



# Inductive Proximity Sensors PAE Series



[PAE-AP-1A](#)



[PAE-AP-2F](#)

## Tubular M8 (8mm) Stainless Steel – DC

### Features

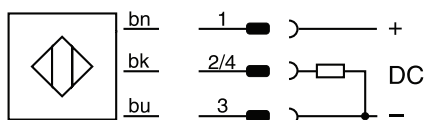
- 304 stainless steel construction
- Axial cable or M8 quick-disconnect models
- Complete overload protection
- IP67 rated
- LED status indicator
- Mounting hardware included
- Lifetime warranty



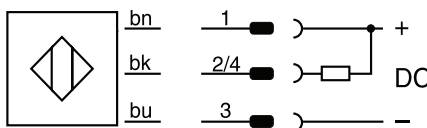
Tubular M8 DC Inductive Proximity Sensors PAE Series Selection Chart									
Part Number	Price	Sensing Distance mm [in]	Mounting	Output State	Logic	Connection	Weight g [oz]	Body Size mm [in]	Drawing Link
<u><a href="#">PAE-AP-1A</a></u>	\$13.00	1.5 [0.05]	Flush	N.O.	PNP	PVC, 3-wire pigtail 2m [6.5 ft], 26AWG	40.2 [1.41]	22 [0.86]	<u><a href="#">PDF</a></u>
<u><a href="#">PAE-AP-1F</a></u>	\$13.00					3-pin M8 quick-disconnect [purchase cable separately]	13 [0.45]	45 [0.77]	<u><a href="#">PDF</a></u>
<u><a href="#">PAE-AN-1F</a></u>	\$13.00				NPN		<u><a href="#">PDF</a></u>		
<u><a href="#">PAE-AP-2A</a></u>	\$13.00	2.5 [0.09]	Non-flush	N.O.	PNP	PVC, 3-wire pigtail 2m [6.5 ft], 26AWG	39.8 [1.40]	22 [0.86]	<u><a href="#">PDF</a></u>
<u><a href="#">PAE-AP-2F</a></u>	\$13.00					3-pin M8 quick-disconnect [purchase cable separately]	12.5 [0.44]	45 [0.77]	<u><a href="#">PDF</a></u>
<u><a href="#">PAE-AN-2F</a></u>	\$13.00				NPN	<u><a href="#">PDF</a></u>			

## Wiring Diagrams

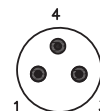
### PNP Cable



### NPN Cable



### M8 Connector





# Inductive Proximity Sensors

## PAE Series Specifications

Tubular M8 DC Inductive Proximity Sensors PAE Series Specifications		
<b>Mounting Type</b>	Flush	Non-Flush
<b>Rated Operating Distance</b>	1.5 mm [0.05 in]	2.5 mm [0.09 in]
<b>Assured Operating Distance</b>	$\leq (0.81 \times S_d)$ mm	
<b>Repeat Accuracy</b>	0.07 mm	0.12 mm
<b>Hysteresis</b>	$\leq 20\% S_d$	
<b>Temperature Drift</b>	$\leq 10\% S_d$	
<b>Material Correction Factors</b>	See the <a href="#">Material Influence Table</a>	
<b>Output Type</b>	PNP or NPN, N.O.	
<b>Operating Voltage</b>	10 to 30 VDC	
<b>Residual Ripple</b>	$\leq 20\% U_B$	
<b>Output Current</b>	$\leq 200\text{mA}$	
<b>Output Voltage Drop</b>	$\leq 2.0\text{ V @ } 200\text{mA}$	
<b>Power Consumption (no-load)</b>	$\leq 10\text{ mA}$	
<b>Residual Current</b>	$\leq 0.1\text{ mA}$	
<b>Switching Frequency</b>	5kHz	4.5 kHz
<b>Short-Circuit Protection</b>	Yes	
<b>Reverse Polarity Protection</b>	Yes	
<b>Operating Temperature</b>	-25 to 70°C [-13 to 158°F]	
<b>Protection Degree (DIN 40050)</b>	IP67	
<b>Indication/Switch Status</b>	LED, Yellow Sensing state ( $0 \leq s \leq S_r$ )	
<b>Mounting</b>	Embeddable	Non-embeddable
<b>Housing Material</b>	304 Stainless steel	
<b>Sensing Face Material</b>	PA66 (polyamide)	PBTP (Crastin) - glass fiber reinforced polybutylene terephthalate
<b>Shock/Vibration</b>	IEC 60947-5-2	
<b>Agency Approvals</b>	cULus File E328811, CE	

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

# 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="#">ST08A</a>	\$2.00	Micro Detectors mounting bracket, axial, zinc plated steel. For use with 8mm sensors.	<a href="#">PDF</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="#">ST08C</a>	\$2.00	Micro Detectors mounting bracket, right-angle, zinc plated steel. For use with 8mm sensors.	<a href="#">PDF</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="#">OPT2101</a>	\$8.00	Wenglor mounting bracket, right-angle, plastic. For use with 8mm sensors.	<a href="#">PDF</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="#">OPT2112</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="#">PDF</a>	0.14
<a href="#">OPT2113</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="#">PDF</a>	0.26



[OPT2112 & OPT2113](#)

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