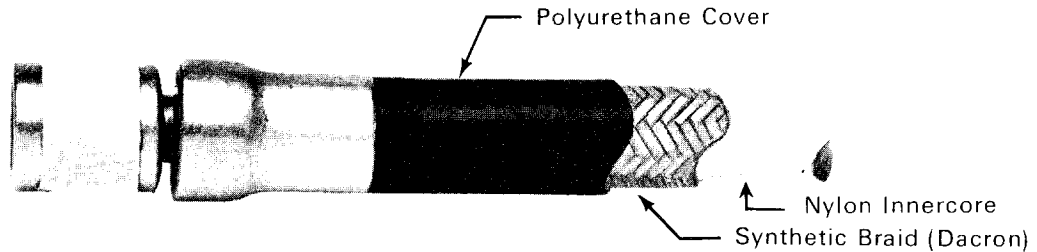




PREECE INC.
ENGINEERING
BULLETIN

THERMOPLASTIC HOSE
 ASSEMBLIES MEDIUM
 PRESSURE
 Bulletin PEB-18



APPLICATIONS AND ENGINEERING INFORMATION

WORKING PRESSURE: Normal operating pressure 3000 psi maximum. May be used at higher pressures if there are no surges.

TEMPERATURE RANGE: -40°F to +200°F (-40°C to +93°C) (Intermittant +250°F 121°C)

APPLICATIONS: Hydraulic, lubrication, and coolant lines and other applications. For higher pressure see PEB-19 and 20.

VACUUM: Full vacuum through -10 size. Larger sizes will require internal support spring.

CONSTRUCTION

INNERCORE: Extruded nylon liner

REINFORCEMENT: Synthetic Braid - Dacron

FITTINGS: Permanently attached. CRES 300 or customer specified material. Tamper proof fittings are normally supplied to eliminate possibility of accidental loosening of fittings. End fittings with 45° and 90° angles are manufactured with formed elbows to reduce pressure drops. Reusable fittings are available.

SPECIFICATIONS

HOSE: SAE 100R7

SPECIAL DESIGNS

Preece Inc. has designed and fabricated special hose assemblies, preformed hose assemblies and specially configured end fittings for the aerospace and marine industries. For special requirements please contact the plant.

DIMENSIONS AND PRESSURE RATINGS

HOSE PART NUMBER	I.D. NOMINAL		O.D. NOMINAL		BEND RADIUS		WORKING PRESSURE		BURST PRESSURE		WEIGHT	
	Inches	MM	Inches	MM	Inches	MM	PSI	Bar	PSI	Bar	Lbs/Ft	Kg/M
401-4	.187	4.8	.42	10.7	3.0	76.2	3000	207	12,000	828	.046	.068
401-5	.250	6.4	.46	11.7	4.0	101.6	2750	190	11,000	759	.049	.073
401-6	.312	7.9	.56	14.2	4.5	114.3	2500	173	10,000	690	.075	.112
401-8	.375	9.5	.62	15.7	5.0	127.0	2250	155	9,000	621	.084	.125
401-10	.500	12.7	.79	20.1	7.0	177.8	2000	138	8,000	552	.120	.179
401-12	.625	15.9	1.07	27.2	9.5	241.3	1250	86	5,000	345	.190	.283
401-16	.875	22.2	1.50	38.1	18.0	457.2	1000	69	4,000	276	.254	.378

HOSE ASSEMBLY NUMBERING SYSTEM

Example 1

STRAIGHT TO STRAIGHT FITTING

ASSEMBLIES WITH STRAIGHT FITTINGS EACH END USE DASH SIZE DESIGNATION.

401000 8C 0145

BASIC ASSEMBLY NO. _____ ASSEMBLY LENGTH 14 3/8" LAST DIGIT IN 1/8 INCH INCREMENTS

SIZE (1/2" OD Tube Size) _____ FITTING MATERIAL DESIGNATION

Example 2

STRAIGHT TO 90° ELBOW FITTING

ASSEMBLIES WITH ELBOW FITTING ONE END AND STRAIGHT FITTING ONE END USE DASH SIZE DESIGNATION.

401007 4D 0134

BASIC ASSEMBLY NO. _____ ASSEMBLY LENGTH 13 1/2" LAST DIGIT IN 1/8 INCH INCREMENTS

SIZE (1/4" OD Tube Size) _____ FITTING MATERIAL DESIGNATION

Example 3

90° ELBOW TO 90° ELBOW FITTING

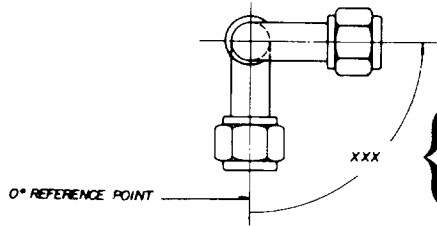
ASSEMBLIES WITH ELBOWS EACH END USE LETTER CODE FOR SIZE DESIGNATION

401003 F 0173 C 090

BASIC ASSEMBLY NO. _____ ANGULAR ROTATION IN DEGREES (MEASURED COUNTER CLOCKWISE)

SIZE (1/4" Tube Size) _____ FITTING MATERIAL DESIGNATION

_____ ASSEMBLY LENGTH 17 3/8" LAST DIGIT IN 1/8 INCH INCREMENTS



ANGULAR ROTATION IN DEGREES MEASURED COUNTERCLOCKWISE WHEN USING ELBOW CONFIGURATIONS ON BOTH ENDS

TUBE SIZE (O.D.)	1/4"	5/16"	3/8"	1/2"	5/8"	3/4"	1"
DASH SIZE	-4	-5	-6	-8	-10	-12	-16
LETTER CODE	F	G	H	J	K	L	M

FITTING MATERIAL DESIGNATION

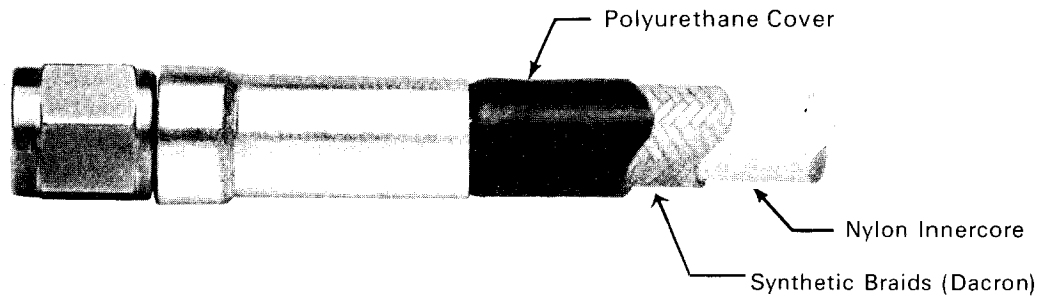
C = Stainless (CRES 304)
 A = Stainless (CRES 316)
 D = Aluminum
 M = Monel QQ-N-281
 P = Copper Nickel

BASIC HOSE ASSEMBLY PART NO.	DESCRIPTION		FITTING A	FITTING B	ASSEMBLY LENGTH	BASIC HOSE ASSEMBLY PART NO.	DESCRIPTION		FITTING A	FITTING B	ASSEMBLY LENGTH
	FITTING A	FITTING B					FITTING A	FITTING B			
401000	STRAIGHT SWIVEL, AN CONNECTION	STRAIGHT SWIVEL, AN CONNECTION				401006	STRAIGHT SWIVEL, FLARELESS CONNECTION	STRAIGHT SWIVEL, FLARELESS CONNECTION			
401001	STRAIGHT SWIVEL, AN CONNECTION	90° SWIVEL, AN CONNECTION				401007	STRAIGHT SWIVEL, FLARELESS CONNECTION	90° SWIVEL, FLARELESS CONNECTION			
401002	STRAIGHT SWIVEL, AN CONNECTION	45° SWIVEL, AN CONNECTION				401008	STRAIGHT SWIVEL, FLARELESS CONNECTION	45° SWIVEL, FLARELESS CONNECTION			
401003	90° SWIVEL, AN CONNECTION	90° SWIVEL, AN CONNECTION				401009	90° SWIVEL, FLARELESS CONNECTION	90° SWIVEL, FLARELESS CONNECTION			
401004	45° SWIVEL, AN CONNECTION	45° SWIVEL, AN CONNECTION				401010	45° SWIVEL, FLARELESS CONNECTION	45° SWIVEL, FLARELESS CONNECTION			
401005	90° SWIVEL, AN CONNECTION	45° SWIVEL, AN CONNECTION				401011	90° SWIVEL, FLARELESS CONNECTION	45° SWIVEL, FLARELESS CONNECTION			



PREECE INC.
ENGINEERING
BULLETIN

THERMOPLASTIC HOSE
 ASSEMBLIES MEDIUM
 PRESSURE
 Bulletin PEB-19



APPLICATIONS AND ENGINEERING INFORMATION

WORKING PRESSURE: Normal operating pressure 5000 psi maximum.

TEMPERATURE RANGE: -40°F to +200°F (-40°C to +93°C) Intermittant +250°F (121°C)

APPLICATIONS: Hydraulic, lubrication, and coolant lines. For higher pressure see PEB-19 and 20.

VACUUM: Full vacuum through -10 size. Larger sizes will require internal support spring.

CONSTRUCTION

INNERCORE: Extruded Nylon liner

REINFORCEMENT: Synthetic Braids - Dacron

FITTINGS: Permanently attached. CRES 300 or customer specified material. Tamper proof fittings eliminate possibility of accidental loosening of fittings. End fittings with 45° and 90° angles are manufactured with formed elbows to reduce pressure drops.

SPECIFICATIONS

HOSE: SAE 100R8

SPECIAL DESIGNS

Preece Inc. has designed and fabricated special hose assemblies, preformed hose assemblies and specially configured end fittings for the aerospace and marine industries. For special requirements please contact the plant.

DIMENSIONS AND PRESSURE RATINGS

HOSE PART NUMBER	I.D. NOMINAL		O.D. NOMINAL		BEND RADIUS		WORKING PRESSURE		BURST PRESSURE		WEIGHT	
	Inches	MM	Inches	MM	Inches	MM	PSI	Bar	PSI	Bar	Lbs/Ft	Kg/M
402-4	.187	4.8	.52	13.2	1.6	40.6	5000	345	20,000	1380	.079	.118
402-5	.250	6.4	.64	16.3	2.0	50.8	5000	345	20,000	1380	.118	.176
402-6	.375	9.5	.78	19.8	2.5	63.5	4000	276	16,000	1104	.150	.223
402-8	.500	12.7	.89	22.6	4.0	101.6	3000	207	12,000	828	.193	.287
402-12	.625	15.9	1.15	29.2	8.0	203.2	2250	155	9,000	621	.257	.382
402-16	.875	22.2	1.48	37.6	11.0	279.4	2000	138	8,000	552	.390	.580

HOSE ASSEMBLY NUMBERING SYSTEM

Example 1

STRAIGHT TO STRAIGHT FITTING

ASSEMBLIES WITH STRAIGHT FITTINGS EACH END USE DASH SIZE DESIGNATION.

402000 8C 0145

BASIC ASSEMBLY NO. _____ ASSEMBLY LENGTH 14 3/8" LAST DIGIT IN 1/8 INCH INCREMENTS
 SIZE (1/2" OD Tube Size) _____ FITTING MATERIAL DESIGNATION

Example 2

STRAIGHT TO 90° ELBOW FITTING

ASSEMBLIES WITH ELBOW FITTING ONE END AND STRAIGHT FITTING ONE END USE DASH SIZE DESIGNATION.

102007 4D 0134

BASIC ASSEMBLY NO. _____ ASSEMBLY LENGTH 13 1/2" LAST DIGIT IN 1/8 INCH INCREMENTS
 SIZE (1/4" OD Tube Size) _____ FITTING MATERIAL DESIGNATION

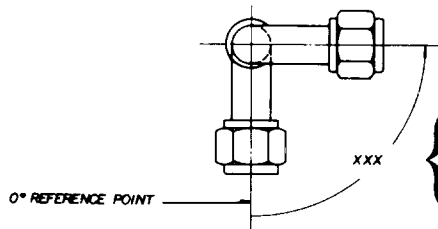
Example 3

90° ELBOW TO 90° ELBOW FITTING

ASSEMBLIES WITH ELBOWS EACH END USE LETTER CODE FOR SIZE DESIGNATION

402003 F 0173 C 090

BASIC ASSEMBLY NO. _____ ANGULAR ROTATION IN DEGREES (MEASURED COUNTER CLOCKWISE)
 SIZE (1/4" Tube Size) _____ FITTING MATERIAL DESIGNATION
 _____ ASSEMBLY LENGTH 17 3/8" LAST DIGIT IN 1/8 INCH INCREMENTS



ANGULAR ROTATION IN DEGREES MEASURED COUNTERCLOCKWISE WHEN USING ELBOW CONFIGURATIONS ON BOTH ENDS

TUBE SIZE (O.D.)	1/4"	5/16"	3/8"	1/2"	3/4"	1"
DASH SIZE	-4	-5	-6	-8	-12	-16
LETTER CODE	F	G	H	J	L	M

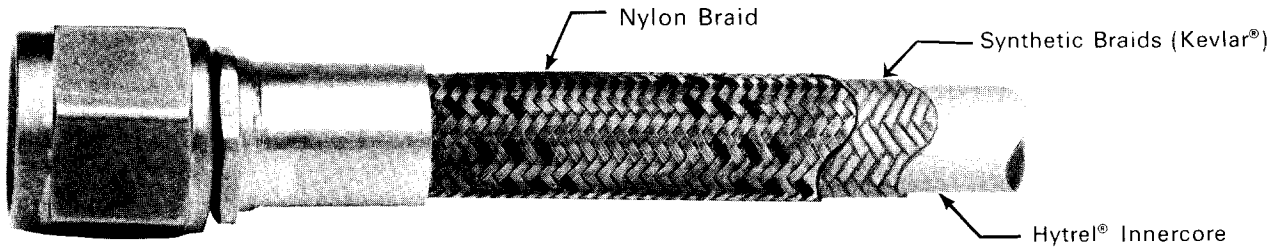
FITTING MATERIAL DESIGNATION
C = Stainless (CRES 304)
A = Stainless (CRES 316)
D = Aluminum
M = Monel QQ-N-281
P = Copper Nickel

BASIC HOSE ASSEMBLY PART NO.	DESCRIPTION		FITTING A	FITTING B	ASSEMBLY LENGTH	BASIC HOSE ASSEMBLY PART NO.	DESCRIPTION		FITTING A	FITTING B	ASSEMBLY LENGTH
	FITTING A	FITTING B					FITTING A	FITTING B			
402000	STRAIGHT SWIVEL, AN CONNECTION	STRAIGHT SWIVEL, AN CONNECTION				402006	STRAIGHT SWIVEL, FLARELESS CONNECTION	STRAIGHT SWIVEL, FLARELESS CONNECTION			
402001	STRAIGHT SWIVEL, AN CONNECTION	90° SWIVEL, AN CONNECTION				402007	STRAIGHT SWIVEL, FLARELESS CONNECTION	90° SWIVEL, FLARELESS CONNECTION			
402002	STRAIGHT SWIVEL, AN CONNECTION	45° SWIVEL, AN CONNECTION				402008	STRAIGHT SWIVEL, FLARELESS CONNECTION	45° SWIVEL, FLARELESS CONNECTION			
402003	90° SWIVEL, AN CONNECTION	90° SWIVEL, AN CONNECTION				402009	90° SWIVEL, FLARELESS CONNECTION	90° SWIVEL, FLARELESS CONNECTION			
402004	45° SWIVEL, AN CONNECTION	45° SWIVEL, AN CONNECTION				402010	45° SWIVEL, FLARELESS CONNECTION	45° SWIVEL, FLARELESS CONNECTION			
402005	90° SWIVEL, AN CONNECTION	45° SWIVEL, AN CONNECTION				402011	90° SWIVEL, FLARELESS CONNECTION	45° SWIVEL, FLARELESS CONNECTION			



PREECE INC.
ENGINEERING
BULLETIN

THERMOPLASTIC HOSE ASSEMBLIES
 HIGH PRESSURE
 Bulletin PEB-20



APPLICATIONS AND ENGINEERING INFORMATION

WORKING PRESSURE: Normal operating pressure 3000-8000 psi (207-552 Bar). May be used at higher pressures if there are no surges.

TEMPERATURE RANGE: -50°F to +250° (-45°C to +121°C)

APPLICATIONS: Hydraulic high pressure applications.

CONSTRUCTION

INNERCORE: Extruded Hytrel® liner.

REINFORCEMENT: Kevlar Braids and Nylon Braid Scuff Guard.

FITTINGS: Permanently attached. CRES 3000 or customer specified material. Tamper proof fittings eliminate possibility of accidental loosening of fittings. End fittings with 45° and 90° angles are manufactured with formed elbows to reduce pressure drops.

SPECIAL DESIGNS

Preece Inc. has designed and fabricated special hose assemblies, preformed hose assemblies and specially configured end fittings for the aerospace and marine industries. For special requirements please contact the plant.

DIMENSIONS AND PRESSURE RATINGS

HOSE PART NUMBER	I.D. NOMINAL		O.D. NOMINAL		BEND RADIUS		WORKING PRESSURE		BURST PRESSURE		WEIGHT (REF)	
	Inches	MM	Inches	MM	Inches	MM	PSI	Bar	PSI	Bar	Lbs/Ft	Kg/M
403-4	.19	4.8	.46	11.7	2.0	50.8	8000	552	32,000	2208	.10	.148
403-6	.31	7.9	.79	20.1	4.0	101.6	8000	552	32,000	2208	.13	.194
403-8	.40	10.3	.90	22.9	6.0	152.4	6000	414	24,000	1656	.16	.238
403-10	.50	12.7	1.00	25.4	7.0	177.8	4500	310	18,000	1242	.21	.312
403-12	.62	15.9	1.15	29.2	9.0	228.6	3000	207	12,000	828	.29	.431
403-16	.87	22.2	1.40	35.6	12.0	304.8	3000	207	12,000	828	.40	.595

HOSE ASSEMBLY NUMBERING SYSTEM

Example 1

STRAIGHT TO STRAIGHT FITTING

ASSEMBLIES WITH STRAIGHT FITTINGS EACH END USE DASH SIZE DESIGNATION.

403000 8C 0145

BASIC ASSEMBLY NO. _____ ASSEMBLY LENGTH 14 $\frac{1}{2}$ " LAST DIGIT IN $\frac{1}{8}$ INCH INCREMENTS

SIZE ($\frac{1}{2}$ " OD Tube Size) _____ FITTING MATERIAL DESIGNATION

Example 2

STRAIGHT TO 90° ELBOW FITTING

ASSEMBLIES WITH ELBOW FITTING ONE END AND STRAIGHT FITTING ONE END USE DASH SIZE DESIGNATION.

403007 4D 0134

BASIC ASSEMBLY NO. _____ ASSEMBLY LENGTH 13 $\frac{1}{2}$ " LAST DIGIT IN $\frac{1}{8}$ INCH INCREMENTS

SIZE ($\frac{1}{4}$ " OD Tube Size) _____ FITTING MATERIAL DESIGNATION

Example 3

90° ELBOW TO 90° ELBOW FITTING

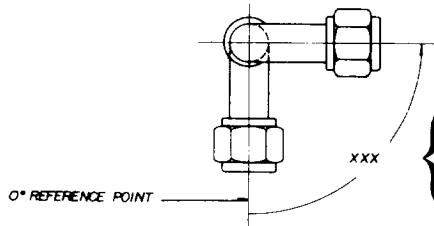
ASSEMBLIES WITH ELBOWS EACH END USE LETTER CODE FOR SIZE DESIGNATION

403003 F 0173 C 090

BASIC ASSEMBLY NO. _____ ANGULAR ROTATION IN DEGREES (MEASURED COUNTER CLOCKWISE)

SIZE ($\frac{1}{4}$ " Tube Size) _____ FITTING MATERIAL DESIGNATION

_____ ASSEMBLY LENGTH 17 $\frac{3}{8}$ " LAST DIGIT IN $\frac{1}{8}$ INCH INCREMENTS



ANGULAR ROTATION IN DEGREES MEASURED COUNTERCLOCKWISE WHEN USING ELBOW CONFIGURATIONS ON BOTH ENDS

TUBE SIZE (O.D.)	$\frac{1}{4}$ "	$\frac{3}{8}$ "	$\frac{1}{2}$ "	$\frac{5}{8}$ "	$\frac{3}{4}$ "	1"
DASH SIZE	-4	-6	-8	-10	-12	-16
LETTER CODE	F	H	J	K	L	M

FITTING MATERIAL DESIGNATION	
C	= Stainless (CRES 304)
A	= Stainless (CRES 316)
D	= Aluminum
M	= Monel QQ-N-281
P	= Copper Nickel

BASIC HOSE ASSEMBLY PART NO.	DESCRIPTION		FITTING A	FITTING B	BASIC HOSE ASSEMBLY PART NO.	DESCRIPTION		FITTING A	FITTING B
	FITTING A	FITTING B				FITTING A	FITTING B		
403000	STRAIGHT SWIVEL, AN CONNECTION	STRAIGHT SWIVEL, AN CONNECTION	ASSEMBLY LENGTH		403006	STRAIGHT SWIVEL, FLARELESS CONNECTION	STRAIGHT SWIVEL, FLARELESS CONNECTION	ASSEMBLY LENGTH	
403001	STRAIGHT SWIVEL, AN CONNECTION	90° SWIVEL, AN CONNECTION	ASSEMBLY LENGTH		403007	STRAIGHT SWIVEL, FLARELESS CONNECTION	90° SWIVEL, FLARELESS CONNECTION	ASSEMBLY LENGTH	
403002	STRAIGHT SWIVEL, AN CONNECTION	45° SWIVEL, AN CONNECTION	ASSEMBLY LENGTH		403008	STRAIGHT SWIVEL, FLARELESS CONNECTION	45° SWIVEL, FLARELESS CONNECTION	ASSEMBLY LENGTH	
403003	90° SWIVEL, AN CONNECTION	90° SWIVEL, AN CONNECTION	ASSEMBLY LENGTH		403009	90° SWIVEL, FLARELESS CONNECTION	90° SWIVEL, FLARELESS CONNECTION	ASSEMBLY LENGTH	
403004	45° SWIVEL, AN CONNECTION	45° SWIVEL, AN CONNECTION	ASSEMBLY LENGTH		403010	45° SWIVEL, FLARELESS CONNECTION	45° SWIVEL, FLARELESS CONNECTION	ASSEMBLY LENGTH	
403005	90° SWIVEL, AN CONNECTION	45° SWIVEL, AN CONNECTION	ASSEMBLY LENGTH		403011	90° SWIVEL, FLARELESS CONNECTION	45° SWIVEL, FLARELESS CONNECTION	ASSEMBLY LENGTH	