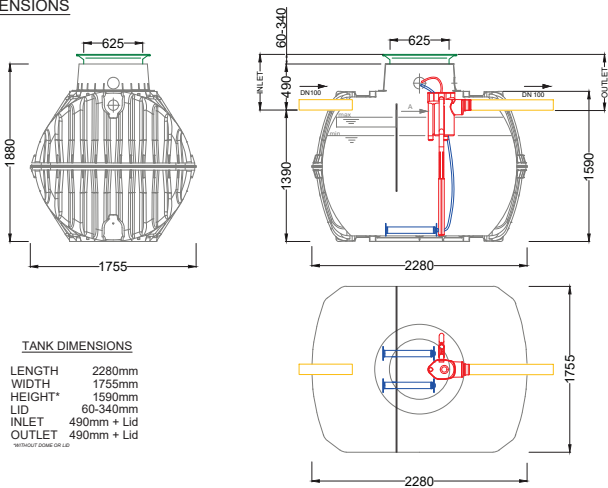


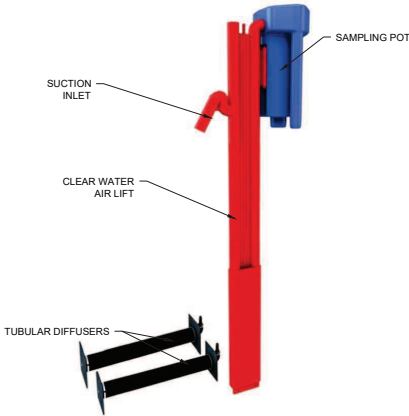
TANK DIMENSIONS



TANK DIMENSIONS

LENGTH 2280mm
WIDTH 1755mm
HEIGHT* 1590mm
LID 60-340mm
INLET 490mm + Lid
OUTLET 490mm + Lid
*WITHOUT DOME OR LID

PIPE SCHEMATIC



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GRAF 5PE ONE2CLEAN SPECIFICATION



Supply Information:

- Pedestrian Loading lid (Mini) is part of the standard supply, all other lids are supplied upon request or unless otherwise specified.
- Tank Dome (Mini) is part of the standard supply, all other domes are supplied upon request or unless otherwise specified.
- If opting for an Internal Pump System (IPS), the system must be supplied with a Tank Dome (Maxi) and a Raised Outlet (RO).
- Raised Outlet (RO) upgrade available upon request, please contact GRAF UK for more information.
- If opting for an Extension sleeve (1m), the sleeve can be cut into smaller sizes of 750mm or 500mm of working height.

PO	LATEST REVISION	KS	21.11.23
REV	DESCRIPTION	BY	DATE

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DRAWN: KS DATE: 21.11.2023
CHECKED: FC SCALE: VARIOUS/BA3

PROJECT

GRAF STANDARD DETAILS

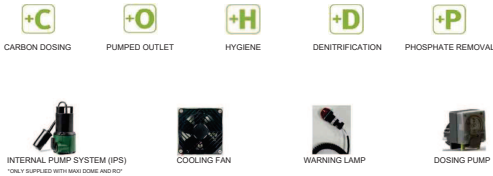
DESCRIPTION

GRAF 5PE ONE2CLEAN
3,750L CARAT S

DRAWING No: 5PE ONE2CLEAN STANDARD DETAIL REV: P0
Page 1

ONE2CLEAN PACKAGE ADD ONS

(SEE PAGE 2 FOR CONTROL PANEL INFORMATION)



Tank Accessories

Item	Dimension (mm)	Max. Weight (kg)	Max. Height (mm)	Max. Loading (kg)
Pedestrian Loading Lid (Mini)	ø 625mm	6500mm	3000mm	150kg
Pedestrian Loading Lid (Maxi)	ø 1000mm	6500mm	6000mm	300kg
Vehicle Loading Lid	ø 1000mm	6500mm	6000mm	3.000kg
Extension Sleeve (1m)	ø 1000mm	6500mm	1.000mm	
Extension Sleeve	ø 1000mm	6500mm		
Tank Dome (Mini)	ø 625mm	6500mm		
Tank Dome (Maxi)	ø 1000mm	6500mm		
Tank Dome (Mini)	ø 625mm	6500mm		

* Loading up to 1500kg with suitable loadline (can be provided by others)

* Tank Dome (Mini) available with 2000mm or 3000mm connection

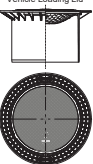
Pedestrian Loading Lid (Mini)



Pedestrian Loading Lid (Maxi)



Vehicle Loading Lid



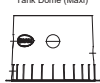
Extension Sleeve (1m)



Extension Sleeve



Tank Dome (Maxi)



Tank Dome (Mini)



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

5PE ONE2CLEANEXTRA WITH INTERNAL CABINET

The diagram illustrates the installation of the 5PE ONE2CLEANEXTRA system with an internal cabinet. The system is designed for use in a building's basement or underground area, connected to a wastewater treatment plant (WWTP) and a drainage field or water course.

Key Components and Connections:

- WC (Toilet):** Connected to the system via a pipe.
- One2Clean Internal Control Panel:** A blue unit with a digital display and buttons. It is connected to the system via a 19mm PVC Hose (blue) and a 13mm PVC Hose (black/red). The panel requires its own, permanently adequately fused (13 amp) power supply. It is crucial to incorporate a fused spur as a safety measure, averting electrical risks. Fitted with isolation switch for repair and maintenance.
- Soil Stack/High Level Air Vent:** All treatable waste water to enter treatment plant via soil stack.
- Ground:** The system is installed underground.
- WWT Intlet pipe:** The pipe entering the underground tank.
- Internal Sampling Chamber:** A chamber for sampling wastewater.
- Low Level Air Vent:** A vent for air from the underground tank.
- To drainage field or water course:** The outlet for treated wastewater.
- Wastewater level:** The level of wastewater in the tank.
- Below ground Wastewater Tank:** The main treatment tank.
- Clear water discharge pipe:** The pipe for clear water discharge.
- Tubular diffuser located in the base of tank:** A diffuser for air or gas in the tank.

Notes:

- The One2Clean control panel supplies compressed air through a 19mm and 13mm Hose to the underground tank. Hoses should be housed inside DN100 drainage dust pipe or similar.

5PE ONE2CLEANEXTRA WITH EXTERNAL CABINET

The diagram illustrates the installation of the One2Clean system with an external cabinet. The system is divided into three main sections: Above Ground, Inside Tank, and Below Ground.

Above Ground: A WC is connected to a First Flush tank. A Fused Spur (provided by others) is connected to the First Flush tank. A control panel is mounted on the wall, connected to the First Flush tank and the Ground. A Soli Stack/High Level Air/Vent is connected to the First Flush tank, with a note: "All treatable waste water to enter treatment plant via soli stack".

Inside Tank: A WWWT inlet pipe enters the tank. A 15mm PVC Hose (Blue) is connected to the control panel and fixed with a Jubilee Clip. A 13mm PVC Hose (black/red) is connected to the control panel and fixed with a Jubilee Clip. An Internal Sampling Chamber is located inside the tank. A Low Level Air Vent is connected to the tank. A Tubular diffuser is located in the base of the tank.

Below Ground: The system is connected to the drainage field or water course. The WWT inlet pipe is connected to the tank. The Tubular diffuser is located in the base of the tank.

Legend:

- 15mm PVC Hose (Blue): Fixed with Jubilee Clip
- 13mm PVC Hose (black/red): Fixed with Jubilee Clip

Notes:

- The One2Clean control panel supplies compressed air through a 15mm and 13mm hose to the underground tank.
- Hoses should be housed inside DN100 drainage duct pipe or similar.

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NOTES:-

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**EXTERNAL PLASTIC CABINET S
FOR STANDARD ONEZCLEAN
CONTROL PANEL**

**EXTERNAL PLASTIC CABINET M
FOR KL CONTROL M-PANEL &
STANDARD ONEZCLEAN CONTROL
PANEL**

HIBLOW XP 80
COMPRESSOR

NOTE:- Tank accessory suitable

ONE2CLEAN
CONTROL PANEL

availability may vary depending on project. Please

*PLEASE NOTE THAT HOSE COLOURS
MAY VARY

 13MM DISCHARGING
AIR LIFT

 19MM AERATION

For more information or to contact Graf UK for sizing and support.

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

 GRAF UK Limited	
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DRAWN: KS CHECKED: FC	DATE: 21.11.2023 SCALE: VARIOUS@A3
<h2 style="text-align: center;">GRAF STANDARD DETAILS</h2>	
DESCRIPTION <h3 style="text-align: center;">GRAF 5PE ONE2CLEAN 3,750L CARAT S</h3>	
DRAWING No. 5PE ONE2CLEAN STANDARD DETAIL	REV. 0 Page 2

TRENCH DETAILS

FOR SUFFICIENT WORKING ROOM, THE BASE AREA OF THE TRENCH MUST EXCEED THE DIMENSIONS OF THE TANK BY 500mm 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.

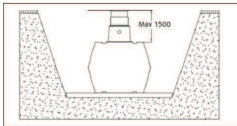
THE CONSTRUCTION SITE MUST BE HORIZONTAL AND PLANE AND MUST GUARANTEE SUFFICIENT LOAD-BEARING CAPACITY.

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 150mm-200mm COMPACTED LAYER OF 10-20mm ROUND GRAIN GRAVEL IS INSTALLED AT THE BASE OF THE EXCAVATION.

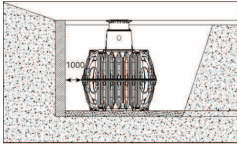
MINIMUM & MAXIMUM COVER



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

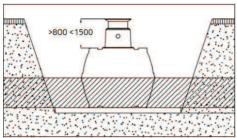
MAXIMUM COVER IN A LANDSCAPED AREA TO BE 1500mm
FROM SHOULDER OF TANK.

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

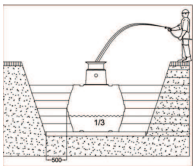


IF IT IS ANTICIPATED THAT THE TANK WILL BE IMMERSED IN GROUNDWATER DEEPER THAN SHOWN IN THE BELOW TABLE, SUFFICIENT DISSIPATION MUST BE ENSURED. DISSIPATION OF THE DRAINAGE WATER (E.G. VIA AN ANNULAR DRAINAGE SYSTEM) IS RECOMMENDED IN CASES OF COHESIVE, WATER-IMPERMEABLE SOIL.

TANK SIZE	2.700L	3.750L	4.800L	6.500L
IMMERSION DEPTH	700mm	795mm	910mm	1050mm

MINIMUM COVER TO BE 800mm FROM SHOULDER OF TANK
IN AREAS WITH GROUNDWATER.
MAXIMUM COVER TO BE 1500mm FROM SHOULDER OF TANK
IN AREAS WITH GROUNDWATER.

INSERTION & FILLING

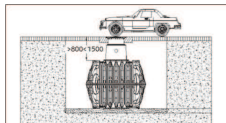


THE TANK MUST BE INSERTED, IMPACT-FREE, INTO THE PREPARED TRENCH USING SUITABLE EQUIPMENT.

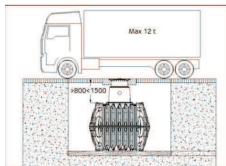
THE TANK IS FILLED WITH WATER BEFORE BACKFILLING. THE 10-20mm ROUND GRAIN GRAVEL IS BACKFILLED IN LAYERS OF MAX. 300mm STEPS AND IS TO BE WELL COMPACTED WITH A MANUAL TAMPER.

MECHANICAL COMPACTION MACHINES ARE NOT TO BE USED UNDER ANY CIRCUMSTANCES. SURROUND MUST BE AT LEAST 500mm ON ALL SIDES OF THE TANK.

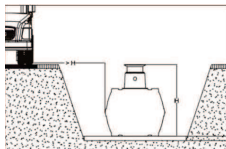
VEHICLE LOADING CONDITIONS



FOR LOADINGS OF UP TO 3.500KG IN TRAFFICKED AREAS WITH NO GROUNDWATER, THERE MUST BE:
MINIMUM COVER OF 800mm FROM THE SHOULDER OF THE TANK, AND
MAXIMUM COVER OF 1500mm FROM THE SHOULDER OF THE TANK.

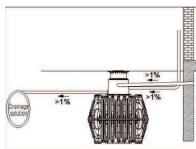


FOR LOADINGS OF MORE THAN 3.500KG AND UP TO 12.000KG IN AREAS OF NO GROUNDWATER, THERE MUST BE:
MINIMUM COVER OF 800mm FROM THE SHOULDER OF THE TANK, AND
MAXIMUM COVER OF 1500mm FROM THE SHOULDER OF THE TANK, AND
SUITABLE MANHOLE COVER & FRAME (PROVIDED BY OTHERS).



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 1988.

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.

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GRAF 5PE ONE2CLEAN INSTALLATION



P0	LATEST REVISION	KS	14.08.23
REV	DESCRIPTION	BY	DATE

GRAF UK Limited

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DRAWN	KS	DATE	14.08.2023
CHECKED	FC	SCALE	VARIOUS/DIA3

GRAF STANDARD DETAILS

DESCRIPTION	REV
GRAF 5PE ONE2CLEAN 3,750L CARAT S	P0
DRAWING No.	Page 3
5PE ONE2CLEAN STANDARD DETAIL	

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