

SHAKTI 50 HZ BOOKLET



 Toll Free : 1800 103 5657, 0731-4253600

 **Shakti Pumps (India) Ltd.**

Regd. Office/ Factory : Plot No.401, Sector No.3, Pithampur-474775 (M.P) India. Tel : +91-7292-410500, Fax : +91-7292-407044, 400371
e-mail : info@shaktipumps.com, ho@shaktipumps.com, Website : www.shaktipumps.com
OFFICES AT : Bangalore: 080-42009277, Chennai: 044-43233247, Hyderabad: 0866-2542622, Punjab: 0181-4618575, Jaipur: 06736-4001106,
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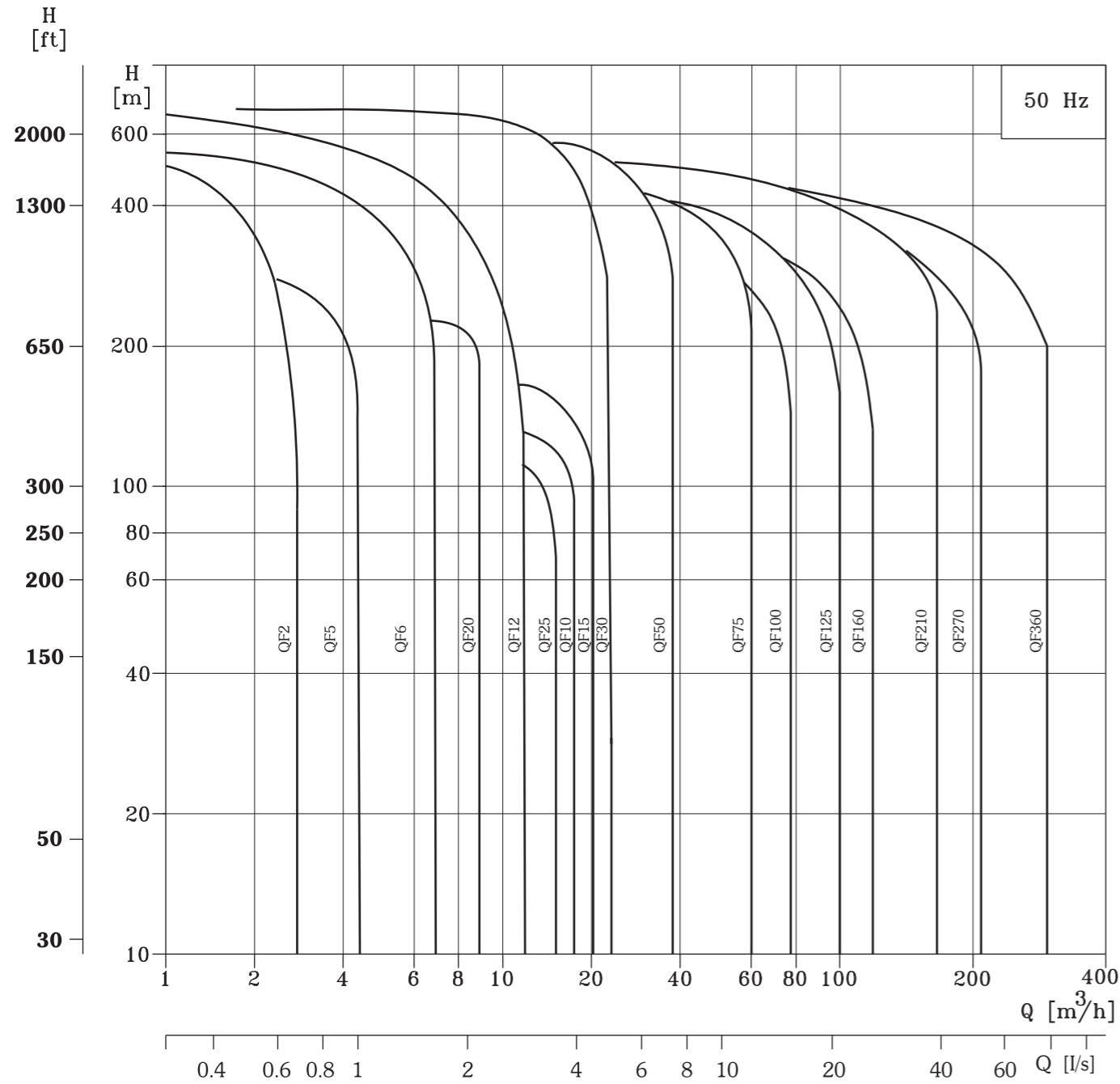
SHAKTI
PUMP > THAT > PAYS >

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Performance Range



Pump Range

Type	QF2	QF5	QF6	QF12	QF20	QF25	QF10	QF15	QF30	QF50	QF75	QF100	QF125	QF160	QF210	QF270	QF360
Steel : AISI SS 304	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Connection: Rp (Inches) BSP Thread	1 1/4	1 1/4	1 1/2	2	2	2	2	2	2 1/2	3	3 4	3 4	5	5	6	6	6
NPT Thread	1 1/4	1 1/4	1 1/2	2	2	2	2	2	3	3	3 4	3 4	5	5	6	6	6
Flange Connection													5"	5"	6"	6"	6"

Motor Range

Motor Output [kW]	0.37	0.55	0.75	1.1	1.5	2.2	3.0	4.0	5.5	7.5	9.2	11	13	15	18.5	22	26	30	37	45	55	75	93	110	132	147	170	190	220	
Single Phase	+	+	+	+	+	+	+	+																						
Three Phase	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Rewindable Motor	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Steel : AISI 304	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Steel : AISI 304 & Cast Iron	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

Direct-on-Line starting is recommended up to 7.5 kW.
Soft starter or autotransformer is recommended above 7.5 kW.

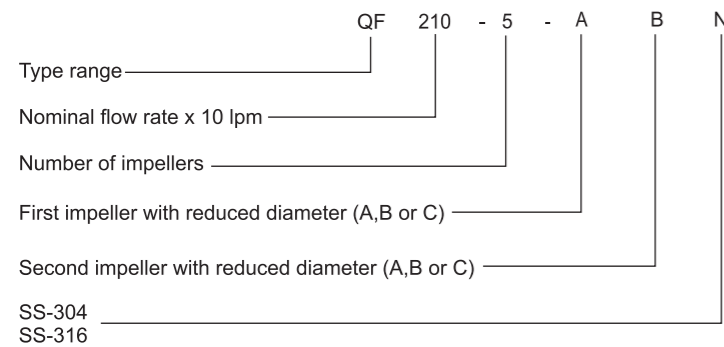
Applications

The QF pumps are suitable for the following applications :

- Raw water supply
- Irrigation systems
- Groundwater lowering
- Pressure boosting
- Industrial applications

Type Key

Example



Pumped Liquids

Clean, thin, non-aggressive liquids without solid particles or fibres.

Operating Conditions

Flow rate, Q : 0.1 - 280 m³/h.

Head, H: Maximum 670m.

Maximum Liquid Temperature:

Motor	Installation		
	Flow velocity-past motor	Vertical	Horizontal
4", 6" & 8"	0.15 m/s	40°C	40°C

Operating pressure: Maximum 0.67m (67 bar)

Curve Conditions

The conditions below apply to the curves shown on the following pages :

General

- Curve tolerance according to ISO 9906, Annex A.
- The performance curves show pump performance at actual speed of standard motor range.
The speed of the motors is approximately :
4" motors : n=2870 min⁻¹
6" motors : n=2870 min⁻¹
8" to 12" motors : n=2900 min⁻¹
- The measurements were made with airless water at a temperature of 20°C. The curves apply to a kinematic viscosity of 1mm²/s. When pumping liquids with a density higher than that of water, motors with correspondingly higher outputs must be used.
- The bold curves indicate the recommended performance range.
- The performance curves are inclusive of possible losses such as non-return valve loss.

QF2, QF5, QF6, QF12, QF20, QF25 Curve

- **Q/H** : The curves are inclusive of valve and inlet losses at the actual speed.
- **Power Curve** : Bpkw/Stage shows pump power input per stage.
- **Efficiency Curve** : Efficiency shows pump stage efficiency.

QF10, QF15, QF30, QF50, QF75, QF100, QF125, QF160, QF210, QF270, QF360 Curve

- **Q/H** : The curves are inclusive of valve and inlet losses at the actual speed.
Operation without non-return valve will increase the actual head at nominal performance by 0.5 to 1.0 m.
- **NPSHR** The curve is inclusive of suction case and shows required inlet pressure.
- **Power Curve**: It shows pump power input at the actual speed for each individual pump size.
- **Efficiency Curve** : Efficiency shows pump stage efficiency.

Features and Benefits

A Wide Pump Range

We offer submersible pumps with energy- efficient duty points ranging from 1m³/h to 280m³/h. The pump range consists of many pump sizes and each pump size is available with an optional number of stages to match any duty point.

High Pump Efficiency

Often pump efficiency is a neglected factor compared to the price variations and are without importance of pump and motor efficiencies.

Example:

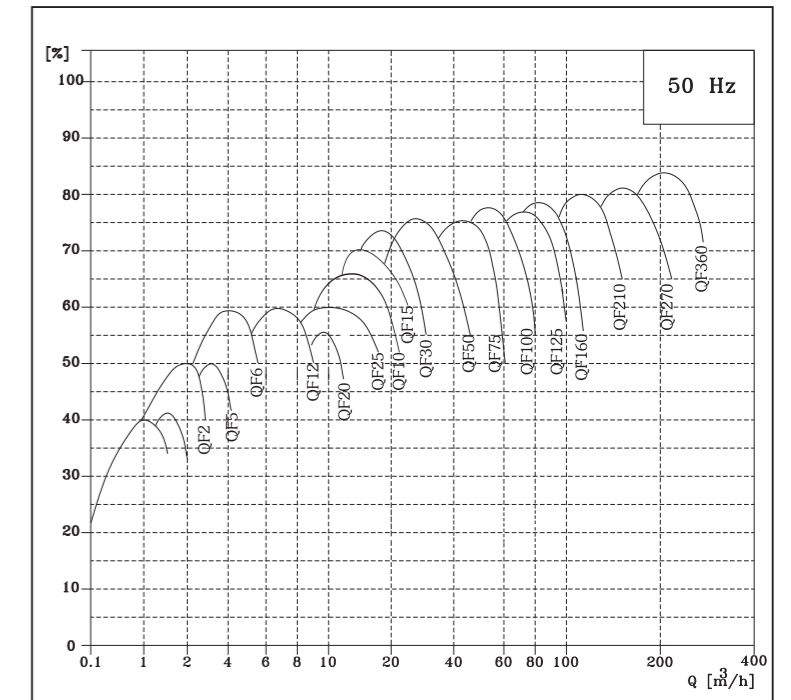
When pumping 125 m³/h with a head of 200m for a period of 10 years \$ 60,000 will be saved if pumps and motors having a 10% higher efficiency are chosen and the price is \$ 0.10 per kWh.

Applications

We offer a complete range of pumps and motors which as a standard are made completely of stainless steel AISI-304. This provides for good wear resistance and a reduced risk of corrosion when pumping ordinary cold water with a minor content of chloride.

Low Installation Costs

Stainless steel means low weight facilitating the handling of pumps and resulting in low equipment costs and reduced installation and service time. In addition pumps will be as new after service due to the high wear resistance of stainless steel.



Bearings with Sand Channels

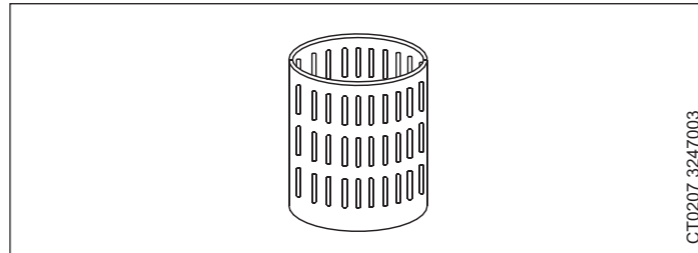
All bearings are water-lubricated and have a square shape, enabling sand particles, if any, to leave the pump together with the pumped liquid.



CT0207 0113003

Inlet Strainer

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



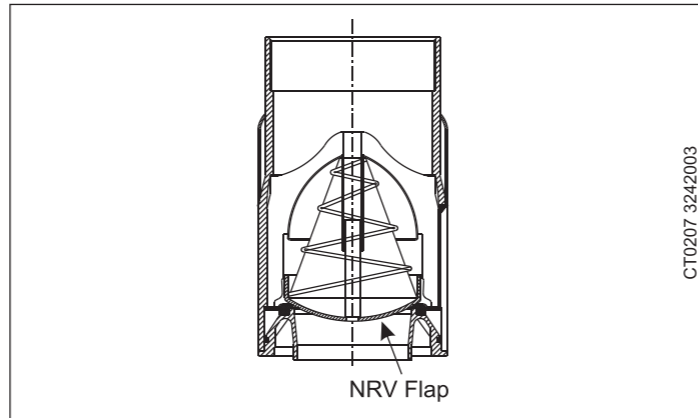
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Non-Return Valve

All pumps are equipped with 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 minimize the pressure loss across the valve and, thus, contributes to the high efficiency of the pump.



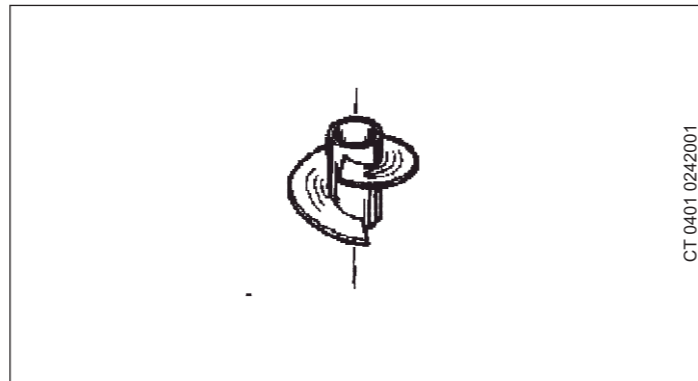
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Priming Screw

All QF and QF 30 pumps are fitted with a priming screw. Consequently, dry running is prevented because the priming screw will make sure that pump bearing are always lubricated.

Due to the semi-axial impellers of large QF pumps (except for QF 30) this priming is automatically provided.

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



CT 0401 0242001

Stop Ring

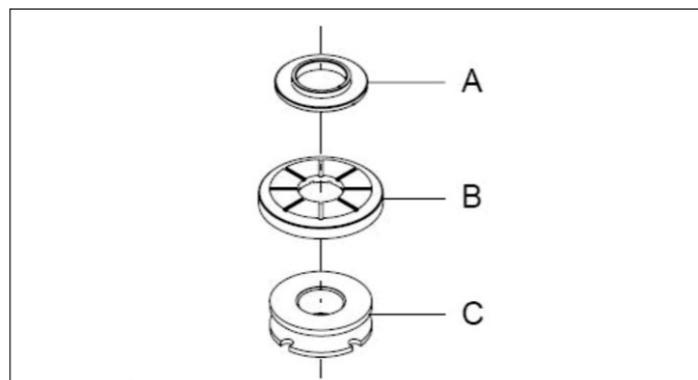
The stop ring prevents damage to the pump during transport and in case of up-thrust in connection with start-up.

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

Example: QF 125

The stationary part of the stop ring (A) is secured in the top bowl (Upper intermediate chamber).

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



Features and Benefits

A Complete Motor Range

We offer a complete submersible motor range in different voltages:

- 4" motors, single - phase up to 4 kW. (Encapsulated & Rewindable)
- 4" motors, three-phase up to 7.5 kW. (Encapsulated & Rewindable)
- 6" motors, three-phase from 2.2 kW to 37 kW. (Rewindable)
- 8" motors, three-phase from 11 kW to 220 kW. (Rewindable)

High Motor Efficiency

Within the area of high motor efficiency Star is a market leader. This is due to newly developed motor concept which is introduced with the MS 100, MS 101 and MS 150.

Shaft Seal

The choice of material is ceramic / tungsten carbide providing optimum sealing, optimum wear resistance and long life.

The spring loaded shaft seal is designed with a large surface and a sand shield. The result is a minimum exchange of pumped and motor liquids and no penetration of particles.

Protection against upthrust

In case of a very small counter pressure in connection with start-up there is a risk that the entire pump body may rise. This is called upthrust. Upthrust may damage both pump and motor. Therefore, both pumps and motors are protected against upthrust as standard, preventing upthrust from occurring in the critical start-up phase. The protection consists of either a built-in stop ring or hydraulic balancing.

Built-in cooling chambers

In all submersible motors an efficient cooling is ensured by cooling chambers at the top and at the bottom of the motor, and by an internal circulation of motor liquid. As long as the required flow velocity cooling of the motor will be efficient.

Rewindable

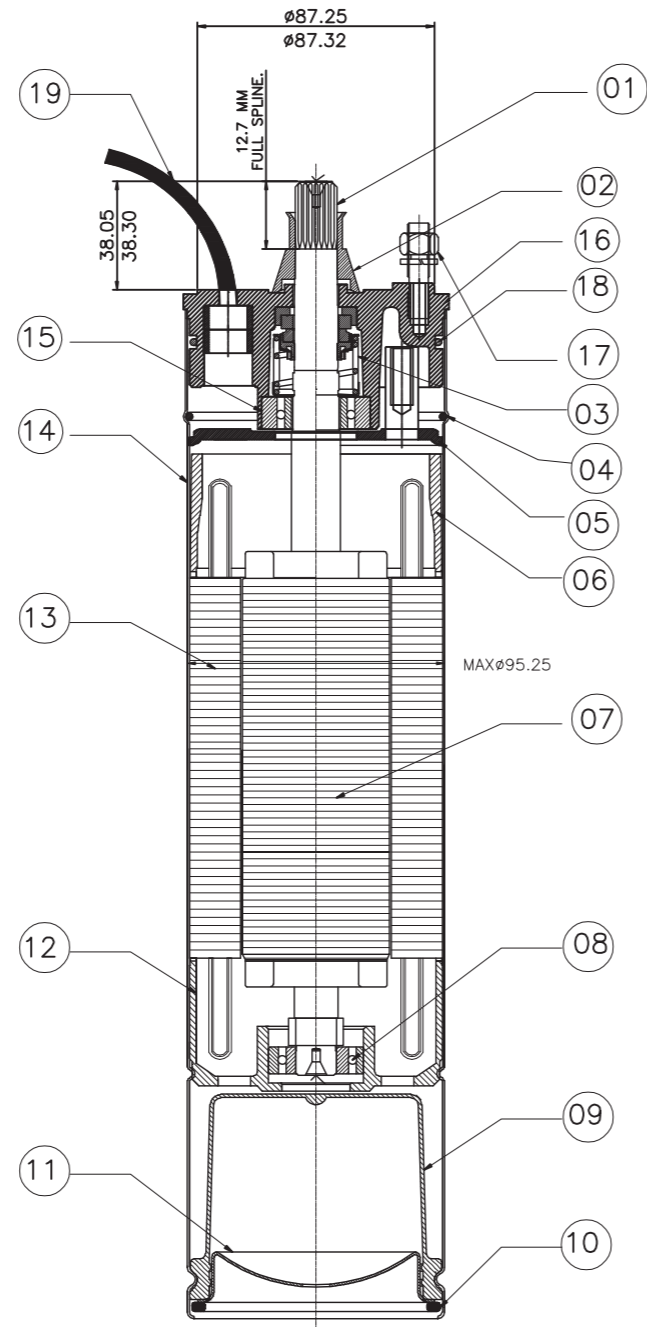


Rewindable



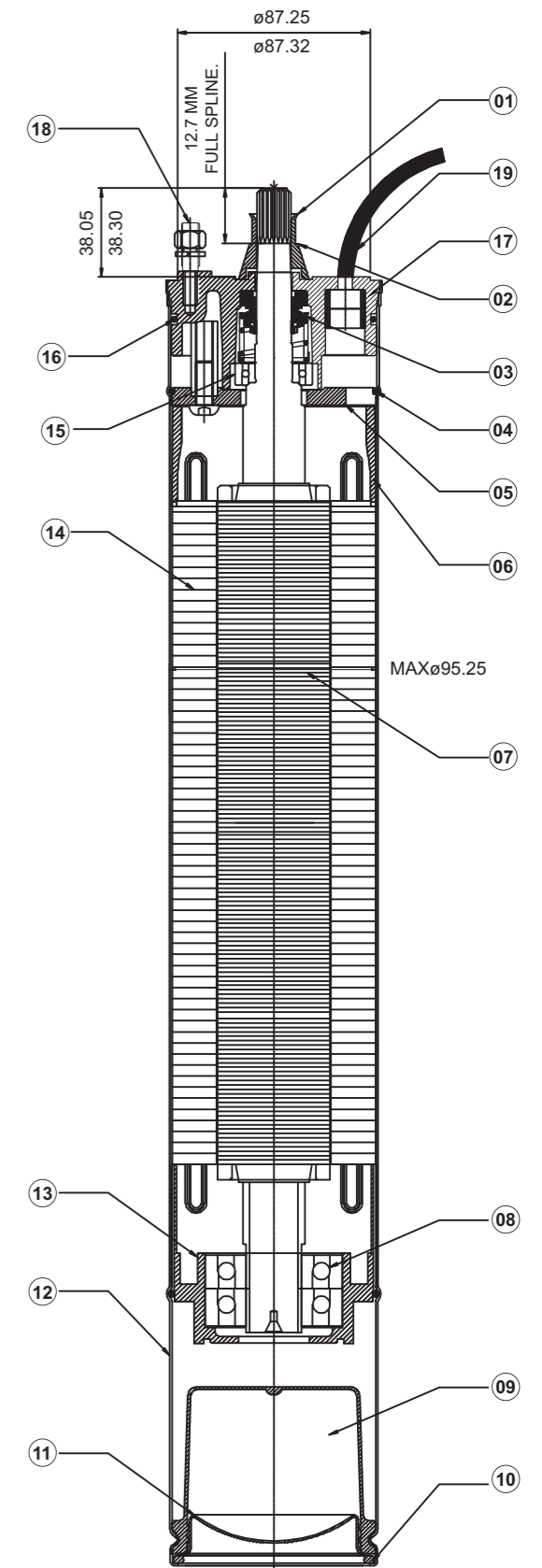
MATERIAL SPECIFICATION RO-100

SR.NO.	DESCRIPTION	MATERIAL
1	SHAFT	SS AISI 420
2	SAND SLINGER	NBR
3	MECH SEAL	-
4	CIRCLIP (93ID X 2.8)	SPRING STEEL
5	WINDING COVER PLATE	M.S.
6	COIL SPACER	PPS
7	ROTOR	-
8	BEARING (6202)B	-
9	DIAPHRAGM	NBR
10	CIRCLIP (87ID X 5MM)	SS AISI 304
11	DIAPHRAGM COVER	SS AISI 304
12	LOWER END BRACKET	ALUMINIUM
13	STAMPING	CR ELECTRIC
14	OUTER PIPE	SS AISI 304
15	BEARING (7203B)LS7	-
16	UPPER END BRACKET	CI FG-260
17	STUD M8X35	-
18	O-RING (84ID X 3.5)	NBR



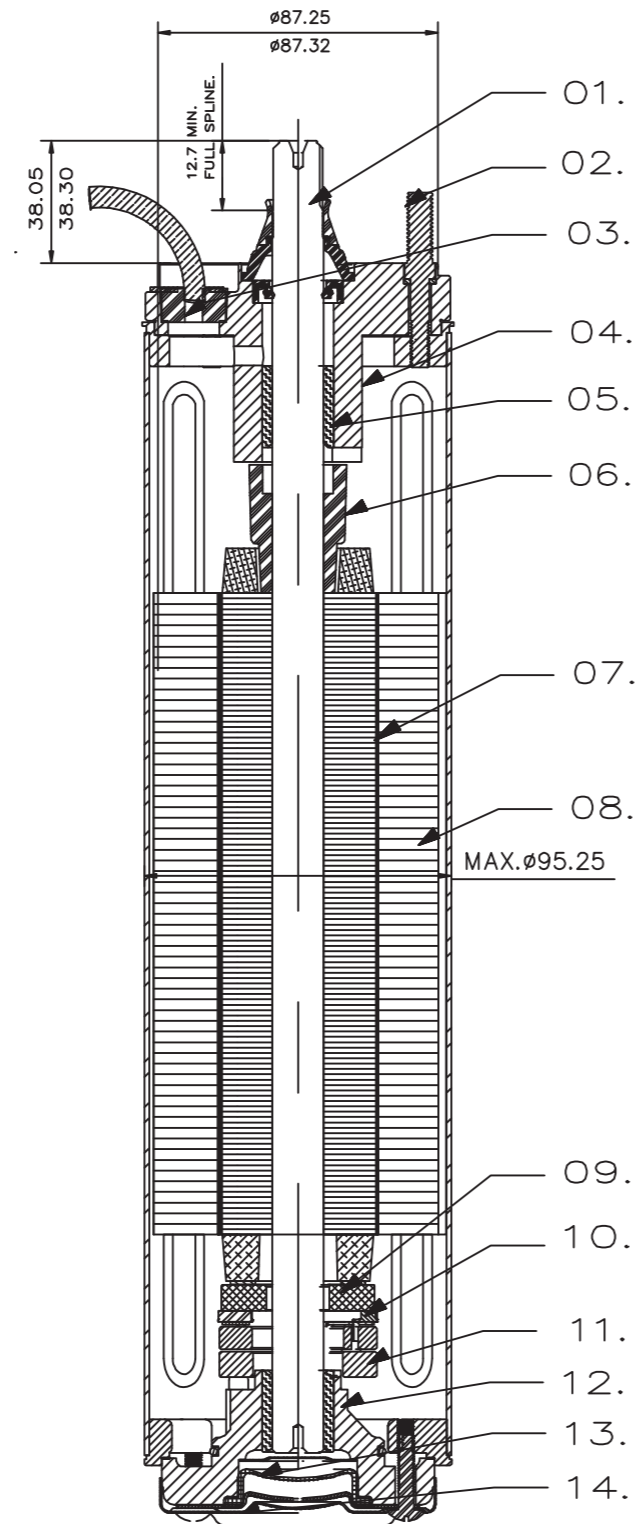
MATERIAL SPECIFICATION RO - 101

S.No.	DESCRIPTION	MATERIAL
1	SHAFT	SS AISI 420
2	SAND SLINGER	NBR
3	MECH SEAL	-
4	CIRCLIP (93ID X 2.8)	SPRING STEEL
5	WINDING COVER PLATE	M.S.
6	COIL SPACER	PPS
7	ROTOR	-
8	BEARING (7305) B	-
9	DIAPHRAGM	NBR
10	CIRCLIP (87ID X 5MM)	SS AISI 304
11	DIAPHRAGM COVER	SS AISI 304
12	OUTER PIPE	SS AISI 304
13	LOWER END BRACKET	ALUMINIUM
14	STAMPING	CR ELECTRIC
15	BEARING (6203B) LS7	-
16	O-RING (84ID X 3.5)	NBR
17	UPPER END BRACKET	CI FG-260
18	STUD M8 X 35	AISI SS-304



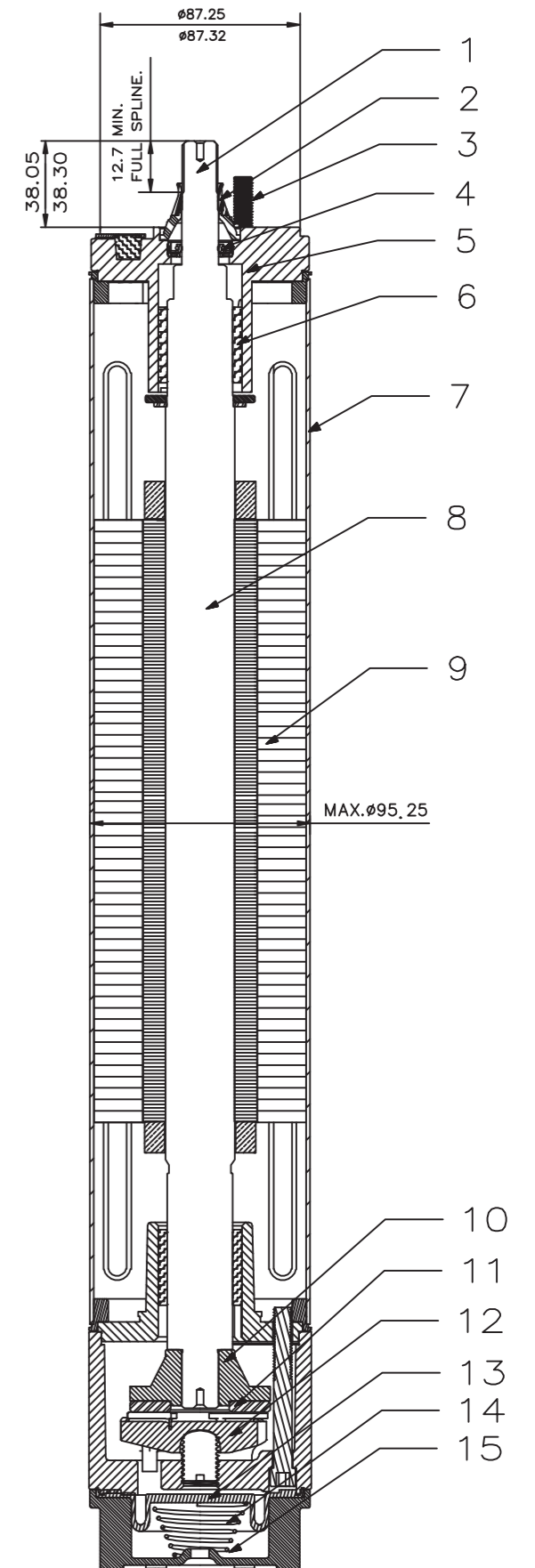
MATERIAL SPECIFICATION MCIP-100

POS. NO:	DISCRIPTION	MATERIAL
01	ROTOR SHAFT.	AISI SS-410
02	STUD	AISI SS-304
03	GROMATE.	NITRILE RUBBER
04	UPPER HOUSING.	CI FG-260
05	CARBON BUSH.	CARBON .
06	SHAFT BUSH.	NYLON 30% GLASS FILLED
07	ROTOR .	N/A
08	STATOR.	N/A
09	REVOLVING PLATE.	N/A
10	SEGEMENT.	SS AISI 420
11	LEVELLING DISK.	HIGH GRADE CARBON
12	BOTTOM END BELL	CI FG-260
13	DIAPHRAGM	NBR
14	END BELL COVER	AISI SS-304



MATERIAL SPECIFICATION MCIP-101

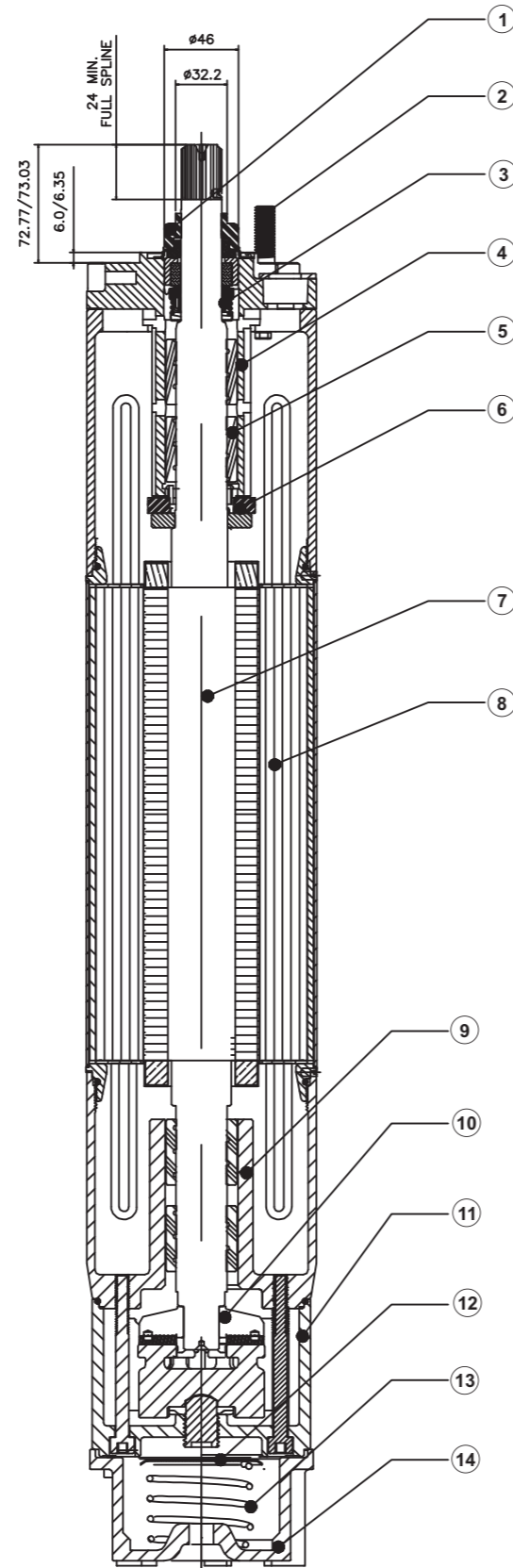
POS.	COMPONENT	MATERIAL
01	SHAFT	STAINLESS STEEL
02	SAND SLINGER	NBR
03	STUD	STAINLESS STEEL
04	OIL SEAL	STD
05	UPPER HOUSING	CI FG-260
06	BUSH	CARBON
07	S.S. MOTOR SHELL	STAINLESS STEEL
08	ROTOR	N/A
09	STATOR	N/A
10	THRUST DISK.	CI FG-260
11	SEGEMENT	STAINLESS STEEL
12	LEVELLING DISK.	SPRING STEEL
13	DIAPHRAGM	NBR
14	DIAPHRAGM SPRING	SPRING STEEL
15	DIAPHRAGM COVER	STAINLESS STEEL



MATERIAL SPECIFICATION MATASF - 150

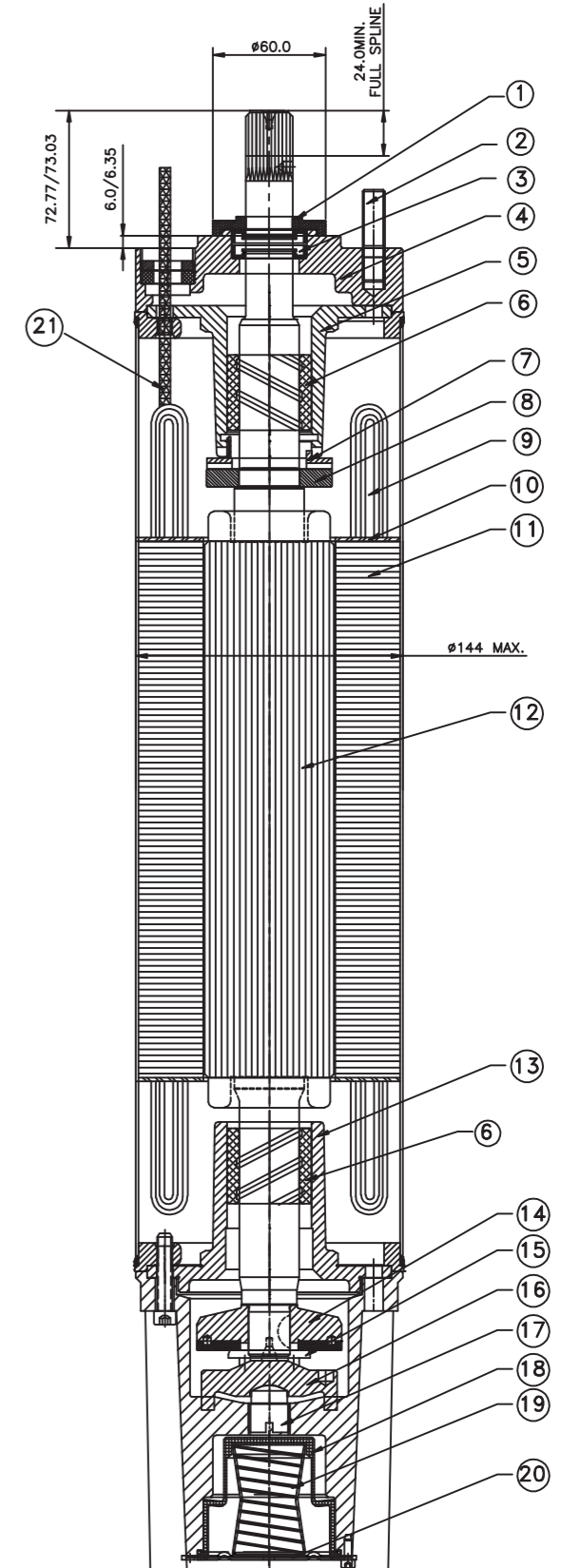
S.No.	DESCRIPTION	MATERIAL
1	SAND SLINGER	NEOPRINE
2	STUD	AISI SS304
3	MECH. SEAL	N/A
4	END BELL UPPER HOUSING	CI FG-260
5	BUSH	CARBON
6	UP THRUST BEARING	NORYL (GLASS FILLED)
7	ROTOR SHAFT	CI FG-260
8	STATOR SUB ASSLY	N/A
9	END BELL LOWER	CI FG-260
10	REVOLVING PLATE ASSLY.	N/A
11	THRUST BEARING HOUSING	CI FG-260
12	DIAPHRAGM	EPDM
13	DIAPHRAGM SPRING	SPRING STEEL
14	MOOR BASE	CI FG-260

SECTIONAL VIEW MATASF 150



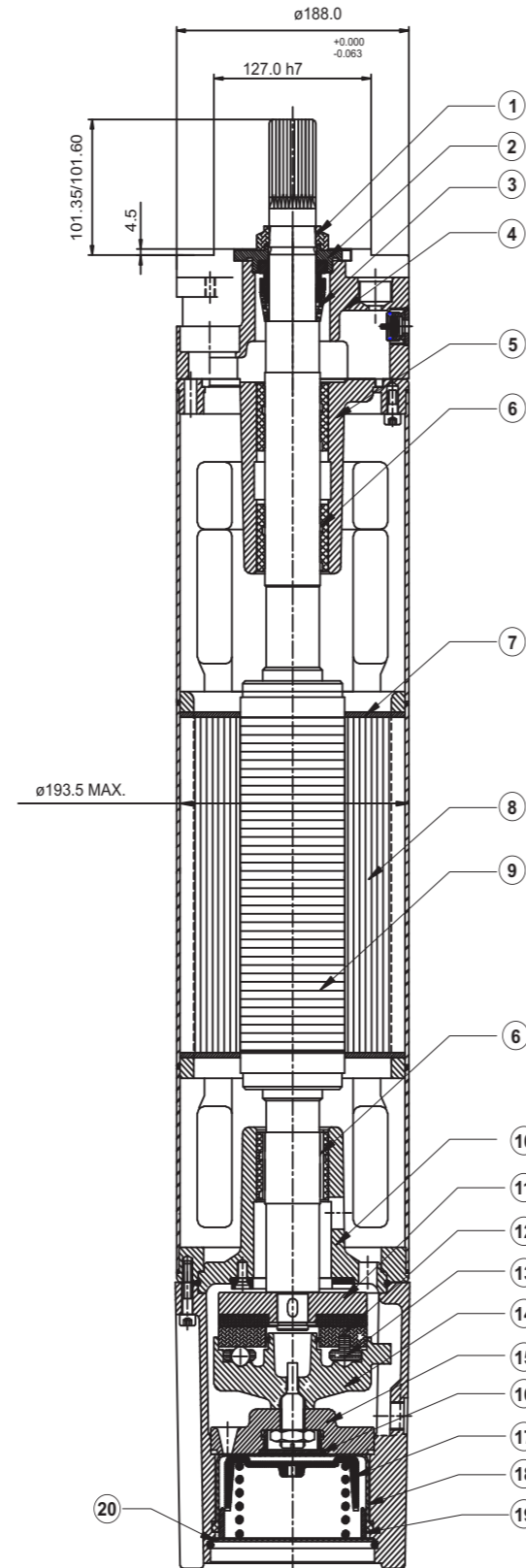
MATERIAL SPECIFICATION SML-150

POS.	COMPONENT	MATERIAL
01	SAND SLINGER	NITRILE RUBBER
02	STUD	SS AISI 304
03	SEAL	STD
04	UPPER HOUSING	CI FG-260
05	END BELL UPPER	CI FG-260
06	BUSH	CARBON
07	UP THRUST BEARING	NYLONE
08	THRUST PLATE	CI FG-260
09	WINDING WIRE	STD
10	END LAMINATION	MS
11	STATOR	N/A
12	ROTOR	N/A
13	END BELL LOWER	CI FG-260
14	REVOLVING PLATE ASSLY.	N/A
15	SEGMENT	AISI SS-304
16	THRUST BEARING PLATE	CI FG-260
17	ADJUSTING STUD	DUPLEX
18	DIAPHRAGM	NITRILE RUBBER
19	DIAPHRAGM SPRING	SPRING STEEL
20	MOTOR BASE COVER	SS AISI 304
21	CABLE	STD



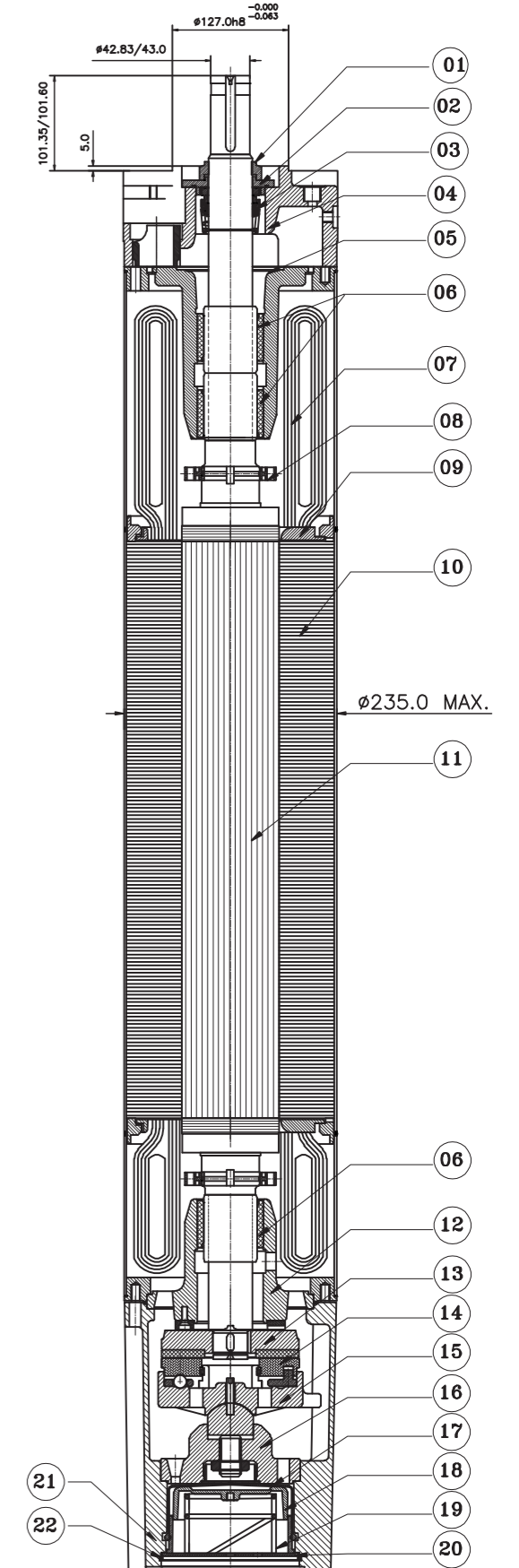
MATERIAL SPECIFICATION MATASF 200

POS. NO.	DESCRIPTION	MATERIAL
1	SAND SLINGER	NITRILE RUBBER
2	STUD	SS AISI 304
3	SEAL	STD
4	UPPER HOUSING	CI FG-260
5	END BELL UPPER	CI FG-260
6	BUSH	CARBON
7	UPTHRUST BEARING	NYLONE
8	THRUST PLATE	CI FG-260
9	WINDING WIRE	STD
10	END LAMINATION	MS
11	STATOR	N/A
12	ROTOR	N/A
13	END BELL LOWER	CI FG-260
14	REVOLVING PLATE ASSLY.	N/A
15	SEGMENT	AISI SS-304
16	THRUST BEARING PLATE	CI FG-260
17	ADJUSTING STUD	DUPLEX
18	DIAPHRAGM	NITRILE RUBBER
19	DIAPHRAGM SPRING	SPRING STEEL
20	MOTOR BASE COVER	SS AISI 304
21	CABLE	STD



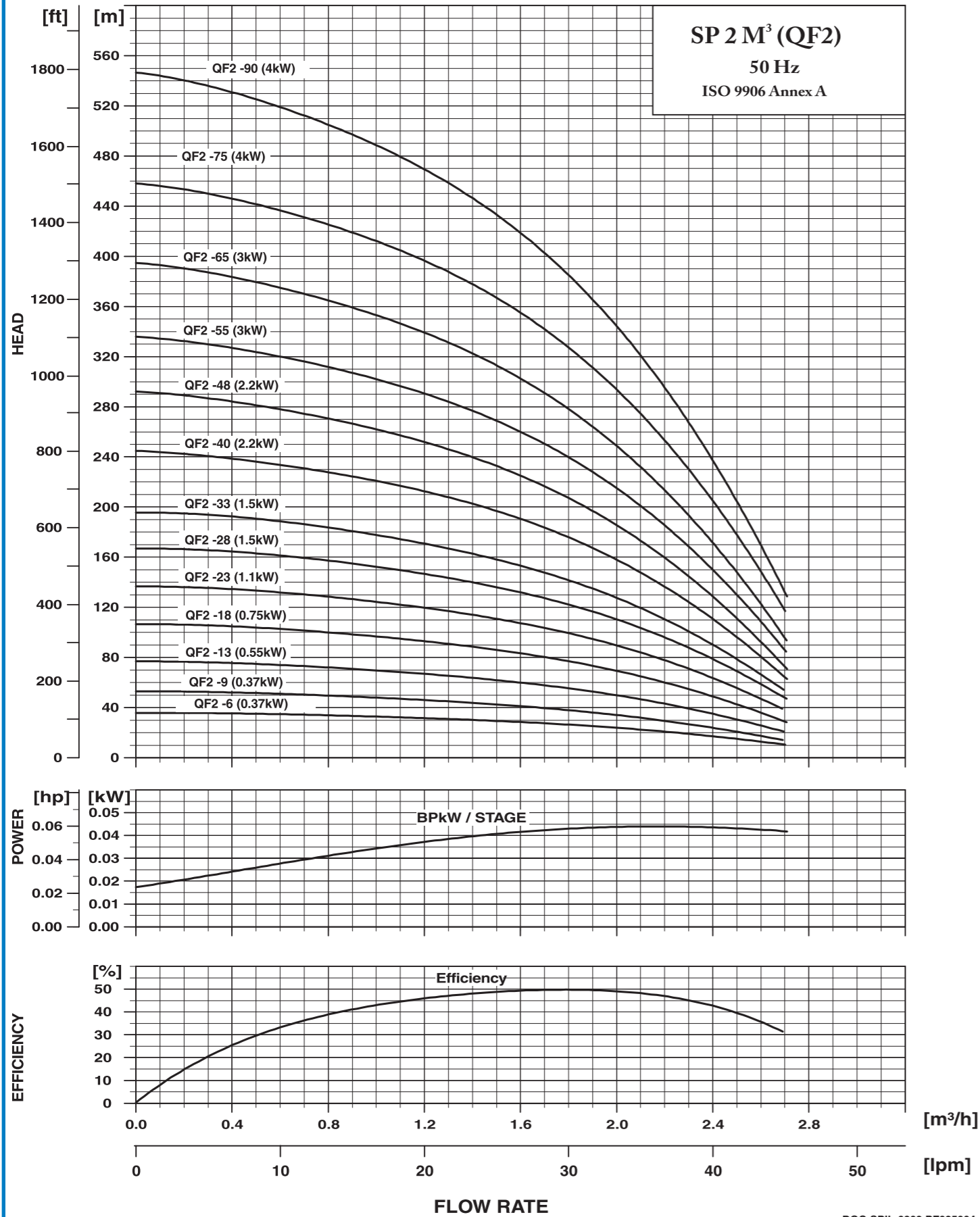
MATERIAL SPECIFICATION MATASF-10

POS.	COMPONENT	MATERIAL
01	SAND SLINGER	NITRILE RUBBER
02	DUST COVER	MS
03	MECHANICAL SEAL	STD
04	ADOPTER	CI FG-260
05	BEARING BODY UPPER	CI FG-260
06	BUSH	CARBON
07	WINDING WIRE	STD
08	AUXILLARY IMPELLER	PPS
09	END LAMINATION	MS
10	STATOR	N/A
11	ROTOR	N/A
12	BEARING BODY LOWER	CI FG-260
13	THRUST BEARING ASSLY.	CI FG-260
14	SEGMENT	SS AISI 420
15	BEARING SEGEMENT CARRIER	CI FG-260
16	THRUST SUPPORT	CI FG-260
17	DIAPHRAGM	NITRILE RUBBER
18	SPRING BASE CUP	ABS
19	DIAPHRAGM SPRING	SPRING STEEL
20	COVER DIAPHRAGM	SS AISI 304
21	THRUST HOUSING	CI FG 260
22	CIRCLIP	SS AISI 302



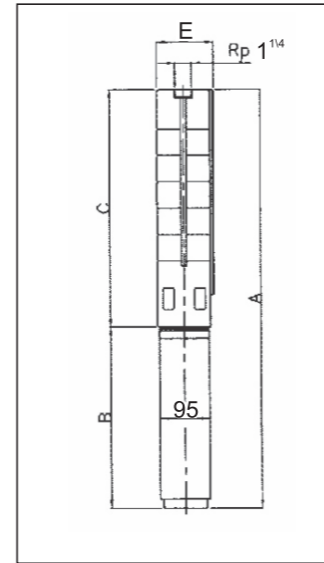
Performance Curve

Submersible Pump
QF2



Technical Data QF 2 and Performance Table QF 2

Dimensions and Weights



E = Max. Dia of Pump inclusive of cable guard & motor.

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

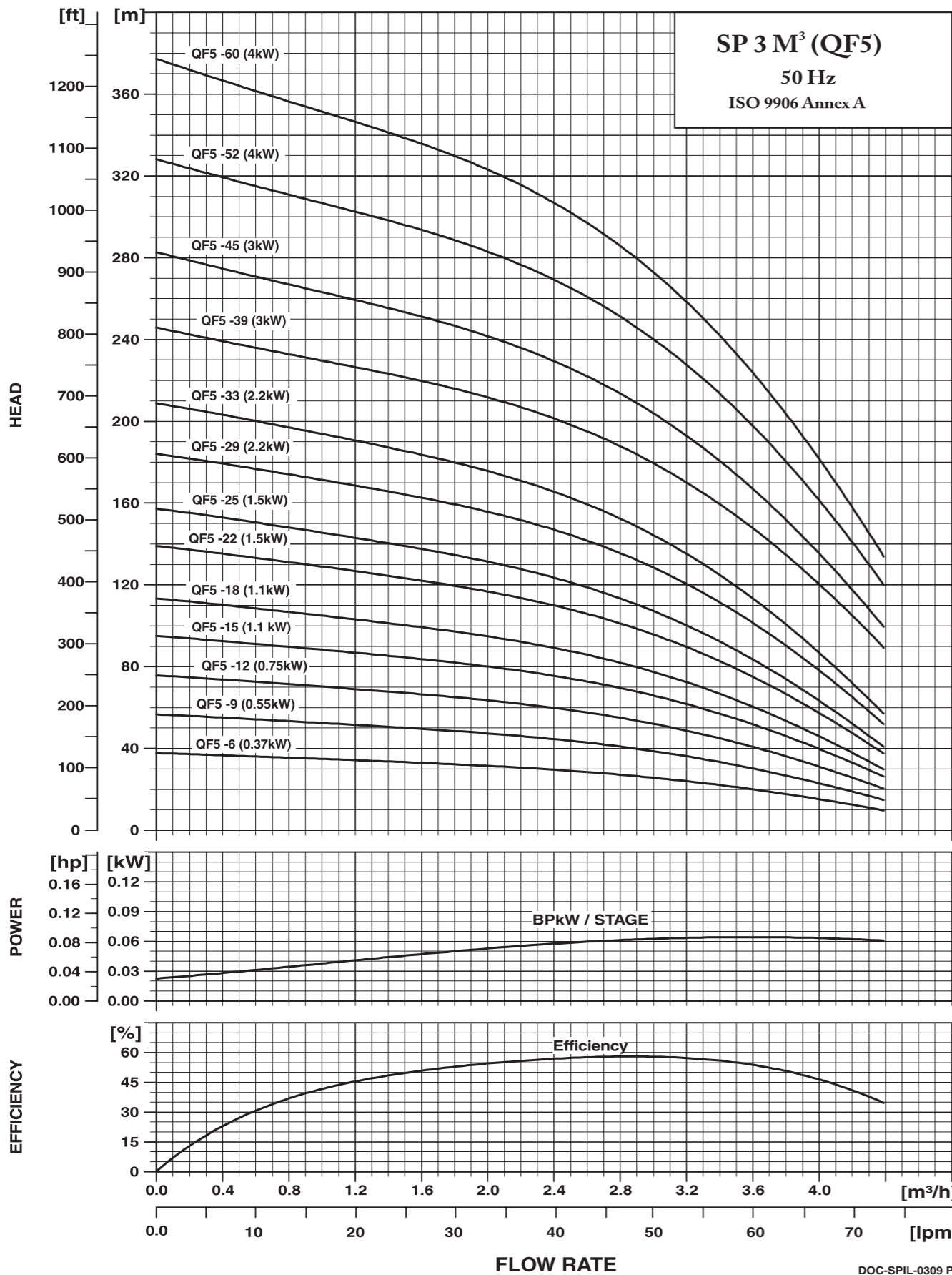
PUMP TYPE	MOTOR		DIMENSIONS (mm)					NET WEIGHT (Kg)				
	TYPE	POWER (KW)	C	B		A		D	E	PUMP WEIGHT (Kg)	MOTOR	
				1X230V	3X220V 3X400V	1X230V	3X220V 3X400V				1 X 230	3X220V 3X400V
QF2 - 6	RO 100	0.37	312	352	302	664	614	95	101	3	8	8
QF2 - 9	RO 100	0.37	375	352	302	727	677	95	101	4	8	8
QF2 - 13	RO 100	0.55	459	367	317	826	776	95	101	5	9	9
QF2 - 18	RO 100	0.75	564	382	352	946	916	95	101	6	10	9
QF2 - 23	RO 100	1.1	669	422	382	1091	1051	95	101	7	12	10
QF2 - 28	RO 100	1.5	774	478	422	1252	1196	95	101	9	13	12
QF2 - 33	RO 100	1.5	879	478	422	1357	1301	95	101	10	13	12
QF2 - 28	RO 101	1.5	839	517	414	1356	1253	95	101	9	13	12
QF2 - 33	RO 101	1.5	944	585	414	1529	1358	95	101	10	13	12
QF2 - 40	RO 101	2.2	1091	585	480	1676	1571	95	101	11	18	16
QF2 - 48	RO 101	2.2	1259	585	480	1844	1739	95	101	13	18	16
QF2 - 55	RO 101	3.0	1406	-	547	-	1953	95	101	15	-	19
QF2 - 65	RO 101	3.0	1616	-	547	-	2163	95	101	17	-	19
QF2 - 75	RO 101	4.0	1826	-	623	-	2449	95	101	20	-	22
QF2 - 90	RO 101	4.0	2141	-	623	-	2764	95	101	23	-	22

PERFORMANCE TABLE QF 2

QF-2		DISCHARGE (Q)										
		m ³ /h				0	1	1.4	1.8	2	2.4	2.8
		l/min.				0	16.7	23.4	30.1	33.4	40.1	46.8
MODEL	CONNECTION	MOTOR RATING		1 ~	3 ~	TOTAL HEAD IN [m]						
		[KW]	[HP]	[A]	[A]	36	33	30	26	23	16	12
QF2 - 6	Rp 1 1/4	0.37	0.5	3.6	2.5	36	33	30	26	23	16	12
QF2 - 9		0.37	0.75	3.9	2.5	54	50	45	39	35	25	18
QF2 - 13		0.55	0.75	3.9	4	78	72	65	57	51	35	26
QF2 - 18		0.75	1.5	5.8	4.2	108	99	91	79	70	49	36
QF2 - 23		1.1	1.5	7.4	6.2	138	127	116	100	90	63	46
QF2 - 28		1.5	2.0	7.3	7.6	168	154	141	122	109	76	55
QF2 - 33		1.5	2.0	10.2	7.6	198	182	166	144	129	90	65
QF2 - 40		2.2	3.0	10.2	10	240	220	201	175	156	109	79
QF2 - 48		2.2	3.0	15	10	288	264	242	209	188	131	95
QF2 - 55		3.0	4.0	15	27	330	303	277	240	215	150	109

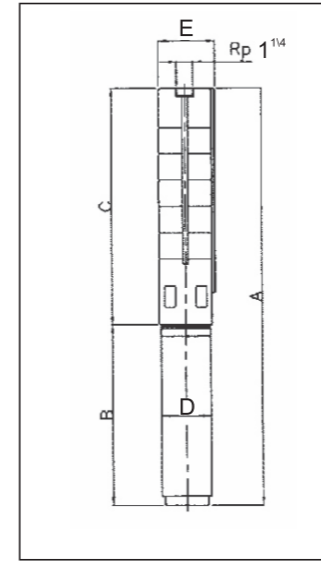
Performance Curve

Submersible Pump
QF5



Technical Data QF 5 and Performance Table QF 5

Dimensions and Weights



E = Max. Dia of Pump inclusive of cable guard & motor.

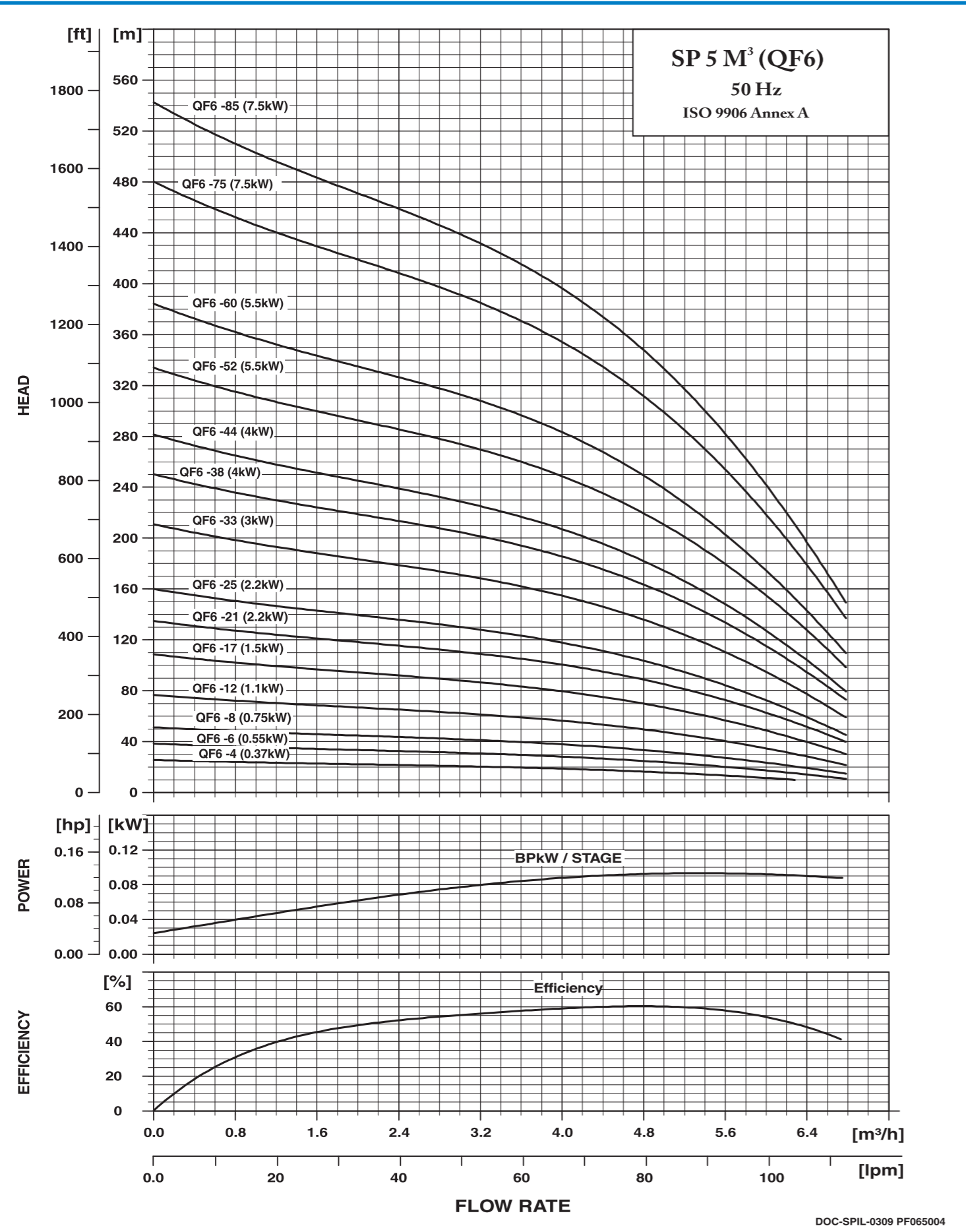
TECHNICAL DATA QF 5														
PUMP TYPE	MOTOR		C	DIMENSIONS (mm)				D	E	PUMP WEIGHT (Kg)	NET WEIGHT (Kg)			
	TYPE	POWER (KW)		B		A					1X230	3X220V		
QF 5 - 6	RO 100	0.37	312	1X230V	3X220V	3X400V	1X230V	3X220V	3X400V	95	101	3	8	8
QF 5 - 9	RO 100	0.55	375	367	317	742	692	95	101	4	9	9	9	9
QF 5 - 12	RO 100	0.75	438	382	352	820	790	95	101	5	10	10	10	10
QF 5 - 15	RO 100	1.1	501	422	382	923	883	95	101	5	12	12	12	12
QF 5 - 18	RO 100	1.1	564	422	382	986	946	95	101	6	12	12	12	12
QF 5 - 22	RO 100	1.5	648	478	422	1126	1070	95	101	7	14	14	14	14
QF 5 - 25	RO 100	1.5	711	478	422	1189	1133	95	101	8	14	14	14	14
QF 5 - 22	RO 101	1.5	648	517	414	1165	1062	95	101	7	14	14	14	14
QF 5 - 25	RO 101	1.5	711	517	414	1228	1125	95	101	8	14	14	14	14
QF 5 - 29	RO 101	2.2	795	585	480	1380	1275	95	101	9	20	20	20	20
QF 5 - 33	RO 101	2.2	879	585	480	1464	1359	95	101	10	20	20	20	20
QF 5 - 39	RO 101	3.0	1070	-	547	-	1617	95	101	11	-	-	-	19
QF 5 - 45	RO 101	3.0	1196	-	547	-	1743	95	101	13	-	-	-	19
QF 5 - 52	RO 101	4.0	1343	-	623	-	1966	95	101	14	-	-	-	22
QF 5 - 60	RO 101	4.0	1511	-	623	-	2134	95	101	16	-	-	-	22

PERFORMANCE TABLE QF 5

QF-5		DISCHARGE (Q)																
		m ³ /h		0	1	1.4	1.8	2	2.4	2.8	3.4	4	4.4					
		l/min.		0	16.7	23.4	30.1	33.4	40.1	46.8	56.8	66.8	73.5					
MODEL	CONNECTION	MOTOR RATING		1 ~		3 ~		TOTAL HEAD IN [m]										
		[KW]	[HP]	[A]	[A]	38	35	34	33	32	31	29	24	18	16			
QF 5 - 6	Rp 1/4	0.37	0.5	3.6	2.5	38	35	34	33	32	31	29	24	18	16			
QF 5 - 9		0.55	0.75	3.9	4	57	53	51	50	48	46	43	36	27	23			
QF 5 - 12		0.75	1	5.8	4.2	75	70	68	66	65	61	57	48	36	31			
QF 5 - 15		1.1	1.5	7.4	6.2	94	88	85	83	81	77	71	60	45	39			
QF 5 - 18		1.1	1.5	7.3	6.2	113	105	102	99	97	92	86	72	54	47			
QF 5 - 22		1.5	2	7.3	7.6	138	128	125	121	118	113	105	88	66	57			
QF 5 - 25		1.5	2	10.2	7.6	157	146	142	138	135	128	119	100	75	65			
QF 5 - 29		2.2	3	10.2	10	182	169	165	160	156	148	138	116	87	75			
QF 5 - 33		2.2	3	15	10	207	193	188	182	178	169	157	132	99	86			
QF 5 - 39		3	4	15	27	245	228	222	215	210	200	186	156	117	101			
QF 5 - 45		3	4	-	27	283	263	256	248	242	230	214	180	135	117			
QF 5 - 52		4	5.5	-	40	327	303	296	286	280	266	248	208	156	135			
QF 5 - 60		4	5.5	-	40	377	350	341	330	323	307	286	240	180	156			

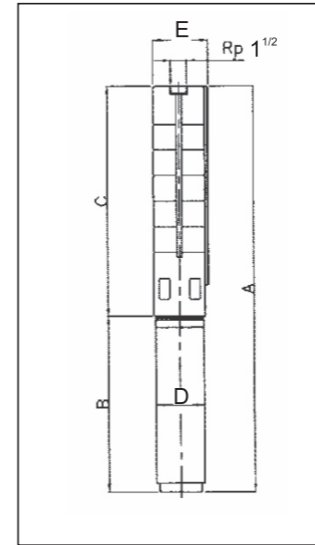
Performance Curve

Submersible Pump
QF6



Technical Data QF 6 and Performance Table QF 6

Dimensions and Weights



TECHNICAL DATA QF 6														
PUMP TYPE	MOTOR		C	DIMENSIONS (mm)				D	E	PUMP WEIGHT (Kg)	NET WEIGHT (Kg)			
	TYPE	POWER (KW)		B		A					1X230V	3X220V	1X230V	3X400V
				1X230V	3X220V	3X400V	3X400V							
QF 6 - 4	RO 100	0.37	270	352	302	622	572	95	101	3	8	8		
QF 6 - 6	RO 100	0.55	312	367	317	679	629	95	101	3	9	9		
QF 6 - 8	RO 100	0.75	354	382	352	736	706	95	101	4	10	10		
QF 6 - 12	RO 100	1.1	438	422	382	860	820	95	101	5	12	12		
QF 6 - 17	RO 100	1.5	543	478	422	1021	965	95	101	6	14	13		
QF 6 - 21	RO 101	2.2	627	585	480	1212	1107	95	101	7	20	16		
QF 6 - 25	RO 101	2.2	711	585	480	1296	1191	95	101	8	20	16		
QF 6 - 33	RO 101	3.0	879	-	547	-	1426	95	101	10	-	19		
QF 6 - 38	RO 101	4.0	1049	-	623	-	1672	95	101	11	-	22		
QF 6 - 44	RO 101	4.0	1175	-	623	-	1798	95	101	12	-	22		
QF 6 - 52	RO 101	5.5	1343	-	737	-	2080	95	101	14	-	27		
QF 6 - 60	RO 101	5.5	1511	-	737	-	2248	95	101	16	-	27		
QF 6 - 75	RO 101	7.5	1826	-	814	-	2640	95	101	20	-	31		
QF 6 - 85	RO 101	7.5	2036	-	814	-	2850	95	101	22	-	31		
QF 6 - 52	MATASF 150	5.5	1418	-	694	-	2112	142	142	14	-	48		
QF 6 - 60	MATASF 150	5.5	1586	-	694	-	2280	142	142	16	-	48		
QF 6 - 75	MATASF 150	7.5	1901	-	714	-	2615	142	142	20	-	50		
QF 6 - 85	MATASF 150	7.5	2111	-	714	-	2825	142	142	22	-	50		

E = Max. Dia of Pump inclusive of cable guard & motor.

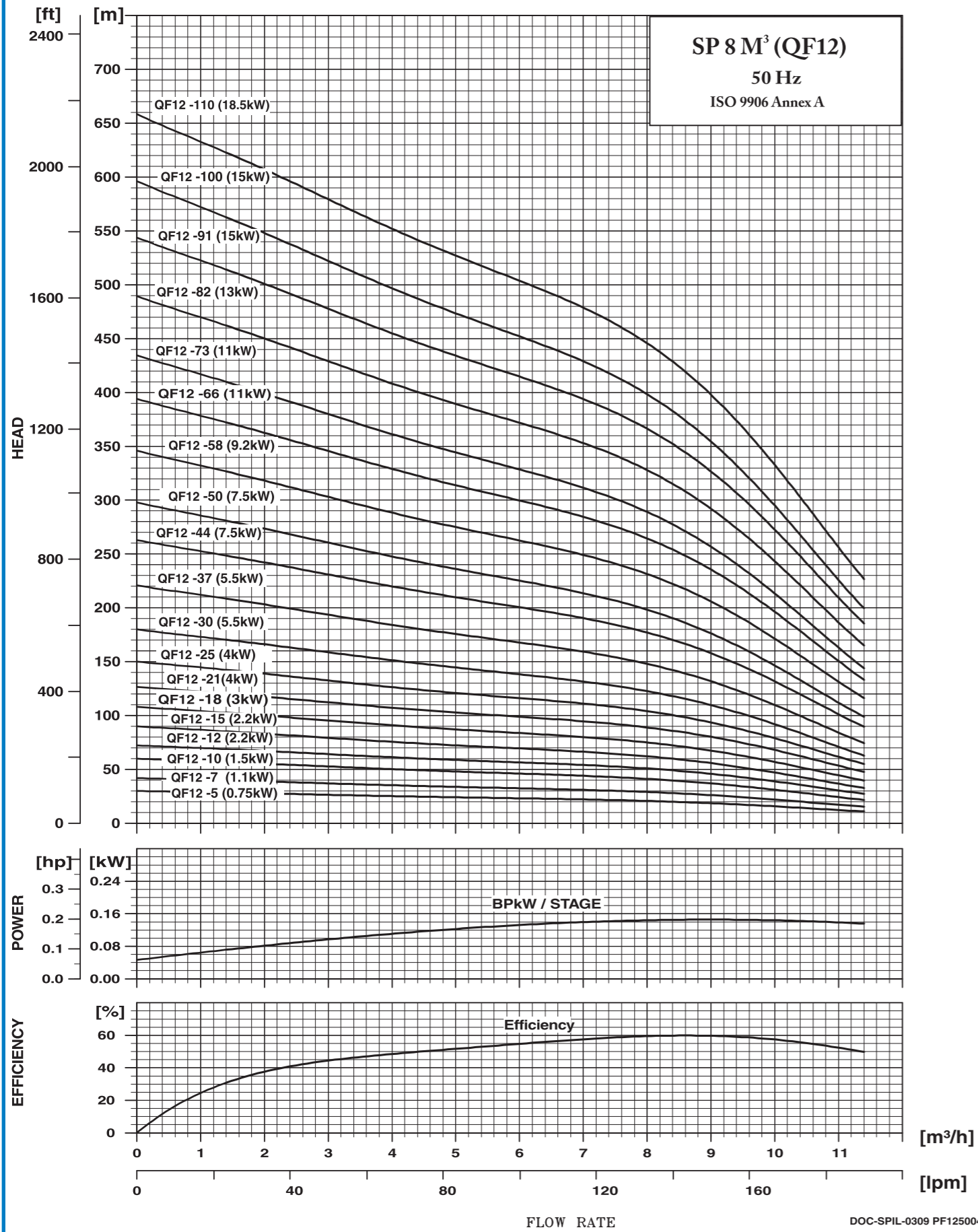
QF6-75 and QF6-85 are mounted in sleeve for R 1 1/2" connection

PERFORMANCE TABLE QF 6

QF-6		DISCHARGE (Q)																
		m ³ /h		l/min.														
		0	1	1.4	1.8	2	2.4	2.8	3.4	4	4.4	5	6	6.7				
MODEL	CONNECTION	MOTOR RATING		TOTAL HEAD IN [m]														
		[KW]	[HP]	1 ~ [A]	3 ~ [A]	0	17	23	30	33	40	47	57	67	74	84	100	112
QF 6 - 4	Rp 1 1/2	0.37	0.5	3.9	2.5	26	24	23	23	22	22	21	20	19	18	16	12	9
QF 6 - 6		0.55	0.75	5.8	4	38	36	35	34	33	33	32	30	28	27	24	17	13
QF 6 - 8		0.75	1	7.4	4.2	51	48	46	45	45	43	43	40	38	36	32	23	17
QF 6 - 12		1.1	1.5	7.3	6.2	77	72	69	68	67	65	64	61	57	54	48	35	26
QF 6 - 17		1.5	2	10	7.6	109	102	98	96	95	92	90	86	80	76	67	50	37
QF 6 - 21		2.2	3	15	10	134	126	121	119	117	114	112	106	99	94	83	61	45
QF 6 - 25		2.2	3	15	10	160	150	144	141	140	135	133	126	118	112	99	73	54
QF 6 - 33		3	4	23	16	211	198	190	186	184	179	175	167	156	148	131	96	71
QF 6 - 38		4	5.5	-	27	243	228	219	215	212	206	202	192	179	170	151	111	82
QF 6 - 44		4	5.5	-	27	282	264	253	249	246	238	234	222	208	197	175	128	95
QF 6 - 52		5.5	7.5	-	40	333	312	299	294	290	282	276	263	245	233	206	152	113
QF 6 - 60		5.5	7.5	-	40	384	360	345	339	335	325	319	303	283	269	238	175	130
QF 6 - 75		7.5	10	-	-	480	450	431	424	419	406	399	379	354	336	298	219	162
QF 6 - 85		7.5	10	-	-	544	510	489	480	475	460	452	429	401	381	337	248	184

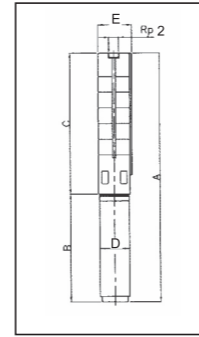
Performance Curve

Submersible Pump
QF12



Technical Data QF 12 and Performance Table QF 12

Dimensions and Weights



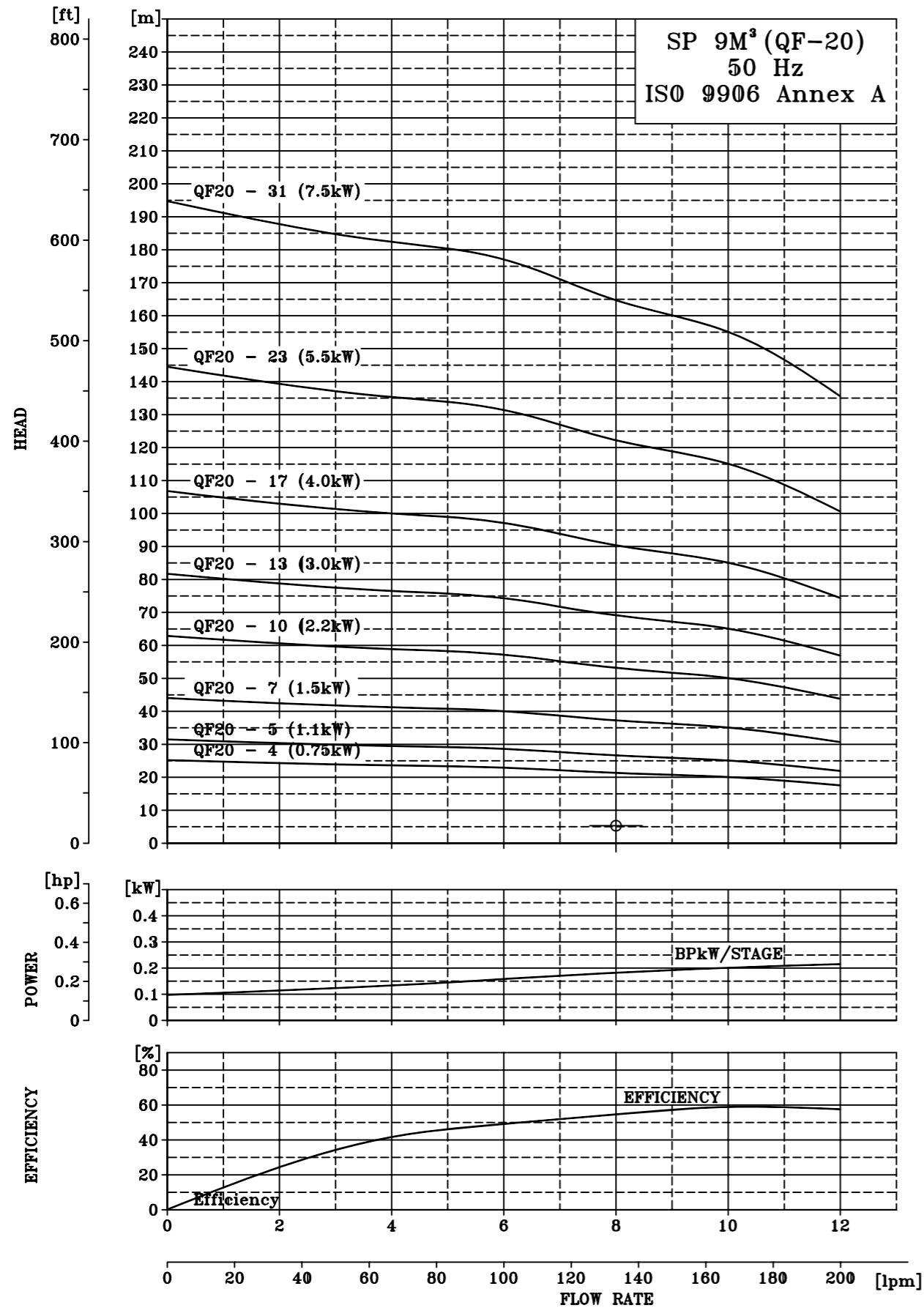
E = Max. Dia of Pump inclusive of cable guard & motor.
QF12-58 and QF 12-110 are mounted in sleeve for R 2" connection

TECHNICAL DATA QF 12												
PUMP TYPE	MOTOR		C	DIMENSIONS (mm)				NET WEIGHT (Kg)				
	TYPE	POWER (KW)		B		A		D	E	PUMP WEIGHT (Kg)	MOTOR	
				1X230V	3X220V 3X400V	1X230V	3X220V 3X400V				1X230	3X220V 3X400V
QF 12 - 5	RO 100	0.75	425	382	352	807	777	95	101	4	10	9
QF 12 - 7	RO 100	1.1	509	422	382	931	891	95	101	5	12	10
QF 12 - 10	RO 100	1.5	635	478	422	1113	1057	95	101	6	13	12
QF 12 - 10	RO 101	1.5	635	517	414	1152	1049	95	101	6	13	12
QF 12 - 12	RO 101	2.2	719	585	480	1304	1199	95	101	7	18	16
QF 12 - 15	RO 101	2.2	845	585	480	1430	1325	95	101	9	18	16
QF 12 - 18	RO 101	3.0	971	-	547	-	1518	95	101	10	-	19
QF 12 - 21	RO 101	4.0	1097	-	623	-	1720	95	101	11	-	20
QF 12 - 25	RO 101	4.0	1265	-	623	-	1888	95	101	13	-	20
QF 12 - 30	RO 101	5.5	1475	-	737	-	2212	95	101	15	-	27
QF 12 - 37	RO 101	5.5	1769	-	737	-	2506	95	101	18	-	27
QF 12 - 44	RO 101	7.5	2063	-	814	-	2877	95	101	21	-	31
QF 12 - 50	RO 101	7.5	2315	-	814	-	3129	95	101	24	-	31
QF 12 - 30	MTSF 150	5.5	1550	-	694	-	2244	138	143	15	-	48
QF 12 - 37	MTSF 150	5.5	1844	-	694	-	2538	138	143	18	-	48
QF 12 - 44	MTSF 150	7.5	2138	-	714	-	2852	138	143	21	-	50
QF 12 - 50	MTSF 150	7.5	2390	-	714	-	3104	138	143	24	-	50
QF 12 - 58	MTSF 150	9.2	2726	-	744	-	3470	138	143	27	-	53
QF 12 - 66	MTSF 150	11.0	3062	-	774	-	3836	138	143	31	-	53
QF 12 - 73	MTSF 150	11.0	3356	-	774	-	4130	138	143	34	-	56
QF 12 - 82	MTSF 150	13.0	3734	-	824	-	4558	138	143	38	-	61
QF 12 - 91	MTSF 150	15.0	4112	-	869	-	4981	138	143	42	-	66
QF 12 - 100	MTSF 150	15.0	4490	-	869	-	5359	138	143	45	-	66
QF 12 - 110	MTSF 150	18.5	4910	-	914	-	5824	138	143	50	-	70

PERFORMANCE TABLE QF 12														
QF-12		DISCHARGE (Q)												
		m ³ /h				0	1.4	2	4	6	8	9	10	11
		l/min.				0	23.4	33.4	66.8	100.2	133.6	150	167	183.7
MODEL	CONNECTION	MOTOR RATING		1 ~	3 ~	TOTAL HEAD IN [m]								
		[KW]	[HP]	[A]	[A]	30	28	27	25	23	20	18	15	11
QF 12 - 5	Rp 2	0.75	1.0	7.4	4.2	30	28	27	25	23	20	18	15	11
QF 12 - 7		1.1	1.50	7.3	6.2	42	40	38	35	32	28	25	21	16
QF 12 - 10		1.5	2.0	10.2	7.6	60	57	55	50	45	40	36	30	23
QF 12 - 12		2.2	3.0	15	10	72	68	66	60	54	48	43	36	27
QF 12 - 15		2.2	3.0	15	10	90	85	82	75	68	60	54	45	34
QF 12 - 18		3	4.0	-	16	107	102	98	89	82	72	64	53	41
QF 12 - 21		4	5.5	-	27	125	119	115	104	95	84	75	62	48
QF 12 - 25		4	5.5	-	27	149	142	137	124	114	100	89	74	57
QF 12 - 30		5.5	7.5	-	40	179	170	164	149	136	120	107	89	68
QF 12 - 37		5.5	7.5	-	40	221	210	202	184	168	148	132	110	84

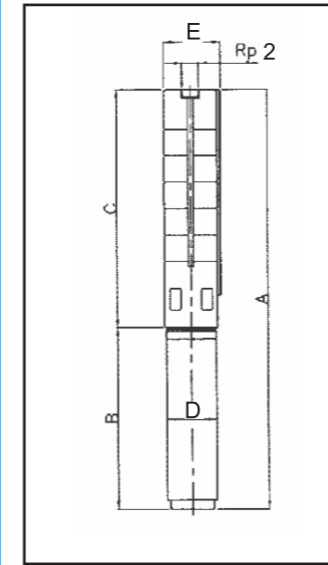
Performance Curve

Submersible Pump
QF20



Technical Data QF 20 and Performance Table QF 20

Dimensions and Weights



E=max. dia of pump inclusive of cable guard and motor

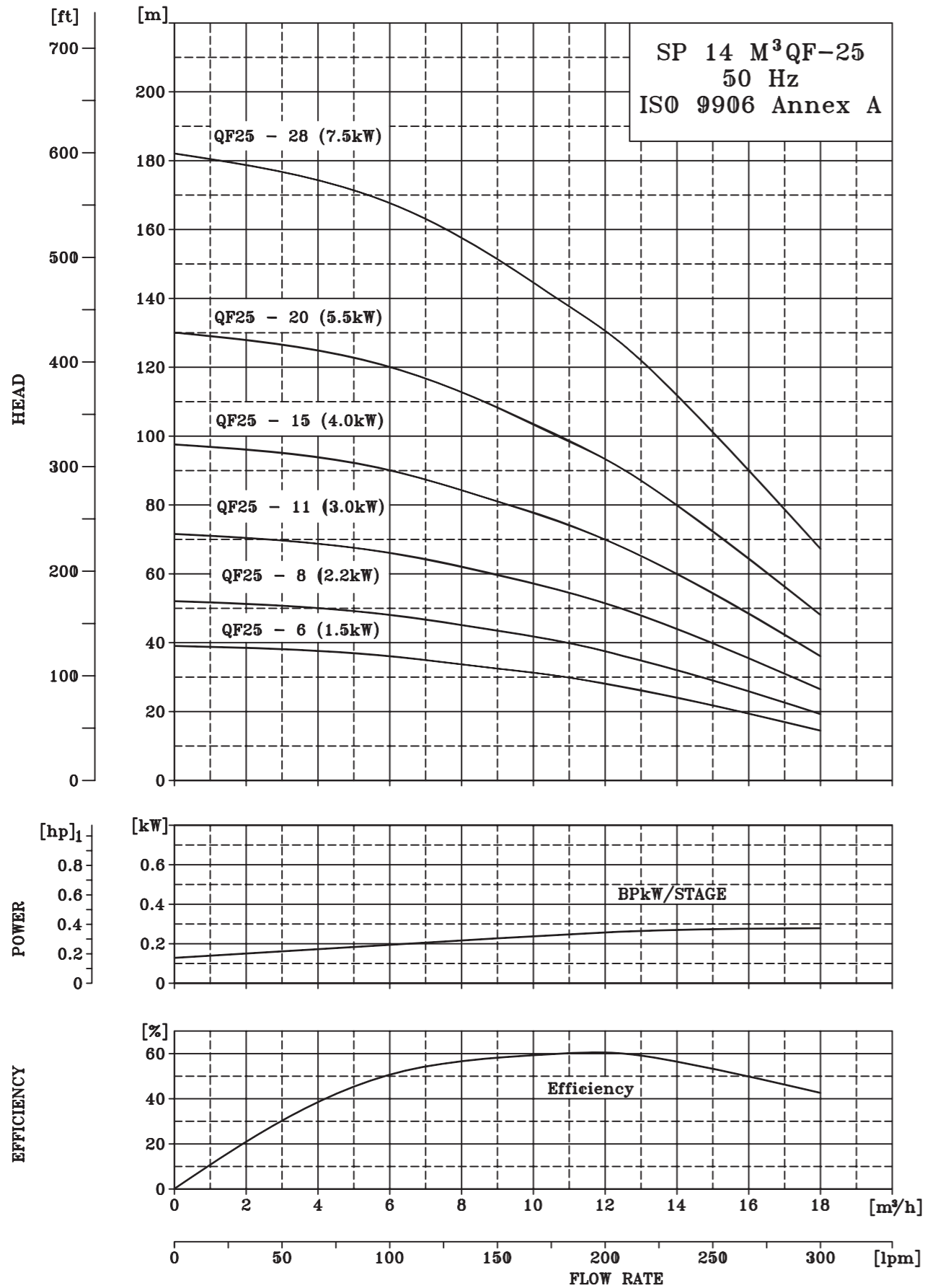
TECHNICAL DATA QF 20												
PUMP TYPE	MOTOR		DIMENSIONS (mm)						NET WEIGHT (Kg)			
	TYPE	POWER (KW)	C	B		A		D	E	PUMP WEIGHT (Kg)	MOTOR	
				1X230V	3X220V 3X400V	1X230V	3X220V 3X400V				1X230	3X220V 3X400V
QF 20 - 4	RO 100	0.75	445	382	352	827	797	95	101	6	10	9
QF 20 - 5	RO 100	1.1	510	424	382	934	892	95	101	6	12	10
QF 20 - 7	RO 100	1.5	640	478	-	1118	-	95	101	7	14	-
QF 20 - 7	RO 101	1.5	640	-	424	-	1064	95	101	7	-	12
QF 20 - 10	RO 101	2.2	835	588	485	1423	1320	95	101	8	21	16
QF 20 - 13	RO 101	3	1030	-	541	-	1571	95	101	11	-	19
QF 20 - 17	RO 101	4	1290	-	624	-	1914	95	101	14	-	22
QF 20 - 23	RO 101	5.5	1680	-	743	-	2423	95	101	19	-	27
QF 20 - 31	RO 101	7.5	2200	-	815	-	3015	95	101	24	-	31
QF 20 - 23	MTSF 150	5.5	1750	-	694	-	2444	138	143	19	-	48
QF 20 - 31	MTSF 150	7.5	2270	-	714	-	2984	138	143	24	-	50

PERFORMANCE TABLE QF 20

QF 20		DISCHARGE (Q)									
		m 3/h		0	4	6	8	10	12		
		l /min.		0	66.8	100.1	133.6	167	200.1		
MODEL	CONNECTION	MOTER RATING		1 ~	3 ~	TOTAL HEAD IN [m]					
		[KW]	[HP]	[A]	[A]						
QF 20 - 4	Rp2	0.75	1	7.45	4.2	25	24	23	21	20	17
QF 20 - 5		1.1	1.5	7.3	6.2	32	30	29	27	26	22
QF 20 - 7		1.5	2	10.2	7.65	44	41	40	37	35	31
QF 20 - 10		2.2	3	15	10	65	60	59	54	52	45
QF 20 - 14		3	4	23	27	88	82	80	74	70	61
QF 20 - 19		4	5.5		40	117	110	107	99	94	82
QF 20 - 26		5.5	7.5		40	161	151	147	136	129	112
QF 20 - 35		7.5	10		55	220	206	200	186	175	153

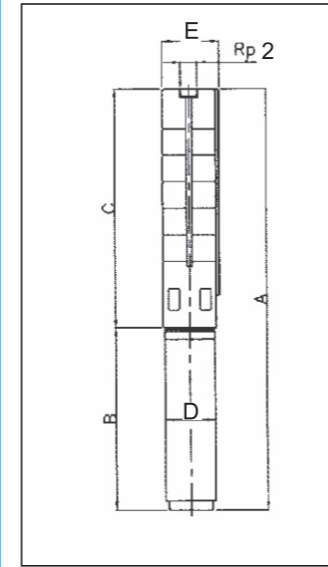
Performance Curve

Submersible Pump
QF25



Technical Data QF 25 and Performance Table QF 25

Dimensions and Weights



E = Max. Dia of Pump inclusive of cable guard & motor.

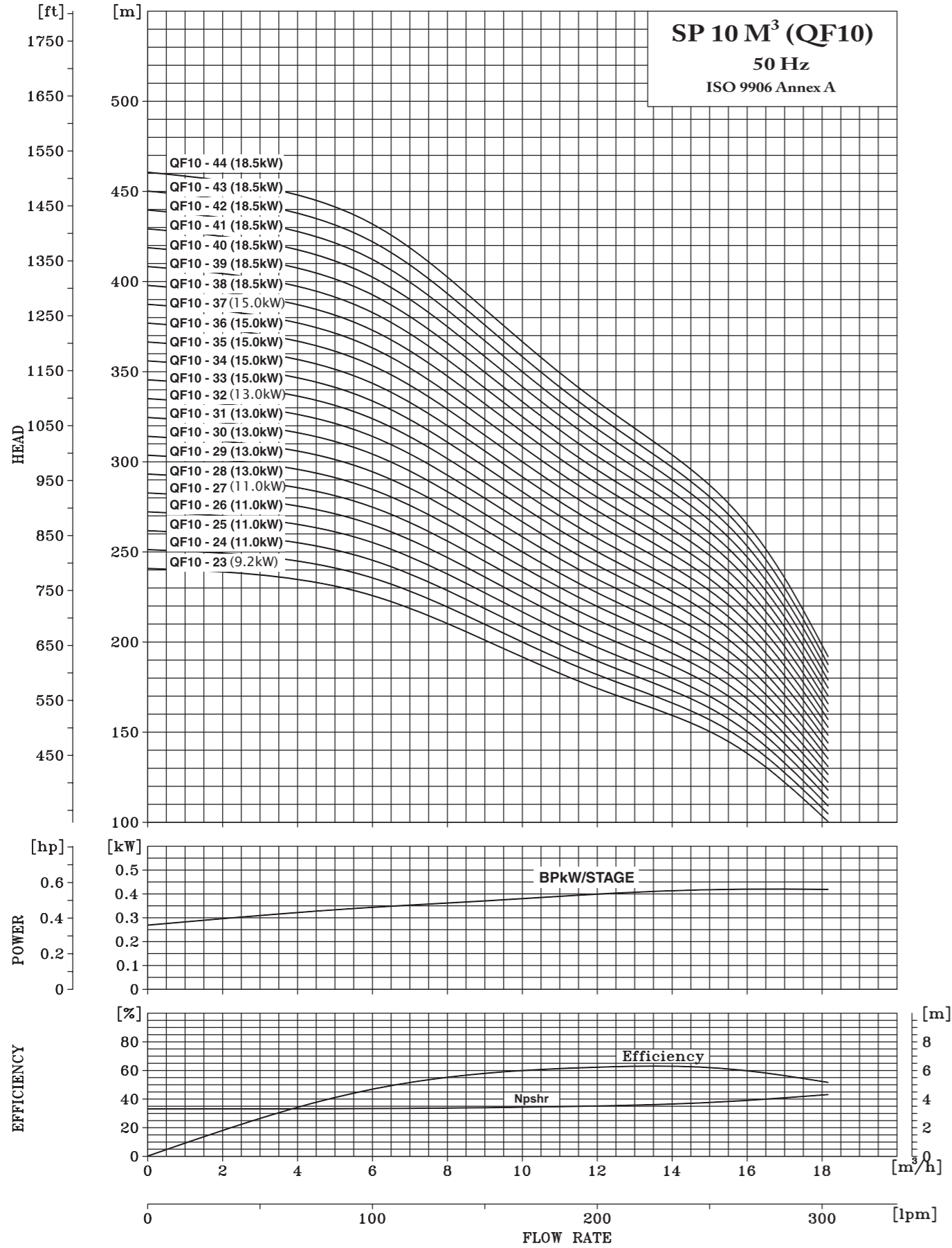
TECHNICAL DATA QF 25												
PUMP TYPE	MOTOR		DIMENSIONS (mm)								NET WEIGHT (Kg)	
	TYPE	POWER (KW)	C	B		A		D	E	PUMP WEIGHT (Kg)	MOTOR	
				1X230V	3X220V 3X400V	1X230V	3X220V 3X400V				1X230	3X220V 3X400V
QF 25 - 6	RO 100	1.5	575	478	422	1053	997	95	101	3	14	-
QF 25 - 6	RO 101	1.5	575	-	414	-	989	95	101	3	-	12
QF 25 - 8	RO 101	2.2	705	585	480	1290	1185	95	101	4	21	16
QF 25 - 11	RO 101	3	900	-	547	-	1447	95	101	4	-	19
QF 25 - 15	RO 101	4	1160	-	623	-	1783	95	101	5	-	22
QF 25 - 20	RO 101	5.5	1485	-	737	-	2222	95	101	7	-	27
QF 25 - 28	RO 101	7.5	2005	-	814	-	2819	95	101	9	-	32
QF 25 - 20	MTSF 150	5.5	1555	-	694	-	2249	142	143	7	-	48
QF 25 - 28	MTSF 150	7.5	2075	-	714	-	2789	142	143	9	-	50

PERFORMANCE TABLE QF 25

QF-25		DISCHARGE (Q)										
		m ³ /h		0	6	9	11	12	14	18		
		l/min.		0	100.2	150	183.7	200.4	233.8	300.6		
MODEL	CONNECTION	MOTOR RATING		1 ~	3 ~	TOTAL HEAD IN [m]						
		[KW]	[HP]	[A]	[A]							
QF 25 - 6	Rp 2"	1.5	2.0	10.2	7.6	46	42	37	34	33	28	17
QF 25 - 8		2.2	3.0	15	10	52	48	42	39	37	32	19
QF 25 - 11		3.0	4.0	15	10	72	66	58	54	51	44	26
QF 25 - 15		4.0	5.5	-	16	98	90	80	74	70	60	36
QF 25 - 20		5.5	7.5	-	27	130	120	106	98	93	80	48
QF 25 - 28		7.5	10.0	-	27	182	168	148	137	131	112	67

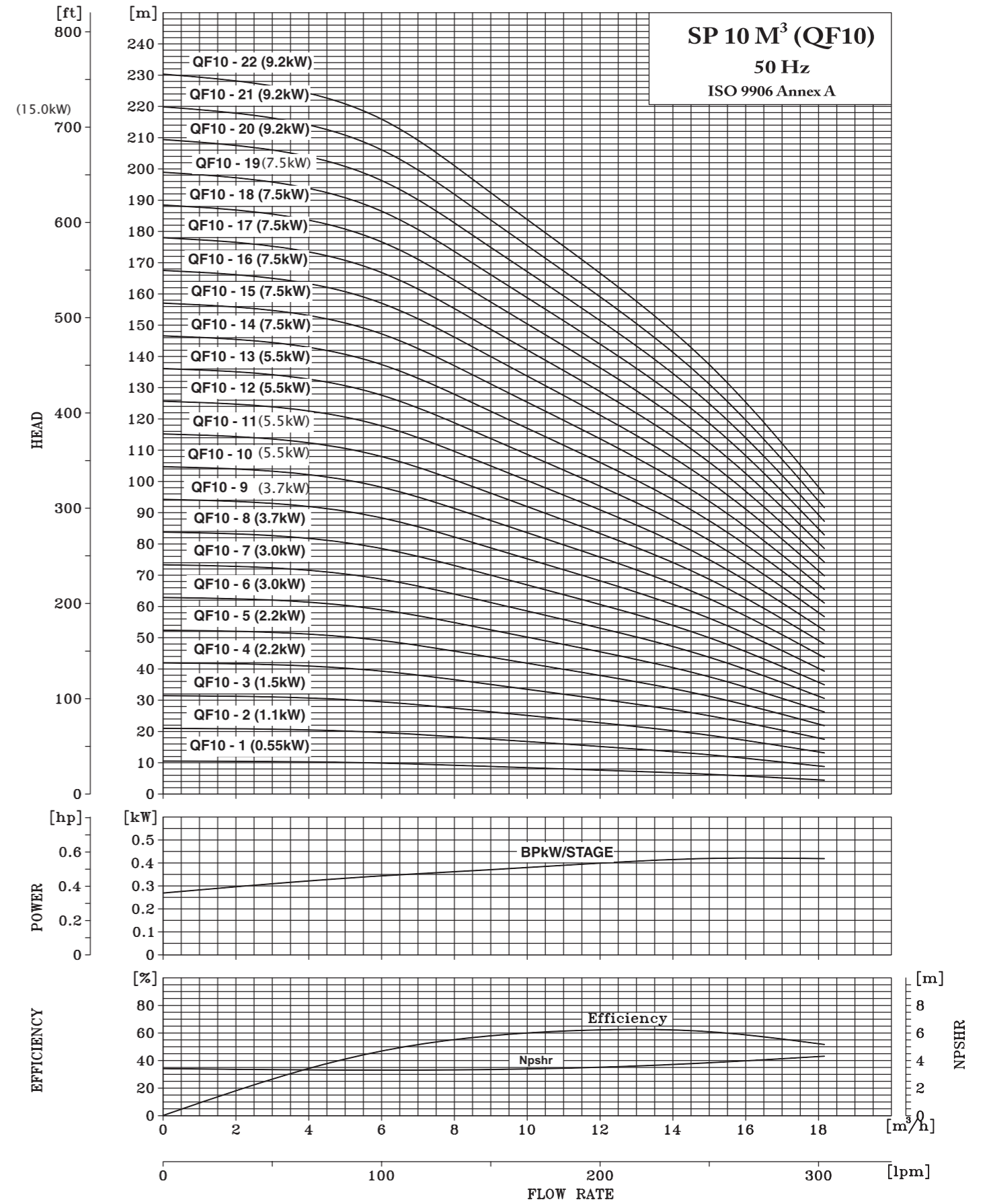
Performance Curve

Submersible Pump
QF10



Performance Curve

Submersible Pump
QF10

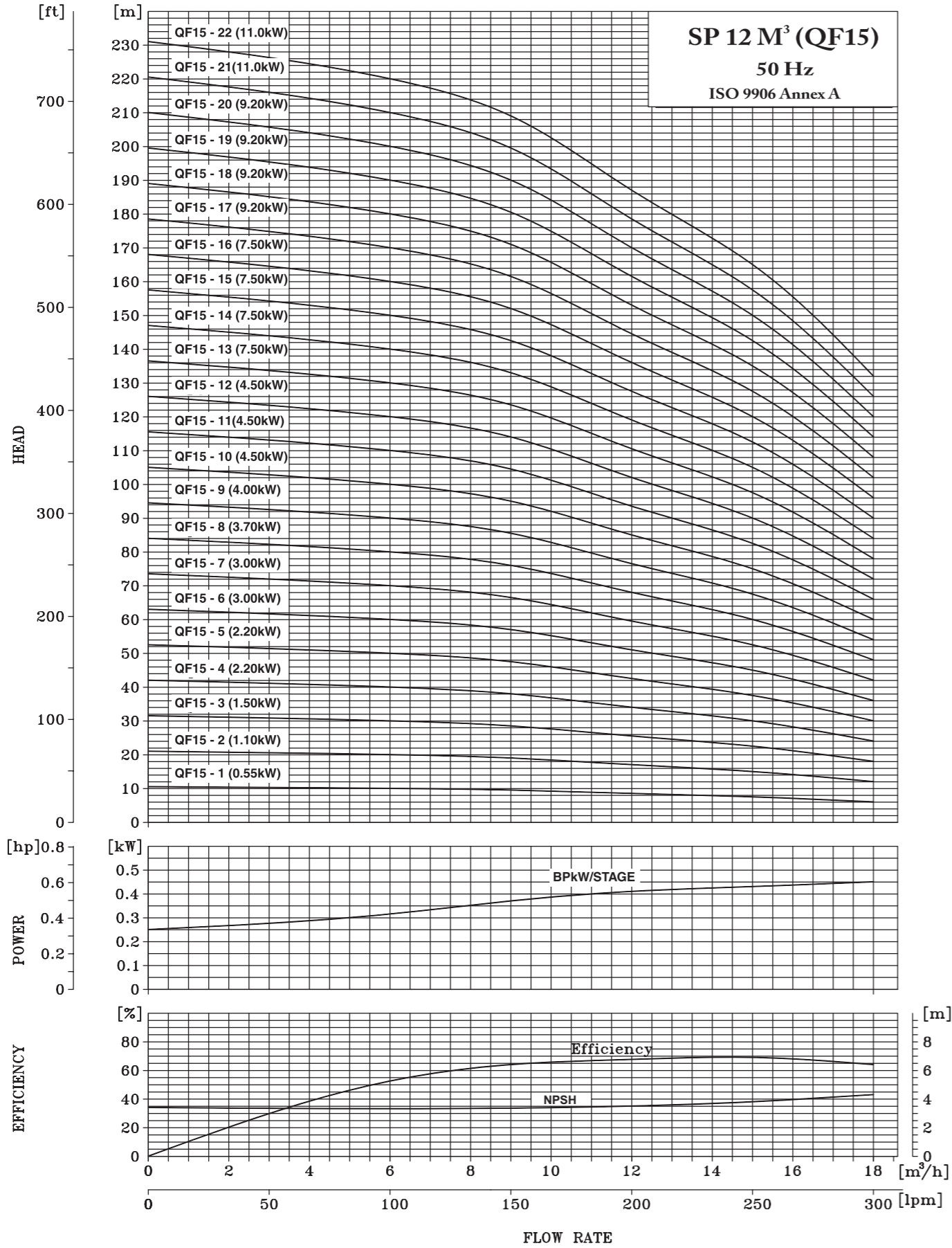


TECHNICAL DATA QF 10													
PUMP TYPE	MOTOR TYPE	POWER (KW)	C	DIMENSIONS (mm)						NET WEIGHT (Kg)			
				B		A		D	E	E**	PUMP	MOTOR	
				1X230V	3X220V 3X400V	1X230V	3X220V 3X400V					1X230	3X220V 3X400V
QF-10-1	RO 100	0.55	318	367	317	685	635	95	131		5	8	8
QF-10-2	RO 100	1.10	378	422	382	800	760	95	131		6	10	9
QF-10-3	RO 100	1.50	439	424	422	863	861	95	131		7	12	10
QF-10-3	RO 101	1.50	439	517	414	956	853	95	131		7	12	10
QF-10-4	RO 101	2.20	499	585	480	1084	979	95	131		9	14	12
QF-10-5	RO 101	2.20	560	585	480	1145	1040	95	131		10	14	12
QF-10-6	RO 101	3.00	620	588	547	1208	1167	95	131		11	20	16
QF-10-7	RO 101	3.00	681	588	547	1269	1228	95	131		12	20	16
QF-10-8	RO 101	3.70	741	-	623	-	1364	95	131		14	-	19
QF-10-9	RO 101	3.70	802	-	623	-	1425	95	131		15	-	19
QF-10-10	RO 101	4.00	862	-	737	-	1599	95	131		16	-	19
QF-10-11	RO 101	5.50	923	-	737	-	1660	95	131		17	-	22
QF-10-12	RO 101	5.50	983	-	737	-	1720	95	131		18	-	22
QF-10-12	MATASF 150	5.50	1000	-	694	-	1694	138	143	145	18	-	48
QF-10-13	MATASF 150	5.50	1061	-	694	-	1755	138	143	145	20	-	48
QF-10-14	MATASF 150	7.50	1121	-	714	-	1835	138	143	145	21	-	50
QF-10-15	MATASF 150	7.50	1182	-	714	-	1896	138	143	145	22	-	50
QF-10-16	MATASF 150	7.50	1242	-	714	-	1956	138	143	145	23	-	50
QF-10-17	MATASF 150	7.50	1303	-	714	-	2017	138	143	145	25	-	50
QF-10-18	MATASF 150	7.50	1363	-	714	-	2077	138	143	145	26	-	50
QF-10-19	MATASF 150	7.50	1424	-	714	-	2138	138	143	145	27	-	50
QF-10-20	MATASF 150	9.20	1484	-	744	-	2228	138	143	145	28	-	53
QF-10-21	MATASF 150	9.20	1545	-	744	-	2289	138	143	145	29	-	53
QF-10-22	MATASF 150	9.20	1605	-	744	-	2349	138	143	145	31	-	53
QF-10-23	MATASF 150	9.20	1666	-	744	-	2410	138	143	145	32	-	53
QF-10-24	MATASF 150	11.00	1726	-	774	-	2500	138	143	145	33	-	56
QF-10-25	MATASF 150	11.00	1787	-	774	-	2561	138	143	145	34	-	56
QF-10-26	MATASF 150	11.00	1847	-	774	-	2621	138	143	145	36	-	56
QF-10-27	MATASF 150	11.00	1908	-	774	-	2682	138	143	145	37	-	56
QF-10-28	MATASF 150	13.00	1968	-	824	-	2792	138	143	145	38	-	61
QF-10-29	MATASF 150	13.00	2029	-	824	-	2853	138	143	145	39	-	61
QF-10-30	MATASF 150	13.00	2089	-	824	-	2913	138	143	145	41	-	61
QF-10-31	MATASF 150	13.00	2150	-	824	-	2974	138	143	145	42	-	61
QF-10-32	MATASF 150	13.00	2210	-	824	-	3034	138	143	145	43	-	61
QF-10-33	MATASF 150	15.00	2271	-	869	-	3140	138	143	145	44	-	66
QF-10-34	MATASF 150	15.00	2331	-	869	-	3200	138	143	145	45	-	66
QF-10-35	MATASF 150	15.00	2392	-	869	-	3261	138	143	145	47	-	66
QF-10-36	MATASF 150	15.00	2452	-	869	-	3321	138	143	145	48	-	66
QF-10-37	MATASF 150	15.00	2513	-	869	-	3382	138	143	145	49	-	66
QF-10-38	MATASF 150	18.50	2573	-	914	-	3487	138	143	145	50	-	70
QF-10-39	MATASF 150	18.50	2634	-	914	-	3548	138	143	145	52	-	70
QF-10-40	MATASF 150	18.50	2694	-	914	-	3608	138	143	145	53	-	70
QF-10-41	MATASF 150	18.50	2755	-	914	-	3669	138	143	145	54	-	70
QF-10-42	MATASF 150	18.50	2815	-	914	-	3729	138	143	145	55	-	70
QF-10-43	MATASF 150	18.50	2876	-	914	-	3790	138	143	145	57	-	70
QF-10-44	MATASF 150	18.50	2936	-	914	-	3850	138	143	145	58	-	70

PERFORMANCE TABLE														
MODEL	CONNECTION	MOTOR RATING [KW] [HP]	DISCHARGE (Q)											
			m 3/h		0	2	4	6	8	10	12	14	16	18
			l/min.		0	33.3	66.7	100	133.3	166.7	200	233.3	266.7	300
			TOTAL HEAD IN [m]											
QF10-1	Rp 2 1/2"	0.55	0.75	10	10	10	10	9	8	8	6	5	4	
QF10-2		1.1	1.5	21	20	20	20	18	17	15	13	11	8	
QF10-3		1.5	2.0	31	29	29	29	27	25	23	19	16	12	
QF10-4		2.2	3.0	42	39	39	39	36	33	30	25	21	16	
QF10-5		2.2	3.0	52	49	49	49	46	42	38	32	27	20	
QF10-6		3.0	4.0	62	59	59	59	55	50	45	38	32	24	
QF10-7		3.0	4.0	73	68	68	68	64	59	53	44	37	28	
QF10-8		3.7	6.0	83	78	78	78	73	67	61	51	43	32	
QF10-9		3.7	5.0	94	88	88	88	82	75	68	57	48	36	
QF10-10		4.0	5.5	104	98	98	98	91	84	76	63	53	40	
QF10-11		5.5	7.5	114	107	107	107	100	92	83	70	59	44	
QF10-12		5.5	7.5	125	117	117	117	109	100	91	76	64	48	
QF10-13		5.5	7.5	135	127	127	127	118	109	98	82	69	52	
QF10-14		7.5	10.0	146	137	137	137	128	117	106	89	75	56	
QF10-15		7.5	10.0	156	147	147	147	137	125	114	95	80	60	
QF10-16		7.5	10.0	166	156	156	156	146	134	121	101	85	64	
QF10-17		7.5	10.0	177	166	166	166	155	142	129	108	91	68	
QF10-18		7.5	10.0	187	176	176	176	164	150	136	114	96	72	
QF10-19		7.5	10.0	198	186	186	186	173	159	144	120	101	76	
QF10-20		9.2	12.5	208	195	195	195	182	167	151	127	107	80	
QF10-21		9.2	12.5	218	205	205	205	191	176	159	133	112	84	
QF10-22		9.2	12.5	229	215	215	215	200	184	167	139	117	88	
QF10-23		9.2	12.5	239	225	225	225	210	192	174	146	123	92	
QF10-24		11.0	15.0	250	234	234	234	219	201	182	152	128	96	
QF10-25		11.0	15.0	260	244	244	244	228	209	189	159	134	100	
QF10-26		11.0	15.0	270	254	254	254	237	217	197	165	139	104	
QF10-27		11.0	15.0	281	264	264	264	246	226	204	171	144	108	
QF10-28		13.0	17.5	291	274	274	274	255	234	212	178	150	112	
QF10-29		13.0	17.5	302	283	283	283	264	242	220	184	155	116	
QF10-30		13.0	17.5	312	293	293	293	273	251	227	190	160	120	
QF10-31		13.0	17.5	322	303	303	303	282	259	235	197	166	124	
QF10-32		13.0	17.5	333	313	313	313	292	268	242	203	171	128	
QF10-33		15.0	20.0	343	322	322	322	301	276	250	209	176	132	
QF10-34		15.0	20.0	354	332	332	332	310	284	257	216	182	136	
QF10-35		15.0	20.0	364	342	342	342	319	293	265	222	187	140	
QF10-36		15.0	20.0	374	352	352	352	328	301	273	228	192	144	
QF10-37		15.0	20.0	385	361	361	361	337	309	280	235	198	148	
QF10-38		18.5	25.0	395	371	371	371	346	318	288	241	203	152	
QF10-39		18.5	25.0	406	381	381	381	355	326	295	247	208	156	
QF10-40		18.5	25.0	416	391	391	391	364	334	303	254	214	160	
QF10-41		18.5	25.0	426	401	401	401	374	343	310	260	219	164	
QF10-42		18.5	25.0	437	410	410	410	383	351	318	266	224	168	
QF10-43		18.5	25.0	447	420	420	420	392	359	326	273	230	172	
QF10-44		18.5	25.0	458	430	430	430	401	368	333	279	235	176	

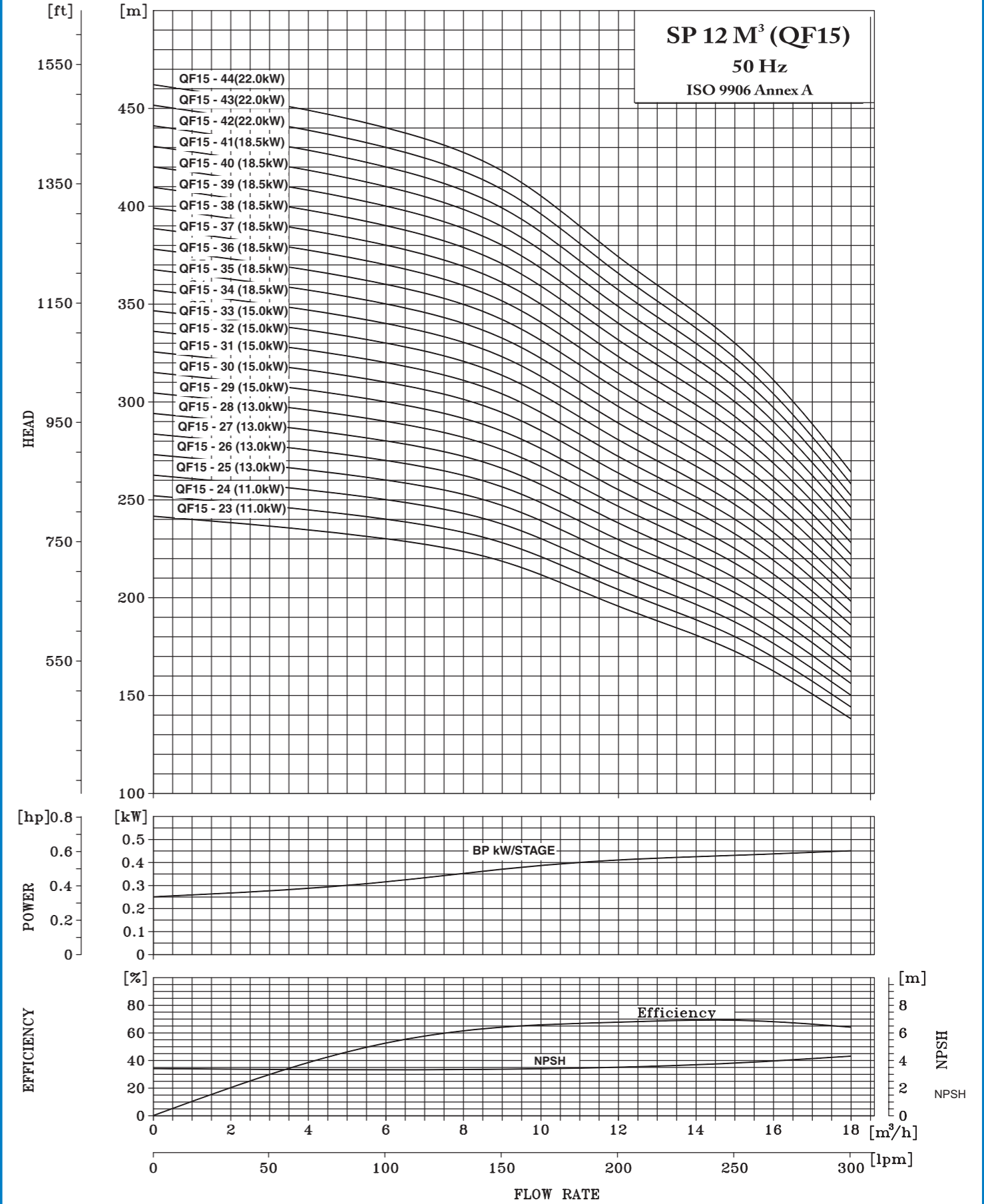
Performance Curve

Submersible Pump
QF15



Performance Curve

Submersible Pump
QF15



TECHNICAL DATA QF 15

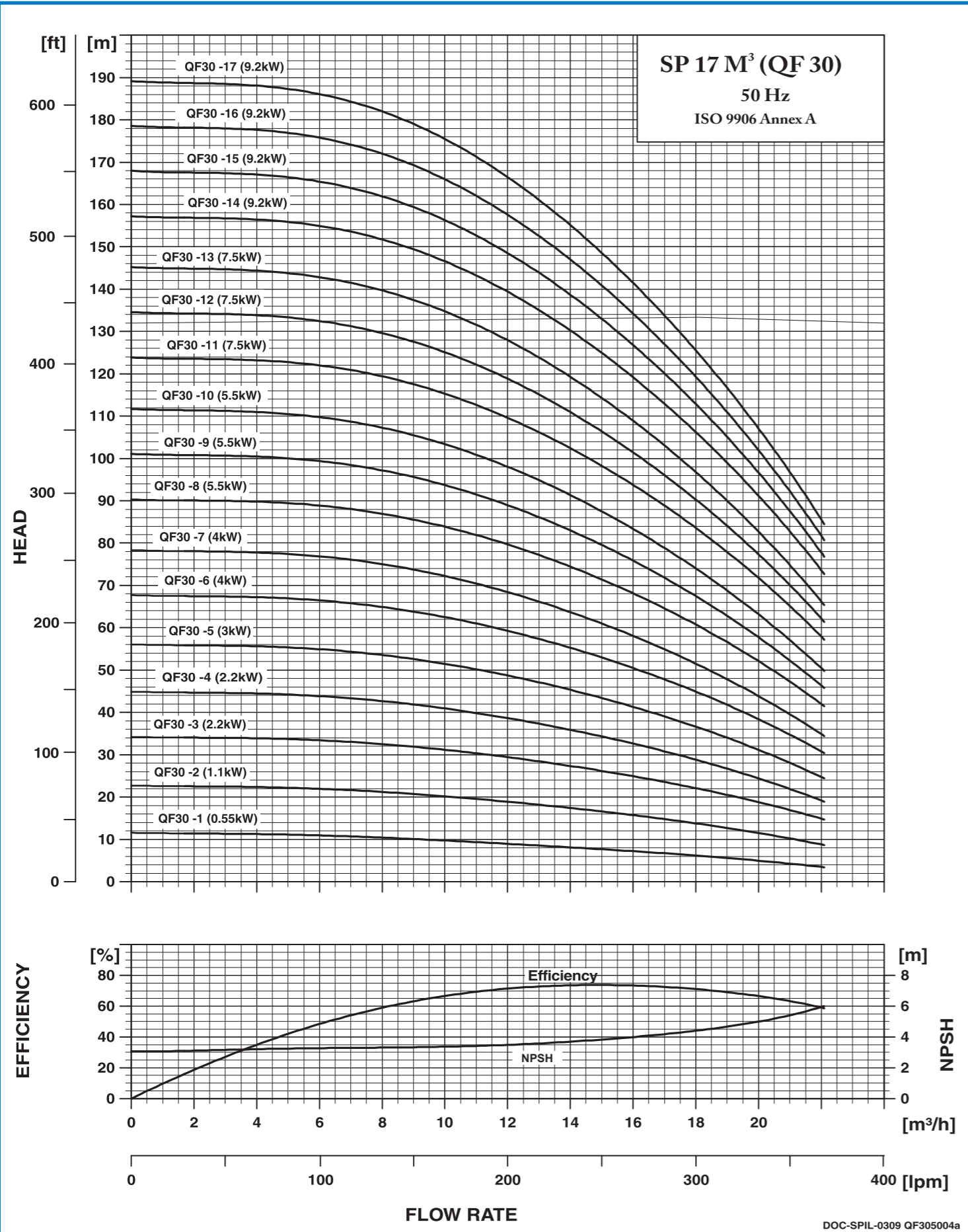
PUMP	MOTOR		DIMENSIONS (mm)						NET WEIGHT (Kg)				
	TYPE	POWER (KW)	C	B		A		D	E	E**	PUMP WEIGHT (Kg)	MOTOR	
				1X230V	3X220V 3X400V	1X230V	3X220V 3X400V					1X230	3X220V 3X400V
QF-15-1	RO 100	0.55	318	367	317	685	635	95	131		5	9	9
QF-15-2	RO 100	1.1	378	422	382	800	760	95	131		6	12	10
QF-15-3	RO 100	1.50	439	-	422	-	861	95	131		7	-	12
QF-15-3	RO 101	1.5	439	517	414	956	853	95	131		7	16	12
QF-15-4	RO 101	2.2	499	585	480	1084	979	95	131		9	20	16
QF-15-5	RO 101	2.2	560	585	480	1145	1040	95	131		10	20	16
QF-15-6	RO 101	3.0	620	-	547	-	1167	95	131		11	-	19
QF-15-7	RO 101	3.0	681	-	547	-	1228	95	131		12	-	19
QF-15-8	RO 101	4.0	741	-	623	-	1364	95	131		14	-	22
QF-15-9	RO 101	4.0	802	-	623	-	1425	95	131		15	-	22
QF-15-10	RO 101	5.5	862	-	737	-	1599	95	131		16	-	27
QF-15-11	RO 101	5.5	923	-	737	-	1660	95	131		17	-	27
QF-15-12	RO 101	5.5	983	-	737	-	1720	95	131		18	-	27
QF-15-11	MATASF 150	5.5	923	-	694	-	1617	143	143	145	17	-	48
QF-15-12	MATASF 150	5.5	1000	-	694	-	1694	143	143	145	18	-	48
QF-15-13	MATASF 150	7.5	1061	-	714	-	1775	143	143	145	20	-	50
QF-15-14	MATASF 150	7.5	1121	-	714	-	1835	143	143	145	21	-	50
QF-15-15	MATASF 150	7.5	1182	-	714	-	1896	143	143	145	22	-	50
QF-15-16	MATASF 150	7.5	1242	-	714	-	1956	143	143	145	23	-	50
QF-15-17	MATASF 150	9.2	1303	-	744	-	2047	143	143	145	25	-	53
QF-15-18	MATASF 150	9.2	1363	-	744	-	2107	143	143	145	26	-	53
QF-15-19	MATASF 150	9.2	1424	-	744	-	2168	143	143	145	27	-	53
QF-15-20	MATASF 150	9.2	1484	-	744	-	2228	143	143	145	28	-	53
QF-15-21	MATASF 150	11.0	1545	-	774	-	2319	143	143	145	29	-	56
QF-15-22	MATASF 150	11.0	1605	-	774	-	2379	143	143	145	31	-	56
QF-15-23	MATASF 150	11.0	1666	-	774	-	2440	143	143	145	32	-	56
QF-15-24	MATASF 150	11.0	1726	-	774	-	2500	143	143	145	33	-	56
QF-15-25	MATASF 150	13.0	1787	-	824	-	2611	143	143	145	34	-	61
QF-15-26	MATASF 150	13.0	1847	-	824	-	2671	143	143	145	36	-	61
QF-15-27	MATASF 150	13.0	1908	-	824	-	2732	143	143	145	37	-	61
QF-15-28	MATASF 150	13.0	1968	-	824	-	2792	143	143	145	38	-	61
QF-15-29	MATASF 150	15.0	2029	-	869	-	2898	143	143	145	39	-	66
QF-15-30	MATASF 150	15.0	2089	-	869	-	2958	143	143	145	41	-	66
QF-15-31	MATASF 150	15.0	2150	-	869	-	3019	143	143	145	42	-	66
QF-15-32	MATASF 150	15.0	2210	-	869	-	3079	143	143	145	43	-	66
QF-15-33	MATASF 150	15.0	2271	-	869	-	3140	143	143	145	44	-	66
QF-15-34	MATASF 150	18.5	2331	-	914	-	3245	143	143	145	45	-	70
QF-15-35	MATASF 150	18.5	2392	-	914	-	3306	143	143	145	47	-	70
QF-15-36	MATASF 150	18.5	2452	-	914	-	3366	143	143	145	48	-	70
QF-15-37	MATASF 150	18.5	2513	-	914	-	3427	143	143	145	49	-	70
QF-15-38	MATASF 150	18.5	2573	-	914	-	3487	143	143	145	50	-	70
QF-15-39	MATASF 150	18.5	2634	-	914	-	3548	143	143	145	52	-	70
QF-15-40	MATASF 150	18.5	2694	-	914	-	3608	143	143	145	53	-	70
QF-15-41	MATASF 150	22.0	2755	-	1004	-	3759	143	143	145	54	-	79
QF-15-42	MATASF 150	22.0	2815	-	1004	-	3819	143	143	145	55	-	79
QF-15-43	MATASF 150	22.0	2876	-	1004	-	3880	143	143	145	57	-	79
QF-15-44	MATASF 150	22.0	2936	-	1004	-	3940	143	143	145	58	-	79

PERFORMANCE TABLE

QF 15		DISCHARGE (Q)											
		m 3/h	0	2	4	6	8	10	12	14	16	18	
		l/min.	0	33.3	66.7	100	133.3	166.7	200	233.3	266.7	300	
MODEL	CONNECTION	MOTOR RATING		TOTAL HEAD IN [m]									
		[KW]	[HP]	11	10	10	10	10	9	9	8	7	6
QF15-1	Rp21/2"	0.55	0.75	11	10	10	10	10	9	9	8	7	6
QF15-2		1.1	1.5	21	20	20	20	19	18	17	15	13	12
QF15-3		1.5	2	32	31	30	30	29	27	26	23	20	18
QF15-4		2.2	3	42	41	40	40	38	36	34	30	26	24
QF15-5		2.2	3	53	51	50	50	48	45	43	38	33	30
QF15-6		3	4	63	61	60	60	57	54	51	45	39	36
QF15-7		3	4	74	71	70	70	67	63	60	53	46	42
QF15-8		4	5.5	84	82	80	80	76	72	68	60	52	48
QF15-9		4	5.5	95	92	90	90	86	81	77	68	59	54
QF15-10		5.5	7.5	105	102	100	100	95	90	85	75	66	60
QF15-11		5.5	7.5	116	112	110	110	105	99	94	83	72	66
QF15-12		5.5	7.5	126	122	120	120	114	108	102	90	79	72
QF15-13		7.5	10	137	133	130	130	124	117	111	98	85	78
QF15-14		7.5	10	147	143	140	140	133	126	119	105	92	84
QF15-15		7.5	10	158	153	150	150	143	135	128	113	98	90
QF15-16		7.5	10	168	163	160	160	152	144	136	120	105	96
QF15-17		9.2	12.5	179	173	170	170	162	153	145	128	111	102
QF15-18		9.2	12.5	189	184	180	180	171	162	153	135	118	108
QF15-19		9.2	12.5	200	194	190	190	181	171	162	143	124	114
QF15-20		9.2	12.5	210	204	200	200	190	180	170	150	131	120
QF15-21		11	15	221	214	210	210	200	189	179	158	138	126
QF15-22		11	15	231	224	220	220	209	198	187	165	144	132
QF15-23		11	15	242	235	230	230	219	207	196	173	151	138
QF15-24		11	15	252	245	240	240	228	216	204	180	157	144
QF15-25		13	17.5	263	255	250	250	238	225	213	188	164	150
QF15-26		13	17.5	273	265	260	260	247	234	221	195	170	156
QF15-27		13	17.5	284	275	270	270	257	243	230	203	177	162
QF15-28		13	17.5	294	286	280	280	266	252	238	210	183	168
QF15-29		15	20	305	296	290	290	276	261	247	218	190	174
QF15-30		15	20	315	306	300	300	285	270	255	225	197	180
QF15-31		15	20	326	316	310	310	295	279	264	233	203	186
QF15-32		15	20	336	326	320	320	304	288	272	240	210	192
QF15-33		15	20	347	337	330	330	314	297	281	248	216	198
QF15-34		18.5	25	357	347	340	340	323	306	289	255	223	204
QF15-35		18.5	25	368	357	350	350	333	315	298	263	229	210
QF15-36		18.5	25	378	367	360	360	342	324	306	270	236	216
QF15-37		18.5	25	389	377	370	370	352	333	315	278	242	222
QF15-38		18.5	25	399	388	380	380	361	342	323	285	249	228
QF15-39		18.5	25	410	398	390	390	371	351	332	293	255	234
QF15-40		18.5	25	420	408	400	400	380	360	340	300	262	240
QF15-41		22	30	431	418	410	410	390	369	349	308	269	246
QF15-42		22	30	441	428	420	420	399	378	357	315	275	252
QF15-43		22	30	452	439	430	430	409	387	366	323	282	258
QF15-44		22	30	462	449	440	440	418	396	374	330	288	264

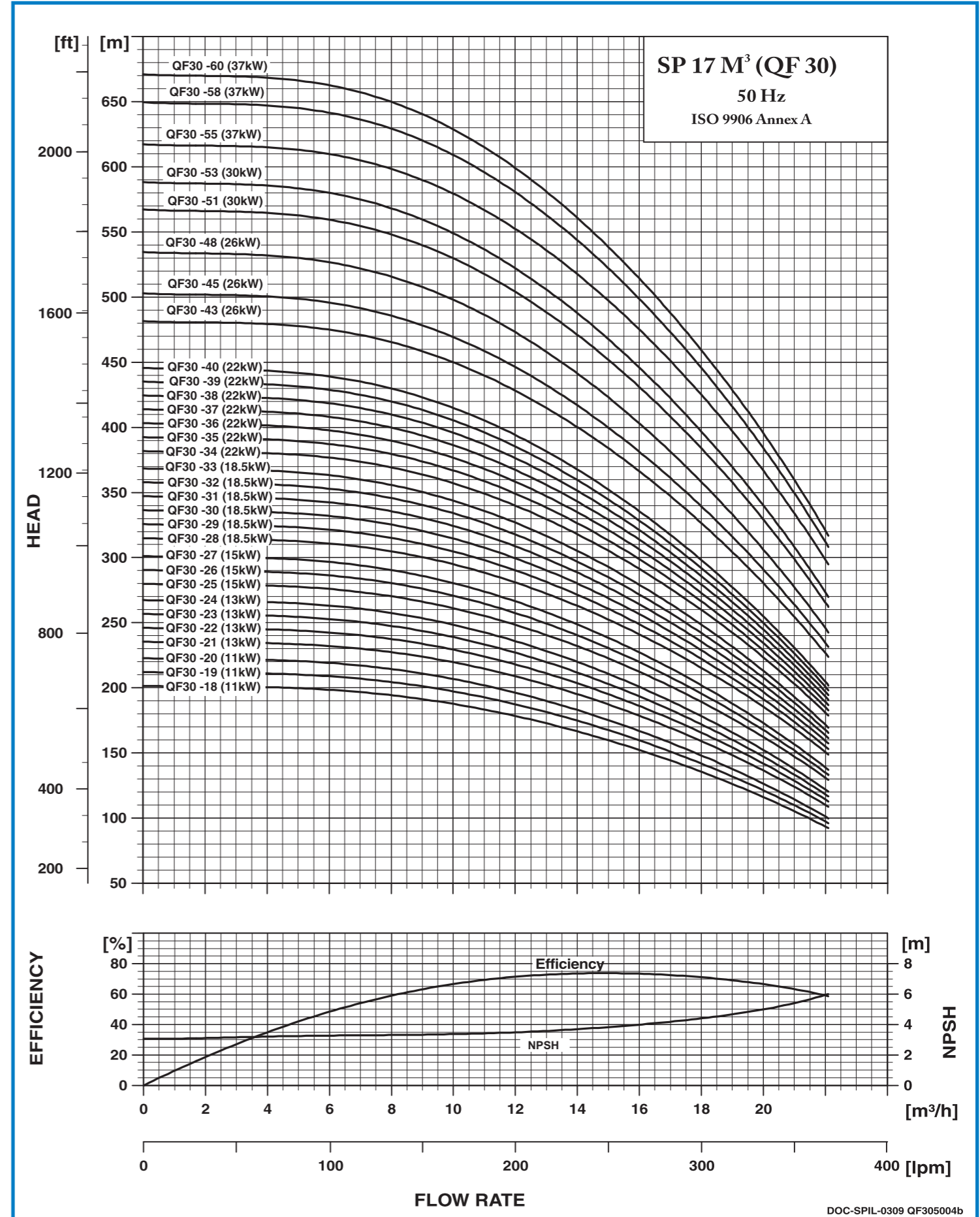
Performance Curve

Submersible Pump
QF30

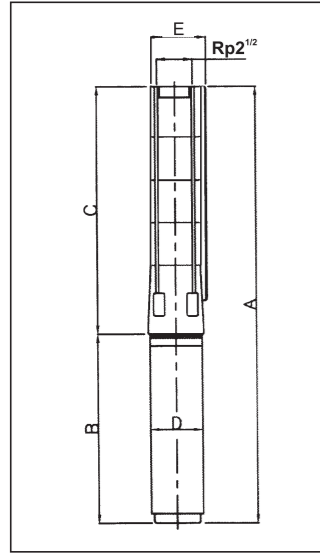


Performance Curve

Submersible Pump
QF30



Dimensions and Weights



QF30-43 to QF30-60 are mounted in sleeve R 3" connection

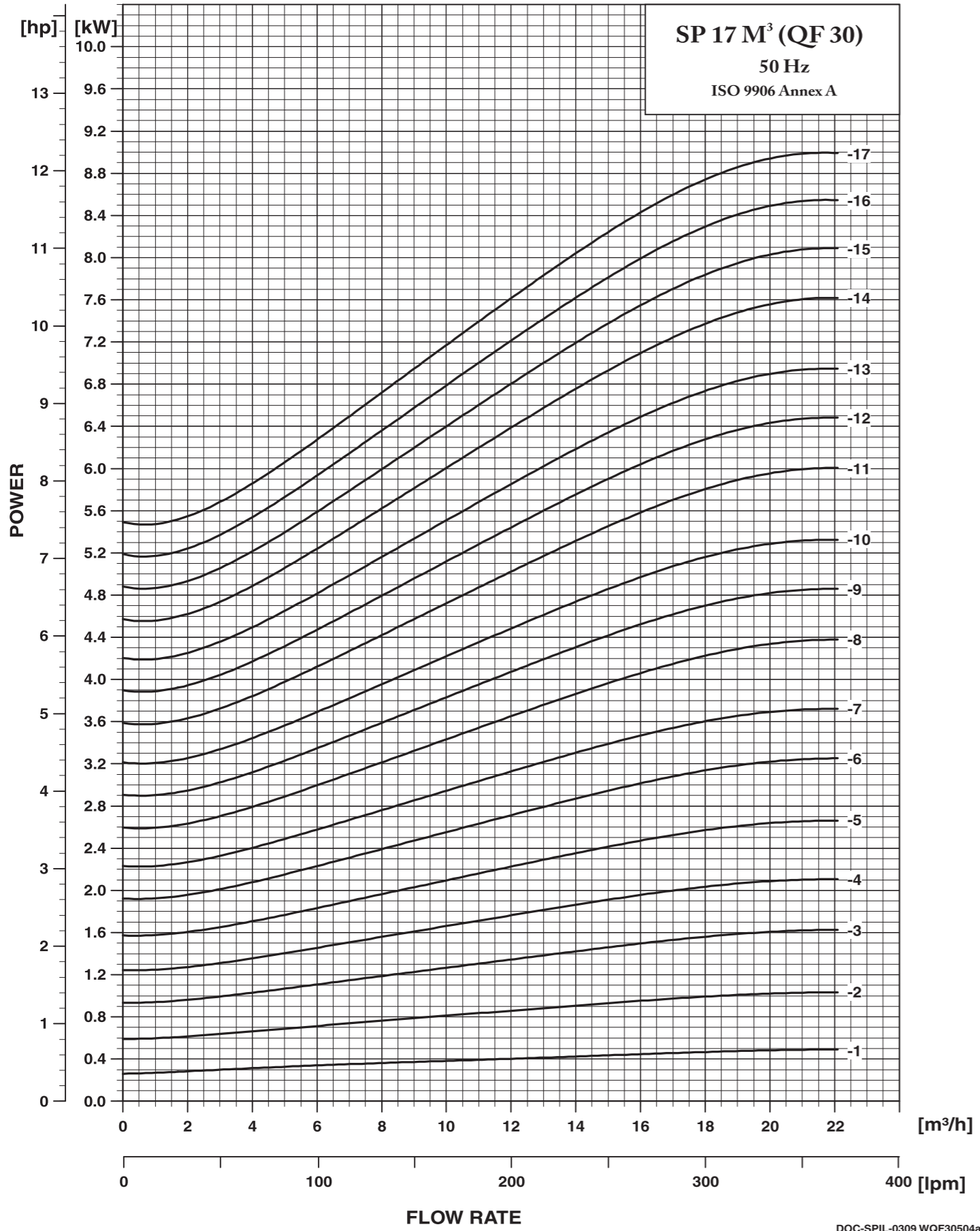
TECHNICAL DATA QF 30													
PUMP TYPE	MOTOR RATING		C	DIMENSIONS (mm)						PUMP WEIGHT (Kg)	NET WEIGHT (Kg)		
	TYPE	POWER (KW)		B		A		D	E*		E**	1X230	3X220V 3X400V
				1X230V	3X220V 3X400V	1X230V	3X220V 3X400V						
QF30-1	RO 100	0.55	318	352	352	670	95	131	-	7	9	9	
QF30-2	RO 100	1.1	378	424	382	802	95	131	-	9	12	10	
QF30-3	RO 101	2.2	439	585	480	1024	95	131	-	10	20	16	
QF30-4	RO 101	2.2	499	585	480	1084	95	131	-	11	20	16	
QF30-5	RO 101	3	439	-	547	-	986	95	131	-	10	19	
QF30-6	RO 101	3	499	-	547	-	1046	95	131	-	11	19	
QF30-7	RO 101	4	560	-	623	-	1183	95	131	-	12	22	
QF30-8	RO 101	4	620	-	623	-	1243	95	131	-	14	22	
QF30-9	RO 101	4	681	-	623	-	1304	95	131	-	15	22	
QF30-10	RO 101	5.5	741	-	737	-	1478	95	131	-	16	27	
QF30-11	RO 101	5.5	802	-	737	-	1539	95	131	-	17	27	
QF30-12	RO 101	5.5	862	-	737	-	1599	95	131	-	18	27	
QF30-13	RO 101	7.5	923	-	814	-	1737	95	131	-	20	32	
QF30-14	RO 101	7.5	983	-	814	-	1797	95	131	-	21	32	
QF30-15	RO 101	7.5	1044	-	814	-	1858	95	131	-	22	32	
QF30-16	MATA SF 150	5.5	758	-	694	-	1452	142	143	145	16	48	
QF30-17	MATA SF 150	5.5	819	-	694	-	1513	142	143	145	17	48	
QF30-18	MATA SF 150	5.5	879	-	694	-	1573	142	143	145	18	48	
QF30-19	MATA SF 150	7.5	940	-	714	-	1654	142	143	145	20	50	
QF30-20	MATA SF 150	7.5	1000	-	714	-	1714	142	143	145	21	50	
QF30-21	MATA SF 150	7.5	1061	-	714	-	1775	142	143	145	22	50	
QF30-22	MATA SF 150	9.3	1121	-	744	-	1865	142	143	145	23	53	
QF30-23	MATA SF 150	9.3	1182	-	744	-	1926	142	143	145	25	53	
QF30-24	MATA SF 150	9.3	1242	-	744	-	1986	142	143	145	26	53	
QF30-25	MATA SF 150	9.3	1303	-	744	-	2047	142	143	145	27	53	
QF30-26	MATA SF 150	11	1363	-	774	-	2137	142	143	145	28	56	
QF30-27	MATA SF 150	11	1424	-	774	-	2198	142	143	145	30	56	
QF30-28	MATA SF 150	11	1484	-	774	-	2258	142	143	145	31	56	
QF30-29	MATA SF 150	13	1545	-	824	-	2369	142	143	145	32	61	
QF30-30	MATA SF 150	13	1605	-	824	-	2429	142	143	145	33	61	
QF30-31	MATA SF 150	13	1666	-	824	-	2490	142	143	145	34	61	
QF30-32	MATA SF 150	13	1726	-	824	-	2550	142	143	145	36	61	
QF30-33	MATA SF 150	15	1787	-	869	-	2656	142	143	145	37	66	
QF30-34	MATA SF 150	15	1847	-	869	-	2716	142	143	145	38	66	
QF30-35	MATA SF 150	15	1908	-	869	-	2777	142	143	145	39	66	
QF30-36	MATA SF 150	18.5	1968	-	914	-	2882	142	143	145	41	70	
QF30-37	MATA SF 150	18.5	2029	-	914	-	2943	142	143	145	42	70	
QF30-38	MATA SF 150	18.5	2089	-	914	-	3003	142	143	145	43	70	
QF30-39	MATA SF 150	18.5	2150	-	914	-	3064	142	143	145	44	70	
QF30-40	MATA SF 150	18.5	2210	-	914	-	3124	142	143	145	46	70	
QF30-41	MATA SF 150	18.5	2271	-	914	-	3185	142	143	145	47	70	
QF30-42	MATA SF 150	22	2331	-	1004	-	3335	142	143	145	48	79	
QF30-43	MATA SF 150	22	2392	-	1004	-	3396	142	143	145	49	79	
QF30-44	MATA SF 150	22	2452	-	1004	-	3456	142	143	145	50	79	
QF30-45	MATA SF 150	22	2513	-	1004	-	3517	142	143	145	52	79	
QF30-46	MATA SF 150	22	2573	-	1004	-	3577	142	143	145	53	79	
QF30-47	MATA SF 150	22	2634	-	1004	-	3638	142	143	145	54	79	
QF30-48	MATA SF 150	22	2694	-	1004	-	3698	142	143	145	55	79	
QF30-49	MATA SF 150	26	2876	-	1109	-	3985	142	143	145	59	90	
QF30-50	MATA SF 150	26	2997	-	1109	-	4106	142	143	145	62	90	
QF30-51	MATA SF 150	26	3178	-	1109	-	4287	142	143	145	65	90	
QF30-52	MATA SF 200	30	3360	-	1209	-	4569	142	143	145	69	100	
QF30-53	MATA SF 200	30	3481	-	1209	-	4690	142	143	145	71	100	
QF30-54	MATA SF 200	37	3602	-	1289	-	4891	142	143	145	74	106	
QF30-55	MATA SF 200	30	3360	-	1140	-	4500	195	195	195	69	172	
QF30-56	MATA SF 200	30	3481	-	1140	-	4621	195	195	195	71	172	
QF30-57	MATA SF 200	37	3602	-	1140	-	4742	195	195	195	74	172	
QF30-58	MATA SF 200	37	3783	-	1140	-	4923	195	195	195	78	172	
QF30-59	MATA SF 200	37	3904	-	1140	-	5044	195	195	195	80	172	

PERFORMANCE TABLE

QF-30	MOTER RATING		TOTEL HEAD IN [m]												
	[KW]	[HP]	12	11	11	11	10	10	9	8	7	6	5	4	
QF30-1	0.55	7.5	12	11	11	11	10	10	9	8	7	6	5	4	
QF30-2	1.1	1.5	22	22	22	22	22	21	20	18	17	15	13	10	
QF30-3	2.2	3	33	33	33	33	32	31	30	28	25	22	19	15	
QF30-4	2.2	3	45	45	44	44	43	42	39	37	34	30	26	21	
QF30-5	4	5.5	56	56	55	55	54	52	49	46	42	37	32	26	
QF30-6	3	5.5	67	67	66	66	65	62	59	55	50	45	38	31	
QF30-7	4	5.5	78	78	78	77	75	73	69	64	59	52	45	36	
QF30-8	5.5	7.5	89	89	89	88	86	83	79	74	67	60	51	41	
QF30-9	5.5	7.5	100	100	100	99	97	93	89	83	76	67	57	46	
QF30-10	5.5	7.5	112	111	111	110	108	104	99	92	84	75	64	51	
QF30-11	7.5	10	123	122	122	121	118	114	108	101	92	82	70	56	
QF30-12	7.5	10	134	134	133	132	129	125	118	110	101	90	77	62	
QF30-13	7.5	10	145	145	144	143	140	135	128	119	109	97	83	67	
QF30-14	9.3	12.5	156	156	155	154	151	145	138	129	118	104	89	72	
QF30-15	9.3	12.5	167	167	166	165	161	156	148	138	126	112	96	77	
QF30-16	9.3	12.5	178	178	177	176	172	166	158	147	134	119	102	82	
QF30-17	9.3	12.5	190	189	188	187	183	176	167	156	143	127	108	87	
QF30-18	11	15	201	200	199	198	194	187	177	165	151	134	115	92	
QF30-19	11	15	212	211	211	209	204	197	187	175	160	142	121	97	
QF30-20	11	15	223	223	222	220	215	208	197	184	168	149	128	103	
QF30-21	13	17.5	234	234	233	231	226	218	207	193	176	157	134	108	
QF30-22	13	17.5	245	245	244	242	237	228	217	202	185	164	140	113	
QF30-23	13	17.5	256	256	255	253	247	239	227	211	193	172	147	118	
QF30-24	13	17.5	268	267	266	264	258	249	236	221	202	179	153	123	
QF30-25	15	20	279	278	277	275	269	260	246	230	210	187	160	128	
QF30-26	15	20	290	289	288	285	280	270	256	239	218	194	166	133	
QF30-27	15	20	301	301	299	296	290	280	266	248	227	201	172	139	
QF30-28	18.5	25	312	312	310	307	301	291	276	257	235	209	179	144	
QF30-29	18.5	25	323	323	321	318	312	301	286	267	244	216	185	149	
QF30-30	18.5	25	335	334	332	329	323	311	296	276	252	224	191	154	
QF30-31	18.5	25	346	345	343	340	333	322	305	285	260	231	198	159	
QF30-32	18.5	25	357	356	355	351	344	332	315	294	269	239	204	164	
QF30-33	18.5	25	368	367	366	362	355	343	325	303	277	246	211	169	
QF30-34	22	30	379	378	377	373	366	353	335	312	286	254	217	174	
QF30-35	22	30	390	390	388	384	376	363	345	322	294	261	223	180	
QF30-36	22	30	401	401	399	395	387	374	355	331	302	269	230	185	
QF30-37	22	30	413	412	410	406	398	384	364	340	311	276	236	190	
QF30-38	22	30	424	423	421	417	409	394	374	349	319	283	242	195	
QF30-39	22	30	435	434	432	428	419	405	384	358	328	291	249	200	
QF30-40	22	30	446	445	443	439	430	415	394	368	336	298	255	205	
QF30-43	26	35	4												

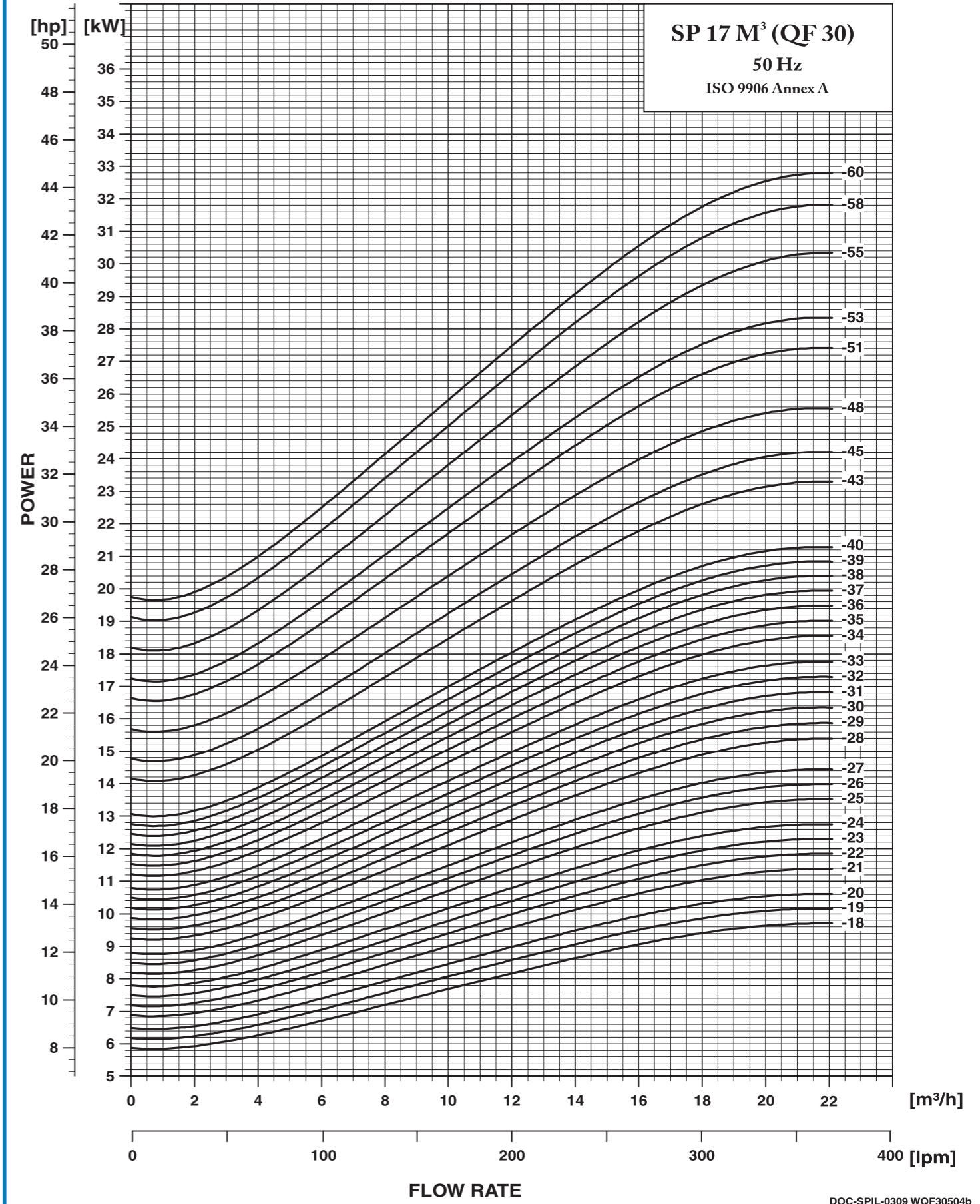
Performance Curve

Submersible Pump
QF30



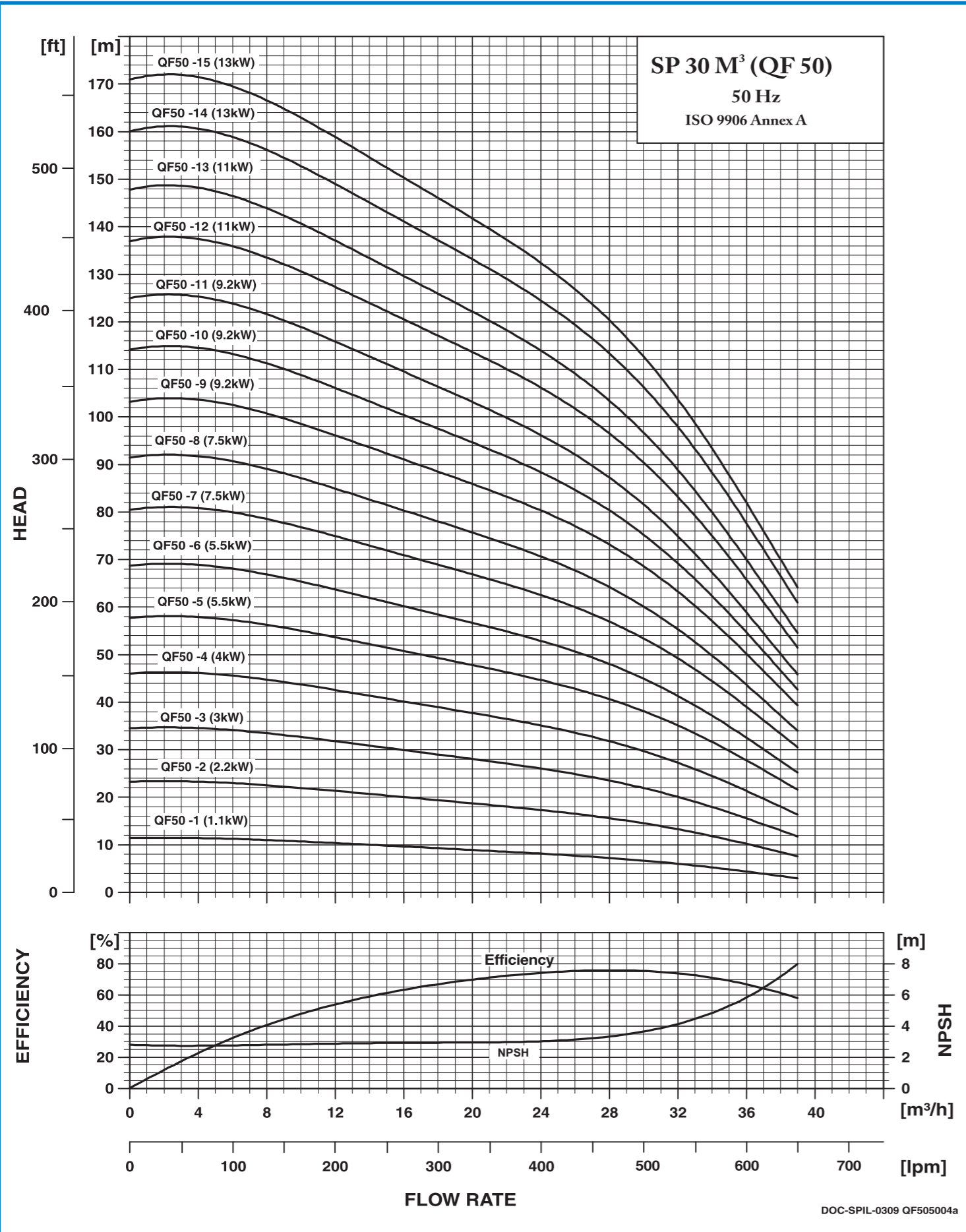
Performance Curve

Submersible Pump
QF30



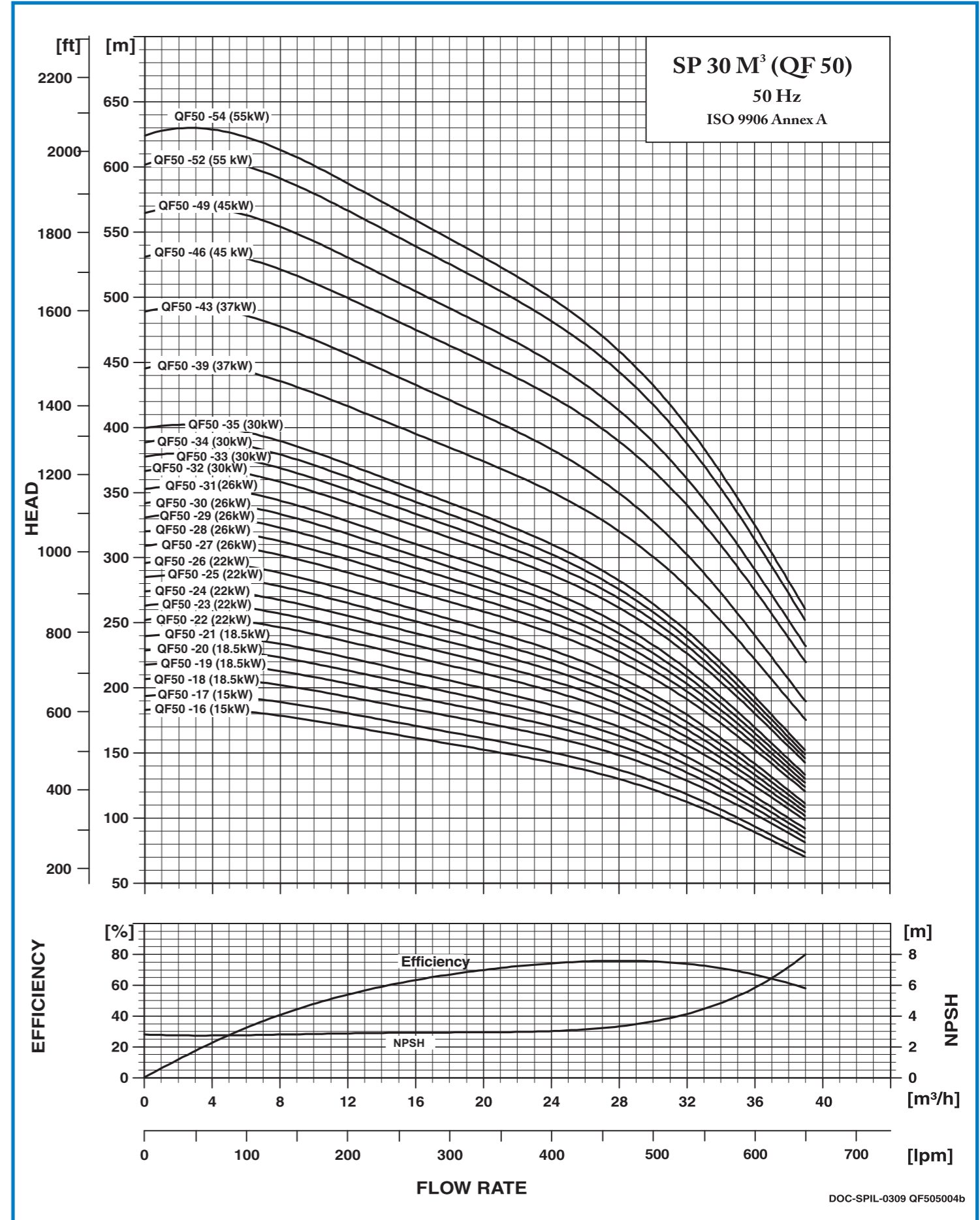
Performance Curve

Submersible Pump
QF50

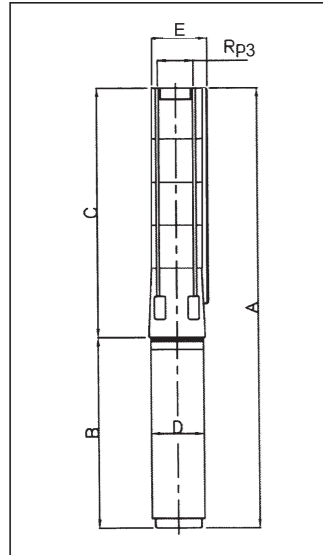


Performance Curve

Submersible Pump
QF50



Dimensions and Weights



QF50-39 to QF50-54 are mounted in sleeve R 3" connection

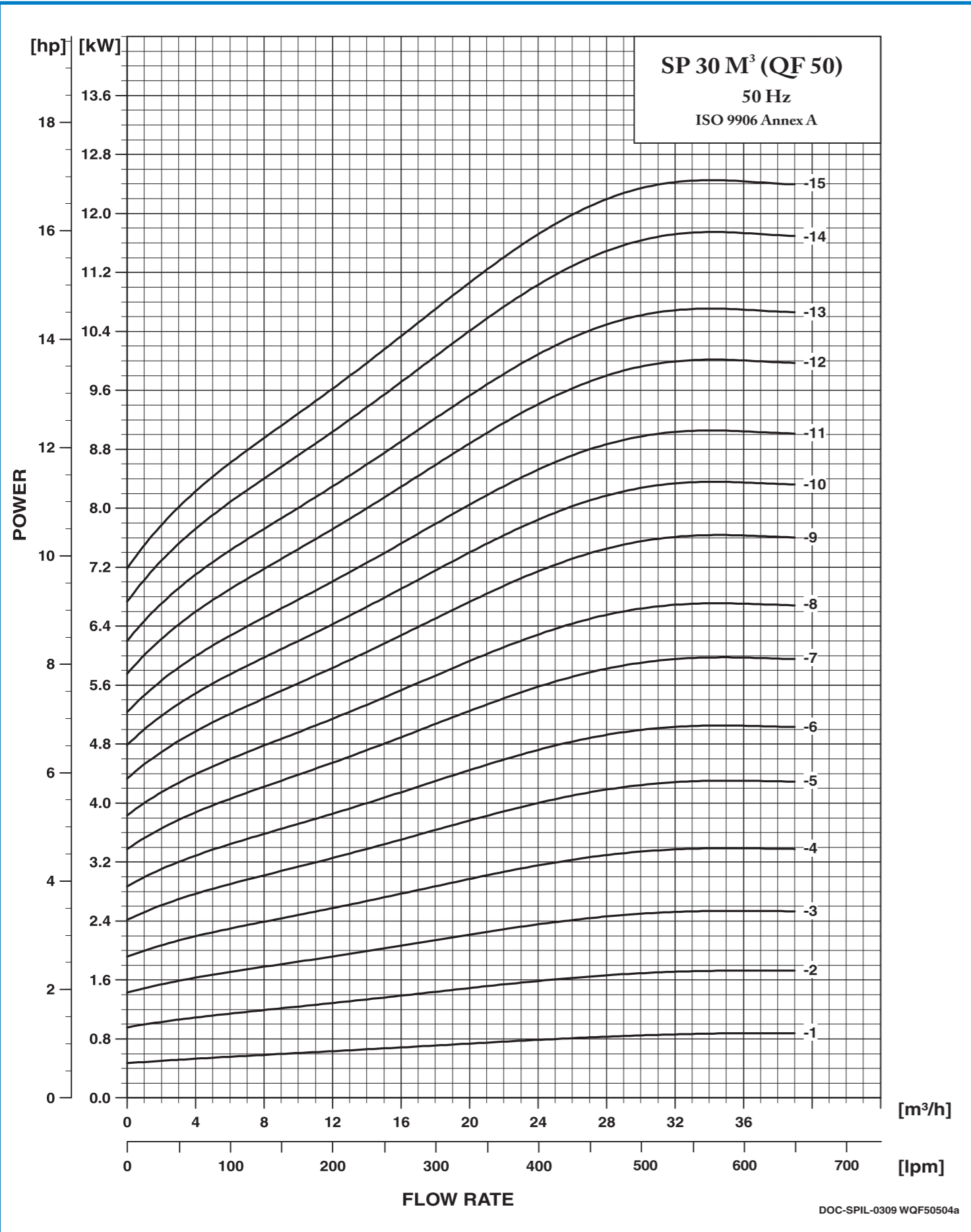
TECHNICAL DATA QF 50													
PUMP TYPE	MOTOR		DIMENSIONS (mm)							NET WEIGHT (Kg)			
	TYPE	POWER (KW)	C	B		A		D	E	E**	PUMP WEIGHT (Kg)	1X230	
				1X230V	3X220V	1X230V	3X220V					3X400V	3X400V
QF50 - 1	RO 100	1.1	353	424	382	777	735	95	131		8	12	10
QF50 - 2	RO 101	2.2	449	585	480	1034	929	95	131		10	21	16
QF50 - 3	RO 101	3.0	545	-	547	-	1092	95	131		12		19
QF50 - 4	RO 101	4.0	641	-	623	-	1264	95	131		14		22
QF50 - 5	RO 101	5.5	737	-	737	-	1474	95	131		16		27
QF50 - 6	RO 101	5.5	833	-	737	-	1570	95	131		18		27
QF50 - 7	RO 101	7.5	929	-	814	-	1743	95	131		20		32
QF50 - 8	RO 101	7.5	1025	-	814	-	1839	95	131		22		32
QF50 - 5	MATA SF 150	5.5	754	-	694	-	1448	142	143	145	16		48
QF50 - 6	MATA SF 150	5.5	850	-	694	-	1544	142	143	145	18		48
QF50 - 7	MATA SF 150	7.5	946	-	714	-	1660	142	143	145	20		50
QF50 - 8	MATA SF 150	7.5	1042	-	714	-	1756	142	143	145	22		50
QF50 - 9	MATA SF 150	9.3	1138	-	744	-	1882	142	143	145	24		53
QF50 - 10	MATA SF 150	9.3	1234	-	744	-	1978	142	143	145	25		53
QF50 - 11	MATA SF 150	9.3	1330	-	744	-	2074	142	143	145	27		53
QF50 - 12	MATA SF 150	11	1426	-	774	-	2200	142	143	145	29		56
QF50 - 13	MATA SF 150	11	1522	-	774	-	2296	142	143	145	31		56
QF50 - 14	MATA SF 150	13	1618	-	824	-	2442	142	143	145	33		61
QF50 - 15	MATA SF 150	13	1714	-	824	-	2538	142	143	145	35		61
QF50 - 16	MATA SF 150	15	1810	-	869	-	2679	142	143	145	37		66
QF50 - 17	MATA SF 150	15	1906	-	869	-	2775	142	143	145	39		66
QF50 - 18	MATA SF 150	18.5	2002	-	914	-	2916	142	143	145	41		70
QF50 - 19	MATA SF 150	18.5	2098	-	914	-	3012	142	143	145	42		70
QF50 - 20	MATA SF 150	18.5	2194	-	914	-	3108	142	143	145	44		70
QF50 - 21	MATA SF 150	18.5	2290	-	914	-	3204	142	143	145	46		70
QF50 - 22	MATA SF 150	22	2386	-	1004	-	3390	142	143	145	48		79
QF50 - 23	MATA SF 150	22	2482	-	1004	-	3486	142	143	145	50		79
QF50 - 24	MATA SF 150	22	2578	-	1004	-	3582	142	143	145	52		79
QF50 - 25	MATA SF 150	22	2674	-	1004	-	3678	142	143	145	54		79
QF50 - 26	MATA SF 150	22	2770	-	1004	-	3774	142	143	145	56		79
QF50 - 27	MATA SF 150	26	2866	-	1109	-	3975	142	143	145	58		90
QF50 - 28	MATA SF 150	26	2962	-	1109	-	4071	142	143	145	59		90
QF50 - 29	MATA SF 150	26	3058	-	1109	-	4167	142	143	145	61		90
QF50 - 30	MATA SF 150	26	3154	-	1109	-	4263	142	143	145	63		90
QF50 - 31	MATA SF 150	26	3250	-	1109	-	4359	142	143	145	65		90
QF50 - 32	MATA SF 150	30	3346	-	1209	-	4555	142	143	145	67		100
QF50 - 33	MATA SF 150	30	3442	-	1209	-	4651	142	143	145	69		100
QF50 - 34	MATA SF 150	30	3538	-	1209	-	4747	142	143	145	71		100
QF50 - 35	MATA SF 150	30	3634	-	1209	-	4843	142	143	145	73		100
QF50 - 31	MATA SF 200	26.0	3278	-	-	-	-	195	195	195	65		
QF50 - 32	MATA SF 200	30.0	3374	-	1140	-	4514	195	195	195	67		172
QF50 - 33	MATA SF 200	30.0	3470	-	1140	-	4610	195	195	195	69		172
QF50 - 34	MATA SF 200	30.0	3566	-	1140	-	4706	195	195	195	71		172
QF50 - 35	MATA SF 200	30.0	3662	-	1140	-	4802	195	195	195	73		172
QF50 - 39	MATA SF 200	37.0	4046	-	1140	-	5186	195	195	195	80		172
QF50 - 43	MATA SF 200	37.0	4430	-	1140	-	5570	195	195	195	88		172
QF50 - 46	MATA SF 200	45.0	4718	-	1230	-	5948	195	195	195	93		188
QF50 - 49	MATA SF 200	45.0	5006	-	1230	-	6236	195	195	195	99		188
QF50 - 52	MATA SF 200	55.0	5294	-	1340	-	6634	195	195	195	105		211
QF50 - 54	MATA SF 200	55.0	5486	-	1340	-	6826	195	195	195	109		211

PERFORMANCE TABLE

QF-50	DISCHARGE (Q)											
	m 3/h	0	4	8	12	16	20	24	28	32	39	
	l/min.	0	67	100	200	267	334	400	467	533	650	
MODEL	MOTOR RATING		TOTAL HEAD IN [m]									
	[KW]	[HP]	12	12	12	11	11	10	9	9	8	5
Qf50 - 1	1.1	1.5	12	12	12	11	11	10	9	9	8	5
QF50 - 2	2.2	3	24	24	23	22	21	20	19	17	15	10
QF50 - 3	3	4	35	35	35	33	32	30	28	26	23	15
QF50 - 4	4	5.5	47	47	46	44	42	40	38	34	30	19
QF50 - 5	5.5	7.5	59	59	58	55	53	50	47	43	38	24
QF50 - 6	5.5	7.5	71	71	69	66	63	60	56	52	45	29
QF50 - 7	7.5	10	82	83	81	77	74	70	66	60	53	34
QF50 - 8	7.5	10	94	95	92	88	84	80	75	69	60	39
QF50 - 9	9.3	12.5	106	106	104	99	95	90	84	77	68	44
QF50 - 10	9.3	12.5	118	118	115	110	105	100	94	86	75	49
QF50 - 11	9.3	12.5	129	130	127	121	116	110	103	95	83	53
QF50 - 12	11	15	141	142	138	132	126	120	113	103	90	58
QF50 - 13	11	15	153	154	150	143	137	129	122	112	98	63
QF50 - 14	13	17.5	165	166	162	154	147	139	131	120	105	68
QF50 - 15	13	17.5	177	177	173	165	158	149	141	129	113	73
QF50 - 16	15	20	188	189	185	176	168	159	150	138	120	78
QF50 - 17	15	20	200	201	196	187	179	169	159	146	128	82
QF50 - 18	18.5	25	212	213	208	198	189	179	169	155	135	87
QF50 - 19	18.5	25	224	225	219	209	200	189	178	163	143	92
QF50 - 20	18.5	25	235	237	231	220	210	199	188	172	150	97
QF50 - 21	18.5	25	247	248	242	231	221	209	197	181	158	102
QF50 - 22	22	30	259	260	254	242	231	219	206	189	165	107
QF50 - 23	22	30	271	272	265	253	242	229	216	198	173	112
QF50 - 24	22	30	282	284	277	264	252	239	225	206	180	116
QF50 - 25	22	30	294	296	289	275	263	249	235	215	188	121
QF50 - 26	22	30	306	308	300	286	273	259	244	224	196	126
QF50 - 27	26	35	318	319	312	297	284	269	253	232	203	131
QF50 - 28	26	35	330	331	323	308	294	279	263	241	211	136
QF50 - 29	26	35	341	343	335	319	305	289	272	249	218	141
QF50 - 30	26	35	353	355	346	330	315	299	281	258	226	146
QF50 - 31	26	35	365	367	358	341	326	309	291	267	233	150
QF50 - 32	30	40	377	379	369	352	336	319	300	275	241	155
QF50 - 33	30	40	388	390	381	363	347	329	310	284	248	160
QF50 - 34	30	40	400	402	392	374	357	339	319	292	256	165
QF50 - 35	30	40	412	414	404	385	368	349	328	301	263	170
QF50 - 39	37	50	459	461	450	429	410	388	366	335	293	189
QF50 - 43	37	50	506	509	496	473	452	428	403	370	323	209
QF50 - 46	45	60	541	544	531	506	483	458	431	396	346	223
QF50 - 49	45	60	577	580	565	539	515	488	460	421	368	238

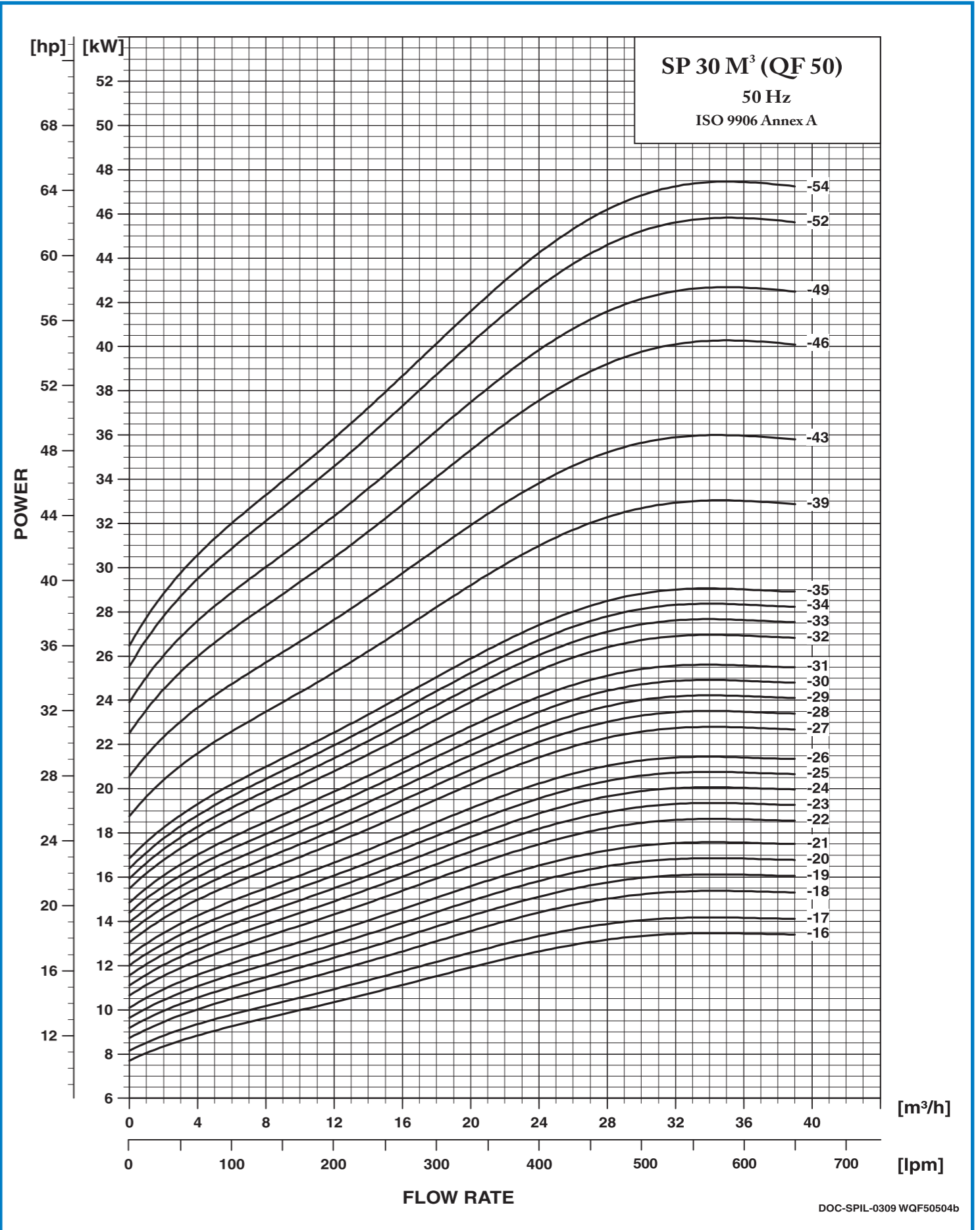
Performance Curve

Submersible Pump
QF50



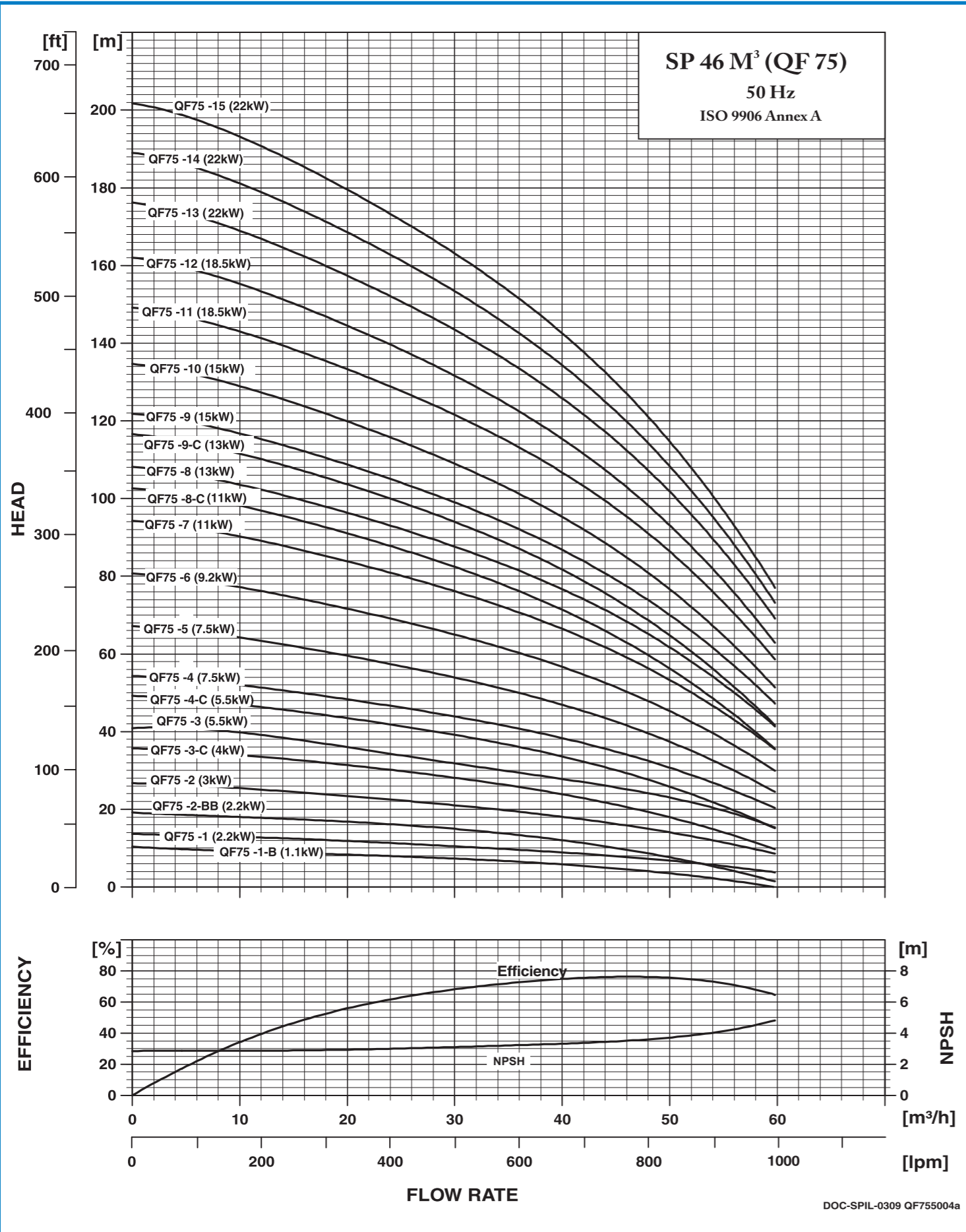
Performance Curve

Submersible Pump
QF50



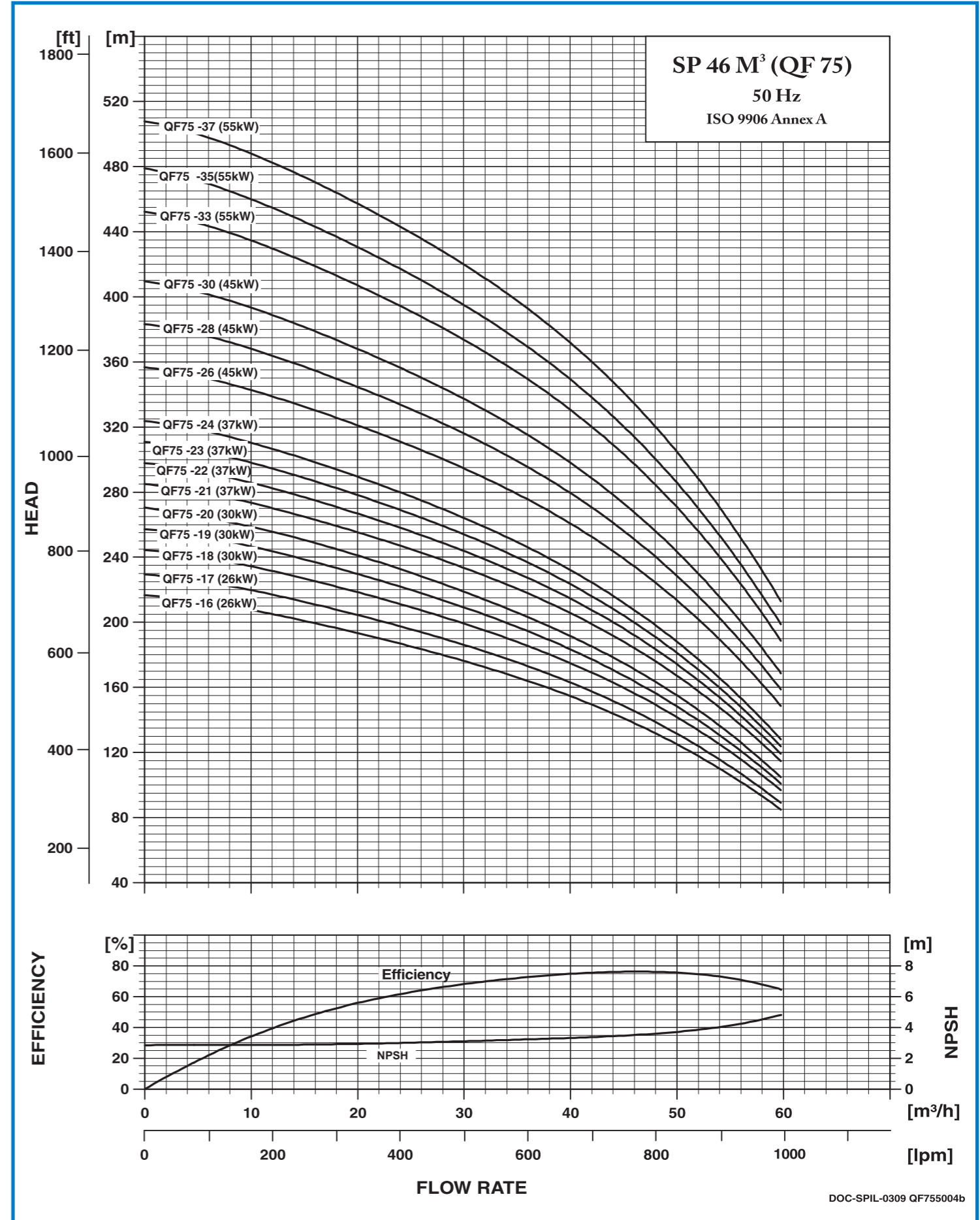
Performance Curve

Submersible Pump
QF75

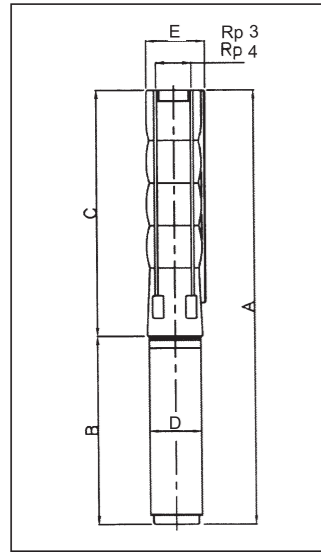


Performance Curve

Submersible Pump
QF75



Dimensions and Weights



QF75-26 to QF75-37 are mounted in sleeve R 4" connection

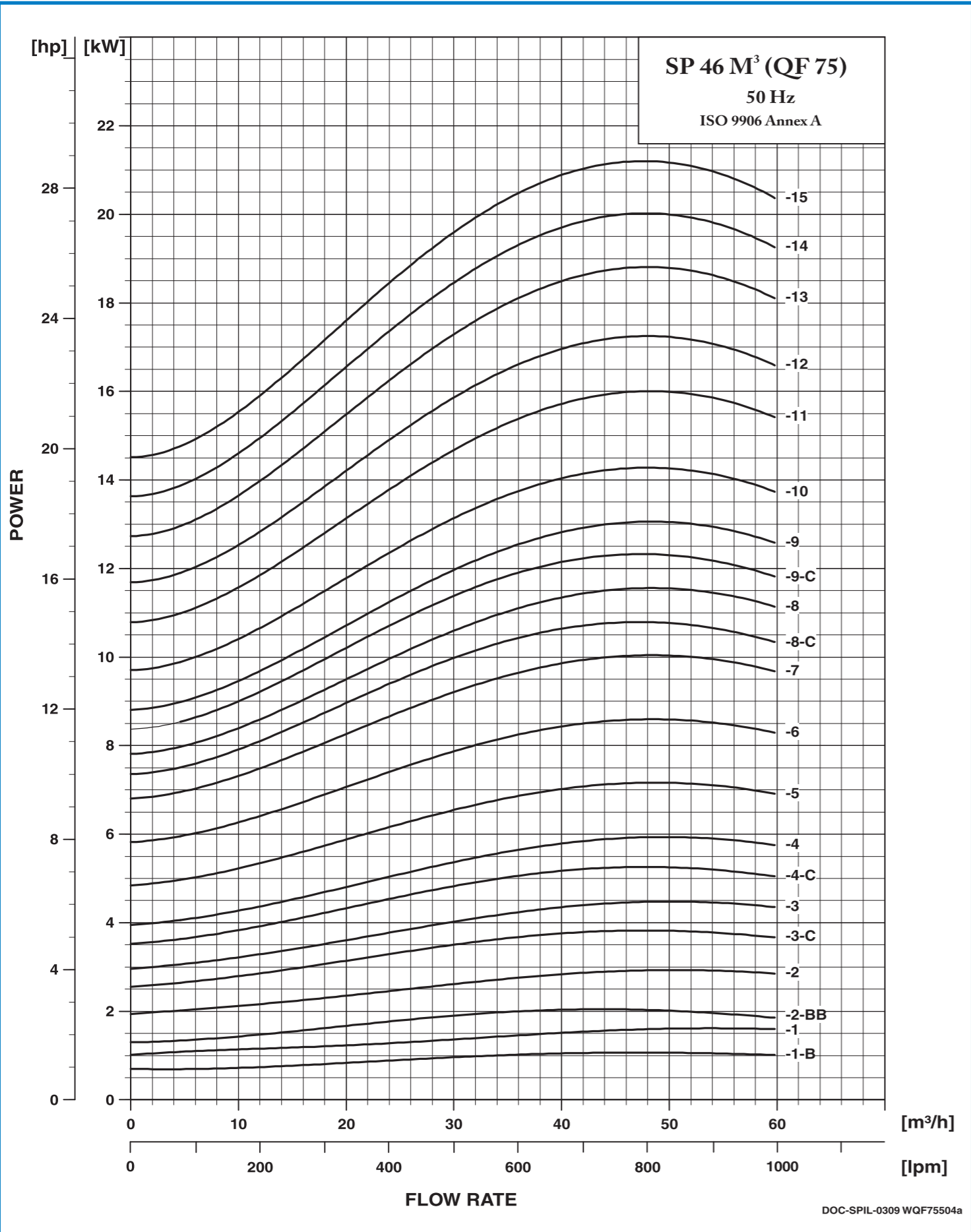
TECHNICAL DATA QF 7 5														
PUMP TYPE	MOTOR TYPE	POWER (KW)	DIMENSIONS (mm)								NET WEIGHT (Kg)			
			Rp 3" CONNECTION				Rp 4" CONNECTION				PUMP	MOTOR		
			A	C	E*	E**	A	C	E*	E**			B	D
QF75-1-B	RO 100	1.1	772	390	150		772	390	150		382		6	
QF75-1	RO 100	2.2	-	390	150		-	390	150		-		6	
QF75-2-BB	RO 100	2.2	-	503	150		-	503	150		-		8	
QF75-1	RO 101	2.2	870	390	150		870	390	150		480		6	
QF75-2-BB	RO 101	2.2	983	503	150		983	503	150		480		8	
QF75-2	RO 101	3	1050	503	150		1050	503	150		547		8	
QF75-3-C	RO 101	4	1239	616	150		1239	616	150		623		11	
QF75-3	RO 101	5.5	1353	616	150		1353	616	150		737		11	
QF75-4-C	RO 101	5.5	1466	729	150		1466	729	150		737		13	
QF75-4	RO 101	7.5	1543	729	150		1543	729	150		814		13	
QF75-5	RO 101	7.5	1656	842	150		1656	842	150		814		15	
QF75-3-C	MATASF 150	4	1310	616	150	155	1310	616	150	155	694	142	11	48
QF75-3	MATASF 150	5.5	1310	616	150	155	1310	616	150	155	694	142	11	48
QF75-4-C	MATASF 150	5.5	1423	729	150	155	1423	729	150	155	694	142	13	48
QF75-4	MATASF 150	7.5	1443	729	150	155	1443	729	150	155	714	142	13	50
QF75-5	MATASF 150	7.5	1556	842	150	155	1556	842	150	155	714	142	15	50
QF75-6	MATASF 150	9.2	1699	955	150	155	1699	955	150	155	744	142	18	53
QF75-7	MATASF 150	11	1842	1068	150	155	1842	1068	150	155	774	142	20	56
QF75-8C	MATASF 150	11	1955	1181	150	155	1955	1181	150	155	774	142	22	56
QF75-8	MATASF 150	13	2005	1181	150	155	2005	1181	150	155	824	142	22	61
QF75-9C	MATASF 150	13	2118	1294	150	155	2118	1294	150	155	824	142	24	61
QF75-9	MATASF 150	15	2163	1294	150	155	2163	1294	150	155	869	142	24	66
QF75-10	MATASF 150	15	2276	1407	150	155	2276	1407	150	155	869	142	27	66
QF75-11	MATASF 150	18.5	2434	1520	150	155	2434	1520	150	155	914	142	29	70
QF75-12	MATASF 150	18.5	2547	1633	150	155	2547	1633	150	155	914	142	31	70
QF75-13	MATASF 150	22	2750	1746	150	155	2750	1746	150	155	1004	142	34	79
QF75-14	MATASF 150	22	2863	1859	150	155	2863	1859	150	155	1004	142	36	79
QF75-15	MATASF 150	22	2976	1972	150	155	2976	1972	150	155	1004	142	38	79
QF75-16	MATASF 150	26	3194	2085	150	155	3194	2085	150	155	1109	142	41	90
QF75-17	MATASF 150	26	3307	2198	150	155	3307	2198	150	155	1109	142	43	90
QF75-18	MATASF 150	30	3520	2311	150	155	3520	2311	150	155	1209	142	45	100
QF75-19	MATASF 150	30	3633	2424	150	155	3633	2424	150	155	1209	142	47	100
QF75-20	MATASF 150	30	3746	2537	150	155	3746	2537	150	155	1209	142	50	100
QF75-18	MATASF 200	30	3451	2311	195	195	3451	2311	195	195	1140	195	45	172
QF75-19	MATASF 200	30	3564	2424	195	195	3564	2424	195	195	1140	195	47	172
QF75-20	MATASF 200	30	3677	2537	195	195	3677	2537	195	195	1140	195	50	172
QF75-21	MATASF 200	37	3790	2650	195	195	3790	2650	195	195	1140	195	52	172
QF75-22	MATASF 200	37	3903	2763	195	195	3903	2763	195	195	1140	195	54	172
QF75-23	MATASF 200	37	4016	2876	195	195	4016	2876	195	195	1140	195	57	172
QF75-24	MATASF 200	37	4129	2989	195	195	4129	2989	195	195	1140	195	59	172
QF75-26	MATASF 200	45			195	195	4445	3215	195	195	1230	195	64	188
QF75-28	MATASF 200	45			195	195	4671	3441	195	195	1230	195	68	188
QF75-30	MATASF 200	45			195	195	4897	3667	195	195	1230	195	73	188
QF75-33	MATASF 200	55			195	195	5346	4006	195	195	1340	195	80	211
QF75-35	MATASF 200	55			195	195	5572	4232	195	195	1340	195	84	211
QF75-37	MATASF 200	55			195	195	5798	4458	195	195	1340	195	89	211

PERFORMANCE TABLE

QF-75	DISCHARGE (Q)														
	m³/h	0	5	10	15	20	25	30	35	40	45	50	55	59.8	
	l/min.	0	83.3	166.7	250	333.3	416.7	500	583.3	666.7	750	833.3	916.7	996.7	
MODEL	MOTOR RATING		TOTAL HEAD IN [m]												
	[KW]	[HP]	19	19	18	17	17	16	15	14	12	10	8	5	1
QF75-2-BB	2.2	3	19	19	18	17	17	16	15	14	12	10	8	5	1
QF75-2	3	4	27	26	25	24	25	23	22	20	18	16	14	11	9
QF75-3-C	4	5.5	36	35	34	33	31	30	28	26	24	21	18	14	10
QF75-3	5.5	7.5	41	40	40	38	37	36	34	32	30	28	25	21	17
QF75-4-C	5.5	7.5	49	48	47	45	43	41	39	37	34	30	26	21	15
QF75-4	7.5	10	55	54	53	51	49	47	45	43	40	37	33	28	23
QF75-5	7.5	10	69	67	66	64	62	59	57	54	50	46	41	35	29
QF75-6	9.2	12.5	82	81	79	77	74	71	68	64	60	55	49	42	34
QF75-7	11	15	96	94	92	89	86	83	79	75	70	64	57	49	40
QF75-8C	11	15	103	101	98	95	91	87	82	77	71	64	56	46	36
QF75-8	13	17.5	110	108	105	102	99	95	91	86	80	73	66	56	46
QF75-9C	13	17.5	117	115	112	108	104	99	94	88	82	74	65	54	42
QF75-9	15	20	123	121	119	115	111	107	102	97	90	83	74	63	52
QF75-10	15	20	137	135	132	128	123	119	113	107	100	92	82	70	57
QF75-11	18.5	25	151	148	145	141	136	130	125	118	110	101	90	77	63
QF75-12	18.5	25	164	162	158	153	148	142	136	129	120	110	99	84	69
QF75-13	22	30	178	175	171	166	160	154	147	139	130	119	107	91	74
QF75-14	22	30	192	189	185	179	173	166	159	150	140	129	115	98	80
QF75-15	22	30	206	202	198	192	185	178	170	161	150	138	123	105	86
QF75-16	26	35	219	216	211	204	197	190	181	172	160	147	131	112	92
QF75-17	26	35	233	229	224	217	210	201	193	182	171	156	140	120	97
QF75-18	30	40	247	243	237	230	222	213	204	193	181	165	148	127	103
QF75-19	30	40	260	256	250	243	234	225	215	204	191	174	156	134	109
QF75-20	30	40	274	270	264	256	247	237	227	215	201	184	164	141	115
QF75-21	37	50	288	283	277	268	259	249	238	225	211	193	172	148	120
QF75-22	37	50	301	297	290	281	271	261	249	236	221	202	181	155	126
QF75-23	37	50	315	310	303	294	284	273	261	247	231	211	189	162	132
QF75-24	37	50	329	324	316	307	296	284	272	258	241	220	197	169	138
QF75-26	45	60	356	350	343	332	321	308	295	279	261	239	213	183	149
QF75-28	45	60	384	377	369	358	345	332	317	300	281	257	230	197	160
QF75-30	45	60	411	404	395	383	370	356	340	322	301	275	246	211	172
QF75-33	55	75	452	445	435	422	407	391	374	354	331	303	271	232	189

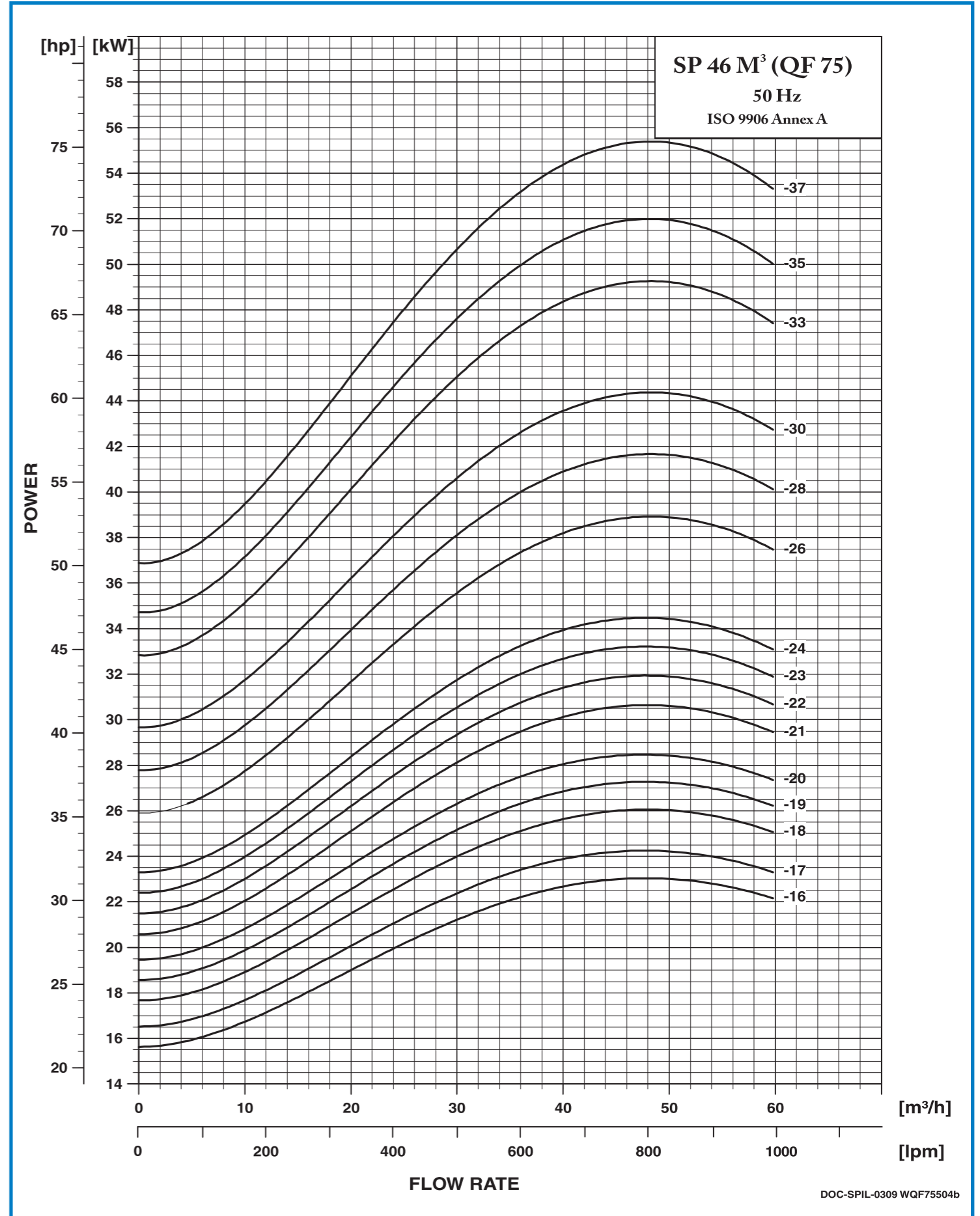
Performance Curve

Submersible Pump
QF75



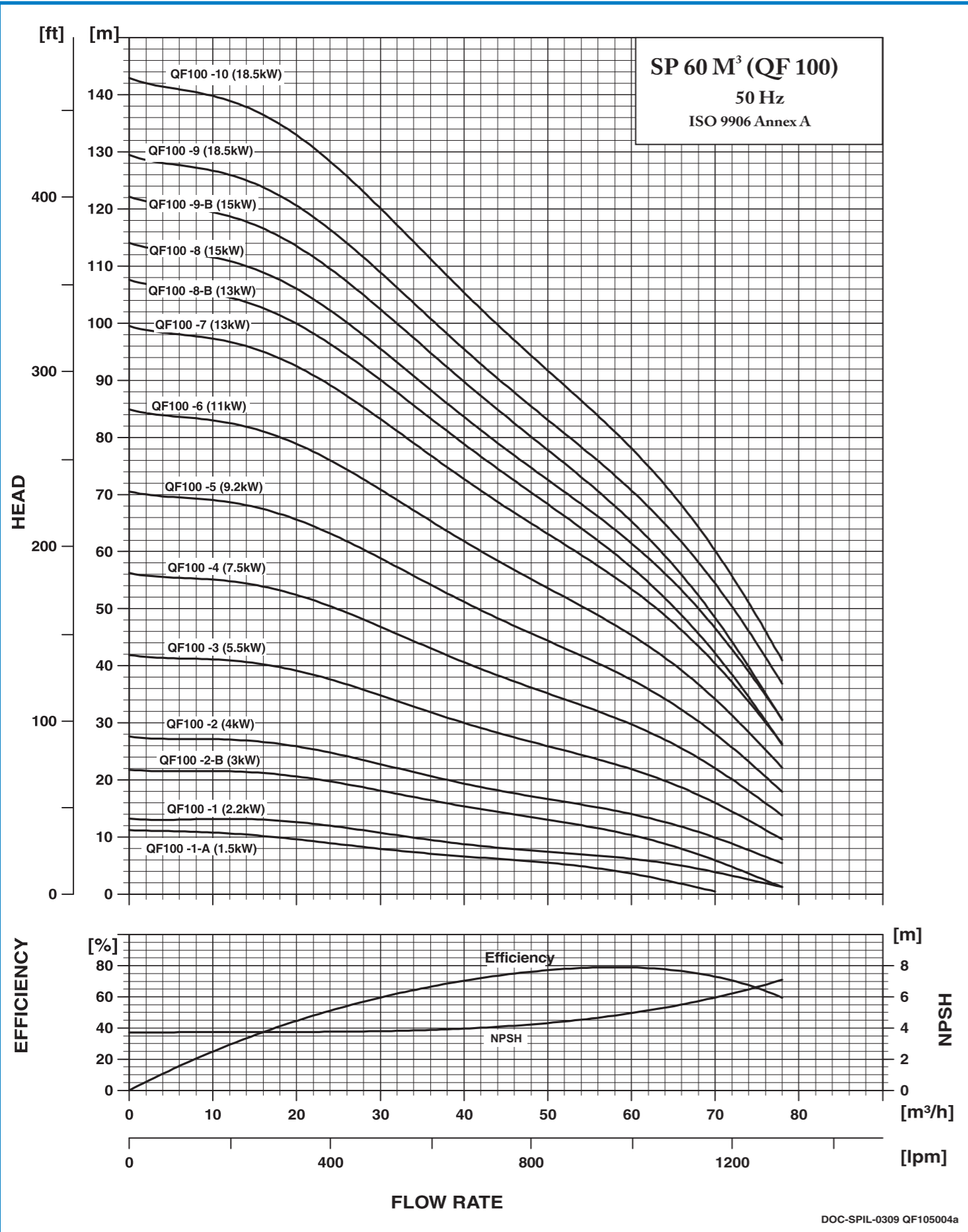
Performance Curve

Submersible Pump
QF75



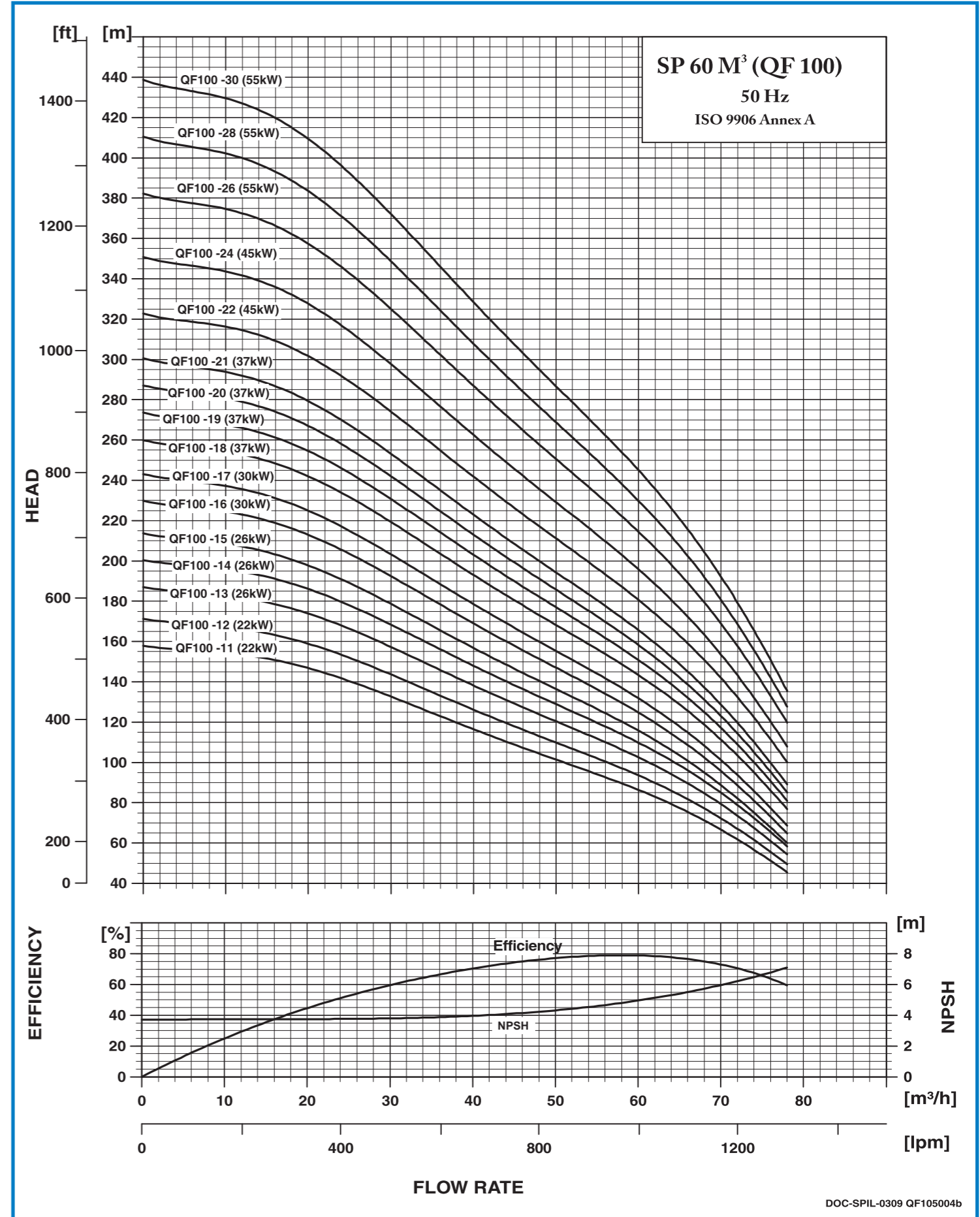
Performance Curve

Submersible Pump
QF100

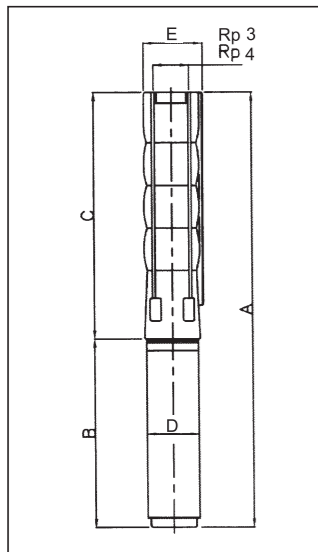


Performance Curve

Submersible Pump
QF100



Dimensions and Weights



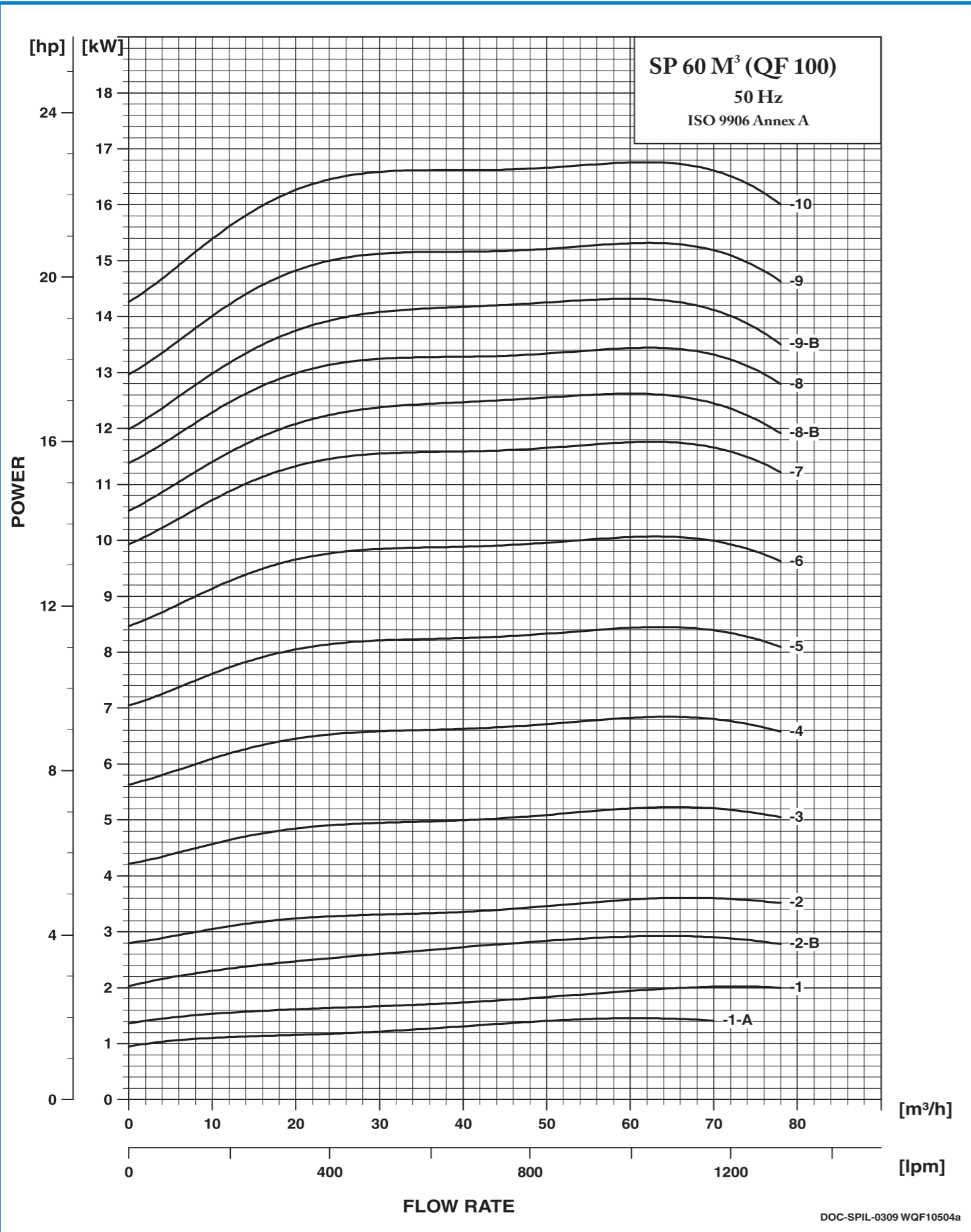
TECHNICAL DATA QF 100														
PUMP TYPE	MOTOR		DIMENSIONS (mm)								NET WEIGHT (Kg)			
	TYPE	POWER (KW)	Rp 3" CONNECTION				Rp 4" CONNECTION				PUMP	MOTOR		
			A	C	E*	E**	A	C	E*	E**				
QF 100-1-A	RO 100	1.5	812	390	150		812	390	150		422	95	6	
QF 100-1-A	RO 101	1.5	804	390	150		804	390	150		414	95	6	
QF100-1	RO 101	2.2	870	390	150		870	390	150		480	95	6	
QF100-2-B	RO 101	3	1050	503	150		1050	503	150		547	95	8	
QF100-2	RO 101	4	1126	503	150		1126	503	150		623	95	8	
QF100-3	RO 101	5.5	1353	616	150		1353	616	150		737	95	11	
QF100-4	RO 101	7.5	1543	729	150		1543	729	150		814	142	13	
QF100-3	MATASF 150	5.5	1310	616	150	155	1310	616	150	155	694	142	11	48
QF100-4	MATASF 150	7.5	1443	729	150	155	1443	729	150	155	714	142	13	50
QF100-5	MATASF 150	9.2	1586	842	150	155	1586	842	150	155	744	142	15	53
QF100-6	MATASF 150	11	1729	955	150	155	1729	955	150	155	774	142	17	56
QF100-7	MATASF 150	13	1892	1068	150	155	1892	1068	150	155	824	142	20	61
QF100-8-B	MATASF 150	13	2005	1181	150	155	2005	1181	150	155	824	142	22	61
QF 100-8	MATASF 150	15	2050	1181	150	155	2050	1181	150	155	869	142	22	66
QF100-9-B	MATASF 150	15	2163	1294	150	155	2163	1294	150	155	869	142	24	66
QF100-9	MATASF 150	18.5	2208	1294	150	155	2208	1294	150	155	914	142	24	70
QF100-10	MATASF 150	18.5	2321	1407	150	155	2321	1407	150	155	914	142	26	70
QF100-11	MATASF 150	22	2524	1520	150	155	2524	1520	150	155	1004	142	29	79
QF100-12	MATASF 150	22	2637	1633	150	155	2637	1633	150	155	1004	142	31	79
QF100-13	MATASF 150	26	2855	1746	150	155	2855	1746	150	155	1109	142	33	90
QF100-14	MATASF 150	26	2968	1859	150	155	2968	1859	150	155	1109	142	35	90
QF100-15	MATASF 150	26	3081	1972	150	155	3081	1972	150	155	1109	142	38	90
QF100-16	MATASF 150	30	3294	2085	150	155	3294	2085	150	155	1209	142	40	100
QF100-17	MATASF 150	30	3407	2198	150	155	3407	2198	150	155	1209	142	42	100
QF100-16	MATASF 200	30	3253	2113	195	195	3253	2113	195	195	1140	195	40	172
QF100-17	MATASF 200	30	3366	2226	195	195	3366	2226	195	195	1140	195	42	172
QF100-18	MATASF 200	37	3479	2339	195	195	3479	2339	195	195	1140	195	44	172
QF100-19	MATASF 200	37	3592	2452	195	195	3592	2452	195	195	1140	195	47	172
QF100-20	MATASF 200	37	3705	2565	195	195	3705	2565	195	195	1140	195	49	172
QF100-21	MATASF 200	37	3818	2678	195	195	3818	2678	195	195	1140	195	51	172
QF100-22	MATASF 200	45	4021	2791	195	195	4021	2791	195	195	1230	195	53	188
QF100-24	MATASF 200	45					4219	2989	195	195	1230	195	58	188
QF100-26	MATASF 200	55					4555	3215	195	195	1340	195	62	211
QF100-28	MATASF 200	55					4781	3441	195	195	1340	195	67	211
QF100-30	MATASF 200	55					5007	3667	195	195	1340	195	71	211

PERFORMANCE TABLE

QF-100		DISCHARGE (Q)									
		m 3/h	0	10	20	30	40	50	60	70	78
		l/min.	0	166.7	333.3	500.0	666.7	833.3	1000.0	1166.7	1300.0
MODEL	MOTOR RATING		TOTAL HEAD IN [m]								
	[KW]	[HP]									
QF100-2-B	3	4	22	22	21	18	15	13	10	6	1
QF100-2	4	5.5	29	29	27	25	22	19	16	13	9
QF100-3	5.5	7.5	44	43	41	37	33	29	25	19	14
QF100-4	7.5	10	59	57	55	50	44	38	33	26	18
QF100-5	9.2	12.5	73	72	69	62	55	48	41	32	23
QF100-6	11	15	88	86	82	75	66	58	49	39	27
QF100-7	13	17.5	103	101	96	87	77	67	58	45	32
QF100-8-B	13	17.5	108	105	100	90	79	68	57	42	26
QF 100-8	15	20	117	115	110	100	88	77	66	52	36
QF100-9-B	15	20	122	119	113	102	90	78	65	48	30
QF100-9	18.5	25	132	129	124	112	99	86	74	58	41
QF100-10	18.5	25	147	144	137	125	110	96	82	65	46
QF100-11	22	30	161	158	151	137	121	105	91	71	50
QF100-12	22	30	176	172	165	149	132	115	99	77	55
QF100-13	26	35	191	187	178	162	143	125	107	84	59
QF100-14	26	35	206	201	192	174	154	134	115	90	64
QF100-15	26	35	220	215	206	187	165	144	123	97	68
QF100-16	30	40	235	230	220	199	176	153	132	103	73
QF100-17	30	40	250	244	233	212	187	163	140	110	77
QF100-18	37	50	264	258	247	224	198	173	148	116	82
QF100-19	37	50	279	273	261	237	209	182	156	123	86
QF100-20	37	50	294	287	275	249	220	192	165	129	91
QF100-21	37	50	308	302	288	261	231	201	173	135	96
QF100-22	45	60	323	316	302	274	242	211	181	142	100

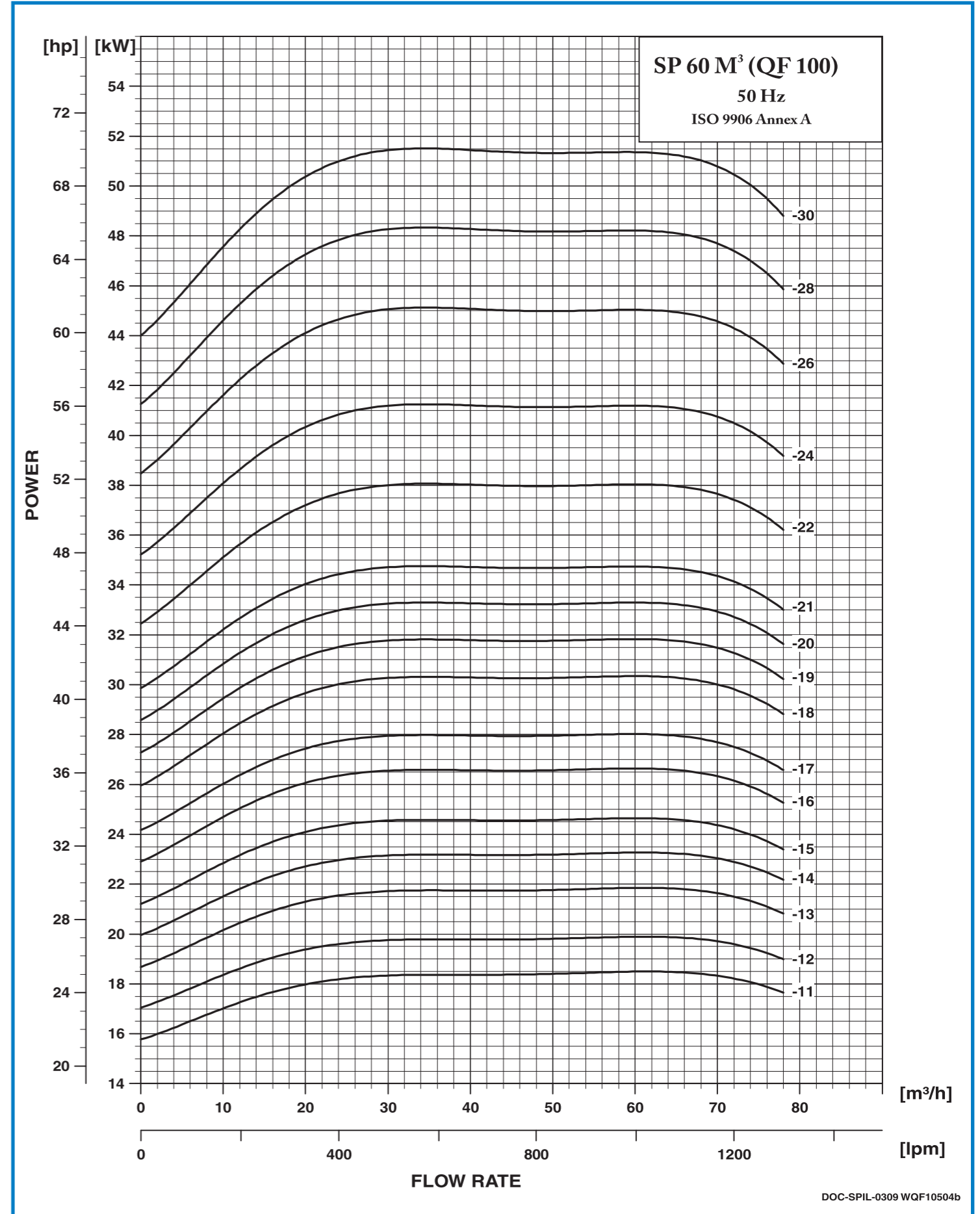
Performance Curve

Submersible Pump
QF100



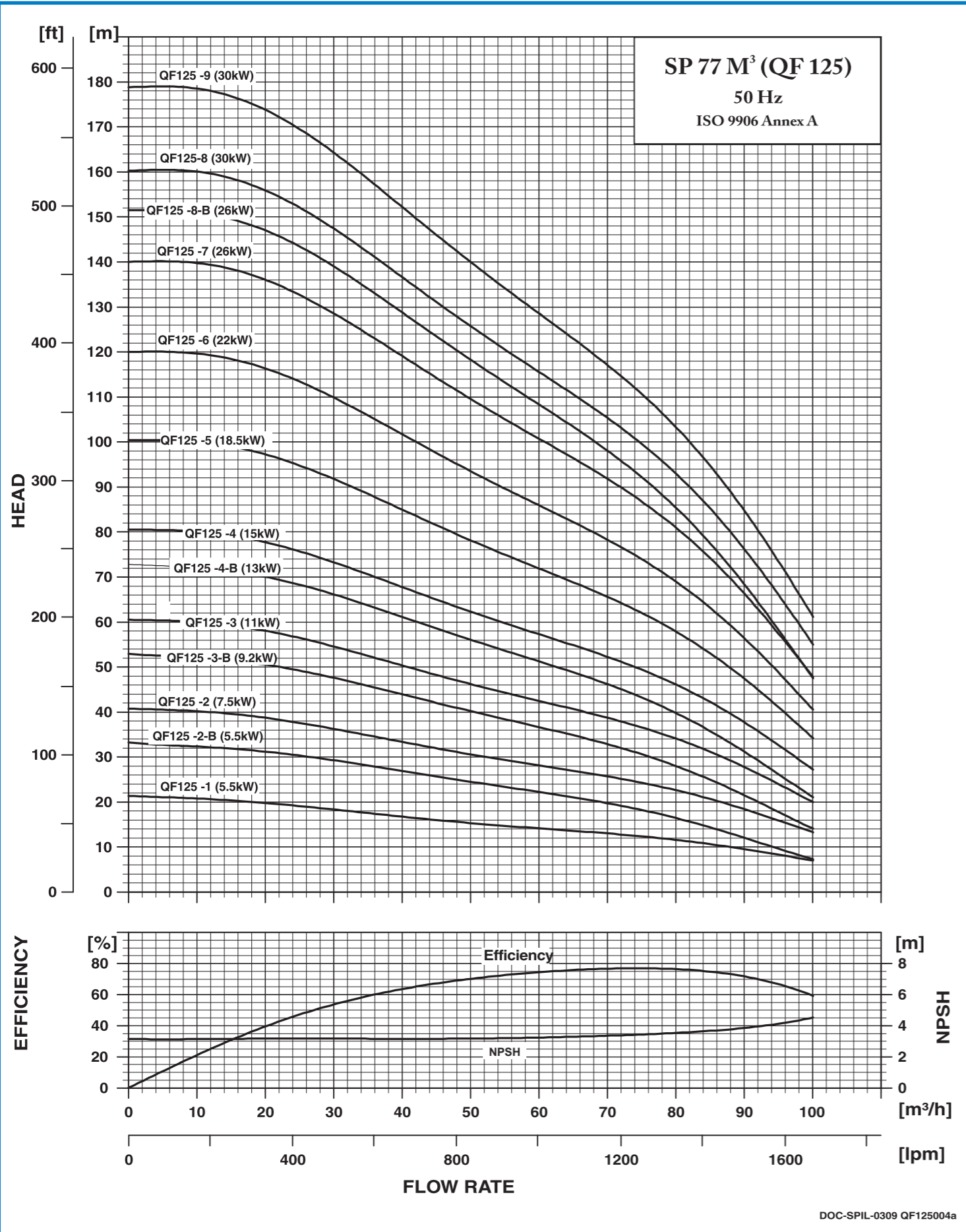
Performance Curve

Submersible Pump
QF100



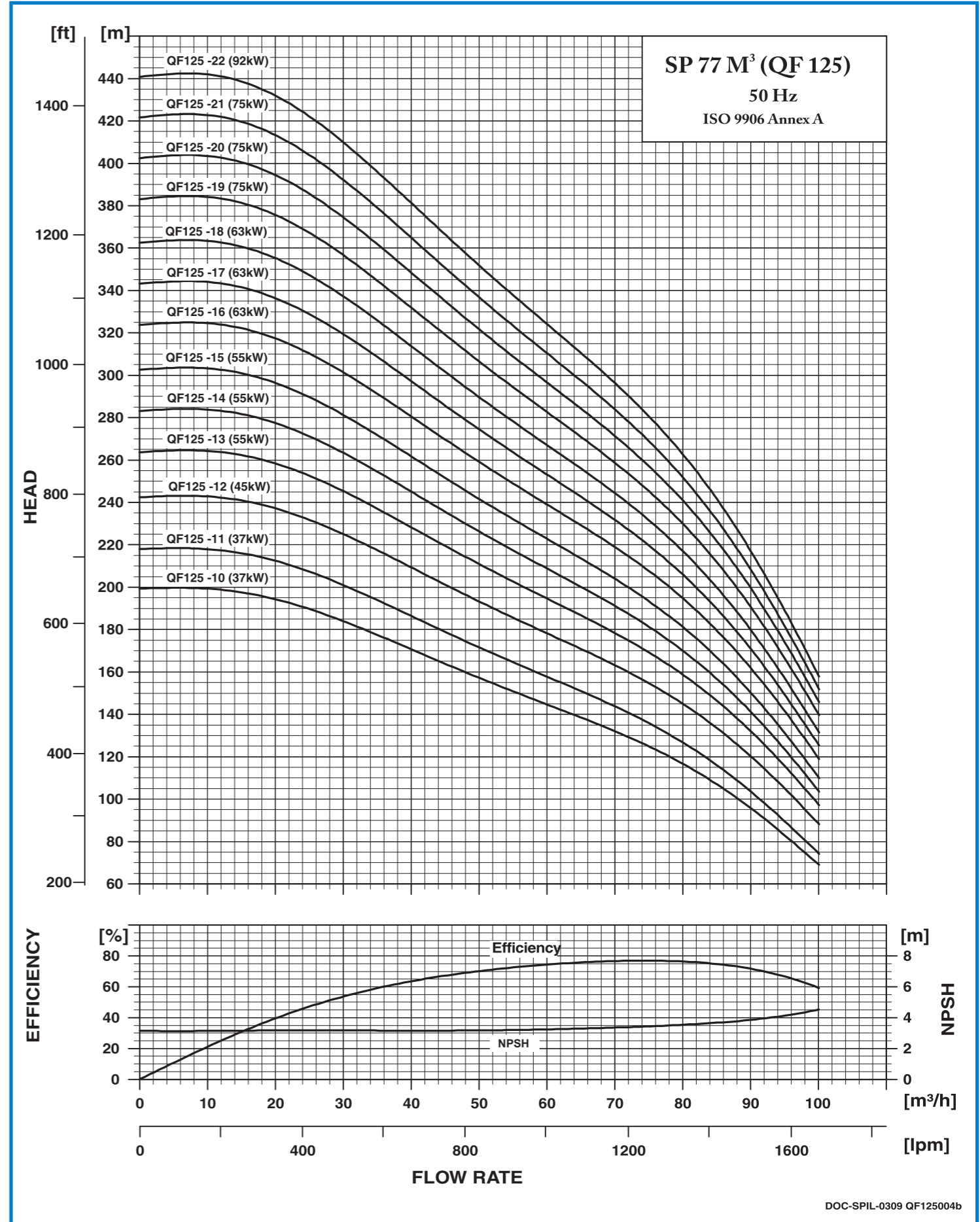
Performance Curve

Submersible Pump
QF125

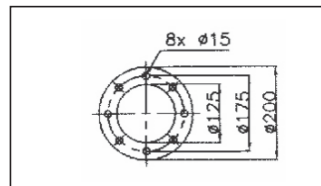
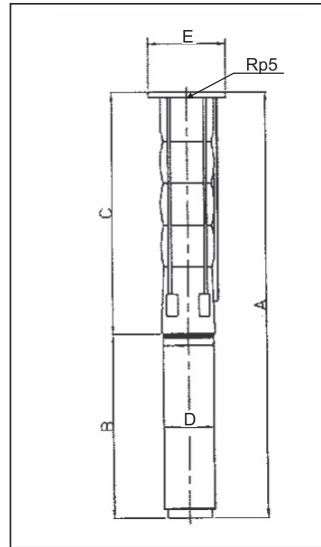


Performance Curve

Submersible Pump
QF125



Dimensions and Weights



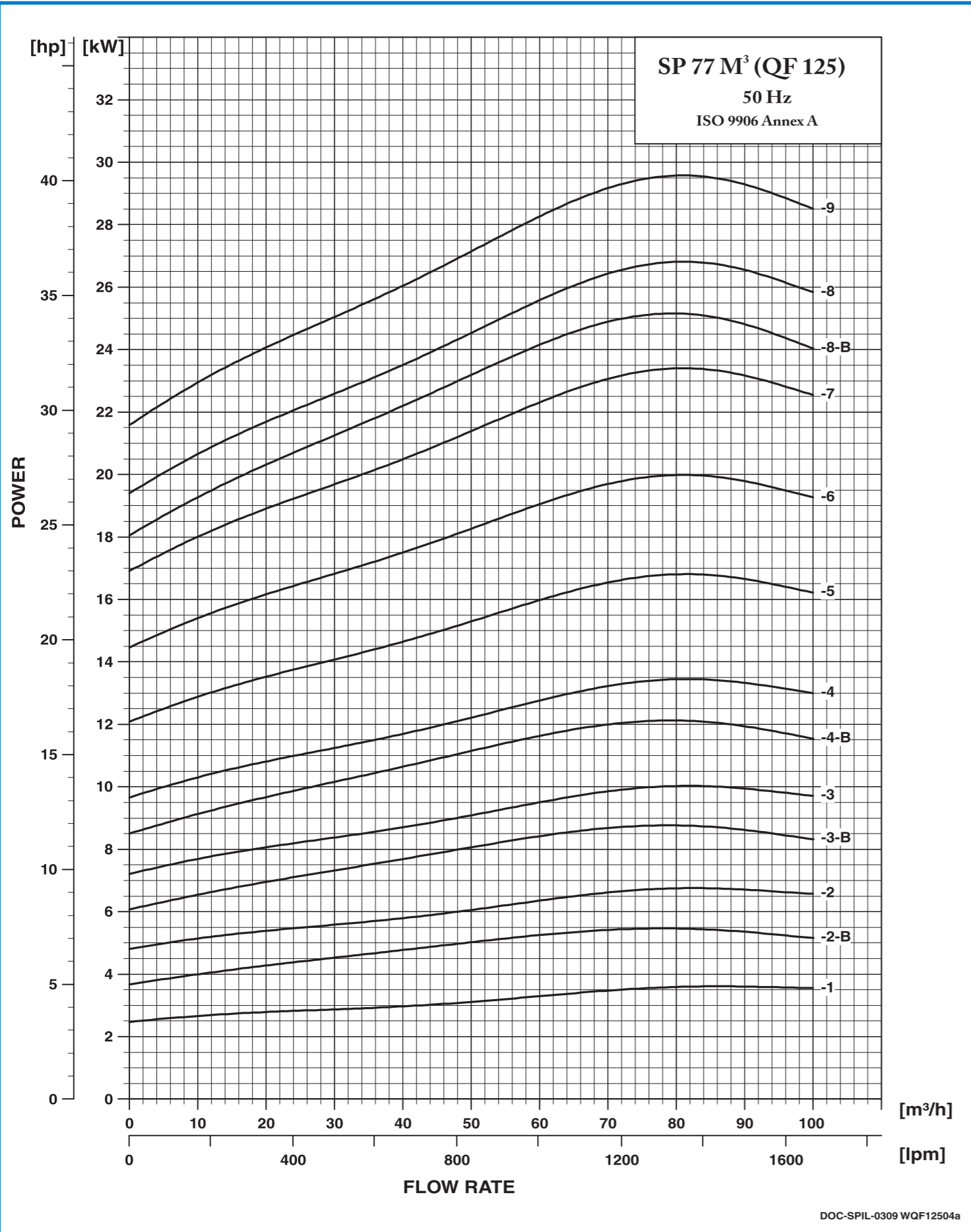
TECHNICAL DATA QF 125														
PUMP TYPE	MOTOR		DIMENSIONS (mm)								NET WEIGHT (Kg)			
	TYPE	POWER (KW)	Rp 5" CONNECTION				5" FLANGE				B	D	PUMP	MOTOR
			A	C	E*	E**	A	C	E*	E**				
QF125-1	RO 101	5.5	1350	619	178	186	1350	619	200	200	731	95	21	45
QF125-2-B	RO 101	5.5	1478	747	178	186	1478	747	200	200	731	95	24	49
QF125-2	RO 101	7.5	1555	747	178	186	1555	747	200	200	808	95	24	54
QF125-1	MATASF 150	5.5	1313	619	178	186	1313	619	200	200	694	142	21	48
QF125-2-B	MATASF 150	5.5	1441	747	178	186	1441	747	200	200	694	142	24	48
QF125-2	MATASF 150	7.5	1461	747	178	186	1461	747	200	200	714	142	24	50
QF125-3-B	MATASF 150	9.2	1619	875	178	186	1619	875	200	200	744	142	28	53
QF125-3	MATASF 150	11	1649	875	178	186	1649	875	200	200	774	142	28	56
QF125-4-B	MATASF 150	13	1827	1003	178	186	1827	1003	200	200	824	142	31	61
QF125-4	MATASF 150	15	1872	1003	178	186	1872	1003	200	200	869	142	31	66
QF125-5	MATASF 150	18.5	2045	1131	178	186	2045	1131	200	200	914	142	35	70
QF125-6	MATASF 150	22	2263	1259	178	186	2263	1259	200	200	1004	142	38	79
QF125-7	MATASF 150	26	2496	1387	178	186	2496	1387	200	200	1109	142	42	90
QF125-8-B	MATASF 150	26	2624	1515	178	186	2624	1515	200	200	1109	142	46	90
QF125-8	MATASF 150	30	2724	1515	178	186	2724	1515	200	200	1209	142	46	100
QF125-9	MATASF 150	30	2855	1643	178	186	2855	1643	200	200	1212	142	49	100
QF125-8	MATASF 200	30	2669	1529	200	205	2669	1529	210	210	1140	195	46	140
QF125-9	MATASF 200	30	2797	1657	200	205	2797	1657	210	210	1140	195	50	140
QF125-10	MATASF 200	37	2925	1785	200	205	2925	1785	210	210	1140	195	53	140
QF125-11	MATASF 200	37	3053	1913	200	205	3053	1913	210	210	1140	195	57	140
QF125-12	MATASF 200	45	3271	2041	200	205	3271	2041	210	210	1230	195	60	156
QF125-13	MATASF 200	55	3509	2169	200	205	3509	2169	210	210	1340	195	64	179
QF125-14	MATASF 200	55	3637	2297	200	205	3637	2297	210	210	1340	195	68	179
QF125-15	MATASF 200	55	3765	2425	200	205	3765	2425	210	210	1340	195	71	179
QF125-16	MATASF 200	63	4023	2553	200	205	4023	2553	210	210	1470	195	75	198
QF125-17	MATASF 200	63	4151	2681	200	205	4151	2681	210	210	1470	195	78	198
QF125-18	MATASF 200	63	4279	2809	200	205	4279	2809	210	210	1470	195	82	198
QF125-19	MATASF 200	75	4497	2937	200	205	4497	2937	210	210	1560	195	85	215
QF125-20	MATASF 200	75	4625	3065	200	205	4625	3065	210	210	1560	195	89	215
QF125-21	MATASF 200	75	4753	3193	200	205	4753	3193	210	210	1560	195	93	215
QF125-22	MATASF 200	92	5061	3321	200	205	5061	3321	210	210	1740	195	96	247

PERFORMANCE TABLE

MODEL	MOTOR RATING [KW] [HP]	DISCHARGE (Q)											
		TOTAL HEAD IN [m]											
		m 3/h	0	10	20	30	40	50	60	70	80	90	100
QF-125		l /min.	0	167	333	500	667	833	1000	1167	1333	1500	1667
QF125-1	5.5 0.75	21	21	20	19	17	16	15	14	12	10	7	
QF125-2-B	5.5 0.75	33	32	31	29	27	25	22	20	16	12	7	
QF125-2	7.5 1	40	40	40	38	35	32	30	27	24	20	15	
QF125-3-B	9.2 12.5	53	52	51	48	44	40	37	33	28	22	14	
QF125-3	11 15	60	61	59	56	52	48	45	41	36	30	22	
QF125-4-B	13 17.5	73	72	70	66	61	56	51	46	40	31	21	
QF125-4	15 20	80	81	79	75	70	64	59	54	48	40	29	
QF125-5	18.5 25	101	101	99	94	87	81	74	68	60	50	37	
QF125-6	22 30	121	121	119	113	105	97	89	81	72	60	44	
QF125-7	26 35	141	141	138	131	122	113	104	95	84	70	51	
QF125-8-B	26 35	152	151	147	139	129	118	108	98	85	68	48	
QF125-8	30 40	161	162	158	150	140	129	119	108	96	80	58	
QF125-9	30 40	181	182	178	169	157	145	134	122	108	90	66	
QF125-10	37 50	201	202	198	188	175	161	149	136	121	100	73	
QF125-11	37 50	221	222	217	206	192	177	163	149	133	110	80	
QF125-12	45 60	241	242	237	225	209	193	178	163	145	120	88	
QF125-13	55 75	261	263	257	244	227	209	193	176	157	130	95	
QF125-14	55 75	281	283	277	263	244	225	208	190	169	140	102	
QF125-15	55 75	302	303	296	281	262	242	223	203	181	150	110	
QF125-16	63 85	322	323	316	300	279	258	238	217	193	160	117	
QF125-17	63 85	342	343	336	319	297	274	252	230	205	170	124	
QF125-18	63 85	362	364	356	338	314	290	267	244	217	180	131	
QF125-19	75 100	382	384	375	356	332	306	282	257	229	190	139	
QF125-20	75 100	402	404	395	375	349	322	297	271	241	200	146	

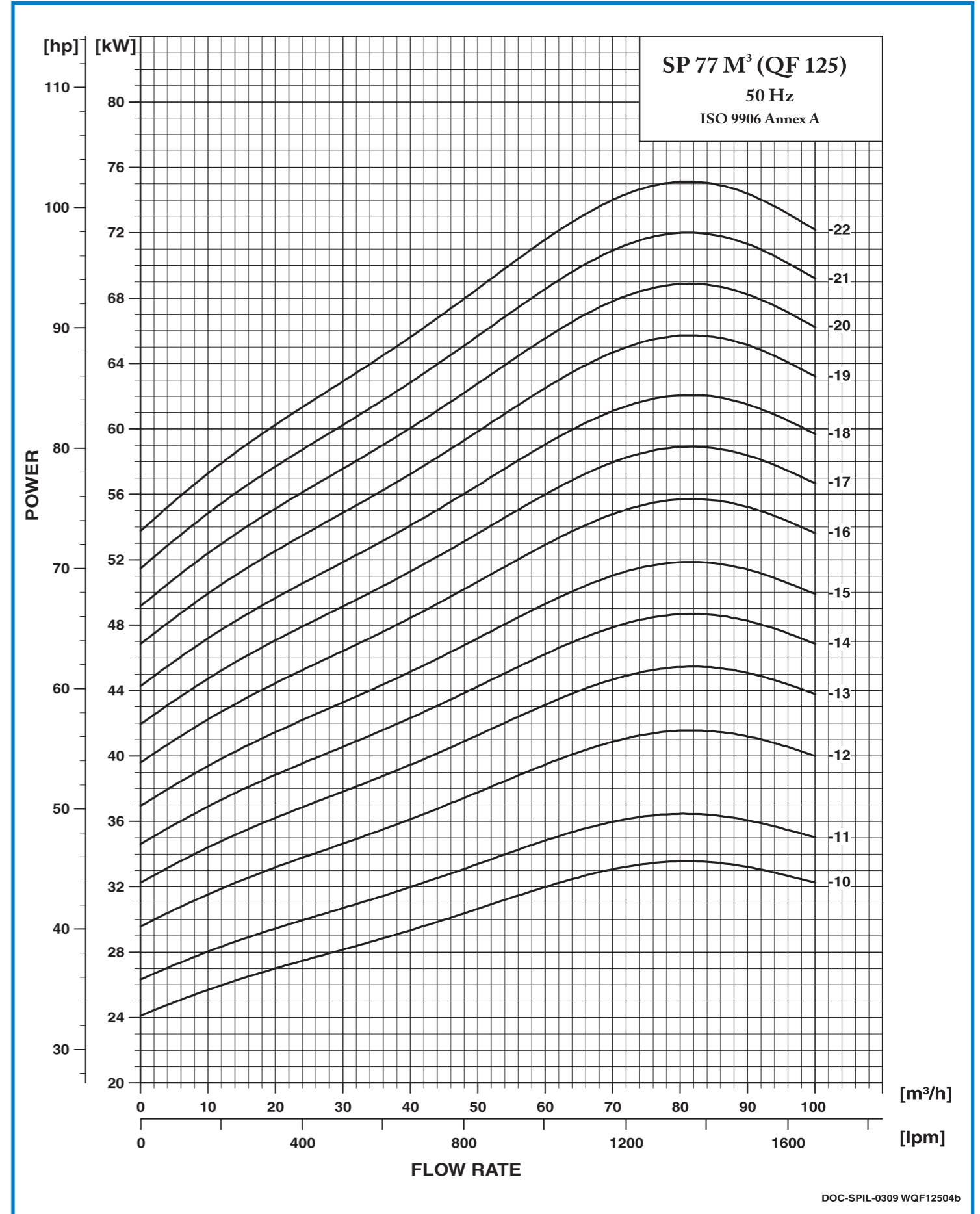
Performance Curve

Submersible Pump
QF125



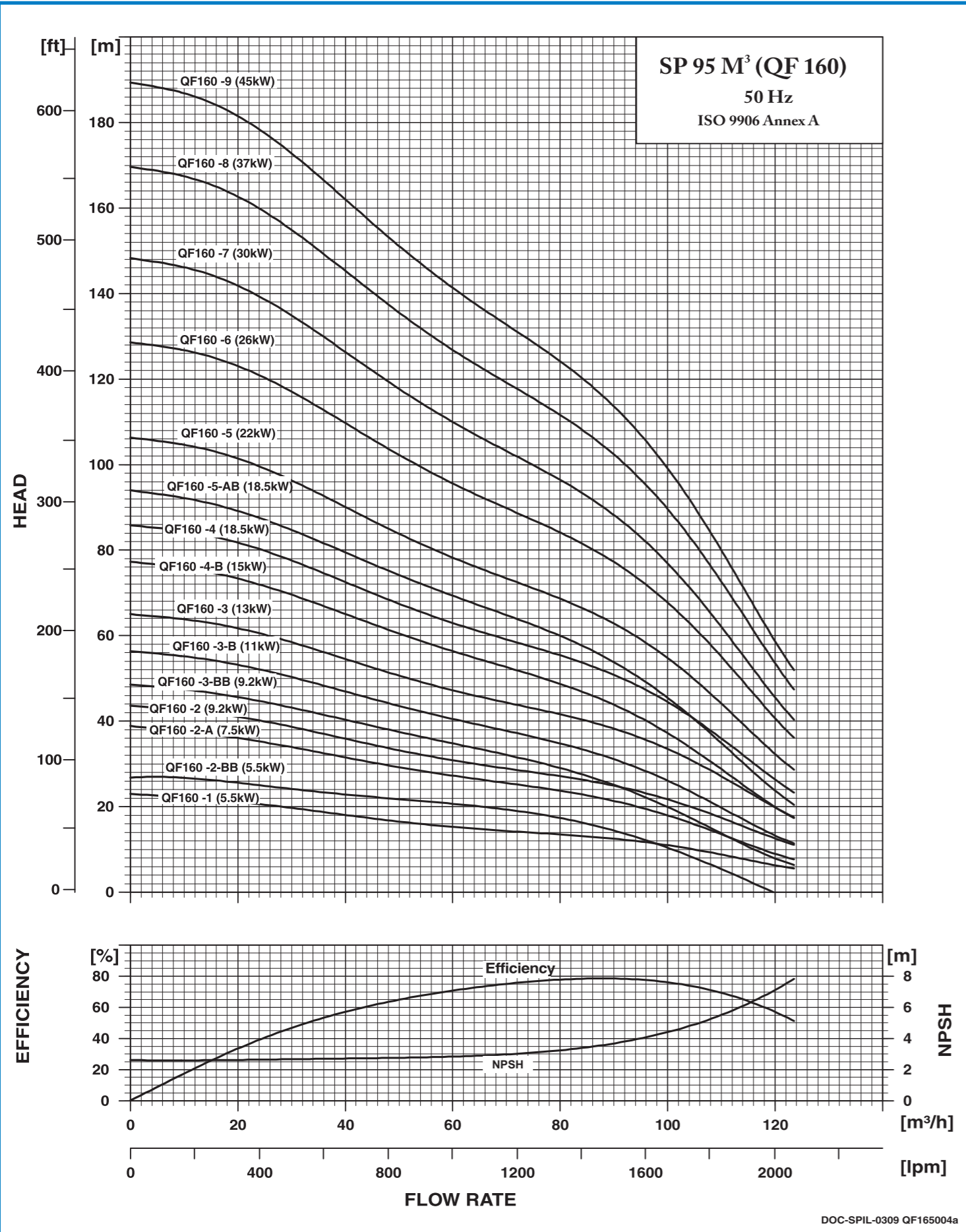
Performance Curve

Submersible Pump
QF125



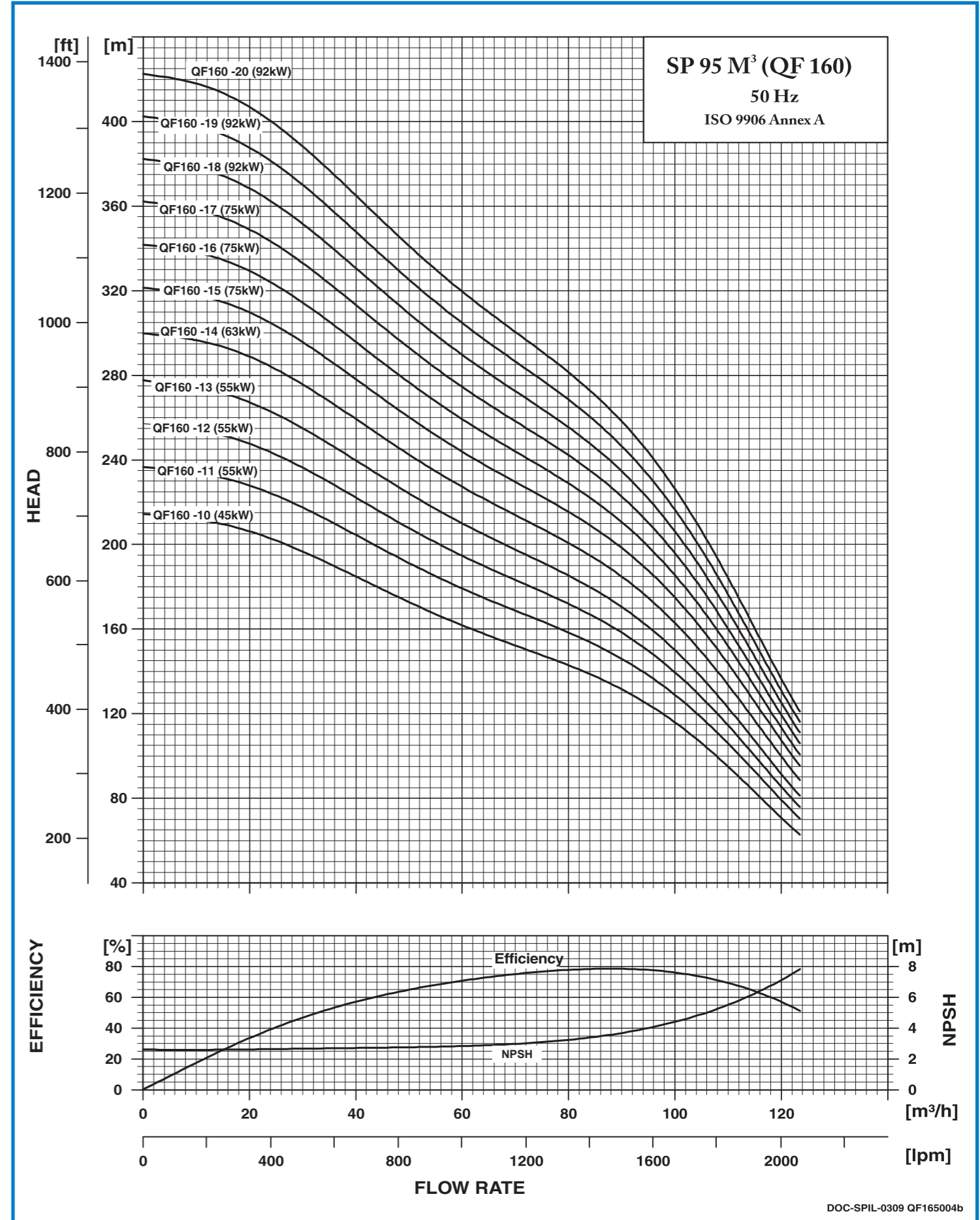
Performance Curve

Submersible Pump
QF160

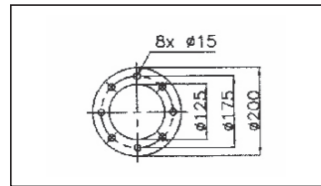
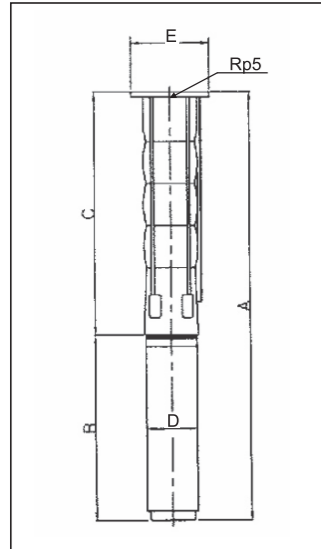


Performance Curve

Submersible Pump
QF160



Dimensions and Weights



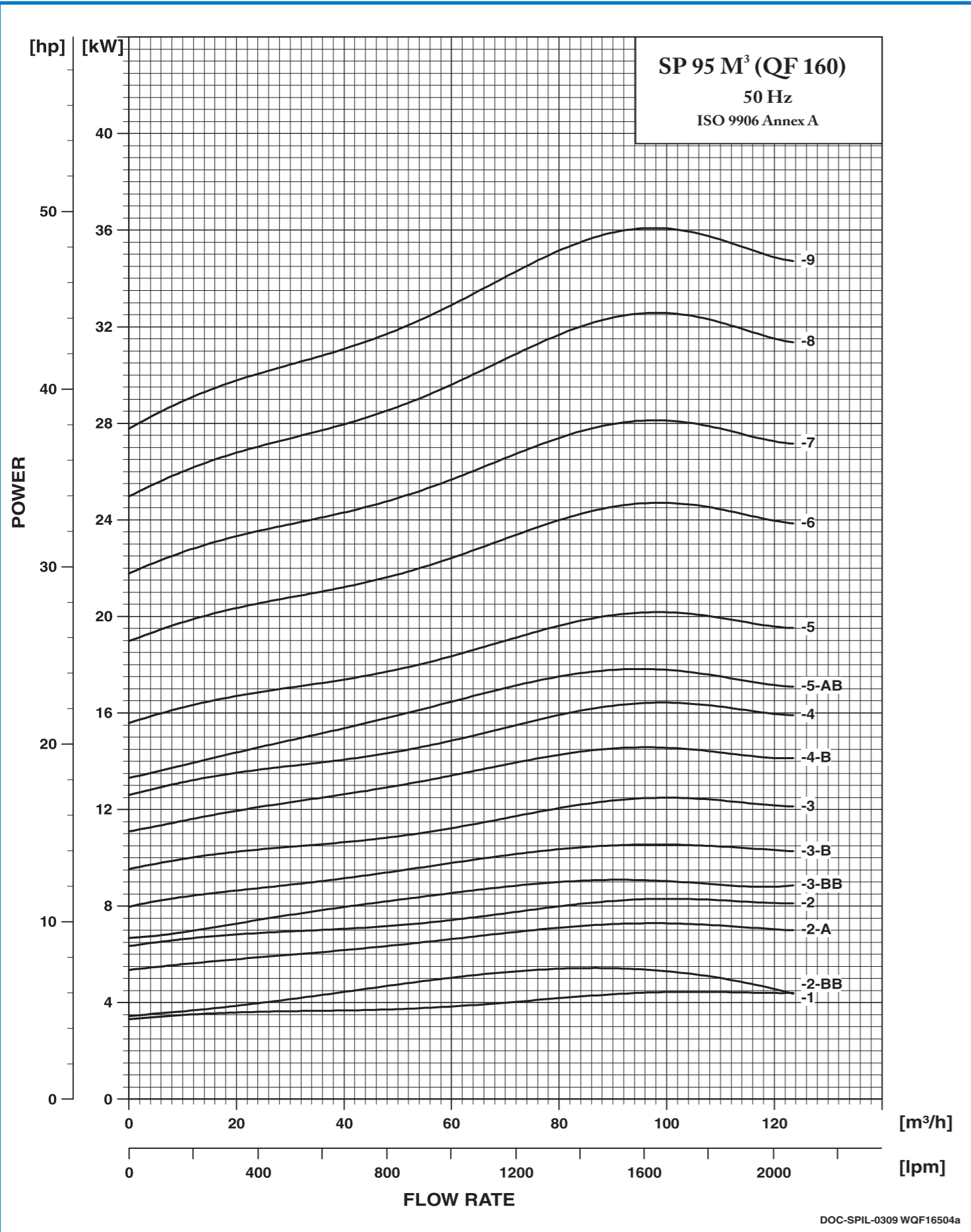
TECHNICAL DATA QF 160														
PUMP TYPE	MOTOR		DIMENSIONS (mm)										NET WEIGHT (Kg)	
	TYPE	POWER (KW)	Rp 5" CONNECTION				5" FLANGE				B	D	PUMP	MOTOR
			A	C	E*	E**	A	C	E*	E**				
QF160-1	MTSF 150	5.5	1313	619	178	186	1313	619	200	200	694	143	21	48
QF160-2-BB	MTSF 150	5.5	1441	747	178	186	1441	747	200	200	694	143	24	48
QF160-2-A	MTSF 150	7.5	1441	747	178	186	1441	747	200	200	694	143	24	50
QF160-2	MTSF 150	9.2	1491	747	178	186	1491	747	200	200	744	143	24	53
QF160-3-BB	MTSF 150	9.2	1619	875	178	186	1619	875	200	200	744	143	28	53
QF160-3-B	MTSF 150	11	1649	875	178	186	1649	875	200	200	774	143	28	56
QF160-3	MTSF 150	13	1699	875	178	186	1699	875	200	200	824	143	28	61
QF160-4-B	MTSF 150	15	1872	1003	178	186	1872	1003	200	200	869	143	31	66
QF160-4	MTSF 150	18.5	1917	1003	178	186	1917	1003	200	200	914	143	31	70
QF160-5-AB	MTSF 150	18.5	2045	1131	178	186	2045	1131	200	200	914	143	35	70
QF160-5	MTSF 150	22	2135	1131	178	186	2135	1131	200	200	1004	143	35	79
QF160-6	MTSF 150	26	2368	1259	178	186	2368	1259	200	200	1109	143	38	90
QF160-7	MTSF 150	30	2596	1387	178	186	2596	1387	200	200	1209	143	42	100
QF160-7	MTSF 200	30	2541	1401	196	204	2541	1401	210	210	1140	195	42	140
QF160-8	MTSF 200	37	2669	1529	196	204	2669	1529	210	210	1140	195	46	140
QF160-9	MTSF 200	37	2887	1657	196	204	2887	1657	210	210	1230	195	49	140
QF160-10	MTSF 200	45	3015	1785	196	204	3015	1785	210	210	1230	195	53	156
QF160-11	MTSF 200	55	3253	1913	196	204	3253	1913	210	210	1340	195	56	179
QF160-12	MTSF 200	55	3381	2041	196	204	3381	2041	210	210	1340	195	60	179
QF160-13	MTSF 200	55	3509	2169	196	204	3509	2169	210	210	1340	195	63	179
QF160-14	MTSF 200	63	3767	2297	196	204	3767	2297	210	210	1470	195	67	179
QF160-15	MTSF 200	75	3985	2425	196	204	2425				1560	195	71	215
QF160-16	MTSF 200	75	4113	2553	196	204	2553				1560	195	74	215
QF160-17	MTSF 200	75	4241	2681	196	204	2681				1560	195	78	215
QF160-18	MTSF 200	92	4549	2809	196	204	2809				1740	195	81	247
QF160-19	MTSF 200	92	4677	2937	196	204	2937				1740	195	85	247
QF160-20	MTSF 200	92	4805	3065	196	204	3065				1740	195	88	247

PERFORMANCE TABLE

MODEL	MOTOR RATING [KW] [HP]	DISCHARGE (Q)															
		TOTAL HEAD IN [m]															
		0	10	20	30	40	50	60	70	80	90	100	110	120	122		
QF-160		0	10	20	30	40	50	60	70	80	90	100	110	120	122		
		0	167	333	500	667	833	1000	1167	1333	1500	1667	1833	2000	2033		
QF160-1	5.5	21	21	20	19	18	17	16	15	14	13	11	9	7	6		
QF160-2-BB	5.5	27	27	26	24	23	22	21	19	17	14	10	5	0			
QF160-2-A	7.5	39	38	36	34	32	29	27	26	24	21	18	14	9	8		
QF160-2	9.2	42	42	41	39	37	34	32	30	28	26	23	18	14	13		
QF160-3-BB	9.2	49	47	46	43	40	37	35	32	29	25	20	14	8	7		
QF160-3-B	11	56	55	53	50	47	44	41	38	35	31	26	20	13	12		
QF160-3	13	63	63	61	58	55	51	48	45	42	39	34	28	21	19		
QF160-4-B	15	77	76	73	70	65	60	56	53	49	44	37	29	20	18		
QF160-4	18.5	85	84	81	78	73	68	64	60	56	52	45	37	27	26		
QF160-5-AB	18.5	94	92	89	85	79	74	69	65	60	54	45	35	24	22		
QF160-5	22	106	105	102	97	91	85	80	75	70	65	57	46	34	32		
QF160-6	26	127	125	122	116	110	102	96	90	84	77	68	55	41	38		
QF160-7	30	148	146	142	136	128	119	112	105	98	90	79	64	48	45		
QF160-8	37	169	167	163	155	146	136	128	120	112	103	90	74	55	51		
QF160-9	45	190	188	183	175	164	153	144	135	126	116	102	83	62	58		
QF160-10	45	212	209	204	194	183	171	160	151	141	129	113	92	69	64		
QF160-11	55	233	230	224	213	201	188	176	166	155	142	124	101	75	70		
QF160-12	55	254	251	244	233	219	205	192	181	169	155	136	110	82	77		
QF160-13	55	275	272	265	252	237	222	208	196	183	168	147	120	89	83		
QF160-14	63	296	293	285	272	256	239	224	211	197	181	158	129	96	90		
QF160-15	75	317	314	305	291	274	256	240	226	211	194	170	138	103	96		
QF160-16	75	338	334	326	310	292	273	256	241	225	206	181	147	110	102		
QF160-17	75	360	355	346	330	310	290	272	256	239	219	192	156	116	109		
QF160-18	92	381	376	366	349	329	307	288	271	253	232	203	166	123	115		
QF160-19	92	402	397	387	369	347	324	304	286	267	245	215	175	130	122		
QF160-20	92	423	418	407	388	365	341	320	301	281	258	226	184	137	128		

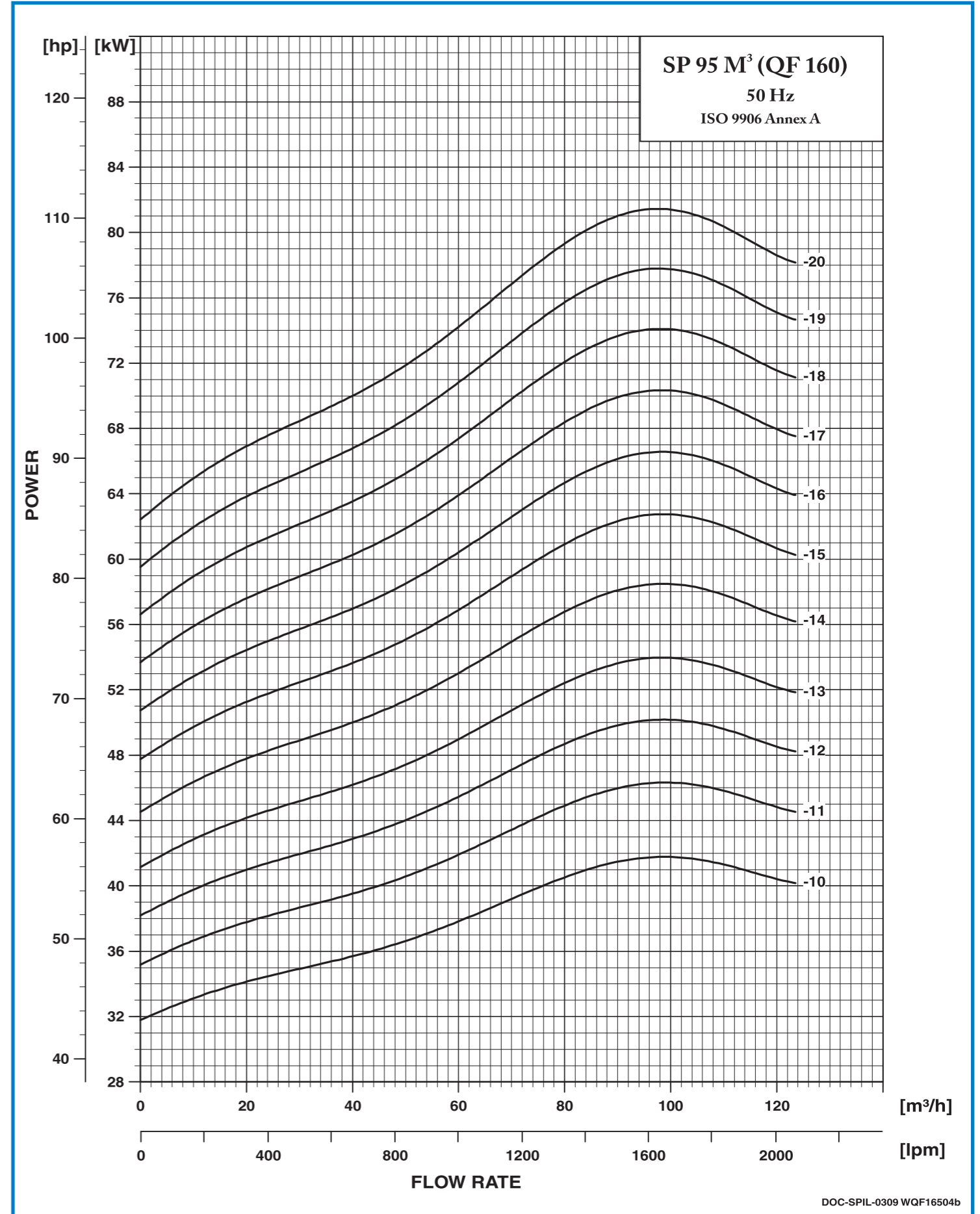
Performance Curve

Submersible Pump
QF160



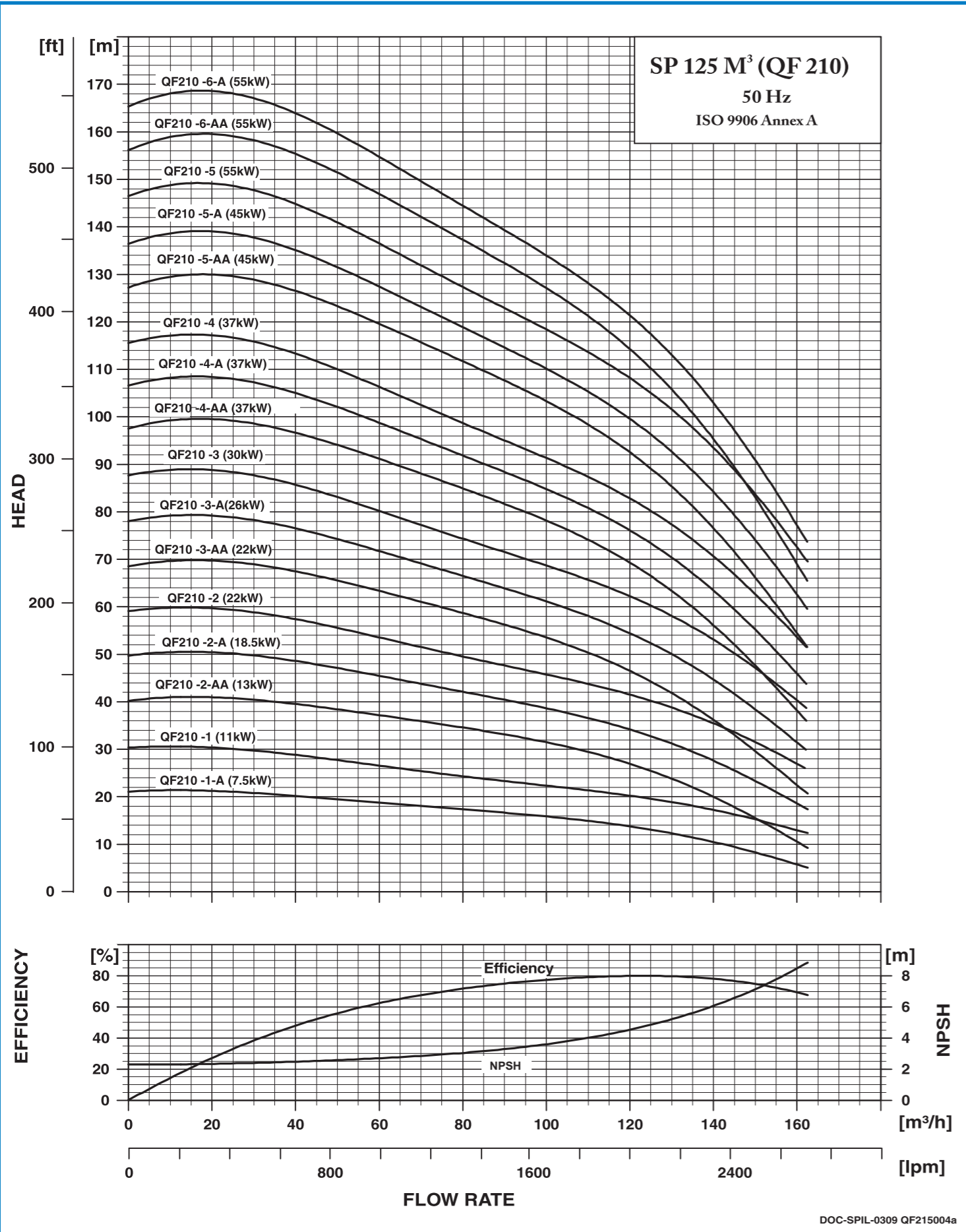
Performance Curve

Submersible Pump
QF160



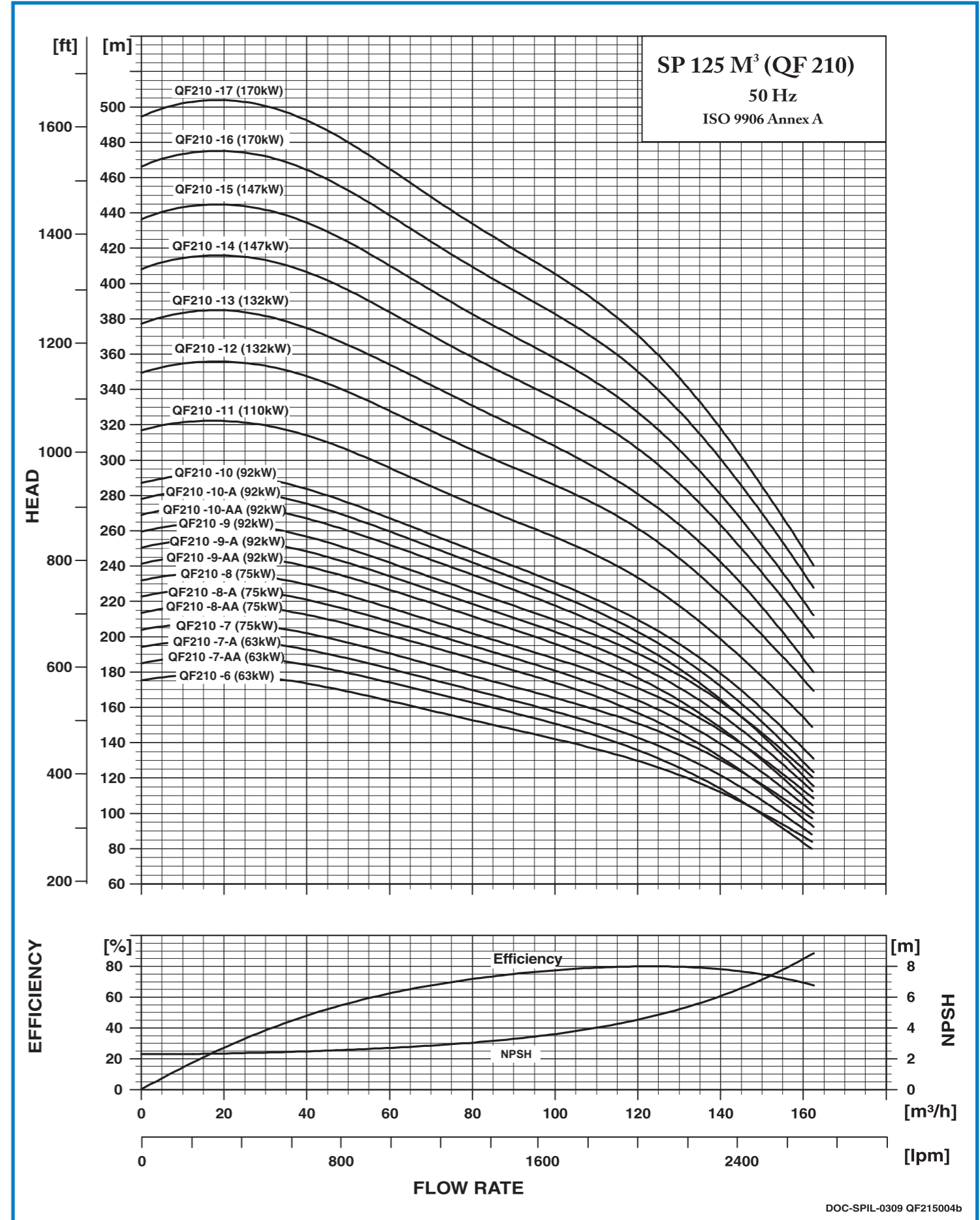
Performance Curve

Submersible Pump
QF210

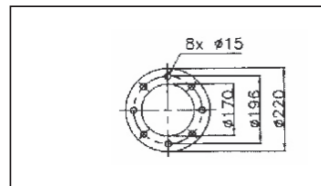
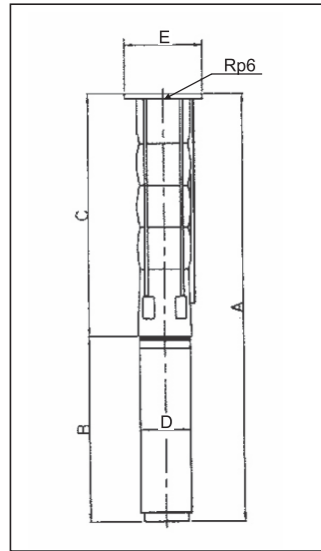


Performance Curve

Submersible Pump
QF210



Dimensions and Weights



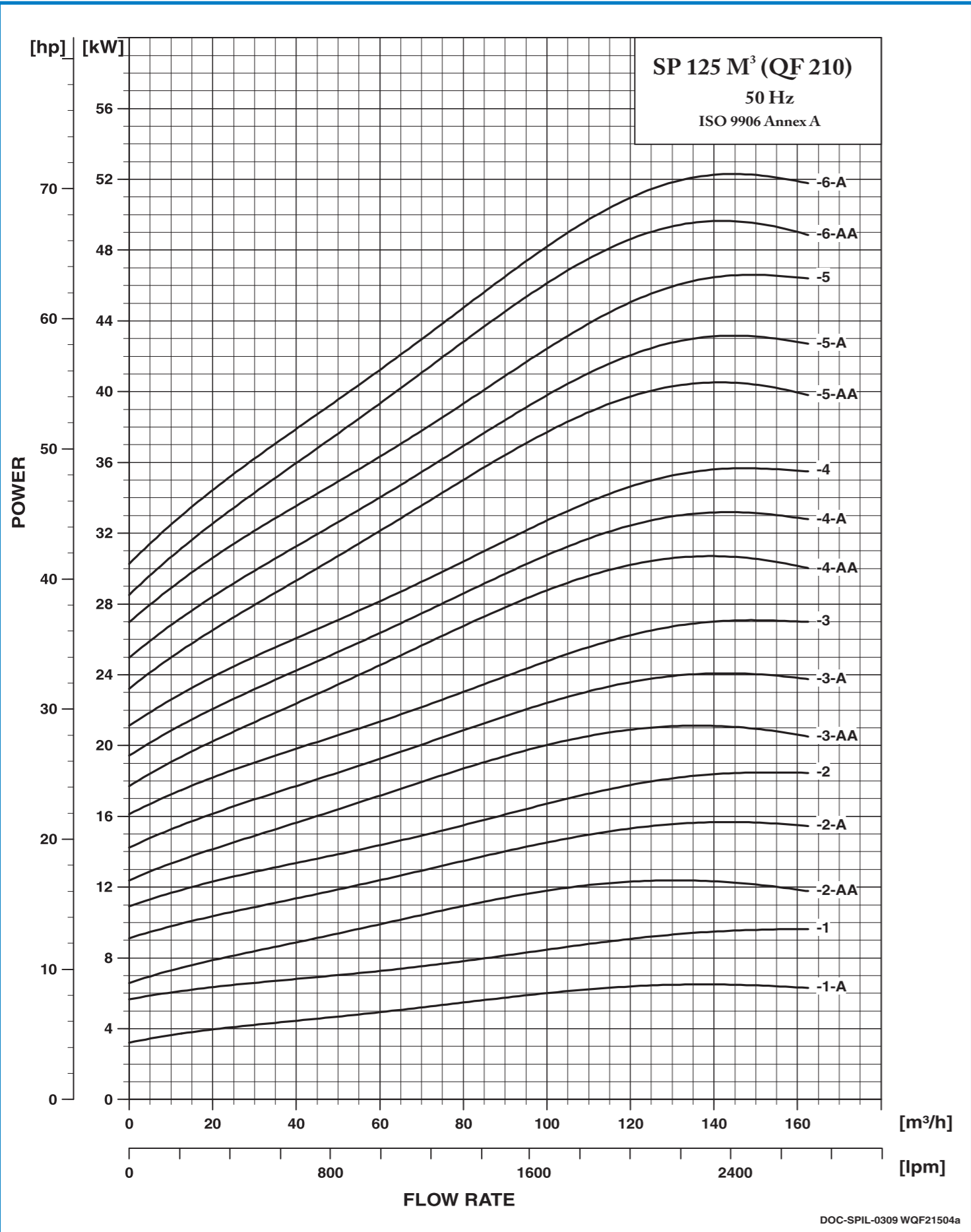
TECHNICAL DATA QF 210														
PUMP TYPE	MOTOR		DIMENSIONS (mm)										NET WEIGHT (Kg)	
	TYPE	POWER (KW)	Rp 6" CONNECTION				6" FLANGE				B	D	PUMP	MOTOR
			A	C	E*	E**	A	C	E*	E**				
QF210-1-A	MATASF 150	7.5	1355	641	211	218	1355	641	222	226	714	143	27	50
QF210-1	MATASF 150	11	1415	641	211	218	1415	641	222	226	774	143	27	53
QF210-2-AA	MATASF 150	13	1621	797	211	218	1621	797	222	226	824	143	33	61
QF210-2-A	MATASF 150	18.5	1711	797	211	218	1711	797	222	226	914	143	33	70
QF210-2	MATASF 150	22	1801	797	213	218	1801	797	222	226	1004	143	33	79
QF210-3-AA	MATASF 150	22	1957	953	213	218	1957	953	222	226	1004	143	39	79
QF210-3-A	MATASF 150	26	2062	953	213	218	2062	953	222	226	1109	143	39	90
QF210-3	MATASF 150	30	2162	953	213	218	2162	953	222	226	1209	143	39	100
QF210-3	MATASF 200	30	2093	953	213	218	2093	953	222	226	1140	195	39	140
QF210-4-AA	MATASF 200	37	2249	1109	213	218	2249	1109	222	226	1140	195	45	140
QF210-4-A	MATASF 200	37	2249	1109	213	218	2249	1109	222	226	1140	195	45	140
QF210-4	MATASF 200	37	2249	1109	213	218	2249	1109	222	226	1140	195	45	140
QF210-5-AA	MATASF 200	45	2495	1265	213	218	2495	1265	222	226	1230	195	51	156
QF210-5-A	MATASF 200	45	2495	1265	213	218	2495	1265	222	226	1230	195	51	156
QF210-5	MATASF 200	55	2605	1265	213	218	2605	1265	222	226	1340	195	51	179
QF210-6-AA	MATASF 200	55	2761	1421	213	218	2761	1421	222	226	1340	195	57	179
QF210-6-A	MATASF 200	55	2761	1421	213	218	2761	1421	222	226	1340	195	57	179
QF210-6	MATASF 200	63	2891	1421	218	227	2891	1421	229	232	1470	195	57	198
QF210-7-AA	MATASF 200	63	3047	1577	218	227	3047	1577	229	232	1470	195	63	198
QF210-7-A	MATASF 200	63	3047	1577	218	227	3047	1577	229	232	1470	195	63	198
QF210-7	MATASF 200	75	3137	1577	218	227	3137	1577	229	232	1560	195	63	215
QF210-8-AA	MATASF 200	75	3293	1733	218	227					1560	195	70	215
QF210-8-A	MATASF 200	75	3293	1733	218	227					1560	195	70	215
QF210-8	MATASF 200	75	3293	1733	218	227					1560	195	70	215
QF210-9-AA	MATASF 200	92	3629	1889	218	227					1740	195	76	247
QF210-9-A	MATASF 200	92	3629	1889	218	227					1740	195	76	247
QF210-9	MATASF 200	92	3629	1889	218	227					1740	195	76	247
QF210-10-AA	MATASF 200	92	3785	2045	218	227					1740	195	82	247
QF210-10-A	MATASF 200	92	3785	2045	218	227					1740	195	82	247
QF210-10	MATASF 200	92	3785	2045	218	227					1740	195	82	247
QF210-11	MATASF 10"	110	3730	2201	237	237					1529	235	91	315
QF210-12	MATASF 10"	132	4016	2357	237	237					1659	235	97	362
QF210-13	MATASF 10"	132	4172	2513	237	237					1659	235	104	362
QF210-14	MATASF 10"	150	4438	2669	237	237					1769	237	110	413
QF210-15	MATASF 10"	150	4594	2825	237	237					1769	237	116	413
QF210-16	MATASF 10"	185	4900	2981	237	237					1919	237	122	449
QF210-17	MATASF 10"	185	5056	3137	237	237					1919	237	128	449

PERFORMANCE TABLE

MODEL	MOTOR RATING [KW] [HP]	DISCHARGE (Q)														
		m 3/h		TOTEI HEAD IN [m]												
		0	60	70	80	90	100	110	120	130	140	150	160	162		
QF-210		0	60	70	80	90	100	110	120	130	140	150	160	162		
		l /min.	1000	1167	1333	1500	1667	1833	2000	2167	2333	2500	2667	2700		
QF210-1-A	7.5 10	21	19	18	17	17	16	15	14	12	10	8	6	5		
QF210-1	11 15	30	27	25	24	23	22	21	20	19	17	15	13	12		
QF210-2-AA	13 17.5	40	37	36	35	33	31	29	27	24	20	16	11	10		
QF210-2-A	18.5 25	50	45	44	42	40	39	37	34	31	28	23	19	18		
QF210-2	22 30	59	54	52	50	48	46	44	42	39	35	32	27	26		
QF210-3-AA	22 30	69	63	61	59	56	54	50	47	42	36	30	22	21		
QF210-3-A	26 35	78	72	69	67	64	61	58	54	50	45	38	31	30		
QF210-3	30 40	88	80	77	74	72	69	66	62	58	53	47	40	39		
QF210-4-AA	37 50	98	91	88	85	82	78	74	69	63	56	48	38	36		
QF210-4-A	37 50	107	99	95	92	88	85	81	76	70	63	55	46	44		
QF210-4	37 50	116	106	102	99	95	91	87	83	77	71	63	54	52		
QF210-5-AA	45 60	127	120	116	112	108	103	98	93	85	77	66	54	52		
QF210-5-A	45 60	136	127	123	119	115	110	105	100	93	84	74	63	60		
QF210-5	55 75	146	137	132	127	123	118	114	108	102	93	84	72	70		
QF210-6-AA	55 75	156	147	142	137	132	127	121	114	106	95	83	69	66		
QF210-6-A	55 75	165	155	150	144	139	134	128	121	113	103	91	77	74		
QF210-6	63 85	175	164	158	153	147	142	136	130	122	112	100	87	84		
QF210-7-AA	63 85	185	174	168	163	157	151	144	136	126	114	100	83	80		
QF210-7-A	63 85	194	182	176	170	164	158	151	143	133	122	107	92	88		
QF210-7	75 100	204	191	184	178	172	165	159	151	142	130	117	101	97		
QF210-8-AA	75 100	214	201	194	188	181	174	166	157	146	132	116	97	93		
QF210-8-A	75 100	223	209	202	195	188	181	173	164	153	139	123	105	101		
QF210-8	75 100	232	216	209	202	195	188	180	171	160	147	131	113	109		
QF210-9-AA	92 125	241	227	219	212	204	196	187	177	164	149	130	110	105		
QF210-9-A	92 125	250	234	226	219	211	203	194	184	171	156	138	117	113		
QF210-9	92 125	260	242	234	226	218	209	201	191	178	163	146	125	121		
QF210-10-AA	92 125	269	252	244	235	227	218	208	196	182	165	144	121	117		
QF210-10-A	92 125	278	260	251	242	233	224	214	203	189	172	152	129	124		
QF210-10	92 125	287	267	258	249	240	231	221	210	196	179	159	137	132		

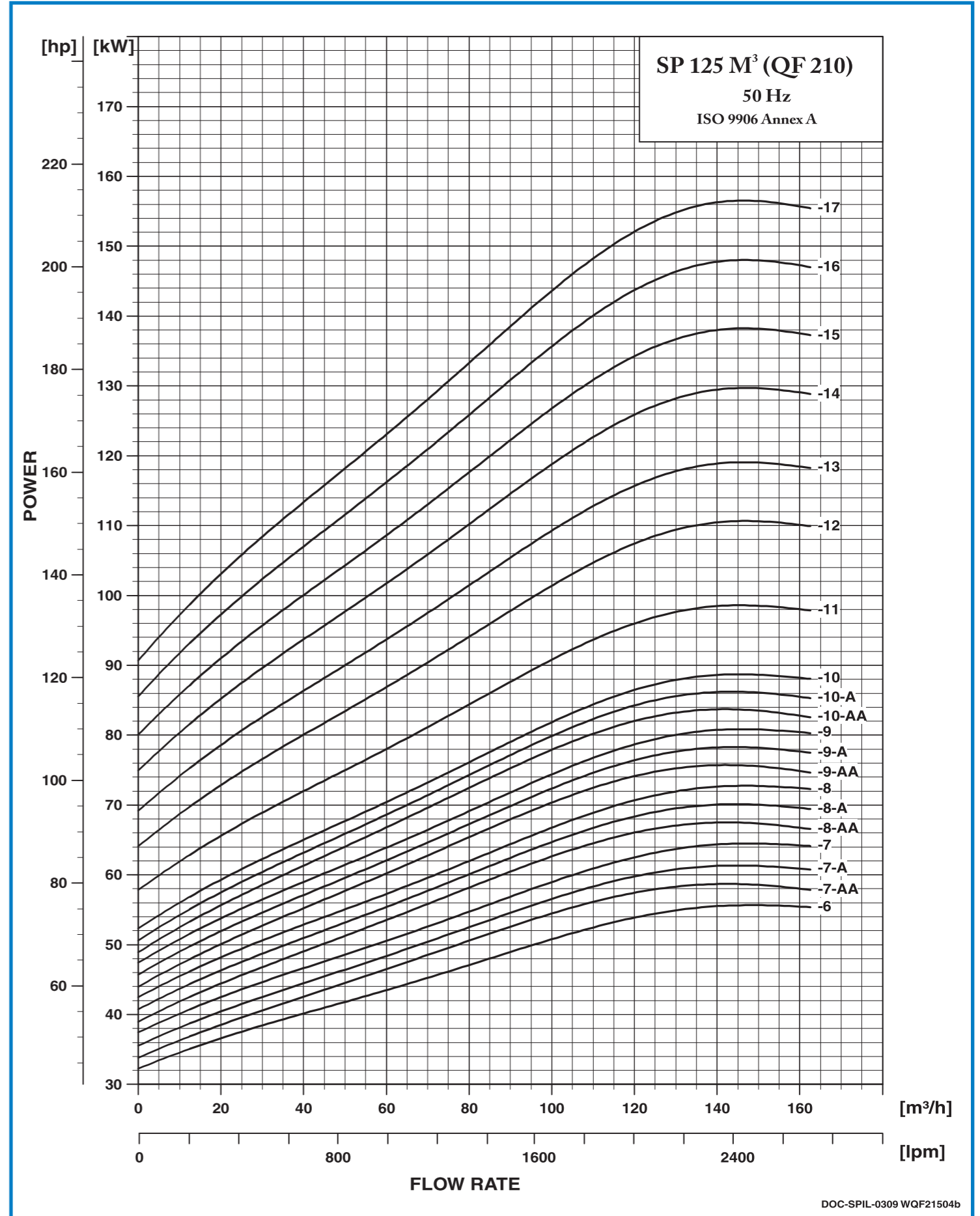
Performance Curve

Submersible Pump
QF210



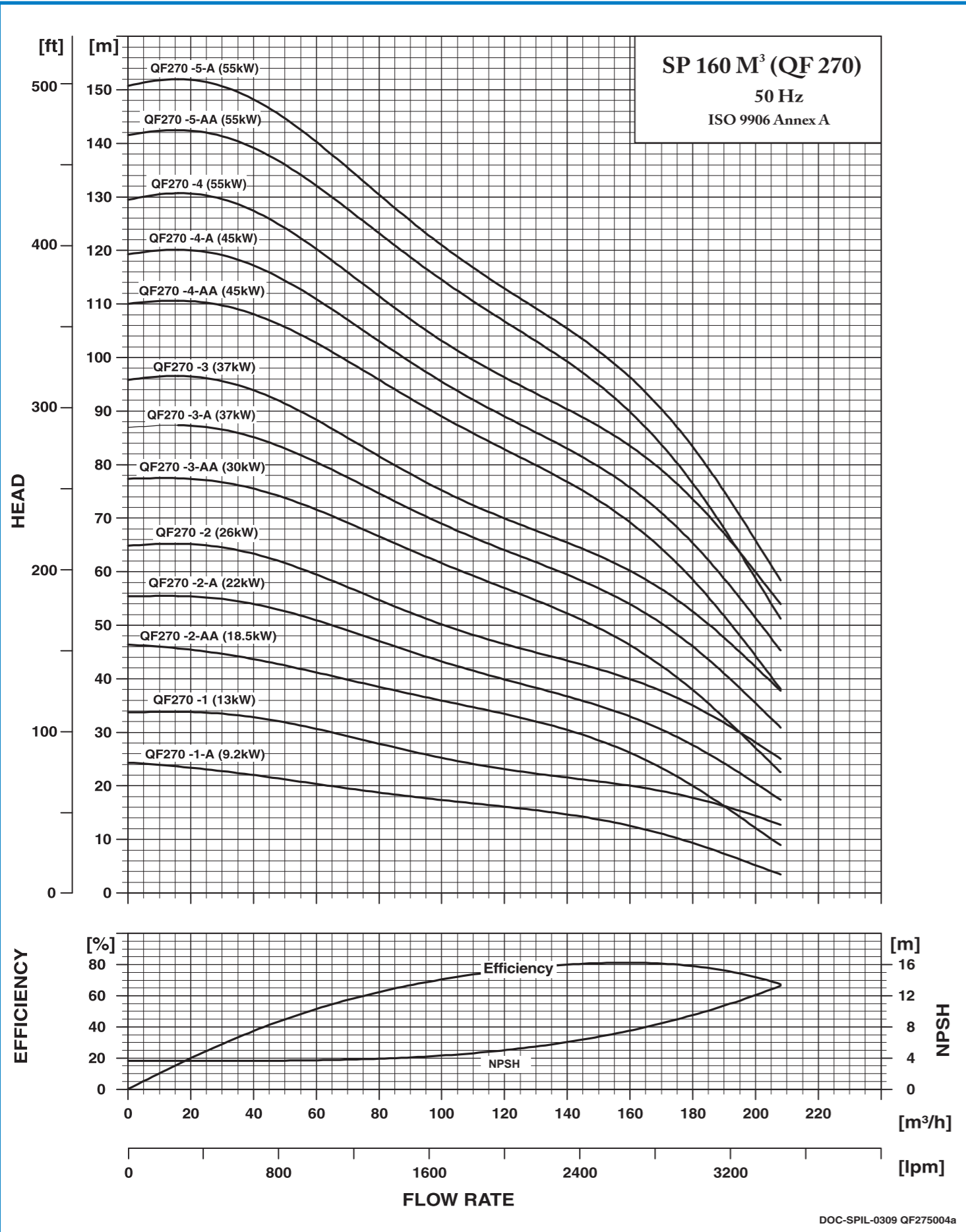
Performance Curve

Submersible Pump
QF210



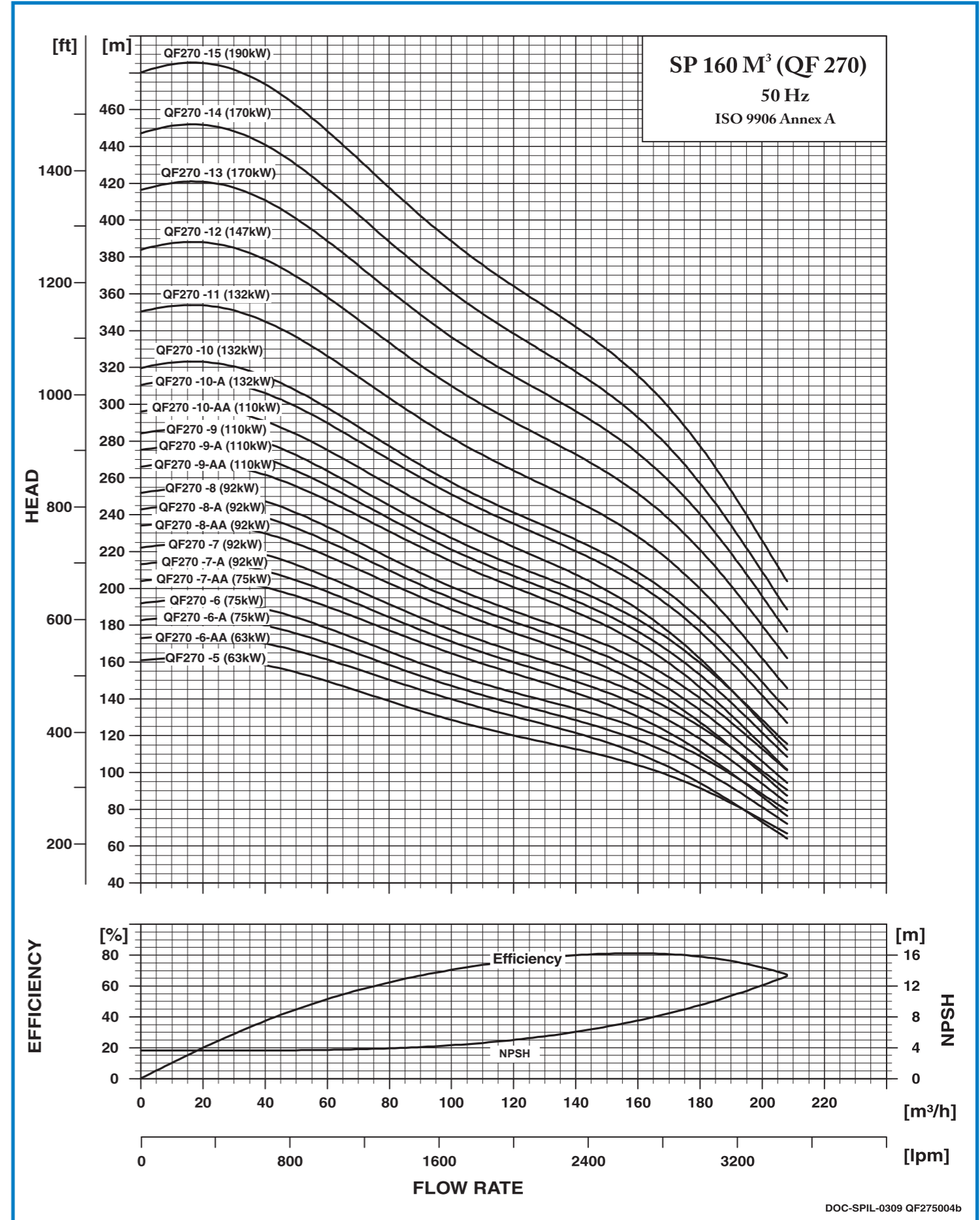
Performance Curve

Submersible Pump
QF270

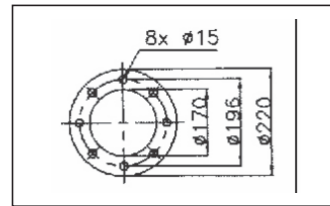
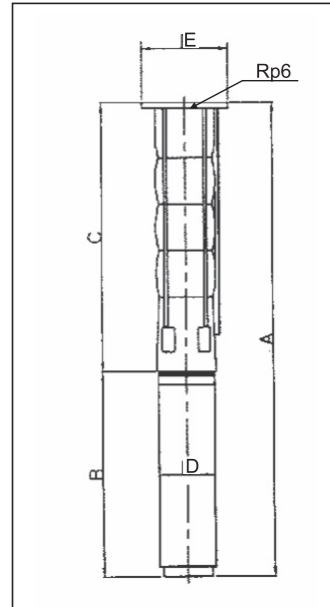


Performance Curve

Submersible Pump
QF270



Dimensions and Weights



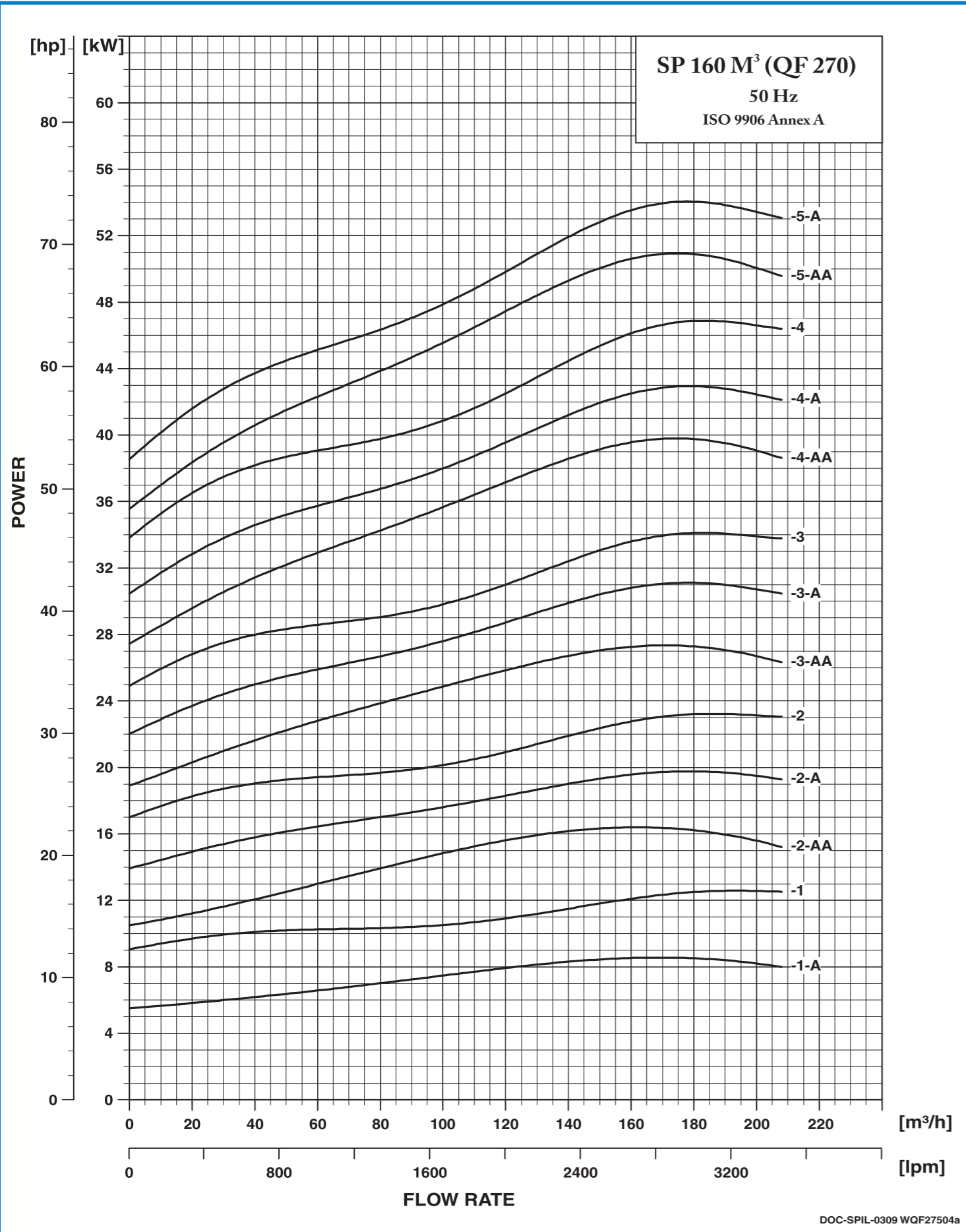
TECHNICAL DATA QF 270														
PUMP TYPE	MOTOR		DIMENSIONS (mm)										NET WEIGHT (Kg)	
	TYPE	POWER (KW)	Rp 6" CONNECTION				6" FLANGE				B	D	PUMP	MOTOR
			A	C	E*	E**	A	C	E*	E**				
QF270-1-A	MATASF 150	7.5	1355	641	211	218	1355	641	222	226	714	143	26	50
QF270-1	MATASF 150	13	1465	641	211	218	1465	641	222	226	824	143	26	61
QF270-2-AA	MATASF 150	18.5	1711	797	211	218	1711	797	222	226	914	143	33	70
QF270-2-A	MATASF 150	22	1801	797	211	218	1801	797	222	226	1004	143	33	79
QF270-2	MATASF 150	26	1906	797	213	218	1906	797	222	226	1109	143	33	90
QF270-3-AA	MATASF 150	30	2162	953	213	218	2162	953	222	226	1209	143	39	100
QF270-3-AA	MATASF 200	30	2093	953	213	218	2093	953	222	226	1140	195	39	140
QF270-3-A	MATASF 200	37	2093	953	213	218	2093	953	222	226	1140	195	39	140
QF270-3	MATASF 200	37	2093	953	213	218	2093	953	222	226	1140	195	39	140
QF270-4-AA	MATASF 200	45	2339	1109	213	218	2339	1109	222	226	1230	195	45	156
QF270-4-A	MATASF 200	45	2339	1109	213	218	2339	1109	222	226	1230	195	45	156
QF270-4	MATASF 200	55	2449	1109	213	218	2449	1109	222	226	1340	195	45	179
QF270-5-AA	MATASF 200	55	2605	1265	213	218	2605	1265	222	226	1340	195	51	179
QF270-5-A	MATASF 200	55	2605	1265	213	218	2605	1265	222	226	1340	195	51	179
QF270-5	MATASF 200	63	2735	1265	213	218	2735	1265	222	226	1470	195	51	198
QF270-6-AA	MATASF 200	63	2891	1421	213	218	2891	1421	222	226	1470	195	58	198
QF270-6-A	MATASF 200	75	2981	1421	213	218	2981	1421	222	226	1560	195	58	215
QF270-6	MATASF 200	75	2981	1421	218	227	2981	1421	229	232	1560	195	58	215
QF270-7-AA	MATASF 200	75	3137	1577	218	227					1560	195	64	215
QF270-7-A	MATASF 200	92	3317	1577	218	227					1740	195	64	247
QF270-7	MATASF 200	92	3317	1577	218	227					1740	195	64	247
QF270-8-AA	MATASF 200	92	3473	1733	218	227					1740	195	70	247
QF270-8-A	MATASF 200	92	3473	1733	218	227					1740	195	70	247
QF270-8	MATASF 200	92	3473	1733	218	227					1740	195	70	247
QF270-9-AA	MATASF 10"	110	3629	1889	218	227					1740	195	80	315
QF270-9-A	MATASF 10"	110	3629	1889	218	227					1740	195	80	315
QF270-9	MATASF 10"	110	3629	1889	218	227					1740	195	80	315
QF270-10-AA	MATASF 10"	110	3785	2045	218	227					1740	195	86	315
QF270-10-A	MATASF 10"	132	3704	2045	218	227					1659	235	86	362
QF270-10	MATASF 10"	132	3704	2045	218	227					1659	235	86	362
QF270-11	MATASF 10"	132	3860	2201	237	237					1659	235	93	362
QF270-12	MATASF 10"	150	4126	2357	237	237					1769	237	99	413
QF270-13	MATASF 10"	185	4432	2513	237	237					1919	237	105	449
QF270-14	MATASF 10"	185	4588	2669	237	237					1919	237	111	449
QF270-15	MOTOR 12"	190	5225	2825	286	286					2400	286	118	817

PERFORMANCE TABLE

QF-270	DISCHARGE (Q)														
	m 3/h		0	80	90	100	110	120	130	140	150	160	170	180	190
	l/min.		0	1333	1500	1667	1833	2000	2167	2333	2500	2667	2833	3000	3167
MODEL	MOTOR RATING		TOTAL HEAD IN [m]												
	[KW]	[HP]													
QF270-1-A	9.2	12.5	24	19	18	17	17	16	15	15	14	13	11	9	7
QF270-1	13	17.5	34	28	26	25	24	23	22	22	21	20	19	18	16
QF270-2-AA	18.5	25	46	38	37	36	35	33	32	30	29	26	23	20	16
QF270-2-A	22	30	55	47	45	43	41	40	38	37	35	33	31	28	24
QF270-2	26	35	65	55	52	50	48	46	45	43	42	40	38	35	32
QF270-3-AA	30	40	77	67	64	62	59	57	55	52	49	46	42	38	33
QF270-3-A	37	50	87	75	72	69	66	64	62	59	57	54	50	46	41
QF270-3	37	50	96	82	78	75	72	70	68	65	63	60	57	53	48
QF270-4-AA	45	60	110	96	92	89	86	83	80	77	73	69	64	58	52
QF270-4-A	45	60	119	103	99	95	92	89	86	83	80	76	71	65	59
QF270-4	55	75	129	111	107	103	100	96	93	90	87	83	79	74	67
QF270-5-AA	55	75	142	123	119	114	111	107	103	99	95	90	84	76	68
QF270-5-A	55	75	151	130	126	121	117	113	109	105	101	96	90	83	75
QF270-5	63	85	161	139	133	129	124	120	116	113	109	104	98	91	83
QF270-6-AA	63	85	173	150	145	140	135	131	126	121	116	110	103	94	84
QF270-6-A	75	100	183	158	153	147	142	137	133	128	123	118	111	102	92
QF270-6	75	100	192	166	159	154	148	144	139	135	130	124	117	109	99
QF270-7-AA	75	100	204	177	171	165	159	154	149	143	137	130	122	112	100
QF270-7-A	92	125	213	184	177	171	165	160	155	149	144	137	128	118	107
QF270-7	92	125	222	191	184	177	171	166	161	155	150	143	135	125	113
QF270-8-AA	92	125	234	203	195	188	182	176	170	164	157	149	139	127	114
QF270-8-A	92	125	243	210	202	195	188	182	176	170	163	155	145	134	121
QF270-8	92	125	252	217	208	201	194	188	182	176	169	161	152	140	127
QF270-9-AA	110	150	266	231	223	215	207	201	194	187	179	170	159	146	131
QF270-9-A	110	150	275	238	229	221	214	207	200	193	186	177	166	153	138
QF270-9	110	150	284	245	236	220	220	213	206	199	192	183	172	160	145

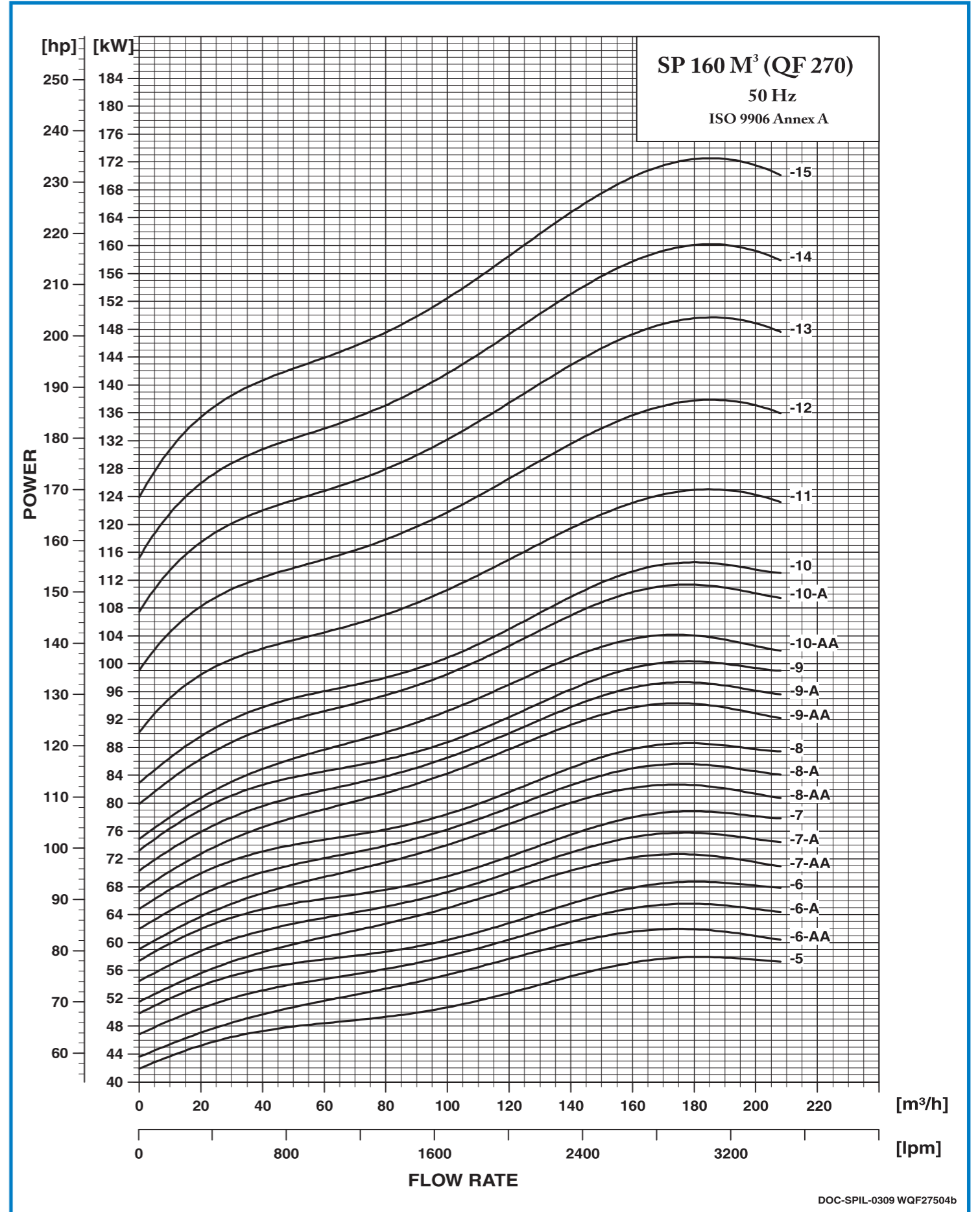
Performance Curve

Submersible Pump
QF270



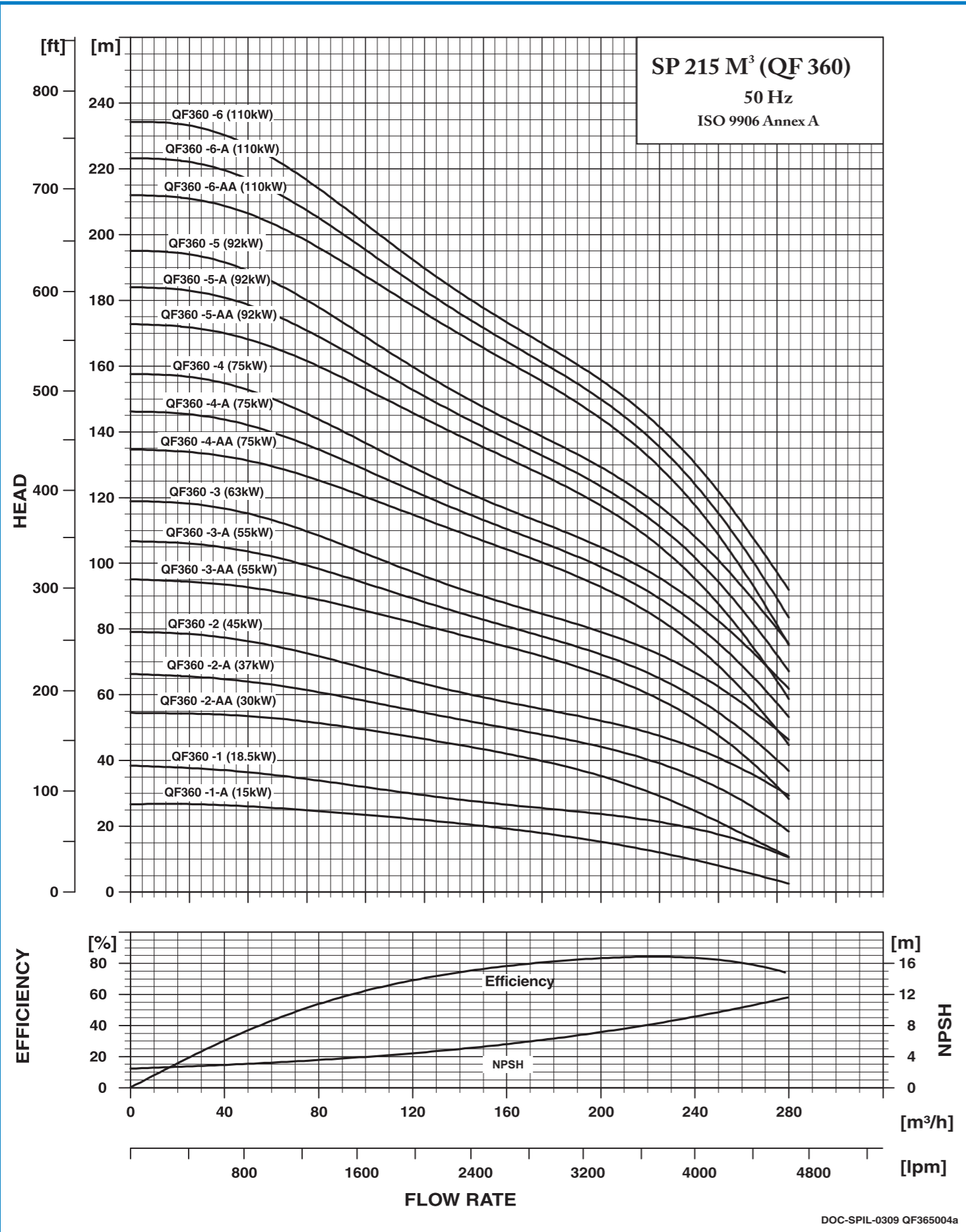
Performance Curve

Submersible Pump
QF270



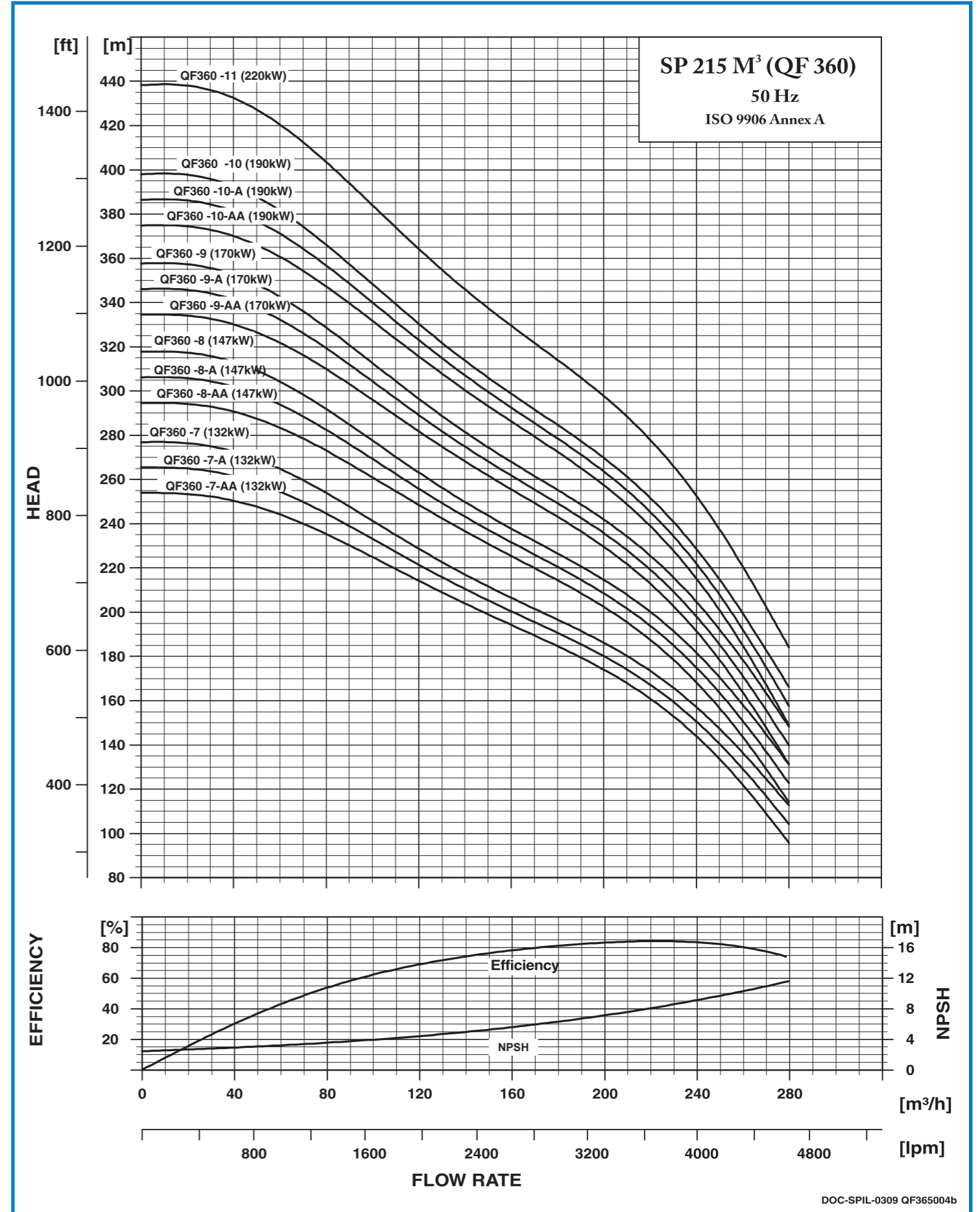
Performance Curve

Submersible Pump
QF360



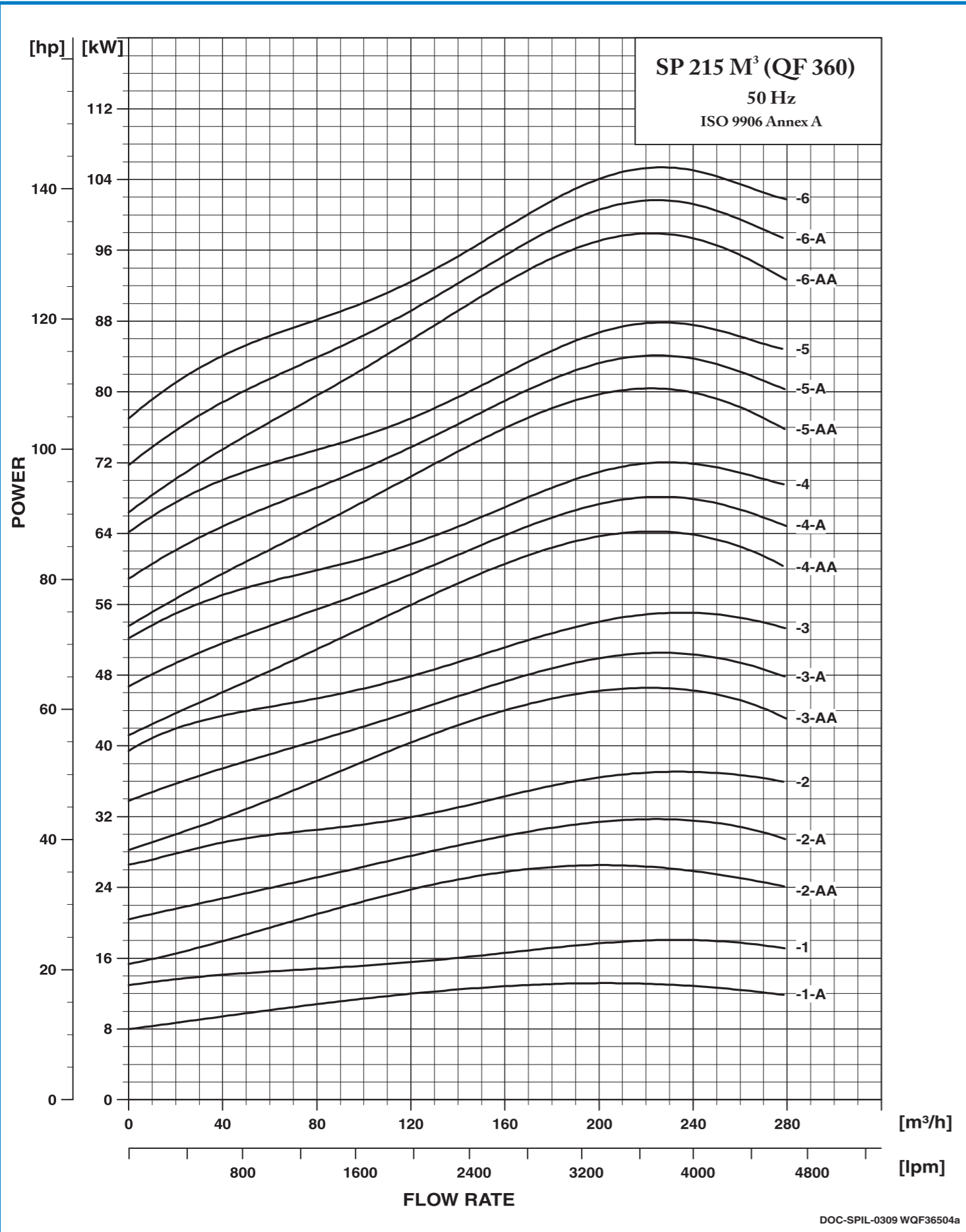
Performance Curve

Submersible Pump
QF360



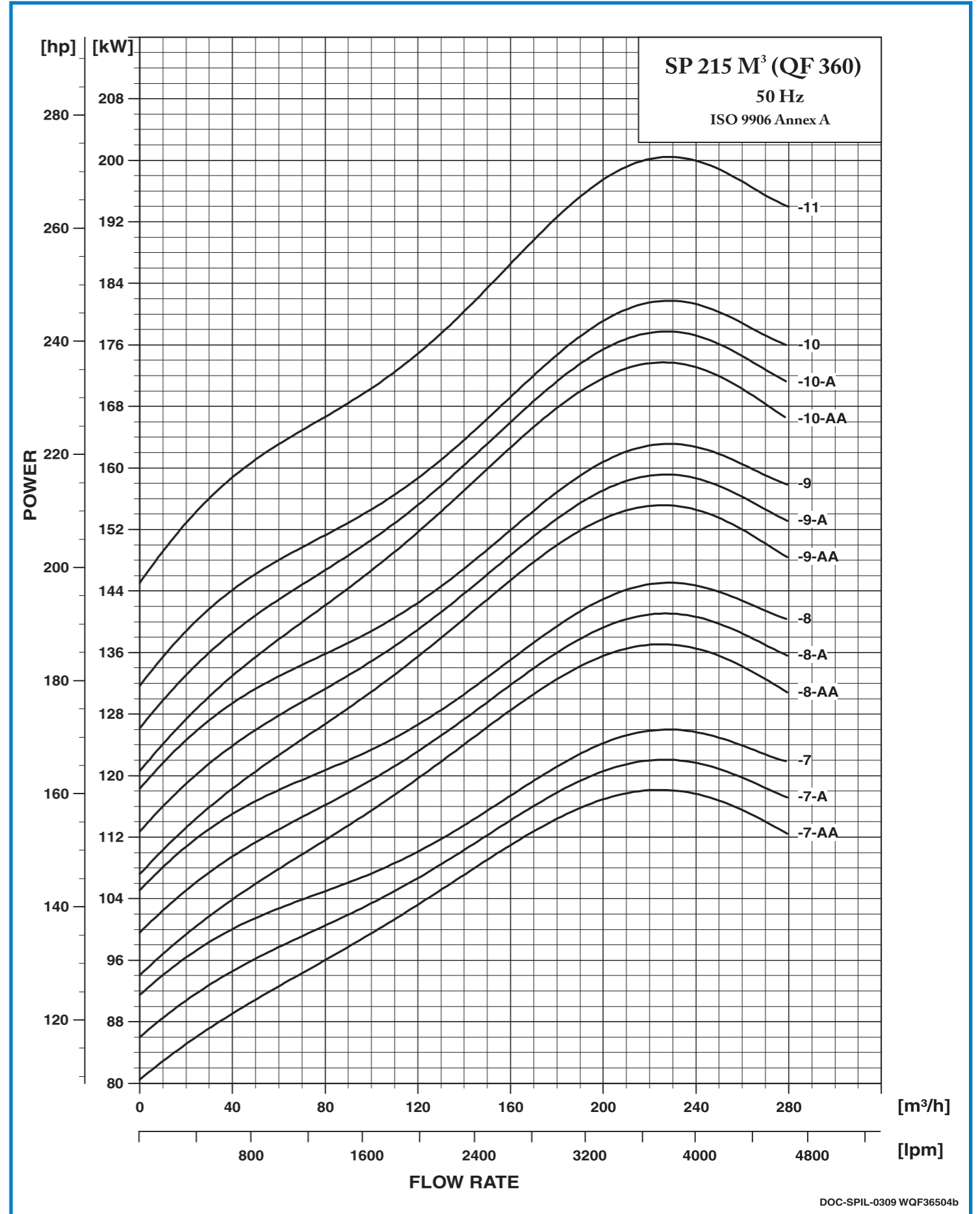
Performance Curve

Submersible Pump
QF360



Performance Curve

Submersible Pump
QF360



SHAKTI 14" PUMPS

360 MM WELL SIZE (14")

- Models

- SSP 270 (SP 270 G m³/h)
- SSP 300 (SP 300 G m³/h)
- SSP 360 (SP 360 G m³/h)

- Operating Condition

- Flow Rate, Q - 24-430 m³/h
- Head, H – Max. 410 meter

- Material:

- Diffuser – Cast Iron
- Impeller - Bronze



Pump Range

Type	SSP 270	SSP 300	SSP 360
Cast Iron	+	+	+
DIN Connection	DIN 175	DIN 175	DIN 175

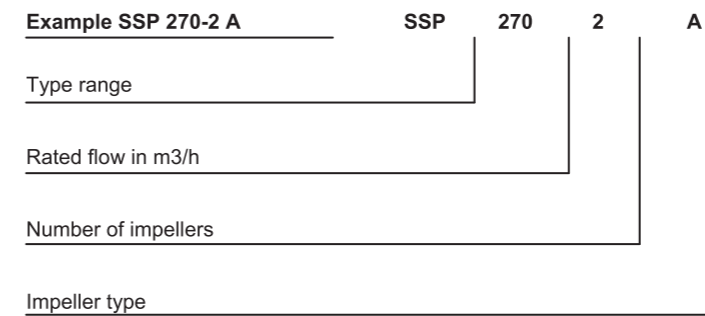
Motor Range

Motor Output [kW]	22	26	30	37	45	55	75	93	110	132	147	170	190	220
Three Phase	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Rewindable Motor	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Steel: AISI 304	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Steel: AISI 304 & Cast Iron	+	+	+	+	+	+	+	+	+	+	+	+	+	+

Soft starter or autotransformer is recommended above 75 kW, see soft starting. The MMS motors can be operated via frequency converter see Frequency converter operation.

Motors with star-delta are available for all motor sizes.

Type key



Pumped liquids

Clean, thin, non-aggressive liquids without solid particles or fibers.

Maximum sand contents: 50 g/m³.

Operating conditions

- Flow rate, Q: 24-430 m³/h
- Head, H: Maximum 410 m
- Operating pressure: Maximum 60 bar
- Storage temperature: Pump: -20 °C to +60 °C
Motor: -20 °C to +70 °C.

Motor	Installation		
	Flow velocity past motor	Vertical	Horizontal
8", 10" & 12"	0.15 m/s	40 °C	40 °C

Submersible Pumps

Features and benefits

Pump range

The SSP pump range consists of pumps which can deliver a higher pressure or a higher flow compared to the rest of the QF pump range offered by Shakti.

SSP Pumps are semi-axial pumps. They are suitable for applications requiring a flow up to 430 m³/h and a head up to 410 m head.

All pumps are available with an optional number of stages to match any duty point.

Product features

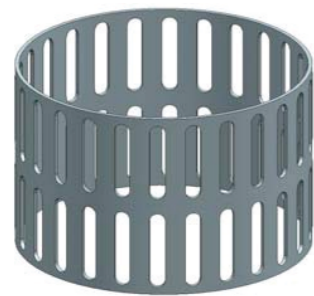
Bearings with sand channels

All bearings are constructed in such a way that channels are formed along the shaft enabling sand, if any, to leave the pump with the pumped liquid.

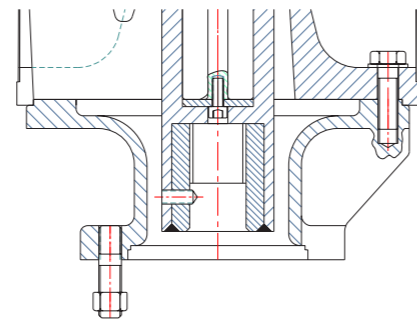
The bearings in SSP Pumps are Octagonal on the inside.

Inlet strainer (fig. no. 1)

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



(fig. no. 1)



(fig. no. 2)

Protection against upthrust (fig. no. 2)

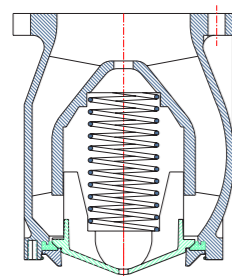
The pump range has a screwed connection between the coupling of the pump and the motor shaft ensuring that upthrust in the pump, if any, is transferred to the stop ring of the motor.

Valve Casing (fig. no. 3)

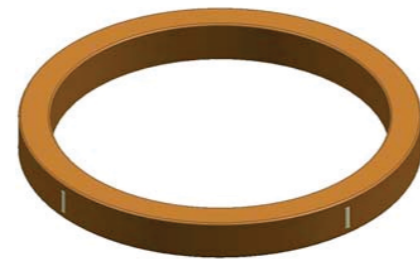
All pumps are equipped with a reliable non-return valve in the valve casing preventing back flow in connection with pump stoppage.

The valve casing is designed for optimum hydraulic properties to minimize the pressure loss across the Valve and thus contribute to minimizing the total pressure loss of the pump.

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



(fig. no. 3)



(fig. no. 4)

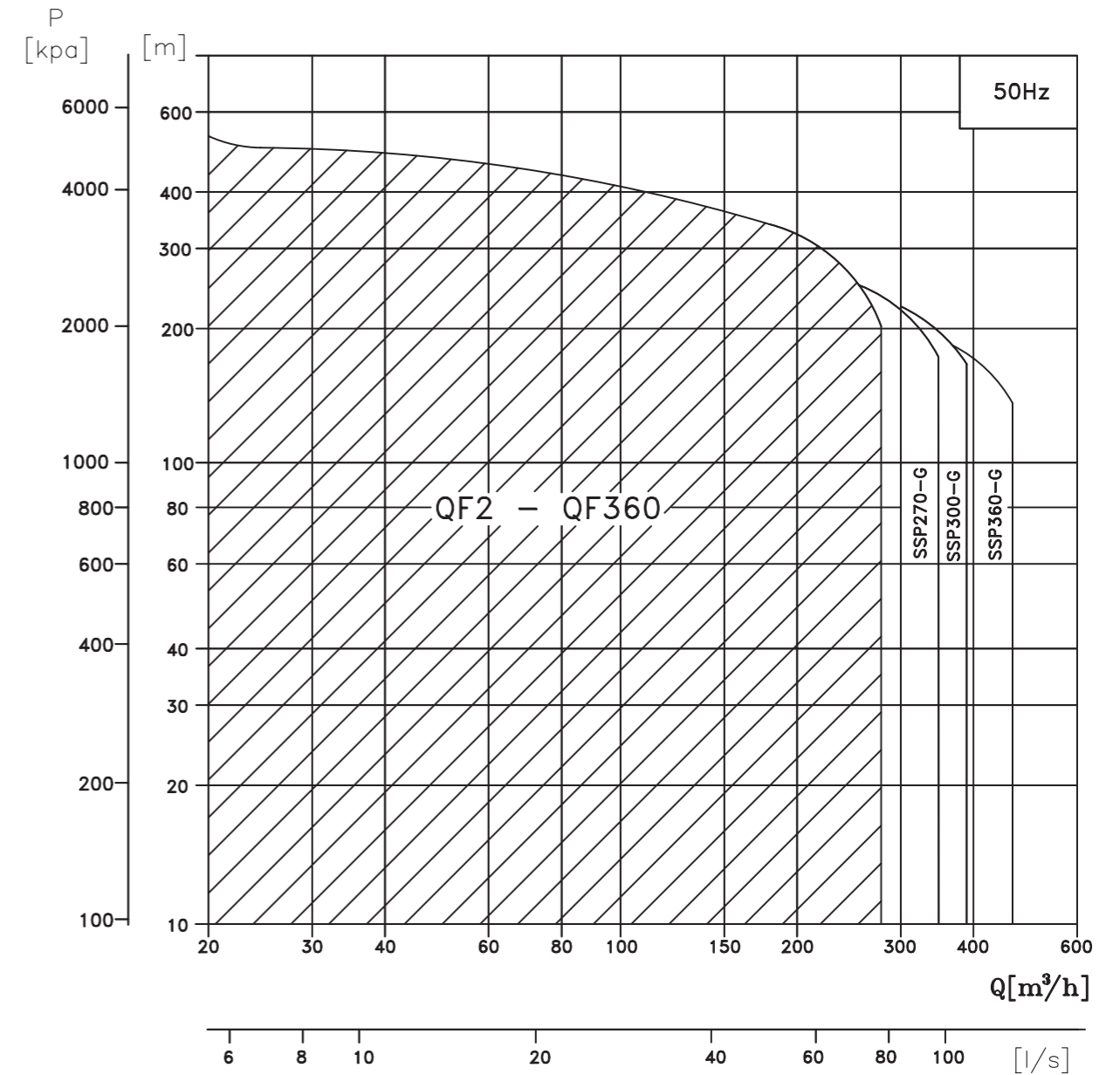
Neck ring (fig. no. 4)

All pumps have a replaceable neck ring in each chamber.

This means that the neck ring can be replaced easily in case of wear.

Performance Curve

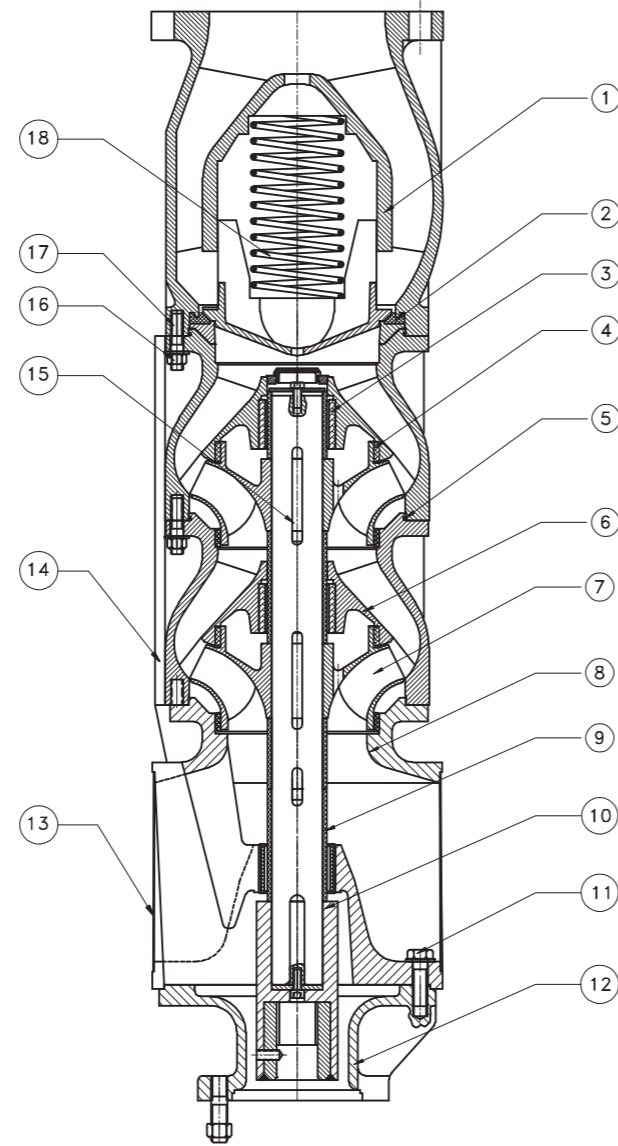
Performance range



Submersible Pumps

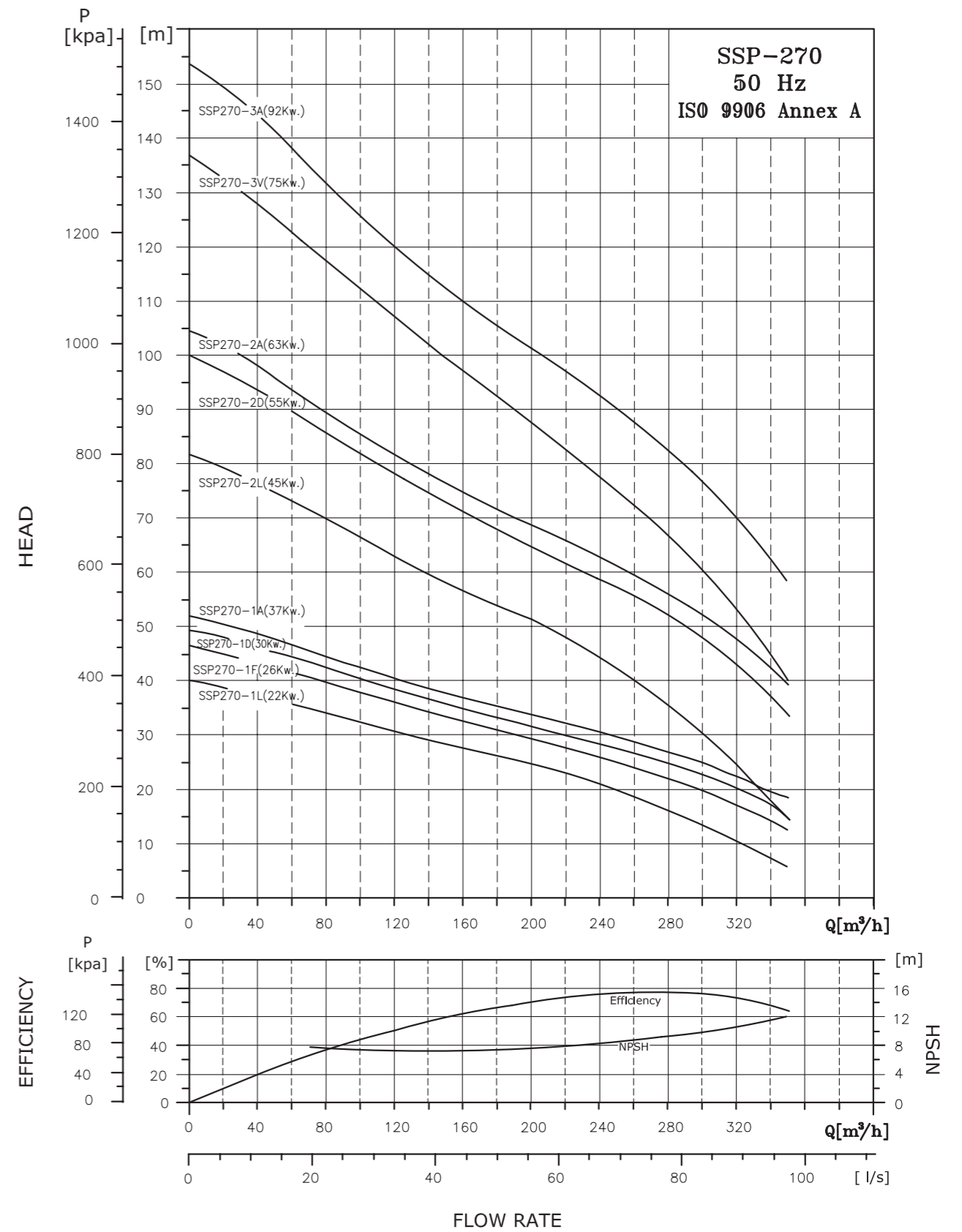
MATERIAL SPECIFICATION SSP-270

Pos. No:	DISCRIPTION	MATERIALS	GRADE
01	VALVE CASTING	CAST IRON	CI-FG-260
02	NECKRING	RUBBER	NBR
03	BUSH	BRONZE	LTB2
04	VALVE SEAT	BRONZE	LTB2
05	O-RING	RUBBER	NBR
06	BOWL	CAST IRON	CI-FG-260
07	IMPELLER	BRONZE	LTB2
08	SUCTION CASE	CAST IRON	CI-FG-260
09	BEARING SLEEVE	BRONZE	LTB2
10	COUPLING	STAINLESS STEEL	AISI-SS-304
11	FASTNER	STAINLESS STEEL	AISI-SS-304
12	SUCTION CASE ADOPTOR	CAST IRON	CI-FG-260
13	STRAINER	MS	*****
14	CABLE GAURD	STAINLESS STEEL	AISI-SS-304
15	SHAFT KEY	STAINLESS STEEL	AISI-SS-304
16	NUT	STAINLESS STEEL	AISI-SS-304
17	STUD	STAINLESS STEEL	AISI-SS-304
18	SPRING FOR VALVE CUP	STAINLESS STEEL	AISI-SS-304

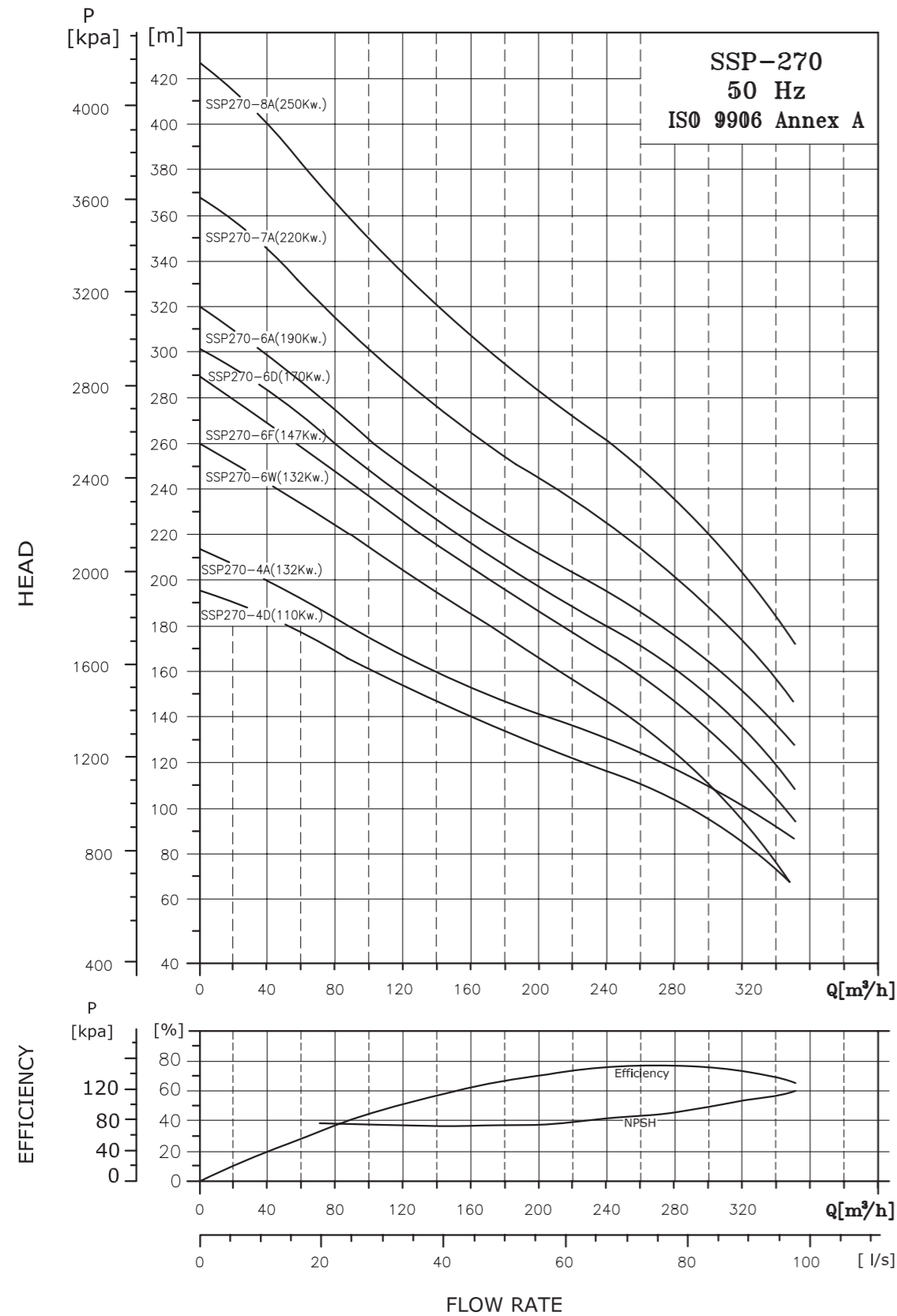


SECTION VIEW OF SSP-270 PUMP ASSLY.

Submersible Pumps



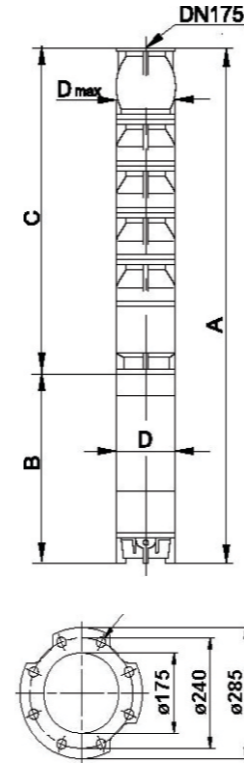
Performance Curve



Technical Data and Performance Table SSP 270

Technical Data and Performance Table

SSP-270

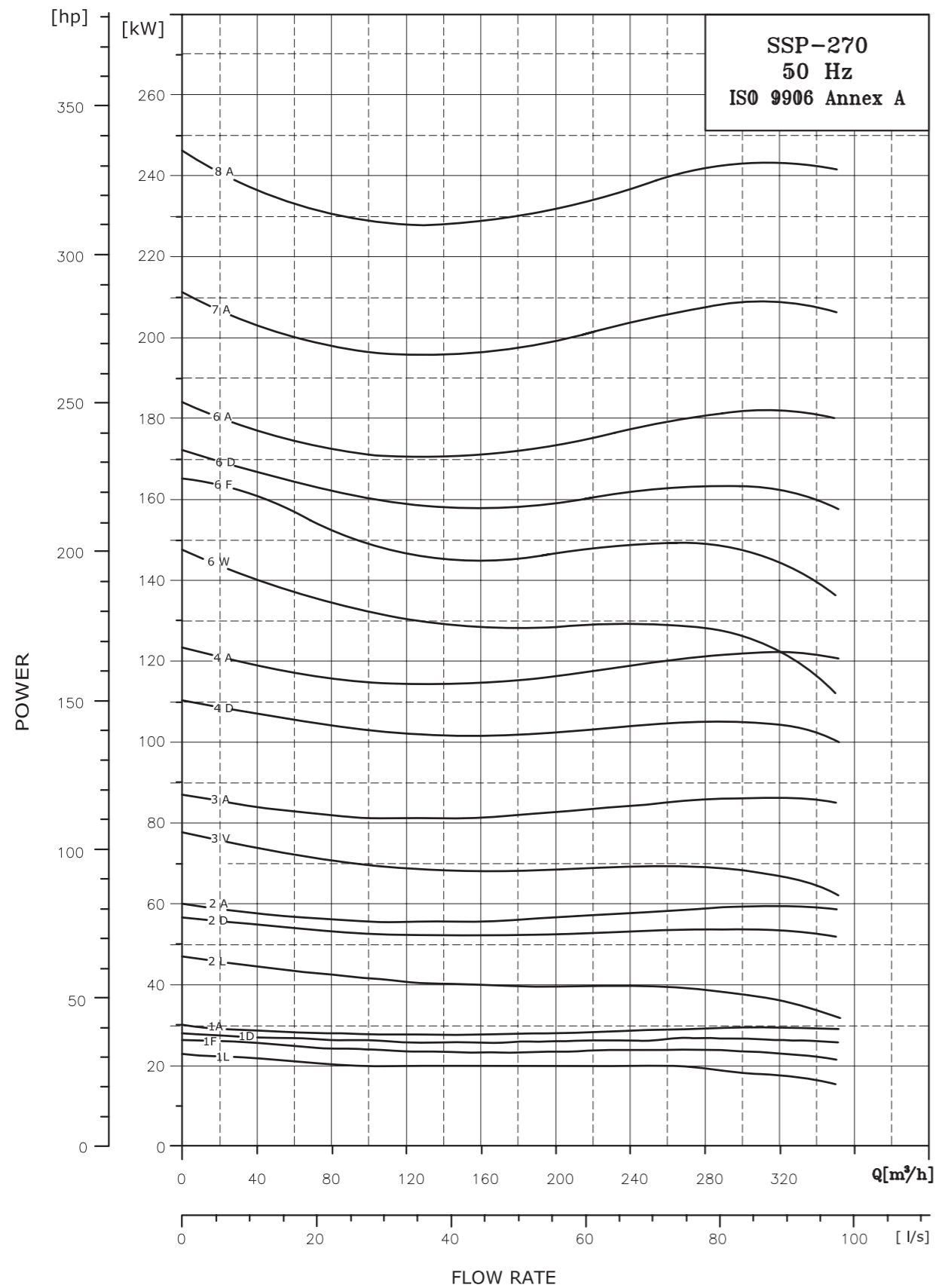


PUMP TYPE	MOTOR		Dimensions [mm]				Net weight [kg] Pump SET
	TYPE	Power (Kw)	C	B	A	D	
SSP 270-1L	MATSFC200	22	881	1085	1966	195	266
SSP 270-1F	MATSFC200	26	881	1085	1966	195	274
SSP 270-1D	MATSFC200	30	881	1140	2021	195	286
SSP 270-1A	MATSFC200	37	881	1140	2021	195	296
SSP 270-2L	MATSFC200	45	1061	1230	2291	195	342
SSP 270-2D	MATSFC200	55	1061	1340	2401	195	357
SSP 270-2A	MATSFC200	63	1061	1470	2531	195	383
SSP 270-3V	MATSFC200	75	1241	1560	2801	195	427
SSP 270-3A	MATSFC200	92	1241	1740	2981	195	473
SSP 270-4D	MATSF10"	110	1421	1529	2950	235	523
SSP 270-4D	MATSF10"	110	1421	1529	2950	235	605
SSP 270-4A	MATSF10"	132	1421	1659	3080	235	655
SSP 270-6W	MATSF10"	132	1781	1659	3440	235	705
SSP 270-6F	MATSF10"	147	1781	1769	3550	235	770
SSP 270-6D	MATSF10"	170	1807	1919	3726	235	890
SSP 270-6A	MATSF10"	190	1807	1919	3726	235	935
SSP 270-7A	MOTOR12"	220	1987	1893	3880	286	1010
SSP 270-8A	MOTOR12"	250	2167	1893	4060	286	1100

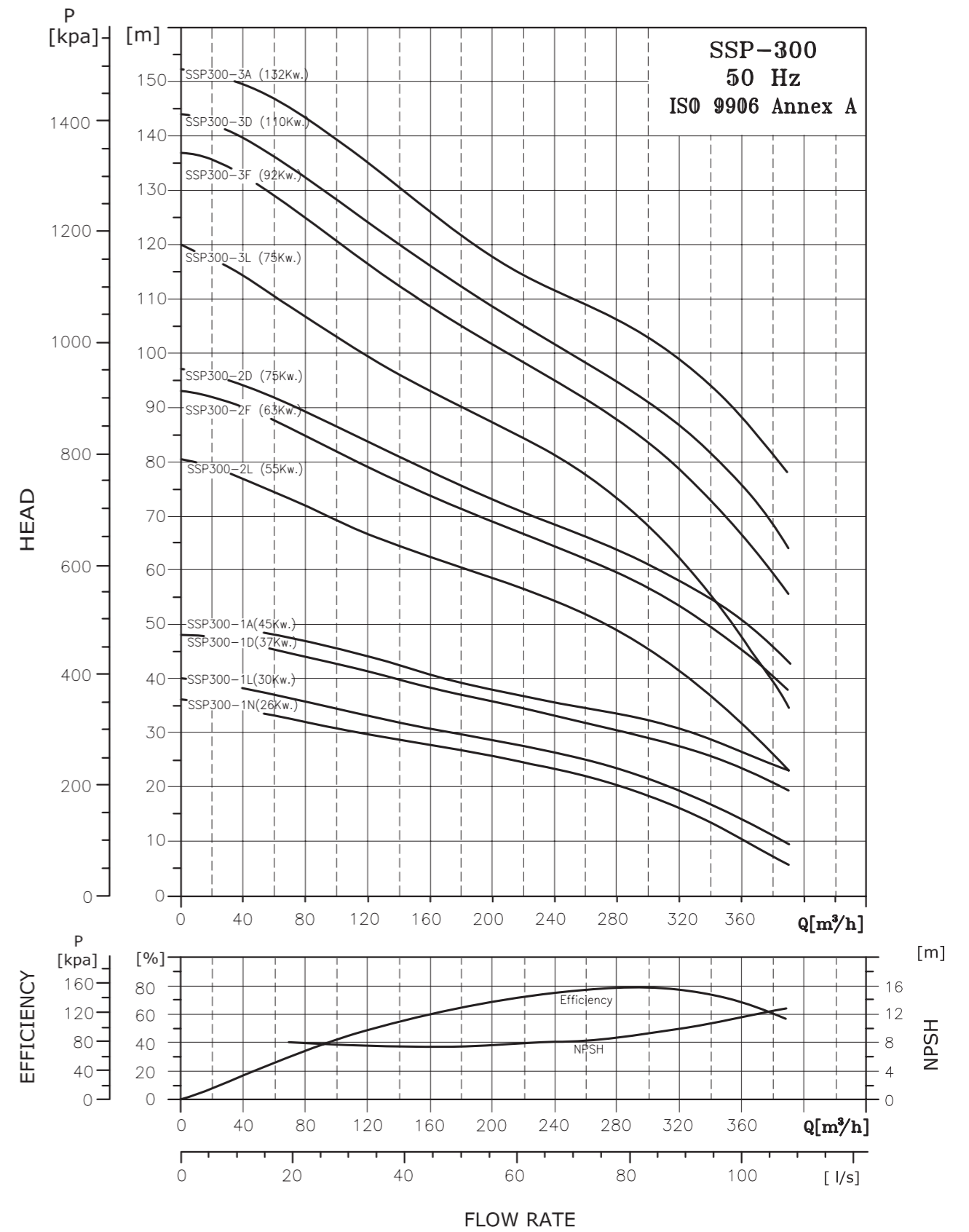
SSP270	DISCHARGE (Q)										
	m 3/h	0	40	80	120	160	200	240	280	320	
	l/min.	0	668	1336	2004	2672	3340	4008	4676	5344	
MODEL	[KW]	[HP]	TOTEL HEAD IN [m]								
SSP270-1 L	22	30	41	38	34	30	28	25	21	17	10
SSP270-1F	26	35	47	44	40	37	33	30	27	23	18
SSP270-1D	30	40	49	47	43	39	35	32	29	25	20
SSP270-1A	37	50	52	49	45	41	37	33	30	27	23
SSP270-2L	45	60	80	76	69	62	56	50	44	35	24
SSP270-2D	55	74	98	92	85	77	70	63	58	51	42
SSP270-2A	63	84	103	96	88	80	73	68	62	55	46
SSP270-3V	75	101	136	128	117	106	96	87	73	67	51
SSP270-3A	92	123	155	145	133	121	111	102	93	83	71
SSP270-4D	110	148	197	185	170	155	141	129	117	104	87
SSP270-4A	132	177	207	194	178	162	149	137	126	113	96
SSP270-6W	132	177	253	238	219	199	181	162	143	119	90
SSP270-6F	147	197	283	266	242	220	199	181	164	144	115
SSP270-6D	170	228	296	277	255	234	213	194	177	158	132
SSP270-6A	190	255	311	290	267	243	223	205	189	170	146
SSP270-7A	220	295	362	338	310	283	260	239	221	197	169
SSP270-8A	250	335	414	387	355	324	297	274	252	226	193

This Performance Table is Approximate as a Performance Curve
Technical Change without notice

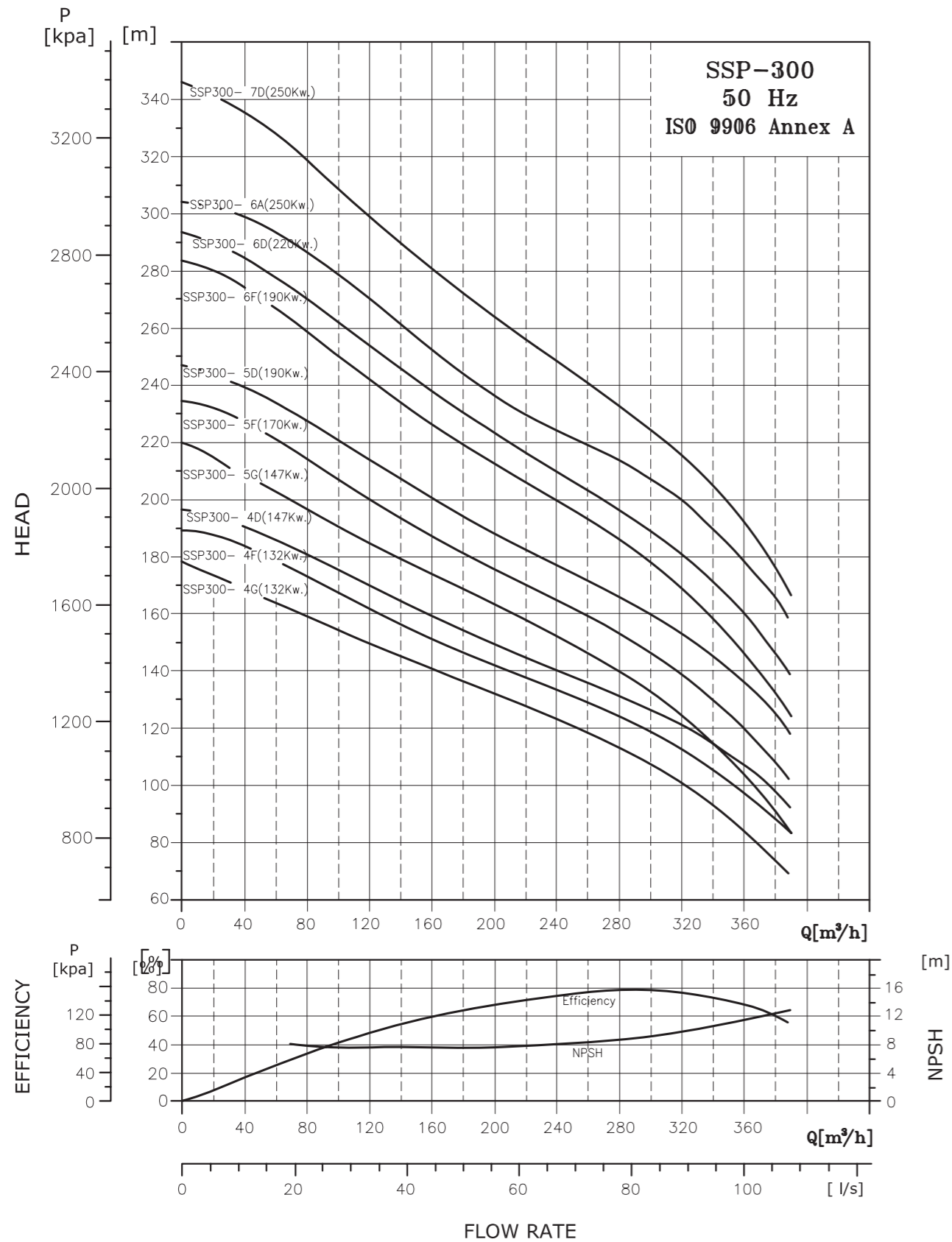
Performance Curve



Performance Curve



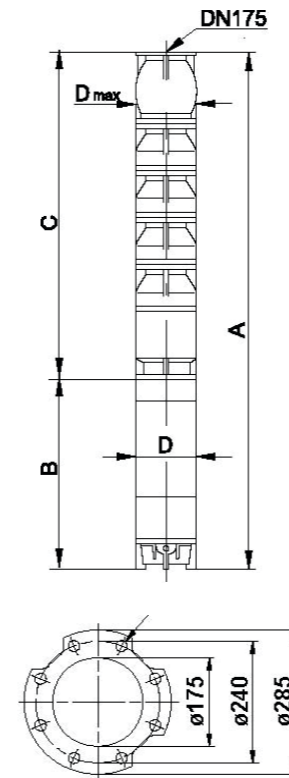
Performance Curve



Performance Table & Technical Data SSP 300

Technical Data and Performance Table

SSP-300

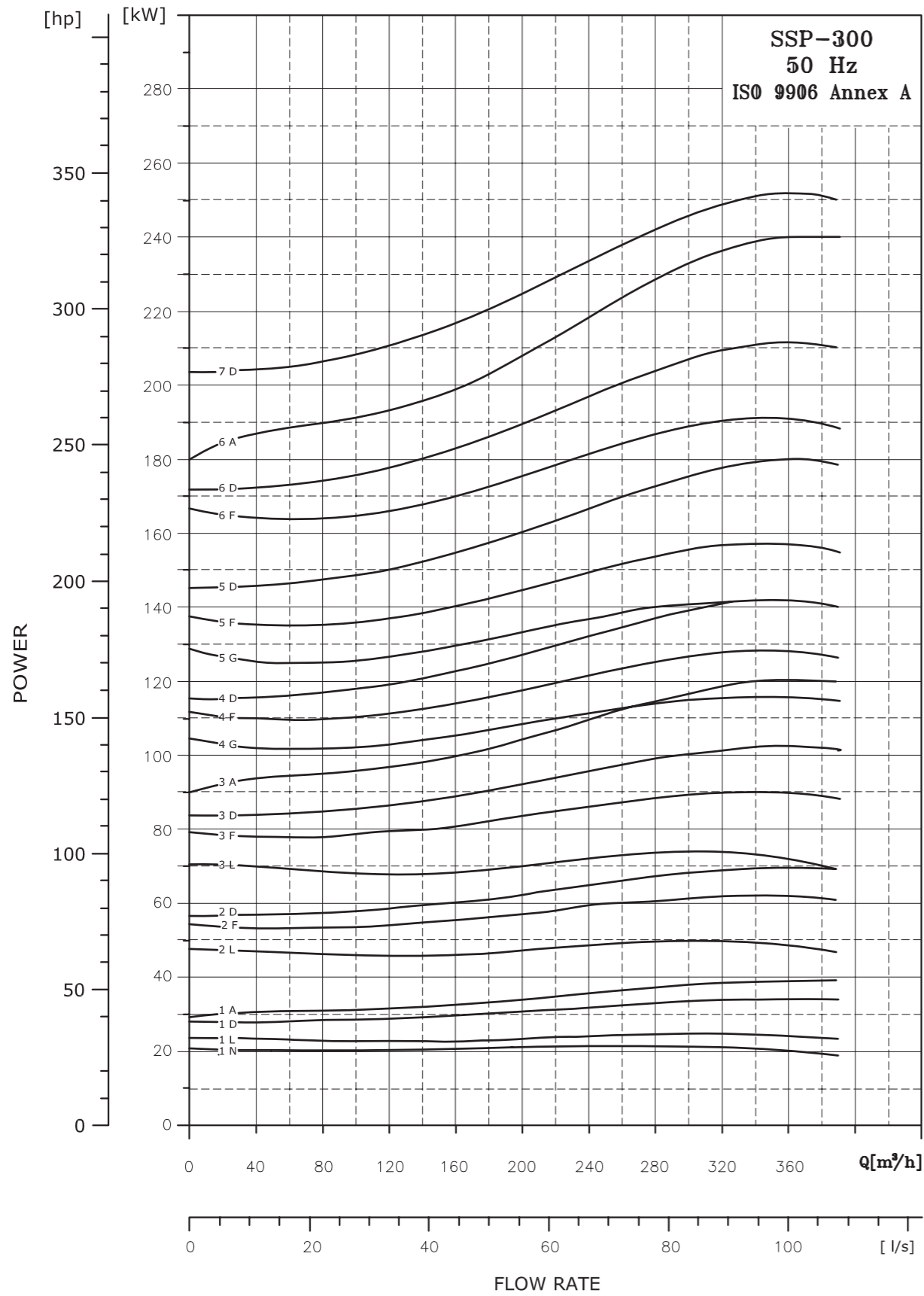


PUMP TYPE	MOTOR		Dimensions [mm]				Net weight [K] Pump SET
	TYPE	Power (Kw)	C	B	A	D	
SSP 300-1N	MATSF200	26	881	1085	1966	192	266
SSP 300-1L	MATSF200	30	881	1140	2021	192	286
SSP 300-1D	MATSF200	37	881	1140	2021	192	296
SSP 300-1A	MATSF200	45	881	1230	2111	192	317
SSP 300-2L	MATSF200	55	1061	1340	2401	192	357
SSP 300-2F	MATSF200	63	1061	1470	2531	192	383
SSP 300-2D	MATSF200	75	1061	1560	2621	192	402
SSP 300-3L	MATSF200	75	1241	1560	2801	192	427
SSP 300-3F	MATSF200	92	1241	1740	2981	192	473
SSP 300-3D	MATSF10"	110	1241	1529	2770	192	523
SSP 300-3D	MATSF10"	110	1241	1529	2770	237	580
SSP 300-3A	MATSF10"	132	1241	1659	2900	237	630
SSP 300-4	MATSF10"	132	1421	1659	3080	237	655
SSP 300-4F	MATSF10"	132	1421	1659	3080	237	655
SSP 300-4D	MATSF10"	147	1421	1769	3190	237	720
SSP 300-5	MATSF10"	147	1601	1769	3370	237	745
SSP 300-5F	MATSF10"	170	1627	1919	3546	286	865
SSP 300-5D	MOTOR12"	190	1627	1743	3370	286	910
SSP 300-6F	MOTOR12"	190	1807	1743	3550	286	935
SSP 300-6D	MOTOR12"	220	1807	1743	3550	286	985
SSP 300-6A	MOTOR12"	250	1807	1893	3700	286	1060
SSP 300-7D	MOTOR12"	250	1987	1893	3880	286	1085

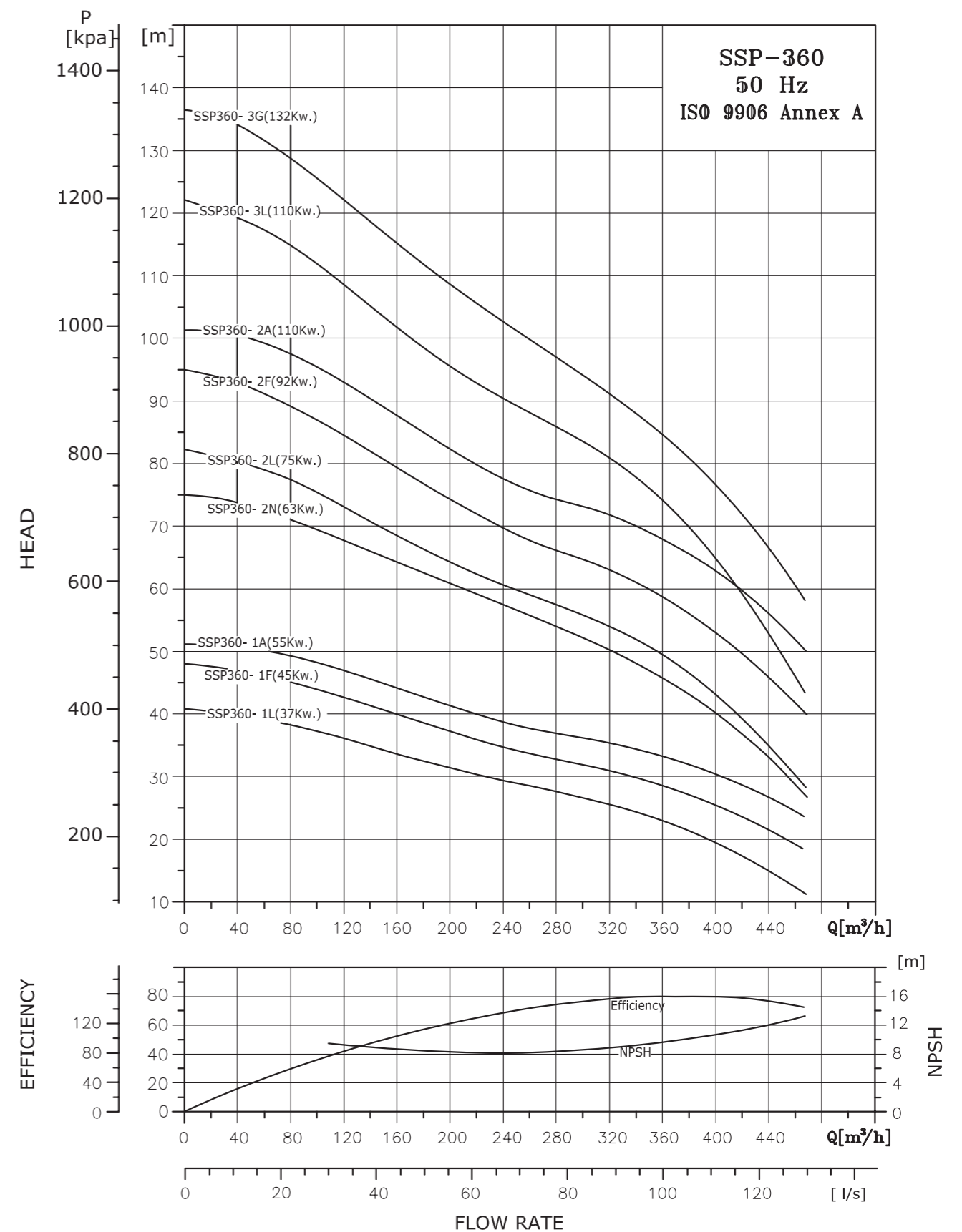
SSP300	DISCHARGE (Q)											
	m 3/h	0	40	80	120	160	200	240	280	320	360	
	l/min.	0	668	1336	2004	2672	3340	4008	4676	5344	6012	
MODEL	[KW]	[HP]	TOTAL HEAD IN [m]									
SSP300-1 N	26	35	37	34	32	29	28	26	23	21	16	10
SSP300-1L	30	40	38	35	33	30	29	27	24	22	17	11
SSP300-1D	37	50	48	46	44	41	39	36	34	31	28	24
SSP300-1A	45	60	49	48	46	44	41	38	36	33	30	26
SSP300-2L	55	74	80	76	71	66	62	58	54	49	41	31
SSP300-2F	63	84	92	89	84	78	73	68	64	59	53	45
SSP300-2D	75	101	93	90	85	79	74	69	65	60	54	46
SSP300-3L	75	101	119	114	106	98	93	87	81	72	62	47
SSP300-3F	92	123	138	134	126	118	110	103	96	89	80	68
SSP300-3D	110	148	145	140	133	125	117	109	103	99	87	76
SSP300-3A	132	177	149	146	140	131	123	115	108	102	95	85
SSP300-4G	132	177	173	165	155	146	137	128	119	109	96	79
SSP300-4F	132	177	185	179	168	157	147	138	129	120	108	92
SSP300-4D	147	197	193	187	178	167	156	146	137	128	118	102
SSP300-5G	147	197	216	204	193	181	170	159	148	135	120	98
SSP300-5F	170	228	231	224	211	197	184	172	162	150	135	116
SSP300-5D	190	255	242	234	222	209	195	183	172	161	148	136
SSP300-6F	190	255	276	268	252	236	230	206	194	180	162	139
SSP300-6D	220	295	290	280	266	250	234	219	206	193	177	156
SSP300-6A	250	335	297	292	279	263	245	230	217	206	192	171
SSP300-7D	250	335	337	327	310	291	272	256	240	224	206	182

This Performance Table is Approximate as a Performance Curve
Technical Change without notice

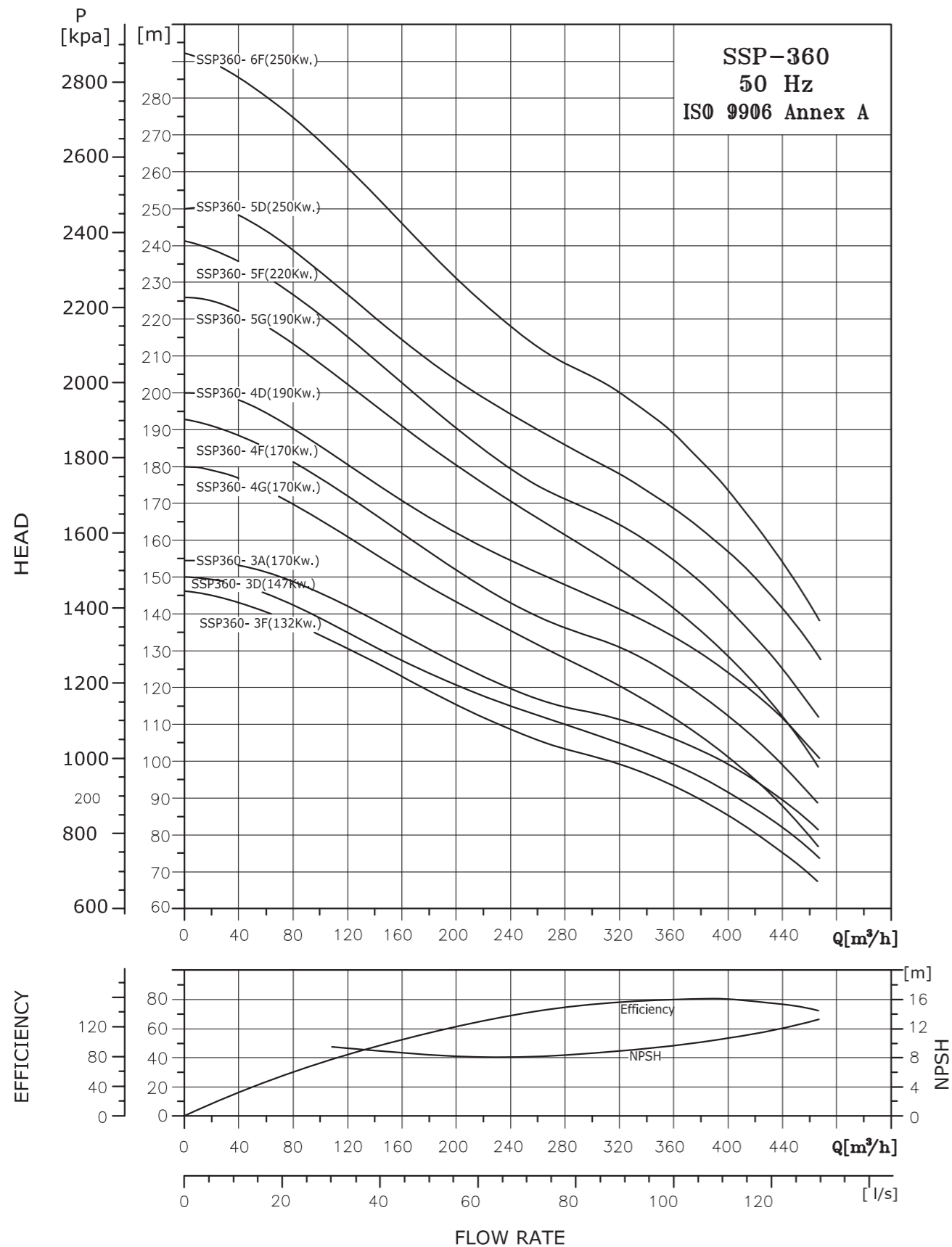
Performance Curve



Performance Curve



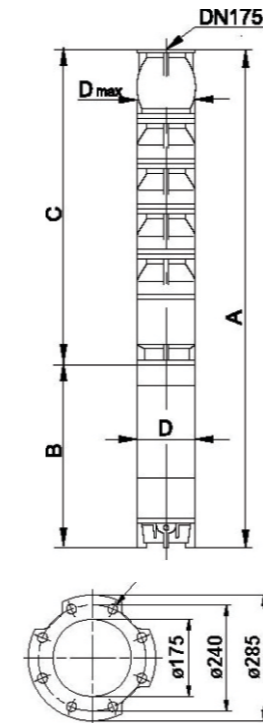
Performance Curve



Technical Data and Performance Table SSP 360

Technical Data and Performance Table

SSP-360

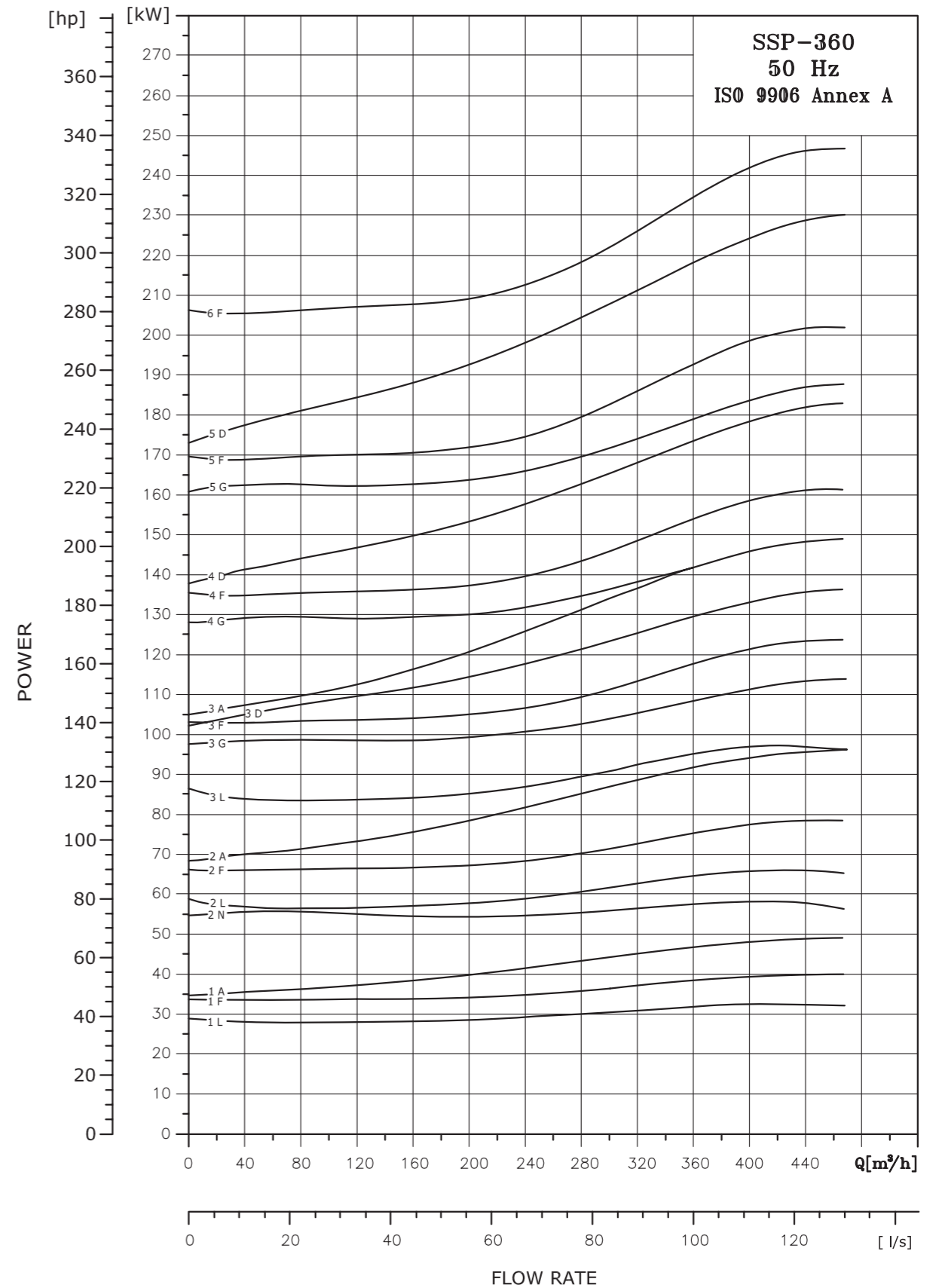


PUMP TYPE	MOTOR		Dimensions [mm]				Net weight [K] Pump SET
	TYPE	Power (Kw)	C	B	A	D	
SSSP 360-1L	MATSF200	37	881	1140	2021	192	296
SSSP 360-1F	MATSF200	45	881	1230	2111	192	317
SSSP 360-1A	MATSF200	55	881	1340	2221	192	332
SSSP 360-2N	MATSF200	63	1061	1470	2531	192	383
SSSP 360-2L	MATSF200	75	1061	1560	2621	192	402
SSSP 360-2F	MATSF200	92	1061	1740	2801	192	448
SSSP 360-2A	MATSF10"	110	1061	1529	2590	192	498
SSSP 360-3L	MATSF10"	110	1241	1529	2770	192	523
SSSP 360-2A	MATSF10"	110	1061	1529	2590	237	555
SSSP 360-3L	MATSF10"	110	1241	1529	2770	237	580
SSSP 360-3	MATSF10"	132	1241	1659	2900	237	630
SSSP 360-3F	MATSF10"	132	1241	1659	2900	237	630
SSSP 360-3D	MATSF10"	147	1241	1769	3010	237	695
SSSP 360-3A	MATSF10"	170	1267	1919	3186	286	805
SSSP 360-4	MATSF10"	170	1447	1919	3366	286	840
SSSP 360-4F	MATSF10"	170	1447	1919	3366	286	840
SSSP 360-4D	MATSF10"	190	1447	1919	3366	286	885
SSSP 360-5	MATSF10"	190	1627	1919	3546	286	910
SSSP 360-5F	MATSF12"	220	1627	1893	3520	286	960

SSP360	DISCHARGE (Q)													
	m 3/h	0	40	80	120	160	200	240	280	320	360	400	440	
	l/min.	0	668	1336	2004	2672	3340	4008	4676	5344	6012	6680	7348	
MODEL	[KW]	[HP]	TOTAL HEAD IN [m]											
SSP360-1L	37	50	41	39	38	36	34	31	30	28	26	23	20	15
SSP360-1F	45	60	47	47	45	42	39	37	35	33	31	28	25	21
SSP360-1A	55	74	51	50	48	47	44	41	38	37	35	33	30	26
SSP360-2N	63	84	74	73	70	67	63	59	56	52	47	42	36	28
SSP360-2L	75	101	82	79	76	73	69	64	60	57	54	49	43	34
SSP360-2F	92	123	96	95	90	85	79	74	70	67	63	59	54	47
SSP360-2A	110	148	102	101	98	93	88	83	78	75	72	68	64	57
SSP360-3L	110	148	123	119	115	109	103	97	91	86	82	75	66	53
SSP360-3G	132	177	133	131	126	119	112	106	100	94	88	82	74	63
SSP360-3F	132	177	143	141	135	127	119	112	106	101	96	70	82	72
SSP360-3D	147	197	147	146	140	132	125	118	113	108	103	97	89	79
SSP360-3A	170	228	153	152	147	140	132	124	118	113	109	104	97	87
SSP360-4G	170	228	178	174	167	159	150	141	133	126	118	110	99	85
SSP360-4F	170	228	190	188	180	169	158	149	141	135	128	120	110	96
SSP360-4D	190	255	196	194	186	176	167	158	150	144	137	130	120	107
SSP360-5G	190	255	221	217	208	197	186	175	166	157	147	137	123	106
SSP360-5F	220	295	238	236	225	212	198	187	177	169	161	151	139	122
SSP360-5D	250	335	246	243	233	221	209	198	189	181	173	163	150	134
SSP360-6F	250	335	286	282	270	253	237	223	212	202	193	182	166	147

This Performance Table is Approximate as a Performance Curve
Technical Change without notice

TECHNICAL DATA QF 360														
PUMP TYPE	MOTOR		DIMENSIONS (mm)										NET WEIGHT (Kg)	
	TYPE	POWER (KW)	Rp 6" CONNECTION				6" FLANGE				B	D	PUMP	MOTOR
			A	C	E*	E**	A	C	E*	E**				
QF360-1-A	MATASF 150	15	1528	611	241	247	1528	611	241	247	917	143		66
QF360-1	MATASF 150	18.5	1528	611	241	247	1528	611	241	247	917	143		66
QF360-2-AA	MATASF 150	30	1999	787	241	247	1999	787	241	247	1212	143		70
QF360-2-AA	MATASF 200	30	2000	860	241	247	2000	860	241	247	1140	195		140
QF360-2-A	MATASF 200	37	2000	860	241	247	2000	860	241	247	1140	195		140
QF360-2	MATASF 200	45	2090	860	241	247	2090	860	241	247	1230	195		156
QF360-3-AA	MATASF 200	55	2376	1036	241	247	2376	1036	241	247	1340	195		179
QF360-3-A	MATASF 200	55	2376	1036	241	247	2376	1036	241	247	1340	195		179
QF360-3	MATASF 200	63	2506	1036	241	247	2506	1036	241	247	1470	195		198
QF360-4-AA	MATASF 200	75	2772	1212	241	247	2772	1212	241	247	1560	195		215
QF360-4-A	MATASF 200	75	2772	1212	241	247	2772	1212	241	247	1560	195		215
QF360-4	MATASF 200	75	2772	1212	241	247	2772	1212	241	247	1560	195		215
QF360-5-AA	MATASF 200	92	3128	1388	241	247	3128	1388	241	247	1740	195		247
QF360-5-A	MATASF 200	92	3128	1388	241	247	3128	1388	241	247	1740	195		247
QF360-5	MATASF 200	92	3128	1388	241	247	3128	1388	241	247	1740	195		247
QF360-6-AA	MATASF 10"	110	3093	1564	241	247	3093	1564	241	247	1529	237		315
QF360-6-A	MATASF 10"	110	3093	1564	241	247	3093	1564	241	247	1529	237		315
QF360-6	MATASF 10"	110	3093	1564	241	247	3093	1564	241	247	1529	237		315
QF360-7-AA	MATASF 10"	132	3399	1740	241	247					1659	237		362
QF360-7-A	MATASF 10"	132	3399	1740	241	247					1659	237		362
QF360-7	MATASF 10"	132	3399	1740	241	247					1659	237		362
QF360-8-AA	MATASF 10"	147	3685	1916	241	247					1769	237		413
QF360-8-A	MATASF 10"	147	3685	1916	241	247					1769	237		413
QF360-8	MATASF 10"	147	3685	1916	276	276					1769	237		413
QF360-9-AA	MATASF 10"	185	4011	2092	276	276					1919	237		449
QF360-9-A	MATASF 10"	185	4011	2092	276	276					1919	237		449
QF360-9	MATASF 10"	185	4011	2092	276	276					1919	237		449
QF360-10-AA	MOTOR 12"	190	2268	2268	276	276						286		
QF360-10-A	MOTOR 12"	190	2268	2268	286	286						286		
QF360-10	MOTOR 12"	190	2268	2268	286	286						286		
QF360-11	MOTOR 12"	220	2444	2444	286	286						286		



1 x 230 V, Submersible Rewindable Motors

Electrical Data											Dimensions		
Motor			Full Load Current (In A)	Motor Efficiency (%)			Power Factor			Capacitor		Length (mm)	Weight (Kg)
Type	Size	Power (kW)		η 50%	η 75%	η 100%	cos φ 50%	cos φ 75%	cos φ 100%	Start	Run		
MCI 100	4"	0.37	4.00	50.50	56.00	60.00	0.50	0.61	0.67	43-52μF, 330V	486.00	15.00	
MCI 100	4"	0.55	5.80	51.60	56.20	68.00	0.52	0.65	0.75	64-77μF, 330V	486.00	15.50	
MCI 100	4"	0.75	6.20	58.50	65.00	72.00	0.58	0.72	0.82	88-106μF, 330V	40μF, 450V	486.00	16.00
MCI 100	4"	1.10	9.00	59.00	64.00	68.00	0.59	0.65	0.76	100-120μF, 230-275V	50μF, 450V	536.00	18.00
MCI 100	4"	1.50	11.00	58.00	63.50	70.00	0.75	0.85	0.93	100-120μF, 230-275V	50μF, 450V	586.00	20.00
MCI 100	4"	2.20	15.25	56.50	63.00	68.00	0.76	0.85	0.94	120-150μF, 230-275V	75μF, 440V	636.00	25.00

* Performance is typical, not guaranteed.
Data apply to 1 x 220 V.

RO 100 & RO 101 Rewindable Motors Performance Data
1x230 V, Submersible Motors

Electrical Data											Dimensions					
Motor			Thrust F [N]	UN [V]	Nn [min-1]	Full Load Current (In A)	Motor Efficiency (%)			Power Factor			Capacitor		Length (mm)	Weight (Kg)
Type	HP	PN (kW)					η 50%	η 75%	η 100%	cos φ 50%	cos φ 75%	cos φ 100%	Start	Run		
RO 100	0.5	0.37	1500	230	2860	4	48	54	57	0.58	0.68	0.77	43-52μF/330V		393	8
RO 100	0.75	0.55	1500	230	2860	6	50	57	60	0.52	0.65	0.74	64-77μF/330V		408	9
RO 100	1	0.75	1500	230	2835	7.5	52	58	60	0.57	0.69	0.79	88-106μF/330V		424	10
RO 100	1.5	1.1	3000	230	2830	9	62	70	72	0.99	0.99	0.99	100-120μF, 230-275V	40μ/450V	464	12
RO 100	2	1.5	3000	230	2810	10	57	67	70	0.91	0.96	0.98	100-120μF, 230-275V	50μ/450V	464	13
RO 101	3	2.2	6500	230	2885	16	61	68	70	0.72	0.82	0.88	120-150μF, 230-275V	60μ/450V	627	18
RO 101	5	3.7	6500	230	2885	22	69	75	76	0.90	0.95	0.98	189-227μF, 220V	75V 35μ/450V	779	20

*Performance is typical, not guaranteed.
Data apply to 1 x 220V.

RO 100 & RO 101 Rewindable Motors Performance Data
3x230, 3x380, 3x400, 3x415V, Submersible Motors

Motor			Thrust F [N]	UN [V]	Nn [min-1]	Full Load Current (In A)	Motor Efficiency (%)			Power Factor			Dimensions	
Type	HP	PN [kW]					η 50%	η 75%	η 100%	cos φ 50%	cos φ 75%	cos φ 100%	Length (mm)	Weight (Kg)
RO 100	0.5	0.37	1500	230	2860	3	51	59	64	0.44	0.55	0.64	343	8
				380	2850	1.3	51	59.5	64	0.44	0.55	0.70		
				400	2860	1.4	51	59.5	64	0.44	0.55	0.64		
				415	2870	1.5	50	59.5	63	0.43	0.54	0.60		
RO 100	0.75	0.55	1500	230	2860	4	49.5	57	64	0.42	0.52	0.64	358	9
				380	2850	2	49	57	64	0.42	0.52	0.70		
				400	2860	2.2	49	57	64	0.42	0.52	0.64		
				415	2870	2.4	48	56	63	0.41	0.57	0.60		
RO 100	1	0.75	1500	230	2835	4.2	64	70	73	0.50	0.62	0.72	393	10
				380	2850	2.2	64	70	73	0.50	0.63	0.75		
				400	2860	2.3	64	70	73	0.50	0.63	0.72		
				415	2870	2.4	63	68	73	0.41	0.62	0.65		
RO 100	1.5	1.1	3000	230	2830	6.2	62	69	73	0.47	0.59	0.72	424	12
				380	2850	3.3	63	69	73	0.47	0.59	0.76		
				400	2860	3.4	63	69	73	0.47	0.59	0.72		
				415	2870	3.2	62	68	73	0.41	0.58	0.65		
RO 100	2	1.5	3000	230	2810	8	56.5	66.5	70	0.91	0.96	0.98	464	13
				380	2850	4	68	73	75	0.50	0.64	0.80		
				400	2860	4	68	73	76	0.51	0.64	0.75		
				415	2870	4	67	72	76	0.51	0.63	0.70		
RO 100	3	2.5	3001	230	2810	10	72.5	75.5	76	0.56	0.71	0.82	464	13
				380	2850	5.5	72.5	75.5	77	0.56	0.71	0.82		
				400	2860	5.4	72.5	75.5	78	0.56	0.70	0.82		
				415	2870	5.3	71.5	74.5	78	0.54	0.70	0.82		
RO 101	3	2.2	6500	230	2840	10.2	69	73	75	0.51	0.64	0.75	474	18
				380	2815	5.8	72	75	75	0.58	0.72	0.81		
				400	2840	5.9	69	73	75	0.51	0.76	0.75		
				415	2870	6.3	66	71	73	0.45	0.59	0.69		
RO 101	4	3	6500	230	2830	13.5	71	74	76	0.51	0.65	0.75	541	19
				380	2850	7.5	73	76	76	0.58	0.72	0.81		
				400	2830	7.8	70	74	76	0.51	0.65	0.75		
				415	2850	8.2	67	73	75	0.46	0.59	0.70		
RO 101	5	3.7	6500	230	2860	15.8	73	77	77	0.55	0.70	0.79	579	20
				380	2850	9.0	75	78	77	0.64	0.76	0.84		
				400	2830	9.1	73	77	77	0.55	0.70	0.79		
				415	2850	9.4	71	76	76	0.51	0.64	0.74		
RO 101	5.5	4	6500	230	2860	17.3	73	77	78	0.56	0.69	0.78	617	25
				380	2855	9.8	75	78	77	0.63	0.76	0.84		
				400	2835	10.0	73	77	78	0.56	0.69	0.78		
				415	2855	10.3	71	76	77	0.50	0.63	0.73		
RO 101	7.5	5.5	6500	230	2870	23.7	71	75	76	0.57	0.70	0.79	731	27
				380	2850	13.5	73	76	76	0.64	0.76	0.84		
				400	2855	13.7	71	75	76	0.57	0.70	0.79		
				415	2860	14.2	69	74	75	0.52	0.65	0.74		
RO 101	10	7.5	6500	380	2800	18.7	70	74	74	0.65	0.77	0.74	808	31
				400	2820	18.8	68	73	74	0.57	0.70	0.79		
				415	2820	17.4	74	77	77	0.56	0.70	0.79		

Technical changes with out notice

Submersible Motors

Submersible Motor
QF

MATASF 150 Rewindable Motors Performance Data
3x380, 3x400, 3x415 Submersible Rewindable Motors

HP	PN [KW]	Thrust F [N]	UN [V]	Nn [min-1]	IN [A]	IA [A]	n(Eff.)[%] bei % load			COS φ (PF) bei % load			TN [Nm]	TA [Nm]	Dimensions	
							50	75	100	50	75	100			Length (mm)	Weight (mm)
5.5	4	15500	380	2910	10.4	48	0.71	0.75	0.76	0.59	0.71	0.78	13.1	15.5	699	48
			400	2930	10.6	51	0.68	0.73	0.76	0.53	0.65	0.73	13.1	17.3		
			415	2930	10.9	53	0.65	0.72	0.76	0.50	0.61	0.69	13.0	18.8		
7.5	5.5	15500	380	2860	13.7	48	0.74	0.76	0.75	0.67	0.78	0.83	18.3	15.5	699	48
			400	2890	13.3	51	0.72	0.76	0.76	0.62	0.74	0.81	18.2	17.3		
			415	2890	13.4	53	0.71	0.75	0.75	0.59	0.71	0.78	18.1	18.8		
10	7.5	15500	380	2860	18.3	59	0.77	0.78	0.76	0.70	0.80	0.84	25.0	19.2	719	50
			400	2880	17.7	63	0.75	0.78	0.77	0.65	0.76	0.82	24.8	21.5		
			415	2890	17.7	65	0.73	0.77	0.77	0.61	0.73	0.80	24.7	23.4		
12.5	9.3	15500	380	2850	22	74	0.79	0.80	0.78	0.71	0.80	0.84	31.1	25.9	749	53
			400	2870	21.4	78	0.78	0.79	0.78	0.64	0.76	0.82	31.0	29.0		
			415	2880	21.2	81	0.76	0.79	0.78	0.6	0.72	0.80	30.9	31.4		
15	11.0	15500	380	2860	25.8	93	0.78	0.80	0.79	0.65	0.76	0.83	36.7	31.5	779	56
			400	2880	25.2	98	0.77	0.80	0.79	0.65	0.76	0.83	36.4	35.5		
			415	2890	25.1	102	0.75	0.78	0.79	0.69	0.73	0.80	36.3	38.2		
17.5	13.0	15500	380	2880	30.1	118	0.80	0.81	0.80	0.68	0.79	0.84	43.1	45.0	829	61
			400	2900	29.6	125	0.78	0.80	0.80	0.61	0.74	0.81	42.8	50.3		
			415	2900	29.7	130	0.76	0.79	0.80	0.57	0.70	0.78	42.7	54.6		
20	15.0	15500	380	2880	33.9	140	0.81	0.82	0.81	0.71	0.81	0.85	49.7	53.9	874	66
			400	2890	33.1	148	0.79	0.81	0.81	0.65	0.77	0.83	49.4	60.4		
			415	2900	33.0	154	0.77	0.80	0.81	0.60	0.73	0.81	49.3	65.5		
25	18.5	15500	380	2860	42.3	172	0.81	0.82	0.81	0.68	0.78	0.84	61.7	75.2	919	70
			400	2880	42.0	182	0.78	0.81	0.81	0.61	0.74	0.80	61.2	84.3		
			415	2890	42.5	189	0.76	0.79	0.80	0.57	0.70	0.77	61.1	91.3		
30	22.0	15500	380	2880	49.1	218	0.82	0.84	0.83	0.68	0.78	0.84	72.6	91.1	1009	79
			400	2900	49.0	231	0.80	0.82	0.82	0.61	0.73	0.80	72.5	102.2		
			415	2910	49.6	240	0.77	0.81	0.82	0.56	0.69	0.77	72.2	110.7		
35	26	15500	380	2880	57.5	268	0.83	0.84	0.83	0.86	0.79	0.86	86.0	120.4	1114	90
			400	2900	66.7	284	0.81	0.83	0.83	0.61	0.74	0.83	85.6	134.7		
			415	2910	57.3	296	0.78	0.82	0.82	0.56	0.69	0.80	85.3	146.1		
40	30.0	27500	380	2900	66.4	328	0.82	0.84	0.83	0.67	0.78	0.84	98.8	135.0	1214	100
			400	2910	66.4	347	0.80	0.83	0.83	0.60	0.73	0.80	98.4	151.0		
			415	2910	67.5	361	0.77	0.81	0.82	0.55	0.68	0.77	98.2	163.0		
50	37	27500	380	2890	82.0	409	0.83	0.84	0.83	0.67	0.78	0.84	122.1	192.8	1294	107
			400	2900	81.9	433	0.80	0.83	0.83	0.60	0.72	0.80	121.6	215.8		
			415	2910	83.9	450	0.77	0.81	0.82	0.55	0.68	0.76	121.3	234.0		

Technical changes without notice

Submersible Motors

Submersible Motor
QF

MCI 200 Rewindable Motors Performance Data
3x380, 3x400, 3x415 Submersible Rewindable Motors

HP	PN [KW]	Thrust F [N]	UN [V]	Nn [min-1]	IN [A]	IA [A]	n(Eff.)[%] bei % load			COS φ (PF) bei % load			TN [Nm]	TA [Nm]	Dimensions	
							50	75	100	50	75	100			Length (mm)	Weight (mm)
40	30	4500	380	2880	63	300	83.5	84.4	83.1	0.84	0.88	0.90	99	126	1140	140
			400	2900	60	318	83.6	85.0	84.3	0.80	0.87	0.89	99	141		
			415	2910	58	332	83.5	85.2	84.9	0.78	0.85	0.88	98	151		
50	37	4500	380	2890	79	378	84.6	85.3	83.9	0.80	0.86	0.88	122	156	1140	140
			400	2900	76	400	83.9	85.2	83.2	0.74	0.82	0.86	122	176		
			415	2910	75	412	82.6	84.5	84.3	0.70	0.80	0.84	121	190		
60	45	4500	380	2900	93	491	85.6	86.4	85.2	0.79	0.86	0.88	149	218	1230	156
			400	2910	90	520	85.3	86.5	85.2	0.74	0.82	0.86	148	241		
			415	2910	89	541	84.5	86.5	85.8	0.69	0.79	0.84	148	263		
70	52	4500	380	2900	107	575	86.5	86.7	85.3	0.81	0.87	0.89	175	284	1340	179
			400	2910	103	608	86.4	87.1	86.2	0.76	0.84	0.87	175	318		
			415	2920	101	633	85.6	87.0	86.7	0.71	0.80	0.85	174	345		
75	55	4500	380	2900	114	624	86.5	86.9	85.7	0.78	0.85	0.88	182	301	1340	179
			400	2915	110	660	85.9	87.0	86.4	0.72	0.82	0.86	181	340		
			415	2920	109	688	85.8	86.4	86.2	0.78	0.78	0.84	181	366		
80	60	4500	380	2900	112	698	87.2	87.6	86.5	0.81	0.87	0.89	198	319	1470	198
			400	2910	116	725	86.8	87.7	87.0	0.77	0.84	0.88	197	357		
			415	2920	115	768	86.1	87.4	87.1	0.73	0.82	0.86	197	387		
85	67	4500	380	2900	137	759	87.2	87.6	86.4	0.79	0.86	0.89	220	352	1470	198
			400	2910	113	797	86.5	87.5	86.9	0.74	0.82	0.86	220	395		
			415	2920	131	828	85.6	87.0	86.6	0.69	0.79	0.84	219	427		
100	75	4500	380	2900	154	892	86.7	87.1	85.9	0.79	0.83	0.89	247	419	1560	215
			400	2910	148	942	86.2	87.3	86.7	0.74	0.83	0.87	246	472		
			415	2920	147	982	85.4	86.9	86.6	0.69	0.79	0.84	245	510		
110	83	4500	380	2910	166	1019	87.8	88.3	87.2	0.81	0.87	0.90	275	483	1740	247
			400	2920	160	1077	87.5	88.4	87.6	0.77	0.84	0.88	273	544		
			415	2925	156	1120	87.2	88.4	88.0	0.73	0.82	0.86	273	586		
125	93	4500	380	2910	188	1186	87.8	88.4	87.5	0.77	0.85	0.88	306	557	1740	247
			400	2920	183	1276	87.2	88.3	87.8	0.71	0.81	0.86	305	626		
			415	2930	184	1308	86.2	87.8	87.7	0.65	0.76	0.83	305	676		

Technical changes without notice

SML 150 Rewindable Motors Performance Data
3x380,3x400, 3x415 Submersible Rewindable Motors

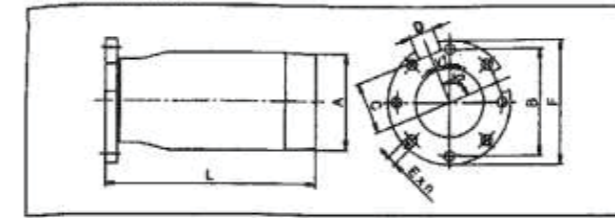
PN	PN	Thrust	UN	n	IN	IA	n(Eff.)[%] at % load			Cos ϕ (PF) a % load			TN	TA	Dimensions	
							50	75	100	50	75	100			Length (mm)	Weight (mm)
5.5	4	15500	380	2860	11.7	49	0.62	0.69	0.71	0.53	0.63	0.72	13.3	22.0	552	37
			400	2880	12.2	52	0.59	0.66	0.70	0.48	0.58	0.67	13.2	24.4		
			415	2890	12	54	0.56	0.64	0.68	0.45	0.59	0.68	13.1	26.3		
7.5	5.5	15500	380	2860	14.9	62	0.69	0.74	0.75	0.53	0.64	0.74	18.3	27.5	592	41
			400	2870	15.8	65	0.64	0.7	0.73	0.74	0.58	0.68	18.2	30.6		
			415	2890	16.5	67	0.63	0.7	0.73	0.42	0.62	0.72	18.2	33.0		
10	7.5	15500	380	2840	18.4	75	0.76	0.78	0.77	0.60	0.72	0.80	25	37.8	642	46
			400	2860	18.7	79	0.72	0.76	0.77	0.53	0.65	0.75	24.9	42.8		
			415	2870	19.4	82	0.69	0.74	0.75	0.49	0.62	0.72	24.8	46.4		
12.5	9.3	15500	380	2850	22.8	112	0.78	0.81	0.81	0.56	0.68	0.76	31	59.0	682	50
			400	2870	23.7	118	0.74	0.79	0.80	0.50	0.60	0.70	30.9	66.4		
			415	2880	24.9	123	0.71	0.76	0.78	0.45	0.58	0.68	30.8	72.3		
15	11	15500	380	2860	27.5	120	0.76	0.79	0.79	0.55	0.67	0.76	36.7	60.6	702	52
			400	2870	28.9	127	0.71	0.76	0.78	0.49	0.60	0.69	36.5	68.2		
			415	2880	30.5	132	0.67	0.73	0.76	0.45	0.59	0.69	36.4	74.2		
17.5	13	15500	380	2840	30.8	136	0.79	0.81	0.81	0.62	0.75	0.79	43.7	67.8	746	56
			400	2860	30.7	144	0.77	0.80	0.81	0.53	0.68	0.75	43.4	75.9		
			415	2870	32	151	0.75	0.79	0.8	0.49	0.60	0.70	43.2	82.4		
20	15	15500	380	2850	33.9	168	0.81	0.83	0.82	0.64	0.75	0.81	50.1	88.0	817	63
			400	2870	34.2	178	0.79	0.81	0.81	0.57	0.70	0.78	49.8	99.0		
			415	2880	49	186	0.77	0.8	0.81	0.52	0.57	0.66	49.7	108		
25	18.5	15500	380	2860	41.1	223	0.84	0.85	0.84	0.65	0.75	0.81	61.6	119	907	72
			400	2870	41.2	236	0.81	0.84	0.84	0.57	0.68	0.77	61.3	133		
			415	2880	42.3	246	0.80	0.82	0.83	0.52	0.63	0.73	61.1	145		

Technical changes without notice

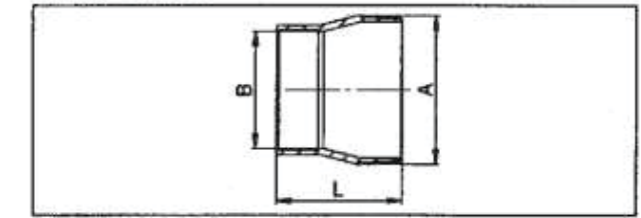
Connecting pieces

The tables below show the range of connecting pieces for connection of thread to flange and thread to thread.

Thread - Flange



Thread - Thread



Type	Pump outlet	Connecting piece	A	Thread - Flange Dimensions [mm]							V ₁	V ₂	n	Product number	
				B	C	D	E	F	L	DIN W - Nr 1.4301				DIN W - Nr 1.4401	
QF 30	Rp 2.5	R 2½ → DIN 50 PN 16	R 2½	125	62.5	22	ø18	165	95	45	180	4	32420222	32420262	
		R 2½ → DIN 50 PN 40	R 2½	125	62.5	22	ø18	165	97	45	180	4	32420223	32420263	
		R 2½ → DIN 65 PN 16	R 2½	145	72.5	22	ø18	185	100	45	180	4	32420224	32420264	
		R 2½ → DIN 65 PN 40	R 2½	145	72.5	25	ø18	185	110	22.5	180	8	32420225	32420265	
		R 2½ → DIN 80 PN 16	R 2½	160	80	25	ø18	200	95	22.5	180	8	32420226	32420266	
		R 2½ → DIN 80 PN 40	R 2½	160	80	25	ø18	200	99	22.5	180	8	32420227	32420267	
QF 50	Rp 3	R 3 → JIS 3	R3	136	66	35	ø15	165	200	22.5	90	8	32420228	32420268	
		R 3 → DIN 65 PN 16	R 3	145	72.5	22	ø18	185	105	45	180	4	32420229	32420269	
		R 3 → DIN 65 PN 40	R 3	145	72.5	25	ø18	185	109	22.5	180	8	32420230	32420270	
		R 3 → DIN 80 PN 16	R 3	160	80	25	ø18	200	110	22.5	180	8	32420231	32420271	
		R 3 → DIN 80 PN 40	R 3	160	80	25	ø18	200	120	22.5	180	8	32420232	32420272	
		R 3 → DIN 100 PN 16	R 3	180	90	25	ø18	220	107	22.5	180	8	32420233	32420273	
QF 75 QF 100	Rp3 Rp4	R 3 → DIN 100 PN 40	R 3	190	95	25	ø22	220	109	22.5	180	8	32420234	32420274	
		R 4 → JIS 4	R 4	155	72	35	ø15	180	200	22.5	90	8	32420235	32420275	
		R 3 → DIN 65 PN 16	R 3	145	72.5	22	ø18	185	105	45	180	4	32420236	32420276	
		R 3 → DIN 65 PN 40	R 3	145	72.5	25	ø18	185	109	22.5	180	4	32420237	32420277	
		R 3 → DIN 80 PN 16	R 3	160	80	25	ø18	200	110	22.5	180	8	32420238	32420278	
		R 3 → DIN 80 PN 40	R 3	160	80	25	ø18	200	120	22.5	180	8	32420239	32420279	
		R 3 → DIN 100 PN 16	R 3	180	90	25	ø18	220	107	22.5	180	8	32420240	32420280	
		R 3 → DIN 100 PN 40	R 3	190	95	25	ø22	220	109	22.5	180	8	32420241	32420281	
		R 4 → DIN 100 PN 16	R 4	180	90	25	ø18	220	120	22.5	180	8	32420242	32420282	
		R 4 → DIN 100 PN 40	R 4	190	95	25	ø22	235	130	22.5	180	8	32420243	32420283	
QF 125 QF 160	Rp 5	R 5 → JIS 4	R 5	155	75	35	ø15	180	313	22.5	90	8	32420244	32420284	
		R 5 → JIS 5	R 5	190	97	45	ø19	225	315	22.5	90	8	32420245	32420285	
		R 5 → DIN 100 PN 16	R 5	180	95	45	ø18	225	315	22.5	90	8	32420246	32420286	
		R 5 → DIN 100 PN 40	R 5	190	102.5	45	ø22	240	314	22.5	90	8	32420247	32420287	
		R 5 → DIN 125 PN 16	R 5	210	110	45	ø18	250	317	22.5	90	8	32420248	32420288	
		R 5 → DIN 125 PN 40	R 5	220	120	45	ø26	270	317	22.5	90	8	32420249	32420289	
		R 5 → DIN 150 PN 16	R 5	240	127.5	45	ø22	285	317	22.5	90	8	32420250	32420290	
		R 5 → DIN 150 PN 40	R 5	250	135	45	ø26	300	323	22.5	90	8	32420251	32420291	
QF 210 QF 270 QF 360	Rp 6	R 6 → JIS 5	R 6	190	97	45	ø19	225	316	22.5	90	8	32420252	32420292	
		R 6 → JIS 6	R 6	224	111	45	ø19	252	317	22.5	90	8	32420253	32420293	
		R 6 → DIN 125 PN 16	R 6	210	110	45	ø18	250	317	22.5	90	8	32420254	32420294	
		R 6 → DIN 125 PN 40	R 6	220	120	45	ø26	270	321	22.5	90	8	32420255	32420295	
		R 6 → DIN 150 PN 16	R 6	240	127.5	45	ø22	285	317	22.5	90	8	32420256	32420296	
		R 6 → DIN 150 PN 40	R 6	250	138.5	45	ø26	300	323	22.5	90	8	32420257	32420297	
		R 6 → DIN 200 PN 16	R 6	295	155	45	ø22	340	317	15	90	12	32420258	32420298	
		R 6 → DIN 200 PN 40	R 6	320	172.5	45	ø30	375	327	15	90	12	32420259	32420299	

Type	Pump outlet	Connecting piece	A	Thread - Flange Dimension [mm]		Product number	
				L	DIN W - Nr 1.4301	DIN W - Nr 1.4401	
QF 125 QF 160	Rp 5	R 5 → Rp 5	R 5	121	32420301	32420307	
		R 5 → Rp 6	R 5	150	32420302	32420308	
	NPT 5	NPT5 → NPT4	NPT 5	121	32420303	32420309	
		NPT5 → NPT6	NPT 5	150	32420304	32420310	
QF 210 QF 270 QF 360	Rp 6	R 6 → Rp 5	R 6	150	32420305	32420311	
	NPT 6	NPT6 → NPT5	NPT 6	150	32420306	32420312	

Cable dimensions at 3 x 400 V, 50 Hz
Voltage drop: 3%

Motor	kW	I _n [A]	Cos φ 100%	Dimensions [mm']															
				1.5	2.5	4	6	10	16	25	35	50	70	95	120	150	185	240	300
4"	0.37	1.4	0.64	192	318	506	752												
4"	0.55	2.2	0.64	122	203	322	479	783											
4"	0.75	2.3	0.72	104	173	275	409	672											
4"	1.1	3.4	0.72	70	117	186	277	455	712										
4"	1.5	4.2	0.75	55	91	145	215	354	556	844									
4"	2.2	5.5	0.82	38	64	101	151	249	393	599	818								
4"	3	7.85	0.77	29	47	75	112	185	291	442	601	822							
4"	4	9.6	0.8	22	37	59	89	146	230	350	477	656	874						
4"	5.5	13	0.81	16	27	43	65	107	168	256	349	480	641	821	983				
4"	7.5	18.8	0.78		20	31	46	76	120	183	248	340	452	577	687	804	923		
6"	5.5	13.6	0.77	16	27	44	65	107	168	255	347	475	629	801	953				
6"	7.5	17.6	0.8	12	20	32	48	80	125	191	260	358	477	610	728	855	984		
6"	9.2	21.8	0.81		16	26	39	64	100	153	208	287	382	490	586	689	795	935	
6"	11	24.8	0.83		14	22	33	55	86	132	180	248	332	427	512	604	699	826	942
6"	13	30	0.81			19	28	46	73	111	151	208	278	356	426	501	577	680	772
6"	15	34	0.82				24	40	64	97	132	182	244	313	375	441	510	601	684
6"	18.5	42	0.81				20	33	52	79	108	149	198	254	304	358	412	486	551
6"	22	48	0.84					28	44	67	92	127	170	220	264	312	361	428	489
6"	26	57	0.84					24	37	57	78	107	144	185	222	263	304	361	412
6"	30	66.5	0.83						32	49	67	92	124	159	191	225	261	308	351
6"	37	85.5	0.79							40	54	74	99	126	150	176	203	238	269
8"	22	48	0.84					28	44	67	92	127	170	220	264	312	361	428	489
8"	26	56.5	0.85					23	37	57	78	107	144	186	224	265	307	365	418
8"	30	64	0.85						33	50	68	95	127	164	197	234	271	322	369
8"	37	78.5	0.85						27	41	56	77	104	134	161	191	221	263	301
8"	45	96.5	0.82							34	47	64	86	110	132	155	180	212	241
8"	55	114	0.85								38	53	71	92	111	131	152	181	207
8"	63	132	0.83									47	62	80	96	113	131	155	177
8"	75	152	0.86									40	53	69	83	98	114	136	156
8"	92	186	0.86										43	56	68	80	94	111	128
8"	110	224	0.87											47	56	67	78	93	107
10"	75	156	0.84										52	68	81	96	111	132	151
10"	92	194	0.82										43	55	66	77	89	105	120
10"	110	228	0.84											46	56	66	76	90	103
10"	132	270	0.84												47	55	64	76	87
10"	147	315	0.81													48	55	65	74
10"	170	365	0.81															56	63
10"	190	425	0.79															48	54
12"	147	305	0.83													49	57	67	77
12"	170	345	0.85														50	60	68
12"	190	390	0.84															53	60
12"	220	445	0.85																53
12"	250	505	0.85																
Max. current for cable [A]*				18.5	25	34	43	60	80	101	126	153	196	38	276	319	364	430	497

* At particularly favourable heat dissipation conditions.

Maximum cable length in metres from motor starter to pump.

HEAD LOSSES IN PLASTIC PIPES

Figures indicate head loss in metres per 100 metres of straight pipes.

QUANTITY OF WATER			HEAD LOSSES IN PLASTIC PIPES																
			PELM/PEH PN 10																
			PELM							PEH									
m ³ /h	Litres/min.	Litres/sec.	NOMINAL PIPE SIZE IN MM																
			25 20.4	32 26.2	40 32.6	50 40.8	63 51.4	75 61.4	90 73.6	110 90.0	125 102.2	140 114.6	160 130.8	180 147.2					
0.6	10	0.16	1.80	0.66	0.27	0.09													
0.9	15	0.25	4.00	1.14	0.60	0.18	0.63												
1.2	20	0.33	6.40	2.20	0.90	0.28	0.11												
1.5	25	0.42	10.00	3.50	1.40	0.43	0.17	0.07											
1.8	30	0.50	13.00	4.60	1.90	0.57	0.22	0.09											
2.1	35	0.58	16.00	6.00	2.00	0.70	0.27	0.12											
2.4	40	0.67	22.00	7.50	3.30	0.93	0.35	0.16	0.06										
3	50	0.83	37.00	11.00	4.80	1.40	0.50	0.22	0.09										
3.6	60	1.00	43.00	15.00	6.50	1.90	0.70	0.32	0.13	0.05									
4.2	70	1.12	50.00	18.00	8.00	2.50	0.83	0.38	0.17	0.07									
4.8	80	1.33		25.00	10.50	3.00	1.20	0.50	0.22	0.08									
5.4	90	1.50		30.00	12.00	3.50	1.30	0.57	0.26	0.09	0.05								
6	100	1.67		39.00	16.00	4.60	1.80	0.73	0.30	0.12	0.07								
7.5	125	2.08		50.00	24.00	6.60	2.50	1.10	0.50	0.18	0.10	0.06							
9	150	2.50			33.00	8.60	3.50	1.40	0.63	0.24	0.13	0.08							
10.5	175	2.92			38.00	11.00	4.30	1.80	0.78	0.30	0.18	0.09							
12	200	3.33			50.00	14.00	5.50	2.40	1.00	0.40	0.22	0.12	0.07						
15	250	4.17				21.00	8.00	3.70	1.50	0.57	0.34	0.18	0.11	0.06					
18	300	5.00				28.00	10.50	4.60	1.95	0.77	0.45	0.25	0.13	0.09					
24	400	6.67					19.00	8.00	3.60	1.40	0.78	0.44	0.23	0.15					
30	500	8.33					28.00	11.50	5.00	2.00	1.20	0.63	0.33	0.21					
36	600	10.00					37.00	15.00	6.60	2.60	1.50	0.82	0.45	0.28					
42	700	11.70					47.00	24.00	8.00	3.50	1.90	1.10	0.60	0.40					
48	800	13.30						26.00	11.00	4.50	2.60	1.40	0.81	0.48					
54	900	15.00						33.00	13.50	5.50	3.20	1.70	0.95	0.58					
60	1000	16.70						40.00	16.00	6.70	3.90	2.20	1.20	0.75					
75	1250	20.80							25.00	9.00	5.00	3.00	1.60	0.95					
90	1500	25.00							33.00	13.00	8.00	4.10	2.30	1.40					
105	1750	29.20							44.00	17.50	9.70	5.70	3.20	1.90					
120	2000	33.30								23.00	13.00	7.00	4.00	2.40					
150	2500	41.70								34.00	18.00	10.50	6.00	3.50					
180	3000	50.00								45.00	27.00	14.00	7.60	4.40					
240	4000	66.70									43.00	24.00	13.00	7.50					
300	5000	83.30										33.00	18.00	11.00					

The table is based on a nomogram.

Roughness: K = 0.01 mm.

Water temperature: t = 10°C.