



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

BDG
Encoders

a Principle
F = absolute

bb Version
B0 = Aluminum casted, coated, shielded radial (58)

cc Size of flange
58 = 58 mm

dd Shaft form, flange
BC = Blind hole, trim ring (clamping ring, spring clamp with hole)

ee Diameter of shaft
12 = 12 mm
14 = 14 mm
15 = 15 mm
R6 = 6 mm with reducing sleeve (base 12 mm)
R7 = 7 mm with reducing sleeve (base 12 mm)
R8 = 8 mm with reducing sleeve (base 12 mm)
RA = 10 mm with reducing sleeve (base 12 mm)
S2 = 1/4" with reducing sleeve (base 12 mm)
S3 = 3/8" with reducing sleeve (base 12 mm)

f Interface category
N = Absolute digital, bidirectional

g Interface
N = PROFINET

hh Interface details
EA = PROFINET, v1

i Power supply
3 = 10...32 VDC

jj Resolution single turn [bit]
1 - 16

kk Resolution multi turn [bit]
0 - 43

ll Shielded cable
00 = No cable

mm Cable length in m
00 = No cable
20 = 2 m
50 = 5 m
A0 = 10 m

nn Connectors
BN = bus terminal cover (1x M12 male 4 pin A coded, 2x M12 female 4 pin D coded)

oo Pinout (Cable / Connector)
E3 = Profi/Ethernet/CAT Standard

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	Bus hood
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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	10 ... 32 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)	300 a
Mission Time	20 a

Interface

Interface	Profinet
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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

