

SITRANS F flowmeters

SITRANS F M

Transmitter MAGFLO MAG 5000/6000

Overview



Transmitter MAG 5000/6000 compact version (left) and 19" insert version (right)

The MAG 5000 and 6000 are microprocessor-based transmitters engineered for high performance, easy installation, commissioning and maintenance. The transmitters evaluate the signals from the SITRANS F M MAGFLO sensors type MAG 1100, MAG 1100 F, MAG 3100 and MAG 5100 W.

Transmitter types:

- MAG 5000: Max. measuring error 0.5% of rate (incl. sensor)
- MAG 6000: Max. measuring error 0.25% of rate (incl. sensor, see also sensor specifications) and with additional features such as: Plug & Play insert bus modules; integrated batch functions.

Benefits

- Superior signal resolution for optimum turn down ratio
- Digital signal processing with many possibilities
- Automatic reading of SENSORPROM data for easy commissioning
- User configurable operation menu with password protection.
- 3 lines, 20 characters display in 11 languages.
- Flow rate in various units
- Totalizer for forward, reverse and net flow as well as additional information available
- Multiple functional outputs for process control, minimum configuration with analogue, pulse/frequency and relay output (status, flow direction, limits)
- Comprehensive self-diagnostic for error indication and error logging (see under SITRANS F M MAGFLO diagnostics)
- Batch control
- Custody transfer approval: PTB, OIML R75, R117, R49
- MAG 6000 with add-on bus modules for HART, MODBUS RTU/RS485, PROFIBUS PA and DP

Application

The MAG flowmeters are suitable for measuring the flow of almost all electrically conductive liquids, pastes and slurries. The main applications can be found in:

- Water and waste water
- Chemical and pharmaceutical industries
- Food & beverage industries
- Power generation and utility

Design

The transmitter is designed as either IP67 NEMA 4X/6 enclosure for compact or wall mounting or 19" version as a 19" insert as a base to be used in:

- 19" rack systems
- Panel mounting IP65/NEMA 4
- Back of panel mounting IP20/NEMA 2
- Wall mounting IP66/NEMA 4

Several options on 19" versions are available such as:

- Transmitters for EEx ATEX approved flow sensors (incl. barriers)
- Transmitters with electrode cleaning unit

Function

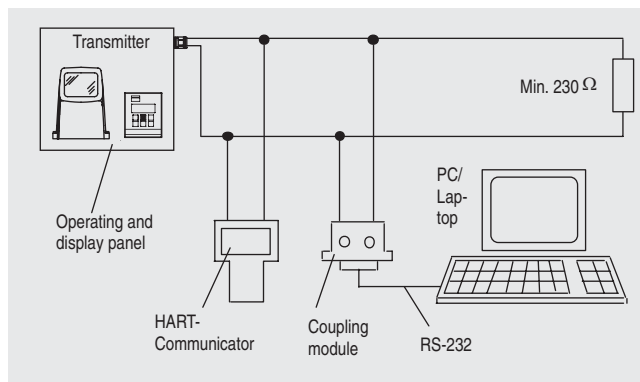
The MAG 5000/6000 are microprocessor-based transmitters with a built-in alphanumeric display in several languages. The transmitters evaluate the signals from the associated electro-magnetic sensors and also fulfil the task of a power supply unit which provides the magnet coils with a constant current.

Further information on connection, mode of operation and installation can be found in the data sheets for the sensors.

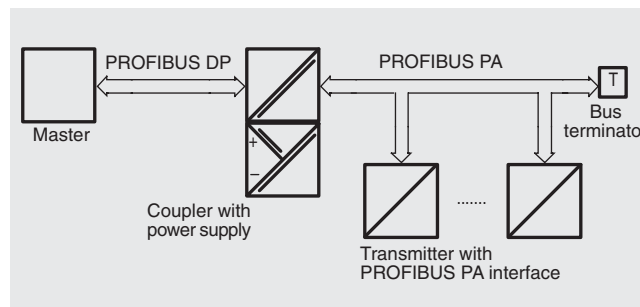
Displays and controls

Operation of the transmitter can be carried out using:

- Control and display unit
- HART communicator
- PC/laptop and SIMATIC PDM software via HART communication
- PC/laptop and SIMATIC PDM software using PROFIBUS communication



HART communication



PROFIBUS PA communication

Technical specifications

Mode of operation and design

Measuring principle	Electromagnetic with pulsed constant field
Empty pipe	Detection of empty pipe (special cable required in remote mounted installation)
Excitation frequency	Sensor size depending pulsating DC current
Electrode input impedance	$> 1 \times 10^{14} \Omega$

Input

Digital input	11 ... 30 V DC, $R_i = 4.4 \text{ K}\Omega$
• Activation time	50 ms
• Current	$I_{DC 11 \text{ V}} = 2.5 \text{ mA}$, $I_{DC 30 \text{ V}} = 7 \text{ mA}$

Output

Current output	
• Signal range	0 ... 20 mA or 4 ... 20 mA
• Load	$< 800 \Omega$
• Time constant	0.1 ... 30 s, adjustable
Digital output	
• Frequency	0 ... 10 kHz, 50% duty cycle (uni/bidirectional)
• Time constant	0.1 ... 30s, adjustable
• Pulse (active)	DC 24 V, 30 mA, $1 \text{ K}\Omega \leq R_i \leq 10 \text{ K}\Omega$, short-circuit-protected (power supplied from flowmeter)
• Pulse (passive)	DC 3 ... 30 V, max. 110 mA, $200 \Omega \leq R_i \leq 10 \text{ K}\Omega$ (powered from connected equipment)
• Time constant	0.1 ... 30 s, adjustable
Relay output	
• Time constant	Changeover relay, same as current output
• Load	42 V AC/2 A, 24 V DC/1 A
Low flow cut off	0 ... 9.9% of maximum flow
Galvanic isolation	All inputs and outputs are galvanically isolated

Max. measuring error (incl. sensor)

• MAG 5000	0.5% of rate
• MAG 6000	0.25% of rate

Rated operation conditions

Ambient temperature	
• Operation	<ul style="list-style-type: none"> • Display version: -20 ... +50 °C (-4 ... +122 °F) • Blind version: -20 ... +60 °C (-4 ... +140 °F)
• Storage	-40 ... +70 °C (-40 ... +158 °F)
Mechanical load	
• Compact version	18 ... 1000 Hz, 3,17 G rms, sinusoidal in all directions to IEC 68-2-36
• 19" insert	1 ... 800 Hz, 1 G, sinusoidal in all directions to IEC 68-2-36

Degree of protection	
• Compact version	IP67/NEMA 4X/6 to IEC 529 and DIN 40050 (1 mH ₂ O 30 min.)
• 19" insert	IP20/NEMA 2 to IEC 529 and DIN 40050
EMC performance	
• Emitted interference	To EN 50081-1 (Light industry)
• Noise immunity	To EN 50082-1 (Industry)
Display and keypad	
Totalizer	Two eight-digit counters for forward, net or reverse flow
Display	Background illumination with alphanumeric text, 3 x 20 characters to indicate flow rate, totalized values, settings and faults; Reverse flow indicated by negative sign
• Time constant	Time constant as current output time constant
Design	
Enclosure material	
• Compact version	Fiber glass reinforced polyamide; optional (IP67 only): AISI 316 stainless steel
• 19"-insert	Standard 19" insert of aluminium/steel (DIN 41494), width: 21 TE, height: 3 HE
• Back of panel	IP20/NEMA 2; Aluminium
• Panel mounting	IP65/NEMA 4; ABS plastic
• Wall mounting	IP66/NEMA 4; ABS plastic
Dimensional drawings	
• Compact version	See dimensional drawings
• 19" insert	See dimensional drawings
Weight	
• Compact version	0.75 kg (2 lb)
• 19" insert	See dimensional drawings
Power supply	<ul style="list-style-type: none"> • 115 ... 230 V AC +10% -15%, 50 ... 60 Hz, 17 VA • 11 ... 30 V DC or 11 ... 24 V AC
Power consumption	<ul style="list-style-type: none"> • 230 V AC: 17 VA • 24 V AC : 9 W, $I_N = 380 \text{ mA}$, $I_{ST} = 8 \text{ A}$ (30 ms) • 12 V DC : 11 W, $I_N = 920 \text{ mA}$, $I_{ST} = 4 \text{ A}$ (250 ms)
Certificates and approvals	CE, ULc general purpose, C-tick; FM Class 1, div 2
Custody transfer approval (MAG 5000/6000 CT)	<ul style="list-style-type: none"> • PTB OIML R49 (cold water) • PTB and DANAK OIML R75 (hot water) • PTB and DANAK OIML R117 (cold water/milk, beer etc.)
Communication	
Standard	
• MAG 5000	Without serial communication or HART as option
• MAG 6000	Prepared for client mounted add-on modules
Optional (MAG 6000 only)	HART, MODBUS RTU/RS485, PROFIBUS PA, PROFIBUS DP as add-on modules

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Transmitter MAGFLO MAG 5000/6000

Safety barrier (ia/ib) DN ≤ 300 / 12"



Application	As combined unit with MAG 6000 only and MAG 1100 Ex / MAG 3100 Ex in the size range DN 2 to 300 / 1/12" to 12"		
Ex approval	[EEx ia/ib] IIB, ATEX for MAG 3100 Ex and 1100 Ex		
Cable parameter	Group	Capacity in μF	Inductance in mH
• Electrode	IIB	≤ 31	≤ 80
• Coil	IIB	≤ 0.5	≤ 8
Ambient temperature			
• During operation	-20 to +50 °C (-4 to +122 °F)		
• During storage	-20 to +70 °C (-4 to +158 °F)		
Enclosure			
• Material	Standard 19" insert in aluminium/steel (DIN 41494)		
• Width	21 TE (4.75")		
• Height	3 HE (5.25")		
• Rating	IP 20 / NEMA 2 to EN 60529 and DIN 40050		
• Mechanical load	1 g, 1 ... 800 Hz sinusoidal in all directions to EN 60068-2-36		
EMC performance			
• Emission	EN 50081-1 (Light industry)		
• Immunity	EN 50082-2 (Industry)		

Safety barrier (e/ia) DN ≥ 350 / 14"



Application	For use with MAG 5000/6000 19" and MAG 3100 Ex in the size range DN 350 to 2000 / 14" to 78"		
Ex approval	[EEx e ia] IIC ATEX		
Cable parameter	Group	Capacity in μF	Inductance in mH
• Electrode	IIC	≤ 4.1	≤ 80
	IIB	≤ 45	≤ 87
	IIA	≤ 45	≤ 87
Ambient temperature			
• During operation	-20 to +50 °C (-4 to +122 °F)		
• During storage	-20 to +70 °C (-4 to +158 °F)		
Enclosure			
• Material	Standard 19" insert in aluminium/steel (DIN 41494)		
• Width	21 TE (4.75")		
• Height	3 HE (5.25")		
• Rating	IP20 / NEMA 2 to EN 60529 and DIN 40050		
• Mechanical load	1 g, 1 ... 800 Hz sinusoidal in all directions to EN 60068-2-36		
EMC performance			
• Emission	EN 50081-1 (Light industry)		
• Immunity	EN 50082-2 (Industry)		

Electrode cleaning unit



Application	For use with transmitters MAG 5000 and 6000 19" to clean the electrodes on sensors MAG 1100, MAG 3100 or MAG 5100 W
	NB: Must not be used with intrinsically safe ATEX sensors
Cleaning voltage	
AC cleaning	60 V AC
DC cleaning	30 V DC
Cleaning period	60 s + 60 s pause period
Relay	
• Load	42 V / 2 A
Operation	Switch relay activated when cleaning is in progress
• Automatic	Yes
• Manual	No
Indicator lamps	LEDs: "ON" and "CLEANING"
Supply voltage and power consumption	115 ... 230 V AC, +10% ... -15%, 50 ... 60 Hz, 7 VA cleaning, 5 VA stand by 11 ... 30 V DC / 11 ... 24 V AC, 50 ... 60 Hz, 7 VA cleaning, 5 VA stand by
Ambient temperature	
• During operation	-20 to +50 °C (-4 to +122 °F)
• During storage	-20 to +70 °C (-4 to +158 °F)
Enclosure	
• Material	Standard 19" insert in aluminium/steel (DIN 41494)
• Width	21 TE (4.75")
• Height	3 HE (5.25")
• Rating	IP20 / NEMA 2 to EN 60529 and DIN 40050
• Mechanical load	1 g, 1 ... 800 Hz sinusoidal in all directions to EN 60068-2-36

Cleaning unit

The Siemens cleaning unit can be used with MAG 5000 or 6000 in 19" insert version.

The cleaning unit can be used in applications where the liner and subsequently the electrodes may be coated with deposits. If the coating is electrically insulating, the electrode signal will be reduced. If the coating is electrically inductive, the electrode signal will be partly short-circuited and in both cases the accuracy of the meter will decrease (dependent on coating type and thickness).

Note:

The cleaning unit cannot be used for inflammable or explosive media!

Empty pipe detection and cleaning facility cannot be used at the same time.

Mode of operation

The cleaning unit cleans the electrodes electro-chemically by applying a voltage to the electrodes for approx. 60 seconds. While cleaning, the transmitter stores and holds the latest measured flow reading on the display and also the signal outputs. After an additional pausing period of 60 seconds the flowmeter resumes normal measurement and the cleaning is now completed.

The relay in the transmitter activates the cleaning cycle. In the relay output menu (under cleaning) the cleaning interval can be set between 1 hour and 24 hours.

Cleaning should only take place with liquid in the pipe. This can be detected via the empty pipe function. It is therefore recommended to select "empty pipe detection" ON when using the cleaning.

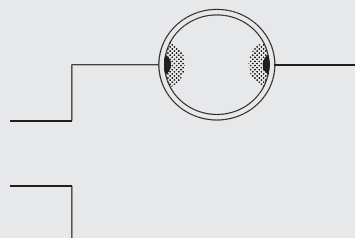
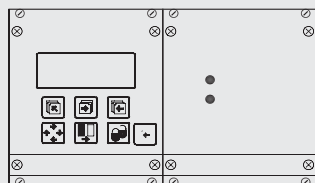
The cleaning sequence can also be controlled manually through the electrical input of the transmitter. Before this is done, ensure that the measuring pipe is full.

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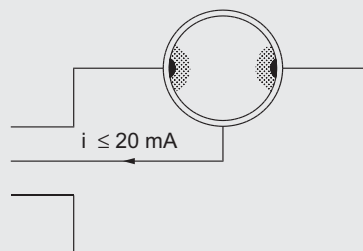
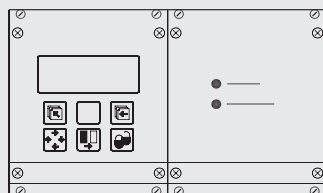
AC cleaning



$$i \leq 80 \text{ mA}$$

4 AC-cleaning is used to remove fatty deposits on the electrodes. These fatty deposits are seen in waste water applications, in abattoirs and water applications with oil residuals. During the cleaning process, the surface of the electrodes get warmer, which tends to soften grease particles and the gas bubbles generated mechanically lift deposits away from the surface of the electrodes.

DC cleaning



$$i \leq 20 \text{ mA}$$

DC-cleaning is used to eliminate electrically conductive deposits in the measuring pipe influencing the measuring accuracy.

Particularly in district heating applications an electrically conductive deposit (magnetite) may occur and short-circuit the electrode signal. In this case the accuracy of the meter decreases and the signal/noise conditions of the meter become inferior. The problem only arises if the conductivity of the water is less than approx. $250 \mu\text{S}/\text{cm}$.


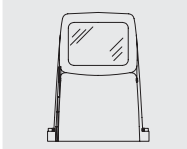
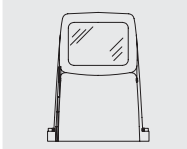

During DC-cleaning electrolysis takes place where the flow of electrons removes the particle deposits from the electrode area.

Note:


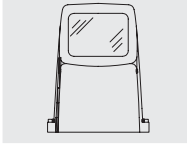
Do not use DC-cleaning on sensors with tantalum electrodes.

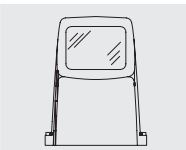
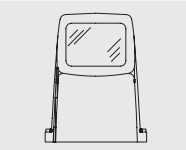

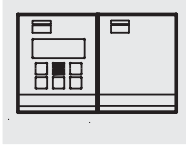

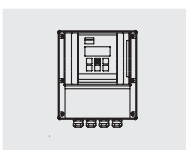
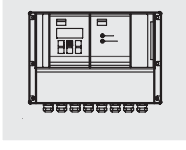
Selection and Ordering Data

Transmitter MAG 5000

Description	Order No.	Symbol
Transmitter MAG 5000 Blind for compact and wall mounting; IP67/NEMA 4X, fibre-glass reinforced polyamide <ul style="list-style-type: none"> • 11 ... 30 V DC / 11 ... 24 V AC • 115/230 V AC, 50/60 Hz 	7ME6910-1AA30-0AA0 7ME6910-1AA10-0AA0	
Transmitter MAG 5000 Display for compact and wall mounting; IP67/NEMA 4X, fibre-glass reinforced polyamide <ul style="list-style-type: none"> • 11 ... 30 V DC / 11 ... 24 V AC • 115/230 V AC, 50/60 Hz • 115/230 V AC, 50/60 Hz, with HART 	▶ 7ME6910-1AA30-1AA0 ▶ 7ME6910-1AA10-1AA0 7ME6910-1AA10-1BA0	
Transmitter MAG 5000 CT for compact and wall mounting, approved for custody transfer; IP67/NEMA 4X, fibre-glass reinforced polyamide <ul style="list-style-type: none"> • 11 ... 30 V DC / 11 ... 24 V AC • 115/230 V AC, 50/60 Hz 	7ME6910-1AA30-1AB0 7ME6910-1AA10-1AB0	
Transmitter MAG 5000 for 19" rack and wall mounting <ul style="list-style-type: none"> • 11 ... 30 V DC / 11 ... 24 V AC • 115/230 V AC, 50/60 Hz 	7ME6910-2CA30-1AA0 7ME6910-2CA10-1AA0	

Transmitter MAG 6000

Description	Order No.	Symbol
Transmitter MAG 6000 Blind for compact and wall mounting; IP67/NEMA 4X, fibre-glass reinforced polyamide <ul style="list-style-type: none"> • 11 ... 30 V DC / 11 ... 24 V AC • 115/230 V AC, 50/60 Hz 	7ME6920-1AA30-0AA0 7ME6920-1AA10-0AA0	
Transmitter MAG 6000 for compact and wall mounting; IP67/NEMA 4X, fibre-glass reinforced polyamide <ul style="list-style-type: none"> • 11 ... 30 V DC / 11 ... 24 V AC • 115/230 V AC, 50/60 Hz 	▶ 7ME6920-1AA30-1AA0 ▶ 7ME6920-1AA10-1AA0	
IP67/NEMA 4X, AISI 316 stainless steel (without S/S terminal box) <ul style="list-style-type: none"> • 11 ... 30 V DC / 11 ... 24 V AC • 115/230 V AC, 50/60 Hz 	7ME6920-1QA30-1AA0 7ME6920-1QA10-1AA0	

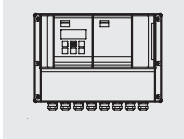
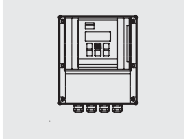
Description	Order No.	Symbol
Transmitter MAG 6000 CT for compact and wall mounting, approved for custody transfer; IP67/NEMA 4X, fibre-glass reinforced polyamide <ul style="list-style-type: none"> • 11 ... 30 V DC / 11 ... 24 V AC • 115/230 V AC, 50/60 Hz 	7ME6920-1AA30-1AB0 7ME6920-1AA10-1AB0	
Transmitter MAG 6000 SV for compact and wall mounting; special excitation 44 Hz settings for Batch application DN ≤ 25/1" IP67/NEMA 4X, fibre-glass reinforced polyamide <ul style="list-style-type: none"> • 11 ... 30 V DC / 11 ... 24 V AC • 115/230 V AC, 50/60 Hz 	7ME6920-1AB30-1AA0 7ME6920-1AB10-1AA0	
Transmitter MAG 6000 for 19" rack and wall mounting <ul style="list-style-type: none"> • 11 ... 30 V DC / 11 ... 24 V AC • 115/230 V AC, 50/60 Hz 	7ME6920-2CA30-1AA0 7ME6920-2CA10-1AA0	
Transmitter MAG 6000 19" (DN ≤ 300/12") Insert with safety barrier [EEx ia/ib] IIB ATEX <ul style="list-style-type: none"> • 11 ... 30 V DC / 11 ... 24 V AC • 115/230 V AC, 50/60 Hz 	7ME6920-2NA31-1AA0 7ME6920-2NA11-1AA0	
Transmitter MAG 6000 SV for 19" rack and wall mounting; special excitation 44 Hz settings, Batch application DN ≤ 25/1" <ul style="list-style-type: none"> • 11 ... 30 V DC / 11 ... 24 V AC • 115/230 V AC, 50/60 Hz 	7ME6920-2CB30-1AA0 7ME6920-2CB10-1AA0	
MAG 6000 with IP66/NEMA 4X enclosure; 115/230 V AC, 50/60 Hz	7ME6920-2EA10-1AA0	
MAG 6000 with electrode cleaning unit, complete mounted with IP66/NEMA 4X mounting enclosure <ul style="list-style-type: none"> • 11 ... 30 V DC / 11 ... 24 V AC • 115/230 V AC, 50/60 Hz 	7ME6920-2PA30-1AA0 7ME6920-2PA10-1AA0	

▶ Available ex stock

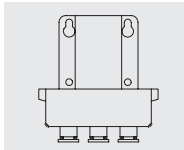
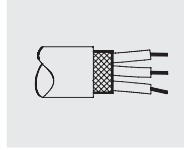
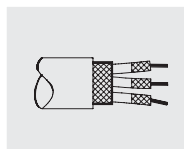
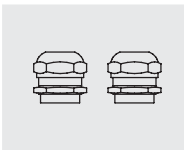
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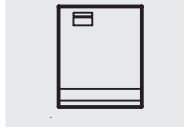
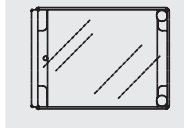
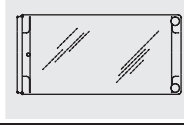
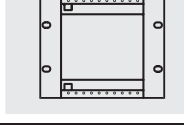
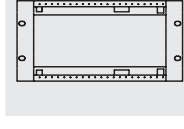
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Transmitter MAGFLO MAG 5000/6000

Description	Order No.	Symbol
MAG 6000 with electrode safety barrier, complete mounted with IP66/NEMA 4X wall mounting enclosure, ATEX, 115/230 V AC, 50/60 Hz <ul style="list-style-type: none"> • DN ≤ 300/12", [EEx ia/ib] IIB • DN ≥ 350/14", [EEx e ia] IIC 	7ME6920-2LA11-1AA0 7ME6920-2MA11-1AA0	
MAG 6000 SV, 19" insert, in IP66/NEMA 4X, ABS plastic enclosure, excitation frequency 44 Hz, Batch application DN ≤ 25/1", 11 ... 30 V DC, 11 ... 24 V AC, 50/60 Hz	7ME6920-2EB30-1AA0	


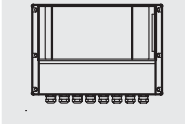
Accessories for MAG 5000 and MAG 6000

Description	Order No.	Symbol
Wall mounting unit for IP67/NEMA 4X version, wall bracket <ul style="list-style-type: none"> • 4 x M20 cable glands ▶ FDK-085U1018 • 4 x ½" NPT cable glands ▶ FDK-085U1053 		
Cable for standard electrode or coil, 3 x 1.5 mm ² / 18 gage with shield PVC <ul style="list-style-type: none"> • 10 m (33 ft) ▶ FDK-083F0121 • 20 m (65 ft) ▶ FDK-083F0210 • 40 m (130 ft) ▶ FDK-083F0211 • 60 m (200 ft) ▶ FDK-083F0212 • 100 m (330 ft) FDK-083F0213 • 150 m (500 ft) FDK-083F3052 • 200 m (650 ft) FDK-083F3053 • 500 m (1650 ft) FDK-083F3054 		
Electrode cable for empty pipe or low conductivity, double shielded, 3 x 0.25 mm ² <ul style="list-style-type: none"> • 10 m (33 ft) FDK-083F3020 • 20 m (65 ft) ▶ FDK-083F3095 • 40 m (130 ft) FDK-083F3094 • 60 m (200 ft) FDK-083F3093 • 100 m (330 ft) FDK-083F3092 • 150 m (500 ft) FDK-083F3056 • 200 m (650 ft) FDK-083F3057 • 500 m (1650 ft) FDK-083F3058 		
Cable glands, for above cable, 2 pcs. <ul style="list-style-type: none"> • M20 A5E00822490 • ½" NPT A5E00822501 		

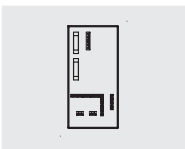
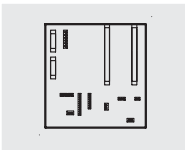
Description	Order No.	Symbol
Sealing screws for sensor/transmitter, 2 pcs	FDK-085U0221	
Terminal box, in polyamide, inclusive lid <ul style="list-style-type: none"> • M20 ▶ FDK-085U1050 • ½" NPT FDK-085U1052 		
Terminal box for MAG 6000, in stainless steel, inclusive lid <ul style="list-style-type: none"> • M20 A5E00836867 • ½" NPT A5E00836868 		
Terminal box (3A) in polyamide, inclusive lid <ul style="list-style-type: none"> • M20 A5E00822478 • ½" NPT A5E00822479 		
Potting kit for terminal box of MAG sensors for IP68/NEMA 6P ▶	FDK-085U0220	
19" cleaning unit for electrode cleaning (21TE) incl. back plate <ul style="list-style-type: none"> • 11 ... 30 V DC / 11 ... 24 V AC FDK-083F5039 • 115 ... 230 V AC, 50/60 Hz FDK-083F5036 		
19" safety barrier [EEx e ia] IIC for MAG 3100 Ex, DN 350 ... 2000 (14" ... 78") (21TE), incl. back plate	FDK-083F5034	
Panel mounting enclosure for 19" insert (21TE); IP65/NEMA 4 enclosure in ABS plastic for front panel mounting	FDK-083F5030	
Panel mounting enclosure for 19" insert (42TE); IP65/NEMA 4 enclosure in ABS plastic for front panel mounting	FDK-083F5031	
Back of panel mounting enclosure for 19" insert (21TE); IP20/NEMA 2 enclosure in aluminium	FDK-083F5032	
Back of panel mounting enclosure for 19" insert (42TE); IP20/NEMA 2 enclosure in aluminium	FDK-083F5033	

▶ Available ex stock

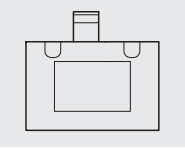
Transmitter MAGFLO MAG 5000/6000

Description	Order No.	Symbol
IP66/NEMA 4, wall mounting enclosure for 19" inserts (without backplates) • 21TE	FDK-083F5037	
• 42TE	▶ FDK-083F5038	
Front cover (7TE)	FDK-083F4525	

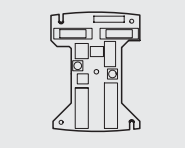
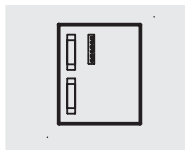
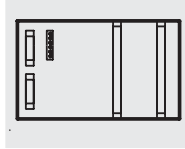
Back plates (if wall enclosure IP66 is used as part)

Description	Order No.	Symbol
Wall unit enclosure IP66, 12 ... 24 V, 115 ... 230 V • Transmitter	FDK-083F4121	
• Transmitter ia and safety barrier	FDK-083F4122	
• Transmitter ia/ib and safety barrier	FDK-083F4120	
• Transmitter and cleaning unit	FDK-083F4124	

Communication modules for MAG 6000

Description	Order No.	Symbol
HART (not for MAG 6000 I)	▶ FDK-085U0226	
MODBUS RTU/RS485	▶ FDK-085U0234	
PROFIBUS PA Profile 3	▶ FDK-085U0236	
PROFIBUS DP Profile 3	▶ FDK-085U0237	

Spare parts

Description	Order No.	Symbol
Connection plate • 12 ... 24 V • 115 ... 230 V	FDK-083F4149 FDK-083F4148	
19" enclosure, 12 ... 24 V, 115 ... 230 V • Transmitter	FDK-083F4117	
• Transmitter ia and safety barrier	FDK-083F4118	
• Transmitter ia/ib and safety barrier	FDK-083F4119	
• Transmitter and cleaning unit	FDK-083F4123	
SENSORPROM memory unit (Sensor code and serial numbers must be specified on order) • 2 kB (for MAG 5000/6000/ MAG 6000 I) • 250 B (for MAG 2500/3000)	FDK-085U1005 FDK-085U1008	
Display unit for MAG 5000/6000 • black neutral front • Siemens neutral front	FDK-085U1038 FDK-085U1039	
▶ Available ex stock		

SITRANS F flowmeters

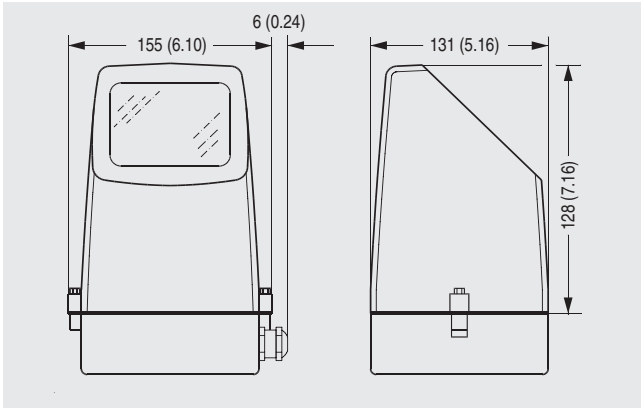
SITRANS F M

Transmitter MAGFLO MAG 5000/6000

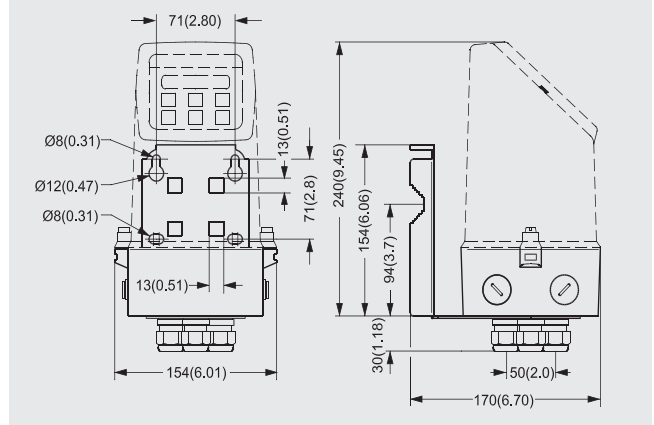
Dimensional drawings

Transmitter IP67/NEMA 4X/6 compact polyamide

4

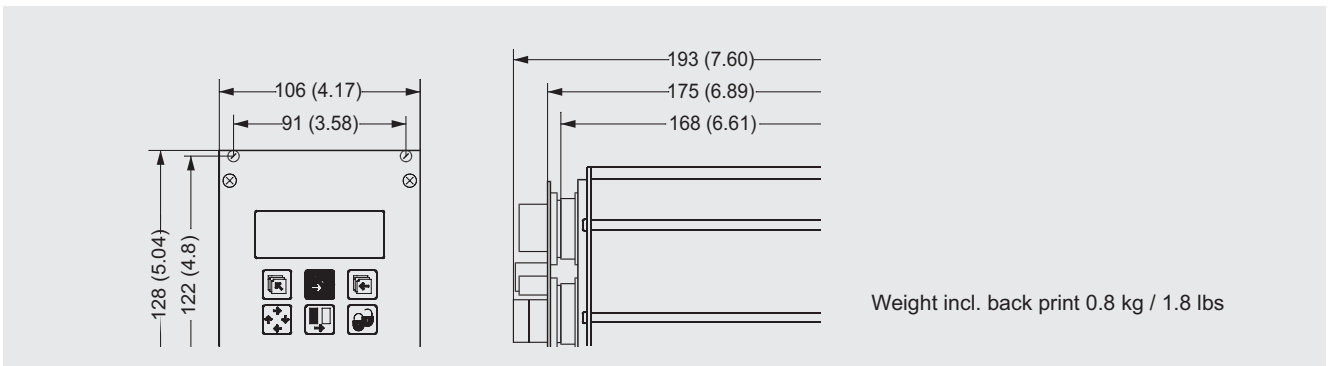


Transmitter integral mounted

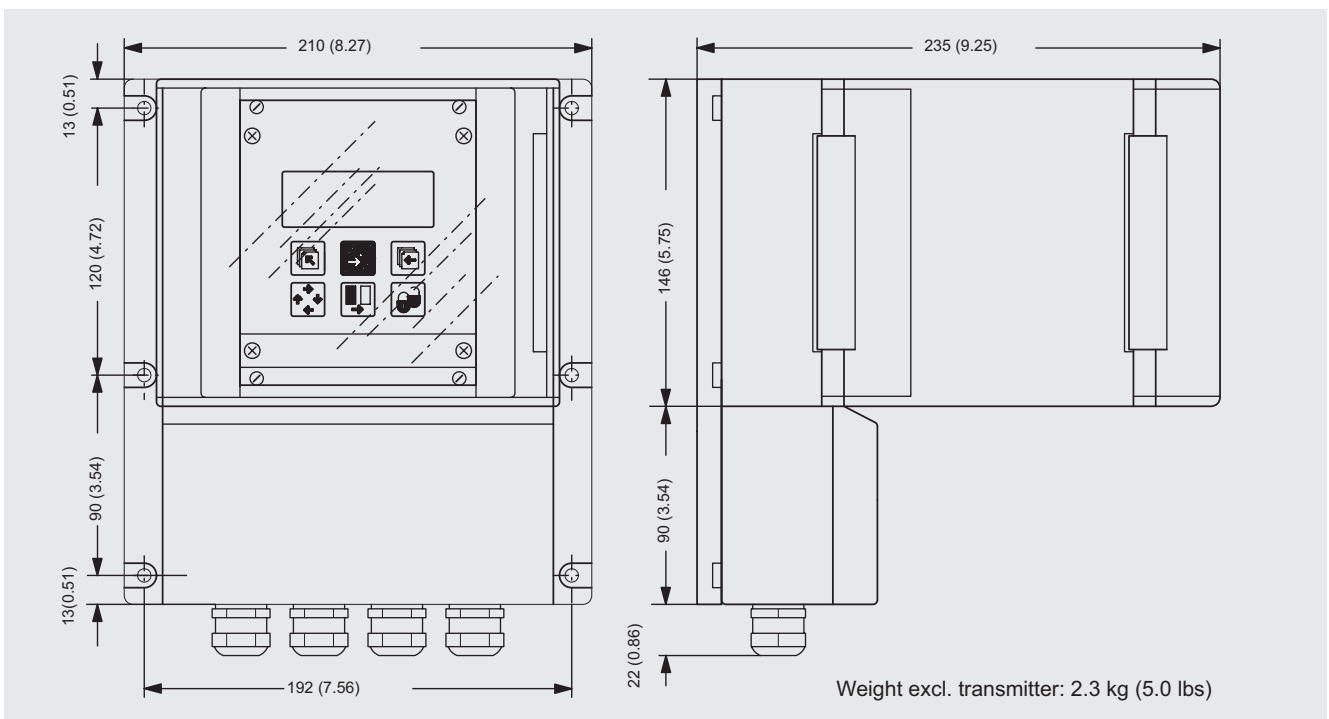


Transmitter wall mounted

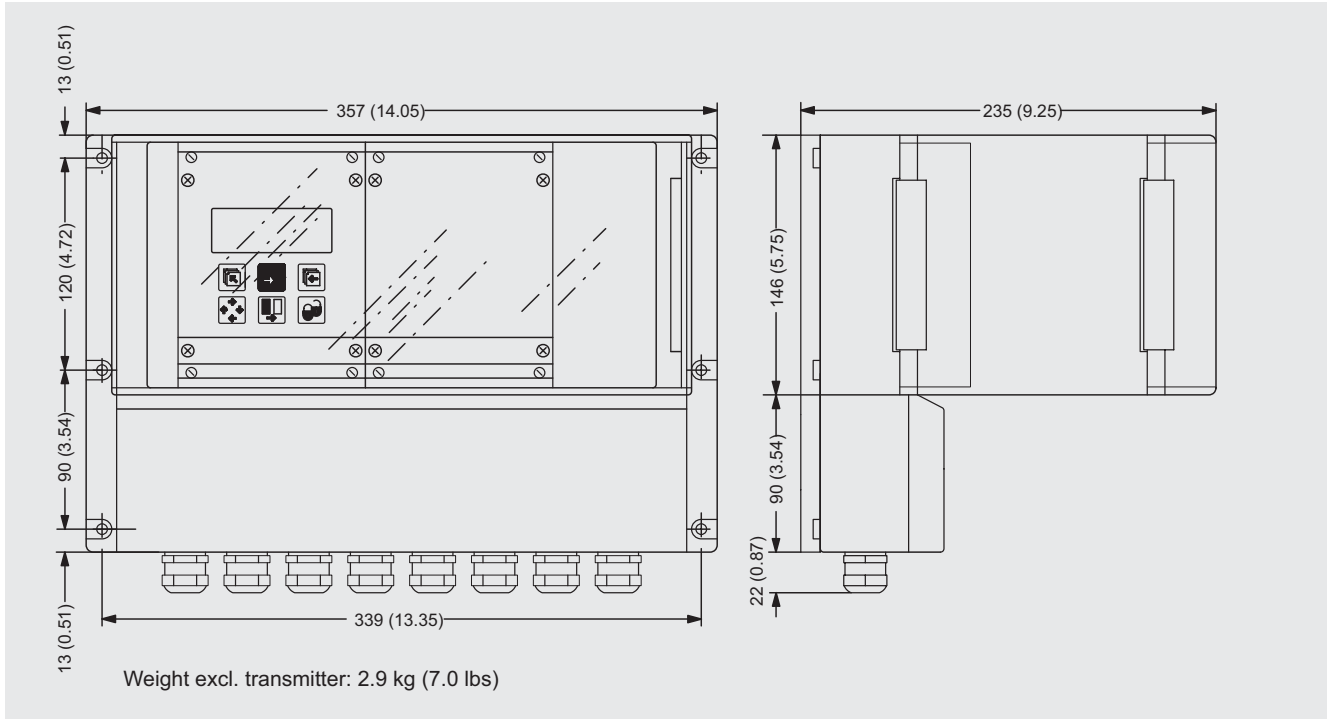
Transmitter, 19" IP20/ NEMA 2 standard unit



Transmitter, wall mounting IP66/NEMA 4, 21 TE

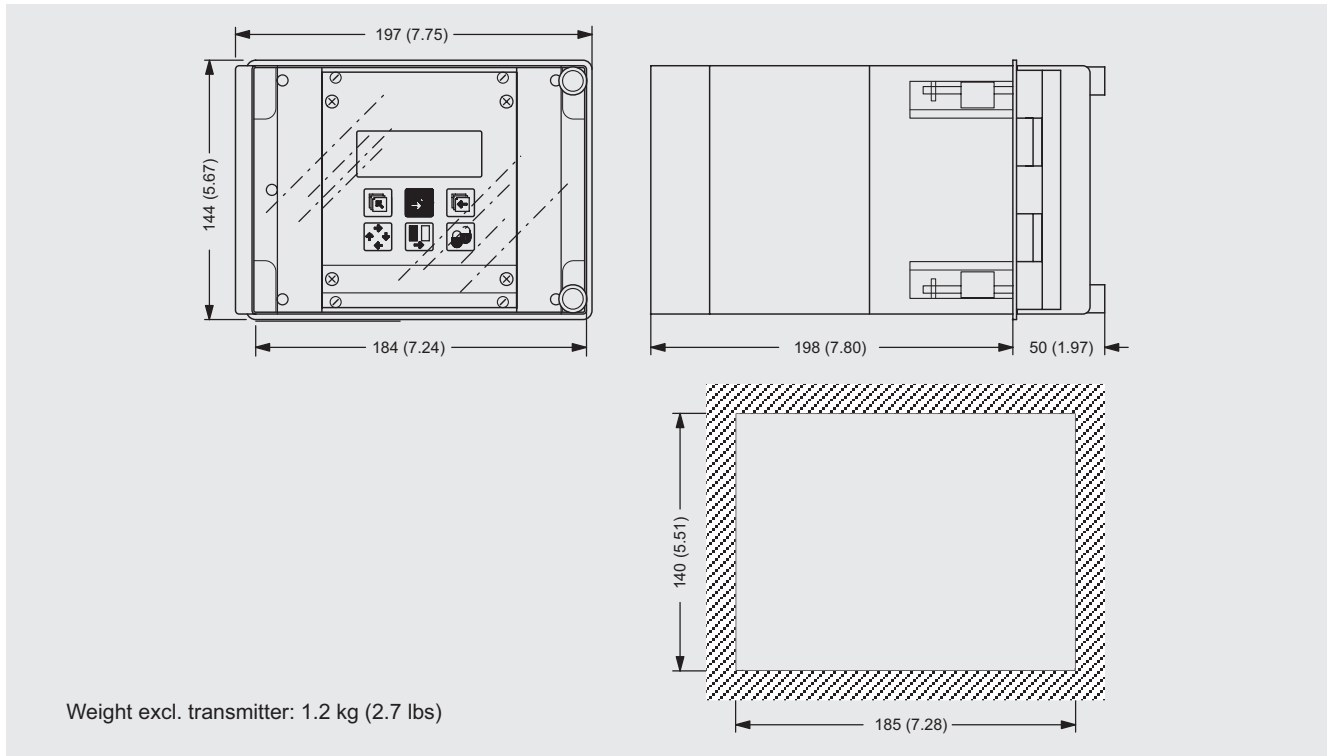


Transmitter, wall mounting IP66/NEMA 4, 42 TE



4

Transmitter, panel front IP65/NEMA 4, 21 TE



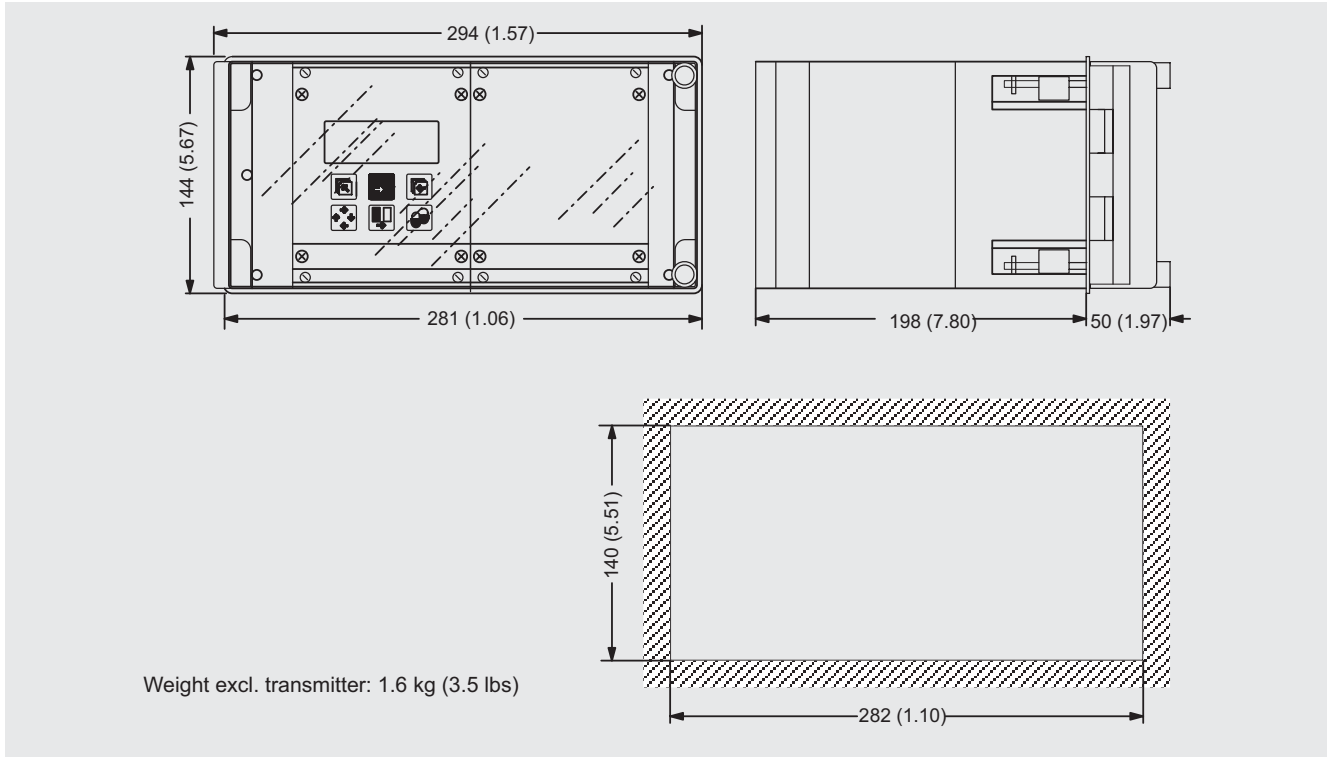
SITRANS F flowmeters

SITRANS F M

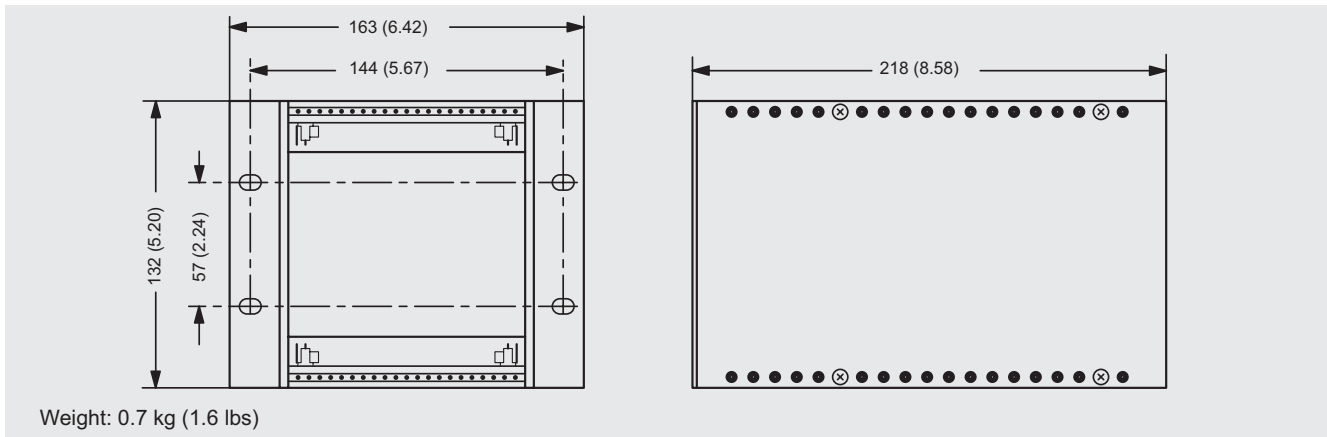
Transmitter MAGFLO MAG 5000/6000

Transmitter, panel front IP65/NEMA 4, 42 TE

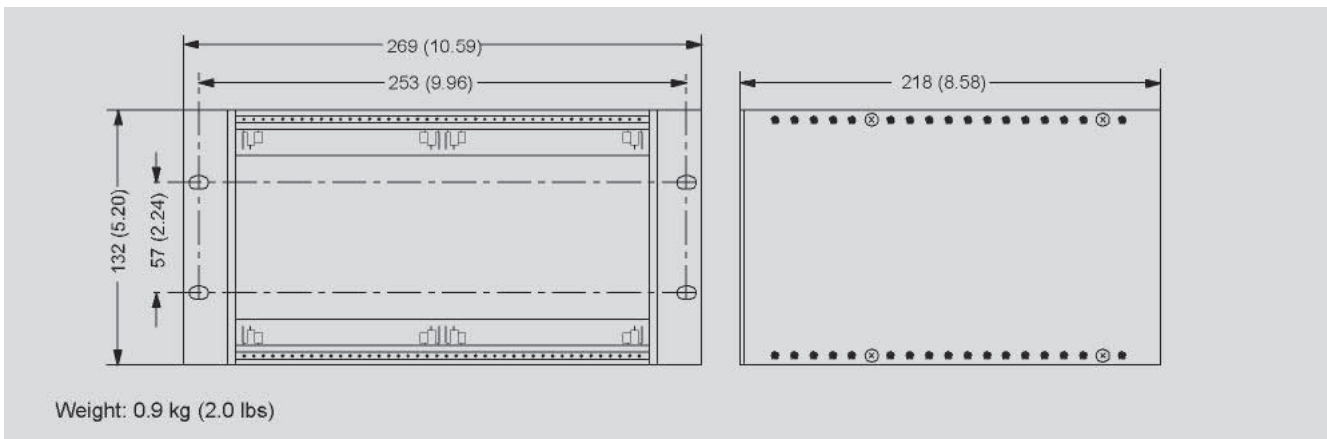
4



Transmitter, back of panel IP20/NEMA 2, 21 TE



Transmitter, back of panel IP20/NEMA 2, 42 TE



Schematics

Electrical connection

Grounding

PE must be connected due to safety class 1 power supply.

Mechanical counters

When mounting a mechanical counter to terminals 57 and 58 (active output), a 1000 μ F capacitor must be connected to the terminals 56 and 58. Capacitor + is connected to terminal 56 and capacitor - to terminal 58.

Output cables

If the output cable length is long in noisy environment, we recommend to use screened cable.

