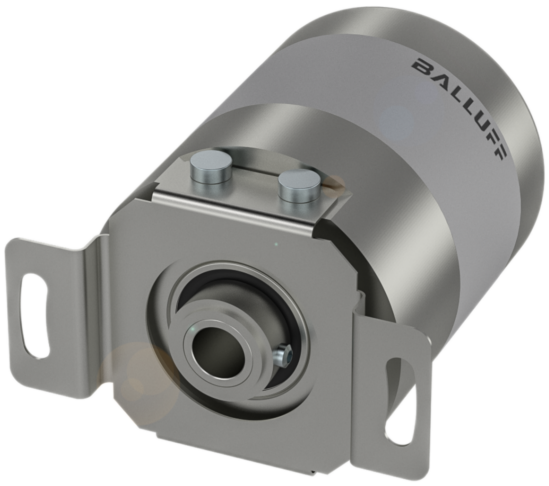
Encoders

BDG - FXX36-BM Series - IO-Link



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
36 = 36 mm

dd Shaft shape, flange
BM = Blind hole, clamping flange (set screw, symmetrical spring clamp with groove)

ee Shaft diameter
06 = 6 mm
P2 = 1/4"

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 Shielded connection cable
00 = no cable

mm Cable length
00 = no cable

nn Connector
S5 = M12 connector 5 Pin A coded

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

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Basic features

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

Display/Operation

Function indicator	LED red/green

Electrical connection

Connection	Connector

Electrical data

Mean life expectancy	1,4x 10'8 revs. at 100 % rated shaft load 2x 10'9 revs. at 40 % rated shaft load 1,7x 10'10 revs. at 20 % rated shaft load
Multi turn technology	Wiegand wire
Operating voltage Ub	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.	12000 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

Material

Housing material	Stainless
Material flange	Aluminium

Mechanical data

Bearings type	2x precision ball bearings
Flange type	End hollow shaft
Housing diameter	36 mm
Shaft load axial max.	50 N
Shaft load radial max.	80 N
Starting torque typ.	ca. 0,3 Ncm bei Raumtemperatur

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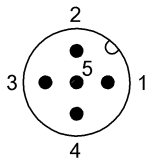
Connector Diagramm



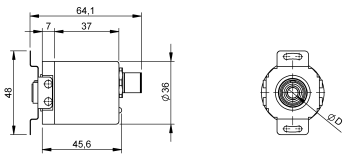
Wiring diagramm

N/A

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

Product View

N/A



N/A