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|   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. 02 | Page 1 of 27 |


Instrument Datasheet & Catalogs

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|----------------|---|
| 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 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. |
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| 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. |

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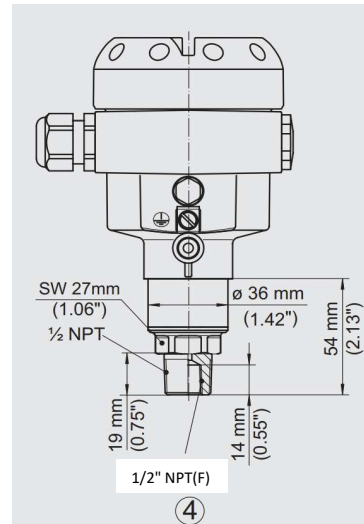
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| 01 | 8-Dec-25 | IFR | N.B | F.T | A.M |
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| Rev. | DATE | PURPOSE OF ISSUE | PREPARED | CHECKED | APPROVED |


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|---|---|-----------|------------|-------------|-----------------|----------------------------------|
|  | PRESSURE 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 | |
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Notes:


- 1 SYSTEM DESIGN PRESSURE & TEMPERATURE:

| | | | | | |
|------------------|-----------|---|--------|--------|-----------------|
| FV to 362.5 PSIG | 25.0 BarG | @ | 250 °F | 121 °C | FOR ITEMS: 1, 2 |
| | | | -45 °F | -43 °C | |
| FV to 406 PSIG | 28.0 BarG | @ | 250 °F | 121 °C | FOR ITEMS: 3 |
| | | | -20 °F | -29 °C | |
- 2 TRANSMITTER ELECTRICAL HOUSING MUST BE POLYURETHANE COVERED ALUMINUM
- 3 REFERENCE ACCURACY: +/- 0.1 % OF FULL SCALE & +/- 0.15 % GUARRANTEED STABILITY OVER FIVE YEARS
- 4 INSTRUMENT SHALL BE SUITABLE FOR MARINE, SALT LADEN, CORROSIVE ENVIRONMENT
- 5 CALIBRATION CERTIFICATE REQUIRED NOT REQUIRED
- 6 HARD COPY OF IEC-79, EExia IIB-T5 CERTIFICATE REQUIRED NOT REQUIRED PER IEC 60079
- 7 CUSTOMER SPECIFICATION: N/A, N/A & N/A
- 8 ELECTRICAL CLASS CERTIFICATION SHALL BE SHOWN ON ALUMINUM DIE-CASTING HOUSING STAMPED USING STAINLESS STEEL TAG PERMANENTLY ATTACHED TO THE DEVICE
- 9 HART COMMUNICATION SHALL BE SUITABLE OVER RANGE OF APPLICATION
- 10 AUSTENSIC 316 SS BOLTS REQUIRED
- 12 MOUNTING BRACKET FOR 2-IN PIPE BY VENDOR (AGCO)
- 13 LCD METER WITH POLYURETHANE COVERED ALUMINUM COVER REQUIRED
- 14 ALL DOCUMENTS TO BE SUBMITTED IN BOTH HARD AND ELECTRONIC FORMAT
- 15 INDICATOR TO SHOW BARG
- 16 MATERIAL SHALL BE PER APPROVED VENDOR LIST. MANUFACTURER LISTED ABOVE IS FOR REFERENCE.
- 17 ELECTRICAL CONNECTION: M20 1/2" NPT
- 18 REQUIRED ASSEMBLY AS PER BELOW PICTURE WITH 2-WAY MANIFOLD OR ISOLATION VALVE
- 19 TRANSMITTERS ARE SUPPLIED WITH THIN FILM TYPE PIEZORESISTIVE SENSORS
- 20 SENSOR FILLING: PAG SYNTHETIC OIL
- 21 REFER TO CONTROL NARRATIVE AND SET POINT LIST FOR THE CONTROLLER ACTION
- 22 HOUSING SHALL BE SELECTED TO SHOW TRANSMITTER LCD AT 90 DEGREE FROM INLET AS SHOWN BELOW.
- 23=REFER TO P&ID AND VALVE DATA SHEETS FOR 2-WAY MANIFOLD VALVE INFORMATION.



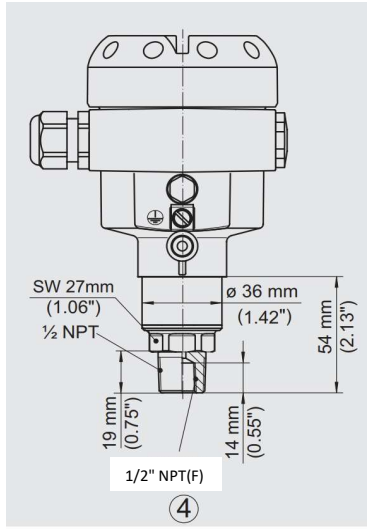
|  | | | | PRESSURE TRANSMITTER INDICATOR DEVICES | | | | Document No: | VD-GPIC-MA-3029-3029-0038 | | | | |
|---|--|--|--|---|--------------------|--|---|--|---|------------------------------------|---|-----------------------------------|---------|
| | | | | | | | | Document Title: | Instrument Data sheet & Catalogs | | | | |
| | | | | NO. | BY | APP | DATE | P.O.I. | | | | | |
| 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 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"/> | Norm. 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"/> | | | | | |
| | | | | 7 | Power Supply | 117V 60 Hz <input type="checkbox"/> | Other ac <input type="checkbox"/> | DC <input checked="" type="checkbox"/> | Volts 24 V | | | IIB-T5 - ZONE 1, CL1 | |
| | | | | 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 type="checkbox"/> PID <input type="checkbox"/> PD <input type="checkbox"/> PI <input type="checkbox"/> Is <input type="checkbox"/> Ds <input type="checkbox"/> | | | | | | | |
| | | | | | | Other <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 | | | | | |
| | | | | | | Location: Bottom: <input checked="" type="checkbox"/> | | | | | | | |
| | | | | | | Back <input type="checkbox"/> | | | | | | | |
| | | | | | | Other <input type="checkbox"/> | | | | | | | |
| 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 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: 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:

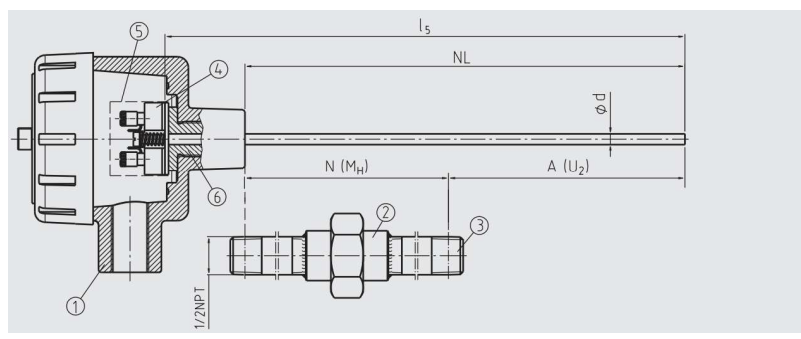
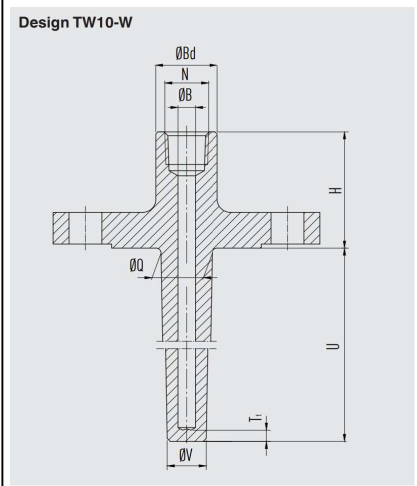
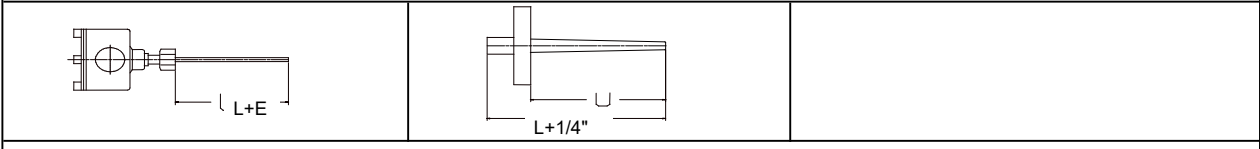
| | | | | | |
|------------------|-----------|---|--------|--------|-----------------|
| FV to 362.5 PSIG | 25.0 BarG | @ | 250 °F | 121 °C | FOR ITEMS: 1, 2 |
| | | | -45 °F | -43 °C | |
| FV to 406 PSIG | 28.0 BarG | @ | 250 °F | 121 °C | FOR ITEMS: 3 |
| | | | -20 °F | -29 °C | |
 - TRANSMITTER ELECTRICAL HOUSING MUST BE POLYURETHANE COVERED ALUMINUM
 - REFERENCE ACCURACY: ± 0.1 % OF FULL SCALE & ± 0.15 % GUARRANTEED STABILITY OVER FIVE YEARS
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 - ELECTRICAL CLASS CERTIFICATION SHALL BE SHOWN ON ALUMINUM DIE-CASTING HOUSING STAMPED USING STAINLESS STEEL TAG PERMANENTLY ATTACHED TO THE DEVICE
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 - AUSTENSIC 316 SS BOLTS REQUIRED
 - MOUNTING BRACKET FOR 2-IN PIPE BY VENDOR (AGCO)
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 - 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
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 - 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 | 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"/> EExia 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 | | | | |
| 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 | | | | | | | | | | |
| 11 | Control Modes | On Measurement Increase, Output: Increases <input type="checkbox"/> Decreases <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 <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 | | | | | | |
| 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, EExia IIB-T3 IP-65 / NEMA4X | | | | Agency Approval: ATEX | | | | |
| TRANSMITTER | | | | | | | | | | |
| Item | Qty | Tag No. | Temperature °F / °C | | Oper. Press. PSIG BARG | | Calibration (mA) °F / °C | | Manufacturer / 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 | | | | | | | | | | |

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|  | TEMPERATURE TRANSMITTER CONTROL DEVICES | | | | Document No: VD-GPIC-MA-3029-3029-0038 |
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| 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 | | | | | | | | | | | | |



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Notes:

- 1 SYSTEM DESIGN PRESSURE & TEMPERATURE:

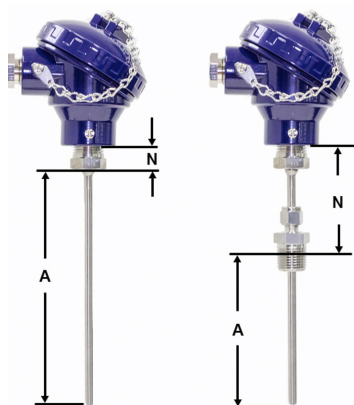
| | | | | | | | |
|-------|------------|-----------|---|--------|--------|------------|---|
| FV to | 362.5 PSIG | 25.0 BarG | @ | 250 °F | 121 °C | FOR ITEMS: | 1 |
| | | | | -45 °F | -43 °C | | |
| FV to | 406 PSIG | 28.0 BarG | @ | 250 °F | 121 °C | FOR ITEMS: | |
| | | | | -20 °F | -29 °C | | |
- 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, EE_xia 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.
- 15 BOTH RTD ELEMENTS ARE WIRED AND TERMINATED IN TERMINAL HEAD OR-TRANSMITTER-
- 16 REQUIRED ASSEMBLY AS PER BELOW PICTURES WITH A UNION. ELEMENT LENGTH SHALL BE ADJUSTED FOR THE UNION USE.
- 17 RTD TO BE TERMINATED IN THE TERMINAL HEAD, AND TRANSMITTER TO BE INSTALLED REMOTELY
- 18 REFER TO CONTROL NARRATIVE AND SET POINT LIST FOR THE CONTROLLER ACTION
- 19 THERMOWELL NATURAL FREQUENCE CALCULATION REQUIRED
- 20 THERMOWELL MATERIAL SHALL BE 316SS




THERMOWELL & HEAD




REMOTE TRANSMITTER WITH ELECTRONIC DISPLAY



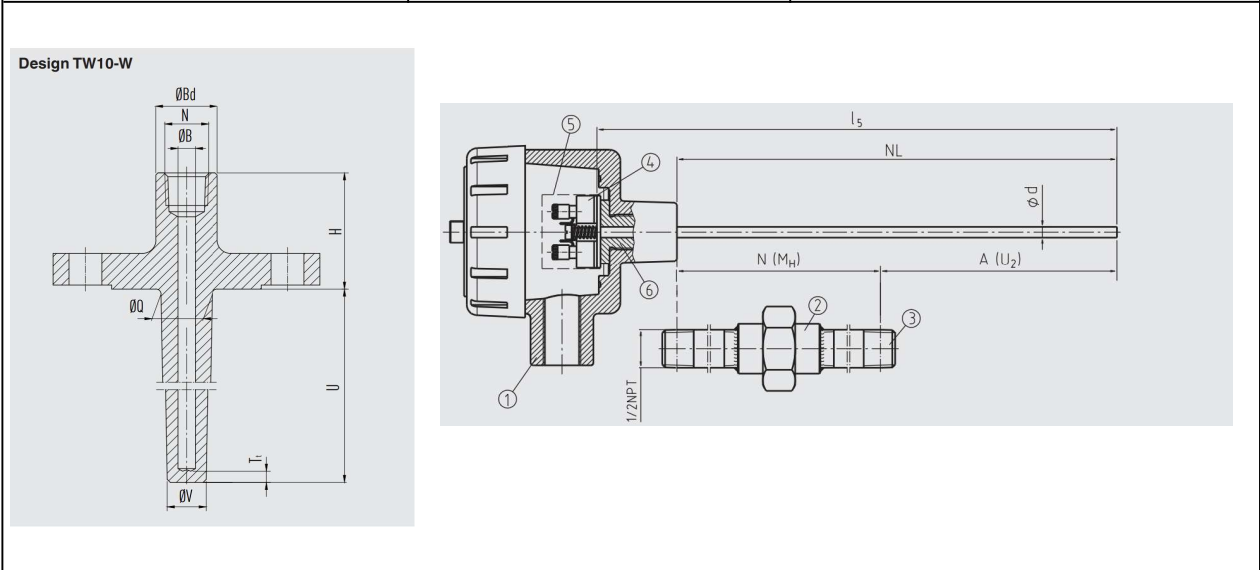
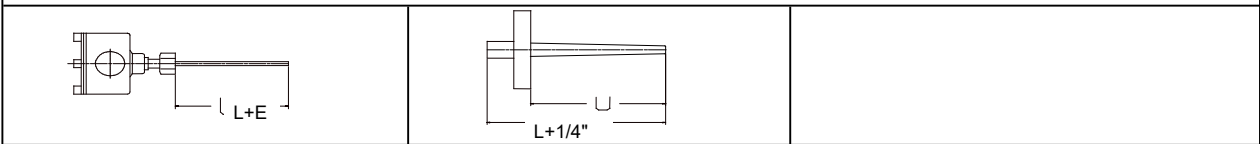
$A = U + H$


|  | | | | TEMPERATURE TRANSMITTER INDICATOR DEVICES | | | | Document No: VD-GPIC-MA-3029-3029-0038 | | | | | | | |
|--|-----|----------|---------------------|--|------------------------|------|--------------------------|---|--------------------------|-------------------|--|--|--|--|--|
| | | | | NO. | | BY | | APP | | DATE | | 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 | | | | 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 type="checkbox"/> Blind <input type="checkbox"/> Trans <input checked="" type="checkbox"/> Other <input type="checkbox"/> | | | | | | | |
| | | | | 3 Case | | | | MFR. Std. <input type="checkbox"/> Nom <input type="checkbox"/> MFR. Std. <input type="checkbox"/> Nom. Size <input type="checkbox"/> 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 <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 <input type="checkbox"/> Power <input type="checkbox"/> | | | | | | | |
| | | | | 9 Scale N/A | | | | Type: <input type="checkbox"/> Range: <input type="checkbox"/> | | | | | | | |
| 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 <input type="checkbox"/> | | | | | | | |
| | | | | | | | | 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), 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 <input type="checkbox"/> | | | | | | | |
| | | | | 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 <input type="checkbox"/> | | | | | | | |
| | | | | 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"/> | | | | | | | |
| ELEMENT | | | | 17 Fill | | | | SAMA Class <input type="checkbox"/> Compensation <input type="checkbox"/> | | | | | | | |
| | | | | 18 Process Data | | | | SEE TABLE BELOW Compensation <input type="checkbox"/> | | | | | | | |
| | | | | 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: <input type="checkbox"/> Form <input type="checkbox"/> Rating <input type="checkbox"/> | | | | | | | |
| VIA UCP | | | | 24 Function | | | | Temp. <input checked="" type="checkbox"/> Deviation <input type="checkbox"/> Contacts to <input type="checkbox"/> On Temp. Incr. <input type="checkbox"/> | | | | | | | |
| | | | | 25 Options | | | | Filter Reg. <input type="checkbox"/> Sup Gage <input type="checkbox"/> Output Gage <input type="checkbox"/> Charts <input type="checkbox"/> | | | | | | | |
| | | | | 26 | | | | Other: <input type="checkbox"/> | | | | | | | |
| AREA CLASS. | | | | 27 | | | | 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 | | | | | | | | | | | | |



| | | | | | |
|--|--|-----|-----|----------|--|
|  | 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 |

Notes:

- 1 SYSTEM DESIGN PRESSURE & TEMPERATURE:

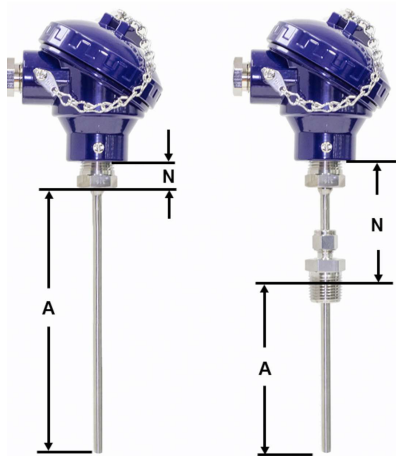
| | | | | | | |
|-------|------------|-------------|--------|--------|------------|---|
| FV to | 362.5 PSIG | 25.0 BarG @ | 250 °F | 121 °C | FOR ITEMS: | 1 |
| | | | -45 °F | -43 °C | | |
| FV to | 406 PSIG | 28.0 BarG @ | 250 °F | 121 °C | FOR ITEMS: | |
| | | | -20 °F | -29 °C | | |
- 2 TRANSMITTER 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.
- 15 BOTH RTD ELEMENTS ARE WIRED AND TERMINATED IN TERMINAL HEAD OR-TRANSMITTER-
- 16 REQUIRED ASSEMBLY AS PER BELOW PICTURES WITH A UNION. ELEMENT LENGTH SHALL BE ADJUSTED FOR THE UNION USE.
- 17 RTD TO BE TERMINATED IN THE TERMINAL HEAD, AND TRANSMITTER TO BE INSTALLED REMOTELY
- 18 REFER TO CONTROL NARRATIVE AND SET POINT LIST FOR THE CONTROLLER ACTION
- 19 THERMOWELL NATURAL FREQUENCE CALCULATION REQUIRED
- 20 THERMOWELL MATERIAL SHALL BE 316SS




THERMOWELL & HEAD




REMOTE TRANSMITTER WITH ELECTRONIC DISPLAY



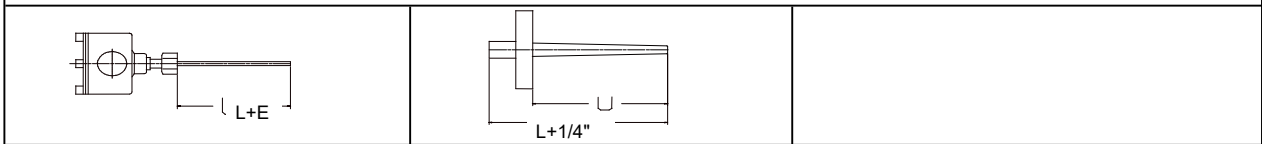
$A = U + H$

|  | | | | TEMPERATURE TRANSMITTER INDICATOR DEVICES | | | | Document No: VD-GPIC-MA-3029-3029-0038 | | |
|---|-----|---------------|---------------------|--|------------------------|-------|--------------------------|---|--------------------------|-------------------|
| | | | | | | | | Document Title: Instrument Data sheet & Catalogs | | |
| | | | | NO. BY APP DATE | | | | P.O.I. | | |
| CLIENT: Gachsaran Polymer Industries Company (GPIC) 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 | | | | SEE TABLE BELOW Service: SEE TABLE BELOW | | | | | | |
| 1 Tag No. | | | | Record <input type="checkbox"/> Indicate <input checked="" type="checkbox"/> Control <input type="checkbox"/> Blind <input type="checkbox"/> Trans <input checked="" type="checkbox"/> Other <input type="checkbox"/> | | | | | | |
| 2 Function | | | | MFR. Std. <input type="checkbox"/> Nom <input type="checkbox"/> Surface <input type="checkbox"/> Yoke <input checked="" type="checkbox"/> Other RACK MOUNT | | | | | | |
| 3 Case | | | | Gen. Purpose <input type="checkbox"/> Weather Proof <input type="checkbox"/> Explosion Proof <input type="checkbox"/> | | | | | | |
| 4 Mounting | | | | Use in intrinsically <input checked="" type="checkbox"/> EEExia Safe System <input type="checkbox"/> Other <input checked="" type="checkbox"/> IIB-T5 - ZONE 2, CL1 | | | | | | |
| 5 Enclosure Class | | | | 117V 60 Hz <input type="checkbox"/> Other ac <input type="checkbox"/> DC <input checked="" type="checkbox"/> Volts 24 V | | | | | | |
| 6 Power Supply | | | | Strip <input type="checkbox"/> Roll <input type="checkbox"/> Fold <input type="checkbox"/> Circular <input type="checkbox"/> Time marks <input type="checkbox"/> | | | | | | |
| 7 Chart | | | | Speed _____ Power _____ | | | | | | |
| 8 Chart Drive | | | | Type: _____ Range: _____ | | | | | | |
| 9 Scale | | | | 4-20 mA <input checked="" type="checkbox"/> 10-50mA <input type="checkbox"/> 21-103 kPa (3-15 psig) <input type="checkbox"/> Other _____ | | | | | | |
| XMTR | | | | For Receiver, see spec sheet. WIRED TO UCP VIA JUNCTION BOXES (2 WIRE OUTPUT) NOTE 12 | | | | | | |
| 10 Output | | | | P = Prop (Gain), 1-Integral (Auto Reset), D = Derivative (Rate) | | | | | | |
| CONTROLLER VIA N/A | | | | 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"/> | | | | | | |
| 11 Control Modes | | | | 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 | | | | SAMA Class _____ Compensation _____ | | | | | | |
| 17 Fill | | | | SEE TABLE BELOW | | | | | | |
| 18 Process Data | | | | Fixed <input type="checkbox"/> Adj. Range <input type="checkbox"/> Set @ SEE BELOW | | | | | | |
| 19 Range | | | | 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 | | | | | | |
| 21 | | | | Size: SEE TABLE BELOW Diameter: 1/4" Number of Wires: 3 WIRES (DUAL) NOTE 15 | | | | | | |
| 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: _____ | | | | | | |
| 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-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 | 1 | TT-61132 | -328 to 1562 | 120 | 304.6 | 335.0 | -58 | 212 | | HYDROCARBON GAS & |
| | | OIL SUPPLY | -200 to 850 | 48.89 | 21.0 | 22.8 | -50 | 100 | | SYNTHETIC OIL |
| C | | | | | | | | | | |
| D | 1 | TT-61131 | -328 to 1562 | 171.86 | 275.6 | 310.6 | -58 | 212 | | HYDROCARBON GAS & |
| | | OIL SEPARATOR | -200 to 850 | 77.70 | 19.0 | 21.1 | -50 | 100 | | SYNTHETIC OIL |
| E | | | | | | | | | | |

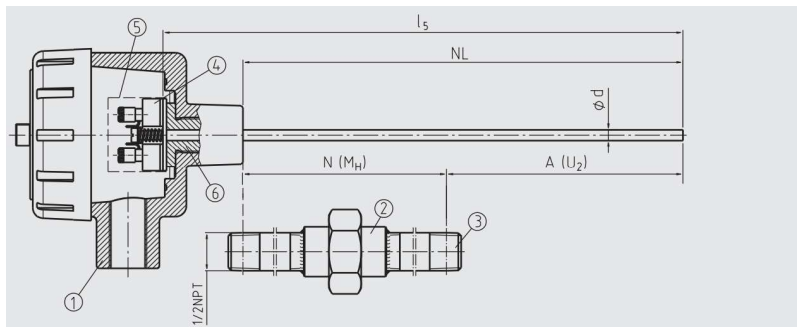
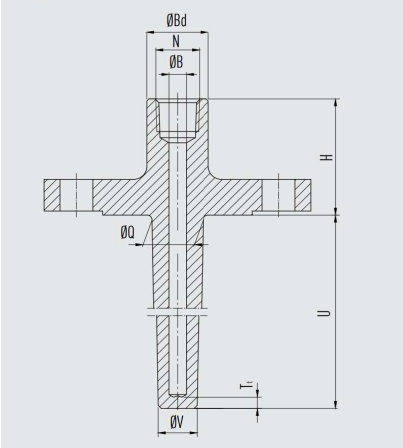
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|--|--|-----|-----|----------|--|
|  | TEMPERATURE TRANSMITTER INDICATOR DEVICES | | | | Document No: VD-GPIC-MA-3029-3029-0038 |
| | | | | | Document Title: Instrument Data sheet & Catalogs |
| CLIENT: Gachsaran Polymer Industries Company (GPIC) P.O. 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 | 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 | 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 | 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 |
| |
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Notes:

- SYSTEM DESIGN PRESSURE & TEMPERATURE:

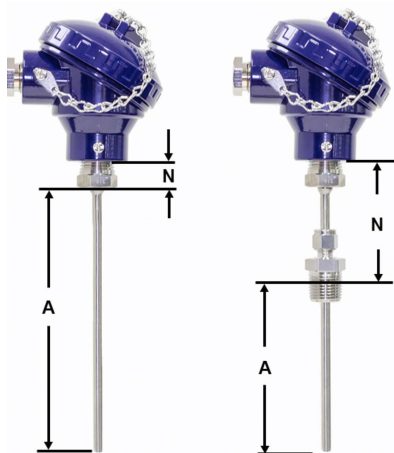
| | | | | | | | |
|-------|------------|-----------|---|--------|--------|------------|------|
| FV to | 362.5 PSIG | 25.0 BarG | @ | 250 °F | 121 °C | FOR ITEMS: | 1, 3 |
| | | | | -45 °F | -43 °C | | |
| FV to | 406 PSIG | 28.0 BarG | @ | 250 °F | 121 °C | FOR ITEMS: | 2 |
| | | | | -20 °F | -29 °C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

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

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**

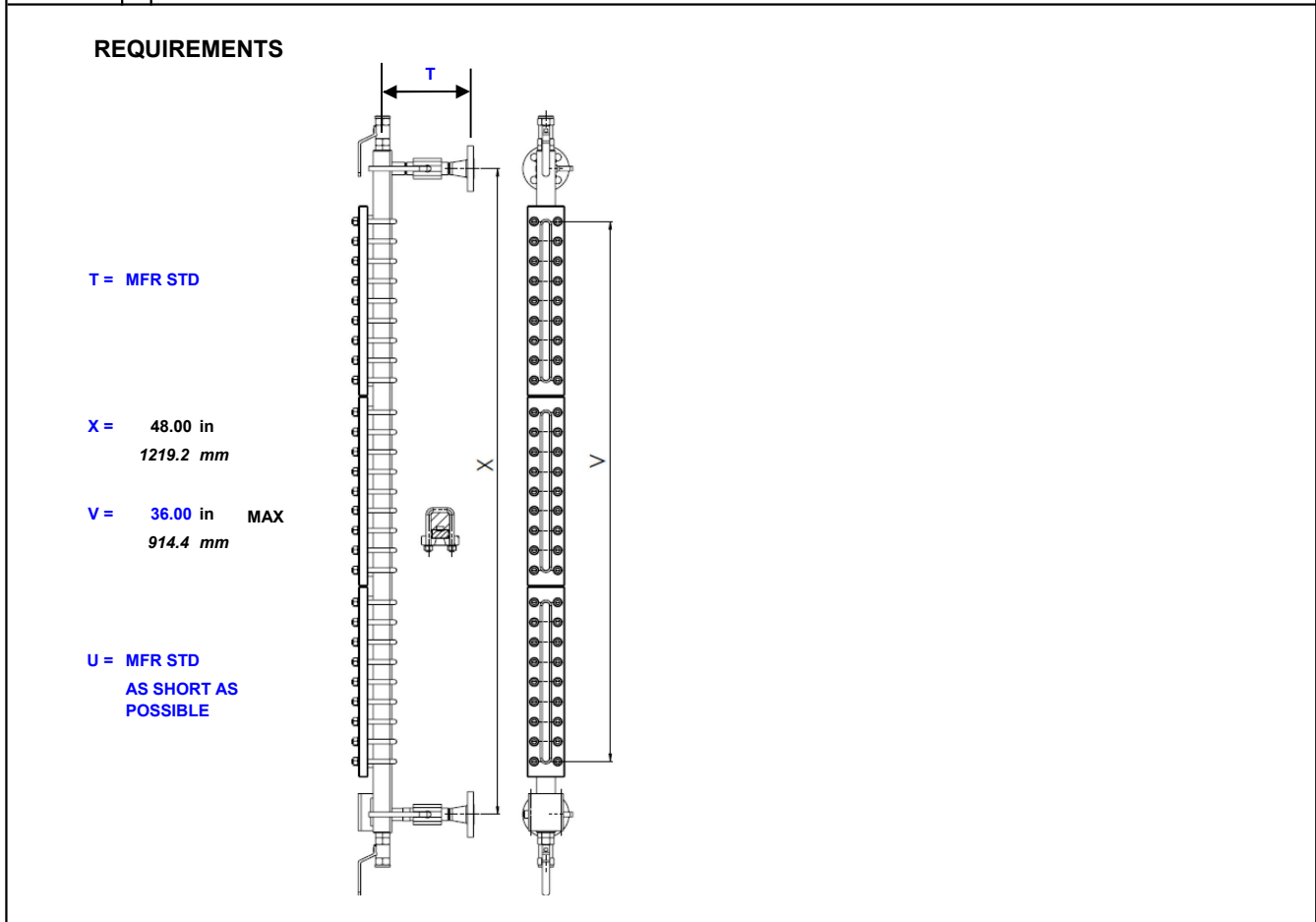
16. Manufacturer & Model: **OTHERS**

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 | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
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|--|-----------------------------------|-----|-----|----------|--|
|  | 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 | | | | | | | | | | | | | | | | | | | | | | |
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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 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"/> | |
| | 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 | Speed | 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 | |

| | | | | | |
|-----------------------|----------|--|------------------------------------|----------|---------------|
| ALARM SWITCHES | 25 | Alarm Switches | Quantity: | Form | Rating |
| 26 | Function | Press. <input checked="" type="checkbox"/> | Deviation <input type="checkbox"/> | Contacts | On Icr. Meas. |

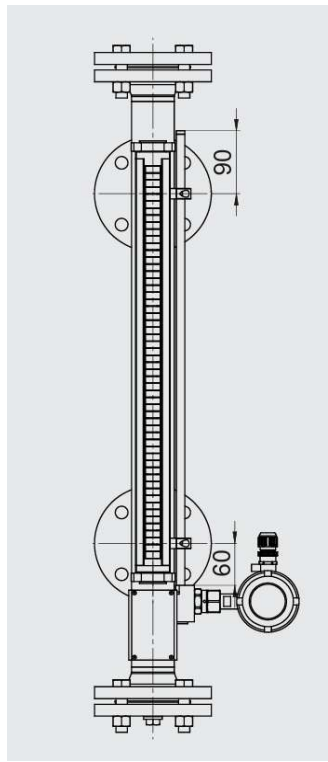
| | | | | | | |
|----------------|----|---------|---|------------------------------------|--------------------------------------|-----------|
| OPTIONS | 27 | Options | Filter Reg. <input type="checkbox"/> | Sup. Gage <input type="checkbox"/> | Output Gage <input type="checkbox"/> | Charts |
| | | | Diaphragm Seal <input type="checkbox"/> | Type N/A | Diaphragm | Bot. Bowl |
| | | | Conn. Capillary: N/A | Length | Mtl. | |
| | | | Other | | | |

| | |
|----------------------------|---|
| 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-61151 CHILLER | 0.00 to 120.9 0 to 3,071 | 2000 137.9 | 22.5 1.55 | 25.9 1.79 | 0 0.00 0% | 111.4 2,830.5 100% | CHAMBER: BNA- TRANSMITTER: BLM- | PROPYLENE REFRIGERANT SYNTHETIC OIL |
| B | | | | | | | | | | |
| C | | | | | | | | | | |

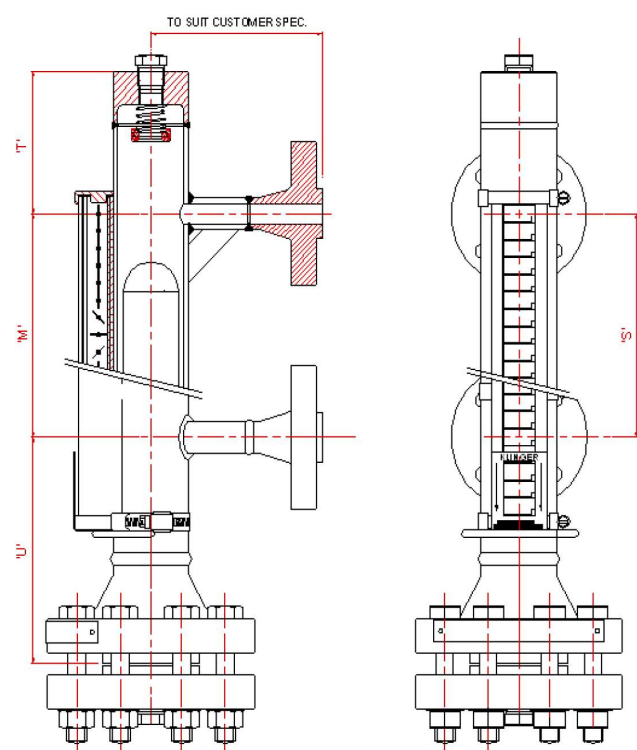
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|--|--|-----|-----|----------|--|
|  | LEVEL TRANSMITTER CONTROL DEVICES | | | | Document No: VD-GPIC-MA-3029-3029-0038 |
| | | | | | Document Title: Instrument Data sheet & Catalogs |
| CLIENT: Gachsaran Polymer Industries Company (GPIC) P.O. NO.: GPIC-PT-MA-PO-000-3029 SERVICE: PROPYLENE REFERIGERATION PACKAGE | NO. | BY | APP | DATE | P.O.I. |
| | 00 | N.B | A.M | 12.10.25 | IFR |
| | 01 | N.B | A.M | 09.12.25 | IFR |
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- Notes:
- 1 SYSTEM DESIGN PRESSURE & TEMPERATURE: **FV to 362.5 PSIG 25.0 BarG @ 250 °F 121 °C**
-45 °F -43 °C
 - 2 NORMAL OPERATING CONDITIONS ARE: **22.5 PSIG 1.55 BarG @ -10.9 °F -23.82 °C**
 - 3 TRANSMITTER ELECTRICAL HOUSING MUST BE POLYURETHANE COVERED ALUMINUM
 - 4 REFERENCE ACCURACY: **+/- 0.1 % OF FULL SCALE & +/- 0.15 % GUARRANTEED STABILITY OVER FIVE YEARS**
 - 5 INSTRUMENT SHALL BE SUITABLE FOR MARINE, SALT LADEN, CORROSIVE ENVIRONMENT
 - 6 CALIBRATION CERTIFICATE 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 |
| | 01 | N.B | A.M | 09.12.25 | 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"/> | X 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 | | | |
| 10 | Scales | Type: LCD / DIGITAL | | Speed | | | | | |
| | | 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, I f <input type="checkbox"/> 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"/> | | | | | | |
| | | | 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 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 | | |
| | 25 | Alarm Switches | Quantity: | | | 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 | 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 | | | | | | | | | | |



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

| Item No. | A | | | | B | | | | C |
|----------------------|---|------|------|------|---|-------|------|--|---|
| Tag No. | SI-701-O-4 RECEIVER | | | | FG-61131 OIL DEPARATOR | | | | |
| Connections | | | | | | | | | |
| Inlet | 3/4"-300# ANSI RF | | | | 1-1/2"-300# ANSI RF | | | | |
| Outlet | 3/4"-300# ANSI RF | | | | 1-1/2"-300# ANSI RF | | | | |
| Rating | 300# | | | | 300# | | | | |
| Drawing | | | | | | | | | |
| P&ID | ULT003-20001-4 | | | | ULT003-20001-3 | | | | |
| Type | | | | | | | | | |
| Mounting | IN-LINE HORIZONTALLY MOUNTED | | | | IN-LINE HORIZONTALLY MOUNTED | | | | |
| Construction | BULL'S EYE TYPE (DUAL WINDOW) | | | | BULL'S EYE TYPE (DUAL WINDOW) | | | | |
| Type | ROTOR | | | | ROTOR | | | | |
| Material | | | | | | | | | |
| Body | STAINLESS STEEL - A351-CF8 | | | | STAINLESS STEEL - A351-CF8 | | | | |
| Glass | TEMPERED BOROSILICATE GLASS (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 | | | | | | | | | |
| Quantity | 2 | | | | 2 | | | | |

Notes:

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


15 INLET AND OUTLET BORES SHALL MATCH WITH SCH80 PIPE




|  | | | | SOLENOID VALVE | | | | Document No: VD-GPIC-MA-3029-3029-0038 | | |
|---|-----|----------|--------------------|--|---|---|---|---|--------------------------|---------------------------------|
| | | | | | | Document Title: Instrument Data sheet & Catalogs | | | | |
| 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-T3 - 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: | 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 | | | |
| 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 | |
| | | 12 | Action | None <input type="checkbox"/> | MFR Std <input checked="" type="checkbox"/> | Increases <input type="checkbox"/> Decreases <input type="checkbox"/> | | | | |
| | | 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 | | | |
| 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 | | | | |
| | | 20 | Bulb | Type: POTENTIOMETER (0-5 VDC) | | | Sheat Material: | | | |
| | | 21 | | Size: | Diameter: | Number of Wires: 3-WIRES | | | | |
| | | 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-T3 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-61121 | 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 | | | | | | |
| VALVE BODY | 4 | Valve No. | DIRV-61111 DIRV-61111 | | | | | | |
| | 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: | | | | | | | |
| | 2 | | 150 | PSIG | 10 | BarG | @ 300 °F 149 °C | | |
| | 3 | | | | | | -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 | | | |
| | 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 | | | | | | | |
| 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. | | | | | | |

|  | | RESTRICTION ORIFICE | | | | ULTIM DOC.: <i>UL T003 - 20160-B</i> | |
|---|--|--|-----------------------------|----------------------|---------|--------------------------------------|--|
| | | NO. | BY | APP | DATE | DESCRIPTION | |
| CLIENT | Gach saran Polymer Industries Company (GPIC) | 0 | FAD | OG | 1/10/26 | FOR CONSTRUCTION | |
| JOB No. | Gach saran HDPE | | | | | | |
| P.O. No. | GPIC DD MA REQ 000 3029 | | | | | | |
| SITE | TBA | | | | | | |
| SERVICE | PROPYLENE REFRIGERATION PACKAGE | | | | | | |
| ORIFICE PLATE 1. Type Concentric <input type="checkbox"/> Other <input type="checkbox"/> 2. Standard ISA <input type="checkbox"/> MFR Standard <input checked="" type="checkbox"/> 3. Bore Maximum Rate <input type="checkbox"/> Nearest 1/8" <input type="checkbox"/> 4. Material 304 SS <input type="checkbox"/> 316 SS <input type="checkbox"/> 316L SS <input checked="" type="checkbox"/> Other <input type="checkbox"/> 5. Ring Material & Type PADDLE 6. MFR & Model DELTA | | ORIFICE FLANGE 15. Taps Flange <input checked="" type="checkbox"/> Vena Contracta <input type="checkbox"/> Pipe <input type="checkbox"/> Other <input type="checkbox"/> 15. Tap Size 1/2" <input type="checkbox"/> Other <input checked="" type="checkbox"/> 1" 16. Flange Type WN <input checked="" type="checkbox"/> SO <input type="checkbox"/> NPT <input type="checkbox"/> 17. Flange Material 304 <input type="checkbox"/> 316 SS <input type="checkbox"/> Other <input checked="" type="checkbox"/> 316L SS 18. Flange Included Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> 19. Rating: 150# RF <input type="checkbox"/> 300# RF <input checked="" type="checkbox"/> Other <input type="checkbox"/> | | | | | |
| GENERAL | 13 | Tag No. | RO-61141 | | | | |
| | 14 | Qty | 1 | | | | |
| | 15 | Service | CONDENSER COOLING MEDIA | | | | |
| | 16 | Line No. / Vessel No. | 8" - 8"-CS300-CS1-CWR-60511 | | | | |
| | 17 | Fluid | COOLING WATER | | | | |
| | 18 | Fluid State | LIQUID | | | | |
| | 19 | Maximum Flow | 1341 GPM | 304,500 kg/h | | | |
| | 20 | Normal Flow | 1277 GPM | 290,000 kg/h | | | |
| | 21 | Inlet pressure (Norm, Max) | 77.45 PSIG / 85 PSIG | 5.34 BARG / 5.9 BARG | | | |
| | | Outlet pressure (Norm, Max) | 71.27 PSIG / 78 PSIG | 4.92 BARG / 5.4 BARG | | | |
| | 22 | Temperature (Norm, Max) | 98 °F / 103 °F | 36.67 °C / 39.4 °C | | | |
| | 23 | Specific Gravity at Base | | | | | |
| | 24 | Operating Specific Gravity | | | | | |
| | 25 | Supercomp. Gravity | --- | | | | |
| | 26 | Molecular Weight | --- | | | | |
| | 27 | Operating Viscosity / Density | 0.713 Cp / 53.24 LB/FT3 | 855.3 kg/m3 | | | |
| | 28 | Quality % or Superheat | --- | | | | |
| | 29 | Base Pressure | --- | | | | |
| | 30 | Base Temperature | --- | | | | |
| | 31 | Discharge Pressure (Downstream) | 71.27 PSIG | 4.92 BARG | | | |
| | 32 | Differential Pressure | 6.18 PSID | 0.43 BARG | | | |
| | METER | 33 | Type of Meter | N/A | | | |
| | | 34 | Diff. Range - Dry | --- | | | |
| 35 | | Seal Sp. Gr. @ 60 °F | --- | | | | |
| 36 | | Static Pressure Range | --- | | | | |
| 37 | | Charet or Scale Range | --- | | | | |
| 38 | | Chart Multiplier | --- | | | | |
| 39 | | | | | | | |
| 40 | | | | | | | |
| 41 | | | | | | | |
| PLATE & FLANGE | | 42 | Beta = d/D | 0.330 | | | |
| | 43 | Orifice Bore Diameter | 2.625 in / 66.68 mm | | | | |
| | 44 | Nozzle Size / Schedule | 8 / 8"-SCH40 | | | | |
| | 45 | Flange Rating | 300# ANSI RF | | | | |
| | 46 | Vent or Drain Hole | N/A | | | | |
| | 47 | Plate Thickness | 0.25 in / 6.35 mm | | | | |
| | 48 | Plate Material | 316LSS | | | | |
| | 50 | Manufacturer | DELTA | | | | |
| | 50 | Model No. | PADDLE TYPE | | | | |
| NOTES: | 1 | SYSTEM DESIGN PRESSURE & TEMPERATURE: 406 PSIG @ 300 °F 28.0 BARG @ 148.9 °C | | | | | |
| | 2 | CERTIFICATE OF COMPLIANCE <input checked="" type="checkbox"/> REQUIRED <input type="checkbox"/> NOT REQUIRED | | | | | |
| | 3 | MTRs ARE REQUIRED | | | | | |
| | 4 | | | | | | |

|  | | RESTRICTION ORIFICE | | | | ULTIM DOC.: <i>UL T003 - 20160-A</i> | |
|---|---|--|-------------------------------------|--|---------------------------------------|--------------------------------------|--|
| | | NO. | BY | APP | DATE | DESCRIPTION | |
| CLIENT | Gachsaran Polymer Industries Company (GPIC) | 0 | FAD | OG | 1/10/26 | FOR CONSTRUCTION | |
| JOB No. | Gachsaran HDPE | | | | | | |
| P.O. No. | GPIC DD MA REQ 000 3029 | | | | | | |
| SITE | TBA | | | | | | |
| SERVICE | PROPYLENE REFRIGERATION PACKAGE | | | | | | |
| ORIFICE PLATE 1. Type Concentric <input type="checkbox"/> Other <input type="checkbox"/> 2. Standard ISA <input type="checkbox"/> MFR Standard <input checked="" type="checkbox"/> 3. Bore Maximum Rate <input type="checkbox"/> Nearest 1/8" <input type="checkbox"/> 4. Material 304 SS <input type="checkbox"/> 316 SS <input type="checkbox"/> 316L SS <input checked="" type="checkbox"/> Other <input type="checkbox"/> 5. Ring Material & Type PADDLE 6. MFR & Model DELTA | | ORIFICE FLANGE 15. Taps Flange <input checked="" type="checkbox"/> Vena Contracta <input type="checkbox"/> Pipe <input type="checkbox"/> Other <input type="checkbox"/> 15. Tap Size 1/2" <input type="checkbox"/> Other <input checked="" type="checkbox"/> 1" 16. Flange Type WN <input checked="" type="checkbox"/> SO <input type="checkbox"/> NPT <input type="checkbox"/> 17. Flange Material 304 <input type="checkbox"/> 316 SS <input type="checkbox"/> Other <input checked="" type="checkbox"/> 316L SS 18. Flange Included Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> 19. Rating: 150# RF <input type="checkbox"/> 300# RF <input checked="" type="checkbox"/> Other <input type="checkbox"/> | | | | | |
| GENERAL | 13 | Tag No. | RO-61131 | | | | |
| | 14 | Qty | 1 | | | | |
| | 15 | Service | COMPRESSOR OIL COOLER COOLING MEDIA | | | | |
| | 16 | Line No. / Vessel No. | 3" - 3"-CS300-CS1-CWR-60311 | | | | |
| | 17 | Fluid | COOLING WATER | | | | |
| | 18 | Fluid State | LIQUID | | | | |
| | 19 | Maximum Flow | 185 GPM | | | | |
| | 20 | Normal Flow | 176 GPM | | | | |
| | 21 | Inlet pressure (Norm, Max) | 77.45 PSIG / 85 PSIG | | 5.34 BARG / 5.9 BARG | | |
| | 21 | Outlet pressure (Norm, Max) | 74.45 PSIG / 82 PSIG | | 5.13 BARG / 5.6 BARG | | |
| | 22 | Temperature (Norm, Max) | 98 °F / 103 °F | | 36.67 °C / 39.4 °C | | |
| | 23 | Specific Gravity at Base | | | | | |
| | 24 | Operating Specific Gravity | | | | | |
| | 25 | Supercomp. Gravity | --- | | | | |
| | 26 | Molecular Weight | --- | | | | |
| | 27 | Operating Viscosity / Density | 0.713 Cp / 53.24 LB/FT3 | | 855.3 kg/m3 | | |
| | 28 | Quality % or Superheat | --- | | | | |
| | 29 | Base Pressure | --- | | | | |
| | 30 | Base Temperature | --- | | | | |
| | 31 | Discharge Pressure (Downstream) | 74.45 PSIG | | 5.13 BARG | | |
| | 32 | Differential Pressure | 3.00 PSID | | 0.21 BARG | | |
| | METER | 33 | Type of Meter | N/A | | | |
| | | 34 | Diff. Range - Dry | --- | | | |
| 35 | | Seal Sp. Gr. @ 60 °F | --- | | | | |
| 36 | | Static Pressure Range | --- | | | | |
| 37 | | Charet or Scale Range | --- | | | | |
| 38 | | Chart Multiplier | --- | | | | |
| 39 | | | | | | | |
| 40 | | | | | | | |
| 41 | | | | | | | |
| PLATE & FLANGE | 42 | Beta = d/D | 0.243 | | | | |
| | 43 | Orifice Bore Diameter | 1 in / 25.40 mm | | | | |
| | 44 | Nozzle Size / Schedule | 4 / 4"-SCH40 | | | | |
| | 45 | Flange Rating | 300# ANSI RF | | | | |
| | 46 | Vent or Drain Hole | N/A | | | | |
| | 47 | Plate Thickness | 0.125 in / 3.18 mm | | | | |
| | 48 | Plate Material | 316LSS | | | | |
| | 49 | | | | | | |
| | 50 | Manufacturer | DELTA | | | | |
| | 50 | Model No. | PADDLE TYPE | | | | |
| NOTES: | 1 | SYSTEM DESIGN PRESSURE & TEMPERATURE: | | 406 PSIG @ 300 °F | | | |
| | | | | 28.0 BARG @ 148.9 °C | | | |
| | 2 | CERTIFICATE OF COMPLIANCE | | <input checked="" type="checkbox"/> REQUIRED | <input type="checkbox"/> NOT REQUIRED | | |
| | 3 | MTRs ARE REQUIRED | | | | | |
| 4 | | | | | | | |