PSE 31_-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 311-8</td>
<td>1 Nm</td>
<td>0.5 Nm</td>
<td>210 rpm</td>
</tr>
<tr>
<td>PSE 312-8</td>
<td>2 Nm</td>
<td>1 Nm</td>
<td>115 rpm</td>
</tr>
<tr>
<td>PSE 315-8</td>
<td>5 Nm</td>
<td>2.5 Nm</td>
<td>40 rpm</td>
</tr>
</tbody>
</table>

**Data interfaces**

CANopen, PROFIbus 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 VDC ± 10 % galvanically separated between control and motor and bus

**Nominal current**

2.2 A

**Power consumption (control unit)**

0.1 A

**Positioning accuracy**

Absolute measurement of position taken directly at the output shaft

0.9°

**Positioning range**

250 rotations not subject to mechanical limits

**Shock resistance**

in accordance with IEC/DIN EN 60068-2-27

50 g 11 ms

**Vibration resistance**

in accordance with IEC/DIN EN 60068-2-6

10...55 Hz ± 15 mm/s²

55...1 000 Hz ± 10 g/s²

10...2 000 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**

700 g

**Certificates**

CE, optional: NRTL (UL, CSA, ANSI)

The order key and accessories can be found on p. 18 / 19.

All dimensions in mm. For details of the connections please see also p. 47 and the instruction manual.
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.

<table>
<thead>
<tr>
<th>Order key PSE/PSS/PSW:</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
</tr>
<tr>
<td>Protection class</td>
</tr>
<tr>
<td>---</td>
</tr>
<tr>
<td>Positioning System Efficient (see p. 20-25)</td>
</tr>
<tr>
<td>Positioning System Washable (see p. 32-35)</td>
</tr>
</tbody>
</table>

1) You can find the order key for the PSE 34_-14 on page 26.
2) (V) not for PSE
3) not for PSW or IO-Link, always via an extra connector
4) only with 14 mm output shafts

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

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.

Examples of orders provided below.
**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</td>
<td><img src="image" alt="Connector" /></td>
<td><img src="image" alt="Connector" /></td>
<td><img src="image" alt="Connector" /></td>
</tr>
<tr>
<td>PROFIBUS DP</td>
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<td><img src="image" alt="Connector" /></td>
<td><img src="image" alt="Connector" /></td>
</tr>
<tr>
<td>Modbus RTU</td>
<td>Connector set: Order no. 9601.0060</td>
<td>Connector set: Order no. 9601.0062</td>
<td>5 m: Order no. 9601.0245</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>10 m: Order no. 9601.0233</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>20 m: Order no. 9601.0234</td>
</tr>
<tr>
<td>DeviceNet</td>
<td>Connector set: Order no. 9601.0088</td>
<td>Connector set: Order no. 9601.0090</td>
<td>5 m: Order no. 9601.0240</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>10 m: Order no. 9601.0244</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Hub on request</td>
</tr>
<tr>
<td>Sercos</td>
<td><img src="image" alt="Connector" /></td>
<td><img src="image" alt="Connector" /></td>
<td><img src="image" alt="Connector" /></td>
</tr>
<tr>
<td>EtherCAT</td>
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<tr>
<td>PROFINET</td>
<td><img src="image" alt="Connector" /></td>
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</tr>
<tr>
<td>EtherNet/IP</td>
<td><img src="image" alt="Connector" /></td>
<td><img src="image" alt="Connector" /></td>
<td><img src="image" alt="Connector" /></td>
</tr>
<tr>
<td>POWERLINK</td>
<td>Connector set: Order no. 9601.0112</td>
<td>Connector set: Order no. 9601.0317</td>
<td>Connector: Order no. 9601.0107</td>
</tr>
<tr>
<td>IO-Link</td>
<td>-</td>
<td>-</td>
<td></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

**MODULES 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)