



 Gachsaran Polymer Industries Company PIDMCO	Gachsaran Polymer Industries Company HDPE Plant			
	Instrument Datasheet & Catalogs		 	
PO No.: GPIC-PT-MA-PO-000-3029	Document Number: VD-GPIC-MA-3029-3029-0038		Rev. 01	Page 1 of 27

Instrument Datasheet & Catalogs

Code1	<input type="checkbox"/> No Comment/ Approved (Applicable Only for "FOR REVIEW" and "For Approval" Documents) No comment and the document are released for Manufacturing.
Code2	<input checked="" type="checkbox"/> 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	<input type="checkbox"/> 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	<input type="checkbox"/> 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	<input type="checkbox"/> 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
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01	8-Dec-25	IFR	N.B	F.T	A.M
00	12-Oct-25	IFR	N.B	F.T	A.M
Rev.	DATE	PURPOSE OF ISSUE	PREPARED	CHECKED	APPROVED

		PRESSURE GAUGE			Document No:	VD-GPIC-MA-3029-3029-0038
		BY	APP	DATE	Document	
PR General Comment: Instrument data sheet will be finalized after finalization of "HAZOP Implementation Report" of package.		N.B	A.M	12.10.25		
					25	

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

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.

1. Type: Direct Reading <input checked="" type="checkbox"/> 3-15 lb Receiver <input type="checkbox"/> Other <input type="checkbox"/> 2. Mounting: Surface <input type="checkbox"/> Local <input checked="" type="checkbox"/> Flush <input type="checkbox"/> 3. Dial: Diameter 6" (150) <input checked="" type="checkbox"/> Color: WHITE (NOTE 13) 4. Case: Cast Iron <input type="checkbox"/> Aluminum <input type="checkbox"/> Phenolic <input type="checkbox"/> Stainless Steel <input checked="" type="checkbox"/> Other <input type="checkbox"/> 5. Ring: Screwed <input checked="" type="checkbox"/> Hinged <input type="checkbox"/> Slip <input type="checkbox"/> Std <input type="checkbox"/> Other <input type="checkbox"/> 6. Blow-out Protection: None <input type="checkbox"/> Back <input checked="" type="checkbox"/> Disc <input type="checkbox"/> Solid Front <input type="checkbox"/> Other <input type="checkbox"/> 7. Lens: Glass <input checked="" type="checkbox"/> SAFETY GLASS FRONT Plastic <input type="checkbox"/> 8. Option: Syphon <input type="checkbox"/> Material: NONE Snubber <input type="checkbox"/> Material: NONE Pressure Limit Valve <input type="checkbox"/> Movement Damping <input checked="" type="checkbox"/> GLYCERINE FILLED	10. Mfr & Model No. SEE LIST BELOW 11. Pressure Element: Bourdon <input checked="" type="checkbox"/> Bellows <input type="checkbox"/> Other <input type="checkbox"/> 12. Bourdon Mat'l: Bronze <input type="checkbox"/> Steel <input type="checkbox"/> 316SS <input checked="" type="checkbox"/> Other <input type="checkbox"/> 13. Socket Mat'l: Bronze <input type="checkbox"/> Steel <input type="checkbox"/> 316SS <input checked="" type="checkbox"/> Other <input type="checkbox"/> 14. MNPT Conn.: 1/4" <input type="checkbox"/> 1/2" <input checked="" type="checkbox"/> Other <input type="checkbox"/> Bottom <input checked="" type="checkbox"/> Back <input type="checkbox"/> 15. Movement Mat'l: Bronze <input type="checkbox"/> 316SS <input checked="" type="checkbox"/> Nylon <input type="checkbox"/> Other <input type="checkbox"/> 16. Diaphragm Seal NOT REQUIRED MFG Type Wetted Part Mtl. Other Mat'l Fill Fluid Process Conn. Gage Conn.
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Item	Qty.	Tag No.	Range PSIG BAR	Oper. Pressure PSIG (BarG)		Service	MANUFACTURER Model NO.
				OPER.	MAX.		
A	1	PG-61133 PUMP DISCHARGE	0 to 590 0 to 40	336 23.2	351 24.2	PROPYLENE GAS & SYNTHETIC OIL	
B	1	PG-61134 PUMP DISCHARGE	0 to 590 0 to 40	336 23.2	351 24.2	PROPYLENE GAS & SYNTHETIC OIL	
C	1	PG-61142 RECEIVER	0 to 590 0 to 40	270 18.6	351 24.2	PROPYLENE GAS & SYNTHETIC OIL	
D	1	PG-61111 SUCTION	0 to 60 0 to 4	23 1.6	26 1.8	PROPYLENE GAS & SYNTHETIC OIL	
E	1	PG-61121 SUCTION	0 to 60 0 to 4	23 1.6	26 1.8	PROPYLENE GAS & SYNTHETIC OIL	
F	1	PG-61113 OIL SUPPLY	0 to 590 0 to 40	305 21.0	335 23.1	PROPYLENE GAS & SYNTHETIC OIL	
G	1	PG-61123 OIL SUPPLY	0 to 590 0 to 40	305 21.0	335 23.1	PROPYLENE GAS & SYNTHETIC OIL	
H							
J							
K	1	PG-61131 DISCHARGE	0 to 590 0 to 40	276 19.0	303 20.9	PROPYLENE GAS & 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

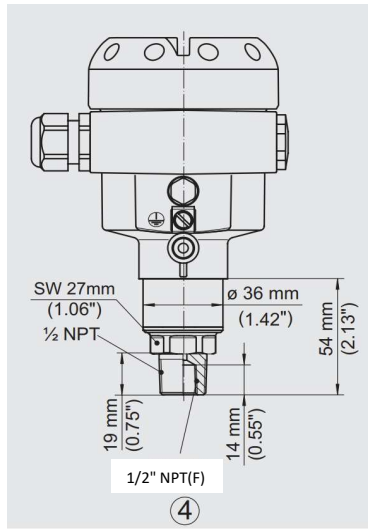
13 REFER TO P&ID AND VALVE DATA SHEETS FOR MANIFOLD VALVE INFORMATION.


				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) P.O. NO.: GPIC-PT-MA-PO-000-3029 SERVICE: PROPYLENE REFERIGERATION PACKAGE				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 <input type="checkbox"/>	Indicate <input checked="" type="checkbox"/>	Control <input checked="" type="checkbox"/>	VIA MCS <input type="checkbox"/>	Blind <input type="checkbox"/>	Trans <input checked="" type="checkbox"/>	Other <input type="checkbox"/>
				4	Case	Mfr. Std. <input checked="" type="checkbox"/>	Nom. Size <input type="checkbox"/>	Color: <input type="checkbox"/>		Other <input type="checkbox"/> NOTE 2		
				5	Mounting	Flush <input type="checkbox"/>	Surface <input type="checkbox"/>	Yoke <input checked="" type="checkbox"/>		Other <input type="checkbox"/>		
				6	Enclosure Class	Gen. Purpose <input type="checkbox"/>	Weather Proof <input type="checkbox"/>	Explosion Proof <input type="checkbox"/>		Use in intrinsically <input checked="" type="checkbox"/> EEExia Safe System <input type="checkbox"/>		
				7	Power Supply	117V 60 Hz <input type="checkbox"/>	Other ac <input type="checkbox"/>	DC <input checked="" type="checkbox"/>	Volts 24 V			
				8	Chart	N/A	Strip <input type="checkbox"/>	Roll <input type="checkbox"/>	Fold <input type="checkbox"/>	Circular <input type="checkbox"/>	Time Mark: <input type="checkbox"/>	
				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 <input checked="" type="checkbox"/> NOTE 9	10-50mA <input type="checkbox"/>	21-103 kPa (3-15 psig) <input type="checkbox"/>		Other <input type="checkbox"/>		
				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), I-Integral (Auto Reset), D = Derivative (Rate)					Sub: s = slow, f = fast, If <input type="checkbox"/> Df <input type="checkbox"/> P <input checked="" type="checkbox"/> PID <input type="checkbox"/> PD <input type="checkbox"/> PI <input type="checkbox"/> Is <input type="checkbox"/> Ds <input type="checkbox"/>	
				14	Action	On Measurement Increase, Output:			Increases <input type="checkbox"/> Decreases <input type="checkbox"/>			
				15	Auto-Man Switch	None <input type="checkbox"/>	MFR Std <input type="checkbox"/>	Other <input checked="" type="checkbox"/>		NOTE 21		
				16	Set Point Adj.	Manual <input type="checkbox"/>	External <input type="checkbox"/>	Remote <input checked="" type="checkbox"/> UCP	Other <input type="checkbox"/> NOTE 9			
				17	Manual Reg.	None <input type="checkbox"/>	MFR Std <input type="checkbox"/>	Other <input type="checkbox"/>				
				18	Output	4-20 mA <input type="checkbox"/>	NOTE 9	10-50 mA <input type="checkbox"/>	21-103 kPa (3-15 psig) <input type="checkbox"/>		Other <input type="checkbox"/>	
ELEMENT				19	Service	Gage Press <input checked="" type="checkbox"/>	Vacuum <input type="checkbox"/>	Absolute <input type="checkbox"/>		Compound <input type="checkbox"/>		
				20	Element Type	Diaphragm <input type="checkbox"/>	Helix <input type="checkbox"/>	Bourdon <input type="checkbox"/>	Bellovs <input type="checkbox"/>	Other <input type="checkbox"/> NOTE 19		
				21	Material (body)	316SS <input checked="" type="checkbox"/>	Ber Copper <input type="checkbox"/>	Other <input type="checkbox"/>				
				22	Range	Fixed <input type="checkbox"/>	Adj. Range <input checked="" type="checkbox"/>					
				Overrange Protection to: SEE TABLE BELOW								
				23	Process Data	Press.: Nor.: SEE TABLE BELOW	MAX.:		Element Range:			
				24	Process Conn.	1/4" in NPT <input type="checkbox"/>	1/2" in NPT (F) <input checked="" type="checkbox"/>	Other: 1/2" CONDUIT CONNECTION				
				25	Alarm Switches	Quantity: BY UCP REFER TO SETPOINT LIST	Form	Rating				
VIA UCP				26	Function	Press. <input checked="" type="checkbox"/>	Deviation <input type="checkbox"/>	Contacts	On Icr. Meas.			
OPTIONS				27	Options	Filter Reg. <input type="checkbox"/>	Sup. Gage <input type="checkbox"/>	Output Gage <input type="checkbox"/>	Charts			
						Diaphragm Seal <input type="checkbox"/>	Type N/A	Diaphragm	Bot. Bowl			
						Conn. Capillary: N/A	Length	Mtl.				
						Other: ELECTRICAL GROUND SCREW REQUIRED						
AREA CLASSIFICATION						IEC <input checked="" type="checkbox"/> ZONE 2, EEExia IIB-T3	IP-65 / NEMA4X	Agency Approval: ATEX				
Item	Qty	Tag No.	Pressure PSIG - BarG		Operating Press. PSIG / BarG		Calibration mA PSIG / BarG		Manufacturer/ (Note 16)	Service		
			Range	Over	Min	Max	4	20	Model no.			
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		


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					Document Title:	Instrument Data sheet & Catalogs
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	00	N.B	A.M	12.10.25	IFR	
	01	N.B	A.M	09.12.25	IFR	

- Notes:
- 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	
 - TRANSMITTER ELECTRICAL HOUSING MUST BE POLYURETHANE COVERED ALUMINUM
 - REFERENCE ACCURACY: +/- 0.1 % OF FULL SCALE & +/- 0.15 % GUARRANTEED STABILITY OVER FIVE YEARS
 - INSTRUMENT SHALL BE SUITABLE FOR MARINE, SALT LADEN, CORROSIVE ENVIRONMENT
 - CALIBRATION CERTIFICATE REQUIRED NOT REQUIRED
 - HARD COPY OF IEC-79, EExia IIB-T5 CERTIFICATE REQUIRED NOT REQUIRED PER IEC 60079
 - CUSTOMER SPECIFICATION: N/A, N/A & N/A
 - ELECTRICAL CLASS CERTIFICATION SHALL BE SHOWN ON ALUMINUM DIE-CASTING HOUSING STAMPED USING STAINLESS STEEL TAG PERMANENTLY ATTACHED TO THE DEVICE
 - HART COMMUNICATION SHALL BE SUITABLE OVER RANGE OF APPLICATION
 - AUSTENSIC 316 SS BOLTS REQUIRED
 - MOUNTING BRACKET FOR 2-IN PIPE BY VENDOR (AGCO)
 - LCD METER WITH POLYURETHANE COVERED ALUMINUM COVER REQUIRED
 - ALL DOCUMENTS TO BE SUBMITTED IN BOTH HARD AND ELECTRONIC FORMAT
 - INDICATOR TO SHOW BARG
 - MATERIAL SHALL BE PER APPROVED VENDOR LIST. MANUFACTURER LISTED ABOVE IS FOR REFERENCE.
 - ELECTRICAL CONNECTION: M20 1/2" NPT
 - REQUIRED ASSEMBLY AS PER BELOW PICTURE WITH 2-WAY MANIFOLD OR ISOLATION VALVE
 - TRANSMITTERS ARE SUPPLIED WITH THIN FILM TYPE PIEZORESISTIVE SENSORS
 - SENSOR FILLING: PAG SYNTHETIC OIL
 - REFER TO CONTROL NARRATIVE AND SET POINT LIST FOR THE CONTROLLER ACTION
 - HOUSING SHALL BE SELECTED TO SHOW TRANSMITTER LCD AT 90 DEGREE FROM INLET AS SHOWN BELOW.
 - REFER TO P&ID AND VALVE DATA SHEETS FOR 2-WAY MANIFOLD VALVE INFORMATION.

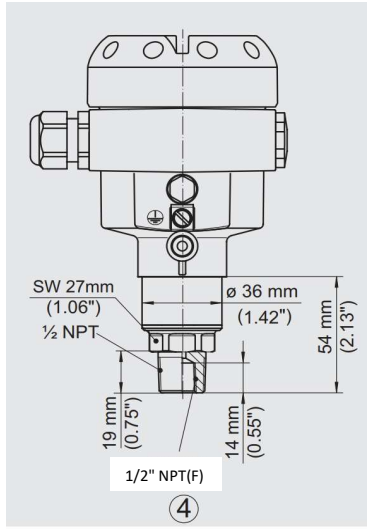
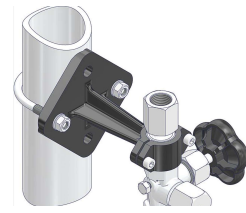


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GENERAL										
1	Tag No.	SEE TABLE BELOW				Service: See Table Below				
2	Qty									
3	Function	Record <input type="checkbox"/>	Indicate <input checked="" type="checkbox"/>	Control <input type="checkbox"/>	VIA MCS <input type="checkbox"/>	Blind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

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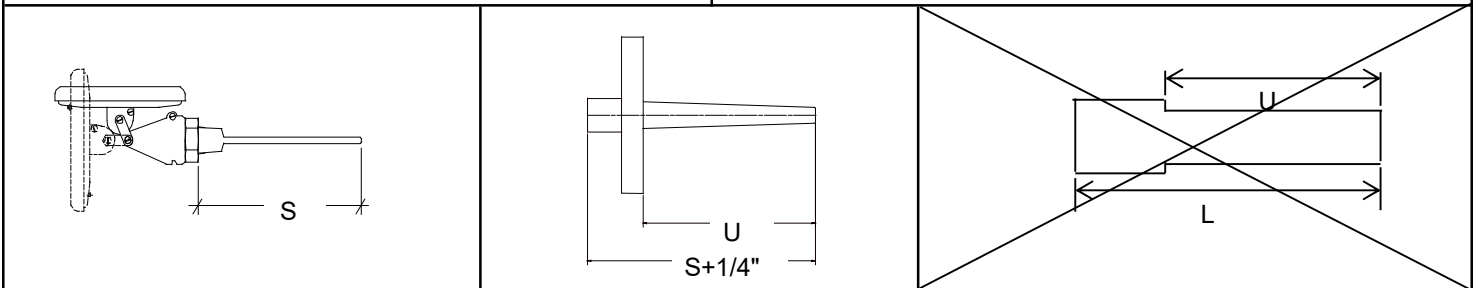
- Notes:
- SYSTEM DESIGN PRESSURE & TEMPERATURE:

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			-45 °F	-43 °C	
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			-20 °F	-29 °C	
 - TRANSMITTER ELECTRICAL HOUSING MUST BE POLYURETHANE COVERED ALUMINUM
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 - HART COMMUNICATION SHALL BE SUITABLE OVER RANGE OF APPLICATION
 - AUSTENSIC 316 SS BOLTS REQUIRED
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 - MATERIAL SHALL BE PER APPROVED VENDOR LIST. MANUFACTURER LISTED ABOVE IS FOR REFERENCE.
 - ELECTRICAL CONNECTION: M20 1/2" NPT
 - REQUIRED ASSEMBLY AS PER BELOW PICTURE WITH 2-WAY MANIFOLD OR ISOLATION VALVE
 - TRANSMITTERS ARE SUPPLIED WITH THIN FILM TYPE PIEZORESISTIVE SENSORS
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					Document Title: Instrument Data sheet & Catalogs
					P.O.I.
CLIENT: Gachsaran Polymer Industries Company (GPIC) P.O. NO.: GPIC-PT-MA-PO-000-3029 SERVICE: PROPYLENE REFERIGERATION PACKAGE					NO. 00 BY N.B APP A.M DATE 12.10.25 IFR
					NO. 01 BY N.B APP A.M DATE 09.12.25 IFR

THERMOMETER 1. Stem: Threaded <input checked="" type="checkbox"/> Plain <input type="checkbox"/> Union <input type="checkbox"/> Material: STAINLESS STEEL Type:			WELL 10. None <input type="checkbox"/> Included <input checked="" type="checkbox"/> By others <input type="checkbox"/> 11. Material: 304SS <input type="checkbox"/> 316SS <input checked="" type="checkbox"/> Other: <input type="checkbox"/>		
2. Stem or Union Thread: 1/2" <input checked="" type="checkbox"/> 3/4" <input type="checkbox"/> 3. Stem Diameter: Std <input type="checkbox"/> 1/4" <input checked="" type="checkbox"/> 3/8" in. <input type="checkbox"/> 4. Case Material: Std <input type="checkbox"/> Others <input checked="" type="checkbox"/> 316SS			13. Construction: Drilled <input type="checkbox"/> Built-up <input checked="" type="checkbox"/> Other: FLANGED TAPERED SHANK FROM SOLID BAR STOCK		
5. Dial Size: 6" in (150 mm) Color: WHITE 6. Scale: SEE BELOW Color: BLACK			14. MFR. & Model ASHCROFT & SEE TABLE BELOW		
7. Form: Adjustable <input checked="" type="checkbox"/> 8. External Calibrator <input type="checkbox"/> Hermetically Sealed Case <input checked="" type="checkbox"/> 9. MFR. & Model No.			15. Connection: SEE TABLE BELOW		



Item	Qty	Tag No.	Range °F (°C)	Oper. Temp. °F (°C)	Stem Depth (S)	Well Conn.	Lag Ext.	Insert (U)	Service	Model Number Sensor/Well
						Inst. Con.				
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** REQUIRED NOT REQUIRED

6 **CERTIFICATE OF COMPLIANCE** 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.**

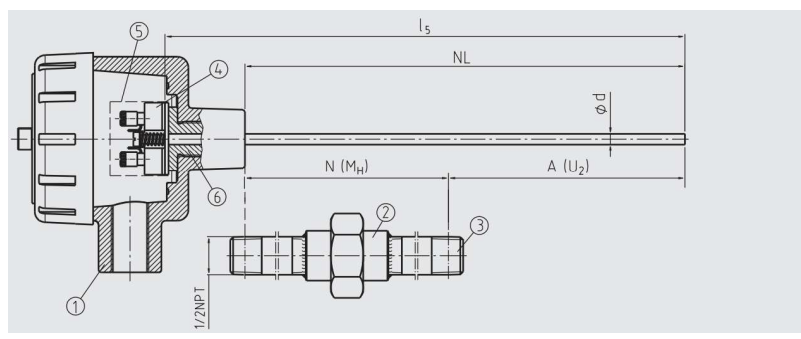
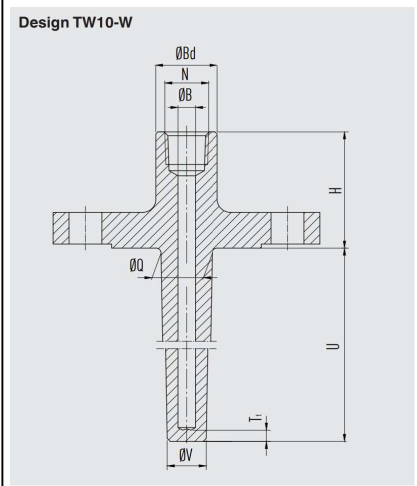
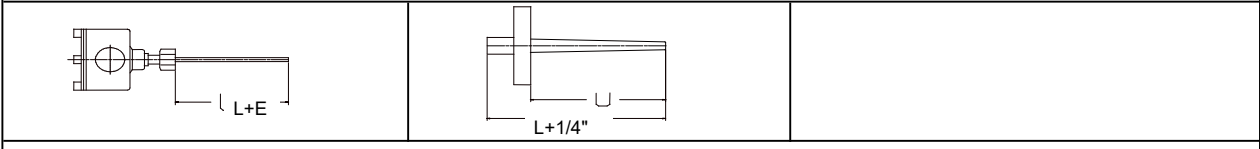
12 **THERMOWELL SHALL BE FULL PENETRATION WELD**


13 **THERMOWELL NATURAL FREQUENCY CALCULATION REQUIRED**

				TEMPERATURE TRANSMITTER CONTROL DEVICES				Document No: VD-GPIC-MA-3029-3029-0038									
CLIENT: Gachsaran Polymer Industries Company (GPIC) P.O. NO.: GPIC-PT-MA-PO-000-3029 SERVICE: PROPYLENE REFERIGERATION PACKAGE				NO.		BY		APP		DATE		Document Title: Instrument Data sheet & Catalogs 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 Function		Record <input type="checkbox"/>		Indicate <input checked="" type="checkbox"/>		Control <input checked="" type="checkbox"/>		Blind <input type="checkbox"/>		Trans <input checked="" type="checkbox"/> Other					
		3 Case		MFR. Std. <input type="checkbox"/>		Nom <input type="checkbox"/>		Nom. Size		Color: MFR. Std <input type="checkbox"/>		Other NOTE 2					
		4 Mounting		Flush <input type="checkbox"/>		Surface <input type="checkbox"/>		Yoke <input checked="" type="checkbox"/>		Other RACK MOUNT							
		5 Enclosure Class		Gen. Purpose <input type="checkbox"/>		Weather Proof <input type="checkbox"/>		Explosion Proof <input type="checkbox"/>		Use in intrinsically <input checked="" type="checkbox"/> EEExia		Safe System <input type="checkbox"/> Other <input checked="" type="checkbox"/> IIB-T5 - ZONE 2, CL1					
		6 Power Supply		117V 60 Hz <input type="checkbox"/>		Other ac		DC <input checked="" type="checkbox"/>		Volts 24 V							
		7 Chart N/A		Strip <input type="checkbox"/>		Roll <input type="checkbox"/>		Fold <input type="checkbox"/>		Circular <input type="checkbox"/>		Time marks <input type="checkbox"/>					
		8 Chart Drive		Speed		Power											
		9 Scale N/A		Type:		Range:											
		XMTR		10 Output NOTE 12		4-20 mA <input checked="" type="checkbox"/>		10-50mA <input type="checkbox"/>		21-103 kPa (3-15 psig) <input type="checkbox"/>		Other					
11 Control Modes				For Receiver, see spec sheet.		WIRED TO UCP VIA JUNCTION BOXES (2 WIRE OUTPUT) NOTE 12		P = Prop (Gain, 1-Integral (Auto Reset), D = Derivative (Rate)		Sub: s = slow, f = fast, If <input type="checkbox"/> Df <input type="checkbox"/> P <input type="checkbox"/> PI <input type="checkbox"/> PD <input checked="" type="checkbox"/> PID <input type="checkbox"/> Is <input type="checkbox"/> Ds <input type="checkbox"/>		Other					
CONTROLLER VIA PLC		12 Action		On Measurement Increase, Output:		Increases <input type="checkbox"/>		Decreases <input type="checkbox"/>									
		13 Auto-Man Switch		None <input type="checkbox"/>		MFR Std <input type="checkbox"/>		Other <input checked="" type="checkbox"/> NOTE 18									
		14 Set Point Adj.		Manual <input type="checkbox"/>		External <input type="checkbox"/>		Remote <input checked="" type="checkbox"/> UCP NOTE 12									
		15 Manual Reg.		None <input type="checkbox"/>		MFR Std <input type="checkbox"/>		Other									
ELEMENT		16 Output		4-20 mA <input type="checkbox"/>		10-50mA <input type="checkbox"/>		21-103 kPa (3-15 psig) <input type="checkbox"/>		Other							
		17 Fill		SAMA Class		Compensation											
		18 Process Data		SEE TABLE BELOW		Compensation											
		19 Range		Fixed <input type="checkbox"/>		Adj. Range <input type="checkbox"/>		Set @ SEE BELOW									
		20 Bulb		Overrange Protection to:		Electrical Connection: M20 1/2" NPT		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. <input checked="" type="checkbox"/>		Deviation <input type="checkbox"/>		Contacts to		On Temp. Incr.							
		25 Options		Filter Reg. <input type="checkbox"/>		Sup Gage <input type="checkbox"/>		Output Gage <input type="checkbox"/>		Charts <input type="checkbox"/>							
		26		27													
AREA CLASS.				IEC <input checked="" type="checkbox"/> ZONE 2, EEExia 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 / Model No.	Service							
			Range	Oper.	Min.	Max.	4	20									
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
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

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												



	TEMPERATURE TRANSMITTER CONTROL DEVICES				Document No: VD-GPIC-MA-3029-3029-0038
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	00	N.B	A.M	12.10.25	IFR
	01	N.B	A.M	09.12.25	IFR

Notes:

- 1 SYSTEM DESIGN PRESSURE & TEMPERATURE:

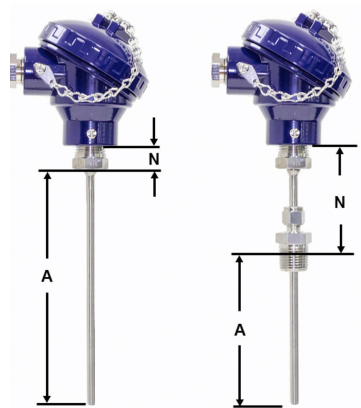
FV to	362.5 PSIG	25.0 BarG @	250 °F	121 °C	FOR ITEMS:	1
			-45 °F	-43 °C		
FV to	406 PSIG	28.0 BarG @	250 °F	121 °C	FOR ITEMS:	
			-20 °F	-29 °C		
- 2 TRANSMITTER AND SENSOR ELECTRICAL HOUSING MUST BE POLYURETHANE COVERED DIE ALUMINUM-HOUSING, THERMOWELL IS 316 STAINLESS STEEL
- 3 REFERENCE ACCURACY: +/- 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 ASSEMBLED 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.
- 16 BOTH RTD ELEMENTS ARE WIRED AND TERMINATED IN TERMINAL HEAD OR-TRANSMITTER
- 17 REQUIRED ASSEMBLY AS PER BELOW PICTURES WITH A UNION. ELEMENT LENGTH SHALL BE ADJUSTED FOR THE UNION USE.
- 18 RTD TO BE TERMINATED IN THE TERMINAL HEAD, AND TRANSMITTER TO BE INSTALLED REMOTELY
- 19 REFER TO CONTROL NARRATIVE AND SET POINT LIST FOR THE CONTROLLER ACTION
- 20 THERMOWELL MATERIAL SHALL BE 316SS



THERMOWELL & HEAD




REMOTE TRANSMITTER WITH ELECTRONIC DISPLAY



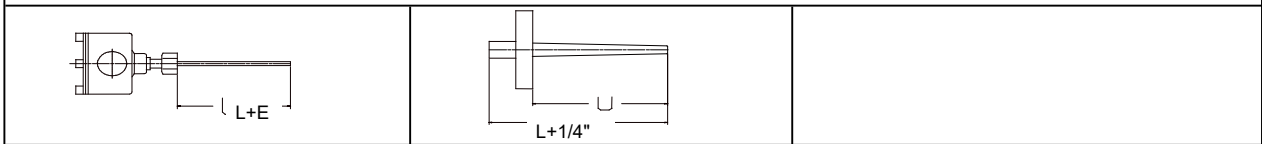
$A = U + H$

				TEMPERATURE TRANSMITTER INDICATOR DEVICES				Document No: VD-GPIC-MA-3029-3029-0038		
				Document Title: Instrument Data sheet & Catalogs						
				P.O.I.						
CLIENT: Gachsaran Polymer Industries Company (GPIC) P.O. NO.: GPIC-PT-MA-PO-000-3029 SERVICE: PROPYLENE REFERIGERATION PACKAGE				NO.	BY	APP	DATE			
				00	N.B	A.M	12.10.25	IFR		
				01	N.B	A.M	09.12.25	IFR		
GENERAL				SEE TABLE BELOW				Service: SEE TABLE BELOW		
1 Tag No.										
2 Function				Record <input type="checkbox"/> Indicate <input checked="" type="checkbox"/> Control <input type="checkbox"/> Blind <input type="checkbox"/> Trans <input checked="" type="checkbox"/> Other						
3 Case				MFR. Std. <input type="checkbox"/> Nom <input type="checkbox"/> Surface <input type="checkbox"/> Yoke <input checked="" type="checkbox"/> Other RACK MOUNT						
4 Mounting				Flush <input type="checkbox"/> Surface <input type="checkbox"/> Yoke <input checked="" type="checkbox"/> Other RACK MOUNT						
5 Enclosure Class				Gen. Purpose <input type="checkbox"/> Weather Proof <input type="checkbox"/> Explosion Proof <input type="checkbox"/> Use in intrinsically <input checked="" type="checkbox"/> EEExia Safe System <input type="checkbox"/> Other <input checked="" type="checkbox"/> IIB-T5 - ZONE 2, CL1						
6 Power Supply				117V 60 Hz <input type="checkbox"/> Other ac <input type="checkbox"/> DC <input checked="" type="checkbox"/> Volts 24 V						
7 Chart N/A				Strip <input type="checkbox"/> Roll <input type="checkbox"/> Fold <input type="checkbox"/> Circular <input type="checkbox"/> Time marks <input type="checkbox"/>						
8 Chart Drive				Speed _____ Power _____						
9 Scale N/A				Type: _____ Range: _____						
XMTR				10 Output NOTE 12 4-20 mA <input checked="" type="checkbox"/> 10-50mA <input type="checkbox"/> 21-103 kPa (3-15 psig) <input type="checkbox"/> 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 <input type="checkbox"/> Df <input type="checkbox"/> P <input type="checkbox"/> PI <input type="checkbox"/> PD <input type="checkbox"/> PID <input type="checkbox"/> Is <input type="checkbox"/> Ds <input type="checkbox"/>						
				Other _____						
12 Action				On Measurement Increase, Output: Increases <input type="checkbox"/> Decreases <input type="checkbox"/>						
13 Auto-Man Switch				None <input type="checkbox"/> MFR Std <input type="checkbox"/> Other						
14 Set Point Adj.				Manual <input type="checkbox"/> External <input type="checkbox"/> Remote <input checked="" type="checkbox"/> UCP Other NOTE 12						
15 Manual Reg.				None <input type="checkbox"/> MFR Std <input type="checkbox"/> Other						
16 Output				4-20 mA <input type="checkbox"/> 10-50mA <input type="checkbox"/> 21-103 kPa (3-15 psig) <input type="checkbox"/> Other						
ELEMENT				17 Fill SAMA Class _____ Compensation _____						
18 Process Data				SEE TABLE BELOW						
19 Range				Fixed <input type="checkbox"/> Adj. Range <input type="checkbox"/> 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 _____						
24 Function				Temp. <input checked="" type="checkbox"/> Deviation <input type="checkbox"/> Contacts to _____ On Temp. Incr.						
25 Options				Filter Reg. _____ Sup Gage <input type="checkbox"/> Output Gage <input type="checkbox"/> Charts <input type="checkbox"/>						
26				Other: _____						
27				AREA CLASS. IEC <input checked="" type="checkbox"/> ZONE 2, EEExia 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 / Model No.	Service
			Range	Oper.	Min.	Max.	4	20		
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										

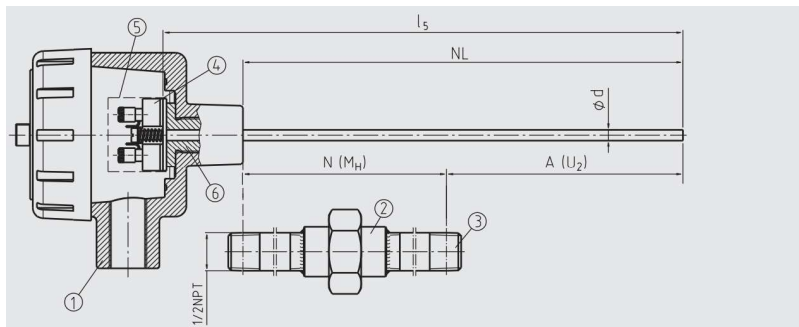
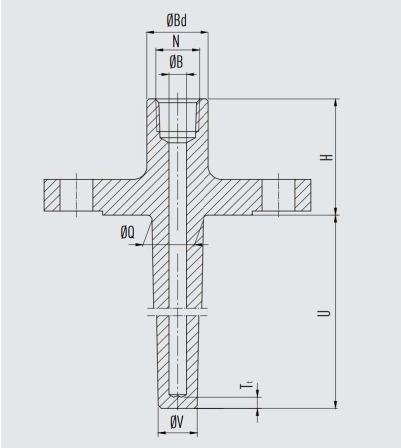
	TEMPERATURE TRANSMITTER INDICATOR DEVICES				Document No: VD-GPIC-MA-3029-3029-0038
					Document Title: Instrument Data sheet & Catalogs
CLIENT: Gachsaran Polymer Industries Company (GPIC) P.O. NO.: GPIC-PT-MA-PO-000-3029 SERVICE: PROPYLENE REFERIGERATION PACKAGE	NO.	BY	APP	DATE	P.O.I.
	00	N.B	A.M	12.10.25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


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
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	00	N.B	A.M	12.10.25	IFR
	01	N.B	A.M	09.12.25	IFR

Notes:

- 1 SYSTEM DESIGN PRESSURE & TEMPERATURE:

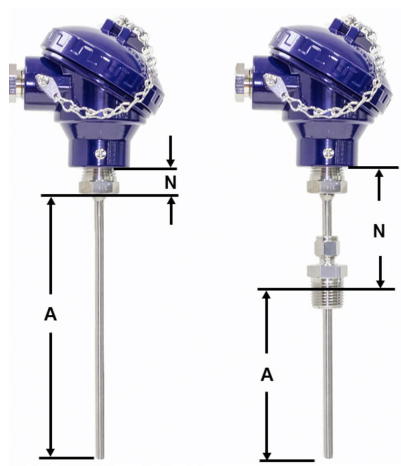
FV to	362.5 PSIG	25.0 BarG	@	250 °F	121 °C	FOR ITEMS:	1
				-45 °F	-43 °C		
FV to	406 PSIG	28.0 BarG	@	250 °F	121 °C	FOR ITEMS:	
				-20 °F	-29 °C		
- 2 TRANSMITTER AND SENSOR ELECTRICAL HOUSING MUST BE POLYURETHANE COVERED DIE ALUMINUM-HOUSING, THERMOWELL IS 316 STAINLESS STEEL
- 3 REFERENCE ACCURACY: +/- 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 ASSEMBLED 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.
- 16 BOTH RTD ELEMENTS ARE WIRED AND TERMINATED IN TERMINAL HEAD OR-TRANSMITTER
- 17 REQUIRED ASSEMBLY AS PER BELOW PICTURES WITH A UNION. ELEMENT LENGTH SHALL BE ADJUSTED FOR THE UNION USE.
- 18 RTD TO BE TERMINATED IN THE TERMINAL HEAD, AND TRANSMITTER TO BE INSTALLED REMOTELY
- 19 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

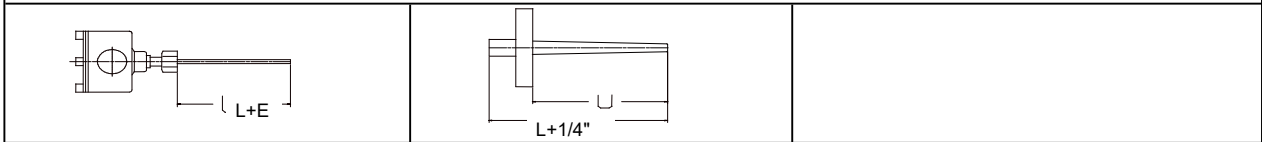


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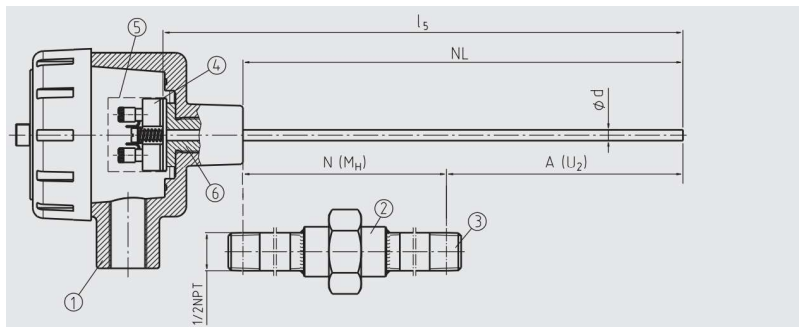
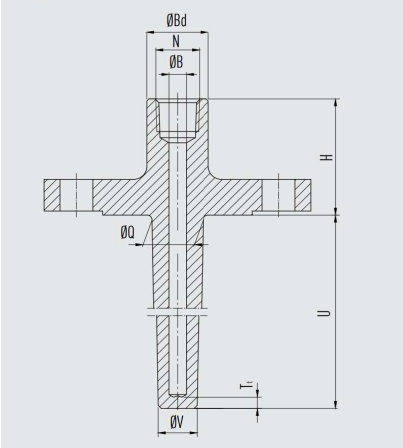
	TEMPERATURE TRANSMITTER INDICATOR DEVICES				Document No: VD-GPIC-MA-3029-3029-0038
					Document Title: Instrument Data sheet & Catalogs
CLIENT: Gachsaran Polymer Industries Company (GPIC) P.O. NO.: GPIC-PT-MA-PO-000-3029 SERVICE: PROPYLENE REFERIGERATION PACKAGE	NO.	BY	APP	DATE	P.O.I.
	00	N.B	A.M	12.10.25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

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												



Design TW10-W





TEMPERATURE 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
00	N.B	A.M	12.10.25
01	N.B	A.M	09.12.25

P.O.I.
IFR
IFR

Notes:

- SYSTEM DESIGN PRESSURE & TEMPERATURE:

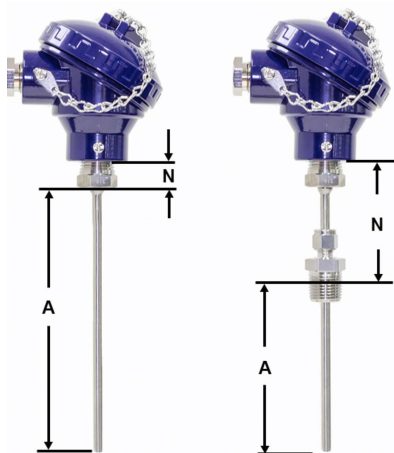
FV to	362.5 PSIG	25.0 BarG	@	250 °F	121 °C	FOR ITEMS:	1, 3
				-45 °F	-43 °C		
FV to	406 PSIG	28.0 BarG	@	250 °F	121 °C	FOR ITEMS:	2
				-20 °F	-29 °C		
- TRANSMITTER AND SENSOR ELECTRICAL HOUSING MUST BE POLYURETHANE COVERED DIE ALUMINUM-HOUSING, THERMOWELL IS 316 STAINLESS STEEL
- REFERENCE ACCURACY: +/- 0.075 % OF FULL SCALE & +/- 0.15 % GUARRANTEED STABILITY OVER FIVE YEARS
- INSTRUMENT SHALL BE SUITABLE FOR MARINE, SALT LADEN, CORROSIVE ENVIRONMENT
- CALIBRATION CERTIFICATE REQUIRED NOT REQUIRED
- HARD COPY OF IIEC-79, EExia IIB-T5 CERTIFICATE REQUIRED NOT REQUIRED PER IEC 60079
- CUSTOMER SPECIFICATION: N/A & N/A
- ELECTRICAL CLASS CERTIFICATION SHALL BE SHOWN ON ALUMINUM DIE-CASTING HOUSING STAMPED USING STAINLESS STEEL TAG PERMANENTLY ATTACHED TO THE DEVICE
- ALL DOCUMENTS TO BE SUBMITTED IN BOTH HARD AND ELECTRONIC FORMAT
- TERMINAL HEAD TO BE ASSEMBLED WITH THERMOWELL USING A UNION
- EXTENSION SECTION OF 3 INCHES (76.2 mm) TO INCLUDE NIPPLE AND UNION
- "SMART" ELECTRONIC TRANSMITTERS WITH "HART PROTOCOL" COMMUNICATION SHALL BE SUITABLE OVER RANGE OF APPLICATION
- EACH TEMPERATURE TRANSMITTER SHALL INCLUDE A MOUNTING BRACKET FOR 2-IN PIPE RACK
- INDICATOR TO SHOW °C
- MATERIAL SHALL BE PER APPROVED VENDOR LIST. MANUFACTURER LISTED ABOVE IS FOR REFERENCE.
- BOTH RTD ELEMENTS ARE WIRED AND TERMINATED IN TERMINAL HEAD OR-TRANSMITTER
- REQUIRED ASSEMBLY AS PER BELOW PICTURES WITH A UNION. ELEMENT LENGTH SHALL BE ADJUSTED FOR THE UNION USE.
- RTD TO BE TERMINATED IN THE TERMINAL HEAD, AND TRANSMITTER TO BE INSTALLED REMOTELY
- REFER TO CONTROL NARRATIVE AND SET POINT LIST FOR THE CONTROLLER ACTION
- THERMOWELL NATURAL FREQUENCE CALCULATION REQUIRED
- THERMOWELL MATERIAL SHALL BE 316SS



THERMOWELL & HEAD



REMOTE TRANSMITTER WITH ELECTRONIC DISPLAY



$A = U + H$

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

1. Gage Column Assembled w/ Nipples Cocks Unassembled

GAGE CLASSES

2. Type: Reflex Transparent Tubular
Large Chamber Weld Pad

3. Conn. Size & Type 2"-300# ANSI RF FLG
Top & Bottom 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 Straight
9. Conn. Vessel 2"-300# Gage 1/2" Vent / Drain 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 Renewal Seats
Other: **RENEWAL SEATS**

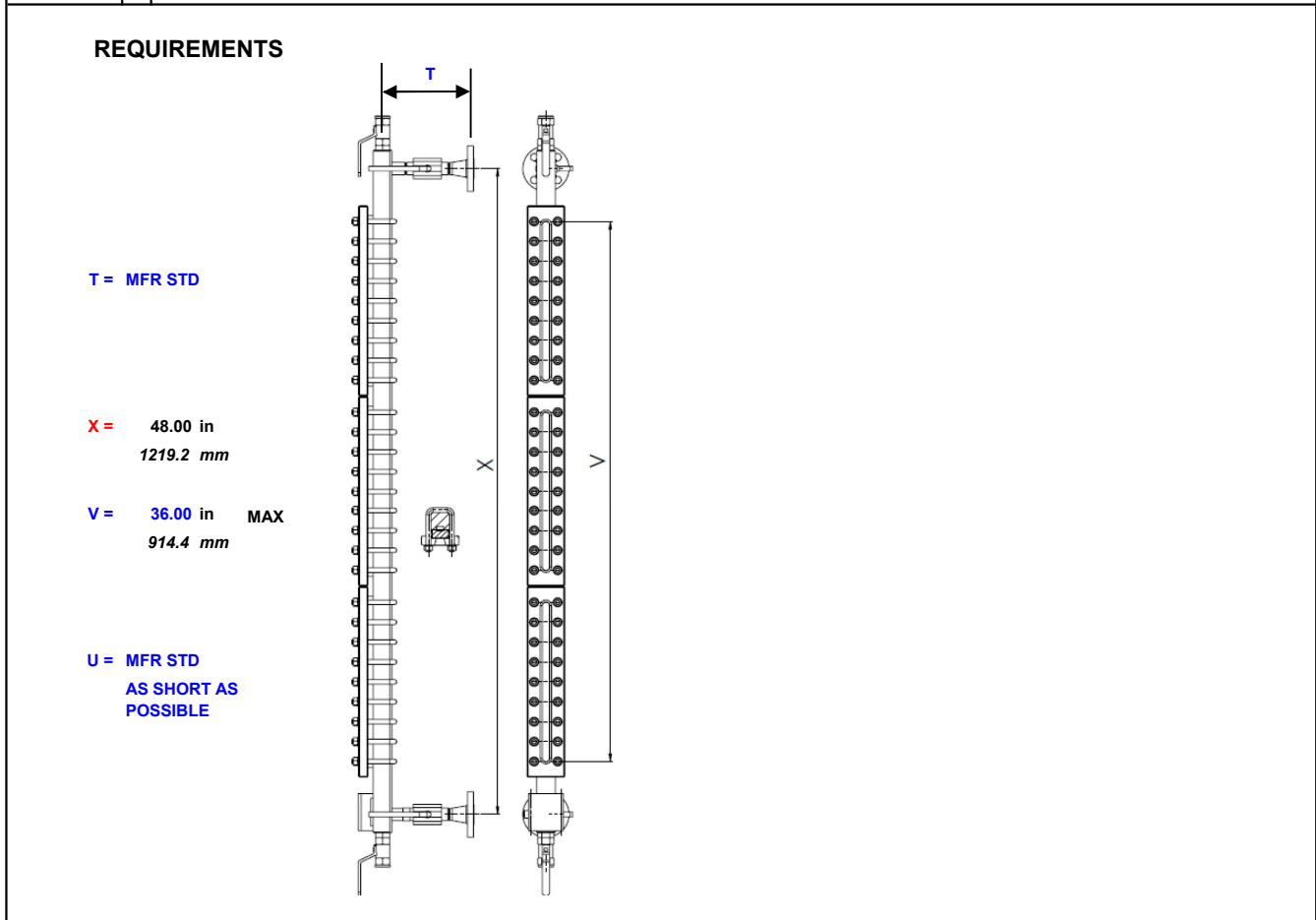
16. Manufacturer & Model: **OTHERS**

17. Bolting Material: **A193-L7 / A194-7**

Item	Qty.	Tag No.	Visible Glass "V"	CONNECTION CENTER TO CENTER "X"	Model No.	Operating		Service
						Pressure PSIG (BarG)	Temp. °F (°C)	
A	1	LG-61141 RECEIVER HEADER	36.0 " 914 mm	36.0 " 914 mm	L21SR/1219.2/A2"300ibR 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
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

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 <input type="checkbox"/> REQUIRED <input checked="" type="checkbox"/> NOT REQUIRED
	6	CERTIFICATE OF COMPLIANCE <input checked="" type="checkbox"/> REQUIRED <input type="checkbox"/> NOT REQUIRED
	7	316SS NAMEPLATE <input checked="" type="checkbox"/> REQUIRED <input type="checkbox"/> 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



CLIENT: Gachsaran Polymer Industries Company (GPIC) P.O. NO.: GPIC-PT-MA-PO-000-3029 SERVICE: PROPYLENE REFERIGERATION PACKAGE	<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th>NO.</th> <th>BY</th> <th>APP</th> <th>DATE</th> <th>P.O.I.</th> </tr> <tr> <td>00</td> <td>N.B</td> <td>A.M</td> <td>12.10.25</td> <td>IFR</td> </tr> <tr> <td>01</td> <td>N.B</td> <td>A.M</td> <td>09.12.25</td> <td>IFR</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>	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										
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 <input type="checkbox"/>	Indicate <input checked="" type="checkbox"/>	Control <input checked="" type="checkbox"/>	VIA MCS Blind <input type="checkbox"/> Trans <input checked="" type="checkbox"/> Other
	4	Case	Mfr. Std. <input checked="" type="checkbox"/>	Nom. Size	Color :	<input type="checkbox"/> Other NOTE 2
	5	Mounting	Flush <input type="checkbox"/>	Surface <input checked="" type="checkbox"/>	Yoke <input type="checkbox"/>	Other
	6	Enclosure Class	Gen. Purpose <input type="checkbox"/>	Weather Proof <input type="checkbox"/>	Explosion Proof <input type="checkbox"/>	
			Use in intrinsically <input checked="" type="checkbox"/> EEExia	Safe System <input type="checkbox"/>	Other <input checked="" type="checkbox"/>	IIB-T5 - ZONE 2, CL1
	7	Power Supply	117V 60 Hz <input checked="" type="checkbox"/>	Other ac <input type="checkbox"/>	DC <input checked="" type="checkbox"/>	Volts 24 V
	8	Chart	N/A	Strip <input type="checkbox"/> Roll <input type="checkbox"/> Fold <input type="checkbox"/>	Circular <input type="checkbox"/>	Time Marks <input type="checkbox"/>
	9	Chart Drive	N/A	Range	Number	Power
10	Scales		Type: LCD / DIGITAL			
			Range	SEE TABLE BELOW		
XMTR	11	Transmitter Output	4-20 mA <input checked="" type="checkbox"/> 10-50mA <input type="checkbox"/> 21-103 kPa (3-15 psig) <input type="checkbox"/> 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, I f <input type="checkbox"/> D f <input type="checkbox"/> P <input type="checkbox"/> PI <input type="checkbox"/> PD <input type="checkbox"/> PID <input checked="" type="checkbox"/> Is <input type="checkbox"/> Ds <input type="checkbox"/>			
			Other			
	14	Action	On Measurement Increase, Output:		Increases <input type="checkbox"/> Decreases <input type="checkbox"/>	
	15	Auto-Man Switch	None <input type="checkbox"/>	MFR Std <input type="checkbox"/>	Other	
	16	Set Point Adj.	Manual <input type="checkbox"/>	External <input type="checkbox"/>	Remote <input type="checkbox"/> Other	
	17	Manual Reg.	None <input type="checkbox"/>	MFR Std <input type="checkbox"/>	Other	
	18	Output	NOTE 18	4-20 mA <input checked="" type="checkbox"/> 10-50 mA <input type="checkbox"/>	21-103 kPa (3-15 psig) <input type="checkbox"/> Other	
ELEMENT	19	Service	Gage Press <input type="checkbox"/>	Vacuum <input type="checkbox"/>	Absolute <input type="checkbox"/> Differential <input checked="" type="checkbox"/>	
	20	Element Type	Diaphragm <input checked="" type="checkbox"/>	Helix <input type="checkbox"/>	Bourdon <input type="checkbox"/> Bellows <input type="checkbox"/> Other	
	21	Material (body)	316SS <input checked="" type="checkbox"/>	Ber Copper <input type="checkbox"/>	Other <input type="checkbox"/>	
	22	Range	Fixed <input type="checkbox"/>	Adj. Range <input checked="" type="checkbox"/>		
			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 <input type="checkbox"/>	1/2" in NPT (F) <input checked="" type="checkbox"/>	Other: 2"-300# ANSI RF FLG		
		Location:	Bottom: <input checked="" type="checkbox"/>	Back <input type="checkbox"/> Other		
OPTIONS	25	Alarm Switches	Quantity:	Form	Rating	
	26	Function	Press. <input checked="" type="checkbox"/>	Deviation <input type="checkbox"/>	Contacts	On Icr. Meas.
	27	Options	Filter Reg. <input type="checkbox"/>	Sup. Gage <input type="checkbox"/>	Output Gage <input type="checkbox"/>	Charts
		Diaphragm Seal <input type="checkbox"/>	Type	N/A	Diaphragm	Bot. Bowl
		Conn.	Capillary:	N/A	Length	Mtl.
		Other				
AREA CLASSIFICATION			IEC <input checked="" type="checkbox"/> ZONE 2, EEExia 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 REFERIGERANT SYNTHETIC OIL
B										
C										

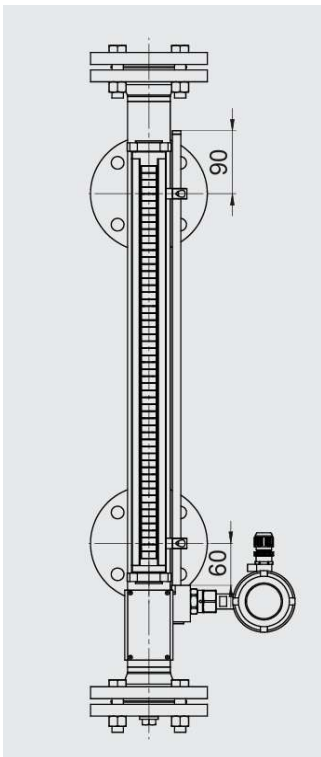
CLIENT: Gachsaran Polymer Industries Company (GPIC)
P.O. NO.: GPIC-PT-MA-PO-000-3029
SERVICE: PROPYLENE REFERIGERATION PACKAGE

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

Notes:

- 1 SYSTEM DESIGN PRESSURE & TEMPERATURE: **FV to 362.5 PSIG** **25.0 BarG @ 250 °F** **121 °C**
- 2 NORMAL OPERATING CONDITIONS ARE: **22.5 PSIG** **1.55 BarG @ -45 °F** **-43 °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 REQUIRED NOT REQUIRED
- 7 HARD COPY OF **IIEC-79, EExia IIB-T5** CERTIFICATE REQUIRED NOT REQUIRED **PER IEC 60079**
- 8 MATERIAL TEST REPORT 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 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



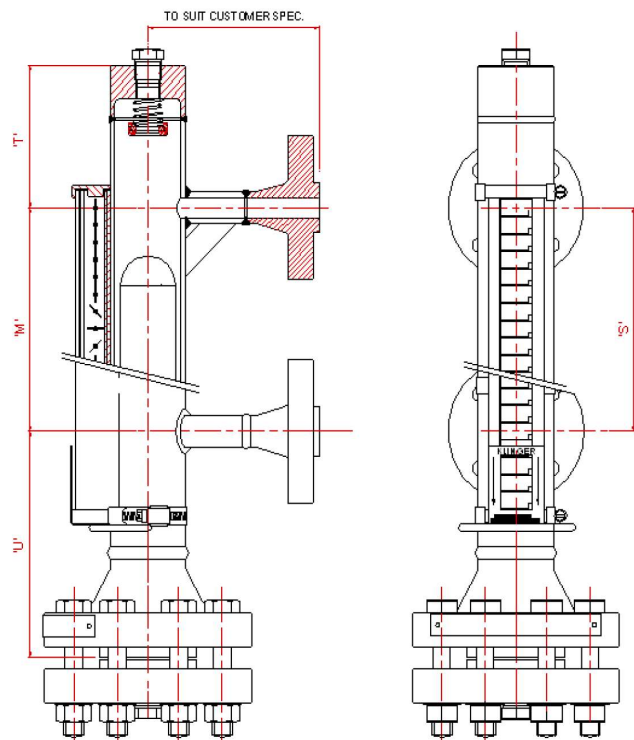
X = 11.5 in
292.1 mm


T = MFR STD

M = 111.44 in
2,830.5 mm

U = MFR STD
AS SHORT AS POSSIBLE


Z = 1 in
25.4 mm



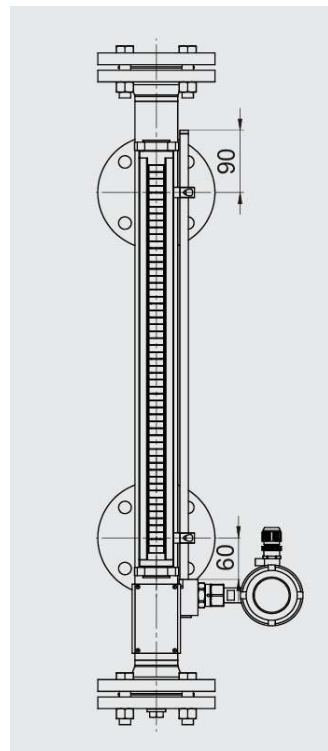
	LEVEL TRANSMITTER INDICATOR DEVICES				Document No: VD-GPIC-MA-3029-3029-0038
					Document Title: Instrument Data sheet & Catalogs
CLIENT: Gachsaran Polymer Industries Company (GPIC) P.O. NO.: GPIC-PT-MA-PO-000-3029 SERVICE: PROPYLENE REFERIGERATION PACKAGE	NO.	BY	APP	DATE	P.O.I.
	00	N.B	A.M	12.10.25	IFR
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GENERAL	1	Tag No.	SEE TABLE BELOW			Service: SEE TABLE BELOW			
	2	Qty							
	3	Function	Record <input type="checkbox"/>	Indicate <input checked="" type="checkbox"/>	Control <input type="checkbox"/>	VIA MCS <input type="checkbox"/>	Blind <input type="checkbox"/>	Trans <input checked="" type="checkbox"/>	Other
	4	Case	Mfr. Std. <input checked="" type="checkbox"/>	Nom. Size	Color :	<input type="checkbox"/>	Other	NOTE 2	
	5	Mounting	Flush <input type="checkbox"/>	Surface <input checked="" type="checkbox"/>	Yoke <input type="checkbox"/>	Other			
	6	Enclosure Class	Gen. Purpose <input type="checkbox"/>	Weather Proof <input type="checkbox"/>	Explosion Proof <input type="checkbox"/>				
			Use in intrinsically <input checked="" type="checkbox"/>	Safe System <input type="checkbox"/>	Other <input type="checkbox"/>	IIB-T5 - ZONE 2, CL1			
	7	Power Supply	117V 60 Hz <input checked="" type="checkbox"/>	Other ac <input type="checkbox"/>	DC <input checked="" type="checkbox"/>	Volts 24 V			
	8	Chart	N/A	Strip <input type="checkbox"/>	Roll <input type="checkbox"/>	Fold <input type="checkbox"/>	Circular <input type="checkbox"/>	Time Marks <input type="checkbox"/>	
	9	Chart Drive	N/A	Range	Number		Speed		
10	Scales	Type: LCD / DIGITAL		Range: SEE TABLE BELOW					
XMTR	11	Transmitter Output	4-20 mA <input checked="" type="checkbox"/>	10-50mA <input type="checkbox"/>	21-103 kPa (3-15 psig) <input type="checkbox"/>	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 <input type="checkbox"/> Df <input type="checkbox"/> P <input type="checkbox"/> PI <input type="checkbox"/> PD <input type="checkbox"/> PID <input type="checkbox"/> Is <input type="checkbox"/> Ds <input type="checkbox"/>						
	14	Action	On Measurement Increase, Output:			Increases <input type="checkbox"/>		Decreases <input type="checkbox"/>	
	15	Auto-Man Switch	None <input type="checkbox"/>	MFR Std <input type="checkbox"/>	Other				
	16	Set Point Adj.	Manual <input type="checkbox"/>	External <input type="checkbox"/>	Remote <input type="checkbox"/>		Other		
	17	Manual Reg.	None <input type="checkbox"/>	MFR Std <input type="checkbox"/>	Other				
	18	Output	NOTE 18	4-20 mA <input type="checkbox"/>	10-50 mA <input type="checkbox"/>	21-103 kPa (3-15 psig) <input type="checkbox"/>	Other		
	19	Service	Gage Press <input type="checkbox"/>	Vacuum <input type="checkbox"/>	Absolute <input type="checkbox"/>		Differential <input checked="" type="checkbox"/>		
	20	Element Type	Diaphragm <input checked="" type="checkbox"/>	Helix <input type="checkbox"/>	Bourdon <input type="checkbox"/>	Bellows <input type="checkbox"/>	Other		
ELEMENT	21	Material (body)	316SS <input checked="" type="checkbox"/>	Ber Copper <input type="checkbox"/>	Other <input type="checkbox"/>				
	22	Range	Fixed <input type="checkbox"/>	Adj. Range <input checked="" type="checkbox"/>	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 <input type="checkbox"/>	1/2" in NPT (F) <input checked="" type="checkbox"/>	Other: 2"-300# ANSI RF FLG				
	25	Alarm Switches	Quantity:			Form <input type="checkbox"/>	Rating		
OPTIONS	26	Function	Press. <input checked="" type="checkbox"/>	Deviation <input type="checkbox"/>	Contacts	On Icr. Meas.			
	27	Options	Filter Reg. <input type="checkbox"/>	Sup. Gage <input type="checkbox"/>	Output Gage <input type="checkbox"/>	Charts			
			Diaphragm Seal <input type="checkbox"/>	Type: N/A	Diaphragm	Bot. Bowl			
			Conn. Capillary: N/A	Length	Mil.				
Other									
AREA CLASSIFICATION			IEC <input checked="" type="checkbox"/>	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-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										

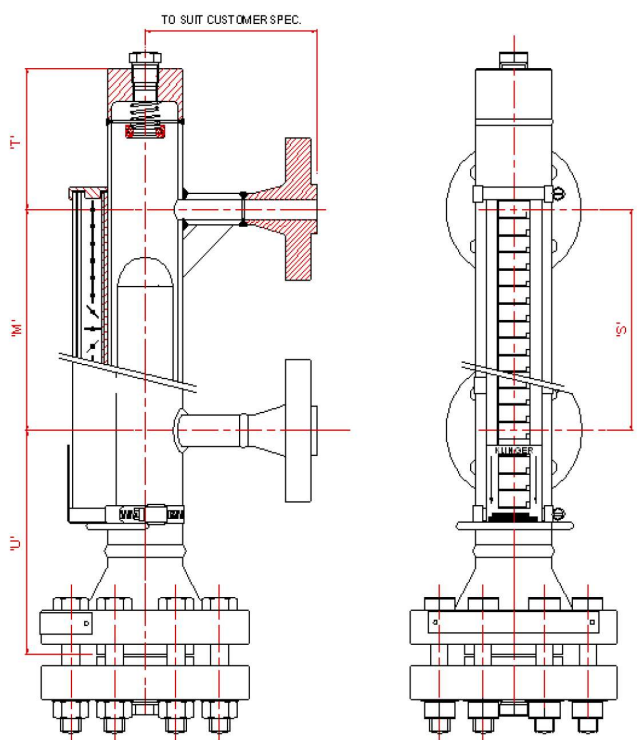
	LEVEL TRANSMITTER INDICATOR DEVICES				Document No: VD-GPIC-MA-3029-3029-0038
					Document Title: Instrument Data sheet & Catalogs
CLIENT: Gachsaran Polymer Industries Company (GPIC) P.O. NO.: GPIC-PT-MA-PO-000-3029 SERVICE: PROPYLENE REFERIGERATION PACKAGE	NO.	BY	APP	DATE	P.O.I.
	00	N.B	A.M	12.10.25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


- Notes:**
- SYSTEM DESIGN PRESSURE & TEMPERATURE: FV to 362.5 PSIG 25.0 BarG @ 250 °F 121 °C
-49 °F -45 °C
 - 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:
 - TRANSMITTER ELECTRICAL HOUSING MUST BE POLYURETHANE COVERED ALUMINUM
 - REFERENCE ACCURACY: +/- 0.075 % OF FULL SCALE & +/- 0.15 % GUARRANTEED STABILITY OVER FIVE YEARS
 - INSTRUMENT SHALL BE SUITABLE FOR MARINE, SALT LADEN, CORROSIVE ENVIRONMENT
 - CALIBRATION CERTIFICATE REQUIRED NOT REQUIRED
 - HARD COPY OF IIEC-79, EExia IIB-T5 CERTIFICATE REQUIRED NOT REQUIRED PER IEC 60079
 - MATERIAL TEST REPORT REQUIRED NOT REQUIRED
 - CUSTOMER SPECIFICATION: N/A, N/A & N/A
 - ALL DOCUMENTS TO BE SUBMITTED IN BOTH HARD AND ELECTRONIC FORMAT
 - INDICATOR TO SHOW PERCENTAGE
 - AUSTENSIC 316 SS BOLTS REQUIRED
 - NAMEPLATE TO BE MOUNTED TO TOP FLANGE
 - HIGH PRESSURE SIDE, REMOTE MOUNT SEAL, PROCESS CONNECTION IS 2"-300# ANSI RF FLG.
 - LIQUID DENSITY := 65= LB/FT3= 1044 KG/M3
 - LOW PRESSURE SIDE, PROCESS CONNECTION 2"-300# ANSI RF FLG
 - LCD METER WITH POLYURETHANE COVERED ALUMINUM COVER REQUIRED
 - "SMART" ELECTRONIC TRANSMITTERS WITH "HART PROTOCOL" COMMUNICATION SHALL BE SUITABLE OVER RANGE OF APPLICATION=
 - ELECTRICAL CLASS CERTIFICATION SHALL BE SHOWN ON A DIE-STAMPED STAINLESS STEEL TAG PERMANENTLY ATTACHED TO THE DEVICE=
 - ELECTRICAL CONNECTION: M20
 - LIQUID MEDIA IS PAG OIL WITH OPERATING CONDITIONS SHOWN IN TABULATION
 - DISTANCE BETWEEN NOZZLES THAT COVERS THE TRANSMITTER CALIBRATION RANGE IS: 48.00 inches 1,214.4 mm
 - IT IS THE RESPONSIBILITY OF THE SUPPLIER TO ASSURE THAT THE FLOATS FIT INSIDE THE CHAMBER
 - 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



				SOLENOID VALVE				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	Function	Record <input type="checkbox"/>		Indicate <input checked="" type="checkbox"/>		Control <input checked="" type="checkbox"/>		Blind <input type="checkbox"/>		Trans <input checked="" type="checkbox"/>		Other		
		3	Case	MFR. Std. <input checked="" type="checkbox"/>		Nom <input type="checkbox"/>		Nom. Size		Color: MFR. Std <input checked="" type="checkbox"/>		Other NOTE 2				
		4	Mounting	Flush <input type="checkbox"/>		Surface <input type="checkbox"/>		Yoke <input type="checkbox"/>		Other RACK MOUNT						
		5	Enclosure Class	Gen. Purpose <input type="checkbox"/>		Weather Proof <input checked="" type="checkbox"/>		Explosion Proof <input checked="" type="checkbox"/>		IIB-T5 - ZONE 2, CL1						
		6	Power Supply	117V 60 Hz <input type="checkbox"/>		Other ac		dc <input checked="" type="checkbox"/>		Volts: 24 V						
		7	Chart	Strip <input type="checkbox"/>		Roll <input type="checkbox"/>		Fold <input type="checkbox"/>		Circular <input type="checkbox"/>		Time marks <input type="checkbox"/>				
		8	Chart Drive	Speed				Power								
		9	Scale	Type: LCD / DIGITAL		Range: 0 - 2000 OHMS										
XMTR		10	Transmitter Output	4-20 mA <input checked="" type="checkbox"/>		10-50mA <input type="checkbox"/>		21-103 kPa (3-15 psig) <input type="checkbox"/>		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 <input type="checkbox"/> Df <input type="checkbox"/> P <input type="checkbox"/> PI <input type="checkbox"/> PD <input type="checkbox"/> PID <input type="checkbox"/>		Is <input type="checkbox"/> Ds <input type="checkbox"/>		Other						
				On Measurement Increase, Output:		Increases <input type="checkbox"/>		Decreases <input type="checkbox"/>								
		12	Action	None <input type="checkbox"/>		MFR Std <input checked="" type="checkbox"/>		Other								
		13	Auto-Man Switch	Manual <input type="checkbox"/>		External <input checked="" type="checkbox"/>		Remote <input checked="" type="checkbox"/>		Other						
		14	Set Point Adj.	None <input type="checkbox"/>		MFR Std <input checked="" type="checkbox"/>		Other								
		15	Manual Reg.	4-20 mA <input checked="" type="checkbox"/>		10-50mA <input type="checkbox"/>		21-103 kPa (3-15 psig) <input type="checkbox"/>		Other						
		16	Output													
ELEMENT		17	Fill	SAMA Class		Compensation										
		18	Process Data	SEE TABLE BELOW												
		19	Range	Fixed <input checked="" type="checkbox"/>		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 <input checked="" type="checkbox"/>		Deviation <input type="checkbox"/>		Contacts to		On Temp. Incr.						
		25	Options	Other: DIGITAL DISPLAY												
AREA CLASS.		27		IEC <input checked="" type="checkbox"/>		ZONE 2, EExia IIB-T: IP-65 / NEMA4X		Agency Approval: ATEX								
TRANSMITTER																
Item	Qty	Tag No.	Resistance (ohms)		Oper. Press. (PSIG)		Calibration (ohms)		Manufacturer / Model No.	Service						
			Range	Oper.	Min.	Max.	4 mA	20 mA								
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 <input checked="" type="checkbox"/> REQUIRED <input type="checkbox"/> NOT REQUIRED																
5 HARD COPY OF IIEC-79, EExia IIB-T5 CERTIFICATE <input checked="" type="checkbox"/> REQUIRED <input type="checkbox"/> 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		
				NO.	BY	APP	DATE	P.O.I.	
CLIENT: Gachsaran Polymer Industries Company (GPIC) P.O. NO.: GPIC-PT-MA-PO-000-3029 SERVICE: PROPYLENE REFERIGERATION PACKAGE				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	<input type="checkbox"/>	REQUIRED	<input checked="" type="checkbox"/>	NOT REQUIRED			
	5	CERTIFICATE OF COMPLIANCE	<input checked="" type="checkbox"/>	REQUIRED	<input type="checkbox"/>	NOT REQUIRED			
	6	HARD COPY OF IEC-79, EEXD IIB-T3 CERTIFICATE	<input checked="" type="checkbox"/>	REQUIRED	<input type="checkbox"/>	NOT REQUIRED		PER IEC 60079	
	7	AREA CLASSIFICATION:	IEC-79, ZONE 2, GROUP IIB, T3, EE x(d)						
	8	MANUFACTURER CALCULATION / SIZING SHEET	<input type="checkbox"/>	REQUIRED	<input checked="" type="checkbox"/>	NOT REQUIRED			
	9	STAINLESS STEEL NAMEPLATE (316)	<input checked="" type="checkbox"/>	REQUIRED	<input type="checkbox"/>	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) P.O. NO.: GPIC-PT-MA-PO-000-3029 SERVICE: PROPYLENE REFERIGERATION PACKAGE			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.	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						
	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				
	32	Fluid	OIL (PAG) / PROPYLENE				
SERVICE CONDITION	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						
	3	INSTRUMENT SHALL BE SUITABLE FOR MARINE, SALT LADEN, CORROSIVE ENVIRONMENT					
	4	CALIBRATION CERTIFICATE	<input type="checkbox"/>	REQUIRED	<input checked="" type="checkbox"/>	NOT REQUIRED	
	5	CERTIFICATE OF COMPLIANCE	<input checked="" type="checkbox"/>	REQUIRED	<input type="checkbox"/>	NOT REQUIRED	
	6	HARD COPY OF IEC-79, EEXD IIB-T3 CERTIFICATE	<input checked="" type="checkbox"/>	REQUIRED	<input type="checkbox"/>	NOT REQUIRED	PER IEC 60079
	7	AREA CLASSIFICATION: IEC-79, ZONE 2, GROUP IIB, T3, EE x(d)					
	8	MANUFACTURER CALCULATION / SIZING SHEET	<input type="checkbox"/>	REQUIRED	<input checked="" type="checkbox"/>	NOT REQUIRED	
	9	STAINLESS STEEL NAMEPLATE (316)	<input checked="" type="checkbox"/>	REQUIRED	<input type="checkbox"/>	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.					