



DeltaFlow Line | Differential pressure | Plug-and-Play | Ready-to-go

Integrated flow measurement solutions



Smart in sensing

DeltaFlow Line: DP flow measurement at the next level

Differential pressure technology featuring compact and ready-to-go flow meters for a wide range of process applications



Particularly suitable for chemical and petrochemical industries, process plants and power generation, water treatment and distribution, gas processing and transport, the differential pressure flow meters perform accurate measurement of different media, from gases to highly viscous liquids, even in the most demanding applications.

Easier implementation of measuring points through ready-made measuring arrangements, consisting of the respective flow element and high-quality measurement technology, such as differential pressure transmitters and electrical thermometers for temperature compensation. The compact assemblies can be effortlessly integrated into the process.



Thanks to the smart DeltaFlow Line solutions, not only do customers reduce both their acquisition and installation costs, but they also lower their maintenance costs, since the number of leakages can be markedly reduced with professionally installed and tested measuring systems.

Product overview

Orifice plate for the direct mounting of differential pressure elements

FLC-CO
Compact orifice plate

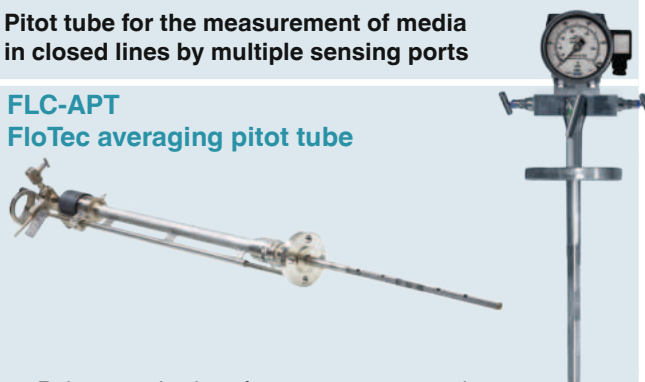


- Simple to install and easy to maintain.
- For secondary element direct mounting, even with integrated valve manifold.
- Optional built-in 1/4" NPT-F thermowell.
- Overall flow measuring accuracy with DPT-20 up to 1 %.
- Overall flow measuring accuracy with DPGT up to 1,5 %.

Data sheet FL 10.10

Pitot tube for the measurement of media in closed lines by multiple sensing ports

FLC-APT
FloTec averaging pitot tube



- Relevant reduction of permanent pressure loss.
- For secondary element direct mounting, even with integrated valve manifold.
- Retractable and non-retractable models available.
- Overall flow measuring accuracy with DPT-20 up to 1,5 %.
- Overall flow measuring accuracy with DPGT up to 2 %.

Data sheet FL 10.05

Key benefits



Robustness

The solid construction of primary elements does not include moving parts, ensuring long-lasting stability as well as easy recalibration and maintenance of the connected secondary devices.



One-stop-shop

Primary elements, valve manifolds and secondary flow elements (proprietary or customer's choice DP or multivariable transmitters) all-in-one for complete and integrated flow measurement systems.



No impulse line required

Avoiding the need of impulse lines the risk of potential leak points is reduced by up to 80 % with positive effect on the measurement accuracy and installation and commissioning costs.



No power supply available?

The intelliGAUGE® feature can be used wherever differential pressure and flow must be indicated locally (dual scale dial) and, at the same time, a signal transmission to the central control or remote centre is desired.



Plug-and-play

The compact and ready-to-go DeltaFlow Line flow meters can be provided preconfigured, allowing short installation time without the need to interrupt the plant production activities.



Cost saving

The DeltaFlow Line flow meters represent advanced solutions that entail low energy consumption as well as installation and commissioning cost typically cut by up to 50 %.



Unique concept

Exclusive proprietary design of WIKA, the ProPak™ eliminates the need for straight up- and downstream pipes, even in installation following two 90° elbows and/or in the case of disturbed flows.



And more ...

- Space saving, no need for mounting brackets
- Wide range of configurations
- Special materials on request

Honed upstream and downstream pipe spool meter run for pipe size lower than 2"

FLC-MR-IO Meter Run/Integral Orifice



- Overall flow measurement accuracy with DPT-20 up to 1 %.
- Overall flow measurement accuracy with DPGT up to 2 %.

Data sheet FL 10.02

Flow meter for measurement without straight upstream and downstream pipes

FLC-HHR-PP ProPak™ Flow Meter



- New performance standard for applications in oil and gas industries.
- High accuracy with no upstream straight pipe requirements.
- Low permanent pressure loss.
- Cost of ownership saving.
- Approved for measurements requiring verification in accordance with API 22.2.
- Overall flow measurement accuracy with DPT-20 up to 1 %.
- Overall flow measurement accuracy with DPGT up to 2 %.

Data sheet FL 10.07

Preconfigured secondary elements model

Basic configurations for multipurpose use. Further options are available on request.

Valve manifolds

Specifications	Model IV316	Model IV516
Valves	3	5
Way	5	
Flange connection	IEC 61518	
Valve body/ trim material	316L	
Sealing	PTFE S6000 series	
Purge size	1/4" NPT-F	
Data sheet	AC 09.23	



Differential pressure transmitter DPT-20



Specifications	Model DPT-20 STD	Model DPT-20 ATEX (Ex i)	Model DPT-20 STD Aluminium case	Model DPT-20 ATEX (Ex i) Aluminium case
Output signal	4 ... 20 mA, HART			
Wetted parts	SS 316L + PTFE			
Max. deltaP	500 mbar			
Max. operating conditions	160 bar-g, -20 ... +85 °C			
Case material	Plastic case		Aluminium case	
Data sheet	PE 86.22			

Differential pressure gauges with diaphragm measuring system and analogue display for high static pressure measurement

Specifications	Model DPGT43HP.1x0 STD LP	Model DPGT43HP.1x0 STD HP	Model DPGT43HP.1x0 ATEX LP
Overpressure safety/ Maximum operating pressure	PN 40 bar	PN 250 bar	PN 40 bar
Output signal	4 ... 20 mA, 2-wire		
Nominal size	100		
Scale range	0 ... 250 mbar		
2 nd scale or special scale	m³/h		
Process connection	EN 615180		
Accuracy class	Class 1		
Case material	Stainless steel 1.4301		
Special features	<ul style="list-style-type: none"> Without liquid damping (case filling) Black colour for 2nd scale 	<ul style="list-style-type: none"> Without liquid damping (case filling) Black colour for 2nd scale 	<ul style="list-style-type: none"> Explosion protection: ATEX/IECEx ignition protection type Ex ia with device category 2G and 2D Without liquid damping (case filling) Black colour for 2nd scale
Data sheet	PV 17.13		



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