



**IA4300**

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# Introduction

The clogging of emitters (drippers, sprinklers and driplines) is the most important drawback of micro-irrigation systems. The water flow sections ranges for this type of components vary from a few tenths of millimeter to a maximum of approximately 2 millimeters.

Without a thorough removal of all impurities before the water flows through the nozzles, the risk that they might clog is considerable. An essential preventive action, in this respect, is ensured by filters, positioned just downstream from the pump or next to the sectors that compose the system.

The choice of an effective filtering system requires the knowledge of few essential parameters, such as the kind of source of the water to be filtered, the maximum expected flow rate, the minimum and maximum working pressure and the destination of the filtered water.

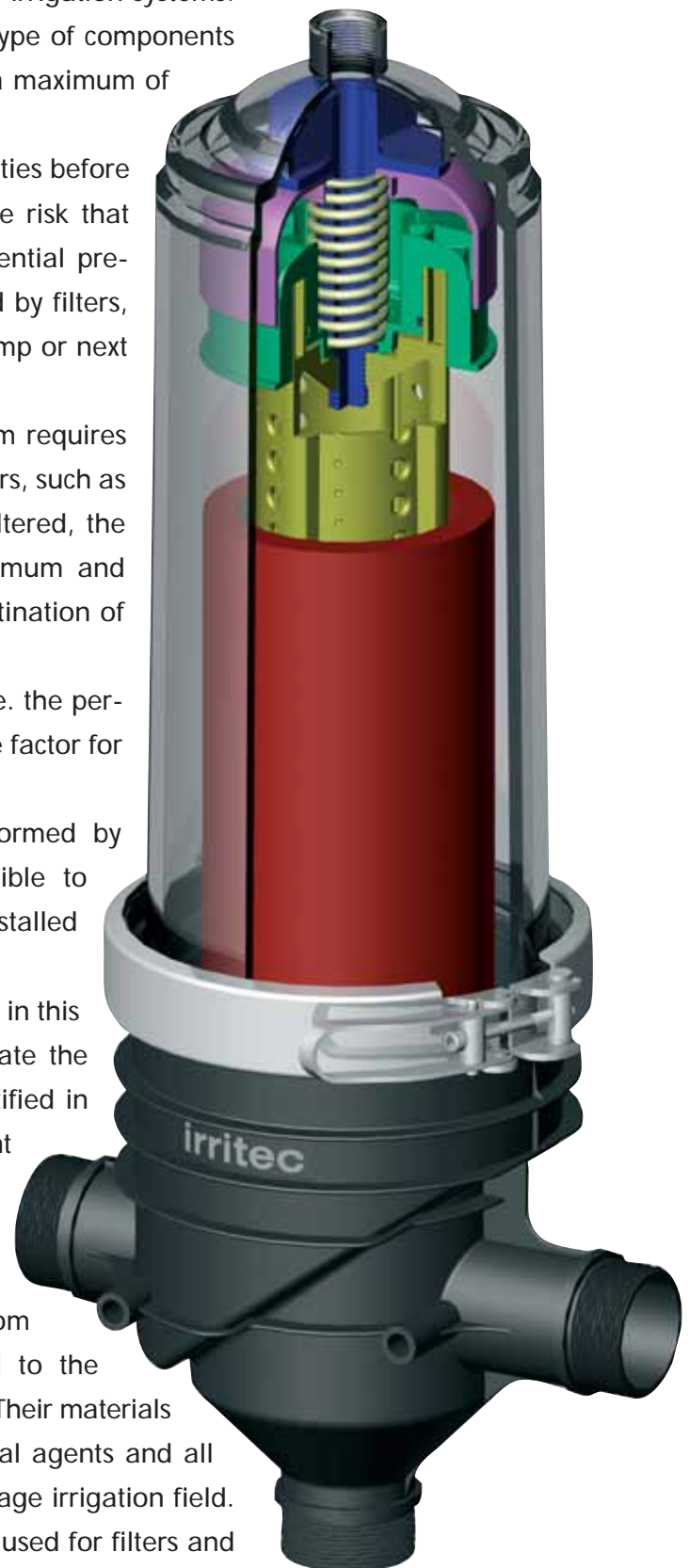
The quality of the water to be treated, i.e. the percentage of suspended solids, is a decisive factor for the choice of the system to be adopted.

A physical analysis of the water, performed by qualified personnel, will make it possible to select the type and filters mesh to be installed in the system.

Irritec filters and filter batteries illustrated in this publication shall be used only to separate the suspended particles which may be identified in the water, and are designed to prevent the irrigation systems from clogging.

These systems cannot perform chemical or biological filtering.

All Irritec filters are manufactured from high-quality technopolymers, submitted to the tests required by international standards. Their materials can resist aggressive physical or chemical agents and all the substances normally used in the sewage irrigation field. All the metal components which may be used for filters and filter batteries are made of stainless steel or are protected against oxidation by galvanizing processes.



# T filters and ROTOFILTERS

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threaded outlet 3/4" BSP



Manufactured from reinforced polyamide, Irritec T filters and Rotofilters are suitable for both in-line and angle installation. The two different closing systems, the different combinations and dimensions of the filtering cartridges and the available filtering grades allow to choose the most suitable system to every requirement in the irrigation field.

Filtering cartridge (T filters)

Stainless steel screen

Disks



Closing systems

Stainless steel clamp

Polyamide nut



Preset for 1/4" BSP pressure gauges



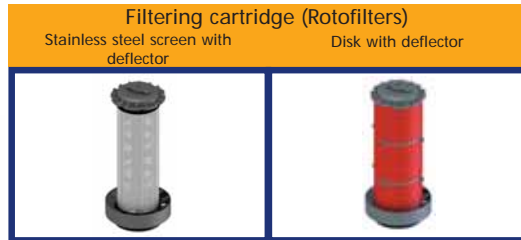
DISK  
MATIC irritec



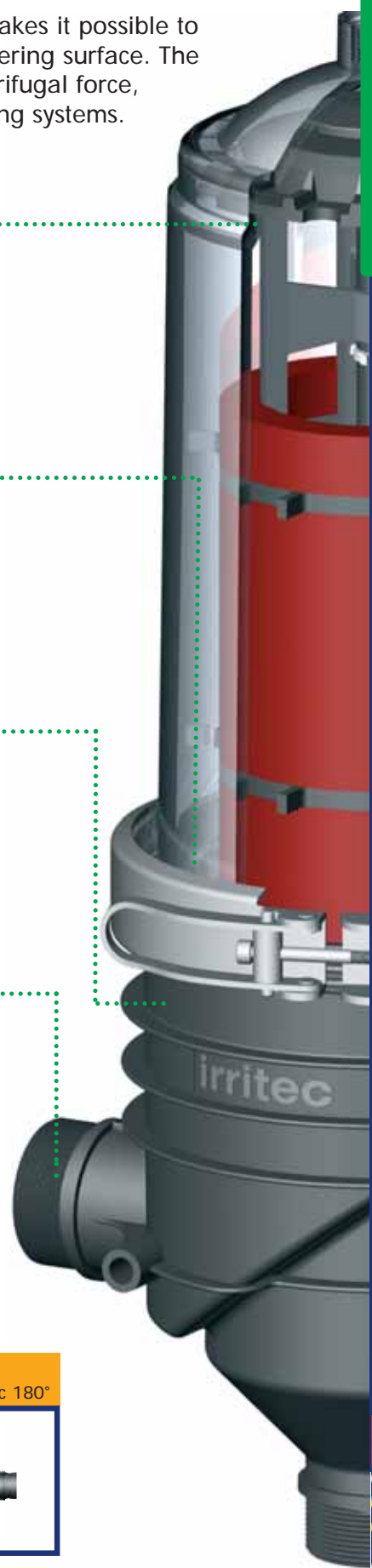
# T filters and ROTOFILTERS

Rotofilters are provided with a special flow rotation system which makes it possible to spread impurities of the inside water to be filtered on the whole filtering surface. The suspended particles are kept far from the filtering cartridge by centrifugal force, delaying the cleaning operations usually required for manual filtering systems.

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\* BSP - NPT available



# T filters and ROTOFILTERS

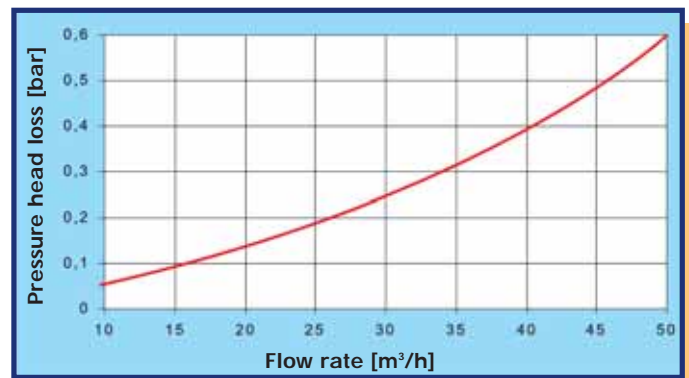
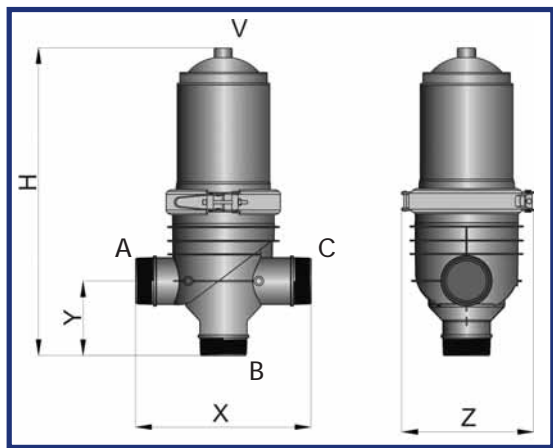
FTG

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- Polyamide filter, reinforced with fiber glass
- Closing system: stainless steel clamp or polyamide nut
- Maximum working pressure: 10 bar at 20°C
- Nominal flow rate: 30 m<sup>3</sup>/h
- Filtering cartridge: stainless steel screen, stainless steel screen with deflector, disks, disks with deflector
- Filtering surface: 916 cm<sup>2</sup> (disks) - 820 cm<sup>2</sup> (stainless steel screen)
- Filtering grade: 80, 120, 155 mesh
- Available connections: 2" threaded BSP, NPT, Victaulic connections, mixed connections (threaded + Victaulic, in all combinations)



- 80 mesh - 180 micron
- 120 mesh - 130 micron
- 155 mesh - 100 micron



Diagrams obtained during lab tests at room temperature, with fresh water and free discharge, and a 120 mesh filter.

ITEM	DIAMETER	FILTERING SURFACE [cm <sup>2</sup> ]	CLOSING SYSTEM	CONNECTION TYPE	A	B	C	X [mm]	H [mm]	Y [mm]	Z [mm]	V	M	WEIGHT [kg]
FTGF	2"	916 (Disks)	STAINLESS STEEL CLAMP	M2	2" BSP	2" BSP	2" BSP	310	510	130	250	3/4" BSP	1/4" BSP	5,3
				V2	2" VICTAULIC	2" VICTAULIC	2" BSP							
		820 (Stainless steel screen)		W2	2" VICTAULIC	2" BSP	2" VICTAULIC	327						
				M5	2" NPT	2" NPT	2" NPT	310						
				V5	2" VICTAULIC	2" VICTAULIC	2" NPT	327						
FTGG	2"	916 (Disks)	STAINLESS STEEL CLAMP	M2	2" BSP	2" BSP	2" BSP	310	510	130	250	3/4" BSP	1/4" BSP	5,7
				V2	2" VICTAULIC	2" VICTAULIC	2" BSP							
		820 (Stainless steel screen)		W2	2" VICTAULIC	2" BSP	2" VICTAULIC	327						
				M5	2" NPT	2" NPT	2" NPT	310						
				V5	2" VICTAULIC	2" VICTAULIC	2" NPT	327						

# AUTOMATIC ROTODISK™

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Self-cleaning filter made of polyamide reinforced with fiber glass

Closing system: stainless steel clamp

Maximum working pressure: 10 bar at 20°C

Nominal flow rate: 2" 20 m³/h

3" 30 m³/h

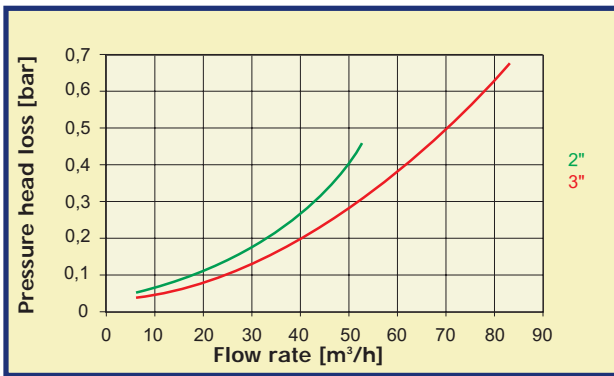
Filtering cartridge: disks with deflector

Filtering surface: 1400 cm²

Filtering grade: 120 mesh - 130 micron

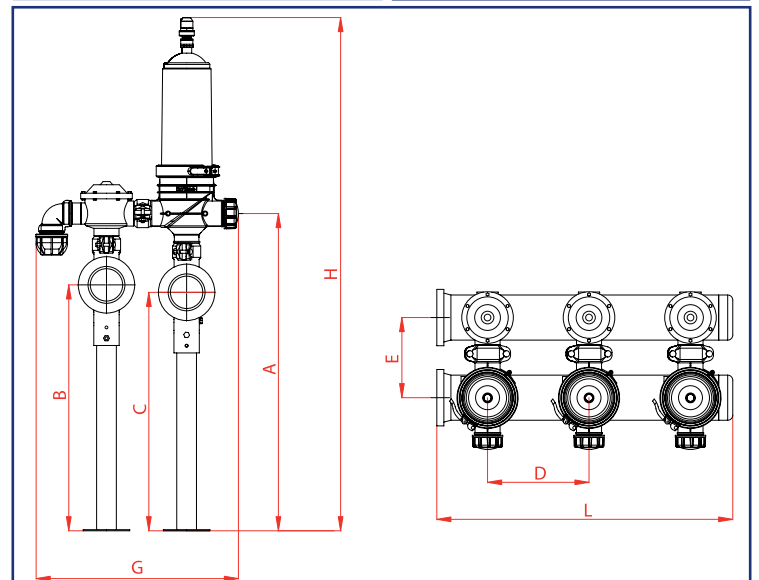
Minimum backwashing pressure: 3 bar

Available connections: 2", 3" threaded BSP, NPT, Victaulic connections, mixed connections (threaded + Victaulic, in all combinations)



Diagrams obtained during lab tests at room temperature, with fresh water and free discharge, and a 120 mesh filter.

2"	Flow rate [m³/h]	No. of filters	Manifold diameter	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	L [mm]	H [mm]	G [mm]
	40	2	3" - 90 mm	1050	834	796	300	284	720	1820	718
	40	2	4" - 110 mm	1070	844	806	300	284	720	1820	718
	60	3	4" - 110 mm	1070	844	806	300	284	1020	1820	718
	80	4	4" - 110 mm	1070	844	806	300	284	1320	1820	718
3"	Flow rate [m³/h]	No. of filters	Manifold diameter	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	L [mm]	H [mm]	G [mm]
	60	2	4" - 110 mm	1072	844	806	300	284	720	1820	718
	90	3	4" - 110 mm	1072	844	806	300	284	1020	1820	718
	90	3	6" - 160 mm	1122	869	831	300	284	1020	1820	718
	120	4	6" - 160 mm	1122	869	831	300	284	1320	1820	718
	150	5	6" - 160 mm	1122	869	831	300	284	1620	1820	718



**ROTODISK**  
AUTOMATIC

# T filters and ROTOFILTERS

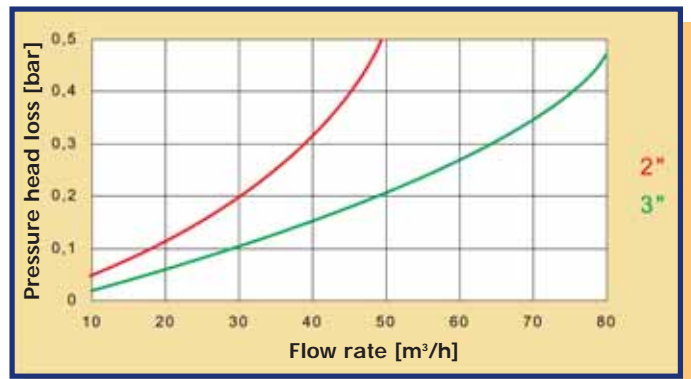
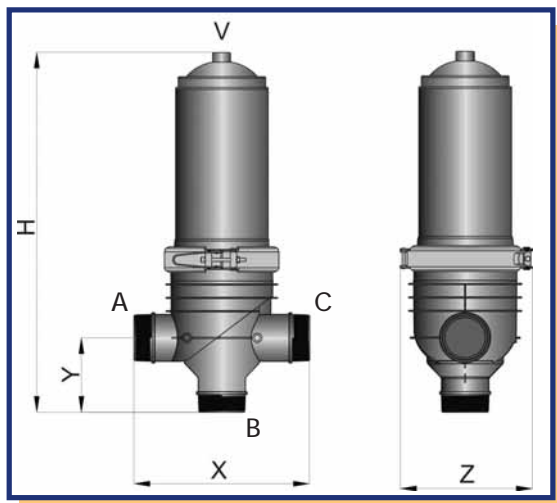
# FTH

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Polyamide filter, reinforced with fiber glass	
Closing system:	stainless steel clamp or polyamide nut
Maximum working pressure:	10 bar at 20°C
Nominal flow rate:	2" 30 m³/h 3" 50 m³/h
Filtering cartridge:	stainless steel screen, stainless steel screen with deflector, disks, disks with deflector
Filtering surface:	1402cm² (disks) - 1270 cm² (stainless steel screen)
Filtering grade:	80, 120, 155 mesh
Available connections:	2", 3" threaded BSP, NPT, Victaulic connections, mixed connections (threaded + Victaulic, in all combinations)



- 80 mesh - 180 micron
- 120 mesh - 130 micron
- 155 mesh - 100 micron



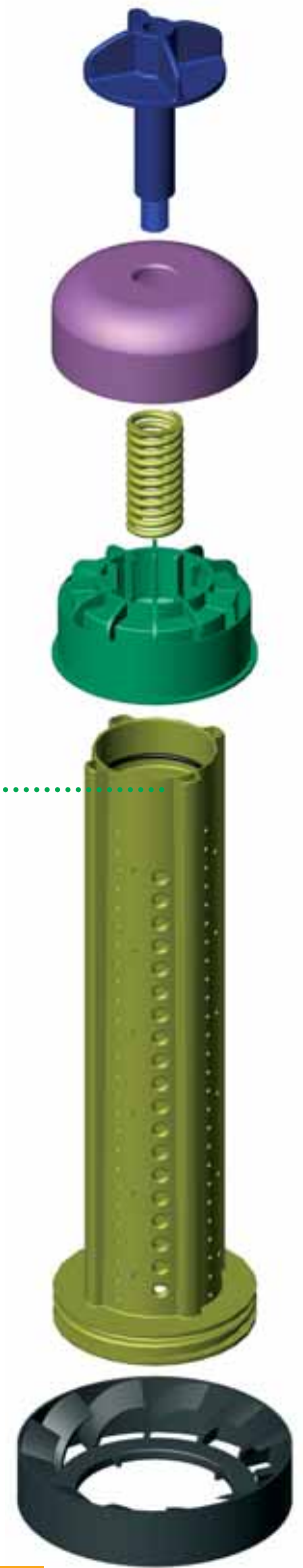
Diagrams obtained during lab tests at room temperature, with fresh water and free discharge, and a 120 mesh filter.

ITEM	DIAMETER	FILTERING SURFACE [cm²]	CLOSING SYSTEM	CONNECTION TYPE	A	B	C	X [mm]	H [mm]	Y [mm]	Z [mm]	V	M	WEIGHT [kg]
FTHF	2"	1402 (Disks)	STAINLESS STEEL CLAMP	M2	2" BSP	2" BSP	2" BSP	310	660	130	250	3/4" BSP	1/4" BSP	6,6
				V2	2" VICTAULIC	2" VICTAULIC	2" BSP							
				W2	2" VICTAULIC	2" BSP	2" VICTAULIC	327						
				M5	2" NPT	2" NPT	2" NPT							
				V5	2" VICTAULIC	2" VICTAULIC	2" NPT							
FTHG	2"	1402 (Disks)	NUT	M2	2" BSP	2" BSP	2" BSP	310	660	130	250	3/4" BSP	1/4" BSP	7
				V2	2" VICTAULIC	2" VICTAULIC	2" BSP							
				W2	2" VICTAULIC	2" BSP	2" VICTAULIC	327						
				M5	2" NPT	2" NPT	2" NPT							
				V5	2" VICTAULIC	2" VICTAULIC	2" NPT							
FTHF	3"	1402 (Disks)	STAINLESS STEEL CLAMP	M2	3" BSP	3" BSP	3" BSP	327	660	140	250	3/4" BSP	1/4" BSP	7
				V2	3" VICTAULIC	3" VICTAULIC	3" BSP							
				W2	3" VICTAULIC	3" BSP	3" VICTAULIC	327						
				M5	3" NPT	3" NPT	3" NPT							
				V5	3" VICTAULIC	3" VICTAULIC	3" NPT							
FTHG	3"	1402 (Disks)	NUT	M2	3" BSP	3" BSP	3" BSP	327	660	140	250	3/4" BSP	1/4" BSP	7,4
				V2	3" VICTAULIC	3" VICTAULIC	3" BSP							
				W2	3" VICTAULIC	3" BSP	3" VICTAULIC	327						
				M5	3" NPT	3" NPT	3" NPT							
				V5	3" VICTAULIC	3" VICTAULIC	3" NPT							

# AUTOMATIC ROTODISK™ filter

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The Automatic Rotodisk filter is a T filter manufactured from polyamide reinforced with fiber glass, provided with a special mechanical-hydraulic system for the automatic backwashing. The Automatic Rotodisk filters, when assembled as a battery of filters, using suitable hydraulic valves and a control unit, maintain a continuous irrigation cycle and reduce the waste of water and the maintenance of the filtering station. The wide range of manifolds (3" to 6") and all the available combinations (2 to 5 filters) allow the automation of any type of system.



Filtering cartridge with disks and mechanical-hydraulic system for automatic backwashing and distributor for a better filtering efficiency

Body manufactured from polyamide reinforced with fiber glass  
2" 3"



Threaded or Victaulic connections

Threaded\*

Threaded\*/Victaulic 90°

Threaded\*/Victaulic 180°



\* BSP - NPT available



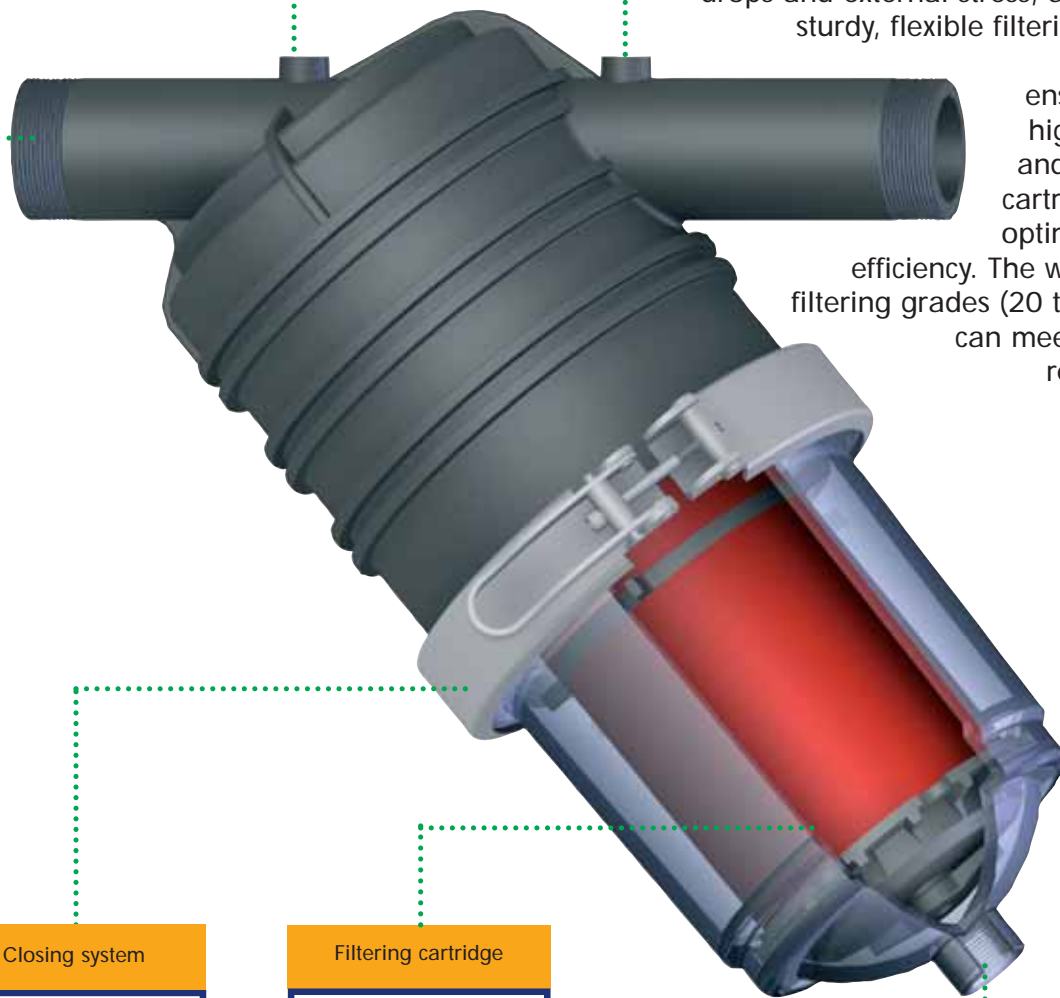


# Filtri a Y

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Available with 3/4" to 3" connections

Preset for pressure gauges



Irritec filters deliver the best filtering protection for any irrigation system. Their simple and safe frame, the fruit of an accurate constructional technology, minimize the need for maintenance. These filters can withstand pressure drops and external stress, and feature a sturdy, flexible filtering cartridge.

Tightness is ensured also at high pressures, and the filtering cartridges deliver optimum filtering efficiency. The wide range of filtering grades (20 to 450 mesh) can meet all filtering requirements.

Pre-threaded outlet

## Closing system



Stainless steel clamp



Polyamide nut



Threaded cover

## Filtering cartridge



Disks

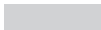



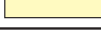







Stainless steel mesh



Stainless steel mesh + polyester

Table of the available meshes

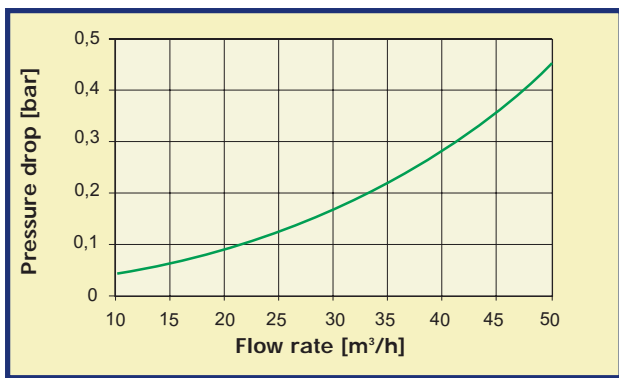
color	mesh	micron
	20	800
	30	500
	50	300
	75	200
	80	180
	100	160
	120	130
	155	100
	200	80
	450	22

**TGDISK**  
OMATIC

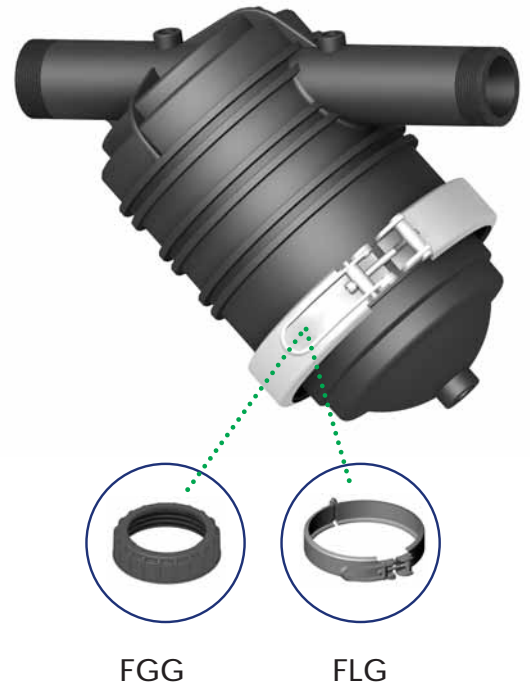
# FGG - FLG

## TECHNICAL CHARACTERISTICS

Polypropylene filter reinforced with fiber glass	
Closing systems:	stainless steel clamp or polyamide nut
Max. pressure:	8 bar at 20°C
Nominal flow rate:	25 m <sup>3</sup> /h
Filtering cartridge:	stainless steel mesh (820 cm <sup>2</sup> ) polyester mesh (1000 cm <sup>2</sup> ) Disks (916 cm <sup>2</sup> )
Cartridge diameter:	136 mm
Cartridge length:	256 mm
Available connections	2" (BSP-NPT)



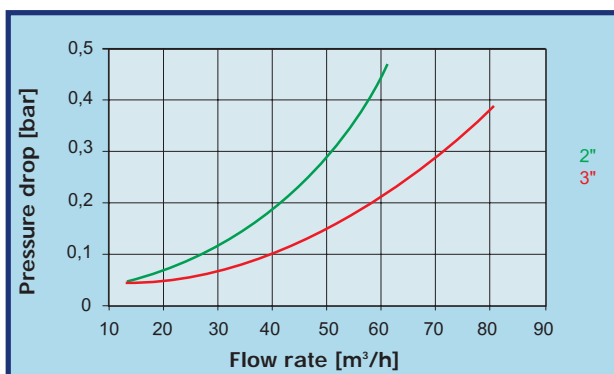
Diagrams obtained during lab tests at room temperature, with fresh water and free discharge, on a 120 mesh filter.



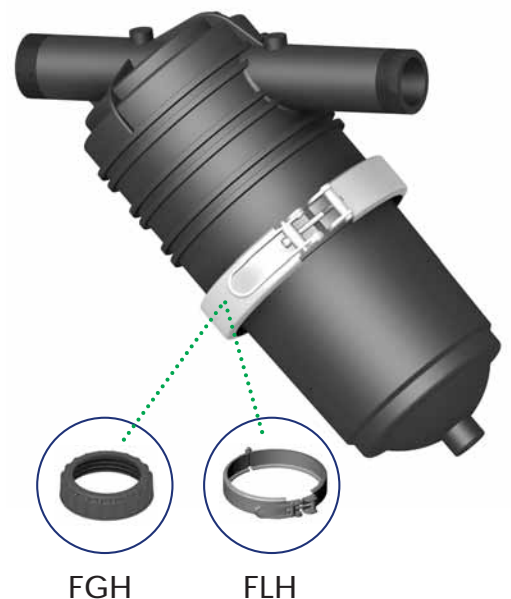
# FGH - FLH

## TECHNICAL CHARACTERISTICS

Polypropylene filter reinforced with fiber glass	
Closing systems:	stainless steel clamp or polyamide nut
Max. pressure:	8 bar at 20°C
Nominal flow rate:	2" 25 m <sup>3</sup> /h - 3" 50 m <sup>3</sup> /h
Filtering cartridge:	stainless steel mesh (1270 cm <sup>2</sup> ) polyester mesh (1900 cm <sup>2</sup> ) Disks (1402 cm <sup>2</sup> )
Cartridge diameter	136 mm
Cartridge length	446 mm
Available connections	2" - 3" (BSP-NPT)



Diagrams obtained during lab tests at room temperature, with fresh water and free discharge, on a 120 mesh filter.

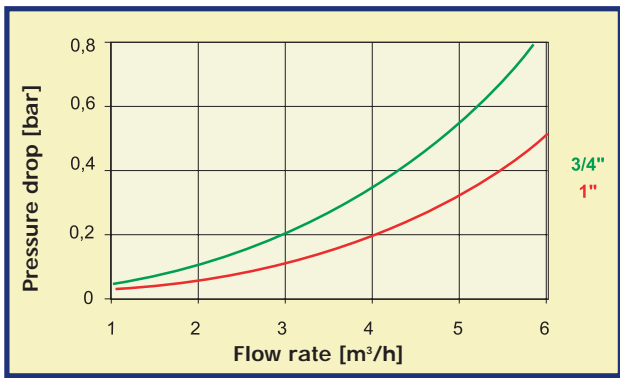


# FLC

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## TECHNICAL CHARACTERISTICS

Polypropylene filter	
Closing system:	with threaded cover
Max. pressure:	8 bar at 20°C
Nominal flow rate:	5 m <sup>3</sup> / h
Filtering cartridge:	stainless steel mesh polyester mesh (100 cm <sup>2</sup> )
Cartridge diameter	37 mm
Cartridge length	129 mm
Available connections	3/4" - 1" (BSP-NPT)



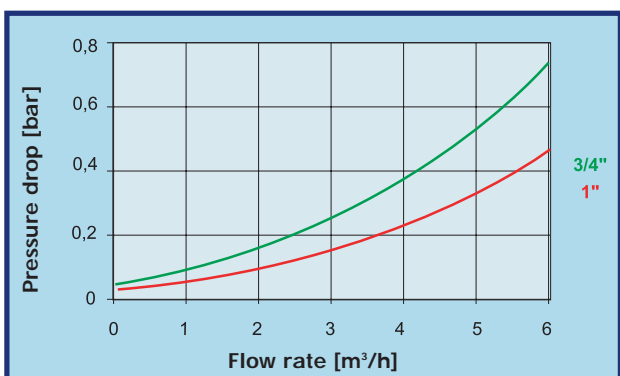
Diagrams obtained during lab tests at room temperature, with fresh water and free discharge, on a 120 mesh filter.



# FLD

## TECHNICAL CHARACTERISTICS

Polypropylene filter	
Closing system:	with threaded cover
Max. pressure:	8 bar at 20°C
Nominal flow rate:	5 m <sup>3</sup> / h
Filtering cartridge:	stainless steel mesh polyester mesh (160 cm <sup>2</sup> ) Disks (170 cm <sup>2</sup> )
Cartridge diameter	47 mm
Cartridge length	150 mm
Available connections	3/4" - 1" (BSP-NPT)



Diagrams obtained during lab tests at room temperature, with fresh water and free discharge, on a 120 mesh filter.





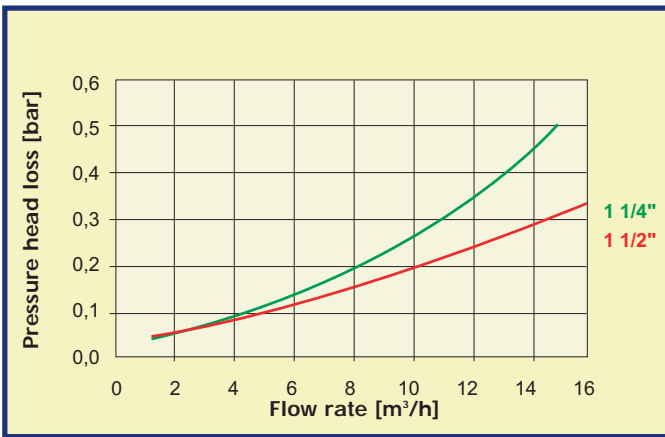
# FLE

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## TECHNICAL CHARACTERISTICS

<b>Polypropylene filter</b>	
Closing system:	with threaded cover
Max. pressure:	8 bar at 20°C
Nominal flow rate:	10 m <sup>3</sup> /h
Filtering cartridge:	stainless steel screen polyester screen (220 cm <sup>2</sup> ) - Disks (260 cm <sup>2</sup> )
Cartridge diameter	58 mm
Cartridge length	156 mm

Available connections: 1 1/4" - 1 1/2" (BSP-NPT)



Diagrams obtained during lab tests at room temperature, with fresh water and free discharge, and a 120 mesh filter.

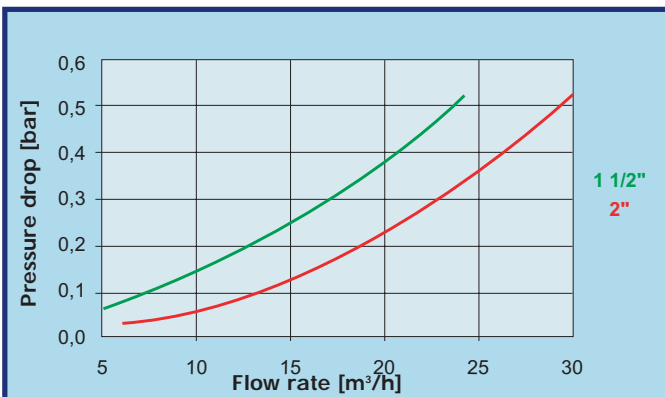


# FLF

## TECHNICAL CHARACTERISTICS

<b>Polypropylene filter</b>	
Closing system:	with threaded cover
Max. pressure:	8 bar at 20°C
Nominal flow rate:	20 m <sup>3</sup> /h
Filtering cartridge:	stainless steel screen polyester scre (450 cm <sup>2</sup> ) - Disks (500 cm <sup>2</sup> )
Cartridge diameter	86 mm
Cartridge length	198 mm

Available connections 1 1/2" - 2" (BSP-NPT)



Diagrams obtained during lab tests at room temperature, with fresh water and free discharge, on a 120 mesh filter.





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Certificato N°: 435  
Norma: UNI EN ISO 9001:2000  
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Commercializzazione accessori.

