

Custom and Special End Tip Fiber Optics

Our extensive standard product line of fiber optics and related components will fit a vast array of applications. If your application requires a custom designed fiber optic, we will be happy to assist you with your specific needs.

In order to keep the cost and turnaround time for a special fiber optic to a minimum, try to design with standard parts that are used in our regular line of fiber optics. Refer to our standard straight single and dual branch fiber optic light guides <http://www.dolan-jenner.com/Pro/PDF/B%20type.pdf> . This would include our standard sheathing materials, fiber and terminations. When a line-to-circle fiber optic is desired, **we have a comprehensive list of fiber molds**. Using these available molds would eliminate a tooling change.

If special configurations and materials are required in which our standard components can not be utilized, we have the resources and expertise available to manufacture to your specific requirements.

Generally, the best approach for receiving price and delivery information on a special fiber optic design is to send a sketch or drawing of your specific requirements. Among the parameters to be considered are OAL (overall length) of the fiber optic assembly, fiber bundle diameter, fiber material, sheathing material, special termination configurations, and length of branches for multi-branch configurations.

Specifications

Fiber Diameter

Individual fiber diameters range from 0.001” (0.025mm) glass to 0.010”(.25mm) quartz fiber optic rod. Typical diameter for individual fibers in a bundle is 0.002” (0.05mm).

Fiber Material

Glass, quartz (PCS clad), quartz (quartz clad), and plastic. For specific fiber information, please contact our sales and application department, or view the information under the technical notes link <http://www.dolan-jenner.com/Pro/Technical%20Notes.htm>

Fiber/Aperture Geometry

We can provide aperture configurations that work best for specific applications.

Transmission

We offer fiber materials that transmit light from the UV spectrum 220nm through visible to extended IR (2700 nm). (For exact transmission data and spectral curves please contact our sales and application department, or view the information under the technical notes link <http://www.dolan-jenner.com/Pro/Technical%20Notes.htm>).

Temperature

We manufacture fiber optics that can withstand temperatures from -40 F (-40 C) to 2000 F (1093 C)

Sheathing material

Dolan-Jenner offers a wide range of sheathings. Our Standard material includes PVC covered mono-coil, interlocking stainless steel and black E-coated self supporting gooseneck. Other possible materials include braided stainless steel, silicone rubber, woven fiber glass, and welding hose.

Terminations

A broad range of ferrule materials are available. These include stainless steel, brass, plastic, aluminum and heated shrinkable materials. Custom end terminations can be manufactured and bent to your dimensional requirements to suit mounting restrictions or sensing areas.

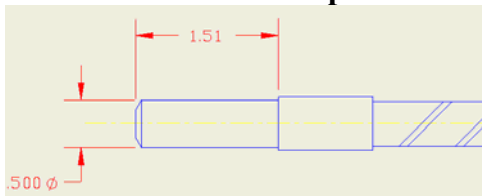
Special Housings

Our machining capability offers the ability to design custom housings for specific fiber optic applications. Examples include housings which incorporate a matrix of fiber bundles, custom designed line to circle housings, and special annular configurations. We can also provide special tooling for line-to-circle arrays. This includes both fiber molds and epoxy encapsulation mold tooling. For high volume requirements Dolan-Jenner can supply injection molded housings.

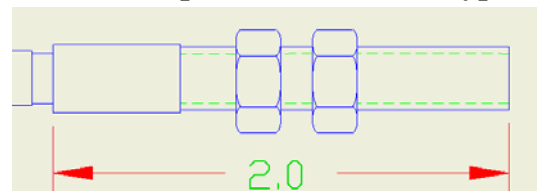
Shown below is a representative sampling of fiber optic configurations that Dolan-Jenner has to offer. Please contact Dolan-Jenner with any further questions, applications, or details for the items shown below.

Follow this link to contact us: <http://www.dolan-jenner.com/Condolan/Contact1.htm>

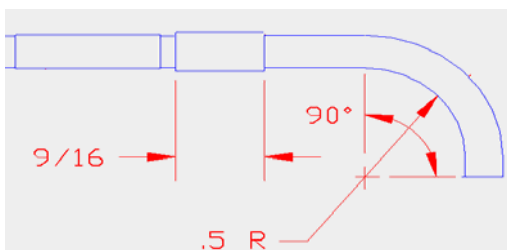
Standard Gooseneck Tip



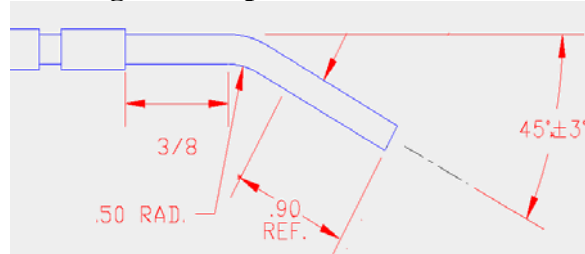
Threaded Tip, 5/16-24 or 1/2-20 typ.



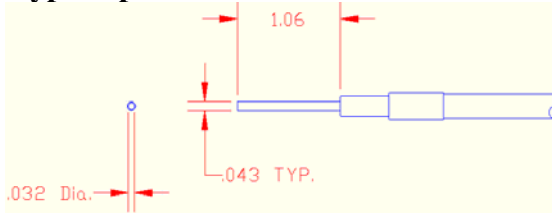
90 Degree L Tip



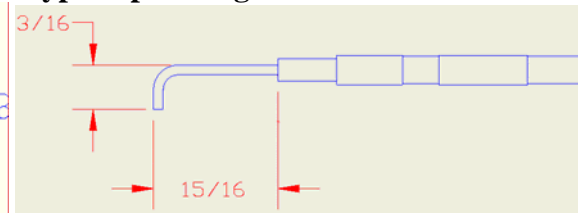
45 Degree M Tip



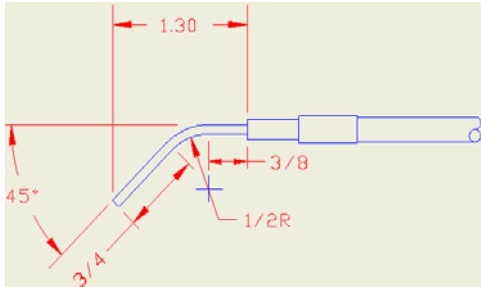
Hypo Tip



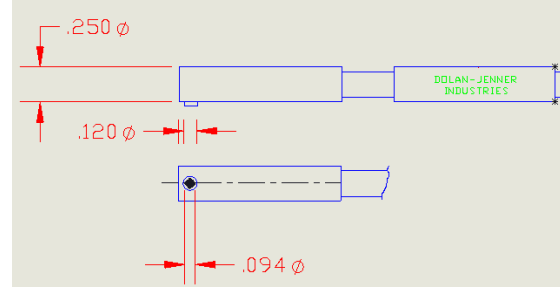
Hypo Tip 90 Degree



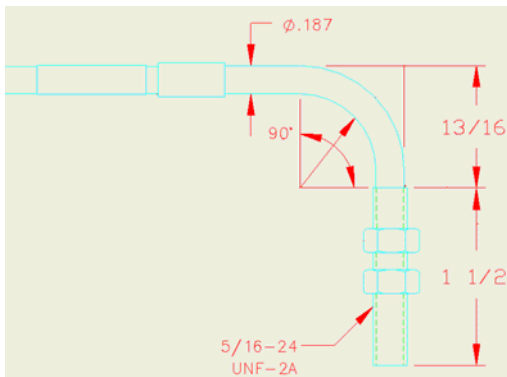
Hypo Tip 45 Degree



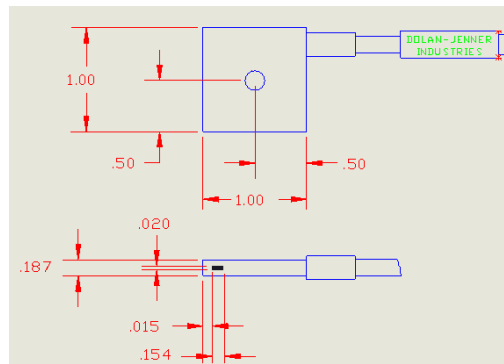
Tight Right Angle



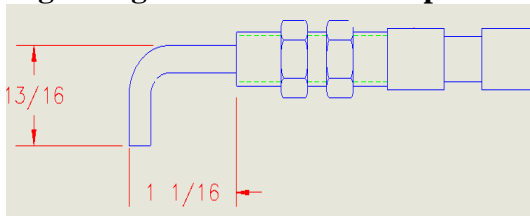
Threaded Right Angle



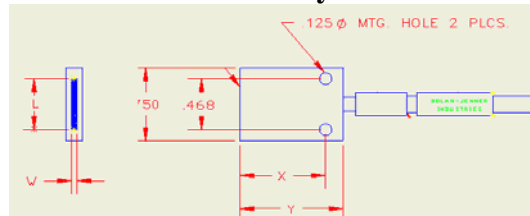
Flared Right Angle Assembly

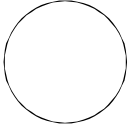
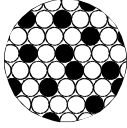
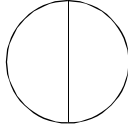
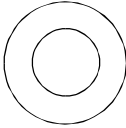
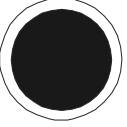
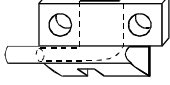


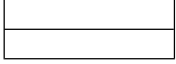


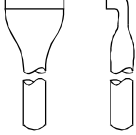
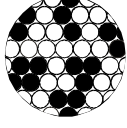
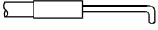


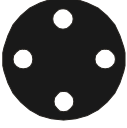
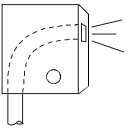
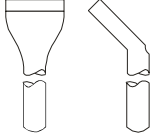



Right Angle after Threaded Tip



Flared End Assembly



			
STANDARD	RANDOMIZED	DIVIDED	CO-AXIAL
			
ANNULAR	CUSTOM MOLD	FLARE	TIGHT RIGHT ANGLE
			
DIVIDED FLARE	THREADED	MULTI APERTURE	· LINE TO CIRCLE RIGHT ANGLE
			
ROUGH RANDOMIZED	'MICRO MINIATURE' HYPO RIGHT ANGLE	· LINE TO CIRCLE RIGHT ANGLE	· LINE TO CIRCLE
			
MULTI-APERTURE ANNULAR	MOLDED RIGHT ANGLE FLARE	LINE TO CIRCLE 45° ANGLE	SEGMENTED ANNULAR