



FLOWSIC600-XT

THE PERFECT MATCH

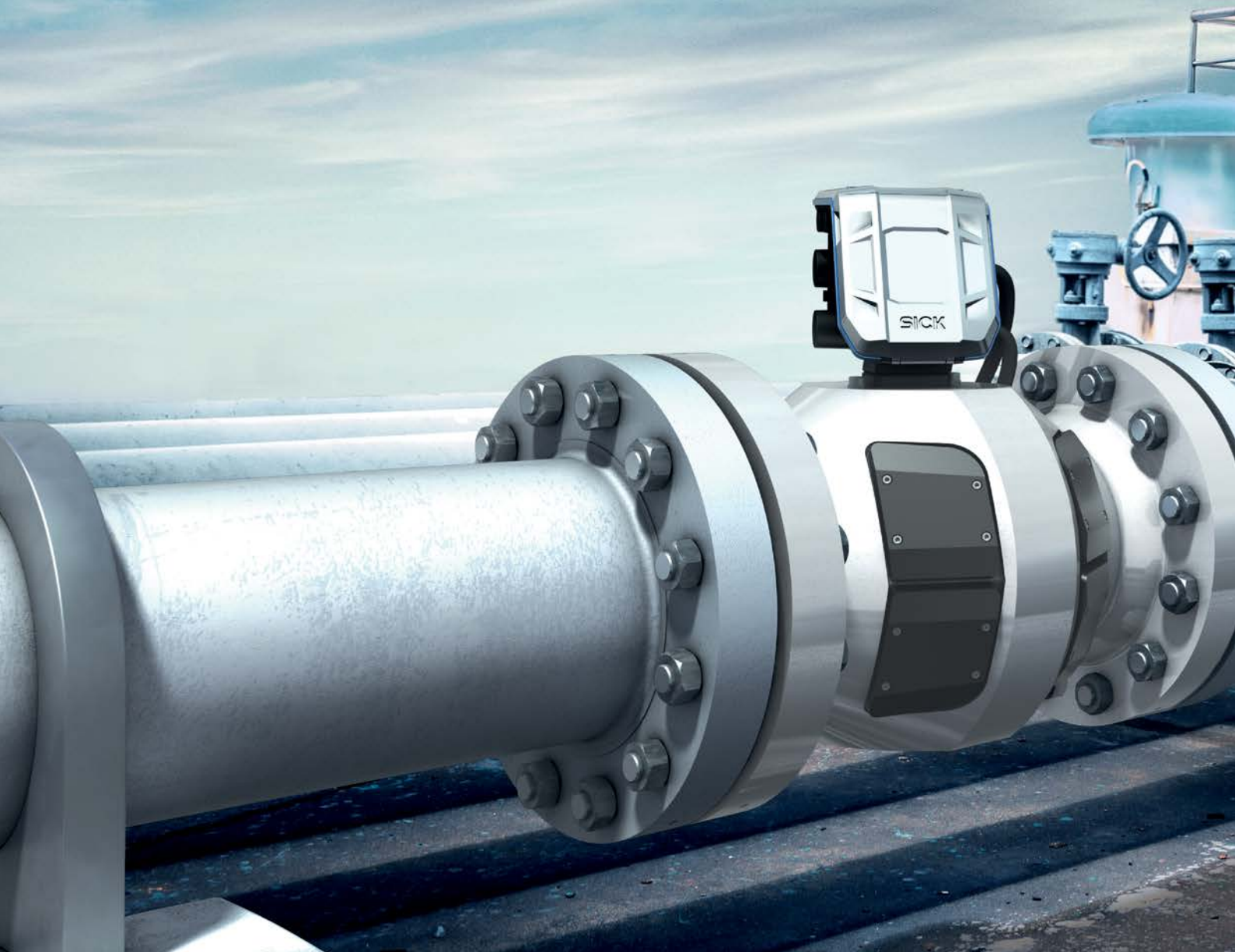
Gas flow meters

SICK
Sensor Intelligence.

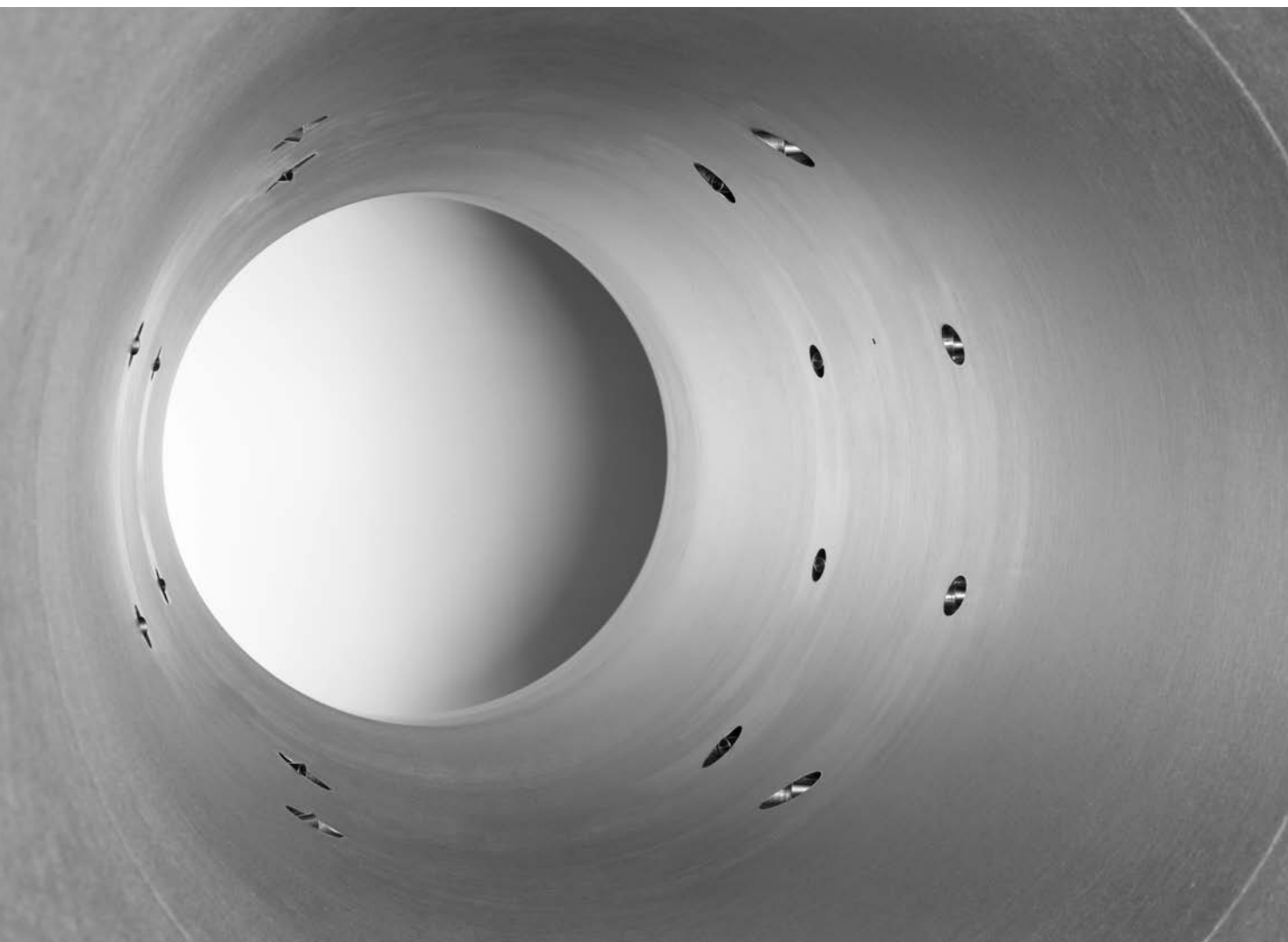
FLOWSIC600-XT: THE PERFECT MATCH

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 stand-alone 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 PowerIn 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.

FLAWSIC600-XT – PROVIDING YOU WITH THE PERFECT GAS FLOW METER FOR ANY APPLICATION

Each of the ultrasonic gas flow meters in the FLAWSIC600-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 FLAWSIC600-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 FLAWSIC600-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.



FLAWSIC600-XT

The FLAWSIC600-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 FLAWSIC600 having been incorporated into this four-path technology.



FLAWSIC600-XT Forte

Providing impressive meter performance in a limited space and combining eight paths on two different path levels in one device, the FLAWSIC600-XT Forte guarantees maximum measurement accuracy. It is the natural first choice for installations in systems with short inlet and outlet piping.



FLAWSIC600-XT 2plex

The extremely compact FLAWSIC600-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.



FLAWSIC600-XT Quatro

The FLAWSIC600-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.

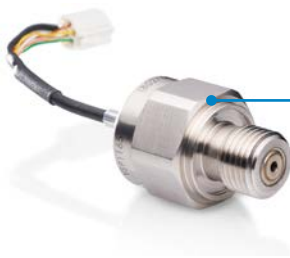
Quick and easy data access

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™ – 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

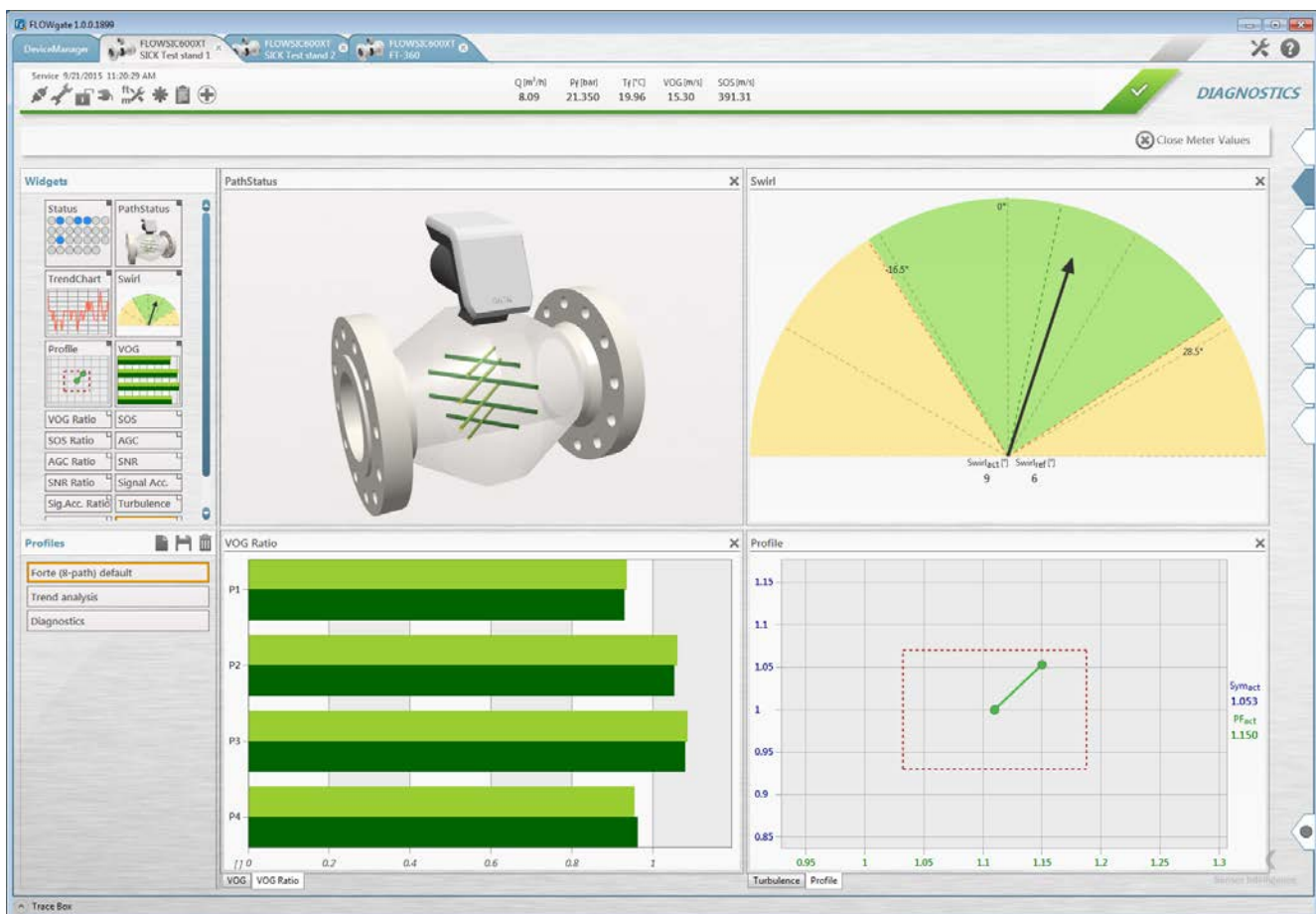
The FLOWSIC600-XT provides even more accurate measurements than its predecessor, with its integrated geometry and Reynolds number correction function boosting measurement accuracy under changing pressure and temperature conditions. Another advantage of the integrated pressure and temperature correction 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.

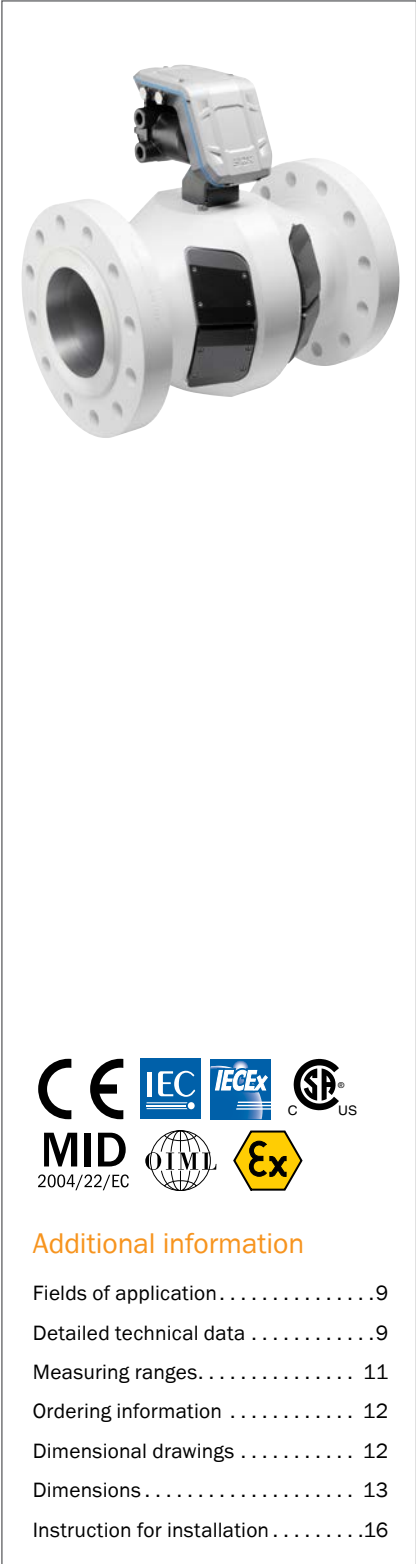
FLOWgate™ – new and intuitive operating software

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™ 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 stand-alone 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



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→ www.mysick.com/en/FLWSIC600-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 H₂S and CO₂ 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 (Quattro), 8 (Forte) |
| Measurement principle | Ultrasonic transit time difference measurement |
| Measuring medium | Natural gas, air, natural gases with contents of CO ₂ , N ₂ , H ₂ S, O ₂ |
| Measuring ranges Q _{min} from ... to / Q _{max} from ... to | 8 ... 750 m ³ /h / 1,000 ... 100,000 m ³ /h Measuring ranges depend on nominal pipe size |
| Repeatability | ± 0.05 % of the measured value |
| Accuracy | Error limits Q _t ... Q _{max} 4-path and 8-path version: ≤ ± 0.5 % Dry calibrated 4-path and 8-path version: ≤ ± 0.2 % After flow calibration and adjustment with constant factor 4-path and 8-path version: ≤ ± 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 | 0 bar (g) ... 250 bar (g) On request: 0 bar (g) ... 450 bar (g) |
| Nominal 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 % Relative humidity; non-condensing |

| | | |
|---------------------------------------|-------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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 Ω 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), $f_{max} = 10$ 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 diagnostics 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

| Nominal size | | Flow rate | | | | Max. velocity * | |
|--------------|-----|-------------------|---------|--------------------|-----------|-----------------|------|
| | | m ³ /h | | Ft ³ /h | | m/s | Ft/s |
| | | Min. | Max. | Min | Max. | | |
| DN 80 | 3" | 8 | 1,000 | 280 | 35,000 | 61 | 201 |
| DN 100 | 4" | 10 | 1,600 | 350 | 56,000 | 63 | 206 |
| DN 150 | 6" | 16 | 3,000 | 570 | 106,000 | 52 | 171 |
| DN 200 | 8" | 20 | 4,500 | 710 | 159,000 | 44 | 145 |
| DN 250 | 10" | 25 | 7,000 | 880 | 247,000 | 44 | 145 |
| DN 300 | 12" | 35 | 8,000 | 1,200 | 283,000 | 39 | 127 |
| DN 350 | 14" | 45 | 10,000 | 1,600 | 354,000 | 36 | 117 |
| DN 400 | 16" | 60 | 14,000 | 2,100 | 495,000 | 38 | 125 |
| DN 450 | 18" | 100 | 17,000 | 3,500 | 602,000 | 37 | 120 |
| DN 500 | 20" | 130 | 20,000 | 4,600 | 708,000 | 35 | 115 |
| DN 550 | 22" | 150 | 24,000 | 5,300 | 850,000 | 35 | 115 |
| DN 600 | 24" | 180 | 32,000 | 6,400 | 1,133,000 | 39 | 127 |
| DN 650 | 26" | 240 | 35,000 | 8,500 | 1,240,000 | 36 | 118 |
| DN 700 | 28" | 280 | 40,000 | 9,900 | 1,420,000 | 36 | 118 |
| DN 750 | 30" | 320 | 45,000 | 11,300 | 1,590,000 | 35 | 115 |
| DN 800 | 32" | 360 | 50,000 | 12,700 | 1,770,000 | 34 | 112 |
| DN 850 | 34" | 400 | 55,000 | 14,200 | 1,950,000 | 33 | 109 |
| DN 900 | 36" | 450 | 66,000 | 15,900 | 2,337,000 | 36 | 118 |
| DN 950 | 38" | 500 | 70,000 | 17,700 | 2,479,000 | 34 | 112 |
| DN 1000 | 40" | 550 | 80,000 | 19,500 | 2,833,000 | 35 | 115 |
| DN 1050 | 42" | 600 | 85,000 | 21,200 | 3,010,000 | 34 | 110 |
| DN 1100 | 44" | 650 | 90,000 | 23,000 | 3,187,000 | 32 | 107 |
| DN 1150 | 46" | 700 | 95,000 | 24,800 | 3,364,000 | 34 | 110 |
| DN 1200 | 48" | 750 | 100,000 | 26,600 | 3,541,000 | 30 | 99 |

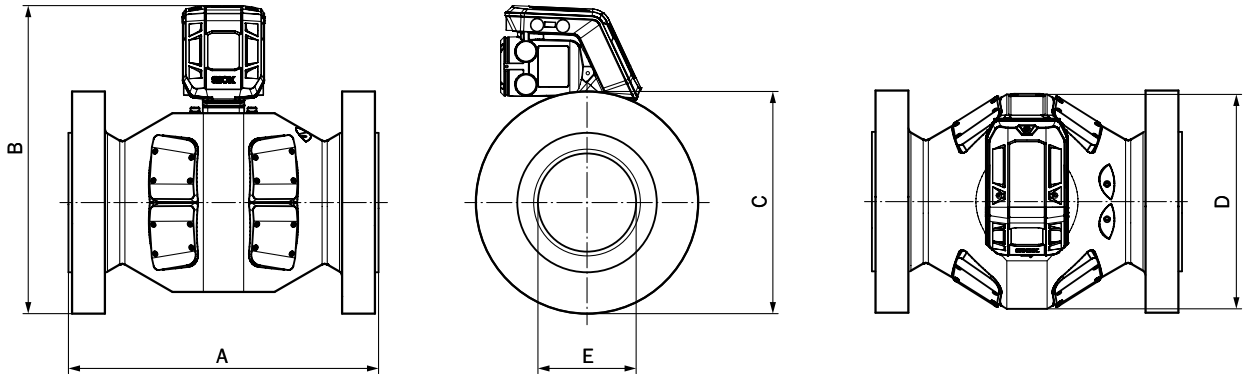
* When using an installation configuration with flow conditioner the maximum allowed gas velocity in the pipe is limited to 40 m/s (131 ft/s).

Ordering information

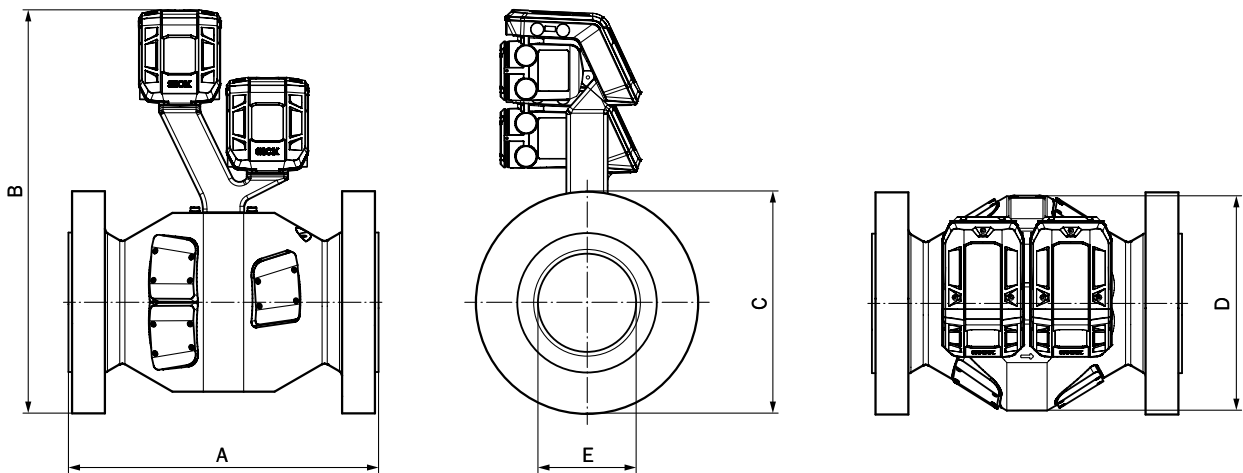
Our regional sales organization will help you to select the optimum device configuration.

Dimensional drawings (Dimensions in mm)

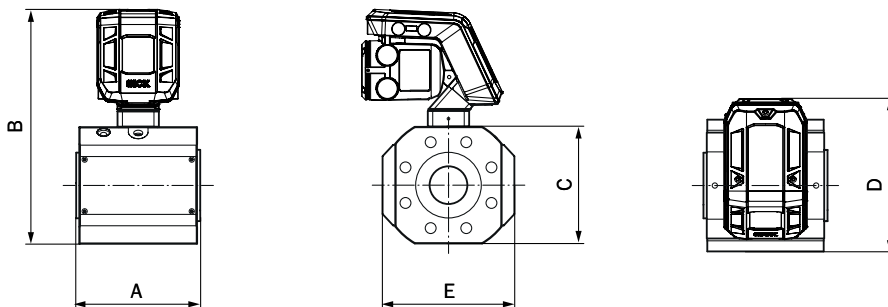
FLWSIC600-XT and FLWSIC600-XT Forte



FLWSIC600-XT 2plex and FLWSIC600-XT Quattro



FLWSIC600-XT: 3" design for up to Class 600/PN100 pressure levels



Dimensions

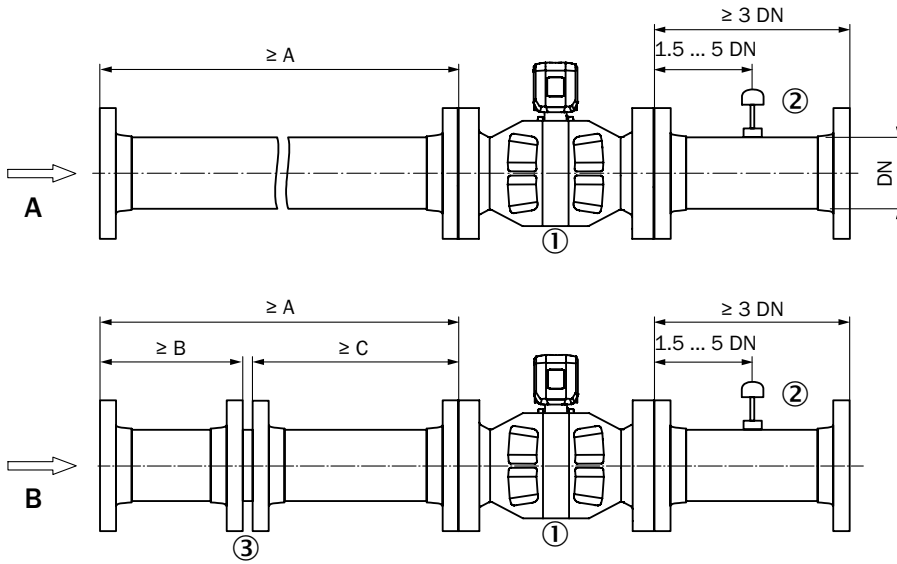
| Nominal pipe size | Connection flange | Standard | Weight | Length (A) | Hight (B) | Flange diameter (C) | Width of measuring section (D) | Internal diameter (E) | |
|-------------------|-------------------|------------|--------|------------|-----------|---------------------|--------------------------------|-----------------------|-----|
| | | | [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 |
| DN 80 | PN 16 | DIN 2633 | 75 | 240 | 454 | 200 | 205 | 73 | |
| | 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 |
| DN 100 | PN 16 | DIN 2633 | 110 | 300 | 490 | 220 | 248 | 95 | |
| | 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 |
| DN 150 | PN 16 | DIN 2633 | 140 | 450 | 540 | 285 | 330 | 142 | |
| | 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 | 600 | 617 | 340 | 415 | 190 | |
| | 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 | 750 | 691 | 405 | 420 | 235 | |
| | 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 | |
| | Cl. 300 | | 494 | | 728 | | | | 520 |
| | Cl. 600 | | 560 | | 728 | | | | 560 |
| | Cl. 900 | | 645 | | 685 | | | | 610 |
| DN 300 | PN 16 | DIN 2633 | 441 | 900 | 728 | 460 | 500 | 270 | |
| | 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 diameter (C) | Width of measuring section (D) | Internal diameter (E) | |
|---------------------------------------------------------------------------|-------------------|-----------------|--------|------------|-----------|---------------------|--------------------------------|-----------------------|--|
| | | | [kg] | [mm] | [mm] | [mm] | [mm] | [mm] | |
| 14" | Cl. 150 | ANSI B16.5 | 475 | 1,050 | 642 | 535 | 540 | 315 | |
| | Cl. 300 | | 600 | | 667 | 585 | | | |
| | Cl. 600 | | 675 | | 677 | 605 | | | |
| | Cl. 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 meters ≥ 16" an installation length of 3D is optionally available | | | | | | | | | |
| 16" | Cl. 150 | ANSI B16.5 | 672 | 762 | 844 | 595 | 610 | 360 | |
| | Cl. 300 | | 760 | | 844 | 650 | | | |
| | Cl. 600 | | 857 | | 844 | 685 | | | |
| | Cl. 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 | | | |
| | Cl. 600 | | 960 | | 820 | 745 | | | |
| | Cl. 900 | | 1,300 | 900 | 830 | 785 | | | |
| DN 450 | PN 16 | Data on request | | | | | | | |
| 20" | Cl. 150 | ANSI B16.5 | 750 | 902 | 815 | 700 | 670 | 450 | |
| | Cl. 300 | | 930 | | 853 | 775 | | | |
| | Cl. 600 | | 1,080 | | 872 | 815 | | | |
| | Cl. 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 | |
| | Cl. 300 | | 1,390 | | 978 | 915 | | | |
| | Cl. 600 | | 1,615 | | 990 | 940 | | | |
| | Cl. 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 | |
| | Cl. 300 | | 1,825 | | 1,016 | 972 | | | |
| | Cl. 600 | | 2,100 | | 1,038 | 1,016 | | | |
| | Cl. 900 | | 2,500 | 1,250 | 1,073 | 1,086 | | | |
| DN 650 | PN16 | Data on request | | | | | | | |
| 28" | Cl. 150 | ASME B16.47 | 1,950 | 1,100 | 1,027 | 927 | 862 | 630 | |
| | Cl. 300 | | 2,225 | | 1,080 | 1,035 | | | |
| | Cl. 600 | | 2,450 | | 1,100 | 1,073 | | | |
| | Cl. 900 | | 3,000 | 1,300 | 1,150 | 1,169 | | | |
| DN 700 | PN16 | Data on request | | | | | | | |

| Nominal pipe size | Connection flange | Standard | Weight | Length (A) | Hight (B) | Flange diameter (C) | Width of measuring section (D) | Internal diameter (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 | | | |
| | Cl. 600 | | 2,820 | | 1,154 | 1,130 | | | |
| | Cl. 900 | | 3,350 | 1,350 | 1,205 | 1,232 | | | |
| DN 750 | PN16 | Data on request | | | | | | | |
| 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 request | | | | | | | |
| 34" | Data on request | | | | | | | | |
| DN 850 | Data on request | | | | | | | | |
| 36" | Cl. 150 | ASME B16.47 | 3,125 | 1,250 | 1,250 | 1,169 | 1,082 | 810 | |
| | Cl. 300 | | 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 request | | | | | | | |
| 38" | Cl. 150 | ASME B16.47 | 3,800 | 1,300 | 1,310 | 1,238 | 1,160 | 855 | |
| | Cl. 300 | | 3,725 | | 1,275 | 1,169 | | | |
| | Cl. 600 | | 4,300 | | 1,325 | 1,270 | | | |
| | Cl. 900 | | Data on request | | 1,421 | 1,461 | | | |
| DN 950 | PN 16 | Data on request | | | | | | | |
| 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 | | | |
| | Cl. 600 | | 4,675 | | 1,375 | 1,321 | | | |
| | Cl. 900 | | Data on request | | 1,470 | 1,512 | | | |
| DN 1000 | PN 16 | Data on request | | | | | | | |
| 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 request | | | | | | | |
| 44" | Data on request | | | | | | | | |
| DN 1100 | Data on request | | | | | | | | |
| 46" | Data on request | | | | | | | | |
| DN 1150 | Data on request | | | | | | | | |
| 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 | | | |
| | Cl. 900 | | 12,100 | 1,900 | 1,711 | 1,785 | | | |
| DN 1200 | PN 16 | Data on request | | | | | | | |

Instruction for installation

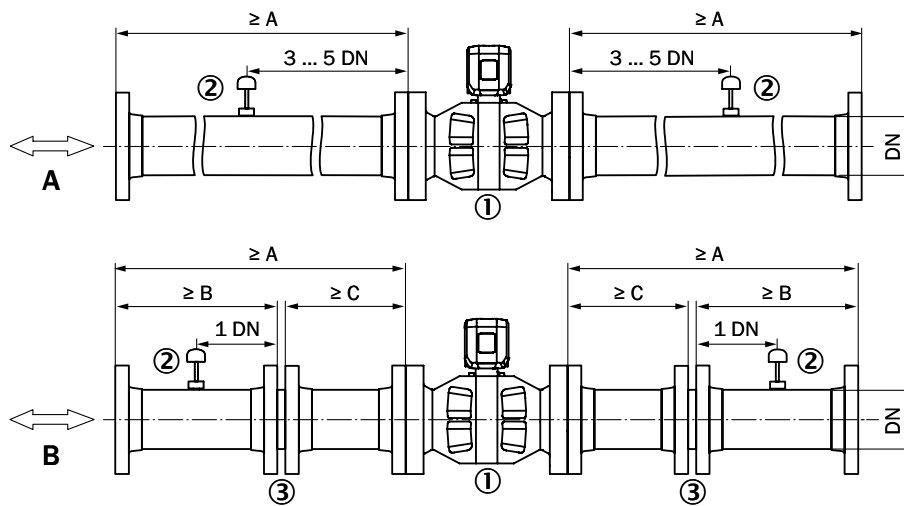
Installation of FLOWSIC600-XT in pipeline for **unidirectional** use



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

| Configuration 1 (A) | | | Configuration 2 (B) | | | | |
|---------------------------|------------|-------|---------------------------|---------------|-------|------|------|
| Number of measuring paths | OIML R 137 | A | Number of measuring paths | OIML R 137 | A | B | 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 FLWSIC600-XT in pipeline for **bidirectional** use

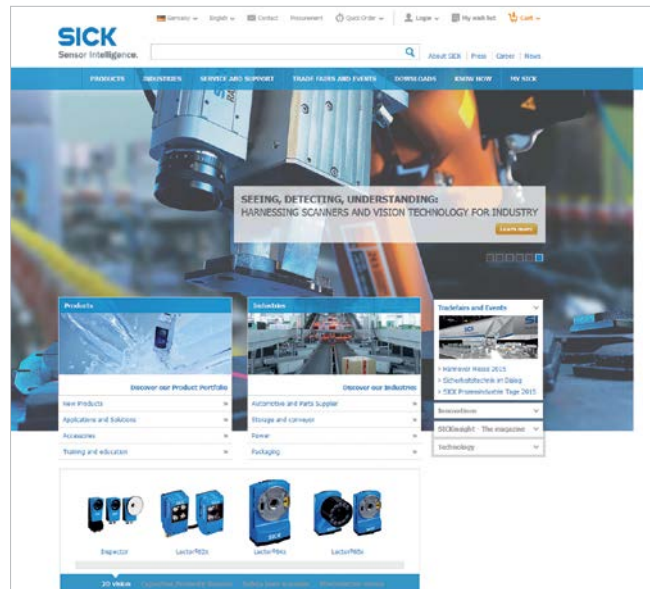


- ① FLWSIC600-XT
- ② Alternative temperature measurement points
- ③ Flow conditioner

| Configuration 1 (A) | | | Configuration 2 (B) | | | | |
|---------------------------|------------|-------|---------------------------|---------------|-------|------|------|
| Number of measuring paths | OIML R 137 | A | Number of measuring paths | OIML R 137 | A | B | C |
| 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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