

# DW Series 30mm Triple Sensing Proximity Sensors

## M30 (30mm) Chrome Plated Brass – DC



- Sixteen models available
- 30mm threaded triple distance proximity sensor
- 22mm and 40mm sensing
- Complete overload protection
- IP67 rated
- Two M30 lock nuts included
- Chrome plated brass construction
- LED status indicator
- Lifetime warranty



DW Series 30mm Stainless Steel Triple Distance Inductive Prox Selection Chart									
Part Number	Price	Size	Sensing Range	Mounting	Output State	Logic	Connection	Wiring	Dimensions
<b>Triple Distance Semi-flush</b>									
DW-AD-501-M30	\$61.00	M30	22mm (0.866 in)	Semi-flush	NO	NPN	2m (6.5 ft) axial cable	Diagram 1	Figure 1
DW-AD-503-M30	\$61.00	M30	22mm (0.866 in)	Semi-flush	NO	PNP	2m (6.5 ft) axial cable	Diagram 2	Figure 1
DW-AS-501-M30-002	\$61.00	M30	22mm (0.866 in)	Semi-flush	NO	NPN	M12 quick disconnect	Diagram 3	Figure 3
DW-AS-503-M30-002	\$61.00	M30	22mm (0.866 in)	Semi-flush	NO	PNP	M12 quick disconnect	Diagram 4	Figure 3
DW-AD-502-M30	\$61.00	M30	22mm (0.866 in)	Semi-flush	NC	NPN	2m (6.5 ft) axial cable	Diagram 1	Figure 1
DW-AD-504-M30	\$61.00	M30	22mm (0.866 in)	Semi-flush	NC	PNP	2m (6.5 ft) axial cable	Diagram 2	Figure 1
DW-AS-502-M30-002	\$61.00	M30	22mm (0.866 in)	Semi-flush	NC	NPN	M12 quick disconnect	Diagram 3	Figure 3
DW-AS-504-M30-002	\$61.00	M30	22mm (0.866 in)	Semi-flush	NC	PNP	M12 quick disconnect	Diagram 4	Figure 3
<b>Triple Distance Non-flush</b>									
DW-AD-511-M30	\$66.00	M30	40mm (1.574 in)	Non-flush	NO	NPN	2m (6.5 ft) axial cable	Diagram 1	Figure 2
DW-AD-513-M30	\$66.00	M30	40mm (1.574 in)	Non-flush	NO	PNP	2m (6.5 ft) axial cable	Diagram 2	Figure 2
DW-AS-511-M30-002	\$66.00	M30	40mm (1.574 in)	Non-flush	NO	NPN	M12 quick disconnect	Diagram 3	Figure 4
DW-AS-513-M30-002	\$66.00	M30	40mm (1.574 in)	Non-flush	NO	PNP	M12 quick disconnect	Diagram 4	Figure 4
DW-AD-512-M30	\$66.00	M30	40mm (1.574 in)	Non-flush	NC	NPN	2m (6.5 ft) axial cable	Diagram 1	Figure 2
DW-AD-514-M30	\$66.00	M30	40mm (1.574 in)	Non-flush	NC	PNP	2m (6.5 ft) axial cable	Diagram 2	Figure 2
DW-AS-512-M30-002	\$66.00	M30	40mm (1.574 in)	Non-flush	NC	NPN	M12 quick disconnect	Diagram 3	Figure 4
DW-AS-514-M30-002	\$66.00	M30	40mm (1.574 in)	Non-flush	NC	PNP	M12 quick disconnect	Diagram 4	Figure 4

## Wiring diagrams

Diagram 1

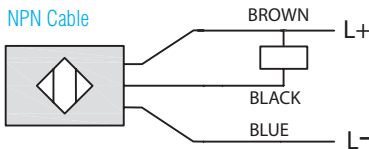


Diagram 2

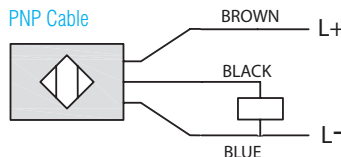


Diagram 3

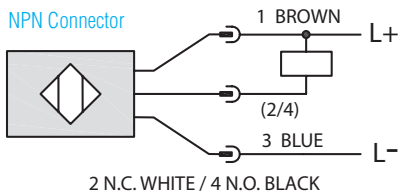
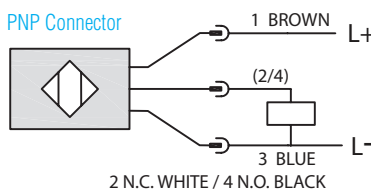
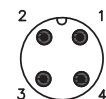


Diagram 4



## Connectors

M12 connector



# DW Series 30mm Triple Sensing Proximity Sensors

DW Series Specifications		
	<i>DW-Ax-50x-M30</i>	<i>DW-Ax-51x-M30</i>
<b>Mounting Type</b>	Semi-flush	Non-flush
<b>Nominal Sensing Distance</b>	22mm	40mm
<b>Operating Distance</b>	NA	
<b>Material Correction Factors</b>	See the <a href="#">Material influence table</a>	
<b>Output Type</b>	NPN or PNP, NO or NC	
<b>Operating Voltage</b>	10 to 30 VDC	
<b>No-load Supply Current</b>	≤ 10mA	
<b>Operating (Load) Current</b>	≤ 200mA	
<b>Off-state (Leakage) Current</b>	≤ 0.1 mA	
<b>Voltage Drop</b>	≤ 2 V	
<b>Switching Frequency</b>	≤ 200 Hz	≤ 100Hz
<b>Differential Travel (% of Nominal Distance)</b>	≤ 10%	
<b>Repeat Accuracy</b>	1.1 mm	2.0 mm
<b>Ripple</b>	≤ 20%	
<b>Time Delay Before Availability (tv)</b>	≤ 200ms	
<b>Reverse Polarity Protection</b>	Yes	
<b>Short-Circuit 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>	Yellow LED	
<b>Housing Material</b>	Chrome plated brass	
<b>Sensing Face Material</b>	PBT (Polybutylene terephthalate)	
<b>Shock/Vibration</b>	IEC 60947-5-2/7.4	
<b>Tightening Torque</b>	--	
<b>Weight</b>	215g (7.58 oz), 155g (5.47 oz)	212g (7.48 oz), 143g (5.04 oz)
<b>Connection</b>	2m cable, M12 connection	
<b>IO-Link</b>	NA	
<b>Agency Approvals</b>	CE, cULus E239373	

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

# DW Series 30mm Triple Sensing Proximity Sensors

## Dimensions

mm [inches]

Figure 1

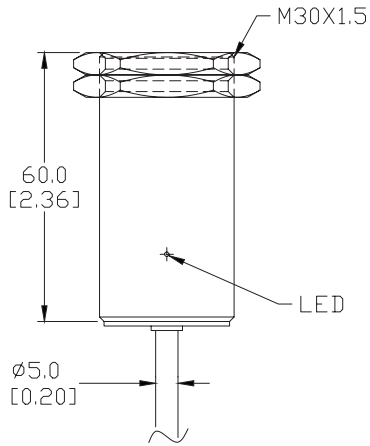


Figure 2

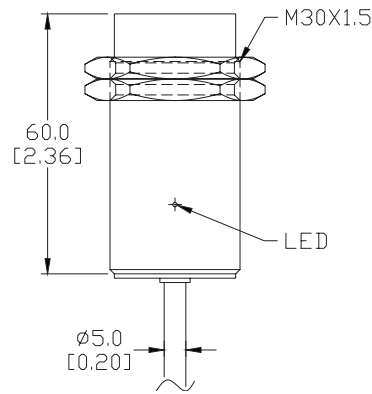


Figure 3

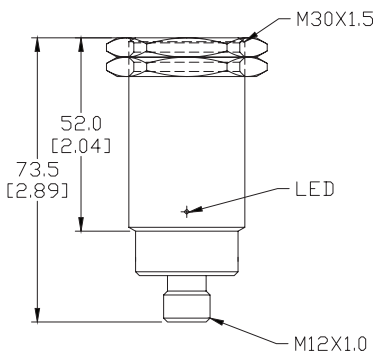
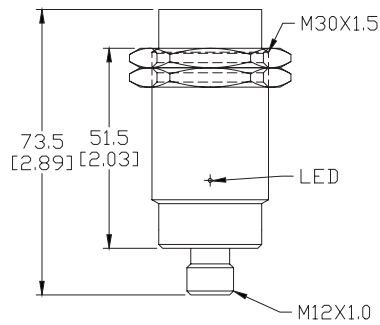


Figure 4



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# Accessories for 30mm Sensors

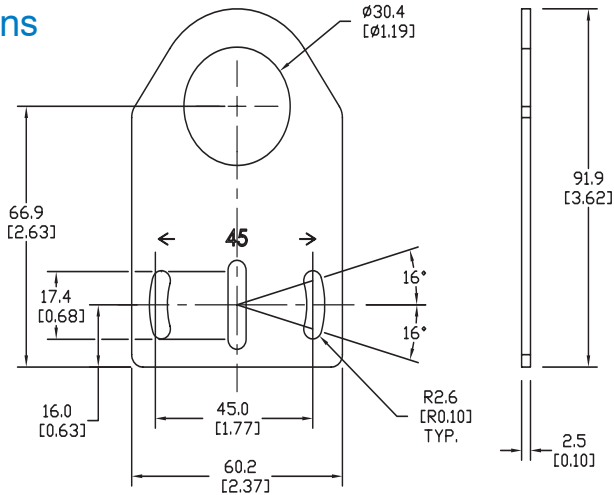
## Axial Mounting Bracket

Mounting bracket, axial, zinc-plated steel. For use with 30mm sensors. Has two mounting holes (use 5mm screws) and allows the rotation of an optical axis for right-beam-angle-adaptor sensors. Hexagonal nuts not included.

Accessories for 30mm Sensors			
Part Number	Price	Description	Weight lb (g)
ST30A	\$2.25	Mounting bracket, axial, zinc-plated steel. For use with 30mm sensors. 1/pk.	0.18 (81.7 g)

### Dimensions

mm [inches]



ST30A

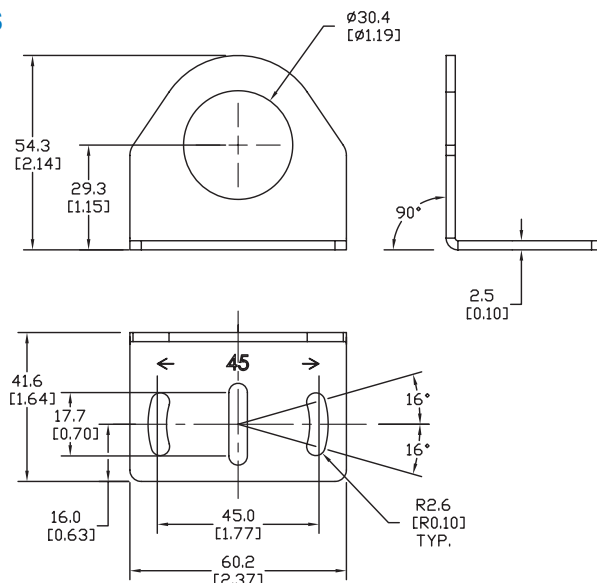
## Right-angle Mounting Bracket

Mounting bracket, right-angle, zinc-plated steel. For use with 30mm sensors. Has two mounting holes (use 5mm screws) and allows the rotation of an optical axis for axial sensors. Hexagonal nuts not included.

Accessories for 30mm Sensors			
Part Number	Price	Description	Weight lb (g)
ST30C	\$2.25	Mounting bracket, right angle, zinc-plated steel. For use with 30mm sensors. 1/pk.	0.18 (81.7 g)

### Dimensions

mm [inches]



ST30C

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# Accessories for 30mm Sensors

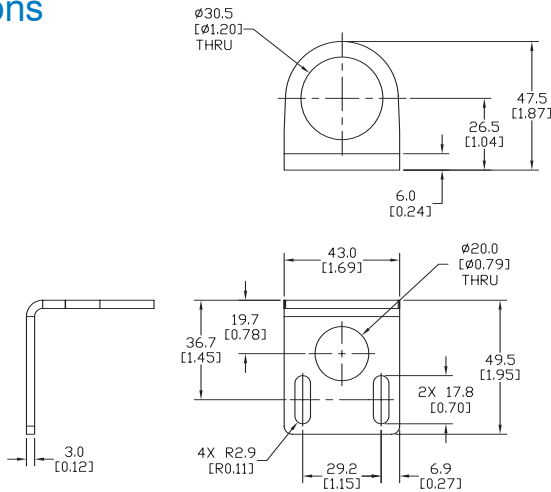
## Right-angle Mounting Bracket

Mounting bracket, right-angle, 304 stainless steel. For use with 30mm sensors.

Accessories for FW Series Sensors			
Part Number	Price	Description	Weight lb (g)
<b>ST30C6W</b>	\$3.50	Mounting bracket, right angle, 304 stainless steel. For use with 30mm sensors.	0.15 (68.0)

### Dimensions

mm [inches]



**ST30C6W**

## Right-angle Swivel Mounting Systems

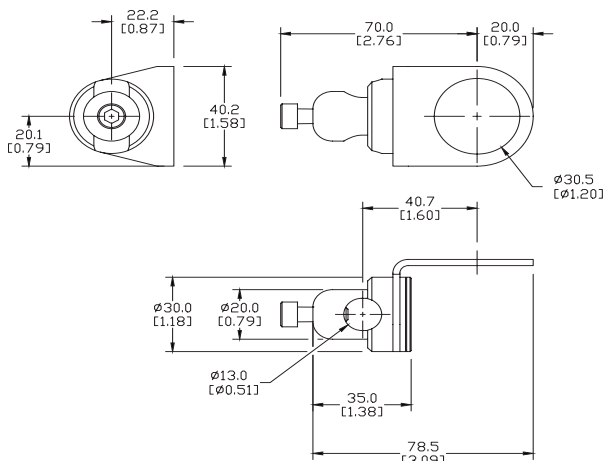
Mounting bracket, right-angle swivel, 360 degree vertical and horizontal adjustment, 12mm rod mount. For use with 30mm sensors. Available in all 304 stainless steel or with an aluminum head with a 304 stainless steel mounting plate.

Accessories for 30mm Sensors					
Part Number	Price	Description	Mounting Head	Mounting Plate	Weight lb (g)
<b>OPT2118</b>	\$9.50	Mounting bracket, right-angle swivel, 360 vertical and horizontal adjustment, aluminum, 12mm rod mount. For use with 30mm sensors.	Aluminum	304 Stainless steel	0.18
<b>OPT2119</b>	\$17.00	Mounting bracket, right-angle swivel, 360 vertical and horizontal adjustment, 304 stainless steel, 12mm rod mount. For use with 30mm sensors.	304 Stainless Steel	304 Stainless steel	0.30

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).

### Dimensions

mm [inches]



**OPT2118, OPT2119**

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# Mounting Rods

## Mounting Rods

304 Stainless steel rods for mounting swivel brackets OPT2112 - OPT2127. Available in three lengths: 200mm, 300mm, and 500mm. 12mm diameter.

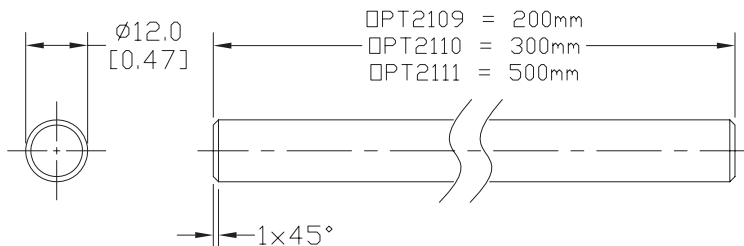
Mounting Rods for OPT2112-2127 Swivel Mounting Brackets			
Part Number	Price	Description	Weight lb (g)
<b>OPT2109</b>	\$10.50	Mounting rod, 12mm diameter, 200mm length, 304 stainless steel.	0.41 (185.97)
<b>OPT2110</b>	\$13.00	Mounting rod, 12mm diameter, 300mm length, 304 stainless steel.	0.60 (272.16)
<b>OPT2111</b>	\$17.00	Mounting rod, 12mm diameter, 500mm length, 304 stainless steel.	0.98 (444.52)



**OPT2109, OPT2110, OPT2111**

## Dimensions

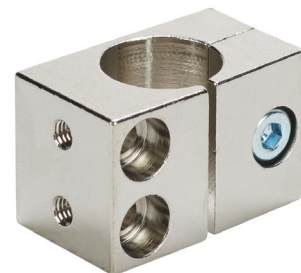
mm [inches]



## Right-angle Mounting Bracket

Mounting bracket, right-angle, nickel-plated brass. For use with 12mm mounting rods OPT2109, OPT2110 & OPT2111.

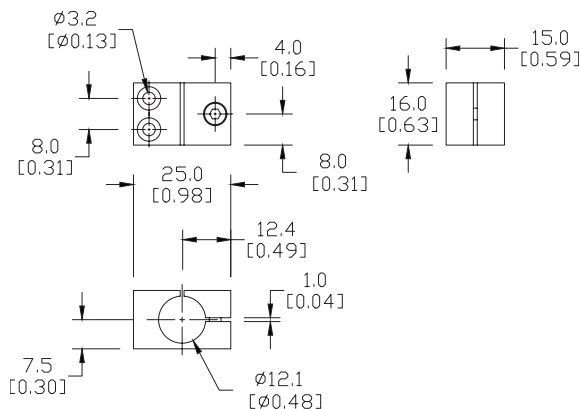
Accessories for 12mm Sensors			
Part Number	Price	Description	Weight lb (g)
<b>OPT2108</b>	\$13.00	Mounting bracket, right-angle, nickel-plated brass. For use with 12mm mounting rods OPT2109, OPT2110 & OPT2111.	0.07 (31.8)



**OPT2108**

## Dimensions

mm [inches]



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