

# 6SR

## 6" submersible pumps



### PERFORMANCE RANGE

- Flow rate up to **1000 l/min** (60 m<sup>3</sup>/h)
- Head up to **390 m**

### APPLICATION LIMITS

- Maximum liquid temperature **+35 °C**
- Maximum sand content **100 g/m<sup>3</sup>**
- **100 m** immersion limit
- Installation:
  - vertical
  - horizontal, with the following limits: up to **12 stages** or **11 kW**
- Starts/hour: 20 at regular intervals
- Minimum flow rate for motor cooling **16 cm/s** (0.5 m/s for 30 kW)
- Continuous service **S1**

### CONSTRUCTION AND SAFETY STANDARDS

#### ELECTRIC MOTOR

– Three-phase 400 V - 50 Hz

4 m long power cable

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



### CERTIFICATIONS



### INSTALLATION AND USE

Suitable for use with clean water with a sand content of no more than 100 g/m<sup>3</sup>. As a result of their high efficiency and reliability, they are suitable for use in civil, agricultural and industrial applications such as for the distribution of water in combination with pressure sets, for irrigation and for pressure boosting in fire-fighting sets, etc.

### OPTIONALS AVAILABLE ON REQUEST

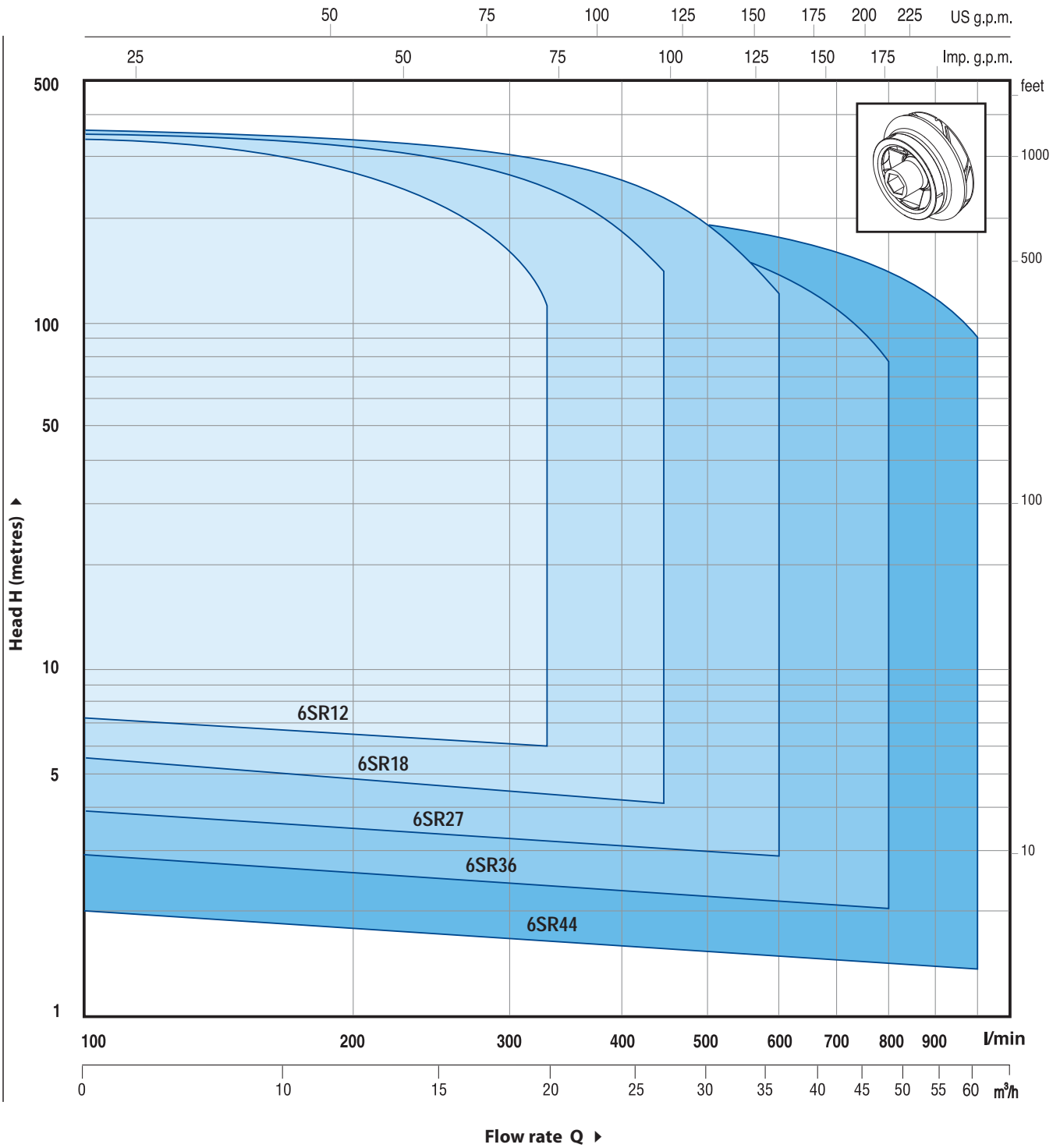
- 6SR-HYD pumps with double cable cover suitable for dual voltage 400/690 V (star/delta) motors from 11 kW to 30 kW
- Other voltages or 60 Hz frequency

### GUARANTEE

2 years subject to terms and conditions

**PERFORMANCE RANGE**

**50 Hz n= 2900 1/min**



**DESCRIPTION**

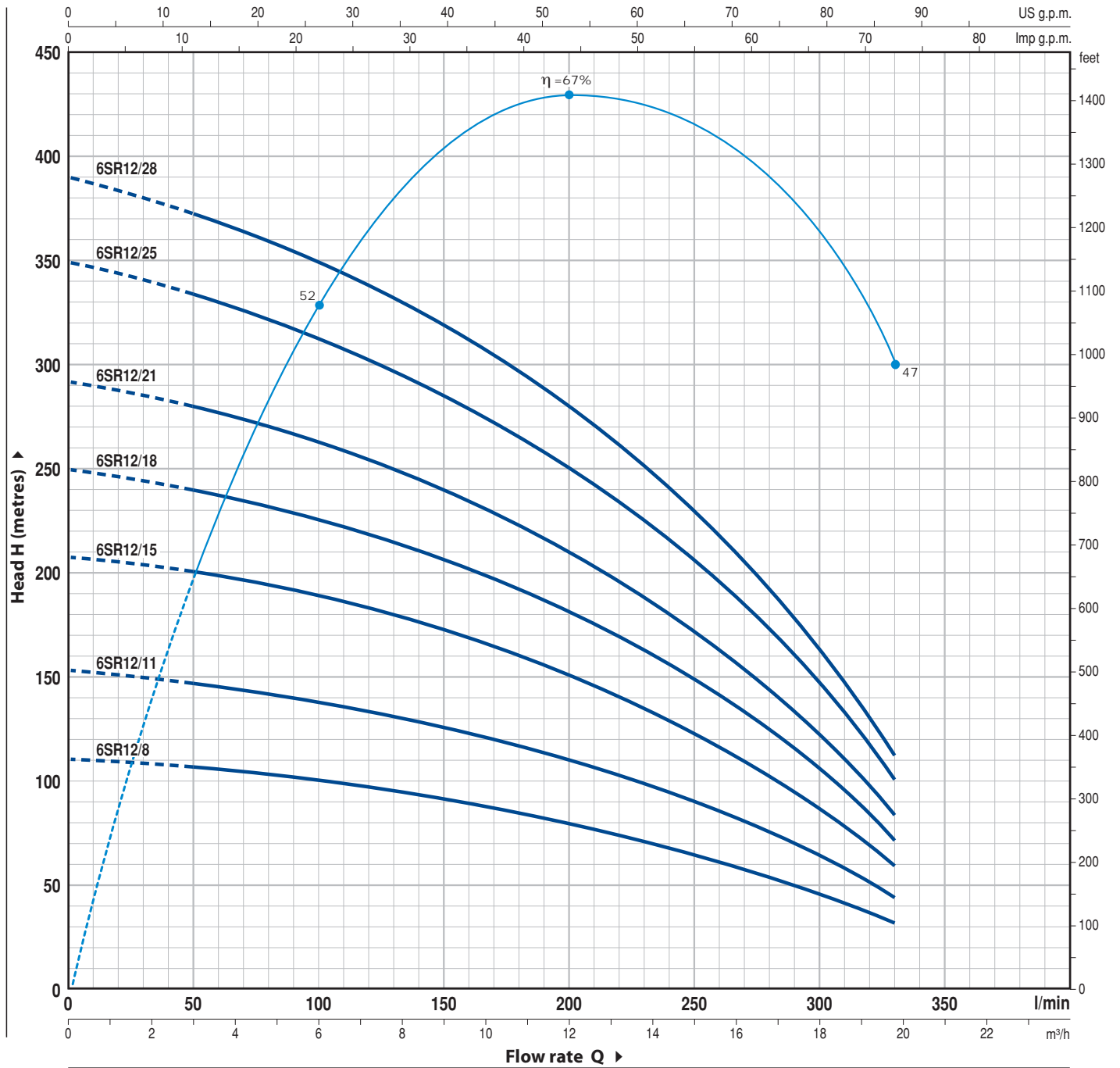
**6 SR 12 / 8 - PD or HYD**

- Borehole diameter in inches \_\_\_\_\_
- Series \_\_\_\_\_
- Flow rate in m³/h at the point of highest efficiency \_\_\_\_\_
- Number of stages \_\_\_\_\_
- PD:** pump with "PEDROLLO" motor \_\_\_\_\_
- HYD:** pump without motor \_\_\_\_\_

# 6SR12

## CHARACTERISTIC CURVES AND PERFORMANCE DATA

50 Hz n= 2900 1/min



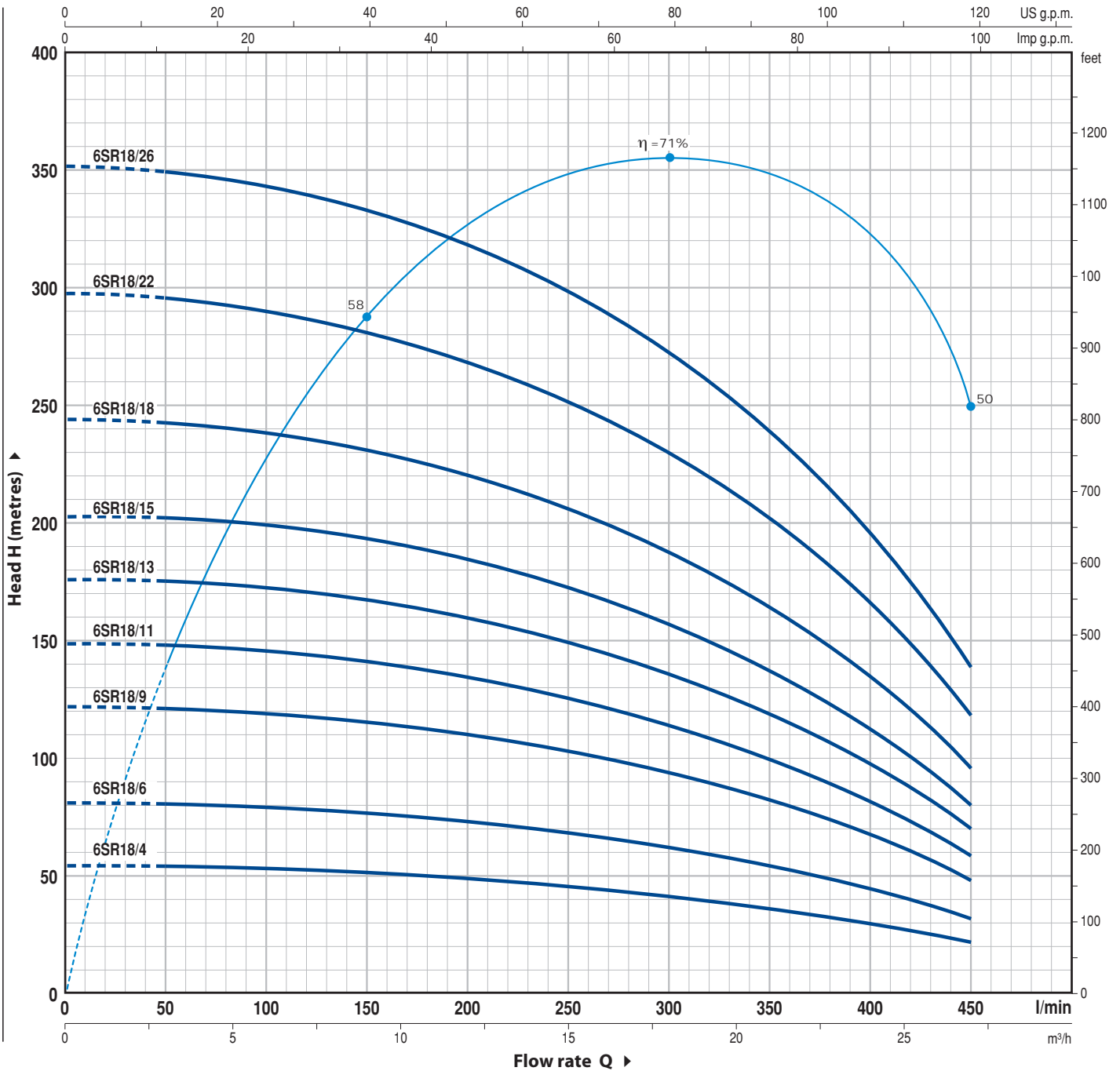
MODEL	POWER		Q	Flow rate										
	kW	HP		0	3.0	6.0	9.0	12.0	15.0	18.0	19.8			
Three-phase			l/min	0	50	100	150	200	250	300	330			
6SR12/8	4	5.5	H metres	111	106	100	91	80	66	47	32			
6SR12/11	5.5	7.5		153	146	138	125	110	91	65	44			
6SR12/15	7.5	10		208	199	189	171	150	124	88	60			
6SR12/18	9.2	12.5		250	239	225	205	180	149	106	72			
6SR12/21	11	15		292	279	263	239	210	174	124	84			
6SR12/25	13	17.5		349	331	313	285	250	206	147	100			
6SR12/28	15	20		390	371	350	319	280	231	165	112			

Q = Flow rate H = Total manometric head

Tolerance of characteristic curves in compliance with EN ISO 9906 App. A.

## CHARACTERISTIC CURVES AND PERFORMANCE DATA

50 Hz n= 2900 1/min



MODEL	POWER		Q	Flow rate												
	kW	HP		0	3	6	9	12	15	18	21	24	27			
Three-phase				0	50	100	150	200	250	300	350	400	450			
6SR18/4	4	5.5	H metres	54	53.8	53	51	49	46	42	37	30	22			
6SR18/6	5.5	7.5		81	80.5	79	77	74	69	63	55	45	32			
6SR18/9	7.5	10		122	121	119	116	111	103	94	83	68	48			
6SR18/11	9.2	12.5		149	148	145.5	141	135	126	115	101	83	59			
6SR18/13	11	15		176	175	172	167	160	149	136	120	98	70			
6SR18/15	13	17.5		203	202	199	193	185	172	157	138	113	80			
6SR18/18	15	20		244	242	238	231	221	206	188	165	135	96			
6SR18/22	18.5	25		298	296	291	282	270	252	230	202	165	118			
6SR18/26	22	30		352	350	344	334	320	298	272	239	195	139			

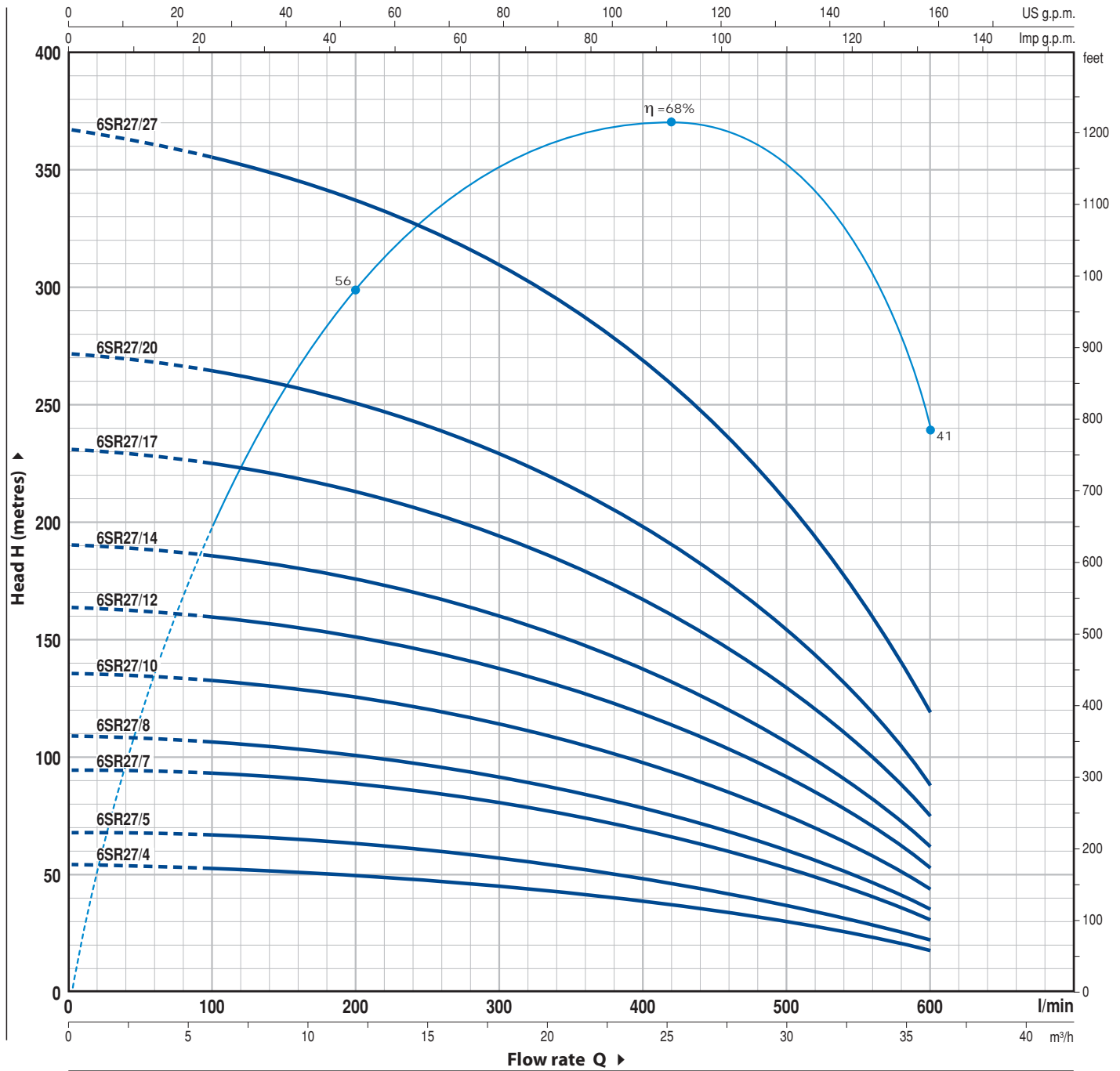
Q = Flow rate H = Total manometric head

Tolerance of characteristic curves in compliance with EN ISO 9906 App. A.

# 6SR27

## CHARACTERISTIC CURVES AND PERFORMANCE DATA

50 Hz n= 2900 1/min



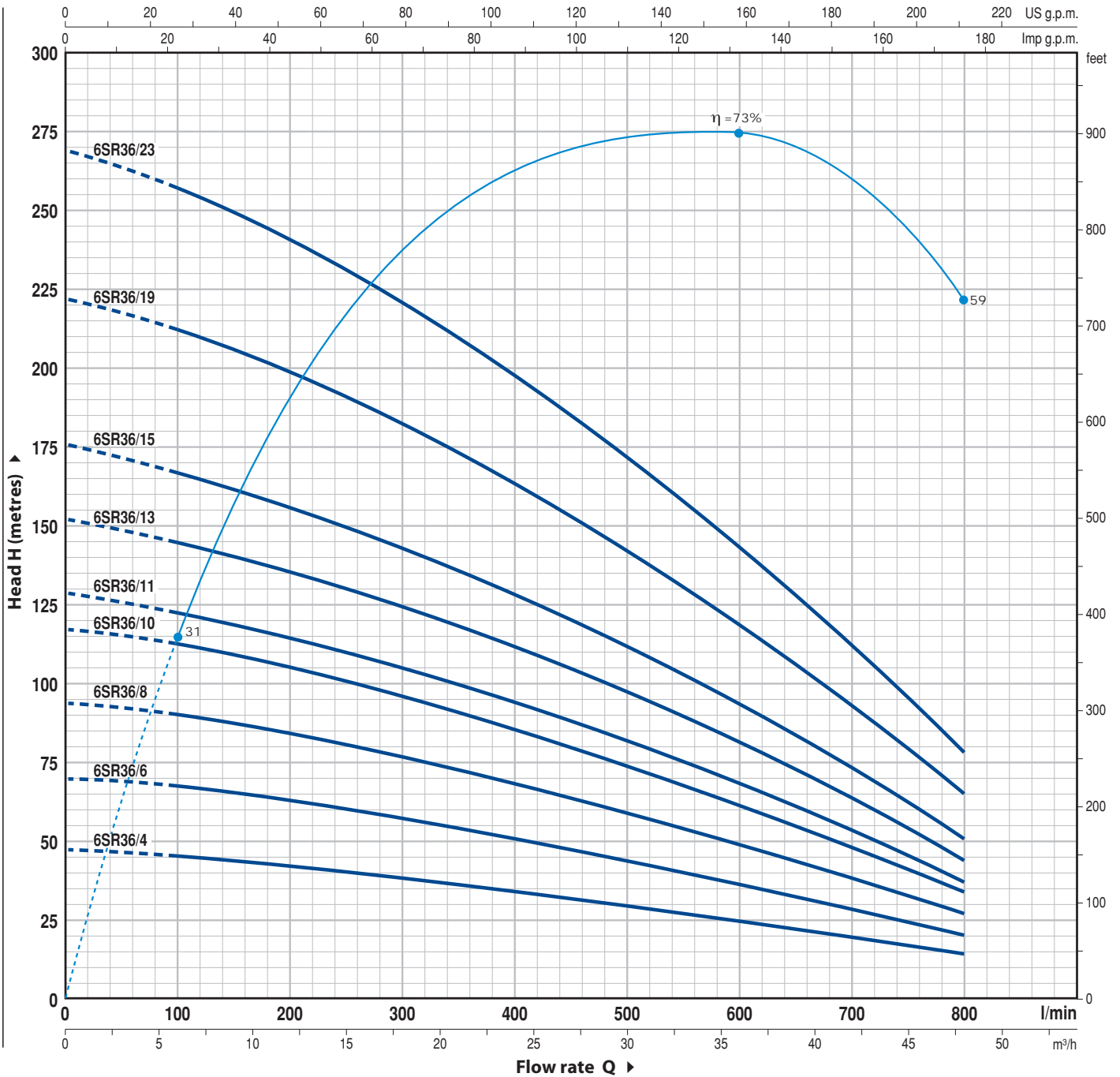
MODEL	POWER		Q	0	6	12	18	24	30	36
	kW	HP		0	100	200	300	400	500	600
Three-phase										
6SR27/4	4	5.5	H metres	54	53	49	45	40	30	18
6SR27/5	5.5	7.5		68	66	62	57	50	37	22
6SR27/7	7.5	10		95	92	87	80	70	52	31
6SR27/8	9.2	12.5		109	106	99	91	80	59	35
6SR27/10	11	15		136	132	124	114	100	74	44
6SR27/12	13	17.5		164	159	149	137	120	89	53
6SR27/14	15	20		191	185	174	160	140	104	62
6SR27/17	18.5	25		231	224	211	194	170	126	75
6SR27/20	22	30		272	264	248	228	200	148	88
6SR27/27	30	40		367	356	335	308	270	205	119

Q = Flow rate H = Total manometric head

Tolerance of characteristic curves in compliance with EN ISO 9906 App. A.

## CHARACTERISTIC CURVES AND PERFORMANCE DATA

50 Hz n= 2900 1/min



MODEL	POWER		Q	Flow rate										
	kW	HP		0	6	12	18	24	30	36	42	48		
Three-phase			l/min	0	100	200	300	400	500	600	700	800		
6SR36/4	4	5.5	H metres	47	45	42	38	34	29	25	19	14		
6SR36/6	5.5	7.5		70	67	63	57	51	44	37	29	20		
6SR36/8	7.5	10		94	89	84	76	68	59	50	39	27		
6SR36/10	9.2	12.5		117	111	105	95	85	74	62	48	34		
6SR36/11	11	15		129	123	115	105	93	81	68	53	37		
6SR36/13	13	17.5		152	145	136	124	110	96	81	63	44		
6SR36/15	15	20		176	167	157	143	127	110	93	72	51		
6SR36/19	18.5	25		222	212	199	181	161	140	118	92	65		
6SR36/23	22	30		269	256	241	219	195	169	143	111	78		

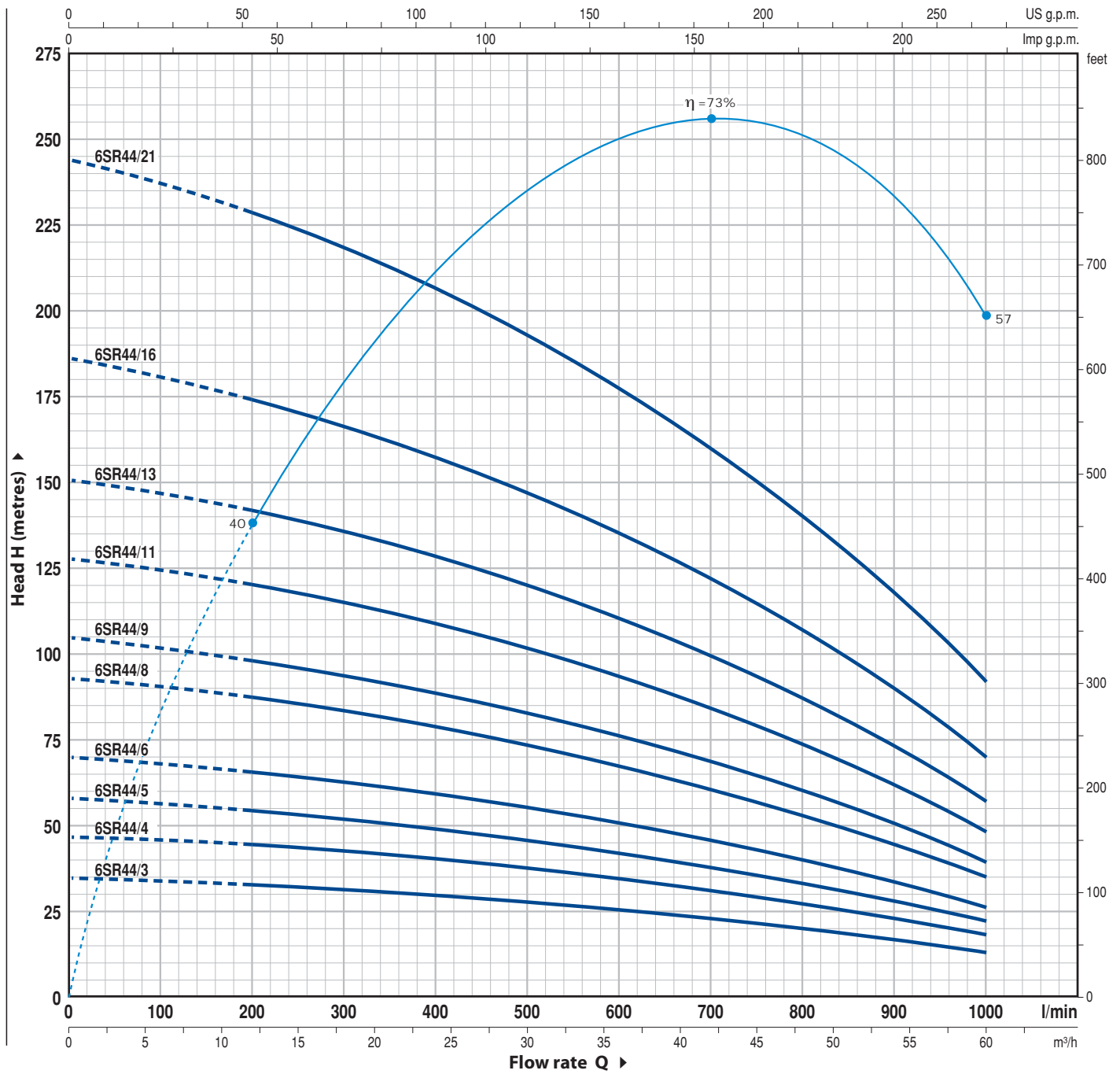
Q = Flow rate H = Total manometric head

Tolerance of characteristic curves in compliance with EN ISO 9906 App. A.

# 6SR44

## CHARACTERISTIC CURVES AND PERFORMANCE DATA

50 Hz n= 2900 1/min

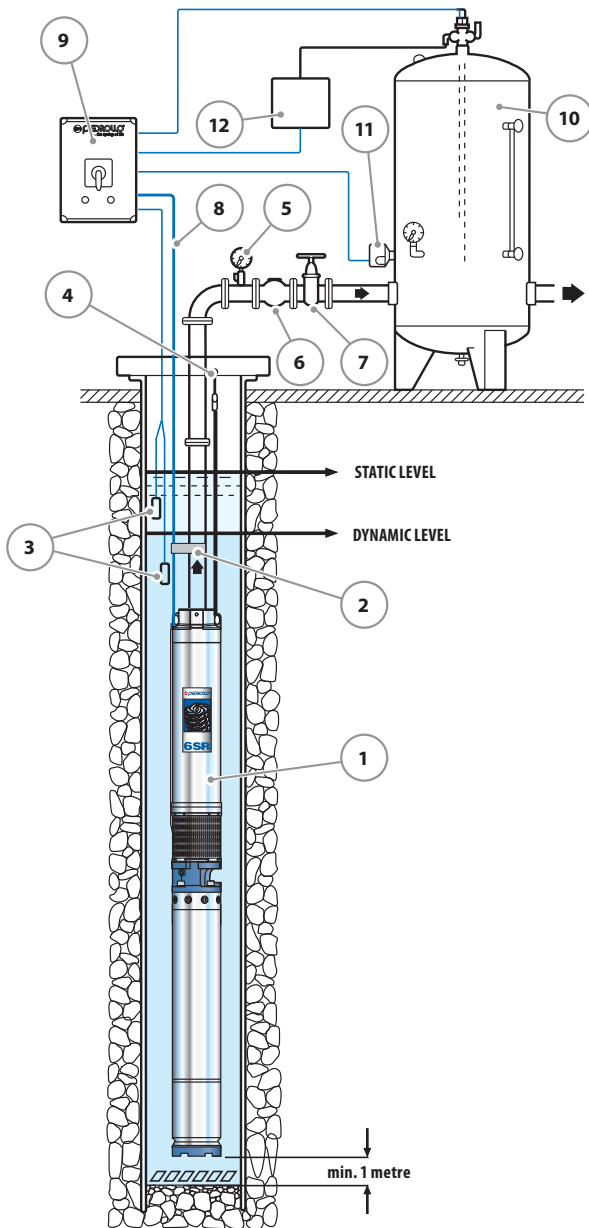


MODEL	POWER		Q	Flow rate											
	kW	HP		0	12	18	24	30	36	42	48	54	60		
Three-phase			l/min	0	200	300	400	500	600	700	800	900	1000		
6SR44/3	4	5.5	H metres	35	33	31	30	28	26	23	20	17	13		
6SR44/4	5.5	7.5		47	44	42	40	37	34	31	27	23	18		
6SR44/5	7.5	10		58	54	52	49	46	43	38	33	28	22		
6SR44/6	9.2	12.5		70	65	62	59	56	51	46	40	34	26		
6SR44/8	11	15		93	87	83	79	74	68	61	53	45	35		
6SR44/9	13	17.5		105	98	93	89	83	77	69	60	51	39		
6SR44/11	15	20		128	120	114	109	102	94	84	73	62	48		
6SR44/13	18.5	25		151	141	135	128	120	111	99	86	73	57		
6SR44/16	22	30		186	174	166	158	148	136	122	106	90	70		
6SR44/21	30	40		244	228	218	207	194	179	160	139	118	92		

Q = Flow rate H = Total manometric head

Tolerance of characteristic curves in compliance with EN ISO 9906 App. A.

## INSTALLATION EXAMPLE

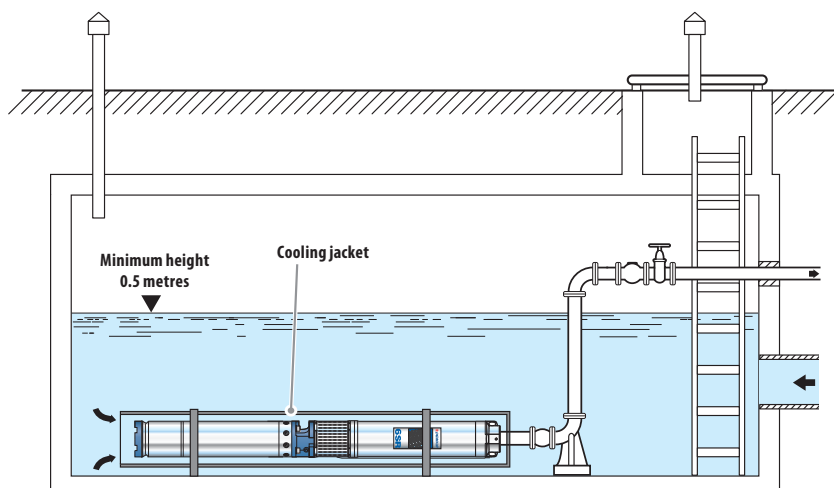


Vertical installation

→ The 6SR series pumps should be installed in boreholes of at least 6" (150 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.

### COMPONENTS

- 1) Submersible pump
- 2) Power cable clamps
- 3) Level probes
- 4) Pump anchorage
- 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

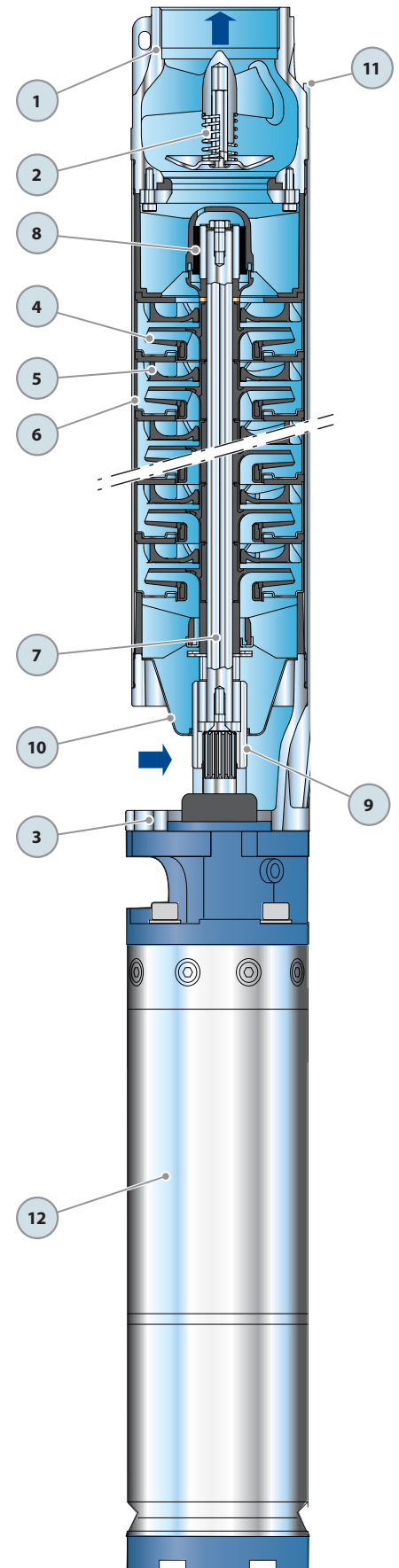


### Cooling jacket

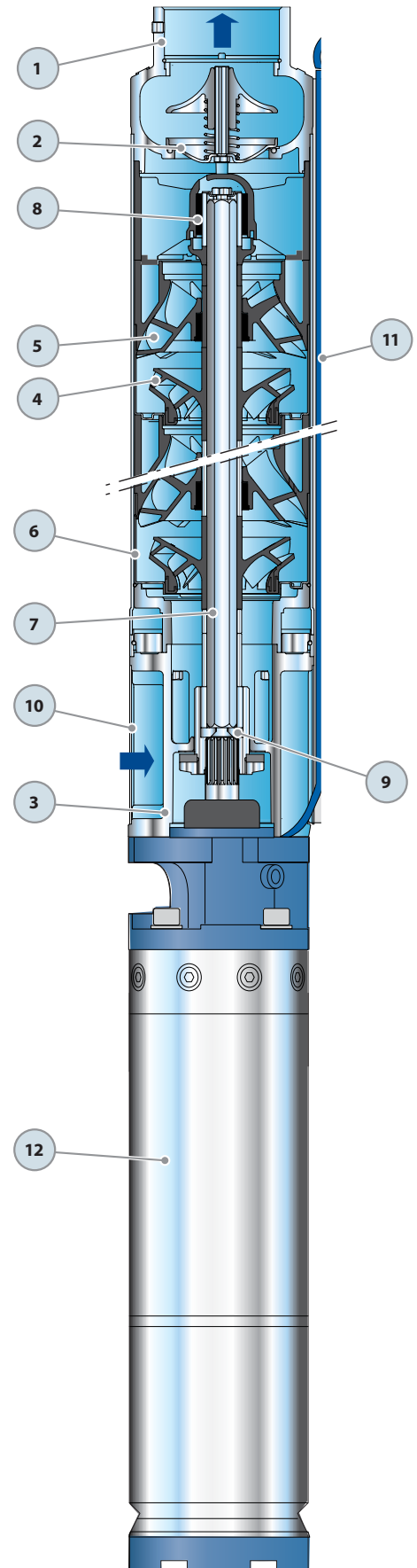
It is necessary to fit the pump with a cooling jacket in installations in storage tanks, rivers and lakes in order to prevent the motor from overheating.



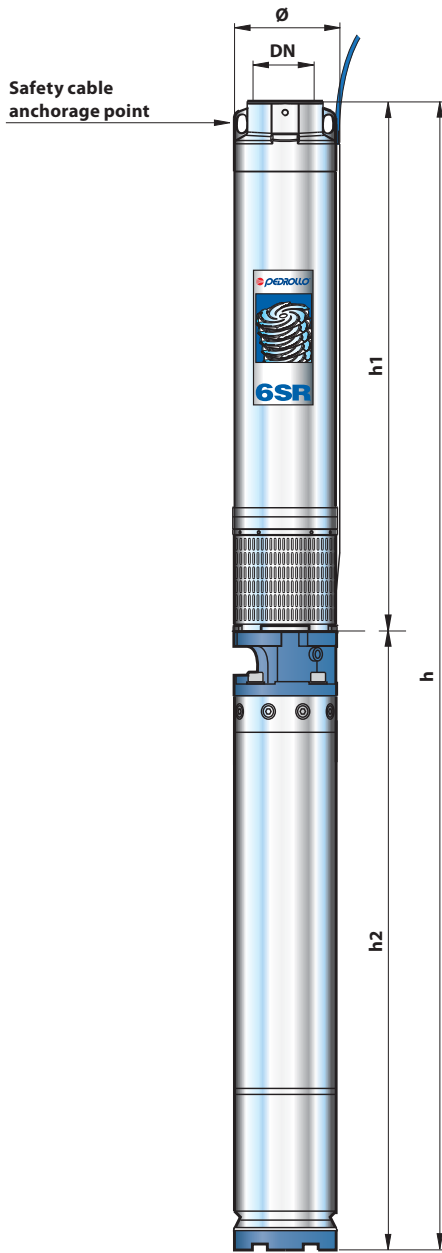
POS. COMPONENT	CONSTRUCTION CHARACTERISTICS
1 DELIVERY BODY	Nickel-plated cast iron complete with threaded delivery port in compliance with ISO 228/1
2 NON-RETURN VALVE	Stainless steel AISI 304
3 MOTOR BRACKET	Nickel-plated cast iron, in compliance with NEMA standards
4 IMPELLERS	Special-rubber coated Noryl GFN2V
5 DIFFUSERS	Noryl GFN2V
6 DIFFUSOR CASING	Stainless steel AISI 304
7 PUMP SHAFT	Stainless steel AISI 304
8 PUMP BEARINGS	Special elastomer housing with stainless steel AISI 316, chrome oxide coated, sand resistant shaft bushing
9 DRIVE COUPLING	Stainless steel AISI 420
10 FILTER	Stainless steel AISI 304
11 CABLE COVER	Stainless steel AISI 304
12 MOTOR 6"	6PD = "PEDROLLO"



POS. COMPONENT	CONSTRUCTION CHARACTERISTICS
1 DELIVERY BODY	Stainless steel AISI 304 complete with threaded delivery port in compliance with ISO 228/1
2 NON-RETURN VALVE	Stainless steel AISI 304
3 MOTOR BRACKET	Nickel-plated cast iron, in compliance with NEMA standards
4 IMPELLERS	Special-rubber coated Noryl GFN2V
5 DIFFUSERS	Noryl GFN2V
6 DIFFUSOR 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 420
10 FILTER	Stainless steel AISI 304
11 CABLE COVER	Stainless steel AISI 304
12 MOTOR 6"	6PD = "PEDROLLO"

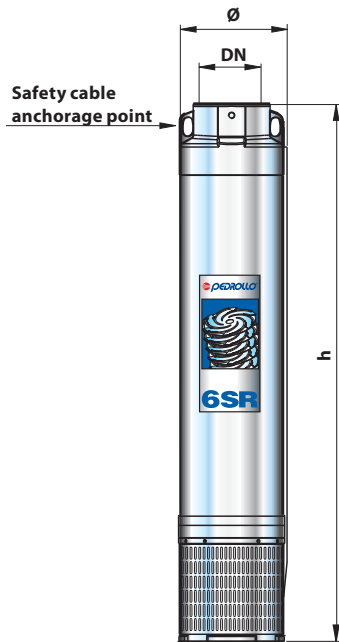


## DIMENSIONS AND WEIGHT



MODEL	PORT DN	Ø	DIMENSIONS mm			kg 3~
			h1	h2	h	
Three-phase						
6 SR 12/8 - PD	3"	149.5	719	633	1352	<b>53.8</b>
6 SR 12/11 - PD			849	667	1516	<b>60.9</b>
6 SR 12/15 - PD			1068	698	1766	<b>66.8</b>
6 SR 12/18 - PD			1198	731	1929	<b>73.0</b>
6 SR 12/21 - PD			1328	826	2154	<b>83.9</b>
6 SR 12/25 - PD			1502	894	2396	<b>96.0</b>
6 SR 12/28 - PD			1632	894	2526	<b>98.1</b>
6 SR 18/4 - PD			545	633	1178	<b>49.6</b>
6 SR 18/6 - PD			632	667	1299	<b>53.6</b>
6 SR 18/9 - PD			762	698	1460	<b>60.3</b>
6 SR 18/11 - PD			849	731	1580	<b>67.0</b>
6 SR 18/13 - PD			981	826	1807	<b>76.9</b>
6 SR 18/15 - PD			1068	894	1962	<b>84.6</b>
6 SR 18/18 - PD			1198	894	2092	<b>87.6</b>
6 SR 18/22 - PD			1371	959	2330	<b>99.7</b>
6 SR 18/26 - PD			1545	1116	2661	<b>125.7</b>
6 SR 27/4 - PD			583	633	1216	<b>47.9</b>
6 SR 27/5 - PD			636	667	1303	<b>53.5</b>
6 SR 27/7 - PD			742	698	1440	<b>58.8</b>
6 SR 27/8 - PD			795	731	1526	<b>63.0</b>
6 SR 27/10 - PD			901	826	1727	<b>74.1</b>
6 SR 27/12 - PD			1051	894	1945	<b>83.6</b>
6 SR 27/14 - PD			1157	894	2051	<b>85.9</b>
6 SR 27/17 - PD			1316	959	2275	<b>97.5</b>
6 SR 27/20 - PD			1474	1116	2590	<b>123.0</b>
6 SR 27/27 - PD			1845	1243	3088	<b>135.8</b>
6 SR 36/4 - PD			823	633	1456	<b>55.4</b>
6 SR 36/6 - PD			1049	667	1716	<b>64.0</b>
6 SR 36/8 - PD			1275	698	1973	<b>71.0</b>
6 SR 36/10 - PD			1501	731	2232	<b>76.2</b>
6 SR 36/11 - PD			1613	826	2439	<b>90.0</b>
6 SR 36/13 - PD			1839	894	2733	<b>102.0</b>
6 SR 36/15 - PD			2065	894	2959	<b>107.0</b>
6 SR 36/19 - PD			2517	959	3476	<b>121.0</b>
6 SR 36/23 - PD			2969	1116	4085	<b>154.0</b>
6 SR 44/3 - PD			710	633	1343	<b>54.0</b>
6 SR 44/4 - PD			823	667	1490	<b>57.5</b>
6 SR 44/5 - PD			936	698	1634	<b>63.1</b>
6 SR 44/6 - PD			1049	731	1780	<b>70.0</b>
6 SR 44/8 - PD			1275	826	2101	<b>82.2</b>
6 SR 44/9 - PD			1388	894	2282	<b>92.0</b>
6 SR 44/11 - PD			1613	894	2507	<b>97.0</b>
6 SR 44/13 - PD	1839	959	2798	<b>110.0</b>		
6 SR 44/16 - PD	2178	1116	3294	<b>141.0</b>		
6 SR 44/21 - PD	2743	1243	3986	<b>154.3</b>		

## DIMENSIONS AND WEIGHT



MODEL	PORT DN	DIMENSIONS mm		kg
		Ø	h	
Pump				
6 SR 12/8 - <b>HYD</b>	3"	149.5	719	<b>19.8</b>
6 SR 12/11 - <b>HYD</b>			849	<b>24.9</b>
6 SR 12/15 - <b>HYD</b>			1068	<b>27.8</b>
6 SR 12/18 - <b>HYD</b>			1198	<b>31.0</b>
6 SR 12/21 - <b>HYD</b>			1328	<b>33.9</b>
6 SR 12/25 - <b>HYD</b>			1502	<b>39.0</b>
6 SR 12/28 - <b>HYD</b>			1632	<b>41.1</b>
6 SR 18/4 - <b>HYD</b>			545	<b>15.6</b>
6 SR 18/6 - <b>HYD</b>			632	<b>17.6</b>
6 SR 18/9 - <b>HYD</b>			762	<b>21.3</b>
6 SR 18/11 - <b>HYD</b>			849	<b>25.0</b>
6 SR 18/13 - <b>HYD</b>			981	<b>26.9</b>
6 SR 18/15 - <b>HYD</b>			1068	<b>27.6</b>
6 SR 18/18 - <b>HYD</b>			1198	<b>30.6</b>
6 SR 18/22 - <b>HYD</b>			1371	<b>34.7</b>
6 SR 18/26 - <b>HYD</b>			1545	<b>38.7</b>
6 SR 27/4 - <b>HYD</b>			583	<b>13.9</b>
6 SR 27/5 - <b>HYD</b>			636	<b>17.5</b>
6 SR 27/7 - <b>HYD</b>			742	<b>19.8</b>
6 SR 27/8 - <b>HYD</b>			795	<b>21.0</b>
6 SR 27/10 - <b>HYD</b>			901	<b>24.1</b>
6 SR 27/12 - <b>HYD</b>			1051	<b>26.6</b>
6 SR 27/14 - <b>HYD</b>			1157	<b>28.9</b>
6 SR 27/17 - <b>HYD</b>			1316	<b>32.5</b>
6 SR 27/20 - <b>HYD</b>			1474	<b>36.0</b>
6 SR 27/27 - <b>HYD</b>			1845	<b>44.8</b>
6 SR 36/4 - <b>HYD</b>			823	<b>21.4</b>
6 SR 36/6 - <b>HYD</b>			1049	<b>28.0</b>
6 SR 36/8 - <b>HYD</b>			1275	<b>32.0</b>
6 SR 36/10 - <b>HYD</b>			1501	<b>34.2</b>
6 SR 36/11 - <b>HYD</b>			1613	<b>40.0</b>
6 SR 36/13 - <b>HYD</b>			1839	<b>45.0</b>
6 SR 36/15 - <b>HYD</b>			2065	<b>50.0</b>
6 SR 36/19 - <b>HYD</b>			2517	<b>56.0</b>
6 SR 36/23 - <b>HYD</b>			2969	<b>67.0</b>
6 SR 44/3 - <b>HYD</b>			710	<b>20.0</b>
6 SR 44/4 - <b>HYD</b>			823	<b>21.5</b>
6 SR 44/5 - <b>HYD</b>			936	<b>24.1</b>
6 SR 44/6 - <b>HYD</b>			1049	<b>28.0</b>
6 SR 44/8 - <b>HYD</b>			1275	<b>32.2</b>
6 SR 44/9 - <b>HYD</b>			1388	<b>35.0</b>
6 SR 44/11 - <b>HYD</b>			1613	<b>40.0</b>
6 SR 44/13 - <b>HYD</b>	1839	<b>45.0</b>		
6 SR 44/16 - <b>HYD</b>	2178	<b>54.0</b>		
6 SR 44/21 - <b>HYD</b>	2743	<b>63.3</b>		