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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.

	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.

# 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>11</sup>	IP54	PSE	30x-8/-14 (V) <sup>21</sup>	CA CANopen DP PROFIBUS DP DN DeviceNet	0 = without jog keys T = with jog keys <sup>31</sup> Y = 1 connector, Y-encoded Z = 1 connector, Y-encoded, with jog keys <sup>31</sup>	0 = without brake M <sup>41</sup> = with brake
Positioning System <b>Stainless</b> (see p. 30-33)	IP65	PSS	31x-8/-14 (V) <sup>21</sup> 32x-14 (V) <sup>21</sup> 33x-14 (V) <sup>21</sup>	MB Modbus RTU SE Sercos EC EtherCAT PN PROFINET		
Positioning System <b>Washable</b> (see p. 34-37)	IP68	PSW		EI EtherNet/IP PL POWERLINK IO IO-Link		

<sup>11</sup> You can find the order key for the PSE 34\_14 on page 28.      <sup>21</sup> (V) not for PSE      <sup>31</sup> not for PSW or IO-Link, always via an extra connector      <sup>41</sup> only with 14 mm output shafts

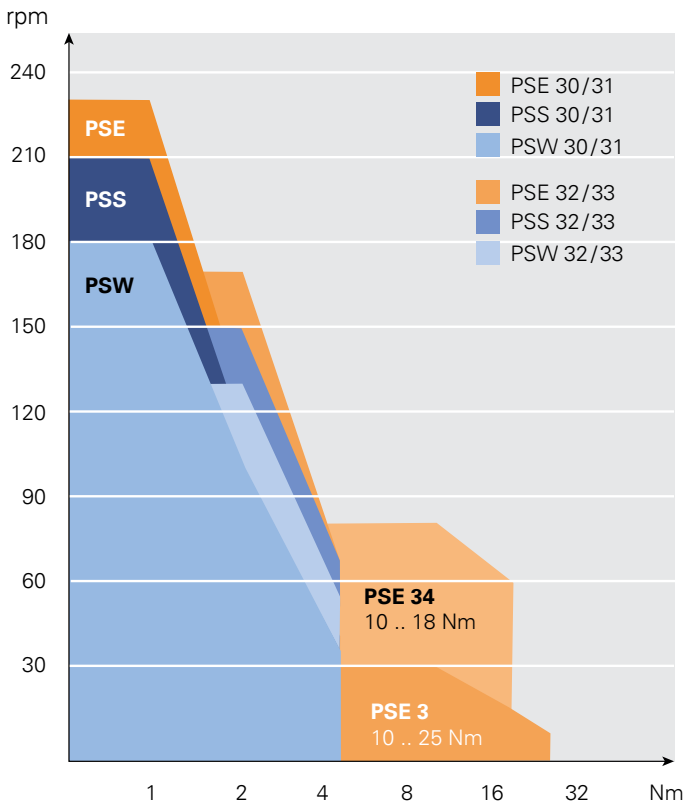
### Standard equipment (Connections)

- 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>61</sup> 14V = 14 mm solid shaft <sup>61</sup>
horizontal  32	<b>x</b> = 10 Nm <sup>61</sup> <b>x</b> = 18 Nm <sup>61</sup> <b>x</b> = 25 Nm <sup>61</sup>	
longitudinal  33		

<sup>61</sup> only for PSE 18 Nm: horiz. 25 Nm: long.      <sup>61</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