

ENCODER

Type: **IMG40A-.....-ABN-.....-S2-V3**



Description

The **IMG40A** is a strong incremental encoder with synchro-flange for the inset in the industry. The 40 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 **IMG40A** will deliver with 8-pole flanged plug (M16).

The **IMG40A** can be fixed both in front by means of three screws type M3 and on the backside by means of three clamping jaws.

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



Technical Data

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

Shaft: Steel (stainless)

Diameter housing: 40 mm

Diameter flange: 40 mm

Diameter shaft: 6 mm

Working temperature: 0 \div +80 °C (-30 \div +110 °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. 10000 min $^{-1}$

Loading capacity of the shaft: max. 10 N axial

max. 20 N radial

Starting torque: 0.15 Ncm (at 25 °C)

Vibration (IEC 68-2-6): \leq 50 m/s 2 \approx 5 g (at 10-2000 c/s)

Impact (IEC 68-2-27): \leq 50 m/s 2 \approx 5 g (during 6 ms)

Masse: 98 g

IP67

max. 3000 min $^{-1}$ (lip-type seal!)

max. 5 N axial

max. 10 N radial

0.6 Ncm (at 25 °C)

Operating voltage: 5 Volt DC \pm 10% \gg IT«

Residual ripple: 50 mVss

Current input: \leq 50 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:

10 \div 24 Volt DC \pm 10 % \gg Tl«

100 mVss

\leq 50 mA (unloaded)

HTL

80 mA

Impulse duration T = vibration duration T = 2π = 360°.

90° Phase offset from channel B to channel A.

Impulse tolerance \pm 20°. Impulse-break-proportion 1:1.

Pulse numbers per turn: max. 3600

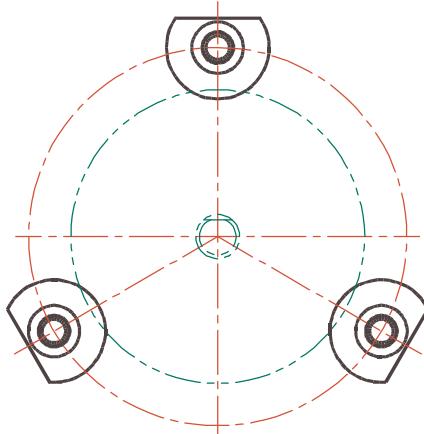
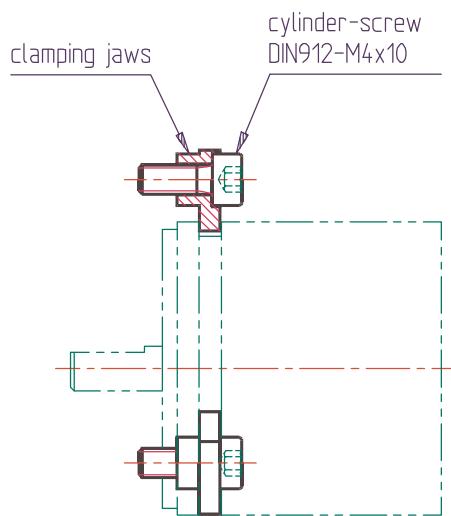
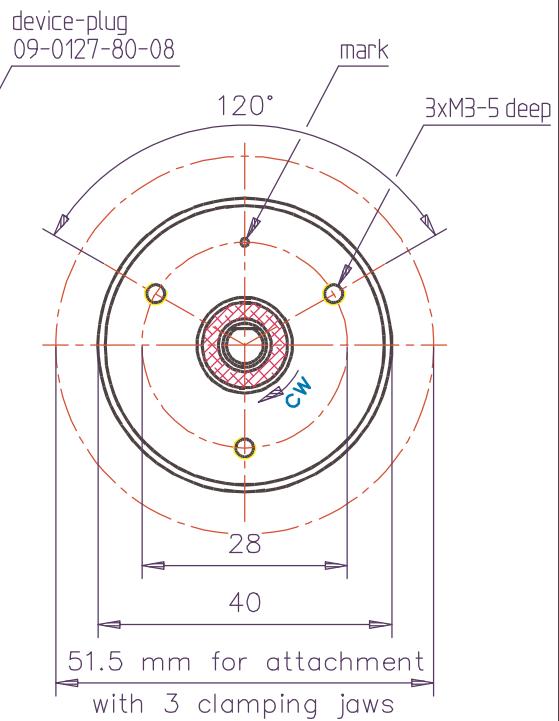
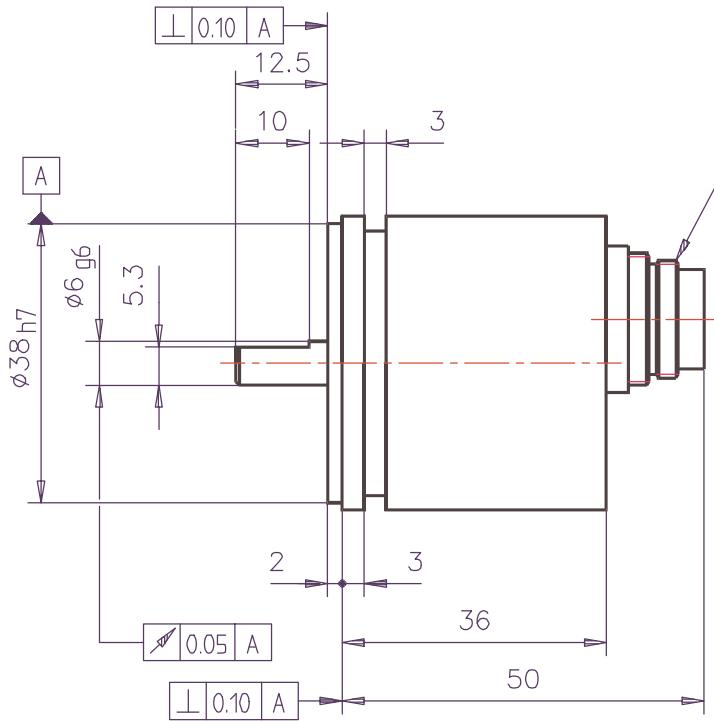
Output frequency: max. 200 kc/s

Type of connection: axial 8-pole plug

Function	Pin	Colour	Pin arrangement
+U _B	4	brown	
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	

View on pin side

Copy this drawing, use and information the contents from this, is not
permit, as far as not explicit entitled. Acts contrary to oblige to damage.
All rights reserved in case the patent-licence or application-entry.



	general tolerance DIN 7168-m line 1	surface DIN ISO 1302	scale 1:1	weight 98g
		material		
	date adapter 19.12.03	name B. Kruse		
	check norm.			
			IMG40A-____-ABN-__-S2-V3	
IMC	Drehimpulsgeber GmbH 50259 Pulheim		00.7-0018044	sheet 2 2 sheets
state	change	date	Nam.	in replacement's
			origin	replace by