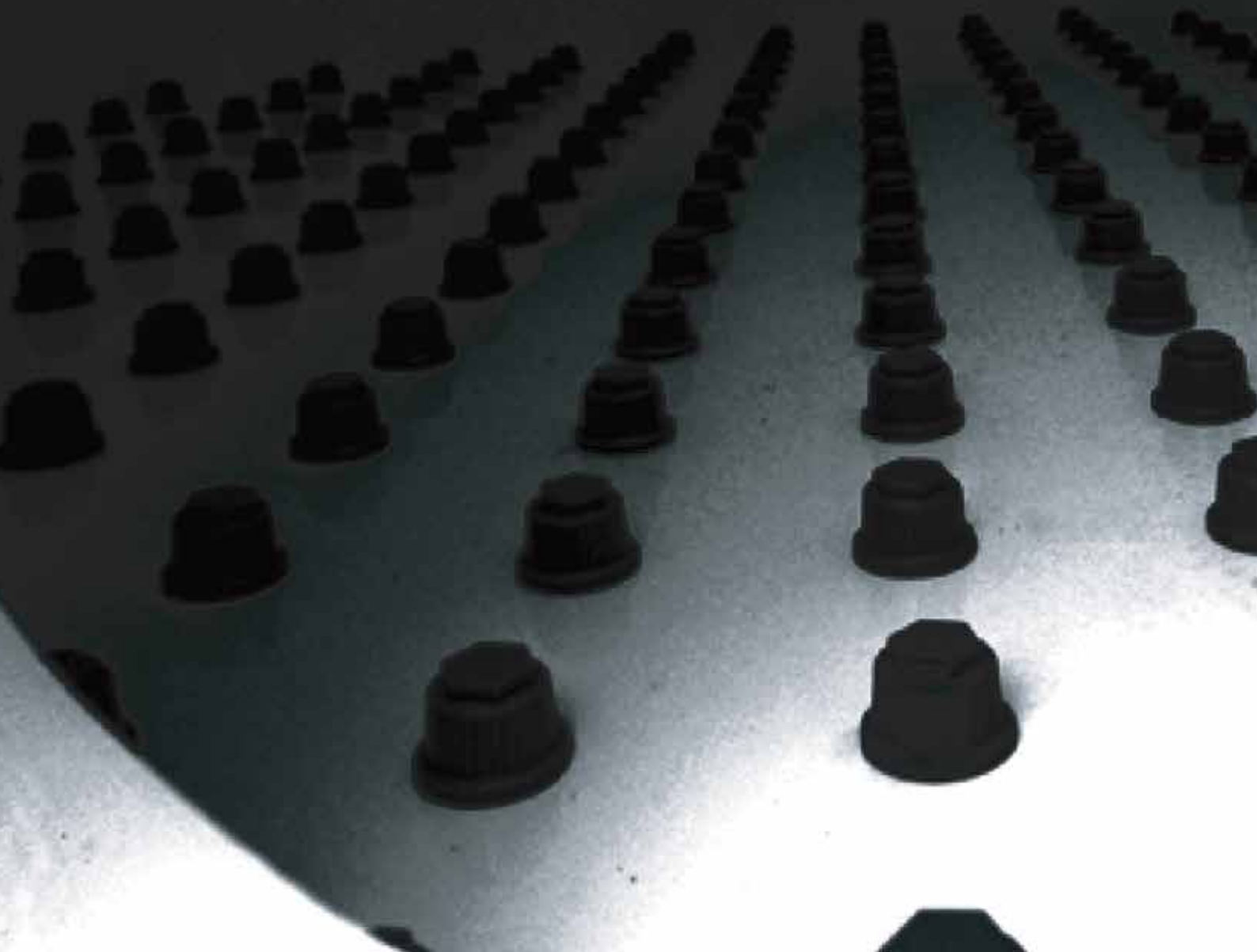


FILTRATION



Filters with manual valves in PVC - residential users

They are made of:
 - fibreglass tank food grade certified;
 - Filtering media:
 > quartz sand for FVM and DM;
 > activated carbon for KVM and KM;
 > catalytic mixture based on pyrolusite (manganese dioxide) for DFVM and DFM.
 Backwashing system composed by:
 > valve battery set consisting of 6 PVC (for backwashing with raw water or clean water)

> multi way valve made of noryl with steel handle (3V models only)
 These filters utilize components tested and certified for use with drinking water.
 The filter media complies with the following standards for use with drinking water:
 - UNI EN 12904:2005 for the quartz sand;
 - UNI EN 12915-1 for activated carbon;
 - UNI EN 13752:2009 for the pyrolusite.
 Optional accessories (see page 124)
 - Flexible IN/OUT connection kit 1", length. 35 cm

NOTE

Working pressure 1.5 to 5 bar. Operating temperature: 2-40 °C.
 From the models DM-KM-DFM 16 the equipment is supplied with filter media and valve apart, unless otherwise indicated in writing while ordering.

NB: The valve battery sets will be provided with in-out connections as in the photo (IN SX, OUT DX and IN/OUT SX for DM-KM-DFM 30 and 36) unless otherwise indicated in writing while ordering.

SAND FILTERS	Model	Filter material (Kg)	I/O connections	Flow rate (m³/h)			Backwash (m³/h)	Pressure drop (bar)
				min	med	max		
FVM16	25	1"	0,3	0,7	1,0	1,0	0,4	
FVM35	45	1"	0,5	1,0	1,6	1,6	0,4	
FVM75	100	1"	0,9	1,9	2,8	2,8	0,4	
DM16	175	1"1/2	1,3	2,6	3,9	3,9	0,4	
DM18	250	1"1/2	1,7	3,5	5,2	5,2	0,4	
DM21	300	1"1/2	2,2	4,5	6,7	6,7	0,4	
DM24	400	1"1/2	2,9	5,8	8,8	8,8	0,4	
DM30	650	63 mm	4,7	9,3	14,0	14,0	0,4	
DM36	1000	63 mm	6,6	13,2	19,8	20,0	0,4	

The minimum flow rate (velocity 10 m/h) is recommended for very cloudy water and waste-water, the maximum flow rate (velocity 30 m/h) is recommended with low turbidity water. The average flow rate is calculated at a speed of 20 m/h.

ACTIVATED CARBON FILTERS	Model	Filter material (Kg)	I/O connections	Flow rate (m³/h)			Backwash (m³/h)	Pressure drop (bar)
				min	med	max		
KVM16	11	1"	0,3	0,5	0,9	0,7	0,4	
KVM35	22	1"	0,5	0,8	1,3	1,0	0,4	
KVM75	45	1"	0,9	1,4	2,3	1,9	0,4	
KM16	75	1"1/2	1,3	1,9	3,2	2,6	0,4	
KM18	100	1"1/2	1,7	2,6	4,3	3,5	0,4	
KM21	125	1"1/2	2,2	3,3	5,6	4,5	0,4	
KM24	200	1"1/2	2,9	4,4	7,3	5,8	0,4	
KM30	325	63 mm	4,7	7,0	11,6	9,5	0,4	
KM36	600	63 mm	6,8	10,2	17,0	13,0	0,4	

The minimum flow rate (velocity 10 m/h) is recommended for water plenty of organic substances, and surfactants. The average flow rate (velocity 15 m/h) is recommended as a tertiary treatment of waste-water. The maximum flow rate (velocity 25 m/h) is recommended for the treatment of drinking water with low chlorine content or micropollutions.

IRON REMOVERS	Model	Filter material (Kg)	I/O connections	Flow rate (m³/h)			Backwash (m³/h)	Pressure drop (bar)
				min	med	max		
DFVM16	30	1"	0,3	0,4	0,5	0,9	0,3	
DFVM35	55	1"	0,4	0,6	0,8	1,3	0,3	
DFVM75	105	1"	0,7	1,0	1,4	2,3	0,3	
DFM16	190	1"1/2	1,0	1,4	1,9	3,2	0,4	
DFM18	275	1"1/2	1,4	1,9	2,6	4,3	0,3	
DFM21	315	1"1/2	1,8	2,5	3,3	5,6	0,3	
DFM24	475	1"1/2	2,3	3,2	4,4	7,3	0,4	
DFM30	700	63 mm	3,7	5,2	7,0	11,8	0,4	
DFM36	1100	63 mm	5,4	7,4	10,1	16,2	0,4	

For correct operation of the system, it is necessary that the raw water has a pH value between 7 and 8 and that it is conveniently oxidized. The maximum flow rate (velocity 15 m/h) is recommended for water with Fe < 1,0 ppm or Mn < 0,3 ppm. The average flow rate (speed 11 m/h) is recommended for water with Fe < 2,0 ppm or Mn < 0,6 ppm. For the treatment of water with higher amounts of Fe and Mn is suggested the minimum speed (8 m/h) and it is necessary place decanting and contact tanks for the feed water.



FVM 21



DFM 36



FVM 35-3V

DIMENSIONS

Model	Filtering column (mm)		Weight (Kg)		
	Ø	h	FVM-DM	KVM-KM	DFVM-DFM
FVM-KVM-DFVM16	210	1200	39	24	39
FVM-KVM-DFVM35	257	1230	51	31	56
FVM-KVM-DFVM75	334	1670	115	60	125
DM-KM-DFM16	406	2020	205	105	230
DM-KM-DFM18	469	2050	284	134	319
DM-KM-DFM21	533	1950	360	160	385
DM-KM-DFM24	610	2450	468	218	518
DM-KM-DFM30	770	2400	770	435	810
DM-KM-DFM36	1010	2350	1180	750	1250

Dimensions and weight may vary without advance notice. In the case of binding dimensions contact the technical office.

Code	Euro
FVM16	
FVM35	
FVM75	
FVM16-3V	
FVM35-3V	
FVM75-3V	
DM16	
DM18	
DM21	
DM24	
DM30	
DM36	

Code	Euro
KVM16	
KVM35	
KVM75	
KVM16-3V	
KVM35-3V	
KVM75-3V	
KM16	
KM18	
KM21	
KM24	
KM30	
KM36	

Code	Euro
DFVM16	
DFVM35	
DFVM75	
DFVM16-3V	
DFVM35-3V	
DFVM75-3V	
DFM16	
DFM18	
DFM21	
DFM24	
DFM30	
DFM36	

SAND FILTERS

ACTIVATED CARBON FILTERS

IRON REMOVERS

Automatic filter systems for residential users

Filter plants suitable for residential users and little industrial applications.

They are composed of:

- fibreglass tank food grade certified;
- filtering media:
 - > quartz sand for FVA;
 - > activated carbon for KVA;
 - > catalytic mixture based on pyrolusite (manganese dioxide) for DFVA;
- multifunction valve Pentair, Autotrol, Fleck or Siata (see photo)
- ability to program the backwash with a set time interval (days) and to determine the cycle time in minutes.

The valves supply unfiltered water during backwashing.

The microswitch kit (optional) permit to obtain a voltfree contact during the backwashing phase (for example: to blocking water supply, pumps start-up, solenoid valves closing, turn off of downstream users, etc.). Made in line with Italian norms for materials in contact with potable waters:

- UNI EN 12904:2005 for the quartz sand;
- UNI EN 12915-1 for activated carbon;
- UNI EN 13752:2009 for the pyrolusite.

Valves choice guide

- LGX 263 series with valve Autotrol Logix electronic and with timer/filtration. Modern valve with wide display LCD, simple interface, programmable regeneration time schedule, changeable duration of filter backwashing.

- FL 5600 SXT series with valve Fleck electronic and with timer/filtration. New valve with LCD display, simplify interface, programmable regeneration time schedule, changeable duration of filter backwashing.

- SI 132 with valve Siata electronic and with SFE time controller. New and sophisticated Siata timer. Programmable regeneration time schedule, changeable duration of filter backwashing. Entering in the advance menu you can visualize the history of filter operations.



Optional accessories (see pages 122/123/124)

- auxiliary microswitch kit for backwash signal;
- by pass;
- flexible IN-OUT connection kit 1", length 35 cm.

TECHNICAL DATA

	Model	Filtering material (Kg)	Valve	I/O connections	Flow rate (m³/h)			Backwash (m³/h)	Pressure drop (bar)
					min	med	max		
SAND FILTERS	FVA16	25	LGX263-FL5600SXT-SI132	1"	0,3	0,7	1,0	1,0	0,4
	FVA35	45	LGX263-FL5600SXT-SI132	1"	0,5	1,0	1,6	1,6	0,6
	FVA75	100	LGX263-SI132	1"	0,9	1,9	2,8	2,8	0,4
	FVA120	175	SI132	1"	1,3	2,6	3,9	3,9	0,5

The minimum flow rate (velocity 10 m/h) is recommended for very cloudy drinking water and waste-water, the maximum flow rate (velocity 30 m/h) is recommended with low turbidity water. The average flow rate is calculated at a speed of 20m/h.

	Model	Filtering material (Kg)	Valve	I/O connections	Flow rate (m³/h)			Backwash (m³/h)	Pressure drop (bar)
					min	med	max		
ACTIVATED CARBON FILTERS	KVA16	11	LGX263-FL5600SXT-SI132	1"	0,3	0,5	0,9	0,7	0,4
	KVA35	22	LGX263-FL5600SXT-SI132	1"	0,5	0,8	1,3	1,0	0,4
	KVA75	45	LGX263-SI132	1"	0,9	1,4	2,3	1,9	0,4
	KVA120	75	SI132	1"	1,3	1,9	3,2	2,6	0,4

The minimum flow rate (velocity 10 m/h) is recommended for water plenty of organic substances, and surfactants. The average flow rate (velocity 15 m/h) is recommended as a tertiary treatment of waste-water. The maximum flow rate (velocity 25 m/h) is recommended for the treatment of drinking water with low chlorine content or micro-pollution.

	Model	Filtering material (Kg)	Valve	I/O connections	Flow rate (m³/h)			Backwash (m³/h)	Pressure drop (bar)
					min	med	max		
IRON REMOVERS	DFVA16	30	LGX263-FL5600SXT-SI132	1"	0,3	0,4	0,5	0,9	0,3
	DFVA35	55	LGX263-FL5600SXT-SI132	1"	0,4	0,6	0,8	1,3	0,4
	DFVA75	105	LGX263-SI132	1"	0,7	1,0	1,4	2,3	0,3
	DFVA120	190	SI132	1"	1,0	1,4	1,9	3,2	0,4

For correct operation of the system, it is necessary that the raw water has a pH value between 7 and 8 and that it is conveniently oxidized. The maximum flow rate (velocity 15 m/h) is recommended for water with Fe < 1,0 ppm or Mn < 0,3 ppm. The average flow rate (speed 11 m/h) is recommended for water with Fe < 2,0 ppm or Mn < 0,6 ppm. For the treatment of water with higher amounts of Fe and Mn is suggested the minimum speed (7 m/h) and it is necessary to place decanting and contact tanks for the feed water.

Note: Working pressure 1.5 to 5 bar. Electrical feed 230 V-50Hz. Operating temperature: 2-40 °C.

FVA-KVA-DFVA 120 is supplied with filter material and the valve apart, unless otherwise indicated in writing while ordering.

DIMENSIONS

Model	Filtering column		Weight (Kg)		
	Ø (mm)	h (mm)	FVA	KVA	DFVA
FVA-KVA-DFVA 16	210	1110	39	24	39
FVA-KVA-DFVA 35	257	1330	51	31	56
FVA-KVA-DFVA 75	334	1590	115	60	125
FVA-KVA-DFVA 120	406	1860	205	105	230

Dimensions and weight may vary without advance notice. In the case of binding dimensions contact the technical office.

	Code	Euro
SAND FILTER	FVA AUTOTROL	
	FVA16-LGX263	
	FVA35-LGX263	

	Code	Euro
FVA FLECK	FVA16-FL5600SXT	
	FVA35-FL5600SXT	

	Code	Euro
FVA SIATA 132	FVA16-SI132	
	FVA35-SI132	
	FVA75-SI132	
	FVA120-SI132	

	Code	Euro
KVA AUTOTROL	KVA16-LGX263	
	KVA35-LGX263	
	KVA75-LGX263	

	Code	Euro
KVA FLECK	KVA16-FL5600SXT	
	KVA35-FL5600SXT	

	Code	Euro
KVA SIATA	KVA16-SI132	
	KVA35-SI132	
	KVA75-SI132	
	KVA120-SI132	

	Code	Euro
DFVA AUTOTROL	DFVA16-LGX263	
	DFVA35-LGX263	
	DFVA75-LGX263	

	Code	Euro
DFVA FLECK	DFVA16-FL5600SXT	
	DFVA35-FL5600SXT	

	Code	Euro
DFVA SIATA	DFVA16-SI132	
	DFVA35-SI132	
	DFVA75-SI132	
	DFVA120-SI132	

Filters with automatic valves Fleck, residential and industrial users

They are made of:

- fibreglass tank food grade certified;
- or
- epoxy painted steel tank (models 60 and 65) with a special anti-corrosion interior food grade certified;
- filtering material:
 - > quartz sand for DA;
 - > activated carbon for KA;
 - > catalytic mixture based on Pyrolusite (manganese dioxide) for DFA.
- automatic valves Fleck 7700 or Fleck 2850 with electronic timer SXT;
- ability to program the backwash with a set time interval (days) and to determine the cycle time in minutes. The valves supply unfiltered water during backwashing.

Valve Selection Guide

Fleck 7700 SXT filter valve, with electronic programmer and LCD display, valve body in Noryl, I/O connections 1"1/4, 6 adjustable cycles, time clock backwashing, flow rate max 8.1 m³/h, back wash flow 7.1 m³/h, unfiltered water supplied during backwash.



Valve Fleck 2850 SXT filter, with electronic programmer with LCD display, bronze valve body, I/O connections 1"1/2, 5 adjustable cycles, time clock backwashing, flow rate max 11,6 m³/h, backwash 10.8 m³/h, unfiltered water supplied during backwash.



NOTE

Note: Working pressure 1.5 to 5 bar. Electrical feed 230 V-50Hz. Operating temperature: 2-40 °C.

The equipments are supplied with filter media and the valve apart, unless otherwise indicated in writing while ordering.

Filters with automatic valves Fleck- industrial users

Through the microswitch kits (optional) you can acquire a volt-free contact when the system is in backwash (e.g. to block the supply of water in use, to start pumps, close valves, and to turn off downstream installations etc.).

These filters utilize components tested and certified for use with drinking water.

The filter media complies with the following standards for use with drinking water:

- UNI EN 12904:2005 for the quartz sand;
- UNI EN 12915-1 for activated carbon;
- UNI EN 13752:2009 for the pyrolusite.

Optional accessories (see page 123)

- auxiliary microswitch kit for backwash signal.



TECHNICAL DATA

	Model	Filtering material (Kg)	Valve	I/O connections	Flow rate (m ³ /h)			Backwash (m ³ /h)	Pressure drop (bar)
					min	med	max		
SAND FILTERS	DA16-FL7700	175	FL7700 SXT	1"1/4	1,3	2,6	3,9	3,9	0,4
	DA18-FL7700	250	FL7700 SXT	1"1/4	1,7	3,5	5,2	5,2	0,4
	DA21-FL7700	300	FL7700 SXT	1"1/4	2,2	4,5	6,7	6,7	0,6
	DA24-FL7700	450	FL7700 SXT	1"1/4	2,9	5,8	8,1	7,1	0,4
	DA60-FL2850SXT	450	FL2850 SXT	1"1/2	2,9	5,8	8,8	8,8	0,4
	DA65-FL2850SXT	550	FL2850 SXT	1"1/2	3,3	6,6	9,9	9,9	0,4

The minimum flow rate (velocity 10 m/h) is recommended for very cloudy drinking water and waste-water, the maximum flow rate (velocity 30 m/h) is recommended with low turbidity water. The average flow rate is calculated at a speed of 20 m/h.

ACTIVATED CARBON FILTERS	KA16-FL7700	75	FL7700 SXT	1"1/4	1,3	1,9	3,2	2,6	0,3
	KA18-FL7700	100	FL7700 SXT	1"1/4	1,7	2,6	4,3	3,5	0,4
	KA21-FL7700	125	FL7700 SXT	1"1/4	2,2	3,3	5,6	4,5	0,4
	KA24-FL7700	200	FL7700 SXT	1"1/4	2,9	4,4	7,3	5,8	0,4
	KA60-FL2850SXT	200	FL2850 SXT	1"1/2	2,9	4,4	7,3	5,8	0,4
	KA65-FL2850SXT	275	FL2850 SXT	1"1/2	3,3	5,0	8,3	6,6	0,4

The minimum flow rate (velocity 10 m/h) is recommended for water plenty of organic substances and surfactants. The average flow rate (velocity 15 m/h) is recommended as a tertiary treatment of waste water. The maximum flow rate (velocity 25 m/h) is recommended for the treatment of drinking water with low chlorine content or micro-pollution.

IRON REMOVERS	DFA16-FL7700	190	FL7700 SXT	1"1/4	1,0	1,4	1,9	3,2	0,3
	DFA18-FL7700	275	FL7700 SXT	1"1/4	1,4	1,9	2,6	4,3	0,3
	DFA21-FL7700	315	FL7700 SXT	1"1/4	1,8	2,5	3,3	5,6	0,4
	DFA24-FL7700	475	FL7700 SXT	1"1/4	2,3	3,2	4,4	7,1	0,3
	DFA60-FL2850SXT	475	FL2850 SXT	1"1/2	2,3	3,2	4,4	7,3	0,3
	DFA65-FL2850SXT	575	FL2850 SXT	1"1/2	2,7	3,6	5,0	8,3	0,4

For correct operation of the system, it is necessary that the raw water has a pH value between 7 and 8 and that it is conveniently oxidized. The maximum flow rate (velocity 15 m/h) is recommended for water with Fe < 1,0 ppm or Mn < 0,3 ppm. The average flow rate (speed 11 m/h) is recommended for water with Fe < 2,0 ppm or Mn < 0,6 ppm. For the treatment of water with higher amounts of Fe and Mn is suggested the minimum speed (8 m/h) and it is necessary place decanting and contact tanks for the feed water.

DIMENSIONS

Model	Filtering column		Weight (Kg)		
	Ø (mm)	h (mm)	DA	KA	DFA
DA-KA-DFA 16-FL7700	406	1875	230	105	245
DA-KA-DFA 18-FL7700	469	1901	280	130	300
DA-KA-DFA 21-FL7700	533	1800	330	160	350
DA-KA-DFA 24-FL7700	610	2305	440	239	515
DA-KA-DFA 60-FL2850	600	2190	506	306	582
DA-KA-DFA 65-FL2850	650	2200	650	360	695

Dimensions and weight may vary without advance notice. In the case of binding dimensions contact the technical office.

	Code	Euro
SAND FILTER	DA16-FL7700	
	DA18-FL7700	
	DA21-FL7700	
	DA24-FL7700	
	DA60-FL2850SXT	
	DA65-FL2850SXT	

	Code	Euro
ACTIVATED CARBON FILTER	KA16-FL7700	
	KA18-FL7700	
	KA21-FL7700	
	KA24-FL7700	
	KA60-FL2850SXT	
	KA65-FL2850SXT	

	Code	Euro
IRON REMOVER	DFA16-FL7700	
	DFA18-FL7700	
	DFA21-FL7700	
	DFA24-FL7700	
	DFA60-FL2850SXT	
	DFA65-FL2850SXT	

Filters with automatic valves Siata for industrial users

They are made of:

- fibreglass tank food grade certified;
- or
- epoxy painted steel tank (series 60/65/80 SI250) with a special anti-corrosion interior food grade certified;
- filtering material :
- > quartz sand for DA;
- > activated carbon for KA;
- > catalytic mixture based on Pyrolusite (manganese dioxide) for DFA.
- automatic valves SIATA 230 or 250 with electronic timer SFE.
- ability to program the backwash with a set time interval (days) and to determine the cycle time in minutes.

The advanced menu displays the statistics relative to the life of the filter. Through the microswitch kits (optional) you can acquire a volt-free contact when the system is in backwash (e.g. to block the supply of water in use, to start pumps, close valves, and to turn off downstream installations etc.). Siata 230 valve supply unfiltered water during backwash, Siata 250 valve do not supply water during backwash. These filters utilize components tested and certified for use with drinking water. The filter media complies with the following standards for use with drinking water:

- UNI EN 12904:2005 for the quartz sand;
- UNI EN 12915-1 for activated carbon;
- UNI EN 13752:2009 for the pyrolusite.

Optional accessories (see page 123)

- auxiliary microswitch kit for backwash signal.

NOTE

Note: Working pressure 1.5 to 5 bar. Electrical feed 230 V-50Hz.
Operating temperature: 2-40 °C.

The equipments are supplied with filter media and the valve apart, unless otherwise indicated in writing while ordering.

Valve Selection Guide

Siata filter valve 230, with electronic programmer SFE, LCD display, fibreglass and ABS valve body, I/O connections 1"1/4, adjustable cycles, time clock backwashing, flow rate max 10 m³/h, backwash flow 4 m³/h, unfiltered water supplied during backwash.



Siata filter valve 250, with electronic programmer SFE, LCD display, fibreglass and ABS valve body, I/O connections 1"1/2, adjustable cycles, time clock backwashing, flow rate max 21 m³/h. The valve does not supply water during the back wash.



TECHNICAL DATA

SAND FILTERS	Model	Filtering material (Kg)	Valve	I/O connections	Flow rate (m³/h)			Backwash (m³/h)	Pressure drop (bar)
					min	med	max		
DA16-SI230	175	SI230	1"1/4	1,3	2,6	3,9	3,9	0,4	
DA18-SI230	250	SI230	1"1/4	1,7	3,5	5,0	4,0	0,4	
DA21-SI250	300	SI250	1"1/2	2,2	4,5	6,7	6,7	0,6	
DA24-SI250	450	SI250	1"1/2	2,9	5,8	8,8	8,8	0,4	
DA30-SI250	650	SI250	1"1/2	4,7	9,3	14,0	13,0	0,5	
DA60-SI250	450	SI250	1"1/2	2,8	5,7	8,5	8,5	0,4	
DA65-SI250	550	SI250	1"1/2	3,3	6,6	9,9	9,9	0,4	
DA80-SI250	825	SI250	1"1/2	5,0	10,0	15,0	13,0	0,5	

The minimum flow rate (velocity 10 m/h) is recommended for very cloudy drinking water and waste-water, the maximum flow rate (velocity 30 m/h) is recommended with low turbidity water. The average flow rate is calculated at a speed of 20 m/h.

ACTIVATED CARBON FILTERS	Model	Filtering material (Kg)	Valve	I/O connections	Flow rate (m³/h)			Backwash (m³/h)	Pressure drop (bar)
					min	med	max		
KA16-SI230	75	SI230	1"1/4	1,3	1,9	3,2	2,6	0,3	
KA18-SI230	100	SI230	1"1/4	1,7	2,6	4,3	3,5	0,4	
KA21-SI250	125	SI250	1"1/2	2,2	3,3	5,6	4,5	0,4	
KA24-SI250	200	SI250	1"1/2	2,9	4,4	7,3	5,8	0,4	
KA30-SI250	325	SI250	1"1/2	4,7	7,0	11,6	9,6	0,4	
KA60-SI250	200	SI250	1"1/2	2,8	4,2	7,1	5,7	0,4	
KA65-SI250	275	SI250	1"1/2	3,3	5,0	8,3	6,6	0,4	
KA80-SI250	400	SI250	1"1/2	5,0	7,5	12,6	10,0	0,4	

The minimum flow rate (velocity 10m/h) is recommended for water plenty of organic substances and surfactants. The average flow rate (velocity 15m/h) is recommended as a tertiary treatment of waste water. The maximum flow rate (velocity 25m/h) is recommended for the treatment of drinking water with low chlorine content or micropollution.

IRON REMOVERS	Model	Filtering material (Kg)	Valve	I/O connections	Flow rate (m³/h)			Backwash (m³/h)	Pressure drop (bar)
					min	med	max		
DFA16-SI230	190	SI230	1"1/4	1,0	1,4	1,9	3,2	0,3	
DFA18-SI230	275	SI230	1"1/4	1,4	1,9	2,6	4,0	0,3	
DFA21-SI250	315	SI250	1"1/2	1,8	2,5	3,3	5,6	0,4	
DFA24-SI250	475	SI250	1"1/2	2,3	3,2	4,4	7,3	0,3	
DFA30-SI250	700	SI250	1"1/2	3,7	5,2	7,0	11,6	0,4	
DFA60-SI250	475	SI250	1"1/2	2,3	3,1	4,2	7,1	0,3	
DFA65-SI250	575	SI250	1"1/2	2,7	3,6	5,0	8,3	0,3	
DFA80-SI250	875	SI250	1"1/2	4,0	5,5	7,5	12,6	0,4	

For correct operation of the system, it is necessary that the raw water has a pH value between 7 and 8 and that it is conveniently oxidized. The maximum flow rate (velocity 15 m/h) is recommended for water with Fe < 1,0 ppm or Mn < 0,3 ppm. The average flow rate (speed 11 m/h) is recommended for water with Fe < 2,0 ppm or Mn < 0,6 ppm. For the treatment of water with higher amounts of Fe and Mn is suggested the minimum speed (8 m/h) and it is necessary place decanting and contact tanks for the feed water.



DIMENSIONS

Model	Filtering column		Weight (Kg)		
	Ø (mm)	h (mm)	DA	KA	DFA
DA-KA-DFA16-SI230	406	1850	230	105	245
DA-KA-DFA18-SI230	469	1900	280	130	300
DA-KA-DFA21-SI250	533	1940	330	160	350
DA-KA-DFA24-SI250	610	2440	450	240	515
DA-KA-DFA30-SI250	770	2560	750	420	800
DA-KA-DFA60-SI250	600	2390	510	310	575
DA-KA-DFA65-SI250	650	2400	650	350	685
DA-KA-DFA80-SI250	800	2430	995	520	1070

Dimensions and weight may vary without advance notice. In the case of binding dimensions contact the technical office.

Code	Euro
DA16-SI230	
DA18-SI230	
DA21-SI250	
DA24-SI250	
DA30-SI250	
DA60-SI250	
DA65-SI250	
DA80-SI250	

Code	Euro
KA16-SI230	
KA18-SI230	
KA21-SI250	
KA24-SI250	
KA30-SI250	
KA60-SI250	
KA65-SI250	
KA80-SI250	

Code	Euro
DFA16-SI230	
DFA18-SI230	
DFA21-SI250	
DFA24-SI250	
DFA30-SI250	
DFA60-SI250	
DFA65-SI250	
DFA80-SI250	

Manual filters with steel ball/butterfly valves

Filters with batteries of manual valves for civil and industrial users with mid/high flow rates.

They are made of:

- epoxy painted steel tank with a special anti-corrosion interior food grade certified;

- filter media:

> quartz sand for DM;

> activated carbon for KM;

> catalytic mixture based on Pyrolusite (manganese dioxide) for DFM.

- battery valve set composed by 5 ball valves in cast iron/steel for models up to 2" size;

- battery valve set composed by 5 butterfly and/or ball valves models starting from DN80 size.

- distribution system from PVC and polypropylene and arm collector system.

These filters utilize components tested and certified for use with drinking water.

NOTE

Note: Working pressure 1.5 to 5 bar. Operating temperature: 2-40 °C.
The equipment is supplied with filter material and the valve apart, unless otherwise indicated in writing while ordering.

The IN-OUT connections are supplied for either right or left depending on the availability, unless otherwise stated by the client in writing when ordering.

TECHNICAL DATA

SAND FILTERS

Model	Filter material (Kg)	Valves set	I/O connections	Flow rate (m³/h)			Backwash (m³/h)	Pressure drop (bar)
				min	med	max		
DM 60	450	ball	1"1/2	2,8	5,7	8,5	8,5	0,3
DM 65	550	ball	1"1/2	3,3	6,6	9,9	9,9	0,3
DM 80	825	ball	2"	5,0	10,0	15,0	15,0	0,3
DM 95	1200	ball	2"	7,1	14,2	21,3	21,3	0,3
DM 110	1625	ball	2"	9,5	19,0	28,5	28,5	0,4
DM 130	2325	ball	2"	13,3	26,5	39,8	39,8	0,4
DM 140	2725	butterfly/ball	DN80	15,4	30,8	46,2	46,2	0,3
DM 150	3150	butterfly/ball	DN80	17,7	35,3	53,0	53,0	0,3
DM 160	3625	butterfly/ball	DN80	20,1	40,2	60,3	60,3	0,3
DM 180	4675	butterfly/ball	DN80	25,4	50,9	76,3	76,3	0,4
DM 200	5925	butterfly	DN100	31,4	62,8	94,2	94,2	0,5

The minimum flow rate (velocity 10 m/h) is recommended for very cloudy drinking water and waste-water, the maximum flow rate (velocity 30 m/h) is recommended with low turbidity water. The average flow rate is calculated at a speed of 20 m/h.

ACTIVATED CARBON FILTERS

KM 60	200	ball	1"1/2	2,8	4,2	7,1	5,7	0,3
KM 65	275	ball	1"1/2	3,3	5,0	8,3	6,6	0,3
KM 80	400	ball	2"	5,0	7,5	12,6	10,0	0,3
KM 95	625	ball	2"	7,1	10,6	17,7	14,2	0,3
KM 110	850	ball	2"	9,5	14,2	23,7	19,0	0,4
KM 130	1250	ball	2"	13,3	19,9	33,2	26,5	0,4
KM 140	1475	butterfly/ball	DN80	15,4	23,1	38,5	30,8	0,3
KM 150	1725	butterfly/ball	DN80	17,7	26,5	44,2	35,3	0,3
KM 160	2000	butterfly/ball	DN80	20,1	30,1	50,2	40,2	0,3
KM 180	2625	butterfly/ball	DN80	25,4	38,2	63,6	50,9	0,4
KM 200	3400	butterfly	DN100	31,4	47,1	78,5	62,8	0,5

The minimum flow rate (velocity 10 m/h) is recommended for water plenty of organic substances and surfactants. The average flow rate (velocity 15 m/h) is recommended as a tertiary treatment of waste water. The maximum flow rate (velocity 25 m/h) is recommended for the treatment of drinking water with low chlorine content or micro-pollution.

IRON REMOVERS

DFM 60	475	a sfera	1"1/2	2,3	3,1	4,2	7,1	0,3
DFM 65	575	a sfera	1"1/2	2,7	3,6	5,0	8,3	0,3
DFM 80	875	a sfera	1"1/2	4,0	5,5	7,5	12,6	0,3
DFM 95	1275	a sfera	1"1/2	5,7	7,8	10,6	17,7	0,3
DFM 110	1700	a sfera	2"	7,6	10,4	14,2	23,7	0,4
DFM 130	2450	a sfera	2"	10,6	14,6	19,9	33,2	0,4
DFM 140	2850	a sfera	2"	12,3	16,9	23,1	38,5	0,3
DFM 150	3300	a sfera	2"	14,1	19,4	26,5	44,2	0,3
DFM 160	3800	a farfalla/sfera	DN80	16,1	22,1	30,1	50,2	0,3
DFM 180	4900	a farfalla/sfera	DN80	20,3	28,0	38,2	63,6	0,4
DFM 200	6200	a farfalla/sfera	DN80	25,1	34,5	47,1	78,5	0,5

For correct operation of the system, it is necessary that the raw water has a pH value between 7 and 8 and that it is conveniently oxidized. The maximum flow rate (velocity 15 m/h) is recommended for water with Fe < 1,0 ppm or Mn < 0,3 ppm. The average flow rate (speed 11 m/h) is recommended for water with Fe < 2,0 ppm or Mn < 0,6 ppm. For the treatment of water with higher amounts of Fe and Mn is suggested the minimum speed (7 m/h) and it is necessary place decanting and contact tanks for the feed water.



DIMENSIONS

Model	Filtering column			Weight (Kg)		
	Ø (mm)	prof. c/batteria (mm)	h (mm)	DM	KM	DFM
DM-KM-DFM 60	600	900	2100	616	574	648
DM-KM-DFM 65	650	950	2110	718	667	754
DM-KM-DFM 80	800	1100	2200	1083	1008	1140
DM-KM-DFM 95	950	1270	2235	1555	1448	1634
DM-KM-DFM 110	1100	1480	2315	2045	1902	2150
DM-KM-DFM 130	1300	1680	2410	2938	2738	3085
DM-KM-DFM 140	1400	1850	2460	3467	3236	3637
DM-KM-DFM 150	1500	1950	2650	3970	3705	4165
DM-KM-DFM 160	1600	2050	2790	4817	4514	5037
DM-KM-DFM 180	1800	2320	2930	6091	5709	6369
DM-KM-DFM 200	2000	2550	3050	7580	7107	7872

Dimensions and weight may vary without advance notice. In the case of binding dimensions contact the technical office.

The filter material complies with the following standards for use with drinking water:

- UNI EN 12904:2005 for the quartz sand;
- UNI EN 12915-1 for activated carbon;
- UNI EN 13752:2009 for the pyrolusite.



Detail of point inside the tank



Internal distribution system

Code	Euro	Code	Euro
DM 60		DM 140	
DM 65		DM 150	
DM 80		DM 160	
DM 95		DM 180	
DM 110		DM 200	
DM 130			

Code	Euro	Code	Euro
KM 60		KM 140	
KM 65		KM 150	
KM 80		KM 160	
KM 95		KM 180	
KM 110		KM 200	
KM 130			

Code	Euro	Code	Euro
DFM 60		DFM 140	
DFM 65		DFM 150	
DFM 80		DFM 160	
DFM 95		DFM 180	
DFM 110		DFM 200	
DFM 130			

Filters with batteries of automatic valves for civil and industrial users with mid/high flow rates.

They are made of:

- epoxy painted steel tank with a special anti-corrosion interior food grade certified;
- filter material :
 - > quartz sand for DP;
 - > activated carbon for KP;
 - > catalytic mixture based on Pyrolusite (manganese dioxide) for DFP.
- battery valve set composed by 5 diaphragm valves in cast iron, for models up to DN100 size;
- battery valve set composed by 5 butterfly valves, for models starting from DN100 size.
- distribution system made of ABS and PP and arm collector system;
- AQUASTAR LOGO TD, electronic controller with LCD display, keyboard and Siemens logical unit to automatically control filter backwash;
- battery set of solenoid pilot valve to operate the control of diaphragm and butterfly valves.

The standard series works with automatic backwashing control (up to 3 times a day), or with an external impulse (e.g. from a PLC).

As an option you can order the control to perform backwash with differential water pressure. The filter does not supply water during the backwash.



NOTE

Battery set of solenoid 3 way pilot valve to operate the control of diaphragm can only be used with either air or clean water. Battery set of solenoid 5 pilot valve to operate the control of butterfly valves can only be used with air. Working pressure 1.5 to 5 bar. Electrical feed 230 V-50Hz. Operating temperature: 2-40 °C. The equipment is supplied with filter media apart, unless otherwise indicated in writing while ordering. The I/O connections are supplied for either right or left depending on the availability, unless otherwise stated by the client in writing when ordering.

TECHNICAL DATA

Model	Filter material (Kg)	Valves set	I/O connections	Flow rate (m ³ /h)			Backwash (m ³ /h)	Pressure drop (bar)
				min	med	max		
SAND FILTERS								
DP 60	450	diaphragm	1"1/2	2,8	5,7	8,5	8,5	0,3
DP 65	550	diaphragm	1"1/2	3,3	6,6	9,9	9,9	0,3
DP 80	825	diaphragm	2"	5,0	10,0	15,0	15,0	0,3
DP 95	1200	diaphragm	2"	7,1	14,2	21,3	21,3	0,3
DP 110	1625	diaphragm	2"	9,5	19,0	28,5	28,5	0,3
DP 130	2325	diaphragm	2"	13,3	26,5	39,8	39,8	0,4
DP 140	2725	diaphragm	DN80	15,4	30,8	46,2	46,2	0,3
DP 150	3150	diaphragm	DN80	17,7	35,3	53,0	53,0	0,3
DP 160	3625	diaphragm	DN80	20,1	40,2	60,3	60,3	0,3
DP 180	4675	diaphragm	DN80	25,4	50,9	76,3	76,3	0,3
DP 200	5925	diaphragm	DN100	31,4	62,8	94,2	94,2	0,4
DP 200F-DN100	5925	butterfly	DN100	31,4	62,8	94,2	94,2	0,3

The minimum flow rate (velocity 10 m/h) is recommended for very cloudy drinking water and waste-water, the maximum flow rate (velocity 30 m/h) is recommended with low turbidity water. The average flow rate is calculated at a speed of 20 m/h.

Model	Filter material (Kg)	Valves set	I/O connections	Flow rate (m ³ /h)			Backwash (m ³ /h)	Pressure drop (bar)
				min	med	max		
ACTIVATED CARBON FILTERS								
KP 60	200	diaphragm	1"1/2	2,8	4,2	7,1	5,7	0,3
KP 65	275	diaphragm	1"1/2	3,3	5,0	8,3	6,6	0,3
KP 80	400	diaphragm	2"	5,0	7,5	12,6	10,0	0,3
KP 95	625	diaphragm	2"	7,1	10,6	17,7	14,2	0,3
KP 110	850	diaphragm	2"	9,5	14,2	23,7	19,0	0,3
KP 130	1250	diaphragm	2"	13,3	19,9	33,2	26,5	0,4
KP 140	1475	diaphragm	DN80	15,4	23,1	38,5	30,8	0,3
KP 150	1725	diaphragm	DN80	17,7	26,5	44,2	35,3	0,3
KP 160	2000	diaphragm	DN80	20,1	30,1	50,2	40,2	0,3
KP 180	2625	diaphragm	DN80	25,4	38,2	63,6	50,9	0,3
KP 200	3400	diaphragm	DN100	31,4	47,1	78,5	62,8	0,4
KP 200F-DN100	3400	butterfly	DN100	31,4	47,1	78,5	62,8	0,3

The minimum flow rate (velocity 10 m/h) is recommended for water plenty of organic substances and surfactants. The average flow rate (velocity 15 m/h) is recommended as a tertiary treatment of waste water. The maximum flow rate (velocity 25 m/h) is recommended for the treatment of drinking water with low chlorine content or micropollution.

Model	Filter material (Kg)	Valves set	I/O connections	Flow rate (m ³ /h)			Backwash (m ³ /h)	Pressure drop (bar)
				min	med	max		
IRON REMOVERS								
DFP 60	475	diaphragm	1"1/2	2,3	3,1	4,2	7,1	0,3
DFP 65	575	diaphragm	1"1/2	2,7	3,6	5,0	8,3	0,3
DFP 80	875	diaphragm	1"1/2	4,0	5,5	7,5	12,6	0,3
DFP 95	1275	diaphragm	1"1/2	5,7	7,8	10,6	17,7	0,3
DFP 110	1700	diaphragm	2"	7,6	10,4	14,2	23,7	0,3
DFP 130	2450	diaphragm	2"	10,6	14,6	19,9	33,2	0,4
DFP 140	2850	diaphragm	2"	12,3	16,9	23,1	38,5	0,3
DFP 150	3300	diaphragm	2"	14,1	19,4	26,5	44,2	0,3
DFP 160	3800	diaphragm	DN80	16,1	22,1	30,1	50,2	0,3
DFP 180	4900	diaphragm	DN80	20,3	28,0	38,2	63,6	0,3
DFP 200	6200	diaphragm	DN80	25,1	34,5	47,1	78,5	0,4
DFP 200F-DN100	6200	butterfly	DN100	25,1	34,5	47,1	78,5	0,3

For correct operation of the system, it is necessary that the raw water has a pH value between 7 and 8 and that it is conveniently oxidized. The maximum flow rate (velocity 15 m/h) is recommended for water with Fe < 1,0 ppm or Mn < 0,3 ppm. The average flow rate (speed 11 m/h) is recommended for water with Fe < 2,0 ppm or Mn < 0,6 ppm. For the treatment of water with higher amounts of Fe and Mn is suggested the minimum speed (7 m/h) and it is necessary to place decanting and contact tanks for the feed water.

The entire automatic backwash and services cycles of the filter is run by the new electronic AQUASTAR LOGO-TD keypad, designed to make the programming really easy (for details see page 240).

Optionals (see pages 123 and 124)

- by-pass valve kit for supplying water during backwash;
- backwash with differential pressure.

These filters utilize components tested and certified for use with drinking water.

The filter material complies with the following standards for use with drinking water:

- UNI EN 12904:2005 for the quartz sand;
- UNI EN 12915-1 for activated carbon;
- UNI EN 13752:2009 for the pyrolusite.



BUTTERFLY VALVES WITH PNEUMATIC ACTUATOR

SAND FILTERS		Code	Euro	Code	Euro
	DP 60			DP 140	
	DP 65			DP 150	
	DP 80			DP 160	
	DP 95			DP 180	
	DP 110			DP 200	
	DP 130			DP 200F-DN100	

ACTIVATED CARBON FILTERS		Code	Euro	Code	Euro
	KP 60			KP 140	
	KP 65			KP 150	
	KP 80			KP 160	
	KP 95			KP 180	
	KP 110			KP 200	
	KP 130			KP 200F-DN100	

IRON REMOVER		Code	Euro	Code	Euro
	DFP 60			DFP 140	
	DFP 65			DFP 150	
	DFP 80			DFP 160	
	DFP 95			DFP 180	
	DFP 110			DFP 200	
	DFP 130			DFP 200F-DN100	

DIMENSIONS

Model	Ø (mm)	Filtering column depth w/valves (mm)	h (mm)	DP	Weight (Kg)	
					KP	DFP
DP-KP-DFP 60	600	900	2100	616	574	648
DP-KP-DFP 65	650	950	2110	718	667	754
DP-KP-DFP 80	800	1100	2200	1083	1008	1140
DP-KP-DFP 95	950	1270	2235	1555	1448	1634
DP-KP-DFP 110	1100	1480	2315	2045	1902	2150
DP-KP-DFP 130	1300	1680	2410	2938	2738	3085
DP-KP-DFP 140	1400	1850	2460	3467	3236	3637
DP-KP-DFP 150	1500	1950	2650	3970	3705	4165
DP-KP-DFP 160	1600	2050	2790	4817	4514	5037
DP-KP-DFP 180	1800	2320	2930	6091	5709	6369
DP-KP-DFP 200	2000	2550	3050	7580	7107	7872
DP-KP-DFP 200F-DN100	2000	2550	3050	7580	7107	7872

Dimensions and weight can vary without advance notice. In case of binding dimensions contact the technical office.

Automatic carbon steel filters with diaphragm /butterfly valves - nozzle pan distributor

They are made of:

- epoxy painted steel tank with a special anti-corrosion interior food grade certified;
 - filter material:
 - > quartz sand for DPP;
 - > activated carbon for KPP;
 - > catalytic mixture based on Pyrolusite (manganese dioxide) for DFPP.
 - battery valve set composed by 5 diaphragm valves in cast iron/steel, for models up to DN100 size;
 - battery valve set composed by 5 pneumatic actuated butterfly valves, for models starting from DN100 size.
 - distribution system with carbon steel nozzle plate and polypropylene nozzles;
 - AQUASTAR LOGO TD, electronic controller with LCD display and Siemens logical unit to automatically control filter backwash;
 - battery set of solenoid pilots valve to operate the control of diaphragm and butterfly valves.
- The standard series works with automatic time clock backwashing control (up to 3 times a day), or with an external impulse (e.g. from a PLC). It is also possible to obtain an auxiliary contact when the system is in backwash mode (e.g. to block the supply of water in use to start pumps, close valves, and to turn off downstream

installations etc.). As an option you can order the control to perform backwash with differential water pressure. The filter does not supply water during the backwash. The entire automatic backwash and services cycles of the filter is run by the new electronic AQUASTAR LOGO-TD keypad, designed to make the programming really easy. The 4 function keys allow you to easily make or delay regeneration/backwash manually, or to advance cycles when you start the installation. The unit AQUASTAR LOGO- TD also allows you to establish the duration of the cycles, thus ensuring an efficient and complete cleaning of the filter media with minimal loss of time and water consumption, eliminating any wastage.

- Optionals (see pages 123 and 124)
- bypass valve kit for supplying water during regeneration;
 - backwash with differential pressure.

These filters utilize components tested and certified for use with drinking water. The filter material complies with the following standards for use with drinking water:

- UNI EN 12904:2005 for the quartz sand;
- UNI EN 12915-1 for activated carbon;
- UNI EN 13752:2009 for the pyrolusite.

TECHNICAL DATA

Model	Filter material (Kg)	Valves set	I/O connections	Flow rate (m ³ /h)			Backwash (m ³ /h)	Pressure drop (bar)
				min	med	max		
DPP 160	2650	diaphragm	DN80	20,1	40,2	60,3	60,3	0,4
DPP 180	3350	diaphragm	DN80	25,4	50,9	76,2	76,3	0,4
DPP 200	4125	diaphragm	DN100	31,4	62,8	94,2	94,2	0,5
DPP 200-2000	5500	diaphragm	DN100	31,4	62,8	94,2	94,2	0,7
DPP 200F	4125	butterfly	DN100	31,4	62,8	94,2	94,2	0,3
DPP 200F-2000	5500	butterfly	DN100	31,4	62,8	94,2	94,2	0,4
DPP 220	5000	diaphragm	DN100	38,0	76,0	114,0	114,0	0,3
DPP 220-2000	6650	diaphragm	DN100	38,0	76,0	114,0	114,0	0,4
DPP 220F	5000	butterfly	DN100	38,0	76,0	114,0	114,0	0,3
DPP 220F-2000	6650	butterfly	DN100	38,0	76,0	114,0	114,0	0,4
DPP 250F	6450	butterfly	DN125	49,1	98,1	147,3	147,2	0,3
DPP 250F-2000	8600	butterfly	DN125	49,1	98,1	147,3	147,2	0,5
DPP 300F	9275	butterfly	DN150	70,7	141,3	212,1	212,0	0,3
DPP 300F-2000	12375	butterfly	DN150	70,7	141,3	212,1	212,0	0,4
DPP 350F	12625	butterfly	DN150	96,2	192,3	288,6	288,5	0,4
DPP 350F-2000	16825	butterfly	DN150	96,2	192,3	288,6	288,5	0,4

The minimum flow rate (velocity 10 m/h) is recommended for very cloudy drinking water and waste-water, the maximum flow rate (velocity 30 m/h) is recommended with low turbidity water. The average flow rate is calculated at a speed of 20 m/h.

NOTE

Battery set of solenoid 3 way pilot valve to operate the control of diaphragm can only be used with either air or clean water. Battery set of solenoid 5 pilot valve to operate the control of butterfly valves can only be used with air. Working pressure 1.5 to 5 bar. Electrical feed 230 V-50Hz.

Operating temperature: 2-40 °C. The equipment is supplied with filter material apart, unless otherwise indicated in writing while ordering. The I/O connections are supplied for either right or left depending on the availability, unless otherwise stated by the client in writing when ordering.



Butterfly valves w/pneumatic actuators.

DIMENSIONI

Model	Ø (mm)	Filtering column (mm)		Weight (Kg)	
		Plating height	depth w/valves	h	DPP
DPP 160	1600	1500	1950	2714	4980
DPP 180	1800	1500	2150	2886	5600
DPP 200	2000	1500	2400	2984	6700
DPP 200-2000	2000	2000	2400	3484	8600
DPP 200F	2000	1500	2400	2984	6700
DPP 200F-2000	2000	2000	2400	3484	8700
DPP 220	2200	1500	2600	3085	8400
DPP 220-2000	2200	2000	2600	3585	10650
DPP 220F	2200	1500	2600	3085	8400
DPP 220F-2000	2200	2000	2600	3585	10550
DPP 250F	2500	1500	2950	3131	10600
DPP 250F-2000	2500	2000	2950	3631	13500
DPP 300F	3000	1500	3520	3470	15800
DPP 300F-2000	3000	2000	3520	3970	20000
DPP 350F	3500	1500	4020	3600	22400
DPP 350F-2000	3500	2000	4020	4100	27650

Dimensions and weight may vary without advance notice. In the case of binding dimensions contact the technical office.



SAND FILTERS

Code	Euro
DPP 160	
DPP 180	
DPP 200	
DPP 200-2000	
DPP 200F	
DPP 200F-2000	
DPP 220	
DPP 220-2000	
DPP 220F	
DPP 220F-2000	
DPP 250F	
DPP 250F-2000	
DPP 300F	
DPP 300F-2000	
DPP 350F	
DPP 350F-2000	

TECHNICAL DATA

ACTIVATED CARBON FILTERS

Model	Filter material (Kg)	Valves set	I/O connections	Flow rate (m ³ /h)			Backwash (m ³ /h)	Pressure drop (bar)
				min	mid	max		
KPP 160	1200	diaphragm	DN80	20,1	30,1	50,2	40,2	0,3
KPP 180	1500	diaphragm	DN80	25,4	38,2	63,6	50,9	0,4
KPP 200	1850	diaphragm	DN100	31,4	47,1	78,5	62,8	0,4
KPP 200-2000	2475	diaphragm	DN100	31,4	47,1	78,5	62,8	0,6
KPP 200F	1850	butterfly	DN100	31,4	47,1	78,5	62,8	0,3
KPP 200F-2000	2475	butterfly	DN100	31,4	47,1	78,5	62,8	0,4
KPP 220	2250	diaphragm	DN100	38,0	57,0	95,0	76,0	0,3
KPP 220-2000	3000	diaphragm	DN100	38,0	57,0	95,0	76,0	0,4
KPP 220F	2250	butterfly	DN100	38,0	57,0	95,0	76,0	0,3
KPP 220F-2000	3000	butterfly	DN100	38,0	57,0	95,0	76,0	0,4
KPP 250F	2900	butterfly	DN125	49,1	73,6	122,7	98,1	0,3
KPP 250F-2000	3850	butterfly	DN125	49,1	73,6	122,7	98,1	0,4
KPP 300F	4175	butterfly	DN150	70,7	106,0	176,6	141,3	0,3
KPP 300F-2000	5550	butterfly	DN150	70,7	106,0	176,6	141,3	0,4
KPP 350F	5675	butterfly	DN150	96,2	144,2	240,4	192,3	0,3
KPP 350F-2000	7550	butterfly	DN150	96,2	144,2	240,4	192,3	0,4

The minimum flow rate (velocity 10 m/h) is recommended for water full of organic substances and surfactants. The average flow rate (velocity 15 m/h) is recommended as a tertiary treatment of waste water. The maximum flow rate (velocity 25 m/h) is recommended for the treatment of drinking water with low chlorine content or micro-pollution.



DIMENSIONS

Model	Ø (mm)	Filtering column (mm)		Weight (Kg)	
		Plating height	depth w/valves	h	KPP
KPP 160	1600	1500	1950	2714	4100
KPP 180	1800	1500	2150	2886	5050
KPP 200	2000	1500	2400	2984	6100
KPP 200-2000	2000	2000	2400	3484	7700
KPP 200F	2000	1500	2400	2984	6100
KPP 200F-2000	2000	2000	2400	3484	7700
KPP 220	2200	1500	2600	3085	7600
KPP 220-2000	2200	2000	2600	3585	9600
KPP 220F	2200	1500	2600	3085	7600
KPP 220F-2000	2200	2000	2600	3585	9600
KPP 250F	2500	1500	2950	3131	9500
KPP 250F-2000	2500	2000	2950	3631	12000
KPP 300F	3000	1500	3520	3470	14300
KPP 300F-2000	3000	2000	3520	3970	18000
KPP 350F	3500	1500	4020	3600	20300
KPP 350F-2000	3500	2000	4020	4100	24850

Dimensions and weight may vary without advance notice. In the case of binding dimensions contact the technical office.

ACTIVATED CARBON FILTERS

Code	Euro
KPP 160	
KPP 180	
KPP 200	
KPP 200-2000	
KPP 200F	
KPP 200F-2000	
KPP 220	
KPP 220-2000	
KPP 220F	
KPP 220F-2000	
KPP 250F	
KPP 250F-2000	
KPP 300F	
KPP 300F-2000	
KPP 350F	
KPP 350F-2000	

TECHNICAL DATA

IRON REMOVERS

Model	Filter material (Kg)	Valves set	I/O connections	Flow rate (m ³ /h)			Backwash (m ³ /h)	Pressure drop (bar)
				min	med	max		
DFPP 160	2800	diaphragm	DN80	16,1	22,1	30,1	50,2	0,3
DFPP 180	3550	diaphragm	DN80	20,3	28,0	38,2	63,6	0,3
DFPP 200	4375	diaphragm	DN80	25,1	34,5	47,1	78,5	0,3
DFPP 200-2000	5825	diaphragm	DN80	25,1	34,5	47,1	78,5	0,5
DFPP 220	5300	diaphragm	DN100	30,4	41,8	57,0	95,0	0,3
DFPP 220-2000	7050	diaphragm	DN100	30,4	41,8	57,0	95,0	0,4
DFPP 220F	5300	butterfly	DN100	30,4	41,8	57,0	95,0	0,3
DFPP 220F-2000	7050	butterfly	DN100	30,4	41,8	57,0	95,0	0,4
DFPP 250	6850	diaphragm	DN100	39,3	54,0	73,6	122,7	0,3
DFPP 250-2000	9125	diaphragm	DN100	39,3	54,0	73,6	122,7	0,4
DFPP 250F	6850	butterfly	DN100	39,3	54,0	73,6	122,7	0,3
DFPP 250F-2000	9125	butterfly	DN100	39,3	54,0	73,6	122,7	0,4
DPP 300F	9850	butterfly	DN125	56,5	77,7	106,0	176,6	0,3
DPP 300F-2000	13125	butterfly	DN125	56,5	77,7	106,0	176,6	0,4
DPP 350F	13400	butterfly	DN125	76,9	105,8	144,2	240,4	0,3
DPP 350F-2000	17850	butterfly	DN125	76,9	105,8	144,2	240,4	0,4

For correct operation of the system, it is necessary that the raw water has a pH value between 7 and 8 and that it is conveniently oxidized. The maximum flow rate (velocity 15 m/h) is recommended for water with Fe < 1,0 ppm or Mn < 0,3 ppm. The average flow rate (velocity 11 m/h) is recommended for water with Fe < 2,0 ppm or Mn < 0,6 ppm. For the treatment of water with higher amounts of Fe and Mn is suggested the minimum speed (7 m/h) and it is necessary to place decanting and contact tanks for the feed water.



DIMENSIONS

Model	Ø (mm)	Filtering column (mm)		Weight (Kg)	
		Plating height	depth w/valves	h	DPP
DFPP 160	1600	1500	1950	2714	4800
DFPP 180	1800	1500	2150	2886	5900
DFPP 200	2000	1500	2350	2984	7150
DFPP 200-2000	2000	2000	2350	3484	9150
DFPP 220	2200	1500	2600	3085	8800
DFPP 220-2000	2200	2000	2600	3585	11250
DFPP 220F	2200	1500	2600	3085	8800
DFPP 220F-2000	2200	2000	2600	3585	11250
DFPP 250	2500	1500	2900	3131	11150
DFPP 250-2000	2500	2000	2900	3631	14300
DFPP 250F	2500	1500	2900	3131	11150
DFPP 250F-2000	2500	2000	2900	3631	14250
DPP 300F	3000	1500	3450	3470	16650
DPP 300F-2000	3000	2000	3450	3970	21150
DPP 350F	3500	1500	3950	3600	23550
DPP 350F-2000	3500	2000	3950	4100	29175

Dimensions and weight may vary without advance notice. In the case of binding dimensions contact the technical office.

DEFERRIZZATORI

Code	Euro
DFPP 160	
DFPP 180	
DFPP 200	
DFPP 200-2000	
DFPP 220	
DFPP 220-2000	
DFPP 220F	
DFPP 220F-2000	
DFPP 250	
DFPP 250-2000	
DFPP 250F	
DFPP 250F-2000	
DPP 300F	
DPP 300F-2000	
DPP 350F	
DPP 350F-2000	