# Data sheet PSS 31x/33x-14 - Date: 11/2023 - Subject to technical changes without notice

# IP 65

### PSS 31x/33x-14





### PSS 31x/33x-14 (with hollow shaft) viewing window and access to address switch and status display cover, manual adjustment beneath 4.5 hollow shaft ø14H7/20 depth 20.5,30±0.1 042 135 99.5 torque support ø6h9 PSS 31x/33x-14 V (with solid shaft) viewing window and access to cover, manual address switch and status display adjustment beneath 4.5 ø42 135 99.5 2 13 ø14h8 Ш Characteristic curve PSS 31x/33x-14 250 150 50 Dimensions in mm. For details of the connections 10 Nm please see also the instruction manual.

Product	Nominal torque (x)	Self-holding torque (energized)	Nominal rated speed
PSS 311-14	1 Nm	0.5 Nm	210 min <sup>-1</sup>
PSS 312-14	2 Nm	1 Nm	115 min <sup>-1</sup>
PSS 332-14	2 Nm	1 Nm	150 min <sup>-1</sup>
PSS 335-14	5 Nm	2.5 Nm	68 min <sup>-1</sup>

Duty cycle 20% (basis time 600s) at nominal torque  Mode of operation S3  Supply voltage 24 VDC ±10% galvanically separated between control and motor and bus  Nominal current PSS 31x: 2.5 A, PSS 33x: 3.2 A  Power consumption (control unit) 0.1 A
Supply voltage  24 VDC ±10% galvanically separated between control and motor and bus  Nominal current  PSS 31x: 2.5 A, PSS 33x: 3.2 A
Nominal current PSS 31x: 2.5 A, PSS 33x: 3.2 A
1 00 0 1/4 210 7 4 1 00 00/4 012 7
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 50 g 11 ms in accordance with IEC/DIN EN 60068-2-27
Vibration resistance 1055 Hz 1.5 mm/ in accordance with IEC/DIN EN 60068-2-6 551000 Hz 10 g/ 102000 Hz 5 g
Output shaft  14 mm solid shaft or 14 mm hollow shaft with clamp ring
Brake optional (holding torque=nominal torque)
Max. axial force 20 N
Max. radial force 40 N
Ambient temperature 045°C
Storage temperature -1070°C
Protection class IP65 when installed and wired
Material stainless steel housing
Weight 1050 g
Certificates CE/UKCA, optional: NRTL, optional: STO with/without test pulses 1)

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

### How to choose your suitable positioning system?



To order our standard products, you can use the graphics on the right for an initial performance assessment of the products and the corresponding order code of the 3 series. The ordering process is described below using an example.



Choose the appropriate **design** based on your operating conditions



### Type:

- Vertical or horizontal form (value even or odd)
- max. rated torque (x) for orientation see characteristic diagrams
- Output shaft (8 or 14) and solid or hollow



select required protocol / interface (bus communication)



integrate the **connections** that are essential for you



if necessary, select a **brake** (without brake select 0)



select required certificates

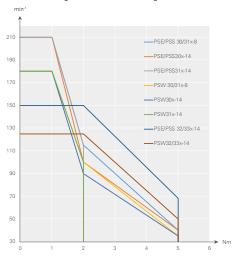
**G** 

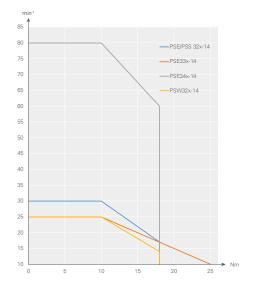
select IP protection class

For example, a stainless steel housing (PSS), the 30x design, a maximum rated torque of 2 Nm and an 8 hollow shaft would be required (302-8). Besides IO-Link, the standard connections are required, no brake, the CE/UKCA certificate and IP65.

→ Order code PSS 302-8-IO-0-0-65

### **Torques and speeds**

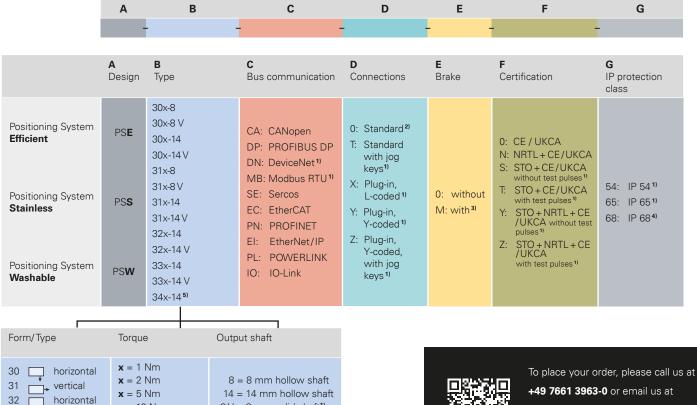






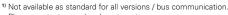


### Order code PSE/PSS/PSW 3 series



8 V = 8 mm solid shaft<sup>1)</sup>

 $14V = 14 \text{ mm solid shaft}^{1}$ 



vertical

horizontal

**x** = 10 Nm

**x** = 18 Nm

 $x = 25 \text{ Nm}^{5}$ 

33

34

Please refer to the data sheets for the respective standard combinations.



info@halstrup-walcher.com.

For additional contacts, please visit

www.halstrup-walcher.de/en/contact

Please contact our sales department.

2) The standard is 3 plugs / sockets (except for IO-Link or Y-coded connector)

<sup>3)</sup> only for variants with 14 mm output shafts

<sup>5)</sup> only for PSE

## Accessories for our positioning systems

The connectors shown here can be used for all 3 device types (PSE / PSS / PSW). For PSE (IP 54/IP 65) and PSS (IP 65), this ensures the IP protection classes. If required, we are happy to help you find a suitable connector for a PSW (IP 68) - please contact us.

Buscommunication	Power supply (+ databus connector) (for option 0) 1)	Power supply + databus + jog key connector	Cable
CANopen			
PROFIBUS DP		377	
Modbus RTU	Connector set: Order no. 9601.0060	Connector set: Order no. 9601.0062	
			On request
DeviceNet	Connector set: Order no. 9601.0088	Connector set: Order no. 9601.0090	
Sercos			
EtherCAT			
PROFINET			
EtherNet / IP			
POWERLINK	Connector set: Order no. 9601.0112	Connector set: Order no. 9601.0317	
IO-Link	Connector: Order no. 9601.0107		
1) see in order code under D			

<sup>1)</sup> see in order code under D



Screw cap to cover the second bus connection (for PSS/PSW)

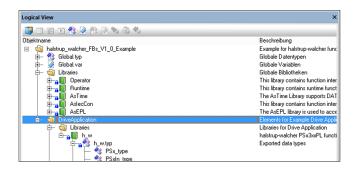
Order no. 9601.0176





### **Software**

Use our function blocks, description files or commissioning tools for the various industrial protocols. You can download the files under www.halstrup-walcher.de/en/software. To do this, enter your specific product in the drop-down menu that appears and select the Software tab in the tab view. After that, the software components are available to you.



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www.halstrup-walcher.de/en/news/