

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 use with low and medium stress and high speeds.






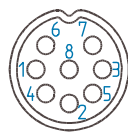
Technical Data

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 ÷ +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
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):	≤ 50 m/s ² ≈ 5 g (at 10-2000 c/s)
Impact (IEC 68-2-27):	≤ 50 m/s ² ≈ 5 g (during 6 ms)
Masse:	98 g

Electrical features:

Operating voltage:	5 Volt DC ±10% »IT«	10 ÷ 24 Volt DC ±10 % »TI«
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:  Channel B:  Channel N: 	Impulse duration T = vibration duration T = 2π = 360°. 90° Phase offset from channel B to channel A. Impulse tolerance ±20°. Impulse-break-proportion 1:1.
(With view on shaft and turn cw)		
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

				general tolerance DIN 7168-m		surface DIN ISO 1302 line 1		scale 1:1		weight 98g			
				material									
				date		name		img40A-____-ABN-__-S2-V3					
				19.12.03		B. Kruse							
				adapter									
				check									
				norm.				00.7-0018044					
				 Drehimpulsgeber GmbH 50259 Pulheim				sheet 2					
								2 sheets					
state		change		date		Nam.		origin		in replacement's		replace by:	