

ENCODER

Type: **IMG60A-.....-ABN-.....-S2-V5**



Description

The **IMG60A** is a robust rotary encoder with Synchro-flange for industrial use. The 60 mm external diameter and the 10 mm or 6 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 **IMG60A** will deliver with a 12-pole flanged plug (M16).

The **IMG60A** can be fixed both in front by means of three screws type M4 and on the backside by means of three clamping jaws.

It is particularly qualified to be use with small 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:	60 mm
Diameter flange:	60 mm
Diameter shaft:	6 mm or 10 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
IP67	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/s ² ≈ 10 g (at 10-2000 c/s)
Impact (IEC 68-2-27):	≤ 100 m/s ² ≈ 10 g (during 6 ms)
Masse:	320 g

Electrical features:

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 = 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)	Channel B:	
	Channel N:	
Pulse numbers per turn:	max. 10000	
Output frequency:	max. 200 kc/s	
Type of connection:	axial 12-pole plug	

Function	Pin	Colour	Pin arrangement
+U _B	L	brown	<p>View on pin side</p>
0 Volt	M	white	
Channel A	A	green	
Channel A inv.	B	yellow	
Channel B	C	grey	
Channel B inv.	D	pink	
Channel N	E	blue	
Channel N inv.	F	red	
Alarm output	G	black	

