				PRESSURE GAUGE		Document No: VD-GPIC-MA-3029-3029-0038-00
						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) P.O. NO.: GPIC-PT-MA-PO-000-3029 SERVICE: PROPYLENE REFERIGERATION PACKAGE						
IN-01. 150mm						
1. Type: Direct Reading <input checked="" type="checkbox"/> Other <input type="checkbox"/> 2. Mounting: Surface <input type="checkbox"/> Local <input checked="" type="checkbox"/> 3. Dial: Diameter <input checked="" type="checkbox"/> 4 1/2" Color: <input checked="" type="checkbox"/> WHITE		3-15 lb F Vendor Reply 2025.12.09: Noted		SEE LIST BELOW 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 <input type="checkbox"/> NOT REQUIRED MFG Type Wetted Part Mtl. Other Mat'l Fill Fluid Process Conn. Gage Conn.		
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		9. Nominal Accuracy Required: +/- 1%				
		IN-02. 0-40 Barg				
		Vendor Reply 2025.12.09: Noted				
Item	Qty.	Tag No.	Range PSIG BAR	Oper. Pressure PSIG (BarG) OPER. MA	Service	MANUFACTURER Model NO.
A	1	PG-61131	0 to 500	336	34	
		PUMP DISCHARGE	0 to 34	23.2	24.2	& SYNTHETIC OIL
B	1	PG-61132	0 to 500	336	351	PROPYLENE GAS
		PUMP DISCHARGE	0 to 34	23.2	24.2	& SYNTHETIC OIL
C	1	PG-61141	0 to 500	270	351	PROPYLENE GAS
		RECEIVER	0 to 34	18.6	24.2	& SYNTHETIC OIL
D						
E						
F						
G						
H						
I						
J						
K						
L						
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 <input checked="" type="checkbox"/> REQUIRED <input type="checkbox"/> NOT REQUIRED 5 CERTIFICATE OF COMPLIANCE <input checked="" type="checkbox"/> REQUIRED <input type="checkbox"/> NOT REQUIRED 6 CUSTOMER SPECIFICATION: N/A & N/A 7 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						



IN-03. 2 valve manifold shall be supplied for all PG


Vendor Reply 2025.12.09:
Noted

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

GENERAL	1	Tag No.	SEE TABLE BELOW	Vendor Reply 2025.12.09: Noted
	2	Qty		
	3	Function	Record <input type="checkbox"/> Indicate <input checked="" type="checkbox"/> Control <input type="checkbox"/> VIA MOC <input type="checkbox"/> Omd <input type="checkbox"/> Trans <input type="checkbox"/> Other	
	4	Case	Mfr. Std. <input checked="" type="checkbox"/> Nom. Size	IN-04. add "EExia" per NOTE 2
	5	Mounting	Flush <input type="checkbox"/> Surface	
	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 checked="" type="checkbox"/> IIB-T5 - ZONE 1, CL1	
	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"/> Time Mark: <input type="checkbox"/>	IN-05. It shall be selected.
	9	Chart Drive	N/A Speed	
	10	Scales	Type: LCD / DIGITAL (UNITS per MIN) Range: SEE TABLE BELOW	Vendor Reply 2025.12.09: Noted
XMTR	11	Transmitter Output	4-20 mA <input type="checkbox"/> NOTE 9 10-50mA For Receiver, see spec sheet. WIRE	
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 NOTE 9	
	17	Manual Reg.	None <input type="checkbox"/> MFR Std <input type="checkbox"/> Other	
	18	Output	4-20 mA NOTE 9 10-50 mA 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"/>	
	23	Process Data	Overrange Protection to: SEE TABLE BELOW 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 Location: Bottom: <input checked="" type="checkbox"/>	Vendor Reply 2025.12.09: Noted
VIA UCP	25	Alarm Switches	Quantity: BY UCP REFER TO SETPOINT LIST	
	26	Function	Press. <input checked="" type="checkbox"/> Deviation <input type="checkbox"/>	
OPTIONS	27	Options	Filter Reg. <input type="checkbox"/> Sup. Gage <input type="checkbox"/> Output Gage <input type="checkbox"/> Charts <input type="checkbox"/> Diaphragm Seal <input type="checkbox"/> Type N/A Bowl Conn. Capillar. N/A Other ELECTRICAL GROUND SCREW REQUIRED	IN-06. "EExia"
AREA CLASSIFICATION			IEC <input checked="" type="checkbox"/> ZONE 1, EExi IIB-IP 67 NEMA4X Agency Approval: ATEX	

Item	Qty	Tag No.	Pressure PSIG - BarG		Op. P. Min	Op. P. Max	Op. P. Range	Op. P. Min	Op. P. Max	Process
			Range	Over						
A	1	PIT 61111	-14.7 to 580	1160	22.5	343.3	0.00	400		PROPYLENE & SYNTHETIC OIL
		SUCTION	-1.01 to 40.0	80.0	1.55	1.76	0.0	17.2		
B	1	PIT 61113	-14.7 to 580	1160	304.6	343.3	0.00	400		PROPYLENE & SYNTHETIC OIL
		OIL SUPPLY	-1.01 to 40.0	80.0	21.0	23.7	0.0	27.6		
C										
D										
AA	1	PIT 61121	-14.7 to 580	1160	22.5	25.9	0.00	250		PROPYLENE & SYNTHETIC OIL
		SUCTION	-1.01 to 40.0	80.0	1.55	1.76	0.0	17.2		
BB	1	PIT 61123	-14.7 to 580	1160	304.6	256.1	0.00	400		PROPYLENE & SYNTHETIC OIL
		OIL SUPPLY	-1.01 to 40.0	80.0	21.0	17.7	0.0	27.6		
CC	1									
DD	1	PIT 61141	-14.7 to 580	1160	85.5	289.1	0.00	400		PROPYLENE & SYNTHETIC OIL
		ECONOMIZER	-1.01 to 40.0	80.0	5.90	19.9	0.0	27.6		

IN-13. "PT"

	PRESSURE TRANSMITTER CONTROL DEVICES			Document No: VD-GPIC-MA-3029-3029-0038-00	
				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

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 ENVIRONMENT
- 5 CALIBRATION CERTIFICATE REQUIRED NOT REQUIRED
- 6 HARD COPY OF IEC-79, EEx IIB-T5 CERTIFICATE Vendor Reply 2025.12.09: Noted
- 7 CUSTOMER SPECIFICATION: N/A & N/A
- 8 ELECTRICAL CLASS CERTIFICATION SHALL BE 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 AND °C
- 16 MATERIAL SHALL BE PER APPROVED VENDOR LIST. MANUFACTURER LISTED ABOVE IS FOR REFERENCE.
- 17 ELECTRICAL CONNECTION: M20
- 18 REQUIRED ASSEMBLY AS PER BELOW PIC WITH 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.

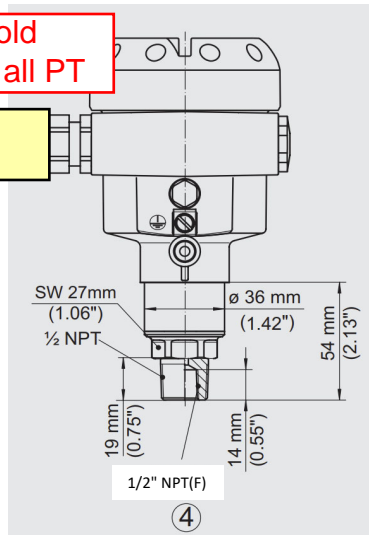
IN-14. "EExia"


Vendor Reply 2025.12.09:
Noted



IN-15. 2 valve manifold shall be supplied for all PT

Vendor Reply 2025.12.09:
Noted



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

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 % GUARANTEED STABILITY OVER FIVE YEARS
- 4 INSTRUMENT SHALL BE SUITABLE FOR MARINE ENVIRONMENT
- 5 CALIBRATION CERTIFICATE REQUIRED NOT REQUIRED
- 6 HARD COPY OF IEC-79, EExIIB-T5 CERTIFICATE Vendor Reply 2025.12.09: Noted
- 7 CUSTOMER SPECIFICATION: N/A & N/A
- 8 ELECTRICAL CLASS CERTIFICATION SHALL BE STAMPED USING STAINLESS STEEL TAG PERMANENTLY
- 9 ATTACHED TO THE DEVICE
- 10 HART COMMUNICATION SHALL BE SUITABLE OVER RANGE OF APPLICATION
- 12 AUSTENSIC 316 SS BOLTS REQUIRED
- 13 MOUNTING BRACKET FOR 2-IN PIPE BY VENDOR (AGCO)
- 14 LCD METER WITH POLYURETHANE COVERED ALUMINUM COVER REQUIRED
- 15 ALL DOCUMENTS TO BE SUBMITTED IN BOTH HARD AND ELECTRONIC FORMAT
- 16 INDICATOR TO SHOW BARG AND °C
- 17 MATERIAL SHALL BE PER APPROVED VENDOR LIST. MANUFACTURER LISTED ABOVE IS FOR REFERENCE.
- 18 ELECTRICAL CONNECTION: M20
- 19 REQUIRED ASSEMBLY AS PER BELOW PIC WITH ISOLATION VALVE
- 20 TRANSMITTERS ARE SUPPLIED WITH THIN FILM TYPE PIEZORESISTIVE SENSORS
- 21 SENSOR FILLING: PAG SYNTHETIC OIL
- 22 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.

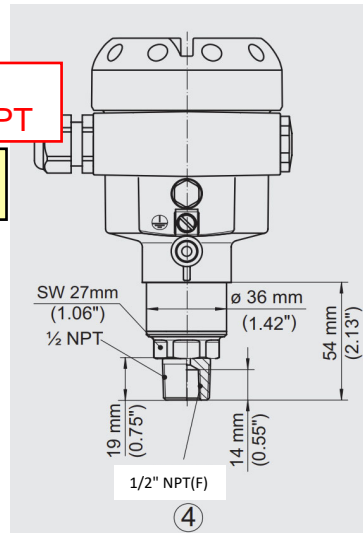
IN-21. "EExia"

Vendor Reply 2025.12.09: Noted



IN-22. 2 valve manifold shall be supplied for all PT

Vendor Reply 2025.12.09: Noted



TEMPERATURE		Document No:	VD-GPIC-							
<p style="text-align: right;">Vendor Reply 2025.12.09: THE ELEMENT IS SEPARATED FROM TRANSMITTER DUE TO POTENTIAL VERY FREQUENCY VIBRATION. BOTH TRANSMITTER AND ELEMENTS ARE INSTALLED IN SITE NO CHANGE</p>										
<p style="text-align: center;">IN-24. Please clarify that what is the meaning of "Rack Mount". Generally TT is located in field not in the panel.</p>										
<p>CLIENT: Gachsaran Polymer Industries Company (GPIC) P.O. NO.: GPIC-PT-MA-PO-000-3029 SERVICE: PROPYLENE REFERIGERATION PACKAGE</p>										
GENERAL		<p>1 Tag No. SEE TABLE BELOW Service: SEE TABLE BELOW</p> <p>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 <input type="checkbox"/></p> <p>3 Case MFR. Std. <input type="checkbox"/> Nom <input type="checkbox"/> Nom. Size Color: MFR. Std <input type="checkbox"/> Other <input checked="" type="checkbox"/> NOTE 2</p> <p>4 Mounting Flush <input type="checkbox"/> Surface <input type="checkbox"/> Yoke <input checked="" type="checkbox"/> Other <input checked="" type="checkbox"/> RACK MOUNT</p> <p>5 Enclosure Class Gen. Purpose <input type="checkbox"/> Weather Proof <input type="checkbox"/> Explosion Proof <input type="checkbox"/></p> <p>Use in intrinsically <input checked="" type="checkbox"/> Safe System <input type="checkbox"/> Other <input checked="" type="checkbox"/> IIB-T5 - ZONE 2, CL1</p> <p>6 Power Supply 117V 60 Hz <input type="checkbox"/> Volts 24 V</p> <p>7 Chart Strip <input type="checkbox"/> Roll <input type="checkbox"/> Time marks <input type="checkbox"/></p> <p>8 Chart Drive Speed <input type="checkbox"/> Power <input type="checkbox"/></p> <p>9 Scale Type: <input type="checkbox"/></p>								
XMTR		<p>10 Output NOTE 12 4-20 mA <input checked="" type="checkbox"/> 10-50mA <input type="checkbox"/> Other <input type="checkbox"/></p> <p>For Receiver, see spec sheet. Vendor Reply 2025.12.09: Noted</p> <p>Other <input type="checkbox"/> IRE OUTPUT) NOTE 12</p>								
CONTROLLER VIA N/A		<p>11 Control Modes P = Prop (Gain), 1-Integral (Auto R) 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"/></p> <p>12 Action On Measurement Increase, Output: Increases <input type="checkbox"/> Decreases <input type="checkbox"/></p> <p>13 Auto-Man Switch None <input type="checkbox"/> MFR Std <input type="checkbox"/> Other <input checked="" type="checkbox"/> NOTE 18</p> <p>14 Set Point Adj. Manual <input type="checkbox"/> External <input type="checkbox"/> Remote <input checked="" type="checkbox"/> UCP NOTE 12</p> <p>15 Manual Reg. None <input type="checkbox"/> MFR Std <input type="checkbox"/> Other <input type="checkbox"/></p> <p>16 Output 4-20 mA <input type="checkbox"/> 10-50mA <input type="checkbox"/> 21-103 kPa (3-15 psig) <input type="checkbox"/> Other <input type="checkbox"/></p>								
ELEMENT		<p>17 Fill SAMA Class Compensation</p> <p>18 Process Data SEE TABLE BELOW Compensation</p> <p>19 Range Fixed <input type="checkbox"/> Adj. Range <input type="checkbox"/> Set @ SEE BELOW</p> <p>Overrange Protection to: Electrical Connection: M20 1/2" NPT</p> <p>20 Bulb Type: RTD-Pt-100 α = 0.00385 Sheath Material: 316 S.S W/ MINERAL INSULATION</p> <p>Size: SEE TABLE BELOW Diameter: 1/4" Number of Wires: 3 WIRES (DUAL) NOTE 15</p> <p>21</p> <p>22</p> <p>23 Alarm Switches Quantity: <input type="checkbox"/></p> <p>24 Function Temp. <input checked="" type="checkbox"/> Deviation <input type="checkbox"/> On Temp. Incr. <input type="checkbox"/></p> <p>25 Options Filter Reg. <input type="checkbox"/> Sup Gage <input type="checkbox"/> Charts <input type="checkbox"/></p> <p>26 Other: <input type="checkbox"/></p>								
VIA UCP		<p>26</p> <p>27</p> <p style="text-align: center;">IN-26. "EExia"</p>								
AREA CLASS.		<p>IEC <input checked="" type="checkbox"/> ZONE 1, EExI IIB-T5 IP-66 / NE Vendor Reply 2025.12.09: Noted</p>								
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	TIT 61141 ECONOMIZER	-328 to 1562	45.77	85.5	96.4	-58	212		HYDROCARBON GAS & SYNTHETIC OIL
B										
C										
D										
E										



TEMPERATURE TRANSMITTER CONTROL DEVICES

Document No: VD-GPIC-MA-3029-3029-0038-00
 Document Title: Instrument Data sheet & Catalogs

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

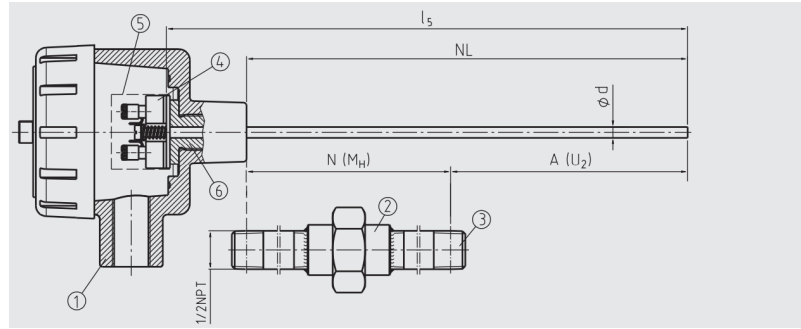
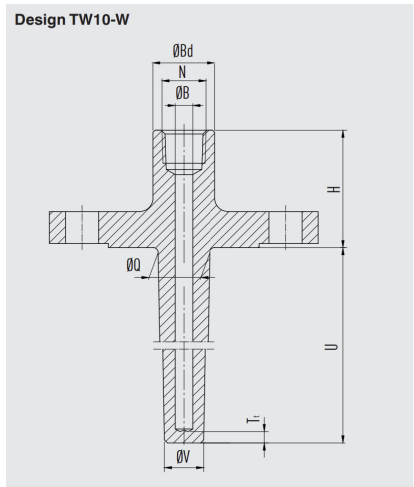
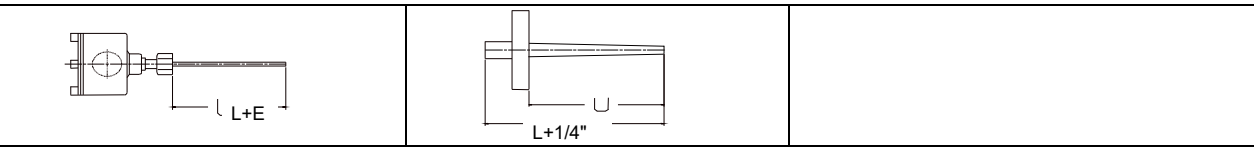
CLIENT: Gachsaran Polymer Industries Company (GPIC)
 P.O. NO.: GPIC-PT-MA-PO-000-3029
 SERVICE: PROPYLENE REFERIGERATION PACKAGE

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-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	YES	
B												
C												
D												
E												

IN-28. Well material shall be specified as 316SS.

Vendor Reply 2025.12.09:
Noted





TEMPERATURE TRANSMITTER CONTROL DEVICES

Document No: VD-GPIC-MA-3029-3029-0038-00
 Document Title: Instrument Data sheet & Catalogs

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

Notes:

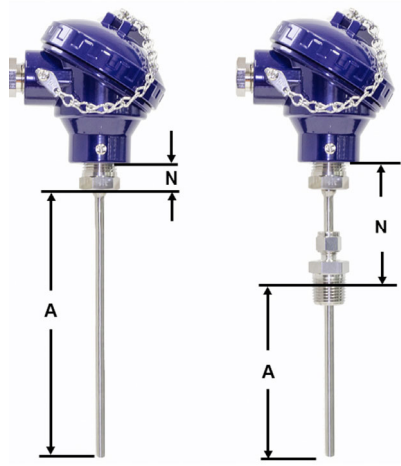
- SYSTEM DESIGN PRESSURE & TEMPERATURE: FV to 362.5 PSIG 25.0 BarG @ 250 °F 121 °C FOR ITEMS: 1
 FV to 406 PSIG 28.0 BarG @ -45 °F -43 °C
 FV to 406 PSIG 28.0 BarG @ 250 °F 121 °C FOR ITEMS:
 -20 °F -29 °C
- TRANSMITTER AND SENSOR ELECTRICAL HOUSING MUST BE POLYURETHANE COVERED DIE ALUMINUM-HOUSING, THERMOWELL IS 316 STAINLESS STEEL
- REFERENCE ACCURACY: **IN-29. "EExia"** & +/- 0.15 % GUARRANTEED STABILITY OVER FIVE YEARS
- INSTRUMENT SHALL BE SUITABLE FOR MARINE, SALT LADEN, CORROSIIVE ENVIRONMENT
- CALIBRATION CERTIFICATE NOT REQUIRED
- HARD COPY OF IIEC-79, EExi IIB-T5 NOT REQUIRED
 Vendor Reply 2025.12.09:
 Noted
- CUSTOMER SPECIFICATION: & 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 Barg AND °C
- MATERIAL SHALL BE PER APPROVED VENDOR LIST. MANUFACTURER LISTED ABOVE IS FOR REFERENCE.
- BOTH RTD ELEMENTS ARE WIRED AND TERMINATED IN TERMINAL HEAD
- 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 & HEAD



REMOTE TRANSMITTER WITH ELECTRONIC DISPLAY



$A = U + H$

Document No: V
 Document Title: H
 Vendor Reply 2025.12.09: THE ELEMENT IS SEPARATED FROM TRANSMITTER DUE TO POTENTIAL VERY FREQUENCY VIBRATION. BOTH TRANSMITTER AND ELEMENTS ARE INSTALLED IN SITE
NO CHANGE

IN-30. Please clarify that what is the meaning of "Rack Mount". Generally TT is located in field not in the panel.

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 <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"/> Non <input type="checkbox"/> Surfa <input type="checkbox"/> Other NOTE 2		
	4	Mounting	Flush <input type="checkbox"/> Other RACK MOUNT		
	5	Enclosure Class	Gen. Purpose <input type="checkbox"/> We <input type="checkbox"/> Use in intrinsically <input checked="" type="checkbox"/> Other IB-T5 - ZONE 2, CL1		
	6	Power Supply	117V 60 Hz <input type="checkbox"/> s 24 V		
	7	Chart	Strip <input type="checkbox"/> Roll <input type="checkbox"/> Time marks		
	8	Chart Drive	Speed <input type="checkbox"/> Power		
	9	Scale	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)		
CONTROLLER VIA N/A	11	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"/> PI <input type="checkbox"/> PD <input type="checkbox"/> PID <input type="checkbox"/> Is <input type="checkbox"/> Ds <input type="checkbox"/>		
	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 Compensation		
	19	Range	Fixed <input type="checkbox"/> Adj. Range <input type="checkbox"/> Set @ SEE BELOW		
			Overrange Protection to: Electrical Connection: M20		
	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. <input checked="" type="checkbox"/> Deviation <input type="checkbox"/> On Temp. Incr.		
	25	Options	Filter Reg. Sup Gage <input type="checkbox"/> Charts <input type="checkbox"/>		
	26	Other:			
AREA CLASS.	27		IEC <input checked="" type="checkbox"/> ZONE 1, EExIB-T5 IP-66 / NEMA4X Agency Approval: ATEX		

IN-31. add "EExia"
 Vendor Reply 2025.12.09: Noted

Vendor Reply 2025.12.09: THIS REQUIREMENT IS FOR CERTIFICATION AND NOT AREA CLASS.
NO CHANGE

IN-32. "EExia"
 Vendor Reply 2025.12.09: Noted

TRANSMITTER									
Item	Qty	Tag No.	Temperature °F / °C		Oper. Press. PSIG BARG		Calibr. °F	Model No.	Service
			Range	Oper.	Min.	Max.			
A	1	TIT-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		TIT-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		TIT-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									

IN-33. "TT"

Vendor Reply 2025.12.09:
 Noted



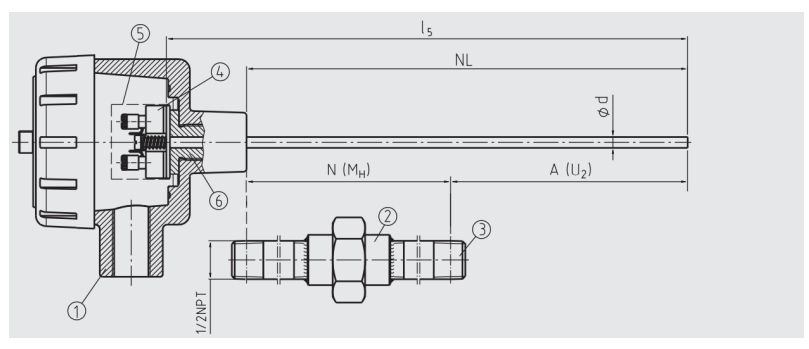
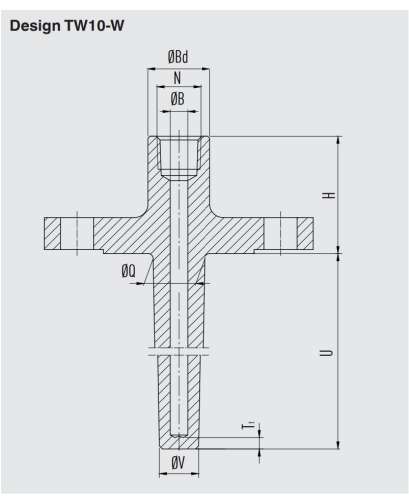
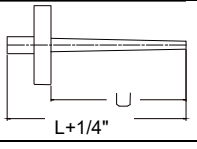
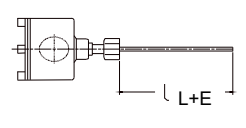
TEMPERATURE TRANSMITTER INDICATOR DEVICES				Document No:	VD-GPIC-MA-3029-3029-0038-00
				Document Title:	Instrument Data sheet & Catalogs
NO.	BY	APP	DATE	P.O.I.	
00	N.B	A.M	12.10.25	IFR	


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

IN-34. Well material shall be specified as 316SS.

Vendor Reply 2025.12.09:
Noted



	TEMPERATURE TRANSMITTER INDICATOR DEVICES				Document No: VD-GPIC-MA-3029-3029-0038-00
					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

- Notes:
- SYSTEM DESIGN PRESSURE & TEMPERATURE:

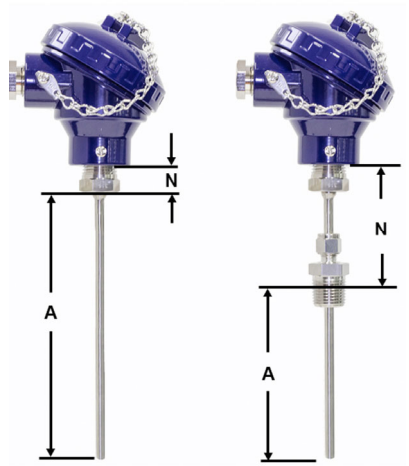
FV to	362.5 PSIG	25.0 BarG	@	250 °F	121 °C	FOR ITEMS:	1, 3
				-45 °F	-43 °C		
FV to	406 PSIG	28.0 BarG	@	250 °F	121 °C	FOR ITEMS:	2
				-20 °F	-29 °C		
 - TRANSMITTER AND SENSOR ELECTRICAL HOUSING MUST BE POLYURETHANE COVERED DIE ALUMINUM-HOUSING, THERMOWELL IS 316 STAINLESS STEEL
 - REFERENCE ACCURACY: +/- 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, EExi IIB-T5 CERTIFICATE REQUIRED NOT REQUIRED
 - 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 Barg AND °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 & HEAD



REMOTE TRANSMITTER WITH ELECTRONIC DISPLAY



A = U + H

Document No: Vendor Reply 2025.12.09: THE ELEMENT IS SEPARATED FROM TRANSMITTER DUE TO POTENTIAL VERY FREQUENCY VIBRATION. BOTH TRANSMITTER AND ELEMENTS ARE INSTALLED IN SITE
Document Title: NO CHANGE

IN-36. Please clarify that what is the meaning of "Rack Mount". Generally TT is located in field not in the panel.

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 <input type="checkbox"/> Indicate <input checked="" type="checkbox"/> Control <input type="checkbox"/> Trans <input checked="" type="checkbox"/> Other <input type="checkbox"/>		
	3	Case	MFR. Std. <input type="checkbox"/> Nom <input type="checkbox"/>		NOTE 2
	4	Mounting	Flush <input type="checkbox"/>		RACK MOUNT
	5	Enclosure Class	Gen. Purpose <input type="checkbox"/> Weather Proof <input type="checkbox"/> Explosion Proof <input type="checkbox"/>		
	6	Power Supply	Use in intrinsically <input checked="" type="checkbox"/>		Vendor Reply 2025.12.09: Noted
	7	Chart	117V 60 Hz <input type="checkbox"/>		IIB-T5 - ZONE 2, CL1
	8	Chart Drive	Strip <input type="checkbox"/> Roll <input type="checkbox"/>		
	9	Scale	Speed _____ Range: _____		
XMTR	10	Output	4-20 mA <input checked="" type="checkbox"/> 10-50mA <input type="checkbox"/> 21-103 kPa (3-15 psig) <input type="checkbox"/> Other _____		
CONTROLLER VIA N/A	11	Control Modes	For Receiver, see spec sheet. WIRED TO UCP VIA JUNCTION BOXES (2 WIRE OUTPUT) P = Prop (Gain), I = Integral (Auto Reset), D = Derivative (Rate)		
	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 _____		
	18	Process Data	SEE TABLE BELOW		
	19	Range	Fixed <input type="checkbox"/> Adj. Range <input type="checkbox"/> Set @ _____		
	20	Bulb	Overrange Protection to: _____ Type: RTD-Pt-100 $\alpha = 0.00385$ Size: SEE TABLE BELOW Diameter: 1/4" Number of Wires: 3 WIRES (DUAL) NOTE 15		
	21				
	22				
VIA UCP	23	Alarm Switches	Quantity: _____ Form _____		
	24	Function	Temp. <input checked="" type="checkbox"/> Deviation <input type="checkbox"/> On Temp. Incr. _____		
	25	Options	Filter Reg. _____ Sup Gage <input type="checkbox"/> Charts <input type="checkbox"/>		
	26		Other: _____		
AREA CLASS.	27		IEC <input checked="" type="checkbox"/> ZONE 1, EExI IIB-T5 IP-66 / NEMA4X Agency Approval: ATEX		

IN-37. add "EExia"

Vendor Reply 2025.12.09: Noted

Vendor Reply 2025.12.09: THIS REQUIREMENT IS FOR CERTIFICATION AND NOT AREA CLASS. NO CHANGE

IN-38. "EExia"

Vendor Reply 2025.12.09: Noted

TRANSMITTER										
Item	Qty	Tag No.	Temperature °F / °C		Oper. Press. PSIG BARG		Calibration (m °F / °C)		Model No.	Service
			Range	Oper.	Min.	Max.	4	20		
A	1	TIT-51121 SUCTION	-328 to 1562	-12.44	22.5	24.8	-58	212		HYDROCARBON GAS & SYNTHETIC OIL
B										
C										
D										
E										

IN-39. "TT"

Vendor Reply 2025.12.09: Noted

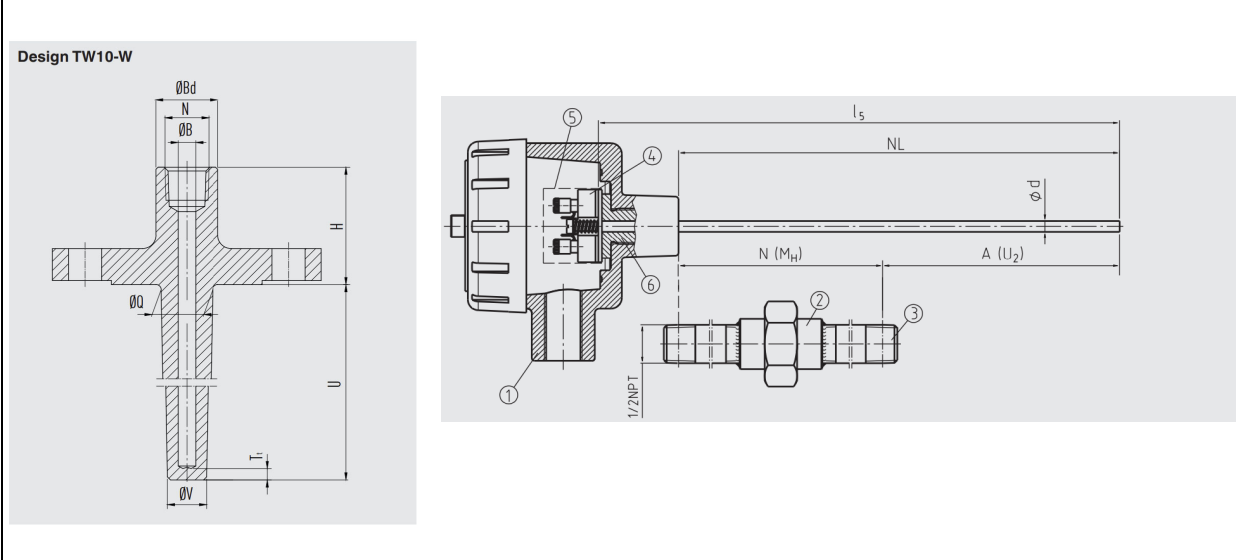
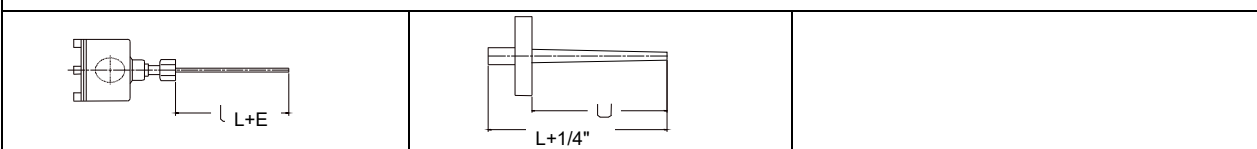
CLIENT: Gachsaran Polymer Industries Company (GPIC)
 P.O. NO.: GPIC-PT-MA-PO-000-3029
 SERVICE: PROPYLENE REFERIGERATION PACKAGE


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	YES	
B												
C												
D												
E												

IN-40. Well material shall be specified as 316SS.

Vendor Reply 2025.12.09:
 Noted



	TEMPERATURE TRANSMITTER INDICATOR DEVICES				Document No:	VD-GPIC-MA-3029-3029-0038-00
					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	

- Notes:
- 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		
 - TRANSMITTER AND SENSOR ELECTRICAL HOUSING MUST BE POLYURETHANE COVERED DIE ALUMINUM-HOUSING, THERMOWELL IS 316 STAINLESS STEEL
 - REFERENCE ACCURACY: +/- 0.075 % & +/- 0.15 % GUARRANTEED STABILITY OVER FIVE YEARS
 - INSTRUMENT SHALL BE SUITABLE FOR MARIN **IN-41. "EExia"** MENT
 - CALIBRATION CERTIFICATE NOT REQUIRED
 - HARD COPY OF IIEC-79, EExi IIB-T5 CERTIFIC NOT REQUIRED
 - CUSTOMER SPECIFICATION: 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 Barg AND °C
 - MATERIAL SHALL BE PER APPROVED VENDOR LIST. MANUFACTURER LISTED ABOVE IS FOR REFERENCE.
 - BOTH RTD ELEMENTS ARE WIRED AND TERMINATED IN TERMINAL HEAD
 - 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

IN-41. "EExia"

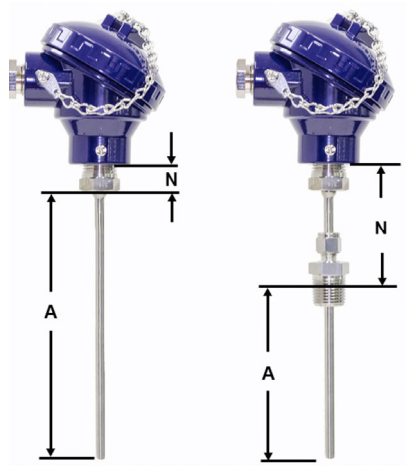
Vendor Reply 2025.12.09:
Noted




THERMOWELL & HEAD



REMOTE TRANSMITTER WITH ELECTRONIC DISPLAY



$A = U + H$

	GAUGES GLASSES & COCKS	Document No:	VD-GPIC-MA-3029-3029-0038-00	
		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) P.O. NO.: GPIC-PT-MA-PO-000-3029 SERVICE: PROPYLENE REFERIGERATION PACKAGE				

1. Gage Column Assembled w/ Nipples Cocks Unassembled

GAGE CLASSES

2. Type: Reflex Large Chamber Transparent Tubular 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**

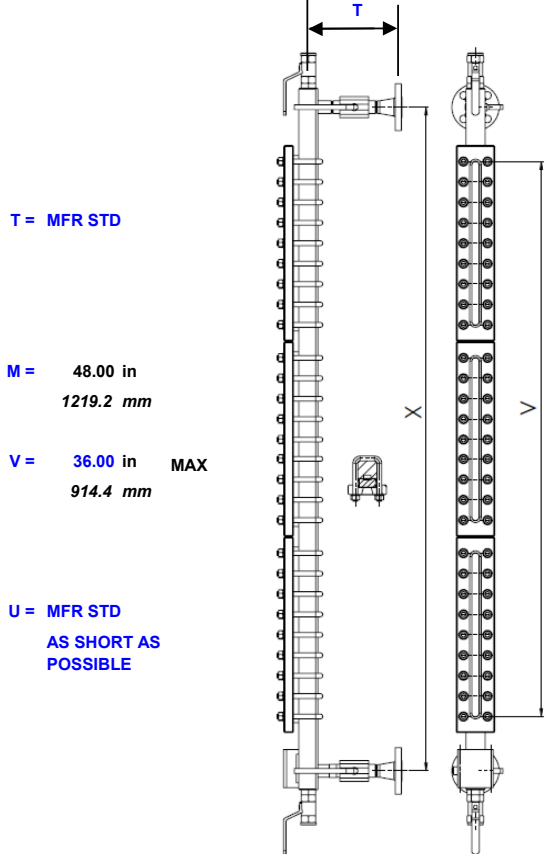
17. Bolting Material: **A193-L7 / A194-7**

Item	Qty.	Tag No.	Visible Glass	OVERALL LENGTH	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-3029-3029-0038-00
					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)					
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 C TO C DISTA 48 inches 1,219.2 mm
 - 10 VENT AND DRAIN CONNECTION SHALL BE SUPPLIED WITH BALL VALVES

REQUIREMENTS



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

IN-42. It shall be selected. add "EExia"

GENERAL	1	Tag No.	SEE TABLE BELOW		Service:	Vendor Reply 2025.12.09: Noted		
	2	Qty						
	3	Function	Record <input type="checkbox"/>	Indicate <input checked="" type="checkbox"/>	Control <input checked="" type="checkbox"/>	VIA MCS		
	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 type="checkbox"/>	Safe System <input checked="" 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"/>	
				Range	Number	Time Marks <input type="checkbox"/>		
	9	Chart Drive	N/A	Speed	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,	if <input type="checkbox"/>	Df <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"/>	
	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		
	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 <input checked="" type="checkbox"/>			
			Location: Bottom: <input checked="" type="checkbox"/>	Back <input type="checkbox"/>	Other			
	25	Alarm Switches	Quantity:	Form	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	m	Bot. Bowl		
			Conn. Capillary:		Mtl.			
			Other					
AREA CLASSIFICATION			IEC <input checked="" type="checkbox"/>	ZONE 1, EExi IIB-T5		Vendor Reply 2025.12.09: Noted	ATEX	

IN-43. "EExia"

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 116.9	2000	22.5	25.9	0	107.4		PROPYLENE REFRIGERANT SYNTHETIC OIL
			0 to 2,969	137.9	1.55	1.79	0.00	2,718.2		
							0%	100%		
B										
C										

	LEVEL TRANSMITTER CONTROL DEVICES				Document No:	VD-GPIC-MA-3029-3029-0038-00
					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	

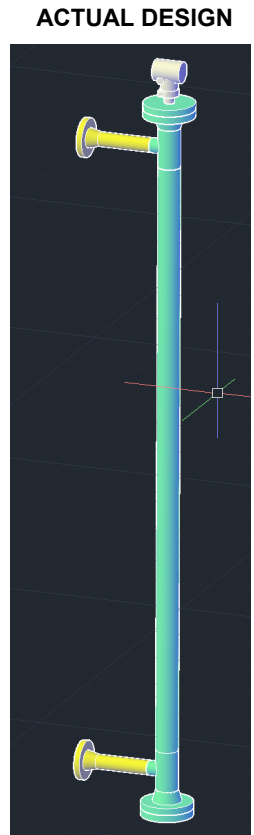
- Notes:
- 1 SYSTEM DESIGN PRESSURE & TEMPERATURE: **FV to 362.5 PSIG** **25.0 BarG** @ **250 °F** **121 °C**
 - 2 NORMAL OPERATING CONDITIONS ARE: **22.5 PSIG** **1.55 BarG** @ **-10.9 °F** **-23.82 °C**
 - 3 TRANSMITTER ELECTRICAL HOUSING MUST BE POLYURETHANE COVERED ALUMINUM
 - 4 REFERENCE ACCURACY: **+/- 0.1 % OF FULL SCALE** & **+/- 0.15 % GUARRANTEED STABILITY OVER FIVE YEARS**
 - 5 INSTRUMENT SHALL BE SUITABLE FOR **HAZARDOUS** ENVIRONMENT
 - 6 CALIBRATION CERTIFICATE REQUIRED NOT REQUIRED
 - 7 HARD COPY OF **IIEC-79, EExi IIB-T5** CERTIFIED NOT REQUIRED
 - 8 MATERIAL TEST REPORT 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 DEVICE
 - 20 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: **107.44 inches** **2,718.2 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"

IN-44. "EExia"

Vendor Reply 2025.12.09:
Noted



- REQUIREMENTS**
- X = **11.5 in**
292.1 mm
 - T = **MFR STD**
 - M = **107.44 in**
2728.91 mm
 - U = **MFR STD**
AS SHORT AS POSSIBLE
 - Z = **1 in**
25.4 mm



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


IN-45. It shall be selected. add "EExia"

GENERAL	1	Tag No.	SEE TABLE BELOW		Service:	Vendor Reply 2025.12.09: Noted
	2	Qty				
	3	Function	Record <input type="checkbox"/>	Indicate <input checked="" type="checkbox"/>	Control <input type="checkbox"/>	VIA MCS
	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 type="checkbox"/>	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	Vendor Reply 2025.12.09: Noted	Circular <input type="checkbox"/>	Time Marks <input type="checkbox"/>
	9	Chart Drive	N/A		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	12	Control Modes	P = Prop (Gain), I = Integral (Auto Reset), D = Derivative (Rate)			
VIA N/A			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 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
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		
	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	
	25	Alarm Switches	Quantity:	Form	Rating	
	26	Function	Press. <input checked="" type="checkbox"/>	Deviation <input type="checkbox"/>	Contacts	On lcr. 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	Bot. Bowl	
			Conn. Capillary:	Mtl.		
			Other			

IN-46. "EExia"

AREA CLASSIFICATION IEC ZONE 1, EExi IIB-T5 Vendor Reply 2025.12.09:
Noted

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%		NATURAL GAS & SYNTHETIC OIL
B										
C										

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

- 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 M... ENVIRONMENT
 - 6 CALIBRATION CERTIFICATE REQUIRED NOT REQUIRED
 - 7 HARD COPY OF IEC-79, EExi IIB-T5 CERTIF... Vendor Reply 2025.12.09: Noted NOT REQUIRED
 - 8 MATERIAL TEST REPORT NOT REQUIRED
 - 9 CUSTOMER SPECIFICATION: 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, 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
 - 20 DEVICE ELECTRICAL CONNECTION: M20
 - 21
 - 22 LIQUID MEDIA IS PAG OIL WITH OPERATING CONDITIONS SHOWN IN TABULATION
 - 23 DISTANCE BETWEEN NOZZLES THAT COVERS THE TRANSMITTER CALIBRATION RANGE IS: 48.00 inches 1,214.4 mm
 - 24 IT IS THE RESPONSIBILITY OF THE SUPPLIER TO ASSURE THAT THE FLOATS FIT INSIDE THE CHAMBER
 - 25 TRANSMITTER ORIENTATION SHALL AS PER SHOWN PER BELOW SNAPSHOT CALLED "ACTUAL DESIGN"



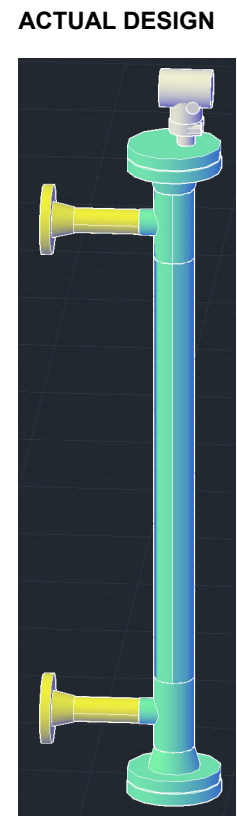
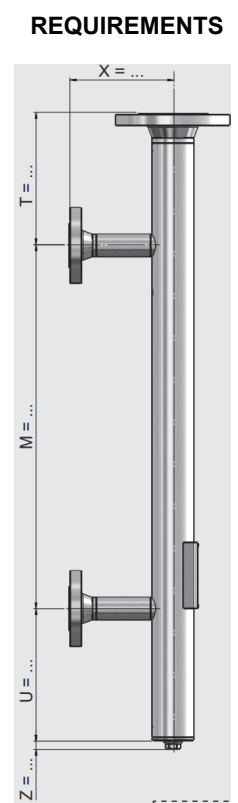
X = 14.38 in
 365 mm


 T = MFR STD

 M = 48.00 in
 1219 mm

 U = MFR STD
 AS SHORT AS
 POSSIBLE

 Z = 1 in
 25.4 mm



	SIGHT INDICATOR (ROTAMETER)				Document No:	VD-GPIC-MA-3029-3029-0038-00	
					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)							
P.O. NO.: GPIC-PT-MA-PO-000-3029							
SERVICE: PROPYLENE REFRIGERATION PACKAGE							

Item No.	A	B	C
Tag No.	SI-701-O-4	RECEIVER	FG-61131
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	VD-GPIC-MA-3029-3029-0015		VD-GPIC-MA-3029-3029-0015
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 (SHATTER PROOF)		TEMPERED BOROSILICATE GLASS (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	FS03-02-02-04 (3/4")		FS03-02-02-04 (3/4")
Quantity	2		2

IN-48. Range of flow shall be specified.

Vendor Reply 2025.12.09: No flow will be specified as it had a full bore as a pipe.
NO CHANGE TO DS

- 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-0475-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 HYDROSTATIC CERTIFICATE REQUIRED FOR ALL VALVES



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

GENERAL	0	Item No.	A	
	1	Tag No.	LOAD	UNLOAD
			XY-61112 & XY-61122 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	
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			
SOLENOID	26	Enclosure	IEC-79, Eex(d) IIC-T6 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	
	31	Cable Entry	M20 x 1.5 mm	
SERVICE CONDITION	32	Fluid	AIR	
	33	Qty., Max	8	SCFM 12.7 SM3/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	ASCO	
46	Model No.	WSNFET8327B302MS 24VDC	MOUNTING BRACKET NO.: C133441	
47	QTY	4		

IN-49. Please recheck.

Vendor Reply 2025.12.09: THIS REQUIREMENT IS A MUST TO SET COMPRESSOR SLIDE VALVE SPEED. NO CHANGE TO DS

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"/>	Vendor Reply 2025.12.09: Noted	
	5	CERTIFICATE OF COMPLIANCE	<input checked="" type="checkbox"/> REQUIRED	<input type="checkbox"/>		
	6	HARD COPY OF IEC-79, EEXD IIC-T6 CERTIFICATE	<input checked="" type="checkbox"/> REQUIRED	<input type="checkbox"/>		
	7	AREA CLASSIFICATION:	IEC-79, ZONE 2, GROUP IIB, T3			
	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 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-3029-3029-0038-00
					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) P.O. NO.: GPIC-PT-MA-PO-000-3029 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) IIC-T6 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		
	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			

Vendor Reply 2025.12.09: MANUAL OVERRIDE WILL REMAIN AS IT IS NEEDED TO FIELD TESTING OIL RECOVERY SYSTEM WHEN THE PANEL IS NOT IN OPERATION, OR DURING SERVICE. NO CHANGE TO DS

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 <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 IIC-T6 CERTIFICATE <input checked="" type="checkbox"/> REQUIRED <input type="checkbox"/> NOT REQUIRED
	7	AREA CLASSIFICATION: IEC-79, ZONE 2, GROUP IIB, T3
	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	LEADS TO BE TERMINATED IN A CONDUIT BOX SUITABLE FOR AREA CLASSIFICATION.
	13	ALL DOCUMENTS TO BE SUBMITTED IN BOTH HARD AND ELECTRONIC FORMAT
	14	INDIVIDUAL PART WEIGHT MUST BE CERTIFIED

Vendor Reply 2025.12.09:
+ Data sheets for motor RTD's are not generated as they are part of the motor vendor scope of supply. For details, refer to motor wiring diagrams. **NO CHANGE TO DS**
+ For compressor ZSL/ZSH, refer to compressor drawing as they are part of the compressor manufacturer. ZT data sheet will be added.
+ LG on the separator and chiller are integral to LT's. Therefore, LT DS will be updated to include the LG information. **DS WILL BE UPDATED**
+ TT-61152 is in client scope and NOT package supplier. **NO CHANGE TO DS**

IN-50. Data sheet of all other instruments in P&ID such as bearing's RTD, ZT/ZSL on Compressors, LG-61131/51, TT-61152... shall be added to this document.
It is at vendor's responsibility to check and add data sheet of all instruments to this document.
Reply sheet shall be submitted by Vendor.

	SOLENOID VALVE (CAPACITY CONTROL)				Document No:	VD-GPIC-MA-3029-3029-0038-00	
					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) P.O. NO.: GPIC-PT-MA-PO-000-3029 SERVICE: PROPYLENE REFERIGERATION PACKAGE							

IMI MAXSEAL **ICO4S 2/2, 3/2 or 5/2 poppet valves**
electromagnetic actuated, directly controlled

- > Port size: 1/4" ... 3/4" (ISO G/NPT) or manifold version
- > Direct acting solenoid valve for the control of hydraulic or pneumatic equipment
- > High flow
- > Up to 414 bar inlet pressure
- > Reliable and long life, ideal for a one time installation
- > Certifications: ATEX, CSA, CSA, TR CU, NEPSI, KOSHA, IECEX, FM, CRN, CCOE IN-METRO
- > Environmental protection; NEMA 4X, IP66/X8



Technical features

Medium:
Hydraulic and pneumatic – customer to specify and confirm compatibility

Operation:
Direct solenoid operated poppet valves

Mounting position:
Solenoid vertical

Flow:
0,8 Cv (11,5 Kv) ... 5,0 Cv (72,0 Kv)

Port size:
1/4 NPT, 1/2 NPT, G1/4, G1/2 or manifold version

Operating pressure:
0 ... 20 bar (0 ... 290 psi)
0 ... 50 bar (0 ... 725 psi)
0 ... 207 bar (0 ... 3002 psi)
0 ... 414 bar (0 ... 6004 psi)

Temperature:
Media:
-20 ... +90°C (-4 ... +194°F)
Options to -60°C (-76°F) available on request

Ambient:
See table on page 2
Air supply must be dry enough to avoid ice formation at temperatures below +2°C (+35°F).


Materials:
Valve body, trim, coil housing and top cover:
stainless steel 1.4404 (316 L)
Other trim and body materials available
O-rings seats & seals: high NBR
Other seal materials available on request

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Option selector

Y1*****S

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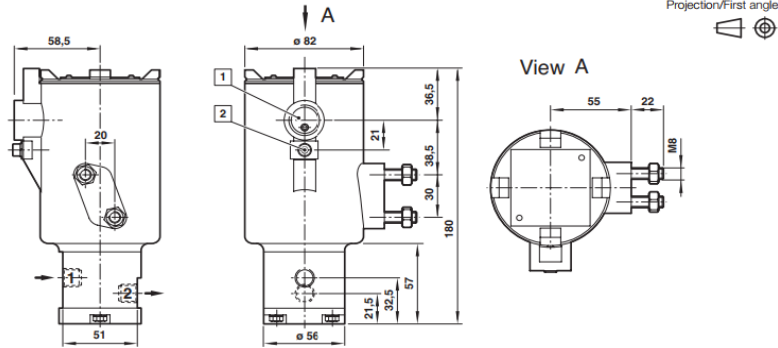
	SOLENOID VALVE (CAPACITY CONTROL)				Document No: VD-GPIC-MA-3029-3029-0038-00
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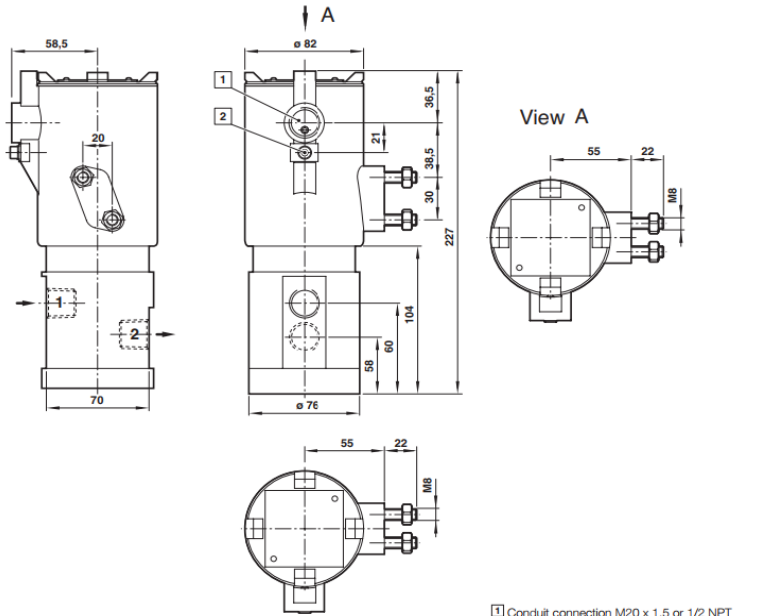
Dimensions

①



Dimensions in mm
Projection/First angle

②



- ① Conduit connection M20 x 1,5 or 1/2 NPT
- ② External earth