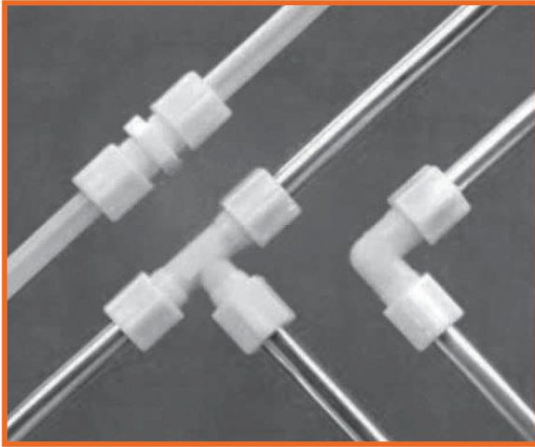


Jaco Compression Tube Fittings



Plastic Fittings That Revolutionized The Techniques of Connecting Tubes.

Compression type metallic fittings have a loose ferrule which requires extra assembly. JACO has been able to mold the sleeve as an integral part of the nut, eliminating the need for a two-piece assembly. Although fittings were originally developed for copper tubing, other fittings were then later engineered with plastic grippers for plastic tubing.

Today, JACO fittings are widely used with all types of tubing including copper, plastic, aluminum and glass.

JACO compression fittings typically cost less than metal fittings and they offer better resistance to corrosion and chemicals. Additionally, we offer four different plastic resins for a range of applications dealing with temperatures, acids and chemicals. JACO plastic fittings offer these additional advantages:

- Good electrical insulating qualities which eliminate electrolytic action that usually corrodes tubing when dissimilar metal meets a fitting.
- The ability to absorb mechanical and acoustical vibrations because of the low density and softness of plastic.
- An inherently low resistance to flow, due to smooth internal surface.
- A resistance to scale buildup.

Fittings are available in size ranges from 1/8" through 7/8" tube O.D. in all common figurations, such as union, bulkhead, male and female connectors, male branch and male run tees, tee unions and ferrule nuts. Metric sizes are also available on a special order basis.

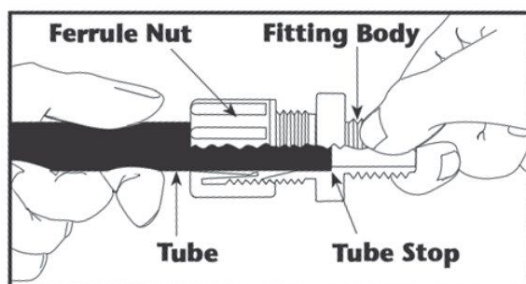
Various resins are used, depending on the application. JACO plastic fittings are made of either nylon, acetal copolymer, polypropylene, or polyvinylidene fluoride.

INSTALLATION INSTRUCTIONS FOR JACO TUBE FITTINGS

1. Cut the tubing end square and remove the internal and external burrs.
2. Insert the tubing through the back of the nut all the way through the nut assembly to the tube stop in the fitting body (see illustration). If the tubing does not enter the nut easily, loosen the nut one turn and then insert the tubing all the way to the tube stop in the fitting body.
3. Turn the nut hand tight.
4. Wrench tighten the nut 1-1/2 - 2 turns.
5. All nuts must be retightened when the system reaches projected operating temperature.

NOTE: Squeaking sound when tightening nut is normal. For pipe threaded connections, Teflon Tape* must be used.

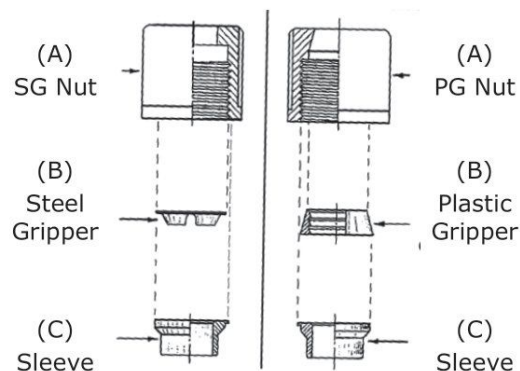
*Dupont's Reg. T.M. Patent 1983



Caution: To insure proper assembly, tubing MUST be fully inserted into the fitting body to the tube stop.

NOTE: It is not necessary to disassemble this fitting for application. Merely insert tubing to stop and tighten nut.

SG NUT ASSEMBLY PG NUT ASSEMBLY



ASSEMBLY INSTRUCTIONS FOR JACO NUTS

Please follow these diagrams in assembling nuts. As shown below, insert gripper (B) into nut (A). Push sleeve (C) into nut assembly.

Compression Tube Fittings

Material Selection

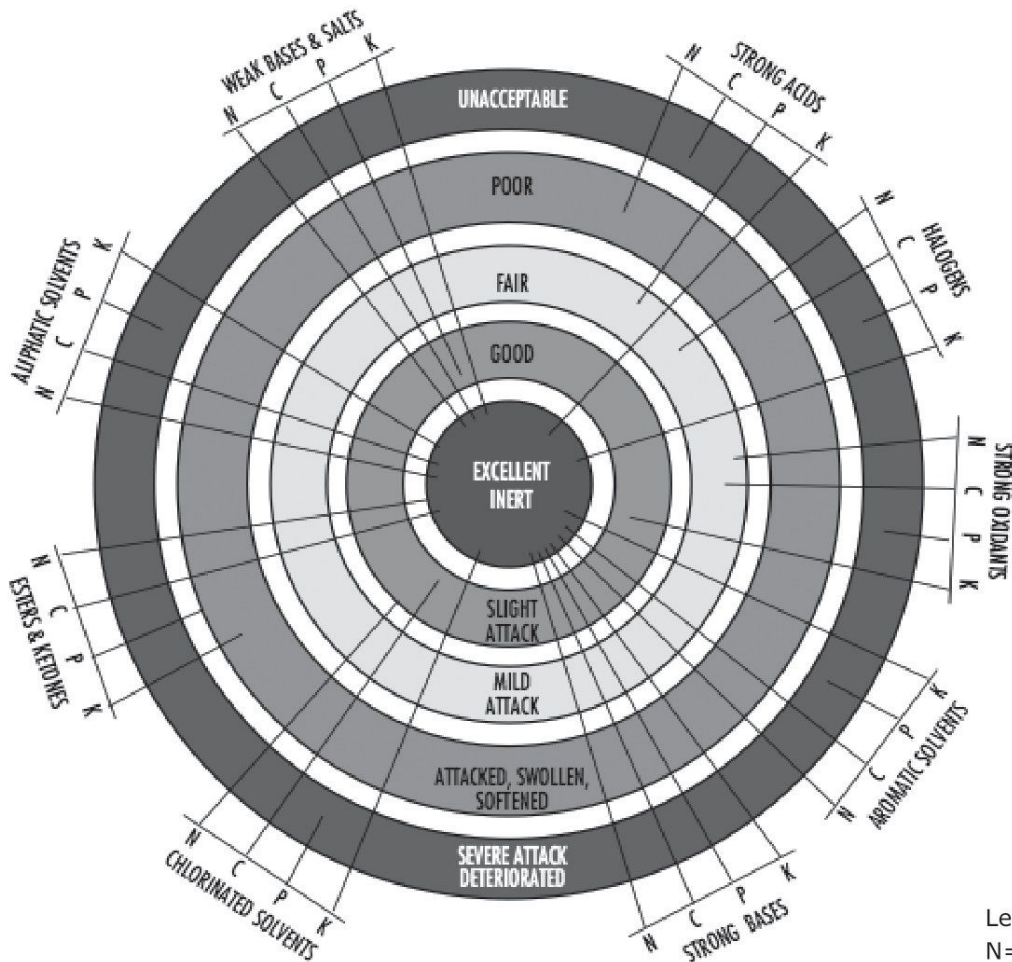
(N) Nylon has good resistance to organic solvents, oils and gasoline. Good strength at high temperatures. Material rating: -40° to 200°F. Cold and hot-water applications. Longtime weathering resistance. Good impact resistance, both single and repeated. Not recommended for use with ammonium, boric acid, calcium, sulfuric acid, or hydrochloric acid. F.D.A. listed. Also N.S.F. listed.

***(C) Celcon, or acetal copolymer,** has high tensile strength and good impact resistance over a broad temperature range. Translucent white color. Not affected by continuous hot-water service and works smoothly with metal tubing. Celcon cannot be recommended for continuous exposure to solutions with a chlorine concentration greater than 1 ppm. Material is rated at -40° to 200°F in open air, and rated for 180°F

in water applications. Unaffected by most inorganics, except sulfuric, nitric and hydrochloric acids. Listed by U.S.D.A. and F.D.A. for coffee, milk and antibiotics. Also N.S.F. listed. Should not be continuously exposed to sunlight.

(P) Polypropylene has good chemical resistance. Material is rated at -30 to 215°. Opaque, white color. Unaffected by most weak acids and alkalis. Below 175°F it has good resistance to organic solvents. Do not use with oxidants or strong acids or in continuous sunlight. N.S.F. listed. 20% glass filled for improved stiffness.

**** (K) Kynar,** a polyvinylidene fluoride, has outstanding chemical resistance for handling highly corrosive fluids. Material rated at -80 to 275°, with a cloudy, white color. F.D.A. listed, N.S.F. Listed.

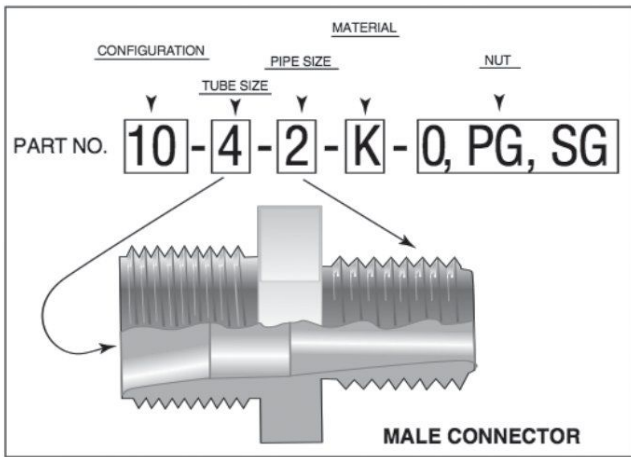


Legend:
 N=Nylon
 *C=Cekon (Acetal)
 P= Polypropylene
 **K=Kynar

Notes:

- *TRADEMARK of Ticona
- **TRADEMARK of Atofina Chemicals, Inc.

Ordering Information



It is not necessary to designate the nut size when ordering complete units as this will be determined by the tube size indication in the part number.

The part number for JACO compression Fittings is designed so that each number and letter immediately identifies the shape, size and material.

For example: the first number identifies the shape, I.E.

- 10 = Male Connector,
- 25 = Female Connector,
- 50 = Union Elbow, etc.

The second number designates the tube size, in 1/16" increments, I.E.

- 4 = 1/4" O.D. Tubing,
- 8 = 1/2" O.D. Tubing.

The third number, also in 1/16" increments, (unless a Union type fitting is required), designates the pipe size.

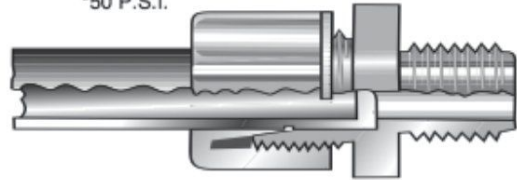
The letter following the numbers indicates the material:

- K =Kynar
- N =Nylon
- P =Polypropylene
- C =Celcon

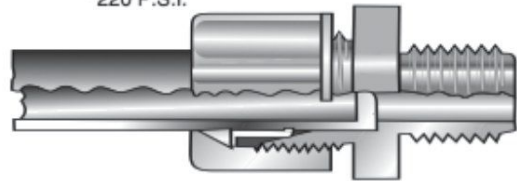
The last letter(s) denote the nut desired:

- O = Standard - *50 P.S.I.
- P.G. = Plastic Gripper for plastic tubing - *220 P.S.I.
- S.G. = Stainless Steel Gripper for use with hard surfaced tubing - *220 P.S.I.

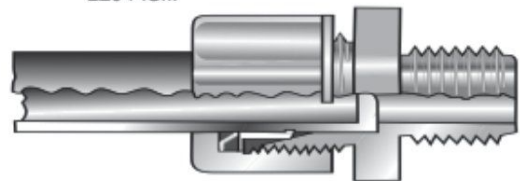
FERRULE NUT
WITH INTEGRAL SLEEVE
LOW PRESSURE APPLICATIONS
SOFT PLASTIC TUBING
*50 P.S.I.



WITH PLASTIC GRIPPER
FOR USE WITH PLASTIC TUBING
FOR SURE GRIP
*220 P.S.I.



WITH STAINLESS STEEL GRIPPER
FOR USE WITH HARD AND SMOOTH
SURFACED TUBING
*220 P.S.I.



Note: Fitting dimensions as described in this brochure may not reflect running changes made to improve part performance. Check with JACO Manufacturing Company in critical applications.

*Operating pressures of JACO Tube Fittings are regulated by ambient and fluid temperatures, type of fluid being carried, tubing type, and conditions of mechanical abuse. Pressures in excess of above specifications in all fitting sizes should be tested by the customer in their particular application.

Compression Tube Fittings

Jaco Compression Tube Fittings



MALE CONNECTOR

JACO PART NO.	TUBE O.D.	PIPE THD.	THREAD
10-2-2	1/8	1/8	5/16-24
10-4-2	1/4	1/8	7/16-20
10-4-4	1/4	1/4	7/16-20
10-4-6	1/4	3/8	7/16-20
10-5-2	5/16	1/8	1/2-20
10-5-4	5/16	1/4	1/2-20
10-6-2	3/8	1/8	5/8-20
10-6-4	3/8	1/4	5/8-20
10-6-6	3/8	3/8	5/8-20
10-6-8	3/8	1/2	5/8-20
10-8-2	1/2	1/8	3/4-20
10-8-4	1/2	1/4	3/4-20
10-8-6	1/2	3/8	3/4-20
10-8-8	1/2	1/2	3/4-20
10-10-6	5/8	3/8	7/8-20
10-10-8	5/8	1/2	7/8-20
10-12-8	3/4	1/2	1-1/16-20
10-12-12	3/4	3/4	1-1/16-20
10-14-12	7/8	3/4	1-3/16-16



UNION ELBOW

JACO PART NO.	TUBE O.D.	THREAD
50-4	1/4	7/16-20
50-5	5/16	1/2-20
50-6	3/8	5/8-20
50-8	1/2	3/4-20
50-10	5/8	7/8-20
50-12	3/4	1-1/16
50-14	7/8	1-3/16-16

REDUCING UNION ELBOW

50-14-10	7/8-5/8	1-3/16-20 - 7/8-20
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UNION CONNECTOR

JACO PART NO.	TUBE O.D.	THREAD
15-4	1/4	7/16-20
15-5	5/16	1/2-20
15-6	3/8	5/8-20
15-8	1/2	3/4-20
15-10	5/8	7/8-20
15-12	3/4	1-1/16-20
15-14	7/8	1-3/16-16

REDUCING UNION

JACO PART NO.	TUBE O.D.	PIPE THD.	THREAD
15-4-2	1/4-1/8	7/16-20	5/16-24
15-5-4	5/16-1/4	1/2-20	7/16-20
15-6-4	3/8-1/4	5/8-20	7/16-20
15-8-6	1/2-3/8	3/4-20	5/8-20
15-10-6	5/8-3/8	7/8-20	5/8-20
15-15-8	5/8-1/2	7/8-20	3/4-20
15-14-10	7/8-5/8	1-3/16	7/8-20 -16



MALE RUN TEE

JACO PART NO.	TUBE O.D.	PIPE THD.	THREAD
75-4-2	1/4	1/8	7/16-20
75-4-4	1/4	1/4	7/16-20
75-5-4	5/16	1/4	1/2-20
75-6-4	3/8	1/4	5/8-20
75-6-6	3/8	3/8	5/8-20
75-8-6	1/2	3/8	3/4-20
75-8-8	1/2	1/2	3/4-20
75-10-8	5/8	1/2	7/8-20
75-12-8	3/4	1/2	1-1/16-20
75-12-12	3/4	3/4	1-1/16-20
75-14-12	7/8	3/4	1-3/16-16



BULKHEAD UNION

JACO PART NO.	TUBE O.D.	THREAD
20-4	1/4	7/16-20
20-5	5/16	1/2-20
20-6	3/8	5/8-20
20-8	1/2	3/4-20
20-12	3/4	1-1/16-20



FEMALE CONNECTORS

JACO PART NO.	TUBE O.D.	PIPE THD.	THREAD
25-4-2	1/4	1/8	7/16-20
25-4-4	1/4	1/4	7/16-20
25-5-4	5/16	1/4	1/2-20
25-6-4	3/8	1/4	5/8-20
25-6-6	3/8	3/8	5/8-20
25-6-8	3/8	1/2	5/8-20
25-8-6	1/2	3/8	3/4-20
25-8-8	1/2	1/2	3/4-20
25-10-8	5/8	1/2	7/8-20



MALE ELBOW

JACO PART NO.	TUBE O.D.	PIPE THD.	THREAD
40-2-2	1/8	1/8	5/16-24
40-4-2	1/4	1/8	7/16-20
40-4-4	1/4	1/4	7/16-20
40-4-6	1/4	3/8	7/16-20
40-5-2	5/16	1/8	1/2-20
40-5-4	5/16	1/4	1/2-20
40-6-4	3/8	1/4	5/8-20
40-6-6	3/8	3/8	5/8-20
40-8-4	1/2	1/4	3/4-20
40-8-6	1/2	3/8	3/4-20
40-8-8	1/2	1/2	3/4-20
40-10-6	5/8	3/8	7/8-20
40-10-8	5/8	1/2	7/8-20

Compression Tube Fittings



FEMALE ELBOW

JACO PART NO.	TUBE O.D.	PIPE THD.	THREAD
45-2-4	1/8	1/4	5/16-24
45-4-2	1/4	1/8	7/16-20
45-4-4	1/4	1/4	7/16-20
45-5-4	5/16	1/4	1/2-20
45-6-4	3/8	1/4	5/8-20
45-6-6	3/8	3/8	5/8-20
45-8-6	1/2	3/8	3/4-20
45-8-8	1/2	1/2	3/4-20
45-10-8	5/8	1/2	7/8-20



MALE BRANCH TEE

JACO PART NO.	TUBE O.D.	PIPE THD.	THREAD
60-4-2	1/4	1/8	7/16-20
60-4-4	1/4	1/4	7/16-20
60-5-4	5/16	1/4	1/2-20
60-6-4	3/8	1/4	5/8-20
60-6-6	3/8	3/8	5/8-20
60-8-6	1/2	3/8	3/4-20
60-8-8	1/2	1/2	3/4-20
60-10-8	5/8	1/2	7/8-20
60-12-8	3/4	1/2	1-1/16-20
60-12-12	3/4	3/4	1-1/16-20
60-14-12	7/8	3/4	1-3/16-20



UNION TEE

JACO PART NO.	TUBE O.D.	THREAD
70-2	1/8	5/16-24
70-4	1/4	7/16-20
70-5	5/16	1/2-20
70-6	3/8	5/8-20
70-8	1/2	3/4-20
70-10	5/8	7/8-20
70-12	3/7	1-1/16 -20
70-14	7/8	1-3/16-16
70-10-6	5/8-3/8	7/8-20 - 5/8-20
70-14-10	7/8-5/8	1-3/16-16 - 7/8-20
70-14-10 -10	7/8-5/8	1-3/16-16 - 7/8-20



COMPRESSION NUTS

FERRULE NUTS WITH INTEGRAL SLEEVE

JACO PART NO.	TUBE O.D.
0-2	1/8
0-4	1/4
0-5	5/16
0-6	3/8
0-8	1/2

PLASTIC GRIPPER NUTS

PG-4	1/4
PG-5	5/16
PG-6	3/8
PG-8	1/2
PG-10	5/8
PG-12	3/4
PG-14	7/8

STAINLESS STEEL GRIPPER NUTS

SG-4	1/4
SG-5	5/16
SG-6	3/8
SG-8	1/2
SG-10	5/8
SG-12	3/4
SG-14	7/8



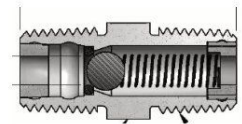
INSERTS*

JACO PART NO.	TUBE O.D.
P-4	1/4
P-5	5/16
P-6	3/8
P-8	1/2



BLIND NUT

JACO PART NO.
0-2 BLD
0-4 BLD
0-5 BLD
0-6 BLD
0-8 BLD



CHECK VALVE*

JACO PART NO.	MALE PIPE NPT
CV-2 K	1/8
CV-4 K	1/4
CV-6 K	3/8
CV-8 K	1/2

- Viton "O" Ring
- Stainless Ball & Spring
- Maximum Operating Temp. 220 P.S.I. @180° F
- Cracking Pressure 1-2.5 PSI
- Zero Leakage
- Male Pipe NPT Style



PIPE NIPPLE*

JACO PART NO.	MALE PIPE NPT
PN-2	1/8
PN-4	1/4
PN-6	3/8
PN-8	1/2



BULKHEAD NUTS*

JACO PART NO.
0-4B
0-5B
0-6B
0-8B
0-12B

* These items are offered in addition to our standard fitting product line. Standard discount schedule applies based upon total number of items ordered and are not subject to combined pricing with our standard fitting line.