

QR series



QR30-360NI-CK
Incremental rotary encoder (contactless)
Output 256ppr A/B pulse: push-pull 0,7V - (Vsupply-0,7V)
Supply voltage 8 - 30V dc
Measuring range 360°



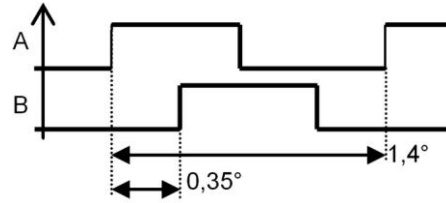
General specifications v20140305	
Housing	Quadro30: PBT black
Dimensions	30x30x15 mm
Mounting	2x steel zinc plated M3x16 mm screws
Ingress Protection (IEC 60529)	IP67
Weight	approx 15 gr (excl. cable)
Magnet type	8x5,5x11,2 mm Neodymium/N35/nickel coated/remanention 1,2 T
Magnet distance to sensor	0,5 to 3 mm
Max magnet misalignment	± 0,25 mm off axis
Direction of magnetization	Axial in 8 mm (N marked with red dot)
Supply voltage	8 - 30V dc
Polarity protection	Yes
Current consumption	≤ 25 mA
Operating temperature	-25 to 85°C
Storage temperature	-25 to 85°C
Measuring range	360°
Programmable center position	No
Accuracy	
Resolution	256 pulses/rev. factory programmed
Max offset error	Not applicable
Non linearity	Not applicable
Repeatability	Not applicable
Response time	not applicable
Max speed	30000 rpm
Output signal	A/B pulse: push-pull 0,7V - (Vsupply-0,7V)
Short circuit protection	No
Output load resistor	≥ 500 Ω
Connection	Cable 2 m PVC/PVC Liyy, black Ø 4,6 mm, wires: 4x0,25 mm² Sensor colors (static usage)
Wire coding	Brown + Supply voltage Black A output Blue Gnd White B output

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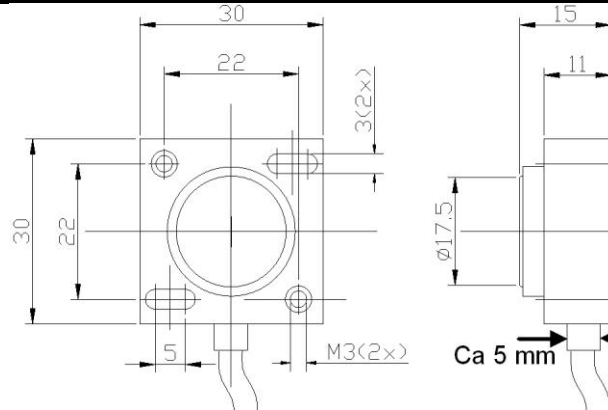
A/B pulse: push-pull
 $V_{out} = 0,7V - (V_{supply} - 0,7V)$
 A leads B rotating clockwise
 (magnet side view)

Transfer characteristic



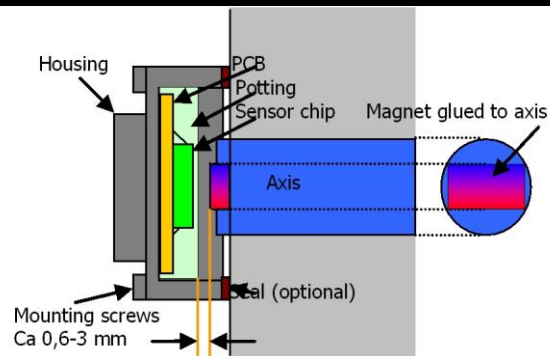
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Dimensions



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Application example



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The magnet is drawn in the 0° position.
 90° position: N pole towards cable.
 The north pole is indicated with a red dot.

Magnet position

