

ENCODER

Type: **IMG30B-.....-ABN-.....-K1-V3**



Description

The **IMG30B** is a strong incremental encoder with clamp-flange for the inset in the industry. The 30 mm diameter and the 6 mm axis of them make possible very hard wear.

The new developed optical electronics in this encoder guarantees with differential scanning the code-disk just so a high technical reliability.

Besides different pulse numbers and pulse series (up to 3 are realisable in one device) and operating voltage (10 Volt at TTL-compatibility), this **IMG30B** will deliver with a 2 m cable.

The **IMG30B** can be fixed in front by means of 2 x three screws type M3.

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



Technical Data

Mechanical features:

Bearing flange with housing: Aluminium solid (high-grade steel on inquiry)
Shaft: Steel (stainless)
Diameter housing: 30 mm
Diameter flange: 30 mm
Diameter shaft: 6 mm
Working temperature: $0 \div +80\text{ }^{\circ}\text{C}$ ($-30 \div +110\text{ }^{\circ}\text{C}$ on inquiry)
Climate class (IEC 721-3-3): 3K3 Type B
Relative moisture: $\leq 75\%$ on average one year max. $\leq 85\%$
Protection class (EN 60529): IP64
Mechanical speed: max. 8000 min^{-1}
Loading capacity of the shaft: max. 5 N axial
max. 10 N radial
Starting torque: 0.15 Ncm (at $25\text{ }^{\circ}\text{C}$)
Vibration (IEC 68-2-6): $\leq 50\text{ m/s}^2 \approx 5\text{ g}$ (at 10-2000 c/s)
Impact (IEC 68-2-27): $\leq 50\text{ m/s}^2 \approx 5\text{ g}$ (during 6 ms)
Masse: 52 g (with out cable)

Electrical features:

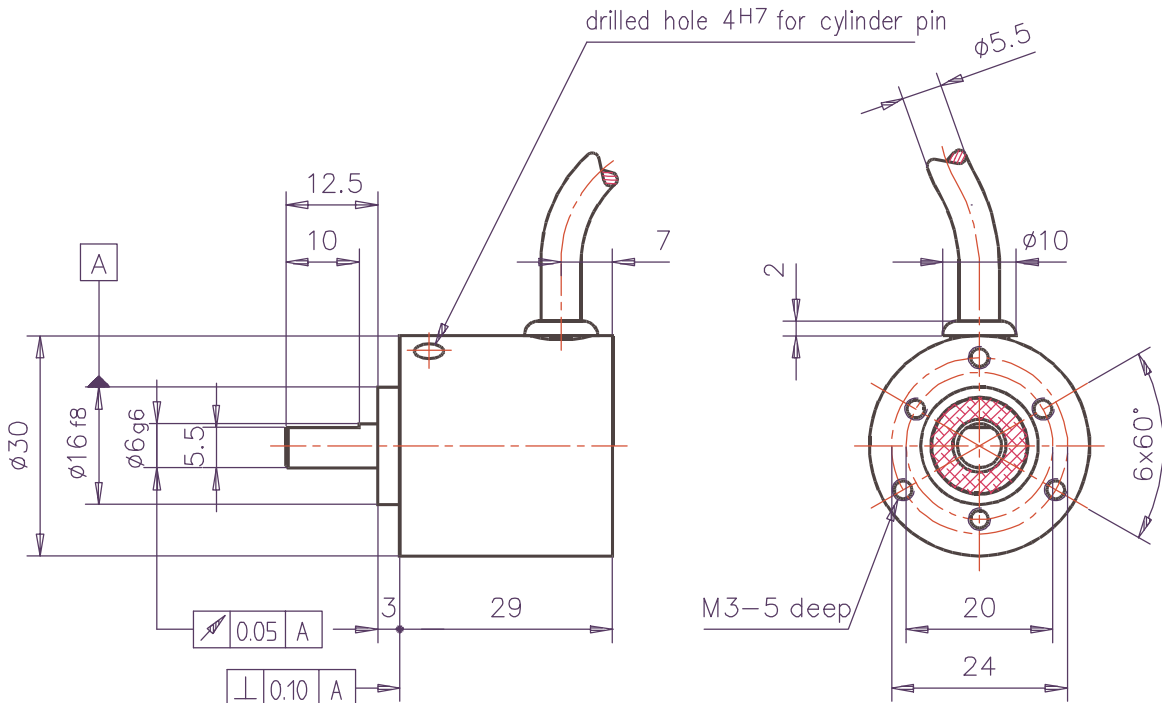
Operating voltage: 5 Volt DC $\pm 10\%$ »IT«
Residual ripple: 50 mVss
Current input: $\leq 50\text{ mA}$ (unloaded)
Output circuit: TTL; RS422 compatible
Output load: 80 mA
Output signals: Channel A:
(With view on shaft and turn cw) Channel B:
Channel N:
Pulse numbers per turn: max. 2500
Output frequency: max. 200 kc/s
Type of connection: Radial cable LIYCY (shielded)

10 ÷ 24 Volt DC $\pm 10\%$ »TI«
100 mVss
 $\leq 50\text{ mA}$ (unloaded)
HTL
80 mA

Impulse duration $T =$ vibration duration $T = 2\pi = 360^{\circ}$.
90° Phase offset from channel B to channel A.
Impulse tolerance $\pm 20^{\circ}$. Impulse-break-proportion 1:1.

Function	Pin	Colour	Pin arrangement
+U _B	4	brown	 View on pin side
0 Volt	2	white	
Channel A	3	green	
Channel A inv.	5	yellow	
Channel B	1	grey	
Channel B inv.	6	pink	
Channel N	7	blue	
Channel N inv.	8	red	

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				general tolerance DIN 7168–m	surface DIN ISO 1302 line 1	scale 1:1	weight 52g
				date 18.02.03	name B. Kruse	material	
				adapter		IMG30B–____–ABN–__–K1–V3	
				check			
				norm.			
				 Drehimpulsgeber GmbH 50259 Pulheim			sheet 2
state	change	date	Nam.	origin	in replacement's	replace by.	2 sheets