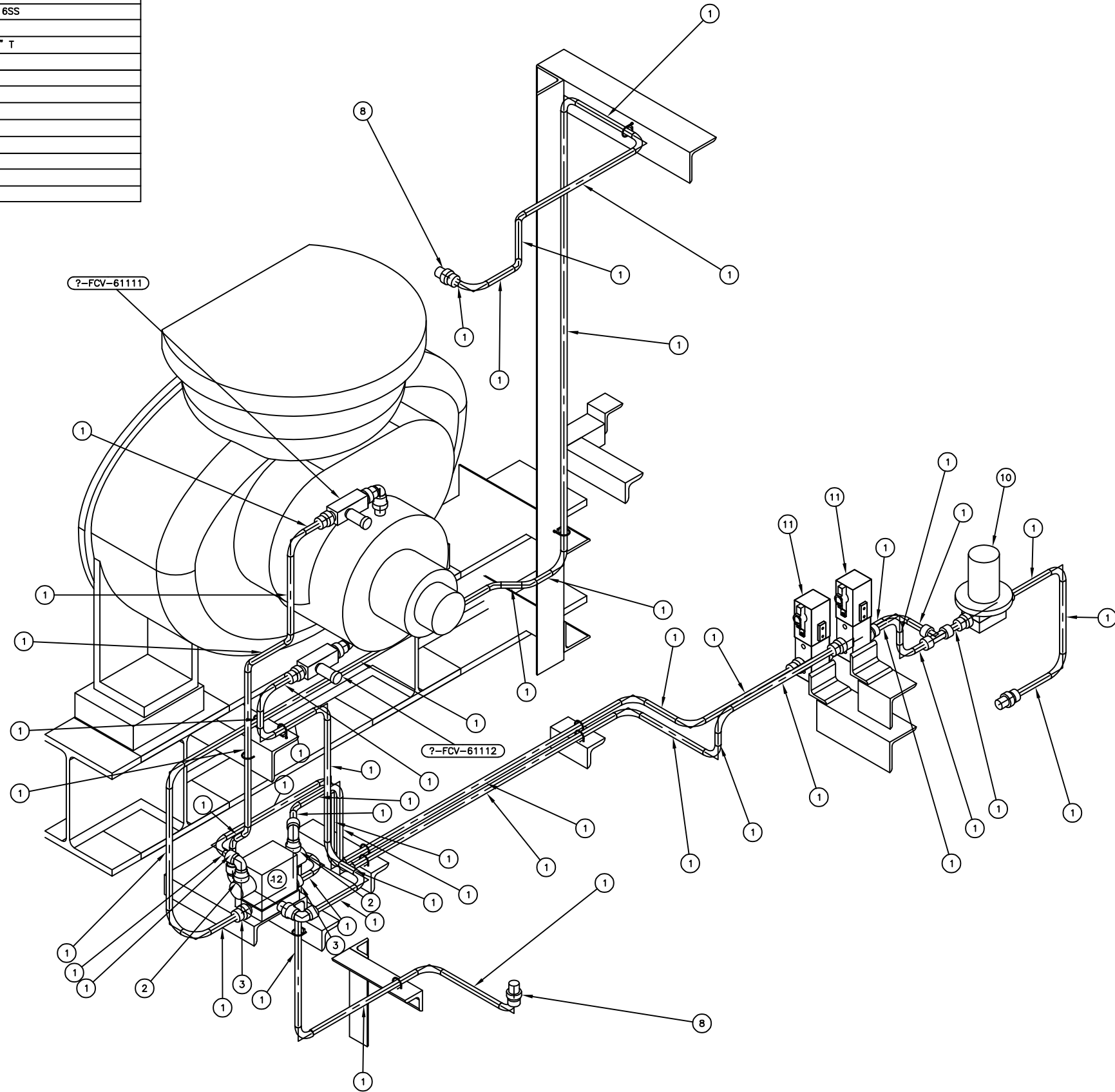


MTO for Tube Fittings

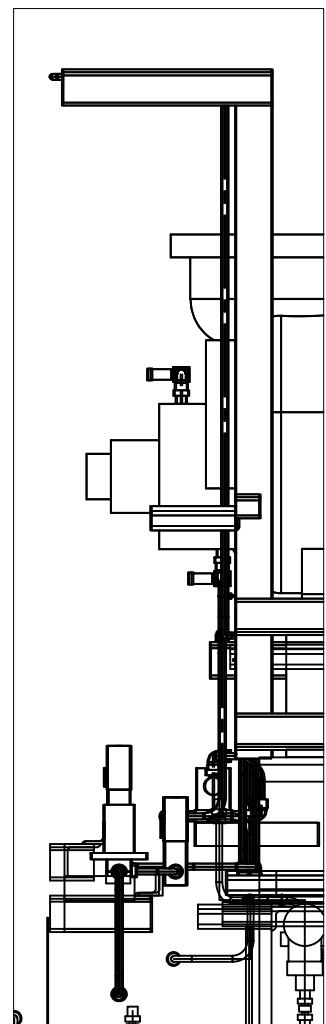
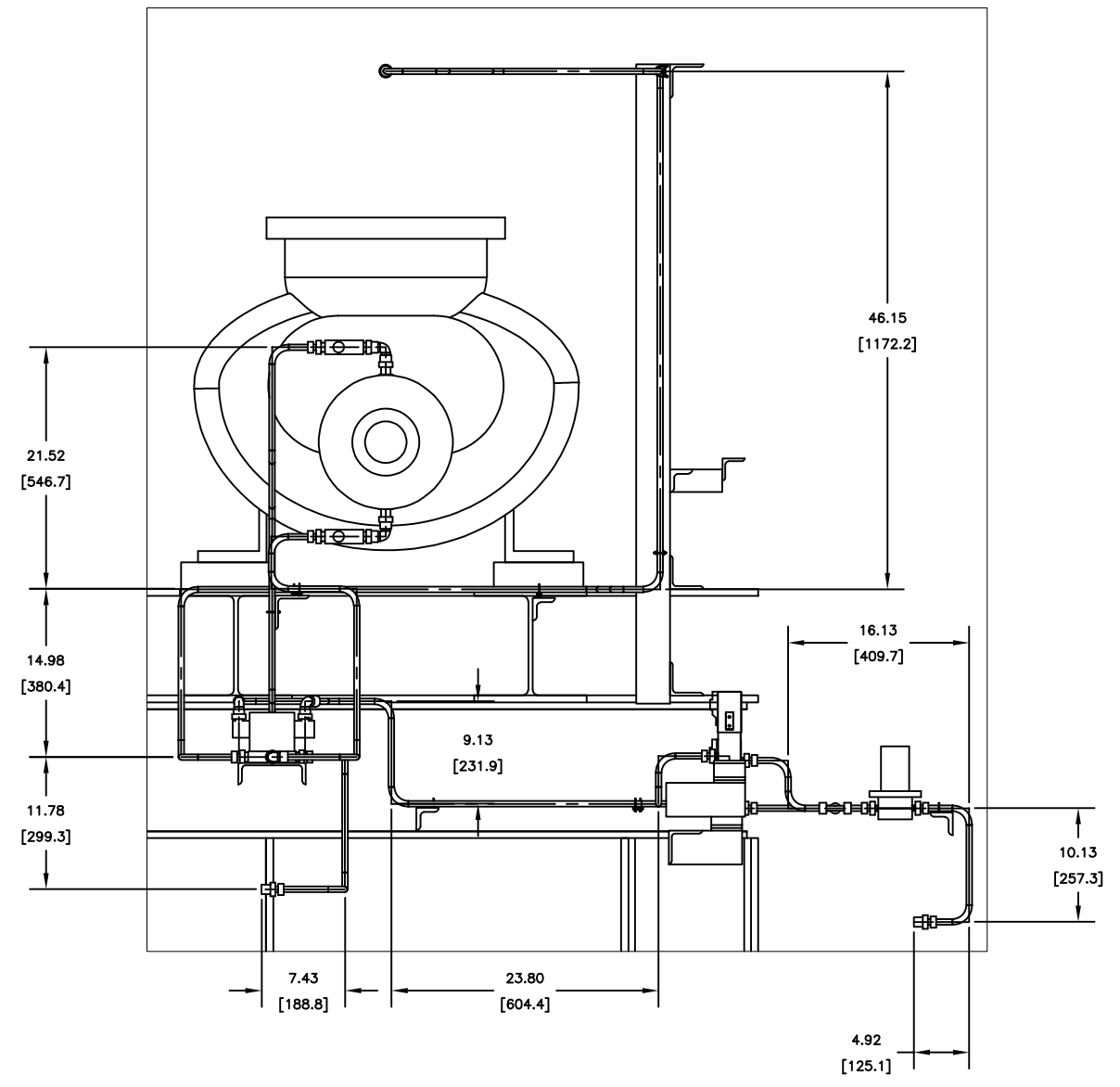
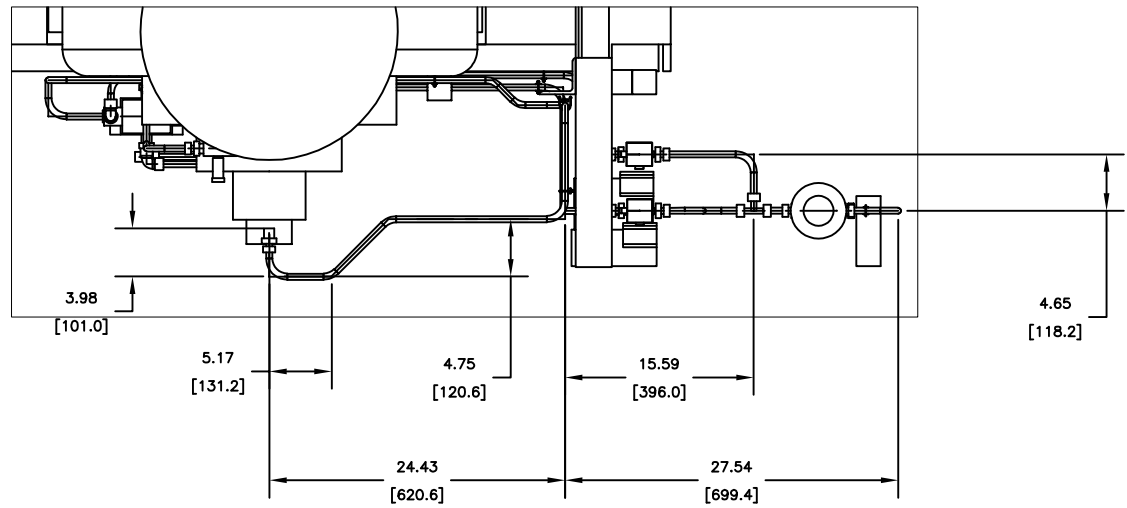
Long Description (Family)	Compatible Standard	Size	Line Number Tag
PLUG, HEX HEAD, MPT, ASME B16.11	ASME B16.11	1/2"	PG-61131
PLUG, HEX HEAD, 1/2" NPT (M), ASME B16.11	ASME B16.11	1/2"	PT-61111
PLUG, HEX HEAD, 1/2" NPT (M), ASME B16.11	ASME B16.11	1/2"	PT-61111
PLUG, HEX HEAD, 1/2" NPT (M), ASME B16.11	ASME B16.11	1/2"	PT-61113
PLUG, HEX HEAD, 1/2" NPT (M), ASME B16.11	ASME B16.11	1/2"	PT-61113
PLUG, HEX HEAD, 1/2" NPT (M), ASME B16.11	ASME B16.11	1/2"	PT-61121
PLUG, HEX HEAD, 1/2" NPT (M), ASME B16.11	ASME B16.11	1/2"	PT-61121
PLUG, HEX HEAD, 1/2" NPT (M), ASME B16.11	ASME B16.11	1/2"	PT-61123
PLUG, HEX HEAD, 1/2" NPT (M), ASME B16.11	ASME B16.11	1/2"	PT-61123
PLUG, HEX HEAD, 1/2" NPT (M), ASME B16.11	ASME B16.11	1/2"	PT-61131
PLUG, HEX HEAD, 1/2" NPT (M), ASME B16.11	ASME B16.11	1/2"	PT-61131
PLUG, HEX HEAD, MPT, ASME B16.11	ASME B16.11	1/2"	PT-61132
PLUG, HEX HEAD, MPT, ASME B16.11	ASME B16.11	1/2"	PT-61132
PLUG, HEX HEAD, 1/2" NPT (M), ASME B16.11	ASME B16.11	1/2"	PT-61133
PLUG, HEX HEAD, 1/2" NPT (M), ASME B16.11	ASME B16.11	1/2"	PT-61134
PLUG, HEX HEAD, 1/2" NPT (M), ASME B16.11	ASME B16.11	1/2"	PT-61141
PLUG, HEX HEAD, 1/2" NPT (M), ASME B16.11	ASME B16.11	1/2"	PT-61142

BILL OF MATERIALS		
PIPE		
ID	QTY	LONG DESCRIPTION (FAMILY)
1	31'-3 7/16"	TUBING, ASTM A269, SEAMLESS -- 316SS
FITTINGS		
ID	QTY	LONG DESCRIPTION (FAMILY)
2	2	STUB 1/4NPT(M) x 1/2"Tube
3	2	MaleConnector 1/2 NPT(M) x 1/2"Tube
4	1	BEND 90 5R, TUBING, ASTM A269, 316SS
5	33	BEND 90 5R, TUBING, ASTM A269, 316SS
6	9	BEND 45 5R, TUBING, ASTM A269, 316SS
7	2	Union ELB, Tubing, 1/4" to 1"
8	2	Male Connector 3/4" NPT(M) x 1/2" T
9	1	Union_TEE_1/4" to 1"
VALVES		
ID	QTY	LONG DESCRIPTION (FAMILY)
10	1	Regulator-1/4"
11	2	Solenoid, 1/4" to 1/2"
12	1	Direction Vale. 1/2"
PIPE SUPPORTS		
ID	QTY	LONG DESCRIPTION (FAMILY)
13	11	U-clamp



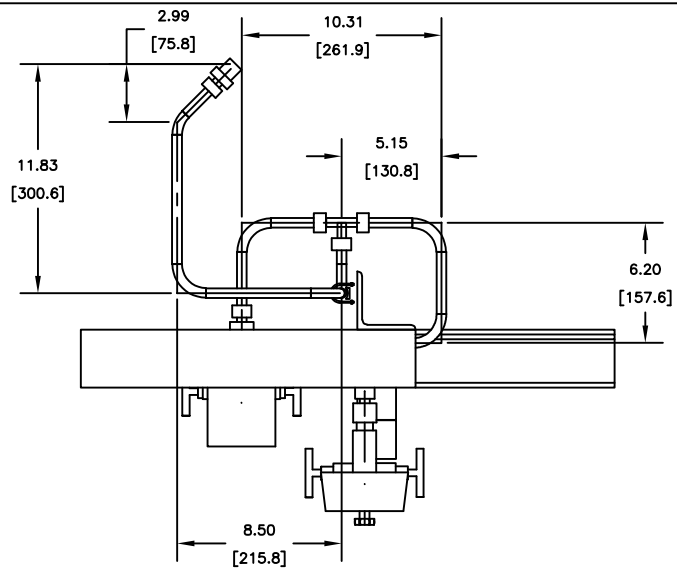
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00	RELEASED FOR CONSTRUCTION	11/28/2025	FAD

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: DIR-61111-1
SIZE: D	HOOKUP DIAGRAM
SHEET:	CUSTOMER DWG. NO.: ULT003- DIR-61111
	REV. 00

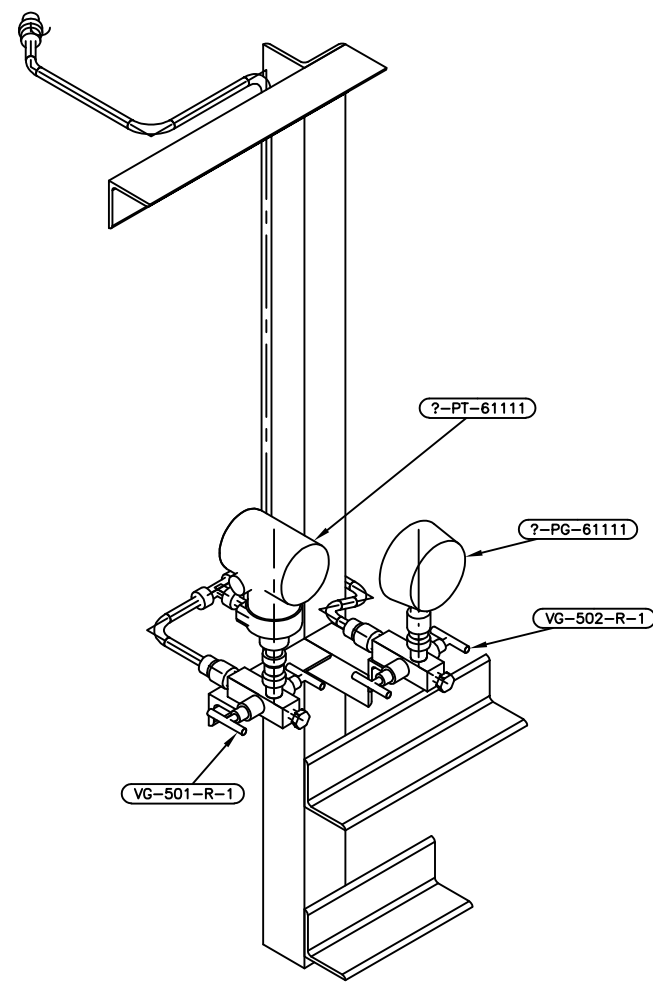
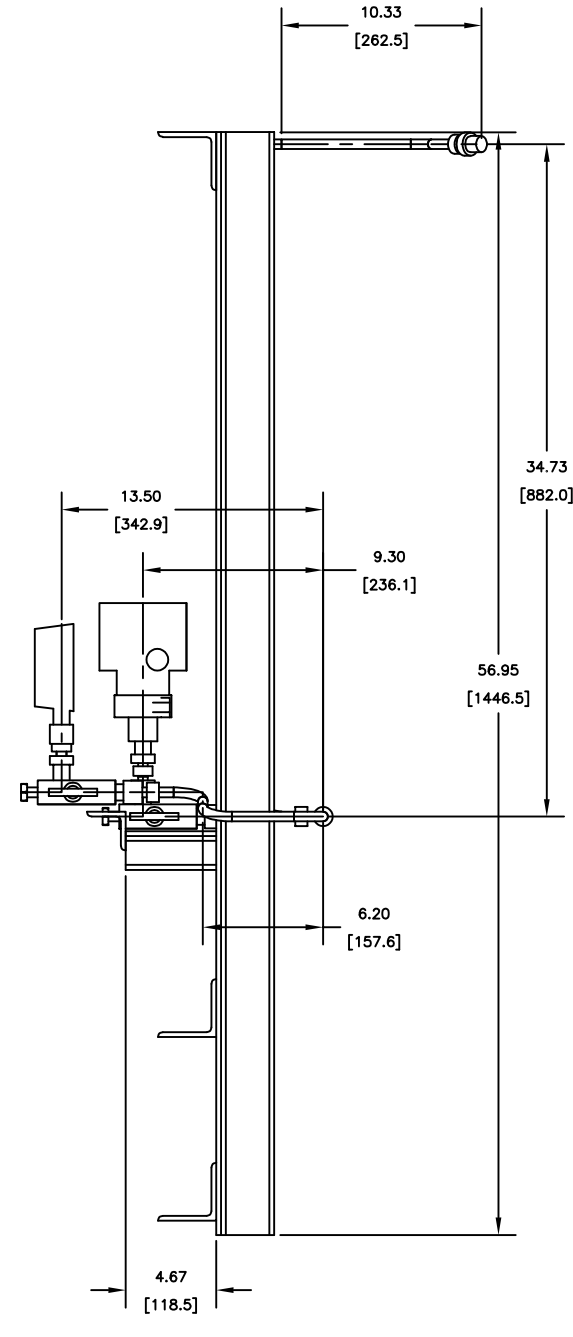
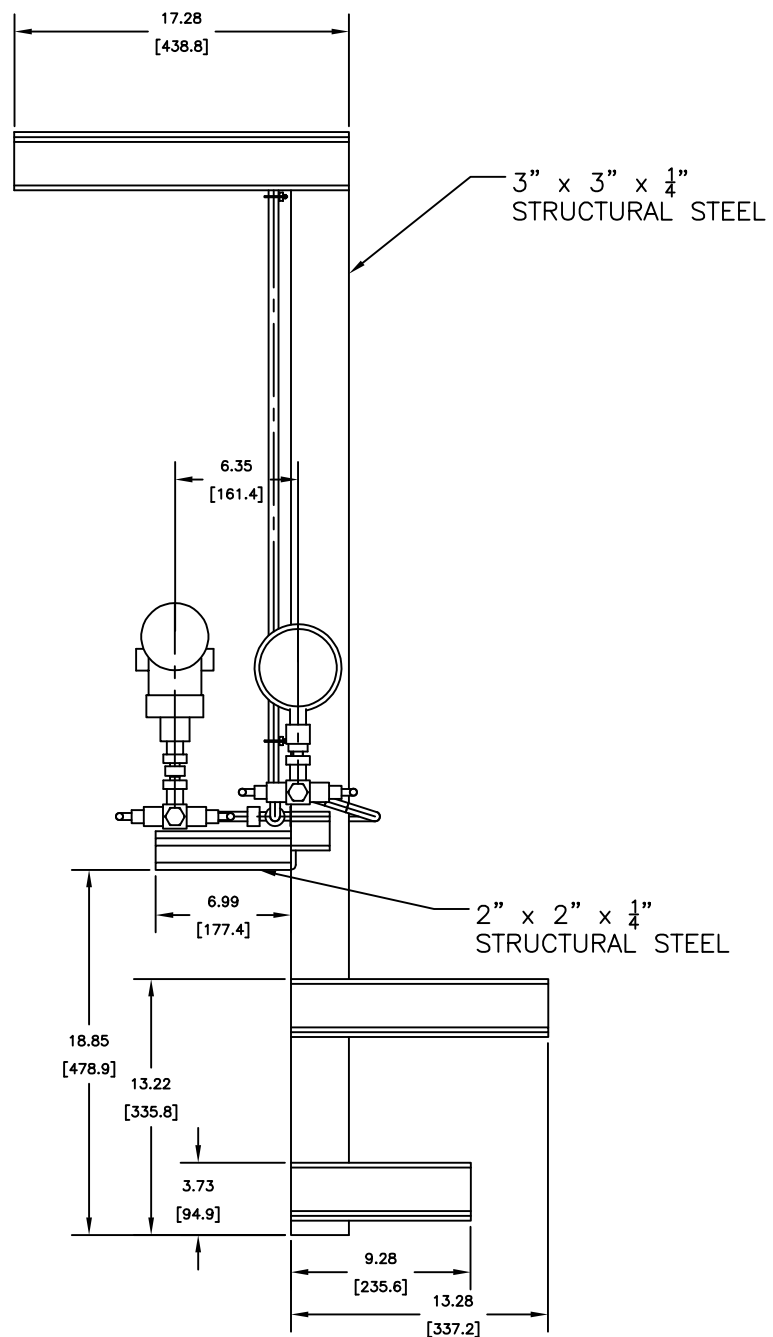


REV	DESCRIPTION	DATE	BY
00	RELEASED FOR CONSTRUCTION	11/28/2025	FAD

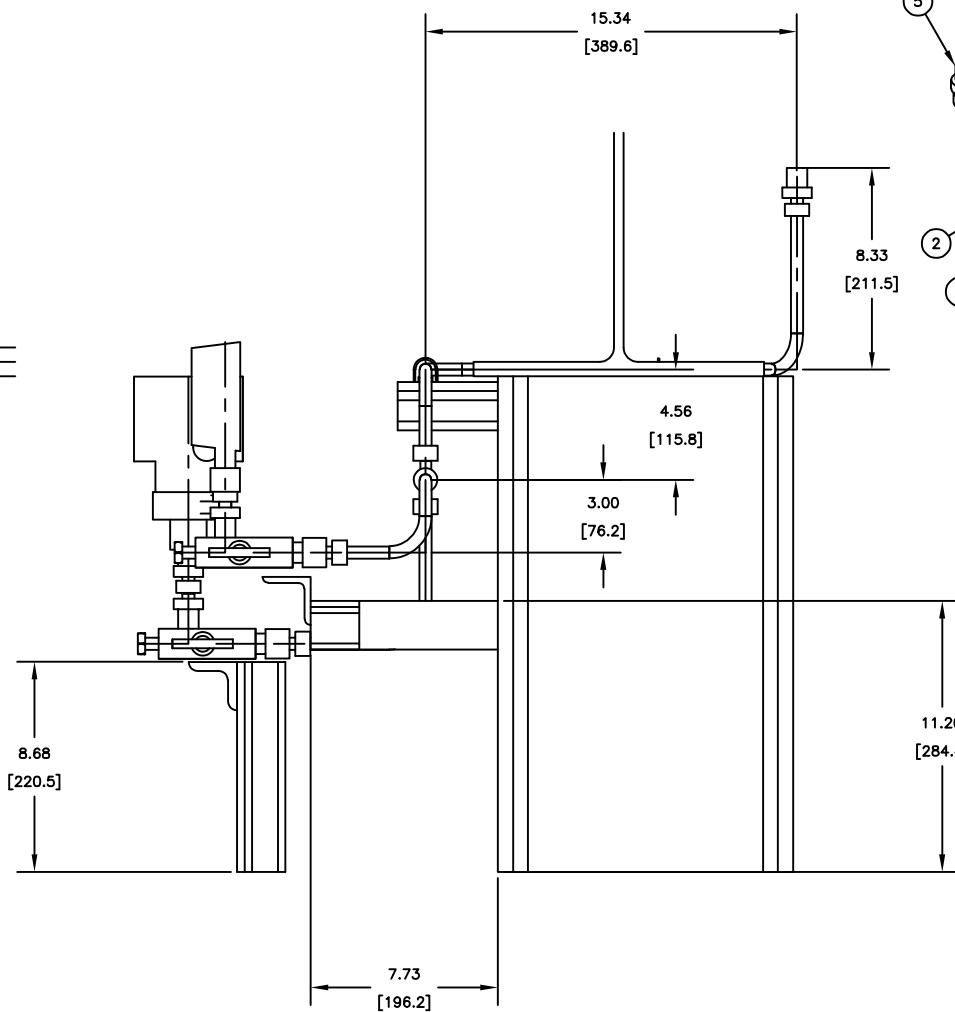
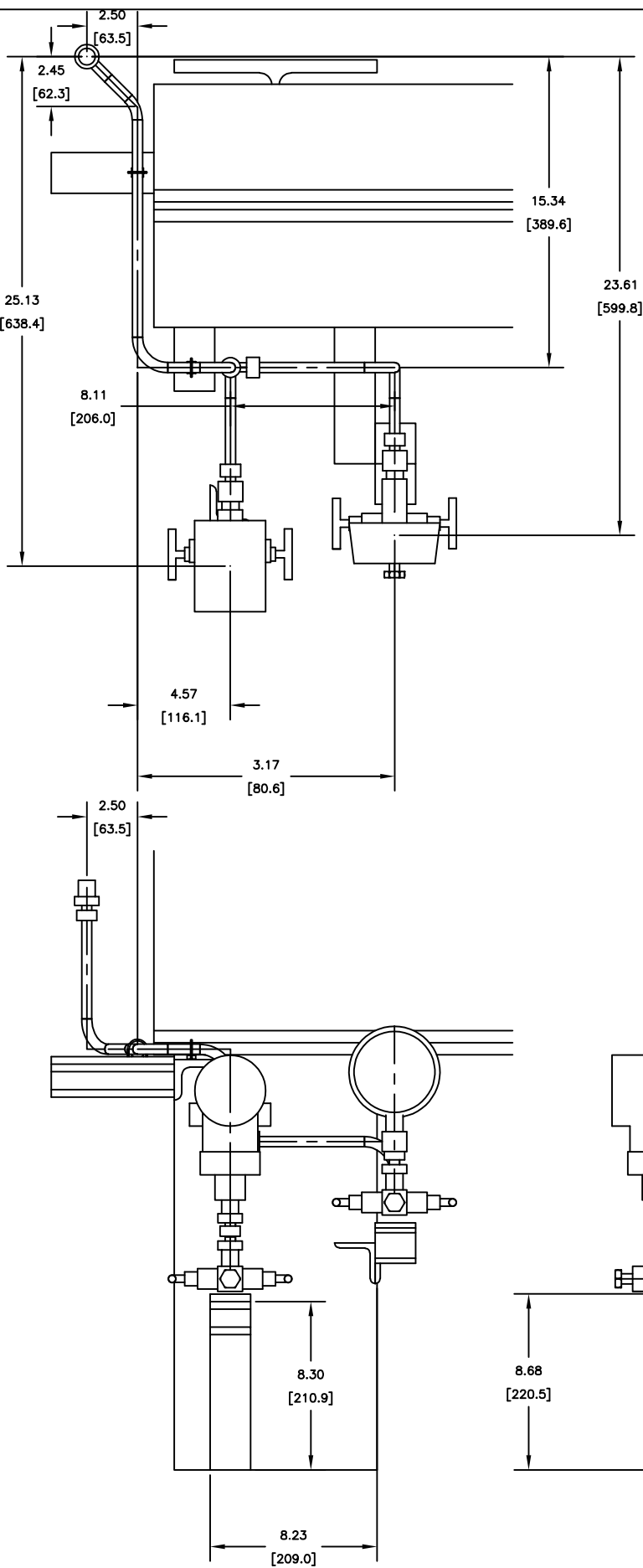
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DRAWN:	
CHECKED:	CLIENT: GPIC
APPROVED:	PO No.: PT-MAPO-000-3029
	UNIT No.: PK-6101
	SERVICE: PROPYLENE REFRIGERATION PACKAGE
	LOCATION: -----
JOB NO.:	TITLE: DIR-61121-2
SIZE: D	HOOKUP DIAGRAM
SHEET:	CUSTOMER DWG. NO.: ULT003- DIR-61121
	REV. 00



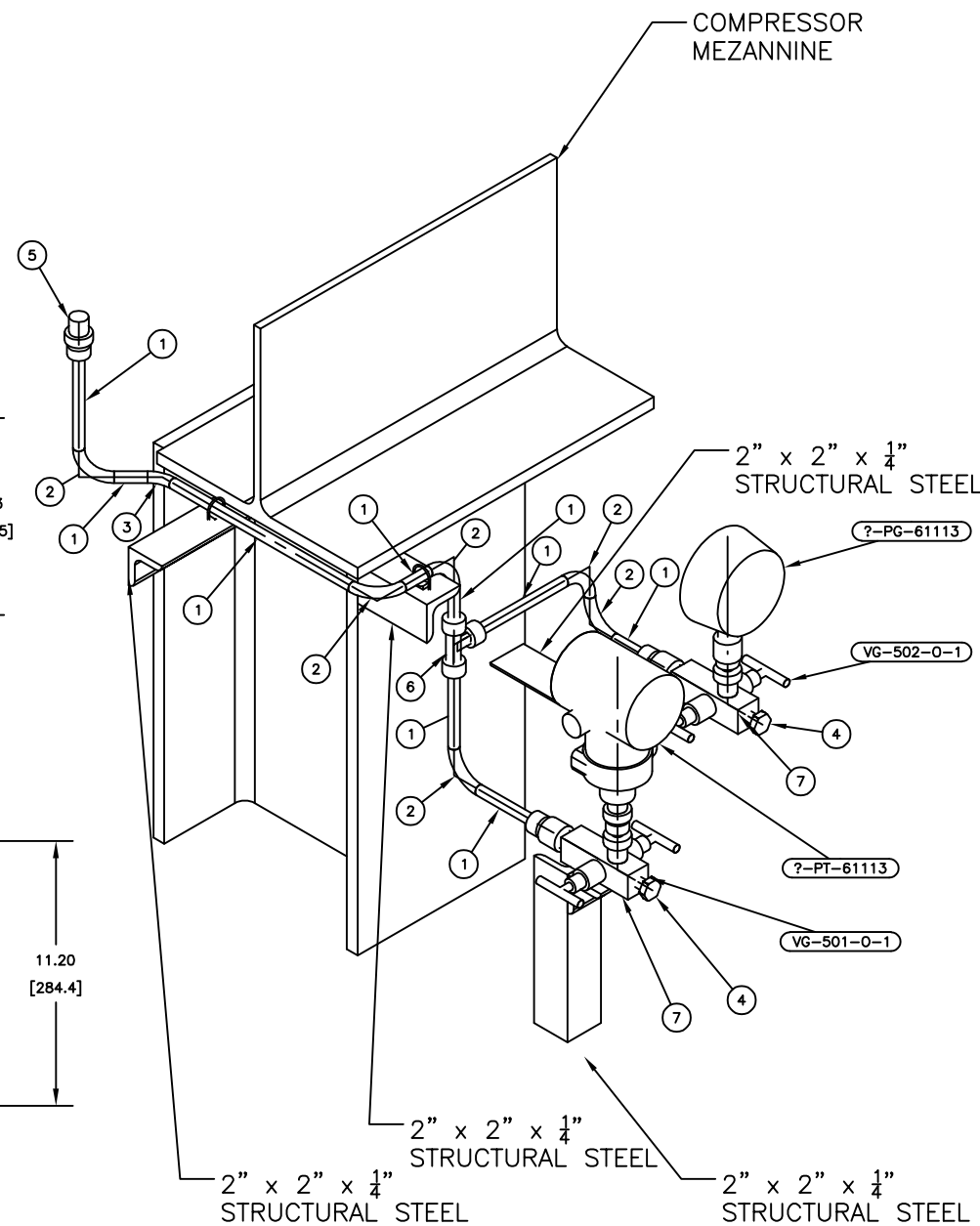
BILL OF MATERIALS			
PIPE			
ID	QTY	ND	DESCRIPTION
1	5'-0 7/8"	1/2"	TUBING, ASTM A269, SEAMLESS - 316SS
FITTINGS			
ID	QTY	ND	DESCRIPTION
2	1	1/2"	BEND 45 5R, TUBING, ASTM A269, 316SS
3	7	1/2"	BEND 90 5R, TUBING, ASTM A269, 316SS
4	2	1/2"	PLUG, HEX HEAD, MPT, ASME B16.11
5	1	3/4"x1/2"	Male Connector 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



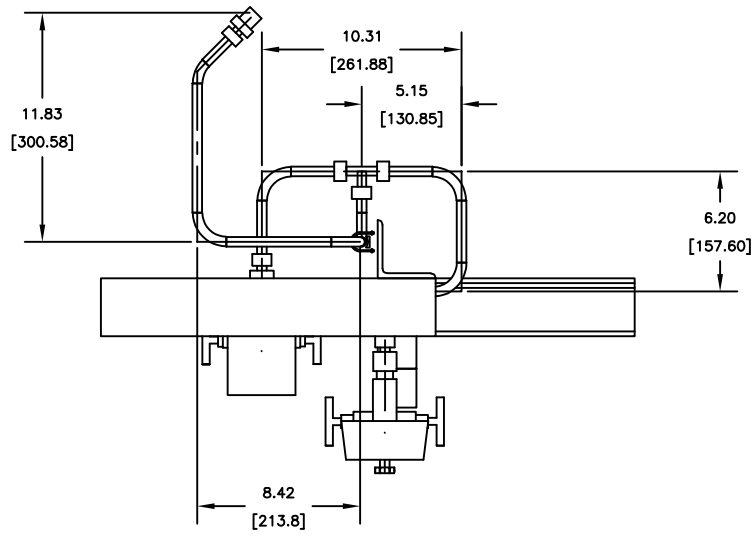
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	DESCRIPTION	DATE	BY
DATE:			
DRAWN:			
CHECKED:	CLIENT: GPIC		
APPROVED:	PO No.: PT-MAPO-000-3029		
	UNIT No.: PK-6101		
	SERVICE: PROPYLENE REFRIGERATION PACKAGE		
	LOCATION: -----		
JOB NO.:	TITLE: PT-61111		
SIZE: D	HOOKUP DIAGRAM		
SHEET:	CUSTOMER DWG. NO.: ULT003- PT-61111	REV.	00



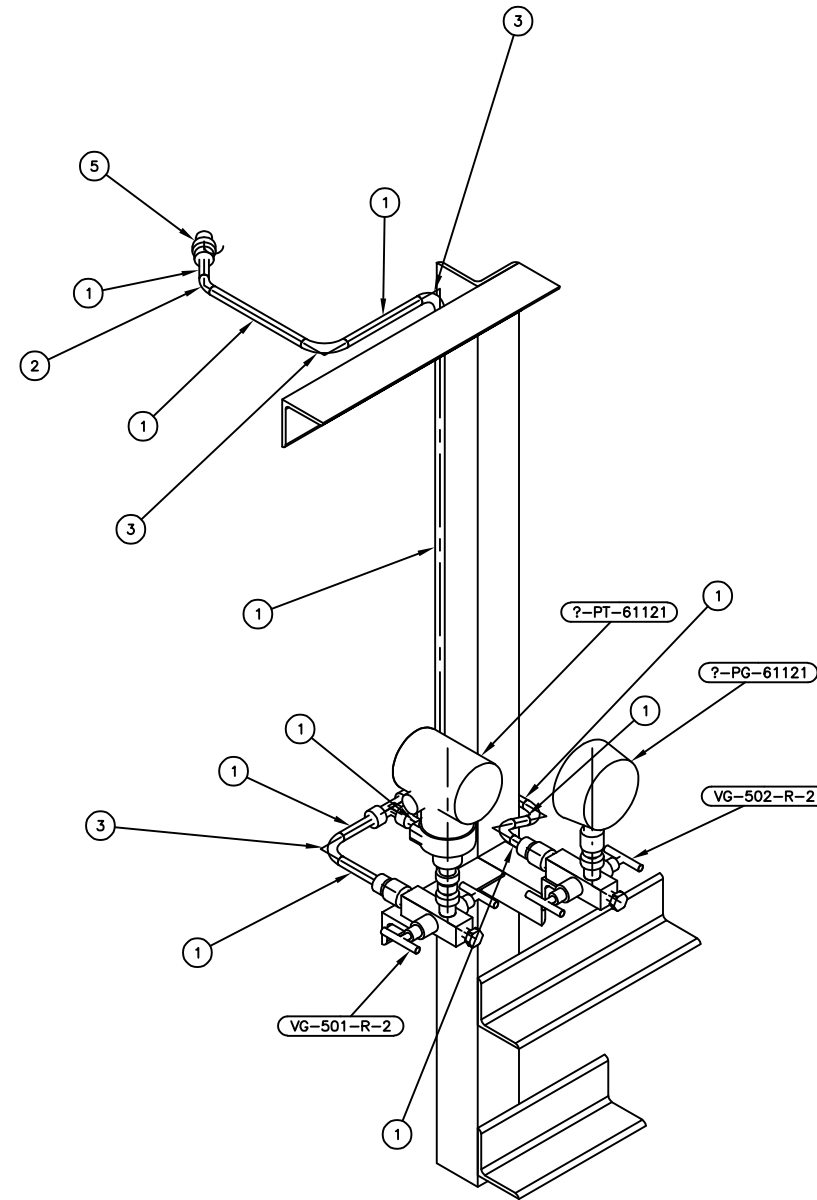
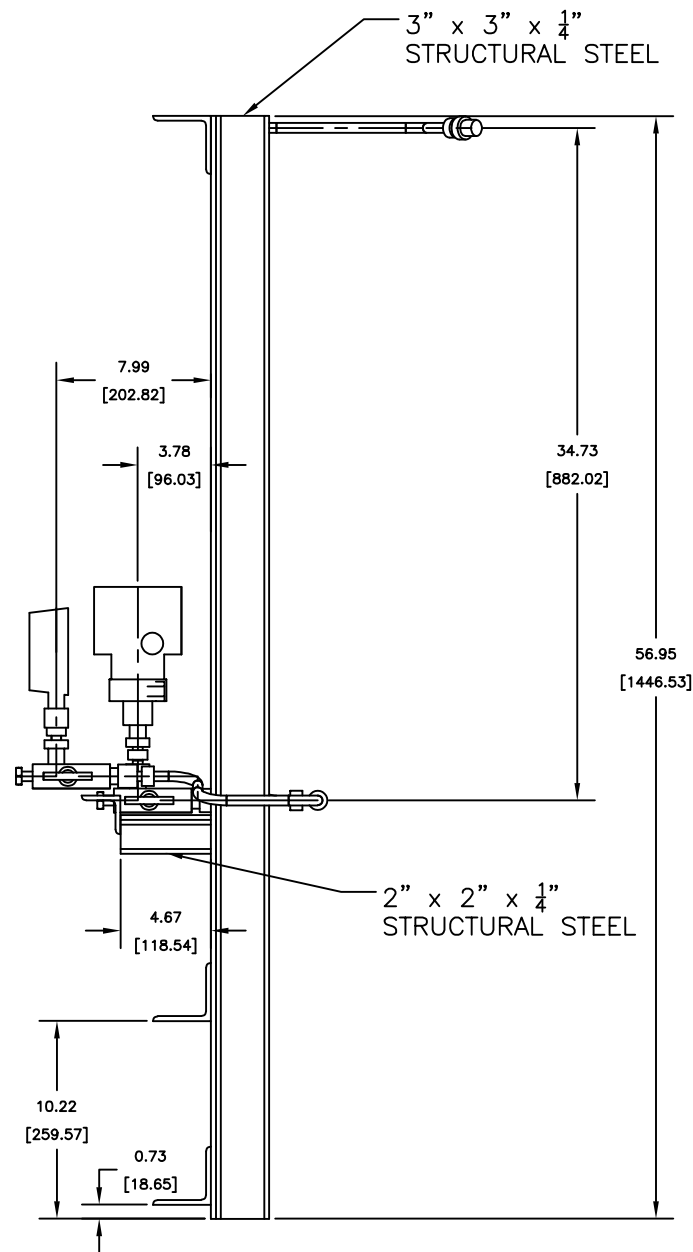
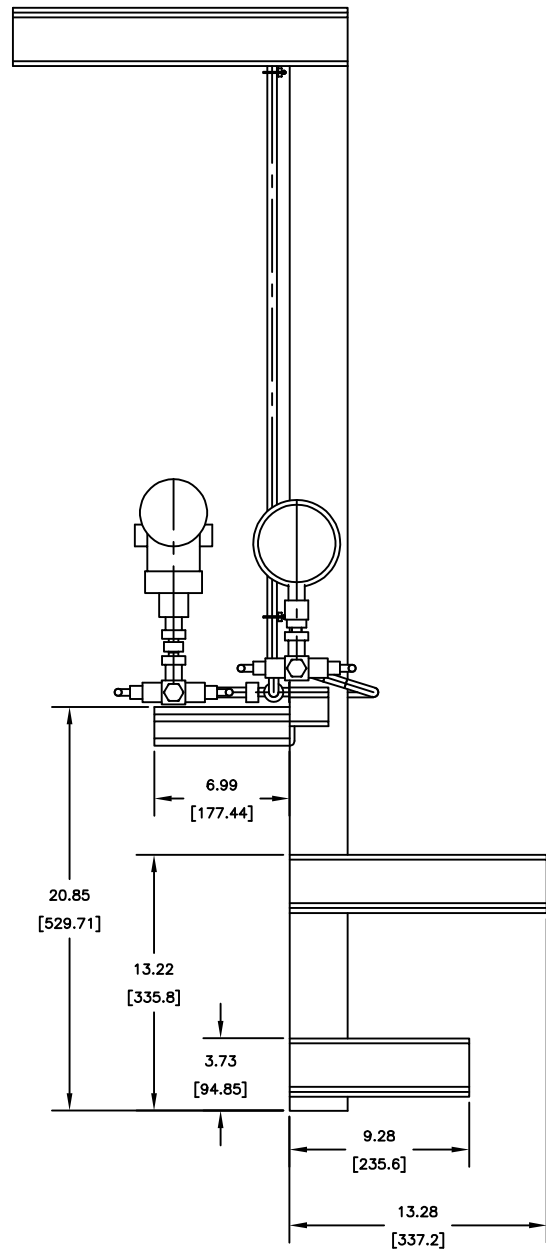
BILL OF MATERIALS			
PIPE			
ID	QTY	ND	DESCRIPTION
1	3'-0	1/2"	TUBING, ASTM A269, SEAMLESS -- 316SS
FITTINGS			
ID	QTY	ND	DESCRIPTION
2	6	1/2"	BEND 90 5R, TUBING, ASTM A269, 316SS
3	1	1/2"	BEND 45 5R, TUBING, ASTM A269, 316SS
4	2	1/2"	PLUG, HEX HEAD, MPT, ASME B16.11
5	1	3/4"x1/2"	Male Connector 3/4" 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



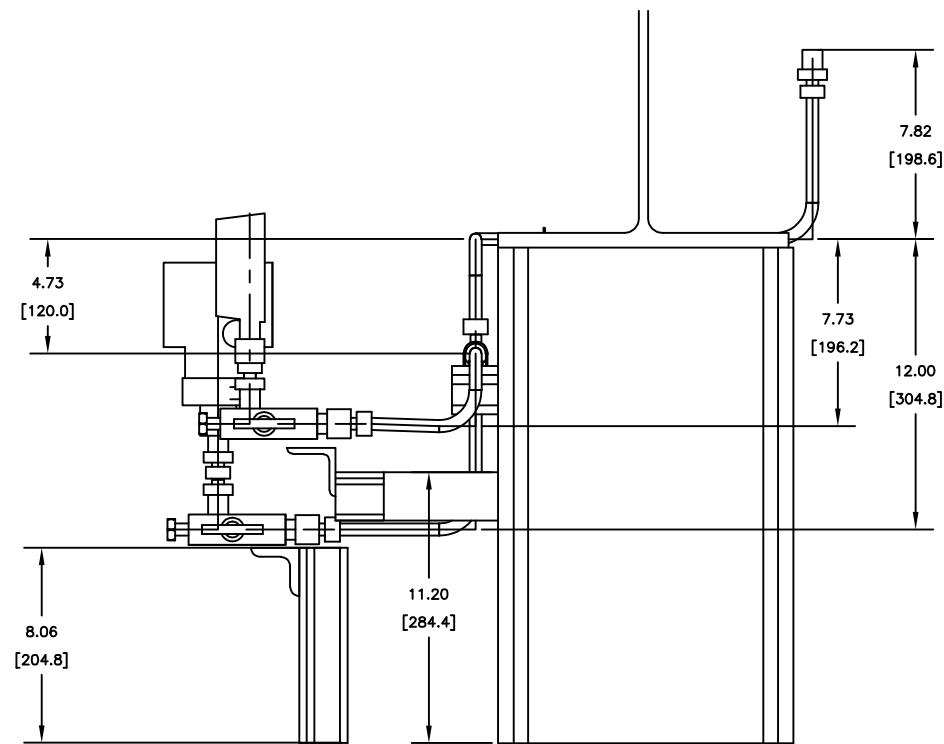
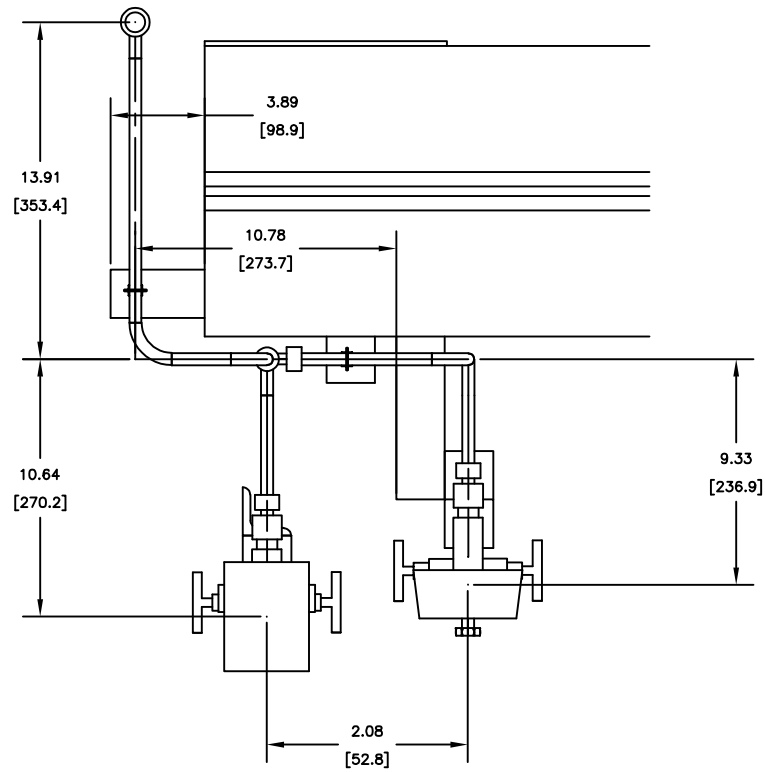
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REV	DESCRIPTION	DATE	BY
DATE:			
DRAWN:			
CHECKED:	CLIENT: GPIC		
APPROVED:	PO No.: PT-MAPO-000-3029		
	UNIT No.: PK-6101		
	SERVICE: PROPYLENE REFRIGERATION PACKAGE		
	LOCATION: -----		
JOB NO.: ULT003-	TITLE: PT-61113		
SIZE: D	HOOKUP DIAGRAM		
SHEET:	CUSTOMER DWG. NO.: PT-61113	REV.	00



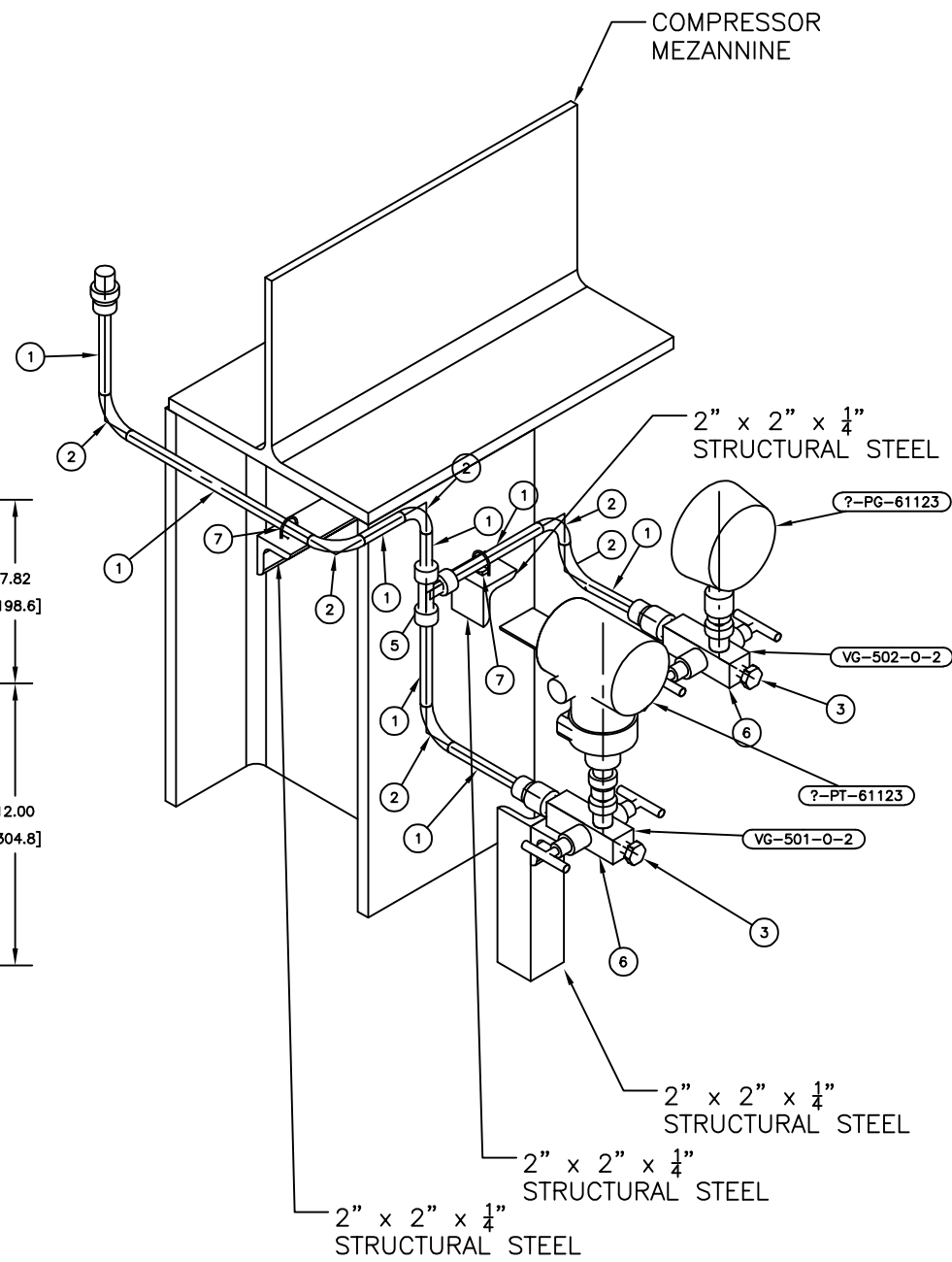
BILL OF MATERIALS			
PIPE			
ID	QTY	ND	DESCRIPTION
1	5'-5 9/16"	1/2"	TUBING, ASTM A269, SEAMLESS -- 316SS
FITTINGS			
ID	QTY	ND	DESCRIPTION
2	1	1/2"	BEND 45 5R, TUBING, ASTM A269, 316SS
3	7	1/2"	BEND 90 5R, TUBING, ASTM A269, 316SS
4	2	1/2"	PLUG, HEX HEAD, MPT, ASME B16.11
5	1	3/4"x1/2"	Male Connector 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



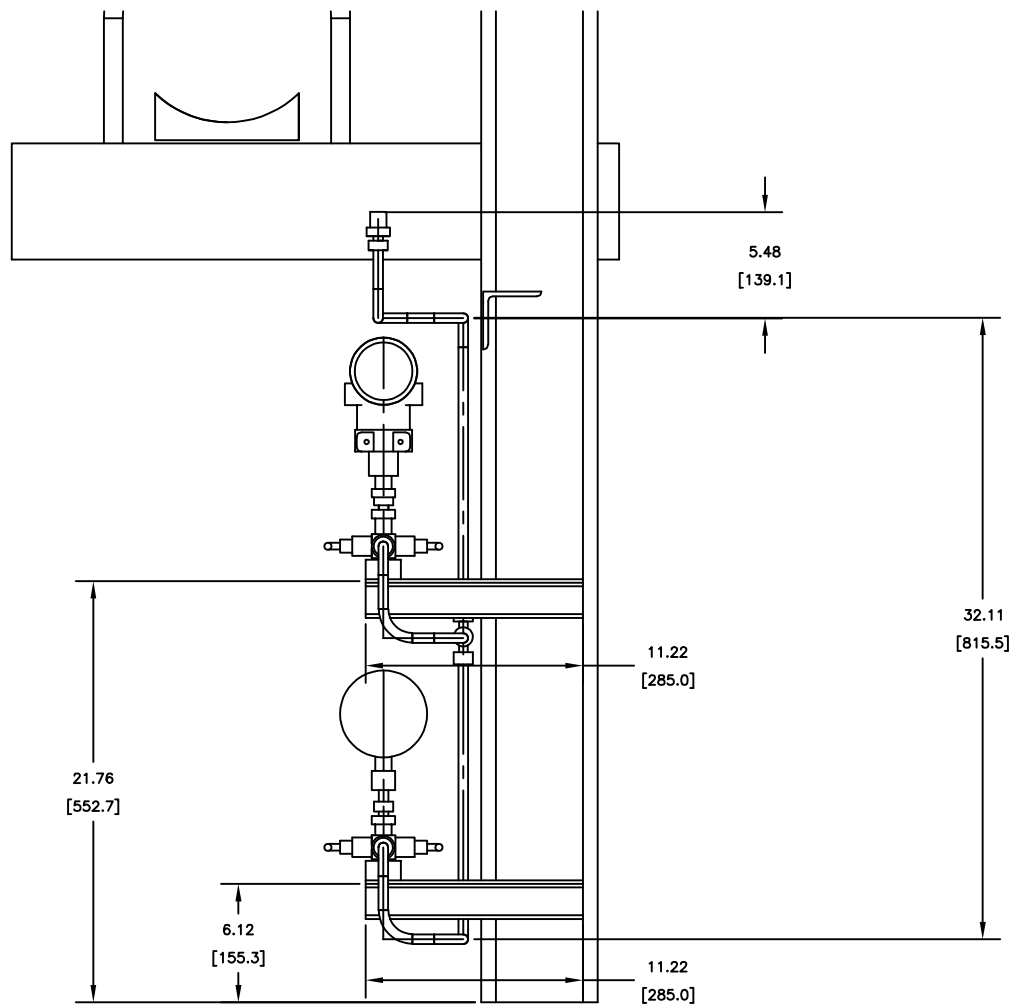
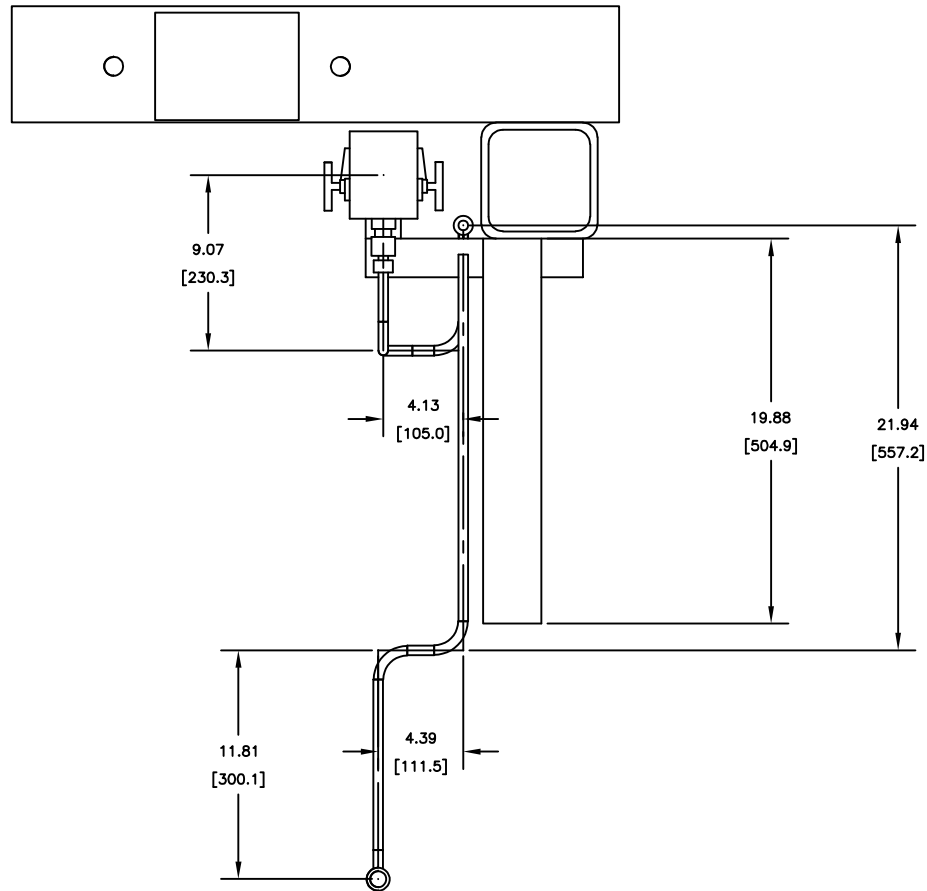
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DRAWN:			
CHECKED:	CLIENT: GPIC		
APPROVED:	PO No.: PT-MAPO-000-3029		
	UNIT No.: PK-6101		
	SERVICE: PROPYLENE REFRIGERATION PACKAGE		
	LOCATION: -----		
JOB NO.:	TITLE: PT-61121		
SIZE: D	HOOKUP DIAGRAM		
SHEET:	CUSTOMER DWG. NO.: ULT003- PT-61121	REV.:	00



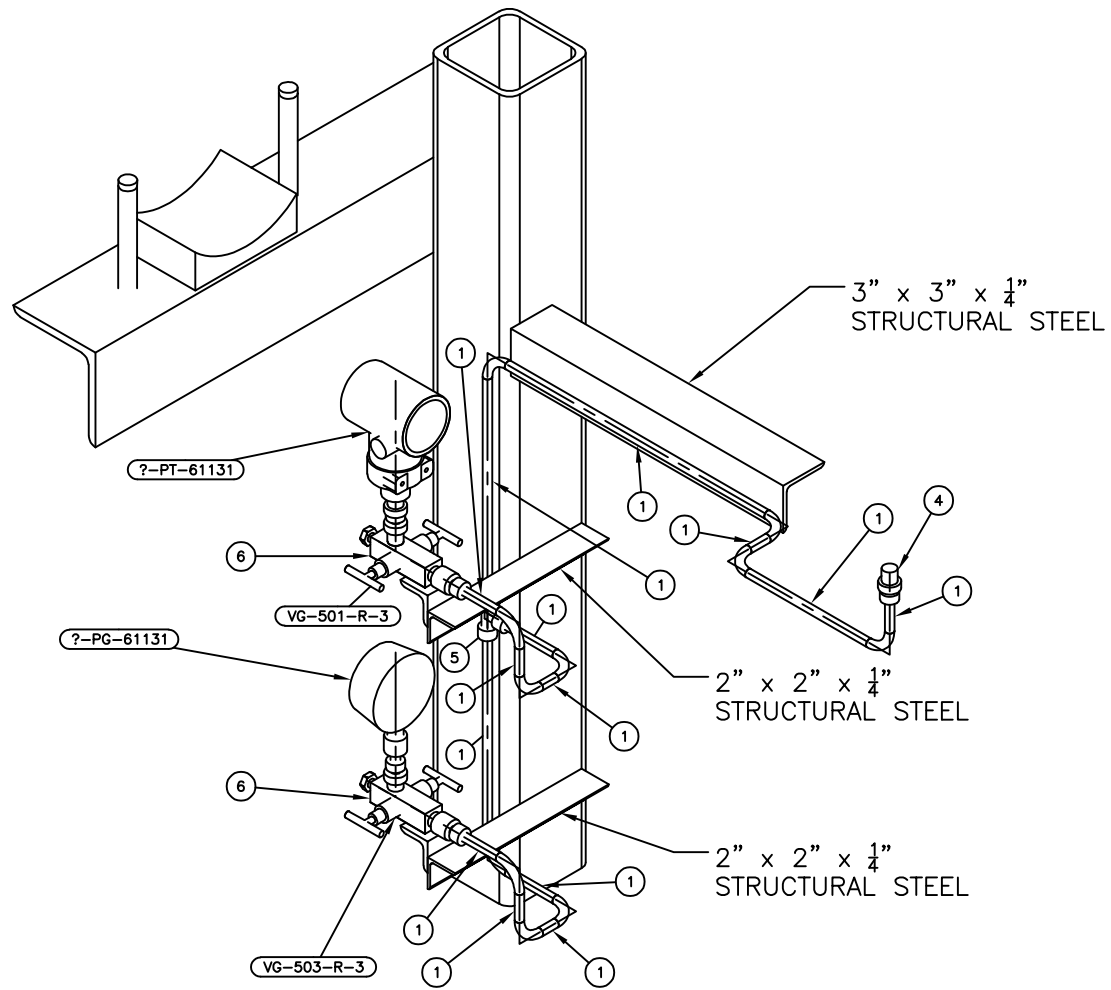
BILL OF MATERIALS			
PIPE			
ID	QTY	ND	DESCRIPTION
1	3'-2 3/4"	1/2"	TUBING, ASTM A269, SEAMLESS - 316SS
FITTINGS			
ID	QTY	ND	DESCRIPTION
2	6	1/2"	BEND 90 5R, TUBING, ASTM A269, 316SS
3	2	1/2"	PLUG, HEX HEAD, MPT, ASME B16.11
4	1	3/4"x1/2"	Male Connector 3/4" NPT(M) x 1/2" T
5	1	1/2"	Union_TEE_1/4" to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



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-61123		
SIZE: D	HOOKUP DIAGRAM		
SHEET:	CUSTOMER DWG. NO.: ULT003- PT-61123	REV.:	00

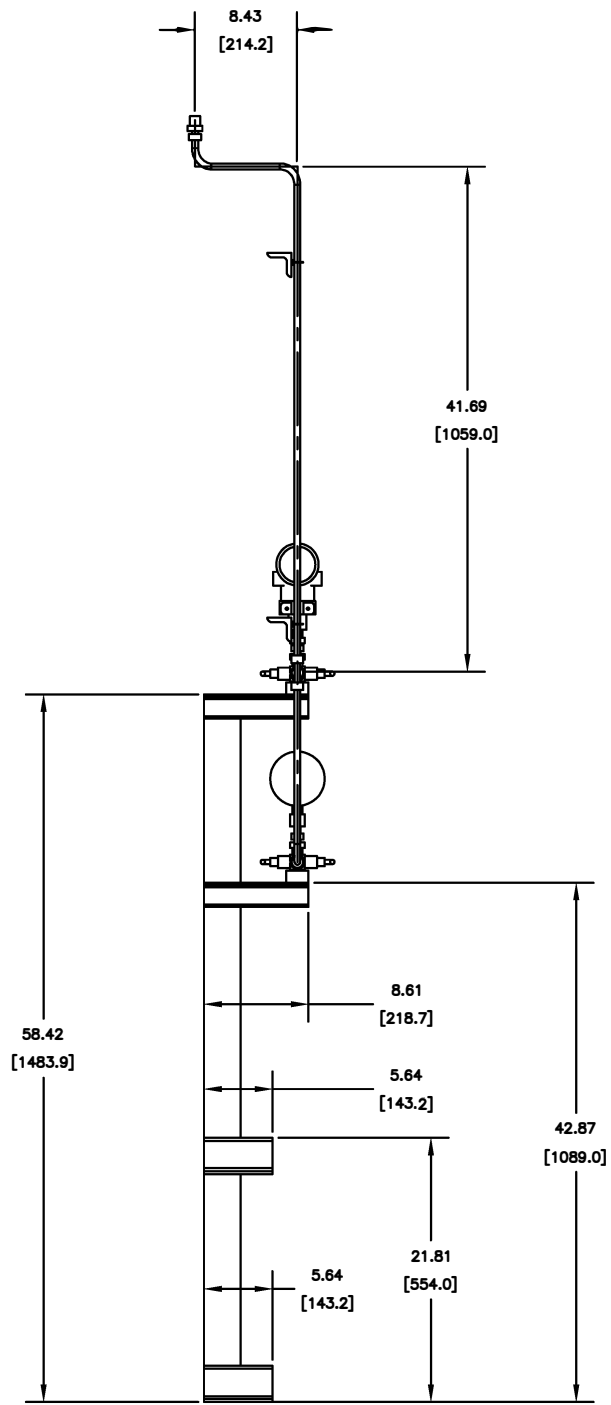
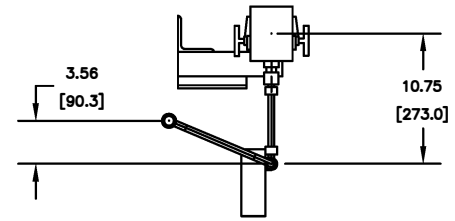
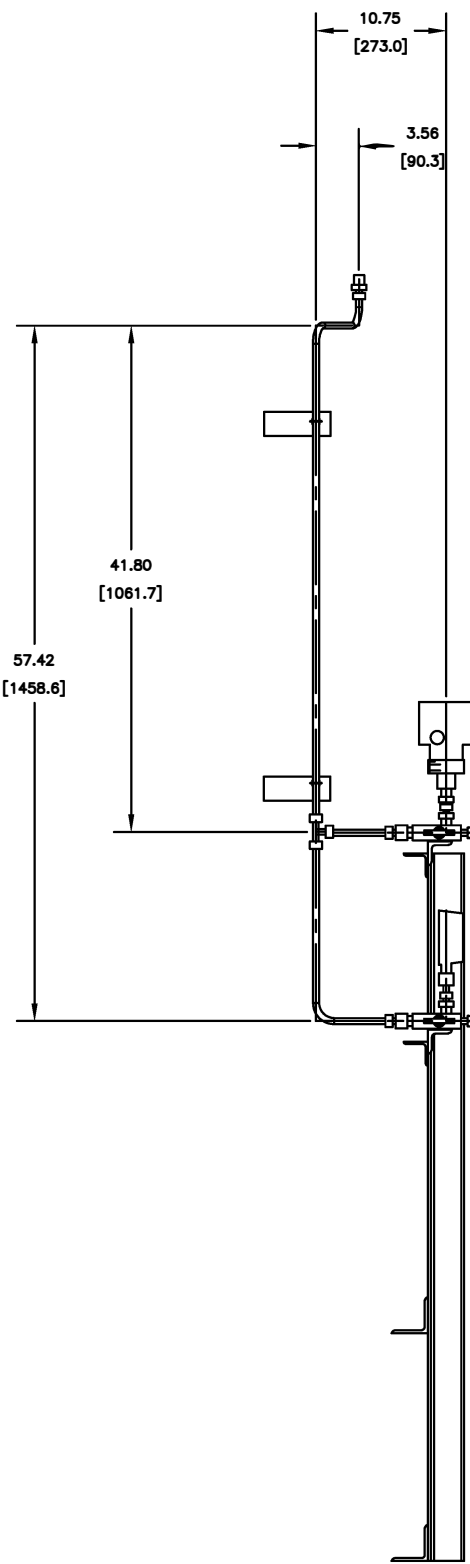


BILL OF MATERIALS			
PIPE			
ID	QTY	ND	DESCRIPTION
1	6'-5 5/16"	1/2"	TUBING, ASTM A269, SEAMLESS - 316SS
FITTINGS			
ID	QTY	ND	DESCRIPTION
2	11	1/2"	BEND 90 5R, TUBING, ASTM A269, 316SS
3	2	1/2"	PLUG, HEX HEAD, MPT, ASME B16.11
4	1	3/4"x1/2"	Male Connector 3/4" NPT(M) x 1/2" T
5	1	1/2"	Union_TEE_1/4"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

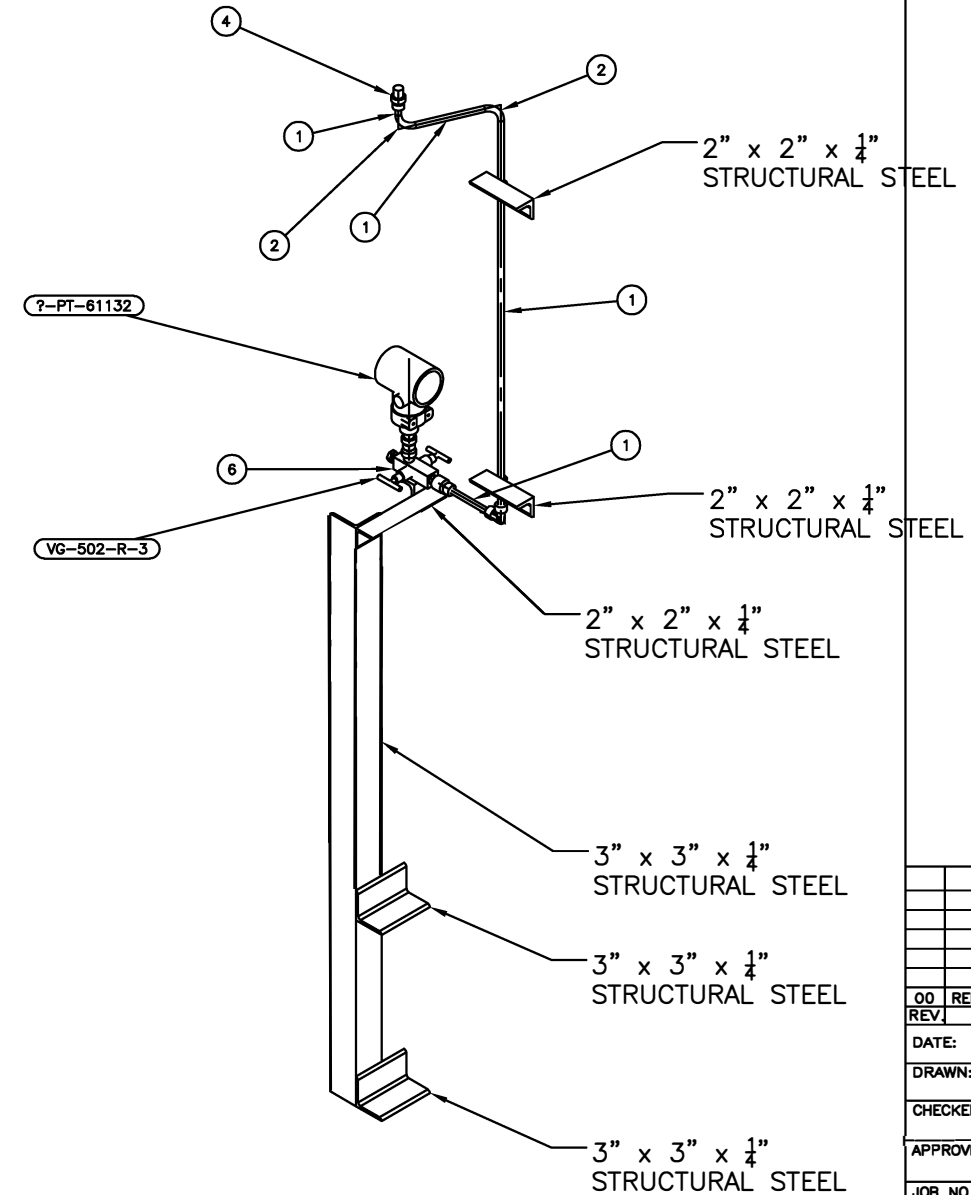


REV	DESCRIPTION	DATE	BY
00	RELEASED FOR CONSTRUCTION	11/28/2025	FAD

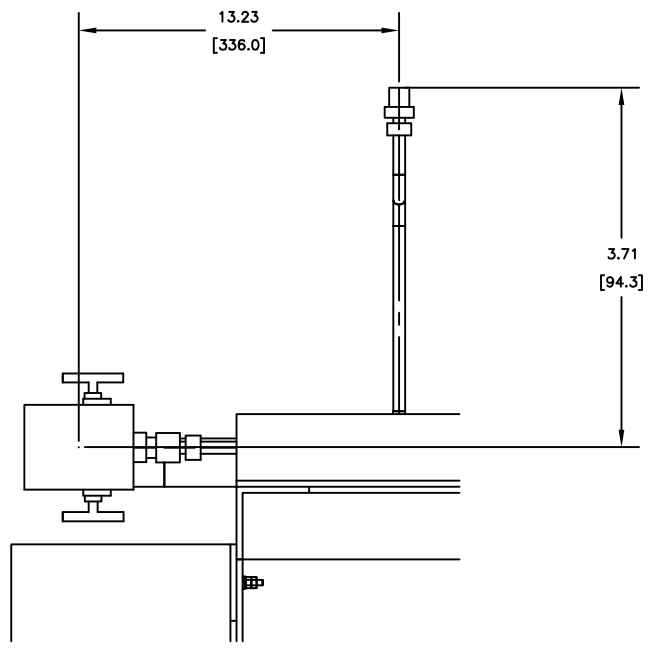
DATE:	
DRAWN:	
CHECKED:	CLIENT: GPIC PO No.: PT-MAPO-000-3029
APPROVED:	UNIT No.: PK-6101 SERVICE: PROPYLENE REFRIGERATION PACKAGE LOCATION: -----
JOB NO.:	TITLE: PT-61131
SIZE: D	HOOKUP DIAGRAM
SHEET:	CUSTOMER DWG. NO.: ULT003- PT-61131
	REV. 00



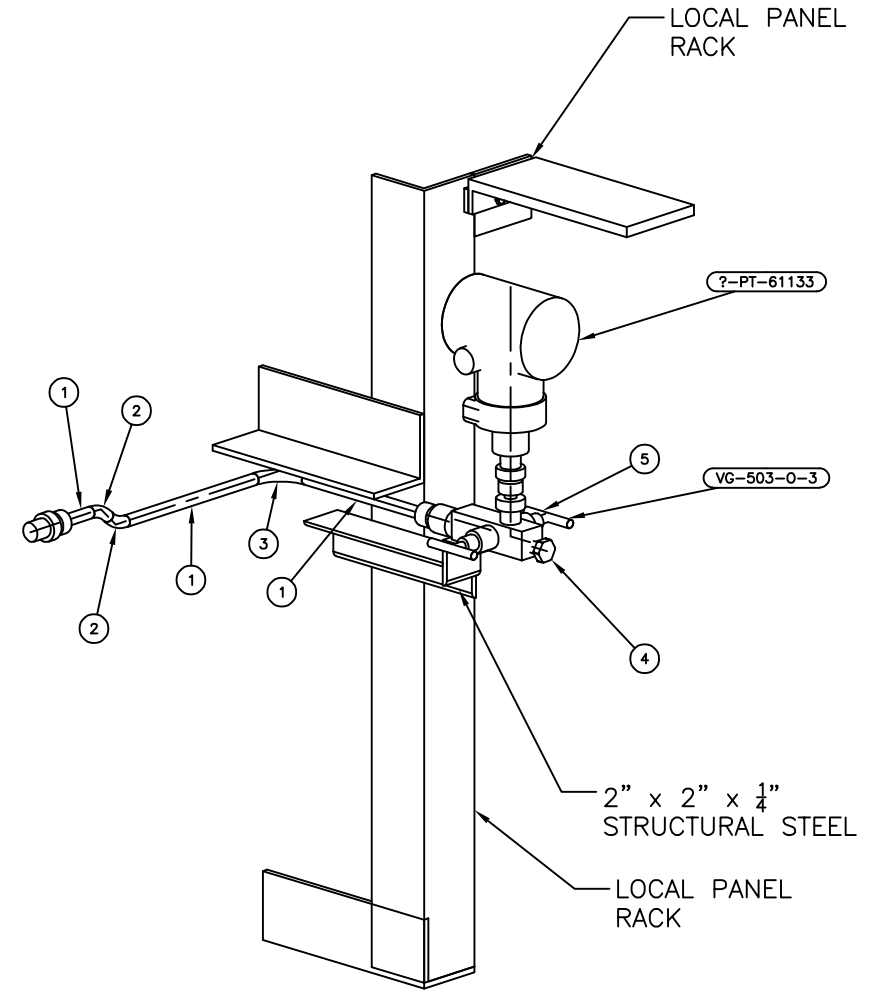
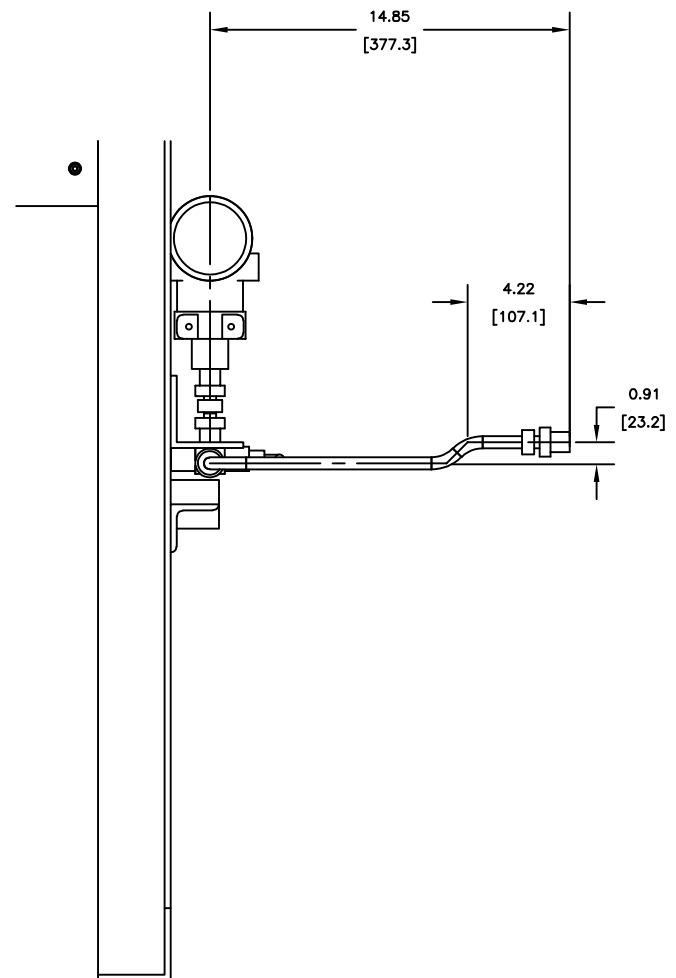
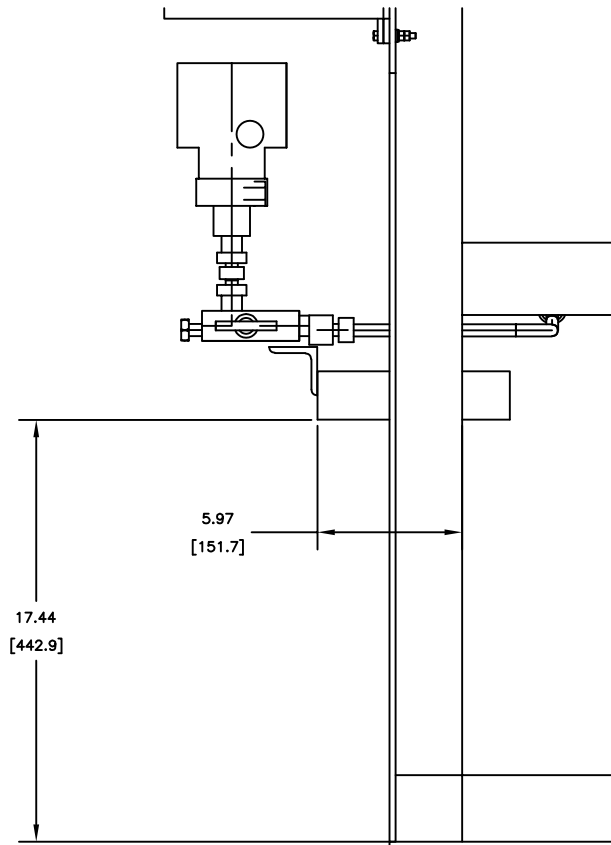
BILL OF MATERIALS			
PIPE			
ID	QTY	ND	DESCRIPTION
1	5'-9 1/8"	1/2"	TUBING, ASTM A269, SEAMLESS - 316SS
FITTINGS			
ID	QTY	ND	DESCRIPTION
2	3	1/2"	BEND 90 5R, TUBING, ASTM A269, 316SS
3	2	1/2"	PLUG, HEX HEAD, MPT, ASME B16.11
4	1	3/4"x1/2"	Male Connector 3/4" NPT(M) x 1/2" T
5	1	1/2"	Union_TEE_1/4" to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



00	RELEASED FOR CONSTRUCTION	11/28/2025	FAD
REV	DESCRIPTION	DATE	BY
DATE:			
DRAWN:			
CHECKED:			
APPROVED:			
JOB NO.:	PT-61132		
SIZE:	D		
SHEET:	CUSTOMER DWG. NO.:	REV.	
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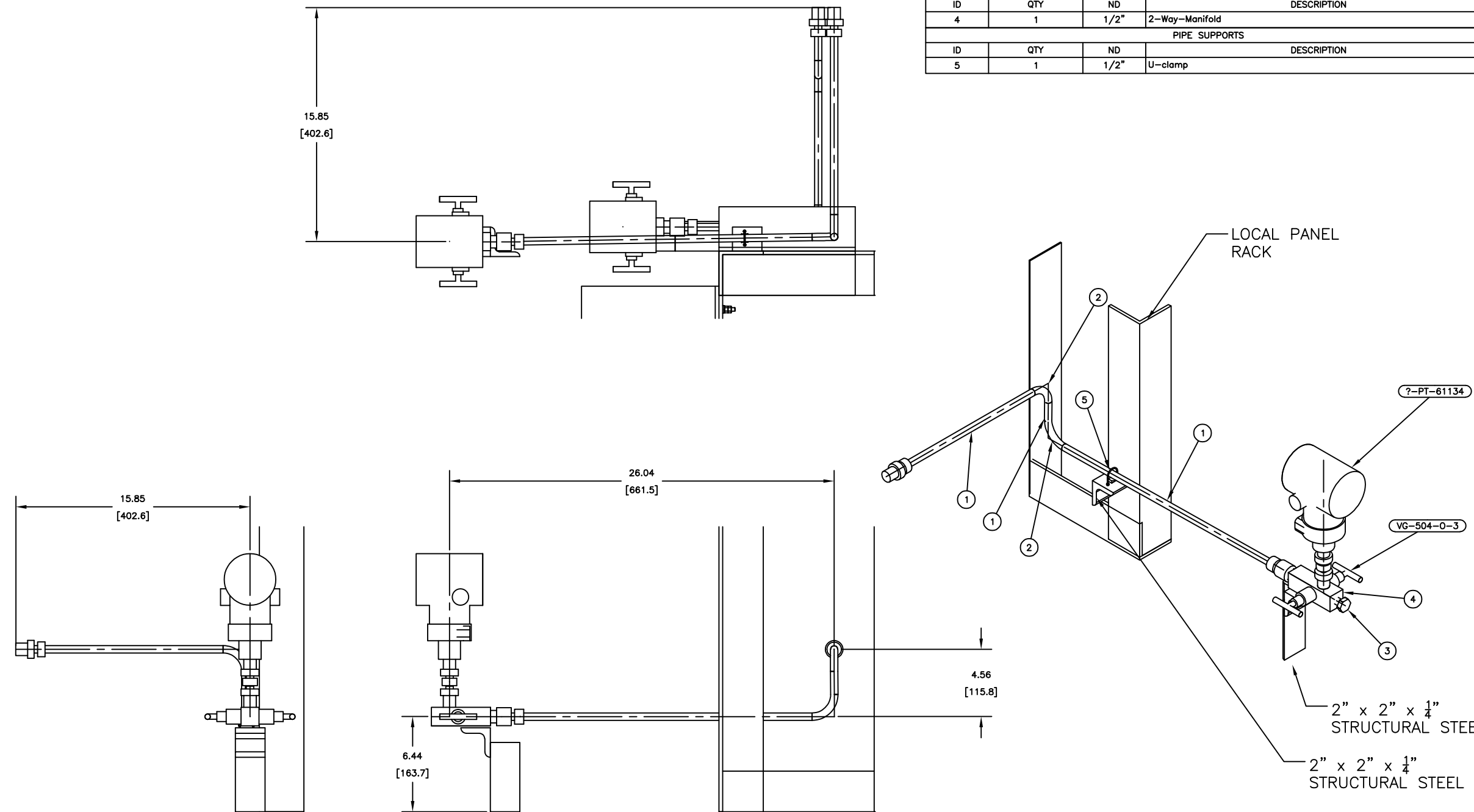


BILL OF MATERIALS			
PIPE			
ID	QTY	ND	DESCRIPTION
1	1'-4 7/16"	1/2"	TUBING, ASTM A269, SEAMLESS - 316SS
FITTINGS			
ID	QTY	ND	DESCRIPTION
2	2	1/2"	BEND 45 5R, TUBING, ASTM A269, 316SS
3	1	1/2"	BEND 90 5R, TUBING, ASTM A269, 316SS
4	1	1/2"	PLUG, HEX HEAD, MPT, ASME B16.11
VALVES			
ID	QTY	ND	DESCRIPTION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

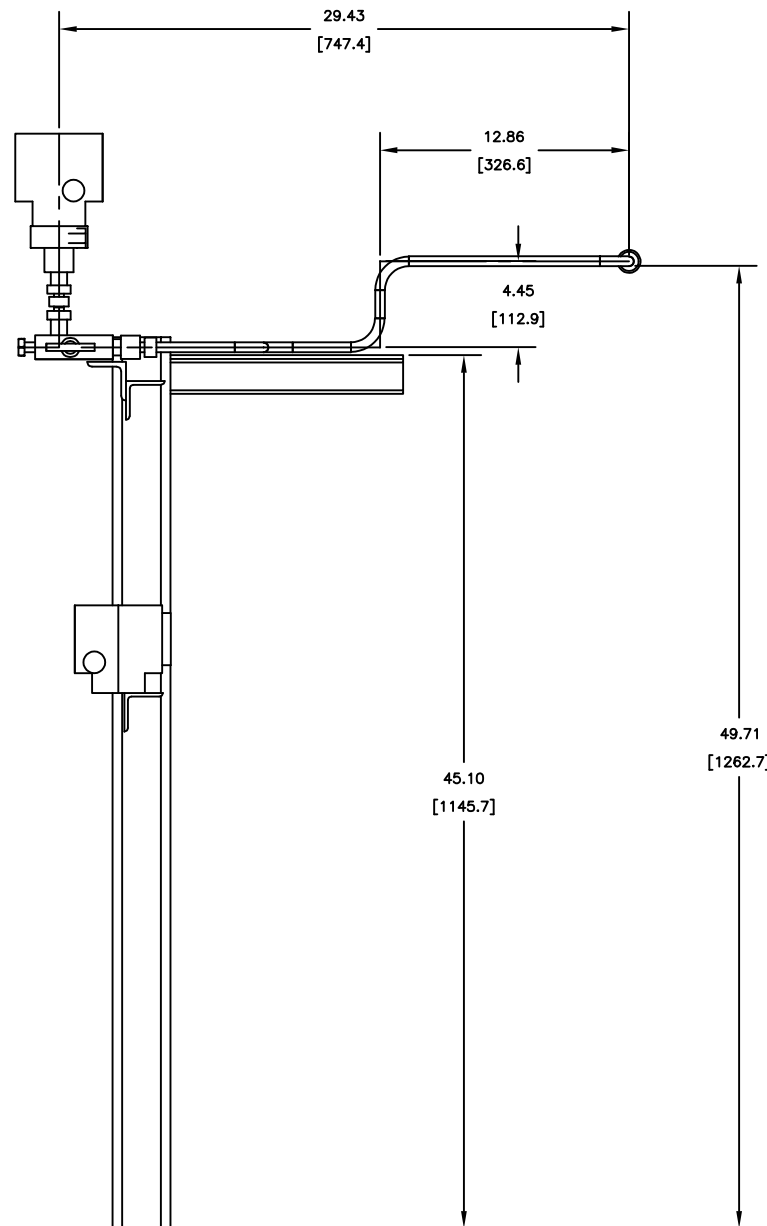
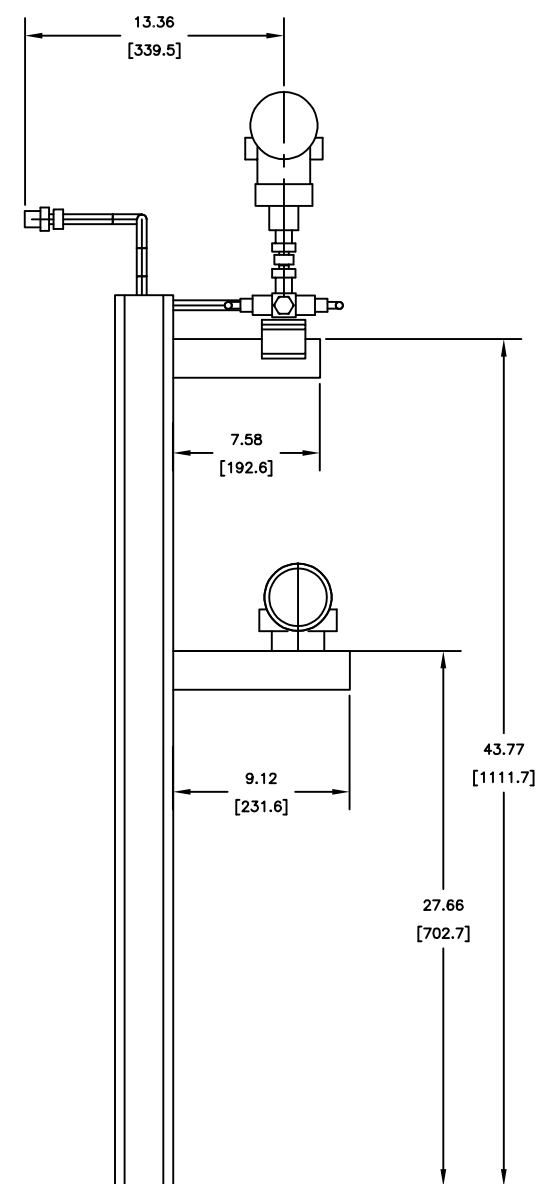
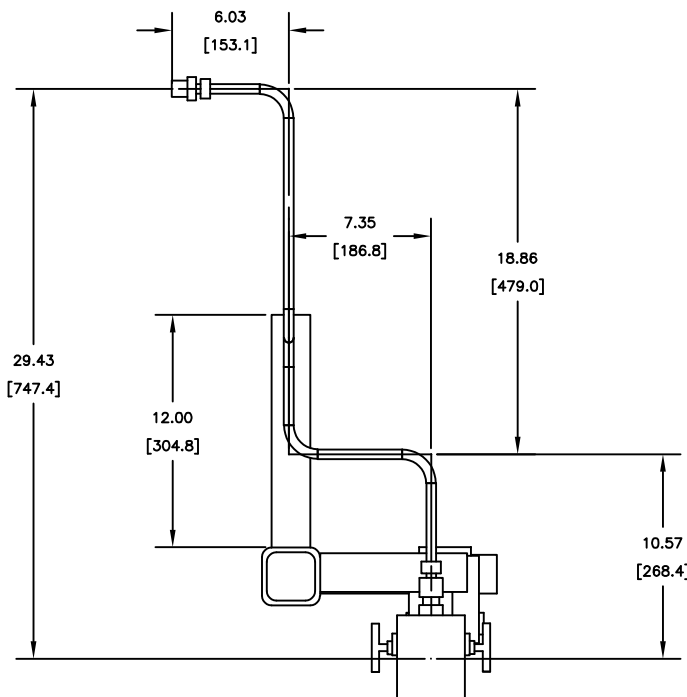


00	RELEASED FOR CONSTRUCTION	11/28/2025	FAD
REV	DESCRIPTION	DATE	BY
DATE:			
DRAWN:			
CHECKED:	CLIENT: GPIC		
APPROVED:	PO No.: PT-MAPO-000-3029		
	UNIT No.: PK-6101		
	SERVICE: PROPYLENE REFRIGERATION PACKAGE		
	LOCATION: -----		
JOB NO.: ULT003-	TITLE: PT-61133		
SIZE: D	HOOKUP DIAGRAM		
SHEET:	CUSTOMER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

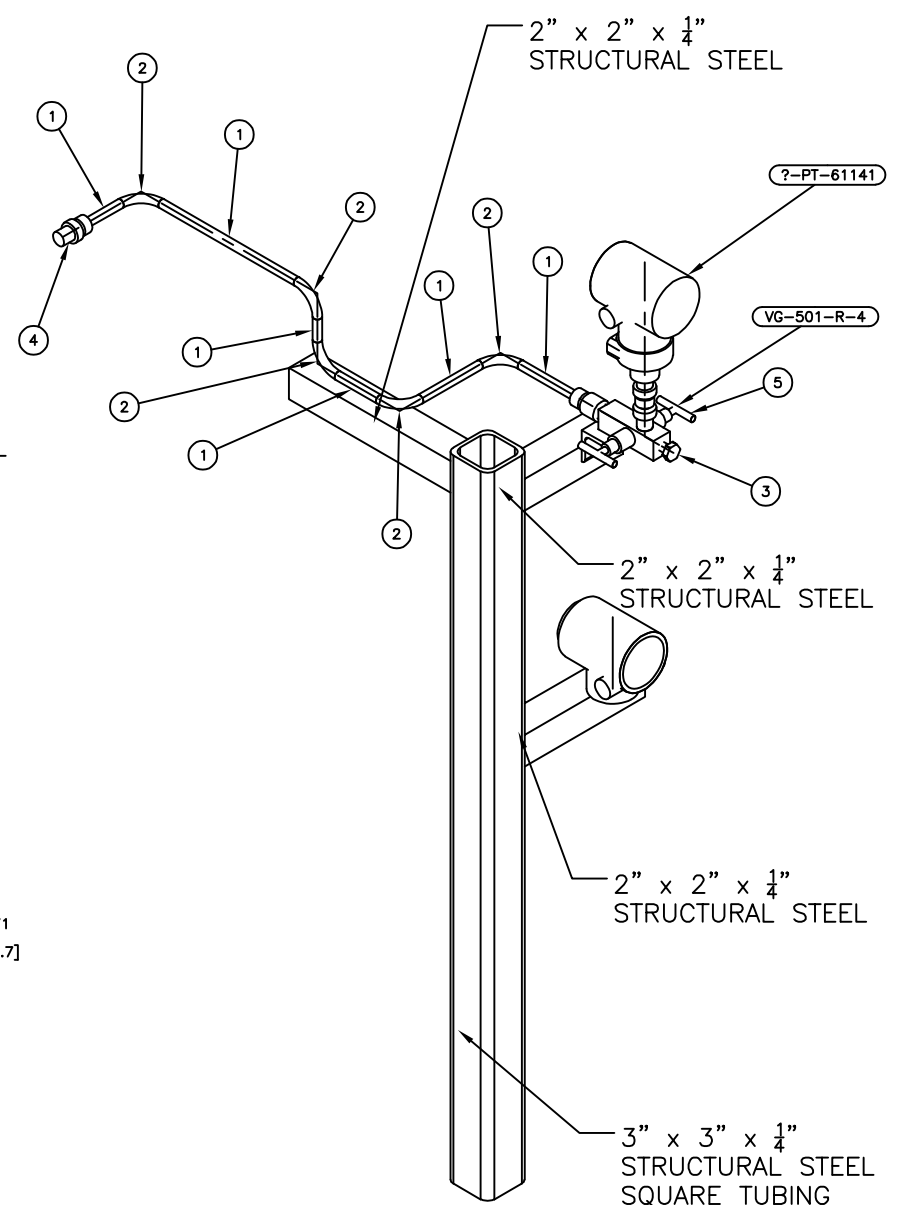
BILL OF MATERIALS			
PIPE			
ID	QTY	ND	DESCRIPTION
1	2'-9 5/8"	1/2"	TUBING, ASTM A269, SEAMLESS - 316SS
FITTINGS			
ID	QTY	ND	DESCRIPTION
2	2	1/2"	BEND 90 5R, TUBING, ASTM A269, 316SS
3	1	1/2"	PLUG, HEX HEAD, MPT, ASME B16.11
VALVES			
ID	QTY	ND	DESCRIPTION
4	1	1/2"	2-Way-Manifold
PIPE SUPPORTS			
ID	QTY	ND	DESCRIPTION
5	1	1/2"	U-clamp



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-61134		
SIZE: D	HOOKUP DIAGRAM		
SHEET:	CUSTOMER DWG. NO.: ULT003- PT-61134	REV.:	00

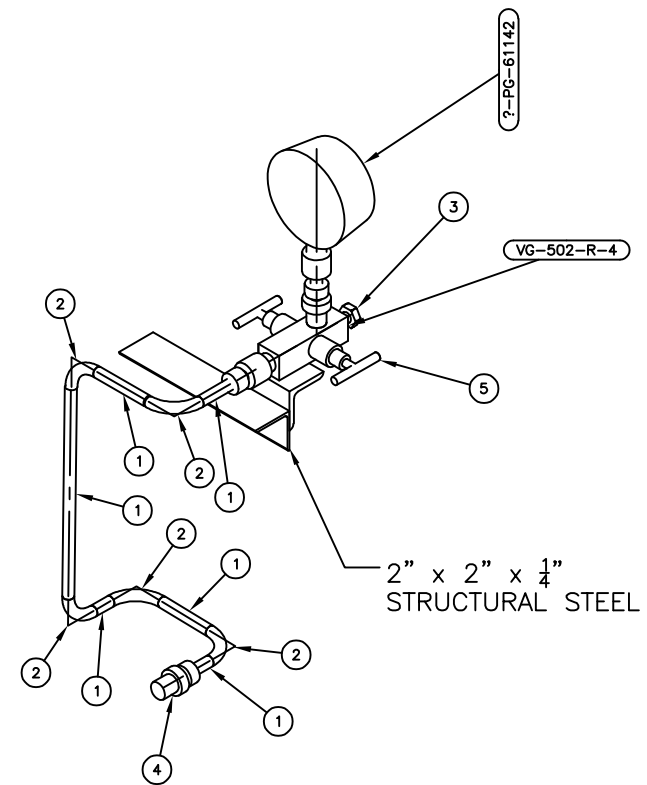
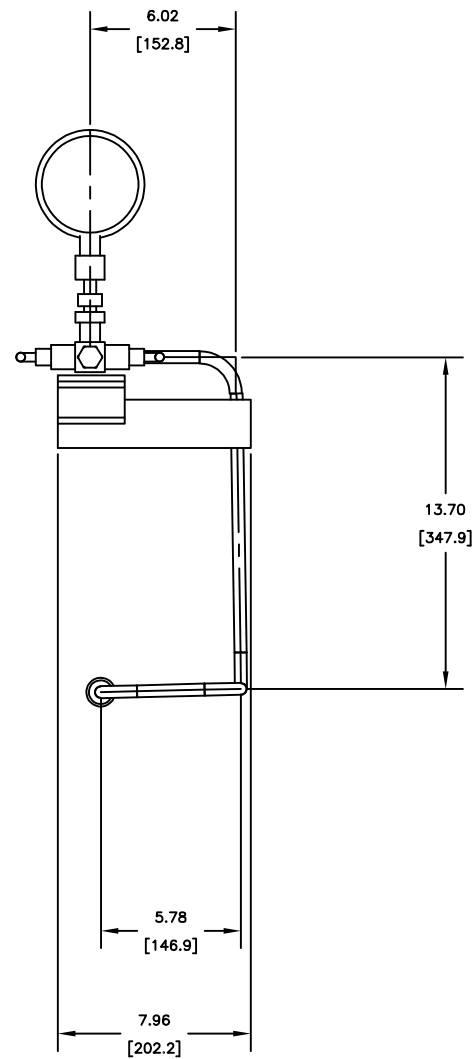
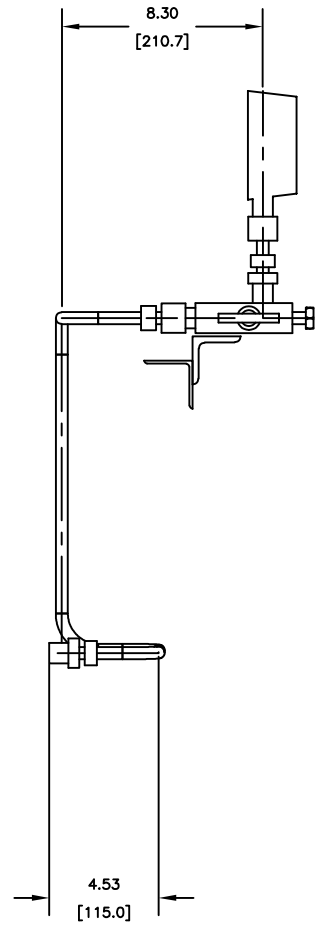
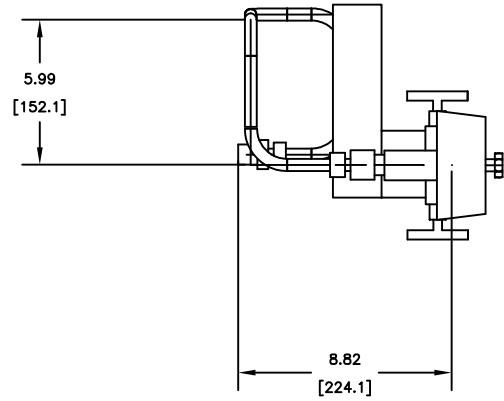


BILL OF MATERIALS			
PIPE			
ID	QTY	ND	DESCRIPTION
1	2'-2"	1/2"	TUBING, ASTM A269, SEAMLESS -- 316SS
FITTINGS			
ID	QTY	ND	DESCRIPTION
2	5	1/2"	BEND 90 5R, TUBING, ASTM A269, 316SS
3	1	1/2"	PLUG, HEX HEAD, MPT, ASME B16.11
4	1	3/4"x1/2"	Male Connector 3/4" NPT(M) x 1/2" T
VALVES			
ID	QTY	ND	DESCRIPTION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



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.: ULT003- PT-61141	REV.	00

BILL OF MATERIALS			
PIPE			
ID	QTY	ND	DESCRIPTION
1	1'-8	15/16"	1/2" TUBING, ASTM A269, SEAMLESS - 316SS
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



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: PG-61142		
SIZE: D	HOOKUP DIAGRAM		
SHEET:	CUSTOMER DWG. NO.: ULT003- PT-61142	REV. 00	