



## Wilo-Sinum



### Pression ultra précise grâce à un dégazage et une réalimentation continu.

La Wilo-Sinum est un automate de maintien de pression des pompes avec fonction de maintien de pression, dégazage et réalimentation dans les systèmes fermés de chauffage et de refroidissement. Les différentes tailles de cuve permettent un large champ d'applications afin de garantir une pression constante du système. Le système permet un dégazage continu grâce à trois modes de fonctionnement sélectionnables. Il peut être parfaitement intégré à une gestion technique centralisée existante grâce aux entrées numériques et analogues.

#### Conception

Installation d'expansion sous pression équilibrée.

#### Utilisation

- Installations de chauffage en circuit fermé (selon EN 12828)
- Installation de réfrigération/eau de refroidissement

#### Vos avantages

- Facilité d'installation grâce à une commande intuitive, un écran large et un microprocesseur avec autoapprentissage
- Différents modes de fonctionnement pour un dégazage continu
- Technologie moderne pour une consommation électrique réduite, longévité et facilité d'entretien
- Utilisation simplifiée et améliorée grâce à la régulation du volume et à la réalimentation automatique durant les cycles de chauffage et de refroidissement
- Conception modulaire assurant un maximum de flexibilité lors de l'installation
- En option : Intégration au sein du Building Management System grâce aux sorties numériques et analogiques

#### Dénomination

Exemple	Pompe Wilo-Sinum M10
Sinum	Désignation du produit Installation d'expansion sous pression
Pompe	Avec pompe
M	Pilotage de pompe simple
10	Classe de performance

Systèmes  
Systèmes

Groupe de prix : PG6			
Informations de commande		Alimentation réseau	Poids brut approx.
Sinum Simple			N° d'art.
			<i>m</i> kg
<b>Sinum Pump M2</b>	1~230 V, 50 Hz	37,9	2198858
<b>Sinum Pump M10</b>	1~230 V, 50 Hz	45,3	2198859
<b>Sinum Pump M20</b>	1~230 V, 50 Hz	45,5	2198860
<b>Sinum Pump M60</b>	1~230 V, 50 Hz	63,2	2198861
<b>Sinum Pump M80</b>	1~230 V, 50 Hz	77,7	2198862
<b>Sinum Pump M100</b>	1~230 V, 50 Hz	127	2198863
<b>Sinum Pump M130</b>	1~230 V, 50 Hz	135	2198864

Groupe de prix : PG6					
Informations de commande		Raccordement de l'entrée	Raccordement de sortie	Poids brut approx.	N° d'art.
Sinum Double					
				<i>m</i> kg	
<b>Sinum Pump D2</b>	G 1¼	G 1¼	55,5	2198867	
<b>Sinum Pump D10</b>	G 1¼	G 1¼	71,7	2198868	
<b>Sinum Pump D20</b>	G 1¼	G 1¼	72,1	2198869	
<b>Sinum Pump D60</b>	G 1¼	G 1¼	72,1	2198870	
<b>Sinum Pump D80</b>	G 1¼	G 1¼	125,4	2198871	
<b>Sinum Pump D100</b>	G 1½	G 1½	134	2198872	
<b>Sinum Pump D130</b>	G 1½	G 1½	188	2198873	

Accessoires	Bâche principale	Volume du réservoir de stockage		Hauteur sans emballage	ØD	N° d'art.	Groupe de prix
		V l	H mm				
	<b>Sinum MV 200</b>	200	1560	484	2198874	PG6	
	<b>Sinum MV 300</b>	300	1596	600	2198875	PG6	
	<b>Sinum MV 400</b>	400	1437	790	2198876	PG6	
	<b>Sinum MV 500</b>	500	1587	790	2198877	PG6	
	<b>Sinum MV 600</b>	600	1737	790	2198878	PG6	
	<b>Sinum MV 800</b>	800	2144	790	2198879	PG6	
	<b>Sinum MV 1000</b>	1000	2493	790	2198880	PG6	
	<b>Sinum MV 1200</b>	1200	2210	1000	2198881	PG6	
	<b>Sinum MV 1600</b>	1600	2710	1000	2198882	PG6	
	<b>Sinum MV 2000</b>	2000	2440	1200	2198883	PG6	
	<b>Sinum MV 2800</b>	2800	3040	1200	2198884	PG6	
	<b>Sinum MV 3500</b>	3500	3840	1200	2198885	PG6	
	<b>Sinum MV 5000</b>	5000	3570	1500	2198886	PG6	
	<b>Sinum MV 6500</b>	6500	3500	1800	2198887	PG6	
	<b>Sinum MV 8000</b>	8000	3650	1900	2198888	PG6	
	<b>Sinum MV 10000</b>	10000	4050	2000	2198889	PG6	

Sous réserve de modifications techniques. Tous les prix s'entendent Hors Taxes, applicables au 1er janvier 2020.

Accessoires		Volume du réservoir de stockage	Hauteur sans emballage	ØD	N° d'art.	Groupe de prix
Bâche d'appoint	V l					
Sinum AV 200	200	1560	484	2198890	PG6	
Sinum AV 300	300	1596	600	2198891	PG6	
Sinum AV 400	400	1437	790	2198892	PG6	
Sinum AV 500	500	1587	790	2198893	PG6	
Sinum AV 600	600	1737	790	2198894	PG6	
Sinum AV 800	800	2144	790	2198895	PG6	
Sinum AV 1000	1000	2493	790	2198896	PG6	
Sinum AV 1200	1200	2210	1000	2198897	PG6	
Sinum AV 1600	1600	2710	1000	2198898	PG6	
Sinum AV 2000	2000	2440	1200	2198899	PG6	
Sinum AV 2800	2800	3040	1200	2198900	PG6	
Sinum AV 3500	3500	3840	1200	2198901	PG6	
Sinum AV 5000	5000	3570	1500	2198902	PG6	
Sinum AV 6500	6500	3500	1800	2198903	PG6	
Sinum AV 8000	8000	3650	1900	2198904	PG6	
Sinum AV 10000	10000	4050	2000	2198905	PG6	

Accessoires		Type	N° d'art.	Groupe de prix
Sinum Bvalve 1 ¼" + adapter			2198906	PG 06
Sinum Bvalve 1"			2198907	PG 06
Sinum Bvalve 1 1/4"			2198908	PG 06
Sinum FC 1G3 200-1600			2198909	PG 06
Sinum FC 2G3 2000-5000			2198910	PG 06
Sinum FC 3G3 65000-10000			2198911	PG 06
Sinum FC 4200-1000			2198912	PG 06
Sinum FC 51200-5000			2198913	PG 06
Sinum FC 66500-10000			2198914	PG 06
Sinum T-Piece			2198917	PG 06
Sinum Backflow Preventer			2198918	PG 06
Sinum Easycontact 1.0			2198919	PG 06
Sinum Diaphragm Rupture Sensor			2198920	PG 06
Sinum Module 33			2198921	PG 06
Sinum SD Card Module			2198922	PG 06
Sinum Master/Slave			2198923	PG 06
Sinum Slave			2198924	PG 06

Sous réserve de modifications techniques. Tous les prix s'entendent Hors Taxes, applicables au 1er janvier 2020.

## Wilo-Sinum – Pump Units

For pressurisation, deaeration and topping up in sealed heating installations (acc. to EN12828) and chilled water (cooling) installations.

Wilo-Sinum pump units are used for storage of expansion water with a closed expansion vessel. It also handles deaeration and topping up the installation automatically with state of the art micro-electronics. The Wilo-Sinum balanced pressure expansion equipment is sized according to the total system volume and the boiler or chiller load. The Wilo-Sinum vessel is 80 % efficient irrespective of the static height of the system. It is the ideal solution for large installations or high installations where standard diaphragm expansion equipment is limited.

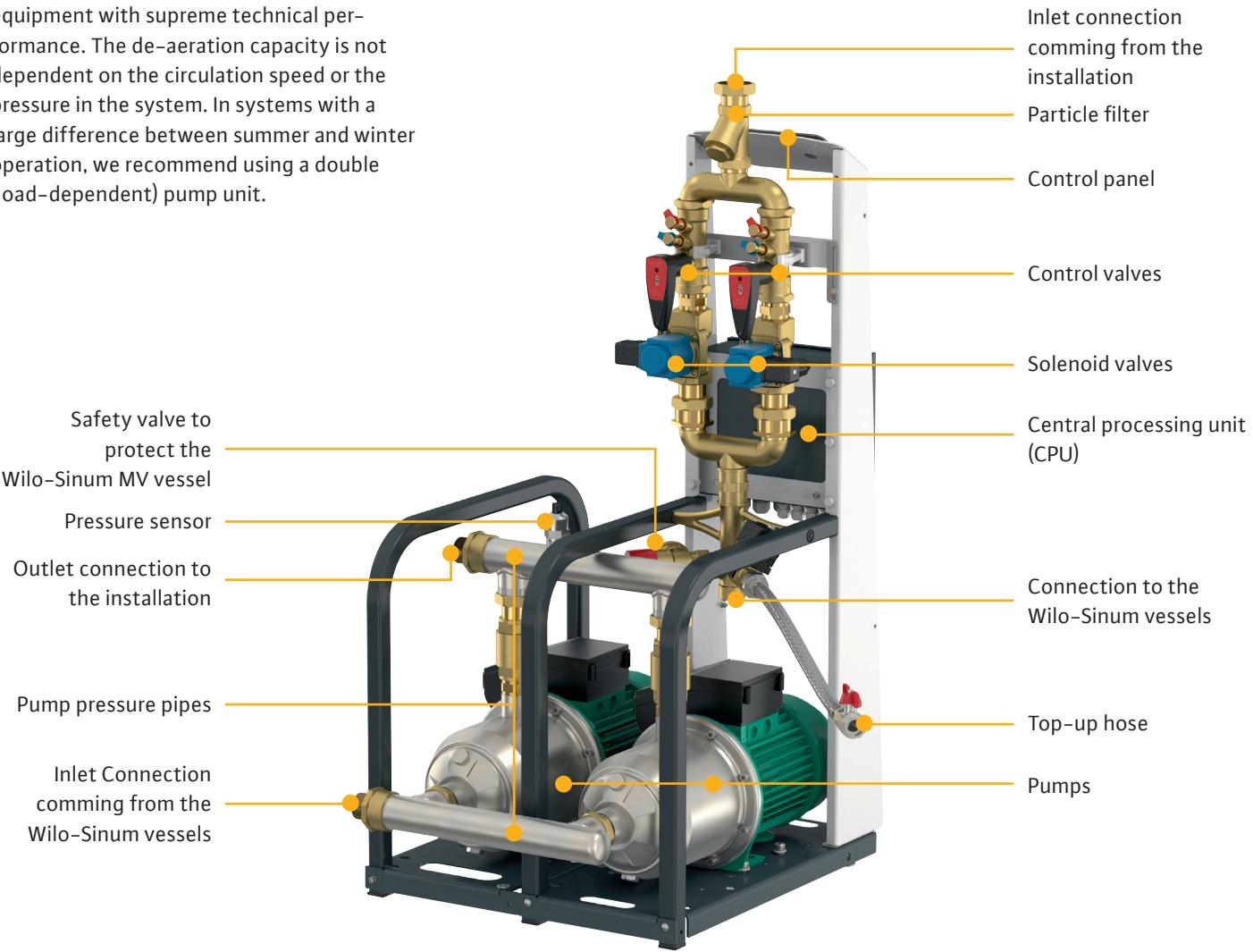
- Automatically performs volumetric control and automatic topping-up during the heating or cooling cycles.
- Integrated turbo degassing allows for very rapid degassing.
- The degassing function allows for continuous degassing if desired.
- The user-friendly control unit displays all operating and error conditions in a comprehensible and convenient way.
- Advanced technology ensures low power consumption, long service life and easy maintenance.
- Single (mono), automatic change-over or load dependent (duo) and combined operation.
- Microprocessor control, self-learning, with graphical display and RS 485 interface.
- 20 languages can be selected in the menu of the SPC controller.
- Due to the hydraulic design of the Wilo-Sinum and the connection sets the vessel can be positioned anywhere around the Wilo-Sinum.
- Beams are fitted to the Wilo-Sinum for protection of components and easy transport into hard to reach places.
- The position of the second pump on a double pump Wilo-Sinum can be positioned on either side of the Wilo-Sinum.
- Deaeration modes: fast, normal or off.

Technical specifications				
Type	Nominal voltage	Rated current	Rated power	Protection class of pump unit*
<b>Single Pump Units</b>				
Wilo-Sinum Pump MM	230 V ~1 N PE 50 Hz	0.43	0.09	IP44
Wilo-Sinum Pump M10	230 V ~1 N PE 50 Hz	4.4	0.75	IP54
Wilo-Sinum Pump M20	230 V ~1 N PE 50 Hz	7.2	1.1	IP54
Wilo-Sinum Pump M60	230 V ~1 N PE 50 Hz	7.4	1.1	IP54
Wilo-Sinum Pump M80	400 V ~3 N PE 50 Hz	3.4	1.5	IP54
Wilo-Sinum Pump M100	400 V ~3 N PE 50 Hz	4.75	2.2	IP54
Wilo-Sinum Pump M130	400 V ~3 N PE 50 Hz	6.4	3.0	IP54
<b>Double Pump Units</b>				
Wilo-Sinum Pump DM	230 V ~1 N PE 50 Hz	0.86	0.18	IP44
Wilo-Sinum Pump D10	230 V ~1 N PE 50 Hz	8.8	1.5	IP54
Wilo-Sinum Pump D20	230 V ~1 N PE 50 Hz	14.4	2.2	IP54
Wilo-Sinum Pump D60	230 V ~1 N PE 50 Hz	14.8	2.2	IP54
Wilo-Sinum Pump D80	400 V ~3 N PE 50 Hz	6.8	3.0	IP54
Wilo-Sinum Pump D100	400 V ~3 N PE 50 Hz	9.5	4.4	IP54
Wilo-Sinum Pump D130	400 V ~3 N PE 50 Hz	12.8	6.0	IP54

\* Protection, Control unit SPCx-Iw / hw: IP54.

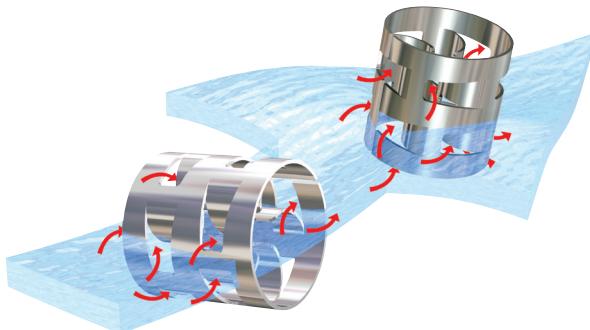
## How the Wilo-Sinum Works

The Wilo-Sinum is a versatile expansion equipment with supreme technical performance. The de-aeration capacity is not dependent on the circulation speed or the pressure in the system. In systems with a large difference between summer and winter operation, we recommend using a double (load-dependent) pump unit.



### Active de-aeration

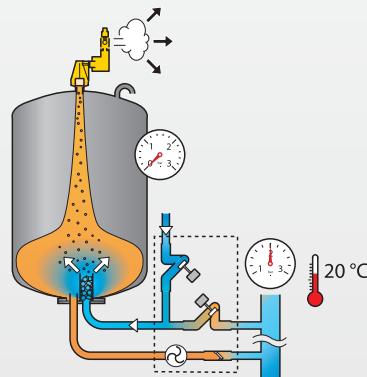
By using an integrated PALL ring box it is possible to de-aerate the installation continuously and completely. The 'Turbo-vent' function significantly increases the de-aeration capacity.



## 5. Topping-up

If the water level in the vessel drops to a critical level, an appropriate amount of water will be carefully pumped into the system from the water mains.

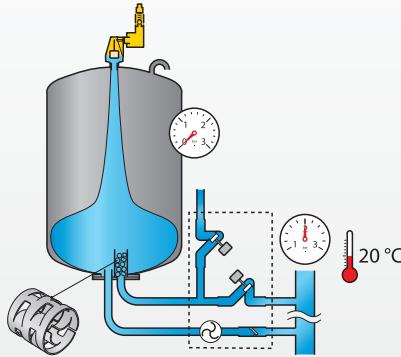
This water will be de-aerated (by pressure loss and the PALL rings), before entering the vessel.



## 1. Cold

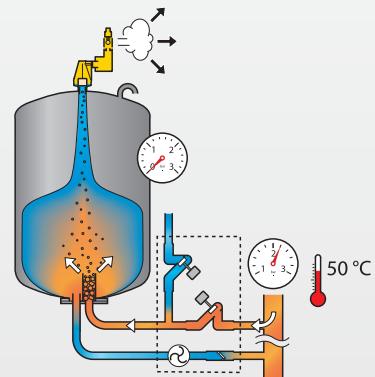
### 1. Cold

The automat contains a small amount of water. The automat is still at rest.



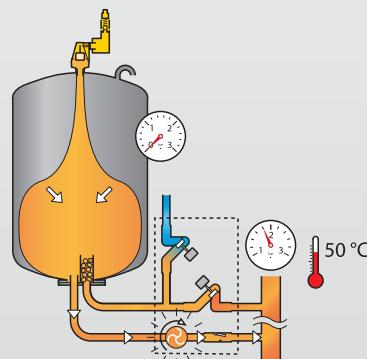
## 2. Warming up

The volume of water and the system pressure increases. The unit responds to this by opening the solenoid valve. Water flows into the pressureless vessel. The water in the vessel is de-aerated due to both the drop in pressure and the presence of the PALL rings.



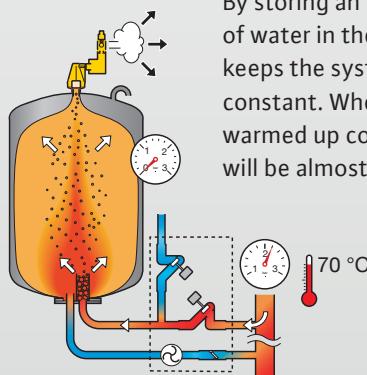
## 4. Cooling down

The volume of water and the system pressure decreases. The de-aerated water is pumped from the pressureless vessel back into the system. This restores the system pressure.



## 3. Full power

By storing an increasing amount of water in the tank, the automat keeps the system pressure almost constant. When the system has warmed up completely, the vessel will be almost full to capacity.



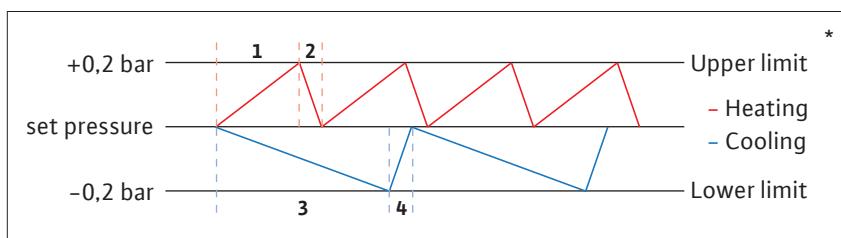
## Accurate Pressure Monitoring

### → Temperature rises:

Pressure rises and reaches the upper limit (1):  
The solenoid valve discharges water into the vessel => Pressure drops to the set pressure (2).

### → Temperature drops:

Pressure drops and reaches the lower limit (3):  
The pump sends the water back into the system => Pressure rises to the set pressure (4).



\* Graph shows heating system.

## Single Pump Unit

- Maximum system pressure: 6, 10 and 16 bar.
- Operating modes: single (mono) operation.
- Suitable for addition of glycol-based anti-freeze up to 50 %.
- Working temperature: 3 °C / 70 °C.
- In accordance with Machinery Directive 2006/42/EC.
- For the correct Wilo-Sinum pump selection, see ('Wilo-Sinum Pump Selection Graphs').



### Technical data

Type	Connection to			For boiler output kW	Design pressure PN	Pump orientation	Working pressure bar	Dimensions L x W x H			Order Code
	Vessel	System connection	Water supply					mm	mm	mm	
Wilo-Sinum Pump MM	G 1" M	G 1 ¼" F	Rp ½"	100 – 200	PN 6	hor.	1.2 – 3.0	506	227	922	2198856
Wilo-Sinum Pump M02	G 1" M	G 1 ¼" F	Rp ½"	500 – 2300	PN 10	hor.	1.2 – 3.5	540	227	922	2198858
Wilo-Sinum Pump M10	G 1" M	G 1 ¼" F	Rp ½"	900 – 4700	PN 10	hor.	2.0 – 5.0	513	227	922	2198859
Wilo-Sinum Pump M20	G 1" M	G 1 ¼" F	Rp ½"	1600 – 8400	PN 10	hor.	2.0 – 5.0	553	227	922	2198860
Wilo-Sinum Pump M60	G 1" M	G 1 ¼" F	Rp ½"	1400 – 4700	PN 10	vert.	3.5 – 8.5	561	227	922	2198861
Wilo-Sinum Pump M80	G 1" M	G 1 ¼" F	Rp ½"	1400 – 4900	PN 16	vert.	4.7 – 10.0	593	299	937	2198862
Wilo-Sinum Pump M100	G 1 ½" F	G 1 ½" F	Rp ½"	1300 – 5200	PN 16	vert.	5.9 – 14.1	540	605	1030	2198863
Wilo-Sinum Pump M130	G 1 ½" F	G 1 ½" F	Rp ½"	3300 – 5300	PN 16	vert.	8.0 – 14.4	540	605	1190	2198864

## Double Pump Unit

- Maximum system pressure: 6, 10 and 16 bar.
- Operating modes: automatic change-over or load dependent (duo) and combined operation.
- Suitable for addition of glycol-based anti-freeze up to 50 %.
- Working temperature: 3 °C / 70 °C.
- In accordance with Machinery Directive 2006/42/EC.
- For the correct Wilo-Sinum pump selection, see ('Wilo-Sinum Pump Selection Graphs').

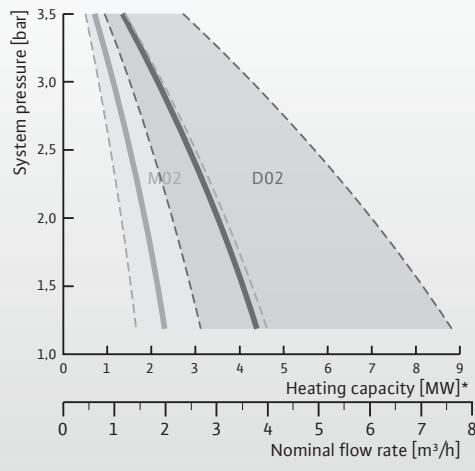
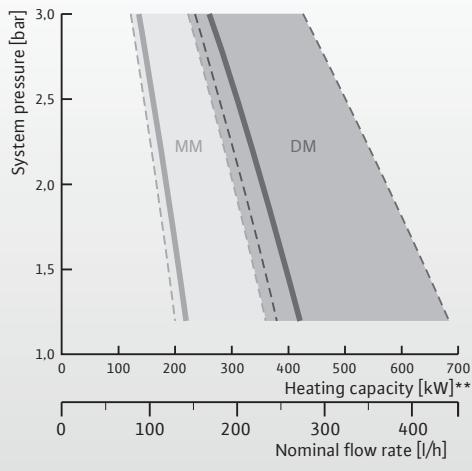


### Technical data

Type	Connection to			For boiler output	Design pressure	Pump orientation	Working pressure	Dimensions L x W x H			Order Code
	Vessel	System connection	Water supply		PN			mm			
Wilo-Sinum Pump DM	G 1" M	G 1 ¼" F	Rp ½"	100 – 400	PN 6	hor.	1.2 – 3.0	506 x 267 x 942		2198865	
Wilo-Sinum Pump D02	G 1" M	G 1 ¼" F	Rp ½"	500 – 4400	PN 10	hor.	1.2 – 3.5	603 x 452 x 974		2198867	
Wilo-Sinum Pump D10	G 1" M	G 1 ¼" F	Rp ½"	900 – 9200	PN 10	hor.	2.0 – 5.0	583 x 452 x 974		2198868	
Wilo-Sinum Pump D20	G 1" M	G 1 ¼" F	Rp ½"	1600 – 10000	PN 10	hor.	2.0 – 5.0	620 x 446 x 974		2198869	
Wilo-Sinum Pump D60	G 1" M	G 1 ¼" F	Rp ½"	1400 – 9400	PN 10	vert.	3.5 – 8.5	594 x 444 x 974		2198870	
Wilo-Sinum Pump D80	G 1" M	G 1 ¼" F	Rp ½"	1400 – 9400	PN 16	vert.	4.7 – 10.0	594 x 515 x 975		2198871	
Wilo-Sinum Pump D100	G 1 ½" F	G 1 ½" F	Rp ½"	1300 – 10000	PN 16	vert.	5.9 – 14.1	930 x 530 x 1030		2198872	
Wilo-Sinum Pump D130	G 1 ½" F	G 1 ½" F	Rp ½"	3300 – 10000	PN 16	vert.	8.0 – 14.4	930 x 530 x 1190		2198873	

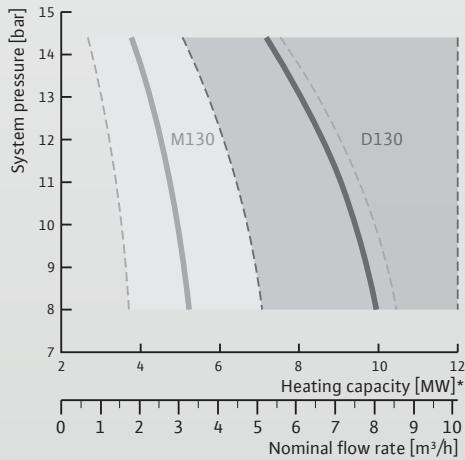
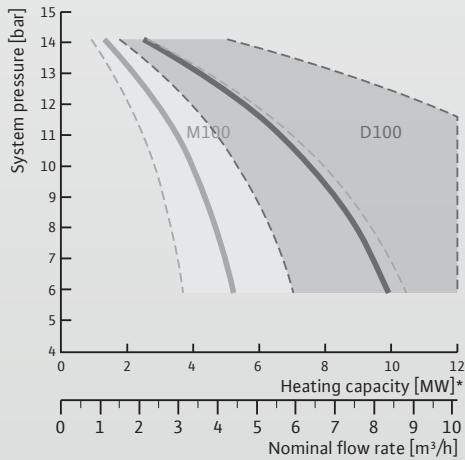
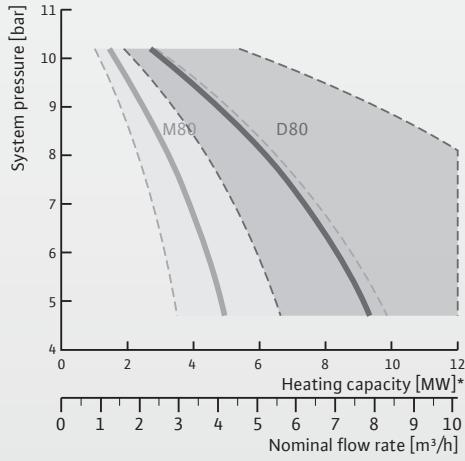
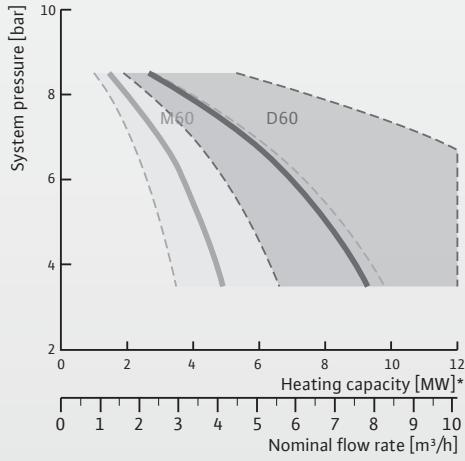
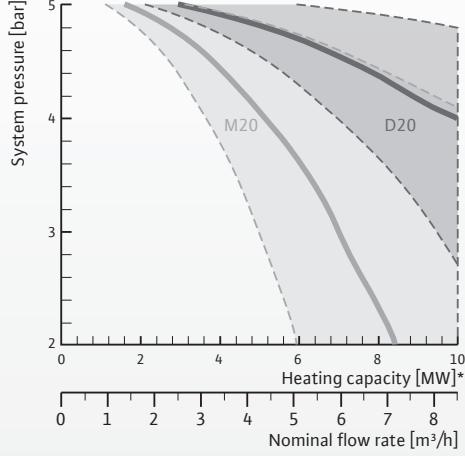
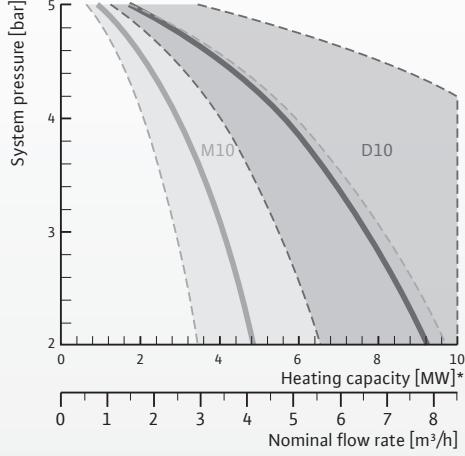
## Wilo-Sinum Pump Selection Graphs

The Wilo calculation program for expansion automats determines the flow according to the exact contraction flow factor (VDI4708-2). Please contact your Wilo contact partner for a recommend pump selection.



\* based on 0.85 l/(kW\*h)

\*\* based on 0.65 l/(kW\*h)



\* based on 0.85  $\text{l}/(\text{kW} \cdot \text{h})$

\*\* based on 0.65  $\text{l}/(\text{kW} \cdot \text{h})$

## Pressureless Expansion Vessels

**For sealed heating installations (acc. to EN12828) and chilled water (cooling) installations.**

A multi function product which provides all the essential requirements for a sealed chilled or heated water system i.e. automatic expansion control, pressurisation, deaeration and make-up.

→ Expansion fluid is stored at atmospheric pressure in the bladder.

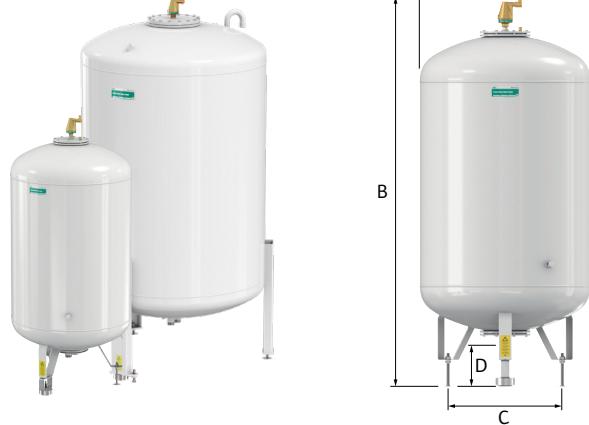
- Unique pressure step degassing process, even when the system is in equilibrium, by combination of pressure drop and application of patented PALL ring technology.
- Suitable for addition of glycol-based anti-freeze up to 50 %.
- Suitable for systems with a maximum flow temperature of 120 °C.
- Maximum temperature bladder: 70 °C.
- Vessels 100 – 1,000 litres: in accordance with EN13831 / 1,200 – 10,000 litres: in accordance with AD2000.

- In accordance with European Pressure Equipment Directive 2014/68/EU and Machinery Directive 2006/42/EC.
- With replaceable butyl bladder.
- Delivered with Wilo-Carus Super.
- White epoxy powder coating.
- Height adjustable feet and weight-capacity sensor (only for Wilo-Sinum MV).

## Wilo-Sinum MV Main Vessels

Pressureless vessel without automat for the Wilo-Sinum pump units. The vessels are for the purpose of storage of expansion water at atmospheric pressure to avoid pressure surges in the system and reduce the switching frequency of the pumps/system.

The integrated weight-capacity sensor in the foot measures the weight and hence, the water level. Up to four vessels with the same sizes can be combined with just one pressure keeping system.

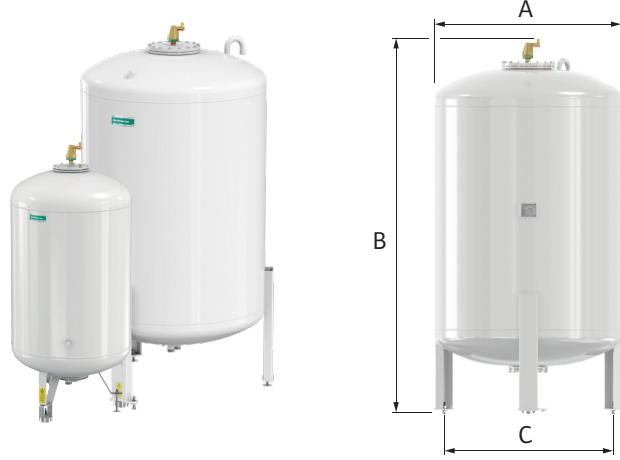


### Technical data

Type	Connection	Capacity	Design pressure	Dimensions				Weight	Order Code		
				I	PN	A mm	B mm				
Wilo-Sinum MV 200	G 1 ½" M	200	PN 6			484	1560	360	150	31	2198874
Wilo-Sinum MV 300	G 1 ½" M	300	PN 6			600	1596	450	185	41	2198875
Wilo-Sinum MV 400	G 1 ½" M	400	PN 6			790	1437	610	185	62	2198876
Wilo-Sinum MV 500	G 1 ½" M	500	PN 6			790	1587	610	185	70	2198877
Wilo-Sinum MV 600	G 1 ½" M	600	PN 6			790	1737	610	185	77	2198878
Wilo-Sinum MV 800	G 1 ½" M	800	PN 6			790	2144	610	185	92	2198879
Wilo-Sinum MV 1000	G 1 ½" M	1000	PN 6			790	2493	610	185	106	2198880
Wilo-Sinum MV 1200	G 1 ½" M	1200	PN 3			1000	2210	1060	170	291	2198881
Wilo-Sinum MV 1600	G 1 ½" M	1600	PN 3			1000	2710	1060	170	346	2198882
Wilo-Sinum MV 2000	G 1 ½" M	2000	PN 3			1200	2440	1265	220	431	2198883
Wilo-Sinum MV 2800	G 1 ½" M	2800	PN 3			1200	3040	1265	225	516	2198884
Wilo-Sinum MV 3500	G 1 ½" M	3500	PN 3			1200	3840	1265	225	626	2198885
Wilo-Sinum MV 5000	G 1 ½" M	5000	PN 3			1500	3570	1570	225	1241	2198886
Wilo-Sinum MV 6500	G 1 ½" M	6500	PN 3			1800	3500	1885	225	1711	2198887
Wilo-Sinum MV 8000	G 1 ½" M	8000	PN 3			1900	3650	1985	225	1831	2198888
Wilo-Sinum MV 10000	G 1 ½" M	10000	PN 3			2000	4050	2085	225	2026	2198889

## Wilo-Sinum AV Auxiliary Vessels

Pressureless auxiliary expansion vessels are designed as a back-up solution to increase the expansion capacity in combination with main expansion vessels in pressure keeping systems. The storage of expansion water at atmospheric pressure avoids pressure surges in the system and reduces the switching frequency of the pumps/system. Up to four vessels with the same sizes can be combined with just one pressure-maintaining system.



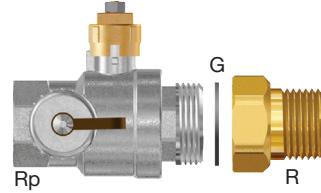
### Technical data

Type	Connection	Capacity	Design pressure	Dimensions			Weight	Order Code		
				I	PN	A mm	B mm	C mm	kg	Order Code
Wilo-Sinum AV 200	G 1 ½" M	200	PN 6			484	1560	360	31	2198890
Wilo-Sinum AV 300	G 1 ½" M	300	PN 6			600	1596	450	41	2198891
Wilo-Sinum AV 400	G 1 ½" M	400	PN 6			790	1437	610	62	2198892
Wilo-Sinum AV 500	G 1 ½" M	500	PN 6			790	1587	610	70	2198893
Wilo-Sinum AV 600	G 1 ½" M	600	PN 6			790	1737	610	77	2198894
Wilo-Sinum AV 800	G 1 ½" M	800	PN 6			790	2144	610	92	2198895
Wilo-Sinum AV 1000	G 1 ½" M	1000	PN 6			790	2493	610	106	2198896
Wilo-Sinum AV 1200	G 1 ½" M	1200	PN 3			1000	2210	1060	290	2198897
Wilo-Sinum AV 1600	G 1 ½" M	1600	PN 3			1000	2710	1060	345	2198898
Wilo-Sinum AV 2000	G 1 ½" M	2000	PN 3			1200	2440	1265	430	2198899
Wilo-Sinum AV 2800	G 1 ½" M	2800	PN 3			1200	3040	1265	515	2198900
Wilo-Sinum AV 3500	G 1 ½" M	3500	PN 3			1200	3840	1265	625	2198901
Wilo-Sinum AV 5000	G 1 ½" M	5000	PN 3			1500	3570	1570	1240	2198902
Wilo-Sinum AV 6500	G 1 ½" M	6500	PN 3			1800	3500	1885	1710	2198903
Wilo-Sinum AV 8000	G 1 ½" M	8000	PN 3			1900	3650	1985	1830	2198904
Wilo-Sinum AV 10000	G 1 ½" M	10000	PN 3			2000	4050	2085	2025	2198905

## Accessories

### Wilo-Sinum Ball Valve

Ball valve with drain connection for expansion automats and auxiliary vessels. The valve is for draining with or without an additional adapter.



#### Technical data

Type	Connection			Drain connection	Application		Order Code
	Rp	G	R		Wilo-Pump unit	Wilo-Vessel	
<b>Wilo-Sinum Bvalve 1 ¼" + adapter</b>	1 ¼"	1 ½"	1 ¼"	G ¾"	-	Sinum AV	2198906
<b>Wilo-Sinum Bvalve 1"</b>	1"	1 ¼"	-	G ¾"	MM - M80 (G3) DM - D80 (G3)	Sinum MV	2198907
<b>Wilo-Sinum Bvalve 1 ¼"</b>	1 ¼"	1 ½"	-	G ¾"	M100 - M130 D100 - D130	Sinum AV	2198908

### Wilo-Sinum Flexible Connections

For connecting the Wilo-Sinum main or auxiliary vessel to the pump unit, face sealed female, with ball valve and drainage valve.

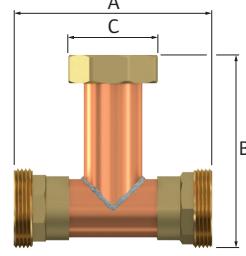
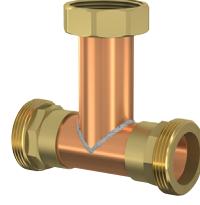


#### Technical data

Type	Connection		Suitable for		Length mm	Weight kg	Order Code
	Vessel	Pump unit	Wilo-Pump unit	Vessel sizes l			
<b>Wilo-Sinum FC 1G3 200-1600</b>	G 1 ½" F	G 1" F	MM - M80, DM - D80	100 - 1600	940	1.4	2198909
<b>Wilo-Sinum FC 2G3 2000-5000</b>	G 1 ½" F	G 1" F	MM - M80, DM - D80	2000 - 5000	1240	1.5	2198910
<b>Wilo-Sinum FC 3G3 6500-10000</b>	G 1 ½" F	G 1" F	MM - M80, DM - D80	6500 - 10000	1440	1.6	2198911
<b>Wilo-Sinum FC 4 200-1000</b>	G 1 ½" F	G 1 ½" M	M100 - M130, D100 - D130	200 - 1000	500	5.0	2198912
<b>Wilo-Sinum FC 5 1200-5000</b>	G 1 ½" F	G 1 ½" M	M100 - M130, D100 - D130	1200 - 5000	750	5.5	2198913
<b>Wilo-Sinum FC 6 6500-10000</b>	G 1 ½" F	G 1 ½" M	M100 - M130, D100 - D130	6500 - 10000	1000	6.5	2198914

## Wilo-Sinum T-Piece

T-piece PN 10 for an easy installation of a Wilo-Sinum AV auxiliary vessel. Use the pump connection from the main vessel for installing an auxiliary vessel with the T-piece.



### Technical data

Type	Dimensions			Weight	Order Code
	A mm	B mm	C mm	kg	
Wilo-Sinum T-Piece G 1 ½"	120	105	52	0.6	2198917

## Wilo-Sinum Backflow Preventer

Backflow preventer suitable for pump controlled pressurisation units for heating and chilled water (cooling) installations.

- Including strainer and shut-off valves.
- Maximum working pressure: 10 bar.
- Maximum working temperature: 65 °C.



### Technical data

Type	Connection	Vessel capacity	K <sub>vs</sub>	Weight	Order Code
		l	m <sup>3</sup> /h	kg	
Wilo-Sinum Backflow Preventer	Rp ½" – R ½"	> 3500	3.5	0.6	2198918

## Optional Control Units

### Wilo-Sinum Easycontact 1.0

Remote volt free failure contacts for pressure, level and thermal motor protection.



#### Technical data

Type	For Control unit	For automat	Order Code
Wilo-Sinum Easycontact 1.0	SPC	Wilo-Sinum	2198919

### Wilo-Sinum Diaphragm Rupture Sensor

Diaphragm rupture sensor for remote monitoring of expansion automats with single or double pumps.

→ Can be integrated at a later date.



#### Technical data

Type	For Control unit	For automat	Order Code
Wilo-Sinum Diaphragm Rupture Sensor	SPC	Wilo-Sinum	2198920

## Wilo-Sinum Analogue Signalling Module

For analogue signalling (0-10 V) of vessel volume (0-100 %) and system pressure (0-16 bar).

- Internal.
- Build-in afterwards is possible.
- Setting up data processing and visualisation is the responsibility of the installer.



### Technical data

Type	For Control unit	For automat	Order Code
Wilo-Sinum Module 33	SPC	Wilo-Sinum	2198921

## Wilo-Sinum SD Card Module

External SD card module used for:

- Saving of SPC parameter files.
- Downloading of files via SD Card to PC.
- Transmission of the files to Service Centre.
- Firmware updates by the service support.



### Technical data

Type	For Control unit	For automat	Order Code
Wilo-Sinum SD Card Module	SPC	Wilo-Sinum	2198922

## Wilo-Sinum Extension Modules

Connection module for communication between two controls.

- For SPC control.
- Makes linked operating options possible (configuration and commissioning by Wilo Service only).



### Technical data

Type	For Control unit	For automat	Order Code
Wilo-Sinum Master / Slave	SPC	Wilo-Sinum	2198923
Wilo-Sinum Slave	SPC	Wilo-Sinum	2198924