

Construction

Submersible borehole pumps for 6" wells (DN 150 mm), 8" (DN 200 mm) and 10" (DN 250 mm), with stages in cast iron or in bronze, on request.

Impellers: - mixed flow impellers.

Connection: - screwed connection ISO 228 for 6SDS;
- flange with counter-flange for welding for 8SDS and 10SDS

Delivery casing with built-in non-return valve.

Applications

For water supply.
For civil and industrial applications.
For fire fighting applications.
For irrigation.

Operating conditions

Liquid temperature up to a 25 °C.
Max. sand quantity into the water: 150 g/m³ (300 g/m³ high percentage of solids and sand).
Continuous duty.

Rewindable motor CS, CS-R series

2-pole induction motor, 50 Hz (n ≈ 2900 rpm).
With water wetted winding in rewindable execution.
Sized for connection to the pumps according to NEMA Standards.
Standard voltages:
- three-phase 400 V; 400/690 V.
Voltage tolerance : +6% / -10%.

In order to limit both current and torque at each starting, for rated motor powers equal to or higher than 7.5kW, one of the following types of starting is necessary: star/delta, soft starter, stator impedance or autotransformer.

Operating conditions motor

Motor	Max. Liquid temperature	Cooling: minimum flow velocity	Max. starts per hour	Motor P2
6CS-R	30 °C	0,1 m/s	15	4÷11 kW
		0,2 m/s	15	13÷15 kW
	25 °C	0,2 m/s	15	18,5 kW
		0,2 m/s	13	22÷30 kW
	40 °C	0,1 m/s	13	37 kW
		0,3 m/s	6	45 kW
8CS-R	25 °C	0,3 m/s	10	30÷45 kW
			8	51÷75 kW
			6	92 kW
10CS	25 °C	0,50 m/s	10	all types

Insulation class E for 6-8" motors, PVC coated wire for 10" motors.

Motor suitable operation with frequency converter.
Protection IP 68.

Special features on request

- Other voltages.
- 60 Hz frequency.
- Other temperatures.
- Encapsulated motor **FK series**.

Designation

B 10 SDS 190 / 6

Bronze construction (on request)

Ø of the well in inches _____

Series _____

Stage identification _____

Number of stages _____

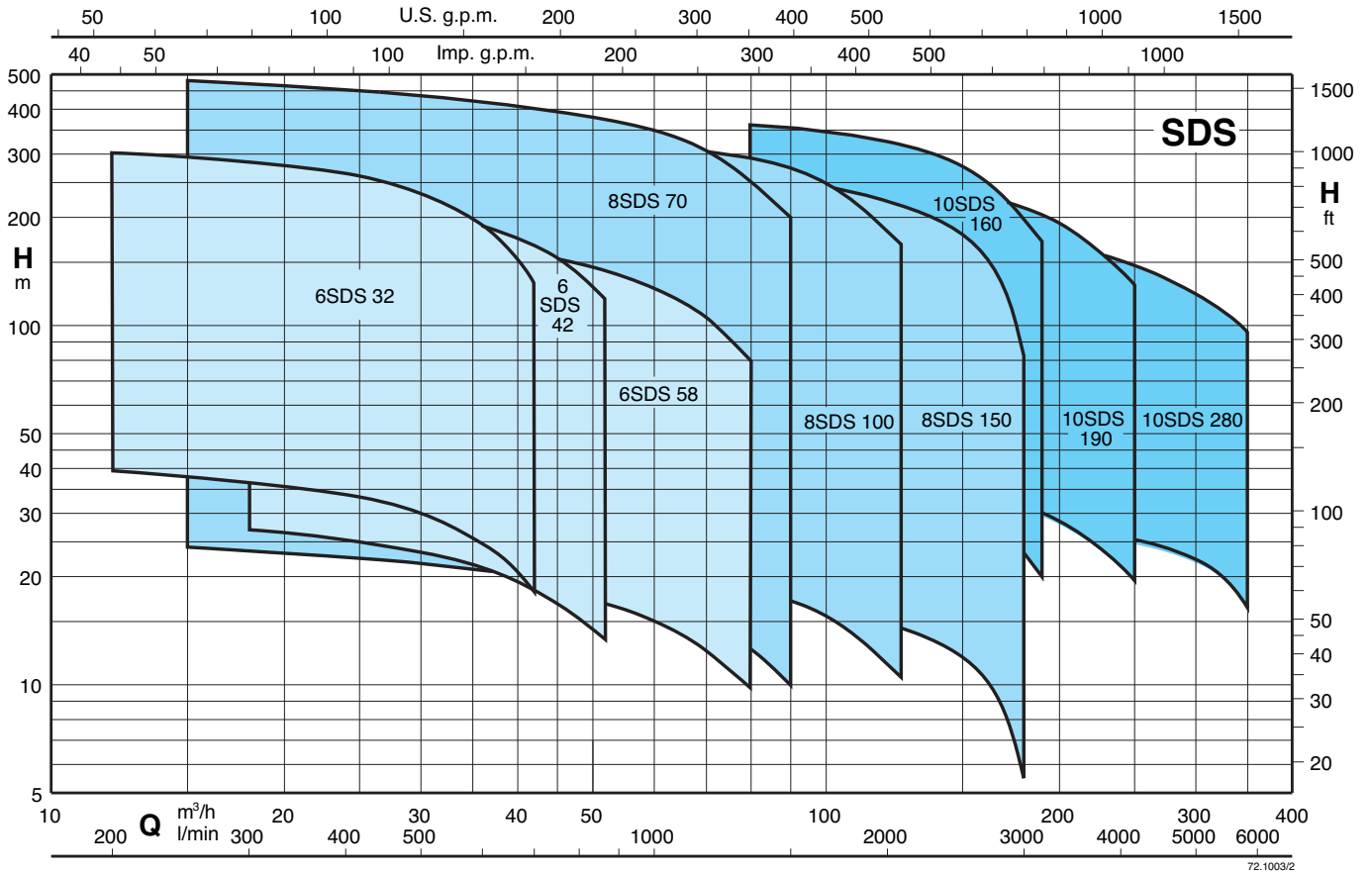
Materials

Components	Part Nr.	6, 8, 10SDS	B-6, B-8, B-10SDS
Stage casing	25.02	Cast iron GJL 200 EN 1561	Bronze G-Cu Sn 10 EN 1982
Diffuser	26.00		
Impeller	28.00		
Wear ring		Rubber (Bronze for 10SDS 190-280)	
Shaft	64.00	6SDS e 8SDS: Steel AISI F51duplex 10SDS Cr steel AISI 420	Cr-Ni-Mo steel AISI 316
Shaft sleeve	64.08	Brass with chromate surface treatment (only for 10SDS)	
Delivery casing	12.01	Cast iron GJL 200 EN 1561	Bronze G-Cu Sn 10 EN 1982
Suction lantern	32.02		
Bearing bush	12.03-12.30	Rubber	
Strainer	15.50	Cr-Ni steel AISI 304	
Screws		Cr-Ni steel AISI 304	

CS, CS-R Motor

Components	CS-R 6", 8", CS 10" standard	I-CS-R 6", 8", I-CS 10" AISI 316
External frame	AISI 304 (AISI 316Ti for 10")	Cr-Ni-Mo steel AISI 316 Ti
Motor flange	Cast iron GJL 200 EN 1561	Cr-Ni-Mo steel AISI 316
Shaft end	Steel AISI 431 (AISI 329 for 10")	AISI 316 (AISI 630 from 30 to 93kW) (AISI 429 for 10")
Thrust bearing	Oscillating pads	Oscillating pads
Bushings	Graphite (Bronze for 8" motor)	Graphite (Bronze for 8" motor)

Coverage chart $n \approx 2900$ rpm

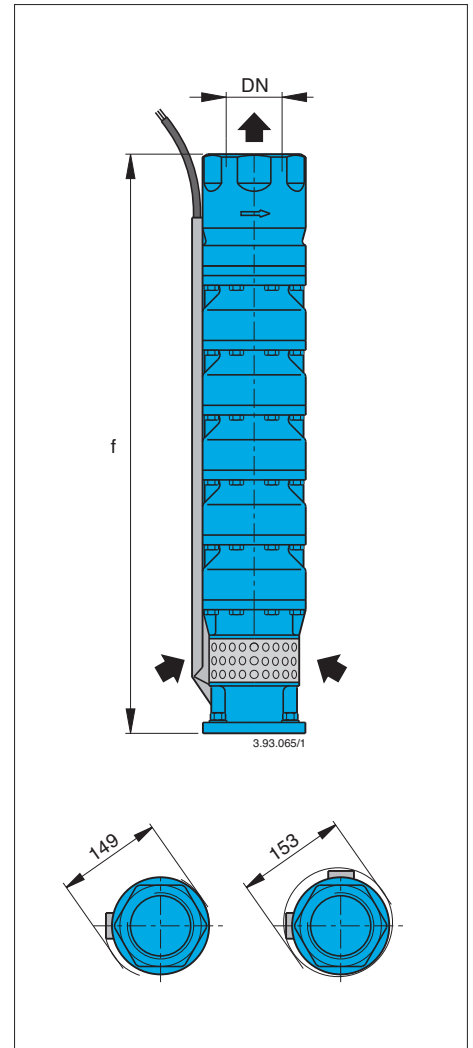
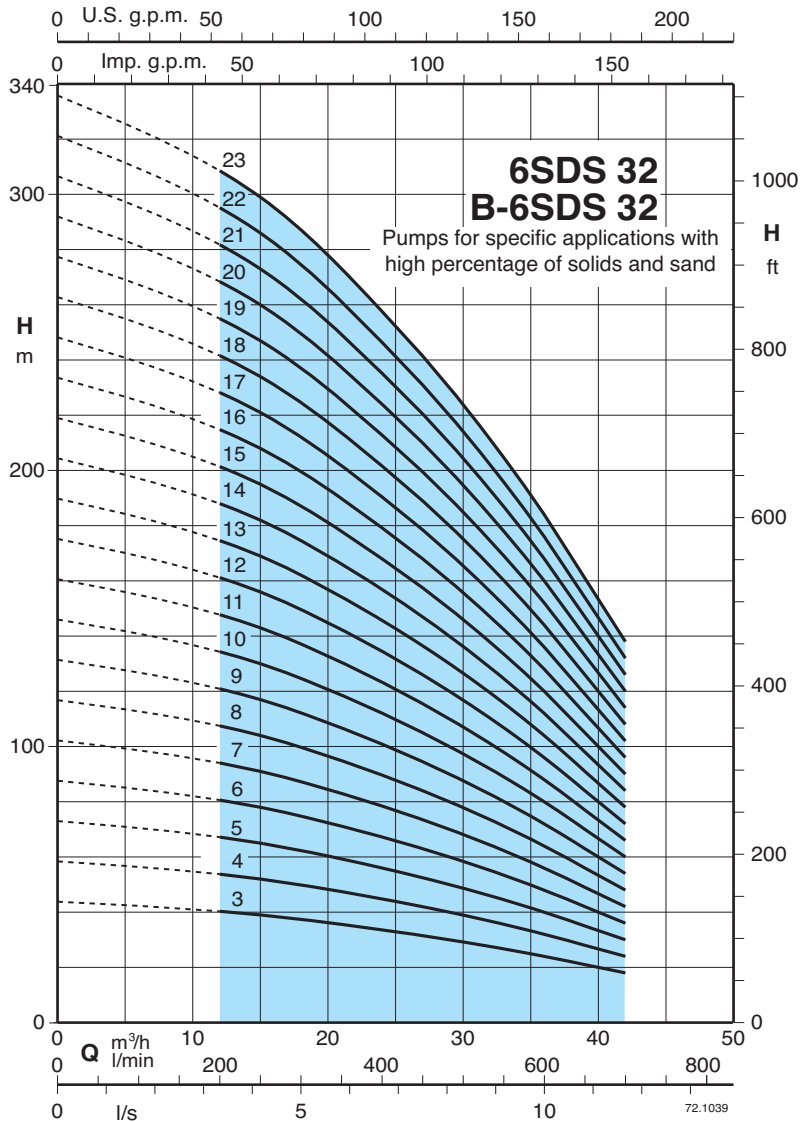


6SDS 32

Submersible borehole pumps for 6" wells



Characteristic curves, performance $n \approx 2900$ rpm, dimensions and weights



3 ~	P ₂		Q	n ≈ 2900 rpm											
	kW	HP		H											
				m											
6SDS 32/3 - B-6SDS 32/3	4	5,5		39	37	35,5	33,5	31,5	30	26,5	24	21	18		
6SDS 32/4 - B-6SDS 32/4	5,5	7,5		52	49	47	45	42	39,5	35,5	32	28	24		
6SDS 32/5 - B-6SDS 32/5	7,5	10		65	61,5	59	56	52,5	49,5	44,5	40	35	30		
6SDS 32/6 - B-6SDS 32/6	7,5	10		78	74	71	67	63	59,5	53,5	48	42	36		
6SDS 32/7 - B-6SDS 32/7	9,2	12,5		92	86	82,5	78,5	73,5	69	62	56	49	42		
6SDS 32/8 - B-6SDS 32/8	11	15		105	98,5	94,5	89,5	84	79	71	64	56	48		
6SDS 32/9 - B-6SDS 32/9	13 (15)	17,5 (20)		118	111	106	101	94,5	89	80	72	63	54		
6SDS 32/10 - B-6SDS 32/10	13 (15)	17,5 (20)		131	123	118	112	105	99	89	80	70	60		
6SDS 32/11 - B-6SDS 32/11	15	20		144	135	130	123	115	109	98	88	77	66		
6SDS 32/12 - B-6SDS 32/12	15	20		157	147	141	134	126	119	107	96	84	72		
6SDS 32/13 - B-6SDS 32/13	18,5	25		170	160	153	145	136	129	116	104	91	78		
6SDS 32/14 - B-6SDS 32/14	18,5	25		183	172	165	157	147	138	124	112	98	84		
6SDS 32/15 - B-6SDS 32/15	22	30		196	184	177	168	157	148	133	120	105	90		
6SDS 32/16 - B-6SDS 32/16	22	30		209	197	189	179	168	158	142	128	112	96		
6SDS 32/17 - B-6SDS 32/17	22	30		223	209	200	190	178	168	151	136	119	102		
6SDS 32/18 - B-6SDS 32/18	26 (30)	35 (40)		236	221	212	201	189	178	160	144	126	108		
6SDS 32/19 - B-6SDS 32/19	26 (30)	35 (40)		246	234	224	213	199	188	169	152	133	114		
6SDS 32/20 - B-6SDS 32/20	26 (30)	35 (40)		262	246	236	224	210	198	178	160	140	120		
6SDS 32/21 - B-6SDS 32/21	26 (30)	35 (40)		275	258	248	235	220	208	187	168	147	126		
6SDS 32/22 - B-6SDS 32/22	30	40		288	270	259	246	231	218	196	176	154	132		
6SDS 32/23 - B-6SDS 32/23	30	40		301	283	271	257	241	228	205	184	161	138		

DN	f	6SDS	B-6SDS
	mm	kg	kg
G 3 ISO 228	686	30,5	35,5
	788	35,6	41,6
	890	41	49
	992	46	55
	1094	52,3	62,3
	1196	57	68
	1298	62,5	74,5
	1400	68,5	81,5
	1502	72,5	86,5
	1604	77,5	93,5
	1706	84	101
	1808	89	108
	1910	94,2	112
	2012	100	119
	2114	105	125
	2216	111	132
2318	116	139	
2420	122	145	
2522	127	151	
2624	132	157	
2726	137	164	

P₂ Rated motor power output

(...) FK motor rated power output

H Total head in m

Tolerances according to UNI EN ISO 9906:2012

