

## Overview



The complete flowmeter system SITRANS FC430 can be ordered for standard, hygienic or NAMUR service. All versions can be ordered for CT service, according to OIML R 117 (Liquids other than water).

SIL specified compact variants can be validated and configured for SIL 2 or SIL 3 operation. SIL 3 operation requires two flowmeters in series and monitored by a SIL-rated control system. Series mounting must not introduce cross-talk between the sensors. Refer to installation guidelines.

The flowmeter is based on the latest developments within digital signal processing technology – engineered for high measuring performance:

- Fast response to rapid changes in flow
- Fast dosing applications
- High immunity against process noise
- High turndown ratio of flowrates
- Suitable for liquid and gas service
- Easy to install, commission and maintain

FC430 is available as standard with 4 to 20 mA analog output with HART 7.2. Additional functions can be freely configured for analog, pulse, frequency, relay or status output or binary input.

The transmitter comes with a user-configurable graphical display and SensorFlash, a micro SD card for configuration backup, firmware update and data storage.

The SITRANS FC430 flowmeter system consists of a SITRANS FCS400 sensor and a SITRANS FCT030 transmitter.

## Benefits

- It is narrow and light, fitting neatly into dense piping arrangements
- Easy maintenance because modules can be exchanged rapidly
- Effective separation of measurement from plant vibration
- Highly secure operation in safety critical applications
- Non-volatile memory of all setup and operation data
- Reliable measurements due to high signal to noise ratio
- Secure, digital transfer of measurement data from the sensor
- Short overall length; easy drop-in replacement into most existing installations
- Functional Safety (SIL X). Device suitable for use in accordance with IEC 61508 and IEC 61511.

## Technical specifications

<b>Sizes</b>	DN 15 (½"), DN 25 (1"), DN 50 (2"), DN 80 (3")
<b>Accuracy</b>	± 0.10 %
<b>Repeatability</b>	± 0.05 %
<b>Flow range</b> (water @ 1 bar pressure loss)	DN 15: 3 700 kg/h (8 157 lb/h) DN 25: 11 500 kg/h (25 353 lb/h) DN 50: 52 000 kg/h (114 640 lb/h) DN 80: 136 000 kg/h (300 000 lb/h)
<b>Architecture</b>	Compact or remote configuration with selection of twelve languages including Chinese and Russian
<b>Display</b>	Full graphical display, 240 x 160 pixels
<b>Power supply</b>	20 ... 27 V DC ± 10%; 100 ... 240 V AC ± 10 %, 47 ... 63 Hz ± 10%
<b>Weight</b>	4.6 ... 50 kg
<b>Material</b>	<ul style="list-style-type: none"> <li>• Sensor           <ul style="list-style-type: none"> <li>- Wetted parts</li> <li>- Enclosure</li> </ul> </li> <li>• Transmitter</li> </ul>
	316L stainless steel or Hastelloy C22 304 stainless steel Aluminum with corrosion-resistant coating
<b>Enclosure rating</b>	IP67
<b>Pressure ratings</b>	<ul style="list-style-type: none"> <li>• Measuring tubes           <ul style="list-style-type: none"> <li>- 316L</li> <li>- Hastelloy C22</li> </ul> </li> <li>• Sensor enclosure</li> <li>• Sensor enclosure burst pressure</li> </ul>
	100 bar (1450 psi) 160 bar (2321 psi) 20 bar (DN15, DN 25) 17 bar (DN 50, DN 80) >160 bar (all sizes)
<b>Temperature ratings</b>	<ul style="list-style-type: none"> <li>• Process medium</li> <li>• Ambient</li> <li>• Display</li> </ul>
	-50 ... +200 °C (-58 ... +392 °F) -40 ... +60 °C (-40 ... +140 °F) -20 ... +60 °C (-4 ... +140 °F)
<b>Process connections</b>	<ul style="list-style-type: none"> <li>• Flanges</li> <li>• Pipe threads</li> <li>• Hygienic threads</li> <li>• Hygienic clamps</li> </ul>
	EN 1092-1 B1, EN 1092-1 D, ANSI/ASME B16.5, JIS B 2220, DIN 11864-2 ASME B1.20 (NPT), ISO228-1 G (BSPP), VCO Quick-connect DIN 11851, DIN 11864-1A, ISO 2853, SMS 1145 DIN 11864-3A, DIN 32676, ISO 2852
<b>Approvals</b>	<ul style="list-style-type: none"> <li>• Hazardous area</li> <li>• Pressure equipment</li> <li>• Hygienic</li> <li>• Custody transfer</li> <li>• Operational safety (compact system only)</li> </ul>
	ATEX, IECEx, FM, NEPSI, CSA, INMETRO PED, CRN 3A, EHEDG OIML R 117 SIL 2 Single SIL 3 Redundant system
<b>NAMUR</b>	NAMUR-compliant (e.g. NE 21, NE 41 and NE 132)
<b>I/O</b>	Up to 4 channels combining analog, relay or digital outputs and binary input
<b>Communication</b>	HART 7.2
<b>EMC performance</b>	<ul style="list-style-type: none"> <li>Emission</li> <li>Immunity</li> </ul>
	EN 55011/CISPR-11 (Class A) EN/IEC 61236-1 (Industry)
<b>Mechanical load</b>	18 to 400 Hz random The flow meter will mechanically tolerate 3.17 g RMS in all directions. Flow accuracy cannot be guaranteed under all conditions.

# Flow Measurement

## SITRANS F C

### Flowmeter SITRANS FC430

#### Selection and Ordering data

**SITRANS FC430 Digital coriolis flowmeter with SITRANS FCS400 Standard flow sensor with hygienic and flange/pipe thread connections and compact or remote mounting with FCT030 transmitter**

Click on the Article No. for the online configuration in the PIA Life Cycle Portal.

#### Sensor size, connection size

DN 15, DN 10 (1/2", 3/8")	3 F
DN 15, DN 15 (1/2", 1/2")	3 G
DN 15, DN 20 (1/2", 3/4")	3 H
DN 15, DN 25 (1/2", 1")	3 J
DN 25, DN 15 (1", 1/2")	3 K
DN 25, DN 25 (1", 1")	3 L
DN 25, DN 40 (1", 1 1/2")	3 N
DN 50, DN 40 (2", 1 1/2")	4 B
DN 50, DN 50 (2", 2")	4 C
DN 80, DN 65 (3", 2 1/2")	4 J
DN 80, DN 80 (3", 3")	4 K
DN 80, DN 100 (3", 4")	4 L

#### Process connection

EN 1092-1 B1, PN 16	A 0
EN 1092-1 B1, PN 40	A 1
EN 1092-1 B1, PN 63	A 2
EN 1092-1 B1, PN 100	A 3
EN 1092-1 B1, PN 160	B 1
EN 1092-1 D NUT, PN 40	A 5
EN 1092-1 D NUT, PN 63	A 6
EN 1092-1 D NUT, PN 100	A 7
EN 1092-1 D NUT, PN 160	A 8
ANSI B16.5-2009, class 150	D 1
ANSI B16.5-2009, class 300	D 2
ANSI B16.5-2009, class 600	D 3
ANSI B16.5-2009, class 900	D 4
ISO228-1 G pipe thread	E 1
ASME B1.20.1 NPT pipe thread	E 3
DIN 11851 hygienic screwed	F 1
DIN 32676 hygienic Tri-Clamp	G 1
DIN 11864-1A aseptic screwed	H 1
DIN 11864-2A aseptic flanged	H 2
DIN 11864-3A clamped	H 3
ISO 2852 hygienic clamped	J 1
ISO 2853 hygienic screwed	J 5
SMS 1145 hygienic screwed	K 1
12-VCO-4 quick connect	K 5
JIS B2200:2004/10K	L 2
JIS B2220:2004/20K	L 4
JIS B2220:2004/40K	L 6
JIS B2220:2004/63K	L 7

#### Wetted parts material

AISI 316L/W1.4435/W1.4404 (100 barg max.)	1
Hastelloy C22 (only for 7ME461)	3

#### Calibration/Accuracy class

0.1 % flow, 5 kg/m <sup>3</sup> density	1
0.1 % flow, 1 kg/m <sup>3</sup> density	4
Standard fraction calibration	8

#### Transmitter/DSL material & mounting style

Compact, IP67, aluminum	D
Remote, IP67, aluminum, M12	G
Remote, IP67, aluminum, T/Box	K

#### Selection and Ordering data

**SITRANS FC430 Digital coriolis flowmeter with SITRANS FCS400 Standard flow sensor with hygienic and flange/pipe thread connections and compact or remote mounting with FCT030 transmitter**

#### Ex approval

Non-Ex	◆	A
ATEX II 2GD	◆	C
IECEx GDb	◆	F
FM, Class 1, Div 1	◆	H
CSA, Class 1, Zone 1	◆	M

#### Local User Interface

Blind	◆	1
Graphical, 240 x 160 pxl	◆	3

◆ We can offer shorter delivery times for configurations designated with the Quick Ship Symbol ◆. For details see page 9/5 in the appendix.

#### Selection and Ordering data

Order code

#### Further designs

Please add "-Z" to Article No. and specify Order code(s).

#### Cable glands

Metric, no glands	◆	A01
Metric, plastic	◆	A02
Metric, brass/Ni plated		A05
Metric, stainless steel		A06
NPT, no glands		A11
NPT, Plastic		A12
NPT, brass/Ni plated		A15
NPT, stainless steel		A16

#### Software functions and CT approvals

Standard	◆	B11
CT standard		B31

#### I/O configuration Ch1

Ca 4 ... 20 mA HART active SIL certified	◆	E04
Cp 4 ... 20 mA HART passive SIL certified	◆	E05
Ca 4 ... 20 mA HART active	◆	E06
Cp 4 ... 20 mA HART passive	◆	E07

Only compact versions can be used in SIL applications.

## Selection and Ordering data

Order code

## I/O configuration Ch2, Ch3 and Ch4

None

aSignal, None, None

aSignal, aSignal, None

aSignal, aSignal, aSignal

aSignal, aSignal, Ia

aSignal, aSignal, R

aSignal, Ia, None

aSignal, Ia, Ia

aSignal, Ia, R

aSignal, R, None

aSignal, R, R

pSignal, None, None

pSignal, pSignal, None

pSignal, pSignal, pSignal

pSignal, pSignal, Ip

pSignal, pSignal, R

pSignal, Ip, None

pSignal, Ip, Ip

pSignal, Ip, R

pSignal, R, None

pSignal, R, R

aSignal, aSignal, pSignal

aSignal, aSignal, Ip

aSignal, pSignal, None

aSignal, pSignal, pSignal

aSignal, pSignal, Ia

aSignal, pSignal, Ip

aSignal, pSignal, R

aSignal, Ia, Ip

aSignal, Ip, None

aSignal, Ip, Ip

aSignal, Ip, R

pSignal, pSignal, Ia

pSignal, Ia, None

pSignal, Ia, Ia

pSignal, Ia, Ip

pSignal, Ia, R

◆ F00

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## Notes on I/O configurations:

**a or p suffix:** The I/O module is selected at ordering with either active or passive function.

**Signal:** The output can be selected for Current (0 or 4 to 20 mA), frequency or pulse function in the menu.

**I:** Discrete status input to the flowmeter. Functions are selected in the menu including 'Freeze output', 'Reset totalizer'.

**R:** Relay output for discrete status reporting. Function is selected in the menu, including 'Error', 'High flow warning'.

The MLFB structure for FC430 systems must be filled to **this level**, including "-Z" options A., B., E. and F.

## Selection and Ordering data

Order code

## Add-on options and accessories

Please add "-Z" to Article No. and specify Order code(s).

## Certificates

Pressure test certificate CRN C01

Pressure test certificate PED C02

Material certificate EN 10204-3.1 C05

Welding inspection report C07

Factory certificate to EN 10204 2.1 ◆ C10

Factory certificate to EN 10204 2.2 C11

## Cable

None L50

5 m (16.4 ft), standard with M12 plugs fitted L51

5 m (16.4 ft), standard L52

10 m (32.8 ft) standard with M12 plugs fitted L55

10 m (32.8 ft), standard L56

25 m (82 ft), standard with M12 plugs fitted L59

25 m (82 ft), standard L60

50 m (164 ft), standard with M12 plugs fitted L63

50 m (164 ft), standard L64

75 m (246 ft), standard with M12 plugs fitted L67

75 m (246 ft), standard L68

150 m (492 ft), standard with M12 plugs fitted L71

150 m (492 ft), standard L72

## Additional data

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

## Tag name

Tag name plate, stainless steel Y17

◆ We can offer shorter delivery times for configurations designated with the Quick Ship Symbol ◆. For details see page 9/5 in the appendix.

## Operating instructions for SITRANS FC430

Description	Article No.
• English	A5E03361511
• German	A5E03651143
• Spanish	A5E03651152
• French	A5E03651188
• Italian	A5E03651190
• Chinese	A5E03922773

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

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

# Flow Measurement

## SITRANS F C

### Flowmeter SITRANS FC430

Selection and Ordering data	Article No.	Ord. code
<b>SITRANS FC430 Digital coriolis flowmeter</b>	<b>7ME 4 6 2 3 -</b>	
<b>with SITRANS FCS400 Flow sensor</b>		
<b>Hygienic version with Ra &lt; 0.8 µm, 3A approved, and compact or remote mounting with FCT030 transmitter</b>		
↗ Click on the Article No. for the online configuration in the PIA Life Cycle Portal.		
<b>Sensor size, connection size</b>		
DN 15, DN 10 (½", 3/8")	3 F	
DN 15, DN 15 (½", ½")	3 G	
DN 15, DN 20 (½", ¾")	3 H	
DN 15, DN 25 (½", 1")	3 J	
DN 25, DN 25 (1", 1")	3 L	
DN 25, DN 32 (1", 1¼")	3 M	
DN 25, DN 40 (1", 1½")	3 N	
DN 50, DN 40 (2", 1½")	4 B	
DN 50, DN 50 (2", 2")	4 C	
DN 80, DN 65 (3", 2½")	4 J	
DN 80, DN 80 (3", 3")	4 K	
<b>Process connection</b>		
DIN 11851 0.8 µm hygienic screwed	F 1	
DIN 32676 0.8 µm hygienic Tri-Clamp	G 1	
DIN 11864-1 0.8 µm hygienic screwed	H 1	
DIN 11864-2A BF-A 0.8 µm hygienic screwed (metric)	H 2	
DIN 11864-3A BF-A 0.8 µm hygienic clamped	H 3	
DIN 11864-2B BF-A 0.8 µm hygienic flanged (NPS)	H 4	
ISO 2852 0.8 µm hygienic clamped	J 1	
ISO 2853 0.8 µm hygienic screwed	J 5	
<b>Wetted parts material</b>		
AISI 316L/1.4435 (40 bar max.)	1	
<b>Calibration/Accuracy class</b>		
0.1 % flow, 5 kg/m³ density	1	
0.1 % flow, 1 kg/m³ density	4	
Standard fraction calibration	8	
<b>Transmitter/DSL material and mounting style</b>		
Compact, IP67, aluminum	D	
Remote, IP67, aluminum, M12	G	
Remote, IP67, aluminum, T/Box	K	
<b>Ex approval</b>		
Non-Ex	A	
ATEX II 2GD	C	
IECEX GDb	F	
FM, Class 1, Div 1	H	
CSA, Class 1, Zone 1	M	
<b>Local User Interface</b>		
Blind	1	
Graphical, 240 x 160 pxl	3	

◆ We can offer shorter delivery times for configurations designated with the Quick Ship Symbol ◆. For details see page 9/5 in the appendix.

Selection and Ordering data	Order code
<b>Further designs</b>	
Please add "-Z" to Article No. and specify Order code(s).	
<b>Cable glands</b>	
Metric, no glands	◆ A01
Metric, plastic	◆ A02
Metric, brass/Ni plated	◆ A05
Metric, stainless steel	◆ A06
NPT, no glands	◆ A11
NPT, plastic	◆ A12
NPT, brass/Ni plated	◆ A15
NPT, stainless steel	◆ A16
<b>Software functions and CT approvals</b>	
Standard	◆ B11
CT standard	◆ B31
<b>I/O configuration Ch1</b>	
Ca 4 ... 20 mA HART active SIL certified	◆ E04
Cp 4 ... 20 mA HART passive SIL certified	◆ E05
Ca 4 ... 20 mA HART active	◆ E06
Cp 4 ... 20 mA HART passive	◆ E07
Only compact versions can be used in SIL applications.	


Selection and Ordering data	Order code	Selection and Ordering data	Order code
<b>I/O configuration Ch2, Ch3 and Ch4</b>		<b>Add-on options and accessories</b>	
None	◆ <b>F00</b>	Please add "-Z" to Article No. and specify Order code(s).	
aSignal, None, None	<b>F40</b>	<b>Certificates</b>	
aSignal, aSignal, None	<b>F41</b>	Pressure test certificate CRN	<b>C01</b>
aSignal, aSignal, aSignal	<b>F42</b>	Pressure test certificate PED	<b>C02</b>
aSignal, aSignal, Ia	<b>F43</b>	Material certificate EN 10204-3.1	<b>C05</b>
aSignal, aSignal, R	<b>F44</b>	Welding inspection report	<b>C07</b>
aSignal, Ia, None	<b>F45</b>	Factory certificate to EN 10204 2.1	◆ <b>C10</b>
aSignal, Ia, Ia	<b>F46</b>	Factory certificate to EN 10204 2.2	<b>C11</b>
aSignal, Ia, R	<b>F47</b>	<b>Cable</b>	
aSignal, R, None	<b>F50</b>	None	<b>L50</b>
aSignal, R, R	<b>F51</b>	5 m (16.4 ft), standard with M12 plugs fitted	<b>L51</b>
pSignal, None, None	<b>F60</b>	5 m (16.4 ft), standard	<b>L52</b>
pSignal, pSignal, None	<b>F61</b>	10 m (32.8 ft) standard with M12 plugs fitted	<b>L55</b>
pSignal, pSignal, pSignal	<b>F62</b>	10 m (32.8 ft), standard	<b>L56</b>
pSignal, pSignal, Ip	<b>F63</b>	25 m (82 ft), standard with M12 plugs fitted	<b>L59</b>
pSignal, pSignal, R	<b>F64</b>	25 m (82 ft), standard	<b>L60</b>
pSignal, Ip, None	<b>F65</b>	50 m (164 ft), standard with M12 plugs fitted	<b>L63</b>
pSignal, Ip, Ip	<b>F66</b>	50 m (164 ft), standard	<b>L64</b>
pSignal, Ip, R	<b>F67</b>	75 m (246 ft), standard with M12 plugs fitted	<b>L67</b>
pSignal, R, None	<b>F70</b>	75 m (246 ft), standard	<b>L68</b>
pSignal, R, R	<b>F71</b>	150 m (492 ft), standard with M12 plugs fitted	<b>L71</b>
aSignal, aSignal, pSignal	<b>F80</b>	150 m (492 ft), standard	<b>L72</b>
aSignal, aSignal, Ip	<b>F81</b>	<b>Additional data</b>	
aSignal, pSignal, None	<b>F82</b>	Please add "-Z" to Article No. and specify Order code(s) and plain text.	
aSignal, pSignal, pSignal	<b>F83</b>	<b>Tag name</b>	
aSignal, pSignal, Ia	<b>F84</b>	Tag name plate, stainless steel	<b>Y17</b>
aSignal, pSignal, Ip	<b>F85</b>	◆ We can offer shorter delivery times for configurations designated with the Quick Ship Symbol ◆. For details see page 9/5 in the appendix.	
aSignal, pSignal, R	<b>F86</b>	<b>Operating instructions for SITRANS FC430</b>	
aSignal, Ia, Ip	<b>F87</b>	<b>Description</b>	<b>Article No.</b>
aSignal, Ip, None	<b>F90</b>	• English	<b>A5E03361511</b>
aSignal, Ip, Ip	<b>F91</b>	• German	<b>A5E03651143</b>
aSignal, Ip, R	<b>F92</b>	• Spanish	<b>A5E03651152</b>
pSignal, pSignal, Ia	<b>F93</b>	• French	<b>A5E03651188</b>
pSignal, Ia, None	<b>F94</b>	• Italian	<b>A5E03651190</b>
pSignal, Ia, Ia	<b>F95</b>	• Chinese	<b>A5E03922773</b>
pSignal, Ia, Ip	<b>F96</b>	This device is shipped with a Quick Start guide and a CD containing further SITRANS F C literature.	
pSignal, Ia, R	<b>F97</b>	All literature is also available for free at: <a href="http://www.siemens.com/flowdocumentation">http://www.siemens.com/flowdocumentation</a>	
<b>Notes on I/O configurations:</b>			
<b>a or p suffix:</b> The I/O module is selected at ordering with either active or passive function.			
<b>Signal:</b> The output can be selected for Current (0 or 4 to 20 mA), frequency or pulse function in the menu.			
<b>I:</b> Discrete status input to the flowmeter. Functions are selected in the menu including 'Freeze output', 'Reset totalizer'.			
<b>R:</b> Relay output for discrete status reporting. Function is selected in the menu, including 'Error', 'High flow warning'.			
The MLFB structure for FC430 systems must be filled to <b>this level</b> , including "-Z" options A., B., E.. and F..			

# Flow Measurement

## SITRANS F C

### Flowmeter SITRANS FC430

Selection and Ordering data	Article No.	Ord. code
<b>SITRANS FC430 Digital coriolis flowmeter with SITRANS FCS400 NAMUR compliant flow sensor with flange/pipe thread connections and compact or remote mounting with FCT030 transmitter</b>	7ME 4 7 1 3 -	
Click on the Article No. for the online configuration in the PIA Life Cycle Portal.		
<b>Sensor size, Connection size</b>		
DN 15, DN 6 (½", ¼")	3 E	
DN 15, DN 10 (½", 3/8")	3 F	
DN 15, DN 15 (½", ½")	3 G	
DN 15, DN 20 (½", ¾")	3 H	
DN 15, DN 25 (½", 1")	3 J	
DN 25, DN 25 (1", 1")	3 L	
DN 25, DN 32 (1", 1¼")	3 M	
DN 25, DN 40 (1", 1½")	3 N	
DN 50, DN 40 (2", 1½")	4 B	
DN 50, DN 50 (2", 2")	4 C	
DN 80, DN 65 (3", 2½")	4 J	
DN 80, DN 80 (3", 3")	4 K	
DN 80, DN 100 (3", 4")	4 L	
<b>Process connection</b>		
EN 1092-1 B1, PN 16	A 0	
EN 1092-1 B1, PN 40	A 1	
EN 1092-1 B1, PN 63	A 2	
EN 1092-1 B1, PN 100	A 3	
EN 1092-1 B1, PN 160	B 1	
EN 1092-1 D, PN 40	A 5	
EN 1092-1 D, PN 63	A 6	
EN 1092-1 D, PN 100	A 7	
EN 1092-1 D, PN 160	A 8	
ANSI B16.5, RF, class 150	D 1	
ANSI B16.5, RF, class 300	D 2	
ANSI B16.5, RF, class 600	D 3	
ANSI B16.5, RF, class 900	D 4	
ISO228-1 G pipe thread	E 1	
ASME B1.20.1 NPT pipe thread	E 3	
DIN 11851 Hygienic screwed	F 1	
DIN 32676-C (inch) Hygienic clamped	G 1	
DIN 11864-1 Hygienic screwed	H 1	
DIN 11864-2A BF-A Hygienic flanged metric	H 2	
DIN 11864-3A Hygienic clamped	H 3	
DIN 11864-2B BF-A Hygienic flanged NPS	H 4	
ISO 2852 Hygienic clamped	J 1	
ISO 2853 Hygienic screwed	J 5	
SMS 1145 Hygienic screwed	K 1	
Swagelok Quick Connect	K 5	
JIS B2200/10K	L 2	
JIS B2200/20K	L 4	
JIS B2200/40K	L 6	
JIS B2200/63K	L 7	
<b>Wetted parts material</b>		
AISI 316L/W1.4435/W1.4404 (100 barg max.)	1	
<b>Calibration/Accuracy class</b>		
0.1 % flow, 5 kg/m³ density	1	
0.1 % flow, 1 kg/m³ density	4	
Standard fraction calibration	8	
<b>Transmitter/DSL material &amp; mounting style</b>		
Compact, IP67, aluminum	D	
Remote, IP67, aluminum, M12	G	
Remote, IP67, aluminum, T/Box	K	

Selection and Ordering data	Article No.	Ord. code
<b>SITRANS FC430 Digital coriolis flowmeter with SITRANS FCS400 NAMUR compliant flow sensor with flange/pipe thread connections and compact or remote mounting with FCT030 transmitter</b>	7ME 4 7 1 3 -	
<b>Ex approval</b>		
Non-Ex		A
ATEX II 2GD		C
IECEx GDb		F
FM, Class 1, Div 1		H
CSA, Class 1, Zone 1		M
<b>Local User Interface</b>		
Blind		1
Graphical, 240 x 160 pxl		3
<ul style="list-style-type: none"> <li>We can offer shorter delivery times for configurations designated with the Quick Ship Symbol . For details see page 9/5 in the appendix.</li> </ul>		

Selection and Ordering data	Order code
<b>Further designs</b>	
Please add "-Z" to Article No. and specify Order code(s).	
<b>Cable glands</b>	
Metric, no glands	A01
Metric, plastic	A02
Metric, brass/Ni plated	A05
Metric, stainless steel	A06
NPT, no glands	A11
NPT, plastic	A12
NPT, brass/Ni plated	A15
NPT, stainless steel	A16
<b>Software functions and CT approvals</b>	
Standard	B11
CT standard	B31
<b>I/O configuration Ch1</b>	
Ca 4 ... 20 mA HART active, SIL certified	E04
Cp 4 ... 20 mA HART passive, SIL certified	E05
Ca 4 ... 20 mA HART active	E06
Cp 4 ... 20 mA HART passive	E07
Only compact versions can be used in SIL applications.	



## Selection and Ordering data

Order code

## I/O configuration Ch2, Ch3 and Ch4

None

aSignal, None, None

aSignal, aSignal, None

aSignal, aSignal, aSignal

aSignal, aSignal, Ia

aSignal, aSignal, R

aSignal, Ia, None

aSignal, Ia, Ia

aSignal, Ia, R

aSignal, R, None

aSignal, R, R

pSignal, None, None

pSignal, pSignal, None

pSignal, pSignal, pSignal

pSignal, pSignal, Ip

pSignal, pSignal, R

pSignal, Ip, None

pSignal, Ip, Ip

pSignal, Ip, R

pSignal, R, None

pSignal, R, R

aSignal, aSignal, pSignal

aSignal, aSignal, Ip

aSignal, pSignal, None

aSignal, pSignal, pSignal

aSignal, pSignal, Ia

aSignal, pSignal, Ip

aSignal, pSignal, R

aSignal, Ia, Ip

aSignal, Ip, None

aSignal, Ip, Ip

aSignal, Ip, R

pSignal, pSignal, Ia

pSignal, Ia, None

pSignal, Ia, Ia

pSignal, Ia, Ip

pSignal, Ia, R

◆ **F00**

**F40**

**F41**

**F42**

**F43**

**F44**

**F45**

**F46**

**F47**

**F50**

**F51**

**F60**

**F61**

**F62**

**F63**

**F64**

**F65**

**F66**

**F67**

**F70**

**F71**

**F80**

**F81**

**F82**

**F83**

**F84**

**F85**

**F86**

**F87**

**F90**

**F91**

**F92**

**F93**

**F94**

**F95**

**F96**

**F97**

## Notes on I/O configurations:

**a or p suffix:** The I/O module is selected at ordering with either active or passive function.

**Signal:** The output can be selected for Current (0 or 4 to 20 mA), frequency or pulse function in the menu.

**I:** Discrete status input to the flowmeter. Functions are selected in the menu including 'Freeze output', 'Reset totalizer'.

**R:** Relay output for discrete status reporting. Function is selected in the menu, including 'Error', 'High flow warning'.

The MLFB structure for FC430 systems must be filled to **this level**, including "-Z" options A..., B..., E... and F...

## Selection and Ordering data

Order code

## Add-on options and accessories

Please add "-Z" to Article No. and specify Order code(s).

## Certificates

Pressure test certificate CRN **C01**

Pressure test certificate PED **C02**

Material certificate EN 10204-3.1 **C05**

Welding inspection report **C07**

Factory certificate to EN 10204 2.1 ◆ **C10**

Factory certificate to EN 10204 2.2 **C11**

## Cable

None **L50**

5 m (16.4 ft), standard with M12 plugs fitted **L51**

5 m (16.4 ft), standard **L52**

10 m (32.8 ft) standard with M12 plugs fitted **L55**

10 m (32.8 ft), standard **L56**

25 m (82 ft), standard with M12 plugs fitted **L59**

25 m (82 ft), standard **L60**

50 m (164 ft), standard with M12 plugs fitted **L63**

50 m (164 ft), standard **L64**

75 m (246 ft), standard with M12 plugs fitted **L67**

75 m (246 ft), standard **L68**

150 m (492 ft), standard with M12 plugs fitted **L71**

150 m (492 ft), standard **L72**

## Additional data

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

## Tag name

Tag name plate, stainless steel **Y17**

◆ We can offer shorter delivery times for configurations designated with the Quick Ship Symbol ◆. For details see page 9/5 in the appendix.












## Operating instructions for SITRANS FC430






Description	Article No.
• English	<b>A5E03361511</b>
• German	<b>A5E03651143</b>
• Spanish	<b>A5E03651152</b>
• French	<b>A5E03651188</b>
• Italian	<b>A5E03651190</b>
• Chinese	<b>A5E03922773</b>

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

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

## Accessories

Description	Article No.	
CT plug Tampor cover for CT locking. Fits over the M12 plug at both sensor and transmitter ends of the remote system cable	<b>A5E31478498</b>	
Bag of glands (metric) in black plastic <sup>1)</sup>	<b>A5E03907414</b>	
Bag of glands, (metric) in gray plastic Ex e/i <sup>1)</sup>	<b>A5E03907424</b>	
Bag of glands (metric) in AISI 316 SS Ex e/i <sup>1)</sup>	<b>A5E03907429</b>	
Bag of glands (metric) in NiPlatedBrass Ex e/i <sup>1)</sup>	<b>A5E03907430</b>	
Bag of glands (NPT) in black plastic <sup>2)</sup>	<b>A5E03907435</b>	
Bag of glands (NPT) in gray plastic Ex e/i <sup>2)</sup>	<b>A5E03907451</b>	
Bag of glands (NPT) in AISI 316 SS Ex e/i <sup>2)</sup>	<b>A5E03907467</b>	
Bag of glands (NPT) in NiPlatedBrass Ex e/i <sup>2)</sup>	<b>A5E03907473</b>	
Standard cable (non-Ex) with M12 plugs, PO insulation and PUR sleeve, gray, -40 ... +80 °C (-40 ... +176 °F)		
• 5 m (16.4 ft)	<b>A5E03914805</b>	
• 10 m (32.8 ft)	<b>A5E03914850</b>	
• 25 m (82 ft)	<b>A5E03914853</b>	
• 50 m (164 ft)	<b>A5E03914859</b>	
• 75 m (246 ft)	<b>A5E03914861</b>	
• 150 m (492 ft)	<b>A5E03914874</b>	
Standard cable (non-Ex) for termination, PO insulation and PUR sleeve, gray, -40 ... +80 °C (-40 ... +176 °F)		
• 5 m (16.4 ft)	<b>A5E03914833</b>	
• 10 m (32.8 ft)	<b>A5E03914849</b>	
• 25 m (82 ft)	<b>A5E03914854</b>	
• 50 m (164 ft)	<b>A5E03914856</b>	
• 75 m (246 ft)	<b>A5E03914864</b>	
• 150 m (492 ft)	<b>A5E03914873</b>	



Description	Article No.	
Standard cable (Ex) with M12 plugs, PO insulation and PUR sleeve, blue, -40 ... +80 °C (-40 ... +176 °F)		
• 5 m	<b>A5E03914929</b>	
• 10 m	<b>A5E03914962</b>	
• 25 m	<b>A5E03914995</b>	
• 50 m	<b>A5E03915004</b>	
• 75 m	<b>A5E03915074</b>	
• 150 m	<b>A5E03915088</b>	
Standard cable (Ex) for termination, PO insulation and PUR sleeve, blue, -40 ... +80 °C (-40 ... +176 °F)		
• 5 m	<b>A5E03914945</b>	
• 10 m	<b>A5E03914973</b>	
• 25 m	<b>A5E03914984</b>	
• 50 m	<b>A5E03915015</b>	
• 75 m	<b>A5E03915057</b>	
• 150 m	<b>A5E03915100</b>	
Suitcase for comprehensive sales support and training for FC430	<b>A5E31467598</b>	
It comes in a special suitcase with a fan implemented that allows the flowmeter to demonstrate airflow.		
Suitcase for comprehensive sales support and training for FC410.	<b>A5E33219071</b>	
It comes in a special suitcase with an S7-1200 PLC and HMI touch-screen display. The operating code is open-source and can be copied to customers to assist with system integration.		
Service toolkit for field maintenance of transmitter and sensor components. Contains all hand tools necessary for maintenance. Other tools may be required for installation.	<b>A5E03722877</b>	



## Flow Measurement

### SITRANS F C

#### Flowmeter - Accessories/Spare parts


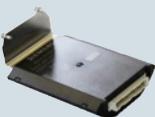
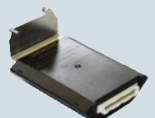








Description	Article No.	
Heating Jacket, indoor use, 0 ... 200 °C (32 ... 392 °F) max. temperature. Complete with 5 m (16.4 ft) high temperature cable fitted. Dedicated plug connection to controller • 230 V AC - DN 15 electric - DN 25 electric - DN 50 electric - DN 80 electric • 115 V AC - DN 15 electric - DN 25 electric - DN 50 electric - DN 80 electric	A5E33035287 A5E33035324 A5E33035325 A5E33035336 A5E32877520 A5E32877556 A5E32877557 A5E32877561	
Heating jacket controller, IP65. Digital display for 0 ... 200 °C (32 ... 392 °F) control setpoint • 230 V AC • 115 V AC	A5E03839193 A5E03839194	


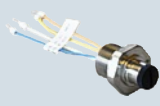



<sup>1)</sup> 2 pcs M20; 1 pce M25 with single and dual cable inserts

<sup>2)</sup> 2 pcs ½" NPT; 1 pce ½" NPT with single and dual cable inserts






Description	Dimension	Article No.
Mating parts for hygienic fittings DIN 11851 Includes: • 2 unions • 2 mating parts (for welding in) • 2 EPDM gaskets	DN 10	<b>FDK:085U1016</b>
	DN 15	<b>FDK:085U1017</b>
	DN 25	<b>FDK:085U1019</b>
	DN 32	<b>FDK:085U1020</b>
	DN 40	<b>FDK:085U1021</b>
	DN 50	<b>FDK:085U1022</b>
Mating parts for hygienic clamp ISO 2852 Includes: • 2 clamps • 2 mating parts • 2 EPDM gaskets	25 mm	<b>FDK:085U1029</b>
	40 mm	<b>FDK:085U1031</b>
	50 mm	<b>FDK:085U1032</b>
2 EPDM gaskets with collar for mounting set DIN 11851	DN 10	<b>FDK:085U1006</b>
	DN 15	<b>FDK:085U1007</b>
	DN 25	<b>FDK:085U1009</b>
	DN 32	<b>FDK:085U1010</b>
	DN 40	<b>FDK:085U1011</b>
	DN 50	<b>FDK:085U1012</b>
	DN 65	<b>FDK:085U1013</b>

**Spare parts - transmitter FCT030**

Description	Article No.	
Display and keypad assembly with firewire connection to the transmitter module <sup>1)</sup>	<b>A5E03548971</b>	
Sensor interface (Compact). Front end flow calculator and process detection. SIL 3 approved <sup>1)</sup>	<b>A5E03549142</b>	
Sensor interface (Remote); barrier unit for high speed digital communication and Ex ib power supply to remote front end DSL module	<b>A5E03549098</b>	
Display lid in painted aluminum with Ex glass plate and o-ring seal	<b>A5E03549344</b>	
Transmitter cassette (active) with SIL approved 4 ... 20 mA output and HART 7.2 <sup>1)</sup>	<b>A5E03549357</b>	
Transmitter cassette (passive) with SIL approved 4 ... 20 mA output and HART 7.2 <sup>1)</sup>	<b>A5E03549383</b>	
Bag of loose spare parts; including cable strain relief components, mounting tool, seals and gasket, assorted screws and washers, hex cap nut, blind plugs, and o-rings	<b>A5E03549396</b>	
Power supply 240 V AC, 47 ... 63 Hz 24 ... 90 V DC	<b>A5E03549413</b>	
Blind lid in painted aluminum with o-ring seal	<b>A5E03549429</b>	
I/O assembly Advise Order code F00 to F97 from Selection and Ordering data <sup>2)</sup>	<b>A5E03939114</b>	
SensorFlash (micro SD card)	<b>A5E03915258</b>	

Description	Article No.	
Mounting bracket - FCT030; in painted aluminum for pipe or wall mounting of transmitter FCT030 remote version. Including lock ring, pressure pads and seal cap	<b>A5E03906091</b>	
M12 option for sensor housing in stainless steel. Pre-wired and potted to replace M12 socket in DSL housing	<b>A5E03906095</b>	
M12 option - remote - in painted aluminum. Pre-wired and potted replacement M12 connection for FCT030 transmitter remote version	<b>A5E03906104</b>	
Remote terminal house - M20	<b>A5E03906112</b>	
Remote terminal house - NPT - in painted aluminum for sensor cable termination at FCT030 transmitter remote version. Pre-wired and potted	<b>A5E03906130</b>	

**Spare parts - sensor FCS400**

Description	Article No.	
Blind lid in painted aluminum with o-ring seal	<b>A5E03549295</b>	
Frontend cassette Spare part frontend cassette for remote version of FC430 and cassette for FC410 <sup>1)</sup>	<b>A5E03549191</b>	
Sensor housing metric	<b>A5E03549313</b>	
Sensor housing NPT in painted aluminum	<b>A5E03906080</b>	
Bag of loose parts for sensor; including cable strain relief components, washer, seals, o-rings, and assorted screws	<b>A5E03549324</b>	

<sup>1)</sup> The system firmware bundle must be stated in the "Remark" field when ordering, to ensure compatibility of the system. The FW revision is found on the product label for FC430 and FC410.

Further for FC430 the firmware bundle can be found in the local display in the menu items 3.1.10. e.g. "2.02.01-02"

<sup>2)</sup> The I/O configuration must be stated in the "Remark" field. The I/O configuration is found in the F option of the ordering code. e.g. code "F40" for ordering Ch2 Active Current/Freq/Pulse, Ch3 Active Current/Freq/Pulse, Ch4 Active Input