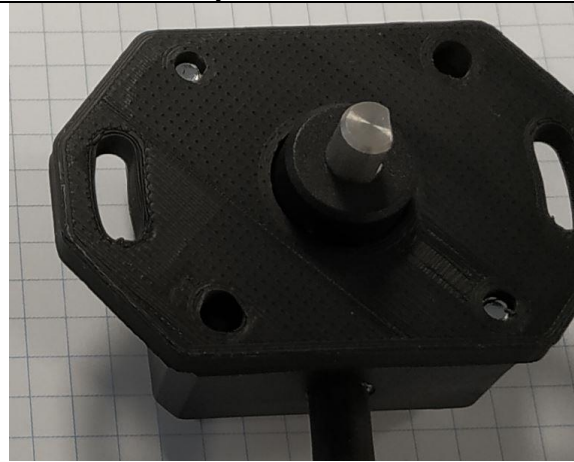


QR series

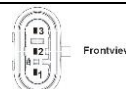
Preliminary

QR46-120HB-I-P0.1CS3p
Absolute rotary encoder (contactless)
Output 4 - 20 mA
Supply voltage 10 - 32 Vdc
Measuring range 120° (±60°)



General specifications v20211202	
Housing	Q46: PBT black with metal plate
Dimensions (indicative)	40.5x63x28 mm, shaft excluded.
Mounting	Not included: Mounting holes in bracket for 2x M4
Ingress Protection (IEC 60529)	IP66
Relative Humidity	0 - 95% (non condensing, fully potted)
Weight	approx 70 gr (cable excluded)
Shaft	Stainless steel Ø 6 mm
Shaft type	D-type 4,6mm with Ø2mm hole (compatible with Elobau lever 350210)
Shaft bearing	Polyamide (glass-filled), Radial force < 1Nm, Axial force < 8N (push & pull)
Shaft length	t.b.d.
Supply voltage	10 - 32 Vdc
Polarity protection	Yes
Current consumption	≤ 25 mA
Operating temperature	-25 to 80°C
Storage temperature	-25 to 85°C
Measuring range	120° (±60°)
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	0,13°
Response time	< 4 ms
Max speed	15 rpm
Output signal	4 - 20 mA
Short circuit protection	Yes (T<55°C), Max 10 s (T>55°C)
Output load resistor	Rload ≤ 50*Vs - 300 [Ω]
Connection (length ±10%)	Pigtail cable: 0,1 m TPE/PP Li9y12y, black ø5,2 mm, wires: 3x0,5 mm², connector AMP superseal 1.5 series 3-pole Cap housing (=male) (p/n 282105-1) Tab contacts (p/n 183036-1) with wire seals (p/n 281934-4) and rubber boot (p/n 880811-2)
Wire coding	Pin 1: (Black1) Gnd Pin 2: (Black2) Supply Voltage Pin 3: (Black3) Output

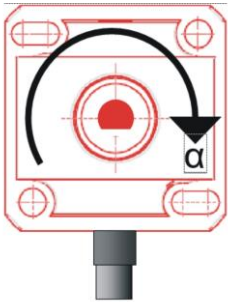
General specifications v20211202	
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40.5x63x28 mm, shaft excluded.	
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0 - 95% (non condensing, fully potted)	
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10 - 32 Vdc	
Yes	
≤ 25 mA	
-25 to 80°C	
-25 to 85°C	
120° (±60°)	
No, use slot holes to adjust 0° point during mounting	
12 bit over 360° (min. step 0,09°)	
±0.5% typ. (@20°C), ±1% typ. (full Temp. range)	
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< ± 1°	
0,13°	
< 4 ms	
15 rpm	
4 - 20 mA	
Yes (T<55°C), Max 10 s (T>55°C)	
Rload ≤ 50*Vs - 300 [Ω]	
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Pin 1: (Black1)	Gnd
Pin 2: (Black2)	Supply Voltage
Pin 3: (Black3)	Output



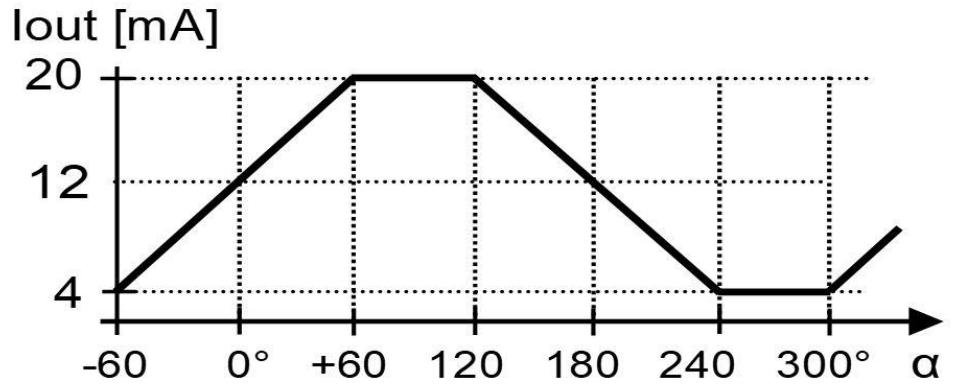
QR series

QR46-120HB-I-P0.1CS3p

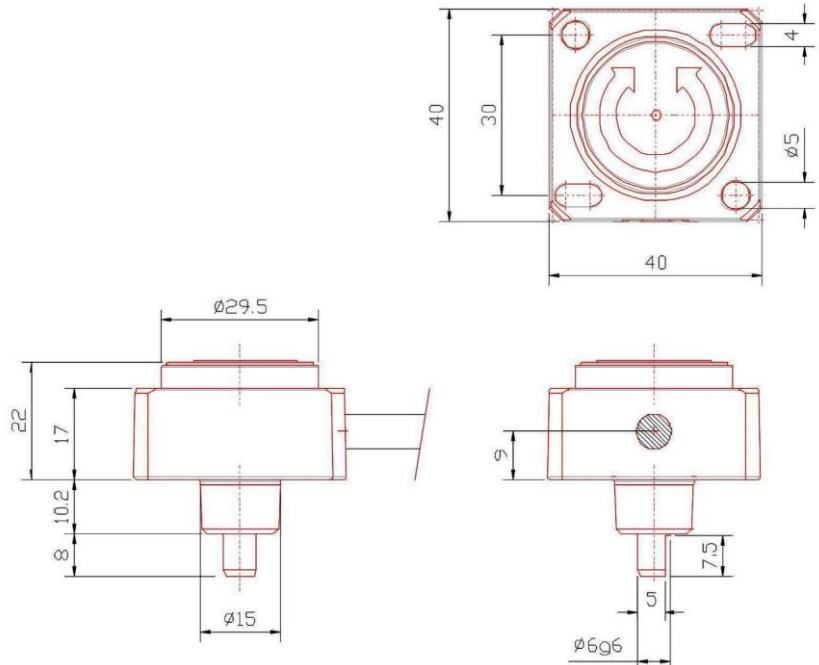
Transfer characteristic



Shaft-view
D-shaft w.r.t cable drawn in 0° (12mA) position
CW rotation from 0° to 60° increases output from 12mA to 20mA
CCW rotation from 0° to -60° decreases output from 12mA to 4mA



Dimensions (indicative only)



Options