

ENCODER

Type: **IMG60B-.....-ABN-.....-S5-V5**



Description

The IMG60B is a robust rotary encoder with clamp-flange for industrial use. The 60 mm external diameter and the 10 mm axis of them make possible very hard wear.

The new developed optical electronics in this encoder guaranteed with differential scanning the code-disk a high technical reliability. The integrated IR-LED-current monitoring with alarm output make possible constant proportion of light.

Beside different pulse numbers and pulse series (8 in one device are to realise at the most), and Operating voltage (10 Volt at TTL-compatibility), this IMG60B will deliver with a 12-pole flanged plug (M23).

The IMG60B can be fixed in front by means of three screws type M3 or M4.

It is particularly qualified to use with medium and high stress and high speeds.



Technical Data

Mechanical features: Bearing flange with housing: Aluminium solid (high-grade steel on inquiry)

Shaft: Steel (stainless)

Diameter housing: 60 mm

Diameter flange: 60 mm

Diameter shaft: 10 mm or 6 mm

Working temperature: 0 ÷ +80 °C (-30 ÷ +110 °C on inquiry)

Climate class (IEC 721-3-3): 3K3 Type B

Relative moisture: ≤ 75 % on average one year max. ≤ 85 %

Protection class (EN 60529): IP64

IP67

Mechanical speed: max. 10000 min⁻¹

max. 3000 min⁻¹ (lip-type seal!)

Loading capacity of the shaft: max. 40 N axial

max. 20 N axial

max. 60 N radial

max. 30 N radial

Starting torque: 0.6 Ncm (at 25 °C)

3 Ncm (at 25 °C)

Vibration (IEC 68-2-6): ≤ 100 m/s² ≈ 10 g (at 10-2000 c/s)

Impact (IEC 68-2-27): ≤ 100 m/s² ≈ 10 g (during 6 ms)

Masse: 320 g

Operating voltage: 5 Volt DC ±10%

10 ÷ 24 Volt DC ±10 %, max. 30 Volt

Residual ripple: 50 mVss

100 mVss

Current input: ≤ 50 mA (unloaded)

≤ 50 mA (unloaded)

Output circuit: TTL; RS422 compatible

HTL

Output load: 80 mA

80 mA

Output signals: Channel A:

Impulse duration T = vibration duration T = $2\pi = 360^\circ$.

(With view on shaft and turn cw) Channel B:

90° Phase offset from channel B to channel A.

Channel N:

Impulse tolerance ±20°. Impulse-break-proportion 1:1.

Pulse numbers per turn: max. 10000

Output frequency: max. 200 kc/s

Type of connection: radial 12-pole plug

Function	Pin	Colour	Pin arrangement
+U _B	12	brown	
0 Volt	10	white	
Channel A	5	green	
Channel A inv.	6	yellow	
Channel B	8	grey	
Channel B inv.	1	pink	
Channel N	3	blue	
Channel N inv.	4	red	
Alarm output	11	black	View on pin side

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