

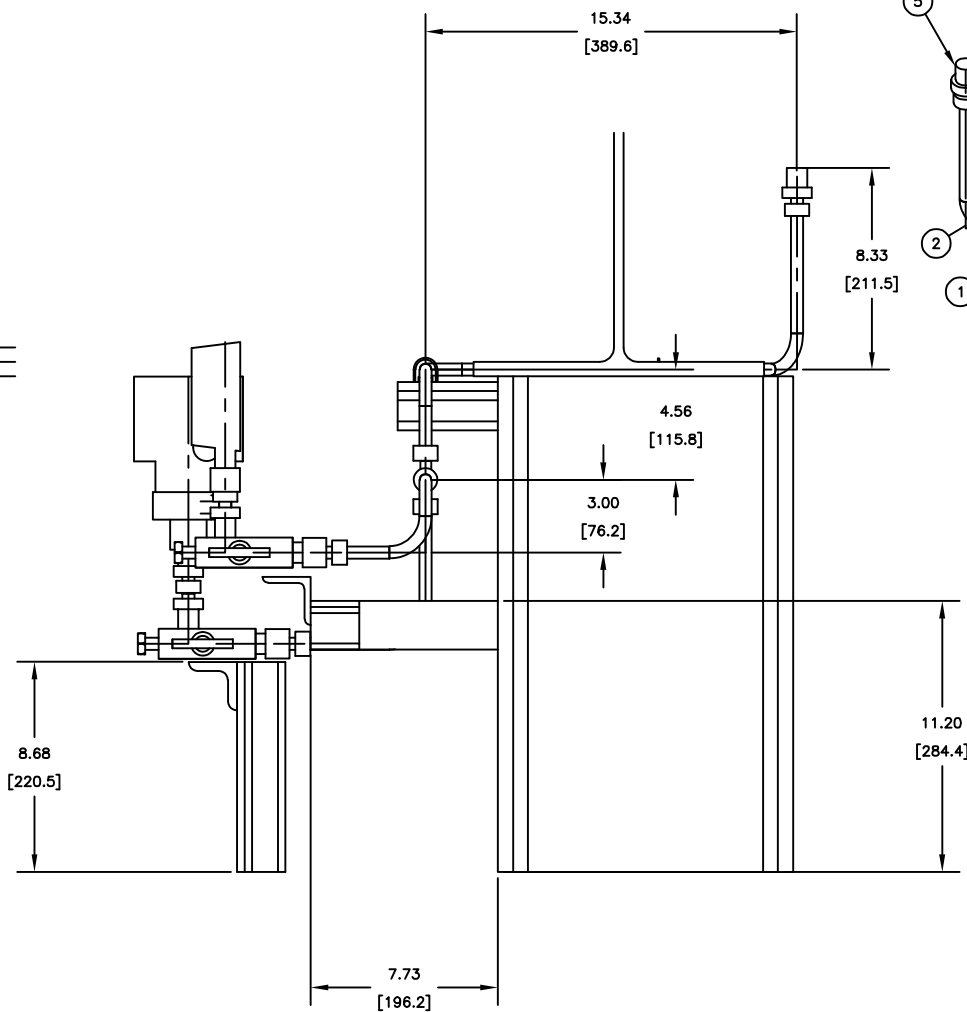
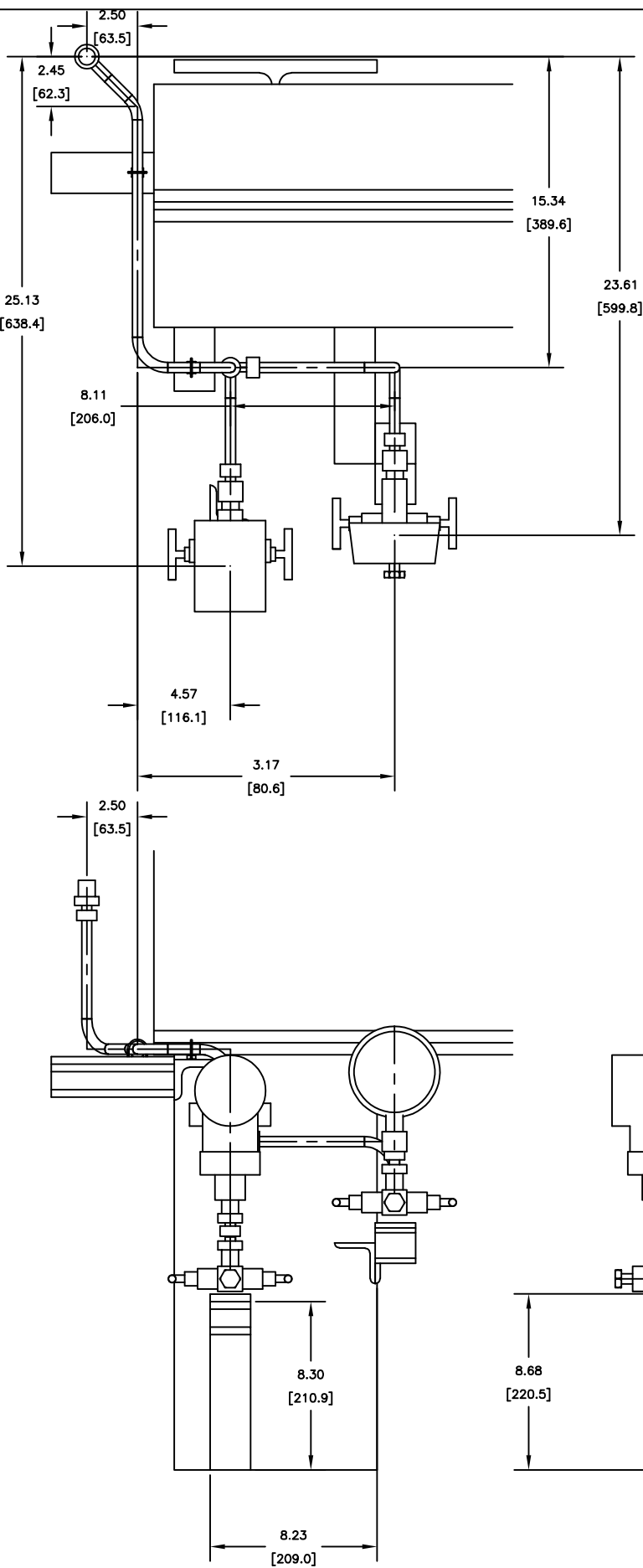
Long Description (Family)	Spec	Size	Line Number Ta
TUBING, 1/2" , 0.065" THK , LENGTH 28'-8 3/4" , ASTM A269 , SEAMLESS	316 SS Tubing	1/2"	DIR-61111
Male Connector 3/4" NPT(M) x 1/2" T	316 SS Tubing	3/4"x1/2"	DIR-61111
Direction Vale. 1/2"	316 SS Tubing	1/2"x1/4"	DIR-61111
MaleConnector 1/2 NPT(M) x 1/2"Tube	316 SS Tubing	1/2"	DIR-61111
Male Connector 3/4" NPT(M) x 1/2" T	316 SS Tubing	3/4"x1/2"	DIR-61111
MaleConnector 1/2 NPT(M) x 1/2"Tube	316 SS Tubing	1/2"	DIR-61111
STUB 1/2NPT(M) x 1/2"Tube	316 SS Tubing	1/2"	DIR-61111
Union Elbow 1/2" T x 1/2"T	316 SS Tubing	1/2"	DIR-61111
MaleStub1/2NPT(M) x 1/2"Tube	316 SS Tubing	1/2"	DIR-61111
FCV 1/2" NPT(F) x 1/2" NPT(F)	316 SS Tubing	1/2"	DIR-61111
MaleConnector 1/2NPT(M) x 1/2"Tube	316 SS Tubing	1/2"	DIR-61111
STUB 1/2NPT(M) x 1/2"Tube	316 SS Tubing	1/2"	DIR-61111
Union Elbow 1/2" T x 1/2"T	316 SS Tubing	1/2"	DIR-61111
MaleStub1/2NPT(M) x 1/2"Tube	316 SS Tubing	1/2"	DIR-61111
FCV 1/2" NPT(F) x 1/2" NPT(F)	316 SS Tubing	1/2"	DIR-61111
MaleConnector 1/2NPT(M) x 1/2"Tube	316 SS Tubing	1/2"	DIR-61111
MaleStub1/2NPT(M) x 1/2"Tube	316 SS Tubing	1/2"	DIR-61111
Union Elbow 1/2" T x 1/2"T	316 SS Tubing	1/2"	DIR-61111
MaleStub1/2NPT(M) x 1/2"Tube	316 SS Tubing	1/2"	DIR-61111
Union Elbow 1/2" T x 1/2"T	316 SS Tubing	1/2"	DIR-61111
Solenoid, 1/4" to 1/2"	316 SS Tubing	1/2"	DIR-61111
Solenoid, 1/4" to 1/2"	316 SS Tubing	1/2"	DIR-61111
Regulator-1/4"	316 SS Tubing	1/4"	DIR-61111
STUB 1/4NPT(M) x 1/2"Tube	316 SS Tubing	1/2"x1/4"	DIR-61111
Union ELB, Tubing, 1/4" to 1"	316 SS Tubing	1/2"	DIR-61111
STUB 1/4NPT(M) x 1/2"Tube	316 SS Tubing	1/2"x1/4"	DIR-61111
Union ELB, Tubing, 1/4" to 1"	316 SS Tubing	1/2"	DIR-61111
MaleConnector 1/4NPT(M) x 1/2"Tube	316 SS Tubing	1/2"	DIR-61111
Union_TEE_1/4" to 1"	316 SS Tubing	1/2"	DIR-61111
MaleConnector 1/4NPT(M) x 1/2"Tube	316 SS Tubing	1/2"	DIR-61111
MaleConnector 1/4NPT(M) x 1/2"Tube	316 SS Tubing	1/2"	DIR-61111
MaleConnector 1/4NPT(M) x 1/2"Tube	316 SS Tubing	1/2"	DIR-61111
MaleConnector 1/4NPT(M) x 1/2"Tube	316 SS Tubing	1/2"	DIR-61111
MaleConnector 1/4NPT(M) x 1/2"Tube	316 SS Tubing	1/2"	DIR-61111
MaleConnector 1/2NPT(M) x 1/2"Tube	316 SS Tubing	1/2"	DIR-61111
TUBING, 1/2" , 0.065" THK , LENGTH 26'-5 3/16" , ASTM A269 , SEAMLESS	316 SS Tubing	1/2"	DIR-61121
Male Connector 3/4" NPT(M) x 1/2" T	316 SS Tubing	3/4"x1/2"	DIR-61121
Male Connector 3/4" NPT(M) x 1/2" T	316 SS Tubing	3/4"x1/2"	DIR-61121
MaleStub 1/2" NPT(M) x 1/2"Tube	316 SS Tubing	1/2"	DIR-61121

Direction Vale. 1/2"	316 SS Tubing	1/2"x1/4"	DIR-61121
Male Connector 1/2" NPT(M) x 1/2" T	316 SS Tubing	1/2"	DIR-61121
Male Connector, 316SS. NPT(M) x Tube	316 SS Tubing	1/4"	DIR-61121
Male Connector 1/2" NPT(M) x 1/2" T	316 SS Tubing	1/2"x1/4"	DIR-61121
MaleStub1/2NPT(M) x 1/2"Tube	316 SS Tubing	1/2"	DIR-61121
Union Elbow 1/2" T x 1/2"T	316 SS Tubing	1/2"	DIR-61121
Union Elbow 1/2" T x 1/2"T	316 SS Tubing	1/2"	DIR-61121
MaleStub1/2NPT(M) x 1/2"Tube	316 SS Tubing	1/2"	DIR-61121
FCV 1/2" NPT(F) x 1/2" NPT(F)		1/2"	DIR-61121
MaleConnector 1/2NPT(M) x 1/2"Tube	316 SS Tubing	1/2"	DIR-61121
MaleStub 1/2" NPT(M) x 1/2"Tube	316 SS Tubing	1/2"	DIR-61121
Union Elbow 1/2" T x 1/2"T	316 SS Tubing	1/2"	DIR-61121
MaleStub1/2NPT(M) x 1/2"Tube	316 SS Tubing	1/2"	DIR-61121
FCV 1/2" NPT(F) x 1/2" NPT(F)		1/2"	DIR-61121
MaleConnector 1/2NPT(M) x 1/2"Tube	316 SS Tubing	1/2"	DIR-61121
MaleStub1/2NPT(M) x 1/2"Tube	316 SS Tubing	1/2"	DIR-61121
Union Elbow 1/2" T x 1/2"T	316 SS Tubing	1/2"	DIR-61121
Solenoid, 1/4" NPT(F)	316 SS Tubing	1/2"	DIR-61121
Solenoid, 1/4" NPT(F)	316 SS Tubing	1/2"	DIR-61121
Regulator-1/4" NPT(F)	316 SS Tubing	1/4"	DIR-61121
Male Connector 1/4" NPT(M) x 1/2" T	316 SS Tubing	1/2"	DIR-61121
MaleStub 1/4" NPT(M) x 1/2"Tube	316 SS Tubing	1/2"x1/4"	DIR-61121
Union ELB, Tubing, 1/4" to 1"	316 SS Tubing	1/2"	DIR-61121
MaleStub 1/4" NPT(M) x 1/2"Tube	316 SS Tubing	1/2"x1/4"	DIR-61121
Union ELB, Tubing, 1/4" to 1"	316 SS Tubing	1/2"	DIR-61121
Union_TEE_1/4" to 1"	316 SS Tubing	1/2"	DIR-61121
Male Connector 1/4" NPT(M) x 1/2" T	316 SS Tubing	1/2"	DIR-61121
Male Connector 1/4" NPT(M) x 1/2" T	316 SS Tubing	1/2"	DIR-61121
MaleConnector 1/2NPT(M) x 1/2"Tube	316 SS Tubing	1/2"	DIR-61121
Male Connector 1/4" NPT(M) x 1/2" T	316 SS Tubing	1/2"	DIR-61121
Male Connector 1/4" NPT(M) x 1/2" T	316 SS Tubing	1/2"	DIR-61121
Male Connector 1/4" NPT(M) x 1/2" T	316 SS Tubing	1/2"	DIR-61121
TUBING, 1/2" , 0.065" THK , LENGTH 1'-5 7/8" , ASTM A269 , SEAMLESS	316 SS Tubing	1/2"	PG-61138
PRESSURE GAUGE 1/2" NPT(M)		1/2"	PG-61138
2-Way-Manifold	316 SS Tubing	1/2"	PG-61138
PLUG, HEX HEAD, MPT, ASME B16.11	316 SS Tubing	1/2"	PG-61138
MaleConnector 1/2NPT(M) x 1/2"Tube	316 SS Tubing	1/2"	PG-61138
FemaleConnector 1/2NPT(F) x 1/2"Tube	316 SS Tubing	1/2"	PG-61138
Female Sub 1/2"NPT(F) x 1/2"Tube	316 SS Tubing	1/2"	PG-61138
MaleStub1/2NPT(M) x 1/2"Tube	316 SS Tubing	1/2"	PG-61138

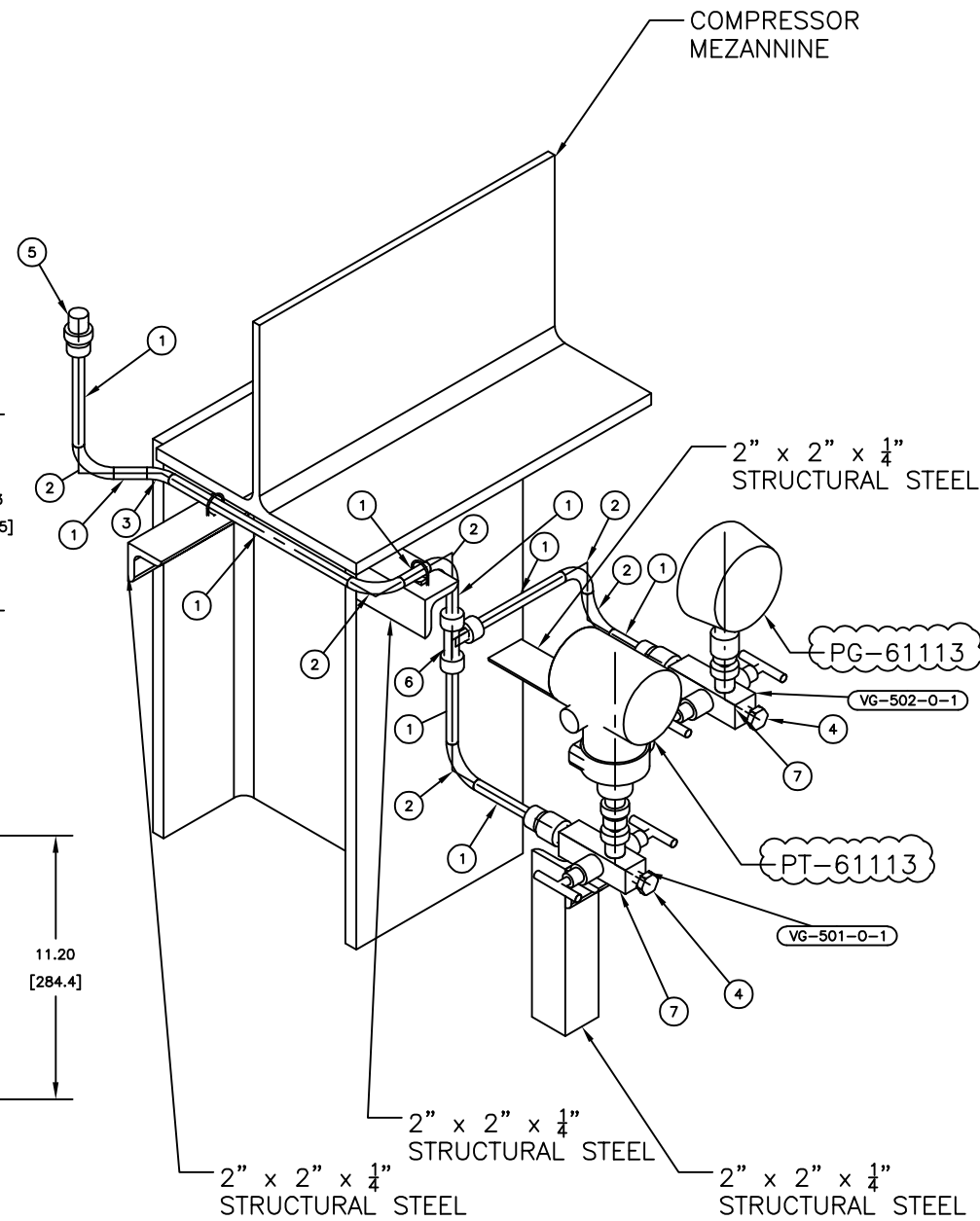
Union Elbow 1/2" T x 1/2"T	316 SS Tubing	1/2"	PG-61138
TUBING, 1/2" , 0.065" THK , LENGTH 7 1/16" , ASTM A269 , SEAMLESS	316 SS Tubing	1/2"	PG-61139
2-Way-Manifold	316 SS Tubing	1/2"	PG-61139
PLUG, HEX HEAD, MPT, ASME B16.11	316 SS Tubing	1/2"	PG-61139
MaleConnector 1/2NPT(M) x 1/2"Tube	316 SS Tubing	1/2"	PG-61139
FemaleConnector 1/2NPT(F) x 1/2"Tube	316 SS Tubing	1/2"	PG-61139
Female Sub 1/2"NPT(F) x 1/2"Tube	316 SS Tubing	1/2"	PG-61139
PRESSURE GAUGE 1/2" NPT(M)		1/2"	PG-61139
MaleConnector 1/2 NPT(M) x 1/2"Tube	316 SS Tubing	1/2"	PG-61139
TUBING, 1/2" , 0.065" THK , LENGTH 5'-0 7/8" , ASTM A269 , SEAMLESS	316 SS Tubing	1/2"	PT-61111
Male Connector 3/4" NPT(M) x 1/2" T	316 SS Tubing	3/4"x1/2"	PT-61111
2-Way-Manifold	316 SS Tubing	1/2"	PT-61111
PLUG, HEX HEAD, 1/2" NPT (M), ASME B16.11	316 SS Tubing	1/2"	PT-61111
MaleStub1/2NPT(M) x 1/2"Tube	316 SS Tubing	1/2"	PT-61111
MaleConnector 1/2NPT(M) x 1/2"Tube	316 SS Tubing	1/2"	PT-61111
FemaleConnector 1/2NPT(F) x 1/2"Tube	316 SS Tubing	1/2"	PT-61111
PRESSURE TRANSMITTER 1/2" NPT(F), PIT-RU600105		1/2"	PT-61111
2-Way-Manifold	316 SS Tubing	1/2"	PT-61111
PLUG, HEX HEAD, 1/2" NPT (M), ASME B16.11	316 SS Tubing	1/2"	PT-61111
MaleConnector 1/2NPT(M) x 1/2"Tube	316 SS Tubing	1/2"	PT-61111
FemaleConnector 1/2NPT(F) x 1/2"Tube	316 SS Tubing	1/2"	PT-61111
Female Sub 1/2"NPT(F) x 1/2"Tube	316 SS Tubing	1/2"	PT-61111
PRESSURE GAUGE 1/2" NPT(M)		1/2"	PT-61111
Union_TEE_1/4" to 1"	316 SS Tubing	1/2"	PT-61111
TUBING, 1/2" , 0.065" THK , LENGTH 3'-0 13/16" , ASTM A269 , SEAMLESS	316 SS Tubing	1/2"	PT-61113
2-Way-Manifold	316 SS Tubing	1/2"	PT-61113
PLUG, HEX HEAD, 1/2" NPT (M), ASME B16.11	316 SS Tubing	1/2"	PT-61113
MaleStub1/2NPT(M) x 1/2"Tube	316 SS Tubing	1/2"	PT-61113
MaleConnector 1/2NPT(M) x 1/2"Tube	316 SS Tubing	1/2"	PT-61113
FemaleConnector 1/2NPT(F) x 1/2"Tube	316 SS Tubing	1/2"	PT-61113
PRESSURE TRANSMITTER 1/2" NPT(F), PIT-RU600105		1/2"	PT-61113
Male Connector 3/4" NPT(M) x 1/2" T	316 SS Tubing	3/4"x1/2"	PT-61113
FemaleConnector 1/2NPT(F) x 1/2"Tube	316 SS Tubing	1/2"	PT-61113
Female Sub 1/2"NPT(F) x 1/2"Tube	316 SS Tubing	1/2"	PT-61113
PRESSURE GAUGE 1/2" NPT(M)		1/2"	PT-61113
2-Way-Manifold	316 SS Tubing	1/2"	PT-61113
PLUG, HEX HEAD, 1/2" NPT (M), ASME B16.11	316 SS Tubing	1/2"	PT-61113
MaleConnector 1/2NPT(M) x 1/2"Tube	316 SS Tubing	1/2"	PT-61113
Union_TEE_1/4" to 1"	316 SS Tubing	1/2"	PT-61113
TUBING, 1/2" , 0.065" THK , LENGTH 5'-5 9/18" , ASTM A269 , SEAMLESS	316 SS Tubing	1/2"	PT-61121

2-Way-Manifold	316 SS Tubing	1/2"	PT-61121
PLUG, HEX HEAD, 1/2" NPT (M), ASME B16.11	316 SS Tubing	1/2"	PT-61121
MaleConnector 1/2NPT(M) x 1/2"Tube	316 SS Tubing	1/2"	PT-61121
FemaleConnector 1/2NPT(F) x 1/2"Tube	316 SS Tubing	1/2"	PT-61121
Female Sub 1/2"NPT(F) x 1/2"Tube		1/2"	PT-61121
PRESSURE GAUGE 1/2" NPT(M)	316 SS Tubing	1/2"	PT-61121
2-Way-Manifold	316 SS Tubing	1/2"	PT-61121
PLUG, HEX HEAD, 1/2" NPT (M), ASME B16.11	316 SS Tubing	1/2"	PT-61121
MaleStub1/2NPT(M) x 1/2"Tube	316 SS Tubing	1/2"	PT-61121
MaleConnector 1/2NPT(M) x 1/2"Tube	316 SS Tubing	1/2"	PT-61121
FemaleConnector 1/2NPT(F) x 1/2"Tube	316 SS Tubing	1/2"	PT-61121
PRESSURE TRANSMITTER 1/2" NPT(F), PIT-RU600105	316 SS Tubing	1/2"	PT-61121
Union_TEE_1/4" to 1"	316 SS Tubing	1/2"	PT-61121
Male Connector 3/4" NPT(M) x 1/2" T	316 SS Tubing	3/4"x1/2"	PT-61121
TUBING, 1/2" , 0.065" THK , LENGTH 2'-2 3/4" , ASTM A269 , SEAMLESS	316 SS Tubing	1/2"	PT-61123
2-Way-Manifold	316 SS Tubing	1/2"	PT-61123
MaleStub1/2NPT(M) x 1/2"Tube	316 SS Tubing	1/2"	PT-61123
MaleConnector 1/2NPT(M) x 1/2"Tube	316 SS Tubing	1/2"	PT-61123
FemaleConnector 1/2NPT(F) x 1/2"Tube	316 SS Tubing	1/2"	PT-61123
PRESSURE TRANSMITTER 1/2" NPT(F), PIT-RU600105		1/2"	PT-61123
Male Connector 3/4" NPT(M) x 1/2" T	316 SS Tubing	3/4"x1/2"	PT-61123
PLUG, HEX HEAD, 1/2" NPT (M), ASME B16.11	316 SS Tubing	1/2"	PT-61123
2-Way-Manifold	316 SS Tubing	1/2"	PT-61123
PLUG, HEX HEAD, 1/2" NPT (M), ASME B16.11	316 SS Tubing	1/2"	PT-61123
MaleConnector 1/2NPT(M) x 1/2"Tube	316 SS Tubing	1/2"	PT-61123
FemaleConnector 1/2NPT(F) x 1/2"Tube	316 SS Tubing	1/2"	PT-61123
Female Sub 1/2"NPT(F) x 1/2"Tube	316 SS Tubing	1/2"	PT-61123
PRESSURE GAUGE 1/2" NPT(M)		1/2"	PT-61123
Union_TEE_1/4" to 1"	316 SS Tubing	1/2"	PT-61123
TUBING, 1/2" , 0.065" THK , LENGTH 6'-5 5/16" , ASTM A269 , SEAMLESS	316 SS Tubing	1/2"	PT-61131
2-Way-Manifold	316 SS Tubing	1/2"	PT-61131
MaleStub1/2NPT(M) x 1/2"Tube	316 SS Tubing	1/2"	PT-61131
MaleConnector 1/2NPT(M) x 1/2"Tube	316 SS Tubing	1/2"	PT-61131
PRESSURE TRANSMITTER 1/2" NPT(F), PIT-RU600105		1/2"	PT-61131
Male Connector 3/4" NPT(M) x 1/2" T	316 SS Tubing	3/4"x1/2"	PT-61131
FemaleConnector 1/2NPT(F) x 1/2"Tube	316 SS Tubing	1/2"	PT-61131
2-Way-Manifold	316 SS Tubing	1/2"	PT-61131
MaleConnector 1/2NPT(M) x 1/2"Tube	316 SS Tubing	1/2"	PT-61131
FemaleConnector 1/2NPT(F) x 1/2"Tube	316 SS Tubing	1/2"	PT-61131
Female Sub 1/2"NPT(F) x 1/2"Tube	316 SS Tubing	1/2"	PT-61131

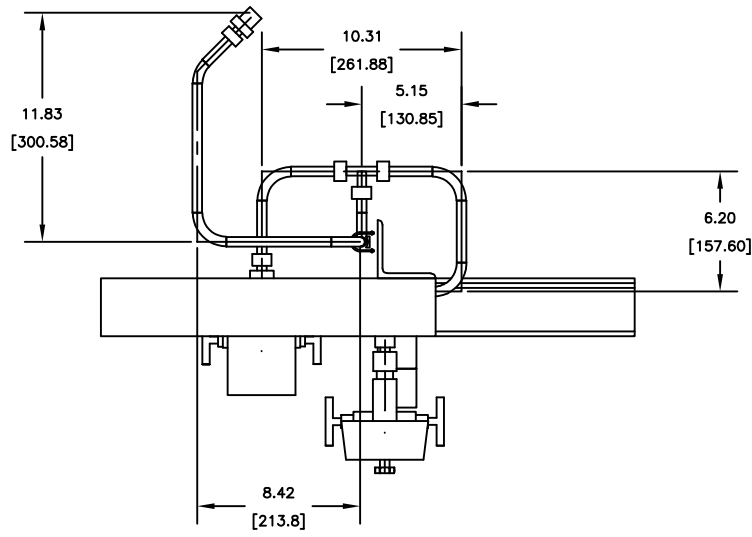
PRESSURE GAUGE 1/2" NPT(M)	316 SS Tubing	1/2"	PT-61131
Union_TEE_1/4" to 1"	316 SS Tubing	1/2"	PT-61131
PLUG, HEX HEAD, 1/2" NPT (M), ASME B16.11	316 SS Tubing	1/2"	PT-61131
PLUG, HEX HEAD, 1/2" NPT (M), ASME B16.11	316 SS Tubing	1/2"	PT-61131
TUBING, 1/2" , 0.065" THK , LENGTH 5'-9 1/8" , ASTM A269 , SEAMLESS	316 SS Tubing	1/2"	PT-61132
2-Way-Manifold	316 SS Tubing	1/2"	PT-61132
MaleStub1/2NPT(M) x 1/2"Tube	316 SS Tubing	1/2"	PT-61132
MaleConnector 1/2NPT(M) x 1/2"Tube	316 SS Tubing	1/2"	PT-61132
PRESSURE TRANSMITTER 1/2" NPT(F), PIT-RU600105		1/2"	PT-61132
FemaleConnector 1/2NPT(F) x 1/2"Tube	316 SS Tubing	1/2"	PT-61132
PLUG, HEX HEAD, 1/2" NPT (M), ASME B16.11	316 SS Tubing	1/2"	PT-61132
Male Connector 3/4" NPT(M) x 1/2" T	316 SS Tubing	3/4"x1/2"	PT-61132
2-Way-Manifold	316 SS Tubing	1/2"	PT-61132
MaleConnector 1/2NPT(M) x 1/2"Tube	316 SS Tubing	1/2"	PT-61132
FemaleConnector 1/2NPT(F) x 1/2"Tube	316 SS Tubing	1/2"	PT-61132
PLUG, HEX HEAD, 1/2" NPT (M), ASME B16.11	316 SS Tubing	1/2"	PT-61132
Female Sub 1/2"NPT(F) x 1/2"Tube	316 SS Tubing	1/2"	PT-61132
4" (100 MM) PRESSURE GAUGE 1/2" NPT(M)		1/2"	PT-61132
Union_TEE_1/4" to 1"	316 SS Tubing	1/2"	PT-61132
MaleConnector 1/2NPT(M) x 1/2"Tube	316 SS Tubing	1/2"	PT-61133
TUBING, 1/2" , 0.065" THK , LENGTH 1'-4 7/16" , ASTM A269 , SEAMLESS	316 SS Tubing	1/2"	PT-61133
2-Way-Manifold	316 SS Tubing	1/2"	PT-61133
PLUG, HEX HEAD, 1/2" NPT (M), ASME B16.11	316 SS Tubing	1/2"	PT-61133
MaleConnector 1/2NPT(M) x 1/2"Tube	316 SS Tubing	1/2"	PT-61133
FemaleConnector 1/2NPT(F) x 1/2"Tube	316 SS Tubing	1/2"	PT-61133
MaleStub1/2NPT(M) x 1/2"Tube	316 SS Tubing	1/2"	PT-61133
PRESSURE TRANSMITTER 1/2" NPT(F), PIT-RU600105		1/2"	PT-61133
TUBING, 1/2" , 0.065" THK , LENGTH 2'-9 5/8" , ASTM A269 , SEAMLESS	316 SS Tubing	1/2"	PT-61134
MaleConnector 1/2NPT(M) x 1/2"Tube	316 SS Tubing	1/2"	PT-61134
2-Way-Manifold	316 SS Tubing	1/2"	PT-61134
MaleStub1/2NPT(M) x 1/2"Tube	316 SS Tubing	1/2"	PT-61134
MaleConnector 1/2NPT(M) x 1/2"Tube	316 SS Tubing	1/2"	PT-61134
FemaleConnector 1/2NPT(F) x 1/2"Tube	316 SS Tubing	1/2"	PT-61134
PRESSURE TRANSMITTER 1/2" NPT(F), PIT-RU600105		1/2"	PT-61134
PLUG, HEX HEAD, 1/2" NPT (M), ASME B16.11	316 SS Tubing	1/2"	PT-61134
TUBING, 1/2" , 0.065" THK , LENGTH 2'-2" , ASTM A269 , SEAMLESS	316 SS Tubing	1/2"	PT-61141
2-Way-Manifold	316 SS Tubing	1/2"	PT-61141
PLUG, HEX HEAD, 1/2" NPT (M), ASME B16.11	316 SS Tubing	1/2"	PT-61141
MaleStub1/2NPT(M) x 1/2"Tube	316 SS Tubing	1/2"	PT-61141
MaleConnector 1/2NPT(M) x 1/2"Tube	316 SS Tubing	1/2"	PT-61141



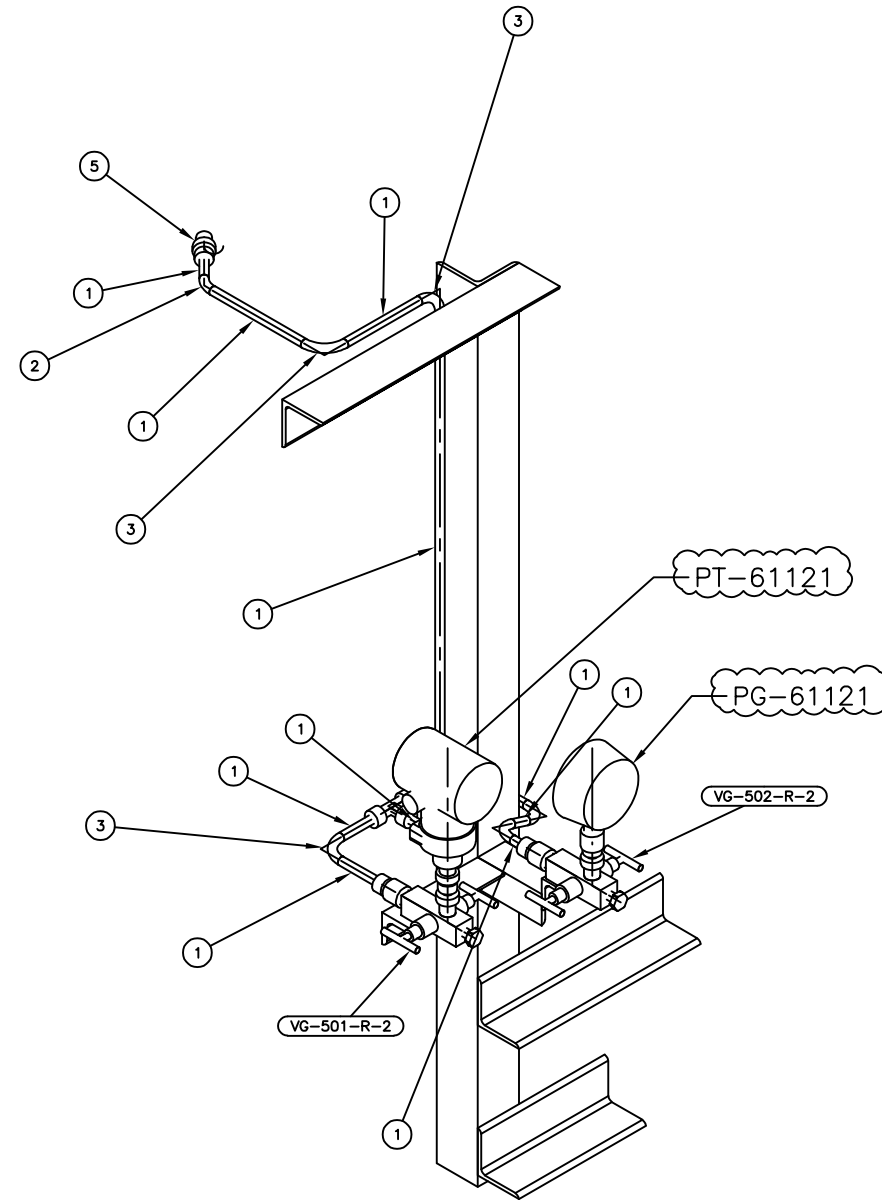
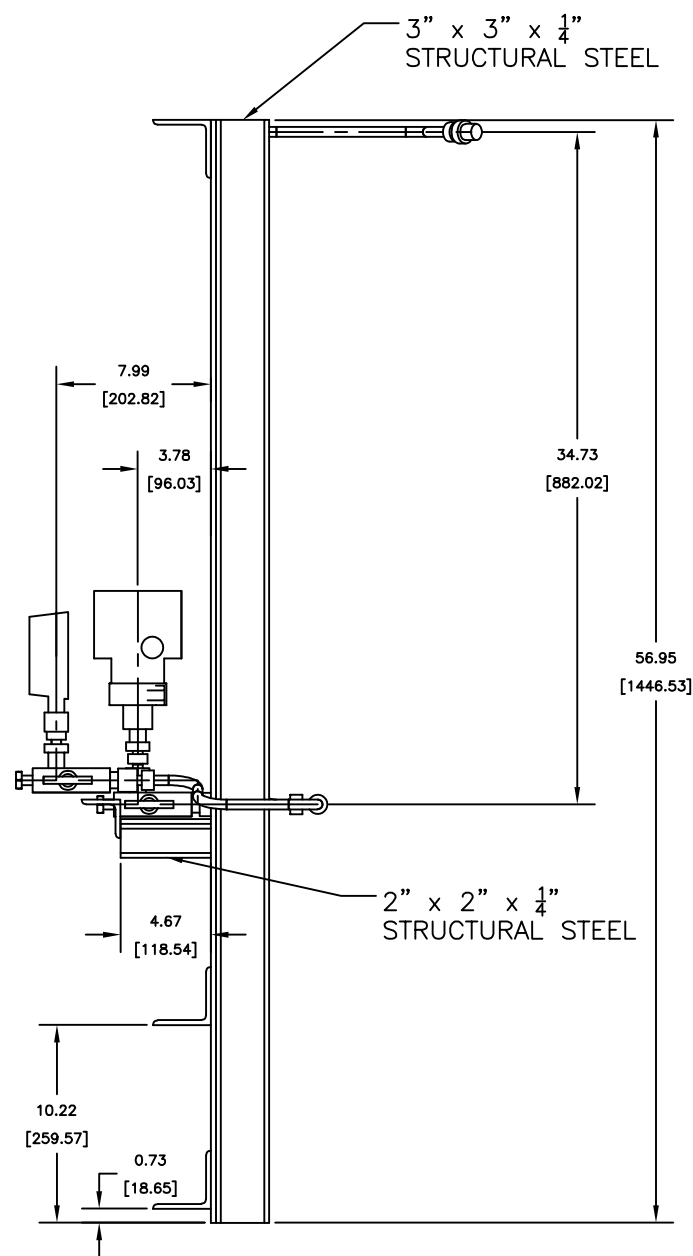
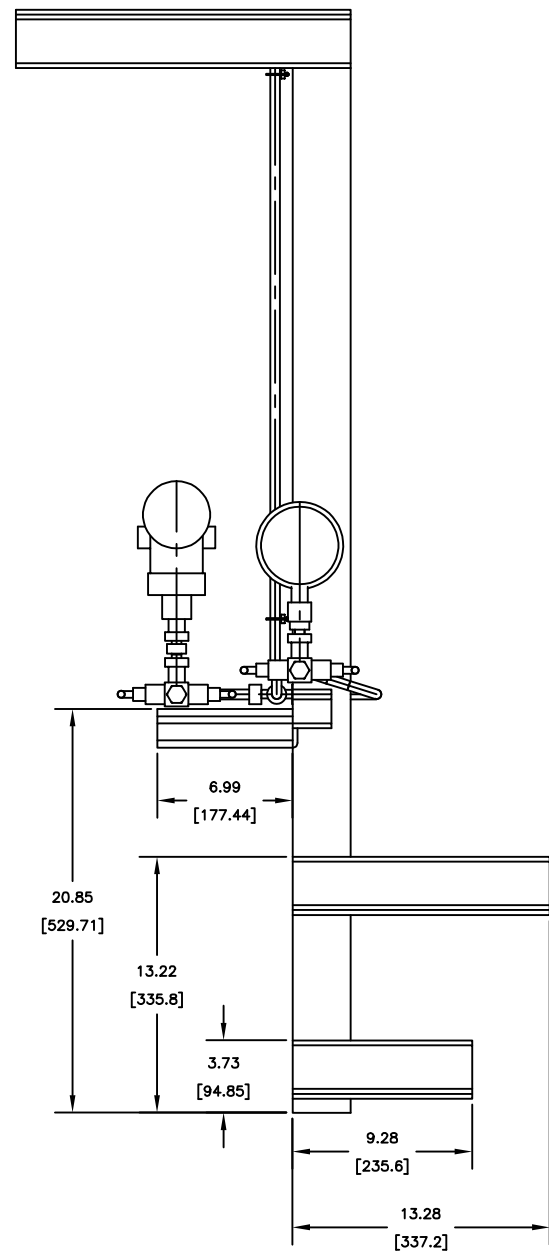
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PIPE				
ID	QTY	ND	DESCRIPTION	
1	3'-0	1/2"	TUBING, ASTM A269, SEAMLESS -- 316SS	0.065" THK
FITTINGS				
ID	QTY	ND	DESCRIPTION	
2	6	1/2"	BEND 90 5R, TUBING, ASTM A269, 316SS	
3	1	1/2"	BEND 45 5R, TUBING, ASTM A269, 316SS	
4	2	1/2"	PLUG, HEX HEAD, MPT, ASME B16.11	
5	1	3/4"x1/2"	Male Connector 3/4" NPT(M) x 1/2" T	
6	1	1/2"	Union_TEE_1/4" to 1"	
VALVES				
ID	QTY	ND	DESCRIPTION	
7	2	1/2"	2-Way-Manifold	
PIPE SUPPORTS				
ID	QTY	ND	DESCRIPTION	
8	2	1/2"	U-clamp	



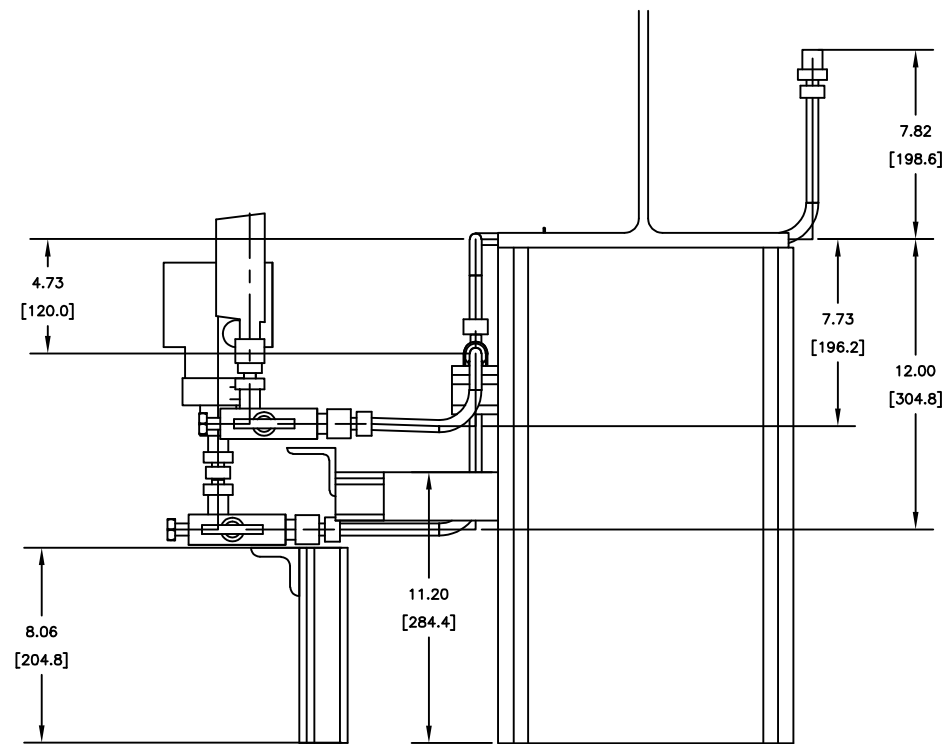
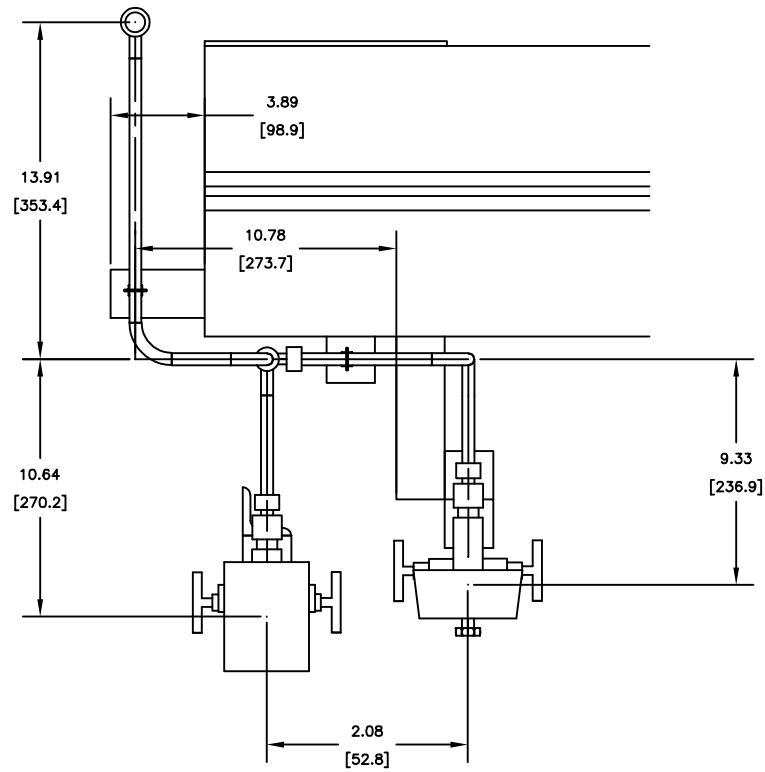
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DRAWN:			
CHECKED:	CLIENT: GPIC		
APPROVED:	PO No.: PT-MAPO-000-3029		
	UNIT No.: PK-6101		
	SERVICE: PROPYLENE REFRIGERATION PACKAGE		
	LOCATION: -----		
JOB NO.:	PT-61113		
SIZE:	HOOKUP DIAGRAM		
SHEET:	CUSTOMER DWG. NO.:	REV.	
	ULT003- PT-61113	01	



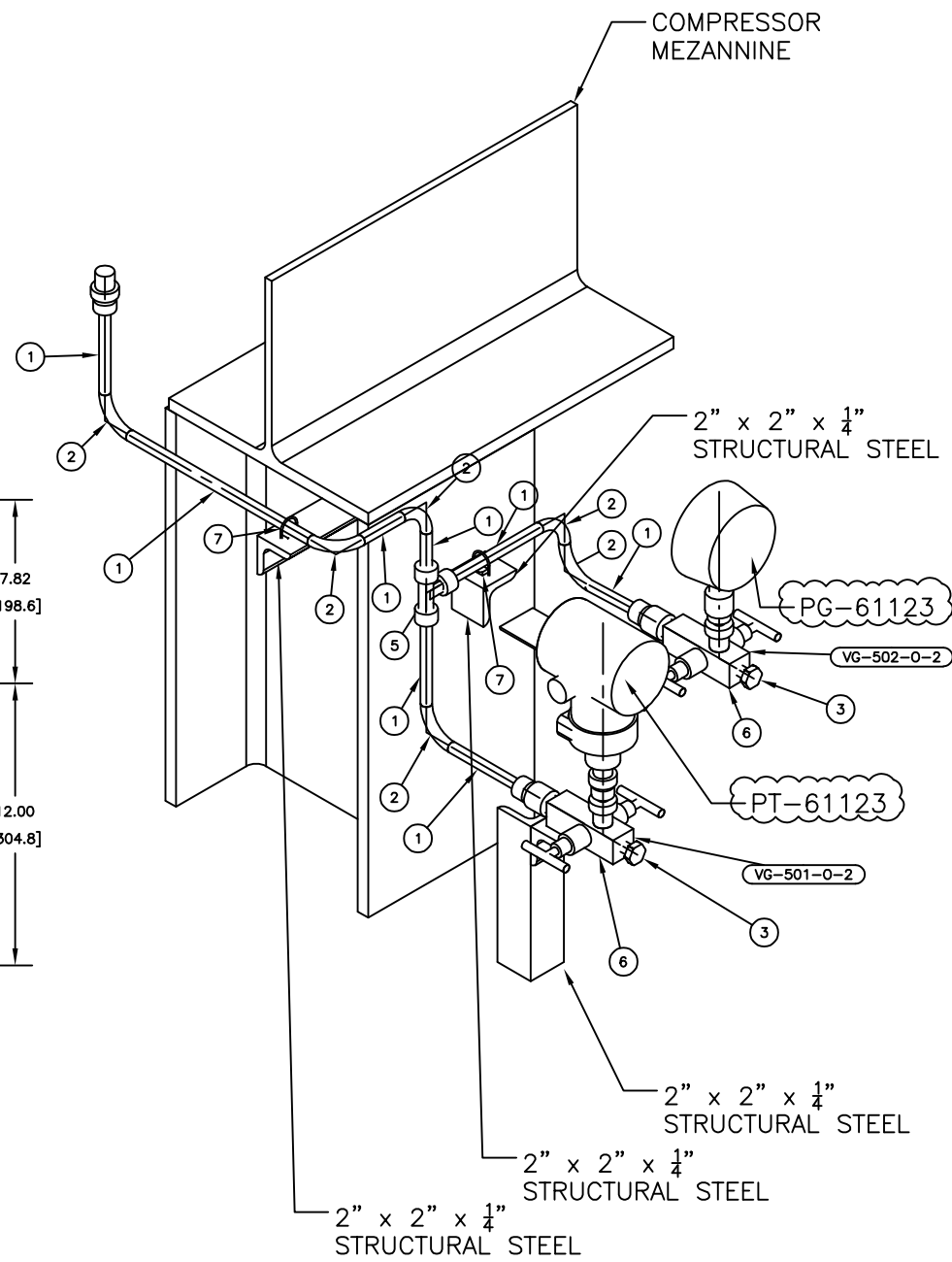
BILL OF MATERIALS				
PIPE				
ID	QTY	ND	DESCRIPTION	
1	5'-5 9/16"	1/2"	TUBING, ASTM A269, SEAMLESS -- 316SS	0.065" THK
FITTINGS				
ID	QTY	ND	DESCRIPTION	
2	1	1/2"	BEND 45 5R, TUBING, ASTM A269, 316SS	
3	7	1/2"	BEND 90 5R, TUBING, ASTM A269, 316SS	
4	2	1/2"	PLUG, HEX HEAD, MPT, ASME B16.11	
5	1	3/4"x1/2"	Male Connector 3/4" NPT(M) x 1/2" T	
6	1	1/2"	Union_TEE_1/4" to 1"	
VALVES				
ID	QTY	ND	DESCRIPTION	
7	2	1/2"	2-Way-Manifold	
PIPE SUPPORTS				
ID	QTY	ND	DESCRIPTION	
8	2	1/2"	U-clamp	



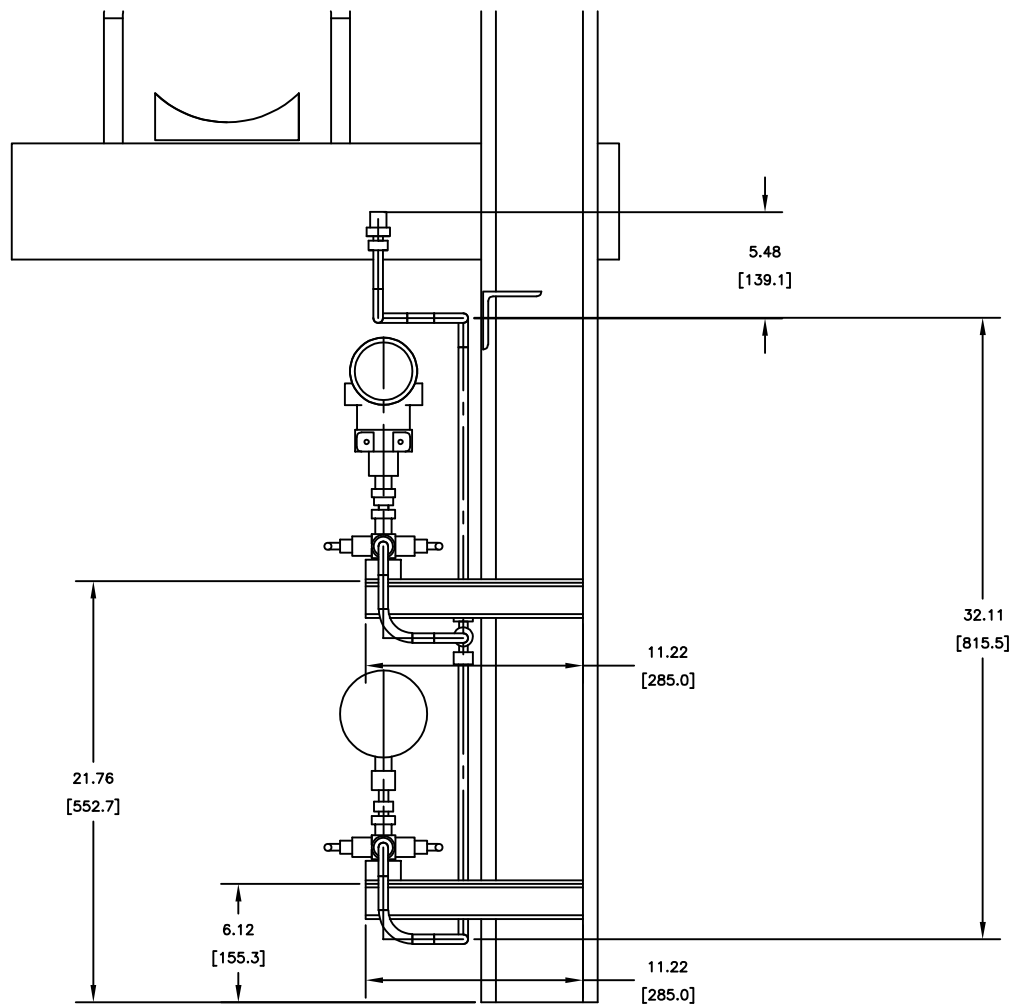
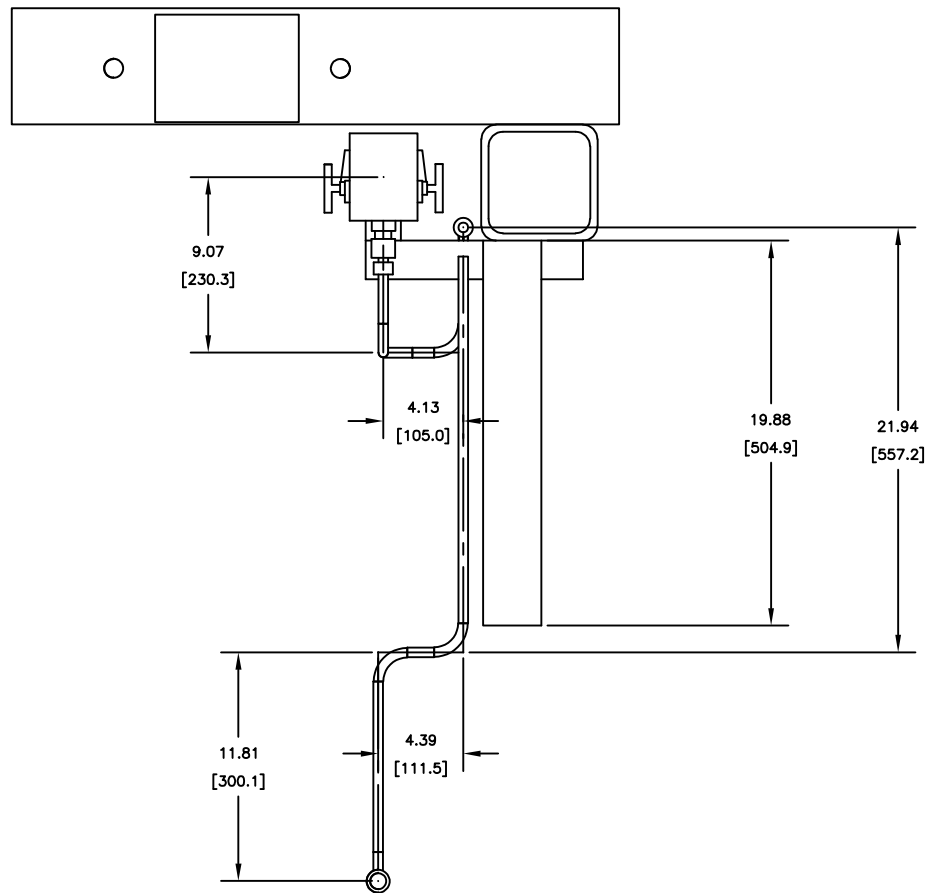
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00	RELEASED FOR CONSTRUCTION	11/28/2025	FAD
REV	DESCRIPTION	DATE	BY
DATE:			
DRAWN:			
CHECKED:	CLIENT: GPIC		
APPROVED:	PO No.: PT-MAPO-000-3029		
	UNIT No.: PK-6101		
	SERVICE: PROPYLENE REFRIGERATION PACKAGE		
	LOCATION: -----		
JOB NO.: ULT003-	TITLE: PT-61121		
SIZE: D	HOOKUP DIAGRAM		
SHEET:	CUSTOMER DWG. NO.: ULT003- PT-61121	REV.	01



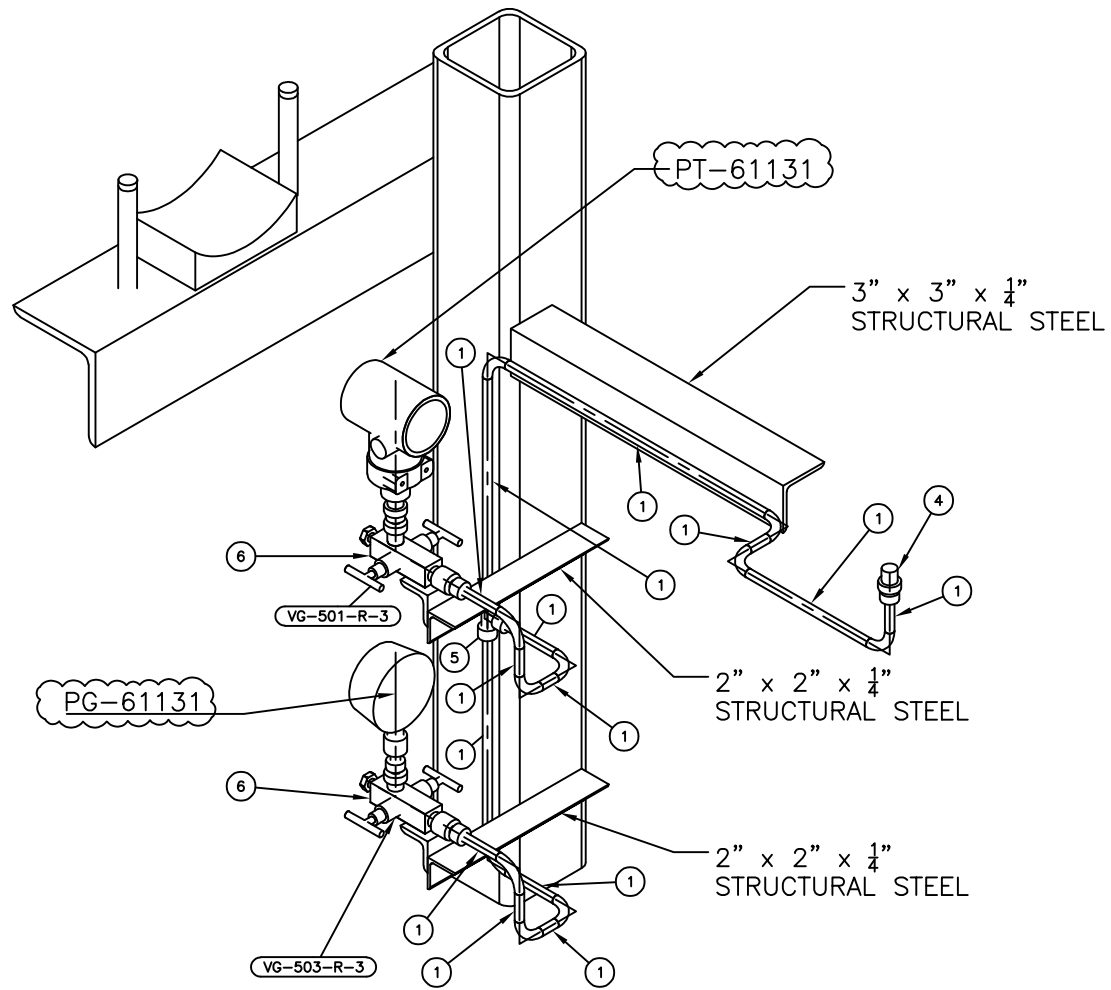
BILL OF MATERIALS			
PIPE			
ID	QTY	ND	DESCRIPTION
1	3'-2 3/4"	1/2"	TUBING, ASTM A269, SEAMLESS - 316SS
0.065" THK			
FITTINGS			
ID	QTY	ND	DESCRIPTION
2	6	1/2"	BEND 90 5R, TUBING, ASTM A269, 316SS
3	2	1/2"	PLUG, HEX HEAD, MPT, ASME B16.11
4	1	3/4"x1/2"	Male Connector 3/4" NPT(M) x 1/2" T
5	1	1/2"	Union_TEE_1/4" to 1"
VALVES			
ID	QTY	ND	DESCRIPTION
6	2	1/2"	2-Way-Manifold
PIPE SUPPORTS			
ID	QTY	ND	DESCRIPTION
7	2	1/2"	U-clamp



DATE:			
DRAWN:			
CHECKED:	CLIENT: GPIC		
APPROVED:	PO No.: PT-MAPO-000-3029		
	UNIT No.: PK-6101		
	SERVICE: PROPYLENE REFRIGERATION PACKAGE		
	LOCATION: -----		
JOB NO.:	TITLE: PT-61123		
SIZE: D	HOOKUP DIAGRAM		
SHEET:	CUSTOMER DWG. NO.: ULT003- PT-61123	REV.:	01

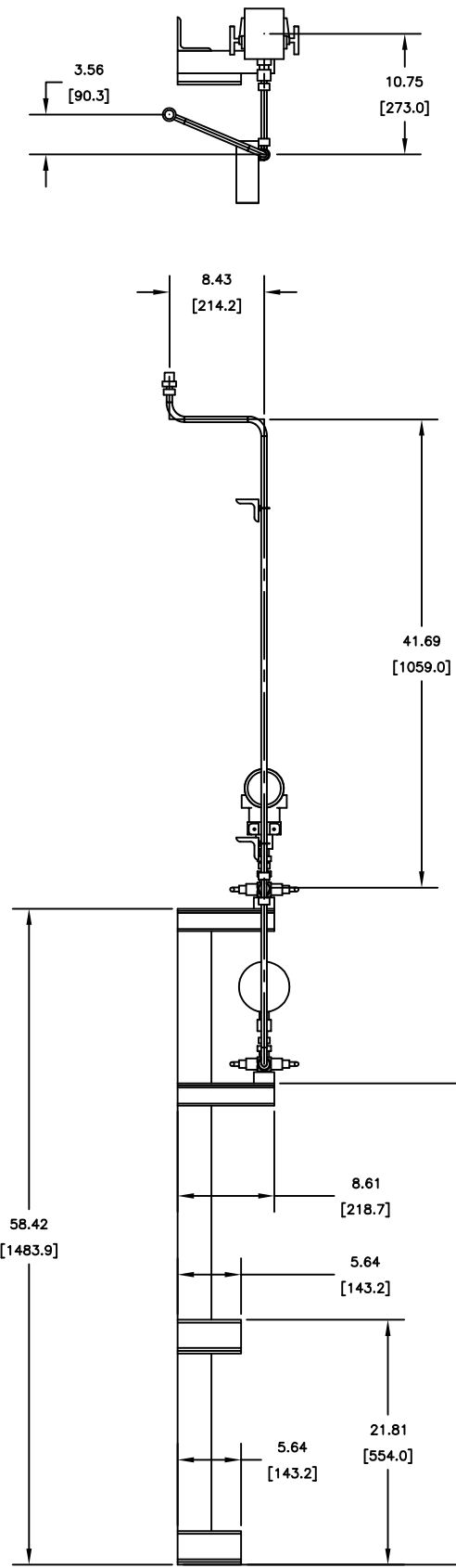
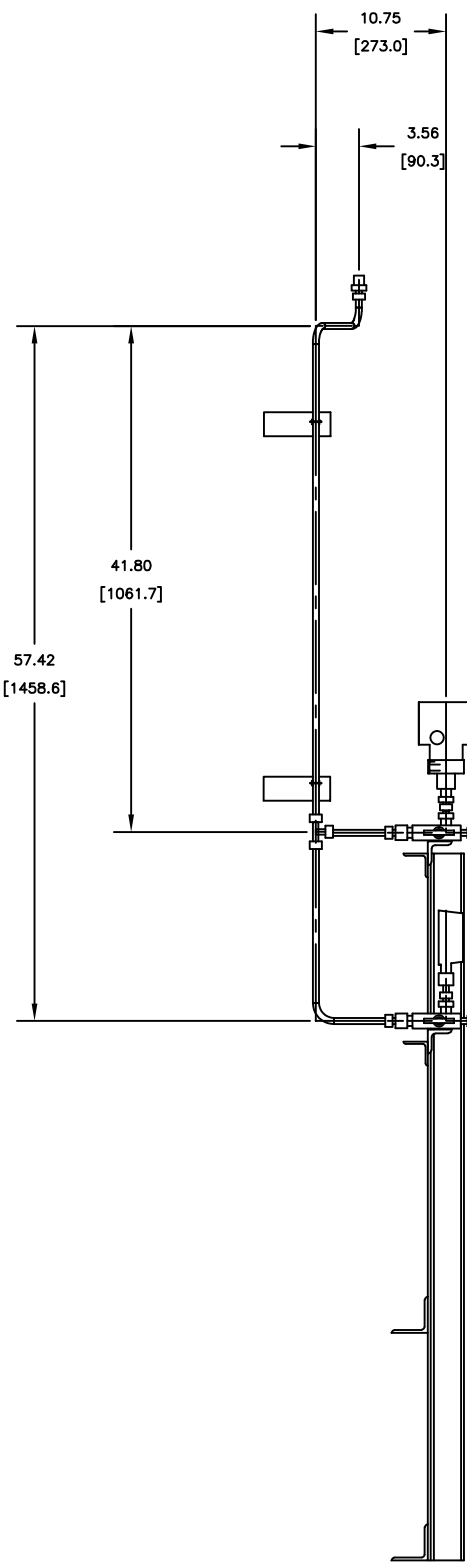


BILL OF MATERIALS				
PIPE				
ID	QTY	ND	DESCRIPTION	
1	6'-5 5/16"	1/2"	TUBING, ASTM A269, SEAMLESS - 316SS	0.065" THK
FITTINGS				
ID	QTY	ND	DESCRIPTION	
2	11	1/2"	BEND 90 5R, TUBING, ASTM A269, 316SS	
3	2	1/2"	PLUG, HEX HEAD, MPT, ASME B16.11	
4	1	3/4"x1/2"	Male Connector 3/4" NPT(M) x 1/2" T	
5	1	1/2"	Union_TEE_1/4" to 1"	
VALVES				
ID	QTY	ND	DESCRIPTION	
6	2	1/2"	2-Way-Manifold	
PIPE SUPPORTS				
ID	QTY	ND	DESCRIPTION	
7	1	10"	U-clamp	

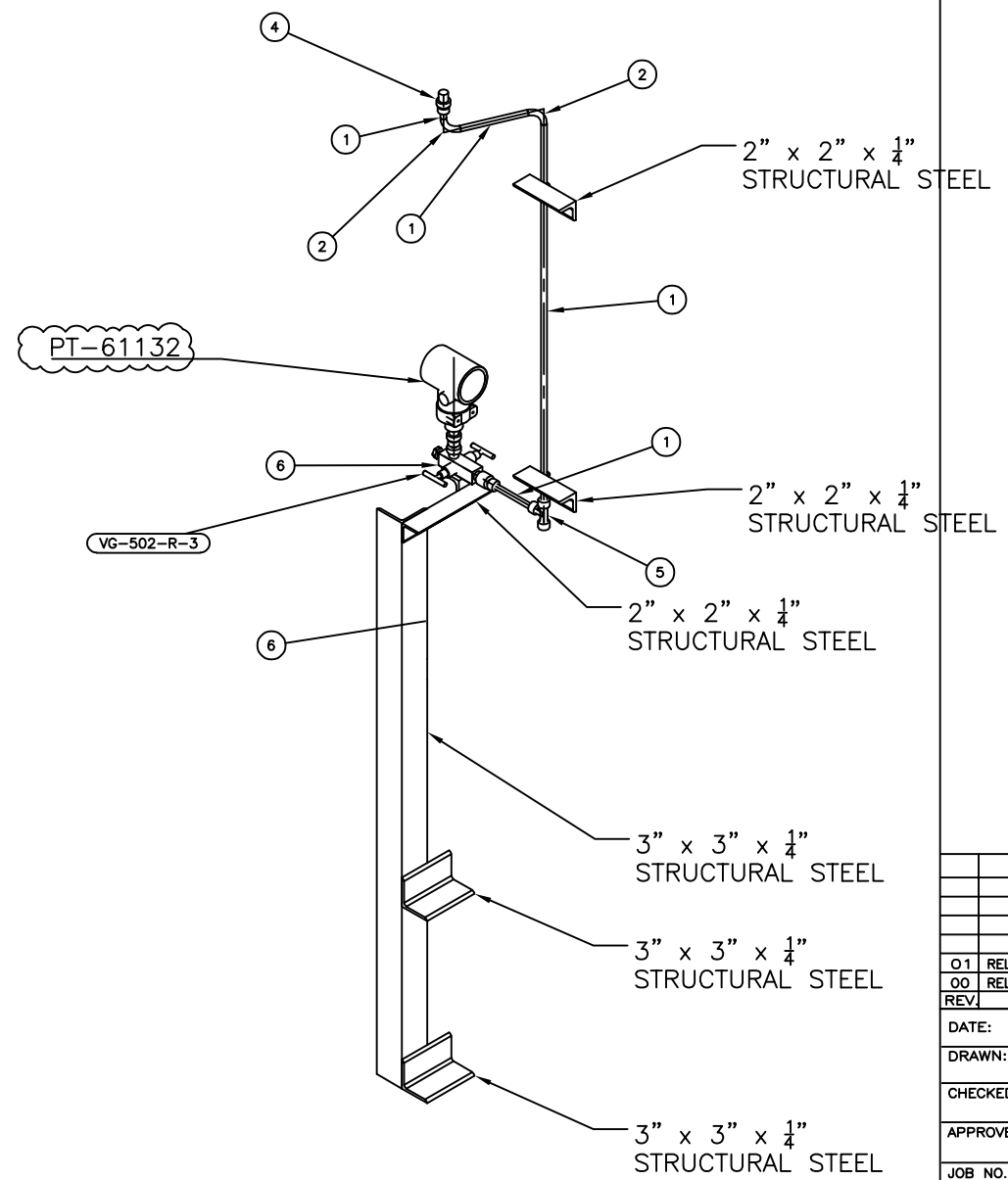


REV	DESCRIPTION	DATE	BY
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00	RELEASED FOR CONSTRUCTION	11/28/2025	FAD

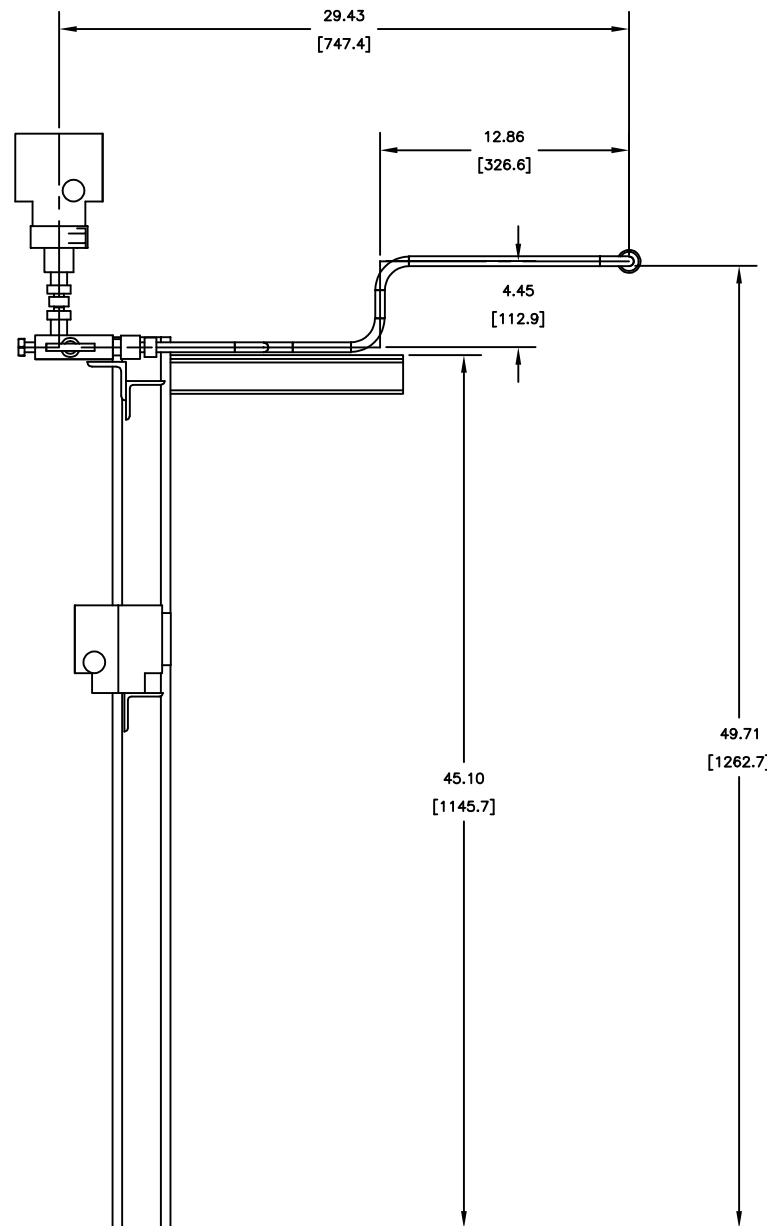
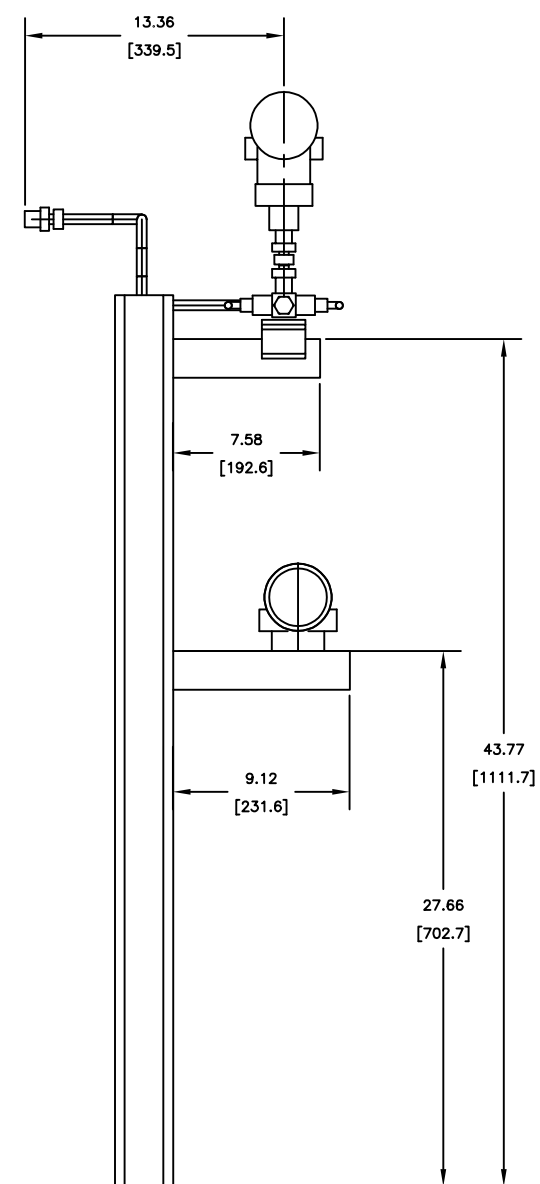
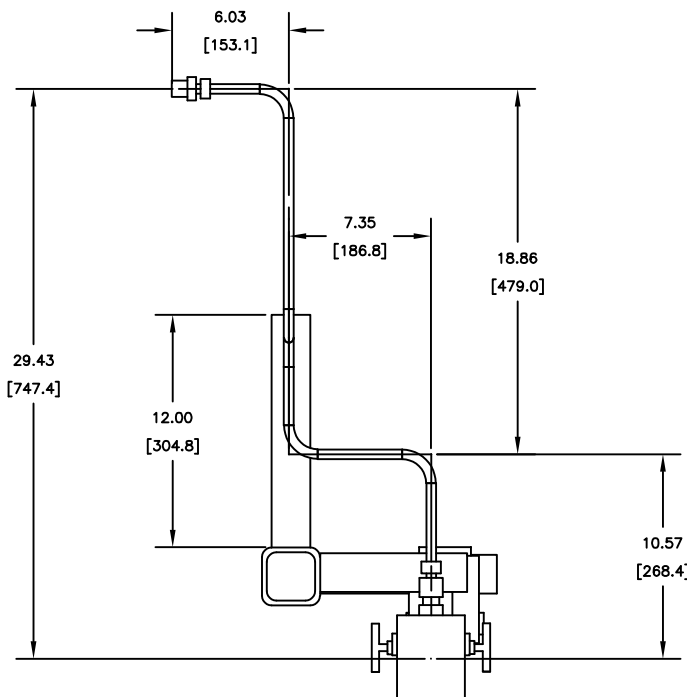
DATE:	
DRAWN:	
CHECKED:	CLIENT: GPIC PO No.: PT-MAPO-000-3029
APPROVED:	UNIT No.: PK-6101 SERVICE: PROPYLENE REFRIGERATION PACKAGE LOCATION: -----
JOB NO.:	TITLE: PT-61131
SIZE: D	HOOKUP DIAGRAM
SHEET:	CUSTOMER DWG. NO.: ULT003- PT-61131
	REV. 01



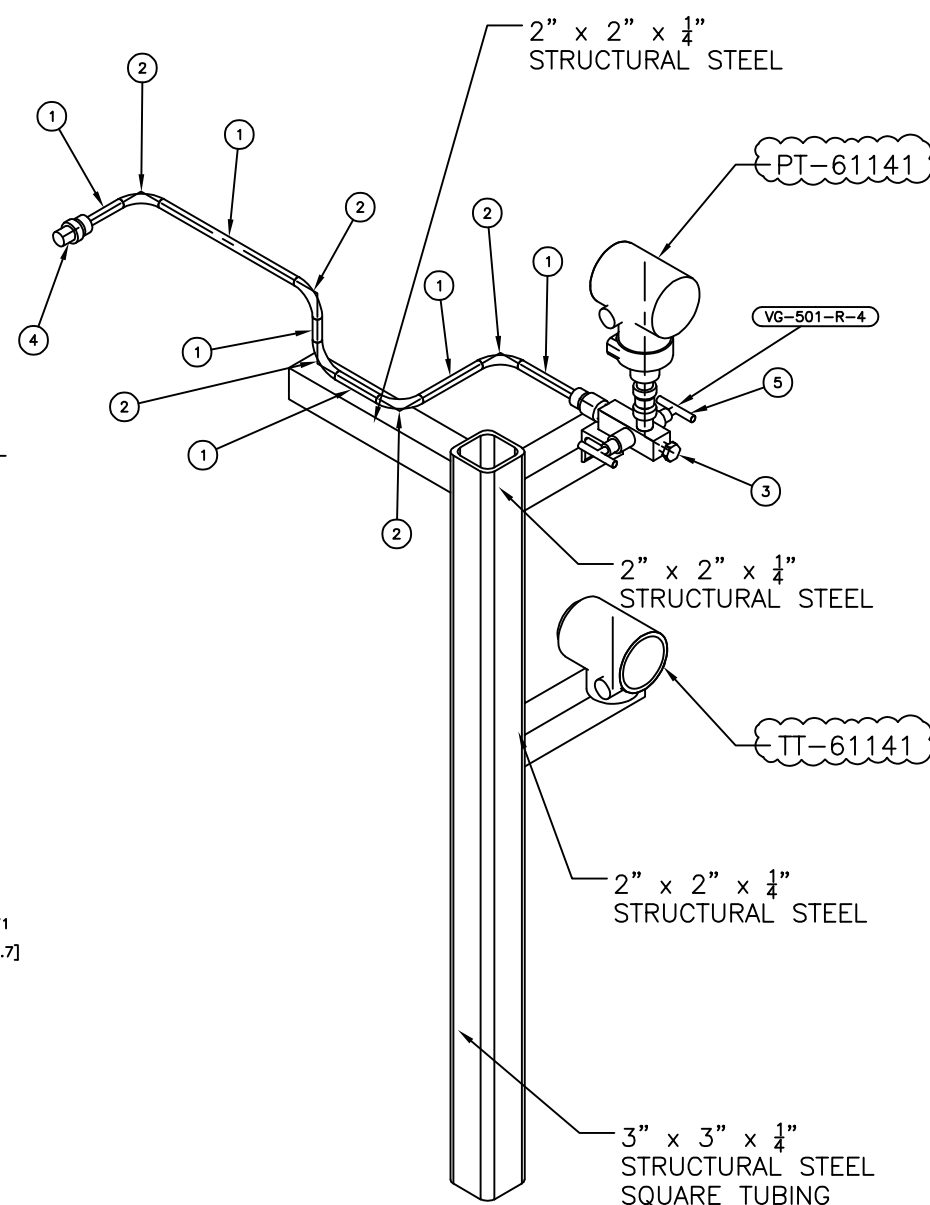
BILL OF MATERIALS			
PIPE			
ID	QTY	ND	DESCRIPTION
1	5'-9 1/8"	1/2"	TUBING, ASTM A269, SEAMLESS - 316SS
FITTINGS			
ID	QTY	ND	DESCRIPTION
2	3	1/2"	BEND 90 5R, TUBING, ASTM A269, 316SS
3	2	1/2"	PLUG, HEX HEAD, MPT, ASME B16.11
4	1	3/4"x1/2"	Male Connector 3/4" NPT(M) x 1/2" T
5	1	1/2"	Union_TEE_1/4" to 1"
VALVES			
ID	QTY	ND	DESCRIPTION
6	1	1/2"	2-Way-Manifold
PIPE SUPPORTS			
ID	QTY	ND	DESCRIPTION
7	2	1/2"	U-clamp



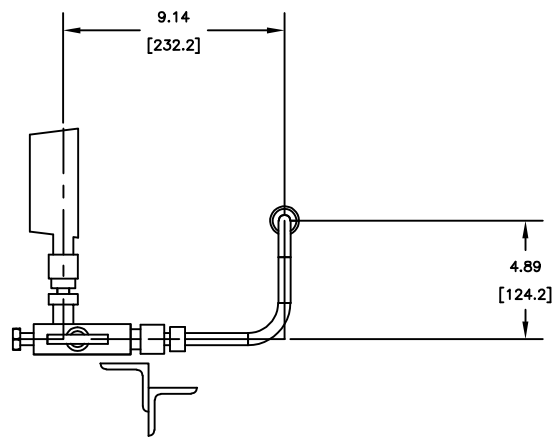
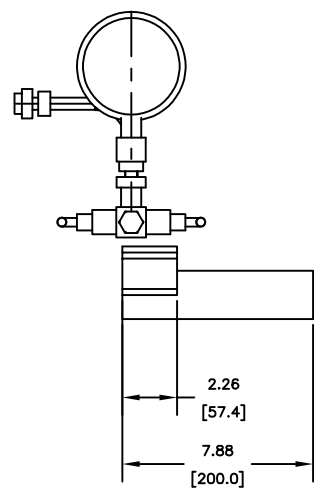
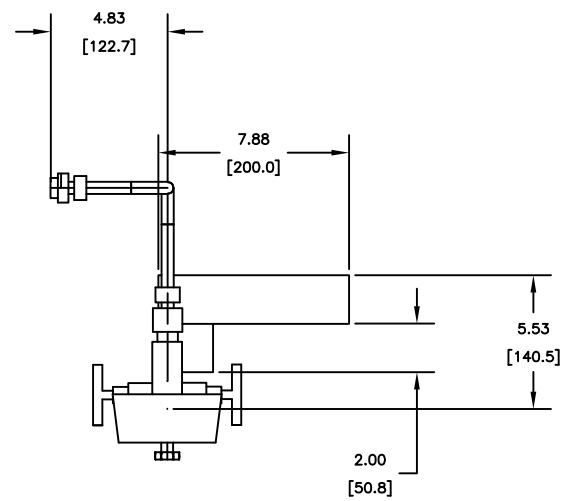
O1	RELEASED FOR CONSTRUCTION	02/02/2026	FAD
00	RELEASED FOR CONSTRUCTION	11/28/2025	FAD
REV	DESCRIPTION	DATE	BY
DATE:			
DRAWN:			
CHECKED:	CLIENT: GPIC		
APPROVED:	PO No.: PT-MAPO-000-3029		
	UNIT No.: PK-6101		
	SERVICE: PROPYLENE REFRIGERATION PACKAGE		
	LOCATION: -----		
JOB NO.:	TITLE: PT-61132		
SIZE: D	HOOKUP DIAGRAM		
SHEET:	CUSTOMER DWG. NO.: ULT003- PT-61132	REV.:	01



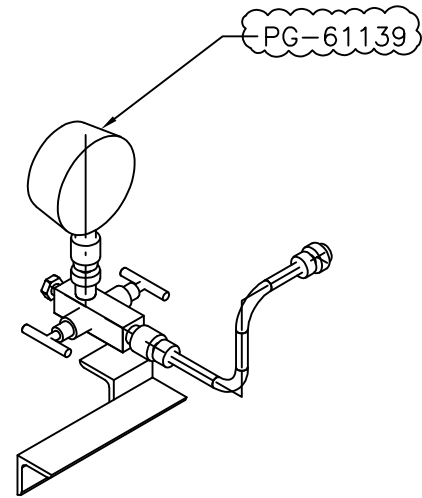
BILL OF MATERIALS				
PIPE				
ID	QTY	ND	DESCRIPTION	
1	2'-2"	1/2"	TUBING, ASTM A269, SEAMLESS -- 316SS	0.065" THK
FITTINGS				
ID	QTY	ND	DESCRIPTION	
2	5	1/2"	BEND 90 5R, TUBING, ASTM A269, 316SS	
3	1	1/2"	PLUG, HEX HEAD, MPT, ASME B16.11	
4	1	3/4"x1/2"	Male Connector 3/4" NPT(M) x 1/2" T	
VALVES				
ID	QTY	ND	DESCRIPTION	
5	1	1/2"	2-Way-Manifold	



01	RELEASED FOR CONSTRUCTION	02/02/2026	FAD
00	RELEASED FOR CONSTRUCTION	11/28/2025	FAD
REV	DESCRIPTION	DATE	BY
DATE:			
DRAWN:			
CHECKED:	CLIENT: GPIC		
APPROVED:	PO No.: PT-MAPO-000-3029		
	UNIT No.: PK-6101		
	SERVICE: PROPYLENE REFRIGERATION PACKAGE		
	LOCATION: -----		
JOB NO.:	ULT003-	TITLE:	PT-61141
SIZE:	D	HOOKUP DIAGRAM	
SHEET:	CUSTOMER DWG. NO.:	REV.	
	ULT003- PT-61141	01	

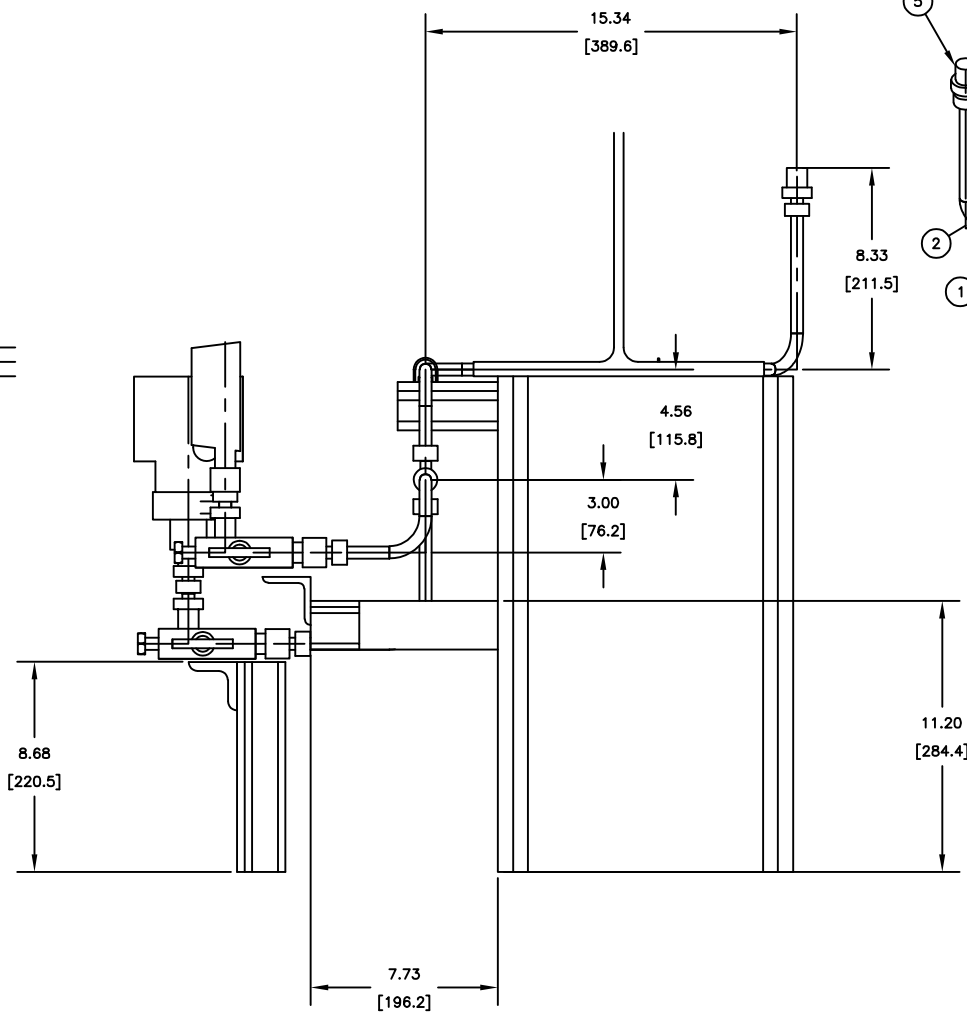
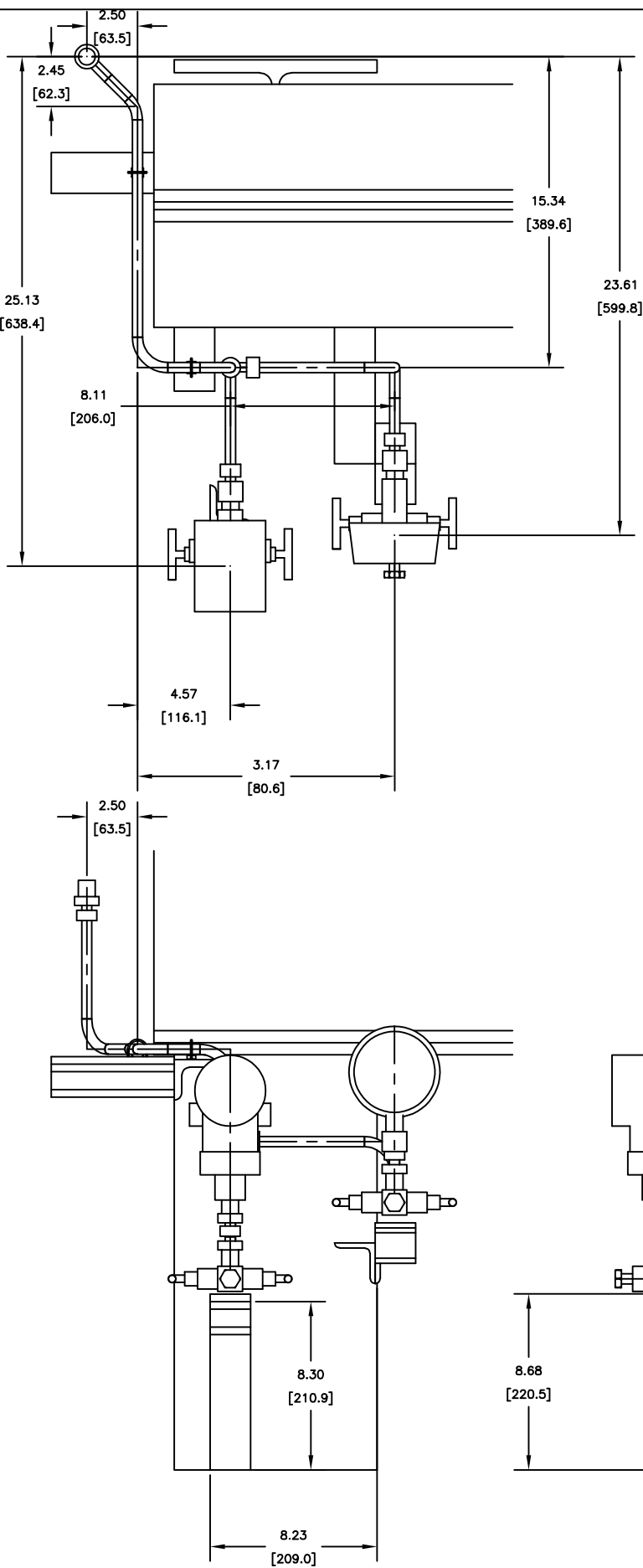


BILL OF MATERIALS				
PIPE				
ID	QTY	ND	DESCRIPTION	
1	7	1/16"	TUBING, ASTM A269, SEAMLESS - 316SS	0.065" THK
FITTINGS				
ID	QTY	ND	DESCRIPTION	
2	1	1/2"xUndefined Size	MaleConnector 1/2 NPT(M) x 1/2"Tube	
3	2	1/2"	BEND 90 5R, TUBING, ASTM A269, 316SS	
4	1	1/2"	PLUG, HEX HEAD, MPT, ASME B16.11	
VALVES				
ID	QTY	ND	DESCRIPTION	
5	1	1/2"	2-Way-Manifold	

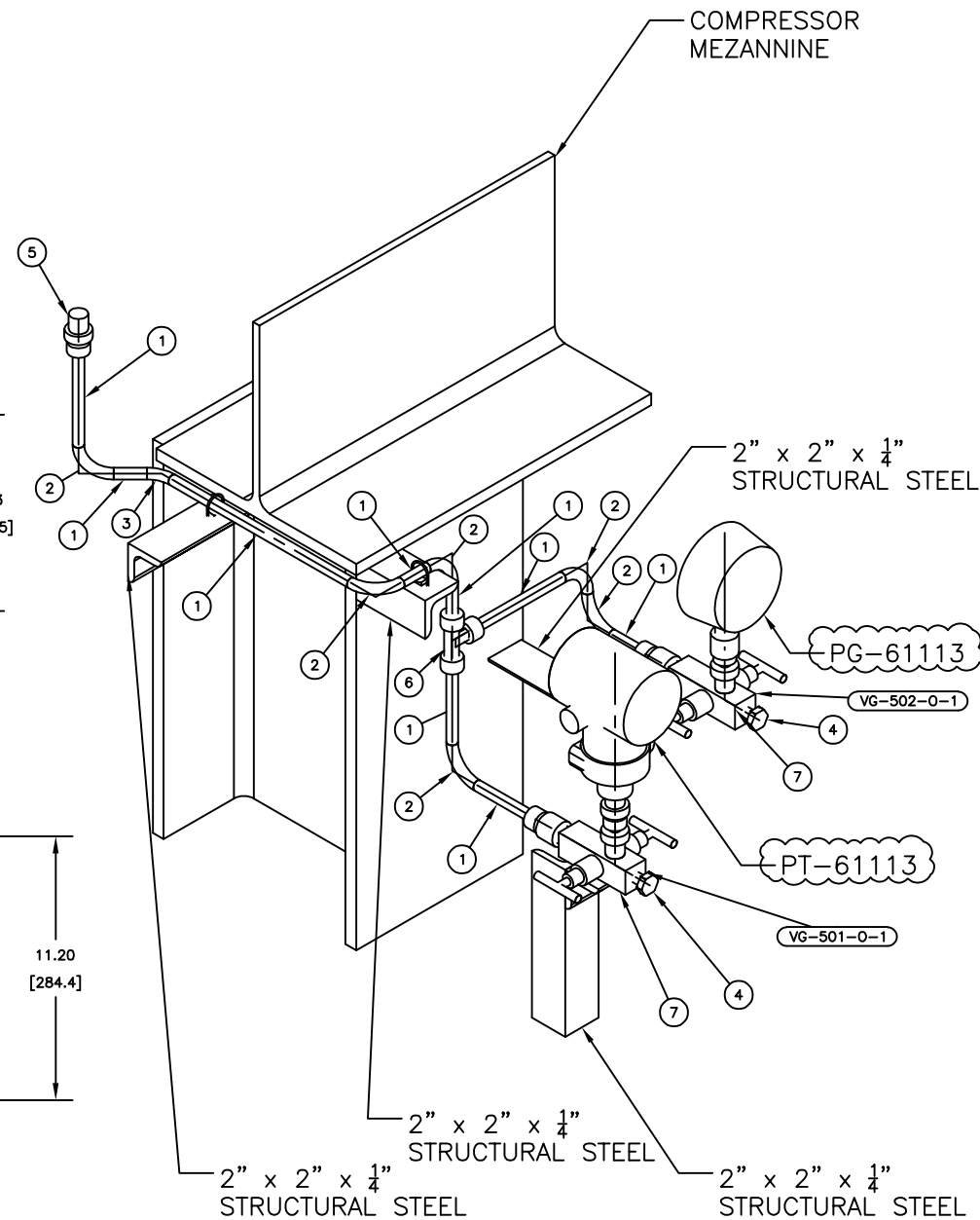


REV	DESCRIPTION	DATE	BY
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00	RELEASED FOR CONSTRUCTION	11/28/2025	FAD

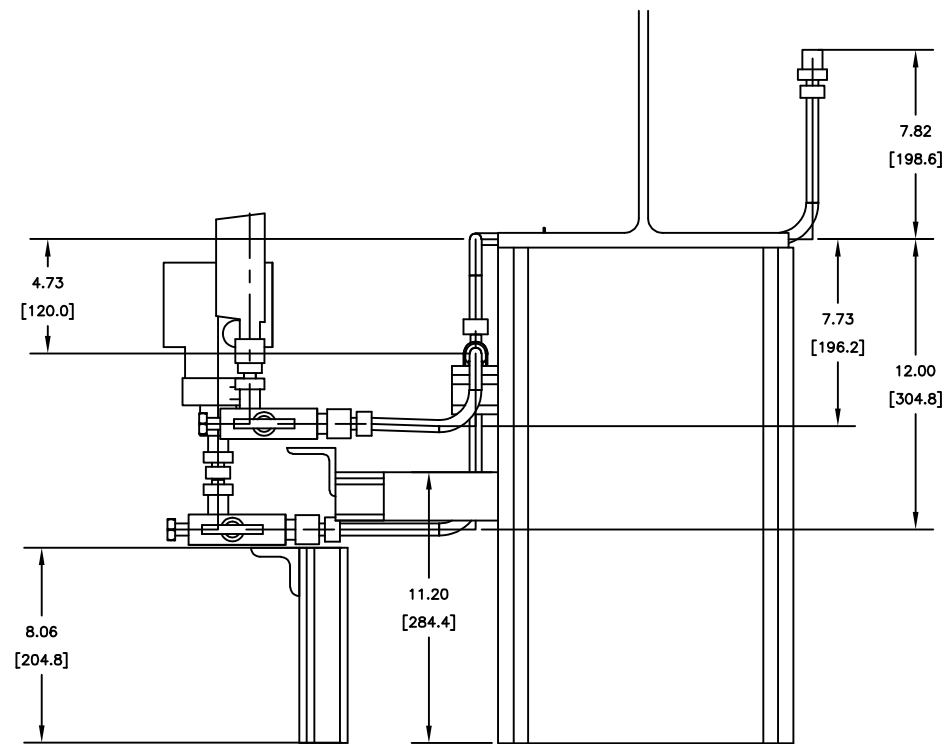
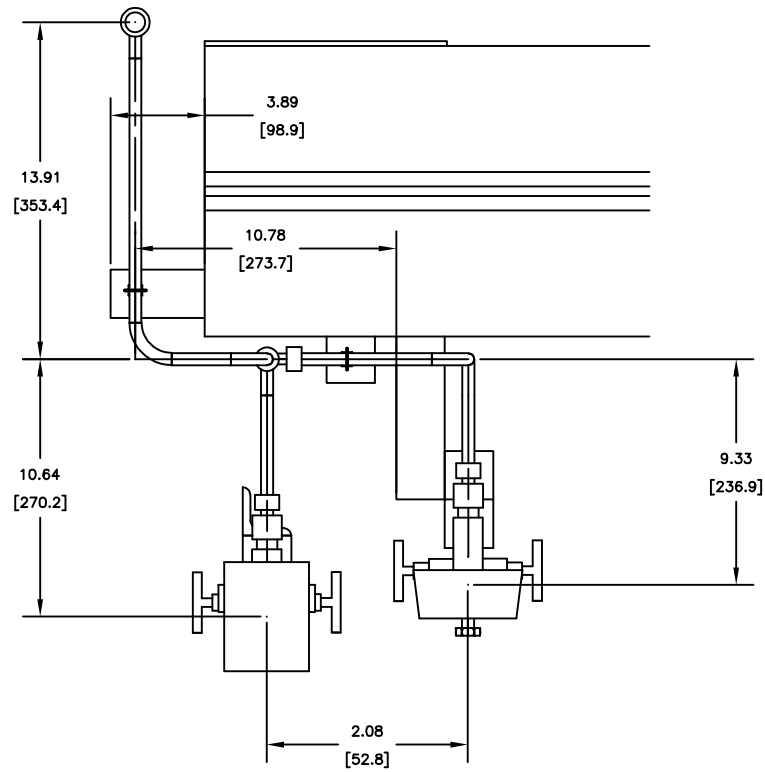
DATE:	
DRAWN:	
CHECKED:	CLIENT: GPIC
APPROVED:	PO No.: PT-MAPO-000-3029
	UNIT No.: PK-6101
	SERVICE: PROPYLENE REFRIGERATION PACKAGE
	LOCATION: -----
JOB NO.: ULT003-	TITLE: PG-61139
SIZE: D	HOOKUP DIAGRAM
SHEET:	CUSTOMER DWG. NO.: PG-61139
	REV. 01



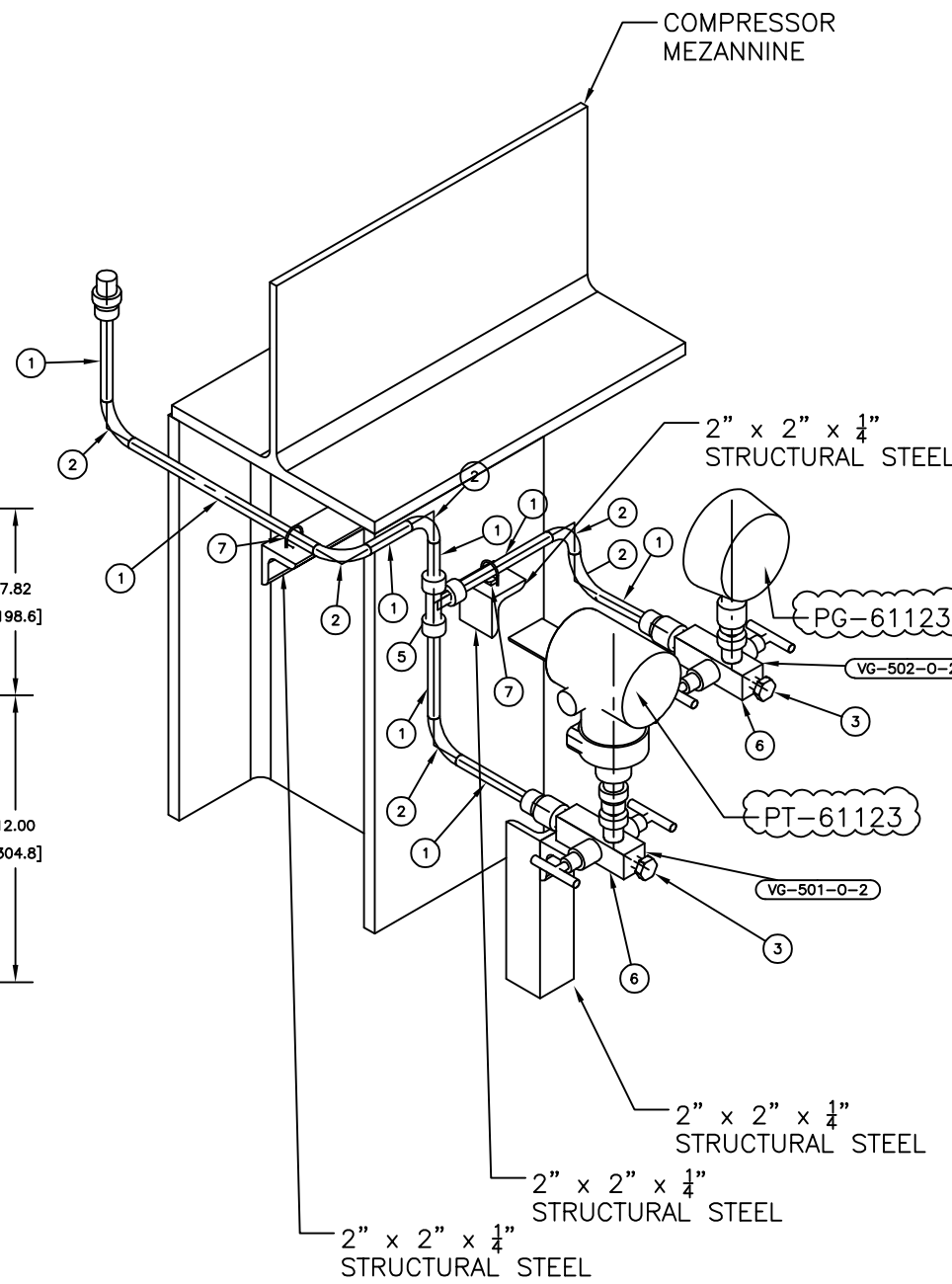
BILL OF MATERIALS				
PIPE				
ID	QTY	ND	DESCRIPTION	
1	3'-0	1/2"	TUBING, ASTM A269, SEAMLESS -- 316SS	0.065" THK
FITTINGS				
ID	QTY	ND	DESCRIPTION	
2	6	1/2"	BEND 90 5R, TUBING, ASTM A269, 316SS	
3	1	1/2"	BEND 45 5R, TUBING, ASTM A269, 316SS	
4	2	1/2"	PLUG, HEX HEAD, MPT, ASME B16.11	
5	1	3/4"x1/2"	Male Connector 3/4" NPT(M) x 1/2" T	
6	1	1/2"	Union_TEE_1/4" to 1"	
VALVES				
ID	QTY	ND	DESCRIPTION	
7	2	1/2"	2-Way-Manifold	
PIPE SUPPORTS				
ID	QTY	ND	DESCRIPTION	
8	2	1/2"	U-clamp	



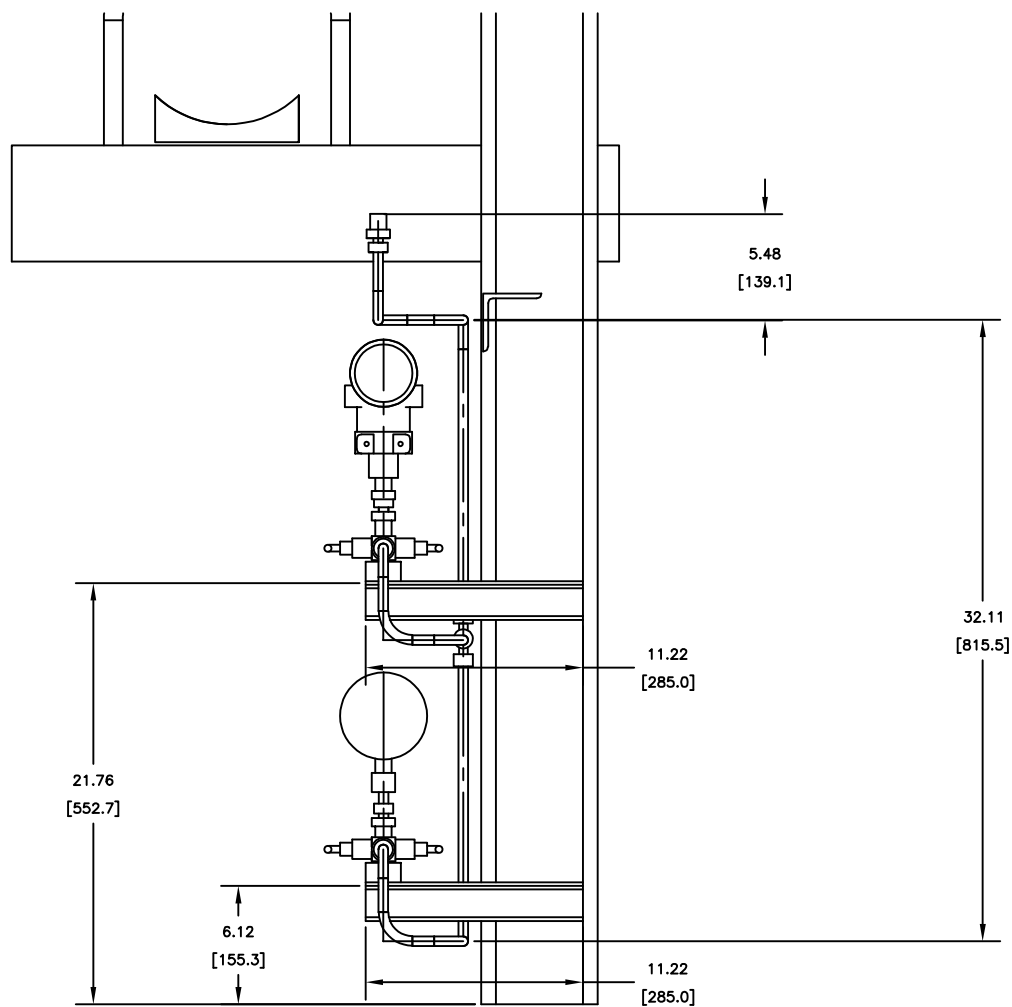
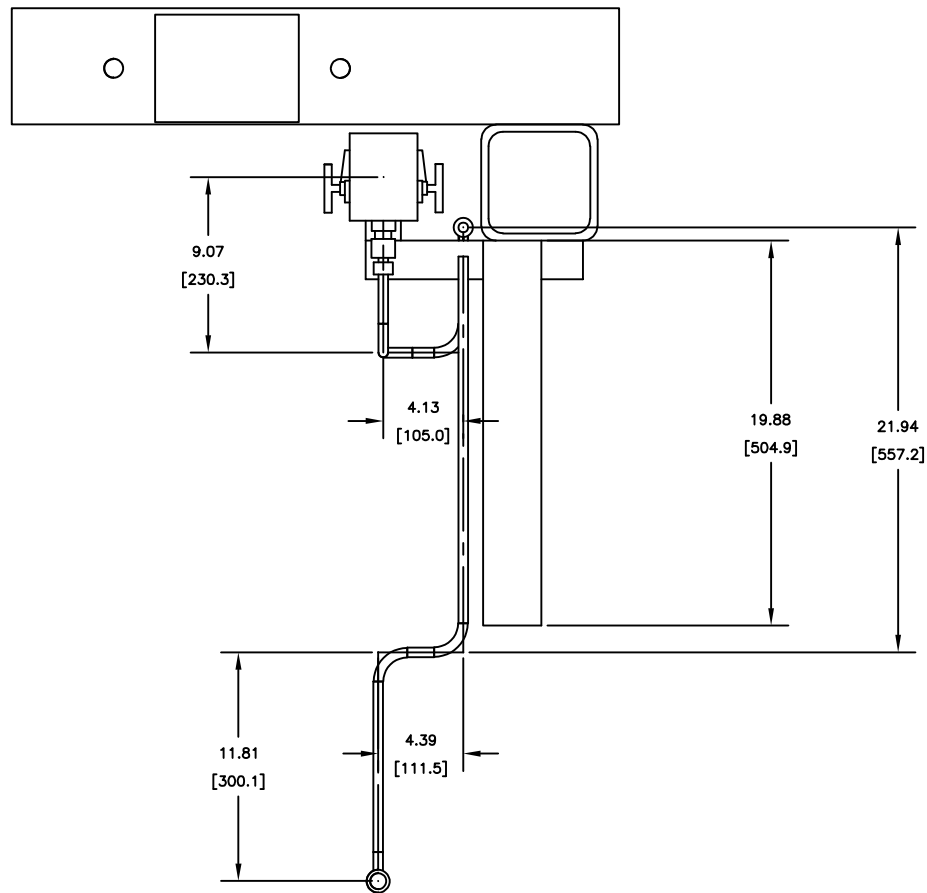
01	RELEASED FOR CONSTRUCTION	02/02/2026	FAD
00	RELEASED FOR CONSTRUCTION	11/28/2025	FAD
REV	DESCRIPTION	DATE	BY
DATE:			
DRAWN:			
CHECKED:	CLIENT: GPIC		
APPROVED:	PO No.: PT-MAPO-000-3029		
	UNIT No.: PK-6101		
	SERVICE: PROPYLENE REFRIGERATION PACKAGE		
	LOCATION: -----		
JOB NO.:	ULT003-	TITLE:	PT-61113
SIZE:	D		HOOKUP DIAGRAM
SHEET:	CUSTOMER DWG. NO.:	REV.	
	ULT003- PT-61113	01	



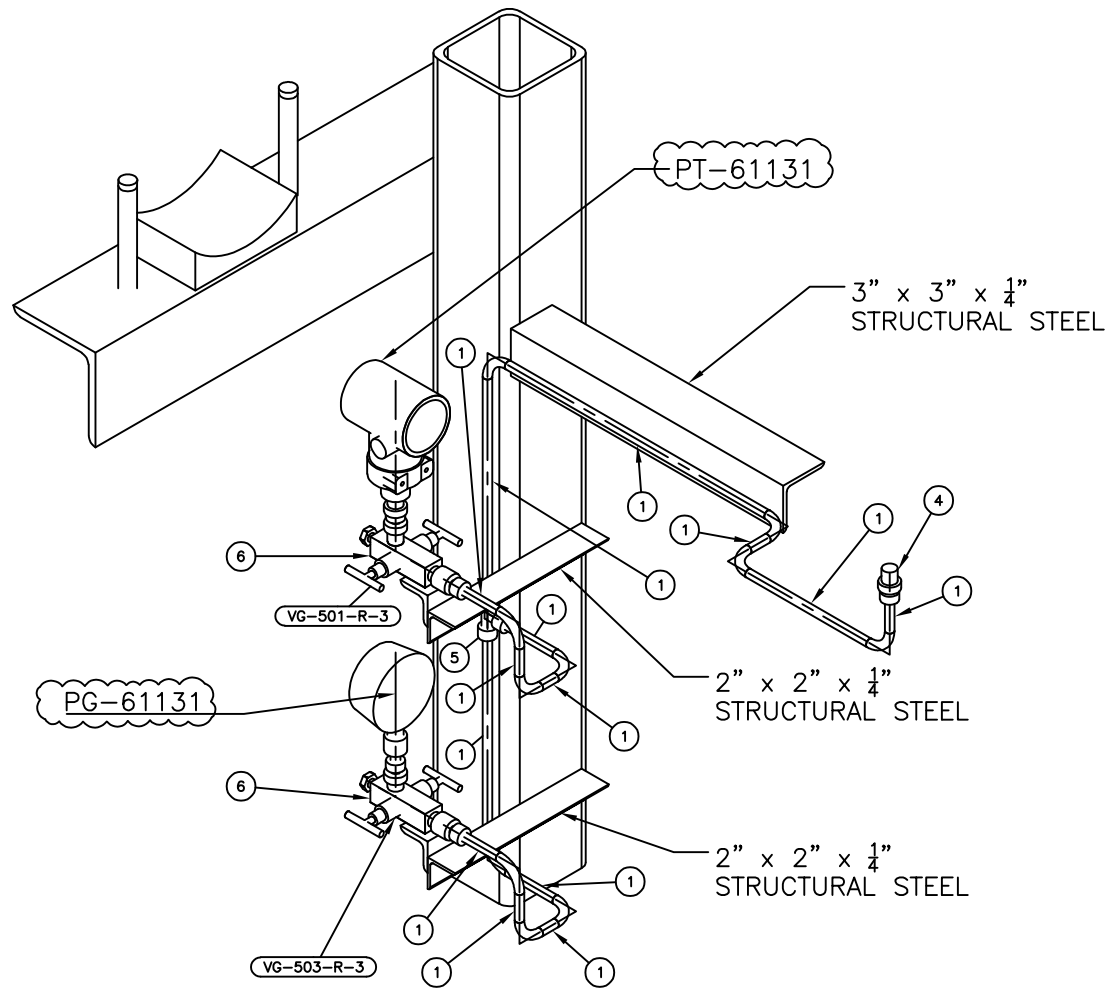
BILL OF MATERIALS				
PIPE				
ID	QTY	ND	DESCRIPTION	
1	3'-2 3/4"	1/2"	TUBING, ASTM A269, SEAMLESS - 316SS	0.065" THK
FITTINGS				
ID	QTY	ND	DESCRIPTION	
2	6	1/2"	BEND 90 5R, TUBING, ASTM A269, 316SS	
3	2	1/2"	PLUG, HEX HEAD, MPT, ASME B16.11	
4	1	3/4"x1/2"	Male Connector 3/4" NPT(M) x 1/2" T	
5	1	1/2"	Union_TEE_1/4" to 1"	
VALVES				
ID	QTY	ND	DESCRIPTION	
6	2	1/2"	2-Way-Manifold	
PIPE SUPPORTS				
ID	QTY	ND	DESCRIPTION	
7	2	1/2"	U-clamp	



01	RELEASED FOR CONSTRUCTION	02/02/2026	FAD
00	RELEASED FOR CONSTRUCTION	11/28/2025	FAD
REV	DESCRIPTION	DATE	BY
DATE:			
DRAWN:			
CHECKED:	CLIENT: GPIC		
APPROVED:	PO No.: PT-MAPO-000-3029		
	UNIT No.: PK-6101		
	SERVICE: PROPYLENE REFRIGERATION PACKAGE		
	LOCATION: -----		
JOB NO.:	ULT003-	TITLE:	PT-61123
SIZE:	D		HOOKUP DIAGRAM
SHEET:	CUSTOMER DWG. NO.:	REV.	
	ULT003- PT-61123	01	

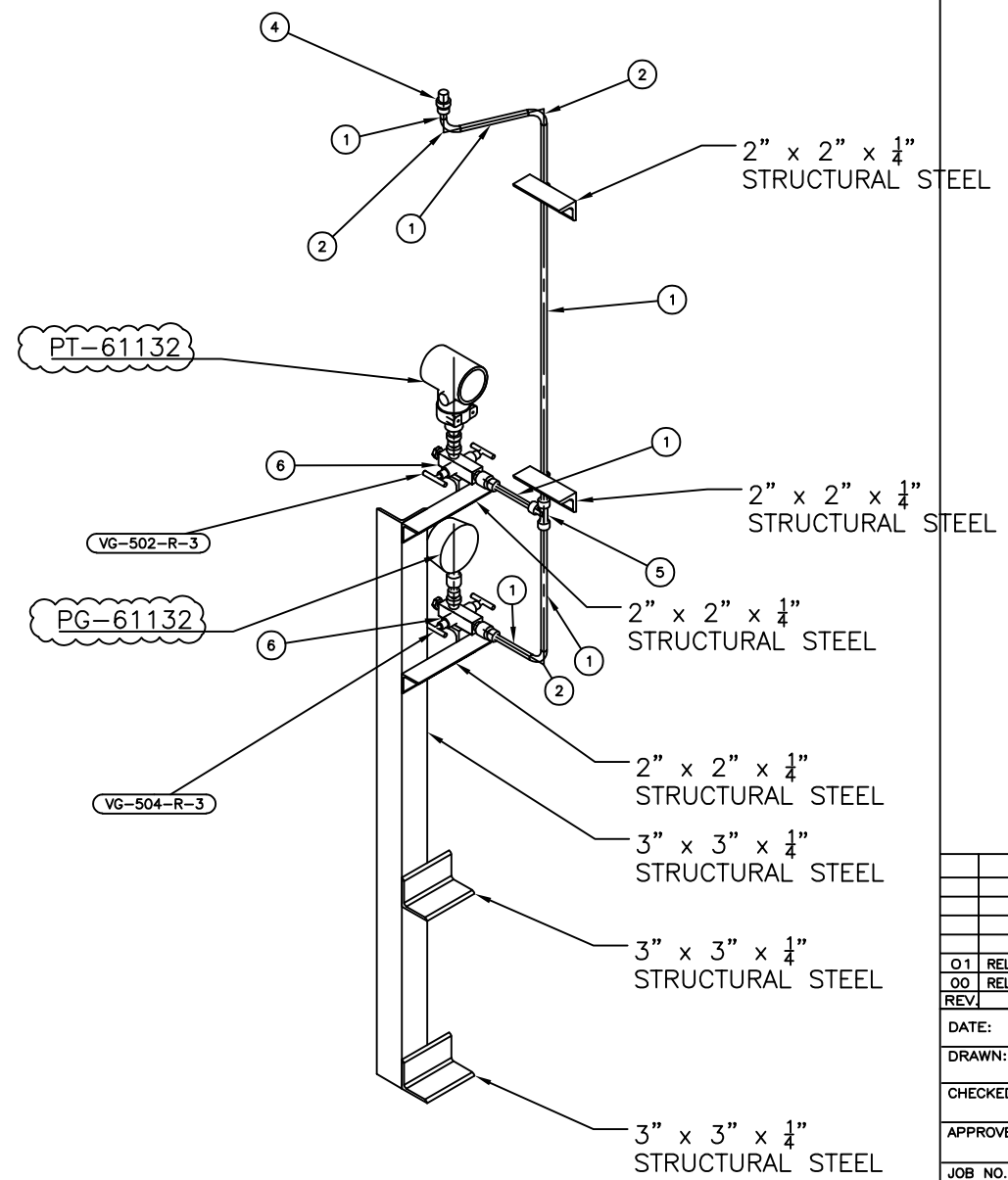
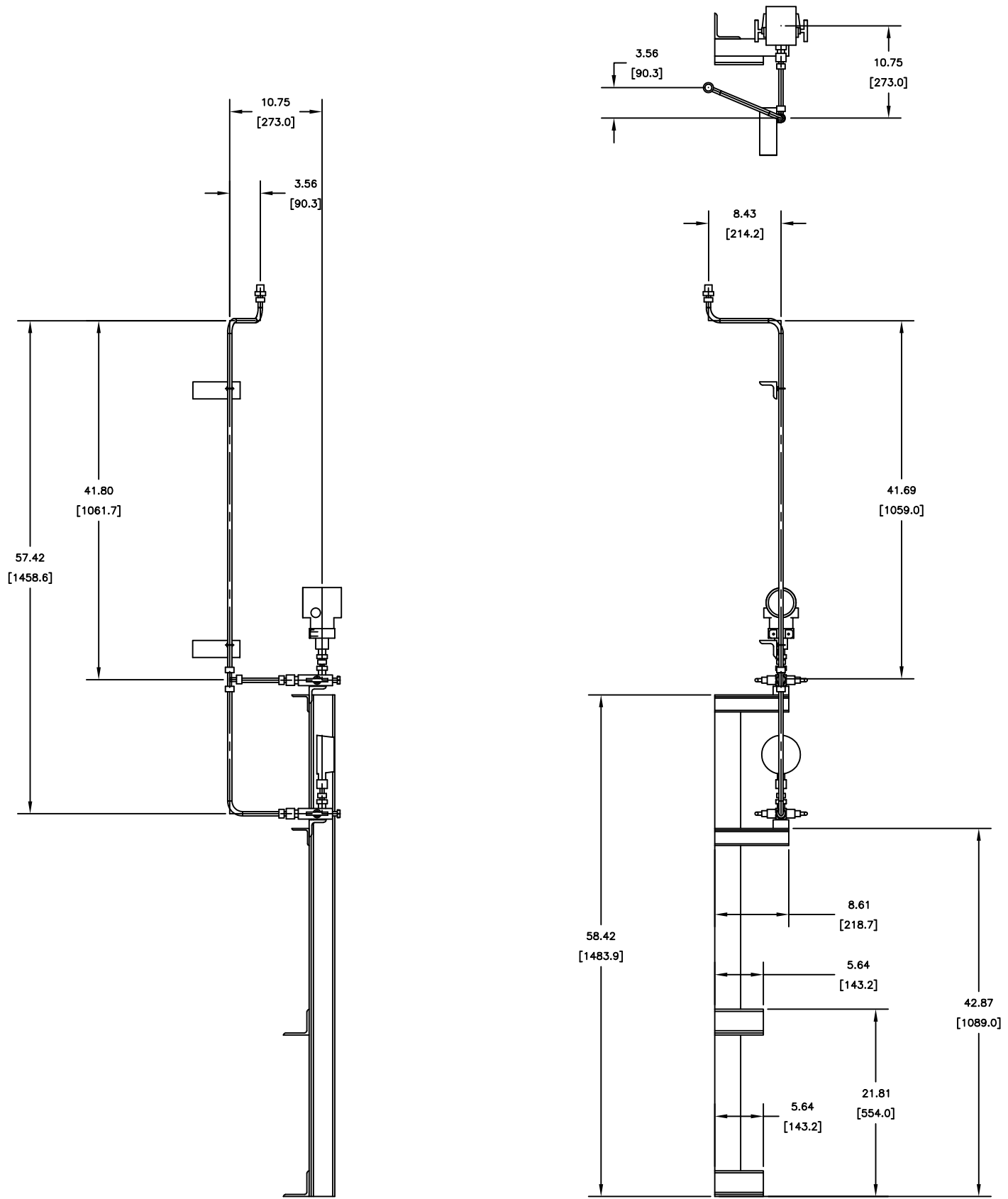


BILL OF MATERIALS				
PIPE				
ID	QTY	ND	DESCRIPTION	
1	6'-5 5/16"	1/2"	TUBING, ASTM A269, SEAMLESS - 316SS	0.065" THK
FITTINGS				
ID	QTY	ND	DESCRIPTION	
2	11	1/2"	BEND 90 5R, TUBING, ASTM A269, 316SS	
3	2	1/2"	PLUG, HEX HEAD, MPT, ASME B16.11	
4	1	3/4"x1/2"	Male Connector 3/4" NPT(M) x 1/2" T	
5	1	1/2"	Union_TEE_1/4" to 1"	
VALVES				
ID	QTY	ND	DESCRIPTION	
6	2	1/2"	2-Way-Manifold	
PIPE SUPPORTS				
ID	QTY	ND	DESCRIPTION	
7	1	10"	U-clamp	

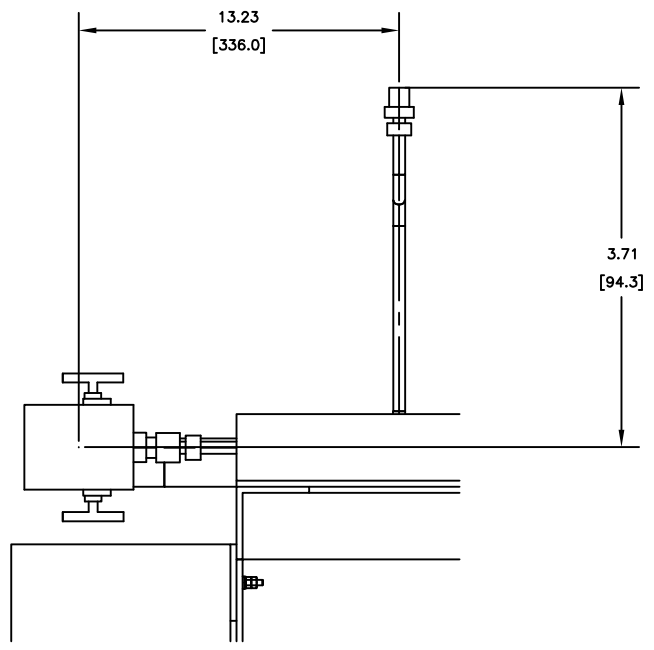


01	RELEASED FOR CONSTRUCTION	02/02/2026	FAD
00	RELEASED FOR CONSTRUCTION	11/28/2025	FAD
REV	DESCRIPTION	DATE	BY
DATE:			
DRAWN:			
CHECKED:	CLIENT: GPIC		
APPROVED:	PO No.: PT-MAPO-000-3029		
	UNIT No.: PK-6101		
	SERVICE: PROPYLENE REFRIGERATION PACKAGE		
	LOCATION: -----		
JOB NO.: ULT003-	TITLE: PT-61131		
SIZE: D	HOOKUP DIAGRAM		
SHEET:	CUSTOMER DWG. NO.: ULT003- PT-61131	REV.	01

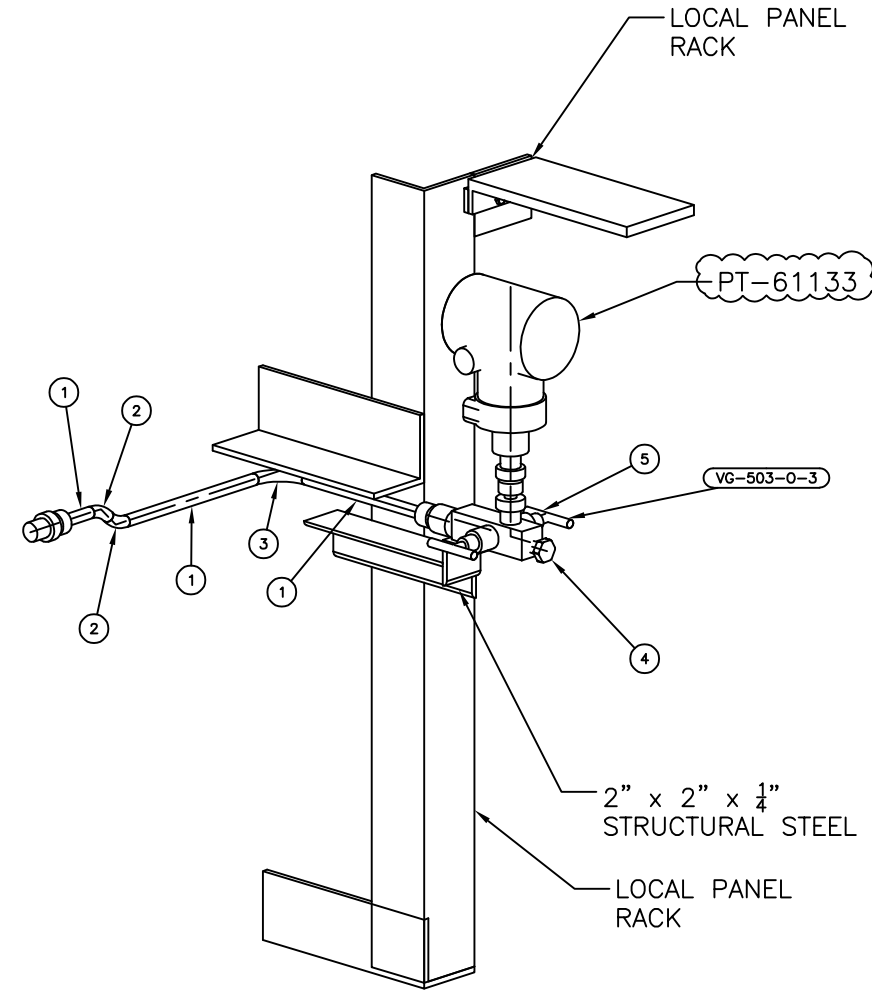
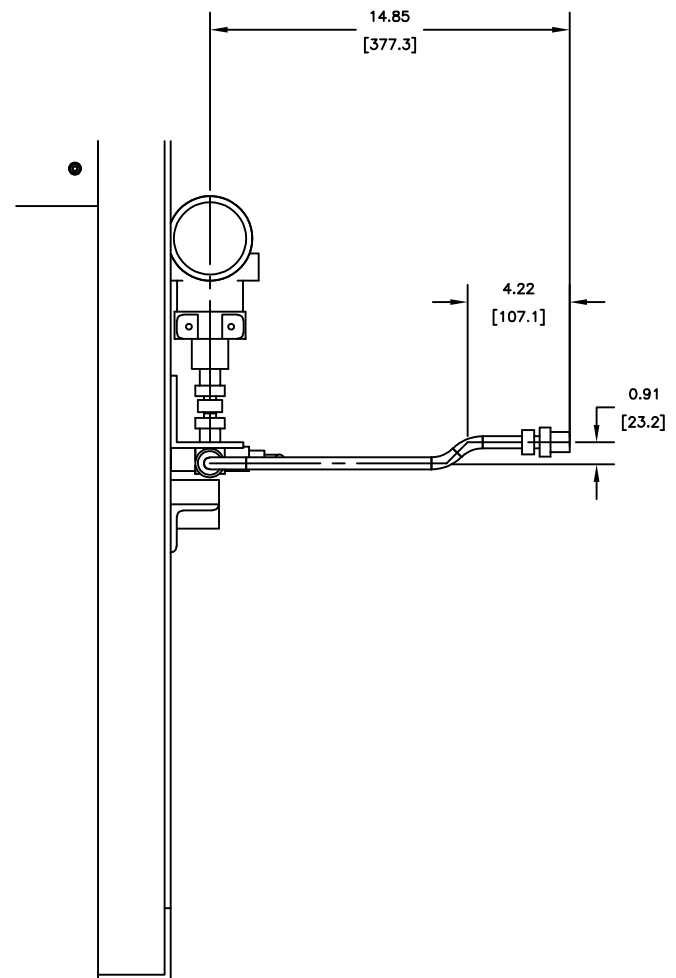
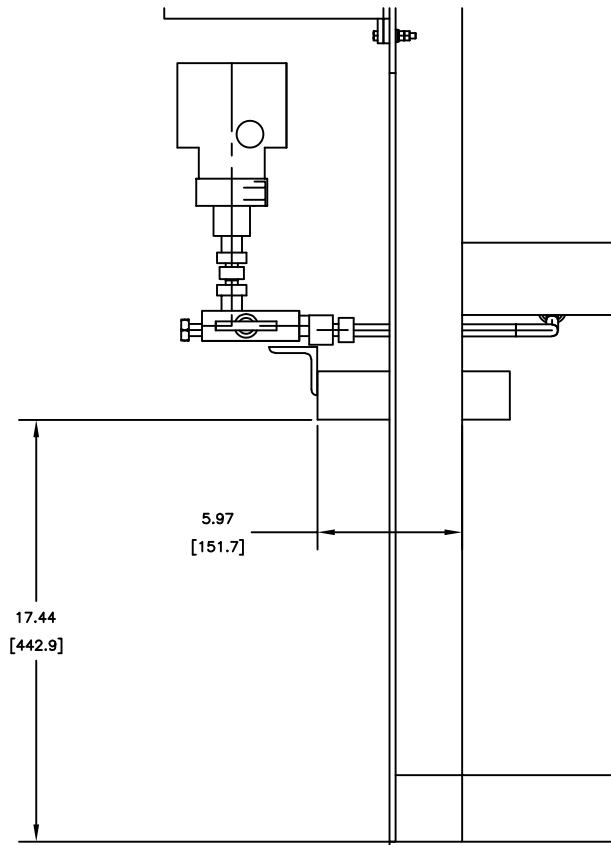
BILL OF MATERIALS			
PIPE			
ID	QTY	ND	DESCRIPTION
1	5'-9 1/8"	1/2"	TUBING, ASTM A269, SEAMLESS - 316SS 0.065" THK
FITTINGS			
ID	QTY	ND	DESCRIPTION
2	3	1/2"	BEND 90 5R, TUBING, ASTM A269, 316SS
3	2	1/2"	PLUG, HEX HEAD, MPT, ASME B16.11
4	1	3/4"x1/2"	Male Connector 3/4" NPT(M) x 1/2" T
5	1	1/2"	Union_TEE_1/4" to 1"
VALVES			
ID	QTY	ND	DESCRIPTION
6	2	1/2"	2-Way-Manifold
PIPE SUPPORTS			
ID	QTY	ND	DESCRIPTION
7	2	1/2"	U-clamp



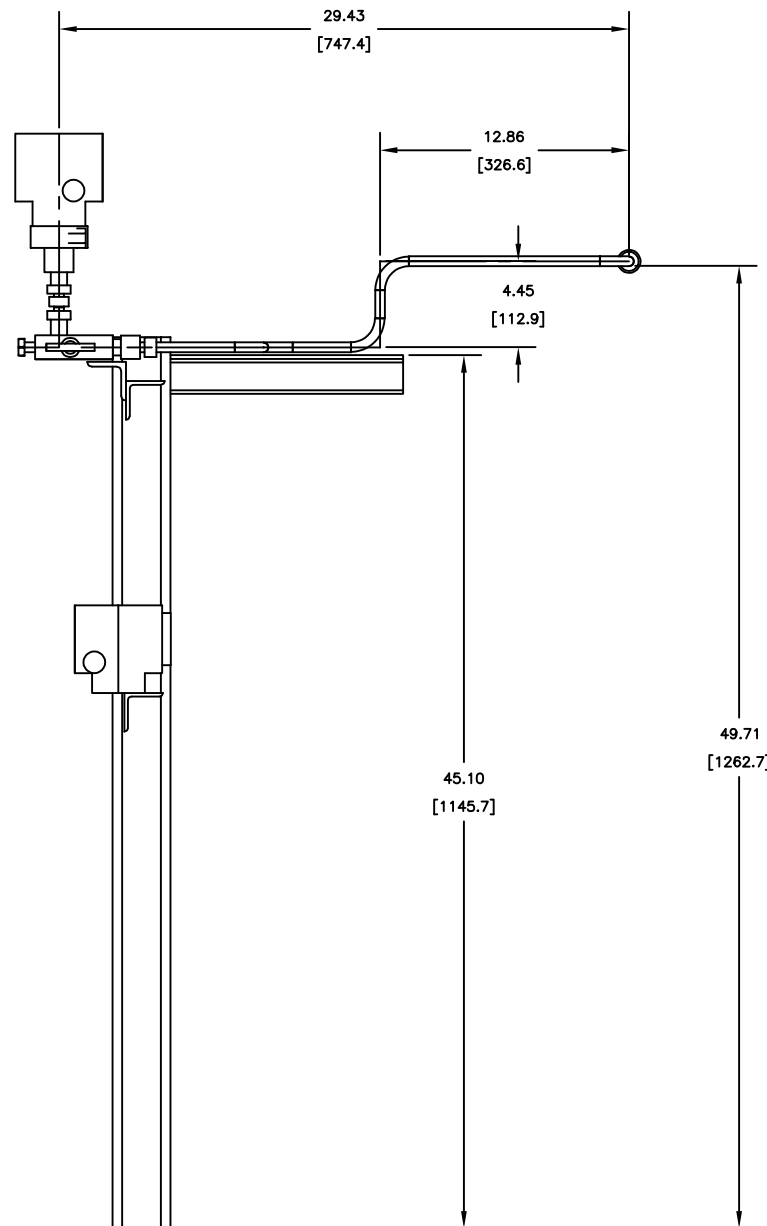
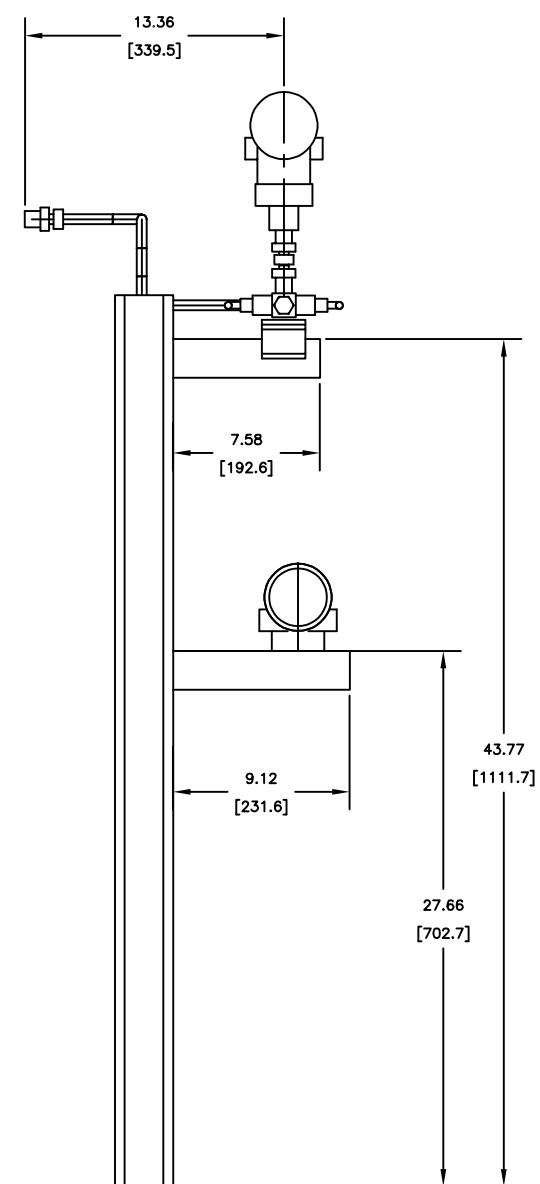
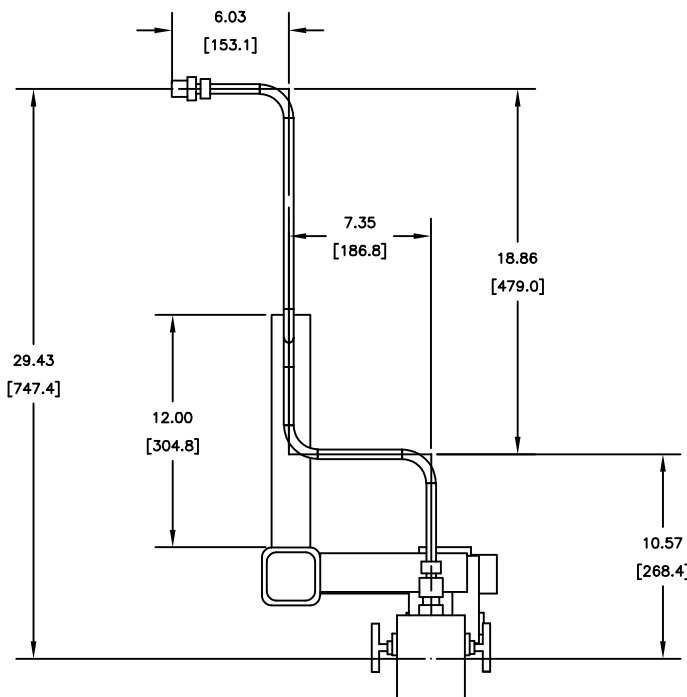
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00	RELEASED FOR CONSTRUCTION	11/28/2025	FAD
REV	DESCRIPTION	DATE	BY
DATE:			
DRAWN:			
CHECKED:	CLIENT: GPIC		
APPROVED:	PO No.: PT-MAPO-000-3029		
	UNIT No.: PK-6101		
	SERVICE: PROPYLENE REFRIGERATION PACKAGE		
	LOCATION: -----		
JOB NO.:	TITLE: PT-61132		
SIZE: D	HOOKUP DIAGRAM		
SHEET:	CUSTOMER DWG. NO.: ULT003- PT-61132	REV.:	01



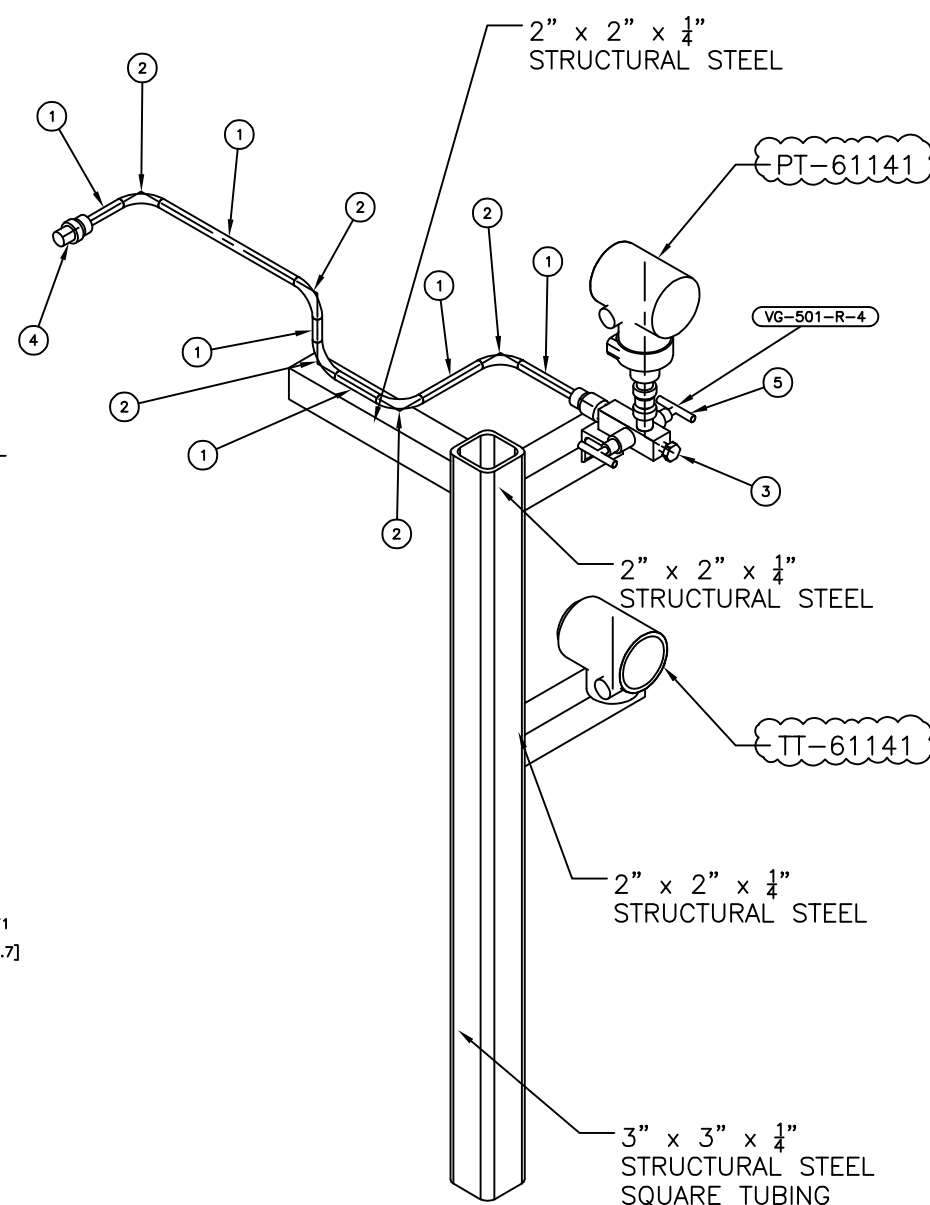
BILL OF MATERIALS			
PIPE			
ID	QTY	ND	DESCRIPTION
1	1'-4 7/16"	1/2"	TUBING, ASTM A269, SEAMLESS - 316SS
0.065" THK			
FITTINGS			
ID	QTY	ND	DESCRIPTION
2	2	1/2"	BEND 45 5R, TUBING, ASTM A269, 316SS
3	1	1/2"	BEND 90 5R, TUBING, ASTM A269, 316SS
4	1	1/2"	PLUG, HEX HEAD, MPT, ASME B16.11
VALVES			
ID	QTY	ND	DESCRIPTION
5	1	1/2"	2-Way-Manifold



01	RELEASED FOR CONSTRUCTION	02/02/2026	FAD
00	RELEASED FOR CONSTRUCTION	11/28/2025	FAD
REV	DESCRIPTION	DATE	BY
DATE:			
DRAWN:			
CHECKED:	CLIENT: GPIC		
APPROVED:	PO No.: PT-MAPO-000-3029		
	UNIT No.: PK-6101		
	SERVICE: PROPYLENE REFRIGERATION PACKAGE		
	LOCATION: -----		
JOB NO.:	ULT003-	TITLE:	PT-61133
SIZE:	D		HOOKUP DIAGRAM
SHEET:	CUSTOMER DWG. NO.:	REV.	
	ULT003- PT-61133	01	



BILL OF MATERIALS				
PIPE				
ID	QTY	ND	DESCRIPTION	
1	2'-2"	1/2"	TUBING, ASTM A269, SEAMLESS -- 316SS	0.065" THK
FITTINGS				
ID	QTY	ND	DESCRIPTION	
2	5	1/2"	BEND 90 5R, TUBING, ASTM A269, 316SS	
3	1	1/2"	PLUG, HEX HEAD, MPT, ASME B16.11	
4	1	3/4"x1/2"	Male Connector 3/4" NPT(M) x 1/2" T	
VALVES				
ID	QTY	ND	DESCRIPTION	
5	1	1/2"	2-Way-Manifold	



01	RELEASED FOR CONSTRUCTION	02/02/2026	FAD
00	RELEASED FOR CONSTRUCTION	11/28/2025	FAD
REV	DESCRIPTION	DATE	BY
DATE:			
DRAWN:			
CHECKED:	CLIENT: GPIC		
APPROVED:	PO No.: PT-MAPO-000-3029		
	UNIT No.: PK-6101		
	SERVICE: PROPYLENE REFRIGERATION PACKAGE		
	LOCATION: -----		
JOB NO.:	TITLE: PT-61141		
SIZE: D	HOOKUP DIAGRAM		
SHEET:	CUSTOMER DWG. NO.: ULT003- PT-61141	REV.	01

