

# **DIFFERENTIAL PRESSURE INSTRUMENTS**

## **AUTOMATIZACIÓN, CONTROL E INTEGRACIÓN DE SEPARADOR DE PRUEBAS PAD 2 ACD**

DOCUMENT NAME:

DIFFERENTIAL PRESSURE INSTRUMENTS

DOCUMENT CODE:

INSAGTEC-6598-INS-DC12

OSI:

6598

Nombre del proyecto: AUTOMATIZACIÓN CONTROL E INTEGRACION AL SCADA DEL SEPARADOR DE PRUEBAS PAD 2 ACD


|            |                                     |                    |   |  |  |   |   |   |                                       |                          |
|------------|-------------------------------------|--------------------|---|--|--|---|---|---|---------------------------------------|--------------------------|
| GENERAL    | 1                                   | Tag No.            | FQIT - 1002   |  | Service : GAS                                      |   |   |   |                                       |                          |
|            | 2                                   | Function           | Record  | <input checked="" type="checkbox"/> Indicate           | <input type="checkbox"/> Control                   | <input type="checkbox"/> Blind  | <input checked="" type="checkbox"/> Trans | <input checked="" type="checkbox"/> Integ | <input type="checkbox"/> Other. _____ |                          |
|            | 3                                   | Case               | MFRSTD  | <input checked="" type="checkbox"/> Nom Size           | Color: MFRSTD                                      |   | <input checked="" type="checkbox"/> Integ | Other. _____                              |                                       |                          |
|            | 4                                   | Mounting           | Flush   | <input type="checkbox"/> Surface                       | <input type="checkbox"/> Yoke                      | <input checked="" type="checkbox"/> Other: Mounting bracket             |   |   |                                       |                          |
|            | 5                                   | Endlosure Class    | General Purpose   | <input type="checkbox"/> Weather Proof                 | <input type="checkbox"/> Explosion-Proof           | <input checked="" type="checkbox"/> Class 1 Div 2                       |   |   |                                       |                          |
|            | 6                                   | Power Supply       | 120 V 60Hz  | <input type="checkbox"/>                               | Other ac _____                                     | <input type="checkbox"/> dc   | Volts 6-30 VDC                            |   |                                       |                          |
|            | 7                                   | Chart              | 12 in. Circ   | <input type="checkbox"/> Other _____                   | Range _____  |   | No. _____                                 |   |                                       |                          |
|            | 8                                   | Chart Drive        | 24 hr   | Other _____  | Elec.  |   | <input type="checkbox"/> Spring           | <input type="checkbox"/> Other _____      |                                       |                          |
|            | 9                                   | Scales             | Type: _____   | Range: _____   |  | 2 _____ 3 _____   |   |   |                                       |                          |
| XMTR       | 10                                  | Transmitter Output | 4 - 20 mA   |  | <input checked="" type="checkbox"/> 10-50 mA       | <input type="checkbox"/> 21-103 kPa (3-15 psig)                         | <input type="checkbox"/> Other: _____     |   |                                       |                          |
|            | For Receiver, See Spec. Sheet _____ |                    |   |  |  |   |   |   |                                       |                          |
| CONTROLLER | 11                                  | Control Modes      | P= Prop (Gain) I = Integral (Auto Reset) D = Derivative (Rate) Sub: s= Slow f= Fast |  |  |   |   |   |                                       |                          |
|            | 12                                  | Action             | P   | <input type="checkbox"/> PI                            | <input type="checkbox"/> PD                        | <input type="checkbox"/> LI   | <input type="checkbox"/> Df               | <input type="checkbox"/> Is               | <input type="checkbox"/> Os           | <input type="checkbox"/> |
|            | 13                                  | Auto - Man Swich   | None  | <input type="checkbox"/> MFR STD                       | <input type="checkbox"/> Other _____               |   |   |   |                                       |                          |
|            | 14                                  | Set Point Adj      | Manual  | <input type="checkbox"/> External                      | <input type="checkbox"/> Remote                    | <input type="checkbox"/> Other  |   |   |                                       |                          |
|            | 15                                  | Manual Reg         | None  | <input type="checkbox"/> MFR STD                       | <input type="checkbox"/>                           |   |   |   |                                       |                          |
|            | 16                                  | Output             | 4 - 20 mA   | <input type="checkbox"/> 10 - 50 mA                    | <input type="checkbox"/> 21 - 103 kPa (3 - 15 psi) | <input type="checkbox"/> Other: _____                                   |   |   |                                       |                          |
| UNIT       | 17                                  | Service            | Flow  | <input checked="" type="checkbox"/> Level              | <input type="checkbox"/> Diff. Pressure            | <input checked="" type="checkbox"/> Other: Temperature, Static Pressure |   |   |                                       |                          |
|            | 18                                  | Element Type       | Diaphragm   | <input type="checkbox"/> Bellows                       | <input type="checkbox"/> Mercury                   | <input type="checkbox"/> Other: MFD STD                                 |   |   |                                       |                          |
|            | 19                                  | Material           | Body MFD STD  | Element MFDSTD   |  |   |   |   |                                       |                          |
|            | 20                                  | Rating             | Overrange MFD STD   | Body Rating MFD STD                                    |  | psig  |   |   |                                       |                          |
|            | 21                                  | Diff. Range        | Fixed   | <input checked="" type="checkbox"/> Adj. Range MFD STD | Set at 120" H2O                                    |   |   |   |                                       |                          |
|            | 22                                  | Elevation          | Suppresion  |  |  |   |   |   |                                       |                          |
|            | 23                                  | Process Data       | Fluid GAS   | Max. Temp. 150 °F                                      |  | Max. Press. 250 PSIG  |   |   |                                       |                          |
|            | 24                                  | Process Conn.      | 1/2 in. NPT   | <input type="checkbox"/> Other 1/2 NPTF                |  |   |   |   |                                       |                          |
|            | 25                                  | Alarm Switches     | Quantity _____ Form _____   |  | Rating _____                                       |   |   |   |                                       |                          |
|            | 26                                  | Function           | Meas. Var.  | <input type="checkbox"/> Deviation                     | <input type="checkbox"/> Contacts To _____         | on Inc Press.   |   |   |                                       |                          |
| OPTIONS    | 27                                  | Options            | Pressure Element  | <input type="checkbox"/> Range _____                   | Material _____                                     |   |   |   |                                       |                          |
|            |                                     | Temp. Element      | <input checked="" type="checkbox"/> Range 90-150 °F                                 | Type RTD PT100   |  |   |   |   |                                       |                          |
|            |                                     | Filter- Reg        | <input type="checkbox"/> Supply Gage  | <input type="checkbox"/> Output Gage                   | <input type="checkbox"/> Charts                    |   |   |   |                                       |                          |
|            |                                     | Valve Manifold     | 5 - Valve Manifold  |  |  |   |   |   |                                       |                          |
|            |                                     | Cond. Pots         | <input type="checkbox"/> Adj. Damp  | <input type="checkbox"/> Integral Sq. Rt. Ext.         | <input type="checkbox"/>                           |   |   |   |                                       |                          |
|            |                                     | Integrator         | MFDSTD  |  |  |   |   |   |                                       |                          |
|            |                                     | Other              |   |  |  |   |   |   |                                       |                          |
|            | 28                                  | MFR & Model No     | CAMERON - NUFLO SCANNER 2000 MICROEFM   |  |  |   |   |   |                                       |                          |

| Rev. | Quant. | Tag No.     | Range        | Set de Operación |
|------|--------|-------------|--------------|------------------|
| C    | 1      | FQIT - 1002 | 0 - 200" H2O | 120" H2O         |
|      |        |             |              |                  |
|      |        |             |              |                  |
|      |        |             |              |                  |
|      |        |             |              |                  |

Notes:

1) El equipo deberá incluir las facilidades de comunicación vía RS-485 y protocolo Modbus.

2) La medición de temperatura sería a través de RTD instalada en el "spooler" de medición de gas.

|  |   |                                     |   |
|--|---|-------------------------------------|---|
| INSA   | INSA  | GTEC                                | Rev   |
| Elaborated by: Soporte de aplicaciones<br>Siganature: Oscar García<br>Date: 2023-12-04 | Approved by: Euro Guerrero<br>Signature: Dir. Operaciones y proyectos<br>Date: 2023-12-04 | Approved by:<br>Signature:<br>Date: | Comments: A B  |

| CHANGE CONTROL |  |            |
|----------------|--|------------|
| Versión        | Description                            | Date       |
| 1              | Emisión inicial del documento A1       | 2023-08-23 |
| 1              | Emisión para revisión del documento B1 | 2023-09-29 |
| 1              | Emisión final del documento C          | 2023-12-04 |
|                |  |            |
|                |  |            |