

Feed tank K-series

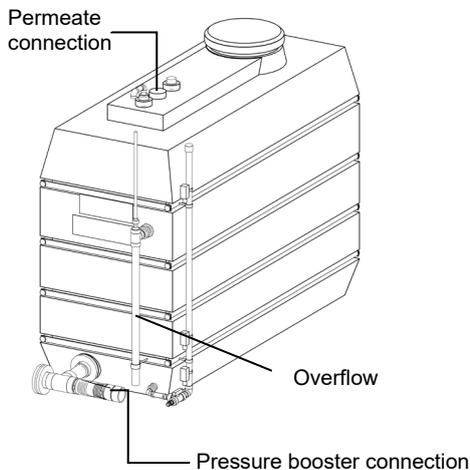


Fig. 1: Basic tank in standard design

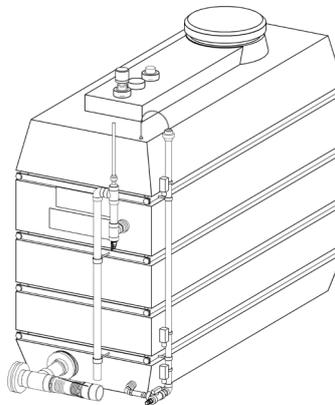


Fig. 2: Basic tank with sterile air filter

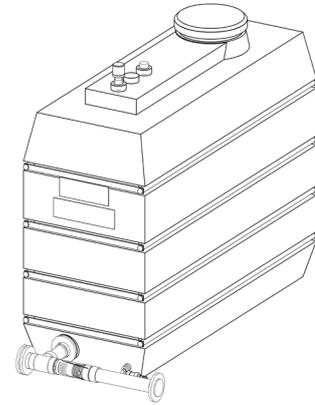


Fig. 3: Additional tank

1 Designated application

The non-pressurised tanks are designed for the storage of pure water resp. permeate.

2 Layout/design

Description of basic tank "standard"

Tank made of black, opaque PE, pipe parts such as overflow and filling level indicator/level control made of PVC.

Level control with three, freely adjustable, external level switches and draining.

Brief operation manual included in the scope of supply.

Pipe connections with bonded socket joint for connection of a pressure booster system and a permeate line.

Top-mounted lid as cleaning dome for visual checks and to clean the tank's interior.

Connection piece at the bottom for interconnection with additional tanks.

Description of basic tank "sterile"

Design as for basic tank "standard", however, with sterile aeration/deaeration element and overflow as siphon.

Ball-type draining valve for overflow siphon (only basic tank).

Description of additional tank

Design as for basic tank, however, without external level control and overflow, connection for interconnection with the basic tank without connection for pressure booster pump. Additional tank available with sterile aeration and deaeration.

3 Installation conditions

Application limits

Please observe local installation directives, general guidelines (e. g. WVU, EVU, VDE, DIN, DVGW resp. ÖVGW or SVGW) and technical specifications.

The installation site must be frost-proof and ensure the basic tank's protection from chemicals, dyes, solvents and vapours.

The ambient temperature as well as the radiation temperature next to the system must not exceed 30 °C.

For connection in series, a basic tank and several additional tanks can be combined.

The installation room must have a floor drain. If no floor drain is available, a corresponding water stop device has to be installed.

4 Installation/mounting

Prior to starting the installation work, the protective caps at the permeate connection and the pressure booster must be removed. Regarding the installation of the permeate line, all tanks have to be provided with a permeate inlet (refer to installation examples), if the feed volume is > 1 tank volume.

In order to completely drain the tank(s), a corresponding draining valve to discharge the residues to the drain has to be installed into the suction line to the pressure booster.

5. Technical specifications		Basic tank K-series						
Type		K 1100	K 1500	K 2000	K 2500	K 3000	K 4000	K 5000
Connection data								
Permeate connection	[DN]	40	40	40	40	40	40	40
Pressure booster connection	[DN]	50 - 80	50 - 80	50 - 80	50 - 80	50 - 80	50 - 80	50 - 80
Overflow	[DN]	40 - 100	40 - 100	40 - 100	40 - 100	40 - 100	40 - 100	40 - 100
Dimensions and weights								
Approx. tank width	[mm]	820	820	820	1100	1100	1100	1450
Approx. tank depth	[mm]	1650	1800	2300	2100	2450	2650	2550
Approx. tank height	[mm]	1520	1750	1750	1750	1750	2020	2100
Approx. tank weight	[kg]	75	90	130	135	190	255	260
Approx. usable supply volume, max.	[l]	950	1300	1750	2250	2750	3700	4700
Order no.		712 300	712 305	712 310	712 315	712 320	712 325	712 330

Note: Standard or sterile design are selected as per the corresponding variants.
 Refer to 6. Table of variants resp. consultat Grünbeck experts.

5.1 Technical specifications		Additional tank K-series						
Type		K 1100	K 1500	K 2000	K 2500	K 3000	K 4000	K 5000
Connection data								
Permeate connection	[DN]	40	40	40	40	40	40	40
Pressure booster connection	[DN]	50 - 80	50 - 80	50 - 80	50 - 80	50 - 80	50 - 80	50 - 80
Overflow	[DN]	---	---	---	---	---	---	---
Dimensions and weights								
Approx. tank width	[mm]	720	720	720	1000	1000	1000	1350
Approx. tank depth	[mm]	1500	1650	2150	1950	2300	2500	2400
Approx. tank height	[mm]	1520	1750	1750	1750	1750	2020	2100
Approx. tank weight	[kg]	60	75	115	120	170	235	240
Approx. usable supply volume, max.	[l]	950	1300	1750	2250	2750	3700	4700
Order no.		712 340	712 345	712 350	712 355	712 360	712 365	712 370

Note: Standard or sterile design are selected as per the corresponding variants.
 Refer to 6. Table of variants resp. consult Grünbeck experts.

6. Table of variants (basic and additional tanks)	
.10	Overflow DN 50 standard
.20	Overflow DN 65 standard
.30	Overflow DN 80 standard
.40	Overflow DN 100 standard
.100	Overflow DN 40 sterile
.110	Overflow DN 50 sterile
.120	Overflow DN 65 sterile
.130	Overflow DN 80 sterile
.140	Overflow DN 100 sterile
.200	Overflow DN 40, for CO ₂ -trap
.210	Overflow DN 50, for CO ₂ -trap
.220	Overflow DN 65, for CO ₂ -trap
.230	Overflow DN 80, for CO ₂ -trap
.240	Overflow DN 100, for CO ₂ -trap

Example:

712 300 110

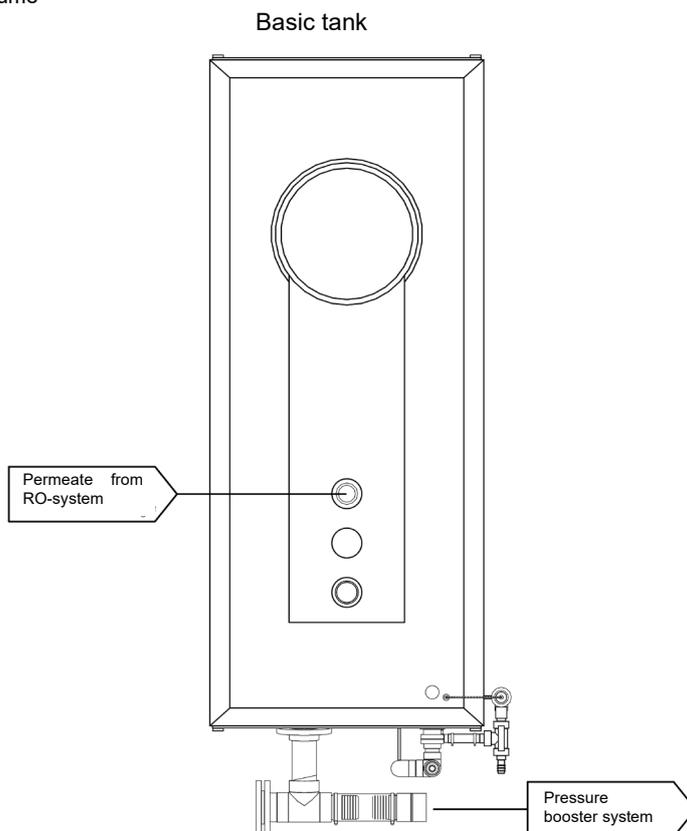
This is a K 1100 basic tank with a sterile overflow DN 50 and sterile air filter.

Attention:

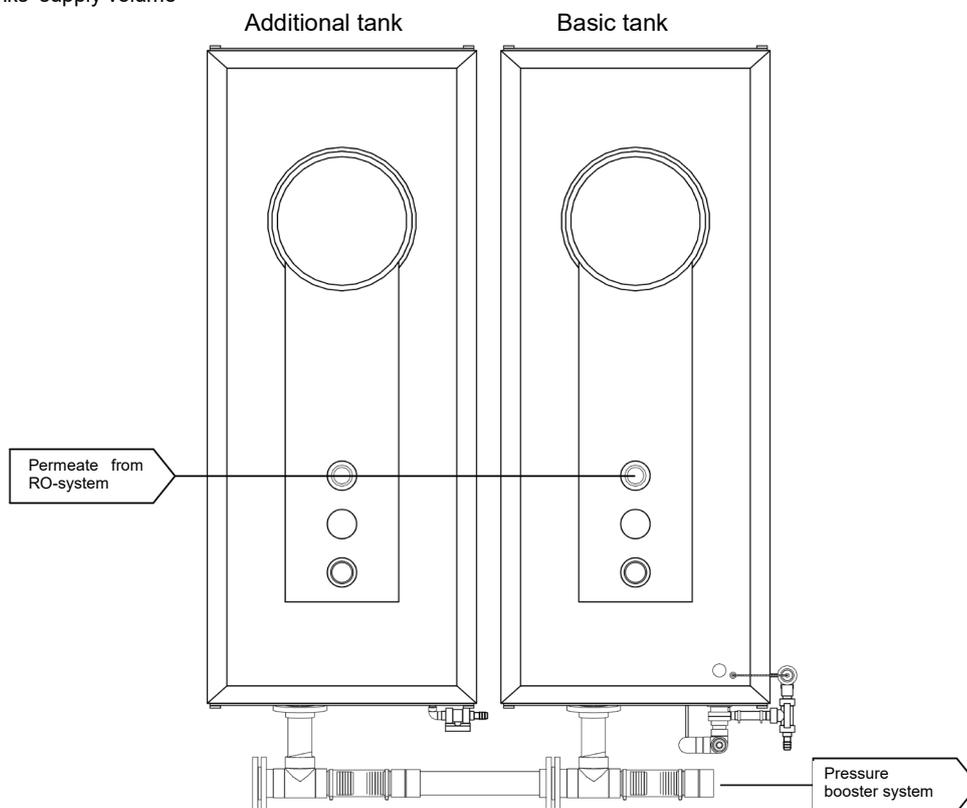
Please order the connecting lines for basic and additional tank separately (refer to example 3). „3 and more tank supply volumes“).

7 Installation examples

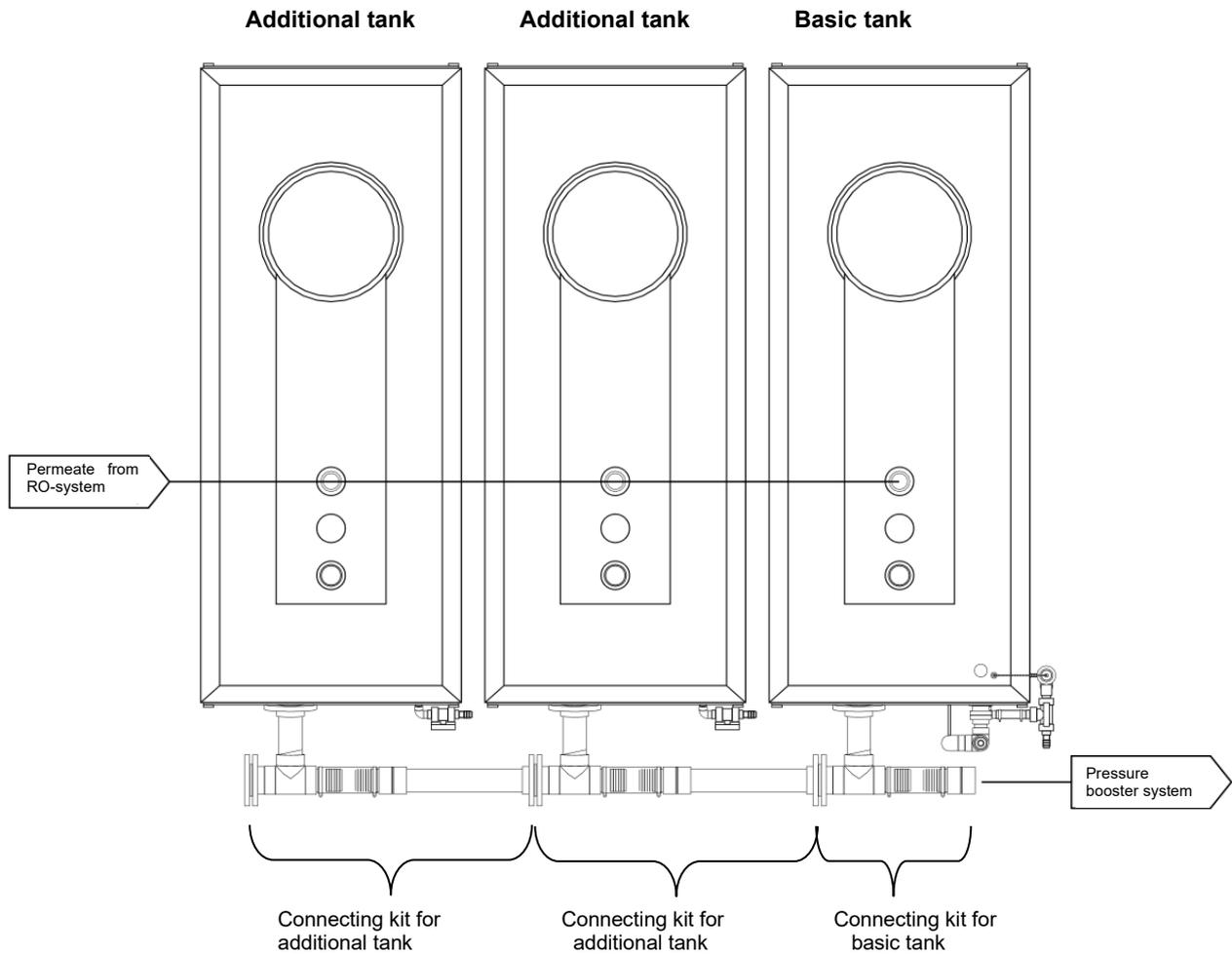
Example 1: 1 Tank's supply volume



Example 2: 2 Tanks' supply volume



Example 3: 3 (and more) Tanks' supply volumes



		Order no. for DN 50	Order no. for DN 65	Order no. for DN 80	Order no. for DN 100
K 1100 - 4000	Connecting kit for basic tank	712 702	712 704	712 706	712 708
	Connecting kit for additional tank	712 712	712 714	712 716	712 718
K 5000	Connecting kit for basic tank	-	712 722	712 724	712 726
	Connecting kit for additional tank	-	712 732	712 734	712 736

Example:

In above mentioned example 3, for 3 tanks

1 x order no. 712 706 connecting kit for basic tank (DN 80 in the example given)

and
 2 x order no. 712 716 connecting kit for additional tank (DN 80 in the example given)

must be ordered for the withdrawal connection (e. g. towards a pressure booster system).