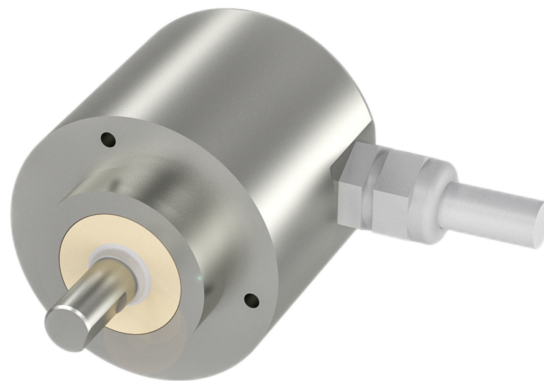




BDG abbcc-ddee-fghhi-jjkk-llmm-nnoo

BDG
Encoders

a Principle
E = Incremental

bb Version
BA = V4A (1.4404 or 1.4571) radial (58)
BB = V4A (1.4404 or 1.4571) axial (58)

cc Flange size
58 = 58 mm

dd Shaft form, flange
PC = Shaft with flat, trim ring (IP67/IP69K)

ee Shaft diameter
10 = 10 mm

f Interface category
A = Incremental analog standard
Q = Incremental digital standard

g Interface
C = HTL, /HTL
F = TTL, /TTL
Q = TTL
R = HTL

hh Interface details

AK = AB 200 kHz
AM = AB 600 kHz
AP = AB 2 MHz
NK = ABN 200 kHz
NM = ABN 600 kHz
NP = ABN 2 MHz

i Supply voltage

U = 5..30 VDC
1 = 10..30 VDC
5 = 5 VDC

jjkk Resolution [pulses per revolution]

0010 = 10 pulses per revolution
(max. 25000 - depending on interface)

ll Shielded cable

00 = no cable
AE = PVC gray, 2x0.34 + 10x0.14 mm²

mm Cable length

00 = no cable
20 = 2 m
50 = 5 m
A0 = 10 m

nn connector

00 = no connector

oo Wire assignments (connector / cable)

H1 = HTL/TTL inv. M23 + cable
T1 = HTL/TTL shielded cable

Basic features

Approval/Conformity	CE
	cULus
	WEEE
	UKCA
Measuring principle	Ecolab
	incremental measuring system

Electrical connection

Connection	Cable
------------	-------

Electrical data

Current consumption max. at 24 V DC	i = U: typ. 70 mA i = 1: typ. 100 mA
Current consumption max. at 5 V DC	i = 5: typ. 100 mA
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
Phase shift	90° ± ≤ 7.5 % of a period
Pulse frequency	f = Q + g = F/Q: ≤ 2 MHz f = Q + g = C/R: ≤ 600 kHz f = Q + g = A: ≤ 100 kHz f = R: ≤ 200 kHz
Pulse/pause ratio	≤ 5000 PPR: 50 % ± ≤ 7 % ≤ 25000 PPR: 50 % ± ≤ 10 %
Pulses per revolution	≤ 25000
Speed max.	3600 U/min

Environmental conditions

Ambient temperature	g = A: -10...70 °C g ≠ A: -20...80 °C
IP rating	IP67 IP69K Salt mist test DIN EN 60068-2-11 passed after 672 hours.
Storage temperature	-20...80 °C

Functional safety

Diagnostic coverage	0 %
MTTF (40 °C)	200 a
Mission Time	25 a

Interface

Channels	AB, ABN
Interface	Digital pulse

Material

Housing material	Stainless steel (1.4404)
Material flange	1.4404 stainless steel

Mechanical data

Bearings type	2x precision ball bearings
Flange type	Clamping flange
Housing diameter	58 mm
Shaft diameter	10 mm
Shaft length	18 mm
Shaft load axial max.	100 N
Shaft load radial max.	100 N
Starting torque typ.	ca. 1 Ncm bei Raumtemperatur

Wiring diagramm

H1 (HTL/TTL inv. cable)

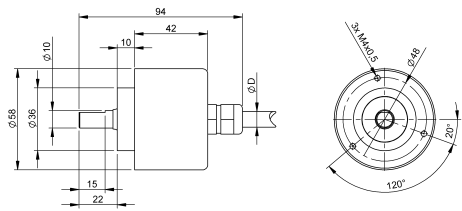
HTL/TTL inv.	H1	
Schaltung	Pin	Color
GND	10	WH
UB	12	BN
A	5	GN
B	8	YE
N	3	GY
Ainv	6	RD
Binv	1	BU
Ninv	4	VT
n.c.	2,7,9,11	
Shield	housing	housing

T1 (HTL/TTL cable)

HTL/TTL	T1	
Schaltung	Pin	Color
GND	3	WH
UB	1	BN
A	2	GN
B	4	YE
N	5	GY
n.c.	6,7,8	
Shield	housing	housing

Product View

Cable outlet axial



Cable outlet radial

