

# FLOWSIC600-XT

THE PERFECT MATCH

**Gas flow meters** 



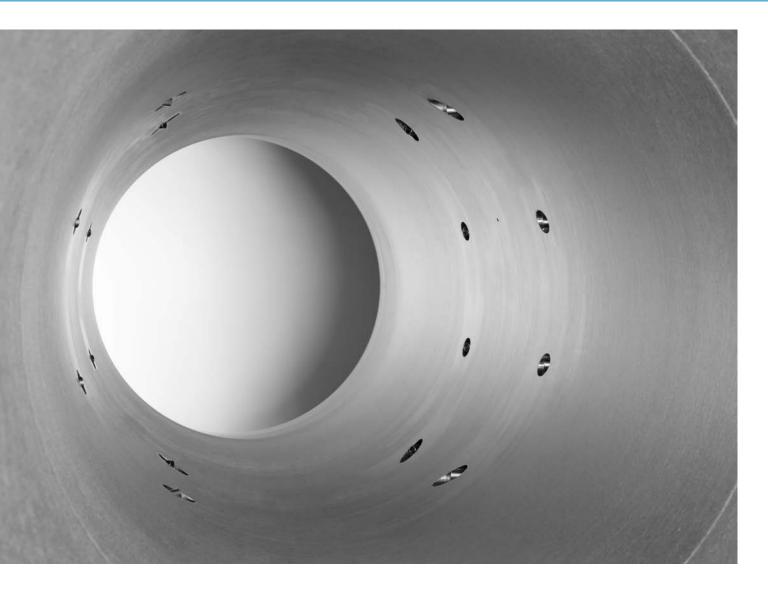
## FLOWSIC600-XT: THE PERFECT MATCH

Just how can the market leader for reliable, maximum precision ultrasonic gas flow measuring devices get any better? The answer is easy: by carefully listening to and consistently responding to the requirements of individual users.

With four device versions, the FLOWSIC600-XT is able to meet any application requirement as a standalone or system solution – and deliver best possible measuring performance at the same time. Along with its groundbreaking design, this product family impresses with innovative intrinsic value: i-diagnostics™ the built-in solution, which delivers intelligent application diagnostics and Powerln Technology™ continues to take measurements and save valuable data for up to three weeks in the event of a mains power failure. FLOWSIC600-XT delivers the ideal combination of maximum measurement accuracy, long-term stability, and unrivaled operational safety, yet is entirely unassuming.







## Measurement data reliability and availability

The FLOWSIC600 ultrasonic gas flow measuring device already provided best-in-class long-term stability in extreme ambient conditions, and now the FLOWSIC600-XT combines the features of its predecessor with unprecedented usability. It meets all the requirements for safe and stable custody transfer gas measurement throughout its service life. Measurement and diagnostics data and status changes can be recorded permanently in six accessible data archives. and the FLOWSIC600-XT's PowerIn Technology™ ensures that measurements continue to be taken and data stored in the event of a mains power failure.

## Simple device integration – even in compact systems

Continuous improvement of ultrasound technologies has become something of a tradition in Dresden, Germany. The FLOWSIC600-XT boasts state-of-the-art measurement technology, meaning it delivers extremely precise measurement results. Compliant with ISO 17089 and AGA9 and compatible with its predecessor the FLOWSIC600, it can be integrated successfully into any system. Plus, the new FLOWSIC600-XT Forte meets the requirements of compact installations and complies with all of the specifications of OIML R 137 Classes 1.0 and 0.5.

## Quick and easy device commissioning and checks

i-diagnostics™ helps make device commissioning and status checks quick and easy, and provides extensive flow meter and application diagnostics during operation. Should maintenance ever be required, the intelligent solution assistant provides support. The built-in infrared interface means measured value and diagnostics data can be accessed in no time, making servicing quick and efficient.

# FLOWSIC600-XT – PROVIDING YOU WITH THE PERFECT GAS FLOW METER FOR ANY APPLICATION

Each of the ultrasonic gas flow meters in the FLOWSIC600-XT product family has been designed for custody transfer applications and fulfills the requirements of all the common national and international standards. There are four device versions to choose from to meet specific gas flow meter performance requirements. Determining which one to use varies, which is why our performance-oriented classification of the FLOWSIC600-XT, -XT Forte, -XT 2plex, and -XT Quatro is the ideal first step in ensuring there is a focus on the task at hand and customer requirements, allowing a unique solution to be provided. All of the FLOWSIC600-XT versions can be installed with ease into any custody transfer measurement application with a nominal width of between 3 and 48 inches, and they can also be conveniently connected to all of the most popular flow computers on the market.



#### FLOWSIC600-XT

The FLOWSIC600-XT has proven to be a versatile device suitable for all custody transfer natural gas applications, with 15 years of field experience gained from the FLOWSIC600 having been incorporated into this four-path technology.



#### FLOWSIC600-XT Forte

Providing impressive meter performance in a limited space and combining eight paths on two different path levels in one device, the FLOWSIC600-XT Forte guarantees maximum measurement accuracy. It is the natural first choice for installations in systems with short inlet and outlet piping.



#### FLOWSIC600-XT 2plex

The extremely compact FLOWSIC600-XT 2plex is the combination of a gas flow meter for custody transfer applications and a check measurement device, featuring extended diagnostic functionality thanks to its additional independent measurement path.



### FLOWSIC600-XT Quatro

The FLOWSIC600-XT Quatro combines two measurement devices for redundant measurements in custody transfer natural gas applications in one, with an installation length equivalent to that of a single device.

#### Quick and easy data access

In addition to its numerous interfaces, the FLOWSIC600-XT also enables quick and easy access to measured value and diagnostics data thanks to the infrared transmission system built into its front display. All of the necessary settings and device data are accessible via this interface. The FLOWSIC600-XT can also be extended for wireless communication.



## PowerIn Technology<sup>™</sup> – data security guaranteed

Operating with an extremely low power consumption and measurement algorithms that have been further optimized, the FLOWSIC600-XT is setting new standards for ultrasonic gas flow meters. It boasts a highly efficient energy concept, including a backup battery that guarantees a continuous power supply even in the event of a mains power failure. If this does happen, the power consumption of all of the electronics is automatically reduced to the minimum level possible. We call this PowerIn Technology™. It makes sure that measurements can continue to be taken for up to three weeks without the need for external power and saves important measurement data. This extremely efficient electronics concept is forward-thinking in the way it allows for autonomous device operation, for example using a solar power supply.



## Automatic correction of measured values under changing operating conditions

The FLOWSIC600-XT provides even more accurate measurements than its predecessor, with its integrated geometry and Reynolds number correction function boosting measurement accuracy under changing pressure and temperature conditions. Another advantage of the integrated pressure and temperature correction function is the ease and safety with which calibration conditions can be transferred over to application conditions. The pressure and temperature values required to enable this feature are provided by built-in sensors, transmitters externally connected via HART, or a flow computer.

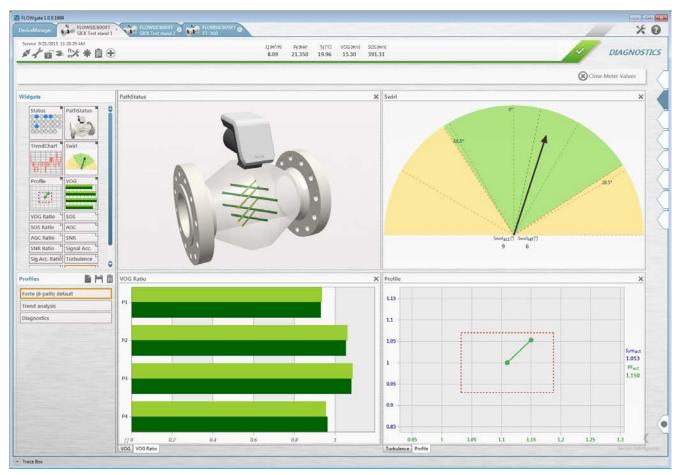


#### i-diagnostics™ – an essential tool for effective and efficient device and application diagnostics

i-diagnostics™ has so much more to offer than just diagnostics – it is an intelligent combination of firmware and software that means the device is safe, reliable, and easy to use for the entire operating time. i-diagnostics™ builds on the FLOWSIC600's CBM (condition based maintenance) smart self-diagnosis functionality, providing useful information about the system status and any changes to it, in addition to device diagnostics. In order to assess the application, diagnostics data from cross-eyed beams is first factored in, with application faults, such as blocked flow conditioners, background noise, corrosion, and liquids in the gas, being detected immediately – making lengthy troubleshooting a thing of the past. Process data is constantly assessed on the basis of the integrated FingerPrint concept. This means that the measurement conditions during calibration can be compared with the measurement conditions during commissioning and with the current measurement and diagnostics data. An internal data logger continuously logs measured values for trend analyses to allow the historical measurement processes to be checked, as well as the results of the self-monitoring. A retroactive thorough check of the measurement process in the form of a graphic trend analysis is also possible.

#### FLOWgate<sup>™</sup> – new and intuitive operating software

FLOWgate™ intelligently links diagnostics data together and then displays it. The quick status function provides immediate information about the current status of the application, and if a warning limit is reached, the solution assistant can be used to analyze the problem at the click of a button. In order to get a quick overview or analysis, each user can put together measured values and diagnostics parameters as required in the measured value overview, and then amend or save their overview. FLOWgate™ allows the FLOWSIC600-XT, and in turn all of the measured value and diagnostics data, to be accessed at any time via a PC or tablet – whether online or offline. The graphical display of trend analyses in charts facilitates the analysis of the measurement process and provides information on changes to the process. Concise diagnostics, maintenance, and calibration reports can be created at any time using the report manager, while a range of wizards, including one for commissioning, make it much easier to operate the device.



FLOWgate<sup>™</sup> overview

## THE PERFECT MATCH



#### **Product description**

As the follow-up to the successful FLOWSIC600, the FLOWSIC600-XT ultrasonic gas flow measuring device is setting new standards in its market segment. The FLOWSIC600-XT is available in variants with 4, 4+1, 4+4, and 8 measurement paths to meet the requirements of every application, whether it is being used as a standalone or system solution. In addition to the OIML R 137 Class 1.0 requirements, the FLOWSIC600-XT meets the requirements of Class 0.5 and AGA9 in their

entirety. The FLOWSIC600-XT contains i-diagnostics™ – an intelligent application diagnostics function – and PowerIn Technology™, which enables continuous measurement operation for up to three weeks in the event of a mains power failure. These functions help ensure usability and unparalleled operational safety – and what's more, the equipment offers the very best possible measurement accuracy and long-term stability.

### At a glance

- User-friendly product family
- Automatic correction of geometry and Reynolds number
- Available under all operating conditions
- PowerIn Technology™ for reliable backup operation
- Intelligent application diagnostics with i-diagnostics™
- Extendable with flow computers per connect-and-go

#### Your benefits

- Low measurement uncertainty in every application
- Excellent measurement data reliability and availability
- The right ultrasonic gas flow measuring device for every application – without compromise
- Simple device integration even in compact systems
- Quick and easy commissioning and checks



#### Additional information

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#### → www.mysick.com/en/FLOWSIC600-XT

For more information, just enter the link and get direct access to technical data, CAD design models, operating instructions, software, application examples and much more.

## Fields of application

- Custody transfer measurement of natural gas
- Transport and storage of gas

- Onshore and offshore applications
- Gas production applications with H<sub>2</sub>S and CO<sub>2</sub> content

## Detailed technical data

The exact device specifications and performance data of the product may deviate from the information provided here, and depend on the application in which the product is being used and the relevant customer specifications.

## System

Measured values	Volumetric flow, a. c., volume a. c., gas velocity, sound velocity, optional volume correction with integrated EVC
Number of measuring paths	4, 4+1 (2plex), 4+4 (Quatro), 8 (Forte)
Measurement principle	Ultrasonic transit time difference measurement
Measuring medium	Natural gas, air, natural gases with contents of CO <sub>2</sub> , N <sub>2</sub> , H <sub>2</sub> S, O <sub>2</sub>
Measuring ranges	
$Q_{min}$ from to / $Q_{max}$ from to	8 750 m <sup>3</sup> /h / 1,000 100,000 m <sup>3</sup> /h
	Measuring ranges depend on nominal pipe size
Repeatability	$\pm~0.05~\%$ of the measured value
Accuracy	
	Error limits $Q_t \dots Q_{max}$
4-path and 8-path version:	≤ ± 0.5 % Dry calibrated
4-path and 8-path version:	$\leq$ $\pm$ 0.2 $\%$ After flow calibration and adjustment with constant factor
4-path and 8-path version:	$\leq$ $\pm$ 0.1 $\%$ After flow calibration and adjustment with polynomial or piecewise correction
Min. piping requirements	
4-path version	According OIML Class 1.0: with straight inlet section of 10D or 5D with flow conditioner According OIML Class 0.5: with straight inlet section of 10D and flow conditioner
8-path version	According OIML Class 1.0: with straight inlet section of 2D According OIML Class 0.5: with straight inlet section of 5D
	For details see operating instructions
Diagnostics functions	i-diagnostics™: integrated device diagnostics and intelligent extended device and application diagnostics via FLOWgate™ software
Gas temperature	
	-40 °C +180 °C
On request:	-194 °C +280 °C
Operating pressure	
On request:	0 bar (g) 250 bar (g) 0 bar (g) 450 bar (g)
Nominal pipe size	0 bai (g) 450 bai (g)
Nonlinai pipe size	3 " 48 " (DN 80 DN 1200), Other nominal pipe sizes on request
Ambient temperature	-40 °C +70 °C
Storage temperature	-40 °C +70 °C
Ambient humidity	≤ 95 %

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Conformities	OIML R 137 1+2, 2012 OIML D 11 ISO 17089-1 AGA-Report No. 9 2004/22/EC (MID MI-002) 97/23/EC (PED) 94/9/EC (ATEX)
Ex-approvals	
IECEx	Ex d e ia [ia Ga] IIC T4 Gb/Ga Ex d e ia [ia Ga] IIA T4 Gb/Ga Ex d e ia [ia Ga] IIC T4 Gb Ex d e ia [ia Ga] IIA T4 Gb Ultrasonic transducers intrinsically safe
ATEX	II 1/2G Ex d e ia [ia Ga] IIC T4 Gb/Ga II 1/2G Ex d e ia [ia Ga] IIA T4 Gb/Ga II 2G Ex d e ia [ia Ga] IIC T4 Gb II 2G Ex d e ia [ia Ga] IIA T4 Gb Ultrasonic transducers intrinsically safe
NEC/CEC (US/CA)	Class I, Division 1, Groups B, C, D T4 Class I, Division 1, Groups B, C, D T4, Exia intrinsically safe Class I, Division 2, Groups A, B, C, D T4 Ultrasonic transducers intrinsically safe
Electrical safety	CE
Enclosure rating	IP 66 / IP 67
Analog outputs	1 output: 4 20 mA, 250 $\Omega$ Active/passive, electrically isolated and as HART slave
Digital outputs	4 outputs: 30 V, 50 mA Passive, electrically isolated, Open Collector or according to NAMUR (EN 50227), $\rm f_{max}=10~kHz$ (scalable) or as encoder
Interfaces	RS-485 (3x, 2x for configuration, output of measured values and diagnosis) Ethernet TCP/IP (1x optional for configuration, output of measured values and diagnosis)
Bus protocol	Modbus ASCII Modbus RTU Modbus TCP HART
Operation	Via display and software FLOWgate™
Dimensions (W x H x D)	See dimensional drawings
Weight	Depending on device version
Material in contact with media	Low temperature carbon steel, stainless steel, duplex steel
Electrical connection	
Voltage	Electrically isolated: 12 24 V DC
	PowerIn Technology™ with back-up battery (2,400 mAh, 10.8 V), optional
Power consumption	0.45 W 2.45 W Depending on electronics configuration
Integrated components	Integrated pressure sensor and temperature sensor for geometry and Reynolds correction (option)

## Volume correction

Correction method	PTZ (optional integrated)
Compressibility	SGERG88 AGA 8 Gross method 1 AGA 8 Gross method 2 AGA NX-19 AGA NX-19 mod. AGA NX-19 mod. (GOST) GERG91 mod. (GOST) Fixed value
Data archives	1 diagostics archive (6,000 entries) 2 measurement periodic archives (6,000 entries each)
Logbooks	Event log book (1,000 entries) Parameter log book (250 entries) Metrology log book (50 entries)

## Measuring ranges

l size		Flow	Max. velocity *			
	m	³/h	Ft	³/h	m/s	Ft/s
	Min.	Max.	Min	Max.		
3″	8	1,000	280	35,000	61	201
4"	10	1,600	350	56,000	63	206
6″	16	3,000	570	106,000	52	171
8″	20	4,500	710	159,000	44	145
10"	25	7,000	880	247,000	44	145
12"	35	8,000	1,200	283,000	39	127
14"	45	10,000	1,600	354,000	36	117
16"	60	14,000	2,100	495,000	38	125
18"	100	17,000	3,500	602,000	37	120
20"	130	20,000	4,600	708,000	35	115
22"	150	24,000	5,300	850,000	35	115
24"	180	32,000	6,400	1,133,000	39	127
26"	240	35,000	8,500	1,240,000	36	118
28″	280	40,000	9,900	1,420,000	36	118
30"	320	45,000	11,300	1,590,000	35	115
32"	360	50,000	12,700	1,770,000	34	112
34"	400	55,000	14,200	1,950,000	33	109
36″	450	66,000	15,900	2,337,000	36	118
38″	500	70,000	17,700	2,479,000	34	112
40"	550	80,000	19,500	2,833,000	35	115
42"	600	85,000	21,200	3,010,000	34	110
44"	650	90,000	23,000	3,187,000	32	107
46"	700	95,000	24,800	3,364,000	34	110
48"	750	100,000	26,600	3,541,000	30	99
	3" 4" 6" 8" 10" 12" 14" 16" 18" 20" 22" 24" 26" 28" 30" 32" 34" 36" 38" 40" 42" 44" 46"	Min.           3"         8           4"         10           6"         16           8"         20           10"         25           12"         35           14"         45           16"         60           18"         100           20"         130           22"         150           24"         180           26"         240           28"         280           30"         320           32"         360           34"         400           36"         450           38"         500           40"         550           42"         600           44"         650           46"         700	Min.         Max.           3"         8         1,000           4"         10         1,600           6"         16         3,000           8"         20         4,500           10"         25         7,000           12"         35         8,000           14"         45         10,000           16"         60         14,000           18"         100         17,000           20"         130         20,000           22"         150         24,000           24"         180         32,000           26"         240         35,000           28"         280         40,000           30"         320         45,000           32"         360         50,000           34"         400         55,000           36"         450         66,000           38"         500         70,000           40"         550         80,000           42"         600         85,000           44"         650         90,000           46"         700         95,000	Min.         Max.         Min           3"         8         1,000         280           4"         10         1,600         350           6"         16         3,000         570           8"         20         4,500         710           10"         25         7,000         880           12"         35         8,000         1,200           14"         45         10,000         1,600           16"         60         14,000         2,100           18"         100         17,000         3,500           20"         130         20,000         4,600           22"         150         24,000         5,300           24"         180         32,000         6,400           26"         240         35,000         8,500           28"         280         40,000         9,900           30"         320         45,000         11,300           32"         360         50,000         12,700           34"         400         55,000         14,200           36"         450         66,000         15,900           38" <td< td=""><td>Min.         Max.         Min         Max.           3"         8         1,000         280         35,000           4"         10         1,600         350         56,000           6"         16         3,000         570         106,000           8"         20         4,500         710         159,000           10"         25         7,000         880         247,000           12"         35         8,000         1,200         283,000           14"         45         10,000         1,600         354,000           16"         60         14,000         2,100         495,000           18"         100         17,000         3,500         602,000           20"         130         20,000         4,600         708,000           22"         150         24,000         5,300         850,000           24"         180         32,000         6,400         1,133,000           26"         240         35,000         8,500         1,240,000           30"         320         45,000         11,300         1,590,000           32"         360         50,000         12,700</td><td>Min.         Max.         Min         Max.           3"         8         1,000         280         35,000         61           4"         10         1,600         350         56,000         63           6"         16         3,000         570         106,000         52           8"         20         4,500         710         159,000         44           10"         25         7,000         880         247,000         44           12"         35         8,000         1,200         283,000         39           14"         45         10,000         1,600         354,000         36           16"         60         14,000         2,100         495,000         38           18"         100         17,000         3,500         602,000         37           20"         130         20,000         4,600         708,000         35           22"         150         24,000         5,300         850,000         35           24"         180         32,000         6,400         1,133,000         39           26"         240         35,000         8,500         1,240,000</td></td<>	Min.         Max.         Min         Max.           3"         8         1,000         280         35,000           4"         10         1,600         350         56,000           6"         16         3,000         570         106,000           8"         20         4,500         710         159,000           10"         25         7,000         880         247,000           12"         35         8,000         1,200         283,000           14"         45         10,000         1,600         354,000           16"         60         14,000         2,100         495,000           18"         100         17,000         3,500         602,000           20"         130         20,000         4,600         708,000           22"         150         24,000         5,300         850,000           24"         180         32,000         6,400         1,133,000           26"         240         35,000         8,500         1,240,000           30"         320         45,000         11,300         1,590,000           32"         360         50,000         12,700	Min.         Max.         Min         Max.           3"         8         1,000         280         35,000         61           4"         10         1,600         350         56,000         63           6"         16         3,000         570         106,000         52           8"         20         4,500         710         159,000         44           10"         25         7,000         880         247,000         44           12"         35         8,000         1,200         283,000         39           14"         45         10,000         1,600         354,000         36           16"         60         14,000         2,100         495,000         38           18"         100         17,000         3,500         602,000         37           20"         130         20,000         4,600         708,000         35           22"         150         24,000         5,300         850,000         35           24"         180         32,000         6,400         1,133,000         39           26"         240         35,000         8,500         1,240,000

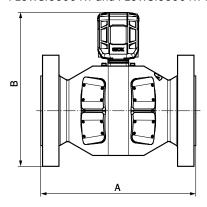
 $<sup>^{\</sup>star}$  When using an installation configuration with flow conditioner the maximum allowed gas velocity in the pipe is limited to 40 m/s (131 ft/s).

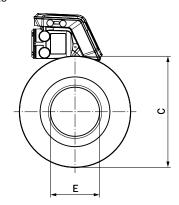
## **Ordering information**

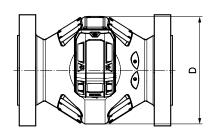
Our regional sales organization will help you to select the optimum device configuration.

## Dimensional drawings (Dimensions in mm)

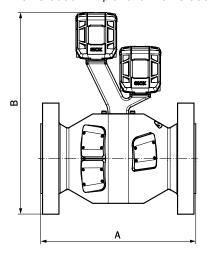
## FLOWSIC600-XT and FLOWSIC600-XT Forte

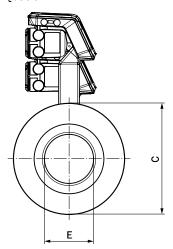


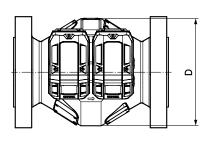




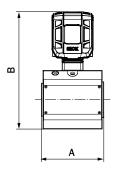
## FLOWSIC600-XT 2plex and FLOWSIC600-XT Quatro

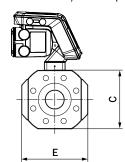


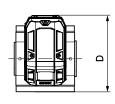




## FLOWSIC600-XT: 3" design for up to Class 600/PN100 pressure levels







## Dimensions

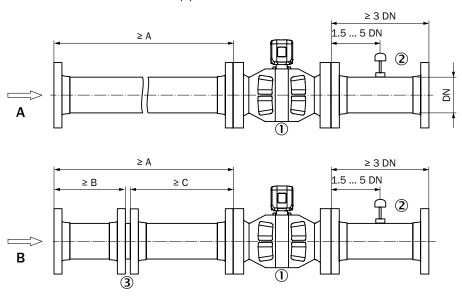
Nominal pipe size	Connection flange	Standard	Weight	Length (A)	Hight (B)	Flange diame- ter (C)	Width of mea- suring section (D)	Internal diame- ter (E)
			[kg]	[mm]	[mm]	[mm]	[mm]	[mm]
3″	Cl. 150	ANSI B16.5	75	240	454	190	205	73
	Cl. 300		75		454	210		
	Cl. 600		75		454	210		
	Cl. 900		120	400	461	240		
DN 80	PN 16	DIN 2633	75	240	454	200		
	PN 63	DIN 2636	75		454	215		
	PN 100	DIN 2637	75		454	230		
4"	Cl. 150	ANSI B16.5	100	300	490	230	248	95
	Cl. 300		110		490	255		
	Cl. 600		120		490	275		
	Cl. 900		130	500	490	290		
DN 100	PN 16	DIN 2633	110	300	490	220		
	PN 63	DIN 2636	120		490	250		
	PN 100	DIN 2637	126		490	265		
6"	Cl. 150	ANSI B16.5	128	450	540	280	330	142
	Cl. 300		145		540	320		
	Cl. 600		170		540	355		
	Cl. 900		238	750	540	380		
DN 150	PN 16	DIN 2633	140	450	540	285		
	PN 63	DIN 2636	162		540 345			
	PN 100	DIN 2637	176		540	355		
8″	Cl. 150	ANSI B16.5	255	600	617	345	415	190
	Cl. 300		276		617	380		
	Cl. 600		316		617	420		
	Cl. 900		360		617	470		
DN 200	PN 16	DIN 2633	260		617	340		
	PN 63	DIN 2636	298		617	415		
	PN 100	DIN 2637	360		617	430		
10"	Cl. 150	ANSI B16.5	377	750	691	405	420	235
	Cl. 300		411		691	445		
	Cl. 600		485		691	510		
	Cl. 900		528		691	545		
DN 250	PN 16	DIN 2633	383		691	405		
	PN 63	DIN 2636	434		691	470		
	PN 100	DIN 2637	486		691	505		
12"	Cl. 150	ANSI B16.5	445	900	728	485	500	270
	CI. 300		494		728	520		
	Cl. 600		560		728	560		
	Cl. 900		645		685	610		
DN 300	PN 16	DIN 2633	441		728	460		
	PN 63	DIN 2636	509		728	530		
	PN 100	DIN 2637	585		638	585		

Nominal pipe size	Connection flange	Standard	Weight	Length (A)	Hight (B)	Flange diame- ter (C)	Width of mea- suring section (D)	Internal diame- ter (E)
			[kg]	[mm]	[mm]	[mm]	[mm]	[mm]
14"	Cl. 150	ANSI B16.5	475	1,050	642	535	540	315
	CI. 300		600		667	585		
	CI. 600		675		677	605		
	CI. 900		850		700	640		
DN 350	PN 16	DIN 2633	475		635	520		
	PN 63	DIN 2636	625		675	600		
	PN 100	DIN 2637	750		705	655		
		For all me	eters ≥ 16" a	n installation le	ngth of 3D is o	ptionally available		
16"	CI. 150	ANSI B16.5	672	762	844	595	610	360
	Cl. 300		760		844	650		
	CI. 600		857		844	685		
	CI. 900		926	800	755	705		
DN 400	PN 16	DIN 2633	658	762	844	580		
	PN 63	DIN 2636	794		844	670		
18"	Cl. 150	ANSI B16.5	660	820	754	635	620	405
	Cl. 300		760		792	710		
	CI. 600		960		820	745		
	CI. 900		1,300	900	830	785		
DN 450	PN 16				Data on red	quest		
20″	Cl. 150	ANSI B16.5	ANSI B16.5 750 902	902	815	700	670	450
	Cl. 300		930		853	775		
	CI. 600	600 1,080		872	815			
	CI. 900		1,500	1,000	892	855		
DN 500	PN 16	DIN 2633	700	902	823	715		
22"				Data	on request			
DN 550								
24"	Cl. 150	ANSI B16.5	1,090	991	927	815	760	540
	CI. 300		1,390		978	915		
	CI. 600		1,615		990	940		
	CI. 900		2,100	1,200	1,040	1,040		
DN 600	PN 16	DIN 2633	1,015	991	940	840		
26"	Cl. 150	ASME B16.47	1,475	1,050	965	870	828	585
	CI. 300		1,825		1,016	972		
	CI. 600		2,100		1,038	1,016		
	CI. 900		2,500	1,250	1,073	1,086		
DN 650	PN16				Data on red	quest		
28"	Cl. 150	ASME B16.47	1,950	1,100	1,027	927	862	630
	CI. 300		2,225		1,080	1,035		
	CI. 600		2,450		1,100	1,073		
	CI. 900		3,000	1,300	1,150	1,169		
DN 700	PN16				Data on red	quest		

Nominal pipe size	Connection flange	Standard	Weight	Length (A)	Hight (B)	Flange diame- ter (C)	Width of mea- suring section (D)	Internal diame- ter (E)
			[kg]	[mm]	[mm]	[mm]	[mm]	[mm]
30″	Cl. 150	ASME B16.47	2,195	1,150	1,080	985	902	675
	Cl. 300		2,545		1,135	1,092		
	CI. 600		2,820		1,154	1,130		
	CI. 900		3,350	1,350	1,205	1,232		
DN 750	PN16				Data on re	quest		
32"	Cl. 150	ASME B16.47	2,485	1,200	1,145	1,061	979	720
	Cl. 300		2,835		1,190	1,150		
	Cl. 600		3,110		1,212	1,194		
	Cl. 900		3,800	1,400	1,272	1,315		
DN 800	PN 16				Data on re	quest		
34"				Data	on request			
DN 850								
36"	Cl. 150	ASME B16.47	3,125	1,250	1,250	1,169	1,082	810
	Cl. 300	CI. 300 CI. 600	3,525		1,300	1,270		
	Cl. 600		3,850		1,323	1,315		
	Cl. 900		5,225	1,450	1,396	1,461		
DN 900	PN 16				Data on re	quest		
38"	CI. 150 A CI. 300 CI. 600	ASME B16.47	3,800	1,300	1,310	1,238	1,160	855
			3,725		1,275	1,169		
			4,300		1,325	1,270		
	Cl. 900		Data on	request	1,421	1,461		
DN 950	PN 16				Data on re	quest		
40"	Cl. 150	ASME B16.47	3,825	1,350	1,359	1,289	1,213	900
	Cl. 300		4,125		1,334	1,239		
	CI. 600		4,675		1,375	1,321		
	Cl. 900		Data on	Data on request		1,512		
DN 1000	PN 16				Data on re	quest		
42"	Cl. 150	ASME B16.47	4,675	1,450	1,415	1,346	1,261	945
	Cl. 300		4,650		1,386	1,289		
	Cl. 600		5,450		1,444	1,404		
	Cl. 900		Data on	request	1,523	1,562		
DN 1050	PN 16				Data on re	quest		
44"				Data	on request			
DN 1100								
46"				Data	on request			
DN 1150								
48"	Cl. 150	ASME B16.47	6,400	1,600	1,574	1,511	1,416	1,080
	Cl. 300		6,475		1,552	1,467		
	Cl. 600		7,850		1,615	1,594		
	CI. 900		12,100	1,900	1,711	1,785		
DN 1200	PN 16				Data on re	quest		

## Instruction for installation

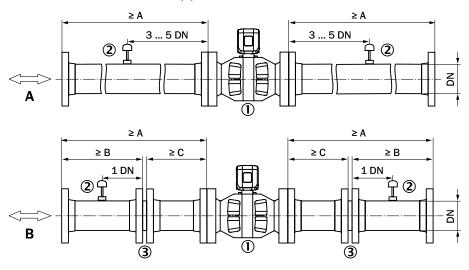
Installation of FLOWSIC600-XT in pipeline for unidirectional use



- ① FLOWSIC600-XT
- ② Temperature measuring point
- 3 Flow conditioner

C	onfiguration 1 (	A)	Configuration 2 (B)					
Number of measuring paths	OIML R 137	A	Number of measuring paths	OIML R 137	A	В	c	
4	Class 1.0	10 DN	4	Class1.0	5 DN	2 DN	3 DN	
8	Class 1.0	2 DN	4	Class 0.5	10 DN	2 DN	8 DN	
8	Class 0.5	5 DN	8	Class 1.0/0.5	5 DN	2 DN	3 DN	

## Installation of FLOWSIC600-XT in pipeline for bidirectional use



- ① FLOWSIC600-XT
- ② Alternative temperature measurement points
- 3 Flow conditioner

С	onfiguration 1 (	A)	Configuration 2 (B)					
Number of measuring paths	OIML R 137	A	Number of measuring paths	OIML R 137	A	В	С	
4	Class 1.0	10 DN	4	Class 1.0	5 DN	2 DN	3 DN	
8	Class 1.0	5 DN	4	Class 0.5	10 DN	2 DN	8 DN	
8	Class 0.5	10 DN	8	Class 1.0/0.5	5 DN	2 DN	3 DN	

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