



AccuFlo[®] LPD-ST

Steam billing



STEAM BILLING accurate - robust - simple

■ New challenges for energy metering

To preserve ever scarcer energy reserves and optimise processes, energy flows need to be measured precisely and reliably. „Plug & Play“ systems, which enable easy installation and operation, are increasingly being used.

These form the basis for optimum energy utilisation and efficient energy controlling.

■ The new solution – AccuFlo® LPD-ST

For measuring steam flows and calculating a statement, AccuFlo® LPD-ST is the perfect response to new challenges. Its design means that it is simple to install and commission. It combines a lower pressure drop, high mechanical stability, a longer life and very low maintenance requirements with high accuracy - to optimum effect.

The standard versions of AccuFlo® LPD-ST are ideal for low and medium-pressure steam. For high-pressure applications, the AccuFlo® LPD-ST version is matched to the relevant application requirements.

In addition to the mass flow rate and the mass, the heat output and the heat quantity are also calculated. This gives AccuFlo® LPD-ST users access to a complete statement calculation system.

■ Functions und highlights

- Determination of mass flow and heat output
- Versatile thanks to simple application matching
- Complete statement calculation system

Accurate

- Confidence and reliability due to high accuracy and longtime stability of measurement – even for large measurement ranges (up to 1:40).
- The individual certificate of calibration proves high quality measurement performance.

Robust

- Developed and designed for everyday industrial requirements and for every possible challenge. The AccuFlo® LPD-ST measures reliably and accurately even under extreme conditions.
- High availability is guaranteed by the robust measurement, even in borderline situations.

Easy

- Thanks to the „Plug & Play“ system of the device, the costs and efforts for assembling and commissioning are reduced to a minimum.

Unwrapping – assembling – measuring!

- Reliable integration in existing and new systems thanks to various interfaces and connections.

On top of established signaling techniques, modern Bus-interfaces are available to integrate the AccuFlo® LPD-ST quick and simple in almost every industrial system.

- Short inlet and downstream zones enable the intended assembling even in tight systems without reduction of the measurement quality.



■ Technical Specification

Technical data

Section material	P235 GH, optional 1.4571
Sensor material	W-Nr. 1.4571
Nominal pressure	PN10/PN16 – PN40
Temperature range	-20 to +150°C (optional +400°C)
Insulation	max. 100 mm (on customer side)
Main dimensions	DN 40 to DN 100 : 715 mm DN 125 : 775 mm DN 150 : 850 mm DN 200 : 1000 mm DN 250 : 1150 mm DN 300 : 1300 mm

Evaluation unit

Display	TFT- display, Touchscreen
2 analog outputs	(0)4...20 mA
3 relay outputs	Selectable function, alarm incl.
Fieldbusses	Modbus; Profibus / Profinet in preparation
Auxiliary energy	90-250 VAC
Dimensions	Housing for panel mounting; internal parts protection class IP20; 135 W x 85 H x 120 D (in mm); Display: Protection class IP54; 144 W x 83 H x 18 D (in mm)

Accuracy*

Calibration with water	Measurement uncertainty 0.6% from measured value in calibrated range
Standard calibration range 1:7 (optional max. 1:40)	Zero point deviation: 0.07% from end value
Automatic zero-point calibration (optional)	Ensures long term accuracy by eliminating zero-point-drift of differential pressure transmitter and thus reduces associated maintenance work.

Mechanical design

Layout, construction and testing	In accordance with DGRL and DIN EN 13480
Flanges	In accordance with EN 1092, Form B1 or ANSI B16.5, Form RF

* under reference conditions



AccuFlo® LPD-ST

Order Code - AccuFlo® LPD-ST

AccuFlo® LPD-ST					
Nominal width / pressure rating (EN 1092, ANSI B16.5)					
	40/40				DN40 PN40 / 1 1/2" class #300 (max. 580 PSI).
	50/40				DN50 PN40 / 2" class #300 (max. 580 PSI).
	65/40				DN65 PN40 / 2 1/2" class #300 (max. 580 PSI).
	80/40				DN80 PN40 / 3" class #300 (max. 580 PSI).
	100/16				DN100 PN16 / 4" class #150 (max. 232 PSI).
	100/40				DN100 PN40 / 4" class #300 (max. 580 PSI).
	125/16				DN125 PN16 / 5" class #150 (max. 232 PSI).
	125/40				DN125 PN40 / 5" class #300 (max. 580 PSI).
	150/16				DN150 PN16 / 6" class #150 (max. 232 PSI).
	150/40				DN150 PN40 / 6" class #300 (max. 580 PSI).
	200/16				DN200 PN16 / 8" class #150 (max. 232 PSI).
	200/40				DN200 PN40 / 8" class #300 (max. 580 PSI).
	250/10				DN250 PN10 / 10" class #150 (max. 145 PSI).
	250/16				DN250 PN16 / 10" class #150 (max. 232 PSI).
	250/40				DN250 PN40 / 10" class #300 (max. 580 PSI).
	300/10				DN300 PN10 / 12" class #150 (max. 145 PSI).
	300/16				DN300 PN16 / 12" class #150 (max. 232 PSI).
	300/40				DN300 PN40 / 12" class #300 (max. 580 PSI).
Design					
	DC				According to EN 1092, P235GH/P250GH
	AC				According to ANSI B16.5, P235GH/P250GH
	DE				According to EN 1092, stainless steel
	AE				According to ANSI B16.5, stainless steel
Pipe run - Flow direction					
	H				Horizontal
	VS				Vertical - ascending
	VF				Vertical - falling
Option 1					
	0				Without
	T2				Second Pt 100 for energy measurement (paired)
	ME				Measuring range extension (1:40)
Option 2					
	0				Without
	24				24 V DC - version
	X				Additional option – please specify clearly

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