

Incremental encoders

Mini series shaft $\varnothing 6$ mm

Resolution 100...25000 manual adjustable

BNIV



BNIV

Features

- Encoder with 16 predefined resolutions
- Resolution max. 25000 ppr
- Optical sensing
- Manual adjustment without any programming tool
- Housing $\varnothing 40$ mm
- Operation speed max. 6000 rpm
- Shaft $\varnothing 6$ mm

Technical data - electrical ratings

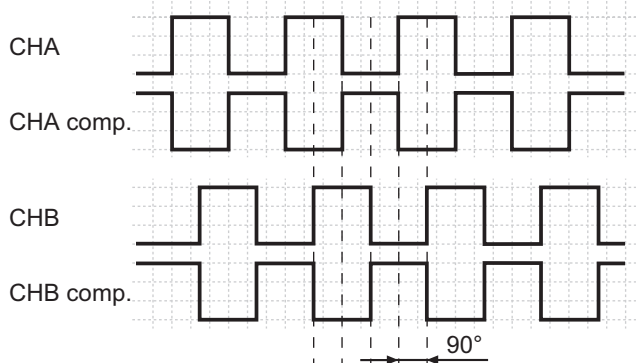
Voltage supply	4.75...30 VDC
Consumption w/o load (typ.)	100 mA (24 VDC)
Resolution (steps/turn)	100...25000
Sensing method	Optical
Output signals	A 90° B
Output circuit	Linedriver RS422 Push-pull antivalent, short-circuit proof (HTL)
Interference immunity	DIN EN 61000-6-2
Emitted interference	DIN EN 61000-6-3

Technical data - mechanical design

Housing	$\varnothing 40$ mm
Shaft	$\varnothing 6$ mm
Protection DIN EN 60529	IP 64
Operating speed	≤ 6000 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, 10-200 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
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. **C6**

Connection
 5 Cable 2 m, radial
 N Connector M12, radial
 See part number (pulses)
 Voltage supply / signals
 05A 5 VDC / antivalent (TTL compatible)
 26W 4.75...30 VDC / push-pull antivalent
 short-circuit proof

Part number (pulses)

100	512	2000	5000
200	720	2048	10000
360	1000	2500	20000
500	1024	3600	25000

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



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

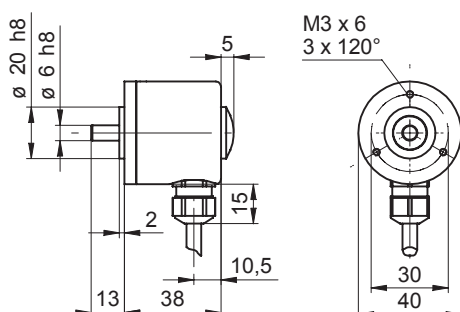
Outputs 26W

Push-pull antivalent short-circuit-proof

Output level High	>+Vs -2.6 V (I = 20 mA)
Output level Low	<0.5 V (I = -20 mA)

Dimensions

BNIV cable



BNIV connector M12

