# Technical Data Sheet

## Type HDLE 5-D

### Hydraulic Driven Booster

<table>
<thead>
<tr>
<th>Technical Data:</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum hydraulic drive pressure $p_H$</td>
<td>210 bar / 3.045 psi</td>
</tr>
<tr>
<td>Maximum hydraulic flow rate</td>
<td>30 l/min</td>
</tr>
<tr>
<td>Pressure ratio $i$</td>
<td>1.068</td>
</tr>
<tr>
<td>Minimum gas inlet pressure $p_A$ min.</td>
<td>4 bar / 58 psi</td>
</tr>
<tr>
<td>Maximum gas inlet pressure $p_A$ max.</td>
<td>100 bar / 1.450 psi</td>
</tr>
<tr>
<td>Maximum gas outlet pressure $p_B$</td>
<td>100 bar / 1.450 psi</td>
</tr>
<tr>
<td>Displacement volume</td>
<td>1492 cm³</td>
</tr>
<tr>
<td>Maximum cycles</td>
<td>60 / min</td>
</tr>
<tr>
<td>Stroke length</td>
<td>194 mm</td>
</tr>
</tbody>
</table>

Pressure and flow performances, please see enclosed graph.

## Standard connections

<table>
<thead>
<tr>
<th>Standard connections</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydraulic drive</td>
<td>1/4&quot; BSP</td>
</tr>
<tr>
<td>Gas Inlet</td>
<td>1/2&quot; BSP</td>
</tr>
<tr>
<td>Gas Outlet</td>
<td>1/2&quot; BSP</td>
</tr>
<tr>
<td>Max. operating temperature</td>
<td>60°C</td>
</tr>
<tr>
<td>Weight</td>
<td>27 kg</td>
</tr>
</tbody>
</table>

## Approximate Dimensions:

<table>
<thead>
<tr>
<th>Approximate Dimensions</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Height</td>
<td>225 mm</td>
</tr>
<tr>
<td>Length</td>
<td>945 mm</td>
</tr>
<tr>
<td>Width</td>
<td>150 mm</td>
</tr>
</tbody>
</table>

## 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.
Leistungsdiagramm HDLE 5 mit doppeltem Hub
Performance Graph HDLE 5 with double displacement volume

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

Connections:
- Fluid drive inlet: P = BSP 1/4"
- Fluid drive outlet: T = BSP 1/4"
- Gas inlet: A = BSP 1/2"
- Gas outlet: B = BSP 1/2"
- Flushing connection: Y = BSP 1/8"
- Cooling inlet/outlet: K = BSP 3/8"

Dimensional Drawing
HDLE 5-D

Performance Graph
HDLE 5-D
### 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 non-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
- **HDLE 5 with double stroke length**
  - Inlet Pressure: \( P_v \)
  - Outlet Pressure: \( P \)
  - Flow capacity: \( Q \)
  - \( P_v = 4 \text{ bar} \), \( P = 100 \text{ bar} \), \( Q \approx 180 \text{ Nl/min} \)
  - \( P_v = 12 \text{ bar} \), \( P = 100 \text{ bar} \), \( Q \approx 520 \text{ Nl/min} \)
  - \( P_v = 50 \text{ bar} \), \( P = 100 \text{ bar} \), \( Q \approx 2200 \text{ Nl/min} \)

- **HDLE 15 with double stroke length**
  - Inlet Pressure: \( P_v \)
  - Outlet Pressure: \( P \)
  - Flow capacity: \( Q \)
  - \( P_v = 10 \text{ bar} \), \( P = 300 \text{ bar} \), \( Q \approx 140 \text{ Nl/min} \)
  - \( P_v = 80 \text{ bar} \), \( P = 300 \text{ bar} \), \( Q \approx 1150 \text{ Nl/min} \)
  - \( P_v = 150 \text{ bar} \), \( P = 300 \text{ bar} \), \( Q \approx 2100 \text{ Nl/min} \)

- **HDLE 30 with double stroke length**
  - Inlet Pressure: \( P_v \)
  - Outlet Pressure: \( P \)
  - Flow capacity: \( Q \)
  - \( P_v = 100 \text{ bar} \), \( P = 900 \text{ bar} \), \( Q \approx 650 \text{ Nl/min} \)
  - \( P_v = 300 \text{ bar} \), \( P = 900 \text{ bar} \), \( Q \approx 2000 \text{ Nl/min} \)
  - \( P_v = 600 \text{ bar} \), \( P = 900 \text{ bar} \), \( Q \approx 4000 \text{ Nl/min} \)