

SITRANS F C sensor MASS 2100 DI 3, DI 6 and DI 15 with SITRANS MASS 6000 and SIFLOW FC070 transmitter

Note: Technical specification see page 3/187 to 3/198.

Selection and Ordering data	Article No.	Ord. code
SITRANS F C sensors	7ME4100-	
MASS 2100 without heating jacket		
Click on the Article No. for the online configuration in the PIA Life Cycle Portal.		
Diameter		
Stainless steel AISI 316L/1.4435		
DI 3 (PN 100/PN 230)	1 C	
DI 6	1 D	
DI 15	1 E	
Hastelloy C22/2.4602		
DI 3 (PN 100/PN 350)	2 C	
DI 6	2 D	
DI 15	2 E	
Pressure		
PN 16 (DI 6, DI 15)	A	
PN 25 (DI 6, DI 15)	B	
PN 40 (DI 6, DI 15)	C	
PN 100 (DI 3, DI 6, DI 15)	D	
PN 130 (DI 15, 1/2", AISI 316L/1.4404)	G	
PN 200 (DI 15, 1/2", Hastelloy C22/2.4602)	K	
PN 230 (DI 3, 1/4", AISI 316L/1.4404)	L	
PN 265 (DI 6, 1/4", AISI 316L/1.4404)	M	
PN 350 (DI 3, 1/4", Hastelloy C22/2.4602)	N	
PN 410 (DI 6, 1/4", Hastelloy C22/2.4602)	Q	
Class 150 (DI 6, DI 15)	R	
Class 600 (DI 6, DI 15)	S	
Process connection/flange		
Pipe thread		
G 1/4"	1 0	
1/4" NPT	1 1	
G 1/2"	1 2	
1/2" NPT	1 3	
G 1	1 4	
1" NPT	1 5	
G 2"	1 6	
2" NPT	1 7	
Flange EN1092-1 Form B		
DN 10 (PN 40/PN 100)	2 0	
DN 15 (PN 40/PN 100)	2 1	
DN 25 (PN 40/PN 100)	2 2	
Flange ASME/ANSI B 16.5		
1/2" (class 150/class 600)	3 0	

Selection and Ordering data	Article No.	Ord. code
SITRANS F C sensors	7ME4100-	
MASS 2100 without heating jacket		
Dairy screwed connection DIN 11851		
DN 10 (PN 40)	4 0	
DN 15 (PN 40)	4 1	
DN 25 (PN 40)	4 2	
Dairy clamp connection ISO 2852 (DIN 32676)		
Cone down the sensor in order to obtain self-drainage with connectors ISO 2852		
25 mm (PN 16)	5 0	
38 mm (PN 16)	5 1	
51 mm (PN 16)	5 2	
Dairy screwed connection ISO 2853		
25 mm (PN 16)	6 0	
38 mm (PN 16)	6 1	
51 mm (PN 16)	6 2	
Configuration/calibration type		
Standard	1	
Density	2	
Brix/Plato	3	
Fraction (specification required)	9	N O Y
Transmitter compact mounted on sensor		
No transmitter, sensor and adapter only	A	
MASS 6000, Ex d, stainless steel enclosure, 1 current, 1 freq./pulse and 1 relay output, 24 V AC/DC with Ex d e ib [ia Ga] IIC T4 Gb Ex-approval	B	
MASS 6000, IP67, Polyamide enclosure, cable glands M20, 1 current, 1 freq./pulse and 1 relay output, 24 V AC/DC	C	
MASS 6000, IP67, Polyamide enclosure, cable glands M20, 1 current, 1 freq./pulse and 1 relay output, 115/230 V AC 50/60 Hz	D	
MASS 6000, IP67, Polyamide enclosure, cable glands 1/2" NPT, 1 current, 1 freq./pulse and 1 relay output, 24 V AC/DC	E	
MASS 6000, IP67, Polyamide enclosure, cable glands 1/2" NPT, 1 current, 1 freq./pulse and 1 relay output, 115/230 V AC 50/60 Hz	F	
Cable		
No cable	A	
Cable with one M20 connector and one end for terminal connect	B	
• 5 m (16.4 ft)	B	
• 10 m (32.8 ft)	C	
• 25 m (82 ft)	D	
• 50 m (164 ft)	E	
• 75 m (246 ft)	F	
• 150 m (492 ft)	G	
Calibration/verification		
Standard calibration 3 flow x 2 points	1	
Stand. calibration matched pair 3 flow x 2 points	2	
Accredited calibration matched pair 5 flow x 2 points (ISO 17025)	3	
Extended calibration customer-specified select Y60, Y61, Y62 or Y63 (see additional information)	8	

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Flow Measurement

SITRANS F C

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Dairy MLFB example

MASS 2100

Sensor size DI 15,
AISI 316L/1.4435

PN 40

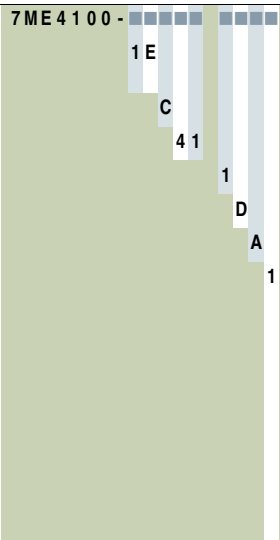
DN 15 connector

Standard configuration/calibration

MASS 6000 IP67 compact mounted

No cable

Standard calibration, 3 flow x 2 points



Selection and Ordering data

Order code

Additional information

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

Pressure testing certificate PED: 2014/68/EU

Material certificate EN 10204-3.1

NDT- X-ray inspection report: EN 1435

DI3 sensor only: NDT-Penetrant inspection report ISO 3452.

Factory certificate according to EN 10204 2.2

Factory certificate according to EN 10204 2.1

Tag name plate, stainless steel

Tag name plate, plastic

Customer-specific transmitter setup

Customer-specified, matched pair (5 x 2)

Customer-specified calibration (5 x 2)

Customer-specified, matched pair (10 x 1)

Customer-specified calibration (10 x 1)

Cleaned for oil and grease

Special version

C11

C12

C13

C14

C15

Y17

Y18

Y20

Y60

Y61

Y62

Y63

Y80

Y99

Operating instructions for

SITRANS F C MASS 2100 DI 3 to DI 40

Description

Article No.

• English

A5E02896535




• German


A5E03073519

All literature is available to download for free, in a range of languages, at www.siemens.com/processinstrumentation/documentation




Selection and Ordering data

Accessories

Description	Dimension	Article No.
Mating parts for hygienic fittings DIN 11851 (AISI 316L)		
Includes: • 2 unions • 2 mating parts (for welding in) • 2 EPDM gaskets		
	DN 10	FDK:085U1016
	DN 15	FDK:085U1017
	DN 25	FDK:085U1019
Mating parts for hygienic clamp ISO 2852 (AISI 316L)		
Includes: • 2 clamps • 2 mating parts • 2 EPDM gaskets		
	25 mm	FDK:085U1029
2 EPDM gaskets with collar for mounting set DIN 11851		
	DN 10	FDK:085U1006
	DN 15	FDK:085U1007
	DN 25	FDK:085U1009

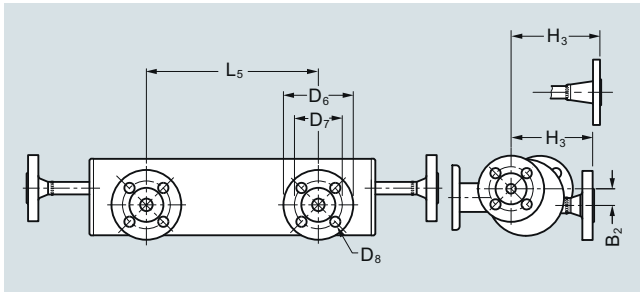
Description	Length	Article No.
Cable with M20 connector Standard blue cable between MASS 6000 and MASS 2100, 5 x 2 x 0.34 mm ² twisted and screened in pairs.		
	5 m (16.4 ft)	FDK:083H3015
	10 m (32.8 ft)	FDK:083H3016
	25 m (82 ft)	FDK:083H3017
	50 m (164 ft)	FDK:083H3018
	75 m (246 ft)	FDK:083H3054
	150 m (492 ft)	FDK:083H3055

Spare parts

Description	Article No.
Adapter for MASS 2100 M20 electrical adapter for MASS 2100 DI 3, 6, 15, 25 and 40	FDK:083L8889
	
M20 connector for cable mounting	FDK:083H5056
	
2 kB SENSORPROM unit, includ- ing programming (Sensor Serial No. and Article No. must be specified by ordering)	FDK:083H4410
	

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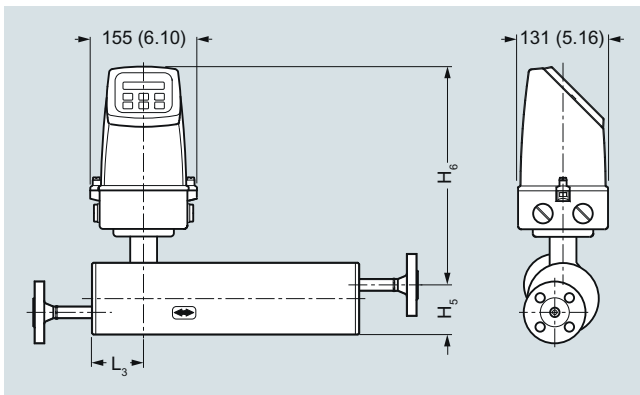
MASS 2100 sensor with "heating jacket"



Dimensions in mm (inch)

Sensor size	Connections heated			L5	H3	B2	D6	D7	D8
DI (inch)	Type	Pressure rating	Size	mm (inch)	mm (inch)	mm (inch)	mm (inch)	mm (inch)	mm (inch)
DI 3 (1/8)	EN 1092-1	PN 40	DN 15	234 (9.21)	122 (4.8)	22 (0.87)	95 (3.74)	65.0 (2.56)	14.0 (0.55)
	ANSI B16.5	Class 150	½"	234 (9.21)	131.6 (5.18)	22 (0.87)	88.9 (3.5)	60.5 (2.38)	15.7 (0.62)
DI 6 (¼)	EN 1092-1	PN 40	DN 15	234 (9.21)	112 (4.41)	22.7 (0.89)	95 (3.74)	65.0 (2.56)	14.0 (0.55)
	ANSI B16.5	Class 150	½"	234 (9.21)	121.6 (4.79)	22.7 (0.89)	88.9 (3.5)	60.5 (2.38)	15.7 (0.62)
DI 15 (½)	EN 1092-1	PN 40	DN 15	234 (9.21)	126.5 (4.98)	31.5 (1.24)	95 (3.74)	65.0 (2.56)	14.0 (0.55)
	ANSI B16.5	Class150	½"	234 (9.21)	136.1 (5.36)	31.5 (1.24)	88.9 (3.5)	60.5 (2.38)	15.7 (0.62)

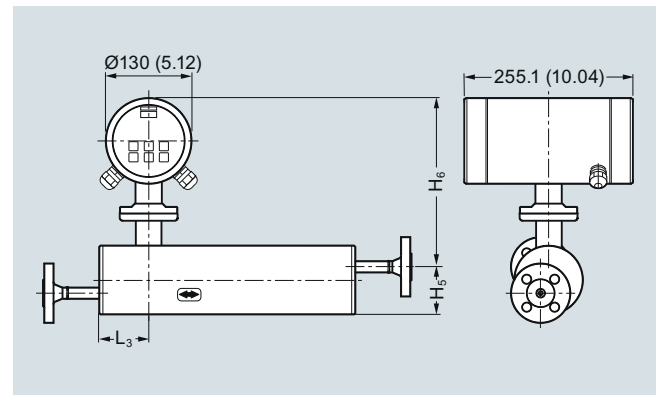
MASS 2100 and MASS 6000 IP67 compact version



MASS 2100 and MASS 6000 IP67 compact version, dimensions in mm (inch)

Sensor size [DI (inch)]	L ₃ [mm (inch)]	H ₅ [mm (inch)]	H ₆ [mm (inch)]	H ₅ + H ₆ [mm (inch)]
3 (1/8)	75 (2.95)	82 (3.23)	306 (12.04)	388 (15.28)
6 (¼)	62 (2.44)	72 (2.83)	316 (12.44)	388 (15.28)
15 (½)	75 (2.95)	87 (3.43)	326 (12.83)	413 (16.26)

MASS 2100 and MASS 6000 Ex d compact version



MASS 2100 and MASS 6000 Ex d compact version, dimensions in mm (inch)

Sensor size [DI (inch)]	L ₃ [mm (inch)]	H ₅ [mm (inch)]	H ₆ [mm (inch)]	H ₅ + H ₆ [mm (inch)]
3 (1/8)	75 (2.95)	82 (3.23)	247 (9.72)	329 (12.95)
6 (¼)	62 (2.44)	72 (2.83)	257 (10.12)	329 (12.95)
15 (½)	75 (2.95)	87 (3.43)	267 (10.51)	354 (13.94)