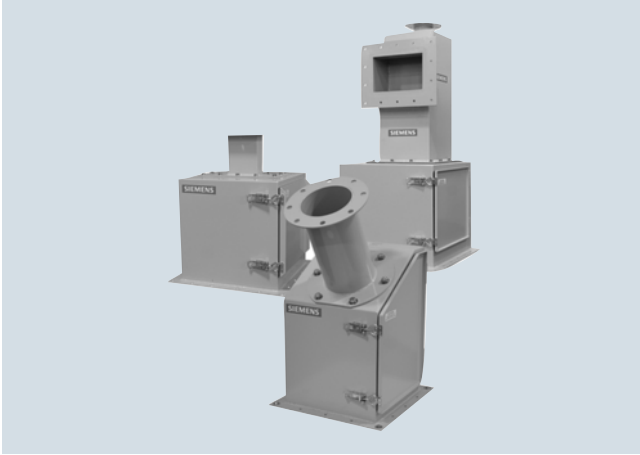


Overview



SITRANS WF300 series are low to medium capacity flowmeters for various product sizes, densities, and fluidities.

Benefits

- For specialized pre-feed applications
- Sensing element mounted outside process
- Flowrates from 0.2 to 300 t/h (0.2 to 330 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

With weighing mechanics located externally, the WF300 series solids flowmeters are unaffected by corrosive, abrasive, or hot materials. Handling a wide range of product sizes, densities, and fluidities including fine powders such as cement, they operate at process temperatures to 230 °C (450 °F). The flowmeters help to improve final product, increase operating efficiency, and realize significant cost savings.

Operating with the appropriate SITRANS WFS sensing head and a micro-processor-based integrator package, the WF300 series flowmeters provide a display of the flow rate, totalized flow, and alarms. Outputs are 0/4 to 20 mA proportional to rate, and open collector output for remote totalization.

Dry bulk solids enter the flow guide producing a mechanical deflection as they strike the flowmeter sensing plate before continuing through the process unhindered. The LVDT in the sensing head converts the deflection of the horizontal force into an electrical signal. The integrator processes this signal into a display of flowrate and integrated total weight. The weighing process is immune to the effect of product build-up as only the horizontal force is measured.

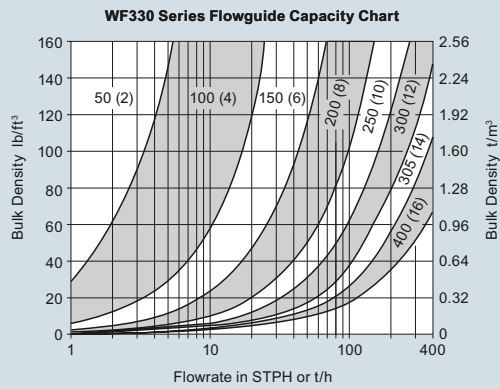
SITRANS WF330 flowmeters are totally enclosed, with external weighing mechanics, operating with corrosive, abrasive or hot materials. SITRANS WF350 series operates with aerated gravity conveyors, and includes integral vents and baffles for air separation. For applications with little available headroom, the SITRANS WF340 series flowmeters provide the answer.

Solids Flowmeters

LVDT flowmeters

SITRANS WF300 series

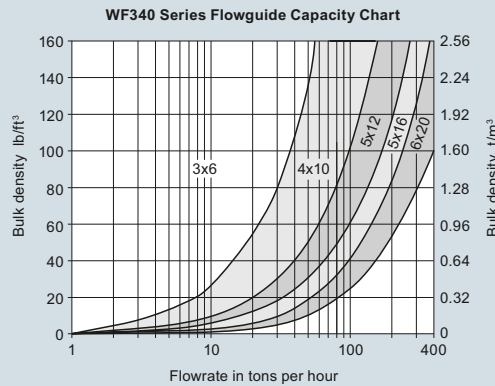
Characteristic curves



Flowrate in STPH or t/h (use highest applicable flowrate for size selection)
 Example: 25 t/h of material at 1.4 t/m³, the selection is a 150 mm flowguide.
 Dimensions are provided as examples only.


WF330 series, flowguide capacity chart

6



Should the material bulk density and flowrate be near a flowguide upper limit, choose the next larger flowguide.

WF340 series, flowguide capacity chart

Selection and ordering data	Article No.	Order Code
SITRANS WF330 Low to medium capacity solids flowmeters for various product sizes, densities, and fluidities, particularly fine powders. A sensing plate, sensing head and integrator are required to complete the system. Click on the Article No. for the online configuration in the PIA Life Cycle Portal.	7MH7102- 	
Model Base mount, 40 t/h (44 STPH) maximum design capacity	1	
Side mount, 40 t/h (44 STPH) maximum design capacity	2	
Base mount, 300 t/h (330 STPH) maximum design capacity	3	
Flowguide size No flowguide 2 inch ASME flange pattern ¹⁾ 4 inch ASME flange pattern ¹⁾ 6 inch ASME flange pattern ²⁾ 8 inch ASME flange pattern ²⁾ 10 inch ASME flange pattern ²⁾ 12 inch ASME flange pattern ³⁾ 14 inch ASME flange pattern ³⁾ 16 inch ASME flange pattern ³⁾ DN 50 flange pattern ¹⁾ DN 100 flange pattern ¹⁾ DN 150 flange pattern ²⁾ DN 200 flange pattern ²⁾ DN 250 flange pattern ²⁾ DN 300 flange pattern ³⁾ DN 350 flange pattern ³⁾ DN 400 flange pattern ³⁾	A B C D E F G H J K L M N P Q R S	
Flowguide construction No flowguide Mild steel, polyester painted Mild steel, epoxy painted with zinc primer ¹⁾ Mild steel, epoxy painted with zinc primer ³⁾ 304 (1.4301) stainless steel ¹⁾ 304 (1.4301) stainless steel ³⁾ 316 (1.4401) stainless steel ¹⁾ 316 (1.4401) stainless steel ³⁾	A B C D E F G H	
Cabinet construction Mild steel, polyester painted Mild steel, epoxy painted with zinc primer ¹⁾ Mild steel, epoxy painted with zinc primer ³⁾ 304 (1.4301) stainless steel ¹⁾ 304 (1.4301) stainless steel ³⁾ 316 (1.4401) stainless steel ¹⁾ 316 (1.4401) stainless steel ³⁾	1 2 3 4 5 6 7	
		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 Y31 C11 C12
		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 ⁴⁾ Note: Not available with cabinet construction option 1
		Instruction manuals <ul style="list-style-type: none"> English German French Note: The instruction manual should be ordered as a separate item on the order.
		Additional instruction manuals <ul style="list-style-type: none"> 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.
		Article No. 7ML1998-5CT02 7ML1998-5CT32 7ML1998-5CT12 7ML1998-5GK01 7ML1998-5GK31

Solids Flowmeters

LVDT flowmeters

SITRANS WF300 series

Selection and ordering data

Spare parts

40 TPH, mild steel flowguide

2 inch ASME	PBD:20377-111
4 inch ASME	PBD:20377-211
6 inch ASME	PBD:20377-311
8 inch ASME	PBD:20377-411
10 inch ASME	PBD:20377-511

40 TPH, mild steel-epoxy flowguide

2 inch ASME	PBD:20377-112
4 inch ASME	PBD:20377-212
6 inch ASME	PBD:20377-312
8 inch ASME	PBD:20377-412
10 inch ASME	PBD:20377-512

40 TPH, 304 (1.4301) stainless steel flowguide

2 inch ASME	PBD:20377-114
4 inch ASME	PBD:20377-214
6 inch ASME	PBD:20377-314
8 inch ASME	PBD:20377-414
10 inch ASME	PBD:20377-514

40 TPH, 316 (1.4401) stainless steel flowguide

2 inch ASME	PBD:20377-115
4 inch ASME	PBD:20377-215
6 inch ASME	PBD:20377-315
8 inch ASME	PBD:20377-415
10 inch ASME	PBD:20377-515

300 TPH, mild steel flowguide

6 inch ASME	PBD:20388-111
8 inch ASME	PBD:20388-211
10 inch ASME	PBD:20388-311
12 inch ASME	PBD:20388-411
14 inch ASME	PBD:20388-511
16 inch ASME	PBD:20388-611

300 TPH, mild steel-epoxy flowguide

6 inch ASME	PBD:20388-112
8 inch ASME	PBD:20388-212
10 inch ASME	PBD:20388-312
12 inch ASME	PBD:20388-412
14 inch ASME	PBD:20388-512
16 inch ASME	PBD:20388-612

300 TPH, 304 (1.4301) stainless steel flowguide

6 inch ASME	PBD:20388-114
8 inch ASME	PBD:20388-214
10 inch ASME	PBD:20388-314
12 inch ASME	PBD:20388-414
14 inch ASME	PBD:20388-514
16 inch ASME	PBD:20388-614

Article No.

Article No.

300 TPH, 316 (1.4401) stainless steel flowguide

6 inch ASME	PBD:20388-115
8 inch ASME	PBD:20388-215
10 inch ASME	PBD:20388-315
12 inch ASME	PBD:20388-415
14 inch ASME	PBD:20388-515
16 inch ASME	PBD:20388-615

40 TPH, mild steel flowguide

2 inch DIN	PBD:20377-121
4 inch DIN	PBD:20377-221
6 inch DIN	PBD:20377-321
8 inch DIN	PBD:20377-421
10 inch DIN	PBD:20377-521

40 TPH, mild steel-epoxy flowguide

2 inch DIN	PBD:20377-122
4 inch DIN	PBD:20377-222
6 inch DIN	PBD:20377-322
8 inch DIN	PBD:20377-422
10 inch DIN	PBD:20377-522

40 TPH, 304 (1.4301) stainless steel flowguide

2 inch DIN	PBD:20377-124
4 inch DIN	PBD:20377-224
6 inch DIN	PBD:20377-324
8 inch DIN	PBD:20377-424
10 inch DIN	PBD:20377-524

40 TPH, 316 (1.4401) stainless steel flowguide

2 inch DIN	PBD:20377-125
4 inch DIN	PBD:20377-225
6 inch DIN	PBD:20377-325
8 inch DIN	PBD:20377-425
10 inch DIN	PBD:20377-525

300 TPH, mild steel flowguide

6 inch DIN	PBD:20388-121
8 inch DIN	PBD:20388-221
10 inch DIN	PBD:20388-321
12 inch DIN	PBD:20388-421
14 inch DIN	PBD:20388-521
16 inch DIN	PBD:20388-621

300 TPH, mild steel-epoxy flowguide

6 inch DIN	PBD:20388-122
8 inch DIN	PBD:20388-222
10 inch DIN	PBD:20388-322
12 inch DIN	PBD:20388-422
14 inch DIN	PBD:20388-522
16 inch DIN	PBD:20388-622

Selection and ordering data	Article No.
<u>300 TPH, 304 (1.4301) stainless steel flowguide</u>	
6 inch DIN	PBD:20388-124
8 inch DIN	PBD:20388-224
10 inch DIN	PBD:20388-324
12 inch DIN	PBD:20388-424
14 inch DIN	PBD:20388-524
16 inch DIN	PBD:20388-624
<u>300 TPH, 316 (1.4401) stainless steel flowguide</u>	
6 inch DIN	PBD:20388-125
8 inch DIN	PBD:20388-225
10 inch DIN	PBD:20388-325
12 inch DIN	PBD:20388-425
14 inch DIN	PBD:20388-525
16 inch DIN	PBD:20388-625
Gasketing	
40 TPH, gasket	PBD:22600493
300 TPH, gasket	PBD:22600494

1) For versions 1 and 2 only.
 2) For versions 1, 2 or 3.
 3) For version 3 only.
 4) Not available with cabinet construction options 1, 2, 3.

Solids Flowmeters

LVDT flowmeters

SITRANS WF300 series

Selection and ordering data

SITRANS WF340

Compact vertical flow, low to medium-capacity solid flowmeters for various product sizes, densities, and fluidities, particularly fine powders. A sensing plate, sensing head and integrator are required to complete the system.

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

Version

Base mount, 40 t/h (44 STPH) max. design capacity

Side mount, 40 t/h (44 STPH) max. design capacity

Base mount, 300 t/h (330 STPH) max. design capacity

Flowguide size

No flowguide (5 x 16 inch model)

3 x 6 inch (76 x 152 mm)¹⁾

4 x 10 inch (102 x 254 mm)¹⁾

5 x 12 inch (127 x 305 mm)¹⁾

5 x 16 inch (127 x 406 mm)²⁾

6 x 20 inch (152 x 508 mm)²⁾

No flowguide (WF340-300 6 x 20 inch model)

Flowguide construction

No flowguide

Mild steel, polyester painted

304 (1.4301) stainless steel¹⁾

304 (1.4301) stainless steel²⁾

316 (1.4401) stainless steel¹⁾

316 (1.4401) stainless steel²⁾

Mild steel, polyester painted with PTFE liner

Mild steel, polyester painted with abrasion resistant liner

304 (1.4301) stainless steel, with PTFE liner¹⁾

304 (1.4301) stainless steel, with PTFE liner²⁾

Mild steel, epoxy paint with zinc primer¹⁾

Mild steel, epoxy paint with zinc primer²⁾

Other flowguide materials available upon request

Cabinet construction

Mild steel, painted

304 (1.4301) stainless steel¹⁾

304 (1.4301) stainless steel²⁾

316 (1.4401) stainless steel¹⁾

316 (1.4401) stainless steel²⁾

Mild steel, epoxy paint with zinc primer¹⁾

Mild steel, epoxy paint with zinc primer²⁾

Article No.

7MH7104-

0

Order Code

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 10204³⁾

Instruction manual

- English
- German

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

Additional instruction manuals

- Solids Flowmeter Application Guidelines, English
- Solids Flowmeter Application Guidelines, German

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

Y15

Y31

C11

C12

Article No.

7ML1998-5CU02

7ML1998-5CU32

7ML1998-5GK01

7ML1998-5GK31

¹⁾ For versions 1 and 2 only.

²⁾ For version 3 only.

³⁾ Not available with cabinet construction option 1.

Selection and ordering data	Article No.		Article No.
Spare parts			
<u>40 TPH, mild steel flowguide</u>		<u>300 TPH, 304 (1.4301) stainless steel flowguide</u>	
3 x 6 inch	PBD:20401-100	5 x 16 inch	PBD:20455-30
4 x 10 inch	PBD:20395-100	6 x 20 inch	PBD:20458-30
5 x 12 inch	PBD:20405-100	<u>300 TPH, 304 (1.4301) stainless steel-PTFE flowguide</u>	
<u>40 TPH, mild steel-epoxy flowguide</u>		5 x 16 inch	PBD:20455-40
3 x 6 inch	PBD:20401-200	6 x 20 inch	PBD:20458-40
4 x 10 inch	PBD:20395-200	<u>300 TPH, 316 (1.4401) stainless steel flowguide</u>	
5 x 12 inch	PBD:20405-200	5 x 16 inch	PBD:20455-50
<u>40 TPH, 304 (1.4301) stainless steel flowguide</u>		6 x 20 inch	PBD:20458-50
3 x 6 inch	PBD:20401-300	<u>300 TPH, mild steel-PTFE flowguide</u>	
4 x 10 inch	PBD:20395-300	5 x 16 inch	PBD:20455-60
5 x 12 inch	PBD:20405-300	6 x 20 inch	PBD:20458-60
<u>40 TPH, 316 (1.4401) stainless steel flowguide</u>		<u>300 TPH, mild steel-AR flowguide</u>	
3 x 6 inch	PBD:20401-400	5 x 16 inch	PBD:20455-70
4 x 10 inch	PBD:20395-400	6 x 20 inch	PBD:20458-70
5 x 12 inch	PBD:20405-400	Gasketing	
<u>40 TPH, mild steel-PTFE flowguide</u>		40 TPH, gasket	PBD:22600495
3 x 6 inch	PBD:20401-500	<u>300 TPH, gasket</u>	
4 x 10 inch	PBD:20395-500	• 5 x 16 inch	PBD:45000969
5 x 12 inch	PBD:20405-500	• 6 x 20 inch	PBD:45000970
<u>40 TPH, 304 (1.4301) stainless steel-PTFE flowguide</u>			
3 x 6 inch	PBD:20401-600		
4 x 10 inch	PBD:20395-600		
5 x 12 inch	PBD:20405-600		
<u>40 TPH, mild steel-AR flowguide</u>			
3 x 6 inch	PBD:20401-700		
4 x 10 inch	PBD:20395-700		
5 x 12 inch	PBD:20405-700		
<u>300 TPH, mild steel flowguide</u>			
5 x 16 inch	PBD:20455-10		
6 x 20 inch	PBD:20458-10		
<u>300 TPH, mild steel-epoxy flowguide</u>			
5 x 16 inch	PBD:20455-20		
6 x 20 inch	PBD:20458-20		

Solids Flowmeters

LVDT flowmeters

SITRANS WF300 series

Selection and ordering data

SITRANS WF350

Low to medium capacity flowmeters for powders conveyed by aerated gravity conveyors. A sensing plate, sensing head and integrator are required to complete the system.

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

Version

40 t/h (44 STPH) maximum design capacity

300 t/h (330 STPH) maximum design capacity

Flowguide size

8 inch (203 mm), 40 t/h (0.2 to 44 STPH) version

10 inch (254 mm), 300 t/h

12 inch (305 mm), 40 t/h (0.2 to 44 STPH) version

14 inch (356 mm), 300 t/h

20 inch (508 mm), 300 t/h

Flowguide construction

Mild steel, polyester painted

304 (1.4301) stainless steel

316 (1.4401) stainless steel

Cabinet construction

Mild steel, polyester painted

304 (1.4301) stainless steel

316 (1.4401) stainless steel

Venting flange

ASME flange pattern

DIN flange pattern

Article No.

7MH7106-



1

2

B

C

D

E

F

B

D

E

1

3

4

1

2

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 cabinet construction option 1

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.

Spare parts

40 TPH, mild steel flowguide

8 inch

12 inch

40 TPH, 304 (1.4301) stainless steel flowguide

8 inch

12 inch

40 TPH, 316 (1.4401) stainless steel flowguide

8 inch

12 inch

300 TPH, mild steel flowguide

10 inch

14 inch

20 inch

300 TPH, 304 (1.4301) stainless steel flowguide

10 inch

14 inch

20 inch

40 TPH, 316 (1.4401) stainless steel flowguide

10 inch

14 inch

20 inch

Gasketing

40 TPH, gasket

300 TPH, gasket

Order Code

Y15

Y31

C11

C12

Article No.

7ML1998-5CV02

7ML1998-5CV32

7ML1998-5GK01

7ML1998-5GK31

PBD:22520-1A0

PBD:22520-2A0

PBD:22520-1B0

PBD:22520-2B0

PBD:22520-1C0

PBD:22520-2C0

PBD:22519-1A0

PBD:22519-2A0

PBD:22519-3A0

PBD:22519-1B0

PBD:22519-2B0

PBD:22519-3B0

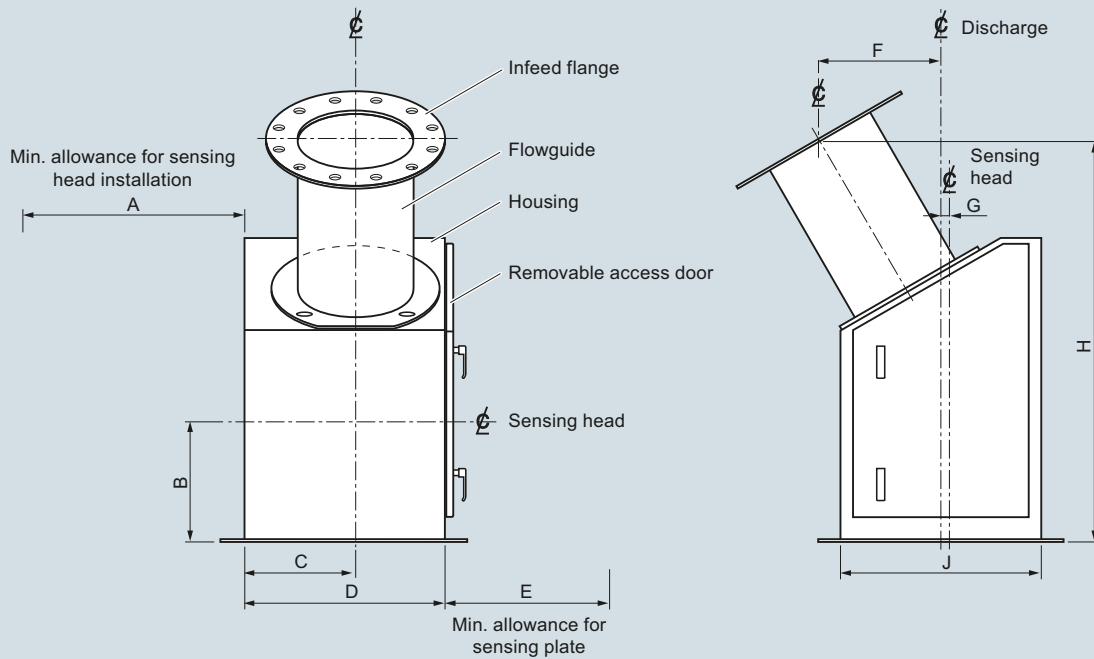
PBD:22519-1C0

PBD:22519-2C0

PBD:22519-3C0

PBD:45000972

PBD:45005013

Dimensional drawings


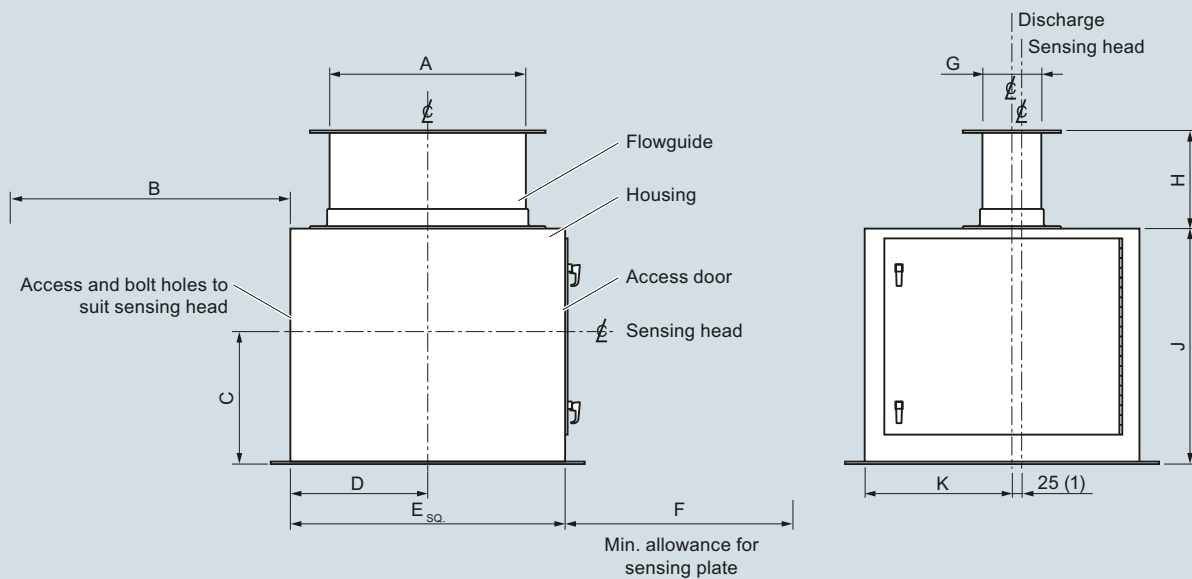
Model	A	B	C	D	E	F	G	H	J
40 t/h (44 STPH)	686 (27)	356 (14)	254 (10)	457 (18)	610 (24)	279 (11)	25 (1)	914 (36)	457 (18)
300 t/h (330 STPH)	1 042 (41)	457 (18)	305 (12)	610 (24)	610 (24)	330 (13)	38 (1.5)	1 270 (50)	610 (24)
40 t/h version inlet sizes									
51 (2)	102 (4)		152 (6)		203 (8)		254 (10)		
300 t/h version inlet sizes									
152 (6)	203 (8)		254 (10)		305 (12)		356 (14)		406 (16)

WF330 series, dimensions in mm (inch)

Solids Flowmeters

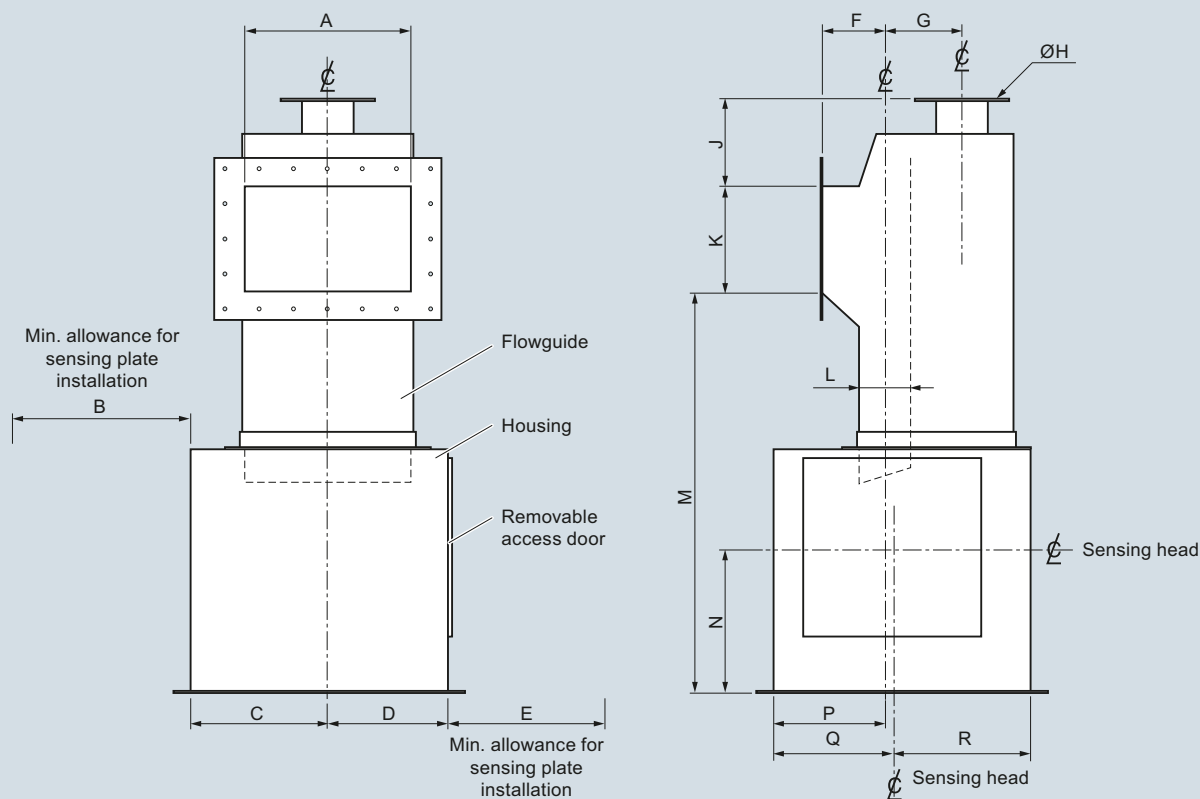
LVDT flowmeters

SITRANS WF300 series



Size	A	B	C	D	E	F	G	H	J	K
40 t/h (44 STPH)	152 (6)	686 (27)	304 (12)	254 (10)	508 (20)	457 (18)	76 (3)	203 (8)	508 (20)	254 (10)
40 t/h (44 STPH)	254 (10)	686 (27)	304 (12)	254 (10)	508 (20)	457 (18)	102 (4)	203 (8)	508 (20)	254 (10)
40 t/h (44 STPH)	305 (12)	686 (27)	304 (12)	254 (10)	508 (20)	457 (18)	127 (5)	203 (8)	508 (20)	254 (10)
300 t/h (330 STPH)	406 (16)	1 041 (41)	343 (13.5)	305 (12)	610 (24)	762 (30)	127 (5)	254 (10)	610 (24)	330 (13)
300 t/h (330 STPH)	508 (20)	1 041 (41)	343 (13.5)	356 (14)	711 (28)	762 (30)	152 (6)	254 (10)	610 (24)	381 (15)

WF340 series, dimensions in mm (inch)



Size	A	B	C	D	E	F	G	H
40 t/h (44 STPH)	203 (8)	686 (27)	305 (12)	254 (10)	711 (28)	127 (5)	203 (8)	102 (4)
40 t/h (44 STPH)	305 (12)	686 (27)	305 (12)	254 (10)	711 (28)	127 (5)	203 (8)	102 (4)
300 t/h (330 STPH)	254 (10)	1 041 (41)	406 (16)	356 (14)	889 (35)	191 (7.5)	229 (9)	152 (6)
300 t/h (330 STPH)	356 (14)	1 041 (41)	406 (16)	356 (14)	889 (35)	191 (7.5)	229 (9)	152 (6)
300 t/h (330 STPH)	508 (20)	1 041 (41)	406 (16)	356 (14)	889 (35)	191 (7.5)	229 (9)	152 (6)

Size	J	K	L	M	N	P	Q	R
40 t/h (44 STPH)	229 (9)	203 (8)	76 (3)	914 (36)	305 (12)	229 (9)	229 (9)	330 (13)
40 t/h (44 STPH)	229 (9)	203 (8)	102 (4)	914 (36)	305 (12)	229 (9)	229 (9)	330 (13)
300 t/h (330 STPH)	254 (10)	305 (12)	127 (5)	1 168 (46)	419 (16.5)	330 (13)	356 (14)	406 (16)
300 t/h (330 STPH)	254 (10)	305 (12)	152 (6)	1 168 (46)	419 (16.5)	330 (13)	356 (14)	406 (16)
300 t/h (330 STPH)	254 (10)	305 (12)	178 (7)	1 168 (46)	419 (16.5)	330 (13)	356 (14)	406 (16)

WF350 series, dimensions in mm (inch)