

# OPT Series Color Sensors

## OPT2022

## \$545.00

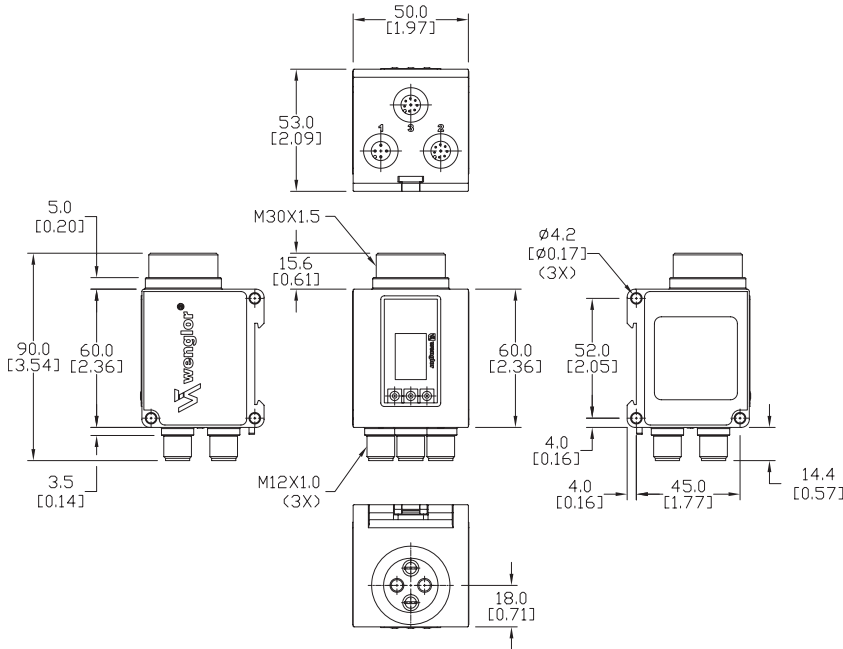


- 12 switching outputs for evaluation of detailed color analysis thanks to spectral measurement in ROYGBV color space
- Integrated LED technology ensures ideal adjustment of light intensity
- Reliable evaluation of measured values even with distance fluctuation
- Sensor settings selectable at graphical display
- Can be operated in the scanning as well as the through-beam mode
- IP67

OPT2022 Specifications	
<b>Spectral sensitivity</b>	450 to 700 nm
<b>Light source</b>	White light
<b>Service Life (T = +25°C)</b>	50,000h
<b>Max. ambient light</b>	10,000 Lux
<b>Operating voltage</b>	10 to 30 VDC
<b>Supply voltage with IO-link</b>	18 to 30 VDC
<b>No-load supply current</b>	~ 260mA
<b>Switching frequency</b>	2kHz
<b>Response time</b>	~ 50µs x filter
<b>On/Off delay</b>	0 to 10,000 ms
<b>Temperature range</b>	-25° to 60°C [-13° to 140°F]
<b>Switching outputs</b>	12 NPN/PNP
<b>Switching output voltage drop</b>	1.5 V
<b>Operating (load) current</b>	100mA
<b>Short circuit protection</b>	yes
<b>Reverse polarity protection</b>	yes
<b>Digital inputs</b>	3
<b>Protection class</b>	III
<b>Setting method</b>	Teach-In
<b>Housing material</b>	Plastic
<b>Degree of protection</b>	IP67
<b>Connection</b>	4-pin M12 and (2) 8-pin M12
<b>DIN-Rail mounting</b>	35mm
<b>Selectable menu language</b>	yes
<b>Operating mode</b>	Selectable light-on/dark-on
<b>Approvals</b>	CE, RoHs, cULus,
<b>Note: To obtain the most current agency approval information– see the Agency Approval Checklist section on the specific part number's web page.</b>	

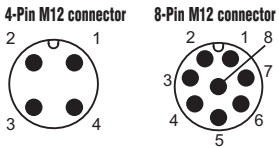
# OPT Series Color Sensors

## OPT2022 Dimensions mm [inches]

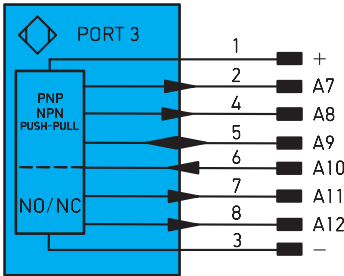
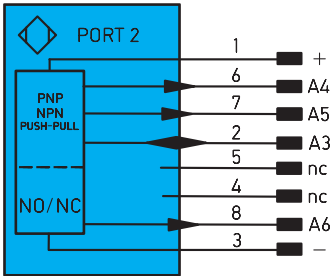
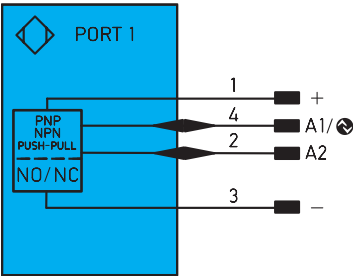


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## OPT2022 Connectors



## OPT2022 Wiring Diagrams



Legend	
+	Supply Voltage +
-	Supply Voltage 0V
A1/⊕	Switching output / IO-Link
A4/5/6/8/9/10/11/12	Switching output NO/NC
A2	Input/A2 Switching output
A3	Input/A3 Switching output
A7	Input/A7 Switching output

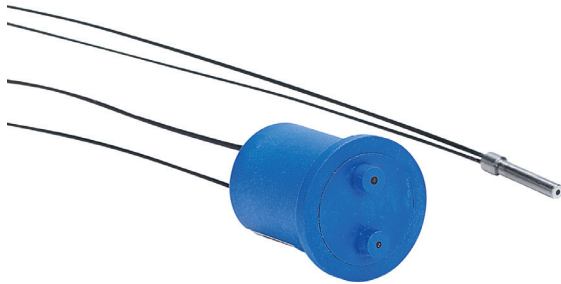
# OPT Series Color Sensors Cable

## Plastic Fiber Optic Cable

### OPT2075 Diffuse Reflex Mode

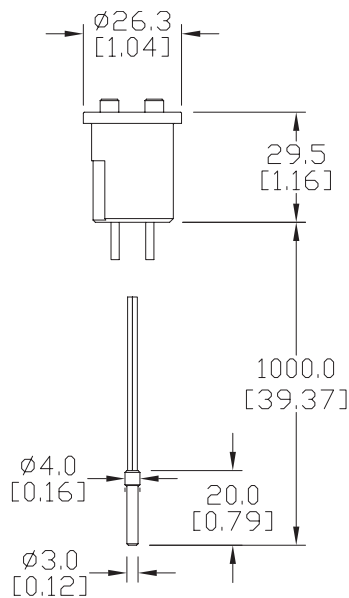
**\$43.00**

- Compatible with the OPT2022 6-channel sensor
- Designed for installation in tight spaces
- IP68



OPT2075 Specifications	
<b>Optical Fiber Core Ø</b>	0.5 mm
<b>Sensing Distance with OPT series</b>	10mm
<b>Fiber Length (L)</b>	1m
<b>Fiber Bending Radius</b>	15mm
<b>Spot Diameter</b>	0.5 to 2 mm
<b>Temperature Range</b>	-40 to 85°C [-40 to 185°F]
<b>Fiber Materials</b>	PMMA
<b>Sleeve Materials</b>	PE (black)
<b>Head Materials</b>	Stainless steel
<b>Jacket Diameter</b>	1.3 mm
<b>Fiber Distribution</b>	Coaxial arrangement
<b>Opening Angle</b>	55°
<b>Light Emission</b>	Straight

### Dimensions mm [inches]



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# OPT Series Color Sensors Cable

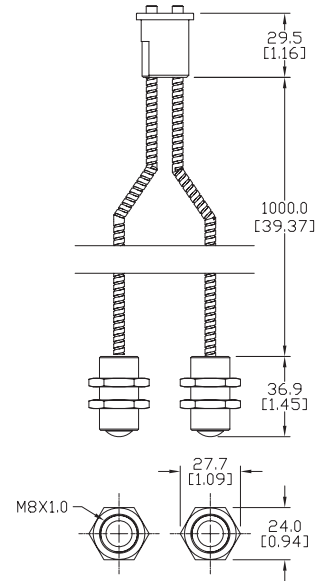
## Glass Fiber Optic Cable

### OPT2087 Through-Beam Mode

\$110.00

### Dimensions mm [inches]

OPT2087 Specifications	
<b>Optical Fiber Core Ø</b>	3mm
<b>Sensing Distance with OPT series</b>	600mm
<b>Fiber Length (L)</b>	1m
<b>Fiber Bending Radius</b>	50mm
<b>Free Cut</b>	No
<b>Head Size</b>	M18
<b>Temperature Range</b>	0 to 60°C [32 to 140°F]
<b>Fiber Materials</b>	Glass
<b>Sleeve Materials</b>	Brass (CuZn) nickel-plated
<b>Head Materials</b>	Anodized aluminum
<b>Fiber Diameter</b>	3mm
<b>Fiber Distribution</b>	Statistical mixture
<b>Opening Angle</b>	30°



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## Glass Fiber Optic Cable

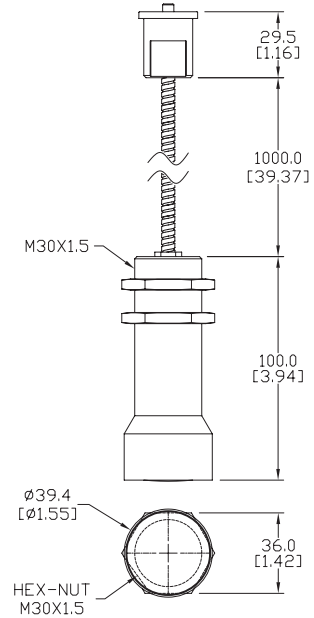
### OPT2088 Diffuse (Reflex) Mode

\$118.00

OPT2088 Specifications	
<b>Optical Fiber Core Ø</b>	3mm
<b>Sensing Distance with OPT series</b>	100mm
<b>Fiber Length (L)</b>	1m
<b>Fiber Bending Radius</b>	50mm
<b>Free Cut</b>	No
<b>Head Size</b>	M30
<b>Temperature Range</b>	0 to 60°C [32 to 140°F]
<b>Fiber Materials</b>	Glass
<b>Sleeve Materials</b>	Brass (CuZn) nickel-plated
<b>Head Materials</b>	Anodized aluminum
<b>Fiber Diameter</b>	3mm
<b>Fiber Distribution</b>	Statistical mixture



Dimensions mm [inches]



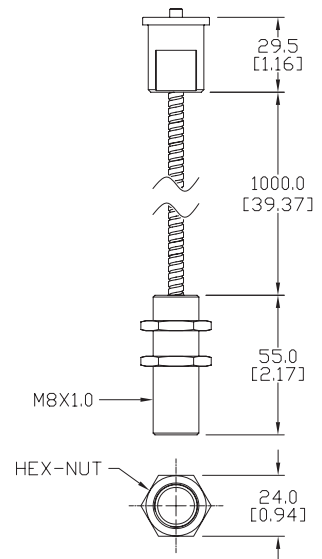
### OPT2089 Diffuse (Reflex) Mode

\$105.00

OPT2089 Specifications	
<b>Optical Fiber Core Ø</b>	1.6 mm
<b>Sensing Distance with OPT series</b>	18mm
<b>Fiber Length (L)</b>	1m
<b>Fiber Bending Radius</b>	50mm
<b>Free Cut</b>	No
<b>Head Size</b>	M18
<b>Temperature Range</b>	0 to 60°C [32 to 140°F]
<b>Fiber Materials</b>	Glass
<b>Sleeve Materials</b>	Brass (CuZn) nickel-plated
<b>Head Materials</b>	Anodized aluminum
<b>Fiber Diameter</b>	1.6 mm
<b>Fiber Distribution</b>	Statistical mixture



Dimensions mm [inches]



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