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prosense®

PNE6 Series 8mm Triple Sensing Proximity Sensors

M8 (8mm) Stainless Steel – DC

- 8mm threaded triple distance proximity sensor
- Complete overload protection
- IP65, IP66, IP67, IP68, IP69K rated
- Two M8 lock nuts included
- 316L Stainless Steel body
- LED Status indicator
- Lifetime warranty

NEED CABLES?

PNE6 Series M8 Triple Distance Inductive Proximity Selection Chart

Part Number	Price	Sensing Range	Mounting	Output State	Logic	Connection	Wiring	Dimensions
Triple Distance Flush								
PNE6-AP-5F	$28.00	3mm [0.118 in]	Flush	N.O.	PNP	3-pin M8 quick-disconnect	Diagram 1	PDF
PNE6-AN-5F	$28.00	3mm [0.118 in]	Flush	N.O.	NPN	3-pin M8 quick-disconnect	Diagram 2	PDF
PNE6-CP-5F	$28.00	3mm [0.118 in]	Flush	N.C.	PNP	3-pin M8 quick-disconnect	Diagram 1	PDF
Triple Distance Non-Flush								
PNE6-AP-6F	$28.00	6mm [0.236 in]	Non-flush	N.O.	PNP	3-pin M8 quick-disconnect	Diagram 1	PDF
PNE6-AN-6F	$28.00	6mm [0.236 in]	Non-flush	N.O.	NPN	3-pin M8 quick-disconnect	Diagram 2	PDF
PNE6-CP-6F	$28.00	6mm [0.236 in]	Non-flush	N.C.	PNP	3-pin M8 quick-disconnect	Diagram 1	PDF

Wiring Diagrams

Diagram 1

PNP Output

1 BROWN — L+
4 BLACK
3 BLUE — L−

Diagram 2

NPN Output
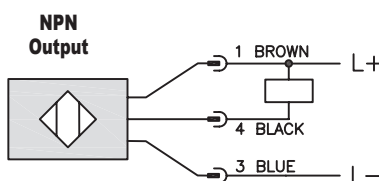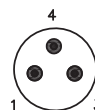
1 BROWN — L+
4 BLACK
3 BLUE — L−
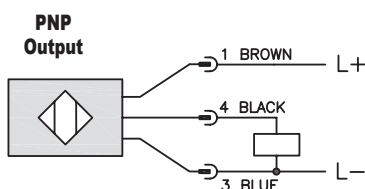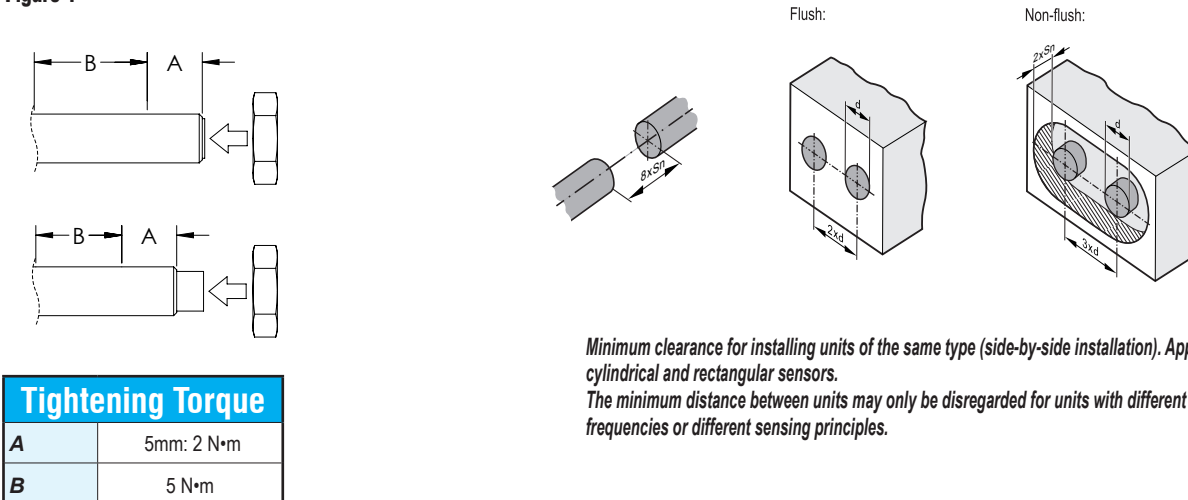
Connector

M8 connector

4
2
1   3

Warning: These products are not safety sensors and are not suitable for use in personal safety applications.

PNE6 Series 8mm Triple Sensing Proximity Sensors Specifications

PNE6 Series M8 Triple Distance Inductive Proximity Specifications		
Sensor	*PNE6-xx-5F*	*PNE6-xx-6F*
Mounting Type	Flush	Non-flush
Sensing Range	3mm	6mm
Real Sensing Range (Sr)	3 ± 10%	6 ± 10%
Material Correction Factors	See Material Influence Table	
Output Type	PNP N.O. or N.C., NPN N.O.	
Operating Voltage	10 – 30 VDC	
No-load Supply Current	≤ 20 mA	
Operating (Load) Current	≤ 100 mA	
Off-state (Leakage) Current	≤ 0.1 mA	
Voltage Drop	2.5 V	
Switching Frequency	1500Hz	800Hz
Hysteresis (% of Sr)	1 to15	
Switch-point Drift (% of Sr)	-10 to 10	
Protection Class	III	
Reverse Polarity Protection	Yes	
Short-Circuit Protection	Yes	
Operating Temperature (UL)	-25 to +80°C [-13 to +180°F]	
Protection Degree (DIN 40050)	IP67, IP66, IP67, IP68, IP69K [With IP69K Cable]	
Indication/Switch Status	Yellow LED, Switching Status, 4 x 90°	
Housing Material	316L Stainless Steel	
Sensing Face Material	Active Face, LCP [Liquid Crystal Polymer]	
Shock/Vibration	Shock EN 60068-2-27, Vibration EN 60068-2-6	
Tightening Torque	See Figure 1	
Weight	17.2 g [0.61 oz]	16.4 g [0.58 oz]
Connection	M8 quick-disconnect	
IO-Link	NA	
Agency Approvals	CE, cULus E328811	

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

Figure 1

Tightening Torque	
A	5mm: 2 N•m
B	5 N•m

Flush:

Non-flush:

Minimum clearance for installing units of the same type (side-by-side installation). Applies to cylindrical and rectangular sensors.
The minimum distance between units may only be disregarded for units with different oscillator frequencies or different sensing principles.

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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]
ST08A	$2.00	Micro Detectors mounting bracket, axial, zinc plated steel. For use with 8mm sensors.	PDF	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-adapter sensors. Hexagonal nuts not included.

Accessories for 8mm Sensors				
Part Number	Price	Description	Drawing Link	Weight [lb]
ST08C	$2.00	Micro Detectors mounting bracket, right-angle, zinc plated steel. For use with 8mm sensors.	PDF	0.04

ST08C

Accessories for 8mm Sensors

Right-angle Mounting Bracket

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

Accessories for 8mm Sensors				
Part Number	Price	Description	Drawing Link	Weight [lb]
OPT2101	$8.00	Wenglor mounting bracket, right-angle, plastic. For use with 8mm sensors.	PDF	0.02

OPT2101

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.

Accessories for 8mm Sensors						
Part Number	Price	Description	Mounting Head	Mounting Plate	Drawing Link	Weight [lb]
OPT2112	$11.50	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	$21.00	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).

OPT2112 & OPT2113