

Encoder WDG 40E



- Robust end hollow shaft encoder with small dimensions
 - With control output
 - Optional: -40°C ... +80°C
- www.wachendorff.de/wdg40e-engl

Application field

Small electric motors, printing machines, drive systems.

Available PPR up to 2500

Mechanical Data

- Housing**
- Flange: Aluminium
 - Housing: Aluminium, powder coated
 - Torque Support:
 1. Spring plate Incl. 1 spring plate WDGDS10001
 Compensation: axial: max. 1,5 mm
radial: max. 0,1 mm
 - Operating speed 12.000 rpm
- Hollow Shaft**
- Material: stainless steel
 - Diameter: 6 mm
 - Load on shaft end: max. 100 N radial
max. 50 N axial
 - Starting torque: approx. 0,2 Ncm at ambient temperature

- Bearings**
- Type: 2 precision ball bearings
 - Service life: 3 x 10⁹ revs. at 100% of full rated shaft load
5 x 10¹⁰ revs. at 40%
4 x 10¹¹ revs. at 20%
- Weight:** approx. 100 g

Connections: Shielded cable or connector

Protection rating: IP67, shaft sealed to IP65 (IP40 -> cable K1) (EN 60529)

Operating temperature: -20... +80°C
Storage temperature: -30... +80°C

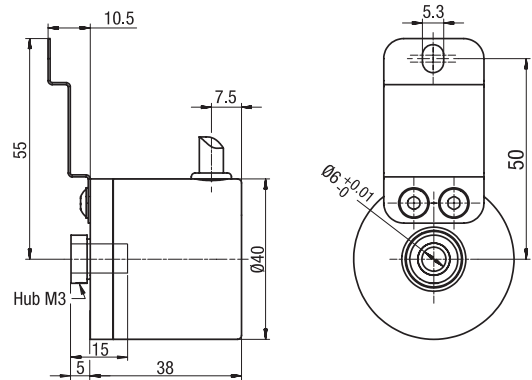
Electrical Data

Power supply	Output circuit	Key	Output circuit	Key
10-30 VDC	HTL	G24	HTL, inv.*1	I24
5 VDC	TTL	G05	RS422, TTL comp.*2	I05

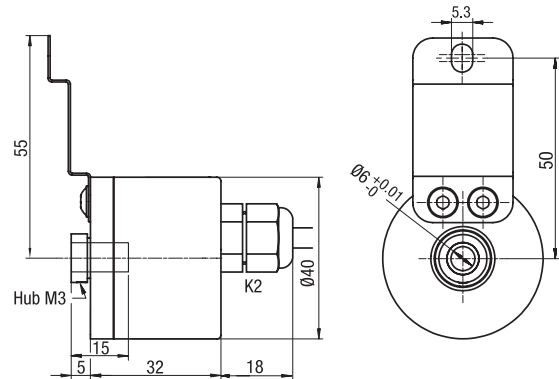
*1: Only shielded cable: K1, K2

*2: Only shielded cable or connector: K1, K2, SB8, SB12

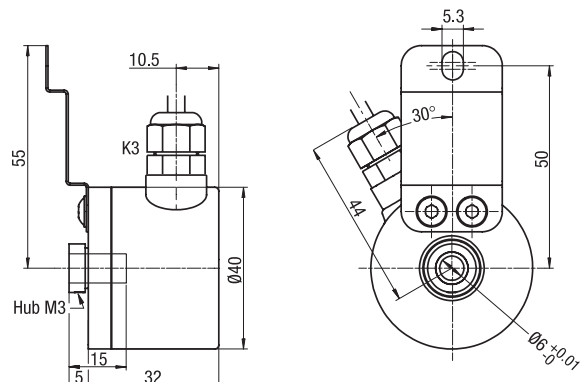
Cable connection K1



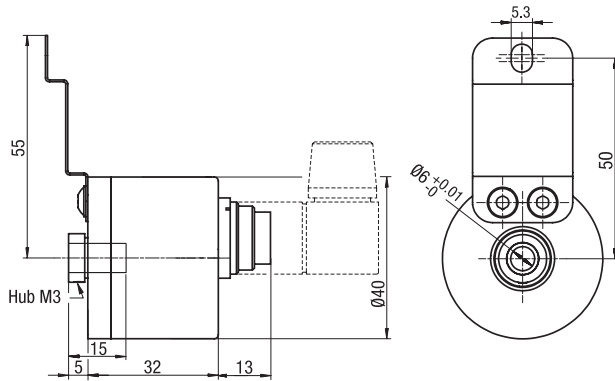
Cable connection K2



Cable connection K3



Connector S2, 7-pin



Options:

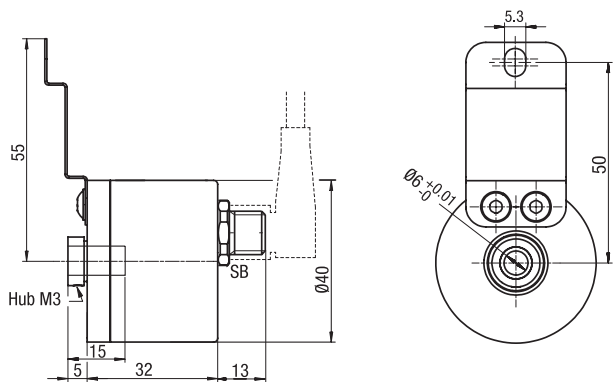
Low-temperature:

The encoder WDG 40E with the output switches G24, I24, G05, I05 and 245 is also available with the extended temperature range -40°C...+80°C (measured at the flange). When ordering please add the suffix code - ACA.

Cable length:

The encoder WDG 40E can be supplied with more than 2 m cable. Please extend the standard order code with a three figure number, specifying the cable length in decimetres.

Sensor-connector (M12x1) SB, 4-, 5-, 8-, 12-pin



All dimensional specifications in mm.

Further technical information on www.wachendorff.de/gtd
 Matching accessories on www.wachendorff.de/acs

Ordering information:

Output circuit: G24 = 10-30 VDC, HTL G05 = 5 VDC, TTL Inverted only for cable or connector: *1: Only shielded cable: K1, K2 *2: Only shielded cable or connector: K1, K2, SB8, SB12	Output circuit inv.: I24*1 = 10-30 VDC, HTL I05*2 = 5 VDC, RS422 TTL comp.	Electrical connections: Cable: K1 = radial, 2 m, shield not connected (protection rating IP40) K2 = axial, 2 m, shield not connected (standard) L2 = axial, 2 m, shield connected to encoder housing K3 = radial, 2 m, shield not connected (standard) L3 = radial, 2 m, shield connected to encoder housing Connector: S2 = 7-pin axial SB4 = 4-pin axial SB5 = 5-pin axial SB8 = 8-pin axial SB12 = 12-pin axial Please note the connection configuration under "General technical data", Page 122
Channels: AB, ABN		Options: Empty = without option Low-temperature -40°C...+80°C = ACA Cable length = in decimetres
Pulses per revolution: 4, 9, 10, 15, 20, 25, 28, 30, 36, 40, 50, 60, 90, 100, 120, 125, 128, 150, 160, 180, 200, 235, 250, 300, 314, 318, 360, 400, 500, 600, 625, 635, 720, 900, 1000, 1024, 1080, 1200, 1250, 1500, 1800, 2000, 2048, 2500. Other PPR's on request		
Hollow shaft diameter: 6		
Order No.: Example WDG 40E 6 1024 ABN G24 K1 Your encoder WDG 40E		