



BDG abbcc-ddee-fghhi-jjkk-llmm-nnoo

**BDG**  
Encoder

**a Principle**  
F = absolute

**bb Version**  
B0 = A-cast powder-coated mag. shielded radial (58)

**cc Flange size**  
58 = 58 mm

**dd Shaft shape, flange**  
BC = blind hole, clamping flange (clamping ring, spring clamp with hole)

**ee Shaft diameter**  
12 = 12 mm  
14 = 14 mm  
15 = 15 mm  
R6 = 6 mm via reducing sleeve (base 12 mm)  
R7 = 7 mm via reducing sleeve (base 12 mm)  
R8 = 8 mm via reducing sleeve (base 12 mm)  
RA = 10 mm via reducing sleeve (base 12 mm)  
S2 = 1/4" via reducing sleeve (base 12 mm)  
S3 = 3/8" via reducing sleeve (base 12 mm)

**f Category interface**  
N = Absolute digital, bidirectional

**g Interface**  
U = IO-Link

**hh Interface details**  
S0 = SSP 2, 3.2, v1

**i Power supply**  
L = 18...30 VDC

**jj Resolution single turn**  
1 - 16 = 1 - 16 Bit

**kk Resolution multi turn**  
0 - 43 = 0 - 43 Bit (interface-dependent)

**ll Connection cable shielded**  
00 = no cable

**mm Cable length**  
00 = no cable

**oo Pin assignment (connector / cable)**  
S5 = M12 connector 5 pin A coded

**oo Pin assignment (connector / cable)**  
L4 = IO-Link Class A

## Basic features

Approval/Conformity	CE
	cULus
	WEEE
	UKCA
Measuring principle	absolute measuring system

## Display/Operation

Function indicator	LED red/green
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## Electrical connection

Connection	Connector
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## Electrical data

Mean life expectancy	1x 10 <sup>9</sup> revs. at 100 % rated shaft load
	1x 10 <sup>10</sup> revs. at 40 % rated shaft load
	1x 10 <sup>11</sup> revs. at 20 % rated shaft load
Multi turn technology	Wiegand wire
Operating voltage U <sub>B</sub>	18 ... 30 VDC
Single turn accuracy	± 0.0878° (≤ 12 bits)
Single turn repeat accuracy	± 0.0878° (≤ 12 bits)
Single turn technology	Hall sensor
Speed max.	6000 U/min
Switch-on delay max.	1.5 s

## Environmental conditions

Ambient temperature	-40...85 °C
IP rating	Housing: IP65, IP67 Shaft entrance: IP65
Storage temperature	-40...100 °C

## Functional safety

Diagnostic coverage	0 %
MTTF (40 °C)	1300 a
Mission Time	20 a

## Interface

Interface	IO-Link 1.1
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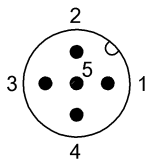
## Material

Housing material	Die cast aluminum
Housing material, surface protection	Powder coated
Material flange	Aluminium

## Mechanical data

Bearings type	2x precision ball bearings
Flange type	End hollow shaft
Housing diameter	58 mm
Shaft load axial max.	50 N
Shaft load radial max.	80 N
Starting torque typ.	ca. 1,6 Ncm bei Raumtemperatur

Connector Diagram



Wiring diagramm

N/A

Pin	Signal
1	L+ (UB)
2	I
3	L- (GND)
4	C/Q
5	n.c.

Product View

N/A

