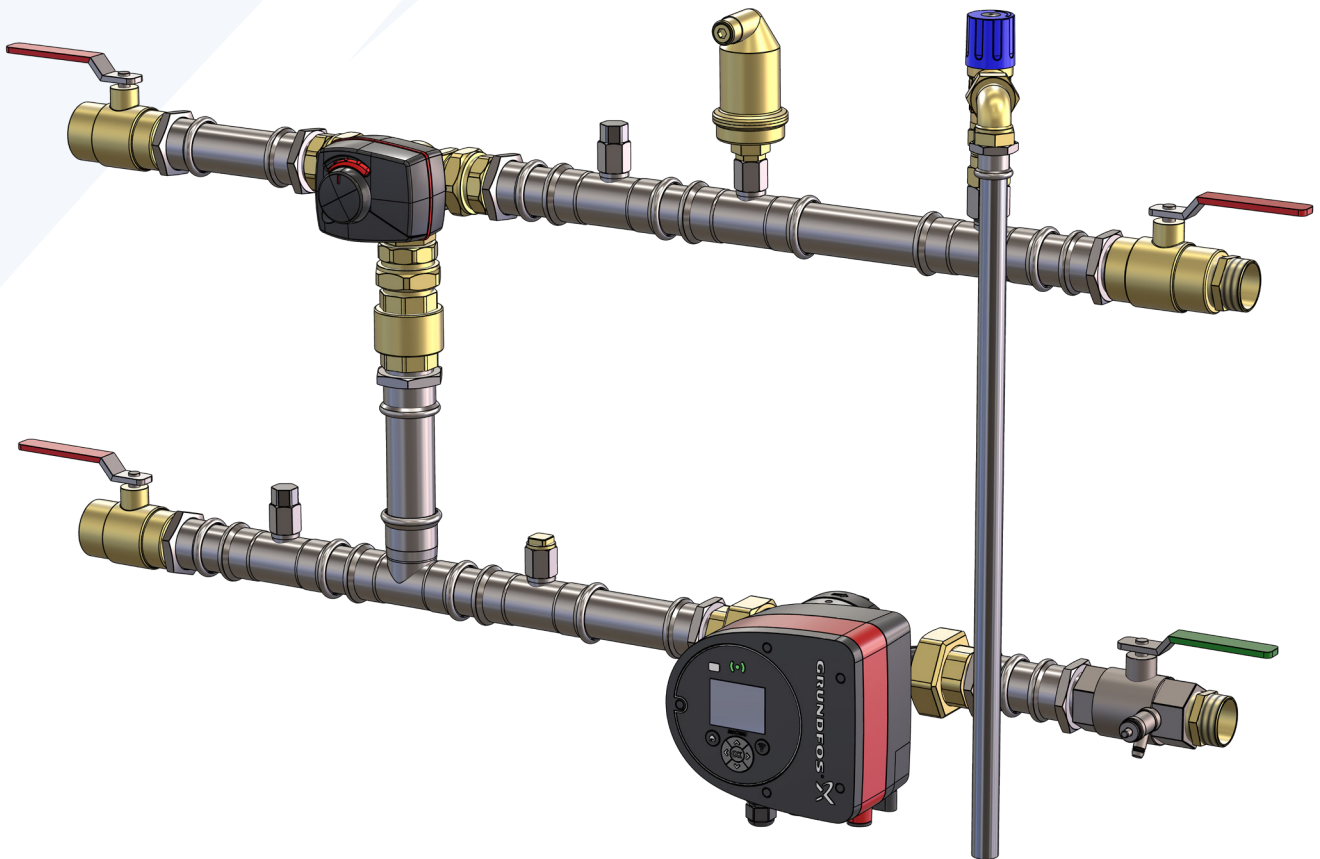


Flue gas and process heat

WATERSYSTEM



The exodraft Watersystem is used to ensure controlled water circulation and stable return temperatures in connection with exodraft Safe Plate (SP) and Basic Plate (BP) heat recovery units. The system supports reliable operation in water-based heat recovery installations.

The exodraft Watersystem secures the system waterflow corresponds with the recommended waterflow in the energy report through the verified flow curves available for each specific system. The system with the Grundfos pump is also prepared for communication with the exodraft controller. The pump will provide flow, water temperature (measured in the pump) differential pressure, pump alarm. The start stop and pump power are also defined via the prepared ModBus communication.

The pipework consists of stainless steel 1.4401 Geberit Mapress press fittings as well as brass fittings and valves, ensuring high corrosion resistance and long service life. The pump housing must be specified when ordering. Choose between cast iron and stainless steel.

The system is equipped with a circulation pump, a motorized 3-way mixing valve for precise temperature control, automatic air vent, safety relief valve, drain valve and service isolation valves. Integrated measuring ports allow monitoring of temperature and pressure conditions.

The compact and prefabricated design minimizes installation time and ensures reliable system operation. The exodraft Watersystem has a minimal space requirement due to its compact design and can be mounted directly onto the SP units using an additional installation. The water system must always be installed so that the automatic air relieve valve is in upright position.

Exodraft watersystems can be installed both indoors and outdoors. It is recommended that you protect against frost heaving if you choose to place the water system outdoors. The pump and valve actuator must always be protected from weather when installed outdoors.

The water system is prepared to

- Be insulated with 30 mm insulation
- Valve actuator supply 24 VDC, 0-10V
- Pump supply. 230 V AC
- Pump interface to exodraft controller ModBus TCP

General specifications

- All pipe parts in the system are made in stainless steel 1.4401
- The system is equipped with:
 - 10 Bar safety pressure valve
 - Automatic air relieve valve
 - Non return valve
 - 3-Way mixing valve
 - Water Circulation pump
 - Temperature sensor PT1000 fwd & return flow
 - Isolation valve
 - Isolation valve with drain
 - Additional 1/2" process connection
- Recommended 30 mm piping insulation
- Designed for indoor use. Can be used outside if the product is covered / encapsulated
- In conformance with 2006/42/EF
- In conformance with 2014/35/EU
- In conformance with 2014/68/EU - PED

Accessories - Installation kits

Only available for SP-units*

- Installation kits for SP80 (8005300)
- Installation kits for SP120 and SP250 (8005301)
- Installation kits for SP375 and SP500 (8005302)

**All kits includes mounting brackets for SP-units, pipe supports and flexible hoses.*

Spare parts

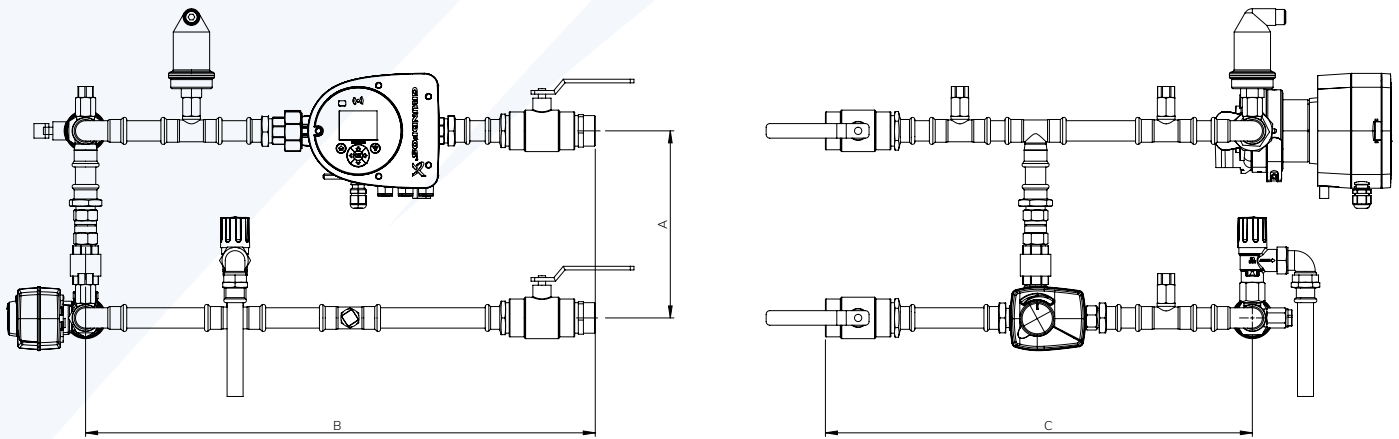
- Circulator Pump Grundfos MAGNA3 25-80-180 - Cast Iron (3305078)
- Circulator Pump Grundfos MAGNA3 32-100-180 - Cast Iron (2400540)
- Circulator Pump Grundfos TPE2 40-180 - Cast Iron (3305127)*
- Circulator Pump Grundfos TPE2 50-200 - Cast Iron (3305145)*
- Circulator Pump Grundfos MAGNA3 25-80N-180 - Stainless steel (3305151)
- Circulator Pump Grundfos MAGNA3 32-100N-180 - Stainless steel (3305152)
- Circulator Pump Grundfos TPE2 40-180 - Stainless steel (3305153)*
- Circulator Pump Grundfos TPE2 50-200 - Stainless steel (3305154)*
- ESBE Mixing valve 3-ways, KVS2,5 (2400341)
- ESBE Mixing valve 3-ways, KVS4 (2400342)
- ESBE Mixing valve 3-ways, KVS6,3 (2400343)
- ESBE Mixing valve 3-ways, KVS16 (2400345)
- ESBE Mixing valve 3-ways, KVS25 (2400346)
- ESBE Mixing valve 3-ways, KVS45 (3302008)
- ESBE Mixing valve 3-ways, KVS65 (3302009)

**The Circulation pump Grundfos TPE are only suitable for installing nore on a prepared foundation.*

Variants

Model	Item no.	Description	Pipe Dimensions	Pump type (Stainless steel)	Pump type (Cast Iron)	KVS	Connection	Available with (Exodraft Heat Recovery units)	Installation kits (Only available for SP-units)
28-KVS2,5	8005005	Watersystem 28 mm KVS2,5 - Connection DN32, 1 1/4"	28 mm	MAGNA3 25-80N-180 (3305151)	MAGNA3 25-80-180 (3305078)	2,5	1 1/4"	SP80 -	8005300
28-KVS2,5	8005050	Watersystem 28 mm KVS2,5 - Connection DN32, 1 1/4"	28 mm	MAGNA3 25-80N-180 (3305151)	MAGNA3 25-80-180 (3305078)	2,5	1 1/4"	SP120 SP250	BP250 8005301
28-KVS4	8005051	Watersystem 28 mm KVS4 - Connection DN32, 1 1/4"	28 mm	MAGNA3 25-80N-180 (3305151)	MAGNA3 25-80-180 (3305078)	4	1 1/4"	SP120 SP250 SP375	BP250 8005301 8005302
35-KVS6,3	8005052	Watersystem 35 mm KVS6,3 - Connection DN32, 1 1/4"	35 mm	MAGNA3 32-100N-180 (3305152)	MAGNA3 32-100-180 (2400540)	6,3	1 1/4"	SP250 SP375 SP500	BP250 8005301 8005302
35-KVS10	8005053	Watersystem 35 mm KVS10 - Connection DN32, 1 1/4"	35 mm	MAGNA3 32-100N-180 (3305152)	MAGNA3 32-100-180 (2400540)	10	1 1/4"	SP250 SP375 SP500	BP250 8005301 8005302
42-KVS16	8005054	Watersystem 42 mm KVS16 - Connection DN32, 1 1/4"	42 mm	MAGNA3 32-100N-180 (3305152)	MAGNA3 32-100-180 (2400540)	16	1 1/4"	SP250 SP375 SP500	8005301 8005302
42-KVS25	8005055	Watersystem 42 mm KVS25 - Connection DN32, 1 1/4"	42 mm	MAGNA3 32-100N-180 (3305152)	MAGNA3 32-100-180 (2400540)	25	1 1/4"	SP250 SP375 SP500	8005301 8005302
54-KVS25	8005056	Watersystem 54 mm KVS25 - Connection DN50, 2"	54 mm	TPE2 40-180 (3305153)	TPE2 40-180 (3305127)	25	2"	-	BP500 BP750 BP1000
54-KVS45	8005057	Watersystem 54 mm KVS45 - Connection DN50, 2"	54 mm	TPE2 40-180 (3305153)	TPE2 40-180 (3305127)	45	2"	-	BP500 BP750 BP1000
54-KVS65	8005058	Watersystem 54 mm KVS65 - Connection DN50, 2"	54 mm	TPE2 50-200 (3305154)	TPE2 50-200 (3305145)	65	2"	-	BP500 BP750 BP1000

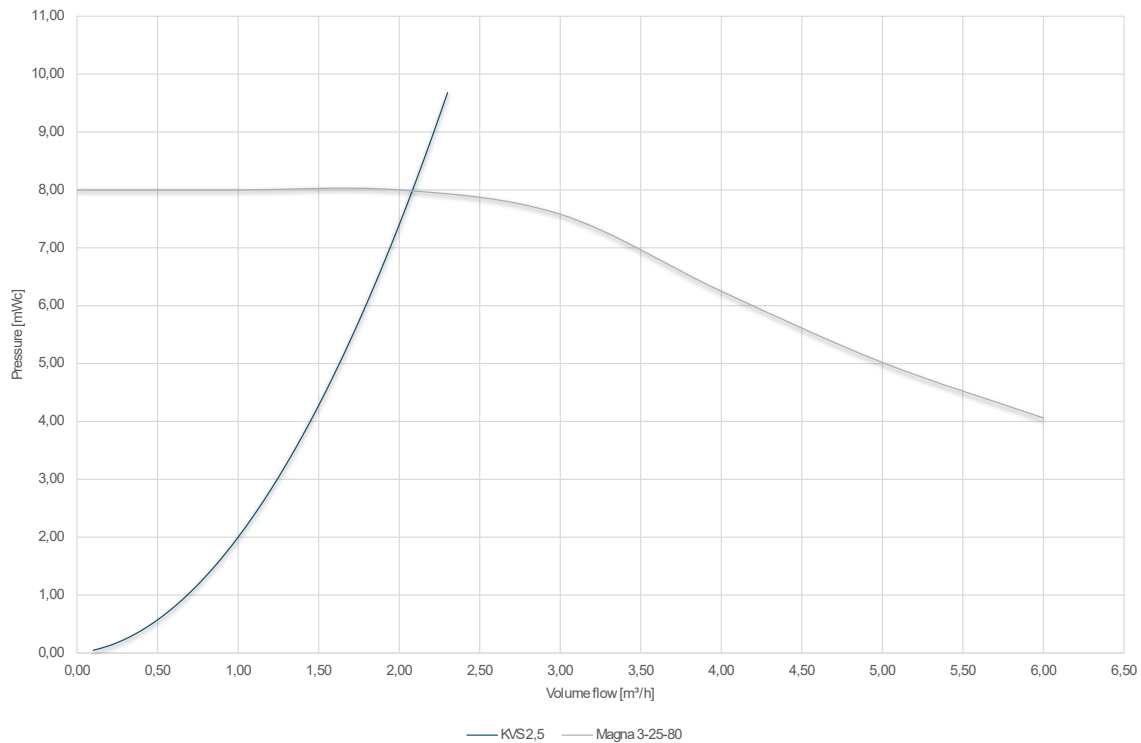
Watersystem - 28 mm (Specific for SP80)



Model	Item no.	A [mm]	B [mm]	C [mm]	Pipe Dimensions
28-KVS2,5*	8005005*	260	700	587	28 mm

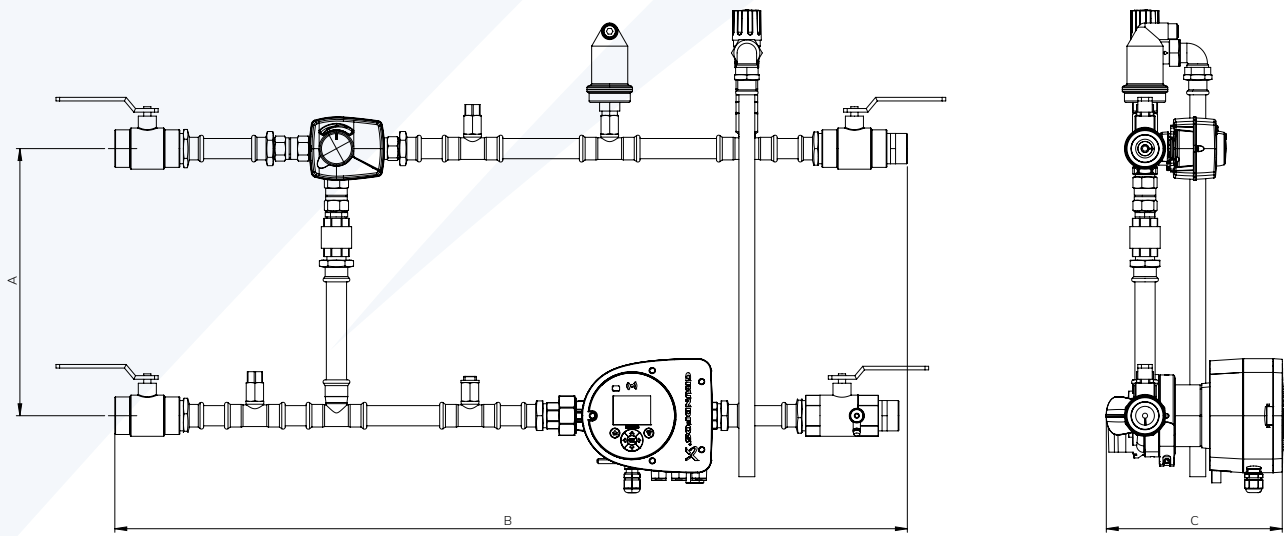
*The water system can only be used for an SP80 units.

Volume flow



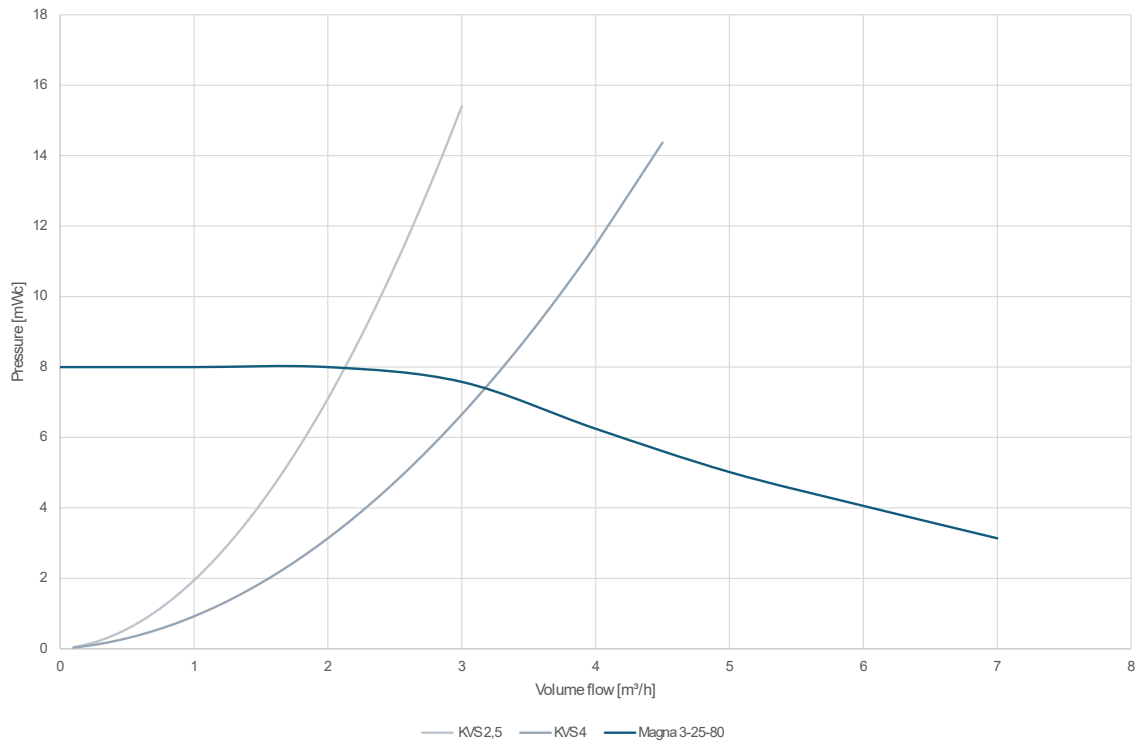
Note! The curve above is only for the pump system. System curves are available for pump systems in combination with heat recovery systems. Contact Exodraft for more information.

Watersystem - 28 mm



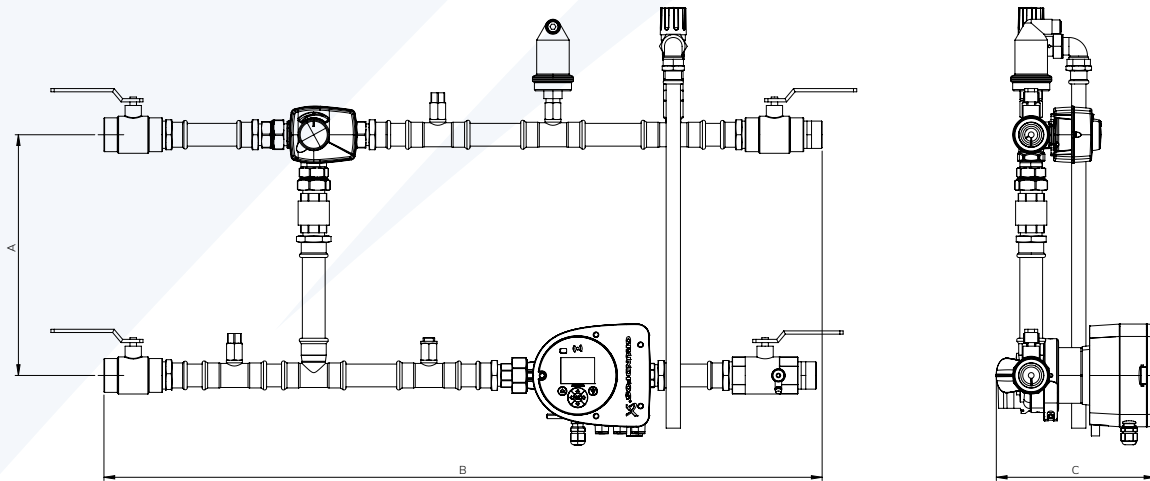
Model	Item no.	A [mm]	B [mm]	C [mm]	Pipe Dimensions
28-KVS2,5	8005050	370	1086	244	28 mm
28-KVS4	8005051	370	1086	244	28 mm

Volume flow



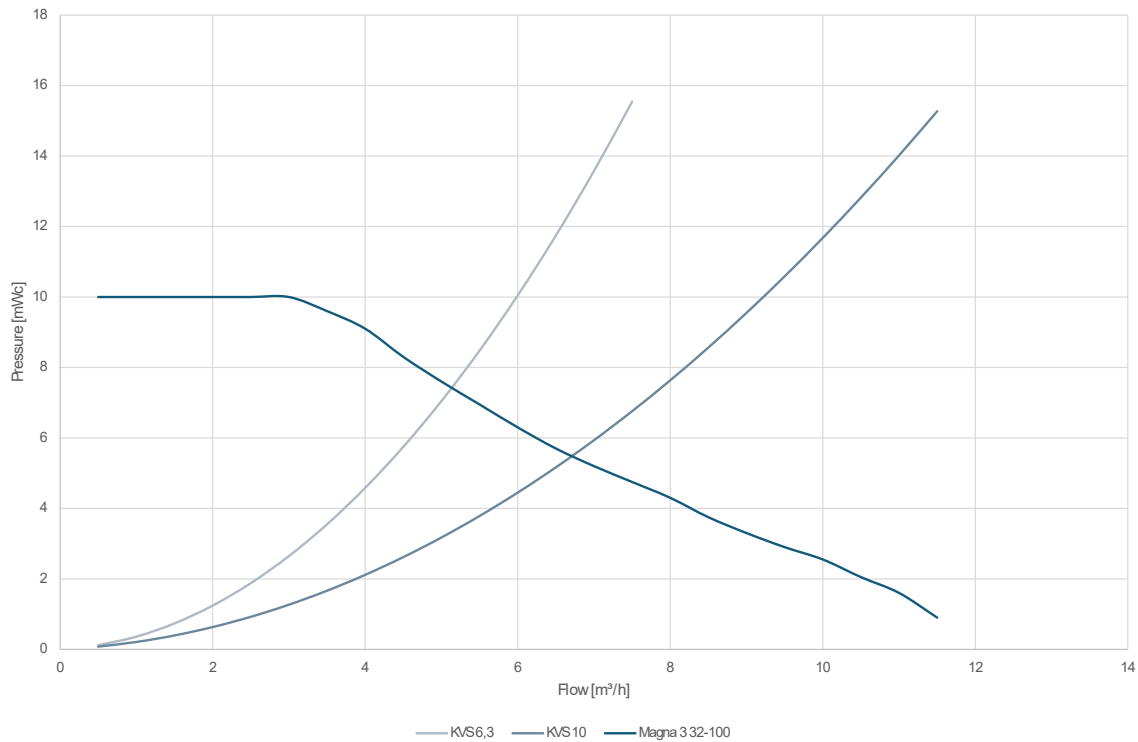
Note! The curve above is only for the pump system. System curves are available for pump systems in combination with heat recovery systems. Contact Exodraft for more information.

Watersystem - 35 mm



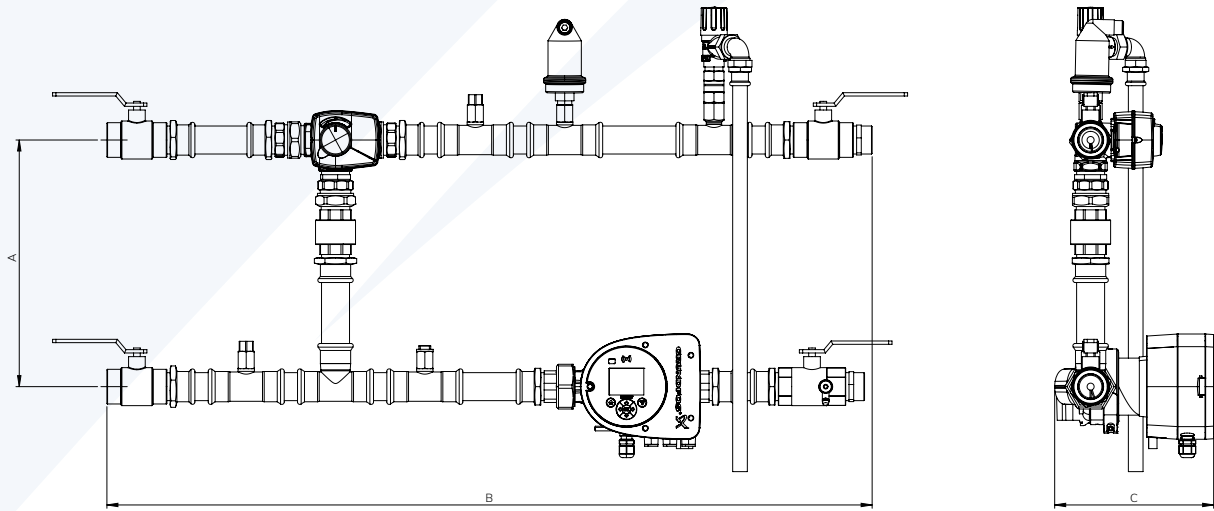
Model	Item no.	A [mm]	B [mm]	C [mm]	Pipe Dimensions
35-KVS6,3	8005052	370	1105	244	35 mm
35-KVS10	8005053	370	1105	244	35 mm

Volume flow



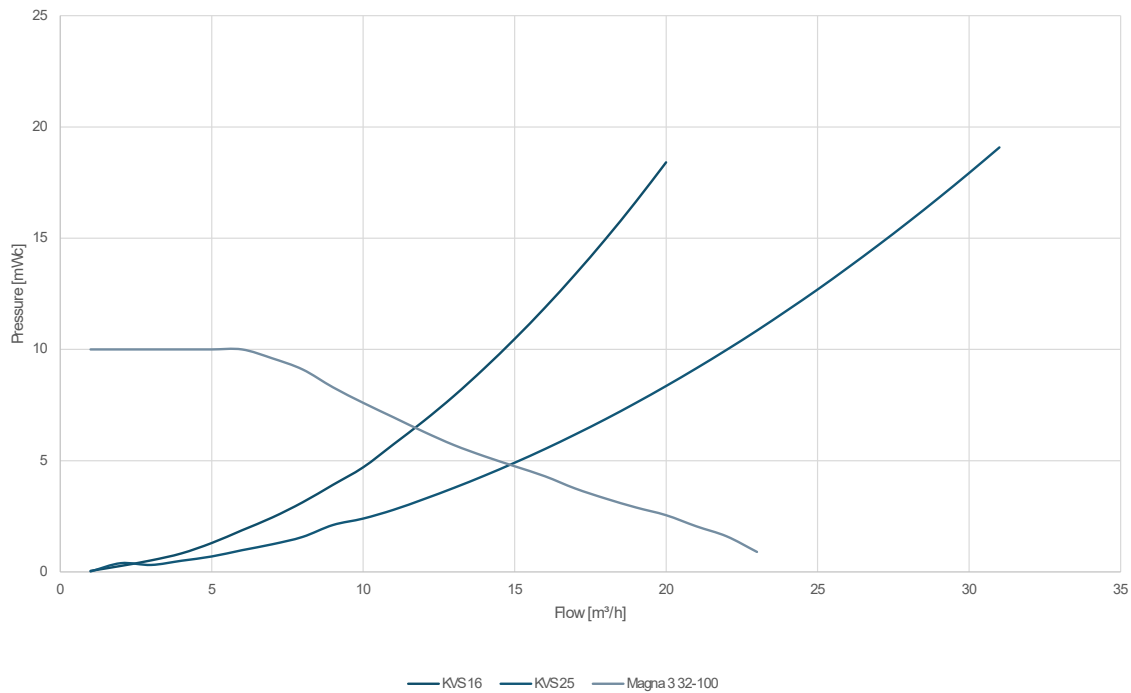
Note! The curve above is only for the pump system. System curves are available for pump systems in combination with heat recovery systems. Contact Exodraft for more information.

Watersystem - 42 mm



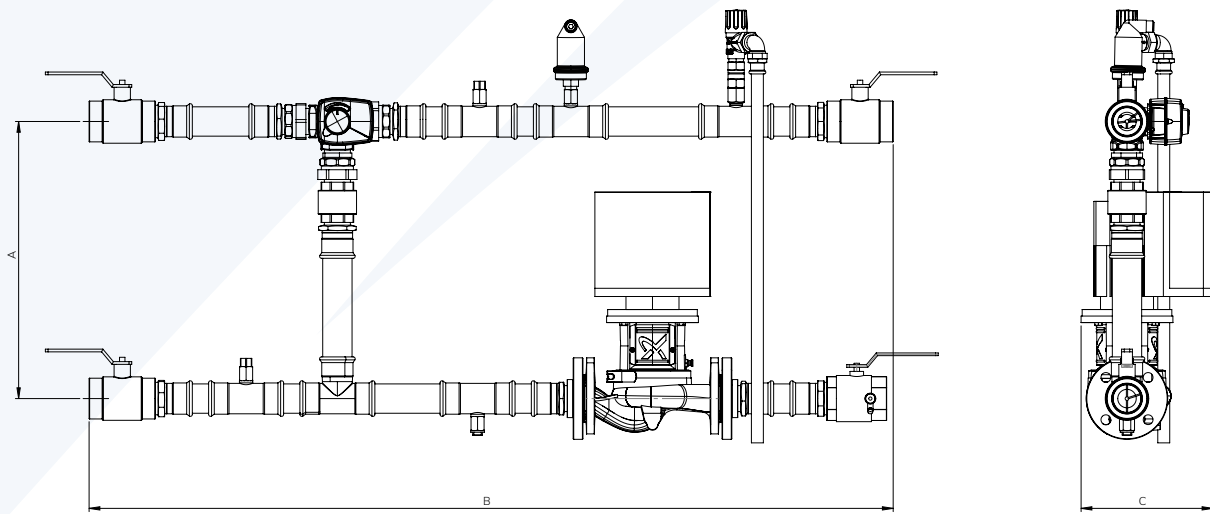
Model	Item no.	A [mm]	B [mm]	C [mm]	Pipe Dimensions
42-KVS16	8005054	370	1150	240	42 mm
42-KVS25	8005055	370	1150	240	42 mm

Volume flow



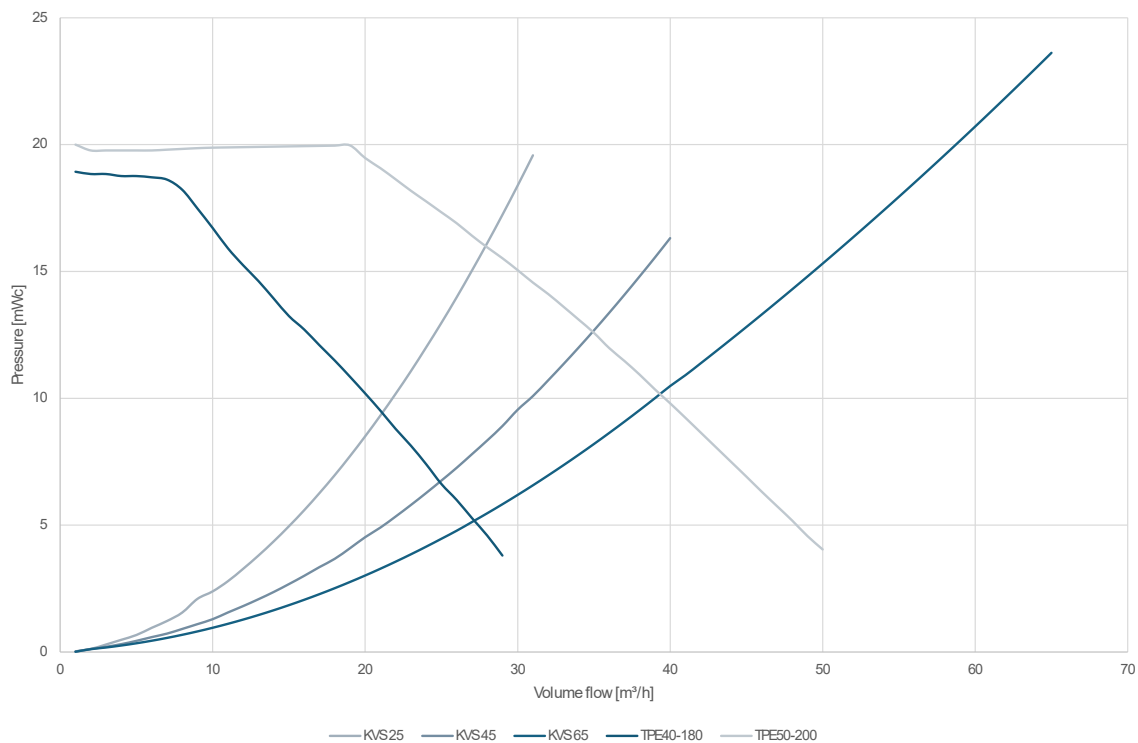
Note! The curve above is only for the pump system. System curves are available for pump systems in combination with heat recovery systems. Contact Exodraft for more information.

Watersystem - 54 mm



Model	Item no.	A [mm]	B [mm]	C [mm]	Pipe Dimensions
54-KVS25	8005056	510	1480	243	54 mm
54-KVS45	8005057	510	1480	243	54 mm
54-KVS65	8005058	560	1505	243	54 mm

Volume flow



Note! The curve above is only for the pump system. System curves are available for pump systems in combination with heat recovery systems. Contact Exodraft for more information.

