

4SR-F®

FLOATING IMPELLERS (PATENTED)



4" submersible pumps

 Clean water
(Maximum sand content 200 g/m³)

 Domestic use

 Civil use

 Industrial use

 Agricultural use

PERFORMANCE RANGE

- Flow rate up to **240 l/min** (14.4 m³/h)
- Head up to **447 m**

APPLICATION LIMITS

- Maximum liquid temperature **+35 °C**
- Maximum sand content **200 g/m³**
- **200 m** immersion limit
- Installation:
 - **vertical**
 - **horizontal**, with the following limits:
 - 4SR10G - 4SR13G - 4SR25G up to **16 stages**
 - 4SR33G - 4SR45G up to **9 stages**
- Starts/hour: **20** at regular intervals
- Minimum flow rate for motor cooling **8 cm/s**
- Continuous service **S1**

INSTALLATION AND USE

4" submersible pumps suitable for pumping clean water for many applications such as domestic supply, irrigation for greenhouses, farms and water systems for communities and pressurisation.

The hydraulic components, coupled to a high performance electric motor, make the 4SR pump extremely efficient in 4" category.

Economic savings on the use of water thanks to the high efficiency and the consequent reduced electricity consumption. The construction with floating impellers allows the pumping of water with a sand content of up to **200 g/m³**. Installation is possible in the vertical and horizontal position.

PATENTS

- Patent n. EP3123031, EP2419642

CONSTRUCTION AND SAFETY STANDARDS

ELECTRIC MOTOR

- Three-phase 380 V - 60 Hz – Single-phase 220 V - 60 Hz
- **Capacitor included in the packaging**

Length of power cable:

- **2 m** powers from 0.37 to 2.2 kW
- **3.6 m** powers from 3 to 7.5 kW.

EN 60335-1
IEC 60335-1
CEI 61-150

EN 60034-1
IEC 60034-1
CEI 2-3



OPTIONS AVAILABLE ON REQUEST

- Pump body with ISO 228/1 threaded ports
- Other voltages
- Kit of cooling jacket complete with filter and supports; recommended for powers from 2.2 kW to 7.5 kW

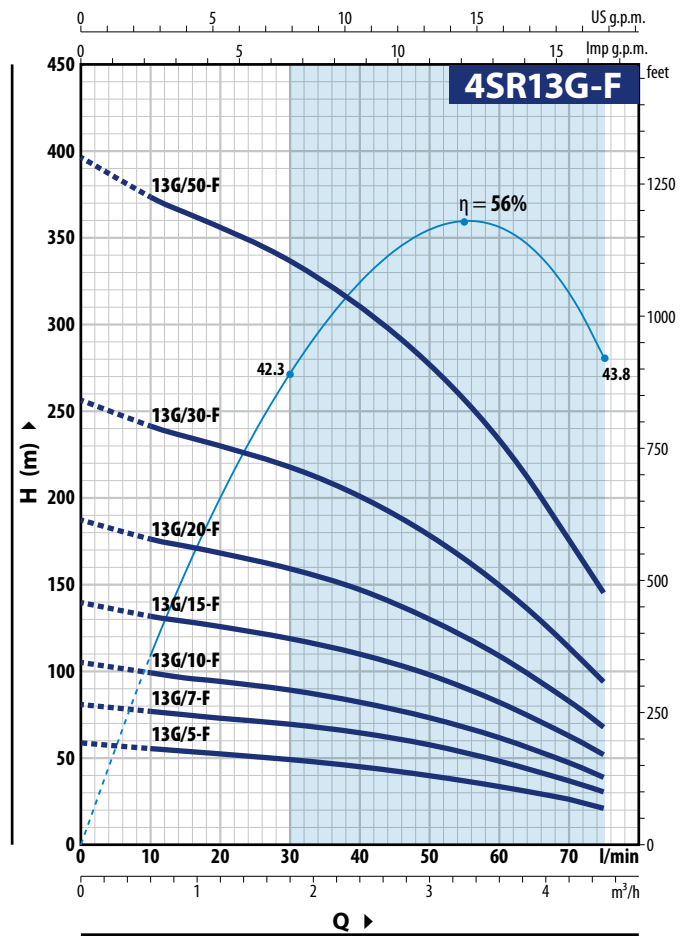
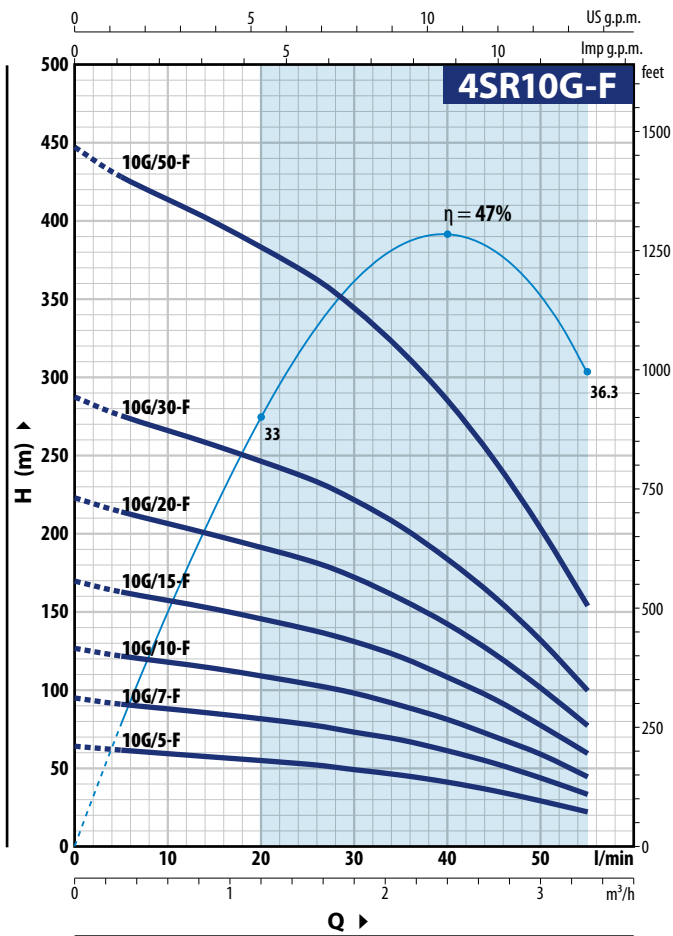


COOLING JACKET



CHARACTERISTIC CURVES AND PERFORMANCE DATA

60 Hz n= 3450 min⁻¹



4SR10G-F

MODEL		N. STAGES	POWER (P ₂)		Q m ³ /h l/min	H metres									
Single-phase	Three-phase		kW	HP		0	0.3	0.6	0.9	1.2	1.5	1.8	2.4	3.0	3.3
4SRm 10G/5 -F	4SR 10G/5 -F	6	0.37	0.50	0	5	10	15	20	25	30	40	50	55	
4SRm 10G/7 -F	4SR 10G/7 -F	9	0.55	0.75	64	61.5	59	57	55	52.5	49	41	29	22	
4SRm 10G/10 -F	4SR 10G/10 -F	12	0.75	1	96	92	89	86	82	78	74	61	43.5	33	
4SRm 10G/15 -F	4SR 10G/15 -F	16	1.1	1.5	128	123	118	114	110	105	98	82	58.5	44	
4SRm 10G/20 -F	4SR 10G/20 -F	21	1.5	2	170	163	158	152	146	140	131	109	78	59	
4SRm 10G/30 -F	4SR 10G/30 -F	27	2.2	3	224	214	207	200	192	183	172	143	102	77	
-	4SR 10G/50 -F	42	3.7	5	288	276	266	257	247	235	221	184	131	99	
					447	429	414	399	384	366	344	286	204	155	

4SR13G-F

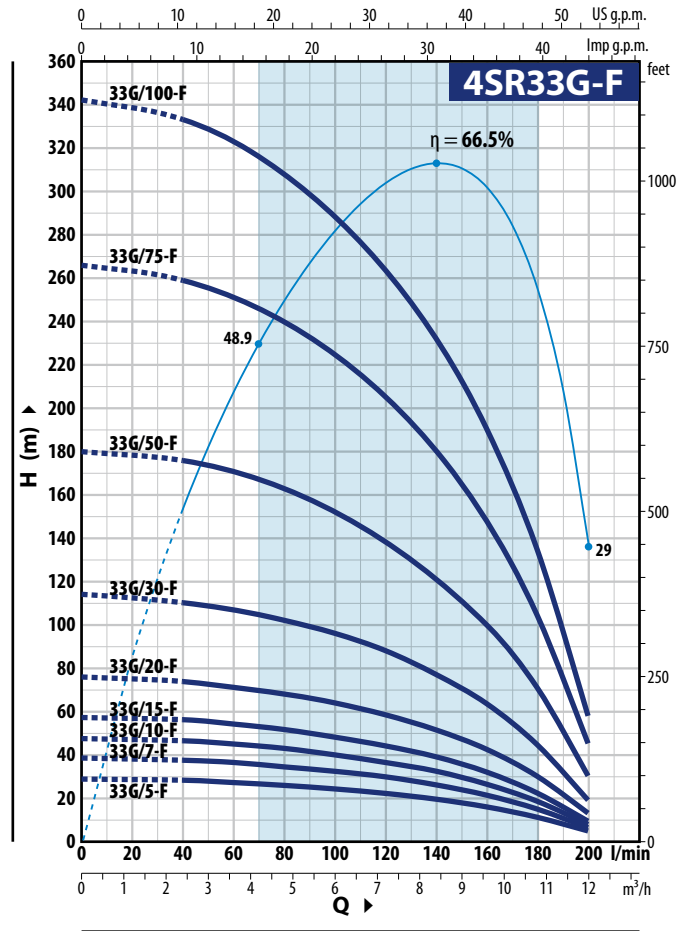
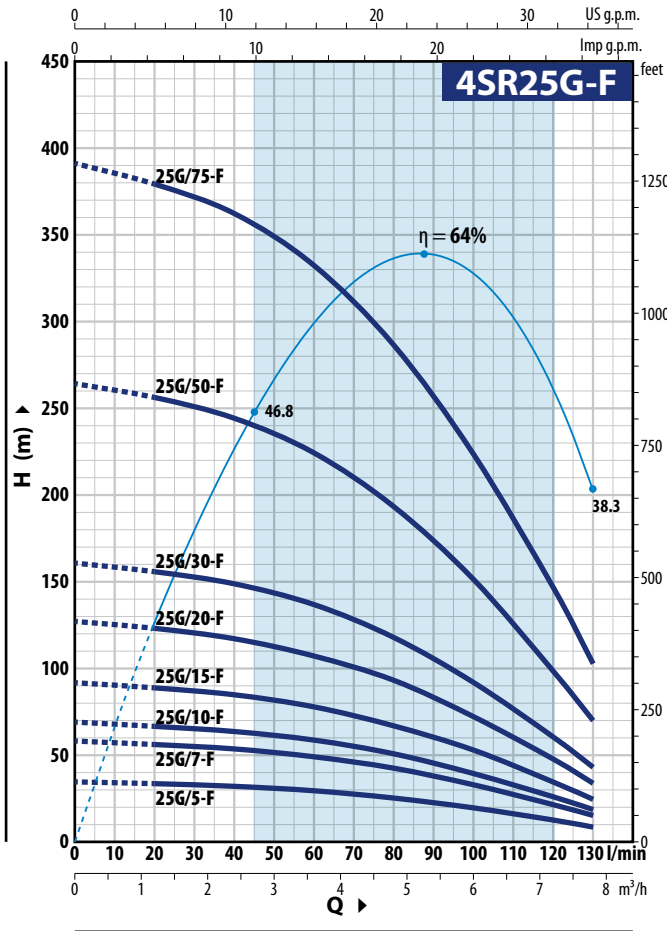
MODEL		N. STAGES	POWER (P ₂)		Q m ³ /h l/min	H metres									
Single-phase	Three-phase		kW	HP		0	0.6	0.9	1.2	1.8	2.4	3.0	3.6	4.2	4.5
4SRm 13G/5 -F	4SR 13G/5 -F	5	0.37	0.50	0	10	15	20	30	40	50	60	70	75	
4SRm 13G/7 -F	4SR 13G/7 -F	7	0.55	0.75	58,5	55	54	52,5	49,5	46	41	34	26	21,5	
4SRm 13G/10 -F	4SR 13G/10 -F	9	0.75	1	82	77	75	74	69,5	64,5	57,5	48	36,5	30	
4SRm 13G/15 -F	4SR 13G/15 -F	12	1.1	1.5	105	99	97	95	89	83	74	61,5	47	38,5	
4SRm 13G/20 -F	4SR 13G/20 -F	16	1.5	2	140	132	129	126	119	110	98	82	62,5	51,5	
4SRm 13G/30 -F	4SR 13G/30 -F	22	2.2	3	187	176	172	168	159	147	131	110	83	68,5	
-	4SR 13G/50 -F	34	3.7	5	257	242	237	231	219	202	180	151	114	94	
					398	375	366	357	338	313	278	233	177	145	

Q = Flow rate H = Total manometric head

Tolerance of characteristic curves in compliance with EN ISO 9906 Grade 3B.

CHARACTERISTIC CURVES AND PERFORMANCE DATA

60 Hz n = 3450 min⁻¹



4SR25G-F

MODEL		N. STAGES	POWER (P ₂)		Q m ³ /h l/min	H metres							
Single-phase	Three-phase		kW	HP		0	1.2	2.4	3.6	4.8	6.0	7.2	7.8
4SRm 25G/5 -F	4SR 25G/5 -F	3	0.37	0.50	0	20	40	60	80	100	120	130	
4SRm 25G/7 -F	4SR 25G/7 -F	5	0.55	0.75	34.5	33.5	32	29.5	25.4	19.8	13	9	
4SRm 25G/10-F	4SR 25G/10-F	6	0.75	1	58	56	53.5	49	42.5	33	21.6	15.5	
4SRm 25G/15-F	4SR 25G/15-F	8	1.1	1.5	69.5	67	64	59	51	39.5	26	18.5	
4SRm 25G/20-F	4SR 25G/20-F	11	1.5	2	92	90	85	78	67.5	53	34.5	24.5	
4SRm 25G/30-F	4SR 25G/30-F	14	2.2	3	127	123	118	108	93	73	47.5	33.5	
-	4SR 25G/50-F	23	3.7	5	162	157	150	137	118	93	60.5	43	
-	4SR 25G/75-F	34	5.5	7.5	266	258	246	226	195	152	100	70.5	
					393	381	363	333	288	225	147	104	

4SR33G-F

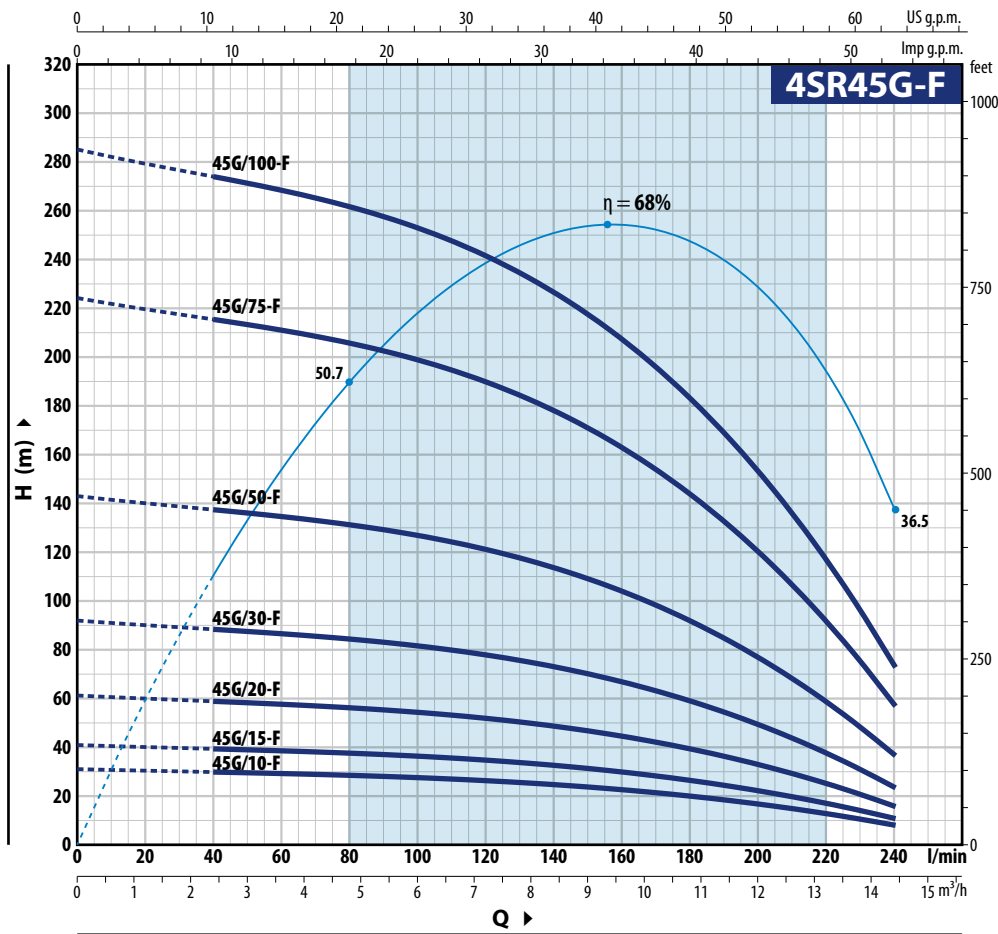
MODEL		N. STAGES	POWER (P ₂)		Q m ³ /h l/min	H metres									
Single-phase	Three-phase		kW	HP		0	2.4	3.6	4.8	6.0	7.2	8.4	9.6	10.8	12.0
4SRm 33G/5 -F	4SR 33G/5 -F	3	0.37	0.50	0	40	60	80	100	120	140	160	180	200	
4SRm 33G/7 -F	4SR 33G/7 -F	4	0.55	0.75	28.5	28	26.8	25.7	24.1	22.1	19.4	15.9	11.1	5	
4SRm 33G/10-F	4SR 33G/10-F	5	0.75	1	38	37	36	34	32	29.5	25.9	21.2	14.9	6.5	
4SRm 33G/15-F	4SR 33G/15-F	6	1.1	1.5	47.5	46.5	44.5	43	40	37	32.5	26.5	18.6	8	
4SRm 33G/20-F	4SR 33G/20-F	8	1.5	2	57	55.5	53.5	51.5	48	44	39	32	22.3	9.5	
4SRm 33G/30-F	4SR 33G/30-F	12	2.2	3	76	74	72	68.5	64.5	59	52	42.5	29.5	13	
-	4SR 33G/50-F	19	3.7	5	114	111	107	103	96	88	78	63.5	44.5	19	
-	4SR 33G/75-F	28	5.5	7.5	181	176	170	162	153	140	123	101	70.5	30.5	
-	4SR 33G/100-F	36	7.5	10	267	259	251	239	225	206	182	148	104	45	
					343	333	322	308	289	265	233	191	134	57.5	

Q = Flow rate H = Total manometric head

Tolerance of characteristic curves in compliance with EN ISO 9906 Grade 3B.

CHARACTERISTIC CURVES AND PERFORMANCE DATA

60 Hz n = 3450 min⁻¹



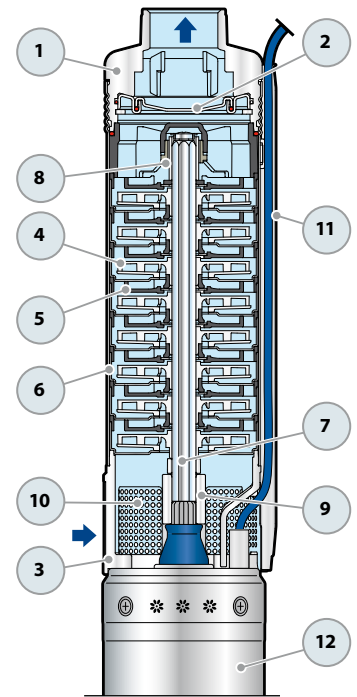
4SR45G-F

MODEL		N. STAGES	POWER (P ₂)		Q	H metres						
Single-phase	Three-phase		kW	HP		0	2.4	4.8	7.2	9.6	12.0	14.4
					l/min	0	40	80	120	160	200	240
4SRm 45G/10-F	4SR 45G/10 -F	3	0.75	1	H metres	30.5	29.5	28	25.9	22.2	16.4	7.5
4SRm 45G/15-F	4SR 45G/15 -F	4	1.1	1.5		41	39	37.5	34.5	29.5	21.8	10.5
4SRm 45G/20-F	4SR 45G/20 -F	6	1.5	2		61	59	56	52	44.5	32.5	15.5
4SRm 45G/30-F	4SR 45G/30 -F	9	2.2	3		92	88	84	78	66.5	49	23
-	4SR 45G/50 -F	14	3.7	5		143	137	131	121	104	76	36
-	4SR 45G/75 -F	22	5.5	7.5		224	216	206	190	163	120	57
-	4SR 45G/100-F	28	7.5	10		286	274	262	242	207	153	72.5

Q = Flow rate H = Total manometric head

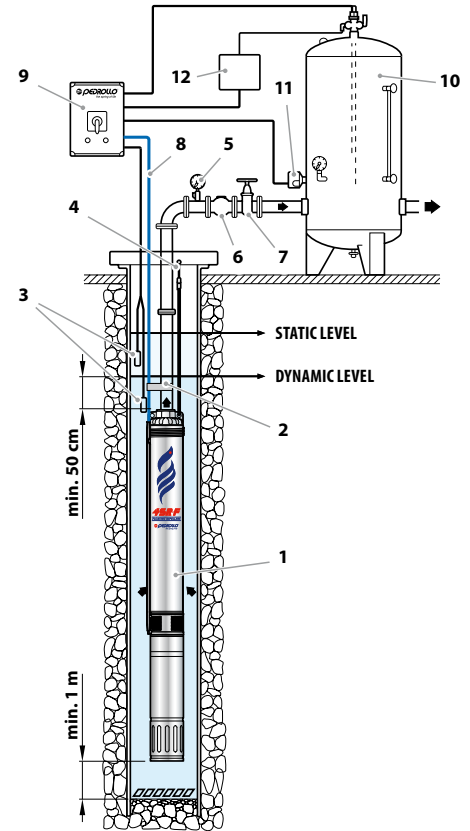
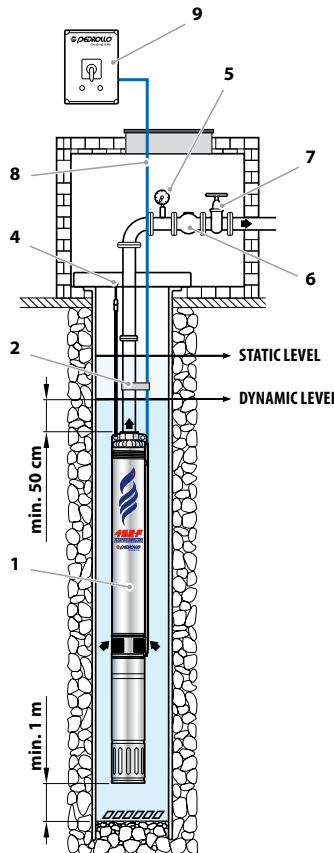
Tolerance of characteristic curves in compliance with EN ISO 9906 Grade 3B.

POS. COMPONENT	CONSTRUCTION CHARACTERISTICS
1 DELIVERY BODY	Precision cast stainless steel AISI 304 complete with threaded delivery port in compliance with NPT ANSI B 1.20.1
2 NON-RETURN VALVE	Stainless steel AISI 304
3 MOTOR BRACKET	Stainless steel AISI 304, in compliance with NEMA standards
4 IMPELLER	Delrin
5 DIFFUSER	Noryl
6 STAGE CASING	Stainless steel AISI 304
7 PUMP SHAFT	Stainless steel AISI 304
8 PUMP BEARINGS	Special technopolymer housing with stainless steel AISI 316, chrome oxide coated, sand resistant shaft bushing
9 DRIVE COUPLING	Stainless steel AISI 316L up to 2.2 kW; stainless steel AISI 304 for higher powers
10 FILTER	Stainless steel AISI 304
11 CABLE COVER	Stainless steel AISI 304
12 MOTOR 4"	4PD = rewindable oil filled submersible motor



STANDARD INSTALLATION

- 1) Submersible pump
- 2) Power cable clamps
- 3) Level probes; prevent dry running
- 4) Bracket and anchorage cable
- 5) Pressure gauge
- 6) Non-return valve
- 7) Gate valve; for flow rate regulation
- 8) Power cable
- 9) Control box
- 10) Pressure vessel
- 11) Pressure switch
- 12) Electro valve/electro-compressor

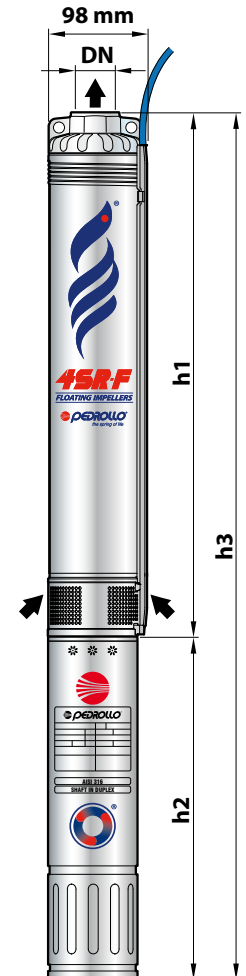


➔ The 4SR-F series pumps should be installed in boreholes of at least 4" (100 mm) in diameter. The pump should be lowered into the borehole, by means of the delivery pipe, to such a depth (min. 50 cm and at least one metre from the bottom) that it is completely immersed during operation when the level of water in the borehole may reduce. It is good practice to secure the pump by attaching a stainless steel cable to the anchorage points present on the delivery body.

DIMENSIONS AND WEIGHT (pumps paired with 4PD submersible motor)

MODEL	DN	N. STAGES	DIMENSIONS mm			kg
			h1	h2	h3	
Single-phase						
4SRm 10G/5 -F - PD		6	283	331	614	10.8
4SRm 10G/7 -F - PD		9	343	331	674	11.2
4SRm 10G/10 -F - PD		12	402	356	758	13.0
4SRm 10G/15 -F - PD		16	508	396	904	16.0
4SRm 10G/20 -F - PD		21	608	437	1045	19.4
4SRm 10G/30 -F - PD		27	727	492	1219	23.7
4SRm 13G/5 -F - PD		5	263	331	594	10.6
4SRm 13G/7 -F - PD		7	303	331	634	10.9
4SRm 13G/10 -F - PD	1 1/4" NPT	9	343	356	699	12.5
4SRm 13G/15 -F - PD		12	402	396	798	15.0
4SRm 13G/20 -F - PD		16	508	437	945	17.9
4SRm 13G/30 -F - PD		22	627	492	1119	22.2
4SRm 25G/5 -F - PD		3	238	331	569	10.2
4SRm 25G/7 -F - PD		5	288	331	619	10.5
4SRm 25G/10 -F - PD		6	313	356	669	12.1
4SRm 25G/15 -F - PD		8	363	396	759	14.3
4SRm 25G/20 -F - PD		11	437	437	874	16.9
4SRm 25G/30 -F - PD		14	538	492	1030	20.8
4SRm 33G/5 -F - PD		3	258	331	589	10.2
4SRm 33G/7 -F - PD		4	289	331	620	10.4
4SRm 33G/10 -F - PD		5	320	356	676	12.1
4SRm 33G/15 -F - PD		6	352	396	748	14.0
4SRm 33G/20 -F - PD	2" NPT	8	415	437	852	16.3
4SRm 33G/30 -F - PD		12	566	492	1058	20.5
4SRm 45G/10 -F - PD		3	258	356	614	11.5
4SRm 45G/15 -F - PD		4	289	396	685	13.5
4SRm 45G/20 -F - PD		6	352	437	789	15.5
4SRm 45G/30 -F - PD		9	446	492	938	19.8

MODEL	DN	N. STAGES	DIMENSIONS mm			kg
			h1	h2	h3	
Three-phase						
4SR 10G/5 -F - PD		6	283	331	614	10.8
4SR 10G/7 -F - PD		9	343	331	674	11.2
4SR 10G/10 -F - PD		12	402	356	758	13.0
4SR 10G/15 -F - PD		16	508	371	879	15.2
4SR 10G/20 -F - PD		21	608	396	1004	17.9
4SR 10G/30 -F - PD		27	727	437	1164	20.5
4SR 10G/50 -F - PD		42	1123	505	1628	25.6
4SR 13G/5 -F - PD		5	263	331	594	10.6
4SR 13G/7 -F - PD		7	303	331	634	10.9
4SR 13G/10 -F - PD	1 1/4" NPT	9	343	356	699	12.5
4SR 13G/15 -F - PD		12	402	371	774	14.2
4SR 13G/20 -F - PD		16	508	396	904	16.4
4SR 13G/30 -F - PD		22	627	437	1064	19.0
4SR 13G/50 -F - PD		34	964	505	1469	29.2
4SR 25G/5 -F - PD		3	238	331	569	10.2
4SR 25G/7 -F - PD		5	288	331	619	10.5
4SR 25G/10 -F - PD		6	313	356	669	12.1
4SR 25G/15 -F - PD		8	363	371	734	13.5
4SR 25G/20 -F - PD		11	437	396	833	15.4
4SR 25G/30 -F - PD		14	538	437	975	17.6
4SR 25G/50 -F - PD		23	762	505	1267	24.6
4SR 25G/75 -F - PD		34	1134	589	1723	34.5
4SR 33G/5 -F - PD	2" NPT	3	258	331	589	10.2
4SR 33G/7 -F - PD		4	289	331	620	10.4
4SR 33G/10 -F - PD		5	320	356	676	12.1
4SR 33G/15 -F - PD		6	352	371	723	13.2
4SR 33G/20 -F - PD		8	415	396	811	14.8
4SR 33G/30 -F - PD		12	566	437	1003	17.3
4SR 33G/50 -F - PD		19	786	505	1291	24.6
4SR 33G/75 -F - PD		28	1095	589	1684	32.5
4SR 33G/100 -F - PD		36	1418	800	2218	47.0
4SR 45G/10 -F - PD		3	258	356	614	11.5
4SR 45G/15 -F - PD		4	289	371	660	12.6
4SR 45G/20 -F - PD		6	352	396	748	14.0
4SR 45G/30 -F - PD		9	446	437	883	16.6
4SR 45G/50 -F - PD		14	629	505	1134	22.4
4SR 45G/75 -F - PD		22	907	589	1496	29.9
4SR 45G/100 -F - PD		28	1095	800	1895	41.1



DIMENSIONS AND WEIGHT (pump only)

MODEL	DN	N. STAGES	DIMENSIONS mm		kg
			h1	h	
4SR 10G/5 -F - HYD		6	283	286	3.5
4SR 10G/7 -F - HYD		9	343	346	3.9
4SR 10G/10 -F - HYD		12	402	405	4.4
4SR 10G/15 -F - HYD		16	508	511	5.5
4SR 10G/20 -F - HYD		21	608	611	7.4
4SR 10G/30 -F - HYD		27	727	730	8.5
4SR 10G/50 -F - HYD		42	1123	1126	8.8
4SR 13G/5 -F - HYD		5	263	266	3.3
4SR 13G/7 -F - HYD		7	303	306	3.6
4SR 13G/10 -F - HYD	1 1/4" NPT	9	343	346	3.9
4SR 13G/15 -F - HYD		12	402	405	4.7
4SR 13G/20 -F - HYD		16	508	511	5.8
4SR 13G/30 -F - HYD		22	627	630	7.0
4SR 13G/50 -F - HYD		34	964	967	12.9
4SR 25G/5 -F - HYD		3	238	241	3.0
4SR 25G/7 -F - HYD		5	288	291	3.3
4SR 25G/10 -F - HYD		6	313	316	3.5
4SR 25G/15 -F - HYD		8	363	366	4.0
4SR 25G/20 -F - HYD		11	437	440	4.8
4SR 25G/30 -F - HYD		14	538	541	5.6
4SR 25G/50 -F - HYD		23	762	765	8.2
4SR 25G/75 -F - HYD		34	1134	1137	13.8

MODEL	DN	N. STAGES	DIMENSIONS mm		kg
			h2	h	
4SR 33G/5 -F - HYD		3	258	261	2.9
4SR 33G/7 -F - HYD		4	289	292	3.2
4SR 33G/10 -F - HYD		5	320	323	3.5
4SR 33G/15 -F - HYD		6	352	355	3.7
4SR 33G/20 -F - HYD		8	415	418	4.2
4SR 33G/30 -F - HYD		12	566	569	5.3
4SR 33G/50 -F - HYD		19	786	789	8.0
4SR 33G/75 -F - HYD	2" NPT	28	1095	1098	11.4
4SR 33G/100 -F - HYD		36	1418	1421	17.3
4SR 45G/10 -F - HYD		3	258	261	2.9
4SR 45G/15 -F - HYD		4	289	292	3.2
4SR 45G/20 -F - HYD		6	352	355	3.7
4SR 45G/30 -F - HYD		9	446	449	4.5
4SR 45G/50 -F - HYD		14	629	632	6.0
4SR 45G/75 -F - HYD		22	907	910	9.6
4SR 45G/100 -F - HYD		28	1095	1098	11.4

