QR series

QR40-180HBS-VK-5V

Absolute rotary encoder (contactless)

Output
0 - 5 V (ratiometric to 5 V supply voltage)

Supply voltage
5V dc

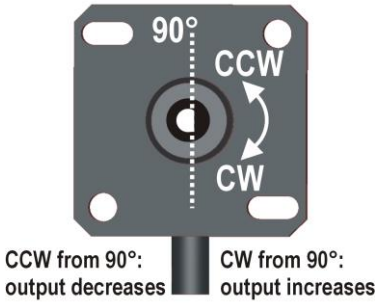
Measuring range
180° (out of 360°)



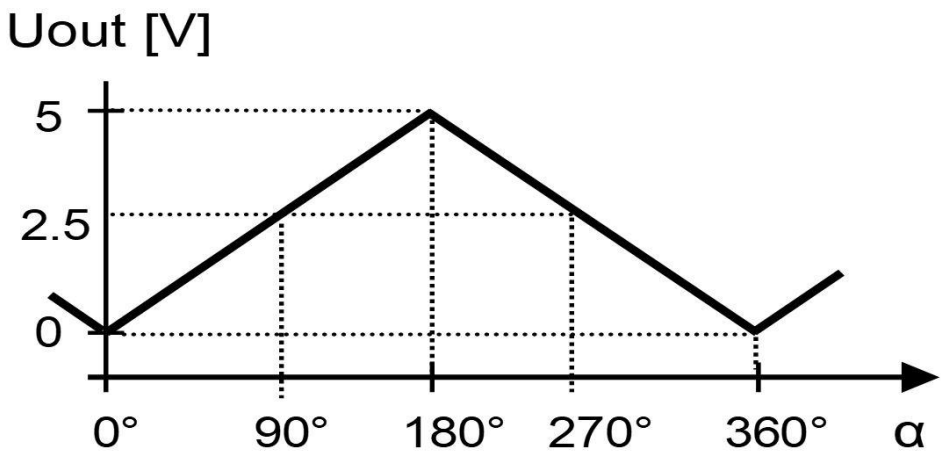
	General specifications v20221010
Housing	Reinforced plastic injection molded (Celanex 2300 GV3/30 - glass filled PBT, black)
Dimensions (indicative)	40x40x22 mm. shaft excluded
Mounting	Included: 2x M4x25 stainless steel pozidrive pan head screws, self-tapping (PZ DIN7500CZ), Mounting on flat surface only. Screw with maximum Torque 1,5 Nm
Ingress Protection (IEC 60529)	IP66
Relative Humidity	0 - 95% (non condensing, fully potted)
Weight	approx 75 gr (excl. cable)
Shaft	Stainless steel Ø 6 mm
Shaft type	D-type 5 mm
Shaft bearing	Polyamide (glass-filled), Radial force < 1Nm, Axial force < 8N (push & pull)
Shaft length	18,2 mm w.r.t. mounting surface
Supply voltage	5V dc
Polarity protection	Yes
Current consumption	≤ 25 mA
Operating temperature	-25 to 80°C (fixed), -5 to +80°C (flex)
Storage temperature	-25 to 85°C
Measuring range	180° (out of 360°)
Programmable center position	No, use slot holes to adjust 0° point during mounting
Accuracy	
Resolution	12 bit over 360° (min. step 0,09°)
Sensitivity error	±0.5% typ. (@20°C), ±1% typ. (full Temp. range)
Offset error	± 7°
Non linearity	< ± 1°
Repeatability	0,12°
Response time	< 4 ms
Max speed	15 rpm
Output signal	0 - 5 V (ratiometric to 5 V supply voltage)
Short circuit protection	Yes (T<55°C), Max 10 s (T>55°C)
Output load resistor	≥ 20 kΩ
Connection (length ±10%)	Cable 2 m PVC/PVC Liyy, black Ø 4,6 mm, wires: 3x0,34 mm² Sensor colors (static usage)
Wire coding	Brown + Supply voltage Black Output Blue Gnd

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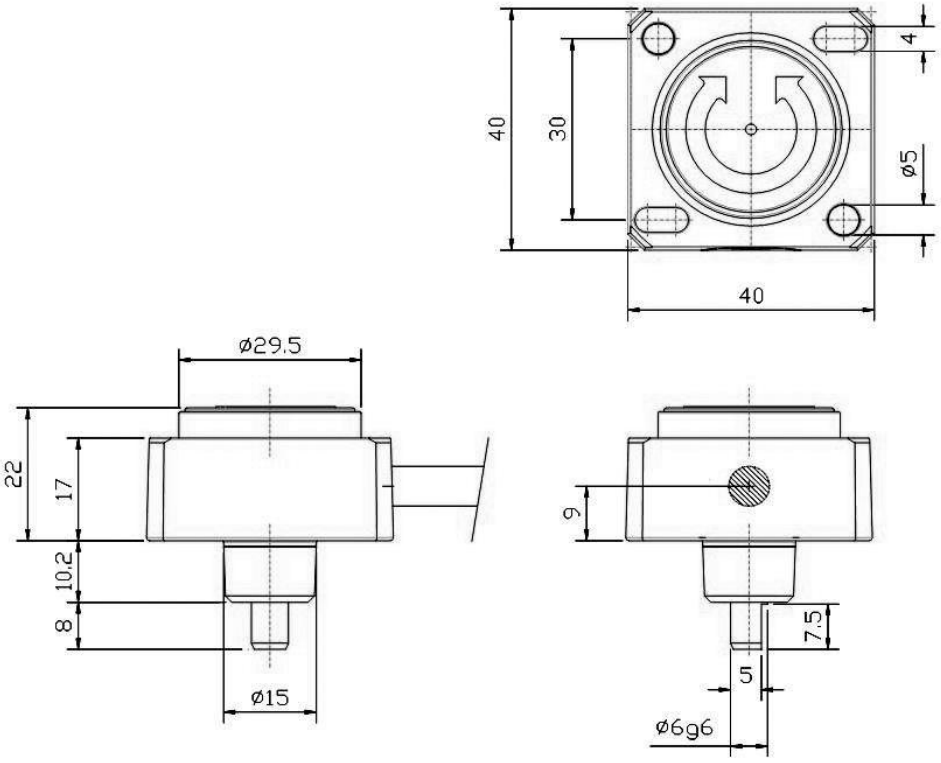
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Transfer characteristic



Dimensions (indicative only)



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