DIRT SEPARATOR

SERIES 5469/5462

CALEFFI Hydronic Solutions

REMOVES DEBRIS FROM CIRCULATING CLOSED LOOP SYSTEMS

FUNCTION AND FEATURES

- Collects dirt particles as small as 5 microns
- Improves the performance and service life of the system
- High separation efficiency with low head loss
- Flushing the debris from the valve can be done
- Available in horizontal or vertical configurations

FUNCTION

The dirt separator separates off the impurities, which are mainly made up of sand and rust particles, circulating within the system closed circuits. The impurities are collected in a large collection chamber, that requires low frequency cleaning procedures, from which they can be removed even while the system is in operation.

This device is capable of efficiently removing even the smallest particles, with extremely limited head loss.

Versions fitted with a magnet are designed for the separation of ferrous impurities. For more information, please refer to the 5453 series brochure.

OPERATING PRINCIPLE

The dirt separator operating principle is based on the combined action of a number of physical phenomena.

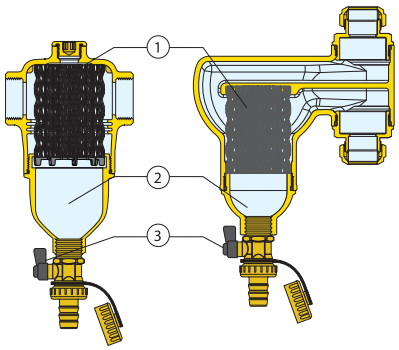
The internal element (1) consists of a set of radial reticular surfaces.

The impurities in the water, on striking these surfaces, get separated, dropping into the bottom of the body (2) where they are collected.

In addition, the large internal volume of DIRTCAL® slows down the flow speed of the medium thus helping, by gravity, to separate the particles it contains.

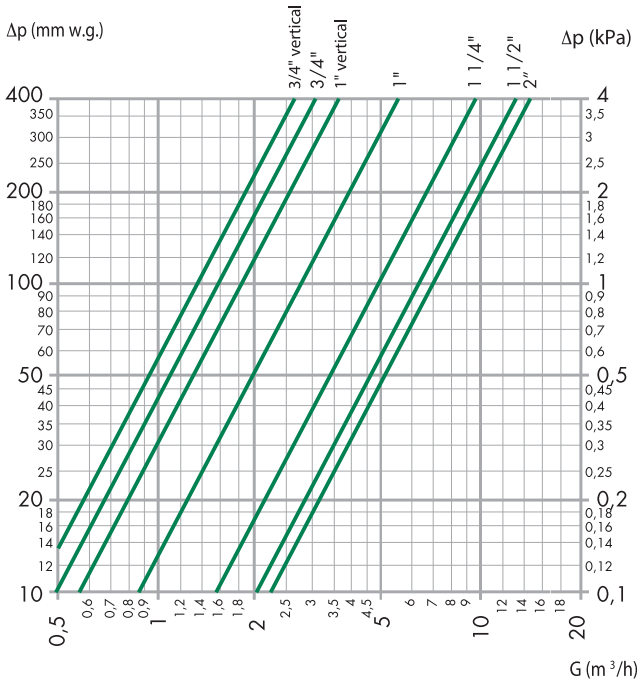
The collected impurities are discharged, even with the system running, by opening the drain cock (3); this procedure can even be performed while the system is in operation.

The dirt separator is designed in such a way that the direction in which the medium is flowing inside makes no difference.



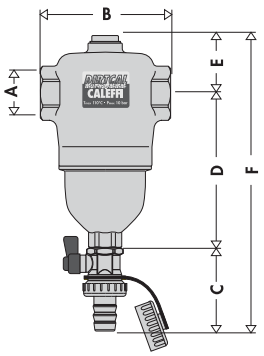
PERFORMANCE 5462/5469	
MEDIUM	water, glycol solutions
MAX. PERCENTAGE OF GLYCOL	50%
MAX. WORKING PRESSURE	1,000kpa
SYSTEM WORKING TEMPERATURE RANGE	0 – 110°C
PARTICLE SEPARATION RATING	down to 5 µm

HYDRAULIC CHARACTERISTICS

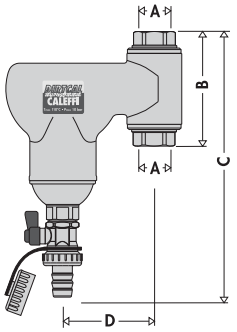


ND	3/4" vertical	3/4"	1" vertical	1"	1 1/4"	1 1/2"	2"
Kv (m³/h)	13.8	16.2	18.2	28.1	48.8	63.2	70
The maximum recommended speed of the medium at the device connections is ~ 1,2 m/s. The following table gives the maximum flow rates to meet this condition.							
l/min	22.7		35.18	57.85	90.36	136.6	
m³/h	1.36		2.11	3.47	5.42	8.2	

DIAGRAM



CODE	546205	546206	546207	546208	546209
A	3/4"	1"	1 1/4"	1 1/2"	2"
B	110	110	124	124	127
C	56	56	56	56	56
D	131.5	131.5	151.5	151.5	145.5
E	49	49	49	49	55
F	236.5	236.5	256.5	256.5	236.5
MASS (kg)	1.87	1.87	2.22	2.22	2.36



CODE	546905	546906
A	3/4"	1"
B	102	107
C	223	225.5
D	80	80
MASS (kg)	1.95	1.95

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