



# PxW2 Series Metal Face Inductive Proximity Sensors

## 316L Stainless Steel – DC



- 8mm, 12mm, 18mm, 30mm
- Complete overload protection
- IP65, IP66, IP67, IP68, IP69K rated
- Lock nuts included
- 316L Stainless Steel body
- Metal sensing face provides durable protection
- LED Status indicator
- Lifetime warranty



### Metal Face Inductive Proximity Sensors PxW2 Series Selection Chart

Part Number	Price	Sensing Range	Real Sensing Range (Sr)	Mounting	Switching Frequency	Output State	Logic	Connection	Wiring	Operating Temperature (UL)	Weight g [oz]	Drawing Link
M8 Proximity Sensors												
<a href="#">PEW2-AP-3F</a>	\$33.50	3mm [0.12in]	3 ± 10%	Semi-flush	250 Hz	N.O.	PNP	3-pin M8 quick-disconnect	Diagram 1	-25 to 85°C [-13 to 185°F]	15.8 [0.56]	<a href="#">PDF</a>
<a href="#">PEW2-AN-3F</a>	\$32.00			Semi-flush		N.O.	NPN		Diagram 2			<a href="#">PDF</a>
<a href="#">PEW2-AP-4F</a>	\$33.50	5mm [0.20in]	5 ± 10%	Non-flush	500 Hz	N.O.	PNP		Diagram 1		15.3 [0.54]	<a href="#">PDF</a>
<a href="#">PEW2-AN-4F</a>	\$32.00			Non-flush		N.O.	NPN		Diagram 2			<a href="#">PDF</a>
M12 Proximity Sensors												
<a href="#">PMW2-AP-3H</a>	\$34.00	4mm [0.16in]	4 ± 10%	Flush	100 Hz	N.O.	PNP	4-pin M12 quick-disconnect	Diagram 1	-25 to 70°C [-13 to 158°F]	25.8 [0.91]	<a href="#">PDF</a>
<a href="#">PMW2-AP-4H</a>	\$34.00	6mm [0.24in]	6 ± 10%	Non-flush	250 Hz	N.O.	PNP		Diagram 1	0 to 70°C [32 to 158°F]	23.9 [0.84]	<a href="#">PDF</a>
M18 Proximity Sensors												
<a href="#">PKW2-AP-3H</a>	\$36.00	8mm [0.31in]	8 ± 10%	Flush	100 Hz	N.O.	PNP	4-pin M12 quick-disconnect	Diagram 1	-25 to 70°C [-13 to 158°F]	44 [1.55]	<a href="#">PDF</a>
<a href="#">PKW2-AP-4H</a>	\$36.00	12mm [0.47in]	12 ± 10%	Non-flush	250 Hz	N.O.	PNP		Diagram 1	0 to 70°C [32 to 158°F]	38.6 [1.36]	<a href="#">PDF</a>
M30 Proximity Sensors												
<a href="#">PTW2-AP-3H</a>	\$44.50	15mm [0.59in]	15 ± 10%	Flush	50 Hz	N.O.	PNP	4-pin M12 quick-disconnect	Diagram 1	-25 to 70°C [-13 to 158°F]	115 [4.05]	<a href="#">PDF</a>
<a href="#">PTW2-AP-4H</a>	\$44.50	25mm [0.98in]	25 ± 10%	Non-flush	100 Hz	N.O.	PNP		Diagram 1	0 to 70°C [32 to 158°F]	106.8 [3.77]	<a href="#">PDF</a>

## Wiring Diagrams

Diagram 1  
PNP Output

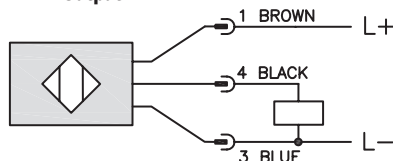
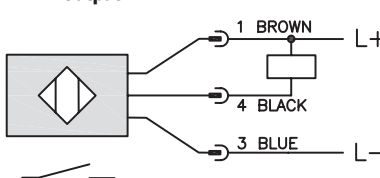
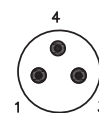


Diagram 2  
NPN Output

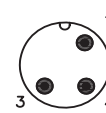


### Connectors

M8 connector



M12 connector

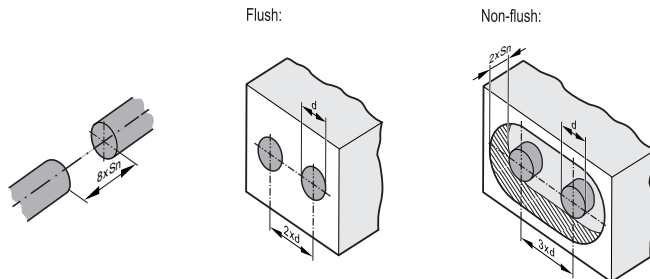


**Warning:** These products are not safety sensors and are not suitable for use in personal safety applications.

# PxW2 Series Metal Face Inductive Proximity Specifications

Metal Face Inductive Proximity Sensors PxW2 Series Specifications				
Sensor	PEW2	PMW2	PKW2	PTW2
Output Type	PNP or 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	2.5V			
Hysteresis (% of Sr)	3 to 15			
Switch-point Drift (% of Sr)	-10 to 10			
Pressure Rating (bar)	50 [725.19 psi]	100 [1450 psi]		
Protection Class	III			
Reverse Polarity Protection	Yes			
Short-Circuit Protection	Yes			
Protection Degree (DIN 40050)	IP65, 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	316L stainless steel			
Material Correction Factors	<a href="#">See Material Influence Table</a>			
Shock/Vibration	Shock EN 60068-2-27, Vibration EN 60068-2-6			
Tightening Torque	5 N•m	15 N•m	50 N•m	80 N•m
Connection	3-pin M8 quick-disconnect	4-pin M12 quick-disconnect		
IO-Link	NA			
Agency Approvals	CE, cULus E328811			

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



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.

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

# 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]
<a href="#"><u>ST08A</u></a>	\$2.00	Micro Detectors mounting bracket, axial, zinc plated steel. For use with 8mm sensors.	<a href="#"><u>PDF</u></a>	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-adaptor sensors. Hexagonal nuts not included.

Accessories for 8mm Sensors				
Part Number	Price	Description	Drawing Link	Weight [lb]
<a href="#"><u>ST08C</u></a>	\$2.00	Micro Detectors mounting bracket, right-angle, zinc plated steel. For use with 8mm sensors.	<a href="#"><u>PDF</u></a>	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]
<a href="#"><u>OPT2101</u></a>	\$8.00	Wenglor mounting bracket, right-angle, plastic. For use with 8mm sensors.	<a href="#"><u>PDF</u></a>	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]
<a href="#"><u>OPT2112</u></a>	\$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	<a href="#"><u>PDF</u></a>	0.14
<a href="#"><u>OPT2113</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 8mm sensors.	304 Stainless Steel	304 Stainless Steel	<a href="#"><u>PDF</u></a>	0.26



[OPT2112 & OPT2113](#)

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