Instrument Datasheet & Catalogs

Code1	☐ **No Comment/ Approved** (Applicable Only for "FOR REVIEW" and "For Approval" Documents) No comment and the document are released for Manufacturing.
Code2	■ **No Comment/ Approved with Note(s)** Vendor/Sub-Contractor shall correct, revise and resubmit the document. The document is released for Manufacturing if changes incorporated.
Code3	☐ **Commented** Vendor/Sub-Contractor shall correct, revise and resubmit the document by the date specified. The document shall be revised under the Status of "R: Revised Issue". All corrected documents shall be resubmitted before starting the Manufacturing Process.
Code 4	☐ **Not Accepted (Rejected)** Vendor/Sub-Contractor shall re-work / re-design / re-specify the contents of the document according to the comments / reasons for rejection. All corrected documents shall be resubmitted before starting the manufacturing. Vendor/Sub-Contractor shall not proceed with subsequent works of Material Supply or Manufacturing until receiving Code1/Code2 or No Code from PURCHASER. Vendor/Sub-Contractor shall resubmit the document with the same revision within 6 working days after receiving comments.
No code	☐ **No Code** (Applicable Only for "For Information" Documents and "As Built DWGs") Document has been submitted for PURCHASER's Information (FI). Consistency, completeness and correctness of document content is in Vendor/Sub-Contractor's responsibility.
Above checking results by EIED shall in no way relieve Vendor of any liability, obligation and responsibility out of the purchase order and the mutual agreement in writing.	
EIED Energy Industries Engineering & Design Co.	**Date:** Dec. 20 , 2025 **Dept.:** MA **Signature:** F.Hamooni

Rev.	DATE	PURPOSE OF ISSUE	PREPARED	CHECKED	APPROVED
01	8-Dec-25	IFR	N.B	F.T	A.M
00	12-Oct-25	IFR	N.B	F.T	A.M

Revision Index

Page	Rev. 00	Rev. 01	Rev. 02	Rev. 03	Rev. 04
1	X	X			
2	X	X			
3	X	X			
4	X	X			
5	X	X			
6	X	X			
7	X	X			
8	X	X			
9	X	X			
10	X	X			
11	X	X			
12	X	X			
13	X	X			
14	X	X			
15	X	X			
16	X	X			
17	X	X			
18	X	X			
19	X	X			
20	X	X			
21	X	X			
22	X	X			
23	X	X			
24	X	X			
25	X	X			
26	X	X			
27	X	X			
28	X				
29					
30					

Page	Rev00	Rev. 01	Rev. 02	Rev. 03	Rev. 04

PR General Comment:
Instrument data sheet will be finalized after finalization of "HAZOP Implementation Report" of package.
Vendor Reply: Noted

PR-01:
As per the HAZOP recommendation regarding the deletion of isolation valves for E-6104 and E-6102, two ROs have been added in the new revision of the vendor's P&ID.
The data sheet of these ROs shall be added to the instrument data sheet of the package.
Vendor Reply: Noted. Pleaserefer to 2 lats pages of revised data sheet

IN-01. Manufacturer and Model no. of all instruments in all sheets shall be specified after Vendor selection.
Vendor Reply: Noted

PRESSURE GAUGE

Document No: VD-GPIC-MA-3029-3029-0038

Documen

	BY	APP	DATE
	N.B	A.M	12.10.25
01	N.B	A.M	09.12.25

SEE LIST BELOW

2. Mounting — Surface ☐ — Local ☒ — Flush ☐
3. Dial — Diameter 6" (150) ☒ — Color: WHITE (NOTE 13)
4. Case: — Cast Iron ☐ — Aluminum ☐ — Phenolic ☐ — Stainless Steel ☒ — Other: ☐
5. Ring: — Screwed ☒ — Hinged ☐ — Slip ☐ — Std ☐ — Other ☐
6. Blow-out Protection — None ☐ — Back ☒ — Disc ☐ — Solid Front ☐ — Other ☐
7. Lens: — Glass ☒ SAFETY GLASS FRONT — Plastic ☐
8. Option: — Syphon ☐ Material: NONE — Snubber ☐ Material: NONE — Pressure Limit Valve ☐ — Movement Damping ☒ GLYCERINE FILLED
9. Nominal Accuracy Required: +/- 1%

11. Pressure Element: — Bourdon ☒ — Bellows ☐ — Other ☐
12. Bourdon Mat'l: — Bronze ☐ — Steel ☐ — 316SS ☒ — Other ☐
13. Socket Mat'l: — Bronze ☐ — Steel ☐ — 316SS ☒ — Other ☐
14. MNPT Conn.: — 1/4" ☐ — 1/2" ☒ — Other ☐ — Bottom ☒ — Back ☐
15. Movement Mat'l: — Bronze ☐ — 316SS ☒ — Nylon ☐ — Other ☐
16. Diaphragm Seal ☐ NOT REQUIRED
MFG — Type
Wetted Part Mtl. — Other Mat'l
Fill Fluid
Process Conn. — Gage Conn.

Item	Qty.	Tag No.	Range PSIG / BAR	Oper. Pressure PSIG (BarG) OPER.	MAX.	Service	MANUFACTURER Model NO.
A	1	PG-61133	0 to 590	336	351	PROPYLENE GAS	
		PUMP DISCHARGE	0 to 40	23.2	24.2	& SYNTHETIC OIL	
B	1	PG-61134	0 to 590	336	351	PROPYLENE GAS	
		PUMP DISCHARGE	0 to 40	23.2	24.2	& SYNTHETIC OIL	
C	1	PG-61142	0 to 590	270	351	PROPYLENE GAS	
		RECEIVER	0 to 40	18.6	24.2	& SYNTHETIC OIL	
D	1	PG-61111	0 to 60	23	26	PROPYLENE GAS	
		SUCTION	0 to 4	1.6	1.8	& SYNTHETIC OIL	
E	1	PG-61121	0 to 60	23	26	PROPYLENE GAS	
		SUCTION	0 to 4	1.6	1.8	& SYNTHETIC OIL	
F	1	PG-61113	0 to 590	305	335	PROPYLENE GAS	
		OIL SUPPLY	0 to 40	21.0	23.1	& SYNTHETIC OIL	
G	1	PG-61123	0 to 590	305	335	PROPYLENE GAS	
		OIL SUPPLY	0 to 40	21.0	23.1	& SYNTHETIC OIL	
H							
J							
K	1	PG-61131	0 to 590	276	303	PROPYLENE GAS	
		DISCHARGE	0 to 40	19.0	20.9	& SYNTHETIC OIL	
L							
M							
N							
O							

Notes:

1 SYSTEM DESIGN PRESSURE & TEMPERATURE:
FV to 362.5 PSIG 25.0 BarG @ 250 °F 121 °C FOR ITEMS: 3
-45 °F -43 °C
FV to 406 PSIG 28.0 BarG @ 250 °F 121 °C FOR ITEMS: 1, 2
-20 °F -29 °C

2 WETTED MATERIAL IS 316 STAINLESS STEEL
3 INSTRUMENT SHALL BE SUITABLE FOR MARINE, SALT LADEN, CORROSIVE ENVIRONMENT
4 CALIBRATION CERTIFICATE ☒ REQUIRED ☐ NOT REQUIRED
5 CERTIFICATE OF COMPLIANCE ☒ REQUIRED ☐ NOT REQUIRED
6 CUSTOMER SPECIFICATION: N/A & N/A
7 MECHANICAL OVERPRESSURE PROTECTION IS REQUIRED
8 MATERIAL SHALL BE PER APPROVED VENDOR LIST. DEVIATION FROM "AVL" IS NOT ALLOWED.
9 ALL DOCUMENTS TO BE SUBMITTED IN BOTH HARD AND ELECTRONIC FORMAT
10 GAUGE OPERATING TEMPERATURE RATING OF 100 C IS ACCEPTBLE AS THE OIL SYSTEM WILL NOT REACG 100C.
11 INGRESS PROTECTION: IP65
12 SCALE PRINTED IN BLACK ON WHITE BACKGROUND
13 REFER TO P&ID AND VALVE DATA SHEETS FOR MANIFOLD VALVE INFORMATION.

GPI / PIDMCO / EIED / RHINE	**PRESSURE TRANSMITTER CONTROL DEVICES**				**Document No:**	**VD-GPIC-MA-3029-3029-0038**	
					Document Title:	**Instrument Data sheet & Catalogs**	
	NO.	**BY**	**APP**	**DATE**	**P.O.I.**		
	00	N.B	A.M	12.10.25	IFR		
CLIENT: Gachsaran Polymer Industries Company (GPIC)	01	N.B	A.M	09.12.25	IFR		
P.O. NO.: GPIC-PT-MA-PO-000-3029							
SERVICE: PROPYLENE REFERIGERATION PACKAGE							

GENERAL	1	Tag No.	**SEE TABLE BELOW**	Service: **See Table Below**
	2	Qty		
	3	Function	Record ☐ Indicate ☒ Control ☒ VIA MCS Blind ☐ Trans ☒ Other	
	4	Case	Mfr. Std. ☒ Nom. Size Color : ☐ Other **NOTE 2**	
	5	Mounting	Flush ☐ Surface ☐ Yoke ☒ Other	
	6	Enclosure Class	Gen. Purpose ☐ Weather Proof ☐ Explosion Proof ☐	
			Use in intrinsically ☒ **EExia** Safe System ☐ Other ☒ **IIB-T5 - ZONE 1, CL1**	
	7	Power Supply	117V 60 Hz ☐ Other ac ☐ DC ☒ Volts **24 V**	
	8	Chart **N/A**	Strip ☐ Roll ☐ Fold ☐ Circular ☐ Time Marks ☐	
			Range Number	
	9	Chart Drive **N/A**	Speed Power	
	10	Scales	Type: **LCD / DIGITAL (UNITS per NOTE 15)**	
			Range **SEE TABLE BELOW**	
XMTR	11	Transmitter Output	4-20 mA ☒ **NOTE 9** 10-50mA ☐ 21-103 kPa (3-15 psig) ☐ Other	
			For Receiver, see spec sheet. **WIRED TO UCP VIA JUNCTION BOXES (2 WIRE OUTPUT)** **NOTE 9**	
CONTROLLER	12	Control Modes	P = Prop (Gain), 1-Integral (Auto Reset), D = Derivative (Rate)	
VIA UCP			Sub: s = slow, f = fast, If ☐ Df ☐ P ☒ PID ☐ PD ☐ PI ☐ Is ☐ Ds ☐	
			Other	
	14	Action	On Measurement Increase, Output: Increases ☐ Decreases ☐	
	15	Auto-Man Switch	None ☐ MFR Std ☐ Other ☒ **NOTE 21**	
	16	Set Point Adj.	Manual ☐ External ☐ Remote ☒ **UCP** Other **NOTE 9**	
	17	Manual Reg.	None ☐ MFR Std ☐ Other	
	18	Output	4-20 mA ☐ **NOTE 9** 10-50 mA ☐ 21-103 kPa (3-15 psig) ☐ Other	
ELEMENT	19	Service	Gage Press ☒ Vacuum ☐ Absolute ☐ Compound ☐	
	20	Element Type	Diaphragm ☐ Helix ☐ Bourdon ☐ Bellows ☐ Other **NOTE 19**	
	21	Material (body)	316SS ☒ Ber Copper ☐ Other ☐	
	22	Range	Fixed ☐ Adj. Range ☒	
			Overrange Protection to: **SEE TABLE BELOW**	
	23	Process Data	Press.: Nor.: **SEE TABLE BELOW** MAX.: Element Range:	
	24	Process Conn.	1/4" in NPT ☐ 1/2" in NPT (F) ☒ Other: **1/2" CONDUIT CONNECTION**	
			Location: Bottom: ☒ Back ☐ Other	
	25	Alarm Switches	Quantity: **BY UCP** **REFER TO SETPOINT LIST** Form Rating	
VIA UCP	26	Function	Press. ☒ Deviation ☐ Contacts On Icr. Meas.	
OPTIONS	27	Options	Filter Reg. ☐ Sup. Gage ☐ Output Gage ☐ Charts	
			Diaphragm Seal ☐ Type **N/A** Diaphragm Bot. Bowl	
			Conn. Capillary: **N/A** Length Mtl.	
			Other **ELECTRICAL GROUND SCREW REQUIRED**	
AREA CLASSIFICATION			**IEC** ☒ **ZONE 2, EExia IIB-T3** **IP-65 / NEMA4X** Agency Approval: **ATEX**	

Item	Qty	Tag No.	Pressure PSIG - *BarG* Range	Over	Operating Press. PSIG / *BarG* Min	Max	Calibration mA PSIG / *BarG* 4	20	Manufacturer/ (Note 16) Model no.	Service
A	1	PT-61111	-14.7 to 290	580	22.5	25.9	0.00	250		PROPYLENE &
		SUCTION	*-1.01 to 20.0*	*40.0*	*1.55*	*1.76*	*0.0*	*17.2*		SYNTHETIC OIL
B	1	PT-61113	-14.7 to 580	1160	*304.6*	*343.3*	0.00	580		PROPYLENE &
		OIL SUPPLY	*-1.01 to 40.0*	*80.0*	*21.0*	*23.7*	*0.0*	*40.0*		SYNTHETIC OIL
C										
D										
AA	1	PT-61121	-14.7 to 290	580	22.5	25.9	0.00	250		PROPYLENE &
		SUCTION	*-1.01 to 20.0*	*40.0*	*1.55*	*1.76*	*0.0*	*17.2*		SYNTHETIC OIL
BB	1	PT-61123	-14.7 to 580	1160	*304.6*	*256.1*	0.00	580		PROPYLENE &
		OIL SUPPLY	*-1.01 to 40.0*	*80.0*	*21.0*	*17.7*	*0.0*	*40.0*		SYNTHETIC OIL
CC	1									
DD	1	PT-61141	-14.7 to 580	1160	*85.5*	*289.1*	0.00	580		PROPYLENE &
		ECONOMIZER	*-1.01 to 40.0*	*80.0*	*5.90*	*19.9*	*0.0*	*40.0*		SYNTHETIC OIL

	PRESSURE TRANSMITTER CONTROL DEVICES				Document No:	VD-GPIC-MA-3029-3029-0038
					Document Title:	Instrument Data sheet & Catalogs
	NO.	BY	APP	DATE	P.O.I.	
CLIENT: Gachsaran Polymer Industries Company (GPIC)	00	N.B	A.M	12.10.25	IFR	
P.O. NO.: GPIC-PT-MA-PO-000-3029	01	N.B	A.M	09.12.25	IFR	
SERVICE: PROPYLENE REFERIGERATION PACKAGE						

Notes:

1 SYSTEM DESIGN PRESSURE & TEMPERATURE: FV to 362.5 PSIG 25.0 BarG @ 250 °F 121 °C FOR ITEMS: 1, 2
-45 °F -43 °C
FV to 406 PSIG 28.0 BarG @ 250 °F 121 °C FOR ITEMS: 3
-20 °F -29 °C

2 TRANSMITTER ELECTRICAL HOUSING MUST BE POLYURETHANE COVERED ALUMINUM

3 REFERENCE ACCURACY: +/- 0.1 % OF FULL SCALE & +/- 0.15 % GUARRANTEED STABILITY OVER FIVE YEARS

4 INSTRUMENT SHALL BE SUITABLE FOR MARINE, SALT LADEN, CORROSIVE ENVIRONMENT

5 CALIBRATION CERTIFICATE [X] REQUIRED [ ] NOT REQUIRED

6 HARD COPY OF *IEC-79, EExia IIB-T5* CERTIFICATE [X] REQUIRED [ ] NOT REQUIRED PER IEC 60079

7 CUSTOMER SPECIFICATION: N/A , N/A & N/A

8 ELECTRICAL CLASS CERTIFICATION SHALL BE SHOWN ON ALUMINUM DIE-CASTING HOUSING STAMPED USING STAINLESS STEEL TAG PERMANENTLY ATTACHED TO THE DEVICE

9 HART COMMUNICATION SHALL BE SUITABLE OVER RANGE OF APPLICATION

10 AUSTENSIC 316 SS BOLTS REQUIRED

12 MOUNTING BRACKET FOR 2-IN PIPE BY VENDOR (AGCO)

13 LCD METER WITH POLYURETHANE COVERED ALUMINUM COVER REQUIRED

14 ALL DOCUMENTS TO BE SUBMITTED IN BOTH HARD AND ELECTRONIC FORMAT

15 INDICATOR TO SHOW BARG

16 MATERIAL SHALL BE PER APPROVED VENDOR LIST. MANUFACTURER LISTED ABOVE IS FOR REFERENCE.

17 ELECTRICAL CONNECTION: M20 ~~1/2" NPT~~

18 REQUIRED ASSEMBLY AS PER BELOW PICTURE WITH 2-WAY MANIFOLD OR ISOLATION VALVE

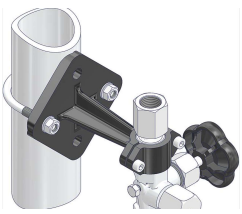
19 TRANSMITTERS ARE SUPPLIED WITH THIN FILM TYPE PIEZORESISTIVE SENSORS

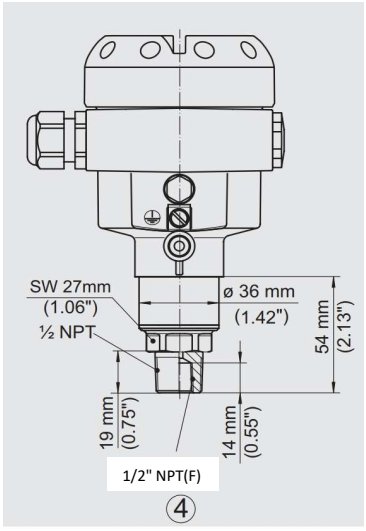
20 SENSOR FILLING: PAG SYNTHETIC OIL

21 REFER TO CONTROL NARRATIVE AND SET POINT LIST FOR THE CONTROLLER ACTION

22 HOUSING SHALL BE SELECTED TO SHOW TRANSMITTER LCD AT 90 DEGREE FROM INLET AS SHOWN BELOW.

23 REFER TO P&ID AND VALVE DATA SHEETS FOR 2-WAY MANIFOLD VALVE INFORMATION.





	PRESSURE TRANSMITTER INDICATOR DEVICES		Document No:	VD-GPIC-MA-3029-3029-0038
			Document Title:	Instrument Data sheet & Catalogs

NO.	BY	APP	DATE	P.O.I.
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01	N.B	A.M	09.12.25	IFR

CLIENT: Gachsaran Polymer Industries Company (GPIC)
P.O. NO.: GPIC-PT-MA-PO-000-3029
SERVICE: PROPYLENE REFERIGERATION PACKAGE

Section	No.	Item	Specification
GENERAL	1	Tag No.	**SEE TABLE BELOW** — Service: **See Table Below**
	2	Qty	
	3	Function	Record ☐ Indicate ☒ Control ☐ VIA MCS Blind ☐ Trans ☒ Other
	4	Case	Mfr. Std. ☒ Nom. Size Color : ☐ Other **NOTE 2**
	5	Mounting	Flush ☐ Surface ☐ Yoke ☒ Other
	6	Enclosure Class	Gen. Purpose ☐ Weather Proof ☐ Explosion Proof ☐
			Use in intrinsically ☒ **EExia** Safe System ☐ Other ☒ **IIB-T5 - ZONE 1, CL1**
	7	Power Supply	117V 60 Hz ☐ Other ac ☐ DC ☒ Volts **24 V**
	8	Chart **N/A**	Strip ☐ Roll ☐ Fold ☐ Circular ☐ Time Marks ☐
			Range Number
	9	Chart Drive **N/A**	Speed Power
	10	Scales	Type: **LCD / DIGITAL (UNITS per NOTE 15)**
			Range **SEE TABLE BELOW**
XMTR	11	Transmitter Output	4-20 mA ☒ **NOTE 9** 10-50mA ☐ 21-103 kPa (3-15 psig) ☐ Other
			For Receiver, see spec sheet. **WIRED TO UCP VIA JUNCTION BOXES (2 WIRE OUTPUT)** **NOTE 9**
CONTROLLER VIA **UCP**	12	Control Modes	P = Prop (Gain), 1-Integral (Auto Reset), D = Derivative (Rate)
			Sub: s = slow, f = fast, If ☐ Df ☐ P ☐ PID ☐ PD ☐ PI ☐ Is ☐ Ds ☐
			Other
	14	Action	On Measurement Increase, Output: Increases ☐ Decreases ☐
	15	Auto-Man Switch	None ☐ MFR Std ☐ Other ☒ **NOTE 21**
	16	Set Point Adj.	Manual ☐ External ☐ Remote ☒ **UCP** Other **NOTE 9**
	17	Manual Reg.	None ☐ MFR Std ☐ Other
	18	Output	4-20 mA ☐ **NOTE 9** 10-50 mA ☐ 21-103 kPa (3-15 psig) ☐ Other
ELEMENT	19	Service	Gage Press ☒ Vacuum ☐ Absolute ☐ Compound ☐
	20	Element Type	Diaphragm ☐ Helix ☐ Bourdon ☐ Bellows ☐ Other **NOTE 19**
	21	Material (body)	316SS ☒ Ber Copper ☐ Other ☐
	22	Range	Fixed ☐ Adj. Range ☒
			Overrange Protection to: **SEE TABLE BELOW**
	23	Process Data	Press.: Nor.: **SEE TABLE BELOW** MAX.: Element Range:
	24	Process Conn.	1/4" in NPT ☐ 1/2" in NPT (F) ☒ Other: **1/2" CONDUIT CONNECTION**
			Location: Bottom: ☒ Back ☐ Other
VIA **UCP**	25	Alarm Switches	Quantity: **BY UCP** **REFER TO SETPOINT LIST** Form Rating
	26	Function	Press. ☒ Deviation ☐ Contacts On Icr. Meas.
OPTIONS	27	Options	Filter Reg. ☐ Sup. Gage ☐ Output Gage ☐ Charts
			Diaphragm Seal ☐ Type **N/A** Diaphragm Bot. Bowl
			Conn. Capillary: **N/A** Length Mtl.
			Other **ELECTRICAL GROUND SCREW REQUIRED**
AREA CLASSIFICATION			**IEC** ☒ **ZONE 2, EExia IIB-T3** **IP-65 / NEMA4X** Agency Approval: **ATEX**

Item	Qty	Tag No.	Pressure PSIG - *BarG* Range					Over	Operating Press. PSIG / *BarG* Min	Max	Calibration mA PSIG / *BarG* 4	20	Manufacturer/ (Note 16) Model no.	Service
A	1	PT-61131	-14.7	to	580			1160	275.6	303.1	0.00	580		PROPYLENE &
		SEPARATOR	*-1.01*	*to*	*40.0*			*80.0*	*19.0*	*20.6*	*0.0*	*40.0*		SYNTHETIC OIL
B	1	PT-61132	-14.7	to	580			1160	275.6	303.1	0.00	580		PROPYLENE &
		COALESCER	*-1.01*	*to*	*40.0*			*80.0*	*19.0*	*20.9*	*0.0*	*40.0*		SYNTHETIC OIL
C	1	PT-61133	-14.7	to	580			1160	329.0	361.8	0.00	580		PROPYLENE &
		OIL FILTER	*-1.01*	*to*	*40.0*			*80.0*	*22.7*	*25.0*	*0.0*	*40.0*		SYNTHETIC OIL
D	1	PT-61134	-14.7	to	580			1160	290.1	319.1	0.00	580		PROPYLENE &
		OIL FILTER	*-1.01*	*to*	*40.0*			*80.0*	*20.0*	*22.0*	*0.0*	*40.0*		SYNTHETIC OIL

PRESSURE TRANSMITTER INDICATOR DEVICES				Document No:	VD-GPIC-MA-3029-3029-0038
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CLIENT: Gachsaran Polymer Industries Company (GPIC)
P.O. NO.: GPIC-PT-MA-PO-000-3029
SERVICE: PROPYLENE REFERIGERATION PACKAGE

Notes:

1 SYSTEM DESIGN PRESSURE & TEMPERATURE: FV to 362.5 PSIG 25.0 BarG @ 250 °F 121 °C FOR ITEMS: 1, 2
-45 °F -43 °C
FV to 406 PSIG 28.0 BarG @ 250 °F 121 °C FOR ITEMS: 3
-20 °F -29 °C

2 TRANSMITTER ELECTRICAL HOUSING MUST BE POLYURETHANE COVERED ALUMINUM

3 REFERENCE ACCURACY: +/- 0.1 % OF FULL SCALE & +/- 0.15 % GUARRANTEED STABILITY OVER FIVE YEARS

4 INSTRUMENT SHALL BE SUITABLE FOR MARINE, SALT LADEN, CORROSIVE ENVIRONMENT

5 CALIBRATION CERTIFICATE [X] REQUIRED [ ] NOT REQUIRED

6 HARD COPY OF *IEC-79, EExia IIB-T5* CERTIFICATE [X] REQUIRED [ ] NOT REQUIRED PER IEC 60079

7 CUSTOMER SPECIFICATION: N/A , N/A & N/A

8 ELECTRICAL CLASS CERTIFICATION SHALL BE SHOWN ON ALUMINUM DIE-CASTING HOUSING STAMPED USING STAINLESS STEEL TAG PERMANENTLY ATTACHED TO THE DEVICE

9 HART COMMUNICATION SHALL BE SUITABLE OVER RANGE OF APPLICATION

10 AUSTENSIC 316 SS BOLTS REQUIRED

12 MOUNTING BRACKET FOR 2-IN PIPE BY VENDOR (AGCO)

13 LCD METER WITH POLYURETHANE COVERED ALUMINUM COVER REQUIRED

14 ALL DOCUMENTS TO BE SUBMITTED IN BOTH HARD AND ELECTRONIC FORMAT

15 INDICATOR TO SHOW BARG

16 MATERIAL SHALL BE PER APPROVED VENDOR LIST. MANUFACTURER LISTED ABOVE IS FOR REFERENCE.

17 ELECTRICAL CONNECTION: M20 ~~1/2" NPT~~

18 REQUIRED ASSEMBLY AS PER BELOW PICTURE WITH 2-WAY MANIFOLD OR ISOLATION VALVE

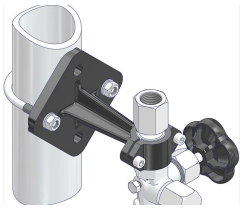
19 TRANSMITTERS ARE SUPPLIED WITH THIN FILM TYPE PIEZORESISTIVE SENSORS

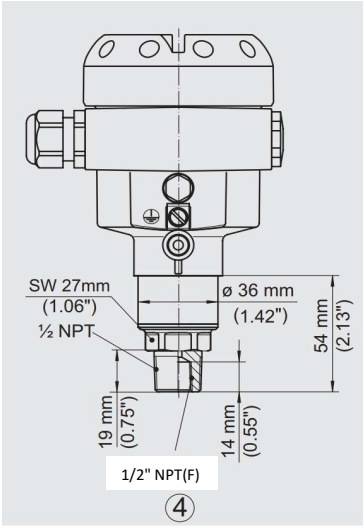
20 SENSOR FILLING: PAG SYNTHETIC OIL

21 REFER TO CONTROL NARRATIVE AND SET POINT LIST FOR THE CONTROLLER ACTION

22 HOUSING SHALL BE SELECTED TO SHOW TRANSMITTER LCD AT 90 DEGREE FROM INLET AS SHOWN BELOW.

23 REFER TO P&ID AND VALVE DATA SHEETS FOR 2-WAY MANIFOLD VALVE INFORMATION.





INDUSTRIAL BIMETAL & GLASS THERMOMETER	Document No:	VD-GPIC-MA-3029-3029-0038
	Document Title:	Instrument Data sheet & Catalogs

NO.	BY	APP	DATE	P.O.I.
00	N.B	A.M	12.10.25	IFR
01	N.B	A.M	09.12.25	IFR

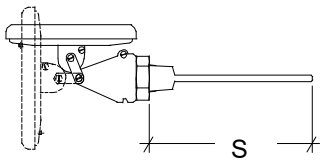
CLIENT: Gachsaran Polymer Industries Company (GPIC)
P.O. NO.: GPIC-PT-MA-PO-000-3029
SERVICE: PROPYLENE REFERIGERATION PACKAGE

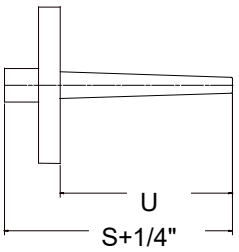
THERMOMETER

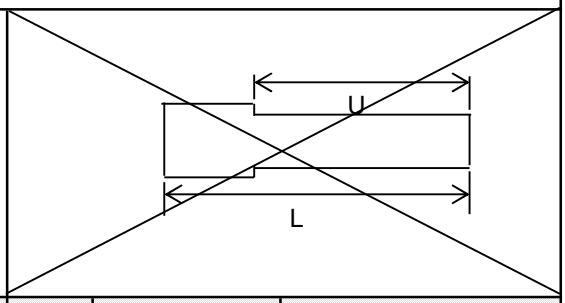
1. Stem: Threaded [x] Plain [ ] Union [ ]
   Material: STAINLESS STEEL Type:
2. Stem or Union Thread: 1/2" [x] 3/4" [ ]
3. Stem Diameter: Std [ ] 1/4" [x] 3/8" in. [ ]
4. Case Material: Std [ ] Others [x] 316SS
5. Dial Size: 6" in (150 mm) Color: WHITE
6. Scale: SEE BELOW Color: BLACK
7. Form: Adjustable [x]
8. External Calibrator [x] Hermetically Sealed Case [x]
9. MFR. & Model No.

WELL

10. None [ ] Included [x] By others [ ]
11. Material: 304SS [ ] 316SS [x]
    Other: [ ]
13. Construction: Drilled [ ] Built-up [x]
    Other: FLANGED TAPERED SHANK FROM SOLID BAR STOCK
14. MFR. & Model ASHCROFT & SEE TABLE BELOW
15. Connection: SEE TABLE BELOW







Item	Qty	Tag No.	Range °F (°C)	Oper. Temp. °F (°C)	Stem Depth (S)	Well Conn. / Inst. Con.	Lag Ext.	Insert (U)	Service	Model Number Sensor/Well
A	1	TG-61141 RECEIVER	-4 to 212 / -20 to 100	117.716 / 47.62	14 " / 355.6	1-1/2"- 300# / 1/2" NPT	-	12 / 304.8	PROPYLENE (RECEIVER VESSEL)	
B	1	TG-61131 OIL SEPARATOR	-4 to 212 / -20 to 100	171.86 / 77.7	14 " / 355.6	1-1/2"- 300# / 1/2"NPT	-	12 / 304.8	SYNTHETIC OIL (OIL SEPARATOR)	
C	1	TG-61132 OIL SUPPLY	-4 to 212 / -20 to 100	122 / 50	7.67" / 195	1-1/2"- 300# / 1/2"NPT	-	5.7 / 145	SYNTHETIC OIL (OIL HEADER)	
D										
E										
F										
G										

Notes:

1 SYSTEM DESIGN PRESSURE & TEMPERATURE: FV to 362.5 PSIG 25.0 BarG @ 250 °F 121 °C FOR ITEMS: 1
-45 °F -43 °C

2 WETTED MATERIAL IS 316 STAINLESS STEEL

3 ACCURACY: +/- 1 % FULL SPAN

4 INSTRUMENT SHALL BE SUITABLE FOR MARINE, SALT LADEN, CORROSIVE ENVIRONMENT

5 CALIBRATION CERTIFICATE [x] REQUIRED [ ] NOT REQUIRED

6 CERTIFICATE OF COMPLIANCE [x] REQUIRED [ ] NOT REQUIRED

7 HERMETIC SEAL REQUIRED

8 CUSTOMER SPECIFICATION: &

9 ALL DOCUMENTS TO BE SUBMITTED IN BOTH HARD AND ELECTRONIC FORMAT

10 DUAL SCALE IS REQUIRED

11 MATERIAL SHALL BE PER APPROVED VENDOR LIST. DEVIATION FROM "AVL" IS NOT ALLOWED.

12 THERMOWELL SHALL BE FULL PENETRATION WELD

13 THERMOWELL NATURAL FREQUENCE CALCULATION REQUIRED

	TEMPERATURE TRANSMITTER CONTROL DEVICES				Document No:	VD-GPIC-MA-3029-3029-0038
					Document Title:	Instrument Data sheet & Catalogs
	NO.	BY	APP	DATE	P.O.I.	
CLIENT: Gachsaran Polymer Industries Company	00	N.B	A.M	12.10.25	IFR	
(GPIC) P.O. NO.: GPIC-PT-MA-PO-000-3029	01	N.B	A.M	09.12.25	IFR	
SERVICE: PROPYLENE REFERIGERATION PACKAGE						

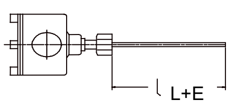
GENERAL	1	Tag No.	SEE TABLE BELOW Service: SEE TABLE BELOW
	2	Function	Record ☐ Indicate ☒ Control ☒ Blind ☐ Trans ☒ Other
	3	Case	MFR. Std. ☐ Nom ☐ Nom. Size Color: MFR. Std ☐ Other NOTE 2
	4	Mounting	Flush ☐ Surface ☐ Yoke ☒ Other RACK MOUNT
	5	Enclosure Class	Gen. Purpose ☐ Weather Proof ☐ Explosion Proof ☐
			Use in intrinsically ☒ EExia Safe System ☐ Other ☒ IIB-T5 - ZONE 2, CL1
	6	Power Supply	117V 60 Hz ☐ Other ac DC ☒ Volts 24 V
	7	Chart N/A	Strip ☐ Roll ☐ Fold ☐ Circular ☐ Time marks ☐
	8	Chart Drive	Speed Power
	9	Scale N/A	Type: Range:
XMTR	10	Output NOTE 12	4-20 mA ☒ 10-50mA ☐ 21-103 kPa (3-15 psig) ☐ Other
			For Receiver, see spec sheet. WIRED TO UCP VIA JUNCTION BOXES (2 WIRE OUTPUT) NOTE 12
CONTROLLER VIA PLC	11	Control Modes	P = Prop (Gain_, 1-Integral (Auto Reset), D = Derivative (Rate)
			Sub: s = slow, f = fast, If ☐ Df ☐ P ☐ PI ☐ PD ☒ PID ☐ Is ☐ Ds ☐
			Other
	12	Action	On Measurement Increase, Output: Increases ☐ Decreases ☐
	13	Auto-Man Switch	None ☐ MFR Std ☐ Other ☒ NOTE 18
	14	Set Point Adj.	Manual ☐ External ☐ Remote ☒ UCP Other NOTE 12
	15	Manual Reg.	None ☐ MFR Std ☐ Other
	16	Output	4-20 mA ☐ 10-50mA ☐ 21-103 kPa (3-15 psig) ☐ Other
ELEMENT	17	Fill	SAMA Class Compensation
	18	Process Data	SEE TABLE BELOW Compensation
	19	Range	Fixed ☐ Adj. Range ☐ Set @ SEE BELOW
			Overrange Protection to: **Electrical** Connection: M20 ~~1/2" NPT~~
	20	Bulb	Type: RTD-Pt-100 α = 0.00385 Sheath Material: 316 S.S W/ MINERAL INSULATION
			Size: SEE TABLE BELOW Diameter: 1/4" Number of Wires: 3 WIRES (DUAL) NOTE 15
	21		
	22		
	23	Alarm Switches	Quantity: Form Rating
VIA UCP	24	Function	Temp. ☒ Deviation ☐ Contacts to On Temp. Incr.
	25	Options	Filter Reg. Sup Gage ☐ Output Gage ☐ Charts ☐
	26		Other:
AREA CLASS.	27		IEC ☒ ZONE 2, EExia IIB-T3 IP-65 / NEMA4X Agency Approval: ATEX

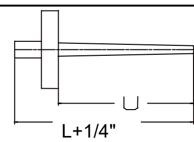
TRANSMITTER

Item	Qty	Tag No.	Temperature °F / °C			Oper. Press. PSIG *BARG*		Calibration (mA) °F / °C		Manufacturer /	Service
			Range		Oper.	Min.	Max.	4	20	Model No.	
A	1	TT-61141	-328 *to* 1562		45.77	*85.5*	*96.4*	-58	212		HYDROCARBON GAS &
		ECONOMIZER	*-200 to 850*		*7.65*	*5.90*	*6.6*	*-50*	*100*		SYNTHETIC OIL
B											
C											
D											
E											

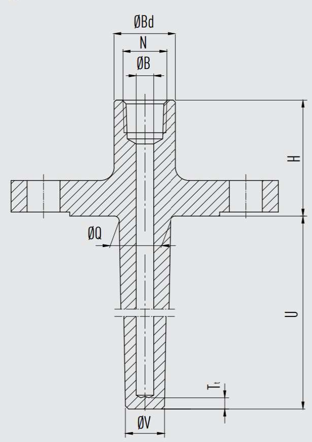
	TEMPERATURE TRANSMITTER CONTROL DEVICES				Document No:	VD-GPIC-MA-3029-3029-0038
					Document Title:	Instrument Data sheet & Catalogs
	NO.	BY	APP	DATE	P.O.I.	
CLIENT: Gachsaran Polymer Industries Company (GPIC)	00	N.B	A.M	12.10.25	IFR	
P.O. NO.: GPIC-PT-MA-PO-000-3029	01	N.B	A.M	09.12.25	IFR	
SERVICE: PROPYLENE REFERIGERATION PACKAGE						

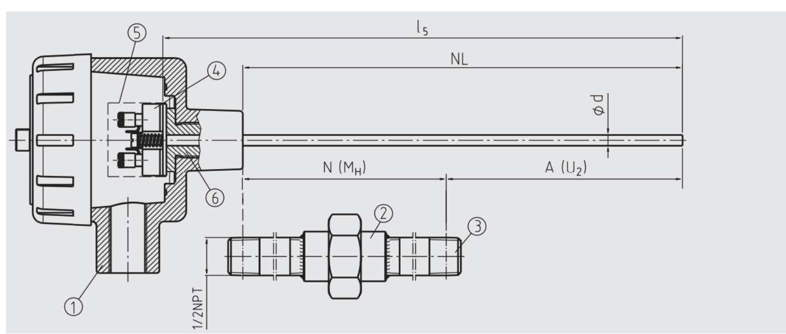
Item	Qty	Tag No.	Range °F (°C)	Oper. Temp. °F (°C)	LG (L) = (U+H) IN (mm)	Well Conn. Proc./Inst.	EXT. (N)	Ins (U) IN (mm)	LAG (H)	Well Type	Head Mtg	Model Number Sensor/Well
A	1	TE-61141 INLET	-148 to 842 *-100 to 450*	45.8 *7.65*	10 " *254 mm*	1-1/2"- 300# RF 1/2" NPT	3.0 " *76.2*	4.0 " *101.6*	3.0 *76.2*	TAPERED NOTE 20	YES	
B												
C												
D												
E												





Design TW10-W





Notes:

1 SYSTEM DESIGN PRESSURE & TEMPERATURE: FV to 362.5 PSIG 25.0 BarG @ 250 °F 121 °C FOR ITEMS: 1
-45 °F -43 °C
FV to 406 PSIG 28.0 BarG @ 250 °F 121 °C FOR ITEMS:
-20 °F -29 °C

2 TRANSMITTER AND SENSOR ELECTRICAL HOUSING MUST BE POLYURETHANE COVERED DIE ALUMINUM-HOUSING, THERMOWELL IS 316 STAINLESS STEEL

3 REFERENCE ACCURACY: +/- 0.075 % OF FULL SCALE & +/- 0.15 % GUARRANTEED STABILITY OVER FIVE YEARS

4 INSTRUMENT SHALL BE SUITABLE FOR MARINE, SALT LADEN, CORROSIVE ENVIRONMENT

5 CALIBRATION CERTIFICATE [X] REQUIRED [ ] NOT REQUIRED

6 HARD COPY OF *IIEC-79, EExia IIB-T5* CERTIFICATE [X] REQUIRED [ ] NOT REQUIRED PER IEC 60079

7 CUSTOMER SPECIFICATION: N/A & N/A

8 ELECTRICAL CLASS CERTIFICATION SHALL BE SHOWN ON ALUMINUM DIE-CASTING HOUSING STAMPED USING STAINLESS STEEL TAG PERMANENTLY ATTACHED TO THE DEVICE

9 ALL DOCUMENTS TO BE SUBMITTED IN BOTH HARD AND ELECTRONIC FORMAT

10 TERMINAL HEAD TO BE ASSEMBLIED WITH THERMOWELL USING A UNION

11 EXTENSION SECTION OF 3 INCHES (76.2 mm) TO INCLUDE NIPPLE AND UNION

12 "SMART" ELECTRONIC TRANSMITTERS WITH "HART PROTOCOL" COMMUNICATION SHALL BE SUITABLE OVER RANGE OF APPLICATION

13 EACH TEMPERATURE TRANSMITTER SHALL INCLUDE A MOUNTING BRACKET FOR 2-IN PIPE RACK

14 INDICATOR TO SHOW °C

15 MATERIAL SHALL BE PER APPROVED VENDOR LIST. MANUFACTURER LISTED ABOVE IS FOR REFERENCE.

15 BOTH RTD ELEMENTS ARE WIRED AND TERMINATED IN TERMINAL HEAD ~~OR TRANSMITTER~~

16 REQUIRED ASSEMBLY AS PER BELOW PICTURES WITH A UNION. ELEMENT LENGTH SHALL BE ADJUSTED FOR THE UNION USE.

17 RTD TO BE TERMINATED IN THE TERMINAL HEAD, AND TRANSMITTER TO BE INSTALLED REMOTELY

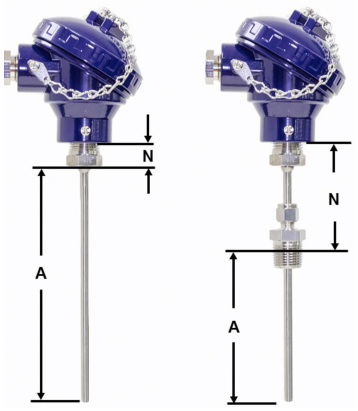
18 REFER TO CONTROL NARRATIVE AND SET POINT LIST FOR THE CONTROLLER ACTION

19 THERMOWELL NATURAL FREQUENCE CALCULATION REQUIRED

20 THERMOWELL MATERIAL SHALL BE 316SS

THERMOWELL & HEAD

REMOTE TRANSMITTER WITH ELECTRONIC DISPLAY



A = U + H

	TEMPERATURE TRANSMITTER INDICATOR DEVICES				Document No:	VD-GPIC-MA-3029-3029-0038
					Document Title:	Instrument Data sheet & Catalogs
	NO.	BY	APP	DATE	P.O.I.	
CLIENT: Gachsaran Polymer Industries Company (GPIC)	00	N.B	A.M	12.10.25	IFR	
P.O. NO.: GPIC-PT-MA-PO-000-3029	01	N.B	A.M	09.12.25	IFR	
SERVICE: PROPYLENE REFERIGERATION PACKAGE						

GENERAL	1	Tag No.	SEE TABLE BELOW Service: SEE TABLE BELOW
	2	Function	Record ☐ Indicate ☒ Control ☐ Blind ☐ Trans ☒ Other
	3	Case	MFR. Std. ☐ Nom ☐ Nom. Size Color: MFR. Std ☐ Other NOTE 2
	4	Mounting	Flush ☐ Surface ☐ Yoke ☒ Other RACK MOUNT
	5	Enclosure Class	Gen. Purpose ☐ Weather Proof ☐ Explosion Proof ☐
			Use in intrinsically ☒ EExia Safe System ☐ Other ☒ IIB-T5 - ZONE 2, CL1
	6	Power Supply	117V 60 Hz ☐ Other ac DC ☒ Volts 24 V
	7	Chart N/A	Strip ☐ Roll ☐ Fold ☐ Circular ☐ Time marks ☐
	8	Chart Drive	Speed Power
	9	Scale N/A	Type: Range:
XMTR	10	Output NOTE 12	4-20 mA ☒ 10-50mA ☐ 21-103 kPa (3-15 psig) ☐ Other
			For Receiver, see spec sheet. WIRED TO UCP VIA JUNCTION BOXES (2 WIRE OUTPUT) NOTE 12
CONTROLLER VIA N/A	11	Control Modes	P = Prop (Gain_, 1-Integral (Auto Reset), D = Derivative (Rate)
			Sub: s = slow, f = fast, If ☐ Df ☐ P ☐ PI ☐ PD ☐ PID ☐ Is ☐ Ds ☐
			Other
	12	Action	On Measurement Increase, Output: Increases ☐ Decreases ☐
	13	Auto-Man Switch	None ☐ MFR Std ☐ Other
	14	Set Point Adj.	Manual ☐ External ☐ Remote ☒ UCP Other NOTE 12
	15	Manual Reg.	None ☐ MFR Std ☐ Other
	16	Output	4-20 mA ☐ 10-50mA ☐ 21-103 kPa (3-15 psig) ☐ Other
ELEMENT	17	Fill	SAMA Class Compensation
	18	Process Data	SEE TABLE BELOW Compensation
	19	Range	Fixed ☐ Adj. Range ☐ Set @ SEE BELOW
			Overrange Protection to: **Electrical** Connection: M20 ~~1/2" NPT~~
	20	Bulb	Type: RTD-Pt-100 α = 0.00385 Sheath Material: 316 S.S W/ MINERAL INSULATION
			Size: SEE TABLE BELOW Diameter: 1/4" Number of Wires: 3 WIRES (DUAL) NOTE 15
	21		
	22		
	23	Alarm Switches	Quantity: Form Rating
VIA UCP	24	Function	Temp. ☒ Deviation ☐ Contacts to On Temp. Incr.
	25	Options	Filter Reg. Sup Gage ☐ Output Gage ☐ Charts ☐
	26		Other:
AREA CLASS.	27		IEC ☒ ZONE 2, EExia IIB-T3 IP-65 / NEMA4X Agency Approval: ATEX

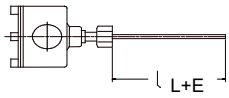
TRANSMITTER

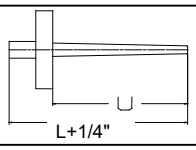
Item	Qty	Tag No.	Temperature °F / °C		Oper. Press. PSIG *BARG*		Calibration (mA) °F / °C		Manufacturer /	Service
			Range	Oper.	Min.	Max.	4	20	Model No.	
A	1	TT-61121	-328 *to* 1562	-12.44	*22.5*	*24.8*	-58	212		HYDROCARBON GAS &
		SUCTION	*-200 to 850*	*-24.69*	*1.55*	*1.69*	*-50*	*100*		SYNTHETIC OIL
B										
C										
D										
E										

	TEMPERATURE TRANSMITTER INDICATOR DEVICES				Document No:	VD-GPIC-MA-3029-3029-0038
					Document Title:	Instrument Data sheet & Catalogs
	NO.	BY	APP	DATE	P.O.I.	
CLIENT: Gachsaran Polymer Industries Company (GPIC)	00	N.B	A.M	12.10.25	IFR	
P.O. NO.: GPIC-PT-MA-PO-000-3029	01	N.B	A.M	09.12.25	IFR	
SERVICE: PROPYLENE REFERIGERATION PACKAGE						

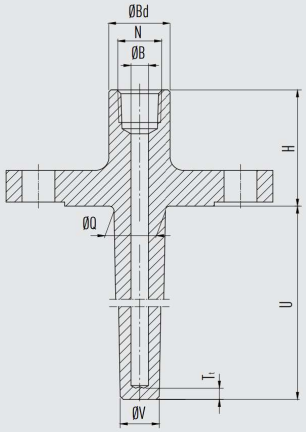
SENSOR WITH THERMOWELL

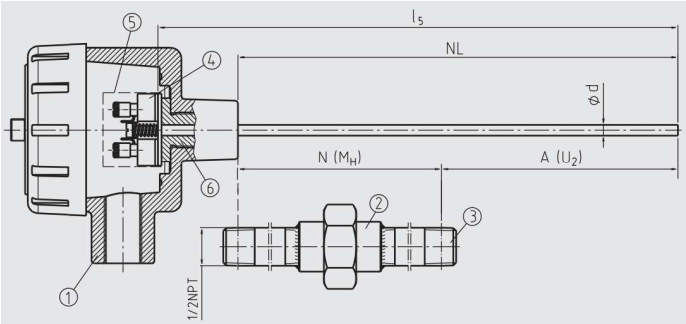
Item	Qty	Tag No.	Range °F (°C)	Oper. Temp. °F (°C)	LG (L) = (U+H) IN (mm)	Well Conn. Proc./Inst.	EXT. (N)	Ins (U) IN (mm)	LAG (H)	Well Type	Head Mtg	Model Number Sensor/Well
A	1	TE-61121 INLET	-148 to 842 -100 to 450	-12.4 -24.69	18 " 457 mm	1-1/2"- 300# RF 1/2" NPT	3.0 " 76.2	12.0 " 304.8	3.0 76.2	TAPERED NOTE 20	YES	
B												
C												
D												
E												





Design TW10-W





	TEMPERATURE TRANSMITTER INDICATOR DEVICES				Document No:	VD-GPIC-MA-3029-3029-0038
					Document Title:	Instrument Data sheet & Catalogs
	NO.	BY	APP	DATE	P.O.I.	
CLIENT: Gachsaran Polymer Industries Company (GPIC)	00	N.B	A.M	12.10.25	IFR	
P.O. NO.: GPIC-PT-MA-PO-000-3029	01	N.B	A.M	09.12.25	IFR	
SERVICE: PROPYLENE REFERIGERATION PACKAGE						

Notes:

1 SYSTEM DESIGN PRESSURE & TEMPERATURE: FV to 362.5 PSIG 25.0 BarG @ 250 °F 121 °C FOR ITEMS: 1
-45 °F -43 °C
FV to 406 PSIG 28.0 BarG @ 250 °F 121 °C FOR ITEMS:
-20 °F -29 °C

2 TRANSMITTER AND SENSOR ELECTRICAL HOUSING MUST BE POLYURETHANE COVERED DIE ALUMINUM-HOUSING, THERMOWELL IS 316 STAINLESS STEEL

3 REFERENCE ACCURACY: +/- 0.075 % OF FULL SCALE & +/- 0.15 % GUARRANTEED STABILITY OVER FIVE YEARS

4 INSTRUMENT SHALL BE SUITABLE FOR MARINE, SALT LADEN, CORROSIVE ENVIRONMENT

5 CALIBRATION CERTIFICATE ☒ REQUIRED ☐ NOT REQUIRED

6 HARD COPY OF *IIEC-79, EExia IIB-T5* CERTIFICATE ☒ REQUIRED ☐ NOT REQUIRED PER IEC 60079

7 CUSTOMER SPECIFICATION: N/A & N/A

8 ELECTRICAL CLASS CERTIFICATION SHALL BE SHOWN ON ALUMINUM DIE-CASTING HOUSING STAMPED USING STAINLESS STEEL TAG PERMANENTLY ATTACHED TO THE DEVICE

9 ALL DOCUMENTS TO BE SUBMITTED IN BOTH HARD AND ELECTRONIC FORMAT

10 TERMINAL HEAD TO BE ASSEMBLIED WITH THERMOWELL USING A UNION

11 EXTENSION SECTION OF 3 INCHES (76.2 mm) TO INCLUDE NIPPLE AND UNION

12 "SMART" ELECTRONIC TRANSMITTERS WITH "HART PROTOCOL" COMMUNICATION SHALL BE SUITABLE OVER RANGE OF APPLICATION

13 EACH TEMPERATURE TRANSMITTER SHALL INCLUDE A MOUNTING BRACKET FOR 2-IN PIPE RACK

14 INDICATOR TO SHOW °C

15 MATERIAL SHALL BE PER APPROVED VENDOR LIST. MANUFACTURER LISTED ABOVE IS FOR REFERENCE.

15 BOTH RTD ELEMENTS ARE WIRED AND TERMINATED IN TERMINAL HEAD ~~OR TRANSMITTER~~

16 REQUIRED ASSEMBLY AS PER BELOW PICTURES WITH A UNION. ELEMENT LENGTH SHALL BE ADJUSTED FOR THE UNION USE.

17 RTD TO BE TERMINATED IN THE TERMINAL HEAD, AND TRANSMITTER TO BE INSTALLED REMOTELY

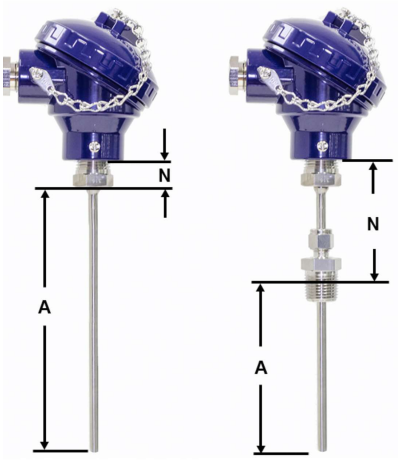
18 REFER TO CONTROL NARRATIVE AND SET POINT LIST FOR THE CONTROLLER ACTION

19 THERMOWELL NATURAL FREQUENCE CALCULATION REQUIRED

20 THERMOWELL MATERIAL SHALL BE 316SS

THERMOWELL & HEAD

REMOTE TRANSMITTER WITH ELECTRONIC DISPLAY



A = U + H

	TEMPERATURE TRANSMITTER INDICATOR DEVICES				Document No:	VD-GPIC-MA-3029-3029-0038
					Document Title:	Instrument Data sheet & Catalogs
	NO.	BY	APP	DATE	P.O.I.	
CLIENT: Gachsaran Polymer Industries Company (GPIC)	00	N.B	A.M	12.10.25	IFR	
P.O. NO.: GPIC-PT-MA-PO-000-3029	01	N.B	A.M	09.12.25	IFR	
SERVICE: PROPYLENE REFERIGERATION PACKAGE						

GENERAL	1	Tag No.	SEE TABLE BELOW Service: SEE TABLE BELOW
	2	Function	Record ☐ Indicate ☒ Control ☐ Blind ☐ Trans ☒ Other
	3	Case	MFR. Std. ☐ Nom ☐ Nom. Size Color: MFR. Std ☐ Other NOTE 2
	4	Mounting	Flush ☐ Surface ☐ Yoke ☒ Other RACK MOUNT
	5	Enclosure Class	Gen. Purpose ☐ Weather Proof ☐ Explosion Proof ☐
			Use in intrinsically ☒ EExia Safe System ☐ Other ☒ IIB-T5 - ZONE 2, CL1
	6	Power Supply	117V 60 Hz ☐ Other ac DC ☒ Volts 24 V
	7	Chart N/A	Strip ☐ Roll ☐ Fold ☐ Circular ☐ Time marks ☐
	8	Chart Drive	Speed Power
	9	Scale N/A	Type: Range:
XMTR	10	Output NOTE 12	4-20 mA ☒ 10-50mA ☐ 21-103 kPa (3-15 psig) ☐ Other
			For Receiver, see spec sheet. WIRED TO UCP VIA JUNCTION BOXES (2 WIRE OUTPUT) NOTE 12
CONTROLLER VIA N/A	11	Control Modes	P = Prop (Gain_, 1-Integral (Auto Reset), D = Derivative (Rate)
			Sub: s = slow, f = fast, If ☐ Df ☐ P ☐ PI ☐ PD ☐ PID ☐ Is ☐ Ds ☐
			Other
	12	Action	On Measurement Increase, Output: Increases ☐ Decreases ☐
	13	Auto-Man Switch	None ☐ MFR Std ☐ Other
	14	Set Point Adj.	Manual ☐ External ☐ Remote ☒ UCP Other NOTE 12
	15	Manual Reg.	None ☐ MFR Std ☐ Other
	16	Output	4-20 mA ☐ 10-50mA ☐ 21-103 kPa (3-15 psig) ☐ Other
ELEMENT	17	Fill	SAMA Class Compensation
	18	Process Data	SEE TABLE BELOW Compensation
	19	Range	Fixed ☐ Adj. Range ☐ Set @ SEE BELOW
			Overrange Protection to: Electrical Connection: M20 ~~1/2" NPT~~
	20	Bulb	Type: RTD-Pt-100 α = 0.00385 Sheath Material: 316 S.S W/ MINERAL INSULATION
			Size: SEE TABLE BELOW Diameter: 1/4" Number of Wires: 3 WIRES (DUAL) NOTE 15
	21		
	22		
	23	Alarm Switches	Quantity: Form Rating
VIA UCP	24	Function	Temp. ☒ Deviation ☐ Contacts to On Temp. Incr.
	25	Options	Filter Reg. Sup Gage ☐ Output Gage ☐ Charts ☐
	26		Other:
AREA CLASS.	27		IEC ☒ ZONE 2, EExia IIB-T3 IP-65 / NEMA4X Agency Approval: ATEX

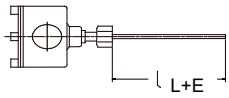
TRANSMITTER

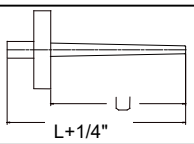
Item	Qty	Tag No.	Temperature °F / °C Range			Oper.	Oper. Press. PSIG *BARG* Min.	Max.	Calibration (mA) °F / °C 4	20	Manufacturer / Model No.	Service
A	1	TT-61111	-328	*to*	1562	-12.44	*22.5*	*24.8*	-58	212		HYDROCARBON GAS &
		SUCTION	-200	to	850	-24.69	1.55	1.69	-50	100		SYNTHETIC OIL
B		TT-61132	-328	*to*	1562	120	*304.6*	*335.0*	-58	212		HYDROCARBON GAS &
		OIL SUPPLY	-200	to	850	48.89	21.0	22.8	-50	100		SYNTHETIC OIL
C												
D		TT-61131	-328	*to*	1562	171.86	*275.6*	*310.6*	-58	212		HYDROCARBON GAS &
		OIL SEPARATOR	-200	to	850	77.70	19.0	21.1	-50	100		SYNTHETIC OIL
E												

	TEMPERATURE TRANSMITTER INDICATOR DEVICES				Document No:	VD-GPIC-MA-3029-3029-0038
					Document Title:	Instrument Data sheet & Catalogs
	NO.	BY	APP	DATE	P.O.I.	
CLIENT: Gachsaran Polymer Industries Company (GPIC)	00	N.B	A.M	12.10.25	IFR	
P.O. NO.: GPIC-PT-MA-PO-000-3029	01	N.B	A.M	09.12.25	IFR	
SERVICE: PROPYLENE REFERIGERATION PACKAGE						

SENSOR WITH THERMOWELL

Item	Qty	Tag No.	Range °F (°C)	Oper. Temp. °F (°C)	LG (L) = (U+H) IN (mm)	Well Conn. Proc./Inst.	EXT. (N)	Ins (U) IN (mm)	LAG (H)	Well Type	Head Mtg	Model Number Sensor/Well
A	1	TE-61111 INLET	-148 to 842 -100 to 450	-12.4 -24.69	18 " 457 mm	1-1/2"- 300# RF 1/2" NPT	3.0 " 76.2	12.0 " 304.8	3.0 76.2	TAPERED NOTE 20	YES	
B		TE--61132 OIL SUPPLY	-148 to 842 -100 to 450	120.0 50	12 " 305 mm	1-1/2"- 300# RF 1/2" NPT	3.0 " 76.2	6.0 " 152.4	3.0 76.2	TAPERED NOTE 20	YES	
C												
D		TE-61131 OIL SEPARATOR	-148 to 842 -100 to 450	171.9 77.70	24 " 610 mm	1-1/2"- 300# RF 1/2" NPT	3.0 " 76.2	18.0 " 457.2	3.0 76.2	TAPERED NOTE 20	YES	
E												





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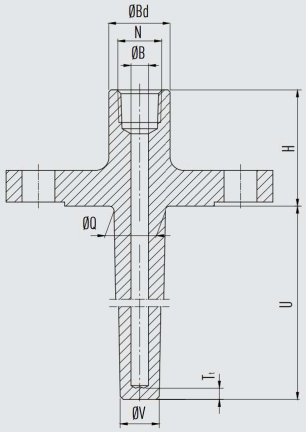
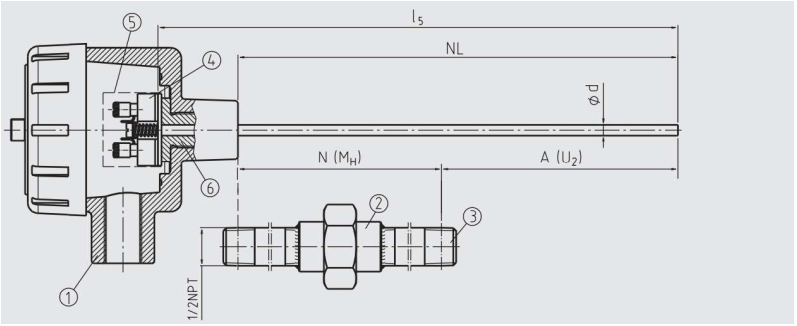




	TEMPERATURE TRANSMITTER INDICATOR DEVICES				Document No:	VD-GPIC-MA-3029-3029-0038
					Document Title:	Instrument Data sheet & Catalogs
	NO.	BY	APP	DATE	P.O.I.	
CLIENT: Gachsaran Polymer Industries Company (GPIC)	00	N.B	A.M	12.10.25	IFR	
P.O. NO.: GPIC-PT-MA-PO-000-3029	01	N.B	A.M	09.12.25	IFR	
SERVICE: PROPYLENE REFERIGERATION PACKAGE						

Notes:

1	SYSTEM DESIGN PRESSURE & TEMPERATURE:	FV	to	362.5	PSIG	25.0	BarG	@	250	°F	121	°C	FOR ITEMS: 1, 3
									-45	°F	-43	°C	
		FV	to	406	PSIG	28.0	BarG	@	250	°F	121	°C	FOR ITEMS: 2
									-20	°F	-29	°C	

2 TRANSMITTER AND SENSOR ELECTRICAL HOUSING MUST BE POLYURETHANE COVERED DIE ALUMINUM-HOUSING, THERMOWELL IS 316 STAINLESS STEEL

3 REFERENCE ACCURACY: +/- 0.075 % OF FULL SCALE & +/- 0.15 % GUARRANTEED STABILITY OVER FIVE YEARS

4 INSTRUMENT SHALL BE SUITABLE FOR MARINE, SALT LADEN, CORROSIVE ENVIRONMENT

5 CALIBRATION CERTIFICATE [X] REQUIRED [ ] NOT REQUIRED

6 HARD COPY OF *IIEC-79, EExia IIB-T5* CERTIFICATE [X] REQUIRED [ ] NOT REQUIRED PER IEC 60079

7 CUSTOMER SPECIFICATION: N/A & N/A

8 ELECTRICAL CLASS CERTIFICATION SHALL BE SHOWN ON ALUMINUM DIE-CASTING HOUSING STAMPED USING STAINLESS STEEL TAG PERMANENTLY ATTACHED TO THE DEVICE

9 ALL DOCUMENTS TO BE SUBMITTED IN BOTH HARD AND ELECTRONIC FORMAT

10 TERMINAL HEAD TO BE ASSEMBLIED WITH THERMOWELL USING A UNION

11 EXTENSION SECTION OF 3 INCHES (76.2 mm) TO INCLUDE NIPPLE AND UNION

12 "SMART" ELECTRONIC TRANSMITTERS WITH "HART PROTOCOL" COMMUNICATION SHALL BE SUITABLE OVER RANGE OF APPLICATION

13 EACH TEMPERATURE TRANSMITTER SHALL INCLUDE A MOUNTING BRACKET FOR 2-IN PIPE RACK

14 INDICATOR TO SHOW °C

15 MATERIAL SHALL BE PER APPROVED VENDOR LIST. MANUFACTURER LISTED ABOVE IS FOR REFERENCE.

15 BOTH RTD ELEMENTS ARE WIRED AND TERMINATED IN TERMINAL HEAD ~~OR TRANSMITTER~~

16 REQUIRED ASSEMBLY AS PER BELOW PICTURES WITH A UNION. ELEMENT LENGTH SHALL BE ADJUSTED FOR THE UNION USE.

17 RTD TO BE TERMINATED IN THE TERMINAL HEAD, AND TRANSMITTER TO BE INSTALLED REMOTELY

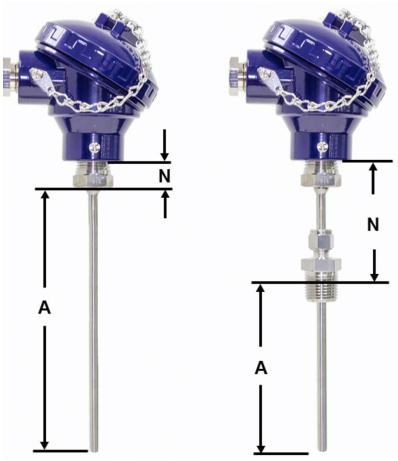
18 REFER TO CONTROL NARRATIVE AND SET POINT LIST FOR THE CONTROLLER ACTION

19 THERMOWELL NATURAL FREQUENCE CALCULATION REQUIRED

20 THERMOWELL MATERIAL SHALL BE 316SS

THERMOWELL & HEAD

REMOTE TRANSMITTER WITH ELECTRONIC DISPLAY



A = U + H

GAUGES GLASSES & COCKS	Document No:	VD-GPIC-MA-3029-3029-0038
	Document Title:	Instrument Data sheet & Catalogs

NO.	BY	APP	DATE	P.O.I.
00	N.B	A.M	12.10.25	IFR
01	N.B	A.M	09.12.25	IFR

CLIENT: Gachsaran Polymer Industries Company (GPIC)
P.O. NO.: GPIC-PT-MA-PO-000-3029
SERVICE: PROPYLENE REFERIGERATION PACKAGE

1. Gage Column [x] Cocks [x]
   Assembled w/ Nipples [x] Unassemled [x]

GAGE CLASSES

2. Type: Reflex [x] Transparent [ ] Tubular [ ]
   Large Chamber [ ] Weld Pad [ ]
3. Conn. Size & Type [x] 2"-300# ANSI RF FLG
   Top & Bottom [x] Side [ ] Back [ ]
   Vent [ ] Drain [ ]
4. Material: Body / Cover LT C.S. (SA350-LF2) *OR SS*
   Glass Borosilicate (TEMPERED)
5. Min. Rating SEE NOTES BELOW
6. Options. Illuminator [ ] Mica Shield [ ]
   Internal Tube [ ] External Jkt. [ ]
   Non Frost [ ] External Length [ ]
   Calb. Scale [ ] Other [ ]
7. Manufacturer & Model:

GAGE COCKS

8. Type: Offset [x] Straight [ ]
9. Conn. Vessel [x] 2"-300# Gage [x] 1/2" Vent / Drain [x] 1/2" W/VALVES
10. Mat: Body: S.S. A182 Trim: 316 SS
11. Min. Rating: 507.5 PSIG @ 300 °F
12. Construction: INTEGRAL BALL-CHECK / UNION
13. Type of Conn.: Vessel: NPT (M) UNION CONNECTOR
    Gage: NPT (F) UNION CONNECTOR
    Vent / Drain: NPT (F)
    Other: DIRECT MOUNT
14. Bonnet: PACKING NUT / TEFLON PACKING
15. Options: Ball Checks [x] Renewal Seats [x]
    Other: RENEWAL SEATS
16. Manufacturer & Model: OTHERS
17. Bolting Material: A193-L7 / A194-7

Item	Qty.	Tag No.	Visible Glass "V"	CONNECTION CENTER TO CENTER "X"	Model No.	Operating Pressure PSIG (BarG)	Operating Temp. °F (°C)	Service
A	1	LG-61141 RECEIVER HEADER	36.0 " 914 mm	36.0 " 914 mm	L21SR/1219.2/A2"300lbR F/N/Ex	268.4 18.5	117.3 47.4	PROPYLENE REFRIGERANT & SYNTHETIC OIL
B								
B								

	GAUGES GLASSES & COCKS			Document No:	VD-GPIC-MA-3029-3029-0038
				Document Title:	Instrument Data sheet & Catalogs

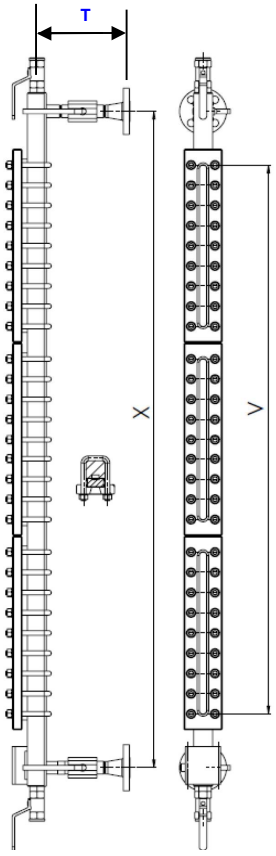
NO.	BY	APP	DATE	P.O.I.
00	N.B	A.M	12.10.25	IFR
01	N.B	A.M	09.12.25	IFR

CLIENT: Gachsaran Polymer Industries Company (GPIC)
P.O. NO.: GPIC-PT-MA-PO-000-3029
SERVICE: PROPYLENE REFERIGERATION PACKAGE

NOTES:

1	SYSTEM DESIGN PRESSURE & TEMPERATURE:	FV to 362.5 PSIG *25.0* BarG @	250 °F *121* °C
			-45 °F *-43* °C
2	WETTED MATERIAL IS 316L STAINLESS STEEL		
3	MATERIAL TEST REPORT TO INCLUDE CHARPY IMPACT TEST PER ASME & ASTM CODES		
4	INSTRUMENT SHALL BE SUITABLE FOR ON-SHORE SERVICE		
5	CALIBRATION CERTIFICATE	☐ REQUIRED	☒ NOT REQUIRED
6	CERTIFICATE OF COMPLIANCE	☒ REQUIRED	☐ NOT REQUIRED
7	316SS NAMEPLATE	☒ REQUIRED	☐ NOT REQUIRED
8	CUSTOMER SPECIFICATION: N/A	&	N/A
9	~~WHERE APPLICABLE, PMI REQUIRED PER SPECIFICATION~~		
10	PAINTING PER CLIENT SPECIFICATION		
11	C TO C DISTA 48 inches *1,219.2 mm*		
12	VENT AND DRAIN CONNECTION SHALL BE SUPPLIED WITH BALL VALVES		

REQUIREMENTS



T = MFR STD

X = 48.00 in
1219.2 mm

V = 36.00 in MAX
914.4 mm

U = MFR STD
AS SHORT AS POSSIBLE

	LEVEL TRANSMITTER CONTROL DEVICES	Document No:	VD-GPIC-MA-3029-3029-0038
		Document Title:	Instrument Data sheet & Catalogs

CLIENT: Gachsaran Polymer Industries Company (GPIC)
P.O. NO.: GPIC-PT-MA-PO-000-3029
SERVICE: PROPYLENE REFERIGERATION PACKAGE

NO.	BY	APP	DATE	P.O.I.
00	N.B	A.M	12.10.25	IFR
01	N.B	A.M	09.12.25	IFR

GENERAL	1	Tag No.	SEE TABLE BELOW — Service: SEE TABLE BELOW
	2	Qty	
	3	Function	Record ☐ Indicate ☒ Control ☒ VIA MCS Blind ☐ Trans ☒ Other
	4	Case	Mfr. Std. ☒ Nom. Size Color : ☐ Other NOTE 2
	5	Mounting	Flush ☐ Surface ☒ Yoke ☐ Other
	6	Enclosure Class	Gen. Purpose ☐ Weather Proof ☐ Explosion Proof ☐
			Use in intrinsically ☒ EExia Safe System ☐ Other ☒ IIB-T5 - ZONE 2, CL1
	7	Power Supply	117V 60 Hz ☒ Other ac ☐ DC ☒ Volts 24 V
	8	Chart N/A	Strip ☐ Roll ☐ Fold ☐ Circular ☐ Time Marks ☐
			Range Number
	9	Chart Drive N/A	Speed Power
	10	Scales	Type: LCD / DIGITAL
			Range SEE TABLE BELOW
XMTR	11	Transmitter Output	4-20 mA ☒ 10-50mA ☐ 21-103 kPa (3-15 psig) ☐ Other
			For Receiver, see spec sheet. WIRED TO UCP VIA JUNCTION BOXES (2 WIRE OUTPUT) NOTE 18
CONTROLLER VIA UCP	12	Control Modes	P = Prop (Gain), 1-Integral (Auto Reset), D = Derivative (Rate)
			Sub: s = slow, f = fast, If ☐ Df ☐ P ☐ PI ☐ PD ☐ PID ☒ Is ☐ Ds ☐
			Other
	14	Action	On Measurement Increase, Output: Increases ☐ Decreases ☐
	15	Auto-Man Switch	None ☐ MFR Std ☐ Other
	16	Set Point Adj.	Manual ☐ External ☐ Remote ☐ Other
	17	Manual Reg.	None ☐ MFR Std ☐ Other
	18	Output NOTE 18	4-20 mA ☒ 10-50 mA ☐ 21-103 kPa (3-15 psig) ☐ Other
ELEMENT	19	Service	Gage Press ☐ Vacuum ☐ Absolute ☐ Differential ☒
	20	Element Type	Diaphragm ☒ Helix ☐ Bourdon ☐ Bellows ☐ Other
	21	Material (body)	316SS ☒ Ber Copper ☐ Other ☐
	22	Range	Fixed ☐ Adj. Range ☒
			Overrange Protection to: SEE TABLE BELOW Electrical Connection: M20 ~~1/2" NPT~~
	23	Process Data	Press.: Nor.: SEE TABLE BELOW MAX.: Element Range:
	24	Process Conn.	1/4" in NPT ☐ 1/2" in NPT (F) ☒ Other: 2"-300# ANSI RF FLG
			Location: Bottom: ☒ Back ☐ Other
	25	Alarm Switches	Quantity: Form Rating
	26	Function	Press. ☒ Deviation ☐ Contacts On Icr. Meas.
OPTIONS	27	Options	Filter Reg. ☐ Sup. Gage ☐ Output Gage ☐ Charts
			Diaphragm Seal ☐ Type N/A Diaphragm Bot. Bowl
			Conn. Capillary: N/A Length Mtl.
			Other
AREA CLASSIFICATION			IEC ☒ ZONE 2, EExia IIB-T3 IP-65 / NEMA4X Agency Approval: ATEX

Item	Qty	Tag No.	Pressure in (mm)		Operating Pressure PSIG / *BarG*		Calibration mA *in (mm)* NOTE 23		Manufacturer/ Model no.	Service
			Range	Over	Min	Max	4	~~20~~		
A	1	LT-61151 CHILLER	0.00 to 120.9 *0 to 3,071*	2000 *137.9*	22.5 *1.55*	25.9 *1.79*	0 *0.00* *0%*	111.4 *2,830.5* *100%*	CHAMBER: BNA- TRANSMITTER: BLM-	PROPYLENE REFRIGERANT SYNTHETIC OIL
B										
C										

	LEVEL TRANSMITTER CONTROL DEVICES			Document No:	VD-GPIC-MA-3029-3029-0038
				Document Title:	Instrument Data sheet & Catalogs
	NO.	BY	APP	DATE	P.O.I.
CLIENT: Gachsaran Polymer Industries Company (GPIC)	00	N.B	A.M	12.10.25	IFR
P.O. NO.: GPIC-PT-MA-PO-000-3029	01	N.B	A.M	09.12.25	IFR
SERVICE: PROPYLENE REFERIGERATION PACKAGE					

Notes:

1 SYSTEM DESIGN PRESSURE & TEMPERATURE: FV to 362.5 PSIG 25.0 BarG @ 250 °F 121 °C
-45 °F -43 °C

2 NORMAL OPERATING CONDITIONS ARE: 22.5 PSIG 1.55 BarG @ -10.9 °F -23.82 °C

3 TRANSMITTER ELECTRICAL HOUSING MUST BE POLYURETHANE COVERED ALUMINUM

4 REFERENCE ACCURACY: +/- 0.1 % OF FULL SCALE & +/- 0.15 % GUARRANTEED STABILITY OVER FIVE YEARS

5 INSTRUMENT SHALL BE SUITABLE FOR MARINE, SALT LADEN, CORROSIVE ENVIRONMENT

6 CALIBRATION CERTIFICATE [X] REQUIRED [ ] NOT REQUIRED

7 HARD COPY OF *IIEC-79, EExia IIB-T5* CERTIFICATE [X] REQUIRED [ ] NOT REQUIRED PER IEC 60079

8 MATERIAL TEST REPORT [X] REQUIRED [ ] NOT REQUIRED

9 CUSTOMER SPECIFICATION: N/A , N/A & N/A

10 ALL DOCUMENTS TO BE SUBMITTED IN BOTH HARD AND ELECTRONIC FORMAT

11 INDICATOR TO SHOW PERCENTAGE

12 AUSTENSIC 316 SS BOLTS REQUIRED

13 NAMEPLATE TO BE MOUNTED TO TOP FLANGE

14 HIGH PRESSURE SIDE, ~~REMOTE MOUNT SEAL,~~ PROCESS CONNECTION IS 2"-300# ANSI RF FLG.

15 LIQUID DENSITY : 36.05 LB/FT3 *579 KG/M3*

16 LOW PRESSURE SIDE, PROCESS CONNECTION 2"-300# ANSI RF FLG

17 LCD METER WITH POLYURETHANE COVERED ALUMINUM COVER REQUIRED

18 "SMART" ELECTRONIC TRANSMITTERS WITH "HART PROTOCOL" COMMUNICATION SHALL BE SUITABLE OVER RANGE OF APPLICATION

19 ELECTRICAL CLASS CERTIFICATION SHALL BE SHOWN ON A DIE-STAMPED STAINLESS STEEL TAG PERMANENTLY ATTACHED TO THE

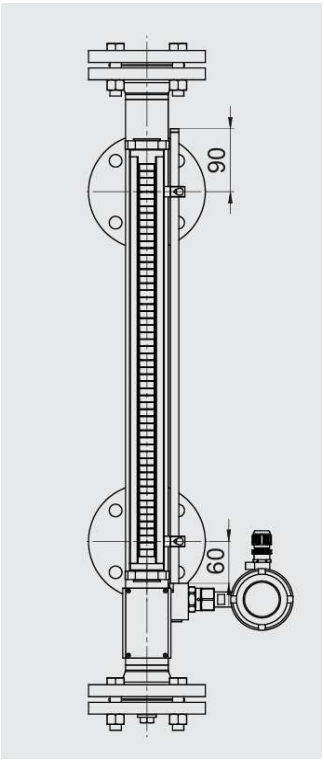
20 DEVICE ELECTRICAL CONNECTION: M20

21 REFRIGERANT IS PROPYLENE WITH OPERATING CONDITIONS SHOWN IN TABULATION

22 C to C DISTANCE BETWEEN NOZZLES THAT COVERS THE TRANSMITTER CALIBRATION RANGE IS: 111.44 inches *2,830.5*

23 IT IS THE RESPONSIBILITY OF THE SUPPLIER TO ASSURE THAT THE FLOATS FIT INSIDE THE CHAMBER *mm*

24 TRANSMITTER ORIENTATION SHALL AS PER SHOWN PER BELOW SNAPSHOT CALLED "ACTUAL DESIGN"



REQUIREMENTS

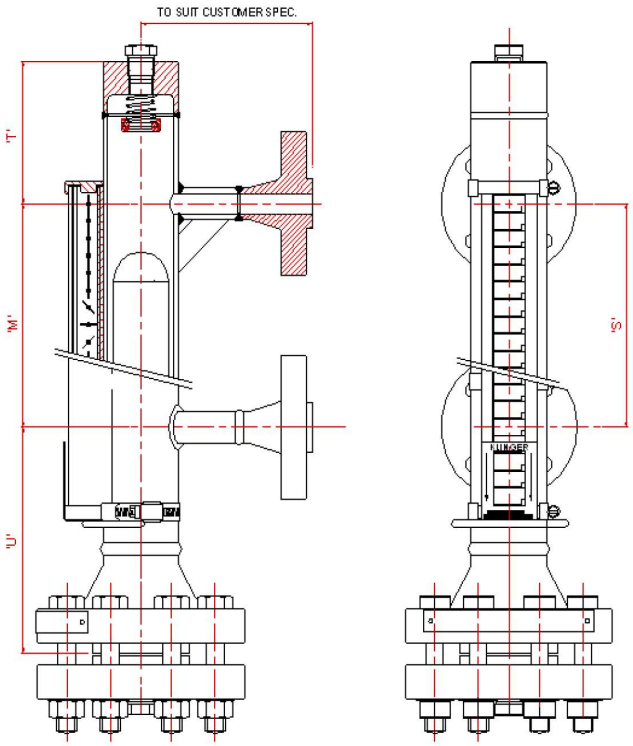
X = 11.5 in
292.1 mm

T = MFR STD

M = 111.44 in
2,830.5 mm

U = MFR STD
AS SHORT AS POSSIBLE

Z = 1 in
25.4 mm



GPI / PGPIC / PIDMCO / EIED / OSC GROUP / RHINE	**LEVEL TRANSMITTER INDICATOR DEVICES**	**Document No:**	**VD-GPIC-MA-3029-3029-0038**
		Document Title:	**Instrument Data sheet & Catalogs**

CLIENT: Gachsaran Polymer Industries Company (GPIC)
P.O. NO.: GPIC-PT-MA-PO-000-3029
SERVICE: PROPYLENE REFERIGERATION PACKAGE

NO.	BY	APP	DATE	P.O.I.
00	N.B	A.M	12.10.25	IFR
01	N.B	A.M	09.12.25	IFR

Section	No.	Item	Data
GENERAL	1	Tag No.	**SEE TABLE BELOW** — Service: **SEE TABLE BELOW**
	2	Qty	
	3	Function	Record ☐ Indicate ☒ Control ☐ VIA MCS Blind ☐ Trans ☒ Other
	4	Case	Mfr. Std. ☒ Nom. Size Color : ☐ Other **NOTE 2**
	5	Mounting	Flush ☐ Surface ☒ Yoke ☐ Other
	6	Enclosure Class	Gen. Purpose ☐ Weather Proof ☐ Explosion Proof ☐
			Use in intrinsically ☒ Safe System ☐ Other ☒ **IIB-T5 - ZONE 2, CL1**
	7	Power Supply	117V 60 Hz ☒ Other ac ☐ DC ☒ Volts **24 V**
	8	Chart N/A	Strip ☐ Roll ☐ Fold ☐ Circular ☐ Time Marks ☐
			Range Number
	9	Chart Drive N/A	Speed Power
	10	Scales	Type: **LCD / DIGITAL**
			Range **SEE TABLE BELOW**
XMTR	11	Transmitter Output	4-20 mA ☒ 10-50mA ☐ 21-103 kPa (3-15 psig) ☐ Other
			For Receiver, see spec sheet. **WIRED TO UCP VIA JUNCTION BOXES (2 WIRE OUTPUT)** **NOTE 18**
CONTROLLER VIA **N/A**	12	Control Modes	P = Prop (Gain), 1-Integral (Auto Reset), D = Derivative (Rate)
			Sub: s = slow, f = fast, If ☐ Df ☐ P ☐ PI ☐ PD ☐ PID ☐ Is ☐ Ds ☐
			Other
	14	Action	On Measurement Increase, Output: Increases ☐ Decreases ☐
	15	Auto-Man Switch	None ☐ MFR Std ☐ Other
	16	Set Point Adj.	Manual ☐ External ☐ Remote ☐ Other
	17	Manual Reg.	None ☐ MFR Std ☐ Other
	18	Output **NOTE 18**	4-20 mA ☐ 10-50 mA ☐ 21-103 kPa (3-15 psig) ☐ Other
ELEMENT	19	Service	Gage Press ☐ Vacuum ☐ Absolute ☐ Differential ☒
	20	Element Type	Diaphragm ☒ Helix ☐ Bourdon ☐ Bellows ☐ Other
	21	Material (body)	316SS ☒ Ber Copper ☐ Other ☐
	22	Range	Fixed ☐ Adj. Range ☐ X
			Overrange Protection to: **SEE TABLE BELOW** **Electrical** Connection: **M20 ~~1/2" NPT~~**
	23	Process Data	Press.: Nor.: **SEE TABLE BELOW** MAX.: Element Range:
	24	Process Conn.	1/4" in NPT ☐ 1/2" in NPT (F) ☒ Other: **2"-300# ANSI RF FLG**
			Location: Bottom: ☒ Back ☐ Other
	25	Alarm Switches	Quantity: Form Rating
	26	Function	Press. ☒ Deviation ☐ Contacts On Icr. Meas.
OPTIONS	27	Options	Filter Reg. ☐ Sup. Gage ☐ Output Gage ☐ Charts
			Diaphragm Seal ☐ Type **N/A** Diaphragm Bot. Bowl
			Conn. Capillary: **N/A** Length Mtl.
			Other
AREA CLASSIFICATION			IEC ☒ **ZONE 2, EExia IIB-T3** **IP-65 / NEMA4X** Agency Approval: **ATEX**

Item	Qty	Tag No.	Pressure in (mm) Range	Over	Operating Pressure PSIG / *BarG* Min	Max	Calibration mA *in (mm)* NOTE 23 — 4	20	Manufacturer/ Model no.	Service
A	**1**	**LT-61131** **OIL SEPARATOR**	0.00 to 57.4 *0 to 1,459*	2000 *137.9*	*275.6* *19.0*	*289.1* *19.9*	0 *0.00* *0%*	48.0 *1,214.4* *100%*	**CHAMBER:** **BNA-** **TRANSMITTER:** **BLM-**	**NATURAL GAS &** **SYNTHETIC OIL**
B										
C										

	LEVEL TRANSMITTER INDICATOR DEVICES				Document No:	VD-GPIC-MA-3029-3029-0038
					Document Title:	Instrument Data sheet & Catalogs
	NO.	BY	APP	DATE	P.O.I.	
	00	N.B	A.M	12.10.25	IFR	
CLIENT: Gachsaran Polymer Industries Company (GPIC)	01	N.B	A.M	09.12.25	IFR	
P.O. NO.: GPIC-PT-MA-PO-000-3029						
SERVICE: PROPYLENE REFERIGERATION PACKAGE						

Notes:

1 SYSTEM DESIGN PRESSURE & TEMPERATURE: FV to 362.5 PSIG 25.0 BarG @ 250 °F 121 °C
-49 °F -45 °C

2 NORMAL OPERATING CONDITIONS ARE: FV to 59.6 PSIG 4.1 BarG @ 158 °F 70 °C FOR ITEMS: 1
158 °F 70 °C FOR ITEMS:

3 TRANSMITTER ELECTRICAL HOUSING MUST BE POLYURETHANE COVERED ALUMINUM

4 REFERENCE ACCURACY: +/- 0.075 % OF FULL SCALE & +/- 0.15 % GUARRANTEED STABILITY OVER FIVE YEARS

5 INSTRUMENT SHALL BE SUITABLE FOR MARINE, SALT LADEN, CORROSIVE ENVIRONMENT

6 CALIBRATION CERTIFICATE [X] REQUIRED [ ] NOT REQUIRED

7 HARD COPY OF *IIEC-79, EExia IIB-T5* CERTIFICATE [X] REQUIRED [ ] NOT REQUIRED PER IEC 60079

8 MATERIAL TEST REPORT [X] REQUIRED [ ] NOT REQUIRED

9 CUSTOMER SPECIFICATION: N/A , N/A & N/A

10 ALL DOCUMENTS TO BE SUBMITTED IN BOTH HARD AND ELECTRONIC FORMAT

11 INDICATOR TO SHOW PERCENTAGE

12 AUSTENSIC 316 SS BOLTS REQUIRED

13 NAMEPLATE TO BE MOUNTED TO TOP FLANGE

14 HIGH PRESSURE SIDE, ~~REMOTE MOUNT SEAL,~~ PROCESS CONNECTION IS 2"-300# ANSI RF FLG.

15 LIQUID DENSITY := 65= LB/FT3= *1044 KG/M3*

16 LOW PRESSURE SIDE, PROCESS CONNECTION 2"-300# ANSI RF FLG

17 LCD METER WITH POLYURETHANE COVERED ALUMINUM COVER REQUIRED

18 "SMART" ELECTRONIC TRANSMITTERS WITH "HART PROTOCOL" COMMUNICATION SHALL BE SUITABLE OVER RANGE OF APPLICATION=

19 ELECTRICAL CLASS CERTIFICATION SHALL BE SHOWN ON A DIE-STAMPED STAINLESS STEEL TAG PERMANENTLY ATTACHED TO THE DEVICE=

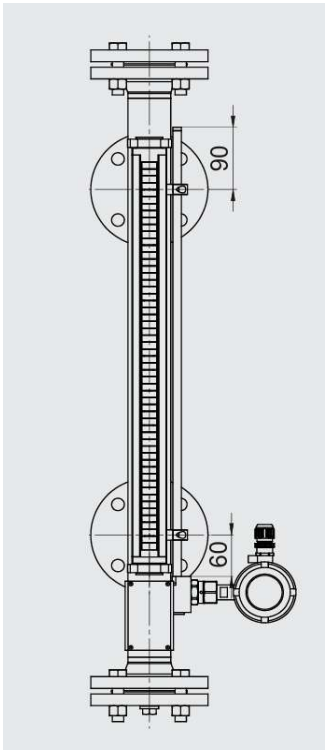
20 ELECTRICAL CONNECTION: M20

21 LIQUID MEDIA IS PAG OIL WITH OPERATING CONDITIONS SHOWN IN TABULATION

22 DISTANCE BETWEEN NOZZLES THAT COVERS THE TRANSMITTER CALIBRATION RANGE IS: 48.00 inches *1,214.4 mm*

23 IT IS THE RESPONSIBILITY OF THE SUPPLIER TO ASSURE THAT THE FLOATS FIT INSIDE THE CHAMBER

24 TRANSMITTER ORIENTATION SHALL AS PER SHOWN PER BELOW SNAPSHOT CALLED "ACTUAL DESIGN"



REQUIREMENTS

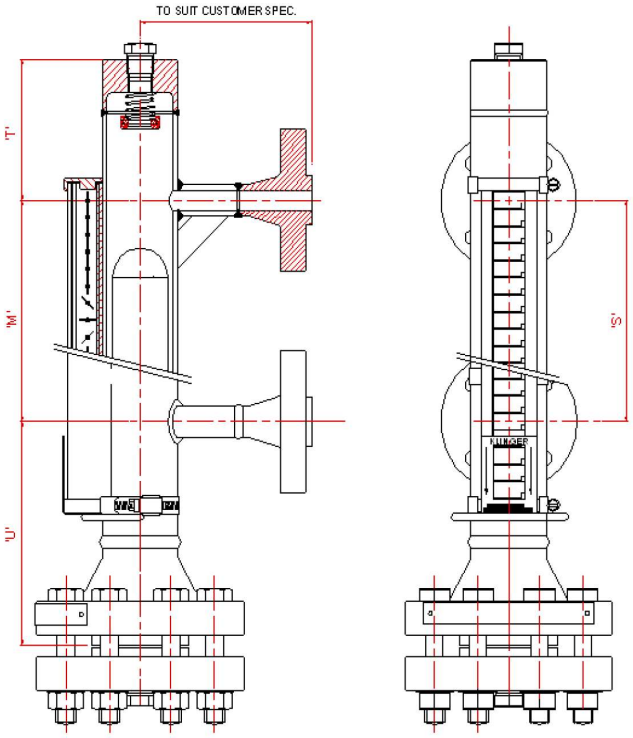
X = 14.4 in
365.76 mm

T = MFR STD

M = 48.00 in
1,219.2 mm

U = MFR STD
AS SHORT AS POSSIBLE

Z = 1 in
25.4 mm



	SIGHT INDICATOR (ROTAMETER)				Document No:	VD-GPIC-MA-3029-3029-0038
					Document Title:	Instrument Data sheet & Catalogs
	NO.	BY	APP	DATE	P.O.I.	
	00	N.B	A.M	12.10.25	IFR	
CLIENT: Gachsaran Polymer Industries Company (GPIC)	01	N.B	A.M	09.12.25	IFR	
P.O. NO.: GPIC-PT-MA-PO-000-3029						
SERVICE: PROPYLENE REFERIGERATION PACKAGE						

Item No.	A	B	C
Tag No.	SI-701-O-4 RECEIVER	FG-61131 OIL DEPARATOR	
Connections			
Inlet	3/4"-300# ANSI RF	1-1/2"-300# ANSI RF	
Outlet	3/4"-300# ANSI RF	1-1/2"-300# ANSI RF	
Rating	300#	300#	
Drawing			
P&ID	ULT003-20001-4	ULT003-20001-3	
Type			
Mounting	IN-LINE HORIZONTALLY MOUNTED	IN-LINE HORIZONTALLY MOUNTED	
Construction	BULL'S EYE TYPE (DUAL WINDOW)	BULL'S EYE TYPE (DUAL WINDOW)	
Type	ROTOR	ROTOR	
Material			
Body	STAINLESS STEEL - A351-CF8	STAINLESS STEEL - A351-CF8	
Glass	TEMPERED BOROSILICATE GLASS	TEMPERED BOROSILICATE GLASS	
	(SHATTER PROOF)	(SHATTER PROOF)	
Seal/Elastomer	TEFLON	TEFLON	
Bolts / Nuts	SA193-B7 / SA194-2H	SA193-B8 / SA194-8	
Service			
Media	SYNTHETIC OIL / PROPYLENE REFRIGERANT	SYNTHETIC OIL / PROPYLENE REFRIGERANT	
Phase	LIQUID / VAPOR	GAS / VAPOR	
Operating Conditions			
Pressure	270.2 PSIG 18.6 BarG	270.7 18.67 BarG	
Temperature	116.96 °F 47.2 °C	171 77.2 °C	
Manufacture			
Model			
Quantity	2	2	

Notes:

1 SYSTEM DESIGN PRESSURE & TEMPERATURE: FV to 362.5 PSIG 25.0 BarG @ 250 °F 121 °C
MINIMUM DESIGN TEMPERATURE -45 °F -43 °C FOR: *1, 3*
-20 °F -29 °C FOR: *1*

2 WETTED MATERIAL IS 316 STAINLESS STEEL
3 INSTRUMENT SHALL BE SUITABLE FOR MARINE, SALT LADEN, CORROSIVE ENVIRONMENT
4 CALIBRATION CERTIFICATE ☐ REQUIRED ☒ NOT REQUIRED
5 CERTIFICATE OF COMPLIANCE ☒ REQUIRED ☐ NOT REQUIRED
6 316SS NAMEPLATE ☒ REQUIRED ☐ NOT REQUIRED
7 ~~NACE MR-0175 RATED~~
8 ALL DOCUMENTS TO BE SUBMITTED IN BOTH HARD AND ELECTRONIC FORMAT
9 BOLTS / NUTS SHALL BE CADMIUM PLATED
10 INDIVIDUAL PART WEIGHT MUST BE CERTIFIED
11 WHERE APPLICABLE, PMI REQUIRED PER SPECIFICATION
12 INSPECTION PER STATED CODES
13 STAINLESS STEEL MATERIAL CAN BE QUOTED IF CARBON STEEL IS NOT AVAILABLE
14 HYDROSTATICE CERTIFICE REQUIRED FOR ALL VALVES
15 INLET AND OUTLET BORES SHALL MATCH WITH SCH80 PIPE

	SOLENOID VALVE	Document No:	VD-GPIC-MA-3029-3029-0038
		Document Title:	Instrument Data sheet & Catalogs

NO.	BY	APP	DATE	P.O.I.
00	N.B	A.M	12.10.25	IFR
01	N.B	A.M	09.12.25	IFR

CLIENT: Gachsaran Polymer Industries Company (GPIC)

P.O. NO.: GPIC-PT-MA-PO-000-3029

SERVICE: PROPYLENE REFERIGERATION PACKAGE

GENERAL	1	Tag No.	SEE TABLE BELOW — Service: See Table Below
	2	Function	Record ☐ Indicate ☒ Control ☒ Blind ☐ Trans ☒ Other
	3	Case	MFR. Std. ☒ Nom ☐ Nom. Size — Color: MFR. Std ☒ Other NOTE 2
	4	Mounting	Flush ☐ Surface ☐ Yoke ☐ Other RACK MOUNT
	5	Enclosure Class	Gen. Purpose ☐ Weather Proof ☒ Explosion Proof ☒ IIB-T5 - ZONE 2, CL1
			For use in intrinsically ☒ EExia Safe System ☐ Other
	6	Power Supply	117V 60 Hz ☐ Other ac — dc ☒ Volts: 24 V
	7	Chart	Strip ☐ Roll ☐ Fold ☐ Circular ☐ Time marks ☐
	8	Chart Drive	Speed — Power
	9	Scale	Type: LCD / DIGITAL — Range: 0 - 2000 OHMS
XMTR	10	Transmitter Output	4-20 mA ☒ 10-50mA ☐ 21-103 kPa (3-15 psig) ☐ Other
			For Receiver, see spec sheet. WIRED TO PLC VIA I/O RACK (2 WIRES OUTPUT)
CONTROLLER VIA PLC	11	Control Modes	Sub: s = slow, f = fast, If ☐ Df ☐ P ☐ PI ☐ PD ☐ PID ☐ Is ☐ Ds ☐
			Other
			On Measurement Increase, Output: Increases ☐ Decreases ☐
	12	Action	None ☐ MFR Std ☒ Other
	13	Auto-Man Switch	Manual ☐ External ☒ Remote ☒ Other
	14	Set Point Adj.	None ☐ MFR Std ☒ Other
	15	Manual Reg.	4-20 mA ☒ 10-50mA ☐ 21-103 kPa (3-15 psig) ☐ Other
	16	Output	
ELEMENT	17	Fill	SAMA Class — Compensation
	18	Process Data	SEE TABLE BELOW
	19	Range	Fixed ☒ Adj. Range 0-1000 ohms — Set @ SEE BELOW
			Instrument Connection: — Electrical Connection: M20 ~~1/2" NPT~~
	20	Bulb	Type: POTENTIOMETER (0-5 VDC) — Sheat Material:
			Size: Diameter: — Number of Wires: 3-WIRES
	21		
	22		
	23	Alarm Switches	Quantity: 1 / TRANSMITTER Form SOFT Rating VIA PLC
	24	Function	Resistor ☒ Deviation ☐ Contacts to — On Temp. Incr.
	25	Options	
			Other: DIGITAL DISPLAY
AREA CLASS.	27		IEC ☒ ZONE 2, EExia IIB-T: IP-65 / NEMA4X — Agency Approval: ATEX

TRANSMITTER

Item	Qty	Tag No.	Resistance (ohms) Range	Resistance (ohms) Oper.	Oper. Press. (PSIG) Min.	Oper. Press. (PSIG) Max.	Calibration (ohms) 4 mA	Calibration (ohms) 20 mA	Manufacturer / Model No.	Service
A	1	ZT-61111	0-2000	0-1000	ATM	ATM	0 ohms	1000 ohms		HYDROCARBON GAS & SYNTHETIC OIL
B	1	ZT-61111	0-2000	0-1000	ATM	ATM	0 ohms	1000 ohms		HYDROCARBON GAS & SYNTHETIC OIL

Notes:

1 SYSTEM DESIGN PRESSURE & TEMPERATURE: 300 ˚F 149 ˚C

2 ACCURACY: +/- 0.02 % FS

3 INSTRUMENT SHALL BE SUITABLE FOR MARINE, SALT LADEN, CORROSIVE ENVIRONMENT

4 CALIBRATION CERTIFICATE ☒ REQUIRED ☐ NOT REQUIRED

5 HARD COPY OF *IIEC-79, EExia IIB-T5* CERTIFICATE ☒ REQUIRED ☐ NOT REQUIRED PER IEC 60079

6 CUSTOMER SPECIFICATION: 1400-20-IC-SP-5102

7

8= ELECTRICAL CLASS CERTIFICATION SHALL BE SHOWN ON A DIE-STAMPED STAINLESS STEEL TAG PERMANENTLY ATTACHED TO THE DEVICE=

9= "SMART" ELECTRONIC TRANSMITTERS SHALL BE SUITABLE OVER RANGE OF APPLICATION

10= ALL HARDWARE SHALL BE 316 SS

11= ALL DOCUMENTS TO BE SUBMITTED IN ELECTRONIC FORMAT

12= AUSTENSIC 316 SS BOLTS REQUIRED

13

14= BRACKET FOR 2" PIPE OR PANEL MOUNTING OF STAINLESS STEEL CONSTRUCTION REQUIRED

15= LCD METER WITH STAINLESS STEEL COVER REQUIRED

16= INDIVIDUAL PART WEIGHT MUST BE CERTIFIED

SOLENOID VALVE (CAPACITY CONTROL)		Document No:	VD-GPIC-MA-3029-3029-0038
		Document Title:	Instrument Data sheet & Catalogs

CLIENT: Gachsaran Polymer Industries Company (GPIC)

P.O. NO.: GPIC-PT-MA-PO-000-3029

SERVICE: PROPYLENE REFERIGERATION PACKAGE

NO.	BY	APP	DATE	P.O.I.
00	N.B	A.M	12.10.25	IFR
01	N.B	A.M	09.12.25	IFR

GENERAL	0	Item No.	A	
	1	Tag No. LOAD	XY-61112 & XY-61122	
		UNLOAD	XY-61111 & XY-61121	
	2	Service	AIR	
	3	Line No. / Vessel No.	COMPRESSOR LOADING / UNLOADING	
	4	Valve No.	DIRV-61111 DIRV-61111	
VALVE BODY	5	Type	3 WAY DIRECT ACTING w/ QUICK EXHAUST	
	6	Size - Body / Port	1/4" / 3	
	7	Rating & Type Connection	NPT	
	8	Material - Body	316 STAINLESS STEEL	
	9	Material - Disc (Trim)	BUNA (HIGH NITRILE)	
	10	Material-Diaphragm / Coil	EPOXY MOLDED	
	11	Operation - Direct/Pilot	DIRECT	
	12	Packless or Type Packed	-----	
	13	Manual Reset Lever	-----	
	14	Manual Operator(override)	INCLUDED	
	15			
	16			
WHEN DE-ENERGIZE	17	2-Ways Valve Opens/Close	---	
	18	3-Way (NOTE 10)	YES	
	19	Vent Port Opens/Close	OPENS	
	20	Pressure Port Opens/Close	CLOSES	
	21	4-Way	----	
	22	Pressure to Cyl. 1/ Cyl. 2	----	
	23	Exh. from Cyl. 1/ Cyl. 2	----	
	24			
	25			
SOLENOID	26	Enclosure	IEC-79, Eex(d) IIB-T3 IP66 (NEMA-4X)	
	27	Voltage/Hz	24 VDC (LOW POWER OPERATOR)	
	28	Style of Coil	CL. "H" HERMETICALLY SEALED HIGH TEMP.	
	29	Single or Double Coil	SINGLE	
	30	Area Classification	*IEC-79, ZONE 2, GROUP IIB, T3, EE x(d)*	
	31	Cable Entry	M20 x 1.5 mm	
SERVICE CONDITION	32	Fluid	AIR	
	33	Qty., Max	8 SCFM *12.7 S M3/HR*	
	34	Operating Differential Min/Max	10 / 15 PSID *0.7 / 1.03 BarD*	
	35	Allow . Differential Min/Max	20 / 150 PSID *1.4 / 10.3 BarD*	
	36	Temperature Norm/Max	70 / 100 °F *21 / 37.8 °C*	
	37	Operating Specific Gravity	1.0	
	38	Operating Viscosity	-----	
	39	Required Cv	0.200	
	40	Valve Cv / Orifice	0.8 /	
	41			
	42	Agency Approval	ATEX	
	43			
	44			
	45	Manufacturer		
	46	Model No.		
	47	QTY	4	

NOTES:	1	SYSTEM DESIGN PRESSURE & TEMPERATURE: 150 PSIG 10 BarG @ 300 °F 149 °C
	2	*-20 °F -29 °C*
	3	INSTRUMENT SHALL BE SUITABLE FOR MARINE, SALT LADEN, CORROSIVE ENVIRONMENT
	4	CALIBRATION CERTIFICATE ☐ REQUIRED ☒ NOT REQUIRED
	5	CERTIFICATE OF COMPLIANCE ☒ REQUIRED ☐ NOT REQUIRED
	6	HARD COPY OF *IEC-79, EEXD IIB-T3* CERTIFICATE ☒ REQUIRED ☐ NOT REQUIRED PER IEC 60079
	7	AREA CLASSIFICATION: *IEC-79, ZONE 2, GROUP IIB, T3, EE x(d)*
	8	MANUFACTURER CALCULATION / SIZING SHEET ☐ REQUIRED ☒ NOT REQUIRED
	9	STAINLESS STEEL NAMEPLATE (316) ☒ REQUIRED ☐ NOT REQUIRED
	10	COILS SHALL BE FITTED WITH SURGE SUPPRESSION DIODES.
	11	SOLENOID VALVE POWER CONSUMPTION SHALL BE LESS LESS THAN 10 WATTS.
	12	BUG SCREENS SHALL BE INSTALLED ON EXHAUST
	13	LEADS TO BE TERMINATED IN A CONDUIT BOX SUITABLE FOR AREA CLASSIFICATION.
	14	ALL DOCUMENTS TO BE SUBMITTED IN BOTH HARD AND ELECTRONIC FORMAT
	15	INDIVIDUAL PART WEIGHT MUST BE CERTIFIED

					SOLENOID VALVE (CAPACITY CONTROL)			Document No:	VD-GPIC-MA-3029-3029-0038
								Document Title:	Instrument Data sheet & Catalogs
					NO.	BY	APP	DATE	P.O.I.
CLIENT: Gachsaran Polymer Industries Company (GPIC)					00	N.B	A.M	12.10.25	IFR
P.O. NO.: GPIC-PT-MA-PO-000-3029					01	N.B	A.M	09.12.25	IFR
SERVICE: PROPYLENE REFERIGERATION PACKAGE									
GENERAL	0	Item No.		A					
	1	Tag No.		XV-61151 XV-61152					
	2	Service		OIL					
	3	Line No. / Vessel No.		OIL RECOVERY SYSTEM					
	4	Valve No.		N/A					
VALVE BODY	5	Type	(NOTE 16)	2 WAY DIRECT ACTING w/ QUICK EXHAUST					
	6	Size - Body / Port		1/2" / 2					
	7	Rating & Type Connection		NPT					
	8	Material - Body		316 STAINLESS STEEL					
	9	Material - Disc (Trim)		VITON					
	10	Material-Diaphragm / Coil		EPOXY MOLDED					
	11	Operation - Direct/Pilot		DIRECT					
	12	Packless or Type Packed		-----					
	13	Manual Reset Lever		-----					
	14	Manual Operator(override)		INCLUDED					
	15								
	16								
WHEN DE-ENERGIZE	17	2-Ways Valve Opens/Close		YES					
	18	3-Way	(NOTE 10)	NO					
	19	Vent Port Opens/Close		N/A					
	20	Pressure Port Opens/Close		CLOSES					
	21	4-Way		----					
	22	Pressure to Cyl. 1/ Cyl. 2		----					
	23	Exh. from Cyl. 1/ Cyl. 2		----					
	24								
	25								
SOLENOID	26	Enclosure		IEC-79, Eex(d) IIB-T3 IP66 (NEMA-4X)					
	27	Voltage/Hz		24 VDC (LOW POWER OPERATOR)					
	28	Style of Coil		CL. "H" HERMETICALLY SEALED HIGH TEMP.					
	29	Single or Double Coil		SINGLE					
	30	Area Classification		*IEC-79, ZONE 2, GROUP IIB, T3 , EE x(d)*					
	31	Cable Entry		M20 x 1.5 mm					
SERVICE CONDITION	32	Fluid		OIL (PAG) / PROPYLENE					
	33	Qty., Max		5 GPM 19 LPM					
	34	Operating Differential Min/Max		1 / 5 PSID 0.1 / 0.345 BarD					
	35	Allow . Differential Min/Max		5 / 290 PSID 0.3 / 20 BarD					
	36	Temperature Norm/Max		-12.4 / 145 °F -25 / 62.78 °C					
	37	Operating Specific Gravity		0.96					
	38	Operating Viscosity		-----					
	39	Required Cv		2.191					
	40	Valve Cv / Orifice		3.80					
	41								
	42	Agency Approval		ATEX					
	43								
	44								
	45	Manufacturer							
	46	Model No.							
	47	QTY		2					

NOTES:

1. SYSTEM DESIGN PRESSURE & TEMPERATURE: FV to 362.5 PSIG 25.0 BarG @ 250 °F 121 °C
2. -45 °F -43 °C
3. INSTRUMENT SHALL BE SUITABLE FOR MARINE, SALT LADEN, CORROSIVE ENVIRONMENT
4. CALIBRATION CERTIFICATE ☐ REQUIRED ☒ NOT REQUIRED
5. CERTIFICATE OF COMPLIANCE ☒ REQUIRED ☐ NOT REQUIRED
6. HARD COPY OF *IEC-79, EEXD IIB-T3* CERTIFICATE ☒ REQUIRED ☐ NOT REQUIRED PER IEC 60079
7. AREA CLASSIFICATION: *IEC-79, ZONE 2, GROUP IIB, T3, EE x(d)*
8. MANUFACTURER CALCULATION / SIZING SHEET ☐ REQUIRED ☒ NOT REQUIRED
9. STAINLESS STEEL NAMEPLATE (316) ☒ REQUIRED ☐ NOT REQUIRED
10. COILS SHALL BE FITTED WITH SURGE SUPPRESSION DIODES.
11. SOLENOID VALVE POWER CONSUMPTION SHALL BE LESS LESS THAN 10 WATTS.
12. ~~BUG SCREENS SHALL BE INSTALLED ON EXHAUST~~
13. LEADS TO BE TERMINATED IN A CONDUIT BOX SUITABLE FOR AREA CLASSIFICATION.
14. ALL DOCUMENTS TO BE SUBMITTED IN BOTH HARD AND ELECTRONIC FORMAT
15. INDIVIDUAL PART WEIGHT MUST BE CERTIFIED
16. 3-WAY VALVES MAY BE USED BY PLUGGING BLEED PORT.