



Versatile, Rugged, Laser Distance Sensor

Superior Performance: Reliably detects distance changes as small as 1 mm.

Versatile

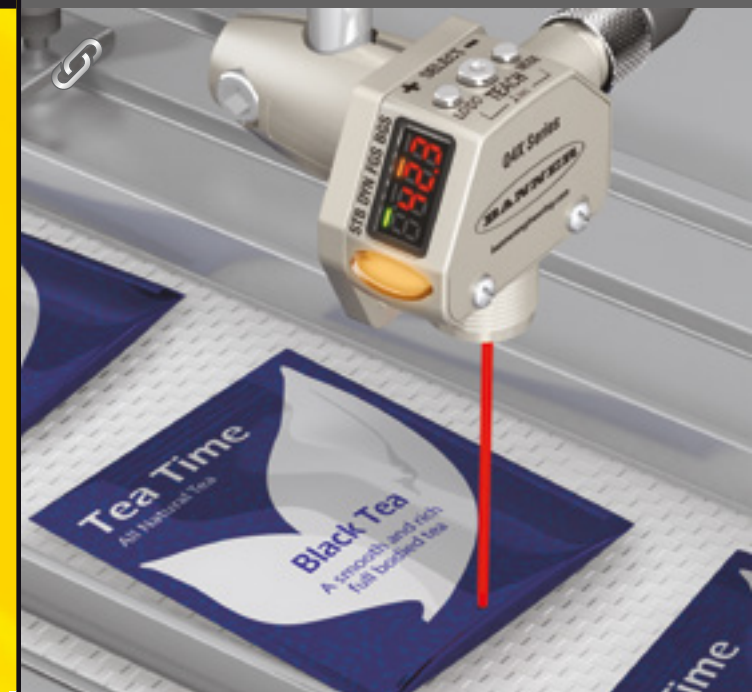
Reliable **sensing range of 25 to 300 mm** across a variety of target colours, materials and surfaces with multiple sensing modes in one device.

Durable

Robust housing rated to IP69K with **FDA-grade stainless steel** resists mechanical impact, over tightening and extreme vibration.

Easy to Use

Simplified user experience with a **clear distance readout** from the angled four-digit display and easy setup with responsive buttons.



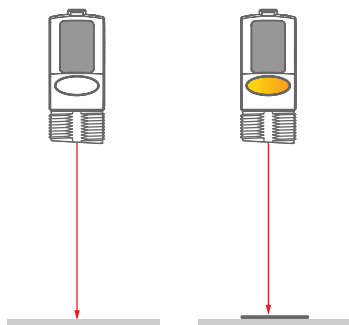
Q4X



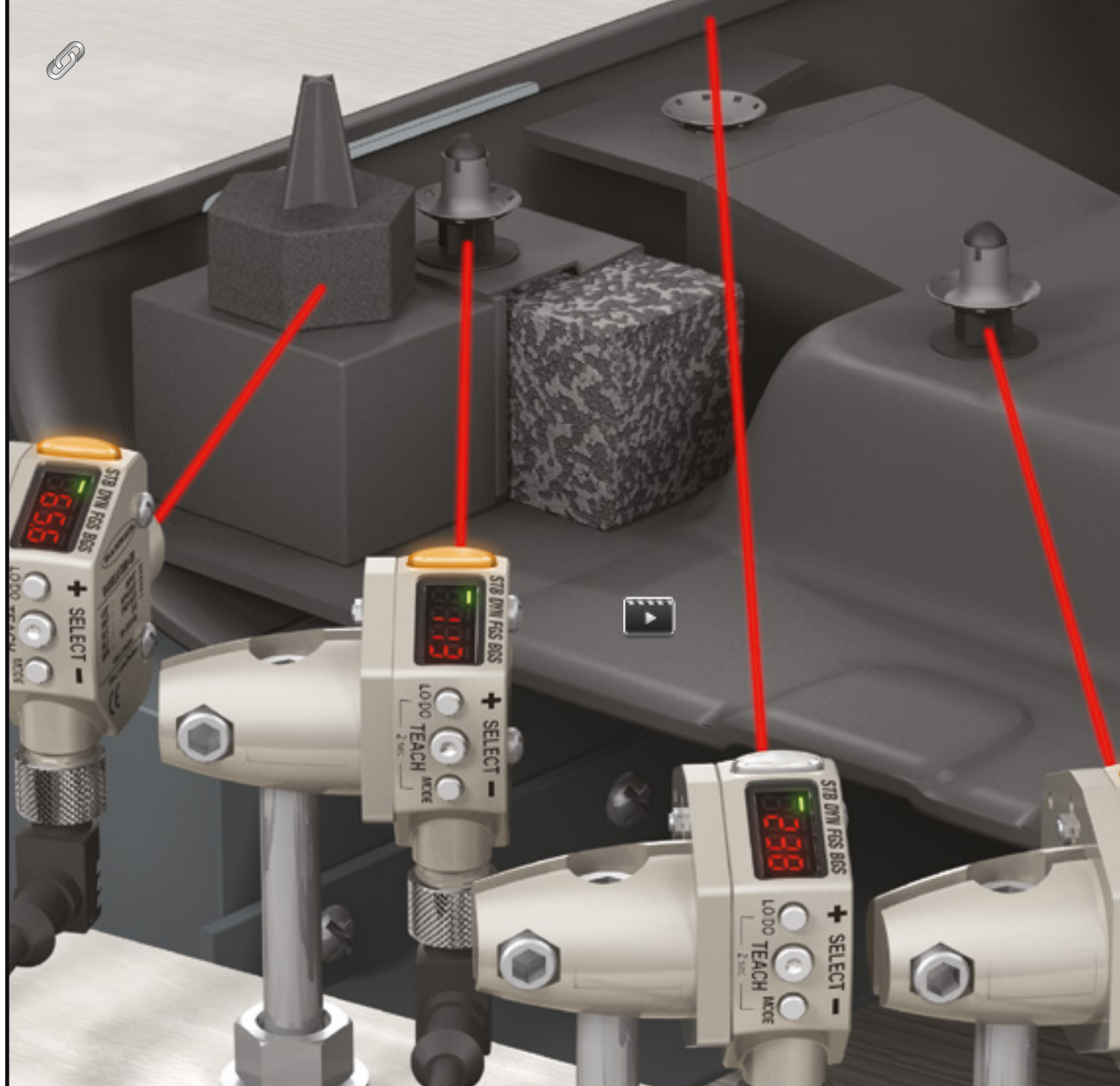
Q4X Laser
Distance Sensor

Performance

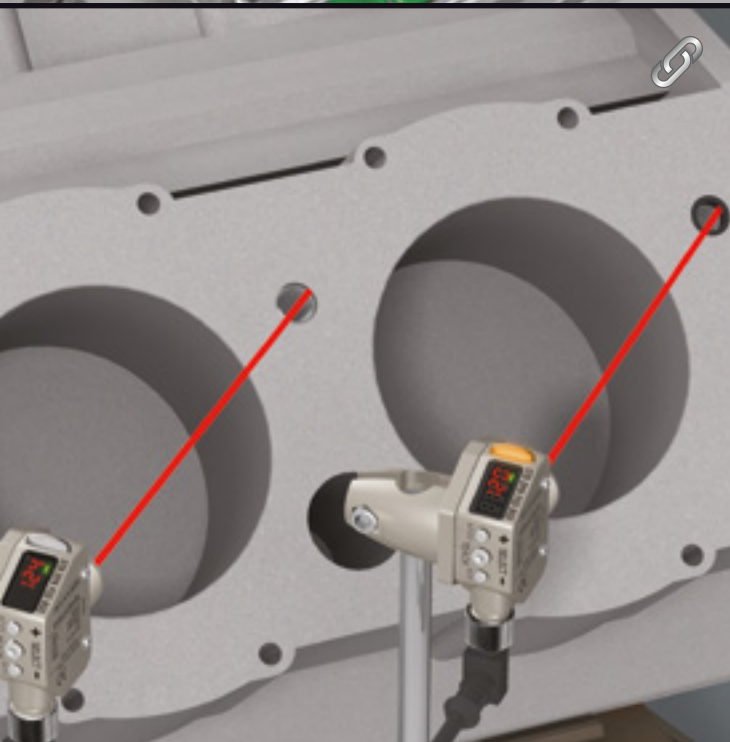
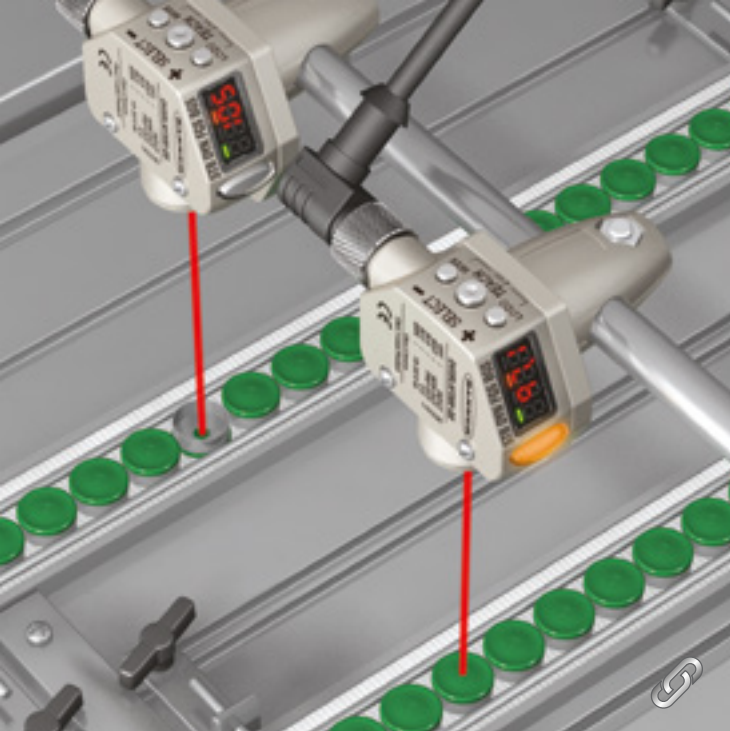
- Solves difficult distance-based applications including black foam on black plastic, black rubber in front of metal, multicolour packaging and targets of all colours
- Used for presence/absence or orientation detection



Can detect a 1 mm target at a range of
25 to 50 mm



Features



Angled Four-Digit Display

- Shows distance from sensor to target for clear measurement display
- Easy to read at all angles
- Display can be inverted for easy mounting, which allows readability from a variety of angles

LED Output Indicator



Three tactile buttons for easy setup

316L Stainless Steel Housing



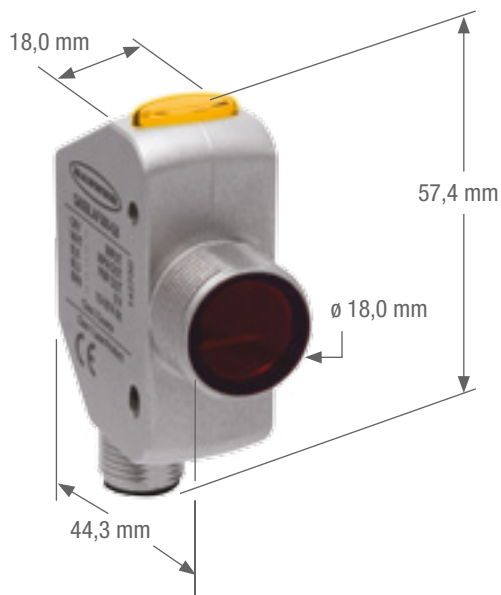
Stability and Active Teach

- STB = Stability: Signal strength indication
- DYN = Dynamic background suppression
- FGS = One-point window (foreground suppression)
- BGS = One-point background suppression

Visible decimal point for clear measurement readout under 100 mm



Q4X Laser
Distance Sensor



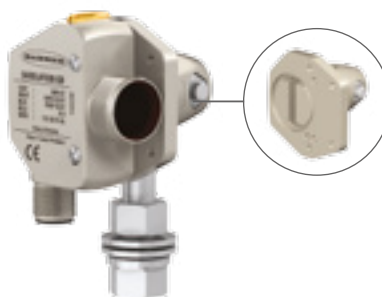
- Best in class excess gain: Detection of 1% black targets out to 300 mm
- User selectable output response time from 1,5 to 50 ms
- Rated to IP67, IP68 and IP69K
- CE and UL approved
- Patent pending



Order Now

Family	Housing Style	Output	Mode	Range		Connector
Q4X	T	B	LAF	300	—	Q8
	T = 18 mm Threaded Barrel	B = Bipolar	LAF = Laser Adjustable-Field	300 = 25...300 mm		Q8 = 5-pin Integral QD <i>QD models require mating cordset</i>

Accessories



[SMBQ4XFA](#)

includes 3/8" bolt for mounting

[SMBQ4XFAM10](#)

includes 10 mm bolt for mounting

[SMBQ4XFAM12](#)

clamps directly onto industry standard bracket systems of 1/2" or 12 mm rods



5-Pin M12/ Euro-Style Cordsets

Straight connector models listed; for right-angle, add **RA** to the end of the model number (example, **MQDC1-506RA**)

[MQDC1-506](#)

2 m (6.5')

[MQDC1-515](#)

5 m (15')

[MQDC1-530](#)

9 m (30')



5-Pin M12/ Euro-Style

Washdown Cordset
Straight connector models only

[MQDC-WDSS-0506](#)

2 m (6.5')

[MQDC-WDSS-0515](#)

5 m (15')

[MQDC-WDSS-0530](#)

9 m (30')




Q4X Laser
Distance Sensor

Additional Resources

Link to
data sheets

WORLD-BEAM® Q12 Series Sensors
Miniature self-contained photoelectric sensors in universal housing



- Bright, visible red (640 nm) light source
- Standard models available with 4-wire (2 x 0.5/0.5) or 3-wire (0.5/0.5) cable or 3 or 4-wire 100 mm (4 in) pigtail with Pre-Alpha 180 threaded connector
- Built-in, laser safety, non-current sensing (NPS) and one current sensing (NPS) standard on 4-wire models
- Single output and status PNP or NPN standard on Q2 models
- Light Operate (L.O.) or Dark Operate (D.O.), depending on model
- Models available with PFA chemical resistant jacket (C20) per workstation valued for use in harsh environments (see Chemical Resistance Manual on page 1)
- Compact 8 mm (0.31 in) housing meets general purposes
- Crosshatch avoidance circuitry for applications with multiple versions
- LED status indicator for Power ON, Output On/Off, Signal Received, and Marginal Signal
- Models with black housing are available

Standard Model **Chemical-Resistant Model**

WARNING: Not To Be Used for Personnel Protection
Never use this device as a sensing device for personnel protection. Doing so could lead to injury or death. This device does not include the self-checking redundancy necessary for use in personnel safety applications. A sensor failure or malfunction can cause either an emergency sensor output condition.

Chemical-Resistant Models

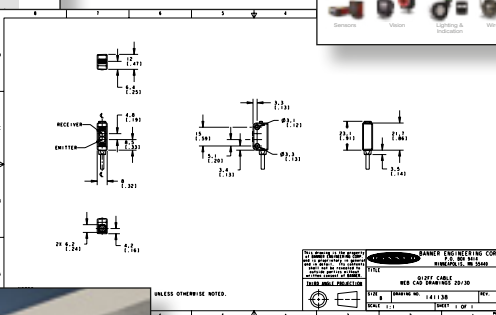
Sensing Mode	Model	Range
400 nm Visible Red	Q12R00R	
	Q12R00C	
	Q12R00B	1.5 m (4.9 ft)
640 nm Visible Red	Q12R00R	
	Q12R00C	
	Q12R00B	
	Q12R00R	13 mm (0.5 in) (all)
	Q12R00C	8 mm (0.3 in) (all)
	Q12R00B	20 mm (0.79 in) (all)
640 nm Visible Red	Q12R00R	40 mm (1.6 in) (all)
	Q12R00C	34 mm (1.3 in) (all)

Performance based on use of 95% reflectance white test card.

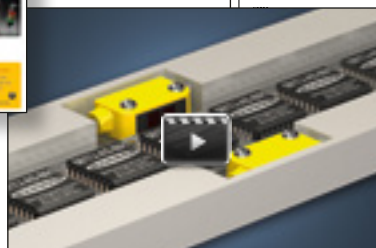


Link to
catalogue

Link to the
Banner website



Link to
CAD files



Link to videos

