



### TECHNICAL DATA

**Operating range:** from 0,6 a 3,7 m<sup>3</sup>/h with head of up to 6 metres.  
**Pumped liquid temperature range:** from -10 °C to +85 °C for sanitary uses, and +110 °C for other uses.

To avoid the formation of calcium, do not exceed 65 °C, and include a calcium removal system when the hardness of the water exceeds 15 French degrees.

**Pumped liquid:** clean, free of solids and mineral oils, non-viscous, chemically neutral, with properties similar to water (glycol max 30%).

**Maximum operating pressure:** 10 bar (1000 kPa).

**Minimum suction pressure:** the values are shown in the corresponding tables.

**Installation:** with HORIZONTAL MOTOR AXIS.

**Special executions on requests:** alternative voltages and frequencies.

**Accessories:** 1/2" F - 3/4" F - 1" F union connectors.

**copper piping welded union connectors:** Ø 22 mm  
 Ø 28 mm

### APPLICATIONS

Pump for hot for water circulation in pressurised closed circuit, or open circulation type, domestic heating and air conditioning systems.

### CONSTRUCTION FEATURES

Single body consisting of the cast iron hydraulic section and the wet rotor motor. Die-cast aluminium motor casing. Technopolymer impeller. Tempered stainless steel motor shaft on graphite bushings lubricated by the pumped liquid. Stainless steel rotor liner, stator liner and closing flange. Ceramic thrust ring, silicon seal rings, and brass air breather plug. The wet rotor asynchronous two-pole motor is protected as far as resistance, and does not require overload protection.

Three-speed operation.

Protection class: IP 44

Insulation class: F

Cable gland: PG 11

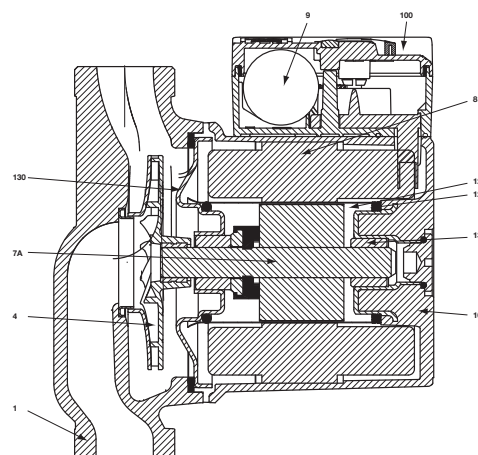
Installation: with horizontal motor axis.

Standard voltage: single-phase 230 V / 50 Hz

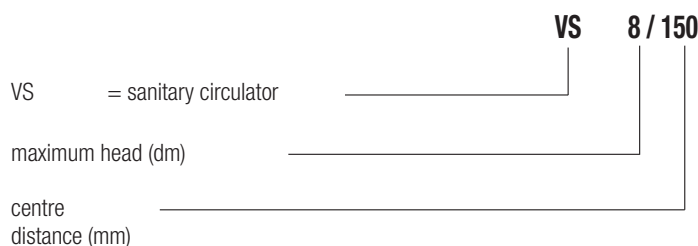
Special versions on request: - alternative voltages and/or frequencies

### MATERIALS

N.	PARTS	MATERIALS
1	PUMP BODY	BRONZE
4	IMPELLER	TECHNOPOLYMER
7A	MOTOR SHAFT	CERAMIC
7B	ROTOR	-
8	STATOR	-
9	CAPACITOR	-
10	MOTOR CASING	DIE-CAST ALUMINIUM
11	BREATHER PLUG	BRASS
100	TERMINAL BOX	-
127	SEAL RING	ETHILENE PROPYLENE
128	STATOR LINER	STAINLESS STEEL
129	ROTOR LINER	STAINLESS STEEL
130	CLOSING FLANGE	STAINLESS STEEL
131	THRUST RING SUPPORT	ETHILENE PROPYLENE
132	BUSHINGS	GRAPHITE
133	THRUST RING	CERAMIC

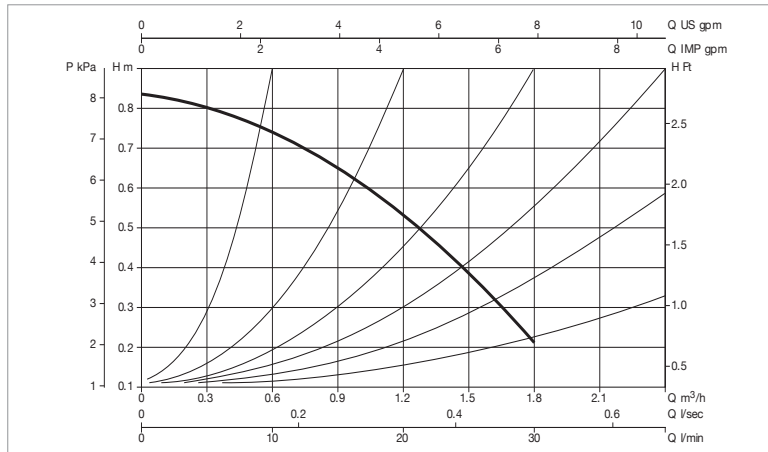
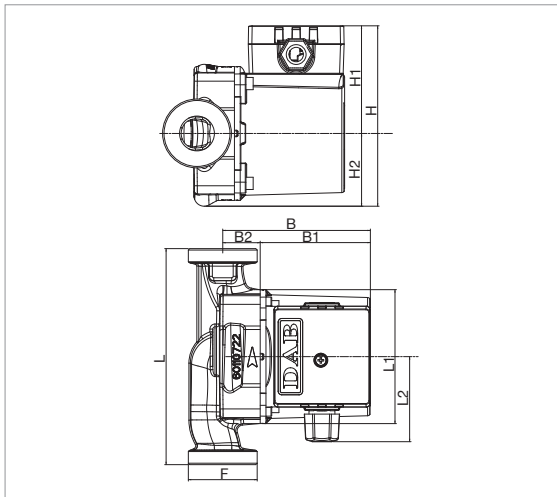


- Legend:  
 (example)



# VS - WET ROTOR CIRCULATORS FOR HOT SANITARY WATER SYSTEMS - SINGLE, FLANGED

Pumped liquid temperature range: from -10 °C to +110°C - Maximum operating pressure: 10 bar (1000 kPa)

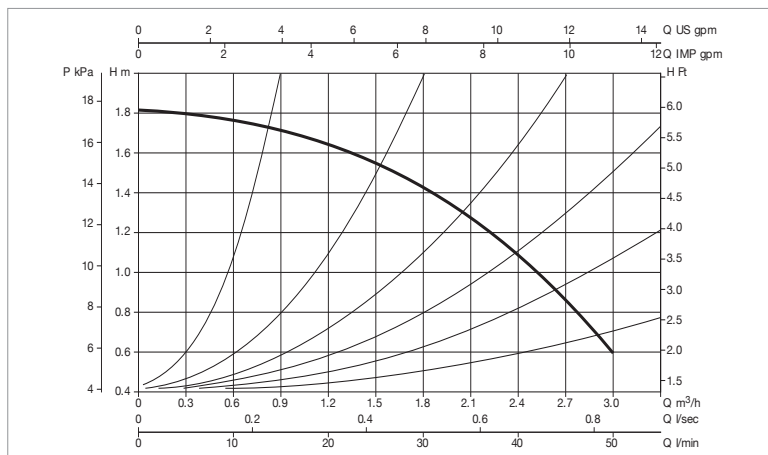
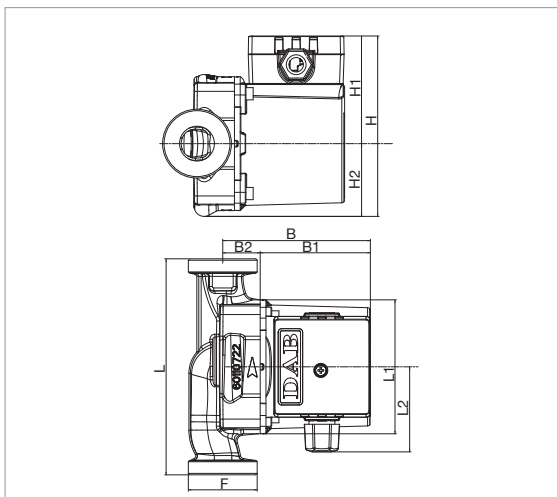


The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

MODEL	Q=m <sup>3</sup> /h	0	0,6	1,2	1,8	2,4	3	4,2	5,4
	Q=l/min	0	10	20	30	40	50	70	90
<b>VS 8/150 M</b>	H (m)	0,83	0,75	0,52	0,22				

MODEL	POWER INPUT 50 Hz	CENTRE DISTANCE mm	PUMP CONNECTIONS	UNIONS ON REQUEST		P1 MAX W	In A	CAPACITOR		MINIMUM SUCTION PRESSURE	
				STANDARDISED	SPECIAL			µF	Vc	t°	90 °
<b>VS 8/150 M</b>	1 x 230 V ~	150	1 1/2"			22	0,14	1,5	450	m.c.w.	1,5

MODEL	L	L1	L2	B	B1	B2	H	H1	H2	F GAS	PACKING DIMENSIONS			VOLUME m <sup>3</sup>	WEIGHT kg
											L	B	H		
<b>VS 8/150 M</b>	150	98	60	104	78	26	124	75	49	1 1/2"	134	188	150	0,0038	2,6



The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

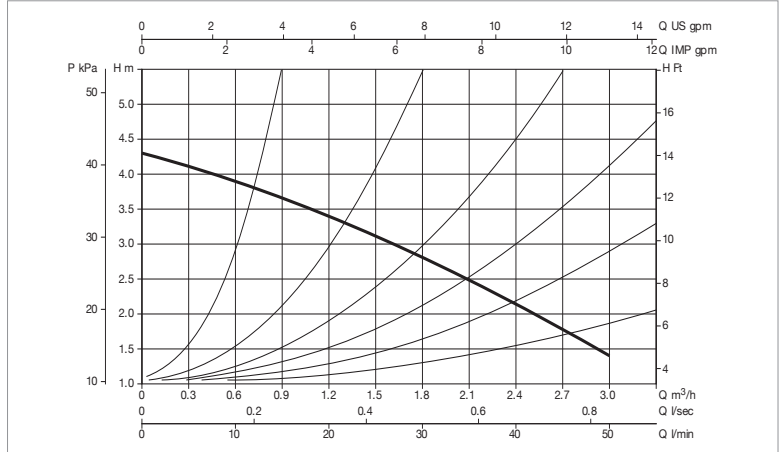
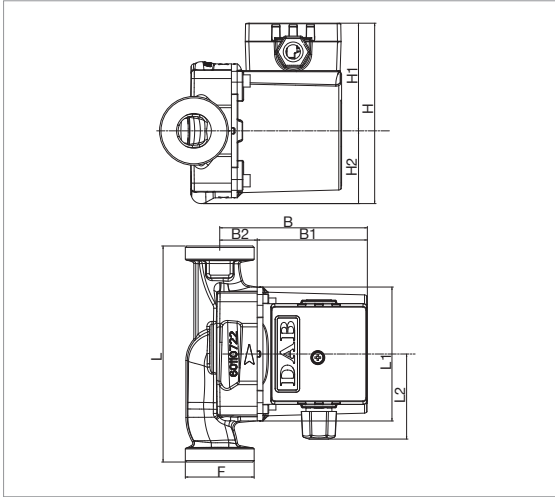
MODEL	Q=m <sup>3</sup> /h	0	0,6	1,2	1,8	2,4	3	4,2	5,4
	Q=l/min	0	10	20	30	40	50	70	90
<b>VS 16/150 M</b>	H (m)	1,82	1,75	1,65	1,44	1,07	0,6		

MODEL	POWER INPUT 50 Hz	CENTRE DISTANCE mm	PUMP CONNECTIONS	UNIONS ON REQUEST		P1 MAX W	In A	CAPACITOR		MINIMUM SUCTION PRESSURE	
				STANDARDISED	SPECIAL			µF	Vc	t°	90 °
<b>VS 16/150 M</b>	1 x 230 V ~	150	1 1/2"			41	0,19	1,5	450	m.c.w.	1,5

MODEL	L	L1	L2	B	B1	B2	H	H1	H2	F GAS	PACKING DIMENSIONS			VOLUME m <sup>3</sup>	WEIGHT kg
											L	B	H		
<b>VS 16/150 M</b>	150	98	60	104	78	26	124	75	49	1 1/2"	134	188	150	0,0038	2,6

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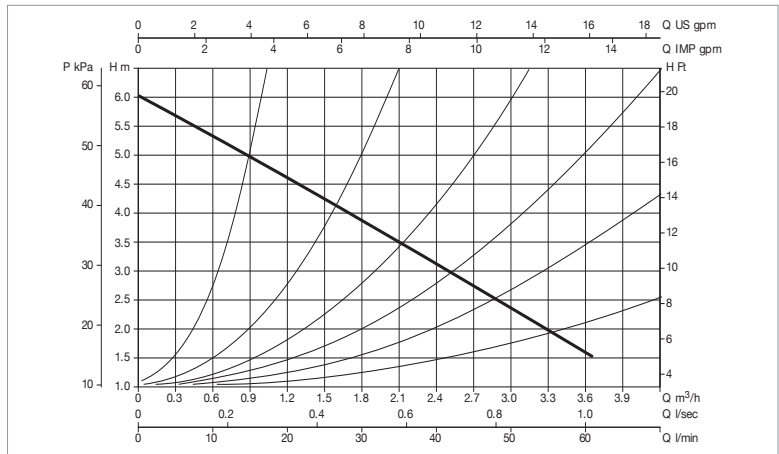
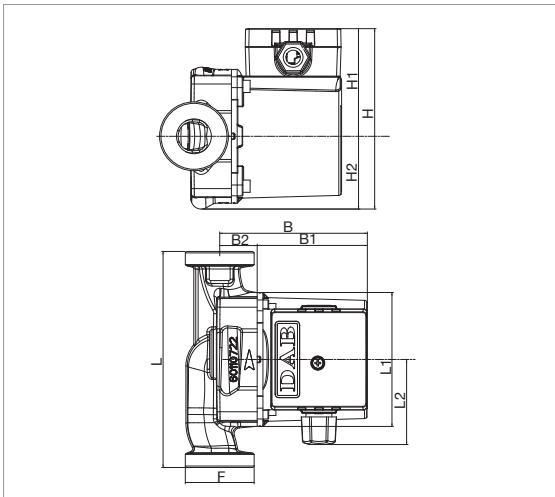


The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	Q=m³/h	0	0,6	1,2	1,8	2,4	3	4,2	5,4
	Q=l/min	0	10	20	30	40	50	70	90
VS 35/150 M	H (m)	4,1	3,7	3,3	2,82	2,2	1,3		

MODEL	POWER INPUT 50 Hz	CENTRE DISTANCE mm	PUMP CONNECTIONS	UNIONS ON REQUEST		P1 MAX W	In A	CAPACITOR		MINIMUM SUCTION PRESSURE	
				STANDARDISED	SPECIAL			µF	Vc	t°	90 °
VS 35/150 M	1 x 230 V ~	150	1 1/2"			55	0,24	1,7	450	m.c.w.	1,5

MODEL	L	L1	L2	B	B1	B2	H	H1	H2	F GAS	PACKING DIMENSIONS			VOLUME m³	WEIGHT kg
											L	B	H		
VS 35/150 M	150	98	60	104	78	26	124	75	49	1 1/2"	134	188	150	0,0038	2,6



The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	Q=m³/h	0	0,6	1,2	1,8	2,4	3	4,2	5,4
	Q=l/min	0	10	20	30	40	50	70	90
VS 65/150 M	H (m)	6	5,55	5,05	4,25	3,4	2,6	1,8	1,05

MODEL	POWER INPUT 50 Hz	CENTRE DISTANCE mm	PUMP CONNECTIONS	UNIONS ON REQUEST		P1 MAX W	In A	CAPACITOR		MINIMUM SUCTION PRESSURE	
				STANDARDISED	SPECIAL			µF	Vc	t°	90 °
VS 65/150 M	1 x 230 V ~	150	1 1/2"			77	0,34	2	450	m.c.w.	1,5

MODEL	L	L1	L2	B	B1	B2	H	H1	H2	F GAS	PACKING DIMENSIONS			VOLUME m³	WEIGHT kg
											L	B	H		
VS 65/150 M	150	98	60	104	78	26	124	75	49	1 1/2"	134	188	150	0,0038	2,6

