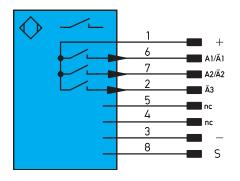
# **OPT Series Color Sensors**



- Capable of evaluating up to 3 colors simultaneously
- Single lens optics allows this sensor to have a small spot diameter and large working range
- Reflex mode operation
- · 3 switching outputs
- IP68

### **Wiring Diagram**



Legend			
+	Supply Voltage +		
-	Supply Voltage 0V		
A1/Ā1	Switching output 1 (N.O./N.C.)		
A2/Ā2	Switching output 2 (N.O./N.C.)		
Ā3	Input (analog or digital)/switching output (N.C.)		
S	Shielding		

#### Connectors

8-Pin M12 connector

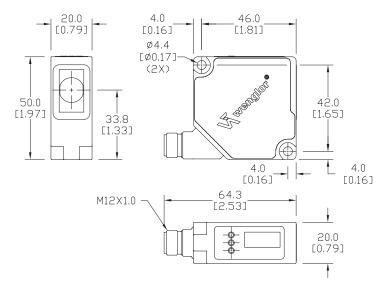


OPT2023 Specifications				
Part Number	<u>OPT2023</u>			
Price	\$372.00			
Working range	30 to 40mm			
Working distance	35mm			
Light source	White light			
Service Life (T = +25°C)	100,000h			
Max. ambient light	10,000 Lux			
Spot diameter	3mm			
Operating voltage	10 to 30VDC			
No load supply current	< 80mA			
Switching frequency	1.8 kHz			
Response time	~ (1000/1.8) µs x filter			
Temperature range	-25 to 60°C [-13 to 140°F]			
Switching outputs	3 NPN/PNP			
Switching output voltage drop	1.5 V			
Operating (load) current	100mA			
Short circuit protection	yes			
Reverse polarity protection	yes			
Overload protection	yes			
Digital inputs	2			
Protection class	III			
Setting method	Teach-In			
Housing material	Plastic			
Degree of protection	IP68			
Connection	8-pin M12			
Operating mode	Selectable light-on/dark-on			
Approvals	CE, RoHs, cULus,			

Note: To obtain the most current agency approval information, see the Agency Compliance & Certifications Checklist section on the specific part number's web page.

#### **Dimensions**

mm [inches]



See our website: www.AutomationDirect.com for complete Engineering drawings.

# Accessories for OPT Series 50x50mm Photoelectric Sensors

## **Right-angle Brackets**

Mounting bracket, right-angle, nickel-plated steel or 304 stainless steel. For use with OPT series 50x50mm photoelectric sensors.

Accessories for OPT Series 50x50mm Photoelectric Sensors						
Part Number	Price	Description	Drawing Link	Weight [lb]		
<u>OPT2031</u>	\$7.00	Wenglor mounting bracket, right-angle, nickel-plated brass. For use with OPT series 50x50mm photoelectric sensors.	<u>PDF</u>	0.24		
<u>OPT2038</u>	\$11.00	Wenglor mounting bracket, right-angle, vertical and horizontal adjustment, 304 stainless steel.  For use with OPT series 50x50mm photoelectric sensors.	<u>PDF</u>	0.19		





**OPT2031** 

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# Accessories for OPT Series 50x50mm Photoelectric Sensors

### **Right-angle Swivel Mounting Systems**

Mounting bracket, right-angle swivel, 360 degree vertical and horizontal adjustment, 12mm rod mount. For use with OPT series 50x50mm photoelectric sensors. Available in all stainless steel or with an aluminum head with a stainless steel mounting plate.

Accessories for OPT Series 50x50mm Photoelectric Sensors							
Part Number	Price	Description	Mounting Head	Mounting Plate	Drawing Link	Weight [lb]	
<u>OPT2122</u>	\$11.50	Wenglor mounting bracket, right-angle swivel, 360 degree vertical and horizontal adjustment, aluminum, 12mm rod mount. For use with OPT series 50x50mm photoelectric sensors.	Aluminum	304 Stainless Steel	<u>PDF</u>	0.19	
<u>OPT2123</u>	\$21.00	Wenglor mounting bracket, right-angle swivel, 360 degree vertical and horizontal adjustment, 304 stainless steel, 12mm rod mount. For use with OPT series 50x50mm photoelectric sensors.	304 Stainless Steel	304 Stainless Steel	<u>PDF</u>	0.31	



NO IE

304 Stainless steel mounting rods sold separately: OPT2109 (200mm length), OPT2110 (300mm length), and OPT2111 [500mm length].

OPT2122,

# **Mounting Rods and Brackets**

### **Mounting Rods**

304 Stainless steel rods for mounting swivel brackets <u>OPT2112</u> - <u>OPT2127</u> Available in three lengths: 200mm, 300mm, and 500mm. 12mm diameter.

Mounting Rods for OPT2112-2127 Swivel Mounting Brackets						
Part Number	Price	Description	Drawing Link	Weight lb (g)		
<u>OPT2109</u>	\$13.00	Wenglor mounting rod, 12mm diameter, 200mm length, 304 stainless steel.	PDF	0.41 [185.97]		
<u>OPT2110</u>	\$16.00	Wenglor mounting rod, 12mm diameter, 300mm length, 304 stainless steel.	PDF	0.60 [272.16]		
<u>OPT2111</u>	\$21.00	Wenglor mounting rod, 12mm diameter, 500mm length, 304 stainless steel.	<u>PDF</u>	0.98 [444.52]		



## **Right-angle Mounting Bracket**

Mounting bracket, right-angle, nickel-plated brass. For use with 12mm mounting rods OPT2109, OPT2110 & OPT2111.

Right-angle Mounting Brackets for 12mm Sensors					
Part Number Price Description Drawing Link			Weight Ib [g]		
<u>OPT2108</u>	\$16.00	Wenglor mounting bracket, right-angle, nickel-plated brass. For use with 12mm mounting rods OPT2109, OPT2110 & OPT2111.	<u>PDF</u>	0.07 [31.8]	



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