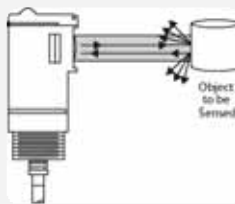


Sensing Mode	Retroreflective	Polarized Retroreflective	Diffuse	Transmitted Beam	Small Aperture Fiber Optic	Large Aperture Fiber Optic
Standard/Diagnostic and Intrinsically Safe Models						
Field of View	1.5°		3.5° for 1.5 m range and 6.5° for 3.0 and 4 m range	1.5°	Depends on fiber optic cable	
Light Source	Visible red 660 nm		Visible red 660 nm		Visible red 660 nm	Infrared 880 nm
Response Time	2 ms (DC), SPDT EM Relay (15 ms), 2 ms (MOSFET AC/DC)					
Laser						
Spot Size	-	20 x 25 mm @ 40 m	2 x 3.5 mm @ 800 nm		-	-
Response Time	-	0.5 ms	0.5 ms		50ms, AC: 25 ms	-

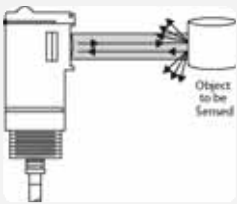
Sensing Mode		Operating Voltage	Light Source	Sensing Distance	Output Type	Sensor Type	Cat. No. §		
Retroreflective		10...30V DC	Visible red 660 nm	0.050...9.1 m (0.16...30 ft)	PNP and NPN (DC models), SPDT relay (AC/DC models), MOSFET (AC/DC models)	Standard ON/OFF	42GRU-9000-QD		
					NPN and PNP	Timing	42GTU-9000-QD		
					PNP and NPN both sensor and diagnostic output (DC models)	Diagnostic	42GDU-9000-QD		
		10...55V DC; 20...40V AC			SPDT EM Relay	Standard ON/OFF	42GRU-9001-QD		
						Timing	42GTU-9001-QD		
		70...264V AC/DC				Standard ON/OFF	42GRU-9002-QD		
						Timing	42GTU-9002-QD		
		90...264V AC/DC			N-MOSFET	Standard ON/OFF	42GRU-9003-QD		
						Timing	42GTU-9003-QD		
					SPST N.O Relay‡	Diagnostic	42GDU-9004-QD		
	42GDU-9005-QD								
Polarized Retroreflective		10...30V DC	Infrared 660 nm	0.050...4.9 m (0.16...16 ft)	NPN and PNP	Standard ON/OFF	42GRU-9200-QD		
						Timing	42GTU-9200-QD		
						Diagnostic	42GDU-9200-QD		
		10...55V DC; 20...40V AC			SPDT EM Relay	Standard ON/OFF	42GRU-9201-QD		
						Timing	42GTU-9201-QD		
		70...264V AC/DC				Standard ON/OFF	42GRU-9202-QD		
						Timing	42GTU-9202-QD		
		90...264V AC/DC			N-MOSFET	Standard ON/OFF	42GRU-9203-QD		
						Timing	42GTU-9203-QD		
					SPST N.O Relay‡	Diagnostic	42GDU-9204-QD		
							42GDU-9205-QD		
		10...30V DC			Class 1 Laser	0.3...40 m (1...130 ft)	NPN and PNP (DC only), EM relay	Standard ON/OFF	42GRU-92L0-QD
								SPDT EM Relay	Standard ON/OFF
		105...132V AC						Standard ON/OFF	42GRU-92L2-QD
Clear Object Detection		10...30V DC	Visible red 660 nm	0.050...1.2 m (0.16...4 ft)	NPN and PNP	Standard ON/OFF	42GRC-9200-QD		
						Timing	42GTC-9200-QD		
		70...264V AC/DC			SPDT EM Relay	Standard ON/OFF	42GRC-9202-QD		

						Timing	42GTC-9202-QD		
					N-MOSFET	Standard ON/OFF	42GRC-9203-QD		
						Timing	42GTC-9203-QD		
Diffuse		10...30V DC	Visible red 660 nm	0.050...1.5 m (0.16...5 ft)	NPN and PNP	Standard ON/OFF Linear Adjustment	42GLP-9000-QD		
						Standard ON/OFF Teach Push Button	42GSP-9000-QD		
						Standard ON/OFF	42GRP-9000-QD		
						Timing	42GTP-9000-QD		
						Diagnostic	42GDP-9000-QD		
		10...55V DC; 20...40V AC			SPDT EM Relay	Standard ON/OFF	42GRP-9001-QD		
						Timing	42GTP-9001-QD		
		70...264V AC/DC				Standard ON/OFF	42GRP-9002-QD		
						Timing	42GTP-9002-QD		
		90...264V AC/DC			N-MOSFET	Standard ON/OFF	42GRP-9003-QD		
						Timing	42GTP-9003-QD		
		90...264V AC/DC			SPST N.O Relay‡	Diagnostic	42GDP-9004-QD		
							42GDP-9005-QD		
		10...30V DC	Class 1 Laser	1...800 mm (0.03...31.5 in.)	NPN and PNP	Standard ON/OFF	42GRP-92L0-QD		
		105...132V AC			SPDT EM Relay		42GRP-92L2-QD		
Recommended standard 4-pin DC micro (M12) quick-disconnect cordset.							889D-F4AC-2		
Recommended standard 4-pin AC micro (M12) quick-disconnect cordset.							889D-F4AEA-2		

§ **Connection Options:** The -QD suffix describes a 4-pin DC micro (M12) integral QD for DC models, a 5-pin mini QD for SPDT EM Relay models and a 4-pin mini (M12) integral QD for N-MOSFET models. For additional connection options:

- Remove the -QD suffix for a 2 m cable without QD (Example: 42GRU-9200).
- For NPN and PNP models replace the -QD suffix with a -QD1 for a 4-pin mini integral QD (for example, 42GRU-9200-QD1). For N-MOSFET models, replace the -QD suffix with a -QD1 for a 4-pin AC micro (M12) integral QD (for example, 42GRU-9203-QD1) .
- Refer to www.ab.com/e-tools or ProposalWorks for available connection options in 600V 2 m cables.
- Diagnostic models are only available with QD options.

‡ SPDT EM Relay with N.O. and N.C. outputs for diagnostics models.

Sensing Mode		Operating Voltage	Light Source	Sensing Distance	Output Type	Sensor Type	Cat. No.★
Diffuse		10...30V DC	Infrared 880 nm	0.050...3.04 m (0.16...10 ft)	NPN and PNP	Standard ON/OFF	42GRP-9040-QD
						Timing	42GTP-9040-QD
		10...55V DC; 20...40V AC			SPDT EM Relay	Standard ON/OFF	42GRP-9041-QD
						Timing	42GTP-9041-QD
		70...264V AC/DC				Standard ON/OFF	42GRP-9042-QD
						Timing	42GTP-9042-QD
		70...264V DC; 40...264V AC		0.050...4.2 m (0.16...14 ft)	N-MOSFET	Standard ON/OFF	42GRP-9043-QD
						Timing	42GTP-9043-QD
		10...30V DC		0.050...4.2 m (0.16...14 ft)	NPN and PNP	Standard ON/OFF	42GRP-9070-QD
		70...264V AC/DC		50.8 mm...4.2 m (2 in...14 ft)	SPDT EM Relay	Standard	42GRP-9072-QD