

# Incremental encoders

Micro series - shaft  $\varnothing$ 5 mm

2...1024 pulses per revolution

## BRIV 30 - EcoMag



BRIV 30 with shaft

### Features

- Micro encoder with solid shaft  $\varnothing$ 5 mm
- Magnetic sensing method
- Max. 1024 pulses per revolution
- Housing  $\varnothing$ 30 mm
- High resistance to shock and vibrations
- Wide pulse number range
- Synchro flange

### Technical data - electrical ratings

Voltage supply	5 VDC $\pm$ 10 % 20...28 VDC
Consumption typ.	25 mA (5 VDC, w/o load) 30 mA (24 VDC, w/o load)
Pulses per revolution	2...1024
Reference signal	Zero pulse, width 90°
Sensing method	Magnetic
Output frequency	$\leq$ 320 kHz
Output signals	A 90° B, N + inverted
Output stages	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

Size (flange)	$\varnothing$ 30 mm
Shaft type	$\varnothing$ 5 mm solid shaft
Admitted shaft load	$\leq$ 10 N axial $\leq$ 10 N radial
Flange	Synchro flange
Protection DIN EN 60529	IP 64
Operating speed	$\leq$ 6000 rpm
Starting torque	$\leq$ 0.3 Ncm
Materials	Housing: polyamide black Flange: aluminium
Operating temperature	-20...+85 °C -20...+65 °C
Relative humidity	95 % non-condensing
Resistance	DIN EN 60068-2-6 Vibration 30 g, 10-2000 Hz DIN EN 60068-2-27 Shock 100 g, 6 ms
Connection	Connector M9, 5-pin Connector M9, 8-pin Cable 1 m
Weight approx.	90 g



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### Terminal assignment

#### Cable

for connection reference -4 and -5

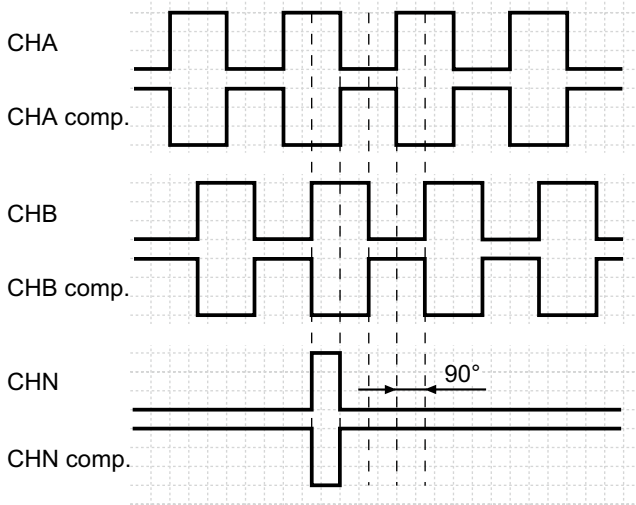
#### 05A

Core colour	Signals	Core colour	Signals
brown	+Vs	brown	+Vs
green	CHA	green	CHA
red	CHA compl.	–	–
yellow	CHB	yellow	CHB
blue	CHB compl.	–	–
pink	CHN	pink	CHN
grey	CHN compl.	–	–
white	0 V	white	0 V
Cable data	8 x 0.14 mm <sup>2</sup>	5 x 0.14 mm <sup>2</sup>	
Screen	connected to flange		

### Output signals

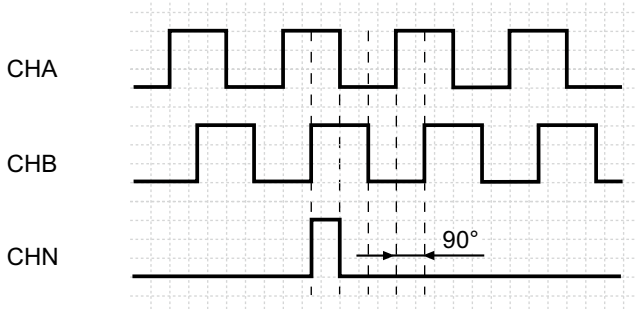
Counter clockwise rotating direction when looking at the flange.

#### 05A



Counter clockwise rotating direction when looking at the flange.

#### 17K



#### Connector M9 male

for connection reference -9

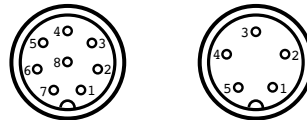
#### 05A

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 compl.
Pin 6	pink	CHN
Pin 7	blue	CHB compl.
Pin 8	red	CHA compl.

#### 17K

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

\*these core colours are valid for the assembled mating connectors (see accessories)



# Incremental encoders

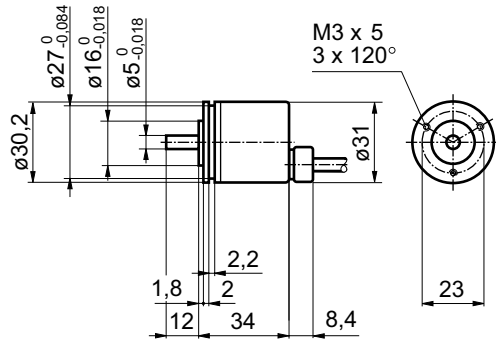
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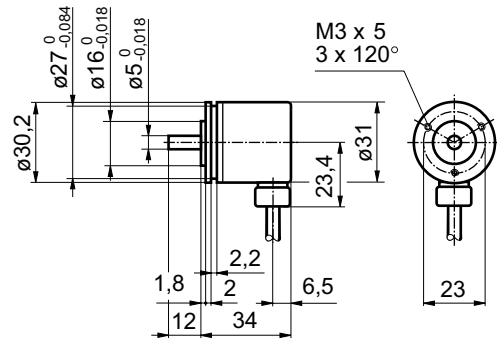
BRIV 30 - EcoMag

## Dimensions

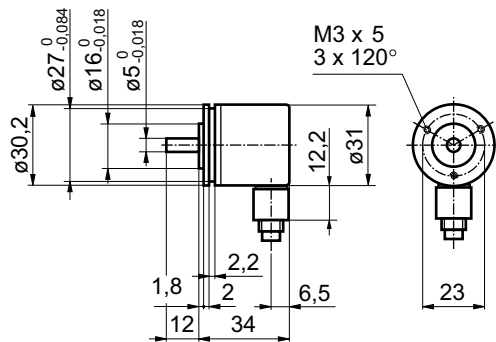
BRIV 30, cable axial



BRIV 30, cable radial



BRIV 30, connector output radial



BRIV 30 connector dimensions

