**PSE 30-8**

<table>
<thead>
<tr>
<th>Product</th>
<th>Nominal torque</th>
<th>Self-holding torque</th>
<th>Nominal rated speed</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSE 301-8</td>
<td>1 Nm</td>
<td>0.5 Nm</td>
<td>210 rpm</td>
</tr>
<tr>
<td>PSE 302-8</td>
<td>2 Nm</td>
<td>1 Nm</td>
<td>115 rpm</td>
</tr>
<tr>
<td>PSE 305-8</td>
<td>5 Nm</td>
<td>2.5 Nm</td>
<td>40 rpm</td>
</tr>
</tbody>
</table>

**Data interfaces**
- CANopen, PROFI BUS DP DeviceNet, Modbus RTU, Sercos, EtherCAT, PROFINET, EtherNet/IP, POWERLINK, IO-Link

**Duty cycle**
- 30% (basis time 300 s)

**Mode of operation**
- S3

**Supply voltage**
- 24 V DC ± 10%

**Nominal current**
- 2.2 A

**Power consumption (control unit)**
- 0.1 A

**Positioning accuracy**
- Absolute measurement of position taken directly at the output shaft

**Positioning range**
- 0.9°

**Shock resistance**
- In accordance with IEC/DIN EN 60068-2-27

**Vibration resistance**
- In accordance with IEC/DIN EN 60068-2-6
  - 10...55 Hz: 1.5 mm/
  - 55...1000 Hz: 10 g/
  - 10...2000 Hz: 5 g

**Output shaft**
- 8 mm hollow shaft with adjustable collar

**Maximum axial force**
- 20 N

**Maximum radial force**
- 40 N

**Ambient temperature**
- 0...45°C

**Storage temperature**
- -10...70°C

**Protection class**
- IP54

**Weight**
- 650 g

**Certificates**
- CE, optional: NRTL (UL, CSA, ANSI)

The order key and accessories can be found on p. 18 / 19.
ORDER KEY PSE/PSS/PSW 3 SERIES

All the positioning systems in the PSE/PSS/PSW 3 series share the same order key.
To provide the best possible overview and to simplify customer documentation, the diverse range of options available for the PSE/PSS/PSW 3 series has been organised in a shared order key.

**Order key**
PSE/PSS/PSW:

<table>
<thead>
<tr>
<th>Protection class</th>
<th>A Design</th>
<th>B Type</th>
<th>C Bus communication (see p. 7)</th>
<th>D Connections</th>
<th>E Brake (see p. 11)</th>
<th>F Certification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positioning System Efficient (see p. 20-25)</td>
<td>IP54</td>
<td>PSE</td>
<td>CA: CANopen</td>
<td>0: standard</td>
<td>0: without M</td>
<td>NRTL certification in accordance with UL, CSA, ANSI and CE</td>
</tr>
<tr>
<td>Positioning System Stainless (see p. 27-30)</td>
<td>IP65</td>
<td>PSS</td>
<td>DP: PROFIBUS DP</td>
<td>T: with jog keys</td>
<td>Y: 1 connector, Y-encoded</td>
<td></td>
</tr>
<tr>
<td>Positioning System Washable (see p. 32-35)</td>
<td>IP68</td>
<td>PSW</td>
<td>MB: Modbus RTU</td>
<td>Z: 1 connector, Y-encoded, with jog keys</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: You can find the order key for the PSE 34_-14 on page 26.

Standard equipment (connections):
- always provided with 3 plugs/sockets (not for IO-Link or Y-encoded connector)
- address switches always provided (also IE-buses, not for IO-Link)

For further information on connections and address settings see also “Overview: bus communication” on p. 47.

**TORQUES AND SPEEDS**

**Example 1**
You require the protection class IP54 and a maximum torque of 2 Nm. The speed should be greater than 100 rpm. An 8 mm hollow shaft and longitudinal construction meet the requirements of your application.
Your wish to use EtherNet/IP as the bus and connect the PSE to the control unit using a hybrid connector and hub. You do not require an additional holding brake in your application.

→ PSE 312-8-EI-Y-0-0

**Example 2**
IP68, max. 3 Nm, > 100 rpm, horizontal construction, 14 mm solid circular shaft, IO-Link via a connector, with brake.

→ PSW 325-14V-IO-0-M-0
ACCESSORIES PSE/PSS/PSW 3 SERIES

The connectors shown here can be used for all three types of device (PSE/PSS/PSW). This ensures that the PSE (IP 54) and PSS (IP 65) comply with the IP protection classes. We will also be pleased to help you find a suitable mating connector for the PSW (IP 68) if necessary – just ask us!

<table>
<thead>
<tr>
<th>Bus communication</th>
<th>Power supply + databus connector (2x) (for option 0)</th>
<th>Power supply + databus (2x) + jog key connector (for option T, not for PSW)</th>
<th>Cable and connectors for 1-connector solution (for option Y or IO-Link)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CANopen ²</td>
<td><img src="image1" alt="Image" /></td>
<td><img src="image2" alt="Image" /></td>
<td><img src="image3" alt="Image" /></td>
</tr>
<tr>
<td>PROFIBUS DP</td>
<td><img src="image4" alt="Image" /></td>
<td><img src="image5" alt="Image" /></td>
<td><img src="image6" alt="Image" /></td>
</tr>
<tr>
<td>Modbus RTU</td>
<td><img src="image7" alt="Image" /></td>
<td><img src="image8" alt="Image" /></td>
<td><img src="image9" alt="Image" /></td>
</tr>
<tr>
<td>DeviceNet</td>
<td><img src="image10" alt="Image" /></td>
<td><img src="image11" alt="Image" /></td>
<td><img src="image12" alt="Image" /></td>
</tr>
<tr>
<td>Sercos</td>
<td><img src="image13" alt="Image" /></td>
<td><img src="image14" alt="Image" /></td>
<td><img src="image15" alt="Image" /></td>
</tr>
<tr>
<td>EtherCAT</td>
<td><img src="image16" alt="Image" /></td>
<td><img src="image17" alt="Image" /></td>
<td><img src="image18" alt="Image" /></td>
</tr>
<tr>
<td>PROFINET</td>
<td><img src="image19" alt="Image" /></td>
<td><img src="image20" alt="Image" /></td>
<td><img src="image21" alt="Image" /></td>
</tr>
<tr>
<td>EtherNet/IP</td>
<td><img src="image22" alt="Image" /></td>
<td><img src="image23" alt="Image" /></td>
<td><img src="image24" alt="Image" /></td>
</tr>
<tr>
<td>POWERLINK</td>
<td><img src="image25" alt="Image" /></td>
<td><img src="image26" alt="Image" /></td>
<td><img src="image27" alt="Image" /></td>
</tr>
<tr>
<td>IO-Link ³</td>
<td>-</td>
<td>-</td>
<td><img src="image28" alt="Image" /></td>
</tr>
</tbody>
</table>

¹ see under "D" in the order key ² power supply and bus via one cable, without second databus connector ³ A- or B- coding of the connectors is possible

Further Accessories

- Jog key box (for option T, not for PSW) Order no. 9601.0241
- Screw cap to cover the second bus connection (for PSS/PSW) Order no. 9601.0176

MODULLES AND DESCRIPTION FILES

Take advantage of our functional modules or description files for the various buses. You can download the files on our website:

[www.halstrup-walcher.de/en/software](http://www.halstrup-walcher.de/en/software)