

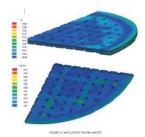
# WHAT WE DO



Manually laminated hand lay-up polyester resin fiberglass to controlled thickness.



The strength of steel The chemical corrosion resistance of polyester.



Engineering soul.



Expected lifespan: more than 30 years.



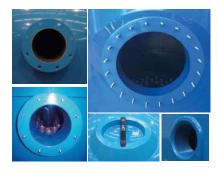
Sold worldwide with complete reliability since 1970.



Armoured nozzle plate.



Optimized distribution systems for flow distribution and each application



Complete safety: Connections are part of the structure.



100% full vision inside: Methacrylate sightglasses



Each and every filter is tested.



Closed legs are part of the filter structure.



On site assembling



Special colors on demand



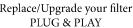
UV resistant external gel coat.



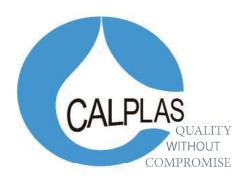
Wind & Seismic Calculation



Replace/Upgrade your filter









# CALPLAS PRESSURE VESSELS

Calplas vessels have been used in industrial projects worldwide since 1970 and it is one of the most experienced filter manufacturer in the world. A continuous growth, stimulated by a very hard working, experienced team, and a mechanical engineer soul has allowed us to become a quality and reliability reference. During this period our manufacturing has demonstrated the complete reliability of our products. Our daily contact with water treatment companies and experienced pool distributors all over the world has also helped us to innovate and to gain an advantage over our competitors responding to new water treatment challenges. This experience has also allowed us to trial new materials in order to overcome specific project water treatment requirements.

### WHY CALPLAS?

The first question is which is the best material for a vessel?

Steel tanks:

PROS: Very reliable and strong vessels.

CONS: These suffer from corrosion and require continuous maintenance to replace the different linings used (epoxy painting, rubber coatings...).

Fiber Glass vessels:

PROS: No corrosion.

CONS: Most polyester vessels are built for the swimming pool industry, where both pressure requirements and reliability fall far short of what is required in any industrial project.

# Why choose between one or the other?

Calplas uses only the most reliable GRP Polyester technology in its manufacturing process. MANUALLY LAMINATED HAND LAY UP. This means that the fibers are oriented in the directions of the maximum tensions of the filter, strictly calculated. On top, this is combined with encapsulated internal steel reinforcement used at all points where the filter is under additional stress. This makes our filters the most reliable on the market.

<u>Calplas filters are as strong as steel with the corrosion resistance of the polyester reinforced with fiberglass</u>



### **OUR EXPERIENCE**

No other manufacturer has more than 50 years experience in :

- $\hbox{-} Filtration\ systems$
- -Ion exchanger vessels
- -Adequate internal lining adaptation

After 50 years of manufacturing in direct collaboration with water treatment companies and pool distributors, Calplas is proud to manufacture the best filters in the world, with an outstanding reliability, durability and performance.











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# FA SERIES Ø 415-960

# FA SERIES

Manufactured and calculated according to EN 13121-3.

Material: Hand lay-up polyester with fiberglass (max quality polyester tech). Steel reinforced GRP vessel.

All threaded connections are part of the structure of the filter in GRP.

Closed legs & part of the filter structure.

Top access.

Design temperature 40°C.

Laterals distribution.

Top distributor according to the media/application.

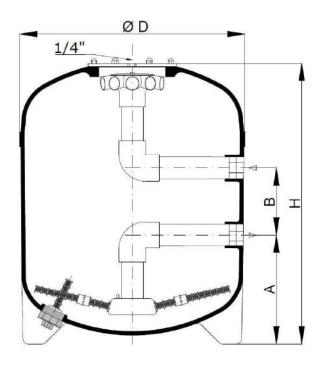
Tested 1.5 times design pressure

# ADDITIONAL OPTIONS

Higher temperatures. (Ask us)
High-chemical resistance. (Ask us) See page 31
Anchorage system to ground. See page 31
Seismic calculations. (Ask us)
Drinking water / Food contact. (Ask us)
BESGO READY FILTERS See page 34

# FA SERIES BED HEIGHT 350-450





Design Pressure		FA-6 Ø415 H=730	FA-8 Ø460 H=740	FA-10 Ø520 H=800	FA-15 Ø640 H=830	FA-20 Ø720 H=930	FA-30 Ø840 H=950	FA-35 Ø960 H=1040
2.5 W = /2	Ref.	102041	102046	102052	102064	102072	102084	102096
2.5 Kg /cm <sup>2</sup>	Price	870 €	950 €	1 135 €	1 315 €	1 550 €	1 845 €	2 610 €
F.V. a. low 2	Ref.	315041	315046	315052	315064	315072	315084	315096
5 Kg/cm <sup>2</sup>	Price	979 €	1 043 €	1 269 €	1 597 €	1 991 €	2 361 €	3 370 €
7 Va Jam²	Ref.	317041	317046	317052	317064	317072	317084	317096
7 Kg/cm <sup>2</sup>	Price	1 263 €	1 389 €	1 612 €	2 055 €	2 616 €	3 184 €	4 237 €





# HFS/HFX SERIES Ø 415-960

# HFX SERIES

Manufactured and calculated according to EN 13121-3.

Material: Hand lay-up polyester with fiberglass (max quality polyester tech). Steel reinforced GRP vessel.

All threaded connections are part of the structure of the filter in GRP.

Closed legs & part of the filter structure.

Top access.

Design temperature 40°C.

Laterals distribution.

Top distributor according to the media/application.

Tested 1.5 times design pressure

Methacrylate sightglass or methacrylate top lid (2.5kg/cm²)

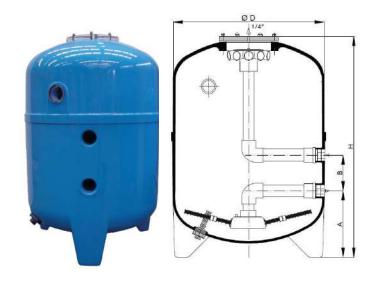
# ADDITIONAL OPTIONS

Higher temperatures. (Ask us)
High-chemical resistance. (Ask us) See page 31
Flange connections available See page 31
Anchorage system to ground. See page 31
Seismic calculations. (Ask us)
Drinking water / Food contact. (Ask us)
BESGO READY FILTERS See page 34

# HFS SERIES P=2.5 Kg/cm<sup>2</sup>



# HFX SERIES P=5/7 Kg/cm<sup>2</sup>





















Integrated GRP threads

Optional flanges

Transparent top lid Ø415-520 P=2.5 Kg/cm²

BIG Transparent top lid Ø640-960 P=2.5 Kg/cm²

Stee**l** Top lid 5 / 7 kg/cm²

Arms collector

Arms 0.3 mm

Diffuser for Sand / AFM

Emptying plug



Design Pressure		HFS-6 Ø415 H=861	HFS-8 Ø460 H=861	HFS-10 Ø520 H=931	HFS-15 Ø640 H=1090	HFS-20 Ø720 H=1140	HFS-30 Ø840 H=1190	HFS-35 Ø960 H=1240
2.5 V ~ / ~ 2	Ref.	112041	112046	112052	112064	112072	112084	112096
2.5 Kg /cm <sup>2</sup>	Price	970 €	1 065 €	1 290 €	1 790 €	2 060 €	2 380 €	3 100 €
Design Pressure		HFX-6 Ø415 H=861	HFX-8 Ø460 H=861	HFX-10 Ø520 H=931	HFX-15 Ø640 H=986	HFX-20 Ø720 H=1105	HFX-30 Ø840 H=1165	HFX-35 Ø960 H=1175
F. V. a. /am²	Ref.	315141	315146	315152	315164	315172	315184	315196
5 Kg/cm <sup>2</sup>	Price	1 357 €	1 421 €	1 578 €	2 153 €	2 488 €	3 017 €	3 691 €
7 Kg/cm <sup>2</sup>	Ref.	317141	317146	317152	317164	317172	317184	317196
/ Kg/CIII	Price	1 667 €	1 837 €	2 066 €	2 780 €	3 183 €	3 492 €	4 659 €



# **AFM SERIES Ø 520-960**

# AFM SERIES

Manufactured and calculated according to EN 13121-3.

Material: Hand lay-up polyester with fiberglass (max quality polyester tech). Steel reinforced GRP vessel.

All threaded connections are part of the structure of the filter in GRP.

Closed legs & part of the filter structure.

Top access.

Design temperature 40°C.

Laterals distribution.

Top distributor according to the media/application.

Tested 1.5 times design pressure

# ADDITIONAL OPTIONS

Higher temperatures. (Ask us)

High-chemical resistance. (Ask us) See page 31

Flange connections available See page 31

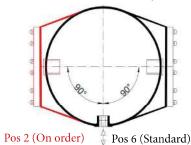
Anchorage system to ground. See page 31

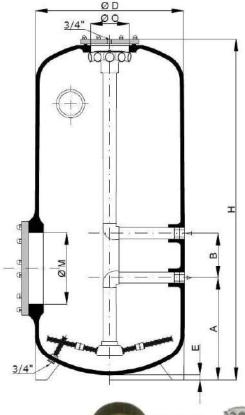
Seismic calculations. (Ask us)

Drinking water / Food contact. (Ask us)

BESGO READY FILTERS See page 34

2 Orientation available: Pos 6 X=6 (Standard) / Pos 2 X=2



























Integrated GRP threads

Transparent top **l**id 2.5 Kg/cm²

Stee**l** Top **l**id 5 / 7 kg/cm²

Arms collector

Arms [

Diffuser for Sand / AFM

Sightg**l**ass

Transparent side hatch 2.5 Kg/cm<sup>2</sup> Manhole lid P=5/7 Kg/ cm<sup>2</sup>

Emptying plug



Design Pressure		AFM 520 H=1400	AFM 640 H=1440	AFM 720 H=1440	AFM 840 H=1460	AFM 960 H=1520
2.5 Kg /cm <sup>2</sup>	Ref.	112152. <mark>X</mark>	112164. <mark>X</mark>	112172. <mark>X</mark>	112184. <mark>X</mark>	112196. <mark>X</mark>
2.5 Kg /CIII	Price	2 165 €	2 545 €	2 915 €	3 240 €	4 150 €
F. Way Jama 2	Ref.	315252. <mark>X</mark>	315264. <mark>X</mark>	315272. <mark>X</mark>	315284. <mark>X</mark>	315296. <mark>X</mark>
5 Kg/cm <sup>2</sup>	Price	3 060 €	3 620 €	3 966 €	4 594 €	5 480 €
7 V ~ / 2	Ref.	317252. <mark>X</mark>	317264. <mark>X</mark>	317272. <mark>X</mark>	317284. <mark>X</mark>	317296. <mark>X</mark>
7 Kg/cm <sup>2</sup>	Price	3 980 €	4 705 €	5 155 €	5 975 €	7 124 €



# **D SERIES**

Manufactured and calculated according to EN 13121-3.

Material: Hand lay-up polyester with fiberglass (max quality polyester tech). Steel reinforced GRP vessel.

All threaded connections are part of the structure of the filter in GRP.

Closed legs & part of the filter structure.

Top & bottom access.

Design temperature 40°C.

Laterals distribution.

Top distributor according to the media/application.

Tested 1.5 times design pressure

Threaded

connections

Maximum C for 1 cylinder

# ADDITIONAL OPTIONS

Higher temperatures. (Ask us)
High-chemical resistance. (Ask us) See page 31
Cylindrical height ad-hoc. (Check below)
Flange connections available. See page 31
Additional sight glass. See page 31
Anchorage system to ground. See page 31
Seismic calculations. (Ask us)
Drinking water / Food contact. (Ask us)



Design Pressure		D-415 C=1500 H=1856	D-460 C=1500 H=1867	D-520 C=1500 H=1887	D-640 C=1500 H=1941	D-720 C=1500 H=2010	D-840 C=1500 H=2090	D-960 C=1500 H=2168			
	Ref.	332141	332146	332152	332164	332172	332184	332196			
2.5 Kg/cm <sup>2</sup>	Price	2 277 €	2 706 €	3 211 €	3 569 €	4 014 €	4 780 €	5 847 €			
	$\Delta$ 100 mm	28 €	36 €	48 €	62 €	75 €	99 €	105 €			
	Ref.	335141	335146	335152	335164	335172	335184	335196			
5 Kg/cm²	Price	2 808 €	3 326 €	3 945 €	4 377 €	4 953 €	5 880 €	7 177 €			
	$\Delta$ 100 mm	44 €	59 €	69 €	86 €	105 €	141 €	155 €			
	Ref.	337141	337146	337152	337164	337172	337184	337196			
7 Kg/cm²	Price	3 497 €	4 150 €	4 998 €	5 458 €	6 144 €	7 340 €	8 876 €			
	$\Delta$ 100 mm	56 €	74 €	77 €	111 €	142 €	180 €	220 €			
Recomended! Sightglass		+285 €	+285 €	+285 €	+355 €	+355 €	+355 €	+415€			
Minim	num C	Check out FA & HFX models (Page 6)									

We can manufacture filters for higher cylindrical height (please check with us)

Table valid for calculation up to 2500 mm

CALPLAS

# **DC SERIES**

Manufactured and calculated according to EN 13121-3.

Material: Hand lay-up polyester with fiberglass (max quality polyester tech). Steel reinforced GRP vessel.

All threaded connections are part of the structure of the filter in GRP.

Closed legs & part of the filter structure.

Manhole access.

Top & bottom access.

Design temperature 40°C.

Laterals distribution.

Top distributor according to the media/application.

Tested 1.5 times design pressure

# ADDITIONAL OPTIONS

Higher temperatures. (Ask us)
High-chemical resistance .(Ask us) See page 31
Cylindrical height ad-hoc. (Check below)
Flange connections available. See page 31

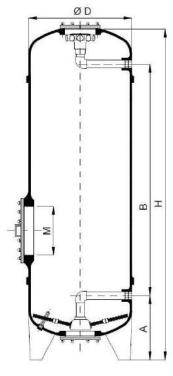
Sight glass. See page 31

Anchorage system to ground. See page 31

Seismic calculations. (Ask us)

Drinking water / Food contact. (Ask us)















Diffuser









Threaded connections	Plastiziced Manhole lid	Arms collector 0.3 mm	Arms collector 0.2/0.5 mm	according to application	Optional sightglass	Standard Top <b>l</b> id	Optiona <b>l</b> flanges	Customizab <b>l</b> e height
Design Pressure		DC-415 C=1500 H=1856	DC-460 C=1500 H=1867	DC-520 C=1500 H=1887	DC-640 C=1500 H=1941	DC-720 C=1500 H=2010	DC-840 C=1500 H=2090	DC-960 C=1500 H=2168
	Ref.	332241	332246	332252	332264	332272	332284	332296
2.5 Kg/cm <sup>2</sup>	Price	3 147 €	3 576 €	4 081 €	4 623 €	5 069 €	5 836 €	7 131 €
	$\Delta$ 100 mm	28 €	36 €	48 €	62 €	75 €	99 €	105 €
	Ref.	335241	335246	335252	335264	335272	335284	335296
5 Kg/cm <sup>2</sup>	Price	3 678 €	4 197 €	4 816 €	5 433 €	6 007 €	6 936 €	8 463 €
	$\Delta$ 100 mm	44 €	59 €	69€	86 €	105 €	141 €	155 €
	Ref.	337241	337246	337252	337264	337272	337284	337296
7 Kg/cm <sup>2</sup>	Price	4 367 €	5 020 €	5 867 €	6 511 €	7 199 €	8 394 €	10 160 €
	$\Delta$ 100 mm	56 €	74 €	77 €	111 €	142 €	180 €	220 €
Recomended!	Sightglass	+285 €	+285 €	+285€	+355 €	+355 €	+355 €	+415 €
Minimum C	for manhole	924	928	928	974	965	965	1082

Maximum C for 1 cylinder

Table valid for calculation up to 2500 mm

We can manufacture filters for higher cylindrical height (please check with us)



# **DCP SERIES**

Manufactured and calculated according to EN 13121-3.

Material: Hand lay-up polyester with fiberglass (max quality polyester tech). Steel reinforced GRP vessel.

All threaded connections are part of the structure of the filter in GRP.

Closed legs & part of the filter structure.

Top & bottom access.

Design temperature 40°C.

Bottom nozzle plate distribution.

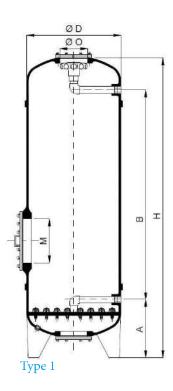
Top distributor according to the media/application.

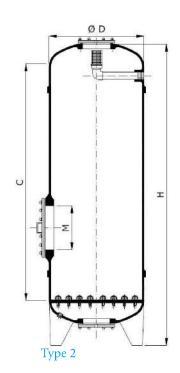
Tested 1.5 times design pressure

# ADDITIONAL OPTIONS

Higher temperatures. (Ask us) High-chemical resistance. (Ask us) See page 31 Cylindrical height ad-hoc. (Check below) Flange connections available. See page 31 Additional sight glass. See page 31 Anchorage system to ground. See page 31 Seismic calculations. (Ask us) Drinking water / Food contact. (Ask us)

























Threaded connections

**Plastiziced** Manhole lid

Stee ARMORED Nozzle plate

Nozzle plate detail

Diffuser according to

application

Optional sightglass

Standard Top lid

Optional flanges

Customizable height

		NOZZIC Plate		аррисаціон				
Design Pressure		DCP-415 C=1500 H=1856	DCP-460 C=1500 H=1867	DCP-520 C=1500 H=1887	DCP-640 C=1500 H=1941	DCP-720 C=1500 H=2010	DCP-840 C=1500 H=2090	DCP-960 C=1500 H=2168
	Ref.	342141	342146	342152	342164	342172	342184	342196
2.5 Kg /cm <sup>2</sup>	Price	3 778 €	4 254 €	4 940 €	5 619 €	6 222 €	7 377 €	9 125 €
	$\Delta$ 100 mm	28 €	36 €	48 €	62 €	75 €	99 €	105 €
	Ref.	345141	345146	345152	345164	345172	345184	345196
5 Kg/cm <sup>2</sup>	Price	4 309 €	4 873 €	5 674 €	6 430 €	7 160 €	8 478 €	10 455 €
	$\Delta$ 100 mm	44 €	59 €	69 €	86 €	105 €	141 €	155 €
	Ref.	347141	347146	347152	347164	347172	347184	347196
7 Kg/cm <sup>2</sup>	Price	4 998 €	5 696 €	6 728 €	7 508 €	8 351 €	9 937 €	12 153 €
	$\Delta$ 100 mm	56 €	74 €	77 €	111 €	142 €	180 €	220 €
Recomended!	Sightglass	+285 €	+285 €	+285 €	+355 €	+355 €	+355 €	+415€
Minimum C	for manhole	924	928	928	974	965	965	1082

We can manufacture filters for higher cylindrical height (please check with us)

Maximum C for 1 cylinder

Table valid for calculation up to 2500 mm



# **DPP SERIES**

Manufactured and calculated according to EN 13121-3.

Material: Hand lay-up polyester with fiberglass (max quality polyester tech). Steel reinforced GRP vessel.

All threaded connections are part of the structure of the filter in GRP.

Closed legs & part of the filter structure.

Top & bottom access.

Design temperature 40°C.

Bottom nozzle plate distribution.

Top nozzle plate distribution.

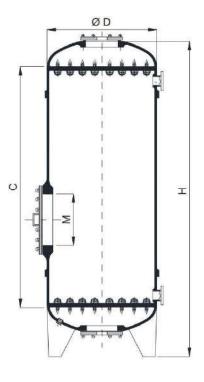
Tested 1.5 times design pressure

Resin transfer flanges DN65 included

# ADDITIONAL OPTIONS

Higher temperatures. (Ask us)
High-chemical resistance. (Ask us) See page 31
Cylindrical height ad-hoc. (Check below)
Flange connections available. See page 31
Additional sight glass. See page 31
Anchorage system to ground. See page 31
Seismic calculations. (Ask us)
Drinking water / Food contact. (Ask us)





















DN80 Flanges Load/Unload Included

Plastiziced Manhole lid

2 x Steel ARMORED Nozzle plate

Nozz**l**e p**l**ate detai**l** 

Optional sightglass

Standard INLET OUTLET

Optional INLET OUTLET

Customizable height

Design Pressure		DPP-415 C=1500 H=1945	DPP-460 C=1500 H=1955	DPP-520 C=1500 H=1965	DPP-640 C=1500 H=2015	DPP-720 C=1500 H=2010	DPP-840 C=1500 H=2090	DPP-960 C=1500 H=2140
	Ref.	342241	342246	342252	342264	342272	342284	342296
2.5 Kg /cm <sup>2</sup>	Price	4 959 €	5 479 €	6 349 €	7 166 €	7 925 €	9 469 €	11 668 €
	Δ 100 mm	28 €	36 €	48 €	62 €	75 €	99 €	105 €
	Ref.	345241	345246	345252	345264	345272	345284	345296
5 Kg/cm <sup>2</sup>	Price	5 490 €	6 100 €	7 085 €	7 976 €	8 863 €	10 570 €	12 997 €
	$\Delta$ 100 mm	44 €	59 €	69 €	86 €	105 €	141 €	155 €
	Ref.	347241	347246	347252	347264	347272	347284	347296
7 Kg/cm <sup>2</sup>	Price	6 178 €	6 921 €	8 136 €	9 055 €	10 054 €	12 029 €	14 695 €
	$\Delta$ 100 mm	56 €	74€	77 €	111 €	142 €	180 €	220 €
Recomended! Sightglass		+285 €	+285 €	+285 €	+355 €	+355 €	+355 €	+415 €
Minimum C for manhole		835	840	850	900	965	965	1110

Maximum C for 1 cylinder

Table valid for calculation up to 2500 mm

We can manufacture filters for higher cylindrical height (please check with us)



# FB SERIES Ø 1010-3000

# **FB SERIES**

Manufactured and calculated according to EN 13121-3.

Material: Hand lay-up polyester with fiberglass (max quality polyester tech).

Steel reinforced GRP vessel.

Flanged connections for INLET/OUTLET.

All connections are part of the structure of the filter in GRP.

Closed legs & part of the filter structure.

Side manhole & elliptical top manhole.

Design temperature 40°C.

Laterals distribution.

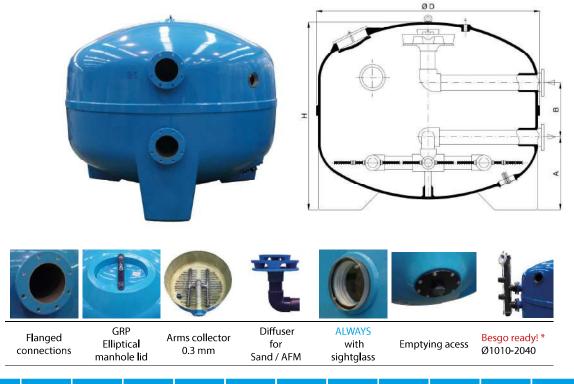
Tested 1.5 times design pressure Sightglass included. (ALWAYS)

# ADDITIONAL OPTIONS

Higher temperatures. (Ask us)
High-chemical resistance. (Ask us) See page 31
Additional sight glass. See page 31
Anchorage system to ground. See page 31
Seismic calculations. (Ask us)
Drinking water / Food contact. (Ask us)
BESGO READY FILTERS "B" IN RED See below
BESGO valves See page 34

# WHY FB SERIES?

FB SERIES filters are a consecuence of our molds design. This filter is the solution for a lower budget without compromising manufacturing quality, with a reasonable bed height and very proper internal distribution.



Design Pressure		FB-40 Ø1010 H=1200	FB-50 Ø1160 H=1300	FB-60 Ø1260 H=1350	FB-80 Ø1440 H=1470	FB-100 Ø1640 H=1670	FB-125 Ø1840 H=1760	FB-150 Ø2040 H=1870	FB-175 Ø2210 H=1990	FB-200 Ø2340 H=2000	FB-250 Ø2550 H=2070	FB-300 Ø2800 H=2200	FB-350 Ø3000 H=2090
2 5 Var/sm²	Ref.	232010	232011	232012	232014	232016	232018	232020	232022	232023	232025	232028	232030
2.5 Kg/cm <sup>2</sup>	Price	5 045 €	5 575 €	6 335 €	7 340 €	9 640 €	11 840 €	14 420 €	16 170 €	17 965 €	20 700 €	23 540 €	27 185 €
4 V = / = == 2	Ref.	314010	314011	314012	314014	314016	314018	314020	314022	314023	314025	314028	314030
4 Kg/cm <sup>2</sup>	Price	6 744 €	7 705 €	8 884 €	10 581 €	14 281 €	17 056 €	20 561 €	23 335 €	24 715 €	30 601 €	36 195 €	38 856 €
5 K = / = == 2	Ref.	315010	315011	315012	315014	315016	315018	315020	315022	315023	315025	315028	315030
5 Kg/cm <sup>2</sup>	Price	7 829 €	8 567 €	9 901 €	11 847 €	15 243 €	18 888 €	22 603 €	26 744 €	29 104 €	35 166 €	39 069 €	47 206 €
6 Ka/cm²	Ref.	316010	316011	316012	316014	316016	316018	316020	316022	316023	316025	316028	316030
6 Kg/CIII	Price	8 378 €	9 131 €	10 852 €	12 606 €	16 529 €	20 274 €	25 908 €	31 964 €	34 297 €	39 997 €	46 476 €	52 539 €
Flange	S	DN80 A=500 <b>B=300</b> *	DN80 A=550 B=300*	DN100 A=550 B=400*	DN100 A=625 B=400*	DN125 A=720 <b>B=450*</b> *	DN125 A=740 B=450*	DN150 A=725 B=450*	DN200 A=760 B=605	DN200 A=765 B=600	DN250 A=760 B=700	DN250 A=850 B=650	DN250 A=check B=check
Media heiş	ght *	500	600	650	720	800	850	900	1000	1000	1000	1000	900

<sup>\*</sup> Media height recommended calculated based on ~ 30% expansion on distance between laterals and top distribution



# **D SERIES**

Manufactured and calculated according to EN 13121-3.

Material: Hand lay-up polyester with fiberglass (max quality polyester tech).

Steel reinforced GRP vessel.

Flanged connections for INLET/OUTLET.

All connections are part of the structure of the filter in GRP.

Closed legs & part of the filter structure.

Elliptical top manhole.

Design temperature 40°C.

Laterals distribution.

Tested 1.5 times design pressure

# ADDITIONAL OPTIONS

Higher temperatures. (Ask us)

High-chemical resistance. (Ask us) See page 31

Cylindrical height ad-hoc. (Check below)

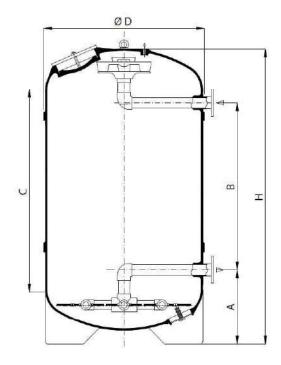
Additional sight glass. See page 31

Anchorage system to ground. See page 31

Seismic calculations. (Ask us)

Drinking water / Food contact. (Ask us)





















Flanged connections

**GRP Elliptical** manhole lid

Arms collector 0.3 mm

Diffuser for Sand / AFM

Diffuser for Ionic Exchange

Optional sightglass

**Emptying acess** 

Customizable height

Design Pressure		D-1010 C=1500 H=2000	D-1160 C=1500 H=2060	D-1260 C=1500 H=2100	D-1440 C=1500 H=2180	D-1640 C=1500 H=2260		D-2040 C=1500 H=2410	D-2210 C=1500 H=2510	D-2340 C=1500 H=2530	D-2550 C=1500 H=2600	D-2800 C=1500 H=2800	D-3000 C=1500 H=2760
	Ref.	352110	352111	352112	352114	352116	352118	352120	352122	352123	352125	352128	352130
2.5 Kg/cm <sup>2</sup>	Price	6 977 €	8 142 €	8 796 €	10 701 €	13 849 €	16 936 €	19 930 €	21 529€	23 795 €	28 603 €	30 922 €	35 904 €
	$\Delta$ 100 mm	169€	180€	274€	351 €	390€	410€	423€	435€	462€	545€	699€	944 €
	Ref.	354110	354111	354112	354114	354116	354118	354120	354122	354123	354125	354128	354130
4 Kg/cm²	Price	8 365 €	9 588 €	11 092 €	13 267 €	17 315 €	20 536 €	25 570 €	27 950 €	29 837 €	36 638 €	43 882 €	47 006 €
	$\Delta$ 100 mm	178€	184€	275€	358€	400€	435€	473€	495€	539€	616€	751 €	993 €
	Ref.	355110	355111	355112	355114	355116	355118	355120	355122	355123	355125	355128	355130
5 Kg/cm²	Price	9 693 €	10 652 €	12 174 €	15 075 €	18 989 €	23 110 €	28 183 €	32 686 €	35 266 €	42 445 €	48 741 €	57 482 €
	$\Delta$ 100 mm	195€	233€	308€	379€	441 €	526€	554€	597€	638€	721 €	862€	1 014€
	Ref.	356110	356111	356112	356114	356116	356118	356120	356122	356123	356125	356128	356130
6 Kg/cm²	Price	10 387 €	11 465 €	13 431 €	16 278 €	20 452 €	24 717 €	31 155 €	37 729 €	40 325 €	47 286 €	56 421 €	65 359€
	$\Delta$ 100 mm	218€	266€	329€	384€	505€	605€	682€	715€	759€	825€	898€	1 039€
Recomended!	Sightglass	+415 €	+415 €	+415 €	+415 €	+505 €	+505 €	+595 €	+595 €	+595 €	+595 €	+595 €	+595 €
Minim	ım C					D Series c	an be redu	iced up to	FB model				
Maximum C fo	or 1 cylinder	2310	2350	2345	2390	2510	2520	2640	2580	2570	2650	2570	2510
	We can manufacture filters for higher cylindrical height (please check with us)												



# **DC SERIES**

Manufactured and calculated according to EN 13121-3.

Material: Hand lay-up polyester with fiberglass (max quality polyester tech). Steel reinforced GRP vessel.

Flanged connections for INLET/OUTLET.

All connections are part of the structure of the filter in GRP.

Closed legs & part of the filter structure.

Side manhole & elliptical top manhole.

Design temperature 40°C.

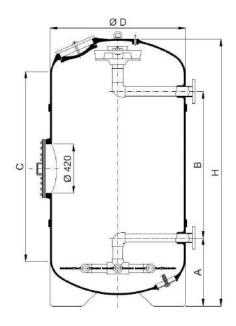
Laterals distribution.

Tested 1.5 times design pressure

# **ADDITIONAL OPTIONS**

Higher temperatures. (Ask us) High-chemical resistance. (Ask us) See page 31 Cylindrical height ad-hoc. (Check below) Additional sight glass. See page 31 Anchorage system to ground. See page 31 Seismic calculations. (Ask us) Drinking water / Food contact. (Ask us) Lateral manhole Ø500 mm.























Flanged connections

**Plastiziced** Manhole lid

GRP Elliptical manhole lid

Arms collector 0.3 mm

Diffuser for Sand / AFM

Diffuser for Ionic Exchange

Optional sightglass

**Emptying acess** 

Customizable height

Design Pressure			C=1500		DC-1440 C=1500 H=2180		C=1565	DC-2040 <b>©≡1605</b> H=2515		C=1820			
	Ref.	352210	352211	352212	352214	352216	352218	352220	352222	352223	352225	352228	352230
2.5 Kg/cm <sup>2</sup>	Price	9 072 €	10 254 €	10 906 €	12 903 €	16 187 €	19 404 €	22 902 €	25 457 €	27 848 €	32 656 €	35 678 €	41 908 €
	$\Delta$ 100 mm	169€	180€	274€	351 €	390€	410€	423€	435€	462€	545€	699€	944€
	Ref.	354210	354211	354212	354214	354216	354218	354220	354222	354223	354225	354228	354230
4 Kg/cm <sup>2</sup>	Price	10 460 €	11 698 €	13 202 €	15 469 €	19 658 €	23 015 €	28 558 €	31 937 €	34 102 €	41 163 €	48 763 €	53 162 €
	$\Delta~100~mm$	178€	184€	275€	358€	400€	435€	473€	495€	539€	616€	751 €	993€
	Ref.	355210	355211	355212	355214	355216	355218	355220	355222	355223	355225	355228	355230
5 Kg/cm <sup>2</sup>	Price	11 786 €	12 762 €	14 284 €	17 278 €	21 346 €	25 655 €	31 294 €	37 044 €	39 813 €	47 298 €	53 887 €	63 617 €
	$\Delta$ 100 mm	195€	233€	308€	379€	441 €	526€	554€	597€	638€	721 €	862€	1 014 €
	Ref.	356210	356211	356212	356214	356216	356218	356220	356222	356223	356225	356228	356230
6 Kg/cm <sup>2</sup>	Price	12 483 €	13 576 €	15 541 €	18 482 €	22 830 €	27 368 €	34 486 €	42 257 €	45 033 €	52 196 €	61 656 €	71 662 €
	$\Delta$ 100 mm	218€	266€	329€	384€	505€	605€	682€	715€	759€	825€	898€	1 039€
Recomended!	Sightglass	+415€	+415€	+415€	+415 €	+505 €	+505 €	+595 €	+595 €	+595 €	+595 €	+595 €	+595 €
Minimum C fo	or manhole	1470	1510	1505	1495	1535	1565	1605	1830	1820	1820	1740	1810
Maximum C fo	r 1 cylinder	2310	2350	2345	2390	2510	2520	2640	2580	2570	2650	2570	2510



# DP SERIES Ø 1010-3000

# **DP SERIES**

Manufactured and calculated according to EN 13121-3.

Material: Hand lay-up polyester with fiberglass (max quality polyester tech). Steel reinforced GRP vessel.

Flanged connections for INLET/OUTLET

All connections are part of the structure of the filter in GRP.

Closed legs & part of the filter structure.

Side manhole & elliptical top manhole.

Design temperature 40°C.

Nozzle plate. (GRP + Steel) Tested 1.5 times design pressure

### ADDITIONAL OPTIONS

Higher temperatures. (Ask us)

High-chemical resistance. (Ask us) See page 31

Cylindrical height ad-hoc.

Additional sight glass. See page 31

Anchorage system to ground. See page 31

Seismic calculations. (Ask us)

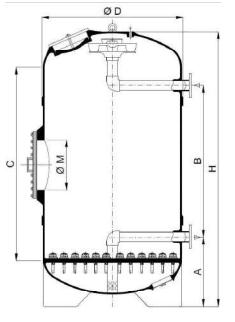
Drinking water / Food contact. (Ask us)

Lateral manhole Ø500 mm.

Shorter cylinder with Ø200mm hand hole Solution





























Flanged connections

**Plastiziced** Manhole lid

GRP **Elliptical** manhole lid

Stee **ARMORED** Nozzle plate

Diffuser for Sand / AFM

Diffuser for Ionic Exchange

Optional sightglass

**Emptying acess** 

Customizable height

Design Pressure		DP-1010 C=1500 H=2090		DP-1260 C=1500 H=2180		C=1500	C=1500	C=1500		DP-2340 <b>C=1730</b> H=2850			DP-3000 <b>C=1760</b> H=3070
	Ref.	362110	362111	362112	362114	362116	362118	362120	362122	362123	362125	362128	362130
2.5 Kg/cm <sup>2</sup>	Price	11 484 €	13 371 €	14 697 €	17 333 €	21 845 €	25 624 €	31 021 €	35 109 €	37 882 €	44 540 €	51 163 €	59 426 €
	Δ 100 mm	169€	180€	274€	351 €	390€	410€	423€	435€	462€	545€	699€	944 €
	Ref.	364110	364111	364112	364114	364116	364118	364120	364122	364123	364125	364128	364130
4 Kg/cm <sup>2</sup>	Price	12 872 €	14 814 €	16 994 €	19 898 €	25 313 €	29 225 €	36 661 €	41 570 €	44 076 €	52 914 €	64 234 €	70 655 €
	$\Delta$ 100 mm	178€	184€	275€	358€	400€	435€	473€	495€	539€	616€	751 €	993€
	Ref.	365110	365111	365112	365114	365116	365118	365120	365122	365123	365125	365128	365130
5 Kg/cm <sup>2</sup>	Price	14 199 €	15 878 €	18 076 €	21 707 €	26 985 €	31 799 €	39 273 €	46 572 €	49 707 €	58 957 €	69 323 €	81 113 €
	Δ 100 mm	195€	233€	308€	379€	441 €	526€	554€	597€	638€	721 €	862€	1 014 €
	Ref.	366110	366111	366112	366114	366116	366118	366120	366122	366123	366125	366128	366130
6 Kg/cm <sup>2</sup>	Price	14 894 €	16 692 €	19 333 €	22 911 €	28 448 €	33 404 €	42 246 €	51 735 €	54 882 €	63 839 €	77 082 €	89 131 €
	Δ 100 mm	218€	266€	329€	384€	505€	605€	682€	715€	759€	825€	898€	1 039€
Recomended!	Sightglass	+415€	+415 €	+415 €	+415 €	+505 €	+505 €	+595 €	+595 €	+595 €	+595 €	+595 €	+595 €
Minimum C f	for manhole	1380	1420	1425	1385	1425	1455	1500	1735	1730	1730	1710	1760
Maximum C fo	or 1 cylinder	2220	2260	2265	2280	2400	2410	2535	2485	2480	2560	2540	2460
	We can manufacture filters for higher cylindrical height (please check with us)												

# HORIZONTAL FILTERS (Ø1840 - 3000)

# HORIZONTAL SERIES

Manufactured and calculated according to EN 13121-3.

Material: Hand lay-up polyester with fiberglass (max quality polyester tech). Steel reinforced GRP vessel.

Flanged connections for INLET/OUTLET.

All connections are part of the structure of the filter in GRP.

Supports for the filter included (2 or 3 according to model).

2 x elliptical top manhole.

Sightglass included.

Design temperature 40°C.

Laterals distribution.

Tested 1.5 times design pressure

# ADDITIONAL OPTIONS

Customizable length if neccesary.
Air backwash distribution. (Ask us)
Higher temperatures. (Ask us)
High-chemical resistance. (Ask us) See page 31

Additional sight glass. See page 31
Anchorage system to ground. See page 31

Flange connections in the dome. (Ask us) Seismic calculations. (Ask us)

Drinking water / Food contact. (Ask us)

Additional flanges. See page 31























Flanged connections

Optional Plastiziced Manhole lid

2 x GRP Elliptical manhole lid

Arms collector 0.3 mm

Diffuser for Sand / AFM

Diffuser for Active Carbon

ALWAYS with sightglass

Emptying acess

Separated supports

Ø	Tota <b>l</b> Length	Filtering Surface		FM 'Rest)	Supports	Ref.	2,5 Kg/cm <sup>2</sup>	Ref.	4 Kg/cm²	Ref.	5 Kg/cm <sup>2</sup>	Ref.	6 Kg/cm <sup>2</sup>
	3100	$5,22 \text{ m}^2$	1,1	4,2	2	322118	22 435 €	324118	34 554 €	325118	38 099 €	326118	44 907 €
	3900	$6,50 \text{ m}^2$	1,3	5,6	2	322218	27 825 €	324218	41 077 €	325218	49 926 €	326218	55 101 €
1840	4700	$8,11 \text{ m}^2$	1,5	6,8	3	322318	33 980 €	324318	49 672 €	325318	57 564 €	326318	66 504 €
	5500	9,55 m <sup>2</sup>	1,8	8,1	3	322418	37 270 €	324418	57 584 €	325418	66 847 €	326418	77 384 €
	6300	11,11 m²	2,1	9,4	3	322518	44 200 €	324518	65 433 €	325518	76 631 €	326518	88 422 €
	3360	$6,50 \text{ m}^2$	1,1	7,3	2	322120	27 650 €	324120	38 799 €	325120	44 910 €	326120	52 753 €
	4160	$8,00 \text{ m}^2$	1,5	8,2	2	322220	33 050 €	324220	46 869 €	325220	53 165 €	326220	64 730 €
2040	4960	$9,50 \text{ m}^2$	1,7	10	3	322320	39 480 €	324320	56 561 €	325320	65 115 €	326320	75 673 €
	5660	$11,00 \text{ m}^2$	2	11,3	3	322420	44 930 €	324420	65 226 €	325420	74 034 €	326420	87 854 €
	6460	$12,70 \text{ m}^2$	2,3	13,3	3	322520	50 225 €	324520	72 617 €	325520	85 095 €	326520	99 327 €
	3400	$7,08 \text{ m}^2$	1,3	7,8	2	322122	31 385 €	324122	44 010 €	325122	51 865 €	326122	61 045 €
2210	4170	$8,80 \text{ m}^2$	1,5	10	2	322222	36 350 €	324222	52 925 €	325222	60 796 €	326222	71 657 €
	5000	$10,70 \text{ m}^2$	2	11,7	3	322322	43 065 €	324322	63 208 €	325322	72 524 €	326322	83 874 €
	5720	$12,40 \text{ m}^2$	2,2	13,8	3	322422	48 585 €	324422	72 378 €	325422	82 183 €	326422	95 630 €
	6500	$14,20 \text{ m}^2$	2,5	15,8	3	322522	54 085 €	324522	80 862 €	325522	92 957 €	326522	106 615 €
	3520	$7,40 \text{ m}^2$	1,5	8,5	2	322123	34 365 €	324123	48 160 €	325123	57 567 €	326123	67 863 €
	4300	$9,30 \text{ m}^2$	1,8	11	2	322223	38 770 €	324223	57 701 €	325223	66 957 €	326223	76 851 €
2340	5100	$11,20 \text{ m}^2$	2,1	13,2	3	322323	45 615 €	324323	68 328 €	325323	78 179 €	326323	90 050 €
	5800	$13,00 \text{ m}^2$	2,5	15	3	322423	51 060 €	324423	77 783 €	325423	88 346 €	326423	101 098 €
	6600	15,00 m <sup>2</sup>	2,8	17,3	3	322523	56 635 €	324523	87 151 €	325523	98 575 €	326523	111 328 €
	3450	$8,00 \text{ m}^2$	2,2	9,1	2	322125	37 215 €	324125	53 336 €	325125	63 918 €	326125	76 075 €
	4350	$10,00 \text{ m}^2$	3	12	2	322225	43 120 €	324225	64 194 €	325225	75 342 €	326225	87 614 €
2550	5150	$12,30 \text{ m}^2$	3,5	14,5	3	322325	50 150 €	324325	76 377 €	325325	87 988 €	326325	101 301 €
	6000	14,40 m <sup>2</sup>	4,2	17	3	322425	56 015 €	324425	87 117 €	325425	98 134 €	326425	113 506 €
	6850	$16,50 \text{ m}^2$	5	20	3	322525	61 830 €	324525	98 159 €	325525	110 658 €	326525	126 645 €
	3680	$9,30 \text{ m}^2$	2,5	12,5	2	322128	40 750 €	324128	63 273 €	325128	75 809 €	326128	91 432 €
	4500	$11,60 \text{ m}^2$	3,5	15,5	2	322228	51 190 €	324228	75 856 €	325228	89 154 €	326228	103 547 €
2800	5360	$14,00 \text{ m}^2$	4	18,5	3	322328	58 345 €	324328	88 753 €	325328	102 915 €	326328	118 862 €
	6230	16,40 m <sup>2</sup>	4,5	22,5	3	322428	65 045 €	324428	101 195 €	325428	115 401 €	326428	131 929 €
	7040	18,50 m <sup>2</sup>	5,2	26	3	322528	72 205 €	324528	110 215 €	325528	126 721 €	326528	145 042 €
3000							Ask for	price					



# **CARTRIDGE FILTERS**

# CARTRIDGE FILTER

Design pressure 6 Kg/cm<sup>2</sup>

Steel reinforced GRP vessel.

Material: Hand lay-up polyester with fiberglass (max quality polyester tech).

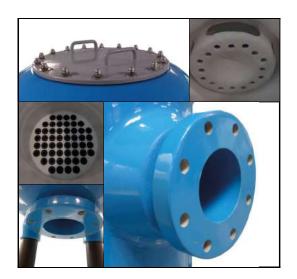
Manufactured and calculated according to EN 13121-3.

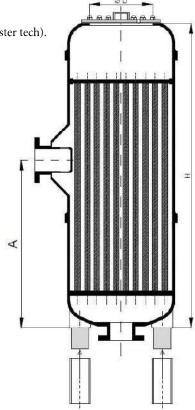
All connections are part of the structure of the filter in GRP.

Design temperature 40°C.

PVC pipes inside threaded to plate to insert Cartridges.

Tested 1.5 times design pressure







Model	CF-330/30 Ø330	CF-415/30 Ø415	CF-520/30 Ø520	CF-640/30 Ø640
Nº Cartridges	14	21	32	52
Ref	436303	436304	436305	436306
Length Cartridges	30" (28.1 m <sup>3</sup> /h)	30" (42.2 m <sup>3</sup> /h)	30" (64.3 m <sup>3</sup> /h)	30" (104.5 m <sup>3</sup> /h)
Price	4 849 €	7 786 €	8 864 €	11 356 €
Model	CF-330/40 Ø330	CF-415/40 Ø415	CF-520/40 Ø520	CF-640/40 Ø640
Nº Cartridges	14	21	32	52
Ref	436403	436404	436405	436406
Length Cartridges	40" (37.5 m <sup>3</sup> /h)	40" (56.2 m <sup>3</sup> /h)	40" (85.7 m <sup>3</sup> /h)	40" (139.3 m <sup>3</sup> /h)
Price	4 983 €	7 947 €	9 051 €	11 611 €

Recommended flow for each 10" 0.67 m<sup>3</sup>/h

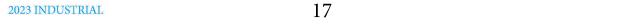
# Cartridges not included in the price!



TwinPure 4 layers is a new cartridge filter, manufactured with 4 different filtration layers. The patented multilayer configuration has the benefits of a deep filtration. TwinPure 4 layers has been designed without internal soul and with a high particle retention capacity and a lower initial differential pressure. The 4 layers with different miron sizes allows increase the colloidal retention capacity andreduce the filtration costs.

It is reccomended to replace the filtration element at 1,0-1,5 Bar.

	5 μ
30″	14€
40"	17€





# KP SERIES Ø 1010-1840

# **KP SERIES**

Manufactured and calculated according to EN 13121-3.

 $Material: \ Hand \ lay-up \ polyester \ with \ fiberglass \ (max \ quality \ polyester \ tech).$ 

Steel reinforced GRP vessel.

Flanged connections for INLET/OUTLET or PVC lid in the bottom.

All connections are part of the structure of the filter in GRP.

Closed legs & part of the filter structure.

Side manhole & elliptical top manhole.

Design temperature 40°C.

Bottom nozzle plate. (GRP + Steel)

Longer legs for bottom connection or complete drain.

Tested 1.5 times design pressure

# ADDITIONAL OPTIONS

Higher temperatures. (Ask us)

High-chemical resistance. (Ask us) See page 31

Cylindrical height ad-hoc. (Check below)

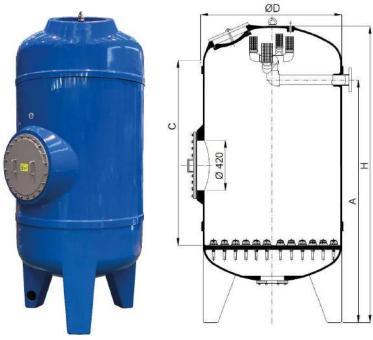
Additional sight glass. See page 31 Additional flanges. See page 31

Anchorage system to ground. See page 31

Seismic calculations. (Ask us)

Drinking water / Food contact. (Ask us)

Lateral manhole Ø500 mm.



















Flanged
connections

Plastiziced Manhole lid

GRP Elliptical manhole lid

Steel ARMORED

Optional Sightglass

Diffuser for Ionic exchange

Higher **l**egs

Optional bottom flange

Customizab**l**e height

	m	ianhole lid Nozz	zle plate	lonic excha	inge	flange	
Design Pressure		KP-1010 C=1500 H=2290	KP-1160 C=1500 H=2385	KP-1260 C=1500 H=2435	KP-1440 C=1500 H=2510	KP-1640 C=1500 H=2570	KP-1840 C=1500 H=2700
	Ref.	382110	382111	382112	382114	382116	382118
2.5 Kg/cm²	Price	11 857 €	13 740 €	15 226 €	18 033 €	22 778 €	26 671 €
	$\Delta$ 100 mm	169 €	180 €	274 €	351 €	390 €	410 €
	Ref.	384110	384111	384112	384114	384116	384118
4 Kg/cm²	Price	13 224 €	15 254 €	17 596 €	20 636 €	26 359 €	30 352 €
	$\Delta$ 100 mm	178 €	184 €	275 €	358 €	400 €	435 €
	Ref.	385110	385111	385112	385114	385116	385118
5 Kg/cm <sup>2</sup>	Price	14 522 €	16 314 €	18 693 €	22 451 €	28 022 €	33 101 €
	$\Delta$ 100 mm	195 €	233 €	308 €	379 €	441 €	526 €
	Ref.	386110	386111	386112	386114	386116	386118
6 Kg/cm²	Price	15 326 €	17 256 €	20 311 €	23 881 €	29 678 €	34 823 €
	$\Delta$ 100 mm	218€	266 €	329€	384€	505€	605€
Recomended!	Sightglass	+415 €	+415 €	+415 €	+415 €	+505 €	+505 €
Minimum C	for manhole	1355	1350	1325	1295	1265	1285
Maximum C f	Maximum C for 1 cylinder		2190	2170	2190	2240	2240

We can manufacture filters for higher cylindrical height (please check with us)



# KPP SERIES Ø 1010-1840

# **KPP SERIES**

Manufactured and calculated according to EN 13121-3.

Material: Hand lay-up polyester with fiberglass (max quality polyester tech). Steel reinforced GRP vessel.

Flanged connections for INLET/OUTLET or PVC lids.

All connections are part of the structure of the filter in GRP.

Closed legs & part of the filter structure.

Side manhole.

Design temperature 40°C.

Bottom nozzle plate (GRP + Steel)

Top nozzle plate. (GRP + Steel)

Longer legs for bottom connection or complete drain.

Tested 1.5 times design pressure

Resin transfer flanges DN80 included

# **ADDITIONAL OPTIONS**

Higher temperatures. (Ask us)

High-chemical resistance. (Ask us) See page 31

Cylindrical height ad-hoc. (Check below)

Additional sight glass. See page 31

Additional flanges. See page 31

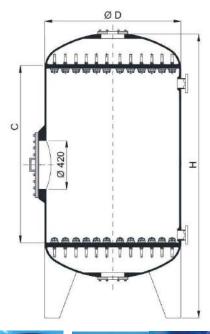
Anchorage system to ground. See page 31

Seismic calculations. (Ask us)

Drinking water / Food contact. (Ask us)

Lateral manhole Ø500 mm.









Included



**Plastiziced** Manhole lid



2 x Stee **ARMORED** Nozzle plate



Optional Sightglass



Top connection Standard



Higher legs



Optional flanged connections



Customizable height

Design Pressure		KPP-1010 C=1500 H=2325	KPP-1160 C=1500 H=2435	KPP-1260 C=1500 H=2450	KPP-1440 C=1500 H=2535	KPP-1640 C=1500 H=2585	KPP-1840 C=1500 H=2735
	Ref.	382210	382211	382212	382214	382216	382218
2.5 Kg/cm <sup>2</sup>	Price	14 942 €	17 638 €	19 846 €	23 507 €	29 735 €	34 773 €
	$\Delta$ 100 mm	169 €	180 €	274 €	351 €	390 €	410 €
	Ref.	384210	384211	384212	384214	384216	384218
4 Kg/cm²	Price	16 308 €	19 151 €	22 218 €	26 110 €	33 315 €	38 456 €
	$\Delta$ 100 mm	178 €	184 €	275 €	358 €	400 €	435 €
	Ref.	385210	385211	385212	385214	385216	385218
5 Kg/cm <sup>2</sup>	Price	17 604 €	20 212 €	23 315 €	27 925 €	34 979 €	41 203 €
	$\Delta$ 100 mm	195 €	233 €	308 €	379 €	441 €	526 €
	Ref.	386210	386211	386212	386214	386216	386218
6 Kg/cm²	Price	18 409 €	21 152 €	24 933 €	29 355 €	36 635 €	42 925 €
	$\Delta$ 100 mm	218€	266€	329€	384€	505€	605€
Recomended!	Sightglass	+415 €	+415 €	+415 €	+415 €	+505 €	+505 €
Minimum C	for manhole	1320	1300	1310	1270	1250	1250
Maximum C f	Maximum C for 1 cylinder		2050	2060	2020	2000	2000

We can manufacture filters for higher cylindrical height (please check with us)



### **DPC SERIES**

Manufactured and calculated according to EN 13121-3.

Material: Hand lay-up polyester with fiberglass (max quality polyester tech). Steel reinforced GRP vessel.

Flanged connections for INLET/OUTLET or PVC lid in the bottom.

All connections are part of the structure of the filter in GRP.

Closed legs & part of the filter structure.

Side manhole & elliptical top manhole.

Design temperature 40°C.

Bottom nozzle plate (GRP + Steel).

Leg extension for bottom connection (up to 500 mm) or complete drain.

Tested 1.5 times design pressure

### ADDITIONAL OPTIONS

Higher temperatures. (Ask us)

High-chemical resistance .(Ask us) See page 31

Cylindrical height ad-hoc. (Check below)

Additional sight glass. See page 31

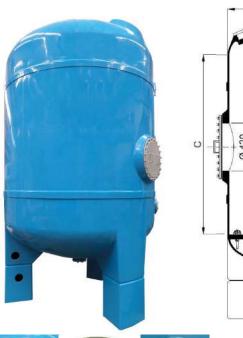
Additional flanges. See page 31

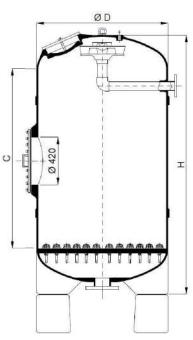
Anchorage system to ground. See page 31

Seismic calculations. (Ask us)

Drinking water / Food contact. (Ask us)

Lateral manhole Ø500 mm.





















Flanged connections

Plastiziced Manhole lid

GRP Elliptical manhole lid

Steel ARMORED Nozzle plate

Optional sightglass

Diffuser for Ionic Exchange

Leg extension in GRP

Standard bottom flange

Customizable height

	1116	annole iid Nozz	ie piate	ionic Excn	ange	Tiange	
Design Pressure		DPC-2040 C=1500 *H=2515	DPC-2210 <b>©≡1735</b> *H=2840	DPC-2340 <b>©=1780</b> *H=2850	DPC-2550 <b>©=1780</b> *H=2920	DPC-2800 <b>©=1710</b> *H=3040	DPC-3000 <b>©=1760</b> *H=3070
	Ref.	382120	382122	382123	382125	382128	382130
2.5 Kg/cm <sup>2</sup>	Price	33 481 €	37 567 €	40 340 €	46 999 €	53 623 €	61 885 €
	$\Delta$ 100 mm	423 €	435 €	462 €	545 €	699 €	944 €
	Ref.	384120	384122	384123	384125	384128	384130
4 Kg/cm²	Price	39 121 €	44 030 €	46 535 €	55 373 €	66 692 €	73 114 €
	$\Delta$ 100 mm	473 €	495 €	539 €	616 €	751 €	993 €
	Ref.	385120	385122	385123	385125	385128	385130
5 Kg/cm <sup>2</sup>	Price	41 733 €	49 031 €	52 167 €	61 417 €	71 782 €	83 573 €
	$\Delta$ 100 mm	554 €	597 €	638 €	721 €	862 €	1 014 €
	Ref.	386120	386122	386123	386125	386128	386130
6 Kg/cm²	Price	44 706 €	54 195 €	57 342 €	66 298 €	79 542 €	91 589 €
	$\Delta~100~\text{mm}$	682€	715€	759€	825€	898€	1 039 €
Recomended!	Sightglass	+595 €	+595 €	+595 €	+595 €	+595 €	+595 €
Minimum C	for manhole	1500	1735	1730	1730	1710	1760
Maximum C f	for 1 cylinder	2535	2485	2480	2560	2540	2460

We can manufacture filters for higher cylindrical height (please check with us)



# **DPPC SERIES Ø 2040-3000**

# **DPPC SERIES**

Manufactured and calculated according to EN 13121-3.

Material: Hand lay-up polyester with fiberglass (max quality polyester tech). Steel reinforced GRP vessel.

Flanged connections for INLET/OUTLET or PVC lids.

All connections are part of the structure of the filter in GRP.

Closed legs & part of the filter structure.

Side manhole.

Design temperature 40°C.

Bottom nozzle plate. (GRP + Steel)

Top nozzle plate. (GRP + Steel)

Leg extension for bottom connection (up to 500 mm) or complete drain.

Tested 1.5 times design pressure

Resin transfer flanges DN80 included

# ADDITIONAL OPTIONS

Higher temperatures. (Ask us)

High-chemical resistance. (Ask us) See page 31

Cylindrical height ad-hoc. (Check below)

Additional sight glass. See page 31

Additional flanges. See page 31

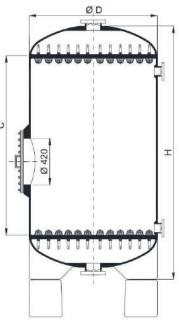
Anchorage system to ground. See page 31

Seismic calculations. (Ask us)

Drinking water / Food contact. (Ask us)

Lateral manhole Ø500 mm.





















Optional Flanged Load/Unload

Plastiziced Manhole lid

2 x Steel ARMORED Nozzle plate

Optional sightglass

Leg extension in GRP

Optional Lid connections

Standard flanged connections

Customizab**l**e height

LOAU/UNIOAU		Nozzie piate		Connections connections					
Design Pressure		DPPC-2040 <b>©=1650</b> *H=2720	DPPC-2210 <b>©=1655</b> *H=2840	DPPC-2340 <b>©=1660</b> *H=2850	DPPC-2550 <b>©=1680</b> *H=2920	DPPC-2800 <b>©=1680</b> *H=3040	DPPC-3000 <b>©=1710</b> *H=3070		
	Ref.	382220	382222	382223	382225	382228	382230		
2.5 <b>Kg/cm²</b>	Price	45 113 €	50 032 €	53 507 €	62 395 €	72 750 €	83 180 €		
	$\Delta$ 100 mm	423 €	435 €	462 €	545 €	699 €	944 €		
	Ref.	384220	384222	384223	384225	384228	384230		
4 Kg/cm²	Price	50 774 €	56 480 €	59 656 €	70 695 €	85 805 €	94 385 €		
	$\Delta$ 100 mm	473 €	495 €	539 €	616 €	751 €	993 €		
	Ref.	385220	385222	385223	385225	385228	385230		
5 Kg/cm²	Price	53 565 €	61 391 €	65 226 €	76 687 €	90 861 €	104 847 €		
	$\Delta$ 100 mm	554 €	597 €	638 €	721 €	862 €	1 014 €		
	Ref.	386220	386222	386223	386225	386228	386230		
6 Kg/cm²	Price	56 849 €	66 513 €	70 366 €	81 560 €	98 609 €	112 838 €		
	$\Delta$ 100 mm	682 €	715€	759€	825€	898€	1 039 €		
Recomended!	Sightglass	+595 €	+595 €	+595 €	+595 €	+595 €	+595 €		
Minimum C	for manhole	1650	1655	1660	1680	1680	1710		
Maximum C f	Maximum C for 1 cylinder		2405	2410	2510	2510	2410		
	200			10 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	/				

We can manufacture filters for higher cylindrical height (please check with us)



# DPPP/KPPP SERIES Ø 415-3000 (THREE NOZZLE PLATE)

# DPPP/KPPP SERIES

Manufactured and calculated according to EN 13121-3.

Material: Hand lay-up polyester with fiberglass (max quality polyester tech). Steel reinforced GRP vessel.

Flanged connections for INLET/OUTLET or PVC lid in the bottom.

All connections are part of the structure of the filter in GRP.

Closed legs & part of the filter structure.

2 x Side manhole.

Design temperature 40°C.

Top mid & bottom nozzle plate. (GRP + Steel)

Longer legs for bottom connection or complete drain.

Tested 1.5 times design pressure

# ADDITIONAL OPTIONS

Higher temperatures. (Ask us)

High-chemical resistance. (Ask us) See page 31

Cylindrical height ad-hoc.

Additional sight glass. See page 31

Additional flanges. See page 31

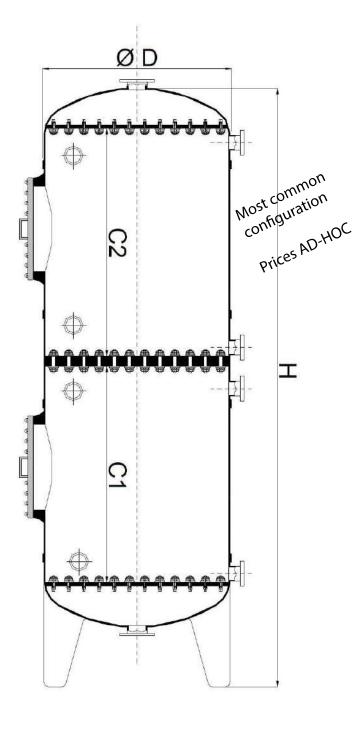
Anchorage system to ground. See page 31

Seismic calculations. (Ask us)

Drinking water / Food contact. (Ask us)

Lateral manhole Ø500 mm. See page 31







4 x Flanged Load/Unload



2 x Plastiziced Manhole lid



3 x Steel ARMORED Nozzle plate



Mid plate double thickness



4 x Sightg**l**ass



Optional Lid connections



Long legs detail



Optional flanged connections



Customizab**l**e height



# MB SERIES Ø 415-3000 (MIXED BEDS)

# MIXED BEDS

Manufactured and calculated according to EN 13121-3.

Material: Hand lay-up polyester with fiberglass (max quality polyester tech). Steel reinforced GRP vessel.

Flanged connections for INLET/OUTLET or PVC lid in the bottom.

All connections are part of the structure of the filter in GRP.

Closed legs & part of the filter structure.

Side manhole & elliptical top manhole.

Design temperature 40°C.

Bottom nozzle plate. (GRP + Steel)

Longer legs for bottom connection or complete drain.

Mid distributor included.

Tested 1.5 times design pressure

### ADDITIONAL OPTIONS

Higher temperatures. (Ask us)

High-chemical resistance. (Ask us) See page 31

Cylindrical height ad-hoc.

Additional sight glass. See page 31

Additional flanges. See page 31

Anchorage system to ground. See page 31

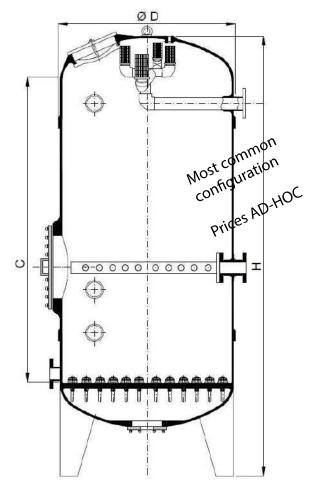
Seismic calculations. (Ask us)

Drinking water / Food contac.t (Ask us)

Lateral manhole Ø500 mm. See page 31

Mid distributor provided by engineering company (Ask us).







Flanged connections



Plastiziced Manhole lid



GRP Elliptical manhole lid



Steel ARMORED Nozzle plate



3 x Sightglass



Diffuser for **l**onic exchange



Optional

bottom

flange

Standard bottom connection



Customizab**l**e height

# Types of mid distributors

23



Stainless Steel star with PP nozzles



Stainless Steel beams with PP arms



Stainless Steel beams with Steel arms (provided by customer)



Stainless Steel beams with Steel nozzles (provided by customer)



GRP beams with PP Arms



GRP beams with PP nozz**l**es



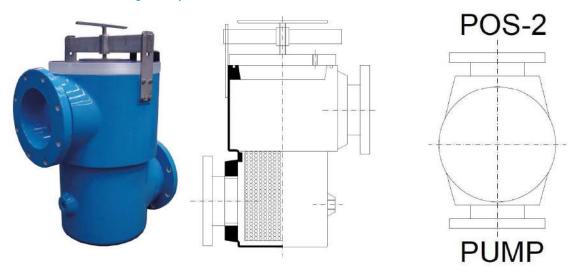
# STANDARD PUMP STRAINERS POSITION 2

Ref	ID	Connections	Basket	Max press.	Price
410811	S P8/110	DN100	8 litres	1 bar	2 145 €
411511	S P15/110	DN100	15 litres	1 bar	2 490 €
412516	S P25/160	DN150	25 litres	1 bar	2 810 €
412522	S P25/225	DN200	25 litres	1 bar	2 885 €
416030	S P60/300	DN300	60 litres	1 bar	3 940 €

# **CHARACTERISTICS**

1 bar Max. pressure. Quick opening device. 316 Stainless steel Ø4 mm hole. Extremely robust. Designed for suction side.

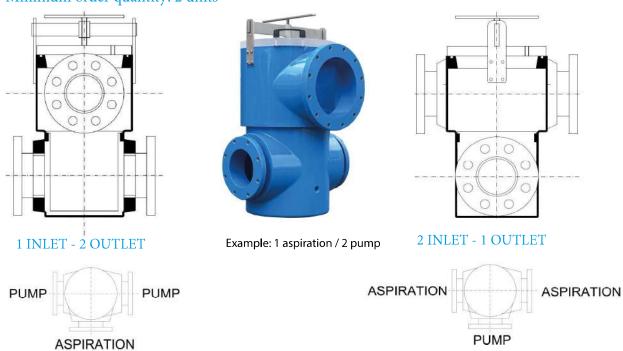
# Minimum order quantity: 5 units



# STANDARD PUMP STRAINERS COLLECTORS

	Ref	ID	Aspiration	Pump	Basket	Max press.	Price
_	412516.22	P25/2x160-225	2xDN150	DN200	25 litres	1 bar	3 245 €
	412522.16	P25/225-2x160	DN200	2xDN150	25 litres	1 bar	3 245 €
	416022.30	P60/2x225-300	2 x DN200	DN300	60 litres	1 bar	4 370 €
	416030.22	P60/300-2x225	DN300	2xDN200	60 litres	1 bar	4 370 €

# Minimum order quantity: 2 units



24



# **CUSTOMIZED PUMP STRAINERS**

Baske	Basket capacity: 4 l   ~ Flow 30 m³/h				Basket capacity: 8 l   ~ Flow 80 m³/h				Basket capacity: 15 l   ~ Flow 120 m³/h			
Ref	ID	Connections	Price	Ref	ID	Connections	Price	Ref	ID	Connections	Price	
410403	P4/32	DN25	1 735 €	410805	P8/50	DN40	2 550 €	411507	P15/75	DN65	2 960 €	
410404	P4/40	DN32	1 745 €	410806	P8/63	DN50	2 560 €	411509	P15/90	DN80	2 990 €	
410405	P4/50	DN40	1 750 €	410807	P8/75	DN65	2 570 €	411511	P15/110	DN100	3 010 €	
410406	P4/63	DN50	1 760 €	410809	P8/90	DN80	2 595 €	411512	P15/125	DN110	3 035 €	
410407	P4/75	DN65	1 785 €	410811	P8/110	DN100	2 615 €	411514	P15/140	DN125	3 065 €	
410409	P4/90	DN80	1 800 €	410812	P8/125	DN110	2 635 €	411516	P15/160	DN150	3 110 €	
				410814	P8/140	DN125	2 670 €	411520	P15/200	DN175	3 160 €	
				410816	P8/160	DN150	2 720 €	411522	P15/225	DN200	3 200 €	
	P4 Basket	SS 316: +35 €		P8 Basket SS 316: +55 €				P15 Basket SS 316: +75 €				

Basket	capacity: 2	5     ~ Flow 250	) m³/h	Basket capacity: 60 l   ~ Flow 350 m³/h				Basket capacity: 75 l   ~ Flow 600 m³/h			
Ref	ID	Connections	Price	Ref	ID	Connections	Price	Ref	ID	Connections	Price
412509	P25/90	DN80	3 280 €	416012	P60/125	DN110	4 410 €	417525	P75/250	DN250	5 035 €
412511	P25/110	DN100	3 310 €	416014	P60/140	DN125	4 445 €	417530	P75/300	DN300	5 110 €
412512	P25/125	DN110	3 330 €	416016	P60/160	DN150	4 490 €	417535	P75/350	DN350	5 195 €
412514	P25/140	DN125	3 365 €	416020	P60/200	DN175	4 540 €	417540	P75/400	DN400	5 385 €
412516	P25/160	DN150	3 405 €	416022	P60/225	DN200	4 580 €	417545	P75/450	DN450	5 515 €
412520	P25/200	DN175	3 455 €	416025	P60/250	DN250	4 640 €	417550	P75/500	DN500	5 830 €
412522	P25/225	DN200	3 495 €	416030	P60/300	DN300	4 720 €				
412525	P25/250	DN250	3 560 €	416035	P60/350	DN350	4 805 €				
	P25 Basket	SS 316: +85 €		P60 Basket SS 316: +160 €				P75 Basket SS 316: +175 €			

# **PUMP STRAINERS**

Flanged connections for INLET/OUTLET

All connections are part of the structure of the filter in GRP.

1 bar Max. pressure.

Quick opening device.

304 Stainless steel Ø4 mm hole.

Extremely robust.

304 SS

GRP Flanges

Designed for suction side.

Basket hole Ø4 mm.

Flange position customizable in angle.

Design temperature 40°C.

# ADDITIONAL OPTIONS

Different Inlet/Outlet flange sizes in same strainer. Stainless steel 316 available at order. See yellow boxes Optional basket hole size Ø2mm.

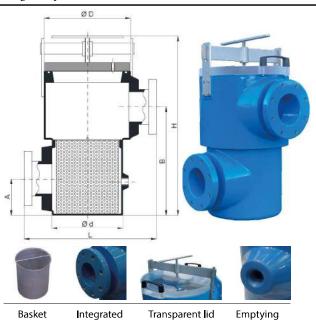
# **USE IT AS A COLLECTOR!**

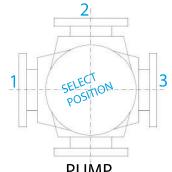
Multiple flanges for inlet or oulet . Just add price of flange. See page 20



+20% price increase according to model







# **PUMP**

MODEL	D	d	Н	L	A	В
P4	250	200	500	370	100	290
Р8	305	250	635	450	130	370
P15	355	300	760	500	150	455
P25	415	315	785	560	165	495
P60	530	480	1030	700	260	695
P75	530	480	1260	700	300	850



thread

Fast openning

# **DEGASSIFIERS**

Atmospheric vessel.

Material: Hand lay-up polyester with fiberglass (max quality polyester tech). Steel reinforced GRP vessel.

Flanged connections for INLET/OUTLET or PVC lid in the bottom.

All connections are part of the structure of the filter in GRP.

Closed legs & part of the filter structure.

Side manhole.

Design temperature 40°C.

Drilled plate or PVC grid (According to diameter)

# ADDITIONAL OPTIONS

Higher temperatures. (Ask us)

High-chemical resistance. (Ask us) See page 31

Cylindrical height ad-hoc. (Check below)

Additional sight glass. See page 31

Additional flanges. See page 31

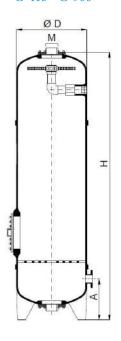
Anchorage system to ground. See page 31

Seismic calculations. (Ask us)

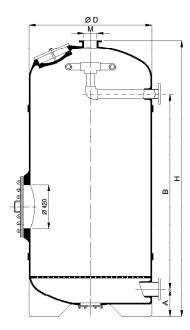
Additional tank available. See page 28 ----



G-415 - G-960



G-1010 - G-2550





0





Plastiziced Manhole lid



GRP Elliptical manhole lid



Support for rings G415-G960



Support for rings G1010-G2550



Threaded connections



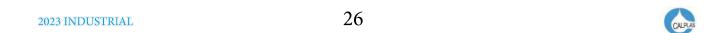
Optional sightglass



Customizab**l**e height

ID	G-415	G-460	G-520	G-640	G-720	G-840	G-960
Ref.	522041	522046	522052	522064	522072	522084	522096
Ø	415	460	520	640	720	840	960
Н	2355	2370	2385	2435	2460	2580	2700
Price	4 373 €	4 974 €	5 354 €	6 044 €	6 705 €	7 463 €	8 811 €

ID	G-1010	G-1160	G-1260	G-1440	G-1640	G-1840	G-2040	G-2210	G-2340	G-2550
Ref.	522010	522011	522012	522014	522016	522018	522020	522022	522023	522025
Ø	1010	1160	1260	1440	1640	1840	2040	2210	2340	2550
Н	2800	2900	2950	3070	3270	3270	3470	3500	3570	3740
Price	10 636 €	12 648 €	14 602 €	18 548 €	22 523 €	27 426 €	36 218 €	40 034 €	42 955 €	50 226 €



# **DECANTERS**

Material: Hand lay-up polyester with fiberglass (max quality polyester tech). Flanged connections for INLET/OUTLET.

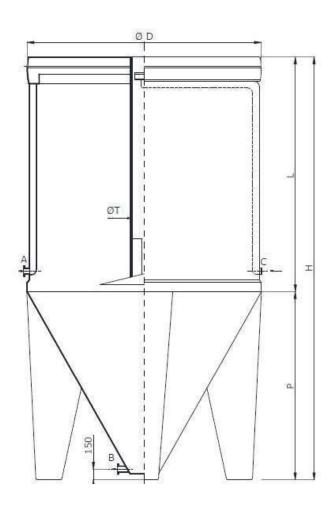
All connections are part of the structure of the filter in GRP.

Closed legs & part of the filter structure.

Design temperature 40°C.

# ADDITIONAL OPTIONS Higher temperatures. (Ask us)

High-chemical resistance. (Ask us)
Cylindrical height ad-hoc.
Additional sight glass. See page 31
Additional flanges. See page 31
Anchorage system to ground. See page 31
Seismic calculations .(Ask us)
Folding lids can be also included.



Internal detail

Distribution

cone





Overflow

connections

height

Bottom drain

	DEC-1260	DEC-1640	DEC-2040	DEC-2340	DEC-2550
Ref.	522412	522416	522420	522423	522425
Ø	1260	1640	2040	2340	2550
Р	1100	1280	1650	1900	2200
L	1200	1650	1650	1650	1650
Н	2300	2930	3300	3550	3850
Price	8 753 €	10 785 €	15 435 €	17 480 €	19 972 €
Δ 800 mm	1 216 €	1 382 €	2 135 €	3 245 €	5 630 €

# TANKS & MIXING TANKS Ø 520 - 2550

# ATMOSPHERIC TANKS

Atmospheric vessel.

 $Material:\ Hand\ lay-up\ polyester\ with\ fiberglass\ (max\ quality\ polyester\ tech).$ 

Steel reinforced GRP vessel.

All connections are part of the structure of the filter in GRP.

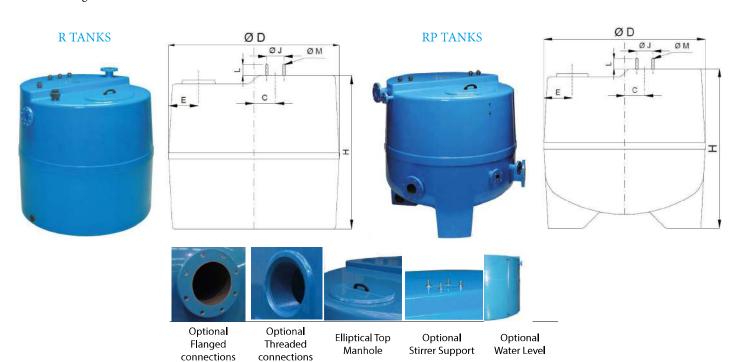
Design temperature 40°C.

R model Flat bottom

RP Closed legs.

### ADDITIONAL OPTIONS

Higher temperatures. (Ask us)
High-chemical resistance. (Ask us) See below
Additional sight glass. See page 31
Additional flanges. See page 31
Anchorage system to ground. See page 31
Seismic calculations. (Ask us)



Ø	520	640	720	840	1010	1260	1440	1640	2040	2040	2040	2340	2550
ID	R - 02	R - 03	R - 04	R-06	R - 10	R - 13	R - 17	R - 25	R - 35	R - 45	R - 50	R - 75	R - 100
Ref.	522152	522164	522172	522184	522110	522112	522114	522116	522120	522121	522122	522123	522125
Н	1050	1050	1050	1330	1330	1330	1330	1330	1330	1605	1880	1880	2110
Volume	200	300	400	660	975	1500	2000	2575	4000	4880	5750	7600	10000
Price	965 €	1 531 €	2 029 €	2 787 €	3 341 €	4 034 €	4 962 €	5 727 €	7 229 €	7 777 €	8 483 €	9 773 €	12 597 €
ID	RP - 02	RP - 03	RP - 04	RP - 06	RP - 10	RP - 13	RP - 17	RP - 25	RP - 35		RP - 50	RP - 75	RP - 100
Ref.	522252	522264	522272	522284	522210	522212	522214	522216	522220		522221	522223	522225
Н	1015	1035	1065	1075	1360	1460	1500	1610	1670		1970	2035	2110
Volume	140	240	340	520	840	1350	1870	2550	4000		5000	7000	9000
Price	1 095 €	1 677 €	2 237 €	3 066 €	3 741 €	4 536 €	5 518 €	6 362 €	8 582 €		9 287 €	10 675 €	13 676 €

	Price
GRP Deflector (3 inside)	385 €
Mixing funnel	310 €
Stirrer support / Tank in the top	370 €
Water level indicator	310 €
High Chemical resistance for tanks (Always check with us)	50 € + 12%

# NEED MORE VOLUME? CHECK WITH US!





# **MEDIATRAPS**

# **MEDIATRAPS**

Material: Hand lay-up polyester with fiberglass (max quality polyester tech) or PVC GRP Media traps manufactured and calculated according to EN 13121-3.

Steel reinforced GRP vessel.

Flanged connections for INLET/OUTLET or PVC.

Design temperature 40°C.

KSH internal nozzles 0.2 mm.

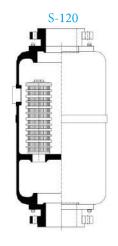
# ADDITIONAL OPTIONS

Higher temperatures. (Ask us) High-chemical resistance. (Ask us) See page 31 Additional sight glass. See page 31 Additional flanges. See page 31

Drinking water / Food contact. (Ask us)



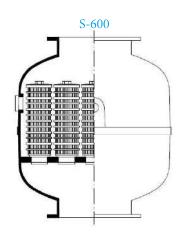










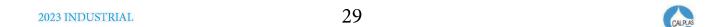




OPTIONAL support horizontal/vertical for S600: 465 €



ID	S-20	S <b>-</b> 40	S - 120	S <b>-</b> 200	S - 280	S - 600
Ref.	426000	426001	426003	426005	426007	426015
Max. Flow	20 m3/h	40 m3/h	120 m3/h	200 m3/h	280 m3/h	600 m3/h
Max Connections	Ø 63 (DN 50)	Ø 90 (DN 80)	Ø 140 (DN 125)	Ø 225 (DN 200)	Ø 280 (DN 250)	Ø 505(DN 350)
Diameter	Ø110	Ø230	Ø360	Ø415	Ø460	Ø730
Length	465	560	750	770	770	930
Pressure	6 kg/cm2	6 kg/cm2	6 kg/cm2	6 kg/cm2	6 kg/cm2	6 kg/cm2
Material	PVC	PVC	GRP	GRP	GRP	GRP
Price	469 €	1 190 €	2 020 €	3 054 €	3 990 €	8 977 €



# FILTRATION / PILOT PLANT SKIDS

# CALPLAS / DRYDEN AQUA FILTRATION UNITS



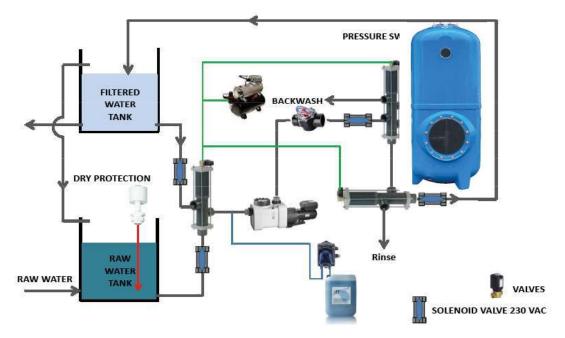
ID	Description	Price
64564	Calplas Filter AFM-640 mm, 0.3m <sup>2</sup> Speck Badu Delta ECO VS 1.10 kW 230 V 3x Besgo DN50/d63 & air compressor, pressure switch Filtration control panel - ASC3, APF® dosing pump. Dimensions: 1500 x 780 x 1800 mm (I * w * h) AFM bags: 14 (25 Kg) Not included	14 190 €
64572	Calplas Filter AFM-720 mm, 0.4m <sup>2</sup> Speck Badu Delta ECO VS 1.10 kW 230 V 3x Besgo DN50/d63 & air compressor, pressure switch Filtration control panel - ASC3, APF® dosing pump. Dimensions: 1500 x 780 x 1800 mm (I * w * h) AFM bags: 19 (25 Kg) Not included	14 995 €
64572.S	SEA WATER EDITION Calplas Filter AFM-720 mm,0.4m² Speck Badu Delta ECO VS 1.10 kW 230 V (Sea water) 3x Besgo DN50/d63 (Sea water) & air compressor, pressure switch Filtration control panel - ASC3, APF® dosing pump. Dimensions: 1500 x 780 x 1800 mm (I * w * h) AFM bags: 19 (25 Kg) Not included	15 310 €
64596	Calplas Filter AFM-960 mm, 0.7m <sup>2</sup> Speck Badu ECO Motion 3x Besgo DN65/d75 & air compressor, pressure switch Filtration control panel - ASC3, APF® dosing pump. Dimensions: 1850 x 1120 x 1800 mm (I * w * h) AFM bags: 37 (25 Kg) Not included	19 995 €

Price of systems excluding AFM® & APF®





# FILTRATION WITH CALPLAS 640/720/960





# ADDITIONAL ELEMENTS

# SIGHT GLASS

ID	Price
Circular sight glass 2 1/2" - From Ø415 to Ø520	285 €
Circular sight glass 3" - From Ø640 to Ø840	355 €
Circular sight glass 4" - From Ø960 to Ø1440	415 €
Circular sight glass 5" - From Ø1640 to Ø1840	505 €
Circular sight glass 6" - From Ø2040 to Ø3000	595 €

CHEMICAL LINING INCREASES
SEE BELOW

Standard Lining for Food Contact / Drinking water 50 € + 8%

LONG SIGHT GLASS (only available for 2.5 bar design pressure)



ID	Price
Standard vertical sight glass 200 mm	850 €
Long vertical sight glass 300 mm	950 €

Anionic Column Regeneration (NaOH[5%])
Tmax in regeneration=30°C
Higher values check with us

50 € + 8%

Cationic Column Regeneration (HCl or H<sub>2</sub>SO<sub>4</sub>)[5%] Tmax in regeneration=30°C Higher values check with us

50 € + 5%

THREADED I/O

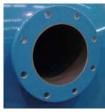


ID	Price
Threaded I/O - from 1/2" up to 1"	75 €
Threaded I/O - from 1 1/4" to 2"	100 €
Threaded I/O - from 2 1/2" to 4"	125 €

Cationic Column Regeneration (NaCl)

0 %

**FLANGES** 



ID	Price
Polyester flange - from DN15 up to DN 25	150 €
Polyester flange - from DN32 up to DN 65	275 €
Polyester flange - from DN 80 up to DN 100	350 €
Polyester flange - from DN 125	390 €
Polyester flange - from DN 150	500 €
Polyester flange - from DN 200	615 €
Polyester flange - from DN 250	685 €
Polyester flange - from DN 300	735 €
Polyester flange - from DN 350	850 €
Polyester flange - from DN 400	970 €
Polyester flange - from DN 450	1 075 €
Polyester flange - from DN 500	1 195 €

Anionic or Cationic Column Regeneration + Standard Lining Food Contact / Drinking water NaOH HCl H<sub>2</sub>SO<sub>4</sub>[5%] Tmax in regeneration=30°C Higher values check with us

50 € + 10%

ACS certification

Check with us.

Ozone max 1 ppm

50 € + 10%

Special conditions

Check with us

HANDHOLE	UPGRADE MANHOLE Ø420 to Ø500	PIPE SUPPORT	STANDARD FIXING HOLES	NAME PLATE SUPPORT
	20500 mm			
Hand hole	Only for Ø1010 -Ø3000	Per unit	Holes for 3 legs + Acess	GRP plate

Hand hole<br/>Ø160/Ø200 mmOnly for Ø1010 -Ø3000<br/>Only Metallic lidPer unit<br/>Holes for 3 legs + Acess<br/>4<br/>245 €GRP plate690 €900 €240 €245 €215 €

# **AFM MEDIA**

### WHAT IS AFM?

AFM® is quite simply the most efficient granular filtration medium available on the market. It is highly engineered to give optimum mechanical filtration performance in a range of industrial and municipal water filtration applications. Activated to increase the surface area up to 300 times that of crushed glass or sand and chemically and thermally treated to ensure permanent negatively charged surface properties that make AFM® self-sterilising.

AFM® replaces sand in all filtration applications and can be used in a conventional sand filter without modification.

### WHY AFM?

Will not support bacterial growth

At up to 20m/h will consistently filter, without flocculation:

- -->95% of 1  $\mu$  particles (Grade 1).
- -- >95% of  $1\mu$  particles (Grade 0).

Will selectively filter positively charged ionic particles such as heavy metals.

Will not suffer from channelling or preferential pathways.

Will consistently evacuate more than 95% of retained particles with 50% or less water

than required for sand. (backwash duration 5 mins max at 45m/h).

Service lifespan of 10 - 15 years or more.

### CALPLAS FILTERS + AFM INSTALLATIONS



# SELF-STERILIZING SURFACE RESISTANT TO BACTERIAL GROWTH



Water molecules and dissolved oxygen

Transformed into free radicals on the surface of AFM° (catalytic reaction)



Inhibits biofouling and protects AFM\* from bacterial colonisation. Free radicals oxidise dissolved organic matter and heavy metals.

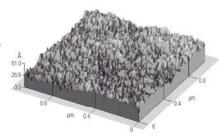
# INCREASED SURFACE AREA FOR SUPERIOR FILTRATION



Large surface area provides for superior mechanical filtration

Optimal sphericity, uniformity coefficient, particle size and shape of grain for best hydraulic performance (not round, not flat, no broken bits of glass)

Surface Area by Langmuir Isotherm Method 1'000kg:  $AFM = 50.000 \text{ m}^2 / \text{Sand } 3.000 \text{ m}^2$ 





# AFM' NG HYDROPHOBIC, NEUTRAL SURFACE CHARGE



Superior mechanical filtration up to 1µm particles (95% removal)

Adsorption of organic substances including Hydrocarbon and Microplastic

# AFM\*S (STANDARD) NEGATIVE SURFACE CHARGE



Superior mechanical filtration up to 4µm particles (98% removal)

Adsorption of positively charged particles, flocs and metals (Fe, Mn, As)

# RECOMMENDED OPERATIONAL PARAMETERS

PARAMETER	Value		
Filtration velocity	1 - 30 m3/h/m2		
Back Wash Velocity	30 - 50 m/h (20 m/h Ask)		
Max. operating differential pressure	< 0.5 bar		
Back Wash Duration	for 3 - 5/10 mins		
Water pH limits	4 - 10		
Water temperature limits	1 - 100°C		

# **AFM CERTIFICATIONS:**

- ISO 9001, 14001 & 18001.
- NSF 50 & 61 for potable water use.
- DWI EC Regulation 31 certification for potable water use.
- European Water Directive (98/83/EC) & 80/778/EEC) compliant.
- BSEN12902 and BSEN12904 compliant.
- Independently tested by accredited laboratory, IFTS



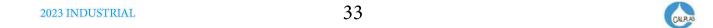
Ref	ID	Package quantity	Price
6400	AFM <sup>®</sup> Grade 0 St (0.25-0.5 mm)	(25 Kg/bag)	50 €
6401	AFM® Grade 1 St (0.4-0.8 mm)	(25 Kg/bag)	50 €
6431	AFM® Grade 1 NG (0.4-0.8 mm)	(25 Kg/bag)	50 €
6432	AFM <sup>®</sup> Grade 2 NG (0.7-2.0 mm)	(25 Kg/bag)	50 €
6403	AFM <sup>®</sup> Grade 3 St (2.0-4.0 mm)	(25 Kg/bag)	50 €
6410	AFM <sup>®</sup> Grade 0 St (0.25-0.5 mm)	1 Tn/bag	2000 €
6411	AFM* Grade 1 St (0.4-0.8 mm)	1 Tn/bag	2000 €
6441	AFM <sup>®</sup> Grade 1 NG (0.4-0.8 mm)	1 Tn/bag	2000 €
6442	AFM <sup>®</sup> Grade 2 NG (0.7-2.0 mm)	1 Tn/bag	2000 €
6413	AFM® Grade 3 St (2.0-4.0 mm)	1 Tn/bag	2000 €

# ANTHRACITE & ACTIVATED CARBON



Ref	ID	Package quantity	Price
6100	Anthracite N-( 0.8 - 1.6 mm) 720 Kg/m <sup>3</sup>	(50 l/bag)	CHECK
6101	Anthracite N-( 1.4 - 2.5 mm) 720 Kg/m <sup>3</sup>	(50 l/bag)	CHECK





# **BESGO VALVES**

# BESGO







Ref	ID	Price
60040	Besgo DN40 / d50 mm / 1½ " Distance 190 mm	820 €
60050	Besgo DN50 / d63 mm / 2" Distance 190 mm	895 €
60065	Besgo DN65 / d75 mm / 21/2" Distance 250 mm	1 180 €
60080	Besgo DN80 / d90 mm / 3" Distance 300 mm	1 790 €
60100	Besgo DN100 / d110 mm / 4" Distance 400 mm	2 590 €
60125	Besgo DN125 / d140 mm / 5" Distance 450 mm	4 820 €
60050.S	Besgo DN50 / d63 mm / 2" Distance 190 mm Sea water	1 045 €
60065.S	Besgo DN65 / d75 mm / 2½" Distance 250 mm Sea water	1 425 €
60080.S	Besgo DN80 / d90 mm / 3" Distance 300 mm Sea water	2 195 €
60100.S	Besgo DN100 / d110 mm / 4" Distance 400 mm Sea water	3 410 €
60125.S	Besgo DN125 / d140 mm / 5" Distance 450 mm Sea water	5 735 €

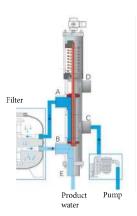


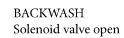
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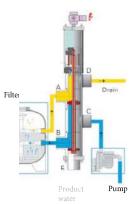
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Ref	ID	Price
60045	Besgo DN40 / d50 mm / 1½ "	680 €
60055	Besgo DN50 / d63 mm / 2"	750 €
60068	Besgo DN65 / d75 mm / 2½"	990 €
60082	Besgo DN80 / d90 mm / 3"	1 490 €
60101	Besgo DN100 / d110 mm / 4"	2 300 €
60126	Besgo DN125 / d140 mm / 5"	3 990 €
60055.S	Besgo DN50 / d63 mm / 2" Sea water	935 €
60068.S	Besgo DN65 / d75 mm / 2½" Sea water	1 155 €
60082.S	Besgo DN80 / d90 mm / 3" Sea water	1 815 €
60101.S	Besgo DN100 / d110 mm / 4" Sea water	2 745 €
60126.S	Besgo DN125 / d140 mm / 5" Sea water	4 900 €

# HOW DOES IT WORK?

FILTRATION Solenoid valve closed

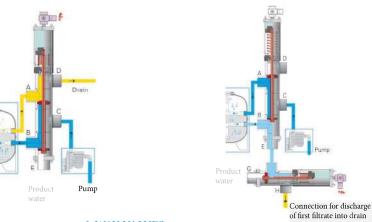




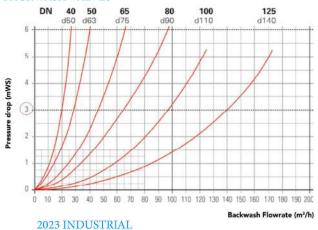


RINSING

Solenoid of 5 way valve closed / 3-way valve open

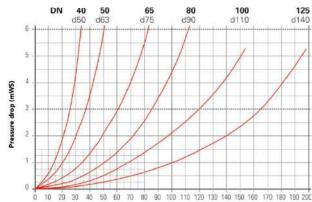


BACKWASH VALVES



3-WAY VALVES

34



Flowrate (m³/h)



# FLOWMETERS & AIR DIFFUSERS

### **FLOWMETERS**



The Flow Meter FlowVis® from H2Flow can be installed in every direction and includes a non return Valve (DN 40 to DN 65). The average accuracy is 97.9%. The product is NSF 50 certified and a product of high quality. Scale in LPM.

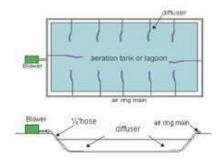
Ref	ID	Flow	Price
63602	FlowVis® d 25/32 mm	1.2 - 5.4 m³/h	155 €
63604	FlowVis® d 50 mm	2.4-21 m <sup>3</sup> /h	245 €
63605	FlowVis® d63 mm	2.4-24 m³/h	245 €
63606	FlowVis® d75 mm	7 - 45 m³/h	245 €
63608	FlowVis® d90 mm	16-54 m³/h	690 €
63610	FlowVis® d110 mm	27-102 m³/h	705 €
63615	FlowVis® d160 mm	68 - 227 m³/h	840 €
63617	FlowVis® d200 mm	113 - 420 m³/h	1 040 €
63697	FlowVis® Display extension cal	ole 8 m	255 €
63698	FlowVis® Flapper with indicato	r and magnet d50mm-d75mm	38 €
63699	FlowVis® Digital Display for all	installations: Digital Display in casing	1 005 €

### AIR DIFFUSERS



Dryden Aqua Air Diffusers are the best semi flexible fine bubble aeration system available in the market. They are 5 times more efficient than coarse bubble air diffusers in mixing action and aeration capacity, with an average bubble size of 1 mm. They usually connect to a circular ring main pipe with quick connections. The ring main pipe connects to a low pressure (around 1 bar) roots type or rotary vane air blower.

- Tubular diffuser up to 3m in length
- Air flow from 1 to 10 m3/h
- Oxygen transfer up to 5kg/kwh
- Less than 0.2 Bar (3psi) pressure differential
- Outer polyester jacket
- Internal glass bead ballast (self weighted)
- Plastic & stainless steel construction
- Simple installation
- Very easy maintenance



		Diffuser	A: El 3/	rent depths	Oxygen Transfer kg of O <sub>2</sub> /day per diffuser at different depths at 20 °C and 50 % O <sub>2</sub> saturation		
Ref	ID	Weight kg	Air Flow m³/h (+/- 20%)	2 m	3 m	4 m	Price
64301	0.33 m Diffuser	0.5	1	$2 \text{ kg O}_2$	$2.5 \text{ kg O}_2$	$3 \text{ kg O}_2$	182 €
64303	1.00 m Diffuser	1.5	3	$6~{\rm kg}~{\rm O}_{_2}$	$7.5 \text{ kg O}_2$	$9 \text{ kg O}_2$	205 €
64306	2.00 m Diffuser	3.0	6	$14  \mathrm{kg}  \mathrm{O}_{_2}$	$15  \mathrm{kg}  \mathrm{O}_{_2}$	$18~{\rm kg~O}_{_2}$	240 €
64309	3.00 m Diffuser	4.5	9	20 kg O <sub>2</sub>	22 kg O <sub>2</sub>	27 kg O <sub>2</sub>	275 €

In water depths of >3 - 5m there may be a tendency for the diffusers to lift. Stainless steel ballast blocks are available that fit onto the hose end of the diffusers.

These have a single air connection on the top and either one or four diffuser outlets, one on each side.

64402	Dryden Aqua Weight for Air Diffuser 75mm x 75mm; 2 Connections 1/2"	210 €
64405	Diffuser ring adapter	210 €

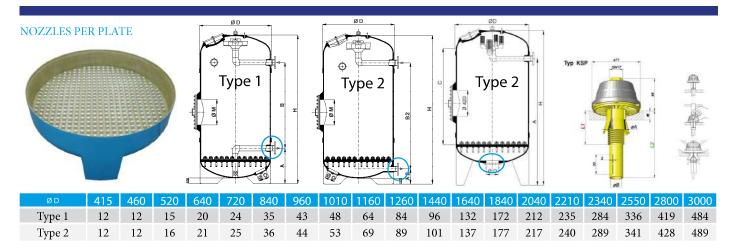




Weight for air diffuser



# **USEFUL INFORMATION**



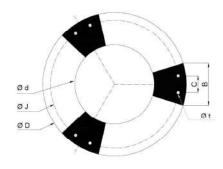
# CALPLAS INTERNAL DIAMETER/ SURFACE ACCORDING TO PRESSURE Internal diameter estimation: This might change (Can be confirmed in manufacturing)

	2.5 kg	g/cm²	4 kg	/cm²	5 kg	/cm²	6 kg	/cm²	7 kg	/cm²
Diameter	Ø Int. (mm)	Surface (m²)								
415	404	0,13	*	*	402	0,13	*	*	398	0,12
460	449	0,16	*	*	445	0,16	*	*	441	0,15
520	508	0,20	*	*	504	0,20	*	*	500	0,20
640	627	0,31	*	*	622	0,30	*	*	616	0,30
720	708	0,39	*	*	702	0,39	*	*	695	0,38
840	816	0,52	*	*	810	0,52	*	*	804	0,51
960	946	0,70	*	*	938	0,69	*	*	932	0,68
1010	994	0,78	990	0,77	986	0,76	984	0,76	*	*
1160	1135	1,01	1130	1,00	1126	1,00	1122	0,99	*	*
1260	1241	1,21	1238	1,20	1234	1,20	1230	1,19	*	*
1440	1405	1,55	1396	1,53	1390	1,52	1385	1,51	*	*
1640	1610	2,04	1600	2,01	1596	2,00	1590	1,99	*	*
1840	1790	2,52	1783	2,50	1777	2,48	1770	2,46	*	*
2040	2010	3,17	2000	3,14	1988	3,10	1978	3,07	*	*
2210	2190	3,77	2177	3,72	2165	3,68	2155	3,65	*	*
2340	2275	4,06	2262	4,02	2250	3,98	2240	3,94	*	*
2550	2500	4,91	2485	4,85	2475	4,81	2465	4,77	*	*
2800	2758	5,97	2734	5,87	2728	5,84	2720	5,81	*	*
3000	2964	6,90	2937	6,77	2928	6,73	2918	6,69	*	*

# FLANGES INFORMATION DIN PN10

T DI II ( GDO II			11110				_
Connection	Inch	i	D <sub>e</sub>	K	Nº Ho <b>l</b> es	ØHo <b>l</b> e	
DN15	1/2"	20	95	65	4	14	
DN20	3/4"	25	105	75	4	14	
DN25	1"	32	115	85	4	14	
DN32	1 1/4"	40	140	32	4	18	
DN40	1 1/2"	50	150	110	4	18	100
DN50	2"	63	165	125	4	18	
DN65	2" 1/2	75	185	145	4	18	
DN80	3"	90	200	160	8	18	. σ
DN100	4"	110	220	180	8	18	2×0
DN110		125	230	190	8	18	000
DN125	5"	*125/140	250	210	8	18	,
DN150	6"	160	285	240	8	22	11/2/22
DN175		200	315	270	8	22	
DN200	8"	225	340	295	8	22	
DN250	10"	*250/280	395	350	12	22	Φ .
DN300	12	315	445	400	12	22	0
DN350	14	355	505	460	16	22	ØHole
DN400	16	400	565	515	16	26	Q
DN500	20	560	670	620	20	26	

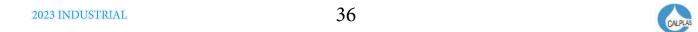
CALPLAS LEG INFORMATION / FIXING HOLES DATA



Ø	D	d	J	В	C	t
415	400	310	355	90	0	12
460	440	340	390	95	0	12
520	503	493	450	105	0	12
640	612	482	550	120	0	12
720	670	510	600	130	0	14
840	795	615	705	140	0	14
960	925	725	825	160	0	14
1010	970	470	830	250	0	16
1160	1120	620	1000	270	130	16
1260	1215	670	1125	290	150	16
1440	1380	780	1250	325	170	16
1640	1560	810	1400	370	190	16
1840	1760	1060	1610	370	200	20
2040	1980	1230	1800	410	200	20
2210	2160	1450	1960	430	220	20
2340	2240	1440	2000	450	220	20
2550	2435	1550	2200	550	250	20
2800	2700	1700	2400	570	250	20
3000	CHECK WITH US					

<sup>\*</sup> With this sizes, please always inform about pipe dimension.

ANSI and JIS also available



# **USEFUL INFORMATION**

# CALPLAS FILTERS INFORMATION

Diameter	Standard Connection (Filters)	Besgo automatic valve compability	Manhole size (mm)	Sightglass size	Filtering surface 2.5 Kg/cm² (m²)	Volume to cover laterals (liters)	Volume to cover nozzle plate (liters)	Volume for Δ 100 mm (liters)
415	2"	Sesgo AG	305	2 1/2"	0,13	8	7 (50 mm)	13
460	2"	Sesgo AG	305	2 1/2"	0,16	11	8 (50 mm)	16
520	2"	Sesgo AG	305	2 1/2"	0,20	14	11 (50 mm)	21
640	2"	Sesgo AG	355	3"	0,31	27	16 (50 mm)	31
720	2"	Sesgo AG	355	3"	0,39	43	20 (50 mm)	40
840	2"	Sesgo AG	355	3"	0,52	73	27 (50 mm)	53
960	2 1/2"	Sesgo AG	420	4"	0,70	105	36 (50 mm)	71
1010	DN80	Sesgo AG	420 / 500	4"	0,78	105	78 (100 mm)	78
1160	DN80/DN100	Sesgo AG	420 / 500	4"	1,01	127	102 (100 mm)	102
1260	DN100	Sesgo AG	420 / 500	4"	1,21	163	121 (100 mm)	121
1440	DN100	Sesgo AG	420 / 500	4"	1,55	249	155 (100 mm)	155
1640	DN125	<b>Ø</b> Besgo AG	420 / 500	5"	2,04	371	204 (100 mm)	204
1840	DN125	Sesgo AG	420 / 500	5"	2,52	515	252 (100 mm)	252
2040	DN150	Sesgo AG	420 / 500	6"	3,17	699	318 (100 mm)	318
2210	DN200		420 / 500	6"	3,77	971	377 (100 mm)	377
2340	DN200		420 / 500	6"	4,06	1.039	407 (100 mm)	407
2550	DN200		420 / 500	6"	4,91	1.325	491 (100 mm)	491
2800	DN250		420 / 500	6"	5,97	2.070	598 (100 mm)	598
3000	DN250		420 / 500	6"	6,90	2.212	690 (100 mm)	690

# FLOW (m³/h) AT DIFFERENT VELOCITIES (Calculated 2.5 bar design pressure internal diameter)

Diameter	Flow at 5 m/h	Flow at 10 m/h	Flow at 15 m/h	Flow at 20 m/h	Flow at 25 m/h	Flow at 30 m/h	Flow at 35 m/h	Flow at 40 m/h	Flow at 45 m/h	Flow at 50 m/h	Flow at 55 m/h	Flow at 60 m/h
415	0,65	1,3	1,95	2,6	3,25	3,9	4,55	5,2	5,85	6,5	7,15	7,8
460	0,8	1,6	2,4	3,2	4	4,8	5,6	6,4	7,2	8	8,8	9,6
520	1	2	3	4	5	6	7	8	9	10	11	12
640	1,55	3,1	4,65	6,2	7,75	9,3	10,85	12,4	13,95	15,5	17,05	18,6
720	1,95	3,9	5,85	7,8	9,75	11,7	13,65	15,6	17,55	19,5	21,45	23,4
840	2,6	5,2	7,8	10,4	13	15,6	18,2	20,8	23,4	26	28,6	31,2
960	3,5	7	10,5	14	17,5	21	24,5	28	31,5	35	38,5	42
1010	3,9	7,8	11,7	15,6	19,5	23,4	27,3	31,2	35,1	39	42,9	46,8
1160	5,05	10,1	15,15	20,2	25,25	30,3	35,35	40,4	45,45	50,5	55,55	60,6
1260	6,05	12,1	18,15	24,2	30,25	36,3	42,35	48,4	54,45	60,5	66,55	72,6
1440	7,75	15,5	23,25	31	38,75	46,5	54,25	62	69,75	77,5	85,25	93
1640	10,2	20,4	30,6	40,8	51	61,2	71,4	81,6	91,8	102	112,2	122,4
1840	12,6	25,2	37,8	50,4	63	75,6	88,2	100,8	113,4	126	138,6	151,2
2040	15,85	31,7	47,55	63,4	79,25	95,1	110,95	126,8	142,65	158,5	174,35	190,2
2210	18,85	37,7	56,55	75,4	94,25	113,1	131,95	150,8	169,65	188,5	207,35	226,2
2340	20,3	40,6	60,9	81,2	101,5	121,8	142,1	162,4	182,7	203	223,3	243,6
2550	24,55	49,1	73,65	98,2	122,75	147,3	171,85	196,4	220,95	245,5	270,05	294,6
2800	29,85	59,7	89,55	119,4	149,25	179,1	208,95	238,8	268,65	298,5	328,35	358,2
3000	34,5	69	103,5	138	172,5	207	241,5	276	310,5	345	379,5	414



# PACKAGING INFORMATION IN CALPLAS EQUIPMENT

# PUMP STRAINERS & MEDIATRAPS

Calplas Pump strainers & mediatraps are sent in carton box which is included in the price.

# FA HFX AFM & VESSELS WITH THREADED CONNECTIONS

Calplas vessels with threaded connections are sent in carton box which is included in the price.

# **VESSELS WITH FLANGED CONNECTIONS**

Calplas vessels with flanged connections require a wooden box crate if it is sharing transport with other loads. Please see prices below.



### FB

Model	Net Price
FB-40 to FB-80	150 €
FB-100 to FB-175	235 €
FB-200	366 €
FB-250	285 €
FB-300	350 €
FB-350	390 €

# **COLUMNS WITH FLANGES**

Model	Net Price
Ø415 to Ø640 mm	100 €
Ø720 to Ø960 mm	155 €
Ø1010 to Ø1260 mm	190 €
Ø1440 to Ø1640 mm	300 €
Ø1840 to Ø2210 mm	370 €
Ø2340 mm	430 €
Ø2550 mm	530 €
Ø2800 mm	585 €
Ø3000 mm	685 €

# FULL TRUCK (DIRECT SHIPMENT TO INSTALLATION)

For some installations a direct shipment can be done, with a full truck load, under this circumstances wooden box crates can be avoided under customers responsability not to damage the filters on the unloading process.





# NOTES




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