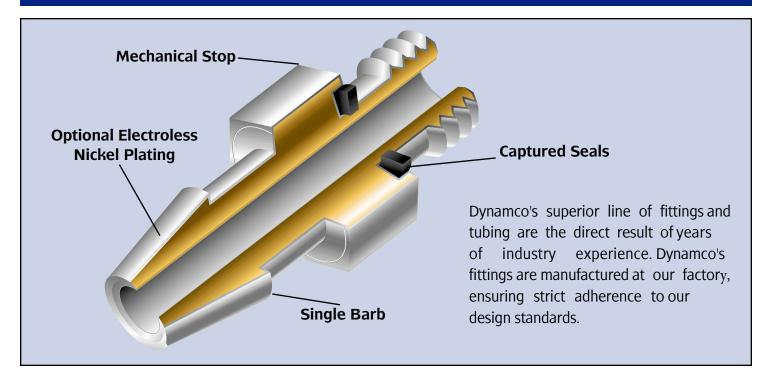


Dynamco Fittings & Tubing – Superior By Design



- Captured Seals Dynamco fittings have their seals already installed on the fitting thread. This feature offers significant time savings, eliminating the need to install seals upon receipt or during installation.
- Mechanical Stop The thread and seal design allows the user to tighten the fitting (5.5 in–lb ± 0.5) without cutting or damaging the seal. This seal "squeeze" is controlled by the undercut cavity, allowing the seal to be used an infinite number of times, without wear or damage.
- Single Barb The tapered nose of Dynamco's single barb fitting eases installation, but also ensures more positive sealing and holding of pneumatic tubing.
- Electroless Nickel Plating While standard brass fittings work in most applications, several Dynamco fittings are now available with electroless nickel plating. This catalog outlines where plating is offered as an option by listing a "P" at the beginning of the part number.
- Stainless Steel Check Valves & Flow Controls Dynamco's check valves and flow controls are now also available in Stainless Steel.
- Elimination of Unnecessary Fittings It is possible, in many cases, to replace two ordinary fittings with just one Dynamco fitting, simplifying connections and minimizing cost.
- Variety Dynamco offers a full line of tees, elbows and connectors, allowing you to complete virtually any job with miniature sized tubing.
- Versatility Contact Dynamco if any of your fitting needs are not met within this catalog. Special designs will be considered for production quantities.
- Tubing Dynamco offers polyurethane tubing in black and clear colors. Two sizes of tubing are available. The smaller tubing (1/16" ID x 1/8" OD) is used for interconnection between logic components, for communication with power valve pilots and limit valves, and for all other connections not requiring a high flow. The larger tubing (1/8" ID x 1/4" OD) is used for control air supply lines and with valves that require a higher flow capacity.

Tubing Material	Color	Tube ID	Tube OD	Part Number
Polyurethane	Clear	1/16 in (1.6 mm)	1/8 in (3.2 mm)	150-3
Polyurethane	Clear	1/8 in (3.2 mm)	1/4 in (6.4 mm)	150-4

Dynamco fittings and tubing are rated to 100 psig (6.9 bar) at standard operating temperatures.

All Dynamco fittings are manufactured out of brass and designed to be used with polyurethane tubing unless otherwise noted.

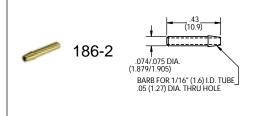
CONNECTORS



Tube to Male	Thread		TUBE ID	TUBE OD	MALE THREAD	L	FLOW DIAMETER
×	211-1 P211-1		1/16" (1.6)	1/8" (3.2)	10-32 (M5)	.45 (11.4)	.05 (1.3)
× P	210-1 P210-1	7/16 HEX	1/16" (1.6)	1/8" (3.2)	1/8" NPT	.91 (23.1)	.05 (1.3)
all a	211-2 P211-2	1/4 HEX	1/8" (3.2)	1/4" (6.4)	10-32 (M5)	.58 (14.7)	.10 (2.5)
a	212-4	- (15.2) - (1/8" (3.2)	1/4" (6.4)	10-32 (M5)	.74 (18.8)	.10 (2.5)
and you	213-2	→ 53 065 065 (1.65) 065 (1.65) 065 (1.1.4) (1.1.	1/8" (3.2)	1/4" (6.4)	10-32 (M5)	.74 (18.8)	.10 (2.5)
1 All	211-9		3/32" (2.5)	5/32" (4.0)	10-32 (M5)	.57 (14.5)	.10 (2.5)
and the	212-3		5/32" (4.0)	1/4" (6.0)	10-32 (M5)	.57 (14.5)	.10 (2.5)
15	3276-0		1/8" (3.2)	1/4" (6.4)	10-32 (M5)	.80 (20.3)	.10 (2.5)
A	521-1 P521-1	7/16 HEX	1/8" (3.2)	1/4" (6.4)	1/8" NPT	.81 (20.6)	.10 (2.5)
and the	521-2		1/8" (3.2)	1/4" (6.4)	1/16" NPT	. 94 (23.9)	.12 (3.0)

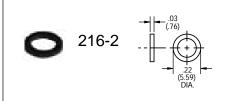
Accessories

Tube Barb 1/16 in (1.6 mm) ID Tube



Custom barb installation requires a close tolerance .073 in (1.85 mm) hole. Apply Loctite[®] 640 to the barb shank along the chamfer. **CAUTION: Keep air passage free of Loctite[®].** Press or tap barb shank into hole to a depth of .15 in (3.8 mm). Bake overall assembly for 1 hour at 200°F (93°C). Overall length of barb is .43 in (10.9 mm).

Seal for 10-32 (M5) Threads





CONNECTORS

Tube to Fema	le Thread		TUBE ID	TUBE OD	FEMALE THREAD	L	FLOW DIAMETER
Ś	210-2	9/16 HEX	1/16" (1.6)	1/8" (3.2)	1/8" NPT	.80 (20.3)	.05 (1.3)
	522-1		1/8" (3.2)	1/4" (6.4)	1/8" NPT	.91 (23.1)	.12 (3.0)
Tube to Tube			TUBE ID	TUBE OD	м	L	FLOW DIAMETER
/	391-2 P391-2		1/16" (1.6)	1/8" (3.2)	.30 (7.6)	.90 (22.9)	.05 (1.3)
Ø	520-1 P520-1		1/8" (3.2)	1/4" (6.4)	.30 (7.6)	.80 (20.3)	.10 (2.5)
Male Thread t	o Male Thre	ead (Nipple)	THREAD 1	THREAD 2	м	L	FLOW DIAMETER
	1299-2		10-32 (M5)	10-32 (M5)	.20 (5.1)	.48 (12.2)	.10 (2.5)
	514-1	7/16 HEX	1/8" NPT	1/8" NPT	.40 (10.2)	.97 (24.6)	.22 (5.6)
	514-2	9/16 HEX	1/4" NPT	1/4" NPT	.56 (14.2)	1.38 (35.1)	.31 (7.9)
Female Threa	d to Female	Thread	THREAD 1	THREAD 2	D	L	FLOW DIAMETER
L	1046-1 P1046-1		10-32	10-32	.25 (6.4)	.42 (10.7)	.16 (4.1)
	399-2 (15.0) 1/81		1/8" NPT	10-32			
Female Threa	d to Male Th	nread (Reducer)	FEMALE THREAD	MALE THREAD	L	HEX	
-	510-1		1/8" NPT	1/4" NPT	.75 (19.1)	9/16"	
	3300-1		10-32 (M5)	1/8" NPT	.66 (16.8)	7/16"	.16 (4.1)

ELBOWS



Tube to Male T	hread		TUBE ID	MALE THREAD	S	Н	FLOW DIAMETER
-7	524-2 P524-2	7/16 HEX 7	1/16" (1.6)	1/8" NPT	.50 (12.7)	.66 (16.8)	.05 (1.3)
	524-1		1/8" (3.2)	1/8" NPT	.69 (17.5)	.74 (18.8)	.12 (3.0)
Tube to Female	Thread		TUBE ID	FEMALE THREAD	S	Н	FLOW DIAMETER
-	526-1	9/16 HEX	1/16" (1.6)	1/8" NPT	.50 (12.7)	.50 (12.7)	.05 (1.3)
-	526-3		1/8" (3.2)	1/8" NPT	.66 (16.8)	.55 (14.0)	.12 (3.0)
Tube to Tube			TUBE ID	TUBE OD	S	н	FLOW DIAMETER
-	523-1		1/8" (3.2)	1/4" (6.4)	.64 (16.3)	.74 (18.8)	.12 (3.0)
Female Thread	to Male Thre	ad	FEMALE THREAD	MALE THREAD	S	Н	FLOW DIAMETER
	528-1 P528-1	S	10-32	1/8" NPT	.22 (5.6)	.66 (16.8)	.16 (4.1)



Tees & Crosses

Tube Tees			PORT	TUBE ID	Н	L	FLOW DIAMETER
-	209-1 P209-1		A B C	1/16" (1.6) 1/16" (1.6) 1/16" (1.6)	.50 (12.7)	1.0 (25.4)	.05 (1.3) .05 (1.3) .05 (1.3)
	209-4		A B C	1/8" (3.2) 1/16" (1.6) 1/8" (3.2)	.55 (14.0)	1.25 (31.8)	.12 (3.0) .05 (1.3) .12 (3.0)
	209-6		A B C	1/16" (1.6) 1/8" (3.2) 1/8" (3.2)	.64 (16.3)	1.1 (27.9)	.05 (1.3) .12 (3.0) .12 (3.0)
	525-1		A B C	1/8" (3.2) 1/8" (3.2) 1/8" (3.2)	.64 (16.3)	1.25 (31.8)	.12 (3.0) .12 (3.0) .12 (3.0)
Female Thread	d Tee		PORT	FEMALE THREAD	н	L	FLOW DIAMETER
and a second	1047-1 P1047-1		A B C	10-32 10-32 10-32	.38 (9.6)	.60 (15.2)	.16 (4.1) .16 (4.1) .16 (4.1)
Female Thread	d to Male Th	read Tees	PORT	THREAD	н	L	FLOW DIAMETER
	528-2	$\begin{array}{c} 19 \\ (4.8) \\ L \\ L \\ A \end{array} \qquad B$	A B C	10-32 1/8" NPT 10-32	.66 (16.8)	.44 (11.2)	
Tube Cross			PORT	TUBE ID	Н	L	FLOW DIAMETER
+	1241-1		A B C D	1/16" (1.6) 1/16" (1.6) 1/16" (1.6) 1/16" (1.6)	1.0 (25.4)	1.0 (25.4)	.05 (1.3) .05 (1.3) .05 (1.3) .05 (1.3)
Female Thread	d Cross		PORT	FEMALE THREAD	Н	L	FLOW DIAMETER
	1298-1		A B C D	10-32 10-32 10-32 10-32	. 38 (9.6)	.60 (15.2)	.16 (4.1) .16 (4.1) .16 (4.1) .16 (4.1)

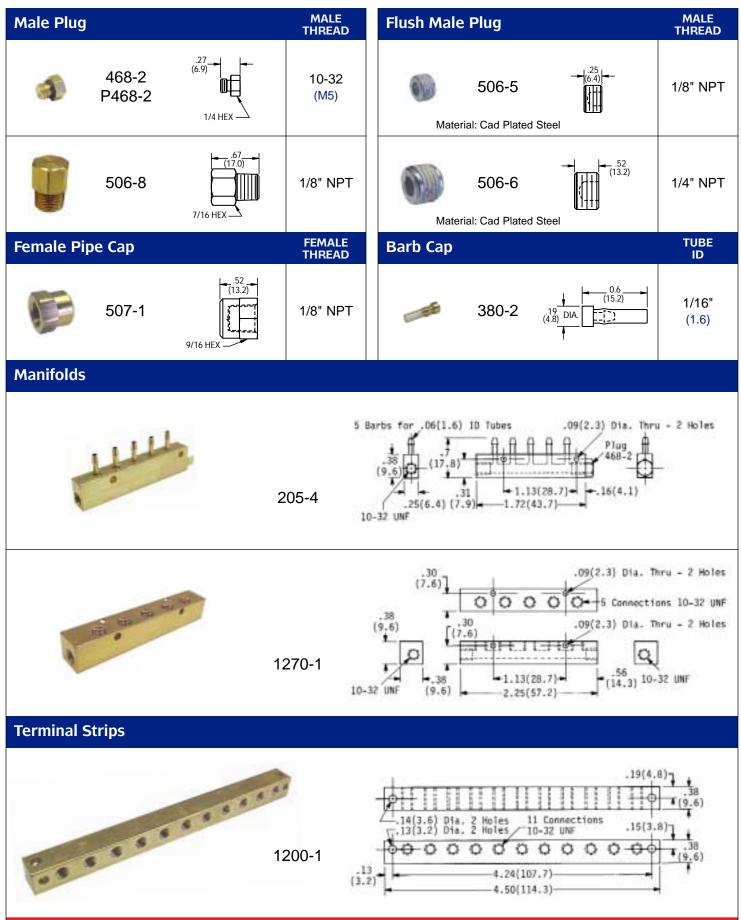
ADJUSTABLE ELBOWS



Tube to Male	Thread – Elb	ow	PORT	SIZE	S	н	FLOW DIAMETER
-	1292-1 P1292-1		A–Tube ID B–Thread	1/16" (1.6) 10-32 (M5)	.60 (15.2)	.50 (12.7)	.05 (1.3)
-	1293-1 P1293-1		A-Tube ID B-Thread	1/8" (3.2) 10-32 (M5)	.50 (12.7)	.50 (12.7)	.10 (2.5)
- P	3298-1		A–Tube ID B–Thread	3/32" (2.5) 10-32 (M5)	.50 (12.7)	.50 (12.7)	.10 (2.5)
	3299-1		A–Tube ID B–Thread	5/32" (4.0) 10-32 (M5)	.50 (12.7)	.50 (12.7)	.10 (2.5)
Female Threa	d to Male Th	read – Elbow	PORT	SIZE	S	Н	FLOW DIAMETER
æ	1291-1 P1291-1		A–Female B–Male	10-32 (M5) 10-32 (M5)	.30 (7.6)	.50 (12.7)	.10 (2.5)
Tube to Tube	to Male Thre	ad – Tee	PORT	SIZE	L	н	FLOW DIAMETER
-	1295-1		A–Tube ID B–Thread C–Tube ID	1/16" (1.6) 10-32 (M5) 1/16" (1.6)	1.1 (27.9)	.50 (12.7)	.05 (1.3) .10 (2.5) .05 (1.3)
-	1296-1		A–Tube ID B–Thread C–Tube ID	1/8" (3.2) 10-32 (M5) 1/8" (3.2)	1.0 (25.4)	.50 (12.7)	.10 (2.5) .10 (2.5) .10 (2.5)
Female Threa	d to Male Th	read – Tee	PORT	SIZE	L	Н	FLOW DIAMETER
-	1294-1		A–Female B–Male C–Female	10-32 (M5) 10-32 (M5) 10-32 (M5)	.60 (15.2)	.50 (12.7)	.16 (4.1) .10 (2.5) .16 (4.1)

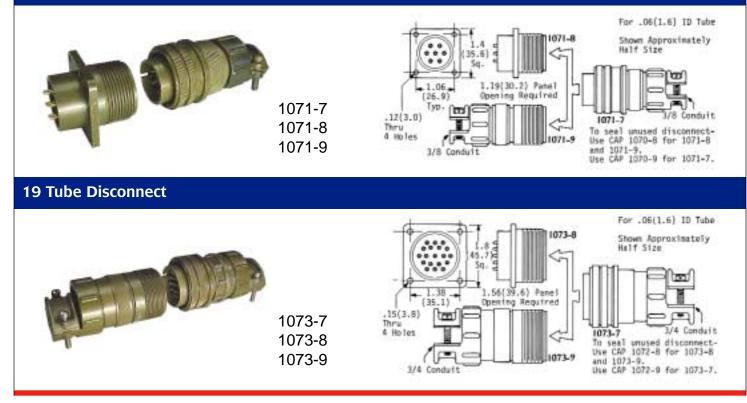


PLUGS / CAPS / MANIFOLDS TERMINAL STRIPS



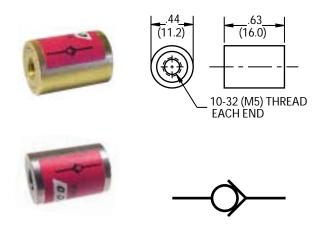


7 Tube Disconnect





In-Line Check Valves



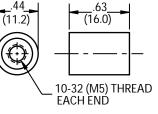
In-line check valves provide free flow in one direction and checked flow in the opposite direction, as indicated by the symbol on the side of the valve. All versions listed below have the same connections and dimensions, as shown.

Material	Estimated Cracking Pressure	Part Number
Brass	0.5 psig (.035 bar)	1375-2
Stainless Steel	0.5 psig (.035 bar)	3310-0
Brass	5 in H₂O	2452-0
Stainless Steel	5 in H₂O	3309-0

In-Line Flow Controls

In-line flow controls (non-adjustable) are used in pneumatic systems to restrict flow and accomplish time delays.









Fixed Flo	w Control	
Brass	Stainless Steel	Orifice Size
IFC06	IFS06	.06mm .0024in
IFC07	IFS07	.07mm .0028in
IFC08	IFS08	.08mm .0031in
IFC09	IFS09	.09mm .0035in
IFC10	IFS10	.10mm .0039in
IFC11	IFS11	.11mm .0043in
IFC12	IFS12	.12mm .0047in
IFC13	IFS13	.13mm .0051in
IFC14	IFS14	.14mm .0055in
IFC15	IFS15	.15mm .0059in
IFC16	IFS16	.16mm .0063in
IFC17	IFS17	.17mm .0067in
IFC18	IFS18	.18mm .0071in
IFC20	IFS20	.20mm .0079in
IFC22	IFS22	.22mm .0087in
IFC24	IFS24	.24mm .0094in
IFC26	IFS26	.26mm .0102in
IFC28	IFS28	.28mm .0110in
IFC30	IFS30	.30mm .0118in
IFC32	IFS32	.32mm .0126in
IFC34	IFS34	.34mm .0134in
IFC36	IFS36	.36mm .0142in
IFC40	IFS40	.40mm .0157in
IFC44	IFS44	.44mm .0173in
IFC48	IFS48	.48mm .0189in
IFC52	IFS52	.52mm .0205in
IFC54	IFS54	.54mm .0213in
IFC58	IFS58	.58mm .0228in
IFC64	IFS64	.64mm .0252in

Fixed Restrictors



Restrictors are used in pneumatic circuits where the flow of air is to be reduced. Common examples for fixed flow restrictors are in back pressure sensing circuits, proximity and air jet position sensing circuits, in dynamic flow circuits to reduce pressure, and any other application where the flow needs to be restricted.



RF1

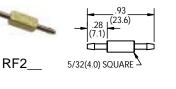
RF3

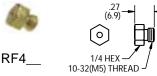


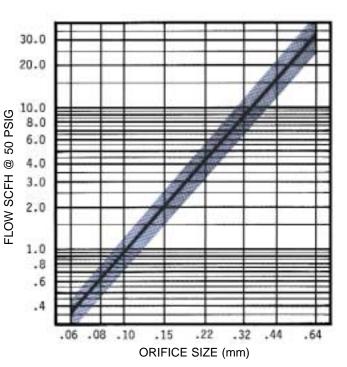
.63 (16.0)

5/16 HEX

10-32(M5) THREAD EACH END







Restrictor-Connector Male Thread to Tube	Restrictor-Union Tube to Tube	Restrictor-Union Female Thread to Female Thread	Restrictor-Connector Male Thread Cap	Orifice Size
RF106	RF206	RF306	RF406	.06mm .0024in
RF107	RF207	RF307	RF407	.07mm .0028in
RF108	RF208	RF308	RF408	.08mm .0031in
RF109	RF209	RF309	RF409	.09mm .0035in
RF110	RF210	RF310	RF410	.10mm .0039in
RF111	RF211	RF311	RF411	.11mm .0043in
RF112	RF212	RF312	RF412	.12mm .0047in
RF113	RF213	RF313	RF413	.13mm .0051in
RF114	RF214	RF314	RF414	.14mm .0055in
RF115	RF215	RF315	RF415	.15mm .0059in
RF116	RF216	RF316	RF416	.16mm .0063in
RF117	RF217	RF317	RF417	.17mm .0067in
RF118	RF218	RF318	RF418	.18mm .0071in
RF120	RF220	RF320	RF420	.20mm .0079in
RF122	RF222	RF322	RF422	.22mm .0087in
RF124	RF224	RF324	RF424	.24mm .0094in
RF126	RF226	RF326	RF426	.26mm .0102in
RF128	RF228	RF328	RF428	.28mm .0110in
RF130	RF230	RF330	RF430	.30mm .0118in
RF132	RF232	RF332	RF432	.32mm .0126in
RF134	RF234	RF334	RF434	.34mm .0134in
RF136	RF236	RF336	RF436	.36mm .0142in
RF140	RF240	RF340	RF440	.40mm .0157in
RF144	RF244	RF344	RF444	.44mm .0173in
RF148	RF248	RF348	RF448	.48mm .0189in
RF152	RF252	RF352	RF452	.52mm .0205in
RF154	RF254	RF354	RF454	.54mm .0213in
RF158	RF258	RF358	RF458	.58mm .0228in
RF164	RF264	RF364	RF464	.64mm .0252in