Encoders

BDG - FXX58-PS/SS Series - IO-Link

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

BDG
Encoder

a Principle
F = absolute

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

cc Flange size
58 = 58 mm

dd Shaft shape, flange
PS = flat shaft, synchronous flange (IP67)
SS = flat shaft, synchronous 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 Single turn resolution
1 - 16 = 1 - 16 Bit

kk Multi turn resolution
0 - 43 = 0 - 43 Bit (interface-dependent)

ll Shielded connection cable
00 = no cable

mm Cable length
00 = no cable

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

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

BDG - FXX58-PS/SS Series - IO-Link

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	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 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.	dd = SS: 8000 U/min dd = PS: 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

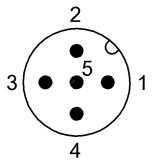
Material

Housing material	Stainless
Material flange	Aluminium

Mechanical data

Bearings type	2x precision ball bearings
Flange type	Synchro flange
Housing diameter	58 mm
Shaft length	ee = 06: 12 mm ee = 08: 20 mm
Shaft load axial max.	dd = SS: 120 N dd = PS: 100 N
Shaft load radial max.	D = 6: 125 N D = 10: 220 N dd = PS: 110 N
Starting torque typ.	dd = SS: ca. 1 Ncm bei Raumtemperaturdd = PS: ca. 4 Ncm bei Raumtemperatur

Connector Diagramm



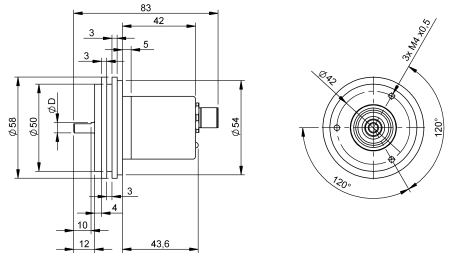
Wiring diagramm

N/A

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

Product View

N/A



N/A