

spirax sarco®

Pressure Powered Pump™ Packages PPEC / PPC / PPF

A standard PPEC / PPC / PPF Pressure Powered Pump pre-piped with the necessary auxiliary components and integral receiver mounted on a skid base. The unit offers versatility of providing a base mounted module and pump with added modular options for a comprehensive fully engineered modular package to ensuring a technically correct and complete hook up.

Model ↕	Simplex	Duplex
PMO	Pump: 125 psig	Tank: 0 psig (vented to atmosphere)
Sizes		1", 1-1/2" (PPEC) 2", 3" x 2" (PPC / PPF)
Connections		Pump = NPT Tank: ANSI, 150# RF
Construction		Fabricated Steel Receiver Stainless Steel Pump Internals Stainless Steel or Bronze Check Valves
Options		see below

For increased service life —
Operate pump with motive pressure 15-20 psig above pump back pressure.

Pressure Shell Design Conditions

PMA (Max. Allowable Pressure)

Pump:
PPEC see TIS 5.218
PPC / PPF see TIS 5.200
Tank: Atmospheric Pressure

TMA (Max. Allowable Temperature)

Pump:
PPEC see TIS 5.218
PPC / PPF see TIS 5.200
Tank: 650°F / 0 psig

Limiting Operating Conditions

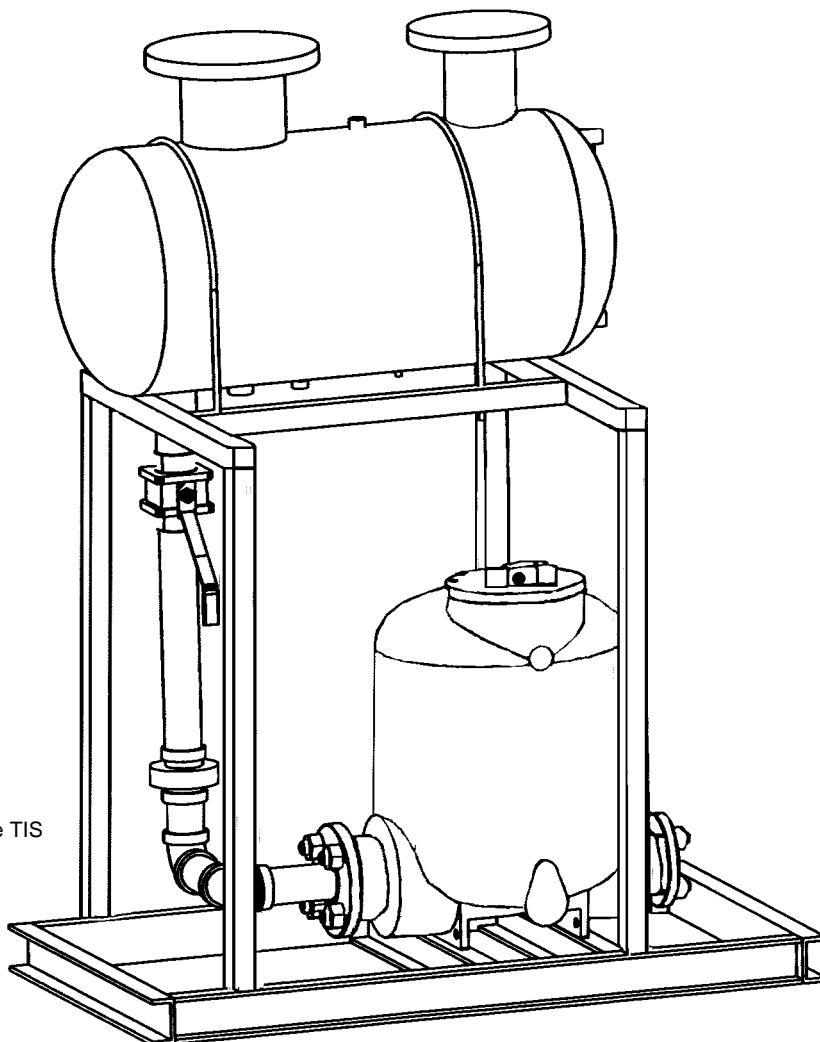
PMO (Maximum Operating Conditions)
Pump: 125 psig (8.6 barg)
Tank: 0 psig (vented to atmosphere)

Construction Materials

No.	Part	Material
1.	Receiver Shell	Steel - Welded
2.	Receiver Heads	Steel
3.	Piping	Steel - SCH 40
4.	Pump	See appropriate TIS

Capacities

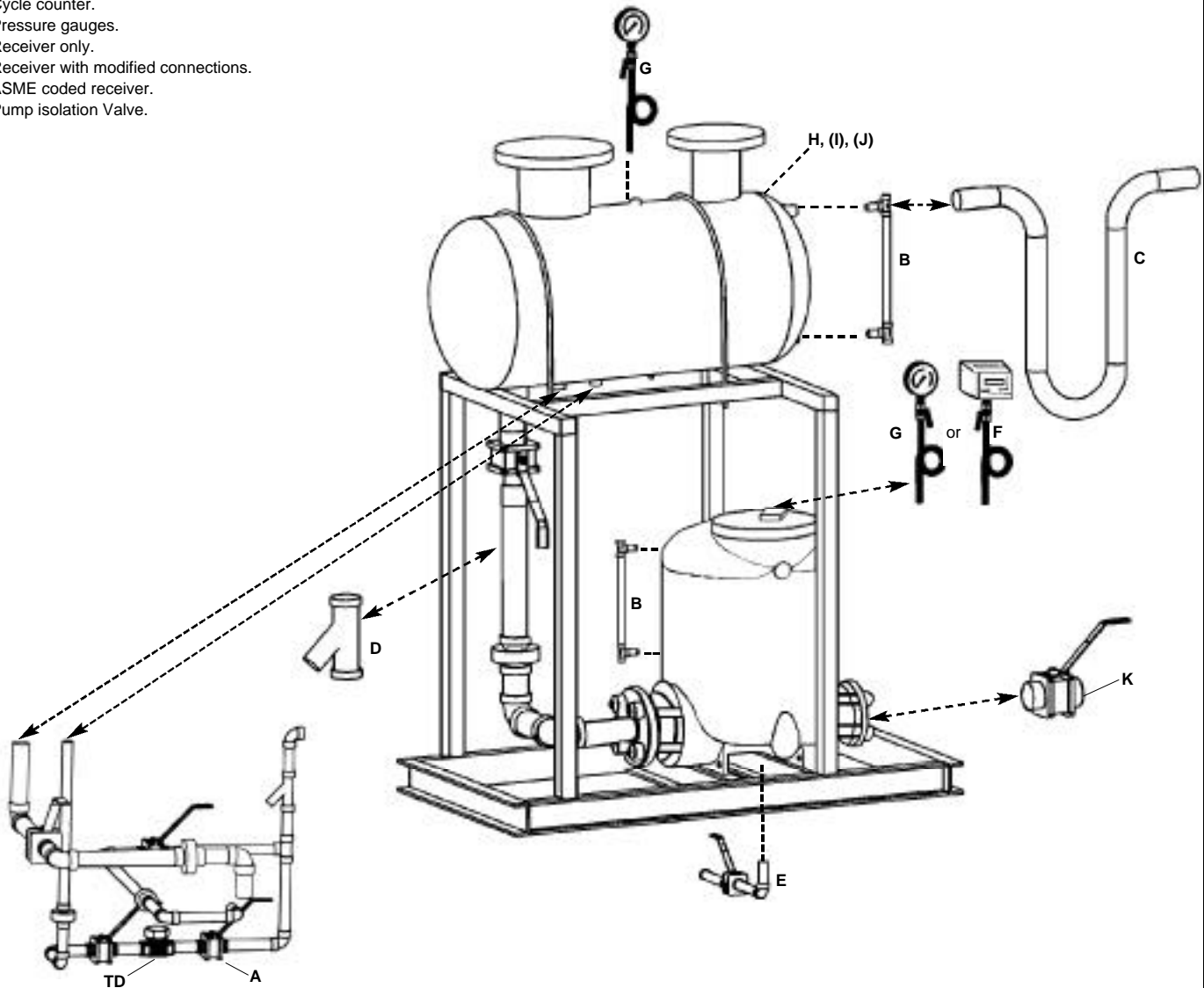
For sizing and selection data, see TIS 5.202.



Vented Packaged Pressure Powered Pump™ Unit PPEC / PPC / PPF

Options

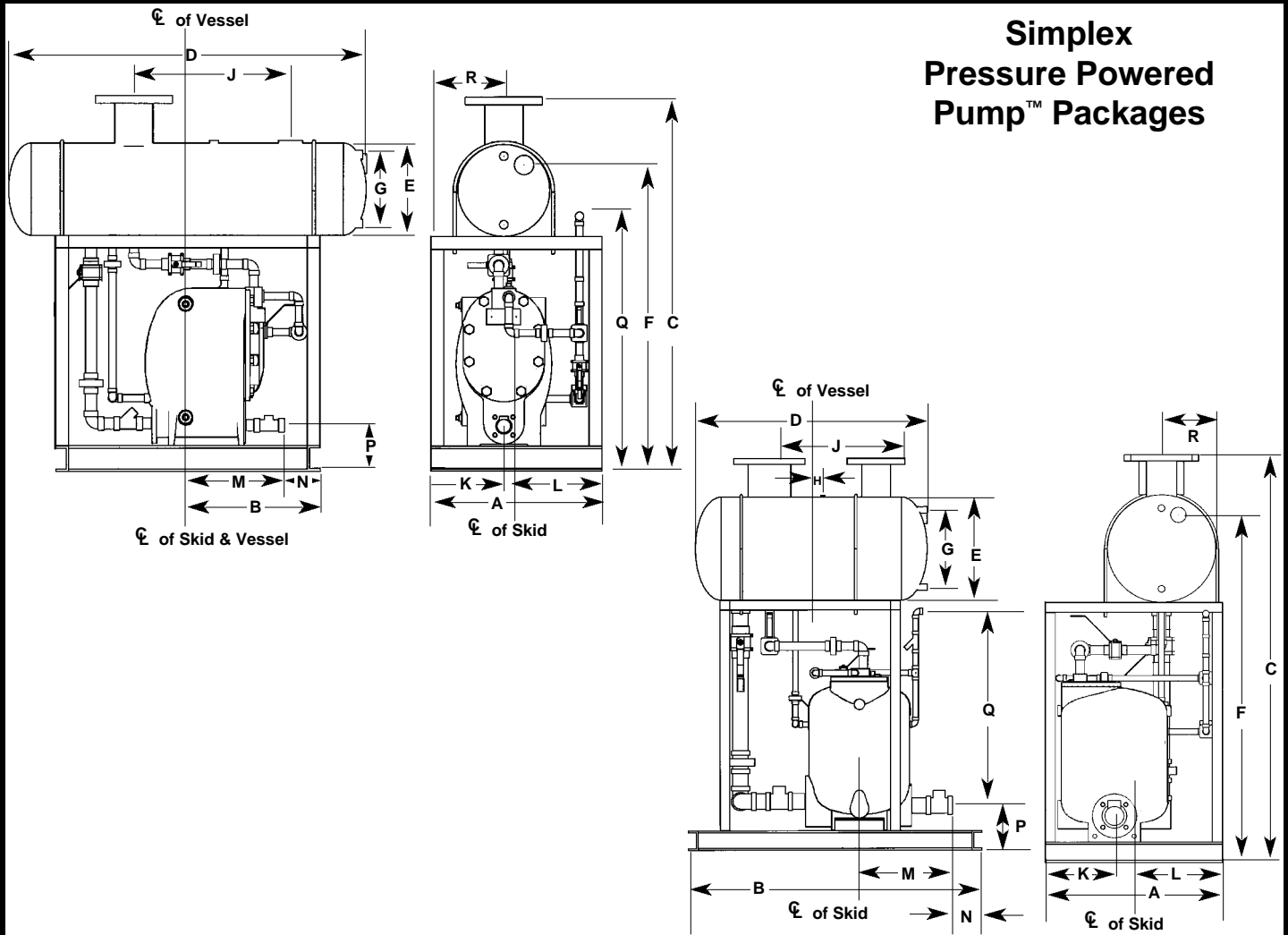
- A. Pump motive inlet (fully trapped) and exhaust piping.
- B. Pump and receiver gauge glass.
- C. Overflow pipe.
- D. Inline strainer.
- E. Pump drain.
- F. Cycle counter.
- G. Pressure gauges.
- H. Receiver only.
- I. Receiver with modified connections.
- J. ASME coded receiver.
- K. Pump isolation Valve.



Sample Specification

The packaged pump unit shall be Spirax Sarco Pressure Powered Pump Unit operated by steam, compressed air or other pressurized gas to 125 psig, which does not require any electrical energy, and is safe for use in explosive atmospheres. The pump shall be ductile iron A395 (PPC) or cast iron (PPEC) and supplied complete with vented receiver as a prepiped packaged unit. The pump shall have a float operated snap-acting mechanism with no external seals or packing, stainless steel trim and hardened stainless steel mechanism bearing components. When required, shall be equipped with a cycle counter to monitor pumping cycles.

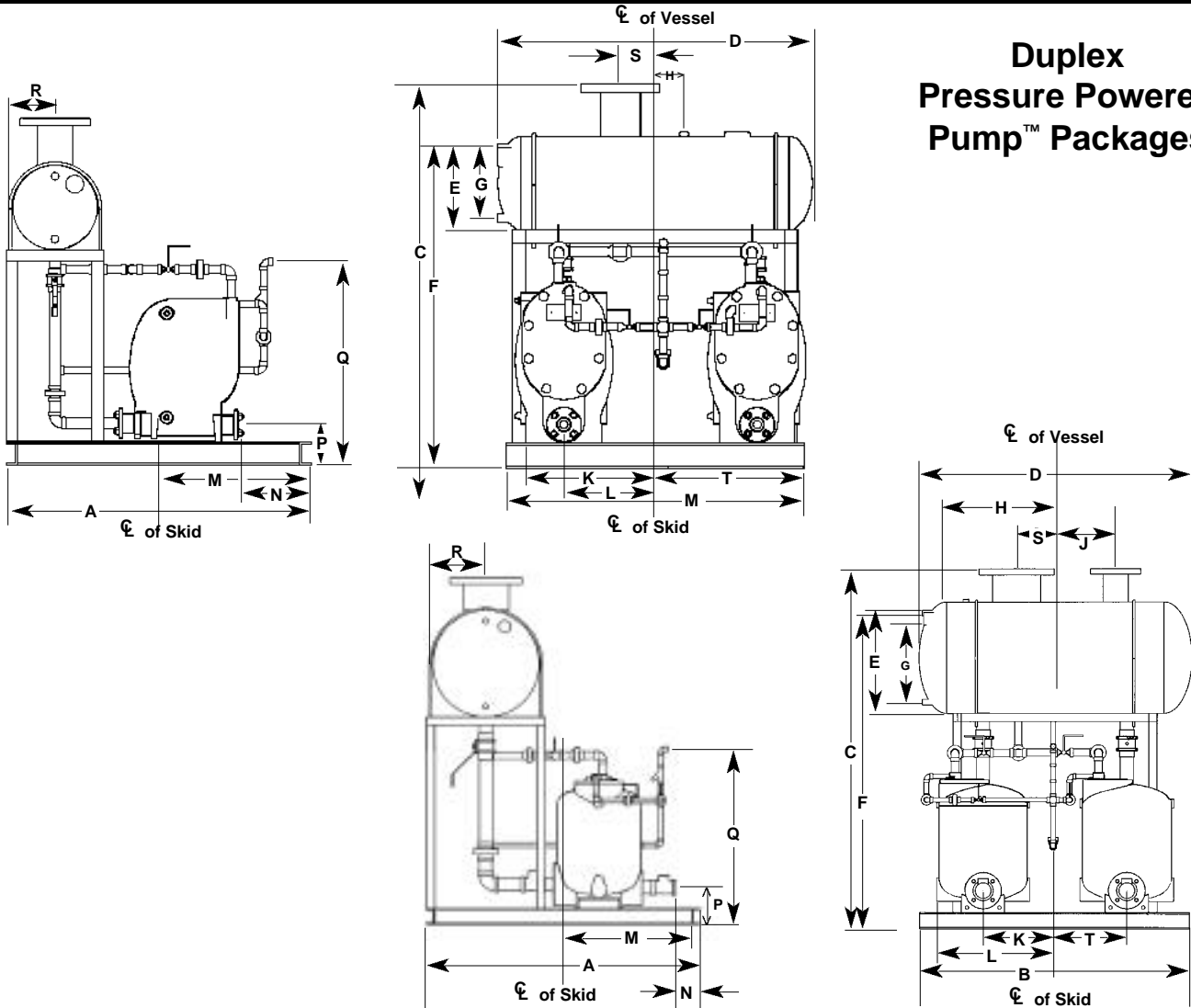
Simplex Pressure Powered Pump™ Packages



Dimensions (nominal) in inches and millimeters

Unit	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	S	T	Weight
100 1" PPEC/BRZ (12 Gal)	20	31	44-1/8	42	10-3/4	36-1/8	8	3	18-3/8	1-1/2	7-5/8	13	4-1/4	5-1/8	30-1/8	8-1/2	-	-	415
	508	787	1121	1067	273	918	203	76	467	38	194	330	108	130	765	216	-	-	188
101 1-1/2" PPEC/BRZ (12 Gal)	20	31	44-1/8	42	10-3/4	36-1/8	8	3	18-3/8	1-1/2	7-5/8	13	0	5-1/8	30-1/8	8-1/2	-	-	425
	508	787	1121	1067	273	918	203	76	467	38	194	330	0	130	765	216	-	-	193
102 1" PPEC/SS (12 Gal)	20	31	44-1/8	42	10-3/4	36-1/8	8	3	18-3/8	1-1/2	7-5/8	13	4-3/8	5-1/8	30-1/8	8-1/2	-	-	415
	508	787	1121	1067	273	918	203	76	467	38	194	330	111	130	765	216	-	-	188
103 1-1/2" PPEC/SS (12 Gal)	20	31	44-1/8	42	10-3/4	36-1/8	8	3	18-3/8	1-1/2	7-5/8	13	1-3/8	5-1/8	30-1/8	8-1/2	-	-	425
	508	787	1121	1067	273	918	203	76	467	38	194	330	35	130	765	216	-	-	193
106 1" PPEC/SS CS (12 Gal)	20	31	44-1/8	42	10-3/4	36-1/8	8	3	18-3/8	1-1/2	7-5/8	13	6-5/8	5/78	30-1/8	8-1/2	-	-	430
	508	787	1121	1067	273	918	203	76	467	38	194	330	168	149	765	216	-	-	195
107 1-1/2" PPEC/SS CS (12 Gal)	20	31	44-1/8	42	10-3/4	36-1/8	8	3	18-3/8	1-1/2	7-5/8	13	6-5/8	5-7/8	30-1/8	8-1/2	-	-	435
	508	787	1121	1067	273	918	203	76	467	38	194	330	168	149	765	216	-	-	197
108 2" PPC/BRZ (31 Gal)	26-1/4	45-3/4	60-7/8	36	16	51-7/8	12	1-3/4	16-1/2	2-7/8	10-3/4	20-3/8	4-5/8	6-7/8	37-1/4	9	-	-	660
	667	1162	1546	914	406	1318	305	44	419	73	273	518	117	175	946	229	-	-	299
109 3x2" PPC/BRZ (31 Gal)	28-3/8	45-3/4	60-7/8	36	16	51-7/8	12	1-3/4	16-1/2	3-3/4	11-3/4	20-3/8	3-5/8	6-7/8	37-1/4	9	-	-	760
	721	1162	1546	914	406	1318	305	44	419	95	298	518	92	175	946	229	-	-	345
110 2" PPC/SS (31 Gal)	28-3/8	45-3/4	60-7/8	36	16	51-7/8	12	1-3/4	16-1/2	4-7/8	11-3/4	20-3/8	7-1/4	6-7/8	37-1/4	9	-	-	670
	721	1162	1546	914	406	1318	305	44	419	124	298	518	183	175	946	229	-	-	304
111 3x2" PPC/SS (31 Gal)	28-3/8	45-3/4	60-7/8	36	16	51-7/8	12	1-3/4	16-1/2	3-7/8	11-3/4	20-3/8	7-1/4	6-7/8	37-1/4	9	-	-	770
	721	1162	1546	914	406	1318	305	44	419	98	298	518	184	175	946	229	-	-	349
112 2" PPF/SS (31 Gal)	28-3/8	45-3/4	60-7/8	36	16	58-3/8	12	1-3/4	16-1/2	3-7/8	11-3/4	20-3/8	3-1/8	13-3/8	43-5/8	9	-	-	660
	721	1162	1711	914	406	1483	305	44	419	98	298	518	79	340	1108	229	-	-	299
113 3x2" PPF/SS (31 Gal)	28-3/8	45-3/4	60-7/8	36	16	58-3/8	12	1-3/4	16-1/2	3-7/8	11-3/4	20-3/8	3-1/8	13-3/8	43-5/8	9	-	-	760
	721	1162	1711	914	406	1483	305	44	419	98	298	518	79	340	1108	229	-	-	345

Duplex Pressure Powered Pump™ Packages



Dimensions (nominal) in inches and millimeters

Unit	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	S	T	Weight
114 1" PPEC/BRZ (12 Gal)	39-1/4 997	34 864	44-1/4 1124	36 914	10-3/4 273	35-7/8 911	8 203	3-3/8 86	9-3/8 238	10-3/8 264	14-1/2 368	17-1/8 435	7-1/4 184	5-3/8 137	26 660	6-1/4 159	3-7/8 98	11-5/8 295	630 286
115 1-1/2" PPEC/BRZ (12 Gal)	39-1/4 997	34 864	44-1/4 1124	36 914	10-3/4 273	35-7/8 911	8 203	3-3/8 86	9-3/8 238	10-3/8 264	14-1/2 368	17-1/8 435	5-5/8 143	5-1/8 130	26 660	6-1/4 159	3-7/8 98	11-5/8 295	640 290
116 1" PPEC/SS (12 Gal)	39-1/4 997	34 864	44-1/4 1124	36 914	10-3/4 273	35-7/8 911	8 203	3-3/8 86	9-3/8 238	10-3/8 264	14-1/2 368	17-1/8 435	6-7/8 175	5-3/8 137	26 660	6-1/4 159	3-7/8 98	11-5/8 295	630 286
117 1-1/2" PPEC/SS (31 Gal)	41-1/4 1048	34 864	49-1/4 1254	36 914	16 406	40-3/8 1026	12 305	4-7/8 124	9-3/8 238	10-3/8 264	14-1/2 368	18-1/8 460	5-1/4 133	5-1/8 130	26 660	8-3/4 222	3-7/8 98	11-5/8 295	640 290
120 1" PPEC/SS CS (12 Gal)	39-1/4 997	34 864	44-1/4 1124	36 914	10-3/4 273	35-7/8 911	8 203	3-3/8 86	9-3/8 238	10-3/8 264	14-1/2 368	17-1/8 435	9-1/2 241	5-7/8 149	26 660	6-1/4 159	3-7/8 98	11-5/8 295	660 299
121 1-1/2" PPEC/SS CS (31 Gal)	41-1/4 1048	34 864	49-3/8 1254	36 914	16 406	40-3/8 1026	12 305	4-7/8 124	9-3/8 238	10-3/8 264	14-1/2 368	18-1/8 460	5-1/4 133	5-1/8 130	26 660	8-3/4 222	3-7/8 98	11-5/8 295	790 358
130 2" PPC/BRZ (65 Gal)	51-1/4 1302	48 1219	64-7/8 1648	48 1219	20 508	55-7/8 1419	16 406	16 406	10-7/8 276	12-7/8 327	21-1/2 546	23-1/8 587	4-1/2 114	6-7/8 175	33 838	11-1/8 283	6-7/8 175	12-7/8 327	1130 513
131 3x2" PPC/BRZ (65 Gal)	51-1/4 1302	48 1219	64-7/8 1648	48 1219	20 508	55-7/8 1419	16 406	16 406	10-7/8 276	12-7/8 327	21-1/2 546	23-1/8 587	3-5/8 92	6-7/8 175	33 838	11-1/8 283	6-7/8 175	12-7/8 327	1300 590
132 2" PPC/SS (65 Gal)	51-1/4 1302	48 1219	64-7/8 1648	48 1219	20 508	55-7/8 1419	16 406	16 406	10-7/8 276	12-7/8 327	21-1/2 546	23-1/8 587	7-3/8 187	6-7/8 175	33 838	11-1/8 283	6-7/8 175	12-7/8 327	1150 522
133 3x2" PPC/SS (65 Gal)	51-1/4 1302	48 1219	64-7/8 1648	48 1219	20 508	55-7/8 1419	16 406	16 406	10-7/8 276	12-7/8 327	21-1/2 546	23-1/8 587	7-3/8 187	6-7/8 175	33 838	11-1/8 283	6-7/8 175	12-7/8 327	1320 599
134 2" PPF/SS (65 Gal)	51-1/4 1302	48 1219	70-5/8 1794	48 1219	20 508	61-5/8 1565	16 406	16 406	10-7/8 276	12-7/8 327	21-1/2 546	23-1/8 587	4 102	13-3/8 340	39-3/8 1000	11-1/8 283	6-7/8 175	12-7/8 327	1090 494
135 3x2" PPF/SS (65 Gal)	56-3/4 1441	48 1219	71-3/8 1813	48 1219	20 508	62-3/8 1584	16 406	16 406	10-7/8 276	12-7/8 327	21-1/2 546	25-7/8 657	7 178	13-3/8 340	39-1/2 1003	11-1/8 283	6-7/8 175	12-7/8 327	1290 585