

S4



RESISTANT
TO SAND

CE

(CONTROLBOX only for single-phase version)

GENERAL DATA

Applications

Bore hole pumps for 4" wells or greater capable of developing a wide range of flow rates and heads. These pumps can be used in a wide range of lifting, distributing and pressurising applications in civil and industrial supplies, autoclaves and tanks, fire-fighting and washing installations, and irrigation systems.

Construction features of pump:

Centrifugal multi-stage pump with radial or semi-axial impellers. Pump and motor directly connected with a rigid coupling. The technopolymer impeller with parts subject to wear in stainless steel, operating on floating adjustment rings in abrasion-proof synthetic material and the technopolymer diffusers make the pump particularly hard-wearing.

Pump liner, shaft with coupling, filter and cable sheath in stainless steel.

Base and upper head in precision-cast AISI 304 steel with steel check valve incorporated in the head.

These pumps comply with Community Directives.

Construction features of motor

Asynchronous 2-pole submerged motor totally built from AISI 304 stainless steel. Squirrel-cage rotor mounted on a self-centring thrust block bearing suitable for withstanding axial loads. The bearing and the bushings are cooled by the water so as to prevent dangers of pollution. Stator encased in synthetic resin with high quality dielectric inserted in a stainless steel airtight casing. Capacitor and manually resettable overload cut-out located on the standard supplied electrical power panel for the single-phase version. The user must provide overload protection for the three-phase version. Flanging to NEMA - 4"

Protection level: IP58

Heat insulation class: B

Cooling flow: 8 cm/sec.

Max. number of starts/hour: 20

Input voltage:	single-phase	220-230 V/50Hz
	three-phase	400 V/50Hz

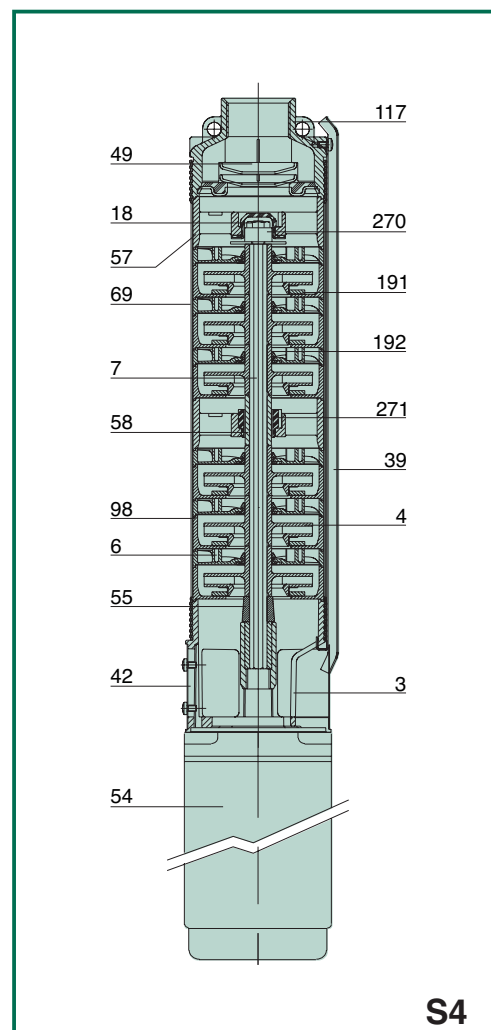
Supply

Controlbox (for the single-phase version) and motor to be ordered separately.

TECHNICAL DATA

N.	PARTS*	MATERIALS
3	SUPPORT	PRECISION CAST AISI 304 STEEL
4	IMPELLER	TECHNOPOLYMER A WITH STEEL SHIM STAINLESS STEEL AISI 304 X5CrNi1810 - UNI 6900/71
6	DIFFUSER	TECHNOPOLYMER A
7	SHAFT WITH COUPLING	STAINLESS STEEL AISI 304 X5CrNi1810 - UNI 6900/71
18	IMPELLER LOCK NUT	STAINLESS STEEL
39	CABLE SHEATH	STAINLESS STEEL AISI 304 X5CrNi1810 - UNI 6900/71
42	FILTER	STAINLESS STEEL
49	VALVE	STAINLESS STEEL AISI 304 X5CrNi1810 - UNI 6900/71
54	MOTOR	STAINLESS STEEL AISI 304 X5CrNi1810 - UNI 6900/71
55	SPACER	TECHNOPOLYMER A
57	SUPPORT	TECHNOPOLYMER A
58	INTERMEDIATE BUSHING	STAINLESS STEEL AISI 304 X5CrNi1810 - UNI 6900/71
69	PUMP LINING	STAINLESS STEEL AISI 304 X5CrNi1810 - UNI 6900/71
98	DIFFUSER BODY	TECHNOPOLYMER A
117	UPPER HEAD	PRECISION CAST AISI 304 STEEL
191	FRONT ADJUSTMENT RING	ABRASION-PROOF SYNTHETIC MATERIAL
192	REAR ADJUSTMENT RING	ABRASION-PROOF SYNTHETIC MATERIAL
270	UPPER SHAFT GUIDE BUSHING	RUBBER
271	INTERMEDIATE SHAFT GUIDE BUSHING	ABRASION-PROOF SYNTHETIC MATERIAL

* In contact with the liquid

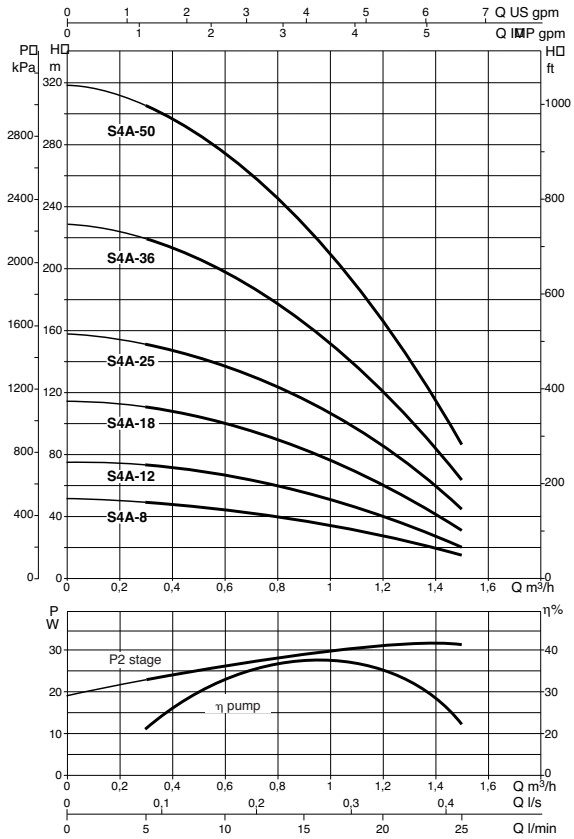
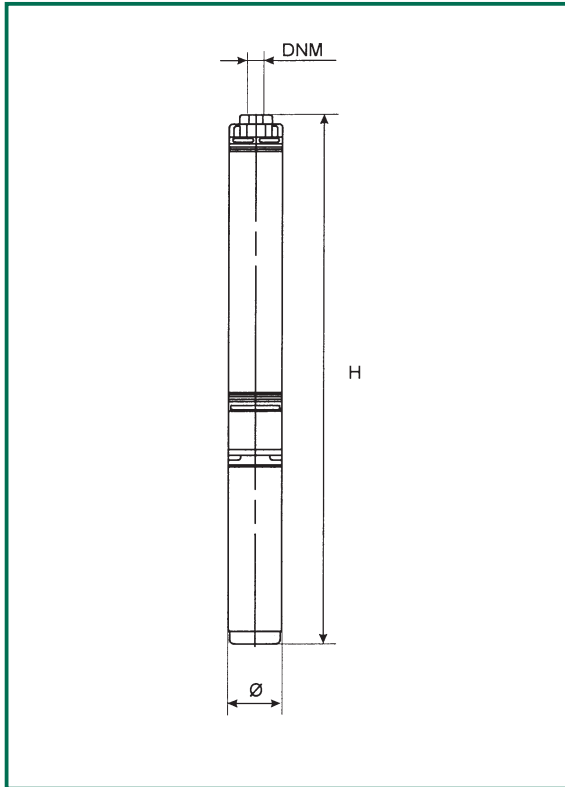


- Operating range: from 0,3 to 24 m³/h with head up to 320 metres;
- Liquid quality requirements: clean, free from solids or abrasive substances, non viscous, non aggressive, non crystallized, chemically neutral, close to the characteristics of water.
- Liquid temperature range: from 0°C to +40°C
- **Maximum quantity of sand:** **120 gr/m³**
- Installation: in wells and boreholes with a diameter of 4" or greater, tanks and cisterns, in a vertical position.
- Starts/hour: max. 20
- Cooling flow: 8 cm/sec.
- Special executions on request: other voltages and/or frequencies
- Accessories: see page 95-96.
- Power cable section: see table on page 96.
- On request, the CONTROL BOX HS for increasing the static torque may be supplied for the single-phase version.

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

S4A

Liquid temperature range: from 0°C to +40°C



MODEL	Ø (mm)	HEIGHT H Franklin motor		HEIGHT H Dab motor		DNM	PACKING DIMENSIONS (mm)			VOLUME m ³	WEIGHT Kg	
		M single-phase	T three-phase	M single-phase	T three-phase		L/A	L/B	H		M single-phase	T three-phase
S4A-8 M	97	565	—	559	—	1" 1/4 G	110	110	770	0,010	11,4	—
S4A-12 M / S4A-12 T	97	665	645	659	638	1" 1/4 G	110	110	770	0,010	13	12
S4A-18 M / S4A-18 T	97	813	785	808	779	1" 1/4 G	110	110	910	0,011	15,2	13,9
S4A-25 M / S4A-25 T	97	981	953	969	948	1" 1/4 G	110	110	1080	0,013	16	16,2
S4A-36 M / S4A-36 T	97	1291	1233	1295	1221	1" 1/4 G	120	120	1590	0,023	21,9	19,2
S4A-50 M / S4A-50 T	97	1599	1542	1636	1563	1" 1/4 G	120	120	1920	0,028	24,8	22,5

MODEL	ELECTRICAL DATA			HYDRAULIC DATA (n ≈ 2850 1/min)						
	VOLTAGE 50 Hz	P2 NOMINAL		Q m ³ /h	0	0,3	0,6	0,9	1,2	1,5
		kW	HP							
S4A-8 M ⁽¹⁾	1x230 V ~*	0,25	0,37	H (m)	51	48,6	44,4	37,3	26,8	13,7
S4A-12 M	1x230 V ~*	0,37	0,5		76,5	72,9	66,6	55,9	40,2	20,5
S4A-12 T	3x400 V ~**	0,37	0,5		76,5	72,9	66,6	55,9	40,2	20,5
S4A-18 M	1x230 V ~*	0,55	0,75		114,8	109,3	99,8	84	60,3	30,8
S4A-18 T	3x400 V ~**	0,55	0,75		114,8	109,3	99,8	84	60,3	30,8
S4A-25 M	1x230 V ~*	0,75	1		159,4	151,8	138,7	116,5	83,7	42,7
S4A-25 T	3x400 V ~**	0,75	1		159,4	151,8	138,7	116,5	83,7	42,7
S4A-36 M	1x230 V ~*	1,1	1,5		229,5	218,6	200	167,8	120,6	61,6
S4A-36 T	3x400 V ~**	1,1	1,5		229,5	218,6	200	167,8	120,6	61,6
S4A-50 M	1x230 V ~*	1,5	2		318,8	303,7	277,4	233,1	167,5	85,5
S4A-50 T	3x400 V ~**	1,5	2		318,8	303,7	277,4	233,1	167,5	85,5

* 1x220-230 V ~ for Franklin motor.

** 3x230 V ~ available on request.

⁽¹⁾ Dab motor: P2(kW) = 0,37 and P2(HP) = 0,5

