Real time pressure display with backlight
Compact and robust design
Easy programming of set points and additional functions
Transistor output signals 1 x PNP, 2 x PNP, or 1 x PNP + 4 to 20 mA
Electronic lock
Switching status indicated by LED
Standard M12x1 electrical connection (IP 65)
For pneumatic, all fluid and hydraulic applications

Technical data

**Medium**
Pneumatic types: compressed air or neutral gases
All fluid types: gases or liquids, including aggressive

**Display**
LCD 4 digits illuminated, pressure unit programmable for bar, psi, mpa

**Mounting position**
Optional

**Operating pressure**
Vac to 230 psi (pneumatic)
0 to 9100 psi (hydraulic/allfluid)

**Temperature sensitivity**
(zero point)
0.4% of final value/10 K

**Temperature sensitivity**
(rang)
0.4% FS/10 K

**Ambient temperature**
14°F to 140°F (-10°C to 60°C)

**Fluid temperature**
14°F to 75°F (-10°C to 80°C)

**Switching point**
Adjustable between 0 and 100% FS

**Reset point**
Adjustable between 0 and 100% FS

**Electrical connection**
M12 x 1

**Linearity**
< 0.2% FS ±1 digit

**Degree of protection** to DIN 40 050
IP 65 (with mounted plug)

**Materials**
Housing: aluminum
Pneumatic version
Seal : FPM O-ring (FKM)
Sensor: silicon
Hydraulic/All fluid version
Porting block / sensor: 316 SS welded

**Options selector**

<table>
<thead>
<tr>
<th>Pressure range (pneumatic)</th>
<th>Substitute</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vac–15 psi</td>
<td>0</td>
</tr>
<tr>
<td>0 – 230 psi</td>
<td>2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Pressure range (allfluid)</th>
<th>Substitute</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 – 145 psi</td>
<td>1</td>
</tr>
<tr>
<td>0 – 580 psi</td>
<td>3</td>
</tr>
<tr>
<td>0 – 1450 psi</td>
<td>4</td>
</tr>
<tr>
<td>0 – 2300 psi</td>
<td>5</td>
</tr>
<tr>
<td>0 – 3600 psi</td>
<td>6</td>
</tr>
<tr>
<td>0 – 5800 psi</td>
<td>7</td>
</tr>
<tr>
<td>0 – 9100 psi</td>
<td>8</td>
</tr>
</tbody>
</table>

**Fluid/electrical connection**
0 1/4, M12 x 1 | 2
1/4 NPT, M12 x 1 | 4
Flange, M12 x 1 | 6

**Output signal**
1 digital out | 1
2 digital out | 2
1 digital out/4 – 20 mA** | 4

**M12 x 1 connector not included. Please see table on next page.**

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For further information [www.norgren.com](http://www.norgren.com)
**Herion 33D Series**  
Solid state switches (pneumatic / all-fluid)  
Vac to 9100 psi

**Electrical parameters**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electrical connection</td>
<td>M12 x 1</td>
</tr>
<tr>
<td>Power supply</td>
<td>10 – 32 V d.c. (polarity safe) digital models</td>
</tr>
<tr>
<td></td>
<td>15 – 32 V d.c. (polarity safe) analog models</td>
</tr>
<tr>
<td>Permissible residual ripple</td>
<td>10% (within 12 to 32 V)</td>
</tr>
<tr>
<td>Current consumption</td>
<td>&lt;50 mA (plus load current)</td>
</tr>
</tbody>
</table>

**Electromagnetic compatibility**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interference emission</td>
<td>Conforming to EN 50081. Part 1</td>
</tr>
<tr>
<td>Interference immunity</td>
<td>Conforming to EN 50082. Part 2</td>
</tr>
</tbody>
</table>

**Electrical connection M12 x 1**

<table>
<thead>
<tr>
<th>Pin</th>
<th>Signal</th>
<th>Cable</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Supply voltage</td>
<td>Brown</td>
</tr>
<tr>
<td>2</td>
<td>Out 2 (PNP) / analog 4 – 20 mA</td>
<td>White</td>
</tr>
<tr>
<td>3</td>
<td>Common</td>
<td>Blue</td>
</tr>
<tr>
<td>4</td>
<td>Out 1 (PNP)</td>
<td>Black</td>
</tr>
<tr>
<td>5</td>
<td>Earth ground</td>
<td>Grey</td>
</tr>
</tbody>
</table>

**Switching output**

- **Switching mode**: PNP sourcing type transistor, suitable for inductive load
- **Output voltage**: Supply voltage -1.5 V
- **Analog output**: 4 – 20mA
- **Contact rating**: Imax = 500 mA (short-circuit proof)
- **Switching time**: < 10 ms
- **Damping**: 5 ms – 0.64 sec programmable
- **Signal delay**: On/off 0 to 20 sec programmable
- **Service life**: min. 100 million switching cycles
- **Switching logic**: n.o. / n.c. programmable
- **Operating mode**: Standard, hysteresis and window mode
  Separately selectable for each output

**Accessories**

<table>
<thead>
<tr>
<th>Part number</th>
<th>Connectors and cordsets (M12 x 1)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>8112184000000000</td>
<td>Mating connector 5-pin straight</td>
</tr>
<tr>
<td></td>
<td>w/screw terminals, no cable</td>
</tr>
</tbody>
</table>

* must be ordered separately

**Dimensions in inches (mm)**

- Front view
- Rear view (flange version)

* Suitable for M 5 x 35 or 10-24 screws
** Flange diameter 8 x 1.2 deep, O-ring 4.47 x 1.78 (FPM 90)