Hydraulic Driven Booster

Type HDLE 15-D

Available Models:
- double acting, single stage
- double acting, single stage, double stroke length

Technical Data:
- Maximum hydraulic drive pressure pH: 210 bar / 3.045 psi
- Maximum hydraulic flow rate: 30 l/min
- Pressure ratio i: 1:2
- Minimum gas inlet pressure pA min.: 7 bar / 101 psi
- Maximum gas inlet pressure pA max.: 300 bar / 4.350 psi
- Maximum gas outlet pressure pB: 300 bar / 4.350 psi
- Displacement volume: 488 cm³
- Maximum cycles: 60 / min
- Stroke length: 194 mm

Pressure and flow performances, please see enclosed graph.

Standard connections:
- Hydraulic drive: 1/4" BSP
- Gas Inlet: 1/4" BSP
- Gas Outlet: 1/4" BSP
- Max. operating temperature: 60°C
- Weight: 27 kg

Approximate Dimensions:
- Height: 208 mm
- Length: 913 mm
- Width: 145 mm

Options:
- Inert Gas Flushing for applications with explosive or dangerous gases
- CO2 service
- Seal Package: PTFE, NBR

Hydraulic Drive System:
- Customized Hydraulic Booster Station

Hydraulic boosters are delivered as complete packages (including the hydraulic supply unit). Through compact and modular construction, the HDLE is able to conform miscellaneous requirements. Available constructions are for example multi-stage applications as well as parallel or single applications.

The hydraulic supply unit can be supplied with fixed displacement pump or variable capacity pump and electric motor. The electrical control system ensures that the hydraulic booster shuts down on reaching the preset operating pressure. As an option, pressure inlet and pressure outlet can be supplied with shut-off valves, pressure gauges and pressure switches. More information is summarized on page 3.

Please consult factory for more information. All technical and dimensional information subject to change. All General Terms and Conditions of sale, including limitations of our liability, apply to all products and services sold.
Dimensional Drawing

HDLE 15-D

Connections:
- Fluid drive inlet: P = BSP 1/4"*
- Fluid drive outlet: T = BSP 1/4"*
- Gas inlet: A = BSP 1/4"*
- Gas outlet: B = BSP 1/4"*
- Flushing connection: Y = BSP 1/8"*
- Cooling inlet/outlet: K = BSP 3/8"*

Performance Graph

HDLE 15-D

Leistungsdiagramm HDLE 15 mit doppeltem Hub

Performance Graph HDLE 15 with double displacement volume

NOTE: The flow capacity of HDLE remains constant over the entire pressure range.
Technical Data Sheet

Hydraulic Booster Station

Characteristic Features

- hydraulic supply unit with fixed displacement pump or variable capacity pump and electric motor
- electrical control system for shut down on reaching preset operating pressure
- shut-off valves, pressure gauges and pressure switches for pressure inlet and outlet
- air-or water cooler

Options

- Nitrogen flushing for handling of not inert gases
- Frequency converter for speed control
- Thermostatic control for oil-air cooling

Pressure ranges:

- HDLE 2 up to 50 bar
- HDLE 5 up to 100 bar
- HDLE 15 up to 300 bar
- HDLE 30 up to 900 bar

Technical Data

Inlet pressure $P_v$ 2-900 bar
Working pressure $P$ max. 900 bar

Examples for Flow capacities

<table>
<thead>
<tr>
<th>HDLE 5 with double stroke length</th>
<th>Inlet Pressure $P_v$</th>
<th>Outlet Pressure $P$</th>
<th>Flow capacity $Q$</th>
</tr>
</thead>
<tbody>
<tr>
<td>$P_v = 4$ bar</td>
<td>$P = 100$ bar</td>
<td>$Q = 180$ Nl/min</td>
<td></td>
</tr>
<tr>
<td>$P_v = 12$ bar</td>
<td>$P = 100$ bar</td>
<td>$Q = 520$ Nl/min</td>
<td></td>
</tr>
<tr>
<td>$P_v = 50$ bar</td>
<td>$P = 100$ bar</td>
<td>$Q = 2200$ Nl/min</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>HDLE 15 with double stroke length</th>
<th>Inlet Pressure $P_v$</th>
<th>Outlet Pressure $P$</th>
<th>Flow capacity $Q$</th>
</tr>
</thead>
<tbody>
<tr>
<td>$P_v = 10$ bar</td>
<td>$P = 300$ bar</td>
<td>$Q = 140$ Nl/min</td>
<td></td>
</tr>
<tr>
<td>$P_v = 80$ bar</td>
<td>$P = 300$ bar</td>
<td>$Q = 1150$ Nl/min</td>
<td></td>
</tr>
<tr>
<td>$P_v = 150$ bar</td>
<td>$P = 300$ bar</td>
<td>$Q = 2100$ Nl/min</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>HDLE 30 with double stroke length</th>
<th>Inlet Pressure $P_v$</th>
<th>Outlet Pressure $P$</th>
<th>Flow capacity $Q$</th>
</tr>
</thead>
<tbody>
<tr>
<td>$P_v = 100$ bar</td>
<td>$P = 900$ bar</td>
<td>$Q = 650$ Nl/min</td>
<td></td>
</tr>
<tr>
<td>$P_v = 300$ bar</td>
<td>$P = 900$ bar</td>
<td>$Q = 2000$ Nl/min</td>
<td></td>
</tr>
<tr>
<td>$P_v = 600$ bar</td>
<td>$P = 900$ bar</td>
<td>$Q = 4000$ Nl/min</td>
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