

Magnetic Incremental hollow shaft encoder

BRIH/BRID - *EcoMag*

features

- robust against shock and vibration
- high switching frequency
- end shaft mounting type BRIH
- through shaft mounting type BRID



general data

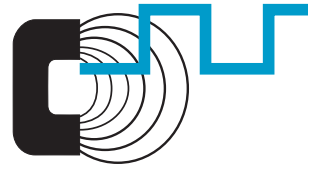
voltage supply	5 VDC $\pm 10\%$ (05A) 10 - 30 VDC (24K)
max. supply current no load	typ. 30 mA (at 5 VDC) (05A) typ. 15 mA (at 24 VDC) (24K)
pulse range	see order designation
pulse tolerance	$\pm 15\%$
max. measuring steps	8'192 steps
max. switching frequency	320 kHz

mechanical data

max. revolutions	
BRIH	12'000 rpm
BRID	6'000 rpm
torque	
BRIH	typ. 0,9 cNm IP 42 typ. 3,7 cNm IP 65
BRID	typ. 1,75 cNm IP 42 typ. 4,7 cNm IP 65 (3'000 rpm / 20 °C)
product life	depending on ambient conditions (typ. 10^9 revolutions)
max. protection class	shaft: IP 65 housing: IP 65
material	housing: aluminum flange: aluminum
weight	approx. 150 g

ambient conditions

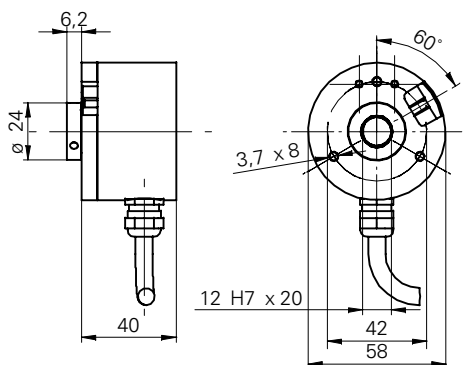
temperature range	-20...+85 °C
relative humidity	max. 95% non condensing
vibration (sine)	IEC 60068-2-6 ($\leq 300 \text{ m/s}^2$ / 10 - 2000 Hz) 150 min per axis
vibration (random)	IEC 60068-2-64 ($\leq 0,1 \text{ g}^2/\text{Hz}$ / 20 - 2000 Hz) 30 min per axis
shock	IEC 60068-2-27 ($\leq 1000 \text{ m/s}^2$ / 6 ms) 10 pulses per axis and direction
bump	IEC 60068-2-29 ($\leq 1000 \text{ m/s}^2$ / 2 ms) 4000 pulses per axis and direction
noise immunity	EN 61000-6-2
emitted interference	EN 61000-6-3



dimensions and connection dimensions

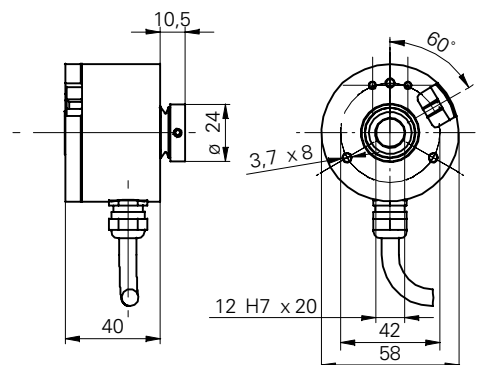
BRIH

-5

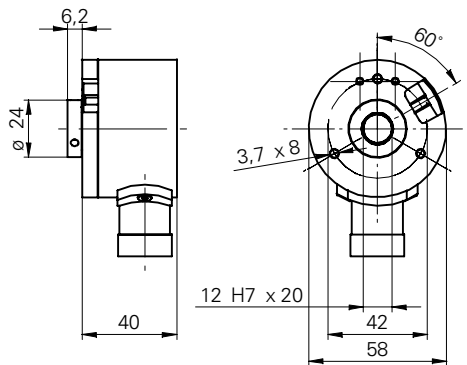


BRID

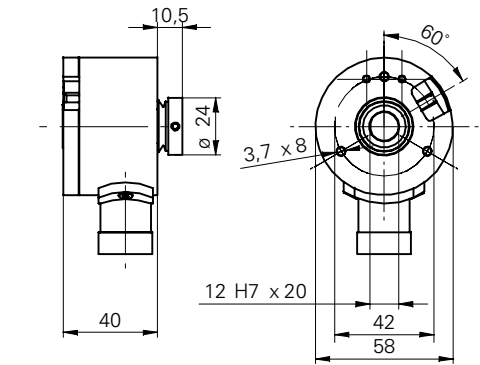
-5



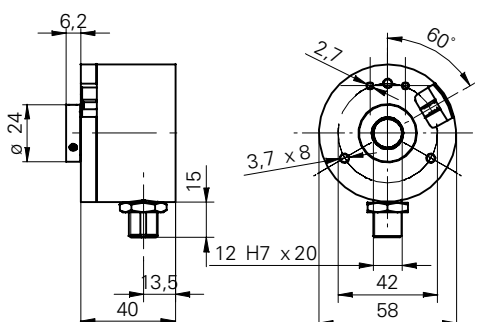
-A



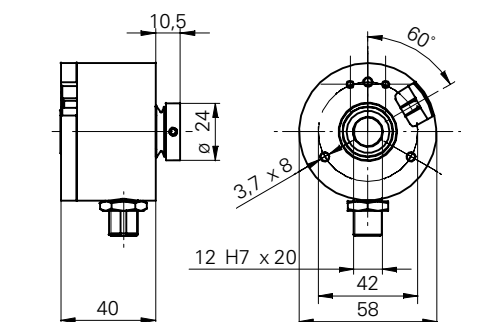
-A



-N



-N



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assignment cable

for connection reference **-5**

05A (5 VDC complementary)

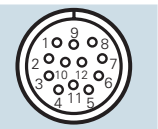
cable color	signals
brown	+Vs
green	CHA
red	CHA complementary
yellow	CHB
blue	CHB complementary
pink	CHN
grey	CHN complementary
white	0 V
screen	connected to connector housing
cable data	8 x 0,14 mm ² , max. ext. ø 5,7 mm

24K (10 - 30 VDC push-pull, short-circuit protection)

cable color	signals
brown	+Vs
green	CHA
yellow	CHB
pink	CHN
white	0 V
screen	connected to flange
cable data	5 x 0,14 mm ² , max. ext ø 5,4 mm

assignment connector

for connection reference **-A**



view on
encoder

05A (5 VDC complementary)

24K (10 - 30 VDC push-pull, short-circuit prot.)

pin number	signals
1	CHA compl.
2	+Vs
3	CHN
4	CHN compl.
5	CHB
6	CHB compl.
7	n.c.
8	CHA
9	housing
10	0 V
11	n.c.
12	n.c.

push-pull version **24K** without CHx
complementary signals.

assignment connector

for connection reference **-N**



view on
encoder

05A (5 VDC complementary)

pin number	cable color*	signals
1	white	0 V
2	brown	+Vs
3	green	CHA
4	yellow	CHB
5	grey	CHN compl.
6	pink	CHN
7	blue	CHB compl.
8	red	CHA compl.

for connection reference **-N**



view on
encoder

24K (10 - 30 VDC push-pull, short-circuit prot.)

pin number	cable color*	signals
1	brown	+Vs
2	white	0 V
3	blue	CHA
4	black	CHB
5	grey	CHN

*Note

These cable colors are valid for the pre-assembled cable
socket (see accessories).

