

Overview



SITRANS WF100 flowmeter is a low to medium capacity flowmeter for various product sizes, densities, and fluidities in restricted spaces.

Benefits

- Flowrates from 3 to 200 t/h (4 to 220 STPH)
- Continuous monitoring of the material flow without interrupting the process
- Dust-tight construction: suitable for use in hazardous areas and in washdown applications that require frequent cleaning
- Minimal maintenance or recalibration after the initial installation and material tests

Application

WF100 is unaffected by corrosive, abrasive, or hot materials. Handling various product sizes, densities, and fluidities including fine powders such as sugar, the WF100 helps to improve final product, increase operating efficiency, and realize significant cost savings.

Dry bulk solids enter the flow guide producing a mechanical deflection as they strike the flowmeter sensing plate before continuing through the process un-hindered. The WF100 converts the deflection into an electrical signal that feeds into an accompanying integrator, which instantaneously displays the flow rate and totalizes the weight.

- Key applications: cement, wood chips, cereals, seeds, grains, soybean and rice hulls, unshelled peanuts, starch, sugar, potato flakes, grain tailings and screenings, and plastic pellets

Solid Flowmeters

LVDT flowmeters

SITRANS WF100

Selection and ordering data

SITRANS WF100 Solids flowmeter

Impact solids flowmeter for low to medium capacity applications. Accuracy is $\pm 1\%$ or better, with capacity up to 200 t/h (220 STPH).

➤ Click on the Article No. for the online configuration in the PIA Life Cycle Portal.

Flowguide size (Universal flat-faced flange fits ASME/DIN flanges)

4 inch (100 mm)
Available with fabrication options A ... E and sensing plate options 10 ... 15 only

6 inch (150 mm)
Available with fabrication options F ... K and sensing plate options 20 ... 25 only

8 inch (200 mm)
Available with fabrication options L ... Q and sensing plate options 30 ... 35 only

10 inch (250 mm)
Available with fabrication options R ... V and sensing plate options 40 ... 45 only

Fabrication

Mild steel, painted 4 inch (100 mm) flowguide

AISI 304 stainless steel 4 inch (100 mm) flowguide

AISI 304 stainless steel with PTFE coated infeed 4 inch (100 mm) flowguide

AISI 316 stainless steel 4 inch (100 mm) flowguide

AISI 316 stainless steel with PTFE coated infeed 4 inch (100 mm) flowguide

Mild steel, painted 6 inch (150 mm) flowguide

AISI 304 stainless steel 6 inch (150 mm) flowguide

AISI 304 stainless steel with PTFE coated infeed 6 inch (150 mm) flowguide

AISI 316 stainless steel 6 inch (150 mm) flowguide

AISI 316 stainless steel with PTFE coated infeed 6 inch (150 mm) flowguide

Mild steel, painted 8 inch (200 mm) flowguide

AISI 304 stainless steel 8 inch (200 mm) flowguide

AISI 304 stainless steel with PTFE coated infeed 8 inch (200 mm) flowguide

AISI 316 stainless steel 8 inch (200 mm) flowguide

AISI 316 stainless steel with PTFE coated infeed 8 inch (200 mm) flowguide

Mild steel, painted 10 inch (250 mm) flowguide

AISI 304 stainless steel 10 inch (250 mm) flowguide

AISI 304 stainless steel with PTFE coated infeed 10 inch (250 mm) flowguide

AISI 316 stainless steel 10 inch (250 mm) flowguide

AISI 316 stainless steel with PTFE coated infeed 10 inch (250 mm) flowguide

Load cell, stainless steel [17-4 PH (1.4568) construction with 304 (1.4301) stainless steel cover]

2 lb (0.9 kg)

5 lb (2.3 kg)

10 lb (4.5 kg)

20 lb (9.1 kg)

Not specified (Only for quotation purposes, not a valid ordering option)

Article No.

7MH7186-

■ ■ ■ ■ ■ - ■ A

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7MH7186-

■ ■ ■ ■ ■ - ■ A

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Impact solids flowmeter for low to medium capacity applications. Accuracy is $\pm 1\%$ or better, with capacity up to 200 t/h (220 STPH).

Sensing plate fabrication

4 inch (100 mm) AISI 304 stainless steel

1 0

4 inch (100 mm) AISI 304 stainless steel with PTFE coating

1 1

4 inch (100 mm) AISI 304 stainless steel with polyurethane coating

1 2

4 inch (100 mm) AISI 316 stainless steel

1 3

4 inch (100 mm) AISI 316 stainless steel with PTFE coating

1 4

4 inch (100 mm) AISI 316 stainless steel with polyurethane coating

1 5

6 inch (150 mm) AISI 304 stainless steel

2 0

6 inch (150 mm) AISI 304 stainless steel with PTFE coating

2 1

6 inch (150 mm) AISI 304 stainless steel with polyurethane coating

2 2

6 inch (150 mm) AISI 316 stainless steel

2 3

6 inch (150 mm) AISI 316 stainless steel with PTFE coating

2 4

6 inch (150 mm) AISI 316 stainless steel with polyurethane coating

2 5

8 inch (200 mm) AISI 304 stainless steel

3 0

8 inch (200 mm) AISI 304 stainless steel with PTFE coating

3 1

8 inch (200 mm) AISI 304 stainless steel with polyurethane coating

3 2

8 inch (200 mm) AISI 316 stainless steel

3 3

8 inch (200 mm) AISI 316 stainless steel with PTFE coating

3 4

8 inch (200 mm) AISI 316 stainless steel with polyurethane coating

3 5

10 inch (250 mm) AISI 304 stainless steel

4 0

10 inch (250 mm) AISI 304 stainless steel with PTFE coating

4 1

10 inch (250 mm) AISI 304 stainless steel with polyurethane coating

4 2

10 inch (250 mm) AISI 316 stainless steel

4 3

10 inch (250 mm) AISI 316 stainless steel with PTFE coating

4 4

10 inch (250 mm) AISI 316 stainless steel with polyurethane coating

4 5

Approvals

Ordinary Locations/General Purpose (Non-Ex), CE, UKCA, RCM, EAC

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CSA/FM Class II, Div. 1, Groups E, F, G, Class III; ATEX II 2D Ex tb IIIC T80 °C Db IP65, Ta = -40 °C to +65 °C;

UKEX II 2D Ex tb IIIC T80 °C Db IP65, Ta = -40 °C to +65 °C;

IECEx Ex tb IIIC T80 °C Db IP65, Ta = -40 °C to +65 °C;

EAC Ex, 0Ex tb IIIC T80 °C Db X; CE, UKCA, RCM

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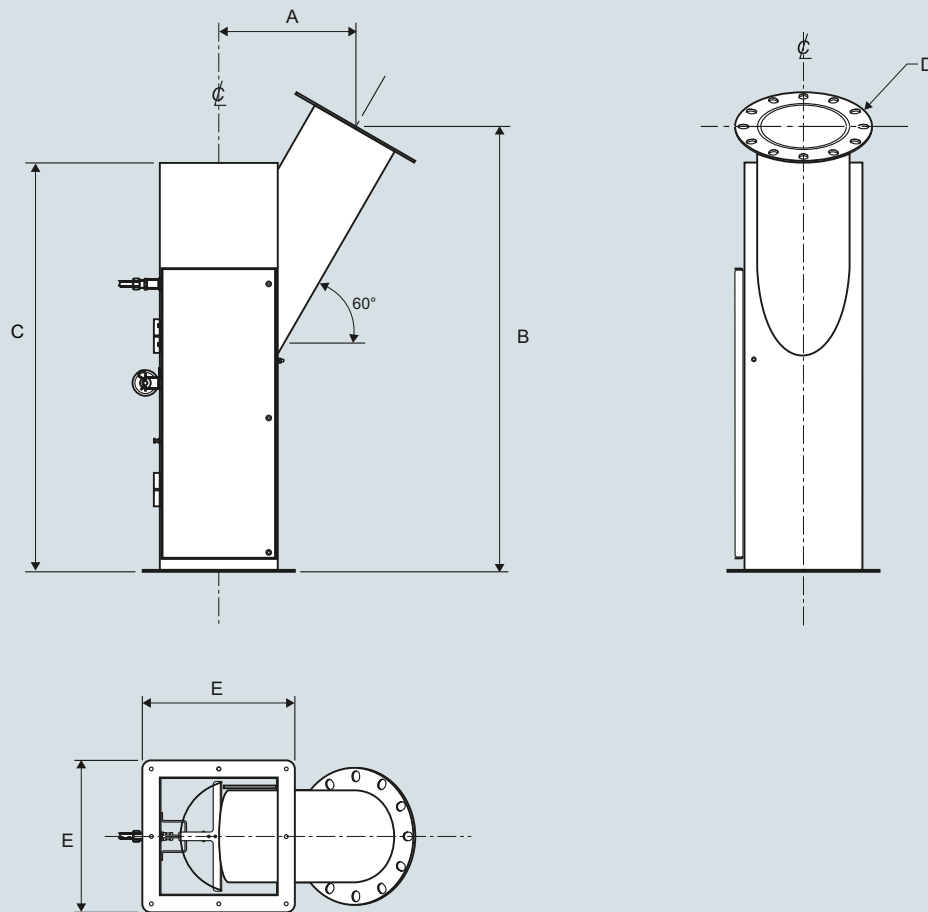
Selection and ordering data	Order Code	Article No.
Further designs		
Please add "-Z" to article no. and specify order code(s).		WF100 10 inch (250 mm) sensing plate 304 PTFE lined 7MH7723-1LA
Stainless steel tag [69 x 38 mm (2.7 x 1.5 inch)], Measuring-point number/identification (max 27 characters), specify in plain text.	Y15	WF100 4 inch (100 mm) sensing plate 316 PTFE lined 7MH7723-1LB
Application Eng. reference number (max. 15 characters), specify in plain text.	Y31	WF100 6 inch (150 mm) sensing plate 316 PTFE lined 7MH7723-1LC
Manufacturer's test certificate: According to EN 10204-2.2	C11	WF100 8 inch (200 mm) sensing plate 316 PTFE lined 7MH7723-1LD
Inspection certificate type 3.1 per EN 10204 Not available with fabrication options A, F, L, R	C12	WF100 10 inch (250 mm) sensing plate 316 PTFE lined 7MH7723-1LE
Instruction manuals		WF100 4 inch (100 mm) sensing plate 304 polyurethane lined 7MH7723-1LF
All literature is available to download for free, in a range of languages, at https://www.siemens.com/weighing/documentation		WF100 6 inch (150 mm) sensing plate 304 polyurethane lined 7MH7723-1LG
Calibration hanger weights	Article No.	WF100 8 inch (200 mm) sensing plate 304 polyurethane lined 7MH7723-1LH
20 g (0.04 lb)	7MH7724-1AC	WF100 10 inch (250 mm) sensing plate 304 polyurethane lined 7MH7723-1LJ
50 g (0.1 lb)	7MH7724-1AD	WF100 4 inch (100 mm) sensing plate 316 polyurethane lined 7MH7723-1LK
100 g (0.2 lb)	7MH7724-1AE	WF100 6 inch (150 mm) sensing plate 316 polyurethane lined 7MH7723-1LL
200 g (0.4 lb)	7MH7724-1AF	WF100 8 inch (200 mm) sensing plate 316 polyurethane lined 7MH7723-1LM
500 g (1.1 lb)	7MH7724-1AG	WF100 10 inch (250 mm) sensing plate 316 polyurethane lined 7MH7723-1LN
1 000 g (2.2 lb)	7MH7724-1AH	WF100 load cell spare 2 lb PBD-23900176
2 000 g (4.4 lb)	7MH7724-1AJ	WF100 load cell spare 5 lb PBD-23900177
5 000 g (11 lb)	7MH7724-1AK	WF100 load cell spare 10 lb PBD-23900244
Note: calibration accessories should be ordered as a separate item on the order.		WF100 load cell spare 20 lb PBD-23900245
Spare parts		WF calibration pulley with hardware and cable spare 7MH7723-1LT
WF100 4 inch (100 mm) sensing plate 304 standard	7MH7723-1KN	
WF100 6 inch (150 mm) sensing plate 304 standard	7MH7723-1KP	
WF100 8 inch (200 mm) sensing plate 304 standard	7MH7723-1KQ	
WF100 10 inch (250 mm) sensing plate 304 standard	7MH7723-1KR	
WF100 4 inch (100 mm) sensing plate 316 standard	7MH7723-1KS	
WF100 6 inch (150 mm) sensing plate 316 standard	7MH7723-1KT	
WF100 8 inch (200 mm) sensing plate 316 standard	7MH7723-1KU	
WF100 10 inch (250 mm) sensing plate 316 standard	7MH7723-1KV	
WF100 4 inch (100 mm) sensing plate 304 PTFE lined	7MH7723-1KW	
WF100 6 inch (150 mm) sensing plate 304 PTFE lined	7MH7723-1KX	
WF100 8 inch (200 mm) sensing plate 304 PTFE lined	7MH7723-1KY	

Solid Flowmeters

LVDT flowmeters

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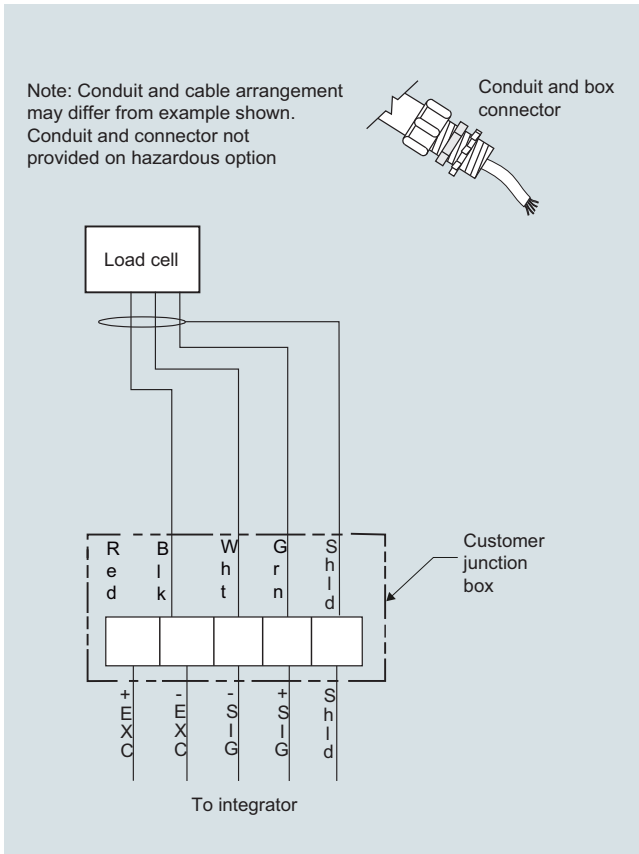
Dimensional drawings



	A	B	C	D (flange)	E	F (x 8)
4 inch (100 mm)	8 inch (203.2 mm)	23.5 inch (596.9 mm)	21.87 inch (555.5 mm)	Ø ASME 4 inch DIN 100 mm	11.25 inch (285.8 mm)	Ø 0.43 inch (11 mm)
6 inch (150 mm)	10 inch (254 mm)	33 inch (838.2 mm)	31.12 inch (790.4 mm)	Ø ASME 6 inch DIN 150 mm	13.35 inch (339.1 mm)	Ø 0.43 inch (11 mm)
8 inch (200 mm)	14 inch (355.6 mm)	46 inch (1 168.4 mm)	42.62 inch (1 082.5 mm)	Ø ASME 8 inch DIN 200 mm	16.5 inch (419.1 mm)	Ø 0.43 inch (11 mm)
10 inch (250 mm)	16 inch (406.4 mm)	52 inch (1 320.8 mm)	48.74 inch (1 238.1 mm)	Ø ASME 10 inch DIN 250 mm	19 inch (482.6 mm)	Ø 0.43 inch (11 mm)

SITRANS WF100, dimensions

Circuit diagrams



SITRANS WF100 connections