



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												
PEW2-AP-3F	\$4z7b:	3mm	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	PDF
PEW2-AN-3F	\$6k1z:	[0.12in]		Semi-flush		N.O.	NPN		Diagram 2		[0.56]	PDF
PEW2-AP-4F	\$4z7d:	5mm	5 ± 10%	Non-flush	500 Hz	N.O.	PNP		Diagram 1		15.3	PDF
PEW2-AN-4F	\$.6k1j:	[0.20in]		Non-flush		N.O.	NPN		Diagram 2		[0.54]	PDF
M12 Proximity Sensors												
PMW2-AP-3H	\$4z75:	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]	PDF
PMW2-AP-4H	\$4z76:	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]	PDF
M18 Proximity Sensors												
PKW2-AP-3H	\$4z77:	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]	PDF
PKW2-AP-4H	\$4z78:	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]	PDF
M30 Proximity Sensors												
PTW2-AP-3H	\$4z7e:	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]	PDF
PTW2-AP-4H	\$.4z7f:	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]	PDF

Wiring Diagrams

Diagram 1
PNP Output

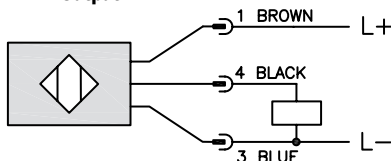
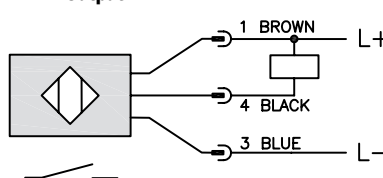
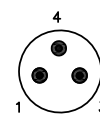


Diagram 2
NPN Output

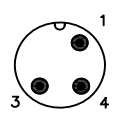


Connectors

M8 connector



M12 connector

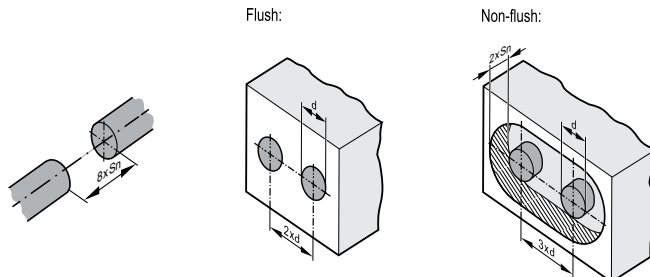


Warning: These products are not safety sensors and are not suitable for use in personal safety applications.

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	See Material Influence Table			
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 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.

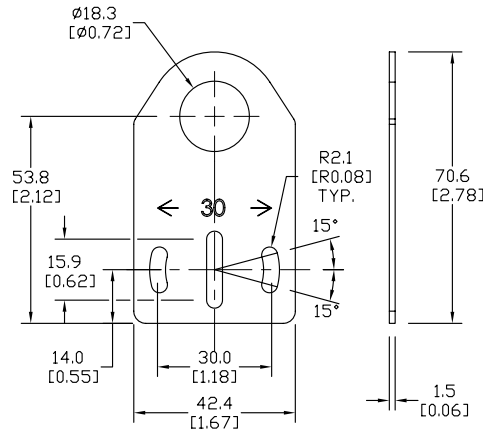
Accessories for 18mm Sensors			
Part Number	Price	Description	Weight lb [g]
ST18A	\$97.:	Micro Detectors mounting bracket, axial, zinc plated steel. For use with 18mm sensors.	0.06 [27.2]
ST18A7W	\$980:	Micro Detectors mounting bracket, axial, 316L stainless steel. For use with 18mm sensors.	0.06 [27.2]



ST18A

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.

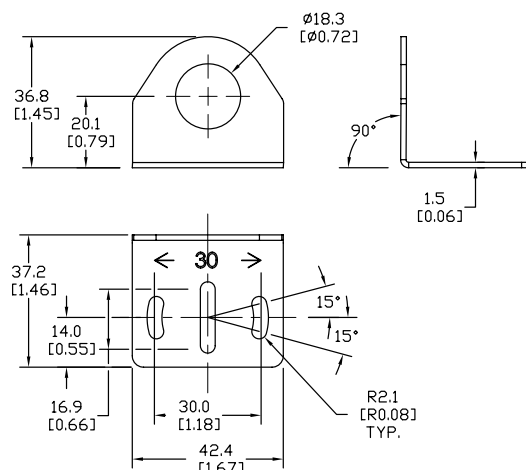
Accessories for 18mm Sensors			
Part Number	Price	Description	Weight lb [g]
ST18C	\$981:	Micro Detectors mounting bracket, right-angle, zinc plated steel. For use with 18mm sensors.	0.06 [27.2]
ST18C7W	\$982:	Micro Detectors mounting bracket, right-angle, 316L stainless steel. For use with 18mm sensors.	0.06 [27.2]



ST18C

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]
OPT2036	\$-1nlk:	Wenglor mounting bracket, right-angle, fine tune vertical and horizontal adjustment, nickel plated steel. For use with 18mm sensors.	PDF	0.02

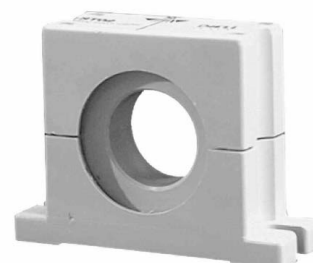


OPT2036

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).

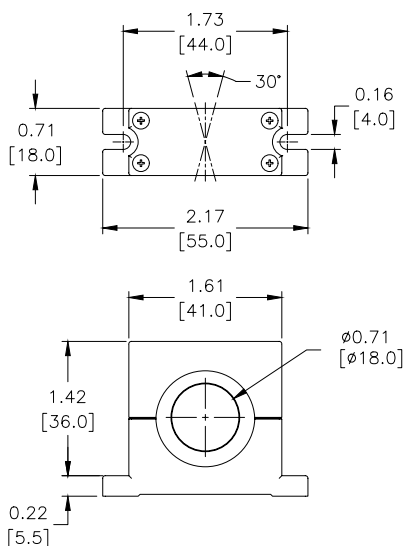
Accessories for 18mm Sensors			
Part Number	Price	Description	Weight [lb]
ST02	\$05h#:	Micro Detectors mounting bracket, ball swivel, plastic. For use with 18mm sensors.	0.06



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]
OPT2104	\$;-1nlt:	Wenglor mounting bracket, right-angle, fixed insertion stop adjustment, plastic. For use with 18mm sensors.	PDF	0.06 [27.2]
OPT2105	\$;-1nlu:	Wenglor mounting bracket, right-angle, plastic. For use with 18mm sensors.	PDF	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]
OPT2116	\$;-1n#:	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	PDF	0.15 [68.0]
OPT2117	\$;-1nll:	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	PDF	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).