

Model SS-TEG-LP Natural Gas Sample System



Instruction Manual

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GENERAL DESCRIPTION

The Model SS-TEG-LP is a sample system designed to present a sample of natural gas to the sensor of a moisture analyser when TEG or heavy hydrocarbon condensate may be present, typically downstream of a glycol contactor. In the SSNGH-LP the pressure regulator is upstream of the analyser sensor, so that the measurement can be taken at atmospheric pressure, for example when the result is wanted in concentration units.

The heated regulator incorporated in the system can either be for 115VAC or 230VAC operation, as specified on the order.

INSTALLATION OF SAMPLE SYSTEM

Refer to drawing 1724

Install the sample system cabinet on a flat vertical surface, in a position higher than the sample tapping point.

Ensure that all sample pipe work from the sample point to the inlet of the sample system runs in an upward direction.

Install the sample outlet pipe work, running in a downward direction, to a suitable gas disposal system.

Do not install the sensor at this time, wait until the commissioning stage.

Install the power cable to the heated regulator junction box.

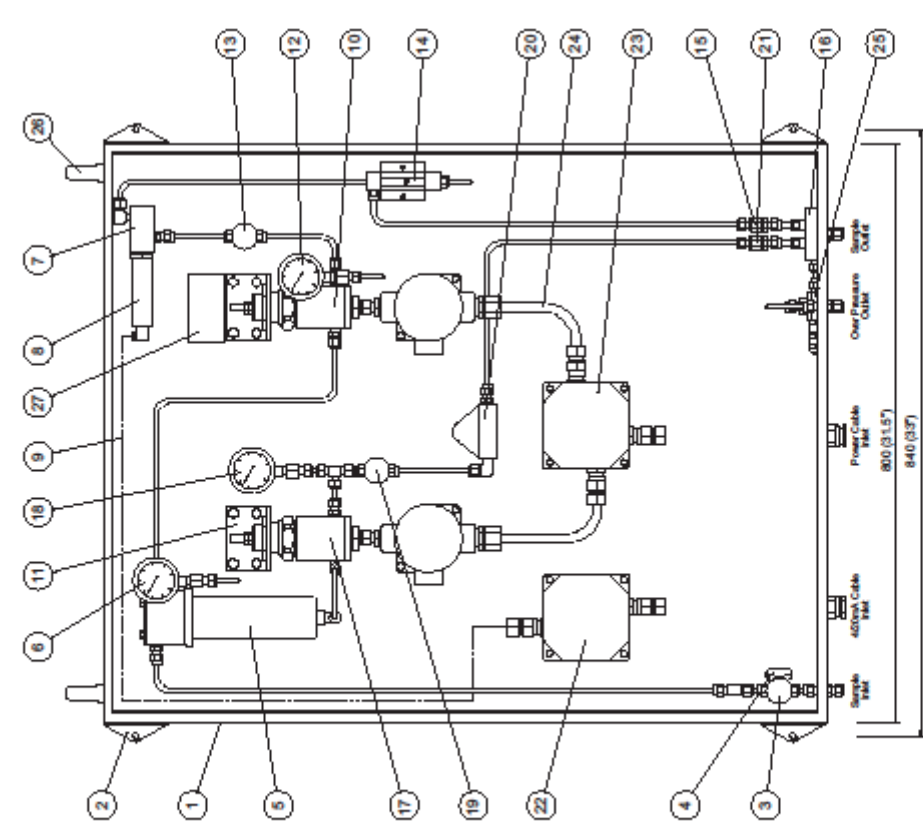
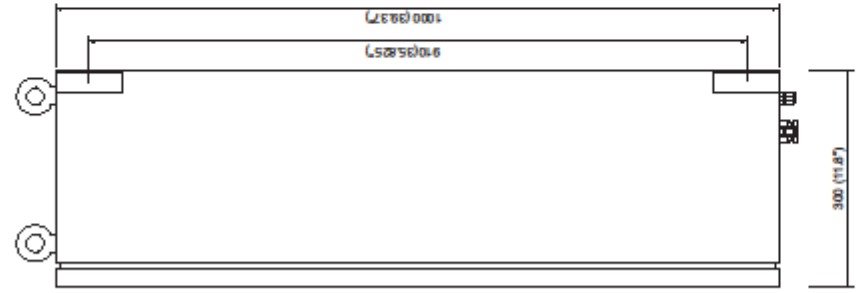
Ensure that all connections are in accordance with the relevant safety standards.

SETTING UP THE SAMPLE SYSTEM

1. Mount sensor/transmitter in the sensor holder and connect the cable.
2. Switch ON the power supply to the heated regulators and allow them to warm up.
3. Release the locking nut on the regulator for the by pass flow from the drain outlet of the coalescing filter.
4. Using a flat bladed screwdriver, turn the adjusting screw anti-clockwise to ensure that the regulator is closed.
5. Fully open the sample flow control valve, anti-clockwise.
6. Open the sample isolation valve fully, anti-clockwise. The supply pressure will register on the inlet pressure gauge.
7. Carefully and slowly turn the pressure regulator adjusting screw clockwise until a flow is indicated at the by pass flow indicator.
8. Re-tighten the locking nut on the regulator.
9. Release the locking nut on the sample regulator downstream of the top outlet from the coalescing filter.
10. Using a flat bladed screwdriver, turn the adjusting screw anti-clockwise to ensure that the regulator is closed.
11. Fully open the sample flow control valve, anti-clockwise.
12. Carefully and slowly turn the pressure regulator adjusting screw clockwise until a flow of 2 to 3 lt/min appears at the sample flow meter.
13. Re-tighten the locking nut on the regulator.

This completes commissioning of the sample system.

Parts List	
Part No.	Description
1	Cabinet - Stainless Steel - IP66
2	Cabinet Mounting Brackets
3	Sample Isolation Valve
4	Auxiliary Outlet Control Valve
5	Coalescing Filter
5A	Coalescing Filter Cartridge
6	Inlet Pressure Gauge
7	Sensor Holder
8	Dewpoint Transmitter
9	Transmitter Cable
10	Sample Pressure Regulator
11	Regulator Mounting Bracket
12	Sample Pressure Gauge
13	Sample Flow Control Valve
14	Sample Flow Indicator
15	Sample Outlet Flow Check Valve
16	Outlet Manifold
17	Bypass Pressure Regulator
18	Bypass Pressure Gauge
19	Bypass Flow Control Valve
20	Bypass Flow Indicator
21	Bypass Outlet Flow Check Valve
22	Transmitter Cable Terminal Enclosure
23	Heater Cable Terminal Enclosure
24	Regulator Heater Cable
25	Pressure Relief Valve
26	Lifting Eye
27	Name Plate



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DRIVING NO. **1724**
 TAG NUMBERS
 24-AT-3010

TITLE **SS-TEG-LP-AMTEX-EMB Sample System.**
 Rev 1
 Date: 08.09.10
 Author: DLC
 Drawing Change Mark:

- NOTES:
1. Process gas connections: in 6mm O.D. tube fittings.
 2. Cable entries to cabinet through M20 weatherproof cable glands.
 3. Entries to Exe enclosure through Hawk Universal Glands.
 4. Cable mounting through cable glands, 12 x (0.47" dia.)
 5. Wind advisory strips fixed to door.
 6. Supply voltage: 200/240VAC (50/60 Hz) 1 AMP.
 7. System weight: 75kg.

MAINTENANCE

This system is designed to run continuously, with minimum operator input but it is recommended that periodic checks be made to confirm the correct pressures and flows are being maintained.

The filter element in the coalescing filter should be checked periodically and replaced as necessary.

GASES TO AVOID

Corrosive Gases: The Sensor should not be exposed to corrosive gases (or corrosive contaminants in the gas sample) as these can chemically attack the sensor, impairing calibration accuracy and/or damaging it beyond economic repair. Examples of such gases are mercury (Hg), ammonia (NH₃), chlorine (Cl₂) etc. Strong oxidising agents such as ozone (O₃) should also be prevented from coming into contact with the sensor.