

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 _____

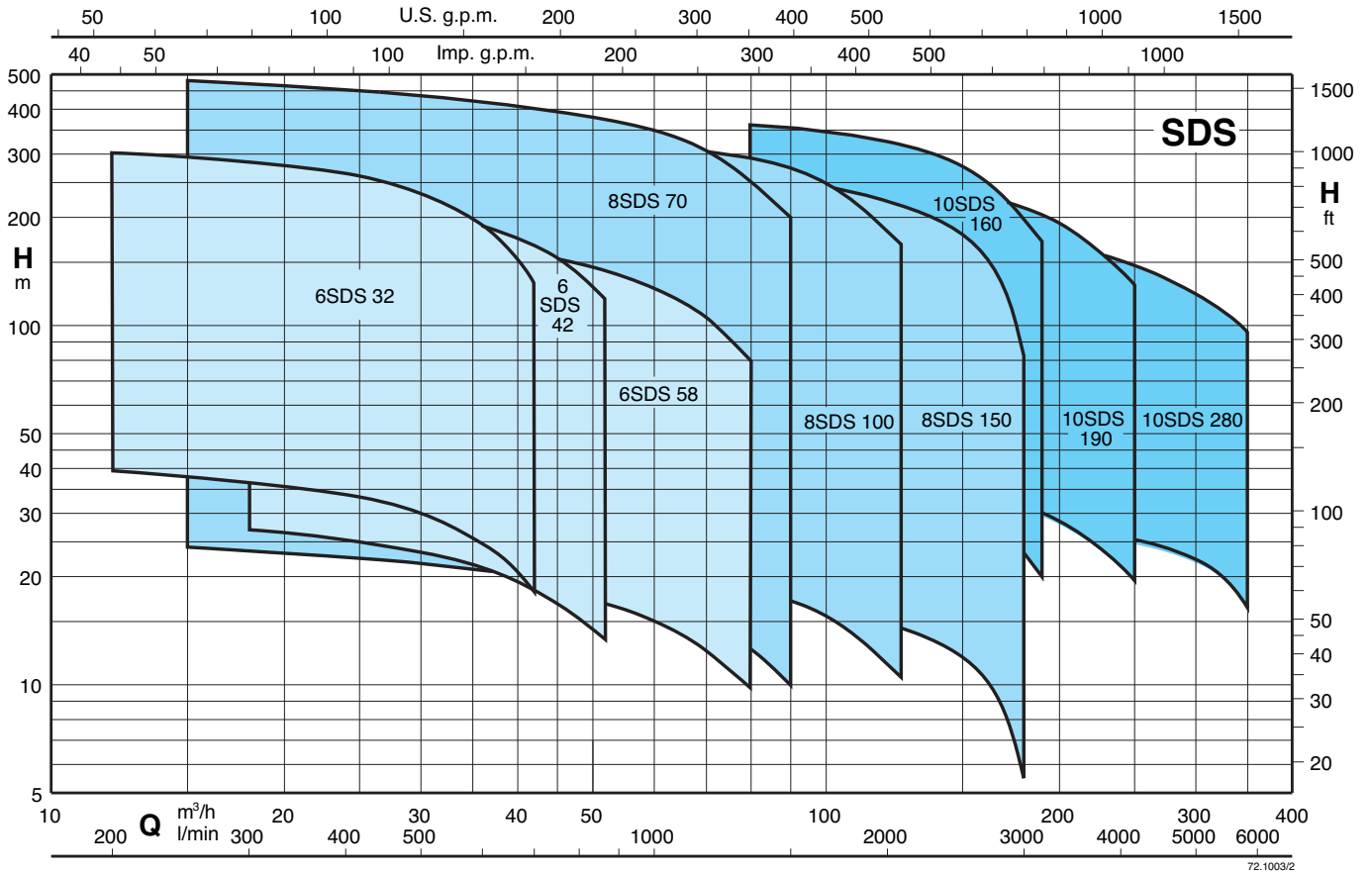
Materials

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

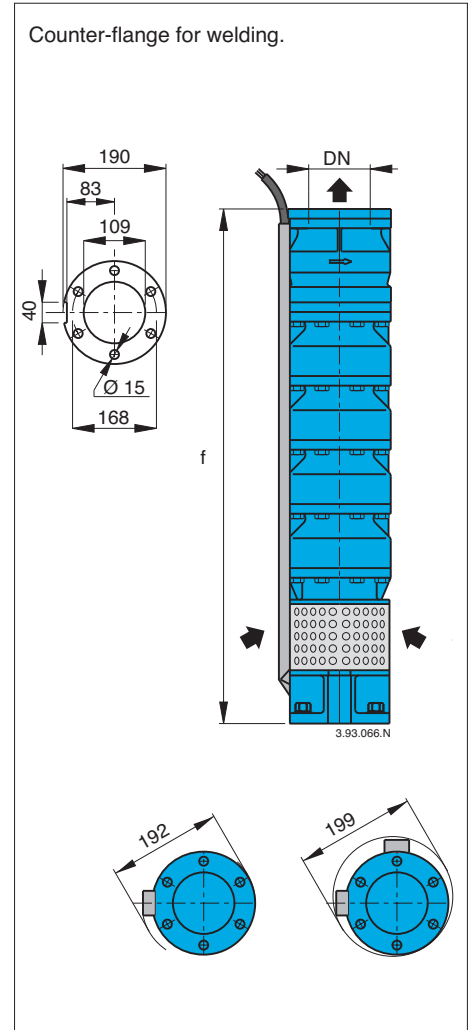
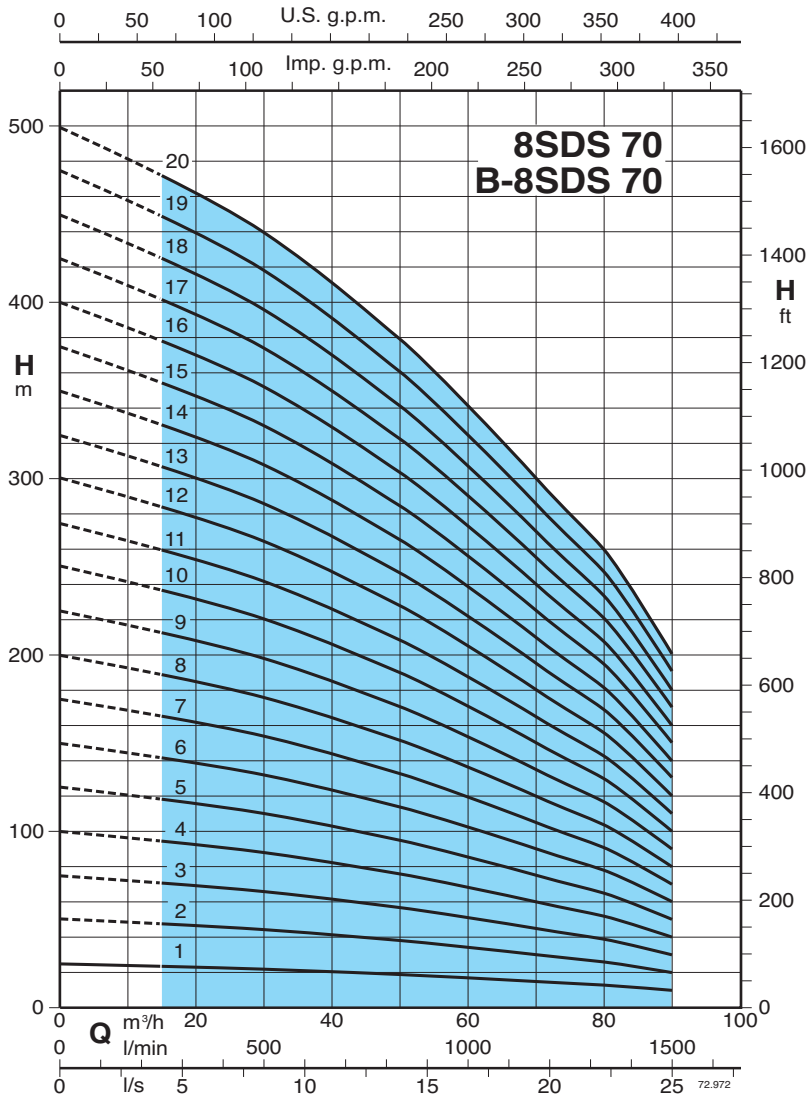


8SDS 70

Submersible borehole pumps for 8" wells



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



3 ~	P ₂		Q	n ≈ 2900 rpm																			
				H																			
	kW	HP		m³/h	15	20	30	40	50	60	70	80	90	l/min	250	333	500	666	833	1000	1166	1333	1500
8SDS 70/1 - B-8SDS 70/1	5,5	7,5	23,5	23	22	20,5	19	17	15	13	10												
8SDS 70/2 - B-8SDS 70/2	9,2	12,5	47	46	44	41	38	34	30	26	20												
8SDS 70/3 - B-8SDS 70/3	15	20	70,5	69	66	61,5	57	51	45	39	30												
8SDS 70/4 - B-8SDS 70/4	18,5	25	94	92	88	82	76	68	60	52	40												
8SDS 70/5 - B-8SDS 70/5	22	30	118	115	110	102	95	85	75	65	50												
8SDS 70/6 - B-8SDS 70/6	26 (30)	35 (40)	141	138	132	123	114	102	90	78	60												
8SDS 70/7 - B-8SDS 70/7	30	40	165	161	154	143	133	119	105	91	70												
8SDS 70/8 - B-8SDS 70/8	37	50	188	184	176	164	152	136	120	104	80												
8SDS 70/9 - B-8SDS 70/9	45	60	212	207	198	184	171	153	135	117	90												
8SDS 70/10 - B-8SDS 70/10	45	60	235	230	220	205	190	170	150	130	100												
8SDS 70/11 - B-8SDS 70/11	51 (55)	70 (75)	259	253	242	225	209	187	165	143	110												
8SDS 70/12 - B-8SDS 70/12	55	75	282	276	264	246	228	204	180	156	120												
8SDS 70/13 - B-8SDS 70/13	59 (75)	80 (100)	306	299	286	266	247	221	195	169	130												
8SDS 70/14 - B-8SDS 70/14	59 (75)	80 (100)	329	322	308	287	266	238	210	182	140												
8SDS 70/15 - B-8SDS 70/15	66 (75)	90 (100)	353	345	330	307	285	255	225	195	150												
8SDS 70/16 - B-8SDS 70/16	75	100	376	368	352	328	304	272	240	208	160												
8SDS 70/17 - B-8SDS 70/17	75	100	400	391	374	348	323	289	255	221	170												
8SDS 70/18 - B-8SDS 70/18	92	125	423	414	396	369	342	306	270	234	180												
8SDS 70/19 - B-8SDS 70/19	92	125	447	437	418	389	361	323	285	247	190												
8SDS 70/20 - B-8SDS 70/20	92	125	470	460	440	410	380	340	300	260	200												

DN	Motor		f	8SDS	B-8SDS
	CS-R	FK			
	mm	mm	mm	kg	kg
100	145 6"	137 6"	602	38	43
			734	49	55,5
			866	60	68
			998	71,5	80,5
			1130	82,5	93
	1262	93,5	106		
	1394	105	118		
	1526	116	131		
	1658	127	143		
	1790	138	156		
191 8"	196 8"	1922	149	168	
		2054	160	181	
		2186	171	194	
		2318	182	206	
		2450	193	219	
2582	205	231			
2714	216	244			
2846	227	256			
2978	238	269			
3110	249	281			

P₂ Rated motor power output

(...) FK motor rated power output

H Total head in m

Tolerances according to UNI EN ISO 9906:2012

