



# D80 Series Rectangular Inductive Proximity Sensors



**D80-OP-4T**



**D80V-A0-3M**

## Large Rectangular 80 x 40 mm

- Long sensing range
- Large active sensor face
- Non-flush or flush models
- Robust housing for harsh environments  
PPE (Polyphenylene Ether)
- IP65 or IP67 rated
- Lifetime warranty



D80 Series Rectangular Inductive Proximity Sensors Selection Chart									
Part Number	Price	Sensing Range	Operating Voltage	Mounting	Output State	Logic	Connection	Wiring	Drawing Link
<b>80 x 40 x 105 mm</b>									
<a href="#">D80-OP-4T</a>	\$152.00	20-60mm [0.78-2.36 in]	10-36 VDC	Non-flush	N.O./N.C. (selectable)	PNP	Terminal Chamber	Diagram 1	<a href="#">PDF</a>
<a href="#">D80-OP-4H*</a>	\$152.00						4-pin M12 quick-disconnect	Diagram 2	<a href="#">PDF</a>
<b>80 x 40 x 92 mm</b>									
<a href="#">D80-AP-3H*</a>	\$146.00	50mm [1.96 in]	10-36 VDC	Flush	N.O.	PNP	4-pin M12 quick-disconnect	Diagram 2	<a href="#">PDF</a>
<a href="#">D80V-A0-3M*</a>	\$146.00		20-140 VAC/ 10-140 VDC			—	3-pin mini 7/8 in - 16UNF thread	Diagram 3	<a href="#">PDF</a>
<a href="#">D80V-A0-3Q*</a>	\$146.00		—			—	3-pin 1/2 in - 20UNF thread	Diagram 3	<a href="#">PDF</a>

\*Purchase cable separately.

## Wiring Diagrams

Diagram 1

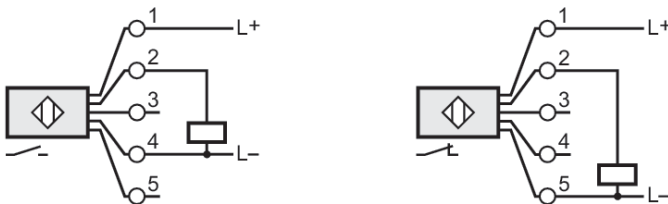
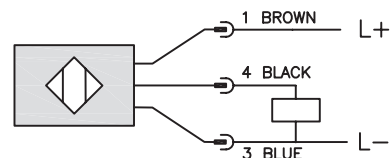
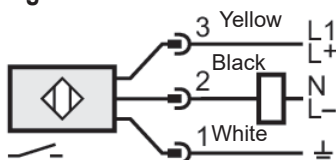


Diagram 2

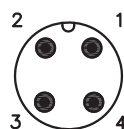


Terminals: 2.5 mm<sup>2</sup>; Cable sheath: Ø 7-13 mm; Cable gland: M20 X 1.5

Diagram 3



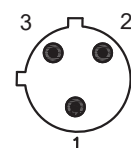
M12 connector



Connector: 1 x 7/8" coding: A



Connector: 1 x 1/2" coding: C



## Mounting Bracket

D80 Series Rectangular Proximity Sensors Mounting Bracket				
Part Number	Price	Description	Weight	Drawing Link
<a href="#">D80-BRKT-3</a>	\$30.00	ProSense mounting bracket, parallel, stainless steel. For use with D80-xx-3x flush mount prox sensors only.	317.1 g [11.18 oz]	<a href="#">PDF</a>





# D80 Series Rectangular Inductive Proximity Sensors

## D80 Series Rectangular Inductive Proximity Sensors Specifications

Sensor	D80-OP-4T	D80-OP-4H	D80-AP-3H	D80V-A0-3M	D80V-A0-3Q
<b>Mounting Type</b>	Non-flush			Flush	
<b>Sensing Range</b>	20-60mm [0.78-2.36 in] Adjustable via potentiometer			50mm [1.96 in]	
<b>Real Sensing Range (Sr)</b>	60mm ± 10%			50mm	
<b>Material Correction Factors</b>	See Material Influence Table				
<b>Output Type</b>	N.O./N.C.(selectable), PNP		N.O. PNP	N.O.	
<b>Operating Voltage</b>	10 – 36 VDC			20 –140 VAC / 10 –140 VDC	
<b>No-load Supply Current</b>	15mA (24V)	< 15	15mA (24V)	5.5 mA	
<b>Operating (Load) Current</b>	250mA			450mA	
<b>Off-state (Leakage) Current</b>	Neglectable (3-wire system)			1.7mA (140 VAC/VDC)	
<b>Voltage Drop</b>	2.5 V			6V	
<b>Switching Frequency</b>	100 Hz		70 Hz	25 Hz	
<b>Hysteresis (% of Sr)</b>	1 to 15		3 to 20		
<b>Switch-point Drift (% of Sr)</b>	-10 to 10%		-15 to 15%		
<b>Protection Class</b>	II			I	
<b>Reverse Polarity Protection</b>	Yes				
<b>Short-Circuit Protection</b>	Yes	Yes, non-latching			
<b>Ambient Temperature</b>	-25 to 80°C [-13 to 180°F]		-25 to 70°C [-13 to 158°F]		
<b>Protection Degree (DIN 40050)</b>	IP65		IP67		
<b>Indication/Switch Status</b>	Yellow LED: Switching Status		Yellow LED: Switching Status / Green LED: Power	Red LED: Switching Status / Green LED: Power / Green/Red LED: Alternating flashing short circuit	
<b>Housing Material</b>	PPE (Polyphenylene Ether)		PPE (Polyphenylene Ether), diecast zinc nickel-plated		
<b>Shock</b>	EN 60068-2-27 Ea 100g 11 ms half-sine; 3 shocks each in every direction of the 3 coordinate axes				
<b>Vibration</b>	EN 60068-2-6 Fc 20g (10 to 3000 Hz) / 50 sweep cycles per frequency; 1 octave per minute in 3 axes				
<b>Tightening Torque</b>	2.8 +/- 0.3 N•m				
<b>Weight</b>	434g [15.30 oz]	440.5 g [15.53 oz]	420.5 g [14.83 oz]	427g [15.06 oz]	432g [15.23 oz]
<b>Connection</b>	Terminal chamber 2.50 mm <sup>2</sup> (14 AWG)	4-pin M12 quick- disconnect	4-pin M12 quick- disconnect	3-pin 1/2in - 20UNF thread	3-pin mini 7/8in - 16UNF thread
<b>Agency Approvals</b>	CE, cULus E174191, UKCA				

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