Poly-sumps PKS 1200
for submersible sewage pumps UAK/UFK

Application

The pre fabricated plastic pump chamber is designed for ease of installation and totally alleviates any need for sump construction. The chamber must be sunk on a concrete sub base. The sump is then used as a conventional effluent collecting pit in conjunction with the selected pump arrangement and connected to standard pressure drainage systems.
Note: The unit is designed for normal pedestrian and cyclist load. (EN 124 Group 1, permissable traffic load 5KN/m²).
The PKS 1200 is very versatile, it's size and weight makes it easily transportable and convenient to move on site. The unit design allows for total flexibility in pump selection, being able to incorporate single or duplicate MultiCut- (cutting system), MultiStream- (single channel impeller) or MultiFree- (vortex impeller) pumps. The most suitable level control system and control panel can be selected from the separate data sheets.

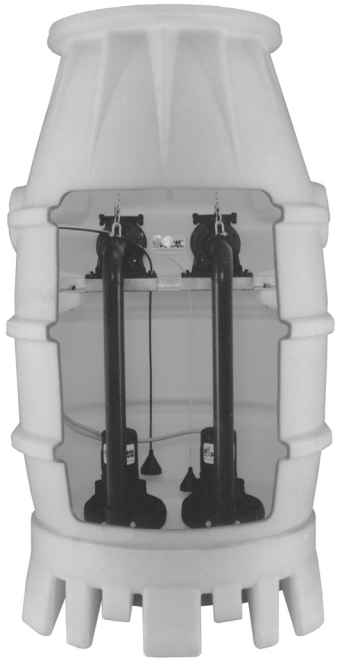
Description

Pre fabricated pump chamber in high grade polyethylene (PE-HD) supplied complete with reducing sockets on inlets, vent socket and pressure outlet connection.

a) MultiCut-pumps with cutter blade system providing complete maceration of medium being pumped and giving high delivery head performance. The unit would incorporate patented coupling valve, integral ball valve with mounting arrangement for flushing connection and DN 40 (1½") delivery branch.

b) MultiStream- or MultiFree-pumps (Single channel impeller or vortex impeller) having 80 mm discharge outlet. The unit incorporating swing-type check valve and DN 65/80 diameter coupling discharge arrangement.

The system is designed to allow suspension of the pumps above the startup water level. Using a chain, pump and delivery pipe can be suspended to the coupling connection. The built in valve unit can be operated from above the pump chamber.
The height of the sump will be 2,20 m. With PSV or a concrete-ring and a concrete-cover the sump can be extended up to 2,60 m or 2,53 m.
The sump has at the bottom a recess for the forks of a forklift and three rings on top to lift in the excavation.
The total volume without support ring is 1770 litres (with PSV 1925 litres). The estimated storage below pump suction is 245 litres (DN 150) or 550 litres (DN 200).



PKS 1200-D 50

- **To be operated from above**
- **Smooth benched collection area to prevent solids build up**
- **Buoyancy-proof and ground water proof**
- **Single or duplex unit**
- **Inlet DN 200 possible**
- **Patented coupling with vertical ball check valve**
- **Mounting arrangement for flushing connection**

Scope of supply

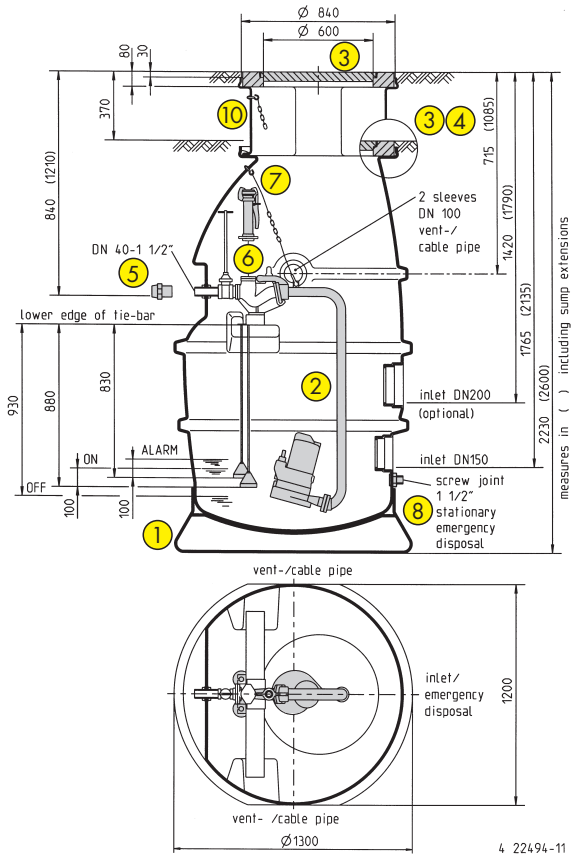
PKS 1200-50
Polyethylene Pump Chamber assembled with 40 mm dia. coupling valve incl. vertically closing ball check valve and 40 mm dia. mounting arrangement for flushing connection DN 40, service gate valve, 40 mm dia. stainless steel delivery piping outlet with 1½" male thread, 150 mm dia. feed with lip seals for pipe between house and sump (DN 200 as a special version) two 100 mm dia. pipe sockets for pipe between house and sump with lip seals for venting and cable pipe, one 100 mm dia. blind cap.

PKS 1200-D50
Polyethylene Pump Chamber assembled with two 40 mm dia. coupling valves incl. vertically closing ball check valves, one 40 mm dia. mounting arrangement for flushing connection DN 40, two elbows, two service gate valves, t-piece, 40 mm dia. stainless steel delivery pipe outlet with 1½" male thread, 150 mm dia. feed with lip seals for pipe between house and sump (DN 200 as a special version) two 100 mm dia. pipe sockets for pipe between house and sump with lip seals for venting and cable pipe, one 100 mm dia. blind cap.

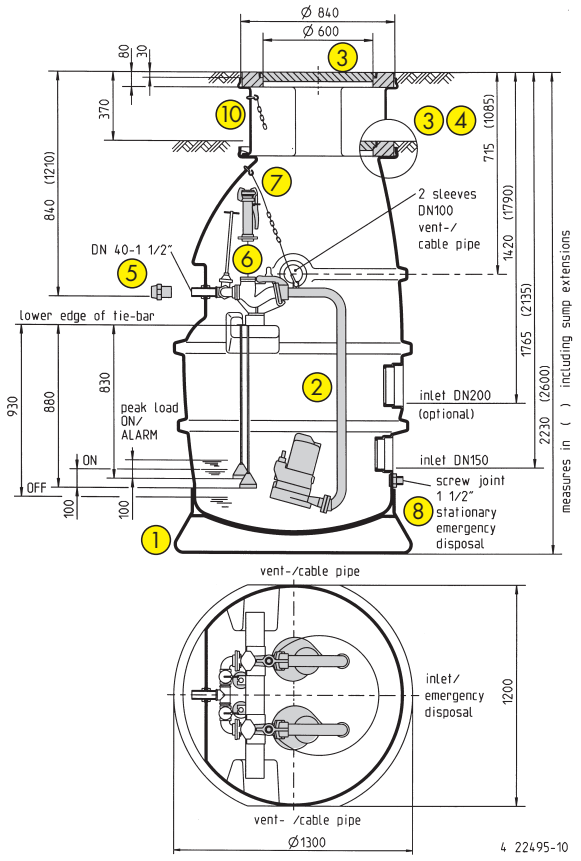
PKS 1200-80
Polyethylene Pump Chamber assembled with 80 mm dia. coupling arrangement, 80 mm dia. swing-type check valve, 80 mm dia. delivery pipe outlet as a 90 mm o.d. flanged socket unit, 150 mm dia. feed with lip seals for pipe between house and sump (DN 200 as a special version) two 100 mm dia. pipe sockets for pipe between house and sump with lip seals for venting and cable pipe, one 100 mm dia. blind cap.

PKS 1200-D80
Polyethylene Pump Chamber assembled with two 80 mm dia. coupling arrangements, two 80 mm dia. swing-type check valves, 2 separate pressure outlet DN 80 as a 90 mm o.d. flanged socket unit, 150 mm dia. feed with lip seals for pipe between house and sump (DN 200 as a special version), two 100 mm dia. pipe sockets for pipe between house and sump with lip seals for venting- and cable pipe, one 100 mm dia. blind cap.

Single unit PKS 1200-50



Dual unit PKS 1200-D 50



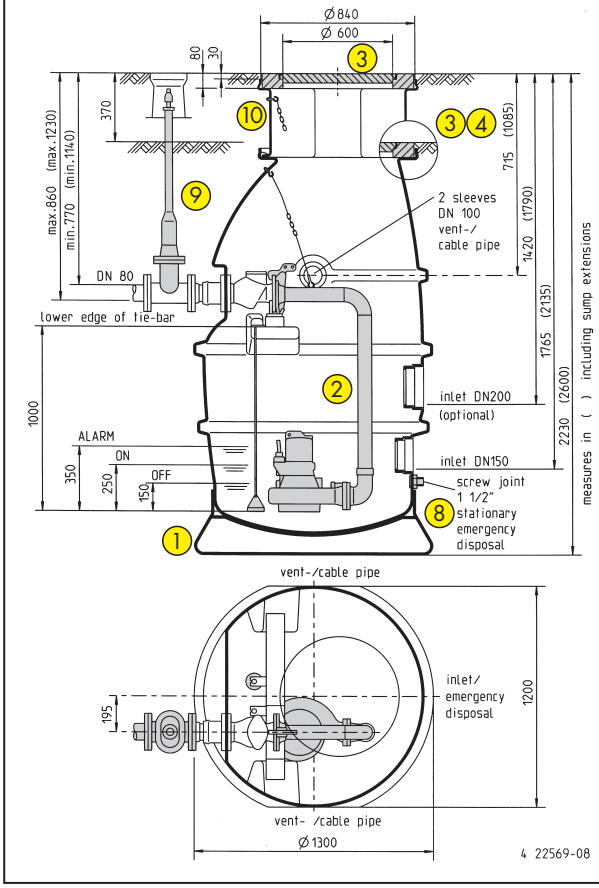
We reserve the right to change specifications without notice

Attention: If dual unit order 2 discharge branches and 2 pumps.

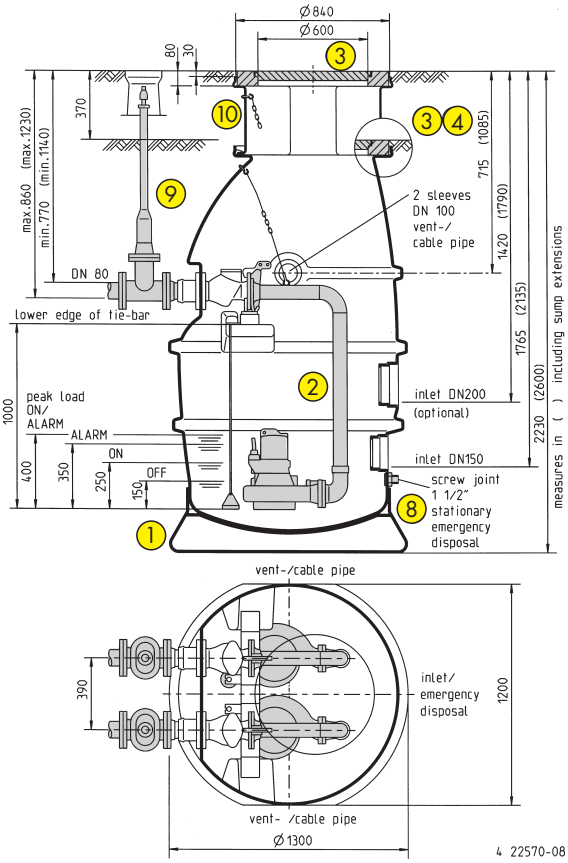
Decsription		Code-No.	Weight (kg)	25/2 ME	25/2 M	35/2 M	36/2 M	75/2 M	76/2 M
(1) **Poly-sump**	PKS 1200-50	**9972**	162	●	●	●	●	●	●
	PKS 1200-D 50	**9973**	174	●	●	●	●	●	●
	PKS 1200-80	**9974**	176						
	PKS 1200-D 80+	**9975**	226						
(2) **Discharge branch**, cpl. with chain DN 40 (stainless steel)*		**24719**	10,0	●	●	●	●	●	●
DN 65 *		**21611**	23,3						
DN 80*		**21612**	24,3						
(3) **Cover** ø 600 mm without ventilation, with frame ø 825 mm, cl. A 15		**20817**	90	●	●	●	●	●	●
Lifting tool for concrete cover system „Göbel"		**25279**		●	●	●	●	●	●
Insolation insert		**24412**		●	●	●	●	●	●
Venting pipe DN 100 for sumps		**25437**		●	●	●	●	●	●
(4) **Concrete ring** h = 100 mm		**25488**	55	●	●	●	●	●	●
(5) **Screwing** with sleeve and clamb connection									
for pressure ø 50 mm x 1½"		**22366**		●	●	●	●	●	●
for pressure ø 63 mm x 1½"		**22367**		●	●	●	●	●	●
(6) **Perrot flushing connection** DN 40, 1½" (not for PSV 370)		**23097**		●	●	●	●	●	●
(7) **Accessories for Perrot flushing connection:**	House coupling ø 50 mm	**19202**		●	●	●	●	●	●
	DRS-connection 1/2"	**22421**	0,5	●	●	●	●	●	●
	Breathing valve	**22422**		●	●	●	●	●	●
	Pressure gauge	**24666**	1,5	●	●	●	●	●	●
	Claw coupling	**22420**		●	●	●	●	●	●
	Flush connector 1" outside	**22466**		●	●	●	●	●	●
(8) **Connection** for stationary emergency disposal 1½"		**19203**		●	●	●	●	●	●
Hand diaphragm pump 1½"		**255**	16	●	●	●	●	●	●
Stop valve 1½"		**11837**		●	●	●	●	●	●
(9) **Spigot flange** DN 80, PN 10*		**11586**	5						
Sluice valve DN 80, PN 10* □		**18936**	24,5						
Set of earth installation equipment DN 80, pipe connection depth 700 mm*		**18938**	30						
1000–1400 mm*		**18939**	32						
(10) **Sump extension** PSV 370		**25318**	13	●	●	●	●	●	●

* If dual unit 2x, □with screws and gaskets + The applications of the submersible ball contact switches is not possible.

Single unit PKS 1200-80



Dual unit PKS 1200-D 80



Attention: If dual unit order 2 discharge branches and 2 pumps.

10/2 A1	15/2 A1	25/2 A2	35/2 A2	25/2 AW	35/2 AW	25/2 B1	35/2 B2	10/4 B1	15/4 B3	25/4 B4	35/4 B4
● ●	● ●	● ●	● ●	● ●	● ●	● ●	● ●	● ●	● ●	● ●	● ●
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●	●	●	●	●	●	●	●	●	●	●	●

Notice and application conditions according to EN 476

	1	2	3	4
PKS+1 concrete ring	●			
PKS+3 concrete rings		●	●	●
PKS+1 PSV 370		●	●	●

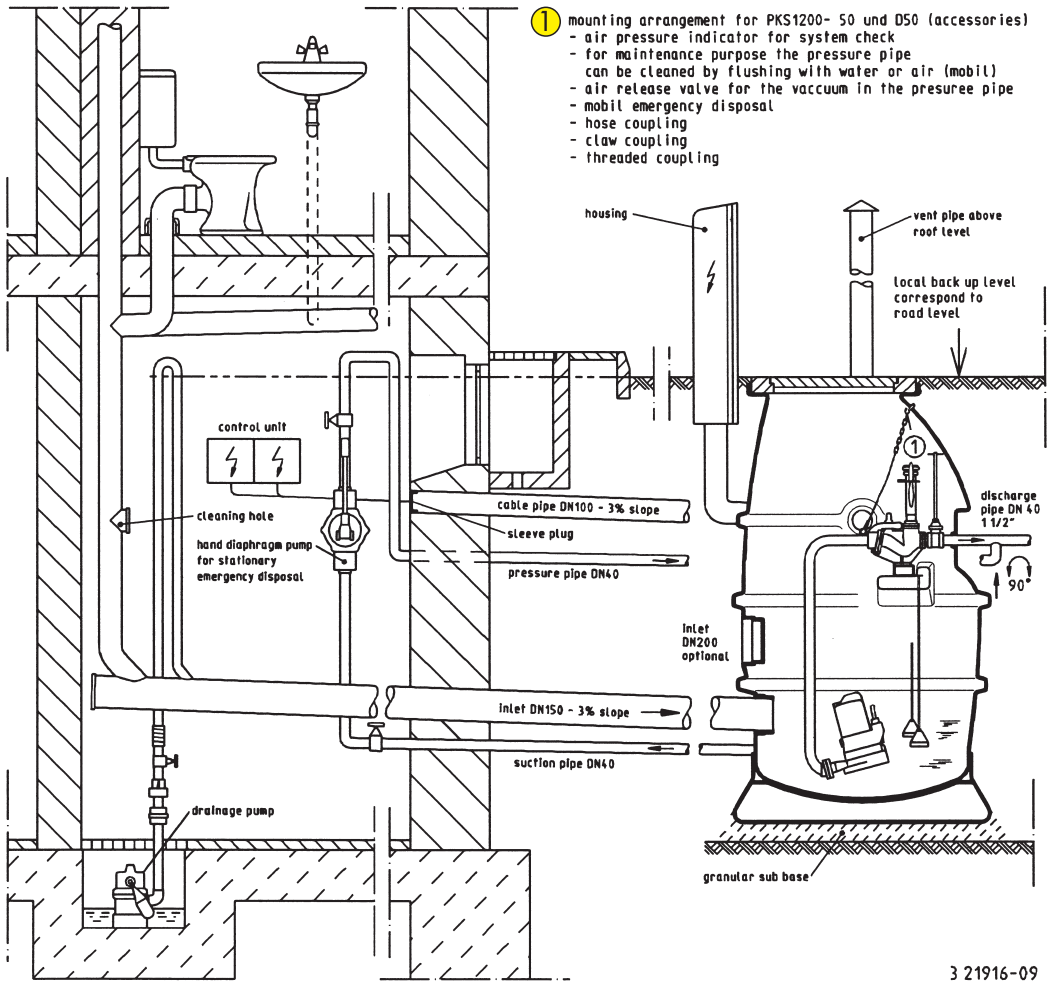
Operation:

1. To operate from above, but only conditionally.
2. Not to operate from above.
3. Conditionally to operate by getting in with a ladder supplied by customer (max. width 30 cm)

Buoyancy proof/statics:

4. Max. depth of immersion into ground water is 1m because of statics and buoyancy proof.

Mounting arrangement



Installation characteristics

The PKS pump chamber conforms to EN 12056/ 752/476 in all respects and is delivered ready for installation and connection.
Its low weight facilitates transport and installation.
The PKS pump chamber saves considerable cost. It can be installed and connected quickly without use of expensive machinery.
Level compensation can be achieved by simple means, using a commercial concrete seat ring (max. height 100 mm) or our PSV 370 sump extension.
Inspection and maintenance operations on the valves can be carried out easily from above – without entering the chamber.
The PKS pumping chamber is buoyancy-proof and ground water tight and therefore also suitable for restricted parts of a catchment area.
Optional connection facility for a manual diaphragm pump for stationary emergency disposal or flushing connection.
The 40 mm dia. stainless steel delivery pipe connection with 1½" male thread can be made with compression union for PVC or PE pipe.
The 80 mm dia. delivery pipe outlet in the form of a 90 mm dia. flanged socket unit can be connected with 80 mm dia. flanged spigot and soil placement gate valve or direct with 90 mm dia. delivery pipe.
The version as a duplex system with automatic alternating and peak load control increases reliability.
Important operational characteristics have also been taken into account in the design of the PKS pumping chamber: a smooth collection space without putrefaction zone, direction of flow orientated socket connections for the 150 or 200 mm dia. feed, a delivery pipe connection secured by axial friction. Additional safety we will get from the two separate working level contact of the static air level control, which are integrated in the AD/BD...ExM and AD/BD...MP control units.