



# SHAKTI SUBMERSIBLE PUMPS & MOTORS



50Hz Booklet



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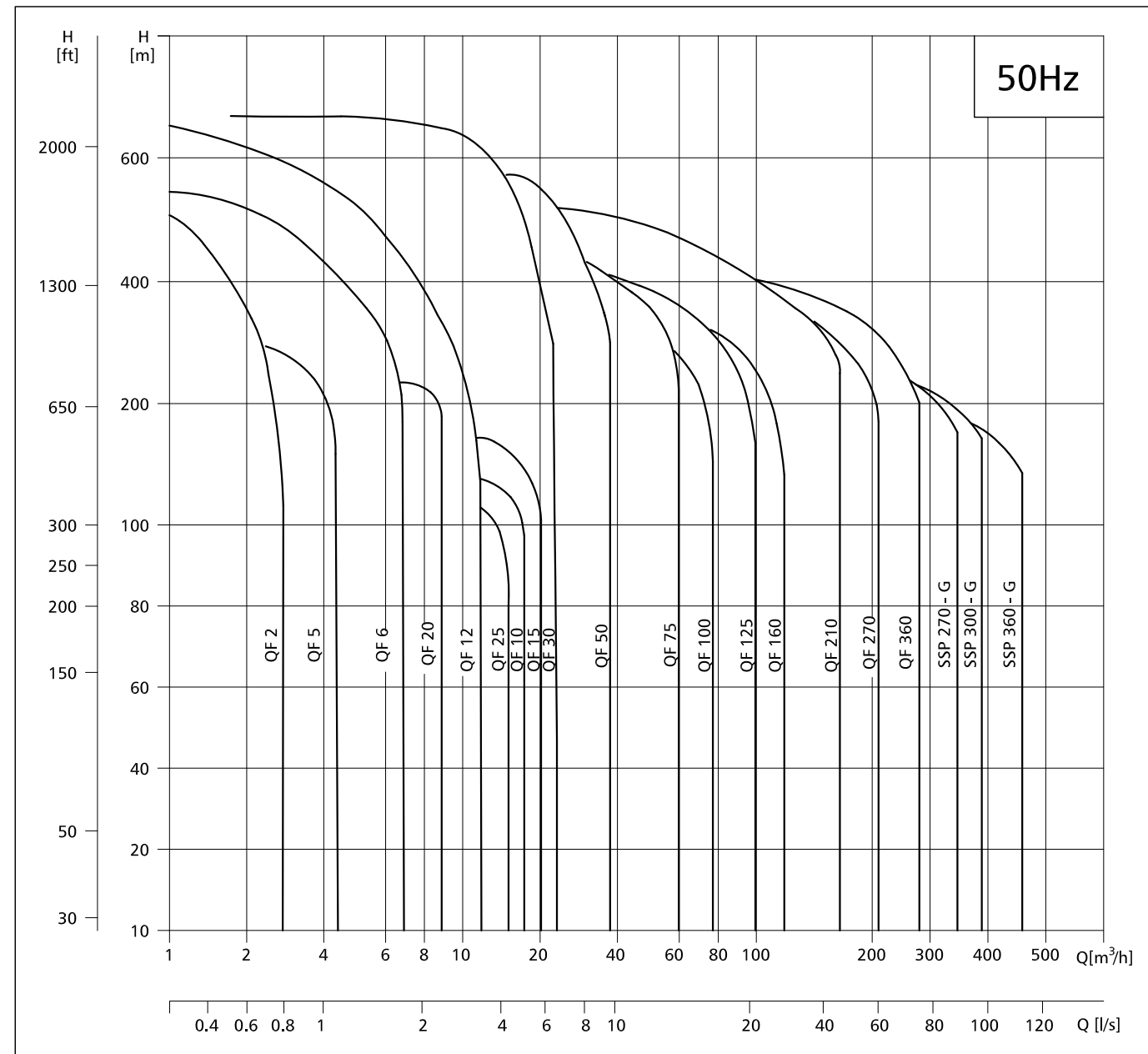
## SHAKTI PUMPS (I) LTD.

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Considering continuous product development the information/performance/specifications and illustrations disseminated in this catalogue are subject to change without notice.

SUBMERSIBLE PUMP QF  
PERFORMANCE RANGE



SUBMERSIBLE PUMP QF  
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 <sup>1/4</sup>	1 <sup>1/4</sup>	1 <sup>1/2</sup>	2	2	2	2	2	2 <sup>1/2</sup>	3	3	3	5	5	6	6	6
NPT Thread	1 <sup>1/4</sup>	1 <sup>1/4</sup>	1 <sup>1/2</sup>	2	2	2	2	2	3	3	3	3	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 auto transformer is recommended above 7.5 kW.

SUBMERSIBLE PUMP QF

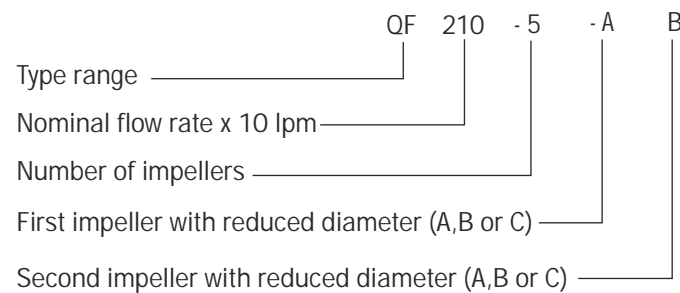
APPLICATIONS

The 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 m<sup>3</sup>/h.  
Head, H: Maximum 670m.

Maximum Liquid Temperature:

Motor	Installation		
	Flow velocity- past motor	Vertical	Horizontal
Shakti 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 cf. standard motor range.  
The speed of the motors is approximately:  
4" motors : n=2870 min<sup>-1</sup>  
6" motors : n=2870 min<sup>-1</sup>  
8" to 12" motors : n=2900 min<sup>-1</sup>
- The measurements were made with airless water at a temperature of 20°C. The curves apply to a kinematic viscosity of 1mm<sup>2</sup>/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.

QF1, 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.
- NPSH 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.

SUBMERSIBLE PUMP QF

FEATURES AND BENEFITS

A WIDE PUMP RANGE

We offers submersible pumps with energy efficient duty points ranging from 0.1 to 335 m<sup>3</sup>/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 PUMPS EFFICIENCY

Often pump efficiency is a neglected factor compared to the price however, the observant user will notice that price variations are without importance to water supply economics compared to the importance of pump and motor efficiencies.

EXAMPLE:

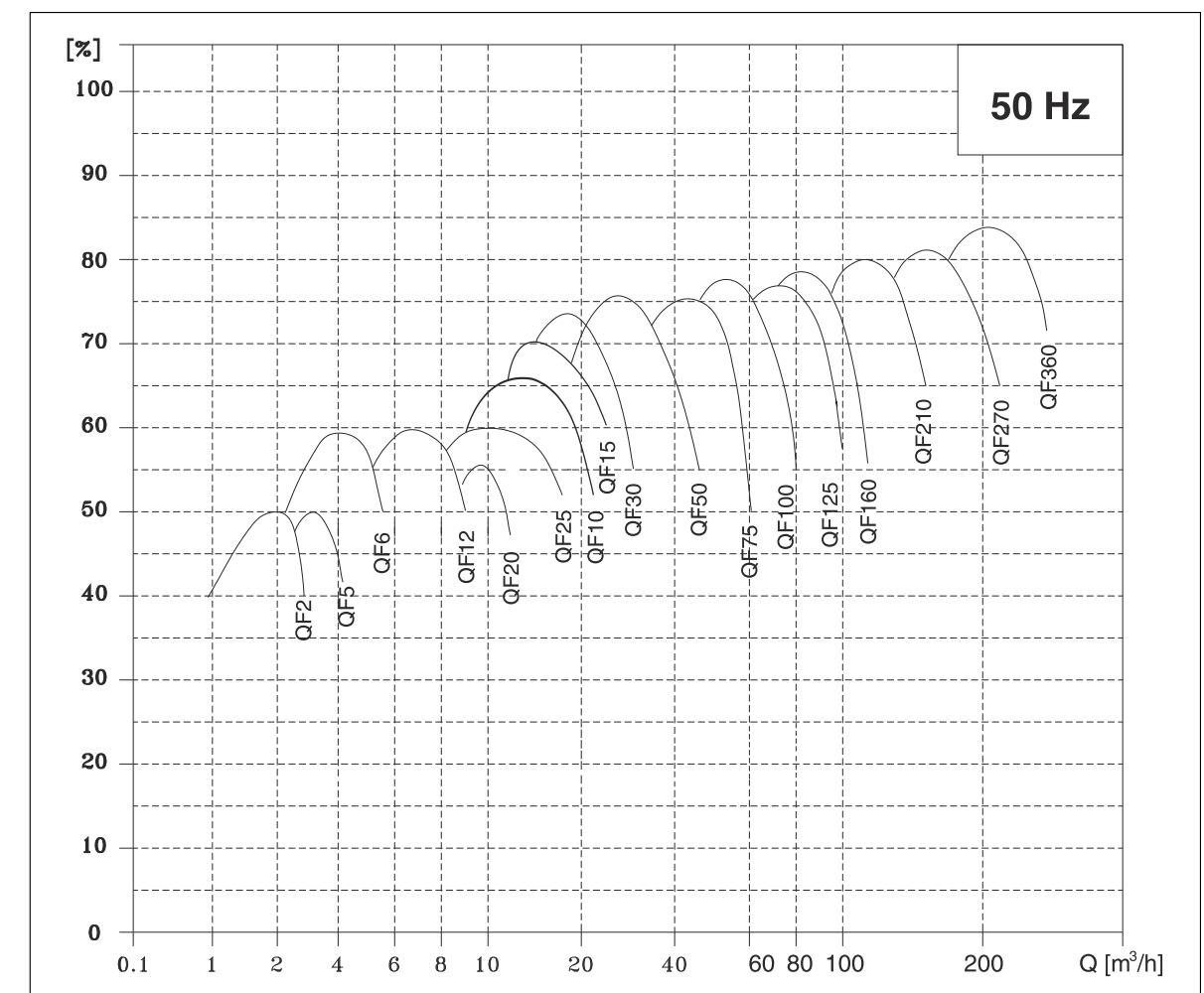
When pumping 125 m<sup>3</sup>/h with a head of 200m for a period of 10 years \$ 60,000 will be saved if a pumps and motors having a 10% higher efficiency is chosen and the price is \$ 0.10 per kWh.

APPLICATIONS

We offers 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.





## SUBMERSIBLE PUMPS

### SUBMERSIBLE PUMP QF

#### 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.

#### INLET STRAINER

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

#### 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.

#### 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.

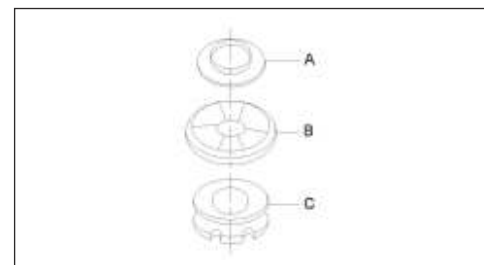
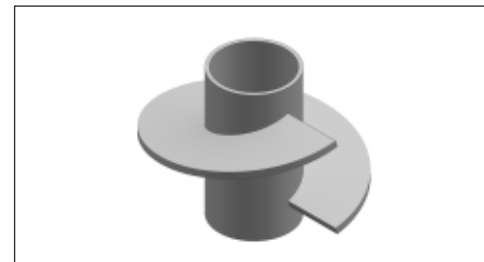
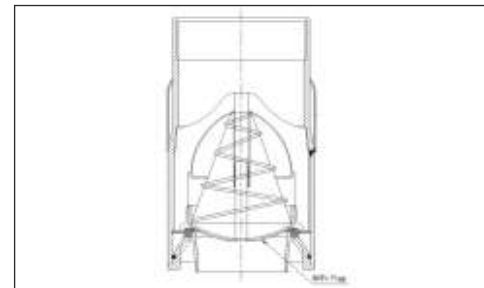
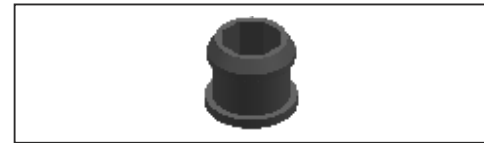
#### STOP RING

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)].



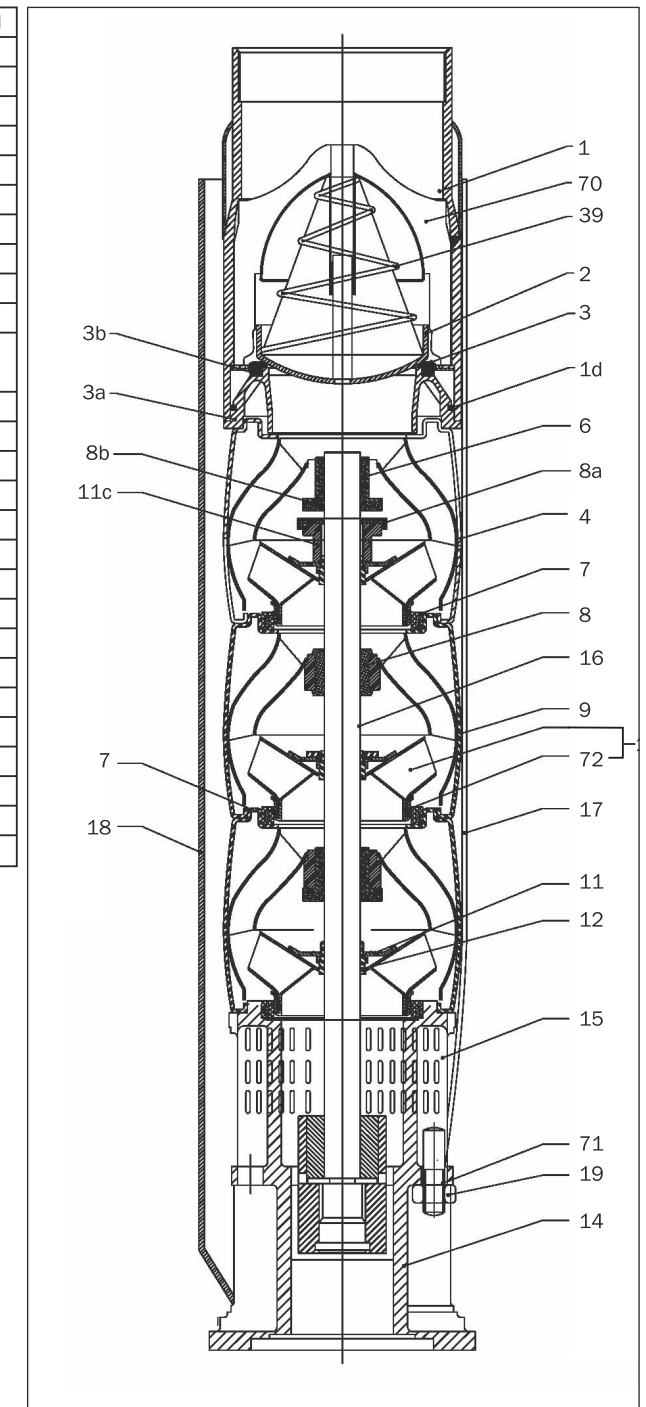
## SUBMERSIBLE PUMPS

### SUBMERSIBLE PUMP QF

#### MATERIAL SPECIFICATION

POS.	DESCRIPTION	MATERIAL	STANDARD	N-VERSION
1	VALVE CASING	STAINLESS STEEL	304	316
1d	O-RING	NBR		
2	VALVE CAP	STAINLESS STEEL	304	316
3	VALVE SEAT	STAINLESS STEEL	304	316
3a	LOWER VALVE SEAT RETAINER	STAINLESS STEEL	304	316
3b	UPPER VALVE SEAT RETAINER	STAINLESS STEEL	304	316
4	TOP CHAMBER CUP	STAINLESS STEEL	304	316
6	UPPER BEARING	STAINLESS STEEL	304	316
7	NECKRING	NBR/PPS		
8	BEARING	NBR		
8a	WASHER FOR STOP RING	CARBON/GRAPHITE HY22 IN PTFE MASS		
8b	STOP RING	STAINLESS STEEL	304	316
9	CHAMBER	STAINLESS STEEL	304	316
11	SPLIT CONE NUT	STAINLESS STEEL	304	316
11c	NUT FOR STOP RING	STAINLESS STEEL	304	316
12	SPLIT CONE	STAINLESS STEEL	304	316
13	IMPELLER	STAINLESS STEEL	304	316
14	SUCTION INTERCONNECTOR	STAINLESS STEEL	304	316
15	STRAINER	STAINLESS STEEL	304	316
16	SHAFT COMPLETE	STAINLESS STEEL	304	316
17	STRAP	STAINLESS STEEL	304	316
18	CABLE GAURD	STAINLESS STEEL	304	316
19	NUT FOR STRAP	STAINLESS STEEL	304	316
39	SPRING FOR VALVE CUP	STAINLESS STEEL	304	316
70	VALVE GUIDE	STAINLESS STEEL	304	316
71	WASHER	STAINLESS STEEL	304	316
72	WEAR RING	STAINLESS STEEL	304	316

#### EXAMPLE : QF - 125



SUBMERSIBLE MOTOR

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 UPTHURST

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.



SUBMERSIBLE MOTOR

FEATURES AND BENEFITS

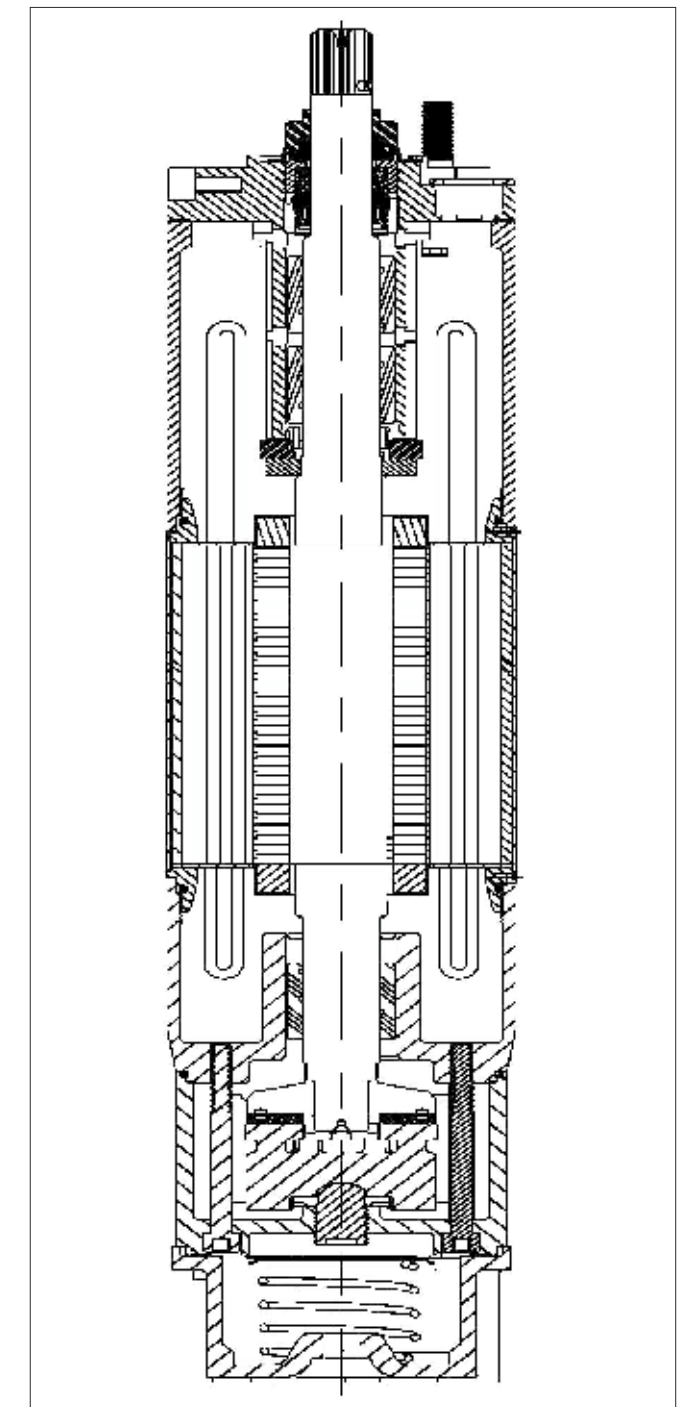
OVER TEMPERATURE PROTECTION

For Shakti submersible motors accessories Pt100 for protection against over temperature is available. When the temperature becomes too high, the protection device will cut-out and damage to the pump and motor be avoided.

PROTECTION AGAINST UPTHURST

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 Shakti pumps and motors are protected against upthrust as standard, preventing upthrust from occurring in the critical startup phase. The protection consists of a built-in upthrust ring.

EXAMPLE : 6" MTSF

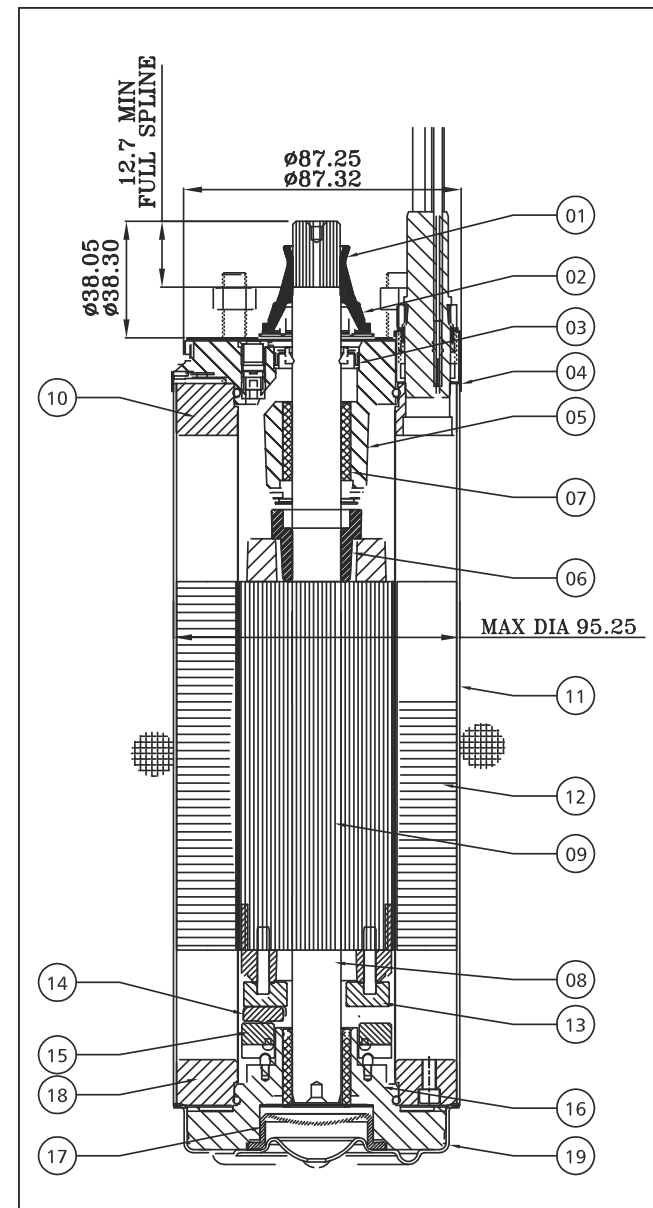


SUBMERSIBLE MOTOR

MATERIAL SPECIFICATION 4" PREMIUM-100

SR.NO.	PART	MATERIAL
1	SAND SLINGER	NBR
2	SEAL COVER	PPS
3	OIL SEAL	EPDM + SS AISI 304
4	TOP END BELL COVER	SS AISI-304
5	TOP END BELL	CI FG-260
6	SHAFT BUSH	NYLON 30% GLASS FILLED
7	BUSH	CARBON WITH RESIGN IMPREGATED
8	ROTOR SHAFT	SS (STAINLESS STEEL SPECIAL GRADE)
9	ROTOR SUB ASSLY	N/A
10	TOP FLANGE	MS
11	STATOR PIPE	SS AISI-304
12	STATOR SUB ASSLY	N/A
13	THRUST DISC	ANTIMONY CARBON
14	THRUST PAD	SS AISI-420
15	LEVELING DISC	MS+ HARD CHROM
16	BOTTOM END BELL	CI FG-260
17	DIAPHRAGM	EPDM
18	BOTTOM FLANGE	MS
19	BOTTOM END BELL COVER	SS AISI-304

SECTION VIEW 4" PREMIUM 100

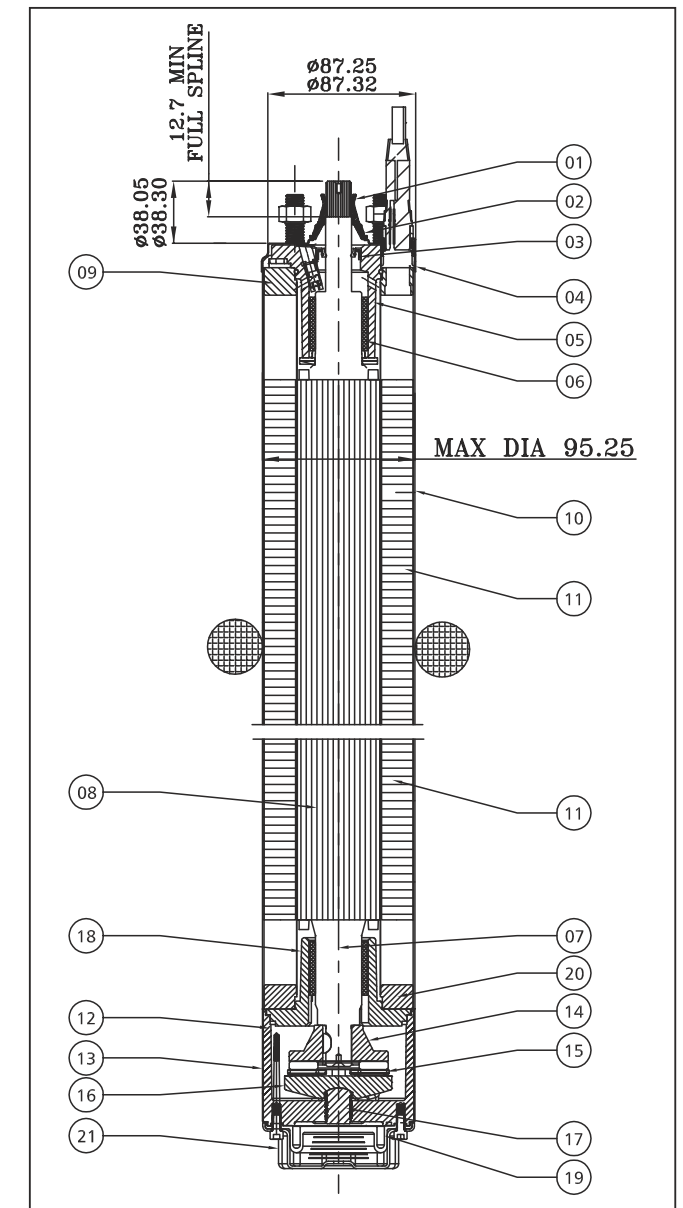


SUBMERSIBLE MOTOR

MATERIAL SPECIFICATION 4" PREMIUM-101

SR.NO.	PART	MATERIAL
1	SAND SLINGER	NBR
2	SEAL COVER	PPS
3	OIL SEAL	EPDM + SS AISI 304
4	TOP END BELL COVER	SS AISI-304
5	TOP END BELL	CI FG-260
6	BUSH	CARBON WITH RESIGN IMPREGATED
7	ROTOR SHAFT	SS (STAINLESS STEEL SPECIAL GRADE)
8	ROTOR SUB ASSLY	N/A
9	TOP FLANGE	MS
10	STATOR PIPE	SS AISI-304
11	STATOR SUB ASSLY	N/A
12	THRUST HOUSING	CI FG-260
13	THRUST PIPE	SS AISI-304
14	THRUST DISC	CI FG-260
15	CARBON PLATE	REGIN IMPREGNATED
16	LEVELING DISC	SS AISI 420
17	ADJUSTING STUD	SS AISI-410
18	BOTTOM END BELL	CI FG-260
19	DIAPHRAGM	EPDM
20	BOTTOM FLANGE	MS
21	DIAPHRAGM COVER	SS AISI-304

SECTION VIEW 4" PREMIUM 101

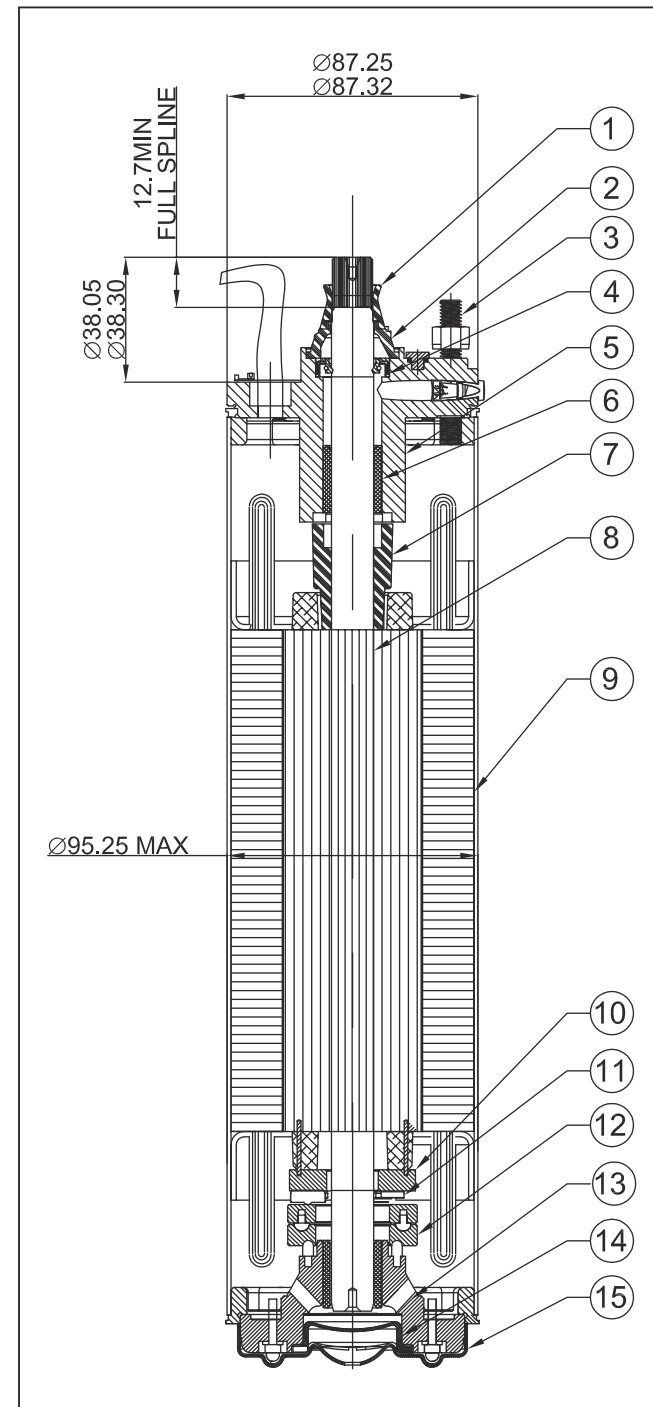


SUBMERSIBLE MOTOR

MATERIAL SPECIFICATION 4" MCIP-100

SR.NO.	COMPONENT	MATERIAL
1	SEND SLINGER	NBR
2	SEAL COVER	PPS
3	STUD	SS AISI-304
4	OIL SEAL	EPDM+ SS AISI 304
5	UPPER HOUSING	CI FG-260
6	BUSH	CARBON WITH RESIN IMPREGNATED
7	SHAFT BUSH	NYLON 30% GLASS FILLED
8	ROTOR SUB ASSY	N/A
9	STATOR SUB ASSY	N/A
10	THRUST DISK	ANTIMONY CARBON
11	THRUST PAD	SS AISI-420
12	LEVELING DISK	HIGH GRADE
13	BOTTOM END BELL	CI FG-260
14	DIAPHRAGM	EPDM
15	END BELL COVER	SS AISI-304

SECTION VIEW 4" MCIP 100

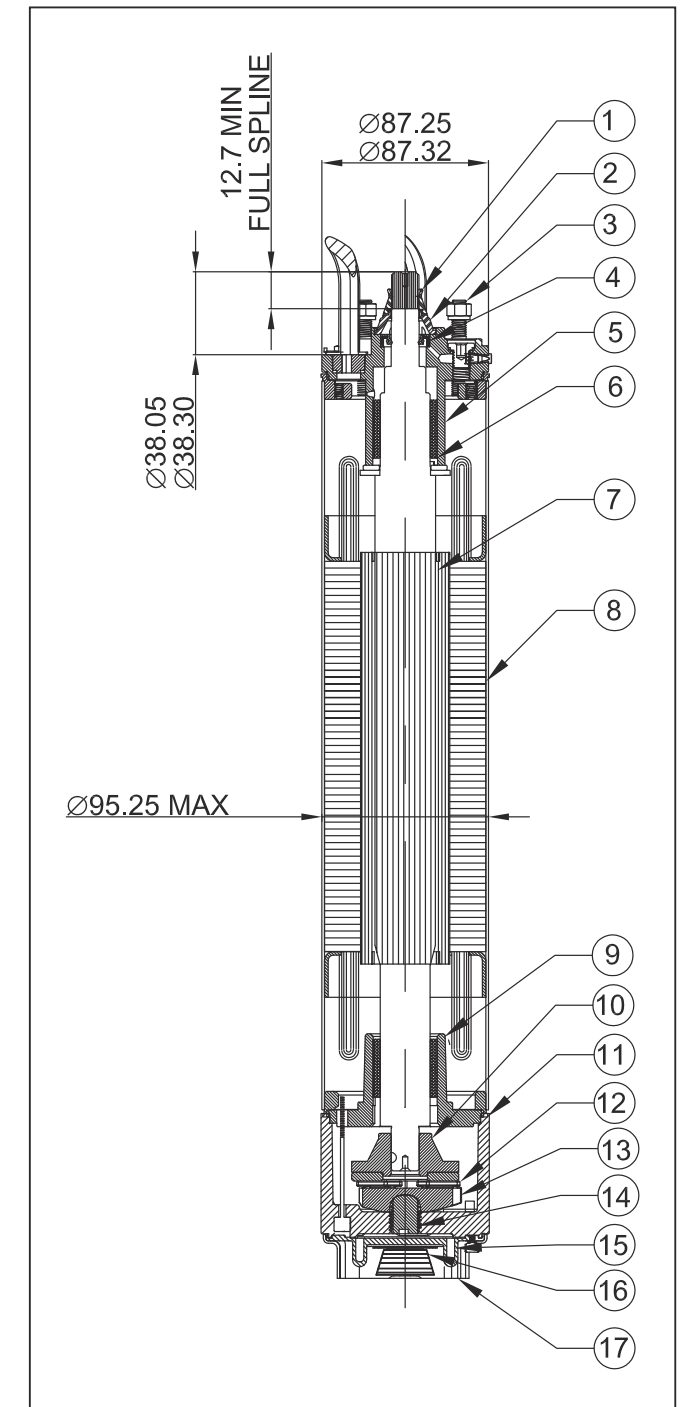


SUBMERSIBLE MOTOR

MATERIAL SPECIFICATION 4" MCIP-101

SR.NO.	COMPONENT	MATERIAL
1	SEND SLINGER	NBR
2	SEAL COVER	PPS
3	STUD	SS AISI-304
4	OIL SEAL	EPDM+ SS AISI 304
5	UPPER HOUSING	CI FG-260
6	BUSH	CARBON WITH RESIN IMPREGNATED
7	ROTOR SUB ASSY	N/A
8	STATOR SUB ASSY	N/A
9	BOTTOM END BELL	CI FG-260
10	THRUST DISK	ANTIMONY CARBON
11	THRUST HOUSING	CI FG-260
12	THRUST SEGMENT	SS AISI-420
13	LEVELING DISK	SS AISI-304
14	ADJUSTING STUD	SS AISI-410
15	DIAPHRAGM	EPDM
16	DIAPHRAGM SPRING	SPRING STEEL
17	DIAPHRAGM COVER	STAINLESS STEEL

SECTION VIEW 4" MCIP 101



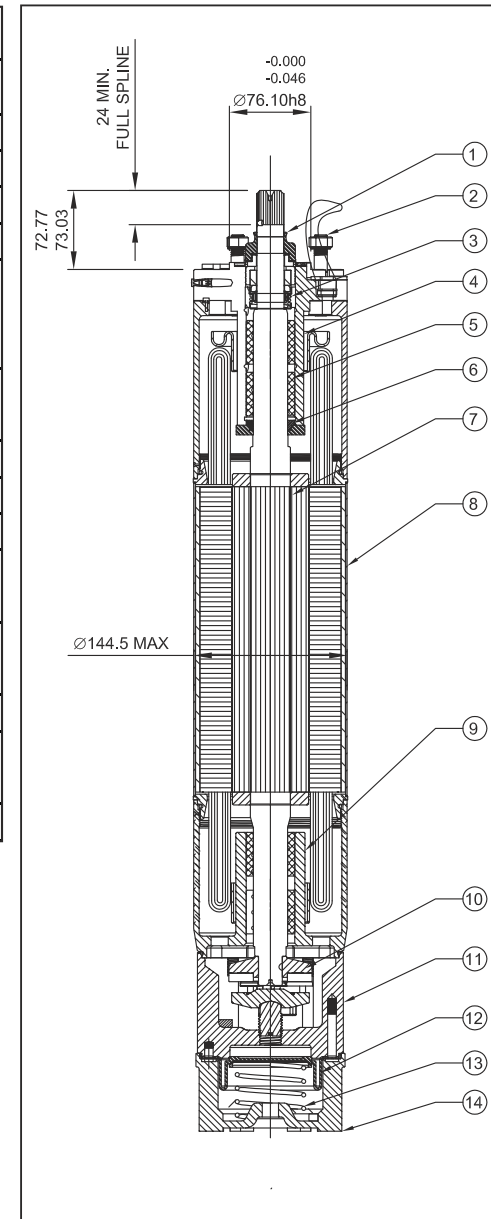


SUBMERSIBLE MOTOR

MATERIAL SPECIFICATION 6" MTSF

S No.	COMPONENT	MATERIAL		
		CI FG-260	SS AISI 304	SS AISI 316
1	SAND SLINGER	NBR	NBR	NBR
2	STUD	CI FG-260	SS AISI 304	SS AISI 316
3	MECH SEAL	SiC/SiC	SiC/SiC	SiC/SiC
4	END BELL UPPER	CI FG-260	SS AISI 304	SS AISI 316
5	BUSH	RESIN IMPREGATED CARBON	RESIN IMPREGATED CARBON	RESIN IMPREGATED CARBON
6	UP THRUST	NYLON30% GLASS FILLED	NYLON30% GLASS FILLED	NYLON30% GLASS FILLED
7	ROTOR SUB ASSY	N/A	N/A	N/A
8	STATOR SUB ASSY	N/A	N/A	N/A
9	END BELL LOWER	CI FG-260	SS AISI 304	SS AISI 316
10	REVOLVING PLATE ASSY	N/A	N/A	N/A
11	THRUST HOUSING BEARING	CI FG-260	SS AISI 304	SS AISI 316
12	DIAPHRAGM	EPDM	EPDM	EPDM
13	DIAPHRAGM SPRING	SPRING STEEL	SPRING STEEL	SPRING STEEL
14	MOTOR BASE	CI FG-260	SS AISI 304	SS AISI 316

SECTION VIEW 6" MTSF

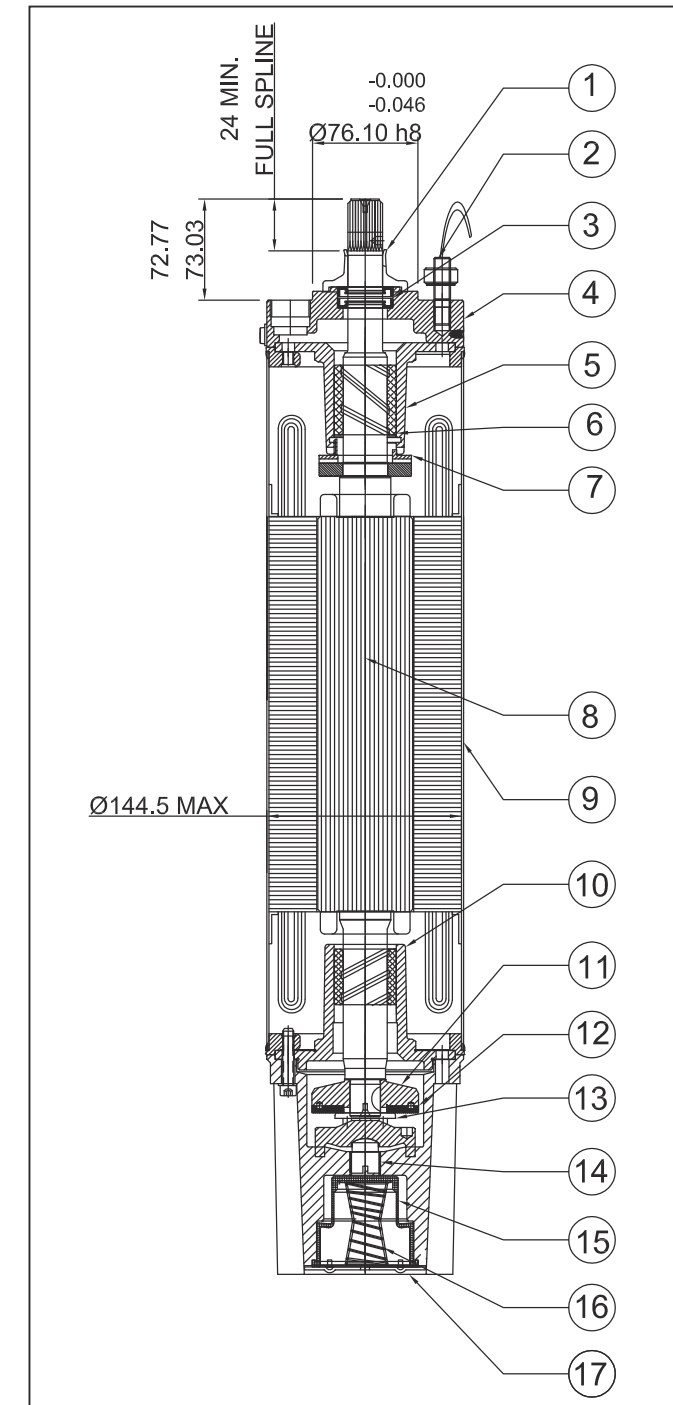


SUBMERSIBLE MOTOR

MATERIAL SPECIFICATION 6" SML

SR.No.	COMPONENT	MATERIAL
1	SAND SLINGER	NBR
2	STUD	SS AISI 304
3	OIL SEAL	EPDM + SS 304
4	UPPER HOUSING	CI FG-260
5	END BELL UPPER	CI FG-260
6	BUSH	RESIN IMPREGATED CARBON
7	UP THRUST BEARING	NYLON 30% GLASS FILLED
8	ROTOR SUB ASSY	N/A
9	STATOR SUB ASSY	N/A
10	END BELL LOWER	CI FG-260
11	REVOLVING PLATE ASSY	N/A
12	THRUST SEGMENT	SS AISI 304
13	THRUSTING BEARING PLATE	CI FG-260
14	ADJUSTING STUD	DUPLEX
15	DIAPHRAGM	EPDM
16	DIAPHRAGM SPRING	SPRING STEEL
17	MOTOR BASE	CI FG-260

SECTION VIEW 6" SML

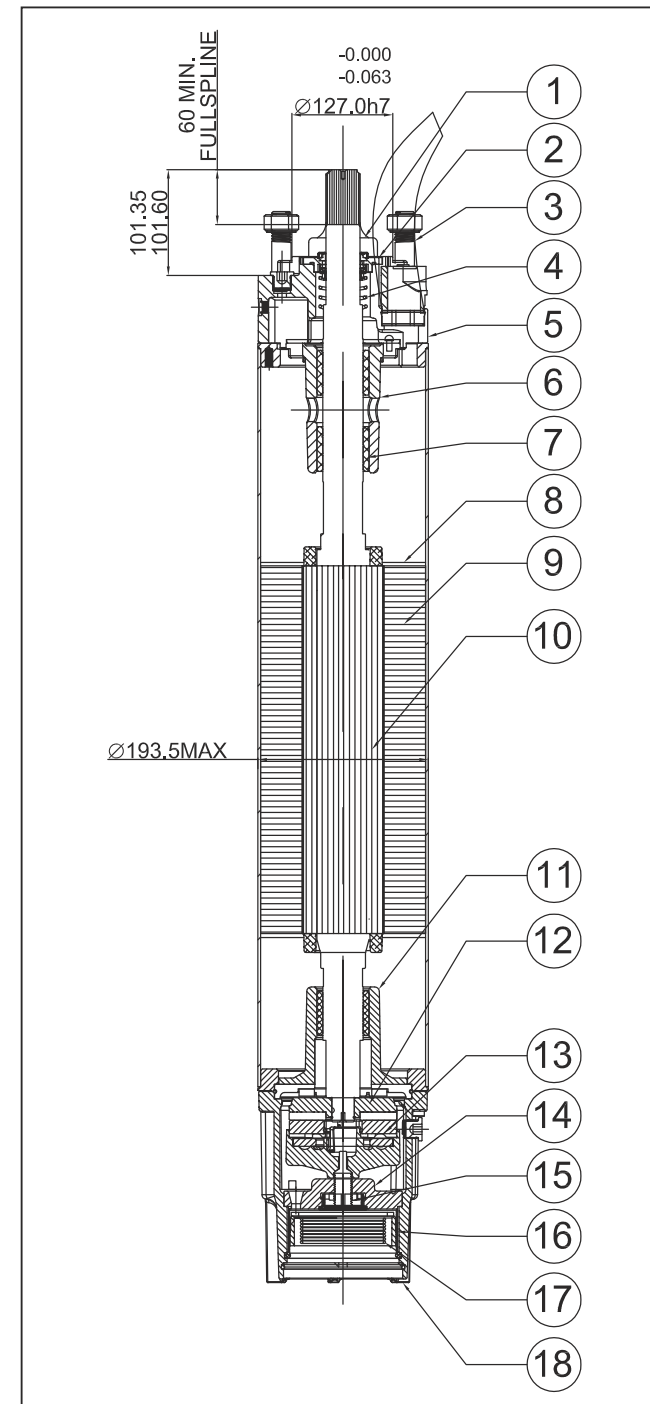


SUBMERSIBLE MOTOR

MATERIAL SPECIFICATION 8" MTSF

SR.NO.	COMPONENT	MATERIAL
1	SAND SLINGER	NBR
2	DUST COVER	CI FG-260
3	STUD	SS AISI 304
4	MECH SEAL	STD
5	UPPER HOUSING	CI FG-260
6	END BELL UPPER	CI FG-260
7	BUSH	METAL IMPREGNATED ANTI-MONY
8	END LAMINATION	PPS
9	STATOR SUB ASSY	N/A
10	ROTOR SUB ASSY	N/A
11	END BELL LOWER	CI FG-260
12	REVOLVING PLATE ASSY	N/A
13	THRUST HOUSING BEARING	CI FG-260
14	THRUST BEARING SUPPORT	CI FG-260
15	ADJUSTING STUD	DUPLEX
16	DIAPHRAGM	EPDM
17	DIAPHRAGM SPRING	SPRING STEEL
18	MOTOR BASE	CI FG-260

SECTION VIEW 8" MTSF

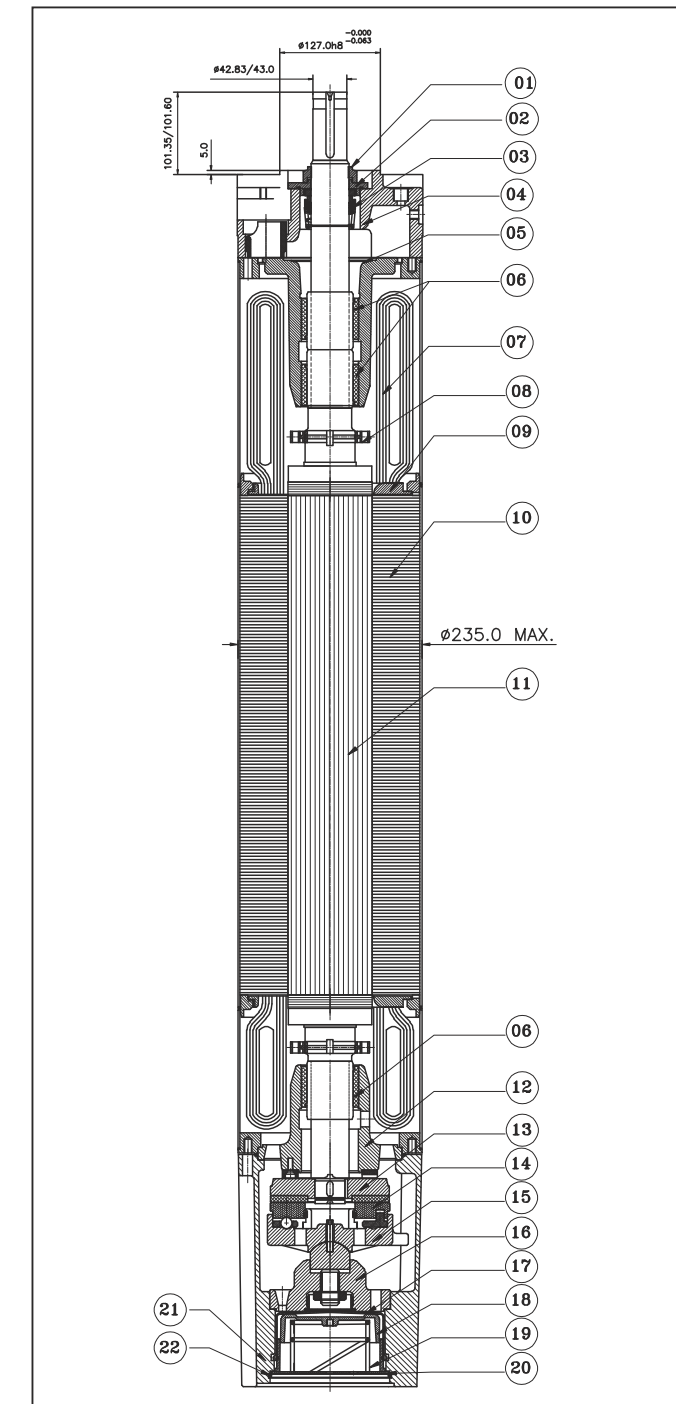


SUBMERSIBLE MOTOR

MATERIAL SPECIFICATION 10" MTSF

SR.NO.	COMPONENT	MATERIAL
1	SEND SLINGER	NBR
2	DUST COVER	MS
3	MECH SEAL	STD
4	ADOPTER	CI FG-260
5	BEARING BODY UPPER	CI FG-260
6	BUSH	CARBON
7	WINDING WIRE	STD
8	AUXILIARY IMPELLER	PPS
9	END LAMINATION	MS
10	STATOR SUB ASSY	N/A
11	ROTOR SUB ASSY	N/A
12	BEARING BODY LOWER	CIFG-260
13	THRUST BEARING ASSY	CIFG-260
14	SEGMENT	SS AISI 420
15	BEARING SEGMENT CARRIER	CI FG-260
16	THRUST SUPPORT	CI FG-260
17	DIAPHRAGM	EPDM
18	SPRING BASE CUP	ABS
19	DIAPHRAGM SPRING	SS AISI 304
20	DIAPHRAGM COVER	SS AISI 304
21	THRUST HOUSING	CIFG-260
22	CIRCLIP	SS AISI 302

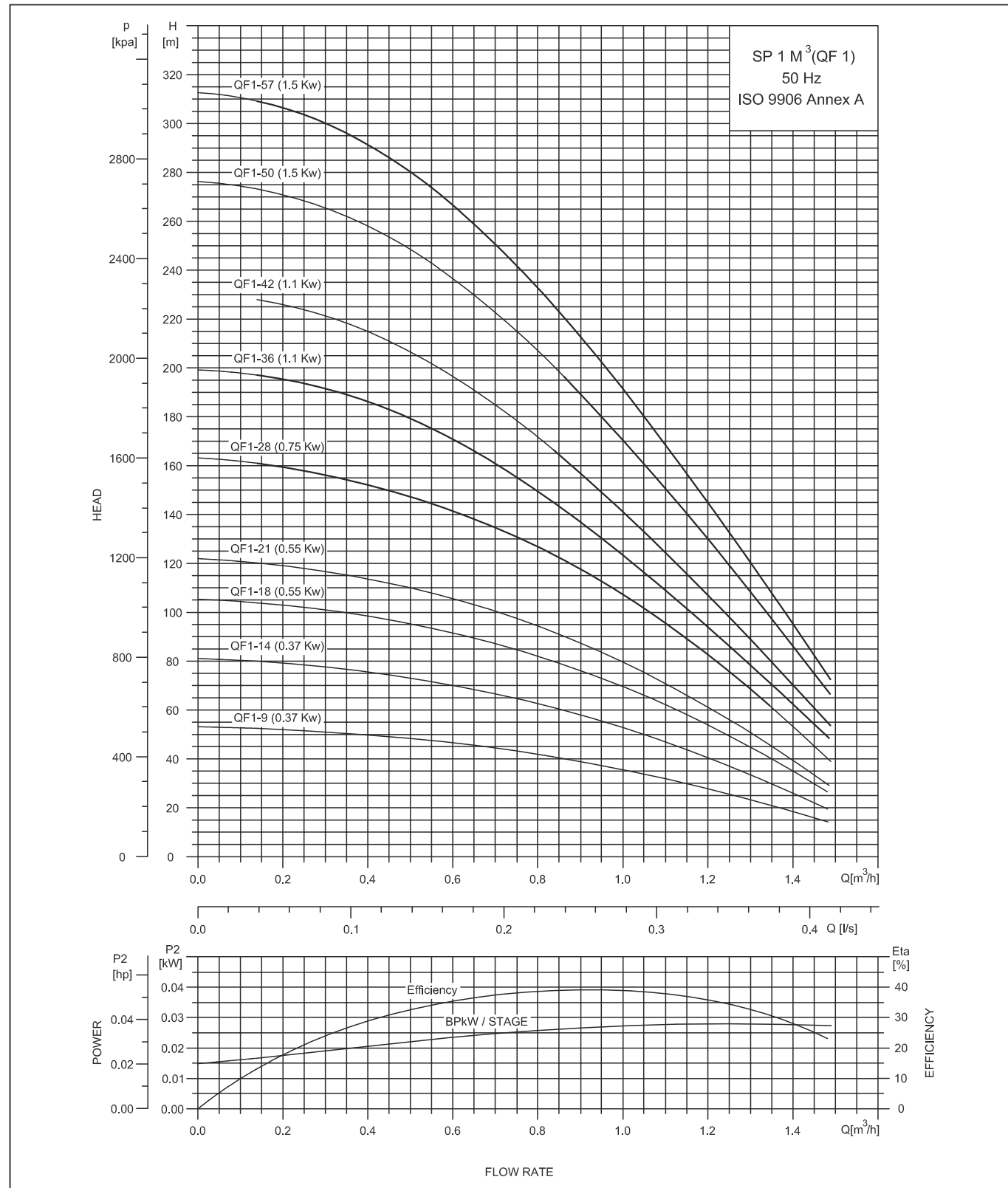
SECTION VIEW 10" MTSF





# PERFORMANCE CURVE OF SUBMERSIBLE PUMP

## SUBMERSIBLE PUMP QF 1

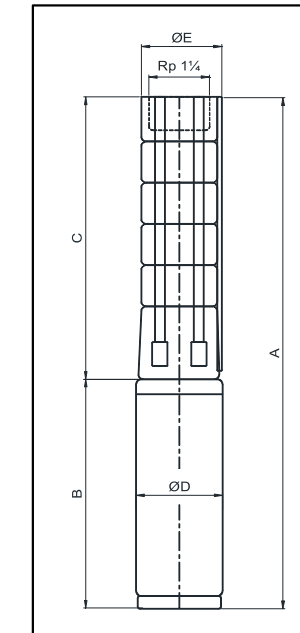


# TECHNICAL DATA OF SUBMERSIBLE PUMP

## SUBMERSIBLE PUMP QF 1

### DIMENSIONS AND WEIGHTS

### SUBMERSIBLE PUMPS QF 1



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

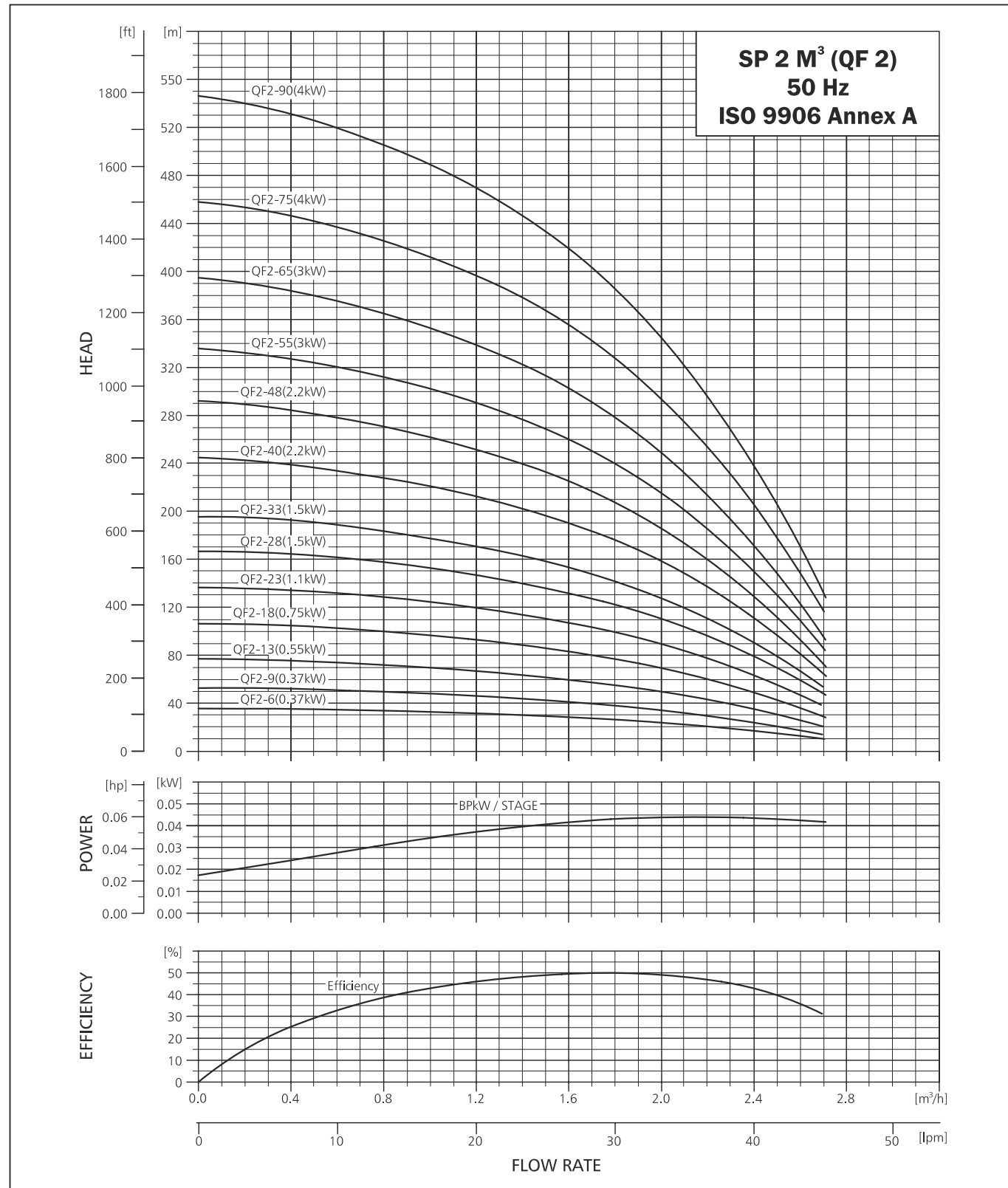
PUMP TYPE	TECHNICAL DATA OF QF 1											
	MOTOR		C	DIMENSIONS (MM)				NET WEIGHT (KG)				
	TYPE	POWER (kW)		B		A		D	E	PUMP	MOTOR	
1x230V	3x220V 3x400V	1x230V	3x220V 3x400V	D	E	1x230V	3x220V 3x400V					
QF 1 - 9	4" PREMIUM 100	0.37	344	256	226	600	570	95	101	4	11	9
QF 1 - 14	4" PREMIUM 100	0.37	449	256	226	705	675	95	101	5	12	10
QF 1 - 18	4" PREMIUM 100	0.55	533	291	241	824	774	95	101	6	14	12
QF 1 - 21	4" PREMIUM 100	0.55	596	291	241	887	837	95	101	7	14	12
QF 1 - 28	4" PREMIUM 100	0.8	743	306	276	1049	1019	95	101	9	16	15
QF 1 - 36	4" PREMIUM 100	1.1	956	346	306	1302	1262	95	101	10	25	23
QF 1 - 42	4" PREMIUM 100	1.1	1082	346	306	1428	1388	95	101	13	27	25
QF 1 - 50	4" PREMIUM 100	1.5	1250	346	346	1596	1596	95	101	14	30	29
QF 1 - 57	4" PREMIUM 100	1.5	1397	346	346	1743	1743	95	101	15	32	32

\* Motor type may change as per requirement .

PERFORMANCE TABLE OF QF 1													
QF-1			DISCHARGE (Q)										
			M <sup>3</sup> /H	0	0.2	0.4	0.6	0.8	1	1.2	1.4		
			l/min.	0	3.33	6.66	10	13.33	16.66	20	23.33		
MODEL	CONNECTION	MOTOR RATING		I-		3-		TOTAL HEAD IN (m)					
		[kW]	[HP]	[A]	[A]								
QF 1 - 9	Rp 1 1/4	0.37	0.5	2.9	1.4	53	52	50	46	42	36	27	18
QF 1 - 14		0.37	0.5	2.9	1.4	82	79	75	70	63	53	40	26
QF 1 - 18		0.55	0.75	4	2.2	105	103	98	92	82	69	53	35
QF 1 - 21		0.55	0.75	4	2.2	122	118	113	105	95	80	61	40
QF 1 - 28		0.75	1	5.5	2.3	163	159	151	142	126	106	82	63
QF 1 - 36		1.1	1.5	8.2	3.4	199	195	186	170	149	123	94	62
QF 1 - 42		1.1	1.5	8.2	3.4	231	226	215	196	171	140	106	70
QF 1 - 50		1.5	2.0	10.2	4.2	276	271	257	236	206	170	130	80
QF 1 - 57		1.5	2.0	10.2	4.2	313	306	291	266	233	192	145	95

PERFORMANCE CURVE OF SUBMERSIBLE PUMP

SUBMERSIBLE PUMP QF 2

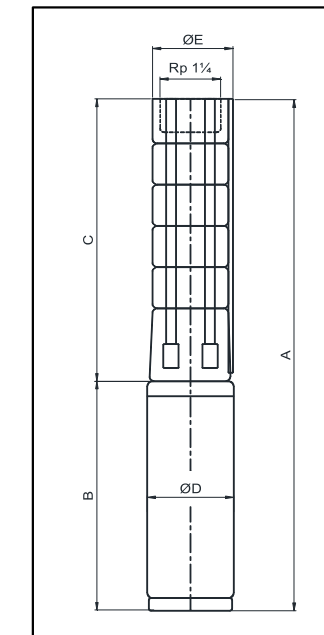


TECHNICAL DATA OF SUBMERSIBLE PUMP

SUBMERSIBLE PUMP QF 2

DIMENSIONS AND WEIGHTS

SUBMERSIBLE PUMPS QF2



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

QF 2-75 to QF 2-90 are mounted in sleeve for Rp 1¼ connection and with max.

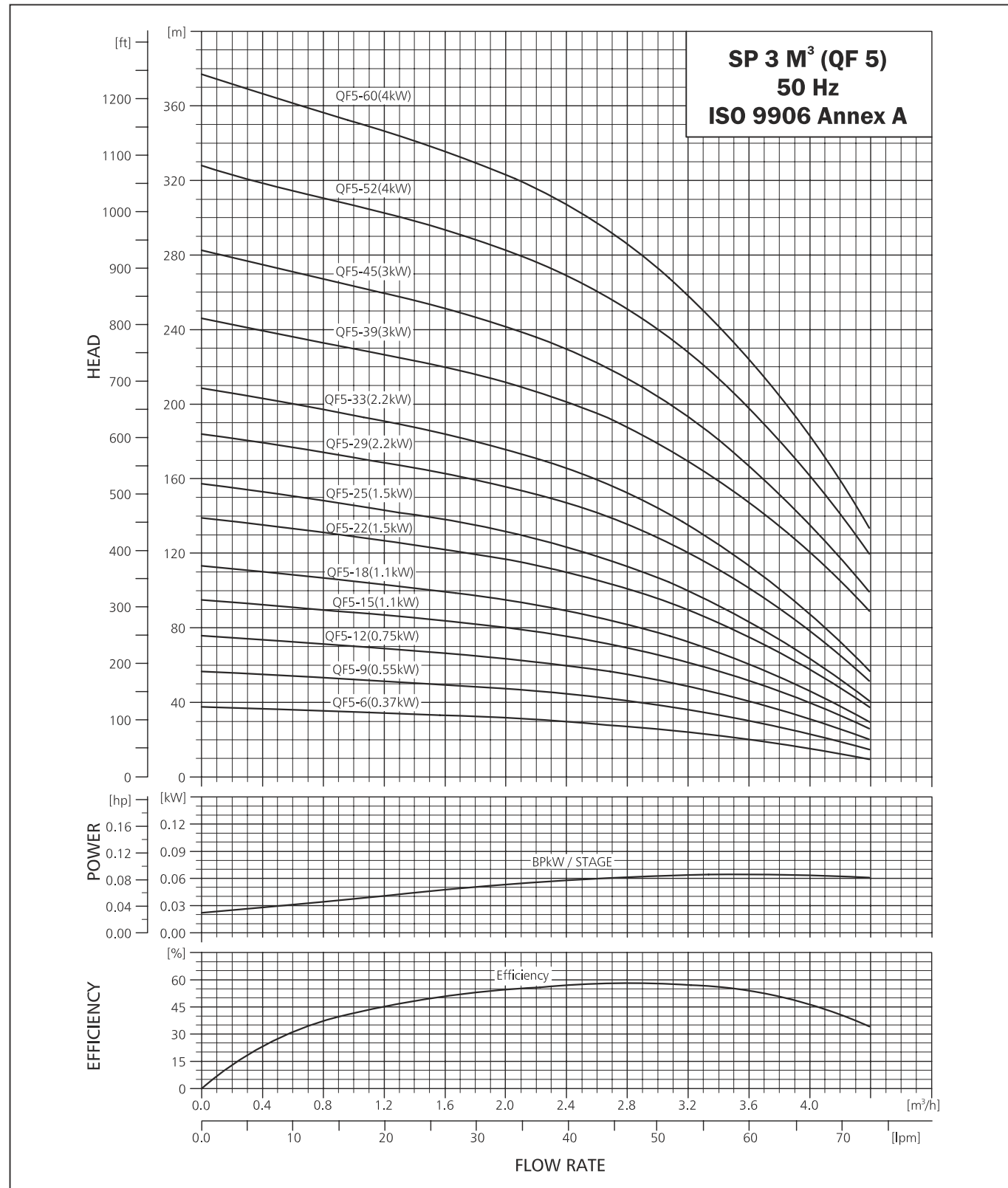
PUMP TYPE	TECHNICAL DATA OF QF 2											
	MOTOR		C	DIMENSIONS (MM)				NET WEIGHT (KG)				
	TYPE	POWER (kW)		B		A		D	E	PUMP	MOTOR	
			1x230V	3x220V 3x400V	1x230V	3x220V 3x400V	1x230V				3x220V 3x400V	
QF 2-6	4" PREMIUM 100	0.37	309	242	-	551	-	95	101	3	9	-
QF 2-9	4" PREMIUM 100	0.37	372	242	-	614	-	95	101	4	9	-
QF 2-13	4" PREMIUM 100	0.55	456	271	242	727	698	95	101	5	10	9
QF 2-18	4" PREMIUM 100	0.75	561	292	271	853	832	95	101	6	11	10
QF 2-23	4" PREMIUM 100	1.1	666	340	292	1006	958	95	101	7	13	11
QF 2-28	4" PREMIUM 100	1.5	771	405	340	1176	1111	95	101	9	15	13
QF 2-33	4" PREMIUM 100	1.5	876	405	340	1281	1216	95	101	10	15	13
QF 2-40	4" PREMIUM 100	2.2	1023	482	405	1505	1428	95	101	11	17	15
QF 2-48	4" PREMIUM 100	2.2	1191	482	405	1673	1596	95	101	13	17	15
QF 2-55	4" PREMIUM 100	3.0	1338	-	482	-	1820	95	101	15	-	17
QF 2-65	4" PREMIUM 100	3.0	1548	-	482	-	2030	95	101	17	-	17
QF 2-75	4" PREMIUM 101	4.0	1758	693	-	2451	-	95	101	20	29	23
QF 2-90	4" PREMIUM 101	4.0	2073	693	-	2766	-	95	101	23	29	23

\* Motor type may change as per requirement .

QF-2		PERFORMANCE TABLE OF QF 2											
		MOTOR RATING		DISCHARGE (Q)									
MODEL	CONNECTION	[kW]	[HP]	1~ [A]	3~ [A]	0	1	1.4	1.8	2	2.4	2.8	
						TOTAL HEAD IN (m)							
QF2 -6	Rp 1¼	0.37	0.5	2.9	1.4	36	33	30	26	24	17	13	
QF2 -9		0.37	0.5	2.9	1.4	53	48	44	38	34	24	17	
QF2 -13		0.55	0.75	4.0	2.2	77	70	64	55	50	35	26	
QF2 -18		0.75	1.0	5.5	2.3	107	97	89	77	69	49	36	
QF2 -23		1.1	1.5	8.2	3.4	137	124	114	99	90	64	47	
QF2 -28		1.5	2.0	10.2	4.2	167	152	140	122	110	79	59	
QF2 -33		1.5	2.0	10.2	4.2	196	178	163	142	128	90	66	
QF2 -40		2.2	3.0	14.0	5.5	245	221	203	176	158	111	81	
QF2 -48		2.2	3.0	14.0	5.5	292	262	240	207	186	129	93	
QF2 -55		3.0	4.0	-	7.9	336	302	277	240	215	150	109	

PERFORMANCE CURVE OF SUBMERSIBLE PUMP

SUBMERSIBLE PUMP QF 5

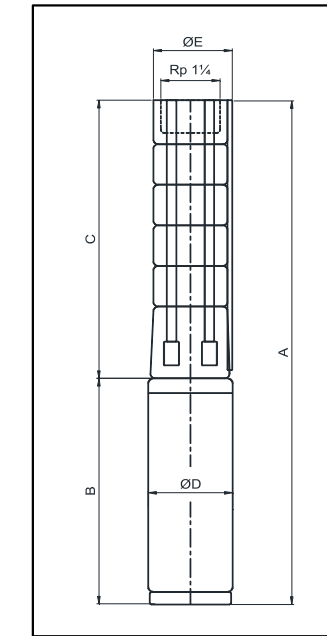


TECHNICAL DATA OF SUBMERSIBLE PUMP

SUBMERSIBLE PUMP QF 5

DIMENSIONS AND WEIGHTS

SUBMERSIBLE PUMPS QF5



E = Maximum Dia of Pump inclusive of cable guard and motor.

PUMP TYPE	MOTOR		C	DIMENSIONS (MM)				NET WEIGHT (KG)				
	TYPE	POWER (kW)		B		A		PUMP	E	MOTOR		
				1x230V	3x220V/3x400V	1x230V	3x220V/3x400V			1x230V	3x220V/3x400V	
QF 5-6	4" PREMIUM 100	0.37	309	242	-	551	-	95	101	3	9	-
QF 5-9	4" PREMIUM 100	0.55	372	271	242	643	614	95	101	4	10	9
QF 5-12	4" PREMIUM 100	0.75	435	292	271	727	706	95	101	5	11	10
QF 5-15	4" PREMIUM 100	1.1	498	340	292	838	790	95	101	5	13	11
QF 5-18	4" PREMIUM 100	1.1	561	340	292	901	853	95	101	6	13	11
QF 5-22	4" PREMIUM 100	1.5	645	405	340	1050	985	95	101	7	15	13
QF 5-25	4" PREMIUM 100	1.5	708	405	340	1113	1048	95	101	8	15	13
QF 5-29	4" PREMIUM 100	2.2	792	482	405	1274	1197	95	101	9	17	15
QF 5-33	4" PREMIUM 100	2.2	876	482	405	1358	1281	95	101	10	17	15
QF 5-39	4" PREMIUM 100	3.0	1002	-	480	-	1482	95	101	11	-	17
QF 5-45	4" PREMIUM 100	3.0	1128	-	482	-	1610	95	101	13	-	17
QF 5-52	4" PREMIUM 101	4.0	1275	-	693	-	1968	95	101	14	-	29
QF 5-60	4" PREMIUM 101	4.0	1443	-	693	-	2136	95	101	16	-	29

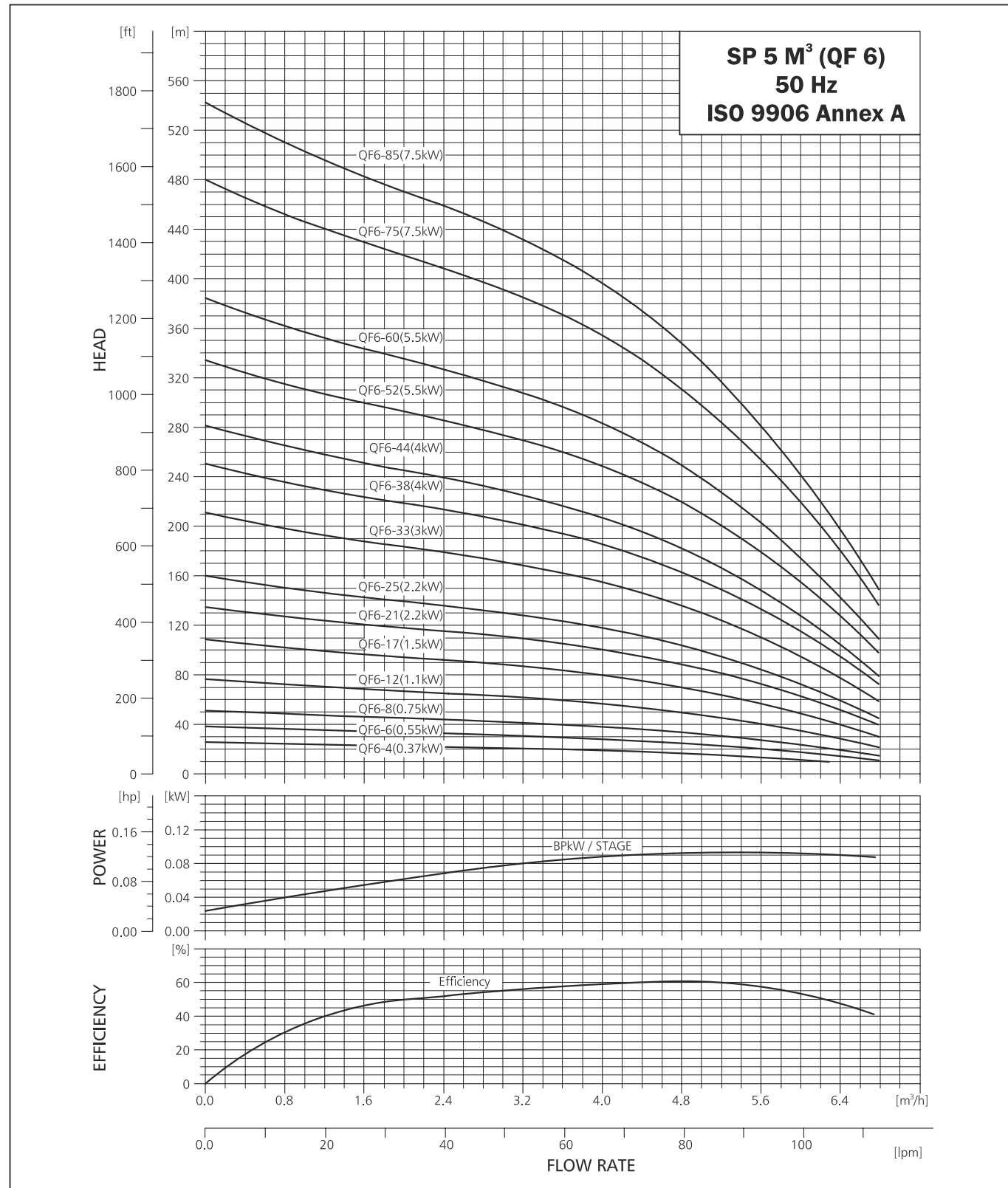
\* Motor type may change as per requirement .

QF-5		DISCHARGE (Q)														
		m <sup>3</sup> /h	0	1	1.4	1.8	2	2.4	2.8	3.4	4	4.4				
QF-5		0	16.7	23.4	30.1	33.4	40.1	46.8	56.8	66.8	73.5					
MODEL	CONNECTION	MOTOR RATING [kW]	[HP]	1- [A]	3- [A]	TOTAL HEAD IN (m)										
QF5 -6	Rp11/4	0.37	0.5	2.9	1.4	38	35	34	32	31	30	27	22	15	12	
QF5 -9		0.55	0.75	4	2.2	57	54	51	49	47	45	41	33	23	19	
QF5 -12		0.75	1	5.5	2.3	76	70	68	65	64	60	55	45	31	26	
QF5 -15		1.1	1.5	8.2	3.4	95	87	85	82	80	76	70	57	40	33	
QF5 -18		1.1	1.5	8.2	3.4	113	105	101	97	95	89	82	67	46	38	
QF5 -22		1.5	2.0	10.2	4.2	139	129	125	120	117	110	101	83	57	47	
QF5 -25		1.5	2.0	10.2	4.2	157	145	140	135	131	124	113	92	63	52	
QF5 -29		2.2	3.0	14	5.5	184	171	166	159	156	147	136	111	78	65	
QF5 -33		2.2	3.0	14	5.5	209	194	187	180	176	166	152	125	87	72	
QF5 -39		3.0	4.0	-	7.9	246	230	223	216	212	201	188	160	120	105	
QF5 -45		3.0	4.0	-	7.9	283	264	255	247	242	229	214	181	135	118	
QF5 -52		4.0	5.5	-	9.6	328	308	298	289	283	269	251	214	161	141	
QF5 -60		4.0	5.5	-	9.6	377	350	341	330	323	307	286	242	182	158	

PERFORMANCE CURVE OF SUBMERSIBLE PUMP



SUBMERSIBLE PUMP QF 6

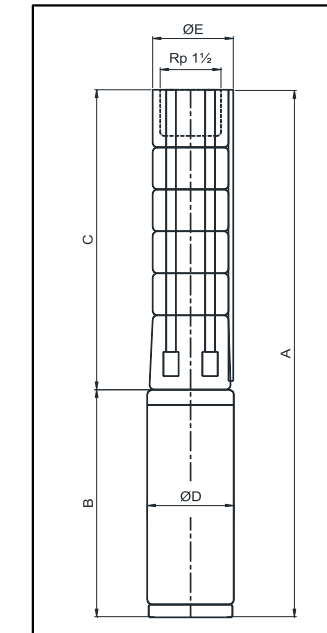


TECHNICAL DATA OF SUBMERSIBLE PUMP

SUBMERSIBLE PUMP QF 6

DIMENSIONS AND WEIGHTS

SUBMERSIBLE PUMPS QF6



PUMP TYPE	TECHNICAL DATA OF QF 6											
	MOTOR		C	DIMENSIONS (MM)				NET WEIGHT (KG)				
	TYPE	POWER (kW)		B		A		PUMP		MOTOR		
			1x230V	3x220V 3x400V	1x230V	3x220V 3x400V	D	E	1x230V	3x220V 3x400V		
QF 6-4	4" PREMIUM 100	0.37	267	242	-	509	-	95	97	3	9	-
QF 6-6	4" PREMIUM 100	0.55	309	271	242	580	551	95	97	3	10	9
QF 6-8	4" PREMIUM 100	0.75	351	292	271	643	622	95	97	4	11	10
QF 6-12	4" PREMIUM 100	1.1	435	340	292	775	727	95	97	5	13	11
QF 6-17	4" PREMIUM 100	1.5	540	405	340	945	880	95	97	6	15	13
QF 6-21	4" PREMIUM 100	2.2	624	482	405	1106	1029	95	97	7	17	15
QF 6-25	4" PREMIUM 100	2.2	708	482	405	1190	1113	95	97	8	17	15
QF 6-33	4" PREMIUM 100	3	876	-	482	-	1358	95	97	10	-	17
QF 6-38	4" PREMIUM 101	4	981	693	-	1674	-	95	97	11	29	-
QF 6-44	4" PREMIUM 101	4	1107	693	-	1800	-	95	97	12	29	-
QF 6-52	4" PREMIUM 101	5.5	1275	-	693	-	1968	95	97	14	-	29
QF 6-60	4" PREMIUM 101	5.5	1443	-	693	-	2136	95	97	16	-	29
QF 6-75	4" PREMIUM 101	7.5	1758	-	770	-	2528	95	97	20	-	33
QF 6-85	4" PREMIUM 101	7.5	1968	-	770	-	2738	95	97	22	-	33
QF 6-52	6" MTSF	5.5	1275	-	699	-	1974	145	143	14	-	48
QF 6-60	6" MTSF	5.5	1443	-	699	-	2142	145	143	16	-	48
QF 6-75	6" MTSF	7.5	1758	-	719	-	2477	145	143	20	-	50
QF 6-85	6" MTSF	7.5	1968	-	719	-	2687	145	143	22	-	50

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

\* Motor type may change as per requirement.

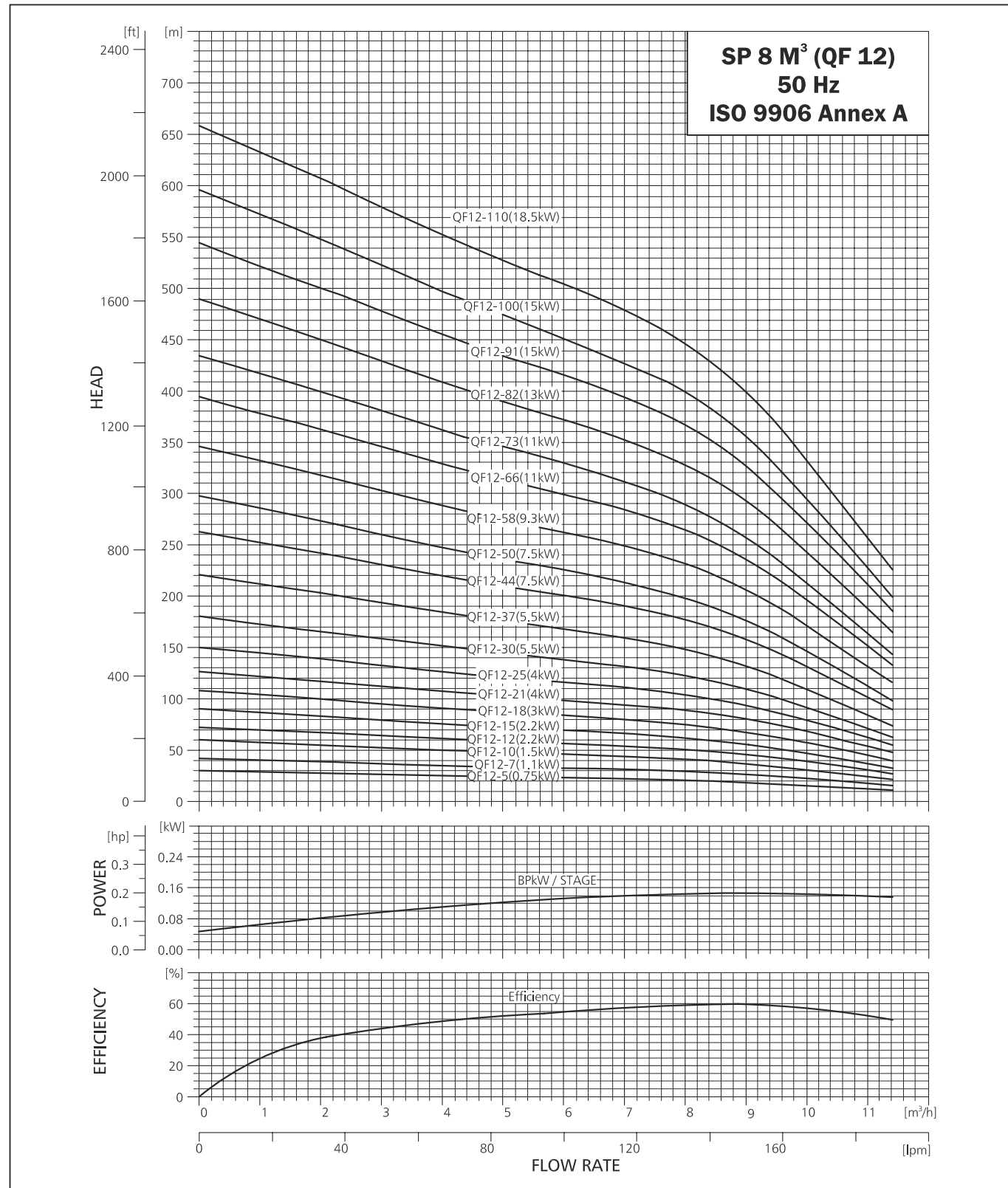
QF 6 -75 to QF 2-85 are mounted in sleeve for Rp 1 1/2" connection and with max. diameter 108 mm.

PERFORMANCE TABLE OF QF 6																		
QF-6			DISCHARGE (O)															
			m <sup>3</sup> /h	0	1	1.4	1.8	2	2.4	2.8	3.4	4	4.4	5	6	6.7		
			l/min.	0	16.7	23.4	30.1	33.4	40.1	46.8	56.8	66.8	73.5	83.5	100.2	111.6		
MODEL	CONNECTION	MOTOR RATING	TOTAL HEAD IN (m)															
		[kW] [HP]	1~ [A]	3~ [A]	26	24	23	23	22	22	21	20	19	18	16	11	9	
QF 6 - 4	Rp 1 1/2	0.37 0.5	2.9	1.4	26	24	23	23	22	22	21	20	19	18	16	11	9	
QF 6 - 6		0.55 0.75	4	2.2	38	36	35	34	33	33	32	30	28	26	24	17	11	
QF 6 - 8		0.75 1	5.5	2.3	51	48	47	46	45	44	43	40	38	36	32	23	15	
QF 6 - 12		1.1 1.5	8.2	3.4	77	72	70	68	67	65	63	60	56	54	47	35	23	
QF 6 - 17		1.5 2	10.2	4.2	109	100	97	96	94	92	90	85	80	75	67	49	32	
QF 6 - 21		2.2 3	14	5.5	135	126	122	120	118	115	112	106	100	95	85	63	42	
QF 6 - 25		2.2 3	14	5.5	160	150	145	141	139	135	131	125	118	112	99	72	48	
QF 6 - 33		3 4	-	7.9	211	195	190	186	183	179	173	166	155	148	130	95	62	
QF 6 - 38		4	5.5	-	9.6	250	233	229	221	219	215	209	199	186	177	157	115	76
QF 6 - 44		4	5.5	-	9.6	281	260	257	250	245	240	232	220	207	195	174	127	84
QF 6 - 52		5.5	7.5	-	13.6	334	310	302	296	293	285	280	267	249	238	210	155	110
QF 6 - 60		5.5	7.5	-	13.6	384	360	345	339	335	325	319	303	283	269	238	175	130



PERFORMANCE CURVE OF SUBMERSIBLE PUMP

SUBMERSIBLE PUMP QF 12

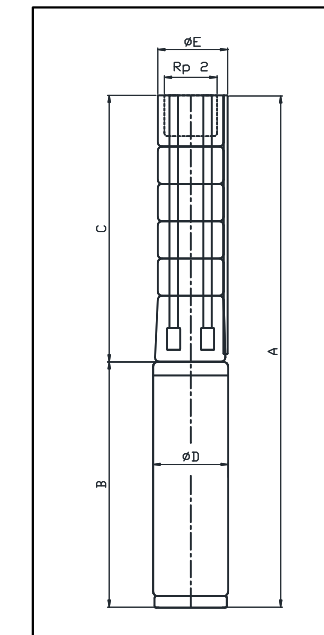


TECHNICAL DATA OF SUBMERSIBLE PUMP

SUBMERSIBLE PUMP QF 12

DIMENSIONS AND WEIGHTS

SUBMERSIBLE PUMPS QF12



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

QF12 58 to QF12 110 are mounted in sleeve for R 2" connection

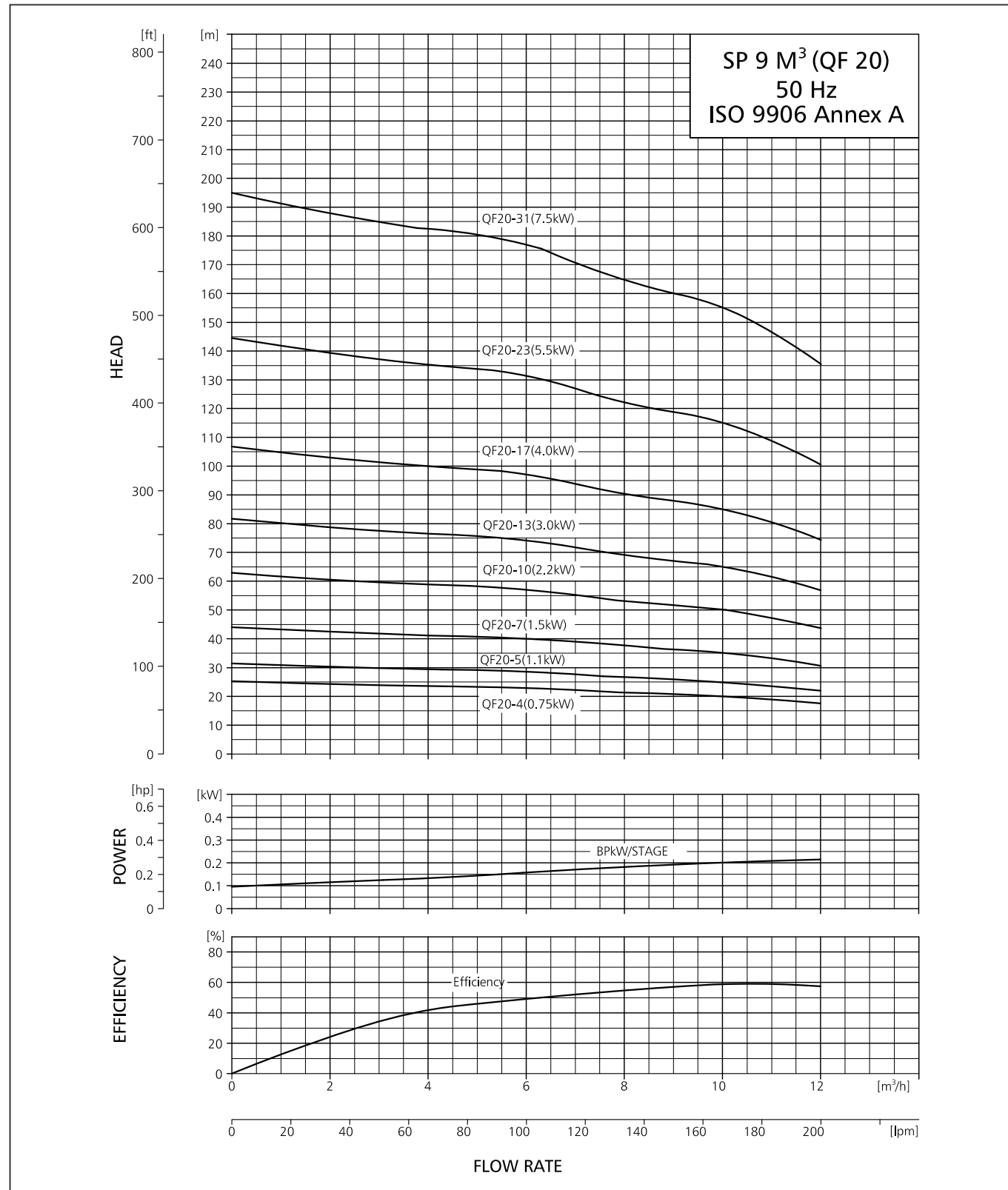
PUMP TYPE	TECHNICAL DATA OF QF 12											
	MOTOR		C	DIMENSIONS (MM)				NET WEIGHT (KG)				
	TYPE	POWER (kW)		B		A		D	E	PUMP	MOTOR	
		1x230V	3x220V 3x400V	1x230V	3x220V 3x400V	1x230V	3x220V 3x400V				1x230V	3x220V 3x400V
QF12-5	4*PREMIUM 100	0.75	415	292	271	707	686	95	101	4	11	10
QF12-7	4*PREMIUM 100	1.1	499	340	292	839	791	95	101	5	13	11
QF12-10	4*PREMIUM 100	1.5	625	405	340	1030	965	95	101	6	15	13
QF12-12	4*PREMIUM 100	2.2	709	482	405	1191	1114	95	101	7	17	15
QF12-15	4*PREMIUM 100	2.2	835	482	405	1317	1240	95	101	9	17	15
QF12-18	4*PREMIUM 100	3	961	-	482	-	1443	95	101	10	-	17
QF12-21	4*PREMIUM 101	4	1087	-	579	-	1666	95	101	11	-	23
QF12-25	4*PREMIUM 101	4	1255	-	579	-	1834	95	101	13	-	23
QF12-30	4*PREMIUM 101	5.5	1465	-	693	-	2158	95	101	15	-	29
QF12-37	4*PREMIUM 101	5.5	1759	-	693	-	2452	95	101	18	-	29
QF12-44	4*PREMIUM 101	7.5	2053	-	770	-	2823	95	101	21	-	33
QF12-50	4*PREMIUM 101	7.5	2305	-	770	-	3075	95	101	24	-	33
QF12-30	6*MTSF	5.5	1465	-	699	-	2164	143	145	15	-	48
QF12-37	6*MTSF	5.5	1759	-	699	-	2458	143	145	18	-	48
QF12-44	6*MTSF	7.5	2053	-	719	-	2772	143	145	21	-	50
QF12-50	6*MTSF	7.5	2305	-	719	-	3024	143	145	24	-	50
QF12-58	6*MTSF	9.3	2641	-	749	-	3390	143	145	27	-	53
QF12-66	6*MTSF	11	2977	-	779	-	3756	143	145	31	-	53
QF12-73	6*MTSF	11	3271	-	779	-	4050	143	145	34	-	56
QF12-82	6*MTSF	13	3649	-	829	-	4478	143	145	38	-	61
QF12-91	6*MTSF	15	4027	-	874	-	4901	143	145	42	-	66
QF12-100	6*MTSF	15	4405	-	874	-	5279	143	143	45	-	66
QF12-110	6*MTSF	18.5	4825	-	919	-	5744	143	143	50	-	70

\* Motor type may change as per requirement .

QF-12		PERFORMANCE TABLE OF 12												
		DISCHARGE (Q)												
MODEL	CONNECTION	MOTOR RATING		DISCHARGE (Q)		TOTAL HEAD IN (m)								
		[kW]	[HP]	1- [A]	3- [A]	0	1.4	2	4	6	8	9	10	11
						0	23.4	33.4	66.8	100.2	133.3	150	167	183.7
QF 12 - 5	Rp 2	0.75	1.0	5.5	2.3	30	29	27	25	23	21	19	16	12
QF 12 - 7		1.1	1.5	8.2	3.4	42	40	38	35	32	29	26	22	17
QF 12 - 10		1.5	2.0	10.2	4.2	60	57	55	50	46	41	37	32	24
QF 12 - 12		2.2	3.0	14.0	5.5	72	68	66	61	57	51	46	39	31
QF 12 - 15		2.2	3.0	14.0	5.5	90	85	82	76	70	62	56	47	37
QF 12 - 18		3.0	4.0	-	7.9	108	102	99	91	84	75	67	57	45
QF 12 - 21		4.0	5.5	-	9.6	127	120	117	107	99	89	80	68	53
QF 12 - 25		4.0	5.5	-	9.6	150	142	139	126	116	104	94	79	62
QF 12 - 30		5.5	7.5	-	13.6	180	170	165	151	138	123	110	92	71
QF 12 - 37		5.5	7.5	-	13.6	221	210	202	184	168	148	132	110	84

PERFORMANCE CURVE OF SUBMERSIBLE PUMP

SUBMERSIBLE PUMP QF 20

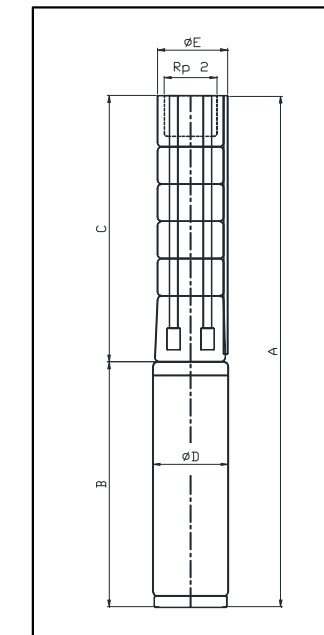


TECHNICAL DATA OF SUBMERSIBLE PUMP

SUBMERSIBLE PUMP QF 20

DIMENSIONS AND WEIGHTS

SUBMERSIBLE PUMPS QF20



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

PUMP TYPE	TECHNICAL DATA QF 20											
	MOTOR		C	DIMENSIONS (MM)				NET WEIGHT (KG)				
	TYPE	POWER (kW)		B		A		D	E	PUMP	MOTOR	
			1x230V	3x220V 3x400V	1x230V	3x220V 3x400V				1x230V	3x220V 3x400V	
QF 20-4	4*PREMIUM 100	1.1	445	340	292	785	737	95	101	6	13	11
QF 20-5	4*PREMIUM 100	1.1	510	340	292	850	802	95	101	6	13	11
QF 20-7	4*PREMIUM 100	1.5	640	405	340	1045	980	95	101	7	15	13
QF 20-10	4*PREMIUM 100	2.2	835	482	405	1317	1240	95	101	8	17	15
QF 20-13	4*PREMIUM 100	3	1030	-	482	-	1512	95	101	11	-	17
QF 20-17	4*PREMIUM 101	4	1290	-	579	-	1869	95	101	14	-	23
QF 20-23	4*PREMIUM 101	5.5	1680	-	693	-	2373	95	101	19	-	29
QF 20-31	4*PREMIUM 101	7.5	2200	-	770	-	2970	95	101	24	-	33
QF 20-23	6*MTSF	5.5	1750	-	699	-	2449	145	143	19	-	48
QF 20-31	6*MTSF	7.5	2270	-	719	-	2989	145	143	24	-	50

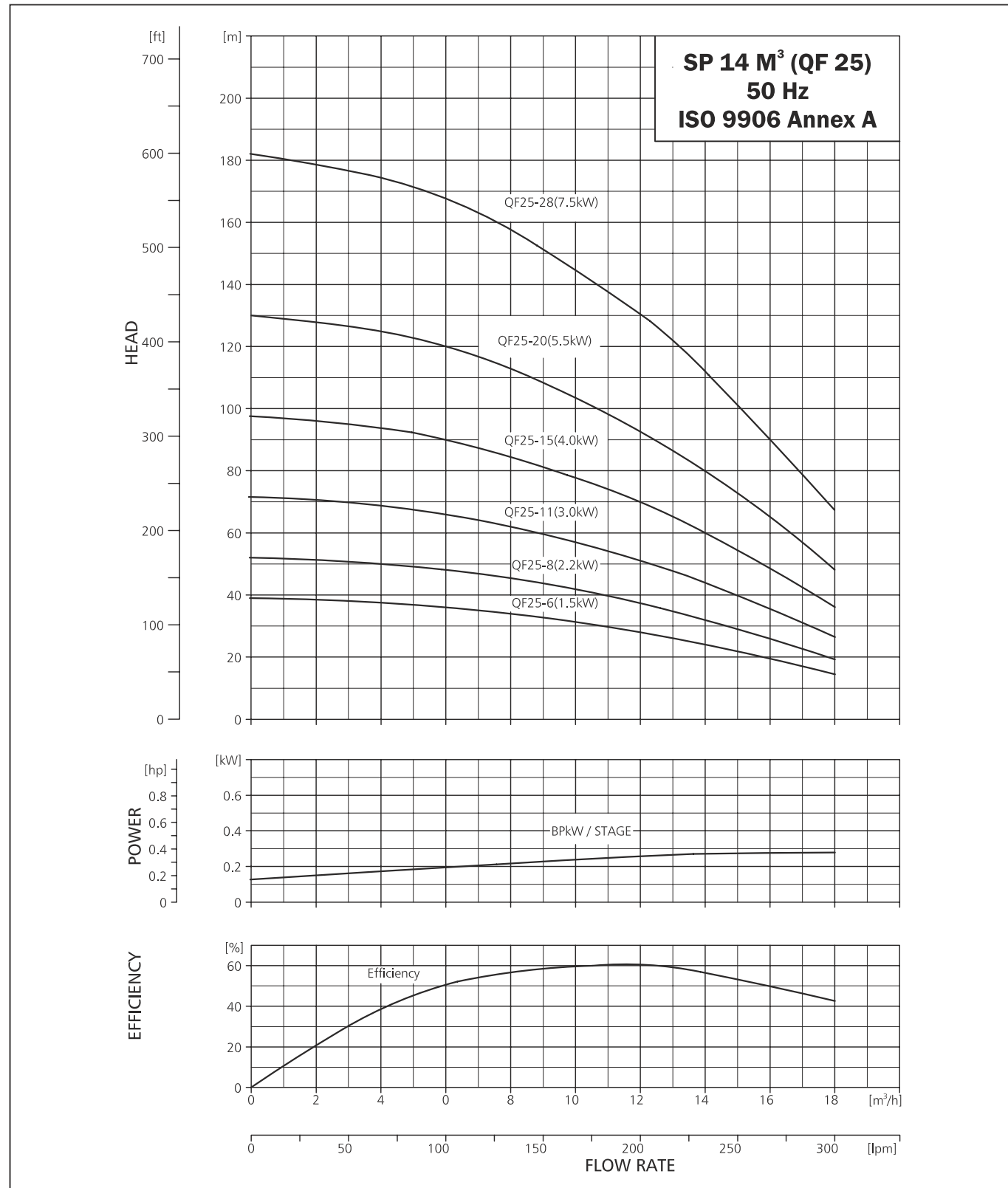
\* Motor type may change as per requirement .

PERFORMANCE TABLE QF 20										
QF-20		DISCHARGE (Q)								
		m <sup>3</sup> /h	0	2	4	6	8	10	12	
		l/min.	0	33.4	66.8	100.1	133.6	167	200.1	
MODEL	CONNECTION	MOTOR RATING		TOTAL HEAD IN (m)						
		[kW]	[HP]	27	26	25	24	22	20	18
QF 20 - 4	Rp 2	0.75	1	27	26	25	24	22	20	18
QF 20 - 5		1.1	1.5	34	33	31	30	28	25	23
QF 20 - 7		1.5	2	47	46	44	42	39	35	32
QF 20 - 10		2.2	3	68	65	63	60	55	50	45
QF 20 - 13		3	4	88	85	81	78	72	65	59
QF 20 - 17		4	5.5	115	111	106	102	94	85	77
QF 20 - 23		5.5	7.5	155	150	144	138	127	115	104
QF 20 - 31		7.5	10	209	202	194	186	171	155	140



PERFORMANCE CURVE OF SUBMERSIBLE PUMP

SUBMERSIBLE PUMP QF 25

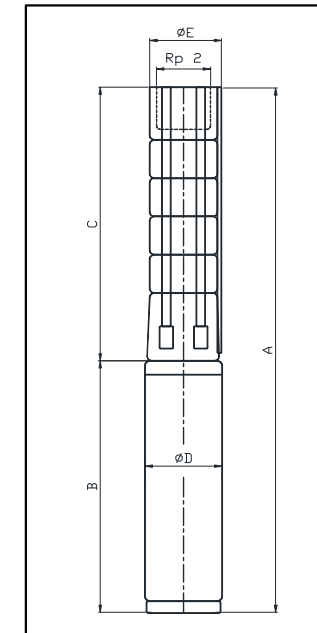


TECHNICAL DATA OF SUBMERSIBLE PUMP

SUBMERSIBLE PUMP QF 25

DIMENSIONS AND WEIGHTS

SUBMERSIBLE PUMPS QF 25



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

TECHNICAL DATA QF 25

PUMP TYPE	MOTOR		C	DIMENSIONS (MM)				NET WEIGHT (KG)				
	TYPE	POWER (kW)		B		A		D	E	PUMP	MOTOR	
				1x230V	3x220V 3x400V	1x230V	3x220V 3x400V				1x230V	3x220V 3x400V
QF 25-6	4*PREMIUM 100	1.5	575	405	340	980	915	95	101	3	15	13
QF 25-8	4*PREMIUM 100	2.2	705	482	405	1187	1110	95	101	4	17	15
QF 25-11	4*PREMIUM 100	3	900	-	482	-	1382	95	101	4	-	17
QF 25-15	4*PREMIUM 100	4	1160	-	579	-	1739	95	101	5	-	23
QF 25-20	4*PREMIUM 100	5.5	1485	-	693	-	2178	95	101	7	-	29
QF 25-28	4*PREMIUM 100	7.5	2005	-	770	-	2775	95	101	9	-	33
QF 25-20	6*MTSF	5.5	1555	-	699	-	2254	145	143	7	-	48
QF 25-28	6*MTSF	7.5	2075	-	719	-	2794	145	143	9	-	50

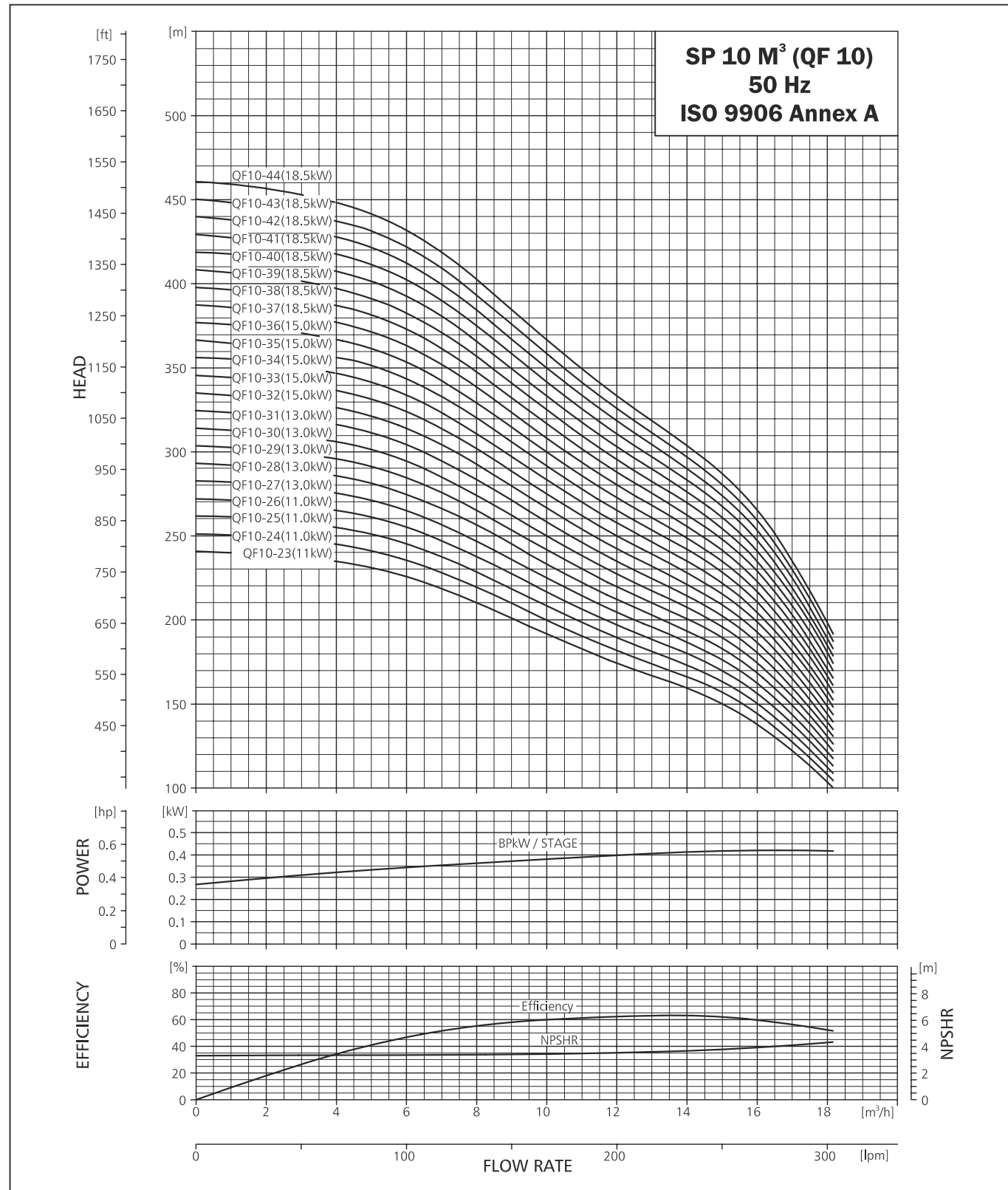
PERFORMANCE TABLE QF 25

QF-25		DISCHARGE (Q)								
		m <sup>3</sup> /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		TOTAL HEAD IN (m)						
		[kW]	[HP]	39	36	32	29	28	24	14
QF 25 - 6	Rp 2	1.5	2	52	48	42	39	37	32	19
QF 25 - 8		2.2	3	72	66	58	54	51	44	26
QF 25 - 11		3	4	98	90	80	74	70	60	36
QF 25 - 15		4	5.5	130	120	106	98	93	80	48
QF 25 - 20		5.5	7.5	182	168	148	137	131	112	67
QF 25 - 28		7.5	10							

PERFORMANCE CURVE OF SUBMERSIBLE PUMP

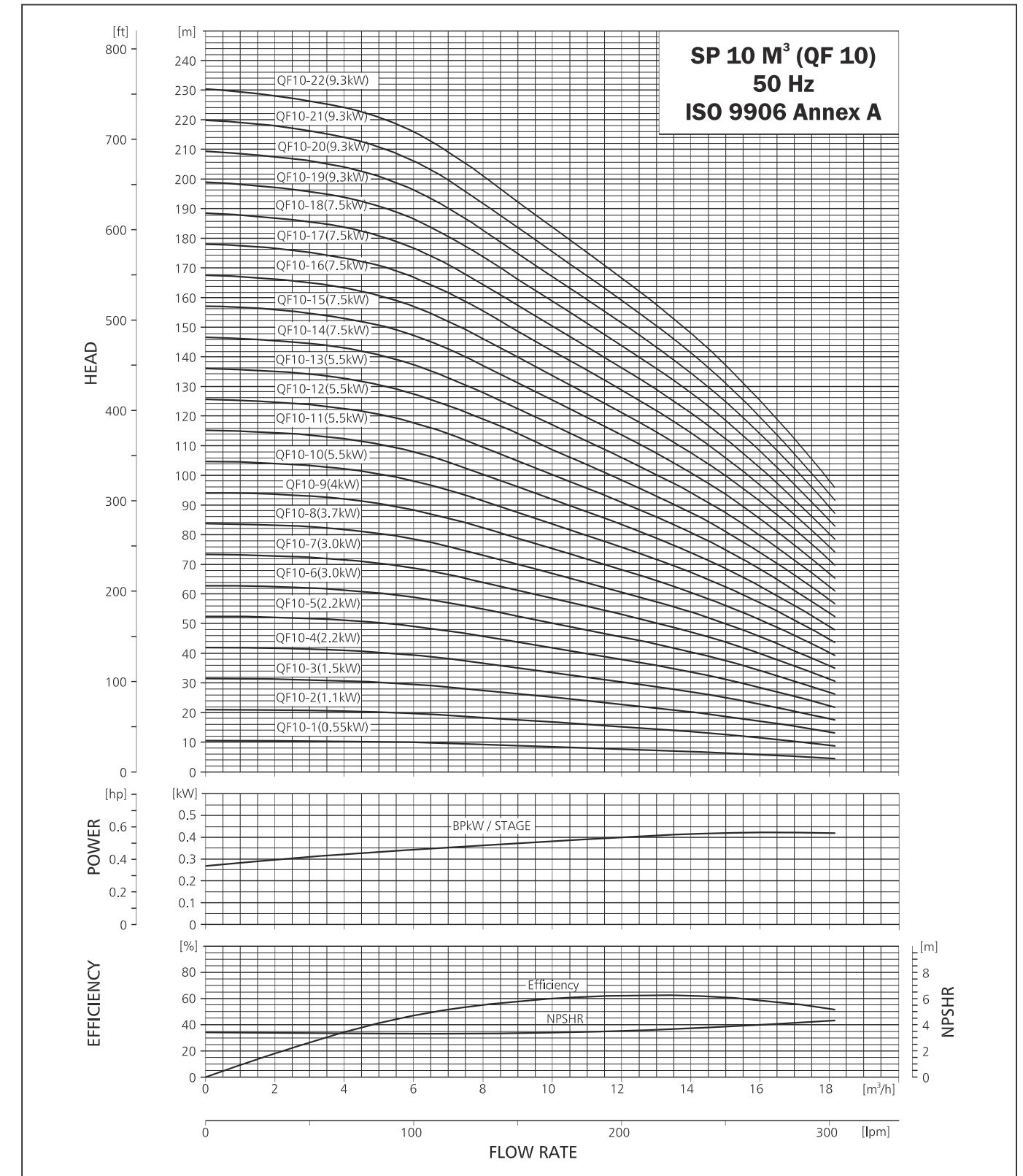


SUBMERSIBLE PUMP QF 10



PERFORMANCE CURVE OF SUBMERSIBLE PUMP

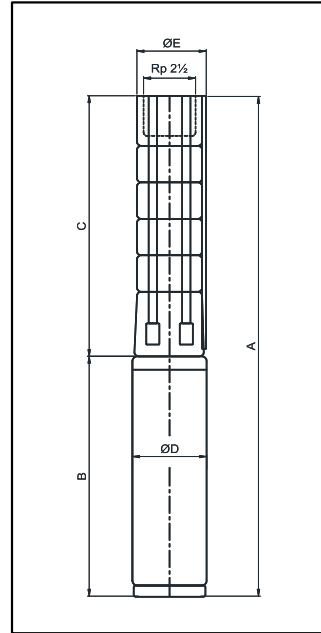
SUBMERSIBLE PUMP QF 10



TECHNICAL DATA OF SUBMERSIBLE PUMP



SUBMERSIBLE PUMP QF 10  
DIMENSIONS AND WEIGHTS



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

TECHNICAL DATA QF 10														
PUMP TYPE	MOTOR		C	DIMENSIONS (MM)						NET WEIGHT (KG)				
	TYPE	POWER (kW)		B		A		D	E*	E**	PUMP	MOTOR		
				1x230V	3x220V 3x400V	1x230V	3x220V 3x400V					1x230V	3x220V 3x400V	
QF 10-1	4*PREMIUM 100	0.55	330	271	242	601	572	95	143	-	5	10	9	
QF 10-2	4*PREMIUM 100	1.1	390	340	292	730	682	95	143	-	6	13	11	
QF 10-3	4*PREMIUM 100	1.5	451	405	340	856	791	95	143	-	7	15	13	
QF 10-4	4*PREMIUM 100	2.2	511	482	405	993	916	95	143	-	9	17	15	
QF 10-5	4*PREMIUM 100	2.2	572	482	405	1054	977	95	143	-	10	17	15	
QF 10-6	4*PREMIUM 100	3	632	-	482	-	1114	95	143	-	11	-	17	
QF 10-7	4*PREMIUM 100	3	693	-	482	-	1175	95	143	-	12	-	17	
QF 10-8	4*PREMIUM 101	3.7	753	693	-	1446	-	95	143	-	14	29	-	
QF 10-9	4*PREMIUM 101	4	814	-	579	-	1393	95	143	-	15	-	23	
QF 10-10	4*PREMIUM 101	5.5	874	-	693	-	1567	95	143	-	16	-	29	
QF 10-11	4*PREMIUM 101	5.5	935	-	693	-	1628	95	143	-	17	-	29	
QF 10-12	4*PREMIUM 101	5.5	995	-	693	-	1688	95	143	-	18	-	29	
QF 10-13	4*PREMIUM 101	5.5	1056	-	693	-	1749	95	143	-	20	-	29	
QF 10-14	4*PREMIUM 101	7.5	1116	-	770	-	1886	95	143	-	21	-	33	
QF 10-15	4*PREMIUM 101	7.5	1177	-	770	-	1947	95	143	-	22	-	33	
QF 10-16	4*PREMIUM 101	7.5	1237	-	770	-	2007	95	143	-	23	-	33	
QF 10-17	4*PREMIUM 101	7.5	1298	-	770	-	2068	95	143	-	25	-	33	
QF 10-18	4*PREMIUM 101	7.5	1358	-	770	-	2128	95	143	-	26	-	33	
QF 10-12	6*MTSF	5.5	995	-	699	-	1694	143	145	-	18	-	48	
QF 10-13	6*MTSF	5.5	1056	-	699	-	1755	143	145	-	20	-	48	
QF 10-14	6*MTSF	7.5	1116	-	719	-	1835	143	145	145	21	-	50	
QF 10-15	6*MTSF	7.5	1177	-	719	-	1896	143	145	145	22	-	50	
QF 10-16	6*MTSF	7.5	1237	-	719	-	1956	143	145	145	23	-	50	
QF 10-17	6*MTSF	7.5	1298	-	719	-	2017	143	145	145	25	-	50	
QF 10-18	6*MTSF	7.5	1358	-	719	-	2077	143	145	145	26	-	50	
QF 10-19	6*MTSF	9.3	1419	-	749	-	2168	143	145	145	27	-	53	
QF 10-20	6*MTSF	9.3	1479	-	749	-	2228	143	145	145	28	-	53	
QF 10-21	6*MTSF	9.3	1540	-	749	-	2289	143	145	145	29	-	53	
QF 10-22	6*MTSF	9.3	1600	-	749	-	2349	143	145	145	31	-	53	
QF 10-23	6*MTSF	11	1661	-	779	-	2440	143	145	145	32	-	56	
QF 10-24	6*MTSF	11	1721	-	779	-	2500	143	145	145	33	-	56	
QF 10-25	6*MTSF	11	1782	-	779	-	2561	143	145	145	34	-	56	
QF 10-26	6*MTSF	11	1842	-	779	-	2621	143	145	145	36	-	56	
QF 10-27	6*MTSF	13	1903	-	829	-	2732	143	145	145	37	-	61	
QF 10-28	6*MTSF	13	1963	-	829	-	2792	143	145	145	38	-	61	
QF 10-29	6*MTSF	13	2024	-	829	-	2853	143	145	145	39	-	61	
QF 10-30	6*MTSF	13	2084	-	829	-	2913	143	145	145	41	-	61	
QF 10-31	6*MTSF	13	2145	-	829	-	2974	143	145	145	42	-	61	
QF 10-32	6*MTSF	15	2205	-	874	-	3079	143	145	145	43	-	66	
QF 10-33	6*MTSF	15	2266	-	874	-	3140	143	145	145	44	-	66	
QF 10-34	6*MTSF	15	2326	-	874	-	3200	143	145	145	45	-	66	
QF 10-35	6*MTSF	15	2387	-	874	-	3261	143	145	145	47	-	66	
QF 10-36	6*MTSF	15	2447	-	874	-	3321	143	145	145	48	-	66	
QF 10-37	6*MTSF	18.5	2508	-	919	-	3427	143	145	145	49	-	70	
QF 10-38	6*MTSF	18.5	2568	-	919	-	3487	143	145	145	50	-	70	
QF 10-39	6*MTSF	18.5	2629	-	919	-	3548	143	145	145	52	-	70	
QF 10-40	6*MTSF	18.5	2689	-	919	-	3608	143	145	145	53	-	70	
QF 10-41	6*MTSF	18.5	2750	-	919	-	3669	143	145	145	54	-	70	
QF 10-42	6*MTSF	18.5	2810	-	919	-	3729	143	145	145	55	-	70	
QF 10-43	6*MTSF	18.5	2871	-	919	-	3790	143	145	145	57	-	70	
QF 10-44	6*MTSF	18.5	2931	-	919	-	3850	143	145	145	58	-	70	

\* Motor type may change as per requirement .

TECHNICAL DATA OF SUBMERSIBLE PUMP

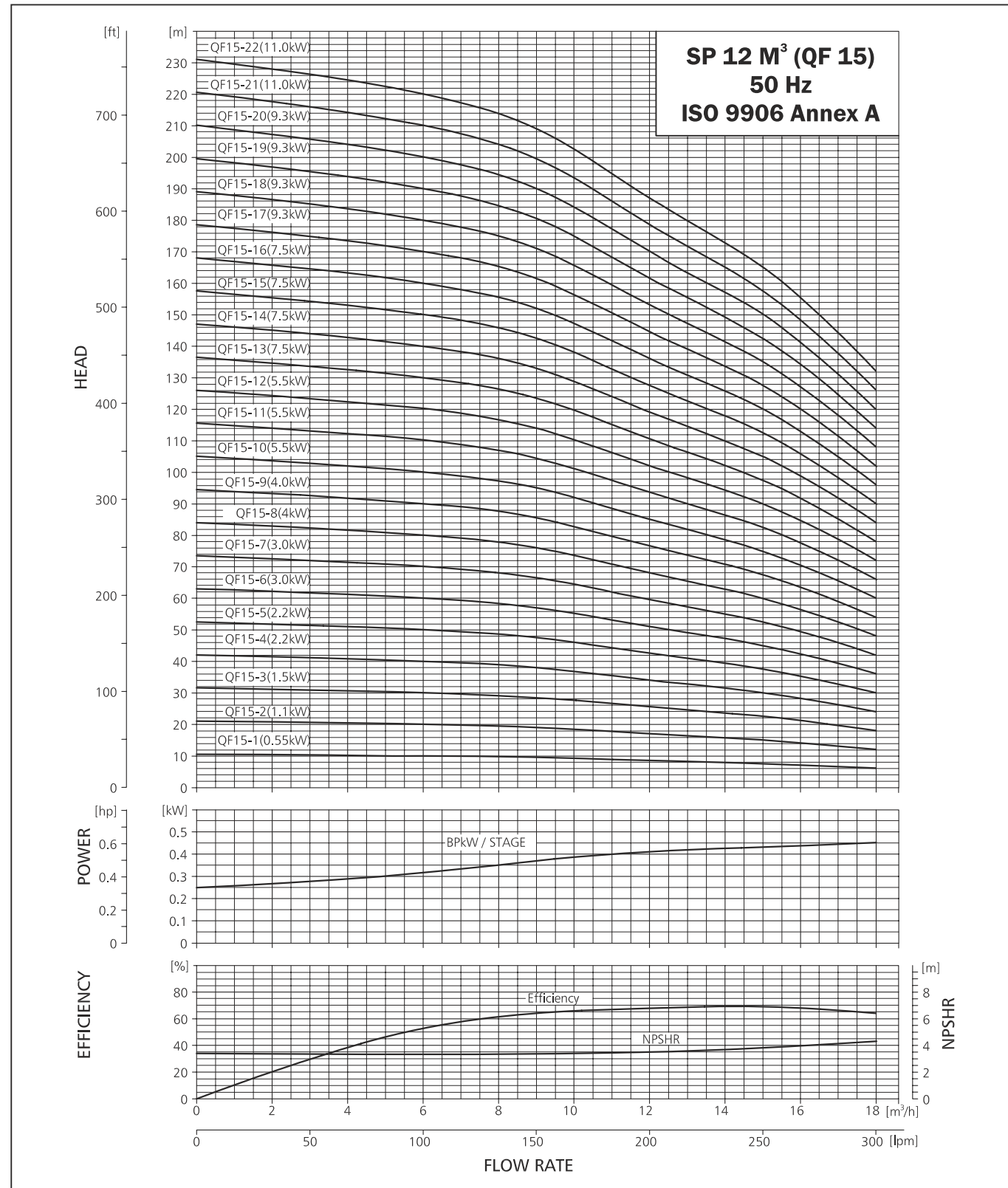
SUBMERSIBLE PUMP QF 10

PERFORMANCE TABLE QF 10													
QF-10		m <sup>3</sup> /h 1/min.	DISCHARGE (Q)										
			0	2	4	6	8	10	12	14	16	18	
MODEL	CONNEC-TION	MOTOR RATING [kW] [HP]	TOTAL HEAD IN (m)										
			QF-10-1	Rp 2 1/2"	0.55 0.75	10	10	10	10	9	8	8	6
QF-10-2	1.1 1.5	21	20		20	20	18	17	15	13	11	8	
QF-10-3	1.5 2	31	29		29	29	27	25	23	19	16	12	
QF-10-4	2.2 3	42	39		39	39	36	33	30	25	21	16	
QF-10-5	2.2 3	52	49		49	49	46	42	38	32	27	20	
QF-10-6	3 4	62	59		59	59	55	50	45	38	32	24	
QF-10-7	3 4	73	68		68	68	64	59	53	44	37	28	
QF-10-8	3.7 5	83	78		78	78	73	67	61	51	43	32	
QF-10-9	4 5.5	94	88		88	88	82	75	68	57	48	36	
QF-10-10	5.5 7.5	104	98		98	98	91	84	76	63	53	40	
QF-10-11	5.5 7.5	114	107		107	107	100	92	83	70	59	44	
QF-10-12	5.5 7.5	125	117		117	117	109	100	91	76	64	48	
QF-10-13	5.5 7.5	135	127		127	127	118	109	98	82	69	52	
QF-10-14	7.5 10	146	137		137	137	128	117	106	89	75	56	
QF-10-15	7.5 10	156	147		147	147	137	125	114	95	80	60	
QF-10-16	7.5 10	166	156		156	156	146	134	121	101	85	64	
QF-10-17	7.5 10	177	166		166	166	155	142	129	108	91	68	
QF-10-18	7.5 10	187	176		176	176	164	150	136	114	96	72	
QF-10-19	9.3 12.5	198	186		186	186	173	159	144	120	101	76	
QF-10-20	9.3 12.5	208	195		195	195	182	167	151	127	107	80	
QF-10-21	9.3 12.5	218	205		205	205	191	176	159	133	112	84	
QF-10-22	9.3 12.5	229	215		215	215	200	184	167	139	117	88	
QF-10-23	11 15	239	225		225	225	210	192	174	146	123	92	
QF-10-24	11 15	250	234		234	234	219	201	182	152	128	96	
QF-10-25	11 15	260	244		244	244	228	209	189	159	134	100	
QF-10-26	11 15	270	254		254	254	237	217	197	165	139	104	
QF-10-27	13 17.5	281	264		264	264	246	226	204	171	144	108	
QF-10-28	13 17.5	291	274		274	274	255	234	212	178	150	112	
QF-10-29	13 17.5	302	283		283	283	264	242	220	184	155	116	
QF-10-30	13 17.5	312	293		293	293	273	251	227	190	160	120	
QF-10-31	13 17.5	322	303		303	303	282	259	235	197	166	124	
QF-10-32	15 20	333	313		313	313	292	268	242	203	171	128	
QF-10-33	15 20	343	322		322	322	301	276	250	209	176	132	
QF-10-34	15 20	354	332		332	332	310	284	257	216	182	136	
QF-10-35	15 20	364	342		342	342	319	293	265	222	187	140	
QF-10-36	15 20	374	352		352	352	328	301	273	228	192	144	
QF-10-37	18.5 25	385	361		361	361	337	309	280	235	198	148	
QF-10-38	18.5 25	395	371		371	371	346	318	288	241	203	152	
QF-10-39	18.5 25	406	381		381	381	355	326	295	247	208	156	
QF-10-40	18.5 25	416	391		391	391	364	334	303	254	214	160	
QF-10-41	18.5 25	426	401		401	401	374	343	310	260	219	164	
QF-10-42	18.5 25	437	410		410	410	383	351	318	266	224	168	
QF-10-43	18.5 25	447	420		420	420	392	359	326	273	230	172	
QF-10-44	18.5 25	458	430		430	430	401	368	333	279	235	176	

PERFORMANCE CURVE OF SUBMERSIBLE PUMP

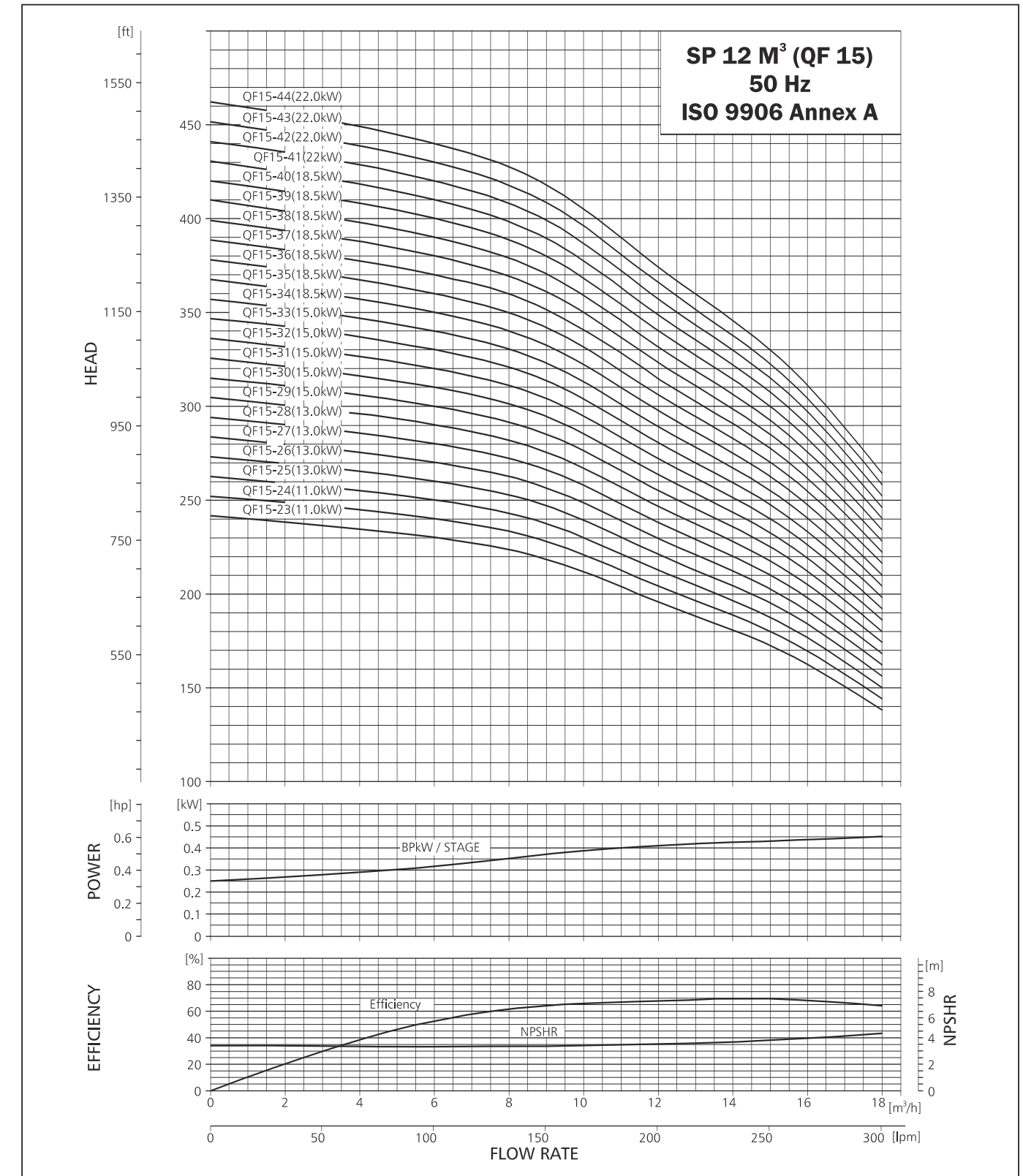


SUBMERSIBLE PUMP QF 15



PERFORMANCE CURVE OF SUBMERSIBLE PUMP

SUBMERSIBLE PUMP QF 15



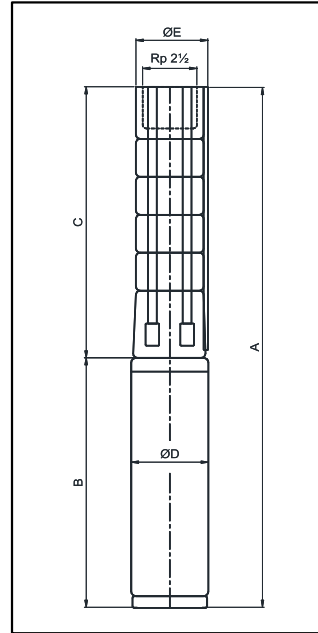


TECHNICAL DATA OF SUBMERSIBLE PUMP



SUBMERSIBLE PUMP QF 15

DIMENSIONS AND WEIGHTS



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

TECHNICAL DATA QF 15													
PUMP TYPE	MOTOR		C	DIMENSIONS (MM)						NET WEIGHT (KG)			
	TYPE	POWER (kW)		B		A		D	E*	E**	PUMP	MOTOR	
				1x230V	3x220V 3x400V	1x230V	3x220V 3x400V					1x230V	3x220V 3x400V
QF 15-1	4*PREMIUM 100	0.55	330	271	242	601	572	95	143	-	5	10	9
QF 15-2	4*PREMIUM 100	1.1	390	340	292	730	682	95	143	-	6	13	11
QF 15-3	4*PREMIUM 100	1.5	451	405	340	856	791	95	143	-	7	15	13
QF 15-4	4*PREMIUM 100	2.2	511	482	405	993	916	95	143	-	9	17	15
QF 15-5	4*PREMIUM 100	2.2	572	482	405	1054	977	95	143	-	10	17	15
QF 15-6	4*PREMIUM 100	3	632	-	482	-	1114	95	143	-	11	-	17
QF 15-7	4*PREMIUM 100	3	693	-	482	-	1175	95	143	-	12	-	17
QF 15-8	4*PREMIUM 101	4	753	-	579	-	1332	95	143	-	14	-	23
QF 15-9	4*PREMIUM 101	4	814	-	579	-	1393	95	143	-	15	-	23
QF 15-10	4*PREMIUM 101	5.5	874	-	693	-	1567	95	143	-	16	-	29
QF 15-11	4*PREMIUM 101	5.5	935	-	693	-	1628	95	143	-	17	-	29
QF 15-12	4*PREMIUM 101	5.5	995	-	693	-	1688	95	143	-	18	-	29
QF 15-13	4*PREMIUM 101	7.5	1056	-	770	-	1826	95	143	-	20	-	33
QF 15-14	4*PREMIUM 101	7.5	1116	-	770	-	1886	95	143	-	21	-	33
QF 15-15	4*PREMIUM 101	7.5	1177	-	770	-	1947	95	143	-	22	-	33
QF 15-16	4*PREMIUM 101	7.5	1237	-	770	-	2007	95	143	-	23	-	33
QF 15-11	6*MTSF	5.5	935	-	699	-	1634	145	143	-	17	-	48
QF 15-12	6*MTSF	5.5	995	-	699	-	1694	145	143	-	18	-	48
QF 15-13	6*MTSF	7.5	1056	-	719	-	1775	145	143	145	20	-	50
QF 15-14	6*MTSF	7.5	1116	-	719	-	1835	145	143	145	21	-	50
QF 15-15	6*MTSF	7.5	1177	-	719	-	1896	145	143	145	22	-	50
QF 15-16	6*MTSF	7.5	1237	-	719	-	1956	145	143	145	23	-	50
QF 15-17	6*MTSF	9.3	1298	-	749	-	2047	145	143	145	25	-	53
QF 15-18	6*MTSF	9.3	1358	-	749	-	2107	145	143	145	26	-	53
QF 15-19	6*MTSF	9.3	1419	-	749	-	2168	145	143	145	27	-	53
QF 15-20	6*MTSF	9.3	1479	-	749	-	2228	145	143	145	28	-	53
QF 15-21	6*MTSF	11	1540	-	779	-	2319	145	143	145	29	-	56
QF 15-22	6*MTSF	11	1600	-	779	-	2379	145	143	145	31	-	56
QF 15-23	6*MTSF	11	1661	-	779	-	2440	145	143	145	32	-	56
QF 15-24	6*MTSF	11	1721	-	779	-	2500	145	143	145	33	-	56
QF 15-25	6*MTSF	13	1782	-	829	-	2611	145	143	145	34	-	61
QF 15-26	6*MTSF	13	1842	-	829	-	2671	145	143	145	36	-	61
QF 15-27	6*MTSF	13	1903	-	829	-	2732	145	143	145	37	-	61
QF 15-28	6*MTSF	13	1963	-	829	-	2792	145	143	145	38	-	61
QF 15-29	6*MTSF	15	2024	-	874	-	2898	145	143	145	39	-	66
QF 15-30	6*MTSF	15	2084	-	874	-	2958	145	143	145	41	-	66
QF 15-31	6*MTSF	15	2145	-	874	-	3019	145	143	145	42	-	66
QF 15-32	6*MTSF	15	2205	-	874	-	3079	145	143	145	43	-	66
QF 15-33	6*MTSF	15	2266	-	874	-	3140	145	143	145	44	-	66
QF 15-34	6*MTSF	18.5	2326	-	919	-	3245	145	143	145	45	-	70
QF 15-35	6*MTSF	18.5	2387	-	919	-	3306	145	143	145	47	-	70
QF 15-36	6*MTSF	18.5	2447	-	919	-	3366	145	143	145	48	-	70
QF 15-37	6*MTSF	18.5	2508	-	919	-	3427	145	143	145	49	-	70
QF 15-38	6*MTSF	18.5	2568	-	919	-	3487	145	143	145	50	-	70
QF 15-39	6*MTSF	18.5	2629	-	919	-	3548	145	143	145	52	-	70
QF 15-40	6*MTSF	18.5	2689	-	919	-	3608	145	143	145	53	-	70
QF 15-41	6*MTSF	22	2750	-	1009	-	3759	145	143	145	54	-	79
QF 15-42	6*MTSF	22	2810	-	1009	-	3819	145	143	145	55	-	79
QF 15-43	6*MTSF	22	2871	-	1009	-	3880	145	143	145	57	-	79
QF 15-44	6*MTSF	22	2931	-	1009	-	3940	145	143	145	58	-	79

\* Maximum diameter of pump with one motor cable.  
 \*\* Maximum diameter of pump with two motor cable.  
 Motor type may change as per requirement.

TECHNICAL DATA OF SUBMERSIBLE PUMP

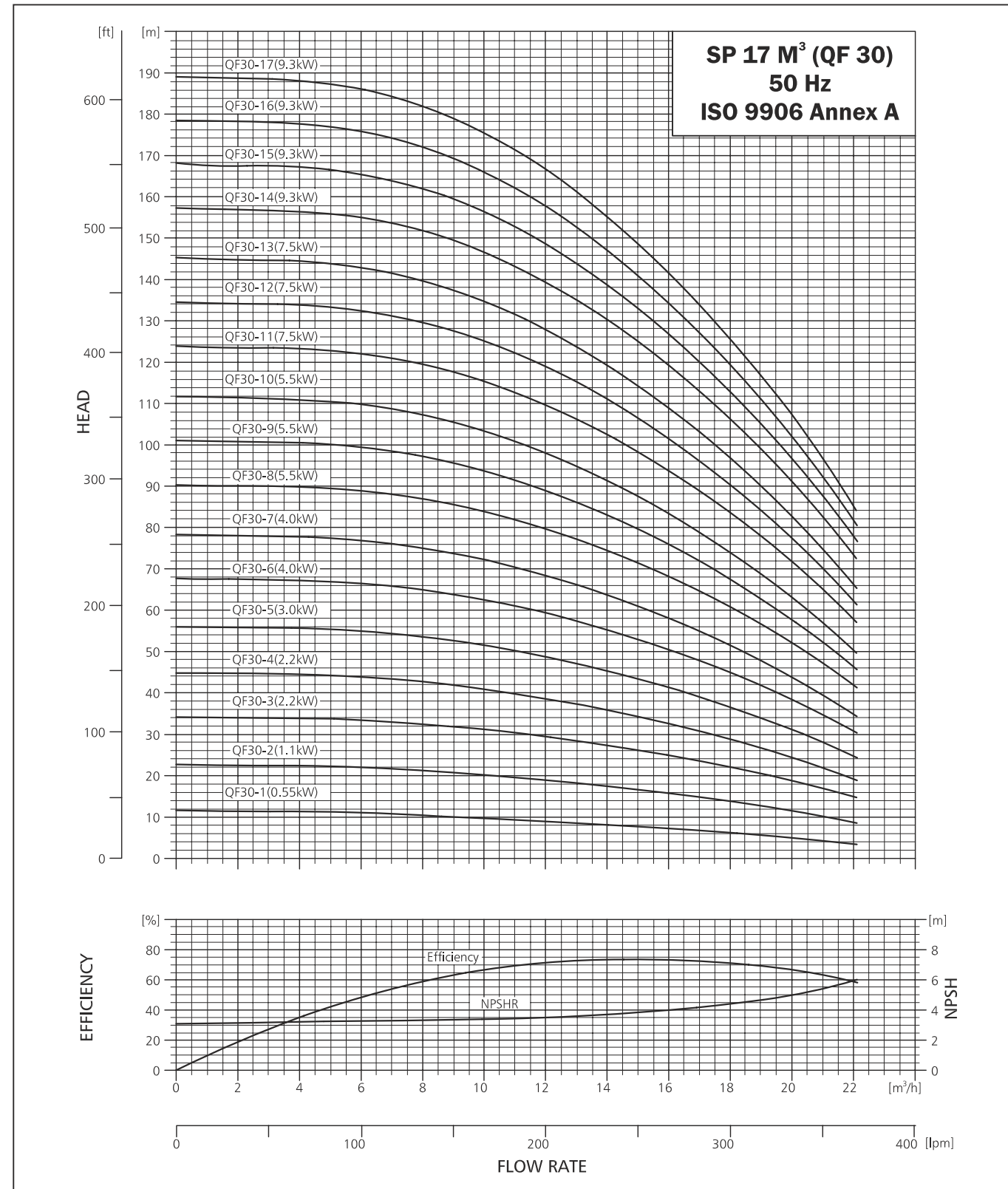
SUBMERSIBLE PUMP QF 15

PERFORMANCE TABLE QF 15												
QF-15		m <sup>3</sup> /h	DISCHARGE (Q)									
			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	CONNEC-TION	MOTOR RATING [kW] [HP]	TOTAL HEAD IN (m)									
			11	10	10	10	10	9	9	8	7	6
QF15-1	Rp2 1/2"	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		9.3 12.5	179	173	170	170	162	153	145	128	111	102
QF15-18		9.3 12.5	189	184	180	180	171	162	153	135	118	108
QF15-19		9.3 12.5	200	194	190	190	181	171	162	143	124	114
QF15-20		9.3 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 OF SUBMERSIBLE PUMP

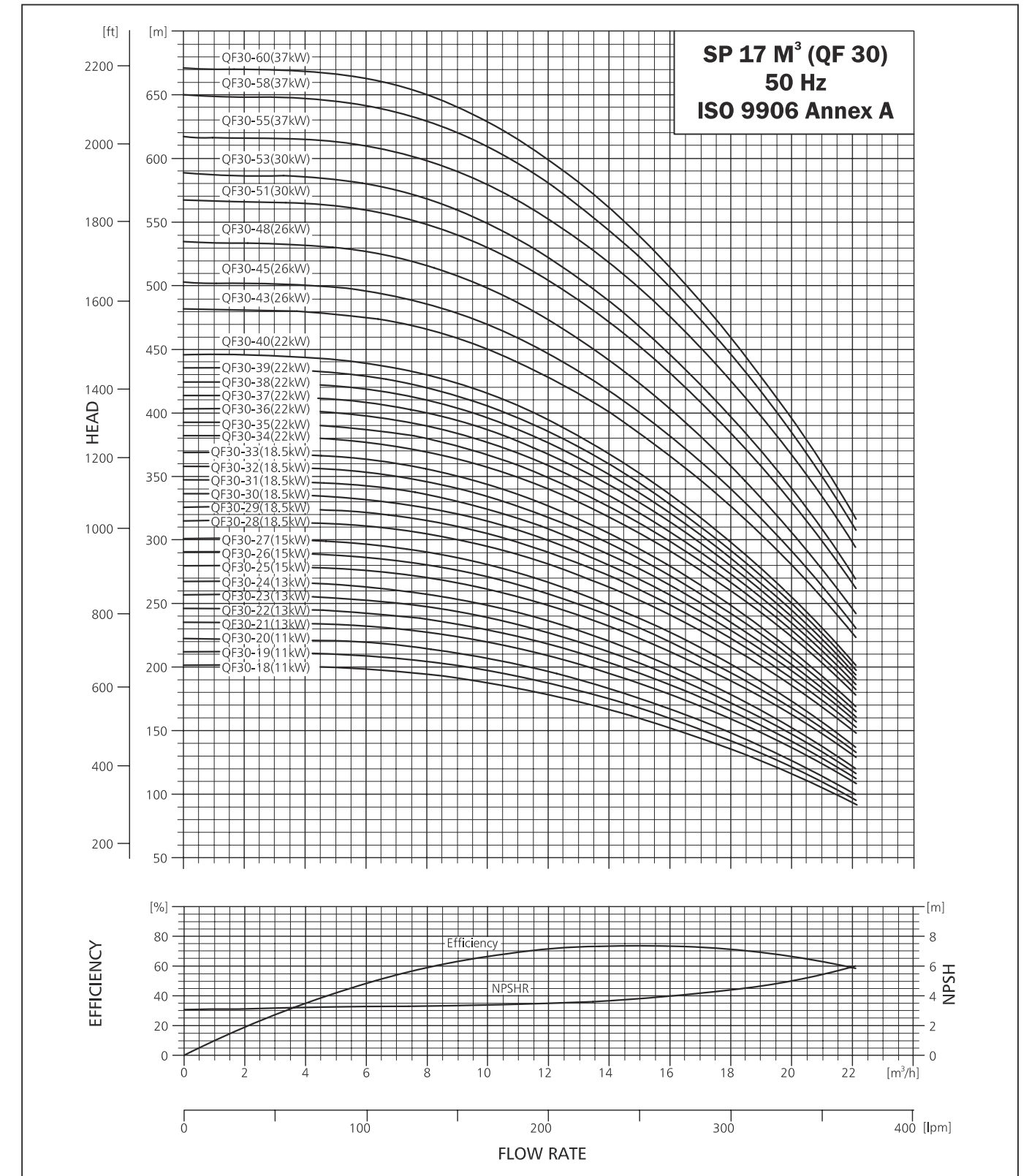


SUBMERSIBLE PUMP QF 30



PERFORMANCE CURVE OF SUBMERSIBLE PUMP

SUBMERSIBLE PUMP QF 30



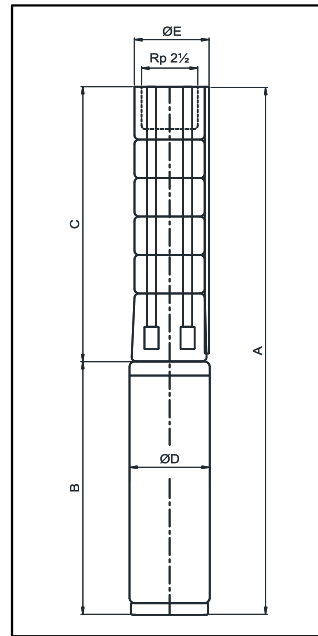


TECHNICAL DATA OF SUBMERSIBLE PUMP



SUBMERSIBLE PUMP QF 30

DIMENSIONS AND WEIGHTS



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

TECHNICAL DATA QF 30														
PUMP TYPE	MOTOR		C	DIMENSIONS (MM)						NET WEIGHT (KG)				
	TYPE	POWER (kW)		B		A		D	E*	E**	PUMP	MOTOR		
				1x230V	3x220V 3x400V	1x230V	3x220V 3x400V					1x230V	3x220V 3x400V	
QF30-1	4*PREMIUM 100	0.55	330	271	242	670	572	95	143	-	7	10	9	
QF30-2	4*PREMIUM 100	1.1	390	340	292	802	682	95	143	-	9	13	11	
QF30-3	4*PREMIUM 100	2.2	451	482	405	1024	856	95	143	-	10	17	15	
QF30-4	4*PREMIUM 100	2.2	511	482	405	1084	916	95	143	-	11	17	15	
QF30-5	4*PREMIUM 100	3	572	-	482	-	1054	95	143	-	12	-	17	
QF30-6	4*PREMIUM 101	4	632	-	579	-	1211	95	143	-	14	-	23	
QF30-7	4*PREMIUM 101	4	693	-	579	-	1272	95	143	-	15	-	23	
QF30-8	4*PREMIUM 101	5.5	753	-	693	-	1446	95	143	-	16	-	29	
QF30-9	4*PREMIUM 101	5.5	814	-	693	-	1507	95	143	-	17	-	29	
QF30-10	4*PREMIUM 101	5.5	874	-	693	-	1567	95	143	-	18	-	29	
QF30-11	4*PREMIUM 101	7.5	935	-	770	-	1705	95	143	-	20	-	33	
QF30-12	4*PREMIUM 101	7.5	995	-	770	-	1765	95	143	-	21	-	33	
QF30-13	4*PREMIUM 101	7.5	1056	-	770	-	1826	95	143	-	22	-	33	
QF30-8	6*MTSF	5.5	753	-	699	-	1452	145	143	145	16	-	48	
QF30-9	6*MTSF	5.5	814	-	699	-	1513	145	143	145	17	-	48	
QF30-10	6*MTSF	5.5	874	-	699	-	1573	145	143	145	18	-	48	
QF30-11	6*MTSF	7.5	935	-	719	-	1654	145	143	145	20	-	50	
QF30-12	6*MTSF	7.5	995	-	719	-	1714	145	143	145	21	-	50	
QF30-13	6*MTSF	7.5	1056	-	719	-	1775	145	143	145	22	-	50	
QF30-14	6*MTSF	9.3	1116	-	749	-	1865	145	143	145	23	-	53	
QF30-15	6*MTSF	9.3	1177	-	749	-	1926	145	143	145	25	-	53	
QF30-16	6*MTSF	9.3	1237	-	749	-	1986	145	143	145	26	-	53	
QF30-17	6*MTSF	9.3	1298	-	749	-	2047	145	143	145	27	-	53	
QF30-18	6*MTSF	11	1358	-	779	-	2137	145	143	145	28	-	56	
QF30-19	6*MTSF	11	1419	-	779	-	2198	145	143	145	30	-	56	
QF30-20	6*MTSF	11	1479	-	779	-	2258	145	143	145	31	-	56	
QF30-21	6*MTSF	13	1540	-	829	-	2369	145	143	145	32	-	61	
QF30-22	6*MTSF	13	1600	-	829	-	2429	145	143	145	33	-	61	
QF30-23	6*MTSF	13	1661	-	829	-	2490	145	143	145	34	-	61	
QF30-24	6*MTSF	13	1721	-	829	-	2550	145	143	145	36	-	61	
QF30-25	6*MTSF	15	1782	-	874	-	2656	145	143	145	37	-	66	
QF30-26	6*MTSF	15	1842	-	874	-	2716	145	143	145	38	-	66	
QF30-27	6*MTSF	15	1903	-	874	-	2777	145	143	145	39	-	66	
QF30-28	6*MTSF	18.5	1963	-	919	-	2882	145	143	145	41	-	70	
QF30-29	6*MTSF	18.5	2024	-	919	-	2943	145	143	145	42	-	70	
QF30-30	6*MTSF	18.5	2084	-	919	-	3003	145	143	145	43	-	70	
QF30-31	6*MTSF	18.5	2145	-	919	-	3064	145	143	145	44	-	70	
QF30-32	6*MTSF	18.5	2205	-	919	-	3124	145	143	145	46	-	70	
QF30-33	6*MTSF	18.5	2266	-	919	-	3185	145	143	145	47	-	70	
QF30-34	6*MTSF	22	2326	-	1009	-	3335	145	143	145	48	-	79	
QF30-35	6*MTSF	22	2387	-	1009	-	3396	145	143	145	49	-	79	
QF30-36	6*MTSF	22	2447	-	1009	-	3456	145	143	145	50	-	79	
QF30-37	6*MTSF	22	2508	-	1009	-	3517	145	143	145	52	-	79	
QF30-38	6*MTSF	22	2568	-	1009	-	3577	145	143	145	53	-	79	
QF30-39	6*MTSF	22	2629	-	1009	-	3638	145	143	145	54	-	79	
QF30-40	6*MTSF	22	2689	-	1009	-	3698	145	143	145	55	-	79	
QF30-43	6*MTSF	26	2871	-	1114	-	3985	145	143	145	59	-	90	
QF30-45	6*MTSF	26	2992	-	1114	-	4106	145	143	145	62	-	90	
QF30-48	6*MTSF	26	3173	-	1114	-	4287	145	143	145	65	-	90	
QF30-51	6*MTSF	30	3355	-	1214	-	4569	145	143	145	69	-	100	
QF30-53	6*MTSF	30	3476	-	1214	-	4690	145	143	145	71	-	100	
QF30-55	6*MTSF	37	3597	-	1294	-	4891	145	143	145	74	-	106	
QF30-51	8*MTSF	30	1140	-	4495	-	4569	194	194	194	69	-	130	
QF30-53	8*MTSF	30	1140	-	4616	-	4690	194	194	194	71	-	130	
QF30-55	8*MTSF	37	1140	-	4737	-	4891	194	194	194	74	-	145	
QF30-58	8*MTSF	37	1140	-	4918	-	5072	194	194	194	78	-	145	
QF30-60	8*MTSF	37	1140	-	5039	-	5193	194	194	194	80	-	145	

\* Maximum diameter of pump with one motor cable.  
 \*\* Maximum diameter of pump with two motor cable.  
 Motor type may change as per requirement.

TECHNICAL DATA OF SUBMERSIBLE PUMP

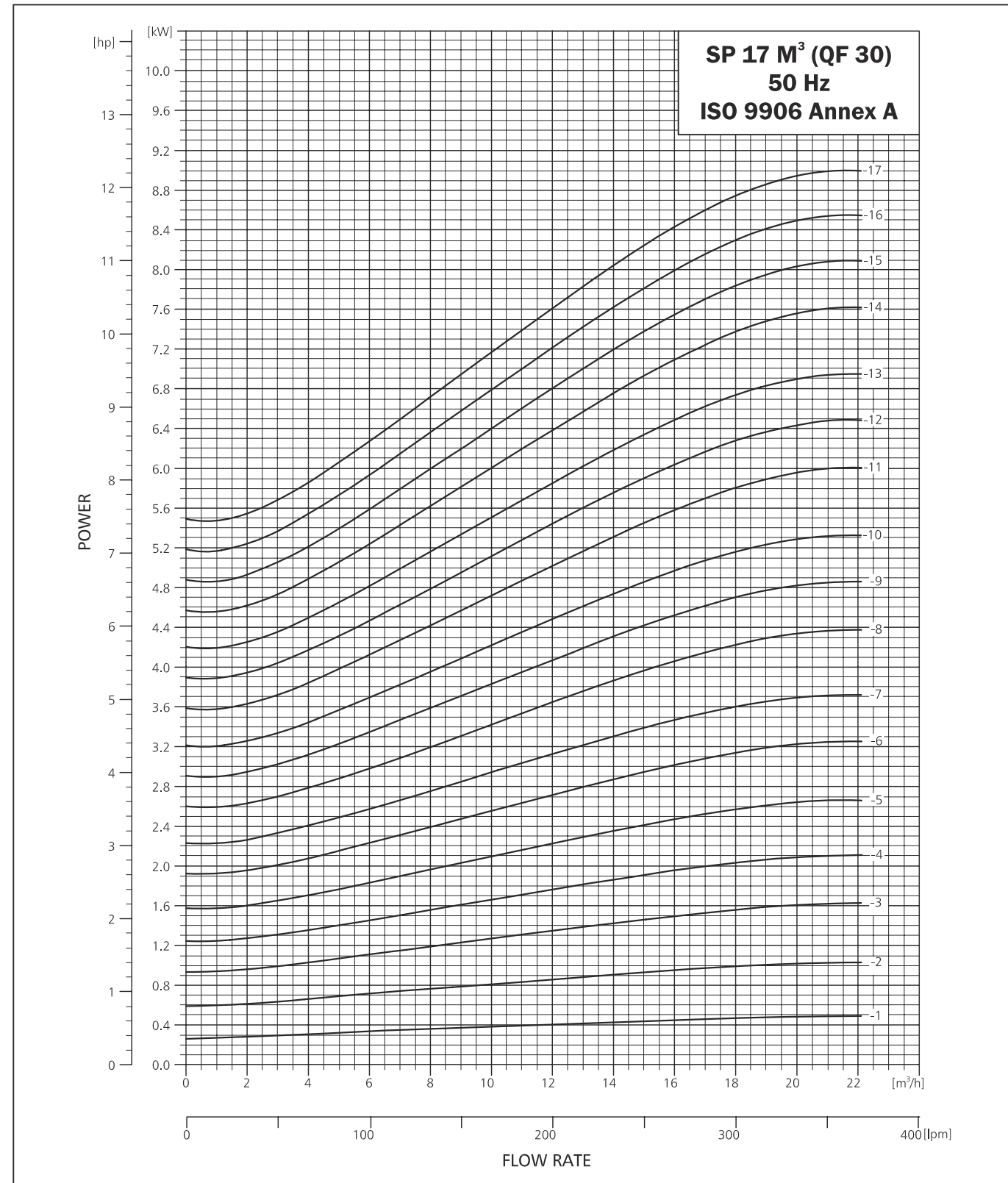
SUBMERSIBLE PUMP QF 30

PERFORMANCE TABLE QF 30														
QF-30	MODEL	MOTOR RATING [kW] [HP]	DISCHARGE (Q)											
			m <sup>3</sup> /h l/min.	0	2	4	6	8	10	12	14	16	18	20
			TOTAL HEAD IN (m)											
QF 30 - 1	0.55	0.75	12	11	11	11	10	10	9	8	7	6	5	4
QF 30 - 2	1.1	1.5	23	23	22	22	21	20	19	17	16	14	12	9
QF 30 - 3	2.2	3	34	34	34	33	33	31	29	27	25	22	19	15
QF 30 - 4	2.2	3	45	45	44	44	43	41	39	36	33	29	24	19
QF 30 - 5	3	4	56	56	56	55	54	51	49	45	41	37	31	25
QF 30 - 6	4	5.5	68	67	67	66	65	63	59	55	50	45	38	31
QF 30 - 7	4	5.5	78	78	78	77	75	72	68	64	58	52	44	35
QF 30 - 8	5.5	7.5	90	90	90	89	87	84	80	74	68	61	52	42
QF 30 - 9	5.5	7.5	101	101	100	99	97	94	89	83	76	67	58	46
QF 30 - 10	5.5	7.5	112	111	111	110	107	103	98	91	83	74	63	50
QF 30 - 11	7.5	10	124	124	123	122	119	115	110	102	94	84	72	58
QF 30 - 12	7.5	10	135	134	134	132	130	125	119	111	101	90	77	62
QF 30 - 13	7.5	10	145	145	144	143	140	135	128	119	109	97	83	66
QF 30 - 14	9.3	12.5	157	157	156	155	152	147	139	130	119	106	91	74
QF 30 - 15	9.3	12.5	168	168	167	165	162	156	149	139	127	113	97	78
QF 30 - 16	9.3	12.5	179	178	178	176	172	166	158	147	134	119	102	82
QF 30 - 17	9.3	12.5	189	189	188	186	182	175	166	155	141	126	107	86
QF 30 - 18	11	15	202	201	200	199	194	188	178	167	152	136	116	94
QF 30 - 19	11	15	212	212	211	209	204	197	187	175	160	142	121	97
QF 30 - 20	11	15	223	222	221	219	214	207	196	183	167	148	126	101
QF 30 - 21	13	17.5	235	235	234	232	227	220	209	195	179	159	137	110
QF 30 - 22	13	17.5	246	246	245	243	237	229	218	204	186	166	142	114
QF 30 - 23	13	17.5	257	256	255	253	248	239	227	212	193	172	147	118
QF 30 - 24	13	17.5	267	267	266	263	258	248	236	220	201	178	152	122
QF 30 - 25	15	20	280	279	279	276	270	261	248	232	212	189	162	131
QF 30 - 26	15	20	291	290	289	286	280	271	257	240	220	196	168	135
QF 30 - 27	15	20	301	300	300	297	290	280	266	249	227	202	173	139
QF 30 - 28	18.5	25	315	314	314	311	305	295	281	263	241	215	186	151
QF 30 - 29	18.5	25	326	325	324	321	315	305	290	272	249	222	191	155
QF 30 - 30	18.5	25	336	336	335	332	325	315	299	280	257	229	197	159
QF 30 - 31	18.5	25	347	346	346	342	336	324	309	289	264	236	202	163
QF 30 - 32	18.5	25	358	357	356	353	346	334	318	297	272	242	208	168
QF 30 - 33	18.5	25	368	368	367	363	356	344	327	305	279	249	213	172
QF 30 - 34	22	30	382	381	380	377	369	357	340	318	291	260	223	181
QF 30 - 35	22	30	392	392	391	387	380	367	349	326	299	266	229	185
QF 30 - 36	22	30	403	402	401	398	390	377	358	335	306	273	234	189
QF 30 - 37	22	30	414	413	412	408	400	386	367	343	314	279	240	193
QF 30 - 38	22	30	425	424	423	418	410	396	376	351	32			

PERFORMANCE CURVE OF SUBMERSIBLE PUMP

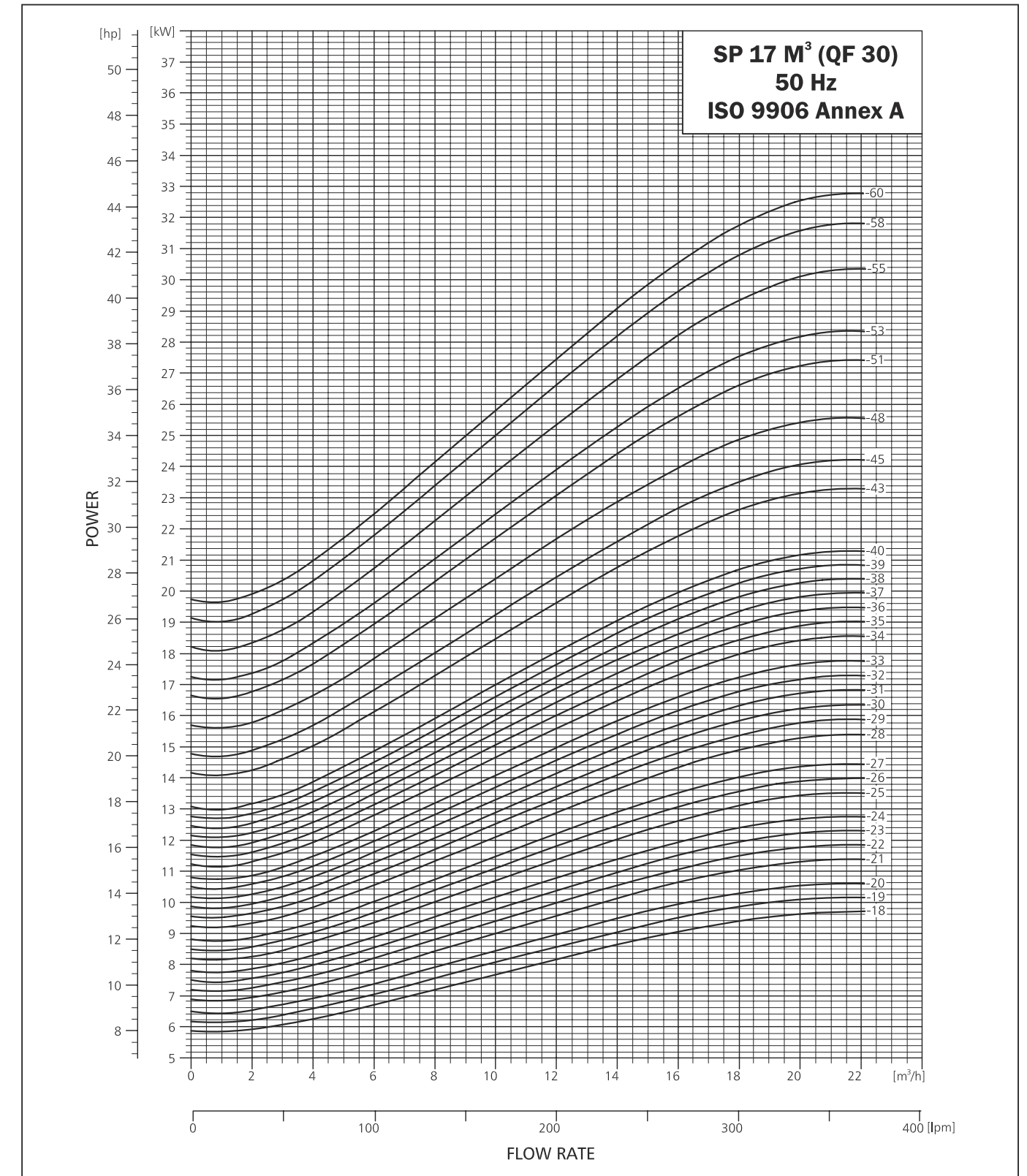


SUBMERSIBLE PUMP QF 30



PERFORMANCE CURVE OF SUBMERSIBLE PUMP

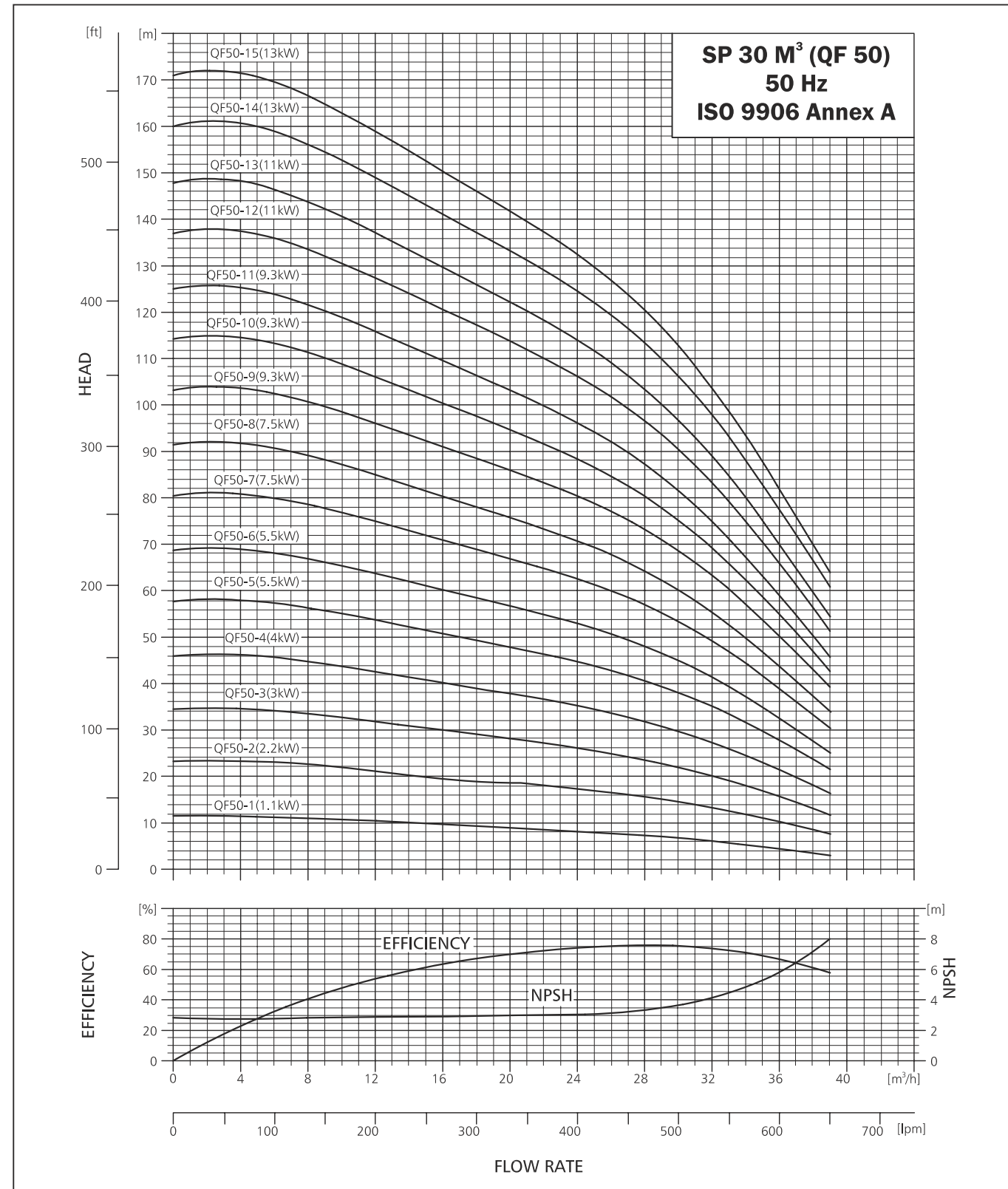
SUBMERSIBLE PUMP QF 30



PERFORMANCE CURVE OF SUBMERSIBLE PUMP

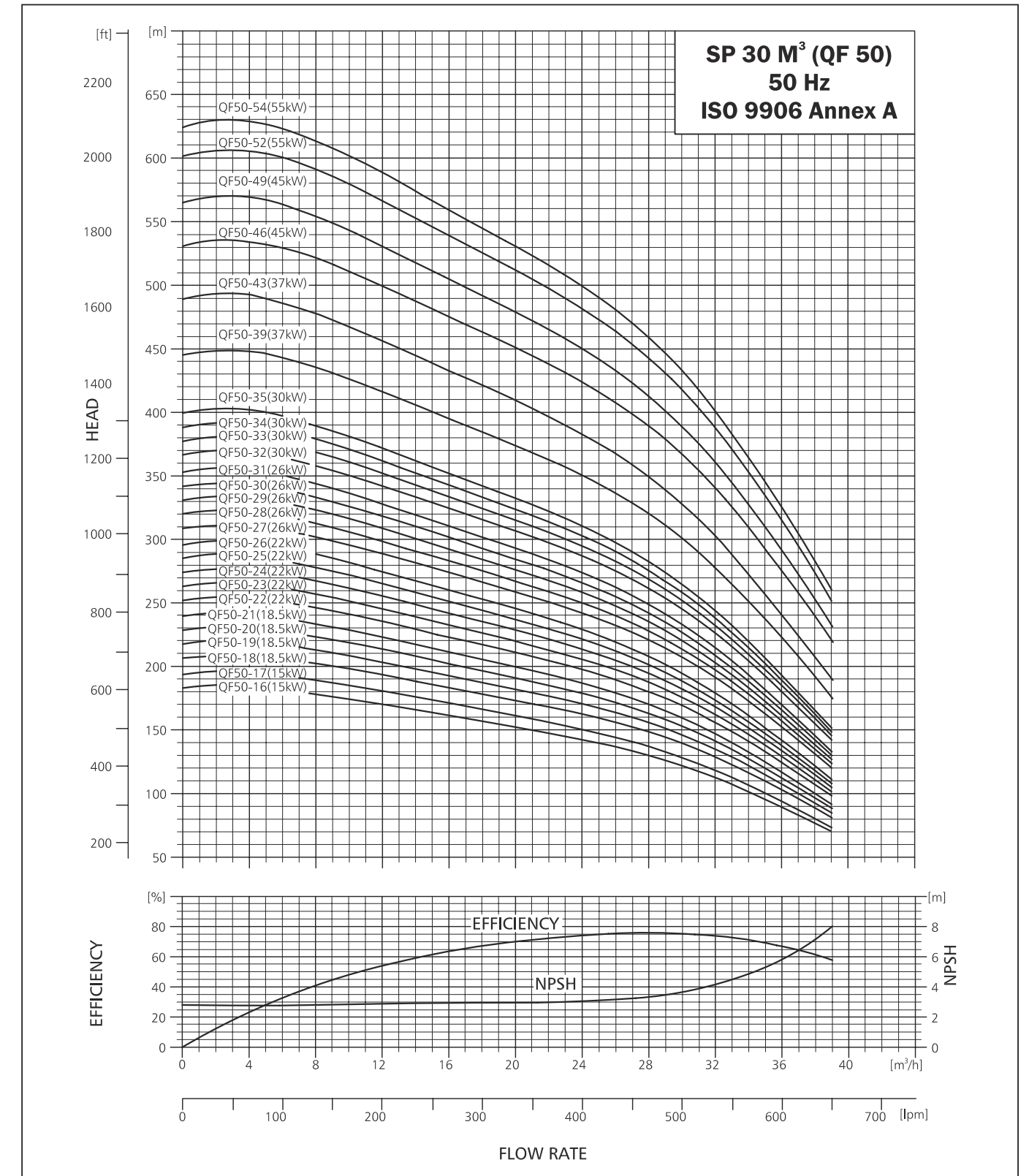


SUBMERSIBLE PUMP QF 50



PERFORMANCE CURVE OF SUBMERSIBLE PUMP

SUBMERSIBLE PUMP QF 50



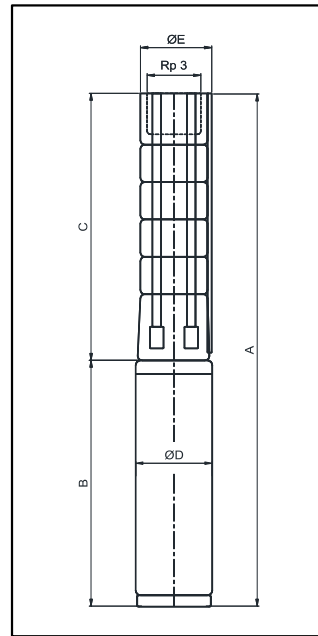


TECHNICAL DATA OF SUBMERSIBLE PUMP



SUBMERSIBLE PUMP QF 50

DIMENSIONS AND WEIGHTS



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

TECHNICAL DATA QF 50														
PUMP TYPE	MOTOR		C	DIMENSIONS (MM)						NET WEIGHT (KG)				
	TYPE	POWER (kW)		B		A		D	E*	E**	PUMP	MOTOR		
				1x230V	3x220V 3x400V	1x230V	3x220V 3x400V					1x230V	3x220V 3x400V	
QF50-1	4*PREMIUM 100	1.1	366	340	292	706	658	95	143	-	8	13	11	
QF50-2	4*PREMIUM 100	2.2	462	482	340	944	802	95	143	-	10	17	15	
QF50-3	4*PREMIUM 100	3	558	-	482	-	1040	95	143	-	12	-	17	
QF50-4	4*PREMIUM 101	4	654	-	579	-	1233	95	143	-	14	-	23	
QF50-5	4*PREMIUM 101	5.5	750	-	693	-	1443	95	143	-	16	-	29	
QF50-6	4*PREMIUM 101	5.5	846	-	693	-	1539	95	143	-	18	-	29	
QF50-7	4*PREMIUM 101	7.5	942	-	770	-	1712	95	143	-	20	-	33	
QF50-8	4*PREMIUM 101	7.5	1038	-	770	-	1808	95	143	-	22	-	33	
QF50-5	6*MTSF	5.5	750	-	699	-	1449	145	143	145	16	-	48	
QF50-6	6*MTSF	5.5	846	-	699	-	1545	145	143	145	18	-	48	
QF50-7	6*MTSF	7.5	942	-	719	-	1661	145	143	145	20	-	50	
QF50-8	6*MTSF	7.5	1038	-	719	-	1757	145	143	145	22	-	50	
QF50-9	6*MTSF	9.3	1134	-	749	-	1883	145	143	145	24	-	53	
QF50-10	6*MTSF	9.3	1230	-	749	-	1979	145	143	145	25	-	53	
QF50-11	6*MTSF	9.3	1326	-	749	-	2075	145	143	145	27	-	53	
QF50-12	6*MTSF	11	1422	-	779	-	2201	145	143	145	29	-	56	
QF50-13	6*MTSF	11	1518	-	779	-	2297	145	143	145	31	-	56	
QF50-14	6*MTSF	13	1614	-	829	-	2443	145	143	145	33	-	61	
QF50-15	6*MTSF	13	1710	-	829	-	2539	145	143	145	35	-	61	
QF50-16	6*MTSF	15	1806	-	874	-	2680	145	143	145	37	-	66	
QF50-17	6*MTSF	15	1902	-	874	-	2776	145	143	145	39	-	66	
QF50-18	6*MTSF	18.5	1998	-	919	-	2917	145	143	145	41	-	70	
QF50-19	6*MTSF	18.5	2094	-	919	-	3013	145	143	145	42	-	70	
QF50-20	6*MTSF	18.5	2190	-	919	-	3109	145	143	145	44	-	70	
QF50-21	6*MTSF	18.5	2286	-	919	-	3205	145	143	145	46	-	70	
QF50-22	6*MTSF	22	2382	-	1009	-	3391	145	143	145	48	-	79	
QF50-23	6*MTSF	22	2478	-	1009	-	3487	145	143	145	50	-	79	
QF50-24	6*MTSF	22	2574	-	1009	-	3583	145	143	145	52	-	79	
QF50-25	6*MTSF	22	2670	-	1009	-	3679	145	143	145	54	-	79	
QF50-26	6*MTSF	22	2766	-	1009	-	3775	145	143	145	56	-	79	
QF50-27	6*MTSF	26	2862	-	1114	-	3976	145	143	145	58	-	90	
QF50-28	6*MTSF	26	2958	-	1114	-	4072	145	143	145	59	-	90	
QF50-29	6*MTSF	26	3054	-	1114	-	4168	145	143	145	61	-	90	
QF50-30	6*MTSF	26	3150	-	1114	-	4264	145	143	145	63	-	90	
QF50-31	6*MTSF	26	3246	-	1114	-	4360	145	143	145	65	-	90	
QF50-32	6*MTSF	30	3342	-	1214	-	4556	145	143	145	67	-	100	
QF50-33	6*MTSF	30	3438	-	1214	-	4652	145	143	145	69	-	100	
QF50-34	6*MTSF	30	3534	-	1214	-	4748	145	143	145	71	-	100	
QF50-35	6*MTSF	30	3630	-	1214	-	4844	145	143	145	73	-	100	
QF50-32	8*MTSF	30	3342	-	1140	-	4482	194	194	194	67	-	172	
QF50-33	8*MTSF	30	3438	-	1140	-	4578	194	194	194	69	-	172	
QF50-34	8*MTSF	30	3534	-	1140	-	4674	194	194	194	71	-	172	
QF50-35	8*MTSF	30	3630	-	1140	-	4770	194	194	194	73	-	172	
QF50-39	8*MTSF	37	4014	-	1140	-	5154	194	194	194	80	-	172	
QF50-43	8*MTSF	37	4398	-	1140	-	5538	194	194	194	88	-	172	
QF50-46	8*MTSF	45	4686	-	1230	-	5916	194	194	194	93	-	188	
QF50-49	8*MTSF	45	4974	-	1230	-	6204	194	194	194	99	-	188	
QF50-52	8*MTSF	55	5262	-	1340	-	6602	194	194	194	105	-	211	
QF50-54	8*MTSF	55	5454	-	1340	-	6794	194	194	194	109	-	211	

\* Maximum diameter of pump with one motor cable.  
 \*\* Maximum diameter of pump with two motor cable.  
 Motor type may change as per requirement.

TECHNICAL DATA OF SUBMERSIBLE PUMP

SUBMERSIBLE PUMP QF 50

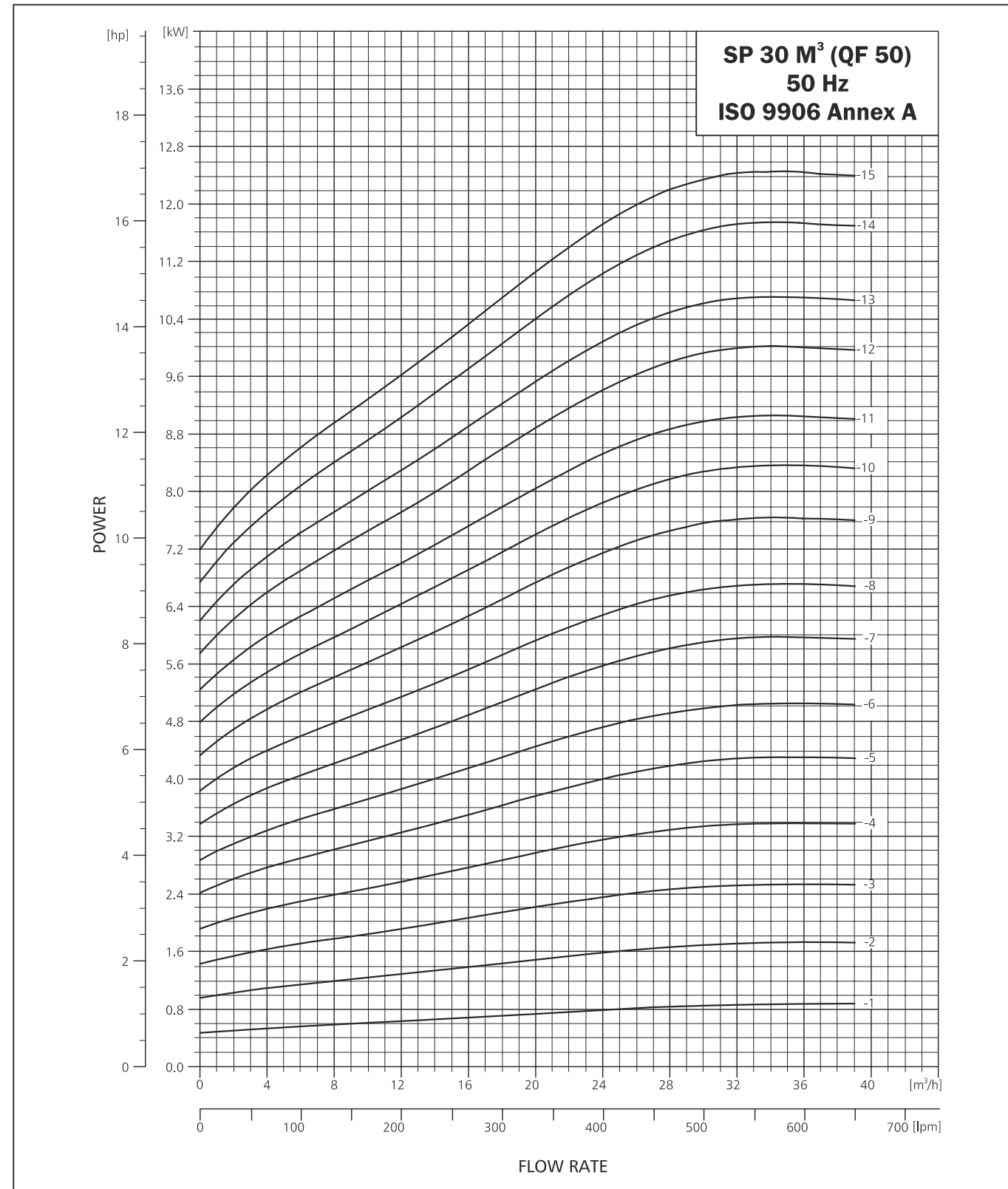
PERFORMANCE TABLE OF 50													
QF-50	MODEL	MOTOR RATING [kW] [HP]	DISCHARGE (Q)										
			m <sup>3</sup> /h l/min.	0	4	8	12	16	20	24	28	32	39
			TOTAL HEAD IN (m)										
	QF 50 - 1	1.1 1.5	11	11	11	10	10	9	8	7	6	3	
	QF 50 - 2	2.2 3	23	23	23	21	20	19	17	16	13	8	
	QF 50 - 3	3 4	35	35	33	32	30	28	26	24	20	12	
	QF 50 - 4	4 5.5	46	46	45	43	40	38	35	32	27	16	
	QF 50 - 5	5.5 7.5	58	58	56	54	51	48	45	41	35	22	
	QF 50 - 6	5.5 7.5	69	69	67	64	60	57	53	48	41	25	
	QF 50 - 7	7.5 10	80	81	79	75	71	67	63	57	49	31	
	QF 50 - 8	7.5 10	91	92	89	85	80	76	71	64	55	34	
	QF 50 - 9	9.3 12.5	103	104	101	96	91	86	80	73	63	39	
	QF 50 - 10	9.3 12.5	114	115	111	106	100	95	88	80	69	43	
	QF 50 - 11	9.3 12.5	125	125	122	116	110	103	96	87	75	46	
	QF 50 - 12	11 15	137	137	134	127	121	114	106	97	83	51	
	QF 50 - 13	11 15	148	148	144	137	130	122	114	103	89	55	
	QF 50 - 14	13 17.5	160	161	156	149	141	133	125	113	98	61	
	QF 50 - 15	13 17.5	171	171	167	159	150	142	132	120	104	64	
	QF 50 - 16	15 20	183	184	179	171	162	153	143	130	112	70	
	QF 50 - 17	15 20	194	195	189	180	171	161	151	137	118	74	
	QF 50 - 18	18.5 25	207	208	202	193	183	173	163	148	129	82	
	QF 50 - 19	18.5 25	218	219	213	203	193	182	171	156	135	85	
	QF 50 - 20	18.5 25	229	230	223	213	202	191	179	163	141	89	
	QF 50 - 21	18.5 25	240	241	234	223	212	200	187	170	147	92	
	QF 50 - 22	22 30	252	253	246	235	223	211	198	180	156	99	
	QF 50 - 23	22 30	263	264	257	245	233	220	206	188	162	102	
	QF 50 - 24	22 30	274	275	268	255	242	228	214	195	168	105	
	QF 50 - 25	22 30	285	286	278	265	251	237	221	201	174	108	
	QF 50 - 26	22 30	296	297	288	275	260	245	229	208	179	111	
	QF 50 - 27	26 35	309	310	302	288	274	259	242	221	191	121	
	QF 50 - 28	26 35	320	321	313	298	283	267	250	228	197	124	
	QF 50 - 29	26 35	331	332	323	308	292	276	258	235	203	127	
	QF 50 - 30	26 35	342	343	333	318	301	284	266	242	209	130	
	QF 50 - 31	26 35	353	354	344	328	310	293	274	249	215	133	
	QF 50 - 32	30 40	367	368	358	342	324	306	287	262	227	143	
	QF 50 - 33	30 40	378	379	369	352	334	315	295	269	232	146	
	QF 50 - 34	30 40	389	390	379	362	343	324	303	276	238	149	
	QF 50 - 35	30 40	399	401	390	372	352	332	310	283	244	152	
	QF 50 - 39	37 50	445	447	435	416	395	374	351	320	278	176	
	QF 50 - 43	37 50	489	491	478	456	433	409	383	350	303	190	
	QF 50 - 46	45 60	531	535	521	499	475	451	424	389	341	220	
	QF 50 - 49	45 60	565	568	554	530	504	478	450	413	361	233	

PERFORMANCE CURVE OF SUBMERSIBLE PUMP

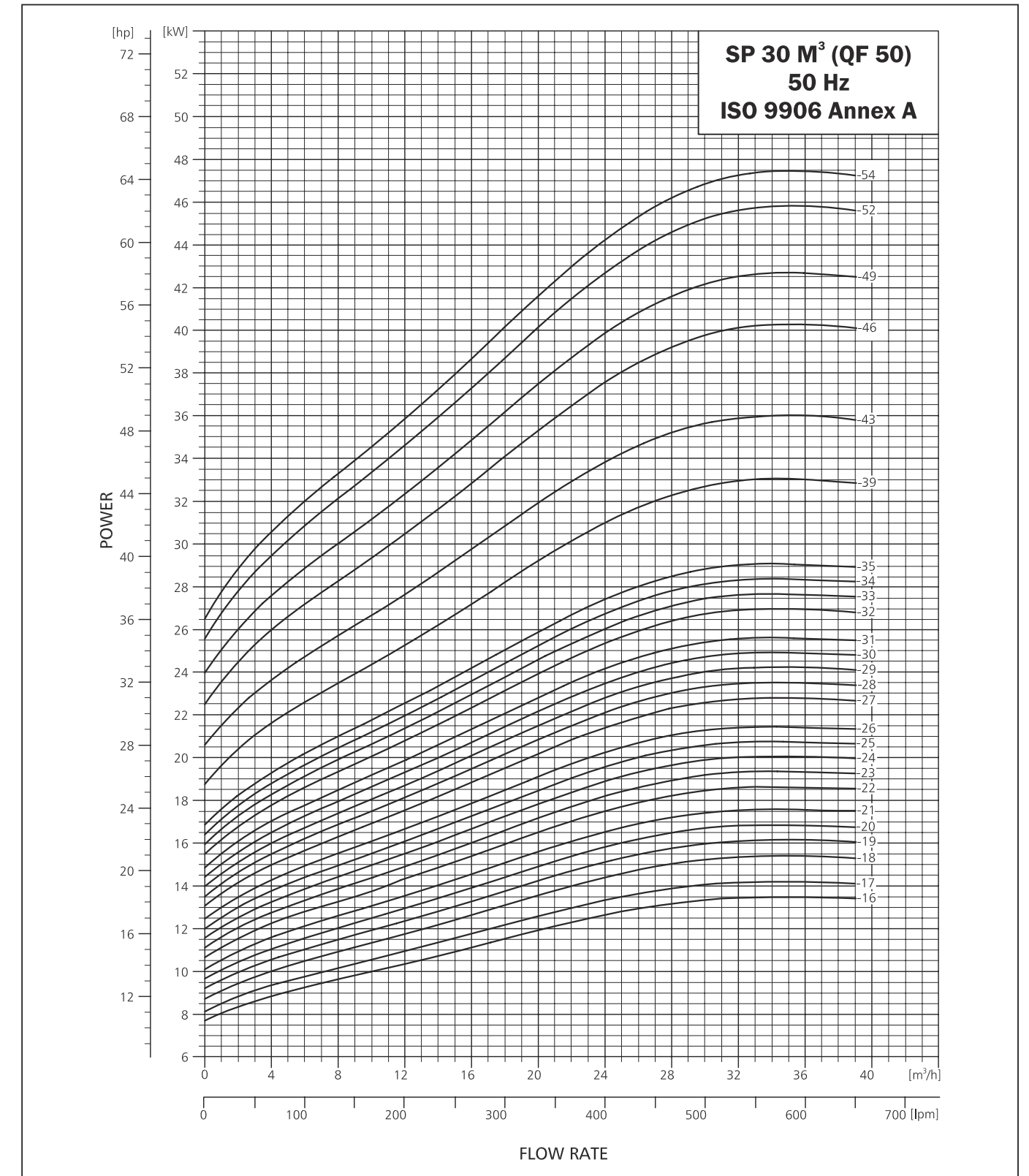


PERFORMANCE CURVE OF SUBMERSIBLE PUMP

SUBMERSIBLE PUMP QF 50



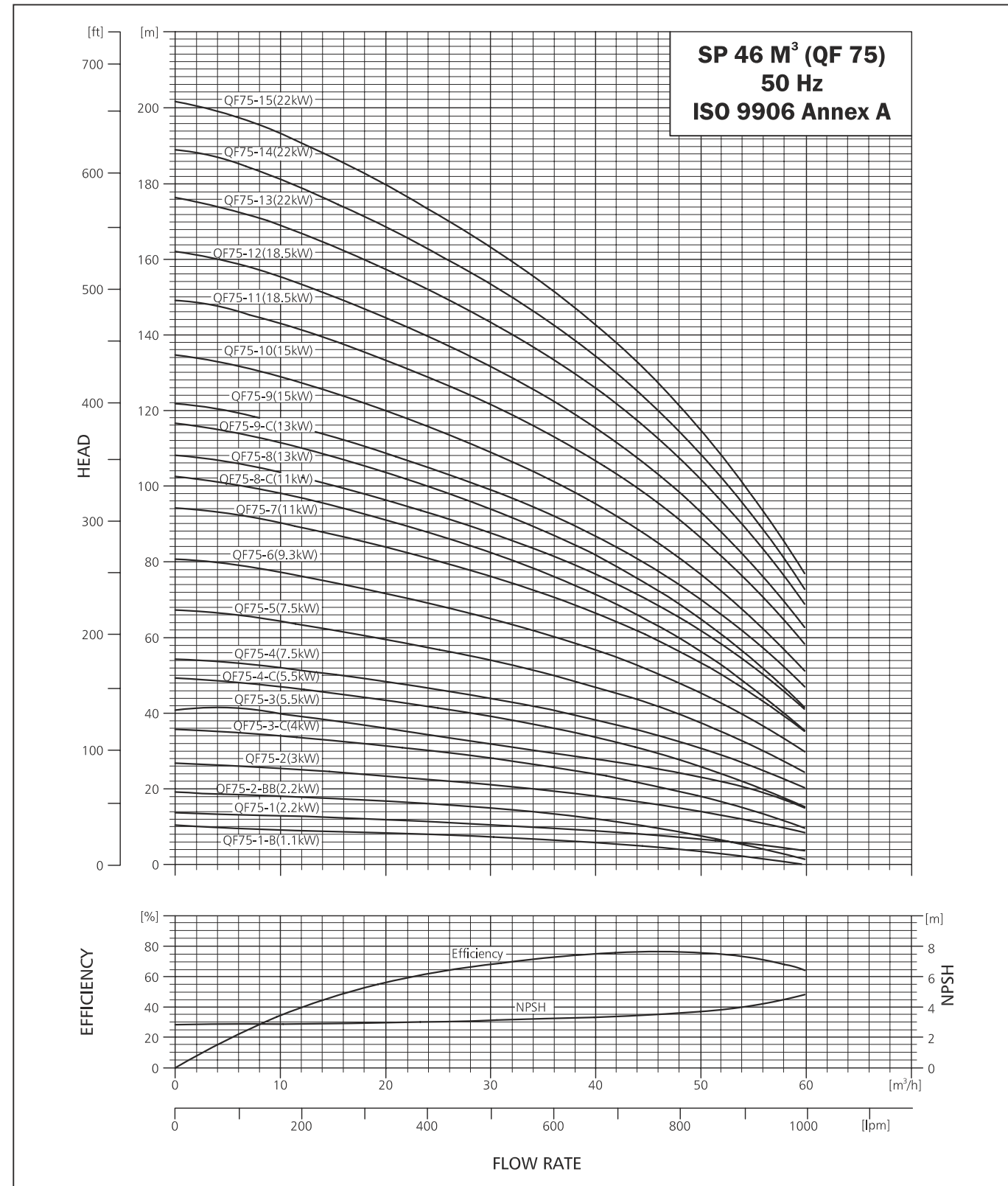
SUBMERSIBLE PUMP QF 50



PERFORMANCE CURVE OF SUBMERSIBLE PUMP

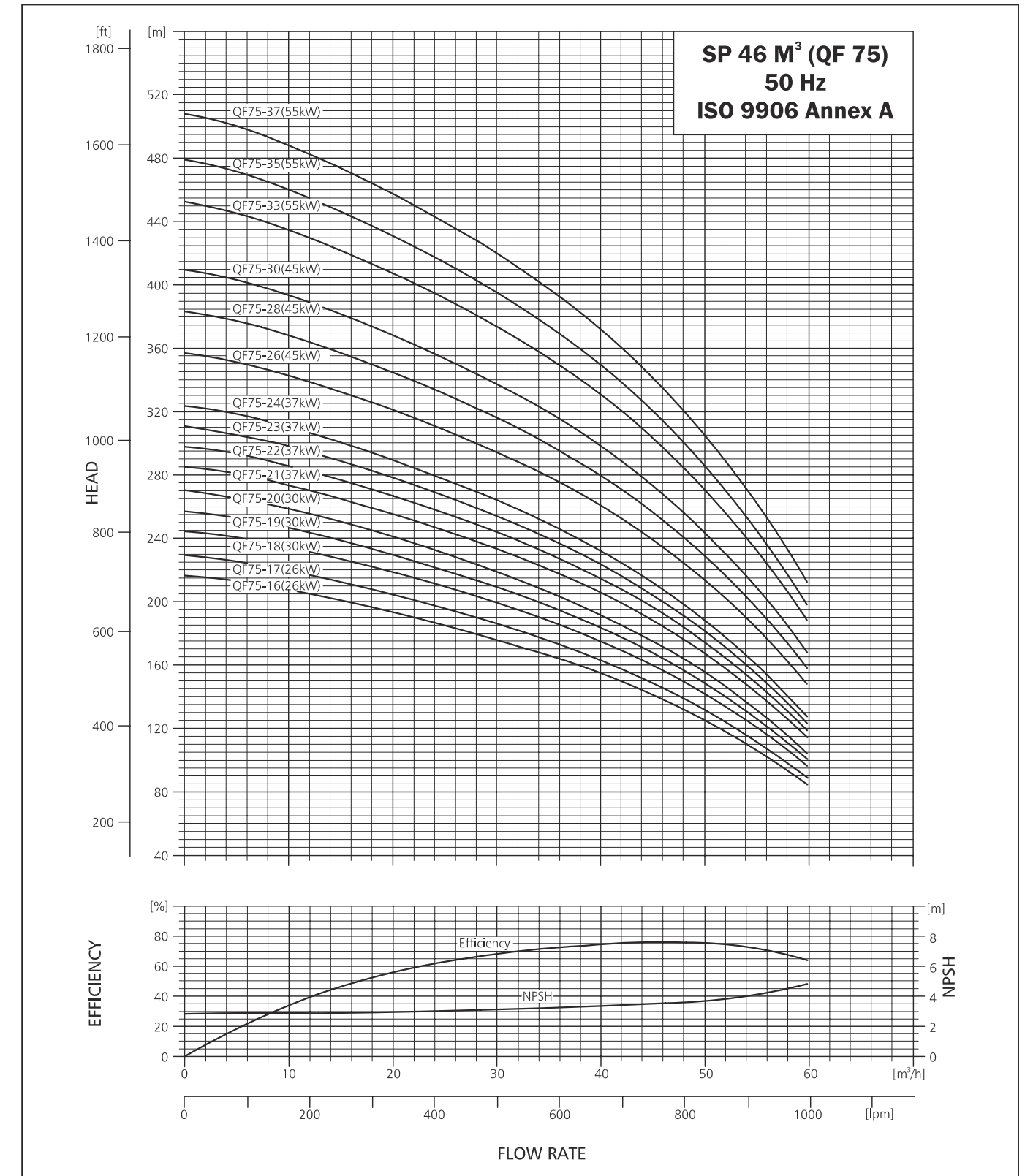


SUBMERSIBLE PUMP QF 75



PERFORMANCE CURVE OF SUBMERSIBLE PUMP

SUBMERSIBLE PUMP QF 75



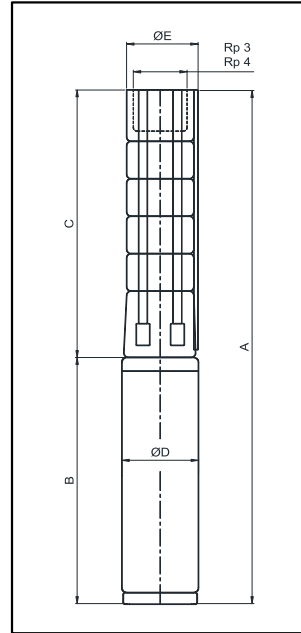


TECHNICAL DATA OF SUBMERSIBLE PUMP



SUBMERSIBLE PUMP QF 75

DIMENSIONS AND WEIGHTS



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

TECHNICAL DATA QF 75														
PUMP TYPE	MOTOR		DIMENSIONS (MM)								NETWEIGHT (KG)			
	TYPE	POWER (kW)	Rp 3" CONNECTION				Rp 4" CONNECTION				PUMP	MOTOR		
			A	C	E*	E**	A	C	E*	E**				
QF75-1-B	4*PREMIUM 100	1.1	659	367	150	-	659	367	150	-	292	95	6	11
QF75-1	4*PREMIUM 100	2.2	772	367	150	-	772	367	150	-	405	95	6	15
QF75-2-BB	4*PREMIUM 100	2.2	885	480	150	-	885	480	150	-	405	95	8	15
QF75-2	4*PREMIUM 100	3	962	480	150	-	962	480	150	-	482	95	8	17
QF75-3-C	4*PREMIUM 101	4	1172	593	150	-	1172	593	150	-	579	95	11	23
QF75-3	4*PREMIUM 101	5.5	1286	593	150	-	1286	593	150	-	693	95	11	29
QF75-4-C	4*PREMIUM 101	5.5	1399	706	150	-	1399	706	150	-	693	95	13	29
QF75-4	4*PREMIUM 101	7.5	1476	706	150	-	1476	706	150	-	770	95	13	33
QF75-5	4*PREMIUM 101	7.5	1589	819	150	-	1589	819	150	-	770	95	15	33
QF75-3-C	6*MTSF	4	1309	610	150	155	1309	610	150	155	699	145	11	48
QF75-3	6*MTSF	5.5	1309	610	150	155	1309	610	150	155	699	145	11	48
QF75-4-C	6*MTSF	5.5	1422	723	150	155	1422	723	150	155	699	145	13	48
QF75-4	6*MTSF	7.5	1442	723	150	155	1442	723	150	155	719	145	13	50
QF75-5	6*MTSF	7.5	1555	836	150	155	1555	836	150	155	719	145	15	50
QF75-6	6*MTSF	9.3	1698	949	150	155	1698	949	150	155	749	145	18	53
QF75-7	6*MTSF	11	1841	1062	150	155	1841	1062	150	155	779	145	20	56
QF75-8C	6*MTSF	11	1954	1175	150	155	1954	1175	150	155	779	145	22	56
QF75-8	6*MTSF	13	2004	1175	150	155	2004	1175	150	155	829	145	22	61
QF75-9C	6*MTSF	13	2117	1288	150	155	2117	1288	150	155	829	145	24	61
QF75-9	6*MTSF	15	2162	1288	150	155	2162	1288	150	155	874	145	24	66
QF75-10	6*MTSF	15	2275	1401	150	155	2275	1401	150	155	874	145	27	66
QF75-11	6*MTSF	18.5	2433	1514	150	155	2433	1514	150	155	919	145	29	70
QF75-12	6*MTSF	18.5	2546	1627	150	155	2546	1627	150	155	919	145	31	70
QF75-13	6*MTSF	22	2749	1740	150	155	2749	1740	150	155	1009	145	34	79
QF75-14	6*MTSF	22	2862	1853	150	155	2862	1853	150	155	1009	145	36	79
QF75-15	6*MTSF	22	2975	1966	150	155	2975	1966	150	155	1009	145	38	79
QF75-16	6*MTSF	26	3193	2079	150	155	3193	2079	150	155	1114	145	41	90
QF75-17	6*MTSF	26	3306	2192	150	155	3306	2192	150	155	1114	145	43	90
QF75-18	6*MTSF	30	3519	2305	150	155	3519	2305	150	155	1214	145	45	100
QF75-19	6*MTSF	30	3632	2418	150	155	3632	2418	150	155	1214	145	47	100
QF75-20	6*MTSF	30	3745	2531	150	155	3745	2531	150	155	1214	145	50	100
QF75-18	8*MTSF	30	3445	2305	195	195	3445	2305	195	195	1140	195	45	172
QF75-19	8*MTSF	30	3558	2418	195	195	3558	2418	195	195	1140	195	47	172
QF75-20	8*MTSF	30	3671	2531	195	195	3671	2531	195	195	1140	195	50	172
QF75-21	8*MTSF	37	3784	2644	195	195	3784	2644	195	195	1140	195	52	172
QF75-22	8*MTSF	37	3897	2757	195	195	3897	2757	195	195	1140	195	54	172
QF75-23	8*MTSF	37	4010	2870	195	195	4010	2870	195	195	1140	195	57	172
QF75-24	8*MTSF	37	4123	2983	195	195	4123	2983	195	195	1140	195	59	172
QF75-26	8*MTSF	45	4439	3209	195	195	4439	3209	195	195	1230	195	64	188
QF75-28	8*MTSF	45	4665	3435	195	195	4665	3435	195	195	1230	195	68	188
QF75-30	8*MTSF	45	4891	3661	195	195	4891	3661	195	195	1230	195	73	188
QF75-33	8*MTSF	55	5340	4000	195	195	5340	4000	195	195	1340	195	80	211
QF75-35	8*MTSF	55	5566	4226	195	195	5566	4226	195	195	1340	195	84	211
QF75-37	8*MTSF	55	5792	4452	195	195	5792	4452	195	195	1340	195	89	211

\* Maximum diameter of pump with one motor cable.  
 \*\* Maximum diameter of pump with two motor cable.  
 Motor type may change as per requirement.  
 Other type of connection is possible by means of connecting pieces. See page no. 117.

TECHNICAL DATA OF SUBMERSIBLE PUMP

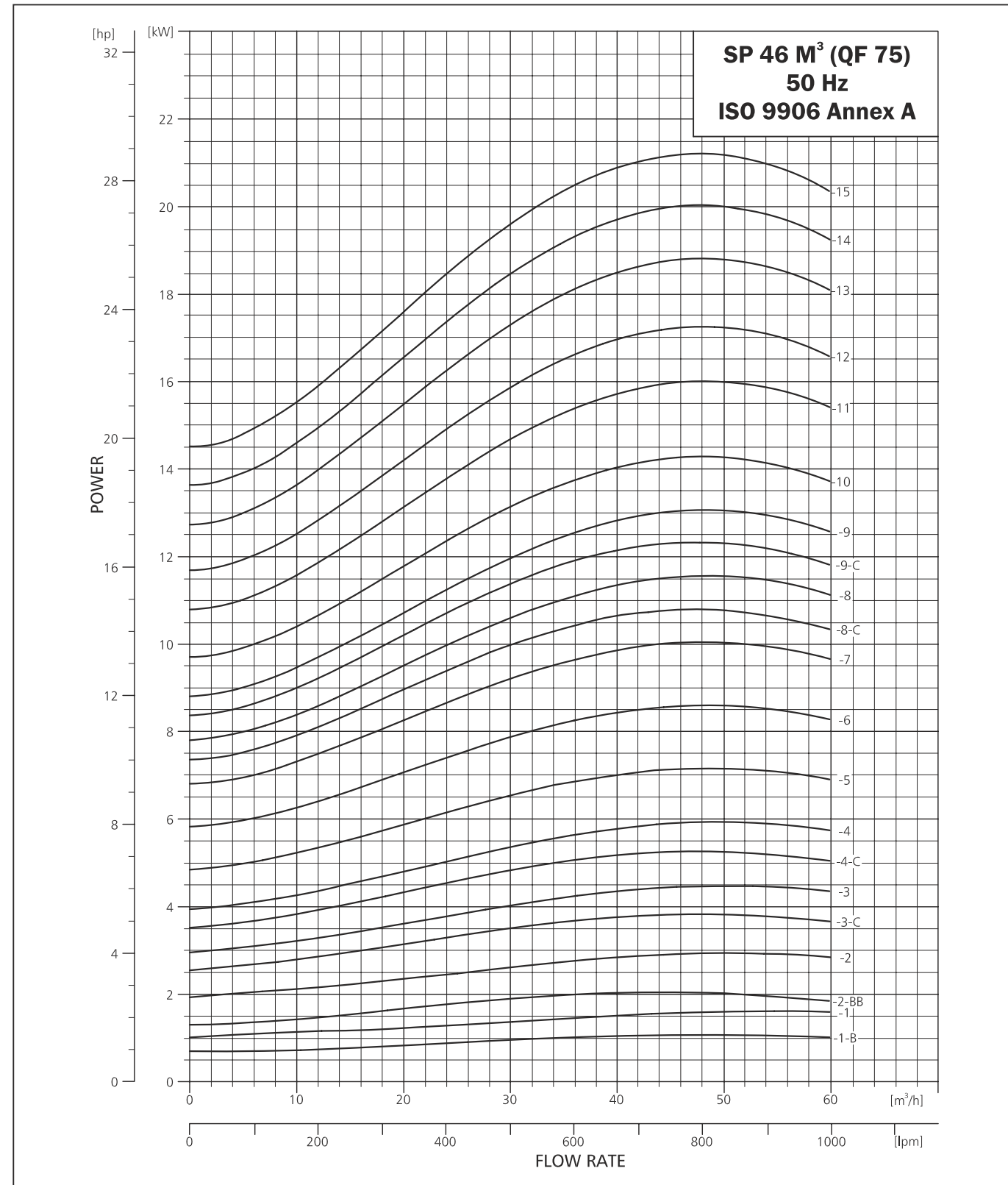
SUBMERSIBLE PUMP QF 75

PERFORMANCE TABLE QF 75															
QF-75	MODEL	MOTOR RATING [kW] [HP]	DISCHARGE (Q)												
			TOTAL HEAD IN (m)												
			m³/h	0	5	10	15	20	25	30	35	40	45	50	55
			0	83.3	166.7	250	333.3	416.7	500	583.3	666.7	750	833.3	916.7	996.7
			0	83.3	166.7	250	333.3	416.7	500	583.3	666.7	750	833.3	916.7	996.7
			19	19	18	17	17	16	15	14	12	10	8	5	1
			27	26	25	24	23	22	21	20	18	16	14	11	9
			36	35	34	33	31	30	28	26	24	21	18	14	10
			41	41	40	38	36	34	32	30	28	26	23	20	15
			49	48	47	45	43	41	39	37	34	30	26	21	15
			54	53	52	50	48	46	44	41	38	35	31	26	20
			67	66	64	62	60	57	54	51	47	43	37	31	24
			81	79	77	75	72	68	65	61	57	51	45	38	30
			94	93	90	87	84	80	76	72	66	60	53	45	35
			103	101	98	95	91	87	82	77	71	64	56	46	36
			108	106	104	100	96	92	88	83	77	70	62	52	41
			117	115	112	108	104	99	94	88	82	74	65	54	42
			122	120	117	113	109	104	99	93	87	79	70	59	47
			135	132	129	125	120	115	109	103	95	87	77	65	51
			149	147	143	138	133	128	122	115	107	97	86	73	59
			162	159	155	150	145	138	132	124	115	105	93	79	63
			176	173	169	163	157	151	143	135	126	115	102	86	69
			189	186	181	175	169	161	153	144	134	122	108	92	73
			202	198	193	187	180	172	163	154	143	130	115	97	77
			217	213	208	201	193	185	176	166	155	141	125	106	85
			229	226	220	213	205	196	186	175	163	149	132	112	89
			244	241	234	227	219	209	199	188	175	160	142	121	97
			257	253	247	239	230	220	209	197	183	167	148	126	101
			270	265	259	251	241	230	219	206	192	175	155	132	105
			285	280	273	265	255	245	234	221	206	188	167	143	115
			298	293	286	277	267	256	244	230	215	196	174	148	119
			311	306	298	289	278	267	254	240	223	204	181	154	124
			324	318	310	300	289	277	264	249	232	212	188	160	128
			357	351	343	332	321	308	295	279	261	239	214	183	149
			383	377	368	357	345	331	316	299	280	256	229	196	159
			410	403	393	381	368	353	337	319	298	273	244	208	169
			452	445	435	422	407	391	374	354	331	303	271	232	189

PERFORMANCE CURVE OF SUBMERSIBLE PUMP

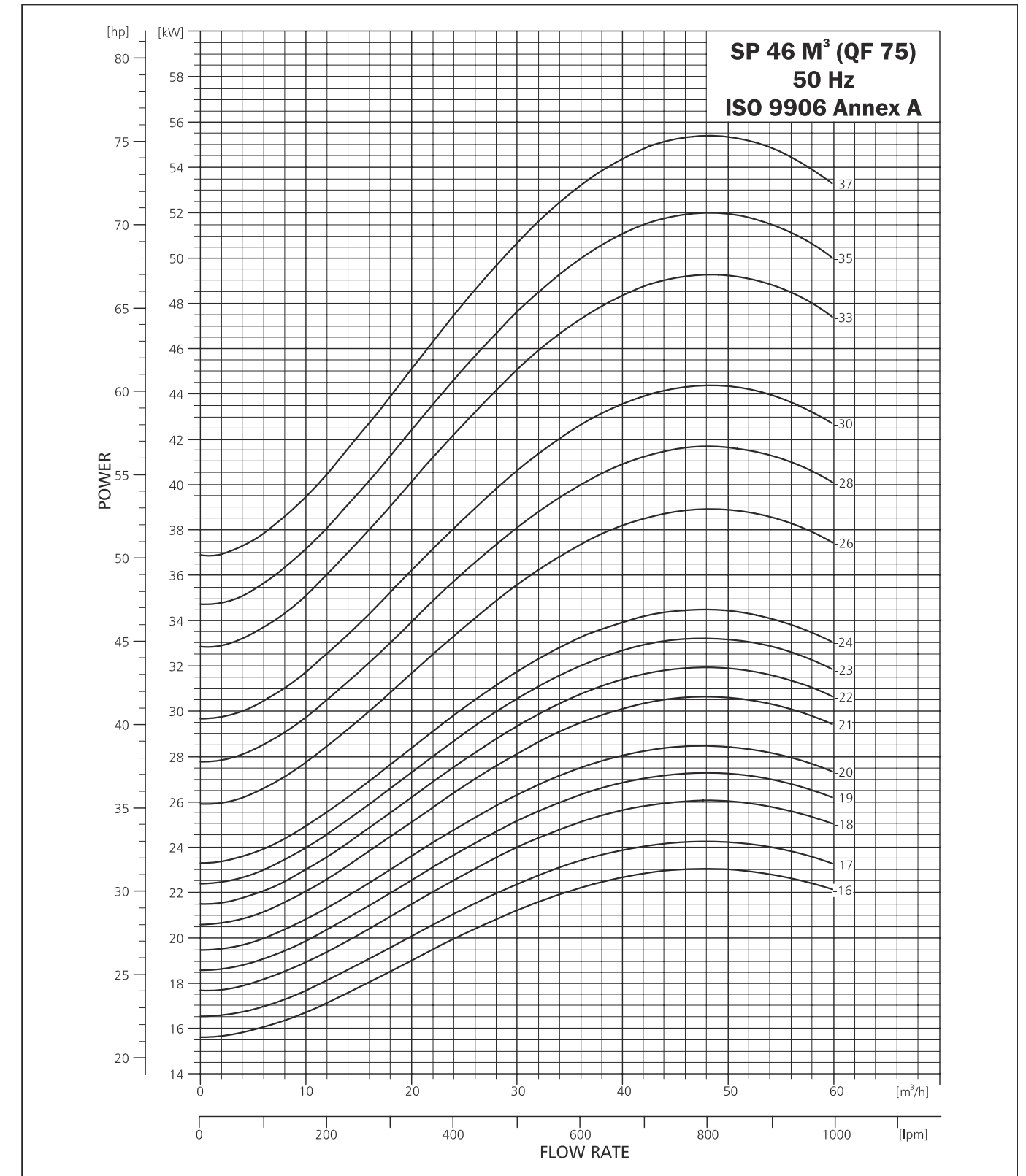


SUBMERSIBLE PUMP QF 75



PERFORMANCE CURVE OF SUBMERSIBLE PUMP

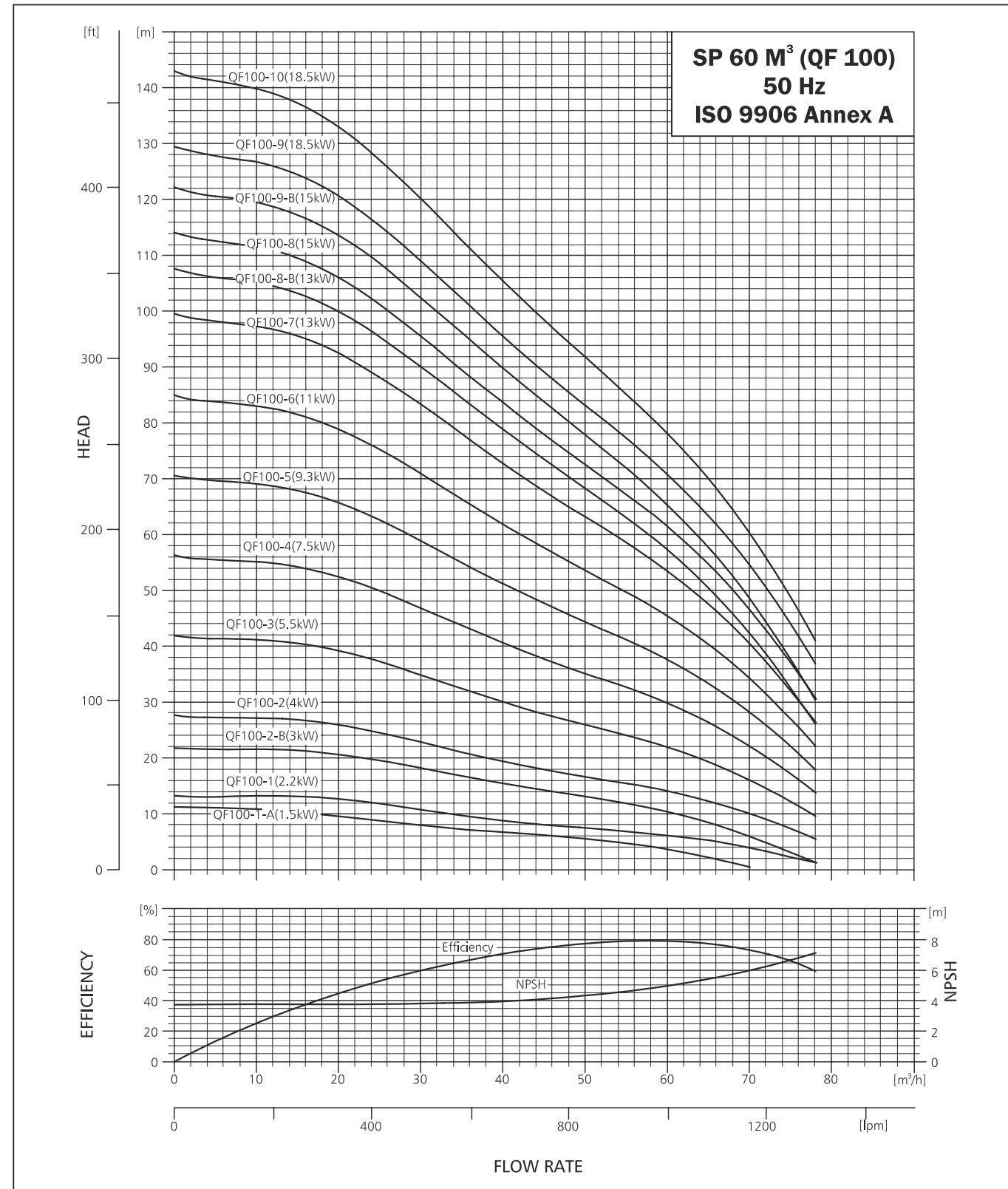
SUBMERSIBLE PUMP QF 75



PERFORMANCE CURVE OF SUBMERSIBLE PUMP

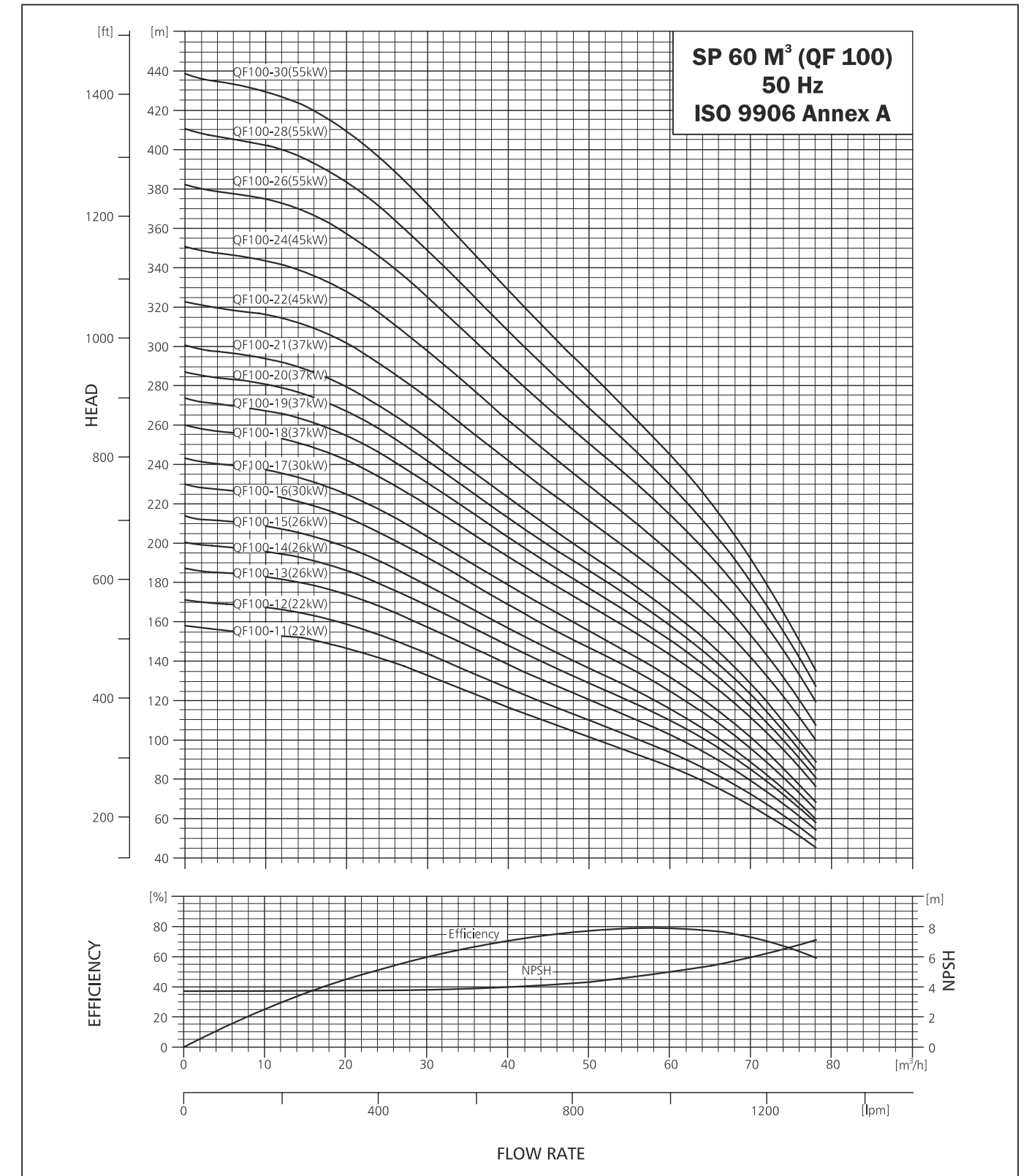


SUBMERSIBLE PUMP QF 100



PERFORMANCE CURVE OF SUBMERSIBLE PUMP

SUBMERSIBLE PUMP QF 100

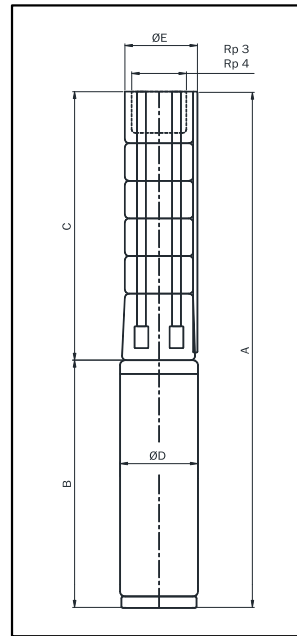


TECHNICAL DATA OF SUBMERSIBLE PUMP



SUBMERSIBLE PUMP QF 100

DIMENSIONS AND WEIGHTS



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

TECHNICAL DATA QF 100														
PUMP TYPE	MOTOR TYPE	POWER (kW)	DIMENSIONS (MM)								NET WEIGHT (KG)			
			RP 3" CONNECTION				RP 4" CONNECTION				B	D	PUMP	MOTOR
			A	C	E*	E**	A	C	E*	E**				
QF100-1-A	4"PREMIUM 100	1.5	707	367	150	-	707	367	150	-	340	95	6	13
QF100-1	4"PREMIUM 100	2.2	772	367	150	-	772	367	150	-	405	95	6	15
QF100-2-B	4"PREMIUM 100	3	962	480	150	-	962	480	150	-	482	95	8	17
QF100-2	4"PREMIUM 101	4	1059	480	150	-	1059	480	150	-	579	95	8	23
QF100-3	4"PREMIUM 101	5.5	1286	593	150	-	1286	593	150	-	693	95	11	29
QF100-4	4"PREMIUM 101	7.5	1476	706	150	-	1476	706	150	-	770	145	13	33
QF100-3	6"MTSF	5.5	1309	610	150	-	1309	610	150	-	699	145	11	48
QF100-4	6"MTSF	7.5	1442	723	150	-	1442	723	150	-	719	145	13	50
QF100-5	6"MTSF	9.3	1585	836	150	155	1585	836	150	155	749	145	15	53
QF100-6	6"MTSF	11	1728	949	150	155	1728	949	150	155	779	145	17	56
QF100-7	6"MTSF	13	1891	1062	150	155	1891	1062	150	155	829	145	20	61
QF100-8-B	6"MTSF	13	2004	1175	150	155	2004	1175	150	155	829	145	22	61
QF100-8	6"MTSF	15	2049	1175	150	155	2049	1175	150	155	874	145	22	66
QF100-9-B	6"MTSF	15	2162	1288	150	155	2162	1288	150	155	874	145	24	66
QF100-9	6"MTSF	18.5	2207	1288	150	155	2207	1288	150	155	919	145	24	70
QF100-10	6"MTSF	18.5	2320	1401	150	155	2320	1401	150	155	919	145	26	70
QF100-11	6"MTSF	22	2523	1514	150	155	2523	1514	150	155	1009	145	29	79
QF100-12	6"MTSF	22	2636	1627	150	155	2636	1627	150	155	1009	145	31	79
QF100-13	6"MTSF	26	2854	1740	150	155	2854	1740	150	155	1114	145	33	90
QF100-14	6"MTSF	26	2967	1853	150	155	2967	1853	150	155	1114	145	35	90
QF100-15	6"MTSF	26	3080	1966	150	155	3080	1966	150	155	1114	145	38	90
QF100-16	6"MTSF	30	3293	2079	150	155	3293	2079	150	155	1214	145	40	100
QF100-17	6"MTSF	30	3406	2192	150	155	3406	2192	150	155	1214	145	42	100
QF100-16	8"MTSF	30	3219	2079	195	195	3219	2079	195	195	1140	195	40	172
QF100-17	8"MTSF	30	3332	2192	195	195	3332	2192	195	195	1140	195	42	172
QF100-18	8"MTSF	37	3445	2305	195	195	3445	2305	195	195	1140	195	44	172
QF100-19	8"MTSF	37	3558	2418	195	195	3558	2418	195	195	1140	195	47	172
QF100-20	8"MTSF	37	3671	2531	195	195	3671	2531	195	195	1140	195	49	172
QF100-21	8"MTSF	37	3784	2644	195	195	3784	2644	195	195	1140	195	51	172
QF100-22	8"MTSF	45	3987	2757	195	195	3987	2757	195	195	1230	195	53	188
QF100-24	8"MTSF	45	4213	2983	195	195	4213	2983	195	195	1230	195	58	188
QF100-26	8"MTSF	55	4549	3209	195	195	4549	3209	195	195	1340	195	62	211
QF100-28	8"MTSF	55	4775	3435	195	195	4775	3435	195	195	1340	195	67	211
QF100-30	8"MTSF	55	5001	3661	195	195	5001	3661	195	195	1340	195	71	211

\* Maximum diameter of pump with one motor cable.  
 \*\* Maximum diameter of pump with two motor cable.  
 Motor type may change as per requirement.  
 Other type of connection is possible by means of connecting pieces. See page no. 117.

TECHNICAL DATA OF SUBMERSIBLE PUMP

SUBMERSIBLE PUMP QF 100

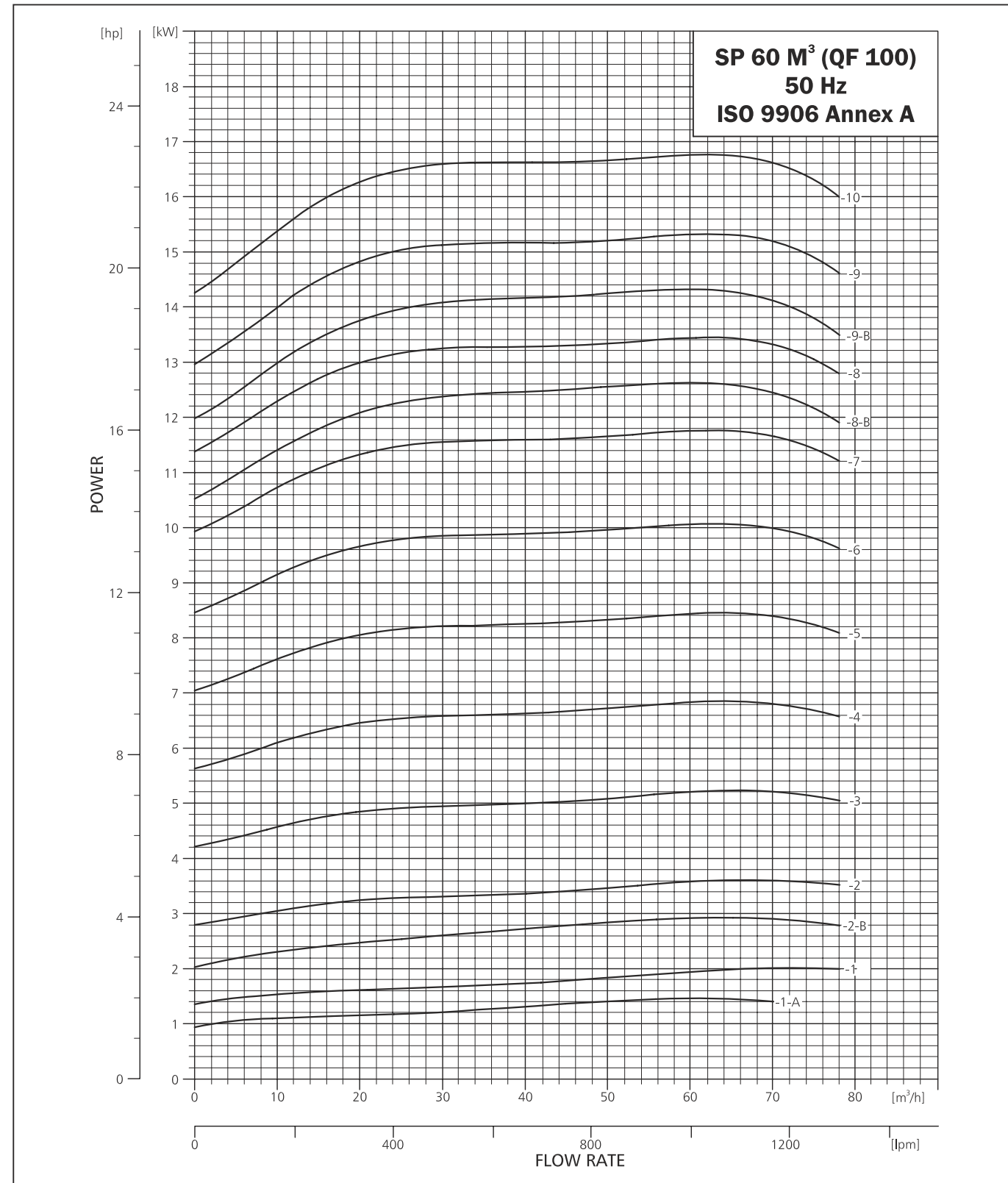
PERFORMANCE TABLE OF 100												
QF-100	m <sup>3</sup> /h l/min.	DISCHARGE (Q)										
		0	10	20	30	40	50	60	70	78		
MODEL	MOTOR RATING		TOTAL HEAD IN (m)									
	[kW]	[HP]	0	10	20	30	40	50	60	70	78	
QF 100 1-A	1.5	2	12	11	10	8	6	5	4	1	0	
QF 100 - 1	2.2	3	14	14	13	12	11	10	8	6	5	
QF 100 -2-B	3	4	22	22	21	18	15	13	10	6	1	
QF 100 - 2	4	5.5	28	27	26	23	19	17	14	10	5	
QF 100 - 3	5.5	7.5	42	41	39	35	30	26	22	16	10	
QF 100 - 4	7.5	10	56	55	52	47	41	35	30	22	14	
QF 100 - 5	9.3	12.5	71	69	66	59	51	44	38	28	18	
QF 100 - 6	11	15	85	83	79	71	62	54	45	34	22	
QF 100 - 7	13	17.5	99	97	92	83	73	63	53	40	26	
QF 100 -8-B	13	17.5	108	105	100	90	79	68	57	42	26	
QF 100 - 8	15	20	114	112	106	96	84	73	61	47	31	
QF 100 -9-B	15	20	122	119	113	102	90	78	65	48	30	
QF 100 - 9	18.5	25	129	127	121	109	95	83	71	54	37	
QF 100 -10	18.5	25	143	140	133	120	105	92	78	60	41	
QF 100 -11	22	30	158	154	147	133	116	101	86	67	45	
QF 100 -12	22	30	171	167	159	144	126	110	94	72	50	
QF 100 -13	26	35	187	183	174	157	138	120	103	79	54	
QF 100 -14	26	35	200	196	186	168	148	129	110	85	58	
QF 100 -15	26	35	214	209	198	179	157	136	116	89	60	
QF 100 -16	30	40	230	224	213	192	169	147	125	96	65	
QF 100 -17	30	40	243	237	225	203	179	155	132	101	69	
QF 100 -18	37	50	260	254	242	219	193	168	143	111	77	
QF 100 -19	37	50	274	268	255	231	203	177	151	117	81	
QF 100 -20	37	50	287	281	267	242	213	186	158	123	85	
QF 100 -21	37	50	301	294	279	253	223	194	166	129	89	
QF 100 -22	45	60	323	316	302	274	242	211	181	142	100	



PERFORMANCE CURVE OF SUBMERSIBLE PUMP

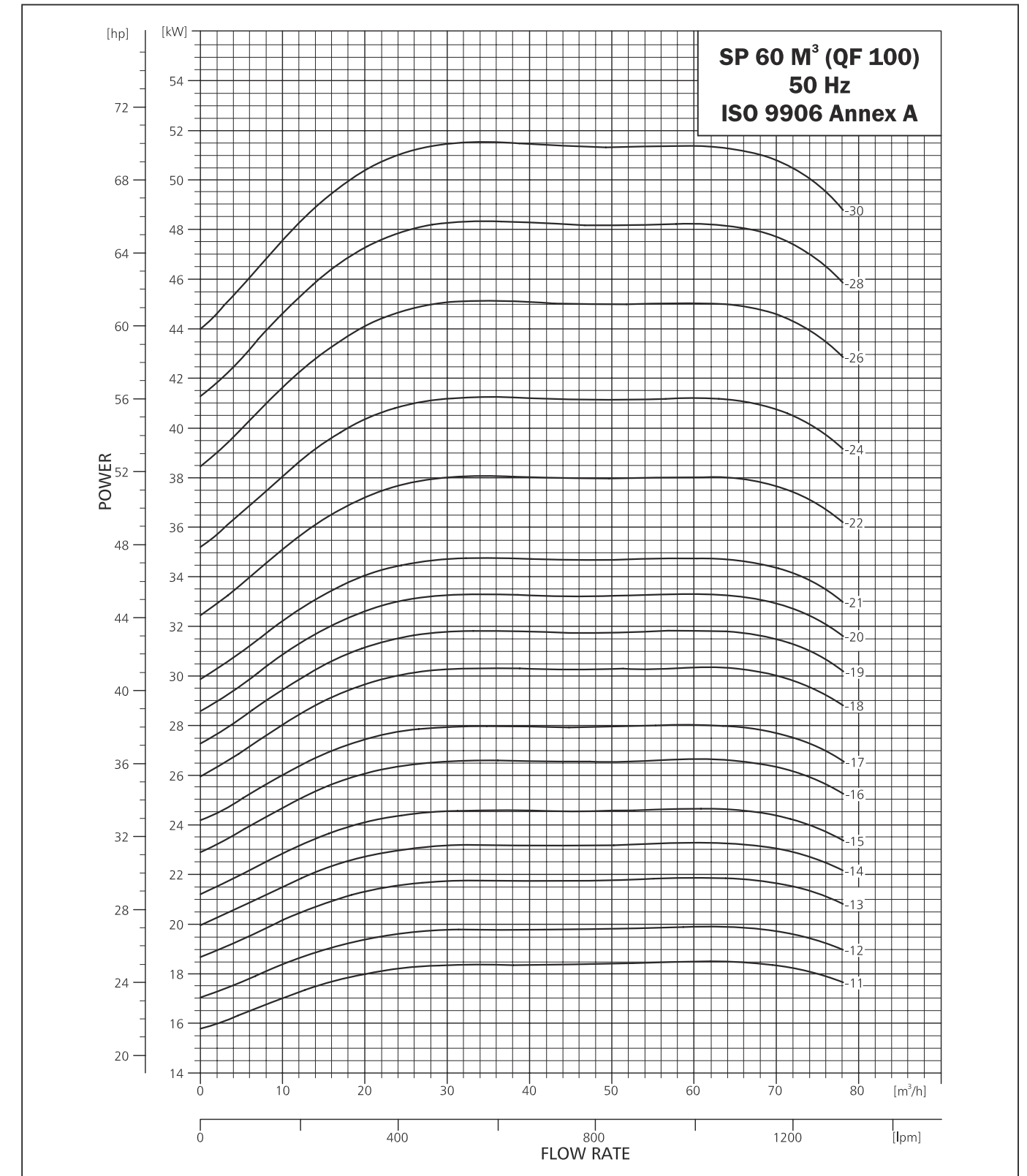


SUBMERSIBLE PUMP QF 100



PERFORMANCE CURVE OF SUBMERSIBLE PUMP

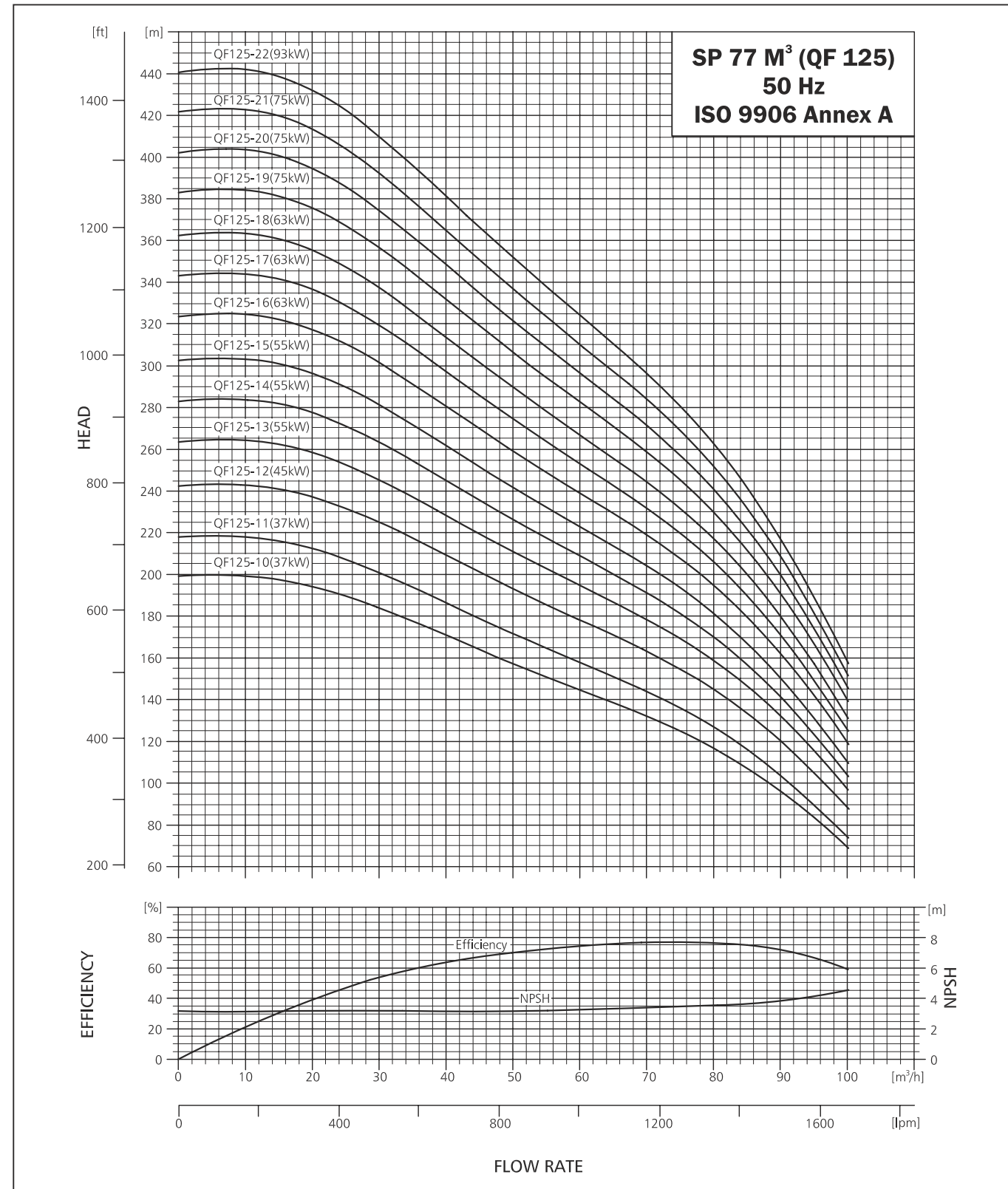
SUBMERSIBLE PUMP QF 100



PERFORMANCE CURVE OF SUBMERSIBLE PUMP

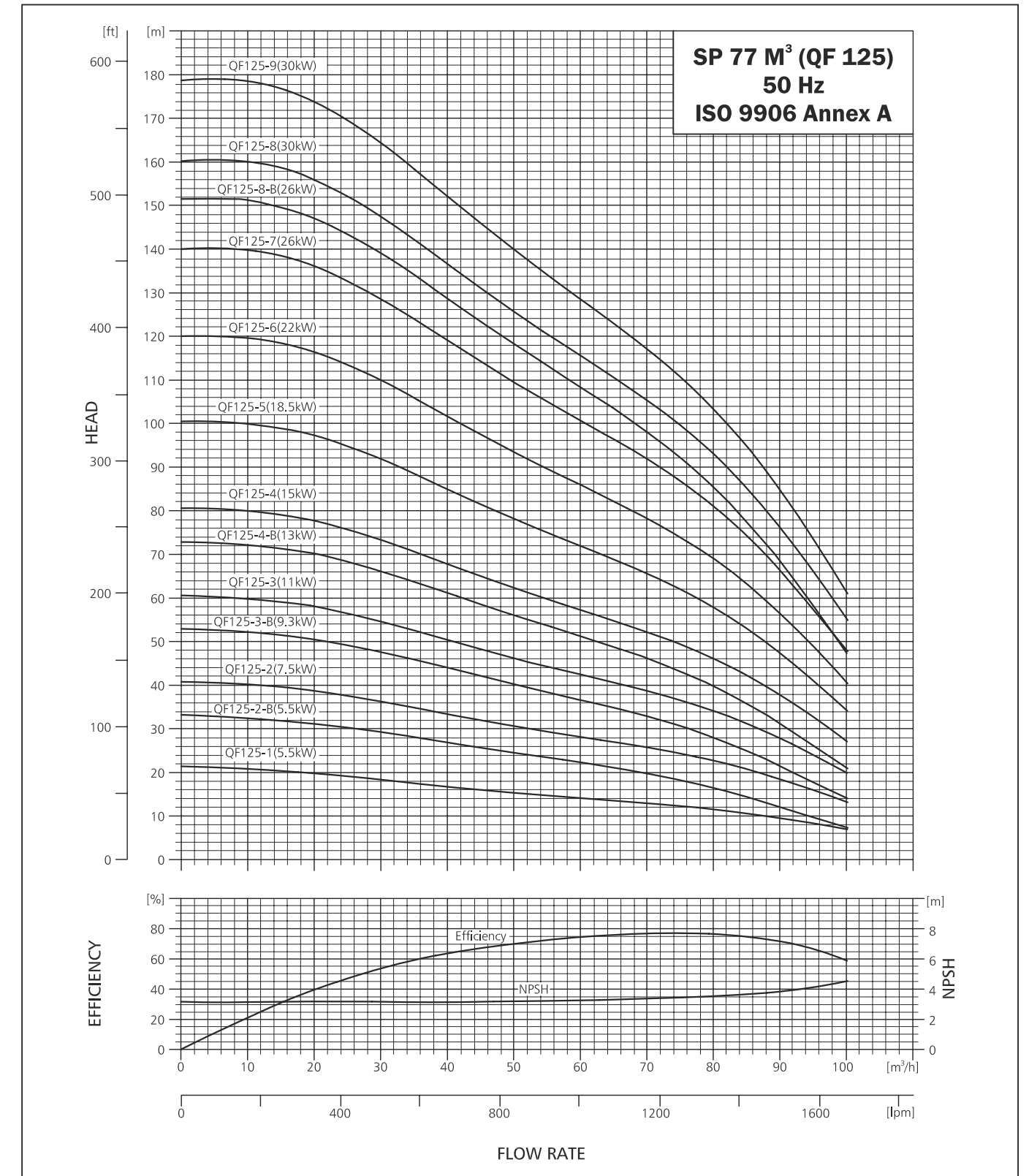


SUBMERSIBLE PUMP QF 125



PERFORMANCE CURVE OF SUBMERSIBLE PUMP

SUBMERSIBLE PUMP QF 125

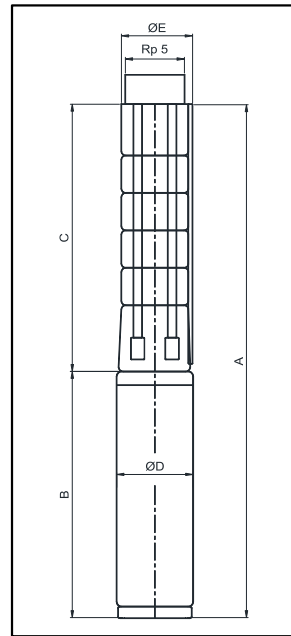


TECHNICAL DATA OF SUBMERSIBLE PUMP



SUBMERSIBLE PUMP QF 125

DIMENSIONS AND WEIGHTS



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

TECHNICAL DATA QF 125														
PUMP TYPE	MOTOR		DIMENSIONS (MM)								NET WEIGHT (KG)			
	TYPE	POWER (kW)	RP 5" CONNECTION				RP 5" FLANGE				B	D	PUMP	MOTOR
			A	C	E*	E**	A	C	E*	E**				
QF125-1	6*MTSF	5.5	1319	626	178	186	1319	626	180	185	693	95	21	29
QF125-2-B	6*MTSF	5.5	1447	754	178	186	1447	754	180	185	693	95	24	29
QF125-2	6*MTSF	7.5	1524	754	178	186	1524	754	180	185	770	95	24	33
QF125-1	6*MTSF	5.5	1325	626	178	186	1325	626	180	185	699	142	21	48
QF125-2-B	6*MTSF	5.5	1453	754	178	186	1453	754	180	185	699	142	24	48
QF125-2	6*MTSF	7.5	1473	754	178	186	1473	754	180	185	719	142	24	50
QF125-3-B	6*MTSF	9.3	1631	882	178	186	1631	882	180	185	749	142	28	53
QF125-3	6*MTSF	11	1661	882	178	186	1661	882	180	185	779	142	28	56
QF125-4-B	6*MTSF	13	1839	1010	178	186	1839	1010	180	185	829	142	31	61
QF125-4	6*MTSF	15	1884	1010	178	186	1884	1010	180	185	874	142	31	66
QF125-5	6*MTSF	18.5	2057	1138	178	186	2057	1138	180	185	919	142	35	70
QF125-6	6*MTSF	22	2275	1266	178	186	2275	1266	180	185	1009	142	38	79
QF125-7	6*MTSF	26	2508	1394	178	186	2508	1394	180	185	1114	142	42	90
QF125-8-B	6*MTSF	26	2636	1522	178	186	2636	1522	180	185	1114	142	46	90
QF125-8	6*MTSF	30	2736	1522	178	186	2736	1522	180	185	1214	142	46	100
QF125-9	6*MTSF	30	2864	1650	178	186	2864	1650	180	185	1214	142	49	100
QF125-8	8*MTSF	30	2662	1522	200	205	2662	1522	210	210	1140	195	46	140
QF125-9	8*MTSF	30	2790	1650	200	205	2790	1650	210	210	1140	195	50	140
QF125-10	8*MTSF	37	2918	1778	200	205	2918	1778	210	210	1140	195	53	140
QF125-11	8*MTSF	37	3046	1906	200	205	3046	1906	210	210	1140	195	57	140
QF125-12	8*MTSF	45	3264	2034	200	205	3264	2034	210	210	1230	195	60	156
QF125-13	8*MTSF	55	3502	2162	200	205	3502	2162	210	210	1340	195	64	179
QF125-14	8*MTSF	55	3630	2290	200	205	3630	2290	210	210	1340	195	68	179
QF125-15	8*MTSF	55	3758	2418	200	205	3758	2418	210	210	1340	195	71	179
QF125-16	8*MTSF	63	4016	2546	200	205	4016	2546	210	210	1470	195	75	198
QF125-17	8*MTSF	63	4144	2674	200	205	4144	2674	210	210	1470	195	78	198
QF125-18	8*MTSF	63	4272	2802	200	205	4272	2802	210	210	1470	195	82	198
QF125-19	8*MTSF	75	4490	2930	200	205	4490	2930	210	210	1560	195	85	215
QF125-20	8*MTSF	75	4618	3058	200	205	4618	3058	210	210	1560	195	89	215
QF125-21	8*MTSF	75	4746	3186	200	205	4746	3186	210	210	1560	195	93	215

\* Maximum diameter of pump with one motor cable.  
 \*\* Maximum diameter of pump with two motor cable.  
 Motor type may change as per requirement.  
 Other type of connection is possible by means of connecting pieces. See page no. 117.

TECHNICAL DATA OF SUBMERSIBLE PUMP

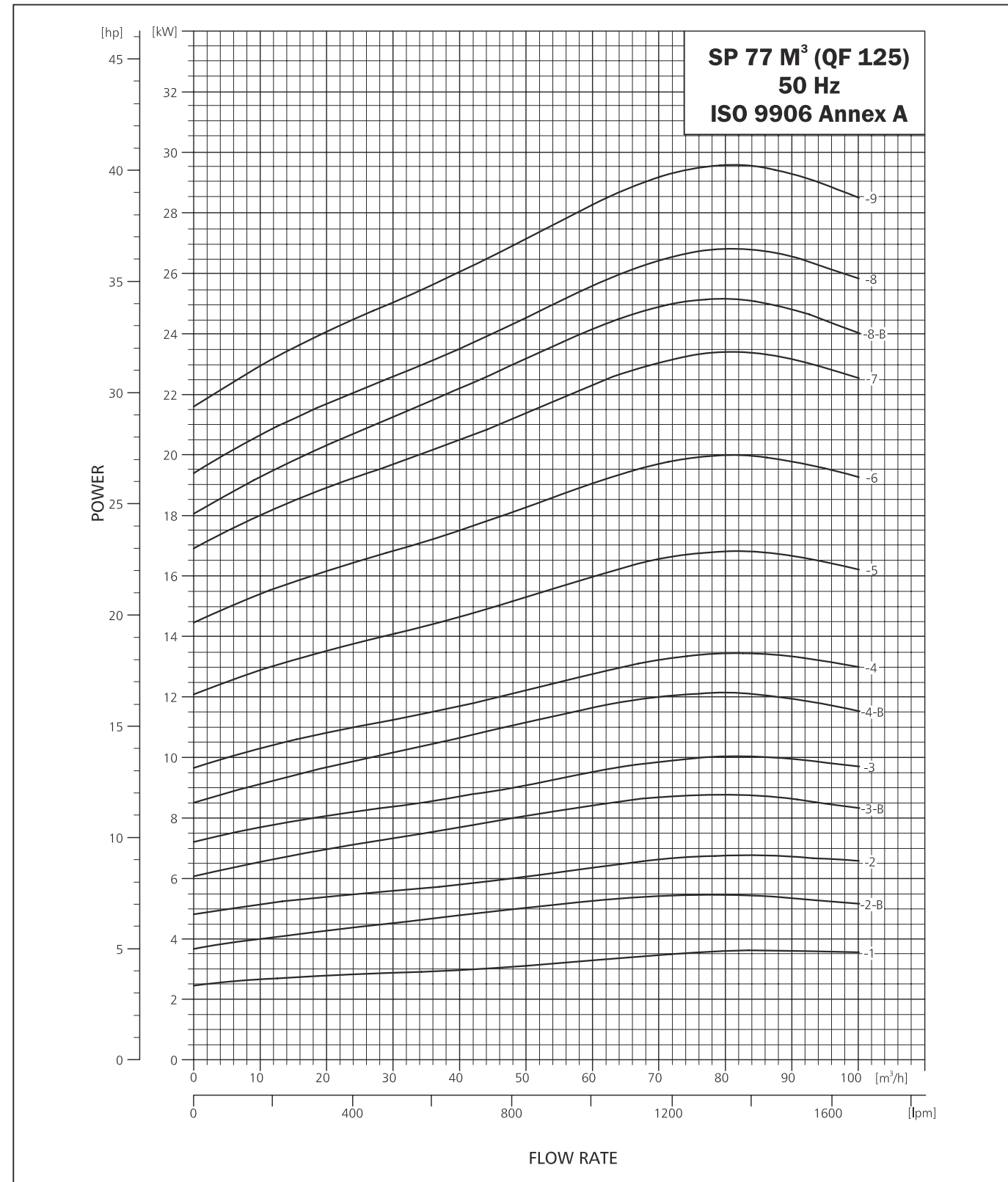
SUBMERSIBLE PUMP QF 125

PERFORMANCE TABLE OF QF 125														
QF-125	m <sup>3</sup> /h l/min.	DISCHARGE (Q)												
		0	10	20	30	40	50	60	70	80	90	100		
		0	166.7	333.3	500	666.7	833.3	1000	1167	1333	1500	1666.7		
MODEL	MOTOR RATING		TOTAL HEAD IN (m)											
	[kW]	[HP]	21	21	20	18	17	15	14	13	12	10	7	
QF 125 - 1	5.5	7.5	21	21	20	18	17	15	14	13	12	10	7	
QF 125 - 2-B	5.5	7.5	33	32	31	29	27	25	22	20	16	12	7	
QF 125 - 2	7.5	10	41	40	39	36	33	31	28	26	23	18	13	
QF 125 - 3-B	9.3	125	53	52	51	48	44	40	37	33	28	22	14	
QF 125 - 3	11	15	61	60	58	55	50	46	42	39	34	28	20	
QF 125 - 4-B	13	18	73	72	70	66	61	56	51	46	40	31	21	
QF 125 - 4	15	20	81	80	78	73	68	62	57	52	46	38	27	
QF 125 - 5	18.5	25	100	100	97	92	85	78	72	66	58	47	34	
QF 125 - 6	22	30	120	120	116	110	102	94	86	78	69	56	41	
QF 125 - 7	26	35	140	140	136	129	119	110	101	92	81	66	48	
QF 125 - 8-B	26	35	152	151	147	139	129	118	108	98	85	68	48	
QF 125 - 8	30	40	160	160	156	147	137	126	116	105	93	76	55	
QF 125 - 9	30	40	179	179	174	164	152	140	129	117	103	85	61	
QF 125 - 10	37	50	199	199	194	184	171	157	145	132	117	96	69	
QF 125 - 11	37	50	218	218	212	201	186	172	158	144	127	104	74	
QF 125 - 12	45	60	242	243	237	225	209	193	178	163	145	120	88	
QF 125 - 13	55	75	264	264	258	245	228	211	195	178	159	132	98	
QF 125 - 14	55	75	283	284	277	263	245	226	209	191	170	141	104	
QF 125 - 15	55	75	303	303	296	281	262	242	223	204	181	150	110	
QF 125 - 16	63	85	324	325	317	301	281	259	239	219	195	162	119	
QF 125 - 17	63	85	343	344	336	319	297	274	253	232	206	171	126	
QF 125 - 18	63	85	363	363	355	337	314	290	267	244	217	180	132	
QF 125 - 19	75	100	383	384	376	357	332	307	283	259	230	191	140	
QF 125 - 20	75	100	402	404	395	375	349	322	297	271	241	200	146	
QF 125 - 21	75	100	422	424	415	394	366	338	312	285	253	210	153	
QF 125 - 22	93	125	442	444	435	413	384	354	327	298	265	220	161	

PERFORMANCE CURVE OF SUBMERSIBLE PUMP

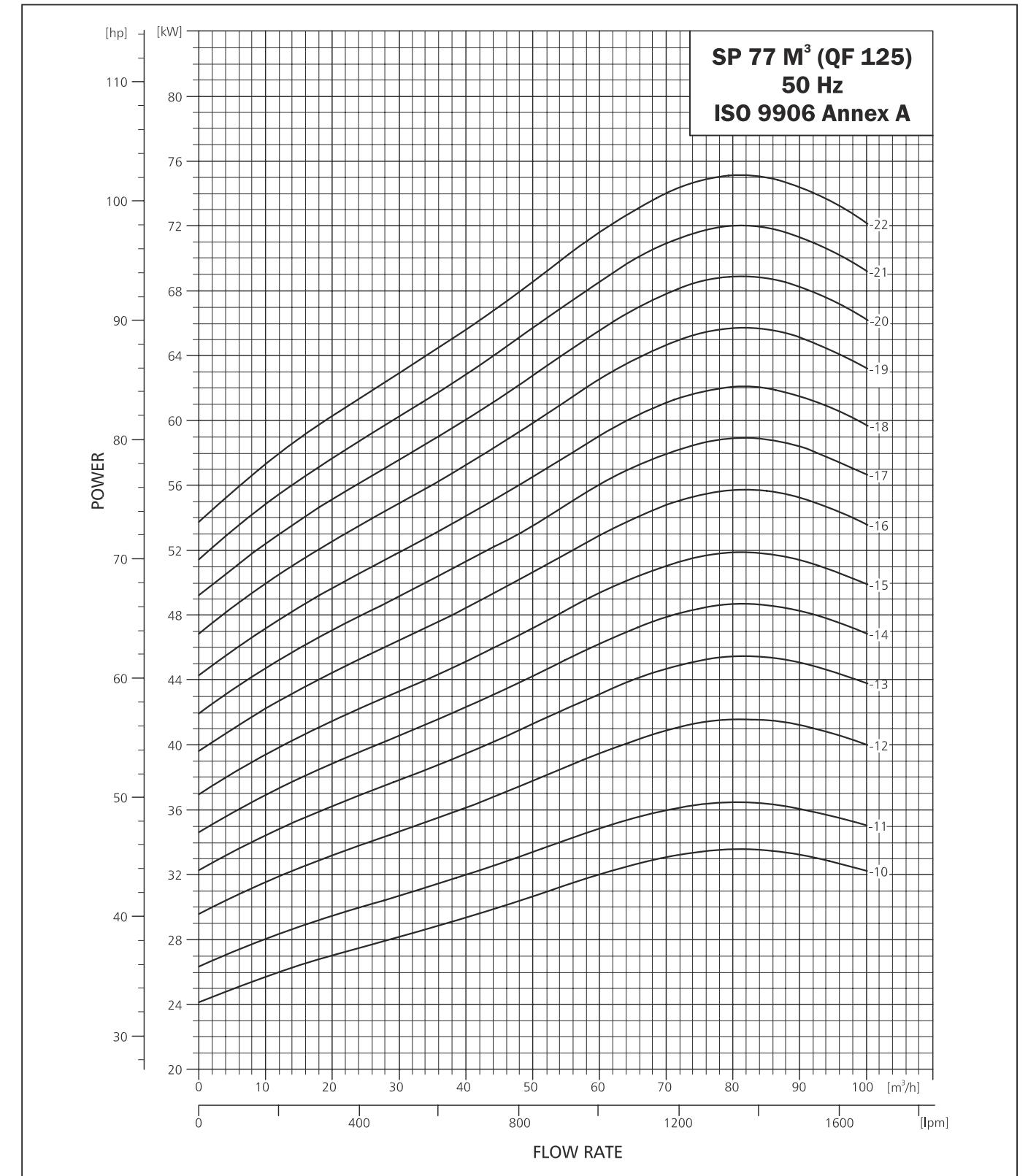


SUBMERSIBLE PUMP QF 125



PERFORMANCE CURVE OF SUBMERSIBLE PUMP

SUBMERSIBLE PUMP QF 125

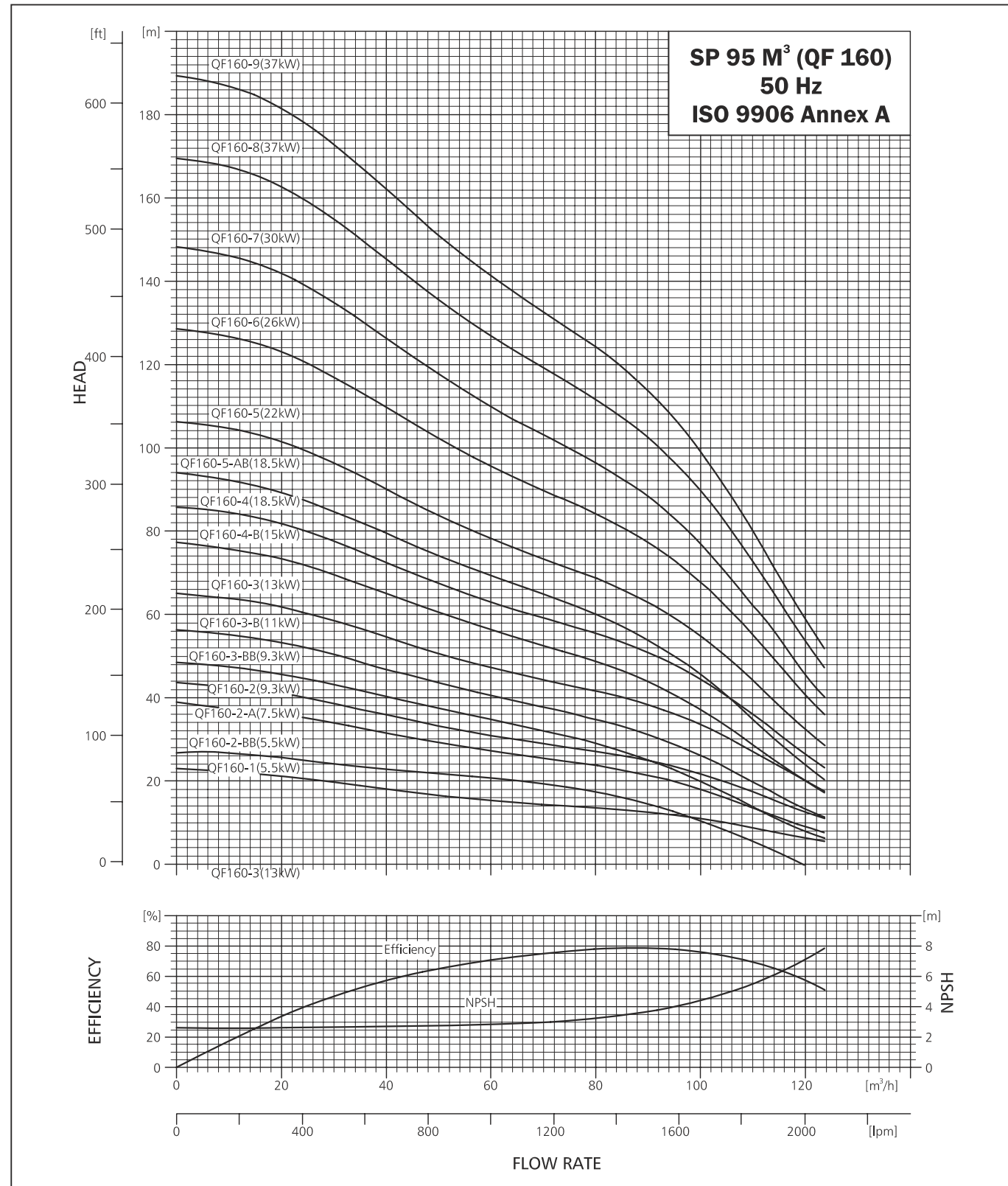




PERFORMANCE CURVE OF SUBMERSIBLE PUMP

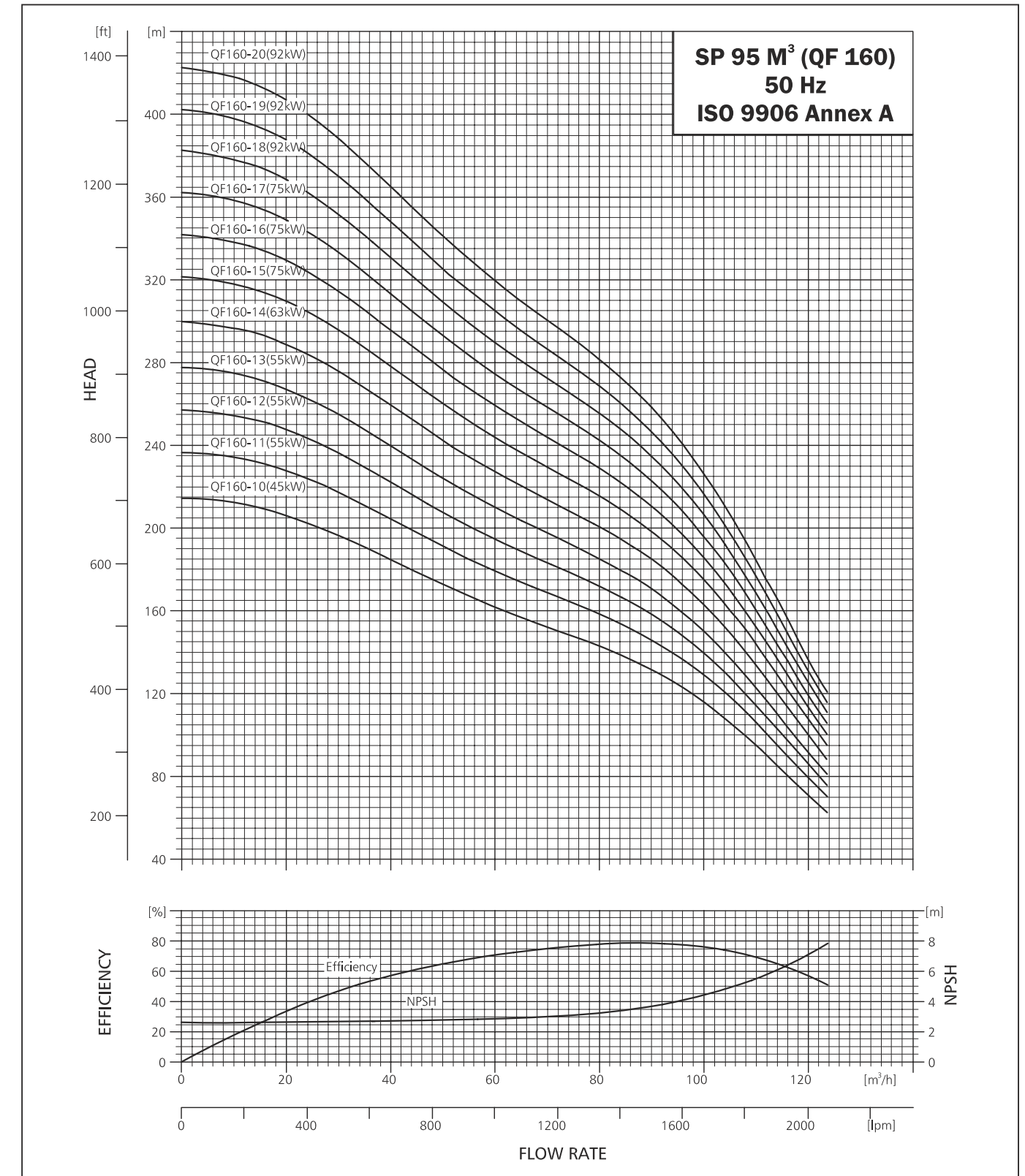


SUBMERSIBLE PUMP QF 160



PERFORMANCE CURVE OF SUBMERSIBLE PUMP

SUBMERSIBLE PUMP QF 160

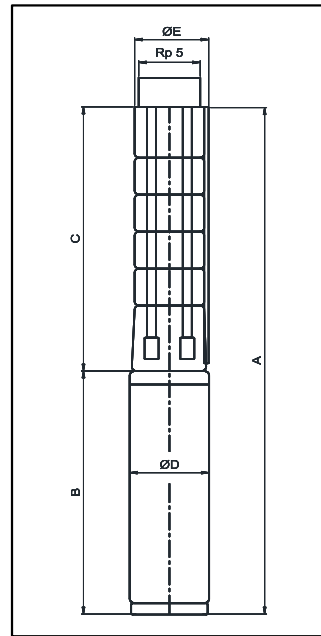


TECHNICAL DATA OF SUBMERSIBLE PUMP



SUBMERSIBLE PUMP QF 160

DIMENSIONS AND WEIGHTS



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

TECHNICAL DATA QF 160														
PUMP TYPE	MOTOR		DIMENSIONS (MM)								NET WEIGHT (KG)			
	TYPE	POWER (kW)	RP 5" CONNECTION				RP 5" FLANGE				PUMP	MOTOR		
			A	C	E*	E**	A	C	E*	E**				
Qf160-1	6*MTSF	5.5	1325	626	178	186	1325	626	180	185	699	143	21	48
Qf160-2-BB	6*MTSF	5.5	1453	754	178	186	1453	754	180	185	699	143	24	48
Qf160-2-A	6*MTSF	7.5	1453	754	178	186	1453	754	180	185	699	143	24	50
Qf160-2	6*MTSF	9.3	1503	754	178	186	1503	754	180	185	749	143	24	53
Qf160-3-BB	6*MTSF	9.3	1631	882	178	186	1631	882	180	185	749	143	28	53
Qf160-3-B	6*MTSF	11	1661	882	178	186	1661	882	180	185	779	143	28	56
Qf160-3	6*MTSF	13	1711	882	178	186	1711	882	180	185	829	143	28	61
Qf160-4-B	6*MTSF	15	1884	1010	178	186	1884	1010	180	185	874	143	31	66
Qf160-4	6*MTSF	18.5	1929	1010	178	186	1929	1010	180	185	919	143	31	70
Qf160-5-AB	6*MTSF	18.5	2057	1138	178	186	2057	1138	180	185	919	143	35	70
Qf160-5	6*MTSF	22	2147	1138	178	186	2147	1138	180	185	1009	143	35	79
Qf160-6	6*MTSF	26	2380	1266	178	186	2380	1266	180	185	1114	143	38	90
Qf160-7	6*MTSF	30	2608	1394	178	186	2608	1394	180	185	1214	143	42	100
Qf160-7	8*MTSF	30	2534	1394	196	204	2534	1394	210	210	1140	195	42	140
Qf160-8	8*MTSF	37	2662	1522	196	204	2662	1522	210	210	1140	195	46	140
Qf160-9	8*MTSF	37	2880	1650	196	204	2880	1650	210	210	1230	195	49	140
Qf160-10	8*MTSF	45	3008	1778	196	204	3008	1778	210	210	1230	195	53	156
Qf160-11	8*MTSF	55	3246	1906	196	204	3246	1906	210	210	1340	195	56	179
Qf160-12	8*MTSF	55	3374	2034	196	204	3374	2034	210	210	1340	195	60	179
Qf160-13	8*MTSF	55	3502	2162	196	204	3502	2162	210	210	1340	195	63	179
Qf160-14	8*MTSF	63	3760	2290	196	204	3760	2290	210	210	1470	195	67	179
Qf160-15	8*MTSF	75	3978	2418	196	204	-	-	-	-	1560	195	71	215
Qf160-16	8*MTSF	75	4106	2546	196	204	-	-	-	-	1560	195	74	215
Qf160-17	8*MTSF	75	4234	2674	196	204	-	-	-	-	1560	195	78	215
Qf160-18	8*MTSF	92	4542	2802	196	204	-	-	-	-	1740	195	81	247
Qf160-19	8*MTSF	92	4670	2930	196	204	-	-	-	-	1740	195	85	247
Qf160-20	8*MTSF	92	4798	3058	196	204	-	-	-	-	1740	195	88	247

\* Maximum diameter of pump with one motor cable.  
 \*\* Maximum diameter of pump with two motor cable.  
 Motor type may change as per requirement.  
 Other type of connection is possible by means of connecting pieces. See page no. 117.

TECHNICAL DATA OF SUBMERSIBLE PUMP

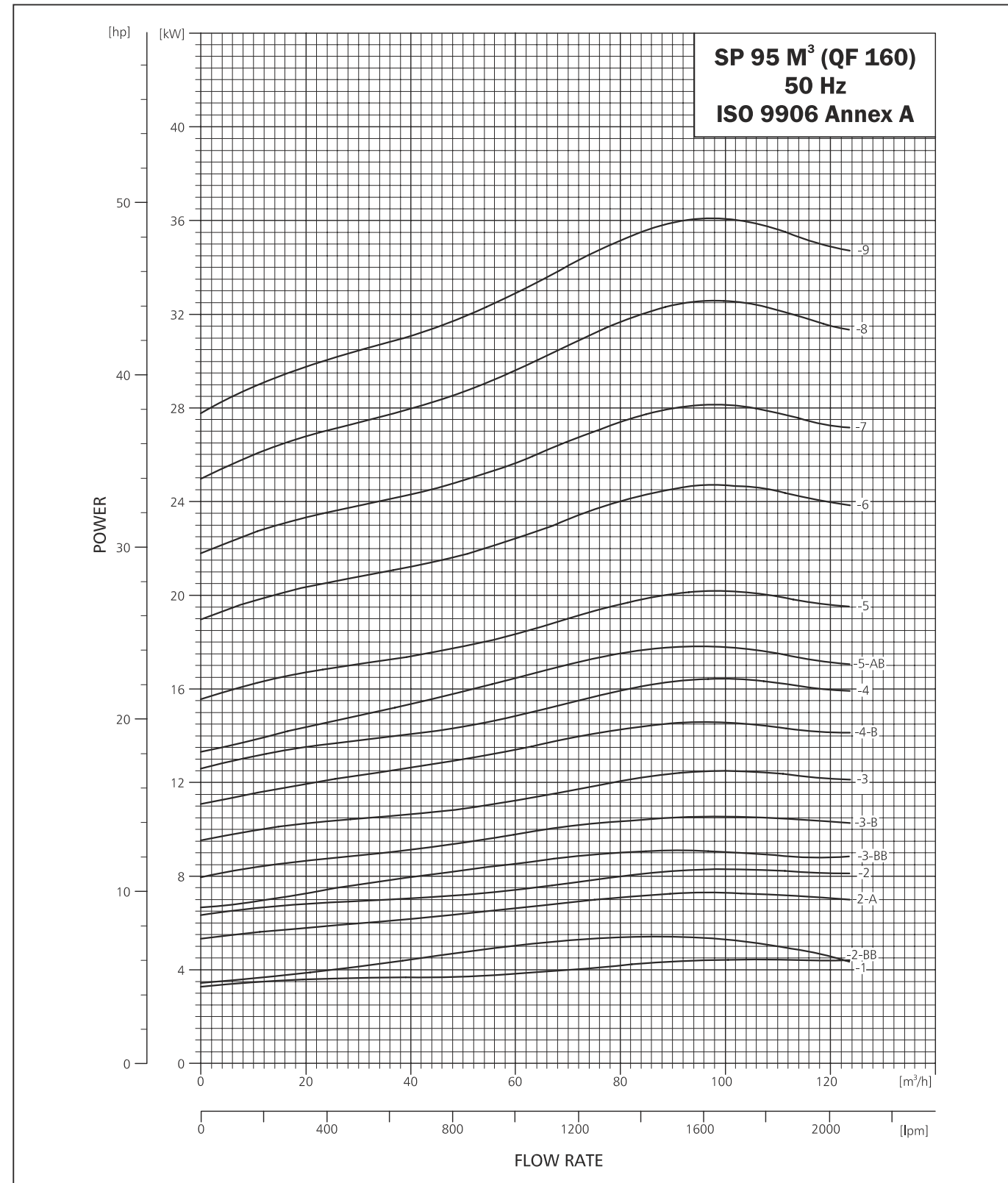
SUBMERSIBLE PUMP QF 160

PERFORMANCE TABLE QF 160																	
QF-160	MODEL	MOTOR RATING [kW] [HP]	DISCHARGE (Q)														
			m <sup>3</sup> /h	0	10	20	30	40	50	60	70	80	90	100	110	120	122
			l/min.	0	167	333	500	667	833	1000	1167	1333	1500	1667	1833	2000	2033
			TOTAL HEAD IN (m)														
QF 160 - 1	5.5	7.5	23	22	21	20	18	17	15	14	13	13	11	9	6	6	
QF 160 - 2-BB	5.5	7.5	27	27	26	24	23	22	21	19	17	14	10	5	0	-	
QF 160 - 2-A	7.5	10	39	38	36	34	32	29	27	26	24	21	18	14	9	8	
QF 160 - 2	9.3	12.5	44	43	41	39	36	33	31	29	27	25	22	17	13	12	
QF 160 - 3-BB	9.3	12.5	49	47	46	43	40	37	35	32	29	25	20	14	8	7	
QF 160 - 3-B	11	15	56	55	53	50	47	44	41	38	35	31	26	20	13	12	
QF 160 - 3	13	17.5	65	64	62	58	55	51	47	44	42	38	33	27	20	19	
QF 160 - 4-B	15	20	77	76	73	70	65	60	56	53	49	44	37	29	20	18	
QF 160 - 4	18.5	25	86	84	82	78	73	67	63	59	55	51	44	36	26	25	
QF 160 - 5-AB	18.5	25	94	92	89	85	79	74	69	65	60	54	45	35	24	22	
QF 160 - 5	22	30	106	105	101	96	90	84	78	73	69	63	55	44	32	30	
QF 160 - 6	26	35	129	127	123	117	110	102	96	90	84	77	68	55	41	38	
QF 160 - 7	30	40	148	146	142	135	126	118	110	103	96	88	77	62	46	43	
QF 160 - 8	37	50	170	167	163	155	145	136	127	119	112	102	90	73	54	50	
QF 160 - 9	37	50	189	187	182	173	162	151	141	133	124	114	99	80	59	55	
QF 160 - 10	45	60	214	212	206	197	185	173	162	152	143	132	116	95	71	66	
QF 160 - 11	55	75	237	234	228	217	205	191	179	169	158	146	129	106	79	74	
QF 160 - 12	55	75	257	254	248	236	222	208	195	183	172	158	140	115	86	80	
QF 160 - 13	55	75	278	275	267	255	240	224	210	198	185	170	150	123	92	86	
QF 160 - 14	63	85	300	297	289	276	259	243	227	214	201	185	163	134	100	93	
QF 160 - 15	75	100	321	318	310	296	278	260	244	230	215	198	175	144	107	100	
QF 160 - 16	75	100	342	338	329	314	296	277	259	244	229	211	186	152	114	106	
QF 160 - 17	75	100	362	358	349	333	313	293	275	258	242	223	196	160	120	112	
QF 160 - 18	93	125	382	378	368	352	331	309	290	272	255	235	206	169	125	117	
QF 160 - 19	93	125	402	398	388	370	348	325	305	287	269	247	216	177	131	122	
QF 160 - 20	93	125	423	418	407	388	365	341	320	301	281	258	226	184	137	128	

PERFORMANCE CURVE OF SUBMERSIBLE PUMP

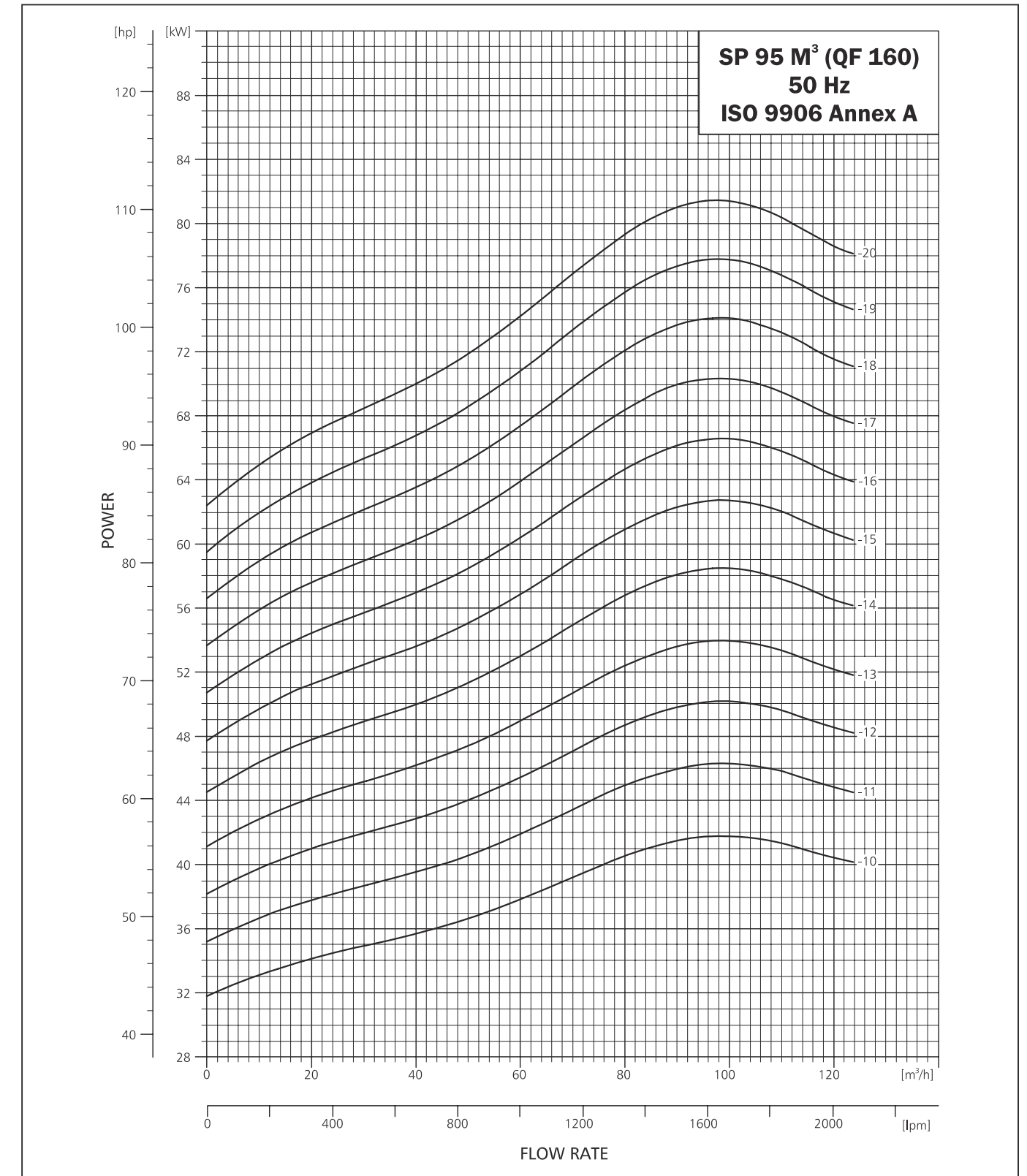


SUBMERSIBLE PUMP QF 160



PERFORMANCE CURVE OF SUBMERSIBLE PUMP

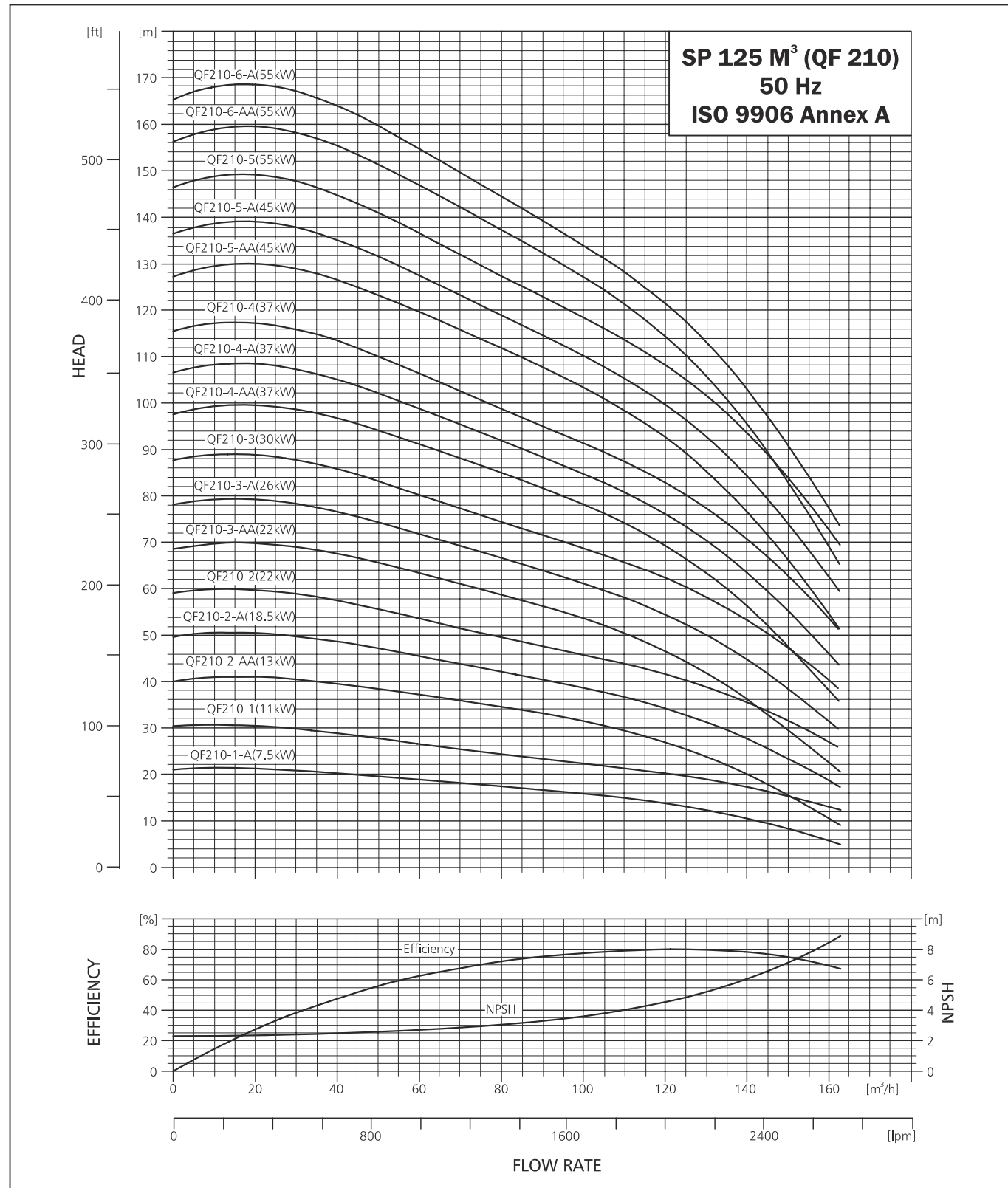
SUBMERSIBLE PUMP QF 160



PERFORMANCE CURVE OF SUBMERSIBLE PUMP

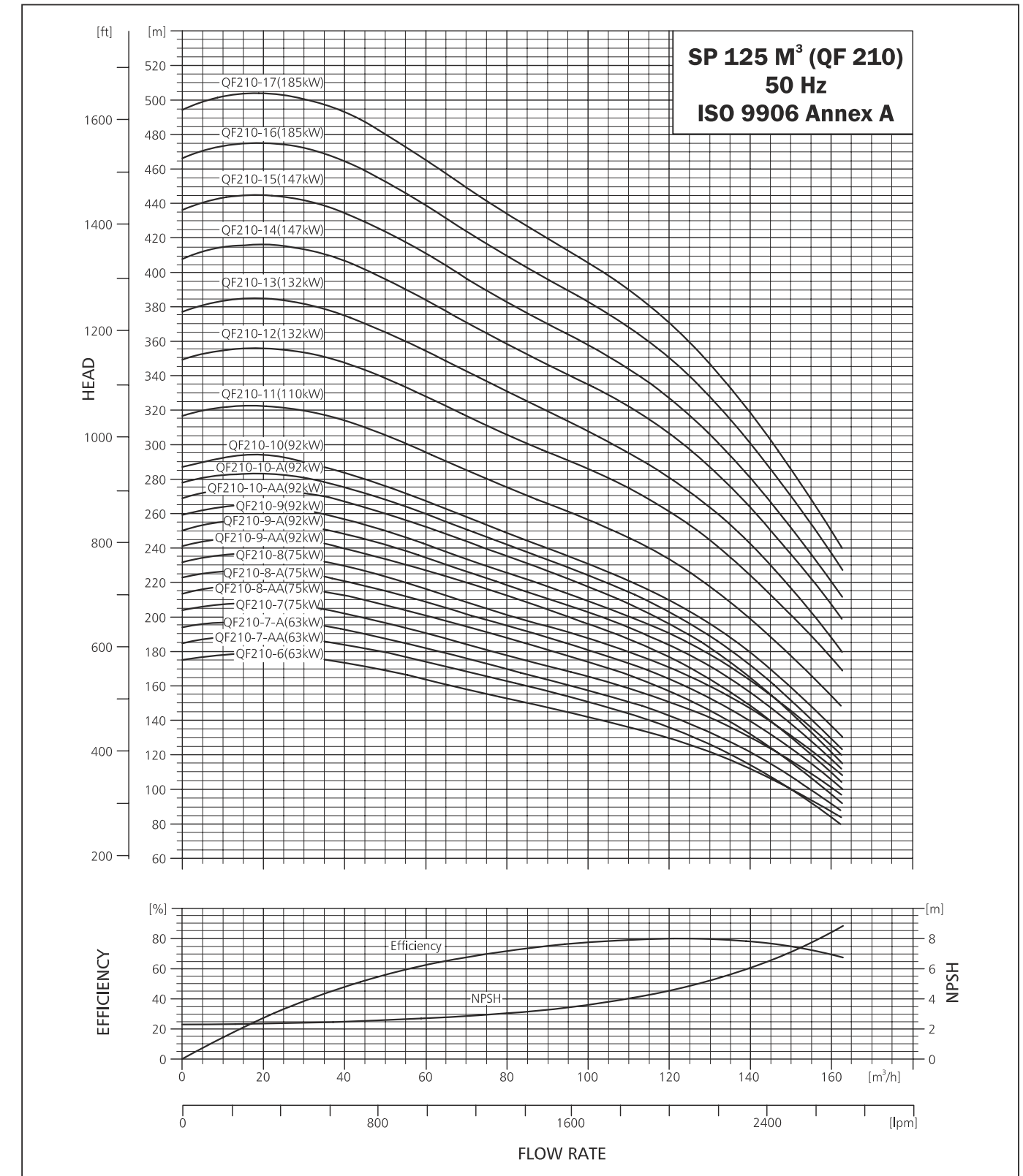


SUBMERSIBLE PUMP QF 210



PERFORMANCE CURVE OF SUBMERSIBLE PUMP

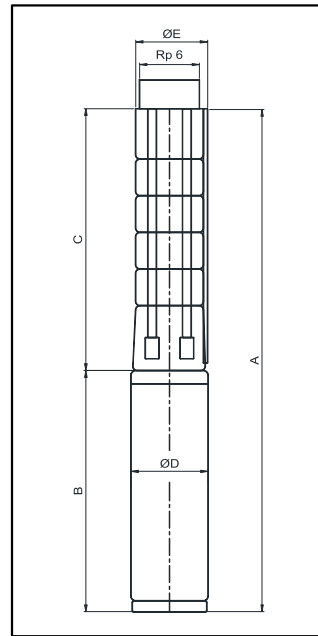
SUBMERSIBLE PUMP QF 210





**SUBMERSIBLE PUMP QF 210**

**DIMENSIONS AND WEIGHTS**



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

TECHNICAL DATA QF 210														
PUMP TYPE	MOTOR		DIMENSIONS (MM)								NET WEIGHT (KG)			
	TYPE	POWER (kW)	RP 6" CONNECTION				6" FLANGE				PUMP	MOTOR		
			A	C	E*	E**	A	C	E*	E**			B	D
QF210-1-A	6"MTSF	7.5	1360	641	211	218	1360	641	222	226	719	143	27	50
QF210-1	6"MTSF	11	1420	641	211	218	1420	641	222	226	779	143	27	53
QF210-2-AA	6"MTSF	13	1626	797	211	218	1626	797	222	226	829	143	33	61
QF210-2-A	6"MTSF	18.5	1716	797	211	218	1716	797	222	226	919	143	33	70
QF210-2	6"MTSF	22	1806	797	213	218	1806	797	222	226	1009	143	33	79
QF210-3-AA	6"MTSF	22	1962	953	213	218	1962	953	222	226	1009	143	39	79
QF210-3-A	6"MTSF	26	2067	953	213	218	2067	953	222	226	1114	143	39	90
QF210-3	6"MTSF	30	2167	953	213	218	2167	953	222	226	1214	143	39	100
QF210-3	8"MTSF	30	2093	953	213	218	2093	953	222	226	1140	194	39	140
QF210-4-AA	8"MTSF	37	2249	1109	213	218	2249	1109	222	226	1140	194	45	140
QF210-4-A	8"MTSF	37	2249	1109	213	218	2249	1109	222	226	1140	194	45	140
QF210-4	8"MTSF	37	2249	1109	213	218	2249	1109	222	226	1140	194	45	140
QF210-5-AA	8"MTSF	45	2495	1265	213	218	2495	1265	222	226	1230	194	51	156
QF210-5-A	8"MTSF	45	2495	1265	213	218	2495	1265	222	226	1230	194	51	156
QF210-5	8"MTSF	55	2605	1265	213	218	2605	1265	222	226	1340	194	51	179
QF210-6-AA	8"MTSF	55	2761	1421	213	218	2761	1421	222	226	1340	194	57	179
QF210-6-A	8"MTSF	55	2761	1421	213	218	2761	1421	222	226	1340	194	57	179
QF210-6	8"MTSF	63	2891	1421	218	227	2891	1421	229	232	1470	194	57	198
QF210-7-AA	8"MTSF	63	3047	1577	218	227	3047	1577	229	232	1470	194	63	198
QF210-7-A	8"MTSF	63	3047	1577	218	227	3047	1577	229	232	1470	194	63	198
QF210-7	8"MTSF	75	3137	1577	218	227	3137	1577	229	232	1560	194	63	215
QF210-8-AA	8"MTSF	75	3293	1733	218	227	-	-	-	-	1560	194	70	215
QF210-8-A	8"MTSF	75	3293	1733	218	227	-	-	-	-	1560	194	70	215
QF210-8	8"MTSF	75	3293	1733	218	227	-	-	-	-	1560	194	70	215
QF210-9-AA	8"MTSF	93	3629	1889	218	227	-	-	-	-	1740	194	76	247
QF210-9-A	8"MTSF	93	3629	1889	218	227	-	-	-	-	1740	194	76	247
QF210-9	8"MTSF	93	3629	1889	218	227	-	-	-	-	1740	194	76	247
QF210-10-AA	8"MTSF	93	3785	2045	218	227	-	-	-	-	1740	194	82	247
QF210-10-A	8"MTSF	93	3785	2045	218	227	-	-	-	-	1740	194	82	247
QF210-10	8"MTSF	93	3785	2045	218	227	-	-	-	-	1740	194	82	247
QF210-11	10"MTSF	110	4961	2201	237	237	-	-	-	-	2760	237	91	310
QF210-12	10"MTSF	130	5378	2357	237	237	-	-	-	-	3021	237	97	320
QF210-13	10"MTSF	130	5534	2513	237	237	-	-	-	-	3021	235	104	320
QF210-14	10"MTSF	150	5910	2669	237	237	-	-	-	-	3241	237	110	320
QF210-15	10"MTSF	150	6066	2825	237	237	-	-	-	-	3241	237	116	320
QF210-16	10"MTSF	185	6522	2981	237	237	-	-	-	-	3541	237	122	430
QF210-17	10"MTSF	185	6678	3137	237	237	-	-	-	-	3541	237	128	430

\* Maximum diameter of pump with one motor cable.  
 \*\* Maximum diameter of pump with two motor cable.  
 Motor type may change as per requirement.

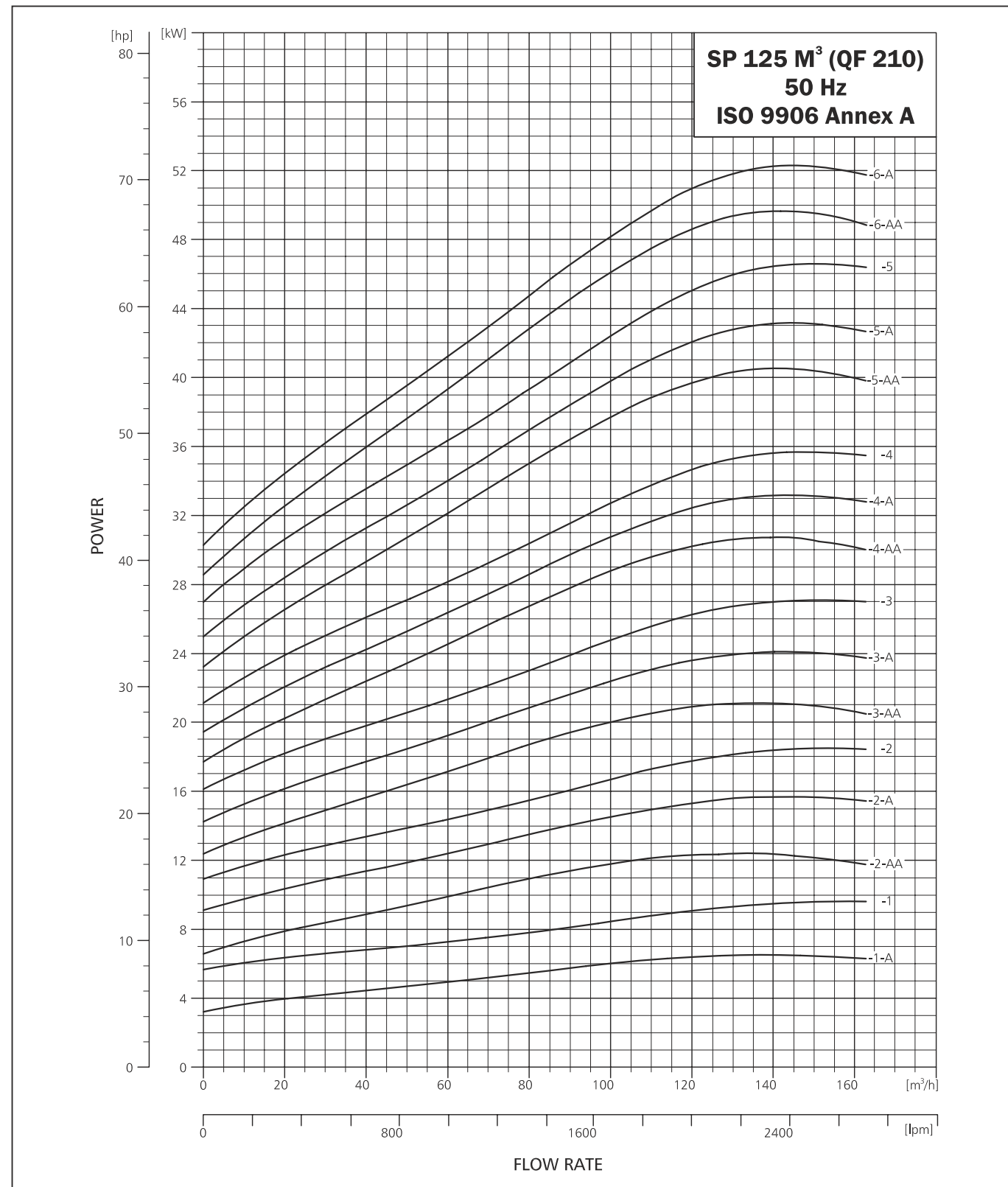
**SUBMERSIBLE PUMP QF 210**

PERFORMANCE TABLE QF 210																
QF-210	MODEL	MOTOR RATING [kW] [HP]	DISCHARGE (Q)													
			m³/h	0	60	70	80	90	100	110	120	130	140	150	160	162
			l/min.	0	1000	1167	1333	1500	1667	1833	2000	2167	2333	2500	2667	2700
			TOTAL HEAD IN (m)													
	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	93 125	241	227	219	212	204	196	187	177	164	149	130	110	105	
	QF210-9-A	93 125	250	234	226	219	211	203	194	184	171	156	138	117	113	
	QF210-9	93 125	260	242	234	226	218	209	201	191	178	163	146	125	121	
	QF210-10-AA	93 125	269	252	244	235	227	218	208	196	182	165	144	121	117	
	QF210-10-A	93 125	278	260	251	242	233	224	214	203	189	172	152	129	124	
	QF210-10	93 125	287	267	258	249	240	231	221	210	196	179	159	137	132	

PERFORMANCE CURVE OF SUBMERSIBLE PUMP

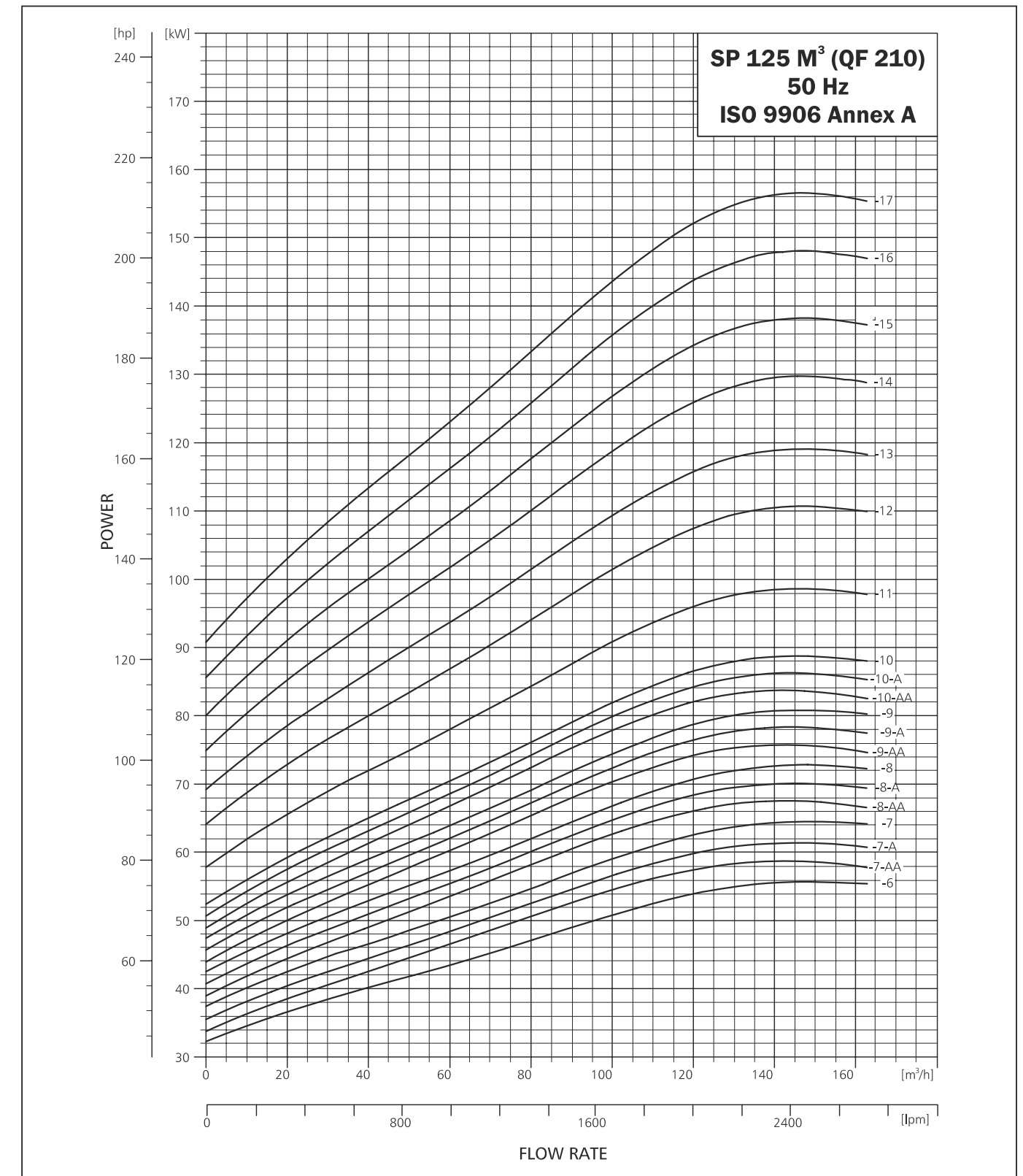


SUBMERSIBLE PUMP QF 210



PERFORMANCE CURVE OF SUBMERSIBLE PUMP

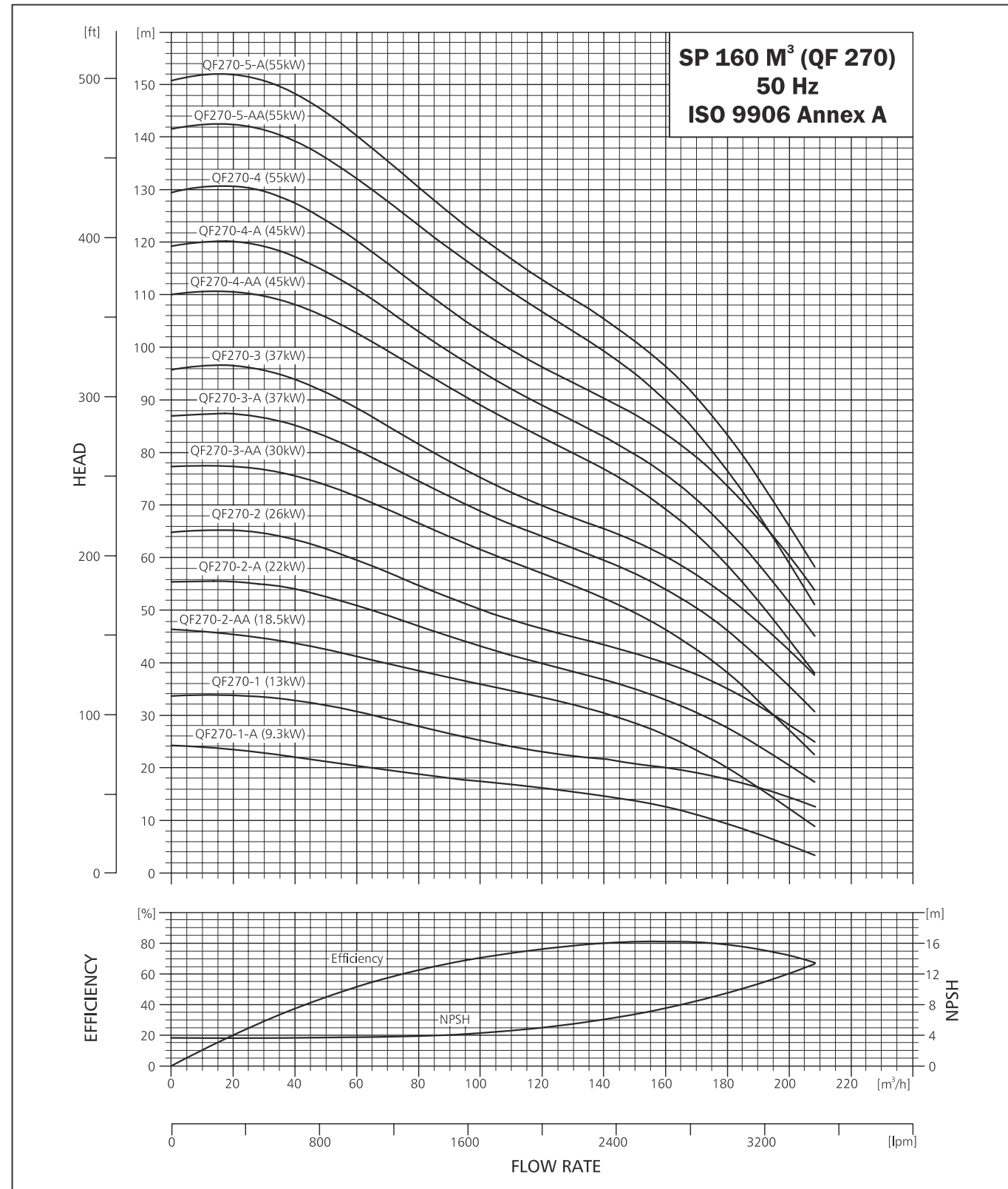
SUBMERSIBLE PUMP QF 210



PERFORMANCE CURVE OF SUBMERSIBLE PUMP

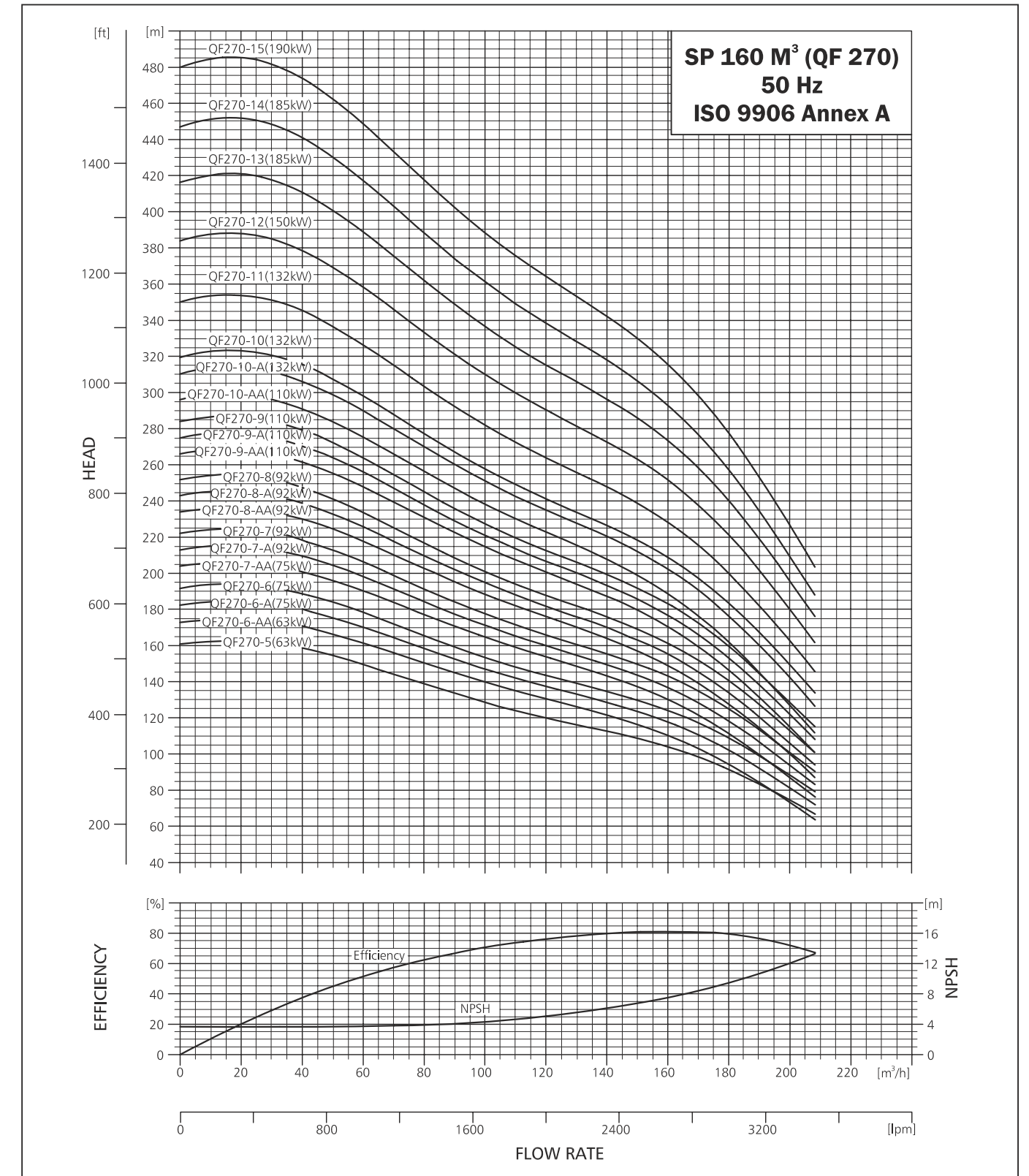


SUBMERSIBLE PUMP QF 270



PERFORMANCE CURVE OF SUBMERSIBLE PUMP

SUBMERSIBLE PUMP QF 270

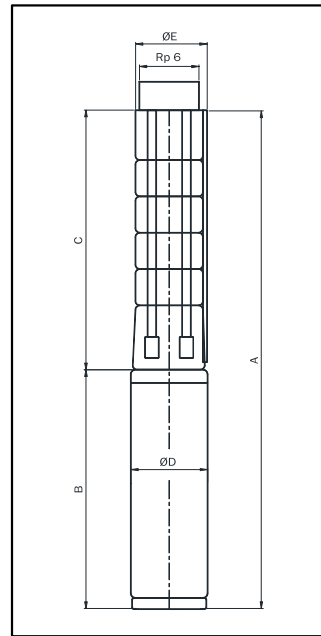


TECHNICAL DATA OF SUBMERSIBLE PUMP



SUBMERSIBLE PUMP QF 270

DIMENSIONS AND WEIGHTS



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

TECHNICAL DATA QF 270														
PUMP TYPE	MOTOR		DIMENSIONS (MM)								NET WEIGHT (KG)			
	TYPE	POWER (kW)	RP 6" CONNECTION				6" FLANGE				PUMP	MOTOR		
			A	C	E*	E**	A	C	E*	E**				
QF270-1-A	6*MTSF	9.3	1390	641	211	218	1390	641	222	226	749	143	26	50
QF270-1	6*MTSF	13	1470	641	211	218	1470	641	222	226	829	143	26	61
QF270-2-AA	6*MTSF	18.5	1716	797	211	218	1716	797	222	226	919	143	33	70
QF270-2-A	6*MTSF	22	1806	797	211	218	1806	797	222	226	1009	143	33	79
QF270-2	6*MTSF	26	1911	797	213	218	1911	797	222	226	1114	143	33	90
QF270-3-AA	6*MTSF	30	2167	953	213	218	2167	953	222	226	1214	143	39	100
QF270-3-AA	8*MTSF	30	2093	953	213	218	2093	953	222	226	1140	195	39	140
QF270-3-A	8*MTSF	37	2093	953	213	218	2093	953	222	226	1140	195	39	140
QF270-3	8*MTSF	37	2093	953	213	218	2093	953	222	226	1140	195	39	140
QF270-4-AA	8*MTSF	45	2339	1109	213	218	2339	1109	222	226	1230	195	45	156
QF270-4-A	8*MTSF	45	2339	1109	213	218	2339	1109	222	226	1230	195	45	156
QF270-4	8*MTSF	55	2449	1109	213	218	2449	1109	222	226	1340	195	45	179
QF270-5-AA	8*MTSF	55	2605	1265	213	218	2605	1265	222	226	1340	195	51	179
QF270-5-A	8*MTSF	55	2605	1265	213	218	2605	1265	222	226	1340	195	51	179
QF270-5	8*MTSF	63	2735	1265	213	218	2735	1265	222	226	1470	195	51	198
QF270-6-AA	8*MTSF	63	2891	1421	213	218	2891	1421	222	226	1470	195	58	198
QF270-6-A	8*MTSF	75	2981	1421	213	218	2981	1421	222	226	1560	195	58	215
QF270-6	8*MTSF	75	2981	1421	218	227	2981	1421	229	232	1560	195	58	215
QF270-7-AA	8*MTSF	75	3137	1577	218	227	-	-	-	-	1560	195	64	215
QF270-7-A	8*MTSF	93	3317	1577	218	227	-	-	-	-	1740	195	64	247
QF270-7	8*MTSF	93	3317	1577	218	227	-	-	-	-	1740	195	64	247
QF270-8-AA	8*MTSF	93	3473	1733	218	227	-	-	-	-	1740	195	70	247
QF270-8-A	8*MTSF	93	3473	1733	218	227	-	-	-	-	1740	195	70	247
QF270-8	8*MTSF	93	3473	1733	218	227	-	-	-	-	1740	195	70	247
QF270-9-AA	10*MTSF	110	4650	1889	218	227	-	-	-	-	2761	195	80	310
QF270-9-A	10*MTSF	110	4650	1889	218	227	-	-	-	-	2761	195	80	310
QF270-9	10*MTSF	110	4650	1889	218	227	-	-	-	-	2761	195	80	310
QF270-10-AA	10*MTSF	110	4806	2045	218	227	-	-	-	-	2761	195	86	310
QF270-10-A	10*MTSF	132	5066	2045	218	227	-	-	-	-	3021	235	86	320
QF270-10	10*MTSF	132	5066	2045	218	227	-	-	-	-	3021	235	86	320
QF270-11	10*MTSF	132	5222	2201	237	237	-	-	-	-	3021	235	93	320
QF270-12	10*MTSF	150	5598	2357	237	237	-	-	-	-	3241	237	99	320
QF270-13	10*MTSF	185	6054	2513	237	237	-	-	-	-	3541	237	105	430
QF270-14	10*MTSF	185	6210	2669	237	237	-	-	-	-	3541	237	111	430

\* Maximum diameter of pump with one motor cable.  
 \*\* Maximum diameter of pump with two motor cable.  
 Motor type may change as per requirement.

TECHNICAL DATA OF SUBMERSIBLE PUMP

SUBMERSIBLE PUMP QF 270

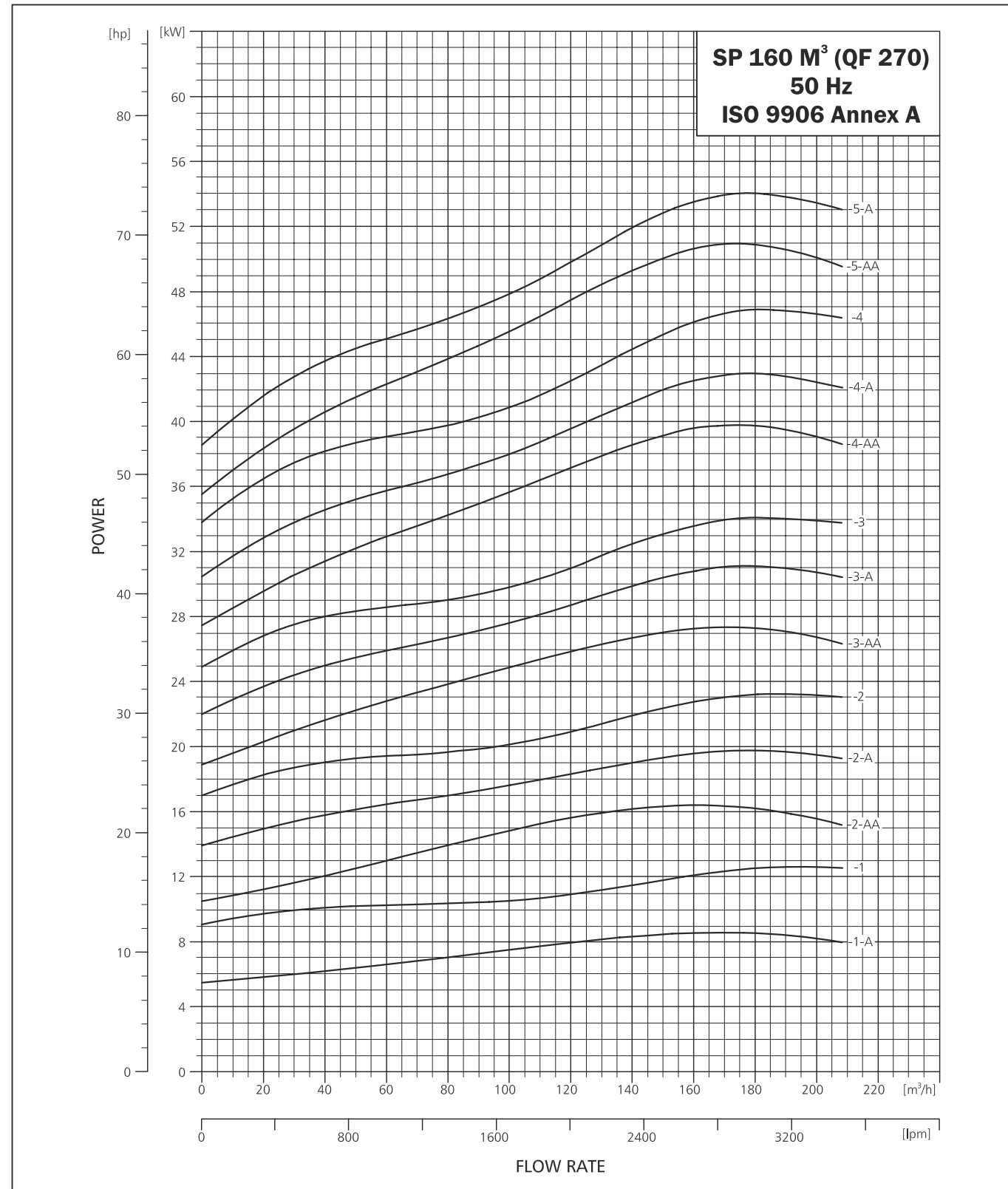
PERFORMANCE TABLE QF 270																		
QF-270		DISCHARGE (Q)																
		m³/h	0	80	90	100	110	120	130	140	150	160	170	180	190	200	208	
		l/min.	0	1333	1500	1667	1833	2000	2167	2333	2500	2667	2833	3000	3167	3333	3467	
MODEL	CONNECTION	MOTOR RATING		TOTAL HEAD IN (m)														
		[kW]	[HP]	24	19	18	17	17	16	15	15	14	13	11	9	7	5	3
QF 270 - 1-A	Rp 6	9.3	12.5	24	19	18	17	17	16	15	15	14	13	11	9	7	5	3
QF 270 - 1		13	17.5	34	28	26	25	24	23	22	22	21	20	19	18	16	14	13
QF 270 - 2-AA		18.5	25	46	38	37	36	35	33	32	30	29	26	23	20	16	12	9
QF 270 - 2-A		22	30	55	47	45	43	41	40	38	37	35	33	31	28	24	20	17
QF 270 - 2		26	35	65	55	52	50	48	46	45	43	42	40	38	35	32	28	25
QF 270 - 3-AA		30	40	77	67	64	62	59	57	55	52	49	46	42	38	33	27	23
QF 270 - 3-A		37	50	87	75	72	69	66	64	62	59	57	54	50	46	41	35	31
QF 270 - 3		37	50	96	82	78	75	72	70	68	65	63	60	57	53	48	42	38
QF 270 - 4-AA		45	60	110	96	92	89	86	83	80	77	73	69	64	58	52	44	38
QF 270 - 4-A		45	60	119	103	99	95	92	89	86	83	80	76	71	65	59	51	45
QF 270 - 4		55	75	129	111	107	103	100	96	93	90	87	83	79	74	67	60	54
QF 270 - 5-AA		55	75	142	123	119	114	111	107	103	99	95	90	84	76	68	59	51
QF 270 - 5-A		55	75	151	130	126	121	117	113	109	105	101	96	90	83	75	66	58
QF 270 - 5		63	85	161	139	133	129	124	120	116	113	109	104	98	91	83	74	67
QF 270 - 6-AA	63	85	173	150	145	140	135	131	126	121	116	110	103	94	84	73	64	
QF 270 - 6-A	75	100	183	158	153	147	142	137	133	128	123	118	111	102	92	81	72	
QF 270 - 6	75	100	192	166	159	154	148	144	139	135	130	124	117	109	99	88	79	
QF 270 - 7-AA	75	100	204	177	171	165	159	154	149	143	137	130	122	112	100	87	76	
QF 270 - 7-A	92	125	213	184	177	171	165	160	155	149	144	137	128	118	107	94	84	
QF 270 - 7	92	125	222	191	184	177	171	166	161	155	150	143	135	125	113	101	91	
QF 270 - 8-AA	92	125	234	203	195	188	182	176	170	164	157	149	139	127	114	99	87	
QF 270 - 8-A	92	125	243	210	202	195	188	182	176	170	163	155	145	134	121	106	94	
QF 270 - 8	92	125	252	217	208	201	194	188	182	176	169	161	152	140	127	113	101	
QF 270 - 9-AA	110	150	266	231	223	215	207	201	194	187	179	170	159	146	131	115	102	
QF 270 - 9-A	110	150	275	238	229	221	214	207	200	193	186	177	166	153	138	122	109	
QF 270 - 9	110	150	284	245	236	227	220	213	206	199	192	183	172	160	145	129	116	



PERFORMANCE CURVE OF SUBMERSIBLE PUMP

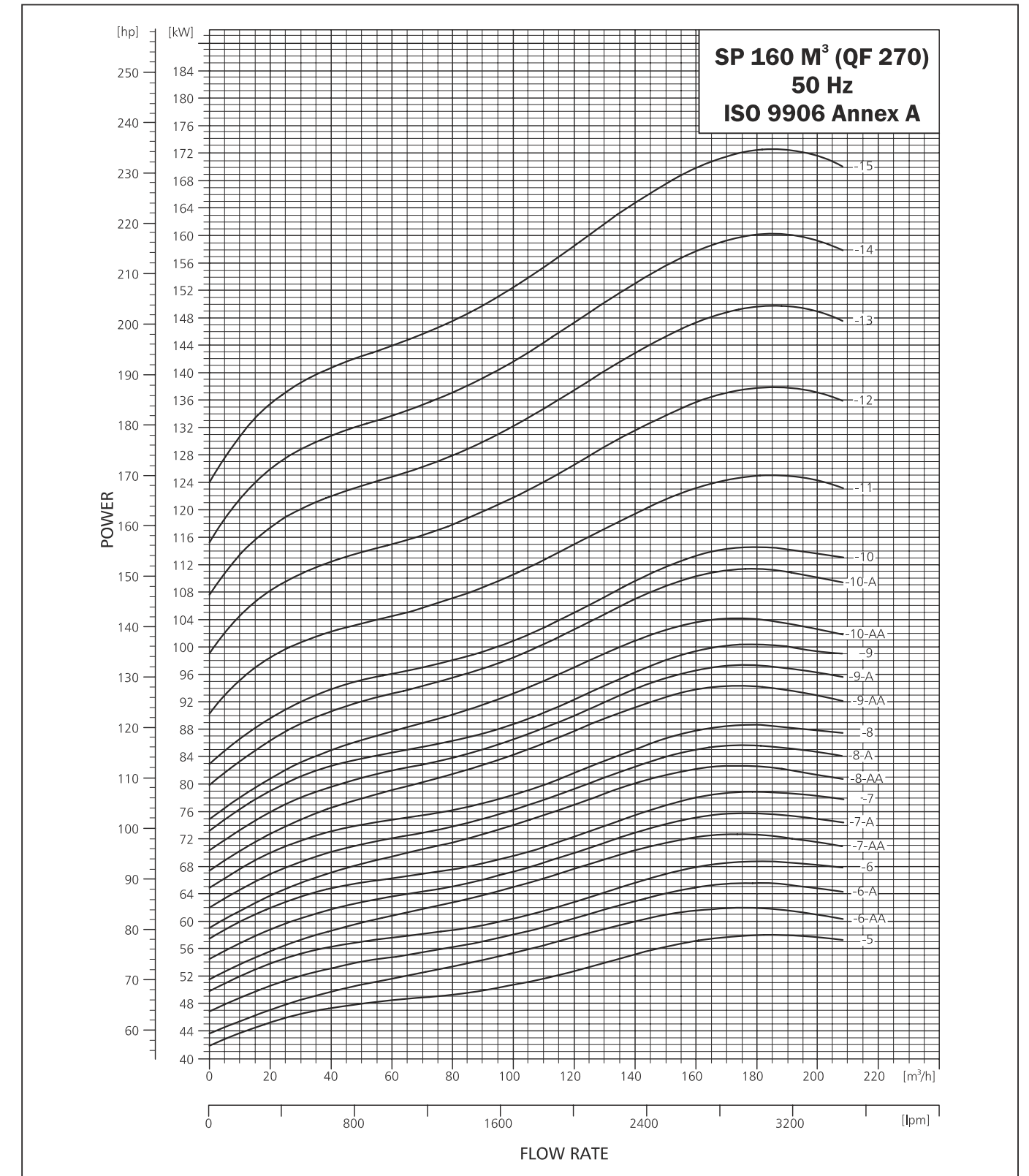


SUBMERSIBLE PUMP QF 270



PERFORMANCE CURVE OF SUBMERSIBLE PUMP

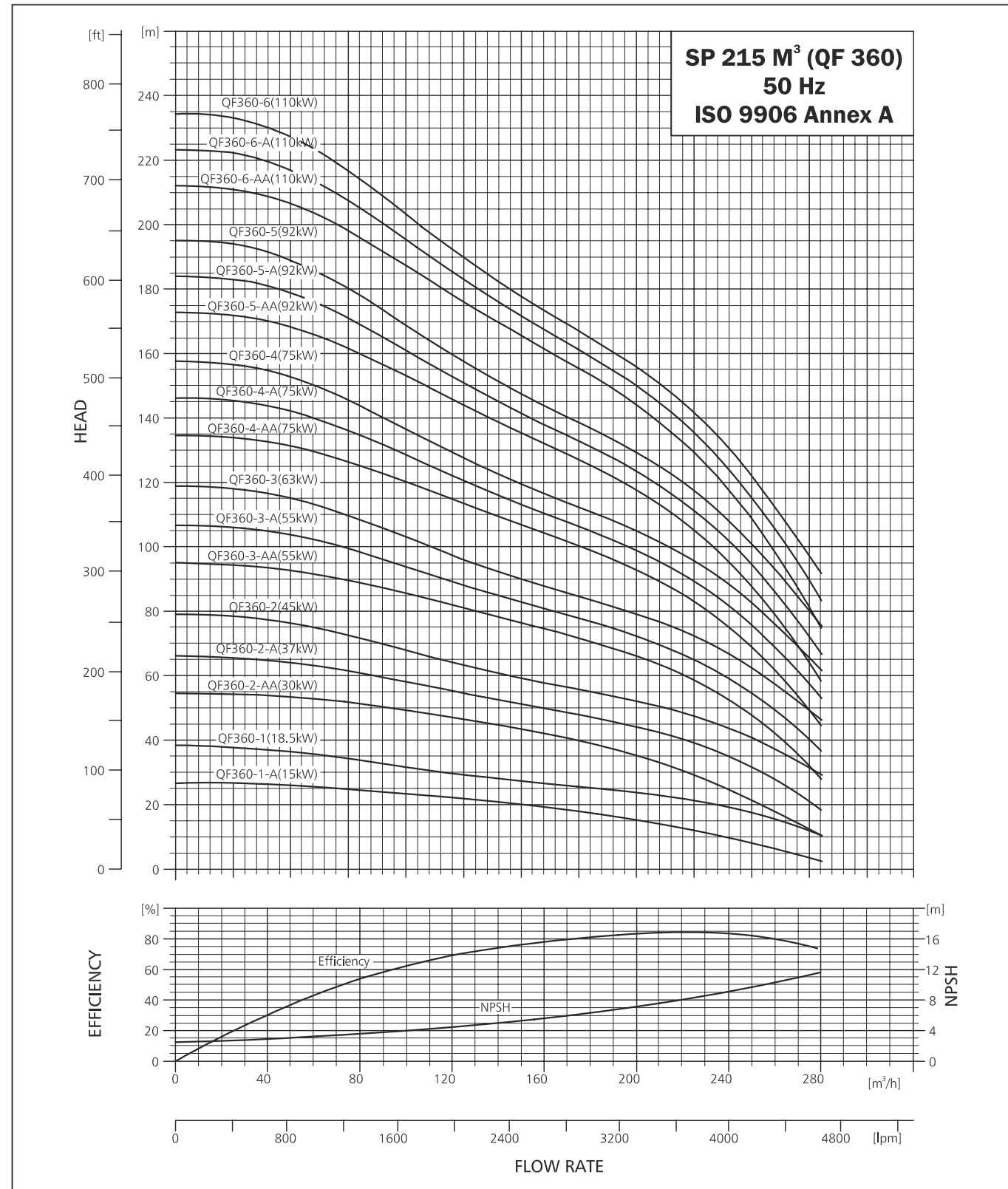
SUBMERSIBLE PUMP QF 270



PERFORMANCE CURVE OF SUBMERSIBLE PUMP

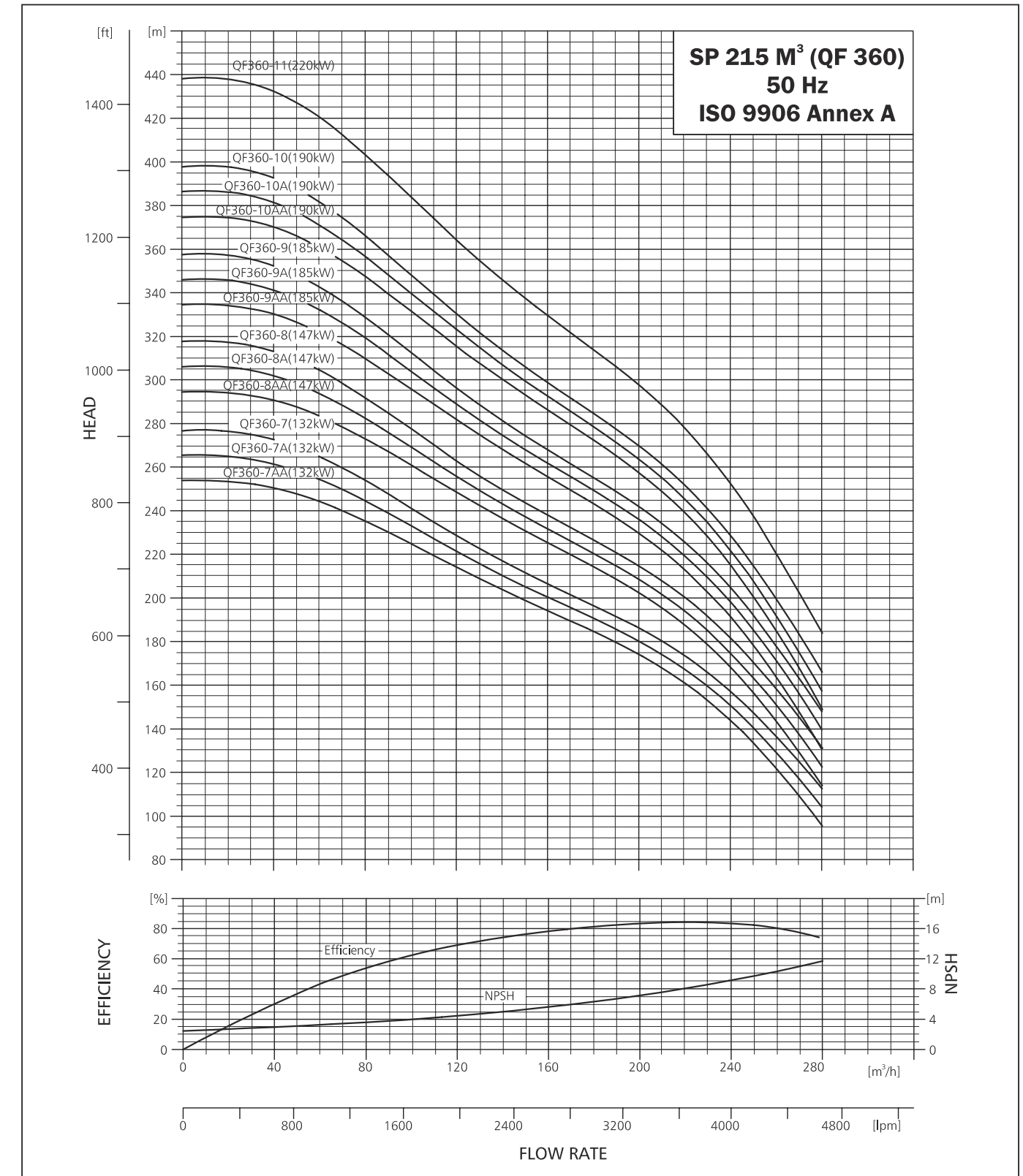


SUBMERSIBLE PUMP QF 360



PERFORMANCE CURVE OF SUBMERSIBLE PUMP

SUBMERSIBLE PUMP QF 360

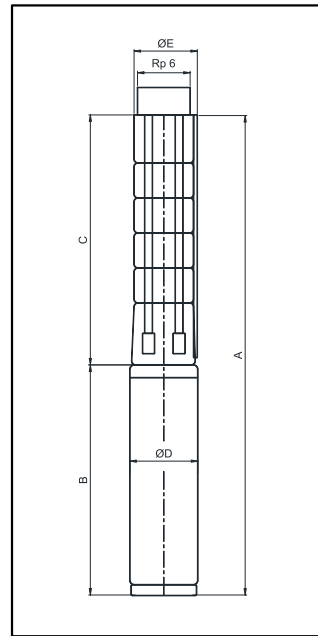


TECHNICAL DATA OF SUBMERSIBLE PUMP



SUBMERSIBLE PUMP QF 360

DIMENSIONS AND WEIGHTS



TECHNICAL DATA OF 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	6"MTSF	15	1482	608	241	247	1482	608	241	247	874	143	28	66
QF360-1	6"MTSF	18.5	1527	608	241	247	1527	608	241	247	919	143	28	70
QF360-2-AA	6"MTSF	30	1998	784	241	247	1998	784	241	247	1214	143	56	100
QF360-2-AA	8"MTSF	30	1924	784	241	247	1924	784	241	247	1140	195	56	140
QF360-2-A	8"MTSF	37	1924	784	241	247	1924	784	241	247	1140	195	56	140
QF360-2	8"MTSF	45	2014	784	241	247	2014	784	241	247	1230	195	56	156
QF360-3-AA	8"MTSF	55	2300	960	241	247	2300	960	241	247	1340	195	84	179
QF360-3-A	8"MTSF	55	2300	960	241	247	2300	960	241	247	1340	195	84	179
QF360-3	8"MTSF	63	2430	960	241	247	2430	960	241	247	1470	195	84	198
QF360-4-AA	8"MTSF	75	2696	1136	241	247	2696	1136	241	247	1560	195	111	215
QF360-4-A	8"MTSF	75	2696	1136	241	247	2696	1136	241	247	1560	195	111	215
QF360-4	8"MTSF	75	2696	1136	241	247	2696	1136	241	247	1560	195	111	215
QF360-5-AA	8"MTSF	92	3052	1312	241	247	3052	1312	241	247	1740	195	139	247
QF360-5-A	8"MTSF	92	3052	1312	241	247	3052	1312	241	247	1740	195	139	247
QF360-5	8"MTSF	92	3052	1312	241	247	3052	1312	241	247	1740	195	139	247
QF360-6-AA	10"MTSF	110	4249	1488	241	247	4249	1488	241	247	2761	237	167	315
QF360-6-A	10"MTSF	110	4249	1488	241	247	4249	1488	241	247	2761	237	167	315
QF360-6	10"MTSF	110	4249	1488	241	247	4249	1488	241	247	2761	237	167	315
QF360-7-AA	10"MTSF	132	4685	1664	241	247	-	-	-	-	3021	237	195	362
QF360-7-A	10"MTSF	132	4685	1664	241	247	-	-	-	-	3021	237	195	362
QF360-7	10"MTSF	132	4685	1664	241	247	-	-	-	-	3021	237	195	362
QF360-8-AA	10"MTSF	147	5081	1840	241	247	-	-	-	-	3241	237	223	413
QF360-8-A	10"MTSF	147	5081	1840	241	247	-	-	-	-	3241	237	223	413
QF360-8	10"MTSF	147	5081	1840	276	276	-	-	-	-	3241	237	223	413
QF360-9-AA	10"MTSF	185	5557	2016	276	276	-	-	-	-	3541	237	251	449
QF360-9-A	10"MTSF	185	5557	2016	276	276	-	-	-	-	3541	237	251	449
QF360-9	10"MTSF	185	5557	2016	276	276	-	-	-	-	3541	237	251	449
QF360-10-AA	12" MTSF	190	4172	2192	286	286	-	-	-	-	1980	286	278	632
QF360-10-A	12" MTSF	190	4172	2192	286	286	-	-	-	-	1980	286	278	632
QF360-10	12" MTSF	190	4172	2192	286	286	-	-	-	-	1980	286	278	632
QF360-11	12" MTSF	220	4508	2368	286	286	-	-	-	-	2140	286	306	653

\* Maximum diameter of pump with one motor cable.  
 \*\* Maximum diameter of pump with two motor cable.  
 Motor type may change as per requirement.

TECHNICAL DATA OF SUBMERSIBLE PUMP

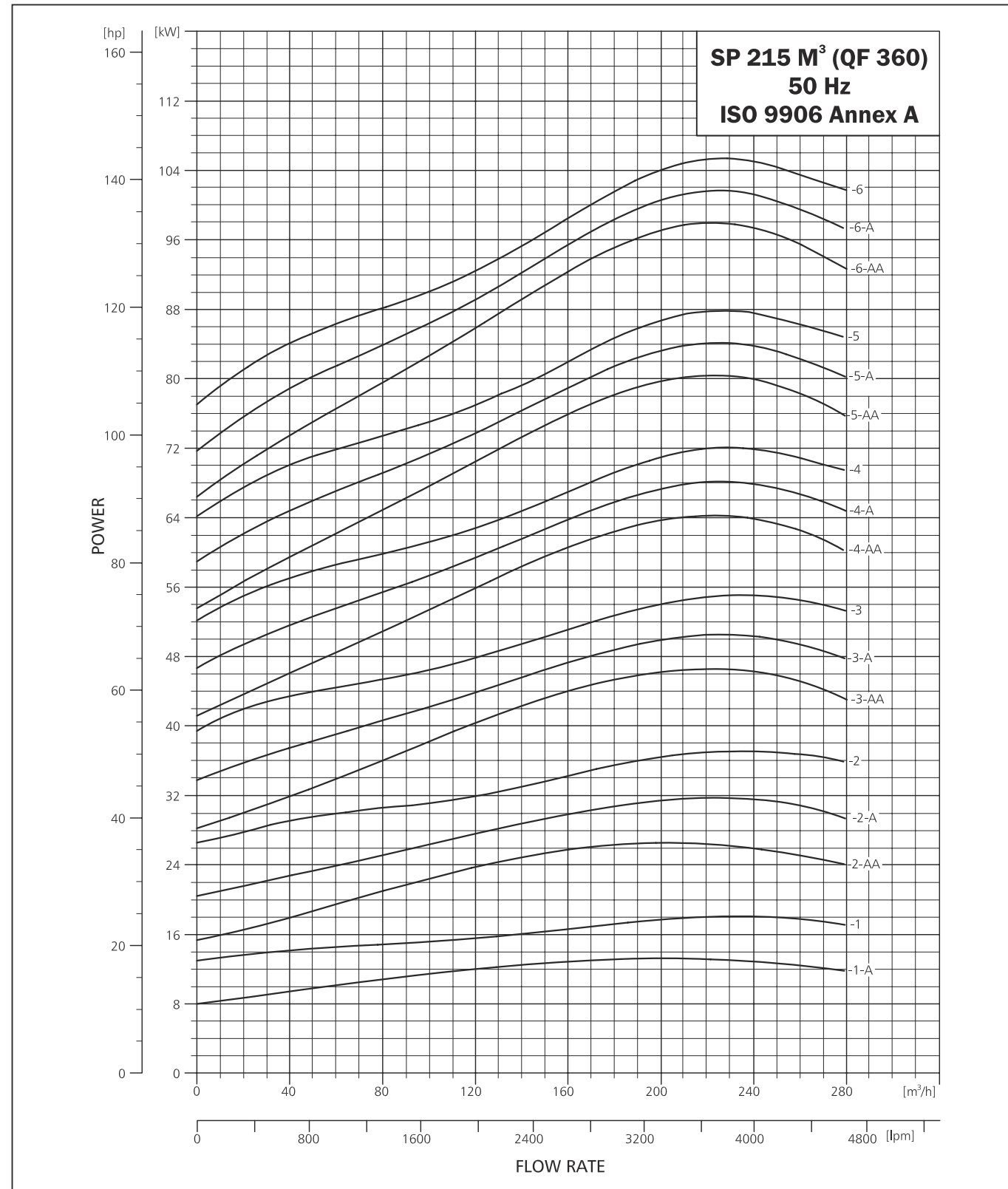
SUBMERSIBLE PUMP QF 360

PERFORMANCE TABLE OF 360																																									
QF-360	MODEL	DISCHARGE (Q)																																							
		MOTOR RATING		TOTAL HEAD IN (m)																																					
		[kW]	[HP]	0	90	110	130	150	170	180	190	200	210	220	230	240	250	260	270	280																					
		15	20	27	24	23	22	20	18	17	16	15	14	13	11	10	8	6	4	3	0	90	110	130	150	170	180	190	200	210	220	230	240	250	260	270	280				
		18.5	25	38	33	31	29	27	26	25	24	24	23	22	21	19	18	16	13	11	0	1500	1833	2167	2500	2833	3000	3167	3333	3500	3667	3833	4000	4167	4333	4500	4667				
		15	20	27	24	23	22	20	18	17	16	15	14	13	11	10	8	6	4	3																					
	QF 360 - 1-A	18.5	25	38	33	31	29	27	26	25	24	24	23	22	21	19	18	16	13	11																					
	QF 360 - 1	30	40	55	50	48	46	43	41	39	37	35	33	31	28	25	21	18	14	11																					
	QF 360 - 2-AA	37	50	66	59	57	54	51	49	47	46	44	42	40	38	35	32	28	23	18																					
	QF 360 - 2-A	45	60	79	70	66	62	59	56	55	54	52	50	49	46	44	41	37	34	19																					
	QF 360 - 2	55	75	95	87	84	80	76	73	71	69	66	63	60	57	53	48	42	36	28																					
	QF 360 - 3-AA	55	75	107	96	92	87	83	79	77	75	72	70	67	63	59	55	49	43	37																					
	QF 360 - 3-A	63	85	119	106	100	95	90	86	84	81	79	77	74	71	67	62	58	52	46																					
	QF 360 - 3	75	100	135	123	117	112	107	102	99	96	93	89	85	80	75	69	62	54	45																					
	QF 360 - 4-AA	75	100	146	132	125	119	113	108	105	102	99	95	91	87	82	76	69	61	53																					
	QF 360 - 4-A	75	100	158	140	133	126	119	114	111	108	105	102	98	93	88	82	76	69	62																					
	QF 360 - 4	92	125	173	157	149	142	135	129	125	122	118	113	108	102	95	88	79	69	59																					
	QF 360 - 5-AA	92	125	184	165	157	149	141	135	131	127	123	119	114	108	102	94	86	77	67																					
	QF 360 - 5-A	92	125	195	173	164	155	148	140	137	133	129	125	120	114	108	101	93	84	76																					
	QF 360 - 5	110	150	212	192	183	174	166	157	153	149	144	139	133	126	118	109	98	87	75																					
	QF 360 - 6-AA	110	150	223	200	190	181	172	163	159	155	150	145	139	132	124	115	105	95	83																					
	QF 360 - 6-A	110	150	234	209	198	187	178	169	165	160	156	151	145	138	130	122	112	102	92																					
	QF 360 - 6	132	177	254	230	220	209	199	190	185	180	174	168	161	153	144	134	122	109	96																					
	QF 360 - 7-AA	132	177	265	239	227	216	205	196	191	186	180	174	167	159	151	141	129	117	104																					
	QF 360 - 7-A	132	177	277	248	235	223	212	202	197	192	186	180	174	166	157	147	137	125	113																					
	QF 360 - 7	147	204	295	267	255	242	231	220	214	209	202	195	188	179	168	157	144	129	114																					
	QF 360 - 8-AA	147	204	306	276	263	249	237	226	221	215	209	202	194	185	175	164	151	137	123																					
	QF 360 - 8-A	147	204	318	285	270	256	244	232	227	221	215	208	200	192	182	171	158	145	131																					
	QF 360 - 8	185	252	334	303	289	275	262	249	243	237	230	222	213	203	191	178	164	148	131																					
	QF 360 - 9-AA	185	252	346	312	297	282	268	256	249	243	236	228	219	209	198	185	171	156	140																					
	QF 360 - 9-A	185	252	358	321	305	289	275	262	255	249	242	234	226	216	205	192	179	164	148																					
	QF 360 - 9	190	260	375	340	324	308	293	279	272	265	257	249	239	228	215	201	185	168	149	</																				

PERFORMANCE CURVE OF SUBMERSIBLE PUMP

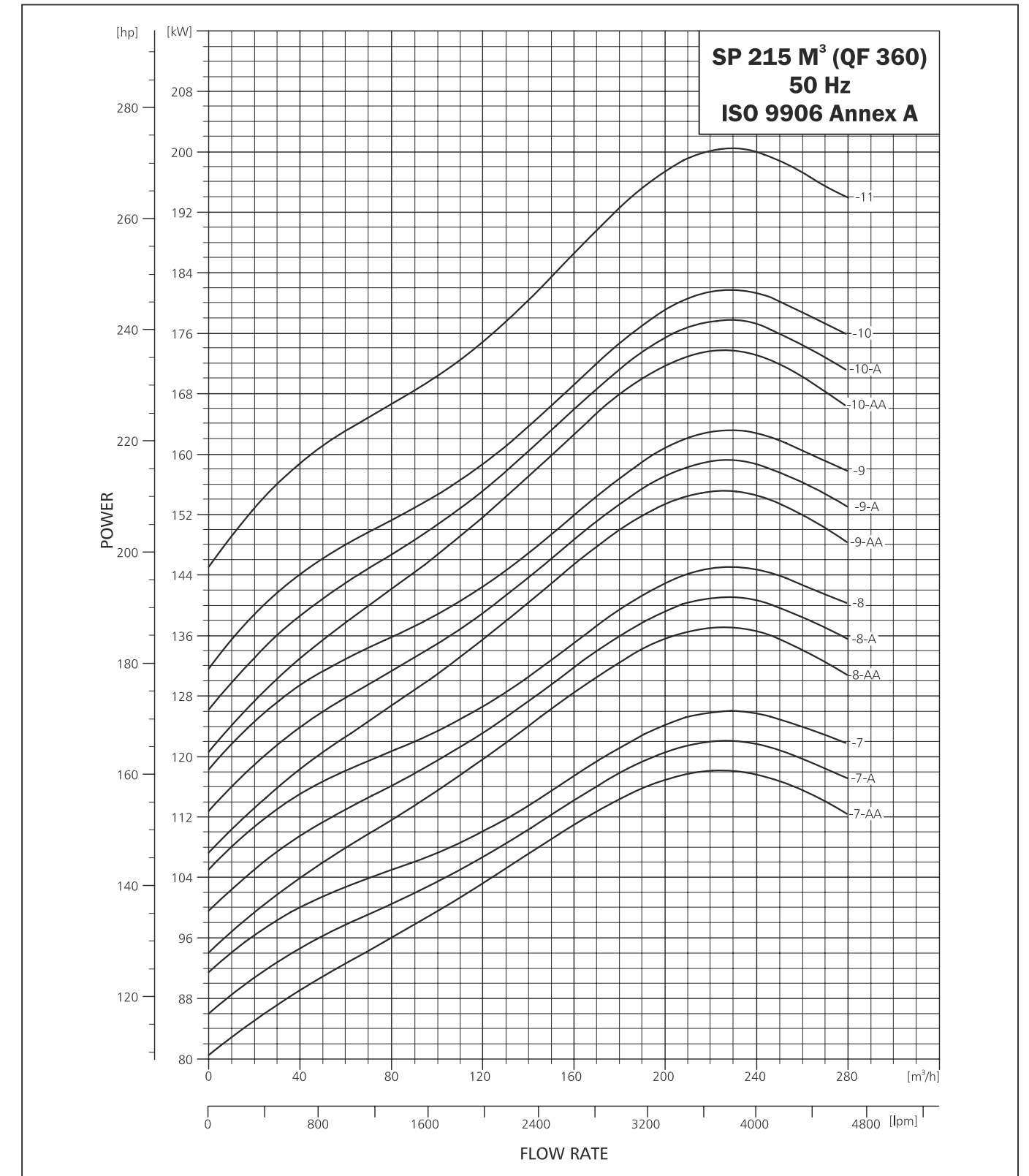


SUBMERSIBLE PUMP QF 360



PERFORMANCE CURVE OF SUBMERSIBLE PUMP

SUBMERSIBLE PUMP QF 360





SSP GENERAL DATA (SSP 270, SSP300, SSP 360)

14" WELL SIZE

Models

- SSP 270 (SP 270 G m<sup>3</sup>/h)
- SSP 300 (SP 300 G m<sup>3</sup>/h)
- SSP 360 (SP 360 G m<sup>3</sup>/h)

Operating Condition

- Flow Rate, Q - 24 - 430 m<sup>3</sup>/h
- Head, H - Max. 410 meter

Material

- Diffuser - Cast Iron
- Impeller - Bronze



PUMP RANGE

Type	SSP 270	SSP 300	SSP360
Cast Iron	+	+	+
DIN Connection	DIN 175	DIN 175	DIN 175

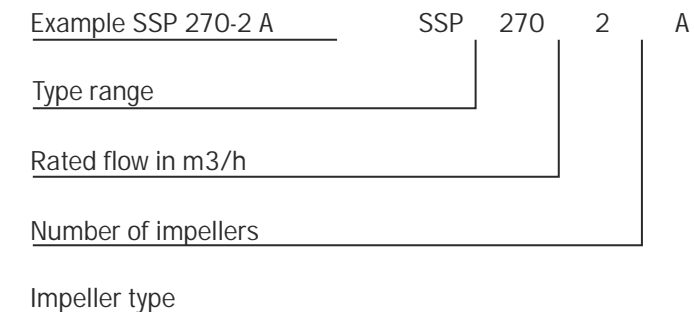
MOTOR RANGE

Motor Output 1kW]	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 auto transformer 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/m<sup>3</sup>

OPERATING CONDITIONS

- Flow Rate, Q : 24-430 m<sup>3</sup>/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

FEATURES & 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 m<sup>3</sup>/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

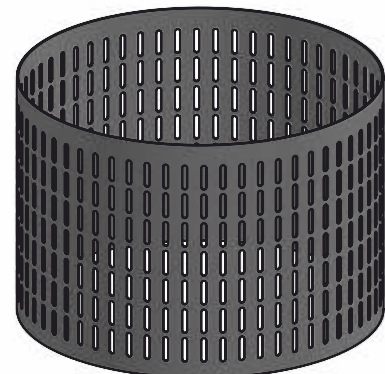
Bearings with sand channels

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)

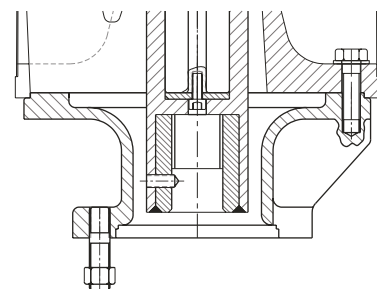
The inlet strainer prevents particles over a certain size from entering and damaging the pump.



(Fig. no. 1)

PROTECTION AGAINST UPTHURST (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.



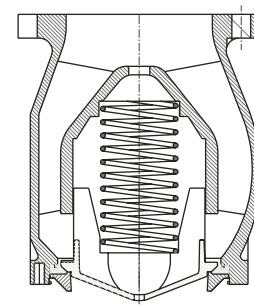
(Fig. no. 2)

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)

NECK RING (Fig. no.4)

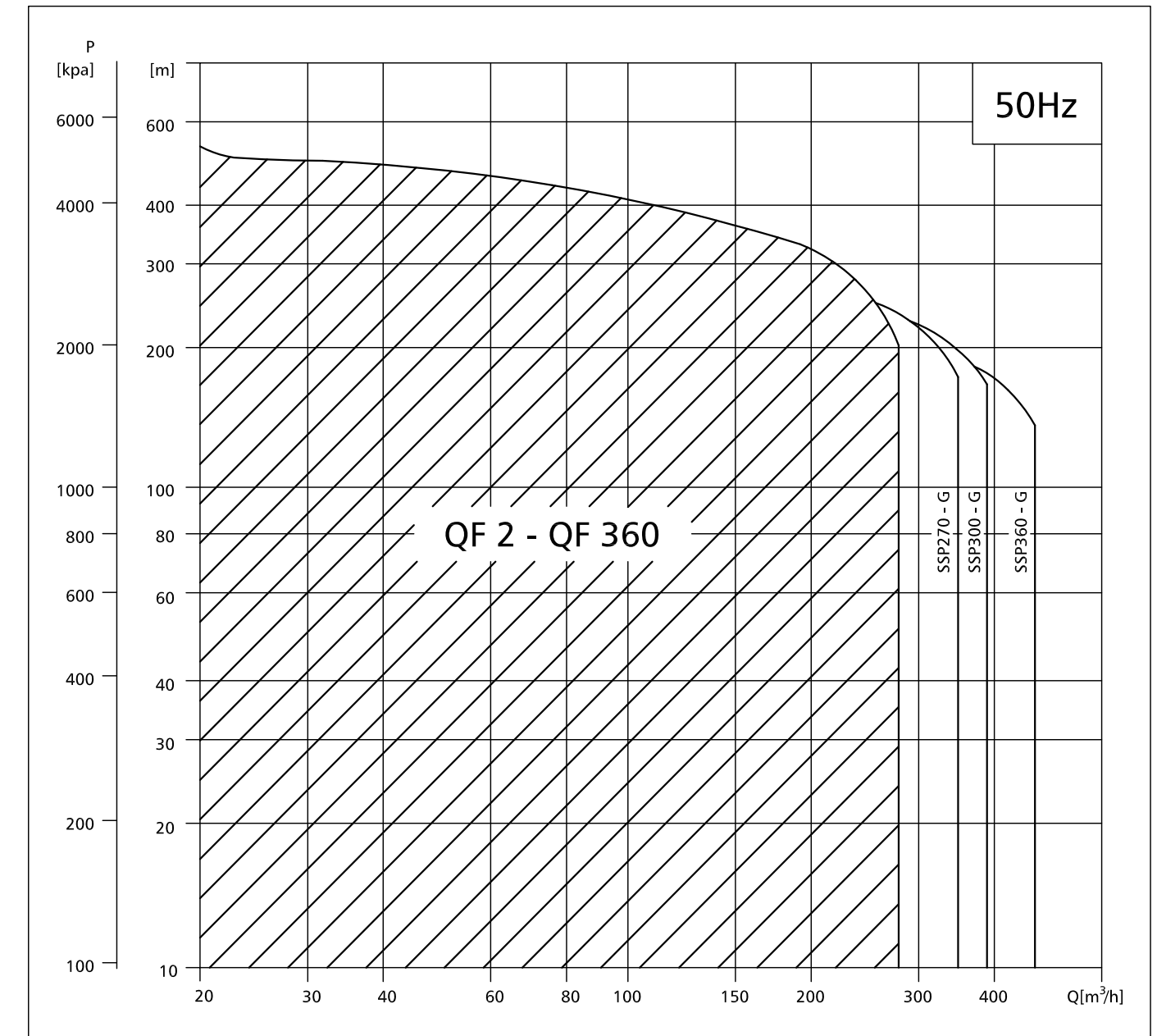
All pumps have a replaceable neck ring in each chamber.

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



(Fig. no. 4)

PERFORMANCE RANGE

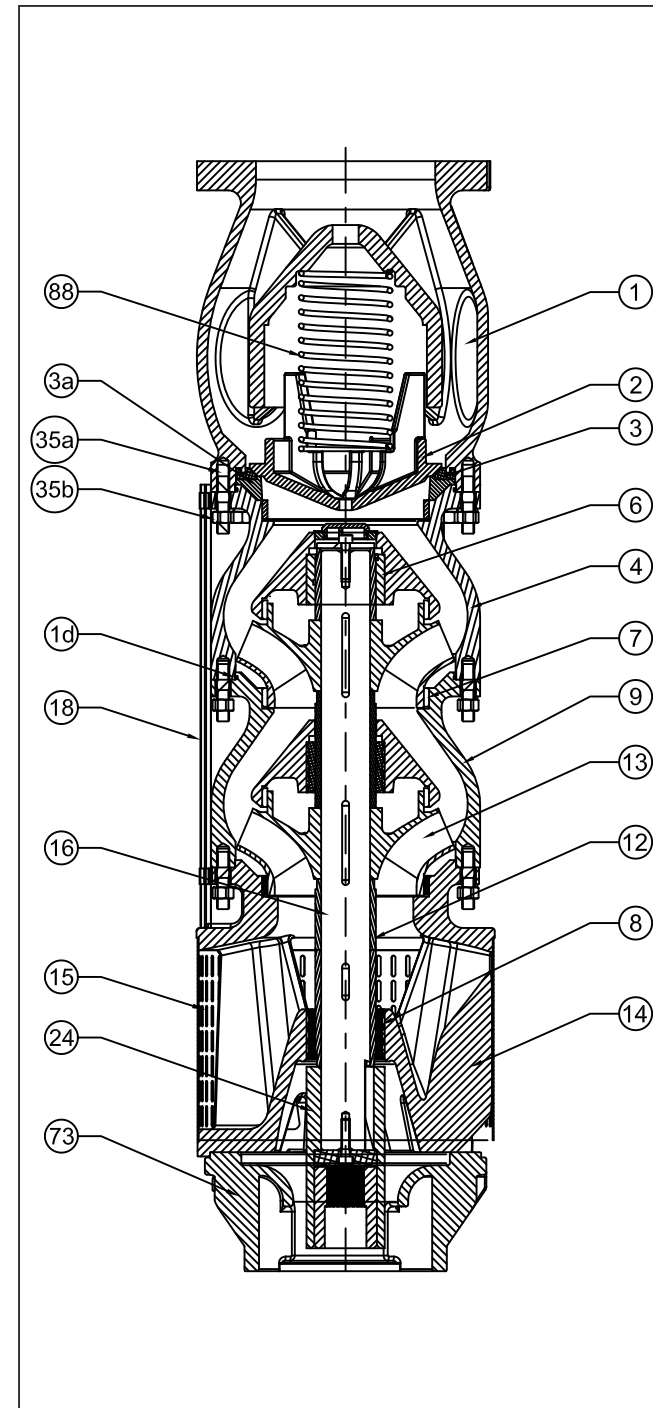


SUBMERSIBLE PUMP SSP-270

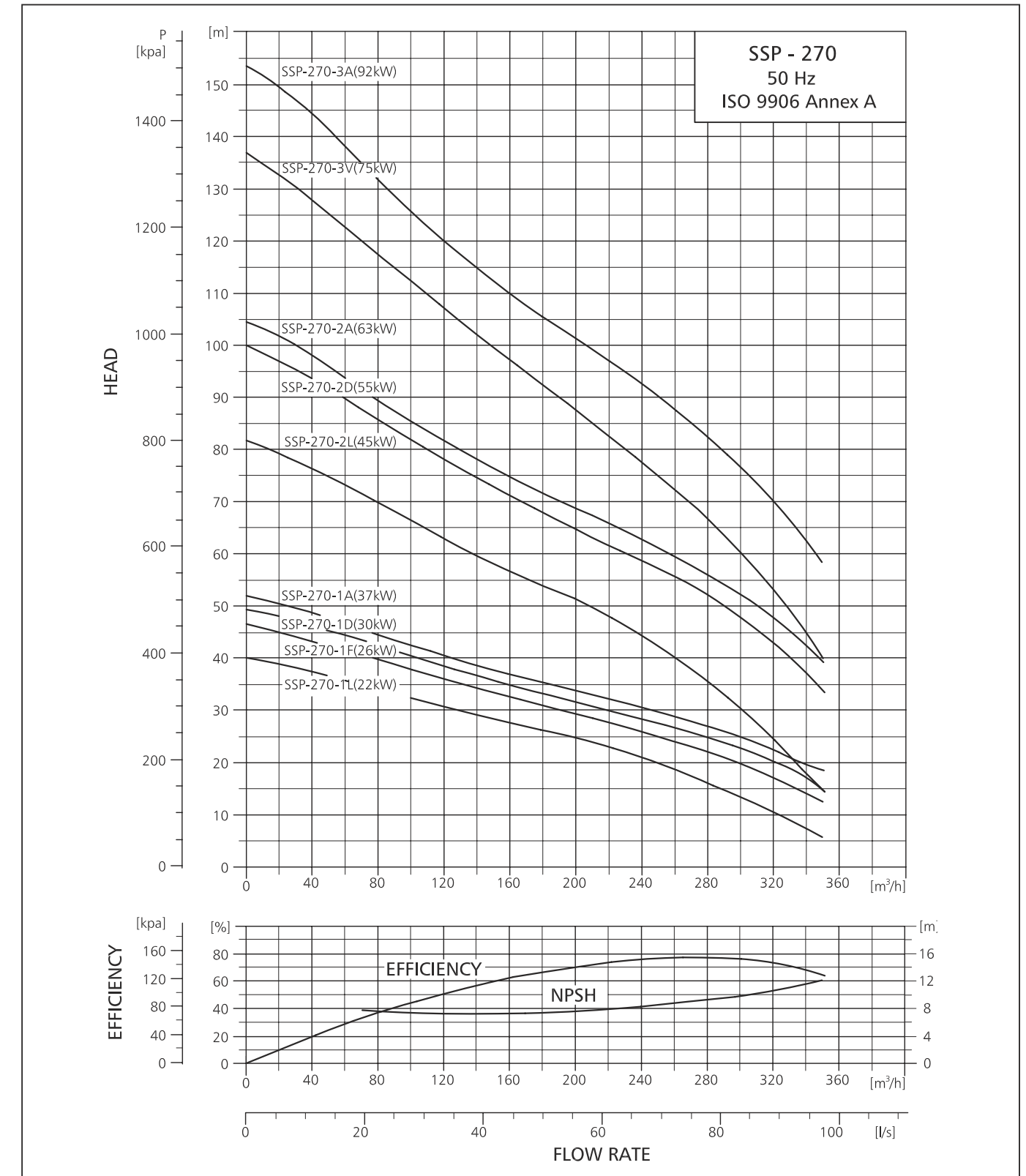
MATERIAL SPECIFICATION SSP-270

SR.NO.	DESCRIPTION	MATERIAL	MATERIAL
1	VALVE CASING	CAST IRON	CI-FG-260
1d	BOWL O-RING	RUBBER	NBR
2	VALVE CUP	BRONZE	LBT-2
3	VALVE SEAT	RUBBER	NBR
3a	VALVE SEAT RETAINER	BRONZE	LBT-2
4	TOP CHAMBER	CAST IRON	CI-FG-260
6	TOP BEARING BUSH	BRONZE	LBT-4
7	WEARING RING	BRONZE	LBT-4
8	BEARING BUSH	SS+RUBBER	SS-304+NBR
9	INTER CHAMBER	CAST IRON	CI-FG-260
12	BEARING SLEEVE	STAINLESS STEEL	AISI SS-304
13	IMPELLER	BRONZE	LBT-2
14	SUCTION INTERCONNECTOR	CAST IRON	CI-FG-260
15	STRAINER	STAINLESS STEEL	AISI SS-304
16	SHAFT	STAINLESS STEEL	DUPLEX
18	CABLE GUARD	STAINLESS STEEL	AISI SS-304
24	COUPLING	STAINLESS STEEL	AISI SS-304
35a	STUD	STAINLESS STEEL	AISI SS-304
35b	NUT	STAINLESS STEEL	AISI SS-304
73	SUCTION CASE ADOPTER	CAST IRON	CI-FG-260

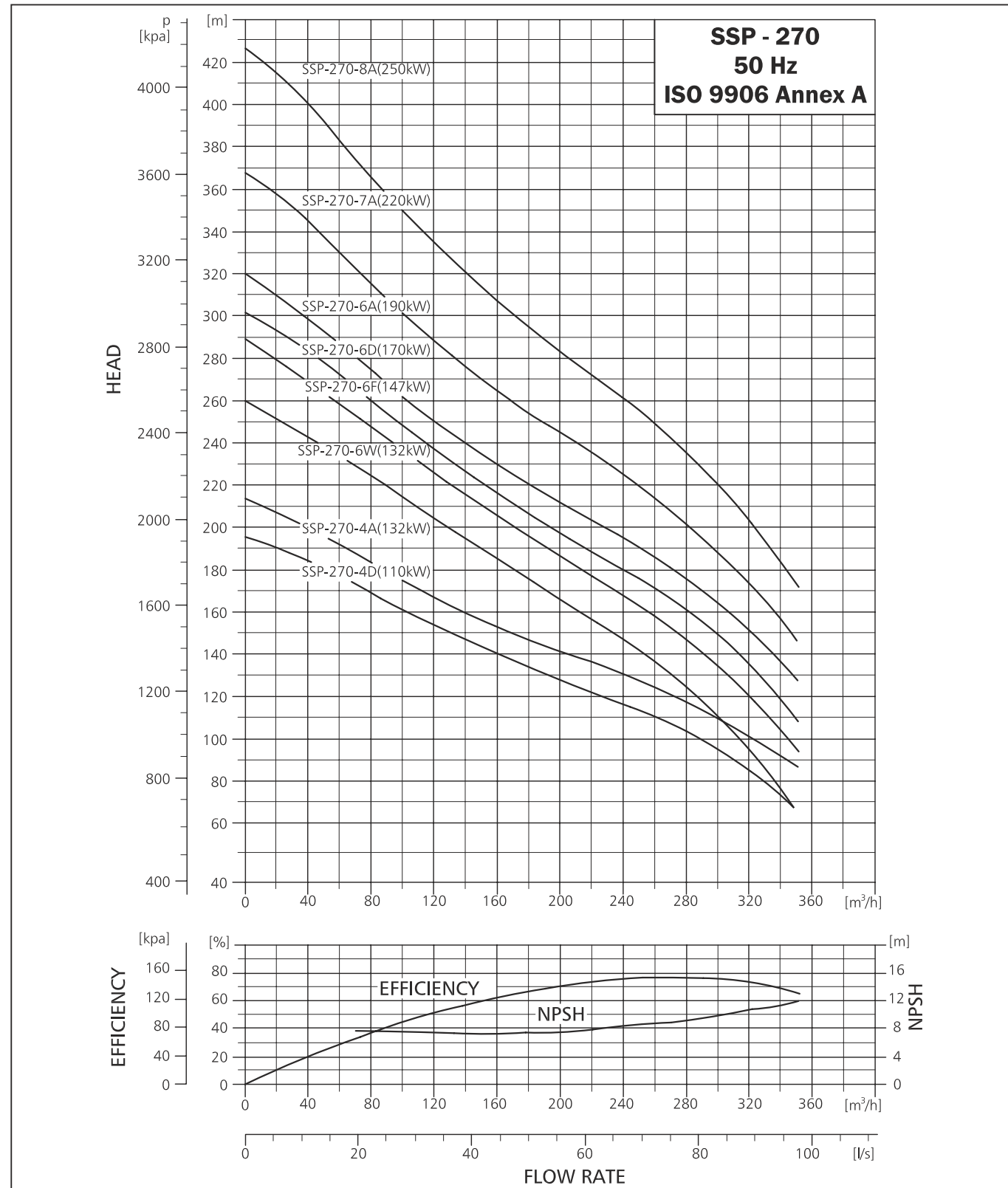
SECTION VIEW SSP-270 PUMP ASSLY



SUBMERSIBLE PUMP SSP-270



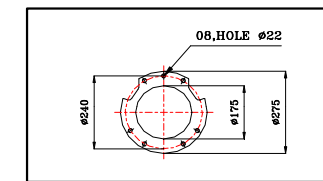
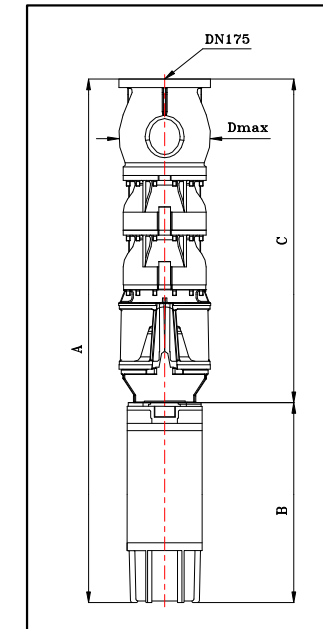
SUBMERSIBLE PUMP SSP-270



SUBMERSIBLE PUMP SSP-270

DIMENSIONS AND WEIGHTS

SUBMERSIBLE PUMPS SSP-270



PUMP TYPE	MOTOR		DIMENSIONS (MM)				NET WEIGHT (KG) PUMPS SET
	TYPE	POWER (kW)	A	B	C	D	
SSP 270-1L	8"MTSF C	22	885	1040	1925	285	266
SSP 270-1F	8"MTSF C	26	885	1140	2025	285	274
SSP 270-1D	8"MTSF C	30	885	1140	2025	285	286
SSP 270-1A	8"MTSF C	37	885	1140	2025	285	296
SSP 270-2L	8"MTSF C	45	1065	1230	2295	285	342
SSP 270-2D	8"MTSF C	55	1065	1340	2405	285	357
SSP 270-2A	8"MTSF C	63	1065	1470	2535	285	383
SSP 270-3V	8"MTSF C	75	1245	1560	2805	285	427
SSP 270-3A	8"MTSF C	93	1245	1740	2985	285	473
SSP 270-4D	10"MTSF	110	1425	2761	4186	285	605
SSP 270-4A	10"MTSF	132	1425	3021	4446	285	655
SSP 270-6W	10"MTSF	132	1785	3021	4806	285	705
SSP 270-6F	10"MTSF	147	1785	3241	5026	285	770
SSP 270-6D	10"MTSF	185	1785	3541	5326	285	890
SSP 270-6A	10"MTSF	185	1785	3541	5326	285	935
SSP 270-7A	12"MTSF	220	1965	1893	3858	285	1010
SSP 270-8A	12"MTSF	250	2145	1893	4038	285	1100

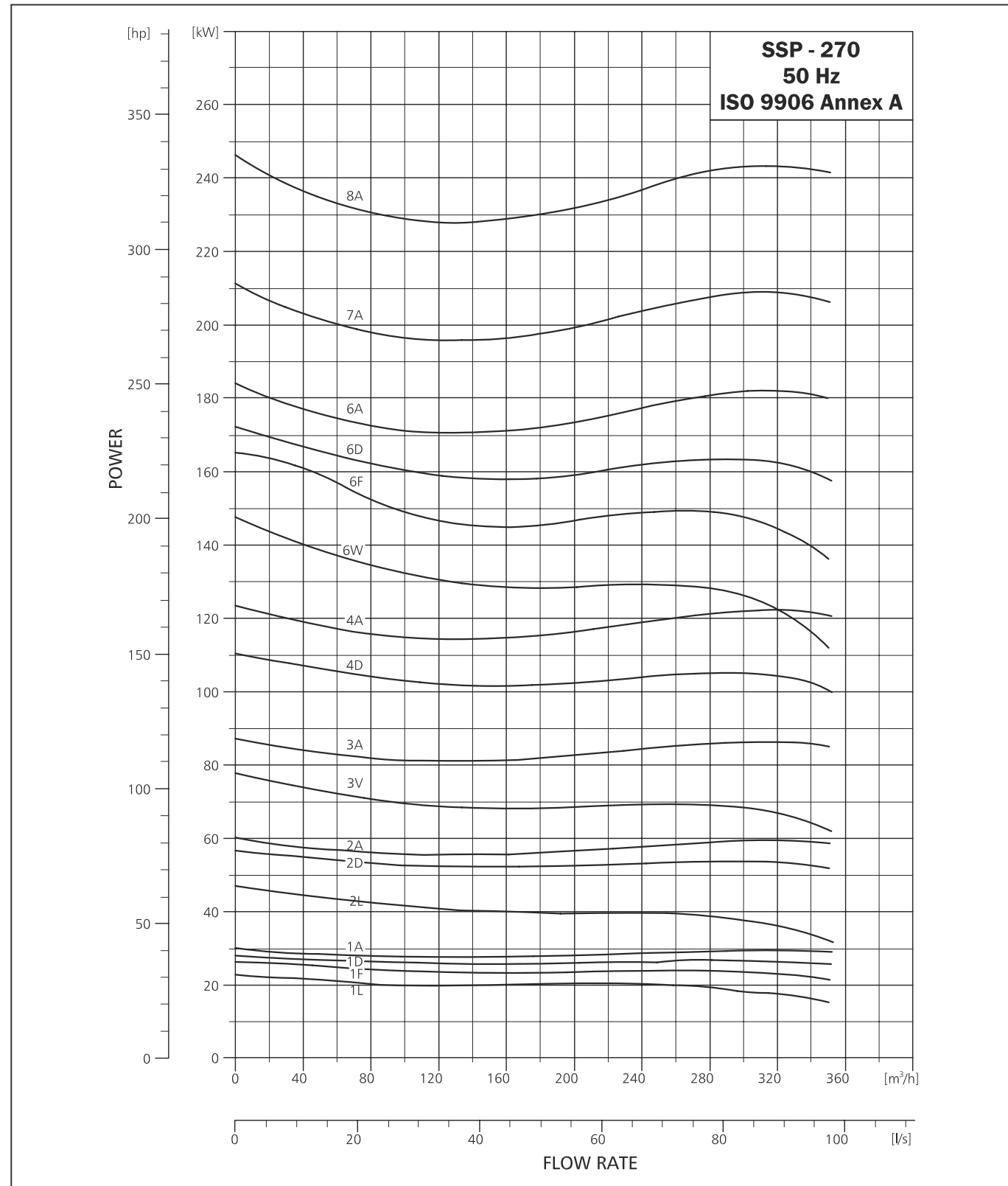
PERFORMANCE TABLE SSP-270											
SSP-270		DISCHARGE (Q)									
		m³/h	0	40	80	120	160	200	240	280	320
		l/min.	0	668	1336	2004	2672	3340	4008	4676	5344
MODEL	MOTOR RATING		TOTAL HEAD IN (m)								
	[kW]	[HP]									
SSP270-1 L	22	30	41	38	34	30	28	25	21	17	10
SSP270-1F	26	35	47	44	40	37	33	30	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	75	98	92	85	77	70	63	58	51	42
SSP270-2A	63	85	103	96	88	80	73	68	62	55	46
SSP270-3V	75	100	136	128	117	106	96	87	73	67	51
SSP270-3A	92	125	155	145	133	121	111	102	93	83	71
SSP270-4D	110	150	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	185	252	296	277	255	234	213	194	177	158	132
SSP270-6A	185	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



PERFORMANCE CURVE

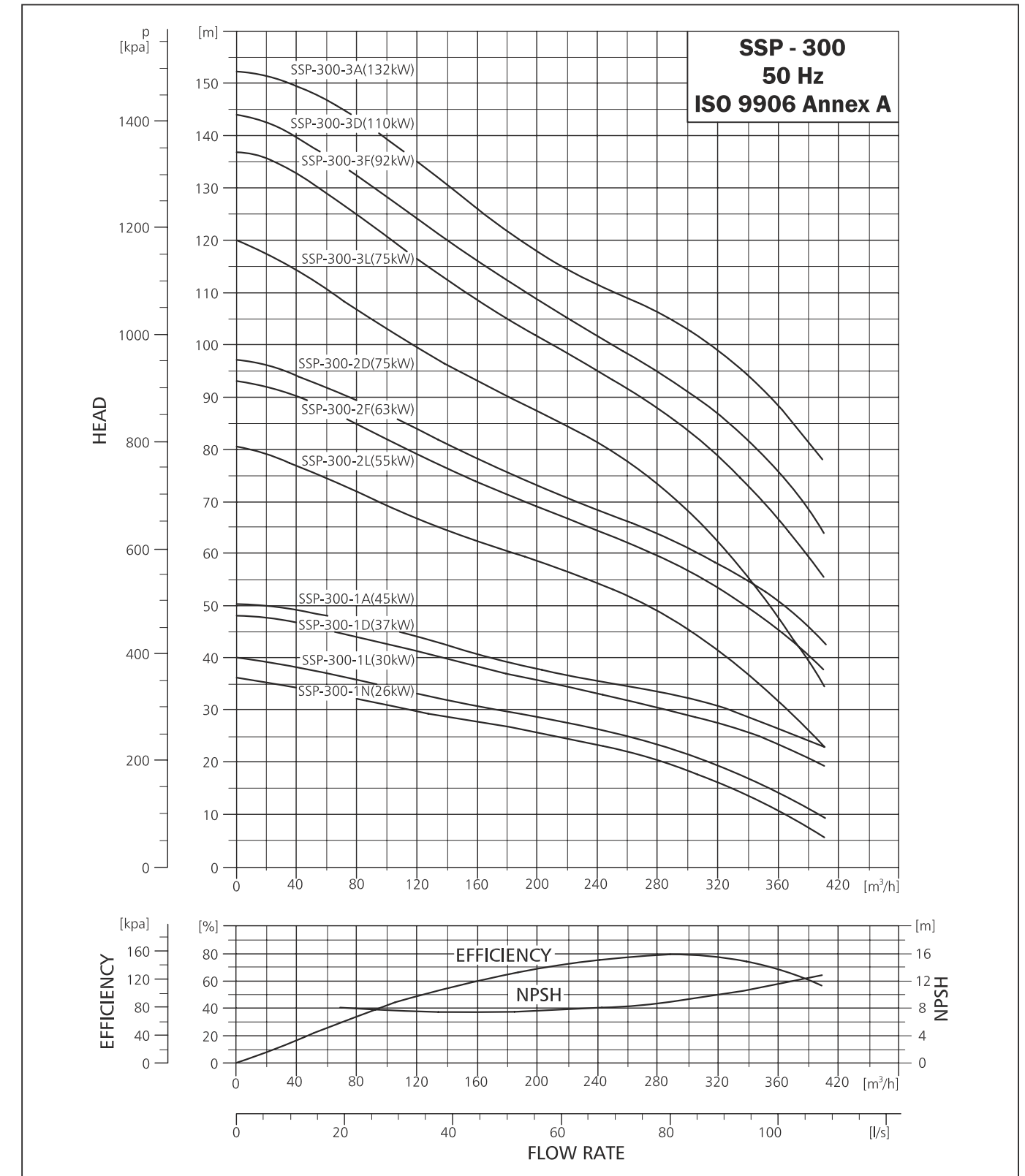


SUBMERSIBLE PUMP SSP-270

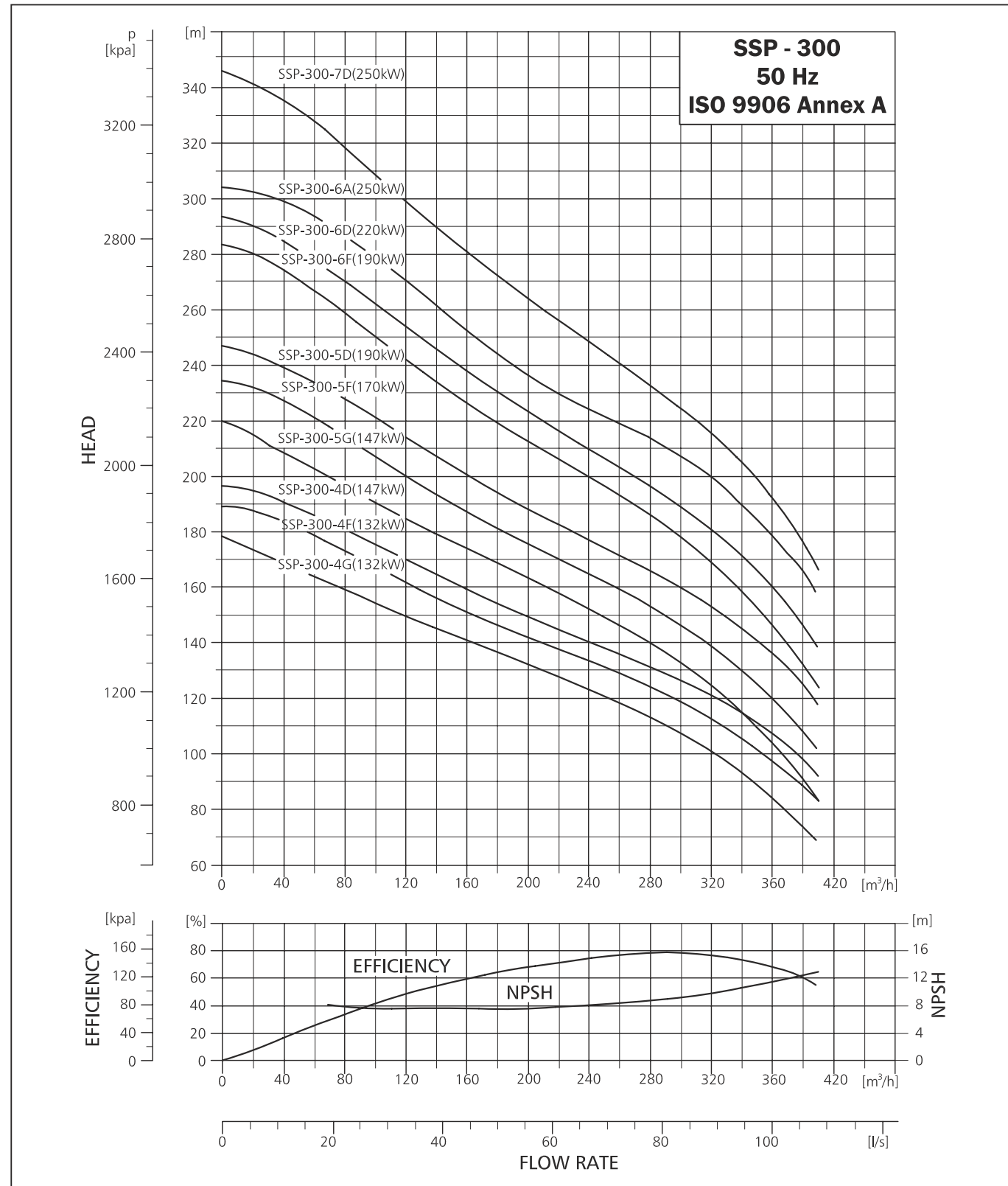


PERFORMANCE CURVE

SUBMERSIBLE PUMP SSP-300



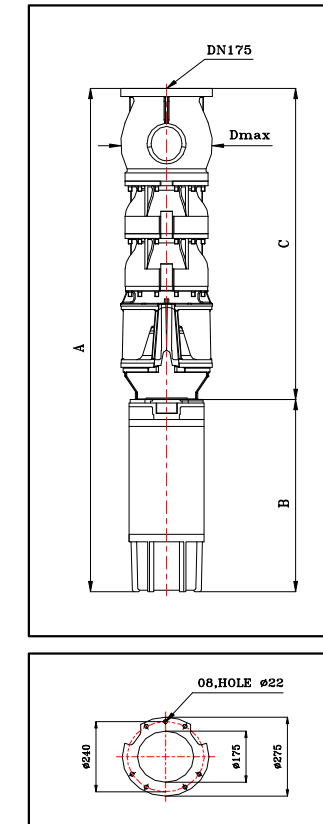
SUBMERSIBLE PUMP SSP-300



SUBMERSIBLE PUMP SSP-300

DIMENSIONS AND WEIGHTS

SUBMERSIBLE PUMPS SSP-300



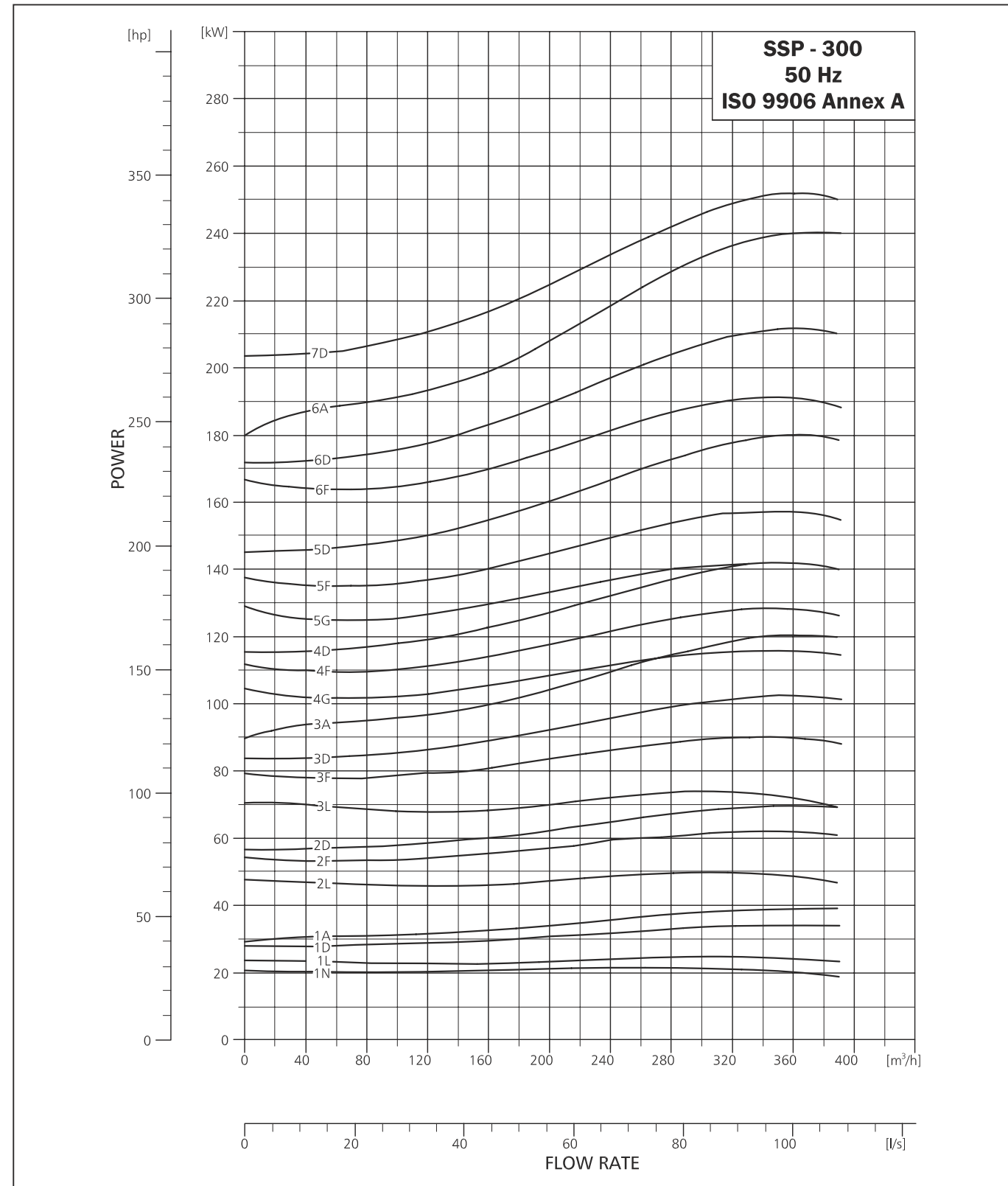
TECHNICAL DATA SSP-300							
PUMP TYPE	MOTOR		DIMENSIONS (MM)				NET WEIGHT (KG) PUMPS SET
	TYPE	POWER (kW)	A	B	C	D	
SSP300-1N	8"MTSF	26	885	1085	1970	192	266
SSP300-1L	8"MTSF	30	885	1140	2025	192	286
SSP300-1D	8"MTSF	37	885	1140	2025	192	296
SSP300-1A	8"MTSF	45	885	1230	2115	192	317
SSP300-2L	8"MTSF	55	1065	1340	2405	192	357
SSP300-2F	8"MTSF	63	1065	1470	2535	192	383
SSP300-2D	8"MTSF	75	1065	1560	2625	192	402
SSP300-3L	8"MTSF	75	1245	1560	2805	192	427
SSP300-3F	8"MTSF	92	1245	1740	2985	192	473
SSP300-3D	10"MTSF	110	1245	1529	2774	237	580
SSP300-3A	10"MTSF	132	1245	1659	2904	237	630
SSP300-4G	10"MTSF	132	1425	1659	3084	237	655
SSP300-4F	10"MTSF	132	1425	1659	3084	237	655
SSP300-4D	10"MTSF	147	1425	1769	3194	237	720
SSP300-5G	10"MTSF	147	1605	1769	3374	237	745
SSP300-5F	10"MTSF	185	1605	1919	3524	286	865
SSP300-5D	12"MTSF	185	1605	1743	3348	286	910
SSP300-6F	12"MTSF	185	1785	1743	3528	286	935
SSP300-6D	12"MTSF	220	1785	1743	3528	286	985
SSP300-6A	12"MTSF	250	1785	1893	3678	286	1060
SSP300-7D	12"MTSF	250	1965	1893	3858	286	1085

PERFORMANCE TABLE SSP-300												
SSP-300		DISCHARGE (Q)										
		m³/h	0	40	80	120	160	200	240	280	320	360
		l/min.	0	668	1336	2004	2672	3340	4008	4676	5344	6012
MODEL	MOTOR RATING		TOTAL HEAD IN (m)									
	[kW]	[HP]	37	34	32	29	28	26	23	21	16	10
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	75	80	76	71	66	62	58	54	49	41	31
SSP300-2F	63	85	92	89	84	78	73	68	64	59	53	45
SSP300-2D	75	100	93	90	85	79	74	69	65	60	54	46
SSP300-3L	75	100	119	114	106	98	93	87	81	72	62	47
SSP300-3F	92	125	138	134	126	118	110	103	96	89	80	68
SSP300-3D	110	150	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	185	252	231	224	211	197	184	172	162	150	135	116
SSP300-5D	185	255	242	234	222	209	195	183	172	161	148	136
SSP300-6F	185	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

PERFORMANCE CURVE

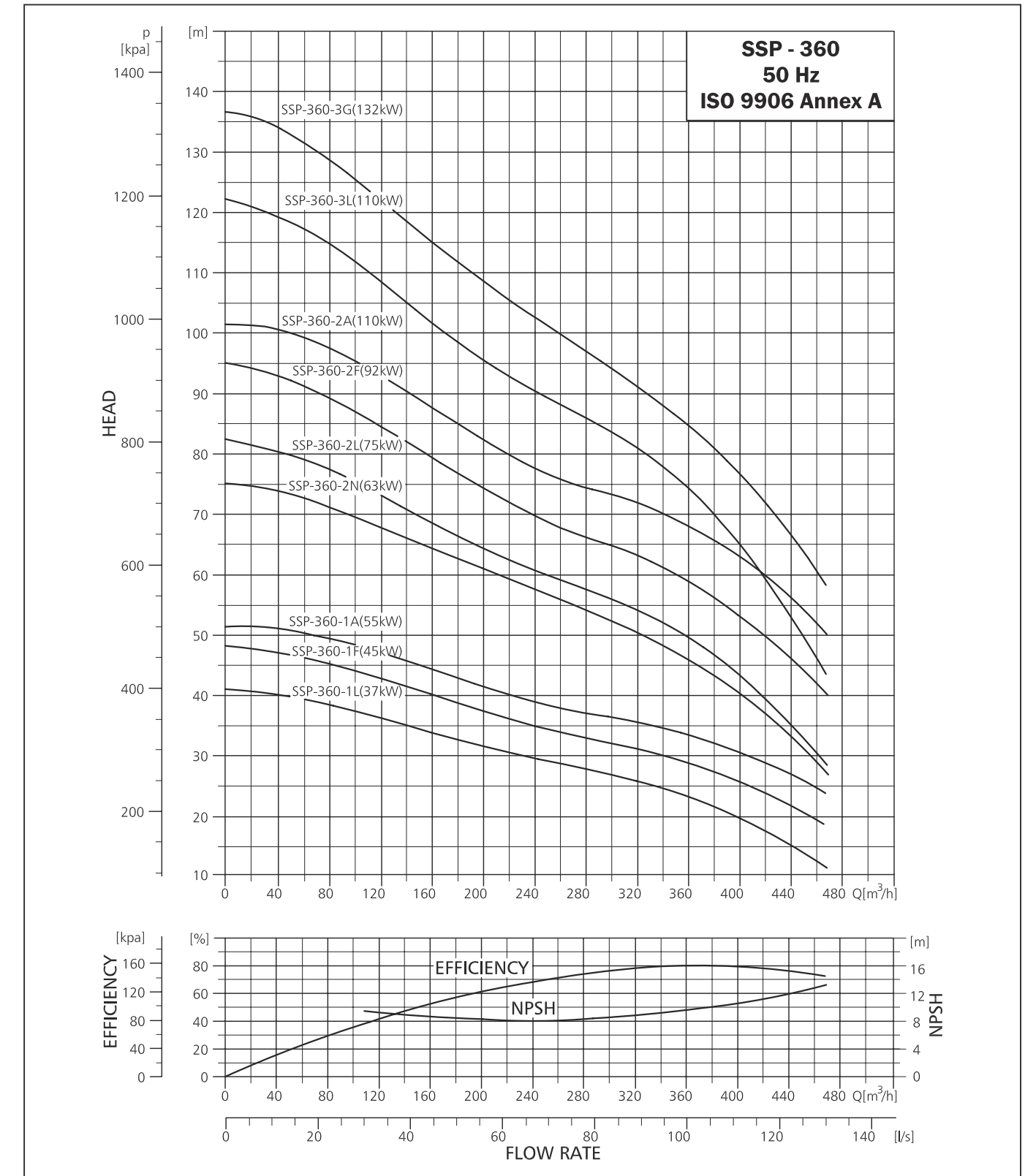


SUBMERSIBLE PUMP SSP-300



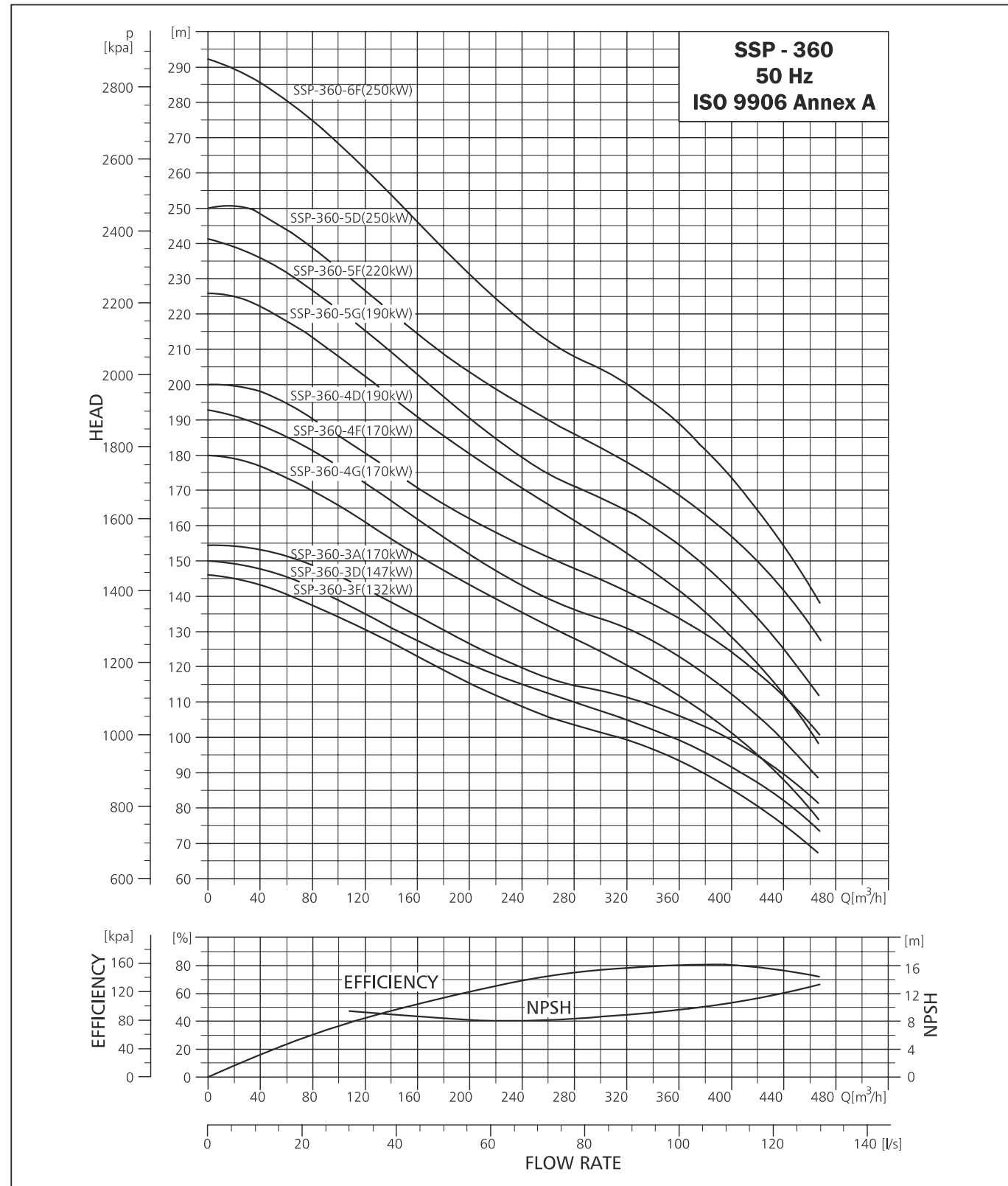
PERFORMANCE CURVE

SUBMERSIBLE PUMP SSP-360



PERFORMANCE CURVE

SUBMERSIBLE PUMP SSP-360

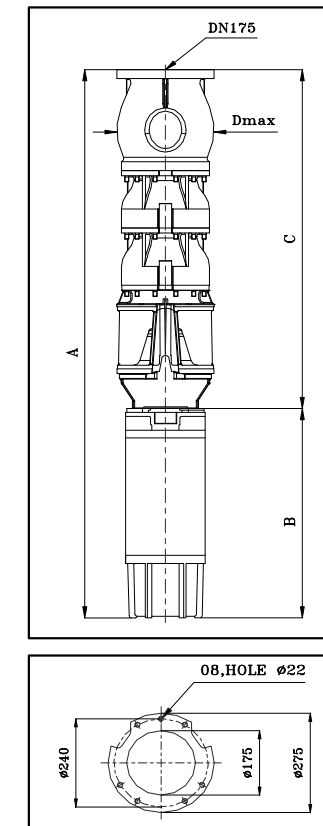


TECHNICAL DATA

SUBMERSIBLE PUMP SSP-360

DIMENSIONS AND WEIGHTS

SUBMERSIBLE PUMPS SSP-360

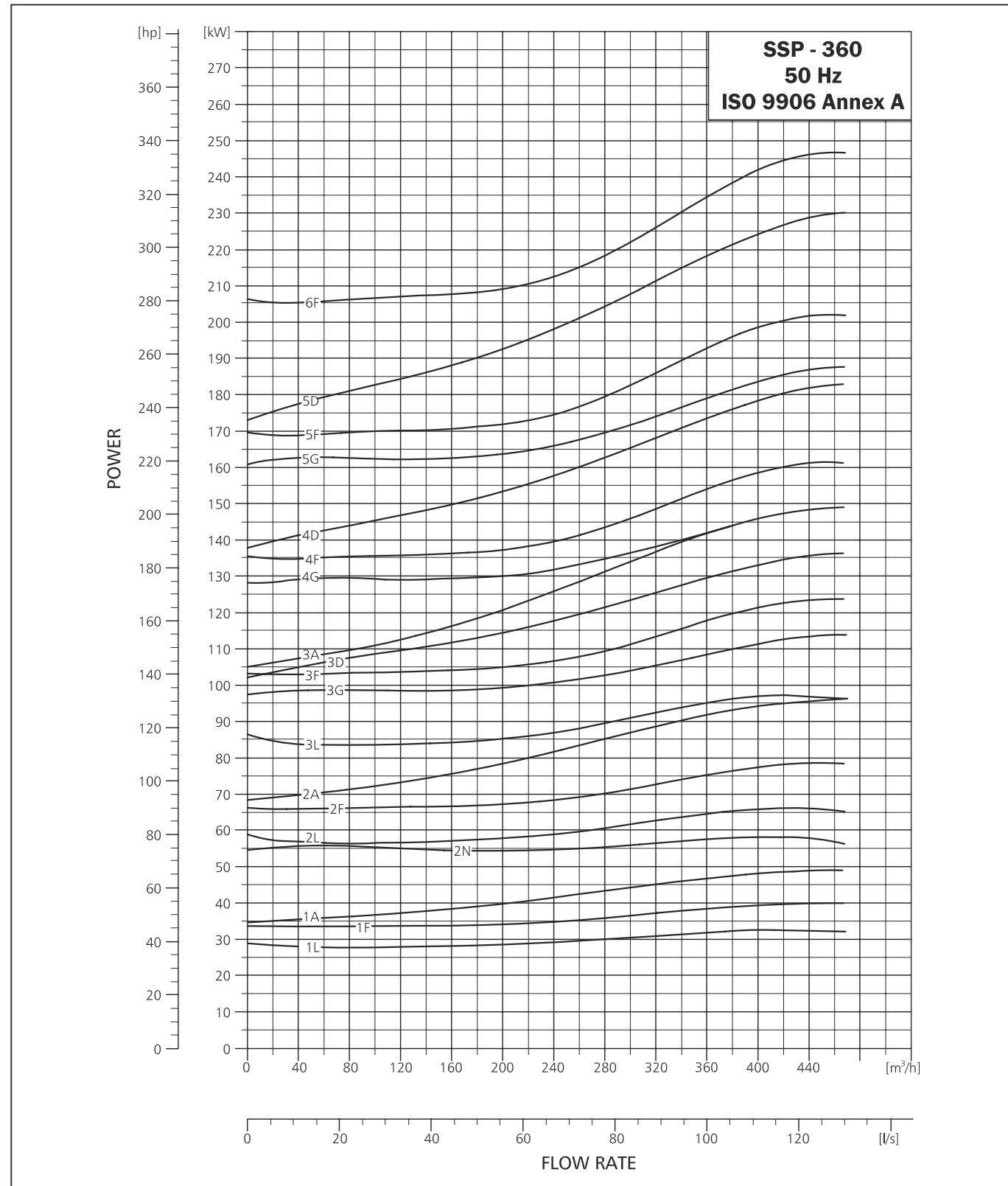


PUMP TYPE	MOTOR		DIMENSIONS (MM)				NET WEIGHT (KG)
	TYPE	POWER (kW)	C	B	A	D	
SSP360-1L	8"MTSF	37	885	1140	2025	285	296
SSP360-1F	8"MTSF	45	885	1230	2115	285	317
SSP360-1A	8"MTSF	55	885	1340	2225	285	332
SSP360-2N	8"MTSF	63	1065	1470	2535	285	383
SSP360-2L	8"MTSF	75	1065	1560	2625	285	402
SSP360-2F	8"MTSF	93	1065	1740	2805	285	448
SSP360-2A	10"MTSF	110	1065	1529	2594	285	498
SSP360-3L	10"MTSF	110	1245	1529	2774	285	523
SSP360-3G	10"MTSF	132	1245	1659	2904	285	630
SSP360-3F	10"MTSF	132	1245	1659	2904	285	630
SSP360-3D	10"MTSF	147	1245	1769	3014	285	695
SSP360-3A	10"MTSF	147	1245	1919	3164	285	805
SSP360-4G	10"MTSF	170	1425	1919	3344	285	840
SSP360-4F	10"MTSF	170	1425	1919	3344	285	840
SSP360-4D	10"MTSF	185	1425	1919	3344	285	885
SSP360-5G	10"MTSF	185	1605	1919	3524	285	910
SSP360-5F	12"MTSF	220	1605	1893	3498	285	1010
SSP360-5D	12"MTSF	250	1605	1893	3498	285	1100
SSP360-6F	12"MTSF	250	1785	1893	3678	285	1210

PERFORMANCE TABLE SSP-360														
SSP-360		DISCHARGE (Q)												
		m³/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	MOTOR RATING	TOTAL HEAD IN (m)												
	[kW]	[HP]												
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	75	51	50	48	47	44	41	38	37	35	33	30	26
SSP360-2N	63	85	74	73	70	67	63	59	56	52	47	42	36	28
SSP360-2L	75	100	82	79	76	73	69	64	60	57	54	49	43	34
SSP360-2F	93	125	96	95	90	85	79	74	70	67	63	59	54	47
SSP360-2A	110	150	102	101	98	93	88	83	78	75	72	68	64	57
SSP360-3L	110	150	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	204	147	146	140	132	125	118	113	108	103	97	89	79
SSP360-3A	147	204	153	152	147	140	132	124	118	113	109	104	97	87
SSP360-4G	170	230	178	174	167	159	150	141	133	126	118	110	99	85
SSP360-4F	170	230	190	188	180	169	158	149	141	135	128	120	110	96
SSP360-4D	185	252	196	194	186	176	167	158	150	144	137	130	120	107
SSP360-5G	185	252	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



SUBMERSIBLE PUMP SSP-360



SINGLE PHASE PERFORMANCE DATA 50 HZ

SINGLE PHASE PERFORMANCE DATA 50 Hz 4" PREMIUM 100																
P <sub>N</sub> [HP]	P <sub>N</sub> [kW]	Thrust F [N]	U <sub>N</sub> [V]	N <sub>n</sub> [min 1]	S.F	I <sub>N</sub> [A]	MAXIMUM [S.F LOAD AMP]	I <sub>A</sub> [A]	(Eff.)[%] at % load			COS (PF.) at % load			T <sub>N</sub> [Nm]	T <sub>A</sub> [Nm]
									50	75	100	50	75	100		
0.5	0.37	1500	230	2890	1.6	B4.2 R3.9 Y1.72	B5.2 R4.9 Y1.72	14.4	51	59	62	0.52	0.6	0.62	2	1.2
0.75	0.55	1500	230	2900	1.5	B4.4 R3.7 Y2.15	B5.8 R5 Y2.15	23.1	52	59	63	0.48	0.59	0.86	2.7	1.8
1	0.75	1500	230	2890	1.4	B6.9 R6.4 Y3.4	B8.3 R7.5 Y3.4	28.3	56	62	64	0.54	0.66	0.73	4.1	2.5
1.5	1.1	3000	230	2890	1.3	B8.2 R7.4 Y3.9	B10 R9.2 Y3.9	39.6	58	65	68	0.59	0.71	0.85	6	3.7
2	1.5	3000	230	2875	1.25	B10.6 R6.9 Y6.0	B12.5 R8.8 Y6.0	53.4	60	66	68	0.71	0.81	0.9	8.3	4.9

\*PERFORMANCE IS TYPICALLY GUARANTEED

SINGLE PHASE PERFORMANCE DATA 50 Hz 4" PREMIUM 101																
P <sub>N</sub> [HP]	P <sub>N</sub> [kW]	Thrust F [N]	U <sub>N</sub> [V]	N <sub>n</sub> [min 1]	S.F	I <sub>N</sub> [A]	MAXIMUM [S.F LOAD AMP]	I <sub>A</sub> [A]	(Eff.)[%] at % load			COS (PF.) at % load			T <sub>N</sub> [Nm]	T <sub>A</sub> [Nm]
									50	75	100	50	75	100		
3	2.2	4000	230	2885	1.15	B14 R9.7 Y6.5	B15.2 R10.9 Y6.5	80.0	61	68	70	0.72	0.82	0.97	14	7.4
4	3	6500	230	2830	1.15	B19 R15.2 Y6.8	B20.0 R16.8 Y6.8	88.0	61	68	72	0.69	0.7	0.95	18	8.2
5	3.7	6500	230	2885	1.15	B22.2 R18 Y7.2	B26.5 R22.1 Y7.2	121	69	75	76	0.9	0.93	0.95	21	12.3

\*PERFORMANCE IS TYPICALLY GUARANTEED

THREE PHASE PERFORMANCE DATA 50 HZ

THREE PHASE PERFORMANCE DATA 50 Hz 4" PREMIUM 100																
P <sub>N</sub> [HP]	P <sub>N</sub> [kW]	Thrust F [N]	U <sub>N</sub> [V]	N <sub>n</sub> [min 1]	S.F	I <sub>N</sub> [A]	MAXIMUM [S.F LOAD AMP]	I <sub>A</sub> [A]	(Eff.)[%]			COS (PF.)			T <sub>N</sub> [Nm]	T <sub>A</sub> [Nm]
									at % load			at % load				
									50	75	100	50	75	100		
0.5	0.37	1500	380	2840	1.6	1.9	1.3	4.4	59	64	66	0.57	0.69	0.76	1.2	2.3
			400	2865	1.6	1.9	1.3	4.7	56	63	66	0.53	0.65	0.7	1.2	2.5
			415	2875	1.6	1.1	1.4	4.9	54	62	66	0.49	0.6	0.76	1.2	2.8
0.75	0.55	1500	380	2830	1.5	1.6	1.9	6.0	61	67	67	0.59	0.72	0.8	1.9	3.1
			400	2855	1.5	1.6	1.9	6.4	58	64	67	0.54	0.67	0.75	1.9	3.5
			415	2870	1.5	1.7	2.0	6.6	55	63	66	0.5	0.63	0.8	1.9	3.7
1	0.75	1500	380	2850	1.4	2.1	2.5	8.9	63	68	70	0.57	0.7	0.79	2.5	4.8
			400	2870	1.4	2.1	2.5	9.3	60	67	69	0.52	0.65	0.75	2.5	5.3
			415	2880	1.4	2.2	2.6	9.8	57	65	68	0.49	0.61	0.71	2.5	5.9
1.5	1.1	3000	380	2820	1.3	3	3.6	13.8	69	72	72	0.59	0.73	0.81	3.8	9.6
			400	2840	1.3	3	3.6	14.5	66	71	73	0.53	0.67	0.76	3.7	10.6
			415	2860	1.3	3.1	3.7	15.3	64	70	72	0.49	0.62	0.72	3.7	11.5
2	1.5	3000	380	2840	1.25	3.9	4.6	18.6	69	72	73	0.59	0.72	0.81	5.0	11.3
			400	2855	1.25	4	4.7	19.2	66	71	73	0.53	0.66	0.76	5.0	12.6
			415	2870	1.25	4.1	4.8	20.2	63	69	72	0.48	0.61	0.72	4.9	13.5

\*PERFORMANCE IS TYPICALLY GUARANTEED

THREE PHASE PERFORMANCE DATA 50 Hz 4" PREMIUM 101																
P <sub>N</sub> [HP]	P <sub>N</sub> [kW]	Thrust F [N]	U <sub>N</sub> [V]	N <sub>n</sub> [min 1]	S.F	I <sub>N</sub> [A]	MAXIMUM [S.F LOAD AMP]	I <sub>A</sub> [A]	(Eff.)[%]			COS (PF.)			T <sub>N</sub> [Nm]	T <sub>A</sub> [Nm]
									at % load			at % load				
									50	75	100	50	75	100		
3	2.2	4000	380	2815	1.15	5.8	6.4	28.7	72	75	75	0.58	0.72	0.81	7.6	21.7
			400	2840	1.15	5.8	6.4	28.9	69	73	75	0.51	0.64	0.75	7.5	23.6
			415	2870	1.15	6.3	6.9	30.8	66	71	73	0.45	0.59	0.69	7.5	25.9
4	3	4000	380	2830	1.15	7.5	8.2	39.9	73	76	76	0.58	0.72	0.81	10	27.6
			400	2850	1.15	7.8	8.6	41.6	70	74	76	0.51	0.65	0.75	9.9	31.5
			415	2860	1.15	8.2	9.0	43.3	67	73	75	0.46	0.59	0.7	9.9	33.8
5	3.7	6500	380	2830	1.15	9	9.9	46	75	78	77	0.64	0.76	0.84	34.9	12.5
			400	2850	1.15	9.1	10.0	49	73	77	77	0.55	0.7	0.79	38.8	12.4
			415	2860	1.15	9.4	10.3	50	71	76	76	0.51	0.64	0.74	41.6	12.4
6	4.5	6500	380	2835	1.15	9.8	10.8	55	75	78	77	0.63	0.76	0.84	41.6	13.8
			400	2855	1.15	10	11.0	58	73	77	78	0.56	0.69	0.78	46.1	13.7
			415	2870	1.15	10	11.0	60	71	76	77	0.5	0.63	0.73	49.5	13.6
7.5	5.5	6500	380	2830	1.15	13.5	14.3	72	73	76	76	0.64	0.76	0.81	46.7	18.8
			400	2850	1.15	13.7	14.3	76	71	75	76	0.57	0.7	0.76	51.8	18.7
			415	2860	1.15	14.2	15.4	79	69	74	75	0.52	0.65	0.71	55.7	18.6
10	7.5	6500	380	2800	1.15	18.3	20.1	96	70	74	77	0.53	0.65	0.84	81.2	25.2
			400	2820	1.15	18.4	19.8	97	70	73	74	0.47	0.57	0.79	89.9	25.1
			415	2820	1.15	17.4	18.7	102	74	77	77	0.56	0.7	0.77	81.2	25.2

\*PERFORMANCE IS TYPICALLY GUARANTEED

MTSF 6" REWINDABLE MOTORS PERFORMANCE DATA 50 HZ

MTSF 6" REWINDABLE MOTORS PERFORMANCE DATA 50 Hz														
P <sub>N</sub> [HP]	P <sub>N</sub> [kW]	Thrust F [N]	U <sub>N</sub> [V]	N <sub>n</sub> [min 1]	I <sub>N</sub> [A]	I <sub>A</sub> [A]	(Eff.)[%]			COS (PF.)			T <sub>N</sub> [Nm]	T <sub>A</sub> [Nm]
							at % load			at % load				
							50	75	100	50	75	100		
5	3.7	15500	380	2910	10.4	48	0.71	0.75	0.76	0.59	0.71	0.78	13.10	15.50
			400	2930	10.6	51	0.68	0.73	0.76	0.53	0.65	0.73	13.10	17.30
			415	2930	10.9	53	0.65	0.72	0.76	0.50	0.61	0.69	13.00	18.80
5.5	4	15500	380	2910	10.4	48	0.71	0.75	0.76	0.59	0.71	0.78	13.10	15.50
			400	2930	10.6	51	0.68	0.73	0.76	0.53	0.65	0.73	13.10	17.30
			415	2930	10.9	53	0.65	0.72	0.76	0.50	0.61	0.69	13.00	18.80
7.5	5.5	15500	380	2860	13.7	48	0.74	0.76	0.75	0.67	0.78	0.83	18.30	15.50
			400	2890	13.3	51	0.72	0.76	0.76	0.62	0.74	0.81	18.20	17.30
			415	2890	13.4	53	0.71	0.75	0.75	0.59	0.71	0.78	18.10	18.80
10	7.5	15500	380	2860	18.3	59	0.77	0.78	0.76	0.70	0.80	0.84	25.00	19.20
			400	2880	17.7	63	0.75	0.78	0.77	0.65	0.76	0.82	24.80	21.50
			415	2890	17.7	65	0.73	0.77	0.77	0.61	0.73	0.80	24.70	23.40
12.5	9.3	15500	380	2850	22	74	0.79	0.80	0.78	0.71	0.80	0.84	31.10	25.90
			400	2870	21.4	78	0.78	0.79	0.78	0.64	0.76	0.82	31.00	29.00
			415	2880	21.2	81	0.76	0.79	0.78	0.60	0.72	0.80	30.90	31.40
15	11	15500	380	2860	25.8	93	0.78	0.80	0.78	0.71	0.80	0.85	36.70	31.50
			400	2880	25.2	98	0.77	0.80	0.79	0.65	0.76	0.83	36.40	35.50
			415	2890	25.1	102	0.75	0.78	0.79	0.61	0.73	0.80	36.30	38.20
17.5	13	15500	380	2880	30.1	118	0.80	0.81	0.80	0.68	0.79	0.84	43.10	45.00
			400	2900	29.6	125	0.78	0.80	0.80	0.61	0.74	0.81	42.80	50.30
			415	2900	29.7	130	0.76	0.79	0.80	0.57	0.70	0.78	42.70	54.60
20	15	15500	380	2880	33.9	140	0.81	0.82	0.81	0.71	0.81	0.85	49.70	53.90
			400	2890	33.1	148	0.79	0.81	0.81	0.65	0.77	0.83	49.40	60.40
			415	2900	33	154	0.77	0.80	0.81	0.60	0.73	0.81	49.30	65.50
25	18.5	27500	380	2860	42.3	172	0.81	0.82	0.81	0.68	0.78	0.84	61.70	75.20
			400	2880	42	182	0.78	0.81	0.81	0.61	0.74	0.80	61.20	84.30
			415	2890	42.5	189	0.76	0.79	0.80	0.57	0.70	0.77	61.10	91.30
30	22	27500	380	2880	49.1	218	0.82	0.84	0.83	0.68	0.78	0.84	72.60	91.20
			400	2900	49	231	0.80	0.82	0.82	0.61	0.73	0.80	72.50	102.20
			415	2910	49.6	240	0.77	0.81	0.82	0.56	0.69	0.77	72.20	110.70
35	26	27500	380	2880	57.5	268	0.83	0.84	0.83	0.68	0.79	0.86	86.00	120.40
			400	2900	56.7	284	0.81	0.83	0.83	0.61	0.74	0.83	85.60	134.70
			415	2910	57.3	296	0.78	0.82	0.82	0.56	0.69	0.80	85.30	146.10
40	30	27500	380	2900	66.4	328	0.82	0.84	0.83	0.67	0.78	0.84	98.80	135.00
			400	2910	66.4	347	0.80	0.83	0.83	0.60	0.73	0.80	98.40	151.00
			415	2910	67.5	361	0.77	0.81	0.82	0.55	0.68	0.77	98.20	163.00
50	37	27500	380	2890	82	409	0.83	0.84	0.83	0.67	0.78	0.84	122.10	192.80
			400	2900	81.9	433	0.80	0.83	0.83	0.60	0.72	0.80	121.60	215.80
			415	2910	83.9	450	0.77	0.81	0.82	0.55	0.68	0.76	121.30	234.00

\*PERFORMANCE IS TYPICALLY GUARANTEED

MTSF 8" REWINDABLE MOTORS PERFORMANCE DATA 50 HZ

MTSF 8" REWINDABLE MOTORS PERFORMANCE DATA 50 Hz														
P <sub>N</sub> [HP]	P <sub>N</sub> [kW]	Thrust F [N]	U <sub>N</sub> [V]	N <sub>n</sub> [min 1]	I <sub>n</sub> [A]	I <sub>a</sub> [A]	η(Eff.)[%]			COS (PF.)			T <sub>N</sub> [Nm]	T <sub>A</sub> [Nm]
							at % load			at % load				
							50	75	100	50	75	100		
40	30	45000	380	2880	63	300	83.5	84.4	83.1	0.81	0.85	0.87	99	126
			400	2900	60	318	83.6	85.0	84.3	0.77	0.84	0.86	99	141
			415	2910	58	332	83.5	85.2	84.9	0.75	0.82	0.85	98	151
50	37	45000	380	2890	79	378	84.6	85.3	83.9	0.77	0.83	0.85	122	156
			400	2900	76	400	83.9	85.2	83.2	0.73	0.81	0.85	122	176
			415	2910	75	412	82.6	84.5	84.3	0.68	0.77	0.81	121	190
60	45	45000	380	2900	93	491	85.8	86.4	85.2	0.77	0.85	0.87	149	218
			400	2910	90	520	85.3	86.5	85.9	0.73	0.81	0.85	148	241
			415	2910	89	541	84.5	86.2	85.8	0.67	0.77	0.82	148	263
70	52	45000	380	2900	107	575	86.5	86.7	85.3	0.77	0.83	0.85	175	284
			400	2910	103	608	86.4	87.1	86.2	0.73	0.81	0.84	175	318
			415	2920	101	633	85.6	87.0	86.7	0.69	0.78	0.83	174	345
75	55	45000	380	2900	114	624	86.5	86.9	85.7	0.75	0.83	0.85	182	301
			400	2915	110	660	85.9	87.0	86.4	0.69	0.79	0.83	181	340
			415	2920	109	688	84.8	86.4	86.2	0.75	0.75	0.81	181	366
80	60	45000	380	2900	122	698	87.2	87.6	86.5	0.86	0.92	0.94	198	319
			400	2910	116	725	86.8	87.7	87.0	0.75	0.82	0.86	197	357
			415	2920	115	768	86.1	87.4	87.1	0.70	0.79	0.83	197	387
85	67	45000	380	2900	137	759	87.2	87.6	86.4	0.76	0.83	0.86	220	352
			400	2910	133	797	86.5	87.5	86.9	0.71	0.79	0.83	220	395
			415	2920	131	828	85.6	87.0	86.6	0.67	0.77	0.82	219	427
100	75	45000	380	2900	154	892	86.7	87.1	85.9	0.76	0.80	0.86	247	419
			400	2910	148	942	86.2	87.3	86.7	0.71	0.80	0.84	246	472
			415	2920	147	982	85.4	86.9	86.6	0.67	0.77	0.82	245	510
110	83	45000	380	2910	166	1019	87.8	88.3	87.2	0.78	0.84	0.87	275	483
			400	2920	160	1077	87.5	88.4	87.6	0.74	0.81	0.85	273	544
			415	2925	156	1120	87.2	88.4	88.0	0.71	0.80	0.84	273	586
125	93	45000	380	2910	188	1186	87.8	88.4	87.5	0.75	0.83	0.86	306	557
			400	2920	183	1276	87.2	88.3	87.8	0.68	0.78	0.83	305	626
			415	2930	184	1308	86.2	87.8	87.7	0.62	0.73	0.80	305	676

\*PERFORMANCE IS TYPICALLY GUARANTEED

SML 6" REWINDABLE MOTORS PERFORMANCE DATA 50 HZ

SML 6" REWINDABLE MOTORS PERFORMANCE DATA 50 Hz														
P <sub>N</sub> [HP]	P <sub>N</sub> [kW]	Thrust F [N]	U <sub>N</sub> [V]	N <sub>n</sub> [min 1]	I <sub>n</sub> [A]	I <sub>a</sub> [A]	η(Eff.)[%]			COS (PF.)			T <sub>N</sub> [Nm]	T <sub>A</sub> [Nm]
							at % load			at % load				
							50	75	100	50	75	100		
5.5	4.0	15500	380	2860	11.7	49	0.62	0.69	0.71	0.53	0.63	0.72	13.3	22.0
			400	2880	12.2	52	0.59	0.66	0.70	0.48	0.58	0.67	13.2	24.4
			415	2890	12.0	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
			400	2870	15.8	65	0.64	0.70	0.73	0.74	0.58	0.68	18.2	30.6
			415	2890	14.5	67	0.63	0.70	0.73	0.42	0.62	0.63	18.2	33.0
10	7.5	15500	380	284	18.4	75	0.76	0.78	0.77	0.6	0.72	0.80	25.0	37.8
			400	2860	18.7	79	0.72	0.76	0.77	0.53	0.65	0.75	24.9	42.8
			415	2870	19.2	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	31.0	59.0
			400	2870	23.7	118	0.74	0.79	0.80	0.50	0.60	0.70	30.9	66.4
			415	2880	24.3	123	0.71	0.76	0.78	0.45	0.58	0.68	30.8	72.3
15.0	11.0	15500	380	2860	27.5	120	0.76	0.79	0.79	0.55	0.67	0.76	36.7	60.6
			400	2870	28.9	127	0.71	0.76	0.78	0.49	0.60	0.70	36.5	68.2
			415	2880	29.0	132	0.67	0.73	0.76	0.45	0.59	0.67	36.4	74.2
17.5	13.0	15500	380	2840	30.8	136	0.79	0.81	0.81	0.62	0.75	0.79	43.7	67.8
			400	2860	30.7	144	0.77	0.80	0.81	0.53	0.68	0.75	43.4	75.9
			415	2870	32.0	151	0.75	0.79	0.8	0.49	0.60	0.70	43.2	82.4
20.0	15.0	15500	380	2850	33.9	168	0.81	0.83	0.82	0.64	0.75	0.81	50.1	88.0
			400	2870	34.2	178	0.79	0.81	0.81	0.57	0.70	0.78	49.8	99.0
			415	2880	39.0	186	0.77	0.80	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
			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

\*PERFORMANCE IS TYPICALLY GUARANTEED

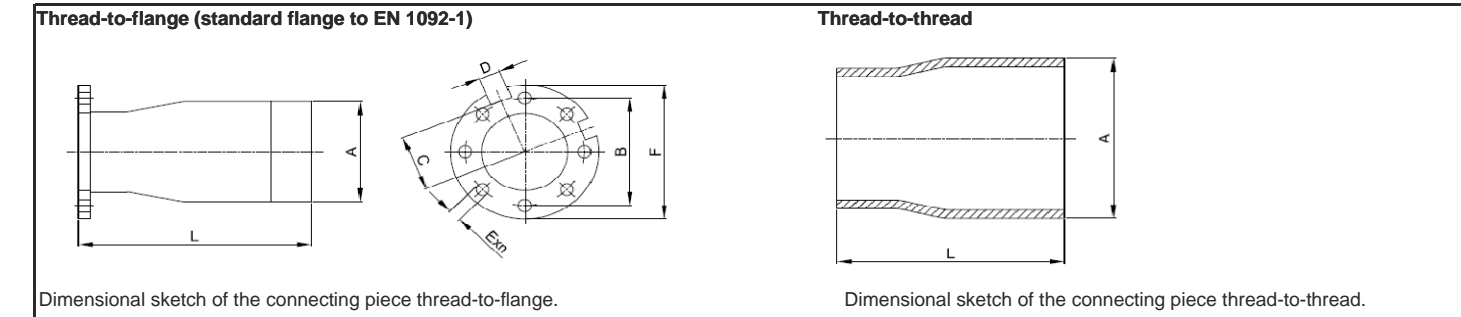
MTSF 10" REWINDABLE MOTORS PERFORMANCE DATA 50 HZ

MTSF 10" REWINDABLE MOTORS PERFORMANCE DATA 50 Hz														
P <sub>N</sub> [HP]	P <sub>N</sub> [kW]	Thrust F [N]	U <sub>N</sub> [V]	N <sub>n</sub> [min 1]	I <sub>n</sub> [A]	I <sub>A</sub> [A]	η(Eff.)[%]			COS (PF)			T <sub>N</sub> [Nm]	T <sub>A</sub> [Nm]
							at % load			at % load				
							50	75	100	50	75	100		
116	85	60000	380	2890	179	783	0.85	0.86	0.85	0.78	0.85	0.87	281	282
			400	2900	174	828	0.83	0.85	0.85	0.72	0.81	0.85	280	316
			415	2910	171	863	0.83	0.85	0.85	0.68	0.78	0.83	279	342
150	110	60000	380	2910	235	1095	0.86	0.87	0.86	0.72	0.81	0.85	361	418
			400	2920	232	1158	0.84	0.86	0.86	0.65	0.76	0.82	360	467
			415	2920	233	1206	0.83	0.85	0.86	0.59	0.71	0.79	360	507
177	130	60000	380	2900	266	1271	0.88	0.88	0.87	0.79	0.85	0.87	428	487
			400	2920	256	1344	0.87	0.88	0.88	0.74	0.82	0.86	425	546
			415	2920	255	1400	0.87	0.88	0.87	0.69	0.78	0.83	425	592
204	150	60000	380	2910	307	1502	0.87	0.87	0.86	0.79	0.85	0.88	492	568
			400	2920	298	1590	0.86	0.88	0.87	0.73	0.81	0.85	491	635
			415	2930	296	1655	0.86	0.87	0.87	0.67	0.77	0.83	489	689
252	185	60000	380	2900	390	2030	0.87	0.88	0.87	0.72	0.81	0.85	609	913
			400	2920	384	2148	0.86	0.88	0.88	0.64	0.75	0.81	605	1022
			415	2920	389	2237	0.84	0.86	0.86	0.57	0.70	0.79	605	1109

\*PERFORMANCE IS TYPICALLY GUARANTEED

CONNECTING PIECES

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



Type	Pump outlet	Connecting piece	A	Dimensions [mm]						v1	v2	n
				B	C	D	E	F	L			
QF-30	Rp 2 1/2	R 2 1/2 DN 50 PN 16/40	R 2 1/2	125	65	40	Ø19	Ø165	170	60	90	4
		R 2 1/2 DN 65 PN 16/40	R 2 1/2	145	71	30	Ø19	Ø185	170	22.5	45	8
		R 2 1/2 DN 80 PN 16/40	R 2 1/2	160	82.5	40	Ø19	Ø200	170	22.5	45	8
QF-50	Rp 3	R 3 DN 65 PN 16/40	R 3	145	71	30	Ø19	Ø185	170	22.5	45	8
		R 3 DN 80 PN 16/40	R 3	160	82.5	40	Ø19	Ø200	170	22.5	45	8
		R 3 DN 100 PN 16/40	R 3	180/190	100	40	Ø19/Ø23	Ø235	170	22.5	45	8
QF-75 QF-100	Rp 3 Rp 4	R 3 DN 65 PN 16/40	R 3	145	71	30	Ø19	Ø185	170	22.5	45	8
		R 3 DN 80 PN 16/40	R 3	160	82.5	40	Ø19	Ø200	170	22.5	45	8
		R 3 DN 100 PN 16/40	R 3	180/190	100	40	Ø19/Ø23	Ø235	170	22.5	45	8
		R 4 DN 100 PN 16/40	R 4	180/190	100	40	Ø19/Ø23	Ø235	180	22.5	45	8
QF-125 QF-160	Rp 5	R 5 DN 100 PN 16/40	R 5	180/190	82	35	Ø19/Ø23	Ø235	195	22.5	45	8
		R 5 DN 125 PN 16/40	R 5	210/220	99	37	Ø19/Ø28	Ø270	195	22.5	45	8
		R 5 DN 150 PN 16/40	R 5	240/250	115	36	Ø23/Ø28	Ø300	195	22.5	45	8
QF-210 QF-270 QF-360	Rp 6	R 6 DN 125 PN 16/40	R 6	210/220	99	36	Ø19/Ø28	Ø270	195	22.5	45	8
		R 6 DN 150 PN 16/40	R 6	240/250	114	36	Ø23/Ø28	Ø300	195	22.5	45	8
		R 6 DN 200 PN 16	R 6	295	134	36	Ø23	Ø340	195	15	30	12
		R 6 DN 200 PN 40	R 6	320	151	36	Ø31	Ø375	200	15	30	12

Type	Pump outlet	Connecting piece	Dimensions		L [mm]
			A	B	
QF-125 QF-160	Rp 5	R 5 R 4	Rp 5	Rp 4	121
		R 5 R 6	Rp 5	Rp 6	150
	5" NPT	5" NPT 4" NPT	5" NPT	4" NPT	121
		5" NPT 6" NPT	5" NPT	6" NPT	150
QF-210 QF-270 QF-360	Rp 6	R 6 R 5	Rp 6	Rp 5	150
	6" NPT	6" NPT 5" NPT	6" NPT	5" NPT	150





CABLE SIZING

SUBMERSIBLE PUMPS SP A, SP

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

VOLTAGE DROP : 3%				DIMENSIONS [mm <sup>2</sup> ]																	
MOTOR	KW	I <sub>n</sub> [A]	Cos φ 100%	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	576	955																
4"	0.55	2.2	0.64	366	608	966															
4"	0.75	2.3	0.72	312	518	824															
4"	1.1	3.4	0.72	211	350	558	830														
4"	1.5	4.2	0.75	164	273	434	646														
4"	2.2	5.5	0.82	115	191	304	453	748													
4"	3	7.85	0.77	86	142	226	337	555	872												
4"	4	9.6	0.8	67	112	178	266	438	689												
4"	5.5	13	0.81	49	82	130	194	320	504	768											
4"	7.5	18.8	0.78	49	59	93	139	229	360	548	745										
6"	5.5	13.6	0.77	37	82	131	195	320	503	765											
6"	7.5	17.6	0.8	61	97	145	239	376	573	781											
6"	9.2	21.8	0.81	49	78	116	191	300	458	625	860										
6"	11	24.8	0.83	42	67	99	164	258	395	540	744	995									
6"	13	30	0.81		56	84	139	218	333	454	625	833									
6"	15	34	0.82			73	121	191	291	397	547	731	938								
6"	18.5	42	0.81			60	99	156	238	324	446	595	763	913							
6"	22	48	0.84			84	132	202	276	382	511	659	792	935							
6"	26	57	0.84			71	111	170	233	321	431	555	667	788	913						
6"	30	66.5	0.83			96	147	201	277	371	477	573	676	782	925						
6"	37	85.5	0.79			119	162	223	296	378	451	529	608	713	806						
8"	22	48	0.84			84	132	202	276	382	511	659	792	935							
8"	26	56.5	0.85			70	111	170	233	322	432	557	671	794	922						
8"	30	64	0.85			98	150	205	284	381	492	592	701	814	967						
8"	37	78.5	0.85			80	122	168	232	311	401	483	572	664	789	903					
8"	45	96.5	0.82			10	140	193	257	330	396	466	539	635	723						
8"	55	114	0.85			115	159	214	276	333	394	457	543	622							
8"	63	132	0.83			140	187	240	289	340	394	466	531								
8"	75	152	0.86			119	160	206	249	295	343	409	469								
8"	92	186	0.86			130	169	203	241	281	334	383									
8"	110	224	0.87			140	169	200	233	279	321										
10"	75	156	0.84			157	203	244	288	334	395	452									
10"	92	194	0.82			128	164	197	232	268	316	360									
10"	110	228	0.84			139	167	197	228	271	309										
10"	132	270	0.84			141	166	193	228	261											
10"	147	315	0.81			143	165	194	221												
10"	170	365	0.81							168	190										
10"	190	425	0.79							143	162										
12"	147	305	0.83							147	170	202	230								
12"	170	345	0.85							151	179	205									
12"	190	390	0.84								158	181									
12"	220	445	0.85									159									
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 Favorable Heat Dissipation Conditions.  
Maximum Cable Length in Meters from Motor Starter to Pump.



CABLE SIZING

SUBMERSIBLE PUMPS SP A, SP

Cable dimensions at 3 X 400 V, 50 Hz  
Voltage drop: 1%

CABLE DIMENSIONS AT 3 X 400 V, 50 Hz VOLTAGE DROP : 1%				DIMENSIONS [mm <sup>2</sup> ]																
MOTOR	KW	I <sub>n</sub> [A]	Cos φ 100%	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				</													