



Q3X

Versatile, Rugged Laser Contrast Sensor

High-Speed Performance: Captures up to 2,000 events per second.

Versatile

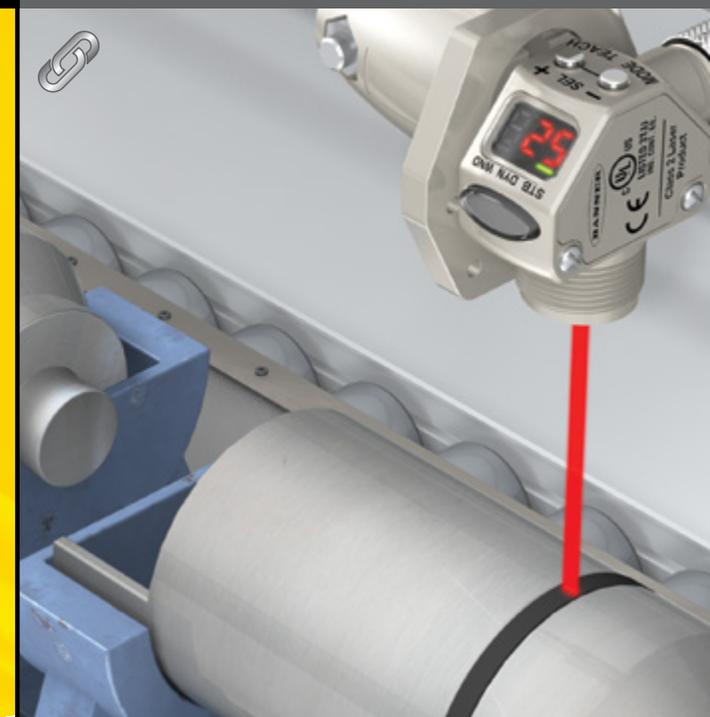
Solves challenging part-detection applications with **small contrast differences**. Short-range models available with **background suppression** capability.

Durable

Rugged nickel-plated zinc housing suitable even in environments with cutting fluids and oils.

Easy to Use

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





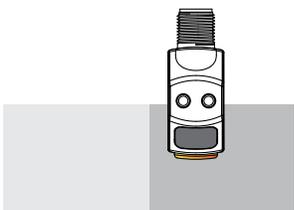
Q3X Laser
Contrast Sensor

Ideal for High-Speed Detection

- High-speed part detection as fast as 250 μ s, capturing up to 2,000 events per second
- Used for presence/absence or orientation detection

High-Performance
Contrast Detection

- Can detect small changes in contrast up to 300 mm



Angled Three-Digit Display

- Clear user feedback facilitates setup
- Easy to read at all angles
- Optional inverted display for easy mounting and readability
- Clear intensity readout



Nicked-Plated Zinc Housing
Rated to IP67, IP68, IP69K

Green LED is ON when
signal strength is stable



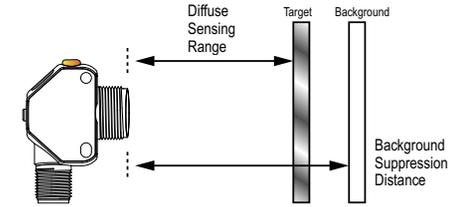
LED Output Indicator

Active TEACH Indicators

Two tactile buttons for easy setup
and advanced menu options

Reliable Detection with
Background Suppression

- Short-range models available with fixed background suppression
- Ignores backgrounds including shiny metal while reliably detecting small contrast changes





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Patent pending

Family	Housing Style	Output	Mode	Connector
Q3X	T	B	LD	Q8
	T = 18 mm Threaded Barrel	B = Bipolar	LD = Laser Diffuse 300 mm range LD50 = Laser Diffuse 50 mm range with 60 mm BGS* LD100 = Laser Diffuse 100 mm range with 120 mm BGS*	Q8 = 5-pin Integral QD <i>QD models require mating cordset</i>

* BGS = Background Suppression

Some models may not be available at time of printing.
Call factory or check website for the latest model information.

Order Now



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')



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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, 6, 8, 10, 12, 15, 18, 20, 25, 30, 35, 40, 45, 50, 60, 70, 80, 90, 100, 110, 120, 130, 140, 150, 160, 170, 180, 190, 200, 210, 220, 230, 240, 250, 260, 270, 280, 290, 300, 310, 320, 330, 340, 350, 360, 370, 380, 390, 400, 410, 420, 430, 440, 450, 460, 470, 480, 490, 500, 510, 520, 530, 540, 550, 560, 570, 580, 590, 600, 610, 620, 630, 640, 650, 660, 670, 680, 690, 700, 710, 720, 730, 740, 750, 760, 770, 780, 790, 800, 810, 820, 830, 840, 850, 860, 870, 880, 890, 900, 910, 920, 930, 940, 950, 960, 970, 980, 990, 1000
- 100 mm (4 in) cable with Plug-in M8 threaded connector
- Solid state, bipolar output: one current sourcing (PNP) and one current sinking (NPN) available on 4-wire models
- Single output solid state PNP or NPN standard on 3-wire models
- Light Output: 0.1 or 0.2 mW (0.1 or 0.2), depending on model
- Housings available with PFA chemical-resistant jacket (200 psi maximum rated) for use in harsh environments (see Chemical-Resistant Models on page 1)
- Compact 5 mm (0.19 in) housing mounts almost anywhere
- Configurable resolution ready for applications with multiple sensors
- LED status indicators for Power On, Output Overload, Signal Received, and Marginal Signal
- Housings with black housing are available

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 redundant circuitry necessary for use in personnel safety applications. A sensor failure or malfunction can cause either an energized or deenergized sensor output condition.



Link to
catalog

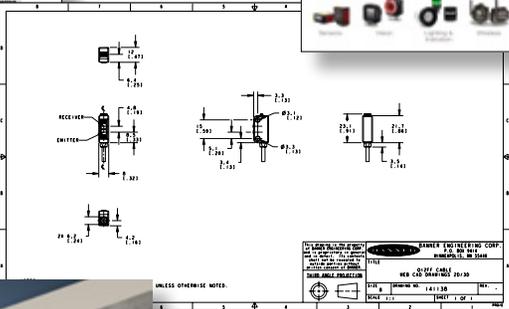
Link to the
Banner website



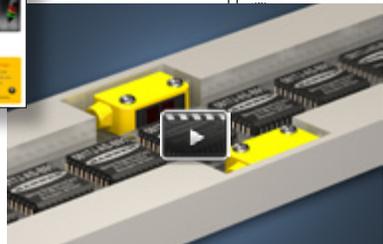
Chemical-Resistant Models

Sensing Mode	Model	Range
4-wire Visible Red	Q12BSCR	1.5 m (4.9 ft)
	Q12ABSCR	
	Q12MBSCR	
3-wire Visible Red	Q12ABFF3SCR	13 mm (0.51 in) cable
	Q12BFF3SCR	8 mm (0.31 in) cable
	Q12ABFF3SCR	None
	Q12BFF3SCR	20 mm (0.79 in) cable
	Q12ABFF3SCR	14 mm (0.55 in) back
	Q12BFF3SCR	46 mm (1.81 in) cable
Q12MBFF3SCR	14 mm (0.55 in) back	

Performance based on use of 90% reflector with red lead cord.



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CAD files



Link to videos



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