**PSE 30_/32_-14**

**Product Nominal torque** | **Self-holding torque** | **Nominal rated speed**
--- | --- | ---
PSE 301-14 1 Nm | 0.5 Nm | 210 rpm
PSE 302-14 2 Nm | 1 Nm | 100 rpm
PSE 305-14 5 Nm | 2.5 Nm | 40 rpm
PSE 322-14 2 Nm | 1 Nm | 150 rpm
PSE 325-14 5 Nm | 2.5 Nm | 68 rpm

**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 V DC ± 10 %
- Nominal current: PSE 30_: 2.4 A, PSE 32_: 3.1 A
- Power consumption (control unit): 0.1 A
- Positioning accuracy: 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: 1200 g
- Certificates: CE, optional: NRTL (UL, CSA, ANSI)

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.
PSE 3210/3218-14

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

Product Nominal torque Self-holding torque Nominal rated speed
PSE 3210-14 10 Nm 5 Nm 30 rpm
PSE 3218-14 18 Nm 9 Nm 17 rpm

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 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 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 1.5 mm/ 55...1000 Hz 10/ 10...2000 Hz 5 g
Output shaft 14 mm hollow shaft with clamp and feather key
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 IP 54
Weight approx. 1350 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.

Order key
PSE / PSS / PSW:

<table>
<thead>
<tr>
<th>Protection class</th>
<th>A</th>
<th>Design</th>
<th>B</th>
<th>Type</th>
<th>C</th>
<th>Bus communication (see p. 7)</th>
<th>D</th>
<th>Connections</th>
<th>E</th>
<th>Brake (see p. 11)</th>
<th>F</th>
<th>Certification</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSS 310/x</td>
<td>1</td>
<td></td>
<td></td>
<td>PSS</td>
<td></td>
<td>CA: CANopen</td>
<td></td>
<td>0: standard</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSS 312/x</td>
<td>2</td>
<td></td>
<td></td>
<td>PSS</td>
<td></td>
<td>DP: PROFIBUS DP</td>
<td></td>
<td>T: with jog keys</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSS 315/x</td>
<td>3</td>
<td></td>
<td></td>
<td>PSS</td>
<td></td>
<td>DN: DeviceNet</td>
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<td>Y: 1 connector,</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSS 318/x</td>
<td>4</td>
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<td></td>
<td>PSS</td>
<td></td>
<td>MB: Modbus RTU</td>
<td></td>
<td>Y: Y-encoded,</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSS 320/x</td>
<td>5</td>
<td></td>
<td></td>
<td>PSS</td>
<td></td>
<td>SE: Sercos</td>
<td></td>
<td>Z: Y-encoded,</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSS 321/x</td>
<td>6</td>
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<td></td>
<td>PSS</td>
<td></td>
<td>EC: EtherCAT</td>
<td></td>
<td>with jog keys</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSS 322/x</td>
<td>7</td>
<td></td>
<td></td>
<td>PSS</td>
<td></td>
<td>PN: PROFINET</td>
<td></td>
<td>0: without</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSS 323/x</td>
<td>8</td>
<td></td>
<td></td>
<td>PSS</td>
<td></td>
<td>PL: EtherCAT/</td>
<td></td>
<td>M: with</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>PSS 324/x</td>
<td>9</td>
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<td></td>
<td>PSS</td>
<td></td>
<td>POWERLINK</td>
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<td></td>
</tr>
<tr>
<td>PSS 325/x</td>
<td>10</td>
<td></td>
<td></td>
<td>PSS</td>
<td></td>
<td>IO: IO-Link</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

You can find the order key for the PSE 34x 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 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.

<table>
<thead>
<tr>
<th>Form / Type</th>
<th>Torque</th>
<th>Output shaft</th>
</tr>
</thead>
<tbody>
<tr>
<td>horizontal</td>
<td>30</td>
<td>8 = 8 mm hollow shaft</td>
</tr>
<tr>
<td>vertical</td>
<td>31</td>
<td>14 = 14 mm hollow shaft</td>
</tr>
<tr>
<td>horizontal</td>
<td>32</td>
<td>8V = 8 mm solid shaft</td>
</tr>
<tr>
<td>vertical</td>
<td>33</td>
<td>14V = 14 mm solid shaft</td>
</tr>
</tbody>
</table>

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
IP 68, 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</td>
<td><img src="image1.png" alt="Image" /></td>
<td><img src="image2.png" alt="Image" /></td>
<td><img src="image3.png" alt="Image" /></td>
</tr>
<tr>
<td>PROFIBUS DP</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>Modbus RTU</td>
<td><img src="image4.png" alt="Image" /></td>
<td><img src="image5.png" alt="Image" /></td>
<td>10 m: Order no. 9601.0233</td>
</tr>
<tr>
<td>DeviceNet</td>
<td>Connector set: Order no. 9601.0088</td>
<td>Connector set: Order no. 9601.0090</td>
<td>20 m: Order no. 9601.0234</td>
</tr>
<tr>
<td>Sercos</td>
<td><img src="image6.png" alt="Image" /></td>
<td><img src="image7.png" alt="Image" /></td>
<td>5 m: Order no. 9601.0240</td>
</tr>
<tr>
<td>EtherCAT</td>
<td><img src="image8.png" alt="Image" /></td>
<td><img src="image9.png" alt="Image" /></td>
<td>10 m: Order no. 9601.0244</td>
</tr>
<tr>
<td>PROFINET</td>
<td><img src="image10.png" alt="Image" /></td>
<td><img src="image11.png" alt="Image" /></td>
<td>Hub on request</td>
</tr>
<tr>
<td>EtherNet/IP</td>
<td><img src="image12.png" alt="Image" /></td>
<td><img src="image13.png" alt="Image" /></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</td>
<td><img src="image14.png" alt="Image" /></td>
<td><img src="image15.png" alt="Image" /></td>
<td>Connector: Order no. 9601.0107</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)