

# VA / VB / VD

## WET ROTOR CIRCULATORS



### TECHNICAL DATA

**Operating range:** from 0.5 to 3,6 m<sup>3</sup>/h with head up to 6 metres.

**Pumped liquid temperature range:** from -10°C to +110°C.

**Pumped liquid:** clean, free from solids and mineral oils, non viscous, chemically neutral, close to the characteristics of water (max 30% glycol).

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

**Minimum suction pressure:** the values are given in the relative tables.

**Installation:** with HORIZONTAL MOTOR SHAFT on discharge or return pipe, with suction port as close as possible to expansion vessel, above maximum boiler level and as far as possible from bends, elbows, and circuit branches to avoid water turbulence with consequent noise.

**Protection level:** corresponding to IP 44

**Insulation class:** F

**Cable grommet:** PG 11

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

**Optional accessories:** 1<sup>3</sup>/<sub>4</sub>"F - 1" F - 1<sup>1</sup>/<sub>4</sub>"F - 1<sup>1</sup>/<sub>4</sub>"M unions

DN20-DN25-DN32 oval counter-flanges

DN32/PN6 round counter-flanges

### APPLICATIONS

Pump for hot water circulation in domestic central heating and air conditioning systems of the closed circuit pressurized type or open circuit type.

### CONSTRUCTION FEATURES

Enbloc body composed of hydraulic section in cast iron and wet rotor motor. Motor casing in die cast aluminium. Impeller in technopolymer. Motor shaft in hardened stainless steel held in graphite bearings lubricated by the pumping medium.

Rotor protective jacket, stator jacket, and closing flange in stainless steel.

Ceramic thrust ring, ethylene-propylene seal rings and brass air breather plug. The two-pole asynchronous wet-rotor motor is resistance protected and does not require any form of overload protection.

Three-speed operation.

Protection rating: IP 44

Insulation class: F

Cable gland: PG 11

Installation: with horizontal motor shaft.

Standard voltage input: single-phase 230 V / 50 Hz

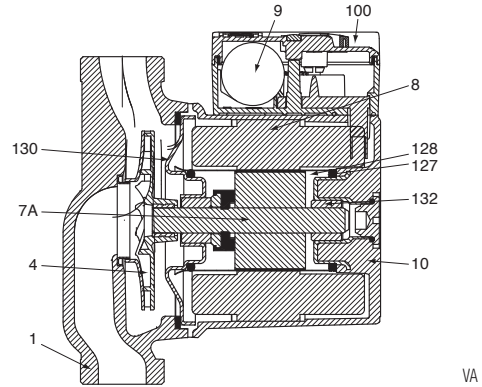
Special versions on request - alternative voltages and/or frequencies

# VA / VB / VD

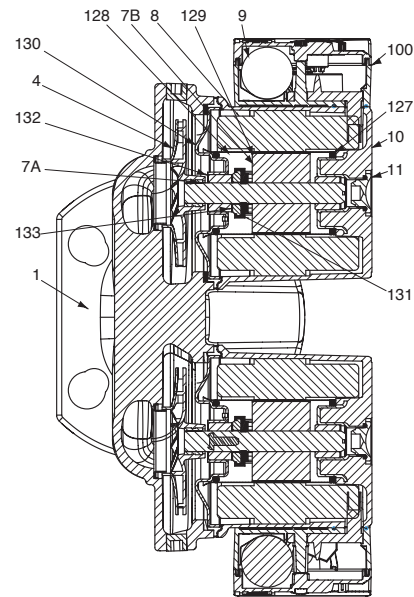
## WET ROTOR CIRCULATORS

### MATERIALS

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



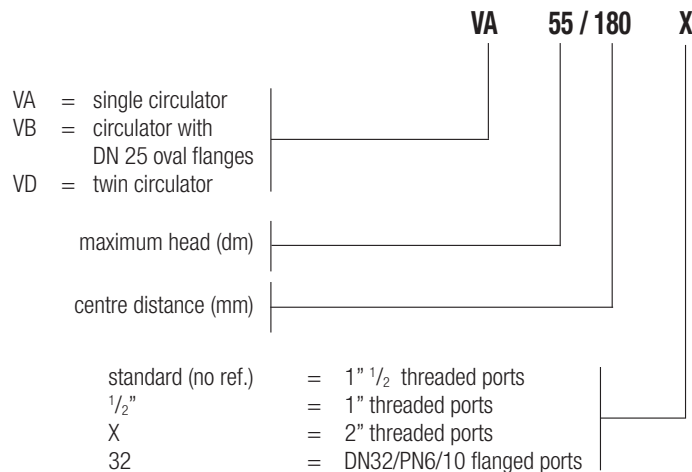
VA



VD

WET ROTOR CIRCULATORS

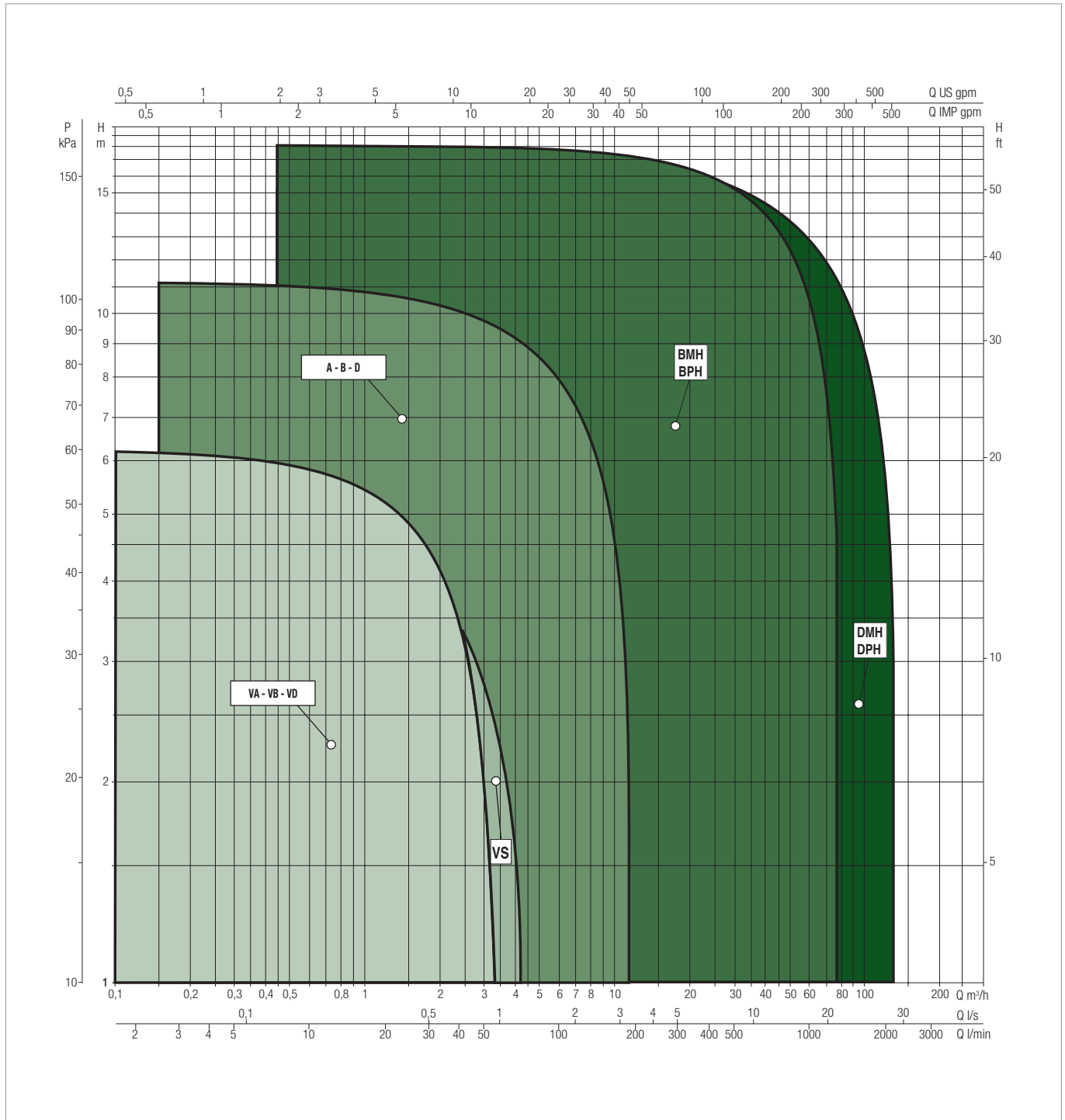
**- Legend:**  
(example)



### PERFORMANCE RANGE

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.

### GRAPHIC SELECTION TABLE



WET ROTOR CIRCULATORS

# VA / VB / VD

## WET ROTOR CIRCULATORS

### SELECTION TABLE - VA SINGLE WITH UNIONS

MODEL	Q=m <sup>3</sup> /h	0	0,6	1,2	1,8	2,4	3	4,2
	Q=l/min	0	10	20	30	40	50	70
VA 25/130	H (m)	2,71	2,45	2,15	1,75	1,2	0,6	
VA 25/180		2,71	2,45	2,15	1,75	1,2	0,6	
VA 25/180X		2,71	2,45	2,15	1,75	1,2	0,6	
VA 35/130		4,3	3,9	3,4	2,8	2,15	1,4	
VA 35/130-1/2"		4,3	3,9	3,4	2,8	2,15	1,4	
VA 35/180		4,3	3,9	3,4	2,8	2,15	1,4	
VA 35/180 X		4,3	3,9	3,4	2,8	2,15	1,4	
VA 55/130		5,4	4,7	4,5	3,3	2,6	1,75	0,85
VA 55/130-1/2"		5,4	4,7	4,5	3,3	2,6	1,75	0,85
VA 55/180		5,4	4,7	4,5	3,3	2,6	1,75	0,85
VA 55/180 X		5,4	4,7	4,5	3,3	2,6	1,75	0,85
VA 65/130		6,3	5,8	5,3	4,3	3,4	2,4	
VA 65/130-1/2"		6,3	5,8	5,3	4,3	3,4	2,4	
VA 65/180		6,3	5,8	5,3	4,3	3,4	2,4	
VA 65/180 X		6,3	5,8	5,3	4,3	3,4	2,4	

### SELECTION TABLE - VB SINGLE WITH OVAL FLANGES

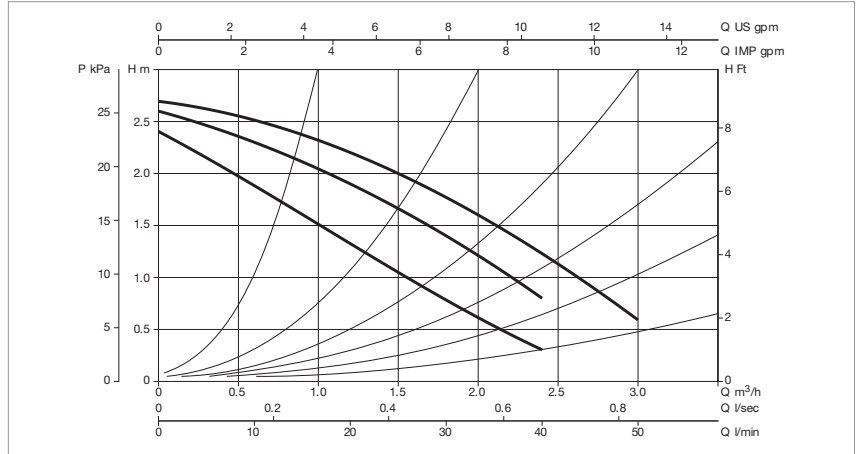
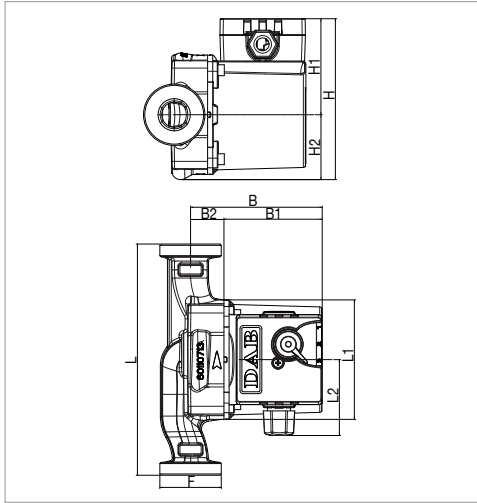
MODEL	Q=m <sup>3</sup> /h	0	0,6	1,2	1,8	2,4	3	4,2
	Q=l/min	0	10	20	30	40	50	70
VB 35/120	H (m)	4,3	3,9	3,4	2,8	2,15	1,4	
VB 55/120		5,4	4,7	4	3,3	2,5	1,75	0,85
VB 65/120		6,3	5,8	5,3	4,3	3,4	2,4	

### SELECTION TABLE - VD TWIN WITH FLANGES

MODEL	Q=m <sup>3</sup> /h	0	0,6	1,2	1,8	2,4	3	4,2
	Q=l/min	0	10	20	30	40	50	70
VD 55/220.32	H (m)	5,4	4,7	4,5	3,3	2,6	1,75	0,85
VD 65/220.32		6,3	5,8	5,3	4,3	3,4	2,4	

## VA 25/130 - HEATING AND AIR CONDITIONING SYSTEMS

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



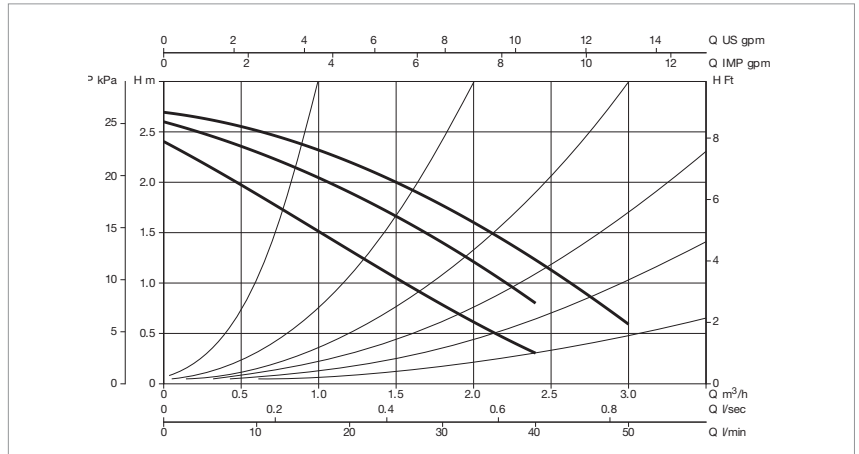
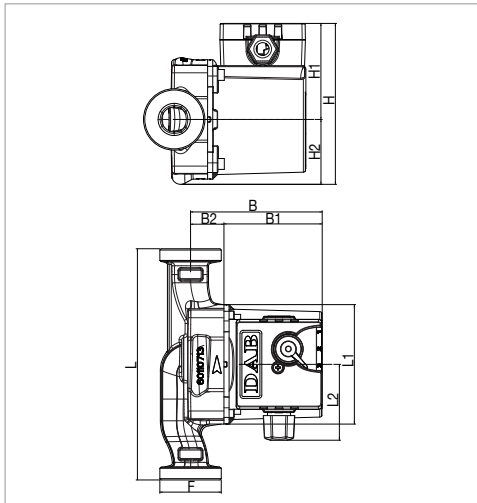
The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

MODEL	CENTRE DISTANCE mm	POWER INPUT 50 Hz	UNIONS ON REQUEST		ELECTRICAL DATA						MINIMUM SUCTION PRESSURE		
			STANDARDISED	SPECIAL	SPEED	REV. 1/min	P1 MAX W	In A	CAPACITOR		t°	90 °	
										µF	Vc		
VA 25/130	130	1x230 V ~	1" F	¾" F - 1¼" M	3	2655	43	0,19	1,5	450	m.c.a.	1,5	
					2	2380	38	0,17					
					1	1680	31	0,15					

MODEL	L	L1	L2	B	B1	B2	H	H1	H2	F	PACKING DIMENSIONS			VOLUME m <sup>3</sup>	WEIGHT kg
											L	B	H		
VA 25/130	130	93	59	102,5	76,5	26	125,5	75	50,5	48	135	135	150	0,0027	2,5

## VA 25/180 - HEATING AND AIR CONDITIONING SYSTEMS

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



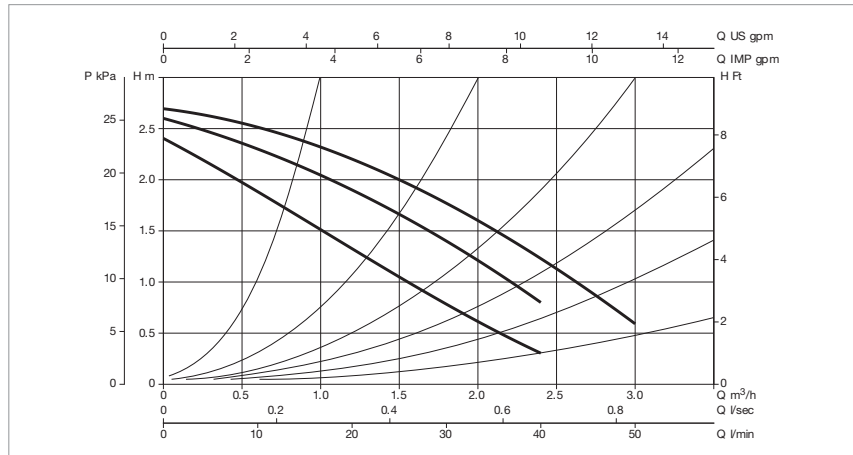
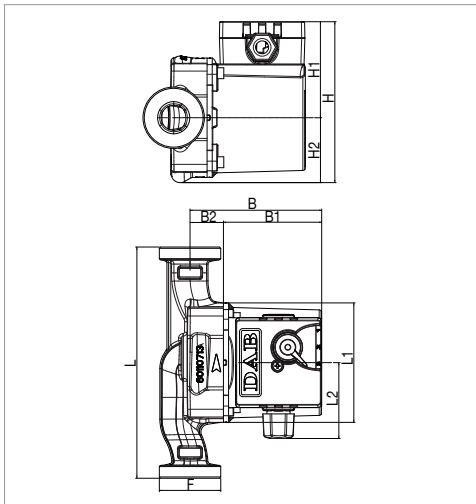
The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

MODEL	CENTRE DISTANCE mm	POWER INPUT 50 Hz	UNIONS ON REQUEST		ELECTRICAL DATA						MINIMUM SUCTION PRESSURE		
			STANDARDISED	SPECIAL	SPEED	REV. 1/min	P1 MAX W	In A	CAPACITOR		t°	90 °	
										µF	Vc		
VA 25/180	180	1x230 V ~	1" F	¾" F - 1¼" M	3	2655	43	0,19	1,5	450	m.c.a.	1,5	
					2	2380	38	0,17					
					1	1680	31	0,15					

MODEL	L	L1	L2	B	B1	B2	H	H1	H2	F	PACKING DIMENSIONS			VOLUME m <sup>3</sup>	WEIGHT kg
											L	B	H		
VA 25/180	180	93	59	102,5	76,5	26	125,5	75	50,5	48	130	190	150	0,0037	2,6

### VA 25/180X - HEATING AND AIR CONDITIONING SYSTEMS

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



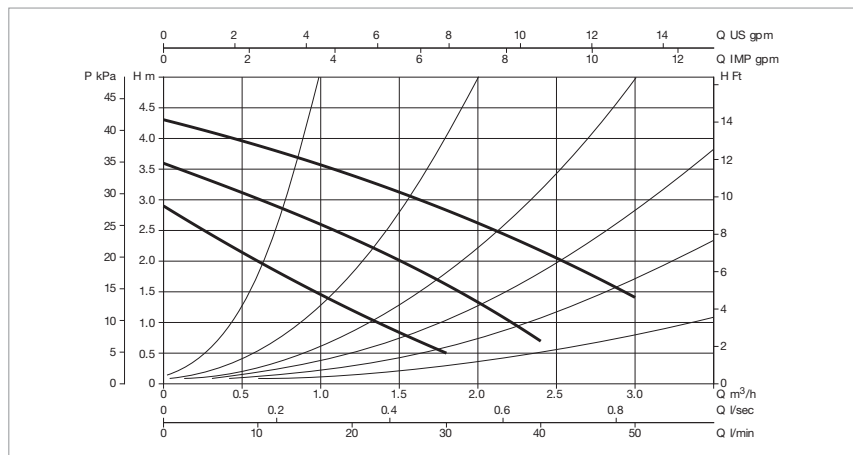
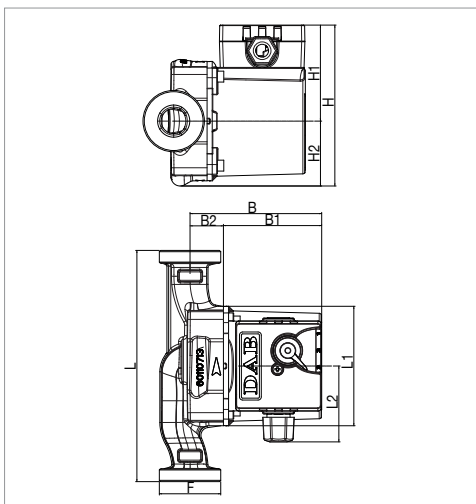
The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	CENTRE DISTANCE mm	POWER INPUT 50 Hz	UNIONS ON REQUEST		ELECTRICAL DATA						MINIMUM SUCTION PRESSURE	
			STANDARDISED	SPEED	REV. 1/min	P1 MAX W	In A	CAPACITOR		t°	90 °	
VA 25/180X	180	1x230 V ~	1" ¼" F	3	2655	43	0,19	1,5	450	m.c.a.	1,5	
				2	2380	38	0,17					
				1	1680	31	0,15					

MODEL	L	L1	L2	B	B1	B2	H	H1	H2	F	PACKING DIMENSIONS			VOLUME m³	WEIGHT kg
											L	B	H		
VA 25/180X	180	93	59	102,5	76,5	26	125,5	75	50,5	48	130	190	150	0,0037	2,6

### VA 35/130 - HEATING AND AIR CONDITIONING SYSTEMS

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 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

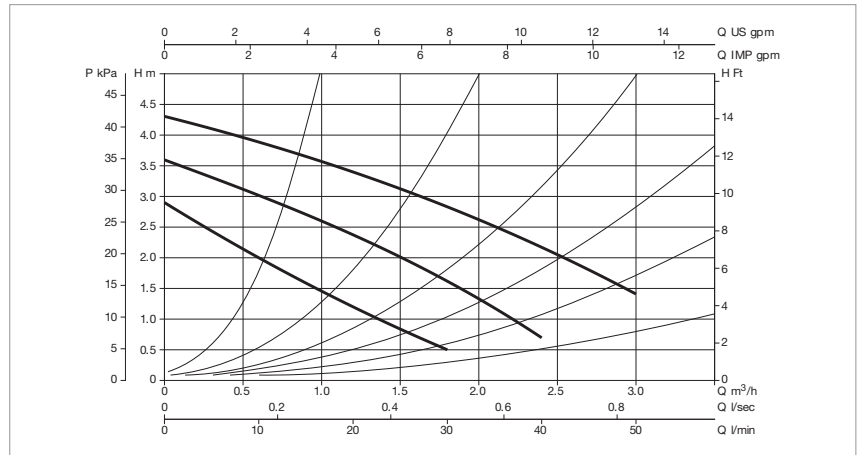
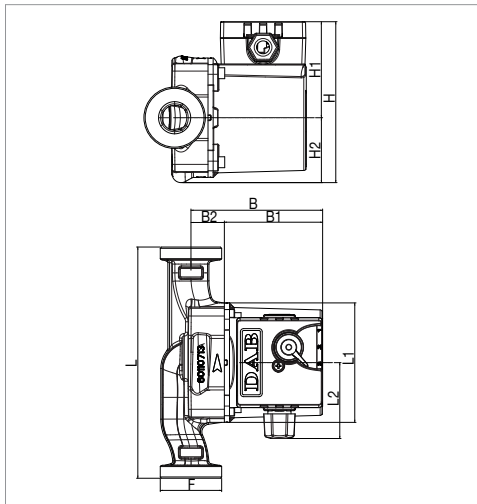
MODEL	CENTRE DISTANCE mm	POWER INPUT 50 Hz	UNIONS ON REQUEST		ELECTRICAL DATA						MINIMUM SUCTION PRESSURE	
			STANDARDISED	SPECIAL	SPEED	REV. 1/min	P1 MAX W	In A	CAPACITOR		t°	90 °
VA 35/130	130	1x230 V ~	1" F	¾" F - 1¼" M	3	2465	56	0,25	1,7	450	m.c.a.	1,5
					2	1930	50	0,22				
					1	1150	35	0,16				

MODEL	L	L1	L2	B	B1	B2	H	H1	H2	F	PACKING DIMENSIONS			VOLUME m³	WEIGHT kg
											L	B	H		
VA 35/130	130	93	59	102,5	76,5	26	125,5	75	50,5	48	135	135	150	0,0027	2,5



## VA 35/130 - 1/2" - HEATING AND AIR CONDITIONING SYSTEMS

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



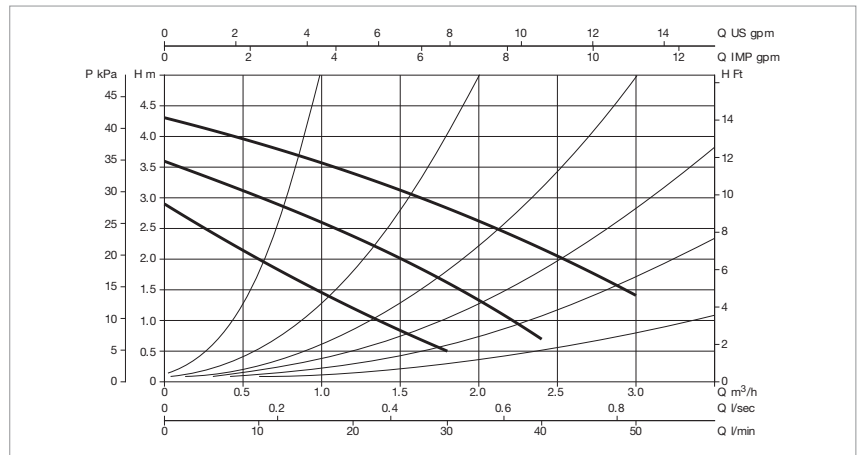
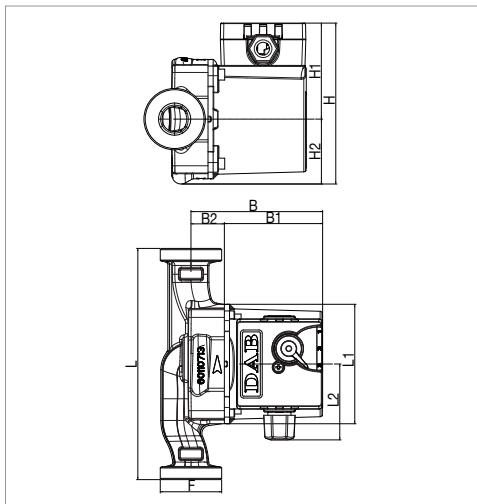
The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

MODEL	CENTRE DISTANCE mm	POWER INPUT 50 Hz	UNIONS ON REQUEST		ELECTRICAL DATA						MINIMUM SUCTION PRESSURE	
			STANDARDISED	SPECIAL	SPEED	REV. 1/min	P1 MAX W	In A	CAPACITOR μF Vc		t°	90 °
VA 35/130 - 1/2"	130	1x230 V ~	-	-	3	2465	56	0,25	1,7	450	m.c.a.	1,5
					2	1930	50	0,22				
					1	1150	35	0,16				

MODEL	L	L1	L2	B	B1	B2	H	H1	H2	F	PACKING DIMENSIONS			VOLUME m <sup>3</sup>	WEIGHT kg
											L	B	H		
VA 35/130 - 1/2"	180	93	59	102,5	76,5	26	125,5	75	50,5	48	135	135	150	0,0027	2,5

## VA 35/180 - HEATING AND AIR CONDITIONING SYSTEMS

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



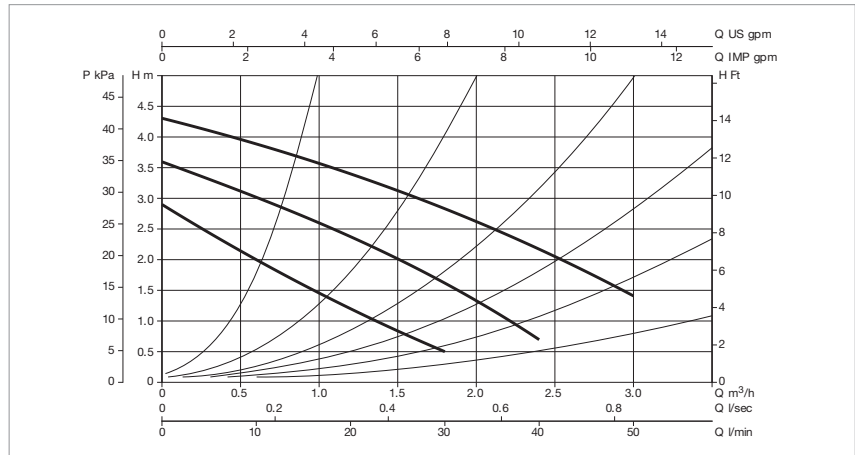
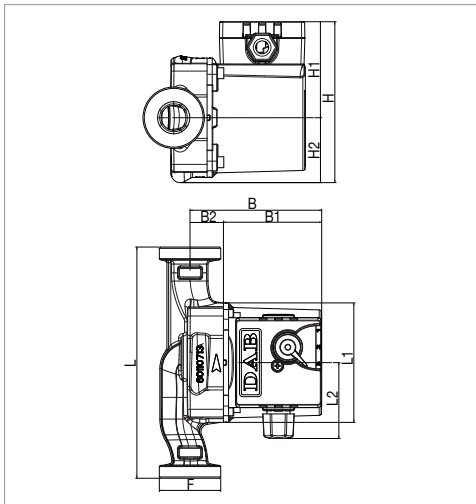
The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

MODEL	CENTRE DISTANCE mm	POWER INPUT 50 Hz	UNIONS ON REQUEST		ELECTRICAL DATA						MINIMUM SUCTION PRESSURE	
			STANDARDISED	SPECIAL	SPEED	REV. 1/min	P1 MAX W	In A	CAPACITOR μF Vc		t°	90 °
VA 35/180	180	1x230 V ~	1" F	¾" F - 1¼" M	3	2465	56	0,25	1,7	450	m.c.a.	1,5
					2	1930	50	0,22				
					1	1150	35	0,16				

MODEL	L	L1	L2	B	B1	B2	H	H1	H2	F	PACKING DIMENSIONS			VOLUME m <sup>3</sup>	WEIGHT kg
											L	B	H		
VA 35/180	180	93	59	102,5	76,5	26	125,5	75	50,5	48	130	190	150	0,0037	2,6

### VA 35/180X - HEATING AND AIR CONDITIONING SYSTEMS

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



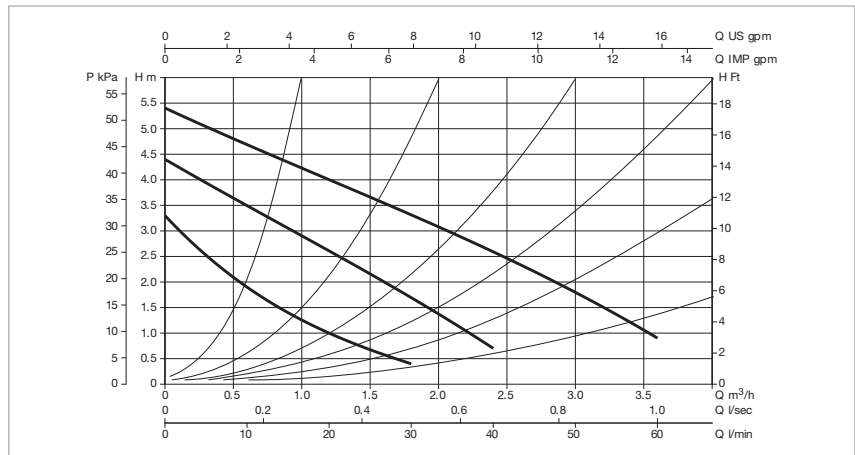
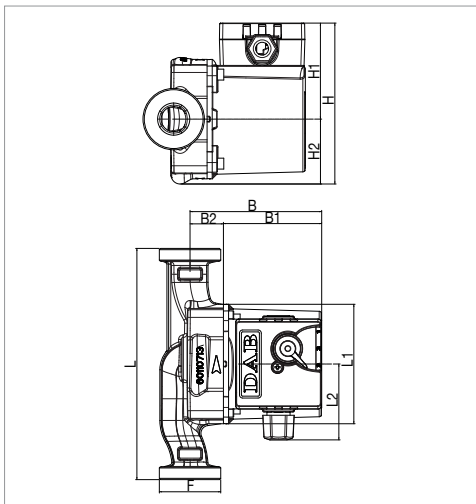
The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	CENTRE DISTANCE mm	POWER INPUT 50 Hz	UNIONS ON REQUEST		ELECTRICAL DATA						MINIMUM SUCTION PRESSURE	
			STANDARDISED	SPECIAL	SPEED	REV. 1/min	P1 MAX W	In A	CAPACITOR		t°	90 °
									µF	Vc		
VA 35/180X	180	1x230 V ~	-	-	3	2465	56	0,25	1,7	450	m.c.a.	1,5
					2	1930	50	0,22				
					1	1150	35	0,16				

MODEL	L	L1	L2	B	B1	B2	H	H1	H2	F	PACKING DIMENSIONS			VOLUME m³	WEIGHT kg
											L	B	H		
VA 35/180X	180	93	59	102,5	76,5	26	125,5	75	50,5	48	130	190	150	0,0037	2,6

### VA 55/130 - HEATING AND AIR CONDITIONING SYSTEMS

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 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	CENTRE DISTANCE mm	POWER INPUT 50 Hz	UNIONS ON REQUEST		ELECTRICAL DATA						MINIMUM SUCTION PRESSURE	
			STANDARDISED	SPECIAL	SPEED	REV. 1/min	P1 MAX W	In A	CAPACITOR		t°	90 °
									µF	Vc		
VA 55/130	130	1x230 V ~	1" F	¾" F - 1¼" M	3	2400	70	0,3	1,7	450	m.c.a.	1,5
					2	1600	58	0,26				
					1	930	36	0,17				

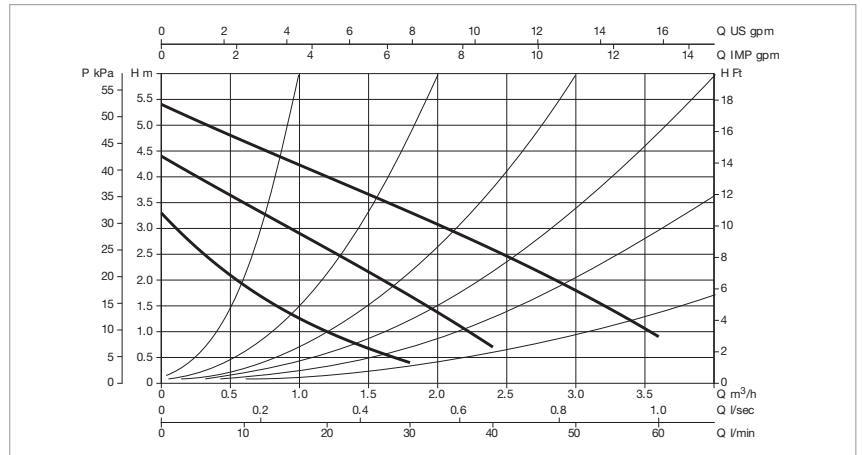
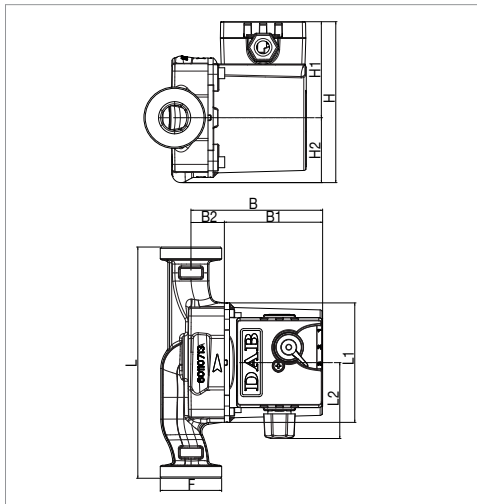
MODEL	L	L1	L2	B	B1	B2	H	H1	H2	F	PACKING DIMENSIONS			VOLUME m³	WEIGHT kg
											L	B	H		
VA 55/130	130	93	59	102,5	76,5	26	125,5	75	50,5	48	135	135	150	0,0027	2,5





## VA 55/130 - 1/2" - HEATING AND AIR CONDITIONING SYSTEMS

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



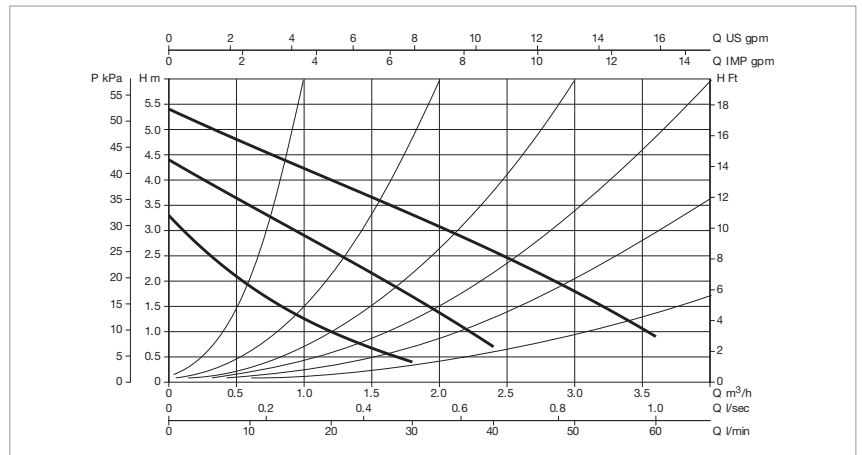
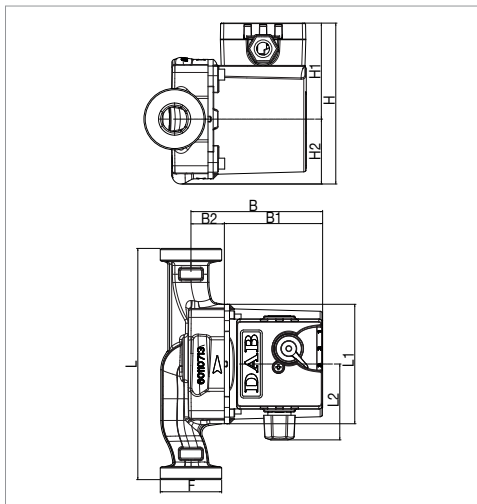
The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

MODEL	CENTRE DISTANCE mm	POWER INPUT 50 Hz	UNIONS ON REQUEST		ELECTRICAL DATA						MINIMUM SUCTION PRESSURE		
			STANDARDISED	SPECIAL	SPEED	REV. 1/min	P1 MAX W	In A	CAPACITOR		t°	90°	
										μF	Vc		
VA 55/130 - 1/2"	130	1x230 V ~	-	-	3	2400	70	0,3	1,7	450	m.c.a.	1,5	
					2	1600	58	0,26					
					1	930	36	0,17					

MODEL	L	L1	L2	B	B1	B2	H	H1	H2	F	PACKING DIMENSIONS			VOLUME m <sup>3</sup>	WEIGHT kg
											L	B	H		
VA 55/130 - 1/2"	130	93	59	102,5	76,5	26	125,5	75	50,5	48	135	135	150	0,0027	2,5

## VA 55/180 - HEATING AND AIR CONDITIONING SYSTEMS

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



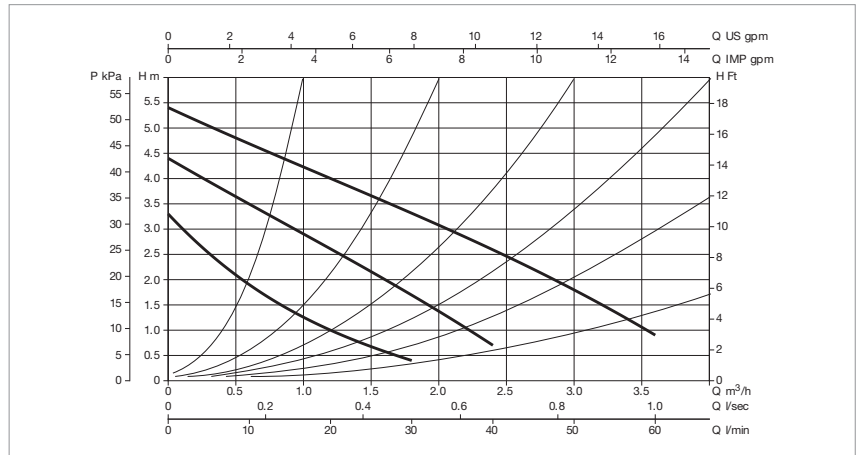
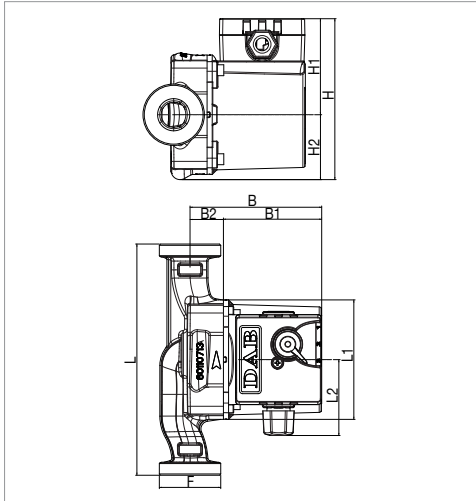
The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

MODEL	CENTRE DISTANCE mm	POWER INPUT 50 Hz	UNIONS ON REQUEST		ELECTRICAL DATA						MINIMUM SUCTION PRESSURE		
			STANDARDISED	SPECIAL	SPEED	REV. 1/min	P1 MAX W	In A	CAPACITOR		t°	90°	
										μF	Vc		
VA 55/180	180	1x230 V ~	1" F	3/4" F - 1 1/4" M	3	2400	70	0,3	1,7	450	m.c.a.	1,5	
					2	1600	58	0,26					
					1	930	36	0,17					

MODEL	L	L1	L2	B	B1	B2	H	H1	H2	F	PACKING DIMENSIONS			VOLUME m <sup>3</sup>	WEIGHT kg
											L	B	H		
VA 55/180	180	93	59	102,5	76,5	26	125,5	75	50,5	48	130	190	150	0,0037	2,6

## VA 55/180X - HEATING AND AIR CONDITIONING SYSTEMS

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



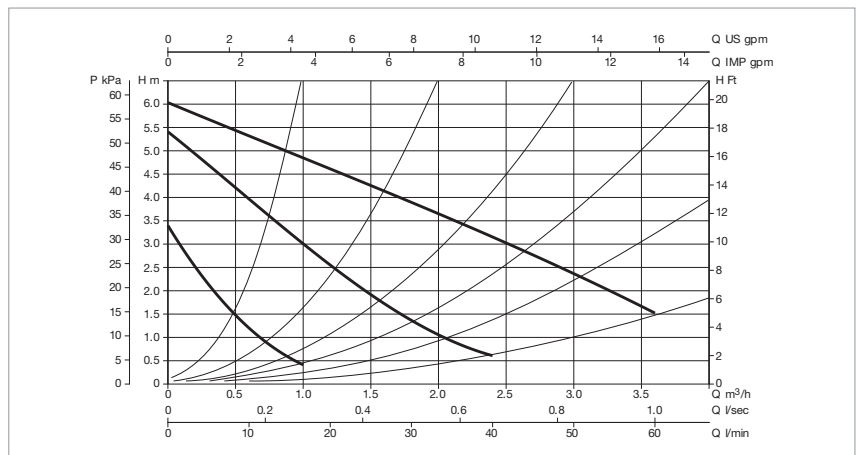
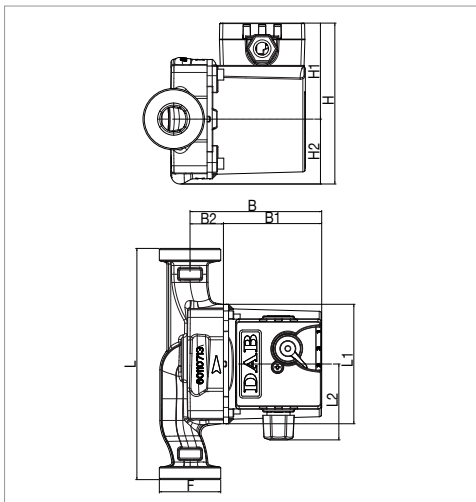
The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

MODEL	CENTRE DISTANCE mm	POWER INPUT 50 Hz	UNIONS ON REQUEST		ELECTRICAL DATA					MINIMUM SUCTION PRESSURE	
			STANDARDISED	SPEED	REV. 1/min	P1 MAX W	In A	CAPACITOR		†°	90 °
VA 55/180X	180	1x230 V ~	1" ¼" F	3	2400	70	0,3	1,7	450	m.c.a.	1,5
				2	1600	58	0,26				
				1	930	36	0,17				

MODEL	L	L1	L2	B	B1	B2	H	H1	H2	F	PACKING DIMENSIONS			VOLUME m <sup>3</sup>	WEIGHT kg
											L	B	H		
VA 55/180X	180	93	59	102,5	76,5	26	125,5	75	50,5	48	130	190	150	0,0037	2,6

## VA 65/130 - HEATING AND AIR CONDITIONING SYSTEMS

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



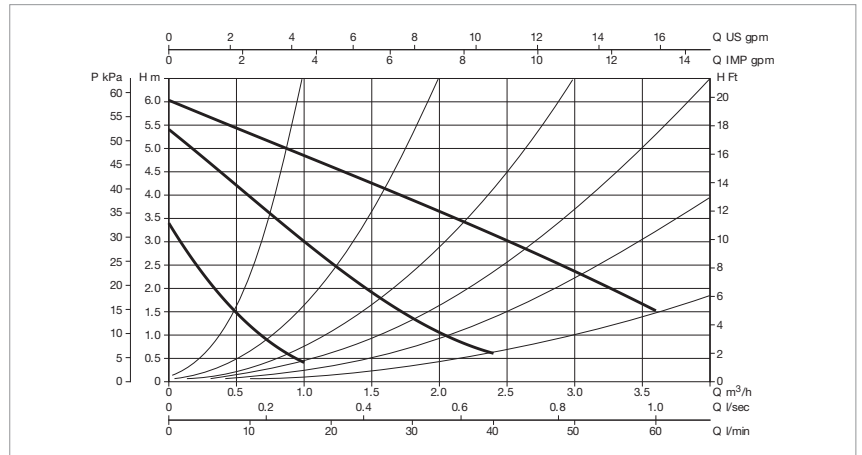
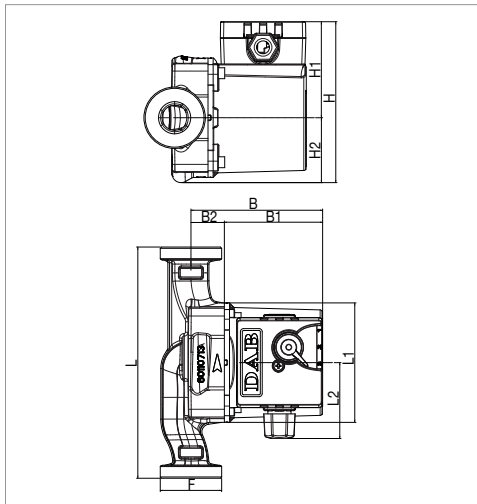
The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

MODEL	CENTRE DISTANCE mm	POWER INPUT 50 Hz	UNIONS ON REQUEST		ELECTRICAL DATA					MINIMUM SUCTION PRESSURE		
			STANDARDISED	SPECIAL	SPEED	REV. 1/min	P1 MAX W	In A	CAPACITOR		†°	90 °
VA 65/130	130	1x230 V ~	1" F	¾" F - 1¼" M	3	2310	78	0,34	2	450	m.c.a.	2,5
					2	1532	59	0,26				
					1	880	37	0,17				

MODEL	L	L1	L2	B	B1	B2	H	H1	H2	F	PACKING DIMENSIONS			VOLUME m <sup>3</sup>	WEIGHT kg
											L	B	H		
VA 65/130	130	93	59	102,5	76,5	26	125,5	75	50,5	48	135	135	150	0,0027	2,5

## VA 65/130 - 1/2" - HEATING AND AIR CONDITIONING SYSTEMS

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



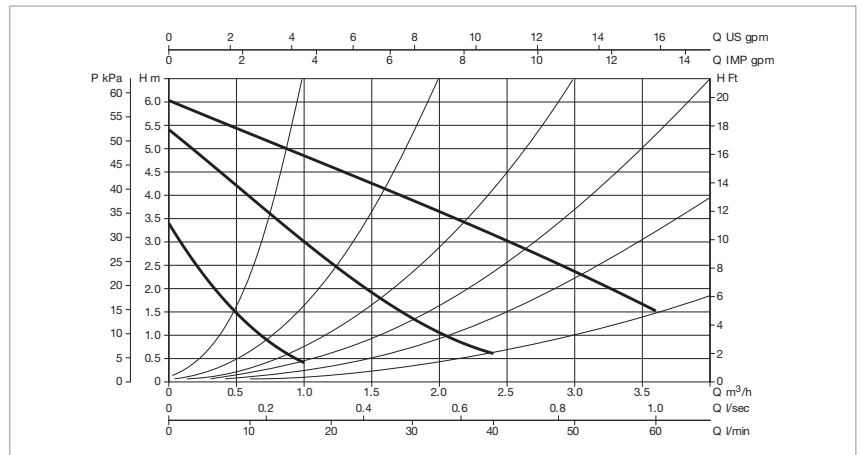
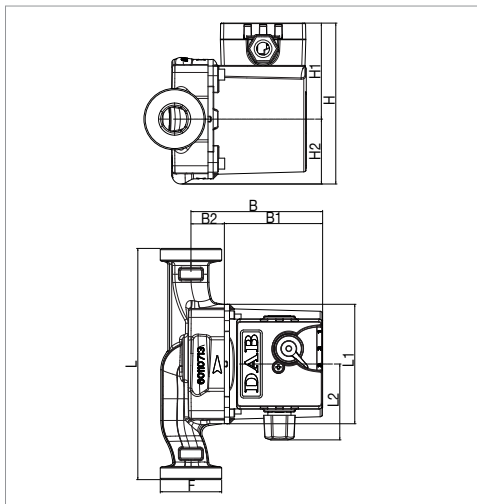
The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

MODEL	CENTRE DISTANCE mm	POWER INPUT 50 Hz	UNIONS ON REQUEST		ELECTRICAL DATA						MINIMUM SUCTION PRESSURE	
			STANDARDISED	SPECIAL	SPEED	REV. 1/min	P1 MAX W	In A	CAPACITOR μF Vc		t°	90 °
VA 65/130 - 1/2"	130	1x230 V ~	-	-	3	2310	78	0,34	2	450	m.c.a.	2,5
					2	1532	59	0,26				
					1	880	37	0,17				

MODEL	L	L1	L2	B	B1	B2	H	H1	H2	F	PACKING DIMENSIONS			VOLUME m <sup>3</sup>	WEIGHT kg
											L	B	H		
VA 65/130 - 1/2"	130	93	59	102,5	76,5	26	125,5	75	50,5	48	135	135	150	0,0027	2,5

## VA 65/180 - HEATING AND AIR CONDITIONING SYSTEMS

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



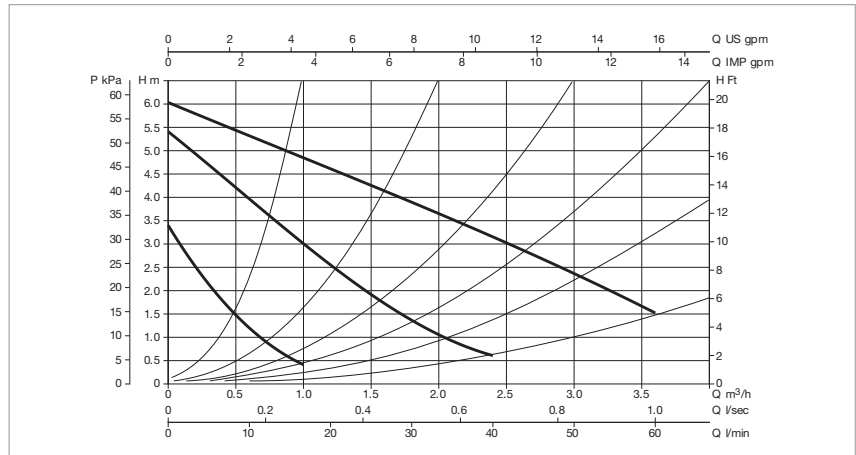
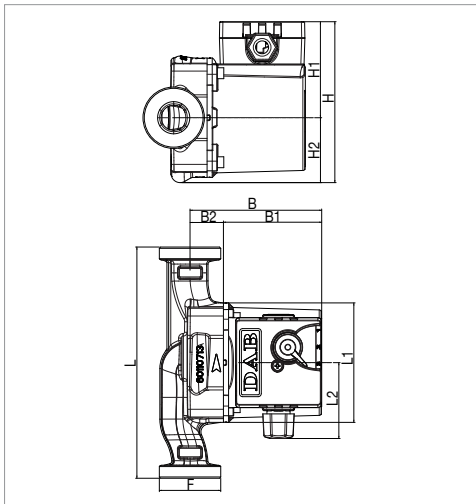
The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

MODEL	CENTRE DISTANCE mm	POWER INPUT 50 Hz	UNIONS ON REQUEST		ELECTRICAL DATA						MINIMUM SUCTION PRESSURE	
			STANDARDISED	SPECIAL	SPEED	REV. 1/min	P1 MAX W	In A	CAPACITOR μF Vc		t°	90 °
VA 65/180	180	1x230 V ~	1" F	3/4" F - 1 1/4" M	3	2310	78	0,34	2	450	m.c.a.	2,5
					2	1532	59	0,26				
					1	880	37	0,17				

MODEL	L	L1	L2	B	B1	B2	H	H1	H2	F	PACKING DIMENSIONS			VOLUME m <sup>3</sup>	WEIGHT kg
											L	B	H		
VA 65/180	180	93	59	102,5	76,5	26	125,5	75	50,5	48	130	190	150	0,0037	2,6

## VA 65/180X - HEATING AND AIR CONDITIONING SYSTEMS

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



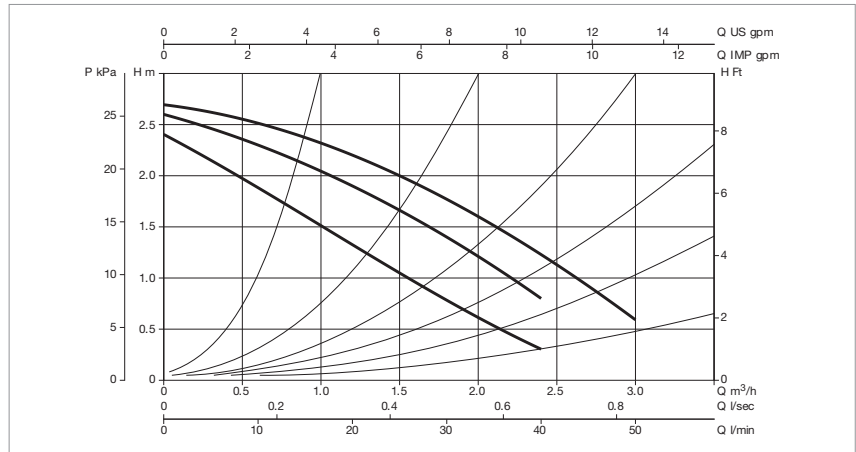
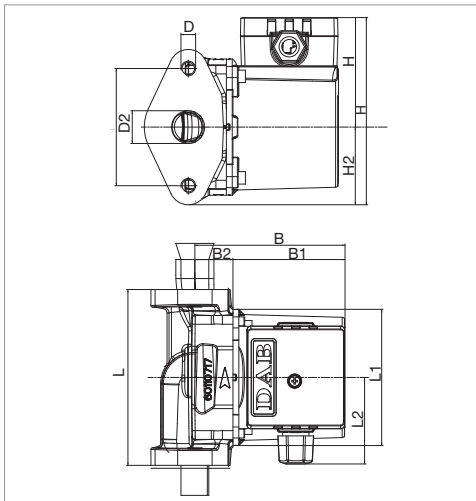
The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

MODEL	CENTRE DISTANCE mm	POWER INPUT 50 Hz	UNIONS ON REQUEST		ELECTRICAL DATA					MINIMUM SUCTION PRESSURE	
			STANDARDISED	SPEED	REV. 1/min	P1 MAX W	In A	CAPACITOR		t°	90 °
VA 65/180X	180	1x230 V ~	1" 1/4" F	3	2310	78	0,34	2	450	m.c.a.	2,5
				2	1532	59	0,26				
				1	880	37	0,17				

MODEL	L	L1	L2	B	B1	B2	H	H1	H2	F	PACKING DIMENSIONS			VOLUME m <sup>3</sup>	WEIGHT kg
											L	B	H		
VA 65/180X	130	93	59	102,5	76,5	26	125,5	75	50,5	48	130	190	150	0,0037	2,6

## VB 35/120 - HEATING AND AIR CONDITIONING SYSTEMS

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



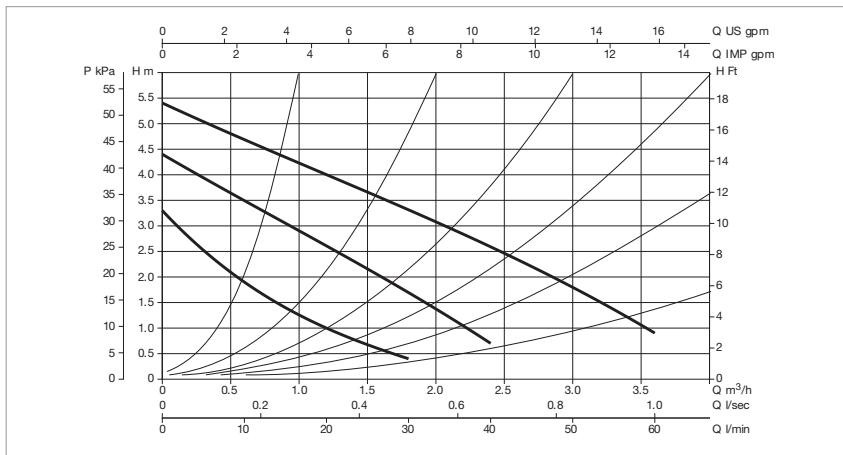
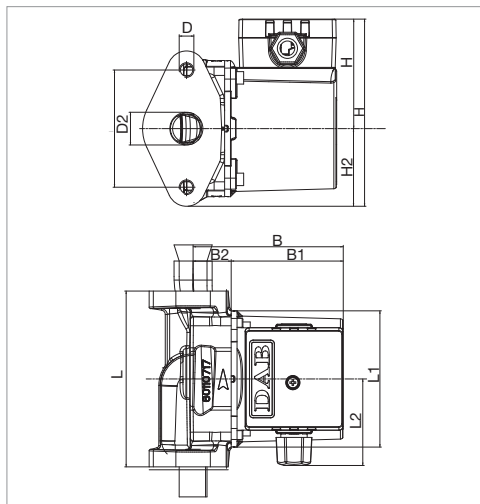
The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

MODEL	CENTRE DISTANCE mm	POWER INPUT 50 Hz	UNIONS ON REQUEST		ELECTRICAL DATA					MINIMUM SUCTION PRESSURE		
			STANDARDISED	SPECIAL	SPEED	REV. 1/min	P1 MAX W	In A	CAPACITOR		t°	90 °
VB 35/120	120	1x230 V ~	DN 25	DN 20 DN 32	3	2465	56	0,25	1,7	450	m.c.a.	1,5
					2	1930	50	0,22				
					1	1150	35	0,16				

MODEL	L	L1	L2	B	B1	B2	H	H1	H2	D2	D1	I	PACKING DIMENSIONS			VOLUME m <sup>3</sup>	WEIGHT kg
													L	B	H		
VB 35/120	120	98	60	104	78	26	124	75	49	25	M10	78	135	135	150	0,0027	2,7

## VB 55/120 - HEATING AND AIR CONDITIONING SYSTEMS

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



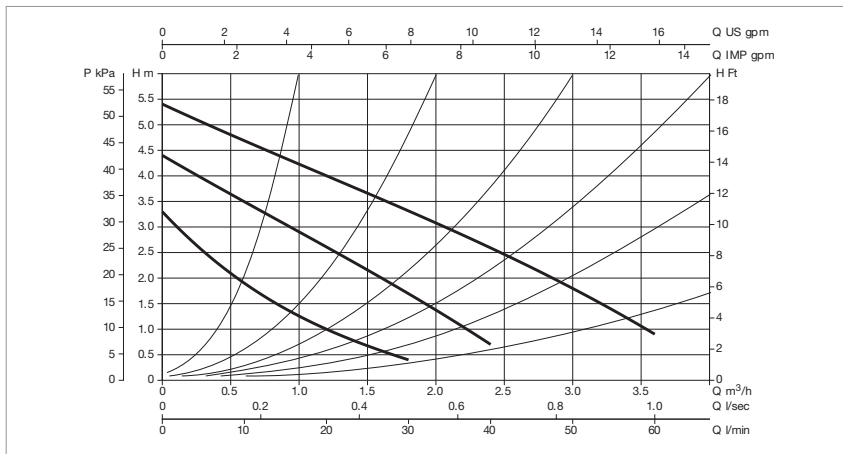
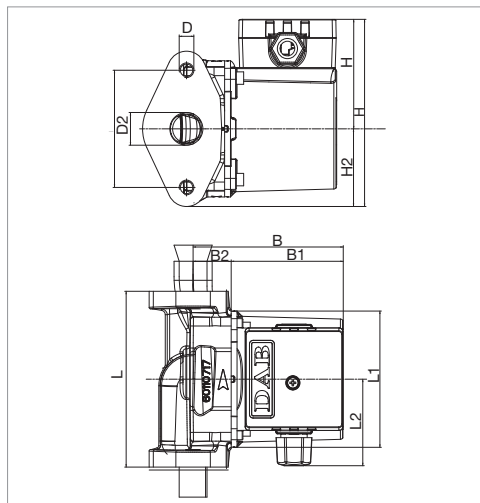
The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

MODEL	CENTRE DISTANCE mm	POWER INPUT 50 Hz	UNIONS ON REQUEST		ELECTRICAL DATA						MINIMUM SUCTION PRESSURE	
			STANDARDISED	SPECIAL	SPEED	REV. 1/min	P1 MAX W	In A	CAPACITOR		t°	90 °
VB 55/120	120	1x230 V ~	DN 25	DN 20 DN 32	3	2400	70	0,3	1,7	450	m.c.a.	1,5
					2	1600	58	0,26				
					1	930	36	0,17				

MODEL	L	L1	L2	B	B1	B2	H	H1	H2	D2	D1	I	PACKING DIMENSIONS			VOLUME m <sup>3</sup>	WEIGHT kg
													L	B	H		
VB 55/120	120	98	60	104	78	26	124	75	49	25	M10	80	135	135	150	0,0027	2,7

## VB 65/120 - HEATING AND AIR CONDITIONING SYSTEMS

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



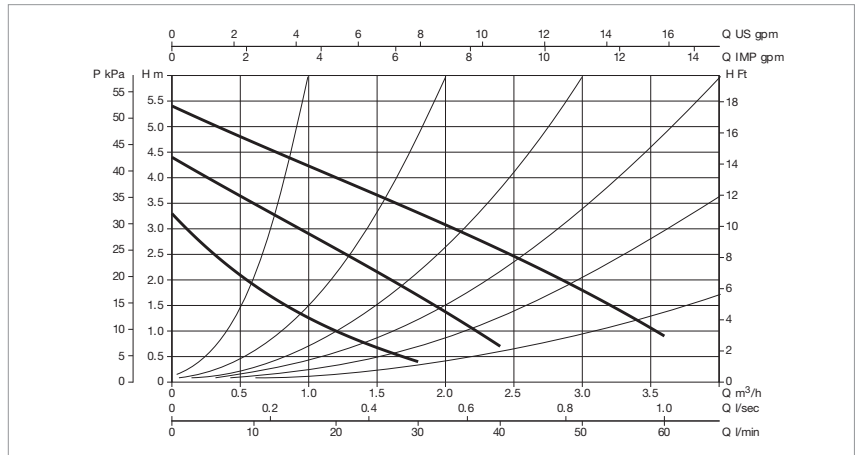
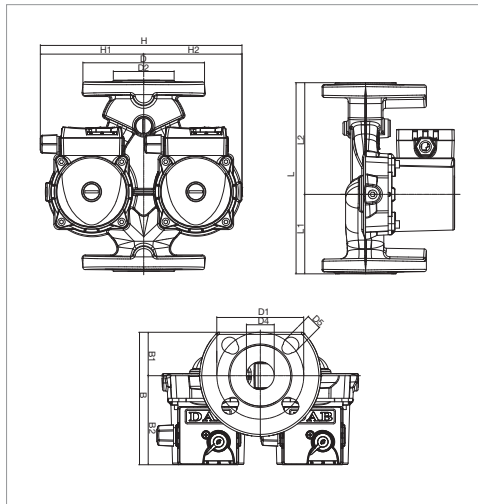
The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

MODEL	CENTRE DISTANCE mm	POWER INPUT 50 Hz	UNIONS ON REQUEST		ELECTRICAL DATA						MINIMUM SUCTION PRESSURE	
			STANDARDISED	SPECIAL	SPEED	REV. 1/min	P1 MAX W	In A	CAPACITOR		t°	90 °
VB 65/120	120	1x230 V ~	DN 25	DN 20 DN 32	3	2310	78	0,34	2	450	m.c.a.	2,5
					2	1532	59	0,26				
					1	880	37	0,17				

MODEL	L	L1	L2	B	B1	B2	D2	D1	I	H	H1	H2	PACKING DIMENSIONS			VOLUME m <sup>3</sup>	WEIGHT kg
													L	B	H		
VB 65/120	120	98	60	104	78	26	26	M10	80	75	75	49	135	135	150	0,0027	2,7

## VD 55/220.32 - HEATING AND AIR CONDITIONING SYSTEMS

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



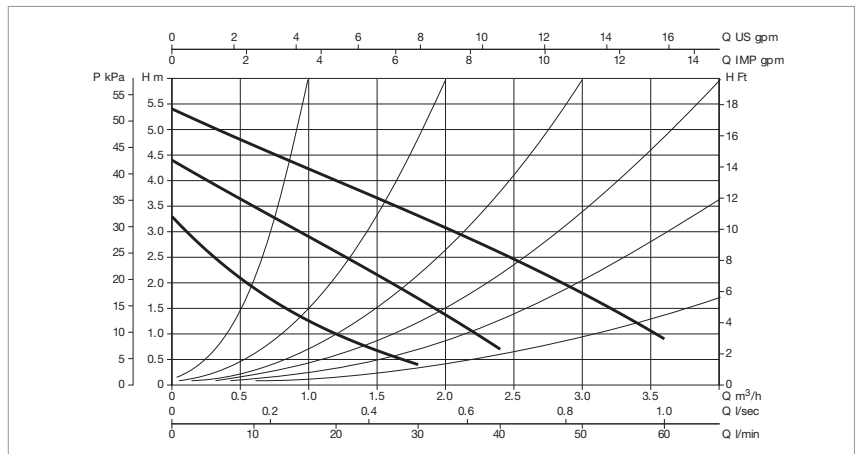
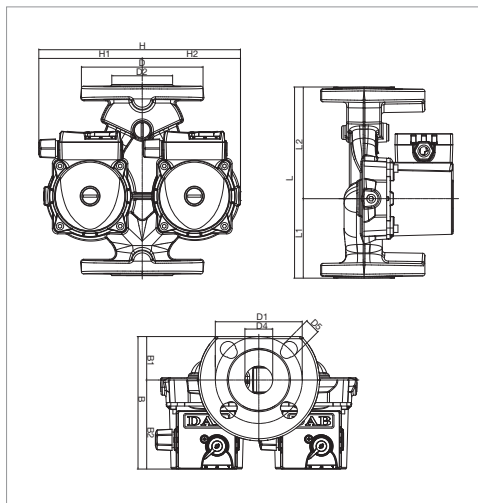
The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	CENTRE DISTANCE mm	POWER INPUT 50 Hz	UNIONS ON REQUEST	ELECTRICAL DATA						MINIMUM SUCTION PRESSURE	
				SPEED	REV. 1/min	P1 MAX W	In A	CAPACITOR		t°	90 °
VD 55/220.32	220	1x230 V ~	DN 32 / PN 6 / PN 10	3	2400	70	0,3	1,7	450	m.c.a.	1,5
				2	1600	58	0,26				
				1	930	36	0,17				

MODEL	L	L1	L2	B	B1	B2	D	D1		D2	D4	D5		H	H1	H2	PACKING DIMENSIONS			VOLUME m³	WEIGHT kg
								PN6	PN10			PN6	PN10				B	L	H		
VD 55/220.32	270	91,5	128,5	150	50	100	140	90	100	70	32	14	18	230	115	115	160	253	238	0,0096	8,2

## VD 65/220.32 - HEATING AND AIR CONDITIONING SYSTEMS

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 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	CENTRE DISTANCE mm	POWER INPUT 50 Hz	UNIONS ON REQUEST	ELECTRICAL DATA						MINIMUM SUCTION PRESSURE	
				SPEED	REV. 1/min	P1 MAX W	In A	CAPACITOR		t°	90 °
VD 65/220.32	220	1x230 V ~	DN 32 / PN 6 / PN 10	3	2310	78	0,34	2	450	m.c.a.	2,5
				2	1532	59	0,26				
				1	880	37	0,17				

MODEL	L	L1	L2	B	B1	B2	D	D1		D2	D4	D5		H	H1	H2	PACKING DIMENSIONS			VOLUME m³	WEIGHT kg
								PN6	PN10			PN6	PN10				B	L	H		
VD 65/220.32	220	91,5	128,5	150	50	100	140	90	100	70	31	14	18	230	115	115	160	253	238	0,0096	8,2