



only with hollow shaft



PSD 48x/49x	Nominal torque / Nominal rated speed ¹⁾	Self-holding torque (energized)	Max. speed	Positioning range ²⁾
0-5V	0.25 Nm/200 min ⁻¹	0.125 Nm	800 min ⁻¹	4026 rot.
0-8H	0.25 Nm/200 min ⁻¹	0.125 Nm	500 min ⁻¹	4026 rot.
0-14H	0.25 Nm/200 min ⁻¹	0.125 Nm	500 min ⁻¹	4026 rot.
1-8H	1 Nm/50 min ⁻¹	0.5 Nm	250 min ⁻¹	986 rot.
1-14H	1 Nm/50 min ⁻¹	0.5 Nm	250 min ⁻¹	986 rot.

¹⁾ at nominal supply voltage

²⁾ not subject to mechanical limits

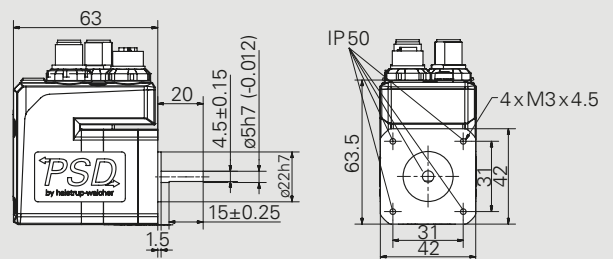
Mode of operation	S1 ³⁾ , S3
Supply voltage	24 VDC ± 10 % galvanically separated between motor and control
Rated current	2.0 A
Power consumption (control unit)	0.1 A
Positioning accuracy	± 0.7° for 1 Nm ± 1.8° for 0.25 Nm
Absolute measurement system	magnetic, without reference run, without buffer battery
Shock resistance in accordance with IEC/DIN EN 60068-2-27	50 g 11 ms ± 3 shocks pos./neg. per axis
Vibration resistance in accordance with IEC/DIN EN 60068-2-6	10..2000 Hz 50 m/s ² (approx. 5 g) 10 frequency cycles
Output shaft	5 mm solid shaft with flattening or 8/14 mm hollow shaft ⁴⁾ with torque support
Max. axial force	15 N, 20 N with attached housing
Max. radial force	40 N
Ambient temperature	0..40 °C
Storage temperature	-10..70 °C
Protection class	IP 50 or IP 65 ⁵⁾
Housing	Aluminum, Silicon steel, Zinc
Weight	max. 850 g (550 g without gearbox)
Certificates	CE, optional: NRTL

³⁾ Use in continuous operation S1 must be checked depending on the application. Please contact our sales department for more information.

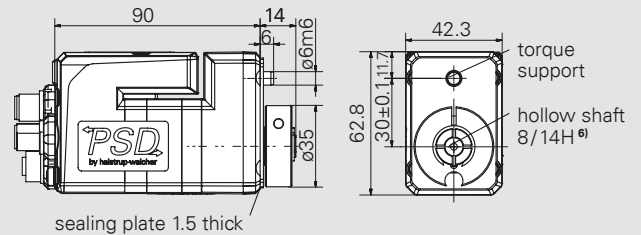
⁴⁾ see table next to the characteristic curve

⁵⁾ Shaft feed-through (solid shaft) IP50, for further information see instruction manual

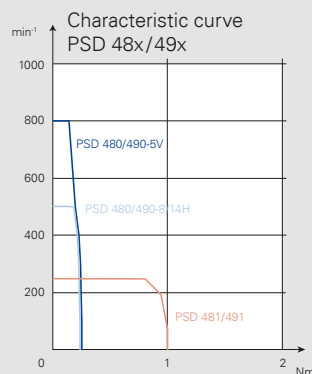
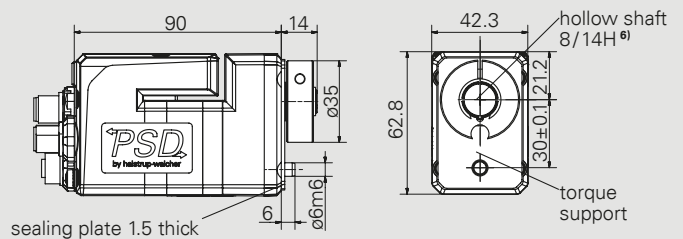
PSD 480-5V (solid shaft)



PSD 490-8H / -14H (hollow shaft, 0.25 Nm)









PSD 491-8H / -14H (hollow shaft, 1 Nm)



	ø8 ø14	
	⁶⁾ Hollow shaft	
Tolerance	H7	
Plug depth	20	
Cylinder screw	DIN912 M4x16	

Dimensions in mm

Order code PSD 4 series

Order code	A	B	C	D	E	F	G	H
PSD								
A	B	C	D	E	F	G	H	
Type	Torque/ Output shaft	Rotation shaft/ Housing	Bus communication ¹⁾	Electical connections	Protection class	Software modules	Certificates	
 40: horizontal	1-5V 1-8H 1-14H with gearbox:	S: direct or 0° 1: 90° 2: 180° 3: 270°	CA: CANopen IO: IO-Link PL: POWER-LINK ⁵⁾ PN: PROFINET EC: EtherCAT EI: EtherNet/IP	0: standard ²⁾	50: IP 50 65: IP 65 ³⁾	1: standard M: with modulo function ⁴⁾ S: with changeover of parameter set ⁴⁾ P: with target speed in process data ⁴⁾ Z: with modulo function and changeover of parameter set and target speed in process data ⁴⁾	O: CE N: NRTL + CE	
 41: vertical	3-8H 3-14H							
 42: horizontal	2-8V 2-8H 2-14H with gearbox:							
 43: vertical	4-14H 6-14H 8-14H							
 48: horizontal	0-5V 0-8H 0-14H with gearbox:							
 49: vertical	1-8H 1-14H							

	B		C				
	Key	Torque	Output shaft	Rotation shaft/Housing			
	B1-B2	B1	B2	S	1	2	3
direct	1-5V	1: 0.8 Nm	5V: 5 mm solid shaft		-	-	-
	1-8H 1-14H	1: 0.8 Nm	8H: 8 mm hollow shaft 14H: 14 mm hollow shaft				
with gearbox	3-8H 3-14H	3: 3 Nm	8H: 8 mm hollow shaft 14H: 14 mm hollow shaft				
direct	2-8V	2: 2 Nm	8V: 8 mm solid shaft		-	-	-
	2-8H 2-14H	2: 2 Nm	8H: 8 mm hollow shaft 14H: 14 mm hollow shaft				
with gearbox	4-14H 6-14H 8-14H	4: 4 Nm 6: 6 Nm 8: 8 Nm	14H: 14 mm hollow shaft				
direct	0-5V	0: 0.25 Nm	5V: 5 mm solid shaft		-	-	-
	0-8H 0-14H	0: 0.25 Nm	8H: 8 mm hollow shaft 14H: 14 mm hollow shaft				
with gearbox	1-8H 1-14H	1: 1 Nm	8H: 8 mm hollow shaft 14H: 14 mm hollow shaft				

¹⁾ others on request

²⁾ standard equipment: 3 plugs / sockets with IO-Link: 1 plug

³⁾ Shaft feed-through (solid shaft) IP50, for further information see instruction manual

⁴⁾ only for IO-Link devices

⁵⁾ Available as of Q1/2026



To place your order, please call us at

+49 7661 3963-0 or email us at



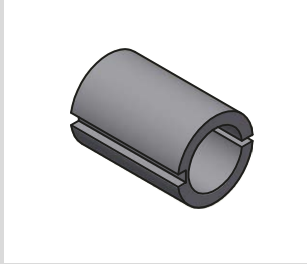


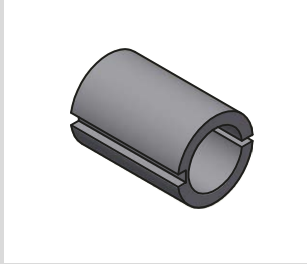

info@halstrup-walcher.com.

For additional contacts, please visit

www.halstrup-walcher.de/en/contact

Accessories for our direct drives

The connectors shown here can be used for all direct drives of the PSD 4xx series. We are happy to help you find the right accessories, please contact us directly.

Buscommunication	Power supply (+ databus connector) (for option 0) ¹⁾	Cable	Reducing sleeve for adaptation to different spindle diameters
CANopen	 <p>Connector set: Order no. 9601.0060</p>	<p>on request</p> 	<p>on request</p> 
EtherCAT	 <p>Connector set: Order no. 9601.0112</p>		
PROFINET			
POWERLINK			
EtherNet/IP			
IO-Link	 <p>Connector: Order no. 9601.0107</p>		

¹⁾ see in order code under E

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.

