

# Incremental-Encoder IH120

Ref.: K-IH120-INK-1

01.11.2016

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## Advantages

- General applications
- Rugged construction



## General Data

Nominal voltage	
- Specific value	24 VDC
- Limit values, min/max	11/27 VDC
Nominal current, typically	
- Specific value	100 mA
- Condition	unloaded
Supply	
- Optional	5 VDC $\pm$ 5 %
Signal form	Square
Optional signal	Sine, 160 kHz (-3dB), U/I
Incremental signals, square	
- Channels	K1+, K1-, K2+, K2-
- Phase position, electrically	90 °
Zero pulse, square	
- Channel (Channels)	K0+, K0-
- Number of revolutions	1x
Impulses, square wave	1024
	2500
	3600
	10000
	different on request

Subject to change.

TR-Electronic GmbH  
 Eglisshalde 6  
 78647 Trossingen  
 Tel. +49 (0) 7425 228-0  
 info@tr-electronic.de  
[www.tr-electronic.de](http://www.tr-electronic.de)

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### General Data continuation

Output driver, TTL	
- Output level	RS-422, 5 VDC
- Load current	$\leq 20$ mA
- Output frequency	$\leq 300$ kHz
Output driver, HTL	
- Output level	Push-Pull, supply voltage
- Load current	$\leq 20$ mA
- Output frequency	$\leq 160$ kHz
Phase angle	$\pm 10^\circ < 20$ kHz
	$\pm 30^\circ < 100$ kHz
Duty factor	$\pm 10^\circ < 20$ kHz
	$\pm 30^\circ < 100$ kHz
Type of parametrization	Factory setting
Maximum Speed, mechanically	$\leq 4000$ 1/min
Angular acceleration	$\leq 10E+4$ rad/s <sup>2</sup>
Moment of inertia, typically	400E-6 kg m <sup>2</sup>
Start-up torque, 20 °C	10 Ncm
Concentricity tolerance	$\pm 0.05$ mm
Mass, typically	1.2 kg

### Environmental conditions

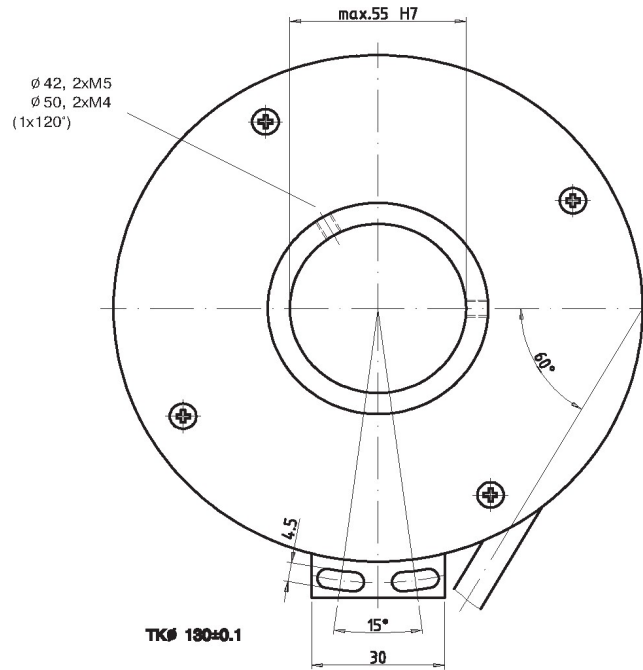
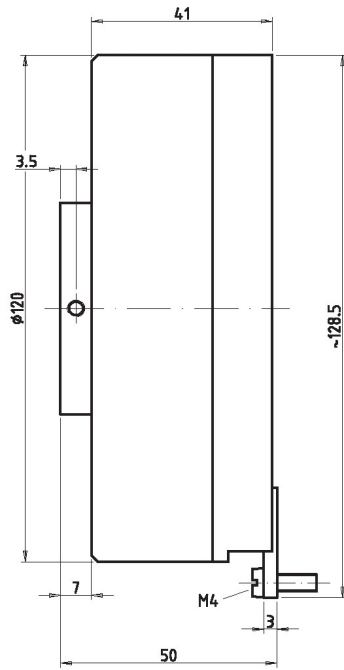
Vibration	
- Specific value	$\leq 100$ m/s <sup>2</sup>
- Sine	20...2000 Hz
Shock	
- Specific value	$\leq 1000$ m/s <sup>2</sup>
- Half sine	11 ms
Immunity to disturbance	DIN EN 61000-6-2
Transient emissions	DIN EN 61000-6-3
Working temperature	
- Standard	0...+80 °C
Storage temperature, dry	-30...+80 °C
Relative humidity	98 %, non condensing

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## Dimensional drawing



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