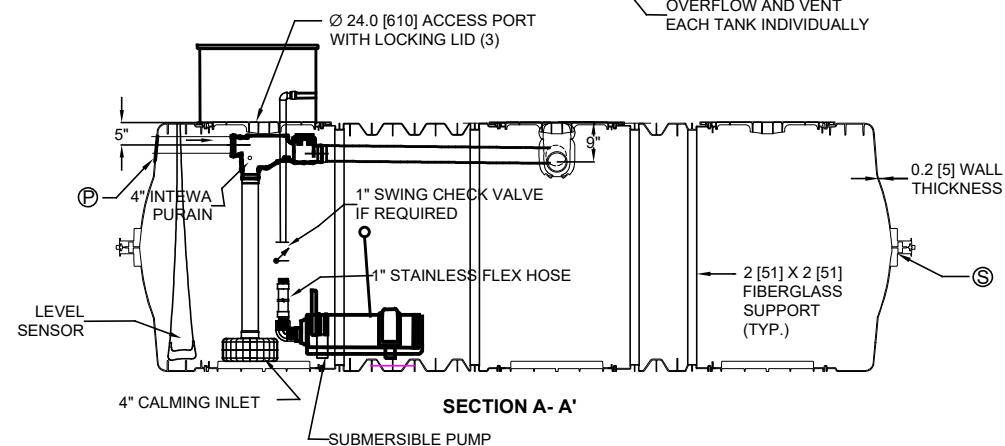
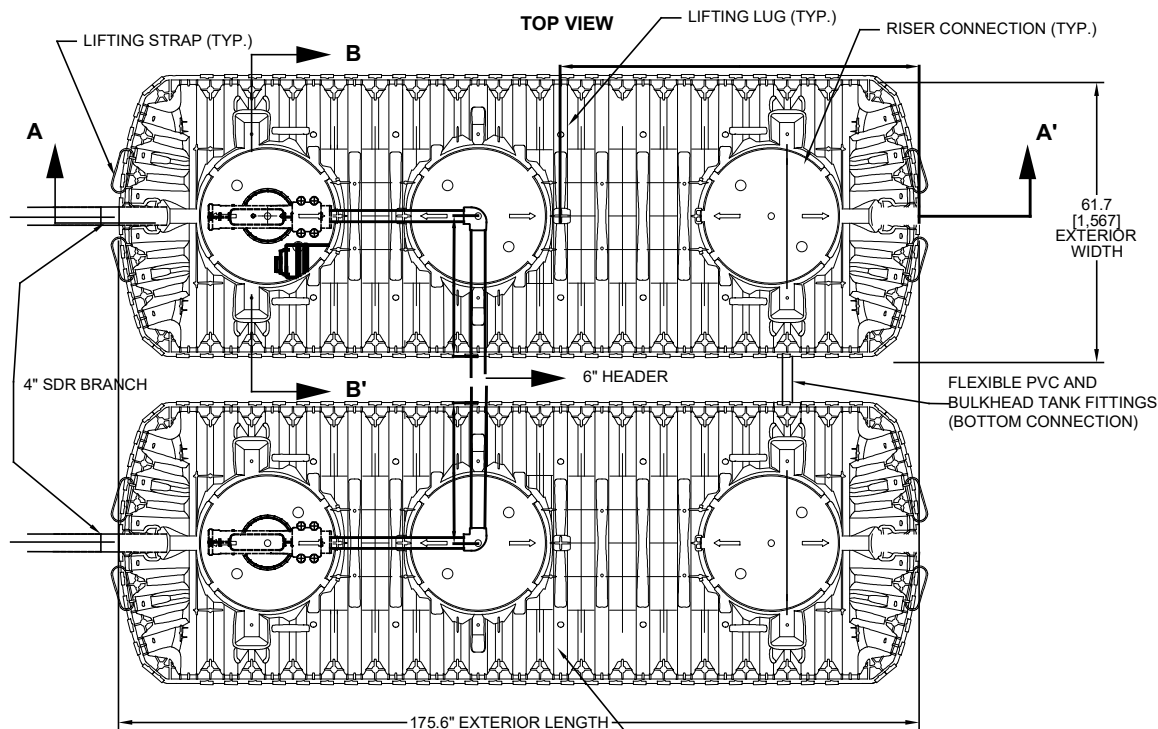




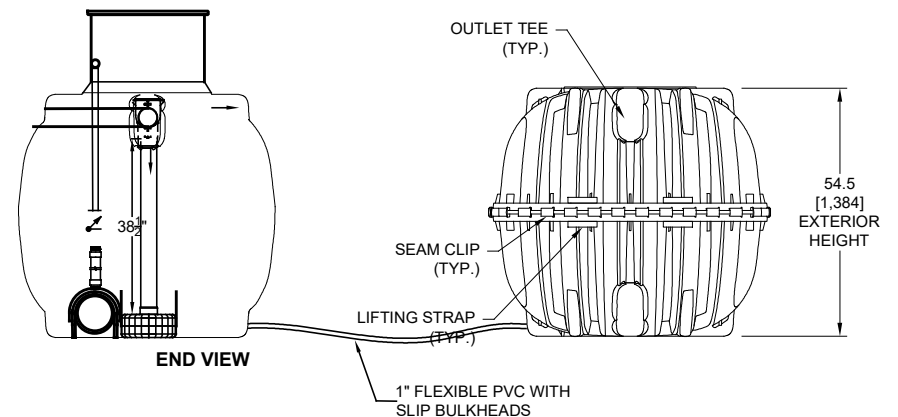
TANK EXTERIOR	
LENGTH	175.6 [4,460]
WIDTH	61.7 [1,567]
HEIGHT	54.5 [1,384]

LIQUID DEPTH	44.0 [1,118]
INVERT DROP	3.0 [76]
FREEBOARD	10.1 [257]

TOTAL CAPACITY	1,787 GAL
WORKING VOLUME	1,650 GAL

NOTES:

1. ALL DRAWING DIMENSIONS IN INCHES OR AS NOTED.
2. EXTERIOR OF ACCESS OPENING LID INCLUDES THE FOLLOWING WARNING IN ENGLISH, FRENCH & SPANISH: "DANGER DO NOT ENTER"
3. TANK MARKINGS WILL INCLUDE: MANUFACTURER NAME, MODEL NUMBER, LIQUID CAPACITY, DATE OF MANUFACTURE, MAXIMUM BURIAL DEPTH, INLET, AND OUTLET.
4. MAXIMUM BURIAL DEPTH IS 48".
5. MINIMUM BURIAL DEPTH IS 6".
6. TANK IS FOR NON-TRAFFIC APPLICATIONS.
7. SUITABLE FOR BURIAL IN NATIVE SOIL; SEE INSTALLATION INSTRUCTIONS.
8. DEADMAN RESTRAINT REQUIRED; SEE INSTALLATION INSTRUCTIONS.
9. SDR PIPING REQUIRED.
10. REQUIRES SKID STEER OR EXCAVATOR FOR OFFLOADING
11. TANKS ASSEMBLED BY GEORGIA WATER TANKS. CUSTOMER TO PROVIDE 4 LABORERS, OR 2 LABORERS PLUS SKID STEER/EXCAVATOR & OPERATOR.
12. FILL WITH WATER OR PIPE TO COLLECTION SURFACE PRIOR TO BACKFILL.
13. TO PREVENT RODENT AND MOSQUITO ACCESS, USE RODENT-PROOF PREFILTER OR INSTALL POPUP EMITTER ON OUTLET LINE.



GEORGIA WATER TANKS
ATLANTA, GA

IM-1530 DUPLEX PARALLEL
WITH 4" INTEWA PURAIN

Drawn by: RDH	Date: 2/21/2021
Scale: NOT TO SCALE	Checked by: RAD Sheet: 1 of 1

Infiltrator IM-Series Septic Tank

General Installation Instructions

BEFORE YOU BEGIN

Infiltrator Water Technologies' tanks must be installed according to state and/or local regulations, which supersede the manufacturer's installation instructions. If unsure of the installation requirements for a specific site, contact the health department or permitting authority. The IM-Series referred to in this document includes the IM-540, IM-1060, and IM-1530 models.



WARNING: IMPLOSIONS MAY CAUSE SERIOUS INJURY

Follow Infiltrator Water Technologies vacuum test instructions

MATERIALS AND EQUIPMENT NEEDED

☐ IM-Series tank	☐ Excavator
☐ Access port lid(s)*	☐ Shovel
☐ 10 screws per lid*	☐ Level
☐ 2 inlet/outlet gaskets (included)	☐ 5-inch-diameter (125 mm) hole saw
☐ Inlet/outlet tees*	☐ Utility knife
☐ Tape measure	☐ PVC pipe glue with primer
☐ Pipe, risers, etc.	
☐ Socket wrench	

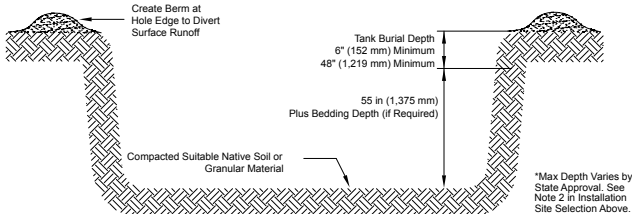
*tee and lid inclusion varies by state/province

INSTALLATION SITE SELECTION

1. Do not install the tank in vehicular traffic areas. The tank is designed for non-traffic applications.
2. The allowable soil cover depth is 6 to 48* inches (150 to 1,200 mm).
*18-inch (450 mm) max. in Florida for Cat. 3 IM-Series tanks;
48-inch (1,200 mm) max. in Florida for Cat. 4 IM-Series tanks; 36-inch (900 mm) max. in Massachusetts, New Hampshire, North Carolina, and Oregon.
3. The tank shall not be installed where the subsurface water level outside the tank exceeds the height of the outlet pipe saddle. Follow Table 4 guidelines.

EXCAVATING AND PREPARING THE SITE

1. Unless buoyancy control measures are required, the excavation width and length should be 18 to 36 inches (450 to 900 mm) larger than the tank on each side or sized as necessary to ensure proper backfill compaction, as outlined in Steps 5-10 of "Backfilling the Tank" in this document. See Infiltrator IM-Series Tank Buoyancy Control Guidance document, available online at www.infiltratorwater.com, for specific excavation requirements when installing buoyancy control measures.
2. Excavation depth shall account for the 55-inch (1,375 mm) tank height. Also account for 4 inches (100 mm) of bedding (if required) and cover depth (permissible cover depth is 0.5 to 4 feet (150 to 1,200 mm) of soil).
Note: If the water level outside the tank exceeds the height of the outlet pipe saddle, tank structural integrity may be compromised. See page 4 for maximum allowable subsurface water elevation guidelines.
3. Inspect bottom of excavation to verify suitability of native soil for tank installation. Soils with large, protruding, or sharp stones or other similar objects that may damage the tank are not suitable.
4. The tank may be installed either in suitable native soil (see Backfilling the Tank section) or a minimum 4-inch (100 mm) layer of well-graded granular soil having particles less than 3 inches (75 mm) in diameter, or maximum 0.5-inch (13 mm) diameter crushed stone.
5. Create a uniform, compacted, level surface to ensure that the bottom of the tank is evenly supported. Verify that the installation surface is flat.



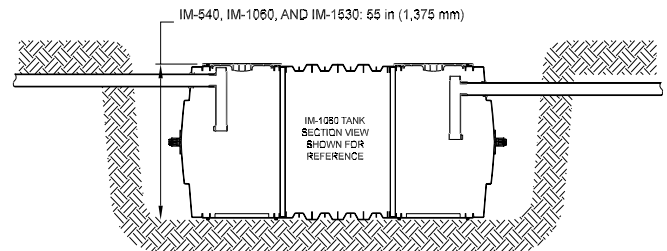
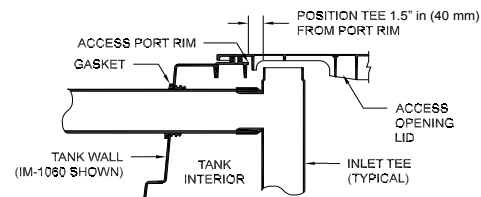
INSTALLING THE TANK

1. Inspect the tank for damage before installation.
2. If the tank inlet and outlet penetrations are not drilled, drill holes using the drill

points provided at each of the inlet and outlet ports according to the applicable Inlet and Outlet Hole Locations section of this document. The inlet and outlet may be drilled on either the sides or ends of the tank, as required based on applicable codes and site conditions.*

* Indiana, Kentucky, Oregon, West Virginia, and certain Florida and Texas tanks are factory-drilled.

3. The gaskets supplied with the tank are compatible with Schedule 40 and SDR 35 pipe using a 5-inch-diameter (125 mm) hole saw.
4. Install the rubber gaskets at the inlet and outlet.
5. Using all four of the tank's integral lifting lugs, lower tank into excavation.
6. Slide the inlet and outlet pipes* through the gaskets. Soapy lubricant may be used to slide the pipe in.
*For North Carolina, the inlet pipe shall be a straight pipe with no tee.
7. Horizontally position the tee 1½ inches (40 mm) from the access port rim, allowing the tee to fit into the recess in the access port lid (see detail).
8. Install lids and risers (see Installing Risers section) as necessary. Rotate lid over access opening until it indexes to tank and drops into position.



BACKFILLING THE TANK

Note: Infiltrator tanks do not require filling with water prior to backfill placement. Water filling and backfilling to the tank mid-height is required if the tank is left in either an open or backfilled excavation that may fill with water from rain or other sources.

1. Backfill with suitable native soil (max. 3-inch (75-mm) stone diameter). If native soil is unsuitable, replace unsuitable fraction with suitable soil. If suitable soil is not locally available, contact Infiltrator for assistance.
2. Suitable soil shall include soil textural classes defined in the United States Department of Agriculture soil triangle. Suitable soil textural classes are based on the tank installation depth, as measured from finished grade to the top of tank.
a) For a tank soil cover depth of 0.5 to 2.0 feet (150 to 600 mm), suitable soil textures include:

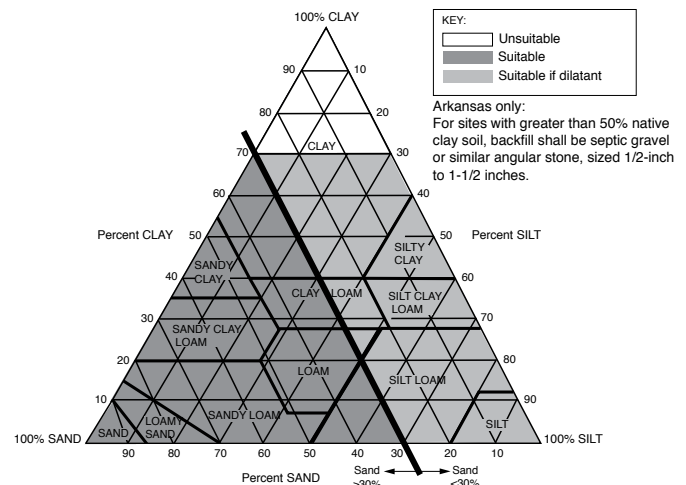


Table 2: Nominal Volume Chart

Height ¹		Total liquid volume in tank at indicated height					
		IM-540		IM-1060		IM-1530	
		U.S. Gal	Liters	U.S. Gal	Liters	U.S. Gal	Liters
1	3	3	11	3	11	17	64
2	5	8	30	13	49	34	128
3	8	14	53	28	106	51	192
4	10	21	80	46	174	68	256
5	13	29	109	65	246	94	357
6	15	37	141	86	326	122	463
7	18	46	173	107	405	152	573
8	20	55	207	129	488	180	681
9	23	64	243	152	575	212	802
10	25	74	279	176	666	245	928
11	28	84	317	200	757	280	1,061
12	30	94	356	225	852	312	1,182
13	33	105	396	251	950	351	1,328
14	36	116	437	277	1,049	387	1,463
15	38	127	480	303	1,147	422	1,597
16	40	138	523	330	1,249	464	1,756
17	43	150	566	357	1,351	500	1,892
18	46	161	611	384	1,454	537	2,034
19	48	173	656	411	1,556	575	2,177
20	50	186	702	438	1,658	614	2,322
21	53	198	749	465	1,760	652	2,468
22	56	210	796	493	1,866	690	2,612
23	58	223	843	521	1,972	729	2,758
24	61	235	891	549	2,078	770	2,914
25	64	248	940	577	2,184	808	3,058
26	66	261	988	605	2,290	847	3,208
27	69	274	1,038	633	2,396	887	3,356
28	71	287	1,088	662	2,506	928	3,513
29	74	300	1,137	691	2,616	968	3,665
30	76	313	1,185	719	2,722	1,007	3,814
31	79	326	1,233	747	2,828	1,048	3,966
32	81	338	1,281	775	2,934	1,087	4,113
33	84	351	1,328	802	3,036	1,126	4,262
34	86	363	1,375	830	3,142	1,165	4,410
35	89	375	1,421	857	3,244	1,204	4,557
36	91	387	1,466	884	3,346	1,242	4,701
37	94	399	1,511	911	3,449	1,280	4,846
38	97	411	1,555	938	3,551	1,318	4,988
39	99	422	1,598	965	3,653	1,355	5,131
40	102	433	1,640	992	3,755	1,393	5,272
41	104	444	1,681	1,018	3,854	1,430	5,412
42	107	455	1,722	1,044	3,952	1,466	5,550
43	109	465	1,761	1,069	4,047	1,502	5,685
44	112	475	1,799	1,094	4,141	1,537	5,817
45	114	485	1,836	1,118	4,232	1,572	5,950
46	117	494	1,871	1,142	4,323	1,604	6,070
47	119	503	1,905	1,165	4,410	1,638	6,201
48	122	512	1,938	1,187	4,493	1,667	6,310
49	124	520	1,970	1,208	4,573	1,697	6,422
50	127	528	1,999	1,228	4,648	1,724	6,527
51	130	535	2,027	1,247	4,720	1,749	6,621
52	132	542	2,050	1,265	4,789	1,766	6,684
53	135	547	2,071	1,278	4,838	1,777	6,726
54	137	551 ²	2,087	1,287	4,872	1,785 ²	6,758

1. Height measured from lowermost inside surface at bottom of corrugation in tank.

2. The total capacity of the IM-540 tank is 552 gallons; the total capacity of the IM-1530 tank is 1,787 gallons.

Failure to comply with these installation instructions will invalidate the warranty. Contact Infiltrator Water Technologies' Technical Services Department for assistance at 1-800-221-4436.

INLET AND OUTLET HOLE LOCATIONS

Drill height marks are provided on all Infiltrator tank models to guide inlet and outlet hole drilling. A single drill height mark is provided at each end or side port on IM-Series tanks (example illustrated below). Holes may be drilled at the end or side inlet and outlet locations, as allowed by

state and/or local regulations. The drill height mark indicates the center point location for the hole saw. The pilot drill bit on the hole saw should be positioned at the center of the drill height mark to align the hole saw properly. Table 3 provides drilling and invert information by regulatory jurisdiction for the installation of 4-inch- (100-mm-) diameter pipe.

Table 3: Inlet and Outlet Hole Locations⁴

Jurisdiction ¹	Inlet Drill Location	Outlet Drill Location	Invert Drop (in) [mm]	Inlet Invert Height (in) [mm]		Outlet Invert Height ² and Liquid Level (in) [mm]
				Above Inside Bottom of Tank ²	Above Excavation Base ³	
IM-540 and IM-1530						
All	All	All	3.00 [76]	47.00 [1,994]	47.20 [1,199]	44.00 [1,118]
IM-1060						
All	End	End	3.00 [76]	47.00 [1,994]	47.20 [1,199]	44.00 [1,118]
	Side	Side	3.00 [76]	47.50 [1,207]	47.70 [1,212]	44.50 [1,130]
	Side	End	3.50 [89]	47.50 [1,207]	47.70 [1,212]	44.00 [1,118]
	End	Side	2.50 [64]	47.00 [1,994]	47.20 [1,199]	44.50 [1,130]

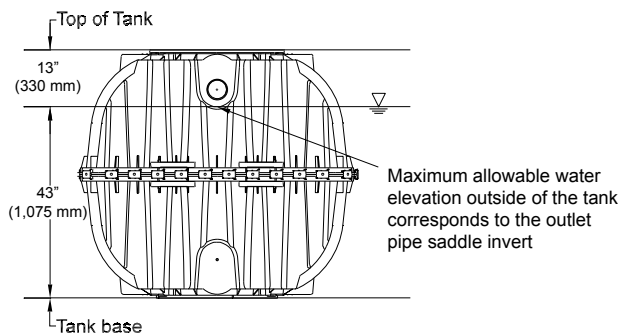
1. Indiana, Kentucky, Oregon, West Virginia, and certain Florida and Texas tanks are factory drilled.

2. Invert heights are measured from the lowest interior surface at the bottom of the tank to the invert.

3. Invert heights are measured from the base of the excavation to the invert.

4. State, provincial, and local regulatory requirements supersede Table 3 information.

IM-Series Tanks: Maximum Allowable Subsurface Water Elevation



Infiltrator Water Technologies, LLC ("Infiltrator")

INFILTRATOR® SEPTIC TANK LIMITED WARRANTY FIVE (5) YEAR MATERIALS AND WORKMANSHIP LIMITED WARRANTY

- (a) This limited warranty is extended to the end user of an Infiltrator Tank. A Tank manufactured by Infiltrator, when installed and operated in accordance with Infiltrator's installation instructions and local regulation by a licensed installer, is warranted to you: (i) against defective materials and workmanship for five (5) years after installation. Infiltrator will, at its option, (i) repair the defective product or (ii) replace the defective materials. Infiltrator's liability specifically excludes the cost of removal and/or installation of the Tank.
- (b) In order to exercise its warranty rights, you must notify Infiltrator in writing at its corporate headquarters in Old Saybrook, Connecticut within fifteen (15) days of the alleged defect.
- (c) YOUR EXCLUSIVE REMEDY WITH RESPECT TO ANY AND ALL LOSSES OR DAMAGES RESULTING FROM ANY CAUSE WHATSOEVER SHALL BE SPECIFIED IN SUBPARAGRAPH (a) ABOVE. INFILTRATOR SHALL IN NO EVENT BE LIABLE FOR ANY CONSEQUENTIAL OR INCIDENTAL DAMAGES OF ANY KIND, HOWEVER OCCASIONED, WHETHER BY NEGLIGENCE OR OTHERWISE. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THIS LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU. THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE.
- (d) THIS LIMITED WARRANTY IS THE EXCLUSIVE WARRANTY GIVEN BY INFILTRATOR AND SUPERSEDES ANY PRIOR, CONTRARY, ADDITIONAL, OR SUBSEQUENT REPRESENTATIONS, WHETHER ORAL OR WRITTEN. INFILTRATOR DISCLAIMS AND EXCLUDES TO THE GREATEST EXTENT ALLOWED BY LAW ALL OTHER WARRANTIES, WHETHER EXPRESS OR IMPLIED, OR STATUTORY, INCLUDING ANY WARRANTY OF MERCHANTABILITY, FINESSE FOR A PARTICULAR PURPOSE AND ANY IMPLIED WARRANTIES OTHERWISE ARISING FROM COURSE OF DEALING, COURSE OF PERFORMANCE, OR USAGE OF TRADE. NO PERSON (INCLUDING ANY EMPLOYEE, AGENT, DEALER, OR REPRESENTATIVE) IS AUTHORIZED TO MAKE ANY REPRESENTATION OR WARRANTY CONCERNING THIS PRODUCT, EXCEPT TO REFER YOU TO THIS LIMITED WARRANTY. EXCEPT AS EXPRESSLY SET FORTH HEREIN, THIS WARRANTY IS NOT A WARRANTY OF FUTURE PERFORMANCE, BUT ONLY A WARRANTY TO REPAIR OR REPLACE.
- (e) YOU MAY ASSIGN THIS LIMITED WARRANTY TO A SUBSEQUENT PURCHASER OF YOUR HOME.
- (f) NO REPRESENTATIVE OF INFILTRATOR HAS THE AUTHORITY TO CHANGE THIS LIMITED WARRANTY IN ANY MANNER WHATSOEVER, OR TO EXTEND THIS LIMITED WARRANTY.
- (g) NO WARRANTY OF ANY KIND IS MADE WITH REGARD TO ANY PRODUCT, COMPONENTS, DEVICES, MEDIA OR TREATMENT UNITS WHICH ARE MANUFACTURED BY OTHERS AND ARE INSTALLED IN AN INFILTRATOR TANK. USE OF THESE PRODUCTS ARE AT YOUR OWN RISK.
- (h) THE INFILTRATOR TANK IS DESIGNED TO BE BURIED UNDERGROUND. NO WARRANTY OF ANY KIND IS MADE IF YOUR TANK IS NOT BURIED UNDERGROUND AS SPECIFIED IN THE PRODUCT'S INSTALLATION INSTRUCTIONS.

CONDITIONS AND EXCLUSIONS

There are certain conditions or applications over which Infiltrator has no control. Defects or problems as a result of such conditions or applications are not the responsibility of Infiltrator and are NOT covered under this warranty. They include failure to install the Tank in accordance with instructions or applicable regulatory requirements or guidance, altering the Tank contrary to the installation instructions and disposing of chemicals or other materials contrary to normal tank usage.

The above represents the Standard Limited Warranty offered by Infiltrator. A limited number of states and counties have different warranty requirements. Any purchaser of a Tank should contact Infiltrator's corporate headquarters in Old Saybrook, Connecticut, prior to such purchase to obtain a copy of the applicable warranty, and should carefully read that warranty prior to the purchase of a Tank.



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TANK01 0815-04

Infiltrator IM-Series Tank

Buoyancy Control Guidance

MARCH 2015



Before you Begin

This document presents recommended buoyancy control methods for Infiltrator Systems Inc.'s (Infiltrator's) IM-Series tanks. Tank buoyancy control methods must be implemented according to state and/or local regulations, which may supersede the guidelines in this document. If unsure of the requirements for a particular site, contact the local health department or permitting authority.

This document provides procedures to determine if tank buoyancy control is required based on site conditions. Please obtain the following information to determine if control is necessary and what methods are applicable:

- Infiltrator tank model
- Maximum height of water outside the tank and above the tank bottom elevation
- Depth of soil cover over the tank top

Once tank buoyancy control measures are determined to be required and a method has been selected and implemented, refer to Infiltrator IM-Series Tank Installation Instructions and Riser Connection Guidance documents, as applicable, for completing the installation.

How to Use this Document

1. Become familiar with the descriptions in the Compatible Devices and Products section.
2. Verify that the water level outside the tank is below the outlet pipe saddle height using Step 1, Tables 1 and 2, and Figure 1.
3. Determine if buoyancy control is required using Step 1, Table 2. If buoyancy control is required, proceed to Step 2.
2. Use the respective table for the tank model from Step 2, Table 2 to determine the appropriate buoyancy control methods for the site conditions.
5. Once a preferred buoyancy control method is selected, follow the procedures for implementation provided in Step 3.

Parts and Supplies

The parts and supplies necessary are to be purchased separately from the tank. All parts and supplies are either commercially available or available through Infiltrator's network of tank distributors. Some parts may require fabrication on site using common construction practices.

Compatible Devices and Products

Infiltrator tanks are compatible with the following products for buoyancy control:

- **Tie-down straps:** high-tensile-strength webbing, 10,000 lb (4,500 kg) minimum capacity, nylon or polyester, with corrosion-resistant hardware.
- **Concrete deadmen anchors:** concrete-filled plastic half pipe, precast parking bumper, precast traffic barrier, or poured block.
- **Helical anchors:** Chance™ No-Wrench Screw Anchors with minimum 6-inch (150 mm) diameter, Class 7 or equal.

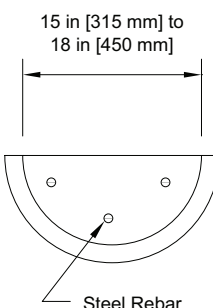
Tie-Down Straps

Straps are commercially available in varying lengths and with assorted hardware and tightening options. Nylon or polyester strapping with minimum 10,000 lb (4,500 kg) capacity is required for buoyancy control use with Infiltrator tanks. Place straps up and over the tank at specified locations only (see Figure 5). Tighten straps snugly with a ratchet or turnbuckle system to remove all slack and slightly pre-load the system. All connections, fittings, and hardware must be corrosion resistant or coated with epoxy or other corrosion-resistant materials to inhibit deterioration in the subsurface environment. Consider encapsulating such components in heat-shrink tubing or painting on additional corrosion-resistant coatings prior to burial.



Concrete Deadmen Anchors

Recommended concrete deadmen anchors include filled plastic half pipe, precast parking bumpers and traffic barriers, and poured blocks. The weight of the deadmen anchors combined with the weight of soil above them provides buoyancy control when properly secured. Deadmen anchors are placed at the bottom of the tank excavation on opposite sides of the tank. The deadmen anchors are fastened to each other with tie-down straps placed up and over the tank at the locations specified for each tank model (see Figure 5).

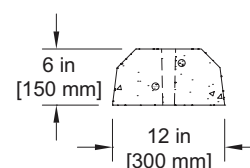


Concrete-filled plastic half pipe

Use Schedule 40 PVC plastic pipe having a minimum inside diameter of 15 inches (375 mm) or HDPE corrugated pipe having a minimum inside diameter of 18 inches (450 mm) cut in half lengthwise. Fill with concrete having a minimum unit weight of 145 lbs/ft³ (2.32 metric tons/m³) reinforced with three equally spaced 40-grade, 1/2-inch (13 mm) diameter steel bars. Weight is 61 lbs/ft (91 kg/m) minimum.

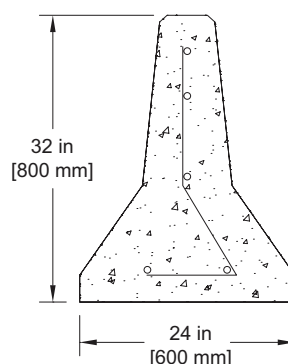
Concrete parking bumper

Use commercially available steel-reinforced parking bumpers with typical dimensions of 12 inches wide by 6 inches high (300 mm x 150 mm). Weight is 58 lbs/foot (86 kg/m) minimum.



Concrete traffic barrier

Use commercially available steel-reinforced concrete traffic barrier or equivalent. Typical dimensions include a 24-inch-wide base tapering to a 6-inch-wide top, with a height of approximately 32 inches (600 mm x 150 mm x 800 mm). Weight is 390 lbs/foot (580 kg/m) minimum.



Poured Blocks

Concrete precasters can pour blocks of various dimensions and weights. Blocks are often an affordable option if they satisfy the weight requirements for use as buoyancy control (see Table 2 and the Supplemental Force section of Step 2 for more information).

Helical Anchors

Chance™ No-Wrench Screw Anchors with a 6-inch (150 mm) diameter flight, Class 7, or equal. These anchors rely on the shear strength of the soil combined with the weight of the soil above the anchor flight to provide holding strength. Proper installation is to 4 feet (1.2 m) below the bottom of the tank excavation and to within 5° of alignment with the webbing load. Determine the proper locations for anchor installation to ensure that tie-down straps will be aligned properly for each tank model (see Step 3: Implementation), and follow anchor manufacturer installation instructions.

Typical working torque:
¾" Rod 400 ft. lbs. (542 N-m)
1" Rod 1,000 ft. lbs. (1,356 N-m)
1¼" Rod 2,300 ft. lbs. (3,118 N-m)



Step 1 – Determine Need for Buoyancy Control

Required information: the maximum height of water outside the tank and above the tank bottom AND the depth of soil cover above the tank top. Tank buoyancy control may be required if the water level outside the tank has the potential to rise 30 inches (750 mm) or more above the bottom of the tank, AND less than 12 inches (300 mm) of soil cover is to be placed as backfill over the tank top. Otherwise, no buoyancy control is required.

Allowable Subsurface Water Elevation

Groundwater elevation, groundwater table, and water table are terms for the subsurface condition where water is held in the subsurface soil pores or rock. The seasonal high groundwater elevation represents the highest point the water table has the potential to reach at any time of the year, and is not necessarily the level at which groundwater may be observed seeping from the soil at the time of tank installation. In general, a qualified soil evaluator or engineer can estimate the seasonal high groundwater elevation from careful examination of the soil profile.

Under certain conditions, a perched water table may be present in the subsurface. A perched water table occurs where there is an impermeable or low-permeability soil that causes water to be present in the soil pores above the main water table. A perched water table elevation may exceed the seasonal high elevation of the main water table. The vertical position of the tank must account for both the seasonal high groundwater table and any existing or future perched water table condition. **Verify that the subsurface water level will not exceed the height of the outlet pipe saddle of the tank, as show in Tables 1 and Figure 1.**

Figure 1: Water Elevation

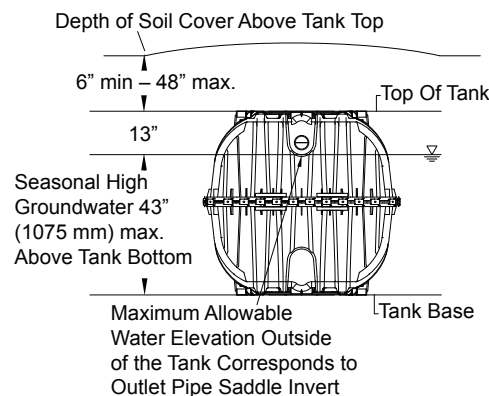


Figure 2: Buoyancy Control Parameters

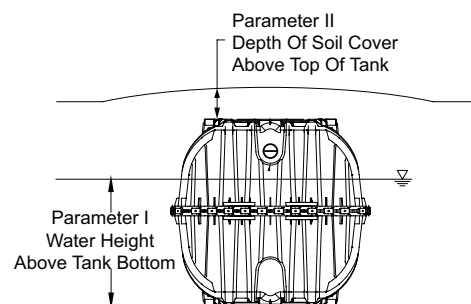


Table 1 Instructions

1. In the left-hand column of Table 1, locate the row corresponding to the height of the water elevation outside the tank and above the tank bottom (Parameter I) for the site conditions. See Figure 2.
2. Follow that row to the right until reaching the column corresponding to the depth of soil cover proposed above the tank top (Parameter II). See Figure 2.
3. If the tank model is listed in that cell, then buoyancy control is required (proceed to Step 2). If the tank model is not listed in that cell, then no buoyancy control is required.
4. The tank shall not be installed where the water level outside the tank exceeds the height of the outlet pipe saddle.

Table 1: Infiltrator tank models¹ and conditions requiring buoyancy control

Parameter I: Water height ² above tank bottom		Parameter II: Soil cover depth above tank top ³	
		A	B
		6 in (150 mm) to 12 in (300 mm)	Above 12 in (300mm)
1	Above outlet pipe saddle ⁴ (greater than 43")	Do not install	Do not install
2	36" (900 mm) to 43" (1075 mm) to outlet pipe saddle	All models	Not Required
3	30" (750 mm) to 36" (900 mm)	IM-1530	Not Required
4	Less than 30" (750 mm)	Not Required	Not Required

NOTES:

1. Infiltrator tank models include: IM-540, IM-1060, and IM-1530.
2. Water height corresponds to seasonal high groundwater elevation or perched water elevation measured from bottom-of-tank elevation.
3. Minimum 6 inches soil cover backfill is required.
4. The tank shall not be installed where the water level outside the tank exceeds the height of the outlet pipe saddle.

Design Example

A contractor plans to install an IM-1060 tank where the water level outside the tank has the potential to rise to 37 inches (940 mm) above the tank bottom (Parameter I), and the design plan calls for 8 inches (200 mm) of soil cover above the top of the tank (Parameter II). In Step 1, Table 1, a 37-inch (940-mm) exterior water height corresponds to row 2 (36 inches [900 mm] to outlet pipe saddle) under Parameter I. The 8-inch (200-mm) soil cover corresponds to column A (6 inches [150 mm] to 12 inches [300 mm]) under Parameter II in Table 1. At the intersection of Parameter I, row 2 and Parameter II, column A, Cell 2A indicates "All models", meaning all tank models, including the IM-1060, require buoyancy control under these conditions. Referring to Step 2, Table 2, under the IM-1060 heading, Case 1 would apply for 37 inches (940 mm) of water above the bottom of tank and 8 inches (200 mm) of soil cover. Available options are as follows (see specific strapping and construction information under Step 3):

- If concrete block is specified to anchor the IM-1060, the total combined minimum weight of blocks placed on each side of the tank shall be 2,700 pounds (1,225 kg). The size and shape can be determined by locally available materials. Connect using two straps.
- For concrete-filled half pipe and concrete traffic barrier, the minimum length on each side of the tank would be 4.2 feet (1.3 m), while at least 4.5 feet (1.4 m) of concrete parking bumper would be required. These controls would be connected with two straps, ensuring that the control extends a minimum of 6 inches (150 mm) beyond the strap positions (see Figure 3).
- If helical anchors were selected, a minimum of two 6-inch (150 mm) diameter anchors per side of tank (4 total) would be installed using two straps.

Design Example Table 1: Infiltrator tank models and conditions requiring buoyancy control

Parameter I: Water height above tank bottom		Parameter II: Soil cover depth above tank top	
		A	B
		6 in (150 mm) to 12 in (300 mm)	Above 12 in (300 mm)
1	Above outlet pipe saddle	Do not install	Do not install
2	36" (900 mm) to 43" (1075 mm) to outlet pipe saddle	All models	Not Required
3	30 in (750 mm) to 36 in (900 mm)	IM-1530	Not Required
4	Less than 30 in (750 mm)	Not Required	Not Required

Step 2 – Determine Buoyancy Control Method

Step 2 is used if the Step 1 analysis shows that buoyancy control is required for the tank model and the conditions of installation. As before, the maximum height of the water outside of the tank and above the tank bottom AND the depth of soil cover above the tank top must be known for the installation conditions to complete Step 2.

Table 2 Instructions

For each tank model, find the Case row on the left side of the table that corresponds to both the water height (Parameter I) and soil cover measurements (Parameter II) for the tank installation conditions. Follow the row to the right for a listing of the appropriate buoyancy control methods for the installation conditions under each method description column. Refer to the Compatible Devices and Products and Step 3 – Implementation sections of this document for additional information.

Table 2: Buoyancy Control Selection

Case	Parameter I: Water height above tank bottom	Parameter II: Soil cover depth above tank top	Minimum supplemental force required ¹ (total, both tank sides)	Buoyancy Control Methods (minimum per side of tank)			
				Concrete-filled half pipe (min. length/side)	Concrete parking bumpers (min. length/side)	Concrete traffic barriers (min. length/side)	Helical anchors (min. no./side)
IM-540							
1	36 in (900 mm) to outlet pipe saddle ²	6 in (150 mm) to 12 in (300 mm)	2,200 lbs (1,000 kg)	3.8 ft (1.2 m)	3.8 ft (1.2 m)	3.8 ft (1.2 m)	2
IM-1060							
1	36 in (900 mm) to outlet pipe saddle ²	6 in (150 mm) to 12 in (300 mm)	2,700 lbs (1,225 kg)	4.2 ft (1.3 m)	4.5 ft (1.4 m)	4.2 ft (1.3 m)	2
IM-1530							
1	30 in (750 mm) to outlet pipe saddle ²	6 in (150 mm) to 12 in (300 mm)	4,300 lbs (1,955 kg)	6.3 ft (2.0 m)	6.5 ft (2.0 m)	6.3 ft (2.0 m)	2

NOTES:

1. See Supplemental Force discussion below.
2. IM-Series outlet pipe saddle height is 43 inches (1,075 mm) above tank bottom.

Supplemental Force

The minimum supplemental downward force required is included in Table 3 to allow custom buoyancy control methods. These values include a factor of safety of 1.5 applied to the calculated force required to restrain the tank. Custom-designed buoyancy control methods shall consider saturated conditions. So long as buoyancy control is provided that supplies the minimum weight listed in the table (for poured-concrete blocks or other methods designed by third parties), the tanks will be stable for the water height outside the tank and above the tank bottom and corresponding soil cover conditions. All Infiltrator strapping and fastening recommendations would still apply for custom-designed buoyancy control methods. Contact Infiltrator's Technical Services Department with any questions regarding supplemental force requirements.

Step 3 – Implementation

Effective buoyancy control of Infiltrator tanks requires careful preparation, thorough excavation, precise placement, secure strapping and proper backfilling, as described and illustrated below.

Excavation Requirements

It is recommended that the excavation width provide a minimum of 36 inches (900 mm) clearance beyond the tank on all sides when utilizing buoyancy control. This will allow sufficient space within the excavation to place deadmen anchors and fasten strapping. The excavation should provide a minimum of 48 inches (1,200 mm) when using Chance™ No-Wrench Screw Anchors to allow for room to properly install the screw anchors. The actual excavation size shall be determined by the installer. Refer to Infiltrator IM- Series Tank Installation Instructions for additional excavation procedures.

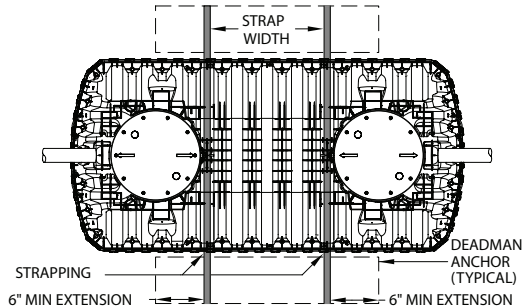
Concrete-filled Half Pipe Construction

Concrete-filled half pipe shall be supported with soil or other stabilizing means below the pipe haunches prior to concrete placement. The stabilization shall prevent the pipe from rolling during placement and curing of the concrete. Concrete shall be allowed to cure for a minimum of one day prior to tank backfilling.

Placement of Deadmen and Anchors

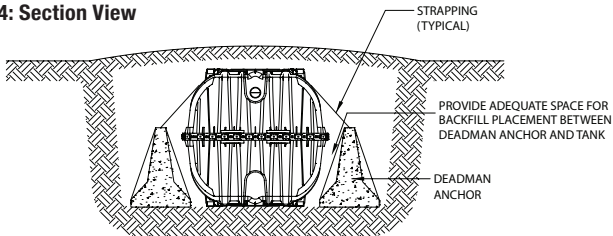
Concrete deadman anchors are to be installed at the bottom of the tank excavation, parallel to the long axis of the tank (see Figure 3).

Figure 3: Plan View



The deadmen should be placed close to, but not touching, the tank on both sides of the tank to allow the placement of backfill between the deadman anchor and tank sidewall (see Figure 4).

Figure 4: Section View

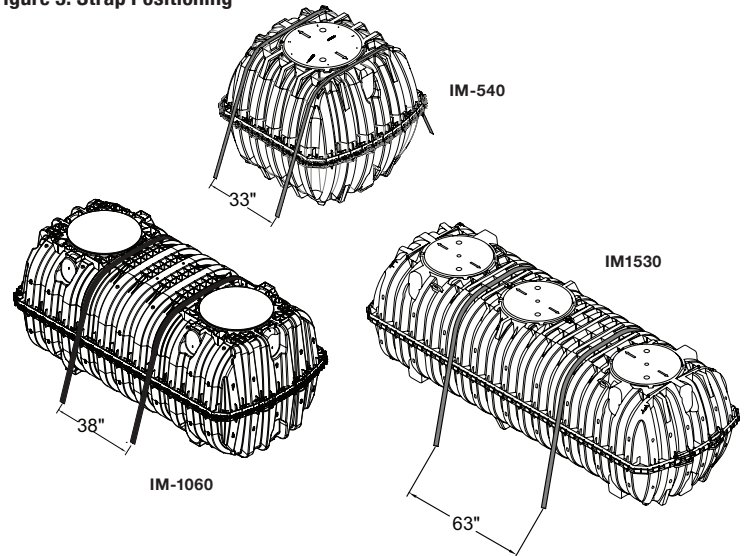


Helical anchors should be installed so that the eye loop is level with the bottom of the tank excavation. They must be in line with the tank model strapping locations (see Figure 5) or lifting lugs, as appropriate. Anchors must also be installed at such a distance from and angle to the tank so that the strapping is within 5° of alignment with the anchor shaft per manufacturer's recommendations.



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Old Saybrook, CT 06475
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1-800-221-4436
www.infiltratorsystems.com

Figure 5: Strap Positioning



Strapping

Preparation and fastening of webbing to/over the tanks is critical for tank stability under constant and fluctuating water conditions both inside and outside the tank. Straps must be placed at the specified strapping locations for each model as illustrated in Figure 5. The IM-Series tank strapping locations correspond to structurally reinforced areas of the tank body. Straps must never be placed over access openings, lids, or inlet/outlet piping. Straps must be tightened with a ratchet or turnbuckle system to remove slack and slightly pre-load the system.

STRAPPING NOTES:

1. The buoyancy control shall be centered across the straps (excludes helical anchors). The control shall extend a minimum of 6 inches (150 mm) beyond the maximum strap width (see Figures 3 and 5).
2. The minimum deadman length corresponds to the tank model-specific strap width plus 12 inches (300 mm).

Backfill and Cover

Place backfill between deadman anchor and tank sidewall to fully fill void and tank body corrugations. A minimum 6" layer (150 mm) of suitable cover material is required over all Infiltrator tank installations. Mound cover to direct surface water drainage away from the tank excavation footprint. Establish a strong stand of erosion-resistant vegetation. Refer to Infiltrator IM-Series Tank Installation Instructions for complete backfilling and cover procedures.

General Specifications

- Prior to ground disturbance, check for subsurface obstructions and utilities in conformance with applicable requirements.
- Excavations shall conform to applicable safety regulations.
- Follow manufacturer instructions for all products and devices used for Infiltrator tank buoyancy control.
- Buoyancy control methods described herein do not account for unanticipated conditions such as surface flooding or other natural disasters, unintended removal of cover fill over tank, etc.
- Buoyancy control methods described herein are recommendations only; consult a professional engineer if desired.

INTEWA

INTEWA PRODUCTS

rainwater harvesting filter for tank
installation with unique efficiency –
self-cleaning, patented.

PURAIN



WATER, WE'RE IN OUR ELEMENT

www.intewa.com

We have designed the PURAIN Rainwater filter, sometimes known as the hydraulic jump filter, for roof areas ranging from 60m² to more than 6000m². 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

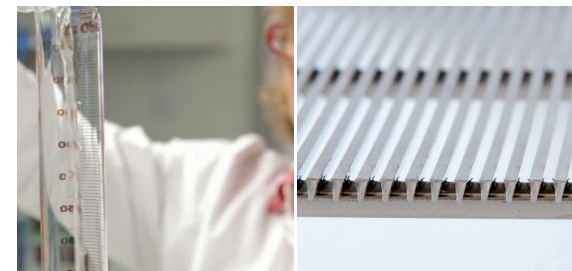
for industrial, public or commercial buildings



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.

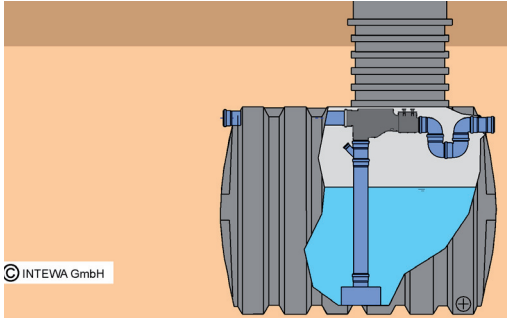


TECHNOLOGY

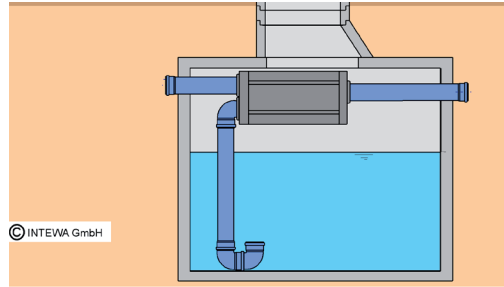
Sample installations:

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

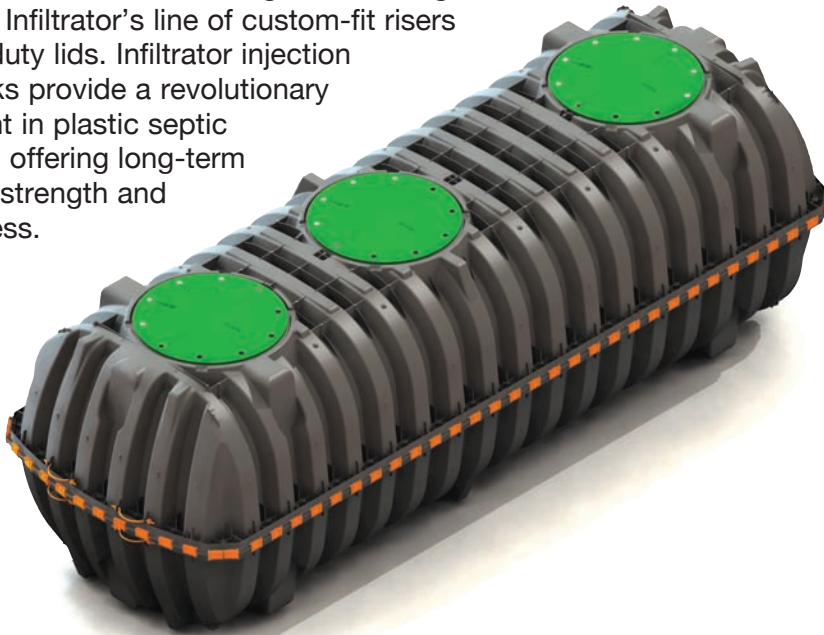
INTEWA
INTEWA



INFILTRATOR®
tanks

IM-1530

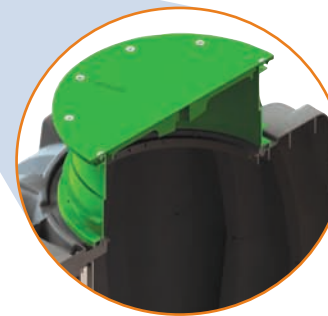
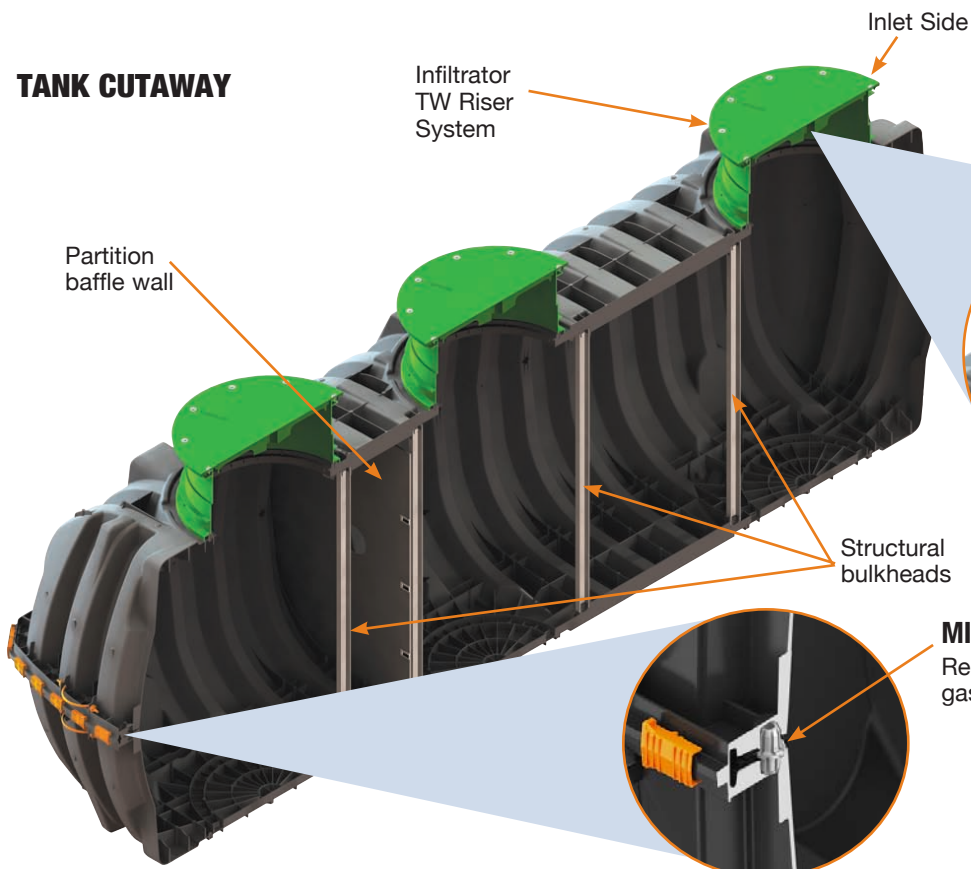
The Infiltrator IM-1530 is a lightweight strong and durable septic tank. This watertight tank design is offered with Infiltrator's line of custom-fit risers and heavy-duty lids. Infiltrator injection molded tanks provide a revolutionary improvement in plastic septic tank design, offering long-term exceptional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



Features & Benefits

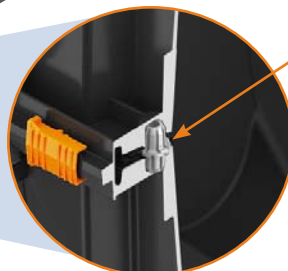
- Strong injection molded polypropylene construction
- Lightweight plastic construction and inboard lifting lugs allow for easy delivery and handling
- Integral heavy-duty green lids that interconnect with TW™ risers and pipe riser solutions
- Structurally reinforced access ports eliminate distortion 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

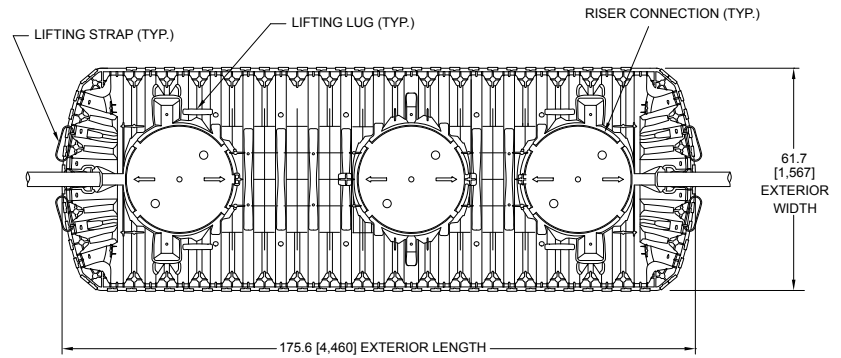
Reinforced water tight mid-seam gasketed connection



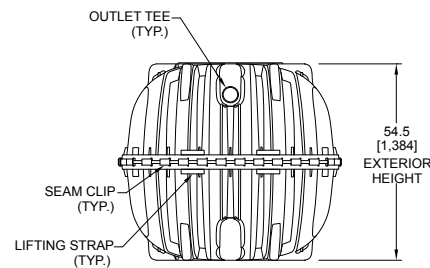
IM-1530 General Specifications and Illustrations

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.

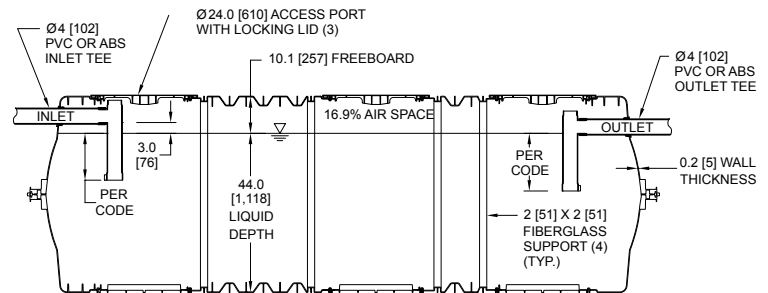
The two-piece design is permanently fastened using a series of non-corrosive plastic alignment dowels and locking seam clips. The IM-1530 is assembled and sold through a network of certified Infiltrator distributors.



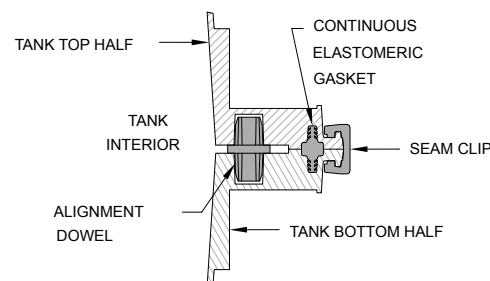
TOP VIEW



END VIEW



SIDE VIEW



MID-HEIGHT SEAM SECTION



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U.S. Patents: 4,759,661; 5,017,041; 5,156,488; 5,336,017; 5,401,116; 5,401,459; 5,511,903; 5,716,163; 5,588,778; 5,839,844 Canadian Patents: 1,329,959; 2,004,564 Other patents pending. Infiltrator, Equalizer, Quick4, and SideWinder are registered trademarks of Infiltrator Systems, Inc. Infiltrator is a registered trademark in France. Infiltrator Systems, Inc. is a registered trademark in Mexico. Contour, MicroLeaching, PolyTuff, ChamberSpacer, MultiPort, PosiLock, QuickCut, QuickPlay, SnapLock and StraightLock are trademarks of Infiltrator Systems, Inc. PolyLok is a trademark of PolyLok, Inc. TUF-TITE is a registered trademark of TUF-TITE, INC. Ultra-Rib is a trademark of IPEX Inc.

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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:

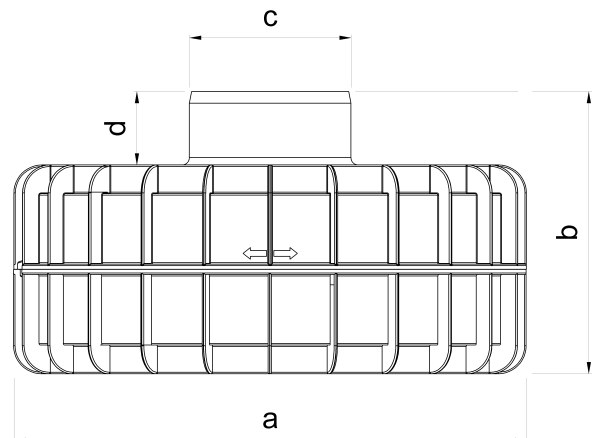
With course of time, fine particles settle at the base of the tank and form a sediment layer. In order to avoid swirling of the sediment layer by inflowing rain water, the water must be steadily supplied to the tank. The inlet calmer leads the rainwater to the tank in the direction of flow created at 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.

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 Drawing



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

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>)

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(ver. 1.9.1.0)

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



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**

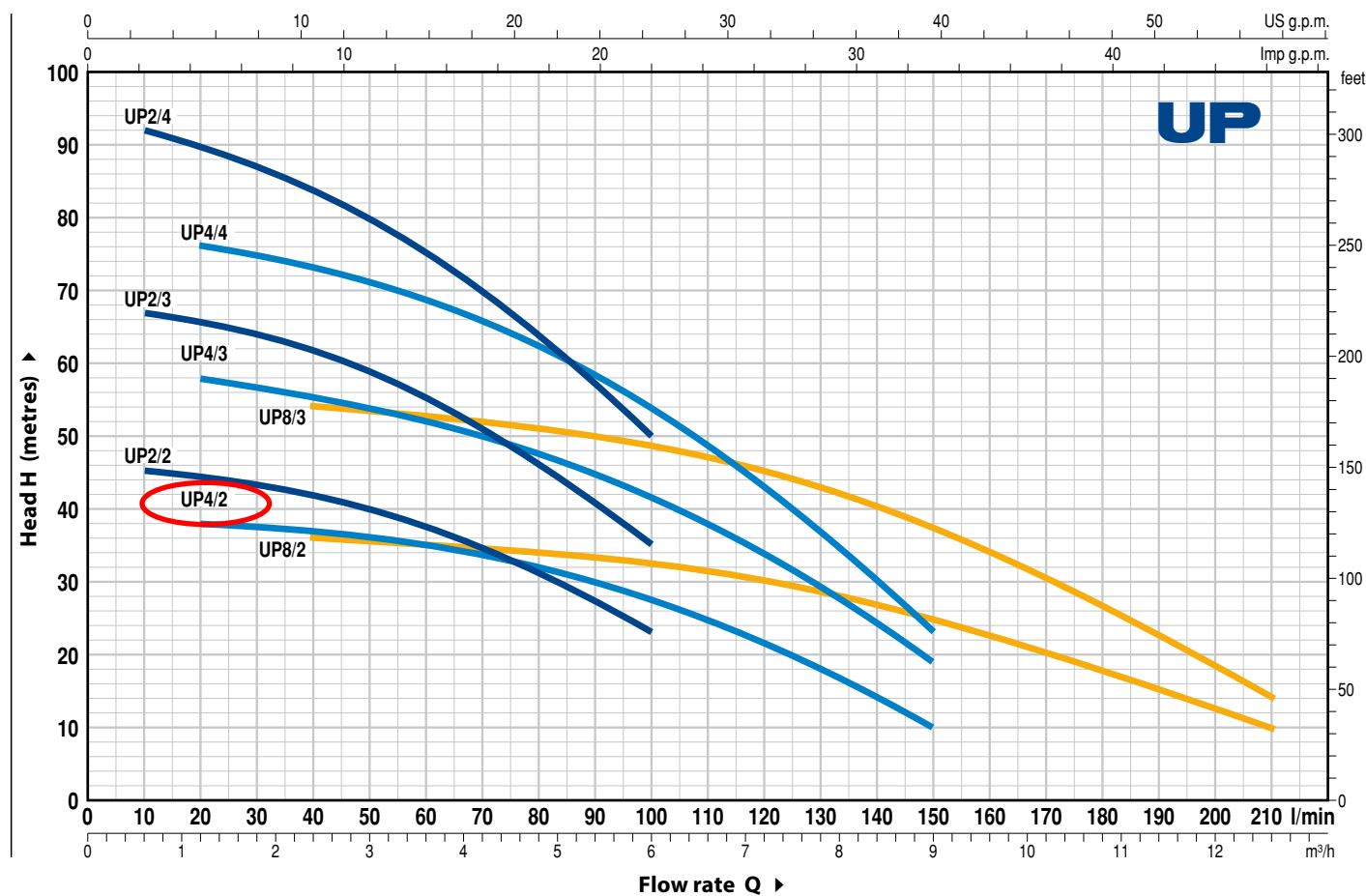


GUARANTEE

2 years subject to terms and conditions

CHARACTERISTIC CURVES AND PERFORMANCE DATA

60 Hz n = 3450 rpm



MODEL		POWER (P ₂)		Q m ³ /h l/min	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		0	10	20	40	60	80	100	120	150	170	190	210
UPm 2/2-GE	UP 2/2	0.75	1	H metres	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		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.

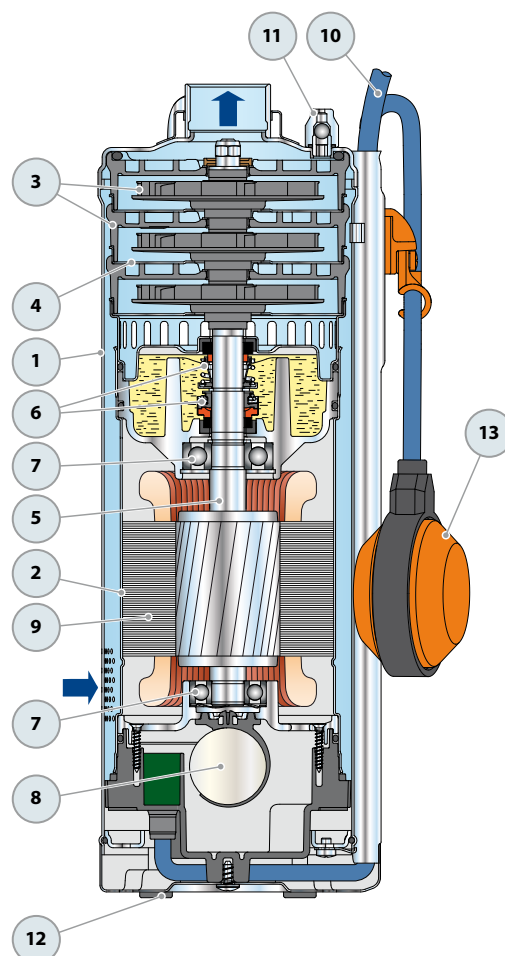
➡ Single-phase pumps without float switch on request

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	16 µF - 500 VL				
	UPm 4/2-GE					
	UPm 2/3-GE	25 µF - 450 VL				
	UPm 4/3-GE					
	UPm 8/2-GE	35 µF - 450 VL				
	UPm 2/4-GE					
	UPm 4/4-GE					
	UPm 8/3-GE					
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)					

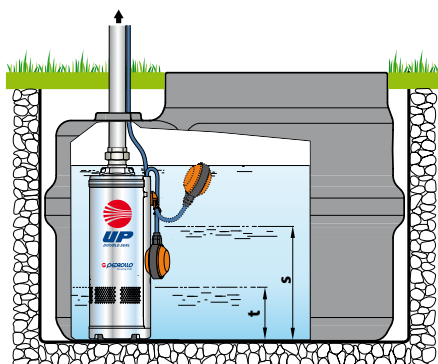
The diagram is a vertical cross-section of a pump assembly. At the top, a blue arrow points upwards from a delivery port (11). Below this is a series of horizontal diaphragms (4) supported by a central shaft (5). The shaft is surrounded by two mechanical seals (6) and bearings (7). The motor (9) is shown as a cylindrical component with internal windings. A power cable (10) is connected to the motor. At the bottom, a float switch (13) is attached to a cable. The entire assembly is housed within a stainless steel sleeve (1) and motor sleeve (2). The impellers and diffusers (3) are located at the top of the pump chamber.



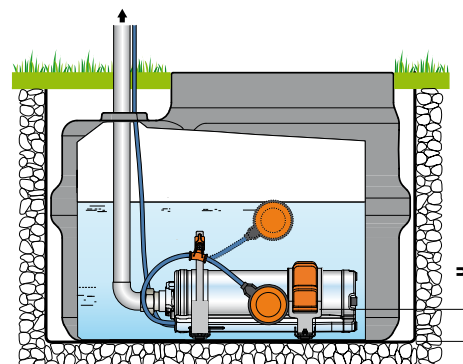
DIMENSIONS AND WEIGHT



Vertical installation



Horizontal installation



3" minimum submergence!

MODEL		PORT DN	N. STAGES	DIMENSIONS mm		kg	
Single-phase	Three-phase			Ø	h	1~	3~
UPm 2/2-GE	UP 2/2	1½"	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	
	220 V	380 V
Three-phase		
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 n. pumps	CONTAINER n. pumps
Single-phase	Three-phase		
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

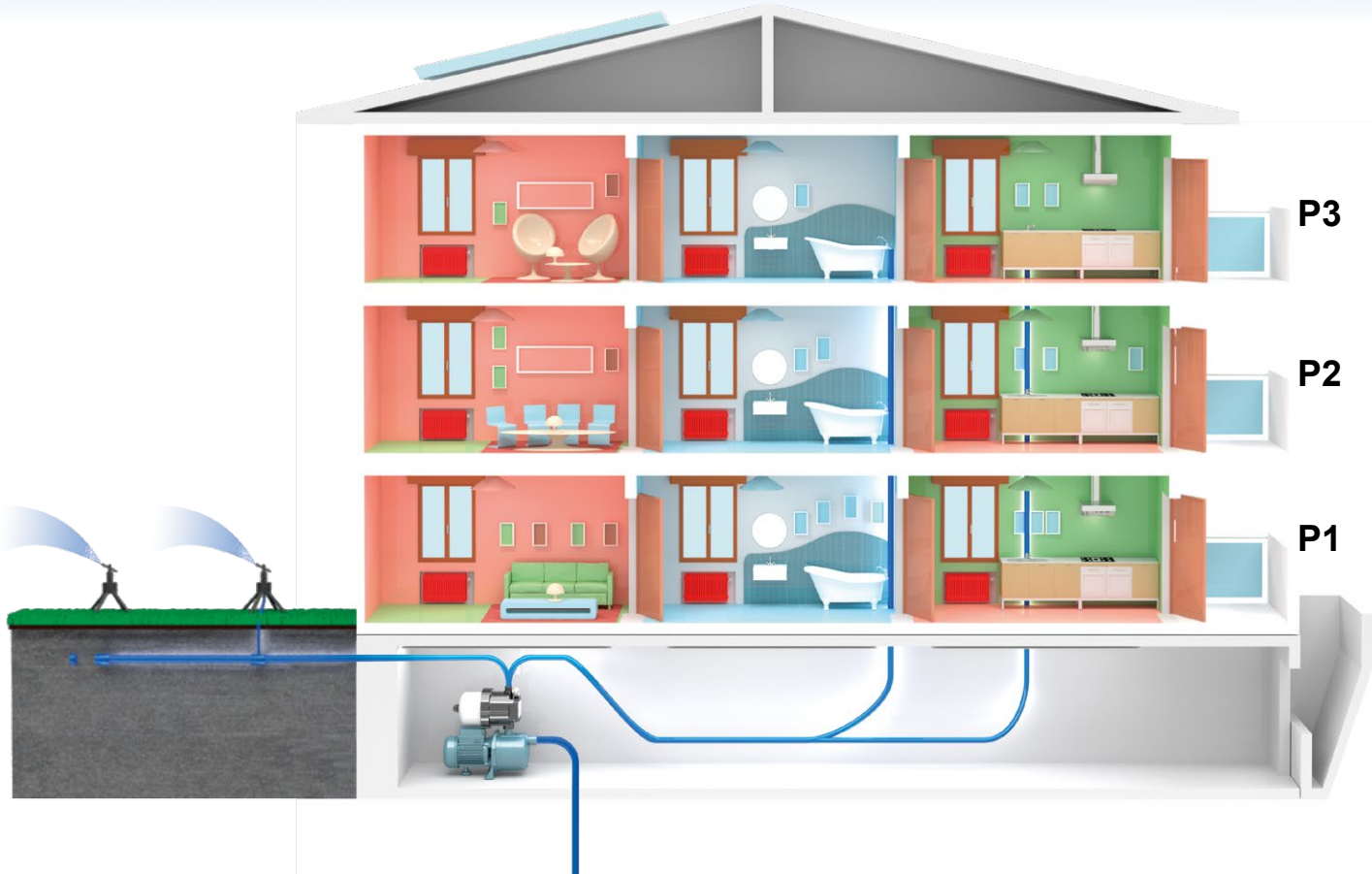
ELECTRONIC PUMP CONTROLLER WITH INTEGRAL PRESSURE TANK



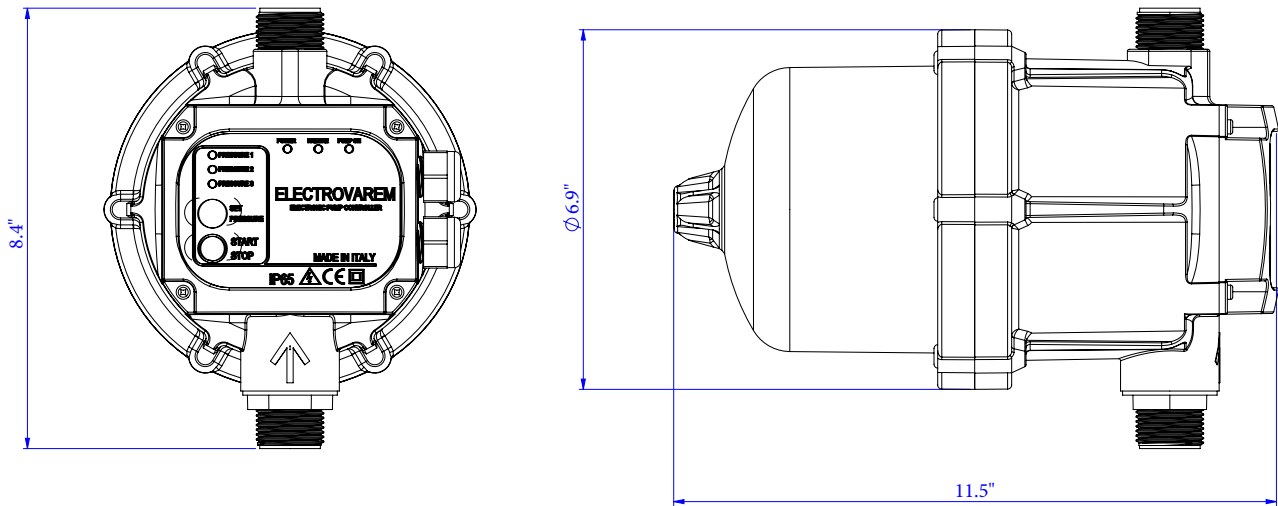
We provide advanced solutions for water handling and for the safety of hydraulic systems, pursuing maximum energy efficiency and reliability.

ADVANTAGES

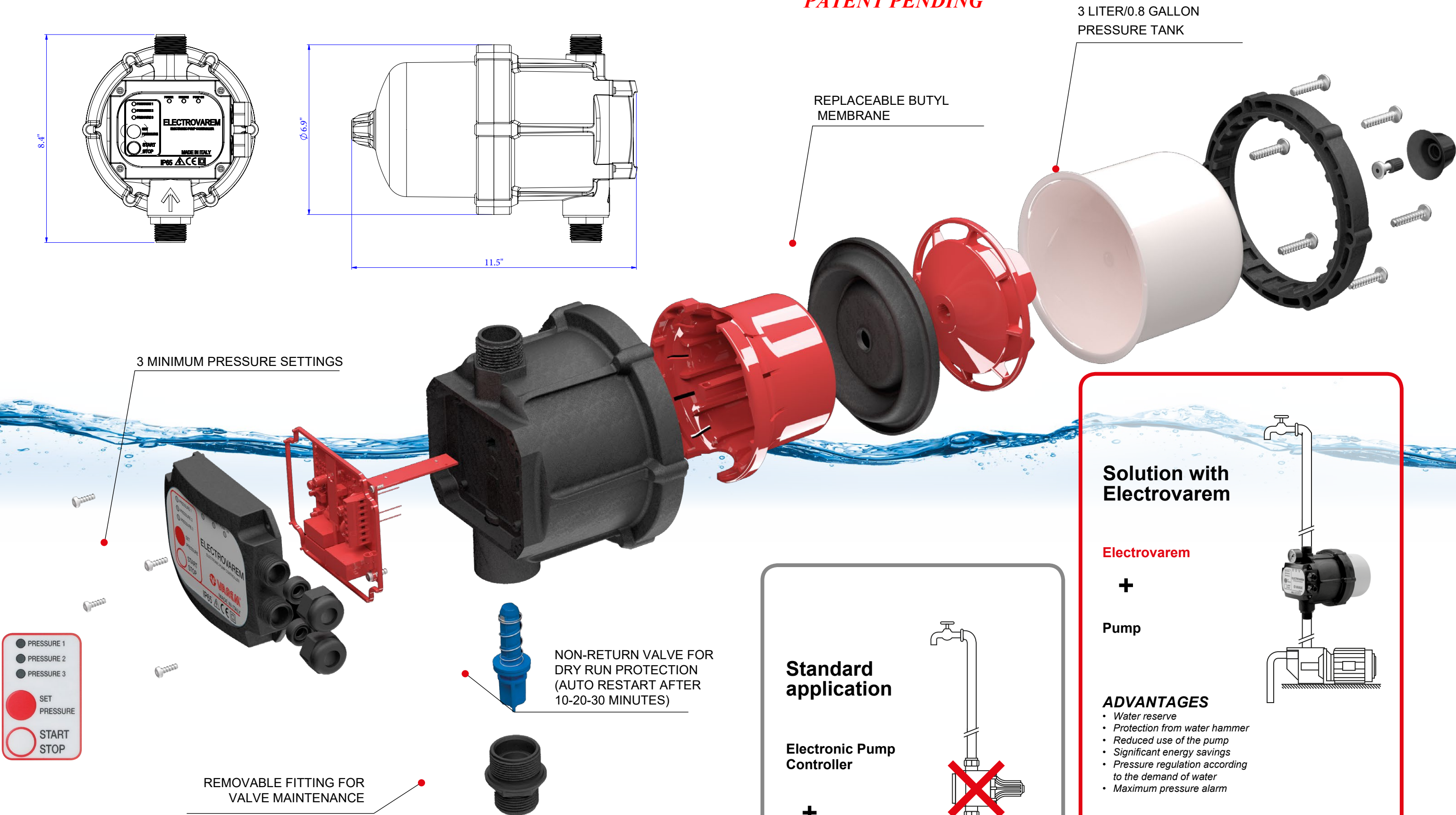
- 1 BUILT-IN PRESSURE TANK
- 2 BUILT-IN PRESSURE REGULATOR
- 4 BUILT-IN CHECK VALVE
- 5 START ON FLOW + LOW PRESSURE
- 6 STOP ON NO FLOW + PRESSURE
- 7 PUMP PROTECTION from dry running, frequent on/off, water hammer, lightning, and power surges



DIMENSIONS



PATENT PENDING

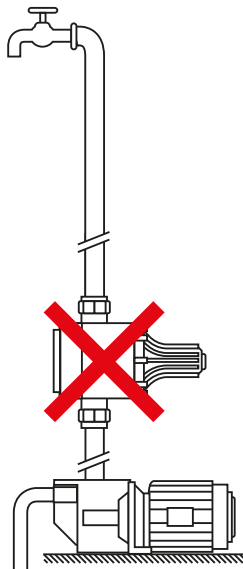


Standard application

Electronic Pump Controller

+

Pump



Solution with Electrovarum

Electrovarum

+

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)



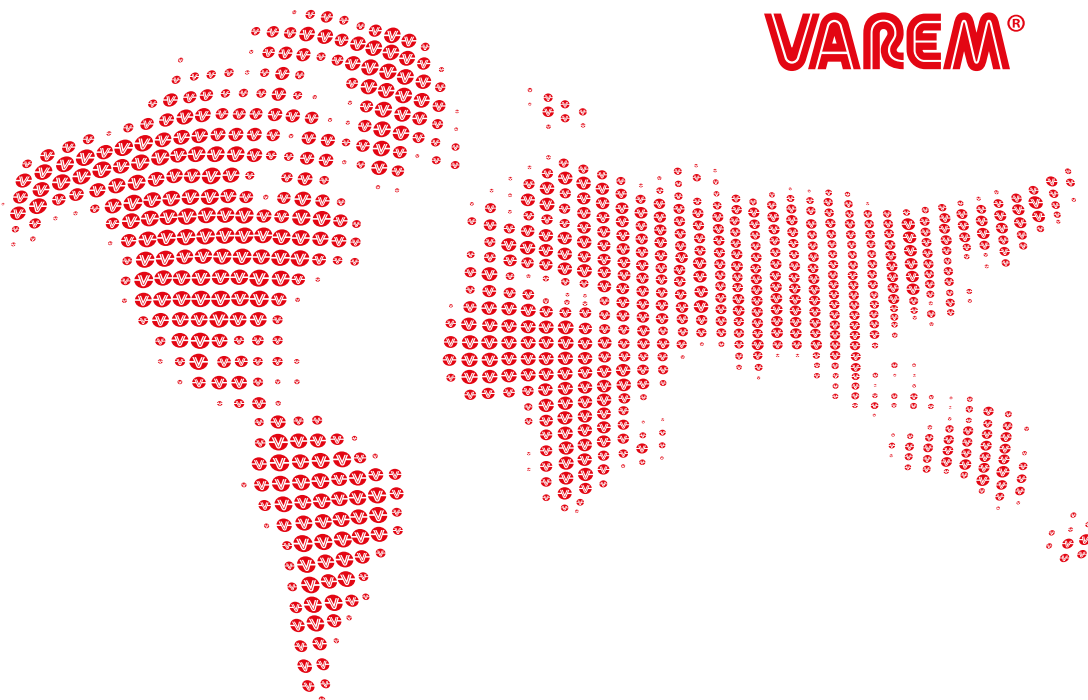
STANDARD



PLUS



TOP



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Limena plant - headquarters

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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

