



PSD 490-5V-S

IP 50

IP 65

48x

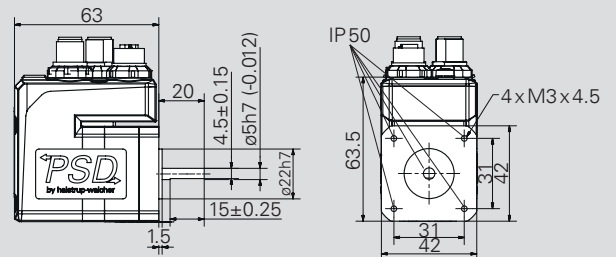
49x

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

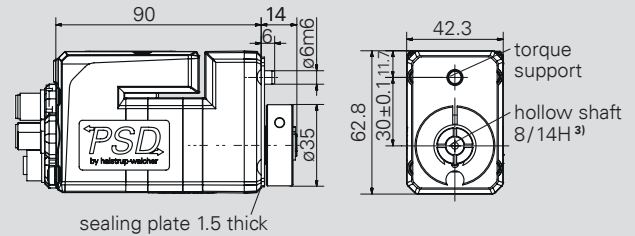
¹⁾ at nominal supply voltage

²⁾ not subject to mechanical limits

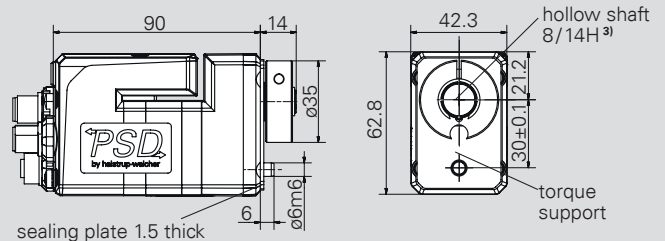
PSD 480-5V (solid shaft)



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



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



Bus communication

CANopen, IO-Link³⁾, EtherNet/IP, EtherCAT, PROFINET

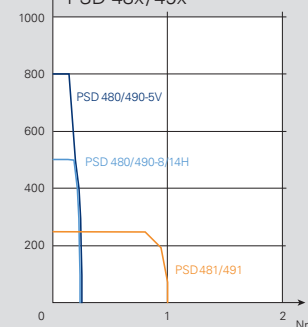
Supply voltage	24 VDC ± 10 % galvanically separated between motor and control
Power consumption	max. 48 W
Nominal current	2.0 A
Power consumption (control unit)	0.1 A
Positioning accuracy	± 0.7° for 1 Nm ± 1.8° for 0.25 Nm
Absolute measurement system	magnetic, without reference run, without buffer battery
Shock resistance in accordance with IEC/DIN EN 60068-2-27	half sinus (3 axes) 50 g 11 ms 3 shocks pos./neg. per axis
Vibration resistance in accordance with IEC/DIN EN 60068-2-6	sliding sinus (1 octave/min, 3 axes) 10..2000 Hz 50 m/s ² (approx. 5 g) 10 frequency cycles
Output shaft	5 mm solid shaft with flattening or 8/14 hollow shaft ⁴⁾ with torque support
Maximum axial force	15 N, 20 N with attached housing
Maximum radial force	40 N
Ambient temperature	0..40 °C
Storage temperature	-10.. 70 °C
Protection class	IP50 or IP65 ⁵⁾
Weight	max. 0.85 kg (0.55 kg without gearbox)
Certificates	CE / UKCA, opt.: NRTL

³⁾ with E-Ident function

⁴⁾ see table next to the characteristic curve

⁵⁾ IP65 installed (motor shaft IP50)

Characteristic curve
PSD 48x/49x



	³⁾ hollow shaft	
	ø8	ø14
Tolerance	H7	
Plug depth	20	
Cylinder screw	DIN912 M4x 16	

Dimensions in mm

ORDER KEY DIRECT DRIVES PSD

Order code	A	B	C	D	E	F	G	H
PSD								

A Type		B Torque/ Output shaft	C Rotation shaft/ Housing	D Bus communication ¹⁾	E Electrical connections	F Protection class	G Software modules	H Certificates
	40: horizontal	1-5V 1-8H 1-14H	S: direct or 0° 1: 90° 2: 180° 3: 270°	CA: CANopen IO: IO-Link PN: PROFINET EC: EtherCAT EI: EtherNet/ IP	0: standard ²⁾	50: IP50 65: IP65 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 pa- rameter set and target speed in process data ⁴⁾	0: CE / UKCA N: NRTL
	41: vertical	with gearbox: 3-8H 3-14H						
	42: horizontal	2-8V 2-8H 2-14H						
	43: vertical	with gearbox: 4-14H 6-14H 8-14H						
	48: horizontal	0-5V 0-8H 0-14H						
	49: vertical	with gearbox: 1-8H 1-14H						

B Key		Torque	Output shaft	C 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⁾ IP 65 installed (motor shaft IP 50)

⁴⁾ only for IO-Link devices