

# SITRANS F flowmeters

## SITRANS F M

### MAGFLO MAG 3100/3100 Ex

#### Overview



The SITRANS F M MAGFLO MAG 3100 is an electromagnetic flow sensor in a large variety that meets the demands of almost every flow application.

#### Benefits

- Wide range of sizes: DN 15 ... DN 2000 (½" ... 78")
- Wide pressure range: PN 6 ... PN 100 ANSI Class 150 / 300, AS 2129 / AS 4087. On request up to 690 bar (10000 psi)
- Wide range of electrode and liner material to fit even the most extreme process media
- Fully welded construction provides a ruggedness that suits the toughest applications and environments
- Easy commissioning, the SENSORPROM unit automatically updates settings.
- Designed to allow patented MAGFLO in-situ verification using the SENSORPROM fingerprints.

#### Application

The main applications of the SITRANS F M MAGFLO electromagnetic flow sensors can be found in the following fields:

- Process industry
- Chemical industry
- Steel industry
- Mining
- Utility
- Power generation & distribution
- Oil & gas / HPI
- Water & waste water

#### Design

The sensor is built up of a stainless steel pipe, 2 coils, 2 electrodes, an isolated liner, a housing and one of different flange connections.

- Ex ATEX version for hazardous areas (MAG 3100 Ex only)
- High temperature sensor for applications with temperatures up to 180 °C (356 °F)
- Approvals for PTB, OIML R75 and OIML R117
- Meets EEC directives: PED, 97/23/EC pressure directive for EN1092-1 flanges
- Build-in length according to ISO 13359 - Please note new build-in length DN 500 to DN 2000
- Simple onsite or factory upgrade to IP68/NEMA 6P of a standard sensor.

#### Mode of operation

The flow measuring principle is based on Faraday's law of electromagnetic induction where the sensor converts the flow into an electrical voltage proportional to the velocity of the flow.

#### Integration

The complete flowmeter consists of a flow sensor and an associated transmitter MAG 5000, 6000 and 6000 I.

The flexible communication concept USM II simplifies integration and update to a variety of fieldbus systems such as HART, PROFIBUS DP & PA, MODBUS RTU/RS485.

#### Technical specifications

| Measuring principle                                                                                                                                     | Electromagnetic induction                                                                                                                                                                                                                                                                    |
|---------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Excitation frequency                                                                                                                                    |                                                                                                                                                                                                                                                                                              |
| • MAG 3100                                                                                                                                              | <ul style="list-style-type: none"> <li>• DN 15 ... 65 (½" ... 2½"): 12.5 Hz</li> <li>• DN 80 ... 150 (3" ... 6"): 6.25 Hz</li> <li>• DN 200 ... 1200 (8" ... 48"): 3.125 Hz</li> <li>• DN 1400 ... 2000 (54" ... 78"): 1.57 Hz</li> </ul>                                                    |
| • MAG 3100 Ex                                                                                                                                           | <ul style="list-style-type: none"> <li>• DN 15 ... 65 (½" ... 2½"): 6.25 Hz</li> <li>• DN 80 ... 100 (3" ... 4"): 3.125 Hz</li> <li>• DN 125 ... 300 (5" ... 12"): 1.063 Hz</li> <li>• DN 350 ... 1200 (14" ... 48"): 3.125 Hz</li> <li>• DN 1400 ... 2000 (54" ... 78"): 1.57 Hz</li> </ul> |
| Process connection                                                                                                                                      |                                                                                                                                                                                                                                                                                              |
| Nominal size                                                                                                                                            | DN 15 ... DN 2000 (½" ... 78")                                                                                                                                                                                                                                                               |
| Flanges                                                                                                                                                 |                                                                                                                                                                                                                                                                                              |
| <ul style="list-style-type: none"> <li>• Standard EN 1092-1, raised face (EN 1092-1, DIN 2501 &amp; BS 4504 have the same mating dimensions)</li> </ul> | <ul style="list-style-type: none"> <li>• DN 15 ... 50 (½" ... 2"): PN 40 (580 psi)</li> <li>• DN 65 ... 150 (2½" ... 6"): PN 16 (232 psi)</li> <li>• DN 200 ... 1000 (8" ... 40"): PN 10 (145 psi)</li> <li>• DN 1200 ... 2000 (48" ... 78"): PN 6 (87 psi)</li> </ul>                       |

#### Technical specifications (continued)

|                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|--------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| • Option                             | <ul style="list-style-type: none"> <li>• DN 25 ... 80 (1" ... 3"): 1) PN 100 (1450 psi)</li> <li>• DN 50 ... 200 (2" ... 8"): 1) PN 63 (913 psi)</li> <li>• DN 65 ... 1000 (2½" ... 40"): PN 6 (87 psi)</li> <li>• DN 65 ... 150 (2½" ... 6"): PN 16 (232 psi)</li> <li>• DN 65 ... 600 (2½" ... 25"): PN 40 (580 psi)</li> <li>• DN 200 ... 600 (8" ... 24"): PN 25 (362 psi)</li> <li>• DN 200 ... 2000 (8" ... 78"): PN 16 (232 psi)</li> <li>• DN 1200 ... 2000 (48" ... 78"): PN 10 (145 psi)</li> </ul> |
| • ANSI B16.5 (~BS 1560), raised face | <ul style="list-style-type: none"> <li>¾" ... 24": Class 150 (20 bar (290 psi))</li> <li>¾" ... 24": Class 300 (50 bar (725 psi))</li> <li>Higher ratings on request</li> <li>28" ... 78": Class D (10 bar)</li> <li>¾" ... 48": Table E</li> </ul>                                                                                                                                                                                                                                                           |
| • AWWA C-207, flat face              | • PN 16 (DN 50 ... 1200, 14 bar (203 psi))                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| • AS 2129, raised face               | • PN 21 (DN 50 ... 600, 21 bar (304 psi))                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| • AS 4087, raised face               | • PN 35 (DN 50 ... 600, 35 bar (508 psi))                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |

#### Rated operating conditions

##### Ambient conditions

##### Ambient temperature<sup>2)</sup>

|                       |                                   |
|-----------------------|-----------------------------------|
| • Remote transmitter  | -40 ... +100 °C (-40 ... +212 °F) |
| • Compact transmitter |                                   |
| - MAG 5000/MAG 6000   | -20 ... +50 °C (-4 ... +122 °F)   |
| - MAG 6000 I          | -20 ... +60 °C (-4 ... +140 °F)   |

Operating pressure [abs. bar]  
(maximum operating pressure decreases with increasing operating temperature and with stainless steel flanges)

##### Liner

|            |                                      |
|------------|--------------------------------------|
| • Neoprene | 0.01 ... 100 bar (0.15 ... 1450 psi) |
| • EPDM     | 0.01 ... 40 bar (0.15 ... 580 psi)   |
| • Linatex® | 0.01 ... 40 bar (0.15 ... 580 psi)   |
| • Ebonite  | 0.01 ... 100 bar (0.15 ... 1450 psi) |

##### PTFE Teflon MAG 3100

|                              |                                                         |
|------------------------------|---------------------------------------------------------|
| - DN 15 ... 600 (½" ... 24") | Max. 100 °C (212 °F):<br>0.3 ... 50 bar (4 ... 725 psi) |
| - DN 15 ... 300 (½" ... 12") | Max. 180 °C (356 °F):<br>0.6 ... 50 bar (9 ... 725 psi) |

##### MAG 3100 Ex

|                              |                                |
|------------------------------|--------------------------------|
| - DN 15 ... 600 (½" ... 24") | 0.3 ... 40 bar (4 ... 580 psi) |
|------------------------------|--------------------------------|

##### Novolak MAG 3100

|                              |                                    |
|------------------------------|------------------------------------|
| - DN 50 ... 600 (2" ... 24") | 0.01 ... 40 bar (0.15 ... 580 psi) |
|------------------------------|------------------------------------|

##### MAG 3100 Ex

|                              |                                    |
|------------------------------|------------------------------------|
| - DN 50 ... 300 (2" ... 12") | 0.01 ... 40 bar (0.15 ... 580 psi) |
|------------------------------|------------------------------------|

|               |                             |
|---------------|-----------------------------|
| Test pressure | 1.5 x PN (where applicable) |
|---------------|-----------------------------|

##### Mechanical load

18 ... 1000 Hz random,  
3.17 G rms in all directions to  
EN 60068-2-36  
  
For compact installation with the  
MAG 6000 I, transmitter to be  
supported to avoid tension on  
sensor part.

#### Enclosure rating

|            |                                                               |
|------------|---------------------------------------------------------------|
| • Standard | IP67/NEMA 4X/6 to EN 60529,<br>1 mH <sub>2</sub> O for 30 min |
| • Option   | IP68/NEMA 6P to EN 60529,<br>10 mH <sub>2</sub> O cont.       |

#### Medium conditions

##### Temperature of medium

##### MAG 3100

|                                                                                                |                                  |
|------------------------------------------------------------------------------------------------|----------------------------------|
| • Liner                                                                                        |                                  |
| - Neoprene                                                                                     | 0 ... 70 °C (32 ... 158 °F)      |
| - EPDM (WRAS approved, tested by WRC (Water Research Council, UK))                             | -10 ... +70 °C (14 ... 158 °F)   |
| - Linatex® (rubber) (for temperatures below -10°C (15°F) AISI 304 or 316 flanges must be used) | -40 ... +70 °C (-40 ... +158 °F) |
| - Ebonite                                                                                      | 0 ... 95 °C (32 ... 203 °F)      |
| - PTFE                                                                                         | -20 ... +100 °C (-4 ... +212 °F) |
| - PTFE high temperature only for remote installation                                           | -20 ... +180 °C (-4 ... +356 °F) |
| - Novolak <sup>3)</sup>                                                                        | -20 ... +130 °C (-4 ... +266 °F) |

##### MAG 3100 Ex

|                              |                                                                                                                          |
|------------------------------|--------------------------------------------------------------------------------------------------------------------------|
| • DN 15 ... 300 (½" ... 12") |                                                                                                                          |
| - Neoprene                   | T4, T5 & T6:<br>0 ... 70 °C (32 ... 158 °F)                                                                              |
| - EPDM                       | T4, T5 & T6:<br>-5 ... +70 °C (-14 ... +158 °F)                                                                          |
| - Linatex                    | T4, T5 & T6:<br>-20 ... +70 °C (-4 ... +158 °F)                                                                          |
| - Ebonite                    | • T4: 0 ... 95 °C (32 ... 203 °F)<br>• T5: 0 ... 87 °C (32 ... 189 °F)<br>• T6: 0 ... 72 °C (32 ... 162 °F)              |
| - PTFE                       | • T4: -20 ... +100 °C (-4 ... +212 °F)<br>• T5: -20 ... +87 °C (-4 ... +189 °F)<br>• T6: -20 ... +72 °C (-4 ... +162 °F) |
| - Novolak                    | • T4: -20 ... +100 °C (-4 ... +212 °F)<br>• T5: -20 ... +87 °C (-4 ... +189 °F)<br>• T6: -20 ... +72 °C (-4 ... +162 °F) |

##### • DN 350 ... 2000 (14" ... 78")

|            |                                                                                                                                  |
|------------|----------------------------------------------------------------------------------------------------------------------------------|
| - Neoprene | T3, T4, T5 & T6:<br>0 ... 70 °C (32 ... 158 °F)                                                                                  |
| - EPDM     | T4, T5 & T6:<br>-5 ... +70 °C (-14 ... +158 °F)                                                                                  |
| - Linatex  | T3, T4, T5 & T6:<br>-20 ... +70 °C (-4 ... +158 °F)                                                                              |
| - Ebonite  | • T3 & T4: 0 ... 95 °C (32 ... 203 °F)<br>• T5: 0 ... 90 °C (32 ... 194 °F)<br>• T6: 0 ... 75 °C (32 ... 167 °F)                 |
| - PTFE     | • T3 & T4:<br>-20 ... +100 °C (-4 ... +212 °F)<br>• T5: -20 ... +90 °C (-4 ... +194 °F)<br>• T6: -20 ... +75 °C (-4 ... +167 °F) |

#### EMC

89/336 EEC

# SITRANS F flowmeters

## SITRANS F M

### MAGFLO MAG 3100/3100 Ex

#### Design

|                                |                                                                                                                                                                                |
|--------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Weight                         | See dimensional drawings                                                                                                                                                       |
| Material                       |                                                                                                                                                                                |
| • Flange and housing           |                                                                                                                                                                                |
| - Standard                     | Carbon steel ASTM A 105, with corrosion resistant two component epoxy coating (min. 150 µm)                                                                                    |
| - Option                       | <ul style="list-style-type: none"> <li>• AISI 304 (1.4301) flanges and carbon steel housing, coating as standard</li> <li>• AISI 316 L (1.4404) flanges and housing</li> </ul> |
| • Measuring pipe               | AISI 304 (1.4301)                                                                                                                                                              |
| • Electrodes                   |                                                                                                                                                                                |
| - Standard                     | AISI 316 Ti (1.4571), Hastelloy C276, Platinum/Iridium, Titanium, Tantalum                                                                                                     |
| • Grounding electrodes         | Material as measuring electrodes; Exceptions - see ordering data.                                                                                                              |
| Cable entries (remote version) | 4 x M20                                                                                                                                                                        |

#### Certificates and approvals

|                          |                                                                                                                                                                                             |
|--------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Drinking water approvals |                                                                                                                                                                                             |
| • EPDM                   | <ul style="list-style-type: none"> <li>• NSF61 (Cold water, US)</li> <li>• WRAS (WRc, BS6920 cold water, GB)</li> <li>• ACS listed (F)</li> <li>• KTW D1 &amp; D2, DVGW W270 (D)</li> </ul> |
| Ex-approval sensor       | DN 15 ... 300: EEx d [ia] [ib] IIB T4 - T6<br>DN 350 ... 2000: EEx e [ia] IIC T3 - T6                                                                                                       |
| Conforms to              | PED – 97/23 EC<br>FM Class 1 Div 2<br>CSA Class 1, Div 2                                                                                                                                    |

<sup>1)</sup> Larger sizes on request

<sup>2)</sup> Conditions are also dependent on liner characteristics

<sup>3)</sup> Sealing O-ring in Viton

| Selection and Ordering data                                  | Order No.             |
|--------------------------------------------------------------|-----------------------|
| <b>Sensor SITRANS F M</b>                                    |                       |
| <b>MAGFLO MAG 3100</b>                                       | <b>7 ME 6 3 1 0 -</b> |
| <b>Diameter</b>                                              |                       |
| DN 15 (½") (PTFE liner only)                                 | ▶ 1 V                 |
| DN 25 (1")                                                   | ▶ 2 D                 |
| DN 40 (1½")                                                  | ▶ 2 R                 |
| DN 50 (2")                                                   | ▶ 2 Y                 |
| DN 65 (2½")                                                  | ▶ 3 F                 |
| DN 80 (3")                                                   | ▶ 3 M                 |
| DN 100 (4")                                                  | ▶ 3 T                 |
| DN 125 (5")                                                  | ▶ 4 B                 |
| DN 150 (6")                                                  | ▶ 4 H                 |
| DN 200 (8")                                                  | ▶ 4 P                 |
| DN 250 (10")                                                 | ▶ 4 V                 |
| DN 300 (12")                                                 | 5 D                   |
| DN 350 (14")                                                 | 5 K                   |
| DN 400 (16")                                                 | 5 R                   |
| DN 450 (18")                                                 | 5 Y                   |
| <b>New short build-in lengths</b>                            |                       |
| DN 500 (20")                                                 | 6 F                   |
| DN 600 (24")                                                 | 6 P                   |
| DN 700 (28")                                                 | 6 Y                   |
| DN 750 (30")                                                 | 7 D                   |
| DN 800 (32")                                                 | 7 H                   |
| DN 900 (36")                                                 | 7 M                   |
| DN 1000 (40")                                                | 7 R                   |
| DN 1050 (42")                                                | 7 U                   |
| DN 1100 (44")                                                | 7 V                   |
| DN 1200 (48")                                                | 8 B                   |
| DN 1400 (54")                                                | 8 F                   |
| DN 1500 (60")                                                | 8 K                   |
| DN 1600 (66")                                                | 8 P                   |
| DN 1800 (72")                                                | 8 T                   |
| DN 2000 (78")                                                | 8 Y                   |
| <b>Flange norm and pressure rating</b>                       |                       |
| to EN 1092-1                                                 |                       |
| PN 6 (DN 65 ... 2000 (2½" ... 78"))                          | ▶ A                   |
| PN 10 (DN 200 ... 2000 (8" ... 78"))                         | ▶ B                   |
| PN 16 (DN 65 ... 1200 (2½" ... 48"))                         | ▶ C                   |
| PN 16, non PED (DN 700 ... 2000 (28" ... 78"))               | D                     |
| PN 25 (DN 200 ... 600 (8" ... 24"))                          | E                     |
| PN 40 (DN 15 ... 600 (½" ... 24"))                           | F                     |
| PN 63 (DN 50 ... 200 (2" ... 8")), not PTFE                  | G                     |
| PN 100 (DN 25 ... 80 (1" ... 3")), not PTFE                  | H                     |
| to ANSI B16.5                                                |                       |
| Class 150 (½" ... 24")                                       | J                     |
| Class 300 (½" ... 24")                                       | K                     |
| to AWWA C207                                                 |                       |
| Class D (28" ... 78")                                        | L                     |
| to AS                                                        |                       |
| 2129, table E                                                | M                     |
| 4087, PN 16 (DN 50 ... 1200 (2" ... 48"))                    | N                     |
| 4087, PN 21 (DN 50 ... 600 (2" ... 24"))                     | P                     |
| 4087, PN 35 (DN 50 ... 600 (2" ... 24"))                     | Q                     |
| <b>Flange material</b>                                       |                       |
| Carbon steel flanges ASTM A 105                              | ▶ 1                   |
| Stainless steel flanges, AISI 304                            | 2                     |
| Stainless steel flanges and sensor body, AISI 316L, polished | 3                     |

Please also see [www.siemens.com/SITRANSOrdering](http://www.siemens.com/SITRANSOrdering) for practical examples of ordering

| Selection and Ordering data                                                        | Order No.             |
|------------------------------------------------------------------------------------|-----------------------|
| <b>Sensor SITRANS F M</b>                                                          |                       |
| <b>MAGFLO MAG 3100</b>                                                             | <b>7 ME 6 3 1 0 -</b> |
| <b>Liner material</b>                                                              |                       |
| Neoprene                                                                           | 1                     |
| EPDM                                                                               | 2                     |
| PTFE (DN ≤ 300, PN ≤ 50 bar / ≤ 12", PN ≤ 725 psi)                                 | ▶ 3                   |
| PTFE (350 ≤ DN ≤ 600, PN ≤ 40 bar / 14" ≤ DN ≤ 24", PN ≤ 580 psi)                  |                       |
| Ebonite                                                                            | 4                     |
| Linatex (PN ≤ 40 bar (580 psi) DN ≤ 600 (24"))                                     | 5                     |
| Novolak (DN 50...600, PN ≤ 40 bar, 2" ... 24", PN ≤ 580 psi)                       | 6                     |
| <b>Electrode material</b><br>(grounding electrodes not for PTFE and Novolak liner) |                       |
| AISI 316 TI                                                                        | 1                     |
| Hastelloy C276                                                                     | ▶ 2                   |
| Platinum (no grounding electrodes)                                                 | 3                     |
| Titanium                                                                           | 4                     |
| Tantalum (no grounding electrodes)                                                 | 5                     |
| <b>Transmitter</b>                                                                 |                       |
| No transmitter (can be ordered separately)                                         | ▶                     |
| MAG 6000 I, 18 ... 90 V DC, 115 ... 230 V AC, 50 ... 60 Hz, standard               | A C                   |
| <b>Communication</b>                                                               |                       |
| No communication, add-on possible                                                  | ▶                     |
| HART                                                                               | A B                   |
| PROFIBUS PA Profile 3                                                              | F                     |
| PROFIBUS DP Profile 3                                                              | G                     |
| MODBUS RTU/RS 485                                                                  | E                     |
| <b>Cable glands/terminal box</b>                                                   |                       |
| Metric: polyamid terminal box or 6000 I compact                                    | 1                     |
| ½" NPT: polyamid terminal box or 6000 I compact                                    | 2                     |
| Metric: SS terminal box                                                            | 3                     |
| ½" NPT: SS terminal box                                                            | 4                     |
| ▶ Available ex stock.                                                              |                       |

| Selection and Ordering data                                            | Order code |
|------------------------------------------------------------------------|------------|
| <b>Additional information</b>                                          |            |
| Please add "-Z" to Order No. and specify Order code(s) and plain text. |            |
| Customer specific converter setup                                      | <b>Y20</b> |
| Tag name plate, stainless steel fixed with SS wire (add plain text)    | <b>Y17</b> |
| Tag name plate, plastic (self adhesive)                                | <b>Y18</b> |
| Factory certificate according to EN 10204-2.1                          | <b>C15</b> |
| Factory certificate according to EN 10204-2.2                          | <b>C14</b> |
| Sensor cables wired (specify cable order no.)                          | <b>Y40</b> |
| Junction box potted to IP68 with wired cable (specify cable order no.) | <b>Y41</b> |
| Other postproduction requirements (add desired text)                   | <b>Y99</b> |

| Description                                                     | Order No.           | Symbol |
|-----------------------------------------------------------------|---------------------|--------|
| Potting kit for terminal box of MAGFLO sensors for IP68/NEMA 6P | <b>FDK-085U0220</b> |        |

Please use online Product selector to get latest updates.

Product selector link: [www.pia-selector.com/its\\_main\\_en.asp](http://www.pia-selector.com/its_main_en.asp)

# SITRANS F flowmeters

## SITRANS F M

### MAGFLO MAG 3100/3100 Ex

#### Selection and Ordering data

Order No.

#### Sensor SITRANS F M

#### MAGFLO MAG 3100 High Temperature

7 ME 6 3 2 0 -

■ ■ ■ ■ ■ - ■ A A ■

#### Diameter

DN 15 (½")  
DN 25 (1")  
DN 40 (1½")  
DN 50 (2")  
DN 65 (2½")  
DN 80 (3")  
DN 100 (4")  
DN 125 (5")  
DN 150 (6")  
DN 200 (8")  
DN 250 (10")  
DN 300 (12")

1 V  
2 D  
2 R  
2 Y  
3 F  
3 M  
3 T  
4 B  
4 H  
4 P  
4 V  
5 D

#### Flange norm and pressure rating

##### to EN 1092-1

PN 10 (DN 200 ... 300 (8" ... 12"))  
PN 16 (DN 65 ... 300 (2½" ... 12"))  
PN 25 (DN 200 ... 300 (8" ... 12"))  
PN 40 (DN 15 ... 300 (½" ... 12"))

##### to ANSI B16.5

Class 150 (½" ... 12")  
Class 300 (½" ... 12")

##### to AS

2129, table E  
4087, PN 16 (DN 50 ... 300 (2" ... 12"))  
4087, PN 21 (DN 50 ... 300 (2" ... 12"))  
4087, PN 35 (DN 50 ... 300 (2" ... 12"))

B  
C  
E  
F  
  
J  
K  
  
M  
N  
P  
Q

#### Flange material

Carbon steel flanges ASTM A 105  
Stainless steel flanges, AISI 304  
Stainless steel flanges and sensor body,  
AISI 316L, polished

1  
2  
3

#### Liner material

PTFE (130 °C (266 °F))  
PTFE including type E protection rings AISI 316  
(180 °C (356 °F))

2  
3

#### Electrode material

AISI 316 Ti  
Hastelloy C276  
Platinum  
Titanium  
Tantalum

1  
2  
3  
4  
5

#### Cable glands/terminal box

Metric: polyamid terminal box  
(only for PTFE (130 °C (266 °F)) liner)  
½" NPT: polyamid terminal box  
(only for PTFE (130 °C (266 °F)) liner)  
Metric: SS terminal box  
½" NPT: SS terminal box

1  
2  
3  
4

#### Selection and Ordering data

Order code

#### Additional information

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

Customer specific converter setup

Y20

Tag name made, stainless steel fixed with SS wire  
(add plain text)

Y17

Tag name plate, plastic (self adhesive)

Y18

Factory certificate according to EN 10204-2.1

C15

Factory certificate according to EN 10204-2.2

C14

Sensor cables wired (specify cable order no.)

Y40

Other postproduction requirements (add desired text)

Y99

Please use online Product selector to get latest updates.

Product selector link: [www.pia-selector.com/its\\_main\\_en.asp](http://www.pia-selector.com/its_main_en.asp)

Please also see [www.siemens.com/SITRANSFordering](http://www.siemens.com/SITRANSFordering)  
for practical examples of ordering

| Selection and Ordering data                    | Order No.             |
|------------------------------------------------|-----------------------|
| <b>Sensor SITRANS F M</b>                      |                       |
| <b>MAGFLO MAG 3100 Ex, ATEX</b>                | <b>7 ME 6 3 3 0 -</b> |
|                                                |                       |
| <b>Diameter</b>                                |                       |
| DN 15 (½") (PTFE liner only)                   | 1 V                   |
| DN 25 (1")                                     | 2 D                   |
| DN 40 (1½")                                    | 2 R                   |
| DN 50 (2")                                     | 2 Y                   |
| DN 65 (2½")                                    | 3 F                   |
| DN 80 (3")                                     | 3 M                   |
| DN 100 (4")                                    | 3 T                   |
| DN 125 (5")                                    | 4 B                   |
| DN 150 (6")                                    | 4 H                   |
| DN 200 (8")                                    | 4 P                   |
| DN 250 (10")                                   | 4 V                   |
| DN 300 (12")                                   | 5 D                   |
| DN 350 (14")                                   | 5 K                   |
| DN 400 (16")                                   | 5 R                   |
| DN 450 (18")                                   | 5 Y                   |
| <u>New short build-in lengths</u>              |                       |
| DN 500 (20")                                   | 6 F                   |
| DN 600 (24")                                   | 6 P                   |
| DN 700 (28")                                   | 6 Y                   |
| DN 750 (30")                                   | 7 D                   |
| DN 800 (32")                                   | 7 H                   |
| DN 900 (36")                                   | 7 M                   |
| DN 1000 (40")                                  | 7 R                   |
| DN 1050 (42")                                  | 7 U                   |
| DN 1100 (44")                                  | 7 V                   |
| DN 1200 (48")                                  | 8 B                   |
| DN 1400 (54")                                  | 8 F                   |
| DN 1500 (60")                                  | 8 K                   |
| DN 1600 (66")                                  | 8 P                   |
| DN 1800 (72")                                  | 8 T                   |
| DN 2000 (78")                                  | 8 Y                   |
| <b>Flange norm and pressure rating</b>         |                       |
| <u>to EN 1092-1</u>                            |                       |
| PN 6 (DN 65 ... 2000 (2½" ... 78"))            | A                     |
| PN 10 (DN 200 ... 2000 (8" ... 78"))           | B                     |
| PN 16 (DN 65 ... 2000 (2½" ... 78"))           | C                     |
| PN 16, non PED (DN 700 ... 2000 (28" ... 78")) | D                     |
| PN 25 (DN 200 ... 600 (8" ... 24"))            | E                     |
| PN 40 (DN 15 ... 600 (½" ... 24"))             | F                     |
| PN 63 (DN 50 ... 400 (2" ... 16")), not PTFE   | G                     |
| PN 100 (DN 25 ... 350 (1" ... 12")), not PTFE  | H                     |
| <u>to ANSI B16.5</u>                           |                       |
| Class 150 (½" ... 24")                         | J                     |
| Class 300 (½" ... 24")                         | K                     |
| <u>to AWWA C207</u>                            |                       |
| Class D (28" ... 78")                          | L                     |
| <u>to AS</u>                                   |                       |
| 2129, table E                                  | M                     |
| 4087, PN 16 (DN 50 ... 1200 (2" ... 48"))      | N                     |
| 4087, PN 21 (DN 50 ... 600 (2" ... 24"))       | P                     |
| 4087, PN 35 (DN 50 ... 600 (2" ... 24"))       | Q                     |

| Selection and Ordering data                                            | Order No.             |
|------------------------------------------------------------------------|-----------------------|
| <b>Sensor SITRANS F M</b>                                              |                       |
| <b>MAGFLO MAG 3100 Ex, ATEX</b>                                        | <b>7 ME 6 3 3 0 -</b> |
|                                                                        |                       |
| <b>Flange material</b>                                                 |                       |
| Carbon steel flanges ASTM A 105                                        | 1                     |
| Stainless steel flanges, AISI 304                                      | 2                     |
| Stainless steel flanges and sensor body, AISI 316L, polished           | 3                     |
| <b>Liner material</b>                                                  |                       |
| Neoprene                                                               | 1                     |
| EPDM                                                                   | 2                     |
| PTFE (DN ≤ 300, PN ≤ 50 bar / ≤ 12", PN ≤ 725 psi),                    | 3                     |
| PTFE (350 ≤ DN ≤ 600, PN ≤ 40 bar / 14" ≤ DN ≤ 24", PN ≤ 580 psi)      |                       |
| Ebonite                                                                | 4                     |
| Linatex (PN ≤ 40 bar (580 psi)) DN ≤ 600/24"                           | 5                     |
| Novolak DN 50...300 PN ≤ 40 bar, (2"...12", PN ≤ 580 psi)              | 6                     |
| <b>Electrode material</b>                                              |                       |
| AISI 316 TI                                                            | 1                     |
| Hastelloy C276                                                         | 2                     |
| Platinum (no grounding electrodes)                                     | 3                     |
| Titanium                                                               | 4                     |
| Tantalum (no grounding electrodes)                                     | 5                     |
| <b>Transmitter</b>                                                     |                       |
| No transmitter (can be ordered separately)                             |                       |
| MAG 6000 I, 18 V ... 30 V DC, ATEX                                     | A                     |
| MAG 6000 I, 115 V ... 230 V, ATEX                                      | D                     |
| <b>Communication</b>                                                   |                       |
| No communication                                                       | A                     |
| HART                                                                   | B                     |
| PROFIBUS PA Profile 3                                                  | F                     |
| <b>Cable glands/terminal box</b>                                       |                       |
| Metric: 6000 I, ATEX                                                   | 1                     |
| ½" NPT: 6000 I, ATEX                                                   | 2                     |
| Metric: SS terminal box                                                | 3                     |
| ½" NPT: SS terminal box                                                | 4                     |
| <b>Selection and Ordering data</b>                                     | <b>Order code</b>     |
| <b>Additional information</b>                                          |                       |
| Please add "-Z" to Order No. and specify Order code(s) and plain text. |                       |
| Customer specific converter setup                                      | <b>Y20</b>            |
| Tag name plate, stainless steel fixed with SS wire (add plain text)    | <b>Y17</b>            |
| Tag name plate, plastic (self adhesive)                                | <b>Y18</b>            |
| Factory certificate according to EN 10204-2.1                          | <b>C15</b>            |
| Factory certificate according to EN 10204-2.2                          | <b>C14</b>            |
| Power cable wired (specify cable order no.)                            | <b>Y40</b>            |
| Junction box IP68 with wired cable (specify cable order no.)           | <b>Y41</b>            |
| Customer specific test                                                 | <b>Y90</b>            |
| Other postproduction requirements (add desired text)                   | <b>Y99</b>            |

Please also see [www.siemens.com/SITRANSOrdering](http://www.siemens.com/SITRANSOrdering) for practical examples of ordering

# SITRANS F flowmeters

## SITRANS F M

### MAGFLO MAG 3100/3100 Ex

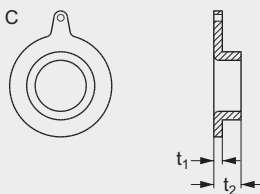
#### Selection and Ordering data

##### Options and accessories for sensors MAG 3100

AISI 304 Earthing and protection flanges **type C** for all liners except PTFE and Novolak

EN 1092-1 (DIN 2501)

Type C



| DN      | PN 06<br>Order No. | PN 10<br>Order No. | PN 16<br>Order No. | PN 25<br>Order No. | PN 40<br>Order No. |
|---------|--------------------|--------------------|--------------------|--------------------|--------------------|
| DN 25   |                    |                    |                    |                    | FDK-083N8361       |
| DN 40   |                    |                    |                    |                    | FDK-083N8362       |
| DN 50   |                    |                    |                    |                    | FDK-083N8344       |
| DN 65   | FDK-083N8345       |                    | FDK-083N8345       |                    | FDK-083N8345       |
| DN 80   | FDK-083N8347       |                    | FDK-083N8347       |                    | FDK-083N8347       |
| DN 100  | FDK-083N8070       |                    | FDK-083N8025       |                    | FDK-083N8025       |
| DN 125  | FDK-083N8071       |                    | FDK-083N8071       |                    | FDK-083N8071       |
| DN 150  | FDK-083N8072       |                    | FDK-083N8008       |                    | FDK-083N8008       |
| DN 200  | FDK-083N8074       | FDK-083N8011       | FDK-083N8011       | FDK-083N8011       | FDK-083N8075       |
| DN 250  | FDK-083N8078       | FDK-083N8013       | FDK-083N8013       | FDK-083N8013       | FDK-083N8079       |
| DN 300  | FDK-083N8080       | FDK-083N8012       | FDK-083N8012       | FDK-083N8081       | FDK-083N8082       |
| DN 350  | FDK-083N8083       | FDK-083N8039       | FDK-083N8039       | FDK-083N8084       | FDK-083N8085       |
| DN 400  | FDK-083N8099       | FDK-083N8100       | FDK-083N8100       | FDK-083N8101       | FDK-083N8102       |
| DN 450  | FDK-083N8103       | FDK-083N8103       | FDK-083N8104       | FDK-083N8104       | FDK-083N8105       |
| DN 500  | FDK-083N8107       | FDK-083N8107       | FDK-083N8108       | FDK-083N8108       | FDK-083N8109       |
| DN 600  | FDK-083N8111       | FDK-083N8111       | FDK-083N8112       | FDK-083N8112       |                    |
| DN 700  | FDK-083N8300       | FDK-083N8294       | FDK-083N8294       |                    |                    |
| DN 800  | FDK-083N8303       | FDK-083N8304       | FDK-083N8304       |                    |                    |
| DN 900  | FDK-083N8306       | FDK-083N8307       | FDK-083N8307       |                    |                    |
| DN 1000 | FDK-083N8309       | FDK-083N8310       | FDK-083N8310       |                    |                    |
| DN 1100 | -                  | FDK-083N8367       | FDK-083N8367       |                    |                    |
| DN 1200 | FDK-083N8312       | FDK-083N8313       | FDK-083N8313       |                    |                    |

#### Selection and Ordering data

##### Option and accessories for sensors MAG 3100

AISI 304 Earthing and protection flanges type C for all liners except PTFE and Novolak

| Size | ANSI<br>Class 150<br>Order No. | Class 300<br>Order No. | AWWA C207<br>Order No. |
|------|--------------------------------|------------------------|------------------------|
| 1"   | FDK-083N8361                   | FDK-083N8361           |                        |
| 1½"  | FDK-083N8362                   | FDK-083N8362           |                        |
| 2"   | FDK-083N8344                   | FDK-083N8344           |                        |
| 2½"  | FDK-083N8345                   | FDK-083N8345           |                        |
| 3"   | FDK-083N8347                   | FDK-083N8347           |                        |
| 4"   | FDK-083N8025                   | FDK-083N8025           |                        |
| 5"   | FDK-083N8071                   | FDK-083N8071           |                        |
| 6"   | FDK-083N8008                   | FDK-083N8073           |                        |
| 8"   | FDK-083N8011                   | FDK-083N8076           |                        |
| 10"  | FDK-083N8013                   | FDK-083N8079           |                        |
| 12"  | FDK-083N8012                   | FDK-083N8082           |                        |
| 14"  | FDK-083N8039                   | FDK-083N8085           |                        |
| 16"  | FDK-083N8100                   | FDK-083N8102           |                        |
| 18"  | FDK-083N8104                   | FDK-083N8106           |                        |
| 20"  | FDK-083N8107                   | FDK-083N8110           |                        |
| 24"  | FDK-083N8113                   | FDK-083N8114           |                        |
| 28"  |                                |                        | FDK-083N8302           |
| 30"  |                                |                        | FDK-083N8366           |
| 32"  |                                |                        | FDK-083N8305           |
| 36"  |                                |                        | FDK-083N8308           |
| 40"  |                                |                        | FDK-083N8311           |
| 42"  |                                |                        | FDK-083N8394           |
| 44"  |                                |                        | FDK-083N8395           |
| 48"  |                                |                        | FDK-083N8314           |

#### Selection and Ordering data

##### Option and accessories for sensors MAG 3100

AISI 304 Earthing and protection flanges type C for all liners except PTFE and Novolak

| AS2129, Table E | Order No.    |
|-----------------|--------------|
| DN 25           | FDK-083N8361 |
| DN 40           | FDK-083N8362 |
| DN 50           | FDK-083N8344 |
| DN 65           | FDK-083N8346 |
| DN 80           | FDK-083N8347 |
| DN 100          | FDK-083N8025 |
| DN 125          | FDK-083N8071 |
| DN 150          | FDK-083N8008 |
| DN 200          | FDK-083N8011 |
| DN 250          | FDK-083N8013 |
| DN 300          | FDK-083N8012 |
| DN 350          | FDK-083N8039 |
| DN 400          | FDK-083N8100 |
| DN 450          | FDK-083N8104 |
| DN 500          | FDK-083N8108 |
| DN 600          | FDK-083N8113 |
| DN 750          | FDK-083N8366 |
| DN 1100         | FDK-083N8367 |

#### Selection and Ordering data

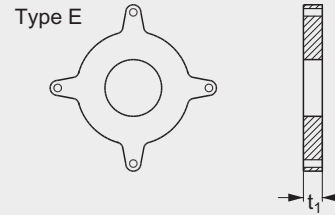
##### Option and accessories for sensors MAG 3100

AISI 316 Earthing and protection flanges **type E** for all PTFE liners

EN 1092-1 (DIN 2501)

##### Note:

For MAG 3100 high temperature version 7ME6320... - grounding ring type E is included and factory mounted.



| DN     | PN 06<br>Order No. | PN 10<br>Order No. | PN 16<br>Order No. | PN 25<br>Order No. | PN 40<br>Order No. |
|--------|--------------------|--------------------|--------------------|--------------------|--------------------|
| DN 15  |                    |                    |                    |                    | FDK-083N8365       |
| DN 25  |                    |                    |                    |                    | FDK-083N8271       |
| DN 40  |                    |                    |                    |                    | FDK-083N8278       |
| DN 50  |                    |                    |                    |                    | FDK-083N8282       |
| DN 65  | FDK-083N8284       |                    | FDK-083N8285       |                    | FDK-083N8286       |
| DN 80  | FDK-083N8288       |                    | FDK-083N8289       |                    | FDK-083N8290       |
| DN 100 | FDK-083N8116       |                    | FDK-083N8117       |                    | FDK-083N8118       |
| DN 125 | FDK-083N8120       |                    | FDK-083N8121       |                    | FDK-083N8122       |
| DN 150 | FDK-083N8124       |                    | FDK-083N8125       |                    | FDK-083N8126       |
| DN 200 | FDK-083N8129       | FDK-083N8130       | FDK-083N8130       | FDK-083N8131       | FDK-083N8132       |
| DN 250 | FDK-083N8135       | FDK-083N8136       | FDK-083N8137       | FDK-083N8138       | FDK-083N8139       |
| DN 300 | FDK-083N8144       | FDK-083N8144       | FDK-083N8145       | FDK-083N8146       | FDK-083N8147       |
| DN 350 | FDK-083N8152       | FDK-083N8153       | FDK-083N8154       | FDK-083N8155       | FDK-083N8156       |
| DN 400 | FDK-083N8160       | FDK-083N8161       | FDK-083N8162       | FDK-083N8163       | FDK-083N8164       |
| DN 450 | FDK-083N8168       | FDK-083N8169       | FDK-083N8170       | FDK-083N8171       | FDK-083N8172       |
| DN 500 | FDK-083N8177       | FDK-083N8178       | FDK-083N8179       | FDK-083N8180       | FDK-083N8181       |
| DN 600 | FDK-083N8186       | FDK-083N8187       | FDK-083N8188       | FDK-083N8189       |                    |

Protection of PTFE liner use 2 pcs.

Earthing of PTFE lined flowmeter use 1 pc.

#### Selection and Ordering data

##### Option and accessories for sensors MAG 3100

AISI 316 Earthing and protection flanges type E for PTFE liners

| Size | ANSI<br>Class 150<br>Order No. | Class 300<br>Order No. |
|------|--------------------------------|------------------------|
| ½"   | FDK-083N8365                   | FDK-083N8365           |
| 1"   | FDK-083N8272                   | FDK-083N8272           |
| 1½"  | FDK-083N8279                   | FDK-083N8279           |
| 2"   | FDK-083N8283                   | FDK-083N8283           |
| 2½"  | FDK-083N8287                   | FDK-083N8287           |
| 3"   | FDK-083N8291                   | FDK-083N8292           |
| 4"   | FDK-083N8118                   | FDK-083N8119           |
| 5"   | FDK-083N8122                   | FDK-083N8123           |
| 6"   | FDK-083N8126                   | FDK-083N8127           |
| 8"   | FDK-083N8370                   | FDK-083N8133           |
| 10"  | FDK-083N8140                   | FDK-083N8141           |
| 12"  | FDK-083N8148                   | FDK-083N8149           |
| 14"  | FDK-083N8157                   | FDK-083N8158           |
| 16"  | FDK-083N8165                   | FDK-083N8166           |
| 18"  | FDK-083N8173                   | FDK-083N8174           |
| 20"  | FDK-083N8182                   | FDK-083N8183           |
| 24"  | FDK-083N8190                   | FDK-083N8191           |

Protection of PTFE liner use 2 pcs.

Earthing of PTFE lined flowmeter use 1 pcs.

#### Selection and Ordering data

##### Option and accessories for sensors MAG 3100

AISI 316 Earthing and protection flanges type E for PTFE liners

##### AS2129, Table E

| DN     | Order No.    |
|--------|--------------|
| DN 15  | FDK-083N8365 |
| DN 25  | FDK-083N8272 |
| DN 40  | FDK-083N8280 |
| DN 50  | FDK-083N8281 |
| DN 65  | FDK-083N8284 |
| DN 80  | FDK-083N8293 |
| DN 100 | FDK-083N8117 |
| DN 125 | FDK-083N8121 |
| DN 150 | FDK-083N8128 |
| DN 200 | FDK-083N8134 |
| DN 250 | FDK-083N8143 |
| DN 300 | FDK-083N8151 |
| DN 350 | FDK-083N8153 |
| DN 400 | FDK-083N8161 |
| DN 450 | FDK-083N8176 |
| DN 500 | FDK-083N8185 |
| DN 600 | FDK-083N8193 |

Protection of PTFE liner use 2 pcs.

Earthing of PTFE lined flowmeter use 1 pcs.

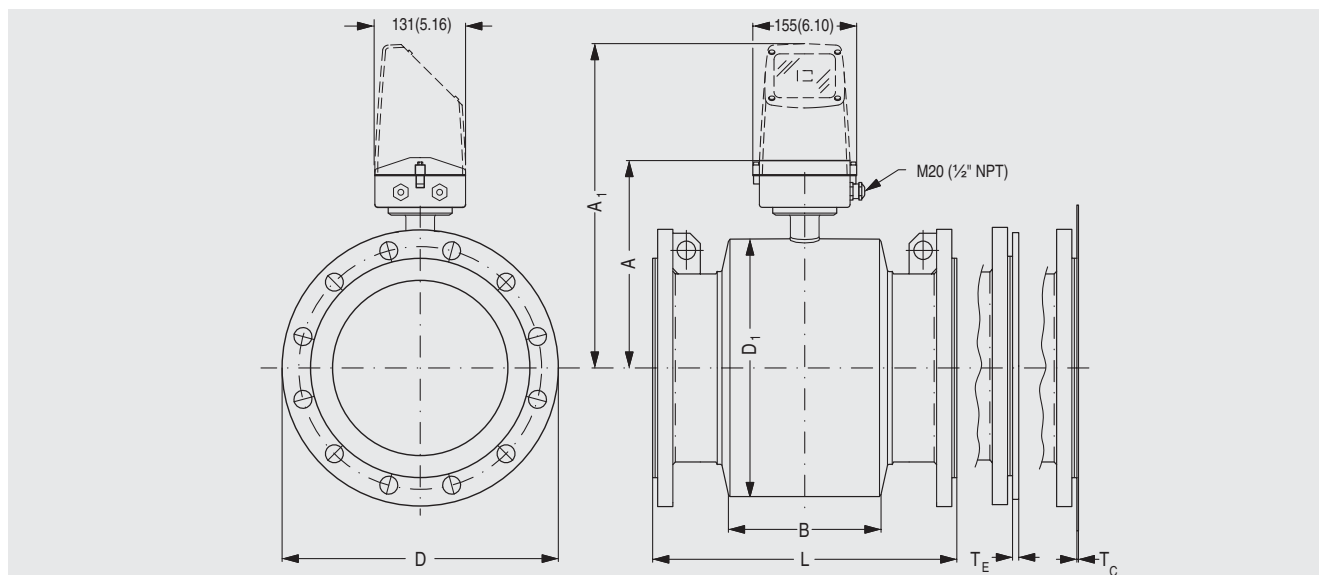
# SITRANS F flowmeters

## SITRANS F M

### MAGFLO MAG 3100/3100 Ex

#### Dimensional drawings

Sensor MAG 3100 compact/remote, MAG 3100 Ex remote



#### Metric

| DN   | A <sup>1)</sup> | A <sub>1</sub> | B    | D <sub>1</sub> | L <sup>2)</sup> |       |       |       |        |              |              |                                     |                          | T <sub>C</sub> <sup>3)</sup> | T <sub>E</sub> <sup>3)</sup> | Weight <sup>4)</sup> |
|------|-----------------|----------------|------|----------------|-----------------|-------|-------|-------|--------|--------------|--------------|-------------------------------------|--------------------------|------------------------------|------------------------------|----------------------|
|      |                 |                |      |                | EN 1092-1-201   |       |       |       |        | ANSI 16.5    |              | AS 2129 E<br>AS 4087<br>PN 16,21,35 | AWWA<br>C-207<br>Class D |                              |                              |                      |
|      |                 |                |      |                | PN 6,<br>10, 16 | PN 25 | PN 40 | PN 63 | PN 100 | Class<br>150 | Class<br>300 |                                     |                          |                              |                              |                      |
| [mm] | [mm]            | [mm]           | [mm] | [mm]           | [mm]            | [mm]  | [mm]  | [mm]  | [mm]   | [mm]         | [mm]         | [mm]                                | [mm]                     | [mm]                         | [mm]                         | [kg]                 |
| 15   | 187             | 338            | 59   | 104            | 200             | 200   | 200   | -     | -      | 200          | 200          | 200                                 | -                        | -                            | 6                            | 4                    |
| 25   | 187             | 338            | 59   | 104            | 200             | 200   | 200   | -     | 260    | 200          | 200          | 200                                 | -                        | 1.2                          | 6                            | 5                    |
| 40   | 197             | 348            | 82   | 124            | 200             | 200   | 200   | -     | 280    | 200          | 200          | 200                                 | -                        | 1.2                          | 6                            | 8                    |
| 50   | 205             | 356            | 72   | 139            | 200             | 200   | 200   | 276   | 300    | 200          | 200          | 200                                 | -                        | 1.2                          | 6                            | 9                    |
| 65   | 212             | 363            | 72   | 154            | 200             | 200   | 200   | 320   | 350    | 200          | 272          | 200                                 | -                        | 1.2                          | 6                            | 11                   |
| 80   | 222             | 373            | 72   | 174            | 200             | 272   | 272   | 323   | 340    | 272          | 272          | 200 <sup>5)</sup>                   | -                        | 1.2                          | 6                            | 12                   |
| 100  | 242             | 393            | 85   | 214            | 250             | 250   | 250   | 380   | 400    | 250          | 310          | 250                                 | -                        | 1.2                          | 6                            | 16                   |
| 125  | 255             | 406            | 85   | 239            | 250             | 250   | 250   | 420   | 450    | 250          | 335          | 250                                 | -                        | 1.2                          | 6                            | 19                   |
| 150  | 276             | 427            | 85   | 282            | 300             | 300   | 300   | 415   | 450    | 300          | 300          | 300                                 | -                        | 1.2                          | 6                            | 27                   |
| 200  | 304             | 455            | 137  | 338            | 350             | 350   | 350   | 480   | 530    | 350          | 350          | 350                                 | -                        | 1.2                          | 8                            | 40                   |
| 250  | 332             | 483            | 137  | 393            | 450             | 450   | 450   | 550   | 620    | 450          | 450          | 450                                 | -                        | 1.2                          | 8                            | 60                   |
| 300  | 357             | 508            | 137  | 444            | 500             | 500   | 500   | 600   | 680    | 500          | 500          | 500                                 | -                        | 1.6                          | 8                            | 80                   |
| 350  | 362             | 513            | 270  | 451            | 550             | 550   | 550   | 700   | 800    | 550          | 550          | 550                                 | -                        | 1.6                          | 8                            | 110                  |
| 400  | 387             | 538            | 270  | 502            | 600             | 600   | 600   | 750   | -      | 600          | 600          | 600                                 | -                        | 1.6                          | 10                           | 125                  |
| 450  | 418             | 569            | 310  | 563            | 600             | 600   | 600   | -     | -      | 600          | 640          | 600                                 | -                        | 1.6                          | 10                           | 175                  |
| 500  | 443             | 594            | 350  | 614            | 600             | 625   | 680   | -     | -      | 600          | 730          | 600 <sup>6)</sup>                   | -                        | 1.6                          | 10                           | 200                  |
| 600  | 494             | 645            | 430  | 715            | 600             | 750   | 750   | -     | -      | 600          | 860          | 600 <sup>7)</sup>                   | -                        | 1.6                          | 10                           | 287                  |
| 700  | 544             | 695            | 500  | 816            | 700             | -     | -     | -     | -      | -            | -            | 700                                 | 700                      | 2.0                          | -                            | 330                  |
| 750  | 571             | 722            | 556  | 869            | -               | -     | -     | -     | -      | -            | -            | 750                                 | 937                      | 2.0                          | -                            | 360                  |
| 800  | 606             | 757            | 560  | 927            | 800             | -     | -     | -     | -      | -            | -            | 800                                 | 1000                     | 2.0                          | -                            | 450                  |
| 900  | 653             | 804            | 630  | 1032           | 900             | -     | -     | -     | -      | -            | -            | 900                                 | 1125                     | 2.0                          | -                            | 530                  |
| 1000 | 704             | 906            | 670  | 1136           | 1000            | -     | -     | -     | -      | -            | -            | 1000                                | 1250                     | 2.0                          | -                            | 660                  |
| 1100 | 755             | 906            | 770  | 1238           | -               | -     | -     | -     | -      | -            | -            | -                                   | -                        | 2.0                          | -                            | 1140                 |
| 1200 | 810             | 961            | 792  | 1348           | 1200            | -     | -     | -     | -      | -            | -            | 1200                                | 1500                     | 2.0                          | -                            | 1180                 |
| 1400 | 925             | 1076           | 1000 | 1675           | 1400            | -     | -     | -     | -      | -            | -            | -                                   | -                        | 2.0                          | -                            | 1600                 |
| 1500 | 972             | 1123           | 1020 | 1672           | -               | -     | -     | -     | -      | -            | -            | -                                   | 1875                     | 3.0                          | -                            | 2460                 |
| 1600 | 1025            | 1176           | 1130 | 1915           | 1600            | -     | -     | -     | -      | -            | -            | -                                   | -                        | 3.0                          | -                            | 2140                 |
| 1800 | 1123            | 1274           | 1250 | 1974           | 1800            | -     | -     | -     | -      | -            | -            | -                                   | -                        | 3.0                          | -                            | 2930                 |
| 2000 | 1223            | 1374           | 1375 | 2174           | 2000            | -     | -     | -     | -      | -            | -            | -                                   | -                        | 3.0                          | -                            | 3665                 |

<sup>1)</sup> 13 mm shorter with AISI terminal box (Ex and high temperature version)

<sup>2)</sup> When earthing flanges are used, the thickness of the earthing flange must be added to the build-in length

<sup>3)</sup> T<sub>C</sub> = Type C grounding ring, T<sub>E</sub> = Type E grounding ring (Included and factory mounted on high temperature 180 °C (356 °F) PTFE sensor)

<sup>4)</sup> Weights are approx. (for PN 16) without transmitter

<sup>5)</sup> PN 35 = 272 mm

<sup>6)</sup> PN 35 DN 500 = 625

<sup>7)</sup> PN 35 DN 600 = 750

- not available

D = Outside diameter of flange, see flange tables

#### Sensor MAG 3100 compact/remote, MAG 3100 Ex remote

##### Imperial

| Size   | A <sup>1)</sup> | A <sub>1</sub> | B      | D <sub>1</sub> | L <sup>2)</sup> |        |        |        |        |           |           |                          | AS 2129 E<br>AS 4087<br>PN 16, 21,<br>35 | T <sub>C</sub> <sup>3)</sup> | T <sub>E</sub> <sup>3)</sup> | Weight <sup>4)</sup> |
|--------|-----------------|----------------|--------|----------------|-----------------|--------|--------|--------|--------|-----------|-----------|--------------------------|------------------------------------------|------------------------------|------------------------------|----------------------|
|        |                 |                |        |                | EN 1092-1-201   |        |        |        |        | ANSI 16.5 |           | AWWA<br>C-207<br>Class D |                                          |                              |                              |                      |
|        |                 |                |        |                | PN 6,<br>10, 16 | PN 25  | PN 40  | PN 63  | PN 100 | Class 150 | Class 300 |                          |                                          |                              |                              |                      |
| [inch] | [inch]          | [inch]         | [inch] | [inch]         | [inch]          | [inch] | [inch] | [inch] | [inch] | [inch]    | [inch]    | [inch]                   | [inch]                                   | [inch]                       | [inch]                       | [lb]                 |
| ½      | 7.36            | 13.31          | 2.32   | 4.09           | 7.87            | 7.87   | 7.87   | -      | -      | 7.87      | 7.87      | -                        | 7.87                                     | -                            | 0.24                         | 11                   |
| 1      | 7.36            | 13.31          | 2.32   | 4.09           | 7.87            | 7.87   | 7.87   | -      | 10.24  | 7.87      | 7.87      | -                        | 7.87                                     | 0.05                         | 0.24                         | 13                   |
| 1½     | 7.76            | 13.70          | 3.23   | 4.88           | 7.87            | 7.87   | 7.87   | -      | 11.02  | 7.87      | 7.87      | -                        | 7.87                                     | 0.05                         | 0.24                         | 17                   |
| 2      | 8.07            | 14.01          | 2.83   | 5.47           | 7.87            | 7.87   | 7.87   | 10.87  | 11.81  | 7.87      | 7.87      | -                        | 7.87                                     | 0.05                         | 0.24                         | 28                   |
| 2½     | 8.35            | 14.29          | 2.83   | 6.06           | 7.87            | 7.87   | 7.87   | 12.60  | 13.78  | 7.87      | 10.71     | -                        | 7.87                                     | 0.05                         | 0.24                         | 30                   |
| 3      | 8.74            | 14.69          | 2.83   | 6.85           | 7.87            | 10.71  | 10.71  | 12.72  | 13.39  | 10.71     | 10.71     | -                        | 7.87 <sup>5)</sup>                       | 0.05                         | 0.24                         | 33                   |
| 4      | 9.53            | 15.47          | 3.35   | 8.43           | 9.84            | 9.84   | 9.84   | 14.96  | 15.75  | 9.84      | 12.20     | -                        | 9.84                                     | 0.05                         | 0.24                         | 44                   |
| 5      | 10.04           | 15.98          | 3.35   | 9.41           | 9.84            | 9.84   | 9.84   | 16.54  | 17.72  | 9.84      | 13.10     | -                        | 9.84                                     | 0.05                         | 0.24                         | 55                   |
| 6      | 10.87           | 16.81          | 5.39   | 11.10          | 11.81           | 11.81  | 11.81  | 16.34  | 17.72  | 11.81     | 11.81     | -                        | 11.81                                    | 0.05                         | 0.24                         | 66                   |
| 8      | 11.97           | 17.91          | 5.39   | 13.31          | 13.78           | 13.78  | 13.78  | 18.90  | 20.87  | 13.78     | 13.78     | -                        | 13.78                                    | 0.05                         | 0.31                         | 110                  |
| 10     | 13.07           | 19.02          | 5.39   | 15.47          | 17.72           | 17.72  | 17.72  | 21.65  | 24.41  | 17.72     | 17.72     | -                        | 17.72                                    | 0.05                         | 0.31                         | 155                  |
| 12     | 14.05           | 20.00          | 5.39   | 17.48          | 19.69           | 19.69  | 19.69  | 23.62  | 26.77  | 19.69     | 19.69     | -                        | 19.69                                    | 0.06                         | 0.31                         | 176                  |
| 14     | 14.25           | 20.20          | 10.63  | 17.76          | 21.65           | 21.65  | 21.65  | 27.56  | 31.50  | 21.65     | 21.65     | -                        | 21.65                                    | 0.06                         | 0.31                         | 242                  |
| 16     | 15.24           | 21.18          | 10.63  | 19.76          | 23.62           | 23.62  | 23.62  | 29.53  | -      | 23.62     | 23.62     | -                        | 23.62                                    | 0.06                         | 0.39                         | 275                  |
| 18     | 16.45           | 22.40          | 12.20  | 22.16          | 23.62           | 23.62  | 23.62  | -      | -      | 23.62     | 25.20     | -                        | 23.62                                    | 0.06                         | 0.39                         | 385                  |
| 20     | 17.44           | 23.39          | 13.78  | 24.17          | 19.69           | 24.61  | 26.77  | -      | -      | 19.69     | 28.70     | -                        | 24.61 <sup>6)</sup>                      | 0.06                         | 0.39                         | 335                  |
| 24     | 19.45           | 25.39          | 16.93  | 28.15          | 23.62           | 29.53  | 29.53  | -      | -      | 23.62     | 33.80     | -                        | 29.53 <sup>7)</sup>                      | 0.06                         | 0.39                         | 630                  |
| 28     | 21.42           | 27.36          | 19.69  | 32.13          | 27.56           | -      | -      | -      | -      | -         | -         | 34.5                     | 34.45                                    | 0.08                         | -                            | 725                  |
| 30     | 22.48           | 28.43          | 21.89  | 34.21          | -               | -      | -      | -      | -      | -         | -         | 29.52                    | -                                        | 0.08                         | -                            | 830                  |
| 32     | 23.86           | 29.80          | 22.05  | 36.50          | 31.50           | -      | -      | -      | -      | -         | -         | 31.50                    | 31.50                                    | 0.08                         | -                            | 990                  |
| 36     | 25.71           | 31.65          | 24.80  | 40.63          | 35.43           | -      | -      | -      | -      | -         | -         | 35.43                    | 35.43                                    | 0.08                         | -                            | 1160                 |
| 40     | 27.72           | 35.67          | 26.38  | 44.72          | 39.37           | -      | -      | -      | -      | -         | -         | 39.37                    | 39.37                                    | 0.08                         | -                            | 1453                 |
| 42     | 27.72           | 35.67          | 26.38  | 44.72          | 39.37           | -      | -      | -      | -      | -         | -         | 39.37                    | 39.37                                    | 0.08                         | -                            | 1453                 |
| 44     | 29.72           | 35.67          | 30.31  | 48.74          | -               | -      | -      | -      | -      | -         | -         | -                        | -                                        | 0.08                         | -                            | -                    |
| 48     | 31.89           | 37.83          | 31.18  | 53.07          | 47.24           | -      | -      | -      | -      | -         | -         | 47.24                    | 47.24                                    | 0.08                         | -                            | 2592                 |
| 54     | 36.42           | 42.36          | 39.37  | 65.94          | 55.12           | -      | -      | -      | -      | -         | -         | 55.12                    | 55.12                                    | 0.12                         | -                            | 2940                 |
| 60     | 38.27           | 44.21          | 40.15  | 65.83          | -               | -      | -      | -      | -      | -         | -         | -                        | -                                        | 0.12                         | -                            | 3422                 |
| 66     | 40.35           | 46.30          | 44.49  | 75.39          | 63.00           | -      | -      | -      | -      | -         | -         | 63.00                    | 63.00                                    | 0.12                         | -                            | 3904                 |
| 72     | 44.21           | 50.16          | 49.21  | 77.72          | 70.87           | -      | -      | -      | -      | -         | -         | 70.87                    | 70.87                                    | 0.12                         | -                            | 4846                 |
| 78     | 48.15           | 54.09          | 54.13  | 85.59          | 78.74           | -      | -      | -      | -      | -         | -         | 78.74                    | 78.74                                    | 0.12                         | -                            | 6806                 |

<sup>1)</sup> 0.512 inch shorter with AISI terminal box (Ex and high temperature version)

<sup>2)</sup> When earthing flanges are used, the thickness of the earthing flange must be added to the build-in length

<sup>3)</sup> T<sub>C</sub> = Type C grounding ring, T<sub>E</sub> = Type E grounding ring (Included and factory mounted on high temperature 180 °C (356 °F) PTFE sensor)

<sup>4)</sup> Weights are for ANSI 150 without transmitter

<sup>5)</sup> PN 35 = 10.70 inch

<sup>6)</sup> PN 35 DN 500 = 24.61

<sup>7)</sup> PN 35 DN 600 = 29.53

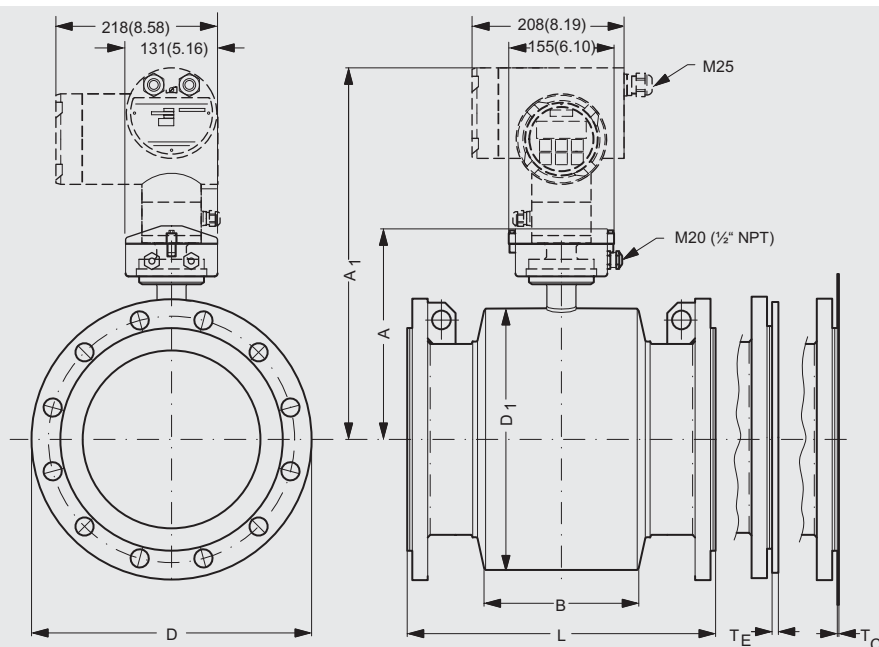
- not available

D = Outside diameter of flange, see flange tables

# SITRANS F flowmeters

## SITRANS F M

### MAGFLO MAG 3100/3100 Ex



| DN   | A <sup>1)</sup> | A <sub>1</sub> <sup>5)</sup> | B    | D <sub>1</sub> | L <sup>2)</sup> |       |       |       |        |           |           |                                       |                          | T <sub>C</sub> <sup>3)</sup> | T <sub>E</sub> <sup>3)</sup> | Weight <sub>4)</sub> |
|------|-----------------|------------------------------|------|----------------|-----------------|-------|-------|-------|--------|-----------|-----------|---------------------------------------|--------------------------|------------------------------|------------------------------|----------------------|
|      |                 |                              |      |                | EN 1092-1-201   |       |       |       |        | ANSI 16.5 |           | AS 2129 E<br>AS 4087<br>PN 16, 21, 35 | AWWA<br>C-207<br>Class D |                              |                              |                      |
|      |                 |                              |      |                | PN 6,<br>10, 16 | PN 25 | PN 40 | PN 63 | PN 100 | Class 150 | Class 300 |                                       |                          |                              |                              |                      |
| [mm] | [mm]            | [mm]                         | [mm] | [mm]           | [mm]            | [mm]  | [mm]  | [mm]  | [mm]   | [mm]      | [mm]      | [mm]                                  | [mm]                     | [mm]                         | [mm]                         | [kg]                 |
| 15   | 187             | 336.4                        | 59   | 104            | 200             | 200   | 200   | -     | -      | 200       | 200       | 200                                   | -                        | -                            | 6                            | 4                    |
| 25   | 187             | 336.4                        | 59   | 104            | 200             | 200   | 200   | -     | 260    | 200       | 200       | 200                                   | -                        | 1.2                          | 6                            | 5                    |
| 40   | 197             | 346.4                        | 82   | 124            | 200             | 200   | 200   | -     | 280    | 200       | 200       | 200                                   | -                        | 1.2                          | 6                            | 8                    |
| 50   | 205             | 354.4                        | 72   | 139            | 200             | 200   | 200   | 276   | 300    | 200       | 200       | 200                                   | -                        | 1.2                          | 6                            | 9                    |
| 65   | 212             | 361.4                        | 72   | 154            | 200             | 200   | 200   | 320   | 350    | 200       | 272       | 200                                   | -                        | 1.2                          | 6                            | 11                   |
| 80   | 222             | 371.4                        | 72   | 174            | 200             | 272   | 272   | 323   | 340    | 272       | 272       | 200 <sup>6)</sup>                     | -                        | 1.2                          | 6                            | 12                   |
| 100  | 242             | 391.4                        | 85   | 214            | 250             | 250   | 250   | 380   | 400    | 250       | 310       | 250                                   | -                        | 1.2                          | 6                            | 16                   |
| 125  | 255             | 404.4                        | 85   | 239            | 250             | 250   | 250   | 420   | 450    | 250       | 335       | 250                                   | -                        | 1.2                          | 6                            | 19                   |
| 150  | 276             | 425.4                        | 85   | 282            | 300             | 300   | 300   | 415   | 450    | 300       | 300       | 300                                   | -                        | 1.2                          | 6                            | 27                   |
| 200  | 304             | 453.5                        | 137  | 338            | 350             | 350   | 350   | 480   | 530    | 350       | 350       | 350                                   | -                        | 1.2                          | 8                            | 40                   |
| 250  | 332             | 481.4                        | 137  | 393            | 450             | 450   | 450   | 550   | 620    | 450       | 450       | 450                                   | -                        | 1.2                          | 8                            | 60                   |
| 300  | 357             | 506.4                        | 137  | 444            | 500             | 500   | 500   | 600   | 680    | 500       | 500       | 500                                   | -                        | 1.6                          | 8                            | 80                   |
| 350  | 362             | 511.1                        | 270  | 451            | 550             | 550   | 550   | 700   | 800    | 550       | 550       | 550                                   | -                        | 1.6                          | 8                            | 110                  |
| 400  | 387             | 536.4                        | 270  | 502            | 600             | 600   | 600   | 750   | -      | 600       | 600       | 600                                   | -                        | 1.6                          | 10                           | 125                  |
| 450  | 418             | 567.4                        | 310  | 563            | 600             | 600   | 600   | -     | -      | 600       | 640       | 600                                   | -                        | 1.6                          | 10                           | 175                  |
| 500  | 443             | 592.4                        | 350  | 614            | 600             | 625   | 680   | -     | -      | 600       | 730       | 600 <sup>7)</sup>                     | -                        | 1.6                          | 10                           | 200                  |
| 600  | 494             | 643.4                        | 430  | 715            | 600             | 750   | 750   | -     | -      | 600       | 860       | 600 <sup>8)</sup>                     | -                        | 1.6                          | 10                           | 287                  |
| 700  | 544             | 693.4                        | 500  | 816            | 700             | -     | -     | -     | -      | -         | -         | 700                                   | 700                      | 2.0                          | -                            | 330                  |
| 750  | 571             | 720.4                        | 556  | 869            | -               | -     | -     | -     | -      | -         | -         | 750                                   | 937                      | 2.0                          | -                            | 360                  |
| 800  | 606             | 755.4                        | 560  | 927            | 800             | -     | -     | -     | -      | -         | -         | 800                                   | 1000                     | 2.0                          | -                            | 450                  |
| 900  | 653             | 802.4                        | 630  | 1032           | 900             | -     | -     | -     | -      | -         | -         | 900                                   | 1125                     | 2.0                          | -                            | 530                  |
| 1000 | 704             | 853.4                        | 670  | 1136           | 1000            | -     | -     | -     | -      | -         | -         | 1000                                  | 1250                     | 2.0                          | -                            | 660                  |
| 1100 | 755             | 904.4                        | 770  | 1238           | -               | -     | -     | -     | -      | -         | -         | -                                     | -                        | 2.0                          | -                            | 1140                 |
| 1200 | 810             | 959.4                        | 792  | 1348           | 1200            | -     | -     | -     | -      | -         | -         | 1200                                  | 1500                     | 2.0                          | -                            | 1180                 |
| 1400 | 925             | 1074.4                       | 1000 | 1675           | 1400            | -     | -     | -     | -      | -         | -         | -                                     | -                        | 2.0                          | -                            | 1600                 |
| 1500 | 972             | 1121.4                       | 1020 | 1672           | -               | -     | -     | -     | -      | -         | -         | -                                     | 1875                     | 3.0                          | -                            | 2460                 |
| 1600 | 1025            | 1174.4                       | 1130 | 1915           | 1600            | -     | -     | -     | -      | -         | -         | -                                     | -                        | 3.0                          | -                            | 2140                 |
| 1800 | 1123            | 1272.4                       | 1250 | 1974           | 1800            | -     | -     | -     | -      | -         | -         | -                                     | -                        | 3.0                          | -                            | 2930                 |
| 2000 | 1223            | 1372.4                       | 1375 | 2174           | 2000            | -     | -     | -     | -      | -         | -         | -                                     | -                        | 3.0                          | -                            | 3665                 |

1) 13 mm shorter with AISI terminal box (Ex and high temperature version)

2) When earthing flanges are used, the thickness of the earthing flange must be added to the build-in length

3) T<sub>C</sub> = Type C grounding ring, T<sub>E</sub> = Type E grounding ring (Included and factory mounted on high temperature 180 °C (356 °F) PTFE sensor)

4) Weights are approx. (for PN 16) without transmitter

5) Ex version 8 mm higher

6) PN 35 = 272 mm

7) PN 35 DN 500 = 625

8) PN 35 DN 600 = 750

- not available

D = Outside diameter of flange, see flange tables

#### Sensor MAG 3100/ MAG 3100 Ex, integral or remote mount and separate

| Size   | A <sup>1)</sup> | A <sub>1</sub> <sup>5)</sup> | B      | D <sub>1</sub> | L <sup>2)</sup> |        |        |        |        |           |           |                          | AS 2129 E<br>AS 4087<br>PN 16, 21,<br>35 | T <sub>C</sub> <sup>3)</sup> | T <sub>E</sub> <sup>3)</sup> | Weight <sup>4)</sup> |
|--------|-----------------|------------------------------|--------|----------------|-----------------|--------|--------|--------|--------|-----------|-----------|--------------------------|------------------------------------------|------------------------------|------------------------------|----------------------|
|        |                 |                              |        |                | EN 1092-1-201   |        |        |        |        | ANSI 16.5 |           | AWWA<br>C-207<br>Class D |                                          |                              |                              |                      |
|        |                 |                              |        |                | PN 6,<br>10, 16 | PN 25  | PN 40  | PN 63  | PN 100 | Class 150 | Class 300 |                          |                                          |                              |                              |                      |
| [inch] | [inch]          | [inch]                       | [inch] | [inch]         | [inch]          | [inch] | [inch] | [inch] | [inch] | [inch]    | [inch]    | [inch]                   | [inch]                                   | [inch]                       | [inch]                       | [lbs]                |
| ½      | 7.36            | 13.31                        | 2.32   | 4.09           | 7.87            | 7.87   | 7.87   | -      | -      | 7.87      | 7.87      | -                        | 7.87                                     | -                            | 0.24                         | 11                   |
| 1      | 7.36            | 13.31                        | 2.32   | 4.09           | 7.87            | 7.87   | 7.87   | -      | 10.24  | 7.87      | 7.87      | -                        | 7.87                                     | 0.05                         | 0.24                         | 13                   |
| 1½     | 7.76            | 13.70                        | 3.23   | 4.88           | 7.87            | 7.87   | 7.87   | -      | 11.02  | 7.87      | 7.87      | -                        | 7.87                                     | 0.05                         | 0.24                         | 17                   |
| 2      | 8.07            | 14.01                        | 2.83   | 5.47           | 7.87            | 7.87   | 7.87   | 10.87  | 11.81  | 7.87      | 7.87      | -                        | 7.87                                     | 0.05                         | 0.24                         | 28                   |
| 2½     | 8.35            | 14.29                        | 2.83   | 6.06           | 7.87            | 7.87   | 7.87   | 12.60  | 13.78  | 7.87      | 10.71     | -                        | 7.87                                     | 0.05                         | 0.24                         | 30                   |
| 3      | 8.74            | 14.69                        | 2.83   | 6.85           | 7.87            | 10.71  | 10.71  | 12.72  | 13.39  | 10.71     | 10.71     | -                        | 7.87 <sup>5)</sup>                       | 0.05                         | 0.24                         | 33                   |
| 4      | 9.53            | 15.47                        | 3.35   | 8.43           | 9.84            | 9.84   | 9.84   | 14.96  | 15.75  | 9.84      | 12.20     | -                        | 9.84                                     | 0.05                         | 0.24                         | 44                   |
| 5      | 10.04           | 15.98                        | 3.35   | 9.41           | 9.84            | 9.84   | 9.84   | 16.54  | 17.72  | 9.84      | 13.10     | -                        | 9.84                                     | 0.05                         | 0.24                         | 55                   |
| 6      | 10.87           | 16.81                        | 5.39   | 11.10          | 11.81           | 11.81  | 11.81  | 16.34  | 17.72  | 11.81     | 11.81     | -                        | 11.81                                    | 0.05                         | 0.24                         | 66                   |
| 8      | 11.97           | 17.91                        | 5.39   | 13.31          | 13.78           | 13.78  | 13.78  | 18.90  | 20.87  | 13.78     | 13.78     | -                        | 13.78                                    | 0.05                         | 0.31                         | 110                  |
| 10     | 13.07           | 19.02                        | 5.39   | 15.47          | 17.72           | 17.72  | 17.72  | 21.65  | 24.41  | 17.72     | 17.72     | -                        | 17.72                                    | 0.05                         | 0.31                         | 155                  |
| 12     | 14.05           | 20.00                        | 5.39   | 17.48          | 19.69           | 19.69  | 19.69  | 23.62  | 26.77  | 19.69     | 19.69     | -                        | 19.69                                    | 0.06                         | 0.31                         | 176                  |
| 14     | 14.25           | 20.20                        | 10.63  | 17.76          | 21.65           | 21.65  | 21.65  | 27.56  | 31.50  | 21.65     | 21.65     | -                        | 21.65                                    | 0.06                         | 0.31                         | 242                  |
| 16     | 15.24           | 21.18                        | 10.63  | 19.76          | 23.62           | 23.62  | 23.62  | 29.53  | -      | 23.62     | 23.62     | -                        | 23.62                                    | 0.06                         | 0.39                         | 275                  |
| 18     | 16.45           | 22.40                        | 12.20  | 22.16          | 23.62           | 23.62  | 23.62  | -      | -      | 23.62     | 25.20     | -                        | 23.62                                    | 0.06                         | 0.39                         | 385                  |
| 20     | 17.44           | 23.39                        | 13.78  | 24.17          | 19.69           | 24.61  | 26.77  | -      | -      | 19.69     | 28.70     | -                        | 24.61 <sup>6)</sup>                      | 0.06                         | 0.39                         | 335                  |
| 24     | 19.45           | 25.39                        | 16.93  | 28.15          | 23.62           | 29.53  | 29.53  | -      | -      | 23.62     | 33.80     | -                        | 29.53 <sup>7)</sup>                      | 0.06                         | 0.39                         | 630                  |
| 28     | 21.42           | 27.36                        | 19.69  | 32.13          | 27.56           | -      | -      | -      | -      | -         | -         | 34.5                     | 34.45                                    | 0.08                         | -                            | 725                  |
| 30     | 22.48           | 28.43                        | 21.89  | 34.21          | -               | -      | -      | -      | -      | -         | -         | 29.52                    | -                                        | 0.08                         | -                            | 830                  |
| 32     | 23.86           | 29.80                        | 22.05  | 36.50          | 31.50           | -      | -      | -      | -      | -         | -         | 31.50                    | 31.50                                    | 0.08                         | -                            | 990                  |
| 36     | 25.71           | 31.65                        | 24.80  | 40.63          | 35.43           | -      | -      | -      | -      | -         | -         | 35.43                    | 35.43                                    | 0.08                         | -                            | 1160                 |
| 40     | 27.72           | 35.67                        | 26.38  | 44.72          | 39.37           | -      | -      | -      | -      | -         | -         | 39.37                    | 39.37                                    | 0.08                         | -                            | 1453                 |
| 42     | 27.72           | 35.67                        | 26.38  | 44.72          | 39.37           | -      | -      | -      | -      | -         | -         | 39.37                    | 39.37                                    | 0.08                         | -                            | 1453                 |
| 44     | 29.72           | 35.67                        | 30.31  | 48.74          | -               | -      | -      | -      | -      | -         | -         | -                        | -                                        | 0.08                         | -                            | -                    |
| 48     | 31.89           | 37.83                        | 31.18  | 53.07          | 47.24           | -      | -      | -      | -      | -         | -         | 47.24                    | 47.24                                    | 0.08                         | -                            | 2592                 |
| 54     | 36.42           | 42.36                        | 39.37  | 65.94          | 55.12           | -      | -      | -      | -      | -         | -         | 55.12                    | 55.12                                    | 0.12                         | -                            | 2940                 |
| 60     | 38.27           | 44.21                        | 40.15  | 65.83          | -               | -      | -      | -      | -      | -         | -         | -                        | -                                        | 0.12                         | -                            | 3422                 |
| 66     | 40.35           | 46.30                        | 44.49  | 75.39          | 63.00           | -      | -      | -      | -      | -         | -         | 63.00                    | 63.00                                    | 0.12                         | -                            | 3904                 |
| 72     | 44.21           | 50.16                        | 49.21  | 77.72          | 70.87           | -      | -      | -      | -      | -         | -         | 70.87                    | 70.87                                    | 0.12                         | -                            | 4846                 |
| 78     | 48.15           | 54.09                        | 54.13  | 85.59          | 78.74           | -      | -      | -      | -      | -         | -         | 78.74                    | 78.74                                    | 0.12                         | -                            | 6806                 |

<sup>1)</sup> 0.512 inch shorter with AISI terminal box (Ex and high temperature version)

<sup>2)</sup> When earthing flanges are used, the thickness of the earthing flange must be added to the build-in length

<sup>3)</sup> T<sub>C</sub> = Type C grounding ring, T<sub>E</sub> = Type E grounding ring (Included and factory mounted on high temperature 180 °C (356 °F) PTFE sensor)

<sup>4)</sup> Weights are for ANSI 150 without transmitter

<sup>5)</sup> PN 35 = 10.70 inch

<sup>6)</sup> PN 35 DN 500 = 24.61

<sup>7)</sup> PN 35 DN 600 = 29.53

- not available

D = Outside diameter of flange, see flange tables

# SITRANS F flowmeters

## SITRANS F M

### MAGFLO sensor calibration

#### Selection and Ordering data

| Product designation                                                         | Order No.                |
|-----------------------------------------------------------------------------|--------------------------|
| <b>SITRANS FM MAGFLO -<br/>Electromagnetic flowmeters</b>                   |                          |
| <b>Calibrations/recalibration for<br/>MAG 1100, 1100 F, 5100 W and 3100</b> |                          |
| <b>Accessories for SITRANS F M</b>                                          | <b>FDK -</b>             |
| <b>Calibration</b>                                                          | <b>O.R.<sup>2)</sup></b> |
| <b>Standard production calibration</b>                                      | <b>-</b>                 |
| Zero-point 2x25%, 2x90%                                                     |                          |
| <b>Standard production calibration -<br/>Matched pair</b>                   |                          |
| Size < DN 350 (14")                                                         | <b>O.R</b>               |
| Size DN 300 ... 1200 (12" ... 48")                                          | <b>O.R</b>               |
| Larger sizes                                                                | <b>O.R</b>               |
| <b>Customer specified calibration up to<br/>10 point<sup>1)</sup></b>       |                          |
| Size ≤ DN 150 (6")                                                          | <b>O.R</b>               |
| Size DN 200 ... 300 (8" ... 12")                                            | <b>O.R</b>               |
| Size DN 350 ... 600 (14" ... 24")                                           | <b>O.R</b>               |
| Size DN 700 ... 1100 (28" ... 48")                                          | <b>O.R</b>               |
| Add-on: Matched pair of any above                                           | <b>O.R</b>               |
| Larger sizes                                                                | <b>O.R</b>               |
| <b>Accredited calibration ISO/IEC 17025 -<br/>Matched pair<sup>1)</sup></b> |                          |
| Accredited calibration report with up<br>to 21 points <sup>1)</sup>         |                          |
| Size ≤ DN 150 (6")                                                          | <b>O.R</b>               |
| Size DN 200 ... 300 (8" ... 12")                                            | <b>O.R</b>               |
| Size DN 350 ... 600 (14" ... 24")                                           | <b>O.R</b>               |
| Size DN 700 ... 1100 (28" ... 48")                                          | <b>O.R</b>               |
| Larger sizes                                                                | <b>O.R</b>               |
| <b>CT-calibration and authority seal</b>                                    |                          |
| Up to DN 300 (12") for PTB and DANAK                                        |                          |
| Size ≤ DN 150 (6")                                                          | <b>O.R</b>               |
| Size DN 200 ... 300 (8" ... 12")                                            | <b>O.R</b>               |
| Larger sizes                                                                | <b>O.R</b>               |
| <b>Customer witnessed calibration</b>                                       |                          |
| Any of above calibration                                                    |                          |
| Add-on price per sensor                                                     | <b>O.R</b>               |
| Size DN 200 ... 300 (8" ... 12")                                            |                          |
| Daily rates available on request for larger<br>project.                     |                          |

<sup>1)</sup> **Size** dependent restriction on maximum flow rates may apply.

<sup>2)</sup> **Ordering O.R.** As we need dedicated information from the customer on the individual sensor, we must have the calibration forms filed and sent together with the order.