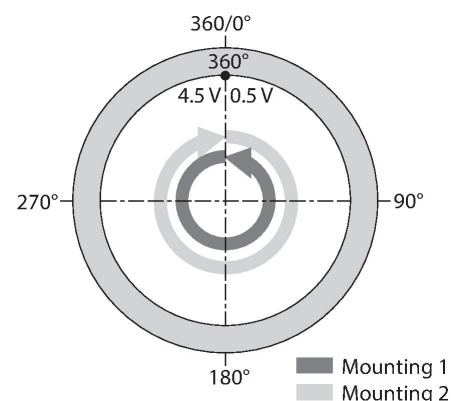


Technical data

Load resistance voltage output	≥ 4.7 kΩ
Sample rate	800 Hz
Load-dump protection (DIN ISO 7637-2)	Severity degree IV/Level 4
Current consumption	< 100 mA
Mechanical data	
Design	Rectangular, QR20
Dimensions	71.6 x 62.6 x 20 mm
Flange type	Flange without mounting element
Shaft Type	Blind hole shaft
Shaft diameter D (mm)	6 6.35
Housing material	Plastic, Ultem
Electrical connection	Cable with connector, AMP Superseal
Cable quality	Ø 5.2 mm, Lif32Y32Y, TPE, 0.24 m
Core cross-section	3 x 0.5 mm ²
Environmental conditions	
Ambient temperature	-40...+85 °C
Storage temperature	-40...+125 °C
Temperature changes (EN60068-2-14)	-40... +85 °C; 20 cycles
Vibration resistance	55 Hz (1 mm)
Vibration resistance (EN 60068-2-6)	20 g; 10...3000 Hz; 50 cycles; 3 axes
Shock resistance (EN 60068-2-27)	100 g; 11 ms ½ sine; 3 × each; 3 axes
Continuous shock resistance (EN 60068-2-29)	40 g; 6 ms ½ sine; 4000 × each; 3 axes
Salt spray test (EN 60068-2-52)	Severity degree 5 (4 test cycles)
Protection class	IP68 IP69K
MTTF	423 years acc. to SN 29500 (Ed. 99) 40 °C
Power-on indication	LED, Green
Measuring range display	multifunction LED, green green flashing
Included in delivery	Positioning element P2-RI-QR20; for technical details see data sheet

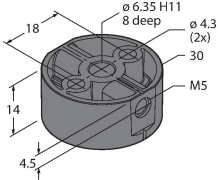
These sensors are extremely reliable even under the most extreme environmental conditions. Their extremely robust design meets the requirements for the IP68 and IP69K protection ratings. Thanks to their excellent resistance to constant shocks and thermal shock resistance, they are the ideal choice for mobile applications, such as road construction vehicles and agricultural machinery.



Mounting instructions

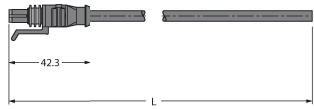
Mounting instructions/Description	
	There are two different mounting options. One option is to position the positioning element above the sensor housing. However, it can also be mounted so that the sensor housing completely encloses the positioning element. LED function Operating voltage Green:Power on Displayed measuring range Green:Positioning element is in the detection range Green flashing:Positioning element is within the measuring range, low signal intensity (e.g. distance too large) Off:Positioning element is outside the detection range Inductive measuring principle provides more safety Due to the measuring principle, which is based on the functional principle of an RLC coupling, the sensor operates absolutely wear-free and is immune to magnetized ironware and other interferences. The amplitude of the signal can be changed by metal parts, which in turn affects the accuracy. Owing to the differential analysis, the output signal remains almost unchanged, even if the position of the positioning element deviates from the ideal axis of rotation. The distance between the sensor and the positioning element can be up to 5 mm, whereby the nominal distance is 1 mm.

Accessories

P1-RI-QR20	1593041	P2-RI-QR20	1593042
	Positioning element for encoder RI-QR20, for Ø 6 mm shafts		Positioning element for encoder RI-QR20, for Ø 6.35 mm shafts

RI360P2-QR20-LU4X2-0.24-AMP01-3P 02/21/2025 15-00 | technical changes reserved

Wiring accessories

Dimension drawing	Type	ID	
	TSS-3S-A-2/TXL	6936796	Valve connector connection cable, Superseal female connector, straight, 3-pin, cable length: 2 m, jacket material: TPE-U (PUR), black, housing: Deutsch DT06/black