



Product	Nominal torque	Self-holding torque	Nominal rated speed
PSE 311-8	1 Nm	0.5 Nm	210 rpm
PSE 312-8	2 Nm	1 Nm	115 rpm
PSE 315-8	5 Nm	2.5 Nm	40 rpm

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

Start-up duration	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	50g 11 ms
Vibration resistance in accordance with IEC/DIN EN 60068-2-6	10 .. 55 Hz 1.5 mm / 55 .. 1 000 Hz 10g / 10 .. 2 000 Hz 5g
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	IP 54
Weight	700g
Certificates	CE

The order key and accessories can be found on p. 20/21.

hollow shaft  
ø8H9/20 depth

torque support

removeable sight glass for LED status/address switches

	A	B
PSE 311	115	70
PSE 312	127	82
PSE 315		

jog key input

For details of the connections please see also p. 11 and the instruction manual.

Characteristic curve for PSE 31\_-8

Model	Nominal Torque (Nm)	Nominal Speed (rpm)
PSE 311-8	1	210
PSE 312-8	2	115
PSE 315-8	5	40

# 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	A	B	C	D	E	
<b>PSE / PSS / PSW:</b>						
	Pro-tection class	<b>A</b> Design	<b>B</b> Type	<b>C</b> Bus communication (see p. 10)	<b>D</b> Connections	<b>E</b> Brake (see p. 13)
Positioning System <b>Efficient</b> (see p. 22-27) <sup>1)</sup>	IP54	PSE	30x-8/-14 (V) <sup>2)</sup>	CA CANopen DP PROFIBUS DP DN DeviceNet	0 = without jog keys T = with jog keys <sup>3)</sup> Y = 1 connector, Y-encoded Z = 1 connector, Y-encoded, with jog keys <sup>3)</sup>	0 = without brake M <sup>4)</sup> = with brake
Positioning System <b>Stainless</b> (see p. 30-33)	IP65	PSS	31x-8/-14 (V) <sup>2)</sup>	MB Modbus RTU SE Sercos		
Positioning System <b>Washable</b> (see p. 34-37)	IP68	PSW	32x-14 (V) <sup>2)</sup> 33x-14 (V) <sup>2)</sup>	EC EtherCAT PN PROFINET EI EtherNet/IP PL POWERLINK IO IO-Link		

<sup>1)</sup> You can find the order key for the PSE 34\_14 on page 28.      <sup>2)</sup> (V) not for PSE      <sup>3)</sup> not for PSW or IO-Link, always via an extra connector      <sup>4)</sup> only with 14 mm output shafts

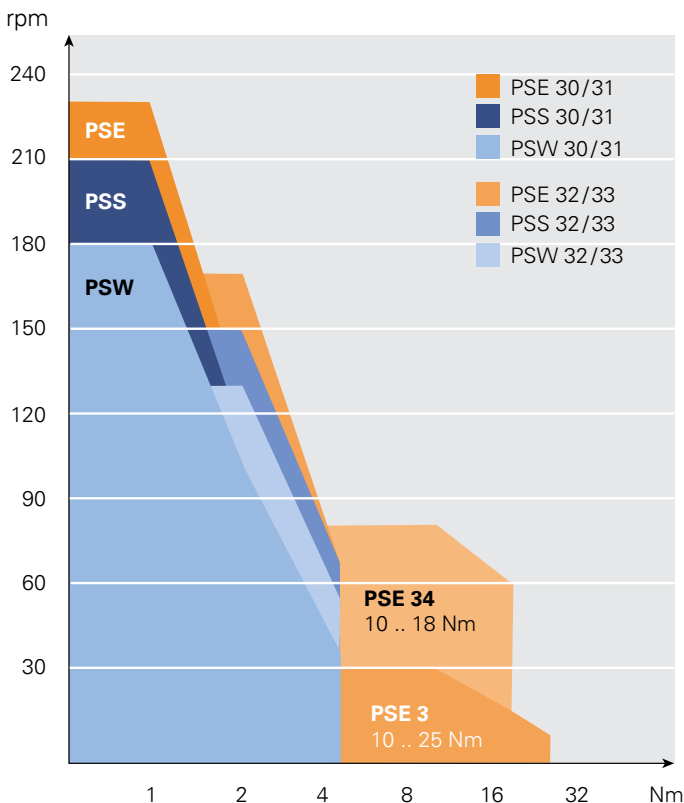
### Standard equipment (Connections)

- second databus connection always provided (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. 11.

Form/Type	Torque	Output shaft
horizontal  30	<b>x</b> = 1 Nm <b>x</b> = 2 Nm	8 = 8 mm hollow shaft 14 = 14 mm hollow shaft
longitudinal  31	<b>x</b> = 5 Nm	8V = 8 mm solid shaft <sup>6)</sup> 14V = 14 mm solid shaft <sup>6)</sup>
horizontal  32	<b>x</b> = 10 Nm <sup>5)</sup>	
longitudinal  33	<b>x</b> = 18 Nm <sup>5)</sup> <b>x</b> = 25 Nm <sup>5)</sup>	

<sup>5)</sup> only for PSE  
18 Nm: horiz.  
25 Nm: long.      <sup>6)</sup> only for PSS/PSW



## TORQUES AND SPEEDS

### Example 1

You require the protection class IP54 and a maximum torque of 2 Nm. The speed (rpm) should be greater than 100 rpm. An 8 mm hollow shaft and longitudinal construction meet the requirements of your application. You 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

### Example 2

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

→ PSW 325-14-IO-0-M