

SUNOPTIC TECHNOLOGIES

ABOUT SUNOPTIC TECHNOLOGIES

For more than 25 years Sunoptic Technologies®, LLC has provided solutions to customer's light delivery and imaging needs. Today, Sunoptic Technologies® is a **leading global supplier** featuring custom design, development, manufacturing, testing, and regulatory services. Products include fiberoptic cables, high intensity light-sources, dental curing probes, digital recording, and imaging devices.

The OEM business segment services the custom illumination and imaging requirements of a broad range of industrial customers.

Formerly known as Cuda Products, the company was acquired in 1999. Under new ownership, significant investments were made in professional management, manufacturing, engineering, development and ISO 9001 and ISO 13485 Certifications.

Sunoptic Technologies® combines vertical integration, low cost manufacturing, worldwide support, a certified quality system, proven vendors and thorough attention to detail. All are dedicated to address the light delivery and imaging concerns of our customer base worldwide.

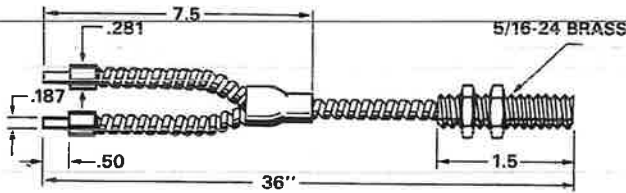
SPECIFICATIONS

OPTICAL SPECIFICATION:

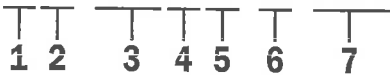
- fiber diameter002 (50 microns) nominal (other diameters available upon request)
- core-to-clad ratio 90% of core and 10% of clad nominal
- temperature range -50°F (-45°C) to 525°F (275°C). High temperature of 825°F (440°C) available
- minimum bend radius..... 2.5 x sheathing O.D.
- chemical stability transmission is unaffected by water, gasoline, engine oil, sulfuric acid and other organic acids
- numerical aperture44, .55, .66
- acceptance angle from 43° to 160°
- lengths up to 30 feet maximum
- active bundle diameters up to 1.0" (25.4 mm)
- end-fittings stainless steel, aluminum, brass or plastic
- sheathing pvc/monocoil, flexible pvc (no monocoil), flexible interlocking stainless steel, silicone and neoprene (fluorocarbon rubber and hermetically sealed teflon available upon request)
- clad white light carrying rigid optical rod
- coherent imaging fused rod, minimum packing fraction results in high light output and image transfer

ORDERING INFORMATION

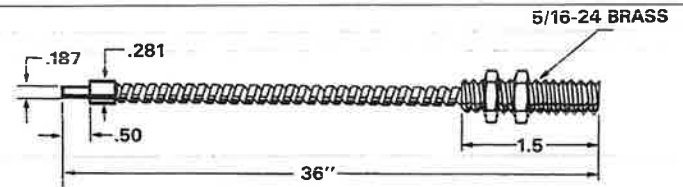
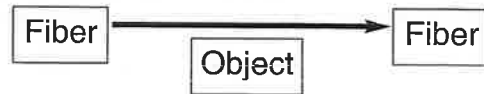
Fiberoptic Assemblies for Photoelectric Controls—Reflective Style



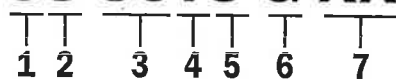
D8-36TS-G-XX



Fiberoptic Assemblies for Photoelectric Controls—Opposed Style



S8-36TS-G-XX



1 Style of Cable

D = Bifurcated, reflective
S = Single, opposed

2 Fiber Bundle Diameter

015 = .015" (0.38 mm) smallest for single cables
027 = .027" (0.69 mm) smallest for bifurcated cables
046 = .046" (1.17 mm)
062 = .062" (1.57 mm)
094 = .094" (2.39 mm)
8 = .125" (1.17 mm)
For larger diameters up to 1.0" (25.4 mm) please call the factory.

3 Overall Length in Inches

All configurations available in lengths up to 30 ft. (9.45 m).
Standard length tolerances are as follows (unless specified):
Overall Length +2" (50.8 mm)/-1" (25.4 mm)
Leg Length +/-1" (25.4 mm)

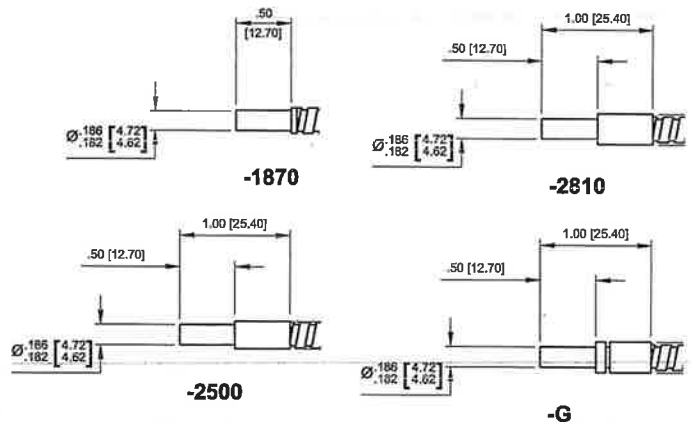
4 Sensing End Configurations

F = Hair
H = Hypodermic needle
H3 = 3" Hypodermic needle
HF = Hypodermic flair
HL = Hypodermic needle with elbow
L = Elbow
LT = Elbow, threaded at end
T = Threaded
TL = Threaded, elbow at end
TRL = Tight right angle
WF = Wide flair

5 Type of Sheathing

P = PVC/Monocoil
PVC = Flexible PVC (no monocoil)
S = Interlocking Stainless Steel
SL = Silicone
FL = Fluorocarbon Rubber*
T = Teflon (hermetically sealed)*
*Available upon request

6 Style of End-fitting



7 Special Applications (if required)

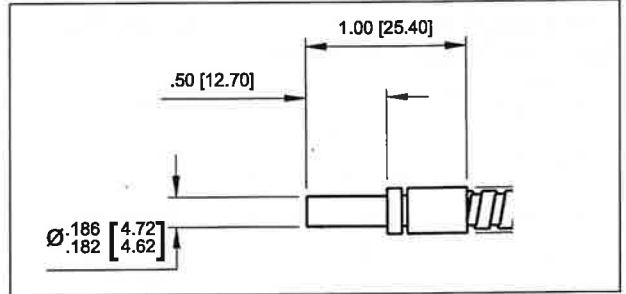
HT = High temperature (800°F/426°C)
Special connectors available upon request.
Keyence AMP ST SMA

We can also manufacture equivalents of all major brands sold. Call us with the part number and we will cross reference to our part number.

FIBEROPTIC CABLE

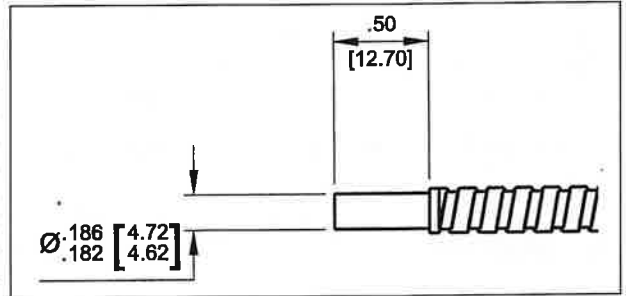
2810-G SENSOR END

		SENSING MODE	DIAMETER	LENGTH
Stainless Steel Sheathing	PVC Sheathing			
S046-36S-G	S046-36P-G	OPPOSED	0.046	36
S062-36S-G	S062-36P-G	OPPOSED	0.062	36
S094-36S-G	S094-36P-G	OPPOSED	0.094	36
S8-36S-G	S8-36P-G	OPPOSED	0.125	36
D027-36S-G	D027-36P-G	REFLECTIVE	0.027	36
D046-36S-G	D027-36P-G	REFLECTIVE	0.046	36
D062-36S-G	D027-36P-G	REFLECTIVE	0.062	36
D094-36S-G	D027-36P-G	REFLECTIVE	0.094	36
D8-36S-G	D8-36P-G	REFLECTIVE	0.125	36



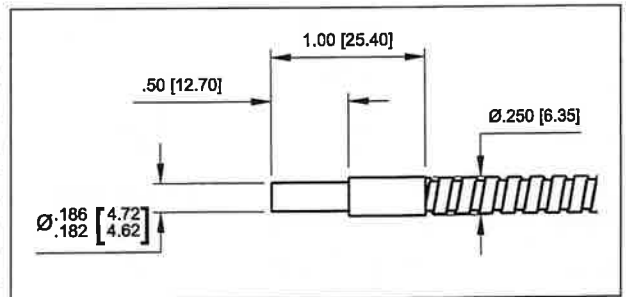
1870 SENSOR END

		SENSING MODE	DIAMETER	LENGTH
Stainless Steel Sheathing	PVC Sheathing			
S046-36S-1870	S046-36P-1870	OPPOSED	0.046	36
S062-36S-1870	S062-36P-1870	OPPOSED	0.062	36
S094-36S-1870	S094-36P-1870	OPPOSED	0.094	36
S8-36S-1870	S8-36P-1870	OPPOSED	0.125	36
D027-36S-1870	D027-36P-1870	REFLECTIVE	0.027	36
D046-36S-1870	D027-36P-1870	REFLECTIVE	0.046	36
D062-36S-1870	D027-36P-1870	REFLECTIVE	0.062	36
D094-36S-1870	D027-36P-1870	REFLECTIVE	0.094	36
D8-36S-1870	D8-36P-1870	REFLECTIVE	0.125	36



2500 SENSOR END

		SENSING MODE	DIAMETER	LENGTH
PVC Sheathing				
S046-36P		OPPOSED	0.046	36
S062-36P		OPPOSED	0.062	36
S094-36P		OPPOSED	0.094	36
S8-36P		OPPOSED	0.125	36
D027-36P		REFLECTIVE	0.027	36
D046-36P		REFLECTIVE	0.046	36
D062-36P		REFLECTIVE	0.062	36
D094-36P		REFLECTIVE	0.094	36
D8-36P		REFLECTIVE	0.125	36



2810-G SENSOR END

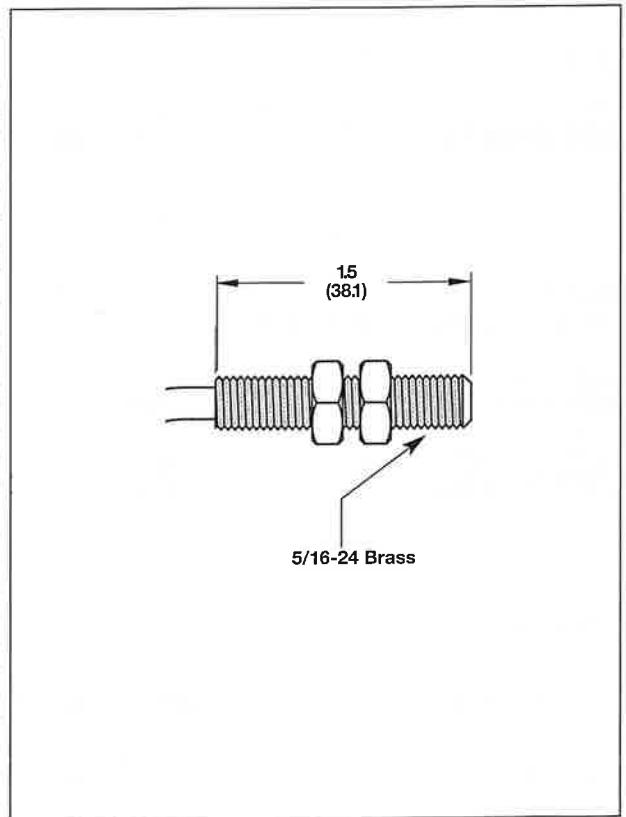
		SENSING MODE	DIAMETER	LENGTH
Stainless Steel Sheathing	PVC Sheathing			
S046-36TS-G	S046-36TP-G	OPPOSED	0.046	36
S062-36TS-G	S062-36TP-G	OPPOSED	0.062	36
S094-36TS-G	S094-36TP-G	OPPOSED	0.094	36
S8-36TS-G	S8-36TP-G	OPPOSED	0.125	36
D027-36TS-G	D027-36TP-G	REFLECTIVE	0.027	36
D046-36TS-G	D027-36TP-G	REFLECTIVE	0.046	36
D062-36TS-G	D027-36TP-G	REFLECTIVE	0.062	36
D094-36TS-G	D027-36TP-G	REFLECTIVE	0.094	36
D8-36TS-G	D8-36TP-G	REFLECTIVE	0.125	36

1870 SENSOR END

		SENSING MODE	DIAMETER	LENGTH
S046-36TS-1870	S046-36TP-1870	OPPOSED	0.046	36
S062-36TS-1870	S062-36TP-1870	OPPOSED	0.062	36
S094-36TS-1870	S094-36TP-1870	OPPOSED	0.094	36
S8-36TS-1870	S8-36TP-1870	OPPOSED	0.125	36
D027-36TS-1870	D027-36TP-1870	REFLECTIVE	0.027	36
D046-36TS-1870	D027-36TP-1870	REFLECTIVE	0.046	36
D062-36TS-1870	D027-36TP-1870	REFLECTIVE	0.062	36
D094-36TS-1870	D027-36TP-1870	REFLECTIVE	0.094	36
D8-36TS-1870	D8-36TP-1870	REFLECTIVE	0.125	36

2500 SENSOR END

		SENSING MODE	DIAMETER	LENGTH
S046-36TP		OPPOSED	0.046	36
S062-36TP		OPPOSED	0.062	36
S094-36TP		OPPOSED	0.094	36
S8-36TP		OPPOSED	0.125	36
D027-36TP		REFLECTIVE	0.027	36
D046-36TP		REFLECTIVE	0.046	36
D062-36TP		REFLECTIVE	0.062	36
D094-36TP		REFLECTIVE	0.094	36
D8-36TP		REFLECTIVE	0.125	36



FIBEROPTIC CABLE

2810-G SENSOR END

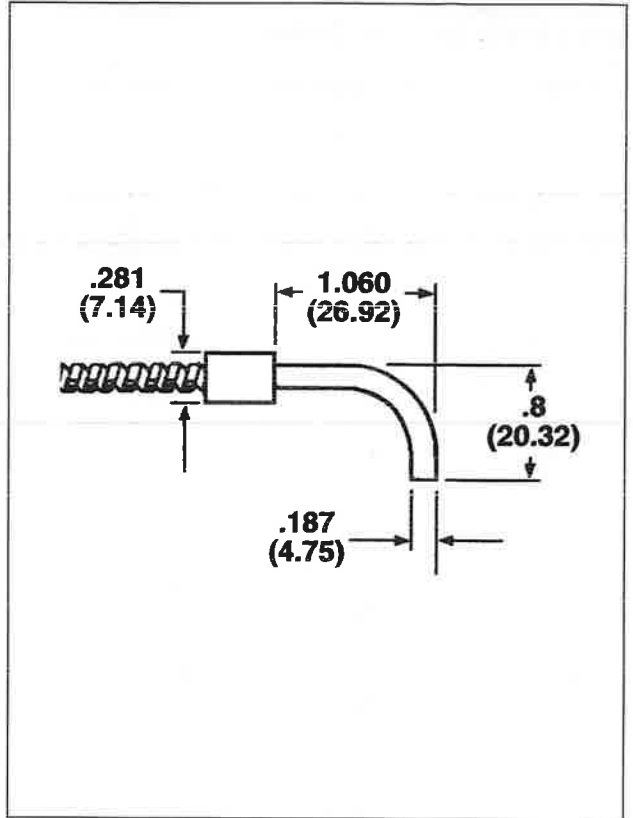
Stainless Steel Sheathing	PVC Sheathing	SENSING MODE	DIAMETER	LENGTH
S046-36LS-G	S046-36LP-G	OPPOSED	0.046	36
S062-36LS-G	S062-36LP-G	OPPOSED	0.062	36
S094-36LS-G	S094-36LP-G	OPPOSED	0.094	36
S8-36LS-G	S8-36LP-G	OPPOSED	0.125	36
D027-36LS-G	D027-36LP-G	REFLECTIVE	0.027	36
D046-36LS-G	D027-36LP-G	REFLECTIVE	0.046	36
D062-36LS-G	D027-36LP-G	REFLECTIVE	0.062	36
D094-36LS-G	D027-36LP-G	REFLECTIVE	0.094	36
D8-36LS-G	D8-36LP-G	REFLECTIVE	0.125	36

1870 SENSOR END

Stainless Steel Sheathing	PVC Sheathing	SENSING MODE	DIAMETER	LENGTH
S046-36LS-1870	S046-36LP-1870	OPPOSED	0.046	36
S062-36LS-1870	S062-36LP-1870	OPPOSED	0.062	36
S094-36LS-1870	S094-36LP-1870	OPPOSED	0.094	36
S8-36LS-1870	S8-36LP-1870	OPPOSED	0.125	36
D027-36LS-1870	D027-36LP-1870	REFLECTIVE	0.027	36
D046-36LS-1870	D027-36LP-1870	REFLECTIVE	0.046	36
D062-36LS-1870	D027-36LP-1870	REFLECTIVE	0.062	36
D094-36LS-1870	D027-36LP-1870	REFLECTIVE	0.094	36
D8-36LS-1870	D8-36LP-1870	REFLECTIVE	0.125	36

2500 SENSOR END

Stainless Steel Sheathing	PVC Sheathing	SENSING MODE	DIAMETER	LENGTH
S046-36LP	S046-36LP	OPPOSED	0.046	36
S062-36LP	S062-36LP	OPPOSED	0.062	36
S094-36LP	S094-36LP	OPPOSED	0.094	36
S8-36LP	S8-36LP	OPPOSED	0.125	36
D027-36LP	D027-36LP	REFLECTIVE	0.027	36
D046-36LP	D027-36LP	REFLECTIVE	0.046	36
D062-36LP	D027-36LP	REFLECTIVE	0.062	36
D094-36LP	D027-36LP	REFLECTIVE	0.094	36
D8-36LP	D8-36LP	REFLECTIVE	0.125	36



2810-G SENSOR END

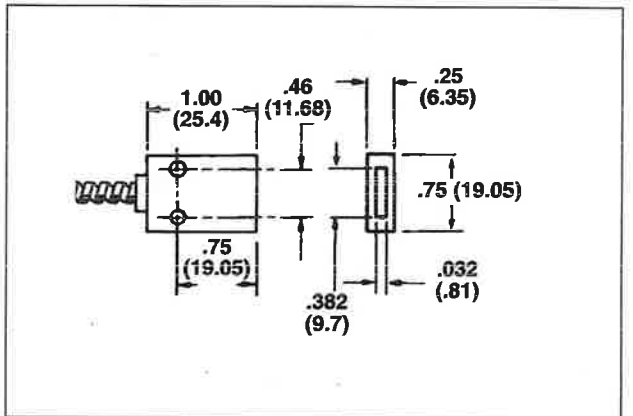
Stainless Steel Sheathing	PVC Sheathing	SENSING MODE	DIAMETER	LENGTH
S062-36FS-G	S062-36FP-G	OPPOSED	0.062	36
S8-36FS-G	S8-36FP-G	OPPOSED	0.125	36
D062-36FS-G	D062-36FP-G	REFLECTIVE	0.062	36
D8-36FS-G	D8-36FP-G	REFLECTIVE	0.125	36

1870 SENSOR END

Stainless Steel Sheathing	PVC Sheathing	SENSING MODE	DIAMETER	LENGTH
S062-36FS-1870	S062-36FP-1870	OPPOSED	0.062	36
S8-36FS-1870	S8-36FP-1870	OPPOSED	0.125	36
D062-36FS-1870	D062-36FP-1870	REFLECTIVE	0.062	36
D8-36FS-1870	D8-36FP-1870	REFLECTIVE	0.125	36

2500 SENSOR END

Stainless Steel Sheathing	PVC Sheathing	SENSING MODE	DIAMETER	LENGTH
S062-36FP	S062-36FP	OPPOSED	0.062	36
S8-36FP	S8-36FP	OPPOSED	0.125	36
D062-36FP	D062-36FP	REFLECTIVE	0.062	36
D8-36FP	D8-36FP	REFLECTIVE	0.125	36



2810-G SENSOR END

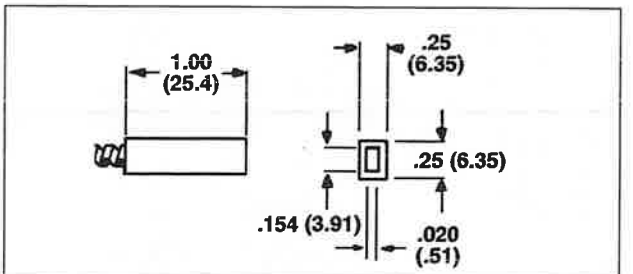
Stainless Steel Sheathing	PVC Sheathing	SENSING MODE	DIAMETER	LENGTH
S062-36HFS-G	S062-36HFP-G	OPPOSED	0.062	36
D062-36HFS-G	D062-36HFP-G	REFLECTIVE	0.062	36

1870 SENSOR END

Stainless Steel Sheathing	PVC Sheathing	SENSING MODE	DIAMETER	LENGTH
S062-36HFS-1870	S062-36HFP-1870	OPPOSED	0.062	36
D062-36HFS-1870	D062-36HFP-1870	REFLECTIVE	0.062	36

2500 SENSOR END

Stainless Steel Sheathing	PVC Sheathing	SENSING MODE	DIAMETER	LENGTH
S062-36HFP	S062-36HFP	OPPOSED	0.062	36
D062-36HFP	D062-36HFP	REFLECTIVE	0.062	36



2810-G SENSOR END

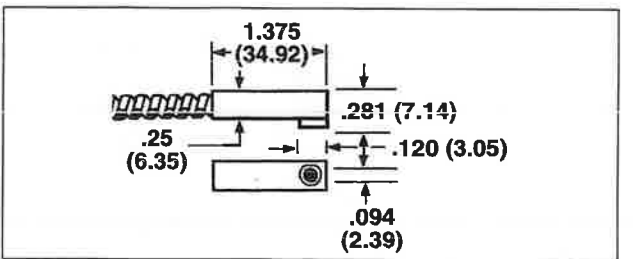
Stainless Steel Sheathing	PVC Sheathing	SENSING MODE	DIAMETER	LENGTH
S094-36TRLS-G	S094-36TRLP-G	OPPOSED	0.094	36
D094-36TRLS-G	S094-36TRLP-G	REFLECTIVE	0.094	36

1870 SENSOR END

Stainless Steel Sheathing	PVC Sheathing	SENSING MODE	DIAMETER	LENGTH
S094-36TRLS-1870	S094-36TRLP-1870	OPPOSED	0.094	36
D094-36TRLS-1870	S094-36TRLP-1870	REFLECTIVE	0.094	36

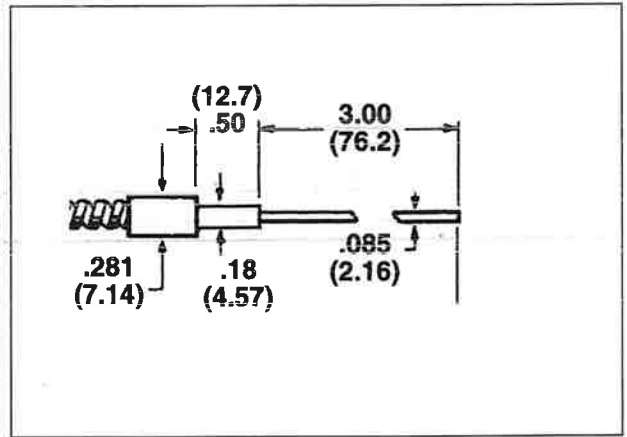
2500 SENSOR END

Stainless Steel Sheathing	PVC Sheathing	SENSING MODE	DIAMETER	LENGTH
S094-36TRLP	S094-36TRLP	OPPOSED	0.094	36
D094-36TRLP	D094-36TRLP	REFLECTIVE	0.094	36

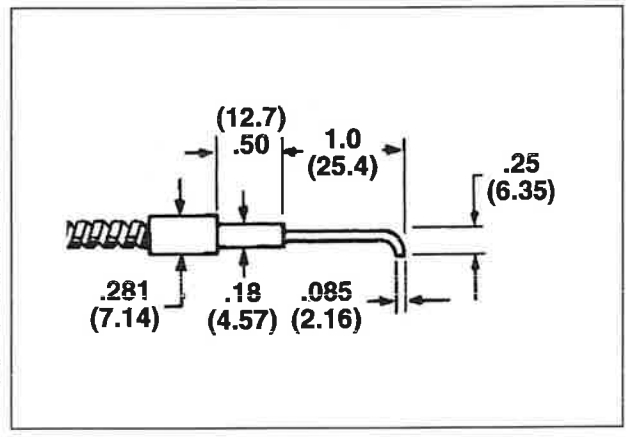


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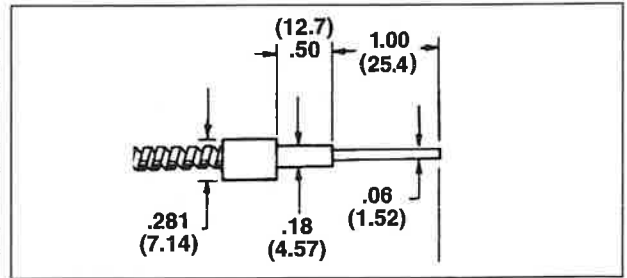
2810-G SENSOR END		SENSING MODE	DIAMETER	LENGTH
Stainless Steel Sheathing	PVC Sheathing			
SO46-36H3S-G	SO46-36H3P-G	OPPOSED	0.046	36
SO62-36H3S-G	SO62-36H3P-G	OPPOSED	0.062	36
DO46-36H3S-G	SO46-36H3P-G	REFLECTIVE	0.046	36
DO62-36H3S-G	SO62-36H3P-G	REFLECTIVE	0.062	36
1870 SENSOR END		SENSING MODE	DIAMETER	LENGTH
Stainless Steel Sheathing	PVC Sheathing			
SO46-36H3S-1870	SO46-36H3P-1870	OPPOSED	0.046	36
SO62-36H3S-1870	SO62-36H3P-1870	OPPOSED	0.062	36
DO46-36H3S-1870	SO46-36H3P-1870	REFLECTIVE	0.046	36
DO62-36H3S-1870	SO62-36H3P-1870	REFLECTIVE	0.062	36
2500 SENSOR END		SENSING MODE	DIAMETER	LENGTH
Stainless Steel Sheathing	PVC Sheathing			
	SO46-36H3P	OPPOSED	0.046	36
	SO62-36H3P	OPPOSED	0.062	36
	DO46-36H3P	REFLECTIVE	0.046	36
	DO62-36H3P	REFLECTIVE	0.062	36



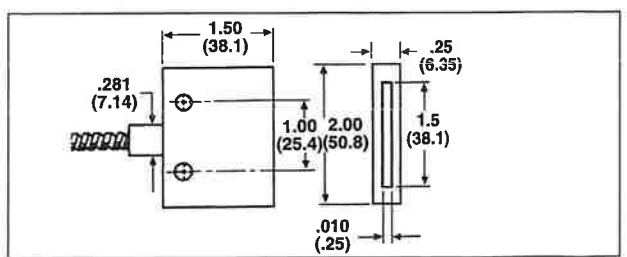
2810-G SENSOR END		SENSING MODE	DIAMETER	LENGTH
Stainless Steel Sheathing	PVC Sheathing			
SO46-36HLS-G	SO46-36HLP-G	OPPOSED	0.046	36
SO62-36HLS-G	SO62-36HLP-G	OPPOSED	0.062	36
DO46-36HLS-G	DO46-36HLP-G	REFLECTIVE	0.046	36
DO62-36HLS-G	DO62-36HLP-G	REFLECTIVE	0.062	36
1870 SENSOR END		SENSING MODE	DIAMETER	LENGTH
Stainless Steel Sheathing	PVC Sheathing			
SO46-36HLS-1870	SO46-36HLP-1870	OPPOSED	0.046	36
SO62-36HLS-1870	SO62-36HLP-1870	OPPOSED	0.062	36
DO46-36HLS-1870	DO46-36HLP-1870	REFLECTIVE	0.046	36
DO62-36HLS-1870	DO62-36HLP-1870	REFLECTIVE	0.062	36
2500 SENSOR END		SENSING MODE	DIAMETER	LENGTH
Stainless Steel Sheathing	PVC Sheathing			
	SO46-36HLP	OPPOSED	0.046	36
	SO62-36HLP	OPPOSED	0.062	36
	DO46-36HLP	REFLECTIVE	0.046	36
	DO62-36HLP	REFLECTIVE	0.062	36



2810-G SENSOR END		SENSING MODE	DIAMETER	LENGTH
Stainless Steel Sheathing	PVC Sheathing			
SO46-36HS-G	SO46-36HP-G	OPPOSED	0.046	36
DO46-36HS-G	DO46-36HP-G	REFLECTIVE	0.046	36
1870 SENSOR END		SENSING MODE	DIAMETER	LENGTH
Stainless Steel Sheathing	PVC Sheathing			
SO46-36HS-1870	SO46-36HP-1870	OPPOSED	0.046	36
DO46-36HS-1870	DO46-36HP-1870	REFLECTIVE	0.046	36
2500 SENSOR END		SENSING MODE	DIAMETER	LENGTH
Stainless Steel Sheathing	PVC Sheathing			
	SO46-36HP	OPPOSED	0.046	36
	DO46-36HP	REFLECTIVE	0.046	36

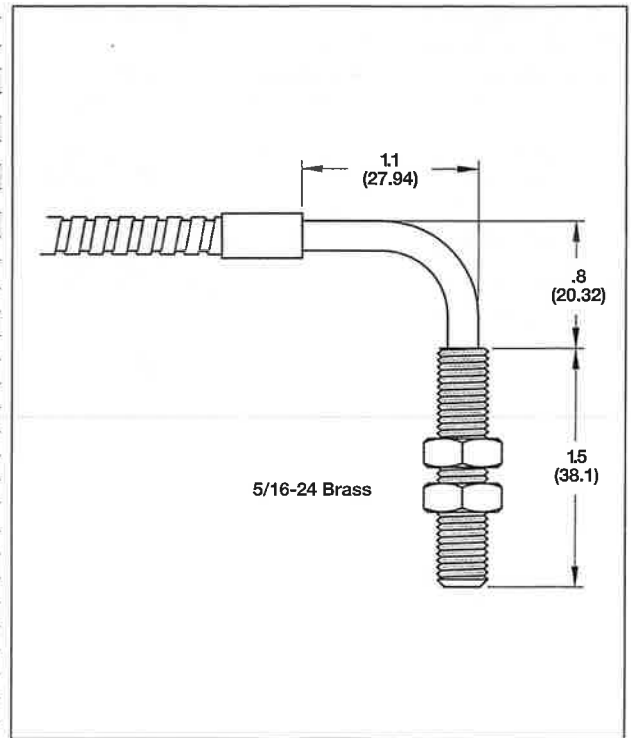


2810-G SENSOR END		SENSING MODE	DIAMETER	LENGTH
Stainless Steel Sheathing	PVC Sheathing			
S8-36WFS-G	S8-36WFP-G	OPPOSED	0.125	36
D8-36WFS-G	D8-36WFP-G	REFLECTIVE	0.125	36
1870 SENSOR END		SENSING MODE	DIAMETER	LENGTH
Stainless Steel Sheathing	PVC Sheathing			
S8-36WFS-1870	S8-36WFP-1870	OPPOSED	0.125	36
D8-36WFS-1870	D8-36WFP-1870	REFLECTIVE	0.125	36
2500 SENSOR END		SENSING MODE	DIAMETER	LENGTH
Stainless Steel Sheathing	PVC Sheathing			
	S8-36WFP	OPPOSED	0.125	36
	D8-36WFP	REFLECTIVE	0.125	36



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2810-G SENSOR END		SENSING MODE	DIAMETER	LENGTH
Stainless Steel Sheathing	PVC Sheathing			
SO46-36LTS-G	SO46-36LTP-G	OPPOSED	0.046	36
SO62-36LTS-G	SO62-36LTP-G	OPPOSED	0.062	36
SO94-36LTS-G	SO94-36LTP-G	OPPOSED	0.094	36
S8-36LTS-G	S8-36LTP-G	OPPOSED	0.125	36
DO27-36LTS-G	DO27-36LTP-G	REFLECTIVE	0.027	36
DO46-36LTS-G	DO27-36LTP-G	REFLECTIVE	0.046	36
DO62-36LTS-G	DO27-36LTP-G	REFLECTIVE	0.062	36
DO94-36LTS-G	DO27-36LTP-G	REFLECTIVE	0.094	36
D8-36LTS-G	D8-36LTP-G	REFLECTIVE	0.125	36
1870 SENSOR END		SENSING MODE	DIAMETER	LENGTH
Stainless Steel Sheathing	PVC Sheathing			
SO46-36LTS-1870	SO46-36LTP-1870	OPPOSED	0.046	36
SO62-36LTS-1870	SO62-36LTP-1870	OPPOSED	0.062	36
SO94-36LTS-1870	SO94-36LTP-1870	OPPOSED	0.094	36
S8-36LTS-1870	S8-36LTP-1870	OPPOSED	0.125	36
DO27-36LTS-1870	DO27-36LTP-1870	REFLECTIVE	0.027	36
DO46-36LTS-1870	DO27-36LTP-1870	REFLECTIVE	0.046	36
DO62-36LTS-1870	DO27-36LTP-1870	REFLECTIVE	0.062	36
DO94-36LTS-1870	DO27-36LTP-1870	REFLECTIVE	0.094	36
D8-36LTS-1870	D8-36LTP-1870	REFLECTIVE	0.125	36
2500 SENSOR END		SENSING MODE	DIAMETER	LENGTH
Stainless Steel Sheathing	PVC Sheathing			
	SO46-36LTP	OPPOSED	0.046	36
	SO62-36LTP	OPPOSED	0.062	36
	SO94-36LTP	OPPOSED	0.094	36
	S8-36LTP	OPPOSED	0.125	36
	DO27-36LTP	REFLECTIVE	0.027	36
	DO46-36LTP	REFLECTIVE	0.046	36
	DO62-36LTP	REFLECTIVE	0.062	36
	DO94-36LTP	REFLECTIVE	0.094	36
	D8-36LTP	REFLECTIVE	0.125	36



2810-G SENSOR END		SENSING MODE	DIAMETER	LENGTH
Stainless Steel Sheathing	PVC Sheathing			
SO46-36TLS-G	SO46-36TLP-G	OPPOSED	0.046	36
SO62-36TLS-G	SO62-36TLP-G	OPPOSED	0.062	36
SO94-36TLS-G	SO94-36TLP-G	OPPOSED	0.094	36
S8-36TLS-G	S8-36TLP-G	OPPOSED	0.125	36
DO27-36TLS-G	DO27-36TLP-G	REFLECTIVE	0.027	36
DO46-36TLS-G	DO27-36TLP-G	REFLECTIVE	0.046	36
DO62-36TLS-G	DO27-36TLP-G	REFLECTIVE	0.062	36
DO94-36TLS-G	DO27-36TLP-G	REFLECTIVE	0.094	36
D8-36TLS-G	D8-36TLP-G	REFLECTIVE	0.125	36
1870 SENSOR END		SENSING MODE	DIAMETER	LENGTH
Stainless Steel Sheathing	PVC Sheathing			
SO46-36TLS-1870	SO46-36TLP-1870	OPPOSED	0.046	36
SO62-36TLS-1870	SO62-36TLP-1870	OPPOSED	0.062	36
SO94-36TLS-1870	SO94-36TLP-1870	OPPOSED	0.094	36
S8-36TLS-1870	S8-36TLP-1870	OPPOSED	0.125	36
DO27-36TLS-1870	DO27-36TLP-1870	REFLECTIVE	0.027	36
DO46-36TLS-1870	DO27-36TLP-1870	REFLECTIVE	0.046	36
DO62-36TLS-1870	DO27-36TLP-1870	REFLECTIVE	0.062	36
DO94-36TLS-1870	DO27-36TLP-1870	REFLECTIVE	0.094	36
D8-36TLS-1870	D8-36TLP-1870	REFLECTIVE	0.125	36
2500 SENSOR END		SENSING MODE	DIAMETER	LENGTH
Stainless Steel Sheathing	PVC Sheathing			
	SO46-36TLP	OPPOSED	0.046	36
	SO62-36TLP	OPPOSED	0.062	36
	SO94-36TLP	OPPOSED	0.094	36
	S8-36TLP	OPPOSED	0.125	36
	DO27-36TLP	REFLECTIVE	0.027	36
	DO46-36TLP	REFLECTIVE	0.046	36
	DO62-36TLP	REFLECTIVE	0.062	36
	DO94-36TLP	REFLECTIVE	0.094	36
	D8-36TLP	REFLECTIVE	0.125	36

