



SPM Series

5" Close-coupled Submersible Electric pumps

50Hz



STAIRS INDUSTRIAL CO., LTD.



SPM

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SPM series pumps are close-coupled multistage multistage centrifugal pumps.

Close coupled multi-stage submersible pumps. The motor is protected by a double seal system with an oil chamber providing long lasting reliability.

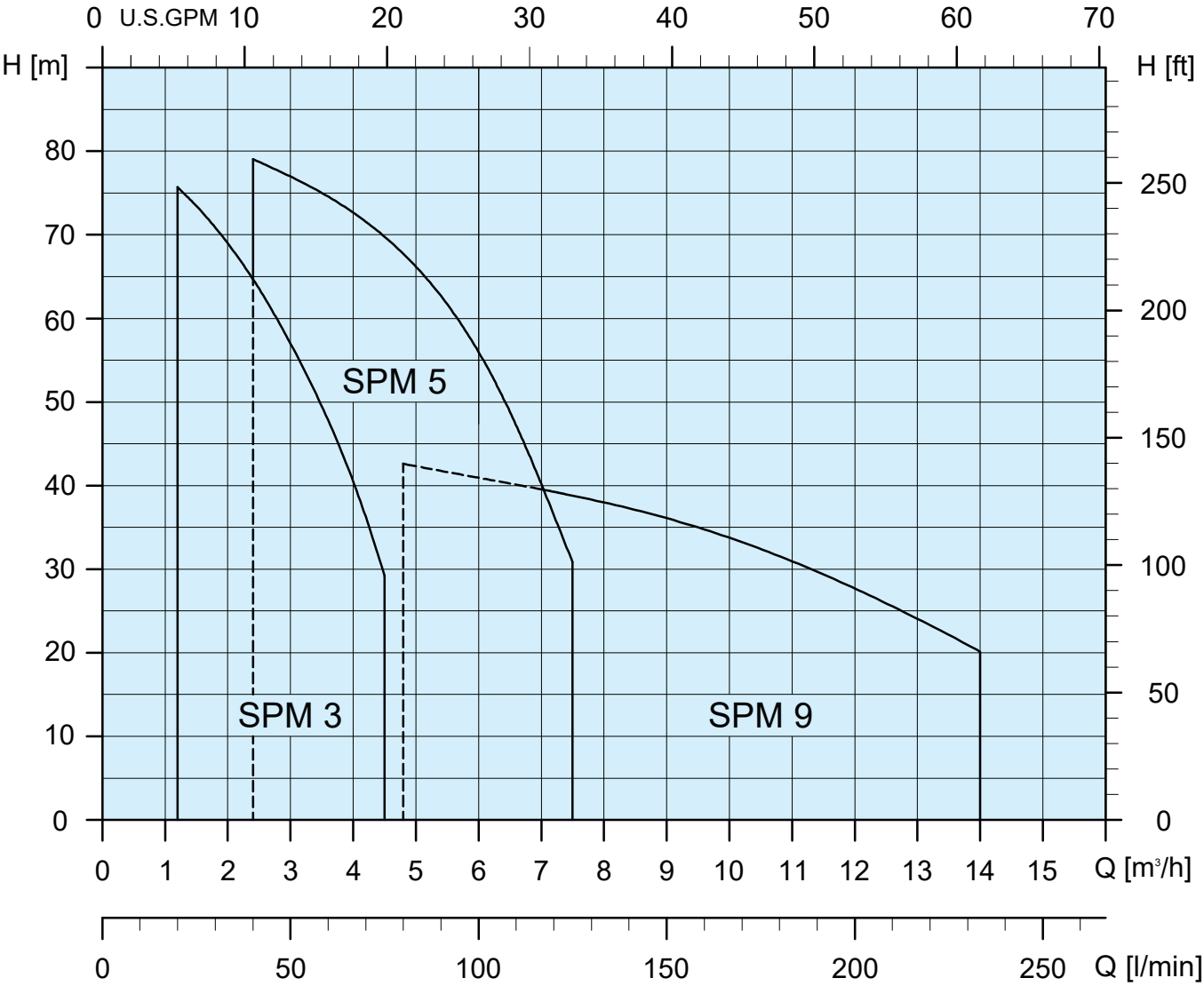
Motor cooling is assured by the pumping liquid.

AISI 304 stainless steel body and impellers ensure superior performance and maximum operational efficiency.

The SPM 5" is available with or without float switch.

It can also be installed in a horizontal position. The unit comes with 20 metres of cable and has a maximum permissible quantity of suspended sand 25 g/m³.

Performance Range





Model Code

	SPM	3	- 08	M	A
STAIRS Series Name					
Flow Rate [m³/h]					
Number Of Stages					
Single Phase					
With Float Switch					

Application

- Water supply from collection tanks , reservoirs , 6" wells traditional wells ,fresh water courses , lakes etc.
- Automatic systems for garden use.
- Surface irrigation systems.
- Increasing pressure in general inside tank or well, to avoid suction problems and noise.
- Rainwater harvesting system.

Motor

- Discharge size : RP 1 1/4" or G 1 1/4"
- Delivery : up to 14 m³/h
- Head : up to 87 m
- Power supply : Single phase , Three phase 50 Hz
- Power : from 0.55 kW up to 1.5 kW
- Temperature of pumped liquid : to 40 °C
- Maximum immersion depth : 20 m
- Maximum solids size : up to 2 mm
- Insulation class : F
- Protection : IP 68

Material Options

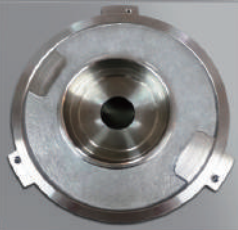
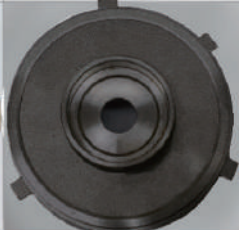
- Pump housing: AISI 304 stainless steel
- Impeller: AISI 304 stainless steel
- Elastomers: NBR
- Motors: Different voltages

Feature

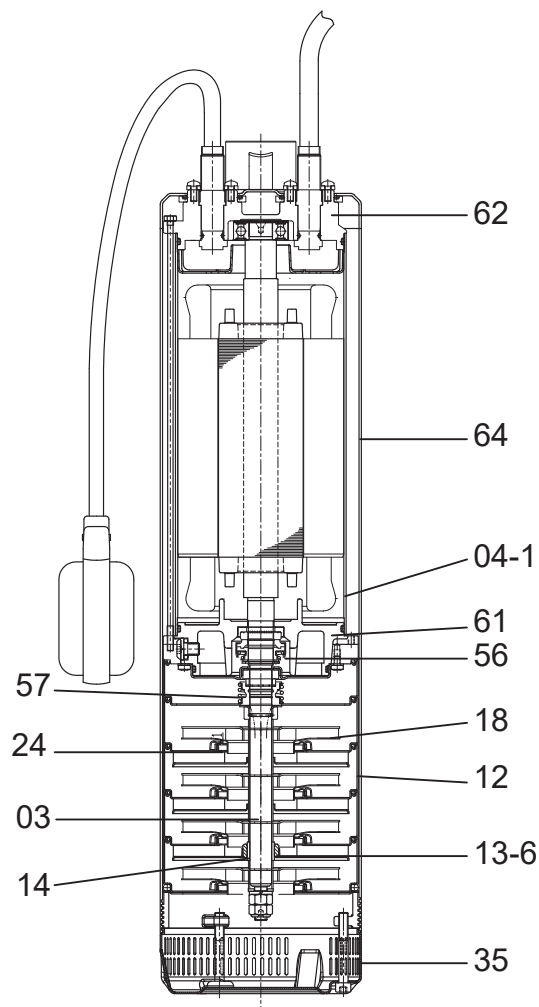
- Innovative
- Fast and easy installation
- Double Mechanical Seal System
- Versions with or without float switch
- Material Stainless Steel - AISI 304
- Installation : horizontal or vertical
- Built in Thermal Protector for Single Phase Model.
- Plug and play (Single Phase Only)

Control Box For Single Phase Models

- Capacitor
- Overload Relay
- On/off Switch

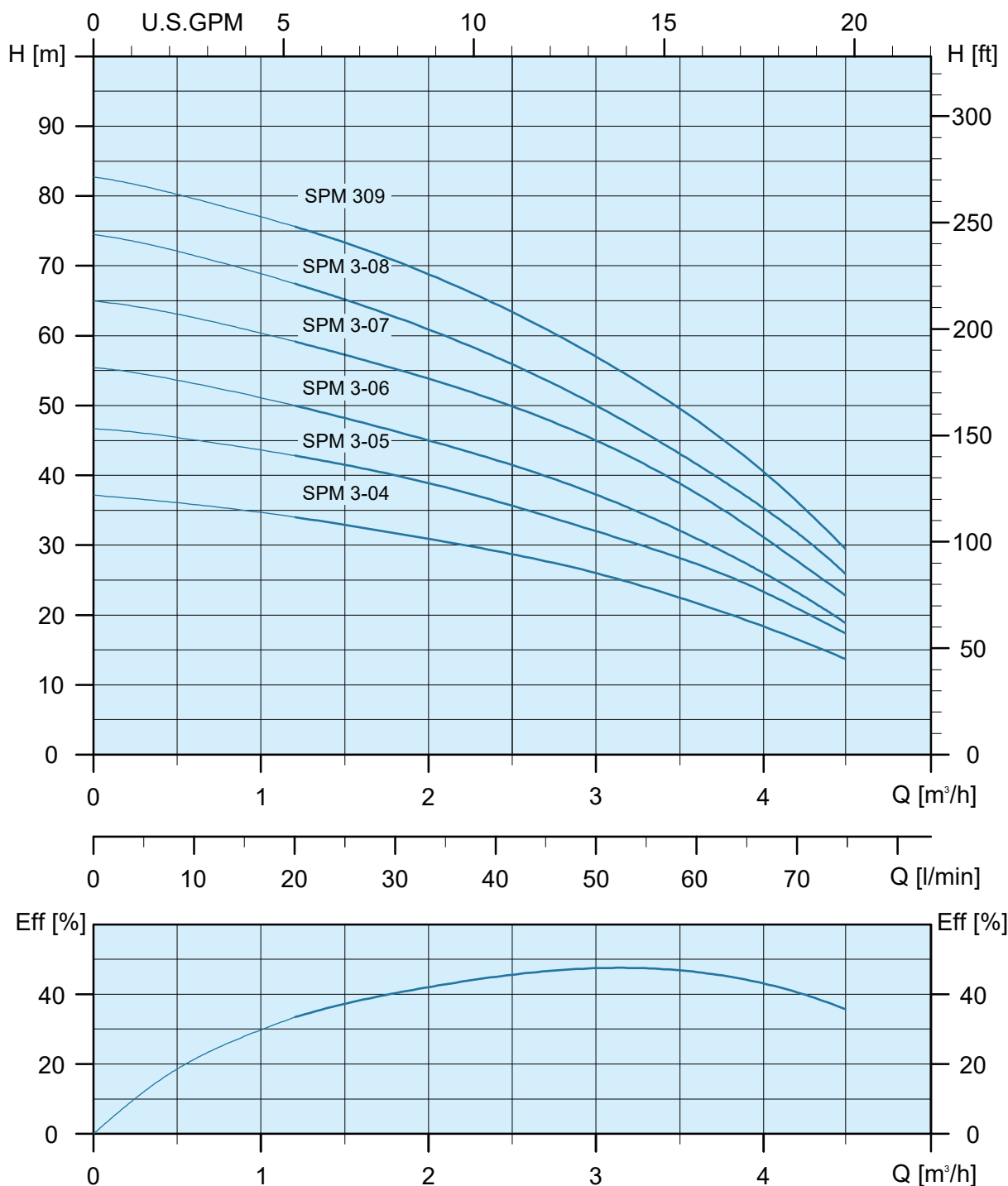
Pos.	STAIRS	Other Brand	Other Brand
01			
02			

Material



Pos.	Componente	Material	ED/DIN	ANSI/ASTM
03	Pump shaft	Stainless steel	1.4057	AISI 431
04-1	Motor sleeve	Stainless steel	1.4301	AISI 304
12	Chamber complete	Stainless steel	1.4301	AISI 304
13-6	Bearing ring (stationary)	Silicon carbide		
14	Bearing ring (rotating)	Silicon carbide		
18	Impeller	Stainless steel	1.4301	AISI 304
24	Neck ring	PTFE		
35	Suction strainer	Stainless steel	1.4301	AISI 304
56	Mechanical seal	Carbon / Ceramic / NBR		
57	Mechanical seal	Carbon / SIC / NBR		
61	Lower bearing bracket	Stainless steel	1.4301	AISI 304
62	Upper bearing bracket	Stainless steel	1.4301	AISI 304
64	External Sleeve	Stainless steel	1.4301	AISI 304

Performance Curve



Specifications

Pump Type			Q = DELIVERY									
1Ø		3Ø	m³/h	0	1.2	1.5	2.0	2.5	3.0	3.5	4.0	4.5
220 - 240V		220 - 240V 380 - 440V	l/min	0	20.0	25.0	33.3	41.7	50.0	58.3	66.7	75.0
SPM 3-04 MA	SPM 3-04 M	SPM 3-04	H (m)	37	34	33	31	29	26	22	18	14
SPM 3-05 MA	SPM 3-05 M	SPM 3-05		47	43	41	39	36	32	28	23	17
SPM 3-06 MA	SPM 3-06 M	SPM 3-06		55	50	48	45	41	37	32	26	19
SPM 3-07 MA	SPM 3-07 M	SPM 3-07		65	59	57	54	50	45	39	31	23
SPM 3-08 MA	SPM 3-08 M	SPM 3-08		74	67	65	61	56	50	43	35	26
SPM 3-09 MA	SPM 3-09 M	SPM 3-09		83	76	73	69	63	57	50	41	29

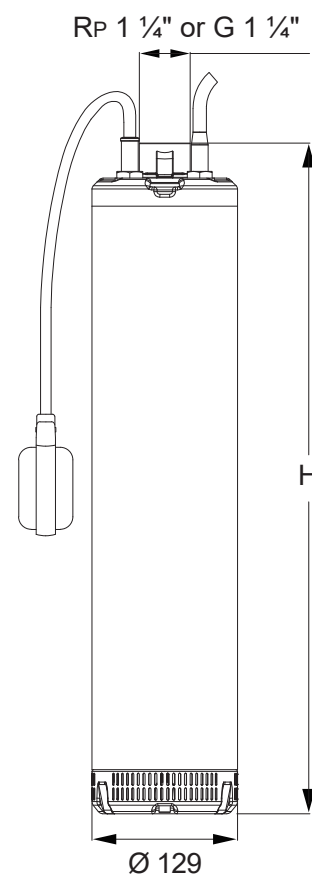
Specifications

Model	P ₁	P ₂		Capacitor		Max.Amp [A]		Head		Flow	
	kW	HP	kW	μF	V	220 - 240V	380 - 440V	Rated (m)	Max. (m)	Rated (m ³ /h)	Max. (m ³ /h)
Single Phase Auto (With float switch,with control box)											
SPM 3-04 MA	0.71	0.75	0.55	12	450	3.3 - 3.2	-	26	37	3	4.5
SPM 3-05 MA	0.86	0.75	0.55	12	450	4.1 - 3.7	-	32	47	3	4.5
SPM 3-06 MA	1.01	0.75	0.55	12	450	4.7 - 4.4	-	37	55	3	4.5
SPM 3-07 MA	1.13	1.0	0.75	18	400	5.4 - 5.0	-	45	65	3	4.5
SPM 3-08 MA	1.2	1.0	0.75	18	400	5.8 - 5.2	-	50	74	3	4.5
SPM 3-09 MA	1.41	1.5	1.1	20	400	6.6 - 6.4	-	57	83	3	4.5
Single Phase Manual (With control box)											
SPM 3-04 M	0.71	0.75	0.55	12	450	3.3 - 3.2	-	26	37	3	4.5
SPM 3-05 M	0.86	0.75	0.55	12	450	4.1 - 3.7	-	32	47	3	4.5
SPM 3-06 M	1.01	0.75	0.55	12	450	4.7 - 4.4	-	37	55	3	4.5
SPM 3-07 M	1.13	1.0	0.75	18	400	5.4 - 5.0	-	45	65	3	4.5
SPM 3-08 M	1.2	1.0	0.75	18	400	5.8 - 5.2	-	50	74	3	4.5
SPM 3-09 M	1.41	1.5	1.1	20	400	6.6 - 6.4	-	57	83	3	4.5
Three Phase											
SPM 3-04	0.72	0.75	0.55	-	-	2.6 - 3.0	1.5 - 1.4	26	37	3	4.5
SPM 3-05	0.86	0.75	0.55	-	-	2.8 - 3.2	1.6 - 1.5	32	47	3	4.5
SPM 3-06	1.0	0.75	0.55	-	-	3.1 - 3.4	1.8 - 1.6	37	55	3	4.5
SPM 3-07	1.16	1.0	0.75	-	-	4.0 - 4.3	2.3 - 2.4	45	65	3	4.5
SPM 3-08	1.22	1.0	0.75	-	-	4.1 - 4.4	2.4 - 2.5	50	74	3	4.5
SPM 3-09	1.42	1.5	1.1	-	-	5.0 - 5.6	2.8 - 3.2	57	83	3	4.5

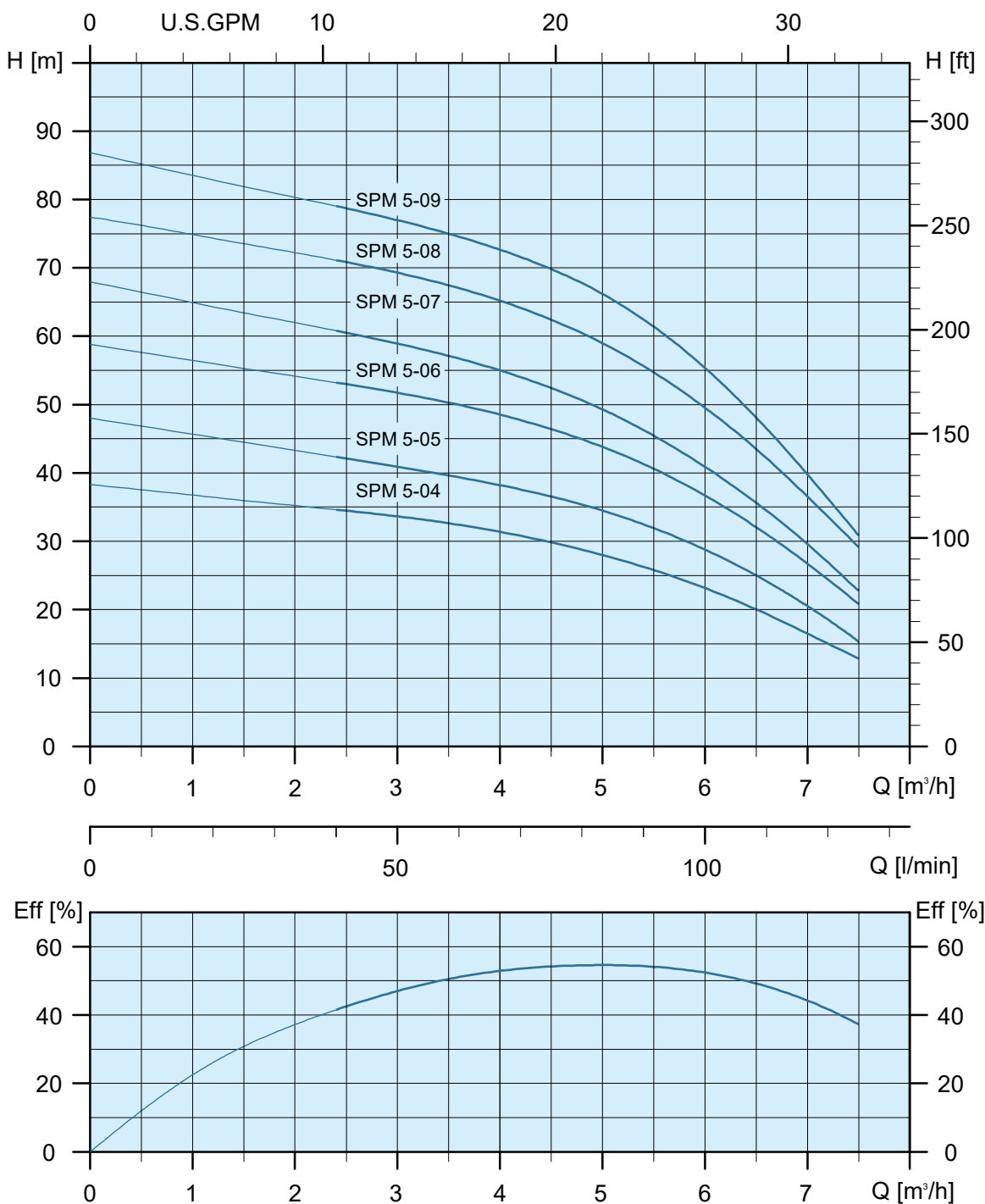
*Maximum values within operating range.

Specifications

Model	H	Cable (H07RN-F)		Solid Passage (mm)	Net Weight (kg)
		m	mm ²		
Single phase Auto (With float switch,with control box)					
SPM 3-04 MA	425	20	4G1.0	2	14.9
SPM 3-05 MA	443	20	4G1.0	2	15.2
SPM 3-06 MA	461	20	4G1.0	2	15.5
SPM 3-07 MA	501	20	4G1.0	2	17.2
SPM 3-08 MA	519	20	4G1.0	2	17.6
SPM 3-09 MA	555	20	4G1.5	2	19.2
Single phase Manual (With control box)					
SPM 3-04 M	425	20	4G1.0	2	14.5
SPM 3-05 M	443	20	4G1.0	2	14.8
SPM 3-06 M	461	20	4G1.0	2	15.1
SPM 3-07 M	501	20	4G1.0	2	16.8
SPM 3-08 M	519	20	4G1.0	2	17.2
SPM 3-09 M	555	20	4G1.5	2	18.8
Three phase					
SPM 3-04	425	20	4G1.0	2	13.8
SPM 3-05	443	20	4G1.0	2	14.1
SPM 3-06	461	20	4G1.0	2	14.4
SPM 3-07	501	20	4G1.0	2	16.1
SPM 3-08	519	20	4G1.0	2	16.4
SPM 3-09	555	20	4G1.0	2	18.0



Performance Curve



Specifications

Pump Type			Q = DELIVERY										
1Ø	3Ø		m³/h	0	2.4	3.0	3.5	4.0	4.5	5.0	5.5	6.5	7.5
220 - 240V	220 - 240V	380 - 440V	l/min	0	40.0	50.0	58.3	66.7	75.0	83.3	91.7	108.3	125.0
SPM 5-04 MA	SPM 5-04 M	SPM 5-04	H (m)	38	35	34	33	31	30	28	26	20	13
SPM 5-05 MA	SPM 5-05 M	SPM 5-05		48	42	41	40	38	37	34	32	25	15
SPM 5-06 MA	SPM 5-06 M	SPM 5-06		59	53	52	50	49	46	44	41	32	21
SPM 5-07 MA	SPM 5-07 M	SPM 5-07		68	61	59	57	55	52	49	45	36	23
SPM 5-08 MA	SPM 5-08 M	SPM 5-08		77	71	69	67	65	62	59	55	43	29
SPM 5-09 MA	SPM 5-09 M	SPM 5-09		87	79	77	75	73	70	66	61	48	31

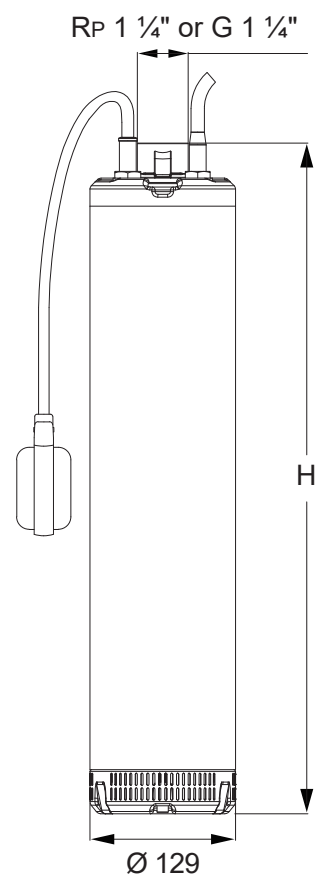
Specifications

Model	P1	P2		Capacitor		Max.Amp [A]		Head		Flow	
	kW	HP	kW	μF	V	220 - 240V	380 - 440V	Rated (m)	Max. (m)	Rated (m ³ /h)	Max. (m ³ /h)
Single Phase Auto (With float switch,with control box)											
SPM 5-04 MA	1.08	1.0	0.75	18	400	5.1 - 4.8	-	28	38	5	7.5
SPM 5-05 MA	1.38	1.0	0.75	18	400	6.5 - 6.0	-	34	48	5	7.5
SPM 5-06 MA	1.66	1.5	1.1	20	400	8.0 - 7.4	-	44	59	5	7.5
SPM 5-07 MA	1.86	1.5	1.1	20	400	8.9 - 8.3	-	49	68	5	7.5
SPM 5-08 MA	2.11	2.0	1.5	35	450	9.8 - 9.3	-	59	77	5	7.5
SPM 5-09 MA	2.37	2.0	1.5	35	450	10.8 - 9.8	-	66	87	5	7.5
Single Phase Manual (With control box)											
SPM 5-04 M	1.08	1.0	0.75	18	400	5.1 - 4.8	-	28	38	5	7.5
SPM 5-05 M	1.38	1.0	0.75	18	400	6.5 - 6.0	-	34	48	5	7.5
SPM 5-06 M	1.66	1.5	1.1	20	400	8.0 - 7.4	-	44	59	5	7.5
SPM 5-07 M	1.86	1.5	1.1	20	400	8.9 - 8.3	-	49	68	5	7.5
SPM 5-08 M	2.11	2.0	1.5	35	450	9.8 - 9.3	-	59	77	5	7.5
SPM 5-09 M	2.37	2.0	1.5	35	450	10.8 - 9.8	-	66	87	5	7.5
Three Phase											
SPM 5-04	1.12	1.0	0.75	-	-	3.9 - 4.3	2.2 - 2.5	28	38	5	7.5
SPM 5-05	1.39	1.0	0.75	-	-	4.5 - 4.6	2.5 - 2.7	34	48	5	7.5
SPM 5-06	1.66	1.5	1.1	-	-	5.5 - 6.0	3.1 - 3.4	44	59	5	7.5
SPM 5-07	1.81	1.5	1.1	-	-	5.9 - 6.3	3.3 - 3.6	49	68	5	7.5
SPM 5-08	2.05	2.0	1.5	-	-	6.5 - 6.6	3.7 - 3.8	59	77	5	7.5
SPM 5-09	2.33	2.0	1.5	-	-	7.0 - 7.1	4.1 - 4.0	66	87	5	7.5

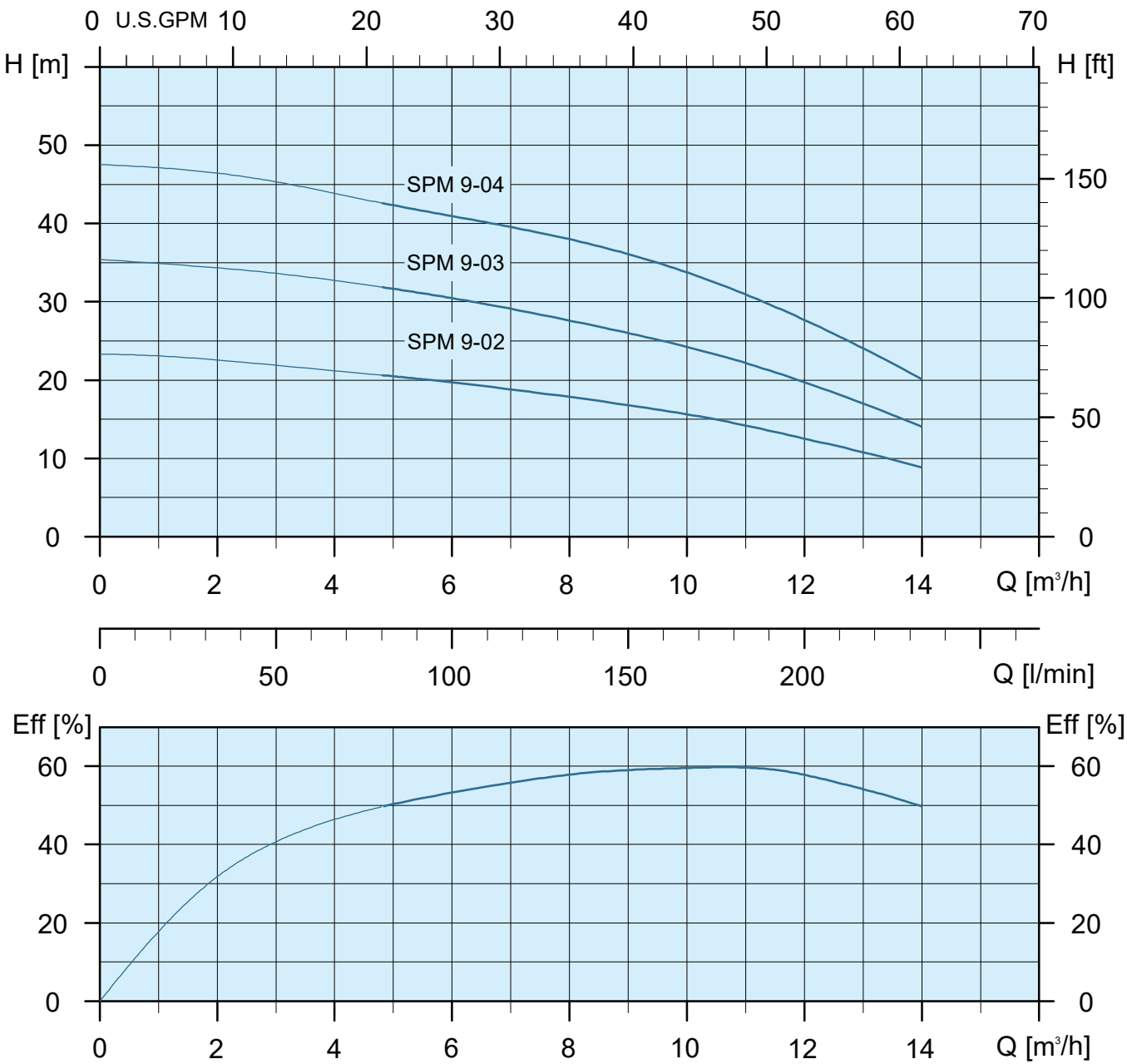
*Maximum values within operating range.

Specifications

Model	H	Cable (H07RN-F)		Solid Passage (mm)	Net Weight (kg)
		m	mm ²		
Single phase Auto (With float switch,with control box)					
SPM 5-04 MA	447	20	4G1.0	2	16.3
SPM 5-05 MA	465	20	4G1.0	2	16.6
SPM 5-06 MA	501	20	4G1.5	2	19.0
SPM 5-07 MA	519	20	4G1.5	2	19.3
SPM 5-08 MA	577	20	4G1.5	2	22.2
SPM 5-09 MA	595	20	4G1.5	2	22.6
Single phase Manual (With control box)					
SPM 5-04 M	447	20	4G1.0	2	15.9
SPM 5-05 M	465	20	4G1.0	2	16.2
SPM 5-06 M	501	20	4G1.5	2	18.6
SPM 5-07 M	519	20	4G1.5	2	18.9
SPM 5-08 M	577	20	4G1.5	2	21.8
SPM 5-09 M	595	20	4G1.5	2	22.2
Three phase					
SPM 5-04	447	20	4G1.0	2	15.1
SPM 5-05	465	20	4G1.0	2	15.4
SPM 5-06	501	20	4G1.0	2	17.0
SPM 5-07	519	20	4G1.0	2	17.4
SPM 5-08	577	20	4G1.0	2	20.3
SPM 5-09	595	20	4G1.0	2	20.6



Performance Curve



Specifications

Pump Type			Q = DELIVERY											
1Ø	3Ø		m³/h	0	4.8	6.0	8.0	9.0	10.0	11.0	12.0	13.0	14.0	
220 - 240V	220 - 240V	380 - 440V	l/min	0	80.0	100.0	133.3	150.0	166.7	183.3	200.0	216.7	233.3	
SPM 9-02 MA	SPM 9-02 M	SPM 9-02	H (m)	23	21	20	18	17	16	14	13	11	9	
SPM 9-03 MA	SPM 9-03 M	SPM 9-03		35	32	30	28	26	24	22	20	17	14	
SPM 9-04 MA	SPM 9-04 M	SPM 9-04		48	43	41	38	36	34	31	28	24	20	

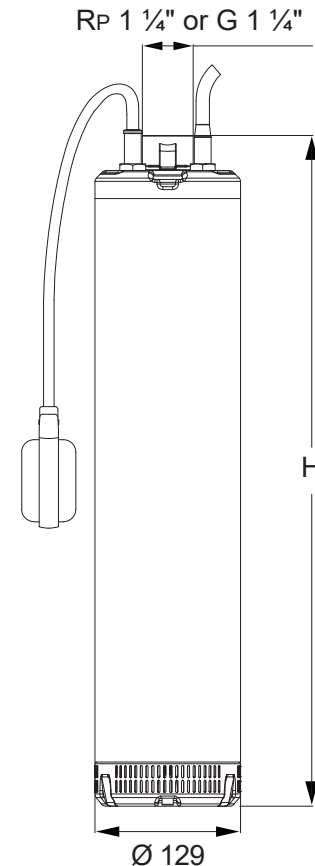
Specifications

Model	P1	P2		Capacitor		Max.Amp [A]		Head		Flow	
	kW	HP	kW	μF	V	220 - 240V	380 - 440V	Rated (m)	Max. (m)	Rated (m ³ /h)	Max. (m ³ /h)
Single Phase Auto (With float switch,with control box)											
SPM 9-02 MA	1.16	1.0	0.75	18	400	5.3 - 5.2	-	16	23	10	14
SPM 9-03 MA	1.62	1.5	1.1	20	400	7.7 - 7.3	-	24	35	10	14
SPM 9-04 MA	2.12	2.0	1.5	35	450	9.9 - 9.2	-	34	48	10	14
Single Phase Manual (With control box)											
SPM 9-02 M	1.16	1.0	0.75	18	400	5.3 - 5.2	-	16	23	10	14
SPM 9-03 M	1.62	1.5	1.1	20	400	7.7 - 7.3	-	24	35	10	14
SPM 9-04 M	2.12	2.0	1.5	35	450	9.9 - 9.2	-	34	48	10	14
Three Phase											
SPM 9-02	1.17	1.0	0.75	-	-	4.0 - 4.4	2.3 - 2.5	16	23	10	14
SPM 9-03	1.58	1.5	1.1	-	-	5.3 - 5.7	3.0 - 3.3	24	35	10	14
SPM 9-04	2.06	2.0	1.5	-	-	6.5 - 6.6	3.8 - 3.7	34	48	10	14

*Maximum values within operating range.

Specifications

Model	H	Cable (H07RN-F)		Solid Passage (mm)	Net Weight (kg)
		m	mm ²		
Single phase Auto (With float switch,with control box)					
SPM 9-02 MA	488	20	4G1.0	2	15.9
SPM 9-03 MA	488	20	4G1.5	2	18.6
SPM 9-04 MA	488	20	4G1.5	2	21.6
Single phase Manual (With control box)					
SPM 9-02 M	488	20	4G1.0	2	15.5
SPM 9-03 M	488	20	4G1.5	2	18.2
SPM 9-04 M	488	20	4G1.5	2	21.2
Three phase					
SPM 9-02	488	20	4G1.0	2	14.7
SPM 9-03	488	20	4G1.0	2	16.6
SPM 9-04	488	20	4G1.0	2	19.7





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