

# Incremental encoders

Mini series - shaft  $\varnothing 6$  mm

100...25000 manual adjustable

## BNIV



BNIV

### Features

- Encoder with 16 predefined resolutions
- Max. 25000 pulses per revolution
- Optical sensing method
- Manual adjustment without any programming tool
- Housing  $\varnothing 40$  mm
- Operation speed max. 3000 rpm
- Solid shaft  $\varnothing 6$  mm

### Technical data - electrical ratings

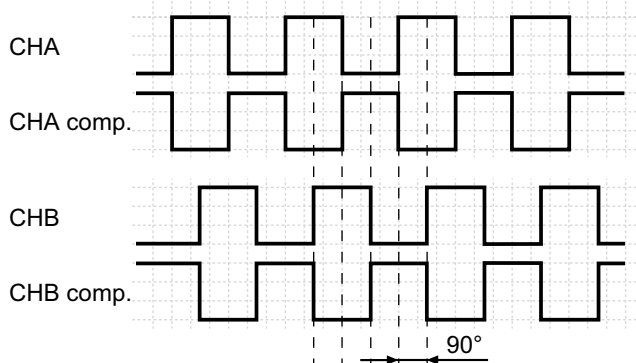
Voltage supply	4.75...30 VDC
Consumption typ.	100 mA (24 VDC, w/o load)
Pulses per revolution	100...25000
Sensing method	Optical
Output frequency	$\leq 300$ kHz
Output signals	A 90° B
Output stages	Linedriver/RS422 Push-pull antivalent, short-circuit proof (HTL)
Interference immunity	DIN EN 61000-6-2
Emitted interference	DIN EN 61000-6-3

### Technical data - mechanical design

Size (flange)	$\varnothing 40$ mm
Shaft type	$\varnothing 6$ mm solid shaft
Admitted shaft load	$\leq 10$ N axial $\leq 40$ N radial
Flange	Synchro flange
Protection DIN EN 60529	IP 64
Operating speed	$\leq 3000$ rpm
Operating torque typ.	0.0075 Nm (3000 rpm / 20 °C)
Materials	Housing: aluminium Flange: aluminium
Operating temperature	-20...+85 °C
Relative humidity	95 % non-condensing
Resistance	DIN EN 60068-2-6 Vibration 10 g, 10-2000 Hz DIN EN 60068-2-27 Shock 50 g, 11 ms
Connection	Connector M12, 8-pin Cable 2 m
Weight approx.	100 g

### Output signals

Counter clockwise rotating direction when looking at the flange.



### Switch setting (HEX switch)

Switch	Resolution	Switch	Resolution
0	100	8	2000
1	200	9	2048 (default)
2	360	A	2500
3	500	B	3600
4	512	C	5000
5	720	D	10000
6	1000	E	20000
7	1024	F	25000

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## Part number

BNIV 40Z1D. **26W** **2048L6**

Connection

5 Cable 2 m, radial  
N Connector M12, 8-pin, radial

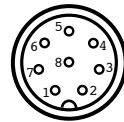
Voltage supply / signals

26W 4.75...30 VDC / push-pull antivalent short-circuit proof

## Terminal assignment

Connector	Core colour	Signals
Pin 1	white	0 V
Pin 2	brown	+Vs
Pin 3	green	CHA
Pin 4	yellow	CHB
Pin 5	grey	n.c.
Pin 6	pink	n.c.
Pin 7	blue	CHB comp.
Pin 8	red	CHA comp.

Connector M12 – for connection reference -N



## Accessories

### Connectors and cables

10146775 Female connector M12, 8-pin, straight, without cable

### Mounting accessories

11053621 Encoder standoff set

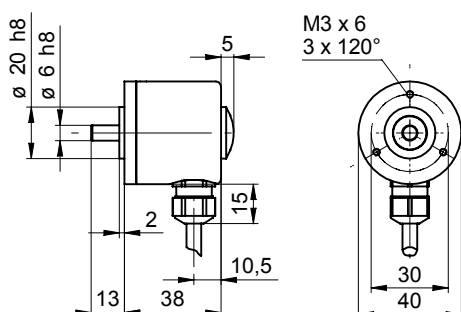
## Trigger level

Outputs	RS422
Output level High	>2.4 V (I = -20 mA)
Output level Low	<0.5 V (I = 20 mA)
Load High/Low	<20 mA

Outputs	HTL
Output level High	>+Vs -3 V (I = -20 mA)
Output level Low	<0.5 V (I = 20 mA)
Load High/Low	<20 mA

## Dimensions

### BNIV cable



### BNIV connector M12

