

Encoders without bearings - incremental

Through hollow shaft $\varnothing 10$ to $\varnothing 45$ mm

20, 50 pulses per revolution

ITD 67 A 4 Y 9



ITD 67 A 4 Y 9 with through hollow shaft

Features

- Bearingless magnetic encoder
- Magnetic sensing
- 20 and 50 pulses per revolution
- Output circuits: HTL
- Without own bearings
- Rotor mounting by 2 set screws
- Cable output radial

Optional

- Redundant sensing

Technical data - electrical ratings

Voltage supply	8...26 VDC
Consumption w/o load	< 20 mA
Pulses per revolution	20...50
Output stages	Push-pull
Output signals	A, B
Output current	≤ 20 mA
Reverse polarity protection	Yes
Interference immunity	DIN EN 61000-6-2
Emitted interference	DIN EN 61000-6-3

Technical data - mechanical design

Motor shaft tolerance	0.2 mm axial 0.05 mm radial
Shaft type	$\varnothing 10 \dots 45$ mm (through hollow shaft)
Protection DIN EN 60529	IP 67 (relating to sealed electronics)
Operating temperature	$-20 \dots +85$ °C
Operating speed	≤ 10000 rpm
Resistance	DIN EN 60068-2-6 Vibration 10 g, 55-2000 Hz DIN EN 60068-2-27 Shock 100 g, 11 ms
Materials	Housing: plastic Shaft: aluminium
Connection	Cable 1 m
Weight approx.	230 g
Admitted cable length	15 m

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Part number

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	H		KR1	S		IP67
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Protection

IP67 IP 67

Through hollow shaft

- 10 $\varnothing 10$ mm
- 14 $\varnothing 14$ mm
- 15 $\varnothing 15$ mm
- 16 $\varnothing 16$ mm
- 20 $\varnothing 20$ mm
- 22 $\varnothing 22$ mm
- 25 $\varnothing 25$ mm
- 27 $\varnothing 27$ mm
- 30 $\varnothing 30$ mm
- 35 $\varnothing 35$ mm
- 40 $\varnothing 40$ mm
- 45 $\varnothing 45$ mm

Operating temperature

S -20...+85 °C

Connection

KR1 Cable 1 m, radial

Output signals

AX A
BX A, B

Voltage supply / signals

H 8...26 VDC / HTL level, push pull

Pulse number - see table

Pulse number

20 | 50

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Output signals

Clockwise rotation when looking at the mounting side.

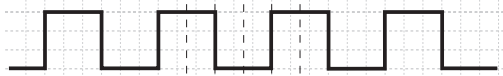
AX-Output signals

Track A

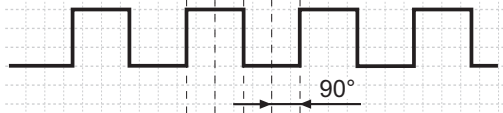


BX-Output signals

Track A



Track B



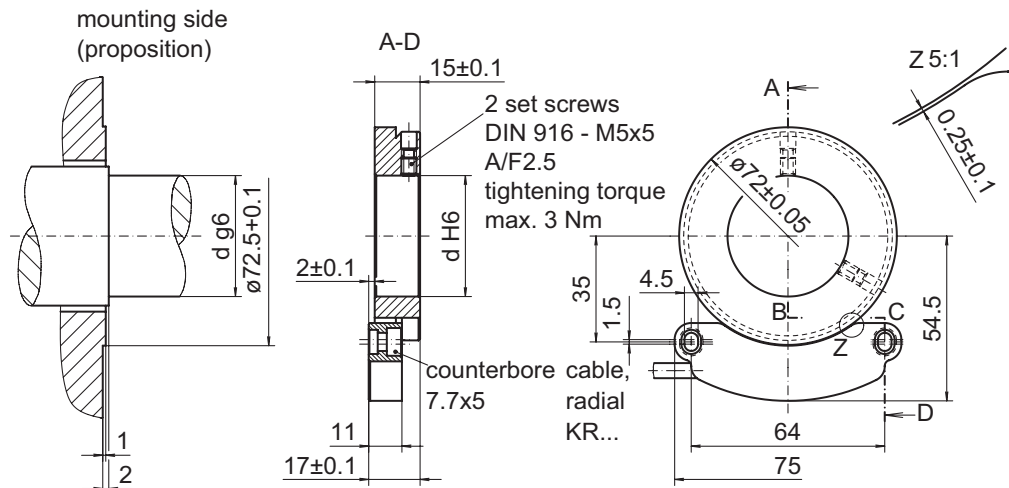
Terminal assignment

Core colour	Assignment
green	Track A
grey	Track B
brown	UB
white	GND
transparent	Shield/Housing

Trigger level

Outputs	Push-pull short-circuit proof
Output level High	$\geq UB - 3 V$
Output level Low	$\leq 1.5 V$
Load	$\leq 20 mA$

Dimensions



031- 5 Y 9

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