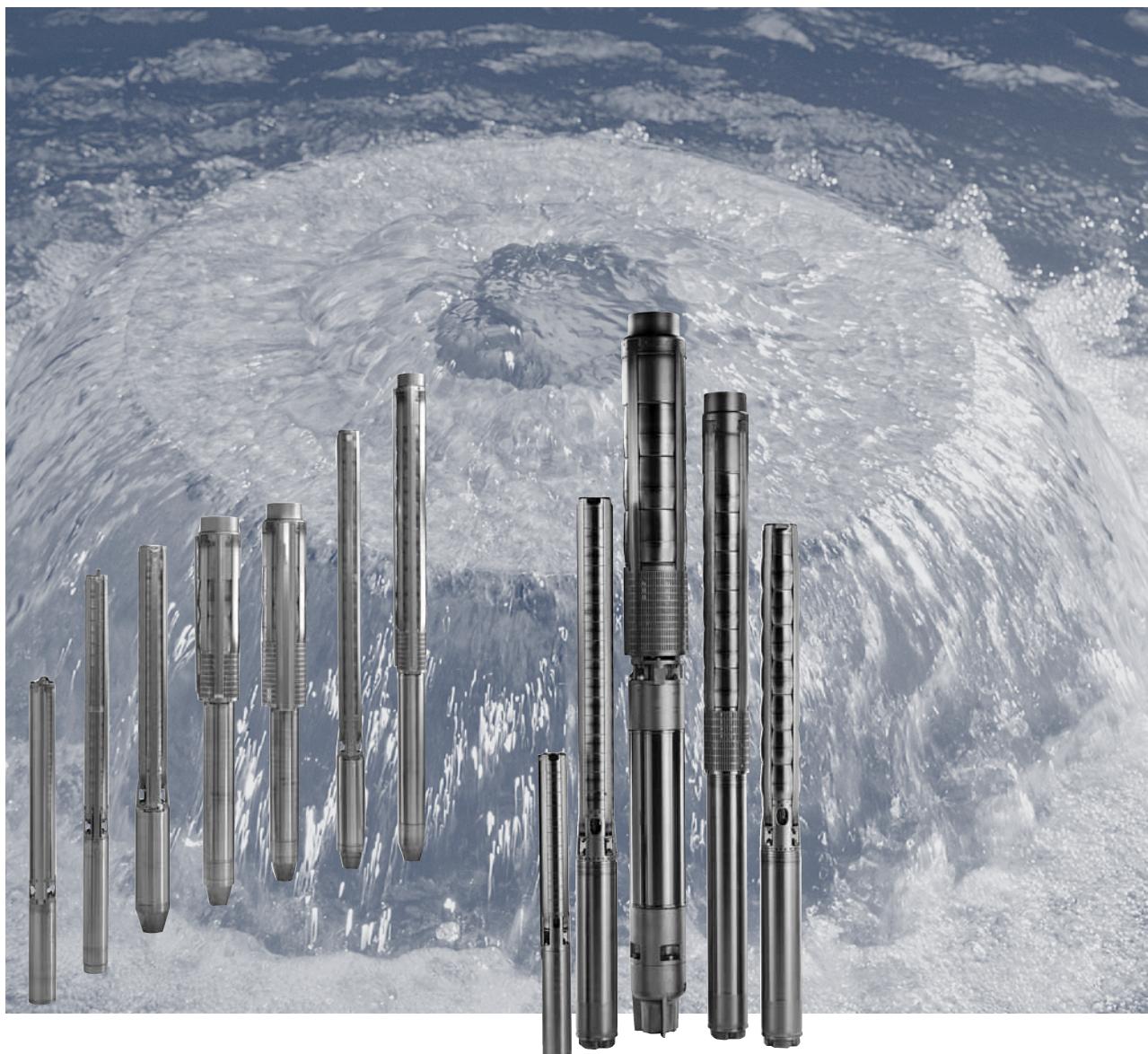


# GRUNDFOS DATA BOOKLET

## SP A, SP

Submersible pumps, motors and accessories  
50 Hz



# General data

SP A, SP

## Pump range

Type	SP 1A	SP 2A	SP 3A	SP 5A	SP 8A	SP 14A	SP 17	SP 30	SP 46	SP 60	SP 77	SP 95	SP 125	SP 160	SP 215
Steel: EN 1.4301 AISI 304	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Steel: EN 1.4401 AISI 316			•	•	•	•	•	•	•	•	•	•	•	•	•
Steel: EN 1.4539 AISI 904L				•	•		•	•	•	•	•	•	•	•	•
Connection*	Rp 1 1/4	Rp 1 1/4 (R 1 1/4)	Rp 1 1/4	Rp 1 1/2 (R 1 1/2)	Rp 2 (R 2)	Rp 2	Rp 2 1/2 (R 3)	Rp 3 (R 3)	Rp 3 (R 4)	Rp 4	Rp 4	Rp 5	Rp 5	Rp 6	Rp 6
Flange connection: Grundfos flange												5"	5"	6"	6"

\* Figures in brackets ( ) indicate connection for pumps with sleeve.

## Motor range

Motor output [kW]	0.37	0.55	0.75	1.1	1.5	2.2	3.0	3.7	4.0	5.5	7.5	9.2	11	13	15	18.5	22	26	30	37	45	55	63	75	92	110	132	147	170	190	220	250
Single-phase	•	•	•	•	•	•																										
Three-phase	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
Industrial motor and MS6 T60 versions							•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
Rewindable motor							•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
Steel: EN 1.4301 AISI 304	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
Steel: EN 1.4301 and cast iron							•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Steel: EN 1.4401 AISI 316							•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Steel: EN 1.4539 AISI 904L							•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Built-in temperature transmitter in motor		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

Direct-on-line starting is recommended up to 75 kW.

Soft starter or autotransformer is recommended above 75 kW.

Motors with star-delta starting are available from 5.5 kW.

## Motor protection and controllers

Motor output [kW]	0.37	0.55	0.75	1.1	1.5	2.2	3.0	3.7	4.0	5.5	7.5	9.2	11	13	15	18.5	22	26	30	37	45	55	63	75	92	110	132	147	170	190	220	250
CUE	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
MP 204	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
IO 112	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
Pr 5714							•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
CU 220							•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Pt100							•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Pt1000							•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Zinc anode		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Vertical flow sleeve	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Flow sleeve	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
SA-SPM	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
R100	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
G100	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

Motor protection of single-phase motors, see *Electrical data*, page 73.

# Submersible pumps

SP A, SP

## Bearings with sand channels

All bearings are water-lubricated and have a squared shape enabling sand particles, if any, to leave the pump together with the pumped liquid.

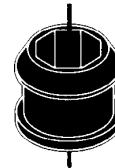


Fig. 3 Bearing

TM00 7301 1096

## Inlet strainer

The inlet strainer prevents particles over a certain size from entering the pump.



Fig. 4 Inlet strainer

TM00 7302 1096

## Non-return valve

All pumps have a reliable non-return valve in the valve casing preventing back flow in connection with pump stoppage.

Furthermore, the short closing time of the non-return valve means that the risk of destructive water hammer is reduced to a minimum.

The valve casing is designed for optimum hydraulic properties to minimise the pressure loss across the valve and thus to contribute to the high efficiency of the pump.

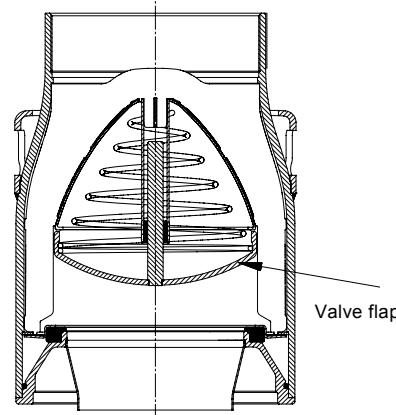


Fig. 5 Non-return valve

TM01 2499 1798

## Priming screw

All Grundfos 4" pumps are fitted with a priming screw. Consequently, dry running is prevented because the priming screw will ensure that the pump bearings are always lubricated.

Due to the semi-axial impellers of large SP pumps, this priming is provided automatically.

However, it applies to all pump types as, if the water table is lowered to a level below the pump inlet, neither pump nor motor will be protected against dry running.



Fig. 6 Priming screw

TM00 7304 1096

## Stop ring

The stop ring prevents damage to the pump during transport and in case of up-thrust in connection with start-up.

The stop ring, which is designed as a thrust bearing, limits axial movements of the pump shaft.

The stationary part of the stop ring (A) is secured in the upper chamber.

The rotating part (B) is fitted above the split cone (C).

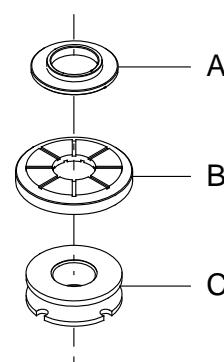


Fig. 7 Stop ring (rotating and stationary parts) and split cone

TM01 3327 3898

## Features and benefits

### A complete motor range

Grundfos offers a complete range of submersible motors in different voltages:

Submersible motors, MS:

- 4" motors, single-phase up to 2.2 kW:  
2-wire  
3-wire  
PSC (permanent split capacitor)
- 4" motors, three-phase up to 7.5 kW
- 6" motors, three-phase from 5.5 kW to 30 kW.

Submersible rewirable motors, MMS:

- 6" motors, three-phase from 3.7 kW up to 37 kW
- 8" motors, three-phase from 22 kW up to 110 kW
- 10" motors, three-phase from 75 kW up to 190 kW
- 12" motors, three-phase from 147 kW up to 250 kW.

### High motor efficiency

Within the area of high motor efficiency, Grundfos is a market leader.

### Rewirable motors

The 2-pole Grundfos MMS submersible motors are all easy to rewind. The windings of the stator are made of a special water-proof wire of pure electrolytic copper sheathed with special non-hydroscopic thermoplastic material. The fine dielectric properties of this material allow direct contact between the windings and the liquid for efficient cooling of the windings.

### Industrial motors and MS6 T60-versions

For heavy-duty applications, Grundfos offers a complete motor range of industrial motors with up to 5 % higher efficiency than that of Grundfos' standard motors. The industrial motors are available in sizes as from 2.2 kW up to 22 kW. The cooling of the motor is very efficient due to the large motor surface. The efficient cooling makes it possible to increase the liquid temperature to 60 °C at a minimum flow of 0.15 m/s past the motor. The industrial motors are for customers who value low operating costs and long life higher than price.

Grundfos industrial motors are developed for difficult operating conditions. These motors will stand a higher thermal load than standard motors and thus have a longer life when subjected to high load. This applies whether the high load is caused by bad power supply, hot water, bad cooling conditions, high pump load, etc.

Please note that heavy-duty motors are longer than motors for standard conditions.



Fig. 9 MS motors

TM00 7305 1096 - GrA4011 - GrA4013



Fig. 10 MMS motors

TM01 7873 4799 - GrA4575

# Submersible motors

SP A, SP

## Material specification for MMS 6000 to 12000 motors

### Submersible rewirable motors

Pos.	Component	Material	EN
202	Shaft	Steel	1.0533
202a	Shaft ends	Stainless steel	1.4460
203/ 206	Thrust bearing Stationary/ rotating part	6" 3.7 to 15 kW 12" 6" 18.5 to 37 kW 8" to 10"	Hardened steel/EPDM Ceramic/ carbon
204	Bearing bush	6" to 10" 12"	Carbon Stainless steel/ NBR
205	Bearing housing, upper	Cast iron	EN-JL1040
212	Diaphragm	CR	
213	Motor end shield	Cast iron	EN-JL1040
218	Motor sleeve	Stainless steel	1.4301
220	Motor cable	EPDM	
226	Shaft seal	Ceramic/ carbon	
235	Intermediate housing	Cast iron	EN-JL1040
236	Bearing housing, lower	Cast iron	EN-JL1040

### N- and R-versions of MMS motors

Pos.	Component	Material	Version	
			N EN	R* EN
202	Shaft	Steel	1.0533	1.0533
202a	Shaft ends	Stainless steel	1.4460	1.4462
203/ 206	Thrust bearing Stationary/rotating part: • 6" (3.7 to 15 kW) • 12"	Hardened steel/EPDM		
204	Bearing bush • 6" to 10"	Carbon		
205	Bearing housing, upper	Stainless steel	1.4401	1.4539
212	Diaphragm	CR		
213	Motor end shield	Stainless steel	1.4401	1.4539
218	Motor sleeve	Stainless steel	1.4401	1.4539
220	Motor cable	EPDM		
226	Shaft seal	Ceramic/ carbon		
235	Intermediate housing	Stainless steel	1.4401	1.4539
236	Bearing housing, lower	Stainless steel	1.4401	1.4539

\* MMS 6000, MMS 8000 and MMS 10000 are available in R-versions.

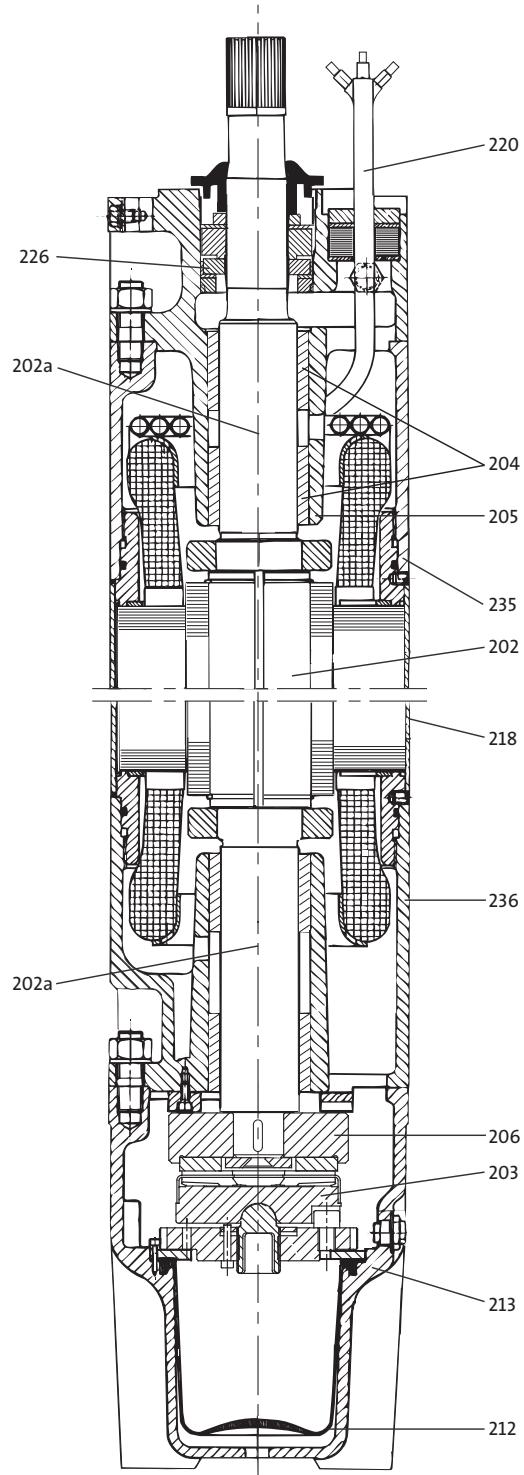


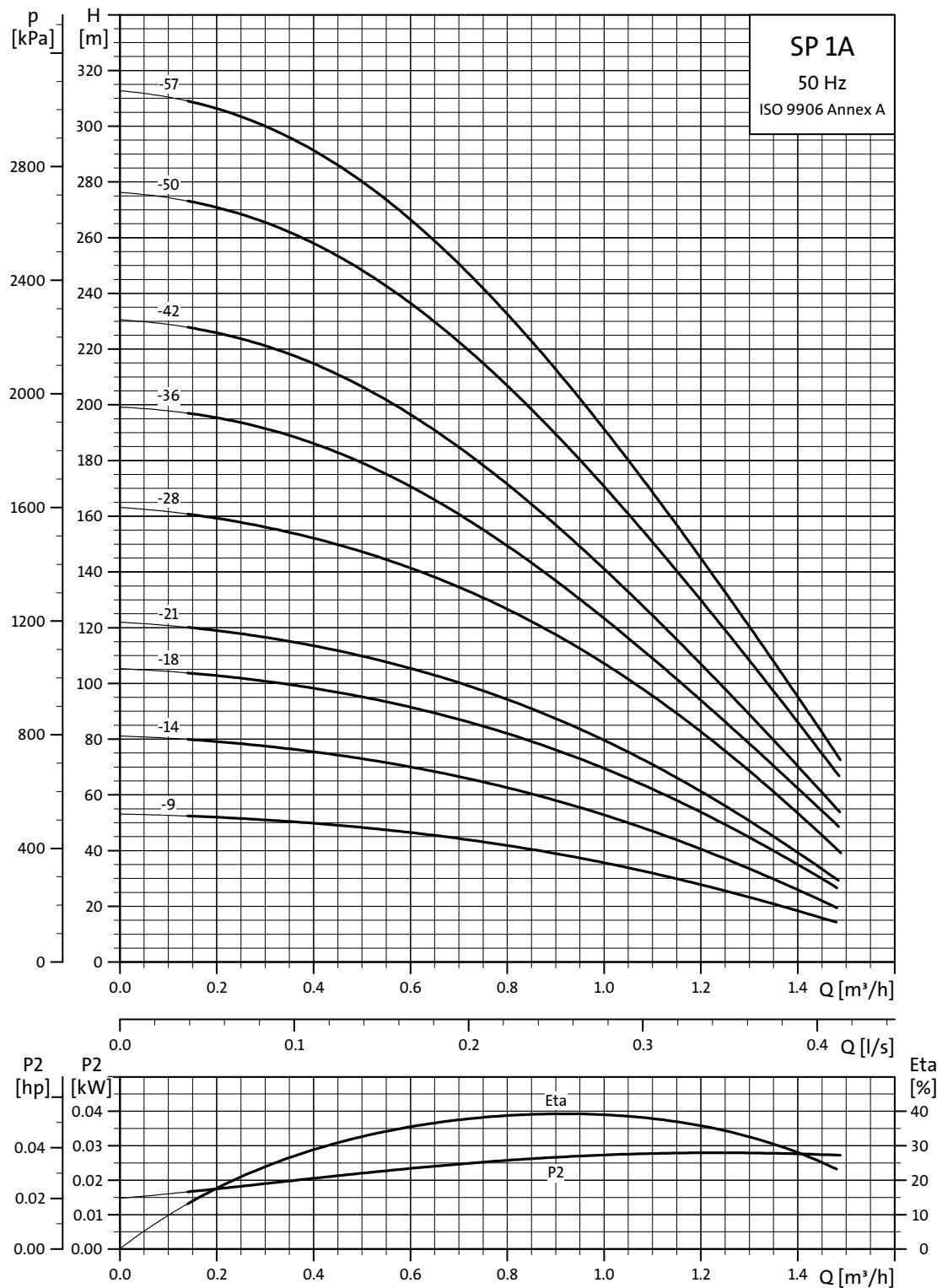
Fig. 16 MMS 10000

TM01 4985 0404

# Performance curves/ Technical data

Submersible pumps  
SP 1A

## SP 1A

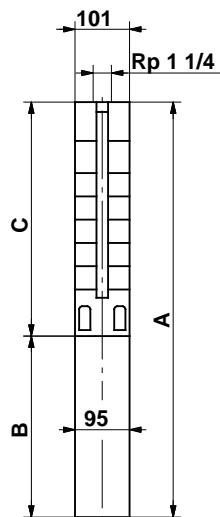


Explanation of efficiency curve, please see *Curve conditions*, page 4.

# Technical data

Submersible pumps  
SP 1A

## Dimensions and weights



TM00 0955 1196

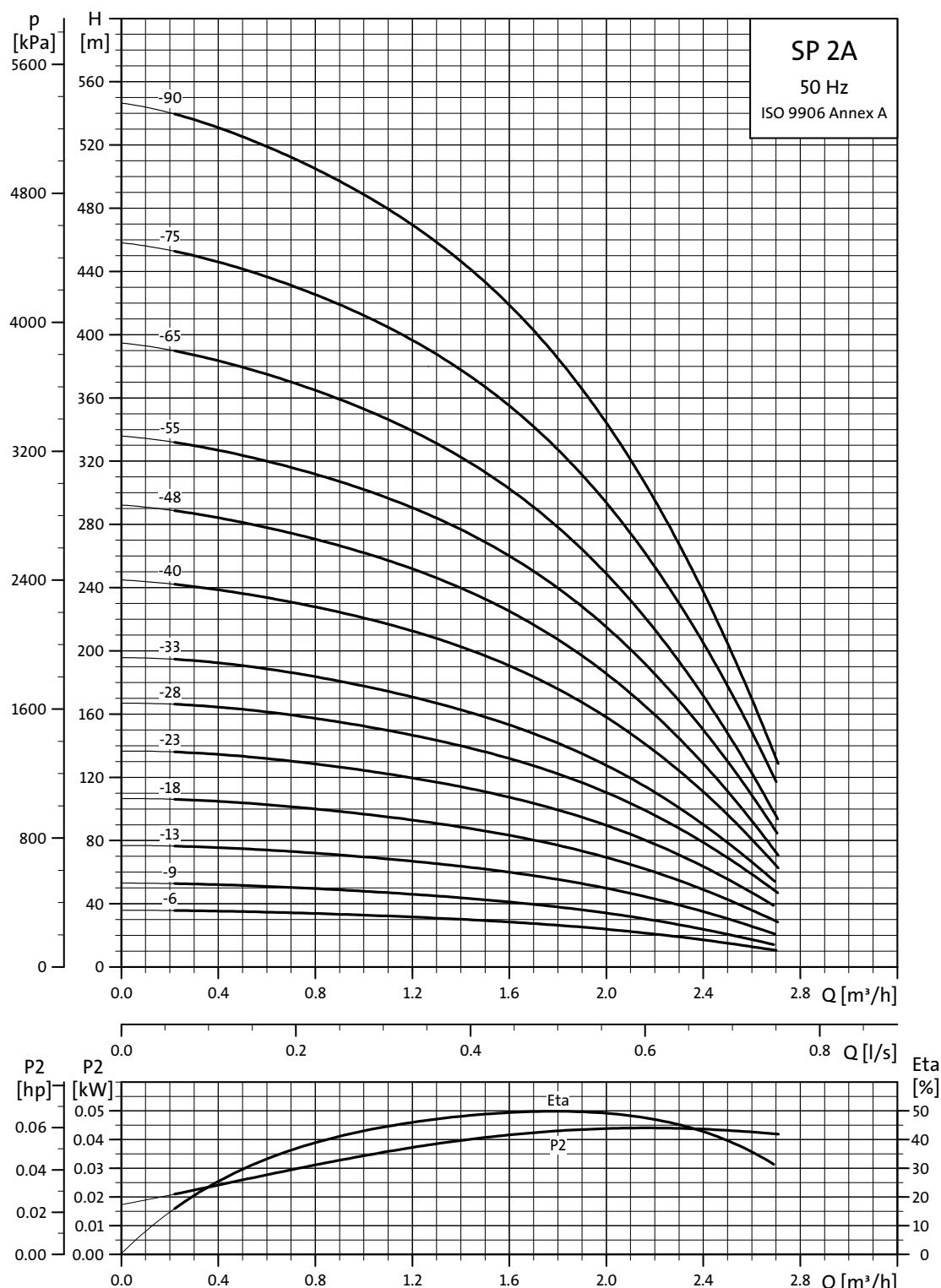
101 mm = Maximum diameter of pump inclusive of cable guard and motor.

Pump type	Motor			Dimensions [mm]				Net weight [kg]	
	Type	Power [kW]	C	B		A		1x230V	3x230V 3x400V
				1x230V	3x230V 3x400V	1x230V	3x230V 3x400V		
SP 1A-9	MS 402	0.37	344	256	226	600	570	11	9
SP 1A-14	MS 402	0.37	449	256	226	705	675	12	10
SP 1A-18	MS 402	0.55	533	291	241	824	774	14	12
SP 1A-21	MS 402	0.55	596	291	241	887	837	14	12
SP 1A-28	MS 402	0.75	743	306	276	1049	1019	16	15
SP 1A-36	MS 402	1.1	956	346	306	1302	1262	25	23
SP 1A-42	MS 402	1.1	1082	346	306	1428	1388	27	25
SP 1A-50	MS 402	1.5	1250	346	346	1596	1596	30	29
SP 1A-57	MS 402	1.5	1397	346	346	1743	1743	32	32

# Performance curves

Submersible pumps  
SP 2A

**SP 2A**



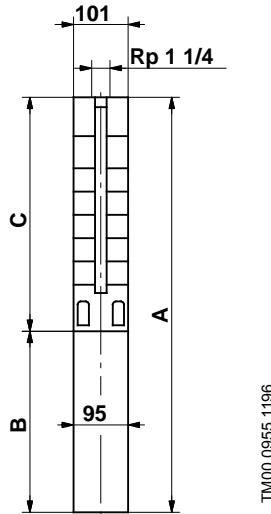
TM0072724702

Explanation of efficiency curve, please see *Curve conditions*, page 4.

# Technical data

Submersible pumps  
SP 2A

## Dimensions and weights



Pump type	Type	Power [kW]	C	Dimensions [mm]				Net weight [kg]	
				B		A		1x230V	3x230V 3x400V
				1x230V	3x230V 3x400V	1x230V	3x230V 3x400V		
SP 2A-6	MS 402	0.37	281	256	226	537	507	10	9
SP 2A-9	MS 402	0.37	344	256	226	600	570	11	9
SP 2A-13	MS 402	0.55	428	291	241	719	669	13	11
SP 2A-18	MS 402	0.75	533	306	276	839	809	15	13
SP 2A-23	MS 402	1.1	638	346	306	984	944	17	16
SP 2A-28	MS 402	1.5	743	346	346	1089	1089	19	18
SP 2A-33	MS 402	1.5	844	346	346	1190	1190	20	19
SP 2A-40	MS 4000	2.2	1040	573		1613		37	
SP 2A-40	MS 402	2.2	1040		346		1386		27
SP 2A-48	MS 4000	2.2	1208	573		1781		39	
SP 2A-48	MS 402	2.2	1208		346		1554		30
SP 2A-55	MS 4000	3.0	1355		493		1848		38
SP 2A-65	MS 4000	3.0	1565		493		2058		41
SP 2A-75	MS 4000	4.0	1954		573		2527		57
SP 2A-90	MS 4000	4.0	2269		573		2842		64

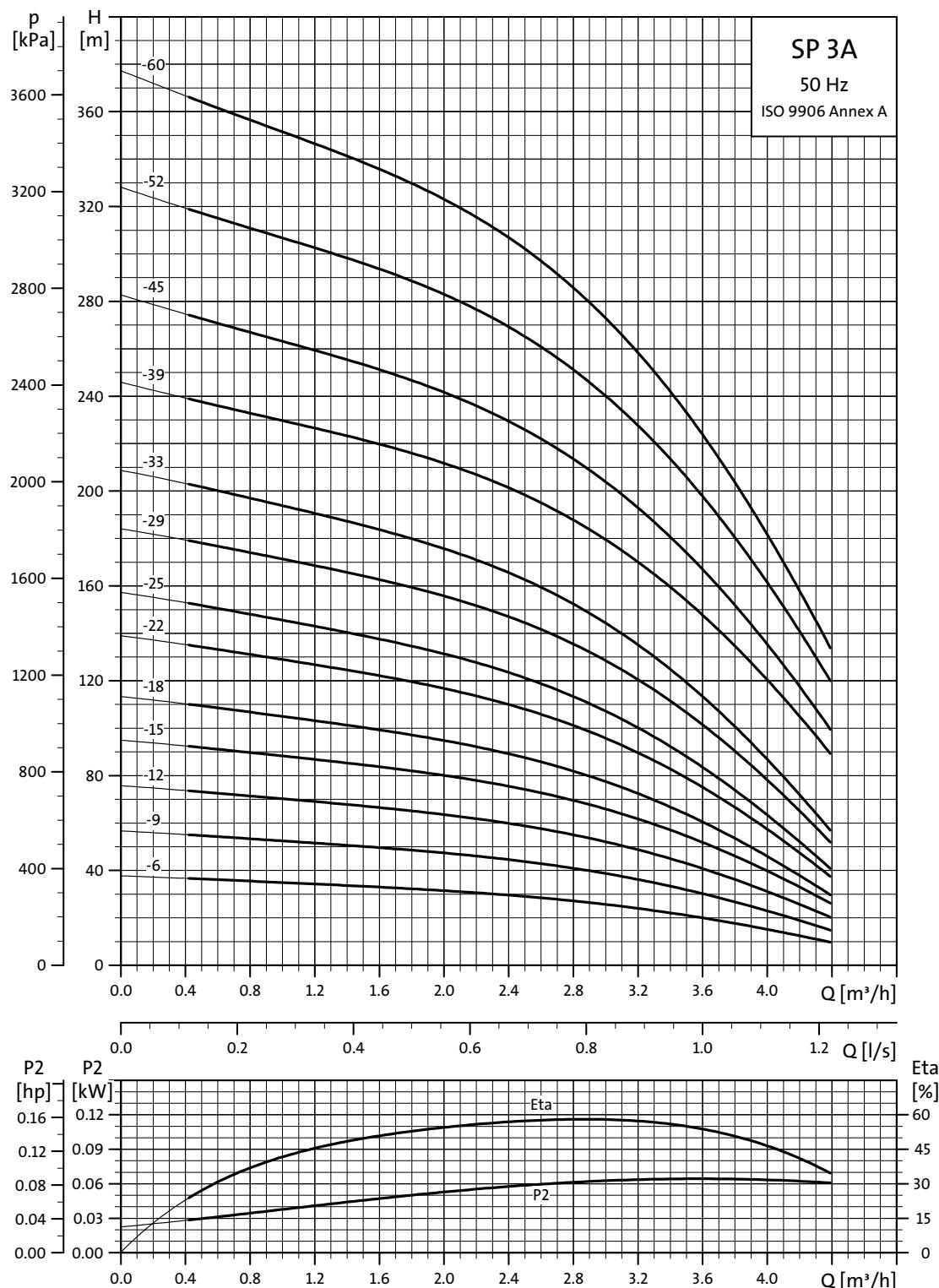
101 mm = Maximum diameter of pump inclusive of cable guard and motor.

SP 2A-75 and SP 2A-90 are mounted in sleeve for R 1 1/4 connection and with max. diameter 108 mm.

# Performance curves

Submersible pumps  
SP 3A

## SP 3A



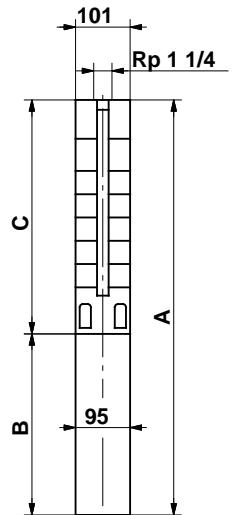
TM00 7273 4702

Explanation of efficiency curve, please see *Curve conditions*, page 4.

# Technical data

Submersible pumps  
SP 3A

## Dimensions and weights



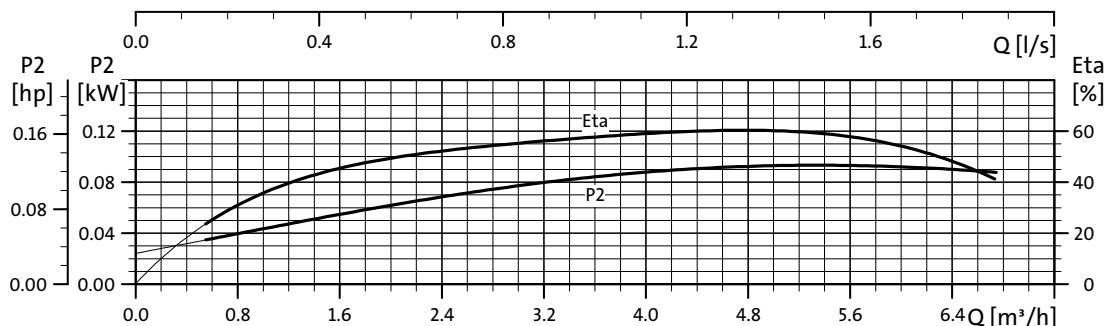
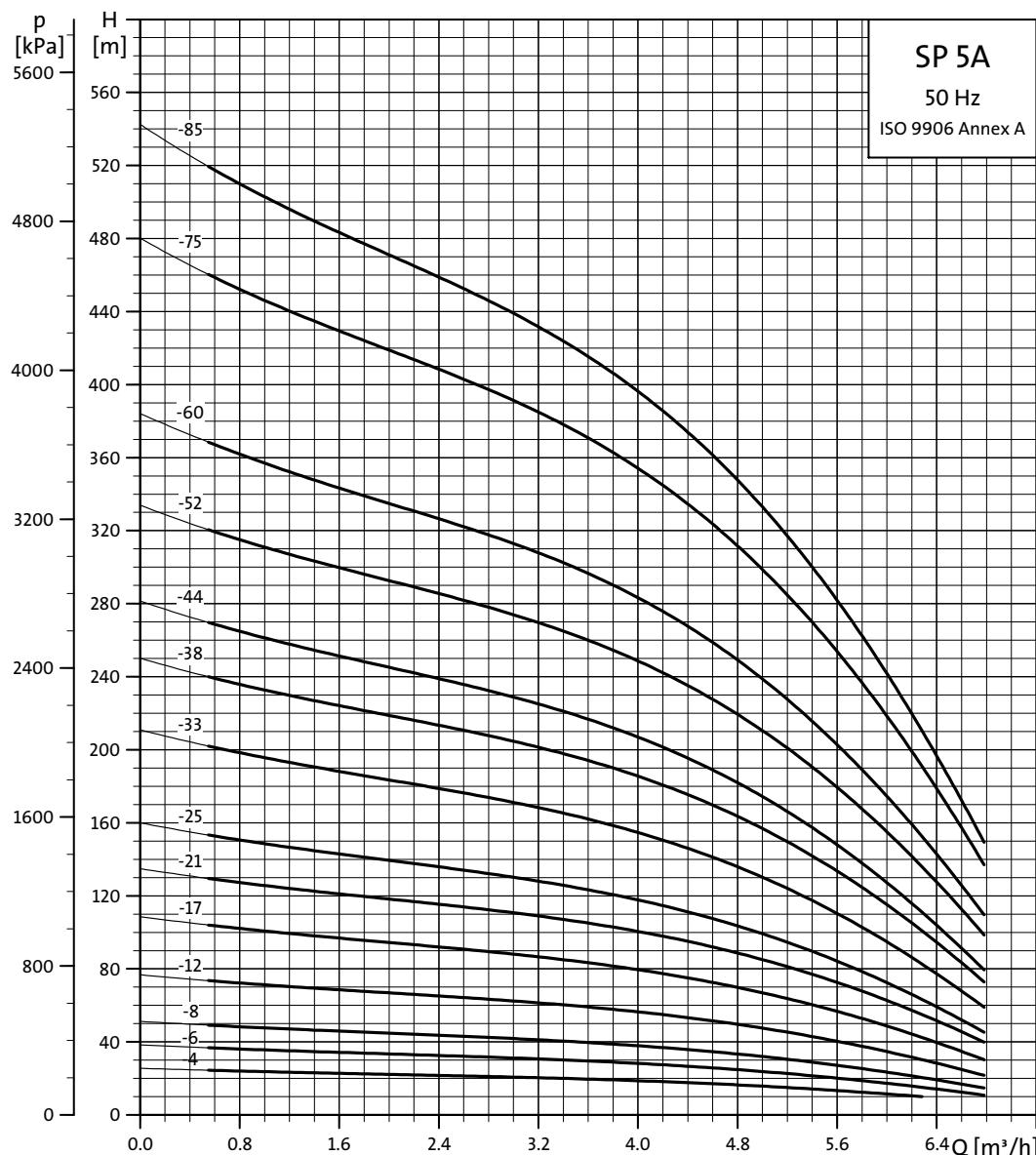
101 mm = Maximum diameter of pump inclusive of cable guard and motor.

Pump type	Type	Power [kW]	C	Dimensions [mm]				Net weight [kg]	
				B	1x230V 3x400V	1x230V	A	1x230V	3x230V 3x400V
SP 3A-6	MS 402	0.37	281	256	226	537	507	10	9
SP 3A-6N	MS 4000R	2.2	326	573		899		26	
SP 3A-6N	MS 4000R	0.75	326		398		724		18
SP 3A-9	MS 402	0.55	344	291	241	635	585	12	10
SP 3A-9N	MS 4000R	2.2	389	573		962		27	
SP 3A-9N	MS 4000R	0.75	389		398		787		19
SP 3A-12	MS 402	0.75	407	306	276	713	683	13	12
SP 3A-12N	MS 4000R	2.2	452	573		1025		28	
SP 3A-12N	MS 4000R	0.75	452		398		850		20
SP 3A-15	MS 402	1.1	470	346	306	816	776	16	14
SP 3A-15N	MS 4000R	2.2	515	573		1088		29	
SP 3A-15N	MS 4000R	1.1	515		413		928		22
SP 3A-18	MS 402	1.1	533	346	306	879	839	16	15
SP 3A-18N	MS 4000R	2.2	578	573		1151		30	
SP 3A-18N	MS 4000R	1.1	578		413		991		23
SP 3A-22	MS 402	1.5	617	346	346	963	963	18	17
SP 3A-22N	MS 4000R	2.2	662	573		1235		31	
SP 3A-22N	MS 4000R	1.5	662		413		1075		24
SP 3A-25	MS 402	1.5	680	346	346	1026	1026	18	18
SP 3A-25N	MS 4000R	2.2	725	573		1298		32	
SP 3A-25N	MS 4000R	1.5	725		413		1138		25
SP 3A-29	MS 4000	2.2	764	573		1337		29	
SP 3A-29	MS 402	2.2	764		346		1110		20
SP 3A-29N	MS 4000R	2.2	809	573	453	1382	1262	33	28
SP 3A-33	MS 4000	2.2	848	573		1421		30	
SP 3A-33	MS 402	2.2	848		346		1194		21
SP 3A-33N	MS 4000R	2.2	893	573	453	1466	1346	34	29
SP 3A-39	MS 4000	3.0	1019		493		1512		32
SP 3A-39N	MS 4000R	3.0	1019		493		1512		32
SP 3A-45	MS 4000	3.0	1145		493		1638		34
SP 3A-45N	MS 4000R	3.0	1145		493		1638		34
SP 3A-52	MS 4000	4.0	1292		573		1865		41
SP 3A-52N	MS 4000R	4.0	1292		573		1865		41
SP 3A-60	MS 4000	4.0	1460		573		2033		43
SP 3A-60N	MS 4000R	4.0	1460		573		2033		43

# Performance curves

Submersible pumps  
SP 5A

**SP 5A**



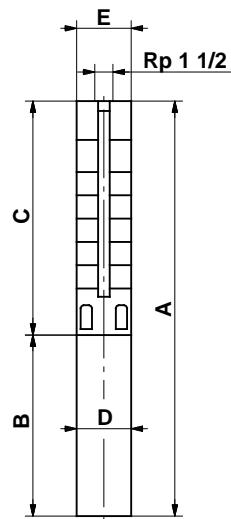
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Explanation of efficiency curve, please see *Curve conditions*, page 4.

# Technical data

Submersible pumps  
SP 5A

## Dimensions and weights



TM00 0956 1196

SP 5A-75 and SP 5A-85 are mounted in sleeve for R 1 1/2 connection.

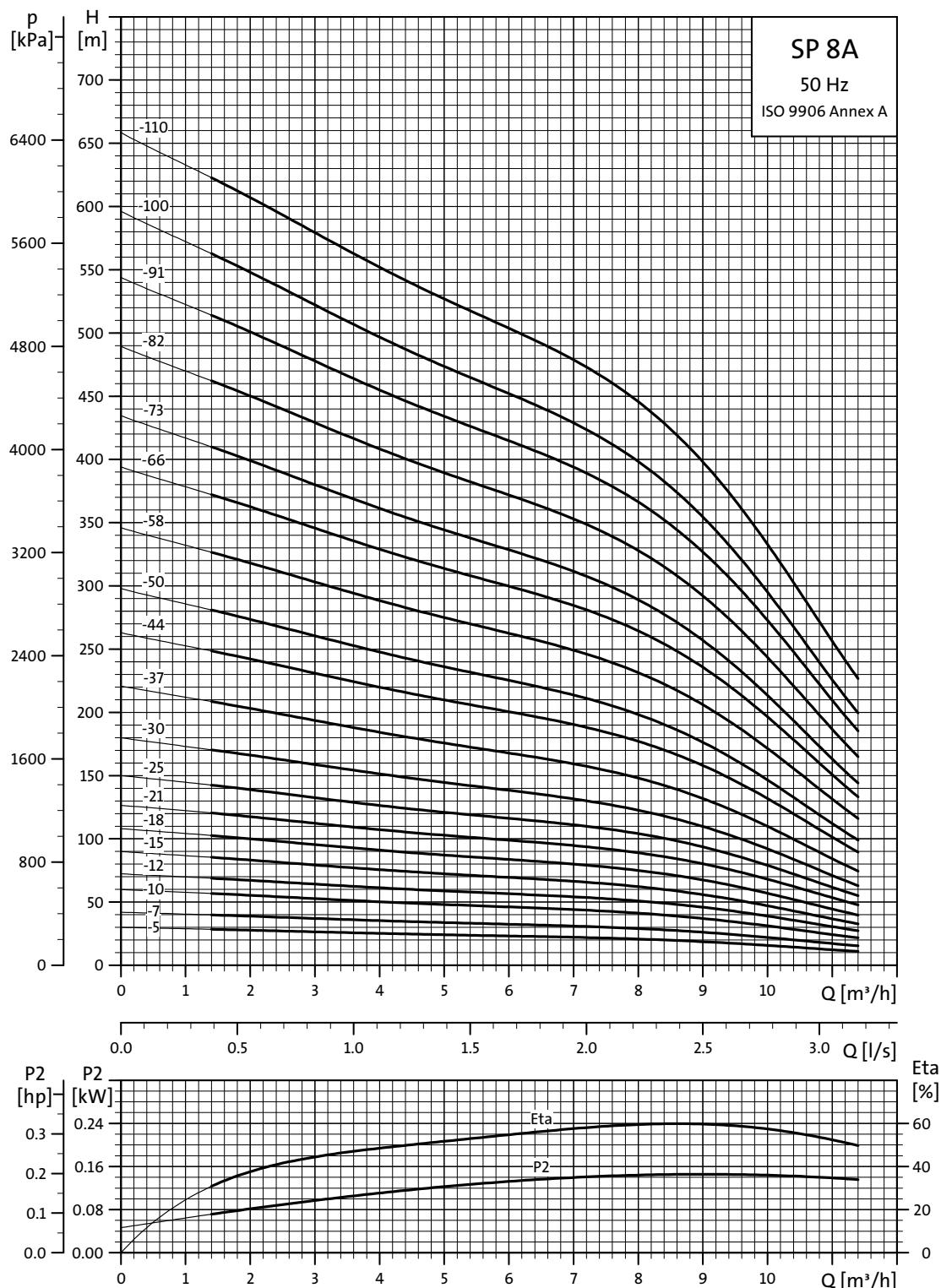
Pump type	Type	Power [kW]	C	Dimensions [mm]				Net weight [kg]		
				B		A				
				1x230V	3x230V 3x400V	1x230V	3x230V 3x400V	D	E	
SP 5A-4	MS 402	0.37	240	256	226	496	466	95	101	10
SP 5A-4N	MS 4000R	2.2	284	573		857		95	101	25
SP 5A-4N	MS 4000R	0.75	284		398		682	95	101	17
SP 5A-6	MS 402	0.55	282	291	241	573	523	95	101	11
SP 5A-6N	MS 4000R	2.2	326	573		899		95	101	26
SP 5A-6N	MS 4000R	0.75	326		398		724	95	101	18
SP 5A-8	MS 402	0.75	324	306	276	630	600	95	101	13
SP 5A-8N	MS 4000R	2.2	368	573		941		95	101	27
SP 5A-8N	MS 4000R	0.75	368		398		766	95	101	19
SP 5A-12	MS 402	1.1	408	346	306	754	714	95	101	15
SP 5A-12N	MS 4000R	2.2	452	573		1025		95	101	28
SP 5A-12N	MS 4000R	1.1	452		413		865	95	101	21
SP 5A-17	MS 402	1.5	513	346	346	859	859	95	101	17
SP 5A-17N	MS 4000R	2.2	557	573		1130		95	101	29
SP 5A-17N	MS 4000R	1.5	557		413		970	95	101	22
SP 5A-21	MS 4000	2.2	597	573		1170		95	101	27
SP 5A-21	MS 402	2.2	597		346		943	95	101	18
SP 5A-21N	MS 4000R	2.2	641	573	453	1214	1094	95	101	30
SP 5A-25	MS 4000	2.2	681	573		1254		95	101	28
SP 5A-25	MS 402	2.2	681		346		1027	95	101	19
SP 5A-25N	MS 4000R	2.2	725	573	453	1298	1178	95	101	32
SP 5A-33	MS 4000	3.0	849		493		1342	95	101	26
SP 5A-33N	MS 4000R	3.0	893		493		1386	95	101	30
SP 5A-38	MS 4000	4.0	998		573		1571	95	101	36
SP 5A-38N	MS 4000R	4.0	998		573		1571	95	101	36
SP 5A-44	MS 4000	4.0	1124		573		1697	95	101	38
SP 5A-44N	MS 4000R	4.0	1124		573		1697	95	101	38
SP 5A-52	MS 4000	5.5	1292		673		1965	95	101	46
SP 5A-52N	MS 4000R	5.5	1292		673		1965	95	101	46
SP 5A-60	MS 4000	5.5	1460		673		2133	95	101	48
SP 5A-60N	MS 4000R	5.5	1460		673		2133	95	101	48
SP 5A-52	MS6	5.5	1354		535		1889	143	138	60
SP 5A-52N	MS6R	5.5	1354		535		1889	143	138	60
SP 5A-60	MS6	5.5	1522		535		2057	143	138	63
SP 5A-60N	MS6R	5.5	1522		535		2057	143	138	63
SP 5A-75	MS6	7.5	2146		565		2711	143	140	86
SP 5A-85	MS6	7.5	2356		565		2921	143	140	92

E=Maximum diameter of pump inclusive of cable guard and motor.

# Performance curves

Submersible pumps  
SP 8A

## SP 8A



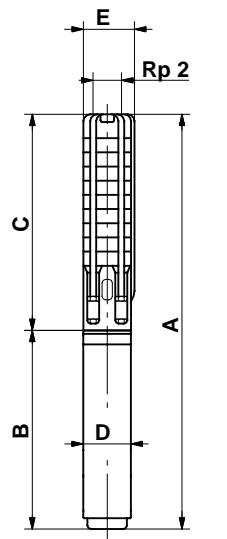
TM00 7275 4702

Explanation of efficiency curve, please see *Curve conditions*, page 4.

# Technical data

Submersible pumps  
SP 8A

## Dimensions and weights



TM00 0957 1196

SP 8A-58(N) to SP 8A-110(N) are mounted in sleeve for R 2 connection.

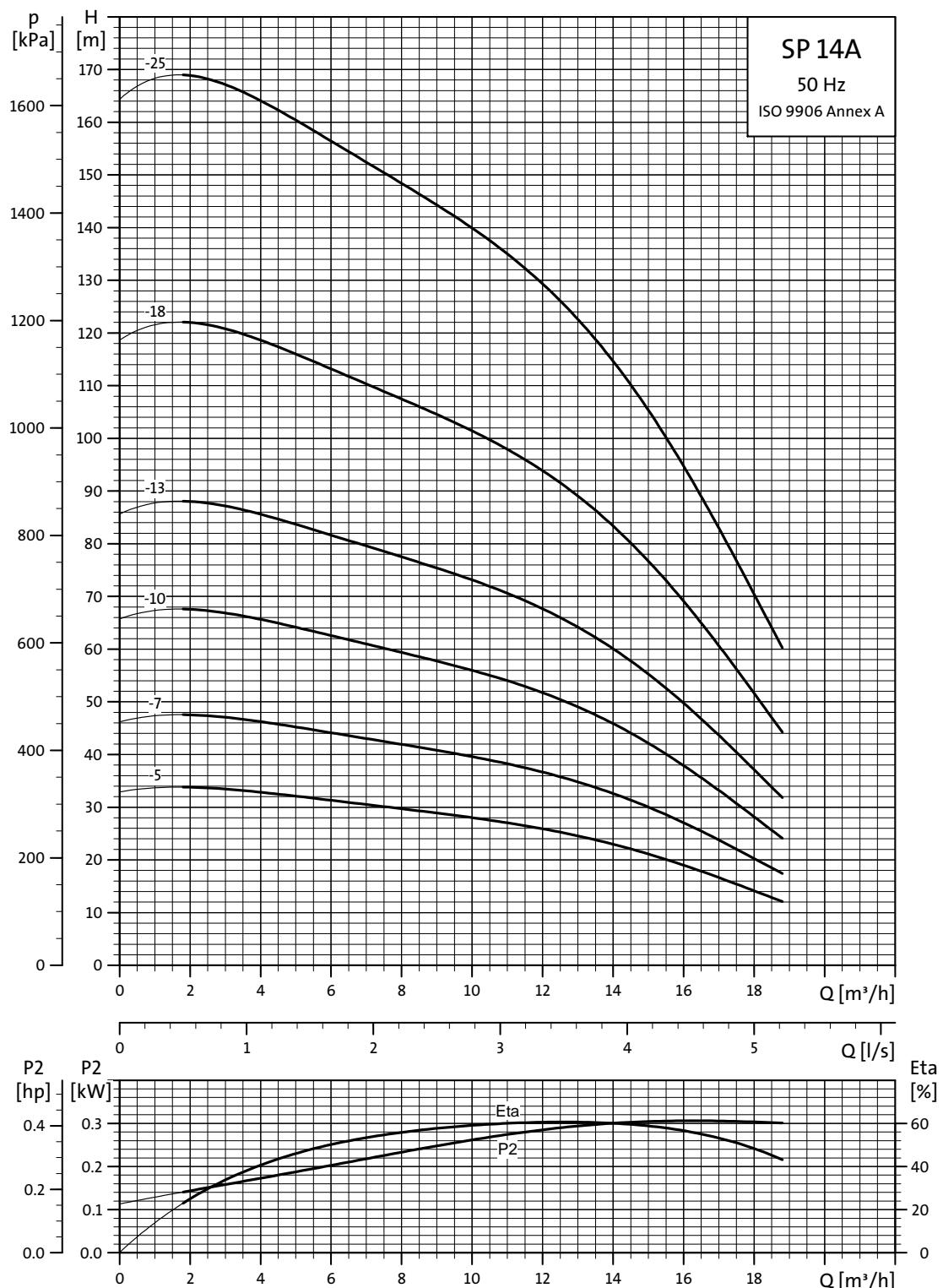
Pump type	Type	Power [kW]	Motor			Dimensions [mm]			Net weight [kg]		
			C	B 1x230V 3x400V	A 1x230V 3x400V	D	E 1x230V 3x400V				
SP 8A-5	MS 402	0.75	409	306	276	715	685	95	101	15	13
SP 8A-5N (R)	MS 4000R	2.2	409	573		982		95	101	27	
SP 8A-5N (R)	MS 4000R	0.75	409		398		807	95	101		19
SP 8A-7	MS 402	1.1	493	346	306	839	799	95	101	17	16
SP 8A-7N (R)	MS 4000R	2.2	493	573		1066		95	101	28	
SP 8A-7N (R)	MS 4000R	1.1	493		413		906	95	101		21
SP 8A-10	MS 402	1.5	619	346	346	965	965	95	101	19	19
SP 8A-10N (R)	MS 4000R	2.2	619	573		1192		95	101	30	
SP 8A-10N (R)	MS 4000R	1.5	619		413		1032	95	101		23
SP 8A-12	MS 4000	2.2	703	573		1276		95	101	30	
SP 8A-12	MS 402	2.2	703		346		1049	95	101		21
SP 8A-12N (R)	MS 4000R	2.2	703	573	453	1276	1156	95	101	30	25
SP 8A-15	MS 4000	2.2	829	573		1402		95	101	32	
SP 8A-15	MS 402	2.2	829		346		1175	95	101		23
SP 8A-15N (R)	MS 4000R	2.2	829	573	453	1402	1282	95	101	32	27
SP 8A-18	MS 4000	3.0	955		493		1448	95	101		29
SP 8A-18N (R)	MS 4000R	3.0	955		493		1448	95	101		29
SP 8A-21	MS 4000	4.0	1081		573		1654	95	101		35
SP 8A-21N (R)	MS 4000R	4.0	1081		573		1654	95	101		35
SP 8A-25	MS 4000	4.0	1249		573		1822	95	101		37
SP 8A-25N (R)	MS 4000R	4.0	1249		573		1822	95	101		37
SP 8A-30	MS 4000	5.5	1459		673		2132	95	101		45
SP 8A-30N (R)	MS 4000R	5.5	1459		673		2132	95	101		45
SP 8A-37	MS 4000	5.5	1753		673		2426	95	101		49
SP 8A-37N (R)	MS 4000R	5.5	1753		673		2426	95	101		49
SP 8A-30	MS6	5.5	1521		535		2056	143	138		56
SP 8A-30N	MS6R	5.5	1521		535		2056	143	138		56
SP 8A-37	MS6	5.5	1815		535		2350	143	138		60
SP 8A-37N	MS6R	5.5	1815		535		2350	143	138		60
SP 8A-44	MS 4000	7.5	2051		773		2824	95	101		60
SP 8A-44N	MS 4000	7.5	2051		773		2824	95	101		60
SP 8A-44	MS6	7.5	2109		565		2674	143	138		66
SP 8A-44N	MS6R	7.5	2109		565		2674	143	138		66
SP 8A-50	MS 4000	7.5	2303		773		3076	95	101		64
SP 8A-50N	MS 4000	7.5	2303		773		3076	95	101		64
SP 8A-50	MS6	7.5	2361		565		2926	143	138		70
SP 8A-50N	MS6R	7.5	2361		565		2926	143	138		70
SP 8A-58	MS6	9.2	3013		590		3603	143	140		104
SP 8A-58N	MS6R	9.2	3013		590		3603	143	140		104
SP 8A-66	MS6	11.0	3349		683		4032	143	140		114
SP 8A-66N	MS6R	11.0	3349		683		4032	143	140		114
SP 8A-73	MS6	11.0	3643		683		4326	143	140		120
SP 8A-73N	MS6R	11.0	3643		683		4326	143	140		120
SP 8A-82	MS6	13.0	4021		708		4729	143	140		131
SP 8A-82N	MS6R	13.0	4021		708		4729	143	140		131
SP 8A-91	MS6	15.0	4399		738		5137	143	140		143
SP 8A-91N	MS6R	15.0	4399		738		5137	143	140		143
SP 8A-100	MS6	15.0	4777		738		5515	143	140		150
SP 8A-100N	MS6R	15.0	4777		738		5515	143	140		150
SP 8A-110	MS6	18.5	5197		783		5980	143	140		164
SP 8A-110N	MS6R	18.5	5197		783		5980	143	140		164

E=Maximum diameter of pump inclusive of cable guard and motor.

# Performance curves

Submersible pumps  
SP 14A

## SP 14A



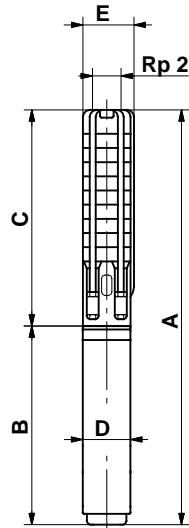
Explanation of efficiency curve, please see *Curve conditions*, page 4.

TM00 7276 4702

# Technical data

Submersible pumps  
SP 14A

## Dimensions and weights



TM00 0957 1196

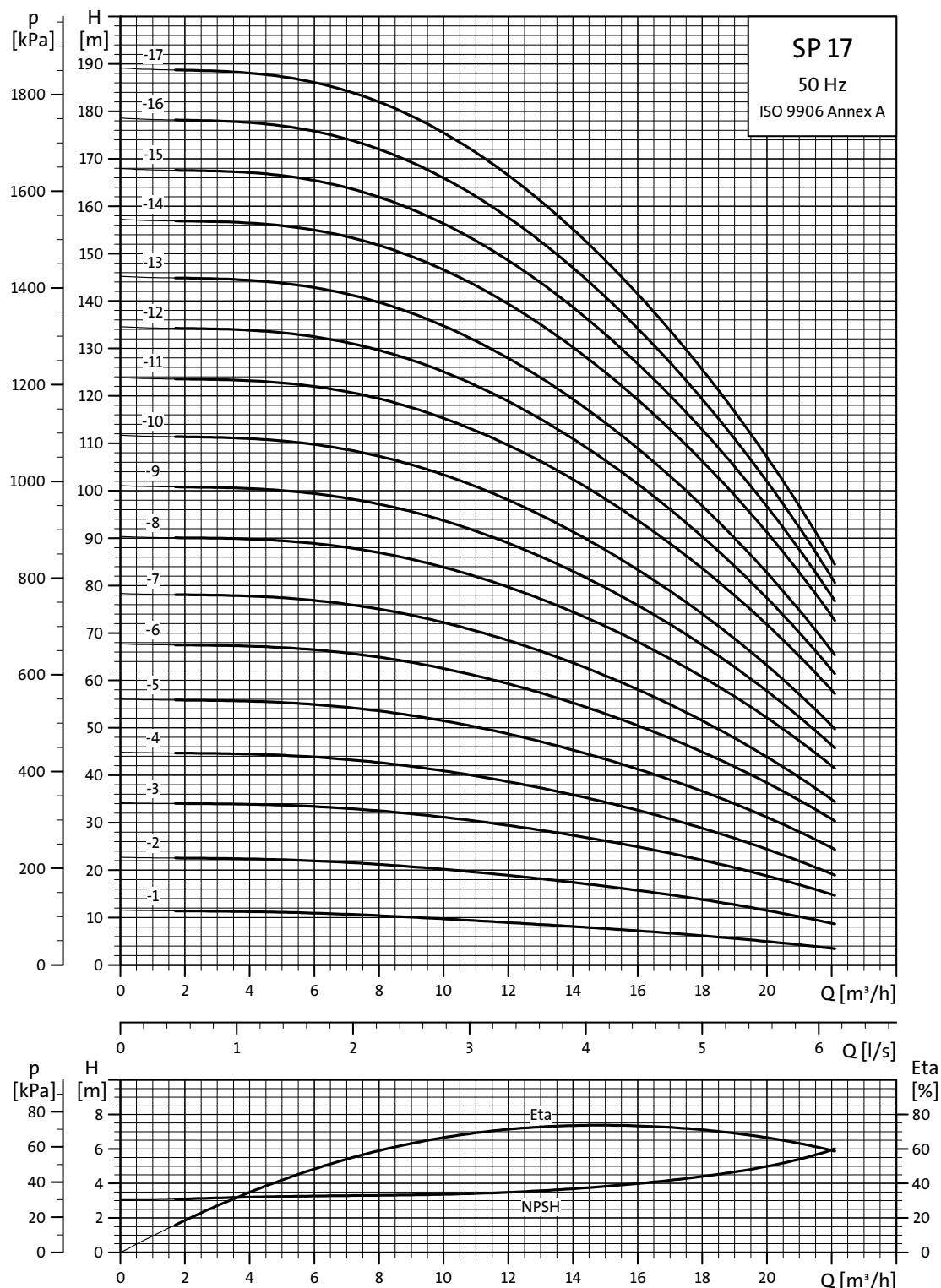
Pump type	Type	Power [kW]	C	Motor				Dimensions [mm]			Net weight [kg]		
				B	A		D	E	1x230V	3x230V 3x400V	1x230V	3x230V 3x400V	1x230V
					1x230V	3x230V 3x400V							
SP 14A-5	MS 402	1.5	510	346	346	856	856	95	101	18	17		
SP 14A-7	MS 4000	2.2	640	573		1213		95	101	29			
SP 14A-7	MS 402	2.2	640		346		986	95	101	19			
SP 14A-10	MS 4000	3.0	835		493		1328	95	101	27			
SP 14A-13	MS 4000	4.0	1030		573		1603	95	101	33			
SP 14A-18	MS 4000	5.5	1355		673		2028	95	101	41			
SP 14A-25	MS 4000	7.5	1810		773		2584	95	101	67			
SP 14A-18	MS6	5.5	1417		535		1952	143	138	52			
SP 14A-25	MS6	7.5	1872		565		2437	143	138	60			

E = Maximum diameter of pump inclusive of cable guard and motor.

# Performance curves

Submersible pumps  
SP 17

SP 17

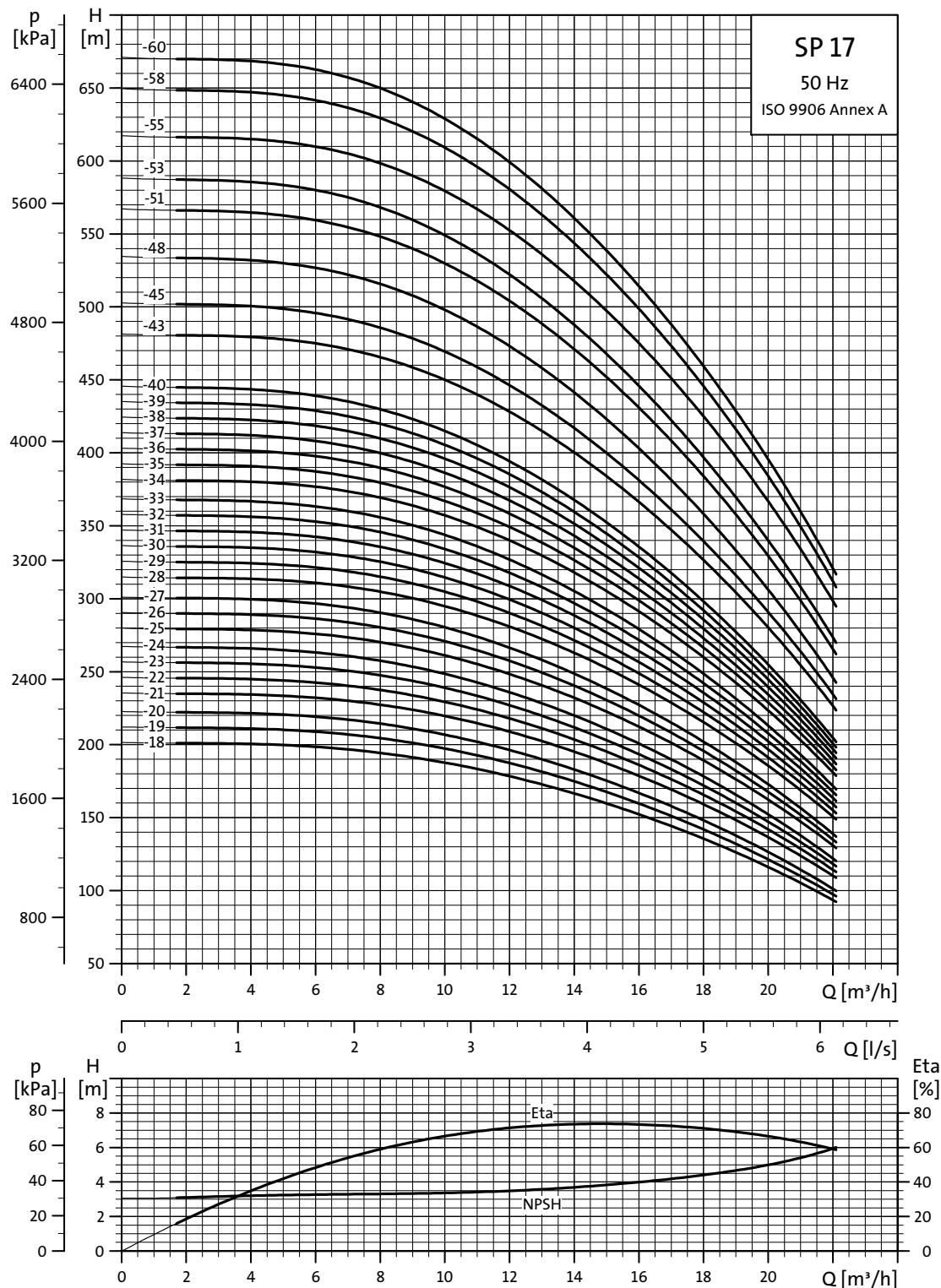


Explanation of efficiency curve, please see *Curve conditions*, page 4.

TM01 8757 4702

# Performance curves

Submersible pumps  
SP 17



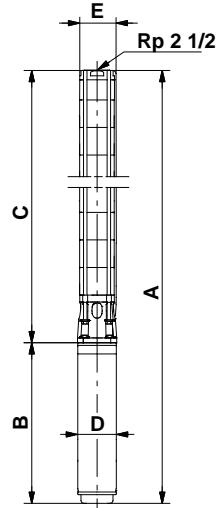
TM01 8758 4702

Explanation of efficiency curve, please see *Curve conditions*, page 4.

# Technical data

Submersible pumps  
SP 17

## Dimensions and weights



TM012435-1798

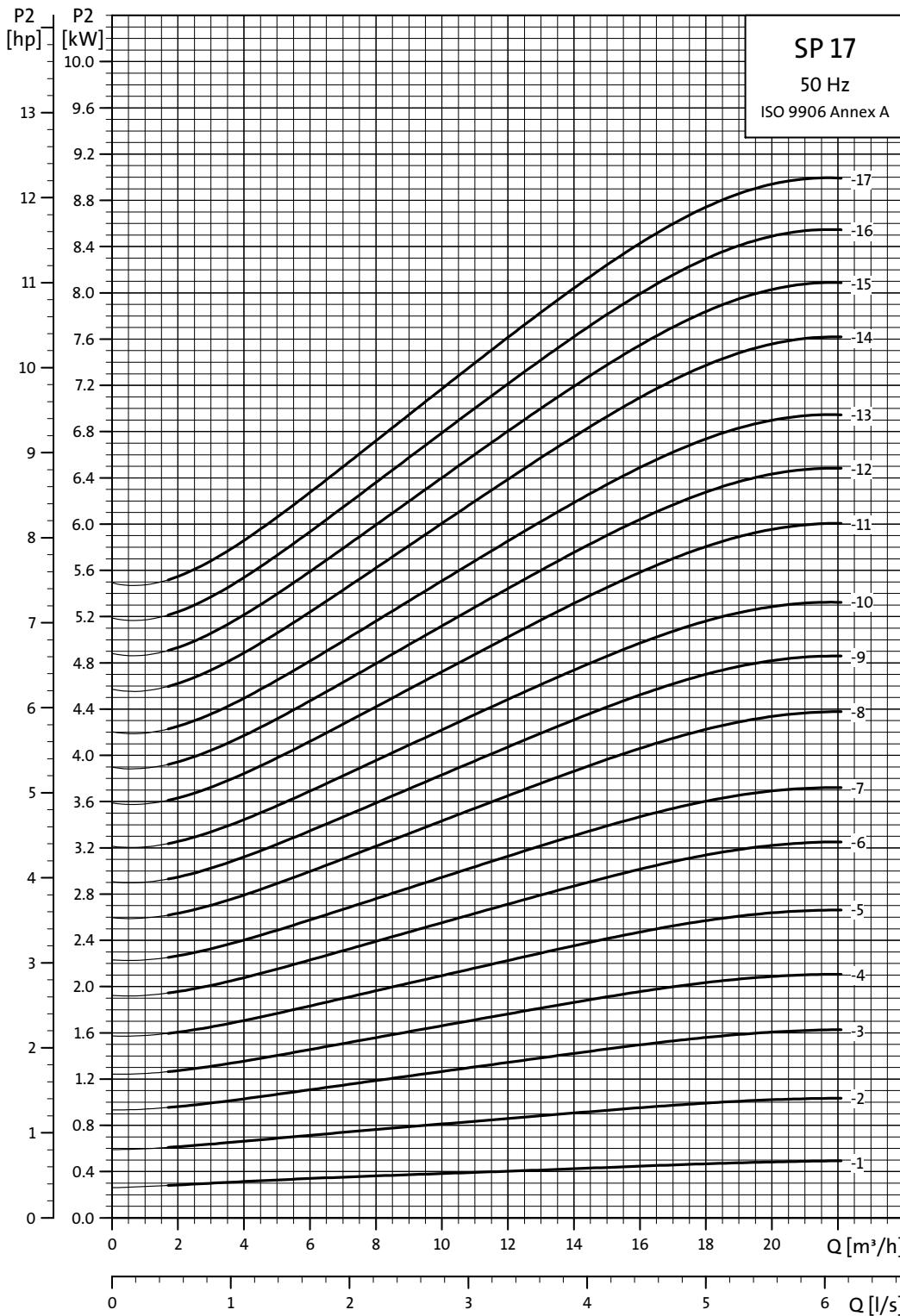
SP 17-43 to SP 17-60 are mounted in sleeve for R 3 connection.

Pump type	Type	Power [kW]	C	Motor		Dimensions [mm]				Net weight [kg]		
				B	A	1x230V 3x400V	3x230V 3x400V	D	E*	E**	1x230V 3x400V	3x230V 3x400V
SP 17-1	MS 402	0.55	314	291	241	605	555	95	131		13	11
SP 17-1 N (R)	MS 4000 R	0.75	314		398		712	95	131			17
SP 17-1 N (R)	MS 4000 R	2.2	314	573		887		95	131		26	
SP 17-2	MS 402	1.1	374	346	306	720	680	95	131		17	15
SP 17-2 N (R)	MS 4000 R	1.1	374		413		787	95	131		20	
SP 17-2 N (R)	MS 4000 R	2.2	374	573		947		95	131		27	
SP 17-3	MS 402	2.2	435		346		781	95	131		19	
SP 17-3 N (R)	MS 4000 R	2.2	435	573	453	1008	888	95	131		28	23
SP 17-4	MS 402	2.2	495		346		841	95	131		20	
SP 17-4	MS 4000	2.2	495	573	453	1068	948	95	131		29	24
SP 17-5	MS 4000	3.0	556		494		1050	95	131		26	
SP 17-6	MS 4000	4.0	616		574		1190	95	131		31	
SP 17-7	MS 4000	4.0	677		574		1251	95	131		33	
SP 17-8	MS 4000	5.5	737		674		1411	95	131		39	
SP 17-9	MS 4000	5.5	798		674		1472	95	131		40	
SP 17-10	MS 4000	5.5	858		674		1532	95	131		41	
SP 17-11	MS 4000	7.5	919		773		1692	95	131		47	
SP 17-12	MS 4000	7.5	979		773		1752	95	131		49	
SP 17-13	MS 4000	7.5	1040		773		1813	95	131		50	
SP 17-8	MS6	5.5	753		535		1288	143	142	142	50	
SP 17-9	MS6	5.5	814		535		1349	143	142	142	51	
SP 17-10	MS6	5.5	874		535		1409	143	142	142	53	
SP 17-11	MS6	7.5	935		565		1500	143	142	142	55	
SP 17-12	MS6	7.5	995		565		1560	143	142	142	56	
SP 17-13	MS6	7.5	1056		565		1621	143	142	142	57	
SP 17-14	MS6	9.2	1116		590		1706	143	142	142	64	
SP 17-15	MS6	9.2	1177		590		1767	143	142	142	65	
SP 17-16	MS6	9.2	1237		590		1827	143	142	142	66	
SP 17-17	MS6	9.2	1298		590		1888	143	142	142	67	
SP 17-18	MS6	11	1358		683		2041	143	142	142	72	
SP 17-19	MS6	11	1419		683		2102	143	142	142	73	
SP 17-20	MS6	11	1479		683		2162	143	142	142	74	
SP 17-21	MS6	13	1540		708		2248	143	142	142	78	
SP 17-22	MS6	13	1600		708		2308	143	142	142	79	
SP 17-23	MS6	13	1661		708		2369	143	142	142	81	
SP 17-24	MS6	13	1721		708		2429	143	142	142	82	
SP 17-25	MS6	15	1782		738		2520	143	142	142	87	
SP 17-26	MS6	15	1842		738		2580	143	142	142	88	
SP 17-27	MS6	15	1903		738		2641	143	142	142	89	
SP 17-28	MS6	18.5	1963		783		2746	143	142	142	96	
SP 17-29	MS6	18.5	2024		783		2807	143	142	142	97	
SP 17-30	MS6	18.5	2084		783		2867	143	142	142	99	
SP 17-31	MS6	18.5	2145		783		2928	143	142	142	100	
SP 17-32	MS6	18.5	2205		783		2988	143	142	142	101	
SP 17-33	MS6	18.5	2266		783		3049	143	142	142	102	
SP 17-34	MS6	22	2326		838		3164	143	142	142	109	
SP 17-35	MS6	22	2387		838		3225	143	142	142	111	
SP 17-36	MS6	22	2447		838		3285	143	142	142	112	
SP 17-37	MS6	22	2508		838		3346	143	142	142	113	
SP 17-38	MS6	22	2568		838		3406	143	142	142	114	
SP 17-39	MS6	22	2629		838		3467	143	142	142	115	
SP 17-40	MS6	22	2689		838		3527	143	142	142	117	
SP 17-43	MS6	26	3118		903		4021	143	175	181	164	
SP 17-45	MS6	26	3239		903		4142	143	175	181	167	
SP 17-48	MS6	26	3420		903		4323	143	175	181	172	
SP 17-51	MS6	30	3602		968		4570	143	175	181	185	
SP 17-53	MS6	30	3723		968		4691	143	175	181	189	
SP 17-55	MMS 6000	37	3844		1425		5269	144	175	181	239	
SP 17-58	MMS 6000	37	4025		1425		5450	144	175	181	244	
SP 17-60	MMS 6000	37	4146		1425		5571	144	175	181	248	
SP 17-55	MMS6	37	3844		1312		5156	143	175	181	234	
SP 17-58	MMS6	37	4025		1312		5337	143	175	181	239	
SP 17-60	MMS6	37	4146		1312		5458	143	175	181	243	

The pump types above are also available in R- and N-versions. See page 5. Dimensions as above.  
Other types of connection are possible by means of connecting pieces. See page 87

# Power curves

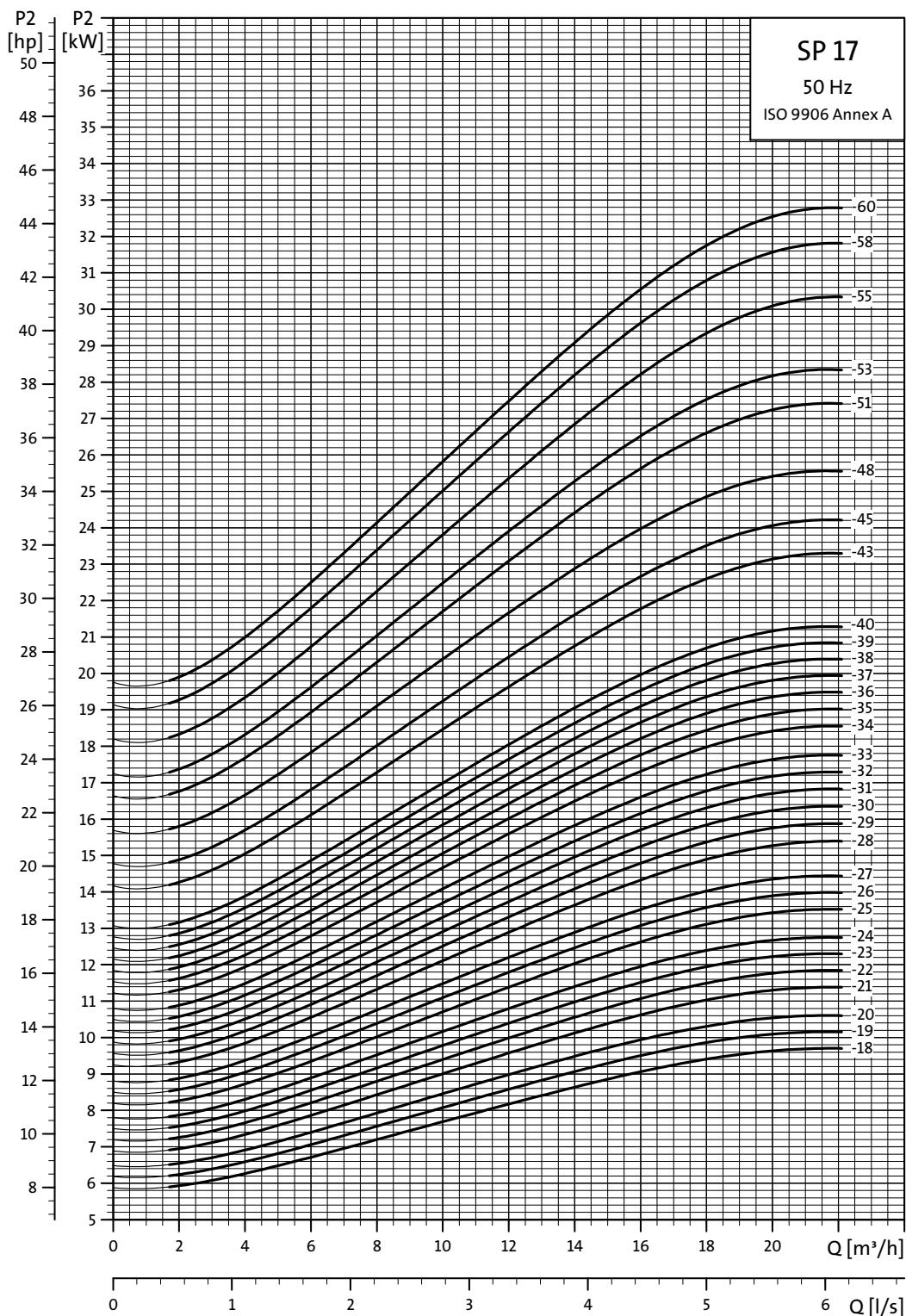
Submersible pumps  
SP 17



TM01 8759 4702

# Power curves

Submersible pumps  
SP 17

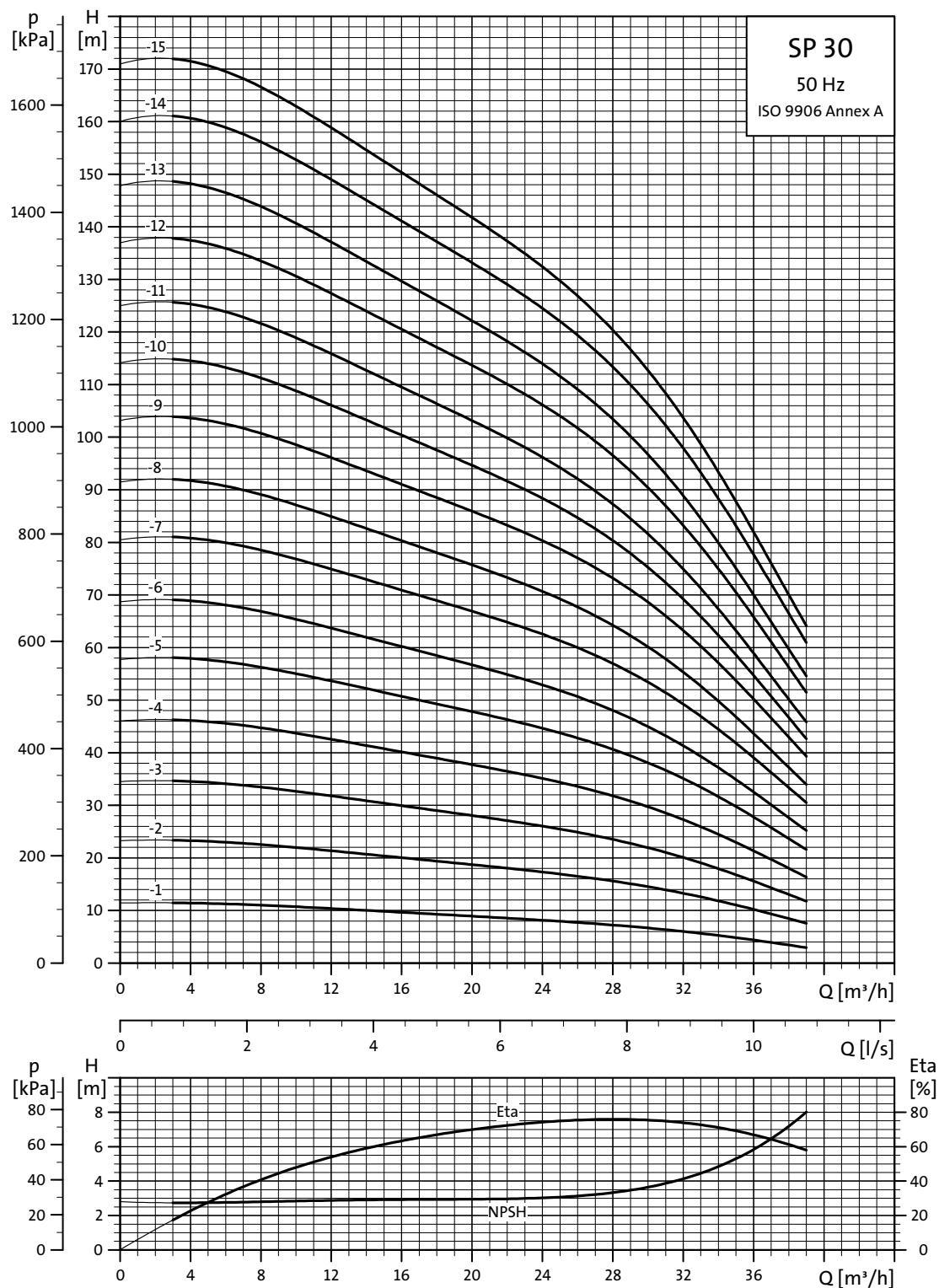


TM01 8760 4702

# Performance curves

Submersible pumps  
SP 30

**SP 30**

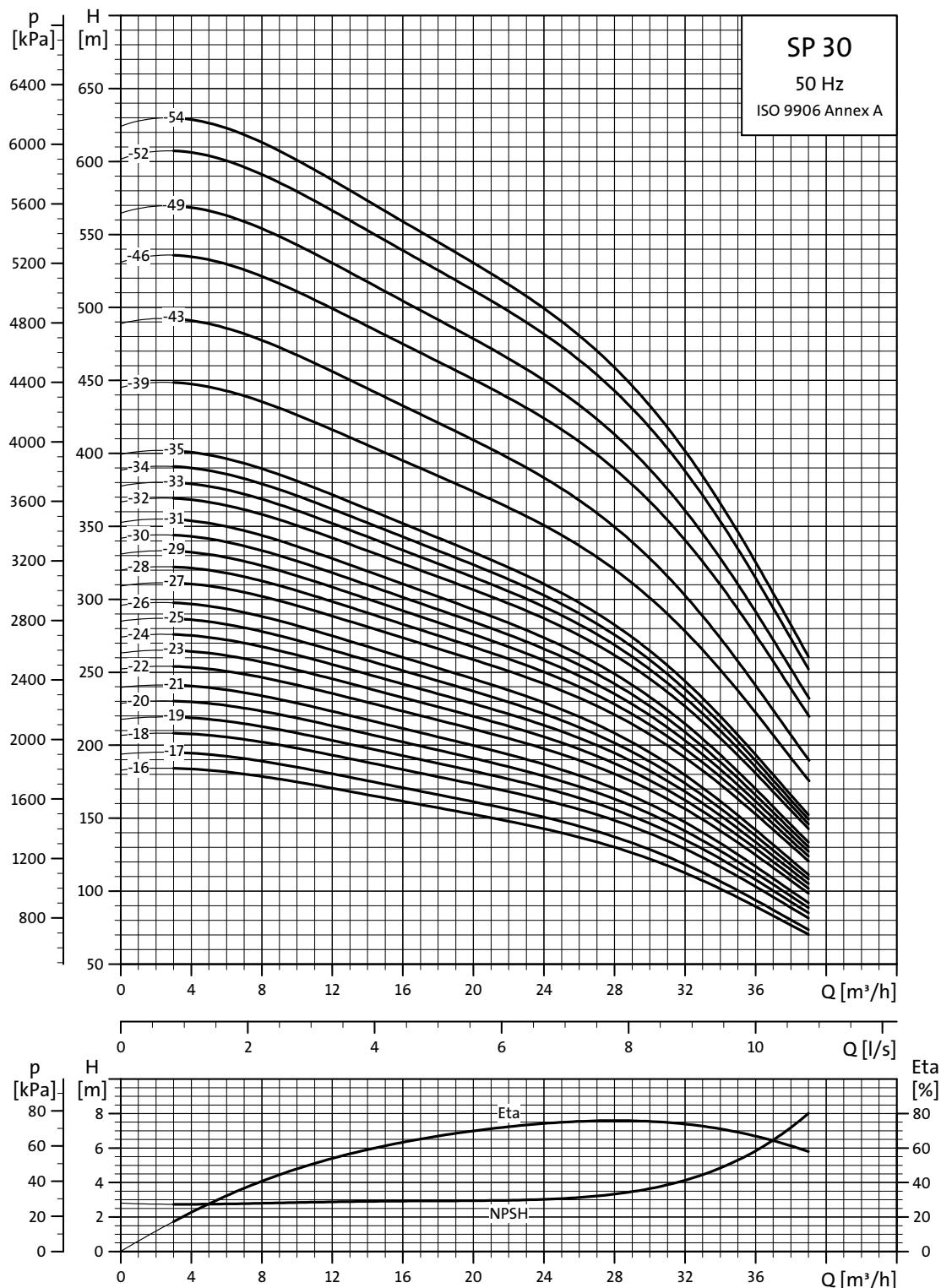


Explanation of efficiency curve, please see *Curve conditions*, page 4.

TM01 8761 4702

# Performance curves

Submersible pumps  
SP 30



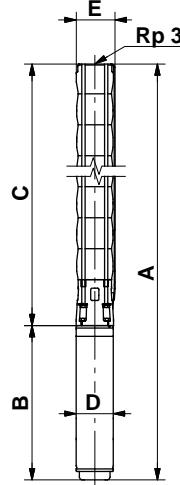
TM01 8762 4702

Explanation of efficiency curve, please see *Curve conditions*, page 4.

# Technical data

Submersible pumps  
SP 30

## Dimensions and weights



TM00 0960 1196

SP 30-39 to SP 30-54 are mounted in sleeve for R 3 connection.

Pump type	Type	Power [kW]	Motor		Dimensions [mm]				Net weight [kg]		
			C	B	A		D	E*	E**	1x230V 3x400V	
					1x230V	3x230V 3x400V				1x230V	3x230V 3x400V
SP 30-1	MS 402	1.1	349	346	306	695	655	95	131	16	14
SP 30-1 N (R)	MS 4000 R	2.2	349	573		922		95	131	26	
SP 30-2	MS 402	2.2	445		346		791	95	131		19
SP 30-2 N (R)	MS 4000 R	2.2	445	573	453	1018	898	95	131	28	23
SP 30-3	MS 4000	3.0	541		494		1035	95	131		25
SP 30-4	MS 4000	4.0	637		574		1211	95	131		31
SP 30-5	MS 4000	5.5	733		674		1407	95	131		38
SP 30-6	MS 4000	5.5	829		674		1503	95	131		39
SP 30-7	MS 4000	7.5	925		773		1698	95	131		46
SP 30-8	MS 4000	7.5	1021		773		1794	95	131		48
SP 30-5	MS6	5.5	749		535		1284	143	142	142	49
SP 30-6	MS6	5.5	845		535		1380	143	142	142	51
SP 30-7	MS6	7.5	941		565		1506	143	142	142	53
SP 30-8	MS6	7.5	1037		565		1602	143	142	142	55
SP 30-9	MS6	9.2	1133		590		1723	143	142	142	62
SP 30-10	MS6	9.2	1229		590		1819	143	142	142	64
SP 30-11	MS6	9.2	1325		590		1915	143	142	142	65
SP 30-12	MS6	11	1421		683		2104	143	142	142	70
SP 30-13	MS6	11	1517		683		2200	143	142	142	72
SP 30-14	MS6	13	1613		708		2321	143	142	142	76
SP 30-15	MS6	13	1709		708		2417	143	142	142	78
SP 30-16	MS6	15	1805		738		2543	143	142	142	84
SP 30-17	MS6	15	1901		738		2639	143	142	142	85
SP 30-18	MS6	18.5	1997		783		2780	143	142	142	93
SP 30-19	MS6	18.5	2093		783		2876	143	142	142	94
SP 30-20	MS6	18.5	2189		783		2972	143	142	142	96
SP 30-21	MS6	18.5	2285		783		3068	143	142	142	98
SP 30-22	MS6	22	2381		838		3219	143	142	142	105
SP 30-23	MS6	22	2477		838		3315	143	142	142	107
SP 30-24	MS6	22	2573		838		3411	143	142	142	109
SP 30-25	MS6	22	2669		838		3507	143	142	142	110
SP 30-26	MS6	22	2765		838		3603	143	142	142	112
SP 30-27	MS6	26	2861		903		3764	143	142	142	119
SP 30-28	MS6	26	2957		903		3860	143	142	142	121
SP 30-29	MS6	26	3053		903		3956	143	142	142	123
SP 30-30	MS6	26	3149		903		4052	143	142	142	124
SP 30-31	MS6	26	3245		903		4148	143	142	142	126
SP 30-32	MS6	30	3341		968		4309	143	144	145	136
SP 30-33	MS6	30	3437		968		4405	143	144	145	137
SP 30-34	MS6	30	3533		968		4501	143	144	145	139
SP 30-35	MS6	30	3629		968		4597	143	144	145	141
SP 30-39	MMS 6000	37	4260		1425		5685	144	175	181	253
SP 30-43	MMS 6000	37	4644		1425		6069	144	175	181	264
SP 30-39	MMS6	37	4260		1312		5572	143	175	181	248
SP 30-43	MMS6	37	4644		1312		5956	143	175	181	259
SP 30-46	MMS 8000	45	4881		1270		6151	192	175	181	325
SP 30-49	MMS 8000	45	5169		1270		6439	192	175	181	332
SP 30-52	MMS 8000	55	5457		1350		6807	192	192	192	357
SP 30-54	MMS 8000	55	5649		1350		6999	192	192	192	362

\* Maximum diameter of pump with one motor cable.

\*\* Maximum diameter of pump with two motor cables.

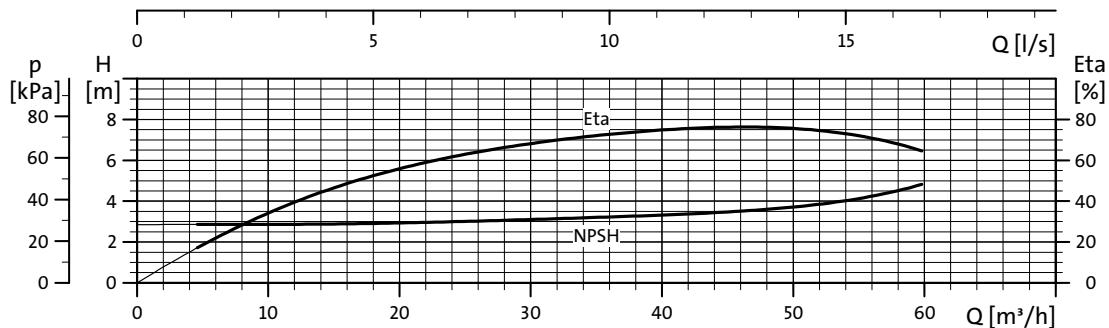
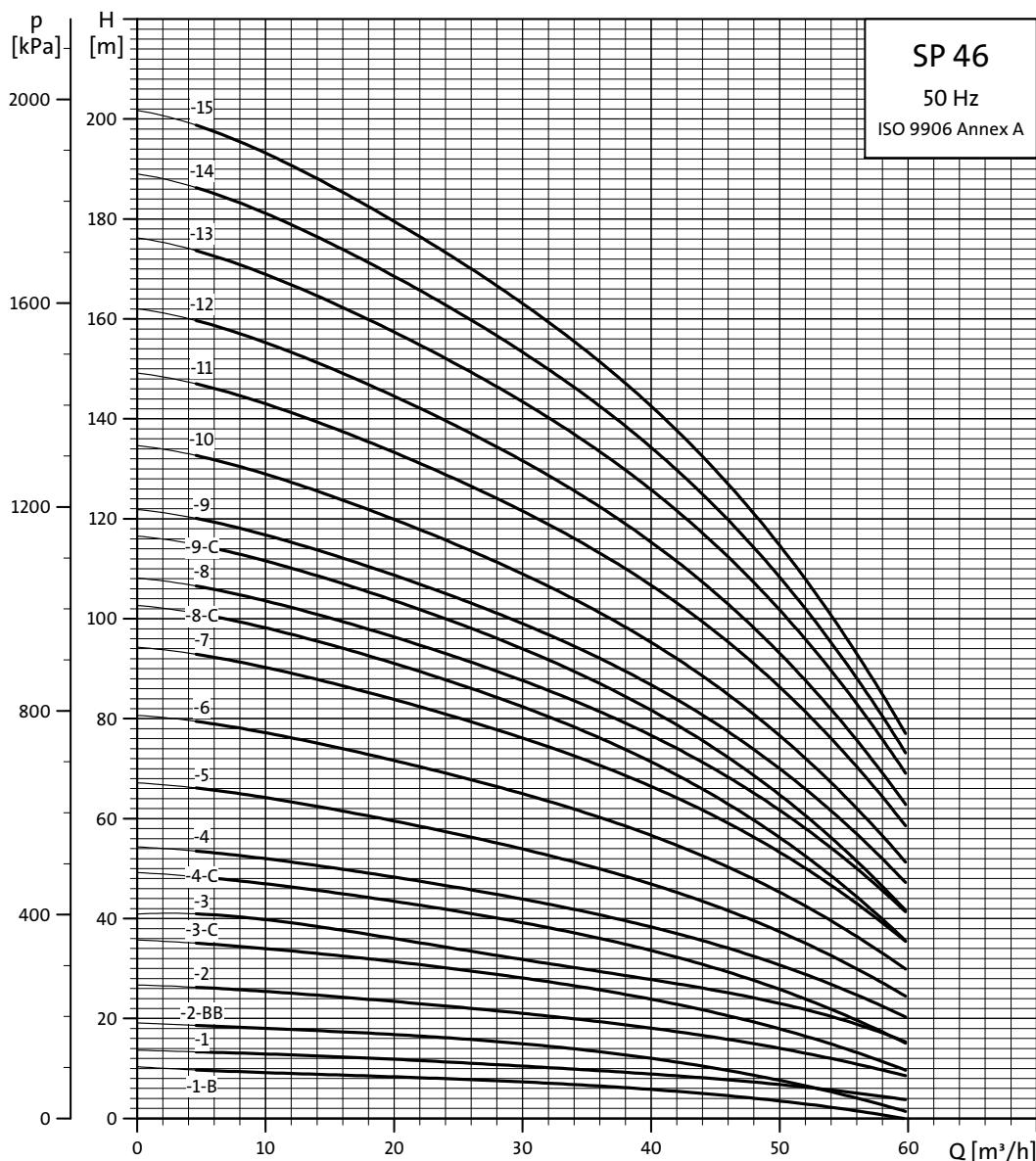
The pump types above are also available in R- and N-versions. See page 5. Dimensions as above.

Other types of connection are possible by means of connecting pieces. See page 87.

# Performance curves

Submersible pumps  
SP 46

SP 46

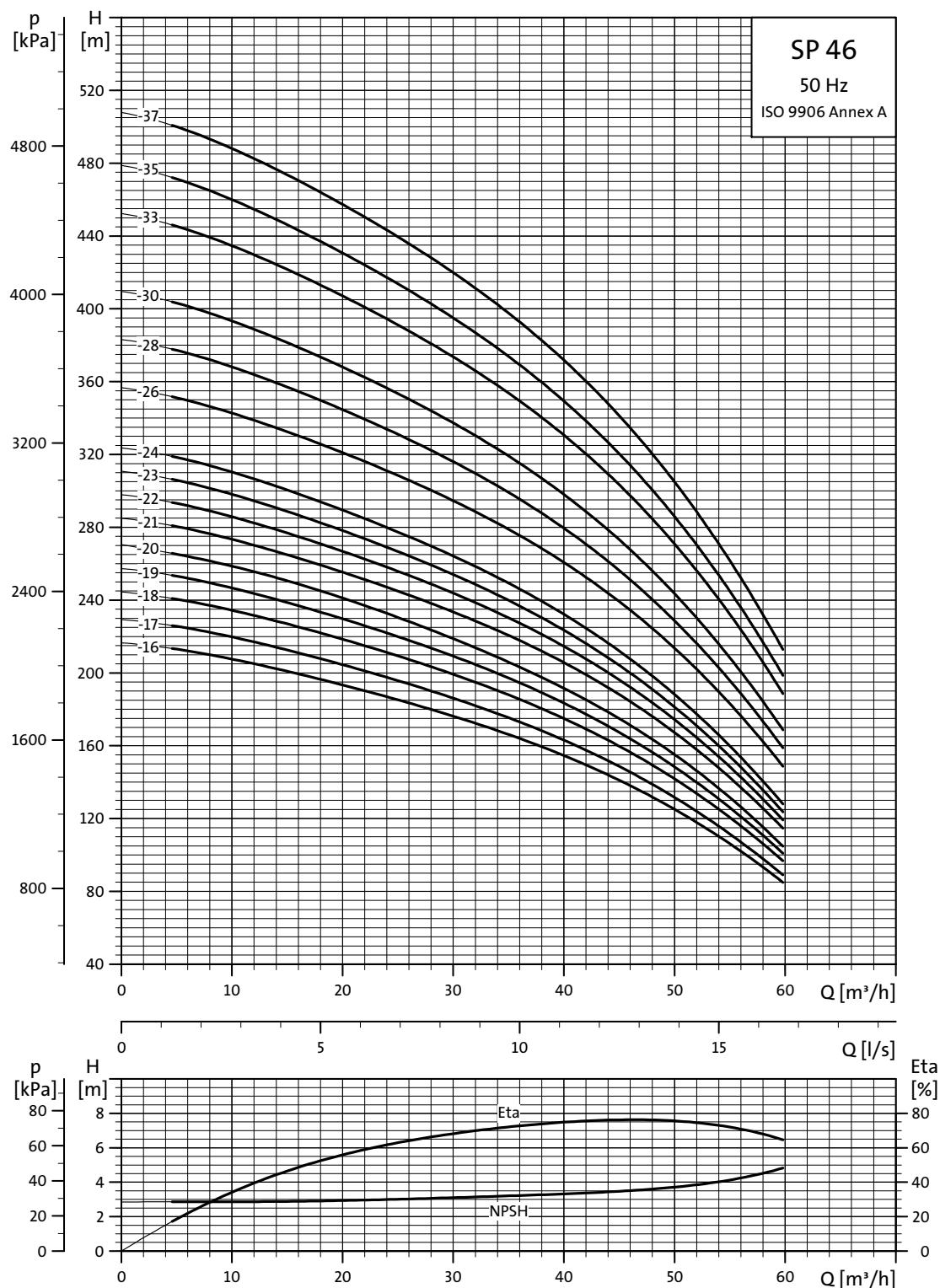


TM01 8765 4702

Explanation of efficiency curve, please see *Curve conditions*, page 4.

# Performance curves

Submersible pumps  
SP 46



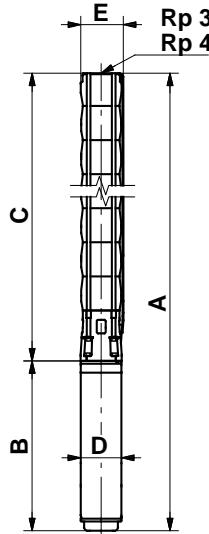
TM01 8766 4702

Explanation of efficiency curve, please see *Curve conditions*, page 4.

# Technical data

Submersible pumps  
SP 46

## Dimensions and weights



TM00 09611196

SP 46-26 to SP 46-37 are mounted in sleeve for R 4 connection.

Pump type	Type	Power [kW]	Motor						Dimensions [mm]				B	D	Net weight [kg]			
			Rp 3 connection				Rp 4 connection											
			A	C	E*	E**	A	C	E*	E**								
SP 46-1-B	MS 4000	1.1	777	364	141		783	370	145		413	95	20					
SP 46-1	MS 4000	2.2	817	364	141		823	370	145		453	95	22					
SP 46-2-BB	MS 4000	2.2	930	477	141		936	483	145		453	95	24					
SP 46-2	MS 4000	3.0	970	477	141		976	483	145		493	95	25					
SP 46-3-C	MS 4000	4.0	1163	590	141		1169	596	145		573	95	32					
SP 46-3	MS 4000	5.5	1263	590	141		1269	596	145		673	95	37					
SP 46-4-C	MS 4000	5.5	1376	703	141		1382	709	145		673	95	39					
SP 46-4	MS 4000	7.5	1476	703	141		1482	709	145		773	95	44					
SP 46-5	MS 4000	7.5	1589	816	141		1595	822	145		773	95	47					
SP 46-3	MS6	5.5	1141	606	145	150	1147	612	147	152	535	143	48					
SP 46-4	MS6	7.5	1284	719	145	150	1290	725	147	152	565	143	52					
SP 46-5	MS6	7.5	1397	832	145	150	1403	838	147	152	565	143	54					
SP 46-6	MS6	9.2	1535	945	145	150	1541	951	147	152	590	143	62					
SP 46-7	MS6	11	1741	1058	145	150	1747	1064	147	152	683	143	68					
SP 46-8-C	MS6	11	1854	1171	145	150	1860	1177	147	152	683	143	70					
SP 46-8	MS6	13	1879	1171	145	150	1885	1177	147	152	708	143	73					
SP 46-9-C	MS6	13	1992	1284	145	150	1998	1290	147	152	708	143	76					
SP 46-9	MS6	15	2022	1284	145	150	2028	1290	147	152	738	143	80					
SP 46-10	MS6	15	2135	1397	145	150	2141	1403	147	152	738	143	82					
SP 46-11	MS6	18.5	2293	1510	145	150	2299	1516	147	152	783	143	90					
SP 46-12	MS6	18.5	2406	1623	145	150	2412	1629	147	152	783	143	93					
SP 46-13	MS6	22	2574	1736	145	150	2580	1742	147	152	838	143	101					
SP 46-14	MS6	22	2687	1849	145	150	2693	1855	147	152	838	143	104					
SP 46-15	MS6	22	2800	1962	145	150	2806	1968	147	152	838	143	106					
SP 46-16	MS6	26	2978	2075	145	150	2984	2081	147	152	903	143	114					
SP 46-17	MS6	26	3091	2188	145	150	3097	2194	147	152	903	143	117					
SP 46-18	MS6	30	3269	2301	145	150	3275	2307	147	152	968	143	128					
SP 46-19	MS6	30	3382	2414	145	150	3388	2420	147	152	968	143	130					
SP 46-20	MS6	30	3575	2607	145	150	3581	2613	147	152	968	143	132					
SP 46-21	MMS 6000	37	4145	2720	145	150	4151	2726	147	152	1425	144	185					
SP 46-22	MMS 6000	37	4258	2833	145	150	4264	2839	147	152	1425	144	188					
SP 46-23	MMS 6000	37	4371	2946	145	150	4377	2952	147	152	1425	144	190					
SP 46-24	MMS 6000	37	4484	3059	145	150	4490	3065	147	152	1425	144	193					
SP 46-21	MMS6	37	4032	2720	145	150	4038	2726	147	152	1312	143	180					
SP 46-22	MMS6	37	4145	2833	145	150	4151	2839	147	152	1312	143	183					
SP 46-23	MMS6	37	4258	2946	145	150	4264	2952	147	152	1312	143	185					
SP 46-24	MMS6	37	4371	3059	145	150	4377	3065	147	152	1312	143	188					
SP 46-26	MMS 8000	45					4673	3403	192	192	1270	192	278					
SP 46-28	MMS 8000	45					4899	3629	192	192	1270	192	284					
SP 46-30	MMS 8000	45					5125	3855	192	192	1270	192	290					
SP 46-33	MMS 8000	55					5544	4194	192	192	1350	192	314					
SP 46-35	MMS 8000	55					5770	4420	192	192	1350	192	319					
SP 46-37	MMS 8000	63					6136	4646	192	192	1490	192	351					

\* Maximum diameter of pump with one motor cable.

\*\* Maximum diameter of pump with two motor cables.

The pump types above are also available in R- and N-versions. See page 5.

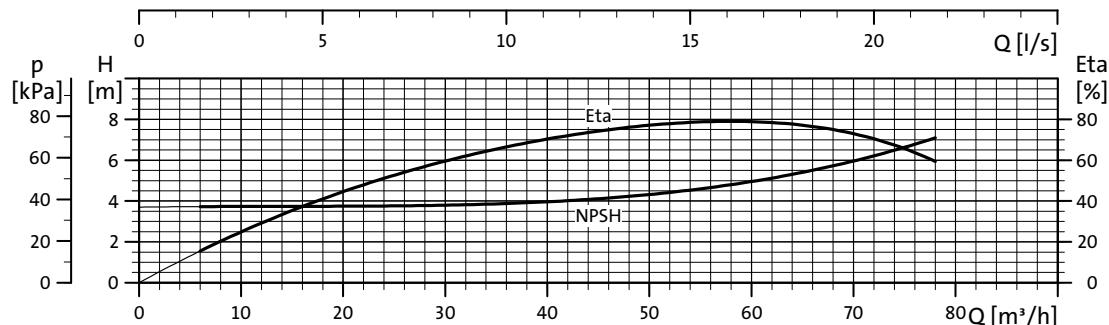
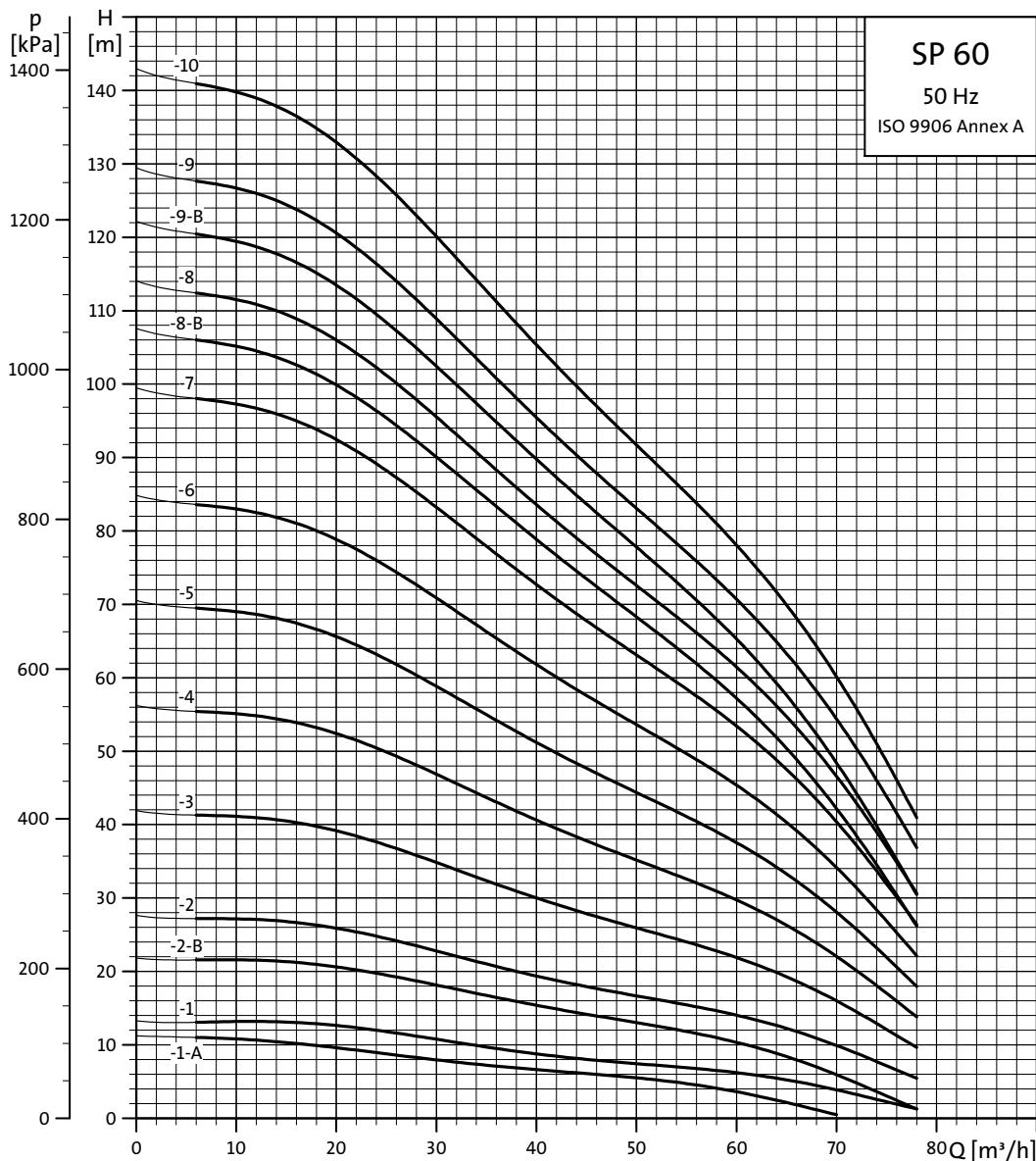
Pumps in R-versions are available up to and incl. SP 46-24, i.e. sleeve versions. Dimensions as above.

Other types of connection are possible by means of connecting pieces. See page 87.

# Performance curves

Submersible pumps  
SP 60

**SP 60**

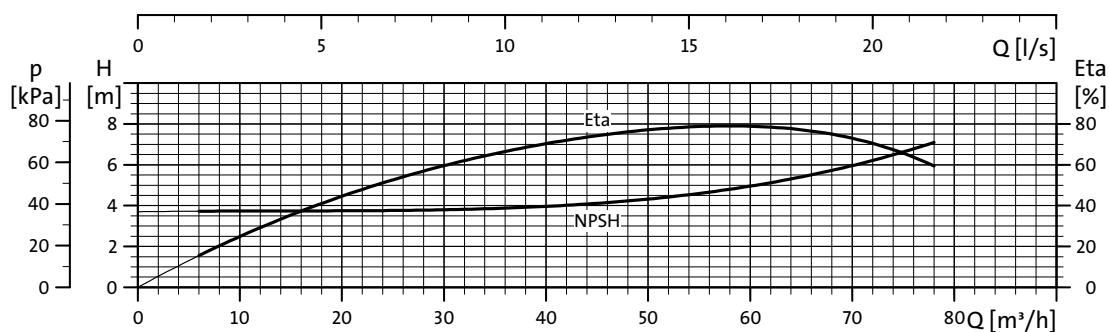
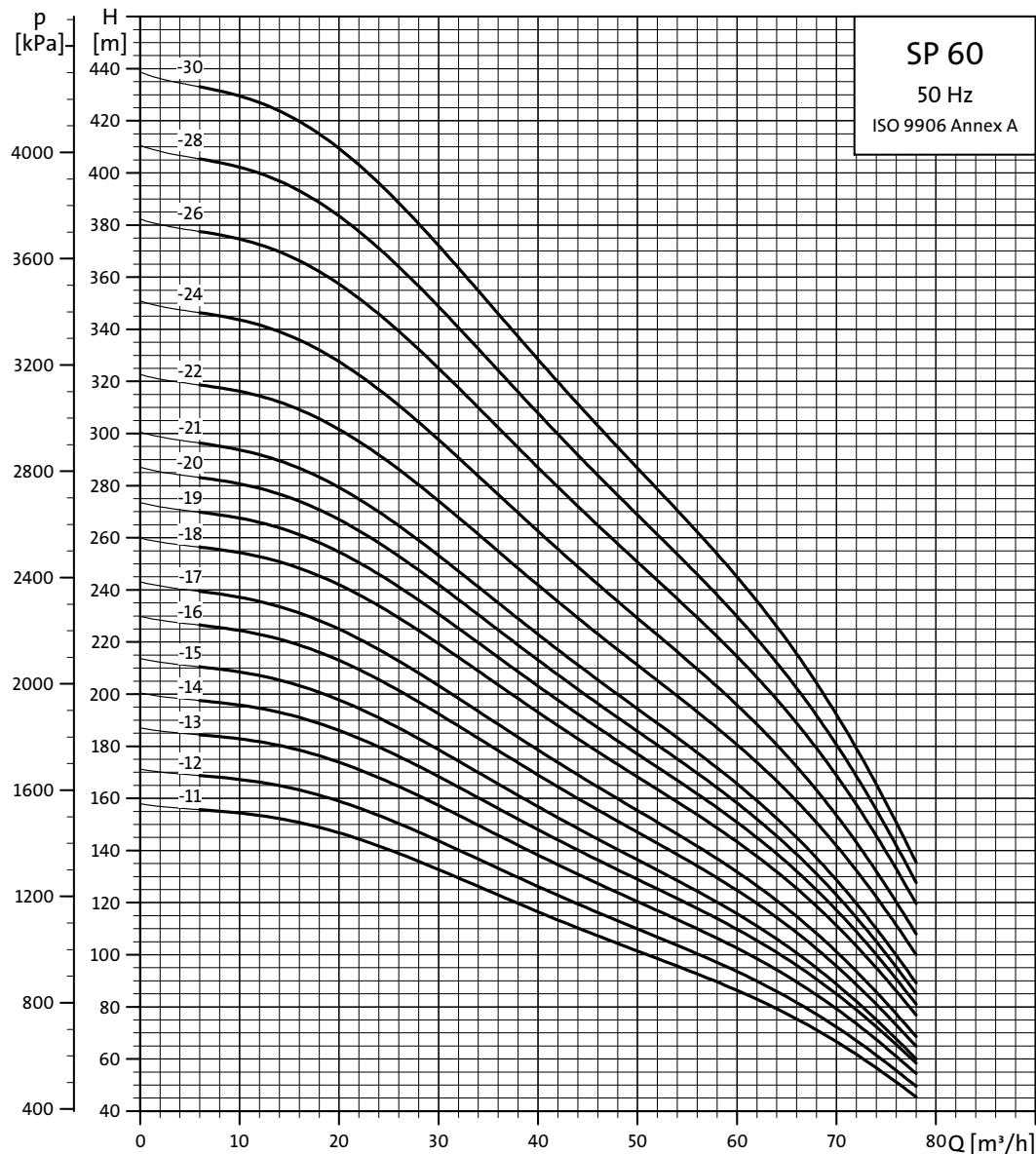


TM01 8826 4702

Explanation of efficiency curve, please see *Curve conditions*, page 4.

# Performance curves

Submersible pumps  
SP 60



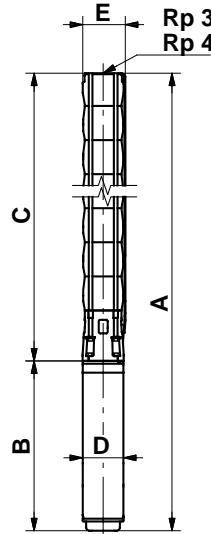
TM01 88227 4702

Explanation of efficiency curve, please see *Curve conditions*, page 4.

# Technical data

Submersible pumps  
SP 60

## Dimensions and weights



TM00 0961 1196

Pump type	Type	Power [kW]	Motor						Dimensions [mm]				B	D	Net weight [kg]			
			Rp 3 connection				Rp 4 connection											
			A	C	E*	E**	A	C	E*	E**								
SP 60-1-A	MS 4000	1.5	780	364	142		786	370	146		416	95	20					
SP 60-1	MS 4000	2.2	817	364	142		823	370	146		453	95	22					
SP 60-2-B	MS 4000	3.0	970	477	142		976	483	146		493	95	25					
SP 60-2	MS 4000	4.0	1050	477	142		1056	483	146		573	95	29					
SP 60-3	MS 4000	5.5	1263	590	142		1269	596	146		673	95	37					
SP 60-3	MS6	5.5	1141	606	147	150	1147	612	149	152	535	138	47					
SP 60-4	MS 4000	7.5	1476	703	142		1482	709	146		773	95	44					
SP 60-4	MS6	7.5	1284	719	147	150	1290	725	149	152	565	143	50					
SP 60-5	MS6	9.2	1422	832	147	150	1428	838	149	152	590	143	60					
SP 60-6	MS6	11	1633	950	147	150	1634	951	149	152	683	143	65					
SP 60-7	MS6	13	1766	1058	147	150	1772	1064	149	152	708	143	71					
SP 60-8-B	MS6	13	1879	1171	147	150	1885	1177	149	152	708	143	73					
SP 60-8	MS6	15	1909	1171	147	150	1915	1177	149	152	738	143	77					
SP 60-9-B	MS6	15	2022	1284	147	150	2028	1290	149	152	738	143	80					
SP 60-9	MS6	18.5	2067	1284	147	150	2073	1290	149	152	783	143	85					
SP 60-10	MS6	18.5	2180	1397	147	150	2186	1403	149	152	783	143	88					
SP 60-11	MS6	22	2348	1510	147	150	2354	1516	149	152	838	143	96					
SP 60-12	MS6	22	2461	1623	147	150	2467	1629	149	152	838	143	99					
SP 60-13	MS6	26	2639	1736	147	150	2645	1742	149	152	903	143	107					
SP 60-14	MS6	26	2752	1849	147	150	2758	1855	149	152	903	143	109					
SP 60-15	MS6	26	2865	1962	147	150	2871	1968	149	152	903	143	112					
SP 60-16	MS6	30	3043	2075	147	150	3049	2081	149	152	968	143	122					
SP 60-17	MS6	30	3156	2188	147	150	3162	2194	152	156	968	143	125					
SP 60-18	MMS 6000	37	3806	2381	150	154	3812	2387	152	156	1425	144	178					
SP 60-19	MMS 6000	37	3919	2494	150	154	3925	2500	152	156	1425	144	180					
SP 60-20	MMS 6000	37	4032	2607	150	154	4038	2613	152	156	1425	144	183					
SP 60-21	MMS 6000	37	4147	2722	150	154	4151	2726	152	156	1425	144	185					
SP 60-18	MMS6	37	3693	2381	150	154	3699	2387	152	156	1312	143	173					
SP 60-19	MMS6	37	3806	2494	150	154	3812	2500	152	156	1312	143	175					
SP 60-20	MMS6	37	3919	2607	150	154	3925	2613	152	156	1312	143	178					
SP 60-21	MMS6	37	4034	2722	150	154	4038	2726	152	156	1312	143	180					
SP 60-22	MMS 8000	45	4054	2784	180	180	4058	2788	180	180	1270	192	239					
SP 60-24	MMS 8000	45					4447	3177	193	195	1270	192	272					
SP 60-26	MMS 8000	55					4753	3403	193	195	1350	192	293					
SP 60-28	MMS 8000	55					4979	3629	193	195	1350	192	299					
SP 60-30	MMS 8000	55					5205	3855	193	195	1350	192	305					

\* Maximum diameter of pump with one motor cable.

\*\* Maximum diameter of pump with two motor cables.

The pump types above are also available in R- and N-versions. See page 5.

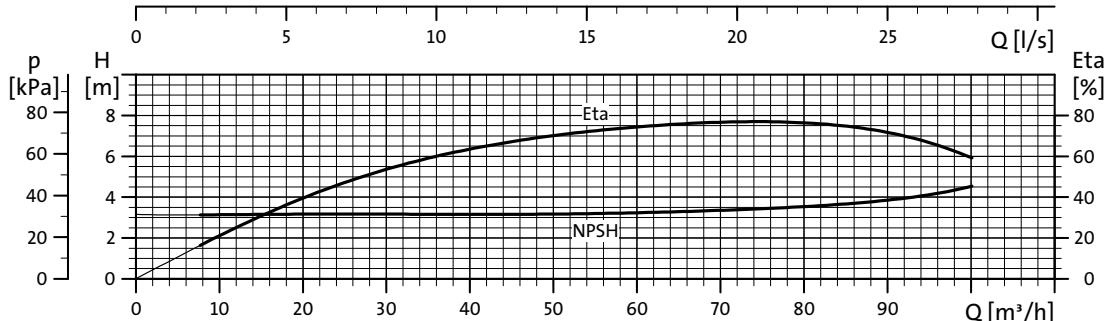
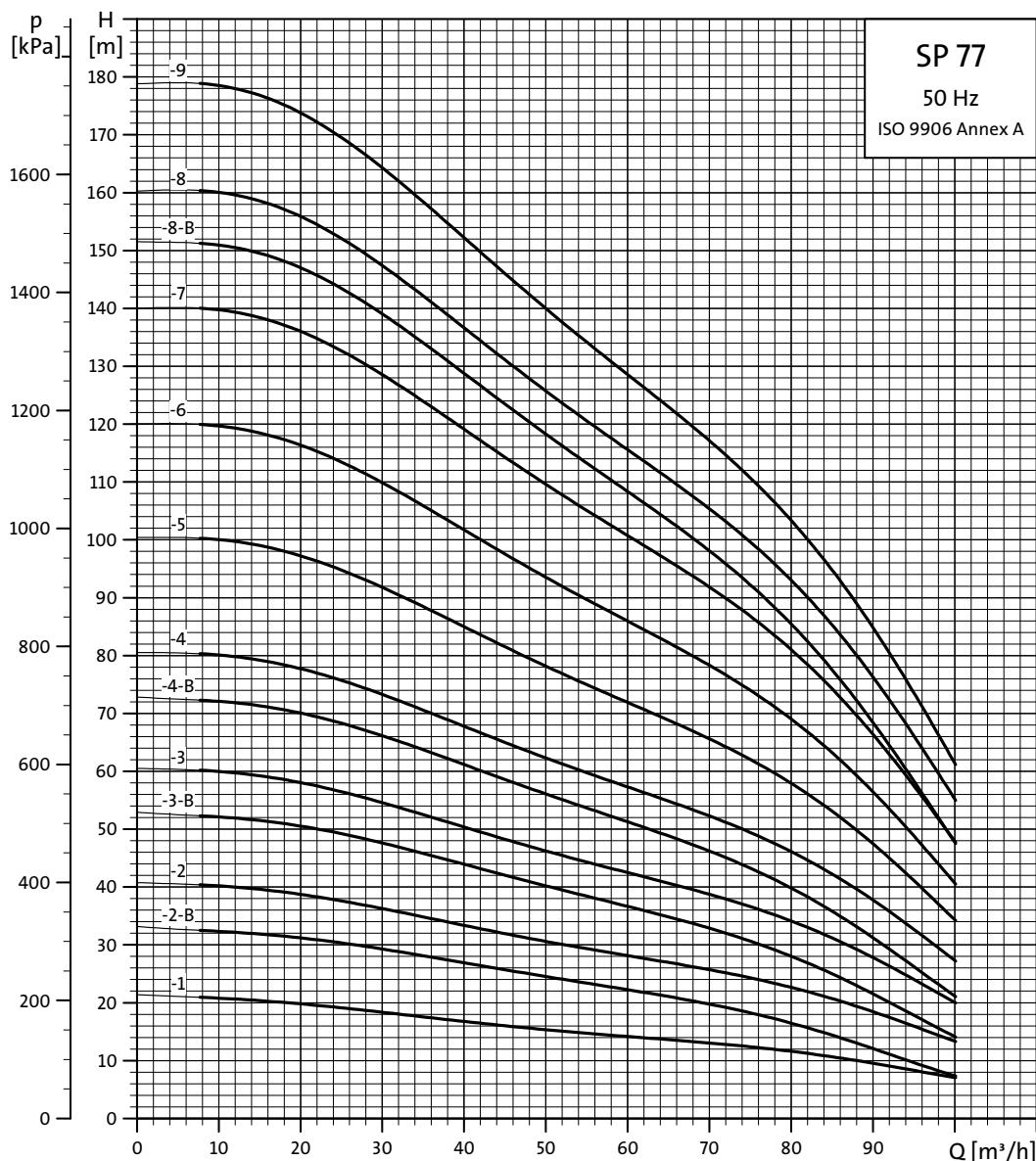
Pumps in R-versions are available up to and incl. SP 60-22, i.e. sleeve versions. Dimensions as above.

Other types of connection are possible by means of connecting pieces. See page 87.

# Performance curves

Submersible pumps  
SP 77

SP 77

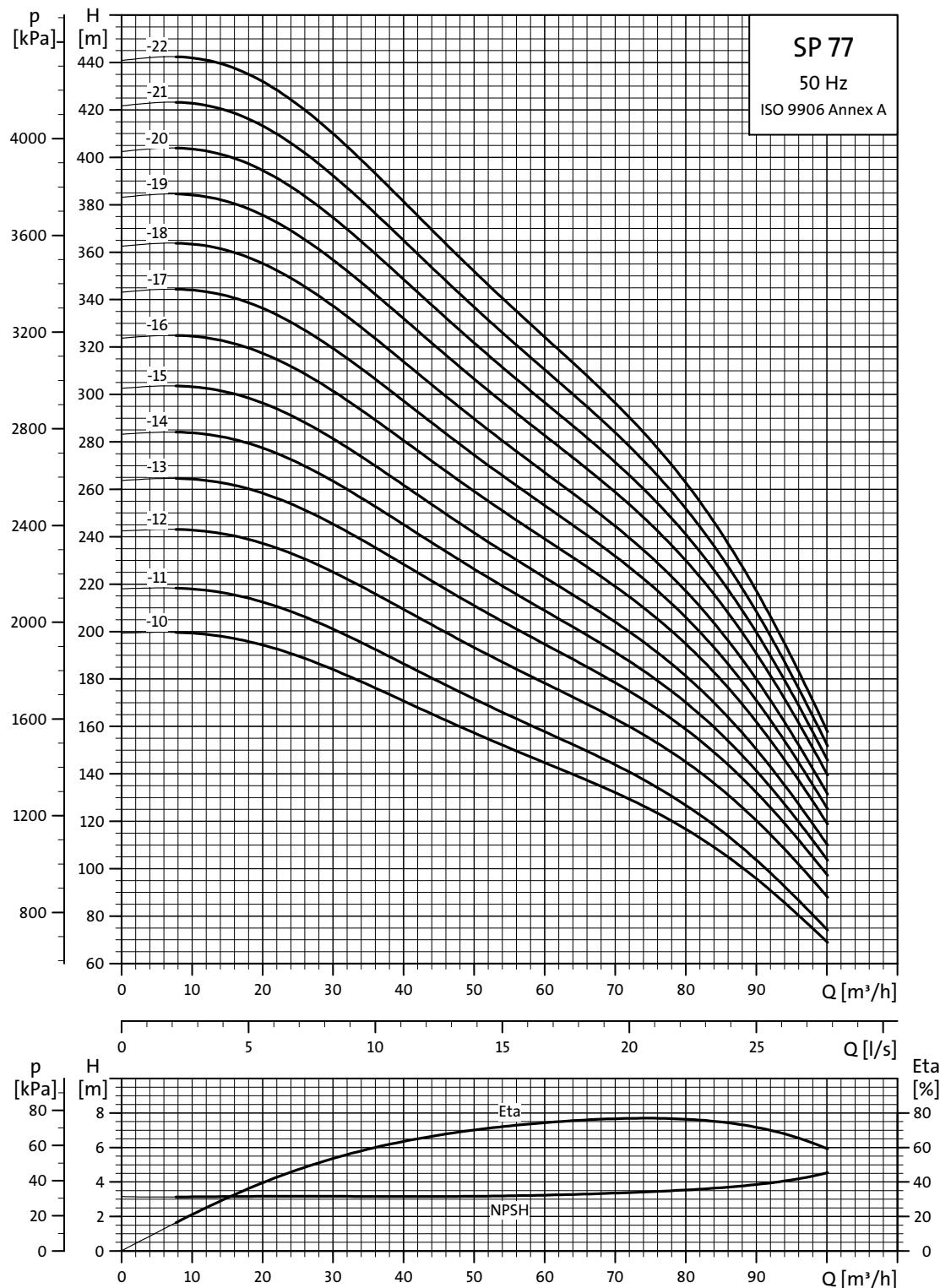


TM01 8769 4702

Explanation of efficiency curve, please see *Curve conditions*, page 4.

# Performance curves

Submersible pumps  
SP 77



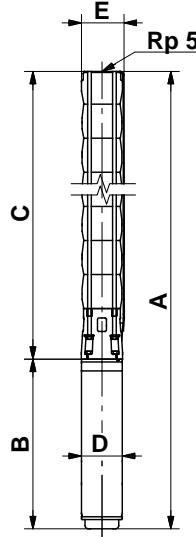
Explanation of efficiency curve, please see *Curve conditions*, page 4.

TM01 8770 4702

# Technical data

Submersible pumps  
SP 77

## Dimensions and weights



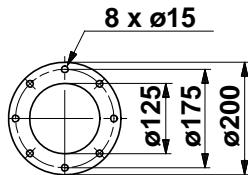
Pump type	Type	Power [kW]	Motor				Dimensions [mm]						B	D	Net weight [kg]
			Rp 5 connection				5" Grundfos flange								
			A	C	E*	E**	A	C	E*	E**					
SP 77-1	MS6	5.5	1153	618	178	186	1153	618	200	200	535	143	55		
SP 77-2-B	MS6	5.5	1281	746	178	186	1281	746	200	200	535	143	59		
SP 77-2	MS6	7.5	1311	746	178	186	1311	746	200	200	565	143	63		
SP 77-3-B	MS6	9.2	1464	874	178	186	1464	874	200	200	590	143	72		
SP 77-3	MS6	11	1557	874	178	186	1557	874	200	200	683	143	75		
SP 77-4-B	MS6	13	1711	1003	178	186	1711	1003	200	200	708	143	82		
SP 77-4	MS6	15	1741	1003	178	186	1741	1003	200	200	738	143	86		
SP 77-5	MS6	18.5	1914	1131	178	186	1914	1131	200	200	783	143	95		
SP 77-6	MS6	22	2097	1259	178	186	2097	1259	200	200	838	143	105		
SP 77-7	MS6	26	2290	1387	178	186	2290	1387	200	200	903	143	114		
SP 77-8-B	MS6	26	2418	1515	178	186	2418	1515	200	200	903	143	118		
SP 77-8	MS6	30	2483	1515	178	186	2483	1515	200	200	968	143	126		
SP 77-9	MS6	30	2611	1643	178	186	2611	1643	200	200	968	143	129		
SP 77-10	MMS 6000	37	3196	1771	178	186	3196	1771	200	200	1425	144	181		
SP 77-11	MMS 6000	37	3339	1898	178	186	3323	1898	200	200	1425	144	184		
SP 77-10	MMS6	37	3083	1771	178	186	3083	1771	200	200	1312	143	176		
SP 77-11	MMS6	37	3226	1898	178	186	3210	1898	200	200	1312	143	179		
SP 77-12	MMS 8000	45	3313	2043	200	204	3313	2043	209	209	1270	192	240		
SP 77-13	MMS 8000	55	3522	2172	200	204	3522	2172	209	209	1350	192	259		
SP 77-14	MMS 8000	55	3650	2300	200	204	3650	2300	209	209	1350	192	263		
SP 77-15	MMS 8000	55	3779	2429	200	204					1350	192	266		
SP 77-16	MMS 8000	63	4047	2557	200	204					1490	192	296		
SP 77-17	MMS 8000	63	4175	2685	200	204					1490	192	300		
SP 77-18	MMS 8000	63	4304	2814	200	204					1490	192	304		
SP 77-19	MMS 8000	75	4826	3236	200	204					1590	192	334		
SP 77-20	MMS 8000	75	4954	3364	200	204					1590	192	338		
SP 77-21	MMS 8000	75	5082	3492	200	202					1590	192	342		
SP 77-22	MMS 8000	92	5450	3620	200	202					1830	192	391		

\* Maximum diameter of pump with one motor cable.

\*\* Maximum diameter of pump with two motor cables.

The pump types are also available in N- and R-versions. See page 5. Dimensions as above.

Other types of connection are possible by means of connecting pieces. See page 87.

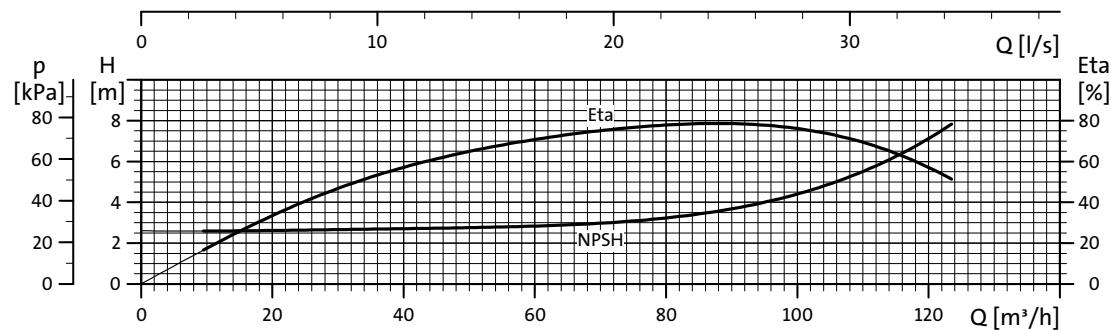
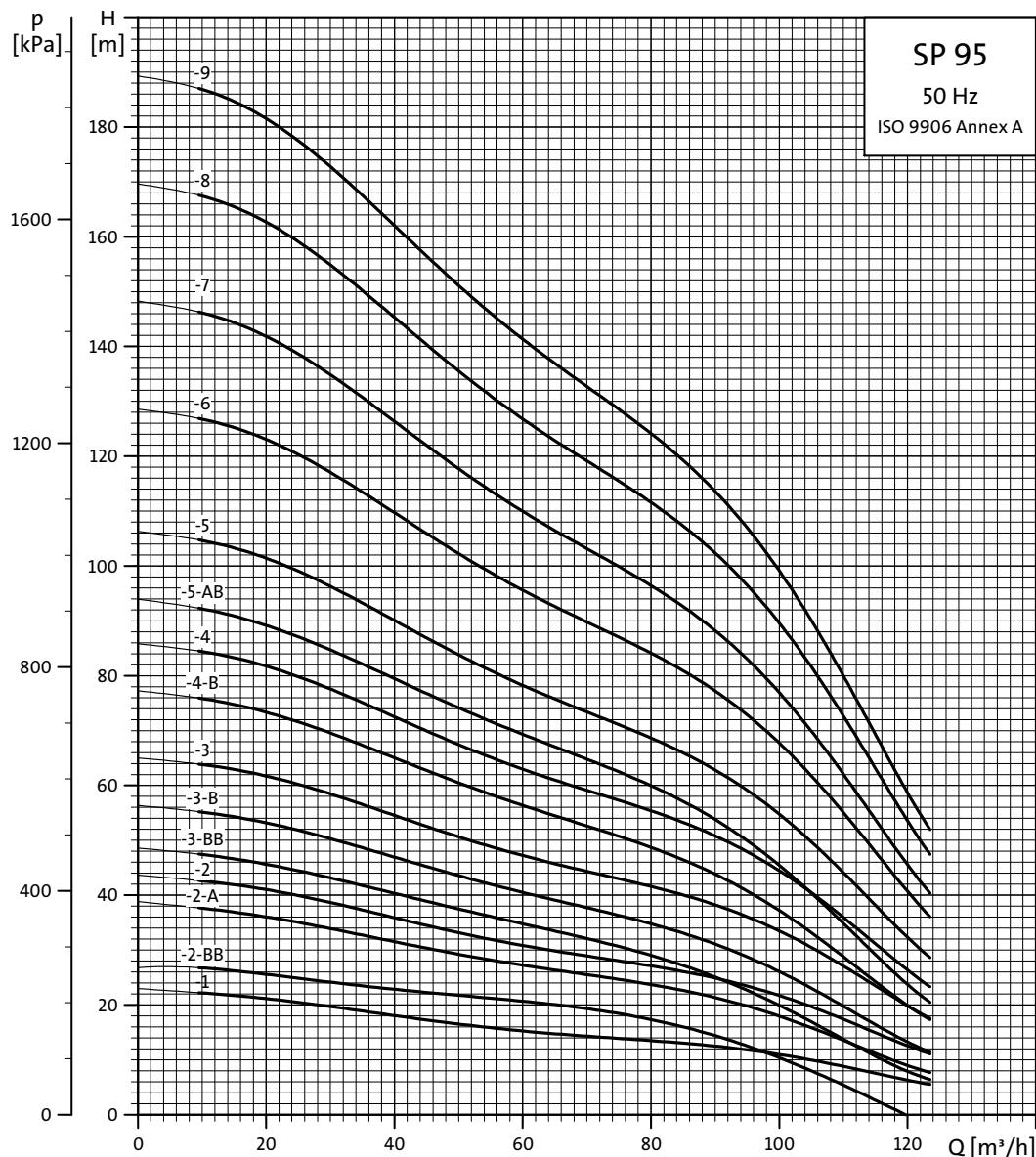


TM00 7323 1798

# Performance curves

Submersible pumps  
SP 95

**SP 95**

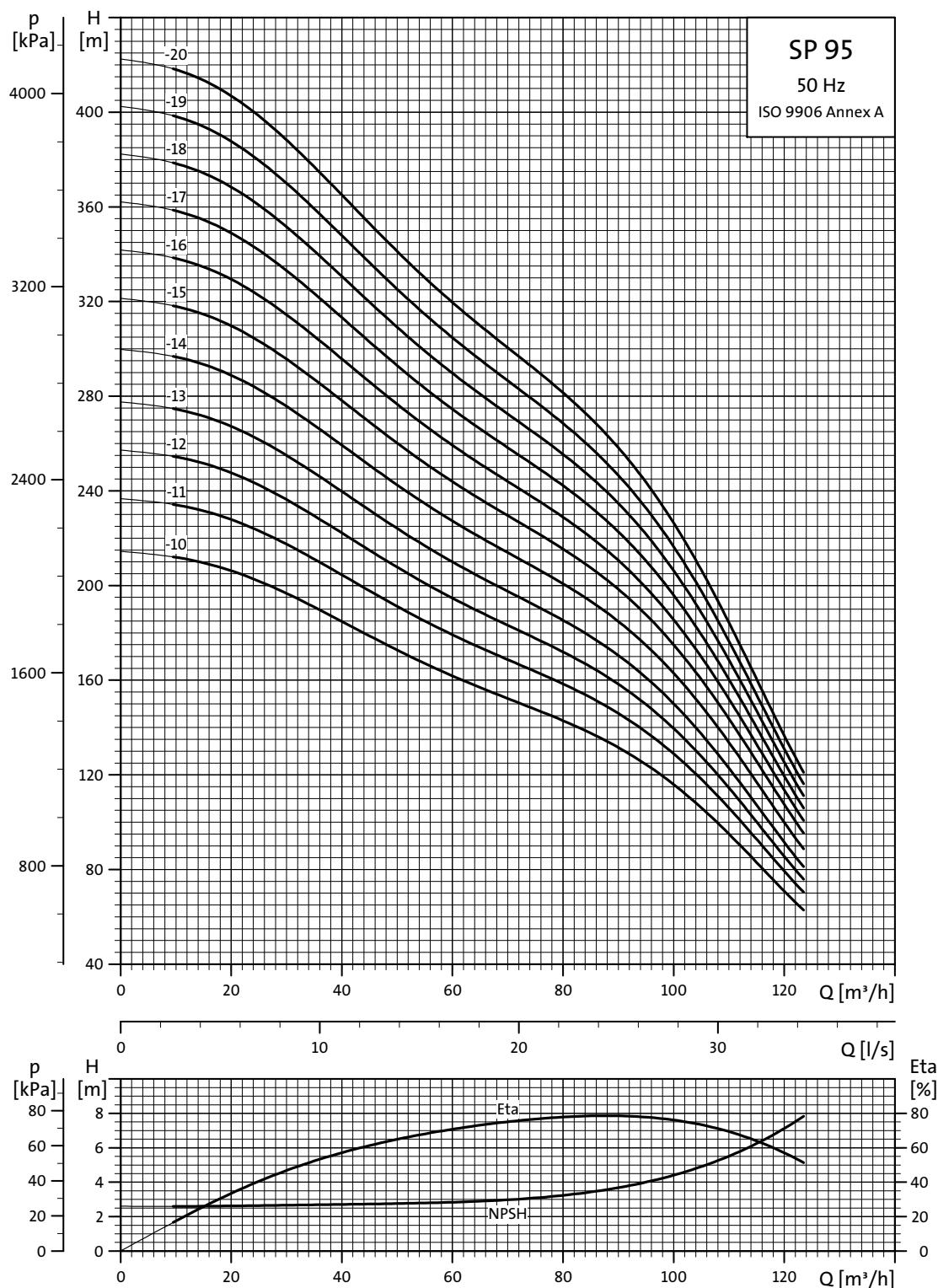


TM01 8773 4702

Explanation of efficiency curve, please see *Curve conditions*, page 4.

# Performance curves

Submersible pumps  
SP 95



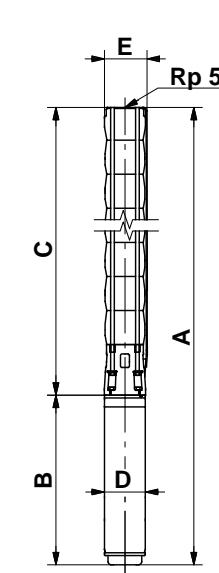
TM01 8774 4702

Explanation of efficiency curve, please see *Curve conditions*, page 4.

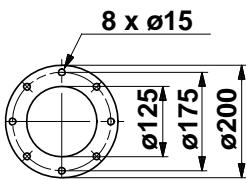
# Technical data

Submersible pumps  
SP 95

## Dimensions and weights



TM00 7872 2196



TM00 7323 1798

Pump type	Type	Power [kW]	Motor			Dimensions [mm]						B	D	Net weight [kg]
			Rp 5 connection			5" Grundfos flange								
			A	C	E*	E**	A	C	E*	E**				
SP 95-1	MS6	5.5	1153	618	178	186	1153	618	200	200	535	143	55	
SP 95-2-BB	MS6	5.5	1281	746	178	186	1281	746	200	200	535	143	72	
SP 95-2-A	MS6	7.5	1311	746	178	186	1311	746	200	200	565	143	63	
SP 95-2	MS6	9.2	1336	746	178	186	1336	746	200	200	590	143	68	
SP 95-3-BB	MS6	9.2	1464	874	178	186	1464	874	200	200	590	143	72	
SP 95-3-B	MS6	11	1557	874	178	186	1557	874	200	200	683	143	75	
SP 95-3	MS6	13	1582	874	178	186	1582	874	200	200	708	143	78	
SP 95-4-B	MS6	15	1741	1003	178	186	1741	1003	200	200	738	143	86	
SP 95-4	MS6	18.5	1786	1003	178	186	1786	1003	200	200	783	143	91	
SP 95-5-AB	MS6	18.5	1914	1131	178	186	1914	1131	200	200	783	143	95	
SP 95-5	MS6	22	1969	1131	178	186	1969	1131	200	200	838	143	101	
SP 95-6	MS6	26	2162	1259	178	186	2162	1259	200	200	903	143	110	
SP 95-7	MS6	30	2355	1387	178	186	2355	1387	200	200	968	143	122	
SP 95-8	MMS 6000	37	2940	1515	178	186	2940	1515	200	200	1425	144	173	
SP 95-9	MMS 6000	37	3067	1642	178	186	3076	1642	200	200	1425	144	177	
SP 95-8	MMS6	37	2827	1515	178	186	2827	1515	200	200	1312	143	168	
SP 95-9	MMS6	37	2954	1642	178	186	2954	1642	200	200	1312	143	172	
SP 95-10	MMS 8000	45	3055	1785	196	204	3055	1785	205	205	1270	192	233	
SP 95-11	MMS 8000	55	3264	1914	196	204	3264	1914	205	205	1350	192	251	
SP 95-12	MMS 8000	55	3393	2043	196	204	3393	2043	205	205	1350	192	255	
SP 95-13	MMS 8000	55	3522	2172	196	204	3522	2172	205	205	1350	192	259	
SP 95-14	MMS 8000	63	3790	2300	196	204	3790	2300	205	205	1490	192	289	
SP 95-15	MMS 8000	75	4019	2429	196	204					1590	192	311	
SP 95-16	MMS 8000	75	4147	2557	196	204					1590	192	315	
SP 95-17	MMS 8000	75	4275	2685	196	204					1590	192	319	
SP 95-18	MMS 8000	92	4938	3108	196	204					1830	192	376	
SP 95-19	MMS 8000	92	5066	3236	196	204					1830	192	380	
SP 95-20	MMS 8000	92	5194	3364	196	204					1830	192	384	

\* Maximum diameter of pump with one motor cable.

\*\* Maximum diameter of pump with two motor cables.

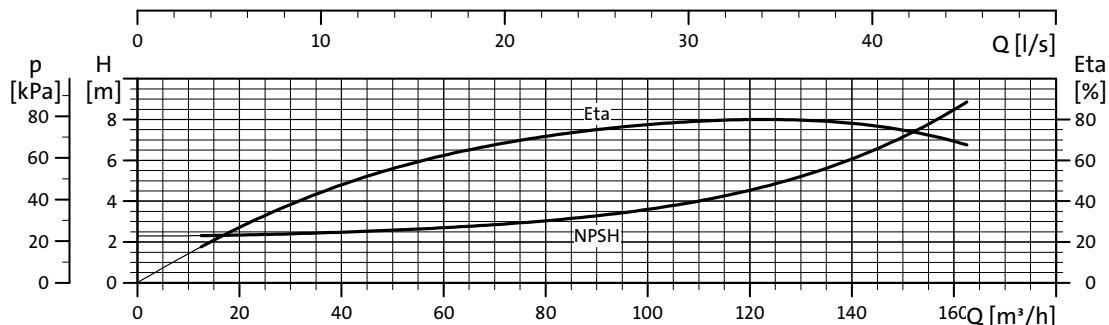
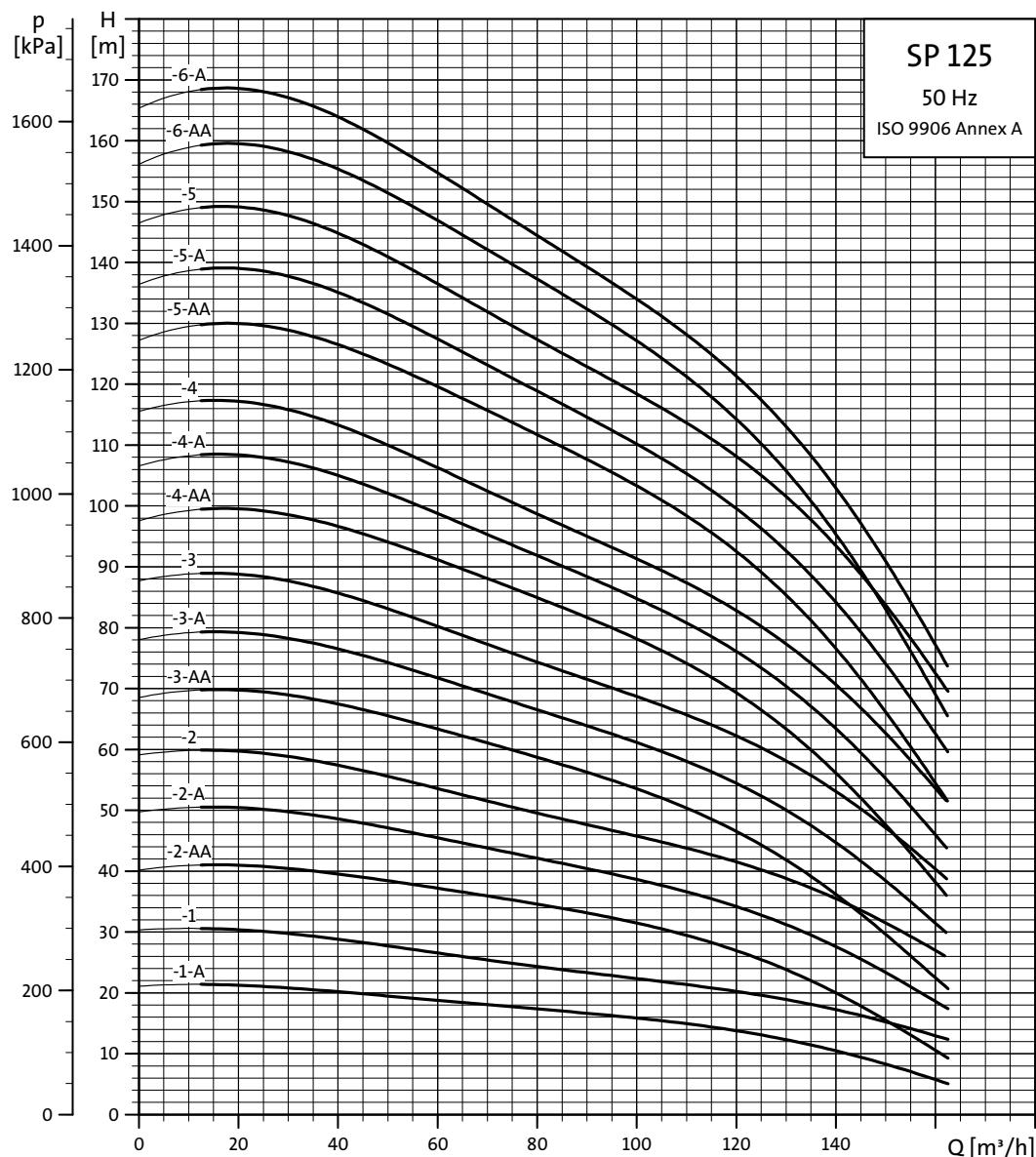
The pump types above are also available in N- and R-versions. See page 5. Dimensions as above.

Other types of connection are possible by means of connecting pieces. See page 87.

# Performance curves

Submersible pumps  
SP 125

**SP 125**

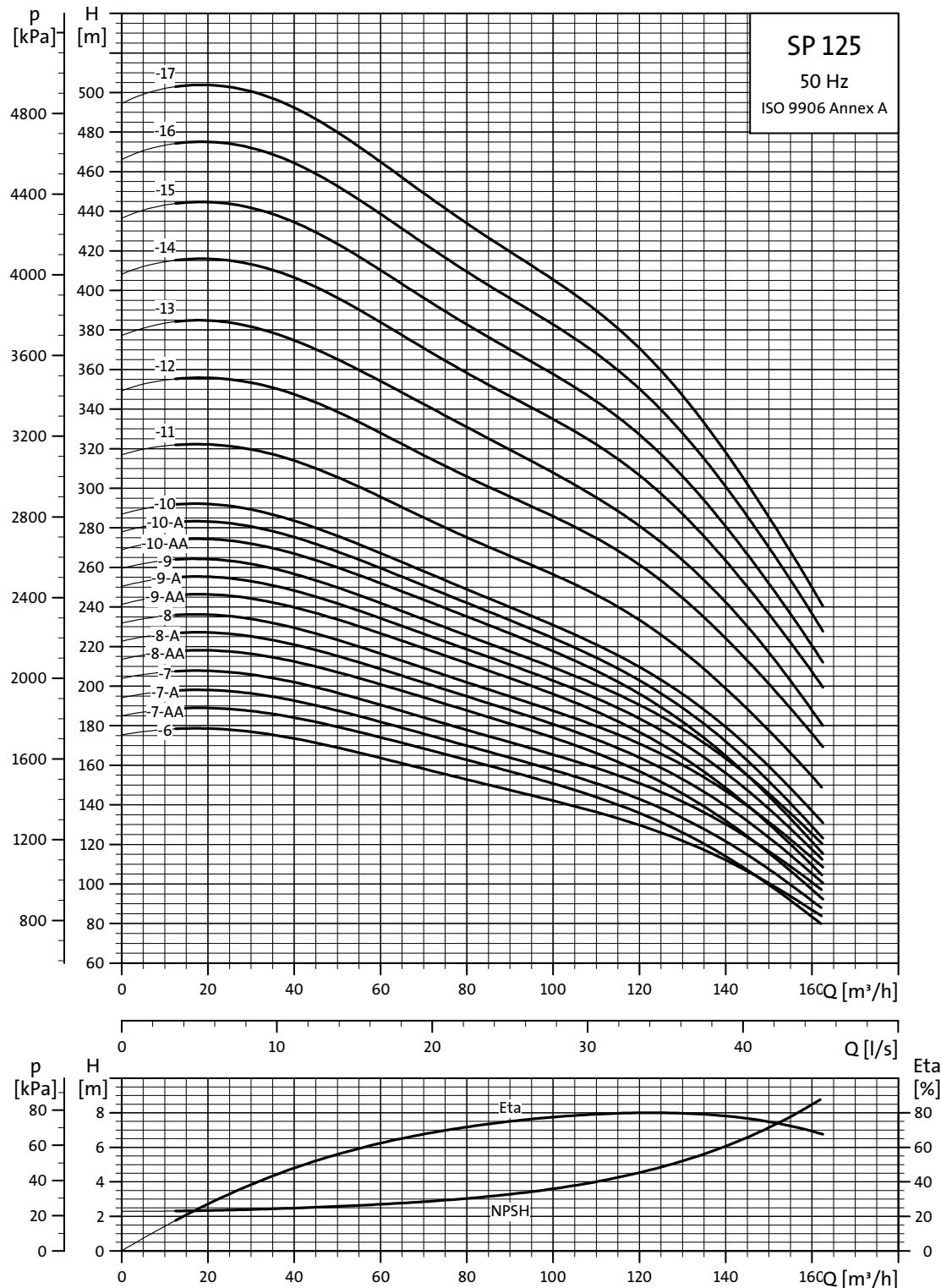


TM01 8777 4702

Explanation of efficiency curve, please see *Curve conditions*, page 4.

# Performance curves

Submersible pumps  
SP 125



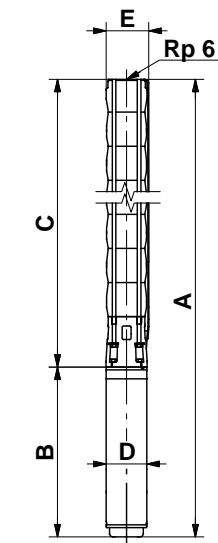
TM01 8778 4702

Explanation of efficiency curve, please see *Curve conditions*, page 4.

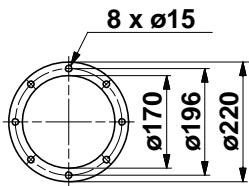
# Technical data

Submersible pumps  
SP 125

## Dimensions and weights



TM00 8760 3596



TM00 7324 1798

Pump type	Type	Power [kW]	Dimensions [mm]						B	D	Net weight [kg]
			Motor			Rp 6 connection					
			A	C	E*	E**	A	C	E*	E**	
SP 125-1-A	MS6	7.5	1216	651	211	218	1216	651	222	226	565
SP 125-1	MS6	11	1334	651	211	218	1334	651	222	226	683
SP 125-2-AA	MS6	13	1515	807	211	218	1515	807	222	226	708
SP 125-2-A	MS6	18.5	1590	807	211	218	1590	807	222	226	783
SP 125-2	MS6	22	1645	807	211	218	1645	807	222	226	838
SP 125-3-AA	MS6	22	1801	963	211	218	1801	963	222	226	838
SP 125-3-A	MS6	26	1866	963	211	218	1866	963	222	226	903
SP 125-3	MS6	30	1931	963	211	218	1931	963	222	226	968
SP 125-4-AA	MMS 6000	37	2544	1119	211	218	2544	1119	222	226	1425
SP 125-4-A	MMS 6000	37	2544	1119	211	218	2544	1119	222	226	1425
SP 125-4	MMS 6000	37	2544	1119	211	218	2544	1119	222	226	1425
SP 125-4-AA	MMS6	37	2431	1119	211	218	2431	1119	222	226	1312
SP 125-4-A	MMS6	37	2431	1119	211	218	2431	1119	222	226	1312
SP 125-4	MMS6	37	2431	1119	211	218	2431	1119	222	226	1312
SP 125-5-AA	MMS 8000	45	2545	1275	213	218	2545	1275	223	226	1270
SP 125-5-A	MMS 8000	45	2545	1275	213	218	2545	1275	223	226	1270
SP 125-5	MMS 8000	55	2625	1275	213	218	2625	1245	223	226	1350
SP 125-6-AA	MMS 8000	55	2781	1431	213	218	2781	1431	223	226	1350
SP 125-6-A	MMS 8000	55	2781	1431	213	218	2781	1431	223	226	1350
SP 125-6	MMS 8000	63	2921	1431	218	227	2921	1431	229	232	1490
SP 125-7-AA	MMS 8000	63	3077	1587	218	227	3077	1587	229	232	1490
SP 125-7-A	MMS 8000	63	3077	1587	218	227	3077	1587	229	232	1490
SP 125-7	MMS 8000	75	3177	1587	218	227	3177	1587	229	232	1590
SP 125-8-AA	MMS 8000	75	3333	1743	218	227					1590
SP 125-8-A	MMS 8000	75	3333	1743	218	227					1590
SP 125-8	MMS 8000	75	3333	1743	218	227					1590
SP 125-9-AA	MMS 8000	92	3729	1899	218	227					1830
SP 125-9-A	MMS 8000	92	3729	1899	218	227					1830
SP 125-9	MMS 8000	92	3729	1899	218	227					1830
SP 125-10-AA	MMS 8000	92	3885	2055	218	227					1830
SP 125-10-A	MMS 8000	92	3885	2055	218	227					1830
SP 125-10	MMS 8000	92	3885	2055	218	227					1830
SP 125-11	MMS 8000	110	4567	2507	218	227					2060
SP 125-12	MMS 10000	132	4584	2714	237	237					1870
SP 125-13	MMS 10000	132	4740	2870	237	237					1870
SP 125-14	MMS 10000	147	5095	3025	237	237					2070
SP 125-15	MMS 10000	147	5251	3181	237	237					2070
SP 125-16	MMS 10000	170	5556	3336	237	237					2220
SP 125-17	MMS 10000	170	5712	3492	237	237					2220

\* Maximum diameter of pump with one motor cable.

\*\* Maximum diameter of pump with two motor cables.

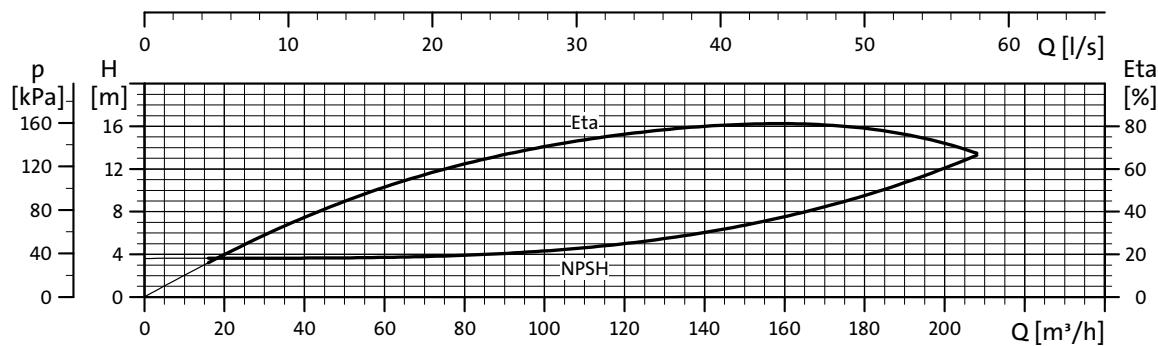
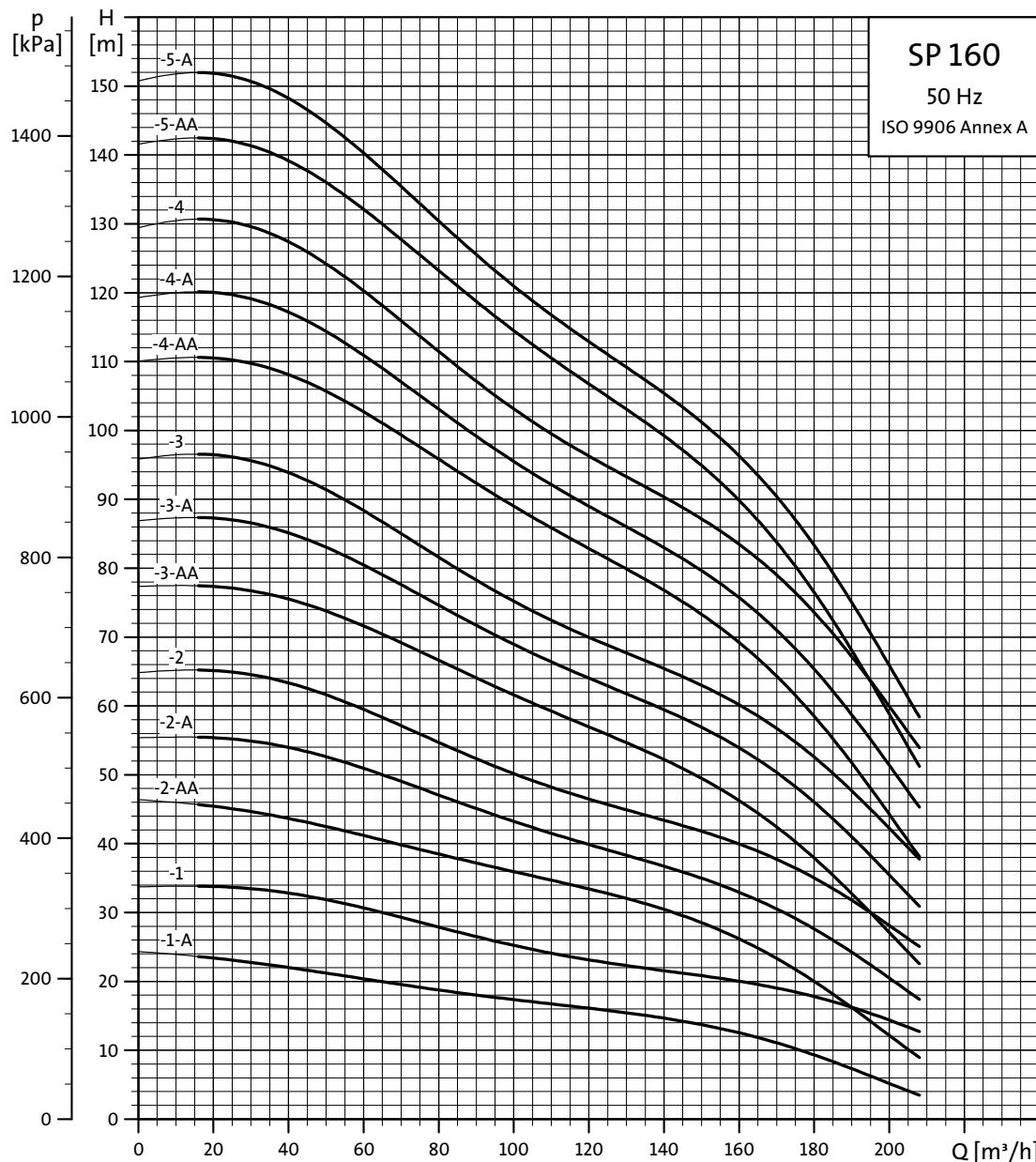
The pump types above are also available in N- and R-versions. See page 5. Dimensions as above.

Other types of connection are possible by means of connecting pieces. See page 87.

# Performance curves

Submersible pumps  
SP 160

## SP 160

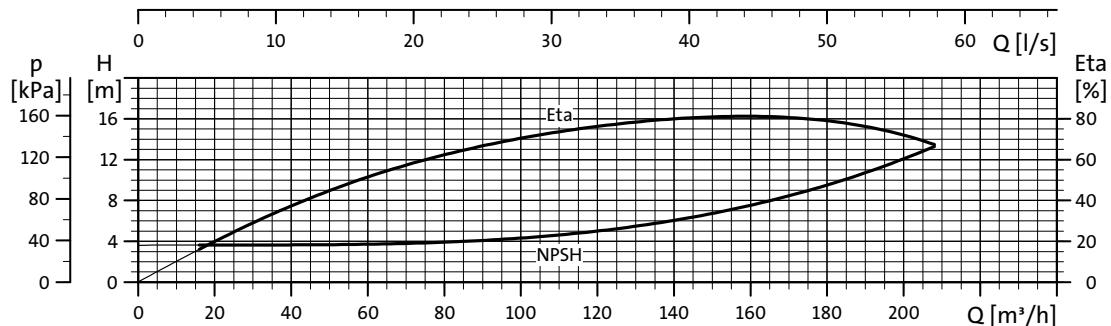
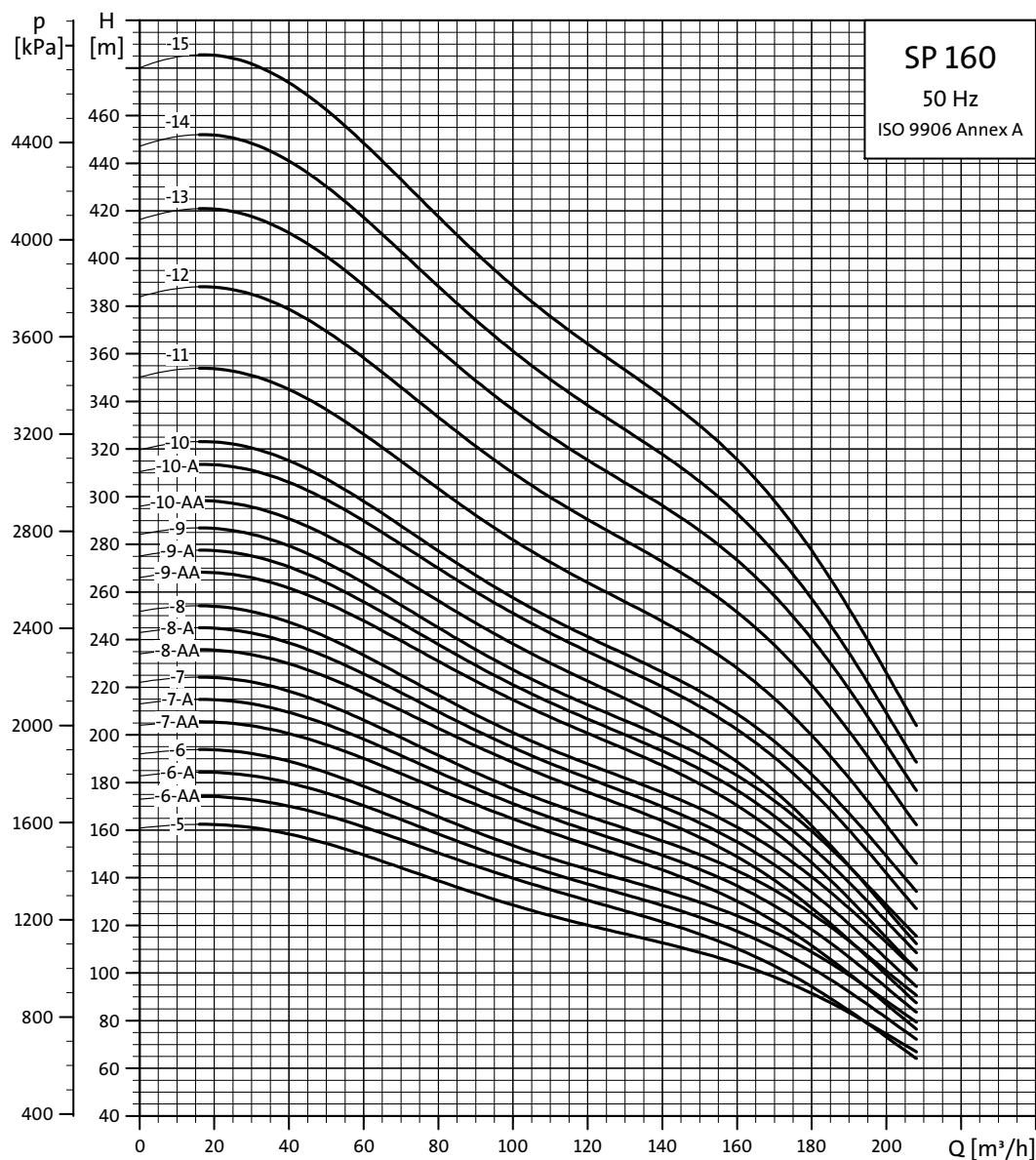


TM01 8781 4702

Explanation of efficiency curve, please see *Curve conditions*, page 4.

# Performance curves

Submersible pumps  
SP 160



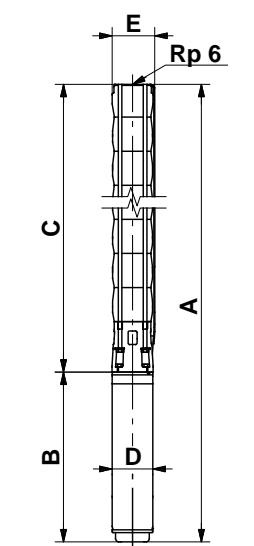
TM00 8782 4702

Explanation of efficiency curve, please see *Curve conditions*, page 4.

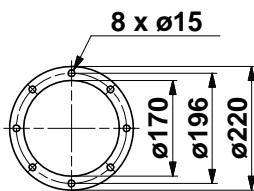
# Technical data

Submersible pumps  
SP 160

## Dimensions and weights



TM00 8760 3596



TM00 7324 1798

Pump type	Type	Power [kW]	Dimensions [mm]						B	D	Net weight [kg]
			Motor			Rp 6 connection					
			A	C	E*	E**	A	C	E*	E**	
SP 160-1-A	MS6	9.2	1241	651	211	218	1241	651	222	226	590
SP 160-1	MS6	13	1359	651	211	218	1359	651	222	226	708
SP 160-2-AA	MS6	18.5	1590	807	211	218	1590	807	222	226	783
SP 160-2-A	MS6	22	1645	807	211	218	1645	807	222	226	838
SP 160-2	MS6	26	1710	807	211	218	1710	807	222	226	903
SP 160-3-AA	MS6	30	1931	963	211	218	1931	963	222	226	968
SP 160-3-A	MMS 6000	37	2388	963	211	218	2388	963	222	226	1425
SP 160-3	MMS 6000	37	2388	963	211	218	2388	963	222	226	1425
SP 160-3-A	MMS6	37	2275	963	211	218	2275	963	222	226	1312
SP 160-3	MMS6	37	2275	963	211	218	2275	963	222	226	1312
SP 160-4-AA	MMS 8000	45	2389	1119	218	227	2389	1119	229	232	1270
SP 160-4-A	MMS 8000	45	2389	1119	218	227	2389	1119	229	232	1270
SP 160-4	MMS 8000	55	2469	1119	218	227	2469	1119	229	232	1350
SP 160-5-AA	MMS 8000	55	2625	1275	218	227	2625	1275	229	232	1350
SP 160-5-A	MMS 8000	55	2625	1275	218	227	2625	1275	229	232	1350
SP 160-5	MMS 8000	63	2765	1275	218	227	2765	1275	229	232	1490
SP 160-6-AA	MMS 8000	63	2921	1431	218	227	2921	1431	229	232	1490
SP 160-6-A	MMS 8000	75	3021	1431	218	227	3021	1431	229	232	1590
SP 160-6	MMS 8000	75	3021	1431	218	227	3021	1431	229	232	1590
SP 160-7-AA	MMS 8000	75	3177	1587	218	227					1590
SP 160-7-A	MMS 8000	92	3417	1587	218	227					1830
SP 160-7	MMS 8000	92	3417	1587	218	227					1830
SP 160-8-AA	MMS 8000	92	3573	1743	218	227					1830
SP 160-8-A	MMS 8000	92	3573	1743	218	227					1830
SP 160-8	MMS 8000	92	3573	1743	218	227					1830
SP 160-9-AA	MMS 8000	110	3959	1899	218	227					2060
SP 160-9-A	MMS 8000	110	3959	1899	218	227					2060
SP 160-9	MMS 8000	110	3959	1899	218	227					2060
SP 160-10-AA	MMS 8000	110	4411	2351	218	227					2060
SP 160-10-A	MMS 10000	132	4273	2403	237	237					1870
SP 160-10	MMS 10000	132	4273	2403	237	237					1870
SP 160-11	MMS 10000	132	4429	2559	237	237					1870
SP 160-12	MMS 10000	147	4784	2714	237	237					2070
SP 160-13	MMS 10000	170	5090	2870	237	237					2220
SP 160-14	MMS 10000	170	5245	3025	237	237					2220
SP 160-15	MMS 12000	190	5239	3259	286	286					1980
											803

\* Maximum diameter of pump with one motor cable.

\*\* Maximum diameter of pump with two motor cables.

The pump types above are also available in N-versions. See page 5. Dimensions as above.

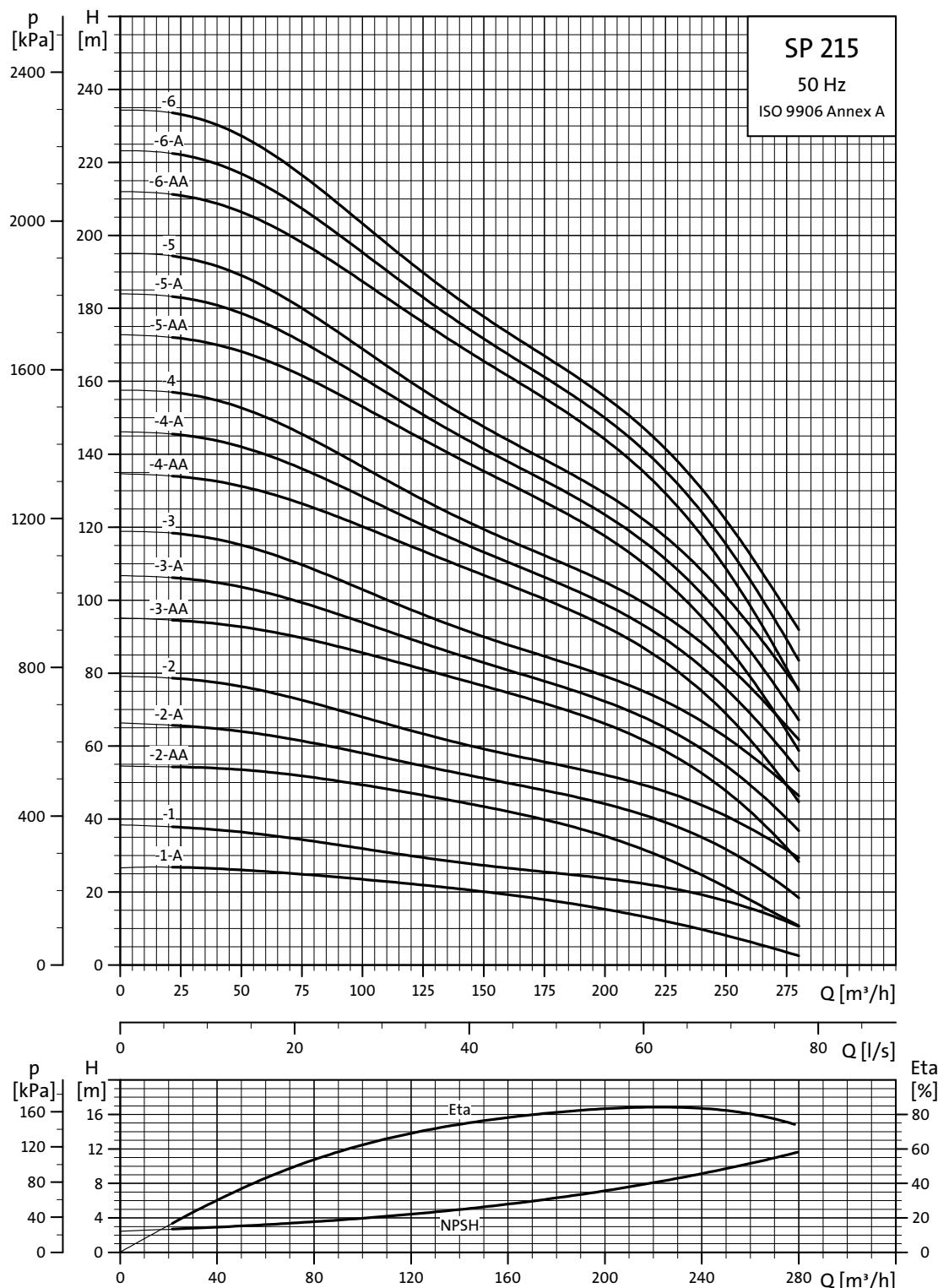
SP 160-1-A to SP 160-14 are also available in R-versions. See page 5. Dimensions as above.

Other types of connection are possible by means of connecting pieces. See page 87.

# Performance curves

Submersible pumps  
SP 215

**SP 215**

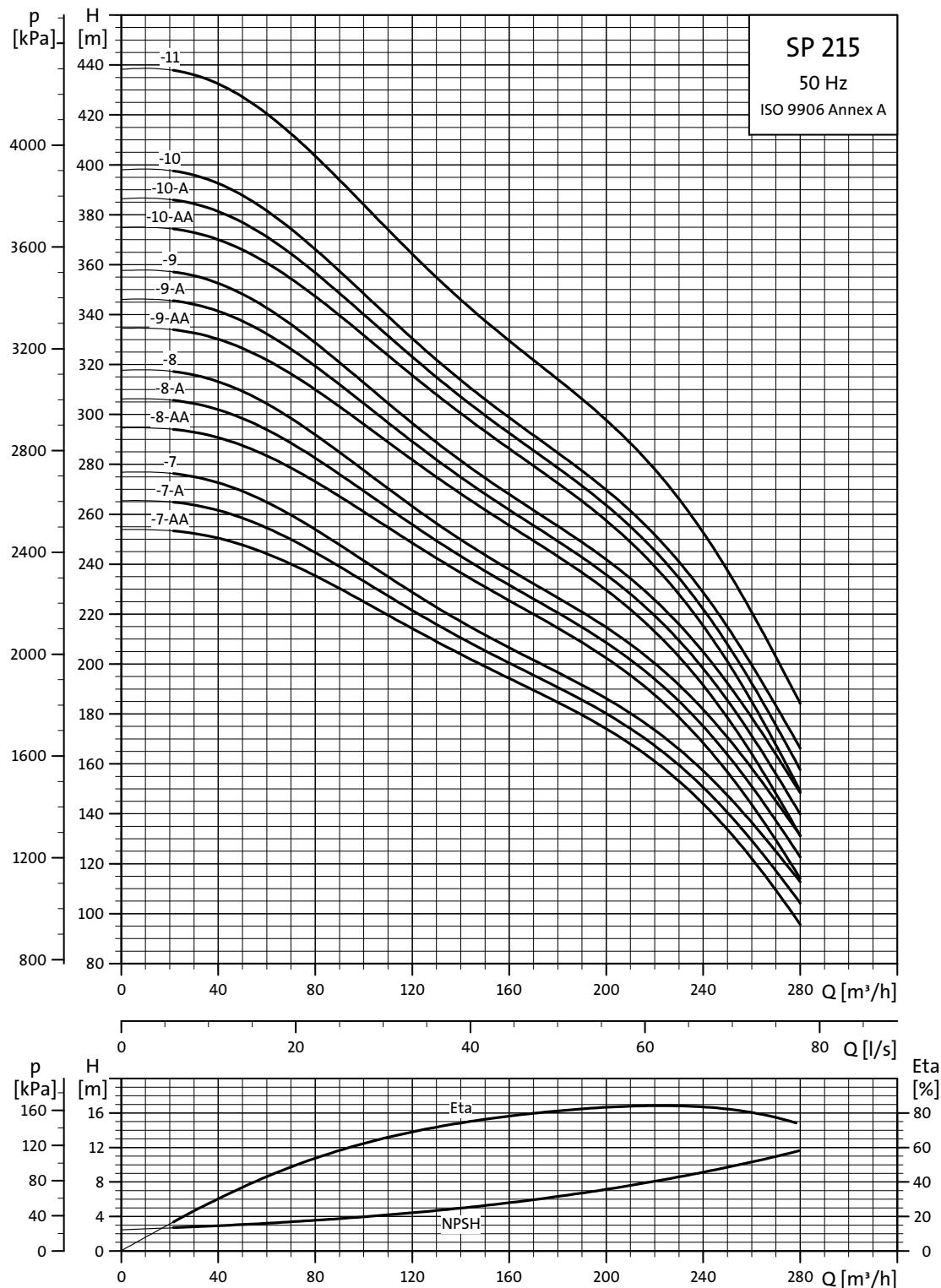


TM00 8785 4702

Explanation of efficiency curve, please see *Curve conditions*, page 4.

# Performance curves

Submersible pumps  
SP 215



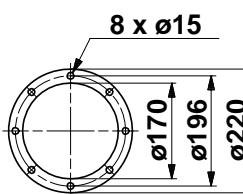
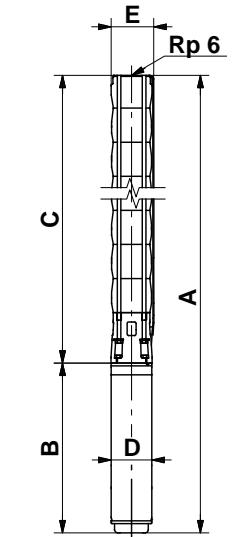
TM01 8786 4702

Explanation of efficiency curve, please see *Curve conditions*, page 4.

# Technical data

Submersible pumps  
SP 215

## Dimensions and weights



Pump type	Type	Power [kW]	Motor				Dimensions [mm]						Net weight [kg]
			Rp 6 connection		6" Grundfos flange		B	D					
		A	C	E*	E**	A	C	E*	E**	B	D		
SP 215-1-A	MS6	15	1528	790	241	247	1528	790	241	247	738	143	92
SP 215-1	MS6	18.5	1573	790	241	247	1573	790	241	247	783	143	97
SP 215-2-AA	MS6	30	1934	966	241	247	1934	966	241	247	968	143	127
SP 215-2-A	MMS 6000	37	2391	966	241	247	2391	966	241	247	1425	144	174
SP 215-2-A	MMS6	37	2278	966	241	247	2278	966	241	247	1312	143	169
SP 215-2	MMS 8000	45	2236	966	241	247	2236	966	241	247	1270	192	228
SP 215-3-AA	MMS 8000	55	2492	1142	241	247	2492	1142	241	247	1350	192	253
SP 215-3-A	MMS 8000	55	2492	1142	241	247	2492	1142	241	247	1350	192	253
SP 215-3	MMS 8000	63	2632	1142	241	247	2632	1142	241	247	1490	192	279
SP 215-4-AA	MMS 8000	75	2908	1318	241	247	2908	1318	241	247	1590	192	308
SP 215-4-A	MMS 8000	75	2908	1318	241	247	2908	1318	241	247	1590	192	308
SP 215-4	MMS 8000	75	2908	1318	241	247	2908	1318	241	247	1590	192	308
SP 215-5-AA	MMS 8000	92	3324	1494	241	247	3324	1494	241	247	1830	192	364
SP 215-5-A	MMS 8000	92	3324	1494	241	247	3324	1494	241	247	1830	192	364
SP 215-5	MMS 8000	92	3554	1494	241	247	3554	1494	241	247	1830	192	364
SP 215-6-AA	MMS 8000	110	3730	1670	241	247	3730	1670	241	247	2060	192	424
SP 215-6-A	MMS 8000	110	3730	1670	241	247	3730	1670	241	247	2060	192	424
SP 215-6	MMS 8000	110	3730	1670	241	247	3730	1670	241	247	2060	192	424
SP 215-7-AA	MMS 10000	132	4016	2146	241	247					1870	237	547
SP 215-7-A	MMS 10000	132	4016	2146	241	247					1870	237	547
SP 215-7	MMS 10000	132	4016	2146	241	247					1870	237	547
SP 215-8-AA	MMS 10000	147	4392	2322	241	247					2070	237	622
SP 215-8-A	MMS 10000	147	4392	2322	241	247					2070	237	622
SP 215-8	MMS 10000	147	4392	2322	241	247					2070	237	622
SP 215-9-AA	MMS 10000	170	4718	2498	276	276					2220	237	672
SP 215-9-A	MMS 10000	170	4718	2498	276	276					2220	237	672
SP 215-9	MMS 10000	170	4718	2498	276	276					2220	237	672
SP 215-10-AA	MMS 12000	190	4654	2674	276	276					1980	286	793
SP 215-10-A	MMS 12000	190	4654	2674	276	276					1980	286	793
SP 215-10	MMS 12000	190	4654	2674	276	276					1980	286	793
SP 215-11	MMS 12000	220	4990	2850	286	286					2140	286	853

\* Maximum diameter of pump with one motor cable.

\*\* Maximum diameter of pump with two motor cables.

The pump types above are also available in N-versions. See page 5. Dimensions as above.

SP 215-1-A to SP 215-9 are also available in R-versions. See page 5. Dimensions as above.

Other types of connection are possible by means of connecting pieces. See page 87.