

# COMPRESSION UNIONS FOR STEEL / COPPER / NYLON / ALUMINUM TUBING

## 360° SEAL COMPRESSION UNIONS

FMSI'S 360° seal compression unions permit the use of one part number of each size to effectively and easily join steel, copper, aluminum, and nylon tubing, or combinations of these materials, including 10mm. These leak free compression unions come in both straight, 90° elbows, and reducing styles. Follow these directions for leak free connections of all fluid carrying lines.

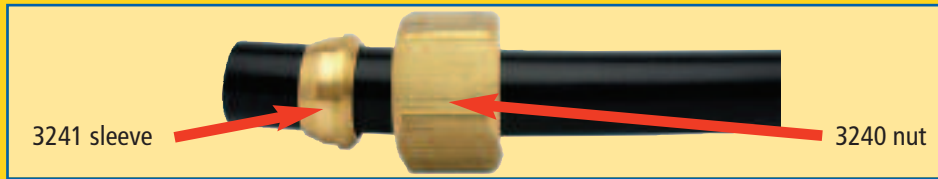
The tubing must be inserted completely through the tube nut and captured sleeve as illustrated to avoid leaks. If the line is not inserted completely through the nut and sleeve, it will not hold pressure and it will leak.



These illustrations show a 10mm nylon fuel line being joined to a 3/8" steel line.

With 10mm applications you will need to use a separate nut (3240) and sleeve (3241) as shown below. Note the direction of the sleeve with the taper towards the body of the compression union. These nuts and sleeves have been designed to seal all 10mm fuel lines.

**NEW!**



## 360° SEAL IN-LINE CAPTIVE SLEEVE COMPRESSION UNIONS JOINS STEEL / NYLON / COPPER / ALUMINUM TUBING

### STRAIGHT

FMSI#	SIZE
2855	3/16"
2856	1/4"



FMSI#	SIZE
2857	5/16"
2858	3/8"
2859	10mm



### 90° ELBOW COMPRESSION UNIONS

FMSI#	SIZE
2845	1/4"
2846	5/16"
2847	3/8"



FMSI#	SIZE
2848	3/8" to 10mm
2849	10mm

### REDUCING

FMSI#	SIZE
2840	5/16" (8mm) to 1/4"
2841	3/8" to 5/16"



FMSI#	SIZE
2842	10mm to 3/8"
2843	10mm to 5/16"



### INLINE CAPTIVE SLEEVE NUT

FMSI#	SIZE
3213	3/16"
3214	1/4"



FMSI#	SIZE
3215	5/16"
3216	3/8"

### INLINE SLEEVE 10 mm SLEEVE NUT

FMSI#	SIZE
3241	10 mm



FMSI#	SIZE
3240	10 mm



### HIGH PRESSURE STEEL (5,000 PSI) COMPRESSION UNIONS

#### COMPRESSION UNIONS

FMSI#	SIZE
3451	3/16"
3452	1/4"
3453	5/16"
3454	3/8"



#### FERRULES

FMSI#	SIZE
3455	3/16"
3456	1/4"
3457	5/16"
3458	3/8"



360° compression union torque procedures. First finger tighten compression nut. Using wrenches on the body and nut, tighten the correct number of turns (see table below)


TYPE OF TUBING	NUMBER OF TURNS WITH WRENCH AFTER FINGER TIGHTENING
Steel - copper- Aluminum	1-1/2 turns
Nylon	3/4 of a turn

# BRASS FITTINGS, JOINERS, 360° SEAL CLAMPS & PINCERS

## STEEL OR COPPER TUBING COMPRESSION UNION

Quick leak free connections of steel or copper tubing

FMSI#	SIZE	FMSI#	SIZE
2952	1/8"	2957	5/16"
2955	3/16"	2958	3/8"
2956	1/4"		



### BRASS FERRULE

FMSI#	SIZE
3209	3/16"
3210	1/4"
3211	5/16"
3212	3/8"



### NYLON FERRULE


FMSI#	SIZE
3206	1/4"
3207	5/16"
3208	3/8"



## NYLON TO STEEL OR COPPER COMPRESSION UNION

Quick leak free connections of steel to nylon fuel lines


FMSI#	SIZE	FMSI#	SIZE
2941	1/4"	2943	3/8"
2942	5/16"		



## NYLON TO NYLON FUEL LINE COMPRESSION UNION

Quick leak free connections of nylon fuel lines

FMSI#	SIZE	FMSI#	SIZE
2890	1/4"	2892	3/8"
2891	5/16"		



## 360° SEAL CLAMPS

Positive 360° seal with no gaps on the inside of clamp. Smooth inner band prevents damage to tube or hose.



Ideal for fuel lines, air lines, heater hose, etc. One ear crimp clamp with a permanent no leak seal.

FMSI#	SIZE	APPLICATION
2940	7.0 mm 9/32" I.D.	used with 6 mm - 1/4" nylon fuel lines
2950	8.7 mm 11/32" I.D.	used with 8 mm - 5/16" nylon fuel lines
2980	9.5 mm 3/8" I.D.	used with 8 mm - 5/16" nylon fuel lines
2981	10.5 mm 13/32" I.D.	
2982	11.3 mm 7/16" I.D.	used with 10 mm - 3/8" nylon fuel lines
2983	12.3 mm 15/32" I.D.	
2984	13.3 mm 1/2" I.D.	
2985	14.5 mm 9/16" I.D.	
2986	15.7 mm 7/8" I.D.	used with 1/4" shop air line
2987	17.0 mm 11/16" I.D.	used with 3/8" shop air line
2988	18.5 mm 13/32" I.D.	used with 3/8" shop air line
2989	21.0 mm 13/16" I.D.	
2990	24.1 mm 15/16" I.D.	used with 4204 (5/8") coolant connector
2991	25.6 mm 1" I.D.	
2995	28.6 mm 1-1/8" I.D.	used with 4205-4215 (3/4") coolant connector

## BRASS BARBED HOSE MENDER


Fuel / Transmission / Welding / Air

FMSI#	SIZE	FMSI#	SIZE
2885	1/4"	2894	1/2"
2886	5/16"	2895	5/8"
2887	3/8"	2896	3/4"




## NYLON FUEL LINE TUBING JOINER - Ring Barb

FMSI#	DESCRIPTION
2959	5/16" (8 mm) nylon tubing joiner
3220	3/8" nylon tubing joiner
2968	10 mm nylon tubing joiner
2994	1/4" (6 mm) nylon tubing joiner



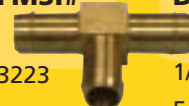
## NYLON FUEL LINE TUBING REDUCER/JOINER - Ring Barb

FMSI#	DESCRIPTION
3204	1/4" to 5/16" (8 mm) reducer/joiner
3205	5/16" (8mm) to 3/8" (10 mm) reducer/joiner




## NYLON FUEL LINE TUBING "TEE" JOINER

FMSI#	DESCRIPTION
3223	1/4" brass barb tee for 1/4" nylon fuel line tubing
3224	5/16" (8 mm) and 3/8" brass barb tee for 5/16" and 3/8" nylon fuel line tubing



## NYLON FUEL LINE TUBING 90° ELBOW JOINER

FMSI#	DESCRIPTION
3225	1/4" brass barb 90° elbow for 1/4" nylon fuel line tubing
3226	5/16" (8 mm) and 3/8" brass barb 90° elbow for 5/16" and 3/8" nylon fuel line tubing



## 360° SEAL CLAMP PINCERS

Closes 1 or 2 ear clamps.

**NEW!**



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