

Your Global Automation Partner

TURCK

Ri360-QR20 Miniature Encoder



Ideal for Mobile Machinery

Turck's compact and wear-free Ri360-QR20 miniature encoder is especially designed for use in mobile machinery. The new encoder series with IP68/IP69K protection exceeds the e1/E1 requirements and comes in a compact 71 x 64 x 20 mm housing. It is based on the contactless resonator measuring principle like its "big brother", the QR24.

And the highlight: The housing fully surrounds the positioning element and provides full protection from the outside environment. Alternatively, the positioning element can also be positioned above the sensor. This design principle allows not only a high mounting flexibility, but also offers mechanical protection, as well as protection from dust and moisture. The housing is also permanently sealed. Even the often problematic potential points of

leakage such as LED lenses are eliminated since the QR20 fully consists of a translucent plastic, where status LEDs are still visible.

The encoder offers very high interference immunity and is protected from line-conducted interference, the so-called load dump. Salt spray or rapid temperature changes, as well as diesel, kerosene or vibrations have no effect on the device. With a temperature range from -40 to +85 °C there are virtually no climatic conditions that could be critical for the QR20. The Ri360-QR20 offers a 12-bit resolution on the output side, corresponding to around 0.09 degrees. The output signal ranges from 0.5 to 4.5 VDC (LU4). If the sensor does not detect a positioning element, the value jumps to 5 volts.

Your Benefits

- Maintenance-free
- No additional protection or auxiliary constructions needed
- Simple diagnostics
- Highest mounting flexibility

Miniature Encoder for Mobile Machinery

Ri...-QR20

Dimensions	Type code	ID number	Measuring range
	RI360P1-QR20-LU4X2-0.15-DT04-3P	100000177	360°
	RI20P1-QR20-LU4X2-0.15-DT04-3P	100000179	20°
	RI40P1-QR20-LU4X2-0.15-DT04-3P	100000180	40°
	RI60P1-QR20-LU4X2-0.15-DT04-3P	100000181	60°
	RI90P1-QR20-LU4X2-0.15-DT04-3P	100000183	90°
	RI120P1-QR20-LU4X2-0.15-DT04-3P	100000184	120°
	RI240P1-QR20-LU4X2-0.15-DT04-3P	100000185	240°
	RI360P1-QR20-LU4X2	100000186	360°
	RI20P1-QR20-LU4X2	100000187	20°
	RI40P1-QR20-LU4X2	100000188	40°
	RI60P1-QR20-LU4X2	100000189	60°
	RI90P1-QR20-LU4X2	100000190	90°
	RI120P1-QR20-LU4X2-0.24-AMP01-3P	100000192	120°
	RI360P1-QR20-LU4X2-0.24-AMP01-3P	100000194	360°
	RI20P1-QR20-LU4X2-0.24-AMP01-3P	100000195	20°
	RI40P1-QR20-LU4X2-0.24-AMP01-3P	100000196	40°
	RI60P1-QR20-LU4X2-0.24-AMP01-3P	100000197	60°
	RI90P1-QR20-LU4X2-0.24-AMP01-3P	100000198	90°
	RI240P1-QR20-LU4X2-0.24-AMP01-3P	100000199	120°
	RI360P1-QR20-LU4X2-H1141	100000201	360°
	RI20P1-QR20-LU4X2-H1141	100000202	20°
	RI40P1-QR20-LU4X2-H1141	100000203	40°
	RI60P1-QR20-LU4X2-H1141	100000204	60°
	RI90P1-QR20-LU4X2-H1141	100000205	90°
	RI120P1-QR20-LU4X2-H1141	100000206	120°
	RI240P1-QR20-LU4X2-H1141	100000207	240°

Accessories

Design	Type code	ID number
	AMP- connector-cable TSS-3S-A-2/TXL	6936796
	Deutsch-connector-cable DT06-3S-A-2/TXL	100000367
	M12 -connector-cable RKC4T-2/TXL	6625500

