

Gilflo Flowmeters - System Overview

Description

The Gilflo flowmetering system consists of 2 major parts:-

1. The Gilflo pipeline unit. This may be a Gilflo 'B' or 'Spool' design. This is installed in the line where the flow is to be measured. Using impulse pipework, this is connected to:-
2. The M610 DP Transmitter Assembly. This measures the differential pressure across the Gilflo pipeline unit and converts it to a 4-20 mA output signal. This output signal can be used in a number of ways:-
 - a- To drive a suitable chart recorder or act as an input to an EMS/DCS. This gives a non-compensated signal proportional to rate of flow.
 - b- To supply an M750 Display Unit. This gives a non-compensated display of totalized flow and rate of flow.
 - c- To supply an M800 series Flow Computer, whose keypad allows the user to select the parameters to be viewed as well as allowing access to the numerous facilities available. The diagram shows these configurations.

Note:- The Gilflo pipeline unit can be used to measure the flow of most industrial liquids, gases and vapors within the pressure and temperature limits detailed in the TIS's.

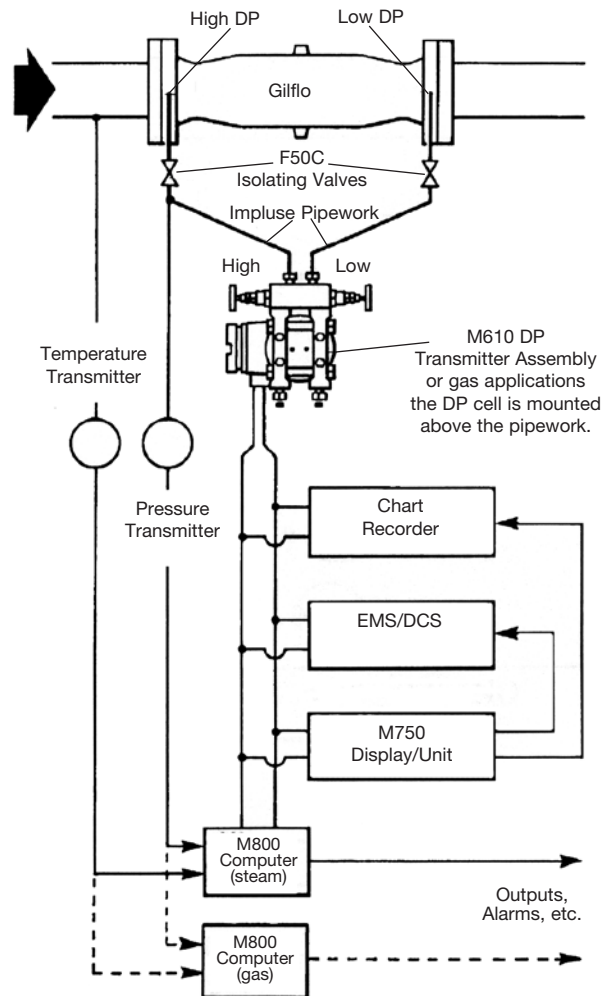
Full density compensation from pressure and temperature transmitters is available when using the M800 series Flow Computer for steam applications or the M800 Series Flow Computer for gas applications. See TIS's for details.

Installation

Care must be taken to meet all the requirements of the Installation and Maintenance Instructions that are included 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 meter body.
5. Take precautions to avoid reverse flow through the meter.
6. Avoid installing the meter downstream of a pressure reducing valve (especially on steam systems) as this may cause inaccuracies and/or possible damage. Similarly avoid installing the meter 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., so as to avoid condensate slugs impacting the meter. Where practical, 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 specify

For details of how to specify each part of your chosen system refer to individual TIS's listed in the Associated Equipment section.

Associated Equipment

M610	DP Transmitter Assembly	TI-P335-10 US
Gilflo 'B'	Pipeline Unit	TIS 8.006
Gilflo 'Spool'	Pipeline Unit	TIS 8.005
M750	Display Unit	TI-P332-08 US
F50C	Isolating Valve	TIS 8.401
M800	Steam Flow Computer	TI-P331-04-US
M800	Gas Flow Computer	TI-P333-24-US