

# Flow Measurement

## SITRANS F US Inline

### Flowmeter SONOKIT (with FUS060 or FUS080)

#### Selection and Ordering data

##### Additional information

Please add „-Z“ to Article No. and specify Order code(s) and plain text.

##### Material certificate

EN 10204-3.1, transducer body material **F30**  
 EN 10204-3.1, transducer holder material **F31**  
 EN 10204-3.1, mounting plate material **F32**

##### Tag name plate

Stainless steel TAG plate (1 x 24 x 80 mm), wire fixed. Font size depends on text length: 8 mm for 1 ... 10 characters, 4 mm for 11 ... 20 characters (specify in plain text). **Y17**

##### Accessories

Alignment rods-set for DN 100 ... 650 (4" ... 26")  
 Ø = 25 mm, L = 500 mm, 3 pcs. **S10**

Alignment rods-set for DN 700 ... 1900 (28" ... 76")  
 Ø = 25 mm, L = 500 mm, 6 pcs. **S11**

Alignment rods-set for DN 2000 ... 2400 (80" ... 96")  
 Ø = 25 mm, L = 500 mm, 8 pcs. **S12**

Spanner key for transducer mounting type SONO 3200  
 O-ring type **T11**

Tool set with various mounting/spare parts for SONOKIT installation **T12**

#### Operating instructions

| Description                 | Article No.        |
|-----------------------------|--------------------|
| SITRANS FUS060              |                    |
| • English                   | <b>A5E01204521</b> |
| • German                    | <b>A5E02123845</b> |
| SITRANS FUS080              |                    |
| • English                   | <b>A5E03059912</b> |
| • German                    | <b>A5E31628428</b> |
| • Spanish                   | <b>A5E31628493</b> |
| • French                    | <b>A5E31628438</b> |
| SITRANS F US SONOKIT 1-path |                    |
| • English                   | <b>A5E00814557</b> |
| • German                    | <b>A5E02610428</b> |
| • Spanish                   | <b>A5E02608231</b> |
| • French                    | <b>A5E02610419</b> |

This device is shipped with a Quick Start guide and a CD containing further SITRANS F US literature.

All literature is also available for free at:  
<http://www.siemens.com/flowdocumentation>



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[www.pia-selector.automation.siemens.com](http://www.pia-selector.automation.siemens.com)

# Flow Measurement SITRANS F US Inline

## Flowmeter SONOKIT (with FUS060 or FUS080)

3

| Selection and Ordering data   |                                     | Article No.     | Ord. code |
|---|-------------------------------------|-----------------|-----------|
| <b>SITRANS F US SONOKIT<br/>2-path sensor</b>   |                                     | <b>7ME3220-</b> |           |
| <b>Diameter</b>   | <b>Qn setting [m<sup>3</sup>/h]</b> |                 |           |
| DN 200 (8")   | 380                                 | <b>2 F</b>      |           |
| DN 250 (10")  | 600                                 | <b>2 K</b>      |           |
| DN 300 (12")  | 850                                 | <b>2 P</b>      |           |
| DN 350 (14")  | 1000                                | <b>2 T</b>      |           |
| DN 400 (16")  | 1300                                | <b>3 B</b>      |           |
| DN 450 (18")  | 1700                                | <b>3 F</b>      |           |
| DN 500 (20")  | 2200                                | <b>3 K</b>      |           |
| DN 550 (22")  | 2600                                | <b>3 P</b>      |           |
| DN 600 (24")  | 3200                                | <b>3 T</b>      |           |
| DN 650 (26")  | 3600                                | <b>4 B</b>      |           |
| DN 700 (28")  | 4200                                | <b>4 F</b>      |           |
| DN 750 (30")  | 4800                                | <b>4 K</b>      |           |
| DN 800 (32")  | 5500                                | <b>4 P</b>      |           |
| DN 900 (36")  | 7500                                | <b>5 B</b>      |           |
| DN 1000 (40")   | 9000                                | <b>5 K</b>      |           |
| DN 1100 (44")   | 10 000                              | <b>5 P</b>      |           |
| DN 1200 (48")   | 13 200                              | <b>5 T</b>      |           |
| <b>Only for FUS060</b>  |                                     |                 |           |
| DN 1300 (52")   | 14 000                              | <b>6 A</b>      |           |
| DN 1400 (56")   | 16 800                              | <b>6 C</b>      |           |
| DN 1500 (60")   | 19 000                              | <b>6 E</b>      |           |
| DN 1600 (64")   | 22 800                              | <b>6 G</b>      |           |
| DN 1700 (68")   | 25 000                              | <b>6 J</b>      |           |
| DN 1800 (72")   | 27 600                              | <b>6 L</b>      |           |
| DN 1900 (76")   | 31 000                              | <b>6 N</b>      |           |
| DN 2000 (80")   | 36 000                              | <b>6 Q</b>      |           |
| DN 2100 (84")   | 37 000                              | <b>6 S</b>      |           |
| DN 2200 (88")   | 42 000                              | <b>6 U</b>      |           |
| DN 2300 (92")   | 45 000                              | <b>6 W</b>      |           |
| DN 2400 (96")   | 51 000                              | <b>7 A</b>      |           |
| DN 2500 (100")  | 53 000                              | <b>7 C</b>      |           |
| DN 2600 (104")  | 60 000                              | <b>7 E</b>      |           |
| DN 2700 (108")  | 62 000                              | <b>7 G</b>      |           |
| DN 2800 (112")  | 72 000                              | <b>7 J</b>      |           |
| DN 2900 (116")  | 71 000                              | <b>7 L</b>      |           |
| DN 3000 (120")  | 78 000                              | <b>7 N</b>      |           |
| DN 3100 (124")  | 82 000                              | <b>7 Q</b>      |           |
| DN 3200 (128")  | 85 000                              | <b>7 S</b>      |           |
| DN 3300 (132")  | 92 000                              | <b>7 U</b>      |           |
| DN 3400 (136")  | 100 000                             | <b>7 W</b>      |           |
| DN 3500 (140")  | 100 000                             | <b>8 A</b>      |           |
| DN 3600 (144")  | 110 000                             | <b>8 C</b>      |           |
| DN 3700 (148")  | 120 000                             | <b>8 E</b>      |           |
| DN 3800 (152")  | 130 000                             | <b>8 G</b>      |           |
| DN 3900 (156")  | 130 000                             | <b>8 J</b>      |           |
| DN 4000 (160")  | 144 000                             | <b>8 L</b>      |           |
| <b>Installation method<sup>2)</sup></b>   |                                     |                 |           |
| Empty pipe (incl. transducer holder and mounting plates). Alignment rods and tools must be ordered as accessories.  |                                     | <b>A</b>        |           |
| Hot tap, mounting under pressure (mounting plates <b>not</b> incl.). Special mounting tools to be ordered separately.                                       |                                     | <b>B</b>        |           |
| SONOKIT for tapping band (DN 200 ... DN 1800) (transducer holder and mounting plates <b>not</b> incl., tapping band to be ordered separately) <sup>1)</sup> |                                     | <b>C</b>        |           |

<sup>1)</sup> Tapping band via special request

<sup>2)</sup> Mounting tools must be ordered separately as "-Z" options

| Selection and Ordering data  |  | Article No.     | Ord. code |
|--|--|-----------------|-----------|
| <b>SITRANS F US SONOKIT<br/>2-path sensor</b>  |  | <b>7ME3220-</b> |           |
| <b>Transducer holder</b>   |  |                 |           |
| None (for tapping band)  |  | <b>0</b>        |           |
| Carbon steel, length = 160 mm, mounting plates in carbon steel   |  | <b>1</b>        |           |
| Stainless steel, length = 160 mm, mounting plates in stainless steel   |  | <b>2</b>        |           |
| Stainless steel, length = 230 mm, for concrete pipe (DN 600 ... DN 4000)   |  | <b>3</b>        |           |
| <b>Transducer type and approval</b>  |  |                 |           |
| IP67 (NEMA 4X/6) PA housing, PN 40, O-ring, 100 °C (212 °F), no approval   |  | <b>1</b>        |           |
| IP68 SS housing, PN 40, O-ring, 180 °C (356 °F), EEx d, ATEX approval (only with standard FUS060)                          |  | <b>2</b>        |           |
| IP68 PA housing, Sylgard potting kit, PN 40, SS, O-ring, 100 °C (212 °F), no approval                                      |  | <b>3</b>        |           |
| IP68 SS housing, Sylgard potting kit, PN 40, SS, O-ring, 200 °C (392 °F), no approval                                      |  | <b>4</b>        |           |
| IP67 SS housing, PN 40, O-ring, 190 °C (374 °F), Ex i, ATEX approval (only with FUS060 Ex)                                 |  | <b>5</b>        |           |
| <b>Cable gland entires</b>   |  |                 |           |
| Cable glands M20 in transducers and in transmitter M25/20/16 x 1.5 (FUS080 only M20)                                       |  | <b>1</b>        |           |
| Cable glands ½" NPT in transducers and in transmitter (only with FUS060)   |  | <b>2</b>        |           |
| <b>Transmitter version of SITRANS FUS060</b><br>(only DN 200 ... 4000 (8" ... 160"))                                       |  |                 |           |
| IP65 (NEMA 4), 120/230 V AC  |  | <b>N</b>        |           |
| IP65 (NEMA 4), 24 V AC/DC  |  | <b>P</b>        |           |
| IP65 (NEMA 4), 24 V AC/DC Ex version   |  | <b>Q</b>        |           |
| <b>Transmitter version of SITRANS FUS080</b><br>(only DN 200 ... 1200 (8" ... 48"))  |  |                 |           |
| PDM software tool and IrDA-adapter, which are needed for settings update, to be ordered separately, see FUS080 accessories |  |                 |           |
| IP67/NEMA 4X/6 115 ... 230 V AC  |  | <b>U</b>        |           |
| IP67/NEMA 4X/6 3.6 V battery version, incl. dual battery pack  |  | <b>V</b>        |           |
| IP67/NEMA 4X/6 115 ... 230 V AC, incl. 3.6 V single battery backup   |  | <b>W</b>        |           |
| IP67/NEMA 4X/6 3.6 V battery version (no battery pack included) <sup>4)</sup>  |  | <b>X</b>        |           |
| <b>Transmitter output module</b>   |  |                 |           |
| <u>Transmitter SITRANS FUS080:</u>   |  |                 |           |
| Pulse and/or alarm output (standard for FUS080).   |  | <b>A</b>        |           |
| <u>Transmitter SITRANS FUS060:</u>   |  |                 |           |
| HART, 1 pulse output, 1 relay  |  | <b>B</b>        |           |
| HART Ex version, 1 pulse output, 1 relay   |  | <b>C</b>        |           |
| PROFIBUS PA, 1 pulse/frequency   |  | <b>D</b>        |           |

# Flow Measurement

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### Flowmeter SONOKIT (with FUS060 or FUS080)

#### Selection and Ordering data

#### SITRANS F US SONOKIT 2-path sensor

#### Transducer coaxial cables (with FUS080 only, 15 and 30 m, 70°C (158 °F) cable types)

4 x 3 m, max. 70 °C (158 °F), the only option for Ex i

4 x 15 m, max. 70 °C (158 °F)

4 x 30 m, high temp. max. 200 °C (392 °F)

4 x 30 m, max. 70 °C (158 °F)

4 x 60 m, max. 70 °C (158 °F) (up to DN 3000)

4 x 90 m, max. 70 °C (158 °F) (up to DN 3000)

4 x 120 m, max. 70 °C (158 °F) (up to DN 3000)

4 x 3 m, high temp. max. 200 °C (392 °F),  
the only option for Ex i

4 x 15 m, high temp. max. 200 °C (392 °F)

#### Special version (add Order code):

No transducer cable, cable length 4 x 3 m,  
the only option for Ex i

No transducer cable, cable length 4 x 15 m

No transducer cable, cable length 4 x 30 m

No transducer cable, cable length 4 x 60 m  
(up to DN 3000)

No transducer cable, cable length 4 x 90 m  
(up to DN 3000)

No transducer cable, cable length 4 x 120 m  
(up to DN 3000)

Article No. Ord. code

7ME3220-

|   |       |
|---|-------|
| 0 |       |
| 1 |       |
| 2 |       |
| 3 |       |
| 4 |       |
| 5 |       |
| 6 |       |
| 7 |       |
| 8 |       |
| 9 | R 0 A |
| 9 | R 0 B |
| 9 | R 0 C |
| 9 | R 0 D |
| 9 | R 0 E |
| 9 | R 0 F |

#### Selection and Ordering data

Order code

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F30

EN 10204-3.1, transducer holder material

F31

EN 10204-3.1, mounting plate material

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#### Tag name plate

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11 ... 20 characters (specify in plain text).

Y17

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Ø = 25 mm, L = 500 mm, 3 pcs.

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Alignment rods-set for DN 800 ... 2100 (32" ... 84")  
Ø = 25 mm, L = 500 mm, 6 pcs.

S11

Alignment rods-set for DN 2200 ... 4000 (88" ... 160")  
Ø = 25 mm, L = 500 mm, 8 or 10 pcs.

S12

Spanner key for transducer mounting type  
SONO 3200 O-ring type

T11

Tool set with various mounting/spare parts for  
SONOKIT installation

T12

#### Operating instructions

Description Article No.

SITRANS FUS060

• English

A5E01204521

• German

A5E02123845

SITRANS FUS080

• English

A5E03059912

• German

A5E31628428

• Spanish

A5E31628493

• French

A5E31628438

SITRANS F US SONOKIT 2-path

• English

A5E02445496

• German

A5E02554972

• Spanish

A5E02555037

• French

A5E02555044

• Czech

A5E02814192

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