

Incremental encoders

Shaft with clamping or synchro flange

Resolution 64...2048 pulses

BRIV 58K, BRIV 58S - EcoMag



BRIV 58K with clamping flange

Features

- Encoder with shaft $\varnothing 10$ mm or $\varnothing 6$ mm
- Magnetic sensing
- Resolution max. 2048 ppr
- High resistance to shock and vibrations
- High limit frequency
- Clamping or synchro flange

Technical data - electrical ratings

Voltage supply	5 VDC ± 10 % 10...30 VDC
Consumption w/o load (typ.)	30 mA (5 VDC) 15 mA (24 VDC)
Resolution (steps/turn)	64...2048
Reference signal	Zero pulse, width 90°
Sensing method	Magnetic
Output frequency	≤ 320 kHz
Output signals	A 90° B, N + inverted
Output circuit	Antivalent Push-pull short-circuit proof
Interference immunity	DIN EN 61000-6-2
Emitted interference	DIN EN 61000-6-3
Approval	UL approval / E217823

Technical data - mechanical design

Dimensions (flange)	$\varnothing 58$ mm
Protection DIN EN 60529	IP 42, IP 65
Operating speed	≤ 12000 rpm (IP 42) ≤ 6000 rpm (IP 65)
Operating torque typ.	0.0175 Nm (IP 42) 0.047 Nm (IP 65)
Materials	Housing: aluminium Flange: aluminium
Operating temperature	-20...+85 °C
Relative humidity	95 % non-condensing
Resistance	DIN EN 60068-2-6 Vibration 30 g, 10-2000 Hz DIN EN 60068-2-27 Shock 500 g, 6 ms
Connection	Connector M12, 5-pin Connector M12, 8-pin Connector M23, 12-pin Cable 2 m
Weight approx.	150 g

BRIV 58K

Shaft	$\varnothing 10$ mm (clamping flange)
Shaft loading	≤ 40 N axial ≤ 60 N radial
Flange	Clamping flange

BRIV 58S

Shaft	$\varnothing 6$ mm (synchro flange)
Shaft loading	≤ 40 N axial ≤ 50 N radial
Flange	Synchro flange

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Part number

Clamping flange

BRIV 58K16

Connection
5 Cable 2 m, radial
A Connector M23, radial
N Connector M12, radial

Shaft
10 ø10 mm, IP 42
C0 ø10 mm, IP 65

See part number (pulses)

Voltage supply / signals

05A 5 VDC / antivalent (TTL compatible)
24K 10...30 VDC / push-pull short-circuit proof

Synchro flange

BRIV 58S16

Connection
5 Cable 2 m, radial
A Connector M23, radial
N Connector M12, radial

Shaft
06 ø6 mm, IP 42
C6 ø6 mm, IP 65

See part number (pulses)

Voltage supply / signals

05A 5 VDC / antivalent (TTL compatible)
24K 10...30 VDC / push-pull short-circuit proof

Part number (pulses)

64	512	1024	2000
360	1000	1800	2048

Other pulse numbers upon request.

Trigger level

Outputs 05A Complementary Linedriver RS422

Output level High	>2,4 V (I = -20 mA)
Output level Low	<0,4 V (I = 20 mA)
Load High	<20 mA
Load Low	<20 mA

Outputs 24K Push-pull short-circuit protection

Output level High	>+Vs - 3,7 V (I = -30 mA)
Output level Low	<2,5 V (I = 30 mA)
Load High	<30 mA
Load Low	<30 mA

Accessories

Connectors and cables

10107687	Female connector M23, 12-pin, straight
10130367	Female connector M23, 12-pin, straight, 2 m cable
10118532	Female connector M23, 12-pin, straight, 5 m cable
10146775	Female connector M12, 8-pin, straight
10127844	Female connector M12, 8-pin, straight, shielded, 2 m
10129332	Female connector M12, 8-pin, straight, shielded, 5 m cable
10153968	Female connector M12, 5-pin, A-coded, straight
10144720	Female connector M12, 5-pin, A-coded, straight, shielded, 2 m
10137485	Female connector M12, 5-pin, A-coded, straight, shielded, 5 m

Mounting accessories for BRIV 58K

10252773	Clamp set ø15 mm
11053277	Bellows coupling aluminium/stainless steel 10 mm

Mounting accessories for BRIV 58S

10252773	Clamp set ø15 mm
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Terminal assignment

Cable

for connection reference -5

05A		24K	
Core colour	Signals	Core colour	Signals
brown	+Vs	brown	+Vs
green	CHA	green	CHA
ret	CHA comp.	–	–
yellow	CHB	yellow	CHB
blue	CHB comp.	–	–
pink	CHN	pink	CHN
grey	CHN comp.	–	–
white	0 V	white	0 V
Cable data	8 x 0.14 mm ²	5 x 0.14 mm ²	
Screen	connected to housing		

Connector M23, 12-pin

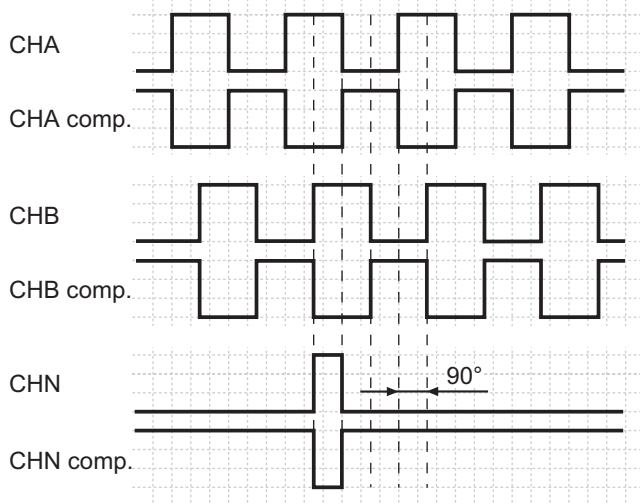
for connection reference -A

05A, 24K	
Connector	Signals
Pin 1	CHA comp.
Pin 2	+Vs
Pin 3	CHN
Pin 4	CHN comp.
Pin 5	CHB
Pin 6	CHB comp.
Pin 7	n.c.
Pin 8	CHA
Pin 9	Housing
Pin 10	0 V
Pin 11 -12	n.c.

Output signals

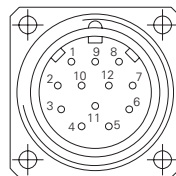
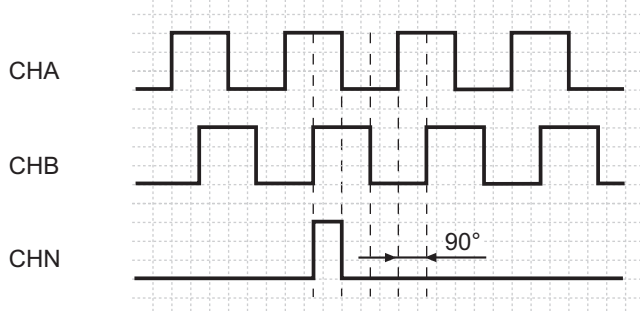
Counter clockwise rotating direction when looking at the flange.

05A



Counter clockwise rotating direction when looking at the flange.

24K



Connector M12, 8-pin / 5-pin

for connection reference -N

05A		
Connector	Core colour*	Signals
Pin 1	white	0 V
Pin 2	brown	+Vs
Pin 3	green	CHA
Pin 4	yellow	CHB
Pin 5	grey	CHN inv.
Pin 6	pink	CHN
Pin 7	blue	CHB inv.
Pin 8	red	CHA inv.

24K

Connector	Core colour*	Signals
Pin 1	brown	+Vs
Pin 2	white	0 V
Pin 3	blue	CHA
Pin 4	black	CHB
Pin 5	grey	CHN

*valid for the assembled mating connectors (see access.)



Incremental encoders

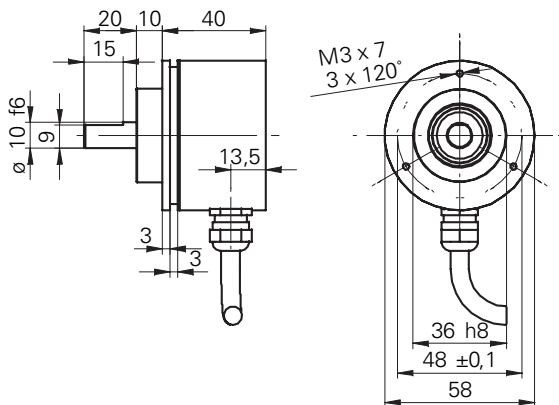
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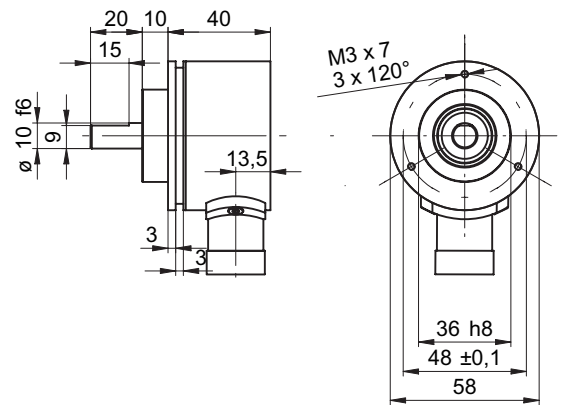
BRIV 58K, BRIV 58S - EcoMag

Dimensions

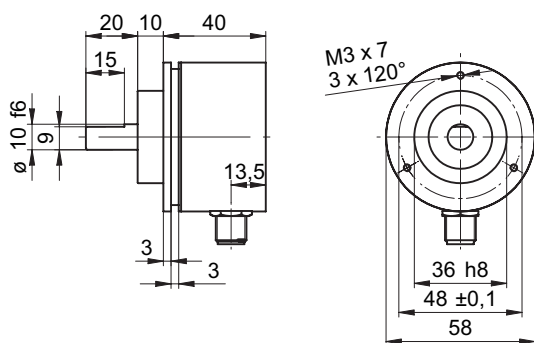
BRIV 58 clamping flange, cable radial



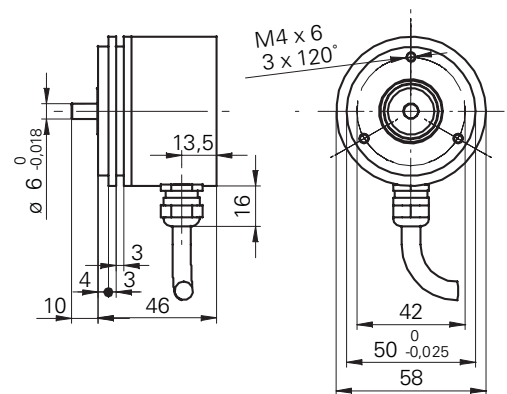
BRIV 58 clamping flange, connector output M23 radial



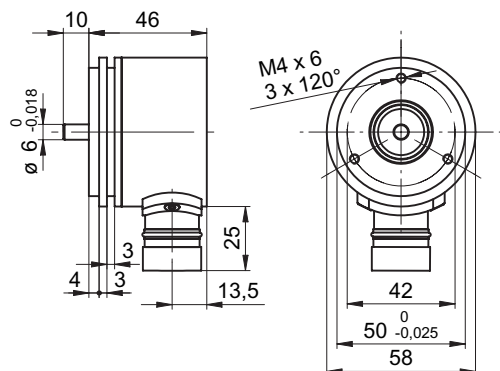
BRIV 58 clamping flange, connector output M12 radial



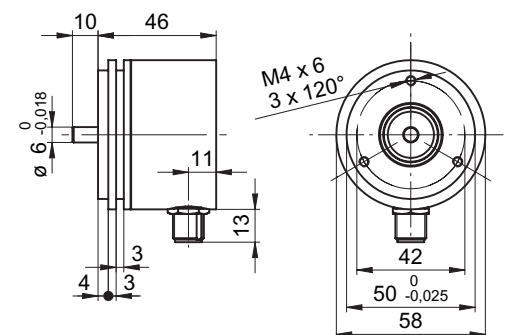
BRIV 58 synchro flange, cable radial



BRIV 58 synchro flange, connector output M23 radial



BRIV 58 clamping flange, connector output M12 radial



Subject to modification in technic and design. Errors and omissions excepted.