



Product	Nominal torque	Self-holding torque	Nominal rated speed
PSE 301-8	1 Nm	0.5 Nm	210 rpm
PSE 302-8	2 Nm	1 Nm	115 rpm
PSE 305-8	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	30 % (basis time 300 s)
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	50 g 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 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	IP54 (IP65 on request)
Weight	650 g
Certificates	CE, optional: NRTL, opt: STO with/without test pulses <sup>1)</sup>

<sup>1)</sup> STO: only for IP65, only for EtherCAT, PROFINET, EtherNet/IP, without galvanic isolation of the power supply voltage

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

hollow shaft  $\varnothing$  8H9/20 depth

torque support

removeable sight glass for LED status/address switches

jog key input

Characteristic curve for PSE 30x-8

Product	Nominal Torque (Nm)	Nominal Speed (rpm)
PSE 301-8	1	210
PSE 302-8	2	115
PSE 305-8	5	40

Dimensions in mm.  
 For details of the connections please see also p. 55 and the instruction manual.

# ORDER KEY PSE/PSS/PSW 3 SERIES



	A	B	C	D	E	F	G	
	Design	Type	Bus communication (see p.7)	Connections	Brake (see p.11)	Certification	IP protection class	
Positioning System <b>Efficient</b> (see p.22-28)	PSE	30x-8/-14 (V)	CA: CANopen DP: PROFIBUS DP DN: DeviceNet <sup>2)</sup> MB: Modbus RTU <sup>2)</sup>	O: Standard T: Standard with jog keys <sup>3)4)</sup>	0: without M: with <sup>6)</sup>	0: CE N: NRTL + CE S: STO + CE without test pulses <sup>7)</sup>	54: IP 54 <sup>8)</sup> 65: IP 65 <sup>9)</sup> 68: IP 68 <sup>10)</sup>	
Positioning System <b>Stainless</b> (see p.29-33)		PSS	32x-14 (V) 33x-14 (V)	SE: Sercos EC: EtherCAT PN: PROFINET EI: EtherNet/IP PL: POWERLINK IO: IO-Link		Y: Plug-in, Y-coded <sup>5)</sup> Z: Plug-in, Y-coded, with jog keys <sup>3)5)</sup>		T: STO + CE with test pulses <sup>7)</sup> Y: STO + NRTL without test pulses <sup>7)</sup> Z: STO + NRTL with test pulses <sup>7)</sup>
Positioning System <b>Washable</b> (see p.34-38)		PSW	34xx-14 <sup>1)</sup>					

<sup>1)</sup> only for PSE

<sup>2)</sup> not for PSE34xx

<sup>3)</sup> not for PSE31x

<sup>4)</sup> always via an extra connector plug, not for IO-Link or PSW

<sup>5)</sup> not for PSE34xx

<sup>6)</sup> only 14 mm output shafts

<sup>7)</sup> only for IP65, not for PSE34xx, only for EtherCAT, PROFINET, EtherNet/IP, only on request

<sup>8)</sup> only for PSE, PSE34xx only IP65  
<sup>9)</sup> for PSS, for PSE 30x/31x/32x/33x on request  
<sup>10)</sup> only for PSW

## Standard equipment (connections)

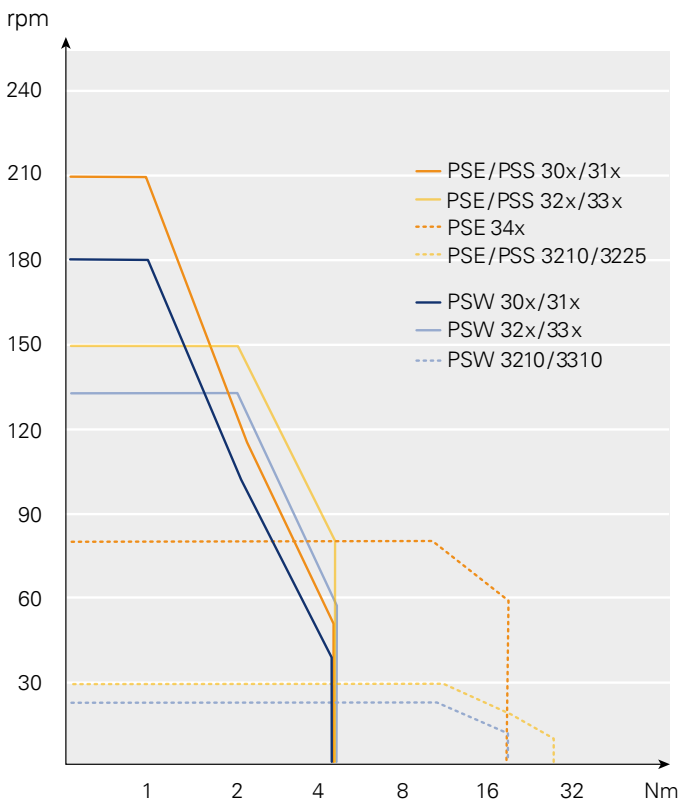
- always provided with 3 plugs/sockets (not for IO-Link or Y-encoded connector)
- address switches always provided (also IE-buses, not for IO-Link)

For further information on connections and address settings see also "bus communication details" on p.55.

Form/Type	Torque	Output shaft
horizontal  30	<b>x</b> = 1 Nm <b>x</b> = 2 Nm	8 = 8 mm hollow shaft
vertical  31	<b>x</b> = 5 Nm	14 = 14 mm hollow shaft
horizontal  32	<b>x</b> = 10 Nm	8V = 8 mm solid shaft
vertical  33	<b>x</b> = 18 Nm <b>x</b> = 25 Nm <sup>11)</sup>	14V = 14 mm solid shaft

<sup>11)</sup> only for PSE

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 2Nm. The speed should be greater than 100rpm. An 8mm 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. 3Nm, > 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 3 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)2)</sup>	Cable and connectors for 1-connector solution <sup>3)</sup> (for option Y or IO-Link) <sup>1)</sup>
CANopen <sup>4)</sup>	 <p>Connector set: Order no. 9601.0060</p>	 <p>Connector set: Order no. 9601.0062</p>	 <p>5 m: Order no. 9601.0245 10 m: Order no. 9601.0233 20 m: Order no. 9601.0234</p>
PROFIBUS DP			
Modbus RTU			
DeviceNet	 <p>Connector set: Order no. 9601.0088</p>	 <p>Connector set: Order no. 9601.0090</p>	
Sercos	 <p>Connector set: Order no. 9601.0112</p>	 <p>Connector set: Order no. 9601.0317</p>	<p>5 m: Order no. 9601.0240 10 m: Order no. 9601.0244</p> <p>Hub on request</p>
EtherCAT			
PROFINET			
EtherNet/IP			
POWERLINK			
IO-Link <sup>3)</sup>	-	-	 <p>Connector: Order no. 9601.0107<sup>3)</sup></p>

<sup>1)</sup> see under "D" in the order key <sup>2)</sup> jog key box order no. 9601.0241 <sup>3)</sup> power supply and bus via one cable, without second data bus connector

<sup>4)</sup> standard connector coding: A- or B- coding, other codings possible on request possible on request

## 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**

## SOFTWARE

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)

