

Selection and Ordering data	Order No.	Ord. code
<b>SITRANS F US SONOKIT</b> <b>1-path sensor</b>	<b>7ME3210-</b>	
<b>Diameter</b>	<b>Qn setting [m³/h]</b>	
DN 100 (4")	100	1 P
DN 125 (5")	150	1 T
DN 150 (6")	220	2 B
DN 200 (8")	380	2 F
DN 250 (10")	600	2 K
DN 300 (12")	850	2 P
DN 350 (14")	1000	2 T
DN 400 (16")	1300	3 B
DN 450 (18")	1700	3 F
DN 500 (20")	2200	3 K
DN 550 (22")	2600	3 P
DN 600 (24")	3200	3 T
DN 650 (26")	3600	4 B
DN 700 (28")	4200	4 F
DN 750 (30")	4800	4 K
DN 800 (32")	5500	4 P
DN 900 (36")	7500	5 B
DN 1000 (40")	9000	5 K
DN 1100 (44")	10000	5 P
DN 1200 (48")	13200	5 T
<u>Only for FUS060</u>		
DN 1300 (52")	14000	6 A
DN 1400 (56")	16800	6 C
DN 1500 (60")	19000	6 E
DN 1600 (64")	22800	6 G
DN 1700 (68")	25000	6 J
DN 1800 (72")	27600	6 L
DN 1900 (76")	31000	6 N
DN 2000 (80")	36000	6 Q
DN 2100 (84")	37000	6 S
DN 2200 (88")	42000	6 U
DN 2300 (92")	45000	6 W
DN 2400 (96")	51000	7 A
<b>Installation method<sup>3)</sup></b>		
Empty pipe (incl. transducer holder and mounting plates). Alignment rods and tools must be ordered as accessories.		A
Hot tap, mounting under pressure (mounting plates <b>not</b> incl.). Special mounting tools to be ordered separately.		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>		C
<b>Transducer holder</b>		
None (for tapping band)		0
Carbon steel, length = 160 mm, mounting plates in carbon steel		1
Stainless steel, length = 160 mm, mounting plates in stainless steel		2
Stainless steel, length = 230 mm, for concrete pipe (DN 600 ... DN 2400)		3
<b>Transducer type and approval</b>		
IP67 (NEMA 4X/6) PA housing, PN 40, O-ring, 100 °C (212 °F), no approval		1
IP68 SS housing, PN 40, O-ring, 180 °C (356 °F), Ex d, ATEX approval (only with standard FUS060)		2
IP68 PA housing, Sylgard potting kit, PN 40, O-ring, 100 °C (212 °F), no approval		3

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<b>SITRANS F US SONOKIT</b> <b>1-path sensor</b>	<b>7ME3210-</b>	
IP68 SS housing, Sylgard potting kit, PN 40, O-ring, 200 °C (392 °F), no approval	4	
IP67 SS housing, PN 40, O-ring, 190 °C (374 °F), Ex i type, ATEX approval (only with FUS060 Ex)	5	
<b>Cable gland entries</b>		
Cable glands M20 in transducers and in transmitter M25/20/16 x 1.5 (FUS080 only M20)	1	
Cable glands ½" NPT in transducers and in transmitter (only with FUS060)	2	
<b>Transmitter version of SITRANS FUS060</b> (only DN 100 ... 2400 (4" ... 96"))		
IP65 (NEMA 4), 120/230 V AC		N
IP65 (NEMA 4), 24 V AC/DC		P
IP65 (NEMA 4), 24 V AC/DC Ex version		Q
<b>Transmitter version of SITRANS FUS080</b> (only DN 100 ... 1200 (4" ... 48"))		
PDM software tool and IrDA-adaptor, which are needed for settings update, to be ordered separately, see FUS080 accessories		
IP67/NEMA 4X/6 115 ... 230 V AC		U
IP67/NEMA 4X/6 3.6 V battery version, incl. dual battery pack		V
IP67/NEMA 4X/6 115 ... 230 V AC, incl. 3.6 V single battery backup		W
IP67/NEMA 4X/6 3.6 V battery version (no battery pack included) <sup>2)</sup>		X
<b>Transmitter output module</b>		
<u>Transmitter SITRANS FUS080:</u>		
Pulse and/or alarm output (standard for FUS080).		A
<u>Transmitter SITRANS FUS060:</u>		
HART, 1 pulse output, 1 relay		B
HART Ex version, 1 pulse output, 1 relay		C
PROFIBUS PA, 1 pulse/frequency		D
<b>Transducer coaxial cables</b> <b>(with FUS080 only, 15 and 30 m, 70°C (158 °F) cable types)</b>		
2 x 3 m, max. 70 °C (158 °F), the only option for Ex i		0
2 x 15 m, max. 70 °C (158 °F)		1
2 x 30 m, high temp. max. 200 °C (392 °F)		2
2 x 30 m, max. 70 °C (158 °F)		3
2 x 60 m, max. 70 °C (158 °F)		4
2 x 90 m, max. 70 °C (158 °F)		5
2 x 120 m, max. 70 °C (158 °F)		6
2 x 3 m, high temp. max. 200 °C (392 °F), the only option for Ex i		7
2 x 15 m, high temp. max. 200 °C (392 °F)		8
Special version (add order code):		
No transducer cable, cable length 2 x 3 m, the only option for Ex i		9 R0A
No transducer cable, cable length 2 x 15 m		9 R0B
No transducer cable, cable length 2 x 30 m		9 R0C
No transducer cable, cable length 2 x 60 m		9 R0D
No transducer cable, cable length 2 x 90 m		9 R0E
No transducer cable, cable length 2 x 120 m		9 R0F
1) Tapping band via special request		
2) Lithium batteries are subject to special transportation regulations according to United Nations "Regulation of Dangerous Goods, UN 3090 and UN 3091". Special transport documentation is required to observe these regulations. This may influence both transport time and costs."		
3) Mounting tools must be ordered separately as "-Z"-options.		

**Selection and Ordering data**

Order code

**Additional information**

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

Material certificate

EN 10204-3.1, transducer body material	<b>F30</b>
EN 10204-3.1, transducer holder material	<b>F31</b>
EN 10204-3.1, mounting plate material	<b>F32</b>

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).	<b>Y17</b>
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Accessories

Alignment rods-set for DN 100 ... 650 (4" ... 26") Ø = 25 mm, L = 500 mm, 3 pcs.	<b>S10</b>
Alignment rods-set for DN 700 ... 1900 (28" ... 76") Ø = 25 mm, L = 500 mm, 6 pcs.	<b>S11</b>
Alignment rods-set for DN 2000 ... 2400 (80" ... 96") Ø = 25 mm, L = 500 mm, 8 pcs.	<b>S12</b>
Spanner key for transducer mounting type SONO 3200 O-ring type	<b>T11</b>
Tool set with various mounting/spare parts for SONOKIT installation	<b>T12</b>

**Operating instructions**

Description	Order No.
SITRANS FUS060	
• English	<b>A5E01204521</b>
• German	<b>A5E02123845</b>
SITRANS FUS080	
• English	<b>A5E03059912</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.

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<http://www.siemens.com/flowdocumentation>



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

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

7ME3220 -

Diameter	Qn setting [m <sup>3</sup> /h]	
DN 200 (8")	380	2 F
DN 250 (10")	600	2 K
DN 300 (12")	850	2 P
DN 350 (14")	1000	2 T
DN 400 (16")	1300	3 B
DN 450 (18")	1700	3 F
DN 500 (20")	2200	3 K
DN 550 (22")	2600	3 P
DN 600 (24")	3200	3 T
DN 650 (26")	3600	4 B
DN 700 (28")	4200	4 F
DN 750 (30")	4800	4 K
DN 800 (32")	5500	4 P
DN 900 (36")	7500	5 B
DN 1000 (40")	9000	5 K
DN 1100 (44")	10 000	5 P
DN 1200 (48")	13 200	5 T
<u>Only for FUS060</u>		
DN 1300 (52")	14 000	6 A
DN 1400 (56")	16 800	6 C
DN 1500 (60")	19 000	6 E
DN 1600 (64")	22 800	6 G
DN 1700 (68")	25 000	6 J
DN 1800 (72")	27 600	6 L
DN 1900 (76")	31 000	6 N
DN 2000 (80")	36 000	6 Q
DN 2100 (84")	37 000	6 S
DN 2200 (88")	42 000	6 U
DN 2300 (92")	45 000	6 W
DN 2400 (96")	51 000	7 A
DN 2500 (100")	53 000	7 C
DN 2600 (104")	60 000	7 E
DN 2700 (108")	62 000	7 G
DN 2800 (112")	72 000	7 J
DN 2900 (116")	71 000	7 L
DN 3000 (120")	78 000	7 N
DN 3100 (124")	82 000	7 Q
DN 3200 (128")	85 000	7 S
DN 3300 (132")	92 000	7 U
DN 3400 (136")	100 000	7 W
DN 3500 (140")	100 000	8 A
DN 3600 (144")	110 000	8 C
DN 3700 (148")	120 000	8 E
DN 3800 (152")	130 000	8 G
DN 3900 (156")	130 000	8 J
DN 4000 (160")	144 000	8 L

**Installation method<sup>2)</sup>**

- A Empty pipe (incl. transducer holder and mounting plates). Alignment rods and tools must be ordered as accessories.
- B Hot tap, mounting under pressure (mounting plates **not** incl.). Special mounting tools to be ordered separately.
- C SONOKIT for tapping band (DN 200 ... DN 1800) (transducer holder and mounting plates **not** incl., tapping band to be ordered separately)<sup>1)</sup>

<sup>1)</sup> Tapping band via special request  
<sup>2)</sup> Mounting tools must be ordered separately as "-Z" options

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

7ME3220 -

<b>Transducer holder</b>	
None (for tapping band)	0
Carbon steel, length = 160 mm, mounting plates in carbon steel	1
Stainless steel, length = 160 mm, mounting plates in stainless steel	2
Stainless steel, length = 230 mm, for concrete pipe (DN 600 ... DN 4000)	3
<b>Transducer type and approval</b>	
IP67 (NEMA 4X/6) PA housing, PN 40, O-ring, 100 °C (212 °F), no approval	1
IP68 SS housing, PN 40, O-ring, 180 °C (356 °F), EEx d, ATEX approval (only with standard FUS060)	2
IP68 PA housing, Sylgard potting kit, PN 40, SS, O-ring, 100 °C (212 °F), no approval	3
IP68 SS housing, Sylgard potting kit, PN 40, SS, O-ring, 200 °C (392 °F), no approval	4
IP67 SS housing, PN 40, O-ring, 190 °C (374 °F), Ex I, ATEX approval (only with FUS060 Ex)	5
<b>Cable gland entires</b>	
Cable glands M20 in transducers and in transmitter M25/20/16 x 1.5 (FUS080 only M20)	1
Cable glands ½" NPT in transducers and in transmitter (only with FUS060)	2
<b>Transmitter version of SITRANS FUS060</b> (only DN 200 ... 4000 (8" ... 160"))	
IP65 (NEMA 4), 120/230 V AC	N
IP65 (NEMA 4), 24 V AC/DC	P
IP65 (NEMA 4), 24 V AC/DC Ex version	Q
<b>Transmitter version of SITRANS FUS080</b> (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	U
IP67/NEMA 4X/6 3.6 V battery version, incl. dual battery pack	V
IP67/NEMA 4X/6 115 ... 230 V AC, incl. 3.6 V single battery backup	W
IP67/NEMA 4X/6 3.6 V battery version (no battery pack included) <sup>4)</sup>	X
<b>Transmitter output module</b>	
<u>Transmitter SITRANS FUS080:</u>	
Pulse and/or alarm output (standard for FUS080).	A
<u>Transmitter SITRANS FUS060:</u>	
HART, 1 pulse output, 1 relay	B
HART Ex version, 1 pulse output, 1 relay	C
PROFIBUS PA, 1 pulse/frequency	D

**Selection and Ordering data**

Order No.    Ord. code

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

7ME3220-


**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)

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

**Additional information**

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

Material certificate

EN 10204-3.1, transducer body material

EN 10204-3.1, transducer holder material

EN 10204-3.1, mounting plate material

**F30**
**F31**
**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 ... 750 (4" ... 30")  
Ø = 25 mm, L = 500 mm, 3 pcs.

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

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

**S10**
**S11**
**S12**

Spanner key for transducer mounting type

SONO 3200 O-ring type

 Tool set with various mounting/spare parts for  
SONOKIT installation

**T11**
**T12**
**Operating instructions**

Description	Order No.
SITRANS FUS060	
• English	<b>A5E01204521</b>
• German	<b>A5E02123845</b>
SITRANS FUS080	
• English	<b>A5E03059912</b>
SITRANS F US SONOKIT 2-path	
• English	<b>A5E02445496</b>
• German	<b>A5E02554972</b>
• Spanish	<b>A5E02555037</b>
• French	<b>A5E02555044</b>
• Czech	<b>A5E02814192</b>

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