

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

Housing	$\varnothing 58$ 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 Connector M23, 12-pin Cable 2 m
Weight approx.	150 g

BRIV 58K

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

BRIV 58S

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

Incremental encoders

Shaft with clamping or synchro flange

Resolution 64...2048 pulses

BRIV 58K, BRIV 58S - EcoMag

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, CAN, 5-pin, straight
10144720	Female connector M12, CAN, 5-pin, straight, shielded, 2 m
10137485	Female connector M12, CAN, 5-pin, straight, shielded, 5 m

Mounting accessories

10252773	Clamp set
----------	-----------

Incremental encoders

Shaft with clamping or synchro flange

Resolution 64...2048 pulses

BRIV 58K, BRIV 58S - EcoMag

Terminal assignment

Cable

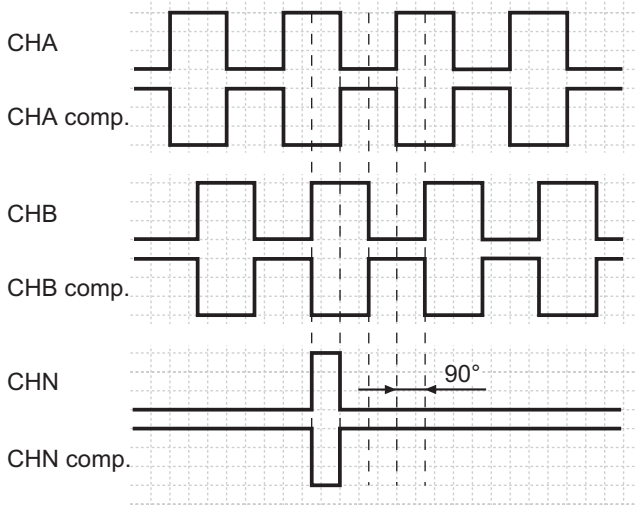
for connection reference -5

05A		24K	
Core colour	Signals	Core colour	Signals
brown	+Vs	brown	+Vs
green	CHA	green	CHA
red	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		

Output signals

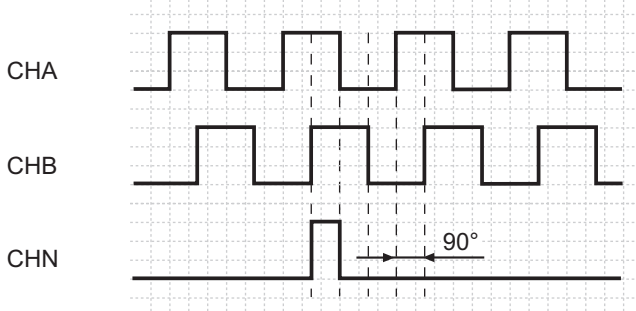
Counter clockwise rotating direction when looking at the flange.

05A



Counter clockwise rotating direction when looking at the flange.

24K

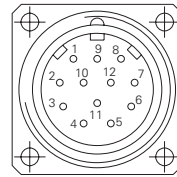


Connector M23 male

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	n.c.
Pin 12	n.c.



Stecker M12

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

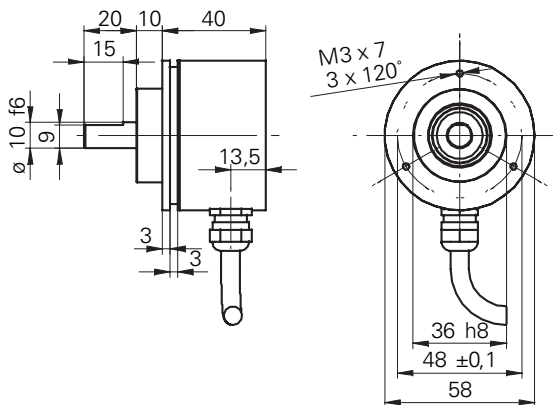
Shaft with clamping or synchro flange

Resolution 64...2048 pulses

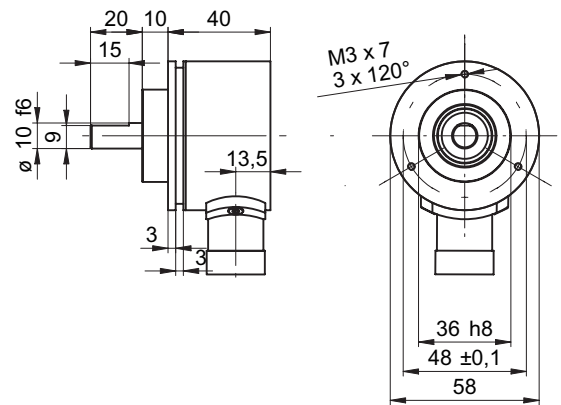
BRIV 58K, BRIV 58S - EcoMag

Dimensions

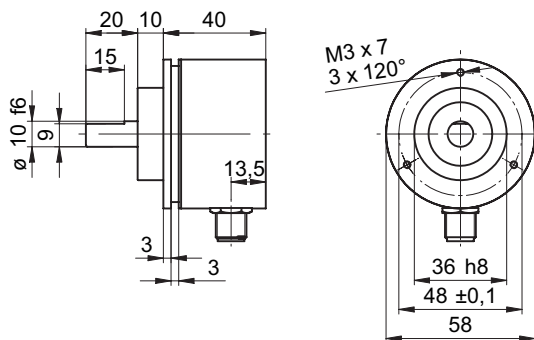
BRIV 58 clamping flange, cable radial



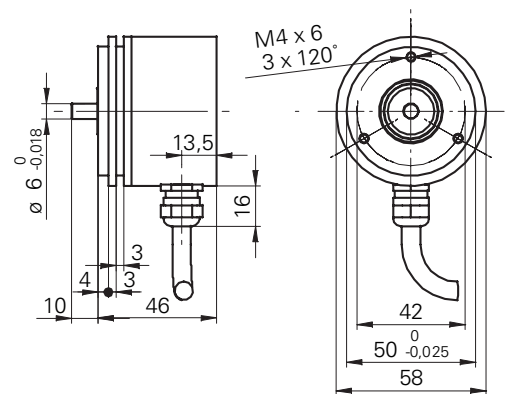
BRIV 58 clamping flange, connector output M23 radial



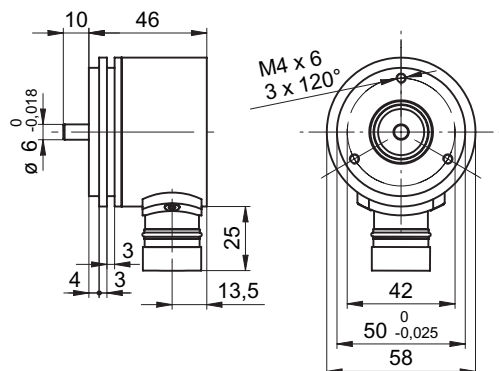
BRIV 58 clamping flange, connector output M12 radial



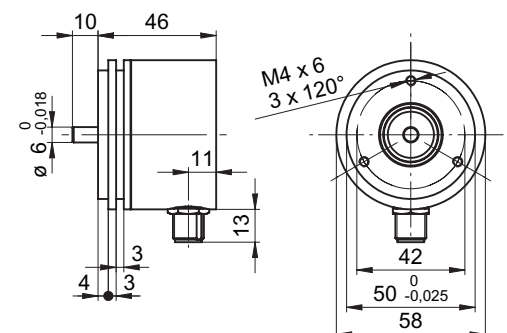
BRIV 58 synchro flange, cable radial



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.