

Solids Flowmeters

LVDT flowmeters

SITRANS WF100

6/6 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
- Plastic pellets

Selection and ordering data

SITRANS WF100

Impact solids flowmeter for low to medium capacity applications. Low cost compact unit improves processing, increases efficiency and provides significant cost savings.

➤ 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

1

2

3

4

A

B

C

D

E

F

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H

J

K

L

M

N

P

Q

R

S

T

U

V

A

B

C

D

X

Article No.

7MH7186-

A

SITRANS WF100

Impact solids flowmeter for low to medium capacity applications. Low cost compact unit improves processing, increases efficiency and provides significant cost savings.

Sensing plate fabrication

4 inch (100 mm) AISI 304 stainless steel

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

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

4 inch (100 mm) AISI 316 stainless steel

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

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

6 inch (150 mm) AISI 304 stainless steel

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

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

6 inch (150 mm) AISI 316 stainless steel

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

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

8 inch (200 mm) AISI 304 stainless steel

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

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

8 inch (200 mm) AISI 316 stainless steel

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

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

10 inch (250 mm) AISI 304 stainless steel

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

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

10 inch (250 mm) AISI 316 stainless steel

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

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

Approvals

Standard: CE, RCM

CSA/FM Class II, Div. 1, Groups E, F, G and Class III, ATEX II 2D, Ex tD A21 IP65 T70 °C, CE, RCM, IECEx, Ex tD A21 IP65 T70 °C

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0

1

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Selection and ordering data

Further designs

Please add **"-Z"** to article no. and specify order code(s).

Stainless steel tag [69 x 38 mm (2.7 x 1.5 inch)], Measuring-point number/identification (max 27 characters), specify in plain text.

Application Eng. reference number (max. 15 characters), specify in plain text.

Manufacturer's test certificate:
According to EN 10204-2.2

Inspection certificate type 3.1 per EN 10204
Not available with fabrication options A, F, L, R

Instruction manuals

- English
- German

Note: The instruction manual should be ordered as a separate item on the order.

Additional instruction manuals

- Solids Flowmeter Application Guide, English
- Solids Flowmeter Application Guide, German

This device is shipped with the Siemens Milltronics manual DVD containing the complete instruction manual library.

Calibration hanger weights

20 g (0.04 lb)

50 g (0.1 lb)

100 g (0.2 lb)

200 g (0.4 lb)

500 g (1.1 lb)

1 000 g (2.2 lb)

2 000 g (4.4 lb)

5 000 g (11 lb)

Note: Calibration accessories should be ordered as a separate item on the order.

Spare parts

WF100 4 inch (100 mm) sensing plate
304 standard

WF100 6 inch (150 mm) sensing plate
304 standard

WF100 8 inch (200 mm) sensing plate
304 standard

WF100 10 inch (250 mm) sensing plate
304 standard

WF100 4 inch (100 mm) sensing plate
316 standard

WF100 6 inch (150 mm) sensing plate
316 standard

WF100 8 inch (200 mm) sensing plate
316 standard

WF100 10 inch (250 mm) sensing plate
316 standard

WF100 4 inch (100 mm) sensing plate
304 PTFE lined

WF100 6 inch (150 mm) sensing plate
304 PTFE lined

WF100 8 inch (200 mm) sensing plate
304 PTFE lined

Order Code

Y15

Y31

C11

C12

Article No.

7ML1998-5NB01

7ML1998-5NB31

7ML1998-5GK01

7ML1998-5GK31

7MH7724-1AC

7MH7724-1AD

7MH7724-1AE

7MH7724-1AF

7MH7724-1AG

7MH7724-1AH

7MH7724-1AJ

7MH7724-1AK

7MH7723-1KN

7MH7723-1KP

7MH7723-1KQ

7MH7723-1KR

7MH7723-1KS

7MH7723-1KT

7MH7723-1KU

7MH7723-1KV

7MH7723-1KW

7MH7723-1KX

7MH7723-1KY

WF100 10 inch (250 mm) sensing plate
304 PTFE lined

WF100 4 inch (100 mm) sensing plate
316 PTFE lined

WF100 6 inch (150 mm) sensing plate
316 PTFE lined

WF100 8 inch (200 mm) sensing plate
316 PTFE lined

WF100 10 inch (250 mm) sensing plate
316 PTFE lined

WF100 4 inch (100 mm) sensing plate
304 polyurethane lined

WF100 6 inch (150 mm) sensing plate
304 polyurethane lined

WF100 8 inch (200 mm) sensing plate
304 polyurethane lined

WF100 10 inch (250 mm) sensing plate
304 polyurethane lined

WF100 4 inch (100 mm) sensing plate
316 polyurethane lined

WF100 6 inch (150 mm) sensing plate
316 polyurethane lined

WF100 8 inch (200 mm) sensing plate
316 polyurethane lined

WF100 10 inch (250 mm) sensing plate
316 polyurethane lined

WF100 load cell spare 2 lb

WF100 load cell spare 5 lb

WF100 load cell spare 10 lb

WF100 load cell spare 20 lb

WF100 load cell spare 2 lb
CSA, FM, ATEX, IEC Ex

WF100 load cell spare 5 lb
CSA, FM, ATEX, IEC Ex

WF100 load cell spare 10 lb
CSA, FM, ATEX, IEC Ex

WF100 load cell spare 20 lb
CSA, FM, ATEX, IEC Ex

WF calibration pulley with hardware and cable spare

Article No.

7MH7723-1LA

7MH7723-1LB

7MH7723-1LC

7MH7723-1LD

7MH7723-1LE

7MH7723-1LF

7MH7723-1LG

7MH7723-1LH

7MH7723-1LJ

7MH7723-1LK

7MH7723-1LL

7MH7723-1LM

7MH7723-1LN

7MH7723-1LP

7MH7723-1LQ

7MH7723-1LR

7MH7723-1LS

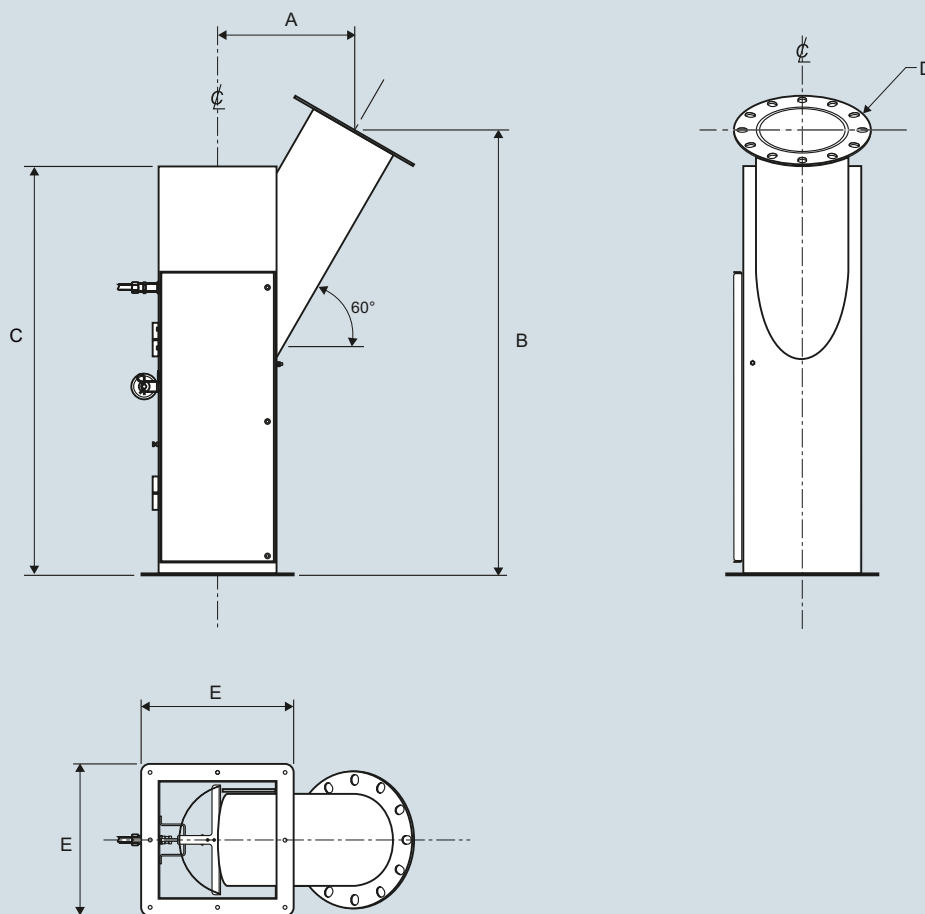
7MH7725-1EU

7MH7725-1EV

7MH7725-1EW

7MH7725-1EX

7MH7723-1LT

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)

WF100, dimensions

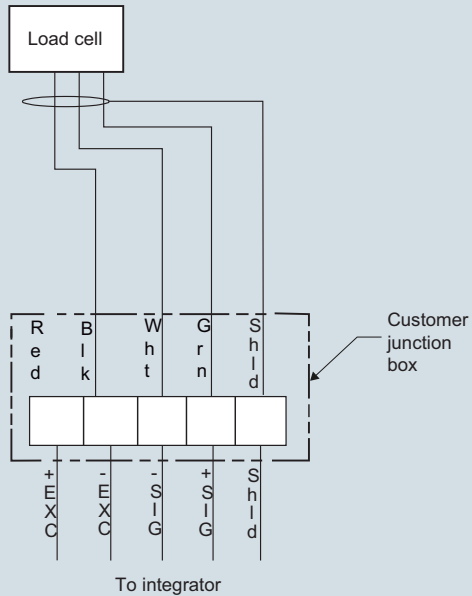
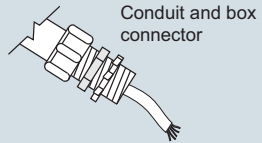
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Schematics

Note: Conduit and cable arrangement may differ from example shown. Conduit and connector not provided on hazardous option



WF100 connections