



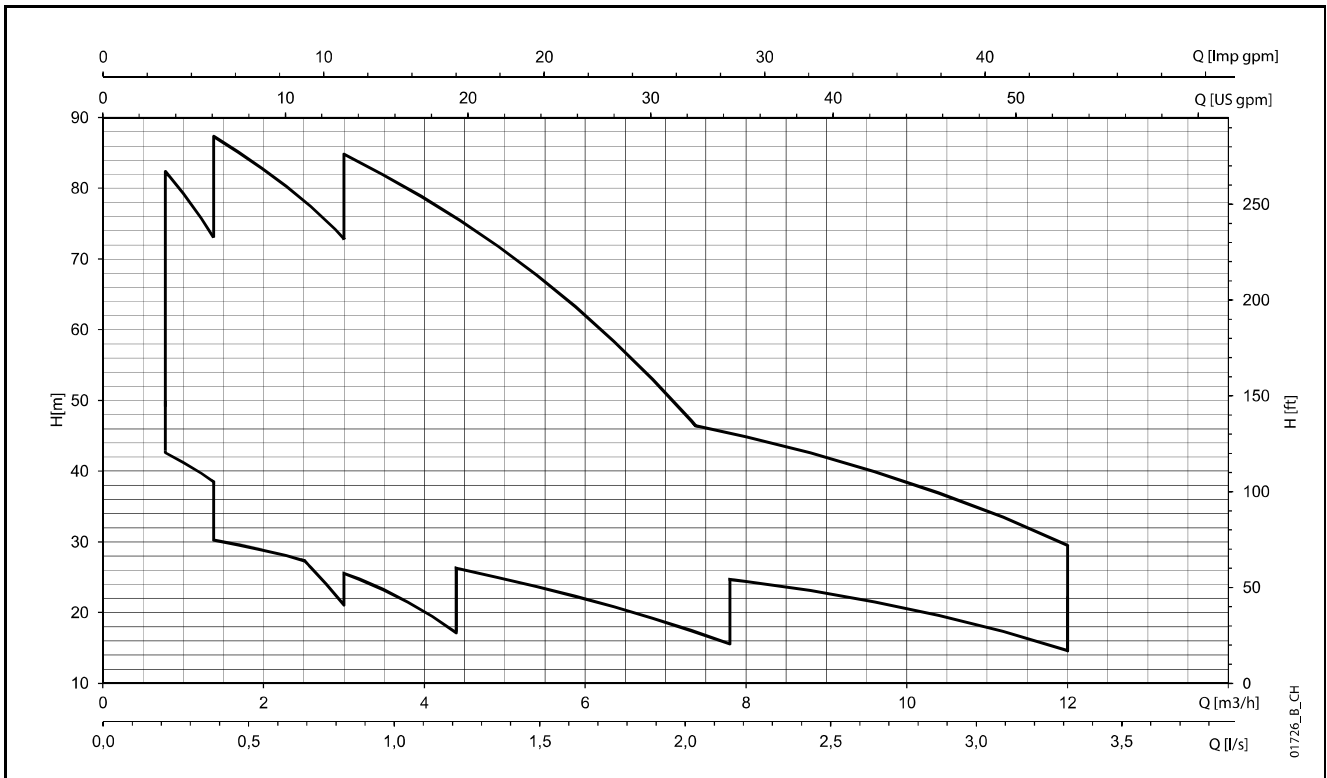
SCUBA Series

CLOSE-COUPLED SUBMERSIBLE ELECTRIC PUMPS

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**SCUBA SERIES
HYDRAULIC PERFORMANCE RANGE**



Close-coupled submersible electric pumps SCUBA Series

GENERAL INTRODUCTION



- **Head made of microcasted stainless steel**
- **Plug-in power supply cable and float switch**
- **Potable water version**
- **Noiseless operation**
- **Decentered delivery manifold and balanced lifting eye**
- **Sand abrasion resistant impellers**

MARKET SECTORS

RESIDENTIAL, AGRICULTURE, INDUSTRY.

APPLICATIONS

- Water supply from primary water supply tanks or reservoirs, 6" wells, basins and watercourses.
- Sprinkler irrigation systems.
- Pressure boosting with pump directly inserted in tank or well.
- Rain water harvesting.
- Car washing system.
- Pressurization on board ship
- Air purification/humidification systems
- Filtration systems
- Water recycling systems

CHARACTERISTIC DATA:

- **Delivery:** up to 12 m³/h at 3450 rpm.
- **Head:** up to 100 m at 3450 rpm.
- **Motor power:** 0,55 to 2,2 kW.
- **Maximum operating pressure:** 10 bar.
- **Single-phase version:** 220-230 V, 60 Hz 2 poles (3450 rpm).
- With built-in automatic reset overload protection.
- Standard version with built-in capacitor, or external capacitor upon request
- **Three-phase version:** 380-400 V, 50 Hz 2 poles (3450 rpm).
- Overload protection to be provided by user and installed in the control panel (see electric panel section).

OPERATING CONDITIONS

- **Temperature of pumped liquid:**
 - Standard version: 0 to 40°C.
 - Potable water version: 0 to 23°C.
- Vertical/Horizontal installation
- **Maximum immersion depth:** 17 m
- **Maximum permissible quantity of suspended sand:** 25 g/m³
- **Maximum quantity of chloride** at 20°C: 200 PPM
- **Passes solids:**
 - 1SC: up to 1 mm.
 - 3SC, 5SC, 8SC: up to 2 mm

CONSTRUCTION CHARACTERISTICS

- The liquid end is located underneath the electric motor, which is cooled by the pumped liquid.
- Impellers are radial centrifugal type, made of technopolymer.
- Diffusers, outer sleeve, motor casing, suction screen and shaft extension are made of stainless steel.
- Head is made of microcasted stainless steel.
- Ease of installation and maintenance due to plug-in power supply cable and float switch
- Potable water version available upon request.
- The electric motor is protected by a double seal system with an oil chamber.

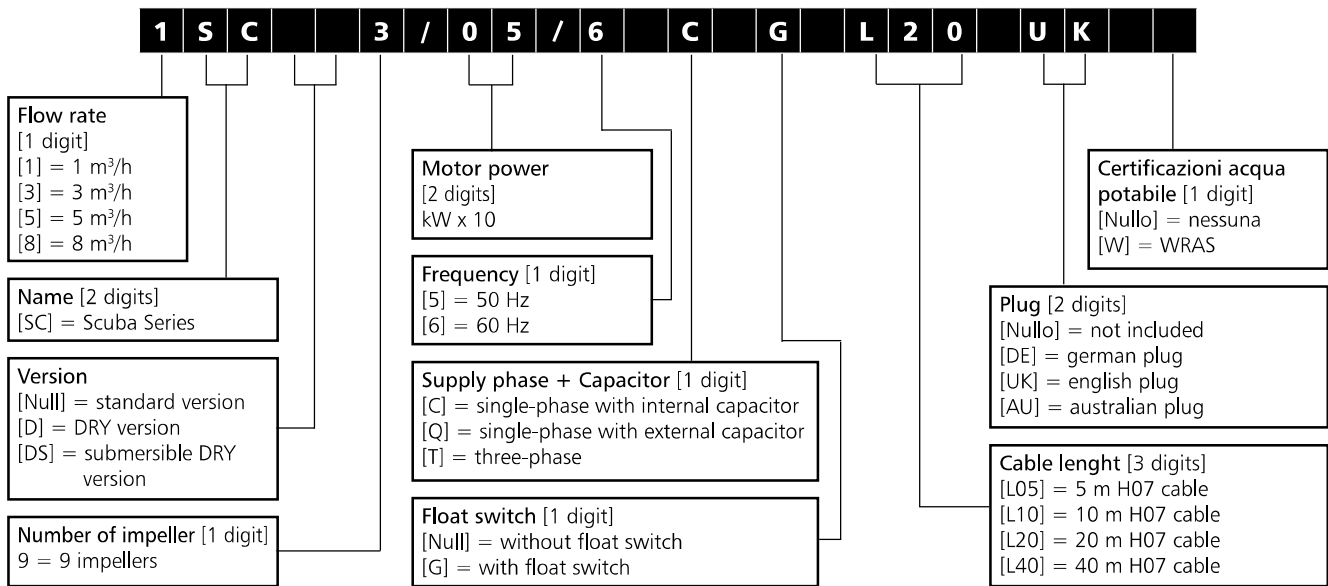
ACCESSORIES

- Kit with anode
- Kit with floating switch
- Control panel with external capacitor
- Control and protection panel

Upon request:

- Installation with float
- Kit with ResiBoost inverter
- 220 - 240V, three-phase version
- Power supply cord available in multiple length
- Potable water version available.

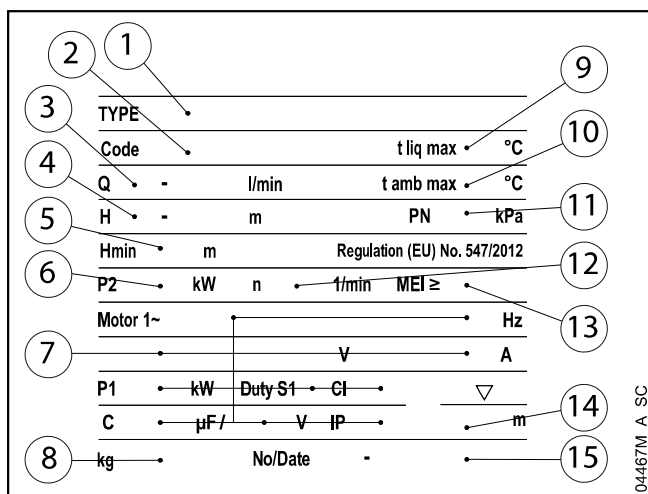
SCUBA SERIES IDENTIFICATION CODE



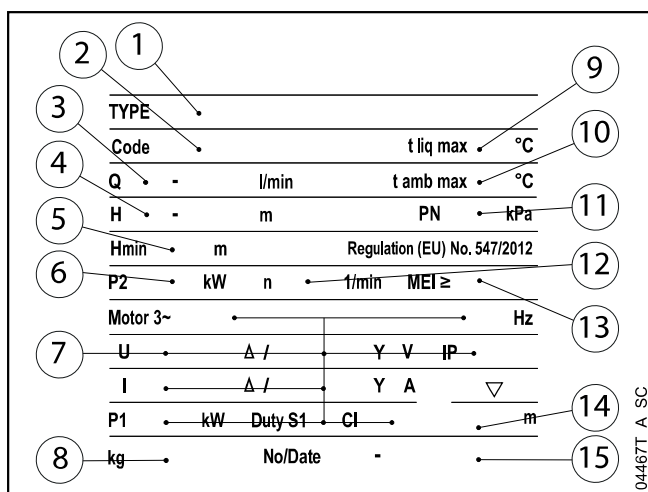
EXAMPLE: 1SC3/05/6 C G L20 UK

Flow rate 1 m³/h, Scuba series electric pump, 3 impellers, motor power 0,55 kW, frequency 60 Hz, single-phase version with internal capacitor, with float switch, 20 m of H07 cable and english plug.

RATING PLATE - SINGLE-PHASE



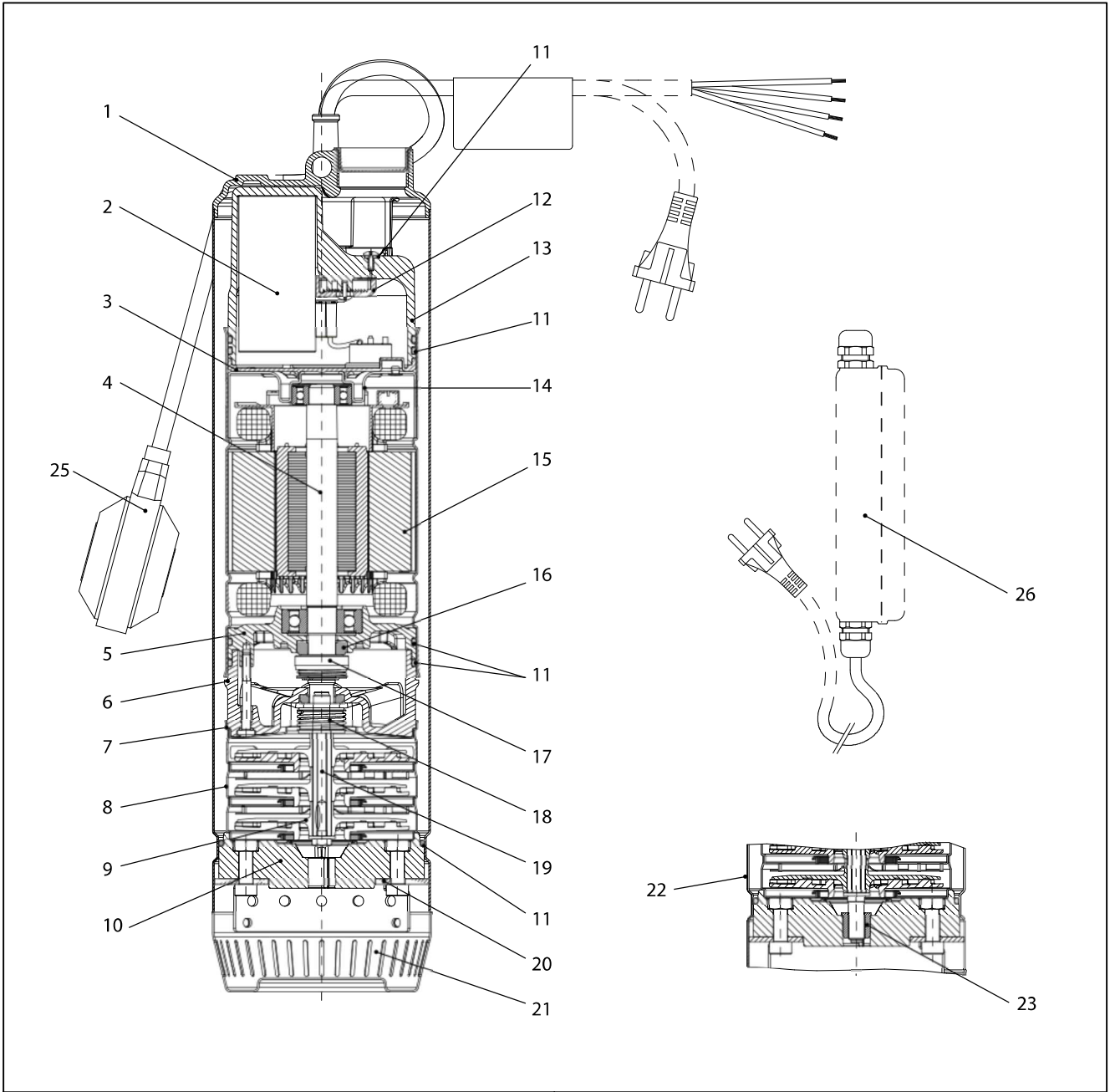
RATING PLATE - THREE-PHASE



LEGEND

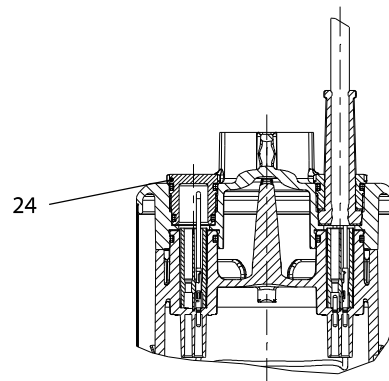
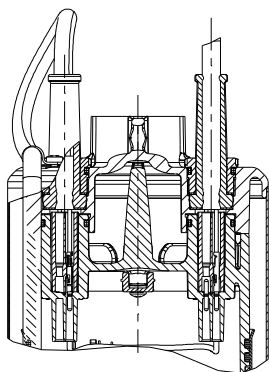
- 1 - Electric pump type
- 2 - Code
- 3 - Delivery range
- 4 - Head range
- 5 - Minimum head
- 6 - Motor nominal power
- 7 - Motor characteristics:
 - Motor type
 - Frequency
 - Supply voltage
 - Absorbed current
 - Absorbed power
 - Type of service S1
 - Thermal class
 - Capacity (single-phase version)
 - Capacitor voltage (single-phase version)
 - Protection class
- 8 - Weight
- 9 - Maximum operating liquid temperature
- 10 - Maximum operating ambient temperature
- 11 - Maximum operating pressure
- 12 - Speed
- 13 - Minimum efficiency index MEI
- 14 - Maximum immersion depth
- 15 - Serial number and manufacturing data

**SCUBA SERIES
PUMP SECTION AND LIST OF MAIN COMPONENTS**



VERSION WITH FLOAT SWITCH

VERSION WITHOUT FLOAT SWITCH



04453B_D_DS

SCUBA SERIES TABLE OF MATERIALS

N°	DENOMINATION	MATERIAL	REFERENCE STANDARD	
			EUROPE	USA
1	Head	Stainless steel	EN 10088-1-GX5CrNi19-10 (1.4308)	ASTM A743 CF8
2	Capacitor			
3	Connection container	PA66-GF25		
4	Motor shaft	Stainless steel	EN 10088-3-X17CrNi16-2 (1.4057)	AISI 431
5	Lower bearing support	Die-cast aluminium		
6	Lower head	Technopolymer		
7	Final bowl	Stainless steel	EN 10088-1-X5CrNi18-10 (1.4301)	AISI 304
8	Diffuser	Stainless steel	EN 10088-1-X5CrNi18-10 (1.4301)	AISI 304
9	Impeller	Technopolymer		
10	Bush bearing bracket	Technopolymer		
11	Elastomers	Nitrile rubber (NBR)		
12	Capacitor housing spacer	PA66-GF25		
13	Upper head	Technopolymer		
14	Upper bearing support	Stainless steel	EN 10088-1-X5CrNi18-10 (1.4301)	AISI 304
15	Sleeve with wound stator	Stainless steel	EN 10088-1-X5CrNi18-10 (1.4301)	AISI 304
16	Internal mech. seal (rotary part)	Carbographite		
17	Internal mech. seal (fixed part)	Steatite		
18	External mech. seal	Silicon carbide / Silicon carbide / NBR		
19	Pump shaft	Stainless steel	EN 10088-3-X17CrNi16-2 (1.4057)	AISI 431
20	Pack locking disk	Stainless steel	EN 10088-1-X5CrNi18-10 (1.4301)	AISI 304
21	Filter	Stainless steel	EN 10088-1-X5CrNi18-10 (1.4301)	AISI 304
22	Sleeve	Stainless steel	EN 10088-1-X5CrNi18-10 (1.4301)	AISI 304
23	Bush bearing (*)	Technopolymer		
24	Plug	Stainless steel	EN 10088-1-X5CrNi18-10 (1.4301)	AISI 304
25	Float switch (**)			
26	QC (***)			

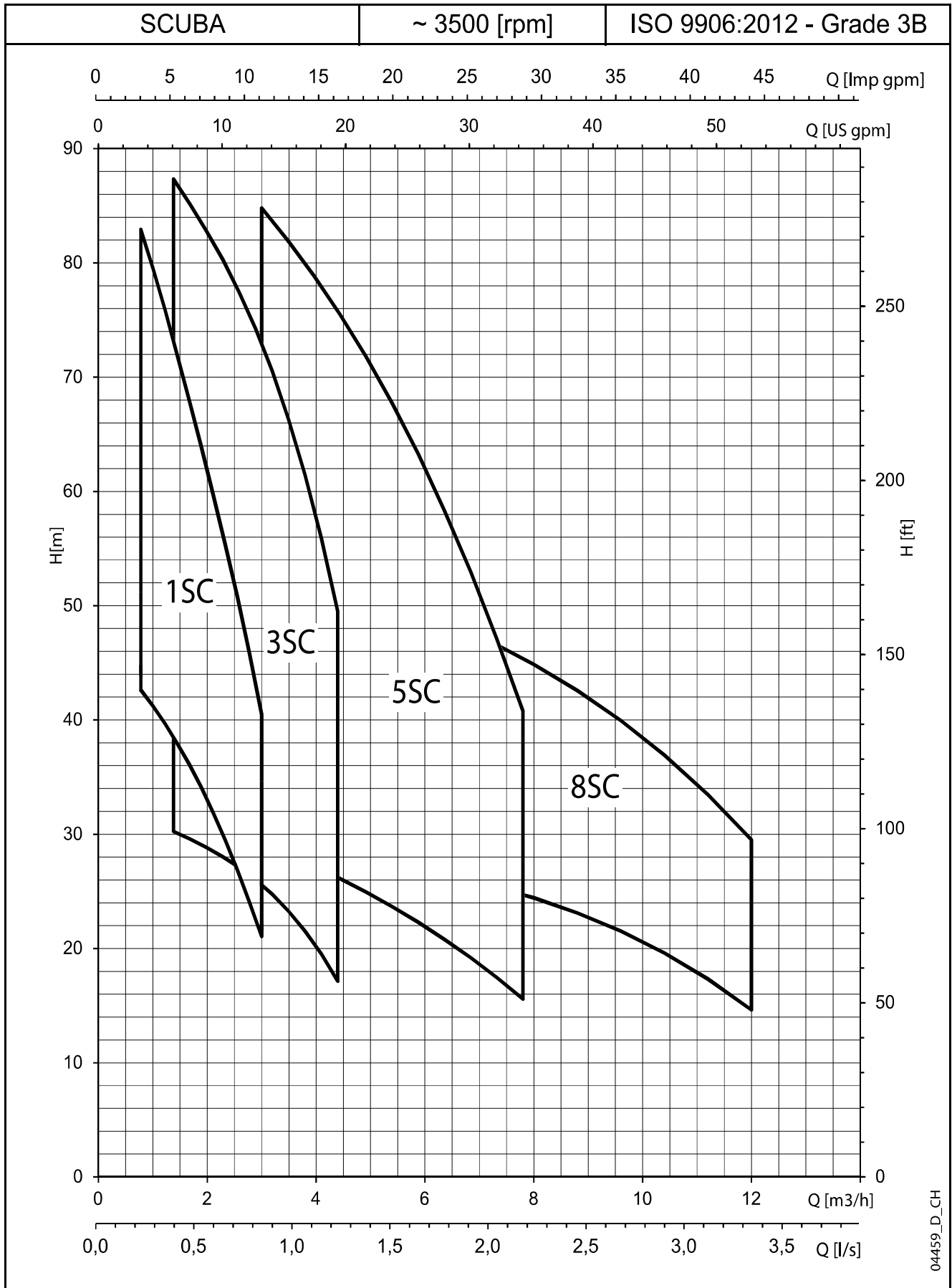
(*) Bush bearing version for models 1SC, 3SC, 5SC from 6 to 9 stages; 8SC from 5 to 6 stages.

scuba-2p50-en_a_tm

(**) for G version only.

(***) for single-phase without capacitor only.

**SCUBA SERIES
HYDRAULIC PERFORMANCE RANGE**

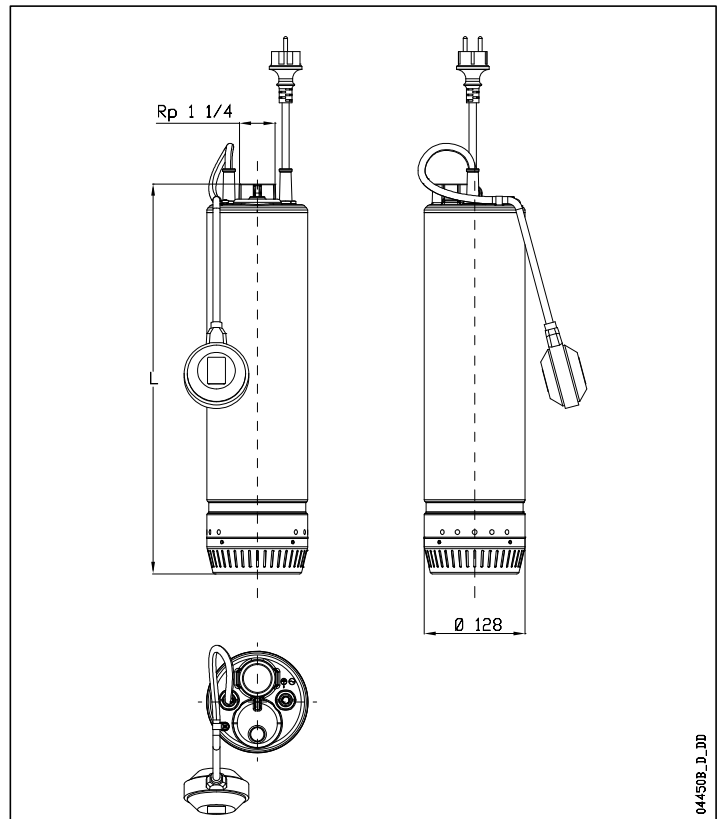


1SC SERIES DIMENSIONS AND WEIGHTS

PUMP TYPE	N. OF STAGE	DIMENSIONS L mm	WEIGHT kg
1SC3/05/6..	3	495	12,7
1SC4/07/6..	4	535	15,3
1SC5/09/6..	5	555	15,5
1SC6/11/6..	6	595	17,2
1SC3/05/6T	3	495	13,2
1SC4/07/6T	4	535	15,7
1SC5/09/6T	5	555	16,0
1SC6/11/6T	6	595	17,7

PUMP TYPE	SECTION	CABLE TYPE	CABLE LENGHT m
1SC3/05/6..	3G1	H07RN-F	20,0
1SC4/07/6..	3G1,5	H07RN-F	20,0
1SC5/09/6..	3G1,5	H07RN-F	20,0
1SC6/11/6..	3G1,5	H07RN-F	20,0
1SC3/05/6T	4G1	H07RN-F	20,0
1SC4/07/6T	4G1,5	H07RN-F	20,0
1SC5/09/6T	4G1,5	H07RN-F	20,0
1SC6/11/6T	4G1,5	H07RN-F	20,0

Versions with 10 meter cable available on request 1SC-2p60-en_a_td



044508_D_DD

HYDRAULIC PERFORMANCE TABLE

PUMP TYPE	RATED POWER		Q = DELIVERY												
			l/min 0	13,3	18,3	23,3	28,3	33,3	38,3	43,3	48,3	50,0			
			m ³ /h 0	0,8	1,1	1,4	1,7	2,0	2,3	2,6	2,9	3,0			
		H = TOTAL HEAD METRES COLUMN OF WATER													
	kW	HP													
1SC3/05/6..	0,55	0,75	48,1	44,0	42,1	39,8	37,3	34,4	31,1	27,7	23,9	22,6			
1SC4/07/6..	0,75	1	63,9	58,6	56,0	53,1	49,7	45,8	41,6	36,9	32,0	30,3			
1SC5/09/6..	0,9	1,2	78,4	71,5	67,7	63,6	59,0	54,2	49,0	43,3	37,1	34,9			
1SC6/11/6..	1,1	1,5	90,7	82,6	77,9	72,8	67,4	61,8	56,0	49,8	42,9	40,5			
1SC3/05/6T	0,55	0,75	47,1	42,5	40,6	38,3	35,8	33,0	29,8	26,3	22,4	21,1			
1SC4/07/6T	0,75	1	62,7	58,2	55,2	51,7	48,1	44,2	40,1	35,8	31,0	29,3			
1SC5/09/6T	0,9	1,2	76,7	69,7	66,0	61,9	57,4	52,5	47,2	41,6	35,5	33,3			
1SC6/11/6T	1,1	1,5	89,4	82,1	77,8	72,7	67,0	60,9	54,3	47,4	40,3	37,9			

Hydraulic performances in compliance with ISO 9906:2012 - Grade 3B (ex ISO 9906:1999 - Annex A)

1SC-2p60-en_a_th

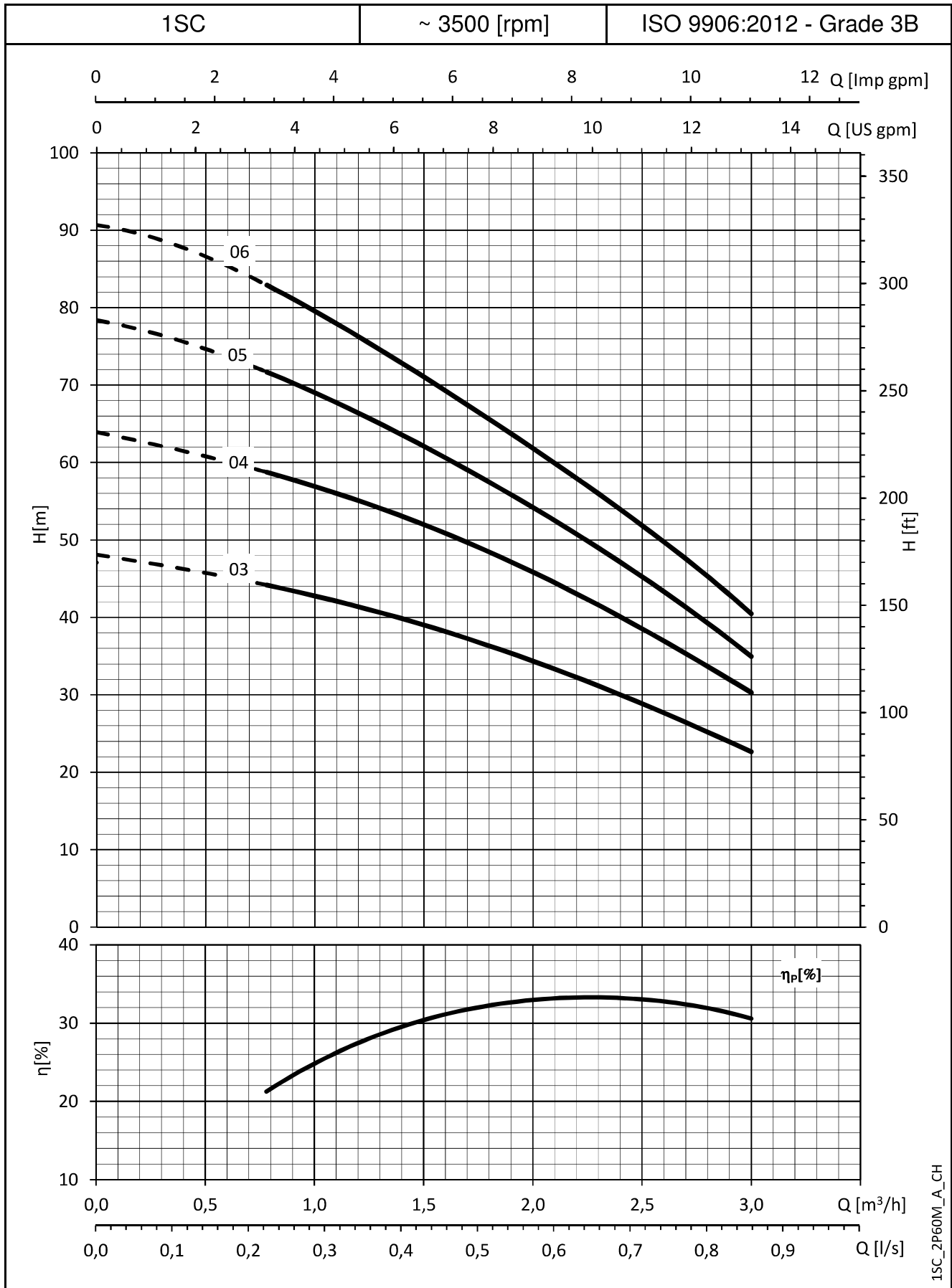
PUMP - CONTROL PANEL COMBINATION TABLE

PUMP TYPE	ABSORBED POWER* (P1 MAX) A	ABSORBED CURRENT* 220-240 V A	ABSORBED CURRENT* 380-415 V A	CAPACITOR µF / 450 V	QC			ELECTRIC PUMP WEIGHT kg	PANEL TYPE** 380-415 V	
					TYPE	CABLE SECTION			QTD	Q3D
						MOTOR SIDE	POWER SIDE			
1SC3/05/6..	0.84	3.83	-	16	0.55	4G1,5	3G1,5	13.2	-	-
1SC4/07/6..	1.07	4.68	-	25	0.90	4G1,5	3G1,5	15.7	-	-
1SC5/09/6..	1.25	5.64	-	25	0.90	4G1,5	3G1,5	16.0	-	-
1SC6/11/6..	1.50	6.82	-	30	1.10	4G1,5	3G1,5	17.2	-	-
1SC3/05/6T	0.75	2.39	1.38	-	-	-	-	-	03-05	03-05
1SC4/07/6T	0.98	3.27	1.89	-	-	-	-	-	05-07	05-07
1SC5/09/6T	1.19	3.74	2.16	-	-	-	-	-	05-07	05-07
1SC6/11/6T	1.41	4.33	2.50	-	-	-	-	-	05-07	05-07

*Maximum values within operating range.

1SC-2p60-en_a_tp

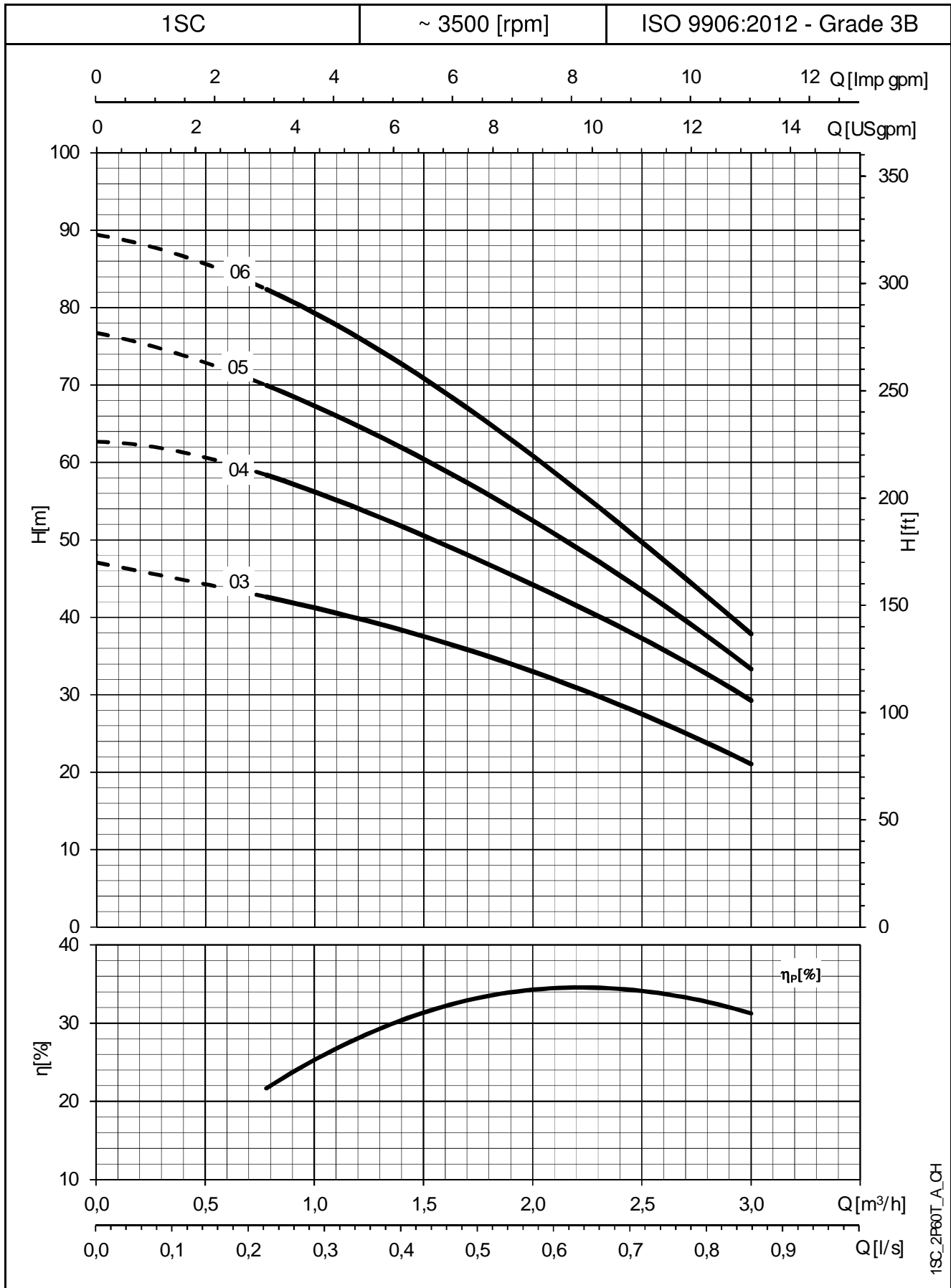
1SC SERIES - SINGLE PHASE VERSION OPERATING CHARACTERISTICS



1SC_2P60M_A_CH

These performances are valid for liquids with density $\rho = 1,0 \text{ Kg/dm}^3$ and kinematic viscosity $\nu = 1 \text{ mm}^2/\text{sec}$.

1SC SERIES - THREE PHASE VERSION OPERATING CHARACTERISTICS



1SC_2P60T_A_CH

These performances are valid for liquids with density $\rho = 1,0 \text{ Kg/dm}^3$ and kinematic viscosity $\nu = 1 \text{ mm}^2/\text{sec}$.

3SC SERIES DIMENSIONS AND WEIGHTS

PUMP TYPE	N. OF STAGE	DIMENSIONS L mm	WEIGHT kg
3SC200	2	1000	12
3SC250	2	1000	15
3SC300	2	1000	18
3SC350	2	1000	22
3SC400	2	1000	26
3SC450	2	1000	30
3SC500	2	1000	34
3SC550	2	1000	38
3SC600	2	1000	42
3SC650	2	1000	46
3SC700	2	1000	50
3SC750	2	1000	54
3SC800	2	1000	58
3SC850	2	1000	62
3SC900	2	1000	66
3SC950	2	1000	70
3SC1000	2	1000	74
3SC1050	2	1000	78
3SC1100	2	1000	82
3SC1150	2	1000	86
3SC1200	2	1000	90
3SC1250	2	1000	94
3SC1300	2	1000	98
3SC1350	2	1000	102
3SC1400	2	1000	106
3SC1450	2	1000	110
3SC1500	2	1000	114
3SC1550	2	1000	118
3SC1600	2	1000	122
3SC1650	2	1000	126
3SC1700	2	1000	130
3SC1750	2	1000	134
3SC1800	2	1000	138
3SC1850	2	1000	142
3SC1900	2	1000	146
3SC1950	2	1000	150
3SC2000	2	1000	154
3SC2050	2	1000	158
3SC2100	2	1000	162
3SC2150	2	1000	166
3SC2200	2	1000	170
3SC2250	2	1000	174
3SC2300	2	1000	178
3SC2350	2	1000	182
3SC2400	2	1000	186
3SC2450	2	1000	190
3SC2500	2	1000	194
3SC2550	2	1000	198
3SC2600	2	1000	202
3SC2650	2	1000	206
3SC2700	2	1000	210
3SC2750	2	1000	214
3SC2800	2	1000	218
3SC2850	2	1000	222
3SC2900	2	1000	226
3SC2950	2	1000	230
3SC3000	2	1000	234
3SC3050	2	1000	238
3SC3100	2	1000	242
3SC3150	2	1000	246
3SC3200	2	1000	250
3SC3250	2	1000	254
3SC3300	2	1000	258
3SC3350	2	1000	262
3SC3400	2	1000	266
3SC3450	2	1000	270
3SC3500	2	1000	274
3SC3550	2	1000	278
3SC3600	2	1000	282
3SC3650	2	1000	286
3SC3700	2	1000	290
3SC3750	2	1000	294
3SC3800	2	1000	298
3SC3850	2	1000	302
3SC3900	2	1000	306
3SC3950	2	1000	310
3SC4000	2	1000	314
3SC4050	2	1000	318
3SC4100	2	1000	322
3SC4150	2	1000	326
3SC4200	2	1000	330
3SC4250	2	1000	334
3SC4300	2	1000	338
3SC4350	2	1000	342
3SC4400	2	1000	346
3SC4450	2	1000	350
3SC4500	2	1000	354
3SC4550	2	1000	358
3SC4600	2	1000	362
3SC4650	2	1000	366
3SC4700	2	1000	370
3SC4750	2	1000	374
3SC4800	2	1000	378
3SC4850	2	1000	382
3SC4900	2	1000	386
3SC4950	2	1000	390
3SC5000	2	1000	394
3SC5050	2	1000	398
3SC5100	2	1000	402
3SC5150	2	1000	406
3SC5200	2	1000	410
3SC5250	2	1000	414
3SC5300	2	1000	418
3SC5350	2	1000	422
3SC5400	2	1000	426
3SC5450	2	1000	430
3SC5500	2	1000	434
3SC5550	2	1000	438
3SC5600	2	1000	442
3SC5650	2	1000	446
3SC5700	2	1000	450
3SC5750	2	1000	454
3SC5800	2	1000	458
3SC5850	2	1000	462
3SC5900	2	1000	466
3SC5950	2	1000	470
3SC6000	2	1000	474
3SC6050	2	1000	478
3SC6100	2	1000	482
3SC6150	2	1000	486
3SC6200	2	1000	490
3SC6250	2	1000	494
3SC6300	2	1000	498
3SC6350	2	1000	502
3SC6400	2	1000	506
3SC6450	2	1000	510
3SC6500	2	1000	514
3SC6550	2	1000	518
3SC6600	2	1000	522
3SC6650	2	1000	526
3SC6700	2	1000	530
3SC6750	2	1000	534
3SC6800	2	1000	538
3SC6850	2	1000	542
3SC6900	2	1000	546
3SC6950	2	1000	550
3SC7000	2	1000	554
3SC7050	2	1000	558
3SC7100	2	1000	562
3SC7150	2	1000	566
3SC7200	2	1000	570
3SC7250	2	1000	574
3SC7300	2	1000	578
3SC7350	2	1000	582
3SC7400	2	1000	586
3SC7450	2	1000	590
3SC7500	2	1000	594
3SC7550	2	1000	598
3SC7600	2	1000	602
3SC7650	2	1000	606
3SC7700	2	1000	610
3SC7750	2	1000	614
3SC7800	2	1000	618
3SC7850	2	1000	622
3SC7900	2	1000	626
3SC7950	2	1000	630
3SC8000	2	1000	634
3SC8050	2	1000	638
3SC8100	2	1000	642
3SC8150	2	1000	646
3SC8200	2	1000	650
3SC8250	2	1000	654
3SC8300	2	1000	658
3SC8350	2	1000	662
3SC8400	2	1000	666
3SC8450	2	1000	670
3SC8500	2	1000	674
3SC8550	2	1000	678
3SC8600	2	1000	682
3SC8650	2	1000	686
3SC8700	2	1000	690
3SC8750	2	1000	694
3SC8800	2	1000	698
3SC8850	2	1000	702
3SC8900	2	1000	706
3SC8950	2	1000	710
3SC9000	2	1000	714
3SC9050	2	1000	718
3SC9100	2	1000	722
3SC9150	2	1000	726
3SC9200	2	1000	730
3SC9250	2	1000	734
3SC9300	2	1000	738
3SC9350	2	1000	742
3SC9400	2	1000	746
3SC9450	2	1000	750
3SC9500	2	1000	754
3SC9550	2	1000	758
3SC9600	2	1000	762
3SC9650	2	1000	766
3SC9700	2	1000	770
3SC9750	2	1000	774
3SC9800	2	1000	778
3SC9850	2	1000	782
3SC9900	2	1000	786
3SC9950	2	1000	790
3SC10000	2	1000	794

PUMP TYPE	SECTION	CABLE TYPE	CABLE LENGTH m
3SC200	2	3	3
3SC250	2	3	3
3SC300	2	3	3
3SC350	2	3	3
3SC400	2	3	3
3SC450	2	3	3
3SC500	2	3	3
3SC550	2	3	3
3SC600	2	3	3
3SC650	2	3	3
3SC700	2	3	3
3SC750	2	3	3
3SC800	2	3	3
3SC850	2	3	3
3SC900	2	3	3
3SC950	2	3	3
3SC1000	2	3	3
3SC1050	2	3	3
3SC1100	2	3	3
3SC1150	2	3	3
3SC1200	2	3	3
3SC1250	2	3	3
3SC1300	2	3	3
3SC1350	2	3	3
3SC1400	2	3	3
3SC1450	2	3	3
3SC1500	2	3	3
3SC1550	2	3	3
3SC1600	2	3	3
3SC1650	2	3	3
3SC1700	2	3	3
3SC1750	2	3	3
3SC1800	2	3	3
3SC1850	2	3	3
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3SC2200	2	3	3
3SC2250	2	3	3
3SC2300	2	3	3
3SC2350	2	3	3
3SC2400	2	3	3
3SC2450	2	3	3
3SC2500	2	3	3
3SC2550	2	3	3
3SC2600	2	3	3
3SC2650	2	3	3
3SC2700	2	3	3
3SC2750	2	3	3
3SC2800	2	3	3
3SC2850	2	3	3
3SC2900	2	3	3
3SC2950	2	3	3
3SC3000	2	3	3
3SC3050	2	3	3
3SC3100	2	3	3
3SC3150	2	3	3
3SC3200	2	3	3
3SC3250	2	3	3
3SC3300	2	3	3
3SC3350	2	3	3
3SC3400	2	3	3
3SC3450	2	3	3
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3SC3550	2	3	3
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3SC3650	2	3	3
3SC3700	2	3	3
3SC3750	2	3	3
3SC3800	2	3	3
3SC3850	2	3	3
3SC3900	2	3	3
3SC3950	2	3	3
3SC4000	2	3	3
3SC4050	2	3	3
3SC4100	2	3	3
3SC4150	2	3	3
3SC4200	2	3	3
3SC4250	2	3	3
3SC4300	2	3	3
3SC4350	2	3	3
3SC4400	2	3	3
3SC4450	2	3	3
3SC4500	2	3	3
3SC4550	2	3	3
3SC4600	2	3	3
3SC4650	2	3	3
3SC4700	2	3	3
3SC4750	2	3	3
3SC4800	2	3	3
3SC4850	2	3	3
3SC4900	2	3	3
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