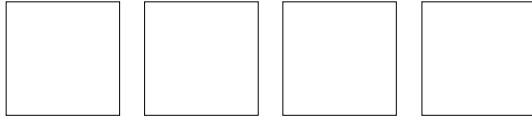


**Incremental-Encoder IH-120**

- **Hollow Shaft Encoder for Direct Coupling to any Drive Shaft (I.D. = 27 ... 55 mm)**
- **Number of Pulses per Revolution Up To 10 000**

**6****Electrical Data**

Supply Voltage .....	11-27 V DC
5 V DC .....	Upon Request
Output (11-27 V) .....	Push-Pull
Maximum Current .....	max. 20 mA
Incremental Signal .....	A, A neg., B, B neg.
Marker Pulse .....	Z, Z neg., 1 pulse per revolution
Maximum Output Frequency .....	160 kHz
Output (5 V) .....	Line Driver
Maximum Current .....	max. 20 mA
Incremental Signal .....	A, A neg., B, B neg.
Marker Pulse .....	Z, Z neg., 1 pulse per revolution
Maximum Output Frequency .....	300 kHz
Tolerance (at 20 kHz)	
Phase Shift .....	±10°
Pulse Width .....	±10°
Tolerance (at 100 kHz)	
Phase Shift .....	±30°
Pulse Width .....	±30°
Pulses per Revolution (standard) .....	1024, 2500, 3600 and 10 000, other pulse numbers upon request
Option .....	Sinusoidal Signal, 160 kHz (-3dB), voltage or current source

**Environmental Data**

Electromagnetic compatibility (EMC) .....	EN 61000-4-2 (IEC-801-2) / EN 61000-4-4 (IEC-801-4)
Operating Temperature .....	0° to 80°C (32° F to 176° F)
Extended Temperature (Optional) .....	-30° to +80°C (-22° to 176°F)
Relative Humidity .....	98 % (non condensing)

### Mechanical Data

Maximum Rotational Speed .....	4000 RPM
Weight .....	1.2 kg (2.6 lb.)
Maximum Angular Acceleration.....	$\leq 10^4 \text{ rad/s}^2$
Momentum of Inertia .....	$400 \times 10^{-6} \text{ kg m}^2$
Startup Momentum 20°C (68° F).....	approx. 0,10 Nm
Vibration (50-2000 Hz Sinusoidal)	
DIN IEC 68-2-6.....	$\leq 100 \text{ m/s}^2$ (10g)
Shock (11ms) DIN IEC 68-2-27.....	$\leq 1000 \text{ m/s}^2$ (100g)
* Standard Connector .....	radial cable (pigtail)

\* Different Cable Lengths on Request

### Dimensional Drawing

