

# 6HR

## 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 **1500 l/min** (90 m<sup>3</sup>/h)
- Head up to **375 m**

### APPLICATION LIMITS

- Maximum liquid temperature **+35 °C**
- Maximum sand content **50 g/m<sup>3</sup>**
- **200 m** immersion limit
- Installation:
  - vertical
  - horizontal, with the following limits:
    - 6HR34 up to **11 stages**
    - 6HR44 fino a **10 stages**
    - 6HR54 fino a **9 stages**
    - 6HR64 fino a **7 stages**
- Starts/hour: **20** at regular intervals
- Minimum flow rate for motor cooling **10 cm/s**
- Continuous service **S1**

### CONSTRUCTION AND SAFETY STANDARDS

#### ELECTRIC MOTOR

– Three-phase 400 V - 50 Hz

4 m long power cable

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

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



EU REGULATION N. 547/2012

### CERTIFICATIONS

Company with management system certified DNV  
ISO 9001: QUALITY



### INSTALLATION AND USE

Suitable for use with clean water with a sand content of no more than 50 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.

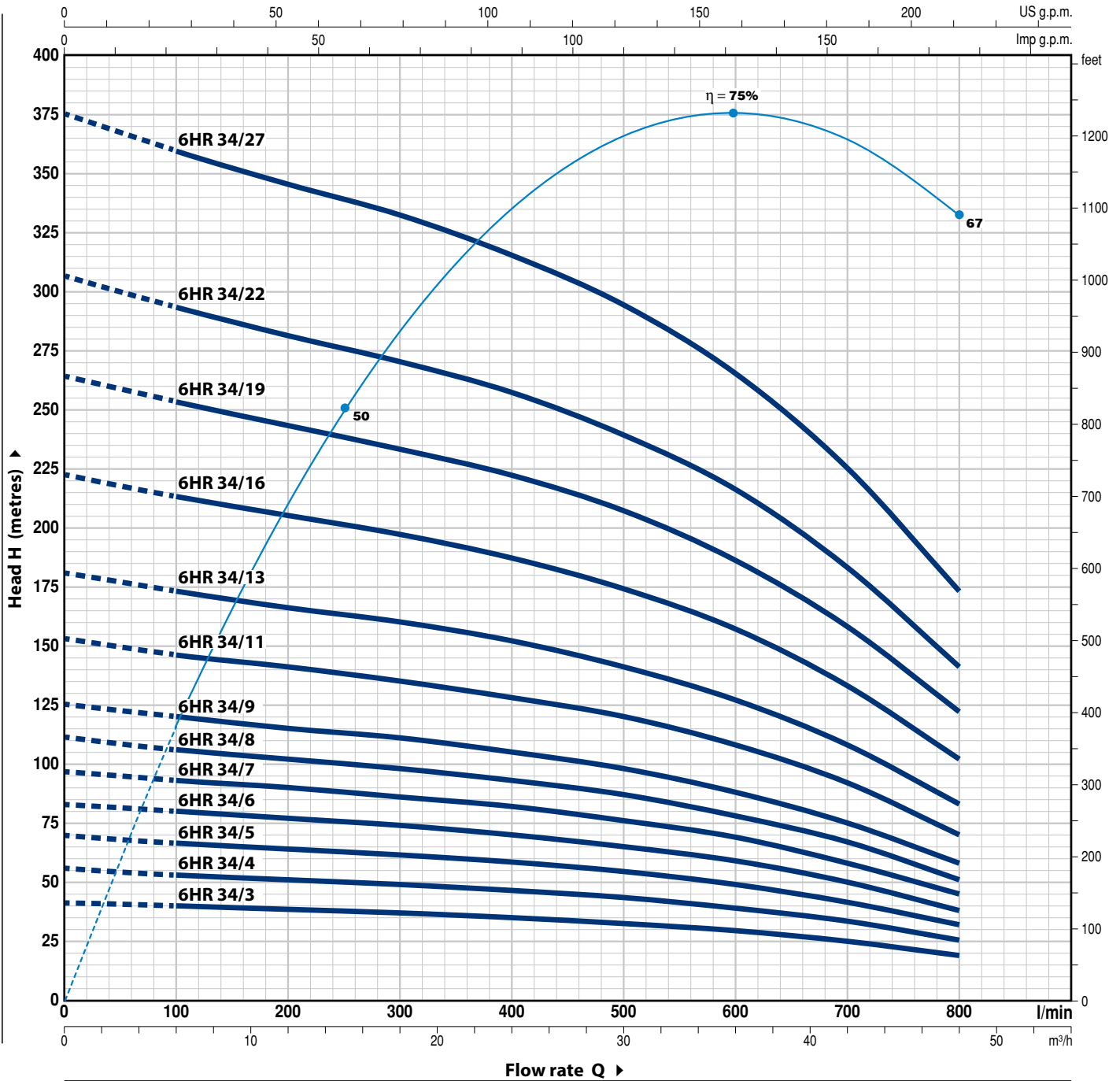


### OPTIONS AVAILABLE ON REQUEST

- 6HR-HYD pumps with double cable cover suitable for dual voltage 400/690 V (star/delta)
- Other voltages or 60 Hz frequency

## CHARACTERISTIC CURVES AND PERFORMANCE DATA

50 Hz n = 2900 min<sup>-1</sup>



MODEL	POWER (P <sub>2</sub> )		Q	Flow rate											
	kW	HP		0	6	12	18	24	30	36	42	48			
<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>800</b>			
6HR34/3	4	5.5	H metres	41.5	40	38.5	37	35	32.5	29.5	25	19			
6HR34/4	5.5	7.5		55.5	53	51	49	46.5	43.5	39	33.5	25.5			
6HR34/5	7.5	10		69.5	66.5	64	61.5	58.5	54.5	49	41.5	32			
6HR34/6	9.2	12.5		83	80	77	74	70	65	59	50	38			
6HR34/7	11	15		97	93	90	86	82	76	69	58	45			
6HR34/8	11	15		111	106	102	98	93	87	78	67	51			
6HR34/9	13	17.5 <sup>(1)</sup>		125	120	115	111	105	98	88	75	58			
6HR34/11	15	20		153	146	141	135	128	120	108	92	70			
6HR34/13	18.5	25		181	173	166	160	152	141	127	108	83			
6HR34/16	22	30		222	213	205	197	187	174	157	133	102			
6HR34/19	26	35 <sup>(2)</sup>		264	253	243	233	222	207	186	158	122			
6HR34/22	30	40		306	293	281	270	257	239	216	183	141			
6HR34/27	37	50		375	359	345	332	315	294	265	225	173			

Q = Flow rate H = Total manometric head

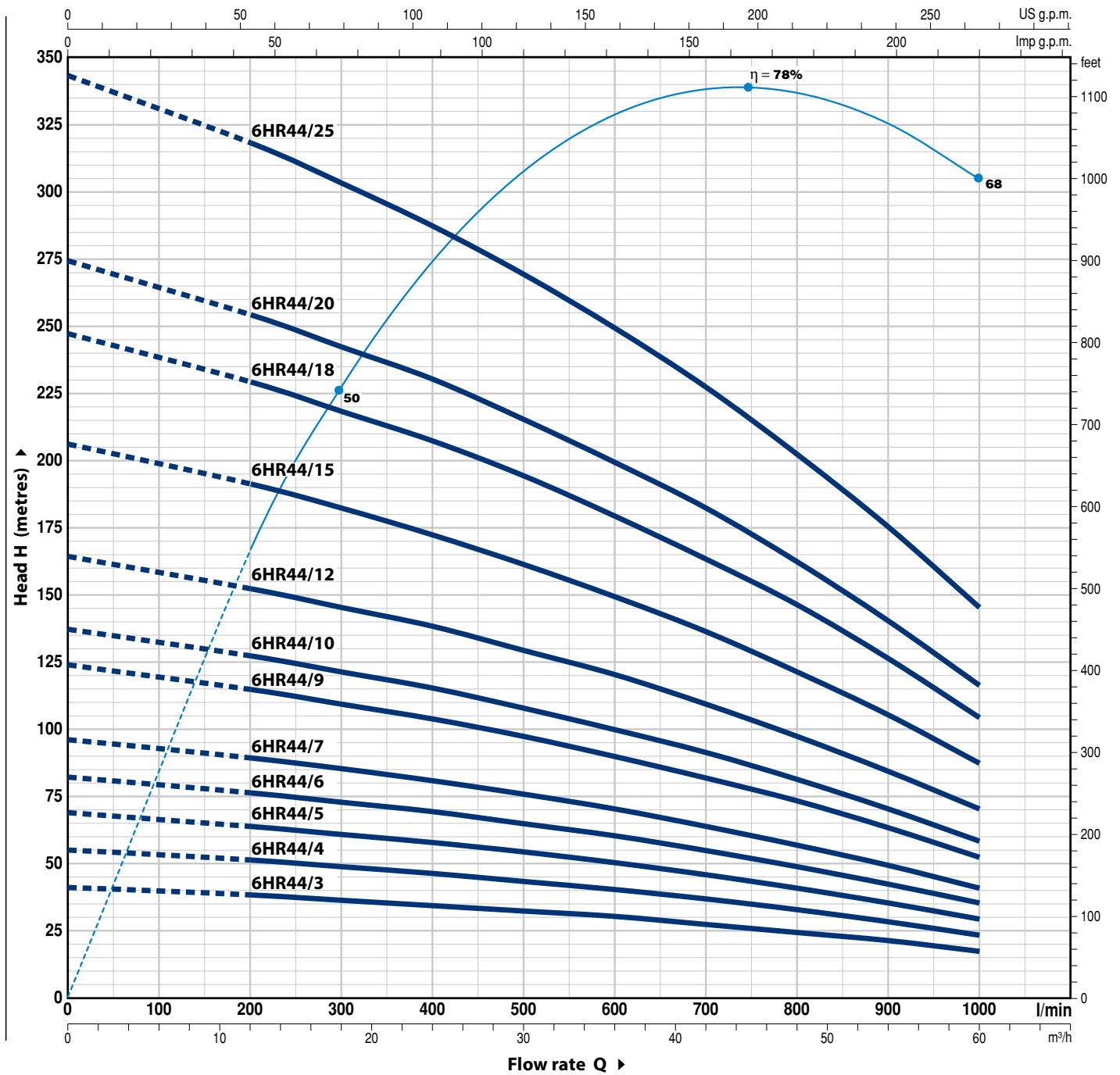
- (1) Pump fitted with a 20 HP motor
- (2) Pump fitted with a 40 HP motor

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

# 6HR44

## CHARACTERISTIC CURVES AND PERFORMANCE DATA

50 Hz n = 2900 min<sup>-1</sup>



MODEL	POWER (P <sub>2</sub> )		Q	Flow rate												
	kW	HP		0	12	18	24	30	36	42	48	54	60			
<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>1000</b>			
6HR 44/3	5.5	7.5	H metres	41	38	36	34	32	30	27	24	21	17			
6HR 44/4	7.5	10		55	51	48.5	46	43	40	36.5	32.5	28	23			
6HR 44/5	7.5	10		68.5	63.5	60.5	57.5	54	50	45.5	40.5	35	29			
6HR 44/6	9.2	12.5		82	76	72.5	69	64.5	60	54.5	48.5	42	35			
6HR 44/7	11	15		96	89	85	80.5	75.5	70	63.5	56.5	49	40.5			
6HR 44/9	13	17.5 <sup>(1)</sup>		123.5	114.5	109	103.5	97	89.5	81.5	73	63	52			
6HR 44/10	15	20		137	127	121	115	107.5	99.5	91	81	70	58			
6HR 44/12	18.5	25		164	152	145	138	129	120	109	97	84	70			
6HR 44/15	22	30		206	191	182	172	161	149	136	121	105	87			
6HR 44/18	26	35 <sup>(2)</sup>		247	229	218	207	194	179	163	146	126	104			
6HR 44/20	30	40		274	254	242	230	215	199	182	162	140	116			
6HR 44/25	37	50		343	318	303	287	269	249	227	202	175	145			

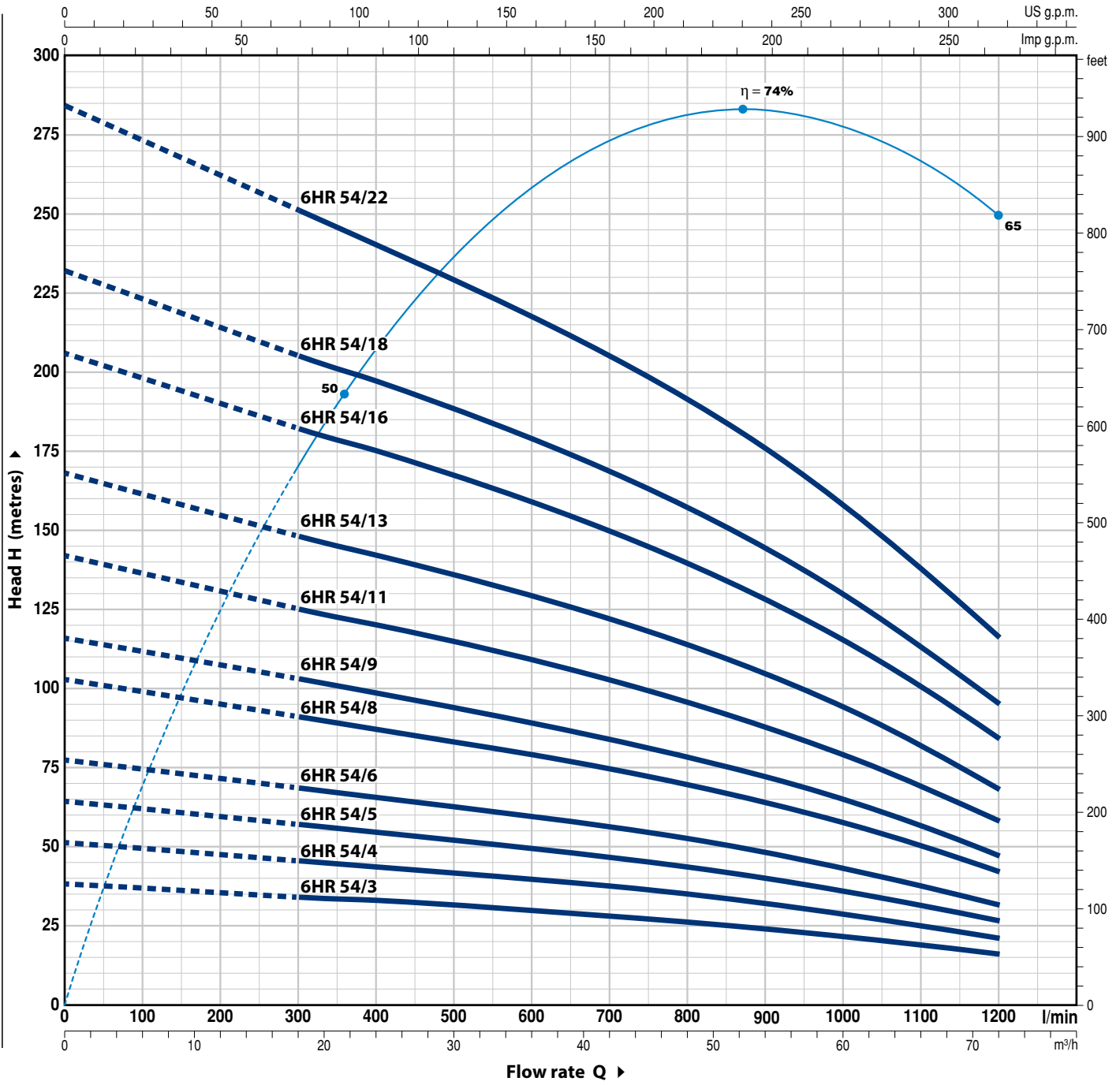
Q = Flow rate H = Total manometric head

(1) Pump fitted with a 20 HP motor  
(2) Pump fitted with a 40 HP motor

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

## CHARACTERISTIC CURVES AND PERFORMANCE DATA

50 Hz n = 2900 min<sup>-1</sup>



MODEL	POWER (P <sub>2</sub> )		Q	Flow rate (l/min)													
	kW	HP		0	18	24	30	36	42	48	54	60	66	72			
<b>Three-phase</b>				<b>0</b>	<b>300</b>	<b>400</b>	<b>500</b>	<b>600</b>	<b>700</b>	<b>800</b>	<b>900</b>	<b>1000</b>	<b>1100</b>	<b>1200</b>			
6HR 54/3	5.5	7.5	H metres	38.5	34	33	31.5	29.5	28	26	24	21.5	19	16			
6HR 54/4	7.5	10		51.5	45.5	43.5	41.5	39.5	37.5	35	32	29	25	21			
6HR 54/5	9.2	12.5		64.5	57	54.5	52	49.5	46.5	43.5	40	36	31.5	26.5			
6HR 54/6	11	15		77.5	68.5	65.5	62.5	59.5	56	52.5	48	43	37.5	31.5			
6HR 54/8	13	17.5 <sup>(1)</sup>		103	91	87	83	79	74.5	69.5	64	57.5	50.5	42			
6HR 54/9	15	20		116	103	98	94	89	84	78	72	65	57	47			
6HR 54/11	18.5	25		142	125	120	115	109	103	96	88	79	69	58			
6HR 54/13	22	30		168	148	142	136	129	121	113	104	94	82	68			
6HR 54/16	26	35 <sup>(2)</sup>		206	182	175	167	159	149	139	128	115	101	84			
6HR 54/18	30	40		232	205	197	188	178	168	157	144	130	113	95			
6HR 54/22	37	50	284	251	240	229	218	205	192	176	158	138	116				

Q = Flow rate H = Total manometric head

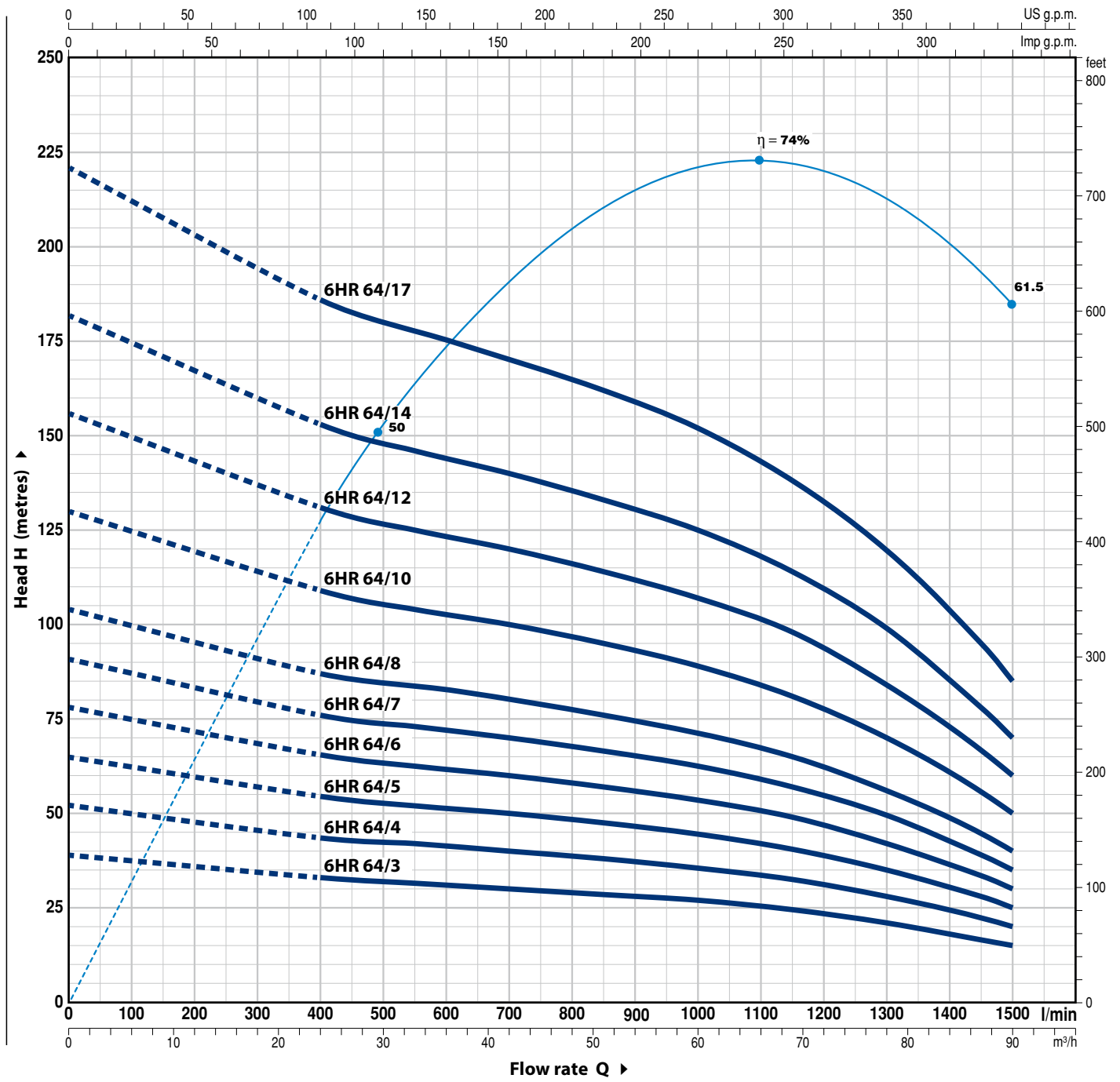
- (1) Pump fitted with a 20 HP motor
- (2) Pump fitted with a 40 HP motor

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

# 6HR64

## CHARACTERISTIC CURVES AND PERFORMANCE DATA

50 Hz n= 2900 min<sup>-1</sup>



MODEL	POWER (P <sub>2</sub> )		Q	Flow rate (m³/h)												
	kW	HP		0	24	33	42	51	60	69	78	87	90			
<b>Three-phase</b>				<b>0</b>	<b>400</b>	<b>550</b>	<b>700</b>	<b>850</b>	<b>1000</b>	<b>1150</b>	<b>1300</b>	<b>1450</b>	<b>1500</b>			
6HR 64/3	7.5	10	H metres	39	33	31.5	30	28.5	27	24.5	21	16.5	15			
6HR 64/4	9.2	12.5		52	43.5	42	40	38	35.5	32.5	28	22.5	20			
6HR 64/5	11	15		65	54.5	52	50	47.5	44.5	40.5	35	28	25			
6HR 64/6	13	17.5 <sup>(1)</sup>		78	65.5	62.5	60	57	53.5	49	42	33.5	30			
6HR 64/7	15	20		91	76	73	70	66.5	62.5	57	49.5	39	35			
6HR 64/8	18.5	25		104	87	84	80	76	71	65	56	45	40			
6HR 64/10	22	30		130	109	104	100	95	89	81	70	56	50			
6HR 64/12	26	35 <sup>(2)</sup>		156	131	125	120	114	107	98	84	67	60			
6HR 64/14	30	40		182	153	146	140	133	125	114	99	78	70			
6HR 64/17	37	50		221	186	178	170	162	152	138	120	95	85			

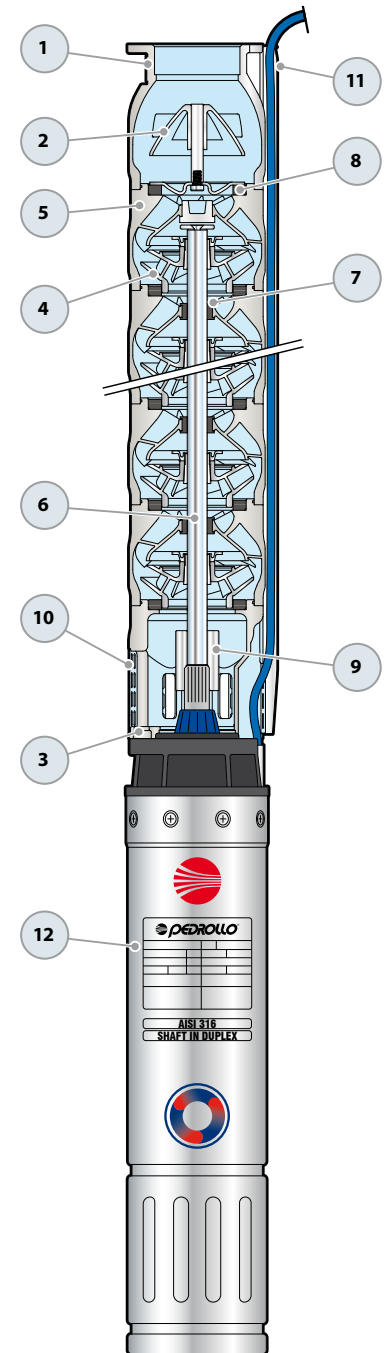
Q = Flow rate H = Total manometric head  
 (1) Pump fitted with a 20 HP motor  
 (2) Pump fitted with a 40 HP motor

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

## POS. COMPONENT

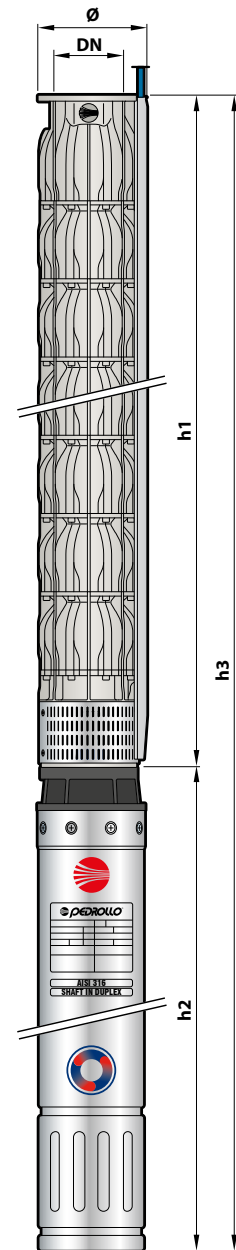
## CONSTRUCTION CHARACTERISTICS

<b>1 DELIVERY BODY</b>	Precision cast stainless steel AISI 304 complete with threaded delivery port in compliance with ISO 228/1
<b>2 NON-RETURN VALVE</b>	Stainless steel AISI 304
<b>3 MOTOR BRACKET</b>	Precision cast stainless steel AISI 304 in compliance with NEMA standards
<b>4 IMPELLERS</b>	Precision cast stainless steel AISI 304
<b>5 DIFFUSERS</b>	Precision cast stainless steel AISI 304
<b>6 PUMP SHAFT</b>	Stainless steel AISI 304
<b>7 PUMP BEARINGS</b>	Special elastomer
<b>8 WEAR RINGS</b>	Special elastomer
<b>9 DRIVE COUPLING</b>	Stainless steel AISI 304
<b>10 FILTER</b>	Stainless steel AISI 304
<b>11 CABLE COVER</b>	Stainless steel AISI 304
<b>12 MOTOR 6"</b>	6PD = "PEDROLLO" oil filled motor



## DIMENSIONS AND WEIGHT

MODEL	PORT DN	Ø	DIMENSIONS mm			kg 3~		
			h1	h2	h3			
6HR34/3 - PD	3"	150	581	595	1176	55.4		
6HR34/4 - PD			682	625	1307	61.1		
6HR34/5 - PD			783	660	1443	67.5		
6HR34/6 - PD			884	700	1584	72.9		
6HR34/7 - PD			985	765	1750	83.2		
6HR34/8 - PD			1086	765	1851	86.6		
6HR34/9 - PD			1187	820	2007	98.0		
6HR34/11 - PD			1389	820	2209	105.7		
6HR34/13 - PD			1591	883	2474	122.4		
6HR34/16 - PD			1894	953	2847	138.5		
6HR34/19 - PD			2197	1098	3295	166.6		
6HR34/22 - PD			2500	1098	3598	176.7		
6HR34/27 - PD			3005	1233	4238	203.5		
6HR44/3 - PD					581	625	1206	57.4
6HR44/4 - PD					682	660	1342	64.1
6HR44/5 - PD					783	660	1443	67.5
6HR44/6 - PD					884	700	1584	72.9
6HR44/7 - PD					985	765	1750	83.2
6HR44/9 - PD					1187	820	2007	98.0
6HR44/10 - PD					1288	820	2108	102.3
6HR44/12 - PD					1490	883	2373	119.0
6HR44/15 - PD					1793	953	2746	135.1
6HR44/18 - PD					2096	1098	3194	163.2
6HR44/20 - PD					2298	1098	3396	169.9
6HR44/25 - PD					2803	1233	4036	196.8
6HR54/3 - PD					599	625	1224	57.5
6HR54/4 - PD					706	660	1366	64.3
6HR54/5 - PD					813	700	1513	69.7
6HR54/6 - PD					920	765	1685	80.2
6HR54/8 - PD					1134	820	1954	95.0
6HR54/9 - PD					1241	820	2061	99.4
6HR54/11 - PD					1455	883	2338	116.2
6HR54/13 - PD					1669	953	2622	129.1
6HR54/16 - PD			1990	1098	3088	156.3		
6HR54/18 - PD			2204	1098	3302	164.1		
6HR54/22 - PD			2632	1233	3865	187.8		
6HR64/3 - PD			599	660	1259	57.2		
6HR64/4 - PD			706	700	1406	63.9		
6HR64/5 - PD			813	765	1578	69.2		
6HR64/6 - PD			920	820	1740	79.6		
6HR64/7 - PD			1027	820	1847	90.9		
6HR64/8 - PD			1134	883	2017	94.2		
6HR64/10 - PD			1348	953	2301	111.8		
6HR64/12 - PD			1562	1098	2660	124.4		
6HR64/14 - PD			1776	1098	2874	147.1		
6HR64/17 - PD			2097	1233	3330	159.0		



## DIMENSIONS AND WEIGHT (PUMP ONLY)

MODEL Pump	PORT DN	DIMENSIONS mm		kg 3~		
		Ø	h1			
6HR34/3 - HYD	3"	150	581	21.8		
6HR34/4 - HYD			682	25.1		
6HR34/5 - HYD			783	28.5		
6HR34/6 - HYD			884	32.5		
6HR34/7 - HYD			985	35.8		
6HR34/8 - HYD			1086	39.2		
6HR34/9 - HYD			1187	42.6		
6HR34/11 - HYD			1389	49.7		
6HR34/13 - HYD			1591	56.4		
6HR34/16 - HYD			1894	69.5		
6HR34/19 - HYD			2197	80.6		
6HR34/22 - HYD			2500	90.7		
6HR34/27 - HYD			3005	108.5		
6HR44/3 - HYD					581	21.8
6HR44/4 - HYD					682	25.1
6HR44/5 - HYD					783	28.5
6HR44/6 - HYD					884	32.5
6HR44/7 - HYD					985	35.8
6HR44/9 - HYD					1187	42.6
6HR44/10 - HYD					1288	46.3
6HR44/12 - HYD					1490	53.0
6HR44/15 - HYD					1793	66.1
6HR44/18 - HYD					2096	77.2
6HR44/20 - HYD					2298	83.9
6HR44/25 - HYD					2803	101.8
6HR54/3 - HYD					599	21.9
6HR54/4 - HYD					706	25.3
6HR54/5 - HYD					813	28.7
6HR54/6 - HYD					920	32.8
6HR54/8 - HYD					1134	39.6
6HR54/9 - HYD					1241	43.0
6HR54/11 - HYD					1455	50.2
6HR54/13 - HYD					1669	57.1
6HR54/16 - HYD					1990	70.3
6HR54/18 - HYD			2204	78.1		
6HR54/22 - HYD			2632	92.8		
6HR64/3 - HYD			599	21.6		
6HR64/4 - HYD			706	24.9		
6HR64/5 - HYD			813	28.2		
6HR64/6 - HYD			920	32.2		
6HR64/7 - HYD			1027	35.5		
6HR64/8 - HYD			1134	38.8		
6HR64/10 - HYD			1348	45.8		
6HR64/12 - HYD			1562	52.4		
6HR64/14 - HYD			1776	62.1		
6HR64/17 - HYD			2097	73.0		

