

### Overview



SITRANS F C MC2 is available as a:

- Standard version (DN 50 to DN 150 (2" to 6"))
- Hygienic EHEDG-certified version (DN 20 to DN 80 (¾" to 3"))

The MC2 sensor is suitable for accurate mass flow measurement of a variety of liquids and gases.

The sensor offers superior performance in terms of flow accuracy, turn-down ratio and density accuracy and delivers true multi-parameter measurements i.e.: mass flow, volume flow, density, temperature and fraction flow.

The very compact sensor construction makes installation and commissioning of even the largest sizes very straight forward and easy.

### Benefits

- High accuracy better than 0.15 % of mass flow rate
- Large dynamic turn-down ratio
- Densitometer performance available through density accuracy better than 0.001 g/cm<sup>3</sup>
- Space-saving split-flow sensor design facilitating low pressure loss
- Parallel S-tube design and optimal oriented inductive sensors enhances accuracy and turn-down ratio.
- Self-draining in both horizontal and vertical position
- Rigid enclosure design reduces the influence from pipeline vibration and thermal stress
- 4-wire Pt100 temperature measurement ensures optimum accuracy on mass flow, density and fraction flow
- SENSORPROM enables true "plug & play" - installed and commissioned in less than 10 minutes.
- Safe Ex design EEx em [ib] IIC
- Sensor pipe available in high-quality stainless steel AISI 316L/1.4571 or Hastelloy C4/2.4610 offering optimum corrosion resistance.
- The sensor calibration is also valid for gas measurement.
- CIP cleanability for food and beverage and pharmaceutical applications

### Application

Coriolis mass flowmeters are suitable for measuring all liquids and gases. The measurement is independent of changes in process conditions/parameters such as temperature, density, pressure, viscosity, conductivity, and flow profile.

Due to this versatility the meter is easy to install and the Coriolis flowmeter is recognized for its high accuracy in a wide turndown ratio which is paramount in many applications.

The main applications of the Coriolis flowmeter can be found in all industries, such as:

<b>Chemical and pharma</b>	Detergents, bulk chemicals, pharmaceuticals, acids, alkalis
<b>Food and beverage</b>	Dairy products, beer, wine, soft-drinks, plato/brix, fruit juices and pulps, bottling, CO <sub>2</sub> dosing, CIP-liquids
<b>Oil and gas</b>	Gas measurement, furnace control, test separators, LPG, oil bunkering
<b>Water and waste water</b>	Dosing of chemicals for water treatment

The wide variety of combinations and versions from the modular system means that ideal adaptation is possible to each measuring task.

The MC2 sensor is also available in a hygienic version which is EHEDG-approved. This is of particular interest for the food and beverage and pharmaceutical markets where the EHEDG approval is often requested for optimum hygienic and process safety.

### Design

The MC2 sensor consists of 2 parallel measuring pipes, welded directly onto a flow-splitter at each end to eliminate a direct coupling to the process connectors and significantly reduce effects from external vibrations.

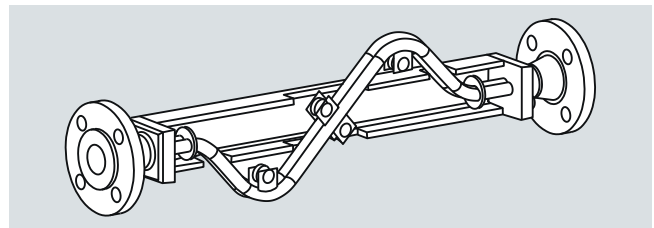
The flow-splitters are welded onto a rigid sensor housing which acts as a mechanical low-pass filter.

The sensor is available in 2 material configurations, AISI 316L/1.4436 or Hastelloy C4/2.4610 with a wide variety of process connections.

The enclosure is made of stainless steel AISI 304/1.4301 with an encapsulation grade of IP67/NEMA 4.

The sensor is Ex-approved EEx em [ib] IIC.

It can be installed in horizontal or vertical position, and is self-draining in both positions.



The MC2 sensor is based on a different Ex concept than MASS 6000. Therefore the MC2 sensor can only be connected to MASS 6000 IP67, MASS 6000 19" or SIFLOW FC070 standard versions, which have to be remote mounted in the safe area. MASS 6000 Ex d and SIFLOW FC070 Ex CT can **not** be used with MC2 sensors.



Hazardous area  
Zone 1 + 2



Safe area

# Flow Measurement

## SITRANS F C

### Flow sensor MC2

#### Function

The measuring principle is based on the Coriolis effect. See "System information Coriolis mass flowmeters".

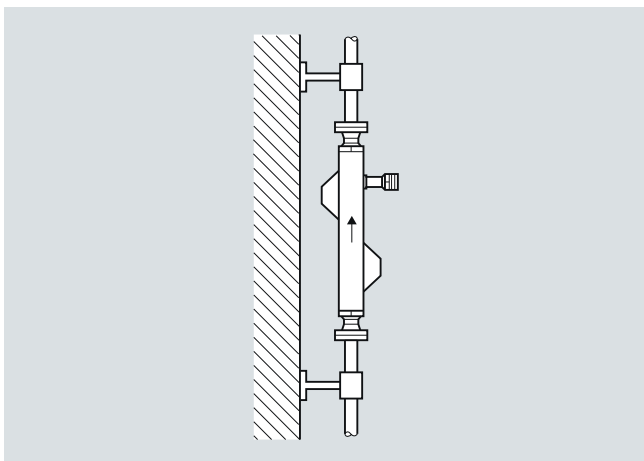
#### Integration

##### Installation guidelines MC2 DN 50 ... DN 150

###### Installation of sensor

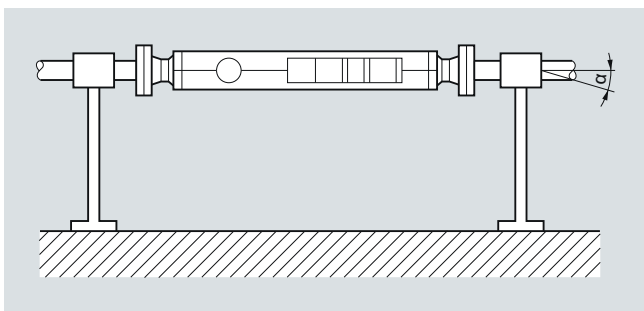
The optimal installation orientation is a vertical installation with an upward flow as shown in the following figure. This has the advantage that any solids contained in the fluid will settle downward and gas bubbles will move upward out of the meter tube when the flow rate is zero. Additionally, it is easy to drain the meter tube. Deposits can thereby be avoided.

###### Vertical orientation:

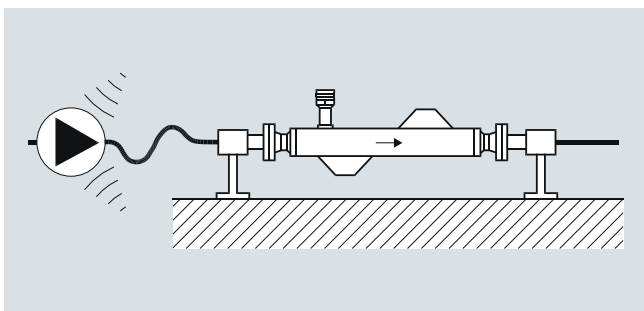


Vertical installation self-draining (upward flow)

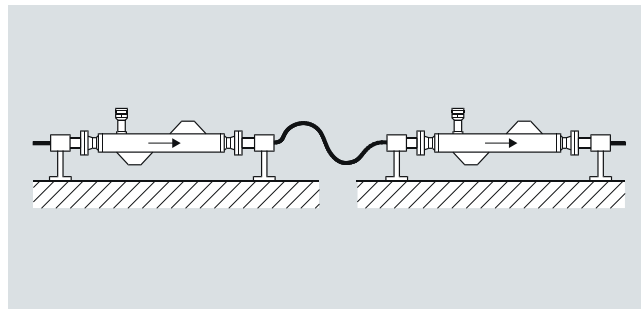
###### Horizontal orientation, self-draining



###### Avoid vibrations

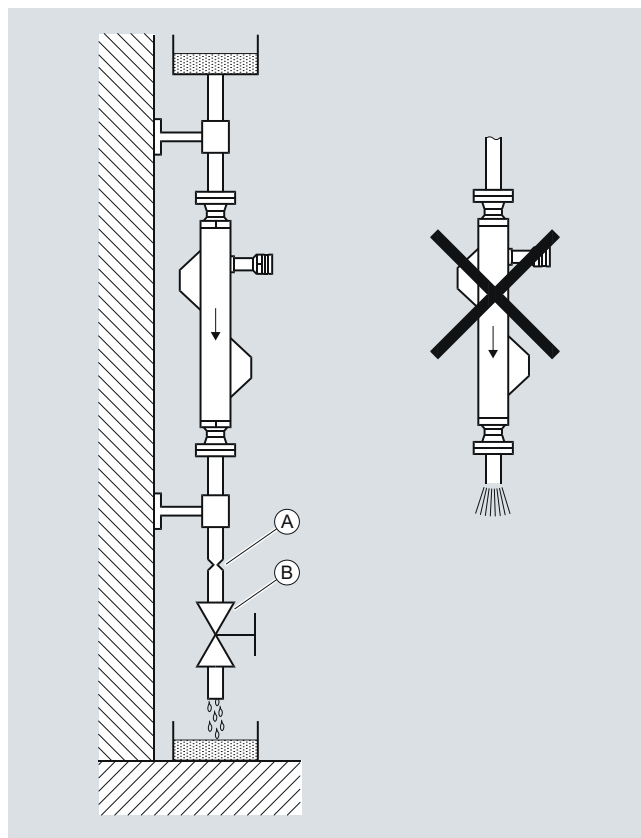


###### Avoid cross talk



###### Installation in a drop line

Mount with reduction (A) or orifice (B) to prevent partially draining.

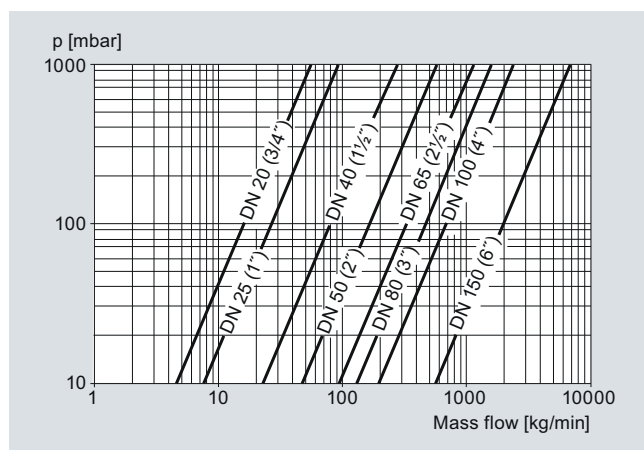


Installation in a drop line

## Technical specifications

Versions (mm (inch))		20 (¾)	25 (1)	40 (1½)	50 (2)	65 (2½)	80 (3)	100 (4)	150 (6)
<b>Inside pipe diameter</b>	<b>mm (inch)</b>	8.0 (0.31)	10.0 (0.39)	16.0 (0.63)	22.0 (0.87)	29.0 (1.14)	34.0 (1.34)	43.1 (1.69)	76.1 (2.99)
<b>Pipe wall thickness</b>	<b>mm (inch)</b>	1.0 (0.04)	1.0 (0.04)	1.0 (0.04)	1.5 (0.06)	1.5 (0.06)	2.0 (0.08)	2.6 (0.10)	3.2 (0.13)
<b>Mass flow measuring range at pressure drop of 2 bar (29 psi) at 1 g/cm<sup>3</sup> (0.036 lb/inch<sup>3</sup>)</b>	<b>kg/h (lb/h)</b>	4 600 (10 141)	7 360 (16 226)	21 850 (48 171)	55 200 (121 695)	113 400 (250 000)	147 600 (325 401)	249 600 (550 273)	660 000 (1 455 049)
<b>Density</b>	<b>g/cm<sup>3</sup> (lb/inch<sup>3</sup>)</b>	0.5 ... 3.5 (0.18 ... 0.126)							
<b>Fraction e.g. Brix</b>	<b>°Brix</b>	0 ... 100							
<b>Temperature</b>									
Standard-version					-50 ... +200 °C (-58 ... +392 °F)				
Ex-version					-50 ... +200 °C (-58 ... +392 °F)				
<b>Liquid pressure measuring pipe</b>		20	25	40					
Stainless steel (DIN 2413, 20 °C (68 °F))	<b>bar (psi)</b>	100 (1450)	100 (1450)	100 (1450)	100 (1450)	100 (1450)	100 (1450)	40 (580)	40 (580)
<b>Materials</b>									
Measuring pipe					Stainless steel AISI 316Ti/1.4571 or Hastelloy C4/2.4610				
Flange					Stainless steel AISI 316Ti/1.4571 or Hastelloy C4/2.4610				
<b>Enclosure</b>									
Enclosure material/connection box					IP67 AISI 304 (1.4301)/aluminum, max. pressure 40 bar (580 psi)				
<b>Process connections</b>									
Electrical connections					See dimensional drawings Screw terminals, M 20				
Cable					5 x 2 x 0.35 mm <sup>2</sup> twisted and screened in pairs, ext. Ø 12 mm				
Cable length					10, 25, 75 or 150 m (32.8, 82, 246 or 492 ft.)				
<b>Ex-version</b>									
ATEX 1443X					≤ DN 40: II 1/2 EEx em [ib] IIC T2-T6 ≥ DN 50: II 2G EEx em [ib] IIC T2-T6				
<b>Weight approx.</b>	<b>kg (lb)</b>	13 (28)	14 (31)	18 (40)	34 (75)	47 (104)	58 (128)	91 (201)	261 (573)

For accuracy specifications see „System information Coriolis mass flowmeters“.

**Pressure drop**

# Flow Measurement

## SITRANS F C

### Flow sensor MC2


Selection and Ordering data	Order No.	Order code
<b>SITRANS F C flow sensors MC2</b>	<b>7ME4300-</b>	
<b>Nominal diameter</b>		
Stainless steel AISI 316Ti/1.4571		
DN 50	1 A	
DN 65	1 B	
DN 80	1 C	
DN 100	1 D	
DN 150	1 E	
Hastelloy C4/2.4610		
DN 50	2 A	
DN 65	2 B	
DN 80	2 C	
DN 100	2 D	
DN 150	2 E	
<b>Nominal pressure</b>		
PN 40	A	
PN 100	B	
Class 150	C	
Class 300	D	
Class 600	E	
Clamps/screwed-connections	F	
<b>Process connections</b>		
Flange EN 1092-1		
DN 50 (PN 40/PN 100)	2 0	
DN 65 (PN 40/PN 100)	2 1	
DN 80 (PN 40/PN 100)	2 2	
DN 100 (PN 40)	2 3	
DN 150 (PN 40)	2 4	
Flange ASME/ANSI		
2" (class 150/300/600)	3 0	
2 1/2" (class 150/300/600)	3 1	
3" (class 150/300/600)	3 2	
4" (class 150/300)	3 3	
6" (class 150/300)	3 4	
Dairy screwed connection to DIN 11851		
DN 50 (PN 25)	4 0	
DN 65 (PN 25)	4 1	
DN 80 (PN 25)	4 2	
DN 100 (PN 25)	4 3	
Dairy clamp connection DIN 32676 Tri-clamp		
50 mm clamp (PN 16)	5 0	
66 mm clamp (PN 10)	5 1	
81 mm clamp (PN 10)	5 2	
100 mm clamp (PN 10)	5 3	
Aseptic nut flange DIN 11864-2 form A for pipes dimensioned by DIN 11866		
DN 40 (1 1/2")	6 0	
DN 50 (2")	6 1	
DN 65 (2 1/2")	6 2	
DN 80 (3")	6 3	
DN 100 (4")	6 4	
<b>Configuration</b>		
Flow and density (5 kg/m <sup>3</sup> [0.31 lb/ft <sup>3</sup> ])	1	
Flow, Brix/Plato and density (1 kg/m <sup>3</sup> [0.06 lb/ft <sup>3</sup> ]) <sup>1)</sup>	2	
Density (1 kg/m <sup>3</sup> [0.06 lb/ft <sup>3</sup> ]) <sup>1)</sup>	5	
Fraction (specified by customer) and density (1 kg/m <sup>3</sup> [0.06 lb/ft <sup>3</sup> ]) <sup>1)</sup>	9	<b>NO Y</b>

Selection and Ordering data	Order No.	Order code
<b>SITRANS F C flow sensors MC2</b>	<b>7ME4300-</b>	
<b>Ex-approval</b>		
Standard, without explosion protection		A
With explosion protection: Ex, ATEX		B
<b>Cable</b>		
No cable (see accessories)		A
<b>Calibration</b>		
Standard		1
Matched pair		2
Extended calibration customer-specified select Y60, Y61, Y62 or Y63 (see additional information)		8

<sup>1)</sup> Extended density and fraction not possible with DN 150.

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

Dairy MLFB example	Order No.
<b>MC2 sensor</b>	<b>7ME4300-</b>
Sensor size DN 80. AISI 316Ti/1.4571	1 C
Nominal pressure: Clamps	F
DIN 11851, DN 80, PN 25	4 2



Configuration/calibration type: flow and density (5 kg/m<sup>3</sup> [0.31 lb/ft<sup>3</sup>])  
Without Ex approval  
No cable  
Standard calibration

Selection and Ordering data	Order code
<b>Additional information</b>	
Please add "-Z" to Order No. and specify Order code(s) and plain text.	
Pressure testing certificate PED: 97/23/EC	<b>C11</b>
Material certificate EN 10204-3.1	<b>C12</b>
Welding certificate NDT X-ray: EN 25817/B	<b>C13</b>
Factory certificate according to EN 10204 2.2	<b>C14</b>
Factory certificate according to EN 10204 2.1	<b>C15</b>
Material certificate according to NACE	<b>C16</b>
Tag name plate, stainless steel	<b>Y17</b>
Customer-specified, matched pair (5 x 2)	<b>Y60</b>
Customer-specified calibration (5 x 2)	<b>Y61</b>
Customer-specified, matched pair (10 x 1)	<b>Y62</b>
Customer-specified calibration (10 x 1)	<b>Y63</b>
Special version	<b>Y99</b>

### Operating instructions for SITRANS F C MC2

Description	Order No.
• English	<b>A5E02154544</b>
• German	<b>A5E02407329</b>
• Spanish	<b>A5E02384868</b>
• French	<b>A5E02384945</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>

# Flow Measurement SITRANS F C

## Flow sensor MC2

### Accessories

Description	Order No.
<b>Cables from MC2 sensor to MASS 6000 transmitter</b>	
10 m (32.8 ft)	<b>FDK-083H3001</b>
25 m (82 ft)	<b>FDK-083H3002</b>
75 m (246 ft)	<b>FDK-083H3003</b>
150 m (492 ft)	<b>FDK-083H3004</b>
<b>Spare parts</b>	
<b>Description</b>	<b>Order No.</b>
<b>2 kB SENSORPROM unit</b> (Sensor Serial No. and Order No. must be specified at ordering)	<b>FDK-083H4410</b>
<b>Connection board/PCB</b>	<b>A5E03004110</b>

### Selection and Ordering data

Description	Order No.	Order code
<b>SITRANS F C flow sensors MC2 for Hygienic applications only</b>		<b>7 ME 4 3 1 0 -</b>
<b>Cable</b>		
No cable (see accessories)		A
<b>Calibration</b>		
Standard		1
Matched pair		2

1) Extended density and fraction not possible with DN 150.

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

### Selection and Ordering data

Description	Order No.	Order code
<b>SITRANS F C flow sensors MC2 for Hygienic applications only</b>		<b>7 ME 4 3 1 0 -</b>
<b>Nominal diameter</b>		
AISI 316L/1.4435		
DN 20	1 A	
DN 25	1 B	
DN 40	1 C	
DN 50	1 D	
DN 65	1 E	
DN 80	1 F	
<b>Nominal pressure 40 bar, PN 25</b> Clamps/screwed-connections		F
<b>Pressure and Process connections</b>		
<u>Dairy screwed connection to DIN 11851</u>		
DN 20, PN 25	4 0	
DN 25, PN 25	4 1	
DN 40, PN 25	4 2	
DN 50, PN 25	4 3	
DN 65, PN 25	4 4	
DN 80, PN 25	4 5	
<u>Dairy clamp connectors for DIN 32676</u> <u>Tri-clamp</u>		
20 mm clamp	4 7	
26 mm clamp	4 8	
38 mm clamp	5 4	
50 mm clamp	5 0	
66 mm clamp	5 1	
81 mm clamp	5 2	
<u>Aseptic connectors DIN 11864-2 Form A for DIN tubes</u>		
DN 20	5 8	
DN 25	5 7	
DN 40	6 0	
DN 50	6 1	
DN 65	6 2	
DN 80	6 3	
<b>Configuration</b>		
Flow and density (5 kg/m <sup>3</sup> )	1	
Flow, BRIX/PLATO and density (1 kg/m <sup>3</sup> ) <sup>1)</sup>	2	
Density (1 kg/m <sup>3</sup> ) <sup>1)</sup>	5	
Flow, fraction (customer-specified application from the net)	9	N O Y
<b>Ex-approval</b>		
Standard, without explosion protection		A
With explosion protection: Ex, FM Class I, Div 2		D

### Selection and Ordering data

Description	Order code
<b>Additional information</b>	
Please add "-Z" to Order No. and specify Order code(s) and plain text.	
Pressure testing certificate PED: 97/23/EC	<b>C11</b>
Material certificate EN 10204-3.1	<b>C12</b>
Welding certificate NDT X-ray: EN 25817/B	<b>C13</b>
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	<b>Y17</b>
Tag name plate, plastic	<b>Y18</b>
Customer-specific transmitter setup	<b>Y20</b>
Customer-specified, matched pair (5 x 2)	<b>Y60</b>
Customer-specified calibration (5 x 2)	<b>Y61</b>
Customer-specified, matched pair (10 x 1)	<b>Y62</b>
Customer-specified calibration (10 x 1)	<b>Y63</b>
Special version	<b>Y99</b>

### Accessories

Description	Order No.
<b>Cables from MC2 sensor to MASS 6000 transmitter</b>	
10 m (32.8 ft)	<b>FDK-083H3001</b>
25 m (82 ft)	<b>FDK-083H3002</b>
75 m (246 ft)	<b>FDK-083H3003</b>
150 m (492 ft)	<b>FDK-083H3004</b>

### Spare parts

Description	Order No.
<b>2 kB SENSORPROM unit</b> (Sensor Serial No. and Order No. must be specified by ordering)	<b>FDK-083H4410</b>

# Flow Measurement SITRANS F C

## Flow sensor MC2

### Dairy MLFB example

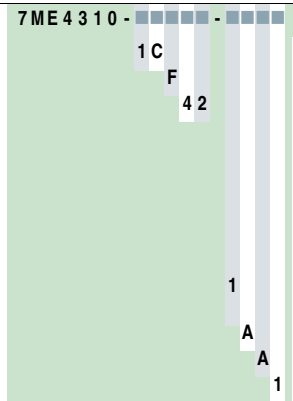
Order No.

#### MC2 sensor

Sensor size DN 40 AISI 316L/1.4435  
Nominal pressure: Clamp  
DIN 11851, DN 40, PN 25



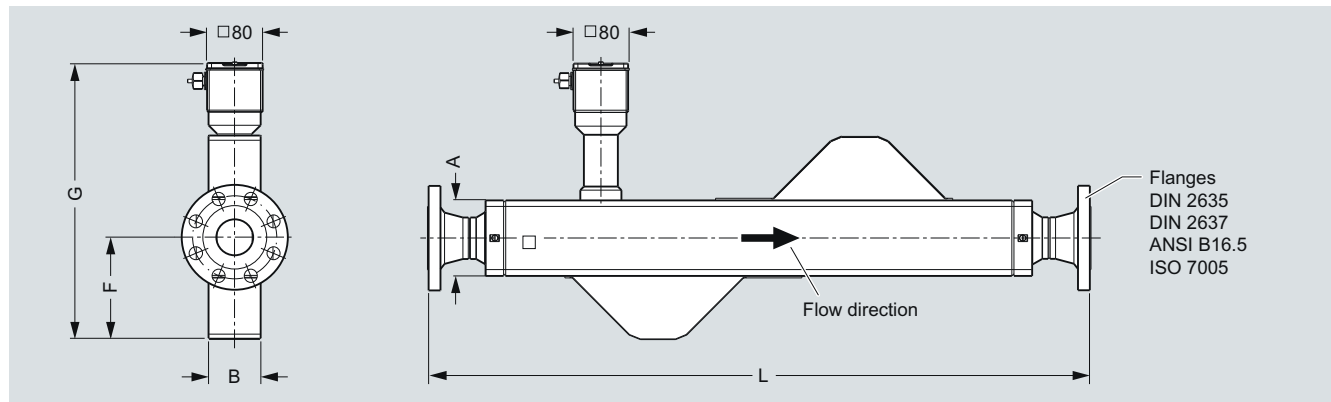
Configuration/calibration type: flow and density (5 kg/m<sup>3</sup> [0.31 lb/ft<sup>3</sup>])  
Without Ex approval  
No cable  
Standard calibration



4

## Dimensional drawings

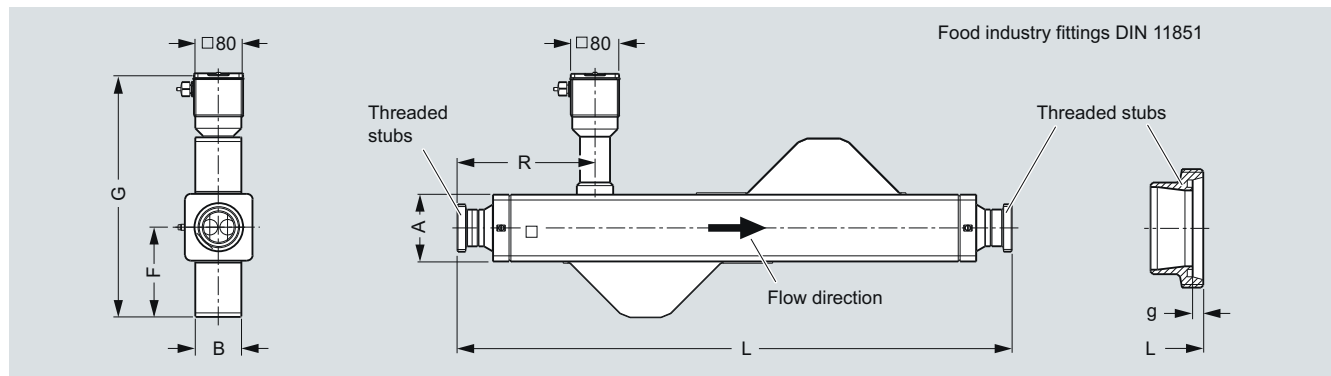
Remote design, flanged construction, DIN/ANSI



Meter size inch DN	Process connection size		L [mm (inch)]						G <sup>1)</sup> [mm (inch)]	F [mm (inch)]	B [mm (inch)]	A [mm (inch)]	Weight [kg (lb)]	
	inch DN	inch DN	DIN 11864-2 form A	DIN 2635 PN 40	DIN 2637 PN 100	ANSI CL 150	ANSI CL 300	ANSI CL 600						
2	50	2	50	918 (36.14)	940 (37.01)	979 (38.54)	970 (38.19)	980 (38.58)	1001 (39.41)	403 (15.87)	148 (5.83)	80 (3.15)	110 (4.33)	34 (75)
		2½	65	1081 (42.56)	1100 (43.31)	1148 (45.20)	1218 (47.95)	1228 (48.35)	1248 (49.13)					38 (84)
2½	65	2	50	1197 (47.13)	1220 (48.03)	1259 (49.57)	1250 (49.21)	1260 (49.61)	1281 (50.43)	429 (16.89)	164 (6.64)	97 (3.82)	130 (5.12)	43 (95)
		2½	65	1081 (42.56)	1100 (43.31)	1148 (45.20)	1218 (47.95)	1228 (48.35)	1249 (49.17)					47 (104)
		3	80	1200 (47.24)	1220 (48.03)	1260 (49.61)	1240 (48.82)	1260 (49.61)	1282 (50.47)					50 (110)
3	80	2½	65	1310 (51.57)	1330 (52.36)	1378 (54.25)	1365 (53.74)	1375 (54.13)	1396 (54.96)	456 (17.95)	186 (7.32)	108 (4.25)	140 (5.51)	56 (123)
		3	80	1200 (47.24)	1220 (48.03)	1260 (49.61)	1240 (48.82)	1260 (49.61)	1282 (50.47)					58 (128)
		4	100	1463 (57.60)	1480 (58.27)	1530 (60.24)	1500 (59.06)	1520 (59.84)	1568 (61.73)					69 (152)
4	100	3	80	1618 (63.70)	1640 (64.57)	1680 (66.14)	1660 (65.35)	1680 (66.14)	1702 (67.01)	500 (19.69)	215 (8.46)	131 (5.16)	170 (6.69)	84 (185)
		4	100	1463 (57.60)	1480 (58.27)	1530 (60.24)	1500 (59.06)	1520 (59.84)	1568 (61.73)					91 (201)
		6	150	N/A	1778 (69.92)	N/A	1806 (71.10)	1826 (71.89)	N/A					120 (265)
6	150	6	150	N/A	2040 (80.31)	N/A	2070 (81.50)	2090 (82.28)	N/A	613 (24.13)	285 (11.22)	190 (7.84)	260 (9.84)	260 (573)

1) For EEx add 54 mm

Remote design, food industry fittings, DIN 11851



Meter size inch DN	Process connection size			L [mm (inch)]	g [mm (inch)]	G <sup>1)</sup> [mm (inch)]	F [mm (inch)]	B [mm (inch)]	A [mm (inch)]	R [mm (inch)]	Weight [kg (lb)]	
	inch DN	inch DN										
2	50	2	50	Rd 78 x 1/6	918 (36.14)	7 (0.28)	403 (15.87)	148 (5.83)	80 (3.15)	110 (4.33)	177 (6.97)	30 (66)
		2½	65	Rd 95 x 1/6	1081 (42.56)	8 (0.31)					254 (10.00)	34 (75)
2½	65	2	50	Rd 78 x 1/6	1197 (47.13)	7 (0.28)	429 (16.89)	164 (6.46)	97 (3.82)	130 (5.12)	291 (11.46)	40 (88)
		2½	65	Rd 95 x 1/6	1081 (42.56)	8 (0.31)					227 (10.91)	44 (97)
		3	80	Rd 110 x 1/6	1200 (47.24)	8 (0.31)					281 (11.06)	47 (104)
3	80	2½	65	Rd 95 x 1/6	1310 (51.57)	8 (0.31)	456 (17.95)	186 (7.32)	108 (4.25)	140 (5.51)	319 (12.56)	54 (119)
		3	80	Rd 110 x 1/6	1200 (47.24)	8 (0.31)					258 (10.16)	56 (123)
		4	100	Rd 110 x 1/6	1463 (57.60)	10 (0.39)					381 (15.00)	60 (132)
4	100	3	80	Rd 110 x 1/6	1618 (63.70)	8 (0.31)	500 (19.69)	215 (8.46)	131 (5.16)	170 (6.69)	401 (15.79)	82 (180)
		4	100	Rd 130 x ¼	1463 (57.60)	10 (0.39)					314 (12.36)	86 (190)

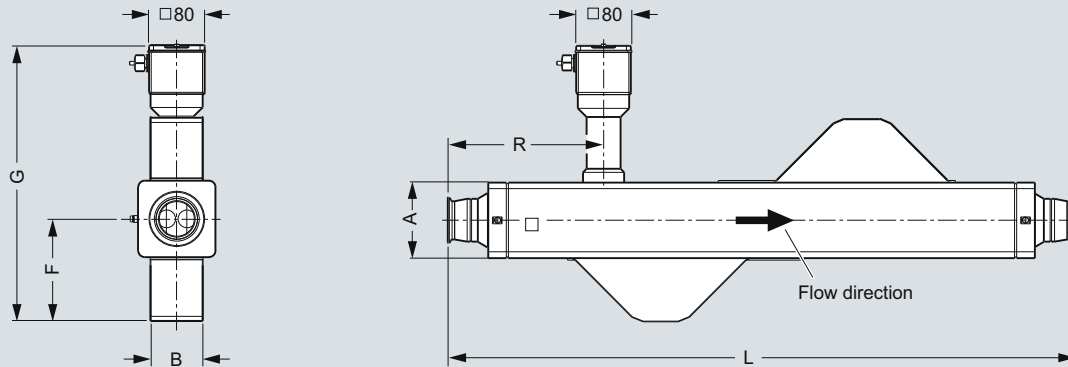
1) For EEx add 54 mm

# Flow Measurement

## SITRANS F C

### Flow sensor MC2

Remote design, Tri-clamp DIN 32676 (ISO 2852)



Dimensions in mm (inch)

Meter size		Process connection size		L [mm (inch)] ± 3	G <sup>1)</sup> [mm (inch)]	F [mm (inch)]	B [mm (inch)]	A [mm (inch)]	R [mm (inch)]	Weight [kg (lb)]	
inch	DN	inch	DN								
2	50	2	50	913 (35.94)	403 (15.87)	148 (5.83)	80 (3.15)	110 (4.33)	225 (8.86)	26 (57)	
		2½	65	1073 (42.24)						305 (12.01)	27 (60)
2½	65	2	50	1192 (46.93)	429 (16.89)	164 (6.64)	97 (3.82)	130 (5.12)	335 (13.19)	36 (79)	
		2½	65	1073 (42.24)						275 (10.83)	37 (82)
		3	80	1180 (46.46)						328 (12.91)	38 (84)
3	80	2½	65	1302 (51.26)	456 (17.95)	186 (7.32)	108 (4.25)	140 (5.51)	378 (14.88)	45 (99)	
		3	80	1180 (46.46)						296 (11.65)	44 (97)
		4	100	1448 (57.01)						430 (16.93)	46 (101)
4	100	3	80	1598 (62.91)	500 (19.69)	215 (8.46)	131 (5.16)	170 (6.69)	440 (17.32)	71 (157)	
		4	100	1448 (57.01)						365 (14.37)	69 (152)

<sup>1)</sup> For EEx add 54 mm



### Process Connections

- Flanges DIN/ASME
- Tri-Clamp DIN 32676
  - DN 15 to DN 50: Series 3
  - DN 65 to DN 100: Series 1
- Food Industry fittings DIN 11851

The max. allowable operating pressure is a function of the process connection type, the fluid temperature, the bolts and the gaskets.

### Pressure Rating

- PN 16, PN 40, PN 100 (to DN 80 (3"))
  - Class 150, Class 300, Class 600 (to DN 80 (3"))

### Housing as secondary containment

- Max. 40 bar

### Pressure Equipment Directive 97/23/EG

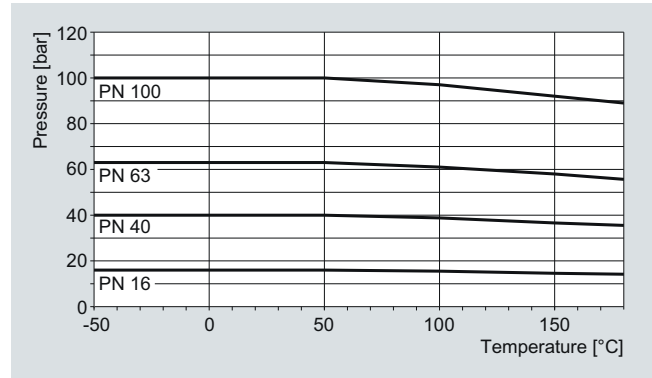
- Conformity evaluation category III, fluid group 1, gas, diagramme 6

Corrosion resistance of measuring pipe material to measuring medium has to be considered.

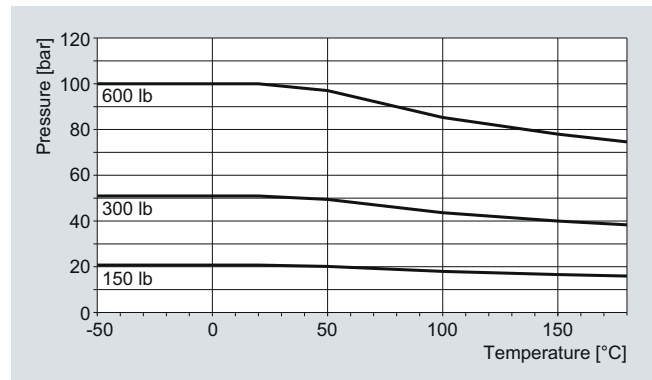
### Material strength for process connections

Process connection	Size		PS <sub>max.</sub> at 20 °C (68 °F)	TS <sub>max.</sub>	TS <sub>min.</sub>
	DN	inch			
Thread acc. DIN 11851	15 ... 40	½ ... 1½	40 (580)	140 (284)	-40 (-40)
	50 ... 100	2 ... 4	25 (363)	140 (284)	-40 (-40)
Tri-Clamp acc. DIN 32676	15 ... 50	½ ... 2	16 (232)	120 (248)	-40 (-40)
	65 ... 100	2½ ... 4	10 (145)	120 (248)	-40 (-40)

### Pressure/temperature curves



DIN-Flanges stainless steel AISI 316Ti/1.4571 to DN 100 (4")



ASME-Flanges stainless steel AISI 326Ti/1.4571 to DN 100 (4")

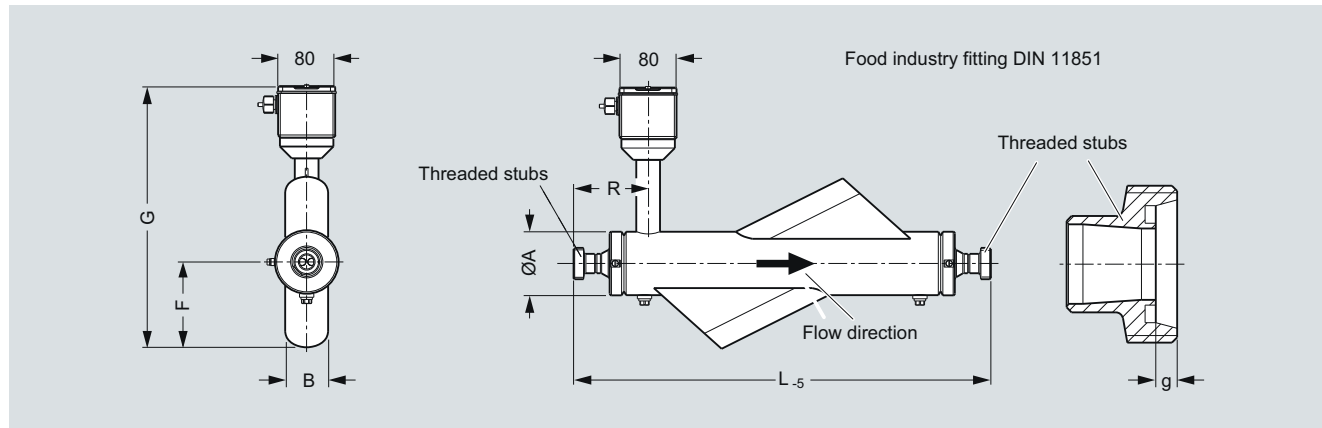
For further information on the PED standard and requirements, see page 10/9.

# Flow Measurement

## SITRANS F C

### Flow sensor MC2

Remote Design, Food Industry Fitting, DIN 11851

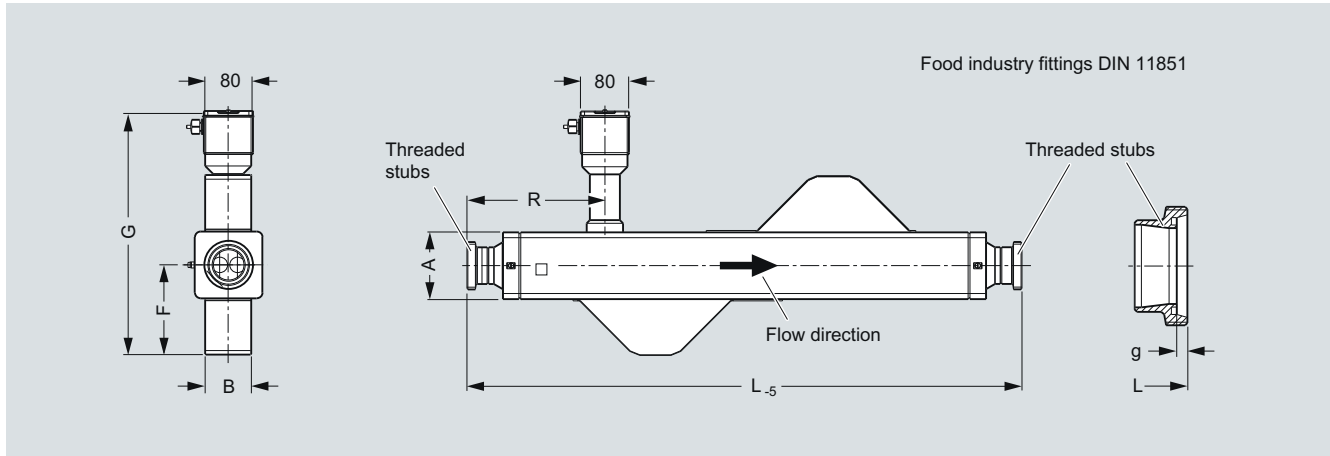


DN (Size)		Process connections			L <sub>-5</sub> mm (inch)	g mm (inch)	G mm (inch)	F mm (inch)	B mm (inch)	ØA mm (inch)	R mm (inch)	Weight kg (lb)
DN	inch	DN	inch									
20	¾	15	½	Rd34 x 1/8	672 (26.46)	4 (0.16)	358 (14.94)	127 (5.00)	66 (2.60)	89 (3.50)	152 (5.98)	13 (29)
		20	¾	Rd44 x 1/6	583 (22.95)	6 (0.24)					102 (4.02)	
		25	1	Rd52 x 1/6	683 (26.89)	7 (0.28)						152 (5.98)
25	1	20	¾	Rd44 x 1/6	743 (29.25)	6 (0.24)	358 (14.94)	127 (5.00)	66 (2.60)	89 (3.50)	162 (6.38)	14 (31)
		25	1	Rd52 x 1/6	643 (25.31)	7 (0.28)					112 (4.11)	
		40	1½	Rd65 x 1/6	786 (30.94)	7 (0.28)					185 (7.28)	



If this connection is supplied with an EHEDG-certified device, the device nominal sizes must correspond with the connection nominal sizes!

## Remote Design, Food Industry Fitting, DIN 11851



DN (Size)	Process connections				L <sub>5</sub>	g	G	F	B	∅A	R	Weight
DN	inch	DN	inch		mm (inch)	mm (inch)	mm (inch)	mm (inch)	mm (inch)	mm (inch)	mm (inch)	kg (lb)
40	1½	25	1	Rd52 x 1/6	864 (34.02)	7 (0.28)	374 (14.72)	129 (5.08)	64 (2.52)	90 (3.54)	218 (8.58)	16 (35)
		40	1½	Rd65 x 1/6	761 (29.96)	7 (0.28)					164 (6.46)	18 (40)
		50	2	Rd78 x 1/6	918 (36.14)	7 (0.28)					241 (9.49)	19 (42)
50	2	40	1½	Rd65 x 1/6	1025 (40.35)	7 (0.28)	403 (15.87)	148 (5.83)	80 (3.15)	110 (4.33)	233 (9.17)	28 (62)
		50	2	Rd78 x 1/6	918 (36.14)	7 (0.28)					177 (6.97)	30 (66)
		65	2½	Rd95 x 1/6	1081 (42.56)	8 (0.31)					254 (10.00)	34 (75)
65	2½	50	2	Rd78 x 1/6	1197 (47.13)	7 (0.28)	429 (16.89)	164 (6.46)	97 (3.82)	130 (5.12)	291 (11.46)	40 (88)
		65	2½	Rd95 x 1/6	1081 (42.56)	8 (0.31)					227 (8.94)	44 (97)
		80	3	Rd110 x 1/4	1200 (47.24)	8 (0.31)					281 (11.06)	47 (104)
80	3	65	2½	Rd95 x 1/6	1310 (51.57)	8 (0.31)	456 (17.95)	186 (7.32)	108 (4.25)	140 (5.51)	319 (12.56)	54 (119)
		80	3	Rd110 x 1/4	1200 (47.24)	8 (0.31)					258 (10.16)	56 (123)
		100	4	Rd130 x 1/4	1463 (57.60)	10 (0.39)					381 (15.00)	60 (132)



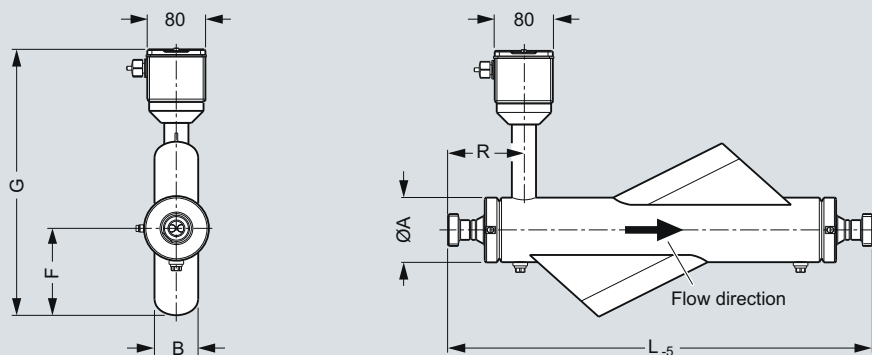
If this connection is supplied with an EHEDG-certified device, the device nominal sizes must correspond with the connection nominal sizes!

# Flow Measurement

## SITRANS F C

### Flow sensor MC2

Remote Design, Tri-Clamp DIN 32676



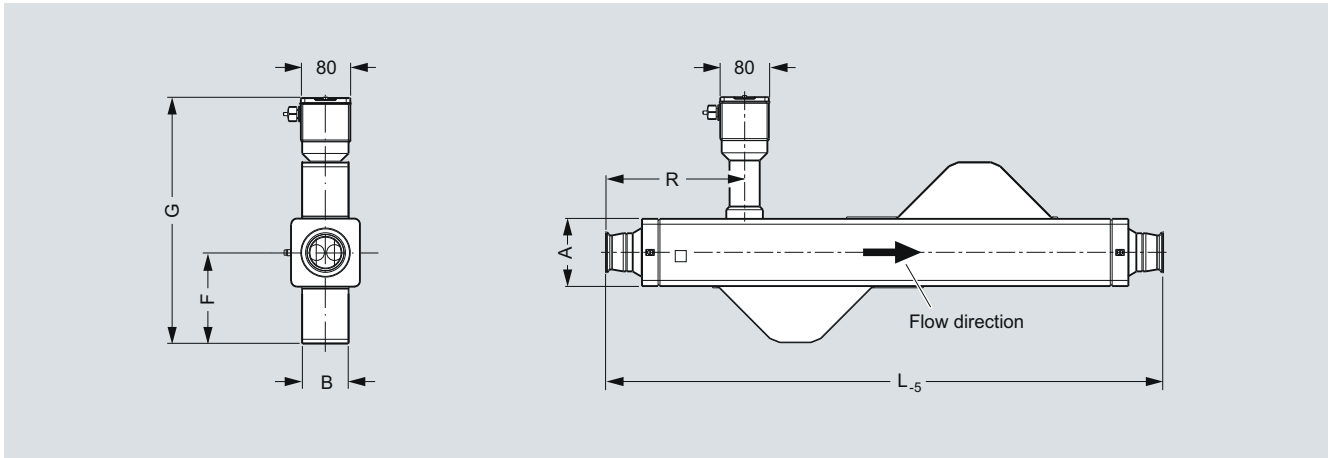
4

DN (Size)		Process connections			L <sub>5</sub> mm (inch)	G mm (inch)	F mm (inch)	B mm (inch)	ØA mm (inch)	R mm (inch)	Weight kg (lb)
DN	inch	DN	inch								
20	¾	15	½	DIN 32676	656 (25.83)	358 (14.09)	127 (5.00)	66 (2.60)	89 (3.50)	140 (5.51)	12 (26)
		20	¾		561 (22.09)					92 (3.62)	
		25	1		661 (26.02)					142 (5.59)	
25	1	20	¾	DIN 32676	721 (28.39)	358 (14.09)	127 (5.00)	66 (2.60)	89 (3.50)	152 (5.98)	13 (29)
		25	1		621 (24.45)					102 (4.02)	
		40	1½		773 (30.43)					180 (7.09)	



If this connection is supplied with an EHEDG-certified device, the device nominal sizes must correspond with the connection nominal sizes!

## Remote Design, Tri-Clamp DIN 32676



4

DN (Size)		Process connections		L <sub>5</sub>	G	F	B	∅A	R	Weight
DN	inch	DN	inch	mm (inch)	mm (inch)	mm (inch)	mm (inch)	mm (inch)	mm (inch)	kg (lb)
40	1½	25	1	842 (33.15)	374 (14.72)	129 (5.08)	64 (2.52)	90 (3.54)	242 (9.53)	17 (37)
		40	1½	748 (29.45)					195 (7.68)	17 (37)
		50	2	913 (35.94)					278 (10.94)	18 (40)
50	2	40	1½	1012 (39.84)	403 (15.87)	148 (5.83)	80 (3.15)	110 (4.33)	275 (10.83)	27 (60)
		50	2	913 (35.94)					225 (8.86)	26 (57)
		65	2½	1073 (42.24)					305 (12.01)	27 (60)
65	2½	50	2	1192 (46.93)	429 (16.89)	164 (6.46)	97 (3.82)	130 (5.12)	335 (13.19)	36 (79)
		65	2½	1073 (42.24)					275 (10.83)	37 (82)
		80	3	1180 (46.46)					328 (12.91)	38 (84)
80	3	65	2½	1302 (51.26)	456 (17.95)	186 (7.32)	108 (4.25)	140 (5.51)	378 (14.88)	45 (99)
		80	3	1180 (46.46)					296 (11.65)	44 (97)
		100	4	1448 (57.01)					430 (16.93)	46 (101)



If this connection is supplied with an EHEDG-certified device, the device nominal sizes must correspond with the connection nominal sizes!