










SAPPHIRE AND RUBY ORIFICE FITTINGS AND CONNECTORS

Bird Precision offers a wide variety of standard options in orifice hardware. Bird Precision orifices are swaged in place by a proprietary method for maximum strength and sealing, and most are available with micro screen filtration. Bird also retrofits customer supplied fittings and currently retrofits many common commercially available fittings. Sapphire and ruby orifices are laser drilled and wire lapped, resulting in a burr free orifice that is extremely round and sharp edged. Bird Precision's synthetic sapphire and ruby orifices feature zero porosity, high temperature tolerance and wear resistance as well as chemical resistance. Repeatable flows from less than .5 cc/min. All fittings and connectors are offered in sizes from .00029" through .081".

Please contact a knowledgeable Bird Sales Representative at (800) 454-7369 with any questions you might have or to inquire about having Bird Precision design a custom fitting to your specifications.

Brass Fittings and Connectors


Brass fittings and connectors are available for brass tubing or threaded tube connectors such as typical 1/8" NPT male to male, male to female, elbows, Y's, T's and unions. Brass is recommended where stainless steel is not warranted, but pressure or application dictates. Most are available with either straight hole insert or "vee" orifice insert. Sizes range from .00029" through .081".

	82029 Face Seal 10-32 THD 1/4" HEX, Buna or Nylon Washer
	82416 Male Hex Nipple, 1/8" Pipe to 1/8" Pipe
	82184 Male Elbow 90 degrees, 1/8" Pipe Thread, 1/8" Tube Size, quick connect
	82703 Male Run Tee for 1/4" Tube
	82802 Barb in Tube Insert for 1/16" ID, flexible 82618 Barb in Tube Insert for 1/16" ID, flexible to terminate
	82717 Adapter 1/8-27" NPT Male to 1/8-27" NPT Female
	82704 3-56 thread to 1/16" Barb Miniature
	82478 10-32 thread to 1/8" Barb Buna Washer Seal
	82666 10-32 thread to 1/16" Barb Buna Washer Seal
	82271 10-32 thread to 1/8" Barb O'Ring Seal
	82385 In-Line Brass Tube Fitting for 1/16" ID Flexible Tubing

The above fittings are available with our complete line of orifices from .00029" through .081" with or without stainless steel filters.

Plastic Fittings and Connectors (with ruby orifices for flexible plastic tubes)

Plastic fittings and connectors for most commercial plastic configurations are available: luer, in-line, threaded to barb, Y's, T's and elbows as well as special quick disconnect components. All standard tube fittings are available for most plastic tubing barb sizes.

Thread to Tube	
	82665 10-32 threads to 1/16" Barb, Nylon Elbow
	82696 10-32 threads to 1/16" Barb, Polypropylene
	82762 10-32 threads to 1/8" Barb, Nylon
	82265 10-32 threads to .170" (4mm) Barb, Nylon
	82672 1/8-27 threads to 3/32" Barb, Nylon
	82427 1/8-27 threads to 1/8" Barb, White and Black Nylon



SAPPHIRE AND RUBY ORIFICE FITTINGS AND CONNECTORS



"T": Designed to connect 1/8" (3mm) ID tubing
82001 1/8x1/8x1/8-27 Thread Nylon
82599 1/8x1/8x1/8 Barbs, White Nylon



82737 "Y": Designed to connect 1/8" (3mm) ID tubing



Luer couplers: Coupler with integral lock ring and heavy-duty female luer thread



Luers for Threaded Ports: Designed to connect male luer to #10-32 UNF port, etc. Heavy-duty female luer and special tapered 1/4-28" thread

Tube to Tube



82673 1/16" Tube, Kynar
82715 1/8" Tube, Nylon, 7 colors
82473 1/8" Tube, Polypropylene
82472 1/8" Tube, Kynar
82426 1/4" Tube, Nylon
82896 3/8" Tube, PVDF



Female Luer and Male Luer: Designed for use with 1/16" (1-1/2 mm) ID tubing



Threaded Couplers: **82449** Designed to connect two #10-32 UNF female ports. 1/4" hex

All of the above fittings and connectors are available with our complete line of orifices from .00029" through .081" with or without stainless steel filters.

Stainless Steel Fittings and Connectors

Stainless steel connectors and fittings may be ordered for common 1/8" and 1/4" stainless tubings as well as for typical male and female connectors including: T's, glands, VCRs, port type and elbow connections. Stainless steel is ideal for high pressure corrosion or temperature requirements. Either straight hole or "vee" orifices are available depending on the application.



82815 Male Connector 1/4" OD Tubing
82627 Male Connector 1/8" OD Tubing
82631 Male Connector Union 1/4" OD Tubing



82323 Port Connector 1/8" OD Tubing
82462 Port Connector 1/4" OD Tubing
82350 Port Connector 3/8" OD Tubing



82573 Male Elbow 1/8" OD Tube 1/8" Pipe



82703 Male Run Tee 1/4" OD Tube 1/8" Pipe



82733 Male Hex Nipple 1/8" Pipe to 1/8" Pipe



82548 316 Stainless Steel 10-32 thread to 1/16" Barb



82502 Face Seal Gasket Orifice Assembly for Stainless Tube Assemblies .475 diameter

All of the above stainless steel fittings and connectors are available with our complete line of orifices from .00029" through .081" with or without stainless steel filters.