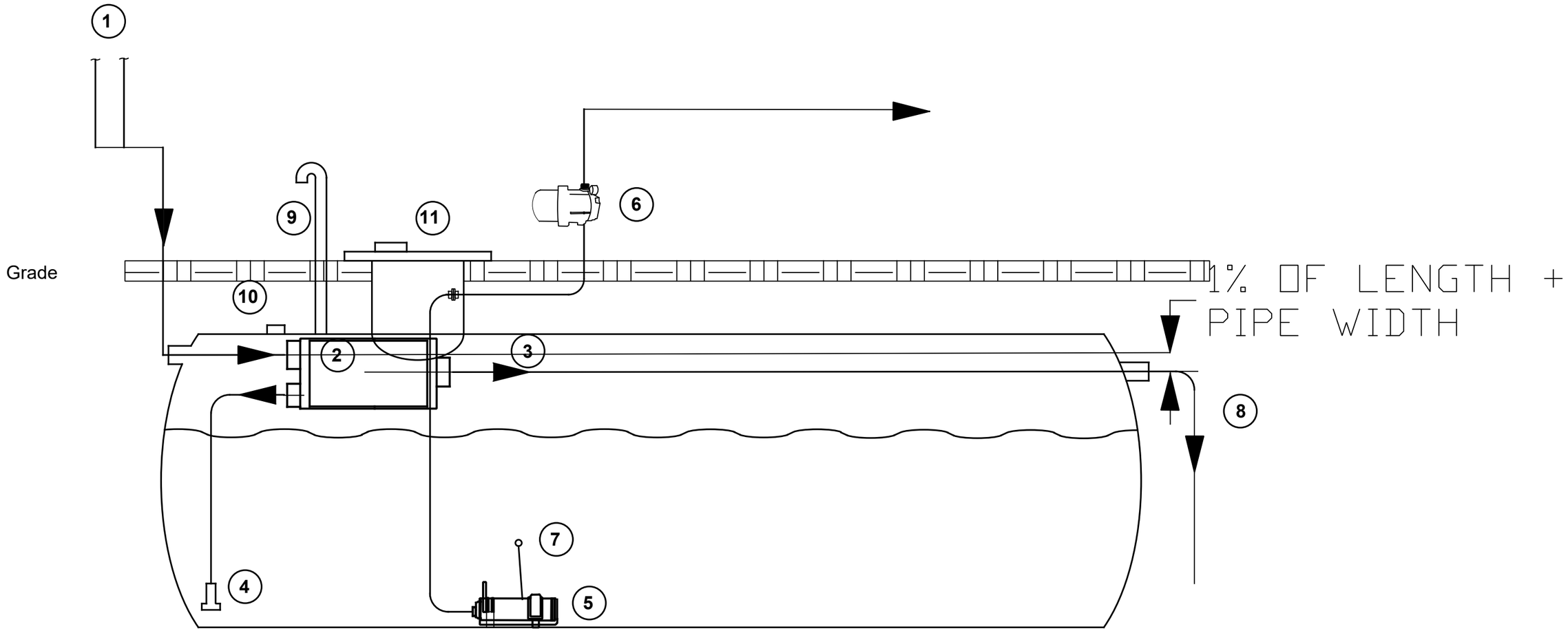


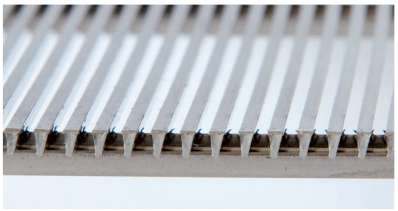
1. Rainwater collection point (roof drains, gutters, etc.)
2. Rainwater enters the jump filter and is processed. (Possible 97% diverted to storage tank.)
3. Remaining water from prefilter to overflow.
4. Smoothing Inlet - "flow-calming" device to eliminate turbulence of the incoming water as it enters the tank.
5. Submersible Pump
6. Electrovarem pump controller w/pressure tank
7. Low water cut off float switch
8. Pipe overflow to BMP or storm drain
9. Vent (sized as required)
10. Auxillary inlet (sized as required)
11. Manhole

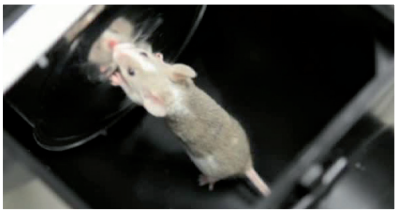
RAINWATER HARVESTING SYSTEM DETAIL

BELOW-GROUND TANK WITH SUBMERSIBLE PUMP, NO PRESSURE TANK, NO FILTRATION **NOT TO SCALE**

INTEWA

INTEWA PRODUCTS





WATER, WE'RE IN OUR ELEMENT

www.intewa.com

PURAIN

ÜBERSETZUNG???

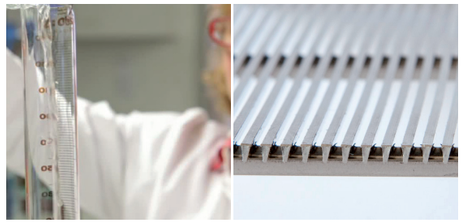
We have designed the PURAIN Rainwater filter, sometimes known as the hydraulic jump filter, for roof areas ranging from 60m^2 to more than 6000m^2. This filter automatically cleans itself by means of the hydraulic jump. The design model for PURAIN Rainwater filters comes from nature. At almost every course in a stream, you can see how the hydraulic jump functions. The water flows over one of the stones, smooth and rounded by the action of the water over time. At the bottom of the dip, the waterflow changes to a subcritical flow in a process now commonly known as hydraulic jump. This resulting increase in water power is similar to a strong eddy and any impurities are then forced over the next level and washed away downstream. The following types of PURAIN Rainwater filters are designed for a variety of:

- **PURAIN PR 100**
  for a single family dwelling: including a nonreturn valve, protection against small animals and skimmer overflow
- **PURAIN PR 100**
  for a single family dwelling: including a skimmer overflow
- **PURAIN PR 150 bis PR 400**
  for industrial, public or commercial buildings

INNOVATION

Best water quality

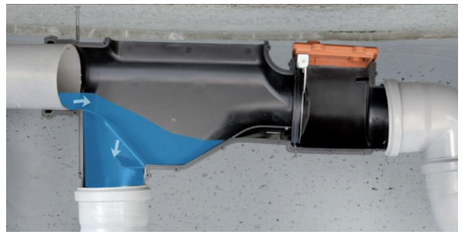
The rainwater filter is designed to filter rainwater coming off roofing. Samples analyzed by us confirm an excellent quality of water. The water is best suited for use in flushing toilets, in the washing machine and for garden irrigation as well as some other commercial applications.
Using soft rainwater saves on detergent costs, prevents the calcification of piping and appliances and is the most natural thing you can give your plants.



The sturdy sieve is break-proof and is designed to last the life of the filter. Its trapezoidal shape and diagonally set profile prevents the dirt from settling and clogging it.
The water surface in the tank is further cleaned by means of an overflow skimmer integrated into the PURAIN Rainwater filter PR100.
The design of PURAIN PR100 features a nonreturn valve of standard size, as stipulated by most regulations. This prevents the overflowing dirty water from flowing back into the system and also stops small animals from entering the tank.

Self-cleans with 98% efficiency

Low rainfall events account for over 97% of total annual rainfall. Therefore, it is particularly important that the filter be designed to collect this light rainfall.



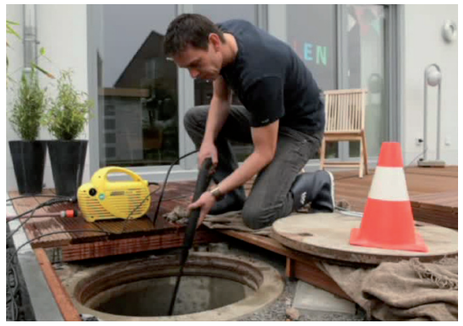
High rainfall events, that occur approx. 4 to 10 times in a year, contribute only about 3% to total water yield and are used by the PURAIN Rainwater filter for self-cleaning. These high rainfalls lead to the formation of an eddy in the PURAIN rainwater filter, the so called hydraulic jump, which spins with such great force that even dirt accumulated in the tray is flushed and discharged with the overflow.

The PURAIN Rainwater filter cleans itself during heavy rainfall events. It means minimum maintenance costs for the user in comparison to other filter systems. An overall rainwater filtering efficiency of 98% is achieved with the unique, self-cleaning PURAIN Rainwater filter.

TECHNOLOGY

Easy to assemble, install and maintain

This filter requires extremely low maintenance in comparison to other self-cleaning rainwater filters due to the self-cleaning by means of hydraulic jump design as well as the sturdy construction of the wedge wire sieve.
If water is accumulating in the try area, the sieve can be cleaned manually within a few seconds with a high pressure cleaner. This is done simply through entry via the tank lid. We recommend the use of a PR-100-RSDS backflushing nozzle for filters installed in hard to reach tanks.



Now, flushing can be done manually using a hand valve or automatically using a timer controlled valve.

Rainwater harvesting with system

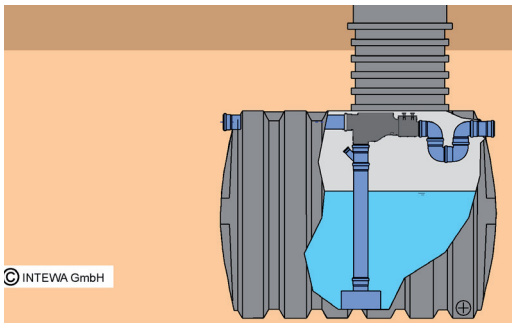
The best place to install a rainwater filter is in the tank. Now there is no need for separate downpipe filters or separate filtration tanks. The PURAIN Rainwater filter itself can be directly used as an overflow and all roofing downpipes can be connected to one single filter.
A lot of tank manufacturers and dealers are already providing PURAIN rainwater filters built into their tanks. Due to its low height offset and its size the PURAIN rainwater filter can be retrofitted easily into most tanks.

TECHNOLOGY

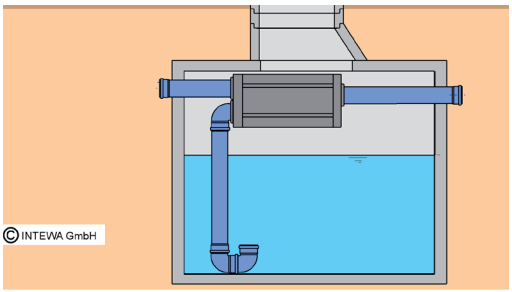
Sample installations:

To follow are a few examples of the PURAIN rainwater filter integrated into various tanks:

PURAIN rainwater harvesting filter PR100 for single family dwelling in plastic tank



PURAIN rainwater harvesting filter PR150 for industrial, public or commercial buildings in concrete tank



PURAIN References

In 2001, the self-cleaning PURAIN rainwater filter patented by INTEWA was launched. Since that time, more than 20,000 units have been installed. The PURAIN Rainwater filter, originally named the hydraulic jump filter, on the basis of its cleaning principle, is now well known all round the world as the leader in rainwater filtering technology.

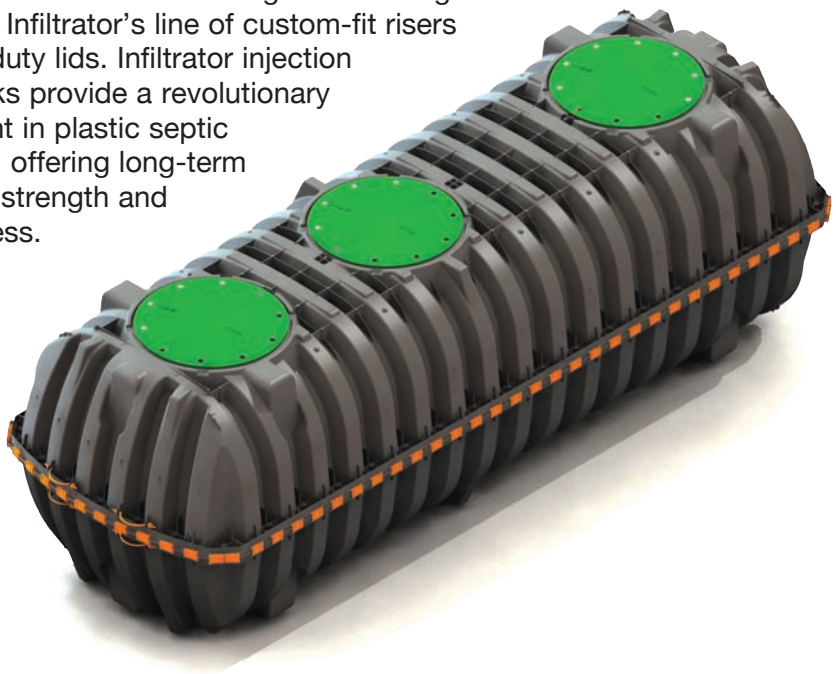
Your chandler:

www.intewa.com

INFILTRATOR® tanks

IM-1530

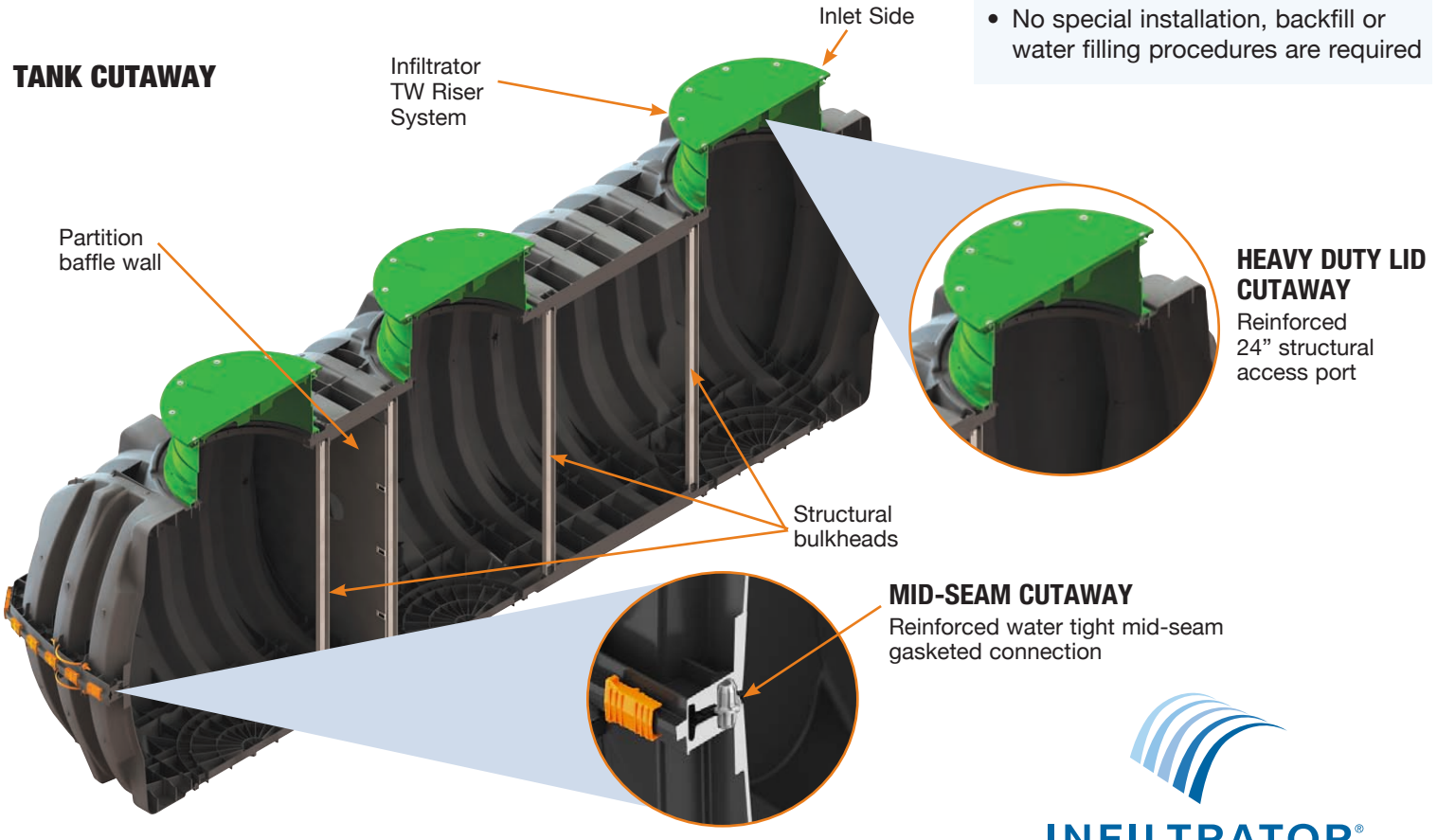
The Infiltrator IM-1530 is a lightweight strong and durable septic tank. This watertight tank design is offered with Infiltrator's line of custom-fit risers and heavy-duty lids. Infiltrator injection molded tanks provide a revolutionary improvement in plastic septic tank design, offering long-term exceptional strength and watertightness.



Features & Benefits

- Strong injection molded polypropylene construction
- Lightweight plastic construction and inboard lifting lugs allow for easy delivery and handling
- Integral heavy-duty green lids that interconnect with TW™ risers and pipe riser solutions
- Structurally reinforced access ports eliminate distortion during installation and pump-outs
- Reinforced structural ribbing and fiberglass bulkheads offer additional strength
- Can be installed with 6" to 48" of cover
- Can be pumped dry during pump-outs
- Suitable for use as a septic tank, pump tank, or rainwater (non-potable) tank
- No special installation, backfill or water filling procedures are required

TANK CUTAWAY



HEAVY DUTY LID CUTAWAY
Reinforced 24" structural access port

MID-SEAM CUTAWAY
Reinforced water tight mid-seam gasketed connection

Protecting the Environment with **Innovative Wastewater Treatment Solutions**

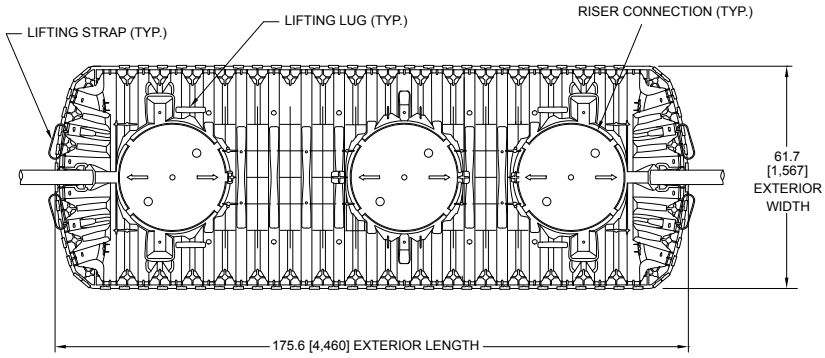
INFILTRATOR® systems inc.

IM-1530 General Specifications and Illustrations

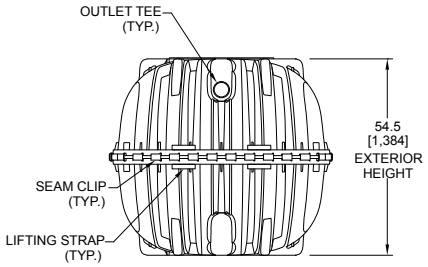
The IM-1530 is an injection molded two piece mid-seam plastic tank. The IM-1530 injection molded plastic design allows for a mid-seam joint that has precise dimensions for accepting an engineered EPDM gasket. Infiltrator's gasket design utilizes technology from the water industry to deliver proven means of maintaining a watertight seal.

The two-piece design is permanently fastened using a series of non-corrosive plastic alignment dowels and locking seam clips. The IM-1530 is assembled and sold through a network of certified Infiltrator distributors.

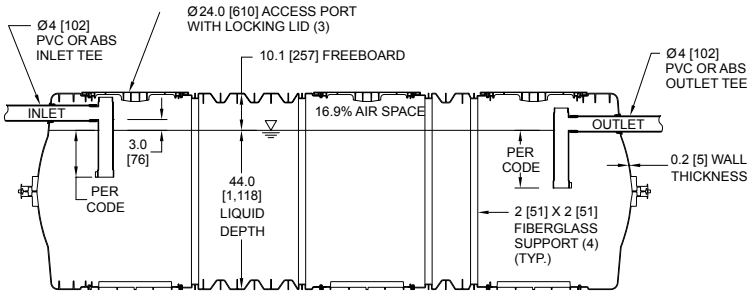
IM-1530	
Working Capacity	1537 gal (5818 L)
Total Capacity	1787 gal (6765 L)
Airspace	16.9%
Length	176" (4460 mm)
Width	62" (1567 mm)
Length-to-Width Ratio	2.8 to 1
Height	55" (1384 mm)
Liquid Level	44" (1118 mm)
Invert Drop	3" (76 mm)
Fiberglass Supports	4
Compartments	1 or 2
Maximum Burial Depth	48" (1219 mm)
Minimum Burial Depth	6" (152 mm)
Maximum Pipe Diameter	4" (100 mm)
Weight	501 lbs (228 kg)



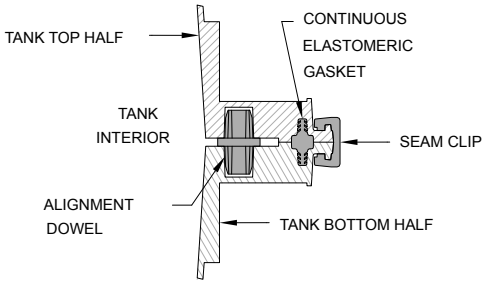
TOP VIEW



END VIEW



SIDE VIEW



MID-HEIGHT SEAM SECTION

INFILTRATOR® systems inc.

4 Business Park Road
P.O. Box 768
Old Saybrook, CT 06475
860-577-7000 • Fax 860-577-7001
1-800-221-4436
www.infiltratorsystems.com

IM21 0214

Contact Infiltrator Systems' Technical Services Department for assistance at 1-800-221-4436

PLURAFIT inlet calmer DN100

Code: **PF 300-100 Calm**
Article number: **300080**
EAN: **4251173101186**

Quick Overview

- separable, therefore pollutants can be removed in the installed condition
- large, closed sedimentation chamber
- high durability by ribbing
- for protecting pumps and consumer
- to avoid swirling of sediments by the inflow of rainwater
- UV stabilised

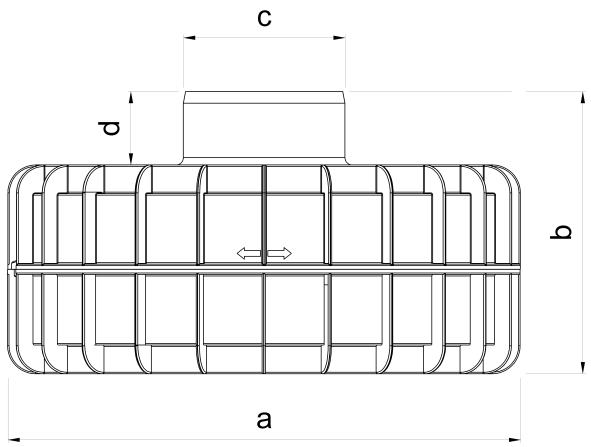
Product Description

The PLURAFIT PF 300-100 Calm allows removal of the bottom bowl and therefore can be cleaned in installed condition. DN100 pipes can be directly fitted to the spigot end of the inlet calmer.

Basic knowledge:

With course of time, fine particles settle at the base of the tank and form a sediment layer. In order to avoid swirling of the sediment layer by inflowing rain water, the water must be steadily supplied to the tank. The inlet calmer leads the rainwater to the tank in the direction of flow created at the base of the tank - the sediment layer is not disturbed. Pumps and other parts of the system are subject to less wear and therefore have higher durability.

Technical Drawing



a:	Ø349 mm
b:	192 mm
c:	Ø110 mm (DN100)
d:	50 mm

Shipping

Gross weight (incl. packaging)	2,81 kg
Net weight	1.45 kg
Weight EU-pallet max. quantity	104.40 kg
Dimensions carton (length x width x height)	640 x 440 x 220 mm
Max. quantity per EU-pallet	72 Stk
Carton volume	0.062 m³
Volume EU-pallet max. quantity	1.872 m³
HS-Code	8421210090

Technical Data

Height	192 mm
Net weight	1.45 kg
Diameter	349 mm

Connections	DN 100
Color	Schwarz
UV stabilisation	Yes
Material	PP

Information

E-Mail: info@intewa.com (http://www.intewa.com)

(ver. 1.9.1.0)

UP

Multi-stage submersible pumps

Clean water
(Maximum sand content 150 g/m³)

Domestic use

Civil use

Agricultural use

PERFORMANCE RANGE

- Flow rate up to **210 l/min** (12.6 m³/h)
- Head up to **94 m**

APPLICATION LIMITS

- Maximum liquid temperature **+40 °C**
- Maximum sand content **150 g/m³**
- **20 m** maximum immersion depth (with a sufficiently long power cable)
- Vertical and horizontal installation
- Continuous service **S1**

CONSTRUCTION AND SAFETY STANDARDS

- **20 m** long power cable
- Float switch for single-phase versions

EN 60335-1
IEC 60335-1
CEI 61-150

EN 60034-1
IEC 60034-1
CEI 2-3

CE

PATENTS - TRADE MARKS - MODELS

- Patent Pending n. PCT/IB2014/063126
- Patent Pending n. BO2015A000116
- Patent n. EP09781276.2

CERTIFICATIONS

Company with management system certified DNV
ISO 9001: QUALITY
ISO 14001: ENVIRONMENT

INSTALLATION AND USE

A new concept range of submersible multi-stage pumps designed guarantee even greater reliability, thanks to patented innovative technical solutions which prevent blockage of the pumps even after prolonged periods of inactivity.
Because of their high efficiency and reliability they are suitable for use with clean water in domestic, civil and agricultural applications such as the distribution of water in combination with pressure tanks, for the irrigation of gardens and orchards and for pressure boosting, etc.

OPTIONS AVAILABLE ON REQUEST

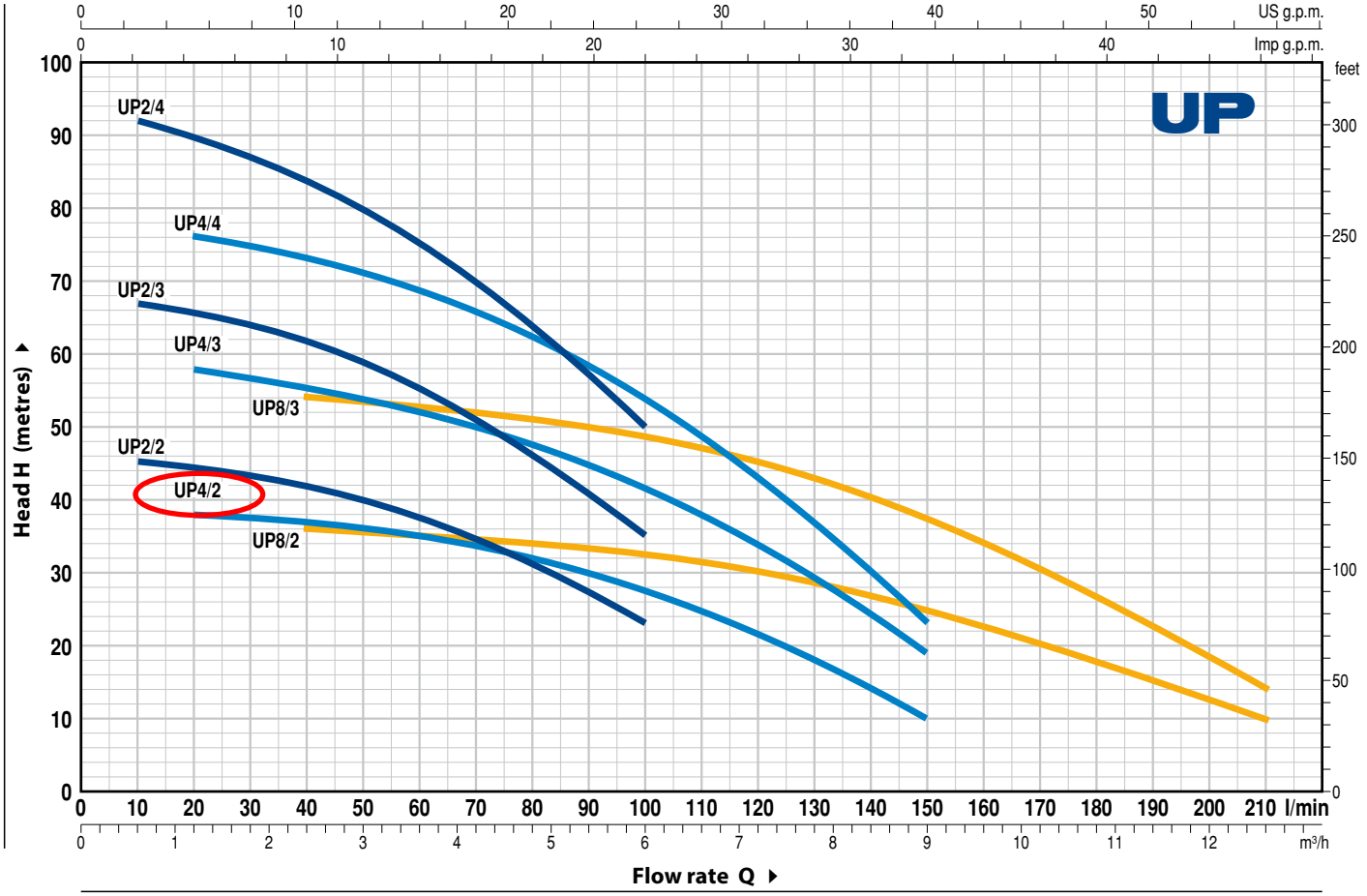
- Pumps without float switch
- Pumps fitted with power cables of other lengths
- Other voltages
- **Support kit for horizontal operation**

GUARANTEE

2 years subject to terms and conditions

CHARACTERISTIC CURVES AND PERFORMANCE DATA

60 Hz n= 3450 rpm



MODEL		POWER (P2)		Q	m³/h	0	0.6	1.2	2.4	3.6	4.8	6.0	7.2	9.0	10.2	11.4	12.6
Single-phase	**Three-phase**	**kW**	**HP**		l/min	**0**	**10**	**20**	**40**	**60**	**80**	**100**	**120**	**150**	**170**	**190**	**210**
UPm 2/2-GE	**UP 2/2**	0.75	1			46	45	44	42	37	31	23					
UPm 2/3-GE	**UP 2/3**	1.1	1.5			68	67	66	62	55	46	35					
UPm 2/4-GE	**UP 2/4**	1.5	2			94	92	90	84	75	64	50					
UPm 4/2-GE	**UP 4/2**	0.75	1	**H**	metres	40	–	38	37	35	32	27	22	10			
UPm 4/3-GE	**UP 4/3**	1.1	1.5			60	–	58	55	52	47	41.5	34	19			
UPm 4/4-GE	**UP 4/4**	1.5	2			78	–	76	73	69	62	54	43	23			
UPm 8/2-GE	**UP 8/2**	1.1	1.5			37	–	–	36	35	34	32	30	25	20	15	10
UPm 8/3-GE	**UP 8/3**	1.5	2			56	–	–	54	53	51	49	45	37	31	23	14

Q = Flow rate **H** = Total manometric head

Tolerance of characteristic curves in compliance with EN ISO 9906 Grade 3B.

➠ **Single-phase pumps without float switch on request**

POS.	COMPONENT	CONSTRUCTION CHARACTERISTICS
1	**EXTERNAL SLEEVE**	Stainless steel AISI 304 complete with threaded delivery port in compliance with ISO 228/1
2	**MOTOR SLEEVE**	Stainless steel AISI 304
3	**IMPELLERS AND DIFFUSERS**	Noryl FE1520PW
4	**DIAPHRAGMS**	Stainless steel AISI 304
5	**MOTOR SHAFT**	Stainless steel EN 10088-3 - 1.4104

6 TWO MECHANICAL SEALS SEPARATED BY AN OIL CHAMBER

Seal	*Shaft*	*Position*		*Materials*	
Model	*Diameter*		*Stationary ring*	*Rotational ring*	*Elastomer*
STA-17	**Ø 17** mm	Motor side	Ceramic	Graphite	NBR
ST1-16	**Ø 16** mm	Pump side	Silicon carbide	Graphite	NBR

7 BEARINGS **6303 2RS - C3 / 6203 ZZ - C3E**

8 CAPACITOR

Pump	*Capacitance*
Single-phase	*(220 V)*
UPm 2/2-GE **UPm 4/2-GE**	**16** µF - 500 VL
UPm 2/3-GE **UPm 4/3-GE** **UPm 8/2-GE**	**25** µF - 450 VL
UPm 2/4-GE **UPm 4/4-GE** **UPm 8/3-GE**	**35** µF - 450 VL

9 ELECTRIC MOTOR

UPm: single-phase 220 V - 60 Hz
with thermal overload protector incorporated into the winding.
UP: three-phase 380 V - 60 Hz
– Insulation: class F
– Protection: IP X8

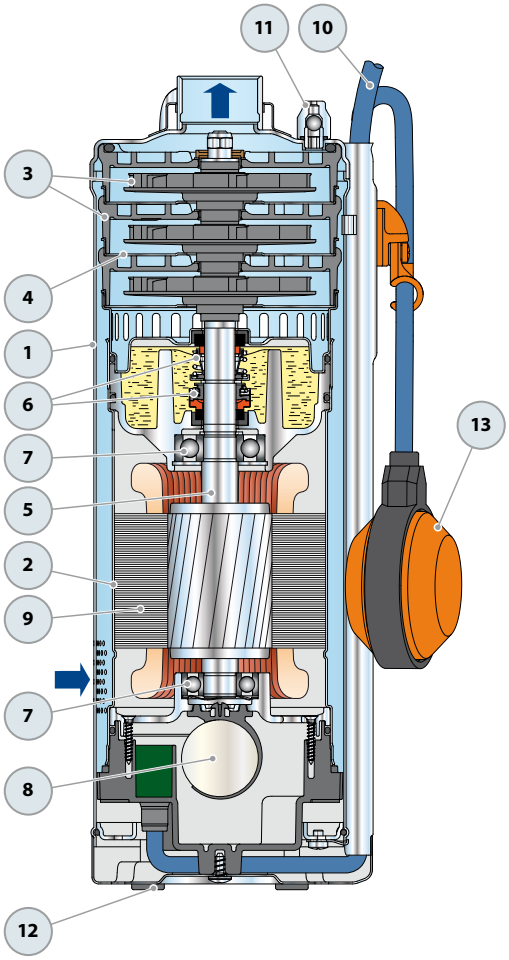
10 POWER CABLE

➠ **DRINCABLE® type**
approved for use in drinking water by "WRAS"
in compliance with BS 6920, approval n. 7513
Standard length 20 metres

11 AUTOMATIC VENT VALVE

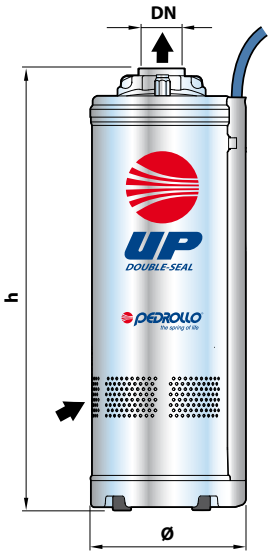
12 ANTI-VIBRATION SUPPORTS

13 FLOAT SWITCH
(only for single-phase versions)

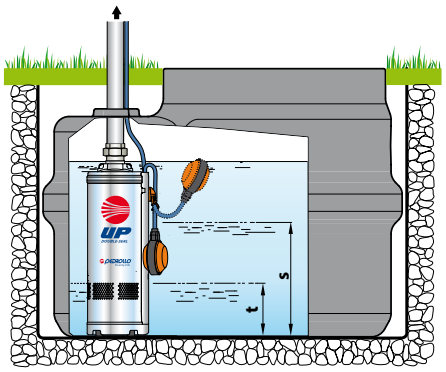


DIMENSIONS AND WEIGHT

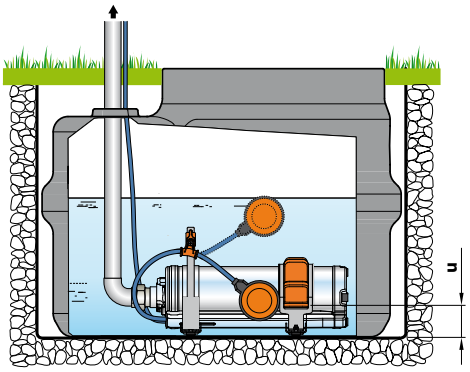
3" minimum submergence!



Vertical installation



Horizontal installation



MODEL		PORT	N. STAGES	DIMENSIONS mm		kg	
Single-phase	Three-phase	DN		Ø	h	1~	3~
UPm 2/2-GE	UP 2/2	1¼"	2	150	398	13.7	13.5
UPm 2/3-GE	UP 2/3		3		455	16.5	15.7
UPm 2/4-GE	UP 2/4		4		502	18.7	17.7
UPm 4/2-GE	UP 4/2		2		398	13.7	13.5
UPm 4/3-GE	UP 4/3		3		455	16.5	15.7
UPm 4/4-GE	UP 4/4		4		502	18.7	17.7
UPm 8/2-GE	UP 8/2		2		428	15.0	14.2
UPm 8/3-GE	UP 8/3		3		475	17.3	16.3

MODEL	LEVELS mm		
	s	t	u
UP 2/2 UP 4/2	320	135	55
UP 2/3 UP 4/3 UP 8/2	350		
UP 2/4 UP 4/4 UP 8/3	370		

s = Minimum restarting level
t = Emptying level
u = Minimum operational level

ABSORPTION

MODEL	VOLTAGE
Single-phase	220 V
UPm 2/2-GE	**5.8** A
UPm 2/3-GE	**8.0** A
UPm 2/4-GE	**10.0** A
UPm 4/2-GE	**5.8** A
UPm 4/3-GE	**7.7** A
UPm 4/4-GE	**10.0** A
UPm 8/2-GE	**8.0** A
UPm 8/3-GE	**10.0** A

MODEL	VOLTAGE	
Three-phase	220 V	380 V
UP 2/2	**3.8** A	**2.2** A
UP 2/3	**5.3** A	**3.1** A
UP 2/4	**6.0** A	**3.5** A
UP 4/2	**3.8** A	**2.2** A
UP 4/3	**5.3** A	**3.1** A
UP 4/4	**6.0** A	**3.5** A
UP 8/2	**5.3** A	**3.1** A
UP 8/3	**6.0** A	**3.5** A

PALLETIZATION

MODEL		GROUPAGE	CONTAINER
Single-phase	Three-phase	n. pumps	n. pumps
UPm 2/2-GE	UP 2/2	**30**	**54**
UPm 2/3-GE	UP 2/3	**30**	**54**
UPm 2/4-GE	UP 2/4	**25**	**45**
UPm 4/2-GE	UP 4/2	**30**	**54**
UPm 4/3-GE	UP 4/3	**30**	**54**
UPm 4/4-GE	UP 4/4	**25**	**45**
UPm 8/2-GE	UP 8/2	**30**	**54**
UPm 8/3-GE	UP 8/3	**30**	**54**

ELECTROVAREM

ELECTRONIC PUMP CONTROLLER WITH INTEGRAL PRESSURE TANK

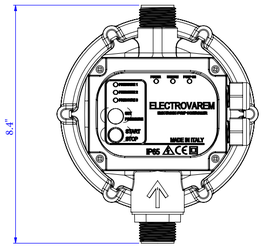
VAREM

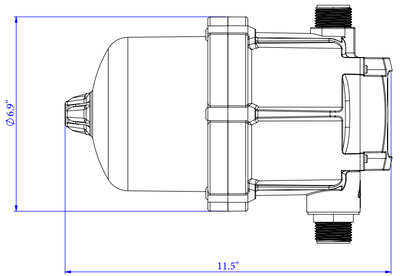
We provide advanced solutions for water handling and for the safety of hydraulic systems, pursuing maximum energy efficiency and reliability.

ADVANTAGES

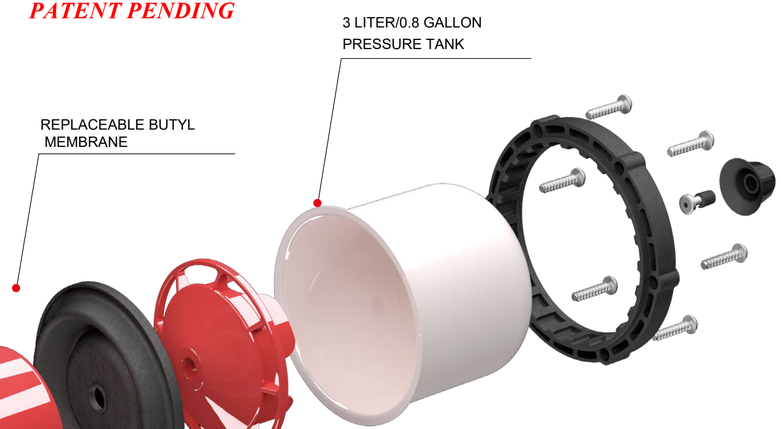
1 BUILT-IN PRESSURE TANK
2 BUILT-IN PRESSURE REGULATOR
4 BUILT-IN CHECK VALVE
5 START ON FLOW + LOW PRESSURE
6 STOP ON NO FLOW + PRESSURE
7 PUMP PROTECTION from dry running, frequent on/off, water hammer, lightning, and power surges

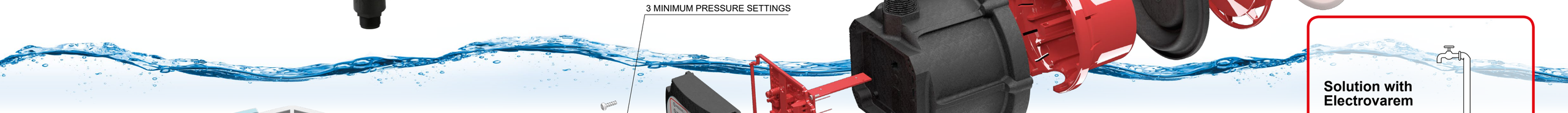
DIMENSIONS

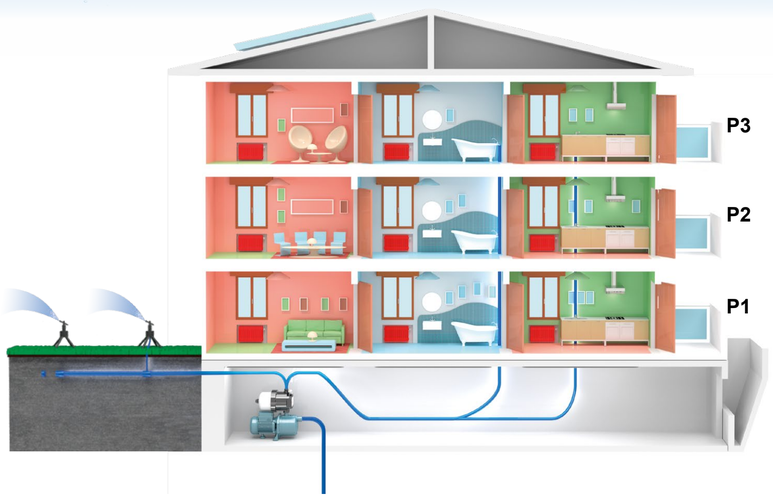




PATENT PENDING





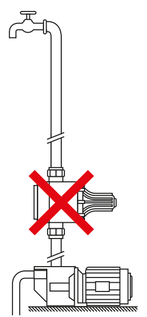


Standard application

Electronic Pump Controller

+

Pump



Solution with Electrovarem

Electrovarem

+

Pump

ADVANTAGES

- *Water reserve*
- *Protection from water hammer*
- *Reduced use of the pump*
- *Significant energy savings*
- *Pressure regulation according to the demand of water*
- *Maximum pressure alarm*

ELECTROVAREM

ELECTRONIC PUMP CONTROLLER WITH BUILT-IN 3 L PRESSURE TANK

TECHNICAL FEATURES

- *Butyl membrane*
- *Max Temp: 120°F*
- *Frequency = 50/60 Hz*
- *Voltage = 230V±10% (120V upon request)*

PROTECTION AGAINST

- *Dry running*
- *Water hammer*
- *Frequent pump ON/OFF*
- *Overvoltage*
- *Overpressure*

3 restart pressures

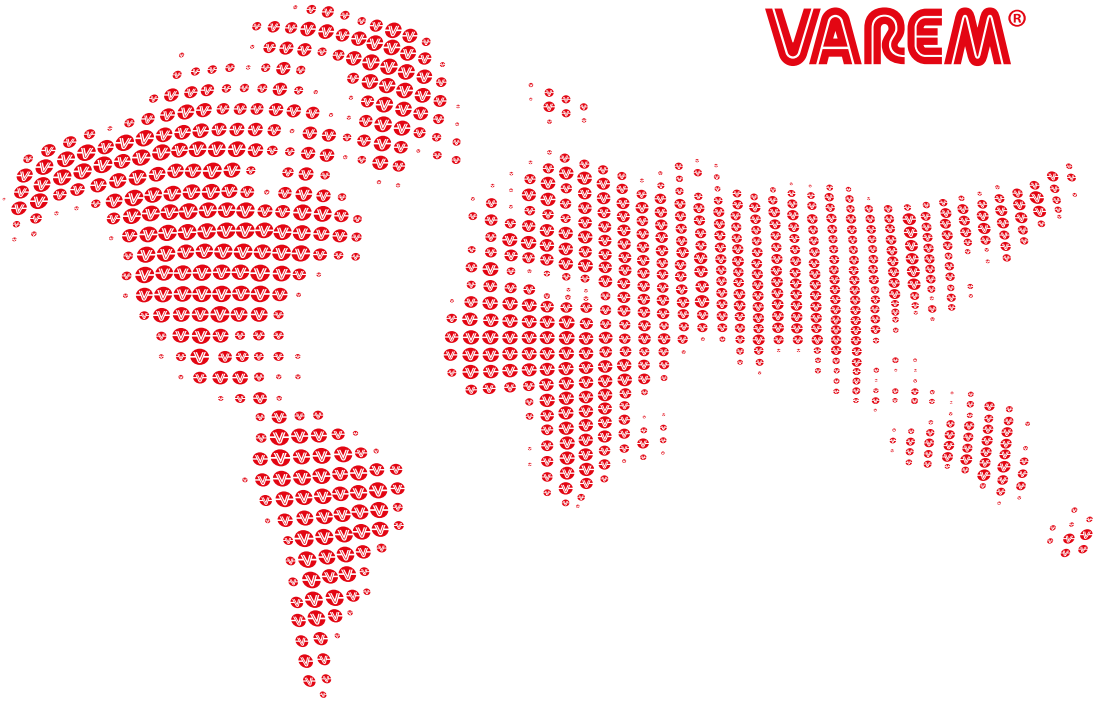
Precharge	22 psig standard factory setup	30 psig	35 psig
P 1	20	26	33
P 2	30	36	44
P 3	38	46	58
P max	62	73	87
TYPICAL APPLICATIONS	Jet, centrifugal and peripheral pumps	Submersible pump up to 73 psig	Submersible pump up to 87 psig

Code	Oqfgn
EV003363PL220000	STANDARD 12A
EV003363PL220C01	STANDARD 12A (non cabled)
EV003363PL22M000	PLUS GAUGE
EV003363PL22MC01	PLUS GAUGE (non cabled)
EV003363PL26M000	TOP 16A WITH GAUGE
EV003363PL26MC01	TOP 16A CON MANOMETRO/GAUGE + CAVI/CABLES (non cablati/not cabled)

STANDARD

PLUS

TOP



VAREM®

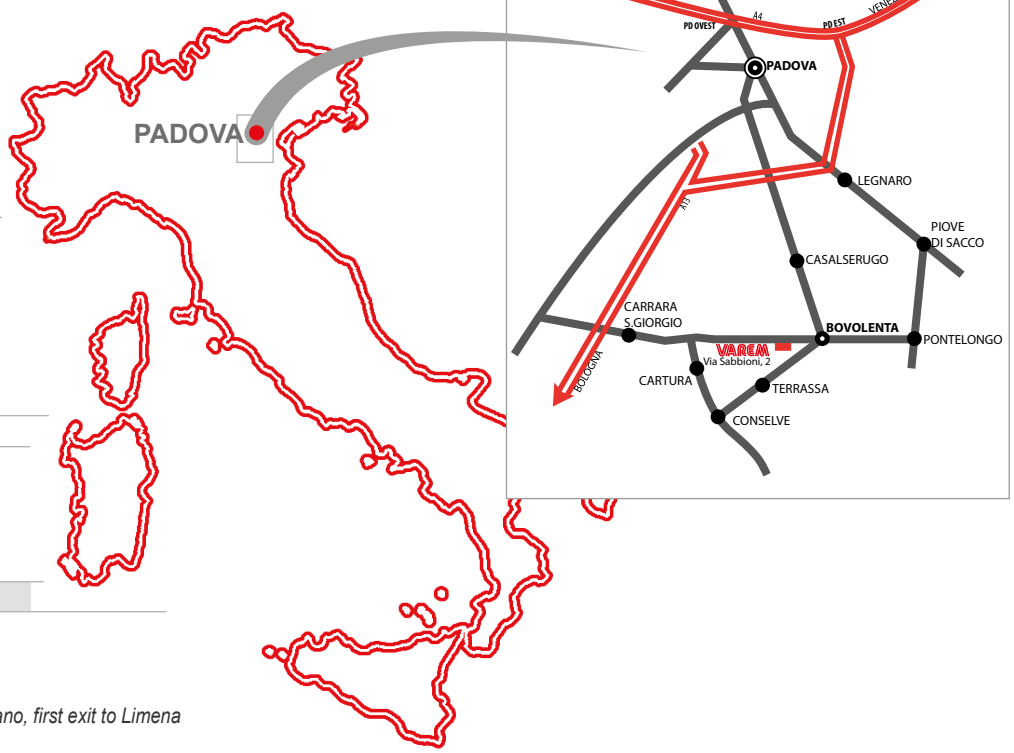
CONTACTS:

USA Sales

GEORGIA WATER TANKS
404-991-0404
www.georgiawatertanks.com

GEORGIA WATER TANKS

HOW TO REACH US



Varem s.p.a
www.varem.com
varem@varem.com, vendite@varem.com
tel. +39 049 8840322
fax +39 049 8841399
P. Iva 01010270286

Bovolenta plant - registered office

via Sabbioni 2, I-35024 Bovolenta (PD) - **Italy**
45° 16' 02.49" N, 11° 55' 51.49" E

Limena plant - headquarters

via del Santo 207, I-35010 Limena (PD) - **Italy**
45° 27' 43.93" N, 11° 15' 12.44" E
By car: exit highway A4 Padova Ovest, way to Trento/Bassano, first exit to Limena