

Magnetic-Inductive Flow Meter FMI

Application/Specified usage

- Magnetic-inductive flowmeter for the measurement of flow rate and volume in food and pharmaceutical applications
- Suitable for liquids, mash and pastes with a minimum conductivity of $5 \mu\text{S}/\text{cm}$
- Precise measurement of media containing solids
- Measurement range from 30 l/h to 280 000 l/h
- Suitable for dosing and filling applications

Hygienic design/Process connection

- Sensor made entirely of stainless steel
- EHEDG-compliant, hygienic design
- All parts in contact with the product are FDA-compliant
- Versions available to conform to 3-A Standard 28-
- Transmitter made of PFA; vacuum-tight and piggable
- Process connection made of stainless steel 1.4404 / AISI 316L, optionally 1.4435 / AISI 316L with inspection certificate 3.1
- Process connection optionally with $R_a \leq 0.4 \mu\text{m}$, electropolished
- Process temperature limit of $165 \text{ }^\circ\text{C}$ / $329 \text{ }^\circ\text{F}$ max. (remote version)
- Electrodes made of stainless steel 1.4404 / AISI 316L with inspection certificate 3.1
- CIP-/SIP-cleaning up to max. $130 \text{ }^\circ\text{C}$ / $266 \text{ }^\circ\text{F}$ (max. 30 minutes)
- Large selection of process adapters

Special features/Advantages

- High measurement accuracy even at low flow rates
- Simple and user-friendly parameterization
- Automatic empty pipe detection avoids undefined readings for empty pipes
- PFA lining for maximum resistance to aggressive substances such as acids and bases
- Vacuum-tight, rigid meter tube lining, even at high temperatures
- Swiveling housing head with illuminated graphic display
- Operation of device via optical keys without opening the housing
- Minimal maintenance and care requirements
- Pharmaceutical version available with all necessary certificates

Functional principle

The principle behind this measurement method is Faraday's law of induction.

This law states that a voltage is induced in a conductor that moves in a magnetic field. In the magnetic-inductive measurement method, the flowing, conductive medium acts as the conductor. Two vertically positioned field coils generate a constant magnetic field. The voltage induced in the flowing medium is measured by two stainless steel electrodes that are arranged horizontally. The voltage is directly proportional to the flow rate and can be expressed as the flow volume using the nominal tube width. The determined measurement values are made available as a counting pulse and 4...20 mA standard signal.

Communication

0/4...20 mA Hz 0/1

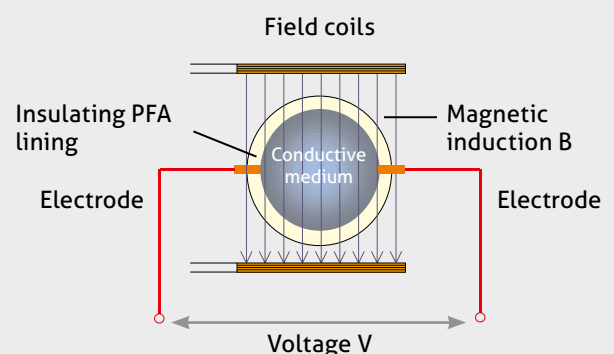
FMI flowmeter



FMI-R Remote version



Magnetic-inductive measurement



Display

- Integrated graphic display, illuminated
- Display surface swivels 4 x 90°
- Operation via optical keys (housing does not need to be opened)
- User guidance in English/German (switchable)

Note

The display comes with a power saving mode. The background lighting automatically switches off after 30 minutes, while the measured values continue to be displayed. For better readability, however, the lighting can be switched on again at any time by pressing the optical keys.

Outputs/Inputs

- 3 digital outputs for volume pulse and status signal
- 1 digital signal input for zero setting, measurement interruption (CIP) or measurement start

Electrical connection

Cable screw connection or M12 plug

Supply voltage

18...30 V DC or
100...240 V AC or
9...32 V DC

Measurement transmitter

- DN 10...DN 100
- PFA liner, vacuum-tight, piggable, FDA-approved
- Measurement electrodes, 1.4404 / AISI 316L with inspection certificate 3.1

Switch converter

Continuously rotatable measurement head

Process connection

Universal DIN 11864 aseptic flange

Tube standards

- DIN 11850 Series 2
- OD tube (ASME BPE)
- DIN 11866 Series A, B, C

**Process adapters**

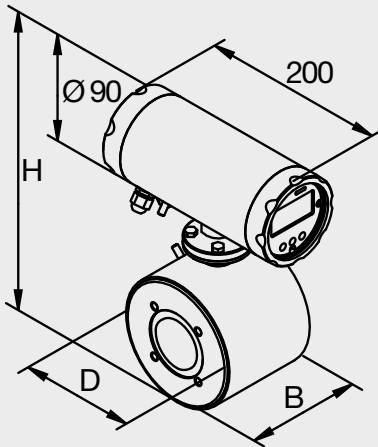
Weld flange	Tri-Clamp	Milk pipe fitting	Aseptic fitting	Varivent	FG hygienic flange	DIN flange	SMS threaded connector

Note

This product information is not an operating manual. Please note the information on device safety, installation and operation in the product operating manual.

Technical data		
Transmitter	Measuring principle Measurement range Nominal width Pipe standard	Magnetic-inductive 0.1...10 m/s DN 10...DN 100 DIN 11850 Series 2
Process connection	Transmitter Tube standards Process adapters	Aseptic flange DIN 11864-2, Form A Inside diameter as per DIN 11850 Series 2 Food: DIN 11850 Series 2, OD Tube (ASME BPE) Pharma: DIN 11866 Series A, B, C See pages 8 and 9
Materials	Pipe connection Seal Transmitter housing Transmitter lining Electrodes Converter housing Cap with control window M12 plug Cable gland	Food: 1.4404 / AISI 316L Pharma: 1.4435 / AISI 316L with 3.1 certificate Food: EPDM, FDA 21 CFR 177.2600 Pharma: EPDM with USP Class VI 1.4301 / AISI 304 (blasted) PFA, FDA 21 CFR 177.1550 1.4404 / AISI 316L with 3.1 certificate 1.4404 / AISI 316L PMMA (acrylic glass) 1.4305 / AISI 303 1.4305 / AISI 303
Temperature ranges	Environment/Storage Compact design Remote design	DC: -20...55 °C / -4...131 °F AC: -20...45 °C / -4...113 °F Process: 0...100 °C / 32...212 °F CIP/SIP cleaning: up to 130 °C / 266 °F max. 30 min Process: 0...165 °C / 32...329 °F
Transmitter	LCD display Electrical connection Supply voltage Power consumption Fuse protection	Graphic LCD, 46 mm x 23 mm, back-lit Cable gland Option: M12 plug (DC version only) DC: 18...30 V DC AC: 100...240 V AC, 50...60 Hz -15 %/+10 % D2: 9...32 V DC Max. 10 VA/8.5 W DC: T 1.5 A AC: 500 mA
Connection cables (remote version only)	Electrode cable Coil cable Cable length	LIYCY-0, 4 x 0.5 mm ² , screened F-CY-OZ, 2 x 0.5 mm ² , screened 5 m (standard), 10 m (option)
Measurement accuracy	Reproducibility	±0.2 % ±1 mm/s, under reference conditions as per DIN EN 29104 and VDI/VDE 2641 ±0.05 % ±0.5 mm/s
Product conductivity	Compact version Remote version	> 5 µS/cm, for demineralized water > 20 µS/cm > 15 µS/cm, for demineralized water > 30 µS/cm
Pulse output (volume counter)	2 x optocoupler, passive	32 V / 20 mA, pulse sequence max. 1 kHz (with option "M12-plug" only one pulse output connected)
Analog output (flow rate)	Active/passive selectable Load resistance	(0)/4...20 mA Max. 500 Ω
Status output	1 x optocoupler, passive	32 V / 20 mA (fault or direction of flow)
Status input	1 x optocoupler, passive	9...32 V, R _i < 3.2 kΩ
Interface	Field bus	CS3-Bus/RS485
Operating pressure	PN16	0.1...17 bar / 1.5...246 psi absolute, vacuum-tight (may be lower depending on the selected process adapter)
Protection class		IP 65

FMI-C dimensional drawing

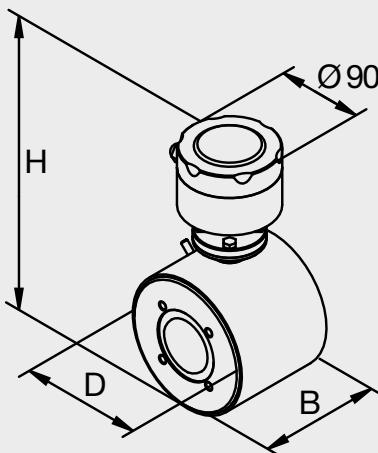


FMI-C dimensions, incl. measurement range and weight

Nominal width DN	B [mm]	D [mm]	H [mm]	Measurement range [l/h]	Weight [kg] *
					Compact design
10	104	90	225	30...3000	6
15	104	90	225	70...7000	6
25	104	90	225	180...18000	6
32	104	105	240	300...30000	7
40	104	105	240	450...45000	7
50	104	130	265	700...70000	8
65	160	130	265	1200...120000	8
80	160	155	290	1800...180000	12
100	200	170	305	2800...280000	17

*) without process connections

FMI-R dimensional drawing

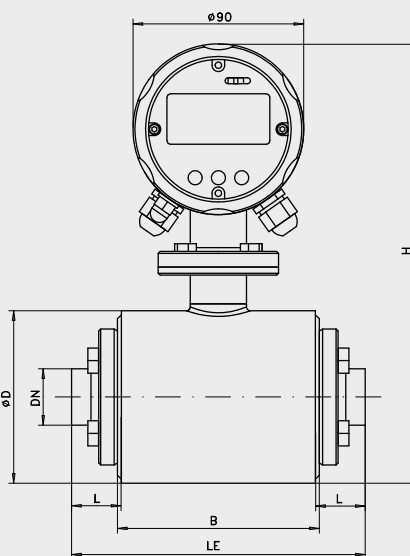


FMI-R dimensions, incl. measurement range and weight

Nominal width DN	B [mm]	D [mm]	H [mm]	Measurement range [l/h]	Weight [kg] *	
					Remote design (measuring feeder)	Transmitter and converter (display unit)
10	104	90	201	30...3000	4	5
15	104	90	201	70...7000	4	5
25	104	90	201	180...18000	4	5
32	104	105	216	300...30000	5	5
40	104	105	216	450...45000	5	5
50	104	130	241	700...70000	6	5
65	160	130	241	1200...120000	6	5
80	160	155	266	1800...180000	10	5
100	200	170	281	2800...280000	15	5

*) without process connections

Installation length



L = fitting length
 LE = installation length
 LE = B - 3 mm + 2 x L

Note



Dimensions "B" of transmitters DN 65, DN 80 and DN 100 have changed effective from production date as of June 2012.

Transmitter	B (old)	B (new, as of 01.06.2012)
DN65	104	160
DN80	105	160
DN100	110	200

Note

All dimensions in millimeters [mm].



Dimensions DIN 11850 Series 2 and transmitter type

DN pipe	Pipe dimension Da x S	Installation length LE							Transmitter type
		SS	TC as per DIN 32676 (plate size)	GG	HH	DF	VN	FG	
10	13 x 1.5	152	200 (34)	200	190	200	200	200	FT010
15	19 x 1.5	152	200 (34)	200	190	200	200	200	FT015
25	29 x 1.5	152	200 (50)	200	204	225	200	200	FT025
32	35 x 1.5	152	200 (50)	200	212	225	200	200	FT032
40	41 x 1.5	152	200 (50)	200	214	225	200	200	FT040
50	53 x 1.5	152	200 (64)	200	214	225	200	200	FT050
65	70 x 2.0	208	256 (91)	256	280	306	256	256	FT065
80	85 x 2.0	212	255 (91)	255	296	305	255	255	FT080
100	104 x 2.0	252	340 (119)	340	352	340	340	340	FT100

Dimensions OD tube (ASME-BPE) and transmitter type

DN pipe	Pipe dimension Da x S	Installation length LE			Transmitter type
		SS	TC as per ASME-BPE (plate size)	SM	
1/2"	12.7 x 1.65	152	170.8 (25)	-	FT010
3/4"	19.05 x 1.65	152	204.6 (25)	-	FT015
1"	25.4 x 1.65	152	202.8 (50)	182	FT025
1½"	38.1 x 1.65	152	202.8 (50)	192	FT040
2"	50.8 x 1.65	152	202.8 (64)	192	FT050
2½"	63.5 x 1.65	208	229.4 (77)	256	FT065
3"	76.2 x 1.65	212	252.6 (91)	260	FT080
4"	101.6 x 2.11	252	299.2 (119)	312	FT100

Dimensions DIN 11866 Series A and transmitter type

DN pipe	Pipe dimension Da x S	Installation length LE		Transmitter type
		SS	Tri-Clamp as per DIN 32676 (plate size)	
10	13 x 1.5	152	200 (34)	FT010
15	19 x 1.5	152	200 (34)	FT015
25	29 x 1.5	152	200 (50)	FT025
32	35 x 1.5	152	200 (50)	FT032
40	41 x 1.5	152	200 (50)	FT040
50	53 x 1.5	152	200 (64)	FT050
65	70 x 2.0	208	256 (91)	FT065
80	85 x 2.0	212	255 (106)	FT080
100	104 x 2.0	252	340 (119)	FT100

Dimensions DIN 11866 Series B and transmitter type

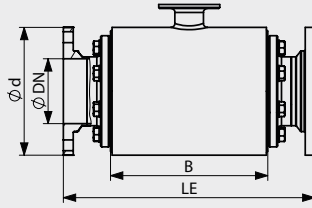
DN pipe	Pipe dimension Da x S	Installation length LE		Transmitter type
		SS	Tri-Clamp as per DIN 32676 (plate size)	
8	13.5 x 1.6	152	200 (25)	FT010
10	17.2 x 1.6	152	200 (25)	FT015
15	21.3 x 1.6	152	200 (50)	FT025
20	26.9 x 1.6	152	200 (50)	FT025
25	33.7 x 2.0	152	200 (50)	FT032
32	42.4 x 2.0	152	200 (64)	FT040
40	48.3 x 2.0	152	200 (64)	FT050
50	60.3 x 2.0	152	200 (77)	FT050
65	76.1 x 2.0	208	256 (91)	FT065
80	88.9 x 2.3	212	255 (106)	FT080
100	114.3 x 2.77	252	340 (119)	FT100

Dimensions DIN 11866 Series C and transmitter type

DN pipe	Pipe dimension Da x S	Installation length LE		Transmitter type
		SS	Tri-Clamp as per ASME-BPE (plate size)	
1/2"	12.7 x 1.65	152	170.8 (25)	FT010
3/4"	19.05 x 1.65	152	204.6 (25)	FT015
1"	25.4 x 1.65	152	202.8 (50)	FT025
1½"	38.1 x 1.65	152	202.8 (50)	FT040
2"	50.8 x 1.65	152	202.8 (64)	FT050
2½"	63.5 x 1.65	208	229.4 (77)	FT065
3"	76.2 x 1.65	212	252.6 (91)	FT080
4"	101.6 x 2.11	252	299.2 (119)	FT100

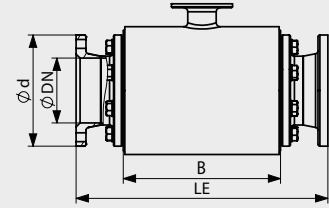
FG | Hygiene flange, smooth flange

ø DN	DN pipe	ø d	LE
25	25	80	200
40	40	92	200
50	50	108	200
65	65	130	256
80	80	146	255
100	71.5	166	340



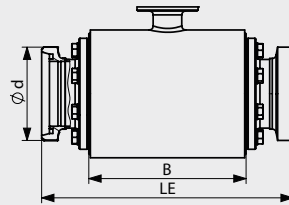
VN | VARIVENT

ø DN	DN pipe	ø d	LE
25	25	70	200
32	32	76	200
40	40	82	200
50	50	94	200
65	65	113	256
80	80	128	256



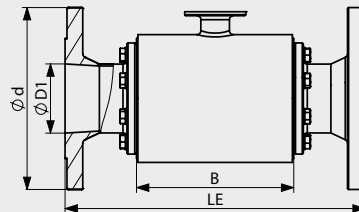
GG | Milk pipe fitting DIN 11851

ø DN	DN pipe	ø d	LE
10	10	Rd 28 x 1/8"	200
15	15	Rd 34 x 1/8"	200
25	25	Rd 52 x 1/6"	200
32	32	Rd 58 x 1/6"	200
40	40	Rd 65 x 1/6"	200
50	50	Rd 78 x 1/6"	200
65	65	Rd 95 x 1/6"	256
80	80	Rd 110 x 1/4"	256



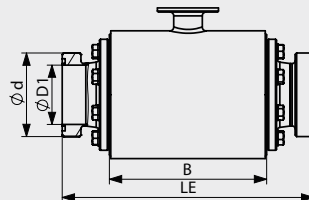
DF | DIN flange DIN EN 1092-1

ø DN	DN pipe	ø D1	ø d	LE
10	10	13.6	90	200
15	15	17.3	95	200
25	25	28.5	115	225
40	40	43.1	150	225
50	50	54.5	165	225
65	65	70.3	185	306
80	80	82.3	200	305
100	100	107.1	235	340



SM | SMS threaded connector 1146

ø DN	DN pipe	ø D1	ø d	LE
25	1"	22.5	Rd 40 x 1/6"	182
40	1 1/2"	35.5	Rd 60 x 1/6"	192
50	2"	48.5	Rd 70 x 1/6"	192
65	2 1/2"	60.5	Rd 85 x 1/6"	256
80	3"	73.1	Rd 98 x 1/6"	260
100	4"	97.6	Rd 132 x 1/6"	312



Note

- All dimensions in millimeters [mm].
- "ø DN" always refers to the pipe diameter of the transmitter.

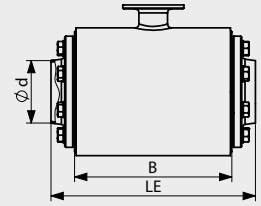


SS | Weld flange DIN 11853-2

DINA, DIN2			
ø DN	DN pipe	ø d	LE
10	10	13.0	152
15	15	19.0	152
25	25	29.0	152
32	32	35.0	152
40	40	41.0	152
50	50	53.0	152
65	65	70.0	208
80	80	85.0	212
100	100	104.0	252

DINB			
ø DN	DN pipe	ø d	LE
10	08	13.5	152
15	10	17.2	152
25	15	21.3	152
	20	26.9	152
32	25	33.7	152
40	32	42.4	152
50	40	48.3	152
	50	60.3	152
65	65	76.1	208
80	80	88.9	212
100	100	114.3	252

DINC, ASME			
ø DN	DN pipe	ø d	LE
10	1/2"	12.7	152
15	3/4"	19.05	152
25	1"	25.4	152
40	1½"	38.1	152
50	2"	50.8	152
65	2½"	63.5	208
80	3"	76.2	212
100	4"	101.6	252

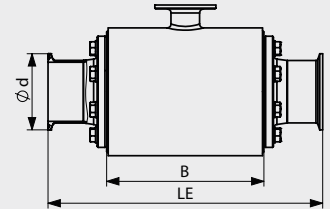


TC | Tri-Clamp DIN 32676 or ASME-BPE

DINA, DIN2			
ø DN	DN pipe	ø d	LE
10	10	34.0	200
15	15	34.0	200
25	25	50.5	200
32	32	50.5	200
40	40	50.5	200
50	50	64.0	200
65	65	91.0	256
80	80	106.0	256
100	100	119.0	340

DINB			
ø DN	DN pipe	ø d	LE
10	08	25.0	200
15	10	25.0	200
25	20	50.5	200
32	25	50.5	200
40	32	64.0	200
50	40	64.0	200
	50	77.0	200
65	65	91.0	256
80	80	106.0	256
100	100	119.0	340

DINC, ASME			
ø DN	DN pipe	ø d	LE
10	1/2"	12.7	170.8
15	3/4"	19.05	204.6
25	1"	25.4	202.8
40	1½"	38.1	202.8
50	2"	50.8	202.8
65	2½"	63.5	229.4
80	3"	76.2	252.6
100	4"	101.6	299.2

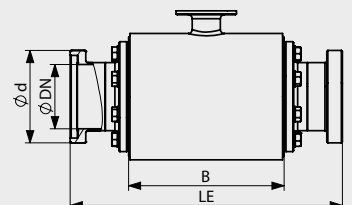


HH | Aseptic fitting 11853-1

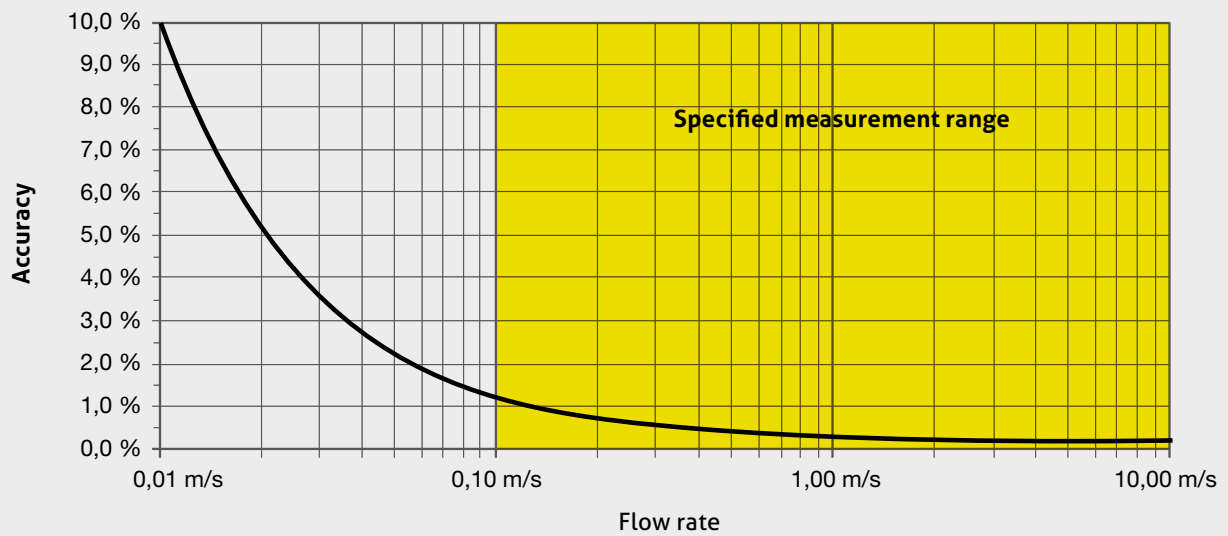
Series A, DIN2			
ø DN	DN pipe	ø d	LE
10	10	Rd 28 x 1/8"	190
15	15	Rd 34 x 1/8"	190
25	25	Rd 52 x 1/6"	204
32	32	Rd 58 x 1/6"	212
40	40	Rd 65 x 1/6"	214
50	50	Rd 78 x 1/6"	214
65	65	Rd 95 x 1/6"	280
80	80	Rd 110 x 1/4"	296
100	100	Rd 130 x 1/4"	352

Series B			
ø DN	DN pipe	ø d	LE
10	08	Rd 28 x 1/8"	190
15	10	Rd 34 x 1/8"	190
25	15	Rd 44 x 1/6"	194
	20	Rd 52 x 1/6"	204
32	25	Rd 58 x 1/6"	212
40	32	Rd 65 x 1/6"	214
50	40	Rd 78 x 1/6"	214
	50	Rd 95 x 1/6"	224
65	65	Rd 110 x 1/4"	292
80	80	Rd 130 x 1/4"	312

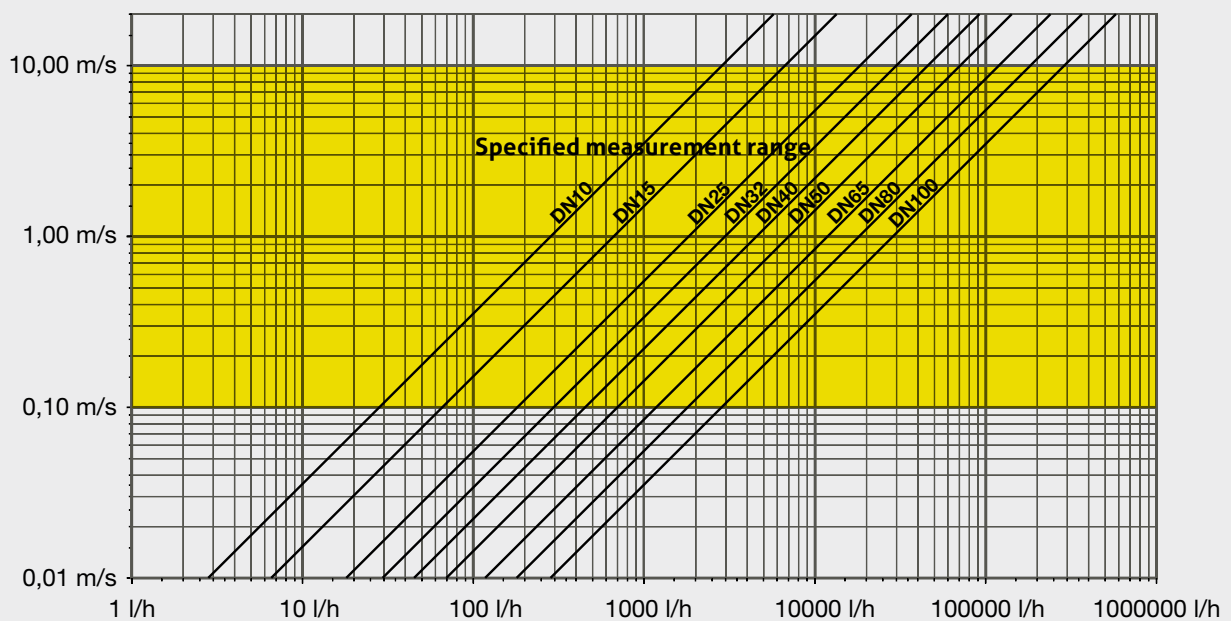
Series C, ASME			
ø DN	DN pipe	ø d	LE
10	1/2"	Rd 28 x 1/8"	190
15	3/4"	Rd 34 x 1/8"	190
25	1"	Rd 52 x 1/6"	204
40	1½"	Rd 65 x 1/6"	214
50	2"	Rd 78 x 1/6"	214
65	2½"	Rd 95 x 1/6"	280
80	3"	Rd 110 x 1/4"	296
100	4"	Rd 130 x 1/4"	352



Measurement accuracy by flow rate



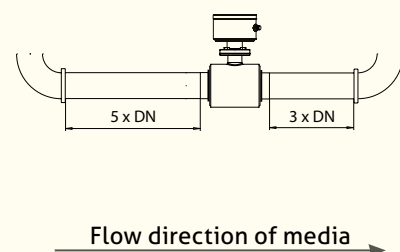
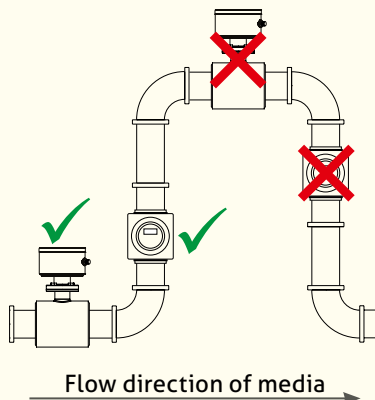
Flow rate nomogram



Mechanical Connection / Installation



- For installation please check also the installation remarks mentioned in the product manual.
- **Correct installation:**
 - Before or into an ascending pipe.
- **Wrong installation:**
 - Before or into a descending pipe.
 - Into the highest point of a pipe, air bubbles will concentrate there.



Pharmaceutical version

For pipe connections DIN 11866 Series A, B, C
Material 1.4435 / AISI 316L with inspection certificate 3.1
USP Class VI for PFA lining and seal

Optional:

- Surface $R_a \leq 0.4 \mu\text{m}$ electropolished
- Measurement report for surface roughness and delta ferrite content

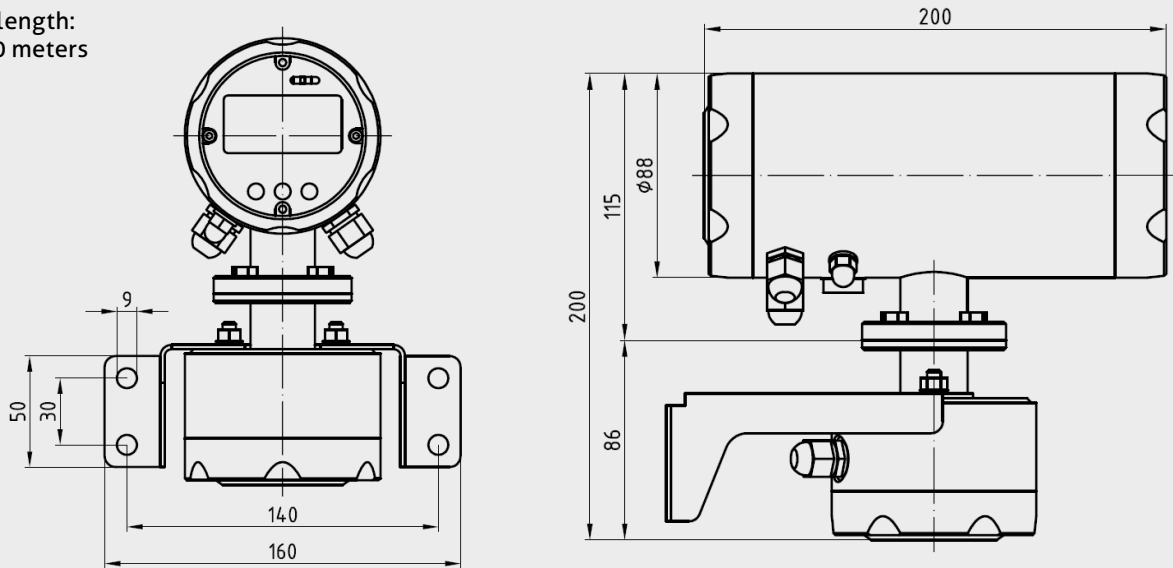
Note on 3-A Sanitary Standard 28-

Information on installation according to 3-A standard is available on our website:
www.anderson-negele.com/3A28.pdf

Click on the PDF icon to download the document.

FMI-R dimensional drawing, installation dimensions

Cable length:
5 or 10 meters

**Cleaning/Maintenance**

- When using a pressure washer, do not point the nozzle directly at the electrical connections.

Standards and guidelines

- Compliance with the applicable regulations and directives is mandatory.

Transport/Storage

- Do not store outside
- Store in an area that is dry and dust-free
- Do not expose to corrosive media
- Protect against solar radiation
- Avoid mechanical shock and vibration
- Storage temperature $0...60 \text{ }^\circ\text{C}$ / $32...140 \text{ }^\circ\text{F}$
- Relative humidity max. 80 %

Reshipment

- Sensors and process connection must be clean and must not be contaminated with hazardous media and/or heat-conductive paste. Please note the cleaning notice!
- To avoid damage of the equipment, use suitable transport packaging only.

Notice on CE

- Applicable directives:
Electromagnetic Compatibility Directive 2014/30/EU
- Compliance with the applicable EU directives is identified by the CE label on the product.
- The operating company is responsible for complying with the guidelines applicable to the entire installation.

Disposal

- Electrical devices should not be disposed of with household trash. They must be recycled in accordance with national laws and regulations.
- Take the device directly to a specialized recycling company and do not use municipal collection points.

Main application area: Food | Material: 1.4404 / AISI 316L (without 3.1 certificate)

FMI-C compact version
FMI-R remote version (includes 5 m coil and electrode cable as standard)

Tube standard

DIN2 DIN 11850 Series 2 - Main application area: Food - Material: 1.4404 / AISI 316L

ODT OD-Tube OD Tube (ASME-BPE) - Main application area: Food - Material: 1.4404 / AISI 316L

Nominal diameter Process connection

DIN2	ODT
10	1/2"
15	3/4"
25	1"
32	-
40	1½"
50	2"
65	2½"
80	3"
100	4"

Process connection (Ⓐ: 3-A conform)

X	without process connection
SS	weld flange Ⓐ
TC	Tri-Clamp Ⓐ
HH	aseptic fitting DIN 11864-1 threaded side Ⓐ
GG	milk pipe fitting DIN 11851
VN	VARIVENT smooth flange
FG	FG hygienic flange, smooth flange
DF	DIN flange as per DIN EN 1092-1 Type 11 Form B, similar to DIN 2623/2633
SMS	SMS threaded connector

DIN 11850 Series 2

DIN2	SS	TC	GG	HH	DF	VN	FG
10	x	x	x	x	x		
15	x	x	x	x	x		
25	x	x	x	x	x		x
32	x	x	x	x		x	
40	x	x	x	x	x		x
50	x	x	x	x	x	x	x
65	x	x	x	x	x	x	x
80	x	x	x	x	x	x	x
100	x	x		x	x		x

OD-Tube (ASME BPE)

ODT	SS	TC	SMS
1/2"	x	x	
3/4"	x	x	
1"	x	x	x
-			
1½"	x	x	x
2"	x	x	x
2½"	x	x	x
3"	x	x	x
4"	x	x	x

x = process connection available for nominal width

X fixed character

Power supply

DC	18...30 V DC
AC	100...240 V AC
D2	9...32 V DC

Electrical connection (DC version only)

X	cable gland
M12	M12-plug

FMI-C /

DIN2 /

40 /

SS /

X /

DC /

M12

Main application area: Pharmaceutical | Material: 1.4435 / AISI 316L with 3.1 certificate

FMI-C compact version
FMI-R remote version (includes 5 m coil and electrode cable as standard)

Tube standard

DINA DIN11866 Series A (pipe size as per DIN 11859 Series 2)
DINB DIN11866 Series B (pipe size as per DIN EN ISO 1127)
DINC DIN11866 Series C (pipe size as per ASME-BPE)

Nominal diameter Process connection

DINA	DINB	DINC
10	08	1/2"
15	10	3/4"
25	15	1"
32	25	-
40	32	1½"
50	40	2"
65	50	2½"
80	65	3"
100	80	4"

Process connection (Ⓐ): 3-A conform)

X without process connection
SS weld flange Ⓐ
TC Tri-Clamp Ⓐ

DIN 11866 Series A

DINA	SS	TC
10	x	x
15	x	x
25	x	x
32	x	x
40	x	x
50	x	x
65	x	x
80	x	x
100	x	x

DIN 11866 Series B

DINB	SS	TC
08	x	x
10	x	x
15	x	x
25	x	x
32	x	x
40	x	x
50	x	x
65	x	x
80	x	x

DIN 11866 Series C

DINC	SS	TC
1/2"	x	x
3/4"	x	x
1"	x	x
-		
1½"	x	x
2"	x	x
2½"	x	x
3"	x	x
4"	x	x

x = process connection available for nominal width

Surface quality (wetted parts, except weldseam)

X Surface $R_a \leq 0.8 \mu\text{m}$
04 Surface electro-polished, $R_a \leq 0.4 \mu\text{m}$

X fixed character

Power supply

DC 18...30 V DC
AC 100...240 V AC
D2 9...32 V DC

Electrical connection (DC version only)

X cable gland
M12 M12-plug

FMI-C / DINA / 40 / SS / 04 / X / DC / M12

FMI replacement electronics

FMI-CE replacement electronics for compact version "FMI-C"
FMI-RE replacement electronics for remote version "FMI-R"

X fixed character

Power supply

DC 18...30 V DC
AC 100...240 V AC
D2 9...32 V DC

Electrical connection (DC version only)

X cable gland
M12 M12 plug

FMI-CE / X / DC / M12

Coil and electrode cables for remote version FMI-R

LIY-CY / 2x0.5G-5 m coil cable, type 2 x 0.5 mm² F-CY-OZ (LIY-CY), for FMI-R, 5 m, screened
LIY-CY / 2x0.5G-10 m coil cable, type 2 x 0.5 mm² F-CY-OZ (LIY-CY), for FMI-R, 10 m, screened
LIY-CY / 4x0.5G-5 m electrode cable, type 4 x 0.5 mm² F-CY-OZ (LIY-CY), for FMI-R, 5 m, screened
LIY-CY / 4x0.5G-10 m electrode cable, type 4 x 0.5 mm² F-CY-OZ (LIY-CY), for FMI-R, 10 m, screened

Note



The standard scope of delivery of the FMI-R contains a 5 m coil and electrode cable.

Accessories

PVC-cable with M12 connection, brass nickel-plated, IP69K, shielded





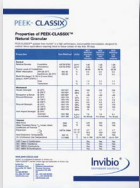

M12-PVC/5G-8m 5 pin, length 8 m
M12-PVC/5G-15m 5 pin, length 15 m
M12-PVC/5G-30m 5 pin, length 30 m

Options

CERT /2.2 / FMI factory certificate 2.2 as per DIN EN 10240 for FMI

CAL / FMI standard factory calibration certificate (2...3 calibration points 10 %, 50 %, 100 %)

Certificates

							
2.2 EN 10204	3.1 EN 10204	Calibration certificate	3-A	USP Class VI	Surface		