

prosense®

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
80 x 40 x 105 mm									
D80-OP-4T	\$152.00	20-60mm [0.78-2.36 in]	10-36 VDC	Non-flush	N.O./N.C. (selectable)	PNP	Terminal Chamber	Diagram 1	PDF
D80-OP-4H*	\$152.00						4-pin M12 quick-disconnect	Diagram 2	PDF
80 x 40 x 92 mm									
D80-AP-3H *	\$146.00	50mm [1.96 in]	10-36 VDC	Flush	N.O.	PNP	4-pin M12 quick-disconnect	Diagram 2	PDF
D80V-A0-3M *	\$146.00		20-140 VAC/ 10-140 VDC			—	3-pin mini 7/8 in - 16UNF thread	Diagram 3	PDF
D80V-A0-3Q *	\$146.00					—	3-pin 1/2 in - 20UNF thread	Diagram 3	PDF

*Purchase cable separately.

Wiring Diagrams

Diagram 1

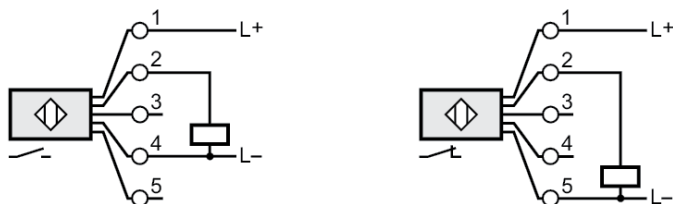
Terminals: 2.5 mm²; Cable sheath: Ø 7-13 mm; Cable gland: M20 X 1.5

Diagram 2

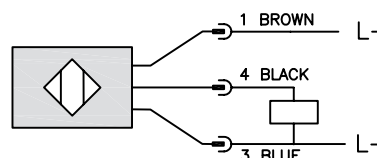
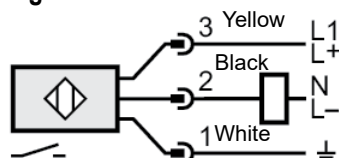
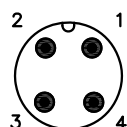
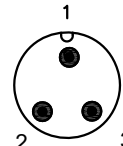
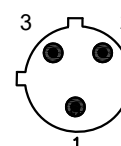


Diagram 3



M12 connector

Connector: 1 x 7/8"
coding: AConnector: 1 x 1/2"
coding: C

Mounting Bracket

D80 Series Rectangular Proximity Sensors Mounting Bracket

Part Number	Price	Description	Weight	Drawing Link
D80-BRKT-3	\$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]	PDF



D80 Series Rectangular Inductive Proximity Sensors

D80 Series Rectangular Inductive Proximity Sensors Specifications

Sensor	D80-0P-4T	D80-0P-4H	D80-AP-3H	D80V-A0-3M	D80V-A0-3Q
Mounting Type	Non-flush		Flush		
Sensing Range	20-60mm [0.78-2.36 in] Adjustable via potentiometer		50mm [1.96 in]		
Real Sensing Range (Sr)	60mm ± 10%		50mm		
Material Correction Factors	See Material Influence Table				
Output Type	N.O./N.C.(selectable), PNP		N.O. PNP	N.O.	
Operating Voltage	10 – 36 VDC			20 –140 VAC / 10 –140 VDC	
No-load Supply Current	15mA (24V)	< 15	15mA (24V)	5.5 mA	
Operating (Load) Current	250mA			450mA	
Off-state (Leakage) Current	Neglectable (3-wire system)			1.7mA (140 VAC/VDC)	
Voltage Drop	2.5 V			6V	
Switching Frequency	100 Hz		70 Hz	25 Hz	
Hysteresis (% of Sr)	1 to 15		3 to 20		
Switch-point Drift (% of Sr)	-10 to 10%		-15 to 15%		
Protection Class	II			I	
Reverse Polarity Protection	Yes				
Short-Circuit Protection	Yes	Yes, non-latching			
Ambient Temperature	-25 to 80°C [-13 to 180°F]		-25 to 70°C [-13 to 158°F]		
Protection Degree (DIN 40050)	IP65	IP67			
Indication/Switch Status	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	
Housing Material	PPE (Polyphenylene Ether)		PPE (Polyphenylene Ether), diecast zinc nickel-plated		
Shock	EN 60068-2-27 Ea 100g 11 ms half-sine; 3 shocks each in every direction of the 3 coordinate axes				
Vibration	EN 60068-2-6 Fc 20g (10 to 3000 Hz) / 50 sweep cycles per frequency; 1 octave per minute in 3 axes				
Tightening Torque	2.8 +/- 0.3 N•m				
Weight	434g [15.30 oz]	440.5 g [15.53 oz]	420.5 g [14.83 oz]	427g [15.06 oz]	432g [15.23 oz]
Connection	Terminal chamber 2.50 mm² (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
Agency Approvals	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.