



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

BDG
Encoder

a Principle
F = absolute

bb Version
BF = Steel mag. shielded axial (36)
BP = Steel mag. shielded radial (36)

cc Flange size
58 = 58 mm

dd Shaft shape, flange
PA = flat shaft, clamping flange (IP67)
SA = flat shaft, clamping flange

ee Shaft diameter
06 = 6 mm
10 = 10 mm

f Interface category
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 ⁹ revs. at 100 % rated shaft load 1x 10 ¹⁰ revs. at 40 % rated shaft load 1x 10 ¹¹ revs. at 20 % rated shaft load
Multi turn technology	Wiegand wire
Operating voltage U _b	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.	dd = SA: 8000 U/min dd = PA: 3500 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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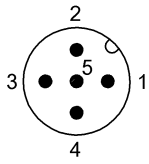
Material

Housing material	Stainless
Material flange	Aluminium

Mechanical data

Bearings type	2x precision ball bearings
Flange type	Clamping flange
Housing diameter	36 mm
Shaft length	ee = 06: 12 mm ee = 10: 20 mm
Shaft load axial max.	dd = SA: 120 N dd = PA: 100 N
Shaft load radial max.	D = 6: 125 N D = 10: 220 N dd = PA: 110 N
Starting torque typ.	dd = SA: ca. 1 Ncm bei Raumtemperatur dd = PA: ca. 4 Ncm bei Raumtemperatur

Connector Diagram



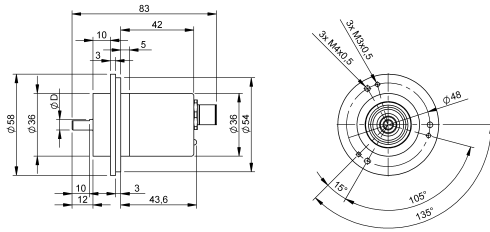
Wiring diagramm

N/A

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

Product View

N/A



N/A

