

# V Series AC & AC/DC Inductive Proximity Sensors

## M30 (30mm)



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



### V Series M30 AC & AC/DC Inductive Proximity Sensors Selection Chart

Part Number	Price	Sensing Range <sup>1</sup>	Mounting	Output State	Voltage	Connection	Wiring	Dimensions
Standard								
VT1-A0-1B	\$45.00	10mm [0.394 in]	Flush	N.O.	20–253 VAC	2m [6.5 ft] axial cable	Diagram 2	Figure 1
VT1-A0-2B	\$45.00	15mm [0.590 in]	Non-flush					
Extended								
V3T1-R0-3A8F	\$48.00	12mm [0.472 in]	Flush	N.O. (VAC) or N.O./N.C. (VDC)	20–250 VAC/ VDC	2m [6.5 ft] axial cable	Diagram 1	Figure 2
V3T1-S0-3A8F	\$48.00			N.C. (VAC) or N.O./N.C. (VDC)			Diagram 3	Figure 2
V3T1-R0-3Q	\$48.00			N.O. (VAC) or N.O./N.C. (VDC)		1/2"-20 UNF, micro AC quick-disconnect	Diagram 4	Figure 3
V3T1-S0-3Q	\$48.00			N.C. (VAC) or N.O./N.C. (VDC)			Diagram 5	Figure 3
V3T1-R0-4A8F	\$48.00	18mm [0.708 in]	Non-flush	N.O. (VAC) or N.O./N.C. (VDC)		2m [6.5 ft] axial cable	Diagram 1	Figure 2
V3T1-S0-4A8F	\$48.00			N.C. (VAC) or N.O./N.C. (VDC)			Diagram 3	Figure 2
V3T1-R0-4Q	\$48.00			N.O. (VAC) or N.O./N.C. (VDC)		1/2"-20 UNF, micro AC quick-disconnect	Diagram 4	Figure 3
V3T1-S0-4Q	\$48.00			N.C. (VAC) or N.O./N.C. (VDC)			Diagram 5	Figure 3

<sup>1</sup>With 30mm x 30mm Fe360 target

## Wiring Diagrams

Diagram 1

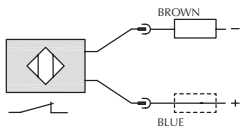
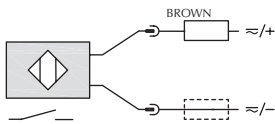


Diagram 3

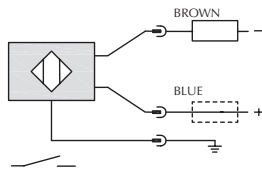
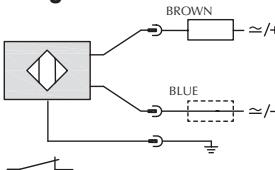


Diagram 2

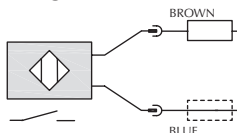
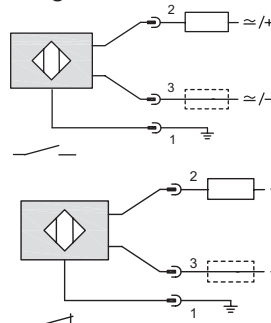
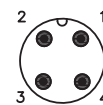


Diagram 4

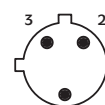


## Connectors

M12 connector

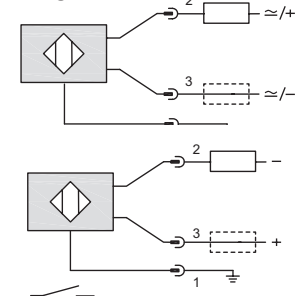


1/2 in. micro AC



Note: Pin 2 is not present on some models.

Diagram 5



# V Series AC & AC/DC Inductive Proximity Sensors

Specifications	VT1 Models		V3T1 Models	
Mounting Type	Flush	Non-flush	Flush	Non-flush
Nominal Sensing Distance (mm)	5	8	12	18
Operating Distance	NA		0–9.7 mm	0–14.6 mm
Material Correction Factors	See <a href="#">Material Influence Table</a>			
Output Type	Triac/N.O./2-wire		<a href="#">N.O. or N.C. (VAC)</a> <a href="#">N.O./N.C. (VDC)</a>	
Operating Voltage	20–253 VAC, 50/60 Hz		20–250 VAC/VDC	
No-load Supply Current	NA			
Operating (Load) Current	DC	NA	200mA	
AC		5–300 mA (RMS)	140mA	
Off-state Leakage Current	DC	NA	0.70 mA	
AC		1.0 mA max. (RMS)	1mA	
Voltage Drop		≤ 8.8 VAC	≤ 7.5 VAC / ≤ 8VDC	
Switching Frequency		25Hz	250Hz	190Hz
Differential Travel (% of Nominal Distance)		2–10%	1–20%	
Repeat Accuracy		5%	≤ 5%	
Peak Current		NA	600mA/150ms Max.	
Time Delay Before Availability (tv)		200ms	100ms	
Reverse Polarity Protection		NA	Yes	
Short Circuit Protection:	Overload	No	Yes	
Overvoltage			Yes	
Operating Temperature		-25 to +70°C [-13 to 158°F]	-25 to +70°C [-13 to 158°F]	
Protection Degree (DIN 40050)		IEC IP67	IP67	
LED Indicators		Yellow (output energized)		
Housing Material		Nickel-plated brass		
Sensing Face Material		Polybutylene Terephthalate (PBT)	PA4T	
Shock/Vibration		IEC 60947-5-2		
Tightening Torque		25 N·m [18.44 lb·ft]	50 N·m [37 lb·ft]	
Weight		120g [4.23 oz]	120g Plug; 170g Cable	
Connection		2m [6.5 ft] axial cable	2m [6.5 ft] axial cable or 1/2"-20 UNF, micro AC quick-disconnect	
Agency Approvals		CE, UL Recognized file E130644	CE, UL E187310	

## Dimensions

mm [inches]

Figure 1

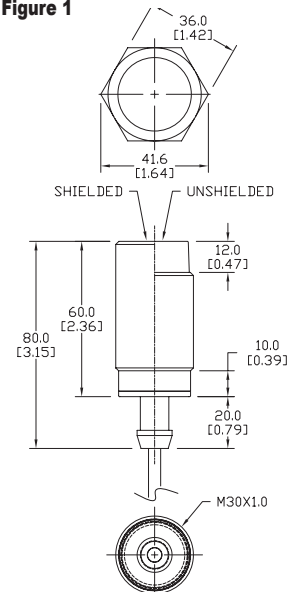


Figure 2

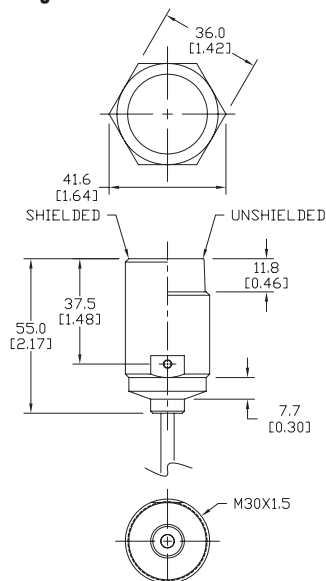
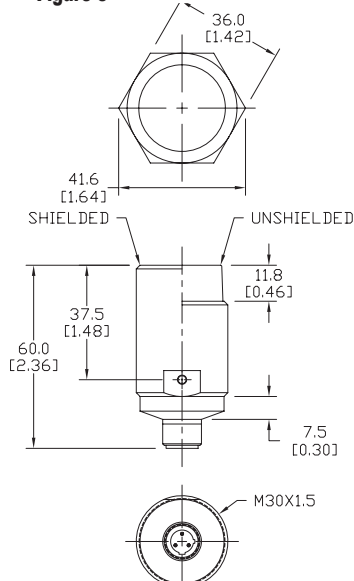


Figure 3



NOTE: Each sensor ships with jam nuts.



# Accessories for 30mm Sensors

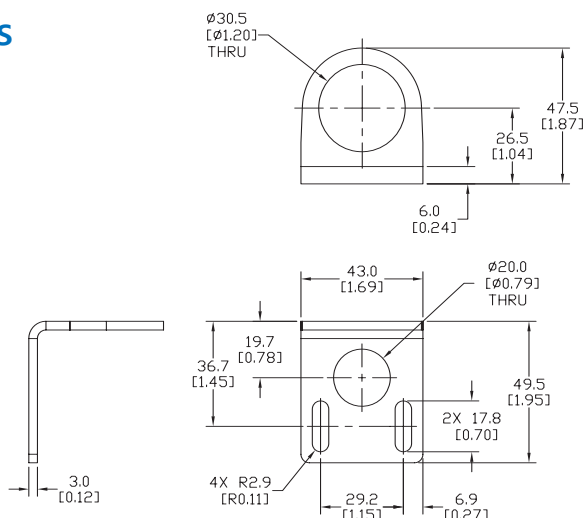
## Right-angle Mounting Bracket

Mounting bracket, right-angle, 304 stainless steel. For use with 30mm sensors.

Accessories for FW Series Sensors			
Part Number	Price	Description	Weight lb [g]
<a href="#"><u>ST30C6W</u></a>	\$5.50	AutomationDirect mounting bracket, right-angle, 304 stainless steel. For use with 30mm sensors.	0.15 (68.0)

## Dimensions

mm [inches]



[ST30C6W](#)

## Right-angle Swivel Mounting Systems

Mounting bracket, right-angle swivel, 360 degree vertical and horizontal adjustment, 12mm rod mount. For use with 30mm sensors. Available in all 304 stainless steel or with an aluminum head with a 304 stainless steel mounting plate.

Accessories for 30mm Sensors						
Part Number	Price	Description	Mounting Head	Mounting Plate	Drawing Link	Weight lb [g]
<a href="#"><u>OPT2118</u></a>	\$11.50	Wenglor mounting bracket, right-angle swivel, 360 degree vertical and horizontal adjustment, aluminum, 12mm rod mount. For use with 30mm sensors.	Aluminum	304 Stainless steel	<a href="#"><u>PDF</u></a>	0.18 [81.7]
<a href="#"><u>OPT2119</u></a>	\$21.00	Wenglor mounting bracket, right-angle swivel, 360 degree vertical and horizontal adjustment, 304 stainless steel, 12mm rod mount. For use with 30mm sensors.	304 Stainless Steel	304 Stainless steel	<a href="#"><u>PDF</u></a>	0.18 [81.7]

Note: 304 Stainless steel mounting rods sold separately: [OPT2109](#) (200mm [7.87 in] length), [OPT2110](#) (300mm [11.81 in] length), and [OPT2111](#) (500mm [19.69 in] length).



[OPT2118](#), [OPT2119](#)