



VANNES EUROPE

CARBON STEEL STRAINER FLANGED CLASS 300 PN50



ISO 9001 : 2015



PED 2014/68/EU



Certificate 3.1



Size : DN 50 to DN 400 (NPS 2" to 16")
Ends : Flanges R.F. Class 300 (PN50)
Min Temperature : - 29°C
Max Temperature : + 425°C
Max Pressure : 50 Bars
Specifications : Removable stainless steel filter
Bolted bonnet with draining cap

Materials : Carbon steel ASTM A216 WCB

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CARBON STEEL STRAINER FLANGED CLASS 300 PN50

SPECIFICATIONS :

- Removable stainless steel filter
- Flanges R.F. Class 300 (PN50)
- Horizontal or vertical position with descendant fluid (respect the flow direction indicated by the arrow)
- Mesh 1 mm for DN50 (2"), 1.5 mm from DN65 to 400 (2"1/2 to 16")
- Bolted bonnet with draining cap threaded NPT
- Grey painting RAL 7001 color, 60 µm thickness

USE :

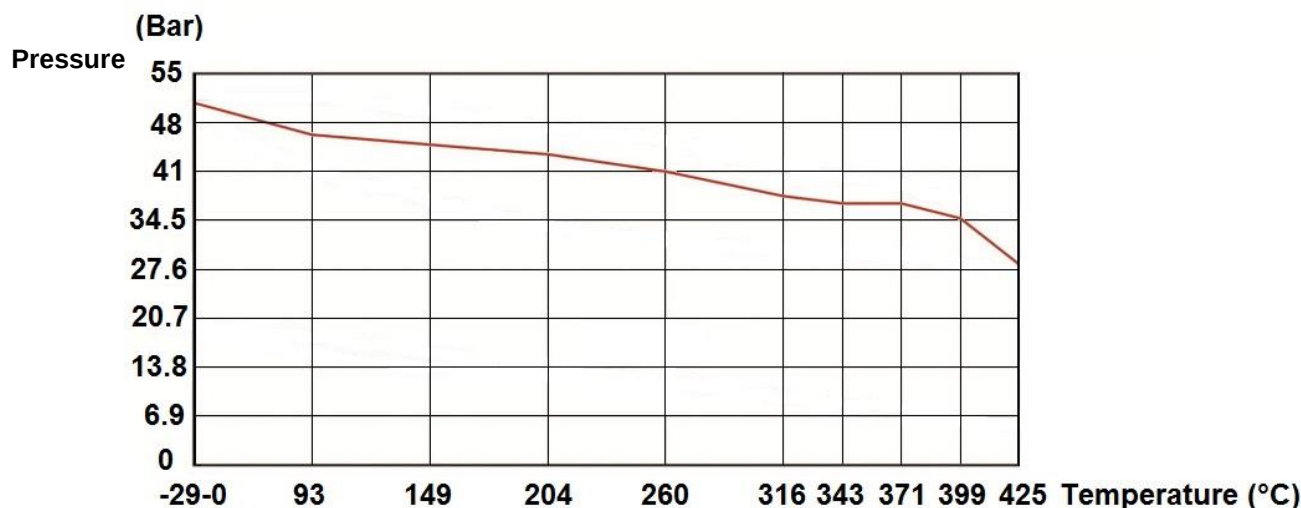
- Water distribution, gas oil, steam, petrochemical, petroleum industry, gas
- Min Temperature Ts : - 29°C
- Max Temperature Ts :+ 425°C
- Max Pressure Ps : 50 bars

PRESSURE / TEMPERATURE RELATION :

(According to AMSE B16-34 for A216 WCB)

Pressure (Bar)	51.1	51.1	46.2	45.1	43.8	41.3	37.9	36.9	36.9	34.8	28.2
Temperature (°C)	-29	38	93	149	204	260	316	343	371	399	425

PRESSURE / TEMPERATURE GRAPH :



FLOW COEFFICIENT Kvs (M3 / h) :

DN (mm)	50	65	80	100	150	200	250	300	350	400
NPS (")	2"	2"1/2	3"	4"	6"	8"	10"	12"	14"	16"
Kvs (m3/h)	32.4	54.8	83.1	129.7	291.2	518.8	810.7	1167.4	1447.1	1923

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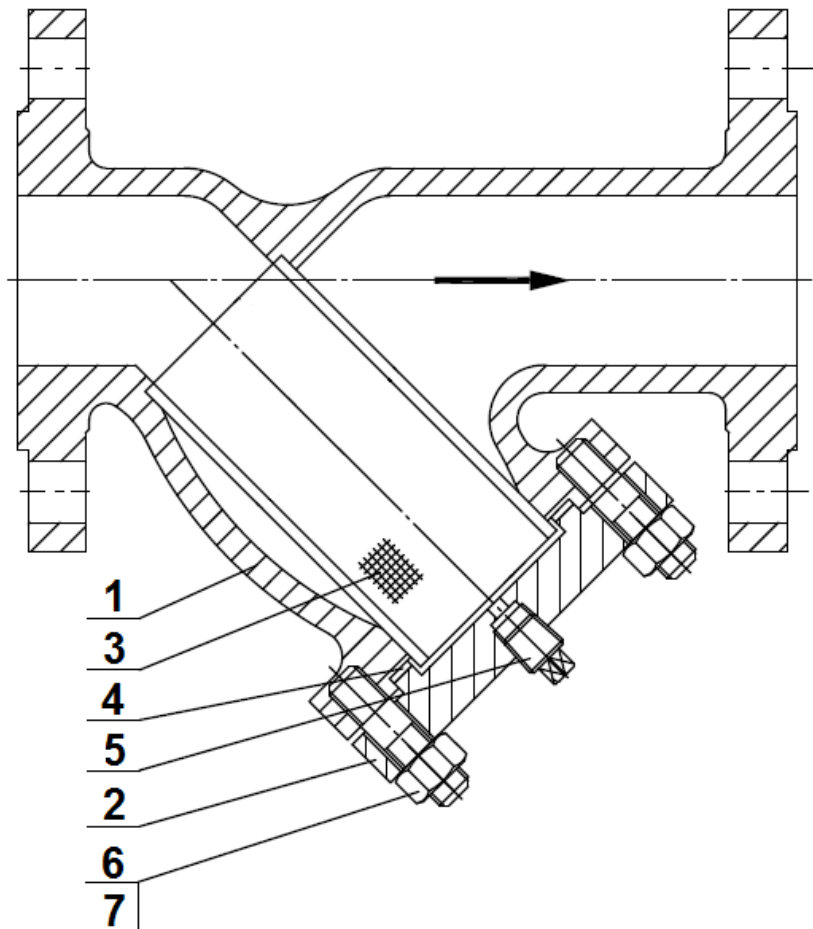
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RANGE :

- Carbon steel strainer flanged R.F. Class 300 (PN50) **Ref. 244** from DN 50 to DN 400 (NPS from 2" to 16")

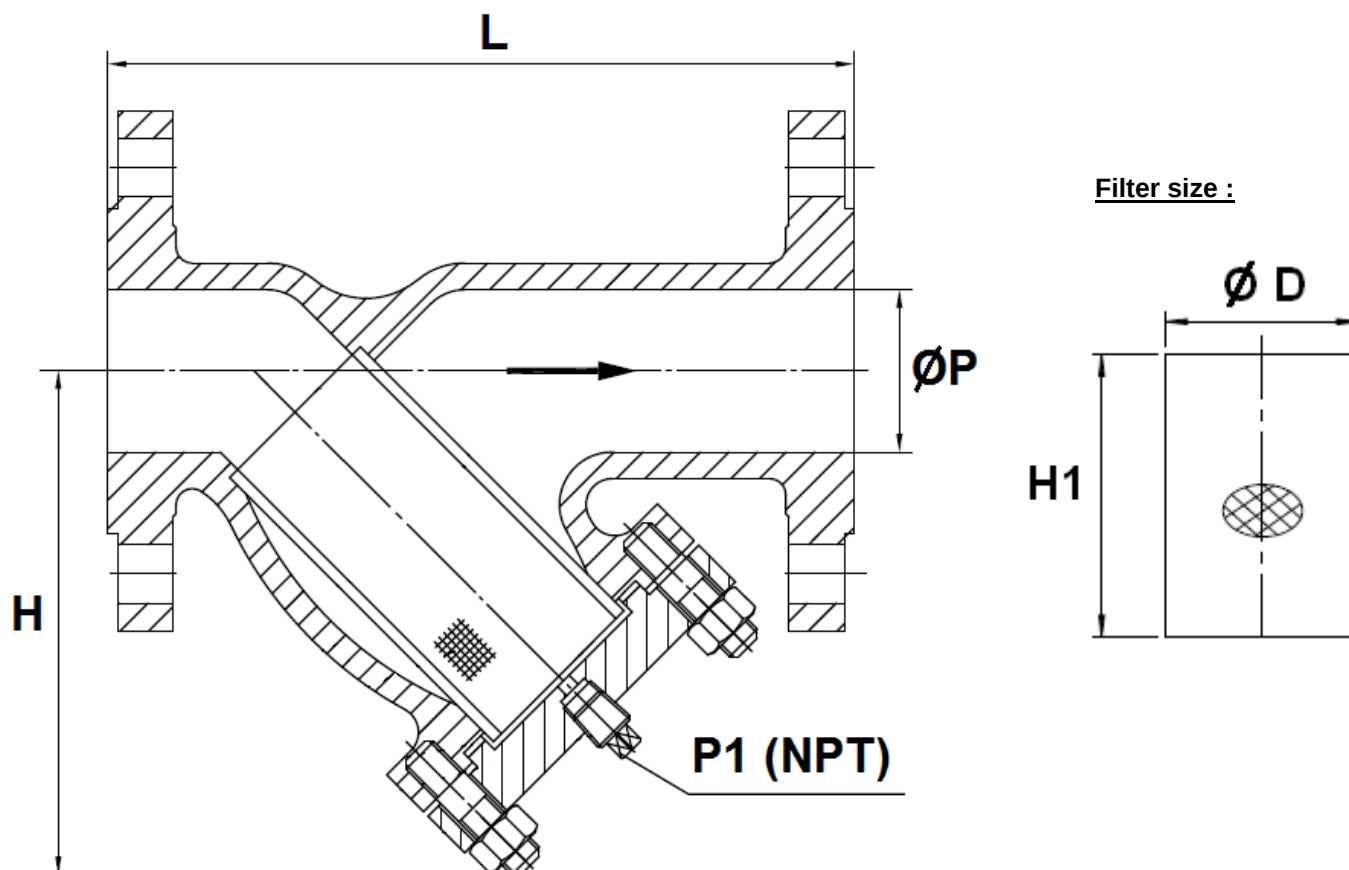
MATERIALS :



Item	Designation	Materials
1	Body	ASTM A216 WCB
2	Bonnet	ASTM A216 WCB
3	Filter	AISI 304
4	Bonnet gasket	Graphite + AISI 304
5	Draining cap	Steel
6	Stud bolt	ASTM A193 Gr.B7
7	Nut	ASTM A194 Gr.2H

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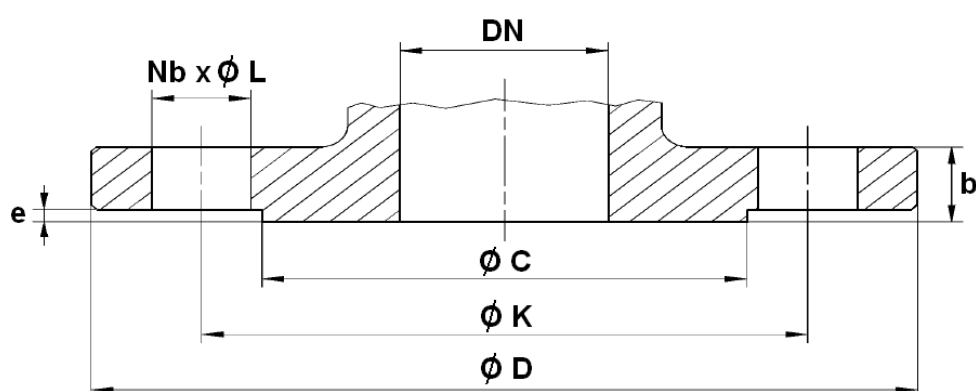
SIZE (in mm) :



DN	50	65	80	100	150	200	250	300	350	400
NPS (")	2"	2"1/2	3"	4"	6"	8"	10"	12"	14"	16"
Ø P	51	64	76	102	152	203	254	305	350	400
L	267	292	318	356	444	559	622	711	838	864
H	140	155	185	225	290	396	485	610	650	740
P1 (drain NPT)	1/2"	1/2"	1/2"	1/2"	3/4"	3/4"	1"	1"	1"1/2	1"1/2
Ø D	55	65	80	105	150	190	235	280	340	390
H1	110	120	135	175	210	275	355	365	435	465
Mesh	1	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Weight (Kg)	11	15	20	34	60	101	154	235	490	620

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FLANGES SIZE (in mm) :



DN (mm)	50	65	80	100	150	200	250	300	350	400
NPS (")	2"	2"1/2	3"	4"	6"	8"	10"	12"	14"	16"
Ø C	92.1	104.8	127	157.2	215.9	269.9	323.8	381	412.8	469.9
Ø D	165	190	210	255	320	380	445	520	585	650
Ø K	127	149.2	168.3	200	269.9	330.2	387.4	450.8	514.4	571.5
Nb x Ø L	8 x 19	8 x 22	8 x 22	8 x 22	12 x 22	12 x 26	16 x 29	16 x 32	20 x 32	20 x 35
b	22.7	25.9	29	32.2	37	41.7	48.1	51.3	54.4	57.6
e	2	2	2	2	2	2	2	2	2	2

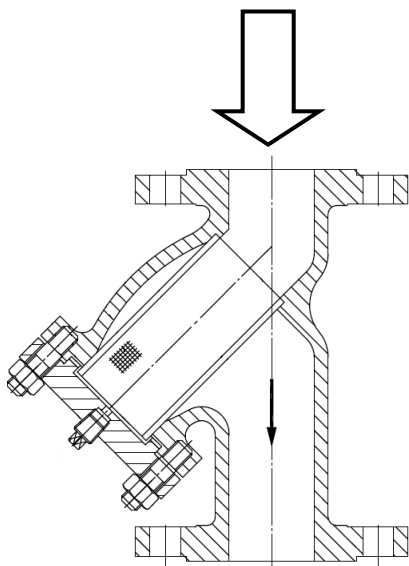
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STANDARDS :

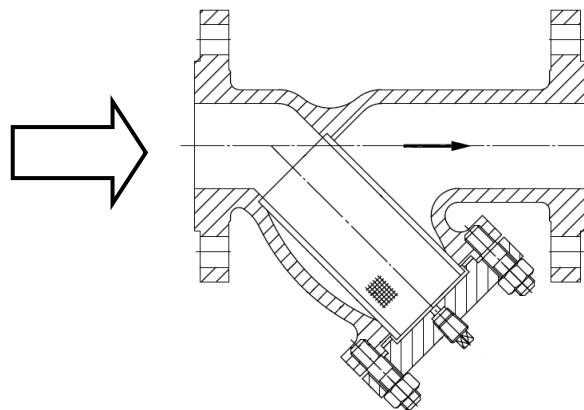
- Fabrication according to ISO 9001 : 2015 and ISO 14001 : 2015
- DIRECTIVE 2014/68/EU : CE N° 0036
Risk category III module H
- Certificate 3.1 on request
- Designing according to ASME B16.34
- Pressure tests according to API 598, table 6
- Length according to ASME B16.10 table 2 series 15 up to DN300, series 17 from DN350 to 400, EN 558 series 21 excepted DN200
- Flanges R.F. according to ASME B16.05 Class 300
- Materials according to NACE MR 01-75 **on request**

INSTALLATION POSITIONS :

Vertical position (descendand fluid)



Horizontal position



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INSTALLATION INSTRUCTIONS

GENERAL GUIDELINES :

- Ensure that the strainers to be used are appropriate for the conditions of the installation (type of fluid, pressure and temperature).
- Be sure to have enough valves to be able to isolate the sections of piping as well as the appropriate equipment for maintenance and repair.
- Ensure that the strainers to be installed are of correct strength to be able to support the capacity of their usage.
- **Installation of all circuits should ensure that their function can be automatically tested on a regular basis (at least two times a year).**

INSTALLATION INSTRUCTIONS :

- **Before installing the strainers, clean and remove any objects from the pipes** (in particular bits of sealing and metal) which could obstruct and block the strainers.
- **Ensure that both connecting pipes either side of the strainer (upstream and downstream) are aligned (if they're not, the strainer may not work correctly).**
- **Make sure that the two sections of the pipe (upstream and downstream) match, the strainer unit will not absorb any gaps. Any distortions in the pipes may affect the tightness of the connection, the working of the strainer and can even cause a rupture.** To be sure, place the kit in position to ensure the assembling will work.
- Make sure flanges are cleaned.
- **If sections of piping do not have their final support in place, they should be temporarily fixed. This is to avoid unnecessary strain on the strainer.**
- Tighten the bolts in cross.
- The pressurisation must be increased gradually.
- So that the maintenance operations could be easily done, place a stop valve before and after the strainer. Thereby, the strainer could be isolated. During this operation, ensure to have a new bonnet gasket to avoid a leakage during the restarting.
- **Fluids in the strainer must not contain solid objects (it could damage the seat).**