



Snub Nose Photoelectric Sensor

The **7600 Series Delta Snub Nose Photoelectric Sensor** was developed to provide an economical sensor in an easy to mount 18mm compatible housing. Available in four operating modes, these units can handle almost all of your sensing applications. They have a NEMA 4 rating and an operating temperature range from -13° to 140°F, so they can withstand the harshest environments. The 7600's transistor output is ideal for fast response and connection to PLC and other DC inputs.

#### DC Version

- 10-30 VDC Power Supply
- Compact Size
- Easy to Mount
- NPN or PNP Transistor Output
- NEMA 4 Housing, Potted

#### AC/DC Version

- Universal AC/DC Power Supply
- Compact Size
- Easy to Mount
- SPDT Relay or FET Output
- NEMA 4 Housing, Potted

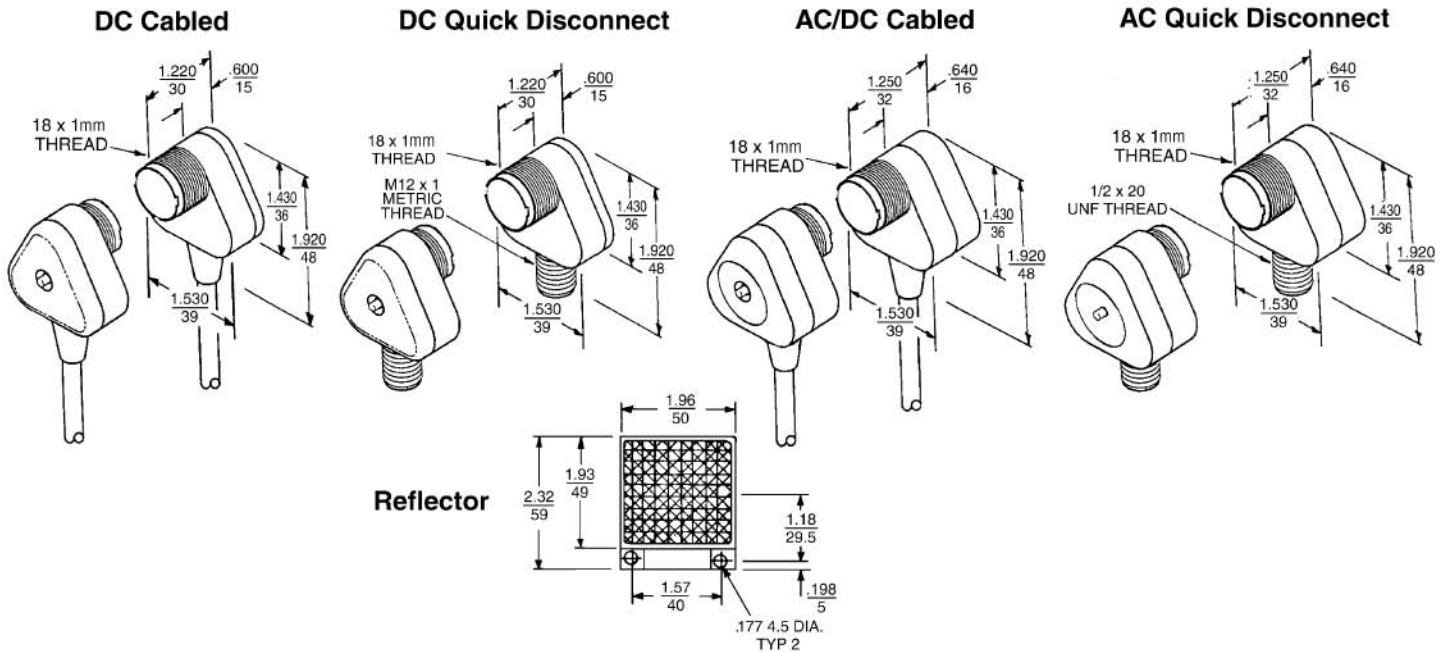
SPECIFICATIONS		DC				AC/DC			
		7602A Short Range Diffused	7603A Retroreflective	7604A Long Range Diffused	7605A Retroreflective Polarized	7602A Short Range Diffused	7603A Retroreflective	7604A Long Range Diffused	7605A Retroreflective Polarized
SENSING	Maximum Distance	4" (10 cm)	12' (3.5 m)*	18" (0.5 m)	12' (3.5 m)*	4" (10 cm)	12' (3.5 m)*	18" (0.5 m)	12' (3.5 m)*
	Minimum Target Size	0.2" (5 mm)	2.0" (5.1 cm)**	0.5" (1.25 cm)	2.0" (5.1 cm)**	0.2" (5 mm)	2.0" (5.1 cm)**	0.5" (1.25 cm)	2.0" (5.1 cm)**
INPUT	Voltage	10 to 30 VDC				10 to 30 VDC/10 to 135 VAC			
	Current (nominal)	30 mA Max.				45 mA Max			
OUTPUT	Type	NPN or PNP Transistor, Short Circuit Protected				SPDT FET: Short Circuit Protected Using 10 to 30 VDC			
	Capacity	200 mA				120 mA			
	Response Time	<2 ms				<3 ms			
	Max. Switching Rate	500 Hz				166 Hz			
	Type					SPDT Relay			
	Capacity					1.0A @ 30 VDC: 0.5A @ 120 VAC (20 cpm)			
	Response Time					<5 ms			
	Max. Switching Rate					100 Hz			
FEATURES	Operating Mode	Light-On / Dark-On				Light-On / Dark-On			
	Status Indicator	Red LED				Light-On / Dark-On			
ENVIRONMENT	Ambient Temperature	-13° to 140° F (-25° to 60° C)				-13° to 140° F (-25° to 60° C)			
	Humidity	Maximum Relative Humidity 85%				Maximum Relative Humidity 85%			

\* Using 2 inch square reflector supplied with sensor. See Ordering Codes for other reflectors.

\*\*Object size shown equals reflector size. Detection of smaller objects possible.

NOTE: All diffuse distances are accomplished with a 2 X 2 inch 90% reflective Kodak white card.

DIMENSIONS (INCHES/MILLIMETERS)



MODEL NUMBER >>>>>>	760	04	2	
Type				
Short Range Diffused	2AD			
Retroreflective (IR)	3AR			
Long Range Diffused	4AD			
Polarized Retroreflective (red)	5AR			
Operation				
On/Off	04			
Power Requirements				
10-30 VDC	N			
10-30 VDC/10 tp 135 VAC	F			
Beam Type				
Visible Red Polarized (Basic Model 5AR Only)	1			
Infrared	2			
View				
End View	2			
Output				
Logic NPN (Available with Power Requirement N Only)	N			
Logic PNP (Available with Power Requirement N Only)	P			
Relay SPDT (Available with Power Requirement F Only)	R			
Solid State FET (Available with Power Requirement F Only)	S			
Features				
Standard	X			
Quick Disconnect	Q			
Special	K			

Note: Reflector shipped with Retroreflective units.  
18mm mounting nut shipped with units.

ACCESSORIES

- 7650-715-01-00: Mounting Nuts (18mm)
- 7640-260-01-00: Right Angle Adapter
- 7680-025-22-00: Quick-Disconnect mating cable (AC only) 2m
- 7680-025-23-00: Quick-Disconnect mating cable (DC only) 2m
- 7600-260-53-00: Quick-Disconnect mating cable (DC only) 10m

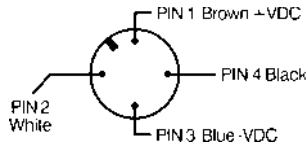
REFLECTORS:

- 7002-210-01-00: 3" Diameter Retroreflective Target  
Sensing Distance-9.0 ft.
  - 7002-210-02-00: 1 5/8" Diameter Retroreflective Target  
Sensing Distance-5.5 ft.
  - 7002-210-03-00: 7/8" Diameter Retroreflective Target  
Sensing Distance-5.0 ft.
  - 7002-210-04-00: 5/8" Diameter Retroreflective Target  
Sensing Distance-3.0 ft.
  - 0000-181-20-00: 1 1/2" x 3" Adhesive Backed Reflector  
Sensing Distance-7.0 ft.
  - 0000-181-53-00: 1.4" Square Reflector  
Sensing Distance-8.0 ft.
  - 0000-181-52-00: 2" Square Reflector\*  
Sensing Distance-12.0 ft.
- \*(Supplied with Models 7603 & 7605)

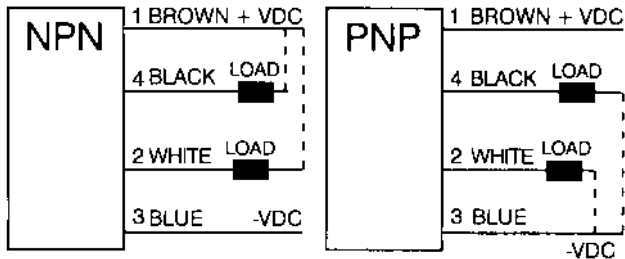
WIRING

DC VERSION

QD VERSION  
QUICK DISCONNECT



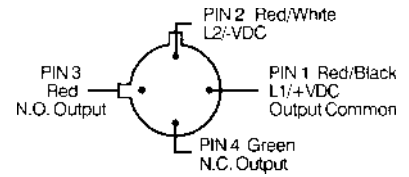
CABLED VERSION



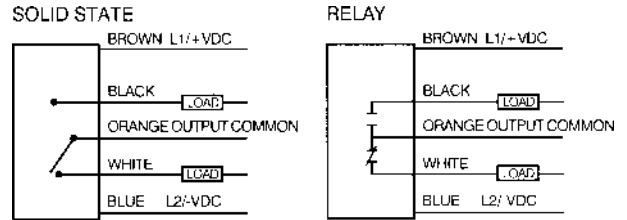
NOTE: The load connected to the black wire is energized when the LED is on.  
The load connected to the white wire is energized when the LED is off.

AC/DC VERSION

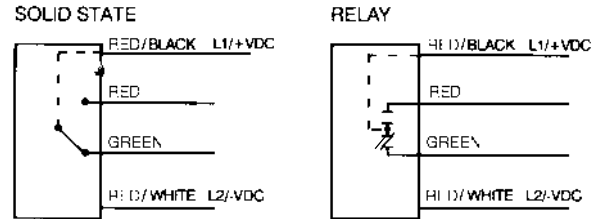
QD VERSION  
QUICK DISCONNECT



CABLED VERSION

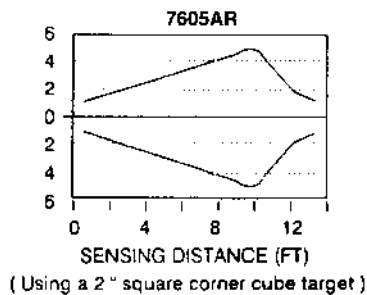
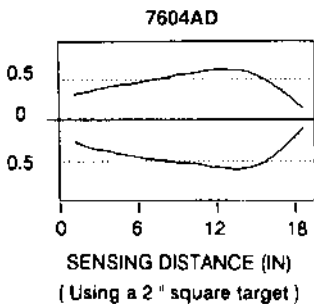
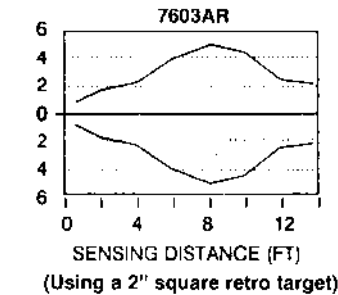
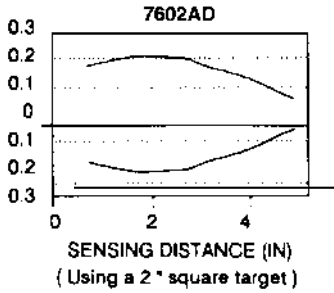


QD VERSION



NOTE: The quick disconnect AC/DC units have output common internally wired.  
NOTE: The load connected to the red wire is energized when the LED is on.  
The load connected to the green wire is energized when the LED is off.

OPERATING CHARACTERISTICS



OPERATING MODES

