

**Section 3**

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

Serviced by GF Little Rock



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# Glossary

- Std. Pack = Standard Carton Quantity
- 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

PPro-Seal  
 Natural PP

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.**

## Pipe

P/L 27: PPro-Seal Schedule 80 Pipe

Material: Natural Polypropylene

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

### Schedule 80 pipe – 10 ft. lengths

Inch Size	Part Number	List \$/ft.	Lift Qty (ft.)	avg. od	min. wall
1/2	*N8008-005AA	<b>1.50</b>	250	0.840	0.147
3/4	*N8008-007AA	<b>2.00</b>	150	1.050	0.154
1	*N8008-010AA	<b>2.75</b>	100	1.315	0.179
1 1/2	*N8008-015AA	<b>6.00</b>	40	1.900	0.200
2	*N8008-020AA	<b>8.30</b>	30	2.375	0.218
3	*N8008-030AA	<b>16.70</b>	10	3.500	0.300

^ = 40% Restock Charge

\* = Non-Cancelable / Non-Returnable

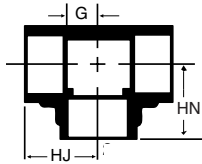
**Dimensions are subject to change.** Please see online "Price Lists" at <http://www.gfpiping.com> for up-to-date information.

# Electrofusion Fittings

P/L 36: PPro-Seal Schedule 80 Electrofusion Fittings

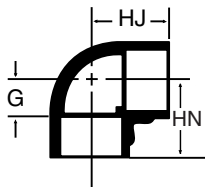
Material: Natural Polypropylene

**Note:** All fittings must be ordered in standard pack quantities to maintain cleanliness.



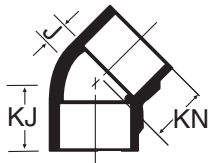
## Tee (S x S x S)

Inch Size	Part Number	\$	std. pack	HJ	HN	G
1/2	801-005F	13.50	5	1.22	1.22	0.51
3/4	801-007F	16.00	5	1.36	1.36	0.58
1	801-010F	19.00	5	1.67	1.67	0.70
1 1/2	801-015F	28.00	2	2.03	2.03	1.00
2	801-020F	37.50	2	2.32	2.32	1.26
3	801-030F	110.00	1	3.72	3.72	1.87



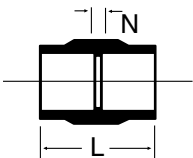
## 90° Ell (S x S)

Inch Size	Part Number	\$	std. pack	HJ	HN	G
1/2	806-005F	11.25	5	1.22	1.22	0.51
3/4	806-007F	14.25	5	1.36	1.36	0.58
1	806-010F	18.00	5	1.67	1.67	0.70
1 1/2	806-015F	24.00	2	2.03	2.03	1.00
2	806-020F	32.50	2	2.32	2.32	1.26
3	806-030F	70.00	1	3.72	3.72	1.87



## 45° Ell (S x S)

Inch Size	Part Number	\$	std. pack	KJ	KN	J
1/2	817-005F	15.50	5	1.02	1.02	0.31
3/4	817-007F	17.00	5	1.11	1.11	0.33
1	817-010F	20.00	5	1.36	1.36	0.39
1 1/2	817-015F	33.00	2	1.55	1.55	0.52
2	817-020F	45.00	2	1.70	1.70	0.64
3	817-030F	105.00	1	2.66	2.66	0.81



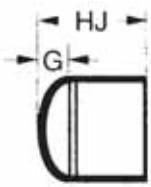
## Coupling (S x S)

Inch Size	Part Number	\$	Std. Pack	L	N
1/2	829-005F	10.20	5	1.56	0.12
3/4	829-007F	12.50	5	1.68	0.12
1	829-010F	14.00	5	2.06	0.12
1 1/2	829-015F	19.00	2	2.25	0.18
2	829-020F	25.00	2	2.26	0.13
3	829-030F	45.00	1	4.00	0.31

^ = 40% Restock Charge

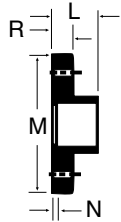
\* = Non-Cancelable / Non-Returnable

Dimensions are subject to change. Please see online "Price Lists" at <http://www.gfpiping.com> for up-to-date information.



### Cap (S)

Inch Size	Part Number	\$	Std. Pack	HJ	G
1/2	847-005F	13.50	5	1.14	0.42
3/4	847-007F	24.50	5	1.23	0.45
1	847-010F	28.00	5	1.50	0.53
1 1/2	847-015F	33.00	2	1.71	0.63
2	847-020F	45.00	2	1.84	0.75
3	847-030F	95.00	1	2.38	1.00



### Flange (S) Without Backing Ring

Inch Size	Part Number	\$	Std. Pack	# hole	bolt dia.	bolt cir. dia.	L	M	N	R
1/2	859-005F	28.00	1	4	0.50	2.38	0.86	3.50	0.14	0.41
3/4	859-007F	33.00	1	4	0.50	2.75	0.97	3.88	0.19	0.47
1	859-010F	39.00	1	4	0.50	3.13	1.16	4.25	0.19	0.53
1 1/2	859-015F	45.00	1	4	0.50	3.88	1.24	5.00	0.21	0.66
2	859-020F	50.00	1	4	0.63	4.75	1.34	6.00	0.28	0.71
3	854-030F	72.00	1	4	0.63	6.00	2.33	7.50	0.48	1.00

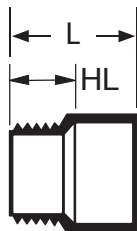
**Note:** Flange Backing Ring recommended for assembly.

**Note:** 3" Flange is Van Stone Style.



### Flange Backing Ring (PVC Coated Metal)

Inch Size	Part Number	\$	Std. Pack
1/2	*855-005F	50.00	1
3/4	*855-007F	56.00	1
1	*855-010F	61.00	1
1 1/2	*855-015F	67.00	1
2	*855-020F	85.00	1
3	*855-030F	115.00	1



### Male Adapter (MPT x S)

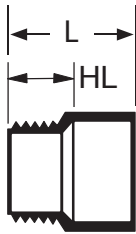
Inch Size	Part Number	\$	Std. Pack	L	HL
1/2	836-005F	13.50	5	1.73	1.02
3/4	836-007F	16.70	5	1.83	1.05
1	836-010F	19.00	5	2.25	1.28
1 1/2	836-015F	23.00	2	2.35	1.32
2	836-020F	37.00	2	2.43	1.37
3	836-030F	75.00	1	3.93	2.08

**Note:** Threaded fittings not recommended for pressure applications.

^ = 40% Restock Charge

\* = Non-Cancelable / Non-Returnable

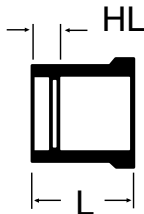
Dimensions are subject to change. Please see online "Price Lists" at <http://www.gfpiping.com> for up-to-date information.



### Male Reducing Adapter (MPT x S)

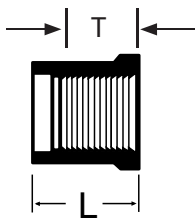
Inch Size	Part Number	\$	Std. Pack	L	HL
1/2x1/4	836-036F	15.00	5	2.00	0.79

**Note:** Threaded fittings not recommended for pressure applications.



### Reducer Bushing (SPG x S)

Inch Size	Part Number	\$	Std. Pack	L	HL
3/4x1/2	837-101F	15.00	5	1.86	1.14
1x1/2	837-130F	22.00	5	1.75	1.03
1x3/4	837-131F	22.00	5	1.88	1.10
1 1/2x3/4	837-210F	28.00	2	1.67	0.95
1 1/2x1	837-211F	28.00	2	2.00	1.03
2x1	837-249F	36.00	2	2.00	1.03
2x1 1/2	837-251F	36.00	2	1.84	0.81
3x1 1/2	837-337F	50.00	1	2.40	0.91
3x2	837-338F	50.00	1	2.40	0.88



### Reducer Bushing (SPG x FPT)

Inch Size	Part Number	\$	Std. Pack	L	T min.	Style
3/4x1/2	^838-101F	15.00	5	1.13	0.69	Flush
1x1/2	^838-130F	22.00	5	1.75	0.69	Extended
1x3/4	^838-131F	22.00	5	1.31	0.69	Flush
1 1/2x3/4	^838-210F	28.00	2	1.67	0.69	Flush
1 1/2x1	^838-211F	28.00	2	1.67	0.81	Flush
2x1	^838-249F	36.00	2	2.00	0.81	Extended
2x1 1/2	^838-251F	36.00	2	1.81	0.88	Flush
3x1 1/2	^838-337F	50.00	1	2.40	0.88	Flush
3x2	^838-338F	50.00	1	2.40	0.94	Flush

**Note:** Threaded fittings not recommended for pressure applications.

^ = 40% Restock Charge

\* = Non-Cancelable / Non-Returnable

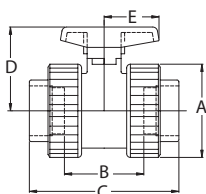
Dimensions are subject to change. Please see online "Price Lists" at <http://www.gfpiping.com> for up-to-date information.

## Valves

P/L 10: PPro-Seal Valves

Material: Natural Polypropylene

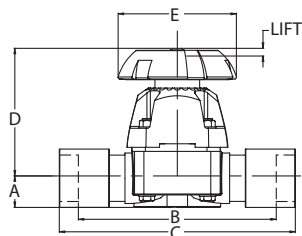
**Note:** All valves must be ordered in standard pack quantities to maintain cleanliness.



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

Inch Size	Part Number FPM	\$	Std. Pack	A	B	C	D	E
1/2	1088375005F	<b>67.00</b>	1	1.88	1.84	3.86	2.31	1.44
3/4	1088375007F	<b>85.00</b>	1	2.27	2.08	4.37	2.50	1.44
1	1088375010F	<b>105.00</b>	1	2.63	2.34	4.86	3.05	1.85
1 1/2	1088375015F	<b>170.00</b>	1	3.67	3.13	5.87	3.60	2.41
2	1088375020F	<b>200.00</b>	1	4.48	3.68	6.73	3.95	2.41
3	1088375030F	<b>500.00</b>	1	6.51	5.67	9.60	5.28	3.07

**Note:** O-Ring material: FPM.



### Type 315 Diaphragm Valve (S x S)

Inch Size	Part Number EPDM	\$	Std. Pack	A	B	C	D	E	Lift
1/2	*1088315005F	<b>305.00</b>	1	0.55	5.12	6.54	3.54	3.15	0.31
3/4	*1088315007F	<b>335.00</b>	1	0.69	5.82	7.50	4.02	3.15	0.43
1	*1088315010F	<b>390.00</b>	1	0.83	6.06	8.00	4.67	3.70	0.51
1 1/2	*1088315015F	<b>470.00</b>	1	1.28	8.27	10.33	5.47	4.61	0.83
2	*1088315020F	<b>555.00</b>	1	1.53	9.10	11.22	6.77	5.98	1.10

**Note:** Diaphragm and backing material: EPDM

^ = 40% Restock Charge

\* = Non-Cancelable / Non-Returnable

Dimensions are subject to change. Please see online "Price Lists" at <http://www.gfpiping.com> for up-to-date information.

# Fusion Accessories

P/L 07: Fusion Accessories

Standard Pack Quantities; No Broken Packs



## Loose Coil

Inch Size	Part Number	\$	Std. Pack
1/2	*6076	3.70	10
3/4	*6077	3.80	10
1	*6078	4.00	10
1 1/2	*6086	4.00	10
2	*6089	4.30	10
3	*6091	4.80	10

PP Pro-Seal  
Natural PP

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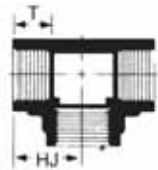
Dimensions are subject to change. Please see online "Price Lists" at <http://www.gfpiping.com> for up-to-date information.

# Threaded Fittings

P/L 09: PPro-Seal Schedule 80 Threaded Fittings

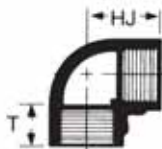
Material: Natural Polypropylene

**Note:** Threaded fittings are not recommended for pressure applications. All fittings must be ordered in standard pack quantities to maintain cleanliness.



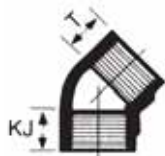
## Tee (FPT x FPT x FPT)

Inch Size	Part Number	\$	Std. Pack	HJ	T min.
1/2	805-005F	9.75	5	1.22	0.69
3/4	805-007F	11.00	5	1.36	0.69
1	805-010F	14.50	5	1.67	0.81
1 1/2	805-015F	22.00	2	2.03	0.88
2	805-020F	27.00	2	2.32	0.94



## 90° ELL (FPT x FPT)

Inch Size	Part Number	\$	Std. Pack	HJ	T min.
1/2	808-005F	8.00	5	1.22	0.69
3/4	808-007F	9.70	5	1.36	0.69
1	808-010F	12.00	5	1.67	0.81
1 1/2	808-015F	16.00	2	2.03	0.88
2	808-020F	22.00	2	2.32	0.94



## 45° ELL (FPT x FPT)

Inch Size	Part Number	\$	Std. Pack	KJ	T min.
1/2	819-005F	15.60	5	1.02	0.69
3/4	819-007F	16.70	5	1.11	0.69
1	819-010F	20.00	5	1.36	0.81
1 1/2	819-015F	33.00	2	1.55	0.88
2	819-020F	45.00	2	1.70	0.94



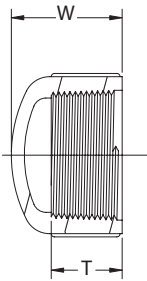
## Coupling (FPT x FPT)

Inch Size	Part Number	\$	Std. Pack	L	T min.
1/2	830-005F	7.00	5	1.56	0.69
3/4	830-007F	9.00	5	1.68	0.69
1	830-010F	10.30	5	2.06	0.81
1 1/2	830-015F	13.50	2	2.25	0.88
2	830-020F	16.50	2	2.26	0.94

^ = 40% Restock Charge

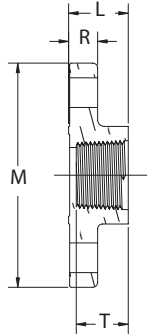
\* = Non-Cancelable / Non-Returnable

Dimensions are subject to change. Please see online "Price Lists" at <http://www.gfpiping.com> for up-to-date information.



### Cap (FPT)

Inch Size	Part Number	\$	Std. Pack	W	T min.
1/2	848-005F	13.00	5	1.14	0.69
3/4	848-007F	24.50	5	1.23	0.69
1	848-010F	27.80	5	1.50	0.81
1 1/2	848-015F	33.00	2	1.71	0.88
2	848-020F	45.00	2	1.84	0.94



### Flange (FPT) Without Backing Ring

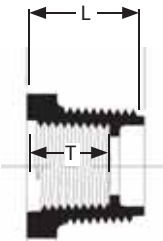
Inch Size	Part Number	\$	Std. Pack	# hole	bolt dia.	bolt cir. dia.	L	M	R	T min.
1/2	852-005F	28.00	1	4	0.50	2.38	0.86	3.50	0.41	0.69
3/4	852-007F	33.00	1	4	0.50	2.75	0.97	3.88	0.47	0.69
1	852-010F	39.00	1	4	0.50	3.13	1.16	4.25	0.53	0.81
1 1/2	852-015F	45.00	1	4	0.50	3.88	1.24	5.00	0.66	0.88
2	852-020F	50.00	1	4	0.63	4.75	1.34	6.00	0.71	0.94



### Flange Backing Ring (PVC Coated Metal)

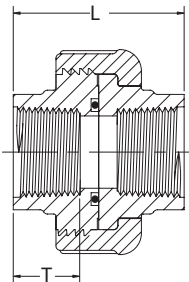
Inch Size	Part Number	\$	Std. Pack
1/2	*855-005F	50.00	1
3/4	*855-007F	56.00	1
1	*855-010F	61.00	1
1 1/2	*855-015F	67.00	1
2	*855-020F	85.00	1

**Note:** Flange Backing Ring recommended for assembly.



### Reducer Bushing (MPT x FPT)

Inch Size	Part Number	\$	Std. Pack	L	HL max.	T min.
3/4x1/2	^839-101F	15.00	5	1.70	0.95	0.69
1x1/2	^839-130F	22.00	5	1.77	1.02	0.69
1x3/4	^839-131F	22.00	5	1.89	1.10	0.69
1 1/2x1	^839-211F	28.00	2	2.00	1.02	0.81
2x1	^839-249F	36.00	2	2.00	1.02	0.81
2x1 1/2	^839-251F	36.00	2	1.81	0.78	0.88



### Union (FPT x FPT)

Inch Size	Part Number	\$	Std. Pack	L	T min.
1/2	898-005F	35.00	5	2.00	0.69
3/4	898-007F	38.00	5	2.08	0.69
1	898-010F	46.00	5	2.50	0.81
1 1/2	898-015F	70.00	2	2.69	0.88
2	898-020F	102.00	2	2.88	0.94

**Note:** O-Ring material: FPM

^ = 40% Restock Charge

\* = Non-Cancelable / Non-Returnable

Dimensions are subject to change. Please see online "Price Lists" at <http://www.gfpiping.com> for up-to-date information.

# 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 seats. 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: \_\_\_\_\_

PPro-Seal  
Natural PP

# 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:** \_\_\_\_\_