Certificates and approvals	
System ATEX approval for SONO 3100 together with transmitter FUS060-Ex	ATEX II 2G Ex dem [ia/ib] IIC T6/T4/T3 or ATEX II 2G EEx d IIC T3-T6 with SONO 3200 Exd transducers (for standard FUS060 transmitter, installed outside of Ex zone) For FUS060 Ex version the transducer cable length is restricted to 3 m (9.84 ft), in order to meet requirements for electrical immunity.
Conformity certificate	The devices are supplied as standard with a Siemens Certificate of Conformity on CD
Material certificate	Material certificate according to EN 10204-3.1 is optionally available
NDT examination report	Extended material certificate is optionally available
Pressure certificate	Pressure test according EN 1024-2.3 optionally available
Calibration report	A standard calibration report is shipped with each flowmeter. Optionally available Extended accredited ISO/IEC 17025 calibration certificates
Approvals	No custody transfer approvals

The sensor SONO 3100 with transmitter FUS060 conforms to Product Family Standard EN 61326/A3 appendix A (Title: Electrical Equipment for Measurement control and laboratory use – EMC requirements).

The sensors are approved according to EU directive 97/23/EC dated 29 May 1997 regarding fluid group 1, classified in category III. Design according to EN 13480 (PED Directive).

The SONO 3100 as weld-in version does not include the flanges. Thus, it can neither be tested nor approved according to PED. After the installation, all installation-related activities (welding, pressure test etc.) are the responsibility of the customer.

Selection and Ordering data		Order No. 7ME3100-	Order code
SITRANS F US SONO 3100 sensor 2-track			
Diameter	**Qn setting [m^3/h]**		
DN 100 (4")	28	1N	
DN 100 (4")	100	1P	
DN 100 (4")	220	1R	
DN 125 (5")	44	1S	
DN 125 (5")	150	1T	
DN 125 (5")	350	1V	
DN 150 (6")	64	2A	
DN 150 (6")	220	2B	
DN 150 (6")	500	2D	
DN 200 (8")	110	2E	
DN 200 (8")	380	2F	
DN 200 (8")	900	2H	
DN 250 (10")	180	2J	
DN 250 (10")	600	2K	
DN 250 (10")	1300[1)]	2M	
DN 300 (12")	250	2N	
DN 300 (12")	850	2P	
DN 300 (12")	2000[1)]	2R	
DN 350 (14")	350	2S	
DN 350 (14")	1000	2T	
DN 350 (14")	2800[1)]	2V	
DN 400 (16")	450	3A	
DN 400 (16")	1300[1)]	3B	
DN 400 (16")	3600[1)]	3D	
DN 500 (20")	1300[1)]	3J	
DN 500 (20")	2200[1)]	3K	
DN 500 (20")	4200[1)]	3M	
DN 600 (24")	1300	3S	
DN 600 (24")	3200	3T	
DN 600 (24")	4200[1)]	3V	
DN 700 (28")	2000	4E	
DN 700 (28")	4200	4F	
DN 800 (32")	4200	4N	
DN 800 (32")	5500[1)]	4P	
DN 900 (36")	4200	5A	
DN 900 (36")	7500[1)]	5B	
DN 1000 (40")	4200	5J	
DN 1000 (40")	9000[1)]	5K	
DN 1200 (48")	4200	5S	
DN 1200 (48")	13200[1)]	5T	
Flange norm and pressure rating (All sizes are not available in all pressure ratings)			
EN 1092-1			
PN 10 (DN 200 ... DN 1200)			B
PN 16 (DN 100 ... DN 1200)			C
PN 25 (DN 200 ... DN 1000)			D
PN 40 (DN 100 ... DN 500)			E
ANSI B16.5			
class 150 (DN 100 ... DN 600)			H
class 300 (DN 100 ... DN 300)			J
Pipe without flanges (weld-in version)			
PN 10 (DN 200 ... DN 1200)			P
PN 16 (DN 100 ... DN 1200)			Q
PN 25 (DN 200 ... DN 1200)			R
PN 40 (DN 100 ... DN 500)			S

Selection and Ordering data	Order No.	Order code
SITRANS F US SONO 3100 sensor 2-track	**7ME3100 -**	
Pipe and flange material		
Carbon steel (DN 100 ... 1200)	**1**	
Stainless steel (DN 100 ... 300)	**2**	
Transducer type and approval		
IP67 (NEMA 4X/6) PA housing, PN 40, O-ring, 50 mm, 100 °C (212 °F) (DN 100 ... 1200; SS and CS sensors)	**1**	
IP68 SS housing, PN 40, O-ring, 50 mm, 200 °C (392 °F) (DN 100 ... 1200; SS and CS sensors)	**2**	
IP68 SS housing, PN 40, O-ring, 50 mm, 180 °C (356 °F), Ex d ATEX approval (only with standard FUS060) (DN 100 ... 1200; SS and CS sensors)	**3**	
IP67 (NEMA 4X/6) PA housing, PN 40, flange, 88 mm, 100 °C (212 °F) (DN 100 ... 300; SS sensors)	**4**	
IP68 SS housing, PN 40, flange, 88 mm, 200 °C (392 °F) (DN 100 ... 300; SS sensors)	**5**	
IP68 SS housing, PN 40, flange, 88 mm, 180 °C (356 °F), Ex d ATEX approval (only with standard FUS060) (DN 100 ... 300; SS sensors)	**6**	
IP67 SS housing, PN 40, O-ring, 50 mm, 190 °C (374 °F), Ex i ATEX approval (only with FUS060 Ex-version)) (DN 100 ... 1200; SS and CS sensors)	**7**	
IP67 SS housing, PN 40, flange, 88 mm, 190 °C (374 °F), Ex i ATEX approval (only with FUS060 Ex-version) (DN 100 ... 300; SS sensors)	**8**	
Cable gland entries		
Cable glands M20 in transducers and in transmitter M25/20/16 x 1.5	**1**	
Cable glands ½" NPT in transducers and in transmitter	**2**	
Transmitter SITRANS FUS060		
IP65 (NEMA 4), 120/230 V AC	**N**	
IP65 (NEMA 4), 24 V AC/DC	**P**	
IP65 (NEMA 4), 24 V AC/DC ATEX Ex version	**Q**	
Module		
HART, 1 pulse output, 1 relay	**B**	
HART Ex, 1 pulse output, 1 relay	**C**	
PROFIBUS PA,1 pulse/frequency	**D**	
PROFIBUS PA, Ex, 1 pulse/frequency	**E**	
Transducer coaxial cable		
4 x 3 m, max. 70 °C (158 °F), the only option for Ex i	**0**	
4 x 15 m, max. 70 °C (158 °F)	**1**	
4 x 30 m, high temp. max. 200 °C (392 °F)	**2**	
4 x 30 m, max. 70 °C (158 °F)	**3**	
4 x 60 m, max. 70 °C (158 °F)	**4**	
4 x 90 m, max. 70 °C (158 °F)	**5**	
4 x 120 m, max. 70 °C (158 °F)	**6**	
4 x 3 m, high temp. max. 200 °C (392 °F), the only option for Ex i	**7**	
4 x 15 m, high temp. max. 200 °C (392 °F)	**8**	

This device is shipped with a Quick Start guide and the SITRANS F manual CD containing the complete manual library. Printed Operating Instructions are available for purchase via PMD.

[1] Reduced Q value during calibration (Qn setting unchanged)

Selection and Ordering data	Order code
Additional information	
Please add „**-Z**" to Order No. and specify Order code(s) and plain text.	
Calibration	
Production calibration DN 100 ... DN 1200 (with certificate)	**Included**
Theoritical calibration DN 500 ... DN 1200	**D03**
Accredited Siemens ISO/IEC 17025 calibration for DN100 to DN500/600 with Qn as selected in diameter. Verification certificate: 2 x 3 points in 10 %, 25 % and 100 % Qn (max. flow 1235/1300 m^3/h).	**D21**
Accredited Siemens ISO/IEC 17025 calibration for DN300 to DN700 with Qn as selected in diameter. Verification certificate: 2 x 3 points in 10 %, 25 % and 100 % Qn (max. flow 4200 m^3/h).	**D22**
Accredited Siemens ISO/IEC 17025 calibration for DN800 to DN1200 with Qn as selected in diameter. Verification certificate: 2 x 3 points in 10 %, 25 % and 100 % Qn (max. flow 4200 m^3/h).	**D23**
Accredited - Third Party ISO/IEC 17025 calibration for DN100 to DN600 with Qn as selected in diameter. Verification certificate: 2 x 3 points in 10 %, 25 % and 100 % Qn (max. flow 1300 m^3/h).	**D31**
Accredited - Third Party ISO/IEC 17025 calibration for DN300 to DN700 with Qn as selected in diameter. Verification certificate: 2 x 3 points in 10 %, 25 % and 100 % Qn (max. flow 4200 m^3/h).	**D32**
Accredited - Third Party ISO/IEC 17025 calibration for DN800 to DN1200 with Qn as selected in diameter. Verification certificate: 2 x 3 points in 10 %, 25 % and 100 % Qn (max. flow 7000 m^3/h).	**D33**
Material certificate	
EN 10204-3.1	**F10**
EN 10204-3.1 and 100 % NDT on weldings, DN 100 ... DN 400	**F11**
EN 10204-3.1 and 100 % NDT on weldings, DN 500 ... DN 700	**F12**
EN 10204-3.1 and 100 % NDT on weldings, DN 800 ... DN 1200	**F13**
Pressure certificate	
EN 10204-2.3	**F21**
Tag name plate	
Stainless steel tag name plate, text length depends on font size: 8 mm up to 10 characters, 4 mm up to 20 characters, or 3 mm up to 30 characters (add plain text)	**Y17**

Please also see www.siemens.com/SITRANSFordering for practical examples of ordering

Please use online Product selector to get latest updates. Product selector link:

www.pia-selector.automation.siemens.com