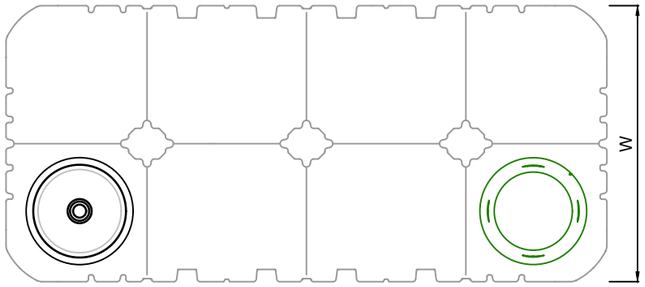
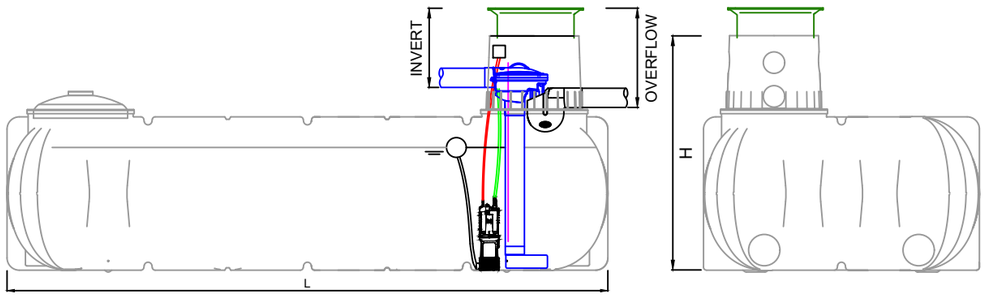
TANK SIZES & DIMENSIONS

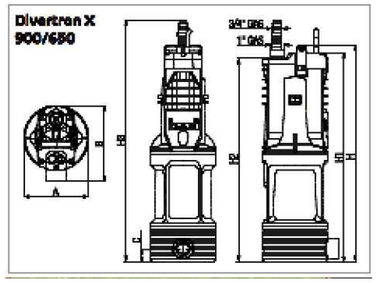


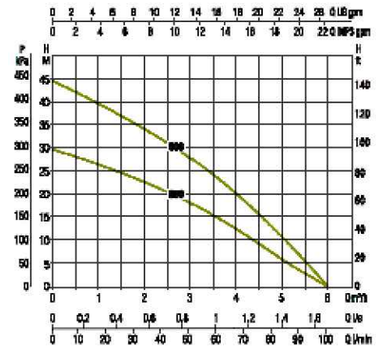
	20,000L	25,000L	30,000L
LENGTH	9405mm	11,580mm	14,265mm
WIDTH	2250mm	2250mm	2250mm
HEIGHT	1910mm	1910mm	1910mm
INVERT	465-765mm	465-765mm	465-765mm
OVERFLOW	630-930mm	630-930mm	630-930mm



SUBMERSIBLE PUMP DETAILS

DAB DIVERTRON 900X





The performance curves are based on kinetic viscosity vaules = 1 mm²/s
and density equivalent to 1000 kg/m³. Curve tolerance according to ISO 9906.

SYSTEM ACCESSORIES (OPTIONAL EXTRAS)

HOSE CONNECTION BOX (EXTERNAL)

HOSE CONNECTION BOX (INTERNAL)

SPRING WATER SHAFT

INTERNAL CLEANING UNIT

DIGITAL FILL LEVEL SENSOR

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HOME DIRECT PLATIN XXL SPECIFICATION

TANK ACCESSORIES

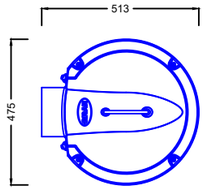
Item	Diameter ø	Min. Height (mm)	Max. Height (mm)	Max. Loading (kg)*
Pedestrian Loading Lid (Mini)	ø 600mm	60mm	360mm	150kg
Pedestrian Loading Lid (Maxi)	ø 600mm	60mm	476mm	150kg
Vehicle Loading Lid	ø 625mm	60mm	476mm	3,500kg
Extension Sleeve (1m)	ø 670mm	500mm	1,000mm	
Extension Sleeve	ø 680mm	250mm		
Tank Dome (Maxi)	ø 650mm	610mm		

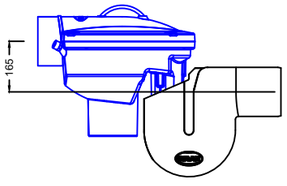
* Loading up to 12,000kg achievable (suitable cover to be provided by others)

** Tank Dome (Maxi) available with DN100 or DN150 connections

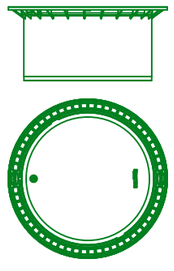
FILTER DETAILS

OPTIMAX XL PRO FILTER (INTERNAL)

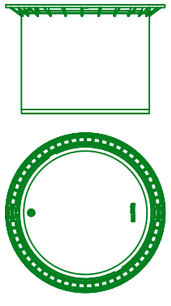




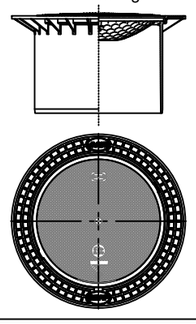
Pedestrian Loading Lid (Mini)



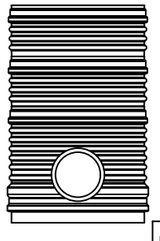
Pedestrian Loading Lid (Maxi)



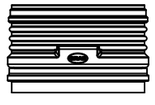
Vehicle Loading Lid



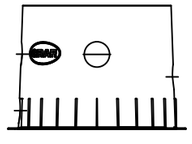
Extension Sleeve (1m)



Extension Sleeve



Tank Dome (Maxi)



NOTE:- Tank accessory suitability may vary depending on project. Please contact Graf UK for sizing and support.

REV.	DESCRIPTION	BY	DATE
P0	LATEST REVISION	DS	29.04.24

GRAF UK Limited

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DRAWN : DS DATE : 29.04.2024

CHECKED : FC SCALE : VARIOUS@A3

PROJECT

GRAF STANDARD DETAILS

DESCRIPTION

HOME DIRECT
RAINWATER HARVESTING SYSTEM
PLATIN XXL TANK

DRAWING No. HOME_DIRECT_STANDARD_DETAIL_PLATIN_XXL

REV. P0

SCOPE OF SUPPLY

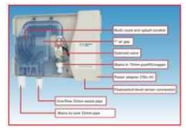
SUPPLIED BY GRAF:

1. Underground tank
2. Telescopic lid
3. Filter
4. Pipe and fixings
5. Mains Water Top-up Unit
6. Submersible pump

SUPPLIED BY OTHERS:

7. 100mm duct for pump cable
8. 100mm drainage pipe to connect downpipes to inlet (all downpipes to be brought into one single inlet)
9. 100mm pipe for overflow from tank

MAINS WATER TOP-UP ASSEMBLY



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All drawings SUBJECT TO SITE SURVEY AND DESIGN APPROVAL

Any enquiries regarding the suitability of this product for your project should be directed to your local supplier.

NOTES:-

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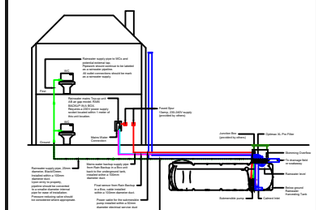
3. All site dewatering & earthing works by others.
4. Installation to be carried out in accordance with Graf installation instructions.
5. This drawing is intended for guidance only. Confirmation of the suitability for a particular project should be sought from the consulting engineers prior to final design or commencement of any construction works.

HOME DIRECT PLATIN XXL SCHEMATIC

HOME DIRECT PLATIN XXL SCHEMATIC


Rainwater supply pipe. 32mm ◄
Rainwater supply pipe. 32mm ◄
Installed within a 160mm
diameter duct
(open-ended, to property)
Rainwater supply pipe. 32mm
to a suitable domestic internal
cold water tap (by others)
Pressure reducing valve should
be considered where appropriate
Rainwater mains Top-up unit
(Graf Rain Backup) to be
INSTALLED IN A
DRY environment within
rainfall-bounded within 1 meter of
the unit location
Mains water feeding supply unit (Graf
Rain Backup) to a 25mm cold
water tap (by others) with 25mm
installed within a 160mm
diameter duct
Float sensor from Rain Backup
in 2.5m cable supplied
(installed within 160mm duct)
Power cable for the submersible
pump installed within a 32 mm
diameter electrical duct to tank
RWP overflow
from roof outlet
Junction Box
(provided by others)
Outlet to Pump
Control Unit
Power supply
(provided by others)
Submersible pump
Outlet to Ø1 Pre-Filter
Rainwater Screening Cowling
(Installed over
the rainwater inlet
in roadway)
Rainwater level
Mains ground
Connection
Connecting Tube
Diameter
Diameter
Diameter

TRENCH DETAILS

FOR SUFFICIENT WORKING ROOM, THE BASE AREA OF THE TRENCH MUST EXCEED THE DIMENSIONS OF THE TANK BY 100mm ON ALL SIDES.

MINIMUM DISTANCE FROM SOLID STRUCTURES TO BE 1000mm.

THE TRENCH EMBANKMENT MUST BE DESIGNED SO SLIPPAGE OR COLLAPSE OF THE EMBANKMENT WALL IS NOT TO BE ANTICIPATED.

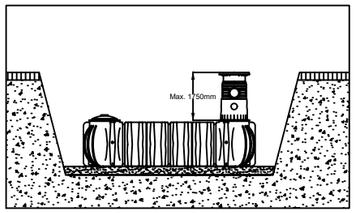
THE CONSTRUCTION SITE MUST BE HORIZONTAL AND PLANE AND MUST GUARANTEE SUFFICIENT LOAD-BEARING CAPACITY.

THE DEPTH OF THE TRENCH MUST BE DIMENSIONED SO THAT THE MAXIMUM COVER ABOVE THE TANK IS NOT EXCEEDED (SEE BELOW DETAILS).

THE TANK AND ANY OTHER COMPONENTS THAT CARRY WATER MUST BE INSTALLED IN A FROST-FREE AREA. THE FROST-FREE DEPTH IS USUALLY APPROX. 600mm-800mm. EXACT DEPTHS CAN BE OBTAINED FROM THE RESPONSIBLY AUTHORITY.

A 100mm-150mm COMPACTED LAYER OF 10-20mm ROUND GRAIN GRAVEL IS INSTALLED AT THE BASE OF THE EXCAVATION.

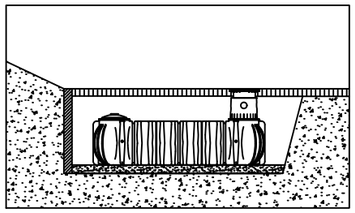
MINIMUM & MAXIMUM COVER



MINIMUM COVER IN A LANDSCAPED AREA TO BE 750mm FROM SHOULDER OF TANK.

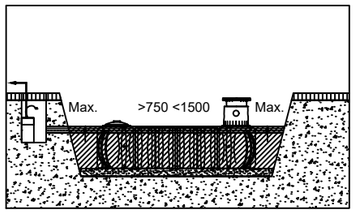
MAXIMUM COVER IN A LANDSCAPED AREA TO BE 1500mm FROM SHOULDER OF TANK.

SLOPE/EMBANKMENT INSTALLATIONS



IF THE TANK IS TO BE INSTALLED IN THE IMMEDIATE VICINITY (<5m) OF A SLOPE OR EMBANKMENT, A STATICALLY CALCULATED RETAINING WALL MUST BE ERECTED TO ABSORB ANY ADDITIONAL LOADING FROM THE SOIL. THE WALL MUST EXCEED THE DIMENSIONS OF THE TANK BY AT LEAST 500mm IN ALL DIRECTIONS AND MUST BE LOCATED AT LEAST 1000mm AWAY FROM THE TANK.

GROUNDWATER INSTALLATIONS



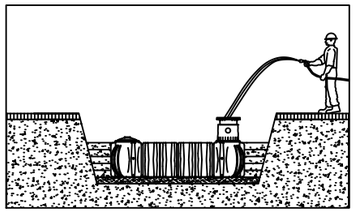
IF IT IS ANTICIPATED THAT THE TANK WILL BE IMMERSED IN GROUNDWATER DEEPER THAN SHOWN IN THE BELOW TABLE, SUFFICIENT DISSIPATION MUST BE ENSURED. DISSIPATION OF THE DRAINAGE WATER (E.G. VIA AN ANNULAR DRAINAGE SYSTEM) IS RECOMMENDED IN CASES OF COHESIVE, WATER-IMPERMEABLE SOIL.

TANK SIZE	20,000L	25,000L	30,000L
IMMERSION DEPTH	1,250mm	1,250mm	1,250mm

MINIMUM COVER TO BE 750mm FROM SHOULDER OF TANK IN AREAS WITH GROUNDWATER.

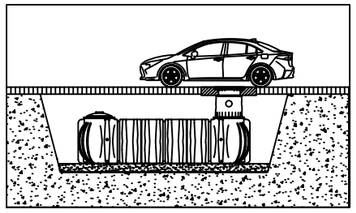
MAXIMUM COVER TO BE 1,500mm FROM SHOULDER OF TANK IN AREAS WITH GROUNDWATER.

INSERTION & FILLING



THE TANK MUST BE INSERTED, IMPACT-FREE, INTO THE PREPARED TRENCH USING SUITABLE EQUIPMENT.
THE TANK IS FILLED WITH ½ WATER BEFORE BACKFILLING.
THE 10-20mm ROUND GRAIN GRAVEL IS BACKFILLED IN LAYERS OF MAX. 300mm STEPS AND IS TO BE WELL COMPACTED WITH A MANUAL TAMPER.
MECHANICAL COMPACTION MACHINES ARE NOT TO BE USED UNDER ANY CIRCUMSTANCES.
SURROUND MUST BE AT LEAST 100mm ON ALL SIDES OF THE TANK.

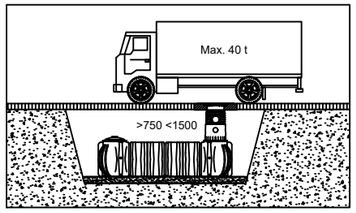
VEHICLE LOADING CONDITIONS



FOR LOADINGS OF UP TO 3,500KG IN TRAFFICKED AREAS WITH NO GROUNDWATER, THERE MUST BE;

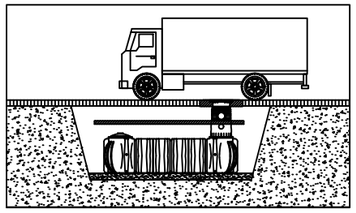
MINIMUM COVER OF 750mm FROM THE SHOULDER OF THE TANK, AND

MAXIMUM COVER OF 1,300mm FROM THE SHOULDER OF THE TANK.



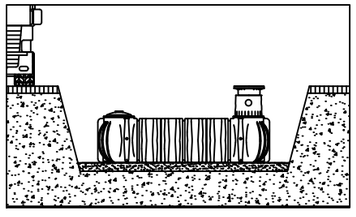
HGV TRAFFIC UP TO 40 T GROSS VEHICLE WEIGHT (MAX. AXLE LOAD 13.5 T) MAY BE ACCOMMODATED WHERE INSTALLED USING AN HGV-RATED TELESCOPIC SHAFT ALONG WITH A HGV RATED D400 COVER PLATE (PROVIDED BY OTHERS).

COVER DEPTH MUST BE MAINTAINED BETWEEN 750–1500 MM.



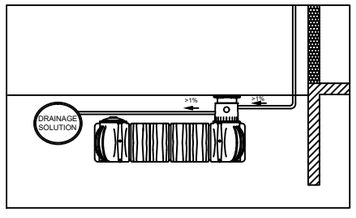
OVER 40 T, THE SHAFT CAN ONLY BE DRIVEN OVER WITH HGVS IN CONJUNCTION WITH A SELF-SUPPORTING, IRON REINFORCED CONCRETE PLATE.

TO ENSURE THAT NO ADDITIONAL FORCES OR EFFECTS OF HGV-BEARING ARE TRANSFERRED TO THE TANKS, THE DIMENSIONS AND STRENGTH OF THE CONCRETE PLATE MUST BE STATICALLY CALCULATED.



FOR INSTALLATIONS ADJACENT TO SURFACES USED BY VEHICLES OF OVER 3,500KG, THE TANK MUST BE INSTALLED AT A DISTANCE FROM THE ROAD SURFACE THAT IT AT LEAST THE DEPTH OF THE TRENCH.

PIPE CONNECTIONS



ALL PIPE CONNECTIONS MUST BE INSTALLED WITH A FALL OF AT LEAST 1% IN THE DIRECTION OF FLOW (POSSIBLE, SUBSEQUENT SETTLING MUST BE TAKEN INTO ACCOUNT).
IF THE TANK OVERFLOW IS CONNECTED TO A PUBLIC SEWER, THIS MUST BE PROTECTED AGAINST REFLUX BY MEANS OF A LIFTING STATION OR REFLUX SEAL IN ACCORDANCE WITH DIN 1986.
ALL SUCTION, PRESSURE & CONTROL LINES MUST BE INSTALLED IN AN EMPTY PIPE / DUCT AND AS STRAIGHT AS POSSIBLE.
ANY NECESSARY BENDS MUST BE FORMED IN 30 DEGREE MOULDED SECTIONS.
IMPORTANT: THE EMPTY PIPE / DUCT MUST BE CONNECTED TO AN APERTURE **ABOVE** THE MAX. WATER LEVEL.

PLEASE REFER TO TANK INSTALLATION GUIDE FOR DETAILS ON; SAFETY, PRODUCT FEATURES, IDENTIFICATION OBLIGATIONS, TECHNICAL DATA, TANK STRUCTURE, TANK ASSEMBLY & SERVICING AND INSPECTION.

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HOME DIRECT PLATIN XXL TANK INSTALLATION

REV.	DESCRIPTION	BY	DATE
P0	LATEST REVISION	DS	29.04.24

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DRAWN : DS DATE : 29.04.2024
CHECKED : FC SCALE : VARIOUS@A3

PROJECT
GRAF STANDARD DETAILS

DESCRIPTION
HOME DIRECT
RAINWATER HARVESTING SYSTEM
PLATIN XXL TANK

DRAWING No. HOME_DIRECT_STANDARD_DETAIL_PLATIN_XXL
REV. P0