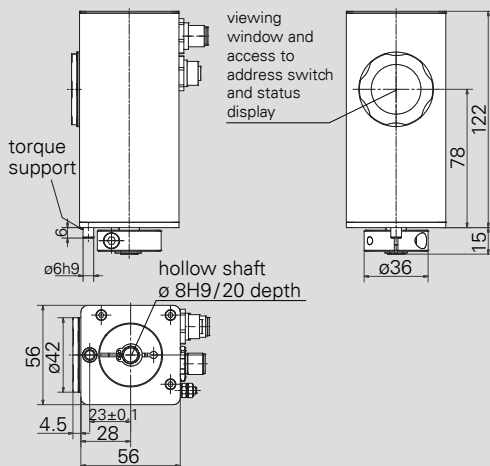
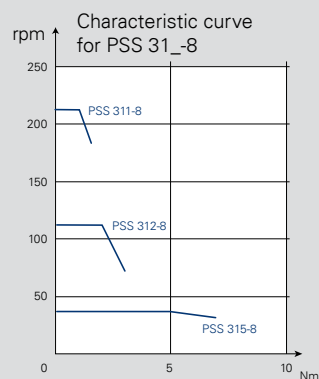
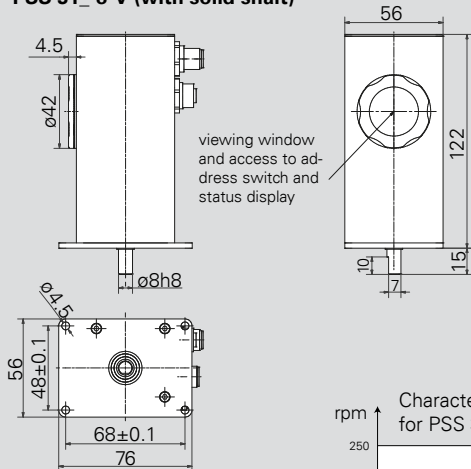




### PSS 31\_-8 (with hollow shaft)



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



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

Product	Nominal torque	Self-holding torque	Nominal rated speed
PSS 311-8	1 Nm	0.5 Nm	210 rpm
PSS 312-8	2 Nm	1 Nm	115 rpm
PSS 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

Duty cycle	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	0.9°
absolute measurement of position taken directly at the output shaft	
Positioning range	250 rotations not subject to mechanical limits
Shock resistance	50g 11 ms
in accordance with IEC/DIN EN 60068-2-27	
Vibration resistance	10..55 Hz 1.5 mm/ 55..1 000 Hz 10g/ 10..2 000 Hz 5g
in accordance with IEC/DIN EN 60068-2-6	
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	IP65 under installed and wired conditions <sup>1)</sup>
Material	as for PSE, but with stainless steel housing
Weight	700 g
Certificates	CE, optional: NRTL (UL, CSA, ANSI)

<sup>1)</sup> welded V2A housing, ball bearings at the output shaft with sealing disc

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

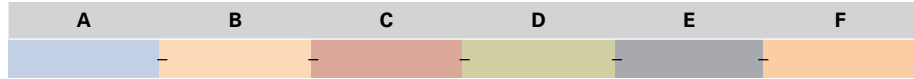
# ORDER KEY PSE/PSS/PSW 3 SERIES

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

PSE/PSS/PSW:



	Protection 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: standard T: with jog keys <sup>3)</sup>		0: <b>CE</b> N: NRTL certification in accordance with UL, CSA, ANSI and CE
Positioning System <b>Stainless</b> (see p. 27-30)	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	Y: 1 connector, Y-encoded Z: 1 connector, Y-encoded, with jog keys <sup>3)</sup>	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)

- always provided with 3 plugs/sockets (not for IO-Link or Y-encoded connector)
- address switches always provided (also IE-buses, not for IO-Link)

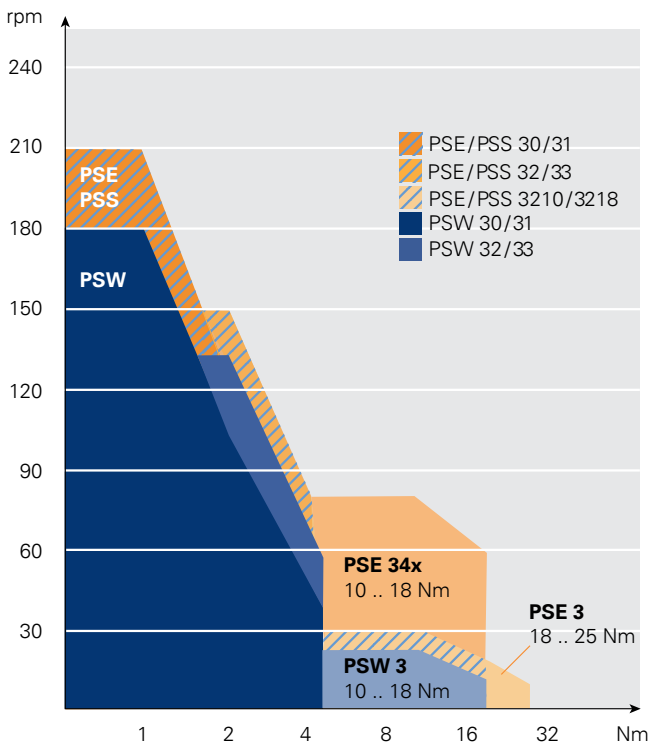
For further information on connections and address settings see also "Overview: bus communication" on p. 47.

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

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

Examples of orders provided below.



Nominal torque – nominal speed combinations

## 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.

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 (IP54) and PSS (IP65) comply with the IP protection classes. We will also be pleased to help you find a suitable mating connector for the PSW (IP68) if necessary – just ask us!

Bus communication	Power supply + databus connector (2x) (for option 0) <sup>1)</sup>	Power supply + databus (2x) + jog key connector (for option T, not for PSW) <sup>1)</sup>	Cable and connectors for 1-connector solution <sup>2)</sup> (for option Y or IO-Link) <sup>1)</sup>
CANopen <sup>3)</sup>	 Connector set: Order no. 9601.0060	 Connector set: Order no. 9601.0062	 5 m: Order no. 9601.0245 10 m: Order no. 9601.0233 20 m: Order no. 9601.0234
PROFIBUS DP			
Modbus RTU			
DeviceNet	 Connector set: Order no. 9601.0088	 Connector set: Order no. 9601.0090	
Sercos	 Connector set: Order no. 9601.0112	 Connector set: Order no. 9601.0317	5 m: Order no. 9601.0240 10 m: Order no. 9601.0244
EtherCAT			Hub on request
PROFINET			
EtherNet/IP			
POWERLINK			
IO-Link <sup>3)</sup>	-	-	 Connector: Order no. 9601.0107 <sup>2)</sup>

<sup>1)</sup> see under "D" in the order key <sup>2)</sup> power supply and bus via one cable, without second databus connector

<sup>4)</sup> A- or B-coding of the connectors is possible

## Further Accessories

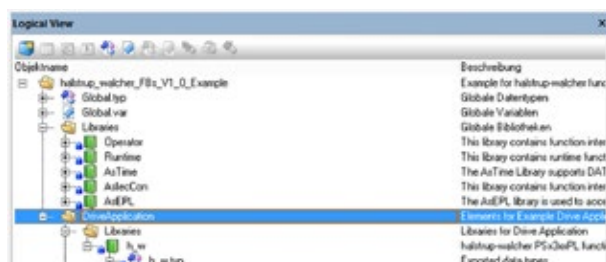


Jog key box (for option T, not for PSW)  
**Order no. 9601.0241**



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)