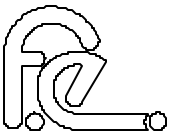


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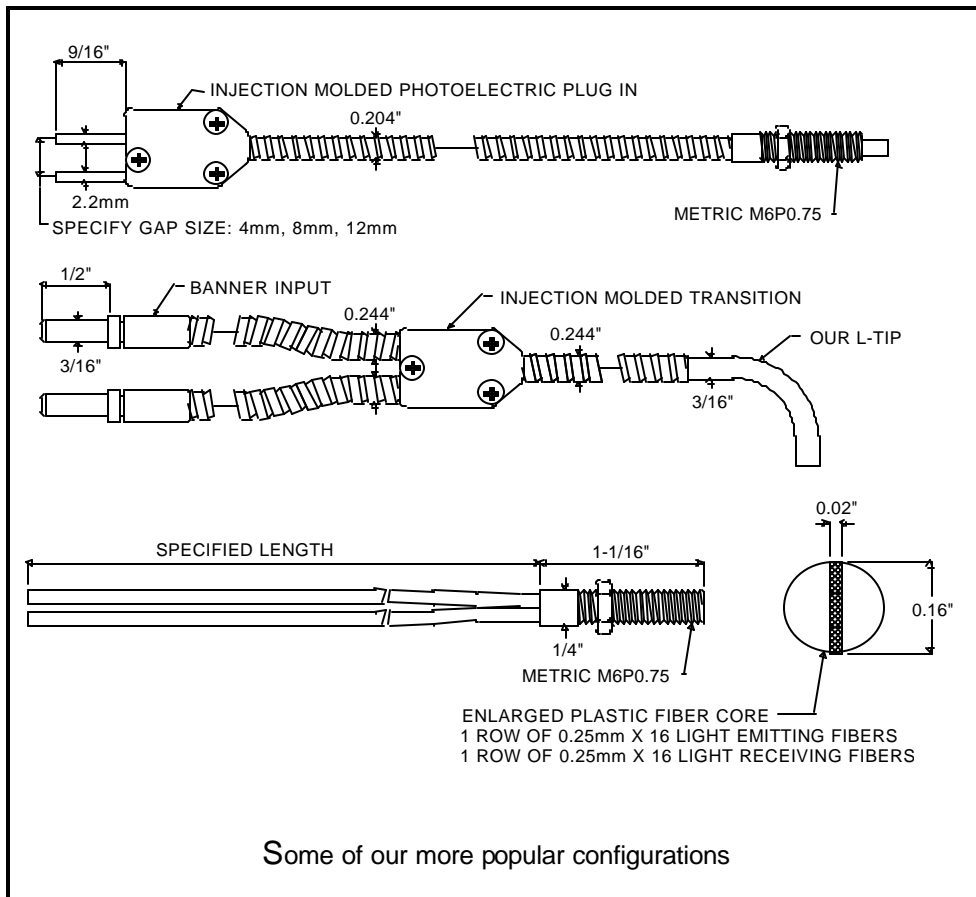


# FIBEROPTIC ENGINEERING CORPORATION

The following pages are dedicated to describing fiber optic scanner geometries and illumination systems we produce as standard components. Our scanner geometries address the American photoelectrics industry, with the versatile Banner tip supplied standard. We also manufacture the inexpensive and efficient Japanese type that require a 2.2mm diameter metal termination or freely

cuttable jacketed plastic fiber for direct plug in to there standard photoelectric controls. We inventory all parts in large volume and maintain that volume with two automatic screw machines with capabilities of producing 5000 plus tips per week. We also have our own in house injection molding machine to produce 2000 plus per day transitions and plug in termination's for Japanese photoelectrics.

Our glass fibers are made with premium core material from Schott Optical, the oldest and highest quality glass maker in the world. This results in glass fibers equal or superior to any competitor here or abroad. Manufacturing glass fiber is accomplished on two ten foot



diameter drawing wheels with solid state programmable controls that wind the required bundle diameter for each application. This results in quick and efficient assembly of scanners since little time is wasted in sizing the bundles. The advantage to the customer is fully stuffed tips, delivering the maximum light output consistently from assembly to assembly.

We utilize, as standard, a high quality 200°C epoxy for all glass to metal. For plastic to plastic or plastic to metal we utilize an epoxy certified for the aerospace industry, capable of excellent bonds to the plastic cladding with no deleterious effects.

Finally, all our scanners and illumination systems are automatically polished in a custom powered lapper and final polished in a \$12,000 Loh-Wetzler polishing machine until they appear as optical flats, guaranteeing the highest light output.

For nonstandard fiber optic scanners please send us your print we have one of the quickest turnaround times in the business. We offer a high level of engineering expertise in solving difficult fiber optic applications. Please consult with us if you have any questions.

# GLASS FIBER OPTICS

We use the highest quality glass from Schott Optical. Our glass fibers are equal or superior to any competitor here or abroad. Please see bottom of page for our transmission specifications. These transmission specifications are standard for glass, do not be fooled by fiber optic houses calling out higher transmission. For greater transmission please look at plastic or fused silica.

Our opposed (thru-beam) and reflective constructions utilize standard 400°F epoxy. Special configurations to 950°F are available. All our configurations come standard with stainless steel metal hose. Where liquids dripping on the fiber are a problem we can utilize either monocoil PVC sheathing or "Viton" tubing over stainless steel metal hose, sealed on both ends with Teflon heat shrink.

Our reflective scanners employ an injection molded transition that is epoxied and screwed together. The stainless steel metal hose is epoxied within this transition. The super smooth interior of the molded transition coupled with the smooth drawn tubing adapters, place the fibers in an excellent mechanical environment as follows.

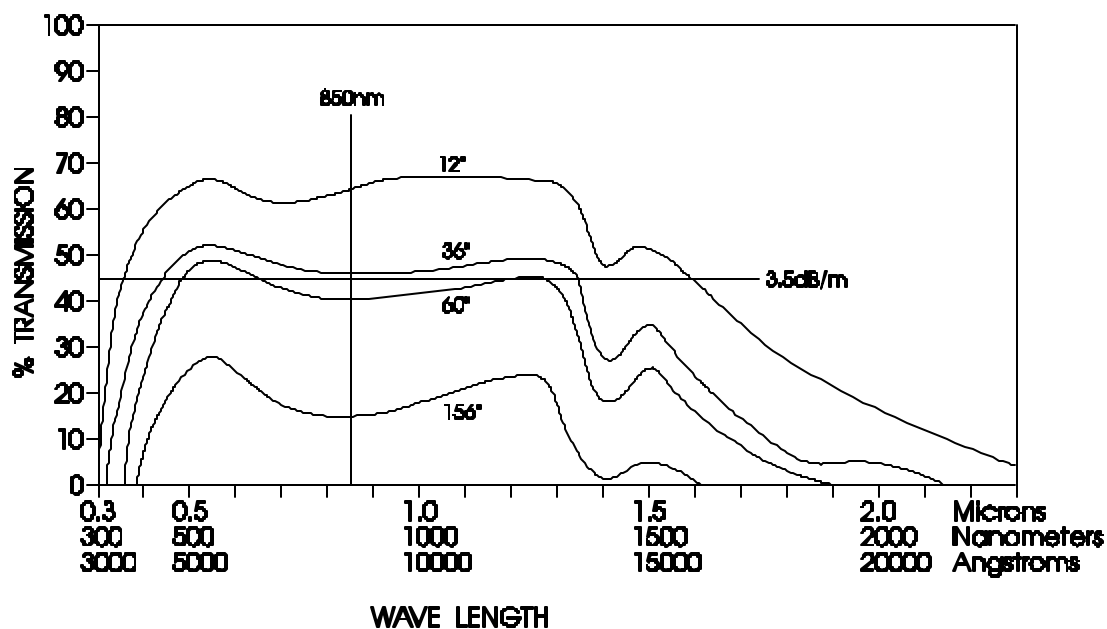
- 1.) The fibers never contact the edge of the stainless steel metal hose while in tension from randomizing.
- 2.) Extreme strength of the junction protecting the fibers from movement at this most critical junction.
- 3.) If the device must be flexed, flexure will occur through the flexibility of the stainless steel metal hose not through the transition as in the cheap PVC heat shrink transitions
- 4.) Metal transitions that clamp to the outside of the metal hose are not only never truly secure but the fiber is moved over the edge of the cut-off and deburred metal hose. This is akin to running the fibers over a hacksaw blade.

The smooth molded surface of our transition is an elegant solution and too long in coming to the business of quality reflective devices.

## Specifications for our standard glass

NA                    0.56  
Diameter        50m

Typical transmission for 1/8" bundles of glass fibers in 12", 36", 60" and 156" lengths.



## OPPOSED CONSTRUCTIONS WITH BANNER INPUT

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Order codes S8-24, S8-24-L, S8-24-T will solve 80% of all fiber optic sensing applications. The balance of these illustrations describe other handy geometries to solve less straight forward applications all available from stock.

Order codes S8-24-FM, S8-24-F are designed for edge detection and are available as an injection molded construction for high volume and low cost applications.

Order codes S8-24-LT, S8-24-TL offer mechanical mounting options to make installing and adjusting to one another easier.

Order codes S8-24-T, S8-24-LT are available with our F1.0 threaded lens assembly to increase sensing distance dramatically.

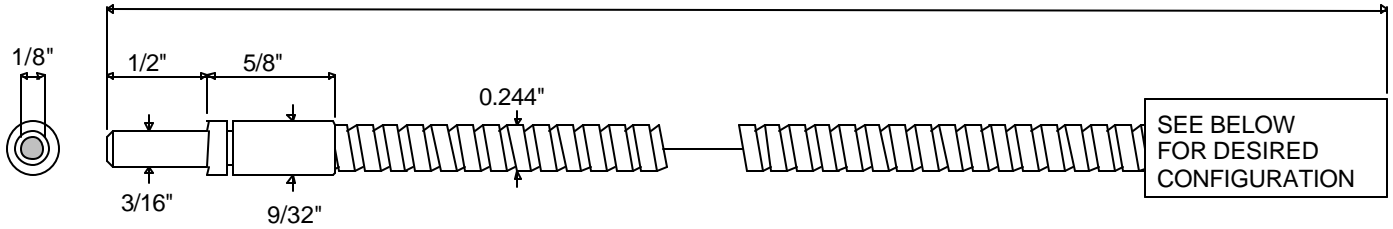
Available in any length to 30"

Standard Ordering lengths of: 24", 36" & 72".

# OPPOSED CONSTRUCTIONS WITH BANNER INPUT

UNLESS OTHERWISE NOTED, ILLUSTRATIONS ARE FULL SCALE, DIMENSIONS ARE IN INCHES  
BUNDLE DIAMETER: 1/8"

STANDARD LENGTH 24", 36", OR 72"  
Also Available in custom lengths up to 30 Feet



ORDER CODE FORMAT	S8	LENGTH	CONFIGURATION
	ORDER CODE	S8 24 L S8 36 L S8 72 L	
	ORDER CODE	S8 24 T S8 36 T S8 72 T	
	ORDER CODE	S8 24 S8 36 S8 72	
	ORDER CODE	S8 24 FM S8 36 FM S8 72 FM	
	ORDER CODE	S8 24 F S8 36 F S8 72 F	
	ORDER CODE	S8 24 LT S8 36 LT S8 72 LT	
COMBINATION 90° BEND PLUS 5/16"-24 THREAD NOT TO SCALE	ORDER CODE	S8 24 TL S8 36 TL S8 72 TL	

## OPPOSED CONSTRUCTIONS WITH BANNER INPUT

---

Order codes S071-24-S, S071-24-L, S071-24-B can be lengthened or shortened to meet your specific requirements. These smaller bundle diameters stuffed in stainless hypodermic needle tubing allow approach to difficult sensing areas and are optimized for small targets.

Order code S8-24-FS is a small rectangular fiber optic aperture that is very effective at sensing small rectangular web marks or for discerning subtle pastel colors against a low contrast web background.

Order code S8-24-FH offers the same advantages as above. Many customers prefer this injection molded termination that allows excellent alignment accuracy when clamped on the 3/16" diameter. This item is also made for volume applications.

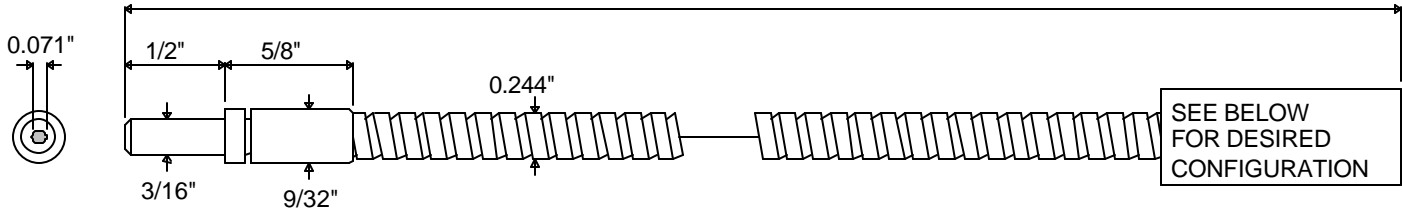
Standard Lengths 24", 36" or 72"

Custom Lengths up to 30"

# 1 OPPOSED CONSTRUCTIONS WITH BANNER INPUT

UNLESS OTHERWISE NOTED, ILLUSTRATIONS ARE FULL SCALE, DIMENSIONS ARE IN INCHES  
 BUNDLE DIAMETER: 0.071"

Standard Lengths 24", 36", 72"  
 Custom Lengths up to 30 feet



ORDER CODE FORMAT	S071	LENGTH	CONFIGURATION
		ORDER CODE	S071 24 S
			S071 36 S
			S071 72 S
		ORDER CODE	S071 24 B
			S071 36 B
			S071 72 B

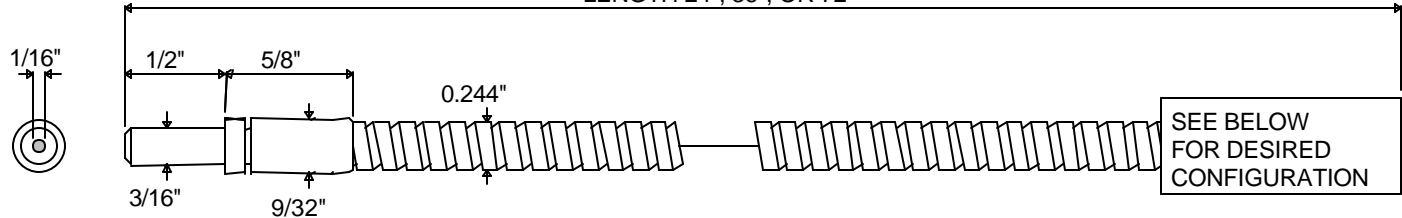
  

ORDER CODE FORMAT	S071	LENGTH	CONFIGURATION
		ORDER CODE	S071 24 L
			S071 36 L
			S071 72 L

BUNDLE DIAMETER: 1/16"

LENGTH 24", 36", OR 72"



ORDER CODE FORMAT	S6	LENGTH	CONFIGURATION
		ORDER CODE	S6 24 FS
			S6 36 FS
			S6 72 FS
		ORDER CODE	S6 24 FH
			S6 36 FH
			S6 72 FH

1/16" BUNDLE CONFIGURATIONS CONTINUED PAGE 7

## OPPOSED CONSTRUCTIONS WITH BANNER INPUT

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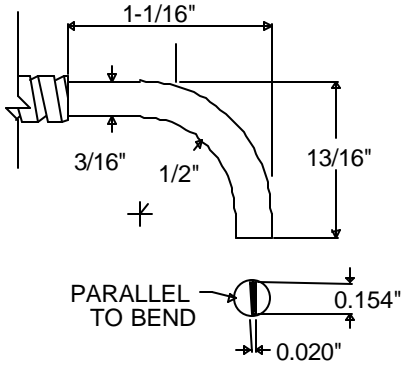
This page is a continuation of useful rectangular apertures to help solve those "insitu" mounting problems. Please note the different position of the rectangular aperture while maintaining the same exterior shape. For example order code S6-24-FLA has a vertical rectangular aperture while order code S6-24-FLB has a horizontal.

Order codes S6-24-FT, S6-24-FLTB, S6-24-FLTA are available with are F1.0 threaded lens assembly to increase sensing range or by careful alignment detect small changes in geometries to be sensed remotely. Please consult us for help if this is of interest.

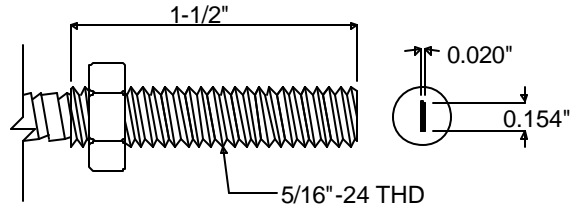
# OPPOSED CONSTRUCTIONS WITH BANNER INPUT

## 1/16" BUNDLE CONFIGURATIONS CONTINUED

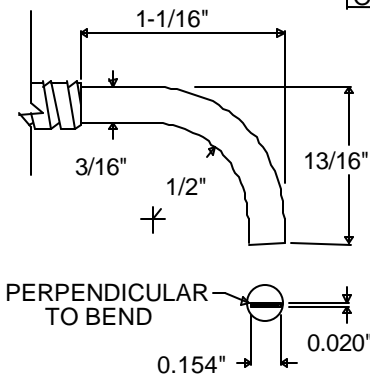
ORDER CODE	S6	24	FLB
	S6	36	FLB
	S6	72	FLB



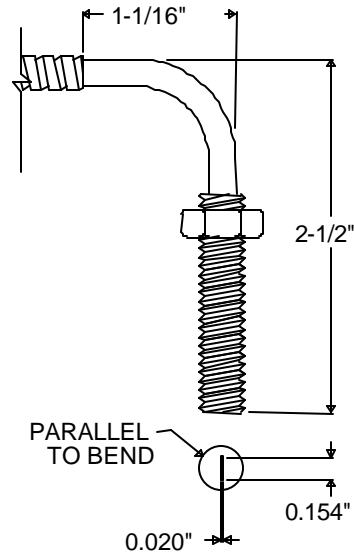
ORDER CODE	S6	24	FT
	S6	36	FT
	S6	72	FT



ORDER CODE	S6	24	FLA
	S6	36	FLA
	S6	72	FLA

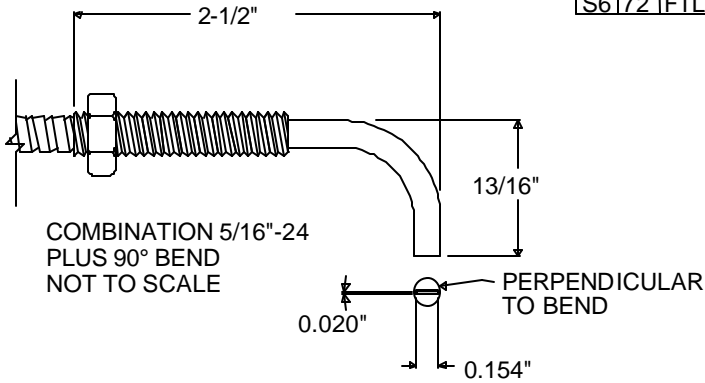


ORDER CODE	S6	24	FLTB
	S6	36	FLTB
	S6	72	FLTB

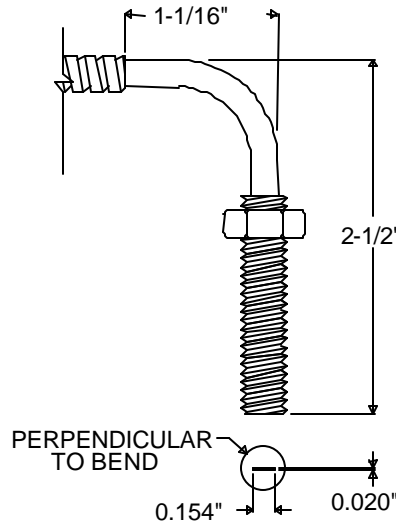


COMBINATION 90° BEND PLUS 5/16"-24 NOT TO SCALE

ORDER CODE	S6	24	FTLA
	S6	36	FTLA
	S6	72	FTLA

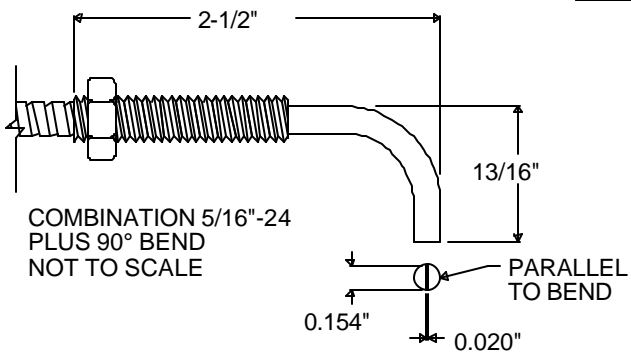


ORDER CODE	S6	24	FLTA
	S6	36	FLTA
	S6	72	FLTA



COMBINATION 90° BEND PLUS 5/16"-24 NOT TO SCALE

ORDER CODE	S6	24	FTLB
	S6	36	FTLB
	S6	72	FTLB



## **OPPOSED CONSTRUCTIONS FOR JAPANESE PHOTOELECTRIC SENSORS**

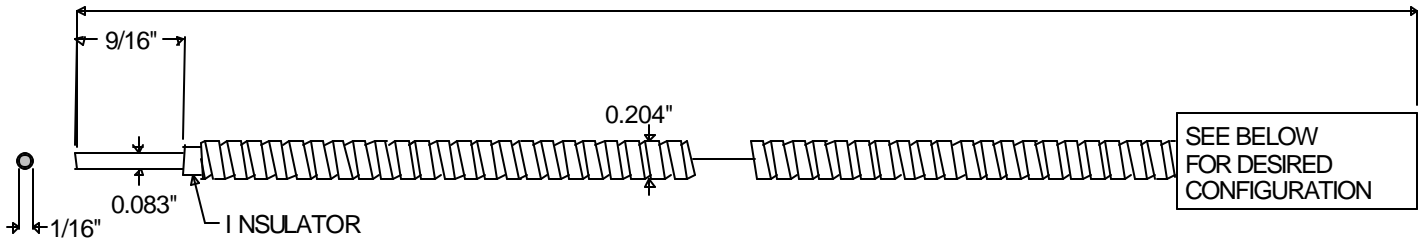
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We have developed a line of glass fiber optic assemblies that will add American availability and customizing to the Japanese photo-electric controls that were designed for the plastic 1 mm fiber with 2.2 mm diameter poly jacketing. Since not all applications can be serviced by plastic, glass fibers have their place where heat, and solvents would damage the plastic fibers, or where high mechanical strengths are needed. Utilizing tooling and apertures from our previous designs for large diameter American photoelectrics, we have increased the fiber bundle diameter to 1/16", adding more sensing power than 1mm glass by approximately 50% and as a bonus we have geometry's with American threads and dimensions. Also note that the input tip is insulated to preclude any antenna effect at high sensitivities with this all stainless steel construction.

# OPPOSED CONSTRUCTIONS FOR JAPANESE PHOTOELECTRIC SENSORS

FITS OMRON E3X-A11, MICRO SWITCH FE5F-1MC6-M, MITSUBISHI RAYON, OPCON, OPTEX, SUNX, ETC.  
 UNLESS OTHERWISE NOTED, ILLUSTRATIONS ARE FULL SCALE, DIMENSIONS ARE IN INCHES  
 BUNDLE DIAMETER: 1/16"

STANDARD LENGTH 24", 36", OR 72"  
 Custom Lengths up to 30 feet



ORDER CODE FORMAT	SJ6	LENGTH	CONFIGURATION
		ORDER CODE	SJ6 24 FLB SJ6 36 FLB SJ6 72 FLB
		ORDER CODE	SJ6 24 FT SJ6 36 FT SJ6 72 FT
		ORDER CODE	SJ6 24 FLA SJ6 36 FLA SJ6 72 FLA
		ORDER CODE	SJ6 24 FH SJ6 36 FH SJ6 72 FH
1/16" BUNDLE CONFIGURATIONS CONTINUED PAGE 11			

## **OPPOSED CONSTRUCTIONS FOR JAPANESE PHOTO-ELECTRIC CONTROLS**

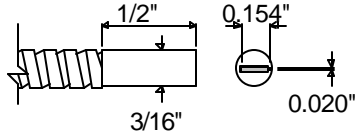
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A continuation of our rectangular apertures available for Japanese photoelectric sensors. Please note the different position of the rectangular aperture while maintaining the same exterior shape.

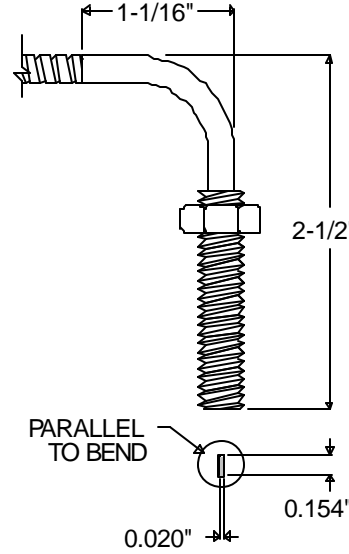
# OPPOSED CONSTRUCTIONS FOR JAPANESE PHOTOELECTRIC SENSORS

FITS OMRON E3X-A11, MICRO SWITCH FE5F-1MC6-M, MITSUBISHI RAYON, OPCON, OPTEX, SUNX, ETC.  
 1/16" BUNDLE CONFIGURATIONS CONTINUED

ORDER CODE	SJ6	24	FS
	SJ6	36	FS
	SJ6	72	FS

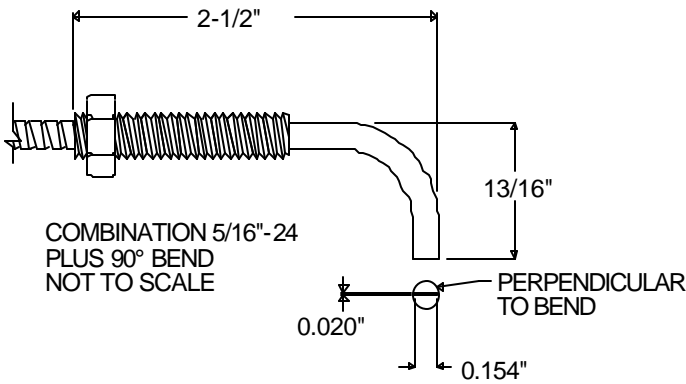


ORDER CODE	SJ6	24	FLTB
	SJ6	36	FLTB
	SJ6	72	FLTB



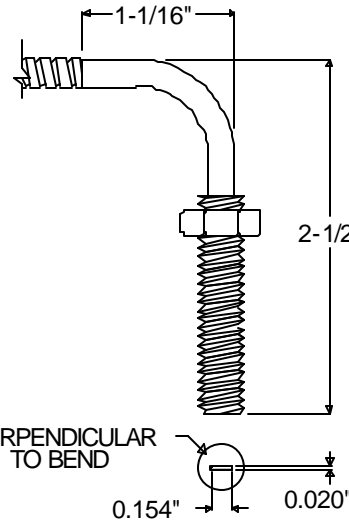
COMBINATION 90°  
 BEND PLUS  
 5/16"-24 THREAD  
 NOT TO SCALE

ORDER CODE	SJ6	24	FLTA
	SJ6	36	FLTA
	SJ6	72	FLTA



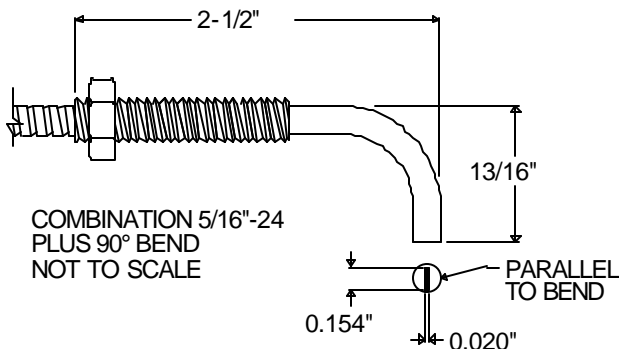
COMBINATION 5/16"-24  
 PLUS 90° BEND  
 NOT TO SCALE

ORDER CODE	SJ6	24	FLTA
	SJ6	36	FLTA
	SJ6	72	FLTA



COMBINATION 90°  
 BEND PLUS  
 5/16"-24 THREAD  
 NOT TO SCALE

ORDER CODE	SJ6	24	FTLB
	SJ6	36	FTLB
	SJ6	72	FTLB



COMBINATION 5/16"-24  
 PLUS 90° BEND  
 NOT TO SCALE

1/16" BUNDLE CONFIGURATIONS CONTINUED PAGE 13

## **OPPOSED CONSTRUCTIONS FOR JAPANESE PHOTOELECTRIC CONTROLS**

Order codes SJ6-24-MT6, SJ6-24-MT4 are made to help field installation by making the most popular Japanese threads utilized on their plastic available with our glass threaded fibers to our glass. We have even put the obsolete M2.6X.45 end tip so that the available small Japanese lens can be attached.

Order codes SJ6-24-AT, SJ6-24-LT are available with our F1.0 lens assembly for extended sensing range.

# OPPOSED CONSTRUCTIONS FOR JAPANESE PHOTOELECTRIC SENSORS

FITS OMRON E3X-A11, MICRO SWITCH FE5F-1MC6-M, MITSUBISHI RAYON, OPCON, OPTEX, SUNX, ETC.  
 1/16" BUNDLE CONFIGURATIONS CONTINUED

<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">ORDER CODE</td> <td style="text-align: center;">SJ6</td> <td style="text-align: center;">24</td> <td style="text-align: center;">MT6</td> </tr> <tr> <td></td> <td style="text-align: center;">SJ6</td> <td style="text-align: center;">36</td> <td style="text-align: center;">MT6</td> </tr> <tr> <td></td> <td style="text-align: center;">SJ6</td> <td style="text-align: center;">72</td> <td style="text-align: center;">MT6</td> </tr> </table> <p style="text-align: center;">METRIC M6P0.75</p>	ORDER CODE	SJ6	24	MT6		SJ6	36	MT6		SJ6	72	MT6	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">ORDER CODE</td> <td style="text-align: center;">SJ6</td> <td style="text-align: center;">24</td> <td style="text-align: center;">MT4</td> </tr> <tr> <td></td> <td style="text-align: center;">SJ6</td> <td style="text-align: center;">36</td> <td style="text-align: center;">MT4</td> </tr> <tr> <td></td> <td style="text-align: center;">SJ6</td> <td style="text-align: center;">72</td> <td style="text-align: center;">MT4</td> </tr> </table> <p style="text-align: center;">M4P0.7 M2.6P0.45</p>	ORDER CODE	SJ6	24	MT4		SJ6	36	MT4		SJ6	72	MT4
ORDER CODE	SJ6	24	MT6																						
	SJ6	36	MT6																						
	SJ6	72	MT6																						
ORDER CODE	SJ6	24	MT4																						
	SJ6	36	MT4																						
	SJ6	72	MT4																						

ORDER CODE	SJ6	24	L
	SJ6	36	L
	SJ6	72	L

COMBINATION 90° BEND PLUS  
5/16"-24  
NOT TO SCALE

ORDER CODE	SJ6	24	AT
	SJ6	36	AT
	SJ6	72	AT

AMERICAN 5/16"-24 THD

ORDER CODE	SJ6	24
	SJ6	36
	SJ6	72

COMBINATION 5/16"-24 PLUS 90° BEND  
NOT TO SCALE

ORDER CODE	SJ6	24	LT
	SJ6	36	LT
	SJ6	72	LT

COMBINATION 90° BEND PLUS  
5/16"-24  
NOT TO SCALE

ORDER CODE	SJ6	24	TL
	SJ6	36	TL
	SJ6	72	TL

COMBINATION 5/16"-24 PLUS 90° BEND  
NOT TO SCALE

## REFLECTIVE CONSTRUCTIONS WITH BANNER INPUT

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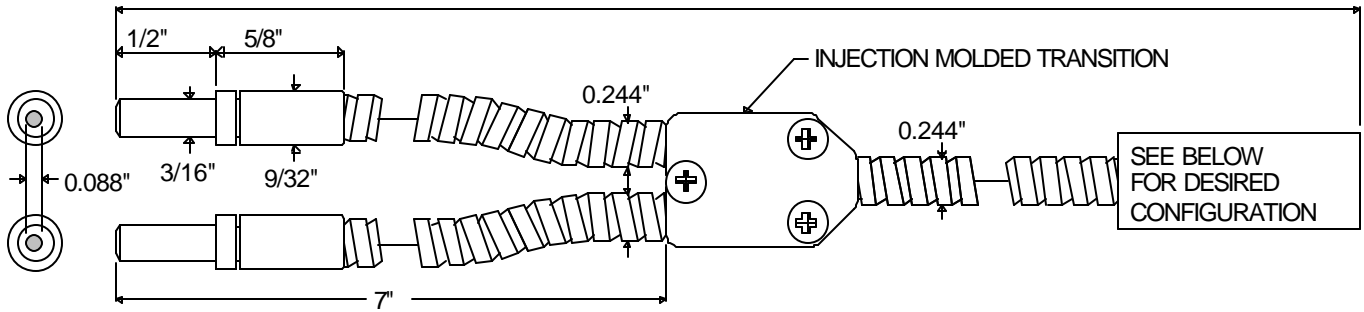
All of our reflective constructions come standard with our injection molded transition see page 1 for explanation.

Order codes D8-24-FM, D8-24-F are designed for edge detection and are available as a injection molded construction for high volume low cost applications.

# REFLECTIVE CONSTRUCTIONS WITH BANNER INPUT

UNLESS OTHERWISE NOTED, ILLUSTRATIONS ARE FULL SCALE, DIMENSIONS ARE IN INCHES  
 BUNDLE DIAMETER: 1/8"

STANDARD LENGTH 24", 36", OR 72"  
 Custom Lengths up to 30 feet



ORDER CODE FORMAT	D8	LENGTH	CONFIGURATION																								
	<table border="1"> <tr><td>ORDER CODE</td><td>D8</td><td>24</td><td>L</td></tr> <tr><td></td><td>D8</td><td>36</td><td>L</td></tr> <tr><td></td><td>D8</td><td>72</td><td>L</td></tr> </table>	ORDER CODE	D8	24	L		D8	36	L		D8	72	L														
ORDER CODE	D8	24	L																								
	D8	36	L																								
	D8	72	L																								
	<table border="1"> <tr><td>ORDER CODE</td><td>D8</td><td>24</td><td>T</td></tr> <tr><td></td><td>D8</td><td>36</td><td>T</td></tr> <tr><td></td><td>D8</td><td>72</td><td>T</td></tr> </table>	ORDER CODE	D8	24	T		D8	36	T		D8	72	T		<table border="1"> <tr><td>ORDER CODE</td><td>D8</td><td>24</td><td>T</td></tr> <tr><td></td><td>D8</td><td>36</td><td>T</td></tr> <tr><td></td><td>D8</td><td>72</td><td>T</td></tr> </table>	ORDER CODE	D8	24	T		D8	36	T		D8	72	T
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	D8	36	T																								
	D8	72	T																								
ORDER CODE	D8	24	T																								
	D8	36	T																								
	D8	72	T																								
	<table border="1"> <tr><td>ORDER CODE</td><td>D8</td><td>24</td><td>FM</td></tr> <tr><td></td><td>D8</td><td>36</td><td>FM</td></tr> <tr><td></td><td>D8</td><td>72</td><td>FM</td></tr> </table>	ORDER CODE	D8	24	FM		D8	36	FM		D8	72	FM		<table border="1"> <tr><td>ORDER CODE</td><td>D8</td><td>24</td><td>F</td></tr> <tr><td></td><td>D8</td><td>36</td><td>F</td></tr> <tr><td></td><td>D8</td><td>72</td><td>F</td></tr> </table>	ORDER CODE	D8	24	F		D8	36	F		D8	72	F
ORDER CODE	D8	24	FM																								
	D8	36	FM																								
	D8	72	FM																								
ORDER CODE	D8	24	F																								
	D8	36	F																								
	D8	72	F																								
	<table border="1"> <tr><td>ORDER CODE</td><td>D8</td><td>24</td><td>LT</td></tr> <tr><td></td><td>D8</td><td>36</td><td>LT</td></tr> <tr><td></td><td>D8</td><td>72</td><td>LT</td></tr> </table>	ORDER CODE	D8	24	LT		D8	36	LT		D8	72	LT	<p>COMBINATION 90° BEND PLUS 5/16"-24 THREAD NOT TO SCALE</p>													
ORDER CODE	D8	24	LT																								
	D8	36	LT																								
	D8	72	LT																								
	<table border="1"> <tr><td>ORDER CODE</td><td>D8</td><td>24</td><td>TL</td></tr> <tr><td></td><td>D8</td><td>36</td><td>TL</td></tr> <tr><td></td><td>D8</td><td>72</td><td>TL</td></tr> </table>	ORDER CODE	D8	24	TL		D8	36	TL		D8	72	TL	<p>COMBINATION 5/16"-24 THREAD PLUS 90° BEND NOT TO SCALE</p>													
ORDER CODE	D8	24	TL																								
	D8	36	TL																								
	D8	72	TL																								

## REFLECTIVE CONSTRUCTIONS WITH BANNER INPUT

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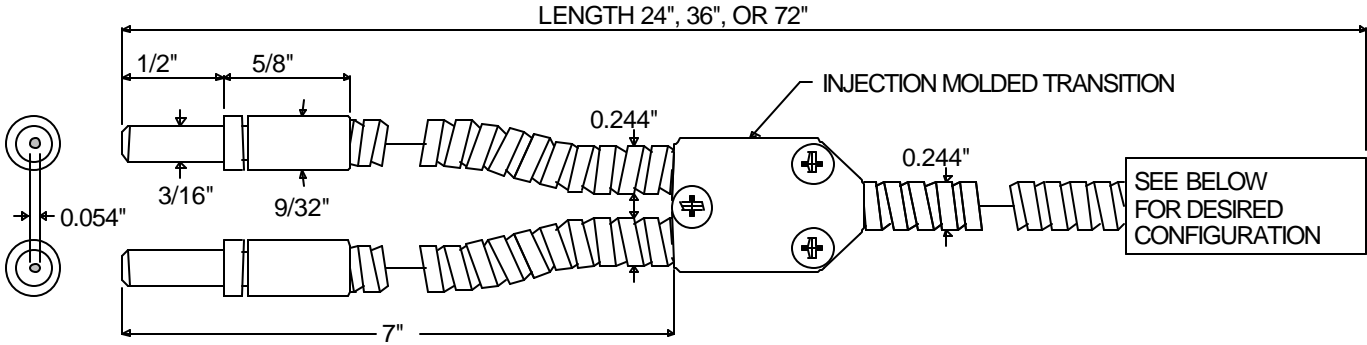
Order codes D071-24-S, D071-24-L, D071-24-B can be lengthened or shortened to meet your specific requirements. These smaller bundle diameters stuffed in stainless hypodermic needle tubing allow approach to difficult sensing areas and are optimized for small targets.

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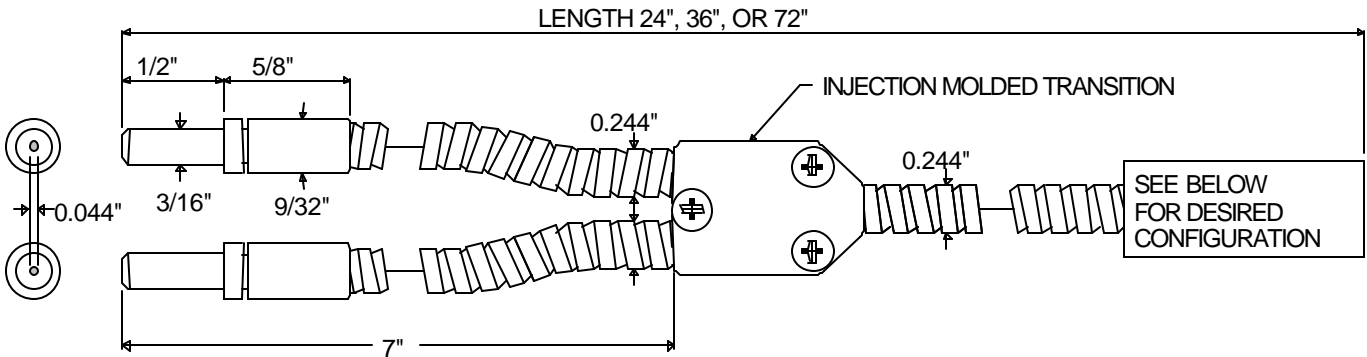
# REFLECTIVE CONSTRUCTIONS WITH BANNER INPUT

UNLESS OTHERWISE NOTED, ILLUSTRATIONS ARE FULL SCALE, DIMENSIONS ARE IN INCHES  
BUNDLE DIAMETER: 0.071"



ORDER CODE FORMAT	D071	LENGTH	CONFIGURATION
		ORDER CODE	D071 24 S
			D071 36 S
			D071 72 S
		ORDER CODE	D071 24 B
			D071 36 B
			D071 72 B
		ORDER CODE	D071 24 L
			D071 36 L
			D071 72 L

BUNDLE DIAMETER: 1/16"



ORDER CODE FORMAT	D6	LENGTH	CONFIGURATION
		ORDER CODE	D6 24 FS
			D6 36 FS
			D6 72 FS
		ORDER CODE	D6 24 FH
			D6 36 FH
			D6 72 FH

1/16" BUNDLE CONFIGURATIONS CONTINUED PAGE 19

## REFLECTIVE CONSTRUCTIONS WITH BANNER INPUT

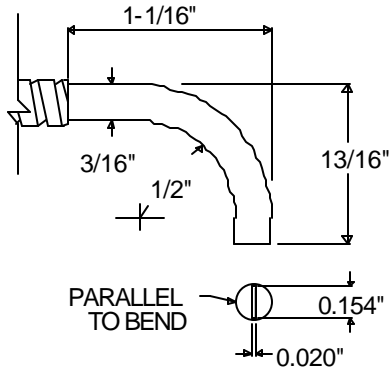
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This page is a continuation of useful rectangular apertures to help solve those "insitu" mounting problems. Please note the different position of the rectangular aperture while maintaining the same exterior shape. For example order code D6-24-FLA has a vertical rectangular aperture while order code D6-24-FLB has a horizontal.

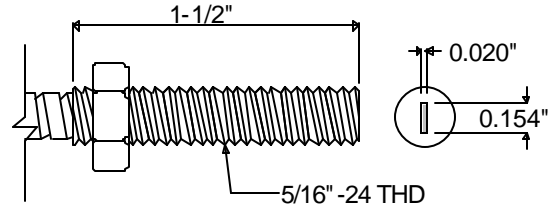
# REFLECTIVE CONSTRUCTIONS WITH BANNER INPUT

1/16" BUNDLE CONFIGURATIONS CONTINUED

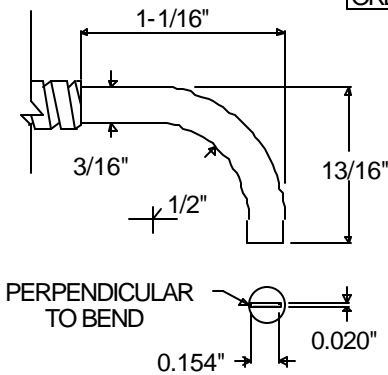
ORDER CODE	D6	24	FLB
	D6	36	FLB
	D6	72	FLB



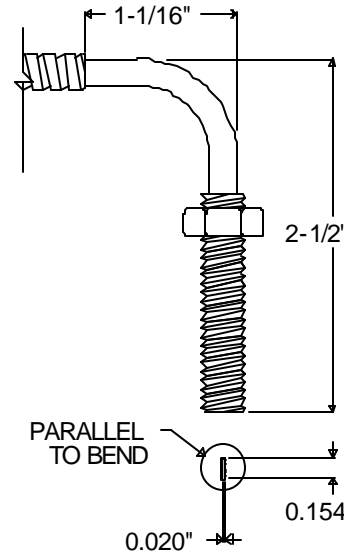
ORDER CODE	D6	24	FT
	D6	36	FT
	D6	72	FT



ORDER CODE	D6	24	FLA
	D6	36	FLA
	D6	72	FLA

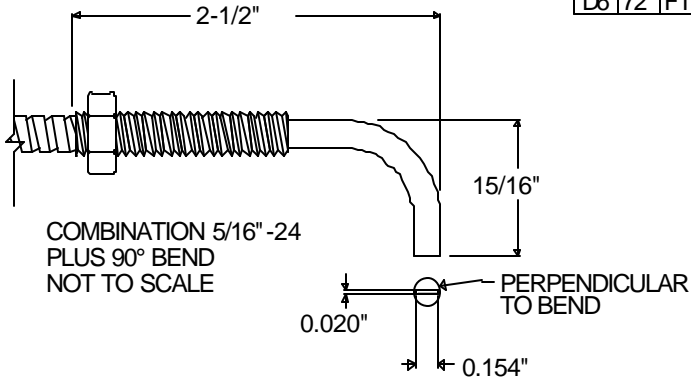


ORDER CODE	D6	24	FLTB
	D6	36	FLTB
	D6	72	FLTB



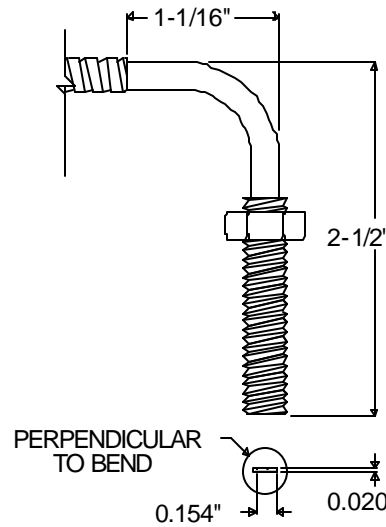
COMBINATION 90° BEND PLUS 5/16"-24 THREAD NOT TO SCALE

ORDER CODE	D6	24	FTLA
	D6	36	FTLA
	D6	72	FTLA



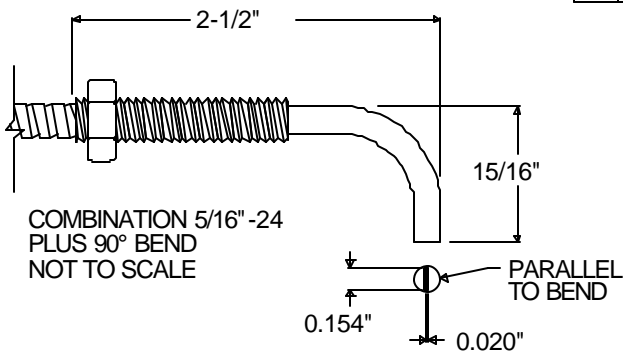
COMBINATION 5/16"-24 PLUS 90° BEND NOT TO SCALE

ORDER CODE	D6	24	FLTA
	D6	36	FLTA
	D6	72	FLTA



COMBINATION 90° BEND PLUS 5/16"-24 THREAD NOT TO SCALE

ORDER CODE	D6	24	FTLB
	D6	36	FTLB
	D6	72	FTLB



COMBINATION 5/16"-24 PLUS 90° BEND NOT TO SCALE

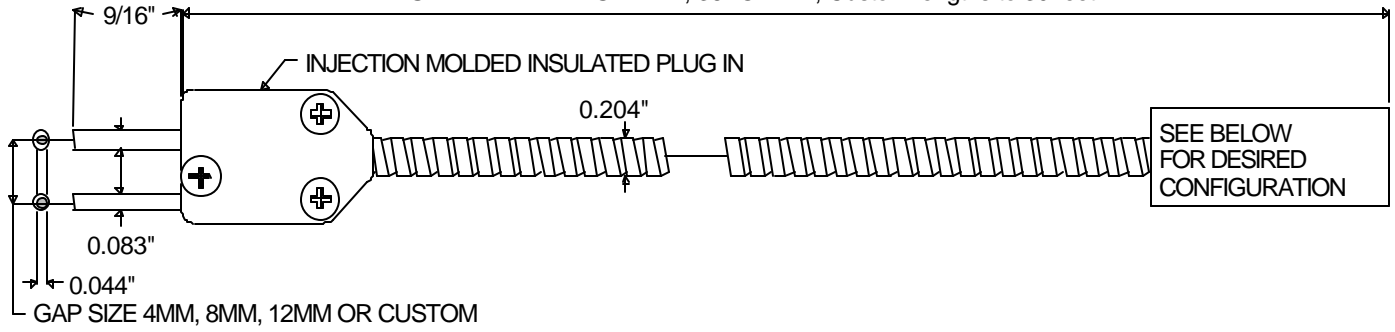
We have developed a line of glass fiber optic assemblies that will add American availability and customizing to the Japanese photo-electric controls that were designed for the plastic 1mm fiber with 2.2mm diameter poly jacketing. Since not all applications can be serviced by plastic, glass fibers have their place where heat, and solvents would damage the plastic fibers, or where high mechanical strengths are needed. Utilizing tooling and apertures from our previous designs for large diameter American photoelectrics, we have increased the fiber bundle diameter to 1/16", adding more sensing power than 1mm glass by approximately 50% and as a bonus we have geometry's with American threads and dimensions. Some customers have a very negative opinion of fragile looking plastic scanners. Here we have stainless steel metal hose construction with a neat plug-in unit that solves many applications that might have soured with plastic. Our injection molded plug-in acts as an insulator to preclude any "antenna effect". Please remember to specify the distance between the light emitting and light receiving ports on your photoelectric control.

Order code DJ6-24-FH is available as a low cost high volume injection molded part and provides excellent alignment accuracy.

# REFLECTIVE CONSTRUCTIONS FOR JAPANESE PHOTOELECTRIC SENSORS

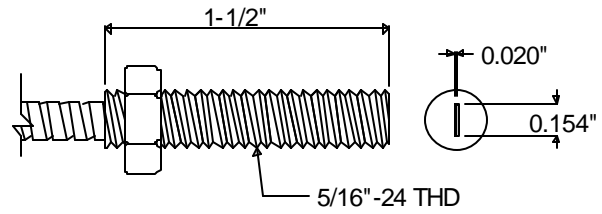
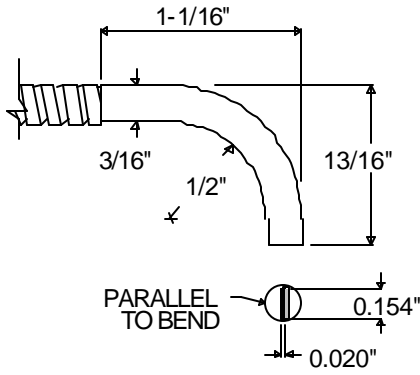
FITS OMRON E3X-A11, MICRO SWITCH FE5F-1MC6-M, MITSUBISHI RAYON, OPCON, OPTEX, SUNX, ETC.  
 UNLESS OTHERWISE NOTED, ILLUSTRATIONS ARE FULL SCALE, DIMENSIONS ARE IN INCHES  
 BUNDLE DIAMETER: 1/16"

STANDARD LENGTH 24", 36" OR 72", Custom lengths to 30 feet



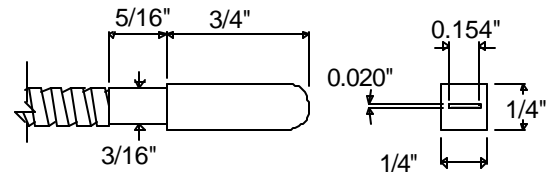
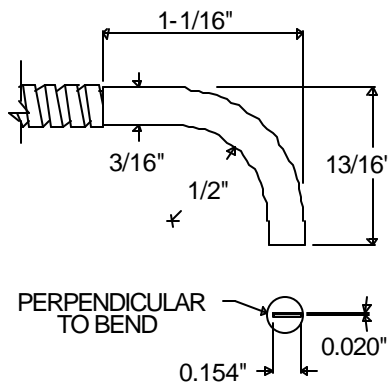
ORDER CODE FORMAT	DJ6	LENGTH	CONFIGURATION
		ORDER CODE	DJ6 24 FLB
			DJ6 36 FLB
			DJ6 72 FLB

ORDER CODE	DJ6	24	FT
		DJ6	36 FT
		DJ6	72 FT



ORDER CODE	DJ6	24	FLA
		DJ6	36 FLA
		DJ6	72 FLA

ORDER CODE	DJ6	24	FH
		DJ6	36 FH
		DJ6	72 FH



1/16" BUNDLE CONFIGURATIONS CONTINUED PAGE 23

## **REFLECTIVE CONSTRUCTIONS FOR JAPANESE PHOTOELECTRIC SENSORS**

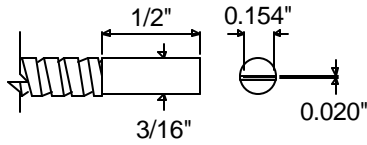
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These scanners are a continuation from the previous page with additional shapes to solve mounting/sensing problems.

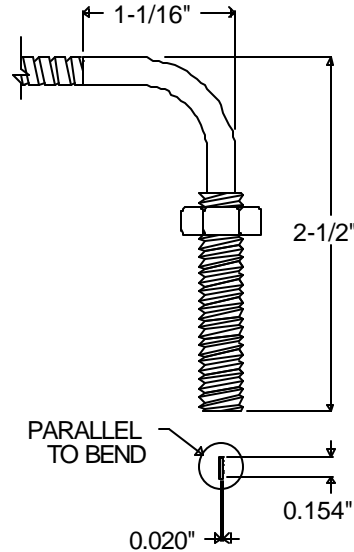
# REFLECTIVE CONSTRUCTIONS FOR JAPANESE PHOTOELECTRIC SENSORS

FITS OMRON E3X-A11, MICRO SWITCH FE5F-1MC6-M, MITSUBISHI RAYON, OPCON, OPTEX, SUNX, ETC.  
1/16" BUNDLE CONFIGURATIONS CONTINUED

ORDER CODE	DJ6	24	FS
	DJ6	36	FS
	DJ6	72	FS

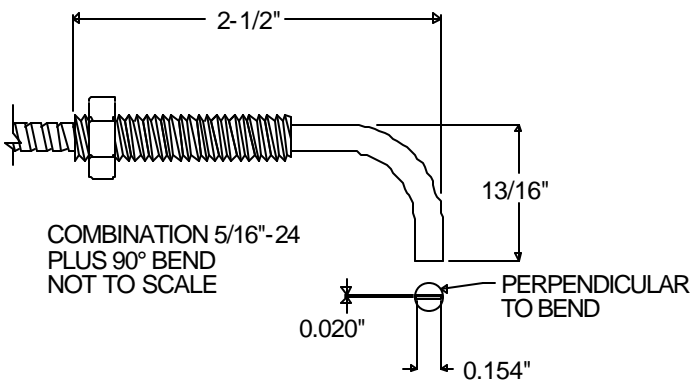


ORDER CODE	DJ6	24	FLTB
	DJ6	36	FLTB
	DJ6	72	FLTB



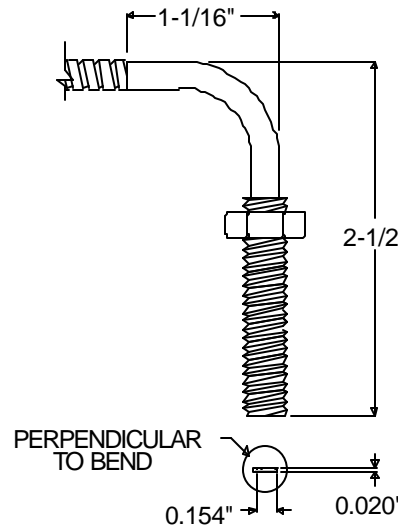
COMBINATION 90°  
BEND PLUS  
5/16"-24  
NOT TO SCALE

ORDER CODE	DJ6	24	FLTA
	DJ6	36	FLTA
	DJ6	72	FLTA



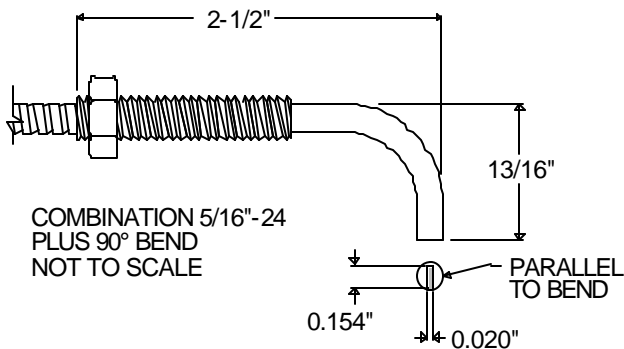
COMBINATION 5/16"-24  
PLUS 90° BEND  
NOT TO SCALE

ORDER CODE	DJ6	24	FLTA
	DJ6	36	FLTA
	DJ6	72	FLTA



COMBINATION 90°  
BEND PLUS  
5/16"-24  
NOT TO SCALE

ORDER CODE	DJ6	24	FTLB
	DJ6	36	FTLB
	DJ6	72	FTLB



COMBINATION 5/16"-24  
PLUS 90° BEND  
NOT TO SCALE

## **REFLECTIVE CONSTRUCTIONS FOR JAPANESE PHOTOELECTRIC SENSORS**

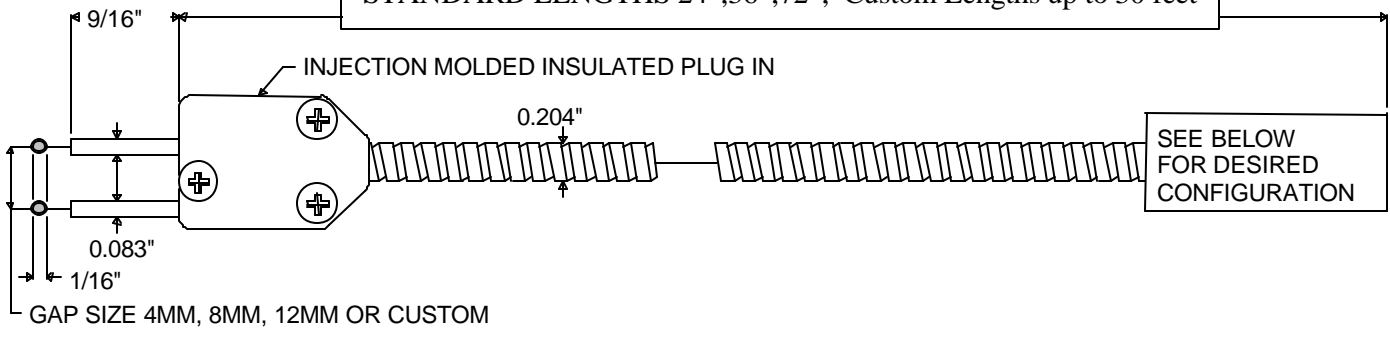
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Order Code DJ088-24-L shows a enlarged bundle detail typical of all configurations this page. The actual bundle size is 0.088" which is enlarged to allow for the 0.008" brass divider separating the light emitting and light receiving fibers. This division of the fibers solves the problem of the photoelectric control receiving a false detection at higher sensitivity's.

# REFLECTIVE CONSTRUCTIONS FOR JAPANESE PHOTOELECTRIC SENSORS

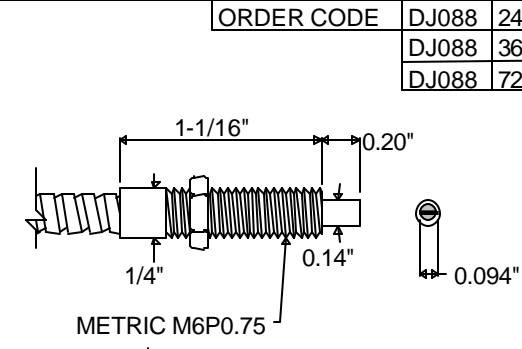
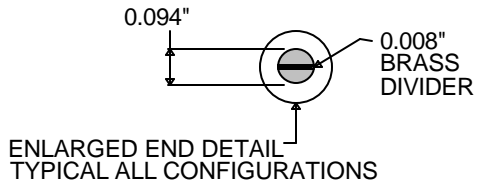
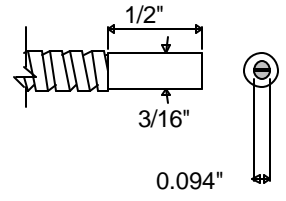
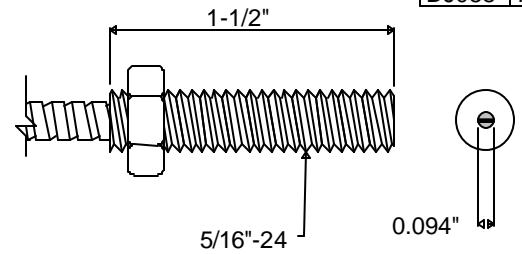
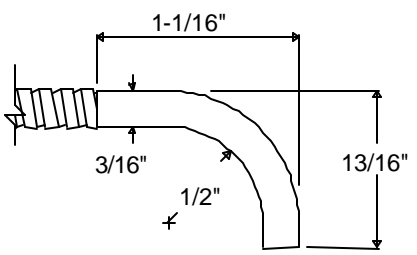
FITS OMRON E3X-A11, MICRO SWITCH FE5F-1MC6-M, MITSUBISHI RAYON, OPCON, OPTEX, SUNX, ETC.  
 UNLESS OTHERWISE NOTED, ILLUSTRATIONS ARE FULL SCALE, DIMENSIONS ARE IN INCHES  
 BUNDLE DIAMETER: 0.088"

STANDARD LENGTHS 24", 36", 72", Custom Lengths up to 30 feet



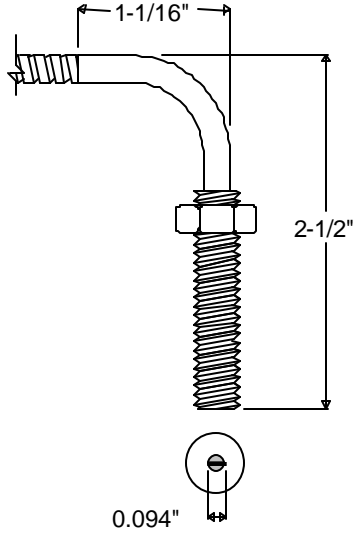
ORDER CODE FORMAT	DJ088	LENGTH	CONFIGURATION
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ORDER CODE	DJ088	24	L	ORDER CODE	DJ088	24	AT	ORDER CODE	DJ088	24
	DJ088	36	L		DJ088	36	AT		DJ088	36
	DJ088	72	L		DJ088	72	AT		DJ088	72



ORDER CODE	DJ088	24	MT6
	DJ088	36	MT6
	DJ088	72	MT6

COMBINATION 90° BEND PLUS 5/16"-24	ORDER CODE	DJ088	24	LT
NOT TO SCALE		DJ088	36	LT
		DJ088	72	LT



COMBINATION 5/16"-24 PLUS 90° BEND	ORDER CODE	DJ088	24	TL
NOT TO SCALE		DJ088	36	TL
		DJ088	72	TL

