




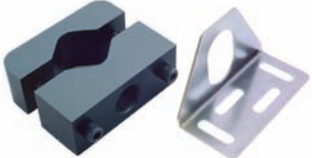


# Sensors

## Accessories

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**Selection Guide**

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Cords - Acc

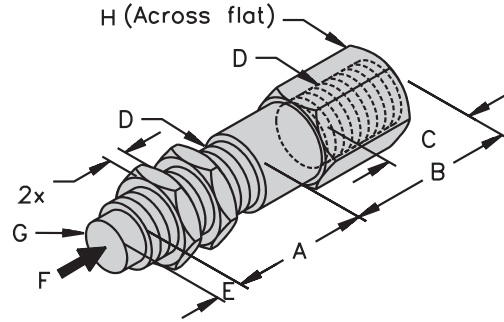
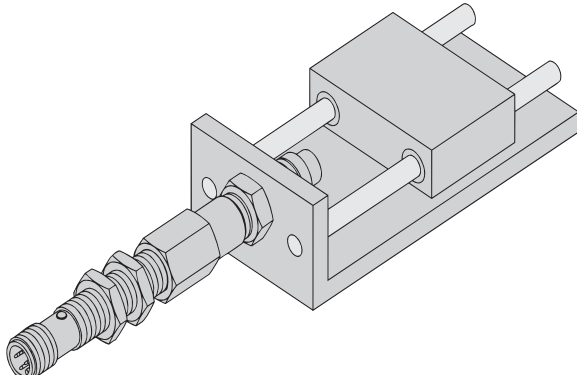
# Sensors

## Accessories

### Die Protector

Part Number	ID Number	Dimensions							
		A	B	C	D	E	F	G	H
DP-08-25-08	A2521	0.984 [25.0]	1.252 [31.8]	0.654 [16.6]	M8x1	0.123 [3.2]	2000 N 450 lbft	0.230 [5.8]	0.437 [11.1]
DP-12-25-12	A2519	0.984 [25.0]	1.252 [31.8]	0.654 [16.6]	M12x1	0.170 [4.3]	20500 N 4608 lbft	0.370 [9.4]	0.618 [15.7]
DP-12-50-12	A9169	1.969 [50.0]	1.252 [31.8]	0.654 [16.6]	M12x1	0.165 [4.2]	20500 N 4608 lbft	0.370 [9.4]	0.618 [15.7]
DP-18-25-18	A2520	0.984 [25.0]	1.252 [31.8]	0.658 [16.7]	M18x1	.170 [4.3]	20500 N 4608 lbft	0.559 [14.2]	.870 [22.1]

Inches [mm]



### Recommended Sensors for Die Protector

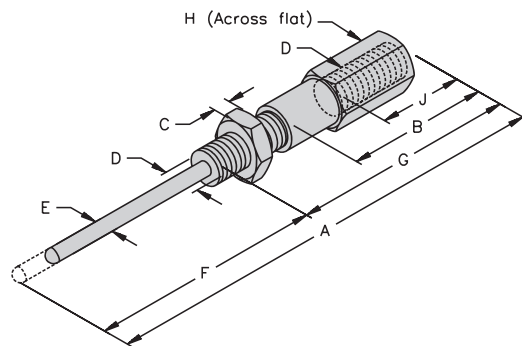
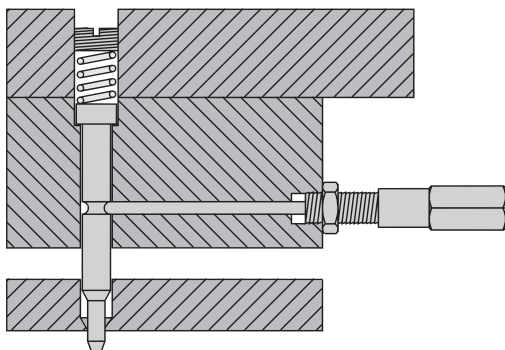
Die Protector	DP-08-25-08	DP-12-25-12	DP-18-25-18
Sensors	Bi 1.5U-EG08-AP6X Bi 2-EG08-AP6X	Bi 2-G12-AP6X-H1141 Bi 2U-EM12-AP4X	Bi 5-G18-AP6X (When not fully engaged)

Note: Works with all shielded NPN, PNP, quick disconnect or potted-in cable versions of the listed part numbers.

**Whisker Probe**

Part Number	ID Number	Dimensions									Probe Travel
		A	B	C	D	E	F	G	H	J	
WP-08-50-03	A2527	3.921 [99.6]	1.252 [31.8]	0.150 [3.8]	M8x1	.126 [3.2]	2.000 [50.8]	1.949 [49.5]	.437 [11.1]	0.858 [21.8]	For activation: .071[1.80] to .075[1.91] Maximum: .080[2.03]
WP-12-50-03	A2528	3.921 [99.6]	1.252 [31.8]	0.150 [3.8]	M12x1	.126 [3.2]	2.000 [50.8]	1.949 [49.5]	.437 [11.1]	0.858 [21.8]	For activation: .056(1.42) to .080(2.03) Maximum: .085[2.15]
WP-12-50-06	A2529	3.921 [99.6]	1.252 [31.8]	0.150 [3.8]	M12x1	.252 [6.4]	2.000 [50.8]	1.949 [49.5]	.622 [15.8]	0.709 [18.0]	
WP-12-100-06	A9195	5.91 [150]	1.252 [31.8]	0.150 [3.8]	M12x1	.252 [6.4]	4.00 [102]	1.949 [49.5]	.622 [15.8]	0.709 [18.0]	

Inches [mm]



**Recommended Sensors for Whisker Probe**

Whisker Probe	WP-08-50-03	WP-12-50-03	WP-12-50-06
Sensors	Bi 1-G08-AN6 Bi 1.5-G08-AP6X Bi 1.5U-EG08-AP6X Bi 2-EG08-AP6X	Bi 2-G12-AP6X-H1141 Bi 2U-EM12-AP4X Bi 3U-M12-AP6X-H1141	Bi 2-G12-AP6X-H1141 Bi 2U-EM12-AP4X Bi 3U-M12-AP6X-H1141

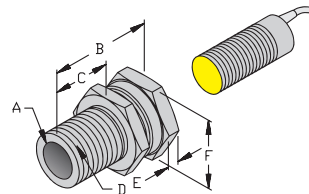
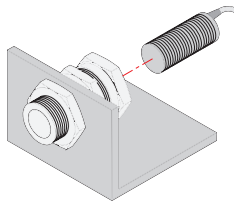
Note: Works with all shielded NPN, PNP, quick disconnect or potted-in cable versions of the listed part numbers.

Cords - Acc

Quick Mount

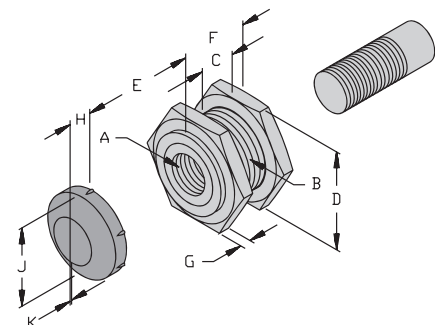
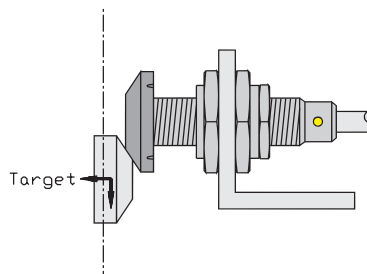
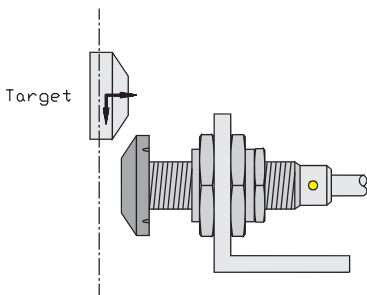
Part Number	ID Number	Dimensions					
		A	B	C	D	E	F
QM-08 QM-08L	A2511	0.32 [8.18]	1.28 [32.4]	0.69 [17.5]	M12x1	0.15 [3.85]	0.67 [16.9]
	A2512		1.90 [48.0]	1.34 [34.0]			
QM-12 QM-12L QM-12L-T	A2513	0.48 [12.1]	1.34 [33.7]	0.77 [19.5]	M16x1	0.16 [4.01]	0.86 [21.8]
	A2514		1.76 [44.8]	1.18 [30.0]			
	A2542		1.76 [44.8]	1.18 [30.0]			
QM-18 QM-18L QM-18L-T	A2515	0.71 [18.1]	1.52 [38.5]	0.79 [20.0]	M24x1.5	0.19 [4.95]	1.18 [30.0]
	A2516		2.28 [58.0]	1.57 [40.0]			
	A2543		2.28 [58.0]	1.57 [40.0]			
QM-30 QM-30L QM-30L-T	A2517	1.19 [30.1]	1.50 [35.0]	0.79 [20.0]	M36x1.5	0.24 [6.13]	1.61 [41.0]
	A2518		2.28 [58.0]	1.57 [40.0]			
	A2544		2.28 [58.0]	1.57 [40.0]			

Inches [mm]



Cushion Mount

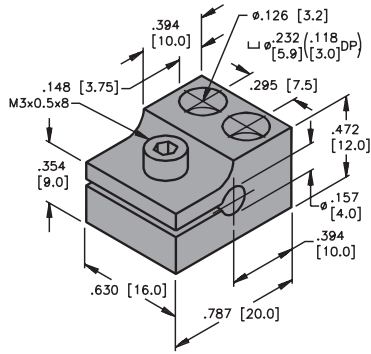
Part Number	ID Number	Dimensions									
		A (INSIDE THREAD)	B (OUTSIDE THREAD)	C (MAX.)	D (Across FLATS)	E (MAXIMUM ALLOWABLE OVERTRAVEL)	F	G	H	J	K
CM-08 CM-08N	A2503 A2504	M8x1	M16x1.5	.433 [11.0]	.875 [22.2]	.395 [10.0]	.750 [19.1]	.155 [3.94]	.200 [5.08]	.600 [15.2]	.0004 [.010]
CM-12 CM-12N	A2505 A2506	M12x1	M22x1.5	.433 [11.0]	1.19 [30.2]	.395 [10.0]	.750 [19.1]	.155 [3.94]	.245 [6.22]	.860 [21.8]	.010 [.250]
CM-18 CM-18N	A2507 A2508	M18x1	M30x1.5	.598 [15.2]	1.38 [35.1]	.395 [10.0]	1.00 [25.4]	0.02 [5.08]	.315 [8.00]	1.18 [30.0]	.001 [.035]
CM-30 CM-30N	A2509 A2510	M30x1.5	M47x1.5	.972 [24.7]	2.05 [52.1]	.591 [15.0]	1.37 [34.9]	0.20 [5.08]	.315 [8.00]	1.75 [44.5]	.035 [.890]



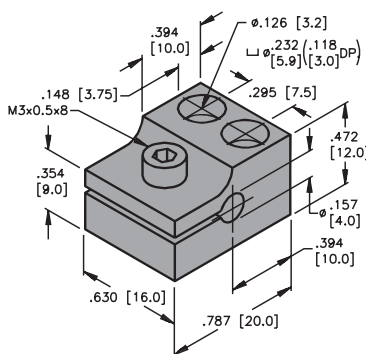
**Mounting Blocks**

Part Number	ID Number	Barrel Diameter
MBS-40	M6947700	4.0 mm
MBS-65	M6947800	6.5 mm
MBS-80	S6947900	8.0 mm

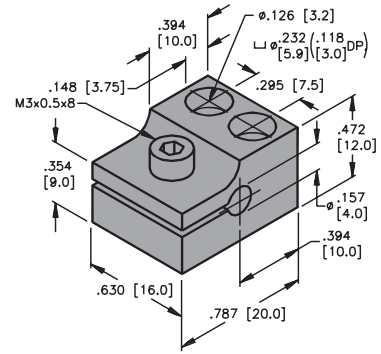
Material: Aluminum  
Finish: Black Anodized



MBS-40



MBS-65



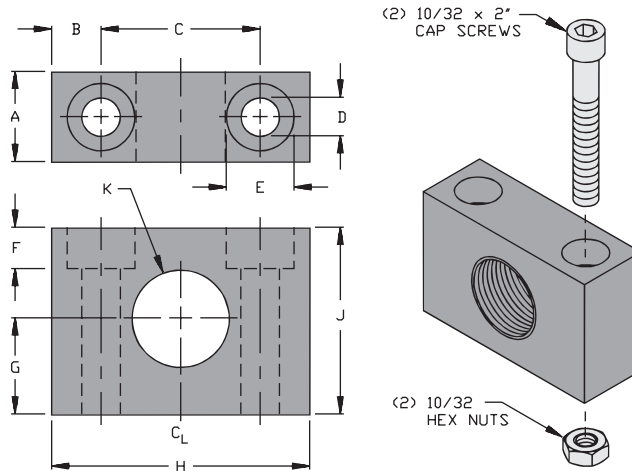
MBS-80

For use with H Barrel *picoprox*<sup>®</sup> sensors.

Inches [mm]

Part Number	ID Number	Barrel Diameter	Dimensions									
			A	B	C	D	E	F	G	H	J	K
MB-S12	A3150	12 mm	0.44 [11.2]	0.24 [6.2]	0.77 [19.6]	0.20 [5.0]	0.34 [8.7]	0.20 [5.0]	0.45 [11.4]	1.26 [32.0]	0.91 [23.0]	M12x1
MB-S18	A3155	18mm	0.63 [16.0]	0.30 [7.6]	1.20 [30.5]	0.22 [5.5]	0.38 [9.6]	0.25 [6.4]	0.57 [14.5]	1.80 [45.8]	1.15 [29.3]	M18x1

Material: Delrin



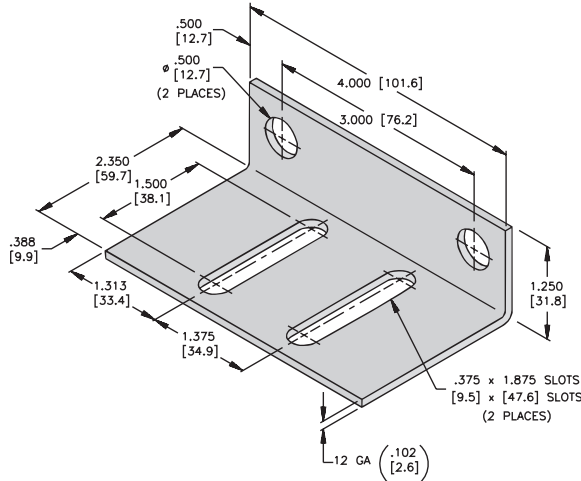
For use with 12 and 18 mm threaded barrel sensors. Mounting hardware included.

Cords - Acc

Mounting Brackets

Part Number	ID Number
MB-Q130	A3145

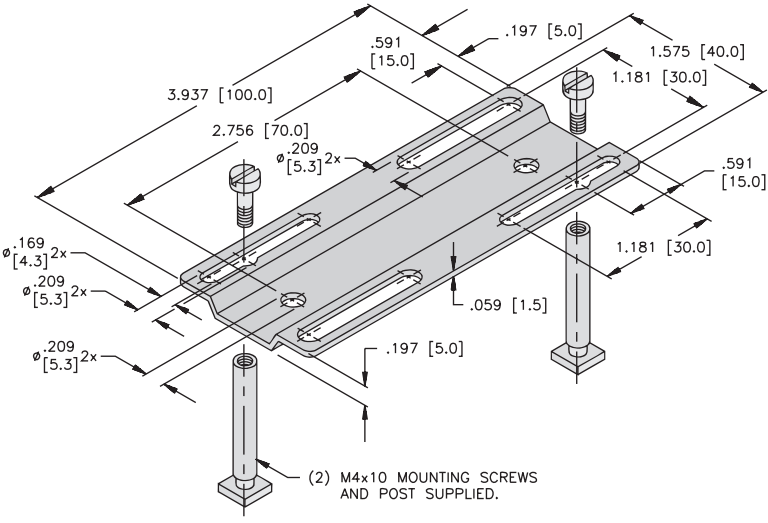
Material: Stainless Steel



For use with Bottle and Can sensors.

Part Number	ID Number
LSAP-2	M6942900

Material: Stainless Steel

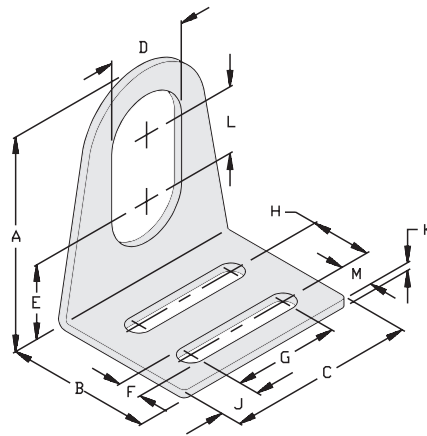


For use with Limit Switch Style *combiprox*, *C\*prox* and *multiprox* sensors.

## Mounting Brackets

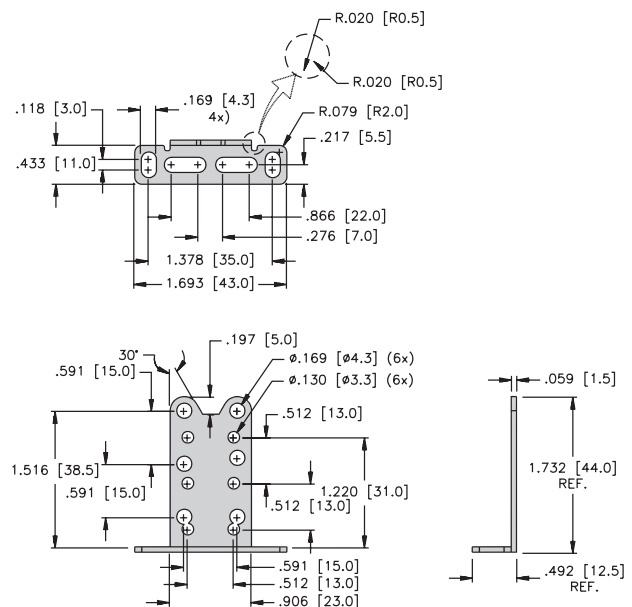
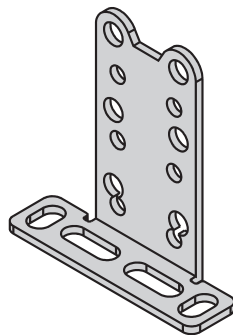
Part Number	ID Number	Dimensions											
		A	B	C	D	E	F	G	H	J	K	L	M
MBSS-08	A2522	1.00 [25.4]	1.13 [28.7]	1.25 [31.8]	.344 [8.74]	.312 [7.92]	.218 [5.54]	.625 [15.9]	.468 [11.9]	.312 [7.92]	.070 [1.78]	.375 [9.53]	.281 [7.14]
MBSS-12	A2523	1.50 [38.1]	1.37 [34.8]	1.50 [38.1]	.500 [12.7]	.550 [13.9]	.218 [5.54]	.750 [19.1]	.563 [14.3]	.375 [9.53]	.070 [1.78]	.500 [12.7]	.312 [7.92]
MBSS-18	A2524	2.00 [50.8]	1.37 [34.8]	1.75 [44.5]	.750 [19.1]	.218 [5.54]	.218 [5.54]	1.00 [25.4]	.563 [14.3]	.375 [9.53]	.070 [1.78]	.625 [15.9]	.312 [7.92]
MBSS-30	A2525	2.50 [63.5]	1.75 [44.5]	2.25 [57.2]	1.18 [30.5]	.907 [23.0]	.218 [5.54]	1.37 [34.8]	.812 [20.6]	.440 [11.2]	.085 [2.16]	.750 [19.1]	.406 [10.3]
MBSS-47	A2526	3.50 [88.9]	2.00 [50.8]	2.50 [63.5]	1.87 [47.5]	1.50 [38.1]	.218 [5.54]	1.50 [38.1]	1.00 [25.4]	.500 [12.7]	.120 [3.05]	.750 [19.1]	.500 [12.7]

Inches [mm]  
Material: 304 Stainless Steel



Part Number	ID Number
MB-Q08/Q10	A3563

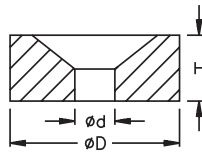
Inches [mm]  
Material: Stainless Steel



Cords - Acc

Actuation Magnets

Actuation Magnet Part Numbers	Diameter D (mm)	Height H	Drilling for mounting d	Sensing Range M12	Sensing Range EG08	Material
DMR15-6-3	15	6	3	36	32	Barium Ferrite (Oxyd 300)
DMR20-10-4	20	10	4	59	50	
DMR31-15-5	31	15	5	90	78	



Mounting Brackets

Part Number	ID Number
MB-Q14/20	A3147

Material: Stainless Steel

Technical drawing of the MB-Q14/20 mounting bracket. The drawing includes a top view and a side view. Dimensions are provided in inches and millimeters in brackets. Key dimensions include:
 

- Top view: .611 [15.5] (height of top flange), .209 [5.3] (height of main body), 1.470 [37.3] (width between mounting holes), 1.970 [50.0] (width between side holes), 2.344 [59.5] (total width).
- Side view: 1.497 [38.0] (total height), 1.103 [28.0] (height of top flange), .788 [20.0] (height of main body), 1.103 [28.0] (height of mounting holes), 2.719 [69.1] (total height including mounting holes), .788 [20.0] (height of bottom flange).
- Bottom view: .059 [1.5] (thickness of bottom flange), 90.000 (corner radius).

Inches [mm]

## Mounting Brackets

Part Number	ID Number
MB-Q50/CK40	A3148

Material: Stainless Steel

10-32x1.5 SCREW 2x

10-32x0.5 SCREW 2x

Dimensions: .874 [22.2], .362 [9.2], .787 [20.0], 1.181 [30.0], 1.189 [30.2], 2.252 [57.2], 1.575 [40.0], 1.575 [40.0], 2.764 [70.2], .246 [6.25]

Inches [mm]

Part Number	ID Number
MB-Q80	A3144

Material: Stainless Steel

#10 NUT 4x

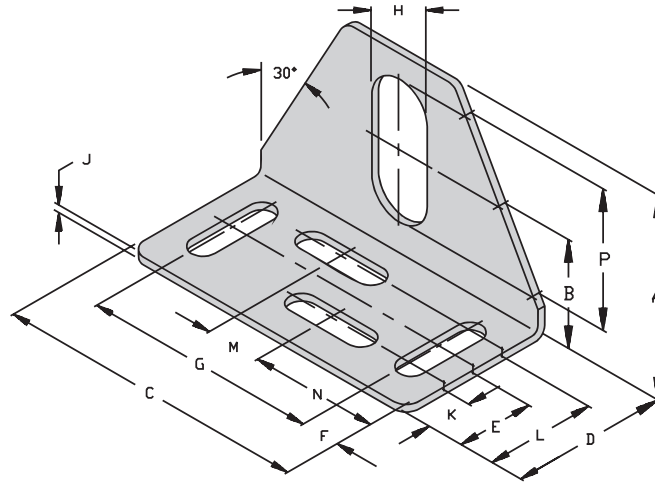
Dimensions: 3.370 [85.6] REF, 3.150 [80.0] TYP, 2.559 [65.0] TYP, .350 [8.9] REF

Cords - Acc

Mounting Brackets

Part No.	ID No.	Barrel Dia.	Dimensions														SLOT
			A	B	C	D	E	F	G	H	J	K	L	M	N	P	
MB-8	A3130-1	8 mm	1.26 [32.0]	0.66 [16.7]	2.00 [50.8]	1.00 [25.4]	0.45 [11.5]	0.30 [7.5]	1.41 [35.8]	0.33 [8.4]	0.06 [1.5]	0.24 [6.0]	0.67 [17.0]	0.35 [8.8]	0.83 [21.0]	.84 [21.4]	0.16 x 0.59 [4.0 x 15.0]
MB-12	A3130	12 mm	1.63 [41.5]	0.87 [22.15]	2.50 [63.5]	1.25 [31.8]	0.61 [15.5]	0.31 [7.9]	1.88 [47.8]	0.50 [12.7]	0.06 [1.5]	0.35 [9.0]	0.87 [22.0]	0.45 [11.5]	1.02 [26.0]	1.13 [28.7]	0.22 x 0.73 [5.6 x 18.6]
MB-18	A3135	18 mm	1.63 [41.5]	0.79 [20.0]	2.50 [63.5]	1.25 [31.8]	0.61 [15.5]	0.31 [7.9]	1.88 [47.8]	0.75 [19.1]	0.06 [1.5]	0.35 [9.0]	0.87 [22.0]	0.45 [11.5]	1.04 [26.3]	1.15 [29.1]	0.22 x 0.75 [5.6 x 19.0]
MB-30	A3140	30 mm	2.62 [66.5]	1.32 [33.5]	4.25 [108.0]	1.75 [44.5]	0.88 [22.4]	0.37 [9.5]	3.50 [88.9]	1.19 [30.2]	0.07 [1.8]	0.63 [16.0]	1.14 [29.0]	1.18 [30.0]	1.54 [39.0]	2.06 [52.2]	0.28 x 1.25 [7.1 x 31.8]

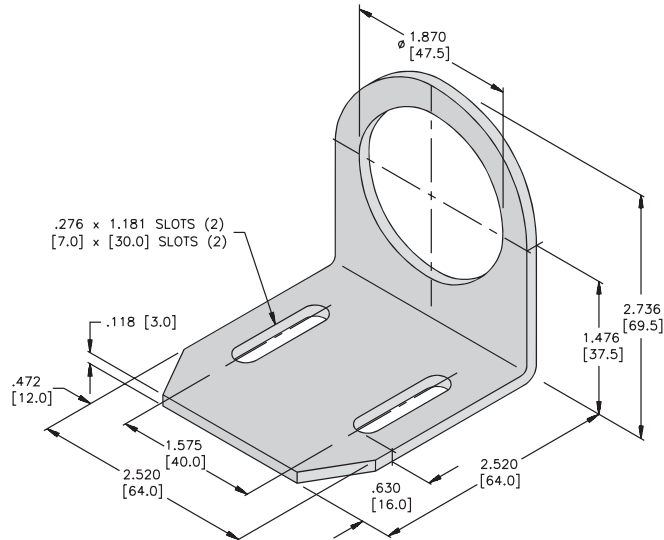
MB-8, MB-18 Material: 16 Gage Cold Roll Steel  
 MB-12, MB-30 Material: 14 Gage Cold Roll Steel  
 Finish: Galvanized



Inches [mm]

Part Number	ID Number
MB-47	M6945200

Material: Cold Roll Steel  
 Finish: Galvanized

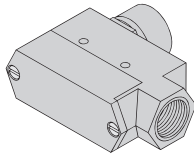


## Mounting Brackets

Part Number	ID Number
TBZE-L	A5150
TBZE-R	A5151

Material:  
Galvanized Plated Steel

Replaces:



**TBZE-L**

**TBZE-R**

For use with **Q08** rectangular housing and 18 mm barrel sensors.

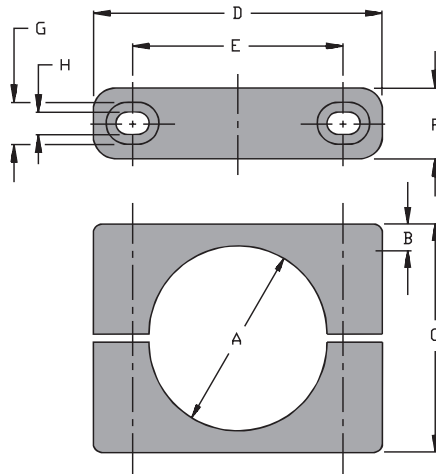
Inches [mm]

Cords - Acc

Mounting Clamps

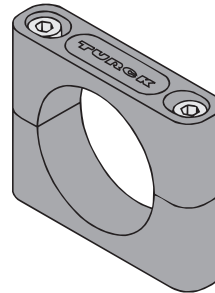
Part Number	ID Number	Barrel Diameter	Dimensions							
			A	B	C	D	E	F	G	H
BS-11	A3075	11 mm	0.43 [11.0]	0.20 [5.0]	0.79 [20.0]	1.26 [32.0]	0.79 [20.0]	0.47 [12.0]	0.32 [8.2]	0.17 [4.3]
BS-20	M6946400	20 mm	0.79 [20.0]	0.24 [6.0]	1.18 [30.0]	1.81 [46.0]	1.22 [31.0]	0.59 [15.0]	0.37 [9.5]	0.21 [5.3]
BS-40	M6946600	40 mm	1.57 [40.0]	0.24 [6.0]	1.97 [50.0]	2.56 [65.0]	1.87 [47.5]	0.63 [16.0]	0.37 [9.5]	0.21 [5.3]

Material:  
Bracket - PBT  
Screws - Galvanized Zinc  
Inches [mm]



SCREWS INCLUDED:

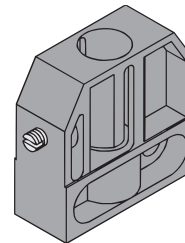
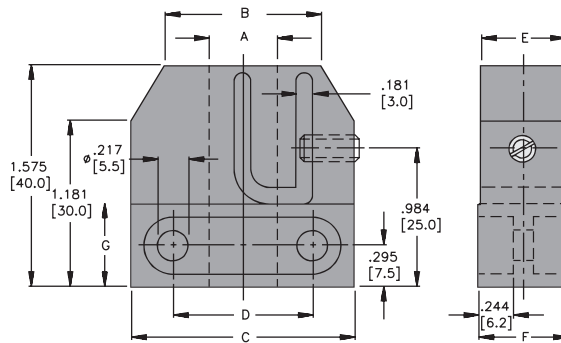
- BS-11: (2) M4x22 -SLOTTED HEAD
- BS-20: (2) M5x30 -CAP SCREWS
- BS-40: (2) M5x50 -CAP SCREWS



For use with 11, 20 and 40 mm smooth plastic barrel sensors.

Part Number	ID Number	Barrel Diameter	Dimensions						
			A	B	C	D	E	F	G
BS-12	M6947000	12 mm	0.48 [12.2]	1.10 [28.0]	1.57 [40.0]	0.98 [25.0]	0.59 [15.0]	0.63 [16.0]	0.59 [15.0]
BS-18	M6947100	18 mm	0.72 [18.2]	1.30 [33.0]	1.77 [45.0]	1.18 [30.0]	0.83 [21.0]	0.87 [22.0]	0.59 [15.0]

Material: PA 66-GF  
Inches [mm]

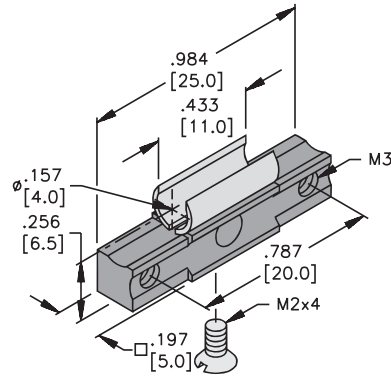


For use with 12 and 18 mm threaded barrel sensors.

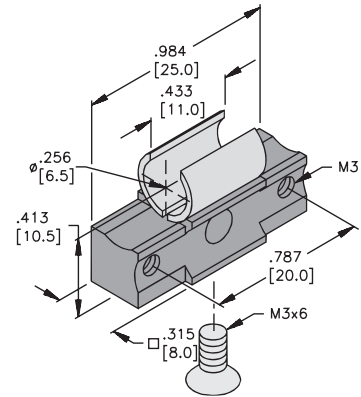
Mounting Clamps

Part Number	ID Number	Barrel Diameter
BS-540	M6947500	4.0 mm
BS-865	S6947600	6.5 mm

Block Material: Aluminum  
Sleeve Material: Steel  
Inches [mm]



BS-540

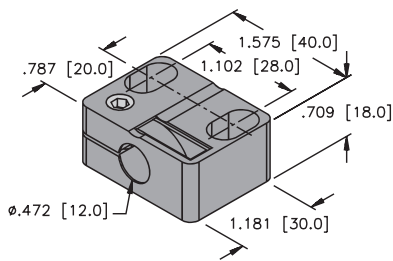


BS-865

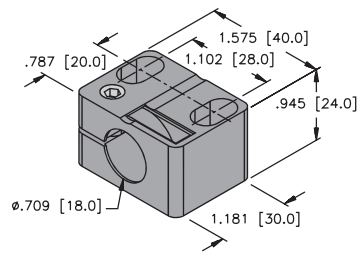
For use with H Barrel *picoprox*<sup>®</sup> sensors.

Part Number	ID Number	Barrel Diameter
BST-12N	M6947213	12 mm
BST-18B	M6947214	18 mm
BST-30B	M6947216	30 mm

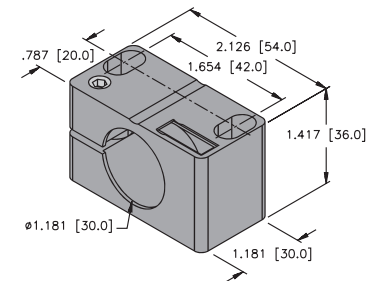
Material: PA 66-6F



BST-12N



BST-18B



BST-30B

# Sensors

## Accessories

Part Number	ID Number	A	B	C	D
TSG-12	A2500	1.75 [44.5]	1.25 [31.8]	12 mm (threaded or non-threaded)	0.37-0.81 [9.40-20.6]
TSG-18	A2501	1.90 [48.3]	1.48 [37.5]	18 mm (threaded or non-threaded)	0.63-1.12 [16.0-28.4]
TSG-30	A2502	3.45 [87.6]	2.00 [50.8]	30 mm (threaded or non-threaded)	1.00-1.75 [25.4-44.5]

Inches [mm]

## Protective Housing "Wet Suit"

Part Number	ID Number
SG40/2	M6949700

For extreme ambient conditions or long term exposure to elevated temperatures up to 170°C (338°F). Especially resistant to UV-radiation and ozone.  
IP 68, NEMA 13

Housing Material: ULTEM 1000  
Cover Plate Material: PBT-GF  
Cable Gland Material: PVDF  
Seal Material: Viton

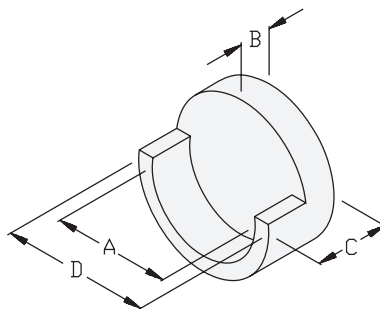
Inches [mm]

Recommended cable styles: 16-18 AWG  
For use with Limit Switch Style *combiprox*, *multiprox*, *C\*prox* and *K40SR* sensors.

**Sensing Gap Gages**

Part Number	ID Number	Barrel Diameter	Dimensions			
			A	B	C	D
SG-Bi0.8-0.64	A5300	5 mm	0.197 [5.0]	0.025 [0.64]	0.378 [9.6]	0.252 [6.4]
SG-Bi 1-0.81	A5301	8 mm	0.315 [8.0]	0.032 [0.81]	0.378 [9.6]	0.374 [9.5]
SG-Bi 2-1.62	A5302	12 mm	0.472 [12.0]	0.064 [1.62]	0.500 [12.7]	0.630 [16.0]
SG-Bi 5-4.05	A5303	18 mm	0.709 [18.0]	0.160 [4.05]	0.500 [12.7]	0.878 [22.3]
SG-Bi10-8.1	A5304	30 mm	1.181 [30.0]	0.319 [8.1]	0.752 [19.1]	1.492 [37.9]
SG-Bi15-12.15	A5305	30 mm	1.181 [30.0]	0.478 [12.15]	0.748 [19.0]	1.492 [37.9]
Use above Gap Gages for embeddable (Shielded) sensors.						
SG-Ni 2-1.62	A5306	8 mm	0.315 [8.0]	0.064 [1.62]	0.347 [9.5]	0.378 [9.6]
SG-Ni 4-MG12-3.24	A5307	12 mm	0.472 [12.0]	0.128 [3.24]	0.528 [13.4]	0.626 [15.9]
SG-Ni 4-S12-3.24	A5308	12 mm	0.472 [12.0]	0.128 [3.24]	0.500 [12.7]	0.626 [15.9]
SG-Ni 5-4.05	A5309	12 mm	0.472 [12.0]	0.160 [4.05]	0.500 [12.7]	0.626 [15.9]
SG-Ni 8-6.48	A5310	18 mm	0.709 [18.0]	0.255 [6.48]	0.500 [12.7]	0.878 [22.3]
SG-Ni10-MG18-8.1	A5311	18 mm	0.709 [18.0]	0.319 [8.1]	0.500 [12.7]	0.878 [22.3]
SG-Ni10-P18-8.1	A5312	18 mm	0.709 [18.0]	0.319 [8.1]	0.756 [19.2]	0.752 [19.1]
SG-Ni15-MG30-12.15	A5313	30 mm	1.181 [30.0]	0.478 [12.15]	1.063 [27.0]	1.240 [31.5]
Use above Gap Gages for non-embeddable (Nonshielded) sensors.						

Material: White Delrin  
Inches [mm]



Cords - Acc

Spacer Plates

<b>Part Number</b>	
SP-_-__ <sup>1)</sup> -C	
Material: Aluminum Inches [mm]	

The drawing shows a circular spacer plate with two diameters: an outer diameter of  $\phi .264$  [6.7] and an inner diameter of  $\phi .531$  [13.5]. There are two holes, each with a diameter of  $\phi .03 \times .45$ . The total height of the plate is 1.378 [35.0]. The side view shows a total thickness of 2.000 [50.8] with an O-RING groove. The groove has a width of .138 [3.5] and a depth of .086 [22.5]. The O-RING groove is .083 [2.1] wide. The text 'SPECIFY THICKNESS IN INCHES' is located below the side view.

<sup>1)</sup> add desired thickness in inches.  
Minimum thickness: 0.125", in .005 increments.  
For use with Cylinder Position Indicators, *CRS Series*

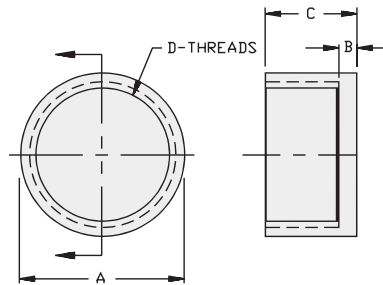
firefast™ Connector Protective Sleeving

Part Number	ID Number	
FF 1/2INCH BLACK (10/BAG)	A0076	
FF 3/4INCH BLACK (10/BAG)	A0075	
FF 1/2INCH BLACK 50 FOOT ROLL	A0078	
FF 3/4INCH BLACK 50 FOOT ROLL	A0079	

## Teflon/Ceramic Covers

Part Number	ID Number	Barrel Diameter	Dimensions			
			A	B	C	D
CAP 12-PTFE	M69662 00	12 mm Embeddable	0.63 [16.0]	0.03 [0.7]	0.63 [16.0]	M12x1
CAP 18N-PTFE	A3056	18 mm Nonembeddable	0.87 [22.0]	0.04 [1.0]	0.79 [20.0]	M18x1
CAP 18-PTFE	A3055	18 mm Embeddable	0.87 [22.0]	0.04 [1.0]	0.35 [9.0]	M18x1
CAP 30N-PTFE	A3058	30 mm Nonembeddable	1.34 [34.0]	0.05 [1.2]	1.14 [29.0]	M30x1.5
CAP 30-PTFE	A3057	30 mm Embeddable	1.34 [34.0]	0.05 [1.2]	0.35 [9.0]	M30x1.5
CAP 47-PTFE	A3060	47 mm Nonembeddable	2.20 [55.8]	0.06 [1.6]	0.38 [9.7]	PG 36

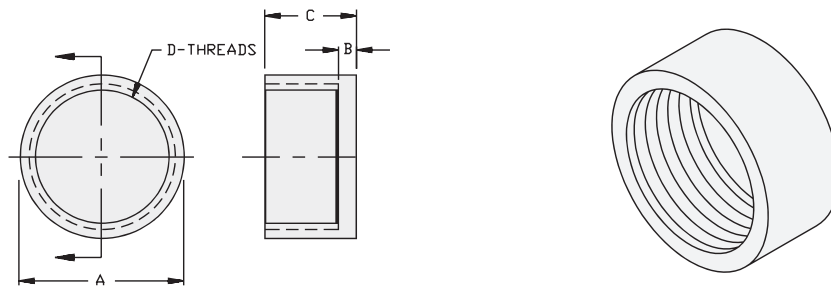
Material: PTFE  
Inches [mm]



For use with metal barrel sensors.

Part Number	ID Number	Dimensions				Max. Temp.	Density	Porosity	Thermal Conductivity (@20°C)
		A	B	C	D				
CAP 12-CER	A2530	0.63 [16.0]	0.04 [1.10]	.352 [8.94]	M12x1	4172°F (2300°C)	3.2 oz/in <sup>3</sup> (6 g/cm <sup>3</sup> )	Impervious	14 BTU • in/ft <sup>2</sup> • m • °F (2 W/m • °K)
CAP 18-CER	A2531	0.88 [22.3]	0.04 [1.10]	.352 [8.94]	M18x1				
CAP 30-CER	A2532	1.34 [34.0]	0.08 [2.00]	.352 [8.94]	M30x1.5				

Inches [mm]  
Material: Ceramic



For use with embeddable metal barrel sensors.

Cords - Acc

# Sensors

## Accessories

### Teflon Covers

Part Number	ID Number	Material
T-CK40-T-FC	A5202	Teflon®
T-CK40-D-FC	A5160	Delrin®
T-CK40-T-MCC	A5201	Teflon
T-CK40-T-MCB	A9126	Teflon

Inches [mm]

A9126

A5202  
A5160

A5201

For use with **CK40** style sensors.

Part Number	ID Number
T-CP40-T-C	A5204

Material: Teflon  
Inches [mm]

For use with **CP40** style sensors.

Part Number	ID Number
T-CP80-T	A5207

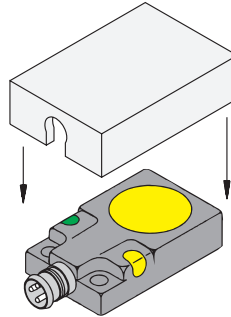
Material: Teflon  
Inches [mm]

For use with **CP80** style sensors.

## Teflon Covers

Part Number	ID Number
T-Q08-T-MCC	A5155
T-Q14-T-MCC	A5154
T-Q20-T-MCC	A5156

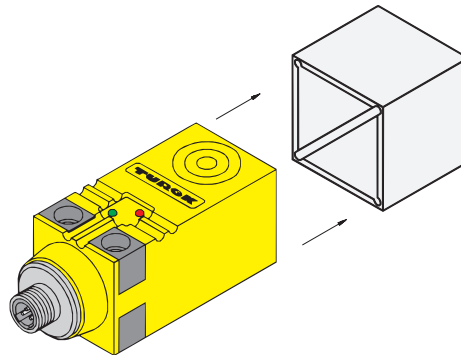
Material: Teflon  
Inches [mm]



For use with **Q08** style sensors.

Part Number	ID Number
T-Q34-D-FC	A5210

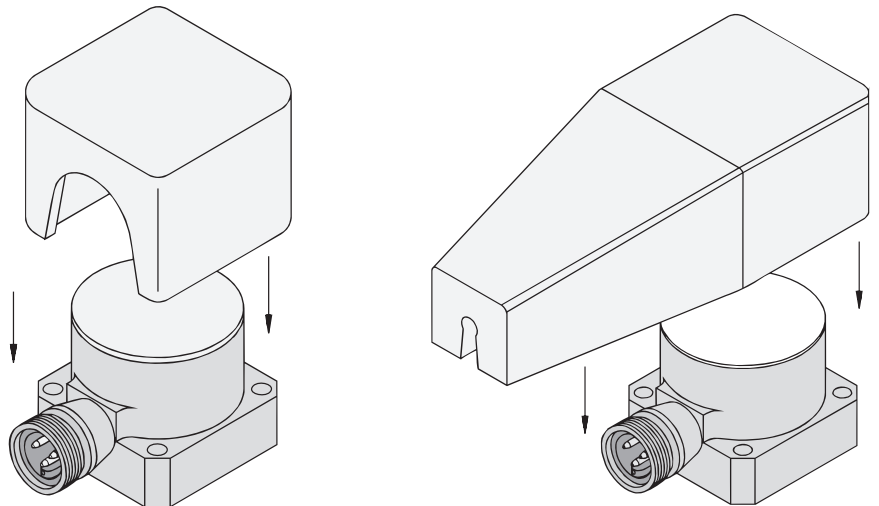
Material: HDPE  
Inches [mm]



For use with **Q34** style sensors.

Part Number	ID Number	Material
T-Q50-T	A5205	Teflon
T-Q50-D	A5206	HDPE

Inches [mm]



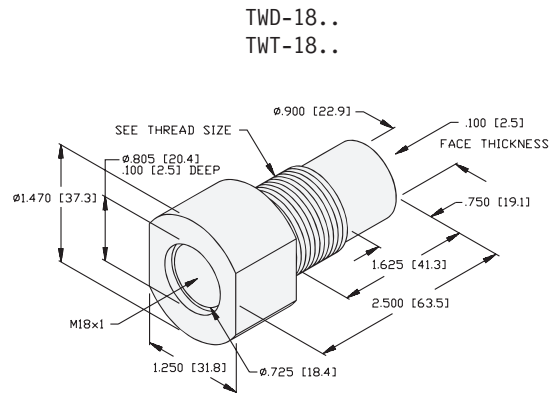
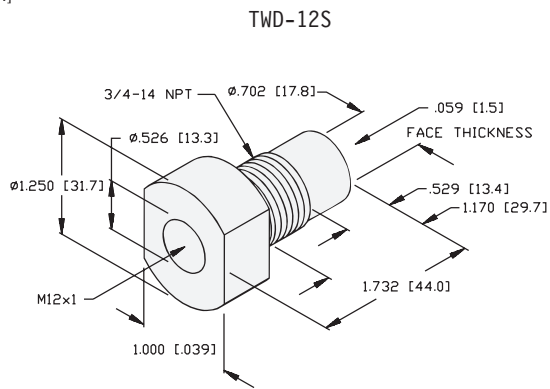
For use with **Q50** style sensors.

Cords - Acc

**Threaded Tank Wells**

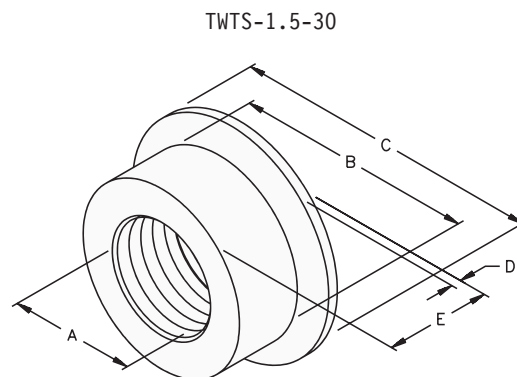
Part Number	ID Number	Material	Thread Size	Drill Size	Application
TWD-12S	A5051	Delrin	3/4-14 NPT	59/64	12 mm threaded capacitive sensors for liquid level sensing.
TWD-18S	A5055	Delrin	3/4-14 NPT	59/64	18 mm threaded capacitive sensors for liquid level sensing.
TWT-18S	A5050	Teflon	3/4-14 NPT	59/64	18 mm threaded capacitive sensors for liquid level sensing.
TWD-18S-1	A5057	Delrin	1-11 1/2 NPT	1-5/32	18 mm threaded capacitive sensors for liquid level sensing.
TWT-18S-1	A5056	Teflon	1-11 1/2 NPT	1-5/32	18 mm threaded capacitive sensors for liquid level sensing.

Pressure Rating: 150 PSI  
Inches [mm]



Part Number	ID Number	Dimensions			
		A	B	C	D
TWTS-1.5-30	A5077	M30x1.5	1.500 [38.1]	1.984 50.4	1.000 [25.4]
TWTS-2-30	A5076	M30x2.0	2.008 [51.0]	2.520 [64.0]	1.000 [25.4]

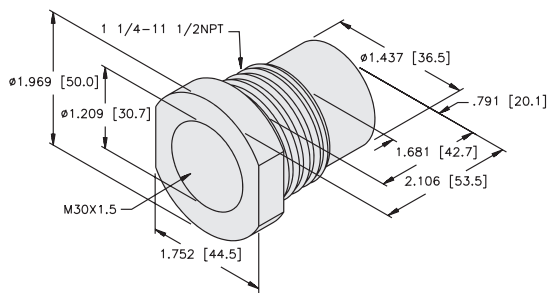
Inches [mm]



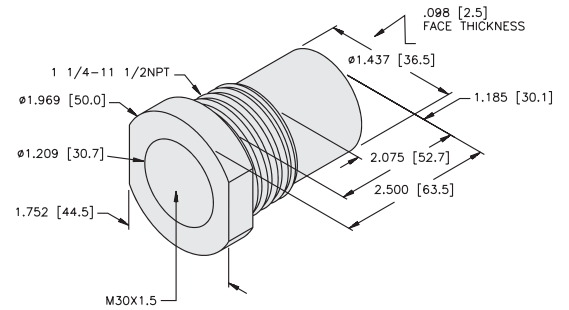
Threaded Tank Wells

Part Number	ID Number	Material	Thread Size	Drill Size	Application
TWD-30S	A5065	Delrin	1 1/4-11 1/2 NPT	1-1/2	30 mm threaded capacitive sensors for liquid level sensing.
TWT-30S	A5060	Teflon	1 1/4-11 1/2 NPT	1-1/2	30 mm threaded capacitive sensors for liquid level sensing.
TWD-40S	A5075	Delrin	1 1/2-11 1/2 NPT	1-47/64	40 mm smooth capacitive sensors for liquid level sensing.
TWT-40S	A5070	Teflon	1 1/2-11 1/2 NPT	1-47/64	40 mm smooth capacitive sensors for liquid level sensing.
TWT-30S-SHORT	A5062	Teflon	1 1/4-11 1/2 NPT	1-1/2	30 mm threaded capacitive sensors for liquid level sensing.

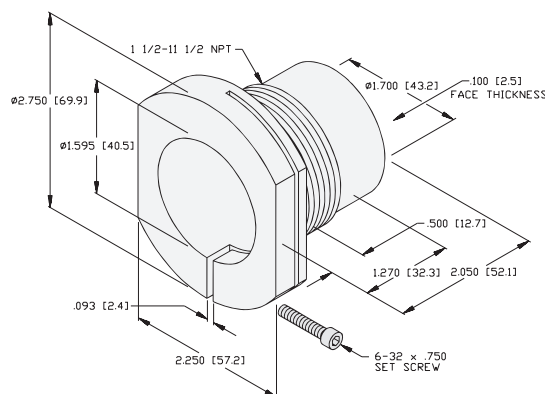
TWT-30S-SHORT



TWD-30S..  
TWT-30S..



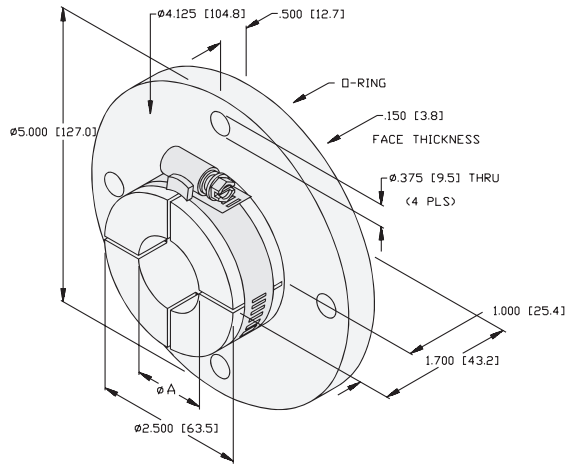
TWD-40..  
TWT-40..



**Bolt-on Tank Wells**

Part Number	ID Number	Dimensions
TWU-30B	A5005	1.181 [30.0]
TWU-40B	A5000	1.575 [40.0]

Material: UHMW/PE  
Pressure Rating: 80 PSI  
Inches [mm]

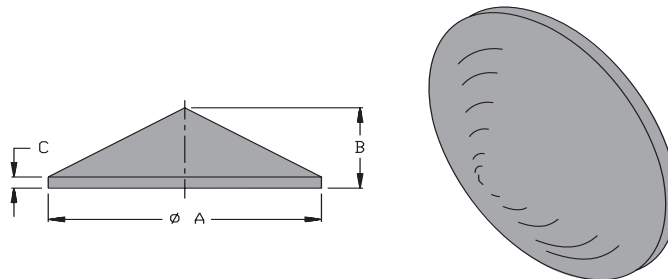


For use with 30 and 40 mm barrel sensors.

**Plastic Covers**

Part Number	ID Number	Sensor Diameter	Dimensions		
			A	B	C
CP80-P-CONE	A5218	80 mm	2.756 [70.0]	0.925 [23.5]	0.129 [3.3]
K90-P-CONE	A5220	90 mm	3.150 [80.0]	1.250 [31.2]	0.341 [8.7]

Material: PVC  
Inches [mm]



For use with CP80, K90 and K90SR style sensors.

## Conduit Adapters

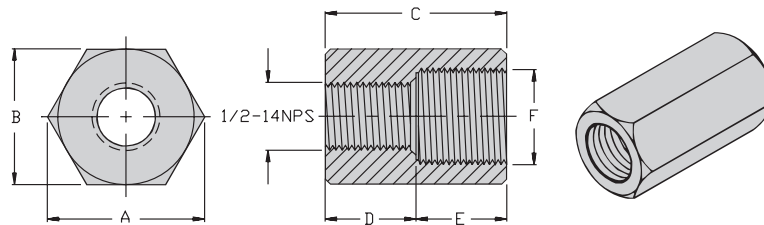
Part Number	ID Number	Barrel Diameter	Dimensions					
			A	B	C	D	E	F
TMF 12-G	A3310	12 mm	1.15 [29.2]	1.00 [25.4]	1.00 [25.4]	0.50 [12.7]	0.50 [12.7]	M12x1
TMF 18-G	A3320	18 mm	1.15 [29.2]	1.00 [25.4]	1.00 [25.4]	0.50 [12.7]	0.50 [12.7]	M18x1
TMF 30-G	A3345	30 mm	1.73 [44.0]	1.50 [38.1]	1.00 [25.4]	0.60 [15.2]	0.40 [10.2]	M30x1.5
TMF 47-G	A3360	47 mm	2.30 [58.4]	2.00 [50.8]	1.75 [44.5]	1.05 [26.7]	0.70 [17.8]	PG36

Use above Conduit Adapters with G and P Barrel sensors.

TMF 18-MS	A3330	18 mm	1.15 [29.2]	1.00 [25.4]	2.00 [50.8]	1.50 [38.1]	0.50 [12.7]	M18x1
TMF 30-MS	A3355	30 mm	1.73 [44.0]	1.50 [38.1]	2.00 [50.8]	0.60 [15.2]	1.40 [35.6]	M30x1.5

Use above Conduit Adapters with M and S Barrel sensors.

Material: Aluminum  
Inches [mm]



Part Number	ID Number
TMF 9-14	A3290
Material: Delrin Inches [mm]	
For use with Integral Terminal Chamber style sensors.	

Part Number	ID Number
TMF 13.5-14	A4500
Material: Delrin Inches [mm]	
For use with Integral Terminal Chamber style sensors.	

Cable Glands

Part Number	ID Number
Cable Gland PG 9	A3054
Material: Polyamide Plastic Recommended Cable Style: 18 and 20 AWG Inches [mm]	
For use with Integral Terminal Chamber style sensors.	

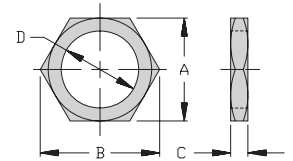
Part Number	ID Number
Cable Gland M20	A0936
Material: Polyamide Plastic Inches [mm]	
For use with Long Range Integral Terminal Chamber style sensors.	

Part Number	ID Number
Cable Gland 1/2-14NPT	A3480
Material: Polyamide Plastic Recommended Cable Style: 18 and 20 AWG Inches [mm]	
For use with Integral Terminal Chamber style sensors.	

**Locknuts**

**Chrome Plated Brass**

Part Number	ID Number	Barrel Diameter	Dimensions			D
			A	B	C	
LN-M05	A3119	5 mm	0.28 [7.0]	0.32 [8.0]	0.10 [2.5]	M5x0.5
LN-M08	A3120	8 mm	0.51 [13.0]	0.58 [14.7]	0.16 [4.0]	M8x1
LN-M12	A3122	12 mm	0.67 [17.0]	0.76 [19.4]	0.16 [4.0]	M12x1
LN-M18	A3125	18 mm	0.94 [24.0]	1.08 [27.4]	0.16 [4.0]	M18x1
LN-M30	A3126	30 mm	1.42 [36.0]	1.63 [41.4]	0.20 [5.0]	M30x1.5
LN-PG36	A3440	47 mm	2.01 [51.1]	2.20 [56.0]	0.20 [5.0]	PG36
LN 1/4-18	A3131	—	0.43"	0.49"	0.22"	1/4-18
LN 1/2-14	A3132	—	0.74"	0.85"	0.43"	1/2-14



**300 Series Stainless Steel**

LN-SS12	A3123	12 mm	0.67 [17.0]	0.76 [19.4]	0.16 [4.0]	M12x1
LN-SS18	A3123-0	18 mm	0.94 [24.0]	1.08 [27.4]	0.16 [4.0]	M18x1
LN-SS30	A3123-1	30 mm	1.42 [36.0]	1.63 [41.4]	0.20 [5.0]	M30x1.5

**Teflon® Coated**

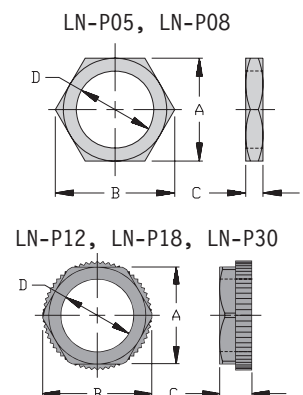
LN-MT12	A3109	12 mm	0.67 [17.0]	0.76 [19.4]	0.16 [4.0]	M12x1
LN-MT18	A3108	18 mm	0.94 [24.0]	1.08 [27.4]	0.16 [4.0]	M18x1
LN-MT30	A3107	30 mm	1.42 [36.0]	1.63 [41.4]	0.20 [5.0]	M30x1.5

For use with Teflon coated threaded metal barrel sensors.

**Polyamide Plastic \***

LN-P05	A3443	5 mm	0.31 [7.9]	0.35 [9.0]	0.08 [2.0]	M5x0.5
LN-P12	A3446	12 mm	0.67 [17.0]	0.75 [19.0]	0.32 [8.0]	M12x1
LN-P18	A3448	18 mm	0.94 [24.0]	1.06 [27.0]	0.32 [8.0]	M18x1
LN-P30	A3450	30 mm	1.42 [36.0]	1.58 [40.1]	0.39 [10.0]	M30x1.5

For use with threaded plastic barrel sensors.  
\* 5 mm Plastic Nut Material: Delrin  
Inches [mm]

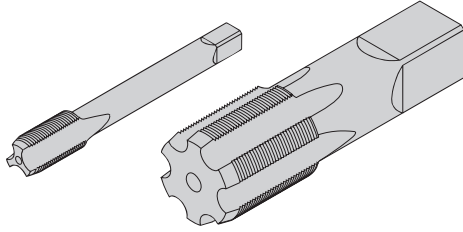


# Sensors

## Accessories

### Plug Taps

Part Number	ID Number	Thread	Drill Hole Diameter (mm)
PT-M05	A3160	M5x0.5	4.5
PT-M08	A3162	M8x1	7.0
PT-M12	A3166	M12x1	11.0
PT-M18	A3168	M18x1	17.0
PT-M30	A3170	M30x1.5	28.5
PT-PG 9	A3467	PG 9	14.0
PT-PG 13.5	A3464	PG13.5	19.0
PT-PG 21	A3466	PG21	27.0
PT-PG 36	A3468	PG36	45.5

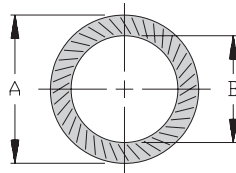


Inches [mm]

### Lockwashers

Part Number	ID Number	Sensor Diameter	Dimensions	
			A	B
LW-12	A3127	12 mm	0.70 [17.8]	0.52 [13.2]
LW-18	A3128	18 mm	1.06 [26.8]	0.76 [19.3]
LW-30	A3129	30 mm	1.76 [44.8]	1.26 [32.0]

Material: Brass  
 Finish: Copper, Nickel, Chrome Plating  
 Inches [mm]



For use with threaded barrel sensors.

Test Box

Part Number	ID Number	Description
TB 1-B	A3475-1	DC powered test box allows you to quickly test DC sensors.
Inches [mm]		

Intrinsic Safety Labels

Part Number	ID Number	Description
IS Labels	A4302	IS Decal 0.59" x 2.36" (10 per sheet)
IS Labels	A4301	IS Decal 2.25" x 3.00" (10 per sheet)
IS Labels	A4300	IS Decal 4.5" x 5.5" (Individual) - Not Pictured
For identification of intrinsic safety wiring that is not color-coded blue		

Cords - Acc

# Sensors

## Reference Tables

### Selection Guide

<i>Reference Tables</i>	Page Number
Cable Diameters of Potted-In Cable Sensors . . . . .	L30 - L31
Fahrenheit to Celsius Temperature . . . . .	L32
Millimeter Equivalents of Decimals and Fractions . . . . .	L33
<i>Specifications</i> . . . . .	M1 - M36
<i>Indexes</i>	
Complete Part Number Index . . . . .	N1
<i>Additional Information</i>	
Warranty Terms and Conditions . . . . .	N20 - N21

**Cable Diameters of Potted-In Cable Sensors**

Housing Style	# of Conductors	Material	AWG	Cable Dia.
H04	3	PUR	26	3
EH04	3	PUR	26	3
H04	2	PVC	26	3.2
EH04	2	PVC	26	3.2
G05	2	PVC	26	3.2
EG05	2	PVC	26	3.2
G05	3	PUR	26	3
EG05	3	PUR	26	3
H6.5	2	PVC	22	5.2
EH6.5	2	PVC	22	5.2
EH6.5K	2	PVC	22	5.2
H6.5	3	PUR	24	4
EH6.5	3	PUR	24	4
EH6.5K	3	PUR	24	4
HS540	3	PUR	26	3
HS540	3	PUR	26	3
HS865	2	PVC	24	4
HS866	3	PUR	24	4
GO8	3	PUR	24	4
GO8	2	PUR	24	4
BC3-M12	3	PVC	24	4
BC3-S12	3	PVC	24	4
G12	3	PVC	22	5.2
M12	3	PVC	22	5.2
P12	3	PVC	22	5.2
S12	3	PVC	22	5.2
G12	2	PVC	22	5.2
M12	2	PVC	22	5.2
P12	2	PVC	22	5.2
S12	2	PVC	22	5.2
BC5-M18	3	PVC	22	5.2
BC5-S18	3	PVC	22	5.2
G18	3	PVC	22	5.2
M18	3	PVC	22	5.2
G18	2	PVC	21	5.2
M18	2	PVC	21	5.2

Housing Style	# of Conductors	Material	AWG	Cable Dia.
S185	3	PVC	22	5.2
BC10-M30	4	PVC	22	5.2
BC10-S30	4	PVC	22	5.2
BC10-S30	2	PVC	22	5.2
G30	3	PVC	22	5.2
M30	3	PVC	22	5.2
M30	2	PVC	21	5.2
G30	2	PVC	21	5.2
PT30	2	PUR	22	5.2
PT30	4	PVDF	22	5.2
KT34	4	PVDF	22	5.2
BC15-K34	3	PVC	22	5.2
G47	3	PVC	19	6.3
G47	2	PVC	21	7.3
Q5.5	3	PUR	26	3
QF5.5	2	PUR	26	3
QF5.5	3	PUR	26	3
Q6.5	3	PUR	26	3
Q6.5	2	PVC	22	5.2
Q9.5	3	PUR	26	3
Q06	3	PUR	24	4
Q8SE	3	PUR	26	3
BC 5-Q08	3	PVC	24	4
Q08	4	PVC	22	4
Q08	3	PVC	22	4
Q08	2	PVC	22	4
BC8-Q10	3	PVC	24	4
Q10	3	PUR	24	4
Q10S	4	PUR	24	4
Q10S	3	PUR	24	4
Q10S	2	PVC	22	4
Q11S	2	PVC	22	5.2
Q55E	3	PUR	26	3
Q07	3	PUR	26	3
K11	3	PVC	22	5.2

Cords - Acc

# Sensors

## Reference Tables

### Cable Diameters of Potted-In Cable Sensors

Housing Style	# of Conductors	Material	AWG	Cable Dia.
Q11S	3	PUR	24	4
Q12	3	PVC	22	5.2
BC10-Q14	3	PVC	24	4
Q14	3	PVC	22	5.2
BC20-Q20	3	PUR	22	5.2
Q18	3	PVC	22	5.2
Q20	3	PVC	22	5.2
Q25	3	PVC	22	5.2
Q26	2	PVC	22	5.2
Q30	3	PVC	22	5.2
Q80	2	PVC	22	5.2
INT-AG	2	PUR	26	3
INT-Y1	2	PVC	26	3.2
INT	3	PUR	26	3
INR	3	PUR	28	2
BIM-M12E	2	PUR	22	5.2
BIM-M12E	3	PUR	22	5.2

Housing Style	# of Conductors	Material	AWG	Cable Dia.
NST	2	PVC	24	4
NST	3	PVC	24	4
PST	2	PVC	24	4
PST	3	PVC	24	4
PSM	3	PVC	24	4
KST	3	PVC	24	4
QST	2	PVC	24	4
QST	3	PVC	24	4
AKT-Y1	2	PVC	24	4
AKT-AD	2	PVC	22	5.2
AKT	3	PVC	24	4
IKT-Y1	2	PVC	24	4
IKT-AD	2	PVC	21	5.2
IKT	3	PVC	24	4
IKE-Y1	2	PVC	24	4
IKE-AD	2	PVC	21	5.2
IKE	3	PVC	24	4
IKT-Y1	2	PVC	24	4
IKT-AD	2	PVC	21	5.2
IKT	3	PVC	24	4

**Fahrenheit to Celsius Temperature**

Degrees Fahrenheit	Degrees Celsius
-70	-56.7
-65	-53.9
-60	-51.2
-55	-48.4
-50	-45.6
-45	-42.8
-40	-40.0
-35	-37.3
-30	-34.5
-25	-31.7
-20	-28.9
-15	-26.1
-10	-23.4
0	-17.8
5	-15.0
10	-12.2
15	-9.5
20	-6.7
25	-3.9
30	-1.1
*32	*0.0
35	1.7
40	4.4
45	7.2
50	10.0
55	12.8
60	15.6
65	18.3
70	21.1
75	23.9
80	26.7
85	29.5
90	32.2

Degrees Fahrenheit	Degrees Celsius
95	35.0
100	37.8
105	40.6
110	43.4
115	46.1
120	48.9
125	51.7
130	54.5
135	57.3
140	60.0
145	62.8
150	65.6
155	68.4
160	71.2
165	73.9
170	76.7
175	79.5
180	82.3
185	85.1
190	87.8
195	90.6
200	93.4
205	96.2
210	99.0
**212	**100.0

\* Water Freezing Point  
 \*\* Water Boiling Point  
 For temperature conversions not given  
 use the following formulas:  
 $^{\circ}\text{Celsius} = (^{\circ}\text{Fahrenheit} - 32) \times .556$   
 $^{\circ}\text{Fahrenheit} = (^{\circ}\text{Celsius} \times 1.8) + 32$

Cords - Acc

# Sensors

## Reference Tables

### Millimeters Equivalents of Decimals and Fractions

Millimeters	Inches	Fraction
0.10	0.0039	
0.20	0.0079	
0.30	0.0118	
0.40	0.0157	
0.50	0.0197	
0.60	0.0236	
0.70	0.0276	
0.80	0.0315	
0.90	0.0354	
1.00	0.0394	
1.59	0.0625	1/16
2.00	0.0787	
3.00	0.1181	
3.18	0.1250	1/8
4.00	0.1575	
4.76	0.1875	3/16
5.00	0.1969	
6.00	0.2362	
6.35	0.2500	1/4
7.00	0.2756	
7.94	0.3125	5/16
8.00	0.3150	
9.00	0.3543	
9.53	0.3750	3/8
10.00	0.3937	
11.00	0.4331	
11.11	0.4375	7/16
12.00	0.4724	
12.70	0.5000	1/2
13.00	0.5118	
14.00	0.5512	
14.29	0.5625	9/16
15.00	0.5906	
15.88	0.6250	5/8
16.00	0.6299	
17.00	0.6693	
17.46	0.6875	11/16
18.00	0.7087	
19.00	0.7480	
19.05	0.7500	3/4
20.00	0.7874	
20.64	0.8125	13/16
21.00	0.8268	
22.00	0.8661	
22.23	0.8750	7/8
23.00	0.9055	
23.81	0.9375	15/16
24.00	0.9449	

Millimeters	Inches	Fraction
25.40	1.000	1.000
26.00	1.024	
27.00	1.063	
28.00	1.102	
29.00	1.142	
30.00	1.181	
31.00	1.220	
32.00	1.260	
33.00	1.299	
34.00	1.339	
35.00	1.378	
36.00	1.417	
37.00	1.457	
38.00	1.496	
39.00	1.535	
40.00	1.575	
41.00	1.614	
42.00	1.654	
43.00	1.693	
44.00	1.732	
45.00	1.772	
46.00	1.811	
47.00	1.850	
48.00	1.890	
49.00	1.929	
50.00	1.969	
51.00	2.008	
52.00	2.047	
53.00	2.087	
54.00	2.126	
55.00	2.165	
56.00	2.205	
57.00	2.244	
58.00	2.283	
59.00	2.323	
60.00	2.362	
61.00	2.402	
62.00	2.441	
63.00	2.480	
64.00	2.520	
65.00	2.559	
66.00	2.598	
67.00	2.638	
68.00	2.677	
69.00	2.717	
70.00	2.756	
71.00	2.795	
72.00	2.835	

Millimeters	Inches	Fraction
73.00	2.874	
74.00	2.913	
75.00	2.953	
76.00	2.992	
77.00	3.031	
78.00	3.071	
79.00	3.110	
80.00	3.150	
81.00	3.189	
82.00	3.228	
83.00	3.268	
84.00	3.307	
85.00	3.346	
86.00	3.386	
87.00	3.425	
88.00	3.465	
89.00	3.504	
90.00	3.543	
91.00	3.583	
92.00	3.622	
93.00	3.661	
94.00	3.701	
95.00	3.740	
96.00	3.780	
97.00	3.819	
98.00	3.858	
99.00	3.898	
100.00	3.937	

Notes:

1M = 100 cm = 1000 mm

For conversions not given  
use the following formulas:

Millimeters = Inches x 25.4

Inches = Millimeters ÷ 25.4

**Notes:**