

Diadef

DEPOSIT SEPARATOR WITH AIR SEPARATION FUNCTION

USE

Heating / cooling plants.

FEATURES

The operating principle of the **Diadef** deposit separator provides for a low turbulence zone where the fluid flow has a very low speed compared to the pipes: in this way the dragging effect on single particles of impurities is significantly reduced, while the action of gravity prevails, helping their settlement on the bottom of the deposit separator.

In order to promote this condition, inside the deposit, crosswise to the flow direction, there is a grid (see drawing and table at the bottom of the page): dirt particles hit the grid, further lowering their speed and, therefore, they sediment more easily.

In the lower part of **Diadef** there is a sump for sediments that, once settled, can not re-enter circulation because of the above-mentioned low speed: then, the periodic opening of a drain cock allows the draining of the sump.



PECULIARITY

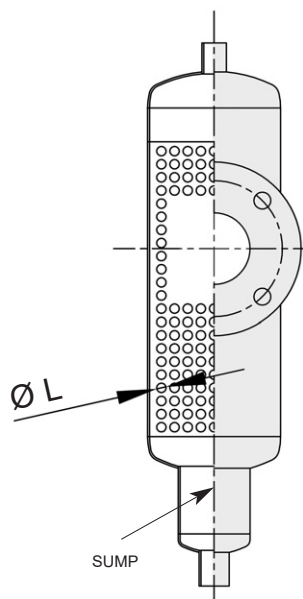
The low speeds inside the **Diadef** deposit separator allow the dirt collection, the ejection of air bubbles and, moreover, they give another important feature to the device: low pressure drops, in general and in particular, in comparison with other comparable filters.

Diadef TECHNICAL FEATURES

- Maximum fluid temperature: 90°C
- Minimum fluid temperature: 5°C
- Maximum fluid pressure: 5 bar
- Material: carbon steel EN10255
- Paint: water-based primer, red

INSULATION TECHNICAL FEATURES

- Shell insulation in flame-retardant polyurethane (B2) density 70÷80 Kg/m³, silver coating.



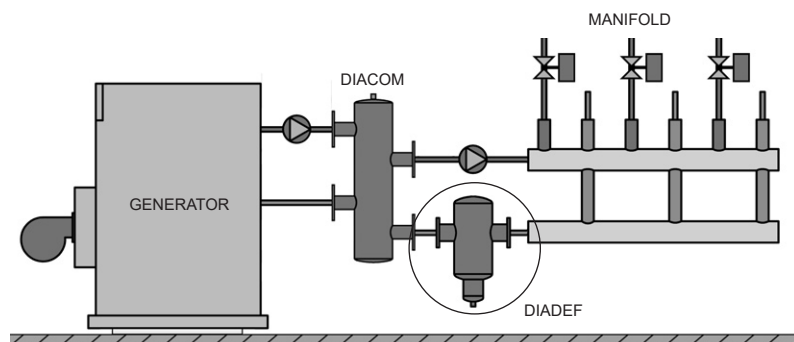
THREADED

Ø	Ø L
R 1"	8 mm
R 1"1/4	8 mm
R 1"1/2	8 mm
R 2"	10 mm

FLANGED

DN	Ø L
DN 65	10 mm
DN 80	10 mm
DN 100	15 mm
DN 125	15 mm
DN 150	15 mm
DN 200	15 mm

APPLICATION EXAMPLE:



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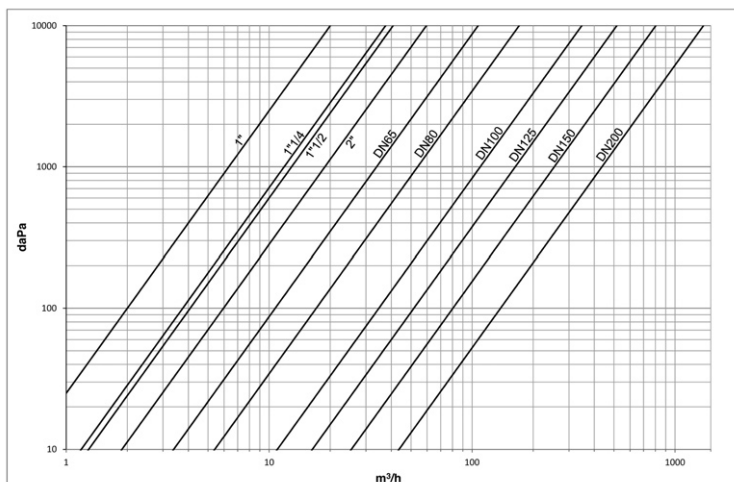
DEPOSIT SEPARATOR WITH AIR SEPARATION FUNCTION

VERSIONS

THREADED MALE	CONNECTIONS			
	1"	1"1/4	1"1/2	2"
Deposit separator code	DF001	DF114	DF112	DF002
Insulation code	CBDF001	CBDF114	CBDF112	CBDF002

FLANGED	CONNECTIONS					
	DN65	DN80	DN100	DN125	DN150	DN200
Deposit separator code	DF212	DF003	DF004	DF005	DF006	DF008
Insulation code	CBDF212	CBDF003	CBDF004	n.d	n.d	n.d

FLUID-DYNAMIC FEATURES



Kv : flow coefficient [m³/h]
 Q : flow rate [m³/h]
 Δp : pressure drop = $(Q / Kv)^2$ [bar]

Kv and INDICATIVE FLOW RATES			
THREADED			
Ø	Kv	Q	Q
1"	20	2 m³/h	2,8 m³/h
1"1/4	37,5	3,8 m³/h	5,3 m³/h
1"1/2	40,8	4,1 m³/h	5,8 m³/h
2"	59,5	6 m³/h	8,4 m³/h
		$\Delta p = 100 \text{ daPa}$	$\Delta p = 200 \text{ daPa}$
FLANGED			
DN	Kv	Q	Q
DN 65	107	10,7 m³/h	15,1 m³/h
DN 80	170,5	17,1 m³/h	24,1 m³/h
DN 100	347	34,7 m³/h	49,1 m³/h
DN 125	516	51,6 m³/h	73 m³/h
DN 150	804	80,4 m³/h	113,7 m³/h
DN 200	1380	138 m³/h	195,2 m³/h
		$\Delta p = 100 \text{ daPa}$	$\Delta p = 200 \text{ daPa}$



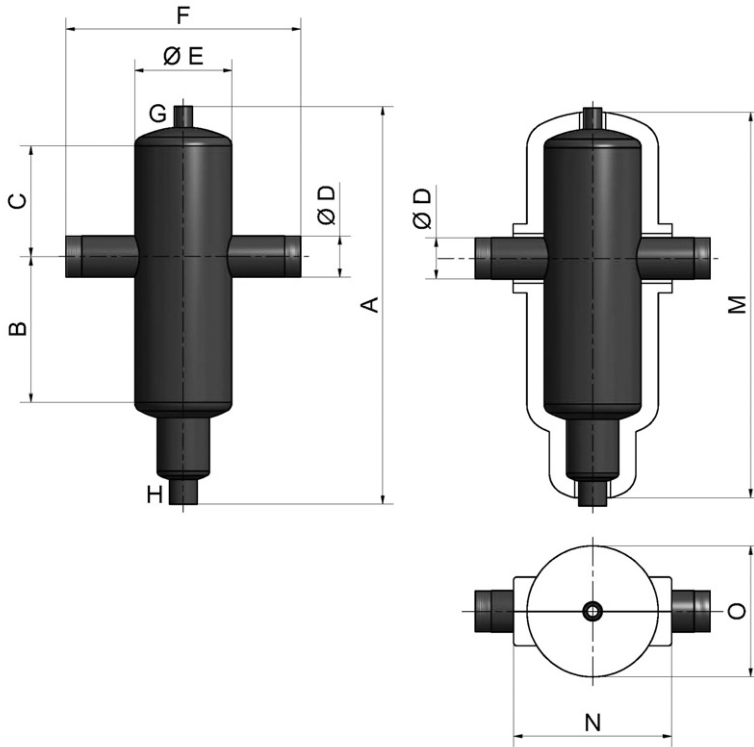
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DEPOSIT SEPARATOR WITH AIR SEPARATION FUNCTION

OVERALL SIZE



THREADED DEPOSIT SEPARATOR SIZE
GAS - (UNI EN 10226-1)

	Ø D	Ø E	A	B	C	F	G	H
R 1"	DN 80	420	140	110	289	Rp 1/2" F	Rp 3/4" F	
R 1"1/4	DN 100	510	160	130	314	Rp 1/2" F	Rp 3/4" F	
R 1"1/2	DN 100	540	180	140	314	Rp 1/2" F	Rp 3/4" F	
R 2"	DN 125	580	200	150	341	Rp 1/2" F	Rp 1" F	

INSULATION SIZE

Ø	M	N	O
1"	405	190	160
1"1/4	485	215	185
1"1/2	510	215	185
2"	590	240	210

FLANGED DEPOSIT SEPARATOR SIZE

	Ø D	Ø E	A	B	C	F	G	H
DN 65	DN 150	640	225	165	418	Rp 1/2" F	Rp 1" F	
DN 80	DN 200	780	280	200	469	Rp 1/2" F	Rp 1" F	
DN 100	DN 250	850	300	220	523	Rp 1/2" F	Rp 1" F	
DN 125	DN 300	970	350	250	624	Rp 3/4" F	Rp 1" F	
DN 150	DN 400	1200	400	300	706	Rp 3/4" F	Rp 1"1/4 F	
DN 200	DN 500	1460	500	400	808	Rp 1" F	Rp 1"1/2 F	

FLANGE TYPE

Ø	flange	No. of holes
DN 65	PN10-16	4
DN 80	PN10-16	8
DN 100	PN10-16	8
DN 125	PN10-16	8
DN 150	PN10-16	8
DN 200	PN10	8

INSULATION SIZE

DN	M	N	O
DN 65	645	325	260
DN 80	765	375	310
DN 100	870	395	340



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NON-STANDARD DEPOSIT SEPARATORS

Iron and stainless steel deposit separators are available on request with non-standard measures, according to the client's drawings. Examples.



EXAMPLE OF SPECIFICATIONS

DIADef deposit separator for thermal power station, with extra air separation function, DN65 flanged connections with PN10-16 flanges, 1/2" F vent valve sleeve, 1" F exhaust valve sleeve, maximum temperature 90°C, minimum temperature 5°C, maximum pressure 5 bar, EN10255 carbon steel, red water-based primer coating.

Brand: **COMPARATO**

Code: **DF212**

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