

# Flow Measurement

## SITRANS F M

### Flow sensor MAG 3100 P

3

Selection and Ordering data	Article No.
<b>Sensor SITRANS F M MAG 3100 P (Short delivery time)</b>	<b>7 ME 6 3 4 0 -</b>
<b>Diameter</b>	
DN 15 (½")	1 V
DN 25 (1")	2 D
DN 40 (1½")	2 R
DN 50 (2")	2 Y
DN 65 (2½")	3 F <sup>1)</sup>
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
<b>Flange norm and pressure rating</b>	
<u>EN 1092-1</u>	
PN 10 (DN 200 ... 300 (8" ... 12"))	B
PN 16 (DN 65 ... 300 (2½" ... 12"))	C
PN 40 (DN 15 ... 50 (½" ... 2"))	F
<u>ANSI B16.5</u>	
Class 150 (½" ... 12")	J
<b>Flange material</b>	
Carbon steel flanges ASTM A 105	1
<b>Liner material</b>	
PTFE (130 °C (266 °F))	3
PFA (150 °C (302 °F)) (DN 15 ... 150 (½" ... 6"))	7
<b>Electrode material</b>	
Hastelloy C	2
Hastelloy C incl. grounding electrode, (only PFA)	6
<b>Transmitter</b>	
Standard sensor for remote transmitter (Order transmitter separately)	A
Ex sensor for remote transmitter (Order transmitter separately)	B
MAG 6000 I, Aluminum, 18 ... 90 V DC, 115 ... 230 V AC	C
MAG 6000 I, Aluminum, 18 ... 30 V DC, Ex	D
MAG 6000 I, Aluminum, 115 ... 230 V AC, Ex	E
MAG 6000 I (NAMUR), Aluminum, 18 ... 30 V DC, 115 ... 230 V AC	F
MAG 6000 I (NAMUR), Aluminum, 18 ... 30 V DC, 115 ... 230 V AC, Ex	G
MAG 6000, Polyamide, 11 ... 30 V DC/11 ... 24 V AC	H
MAG 6000, Polyamide, 115 ... 230 V AC	J
MAG 5000, Polyamide, 11 ... 30 V DC/11 ... 24 V AC	K
MAG 5000, Polyamide, 115 ... 230 V AC	L
<b>Communication</b>	
No communication, add-on possible	A
HART	B
PROFIBUS PA Profile 3 (only MAG 6000/MAG 6000 I)	F
PROFIBUS DP Profile 3 (not for Ex) (only MAG 6000/MAG 6000 I)	G
Modbus RTU/RS 485 (not for Ex) (only MAG 6000/MAG 6000 I)	E
FOUNDATION Fieldbus H1 (only MAG 6000/MAG 6000 I)	J
<b>Cable glands/terminal box</b>	
Metric: Polyamide terminal box or 6000 I compact	1
½" NPT: Polyamide terminal box or 6000 I compact	2
Metric SS terminal box (mandatory for stainless steel MAG 6000 transmitter)	3
½" NPT SS terminal box (mandatory for stainless steel MAG 6000 transmitter)	4

<sup>1)</sup> Only for ANSI flanges

Selection and Ordering data	Order code
<b>Additional information</b>	
Please add "-Z" to Article No. and specify Order code(s) and plain text.	
Factory certificate according to EN 10204-2.2	<b>C14</b>
Factory certificate according to EN 10204-2.1	<b>C15</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>
Customer-specific converter setup	<b>Y20</b>
Power cable wired (specify cable Article No.)	<b>Y40</b>
Sensor for remote transmitter's junction box IP68 with wired cable (specify cable Article No.) (not for ATEX)	<b>Y41</b>
Other postproduction requirements (add desired text)	<b>Y99</b>
<b>Additional calibrations</b>	
• Matched pair - (Standard production calibration where sensor and transmitter is calibrated together)	<b>On request<sup>1)</sup></b>
• Accredited Siemens Flow Instruments matched pair Calibration acc. to ISO/IEC 17025: 2005	<b>On request<sup>1)</sup></b>
• Customer-specified calibration up to 10 points	<b>On request<sup>1)</sup></b>
• CT verification and authority seal according to: PTB (Denmark and Germany)	<b>On request<sup>1)</sup></b>
• Customer-witnessed calibration Any of above calibration	<b>On request<sup>1)</sup></b>

<sup>1)</sup> Ordering On request as dedicated information from the customer on the individual sensors is required. Please fill in the calibration form found on <http://pi.khe.siemens.de/index.aspx?Nr=17460> and send together with the order. (Size dependent restriction on maximum flow rates may apply)

#### Operating instructions for SITRANS F M MAG 3100 P


Description	Article No.
• English	<b>A5E03005599</b>
• German	<b>A5E03086288</b>
• Spanish	<b>A5E03086291</b>
• French	<b>A5E03086290</b>


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

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

MAG 5000/6000 transmitters and sensors are packed in separate boxes, the final assembly takes place during installation at the customer's place. MAG 6000 I/MAG 6000 I ATEX 2G D transmitters and sensors are delivered compact mounted from factory. Communication module will be pre-mounted in the transmitter.

#### Accessories

Description	Article No.
Potting kit for terminal box of flow sensors for IP68/NEMA 6P (not for Ex sensors)	• <b>FDK:085U0220</b> 

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

Please use online Product selector to get latest updates.

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

# Flow Measurement

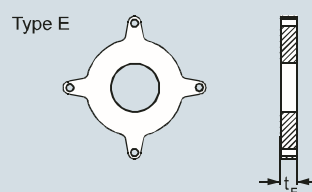
## SITRANS F M

### Flow sensor MAG 3100 P

#### Selection and Ordering data

##### MAG 3100 P Type E grounding and protection ring

1 pc. **AISI 316** grounding and protection rings **type E** for PTFE liners



DN	PN 10 Article No.	PN 16 Article No.	PN 40 Article No.	ANSI <sup>1)</sup>	Class 150 Article No.
DN 15			<b>FDK:083N8365</b>	½"	<b>FDK:083N8365</b>
DN 25			<b>FDK:083N8271</b>	1"	<b>FDK:083N8272</b>
DN 40			<b>FDK:083N8278</b>	1½"	<b>FDK:083N8279</b>
DN 50			<b>FDK:083N8282</b>	2"	<b>FDK:083N8283</b>
DN 65		<b>FDK:083N8285</b>		2½"	<b>FDK:083N8287</b>
DN 80		<b>FDK:083N8289</b>		3"	<b>FDK:083N8291</b>
DN 100		<b>FDK:083N8117</b>		4"	<b>FDK:083N8118</b>
DN 125		<b>FDK:083N8121</b>		5"	<b>FDK:083N8122</b>
DN 150		<b>FDK:083N8125</b>		6"	<b>FDK:083N8126</b>
DN 200	<b>FDK:083N8130</b>	<b>FDK:083N8130</b>		8"	<b>FDK:083N8370</b>
DN 250	<b>FDK:083N8136</b>	<b>FDK:083N8137</b>		10"	<b>FDK:083N8140</b>
DN 300	<b>FDK:083N8144</b>	<b>FDK:083N8145</b>		12"	<b>FDK:083N8148</b>

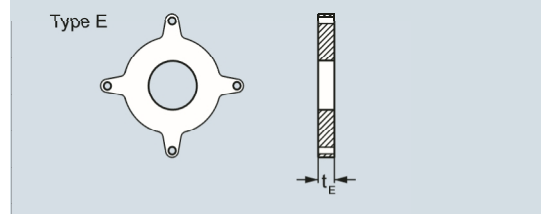
Protection of PTFE liner use 2 pcs.

Earthing of PTFE lined flowmeter use 1 pc.

#### Selection and Ordering data

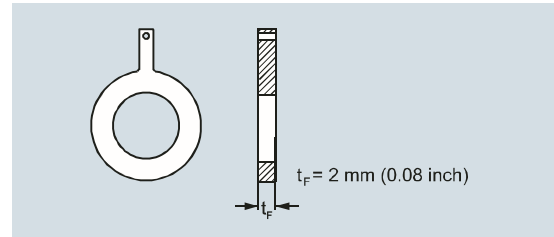
##### MAG 3100 P type E grounding and protecting ring

1 pc. **Hastelloy C276** grounding and protection ring **type E** for PTFE liners

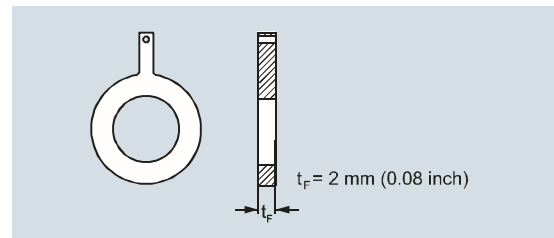


DN	PN 16 Article No.	PN 40 Article No.	Size	ANSI <sup>1)</sup> Class 150 Article No.
DN 15		<b>FDK:083N8487</b>	½"	<b>FDK:083N8487</b>
DN 25		<b>FDK:083N8488</b>	1"	<b>FDK:083N8489</b>
DN 40		<b>FDK:083N8490</b>	1½"	<b>FDK:083N8491</b>
DN 50		<b>FDK:083N8492</b>	2"	<b>FDK:083N8493</b>
DN 65	<b>FDK:083N8495</b>		2½"	<b>FDK:083N8497</b>
DN 80	<b>FDK:083N8499</b>		3"	<b>FDK:083N8501</b>
DN 100	<b>FDK:083N8504</b>		4"	<b>FDK:083N8506</b>

<sup>1)</sup> For dimensions of MAG 3100 P see table on page 3/90

**Selection and Ordering data****MAG 3100 P Grounding rings: Flat rings**1 pc. **ANSI 316** grounding **flat ring** for all liners

DN	PN 10	PN 16	PN 40	Size	ANSI <sup>1)</sup> Class 150 Article No.
	Article No.	Article No.	Article No.		
DN 15			<b>A5E01191969</b>	½"	<b>A5E01191968</b>
DN 25			<b>A5E01150880</b>	1"	<b>A5E01150022</b>
DN 40			<b>A5E01191952</b>	1½"	<b>A5E01191961</b>
DN 50			<b>A5E01150918</b>	2"	<b>A5E01151121</b>
DN 65		<b>A5E01191940</b>		2½"	<b>A5E01191962</b>
DN 80		<b>A5E01152876</b>		3"	<b>A5E01152910</b>
DN 100		<b>A5E01158875</b>		4"	<b>A5E01159146</b>
DN 125		<b>A5E01191941</b>		5"	<b>A5E01191963</b>
DN 150		<b>A5E01191943</b>		6"	<b>A5E01191964</b>
DN 200	<b>A5E01191951</b>	<b>A5E01191944</b>		8"	<b>A5E01191965</b>
DN 250	<b>A5E01191950</b>	<b>A5E01191946</b>		10"	<b>A5E01191966</b>
DN 300	<b>A5E01191949</b>	<b>A5E01191947</b>		12"	<b>A5E01191967</b>

**Selection and Ordering data****MAG 3100 P Grounding rings : Flat rings**1 pc. **Hastelloy C276** grounding **flat ring**

DN	PN 10	PN 16	PN 40	Size	ANSI <sup>1)</sup> Class 150 Article No.
	Article No.	Article No.	Article No.		
DN 15			<b>A5E01191981</b>	½"	<b>A5E01191989</b>
DN 25			<b>A5E01150882</b>	1"	<b>A5E01150028</b>
DN 40			<b>A5E01191982</b>	1½"	<b>A5E01191990</b>
DN 50			<b>A5E01150922</b>	2"	<b>A5E01151124</b>
DN 65		<b>A5E01191971</b>		2½"	<b>A5E01191991</b>
DN 80		<b>A5E01152889</b>		3"	<b>A5E01152913</b>
DN 100		<b>A5E01158886</b>		4"	<b>A5E01159150</b>
DN 125		<b>A5E01191973</b>		5"	<b>A5E01191992</b>
DN 150		<b>A5E01191974</b>		6"	<b>A5E01191993</b>
DN 200	<b>A5E01191978</b>	<b>A5E01191975</b>		8"	<b>A5E01191994</b>
DN 250	<b>A5E01191979</b>	<b>A5E01191976</b>		10"	<b>A5E01191995</b>
DN 300	<b>A5E01191980</b>	<b>A5E01191977</b>		12"	<b>A5E01191996</b>

1) For dimensions of MAG 3100 P see table on page 3/90