

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 ¹	Mounting	Output State	Voltage	Connection	Wiring	Dimensions	
V3E1-R0-3A8F		2mm (0.0787 in)	Flush	N.O.	20–120 VAC/ VDC	2m (6.5 ft) axial cable	Diagram 1	Figure 1	
V3E1-S0-3A8F				N.C.			Diagram 2		
V3E1-R0-3Q				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				N.C. (VAC) or N.O./N.C. (VDC)				Diagram 4	
V3E1-R0-4A8F		4mm (0.1574 in)	Non-flush	N.O.	20–120 VAC/ VDC	2m (6.5 ft) axial cable	Diagram 1	Figure 1	
V3E1-S0-4A8F				N.C.			Diagram 2		
V3E1-R0-4Q				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				N.C. (VAC) or N.O./N.C. (VDC)				Diagram 4	

¹Standard target Fe360

Wiring Diagrams

Diagram 1

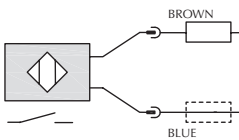


Diagram 2

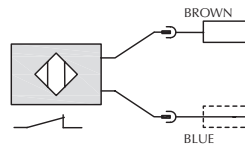


Diagram 3

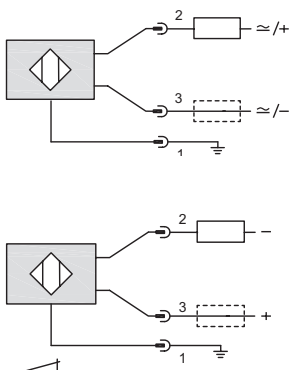
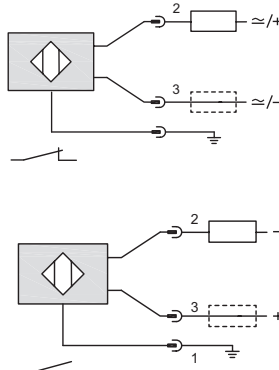
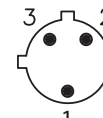


Diagram 4



Connector

1/2 in. micro AC



V Series AC/DC Inductive Proximity Sensors

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

Dimensions

mm [inches]

Figure 1

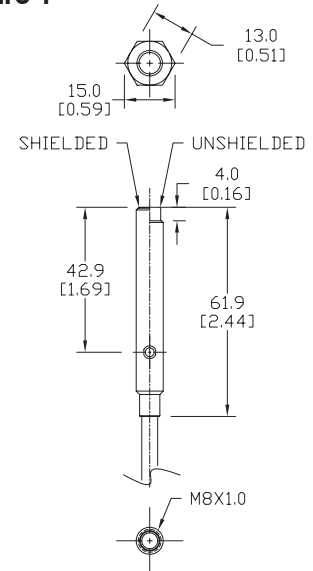
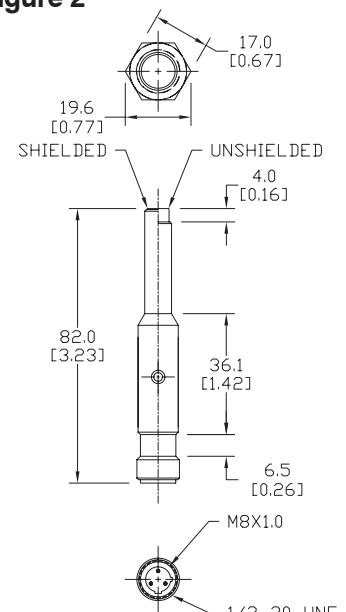


Figure 2



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.

Accessories for 8mm Sensors				
Part Number	Price	Description	Drawing Link	Weight [lb]
<u>ST08A</u>		Micro Detectors mounting bracket, axial, zinc plated steel. For use with 8mm sensors.	<u>PDF</u>	0.04



ST08A

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.

Accessories for 8mm Sensors				
Part Number	Price	Description	Drawing Link	Weight [lb]
<u>ST08C</u>		Micro Detectors mounting bracket, right-angle, zinc plated steel. For use with 8mm sensors.	<u>PDF</u>	0.04



ST08C

Accessories for 8mm Sensors

Right-angle Mounting Bracket

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



OPT2101

Accessories for 8mm Sensors				
Part Number	Price	Description	Drawing Link	Weight [lb]
OPT2101		Wenglor mounting bracket, right-angle, plastic. For use with 8mm sensors.	PDF	0.02

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.



OPT2112 & OPT2113

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

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