Hydraulic Pump

Manually operated, with overload protection
Max. operating pressure: 100, 120 and 400 bar

Advantages
- Compact and self-contained design
- Pumping and unclamping or releasing with the same lever
- 3 pressure stages selectable
- Alternatively with overload protection, pressure gauge, hand or foot operation, with holder or base
- Nearly wear-free
- Completely assembled, ready-for-connection unit

Description
Compact hydraulic pump with hand lever or foot pedal for pumping and releasing. Due to the metallic seal on the pump piston, the pump is almost wear-free. The hydraulic pump is delivered completely assembled, including the filling with hydraulic oil HLP32 as a ready-for-connection unit.

In addition to the three maximum operating pressures, the following options can be selected:
- Holder for fixing the pump at the press bed or with a base for good stability.
- Pressure gauge to display the pressure reached. Display range 0 to 100 / 120 or 400 bar.
- Adjusted overload protection (DBV) to protect the roller and ball bars against damage.

Application
Lifting and lowering of dies using roller or ball bars.

Principle of a manually-operated hydraulic pump with 2 ball or roller bars

Overload protection
It may happen that the lifted roller or ball bars are overloaded and destroyed by e.g. unintentional closing of the press or excessive die weights. To protect the ball or roller bars, the hydraulic pump can be supplied with a special pressure relief valve (DBV). In the case of an overload, a valve on the pump opens, the bars are lowered and remain undamaged.

Technical data

<table>
<thead>
<tr>
<th></th>
<th>Max. operating pressure [bar]</th>
<th>100</th>
<th>120</th>
<th>400</th>
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</thead>
<tbody>
<tr>
<td>Max. operating pressure</td>
<td>[bar]</td>
<td>100</td>
<td>120</td>
<td>400</td>
</tr>
<tr>
<td>Displacement per stroke</td>
<td>[cm³]</td>
<td>8</td>
<td>8</td>
<td>2</td>
</tr>
<tr>
<td>Oil volume, usable</td>
<td>[cm³]</td>
<td>150</td>
<td>150</td>
<td>150</td>
</tr>
<tr>
<td>Oil volume</td>
<td>[cm³]</td>
<td>300</td>
<td>300</td>
<td>300</td>
</tr>
<tr>
<td>Operating force - hand lever</td>
<td>[N]</td>
<td>250</td>
<td>300</td>
<td>500</td>
</tr>
<tr>
<td>Hydraulic connection</td>
<td></td>
<td>G 1/4</td>
<td>G 1/4</td>
<td>G 1/4</td>
</tr>
<tr>
<td>Weight</td>
<td>[kg]</td>
<td>7.3</td>
<td>7.3</td>
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Accessories
To connect the hydraulic pump to the hydraulic elements, a series of connecting components such as hydraulic hoses and fittings are available as accessories (see catalogue sheets WZ 11.2800 and WZ 11.3800).

Code for part numbers
8455 PXXX X MX DX BX
Max. operating pressure
100 = 100 bar
120 = 120 bar
400 = 400 bar

Operation
H = Hand lever
F = Foot pedal

Pressure gauge
M1 = with pressure gauge
M0 = without

Overload protection (DBV)
D1 = with DBV
D0 = without

Fixation
BT = Table holder
BS = Base
BF = Flange
B0 = without

Application example
Version with foot pedal and base
Application examples of completely assembled hydraulic pumps

Part no.: 8455PXXX H M1 D1BT
- with pressure gauge
- with hand lever
- table holder
- with overload protection (DBV)

Part no.: 8455PXXX F M0 D1BT
- with hand lever
- table holder
- with overload protection (DBV)

Part no.: 8455PXXX F M1 D0BS
- with pressure gauge
- with foot pedal
- base
- without overload protection (DBV)

Part no.: 8455PXXX H M0 D0BT
- with hand lever
- table holder
- with overload protection (DBV)

Part no.: 8455PXXX F M0 D1BT
- with hand lever
- table holder
- with overload protection (DBV)
Components and accessories

Individual order
On request, the pump components can also be ordered individually and assembled as required. Please note: Hydraulic pumps with overload protection (DBV) and versions with pressure gauge are not available for individual orders.

Hydraulic pump

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<tr>
<td>Part no.</td>
<td>8804813</td>
<td>8804812</td>
<td>8816813</td>
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</table>

Base
Part no. 3533001

Table holder
Part no. 3533002

Flange
Part no. 3533003

Foot pedal
Part no. 0990102

Hand lever
Part no. 0990103

Hilma-Römheld GmbH
Actual issue see www.roemheld-group.com

Subject to modifications
WZ 8.800 / 7-19 E