

FOR EU MARKETS
AVAILABLE UNTIL
JULY 2015



TECHNICAL DATA

Operating range: from 0 a 3,6 m³/h with head of up to 6 metres.

Pumped liquid temperature range: from -10°C to +110°C (TF110).
For all models, temperature peaks up to 140 °C.

Pumped liquid: clean, free of solids and mineral oils, non-viscous, chemically neutral, with properties similar to water (glycol max 60%).

Maximum operating pressure: 10 bar (1000 kPa).

Installation: with HORIZONTAL MOTOR AXIS.

Protection class: IP 44.

Insulation class: F.

APPLICATIONS

Pump suitable for vector fluid circulation in solar panel systems. VSA wet rotor circulators are capable of ensuring correct operation also with high glycol percentages (concentration up to 60 %).

CONSTRUCTION FEATURES

Single body consisting of the cast iron hydraulic section, and the wet rotor motor. Special cathaphoresis paint coating on the pump body, which guarantees resistance to the aggression of the glycol. Die-cast aluminium motor casing. Technopolymer impeller, tempered stainless steel motor shaft on graphite bearings lubricated by the pumped liquid.

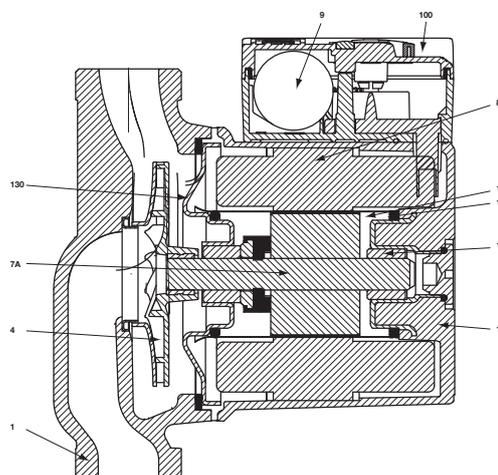
Stainless steel rotor liner, stator liner and closing flange.

Ceramic thrust ring, silicon seal rings, and brass air breather plug.

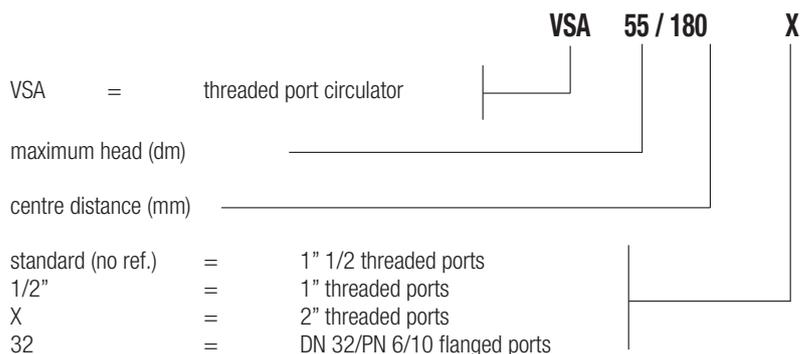
Two-pole asynchronous motor with squirrel cage rotor, designed for three-speed operation through a special selector in the terminal box, in order to adapt the operation of the circulator to the characteristics of the system.

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	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

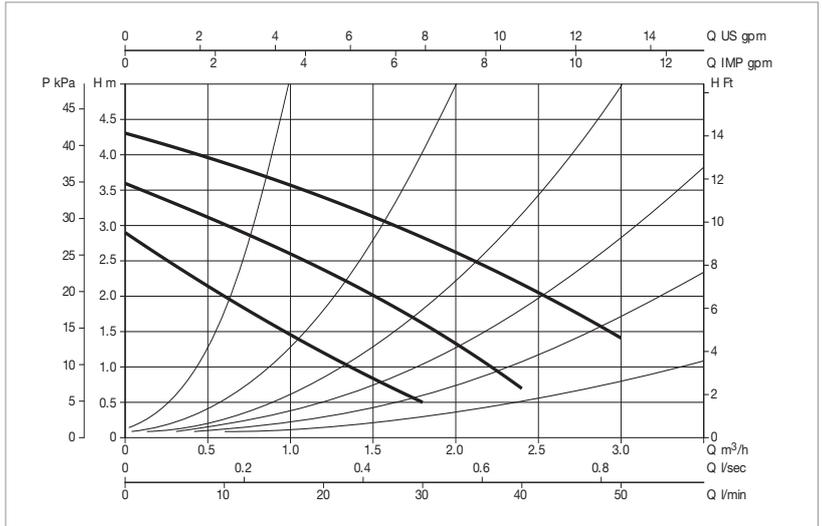
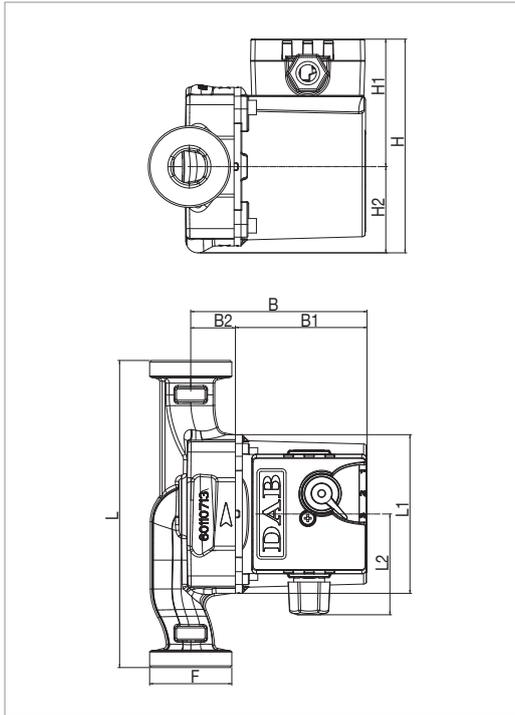


– Legend:
(example)



VSA 35 - WET ROTOR CIRCULATORS FOR SOLAR PANEL 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 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

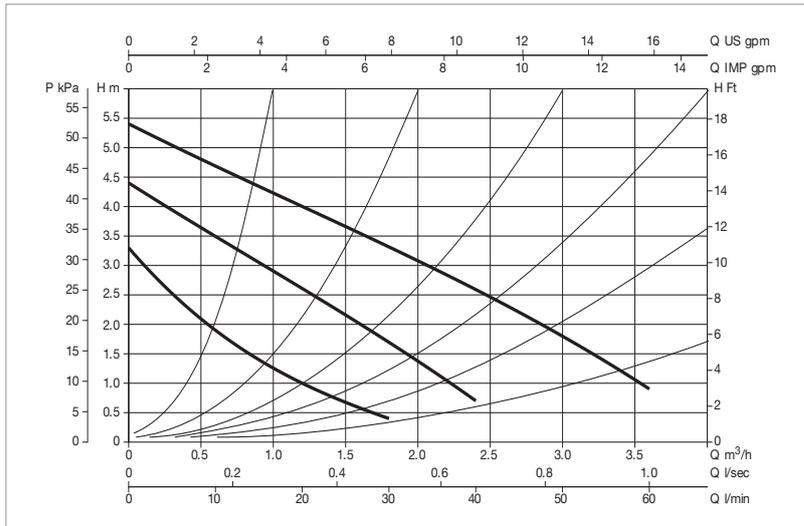
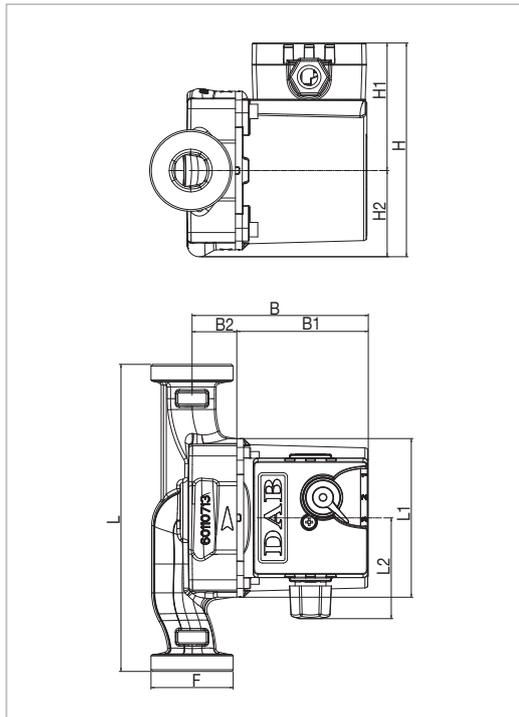
MODEL	Q=m ³ /h	0	0,6	1,2	1,8	2,4	3
	Q=l/min	0	10	20	30	40	50
VSA 35/130	H (m)	4,3	3,9	3,4	2,8	2,15	1,4
VSA 35/130 1/2"		4,3	3,9	3,4	2,8	2,15	1,4
VSA 35/180		4,3	3,9	3,4	2,8	2,15	1,4

MODEL	POWER INPUT 50 Hz	CENTRE DISTANCE mm	PUMP CONNECTIONS	UNIONS ON REQUEST		ELECTRICAL DATA						MINIMUM SUCTION PRESSURE	
				STANDARDISED	SPECIAL	SPEED	n.r.p.m.	P1 MAX W	In A	CAPACITOR		t°	90 °
										µF	Vc		
VSA 35/130	1 x 230 V ~	130	1 ½"	1" F	¾" F ¼" M	3 2 1	2465 1930 1150	56 50 35	0,25 0,22 0,16	1,7	450	m.c.w.	1,5
VSA 35/130 1/2"	1 x 230 V ~	130	1"	-	-	3 2 1	2465 1930 1150	56 50 35	0,25 0,22 0,16	1,7	450	m.c.w.	1,5
VSA 35/180	1 x 230 V ~	180	1 ½"	1" F	¾" F ¼" M	3 2 1	2465 1930 1150	56 50 35	0,25 0,22 0,16	1,7	450	m.c.w.	1,5

MODEL	L	L1	L2	B	B1	B2	H	H1	H2	F	PACKING DIMENSIONS			WEIGHT kg	Q.TY X PALLET
											L	B	H		
VSA 35/130	130	93	59	102,5	76,5	26	125,5	75	50,5	1 ½"	135	135	150	2,5	240
VSA 35/130 1/2"	130	93	59	102,5	76,5	26	125,5	75	50,5	1"	135	135	150	2,5	240
VSA 35/180	180	93	59	102,5	76,5	26	125,5	75	50,5	2"	130	190	150	2,6	180

VSA 55 - WET ROTOR CIRCULATORS FOR SOLAR PANEL 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 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

WET ROTOR CIRCULATORS

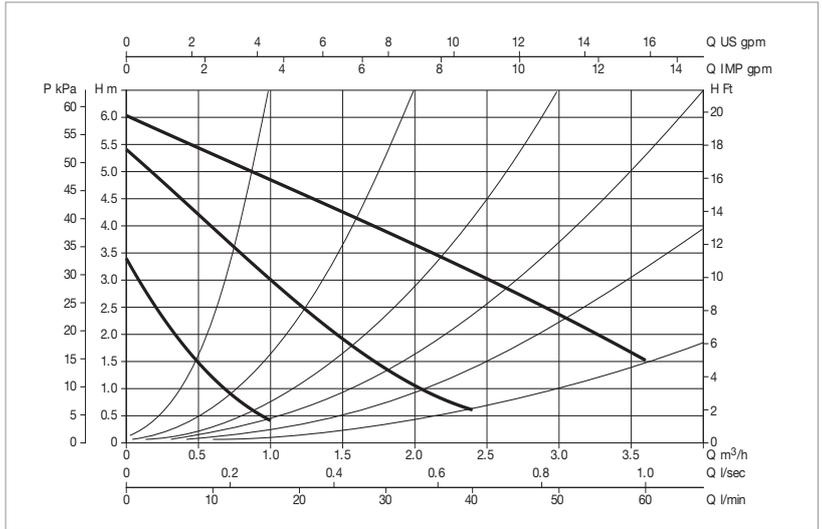
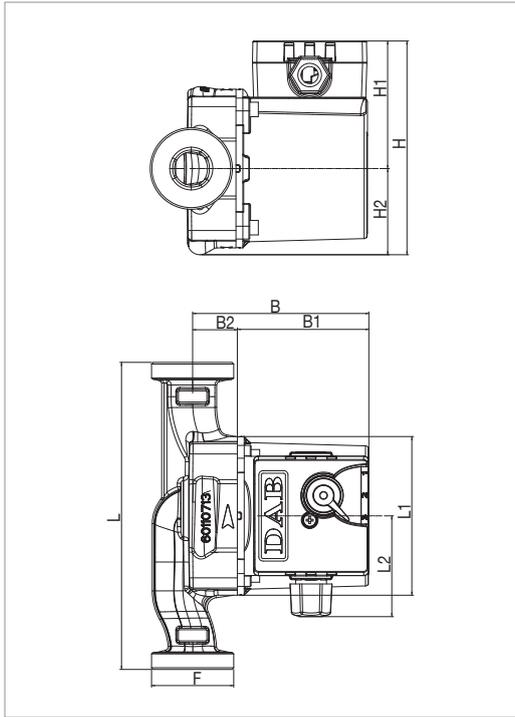
MODEL	Q=m ³ /h	0	0,6	1,2	1,8	2,4	3	4,2
	Q=l/min	0	10	20	30	40	50	70
VSA 55/130	H (m)	5,4	4,7	4,5	3,3	2,6	1,75	0,85
VSA 55/130 1/2"		5,4	4,7	4,5	3,3	2,6	1,75	0,85
VSA 55/180		5,4	4,7	4,5	3,3	2,6	1,75	0,85

MODEL	POWER INPUT 50 Hz	CENTRE DISTANCE mm	PUMP CONNECTIONS	UNIONS ON REQUEST		ELECTRICAL DATA						MINIMUM SUCTION PRESSURE	
				STANDARDISED	SPECIAL	SPEED	n.r.p.m.	P1 MAX W	In A	CAPACITOR		t°	90 °
										µF	Vc		
VSA 55/130	1 x 230 V ~	130	1 1/2"	1" F	3/4" F 1/4" M	3 2 1	2400 1600 930	70 58 36	0,3 0,26 0,17	1,7	450	m.c.w.	1,5
VSA 55/130 1/2"	1 x 230 V ~	130	1"	-	-	3 2 1	2400 1600 930	70 58 36	0,3 0,26 0,17	1,7	450	m.c.w.	1,5
VSA 55/180	1 x 230 V ~	180	1 1/2"	1" F	3/4" F 1/4" M	3 2 1	2400 1600 930	70 58 36	0,3 0,26 0,17	1,7	450	m.c.w.	1,5

MODEL	L	L1	L2	B	B1	B2	H	H1	H2	F	PACKING DIMENSIONS			WEIGHT kg	Q.TY X PALLET
											L	B	H		
VSA 55/130	130	93	59	102,5	76,5	26	125,5	75	50,5	1 1/2"	135	135	150	2,5	240
VSA 55/130 1/2"	130	93	59	102,5	76,5	26	125,5	75	50,5	1"	135	135	150	2,5	240
VSA 55/180	180	93	59	102,5	76,5	26	125,5	75	50,5	2"	130	190	150	2,6	180

VSA 65 - WET ROTOR CIRCULATORS FOR SOLAR PANEL 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 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	Q=m ³ /h	0	0,6	1,2	1,8	2,4	3
	Q=l/min	0	10	20	30	40	50
VSA 65/130	H (m)	6,3	5,8	5,3	4,3	3,4	2,4
VSA 65/130 1/2"		6,3	5,8	5,3	4,3	3,4	2,4
VSA 65/180		6,3	5,8	5,3	4,3	3,4	2,4

MODEL	POWER INPUT 50 Hz	CENTRE DISTANCE mm	PUMP CONNECTIONS	UNIONS ON REQUEST		ELECTRICAL DATA						MINIMUM SUCTION PRESSURE	
				STANDARDISED	SPECIAL	SPEED	n.r.p.m.	P1 MAX W	In A	CAPACITOR		t°	90 °
										μF	Vc		
VSA 65/130	1 x 230 V ~	130	1 1/2"	1" F	3/4" F 1/4" M	3 2 1	2310 1532 880	78 59 37	0,34 0,26 0,17	2	450	m.c.w.	1,5
VSA 65/130 1/2"	1 x 230 V ~	130	1"	-	-	3 2 1	2310 1532 880	78 59 37	0,34 0,26 0,17	2	450	m.c.w.	1,5
VSA 65/180	1 x 230 V ~	180	1 1/2"	1" F	3/4" F 1/4" M	3 2 1	2310 1532 880	78 59 37	0,34 0,26 0,17	2	450	m.c.w.	1,5

MODEL	L	L1	L2	B	B1	B2	H	H1	H2	F	PACKING DIMENSIONS			WEIGHT kg	Q.TY X PALLET
											L	B	H		
VSA 65/130	130	93	59	102,5	76,5	26	125,5	75	50,5	1 1/2"	135	135	150	2,5	240
VSA 65/130 1/2"	130	93	59	102,5	76,5	26	125,5	75	50,5	1"	135	135	150	2,5	240
VSA 65/180	180	93	59	102,5	76,5	26	125,5	75	50,5	1 1/2"	130	190	150	2,6	180