



# PxW2 Series Metal Face Inductive Proximity Sensors

## 316L Stainless Steel – DC



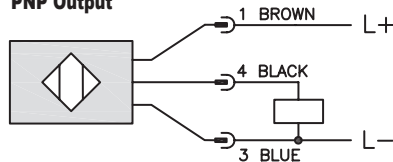
- 8mm, 12mm, 18mm, 30mm
- Complete overload protection
- IP65, IP66, IP67, IP68, IP69K rated
- Lock nuts included
- 316L Stainless Steel body
- Metal sensing face provides durable protection
- LED Status indicator
- Lifetime warranty



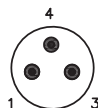
PxW2 Series Metal Face Inductive Proximity Selection Chart								
Part Number	Price	Sensing Range	Mounting	Output State	Logic	Connection	Wiring	Drawing Link
<b>M8 Proximity Sensors</b>								
<a href="#">PEW2-AP-3F</a>	\$33.50	3mm [0.118 in]	Semi-flush	N.O.	PNP	3-pin M8 quick-disconnect	Diagram 1	<a href="#">PDF</a>
<a href="#">PEW2-AP-4F</a>	\$33.50	5mm [0.20 in]	Non-flush	N.O.	PNP	3-pin M8 quick-disconnect	Diagram 1	<a href="#">PDF</a>
<b>M12 Proximity Sensors</b>								
<a href="#">PMW2-AP-3H</a>	\$34.00	4mm [0.157 in]	Flush	N.O.	PNP	4-pin M12 quick-disconnect	Diagram 1	<a href="#">PDF</a>
<a href="#">PMW2-AP-4H</a>	\$34.00	6mm [0.236 in]	Non-flush	N.O.	PNP	4-pin M12 quick-disconnect	Diagram 1	<a href="#">PDF</a>
<b>M18 Proximity Sensors</b>								
<a href="#">PKW2-AP-3H</a>	\$36.00	8mm [0.31 in]	Flush	N.O.	PNP	4-pin M12 quick-disconnect	Diagram 1	<a href="#">PDF</a>
<a href="#">PKW2-AP-4H</a>	\$36.00	12mm [0.47 in]	Non-Flush	N.O.	PNP	4-pin M12 quick-disconnect	Diagram 1	<a href="#">PDF</a>
<b>M30 Proximity Sensors</b>								
<a href="#">PTW2-AP-3H</a>	\$44.50	15mm [0.59 in]	Flush	N.O.	PNP	4-pin M12 quick-disconnect	Diagram 1	<a href="#">PDF</a>
<a href="#">PTW2-AP-4H</a>	\$44.50	25mm [0.984 in]	Non-flush	N.O.	PNP	4-pin M12 quick-disconnect	Diagram 1	<a href="#">PDF</a>

## Wiring Diagrams

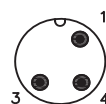
Diagram 1  
PNP Output



Connectors  
M8 connector



M12 connector

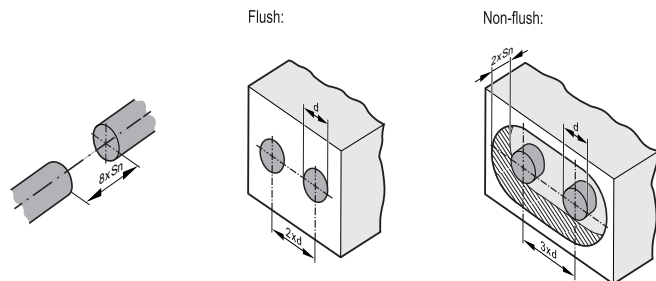


**Warning:** These products are not safety sensors and are not suitable for use in personal safety applications.

# PxW2 Series Metal Face Inductive Proximity Specifications

PxW2 Series Metal Face Inductive Proximity Specifications								
Sensor	PEW2-AP-3F	PEW2-AP-4F	PMW2-AP-3H	PMW2-AP-4H	PKW2-AP-3H	PKW2-AP-4H	PTW2-AP-3H	PTW2-AP-4H
Mounting Type	Semi-flush	Non-flush	Flush	Non-flush	Flush	Non-flush	Flush	Non-flush
Sensing Range	3mm	5mm	4mm	6mm	8mm	12mm	15mm	25mm
Real Sensing Range (Sr)	3 ± 10%	5 ± 10%	4 ± 10%	6 ± 10%	8 ± 10%	12 ± 10%	15 ± 10%	25 ± 10%
Material Correction Factors	See Material Influence Table							
Output Type	PNP 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	250Hz	500Hz	100Hz	250Hz	100Hz	250Hz	50Hz	100Hz
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							
Operating Temperature (UL)	-25 to +85°C [-13 to +185°F]		-25 to +70°C [-13 to 158°F]	0 to +70°C [35 to 158°F]	-25 to +70°C [-13 to 158°F]	0 to +70°C [35 to 158°F]	-25 to +70°C [-13 to 158°F]	0 to +70°C [35 to 158°F]
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							
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	
Weight	15.8 g [0.56 oz]	15.3 g [0.54 oz]	25.8 g [0.91 oz]	23.9 g [0.84 oz]	44g [1.55 oz]	38.6 g [1.36 oz]	115g [4.05 oz]	106.8 g [3.77 oz]
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 Approval 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.

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# Accessories for 18mm Sensors

## Axial Mounting Bracket

Axial mounting bracket available in zinc plated steel or 316L stainless steel. Has two mounting holes (use 4mm screws) and allows for rotation of an optical axis for right-beam-angle-adaptor sensors. Hexagonal nuts not included. For use with 18mm sensors.



**ST18A**

Accessories for 18mm Sensors			
Part Number	Price	Description	Weight lb [g]
<b>ST18A</b>	\$2.00	Micro Detectors mounting bracket, axial, zinc plated steel. For use with 18mm sensors.	0.06 [27.2]
<b>ST18A7W</b>	\$7.25	Micro Detectors mounting bracket, axial, 316L stainless steel. For use with 18mm sensors.	0.06 [27.2]

### Dimensions

mm [inches]



## Right-angle Mounting Bracket

Right-angle mounting bracket for use with 18mm sensors. Has two mounting holes (use 4mm screws) and allows the rotation of an optical axis for axial sensors. Hexagonal nuts not included.

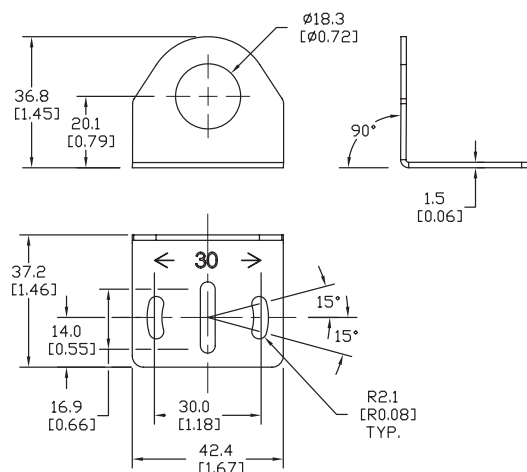


**ST18C**

Accessories for 18mm Sensors			
Part Number	Price	Description	Weight lb [g]
<b>ST18C</b>	\$2.00	Micro Detectors mounting bracket, right-angle, zinc plated steel. For use with 18mm sensors.	0.06 [27.2]
<b>ST18C7W</b>	\$7.25	Micro Detectors mounting bracket, right-angle, 316L stainless steel. For use with 18mm sensors.	0.06 [27.2]

### Dimensions

mm [inches]

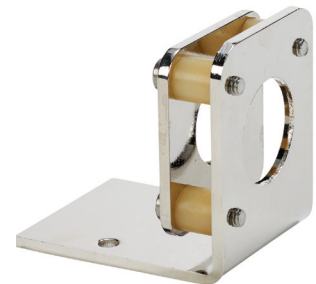


# Accessories for 18mm Sensors

## Right-angle Fine Tune Mounting Bracket

Mounting bracket, right-angle, fine tune vertical and horizontal adjustment, nickel-plated steel. For use with 18mm sensors. Allows for fine tuning vertical and horizontal placement.

Accessories for 18mm Sensors				
Part Number	Price	Description	Drawing Link	Weight [lb]
<b>OPT2036</b>	\$38.50	Wenglor mounting bracket, right-angle, fine tune vertical and horizontal adjustment, nickel plated steel. For use with 18mm sensors.	<a href="#">PDF</a>	0.02

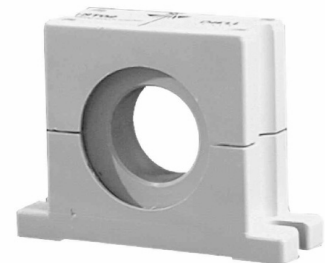


**OPT2036**

## Swivel Mounting Bracket

Mounting bracket, ball swivel, plastic. For use with 18mm sensors. Has a ball-joint and set screws to adjust sensor orientation. Allows angular orientation up to 15 degrees (from center) in all directions for photoelectric sensors (Will not work with C18 series).

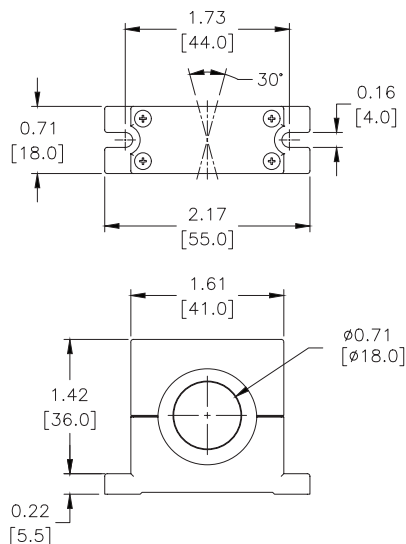
Accessories for 18mm Sensors			
Part Number	Price	Description	Weight [lb]
<b>ST02</b>	\$9.50	Micro Detectors mounting bracket, ball swivel, plastic. For use with 18mm sensors.	0.06



**ST02**

## Dimensions

mm [inches]



# Accessories for 18mm Sensors

## Right-angle Mounting Brackets

Mounting bracket, right-angle, fixed insertion stop adjustment, plastic. For use with 18mm sensors. Available with or without fixed insertion stop.

Accessories for 18mm Sensors				
Part Number	Price	Description	Drawing Link	Weight lb [g]
<a href="#">OPT2104</a>	\$10.50	Wenglor mounting bracket, right-angle, fixed insertion stop adjustment, plastic. For use with 18mm sensors.	<a href="#">PDF</a>	0.06 [27.2]
<a href="#">OPT2105</a>	\$10.50	Wenglor mounting bracket, right-angle, plastic. For use with 18mm sensors.	<a href="#">PDF</a>	0.06 [27.2]



[OPT2104](#), [OPT2105](#)

## Right-angle Swivel Mounting Systems

Mounting bracket, right-angle swivel, 360 degree vertical and horizontal adjustment, 12mm rod mount. For use with 18mm sensors. Available in all 304 stainless steel or with an aluminum head and a stainless steel mounting plate.

Accessories for 18mm Sensors						
Part Number	Price	Description	Mounting Head	Mounting Plate	Drawing Link	Weight lb [g]
<a href="#">OPT2116</a>	\$11.50	Wenglor mounting bracket, right-angle swivel, 360 degree vertical and horizontal adjustment, aluminum, 12mm rod mount. For use with 18mm sensors.	Aluminum	304 Stainless steel	<a href="#">PDF</a>	0.15 [68.0]
<a href="#">OPT2117</a>	\$21.00	Wenglor mounting bracket, right-angle swivel, 360 degree vertical and horizontal adjustment, 304 stainless steel, 12mm rod mount. For use with 18mm sensors.	304 Stainless steel	304 Stainless steel	<a href="#">PDF</a>	0.28 [127.0]



[OPT2116](#), [OPT2117](#)

Note: 304 Stainless steel mounting rods sold separately: [OPT2109](#) (200mm [7.87 in] length), [OPT2110](#) (300mm [11.81 in] length), and [OPT2111](#) (500mm [19.69 in] length).