

Section 3

**PPro-Seal™ Natural PP
Piping System**

Serviced by GF Little Rock



Glossary

S	=	Electrofusion Socket
SPG	=	Spigot End (same dimension as pipe outside diameter)
MPT	=	Male Pipe Thread
FPT	=	Female Pipe Thread
*	=	Non-returnable/Non-cancellable
^	=	40% Restocking Fee

Product Line	Description	Discount
07	Fusion Accessories	_____
09	PPn Sch. 80 Threaded Fittings-molded	_____
10	PPn Valves	_____
27	PPn Sch. 80 Pipe	_____
36	PPn Sch. 80 Fusion Fittings-molded	_____

The technical information given in this publication implies no warranty of any kind and is subject to change without notice. Please consult our Terms and Conditions of Sale.

Not for Use with Compressed Air or Gases

DO NOT TEST with Air or Air over Water

GF Piping DOES NOT RECOMMEND the use of thermoplastic piping products for systems to transport or store compressed air or gases, or the testing of thermoplastic piping systems with compressed air or gases in above or below ground locations. The use of GF Piping products in compressed air or gas systems automatically voids the warranty for such products, and their use against our recommendation is entirely the responsibility and liability of the installer. GF Piping will not accept responsibility for damage or impairment from its products, or other consequential or incidental damages caused by misapplication, incorrect assembly, and/or exposure to harmful substances or conditions.

For more information about any of our product lines, please call (800) 423-2686.

PPro-Seal™ Natural PP

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PPro-Seal Pipe

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PPro-Seal Electrofusion Fittings

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PPro-Seal Valves

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PPro-Seal Fusion Accessories

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PPro-Seal Threaded Fittings

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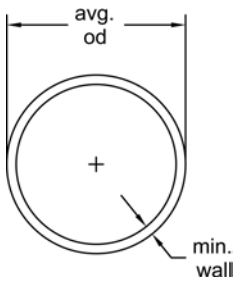
PPro-Seal™ Natural PP

PPro-Seal Pipe

Schedule 80 PPn

20' lengths available upon request

All pipe must be ordered in lift quantities to maintain cleanliness.



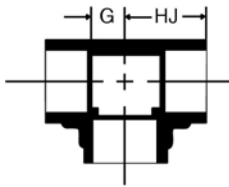
Size [inch]	lengths [ft]	Part No.	USD/ft	Lift Qty [ft]	Minimum Order Qty [ft]	avg. od [inch]	min. wall [inch]
½	10	N8008-005AA *	1.75	250	250	0.840	0.147
¾	10	N8008-007AA *	2.25	150	150	1.050	0.154
1	10	N8008-010AA *	3.00	100	100	1.315	0.179
1 ½	10	N8008-015AA *	6.75	40	40	1.900	0.200
2	10	N8008-020AA *	9.25	30	30	2.375	0.218
3	10	N8008-030AA *	18.00	10	10	3.500	0.300

^ = 40% Restock Charge
* = Non-Cancelable/Non-Returnable

PPro-Seal™ Natural PP

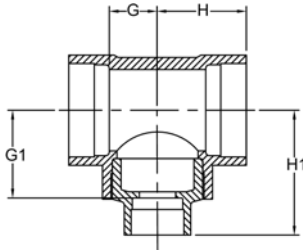
PPro-Seal Electrofusion Fittings

Tee (S x S x S)



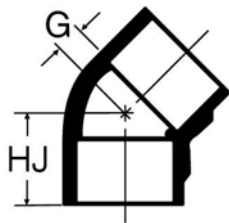
Size [inch]	Part No.	USD	Minimum Order Qty	G [inch]	HJ [inch]
1/2	801-005F	16.00	5	0.51	1.22
3/4	801-007F	18.00	5	0.58	1.36
1	801-010F	21.00	5	0.70	1.67
1 1/2	801-015F	31.00	2	1.00	2.03
2	801-020F	42.00	2	1.26	2.32
3	801-030F	122.00	1	1.87	3.72

Tee - Reducing (S x S x S)



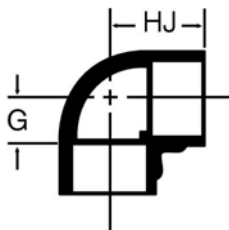
Size [inch]	Part No.	USD	Minimum Order Qty	G [inch]	G1 [inch]	H [inch]	H1 [inch]
1 x 1/2	801-130FFB *	46.00	2	0.70	1.75	1.67	2.46
1 1/2 x 1/2	801-209F	62.00	2	0.88	1.35	1.91	1.88
1 1/2 x 1	801-211FFB *	62.00	2	1.00	2.03	2.03	3.00
2 x 1/2	801-247F	82.00	2	0.86	1.62	2.02	2.16
2 x 1	801-249FFB *	82.00	2	1.26	2.29	2.32	3.26

45° EII (S x S)



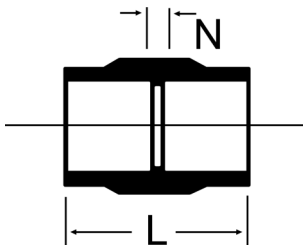
Size [inch]	Part No.	USD	Minimum Order Qty	G [inch]	HJ [inch]
1/2	817-005F	18.00	5	0.31	1.02
3/4	817-007F	19.00	5	0.33	1.11
1	817-010F	23.00	5	0.39	1.36
1 1/2	817-015F	37.00	2	0.52	1.55
2	817-020F	50.00	2	0.64	1.70
3	817-030F	117.00	1	0.81	2.66

90° EII (S x S)



Size [inch]	Part No.	USD	Minimum Order Qty	G [inch]	HJ [inch]
1/2	806-005F	13.00	5	0.51	1.22
3/4	806-007F	16.00	5	0.58	1.36
1	806-010F	20.00	5	0.70	1.67
1 1/2	806-015F	27.00	2	1.00	2.03
2	806-020F	37.00	2	1.26	2.32
3	806-030F	78.00	1	1.87	3.72

Coupling (S x S)



Size [inch]	Part No.	USD	Minimum Order Qty	L [inch]	N [inch]
1/2	829-005F	12.00	5	1.56	0.12
3/4	829-007F	15.00	5	1.68	0.12
1	829-010F	16.00	5	2.06	0.12
1 1/2	829-015F	21.00	2	2.25	0.18
2	829-020F	28.00	2	2.26	0.13
3	829-030F	51.00	1	4.00	0.31

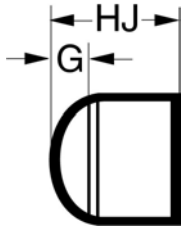
^ = 40% Restock Charge

* = Non-Cancelable/Non-Returnable

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PPro-Seal™ Natural PP

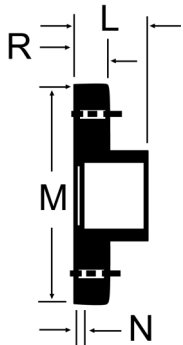
Cap (S)



Size [inch]	Part No.	USD	Minimum Order Qty	G [inch]	HJ [inch]
½	847-005F	16.00	5	0.42	1.14
¾	847-007F	27.00	5	0.45	1.23
1	847-010F	31.00	5	0.53	1.50
1 ½	847-015F	37.00	2	0.63	1.71
2	847-020F	50.00	2	0.75	1.84
3	847-030F	105.00	1	1.00	2.38

Flange (S) without Backing Ring

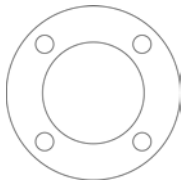
Flange Backing Ring recommended for assembly
3" Flange is Van Stone Style



Size [inch]	Part No.	USD	holes	bolt hole dia. [inch]	bolt cir. dia. [inch]	L [inch]	M [inch]	N [inch]	R [inch]
½	859-005F	31.00	4	0.50	2.38	0.86	3.50	0.14	0.41
¾	859-007F	37.00	4	0.50	2.75	0.97	3.88	0.19	0.47
1	859-010F	44.00	4	0.50	3.13	1.16	4.25	0.19	0.53
1 ½	859-015F	50.00	4	0.50	3.88	1.24	5.00	0.21	0.66
2	859-020F	56.00	4	0.63	4.75	1.34	6.00	0.28	0.71
3	854-030F	80.00	4	0.63	6.00	2.33	7.50	0.48	1.00

Flange Backing Ring

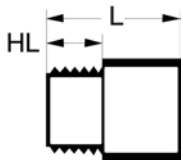
Flange Ring Material : PVC Coated Metal



Size [inch]	Part No.	USD
½	855-005F *	56.00
¾	855-007F *	62.00
1	855-010F *	68.00
1 ½	855-015F *	75.00
2	855-020F *	95.00
3	855-030F *	130.00

Male Adapter (MPT x S)

Threaded fittings not recommended for pressure applications



Size [inch]	Part No.	USD	Minimum Order Qty	HL [inch]	L [inch]
½	836-005F	16.00	5	1.02	1.73
¾	836-007F	19.00	5	1.05	1.83
1	836-010F	21.00	5	1.28	2.25
1 ½	836-015F	26.00	2	1.32	2.35
2	836-020F	41.00	2	1.37	2.43
3	836-030F	84.00	1	2.08	3.93

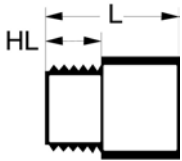
^ = 40% Restock Charge

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PPro-Seal™ Natural PP

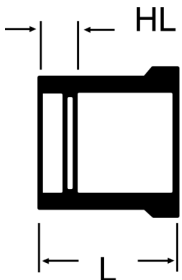
Male Adapter - Reducing (S x MPT)

Threaded fittings not recommended for pressure applications



Size [inch]	Part No.	USD	Minimum Order Qty	HL [inch]	L [inch]
½ x ¼	836-036F	17.00	5	0.79	2.00

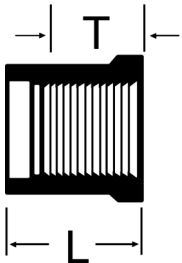
Reducer Bushing (Spg x S)



Size [inch]	Part No.	USD	Minimum Order Qty	HL [inch]	L [inch]
¾ x ½	837-101F	17.00	5	1.14	1.86
1 x ½	837-130F	25.00	5	1.03	1.75
1 x ¾	837-131F	25.00	5	1.10	1.88
1 ½ x ¾	837-210F	32.00	2	0.95	1.67
1 ½ x 1	837-211F	32.00	2	1.03	2.00
2 x 1	837-249F	40.00	2	1.03	2.00
2 x 1 ½	837-251F	40.00	2	0.81	1.84
3 x 1 ½	837-337F	56.00	1	0.91	2.40
3 x 2	837-338F	56.00	1	0.88	2.40

Reducer Bushing (Spg x FPT)

Threaded fittings not recommended for pressure applications



Size [inch]	Part No.	USD	Minimum Order Qty	L [inch]	T min. [inch]	Style
¾ x ½	838-101F ^	17.00	5	1.13	0.53	Flush
1 x ½	838-130F ^	25.00	5	1.75	0.53	Extended
1 x ¾	838-131F ^	25.00	5	1.31	0.55	Flush
1 ½ x ¾	838-210F ^	32.00	2	1.67	0.55	Flush
1 ½ x 1	838-211F ^	32.00	2	1.67	0.68	Flush
2 x 1	838-249F ^	40.00	2	2.00	0.68	Extended
2 x 1 ½	838-251F ^	40.00	2	1.81	0.72	Flush
3 x 1 ½	838-337F ^	56.00	1	2.40	0.72	Flush
3 x 2	838-338F ^	56.00	1	2.40	0.76	Flush

^ = 40% Restock Charge

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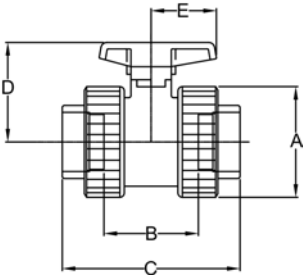
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PPro-Seal™ Natural PP

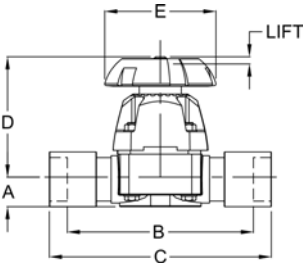
PPro-Seal Valves

Type 375 Ball Valve (S x S) and (FPT x FPT)

O-Ring Material : FPM



Size [inch]	FPM Part No.	USD	A [inch]	B [inch]	C [inch]	D [inch]	E [inch]	
½	1088375005F	75.00	1.88	1.84	3.86	2.31	1.44	
¾	1088375007F	95.00	2.27	2.08	4.37	2.50	1.44	
1	1088375010F	117.00	2.63	2.34	4.86	3.05	1.85	
1 ½	1088375015F	189.00	3.67	3.13	5.87	3.60	2.41	
2	1088375020F	222.00	4.48	3.68	6.73	3.95	2.41	
3	1088375030F	555.00	6.51	5.67	9.60	5.28	3.07	



Type 315 Diaphragm Valve (S x S)

Diaphragm & Backing Ring Material : EPDM

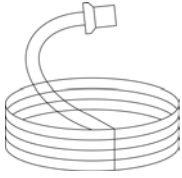
Size [inch]	EPDM Part No.	USD	A [inch]	B [inch]	C [inch]	D [inch]	E [inch]	Lift [ft]	
½	1088315005F *	340.00	0.55	5.12	6.54	3.54	3.15	0.31	
¾	1088315007F *	375.00	0.69	5.82	7.50	4.02	3.15	0.43	
1	1088315010F *	435.00	0.83	6.06	8.00	4.67	3.70	0.51	
1 ½	1088315015F *	525.00	1.28	8.27	10.33	5.47	4.61	0.83	
2	1088315020F *	615.00	1.53	9.10	11.22	6.77	5.98	1.10	

^ = 40% Restock Charge
* = Non-Cancelable/Non-Returnable

PPro-Seal™ Natural PP

PPro-Seal Fusion Accessories

Loose Coil



Size [inch]	Part No.	USD	Minimum Order Qty
1/2	6076 *	4.00	10
3/4	6077 *	4.25	10
1	6078 *	4.50	10
1 1/2	6086 *	5.00	10
2	6089 *	5.25	10
3	6091 *	6.00	10

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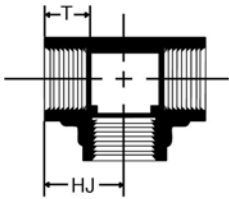
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PPro-Seal™ Natural PP

PPro-Seal Threaded Fittings

Tee (FPT x FPT x FPT)

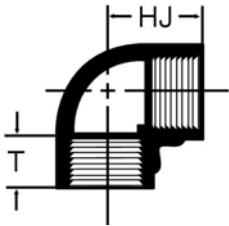
Threaded fittings not recommended for pressure applications



Size [inch]	Part No.	USD	Minimum Order Qty	HJ [inch]	T min. [inch]
½	805-005F	12.00	5	1.22	0.53
¾	805-007F	13.00	5	1.36	0.55
1	805-010F	17.00	5	1.67	0.68
1 ½	805-015F	25.00	2	2.03	0.72
2	805-020F	31.00	2	2.32	0.76

90° EII (FPT x FPT)

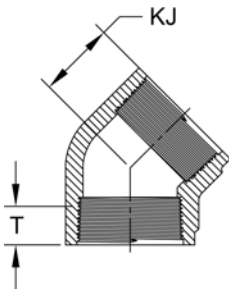
Threaded fittings not recommended for pressure applications



Size [inch]	Part No.	USD	Minimum Order Qty	HJ [inch]	T min. [inch]
½	808-005F	9.50	5	1.22	0.53
¾	808-007F	12.00	5	1.36	0.55
1	808-010F	14.00	5	1.67	0.68
1 ½	808-015F	18.00	2	2.03	0.72
2	808-020F	25.00	2	2.32	0.76

45° EII (FPT x FPT)

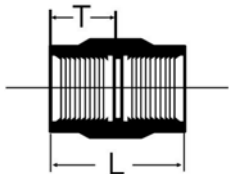
Threaded fittings not recommended for pressure applications



Size [inch]	Part No.	USD	Minimum Order Qty	KJ [inch]	T min. [inch]
½	819-005F	18.00	5	1.02	0.53
¾	819-007F	19.00	5	1.11	0.55
1	819-010F	23.00	5	1.36	0.68
1 ½	819-015F	37.00	2	1.55	0.72
2	819-020F	50.00	2	1.70	0.76

Coupling (FPT x FPT)

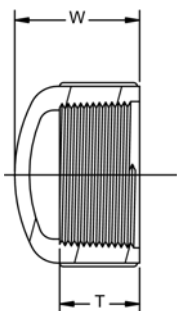
Threaded fittings not recommended for pressure applications



Size [inch]	Part No.	USD	Minimum Order Qty	L [inch]	T min. [inch]
½	830-005F	8.50	5	1.56	0.53
¾	830-007F	10.50	5	1.68	0.55
1	830-010F	12.00	5	2.06	0.68
1 ½	830-015F	16.00	2	2.25	0.72
2	830-020F	19.00	2	2.26	0.76

Cap (FPT)

Threaded fittings not recommended for pressure applications



Size [inch]	Part No.	USD	Minimum Order Qty	W [inch]	T min. [inch]
½	848-005F	15.00	5	1.14	0.53
¾	848-007F	27.00	5	1.23	0.55
1	848-010F	32.00	5	1.50	0.68
1 ½	848-015F	37.00	2	1.71	0.72
2	848-020F	50.00	2	1.84	0.76

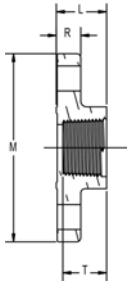
^ = 40% Restock Charge
* = Non-Cancelable/Non-Returnable

PPro-Seal™ Natural PP

Flange (FPT) without Backing Ring

Flange Backing Ring recommended for assembly

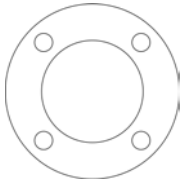
Threaded fittings not recommended for pressure applications



Size [inch]	Part No.	USD	holes	bolt hole dia. [inch]	bolt cir. dia. [inch]	L [inch]	M [inch]	R [inch]	T min. [inch]
1/2	852-005F	32.00	4	0.50	2.38	0.86	3.50	0.41	0.69
3/4	852-007F	37.00	4	0.50	2.75	0.97	3.88	0.47	0.69
1	852-010F	44.00	4	0.50	3.13	1.16	4.25	0.53	0.81
1 1/2	852-015F	51.00	4	0.50	3.88	1.24	5.00	0.66	0.88
2	852-020F	56.00	4	0.63	4.75	1.34	6.00	0.71	0.94

Flange Backing Ring

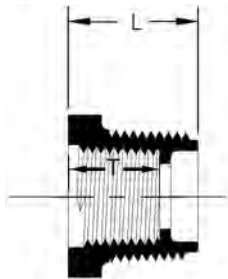
Flange Ring Material : PVC Coated Metal



Size [inch]	Part No.	USD
1/2	855-005F *	56.00
3/4	855-007F *	62.00
1	855-010F *	68.00
1 1/2	855-015F *	75.00
2	855-020F *	95.00

Reducer Bushing (MPT x FPT)

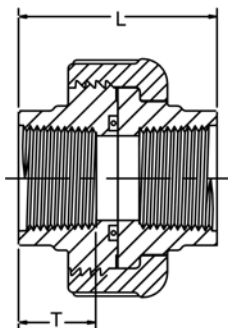
Threaded fittings not recommended for pressure applications



Size [inch]	Part No.	USD	Minimum Order Qty	L [inch]	T min. [inch]
3/4 x 1/2	839-101F ^	17.00	5	1.70	0.53
1 x 1/2	839-130F ^	25.00	5	1.77	0.53
1 x 3/4	839-131F ^	25.00	5	1.89	0.55
1 1/2 x 1	839-211F ^	32.00	2	2.00	0.68
2 x 1	839-249F ^	40.00	2	2.00	0.68
2 x 1 1/2	839-251F ^	40.00	2	1.81	0.72

Union (FPT x FPT)

Threaded fittings not recommended for pressure applications



Size [inch]	Part No.	USD	Minimum Order Qty	L [inch]	T min. [inch]
1/2	898-005F	39.00	5	2.00	0.53
3/4	898-007F	42.00	5	2.08	0.55
1	898-010F	52.00	5	2.50	0.68
1 1/2	898-015F	78.00	2	2.69	0.72
2	898-020F	114.00	2	2.88	0.76

^ = 40% Restock Charge

* = Non-Cancelable/Non-Returnable

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GF Piping Systems

Natural Polypropylene Piping System

Specification Submittal Data Sheet

PPro-Seal™ Natural Polypropylene Pipe and Fittings

Pipe

Pipe will be manufactured to the dimensions and tolerances of ASTM D1785. The material will be from natural virgin copolymer polypropylene with no added plasticizers, pigments or re-grind that is compliant with US Food and Drug Administration regulations 21.CFR 177.1520 Sections A1, B & C and conforms to ASTM D4101. All pipes shall be packaged in polybags at the point of manufacturing to preserve pipe cleanliness.

- PPn Sch.80 Group II Pipe - 10 ft. Lengths

Fittings

Fittings will be manufactured to the dimensions and tolerances of George Fischer Sloane, Inc. The material will be from natural virgin copolymer polypropylene with no added plasticizers, pigments or re-grind that is compliant with US Food and Drug Administration regulations 21.CFR 177.1520 Sections A1, B & C and conforms to ASTM D4101. All fittings shall be packaged in polybags at the point of manufacturing to preserve fitting cleanliness.

- PPn Sch.80 Molded - Electrofusion
- PPn Sch.80 Molded - Threaded

Joining

Pipe and fittings are joined by either electrofusion or threaded connections. Electrofusion joints will conform to ASTM F1290 and consist of a polypropylene jacketed wire. Threaded joints will conform to NPT dimensions and tolerances. (Note: Threaded fittings are not recommended for pressure systems).

- Electrofusion
- Threaded

Job Name: _____

Job Location: _____

Engineer: _____

Contractor: _____

Representative: _____

GF Piping Systems

Natural Polypropylene Piping System

Specification Submittal Data Sheet

PPro-Seal™ Natural Polypropylene True Union Ball Valve Type 375

Ball Valve

Ball valves shall be of True Union design with two-way blocking capability. Valves shall have a blow out proof stem with double stem seals. All O-rings shall be FPM and the valve seats shall be PTFE with an elastomeric backing of the same material as the valve seals. The valve shall be of floating ball design with full Schedule 80 bore. All ball valves shall have an adjustable seat carrier that can be adjusted or removed using the valve handle as a spanner wrench. The material will be natural virgin copolymer polypropylene with no added plasticizers, pigments or re-grind that meets the requirements of ASTM D4101 and is compliant with FDA 21.CFR 177.1520 Sections A1, B & C. The valve Type 375 shall have a pressure rating up to 150 psi at 68°F. All valves shall be packaged in containers at the point of manufacturing to preserve cleanliness.

- PPN True Union Ball Valve Type 375

Joining

Valves are joined to pipe and fittings by either electrofusion or threaded connections. Electrofusion joints will conform to ASTM F1290 and consist of a polypropylene jacketed wire. Threaded joints will conform to NPT dimensions and tolerances. (Note: Threaded fittings are not recommended for pressure systems).

- Electrofusion
- Threaded

Job Name: _____

Job Location: _____

Engineer: _____

Contractor: _____

Representative: _____

GF Piping Systems

Natural Polypropylene Piping System

Specification Submittal Data Sheet

PPro-Seal™ Natural Polypropylene Diaphragm Valve Type 315

Diaphragm Valve

Diaphragm valves upper body will be of glass-filled polypropylene material connected to lower body with exposed stainless steel bolts. All interior metal parts are to be sealed from outside influence. A position indicator must be present to determine diaphragm position. Diaphragms to be from EPDM material with EPDM elastomer backing. Metal threaded bushings shall be molded into lower body to facilitate mounting. Diaphragm valves lower body material will be natural virgin polypropylene with no added plasticizers, pigments or re-grind that meets the requirements of ASTM D4101 as pertains to type I homopolymer compound having a minimum tensile strength of 4350 psi at 73°F when tested in accordance with ASTM D-638 and shall have a melt point which initiates at 316°F. The melt flow index (at 374°F) shall be 0.4 - 0.8 grams per 10 minutes in accordance with ASTM D-1238. The valve Type 315 shall have a pressure rating up to 150 psi at 68°F. All valves shall be packaged in containers at the point of manufacturing to preserve cleanliness.

- PPN Diaphragm Valve Type 315

Joining

Valves are joined to pipe and fittings by electrofusion connections. Electrofusion joints will conform to ASTM F1290 and consist of a polypropylene jacketed wire.

- Electrofusion

Job Name: _____

Job Location: _____

Engineer: _____

Contractor: _____

Representative: _____