

# 6SR

## 6" submersible pump

-  Clean water  
(Maximum sand content 100 g/m<sup>3</sup>)
-  Civil use
-  Agricultural use
-  Industrial use



### PERFORMANCE RANGE

- Flow rate up to **1200 l/min** (72 m<sup>3</sup>/h)
- Head up to **381 m**

### APPLICATION LIMITS

- Maximum liquid temperature **+35 °C**
- Maximum sand content **100 g/m<sup>3</sup>**
- Maximum immersion depth of **100 m** with a sufficiently long power cable
- Installation:
  - vertical
  - horizontal, with the following limits: up to **7 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 380 V - 60 Hz

**4 m** long power cable

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

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



### CERTIFICATIONS

Company with management system certified DNV  
ISO 9001: QUALITY  
ISO 14001: ENVIRONMENT

### INSTALLATION AND USE

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

### OPTIONS AVAILABLE ON REQUEST

- Pump body complete with threaded delivery port in compliance with ISO 228/1
- Other voltages
- **Kit of cooling jacket complete with filter and supports**

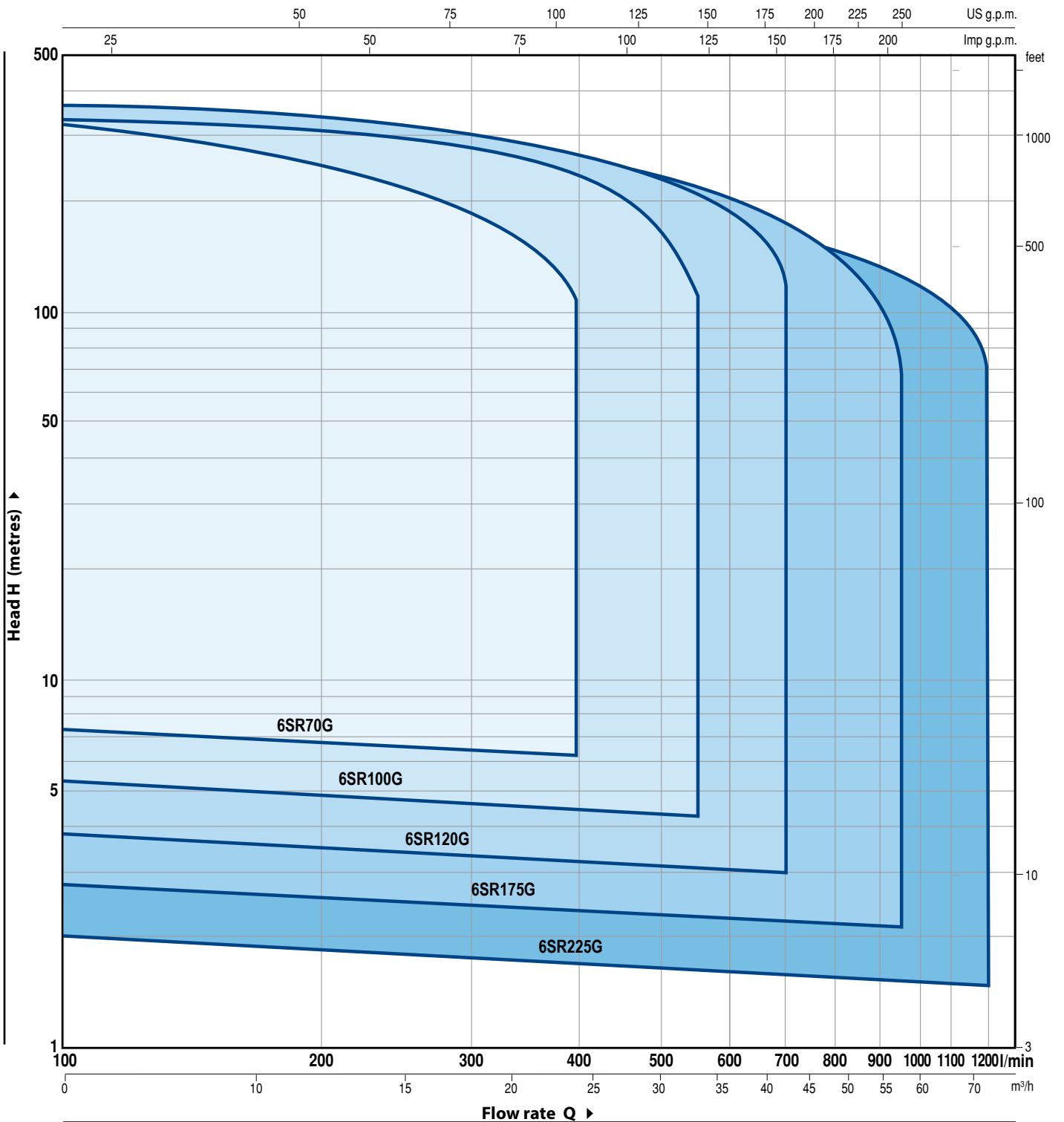


### GUARANTEE

2 years subject to terms and conditions

**PERFORMANCE RANGE**

**60 Hz n = 3450 rpm**



**NOMENCLATURE**

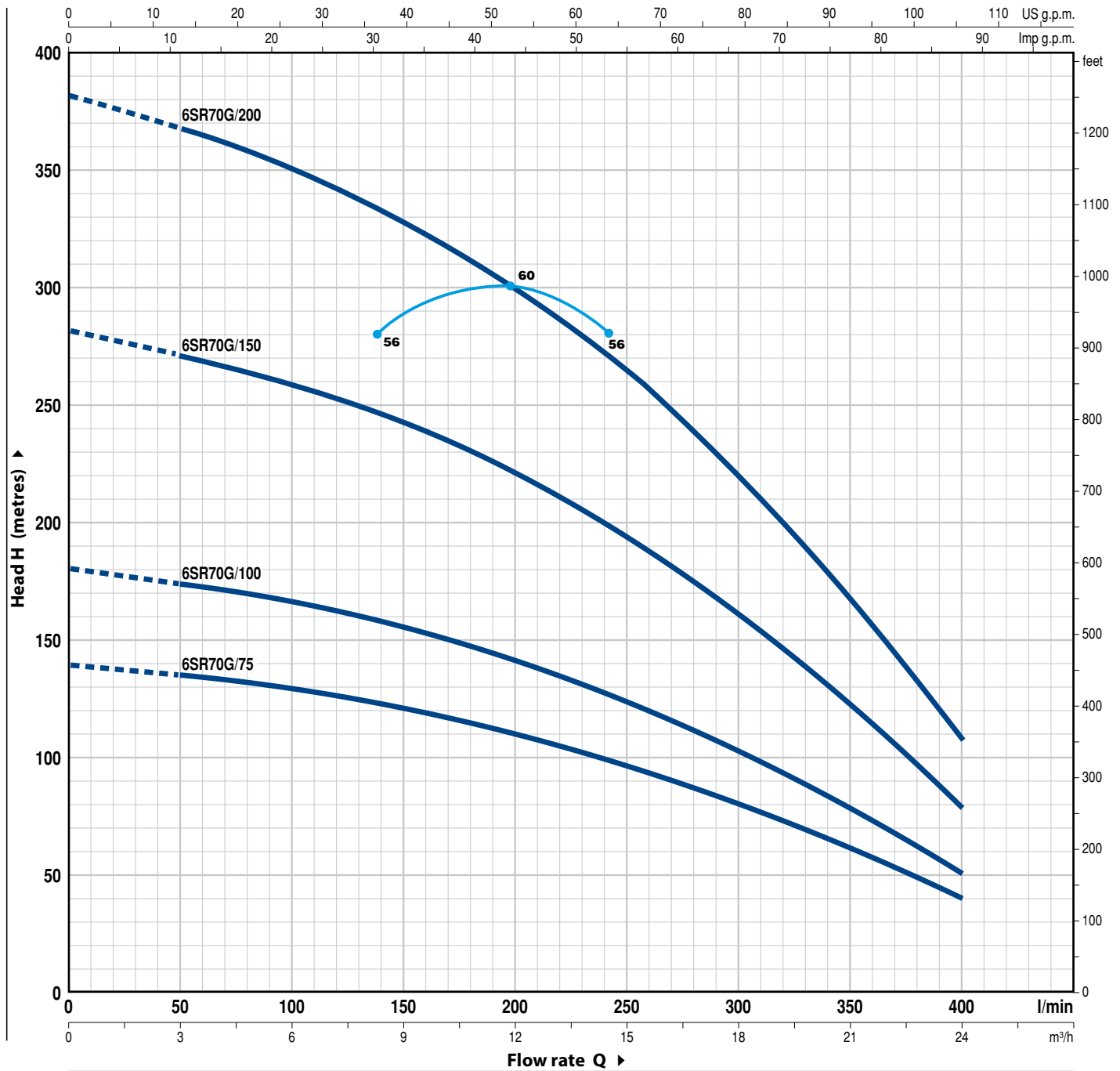
**6 SR 70G / 75 - PD or HYD**

- Borehole diameter in inches \_\_\_\_\_
- Series \_\_\_\_\_
- Flow rate in m³/h at the point of highest efficiency \_\_\_\_\_
- Number of stages \_\_\_\_\_
- PD:** pump with "6PD PEDROLLO" motor \_\_\_\_\_
- HYD:** pump without motor \_\_\_\_\_

# 6SR70G

## CHARACTERISTIC CURVES AND PERFORMANCE DATA

60 Hz n = 3450 rpm



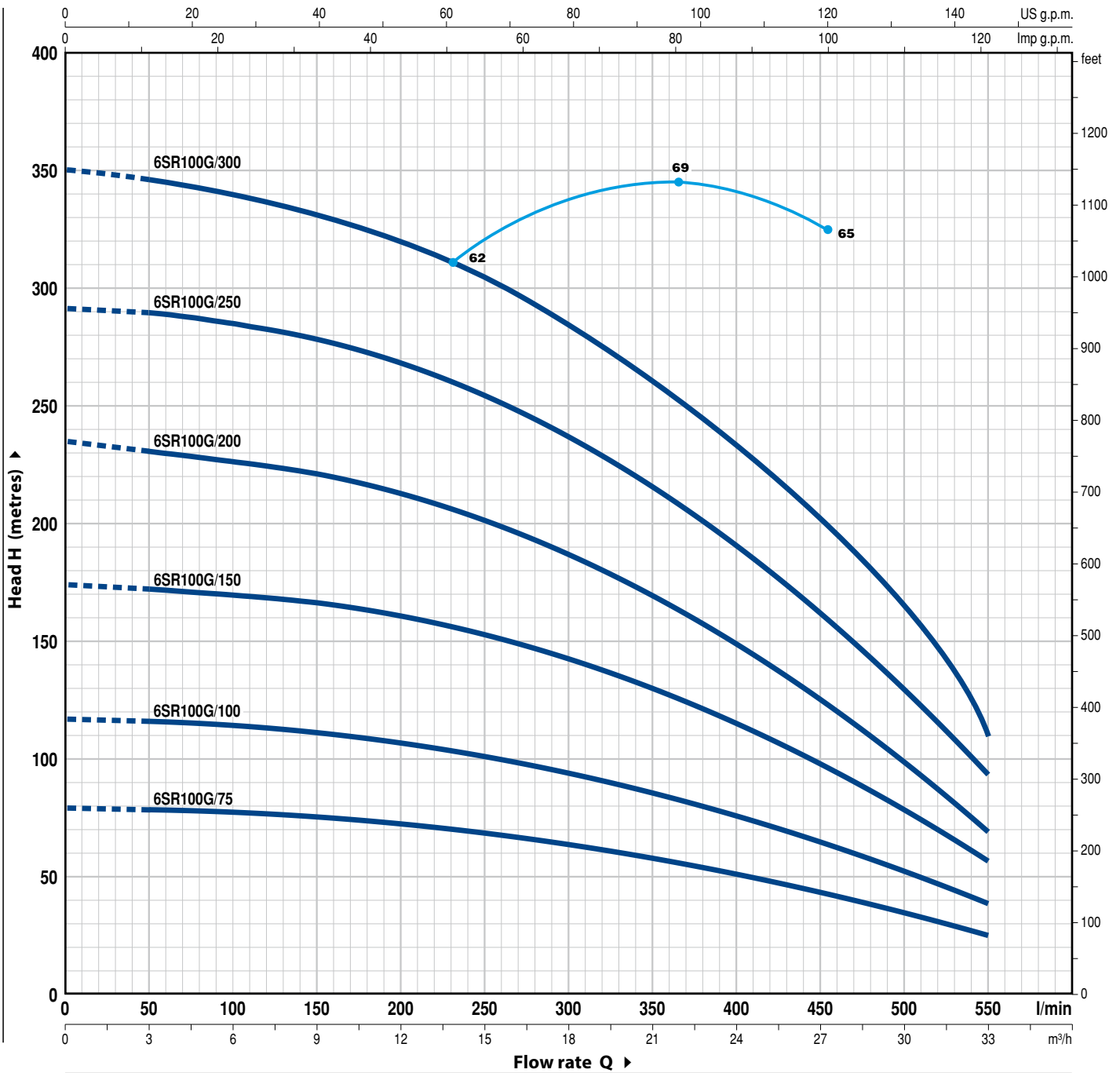
MODEL	POWER (P <sub>2</sub> )		Q	0	3	6	9	12	15	18	21	24
	kW	HP		0	50	100	150	200	250	300	350	400
6SR70G/75	5.5	7.5	H metres	140	135	130	122	110	98	80	60	40
6SR70G/100	7.5	10		182	174	168	155	140	125	104	80	50
6SR70G/150	11	15		281	270	260	240	220	198	162	122	78
6SR70G/200	15	20		381	365	351	325	300	265	220	168	108

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 rpm



MODEL	POWER (P <sub>2</sub> )		Q	Flow rate (l/min)														
	kW	HP		0	3	6	9	12	15	18	21	24	27	30	33			
Three-phase				0	50	100	150	200	250	300	350	400	450	500	550			
<b>6SR100G/75</b>	5.5	7.5	H metres	80	79	77	75	72	68	63	58	52	44	38	25			
<b>6SR100G/100</b>	7.5	10		118	117	114	110	105	100	95	88	78	68	58	38			
<b>6SR100G/150</b>	11	15		177	173	170	166	160	152	142	130	118	100	85	56			
<b>6SR100G/200</b>	15	20		235	230	225	220	213	202	190	170	150	133	110	69			
<b>6SR100G/250</b>	18.5	25		292	290	284	275	265	252	238	218	195	167	140	92			
<b>6SR100G/300</b>	22	30		350	345	339	333	320	305	285	260	230	200	168	110			

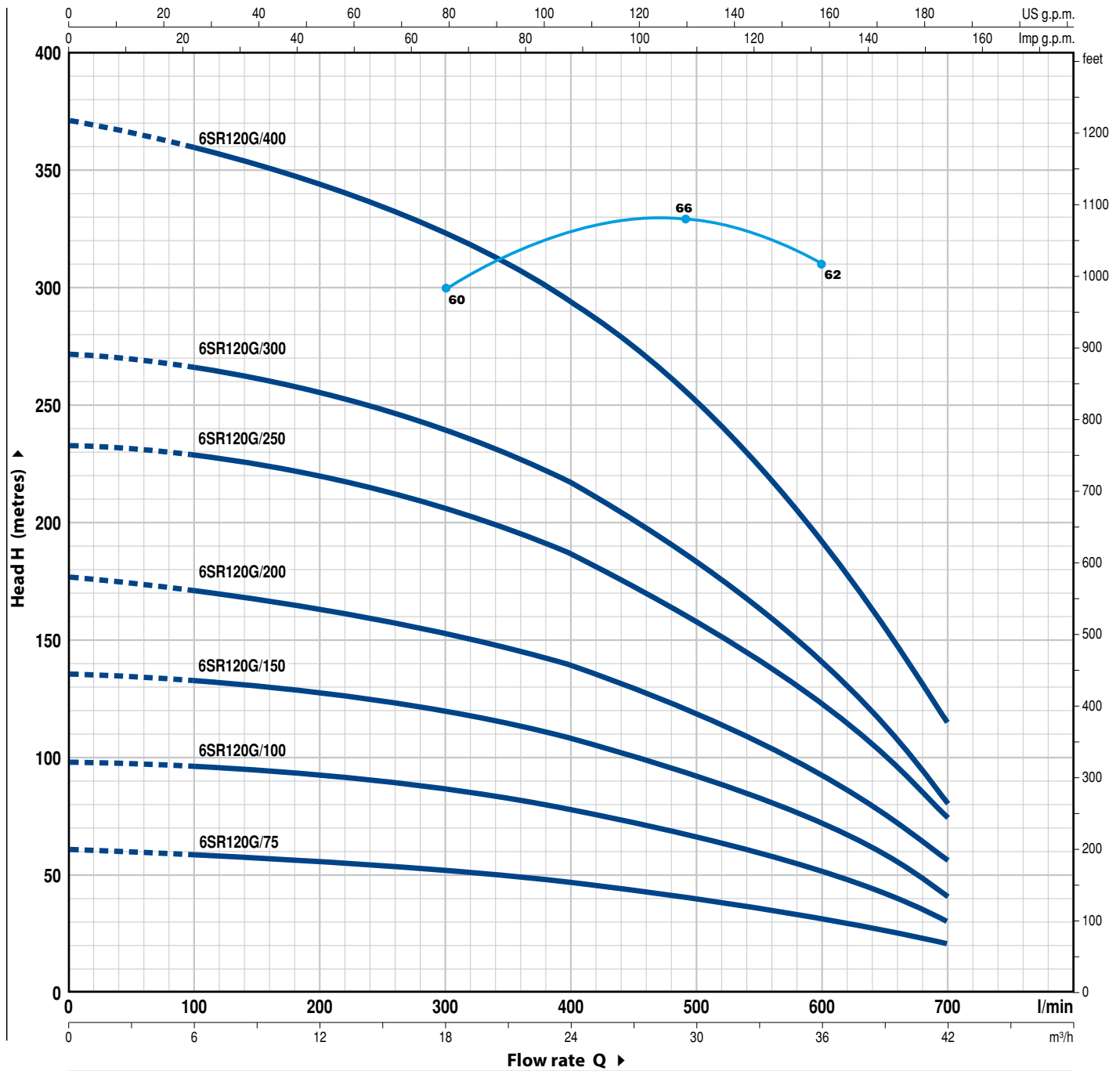
Q = Flow rate H = Total manometric head

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

# 6SR120G

## CHARACTERISTIC CURVES AND PERFORMANCE DATA

60 Hz n = 3450 rpm



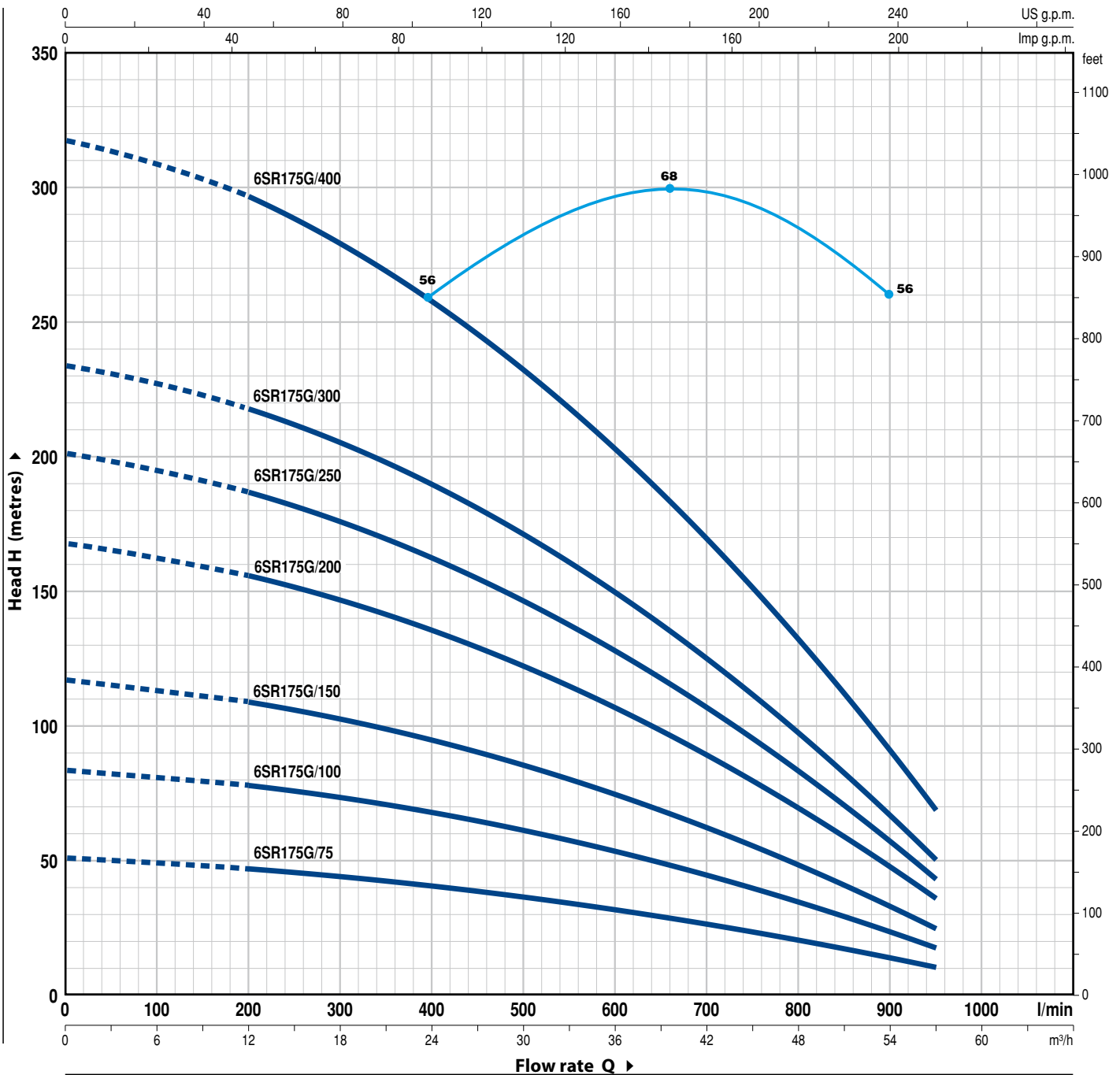
MODEL	POWER (P <sub>2</sub> )		Q	Flow rate Q							
	kW	HP		0	6	12	18	24	30	36	42
<b>Three-phase</b>				<b>0</b>	<b>100</b>	<b>200</b>	<b>300</b>	<b>400</b>	<b>500</b>	<b>600</b>	<b>700</b>
<b>6SR120G/75</b>	5.5	7.5	H metres	61	58	55	52	46	40	31	20
<b>6SR120G/100</b>	7.5	10		98	95	91	85	78	66	52	30
<b>6SR120G/150</b>	11	15		136	132	128	120	108	92	73	45
<b>6SR120G/200</b>	15	20		177	170	163	155	140	120	94	56
<b>6SR120G/250</b>	18.5	25		233	230	220	205	188	159	125	75
<b>6SR120G/300</b>	22	30		272	267	255	240	218	185	143	80
<b>6SR120G/400</b>	30	40		372	360	345	325	295	253	195	115

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 rpm



MODEL	POWER (P <sub>2</sub> )		Q	Flow rate											
	kW	HP		0	12	18	24	30	36	42	48	54	57		
<b>Three-phase</b>				<b>0</b>	<b>200</b>	<b>300</b>	<b>400</b>	<b>500</b>	<b>600</b>	<b>700</b>	<b>800</b>	<b>900</b>	<b>950</b>		
<b>6SR175G/75</b>	5.5	7.5	H metres	50	47	44	40	36	32	27	21	14.5	10		
<b>6SR175G/100</b>	7.5	10		83	78	73	67	60.5	53	45	35.5	24.5	17		
<b>6SR175G/150</b>	11	15		116	109	102.5	94	84.5	74.5	63	49.5	34.5	24		
<b>6SR175G/200</b>	15	20		166	156	146.5	134.5	121	106.5	90.5	71	49.5	35		
<b>6SR175G/250</b>	18.5	25		200	187	176	161.5	145	128	108.5	85	59	42		
<b>6SR175G/300</b>	22	30		233	218	205.5	188.5	169.5	149.5	126.5	99.5	69	49		
<b>6SR175G/400</b>	30	40		316	297	279	256	230	203	172	135	94	67		

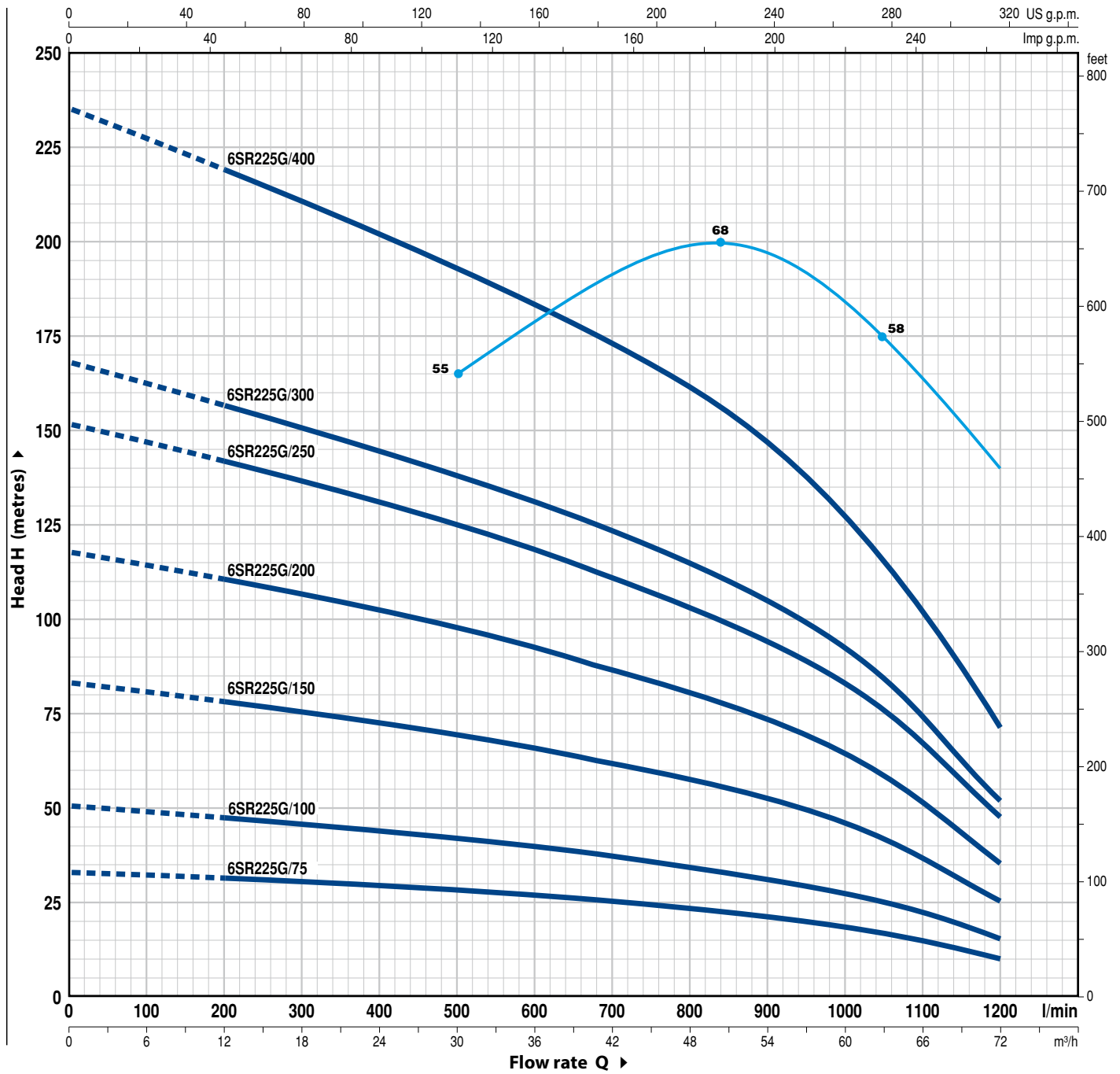
Q = Flow rate H = Total manometric head

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

# 6SR225G

## CHARACTERISTIC CURVES AND PERFORMANCE DATA

60 Hz n = 3450 rpm

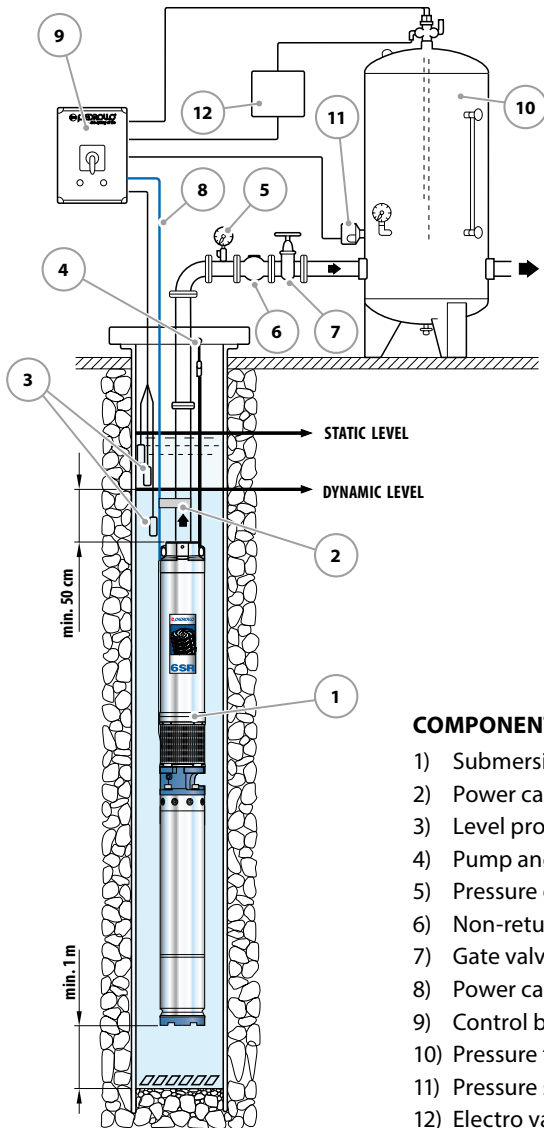


MODEL	POWER (P <sub>2</sub> )		Q	0	12	24	36	48	60	72
	kW	HP		0	200	400	600	800	1000	1200
6SR225G/75	5.5	7.5	H metres	33	31	29	26	23	18	10
6SR225G/100	7.5	10		50	47	43	39	34.5	27.5	15
6SR225G/150	11	15		84	79	72	65.5	57.5	46	25
6SR225G/200	15	20		117	110	101	91.5	80.5	64.5	35
6SR225G/250	18.5	25		151	142	130	118	104	83	46
6SR225G/300	22	30		167	157	144	131	115.5	92	51
6SR225G/400	30	40		235	220	202	183.5	161.5	129	71

Q = Flow rate H = Total manometric head

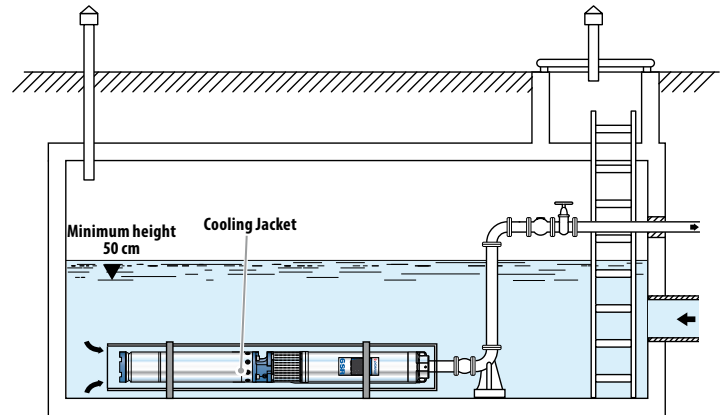
Tolerance of characteristic curves in compliance with EN ISO 9906 Grade 3B.

## STANDARD INSTALLATION



### 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 tank
- 11) Pressure switch
- 12) Electro valve/electro-compressor



### Cooling jacket

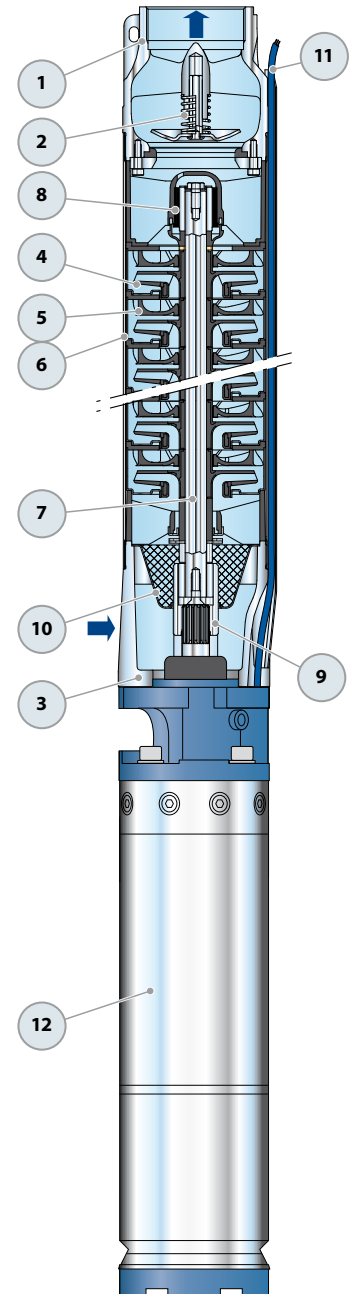
When the pump is installed in storage tanks, rivers or lakes an external jacket must be fitted to establish a flow of cooling water to prevent overheating of the motor.

➡ 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 metres 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.

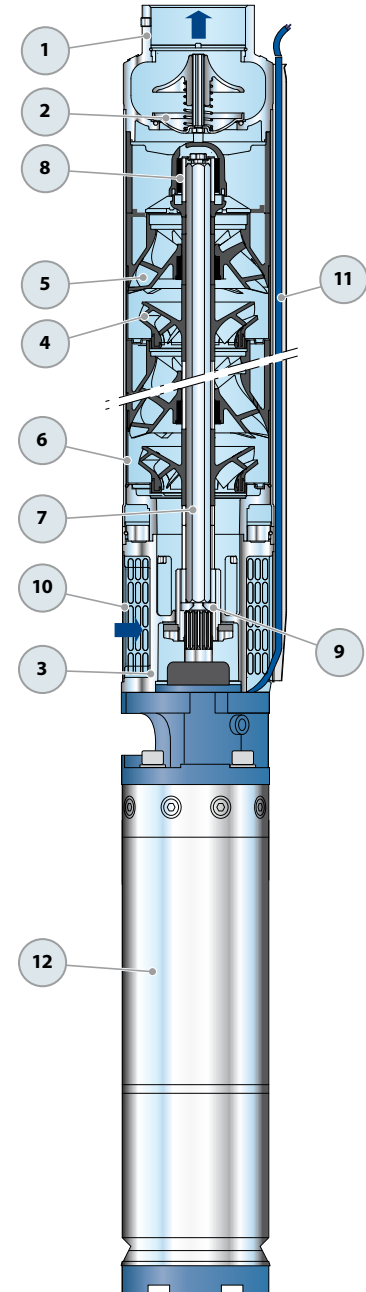


# 6SR70G-100G-120G (Radial impellers)

POS. COMPONENT	CONSTRUCTION CHARACTERISTICS
1 DELIVERY BODY	Nickel-plated cast iron 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	Nickel-plated cast iron in compliance with NEMA standards
4 IMPELLERS	Special-rubber coated Noryl FE1520PW
5 DIFFUSERS	Noryl FE1520PW
6 DIFFUSOR CASING	Stainless steel AISI 304
7 PUMP SHAFT	Stainless steel AISI 304
8 PUMP BEARINGS	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" oil filled rewindable motor

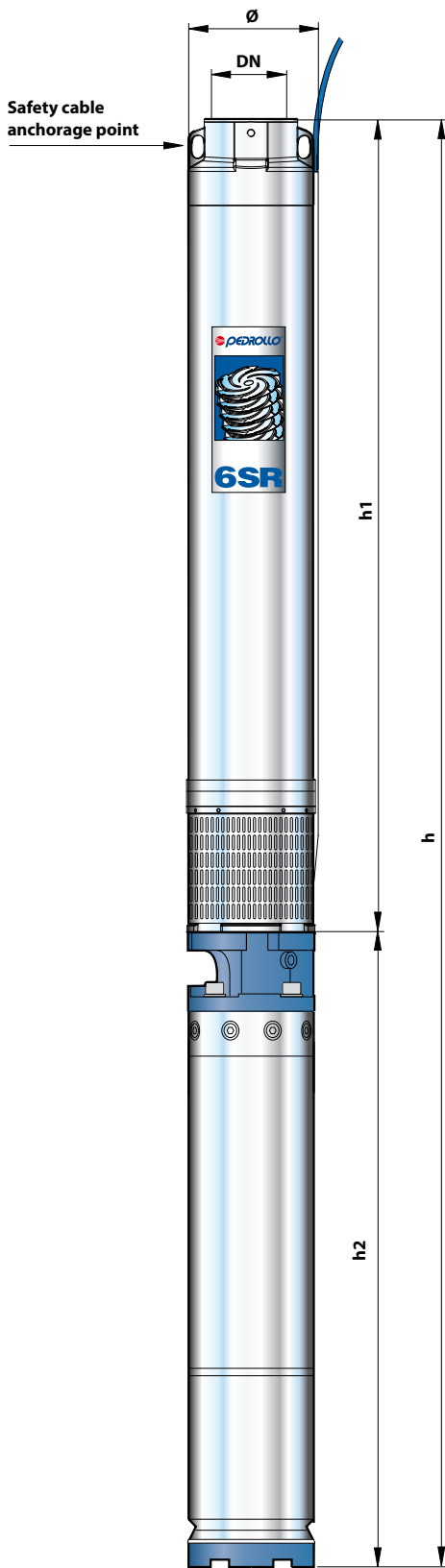


POS. COMPONENT	CONSTRUCTION CHARACTERISTICS
1 DELIVERY BODY	Stainless steel AISI 304 complete with threaded delivery port in compliance with NPT ANSI B 1.20.1
2 NON-RETURN VALVE	Stainless steel AISI 304
3 MOTOR BRACKET	Nickel-plated cast iron in compliance with NEMA standards
4 IMPELLERS	Special-rubber coated Noryl FE1520PW
5 DIFFUSERS	Noryl FE1520PW
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" oil filled rewindable motor



# 6SR-PD

## DIMENSIONS AND WEIGHT



MODEL Three-phase	PORT DN	N° STAGES	DIMENSIONS mm			kg 3~	
			$\varnothing$	h1	h2		h
6SR70G/75 - PD	3"	7	149.5	676	667	1343	55.0
6SR70G/100 - PD		9		763	698	1461	60.5
6SR70G/150 - PD		14		1025	826	1851	77.5
6SR70G/200 - PD		19		1241	894	2135	89.0
6SR100G/75 - PD		4		545	667	1212	51.6
6SR100G/100 - PD		6		632	698	1330	56.6
6SR100G/150 - PD		9		807	826	1633	75.5
6SR100G/200 - PD		12		938	894	1832	83.6
6SR100G/250 - PD		15		1068	959	2027	92.6
6SR100G/300 - PD		18		1198	1116	2314	117.6
6SR120G/75 - PD		3		530	667	1197	46.5
6SR120G/100 - PD		5		636	698	1334	56.5
6SR120G/150 - PD		7		742	826	1568	69.8
6SR120G/200 - PD		9		891	894	1785	80.2
6SR120G/250 - PD		12		1051	959	2010	91.6
6SR120G/300 - PD		14		1157	1116	2273	115.9
6SR120G/400 - PD		19		1422	1243	2665	125.8
6SR175G/75 - PD		3		710	667	1377	56.0
6SR175G/100 - PD		5		936	698	1634	63.1
6SR175G/150 - PD		7		1162	826	1988	80.1
6SR175G/200 - PD		10		1501	894	2395	91.2
6SR175G/250 - PD		12		1726	959	2685	107.5
6SR175G/300 - PD	14	1952	1116	3068	135.0		
6SR175G/400 - PD	19	2517	1243	3760	147.0		
6SR225G/75 - PD	2	597	667	1264	54.5		
6SR225G/100 - PD	3	710	698	1408	59.0		
6SR225G/150 - PD	5	936	826	1762	74.1		
6SR225G/200 - PD	7	1162	894	2056	87.1		
6SR225G/250 - PD	9	1388	959	2347	100.0		
6SR225G/300 - PD	10	1501	1116	2617	124.5		
6SR225G/400 - PD	14	1952	1243	3195	139.0		

## DIMENSIONS AND WEIGHT



MODEL Pump	PORT DN	N° STAGES	DIMENSIONS mm		kg
			Ø	h	
6SR70G/75 - HYD	3"	7	149.5	676	19.0
6SR70G/100 - HYD		9		763	21.5
6SR70G/150 - HYD		14		1025	27.5
6SR70G/200 - HYD		19		1241	32.0
6SR100G/75 - HYD		4		545	15.6
6SR100G/100 - HYD		6		632	17.6
6SR100G/150 - HYD		9		807	25.5
6SR100G/200 - HYD		12		938	26.6
6SR100G/250 - HYD		15		1068	27.6
6SR100G/300 - HYD		18		1198	30.6
6SR120G/75 - HYD		3		530	10.5
6SR120G/100 - HYD		5		636	17.5
6SR120G/150 - HYD		7		742	19.8
6SR120G/200 - HYD		9		891	23.2
6SR120G/250 - HYD		12		1051	26.6
6SR120G/300 - HYD		14		1157	28.9
6SR120G/400 - HYD		19		1422	34.8
6SR175G/75 - HYD		3		710	20.0
6SR175G/100 - HYD		5		936	24.1
6SR175G/150 - HYD		7		1162	30.1
6SR175G/200 - HYD		10		1501	34.2
6SR175G/250 - HYD		12		1726	42.5
6SR175G/300 - HYD		14		1952	48.0
6SR175G/400 - HYD		19		2517	56.0
6SR225G/75 - HYD		2		597	18.5
6SR225G/100 - HYD		3		710	20.0
6SR225G/150 - HYD		5		936	24.1
6SR225G/200 - HYD	7	1162	30.1		
6SR225G/250 - HYD	9	1388	35.0		
6SR225G/300 - HYD	10	1501	37.5		
6SR225G/400 - HYD	14	1952	48.0		