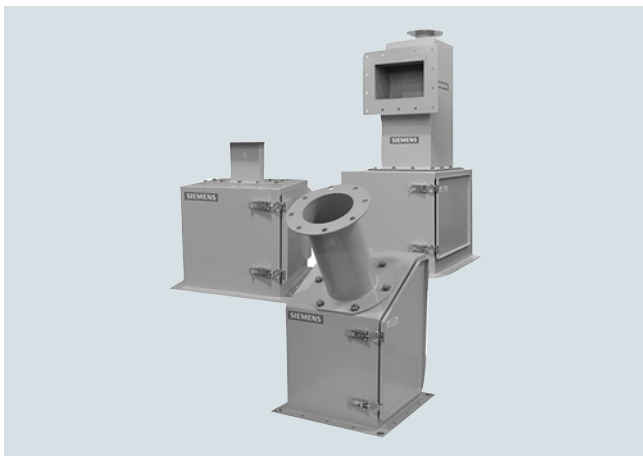


Solid Flowmeters

LVDT flowmeters

SITRANS WF300 series

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

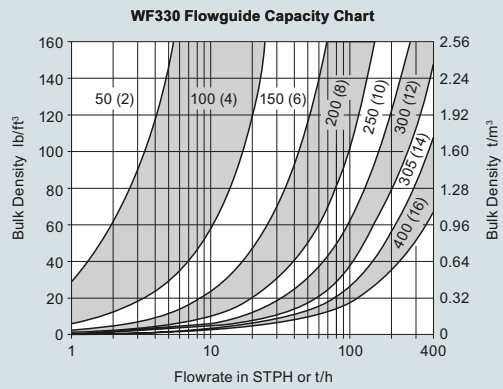
With weighing mechanics located externally, the WF300 series solids flowmeters are unaffected by corrosive, abrasive, or hot materials. Handling a wide range of product sizes, densities, and fluidities including fine powders such as cement, they operate at process temperatures to 230 °C (450 °F). The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

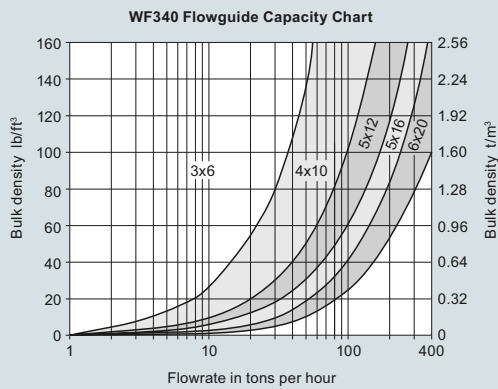
SITRANS WF330 flowmeters are totally enclosed, with external weighing mechanics, operating with corrosive, abrasive or hot materials. SITRANS WF350 series operates with aerated gravity conveyors, and includes integral vents and baffles for air separation. For applications with little available headroom,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

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.

SITRANS WF330 flowguide capacity chart



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

SITRANS WF340 flowguide capacity chart

Solid Flowmeters

LVDT flowmeters

SITRANS WF300 series

Selection and ordering data

Article No.

Order Code

SITRANS WF330 Solids flowmeter, general purpose design

Impact solids flowmeter for low to medium capacity applications. Accuracy is $\pm 1\%$ or better, with capacity up to 300 t/h (330 STPH).

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

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

A

2 inch ASME flange pattern¹⁾

B

4 inch ASME flange pattern¹⁾

C

6 inch ASME flange pattern²⁾

D

8 inch ASME flange pattern²⁾

E

10 inch ASME flange pattern²⁾

F

12 inch ASME flange pattern³⁾

G

14 inch ASME flange pattern³⁾

H

16 inch ASME flange pattern³⁾

J

DN 50 flange pattern¹⁾

K

DN 100 flange pattern¹⁾

L

DN 150 flange pattern²⁾

M

DN 200 flange pattern²⁾

N

DN 250 flange pattern²⁾

P

DN 300 flange pattern³⁾

Q

DN 350 flange pattern³⁾

R

DN 400 flange pattern³⁾

S

Flowguide construction

No flowguide

A

Mild steel, C5-M rated polyester painted

B

Mild steel, epoxy painted with zinc primer¹⁾

C

Mild steel, epoxy painted with zinc primer³⁾

D

304 (1.4301) stainless steel¹⁾

E

304 (1.4301) stainless steel³⁾

F

316 (1.4401) stainless steel¹⁾

G

316 (1.4401) stainless steel³⁾

H

Cabinet construction

Mild steel, C5-M rated polyester painted

1

Mild steel, epoxy painted with zinc primer¹⁾

2

Mild steel, epoxy painted with zinc primer³⁾

3

304 (1.4301) stainless steel¹⁾

4

304 (1.4301) stainless steel³⁾

5

316 (1.4401) stainless steel¹⁾

6

316 (1.4401) stainless steel³⁾

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

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 10204⁴⁾

C12

Note: not available with cabinet construction option 1

Instruction manuals

All literature is available to download for free, in a range of languages, at <https://www.siemens.com/weighing/documentation>

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.

Selection and ordering data	Article No.	Article No.	
<i>Spare parts</i>		<i>Spare parts</i>	
<u>40 TPH, mild steel flowguide</u>		<u>40 TPH, mild steel flowguide</u>	
2 inch ASME	PBD:20377-111	2 inch DIN	PBD:20377-121
4 inch ASME	PBD:20377-211	4 inch DIN	PBD:20377-221
6 inch ASME	PBD:20377-311	6 inch DIN	PBD:20377-321
8 inch ASME	PBD:20377-411	8 inch DIN	PBD:20377-421
10 inch ASME	PBD:20377-511	10 inch DIN	PBD:20377-521
<u>40 TPH, mild steel-epoxy flowguide</u>		<u>40 TPH, mild steel-epoxy flowguide</u>	
2 inch ASME	PBD:20377-112	2 inch DIN	PBD:20377-122
4 inch ASME	PBD:20377-212	4 inch DIN	PBD:20377-222
6 inch ASME	PBD:20377-312	6 inch DIN	PBD:20377-322
8 inch ASME	PBD:20377-412	8 inch DIN	PBD:20377-422
10 inch ASME	PBD:20377-512	10 inch DIN	PBD:20377-522
<u>40 TPH, 304 (1.4301) stainless steel flowguide</u>		<u>40 TPH, 304 (1.4301) stainless steel flowguide</u>	
2 inch ASME	PBD:20377-114	2 inch DIN	PBD:20377-124
4 inch ASME	PBD:20377-214	4 inch DIN	PBD:20377-224
6 inch ASME	PBD:20377-314	6 inch DIN	PBD:20377-324
8 inch ASME	PBD:20377-414	8 inch DIN	PBD:20377-424
10 inch ASME	PBD:20377-514	10 inch DIN	PBD:20377-524
<u>40 TPH, 316 (1.4401) stainless steel flowguide</u>		<u>40 TPH, 316 (1.4401) stainless steel flowguide</u>	
2 inch ASME	PBD:20377-115	2 inch DIN	PBD:20377-125
4 inch ASME	PBD:20377-215	4 inch DIN	PBD:20377-225
6 inch ASME	PBD:20377-315	6 inch DIN	PBD:20377-325
8 inch ASME	PBD:20377-415	8 inch DIN	PBD:20377-425
10 inch ASME	PBD:20377-515	10 inch DIN	PBD:20377-525
<u>300 TPH, mild steel flowguide</u>		<u>300 TPH, mild steel flowguide</u>	
6 inch ASME	PBD:20388-111	6 inch DIN	PBD:20388-121
8 inch ASME	PBD:20388-211	8 inch DIN	PBD:20388-221
10 inch ASME	PBD:20388-311	10 inch DIN	PBD:20388-321
12 inch ASME	PBD:20388-411	12 inch DIN	PBD:20388-421
14 inch ASME	PBD:20388-511	14 inch DIN	PBD:20388-521
16 inch ASME	PBD:20388-611	16 inch DIN	PBD:20388-621
<u>300 TPH, mild steel-epoxy flowguide</u>		<u>300 TPH, mild steel-epoxy flowguide</u>	
6 inch ASME	PBD:20388-112	6 inch DIN	PBD:20388-122
8 inch ASME	PBD:20388-212	8 inch DIN	PBD:20388-222
10 inch ASME	PBD:20388-312	10 inch DIN	PBD:20388-322
12 inch ASME	PBD:20388-412	12 inch DIN	PBD:20388-422
14 inch ASME	PBD:20388-512	14 inch DIN	PBD:20388-522
16 inch ASME	PBD:20388-612	16 inch DIN	PBD:20388-622
<u>300 TPH, 304 (1.4301) stainless steel flowguide</u>		<u>300 TPH, 304 (1.4301) stainless steel flowguide</u>	
6 inch ASME	PBD:20388-114	6 inch DIN	PBD:20388-124
8 inch ASME	PBD:20388-214	8 inch DIN	PBD:20388-224
10 inch ASME	PBD:20388-314	10 inch DIN	PBD:20388-324
12 inch ASME	PBD:20388-414	12 inch DIN	PBD:20388-424
14 inch ASME	PBD:20388-514	14 inch DIN	PBD:20388-524
16 inch ASME	PBD:20388-614	16 inch DIN	PBD:20388-624
<u>300 TPH, 316 (1.4401) stainless steel flowguide</u>		<u>300 TPH, 316 (1.4401) stainless steel flowguide</u>	
6 inch ASME	PBD:20388-115	6 inch DIN	PBD:20388-125
8 inch ASME	PBD:20388-215	8 inch DIN	PBD:20388-225
10 inch ASME	PBD:20388-315	10 inch DIN	PBD:20388-325
12 inch ASME	PBD:20388-415	12 inch DIN	PBD:20388-425
14 inch ASME	PBD:20388-515	14 inch DIN	PBD:20388-525
16 inch ASME	PBD:20388-615	16 inch DIN	PBD:20388-625

Solid Flowmeters

LVDT flowmeters

SITRANS WF300 series

Selection and ordering data

Article No.

Order Code

SITRANS WF340 Solids flowmeter, compact design

Impact solids flowmeter for low to medium capacity applications. Accuracy is $\pm 1\%$ or better, with capacity up to 300 t/h (330 STPH).

➤ 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, C5-M rated polyester painted

304 (1.4301) stainless steel¹⁾

304 (1.4301) stainless steel²⁾

316 (1.4401) stainless steel¹⁾

316 (1.4401) stainless steel²⁾

Mild steel, C5-M rated polyester painted with PTFE liner

Mild steel, C5-M rated 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⁾

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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 manuals

All literature is available to download for free, in a range of languages, at <https://www.siemens.com/weighing/documentation>

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.	Order Code
<i>Spare parts</i>		
<u>40 TPH, mild steel flowguide</u>		
3 x 6 inch	PBD:20401-100	
4 x 10 inch	PBD:20395-100	
5 x 12 inch	PBD:20405-100	
<u>40 TPH, mild steel-epoxy flowguide</u>		
3 x 6 inch	PBD:20401-200	
4 x 10 inch	PBD:20395-200	
5 x 12 inch	PBD:20405-200	
<u>40 TPH, 304 (1.4301) stainless steel flowguide</u>		
3 x 6 inch	PBD:20401-300	
4 x 10 inch	PBD:20395-300	
5 x 12 inch	PBD:20405-300	
<u>40 TPH, 316 (1.4401) stainless steel flowguide</u>		
3 x 6 inch	PBD:20401-400	
4 x 10 inch	PBD:20395-400	
5 x 12 inch	PBD:20405-400	
<u>40 TPH, mild steel-PTFE flowguide</u>		
3 x 6 inch	PBD:20401-500	
4 x 10 inch	PBD:20395-500	
5 x 12 inch	PBD:20405-500	
<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	
<i>Spare parts</i>		
<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
<u>300 TPH, 304 (1.4301) stainless steel flowguide</u>		
5 x 16 inch		PBD:20455-30
6 x 20 inch		PBD:20458-30
<u>300 TPH, 304 (1.4301) stainless steel-PTFE flowguide</u>		
5 x 16 inch		PBD:20455-40
6 x 20 inch		PBD:20458-40
<u>300 TPH, 316 (1.4401) stainless steel flowguide</u>		
5 x 16 inch		PBD:20455-50
6 x 20 inch		PBD:20458-50
<u>300 TPH, mild steel-PTFE flowguide</u>		
5 x 16 inch		PBD:20455-60
6 x 20 inch		PBD:20458-60
<u>300 TPH, mild steel-AR flowguide</u>		
5 x 16 inch		PBD:20455-70
6 x 20 inch		PBD:20458-70

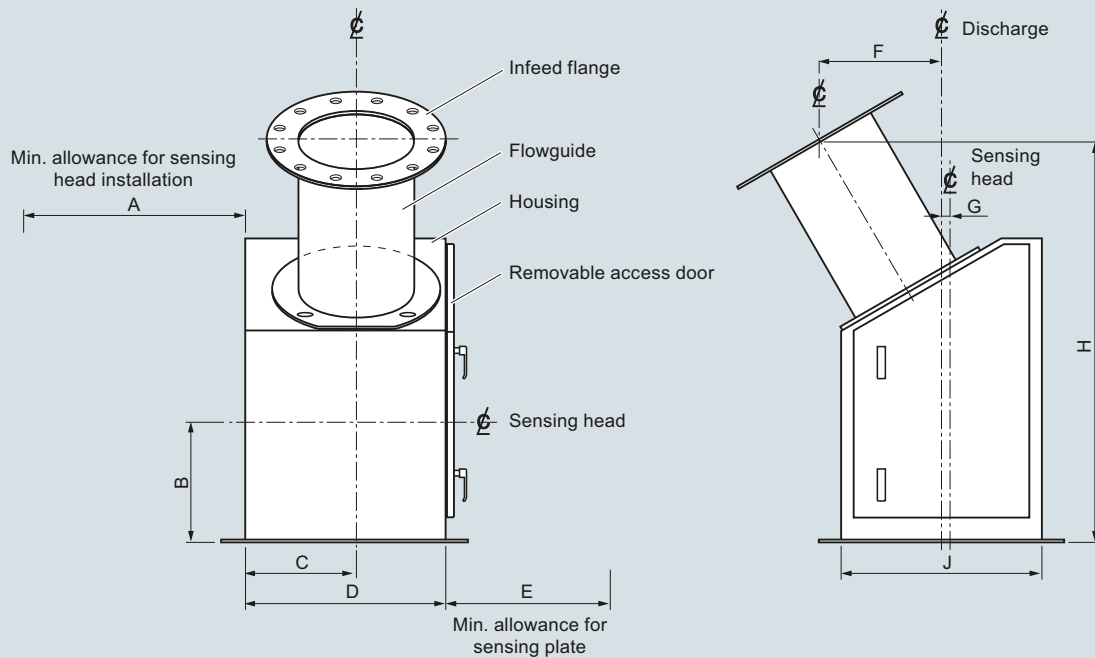
Solid Flowmeters

LVDT flowmeters

SITRANS WF300 series

Selection and ordering data	Article No.	Order Code
SITRANS WF350 Solids flowmeter, aerated infeed design Impact solids flowmeter for low to medium capacity applications. Accuracy is $\pm 1\%$ or better, with capacity up to 300 t/h (330 STPH). Click on the Article No. for the online configuration in the PIA Life Cycle Portal.	7MH7106-	
Version 40 t/h (44 STPH) maximum design capacity 300 t/h (330 STPH) maximum design capacity	1 2	
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	B C D E F	
Flowguide construction Mild steel, C5-M rated polyester painted 304 (1.4301) stainless steel 316 (1.4401) stainless steel	B D E	
Cabinet construction Mild steel, C5-M rated polyester painted 304 (1.4301) stainless steel 316 (1.4401) stainless steel	1 3 4	
Venting flange ASME flange pattern DIN flange pattern	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. 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 Not available with cabinet construction option 1 C12
		Instruction manuals All literature is available to download for free, in a range of languages, at https://www.siemens.com/weighing/documentation
		Spare parts Article No. <u>40 TPH, mild steel flowguide</u> 8 inch PBD:22520-1A0 12 inch PBD:22520-2A0 <u>40 TPH, 304 (1.4301) stainless steel flowguide</u> 8 inch PBD:22520-1B0 12 inch PBD:22520-2B0 <u>40 TPH, 316 (1.4401) stainless steel flowguide</u> 8 inch PBD:22520-1C0 12 inch PBD:22520-2C0 <u>300 TPH, mild steel flowguide</u> 10 inch PBD:22519-1A0 14 inch PBD:22519-2A0 20 inch PBD:22519-3A0 <u>300 TPH, 304 (1.4301) stainless steel flowguide</u> 10 inch PBD:22519-1B0 14 inch PBD:22519-2B0 20 inch PBD:22519-3B0 <u>40 TPH, 316 (1.4401) stainless steel flowguide</u> 10 inch PBD:22519-1C0 14 inch PBD:22519-2C0 20 inch PBD:22519-3C0

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)
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300 t/h version inlet sizes

152 (6)	203 (8)	254 (10)	305 (12)	356 (14)	406 (16)
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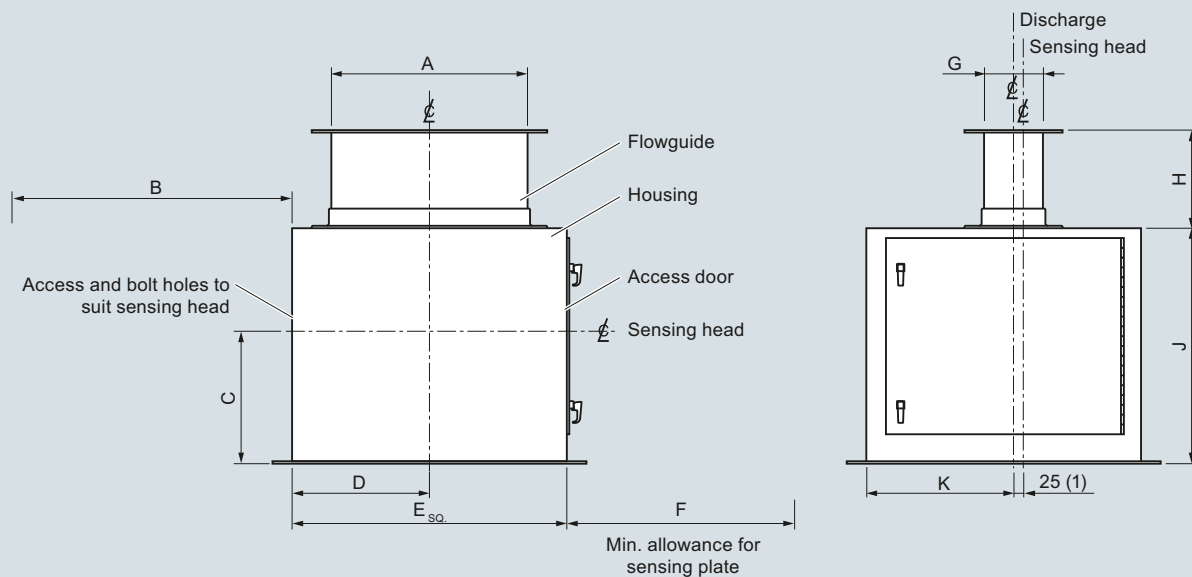
SITRANS WF300, dimensions in mm (inch)

Solid Flowmeters

LVDT flowmeters

SITRANS WF300 series

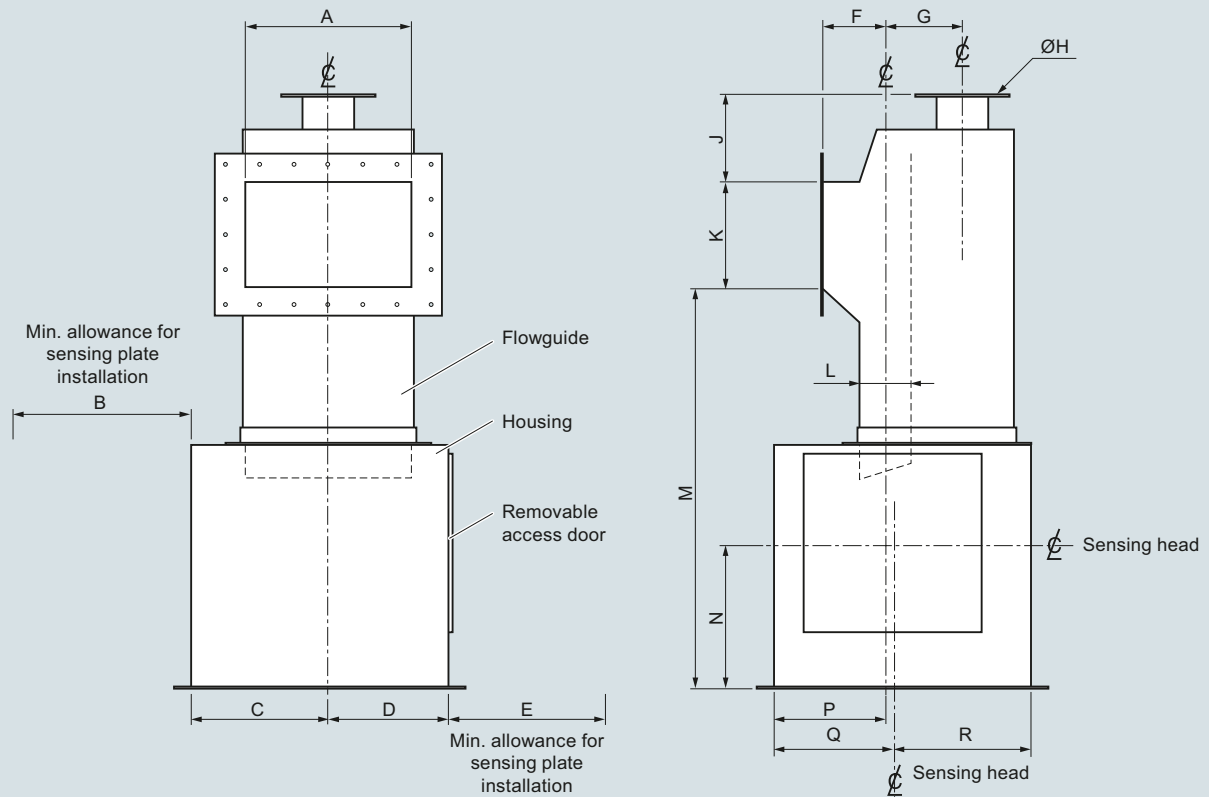
Dimensional drawings (continued)



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)

SITRANS WF340, dimensions in mm (inch)

Dimensional drawings (continued)



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)

SITRANS WF350, dimensions in mm (inch)