

Product	Nominal torque	Self-holding torque	Nominal rated speed
PSW 311-8	1 Nm	0.5 Nm	180 rpm
PSW 312-8	2 Nm	1 Nm	100 rpm
PSW 315-8	5 Nm	2.5 Nm	35 rpm

## Data interfaces

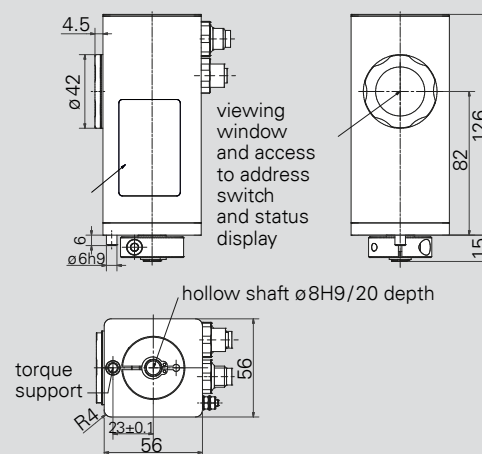
CANopen, PROFIBUS DP, DeviceNet, Modbus RTU, Sercos, EtherCAT, PROFINET, EtherNet/IP, POWERLINK, IO-Link

Start-up duration	20 % (basis time 600 s) at nominal torque
Mode of operation	S3
Supply voltage	24 VDC $\pm$ 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 10 g / 10..2 000 Hz 5 g
Output shaft	8 mm solid shaft or 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	IP68 at standstill <sup>1)</sup> , IP66 during rotation (tested with water) <sup>1)</sup>
Material	stainless steel
Weight	700g
Certificates	CE, optional: NRTL (UL, CSA, ANSI)

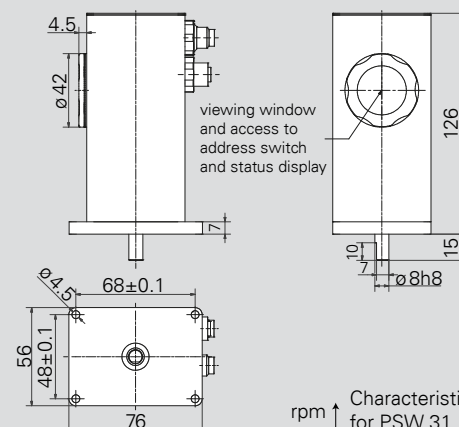
<sup>1)</sup> welded V2A housing, output shaft sealed with quad-ring

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

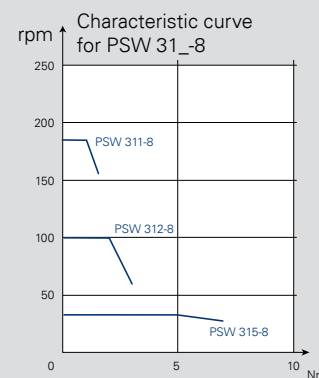
## PSW 31\_-8 (with hollow shaft)



## PSW 31\_-8-V (with solid shaft)



For details of the connections please see also p. 47 and the instruction manual.



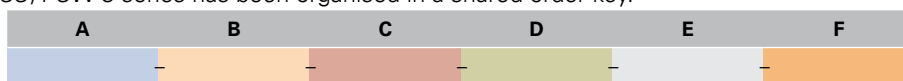
# ORDER KEY PSE/PSS/PSW 3 SERIES

**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:**



	Pro-tection class	A Design	B Type	C Bus communication (see p. 7)	D Connections	E Brake (see p. 11)	F Certification
Positioning System <b>Efficient</b> (see p. 20-25) <sup>1)</sup>	IP 54	PSE		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: N: NRTL certification (in accordance with UL, CSA, ANSI and CE)
Positioning System <b>Stainless</b> (see p. 28-31)	IP 65	PSS	30x-8/-14 (V) <sup>2)</sup> 31x-8/-14 (V) <sup>2)</sup> 32x-14 (V) <sup>2)</sup> 33x-14 (V) <sup>2)</sup>	MB: Modbus RTU SE: Sercos EC: EtherCAT PN: PROFINET EI: EtherNet/IP PL: POWERLINK IO: IO-Link		0: without M <sup>4)</sup> : with	
Positioning System <b>Washable</b> (see p. 32-35)	IP 68	PSW					

<sup>1)</sup> You can find the order key for the PSE 34/-14 on page 26.

<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)

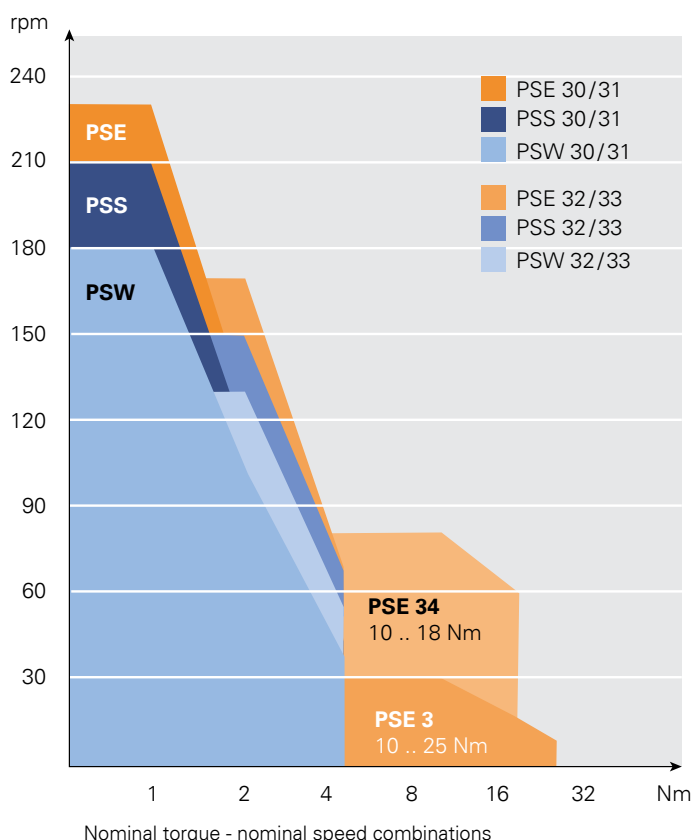
For further information on connections and address settings see also "Overview: bus communication" on p.47.

Form/Type	Torque	Output shaft
horizontal	30	8 = 8 mm hollow shaft
vertical	31	14 = 14 mm hollow shaft
horizontal	32	8V = 8 mm solid shaft <sup>6)</sup>
vertical	33	14V = 14 mm solid shaft <sup>6)</sup>

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

<sup>6)</sup> only for PSS/PSW

Examples of orders provided below.



## TORQUES AND SPEEDS

### 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. 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-0-0

### 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