

# V Series AC/DC Inductive Proximity Sensors



## M8 (8mm)



- Eight models available
- Low cost/high performance
- LED status indicators are visible at a wide angle
- Axial cable or 1/2 in. micro AC quick-disconnect models
- Purchase cable separately (for quick-disconnect models)
- Lifetime warranty

V Series M8 AC/DC Inductive Prox Selection Chart									
Part Number	Price	Sensing Range <sup>1</sup>	Housing	Output State	Voltage	Connection	Wiring	Dimensions	
V3E1-R0-3A8F	\$38.00	2mm (0.0787 in)	Shielded	N.O.	20-120 VAC/VDC	2m (6.5 ft) axial cable	Diagram 1	Figure 1	
V3E1-S0-3A8F	\$38.00			N.C.			Diagram 2		
V3E1-R0-3Q	\$38.00			N.O. (VAC) or N.O./N.C. (VDC)	20-250 VAC/VDC		1/2"-20 UNF, micro AC quick-disconnect	Diagram 3	Figure 2
V3E1-S0-3Q	\$38.00			N.C. (VAC) or N.O./N.C. (VDC)				Diagram 4	
V3E1-R0-4A8F	\$38.00	4mm (0.1574 in)	Unshielded	N.O.	20-120 VAC/VDC	2m (6.5 ft) axial cable	Diagram 1	Figure 1	
V3E1-S0-4A8F	\$38.00			N.C.			Diagram 2		
V3E1-R0-4Q	\$38.00			N.O. (VAC) or N.O./N.C. (VDC)	20-250 VAC/VDC		1/2"-20 UNF, micro AC quick-disconnect	Diagram 3	Figure 2
V3E1-S0-4Q	\$38.00			N.C. (VAC) or N.O./N.C. (VDC)				Diagram 4	

<sup>1</sup>Standard target Fe360

## Wiring Diagrams

Diagram 1

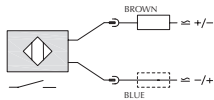


Diagram 2

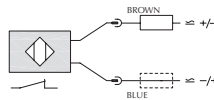


Diagram 3

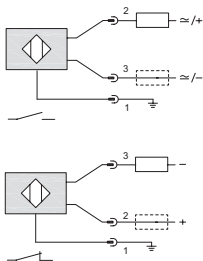
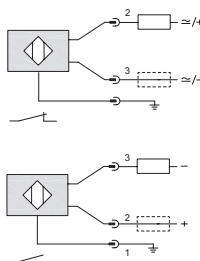
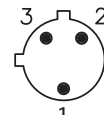


Diagram 4



## Connector

1/2 in. micro AC



# V Series AC/DC Inductive Proximity Sensors

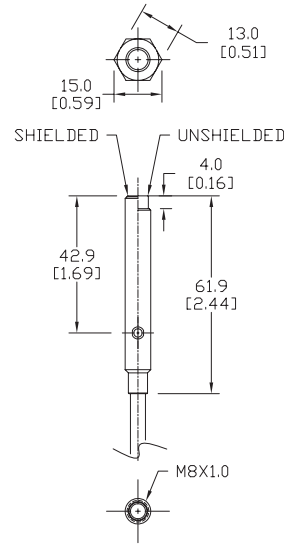
## M8 (8mm)

Specifications	V3E Models	
<b>Mounting Type</b>	Shielded	Unshielded
<b>Nominal Sensing Distance (mm)</b>	2	4
<b>Operating Distance</b>	0–1.6 mm	0–3.2 mm
<b>Material Correction Factors</b>	<a href="#">See Material Influence Table</a>	
<b>Output Type</b>	NO/NC for Plug; NO or NC for Cable	
<b>Operating Voltage</b>	20–120 VAC/VDC; 20–250 VAC/VDC (Plug only)	
<b>No-load Supply Current</b>	1mA (VAC) 0.7 mA (VDC Plug) 0.55 mA (VAC) 0.40 mA (VDC Cable)	
<b>Operating (Load) Current</b>	<b>DC</b>	80mA
	<b>AC</b>	55mA
<b>Off-state Leakage Current</b>	<b>DC</b>	0.40 mA
	<b>AC</b>	0.55 mA
<b>Voltage Drop</b>	≤ 7.5 VAC / ≤ 8.5 VDC	
<b>Switching Frequency</b>	900Hz	750Hz
<b>Differential Travel (% of Nominal Distance)</b>	1–20%	
<b>Repeat Accuracy</b>	≤ 5%	
<b>Ripple</b>	600mA/150ms Plug 150mA/150ms Cable	
<b>Time Delay Before Availability (tv)</b>	100ms	
<b>Short Circuit Protection</b>	Yes	
<b>Operating Temperature</b>	-25° to +70°C (-13° to 158°F)	
<b>Protection Degree (DIN 40 050)</b>	IP67	
<b>LED Indicators</b>	Yellow (Output energized)	
<b>Housing Material</b>	Nickel-plated brass	
<b>Sensing Face Material</b>	PA4T	
<b>Shock/Vibration</b>	IEC 60947-5-2	
<b>Tightening Torque</b>	2 N·m (1.48 lb·ft)	
<b>Weight</b>	20g Plug; 70g Cable	
<b>Connection</b>	2m (6.5 ft) axial cable or 1/2"–20 UNF, micro AC quick-disconnect	
<b>Agency Approvals</b>	CE, UL E187310	
<b>Note: Standard Target Fe360</b>		

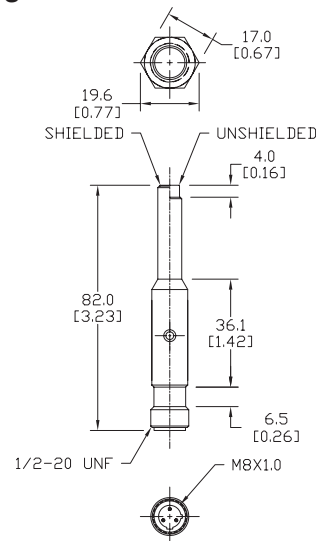
## Dimensions

mm [inches]

**Figure 1**



**Figure 2**



**NOTE:** Each sensor ships with jam nuts.

# Accessories for 8mm Sensors

## Axial Mounting Bracket

Mounting bracket, axial, zinc-plated steel. For use with 8mm sensors. Has two mounting holes (use 3 mm screws) and allows the rotation of an optical axis for axial sensors. Hexagonal nuts not included.

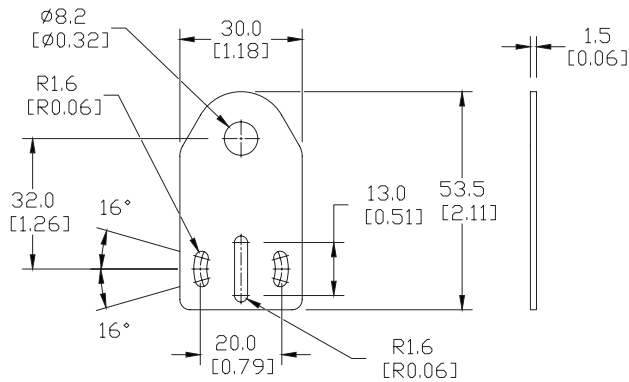


ST08A

Accessories for 8mm Sensors			
Part Number	Price	Description	Weight [lb]
ST08A	\$1.00	Mounting bracket, axial, zinc-plated steel. For use with 8mm sensors. 1/pk.	0.04

## Dimensions

mm [inches]



## Right-angle Mounting Bracket

Mounting bracket, right-angle, zinc-plated steel. For use with 8mm sensors. Has two mounting holes (use 3mm screws) and allows the rotation of an optical axis for right-beam-angle-adaptor sensors. Hexagonal nuts not included.

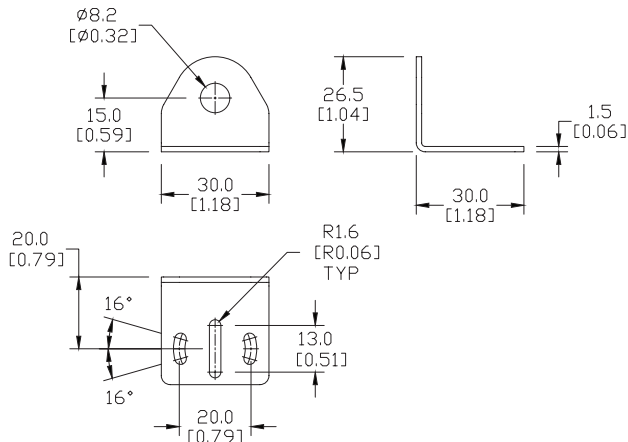


ST08C

Accessories for 8mm Sensors			
Part Number	Price	Description	Weight [lb]
ST08C	\$1.00	Mounting bracket, right angle, zinc-plated steel for 8mm sensors. 1/pk.	0.04

## Dimensions

mm [inches]



See our website: [www.AutomationDirect.com](http://www.AutomationDirect.com) for complete engineering drawings

# Accessories for 8mm Sensors

## Right-angle Mounting Bracket

Mounting bracket, right-angle, plastic. For use with 8mm sensors.

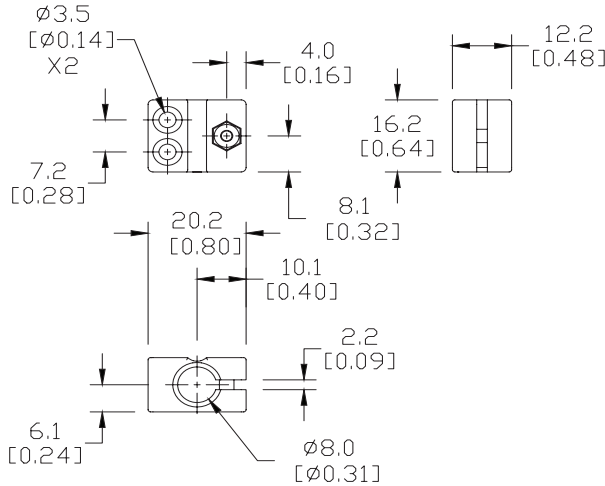
Accessories for 8mm Sensors			
Part Number	Price	Description	Weight [lb]
OPT2101	\$6.00	Mounting bracket, right-angle, plastic. For use with 8mm sensors.	0.02



OPT2101

### Dimensions

mm [inches]



## Right-angle Swivel Mounting Systems

Mounting bracket, right-angle swivel, 360 degree vertical and horizontal adjustment. For use with 8mm sensors. Available in all stainless steel or with an aluminum head and stainless steel mounting plate.

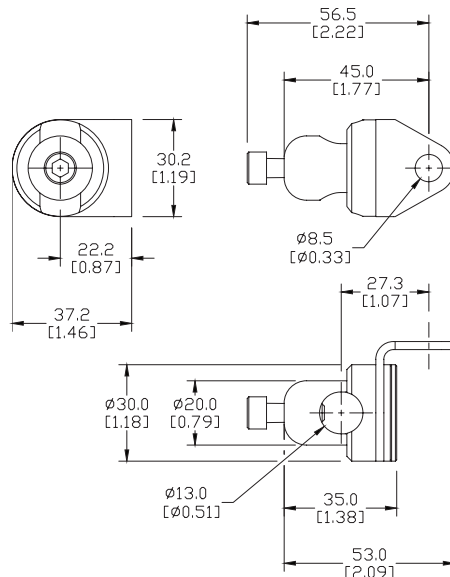
Accessories for 8mm Sensors					
Part Number	Price	Description	Mounting Head	Mounting Plate	Weight [lb]
OPT2112	\$9.00	Mounting bracket, right-angle swivel, 360 vertical and horizontal adjustment, aluminum, 12mm rod mount. For use with 8mm sensors.	Aluminum	304 Stainless Steel	0.14
OPT2113	\$16.00	Mounting bracket, right-angle swivel, 360 vertical and horizontal adjustment, 304 stainless steel, 12mm rod mount. For use with 8mm sensors.	304 Stainless Steel	304 Stainless Steel	0.26



OPT2112 & OPT2113

### Dimensions

mm [inches]



See our website: [www.AutomationDirect.com](http://www.AutomationDirect.com) for complete engineering drawings