PSE 31_/33_-14

- **Supply voltage**: 24 V DC ± 10 %
- **Nominal current**: PSE 31_: 2.4 A, PSE 33_: 3.1 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
- **Shock resistance**:
  - 50 g 11 ms
- **Vibration resistance**:
  - 10...55 Hz 1.5 mm /
  - 55...1000 Hz 10 g /
  - 10...2000 Hz 5 g
- **Output shaft**: 14 mm hollow shaft with adjustable collar
- **Snap-on brake**: optional (holding torque = nominal torque)
- **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)

### Data interfaces
- CANopen, PROFIBUS DP, DeviceNet, Modbus RTU, Sercos, EtherCAT, PROFINET, EtherNet/IP, POWERLINK, IO-Link

### Product Specifications

<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 311-14</td>
<td>1 Nm</td>
<td>0.5 Nm</td>
<td>210 rpm</td>
</tr>
<tr>
<td>PSE 312-14</td>
<td>2 Nm</td>
<td>1 Nm</td>
<td>115 rpm</td>
</tr>
<tr>
<td>PSE 332-14</td>
<td>2 Nm</td>
<td>1 Nm</td>
<td>150 rpm</td>
</tr>
<tr>
<td>PSE 335-14</td>
<td>5 Nm</td>
<td>2.5 Nm</td>
<td>68 rpm</td>
</tr>
</tbody>
</table>

### Characteristic Curve

- rpm vs. Nm

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

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**

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protection class</td>
<td>Design</td>
<td>Type</td>
<td>Bus communication (see p. 7)</td>
<td>Connections</td>
<td>Brake (see p. 11)</td>
</tr>
</tbody>
</table>

- **Positioning System Efficient** (see p. 20–25)
  - IP54: PSE
  - IP65: PSS
  - IP68: PSW
  - Connection: CANopen

- **Positioning System Stainless** (see p. 27–30)
  - Connection: DeviceNet

- **Positioning System Washable** (see p. 32–35)
  - Connection: Modbus RTU

**Standard equipment (connections)**

- always provided with 3 plugs / sockets (not for IO-Link or Y-encoded connector)
- address switches always provided (also I-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.**

**TORQUES AND SPEEDS**

**Example 1**

You require the protection class IP 54 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) 1)</th>
<th>Power supply + databus (2x) + jog key connector (for option T, not for PSW) 11)</th>
<th>Cable and connectors for 1-connector solution 5) (for option Y or IO-Link) 11)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CANopen 2)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PROFIBUS DP</td>
<td></td>
<td></td>
<td></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></td>
</tr>
<tr>
<td></td>
<td></td>
<td></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></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EtherCAT</td>
<td></td>
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<tr>
<td>PROFINET</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EtherNet/IP</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>POWERLINK</td>
<td>Connector set: Order no. 9601.0112</td>
<td>Connector set: Order no. 9601.0317</td>
<td></td>
</tr>
<tr>
<td>IO-Link 3)</td>
<td>-</td>
<td>-</td>
<td>Connector: Order no. 9601.0107 2)</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