



Gilflo Flowmeters System Overview

Description

The Spirax Sarco Gilflo flowmetering system consists of 3 major parts:

1. The Gilflo 'B' pipeline unit. This is installed in the line where the flow is to be measured. Using impulse pipework, this is connected to:
2. A differential pressure transmitter which measures the differential pressure across the Gilflo and converts it into a 4 - 20 mA signal. This signal can then be transmitted to:
 - a - A Chart recorder, EMS / BMS or M750 display unit.
 - b - An M850 flow computer.
3. a - A Chart recorder, EMS / BMS or M750 display unit.
 b - An M850 flow computer.

Note: The Gilflo pipeline unit can be used to measure the flow of most industrial liquids, gases and vapours within the pressure and temperature limits detailed in the appropriate TI document(s).

M850 - Pressure and/or temperature compensated saturated or superheated steam. In addition heat metering is possible by replacing the EL2600 pressure transmitter with an EL2271 temperature transmitter in the condensate return line.

Caution: Steam mass flow transmitters are uniquely configured at the factory to work with a single, specific Gilflo, ILVA or M410 orifice plate flowmeter. For correct operation the configured transmitter must always be installed with its allocated flowmeter. Labels on the packaging give the serial numbers of the matched products.

Installation

Care must be taken to meet all the requirements of the Installation and Maintenance Instructions, which are provided with the equipment.

Installation points to watch:

1. Ensure all pipework is adequately supported and properly aligned.
2. The Gilflo pipeline unit should be selected on capacity rather than line size. Where pipe size reduction on steam systems is necessary, use eccentric reducers to avoid waterlogging.
3. The minimum recommended lengths of straight pipe are 6D upstream and 3D downstream.
4. Take care to ensure the correct direction of flow as indicated by the arrow on the flowmeter body.
5. Take precautions to avoid reverse flow through the flowmeter.
6. Avoid installing the flowmeter downstream of a pressure reducing valve (especially on steam systems) as this may cause inaccuracies and/or possible damage. Similarly avoid installing the flowmeter downstream of a partially open valve.
7. Remember that actuated valves may cause rapid pressure fluctuations which could cause damage.
8. On steam or liquid systems take care to ensure that all impulse lines remain full to prevent damage to the DP transmitter through contact with steam or high temperature liquid.
9. For steam applications, care should be taken to ensure adequate line drainage, trapping etc., to avoid condensate slugs impacting the flowmeter. Where practicable, steam separators should be fitted. These should be drained using a float trap set.
10. For gas applications ensure that the DP cell and impulse lines are positioned above the pipework. Also ensure that the impulse lines allow free drainage of moisture away from the DP cell and back into the pipeline.

Electrical wiring

All electrical wiring must be carried out to the appropriate standards. Full wiring interconnection details are included with the equipment.

How to order

For details of how to specify system components refer to the relevant TI document.

Note: This drawing is schematic only, please see Installation and Maintenance Instructions for specific installation information.

