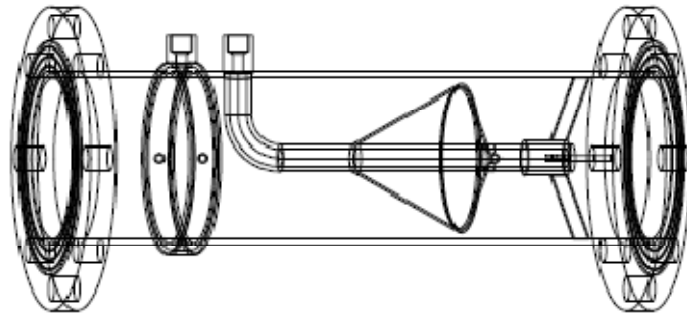


# Technical Specification

## gFlow+™ CF600

### V-Cone Flow Tube



For high accuracy DP flow measurement

#### Application

- Steam/boiler water measurement
- Ideal for high pressure oil/gas measurement
- Direct replacement of orifice plates to achieve life time accuracy stability
- Best fit for harsh installation environment with swirl flow condition or no piping space for straight line

#### Features

- 10:1 turndowns
- No straight pipe required
- Flowtube sizes to choose from 1/2" to 80"
- Repeatability as 0.1%
- Fully build with 304 stainless steel, 316 optional
- Patented design of ring style pressure tap enhances measurement stability
- Optimal designed back support to provide rigid structure while without sacrificing measurement performance

#### User benefits

- Low operating cost – No moving parts to replace
- Long term measurement performance – Fluid away from Beta edge
- Each flow tube is calibrated to customer application
- Fully build by stainless steel – minimize corrosion risk to protect equipment investment

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## Flow measurement

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**Measured variable**                      **Differential Pressure**  
Flow speed (exponential to differential pressure)

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**Measuring range**  
10:1

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**Measuring performance**            **Accuracy**  
0.5% o.R.  
**Repeatability**  
0.1% or better

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**Beta Ratio**                                **Standard**  
0.45, 0.5, 0.55, 0.6, 0.65, 0.7, 0.75, 0.8  
**Special Beta value upon request**

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## Process

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**Temperature**                              0~350°C  
**Pressure rating**                        **Maximum pressure rating**  
**1/2" to 3"      up to 40 bar**  
**4" to 6"        up to 16 bar**  
**8" to 24"      up to 10 bar**  
**Head loss**                                Varies with beta value  
**Standard Connection**                ANSI B16.5 CLASS 150,300,600  
DIN PN16, PN25, PN40  
JIS 10K, 20K, 40K  
Other connection up on user request

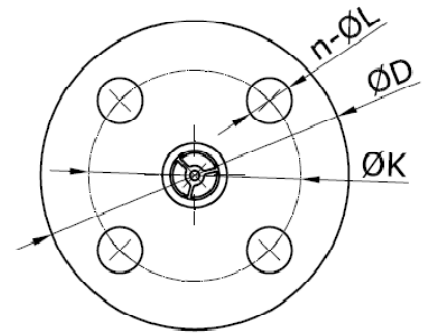
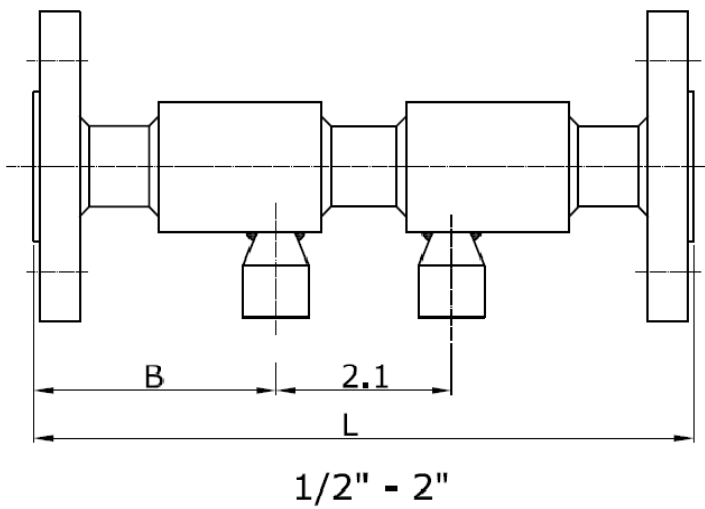
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## Construction

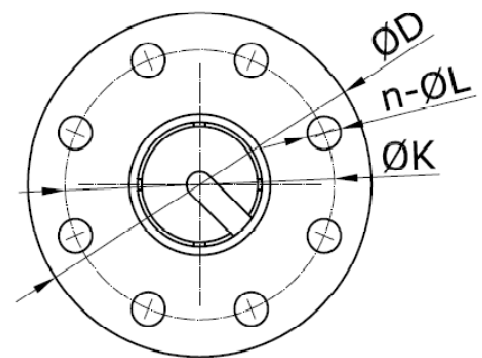
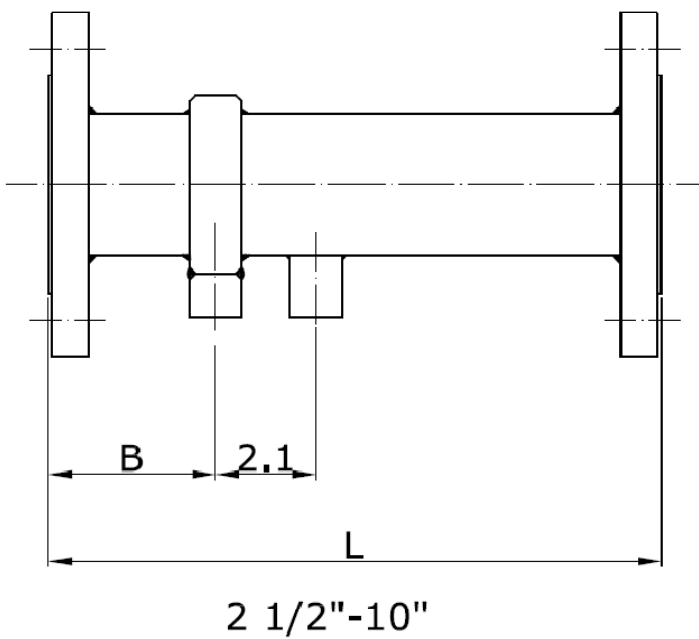
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**Tube and cone material**                304/316 Stainless steel  
Other material up on request  
**Finish**                                        Sand blasted  
**Pressure tap**                              **1/2" to 2"**  
1/4 NPT Female Thread  
**2 1/2" and above**  
1/2 NPT Female Thread  
**Design standard**                         ISO 5167-5

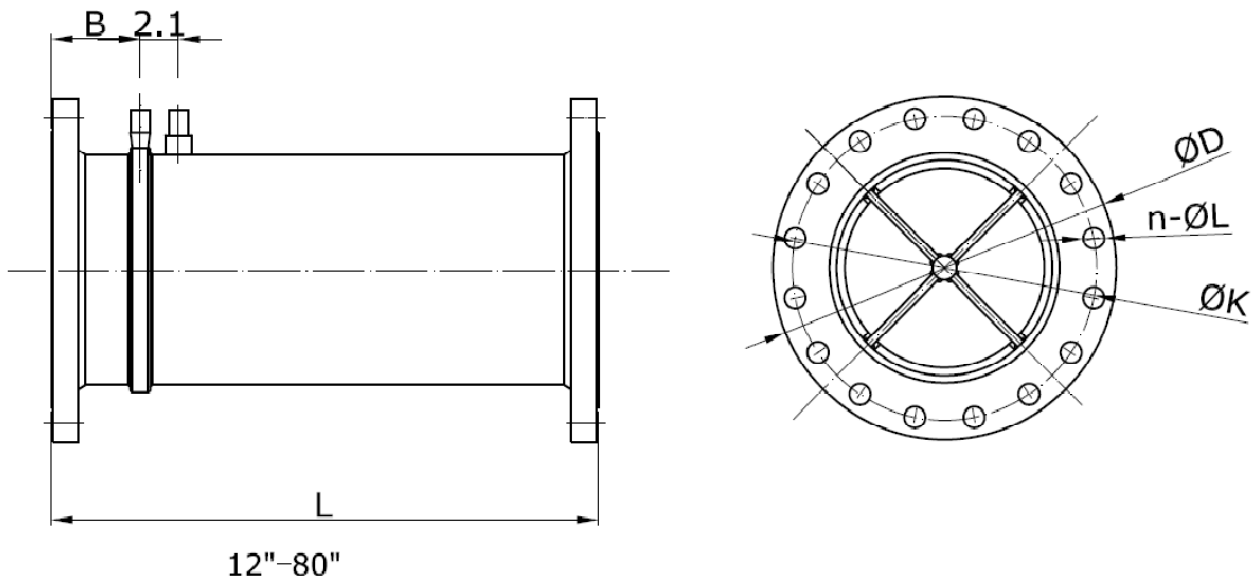
## Installation dimension



Pipe size		L		B		D		K		n-ØL	
inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm
1/2	15	8	203	2.8	70	3.5	88.9	2.38	60.45	4-0.62	4-15.7
3/4	20	8	203	2.8	70	3.88	98.6	2.75	69.85	4-0.62	4-15.7
1	25	8	203	2.8	70	4.25	108	3.12	79.25	4-0.62	4-15.7
1 1/4	32	10.5	265	4.2	105.5	4.62	117	3.5	88.9	4-0.62	4-15.7
1 1/2	40	10.5	265	3.7	95	5	127	3.88	98.6	4-0.62	4-15.7
2	50	12	305	3.7	95	6	152	4.75	120.7	4-0.75	4-19.1



Pipe size		L		B		D		K		n-ØL	
inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm
2 1/2	65	13.0	330	3.5	90	7	177.8	5.5	139.7	4-0.75	4-19.1
3	80	15.0	382	4.5	115	7.5	190.5	6	152.4	4-0.75	4-19.1
4	100	16.7	425	4.7	120	9	228.6	7.5	190.5	8-0.75	8-19.1
5	125	22.4	570	4.8	123	10	254.0	8.5	215.9	8-0.88	8-22.4
6	150	22.8	578	5.9	151	11	279.4	9.5	241.3	8-0.88	8-22.4
8	200	26.2	666	6.1	156	13.5	342.9	11.75	298.5	8-0.88	8-22.4
10	250	28.9	733	6.0	152	16	406.4	14.25	362	12-1.00	12-25.4



Pipe size		L		B		D		K		n-ØL	
inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm
12	300	30.4	772	4.9	125	19	482.6	17	431.8	12-1.00	12-25.4
14	350	31.0	787	5.7	145	21	533.4	18.75	476.3	12-1.12	12-28.4
16	400	31.7	805	4.9	125	23.5	596.9	21.25	539.8	16-1.12	16-28.4
18	450	34.4	874	6.1	155	25	635.0	22.75	577.9	16-1.25	16-31.75
20	500	39.0	990	4.9	125	27.5	698.5	25	635	20-1.25	20-31.75
24	600	48.9	1241	4.9	125	32	812.8	29.5	749.3	20-1.38	20-35.1

## Order structure

CF600 - AAA B CC D

**Model**  
CF600-

**AAA Pipe Size**

102	1/2" size
001	1" size
002	2" size
003	3" size
...	...
020	20" size
024	24" size

xxx Special version

**B Material**

A	304 Stainless Steel
B	316 Stainless Steel
C	Carbon steel
X	Special version

**CC Process Connection**

A1	ANSI B16.5 CLASS 150
A2	ANSI B16.5 CLASS 300
A3	ANSI B16.5 CLASS 600
J1	JIS 10K
J2	JIS 20K
J3	JIS 40K
D1	DIN PN16
D2	DIN PN25
D3	DIN PN40
xx	Special version

**D Tapping**

S	Socket Welding
N	Thread DN15~50: NPT 1/4 DN65~600: NPT 1/2
F	Flange
O	Others