm cylinder stroke
- 405 mm clear height
- 2 fit holes 20 H7-it depth 20 mm
- 2 internal threads M10 – 10 deep



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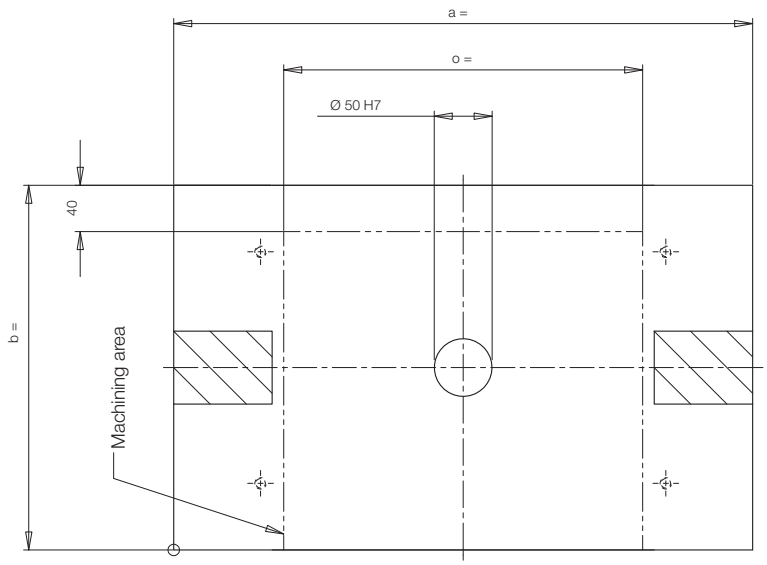
Order pattern
Fax +49 6405/89-211



Note:
Dimensions a, b and o see dimension chart on page 2.

Operator side

Dimensions in mm

Part-No.:	6602	-				

Company:	
Date:	