

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

UK
CA

CE

cULUS

LIMITED
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

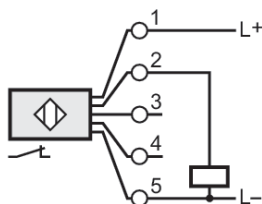
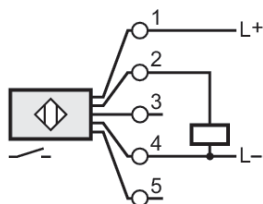
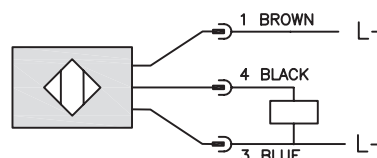
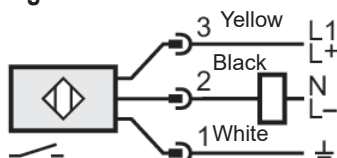


Diagram 2

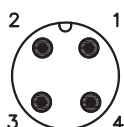
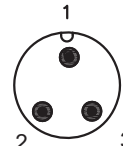
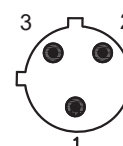


Terminals: 2.5 mm²; Cable sheath: Ø 7-13 mm; Cable gland: M20 X 1.5

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.