

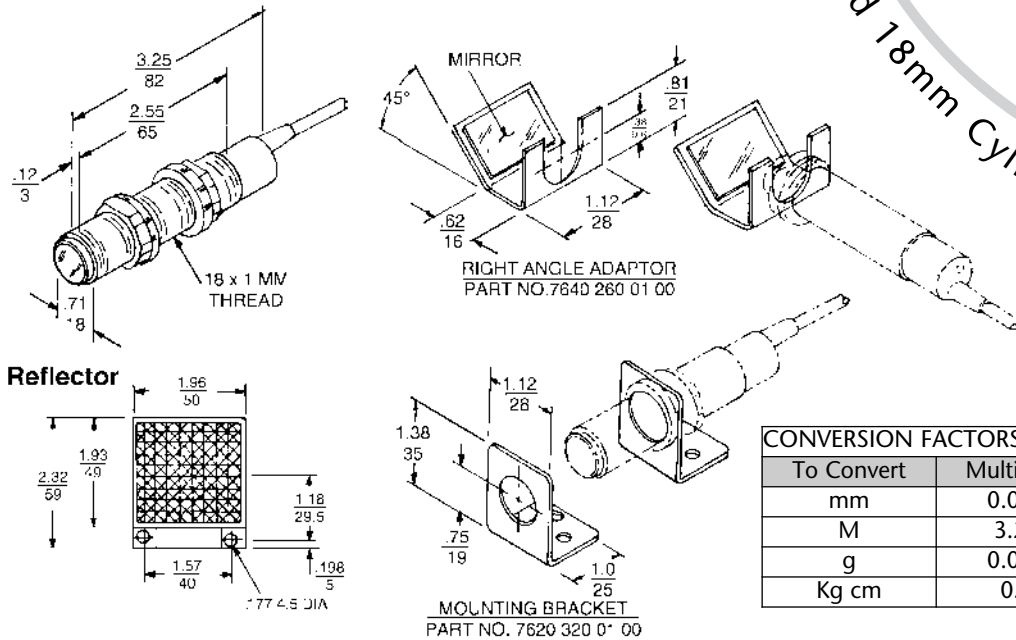
The **7650 Series** was developed for its AC/DC power supply, SPDT output and easy mounting. Available in four operating modes, these units can handle almost all of your sensing applications. They have a NEMA 4 rating and an operating temperature range from -13 to 140°F, so they can withstand the harshest environments. Two output types, relay and FET, make this series ideal for almost any application.

- Universal AC/DC Power Supply
- Easy to mount
- SPDT Relay or FET output
- NEMA 4 Housing, Potted

Self-Contained 18mm Cylindrical Photoelectric



DIMENSIONS (INCHES/MILLIMETERS)



CONVERSION FACTORS		
To Convert	Multiply By	To Obtain
mm	0.0397	inches
M	3.281	feet
g	0.0353	ounces
Kg cm	0.07	feet, pound

SPECIFICATIONS

		7652A Short Range Diffused	7653A Retroreflective	7654A Long Range Diffused	7655A Retroreflective Polarized
SENSING	Maximum Distance	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)**
INPUT	Voltage	10 to 30 VDC/10 to 135 VAC			
	Current (nominal)	45 mA Max.			
OUTPUT	FET	Type	DPST FET: Short Circuit Protected Using 10 to 30 VDC		
		Capacity	120 mA		
		Response Time	<3 ms		
	RELAY	Max. Switching Rate	166 Hz		
		Type	SPDT Relay		
		Capacity	1.0A @ 30 VDC: 0.5A @ 120 VAC (20 cpm)		
FEATURES	Operating Mode	Light-On / Dark-On			
	Status Indicator	Red LED			
ENVIRONMENT	Ambient Temperature	-13° to 140° F (-25° to 60° C)			
	Humidity	Maximum Relative Humidity 85%			

* Using 2" 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" 90% reflective Kodak white card.

MODEL NUMBER >>>>>	765	04	F	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/10-135 VAC	F				
Beam Type					
Visible Red Polarized (7655 only)	1				
Infrared	2				
View					
End View	2				
Output					
Relay (SPDT)	R				
Solid State	S				
Features					
Standard	X				
Special	K				

*Note: Mounting nuts (18mm) are shipped with units.
A 2" square reflector shipped with retroreflective units.

ACCESSORIES

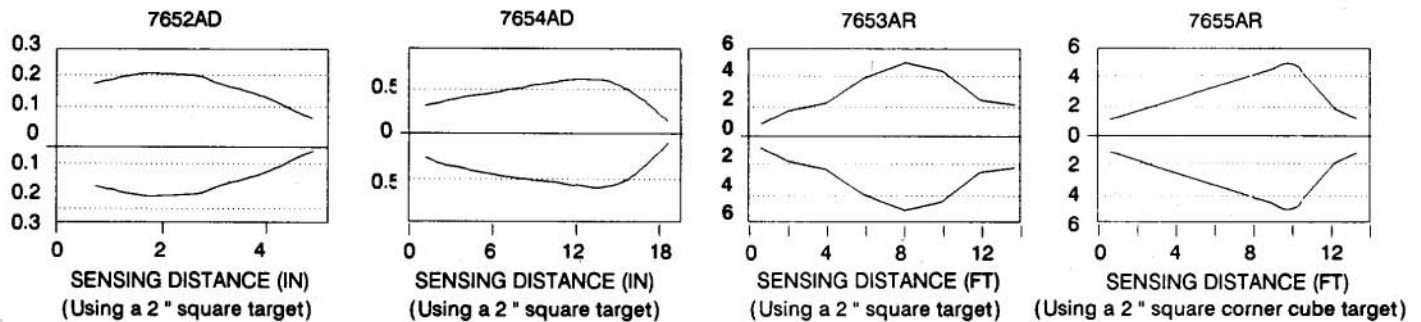
- 7650-715-01-00: Mounting Nuts (18mm)
- 7620-320-01-00: Mounting Bracket
- 7640-260-01-00: Right Angle Adapter

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.

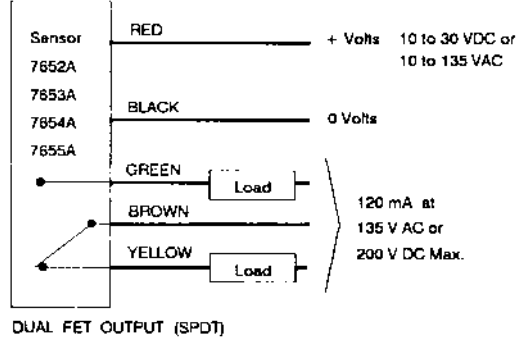
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OPERATING CHARACTERISTICS

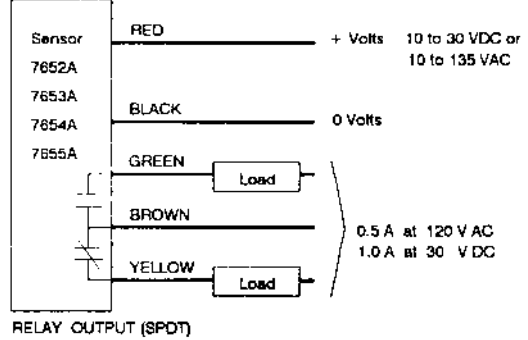


WIRING

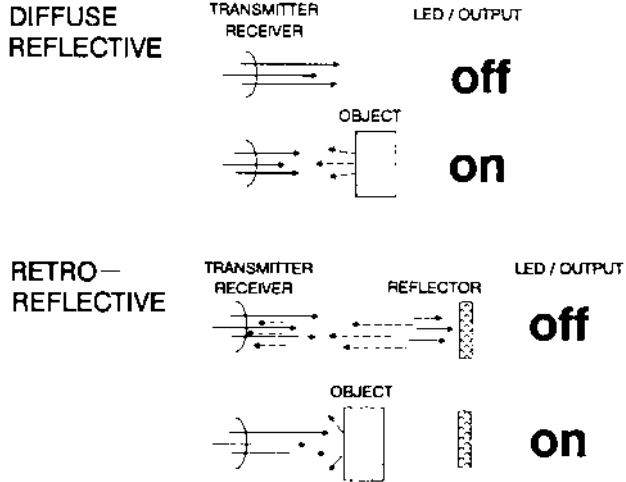
SOLID STATE



RELAY



OPERATING MODES



18mm Sensors // 7650 Series