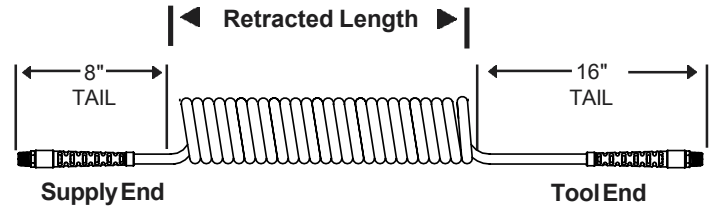


# FLEXCOIL® Instruction and Engineering Data Sheet

## HOSE ASSEMBLY INFORMATION

HOSE I.D. x O.D.	STANDARD LENGTH	RETRACTED LENGTH	APPROXIMATE WEIGHT
.160" x 1/4"	10 feet	7"	.29 lb.
	15 feet	9 1/2"	.37 lb.
	20 feet	12 1/2"	.46 lb.
	25 feet	15 1/2"	.54 lb.
	30 feet	19"	.62 lb.
3/16" x 5/16"	5 feet	2"	.23 lb.
	10 feet	6"	.34 lb.
	15 feet	10 1/4"	.46 lb.
	20 feet	14 1/2"	.56 lb.
	25 feet	18 1/2"	.68 lb.
1/4 " x 3/8"	5 feet	2 1/2"	.26 lb.
	10 feet	6"	.41 lb.
	15 feet	9 1/2"	.59 lb.
	20 feet	13"	.74 lb.
	25 feet	16"	.88 lb.
	30 feet	19"	1.05 lbs.
5/16" x 15/32"	10 feet	7 1/2"	.68 lb.
	15 feet	11 1/2"	.89 lb.
	20 feet	15"	1.11 lbs.
	25 feet	19"	1.32 lbs.
	30 feet	23"	1.52 lbs.
3/8" x 9/16"	10 feet	5 1/2"	1.00 lb.
	15 feet	8 1/2"	1.40 lbs.
	20 feet	11"	1.85 lbs.
	25 feet	14"	2.25 lbs.
	30 feet	17"	2.63 lbs.
.467" x 3/4"	10 feet	7"	2.14 lbs.
	15 feet	11 3/4"	2.95 lbs.
	20 feet	16 1/2"	3.77 lbs.
	25 feet	23"	4.60 lbs.
	30 feet	28"	5.35 lbs.



### CHEMICAL COMPATIBILITY

Has good resistance to fuels, oils, water and many non-polar solvents. Avoid lacquers, thinners and ketones. Consult factory for a complete chemical compatibility list.

### TEMPERATURE CONSIDERATION

Polyurethane is a thermoplastic elastomer so it will be affected by increases in temperature. As a compound, polyurethane has a temperature range of -40°F to +165°F. Careful consideration must be given to the reduced pressure capabilities as temperature is increased. To estimate working pressure at various temperatures, use the "Polyurethane Tubing Technical Information" chart below to find the approximate burst pressure, then calculate for safety factor as explained under "Working Pressure."

### WORKING PRESSURE

Working pressures are normally calculated by dividing the burst pressure by the desired safety factor. Safety factors of 3-to-1 or 4-to-1 are commonly used, depending upon the severity of the application.

### EXAMPLE:

If tubing burst pressure is 380 PSI @ 75°F, the working pressure with a:  
 3-to-1 S.F. is 126 PSI (380/3 = 126)      4-to-1 S.F. is 95 PSI (380/4 = 95)

## POLYURETHANE TUBING TECHNICAL INFORMATION

Size I.D. x O.D.	Approx. Burst Pressure (PSI) at				Vacuum Rating Hg" at 75°F
	75°F	100°F	125°F	150°F	
.160" x 1/4"	445	310	240	170	28
3/16" x 5/16"	440	290	220	180	28
1/4" x 3/8"	445	310	220	170	28
5/16" x 15/32"	400	300	190	170	28
3/8" x 9/16"	400	290	210	180	28
.467" x 3/4"	435	360	290	250	28



**WARNING: Recommended working length is 90% of the total hose length. Stretching the hose beyond that amount while pressurized may cause the fitting to blow out. This may cause violent hose whipping action which could cause injuries to user and surrounding personnel.**

## SPECIFICATIONS

	.160 x 1/4" Hose	3/16" x 5/16" Hose	1/4" x 3/8" Hose	5/16" x 15/32" Hose	3/8" x 9/16" Hose	.467" x 3/4" Hose
Inside Diameter	.165"	.202"	.250"	.320"	.380"	.475"
Tolerance	.155"	.192"	.240"	.310"	.370"	.460"
Outside Diameter	.255"	.320"	.380"	.477"	.567"	.765"
Tolerance	.245"	.310"	.370"	.467"	.557"	.750"
Wall Thickness	.045"	.059"	.065"	.078"	.093"	.145"
Outside Diameter	1 1/2"	1 7/8"	2 1/2"	2 15/16"	4 1/8"	5"
Recommended Temperature Range	-40°F to +165°F	-40°F to +165°F	-40°F to +165°F	-40°F to +165°F	-40°F to +165°F	-40°F to +165°F
Working Pressure	125 psi @ 75°F	145 psi @ 75°F	125 psi @ 75°F	120 psi @ 75°F	115 psi @ 75°F	115 psi @ 75°F



**WARNING: Using higher pressure and/or temperature than rated may cause the hose to rupture, potentially endangering personnel and surrounding equipment.**

# FLEXCOIL® INSTRUCTION AND ENGINEERING DATA SHEET

## REPLACEMENT FITTINGS

**NOTE:** For impact tool applications, we strongly recommend the use of a rigid fitting at the working (tool) end to assure a safer and more durable connection.

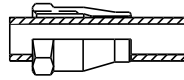
### Introduction:

Unlike conventional reinforced air hoses, polyurethane will expand in diameter when pressurized. Although this highly elastic material will stretch, it will not break under tension. As it is stretched, the hose wall becomes thinner, thus increasing the possibility of "pulling out" from the fittings. This tendency is more pronounced at higher working temperatures as the material "flows" and wall thickness thins under tension.

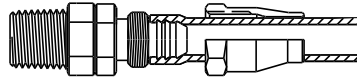
We have developed a fitting with the proper barb spacing and serration which, when used in conjunction with the retainer sleeve, will give optimum holding performance. The retainer sleeve also eliminates the need for a spring guard (strain relief). These same principles were designed into our reusable fittings which use an elongated nut to protect the tubing at its weakest point.

### Assembly Instructions for Reusable:

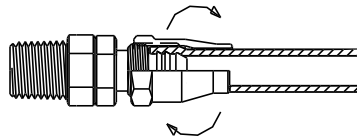
- After cutting the hose end straight and clean, insert it through the rounded end of the brass sleeve (nut) or strain relief.



- Press the barbed end of the fitting into the end of the hose until it seals against the thread base.

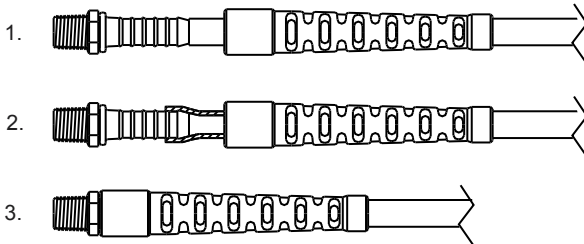


- Slide the brass sleeve (nut) or strain relief over the barbed connection and thread it onto the fitting. The installation is completed by tightening the sleeve with the appropriate sized open end wrench until it securely meets the fitting body.



### Assembly Instructions for Barb and Sleeve:

- Place the retainer sleeve over the hose.
- Place the fitting barb into the end of the hose. While the fitting is held stationary against a solid surface, exert pressure to push the hose over the fitting barb. Wrapping sandpaper around the hose will allow a firmer grip to achieve the required pressure.
- Once the fitting is completely in place, push the retainer sleeve over the increased diameter of the hose, using an open end wrench the size of the tube O.D. under the sleeve for leverage. A lubricant such as light oil, grease or silicone fluid should also be used to aid the assembly of the sleeve over the barb.



REUSABLE TYPE		Thread Sealant On Swivel Fittings Only	
Tubing Size I.D.	Tubing Size O.D.	Fitting Type and Size	Model Number
.160"	1/4"	1/4" NPT Swl Male	PSM53204
3/16"	5/16"	1/4" NPT Swl Male 1/4" BSPP Swl Male	PSM0304 PSM0304P
1/4"	3/8"	1/4" NPT Rigid Male 1/4" NPT Swl Male 1/4" BSPP Swl Male	PRM0404 PSM0404 PSM0404P
5/16"	15/32"	1/4" NPT Swl Male 3/8" NPT Swl Male 3/8" BSPP Swl Male	PSM0504 PSM0506 PSM0506P
3/8"	9/16"	1/4" NPT Rigid Male 3/8" NPT Rigid Male 1/4" NPT Swl Male 3/8" NPT Swl Male 3/8" BSPP Swl Male	PRM0604 PRM0606 PSM0604 PSM0606 PSM0606P
.467"	3/4"	1/2" NPT Swl Male 1/2" NPT Rgd Fem	PSM0808 PRF0808

BARB AND SLEEVE TYPE		Thread Sealant On Swivel Fittings Only		
Tubing Size I.D.	Tubing Size O.D.	Fitting Type and Size	Barb Model No.	Sleeve Model No.
3/16"	5/16"	1/4" NPT Rigid Male 1/4" NPT Swl Male 1/4" BSPP Swl Male	PUB0304 PUB0304S PUB0304SP	PUSC316K
1/4"	3/8"	1/4" NPT Rigid Male 1/4" NPT Swl Male 1/4" BSPP Swl Male 3/8" NPT Rigid Male	PUB0404 PUB0404S PUB0404SP PUB0406	PUSC14K
5/16"	15/32"	1/4" NPT Rigid Male 3/8" NPT Swl Male 3/8" BSPP Swl Male	PUB0504 PUB0506S PUB0506SP	PUSC516K
3/8"	9/16"	1/4" NPT Rigid Male 3/8" NPT Rigid Male 3/8" NPT Swl Male 3/8" BSPP Swl Male	PUB0604 PUB0606 PUB0606S PUB0606SP	PUSC38K



**WARNING:** Our barb and sleeve type fittings will not work without the special retainer sleeve. Hose clamps or other narrow band retainer devices should only be used on a temporary basis where operating pressure does not exceed 90 PSI. For use at the specified maximum operating pressure, the fitting can only be held in place by the properly sized and installed retainer sleeve as supplied by the manufacturer.