

## PSD 41 - Shaft 8 mm hollow

- Software features: spindle compensation drive, increased breakaway performance, synchronized run
- Software modules for IO-Link: changeover of parameter set, target speed in process data and modulo function
- Protection of internal electronics against manual operation
- Space-saving, compact design
- Optional rotatable actuator housing
- Galvanically separated supply voltages between control and motor and bus
- Precise position feedback thanks to an absolute measurement system without battery
- Optional gearbox for more torque
- Address may be set using the bus or an address switch (not for IO-Link)
- Status LEDs visible from the outside



Self-holding torque below at approx. 60 mA supply current and 0.5 A phase current, currentless 0 Nm.

Dimensions in mm.

See link Manual(s) for documentation and software.

Contact us for CAD-files.

**Type:** Vertical

**Nominal Torque (Nm):** 0.8; 3

**Nominal Speed (rpm):** 50; 200

**Nominal Voltage (V DC):** 24 ( $\pm 10\%$ )

**Nominal Current (A):** 2.0

**Output Shaft (mm):** 8

**Output Shaft Type:** Hollow

**Rotation Shaft / Housing:** Direct or 0°; 90°; 180°; 270°

**BUS Communication:** Can Open (CA); IO-Link (IO); ProfiNet (PN); EtherCat (EC); Ethernet IP (EI)

**Electrical connection:** 0: Standard

**Protection Class:** IP50; IP65

**Motor:** Stepper motor

**Supply Voltage:** 24 V DC  $\pm 10\%$  galvanically separated between motor and control

**Measurement System:** Absolute without battery

**Accuracy:** " $\pm 0.7^\circ$  for versions with gearbox;  $\pm 1.8^\circ$  for versions without gearbox"

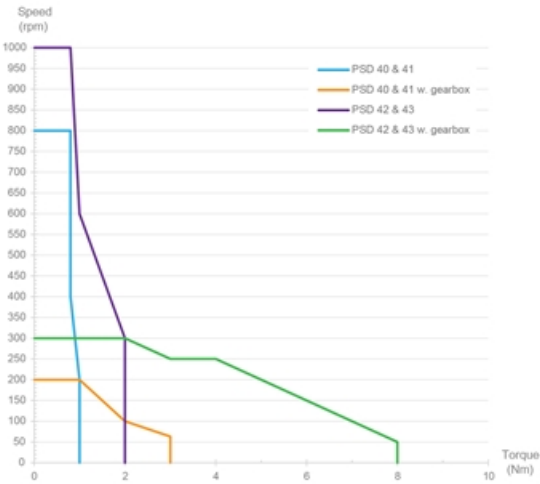
**Intermittence:** Start-up duration up to 50%

**Manual Adjustment:** No

**Brake:** No

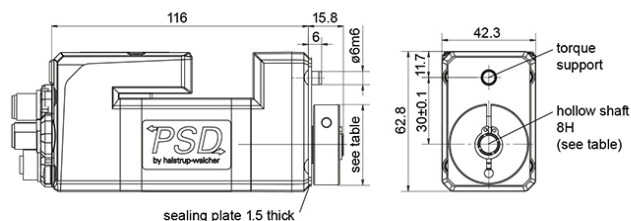
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Performance Curve - Direct Drives PSD

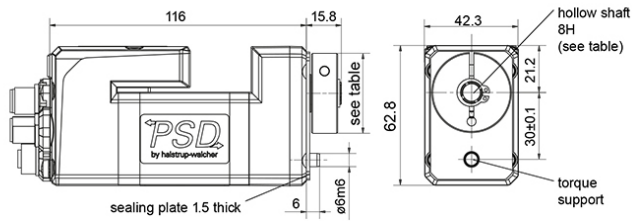


## General Data

PSD 411-8H (hollow shaft, 1 Nm)



PSD 413-8H (hollow shaft, 3 Nm)



| Hollow shaft | Tolerance | Plug depth | $\phi$ Clamp ring | Cylinder screw  |
|--------------|-----------|------------|-------------------|-----------------|
| $\phi 8$     | H9        | 20         | 36                | DIN 912 M4 x 16 |

| Designation       | Nominal Torque (Nm) | Nominal Speed (rpm) | Nominal Current (A) | Self-holding Torque (Nm) | Max. Speed (rpm) |
|-------------------|---------------------|---------------------|---------------------|--------------------------|------------------|
| <b>PSD 411-8H</b> | 0.8                 | 200                 | 2.0                 | 0.4                      | 500              |
| <b>PSD 413-8H</b> | 3                   | 50                  | 2.0                 | 1.5                      | 200              |

| Designation       | Positioning Range (rot.) |
|-------------------|--------------------------|
| <b>PSD 411-8H</b> | 4026                     |
| <b>PSD 413-8H</b> | 986                      |