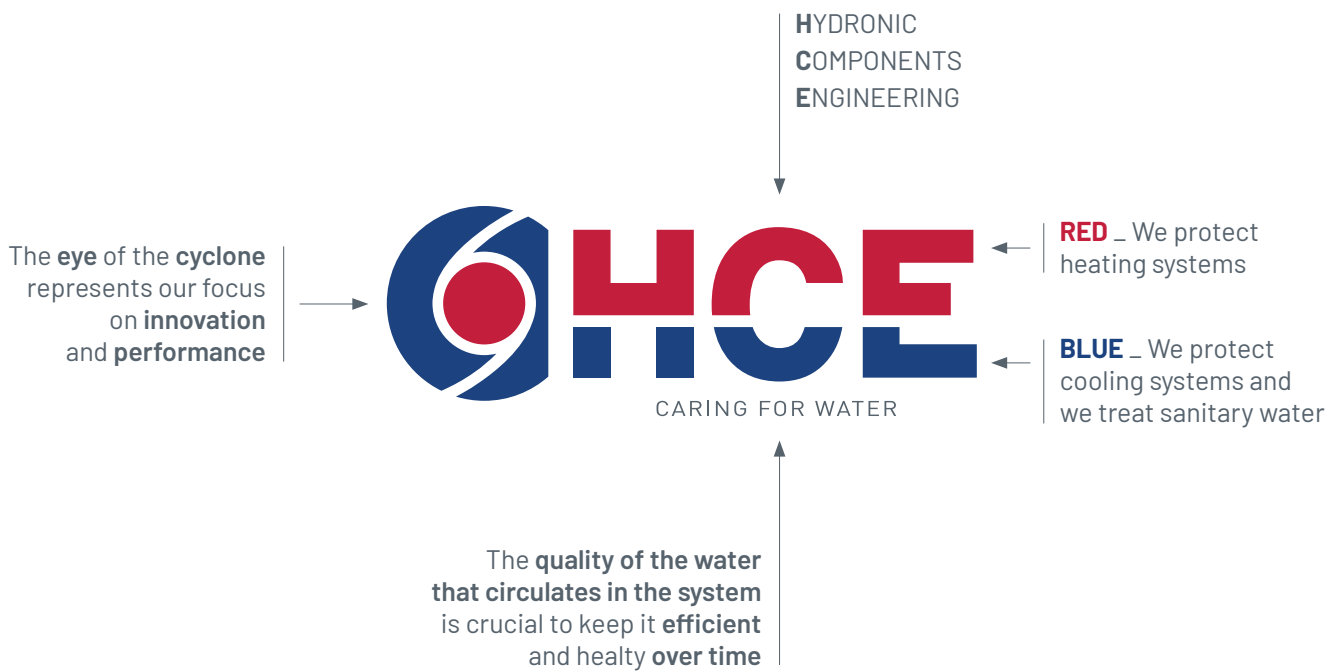




2026.00  
EXPORT  
CATALOG



**WE ARE INDUSTRY SPECIALISTS,  
WE SERVE THOSE WHO SEEK  
SUPERIOR PERFORMANCE.**





MADE IN ITALY



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# ITALIAN EXCELLENCE IN THE PLUMBING, HEATING AND SANITARY INDUSTRY

HCE is a fast-growing company that combines strong technical expertise, in-house production and direct control of the entire supply chain, delivering reliable, high-quality solutions to international partners.



## RESEARCH & DEVELOPMENT

Through our **exclusive patents and an impeccable production process**, a wide range of cutting-edge products is manufactured.

## THE STRENGTH OF MADE IN ITALY

**HCE products are entirely MADE IN ITALY**, marked by unmatched manufacturing quality and an original, distinctive and refined design.



## THE NEW HEADQUARTERS IN THE HEART OF FRANCIACORTA

HCE new headquarters is located in Cellatica (BS), Italy, in a strategic position that enables fast and efficient service to customers both in Italy and abroad. A modern, fully integrated hub bringing together warehousing and logistics, assembly and production areas, a **research and development center**, a training academy, and executive offices. The facility is equipped with the latest technologies, designed to ensure high operational efficiency and outstanding quality standards.

# MAGNETIC DIRT SEPARATORS

The metal components of heating and air conditioning systems are subject to corrosion phenomena that release ferrous impurities into the water.

These are compounded by residues originating from the filling water, installation and maintenance operations, and substances generated within the system itself. Such impurities tend to accumulate in areas with reduced flow sections, causing blockages, noise, and system malfunctions.

HCE magnetic dirt separators effectively capture these particles, keeping the system in optimal operating conditions and enabling quick and easy cleaning.

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# 01

# DIRTOUT™ COMPACT

**Do you care about your boiler?  
So do we.**

**Not all dirt separators protect the system in the same way.**

DirtOUT™ Compact special design, developed using the most advanced fluid dynamics techniques, optimizes the combined action of the **powerful magnet** and the filter cartridge, ensuring high purification efficiency in **any installation position**.



# DIRTOUT™ COMPACT

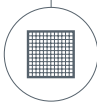
## UNDER-BOILER MAGNETIC DIRT SEPARATOR



Transparent settling chamber



Central magnet with larger surface



High efficiency filtration

### DESCRIPTION

Under-boiler magnetic dirt separator supplied with swivel fitting, connection and ball valve

- Technopolymer body
- Filter cartridge in AISI 304 stainless steel
- Elastomer hydraulic seals
- Threaded connections MF UNI-EN-ISO 228
- Max. working pressure: 3 bar
- Max. operating temperature: 0-90 °C
- Neodymium magnet B = 12.000 gauss
- Filtration rate: 800 µm

  MADE IN ITALY

PRODUCT	CODE	SIZE	COLOUR	UNIT	PACKAGE
DirtOUT™ Compact	DF00300034	3/4"	Black	1	12
Insulation shell (p. 82)	 COIB0007	for DirtOUT™ Compact	Anthracite	1	12



# DIRTOUT™ COMPACT

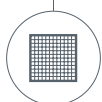
## UNDER-BOILER MAGNETIC DIRT SEPARATOR



Transparent settling chamber



Central magnet with larger surface



High efficiency filtration

## DESCRIPTION

Under-boiler magnetic dirt separator supplied with swivel fitting, connection and ball valve

- Technopolymer body
- Filter cartridge in AISI 304 stainless steel
- Elastomer hydraulic seals
- Threaded connections MF UNI-EN-ISO 228
- Max. working pressure: 3 bar
- Max. operating temperature: 0-90 °C
- Neodymium magnet B = 12.000 gauss
- Filtration rate: 800 µm

  MADE IN ITALY

PRODUCT	CODE	SIZE	COLOUR	UNIT	PACKAGE
DirtOUT™ Compact	DF00300034WT	3/4"	White	1	12
Insulation shell (p. 82)	 COIB0007	for DirtOUT™ Compact	Anthracite	1	12

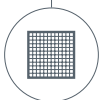


# DIRTOUT™ COMPACT

## UNDER-BOILER MAGNETIC DIRT SEPARATOR



Central magnet  
with larger surface



High efficiency  
filtration

### DESCRIPTION

Under-boiler magnetic dirt separator supplied with swivel fitting, connection and ball valve

- Technopolymer body
- Filter cartridge in AISI 304 stainless steel
- Elastomer hydraulic seals
- Threaded connections MF UNI-EN-ISO 228
- Max. working pressure: 3 bar
- Max. operating temperature: 0-90 °C
- Neodymium magnet B = 12.000 gauss
- Filtration rate: 800 µm

MADE IN ITALY

PRODUCT	CODE	SIZE	COLOUR	UNIT	PACKAGE
DirtOUT™ Compact	DF00300034B	3/4"	Black	1	12
Insulation shell (p. 82)	COIB0007	for DirtOUT™ Compact	Anthracite	1	12

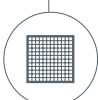


# DIRTOUT™ COMPACT

## UNDER-BOILER MAGNETIC DIRT SEPARATOR



Central magnet  
with larger surface



High efficiency  
filtration

### DESCRIPTION

Under-boiler magnetic dirt separator supplied with swivel fitting, connection and ball valve

- Technopolymer body
- Filter cartridge in AISI 304 stainless steel
- Elastomer hydraulic seals
- Threaded connections MF UNI-EN-ISO 228
- Max. working pressure: 3 bar
- Max. operating temperature: 0-90 °C
- Neodymium magnet B = 12.000 gauss
- Filtration rate: 800 µm

  MADE IN ITALY

PRODUCT	CODE	SIZE	COLOUR	UNIT	PACKAGE
DirtOUT™ Compact	DF00300034W	3/4"	White	1	12
Insulation shell (p. 82)	 COIB0007	for DirtOUT™ Compact	Anthracite	1	12



# IronOUT<sup>®</sup> MINI

## UNDER-BOILER MAGNETIC DIRT SEPARATOR



Integrated shut-off valve



Integral through-hole magnet




High efficiency filtration

## DESCRIPTION

Mini under boiler magnetic dirt separator with integrated valve

- Technopolymer body
- Filter cartridge in AISI 304 stainless steel
- Elastomer hydraulic seals
- Threaded connections MF UNI-EN-ISO 228
- Max. working pressure: 3 bar
- Max. operating temperature: 0-90 °C
- Neodymium magnet B = 12.000 gauss
- Filtration rate: 800 µm

  MADE IN ITALY

PRODUCT	CODE	SIZE	COLOUR	UNIT	PACKAGE
IronOUT <sup>®</sup> MINI	 DF01310034	3/4"	Anthracite grey	1	12

# DIRTOUT™ XL

## Life insurance for your heat pump and boiler!

The heart of innovation lies in positioning. The metal filter is located in the upper section of the insert, away from dirt deposit.

In traditional filters, sludge tends to clog the mesh; in DirtOUT® XL the upper filter does not clog because it operates on pre-filtered water and it is never submerged in sludge.

## DirtOUT™ XL the only filter that never clogs!



### CYCLON-COR3™ SYSTEM

# DIRTOUT™ XL

MULTIFUNCTIONAL  
MAGNETIC  
DIRT SEPARATOR  
FOR BOILERS  
AND HEAT PUMPS



CYCLON CORE™  
system



High-Performance  
central magnet



Anti-clogging  
system

## DESCRIPTION

Multifunctional magnetic dirt separator filter  
with polymer body, brass diverter, FF connections

- Technopolymer body
- Filter cartridge in AISI 304 stainless steel
- Elastomer hydraulic seals
- Threaded connections FF UNI-EN-ISO 228
- Adjustable for horizontal, vertical or 45° installation
- Built-in drain valve
- Max. working pressure: 3 bar
- Max. operating temperature: 0-90 °C
- Neodymium magnet B = 14.000 gauss
- Filtration rate: 500 µm and 800 µm

MADE IN ITALY

PRODUCT	CODE	SIZE	UNIT	PACKAGE
DirtOUT™ XL	DF00110034	3/4" F x 3/4" F	1	6
DirtOUT™ XL	DF00110100	1" F x 1" F	1	6
DirtOUT™ XL	DF00120114	1" 1/4 F x 1" 1/4 F	1	6
Insulation shell (p. 82)	COIB0001	for DirtOUT™ XL	1	6



# DIRTOUT™ XL

MULTIFUNCTIONAL  
MAGNETIC  
DIRT SEPARATOR  
FOR BOILERS  
AND HEAT PUMPS



CYCLON CORE™  
system



High-Performance  
central magnet



Anti-clogging  
system

## DESCRIPTION

Multifunctional magnetic dirt separator filter with polymer body and brass diverter, mechanical compression fittings for copper pipe

- Technopolymer body
- Filter cartridge in AISI 304 stainless steel
- Elastomer hydraulic seals
- Threaded mechanical compression fittings for copper pipe
- Adjustable for horizontal, vertical or 45° installation
- Built-in drain valve
- Max. working pressure: 3 bar
- Max. operating temperature: 0-90 °C
- Neodymium magnet B = 14.000 gauss
- Filtration rate: 500 µm and 800 µm

MADE IN ITALY

PRODUCT	CODE	SIZE	UNIT	PACKAGE
DirtOUT™ XL	DF00110022	ø22 x ø22	1	6
DirtOUT™ XL	DF00110028	ø28 x ø28	1	6
Insulation shell (p. 82)	COIB0001	for DirtOUT™ XL	1	6



# DIRTOUT™ XL

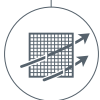
MULTIFUNCTIONAL  
MAGNETIC  
DIRT SEPARATOR  
FOR BOILERS  
AND HEAT PUMPS



CYCLON CORE™  
system



High-Performance  
central magnet



Anti-clogging  
system

## DESCRIPTION

Multifunctional magnetic dirt separator filter with polymer body, brass diverter, MM connections

- Technopolymer body
- Filter cartridge in AISI 304 stainless steel
- Elastomer hydraulic seals
- Threaded connections MM UNI-EN-ISO 228
- Adjustable for horizontal, vertical or 45° installation
- Built-in drain valve
- Max. working pressure: 3 bar
- Max. operating temperature: 0-90 °C
- Neodymium magnet B = 14.000 gauss
- Filtration rate: 500 µm and 800 µm

MADE IN ITALY

PRODUCT	CODE	SIZE	UNIT	PACKAGE
DirtOUT™ XL	DF00110100MM	1" M x 1" M	1	6
Insulation shell (p. 82)	COIB0001	for DirtOUT™ XL	1	6

# DIRTOUT™ DUAL MODE

MULTIFUNCTIONAL  
MAGNETIC  
DIRT SEPARATOR  
**FOR ENERGY SAVINGS**



CYCLON CORE™  
system



High-Performance  
central magnet



Anti-clogging  
system

## DESCRIPTION

Multifunctional magnetic dirt separator filter with polymer body, brass diverter, FF connections

- Technopolymer body
- Filter cartridge in AISI 304 stainless steel
- Elastomer hydraulic seals
- Threaded connections FF UNI-EN-ISO 228
- Adjustable for horizontal, vertical or 45° installation
- Built-in drain valve
- Max. working pressure: 3 bar
- Max. operating temperature: 0-90 °C
- Neodymium magnet B = 14.000 gauss
- Filtration rate: 500 µm and 800 µm

**MIN / START**



SYSTEM  
START-UP

Air, impurities and magnetite are attracted at exceptional speed.



**ECO  
MAX**

SYSTEM  
IN OPERATION

Consumption reduction  
Maintenance

MADE IN ITALY

PRODUCT	CODE	SIZE	UNIT	PACKAGE
DirtOUT™ XL Dual Mode	DF00120114	1" 1/4 F x 1" 1/4 F	1	6
Insulation shell (p. 82)	COIB0003	for Dual Mode	1	6



# DIRTOUT™ XL

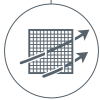
MULTIFUNCTIONAL  
MAGNETIC  
DIRT SEPARATOR  
FOR BOILERS  
AND HEAT PUMPS



CYCLON CORE™  
system



High-Performance  
central magnet



Anti-clogging  
system

## DESCRIPTION

Multifunctional magnetic dirt separator filter with polymer body, ball valves, FF connections

- Technopolymer body
- Filter cartridge in AISI 304 stainless steel
- Elastomer hydraulic seals
- Threaded connections FF UNI-EN-ISO 228
- Adjustable for horizontal, vertical or 45° installation
- Built-in drain valve
- Max. working pressure: 3 bar
- Max. operating temperature: 0-90 °C
- Neodymium magnet B = 14.000 gauss
- Filtration rate: 500 µm and 800 µm



MADE IN ITALY

PRODUCT	CODE	SIZE	UNIT	PACKAGE
DirtOUT™ XL	DF00100034	3/4" F x 3/4" F	1	6
DirtOUT™ XL	DF00100100	1" F x 1" F	1	6
DirtOUT™ XL	DF00100114	1" 1/4 F x 1" 1/4 F	1	6
Insulation shell (p. 82)	COIB0001	for DirtOUT™ XL	1	6



# DIRTOUT™ XL

MULTIFUNCTIONAL  
MAGNETIC  
DIRT SEPARATOR  
FOR BOILERS  
AND HEAT PUMPS



CYCLON CORE™  
system



High-Performance  
central magnet



Anti-clogging  
system

## DESCRIPTION

Multifunctional magnetic dirt separator filter with polymer body, ball valves, mechanical compression fittings for copper pipe

- Technopolymer body
- Filter cartridge in AISI 304 stainless steel
- Elastomer hydraulic seals
- Threaded mechanical compression fittings for copper pipe
- Adjustable for horizontal, vertical or 45° installation
- Built-in drain valve
- Max. working pressure: 3 bar
- Max. operating temperature: 0-90 °C
- Neodymium magnet B = 14.000 gauss
- Filtration rate: 500 µm and 800 µm



MECHANICAL  
COMPRESSION  
FITTINGS FOR  
COPPER PIPE



MADE IN ITALY

PRODUCT	CODE	SIZE	UNIT	PACKAGE
DirtOUT™ XL	DF00100022	ø22 x ø22	1	6
DirtOUT™ XL	DF00100028	ø28 x ø28	1	6
Insulation shell (p. 82)	COIB0001	for DirtOUT™ XL	1	6



# DIRTOUT™ HP 1" - 1" 1/4

MAGNETIC  
DIRT SEPARATOR  
SPECIFICALLY  
FOR HEAT PUMPS

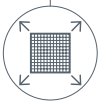
INSULATION  
SHELL INCLUDED



Internal passages  
designed to increase  
flow rate



High-performance  
magnet



Oversized  
filter mesh



## DESCRIPTION

Brass and polymer magnetic dirt separator filter, FF connections

- Brass body
- Filter cartridge in AISI 304 stainless steel
- Elastomer hydraulic seals
- Threaded connections FF UNI-EN-ISO 228
- Built-in drain valve
- Max. working pressure: 3 bar
- Max. operating temperature: 0-90 °C
- Neodymium magnet B B = 14.000 gauss
- Filtration rate: 800 µm

MADE IN ITALY

PRODUCT	CODE	SIZE	UNIT	PACKAGE
DirtOUT™ HP	DF00800100	1" F x 1" F	1	2
DirtOUT™ HP	DF00800114	1" 1/4 F x 1" 1/4 F	1	2
Insulation shell (p. 83)	COIB0002	for DirtOUT™ HP	1	6



# DIRTOUT™ HP MAXI 1" 1/2 - 2"

MAGNETIC  
DIRT SEPARATOR  
SPECIFICALLY  
FOR HEAT PUMPS

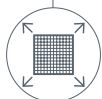
INSULATION  
SHELL INCLUDED



Internal passages  
designed to increase  
flow rate



High-performance  
magnet



Oversized  
filter mesh




## DESCRIPTION

Brass and polymer magnetic dirt separator filter, FF connections

- Brass body
- Filter cartridge in AISI 304 stainless steel
- Elastomer hydraulic seals
- Threaded connections FF UNI-EN-ISO 228
- Built-in drain valve
- Max. working pressure: 3 bar
- Max. operating temperature: 0-90 °C
- Neodymium magnet B B = 14.000 gauss
- Filtration rate: 800 µm



  MADE IN ITALY

PRODUCT	CODE	SIZE	UNIT	PACKAGE
DirtOUT™ HP MAXI 	DF00800112	1" 1/2 F x 1" 1/2 F	1	2
DirtOUT™ HP MAXI 	DF00800200	2" F x 2" F	1	2
Insulation shell (p. 83) 	COIB0002MAX	for DirtOUT™ HP MAXI	1	4



# POWER CLEAN®

HEAVY-DUTY  
IN-LINE MAGNETIC  
DIRT SEPARATOR FILTER  
FOR HYDRAULIC CIRCUITS



Air vent valve  
installation connection



10 bar  
110 °C



High-Performance  
magnet



Dual-layer  
filter cartridge



## DESCRIPTION

In-line magnetic dirt separator filter

- Brass body
- Adjustable sludge evacuation tap
- Elastomer hydraulic seals
- Threaded connections FF UNI-EN-ISO 228
- 1/2" connection in the upper part with plug
- Neodymium magnet B = 14.000 gauss
- Max. working pressure: 10 bar
- Max. operating temperature: 110 °C
- Filtration rate: 800 µm



  MADE IN ITALY

PRODUCT	CODE	SIZE	UNIT	PACKAGE
POWER CLEAN® in-line	DF00700034	3/4" F x 3/4" F	1	6
POWER CLEAN® in-line	DF00700100	1" F x 1" F	1	6
POWER CLEAN® in-line	DF00700114	1" 1/4 F x 1" 1/4 F	1	6

# POWER CLEAN®


HEAVY-DUTY  
IN-LINE MAGNETIC  
DIRT SEPARATOR FILTER  
FOR HYDRAULIC CIRCUITS



 Air vent valve  
installation connection

 10 bar  
110 °C

 High-Performance  
magnet

 Dual-layer  
filter cartridge

## DESCRIPTION



In-line magnetic dirt separator filter

- Brass body
- Adjustable sludge evacuation tap
- Elastomer hydraulic seals
- Mechanical compression fittings for copper pipe
- 1/2" connection in the upper part with plug
- Neodymium magnet B = 14.000 gauss
- Max. working pressure: 10 bar
- Max. operating temperature: 110 °C
- Filtration rate: 800 µm

  MADE IN ITALY

PRODUCT	CODE	SIZE	UNIT	PACKAGE
POWER CLEAN® in-line	DF00700022	ø22 x ø22 mm	1	6
POWER CLEAN® in-line	DF00700028	ø28 x ø28 mm	1	6

# POWER CLEAN®

HEAVY-DUTY ADJUSTABLE  
MAGNETIC DIRT  
SEPARATOR FILTER  
FOR HYDRAULIC CIRCUITS



Air vent valve  
installation connection



10 bar  
110 °C



High-Performance  
magnet



Dual-layer  
filter cartridge



## DESCRIPTION

Adjustable magnetic dirt separator filter

- Brass body
- Adjustable sludge evacuation tap
- Elastomer hydraulic seals
- Threaded connections FF UNI-EN-ISO 228
- Adjustable for horizontal, vertical, 45° or straight installations
- 1/2" connection in the upper part with plug
- Neodymium magnet B = 14.000 gauss
- Max. working pressure: 10 bar
- Max. operating temperature: 110 °C
- Filtration rate: 800 µm

MADE IN ITALY

PRODUCT	CODE	SIZE	UNIT	PACKAGE
POWER CLEAN® adjustable	DF00600034	3/4" F x 3/4" F	1	6
POWER CLEAN® adjustable	DF00600100	1" F x 1" F	1	6

# POWER CLEAN®

HEAVY-DUTY ADJUSTABLE  
MAGNETIC DIRT  
SEPARATOR FILTER  
FOR HYDRAULIC CIRCUITS

MECHANICAL COMPRESSION  
FITTINGS FOR COPPER PIPE



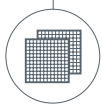
Air vent valve  
installation connection



10 bar  
110 °C



High-Performance  
magnet



Dual-layer  
filter cartridge



## DESCRIPTION

Adjustable magnetic dirt separator filter

- Brass body
- Adjustable sludge evacuation tap
- Elastomer hydraulic seals
- Mechanical compression fittings for copper pipe
- Adjustable for horizontal, vertical, 45° or straight installations
- 1/2" connection in the upper part with plug
- Neodymium magnet B = 14.000 gauss
- Max. working pressure: 10 bar
- Max. operating temperature: 110 °C
- Filtration rate: 800 µm

MADE IN ITALY

PRODUCT	CODE	SIZE	UNIT	PACKAGE
POWER CLEAN® adjustable	DF00600022	ø22 x ø22 mm	1	6
POWER CLEAN® adjustable	DF00600028	ø28 x ø28 mm	1	6

# SMART CLEAN®

IN-LINE MAGNETIC  
DIRT SEPARATOR FILTER  
FOR HYDRAULIC CIRCUITS



Air vent valve  
installation connection



10 bar  
110 °C



Central magnet with  
enlarged surface area



Dual-layer  
filter cartridge



## DESCRIPTION

In-line magnetic dirt separator filter

- Brass body
- Adjustable sludge evacuation tap
- Elastomer hydraulic seals
- Threaded connections FF UNI-EN-ISO 228
- 1/2" connection in the upper part with plug
- Neodymium magnet B = 12.000 gauss
- Max. working pressure: 10 bar
- Max. operating temperature: 110 °C
- Filtration rate: 800 µm

MADE IN ITALY

PRODUCT	CODE	SIZE	UNIT	PACKAGE
SMART CLEAN® in-line	DF01700034	3/4" F x 3/4" F	1	12
SMART CLEAN® in-line	DF01700100	1" F x 1" F	1	12
SMART CLEAN® in-line	DF01700114	1" 1/4 F x 1" 1/4 F	1	12

# SMART CLEAN®

IN-LINE MAGNETIC  
DIRT SEPARATOR FILTER  
FOR HYDRAULIC CIRCUITS

MECHANICAL COMPRESSION  
FITTINGS FOR COPPER PIPE



Air vent valve  
installation connection



10 bar  
110 °C



Central magnet with  
enlarged surface area



Dual-layer  
filter cartridge



## DESCRIPTION

In-line magnetic dirt separator filter

- Brass body
- Adjustable sludge evacuation tap
- Elastomer hydraulic seals
- Mechanical compression fittings for copper pipe
- 1/2" connection in the upper part with plug
- Neodymium magnet B = 12.000 gauss
- Max. working pressure: 10 bar
- Max. operating temperature: 110 °C
- Filtration rate: 800 µm

MADE IN ITALY

PRODUCT	CODE	SIZE	UNIT	PACKAGE
SMART CLEAN® in-line	DF01700022	ø22 x ø22 mm	1	12
SMART CLEAN® in-line	DF01700028	ø28 x ø28 mm	1	12

# SMART CLEAN®

ADJUSTABLE MAGNETIC  
DIRT SEPARATOR FILTER  
FOR HYDRAULIC CIRCUITS



Air vent valve  
installation connection



10 bar  
110 °C



Central magnet with  
enlarged surface area



Dual-layer  
filter cartridge



## DESCRIPTION

Adjustable magnetic dirt separator filter

- Brass body
- Adjustable sludge evacuation tap
- Elastomer hydraulic seals
- Threaded connections FF UNI-EN-ISO 228
- Adjustable for horizontal, vertical, 45° or straight installations
- 1/2" connection in the upper part with plug
- Neodymium magnet B = 12.000 gauss
- Max. working pressure: 10 bar
- Max. operating temperature: 110 °C
- Filtration rate: 800 µm

  MADE IN ITALY

PRODUCT	CODE	SIZE	UNIT	PACKAGE
SMART CLEAN® adjustable	DF01600034	3/4" F x 3/4" F	1	8
SMART CLEAN® adjustable	DF01600100	1" F x 1" F	1	8

# SMART CLEAN®

## ADJUSTABLE MAGNETIC DIRT SEPARATOR FILTER FOR HYDRAULIC CIRCUITS

MECHANICAL COMPRESSION  
FITTINGS FOR COPPER PIPE



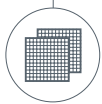
Air vent valve  
installation connection



10 bar  
110 °C



Central magnet with  
enlarged surface area



Dual-layer  
filter cartridge



## DESCRIPTION

### Adjustable magnetic dirt separator filter

- Brass body
- Adjustable sludge evacuation tap
- Elastomer hydraulic seals
- Mechanical compression fittings for copper pipe
- Adjustable for horizontal, vertical, 45° or straight installations
- 1/2" connection in the upper part with plug
- Neodymium magnet B = 12.000 gauss
- Max. working pressure: 10 bar
- Max. operating temperature: 110 °C
- Filtration rate: 800 µm

  MADE IN ITALY

PRODUCT	CODE	SIZE	UNIT	PACKAGE
SMART CLEAN® adjustable	DF01600022	ø22 x ø22 mm	1	8
SMART CLEAN® adjustable	DF01600028	ø28 x ø28 mm	1	8

## UNDER-BOILER MAGNETIC DIRT SEPARATOR FOR LIMITED SPACES

### Wall-mounted heating systems

**COMPACT**



**DIRTOUT COMPACT**

DF00300034	3/4" M x 3/4" F
DF00300034WT	3/4" M x 3/4" F
DF00300034B	3/4" M x 3/4" F
DF00300034W	3/4" M x 3/4" F

+++

**MINI**



**IronOUT<sup>®</sup> MINI**

DF01310034 3/4" M x 3/4" F

+++

#### FEATURES

- Compact, without compromising performance
- Possibility of right angle or in-line pipe connection
- Easy cleaning
- Kv 5.3 m<sup>3</sup>/h

#### FEATURES

- Compact, without compromising performance
- Possibility of right angle or in-line pipe connection
- Easy cleaning
- Kv 4.2 m<sup>3</sup>/h

## MULTI-FUNCTION ADJUSTABLE MAGNETIC DIRT SEPARATOR, FOR BOILERS AND HEAT PUMPS

### Wall-mounted heating systems with technical room air conditioning systems

**XL**

	<p><b>DIRTOUT XL</b></p> <p>DF00110034 3/4" F x 3/4" F DF00110100 1" F x 1" F DF00120114 1" 1/4 F x 1" 1/4 F</p> <p> +++</p>		<p><b>DIRTOUT XL</b></p> <p>DF00100022 ø22 x ø22 DF00100028 ø28 x ø28</p> <p> +++</p>
	<p><b>DIRTOUT XL</b></p> <p>DF00110100MM 1" M x 1" M</p> <p> +++</p>		<p><b>DIRTOUT DUAL MODE</b></p> <p>DF00120114 1" 1/4 F x 1" 1/4 F</p> <p> +++</p> <p></p>
	<p><b>DIRTOUT XL</b></p> <p>DF00100034 3/4" F x 3/4" F DF00100100 1" F x 1" F DF00100114 1" 1/4 F x 1" 1/4 F</p> <p> +++</p>		<p><b>DIRTOUT XL</b></p> <p>DF00100022 ø22 x ø22 DF00100028 ø28 x ø28</p> <p> +++</p>

#### FEATURES

- Designed to maximize magnetite capture
- Ideal for high and low temperature heating systems with high levels of impurities
- Anti-clogging system
- CYCLON CORE™ system
- Kv from 6.4 to 15.1 m<sup>3</sup>/h

# MAGNETIC DIRT SEPARATOR SPECIFICALLY FOR HEAT PUMP

## Heat pump systems

MAXI



**DIRTOUT HP**

DF00800100 1" F x 1" F  
DF00800114 1" 1/4 F x 1" 1/4 F

 +++





**DIRTOUT HP MAXI**

DF00800112 1" 1/2 F x 1" 1/2 F  
DF00800200 2" F x 2" F

 +++



**FEATURES**

- Ideal for heat pump systems with high flow rates and low pressure drops
- It ensures uncompromised protection of the low-temperature heating system
- Kv from 15.39 to 17.10 m<sup>3</sup>/h

**FEATURES**

- Ideal for heat pump systems with high flow rates and low pressure drops
- It ensures uncompromised protection of the low-temperature heating system
- Kv from 28.6 to 30.5 m<sup>3</sup>/h

# HEAVY-DUTY MAGNETIC DIRT SEPARATOR FILTER, ADJUSTABLE OR IN-LINE

## Wall-mounted boiler systems for traditional central heating system

110 °C - 10 bar



**POWER CLEAN®**  
In-line

DF00700034 3/4" F x 3/4" F  
DF00700100 1" F x 1" F  
DF00700114 1" 1/4 F x 1" 1/4 F  
DF00700022 ø22 x ø22 mm  
DF00700028 ø28 x ø28 mm

 +++



**POWER CLEAN®**  
Adjustable

DF00600034 3/4" F x 3/4" F  
DF00600100 1" F x 1" F  
DF00600022 ø22 x ø22 mm  
DF00600028 ø28 x ø28 mm

 +++



**SMART CLEAN®**  
In-line

DF01700034 3/4" F x 3/4" F  
DF01700100 1" F x 1" F  
DF01700114 1" 1/4 F x 1" 1/4 F  
DF01700022 ø22 x ø22 mm  
DF01700028 ø28 x ø28 mm

 +++



**SMART CLEAN®**  
Adjustable

DF01600034 3/4" F x 3/4" F  
DF01600100 1" F x 1" F  
DF01600022 ø22 x ø22 mm  
DF01600028 ø28 x ø28 mm

 +++

**FEATURES**

- Ideal for high-temperature hydronic heating systems
- Robust and effective
- Kv from 12.60 to 17.90 m<sup>3</sup>/h

**FEATURES**

- Ideal for high-temperature hydronic heating systems
- Robust and effective
- Kv from 8.60 to 10.70 m<sup>3</sup>/h

# AIR SEPARATORS AND AIR VENT VALVES

The air separator is used to continuously remove the air contained in the hydraulic circuits of HVAC systems. The circulation of air-free water allows the systems to operate under optimal conditions without problems of noise, corrosion, localized overheating and mechanical damage.

POWER VENT® .....	33
JO DUCK® SMART .....	38
JO DUCK® .....	40



# 02

# POWER VENT®

FLOAT  
OPERATED IN-LINE  
AIR SEPARATOR



- 10 bar** Guaranteed discharge up to 10 bar
- Innovative AIR TRAP™ cartridge
- Bi-directional
- Maximum efficiency

## DESCRIPTION

Float operated in-line air separator

- Brass body
- Adjustable air vent valve
- Elastomer hydraulic seals
- Threaded connection FF UNI-EN-ISO 228
- Integrated 1/2" drain
- Max. discharge pressure: 10 bar
- Max. operating pressure: 10 bar
- Max. operating temperature: 110 °C

## SPECIFICATIONS

The air vent valve can be closed with a screwdriver.  
The automatic air vent valve can be replaced if necessary.

MADE IN ITALY

PRODUCT	CODE	SIZE	UNIT	PACKAGE
POWER VENT® in-line	DA00100034	3/4" F x 3/4" F	1	6
POWER VENT® in-line	DA00100100	1" F x 1" F	1	6
POWER VENT® in-line	DA00100114	1" 1/4 F x 1" 1/4 F	1	6
Insulation shell (p. 83)	COIB0004	for 3/4" - 1"	1	6
Insulation shell (p. 83)	COIB0005	for 1" 1/4	1	6



# POWER VENT®

FLOAT  
OPERATED IN-LINE  
AIR SEPARATOR



- 10 bar** Guaranteed discharge up to 10 bar
- Innovative AIR TRAP™ cartridge
- Bi-directional
- Maximum efficiency

## DESCRIPTION

Float operated in-line air separator

- Brass body
- Adjustable air vent valve
- Elastomer hydraulic seals
- Mechanical compression fittings for copper pipe
- Integrated 1/2" drain
- Max. discharge pressure: 10 bar
- Max. operating pressure: 10 bar
- Max. operating temperature: 110 °C

## SPECIFICATIONS

The air vent valve can be closed with a screwdriver.  
The automatic air vent valve can be replaced if necessary.

**MADE IN ITALY**

PRODUCT	CODE	SIZE	UNIT	PACKAGE
POWER VENT® in-line	DA00100022	ø22 x ø22 mm	1	6
POWER VENT® in-line	DA00100028	ø28 x ø28 mm	1	6
Insulation shell (p. 83)	COIB0004	for ø22 - ø28	1	6

# POWER VENT®

FLOAT OPERATED  
ADJUSTABLE  
AIR SEPARATOR



- 10 bar** Guaranteed discharge up to 10 bar
- Innovative AIR TRAP™ cartridge
- Maximum efficiency

## DESCRIPTION

Float operated adjustable air separator

- Brass body
- Adjustable air vent valve
- Elastomer hydraulic seals
- Threaded connection FF UNI-EN-ISO 228
- Adjustable for horizontal, vertical or 45° installations
- Integrated 1/2" drain
- Max. discharge pressure: 10 bar
- Max. operating pressure: 10 bar
- Max. operating temperature: 110 °C

## SPECIFICATIONS

The air vent valve can be closed with a screwdriver.  
The automatic air vent valve can be replaced if necessary.

MADE IN ITALY

PRODUCT	CODE	SIZE	UNIT	PACKAGE
POWER VENT adjustable	DA00200034	3/4" F x 3/4" F	1	6
POWER VENT® adjustable	DA00200100	1" F x 1" F	1	6
Insulation shell (p. 84)	COIB0006	for 3/4" - 1"	1	6



# POWER VENT®

FLOAT OPERATED  
ADJUSTABLE  
AIR SEPARATOR



**10**  
bar

Guaranteed discharge up to 10 bar



Innovative AIR TRAP™ cartridge



Maximum efficiency

## DESCRIPTION

Float operated adjustable air separator

- Brass body
- Adjustable air vent valve
- Elastomer hydraulic seals
- Mechanical compression fittings for copper pipe
- Adjustable for horizontal, vertical or 45° installations
- Integrated 1/2" drain
- Max. discharge pressure: 10 bar
- Max. operating pressure: 10 bar
- Max. operating temperature: 110 °C

## SPECIFICATIONS

The air vent valve can be closed with a screwdriver.  
The automatic air vent valve can be replaced if necessary.

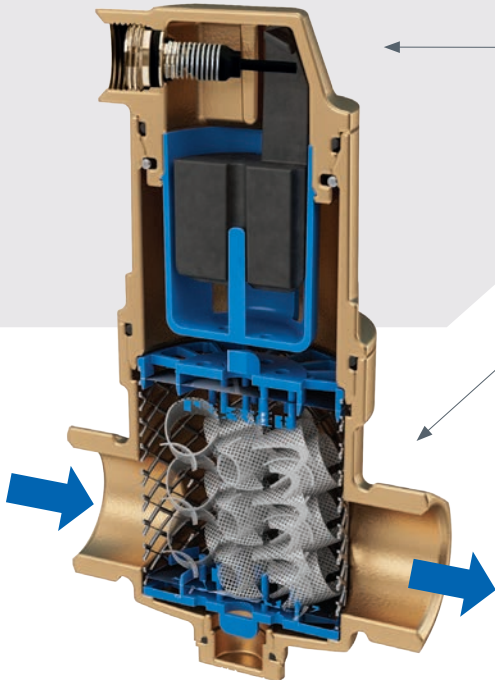
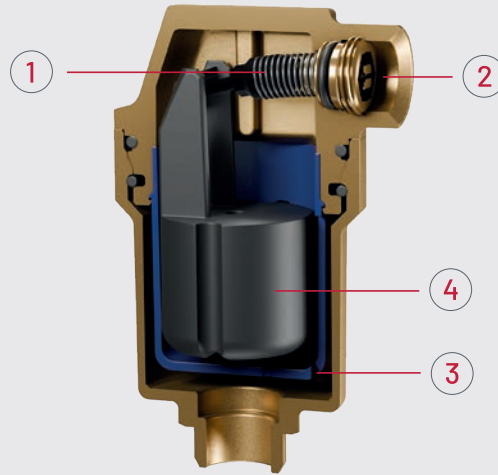
MADE IN ITALY

PRODUCT	CODE	SIZE	UNIT	PACKAGE
POWER VENT® adjustable	DA00200022	ø22 x ø22 mm	1	6
POWER VENT® adjustable	DA00200028	ø28 x ø28 mm	1	6
Insulation shell (p. 84)	COIB0006	for ø22 - ø28	1	6



## Air vent mechanism

1. The precision probe is equipped with a modulating vent valve mechanism with a long arm that ensures accurate control of the water level.
2. The watertight sealed vent valve mechanism, without a protective cap, is a reliable and easily recognizable feature. **It also allows the vent to be closed or set to automatic operation.**
3. The floating guide, with three large holes at the base, reduces turbulence in the upper section, preventing air bubbles from being trapped.
4. **The innovative one-piece float ensures maximum stability, minimal vibrations and optimal sliding**, while eliminating the traditional chain, resulting in increased sensitivity and long-term reliability.

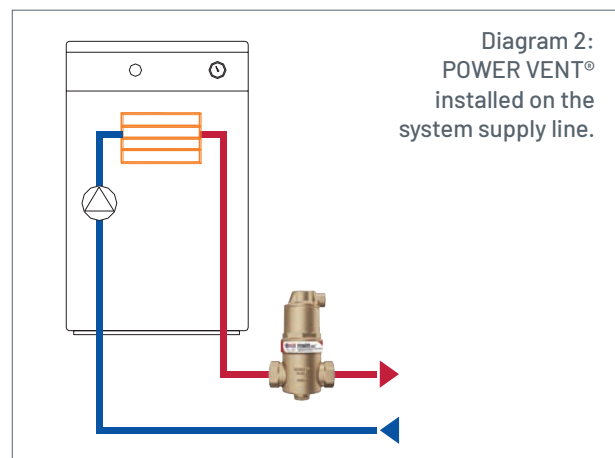
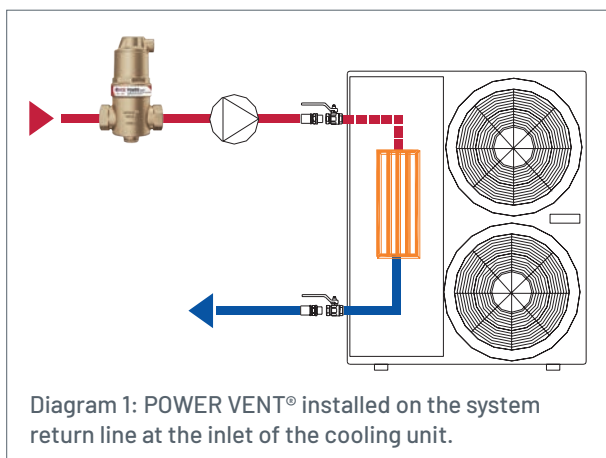


### PASSIVE PART

High performance air vent valve (discharge guaranteed up to 10 bar)

### ACTIVE PART

The innovative AIR TRAP™ Cartridge is made of a stainless steel chamber that guarantees exceptional service life and maximum reliability in variable pressure and temperature conditions. Compared to any other system available on the market, **AIR TRAP™ Cartridge provides greater resistance to corrosion and wear due to impurities (the nature of which is always unpredictable).** The flow passes directly through the cartridge and the filtering cylinder system causes continuous changes in section to produce swirling movements that promote the release of micro-bubbles. **In addition, the cartridge offers little resistance to flow (low pressure drop).** The micro-bubbles settle inside the AIR TRAP™ Cartridge and, after reaching a suitable size, they move upwards and are expelled through the passive part of the device.



To be installed on the hottest side of the system, where the highest concentration of microbubbles forms. In heating systems, to be installed at the boiler outlet; in cooling systems, to be installed on the return line, at the inlet of the cooling unit (chiller).

# JO DUCK<sup>®</sup> SMART

AUTOMATIC HIGH PERFORMANCE AIR VENT VALVE



**10 bar** Guaranteed discharge up to 10 bar

For large amounts of air

Maximum efficiency

## DESCRIPTION

Automatic high performance air vent valve

- Max. operating pressure: 10 bar
- Max. discharge pressure: 10 bar
- Max. operating temperature: 0-110 °C

## SPECIFICATIONS

The air vent valve can be closed with a screwdriver.  
The automatic air vent valve can be replaced if necessary.

MADE IN ITALY

CODE	SIZE	UNIT	PACKAGE
J000200012	1/2" F	1	15
J000200034	3/4" F	1	15

# JO DUCK<sup>®</sup> SMART

AUTOMATIC HIGH PERFORMANCE AIR VENT VALVE



**10**  
bar

Guaranteed discharge up to 10 bar



For large amounts of air



Maximum efficiency

## DESCRIPTION

Automatic high performance air vent valve

- Max. operating pressure: 10 bar
- Max. discharge pressure: 10 bar
- Max. operating temperature: 0-110 °C

## SPECIFICATIONS

The air vent valve can be closed with a screwdriver.  
The automatic air vent valve can be replaced if necessary.

  **MADE IN ITALY**

CODE	SIZE	UNIT	PACKAGE
J000210038	3/8" M	1	15
J000210012	1/2" M	1	15
J000210034 	3/4" M	1	15

# JO DUCK<sup>®</sup>

AUTOMATIC HIGH PERFORMANCE AIR VENT VALVE



**10 bar** Guaranteed discharge up to 10 bar

For large amounts of air

Maximum efficiency

## DESCRIPTION

Automatic high performance air vent valve

- Max. operating pressure: 10 bar
- Max. discharge pressure: 10 bar
- Max. operating temperature: 0-110 °C

## SPECIFICATIONS

The air vent valve can be closed with a screwdriver.  
The automatic air vent valve can be replaced if necessary.

MADE IN ITALY

CODE		SIZE	UNIT	PACKAGE
J000100100		1" F	1	12
J000100114		1" 1/4 F	1	12

# JO DUCK<sup>®</sup>

## AUTOMATIC HIGH PERFORMANCE AIR VENT VALVE



**10 bar** Guaranteed discharge up to 10 bar

For large amounts of air

Maximum efficiency

### DESCRIPTION

Automatic high performance air vent valve

- Max. operating pressure: 10 bar
- Max. discharge pressure: 10 bar
- Max. operating temperature: 0-110 °C

### SPECIFICATIONS

The air vent valve can be closed with a screwdriver.  
The automatic air vent valve can be replaced if necessary.

MADE IN ITALY

CODE	SIZE	UNIT	PACKAGE
JO00110100	1" M	1	12
JO00110114	1" 1/4 M	1	12

# POLYPHOSPHATE DOSER

The polyphosphate doser is the ideal solution to protect domestic water systems from limescale and to preserve their efficiency over time. Installed on the supply pipes of boilers and household appliances, it is essential in areas with **hard or very hard water**.

It reduces scale formation, **maintains high heat exchange performance**, counteracts corrosion and contributes to the gradual **restoration of already compromised systems**.



**WARNING!** The use of non-original refills will result in the immediate voiding of the product warranty.

SafePRO® .....	43
SafePRO® GYRO .....	44
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ULISSE® INCAS .....	52

# 03

# SafePRO<sup>®</sup>

## POWDER POLYPHOSPHATE DOSER



High  
resistance bowl



Automatic  
bypass



First refill included

## DESCRIPTION

Under-boiler powder polyphosphate doser  
for domestic cold water circuit with bypass

- Brass flange
- Threaded connections FF UNI-EN-ISO 228
- Max. working pressure: 6 bar
- Operating temperature range: 5-30 °C
- Ambient temperature: 5-40 °C
- Max. content of polyphosphates in powder: 80 g

Only use original refills code RICAR0001

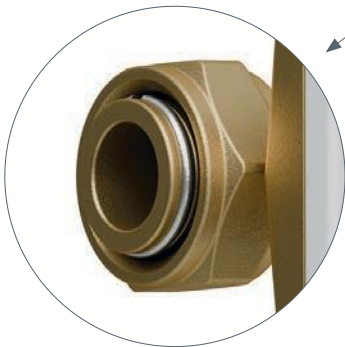
MADE IN ITALY

PRODUCT	CODE	SIZE	UNIT	PACKAGE
SafePRO <sup>®</sup>	DS00300012	1/2" F x 1/2" F	1	12
Refill (p. 86)	RICAR0001	4 pieces	1	18/36
Insulation shell (p. 84)	COIB0009	for SafePRO <sup>®</sup>	1	6



# SafePRO<sup>®</sup> GYRO

POWDER  
POLYPHOSPHATE  
DOSER  
WITH SWIVEL  
CONNECTION



UNSCREW  
BYPASS  
TO REFILL



First refill included



High  
resistance bowl



Automatic  
bypass

## DESCRIPTION

Under-boiler powder polyphosphate doser  
for domestic cold water circuit with bypass

- Brass flange
- Threaded connections FF UNI-EN-ISO 228
- Max. working pressure: 6 bar
- Operating temperature range: 5-30 °C
- Ambient temperature: 5-40 °C
- Max. content of polyphosphates in powder: 80 g

Only use original refills code RICAR0001

MADE IN ITALY

PRODUCT	CODE	SIZE	UNIT	PACKAGE
SafePRO <sup>®</sup> with swivel connections	DS00310012	1/2" F x 1/2" F	1	12
Refill (p. 86)	RICAR0001	4 pieces	1	18/36
Insulation shell (p. 84)	COIB0009	for SafePRO <sup>®</sup> GYRO	1	6

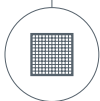


# SafePRO<sup>®</sup> FILTER

MULTIFUNCTION  
APPLIANCE  
SAFETY FILTER  
+ POLYPHOSPHATE  
DOSER



COMPLETE  
WITH SWIVEL  
FITTING 1/2" F



Safety filter  
100 µm



Quick and easy  
filter cleaning



Automatic  
bypass



First refill included

## DESCRIPTION

Multifunction device  
safety filter + polyphosphate doser

- Brass flange
- Threaded connections FF UNI-EN-ISO 228
- Max. working pressure: 6 bar
- Operating temperature range: 5-30 °C
- Ambient temperature: 5-40 °C
- Max. content of polyphosphates in powder: 80 g
- Filtration rate: 100 µm

Only use original refills code RICAR0001

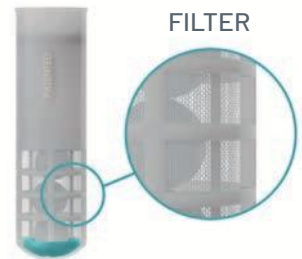
MADE IN ITALY

PRODUCT	CODE	SIZE	UNIT	PACKAGE
SafePRO <sup>®</sup> FILTER	DS00400012	1/2" F x 1/2" F	1	12
Refill (pag. 86)	RICAR0001	4 pieces	1	18/36



# PoliFILTER®

## SPHERICAL POLYPHOSPHATE DOSER



FILTER

First refill included



Integrated filter  
100 µm mesh



4 installation  
position

## DESCRIPTION

Spherical polyphosphate and silicate doser complete with connection kit and wrench for cartridge assembly and disassembly, for domestic cold water systems

- Body in chromed brass
- Connections: 1/2" F x 1/2" F x 1/2" F
- Threaded connections FF UNI-EN-ISO 228
- Max. working pressure: 10 bar
- Operating temperature: 5-30 °C
- Ambient temperature: 5-40 °C
- Filtration rate: 100 µm

Only use original refills code DS0010KIT

## SPECIFICATIONS

### HORIZONTAL INSTALLATION



Right-angle  
pipe connection



Straight  
pipe connection

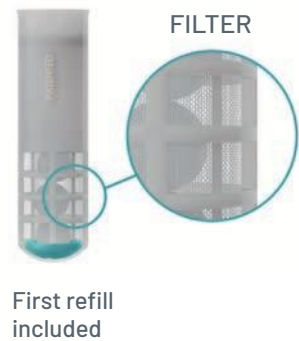
MADE IN ITALY

PRODUCT	CODE	SIZE	UNIT	PACKAGE
PoliFILTER®	DS00100012S	1/2" F x 1/2" F x 1/2" F	1	12
Refill (p. 85)	DS0010KIT	1 pair	4	48
Insulation shell (p. 84)	COIB0008	for PoliFILTER®	1	6



# PoliFILTER® BY-PASS

SPHERICAL  
POLYPHOSPHATE  
DOSER  
WITH BYPASS



- Anti-blocking Bypass
- Integrated filter 100 µm mesh
- 4 installation position

## DESCRIPTION

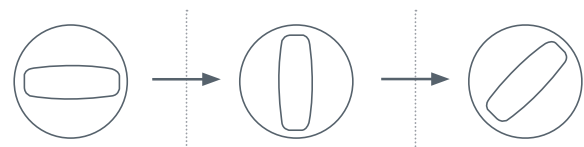
Spherical polyphosphate and silicate doser complete with connection kit and wrench for cartridge assembly and disassembly, for domestic cold water systems

- Body in chromed brass
- Connections: 1/2" F x 1/2" F x 1/2" F
- Threaded connections FF UNI-EN-ISO 228
- Max. working pressure: 10 bar
- Operating temperature: 5-30 °C
- Ambient temperature: 5-40 °C
- Filtration rate: 100 µm

Only use original refills code DS0010KIT

## SPECIFICATIONS

DOSE, DIVERT, STOP.  
Total control with a single motion.



POSITION 1: Operation      POSITION 2: Bypass      POSITION 3: Shut-off

MADE IN ITALY

PRODUCT	CODE	SIZE	UNIT	PACKAGE
PoliFILTER® By-Pass	DS00100012	1/2" F x 1/2" F x 1/2" F	1	12
Refill (p. 85)	DS0010KIT	1 pair	4	48
Insulation shell (p. 84)	COIB0008	for PoliFILTER® By-Pass	1	6

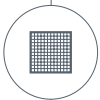


# PoliFILTER® XL

SPHERICAL  
POLYPHOSPHATE  
DOSER



First refill included



Integrated filter  
100 µm mesh



Water hammer  
shock absorber  
installation connection

## DESCRIPTION

Spherical polyphosphate and silicate doser for domestic cold water systems

- Body in chromed brass
- Threaded connections FF UNI-EN-ISO 228
- Max. working pressure: 10 bar
- Operating temperature range: 5-30 °C
- Ambient temperature: 5-40 °C
- Filtration rate: 100 µm

Only use original refills code DS0011KIT

MADE IN ITALY

PRODUCT	CODE	SIZE	UNIT	PACKAGE
PoliFILTER® XL	DS00110034S	3/4" F x 3/4" F	1	3
PoliFILTER® XL	DS00110100S	1" F x 1" F	1	3
Refill (p. 85)	DS0011KIT	1 piece	1	1



## More limescale = more CO<sub>2</sub>

An encrusted system works twice as hard to give you the same heat. Reducing scale means reducing emissions and extending the life of your boiler!



80%



15%



5%



**GAS:**  
1,246 m<sup>3</sup> × €1.25 = €1,557/year\*

\* National average for Italy, source ISTAT.

## Limescale can cost you up to €600 per year

Every year, a family can waste up to €600 on gas due to limescale build-up in heating and hot water systems. It's an invisible cost that directly affects the energy bill.

- Heated water deposits 0.5–1 mm of limescale every year
- Even just 1 mm increases consumption by over 11%
- Over time, waste can exceed 51%

Heating and domestic hot water account for up to 96% of domestic gas consumption.

## Recover up to 51% of wasted energy!

With proper water treatment you can:

- Restore system efficiency
- Reduce energy consumption
- Protect the boiler, heat pump and piping over time
- Prevent failures and extraordinary maintenance

## Did you know?

In Italy there are around 20 million heating systems, but over 60% are obsolete or inefficient. Don't let your system keep wasting energy and money. Investing in efficiency today means saving immediately and over time.

# ULISSE®

## CRYSTAL POLYPHOSPHATE DOSER



STEEL FILTER

First refill included

 Integrated filter  
100 µm mesh

 4 installation  
position

### DESCRIPTION

Crystal polyphosphate and silicate doser complete with connection kit and cartridge, for domestic cold water systems

- Body in chromed brass
- Connections: 1/2" F x 1/2" F x 1/2" F
- Threaded connections FF UNI-EN-ISO 228
- Max. working pressure: 10 bar
- Operating temperature: 5-30 °C
- Ambient temperature: 5-40 °C
- Filtration rate: 100 µm

Only use original refills code DS0020KIT

### SPECIFICATIONS

#### HORIZONTAL INSTALLATION



Right-angle  
pipe connection



Straight  
pipe connection

  MADE IN ITALY

PRODUCT	CODE	SIZE	UNIT	PACKAGE
ULISSE®	DS00200012S	1/2" F x 1/2" F x 1/2" F	1	12
Refill (p. 85)	DS0020KIT	1 pair	4	48



# ULISSE<sup>®</sup> BY-PASS

CRYSTAL  
POLYPHOSPHATE  
DOSER  
WITH BYPASS



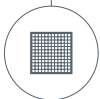
STEEL FILTER



First refill included



Bypass



Integrated filter  
100 µm mesh



4 installation  
position

## DESCRIPTION

Crystal polyphosphate and silicate doser complete with connection kit and cartridge, for domestic cold water system

- Body in chromed brass
- Connections: 1/2" F x 1/2" F x 1/2" F
- Threaded connections FF UNI-EN-ISO 228
- Max. working pressure: 10 bar
- Operating temperature: 5-30 °C
- Ambient temperature: 5-40 °C
- Filtration rate: 100 µm

Only use original refills code DS0020KIT

## SPECIFICATIONS



Through the rings of the ferrule, it is possible to monitor the filter blockage

MADE IN ITALY

PRODUCT	CODE	SIZE	UNIT	PACKAGE
ULISSE <sup>®</sup> By-Pass	DS00200012	1/2" F x 1/2" F x 1/2" F	1	12
Refill (p. 85)	DS0020KIT	1 pair	4	48



# ULISSE<sup>®</sup> INCAS

CRYSTAL  
POLYPHOSPHATE  
DOSER  
ULTRA-COMPACT



First refill included



Ultra-compact,  
ideal for recessed  
installations

## DESCRIPTION

Crystal polyphosphate and silicate doser complete with connection kit and cartridge, for domestic cold water system

- Body in chromed brass
- Connections: 1/2" F x 1/2" F x 1/2" F
- Threaded connections FF UNI-EN-ISO 228
- Max. working pressure: 10 bar
- Operating temperature: 5-30 °C
- Ambient temperature: 5-40 °C

Only use original refills code DS0020KIT



RECESSED INSTALLATION

MADE IN ITALY

PRODUCT	CODE	SIZE	UNIT	PACKAGE
ULISSE <sup>®</sup> INCAS	DS00500012S	1/2" F x 1/2" F x 1/2" F	1	12
Refill (p. 85)	DS0020KIT	1 pair	4	48



# MANUAL AND SELF-CLEANING WATER FILTERS

Water filtration is particularly important, as water contains sand, iron shavings and other foreign particles that are carried along the extensive piping system.

These impurities must not enter the building water supply system, as they can cause a range of problems such as pitting corrosion, damage to taps and valves, to delicate plumbing and heating components, as well as to the mechanisms of household appliances connected to the water network.

MACISTE® ..... 54

MACISTE® Silver ..... 56

HURACLEAN® ..... 57

# 04

# MACISTE®

## MANUAL CLEANING FILTER



Extra resistant brass head and chamber



Non-deformable cartridge

## DESCRIPTION

### Manual cleaning filter

- Brass head
- Threaded connections FF UNI-EN-ISO 228
- Max. pressure: 16 bar
- Working pressure: 1,5-16 bar
- Min./max. water temperature: 5-30 °C
- Min./max. ambient temperature: 5-40 °C
- Filtration rate: 90 µm

MADE IN ITALY

PRODUCT	CODE	SIZE	UNIT	PACKAGE
MACISTE® with 1/4" M plug	FI01000012	1/2" F x 1/2" F	1	8
MACISTE® with 1/4" M plug	FI01000034	3/4" F x 3/4" F	1	8
MACISTE® with 1/4" M plug	FI01000100	1" F x 1" F	1	8
MACISTE® with 1/4" M plug	FI01000114	1" 1/4 F x 1" 1/4 F	1	8

# MACISTE®

## MANUAL CLEANING FILTER WITH PRESSURE GAUGE



Extra resistant brass head and chamber



Non-deformable cartridge

## DESCRIPTION

Manual cleaning filter with pressure gauge

- Brass head
- Threaded connections FF UNI-EN-ISO 228
- Max. pressure: 16 bar
- Working pressure: 1,5-16 bar
- Min./max. water temperature: 5-30 °C
- Min./max. ambient temperature: 5-40 °C
- Filtration rate: 90 µm

  MADE IN ITALY

PRODUCT	CODE	SIZE	UNIT	PACKAGE
MACISTE® with pressure gauge	FI01010012	1/2" F x 1/2" F	1	8
MACISTE® with pressure gauge	FI01010034	3/4" F x 3/4" F	1	8
MACISTE® with pressure gauge	FI01010100	1" F x 1" F	1	8
MACISTE® with pressure gauge	FI01010114	1" 1/4 F x 1" 1/4 F	1	8

# MACISTE<sup>®</sup> SILVER

MANUAL  
CLEANING FILTER  
WITH SILVER ION FILTER

SILVER  
IMPREGNATED  
CARTRIDGE



Extra resistant brass head and chamber



Ag+ non-deformable cartridge

## DESCRIPTION

Manual cleaning filter with silver ion filter

- Brass head
- Threaded connections FF UNI-EN-ISO 228
- Max. pressure: 16 bar
- Working pressure: 1,5-16 bar
- Min./max. water temperature: 5-30 °C
- Min./max. ambient temperature: 5-40 °C
- Filtration rate: 50 µm
- Silver impregnated stainless steel mesh

MADE IN ITALY

PRODUCT	CODE	SIZE	UNIT	PACKAGE
MACISTE <sup>®</sup> Silver with 1/4" M plug	FI01000012050SV	1/2" F x 1/2" F	1	8
MACISTE <sup>®</sup> Silver with 1/4" M plug	FI01000034050SV	3/4" F x 3/4" F	1	8
MACISTE <sup>®</sup> Silver with 1/4" M plug	FI01000100050SV	1" F x 1" F	1	8
MACISTE <sup>®</sup> Silver with 1/4" M plug	FI01000114050SV	1" 1/4 F x 1" 1/4 F	1	8

# HURACLEAN®

## SEMI-AUTOMATIC SELF-CLEANING FILTER



← PRESSURE GAUGE  
(OPTIONAL)



TORNATOP®  
innovative cyclonic  
cleaning system

## DESCRIPTION

Semi-automatic self-cleaning filter

- Brass head
- Threaded connections FF UNI-EN-ISO 228
- Max. pressure: 16 bar
- Working pressure: 1,5-16 bar
- Min./max. water temperature: 5-30 °C
- Min./max. ambient temperature: 5-40 °C
- Filtration rate: 90 µm

MADE IN ITALY

PRODUCT	CODE	SIZE	UNIT	PACKAGE
HURACLEAN® with 1/2" M plug	FI00100034	3/4" F x 3/4" F	1	3
HURACLEAN® with 1/2" M plug	FI00100100	1" F x 1" F	1	3
HURACLEAN® with 1/2" M plug	FI00100114	1" 1/4 F x 1" 1/4 F	1	3

# ACID CONDENSATION NEUTRALIZING FILTERS

Regain heat means saving energy, but it also produces acid condensation that can silently corrode your drains. Our neutralization system tackles the problem at its source: by passing the condensation through an active calcium carbonate charge, it balances the pH, making it safe for disposal. **Protect the value of your home with a simple and effective solution.**

Acid X<sup>®</sup> VENT ..... 59



# 05

# Acid X<sup>®</sup> VENT

## ACID CONDENSATION NEUTRALIZING FILTERS



Transparent bowl



Quick and easy maintenance



Vent cap

## DESCRIPTION

### Acid condensation neutralizing filters

- Cartridge holder body in transparent PA polyamide
- Caps and hose connectors in PA polyamide
- Polymer fixing collar
- Neutraliser holding net in AISI 304 stainless steel
- Elastomer hydraulic seals
- Neutralizing refill of calcium carbonate (CaCO<sub>3</sub>)

## SPECIFICATIONS

### The kit includes:

- Acid condensation neutralizing filter
- Pipe fixing collar
- A pair of elbow hose connectors
- 2 refills of calcium carbonate compound (CaCO<sub>3</sub>)

MADE IN ITALY

PRODUCT	CODE	SIZE	UNIT	PACKAGE
Acid X <sup>®</sup> VENT	AB00200034016	ø 16 mm	1	12
Acid X <sup>®</sup> VENT	AB00200034020	ø 20 mm	1	12
Refill (p. 86)	KIT0005	6 pieces	1	6/12
A pair of straight connectors (p. 90)	ABDRDR016016KIT	1 piece	1	-
A pair of straight connectors (p. 90)	ABDRDR020020KIT	1 piece	1	-



# CHEMICAL CONDITIONER

## CONCENTRATED PROFESSIONAL ADDITIVES

To ensure system efficiency, it is essential that the hydraulic circuit is free from sludge, blockages, algae and deposits. For systems that are obstructed or that have low heat exchange, an appropriate cleaning with professional, concentrated products is recommended. Once the system has been cleaned, it should be refilled and provided with the necessary protection using specific conditioners for high- or low-temperature systems.

H400 Cleaner Power .....	61
H100HT Inhibitor Power .....	62
H100LW Inhibitor Power .....	63
Cleaning procedures .....	64
Dosages .....	65

# 06

# H400 CLEANER POWER

IT RESTORES  
AND REMOVES  
SLUDGE, LIMESCALE  
AND DEBRIS FROM  
ANY TYPE OF SYSTEM



Ecological,  
it can be discharged  
in white water systems



High-temperature  
systems



Low-temperature  
systems

## FEATURES

It removes sludge, limescale and debris

- Low dosage: 1 litre every 100 litres of water
- Best result
- It does not damage metals and polymers

To be used in case of:

- Cleaning and decontamination of high- and low-temperature heating or cooling systems that are clogged or operate with reduced heat exchange efficiency.
- Cleaning and decontamination of an inactive system

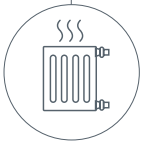
 **MADE IN ITALY**

PRODUCT	CODE	QUANTITY	UNIT	PACKAGE
H400 Cleaner Power	H400	1 litre	1	12

# H100HT

## INHIBITOR POWER

IT PROTECTS  
AGAINST CORROSION  
AND LIMESCALE



High-temperature systems

## FEATURES

It protects against corrosion and limescale

- Low dosage: 1 litre every 100 litres of water

To be used in case of:

- Loading a new (or washed) high temperature heating system



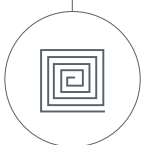
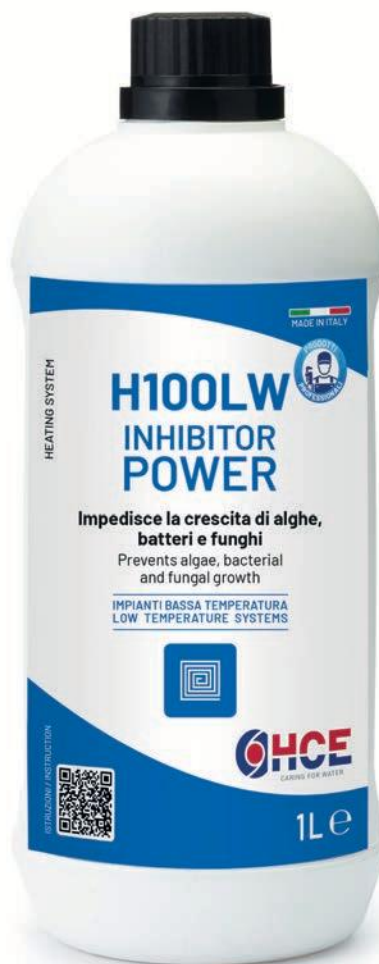
MADE IN ITALY

PRODUCT	CODE	QUANTITY	UNIT	PACKAGE
H100HT Inhibitor Power	H100HT	1 litre	1	12

# H100LW

## INHIBITOR POWER

IT PREVENTS  
THE GROWTH  
OF ALGAE,  
BACTERIA AND FUNGI



Low-temperature systems

## FEATURES

It removes sludge, limescale and debris

- Low dosage: 1 litre every 100 litres of water

To be used in case of:

- Loading a new (or washed) low temperature heating system and for mixed low-high temperature systems

 **MADE IN ITALY**

PRODUCT	CODE	QUANTITY	UNIT	PACKAGE
H100LW Inhibitor Power	H100LW	1 litre	1	12



## CLEANING AND PASSIVATION PROCEDURE OF A THERMAL SYSTEM

To ensure the efficiency of a thermal system, it is essential to have a water circuit free from sludge, obstructions, algae and deposits.

Therefore, in case of clogged or low exchange systems, a suitable sludge removal with professional products is recommended and it should follow the simple procedure below.

### SLUDGE REMOVAL

Add 1% of the H400 Cleaner Power product to the system to be cleaned. This product does not damage ferrous or plastic materials. Therefore, it is compatible with all metals and polymers.

If you have enough time to clean the circuit, we recommend that you use the system pump and circulate the system water for a few days with the addition of the H400 Cleaner Power product at a concentration of 1%.

If you have limited time to clean up the circuit (for example during a boiler replacement), we recommend using an external pump and circulating the system water for at least 2-3 hours with the addition of the H400 Cleaner Power product at a concentration of 2%.

Once the above-mentioned washing time has passed, the circuit must be completely drained of all the cleaning mixture and all the dirt that the product has removed. The product diluted to the indicated concentrations is completely biodegradable in white waters.

### RINSING

Once the Cleaner Power product has been discharged, it is necessary to rinse the system thoroughly.

It is a fundamental phase and if done rigorously and carefully, a perfect washing will result.

Make sure you have rinsed each branch of the system and that the water is clear when drained.

### HIGH TEMPERATURE PASSIVATION

Once thoroughly rinsed, the system will have to be refilled by providing the necessary anti-corrosion protection, using 1% of the H100HT Inhibitor Power conditioning agent, leaving it to circulate inside the system permanently. This product will create a coating patina on the system metal parts, preserving them from sludge, rust, limescale, algae, etc.

It will be possible to check the correct concentration of the filter by analysing the Molybdenum, the basic active ingredient of our H100HT Inhibitor Power product, using a colorimetric kit

### LOW TEMPERATURE PASSIVATION

Once thoroughly rinsed, the system will have to be refilled by providing the necessary anti-corrosion protection, using 1% of the H100LW Inhibitor Power conditioning agent, leaving it to circulate inside the system permanently. This product helps to avoid the proliferation of slime and mucilage that reduce the heat exchange capacity, causing bad smells and obstructions to pipes and pumps.

It avoids the formation of encrustations. Thanks to its scale inhibiting component, it can preserve pipes from any deposit, without altering the heat exchange in any way.

It allows the elimination of gas formation, maintaining proper circulation of liquids within the circuit. Its special formulation also prevents the formation of bacteria and algae that can be generated due to low temperatures, thus maintaining a good circulation of liquids over time and the maximum efficiency of the system. It fights the growth of microorganisms both in radiant floor heating systems and in traditional radiator systems. It is suitable for water of any hardness.



BEFORE CLEANING



AFTER CLEANING

# HEATING SYSTEM INDICATIVE WATER CONTENT TABLE

## TRADITIONAL SYSTEM IN MULTILAYER COPPER

TYPE		INDICATIVE WATER CONTENT	SLUDGE CLEANER		HIGH TEMPERATURE SCALE INHIBITOR	
			H400 CLEANER POWER		H100HT INHIBITOR POWER	
Apartment 100 m <sup>2</sup>		approx. 90-100 L	1 L		1 L	
Single house 150 m <sup>2</sup>		approx. 135 - 150 L	1.5 L		1.5 L	
Single house 200 m <sup>2</sup>		approx. 180 - 200 L	2 L		2 L	
Single house 300 m <sup>2</sup>		approx. 270 - 300 L	2.5 L		2.5 L	

## TRADITIONAL IRON SYSTEM

TYPE		INDICATIVE WATER CONTENT	SLUDGE CLEANER		HIGH TEMPERATURE SCALE INHIBITOR	
			H400 CLEANER POWER		H100HT INHIBITOR POWER	
Apartment 100 m <sup>2</sup>		approx. 130 - 150 L	1.5 L		1.5 L	
Single house 150 m <sup>2</sup>		approx. 200 - 225 L	2.5 L		2.5 L	
Single house 200 m <sup>2</sup>		approx. 260 - 300 L	3 L		3 L	
Single house 300 m <sup>2</sup>		approx. 390 - 450 L	5 L		5 L	

## UNDERFLOOR HEATING SYSTEM

TYPE		INDICATIVE WATER CONTENT	SLUDGE CLEANER		LOW TEMPERATURE SCALE INHIBITOR	
			H400 CLEANER POWER		H100LW INHIBITOR POWER	
Apartment 100 m <sup>2</sup>		approx. 100 - 140 L	1.5 L		1.5 L	
Single house 150 m <sup>2</sup>		approx. 150 - 210 L	2.5 L		2.5 L	
Single house 200 m <sup>2</sup>		approx. 200 - 280 L	3 L		3 L	
Single house 300 m <sup>2</sup>		approx. 300 - 420 L	4.5 L		4.5 L	

Table of water content (indicative S.E.&O.) present in the systems.  
Always check on site for any additional vertical riser pipe runs.



## TECHNICAL DATA

Magnet: 12.000 G

Porosity filters: 800 µm

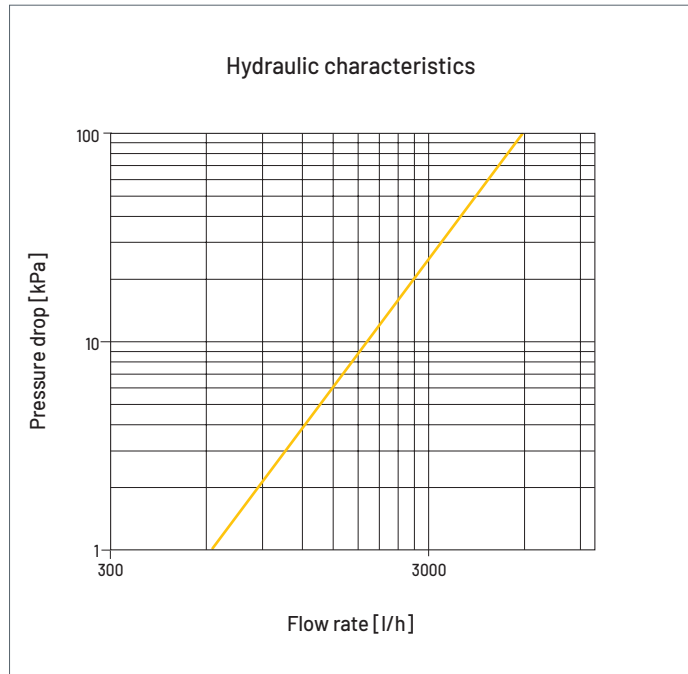
Compatible fluids: water; water + glycol 50% max

Maximum flow: Kv 5.3

Maximum pressure: 3 bar

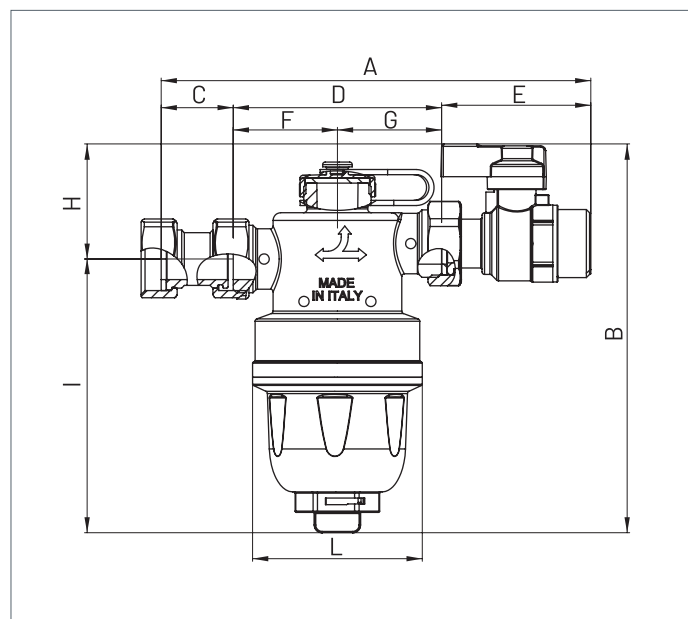
Temperatures: 0 - 90 °C

MODEL	SIZE	Kv
DF0030	3/4"	5,3 m³/h



## DIMENSIONS

SIZE	3/4"
A	167
B	151,1
C	28
D	81
E	58
F	40,5
G	40,5
H	44,8
I	106,4
L	66



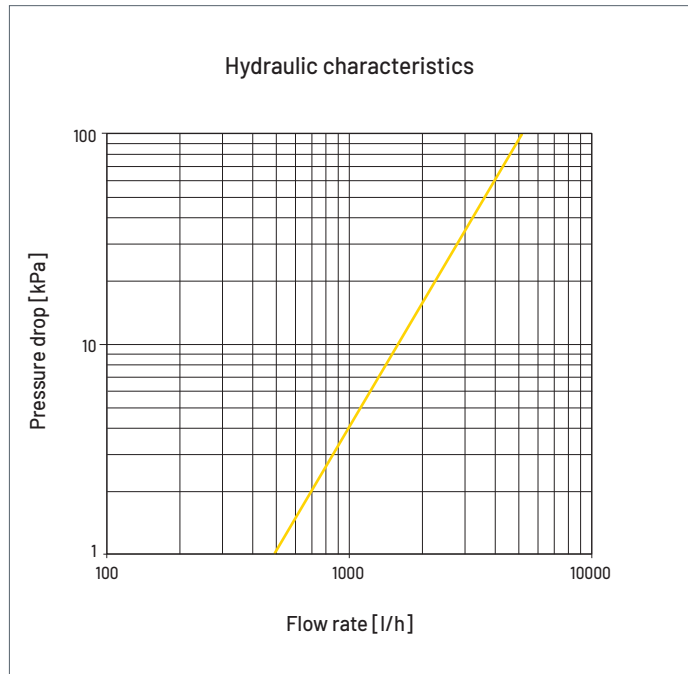
# IronOUT<sup>®</sup> MINI



## TECHNICAL DATA

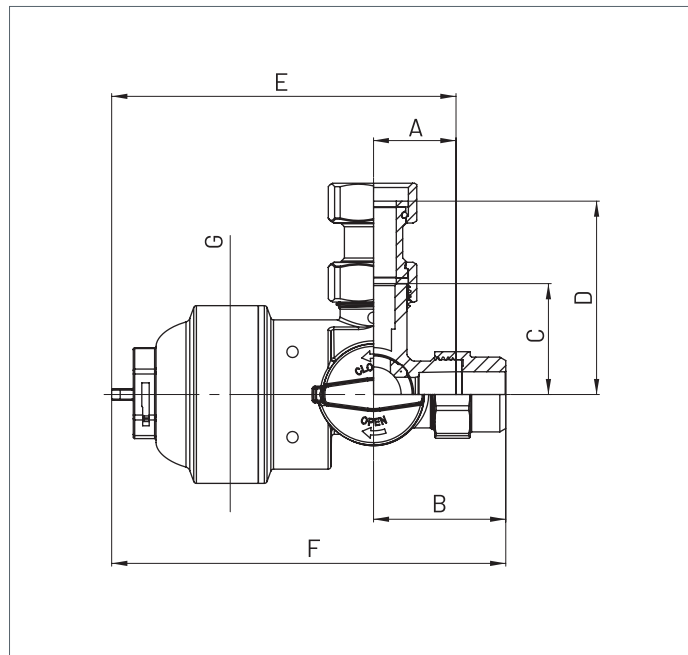
- Magnet: 12.000 G
- Porosity filters included: 800 µm
- Compatible fluids: water; water + glycol 50% max
- Maximum flow: Kv 4.2
- Maximum pressure: 3 bar
- Temperatures: 0-90 °C

MODEL	SIZE	Kv
DF0131	3/4"	4,2 m <sup>3</sup> /h



## DIMENSIONS

SIZE	3/4"
A	29
B	46,5
C	39
D	68
E	121
F	138,5
G	∅ 62,5



# DIRTOUT<sup>™</sup> XL

DF0010 MODEL



## TECHNICAL DATA

Magnet: 14.000 G

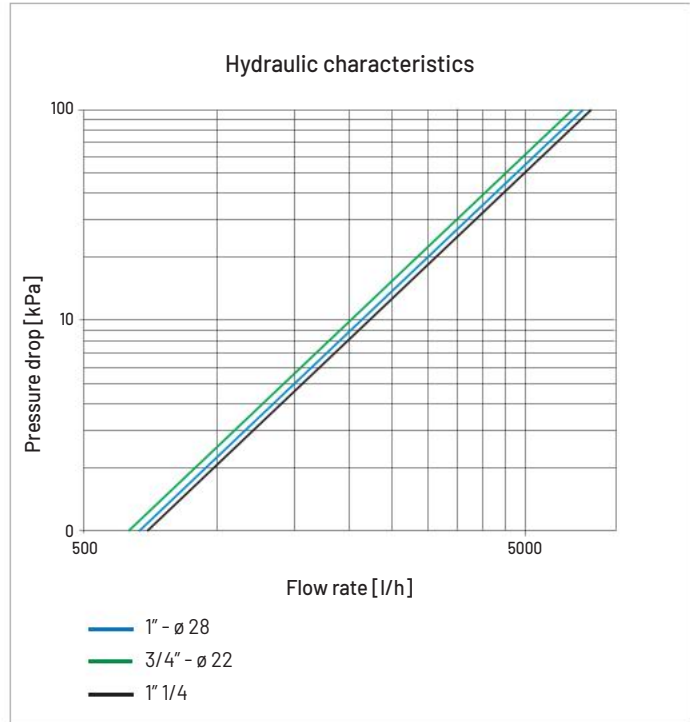
Porosity of filters: 500-800  $\mu\text{m}$

Compatible fluids: water; water + glycol 50% max

Max pressure: 3 bar

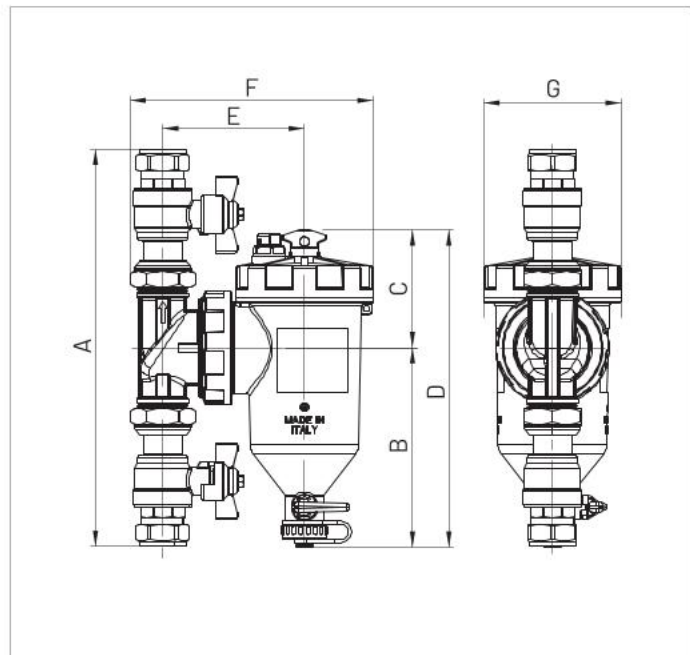
Temperature range: 0-90 °C

MODEL	SIZE	Kv
DF0010	3/4" - $\varnothing$ 22	6,4 m <sup>3</sup> /h
DF0010	1" - $\varnothing$ 28	6,7 m <sup>3</sup> /h
DF0010	1" 1/4	6,9 m <sup>3</sup> /h



## DIMENSIONS

SIZE	3/4"	1"	1" 1/4	22 mm	28 mm
A	206,5	227,5	315,4	258	266
B	129,4	129,4	129,4	129,4	129,4
C	76,6	76,6	76,6	76,6	76,6
D	206	206	206	206	206
E	92	92	92	92	92
F	156,8	156,8	208,9	155,6	158,3
$\varnothing$ G	89	89	89	89	89



# DIRTOUT™ XL

DF0011 MODEL



## TECHNICAL DATA

Magnet: 14.000 G

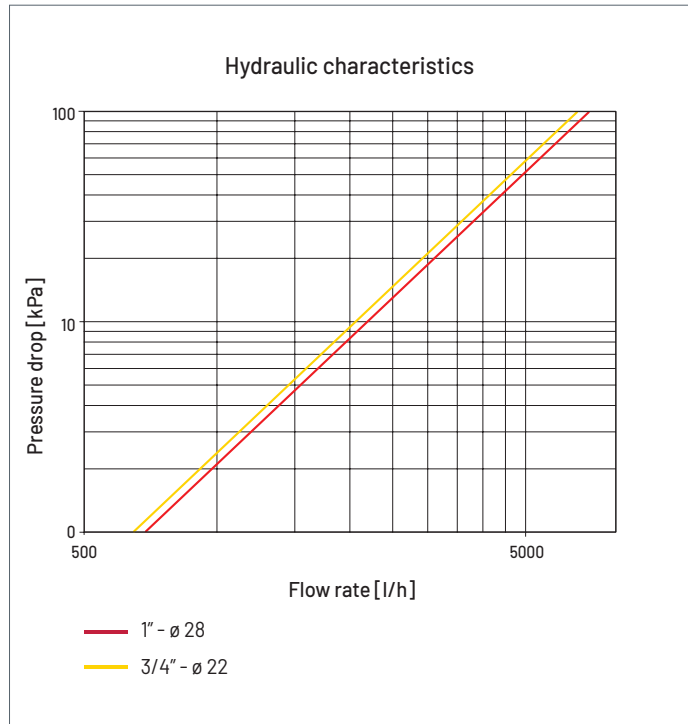
Porosity of filters: 500-800 µm

Compatible fluids: water; water + glycol 50% max

Max pressure: 3 bar

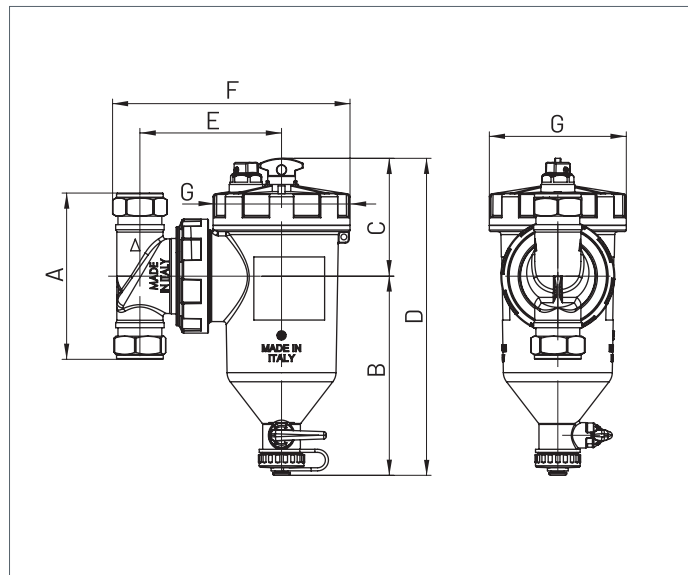
Temperature range: 0-90 °C

MODEL	SIZE	Kv
DF0011	3/4" - ø 22	6,6 m³/h
DF0011	1" - ø 28	6,9 m³/h



## DIMENSIONS

SIZE	3/4"	1"	1" MM	22 mm	28 mm
A	92	98	98	108	115,6
B	129,4	129,4	129,4	129,4	129,4
C	76,6	76,6	76,6	76,6	76,6
D	206	206	206	206	206
E	92,1	92,1	92,1	92,1	92,1
F	153,2	155,6	153	154,2	156,8
ø G	89	89	89	89	89



# DIRTOUT™ DUAL MODE

DF0012 MODEL



## TECHNICAL DATA

Magnet: 14.000 G

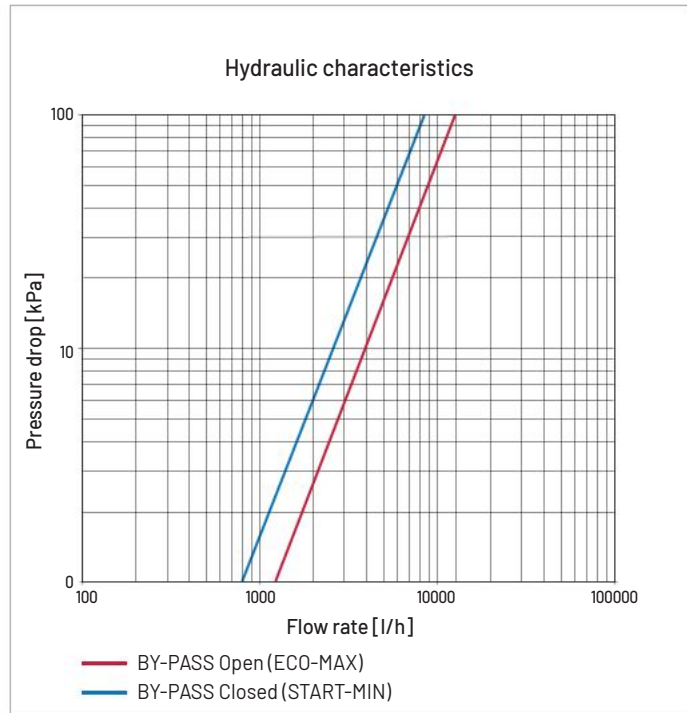
Porosity of filters: 500-800  $\mu\text{m}$

Compatible fluids: water; water + glycol 50% max

Max pressure: 3 bar

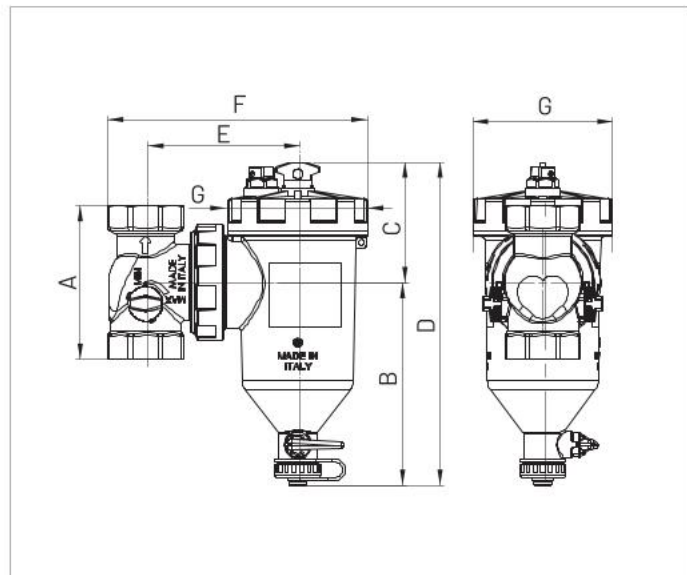
Temperature range: 0-90 °C

MODEL	SIZE	POSITION	MODE	Kv
DF0012	1" 1/4	BY-PASS Closed	START	7,4 m <sup>3</sup> /h
DF0012	1" 1/4	BY-PASS Open	ECO	15,1 m <sup>3</sup> /h



## DIMENSIONS

SIZE	1" 1/4
A	98
B	129,4
C	176,6
D	206
E	97
F	165,6
ø G	89



# DIRTOUT™ HP

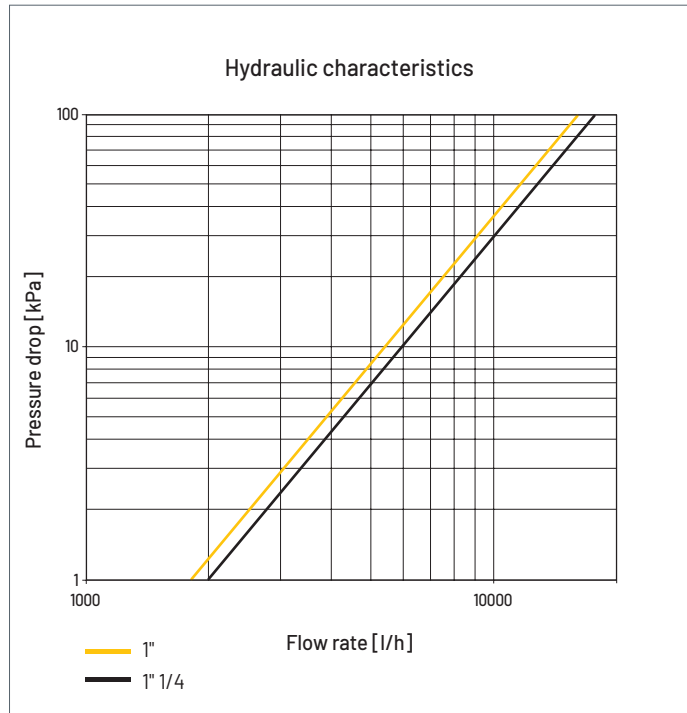
1" - 1" 1/4



## TECHNICAL DATA

- Magnet: 14000 G
- Porosity of filters: 800 µm  
(available with other filtration grades up to 100 µm)
- Compatible fluids: water; water + glycol 50% max
- Max. pressure: 6 bar
- Temperature range: 0-90°C
- Max. pressure during maintenance: 3 bar

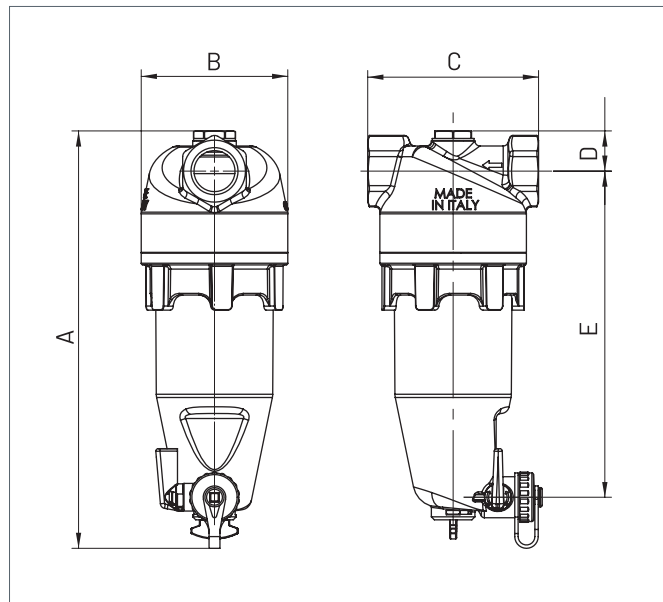
MODEL	SIZE	Kv
DF0080	1"	17,10 m³/h
DF0080	1" 1/4	17,80 m³/h



## DIMENSIONS\*

SIZE	1"	1" 1/4
A	243,6	252,1
B	87,5	87,5
C	102	102
D	24	24
E	194,7	199,7

\* Without insulation shell





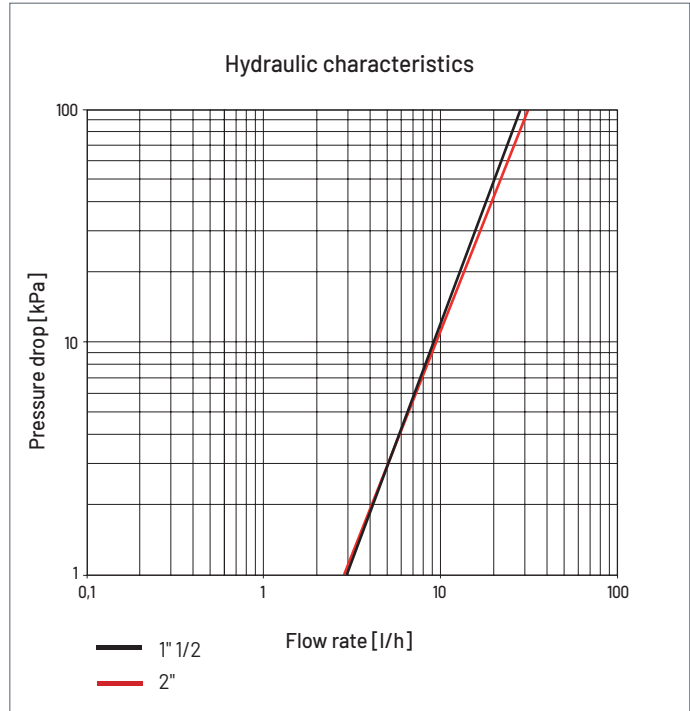
# DIRTOUT™ HP MAXI

1" 1/2 - 2"

## TECHNICAL DATA

- Magnet: 14.000 G
- Porosity of filters: 800 µm  
(available with other filtration grades up to 100 µm)
- Compatible fluids: water; water + glycol 50% max
- Max. pressure: 6 bar
- Temperature range: 0-90°C
- Max. pressure during maintenance: 3 bar

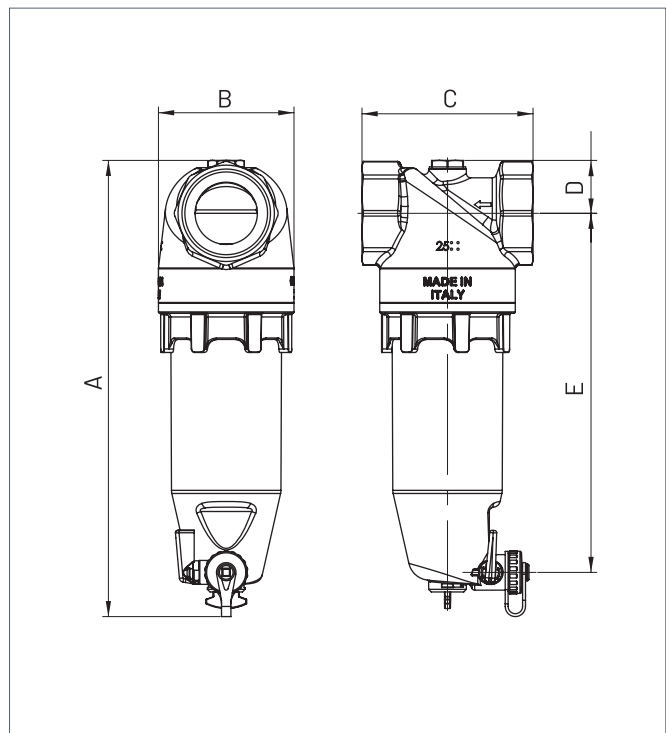
MODEL	SIZE	Kv
DF0080	1" 1/2	28,6 m³/h
DF0080	2"	30,5 m³/h



## DIMENSIONS \*

SIZE	1" 1/2	2"
A	314,7	314,7
B	93,5	93,5
C	112	118
D	36,5	36,5
E	247,7	247,7

\* Without insulation shell





# POWER CLEAN®

## IN-LINE MODEL

### TECHNICAL DATA

Magnet: 14.000 Gauss

Filter cartridge: Multilayer stainless steel

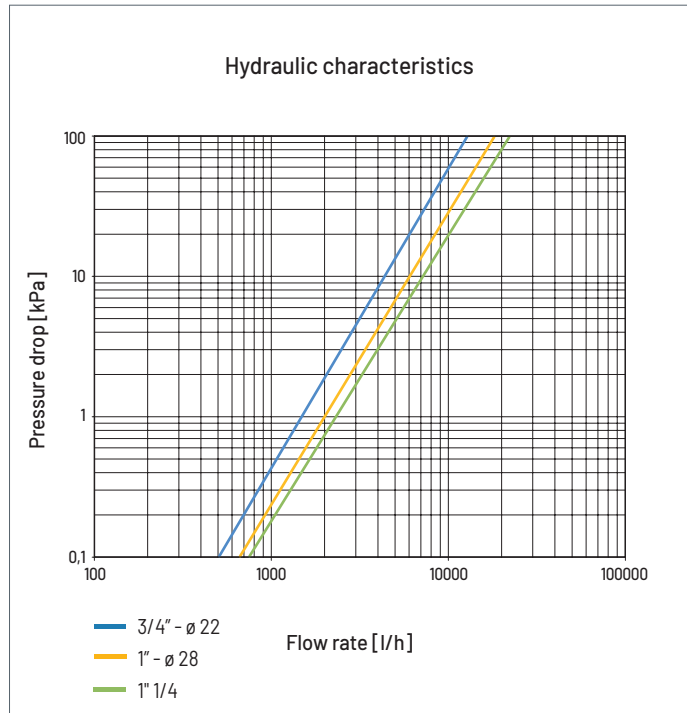
Working temperature: 0-100 °C

Max. Temperature: 110 °C

Maximum working pressure: 10 bar

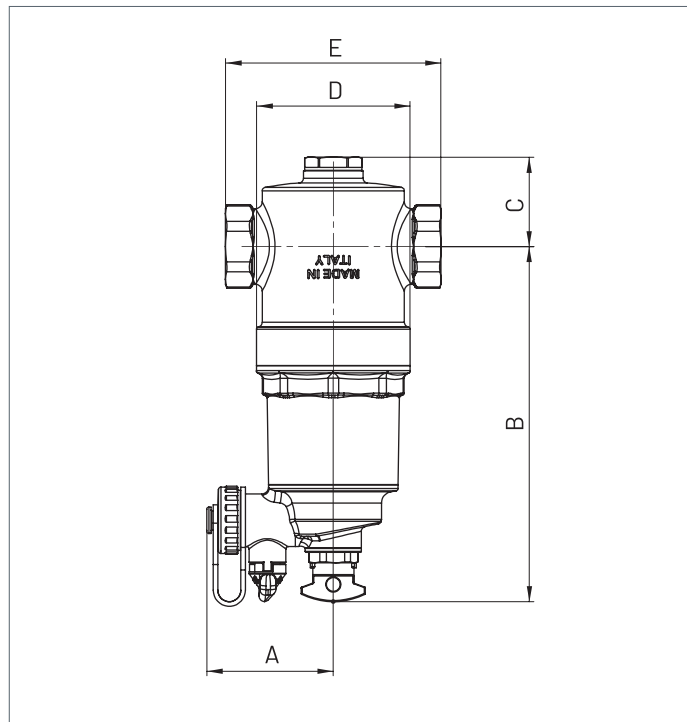
Compatible fluids: water, water + glycol 50% max

MODEL	SIZE	Kv
DF0070	3/4"	12,60 m <sup>3</sup> /h
DF0070	1"	17,90 m <sup>3</sup> /h
DF0070	1" 1/4	21,85 m <sup>3</sup> /h
DF0070	ø 22	12,60 m <sup>3</sup> /h
DF0070	ø 28	17,90 m <sup>3</sup> /h



### DIMENSIONS

SIZE	3/4"	1"	1" 1/4	ø 22 mm	ø 28 mm
A	55,2	55,2	55,2	55,2	55,2
B	155	155	155	155	155
C	39	39	39	39	39
D	67	67	67	67	67
E	94	100	100	106,5	113



# POWER CLEAN®

## ADJUSTABLE MODEL



### TECHNICAL DATA

Magnet: 14.000 Gauss

Filter cartridge: Multilayer stainless steel

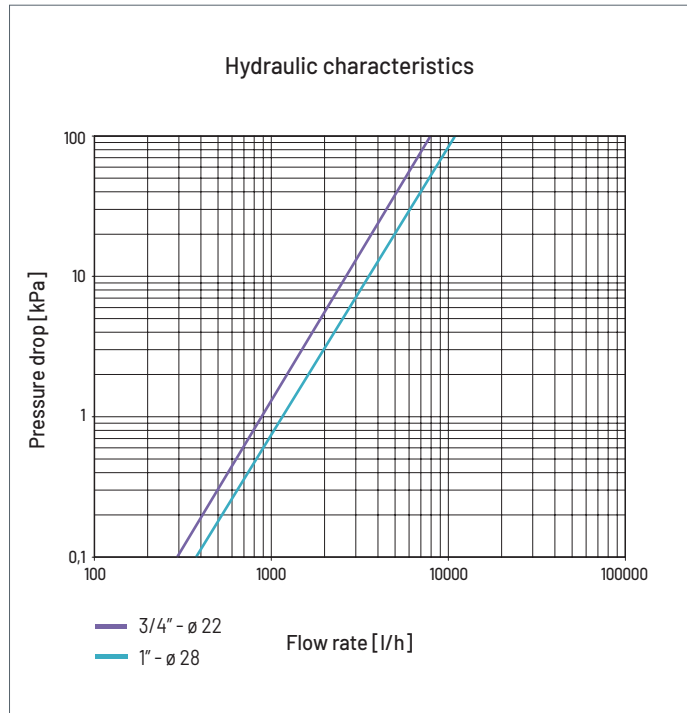
Working temperature: 0-100 °C

Max. Temperature: 110 °C

Maximum working pressure: 10 bar

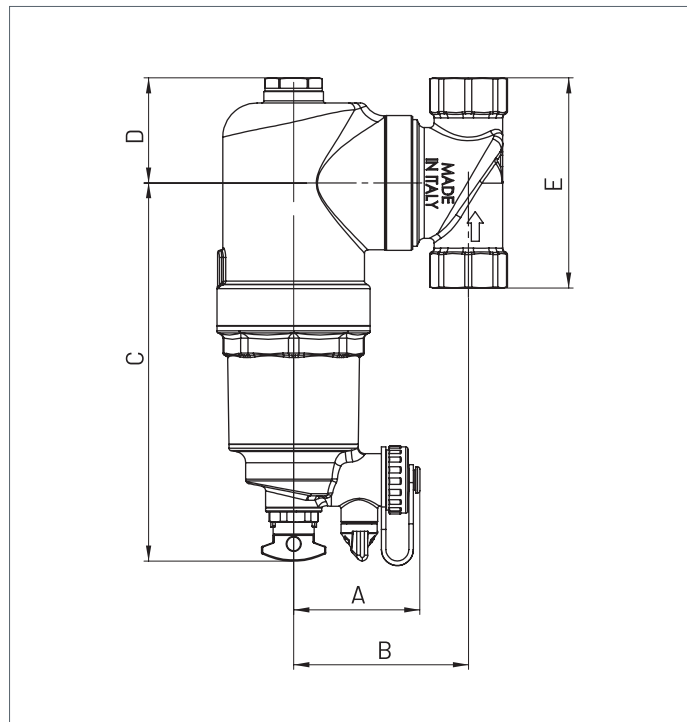
Compatible fluids: water, water + glycol 50% max

MODEL	SIZE	Kv
DF0060	3/4"	8,60 m <sup>3</sup> /h
DF0060	1"	10,70 m <sup>3</sup> /h
DF0060	ø 22	8,60 m <sup>3</sup> /h
DF0060	ø 28	10,70 m <sup>3</sup> /h



### DIMENSIONS

SIZE	3/4"	1"	ø 22 mm	ø 28 mm
A	55,2	55,2	55,2	55,2
B	76,5	76,5	76,5	76,5
C	165,5	165,5	165,5	165,5
D	46	46	46	46
E	92	98	108	115,5



# SMART CLEAN®

## IN-LINE MODEL



### TECHNICAL DATA

Magnet: 12.000 Gauss

Filtering cartridge: Multilayer stainless steel

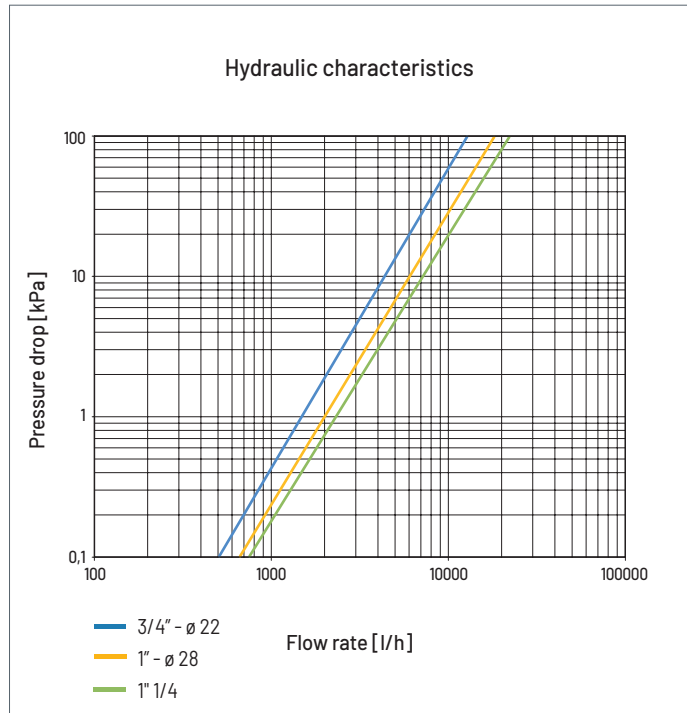
Working temperature: 0-100 °C

Max. Temperature: 110 °C

Maximum working pressure: 10 bar

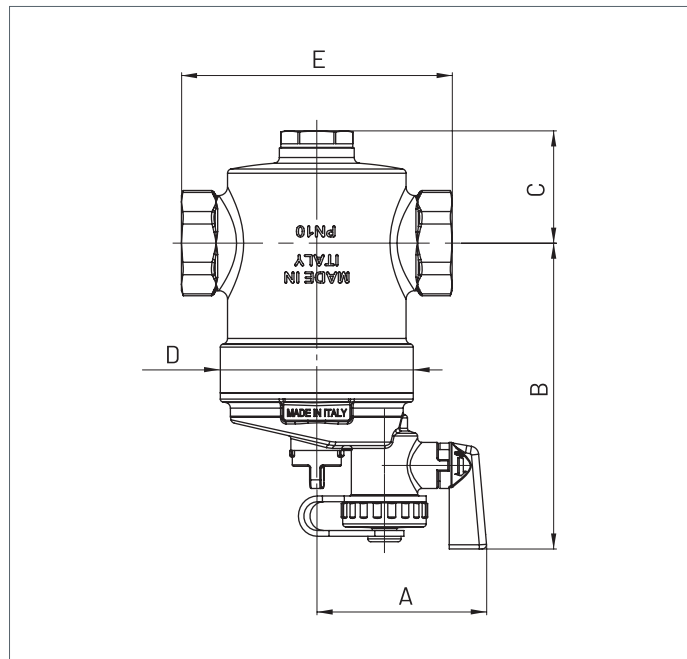
Compatible fluids: water, water + glycol 50% max

MODEL	SIZE	Kv
DF0170	3/4"	12,60 m <sup>3</sup> /h
DF0170	1"	17,90 m <sup>3</sup> /h
DF0170	1" 1/4	21,85 m <sup>3</sup> /h
DF0170	ø 22	12,60 m <sup>3</sup> /h
DF0170	ø 28	17,90 m <sup>3</sup> /h



### DIMENSIONS

SIZE	ø 22 mm	ø 28 mm	3/4"	1"	1" 1/4
A	59	59	59	59	59
B	106	106	106	106	106
C	39	39	39	39	39
D	ø 67	ø 67	ø 67	ø 67	ø 67
E	110	114	94	100	100



# SMART CLEAN®

## ADJUSTABLE MODEL



### TECHNICAL DATA

Magnet: 12.000 Gauss

Filtering cartridge: Multilayer stainless steel

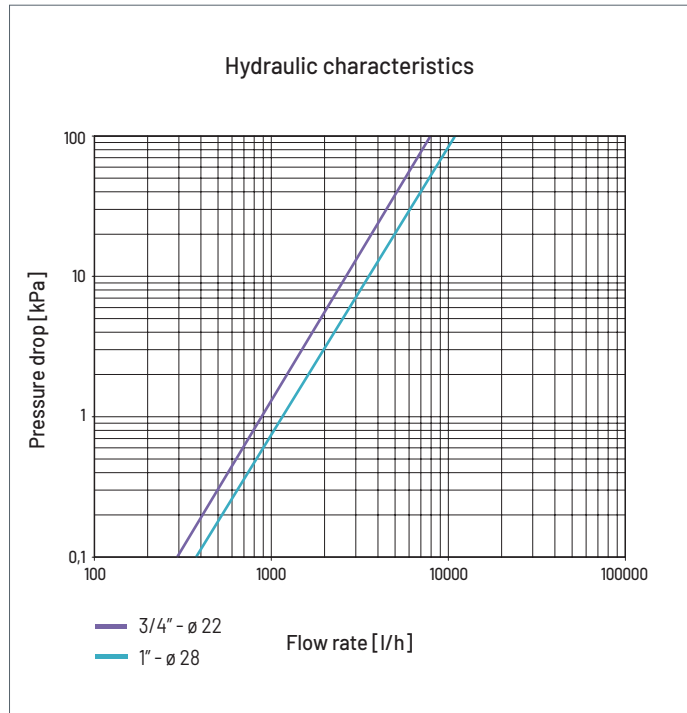
Working temperature: 0-100 °C

Max. Temperature: 110 °C

Maximum working pressure: 10 bar

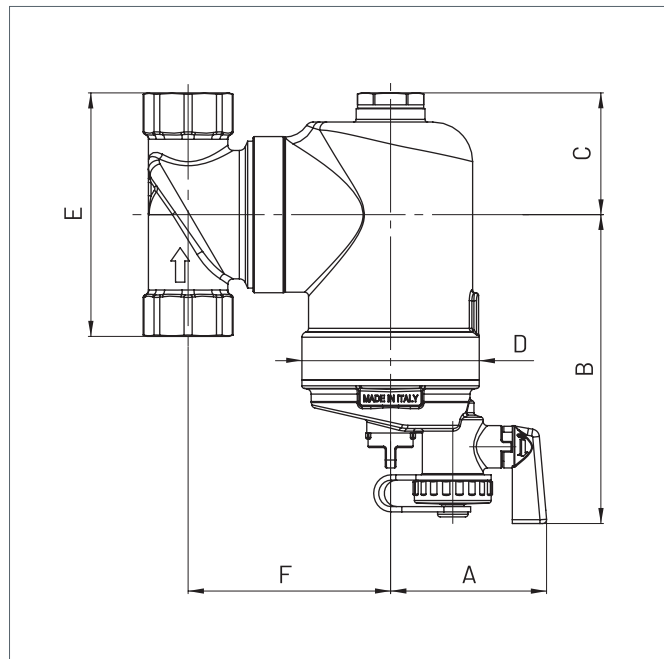
Compatible fluids: water, water + glycol 50% max

MODEL	SIZE	Kv
DF0160	3/4"	8,60 m <sup>3</sup> /h
DF0160	1"	10,70 m <sup>3</sup> /h
DF0160	ø 22	8,60 m <sup>3</sup> /h
DF0160	ø 28	10,70 m <sup>3</sup> /h



### DIMENSIONS

SIZE	ø 22 mm	ø 28 mm	3/4"	1"
A	59	59	59	59
B	117	117	117	117
C	46	46	46	46
D	ø 67	ø 67	ø 67	ø 67
E	108	116	92	98
F	76,5	76,5	76,5	76,5



# POWER VENT®

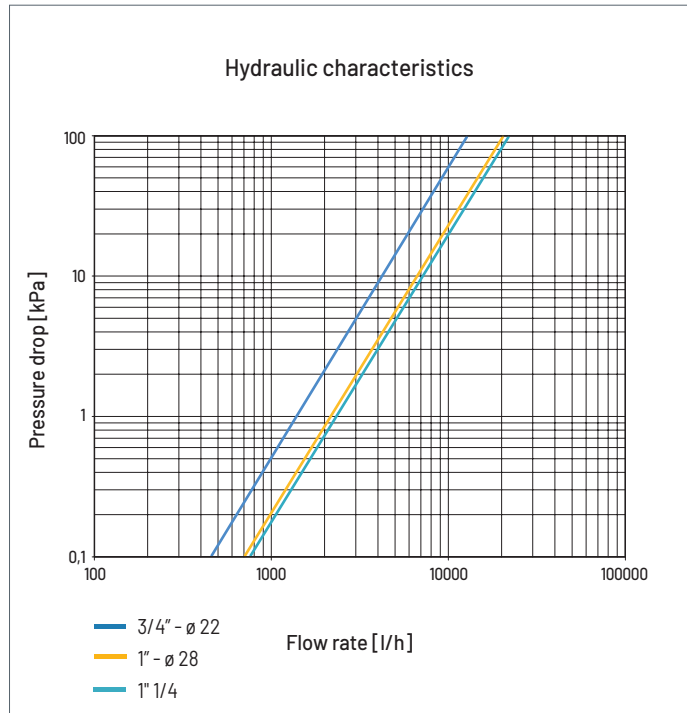
## IN-LINE MODEL



### TECHNICAL DATA

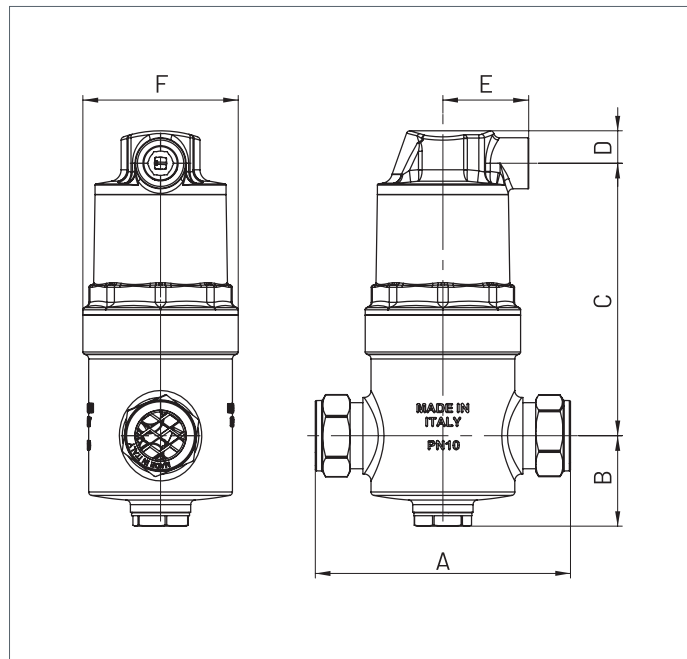
Filter mesh (cylindrical elements): 1000 µm  
 Max fluid temperature: 110 °C  
 Maximum working pressure: 10 bar (1000 kPa)  
 Maximum discharge pressure: 10 bar (1000 kPa)

MODEL	SIZE	Kv
DA0010	3/4"	12,66 m³/h
DA0010	1"	20,44 m³/h
DA0010	1" 1/4	21,83 m³/h
DA0010	ø 22	12,66 m³/h
DA0010	ø 28	20,44 m³/h



### DIMENSIONS

SIZE	3/4"	1"	1" 1/4"	ø 22 mm	ø 28 mm
A	94	100	100	110	113,6
B	39	39	39	39	39
C	117,5	117,5	117,5	117,5	117,5
D	14	14	14	14	14
E	37	37	37	37	37
ø F	67	67	67	67	67



# POWER VENT®

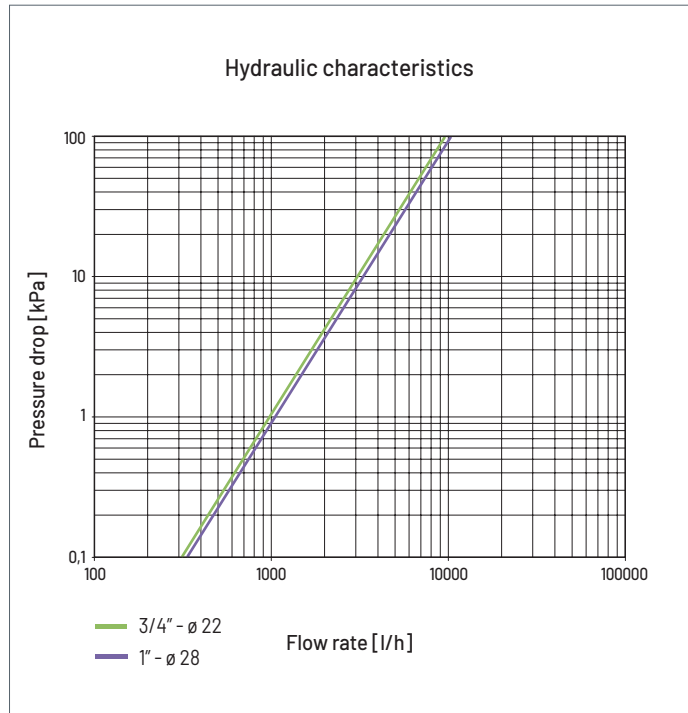
## ADJUSTABLE MODEL



### TECHNICAL DATA

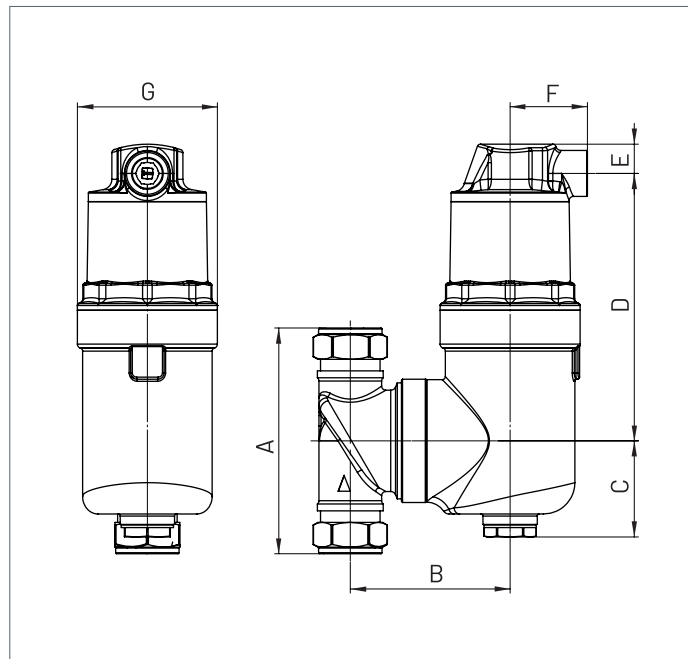
Filter mesh (cylindrical elements): 1000 µm  
 Max fluid temperature: 110 °C  
 Maximum working pressure: 10 bar (1000 kPa)  
 Maximum discharge pressure: 10 bar (1000 kPa)

MODEL	SIZE	Kv
DA0020	3/4"	9,50 m³/h
DA0020	1"	10,30 m³/h
DA0020	ø 22	9,50 m³/h
DA0020	ø 28	10,30 m³/h



### DIMENSIONS

SIZE	3/4"	1"	ø 22 mm	ø 28 mm
A	92	98	108	115,6
B	76,5	76,5	76,5	76,5
C	46	46	46	46
D	128	128	128	128
E	14	14	14	14
F	37	37	37	37
ø G	67	67	67	67





# MACISTE®

## 1/4" PLUG MODEL

### TECHNICAL DATA

Pressure gauge indication: 0-16 bar

Filtration degree: 90 µm

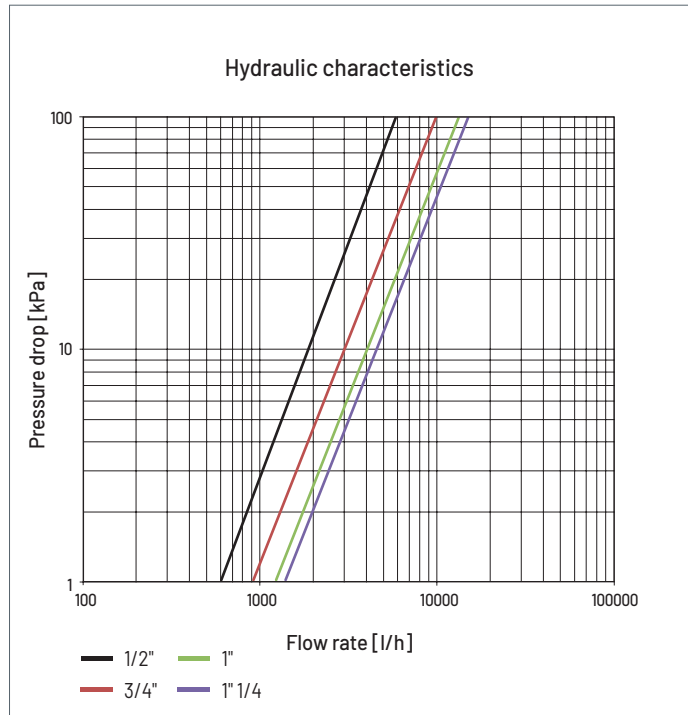
Filtration degree (SILVER): 50 µm

Working pressure: 1.5-16 bar

Water temperature: 5-30 °C

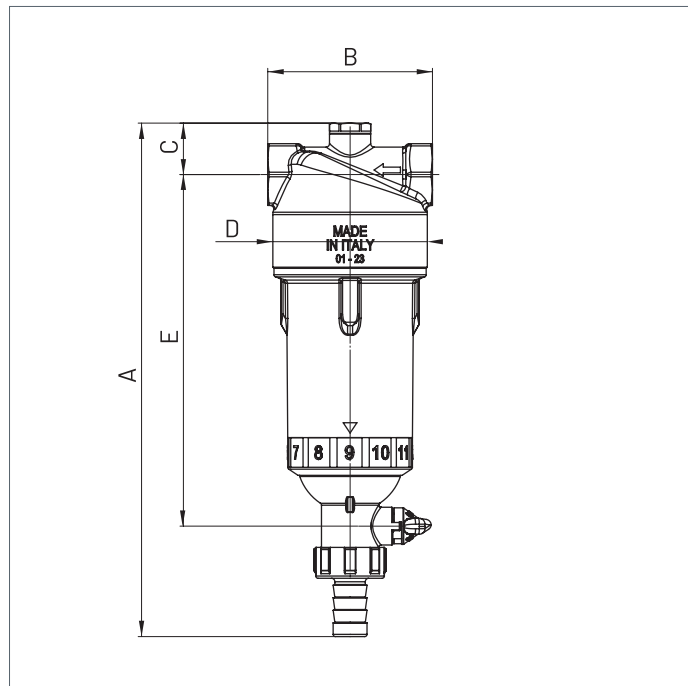
Ambient temperature: 5-40 °C

MODEL	SIZES	Kv	Q by Δp 0.2 bar	Q by Δp 0.5 bar
FI0100	1/2"	6.2 m <sup>3</sup> /h	2.7 m <sup>3</sup> /h	4.3 m <sup>3</sup> /h
FI0100	3/4"	9.7 m <sup>3</sup> /h	4.3 m <sup>3</sup> /h	6.8 m <sup>3</sup> /h
FI0100	1"	12.6 m <sup>3</sup> /h	5.6 m <sup>3</sup> /h	8.8 m <sup>3</sup> /h
FI0100	1" 1/4	13.8 m <sup>3</sup> /h	6.1 m <sup>3</sup> /h	9.7 m <sup>3</sup> /h



### DIMENSIONS

SIZE	1/2"	3/4"	1"	1" 1/4
A	224,5	228,5	229,5	238,5
B	72	76	80	86
C	22,5	24,5	24,5	29,5
D	ø 67,5	ø 67,5	ø 67,5	ø 67,5
E	153,7	155,7	156,7	161,7





# MACISTE®

## PRESSURE GAUGE MODEL

### TECHNICAL DATA

Pressure gauge indication: 0-16 bar

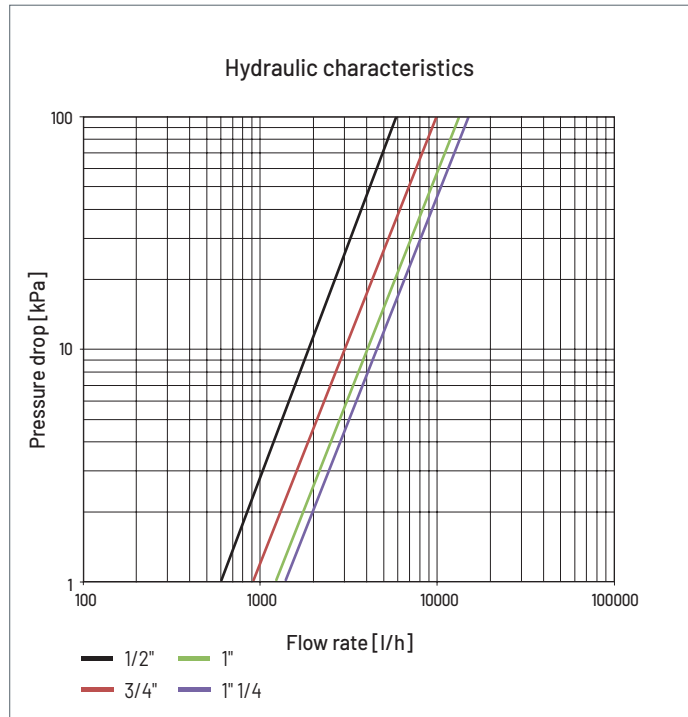
Filtration degree: 90 µm

Working pressure: 1.5-16 bar

Water temperature: 5-30 °C

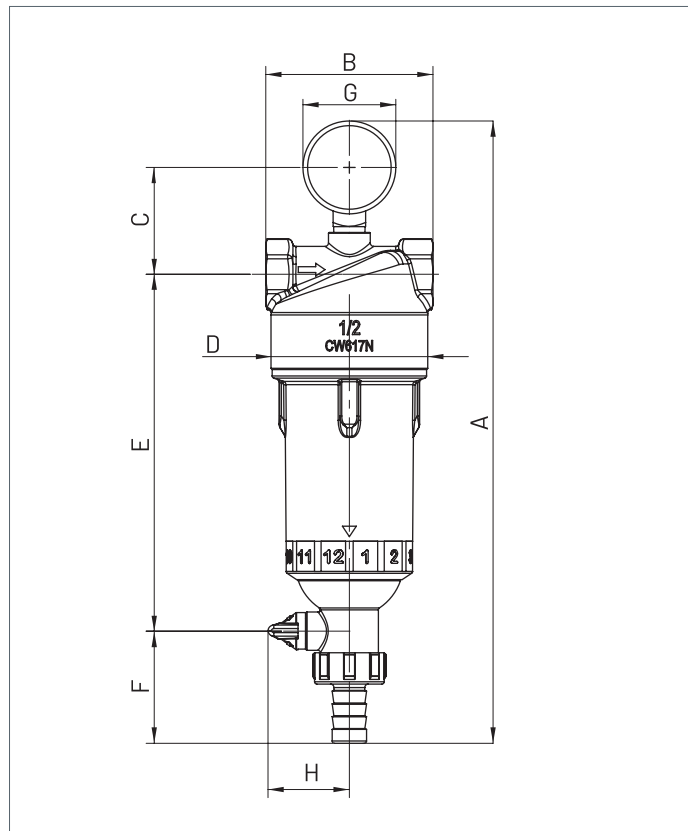
Ambient temperature: 5-40 °C

MODEL	SIZES	Kv	Q by Δp 0.2 bar	Q by Δp 0.5 bar
FI0101	1/2"	6.2 m³/h	2.7 m³/h	4.3 m³/h
FI0101	3/4"	9.7 m³/h	4.3 m³/h	6.8 m³/h
FI0101	1"	12.6 m³/h	5.6 m³/h	8.8 m³/h
FI0101	1" 1/4	13.8 m³/h	6.1 m³/h	9.7 m³/h



### DIMENSIONS

SIZE	1/2"	3/4"	1"	1" 1/4
A	268	272	273	283
B	72	76	80	86
C	46	48	48	53
D	∅ 67,5	∅ 67,5	∅ 67,5	∅ 67,5
E	153,7	155,7	156,7	161,7
F	48,3	48,3	48,3	48,3
G	∅ 40	∅ 40	∅ 40	∅ 40
H	35	35	35	35





# HURACLEAN®

## TECHNICAL DATA

Pressure gauge indication: 0-16 bar

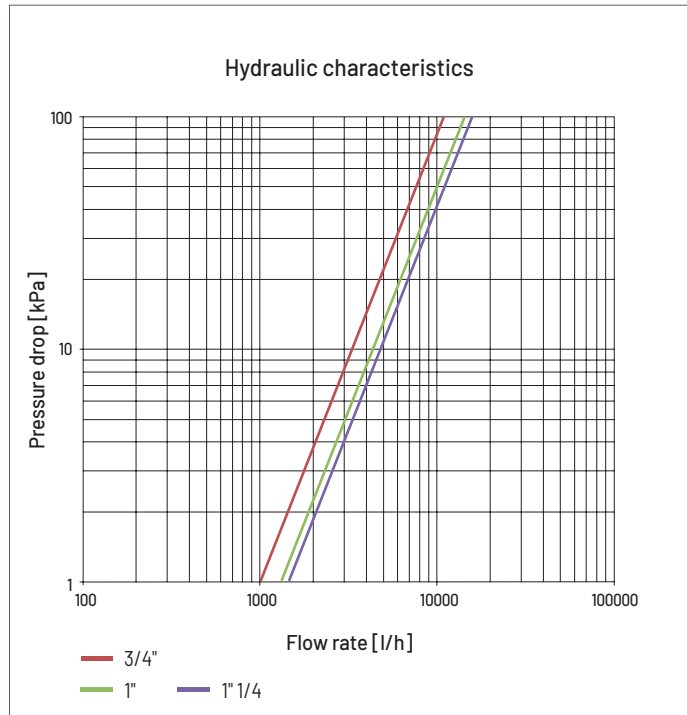
Filtration degree: 90 µm

Working pressure: 1.5-16 bar

Water temperature: 5-30 °C

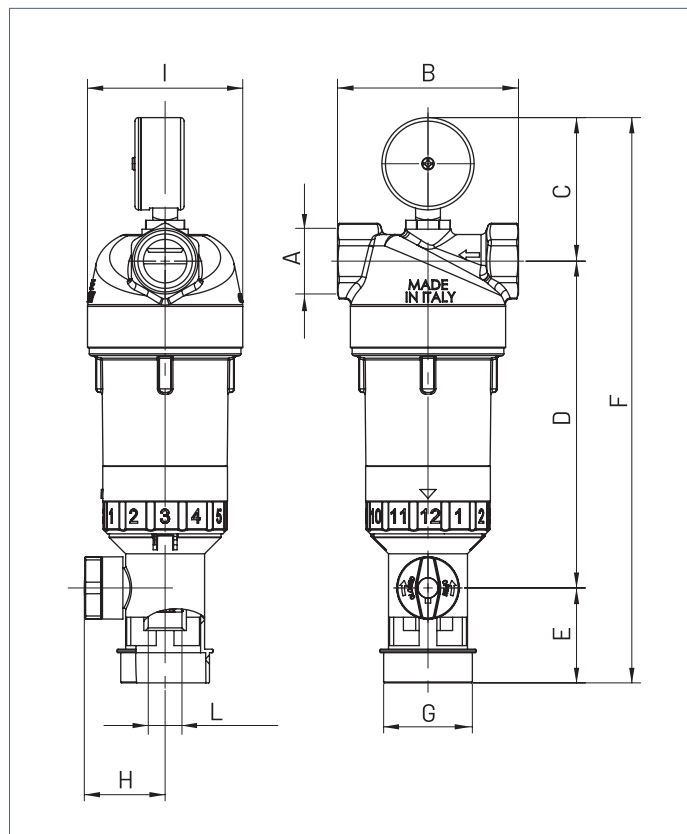
Ambient temperature: 5-40 °C

MODEL	SIZES	Kv	Q by Δp 0.2 bar	Q by Δp 0.5 bar
FI001	3/4"	11 m <sup>3</sup> /h	4.9 m <sup>3</sup> /h	7.7 m <sup>3</sup> /h
FI001	1"	13.80 m <sup>3</sup> /h	6.1 m <sup>3</sup> /h	9.7 m <sup>3</sup> /h
FI001	1" 1/4 F	15.20 m <sup>3</sup> /h	6.7 m <sup>3</sup> /h	10.6 m <sup>3</sup> /h



## DIMENSIONS

SIZE (A)	3/4"	1"	1" 1/4
B	102	102	102
C	81	81	84,5
D	184,2	184,2	189,2
E	53,5	53,5	53,5
F	318,6	318,6	327
G	∅50	∅50	∅50
H	45,6	45,6	45,6
I	87,5	87,5	87,5
L	1/2"	1/2"	1/2"



# ACCESSORIES



Thermal insulation for under-boiler magnetic dirt separator  
DirtOUT™ Compact, made of expanded polyethylene half-shells

## DESCRIPTION

- Fire behaviour class 1
- Density: 45 kg/m<sup>3</sup>
- Operating temperature: -40 ÷ +90 °C

CODE	SIZE	QUANTITY	UNIT	PACKAGE
<b>NEW</b> COIB0007	DirtOUT™ Compact	1 piece	1	6



Thermal insulation for multifunction magnetic dirt separator  
DirtOUT™ XL, made of expanded polyethylene half-shells  
with a scratch-resistant outer coating

## DESCRIPTION

- Fire behaviour class 1
- Density: 45 kg/m<sup>3</sup>
- Operating temperature: -40 ÷ +90 °C

CODE	SIZE	QUANTITY	UNIT	PACKAGE
COIB0001	DirtOUT™ XL	1 piece	1	6



Thermal insulation for multifunction magnetic dirt separator  
DirtOUT™ Dual Mode, made of expanded polyethylene half-shells  
with a scratch-resistant outer coating

## DESCRIPTION

- Fire behaviour class 1
- Density: 45 kg/m<sup>3</sup>
- Operating temperature: -40 ÷ +90 °C

CODE	SIZE	QUANTITY	UNIT	PACKAGE
COIB0003	Dual Mode	1 piece	1	6

# ACCESSORIES



Thermal insulation for multifunction magnetic dirt separator DirtOUT™ HP, made of expanded polyethylene half-shells with a scratch-resistant outer coating

## DESCRIPTION

- Fire behaviour class 1
- Density: 45 kg/m<sup>3</sup>
- Operating temperature: -40 ÷ +90 °C

CODE	SIZE	QUANTITY	UNIT	PACKAGE
COIB0002	DirtOUT™ HP	1 piece	1	6



Thermal insulation for multifunction magnetic dirt separator DirtOUT™ HP MAXI, made of expanded polyethylene half-shells with a scratch-resistant outer coating

## DESCRIPTION

- Fire behaviour class 1
- Density: 45 kg/m<sup>3</sup>
- Operating temperature: -40 ÷ +90 °C

CODE	SIZE	QUANTITY	UNIT	PACKAGE
<b>NEW</b> COIB0002MAX	DirtOUT™ HP MAXI	1 piece	1	4



Thermal insulation for in-line Power Vent® air separator, made of expanded polyethylene half-shells

## DESCRIPTION

- Fire behaviour class 1
- Density: 45 kg/m<sup>3</sup>
- Operating temperature: -40 ÷ +90 °C

CODE	SIZE	QUANTITY	UNIT	PACKAGE
<b>NEW</b> COIB0004	3/4" - 1" - ø22 - ø28	1 piece	1	6
<b>NEW</b> COIB0005	1" 1/4	1 piece	1	6

# ACCESSORIES



Thermal insulation for adjustable Power Vent® air separator, made of expanded polyethylene half-shells

## DESCRIPTION

- Fire behaviour class 1
- Density: 45 kg/m<sup>3</sup>
- Operating temperature: -40 ÷ +90 °C

CODE	SIZE	QUANTITY	UNIT	PACKAGE
<b>NEW</b> COIB0006	POWER VENT® Adjustable	1 piece	1	6



Thermal insulation for SafePRO® and SafePRO® GYRO polyphosphate doser, made of expanded polyethylene half-shells

## DESCRIPTION

- Fire behaviour class 1
- Density: 45 kg/m<sup>3</sup>
- Operating temperature: -40 ÷ +90 °C

CODE	SIZE	QUANTITY	UNIT	PACKAGE
<b>NEW</b> COIB0009	SafePRO® /SafePRO® GYRO	1 piece	1	6



Thermal insulation for PoliFILTER® and PoliFILTER® By-Pass polyphosphate doser, made of expanded polyethylene half-shells

## DESCRIPTION

- Fire behaviour class 1
- Density: 45 kg/m<sup>3</sup>
- Operating temperature: -40 ÷ +90 °C

CODE	SIZE	QUANTITY	UNIT	PACKAGE
<b>NEW</b> COIB0008	PoliFILTER®/PoliFILTER® BY-PASS	1 piece	1	6

# ORIGINAL REFILLS



Polyphosphate and silicate spherical refill with filter for PoliFILTER® and PoliFILTER® By-Pass

## DESCRIPTION

Filtration rate: 100 µm  
Set consisting of 4 refills

CODE	QUANTITY	UNIT	PACKAGE
DS0010KIT	1 pair	4	48

**WARNING!** The use of non-original refills will result in the immediate voiding of the warranty.



Polyphosphate and silicate spherical refill with filter for PoliFILTER® XL

## DESCRIPTION

Filtration rate: 100 µm  
Contains 1 refill

CODE	QUANTITY	UNIT	PACKAGE
DS0011KIT	1 piece	1	1

**WARNING!** The use of non-original refills will result in the immediate voiding of the warranty.



Polyphosphate and silicate crystal refill for ULISSE®, ULISSE® By-Pass and ULISSE® INCAS polyphosphate doser

## DESCRIPTION

Set consisting of 2 refills

CODE	QUANTITY	UNIT	PACKAGE
DS0020KIT	1 pair	4	48

**WARNING!** The use of non-original refills will result in the immediate voiding of the warranty.

# REFILLS



Sodium polyphosphate powder refill for SafePRO® and SafePRO® Filter polyphosphate doser

## DESCRIPTION

Set consisting of 4 refills, 80 g each

CODE	QUANTITY	UNIT	PACKAGE
RICAR0001	4 pieces	1	18/36

**WARNING!** The use of non-original refills will result in the immediate voiding of the warranty.



Refill for Acid X® Vent acid condensation neutralizing filters

## DESCRIPTION

Neutralizing compound CaCO<sub>3</sub> based

CODE	QUANTITY	UNIT	PACKAGE
KIT0005	6 pieces	1	6/12

**WARNING!** The use of non-original refills will result in the immediate voiding of the warranty.

# SPARE PARTS



Spare filter for DirtOUT™ Compact under-boiler magnetic dirt separator

## DESCRIPTION

Stainless steel mesh  
Filtration rate: 300 µm - 500 µm - 800 µm

CODE	FILTRATION	QUANTITY	UNIT
CA0040300	300 µm	1 piece	1
CA0040500	500 µm	1 piece	1
CA0040800	800 µm	1 piece	1



Spare filter for DirtOUT™ XL and DirtOUT® Dual Mode magnetic dirt separators

## DESCRIPTION

Stainless steel mesh  
Filtration rate: 100 µm - 300 µm

CODE	FILTRATION	QUANTITY	UNIT
CA0010100	100 µm	1 piece	1
CA0010300	300 µm	1 piece	1



Radial connection pressure gauge for MACISTE® and MACISTE® Silver

## DESCRIPTION

Connection: 1/4" M  
Pressure gauge scale: 0-16 bar  
Max. fluid temperature under pressure: 90 °C  
Connection: radial in brass  
ABS case

CODE	QUANTITY	UNIT
MA00100014	1 piece	1



Radial connection pressure gauge for HURACLEAN®

## DESCRIPTION

Connection: 1/2" M  
Pressure gauge scale: 0-16 bar  
Max. fluid temperature under pressure: 90 °C  
Connection: radial in brass  
ABS case

CODE	QUANTITY	UNIT
<b>NEW</b> MA00100012	1 piece	1

# SPARE PARTS



Spare filter for MACISTE®

## DESCRIPTION

Stainless steel mesh  
Filtration rate: 90 µm

CODE	QUANTITY	UNIT
RI-CA0170100	1 piece	1



Silver spare filter for MACISTE®

## DESCRIPTION

Silver filter  
Filtration rate: 50 µm

CODE	QUANTITY	UNIT
<b>NEW</b> RI-CA0170050ARGV	1 piece	1



Spare bowl for PoliFILTER® and PoliFILTER® By-Pass

## DESCRIPTION

PA 12 bowl

CODE	QUANTITY	UNIT
<b>NEW</b> DS0010BI034	1 piece	1



Spare bowl for SafePRO®, SafePRO® GYRO and SafePRO® Filter

## DESCRIPTION

PA 12 bowl

CODE	QUANTITY	UNIT
<b>NEW</b> DS0010BI034SAN	1 piece	1

# SPARE PARTS

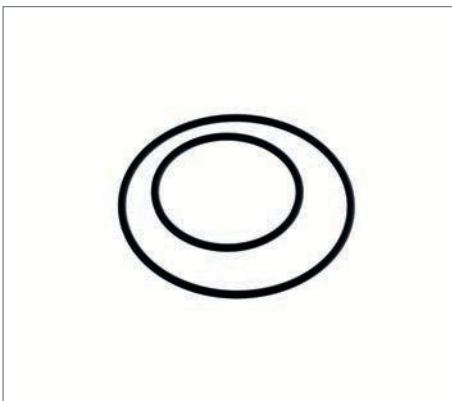


Spare bowl for ULISSE® INCAS

## DESCRIPTION

PA 12 bowl

CODE	QUANTITY	UNIT
<b>NEW</b> DS0050BI012	1 piece	1

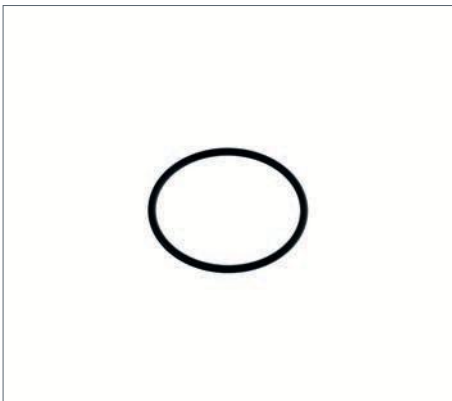


Complete O-ring kit for DirtOUT™ XL and DirtOUT™ XL Dual Mode

## DESCRIPTION

Peroxide-cured EPDM O-ring

CODE	QUANTITY	UNIT
<b>NEW</b> DF0010KIT001	1 small bag	1

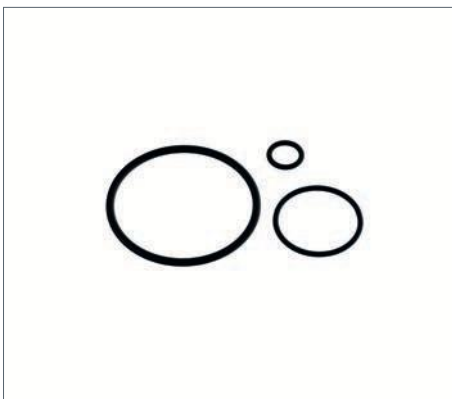


O-ring for PoliFILTER®, PoliFILTER® By-Pass and ULISSE® INCAS bowls

## DESCRIPTION

Peroxide-cured EPDM O-ring

CODE	QUANTITY	UNIT
<b>NEW</b> OR0472026EP	1 small bag	1



Complete O-ring kit for SafePRO®, SafePRO® GYRO and SafePRO® Filter

## DESCRIPTION

Peroxide-cured EPDM O-ring

CODE	QUANTITY	UNIT
<b>NEW</b> DS0030001KIT	1 small bag	1

# SPARE PARTS



A pair of straight connectors complete with flat-seat gasket for Acid X® Vent®

## DESCRIPTION

PA polyamide connectors

CODE	QUANTITY	UNIT
ABDRDR016016KIT	1 piece	1
ABDRDR020020KIT	1 piece	1



Straight hose connector complete with flat gasket

## DESCRIPTION

Technopolymer hose connector

Connection: 3/4" F

CODE	QUANTITY	UNIT
PG00100034	1 piece	1



Cap kit + gasket + polymer strap

CODE	QUANTITY	UNIT
KIT0003P	1 piece	1

## GENERAL SALES TERMS

Sales are carried out by us only under the "conditions" set out below, so that any order accepted by us is processed under these conditions, in derogation of any other rule, unless agreed in writing and signed by us.

1. Orders or commitments taken by our representatives are only valid upon acceptance or confirmation.
2. The data, measurements, articles, prices, characteristics, performances and all other data reproduced in our catalogues, price lists, prospectuses, circulars, etc. are indicative; they can be altered without notice, and are binding for us only in the case of express indication in the acceptance or confirmation.
3. Any drawing or technical document relating to our products, even if forwarded to the customer, always remains our exclusive property, and cannot be used by the customer, or copied, reproduced, transmitted or communicated to third parties without our prior written authorization.
4. The prices indicated in our price lists are intended as "bare goods", and the packaging or means of protection arranged to avoid damage or deterioration of the materials during transportation, are invoiced at the cost price and are not accepted for return.
5. Our goods travel at the risk and peril of the recipient, as they are intended to be sold ex-works, unless otherwise indicated in writing. Therefore they are never insured by us for transport, unless expressly requested in writing by the customer, who bears the relative extra charge.
6. In the event of damage, since our packaging is made in a workmanlike manner, it will be necessary to make reservations for use and requests for compensation from the carriers.
7. The acceptance tests are performed in our factory during normal working hours, according to the systems performed in the industry sector; these tests can be carried out at the installation site only with our express authorization, and upon written communication of the date they will be carried out given well in advance. All tests carried out on the customer's initiative have no value for us, if not carried out jointly with one of our technicians.
8. Our guarantee is limited to the pure and simple replacement of the piece that must first be returned to us and therefore any expenses, damages, interest or indemnities of any kind are strictly excluded. In any case, only our production parts recognized by us as defective, upon express complaint by the customer within the maximum term provided by the legislation in force, will be replaced by us. However, our liability is limited to defects that occur under normal conditions of use and during the correct use of our product.
9. To be valid, complaints must reach us within 8 days from the date of receipt of the goods.
10. The completion terms indicated in our offers or acceptance are purely indicative and not binding. Fires, floods, strikes and other causes of force majeure suspend these terms by right.
11. Unless with written exceptions, all payments must be made to our company headquarters and in Euro. Drafts or other agreed means of payment do not involve in any way changes or exceptions to this regulation. In the event of deferred payment, failure to comply with a deadline will result in the automatic forfeiture of the deadline, the immediate collectability of the entire amount and the commencement of default interest and monetary revaluation according to the Istat (Italian national statistical institute) cost of living indices of the Brescia Chamber of Commerce.
12. For any dispute arising from our sale, the contract will be governed by Italian law, and the jurisdiction will be solely that of the Court of Brescia.

We reserve the right to alter our products, to make technical improvements and to develop them further. All illustrations, numerical data, etc., are not binding.

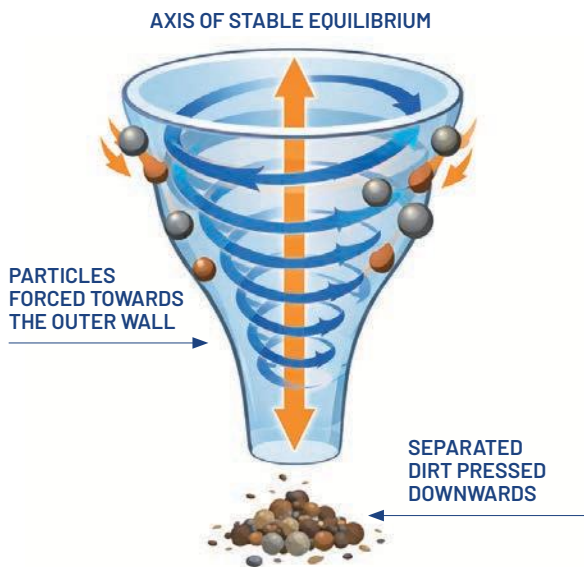
GENERAL INFORMATION:

ATTENTION: the cardboard packaging may have undergone some changes

# We are the specialists in cyclonic cleaning

When water movement is not just rotation,  
but true separation.

## Cyclonic motion CENTRIFUGAL SEPARATION



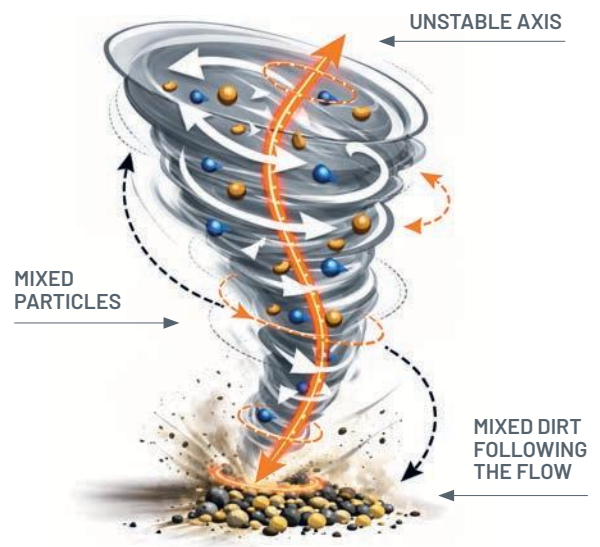
### Controlled separation

- There is an axis of stable equilibrium
- Particles are forced towards the conical walls and pressed downwards

*Like a washing machine.  
The motion is designed to separate dirt.*

- > Controlled rotation
- > Effective centrifugal force
- > True particle separation

## Vortex motion TURBULENCE



### Uncontrolled motion

- No stable central axis
- Particles remain mixed

*It looks like a vortex, but it's not truly one.  
The motion is not organized.*

- > It rotates, but without control
- > Insufficient force
- > No sedimentation

## Not all vortices are cyclones!

Unlike a normal vortex, which keeps dirt suspended and swirling against the filter mesh, HCE cyclone drives it downwards, separating it from water.

**For this reason, the upper filter remains clean: it operates only on pre-filtered water and it is never submerged in sludge.**

## CONTACTS

### SALES DEPARTMENT

[backoffice@hce-hydronic.com](mailto:backoffice@hce-hydronic.com)

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**No impurity can  
withstand the  
power of Tedies!**



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