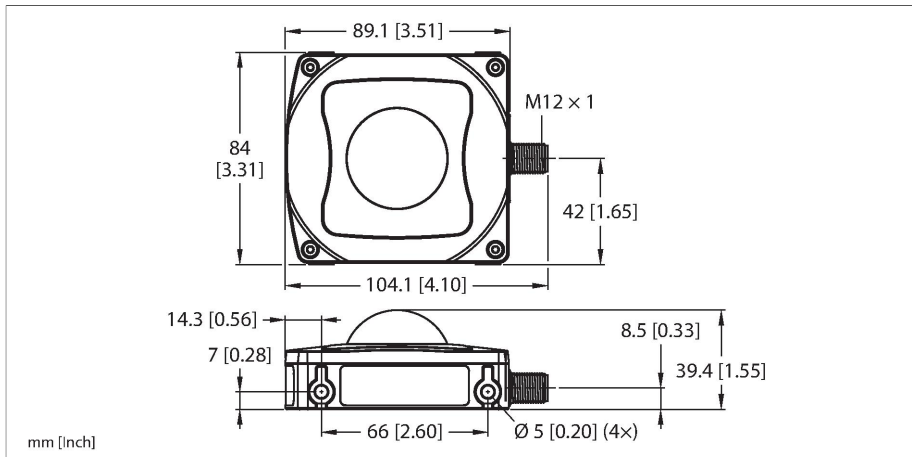


Q90R-4040-6KUQ

Radar Sensor

With Switching and Analog Output and IO-Link



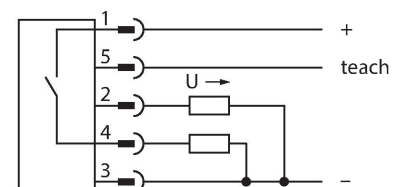
Technical data

Type	Q90R-4040-6KUQ
ID	3815695
Radar data	
Frequency range	60.00...61.50 GHz
Modulation	FMCW (Frequency Modulated Continuous Wave)
Range	150...20000 mm
Repeatability	≤ ± 2 mm
Number of radio channels	1
Antenna connection	Internal, planar
Horizontal cone angle	40 °
Vertical cone angle	40 °
Repeatability	2 mm
Electrical data	
Operating voltage U_B	12...30 VDC
No-load current	≤ 100 mA
Short-circuit protection	yes/Cyclic
Reverse polarity protection	yes
Communication protocol	IO-Link
Output function	NO/NC programmable, Push-pull, PNP/NPN programmable
Output 2	Analog voltage
Voltage output	0...10 V
Readiness delay	≤ 2000 ms
Response time typical	< 50 ms
Setting option	IO-Link

Features

- Operating voltage 12...30 VDC
- Output 1: PNP/NPN switching output, IO-Link
- Output 2: Voltage, 0...10 V analog output

Wiring diagram



Functional principle

The Q90R product series of radar sensors is characterized by a robust design, versatile performance, an intuitive user interface and advanced configuration options. Radar technology provides reliable detection over a wide vertical and horizontal field of view with a wide sensing range. The robust design ensures superior and consistent operation even under demanding conditions. The Q90R product series of radar sensors integrates easily into machine control systems, while the integrated display simplifies troubleshooting. Measurement sensor software simplifies installation and setup, and provides access to advanced diagnostic functions.

Technical data

Vision Software and Firmware	
Mechanical data	
Design	Rectangular, Q90R
Dimensions	84 x 17 x 84 mm
Housing material	Aluminium, AL, Black
Lens	plastic
Electrical connection	Connector, M12 × 1
Number of cores	5
Ambient temperature	-40...+65 °C
Protection class	IP67
Power-on indication	LED, Green
Switching state	LED, Yellow
Excess gain indication	LED, red
Tests/approvals	
Approvals	CE UKCA UL Listed