

## Encoder WDG 58D



- Clamping flange
- Rugged industrial standard encoder
- Protection to IP67, shaft sealed to IP65
- High noise immunity
- High shaft load radial 400N, axial 400N
- Maximum mechanical and electrical safety
- With control output
- Optional: -40°C ... +80°C

[www.wachendorff.de/wdg58d-engl](http://www.wachendorff.de/wdg58d-engl)

### Application field

Electric motors, machine tools, weigh scales, conveyors, printing machines, drives, textile machines, production lines, injection-moulding machines, test machines, elevators/lifts, doors and gates.

**Available PPR** up to 5000

### Mechanical Data

- Clamping flange: Aluminium
- Housing: Aluminium, powder coated
- Cam mounting: pitch  $\varnothing$  69 mm

### Shaft

- Material: stainless steel
- Load on shaft end: max. 400 N radial, max. 400 N axial
- Starting torque: approx. 1 Ncm at ambient temperature

### Bearings

- Type: 2 precision ball bearings
- Service life: 4 x 10<sup>8</sup> revs. at 100% of full rated shaft load, 6 x 10<sup>9</sup> revs. at 40%, 5 x 10<sup>10</sup> revs. at 20%

Operating speed: 8.000 rpm  
 Weight: approx. 250 g  
 Connections: Shielded cable or connector

Protection rating: IP67, shaft sealed to IP65 (EN 60529)

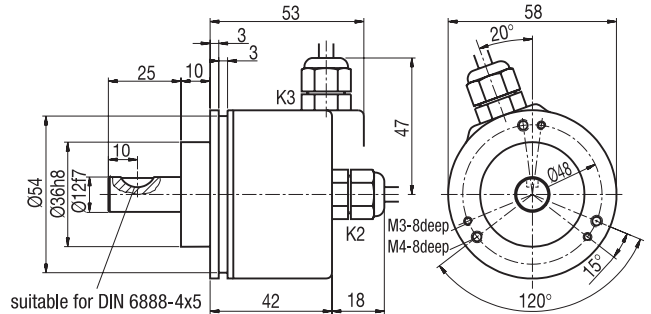
Operating temperature: -20... +80°C, 1Vss: -10... +70°C  
 Storage temperature: -30... +80°C

### Electrical Data

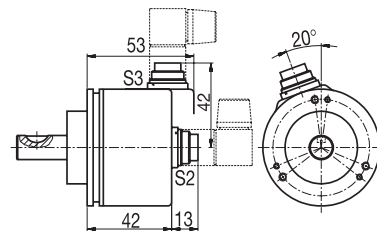
Power supply	Output circuit	Key	Output circuit*	Key
10-30 VDC	HTL	G24	HTL, inv.	I24
5 VDC	TTL	G05	RS422, TTL comp.	I05
5-30 VDC	HTL	H30	HTL, inv.	R30
10-30 VDC	-	-	RS422, TTL comp.	245
5 VDC	-	-	1 Vss Sin./Cos.	SIN

\*Only for cable or connector:  
 K2, L2, K3, L3, S4, S5, SB8, SC8, SB12, SC12

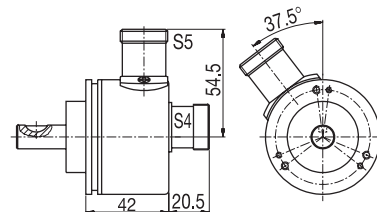
### Cable connection K2, K3

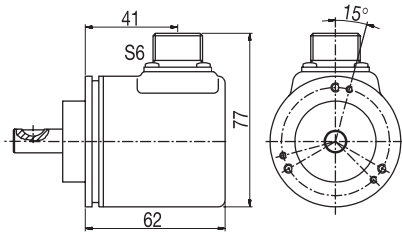


### Connector S2, S3, 7-pin



### Connector S4, S5, 12-pin

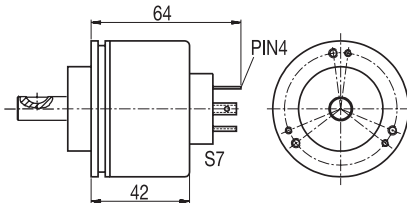
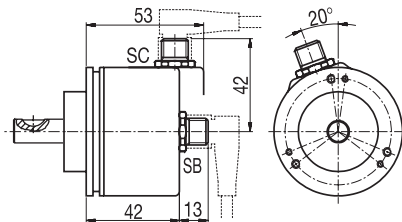


**MIL-connector S6, 6-pin**

**Options:**
**Low-temperature:**

The encoder WDG 58D 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 58D 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.

**Valve-connector S7, 4-pin**

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


All dimensional specifications in mm.  
 Further technical information on [www.wachendorff.de/gtd](http://www.wachendorff.de/gtd)  
 Matching accessories on [www.wachendorff.de/acs](http://www.wachendorff.de/acs)

**Ordering information:**

<b>Output circuit:</b> G24 = 10-30 VDC, HTL G05 = 5 VDC, TTL H30 = 5-30 VDC, HTL	<b>Output circuit inv.:</b> I24 = 10-30 VDC, HTL I05 = 5 VDC, RS422 TTL comp. R30 = 5-30 VDC, HTL 245 = 10-30 VDC, RS422 TTL comp. SIN = 5 V, 1 Vss Sinus (only to 1024 and 2048 PPR)	<b>Electrical connections:</b> <b>Cable:</b> 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  <b>Connector:</b> S2 = 7-pin axial S3 = 7-pin radial S4 = 12-pin axial S5 = 12-pin radial S6 = 6-pin radial S7 = 4-pin axial SB4 = 4-pin axial SC4 = 4-pin radial SB5 = 5-pin axial SC5 = 5-pin radial SB8 = 8-pin axial SC8 = 8-pin radial SB12 = 12-pin axial SC12 = 12-pin radial	<b>Options:</b> Empty = _____ without option Low-temperature -40°C...+80°C = _____ ACA Cable length = _____ in decimetres			
<b>Inverted only for cable or connector:</b> K2, L2, K3, L3, S4, S5, SB8, SC8, SB12, SC12		Please note the connection configuration under "General technical data", Page 122				
<b>Channels:</b> AB, ABN (SIN: AB)		<b>Pulses per revolution:</b> 2, 10, 15, 20, 24, 36, 40, 48, 50, 60, 64, 72, 87, 90, 100, 120, 125, 127, 128, 150, 160, 180, 200, 216, 240, 250, 254, 256, 300, 314, 320, 360, 400, 500, 512, 571, 600, 625, 720, 750, 768, 800, 810, 900, 1000, 1024, 1200, 1250, 1270, 1440, 1500, 1800, 2000, 2048, 2400, 2500, 3000, 3600, 4000, 4096, 4685, 5000. Other PPR's on request				
<b>Order No.:</b>						
Example	WDG 58D	500	ABN	G24	K3	
Your encoder	WDG 58D					