Polyethylene tanks

General
Polyethylene tanks are important components in metering systems because they are not only resistant to the most aggressive chemicals, but also frequently support the pumps themselves plus fittings and agitators.

Versions
The polyethylene tanks are sintered from UV-stabilized medium pressure polyethylene. There are two basic versions:
1. Closed version with sealable screw-on cover located at the top, with Perbunan seal and fitting socket for pumps (sintered threaded bushes).
2. Open version with flange for a plastic cover plate, and with detachable lid.

As a standard both versions are made from natural coloured polyethylene. A temperature resistance of up to 70° C is guaranteed. Threaded bushes are provided on the lower edge of PE tanks up to 1000l for optional fitting of fastening angles. These are recommended for securing PE tanks to a mounting plate or to the floor.
The polyethylene tanks up to 200l are provided on the lower edge with a G 3/4 drain plug, the ones of 300l and more are not. A fitting level indicator is sintered in.
On request, several open polyethylene tanks are available as a multiple version, with a common cover plate.

Gas-tight PE tanks
There are two main reasons for designing gas-tight PE tanks:
1. Escaping gas from aggressive, toxic or evil-smelling media must not reach the atmosphere.
2. The media in the tank must not get into contact with humid air entering from outside (e.g. sulfuric acid).

Tightness is ensured automatically in the case of closed sintered tanks with screw-on cover. For open tanks the screwed-on cover plate is fastened with permanently elastic silicone mastic.
To allow perfect draining and filling, sufficient ventilation towards the atmospere is required. This is achieved using special cartridges.

Avoiding escaping of gas
Activated carbon cartridges are used to neutralize harmful gases for a longer period of time.

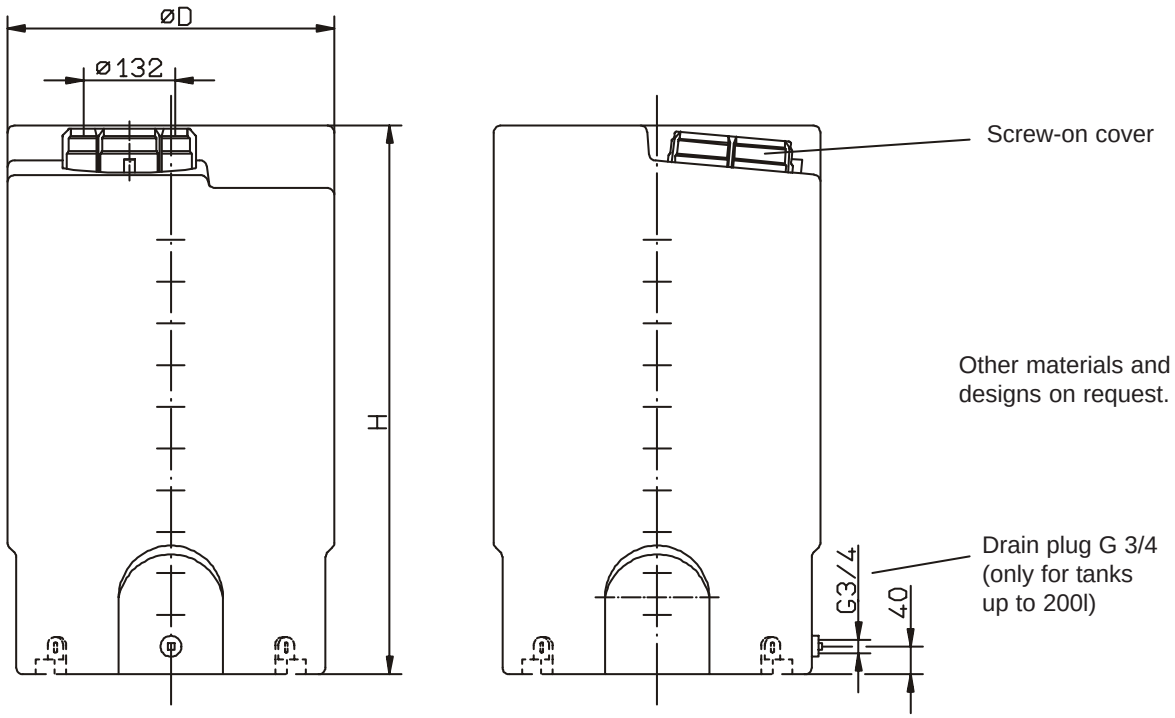
Avoiding entering of humid air
To prevent humid air from entering the tank, moisture-absorbing silicagel cartridges are used.Due to their fine-grain filling, activated carbon and silicagel cartridges are efficient with regard to the aforementioned function but still allow enough air to enter and escape to protect the tank against excessive and low pressure.

Assembly of the suction pipe
Closed PE tanks are generally provided with a G 1 screwed sleeve for receiving the suction pipe, according to MB 1 22 01, a hand mixer or a hand agitator according to MB 1 36 00.

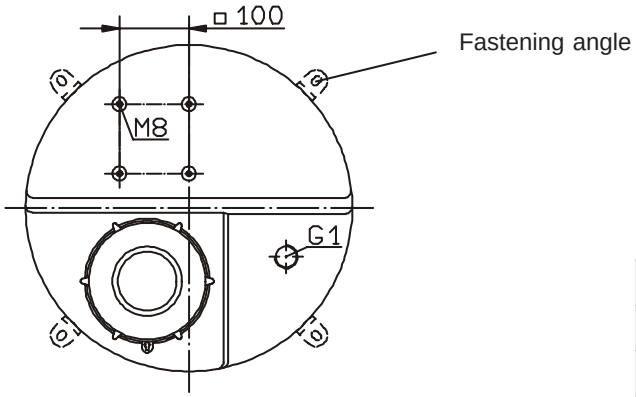
PE container on mounting plate
Depending on the operation to be performed or the specific nature of the medium, it is advisable to assemble the metering pump in front of the polyethylene tank (metering pump with positive suction lift). To ensure that the metering station can be preassembled, it is recommended to fix the PE tank and the pump onto a common mounting plate.

Dimensions

Closed PE tanks 60-1000l



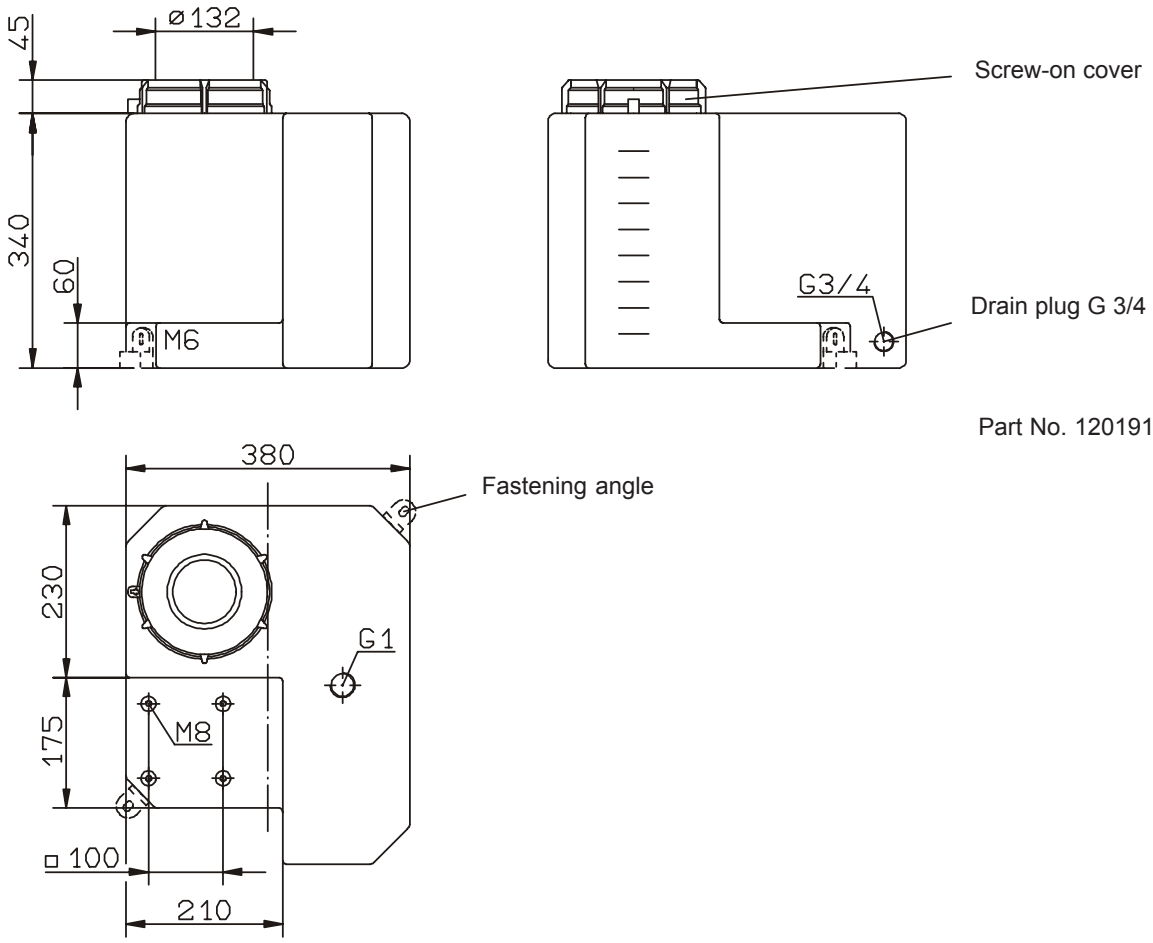
The drawing shows the design of the 100l PE tank.



Capacity	D	H	Part No.
60	415	575	12012727
100	470	790	12012728
200	600	845	12012729
300	675	950	12027454
500	810	1080	12027455
1000	1010	1360	12027456

Dimensions may deviate by +/- 5%.

45l PE tank



Part No. 12019128

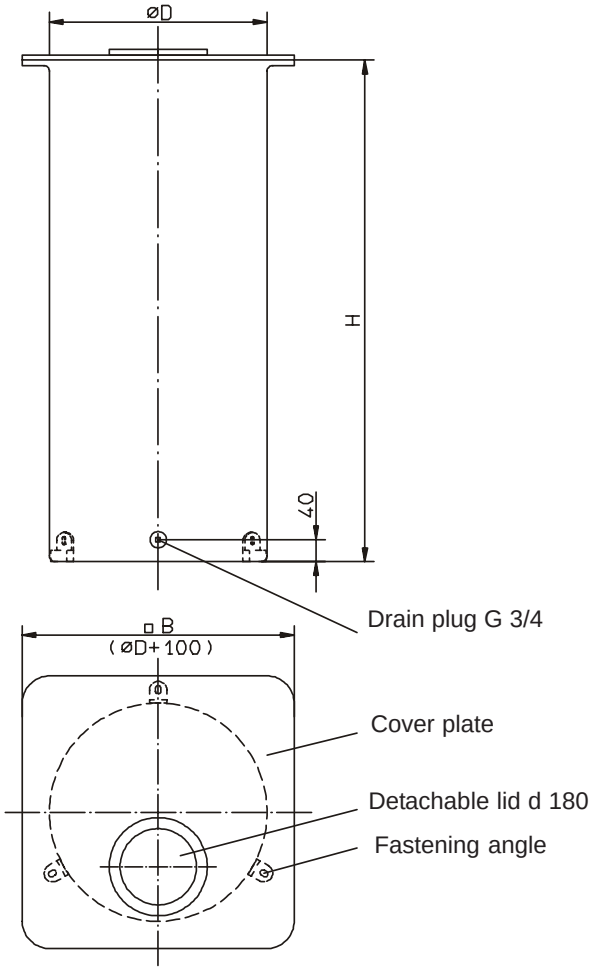
Dimension may deviate by +/- 5%.
Other materials and designs on request.

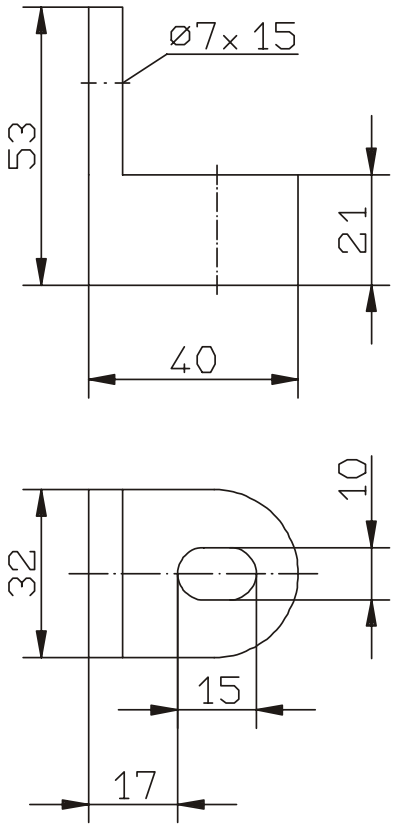
Accessories

•	Fastening angle complete with screw and washer. The following is required: 2 off for 45l PE tanks, 4 off for closed PE tanks 3 off for PE tanks with cover plate	Part No.	27450
•	Detachable lock with key for screw-on cover	Part No.	27451
•	Seal for screw-on cover (up to 200l tanks) Viton	Part No.	81574
•	Seal for screw-on cover (up to 200l tanks) EPDM	Part No.	80733
•	Seal for screw-on cover (from 300l Behälter) Viton	Part No.	81758
•	Seal for screw-on cover (from 300l Behälter) EPDM	Part No.	81668
•	Silica gel cartridge G 1, 0.1l	Part No.	12027453
•	Silica gel cartridge G 2, 0.5l	Part No.	12026434
•	Activ. carbon cartridge G 1, 0.1l	Part No.	12028557
•	Activ. carbon cartridge G 2, 0.5l	Part No.	12028558
•	Threaded sleeve G 3/4	Part No.	19705
•	Threaded sleeve G 1	Part No.	19309
•	Threaded plug G 3/4	Part No.	26419
•	Threaded plug G 1	Part No.	19314
•	Seal G 3/4 Hypalon	Part No.	81388
•	Seal G 3/4 Viton	Part No.	81389
•	Seal G 1 Hypalon	Part No.	81390
•	Seal G 1 Viton	Part No.	81391
•	Suction device G 3/4 with ball valve and filter	Part No.	19125

If required, we can offer a filling level indicator (glass tube).

Open PE tanks 100-1000l with cover plate.





Other materials and versions on request.

Capacity	D	H	Part No.
100	400	920	12027457
200	500	1090	12027458
300	600	1120	12027459
500	750	1245	12027460
750	900	1200	12027461
1000	1000	1335	12027462

Example Order

An average of 8l of 20% hydrochloric acid per day is required for a pH adjustment. The metering system to be acquired should have a tank for at least 10 days supply.

A 100l tank (80l) is selected in the gas-tight, closed version because of the escaping hydrochloric acid.

Screw-on cover with Viton seal.

A 0.1l activated carbon cartridge is provided for venting when sampling and binding the escaping gas. A mixer is not required.

The tank is installed in a corner with suitable protection, fastening angles are therefore not required (when mounting on a pallet or freestanding base, fastening angles are recommended).

Order text:

1 100l, PE tank closed version	Part No.	12012778
1 Viton seal for screw-on cover	Part No.	81574
1 0.1l activated carbon cartridge	Part No.	27453
1 Viton seal for G 3/4 drain plug	Part No.	81389