

Solid Flowmeters

LVDT flowmeters

SITRANS WF200 series

Overview



SITRANS WF200 and WF250 flowmeters are medium to high capacity flowmeters for various product sizes, densities, and fluidities.

Benefits


- For specialized pre-feed applications
- Sensing element mounted outside process
- Flowrates from 200 to 900 t/h (220 to 990 STPH)
- Continuously 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

Operating with a microprocessor based integrator package, the WF200 series flowmeters display flow rate, totalized flow, and rate alarms. Outputs are 0/4 to 20 mA proportional to rate and contact closure for remote totalization. Dry bulk solids enter the flowmeter before continuing through the process unhindered. The load cells convert the horizontal force of the deflection into an electrical signal. The integrator processes this into flowrate and integrated total weight. The sensing process is immune to the effect of product build-up as only the horizontal force is measured.

With load cells located externally to the process, the WF200 series flowmeters measure high capacities with a maximum rate of 900 t/h (990 STPH). For high capacity aerated gravity conveyor pre-feed, the WF250 has a maximum rate of 900 t/h (990 STPH).

- Key applications: aggregates, grain, cement, mineral processing

Selection and ordering data	Article No.	Order Code
SITRANS WF200 series Solids flowmeters Impact solids flowmeter for medium to high capacity applications. Accuracy is $\pm 1\%$ or better, with capacity up to 900 t/h (990 STPH). Click on the Article No. for the online configuration in the PIA Life Cycle Portal.	7MH7115- 	
Model <u>SITRANS WF200</u> 500 t/h maximum design capacity 1 900 t/h maximum design capacity 2 <u>SITRANS WF250, aerated style</u> 500 t/h maximum design capacity 3 900 t/h maximum design capacity 4		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. Y15 Application Eng. reference number (max.15 characters), specify in plain text. Y31 Manufacturer's test certificate: According to EN 10204-2.2 C11 Inspection certificate type 3.1 per EN 10204 ¹⁾ C12
Construction Painted mild steel A		Instruction manuals All literature is available to download for free, in a range of languages, at https://www.siemens.com/weighing/documentation
Sensing plate liner None (standard 304 stainless steel) A <u>Polyurethane</u> For model options 1 and 3 B For model options 2 and 4 C <u>Alumina ceramic tiles</u> For model options 1 and 3 D For model options 2 and 4 E		Calibration hanger weights Article No. 20 g (0.04 lb) 7MH7724-1AC 50 g (0.1 lb) 7MH7724-1AD 100 g (0.2 lb) 7MH7724-1AE 200 g (0.4 lb) 7MH7724-1AF 500 g (1.1 lb) 7MH7724-1AG 1 000 g (2.2 lb) 7MH7724-1AH 2 000 g (4.4 lb) 7MH7724-1AJ 5 000 g (11 lb) 7MH7724-1AK
Load cell 50 lb 1 100 lb 2 Not specified (for quotation purposes only, not a valid ordering option) 0		Note: calibration accessories should be ordered as a separate item on the order. ¹⁾ Not available with construction option A.
Approvals Ordinary Locations/General Purpose (Non-Ex), CE, UKCA, RCM, EAC 1 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 2		

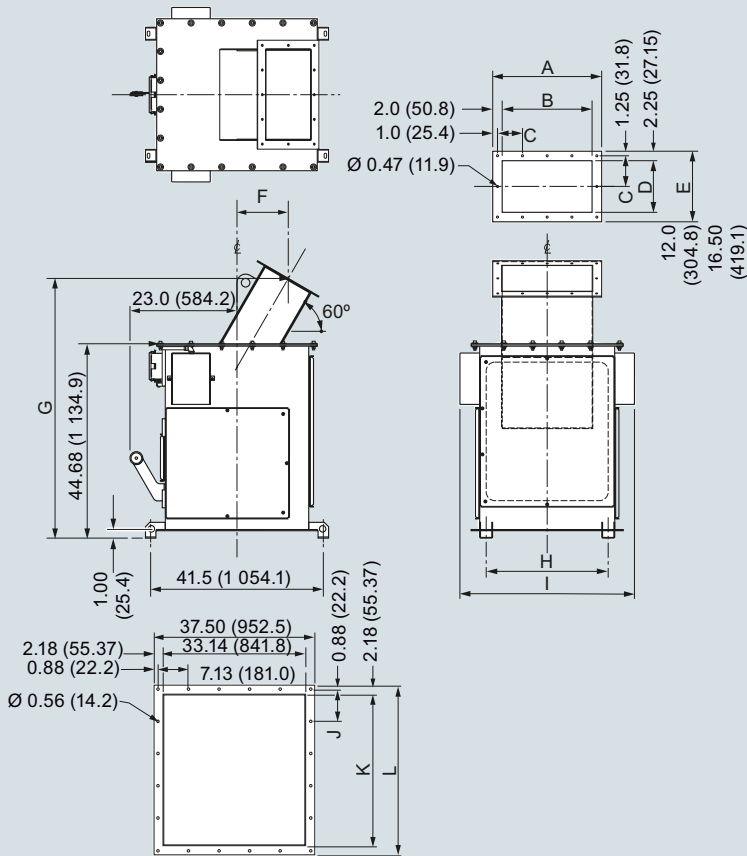
Solid Flowmeters

LVDT flowmeters

SITRANS WF200 series

Selection and ordering data	Article No.
<i>Spare parts</i>	
Load cell, 50 lb, stainless steel	PBD-23900246
Load cell, 100 lb, stainless steel	PBD-23900247
WF calibration pulley with hardware and cable spare	7MH7723-1LT
WF200 series bearing with plate mount shaft, standard, spare	7MH7723-1LU
WF200 series bearing with plate mount shaft, stainless steel, spare	7MH7723-1LV
WF200 series sensing plate support cables, spare	7MH7723-1LW
WF250 series sensing plate support cables, spare	7MH7723-1LX
WF200 sensing plate 500 TPH 304, standard	7MH7723-1LY
WF200 sensing plate 900 TPH 304, standard	7MH7723-1MA
WF250 sensing plate 500 TPH 304, standard	7MH7723-1MB
WF250 sensing plate 900 TPH 304, standard	7MH7723-1MC
WF200 sensing plate 500 TPH 304, polyurethane lined	7MH7723-1MD
WF200 sensing plate 900 TPH 304, polyurethane lined	7MH7723-1ME
WF250 sensing plate 500 TPH 304, polyurethane lined	7MH7723-1MF
WF250 sensing plate 900 TPH 304, polyurethane lined	7MH7723-1MG
WF200 sensing plate 500 TPH 304, ceramic lined	7MH7723-1MH
WF200 sensing plate 900 TPH 304, ceramic lined	7MH7723-1MJ
WF250 sensing plate 500 TPH 304, ceramic lined	7MH7723-1MK
WF250 sensing plate 900 TPH 304, ceramic lined	7MH7723-1ML

Dimensional drawings



	500 t/h	900 t/h
A	25.0 (635.0)	30.0 (762.0)
B	21.0 (533.4)	26.0 (660.4)
C	5.75 (146.1), × 4	7.0 (177.8), × 4
D	12.0 (304.8)	12.0 (304.8)
E	16.5 (419.1)	16.5 (419.1)
F	11.97 (304.1)	14.86 (377.4)
G	59.0 (1498.6)	64.0 (1 625.6)
H	29.13 (739.8)	35.13 (892.2)
I	40.68 (1 033.3)	46.68 (1 185.7)
J	6.75 (171.5), × 5	6.63 (168.3), × 6
K	31.14 (791.0)	37.14 (943.4)
L	35.5 (901.7)	41.5 (1 054.1)

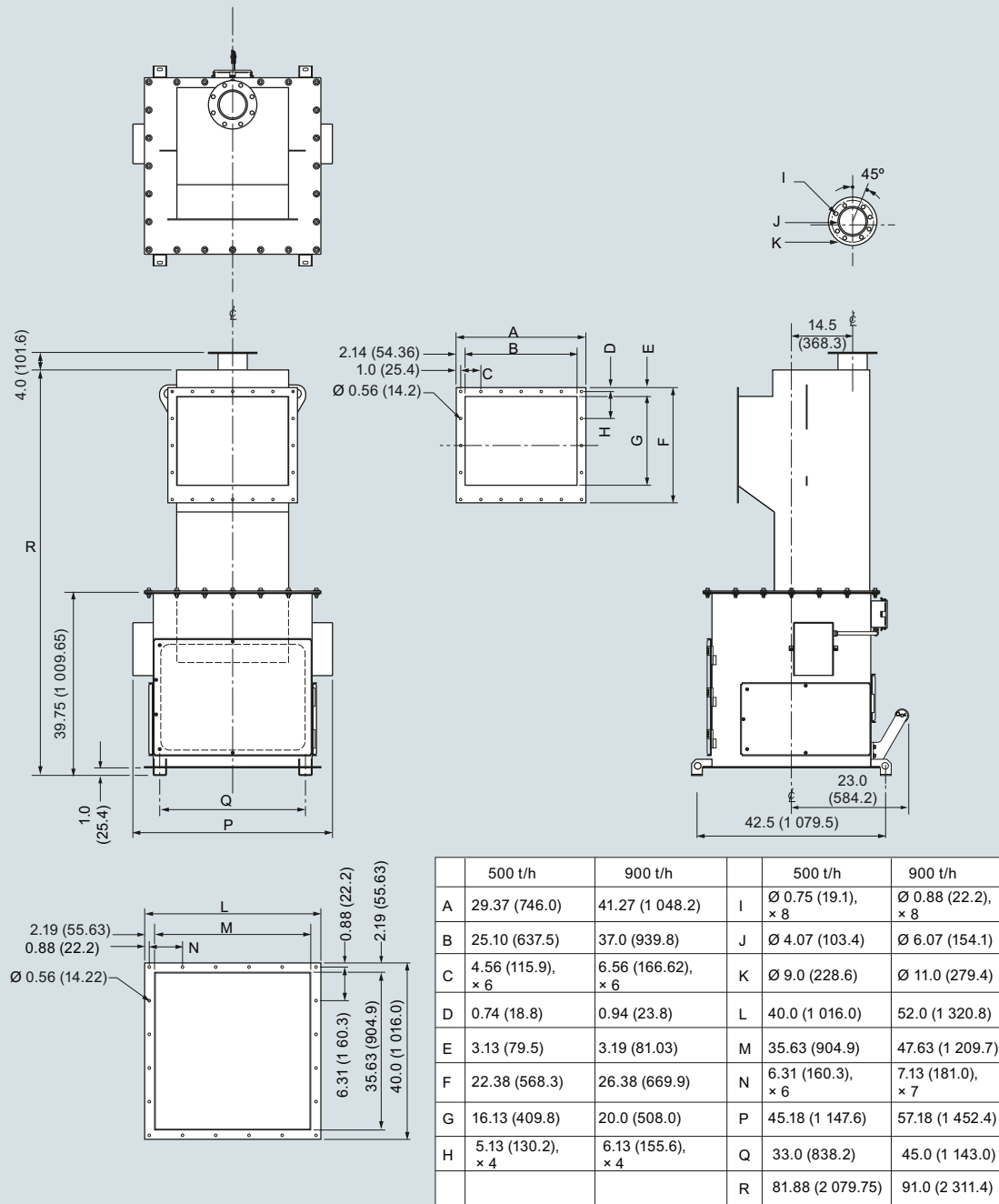
SITRANS WF200, dimensions in inch (mm)

Solid Flowmeters

LVDT flowmeters

SITRANS WF200 series

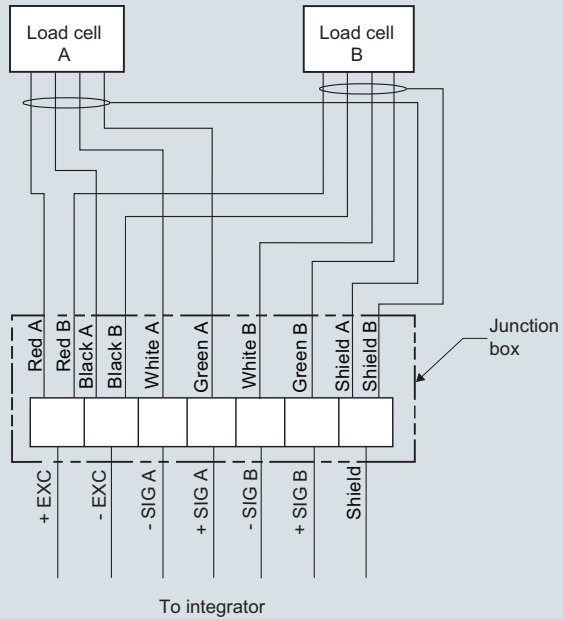
Dimensional drawings (continued)



SITRANS WF250, dimensions in inch (mm)

Circuit diagrams

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



SITRANS WF200 series connections