



# SUBMERSIBLE PUMPS & MOTORS

QF SERIES



Aug/2015-16/L6/500 VC-2176 SAP No. 29000000115



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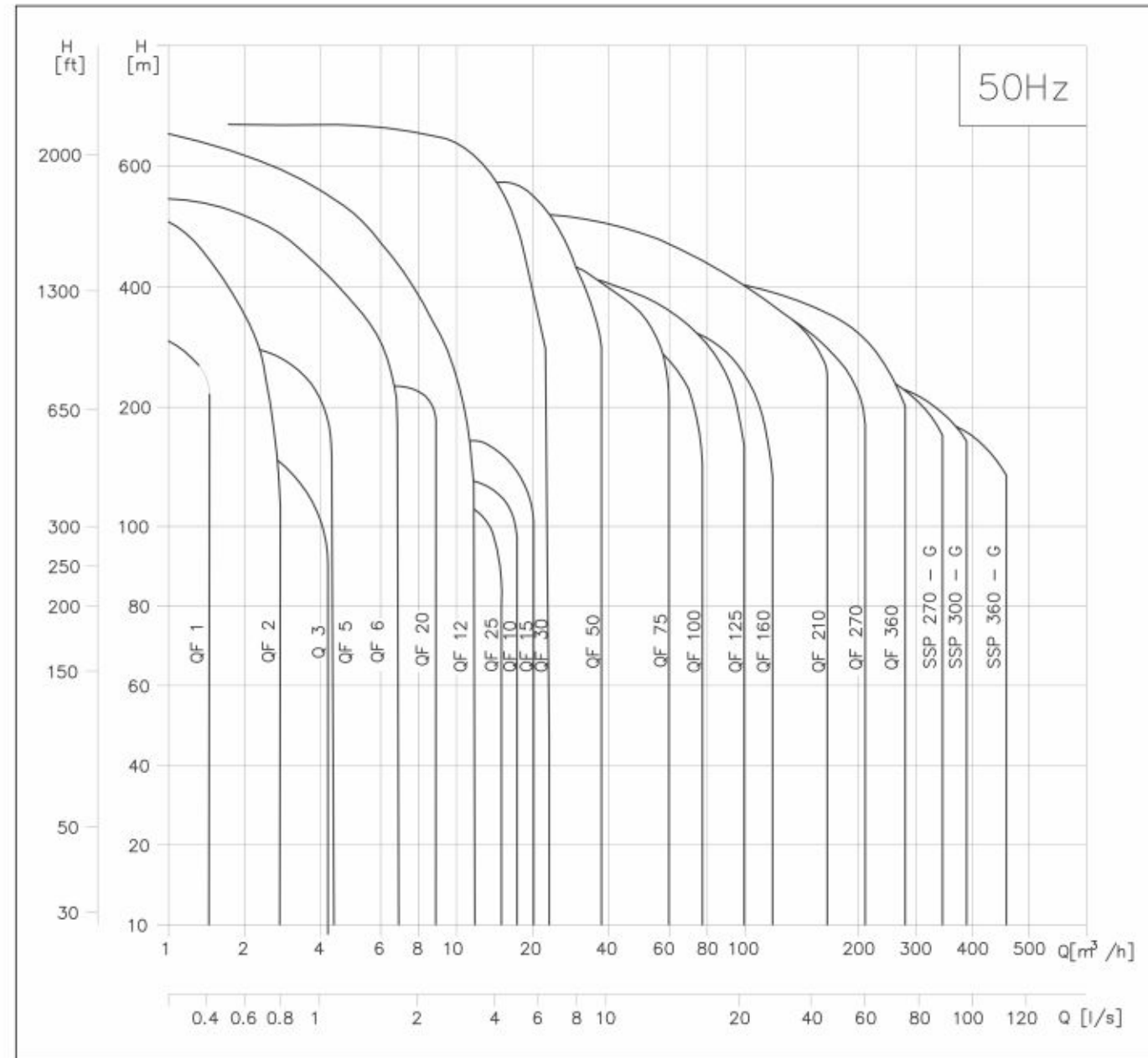
## SHAKTI PUMPS (I) LTD.

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**GENERAL DATA**

**PERFORMANCE RANGE**



**GENERAL DATA**

**PUMP RANGE**

Type	Q3	QF1	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>1/4</sup>	1 <sup>1/4</sup>	1 <sup>1/2</sup>	2	2	2	2	2	2 <sup>1/2</sup>	3	3 4	3 4	5	5	6	6	6
NPT Thread	1 <sup>1/4</sup>	1 <sup>1/4</sup>	1 <sup>1/4</sup>	1 <sup>1/4</sup>	1 <sup>1/2</sup>	2	2	2	2	2	3	3	3 4	3 4	5	5	6	6	6
Flange Connection															5"	5"	6"	6"	6"

**MOTOR RANGE**

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

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

## GENERAL DATA

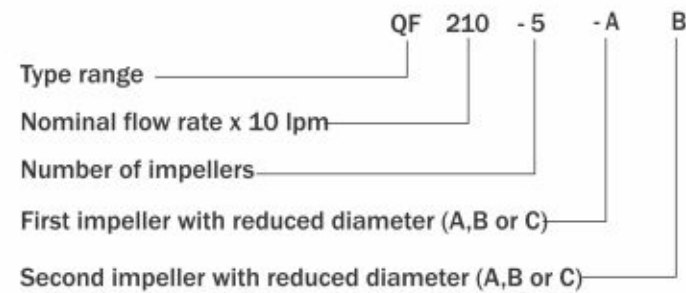
### APPLICATIONS

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 3",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 :  
3" motors : n=2850 min<sup>-1</sup>  
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.

#### Q-3, 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 PUMPS



### 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:

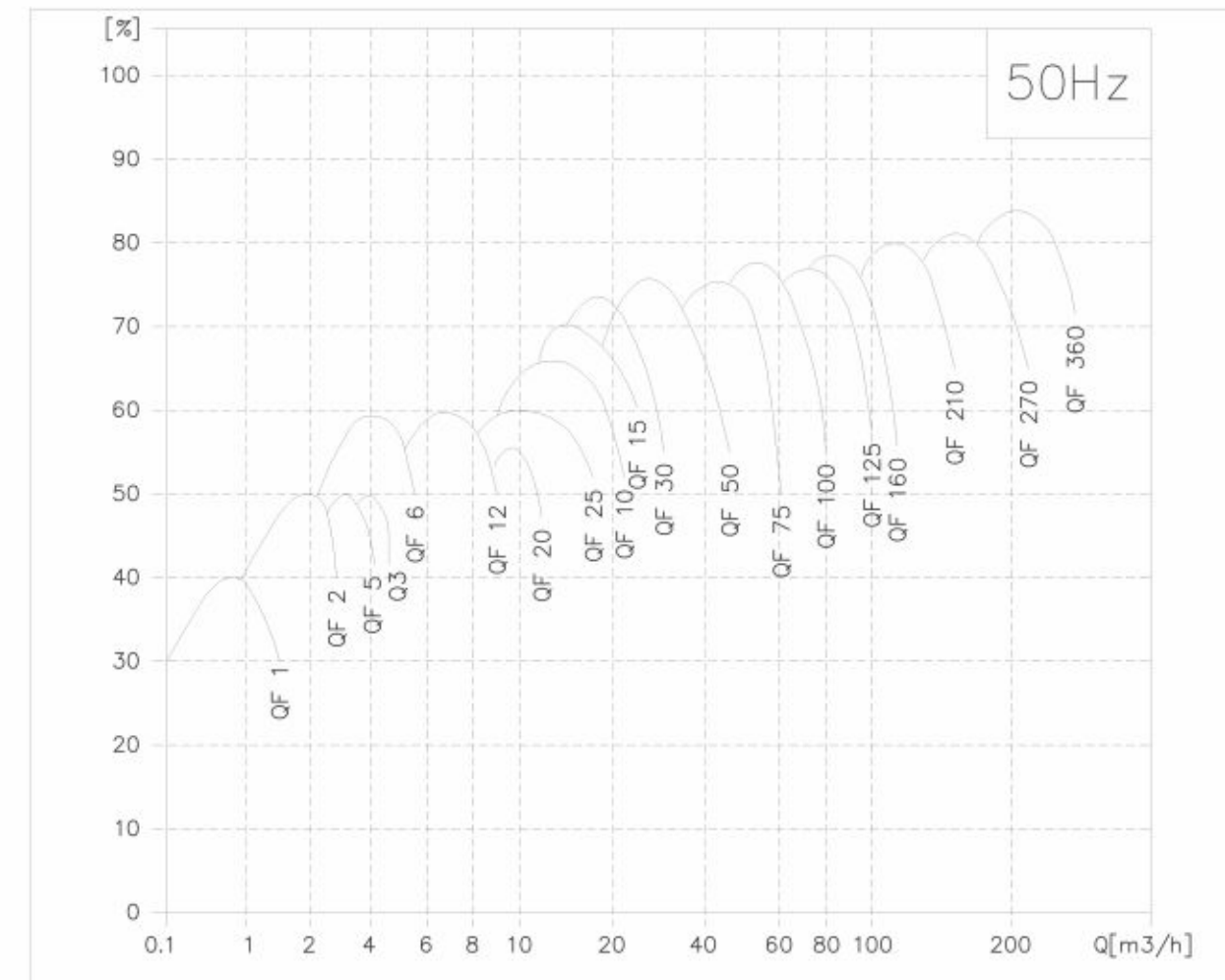
When pumping 125 m<sup>3</sup>/h with a head of 200m for a period of 10 years \$ 60,000 will be saved if a pumps and motors having a 10% higher efficiency is chosen and the price is \$ 0.10 per kWh.

#### 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

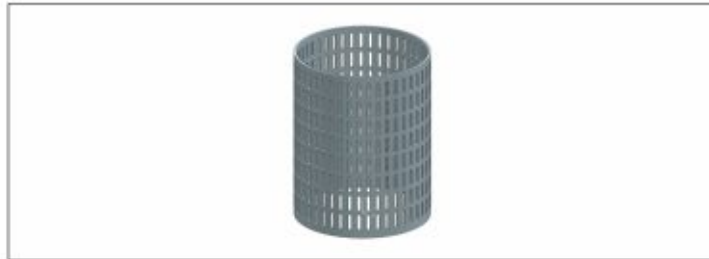
### BEARINGS WITH SAND CHANNELS

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



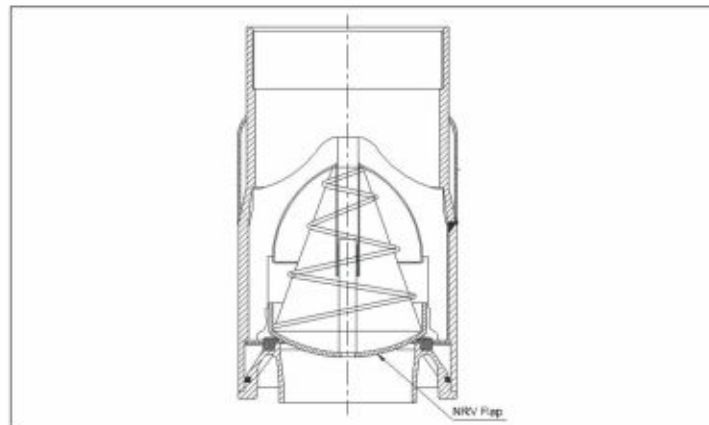
### INLET STRAINER

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



### NON - RETURN VALVE

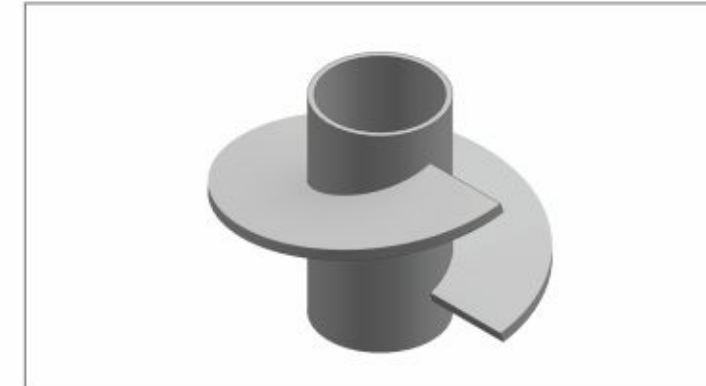
All pumps are equipped with a reliable non-return valve in the valve casing preventing back flow in connection with pump stoppage. Furthermore, the short closing time of the non-return valve means that the risk of destructive water hammer is reduced to a minimum. The valve casing is designed for optimum hydraulic properties to minimize the pressure loss across the valve and thus contributes to the high efficiency of the pump.



## SUBMERSIBLE PUMPS

### 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 bearings 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.

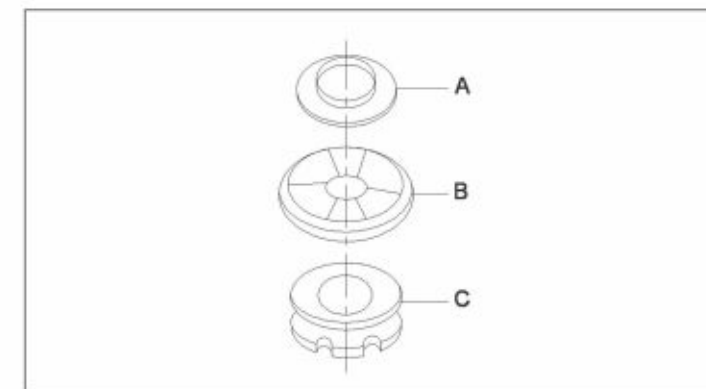


### STOP RING

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

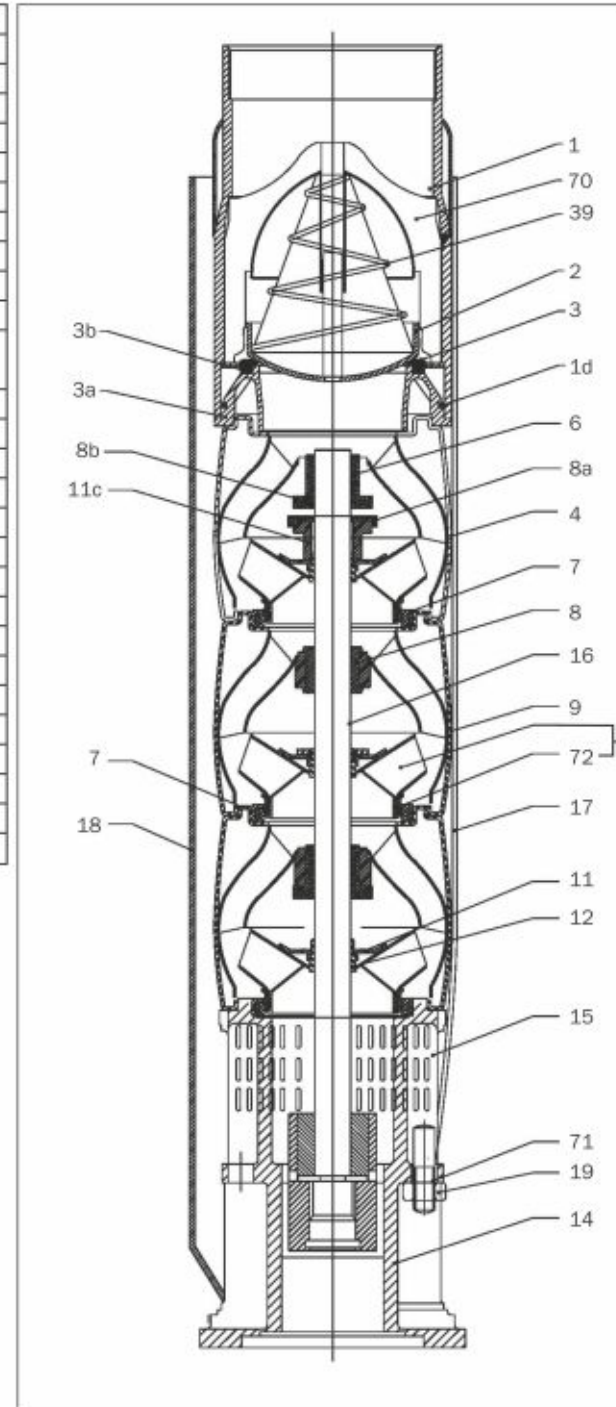
The stationary part of the stop ring (A) is secured in the top bowl (Upper intermediate chamber). The rotating part (B) is fitted above the collet [split cone (C)].



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



FEATURES AND BENEFITS

A COMPLETE MOTOR RANGE

We offer a complete submersible motor range in diff

- 3"motors, single phase up to 1.5 kW (rewindable)
- 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 Premium 100, Premium 101 and Premium 150.

SHAFT SEAL

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

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

PROTECTION AGAINST UPTHRUST

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

BUILT -IN COOLING CHAMBERS

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



## SUBMERSIBLE MOTORS

### FEATURES AND BENEFITS

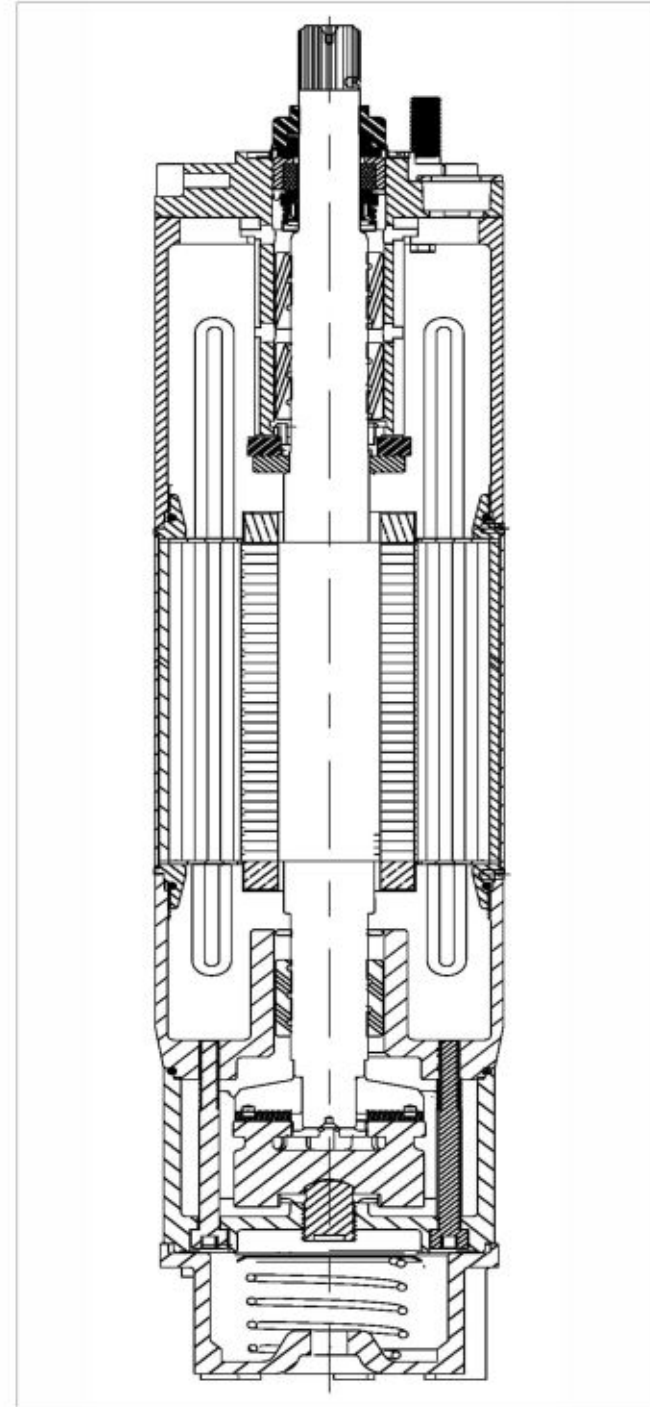
#### OVER TEMPERATURE PROTECTION

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 UPTHRUST

In case of a very small counter pressure in connection with start-up there is a risk that the entire pump body may rise. This is called upthrust. Upthrust may damage both pump and motor. Therefore both 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

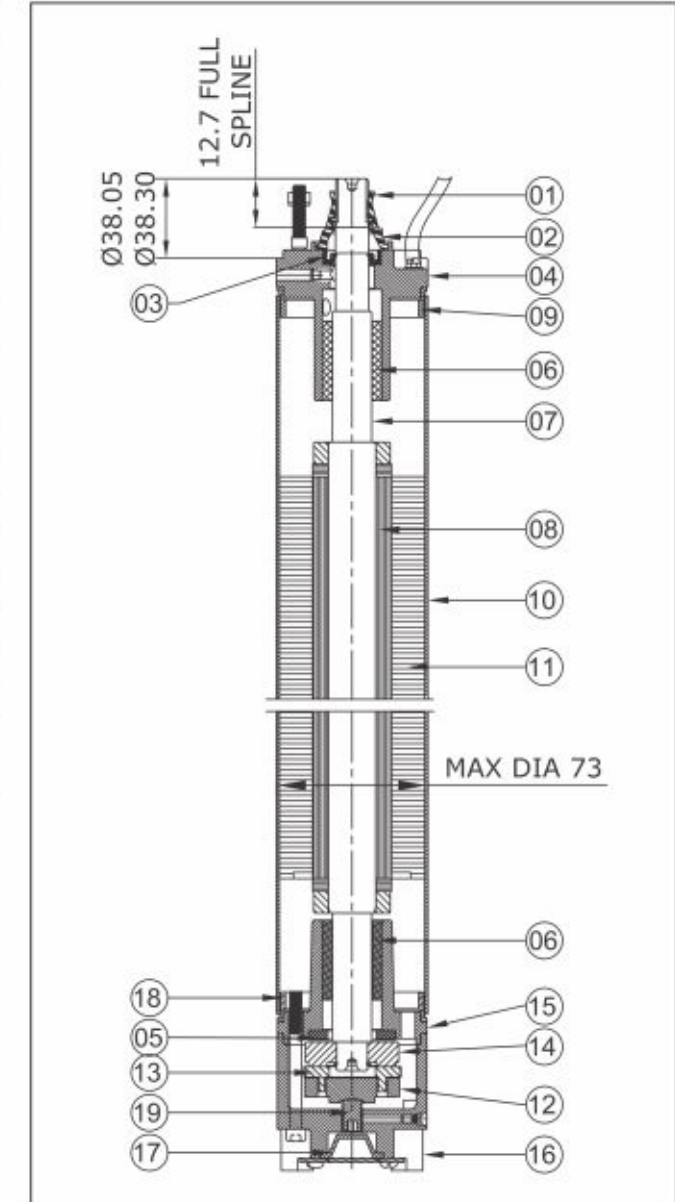


## SUBMERSIBLE MOTORS

### MATERIAL SPECIFICATION 3 INCH MOTOR

SR.NO.	PART	MATERIAL
1	SAND SLINGER	NBR
2	SEAL COVER	PPS
3	OIL SEAL	NBR + SS AISI 304
4	TOP END BELL	CI FG-260
5	UP THRUST WASHER	PP
6	BUSH	CARBON WITH RESIGN IMPREGATED
7	ROTOR SHAFT	SS AISI 420
8	ROTOR SUB ASSLY	N/A
9	TOP FLANGE	MS
10	STATOR PIPE	SS AISI-304
11	STATOR SUB ASSLY	N/A
12	THRUST BEARING PLATE	CI FG-260
13	THRUST PAD	SS AISI-420
14	REVOLVING PLATE ASSLY	NA
15	BOTTOM END BELL	CI FG-260
16	MOTOR BASE	CI FG-260
17	DIAPHRAGM	NBR
18	BOTTOM FLANGE	MS
19	ADJUSTING STUD	SS AISI-410

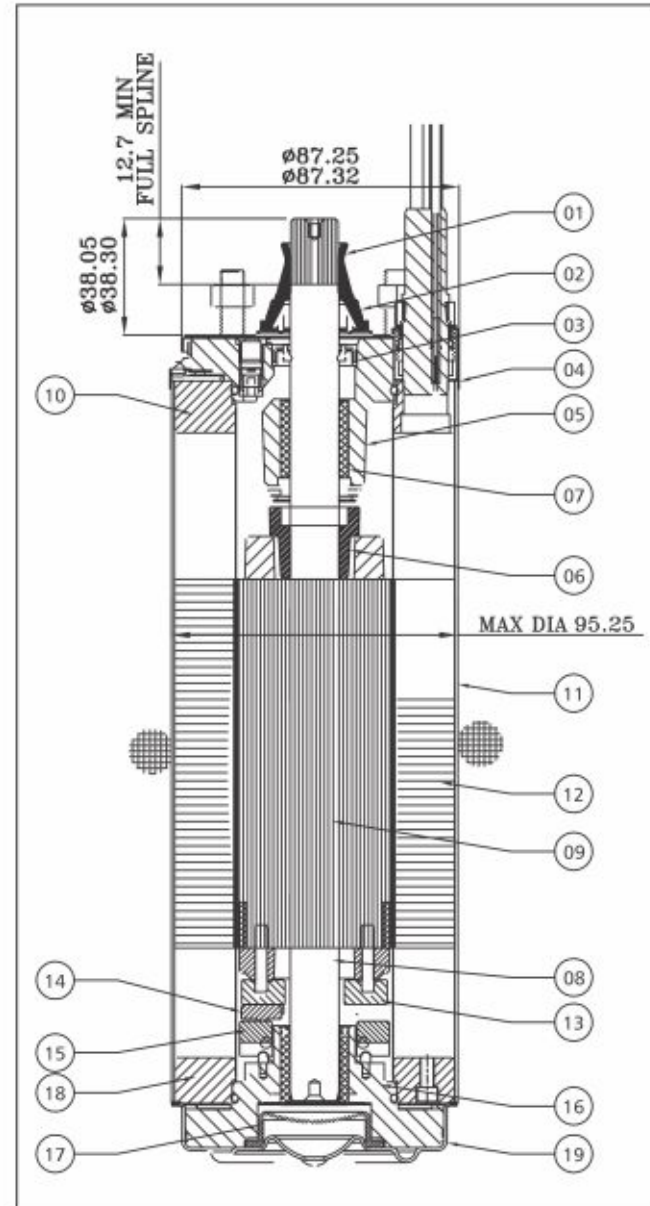
### SECTIONAL VIEW OF 3 INCH MOTOR



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

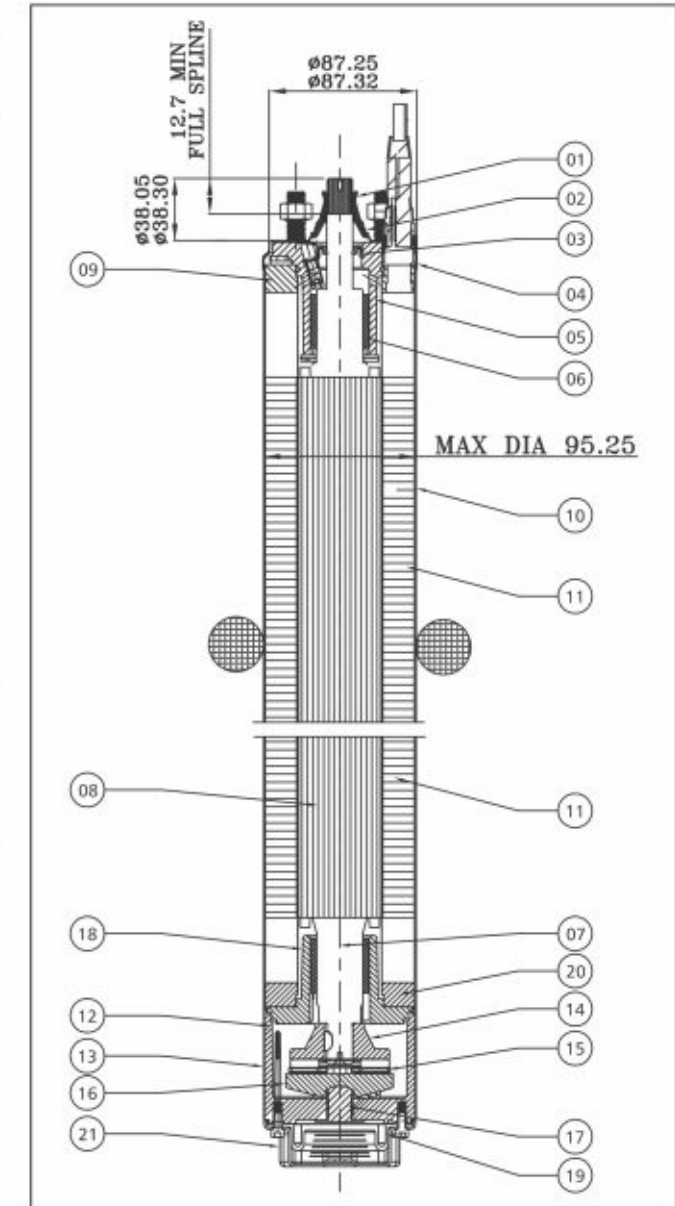
SECTIONAL VIEW OF 4" PREMIUM 100



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

SECTIONAL VIEW OF 4" PREMIUM 101

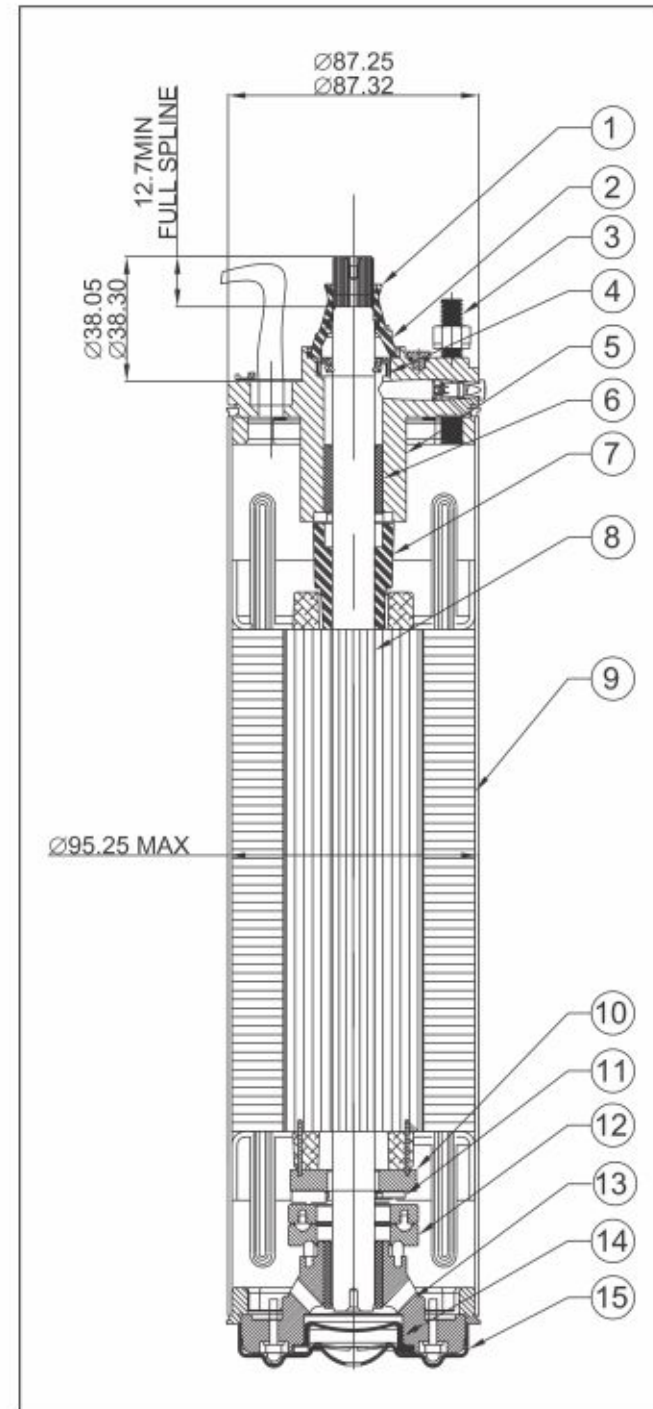




**MATERIAL SPECIFICATION 4" MCIP-100**

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

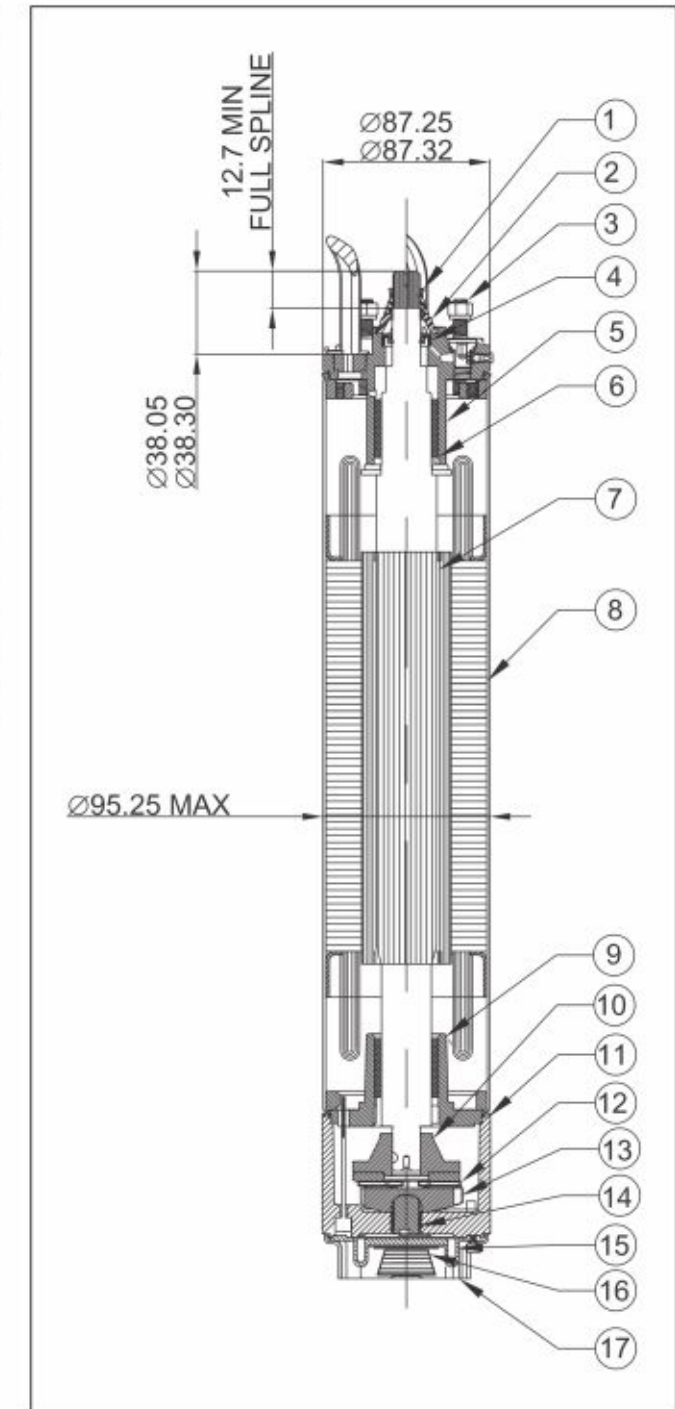
**SECTIONAL VIEW OF 4" MCIP 100**



**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

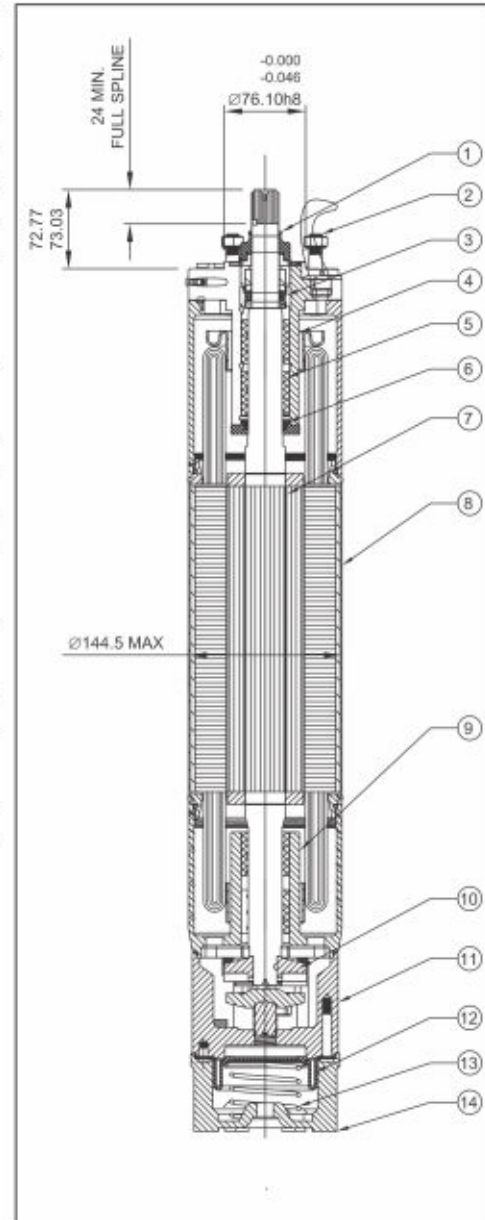
**SECTIONAL VIEW OF 4" MCIP 101**



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 IMPREGANTED CARBON	RESIN IMPREGANTED CARBON	RESIN IMPREGANTED 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

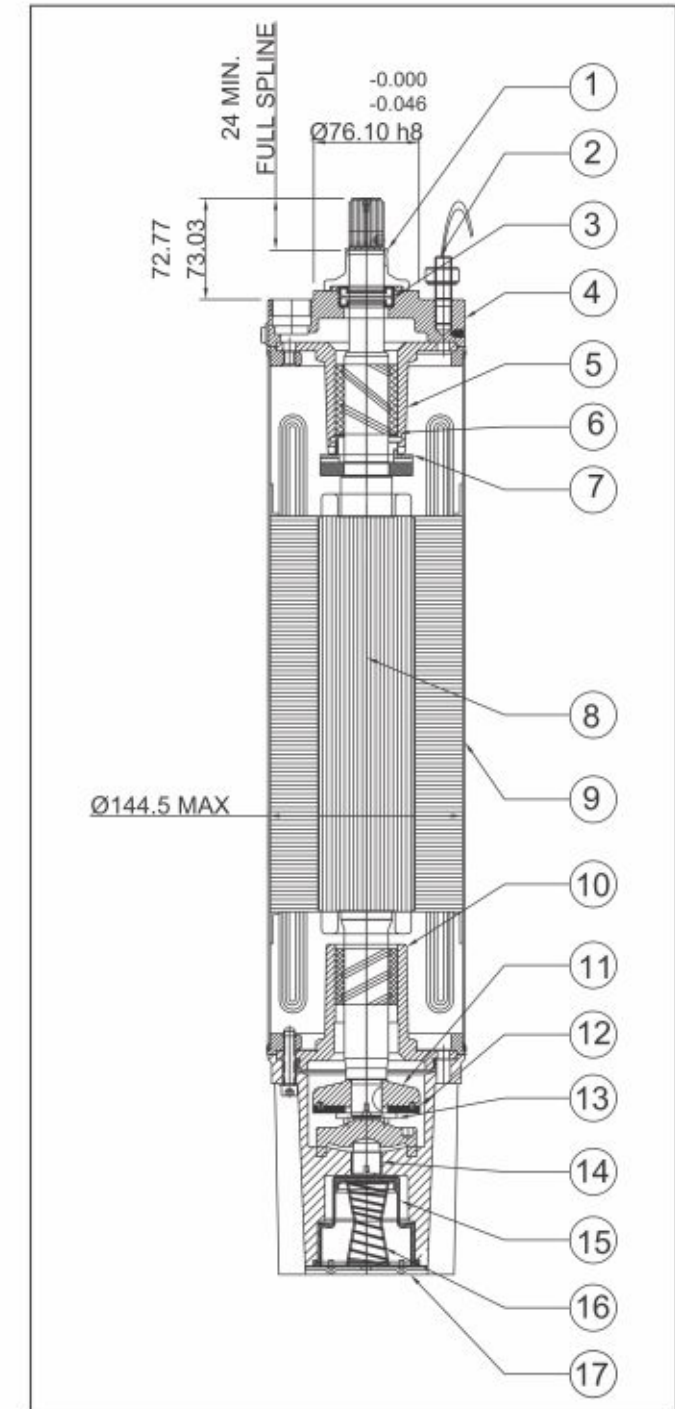
SECTIONAL VIEW OF 6" MTSF



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 IMPREGANTED 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

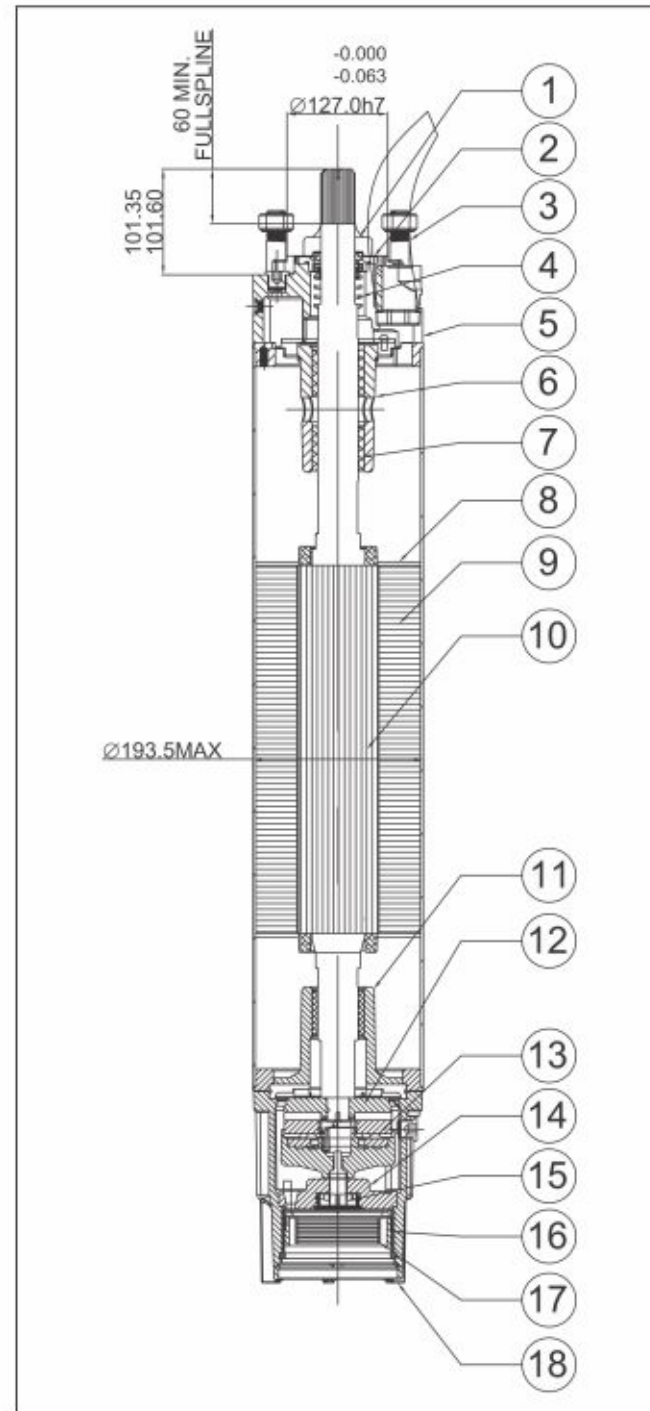
SECTIONAL VIEW OF 6" SML



**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

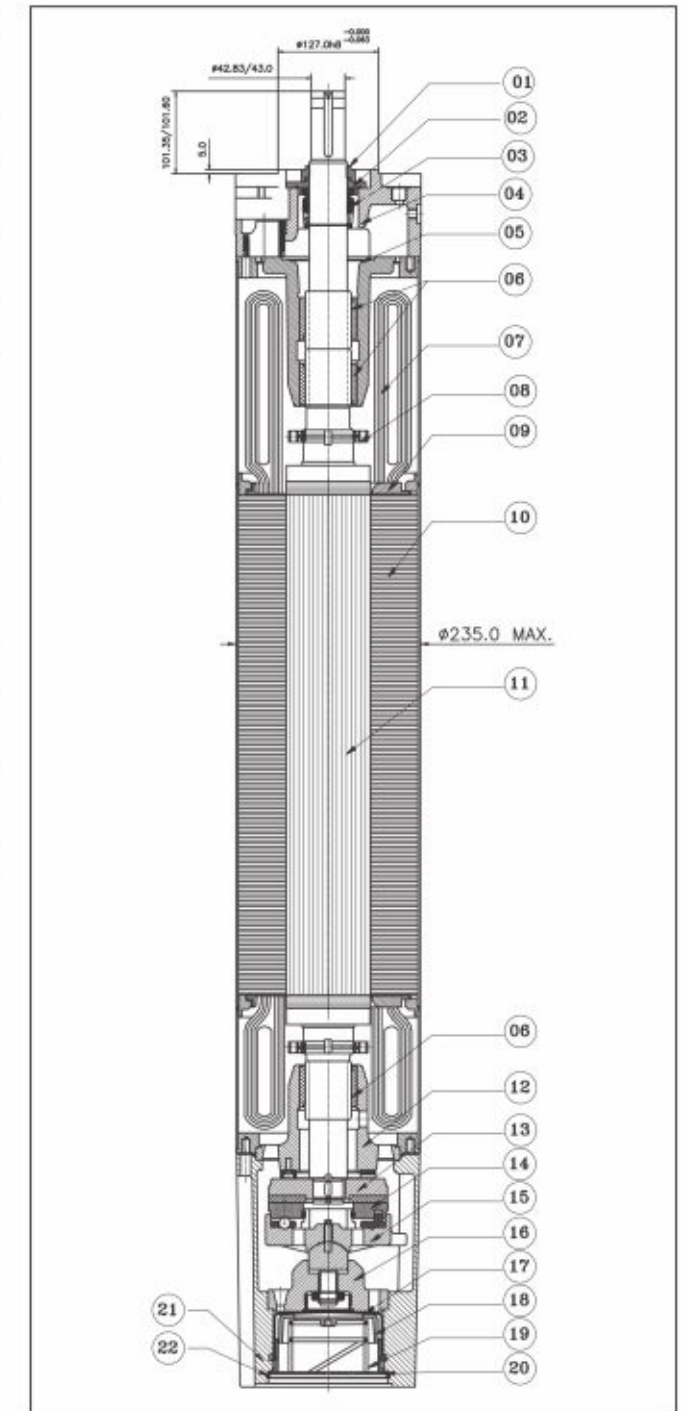
**SECTION VIEW 8" MTSF**



**MATERIAL SPECIFICATION 10" MTSF**

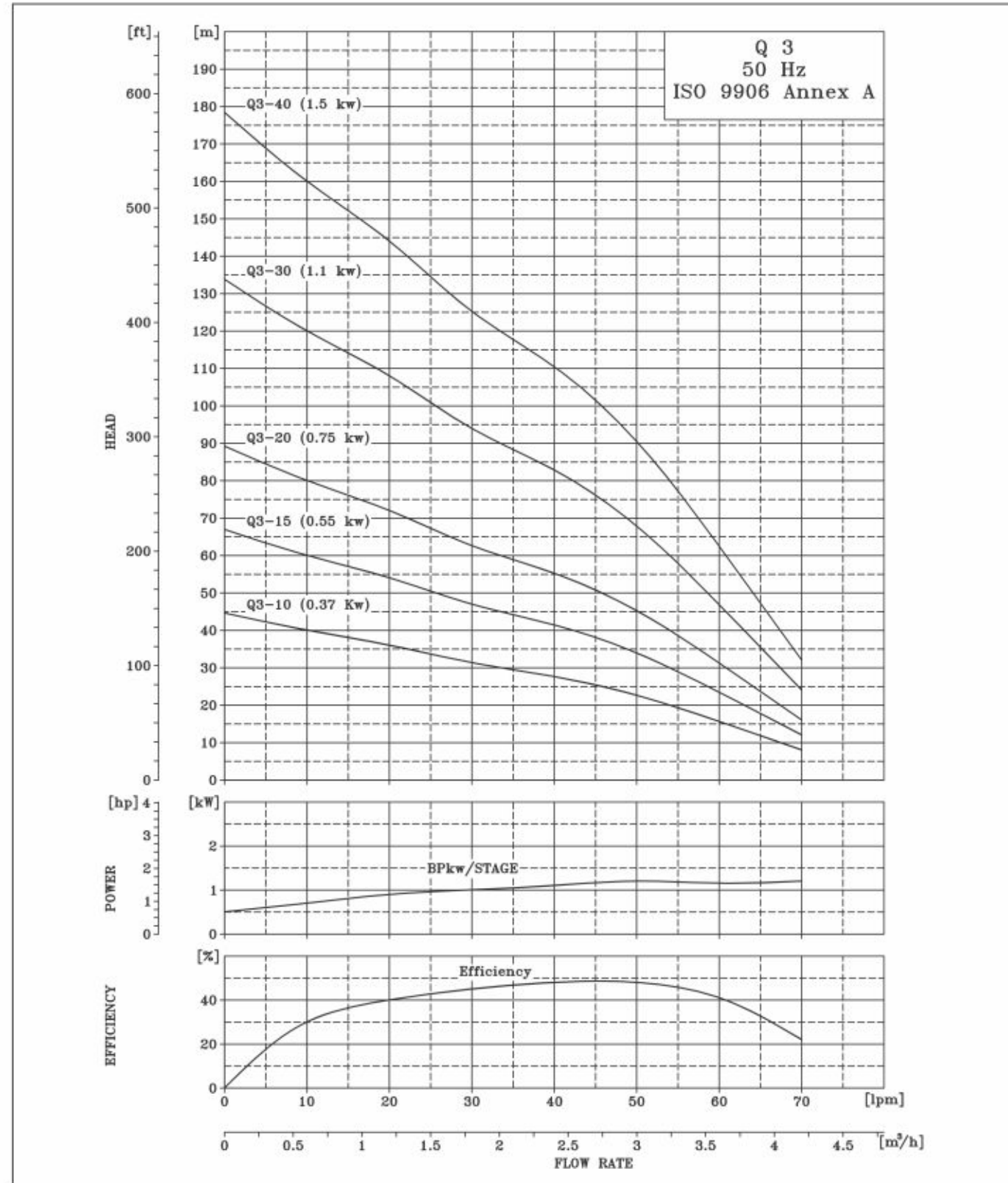
SR.NO.	COMPONENT	MATERIAL
1	SEND SLINGER	NBR
2	DUST COVER	MS
3	MECH SEAL	STD
4	ADOPTER	CI FG-260
5	BEARING BODY UPPER	CI FG-260
6	BUSH	CARBON
7	WINDING WIRE	STD
8	AUXILLIARY IMPELLER	PPS
9	END LAMINATION	MS
10	STATOR SUB ASSY	N/A
11	ROTOR SUB ASSY	N/A
12	BEARING BODY LOWER	CIFG-260
13	THRUST BEARING 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

**SECTIONAL VIEW OF 10" MTSF**



## PERFORMANCE CURVE

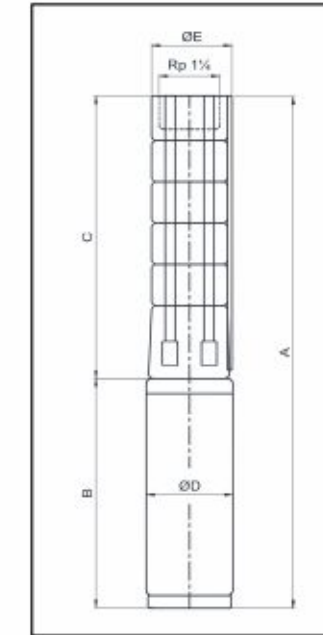
### SUBMERSIBLE PUMP Q 3



## TECHNICAL DATA

### SUBMERSIBLE PUMP Q 3

#### DIMENSIONS AND WEIGHTS



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

#### TECHNICAL DATA Q 3

PUMP TYPE	MOTOR		DIMENSIONS (MM)				NET WEIGHT (KG)		
	TYPE*	POWER (kW)	C	B	A	D	E	PUMP	MOTOR
				1x230V	1x230V				1x230V
Q3 - 10	V3 MOTOR	0.37	402	501	903	73	3	3	9
Q3 - 15	V3 MOTOR	0.55	507	501	1008	73	83	4	10
Q3 - 20	V3 MOTOR	0.75	612	551	1163	73	83	5	12
Q3 - 30	V3 MOTOR	1.1	822	601	1423	73	83	7	15
Q3 - 40	V3 MOTOR	1.5	1032	-	-	73	83	8	18

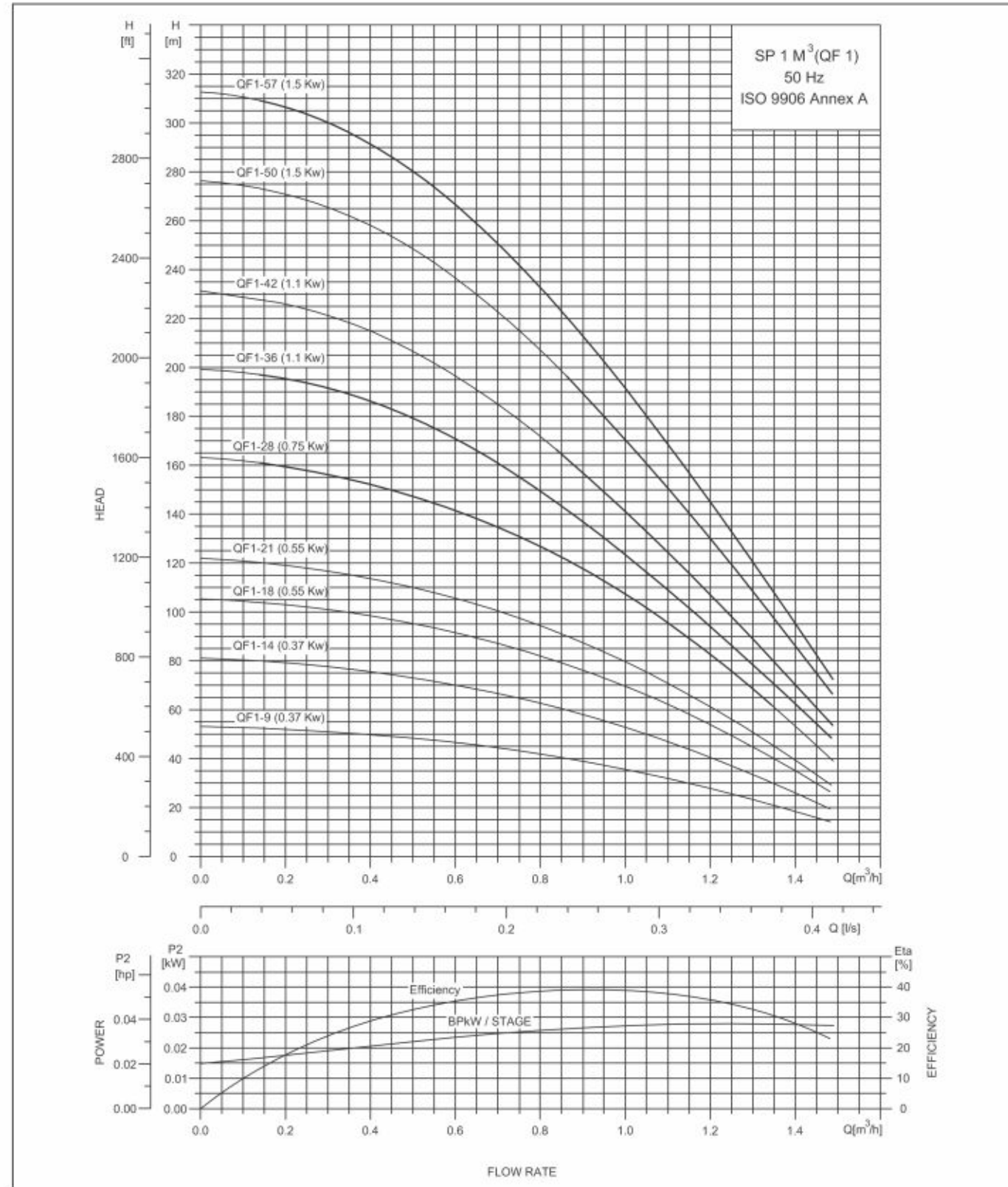
\* Motor type may change as per requirement .

#### PERFORMANCE TABLE Q 3

QF-3		MOTOR RATING		DISCHARGE (Q)									
				I- 3-		TOTAL HEAD IN (m)							
MODEL	CONNECTION	MATERIAL CODE (4x4)	[kW]	[HP]	[A]	[A]	m³/h	0.6	1.2	1.8	2.4	3	4.2
Q-3-10	Rp1¼	9000017891	0.37	0.5	4.1	-	10	40	36	32	27	23	10
Q-3-15		9000018520	0.55	0.75	6.2	-	10	60	53	47	41	34	15
Q-3-20		9000018521	0.75	1	8.3	-	10	80	71	62	55	45	20
Q-3-26		-	0.93	1.25	10	-	10	104	93	81	72	59	26
Q-3-30		9000018522	1.1	1.5	12.5	-	10	120	107	94	83	68	24
Q-3-40		-	-	1.5	2	16.5	-	10	160	142	125	110	90

## PERFORMANCE CURVE

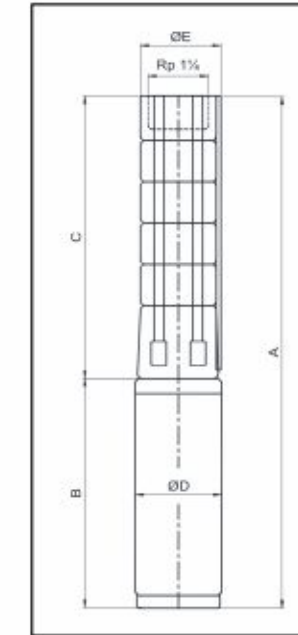
### SUBMERSIBLE PUMP QF 1



## TECHNICAL DATA

### SUBMERSIBLE PUMP QF 1

#### DIMENSIONS AND WEIGHTS



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

#### TECHNICAL DATA QF 1

PUMP TYPE	MOTOR		DIMENSIONS (MM)						NET WEIGHT (KG)			
	TYPE	POWER (kW)	C	B		A		D	E	PUMP	MOTOR	
				1x230V	3x220V 3x400V	1x230V	3x220V 3x400V				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

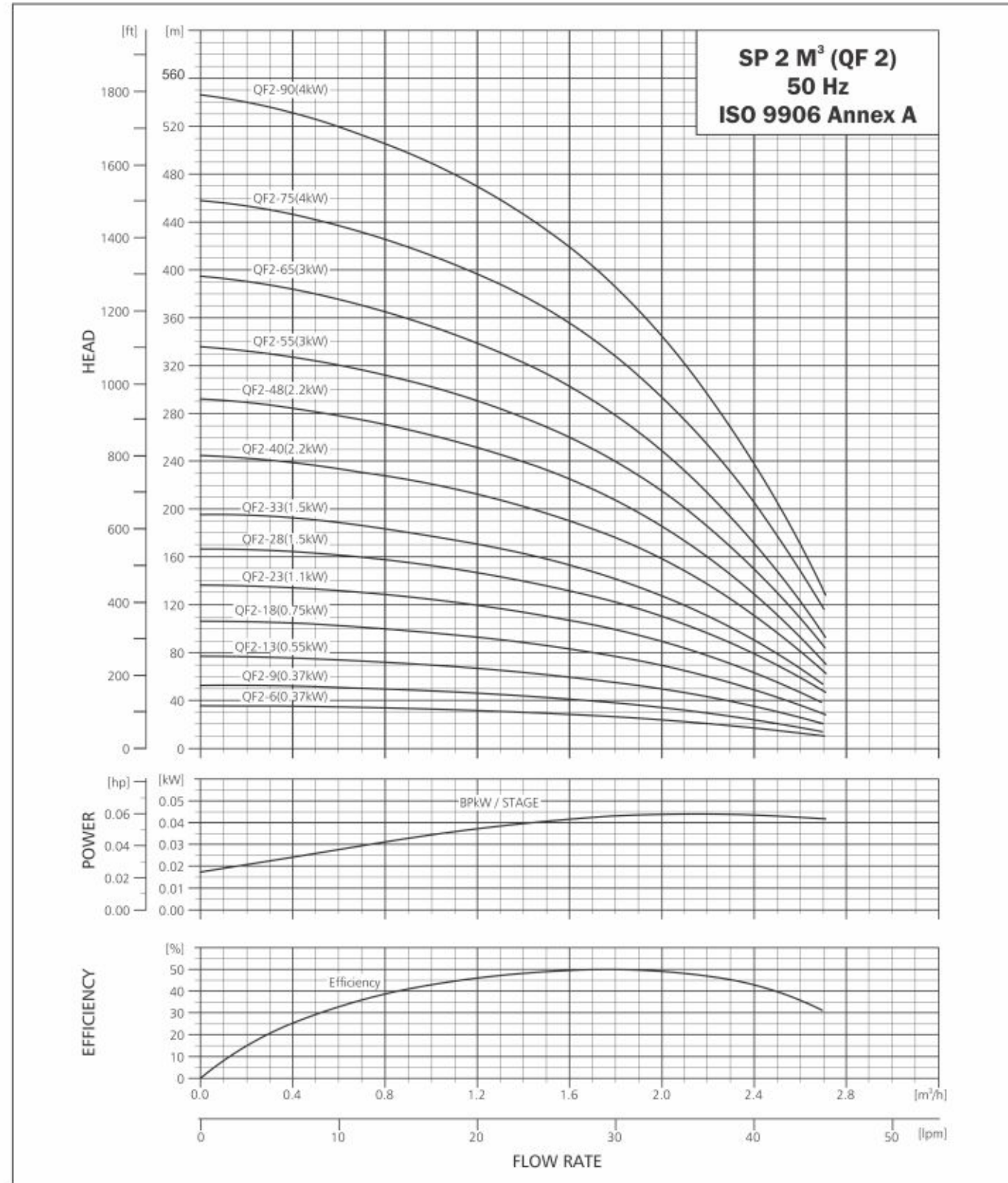
\* Motor type may change as per requirement .

#### PERFORMANCE TABLE 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			
MODEL	CONNECTION	MATERIAL CODE (4x4)	MOTOR RATING		l/min.		TOTAL HEAD IN (m)							
			[kW]	[HP]	1-	3-								
QF1-9	Rp1 1/4	9000002475	0.37	0.5	2.9	1.4	53	52	50	46	42	36	27	18
QF1-14		9000002460	0.37	0.5	2.9	1.4	82	79	75	70	63	53	40	26
QF1-18		9000002462	0.55	0.75	4	2.2	105	103	98	92	82	69	53	35
QF1-21		9000002463	0.55	0.75	4	2.2	122	118	113	105	95	80	61	40
QF1-28		9000002466	0.75	1	5.5	2.3	163	159	151	142	126	106	82	53
QF1-36		9000002468	1.1	1.5	8.2	3.4	199	195	186	170	149	123	94	62
QF1-42		9000002470	1.1	1.5	8.2	3.4	231	226	215	196	171	140	106	70
QF1-50		9000002472	1.5	2.0	10.2	4.2	276	271	257	236	206	170	130	86
QF1-57		9000002473	1.5	2.0	10.2	4.2	313	306	291	266	233	192	145	95

**PERFORMANCE CURVE**

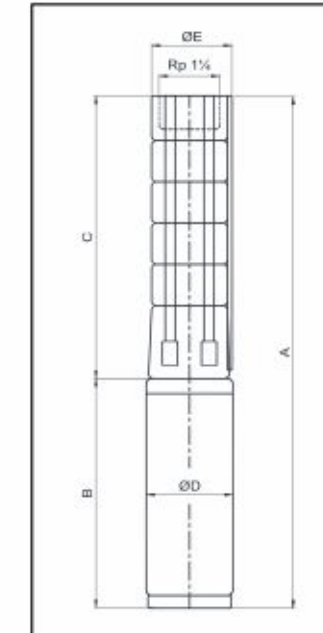
**SUBMERSIBLE PUMP QF 2**



**TECHNICAL DATA**

**SUBMERSIBLE PUMP QF 2**

**DIMENSIONS AND WEIGHTS**



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

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

**TECHNICAL DATA QF 2**

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

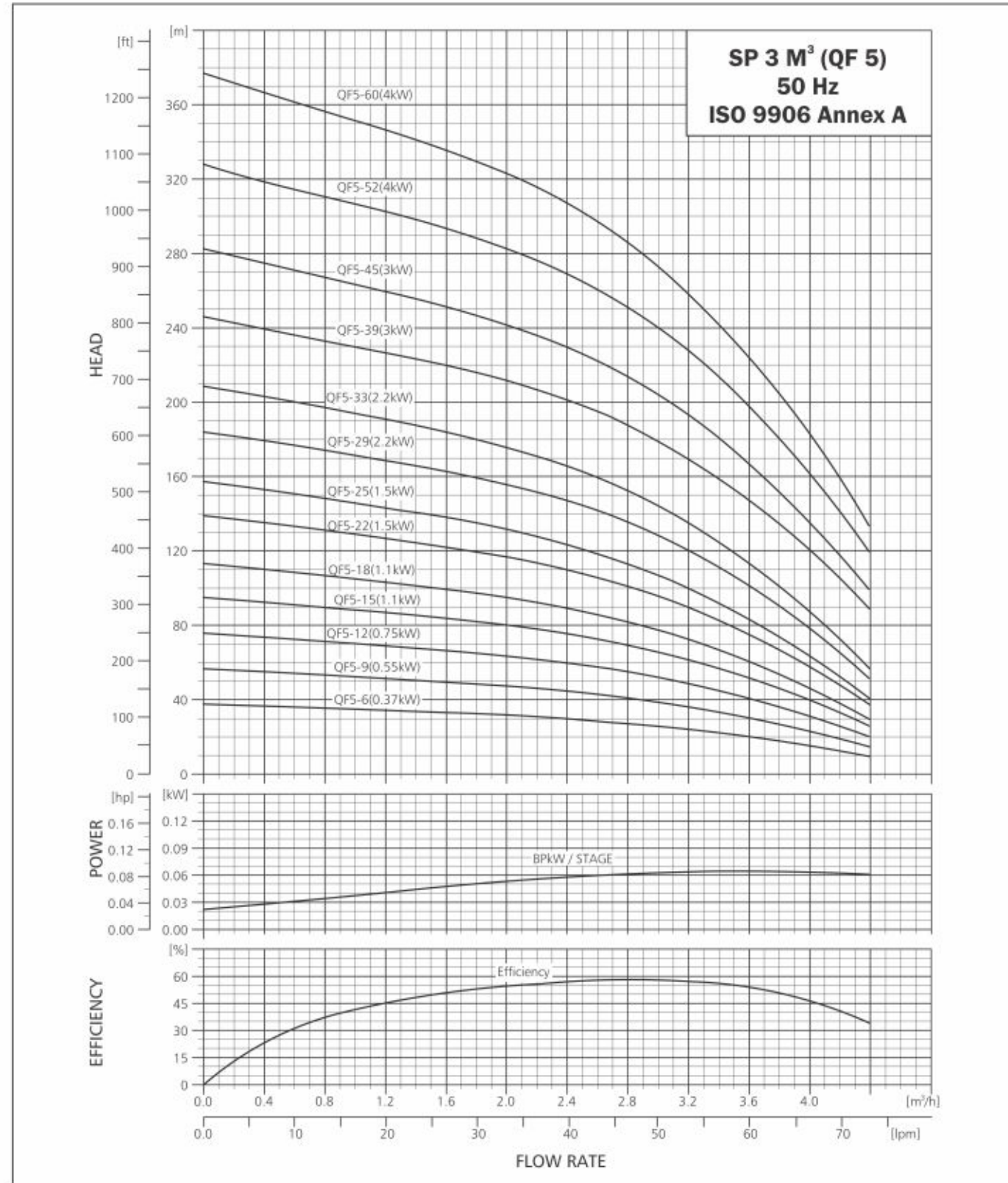
\* Motor type may change as per requirement .

**PERFORMANCE TABLE QF 2**

QF-2				DISCHARGE (Q)								
MODEL	CONNECTION	MATERIAL CODE (4x4)	MOTOR RATING [kW] [HP]	m <sup>3</sup> /h		l/min.						
				1-	3-	0	1	1.4	1.8	2	2.4	2.7
						TOTAL HEAD IN (m)						
QF2 - 6	Rp 1 1/4	9000002503	0.37 0.5	2.9 1.4	36	33	30	26	24	17	10	
QF2 - 9		9000002506	0.37 0.5	2.9 1.4	53	48	44	38	34	24	14	
QF2 - 13		9000002494	0.55 0.75	4.0 2.2	77	70	64	55	50	35	20	
QF2 - 18		9000002495	0.75 1.0	5.5 2.3	107	97	89	77	69	49	29	
QF2 - 23		9000002497	1.1 1.5	8.2 3.4	137	124	114	99	90	64	38	
QF2 - 28		9000002498	1.5 2.0	10.2 4.2	167	152	140	122	110	79	49	
QF2 - 33		9000002499	1.5 2.0	10.2 4.2	196	178	163	142	128	90	55	
QF2 - 40		9000002500	2.2 3.0	14.0 5.5	245	221	203	176	158	111	65	
QF2 - 48		9000002501	2.2 3.0	14.0 5.5	292	262	240	207	186	129	72	
QF2 - 55		9000002502	3.0 4.0	- 7.9	336	302	277	240	215	150	86	
QF2 - 65	sleeve	9000002504	3.0 4.0	- 7.9	395	352	323	280	250	170	94	
QF2 - 75		9000002505	4.0 5.5	- 9.6	457	412	378	328	292	205	118	
QF2 - 90		-	4.0 5.5	- 9.6	545	489	446	386	345	237	130	

PERFORMANCE CURVE

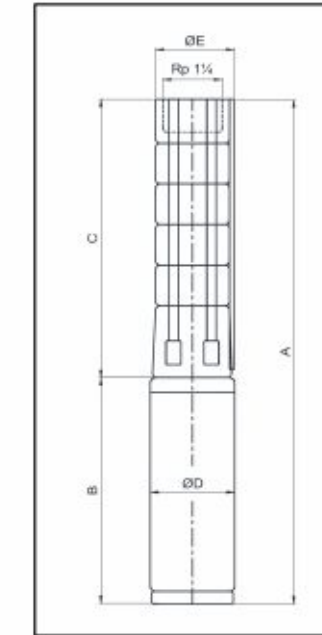
SUBMERSIBLE PUMP QF 5



TECHNICAL DATA

SUBMERSIBLE PUMP QF 5

DIMENSIONS AND WEIGHTS



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

TECHNICAL DATA QF 5

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

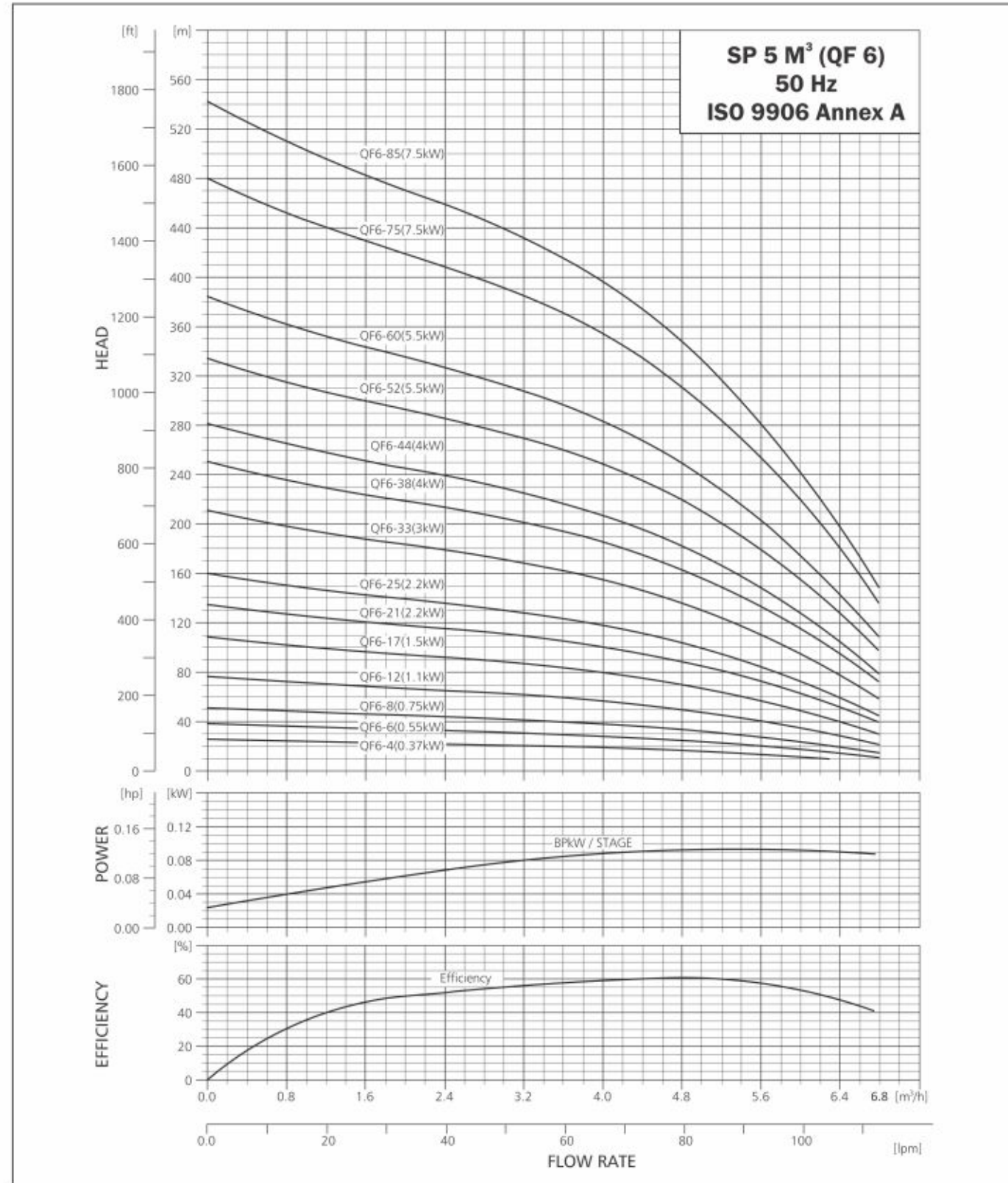
\* Motor type may change as per requirement .

PERFORMANCE TABLE QF 5

MODEL		CONNE-CTION		MATERIAL CODE		MOTOR RATING		DISCHARGE (Q)											
								TOTAL HEAD IN (m)											
								QF-5		DISCHARGE (Q)									
								m <sup>3</sup> /h		DISCHARGE (Q)									
								I/min.		DISCHARGE (Q)									
										DISCHARGE (Q)									
QF5-6	9000002539	-	0.37	0.5	2.9	1.4	38	35	34	32	31	30	27	22	15	10			
QF5-9	9000002542	-	0.55	0.75	4	2.2	57	54	51	49	47	45	41	33	23	15			
QF5-12	9000002524	-	0.75	1	5.5	2.3	76	70	68	65	64	60	55	45	31	20			
QF5-15	9000002525	-	1.1	1.5	8.2	3.4	95	87	85	82	80	76	70	57	40	27			
QF5-18	9000002526	-	1.1	1.5	8.2	3.4	113	105	101	97	95	89	82	67	46	30			
QF5-22	9000002527	-	1.5	2.0	10.2	4.2	139	129	125	120	117	110	101	83	57	37			
QF5-25	9000002529	-	1.5	2.0	10.2	4.2	157	145	140	135	131	124	113	92	63	41			
QF5-29	9000002530	-	2.2	3.0	14	5.5	184	171	166	159	156	147	136	111	78	52			
QF5-33	9000002534	-	2.2	3.0	14	5.5	209	194	187	180	176	166	152	125	87	58			
QF5-39	9000002535	-	3.0	4.0	-	7.9	246	230	223	216	212	201	188	160	120	89			
QF5-45	9000002536	-	3.0	4.0	-	7.9	283	264	255	247	242	229	214	181	135	99			
QF5-52	9000002538	9000013541	4.0	5.5	-	9.6	328	308	298	289	283	269	251	214	161	120			
QF5-60	9000002540	9000013542	4.0	5.5	-	9.6	377	350	341	330	323	307	286	242	182	135			

PERFORMANCE CURVE

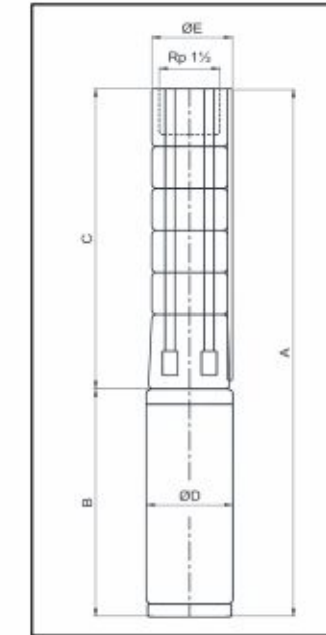
SUBMERSIBLE PUMP QF 6



TECHNICAL DATA

SUBMERSIBLE PUMP QF 6

DIMENSIONS AND WEIGHTS



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

QF 6 -75 to QF 2-85 are mounted in sleeve for Rp 1½" connection and with max. diameter 108 mm.

TECHNICAL DATA QF 6

PUMP TYPE	MOTOR TYPE	POWER (kW)	C	DIMENSIONS (MM)				NET WEIGHT (KG)				
				B		A		D	E	PUMP	MOTOR	
				1x230V	3x220V 3x400V	1x230V	3x220V 3x400V				1x230V	3x220V 3x400V
QF 6-4	PREMIUM100	0.37	267	242	-	509	-	95	97	3	9	-
QF 6-6	PREMIUM100	0.55	309	271	242	580	551	95	97	3	10	9
QF 6-8	PREMIUM100	0.75	351	292	271	643	622	95	97	4	11	10
QF 6-12	PREMIUM100	1.1	435	340	292	775	727	95	97	5	13	11
QF 6-17	PREMIUM100	1.5	540	405	340	945	880	95	97	6	15	13
QF 6-21	PREMIUM100	2.2	624	482	405	1106	1029	95	97	7	17	15
QF 6-25	PREMIUM100	2.2	708	482	405	1190	1113	95	97	8	17	15
QF 6-33	PREMIUM100	3	876	-	482	-	1358	95	97	10	-	17
QF 6-38	PREMIUM101	4	981	693	-	1674	-	95	97	11	29	-
QF 6-44	PREMIUM101	4	1107	693	-	1800	-	95	97	12	29	-
QF 6-52	PREMIUM101	5.5	1275	-	693	-	1968	95	97	14	-	29
QF 6-60	PREMIUM101	5.5	1443	-	693	-	2136	95	97	16	-	29
QF 6-75	PREMIUM101	7.5	1758	-	770	-	2528	95	97	20	-	33
QF 6-85	PREMIUM101	7.5	1968	-	770	-	2738	95	97	22	-	33
QF 6-52	MATASF150	5.5	1275	-	699	-	1974	145	143	14	-	48
QF 6-60	MATASF150	5.5	1443	-	699	-	2142	145	143	16	-	48
QF 6-75	MATASF150	7.5	1758	-	719	-	2477	145	143	20	-	50
QF 6-85	MATASF150	7.5	1968	-	719	-	2687	145	143	22	-	50

\* Motor type may change as per requirement .

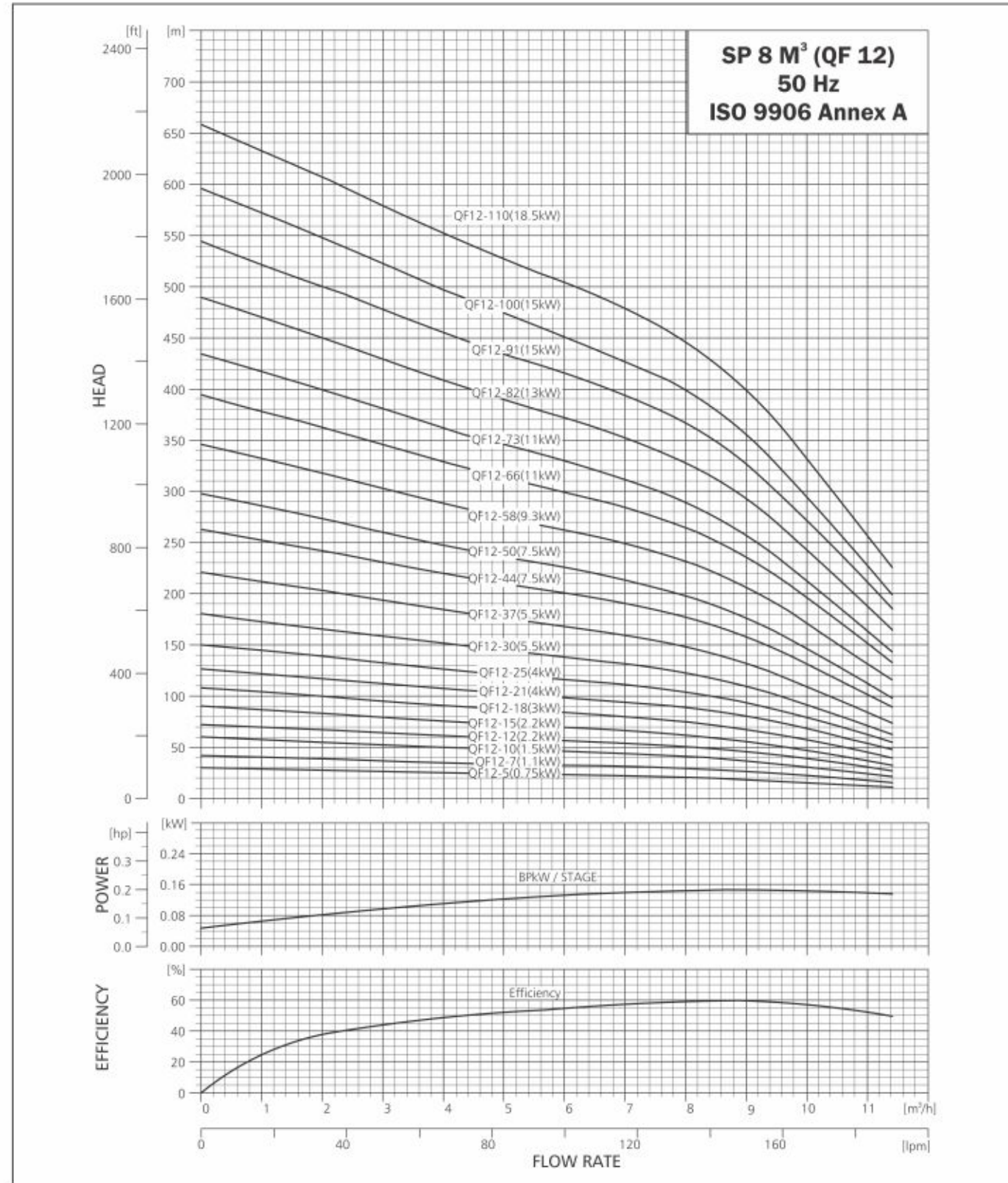
PERFORMANCE TABLE QF 6

QF-6				DISCHARGE (Q)																
				m <sup>3</sup> /h		l/min.														
MODEL	CONNE- CTION	MATERIAL CODE		MOTOR RATING		TOTAL HEAD IN (m)														
		4x4	6x4	[kW]	[HP]	1-	3-	0	1	1.4	1.8	2	2.4	2.8	3.4	4	4.4	5	6	6.8
QF6-4	Rp1½	9000002563	-	0.37	0.5	2.9	1.4	26	24	23	23	22	22	21	20	19	18	16	11	9
QF6-6		9000002567	-	0.55	0.75	4	2.2	38	36	35	34	33	33	32	30	28	26	24	17	11
QF6-8		9000002573	-	0.75	1	5.5	2.3	51	48	47	46	45	44	43	40	38	36	32	23	15
QF6-12		9000002553	-	1.1	1.5	8.2	3.4	77	72	70	68	67	65	63	60	56	54	47	35	21
QF6-17		9000002554	-	1.5	2	10.2	4.2	109	100	97	96	94	92	90	85	80	75	67	49	30
QF6-21		9000002557	-	2.2	3	14	5.5	135	126	122	120	118	115	112	106	100	95	85	63	39
QF6-25		9000002558	-	2.2	3	14	5.5	160	150	145	141	139	135	131	125	118	112	99	72	45
QF6-33		9000002561	-	3	4	-	7.9	211	195	190	186	183	179	173	166	155	148	130	95	59
QF6-38		9000002562	9000011562	4	5.5	-	9.6	250	233	229	221	219	215	209	199	186	177	157	115	72
QF6-44		9000002564	9000011577	4	5.5	-	9.6	281	260	257	250	245	240	232	220	207	195	174	127	79
QF6-52		9000002565	9000002566	5.5	7.5	-	13.6	334	310	302	296	293	285	280	267	249	238	210	155	98
QF6-60		9000002568	9000002569	5.5	7.5	-	13.6	384	360	345	339	335	325	319	303	283	269	238	175	108
QF6-75		-	9000014918	7.5	10	-	-	480	450	431	424	418	405	397	379	353	337	300	212	138
QF6-85		-	9000002575	7.5	10	-	-	544	510	488	480	473	459	450	430	400	382	340	240	150



PERFORMANCE CURVE

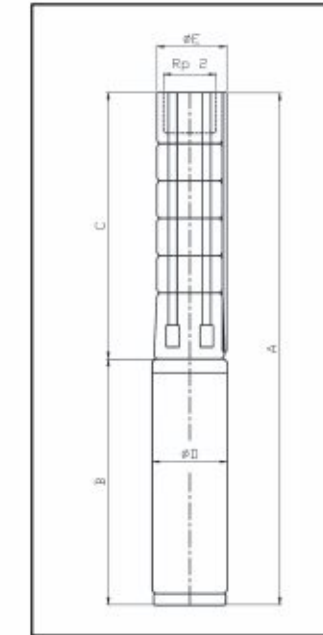
SUBMERSIBLE PUMP QF 12



TECHNICAL DATA

SUBMERSIBLE PUMP QF 12

DIMENSIONS AND WEIGHTS



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

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

TECHNICAL DATA QF 12

PUMP TYPE	MOTOR		DIMENSIONS (MM)						NET WEIGHT (KG)			
	TYPE	POWER (kW)	C	B		A		D	E	PUMP	MOTOR	
				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

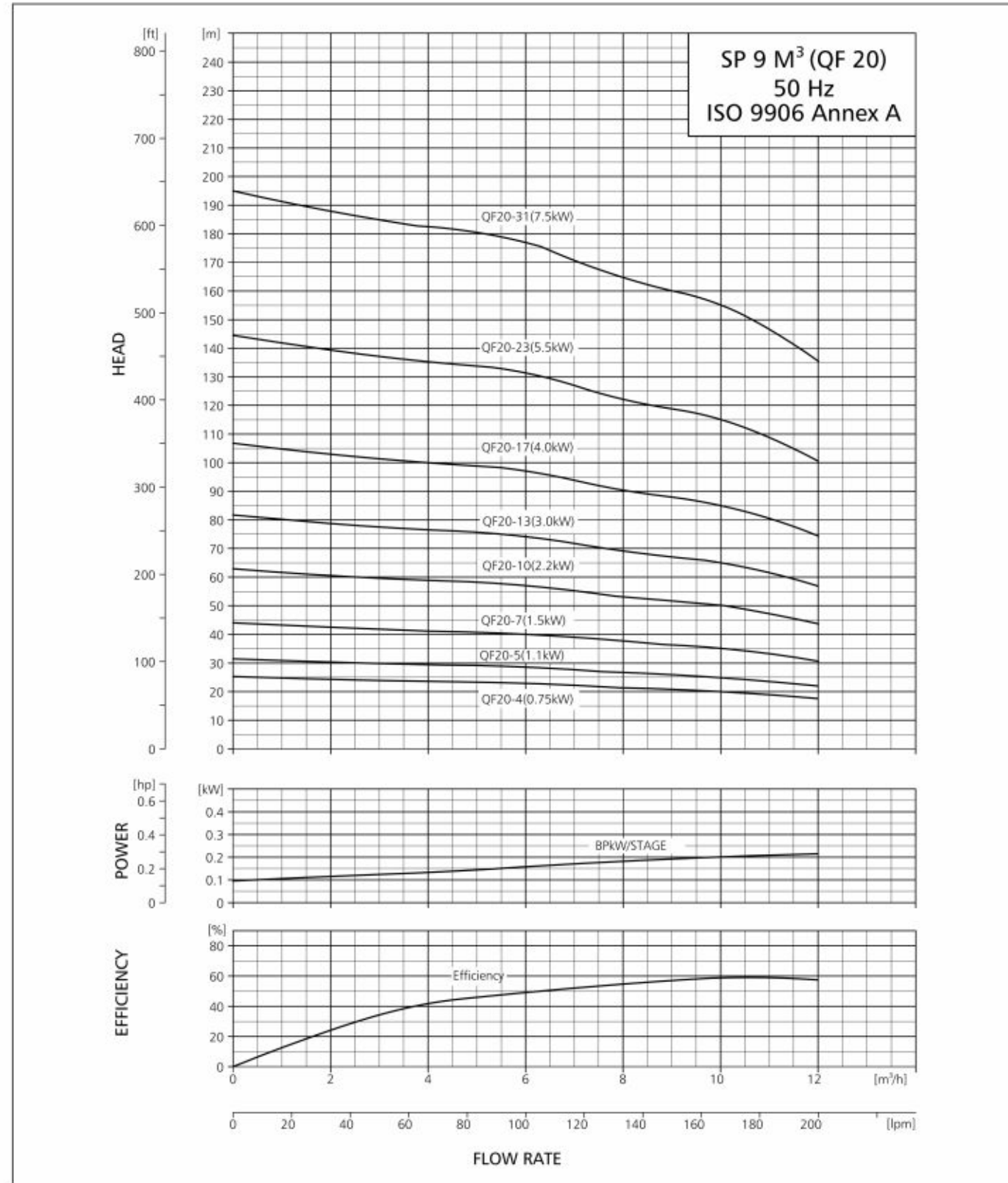
\* Motor type may change as per requirement .

PERFORMANCE TABLE QF 12

MODEL		CONNE- -TION	MATERIAL CODE		MOTOR RATING		DISCHARGE (Q)									
							m <sup>3</sup> /h									
							0	1.4	2	4	6	8	9	10	11	
QF-12							0	23.4	33.4	66.8	100.2	133.3	150	167	183.7	
							1/min.	0	23.4	33.4	66.8	100.2	133.3	150	167	183.7
							TOTAL HEAD IN (m)									
							1-	3-								
							[A]	[A]								
QF 12 - 5	9000002616	-	0.75	1.0	5.5	2.3	30	29	27	25	23	21	19	16	12	
QF 12 - 7	9000002626	-	1.1	1.5	8.2	3.4	42	40	38	35	32	29	26	22	17	
QF 12 - 10	9000002581	-	1.5	2.0	10.2	4.2	60	57	55	50	46	41	37	32	24	
QF 12 - 12	9000002585	-	2.2	3.0	14.0	5.5	72	68	68	61	57	51	46	39	31	
QF 12 - 15	9000002588	-	2.2	3.0	14.0	5.5	90	85	82	76	70	62	56	47	37	
QF 12 - 18	9000002592	-	3.0	4.0	-	7.9	108	102	100	91	84	75	67	57	45	
QF 12 - 21	9000002596	9000011469	4.0	5.5	-	9.6	127	120	117	107	99	89	80	68	53	
QF 12 - 25	9000002600	9000008265	4.0	5.5	-	9.6	150	142	139	126	116	104	94	79	62	
QF 12 - 30	9000002606	9000002607	5.5	7.5	-	13.6	180	170	165	151	138	123	110	92	71	
QF 12 - 37	9000002609	9000002610	5.5	7.5	-	13.6	221	210	202	184	168	148	132	110	84	
QF 12 - 44	-	9000002614	7.5	10.0	-	-	264	246	238	220	202	185	167	141	106	
QF 12 - 50	-	9000002619	7.5	10.0	-	-	300	279	270	250	230	210	190	160	120	
QF 12 - 58	-	9000012044	9.3	12.5	-	-	348	324	314	290	266	244	220	186	140	
QF 12 - 66	-	9000002624	11	15.0	-	-	396	369	357	330	303	277	250	211	159	
QF 12 - 73	-	9000002627	11	15.0	-	-	438	408	395	365	335	307	277	234	176	
QF 12 - 82	-	9000002629	13.0	17.5	-	-	492	458	443	410	376	345	311	263	197	
QF 12 - 91	-	9000002631	15.0	20.0	-	-	546	509	492	455	418	383	345	292	219	
QF 12 - 100	-	9000002582	15.0	20.0	-	-	600	559	541	500	459	420	379	320	241	
QF 12 - 110	-	9000013726	18.5	25.0	-	-	660	615	595	550	505	462	417	352	265	

PERFORMANCE CURVE

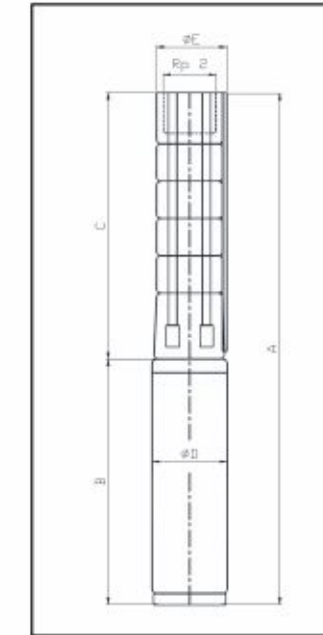
SUBMERSIBLE PUMP QF 20



TECHNICAL DATA

SUBMERSIBLE PUMP QF 20

DIMENSIONS AND WEIGHTS



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

TECHNICAL DATA QF 20

PUMP TYPE	MOTOR TYPE	POWER (kW)	C	DIMENSIONS (MM)				NET WEIGHT (KG)				
				B		A		D	E	PUMP	MOTOR	
				1x230V	3x220V 3x400V	1x230V	3x220V 3x400V				1x230V	3x220V 3x400V
QF 20-4	PREMIUM 100	1.1	445	340	292	785	737	95	101	6	13	11
QF 20-5	PREMIUM 100	1.1	510	340	292	850	802	95	101	6	13	11
QF 20-7	PREMIUM 100	1.5	640	405	340	1045	980	95	101	7	15	13
QF 20-10	PREMIUM 100	2.2	835	482	405	1317	1240	95	101	8	17	15
QF 20-13	PREMIUM 100	3	1030	-	482	-	1512	95	101	11	-	17
QF 20-17	PREMIUM 101	4	1290	-	579	-	1869	95	101	14	-	23
QF 20-23	PREMIUM 101	5.5	1680	-	693	-	2373	95	101	19	-	29
QF 20-31	PREMIUM 101	7.5	2200	-	770	-	2970	95	101	24	-	33
QF 20-23	MATASF 150	5.5	1750	-	699	-	2449	145	143	19	-	48
QF 20-31	MATASF 150	7.5	2270	-	719	-	2989	145	143	24	-	50

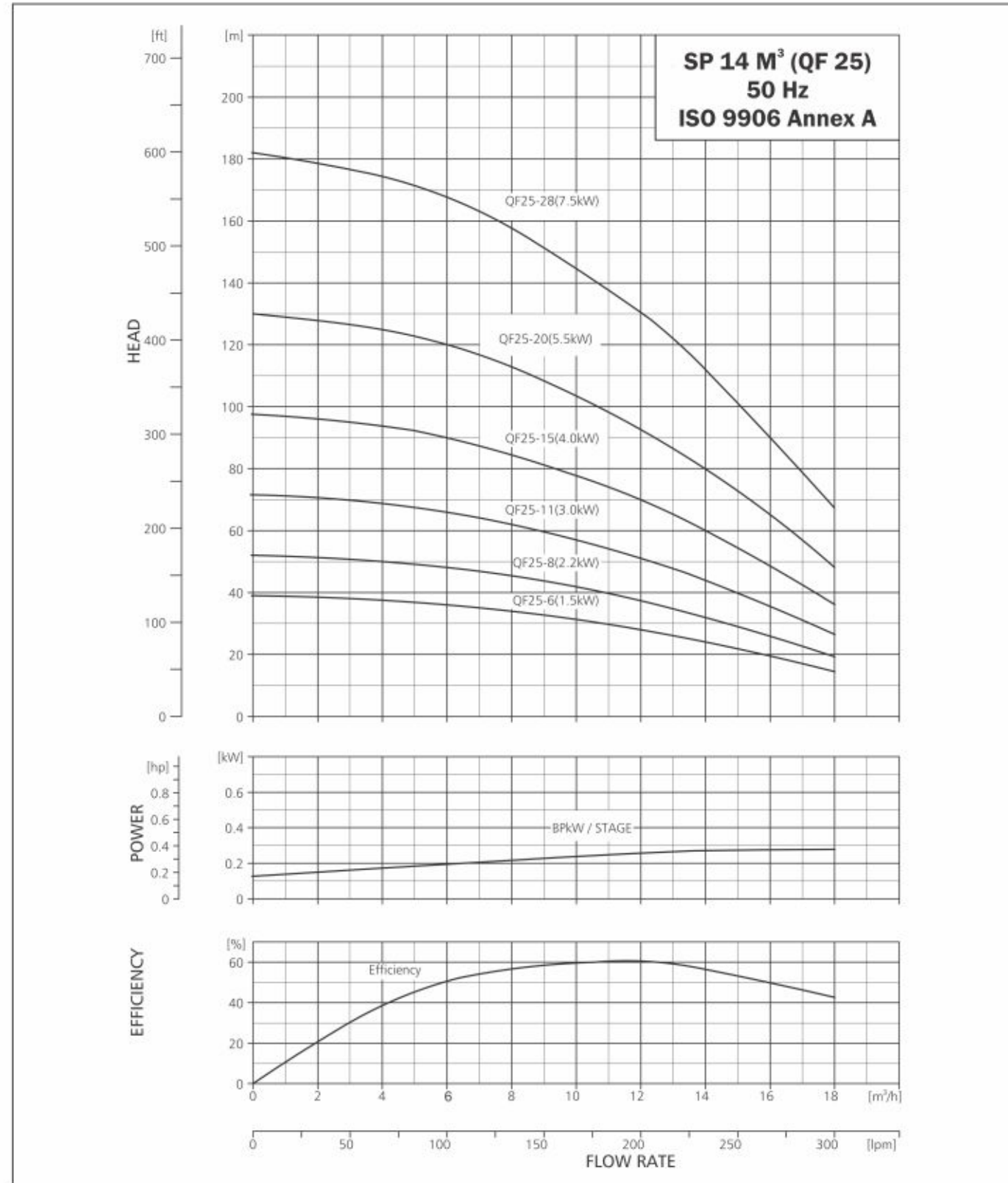
\* Motor type may change as per requirement .

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	CONNE- -TION	MATERIAL CODE		MOTOR RATING		TOTAL HEAD IN (m)						
		6x4	4x4	[kW]	[HP]	0	2	4	6	8	10	12
QF 20 - 4	Rp2	9000002644	-	0.75	1	26	24	23	23	22	20	18
QF 20 - 5		9000011470	-	1.1	1.5	32	31	29	28	27	25	23
QF 20 - 7		9000011471	-	1.5	2	44	43	41	40	38	35	32
QF 20 - 10		9000011862	-	2.2	3	63	61	59	57	53	50	43
QF 20 - 13		9000011473	-	3	4	82	78	76	74	69	65	57
QF 20 - 17		9000011861	-	4	5.5	107	103	100	97	90	85	74
QF 20 - 23		9000011863	-	5.5	7.5	145	139	135	132	122	115	100
QF 20 - 31		9000011864	9000016485	7.5	10	195	188	182	177	165	155	135

PERFORMANCE CURVE

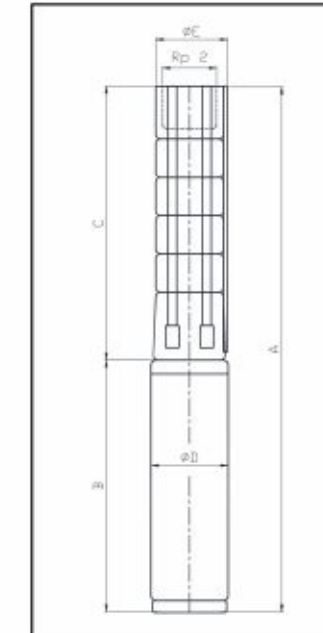
SUBMERSIBLE PUMP QF 25



TECHNICAL DATA

SUBMERSIBLE PUMP QF 25

DIMENSIONS AND WEIGHTS



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

TECHNICAL DATA QF 25

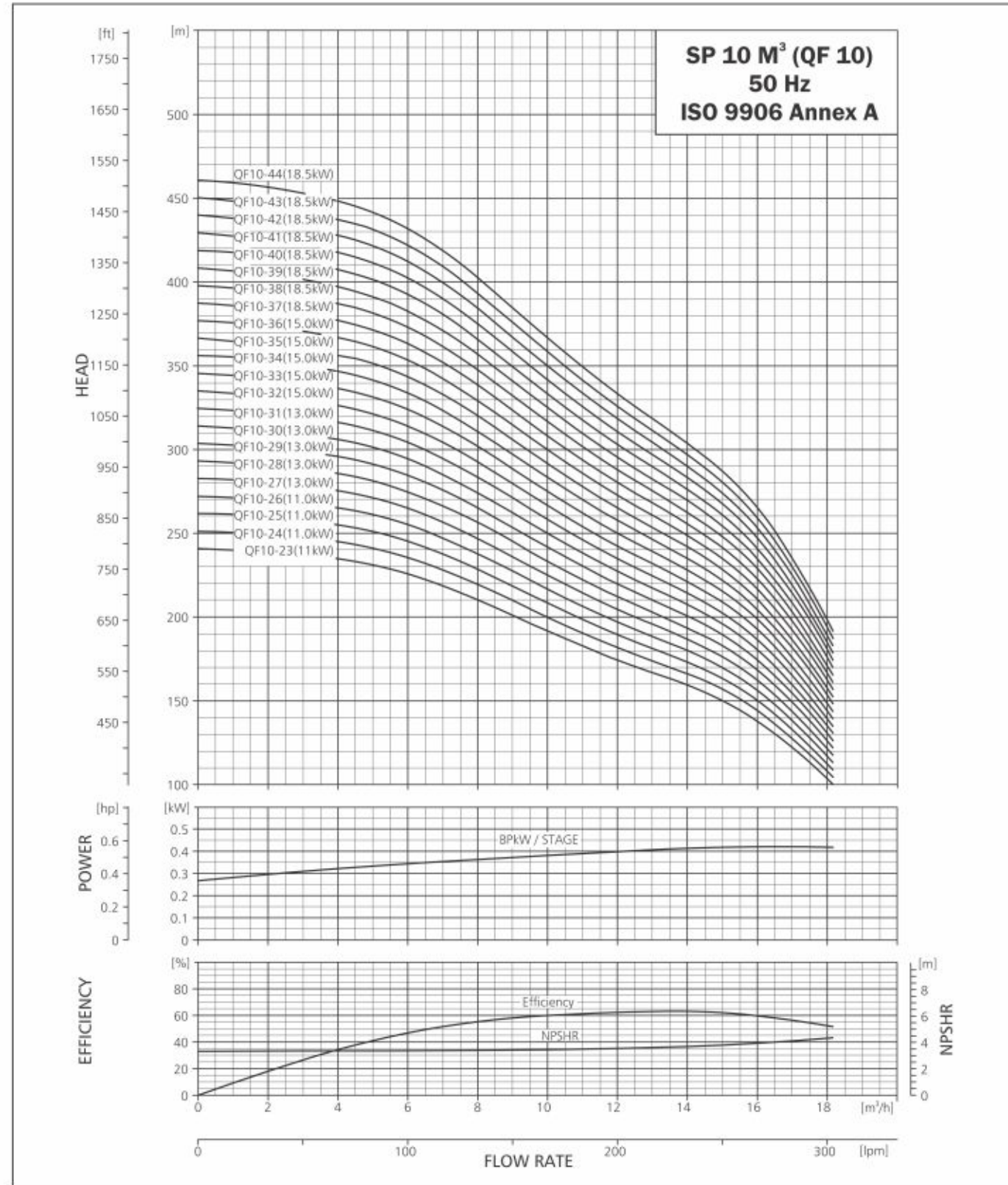
PUMP TYPE	MOTOR TYPE	POWER (kW)	C	DIMENSIONS (MM)				NET WEIGHT (KG)					
				B		A		D	E	PUMP		MOTOR	
				1x230V	3x220V 3x400V	1x230V	3x220V 3x400V			1x230V	3x220V 3x400V	1x230V	3x220V 3x400V
QF 25-6	PREMIUM100	1.5	575	405	340	980	915	95	101	3	15	13	
QF 25-8	PREMIUM100	2.2	705	482	405	1187	1110	95	101	4	17	15	
QF 25-11	PREMIUM100	3	900	-	482	-	1382	95	101	4	-	17	
QF 25-15	PREMIUM101	4	1160	-	579	-	1739	95	101	5	-	23	
QF 25-20	PREMIUM101	5.5	1485	-	693	-	2178	95	101	7	-	29	
QF 25-28	PREMIUM101	7.5	2005	-	770	-	2775	95	101	9	-	33	
QF 25-20	MATASF150	5.5	1555	-	699	-	2254	145	143	7	-	48	
QF 25-28	MATASF150	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	MATERIAL CODE		MOTOR RATING		TOTAL HEAD IN (m)						
		6x4	4x4	[kW]	[HP]	39	36	32	29	28	24	14
QF 25 - 6	Rp 2	9000011848	-	1.5	2	52	48	42	39	37	32	19
QF 25 - 8		9000008189	-	2.2	3	72	66	58	54	51	44	26
QF 25 - 11		9000011850	-	3	4	98	90	82	74	70	60	36
QF 25 - 15		9000011852	-	4	5.5	130	120	108	98	93	80	48
QF 25 - 20		9000011854	9000012090	5.5	7.5	182	168	152	137	131	112	67
QF 25 - 28		9000011856	9000013213	7.5	10							

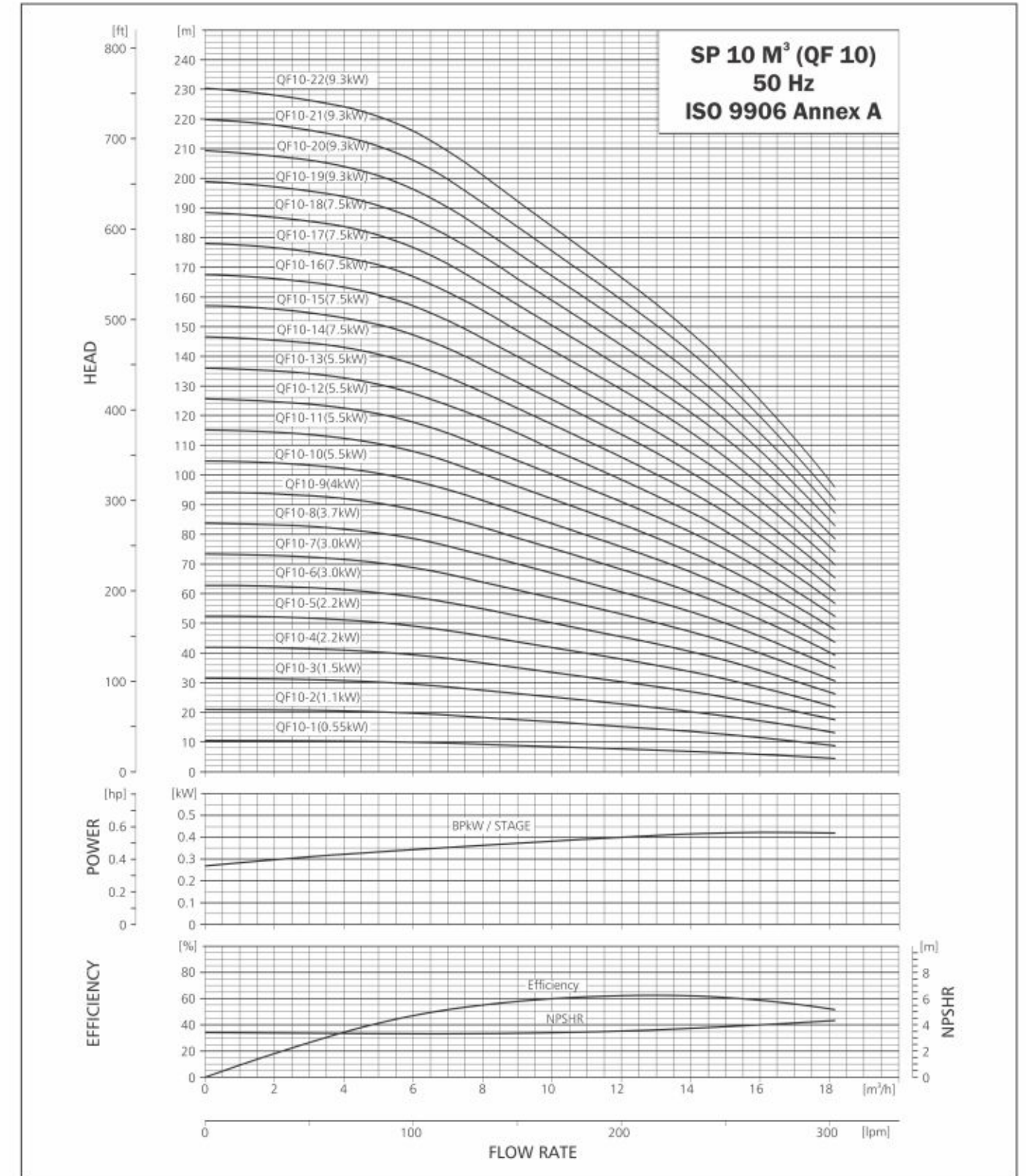
PERFORMANCE CURVE

SUBMERSIBLE PUMP QF 10



PERFORMANCE CURVE

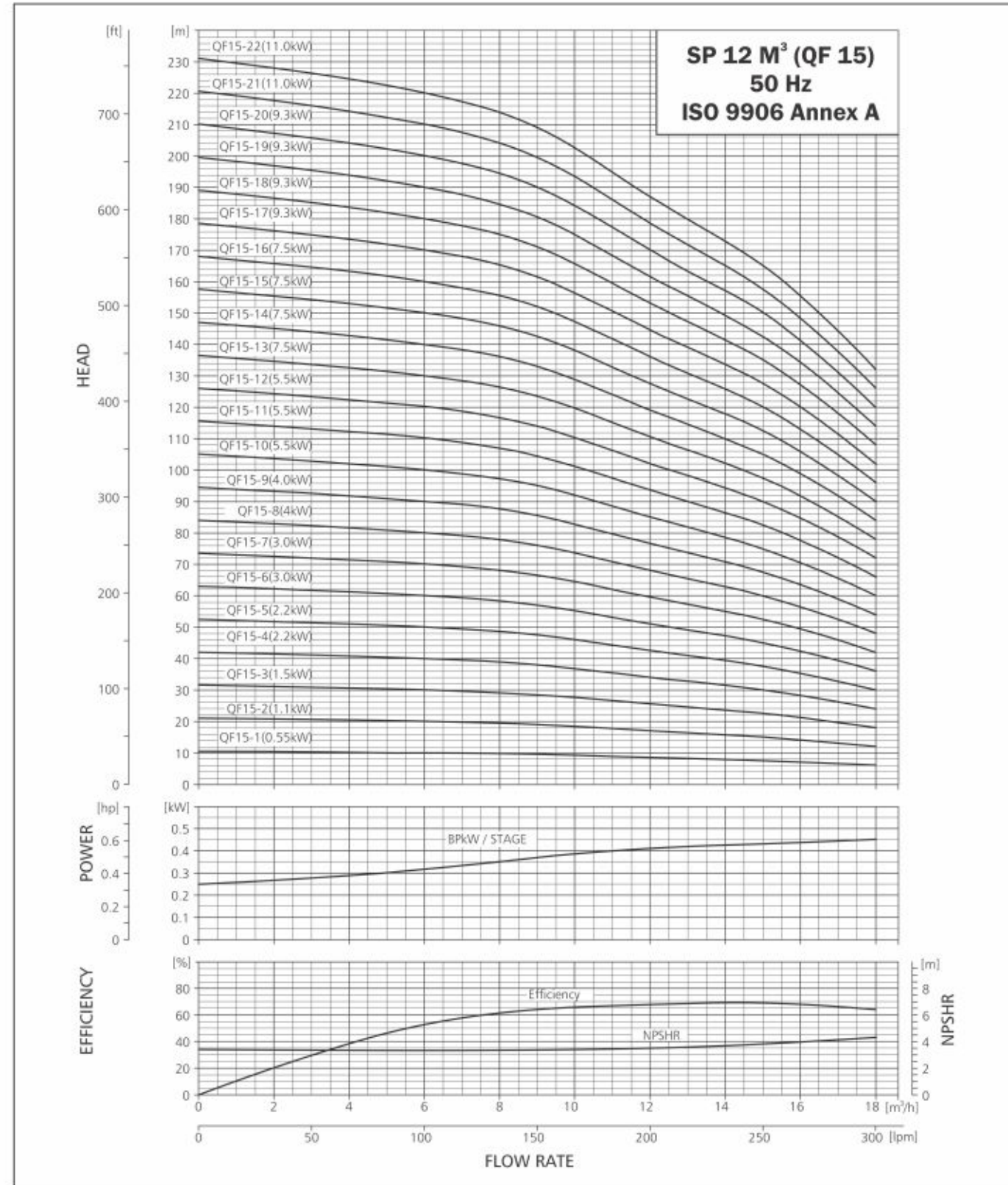
SUBMERSIBLE PUMP QF 10





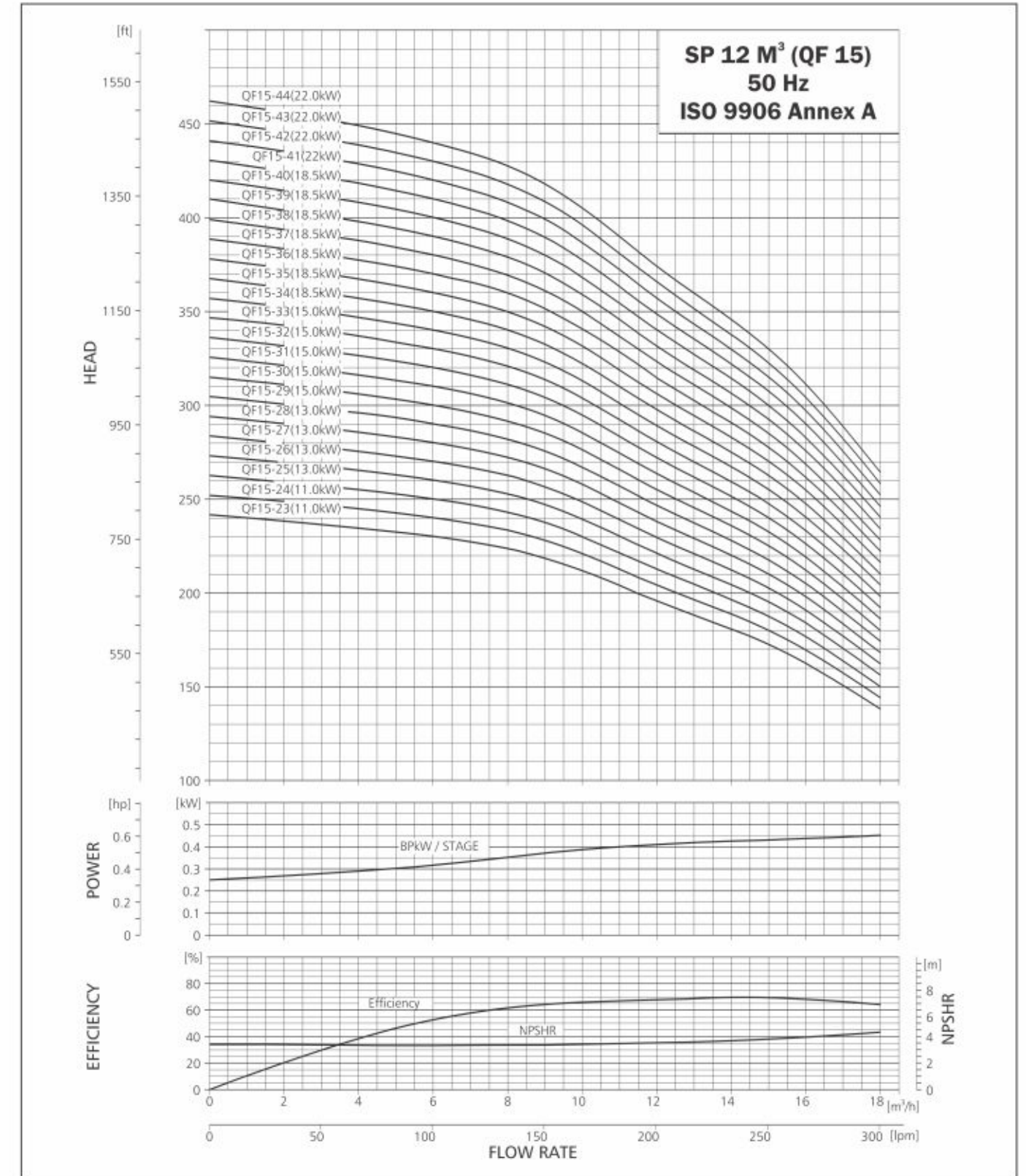
PERFORMANCE CURVE

SUBMERSIBLE PUMP QF 15



PERFORMANCE CURVE

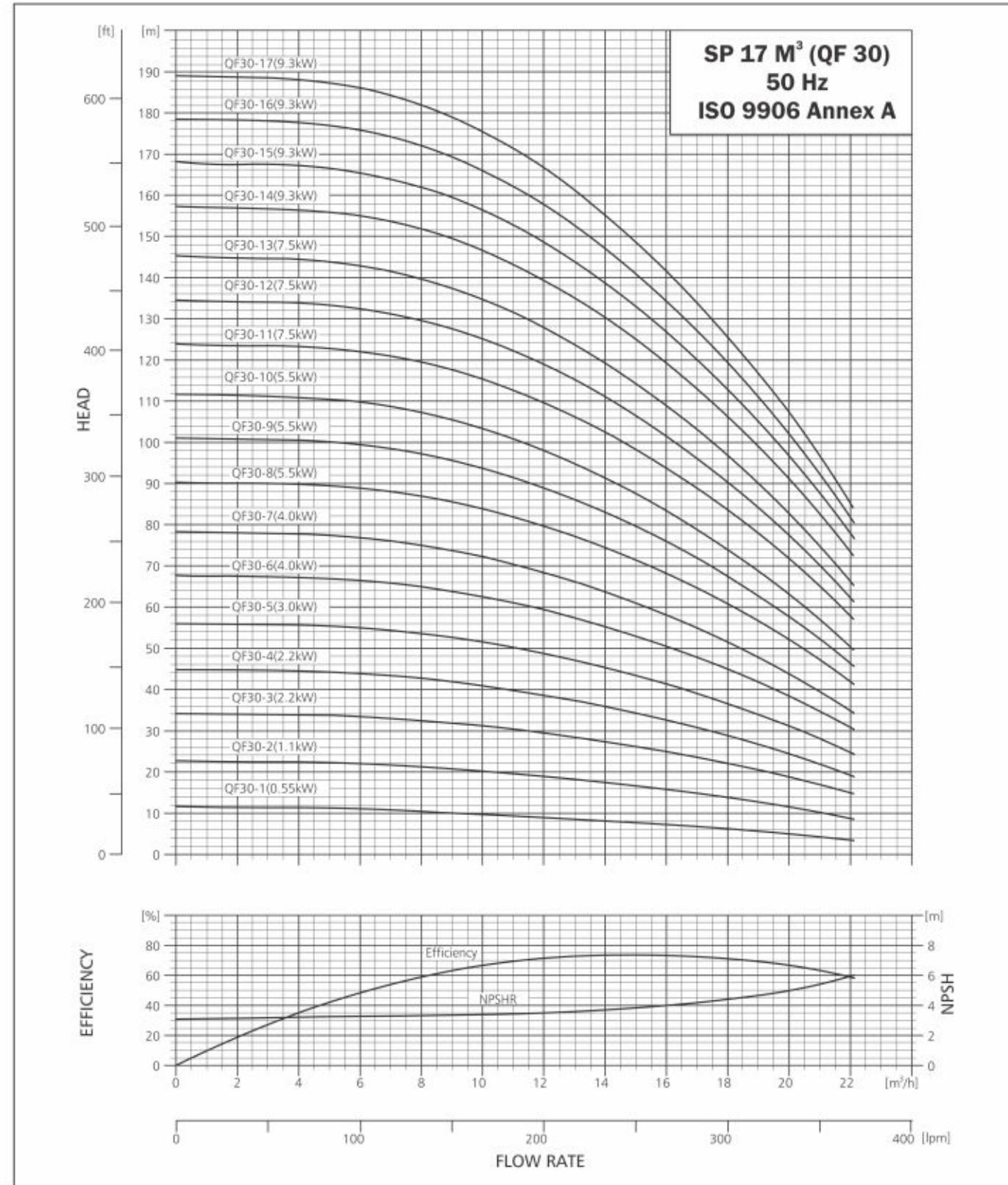
SUBMERSIBLE PUMP QF 15





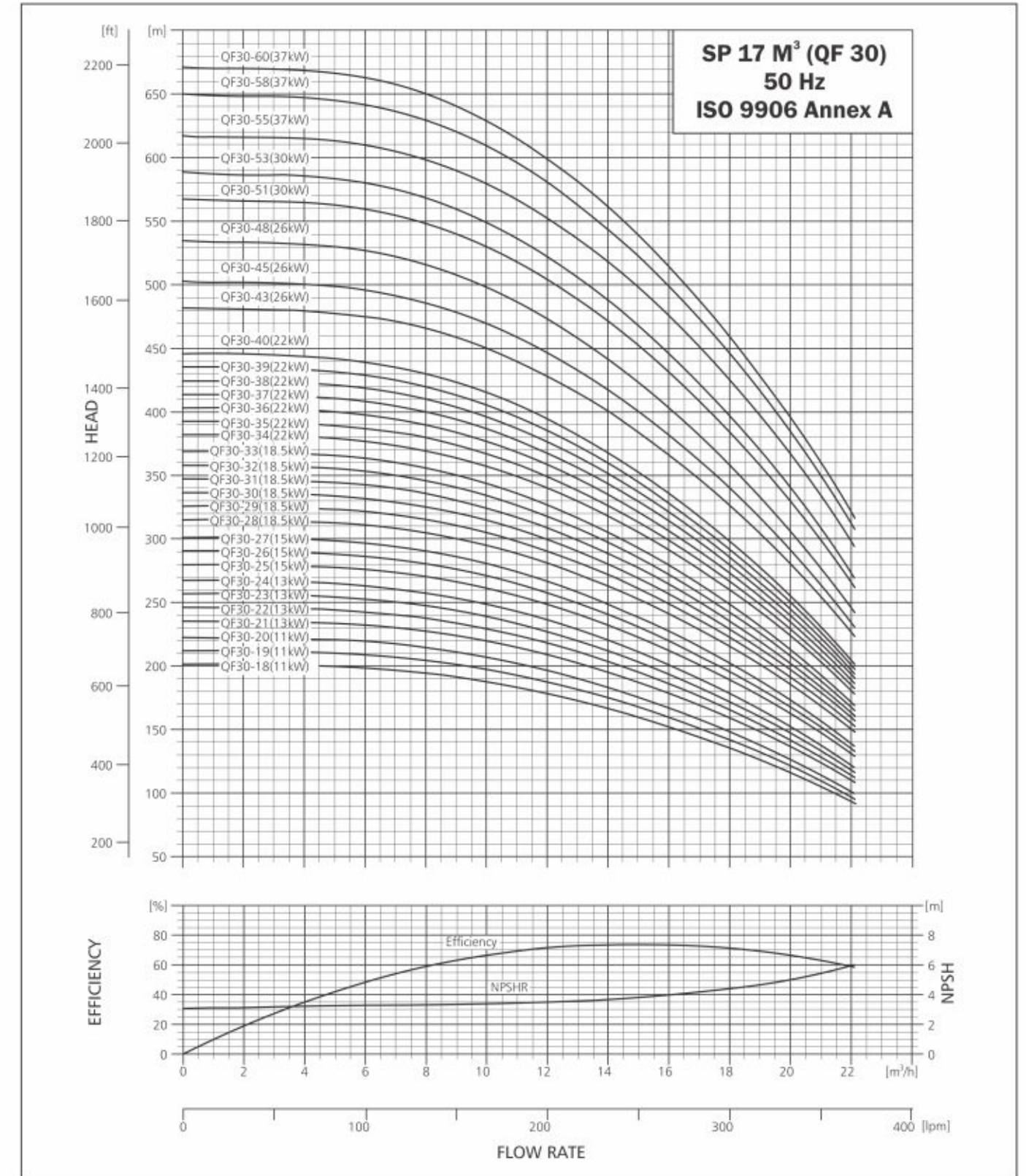
PERFORMANCE CURVE

SUBMERSIBLE PUMP QF 30



PERFORMANCE CURVE

SUBMERSIBLE PUMP QF 30

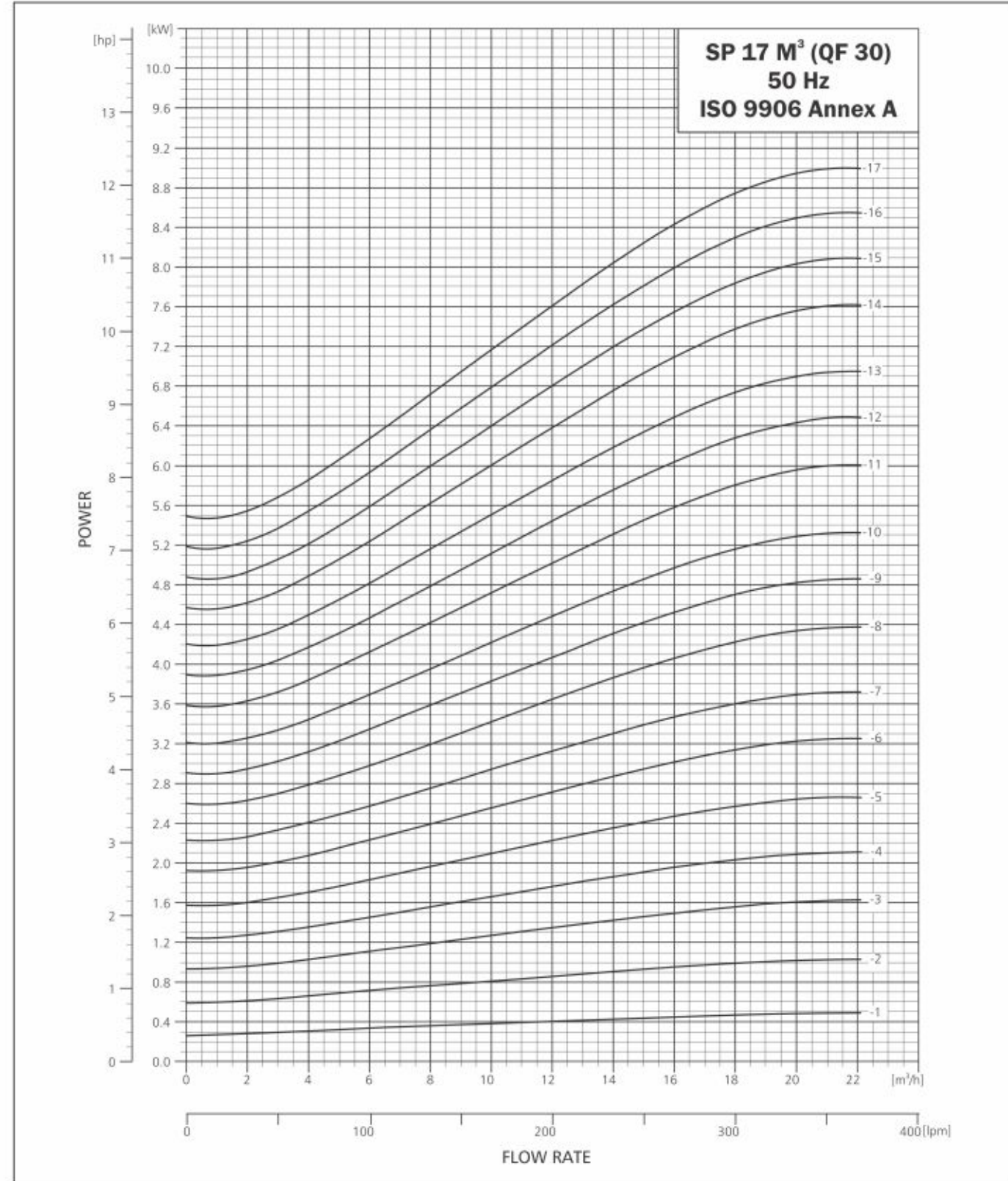






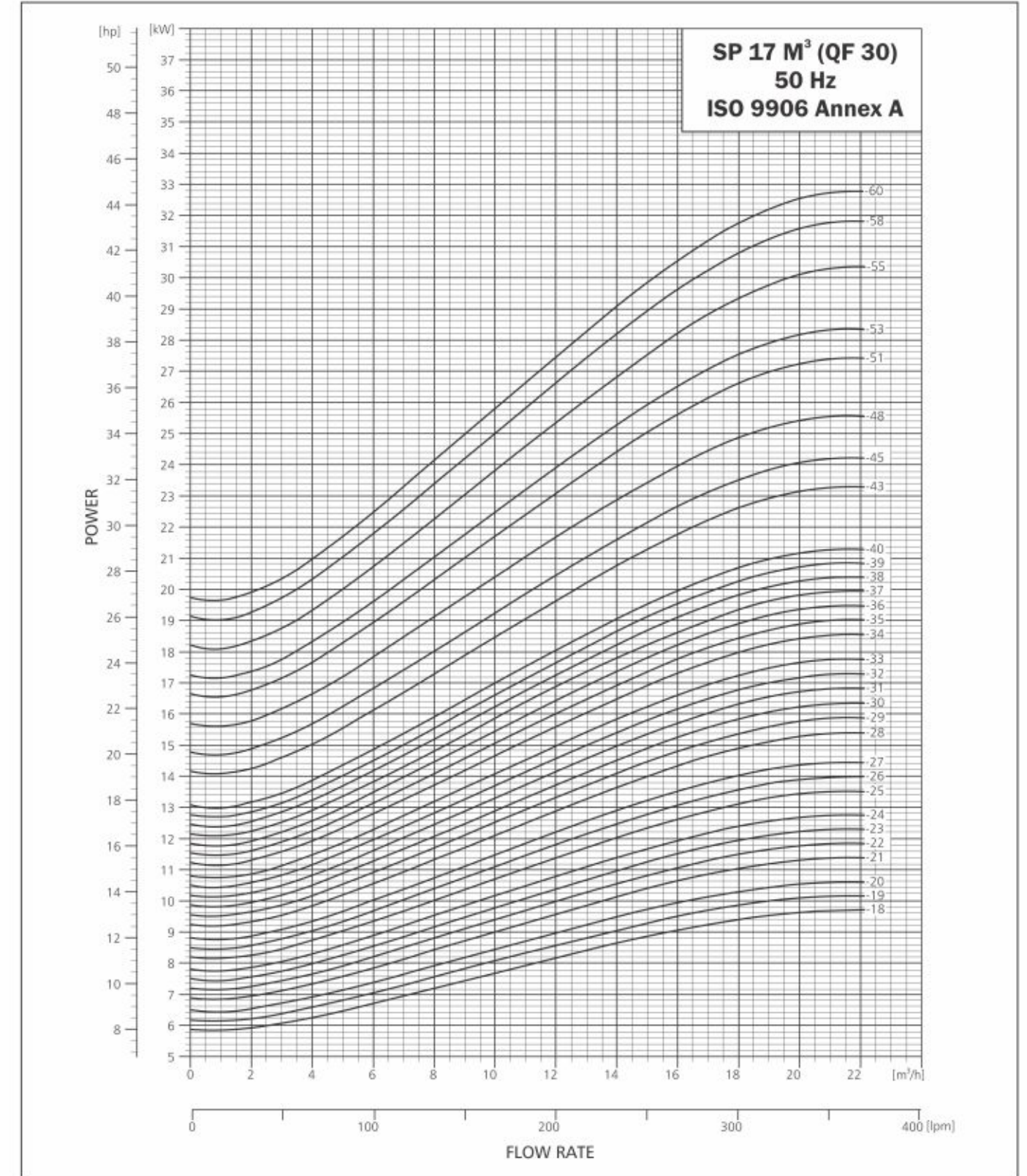
PERFORMANCE CURVE

SUBMERSIBLE PUMP QF 30



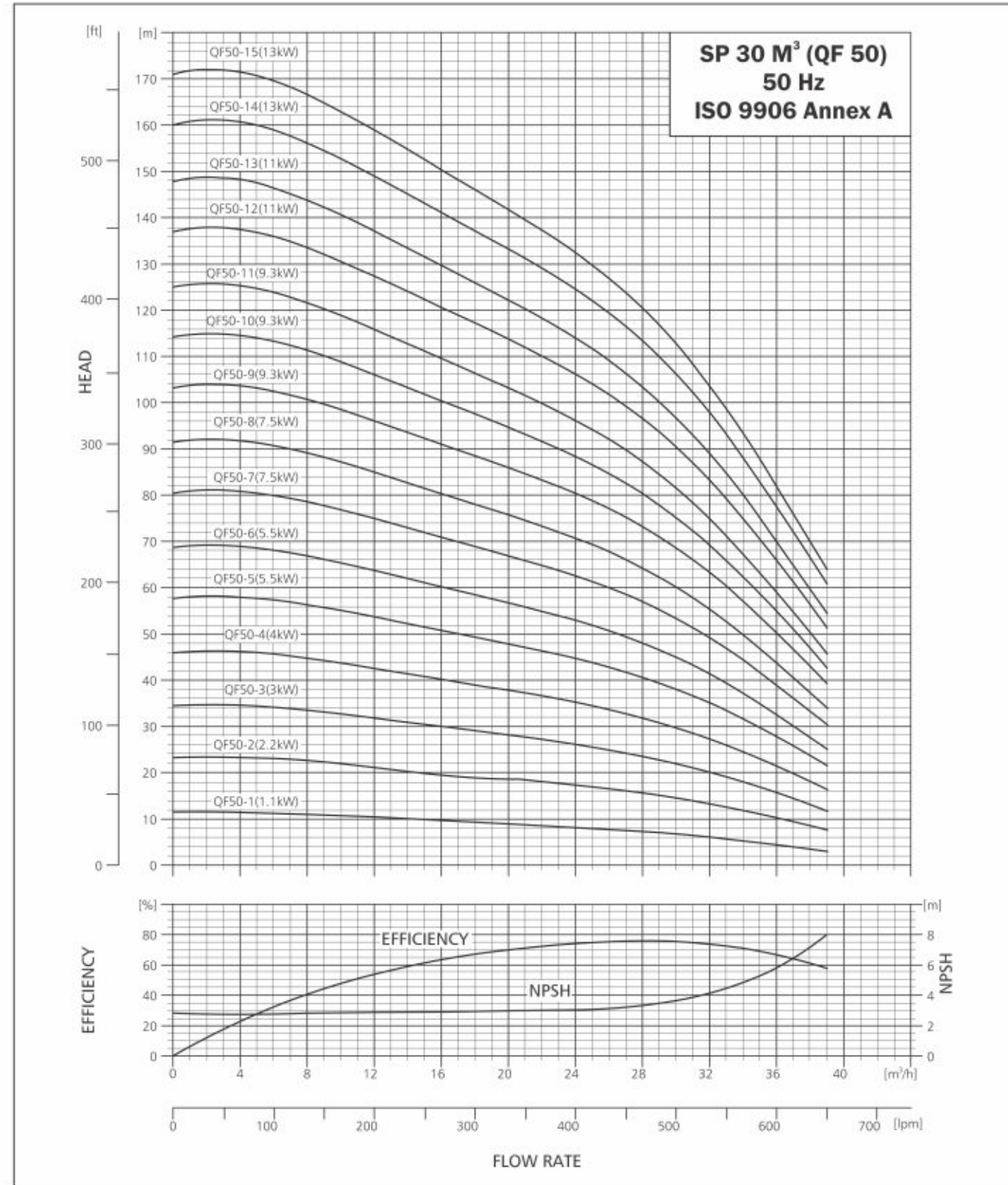
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SUBMERSIBLE PUMP QF 30



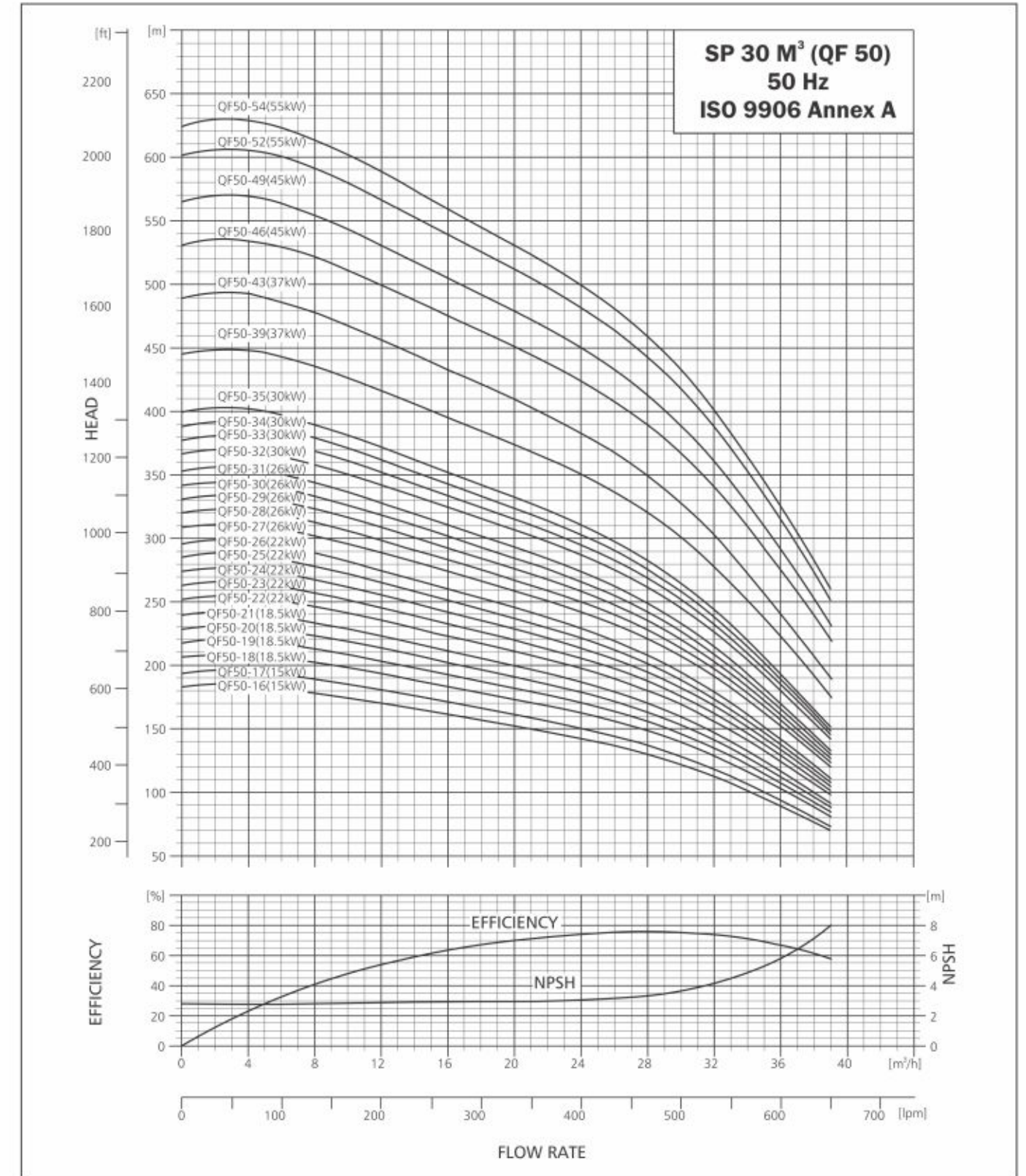
PERFORMANCE CURVE

SUBMERSIBLE PUMP QF 50



PERFORMANCE CURVE

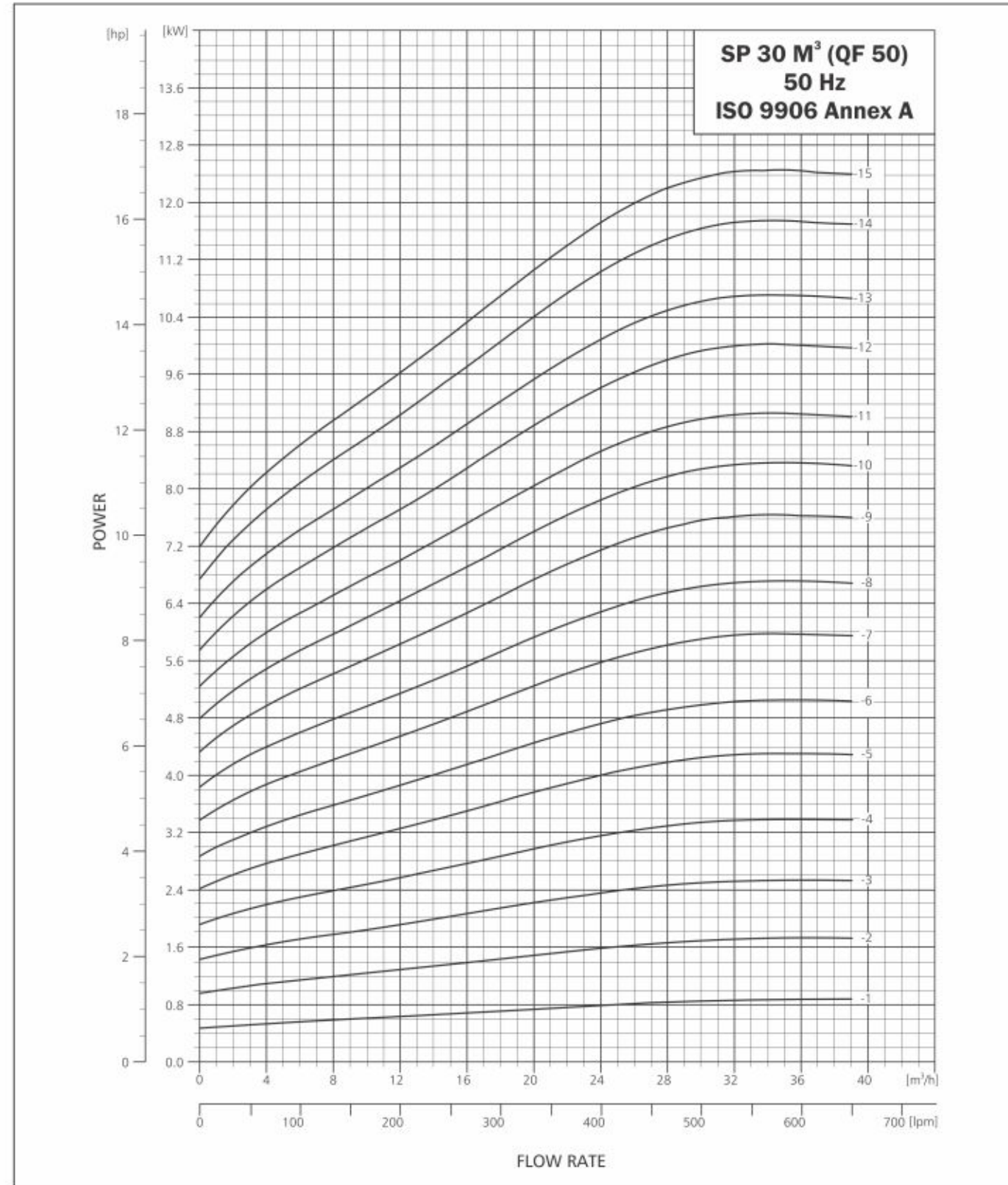
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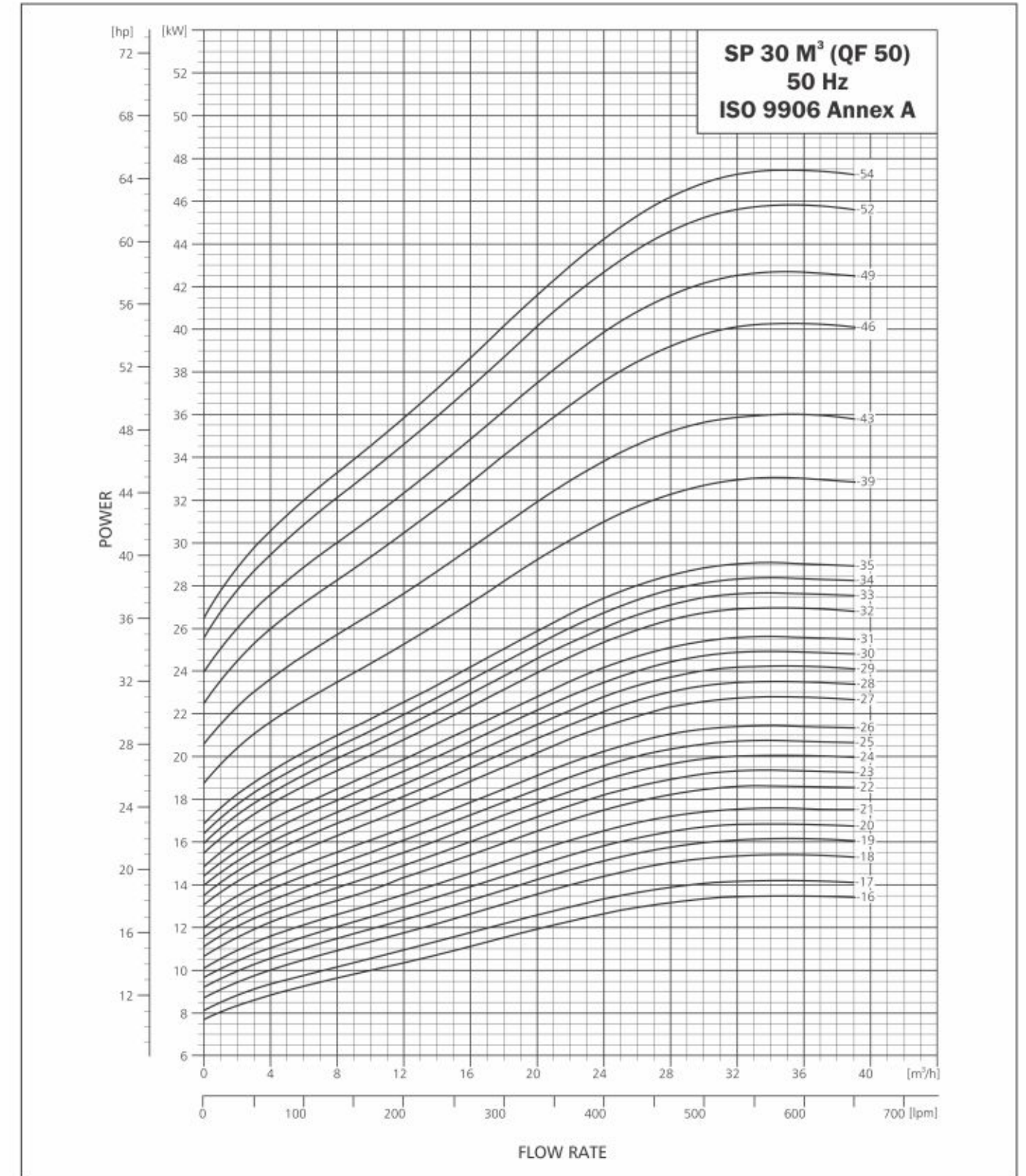
PERFORMANCE CURVE

SUBMERSIBLE PUMP QF 50



PERFORMANCE CURVE

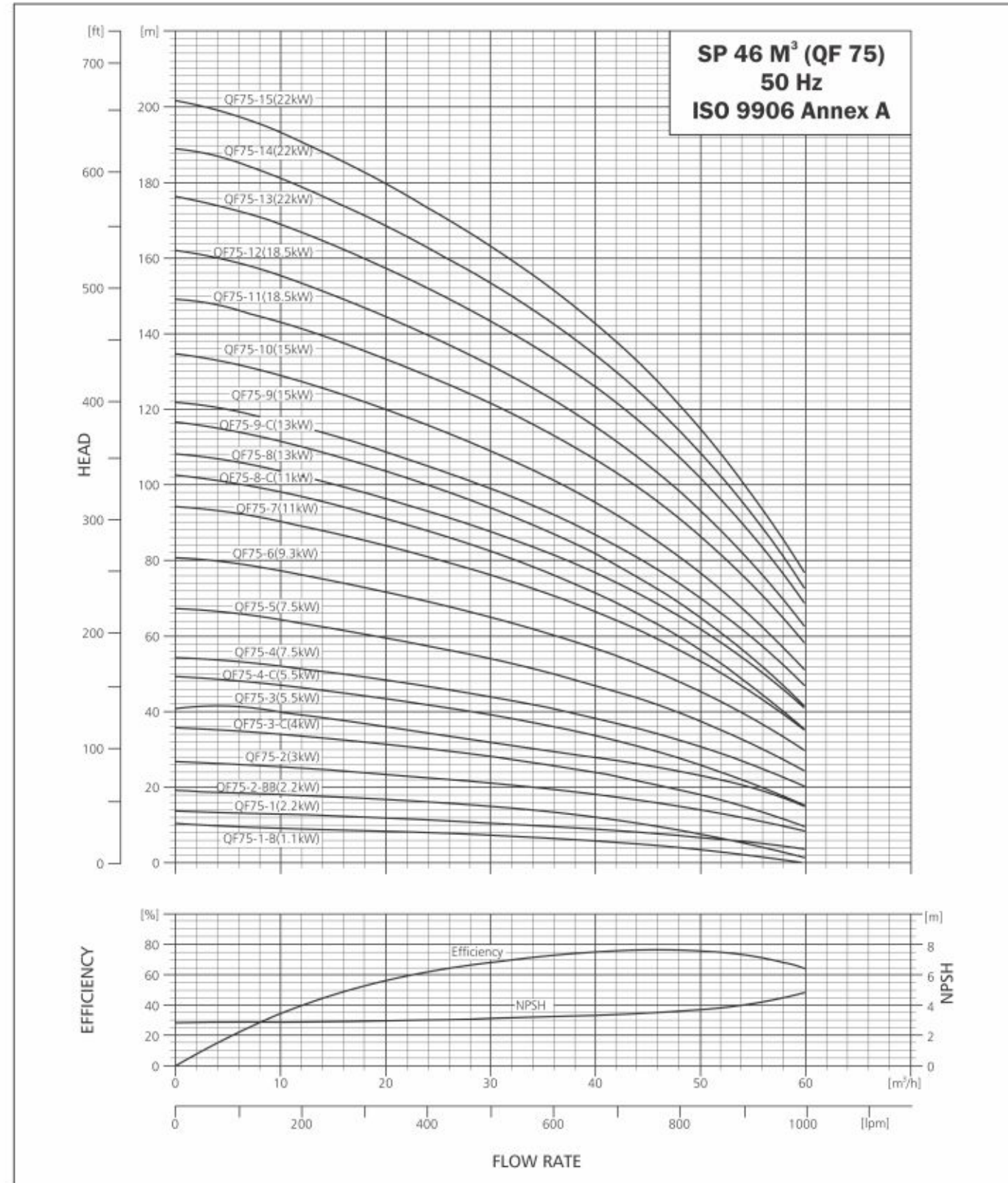
SUBMERSIBLE PUMP QF 50



PERFORMANCE CURVE

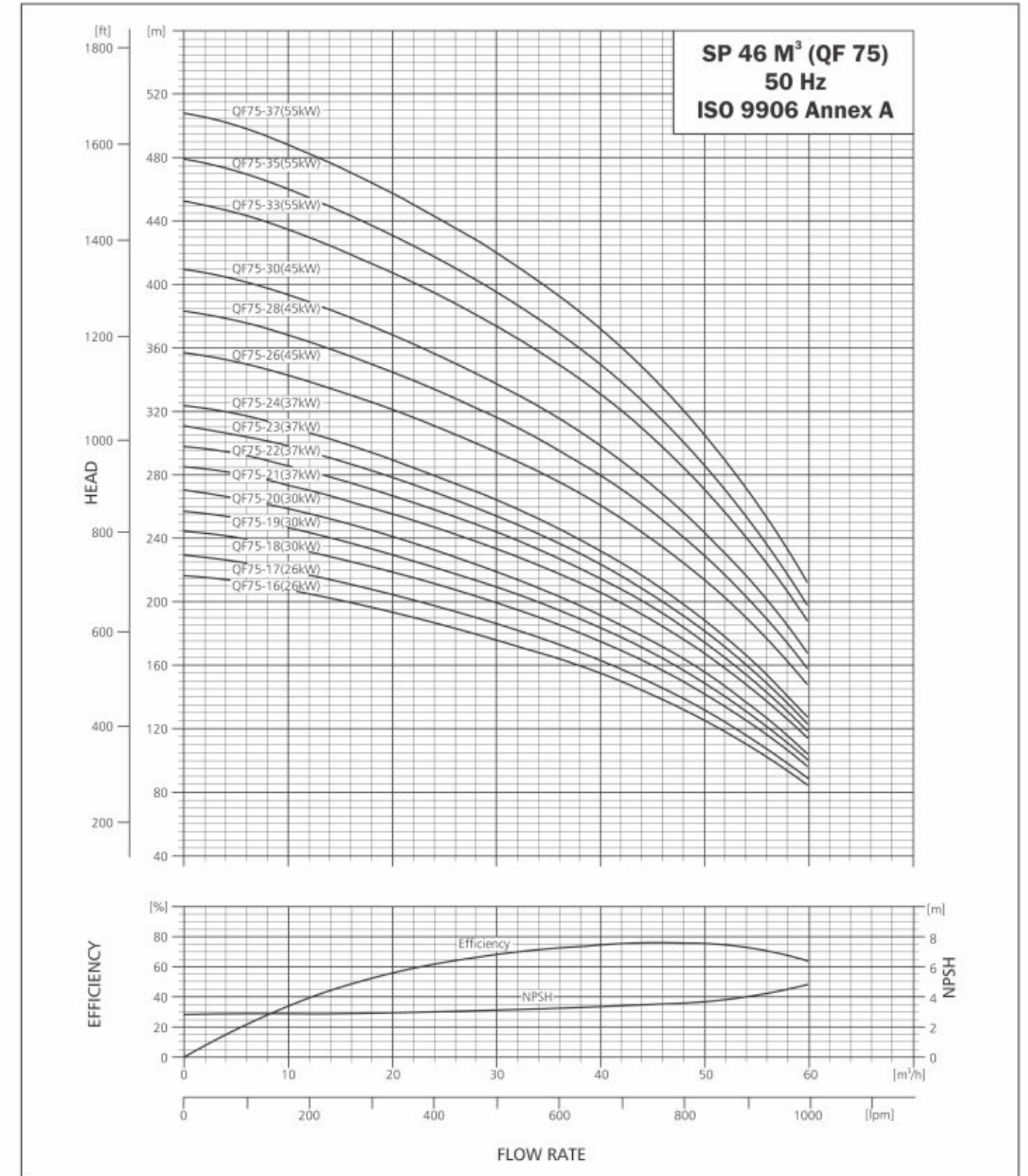


SUBMERSIBLE PUMP QF 75



PERFORMANCE CURVE

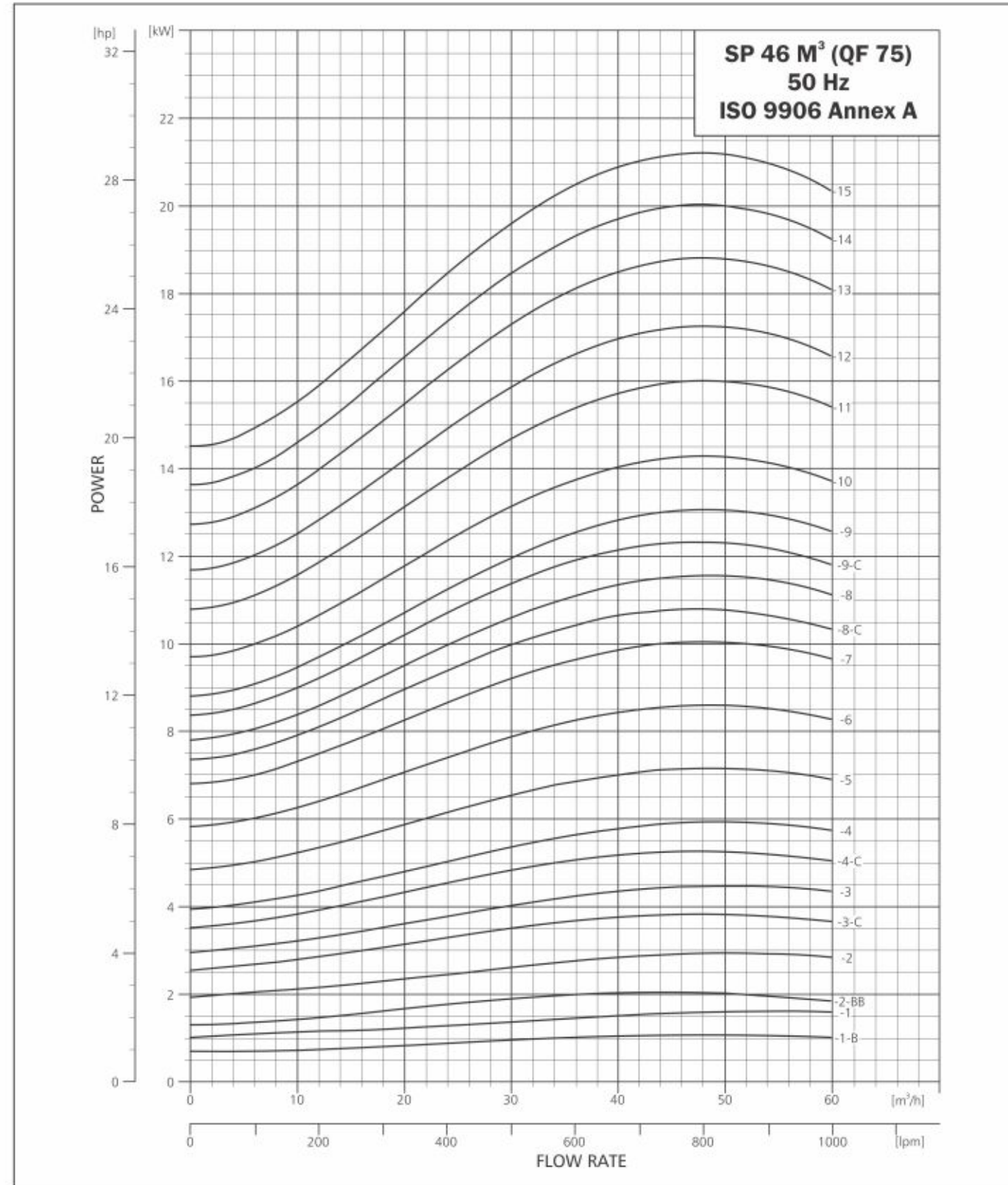
SUBMERSIBLE PUMP QF 75





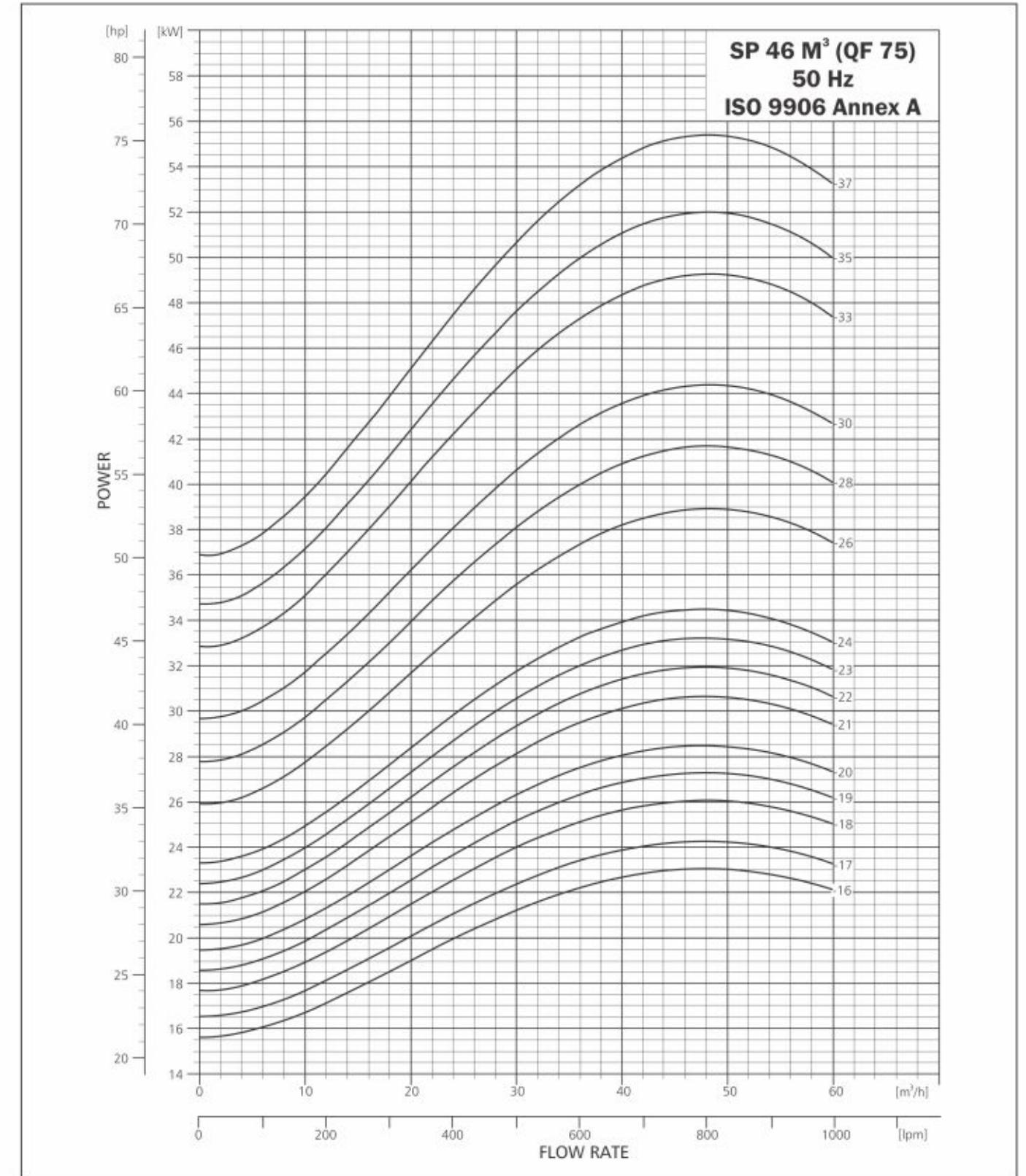
PERFORMANCE CURVE

SUBMERSIBLE PUMP QF 75



PERFORMANCE CURVE

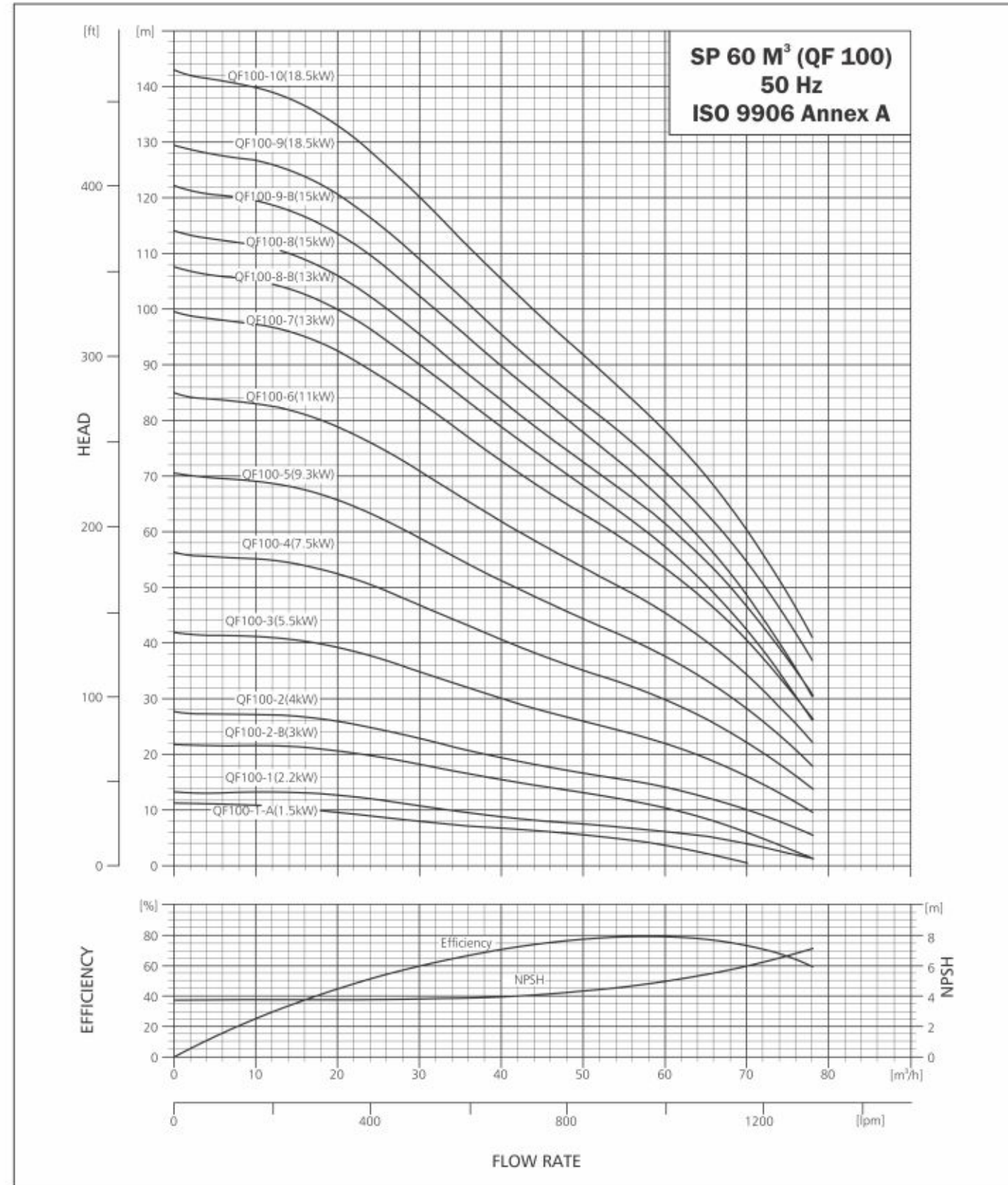
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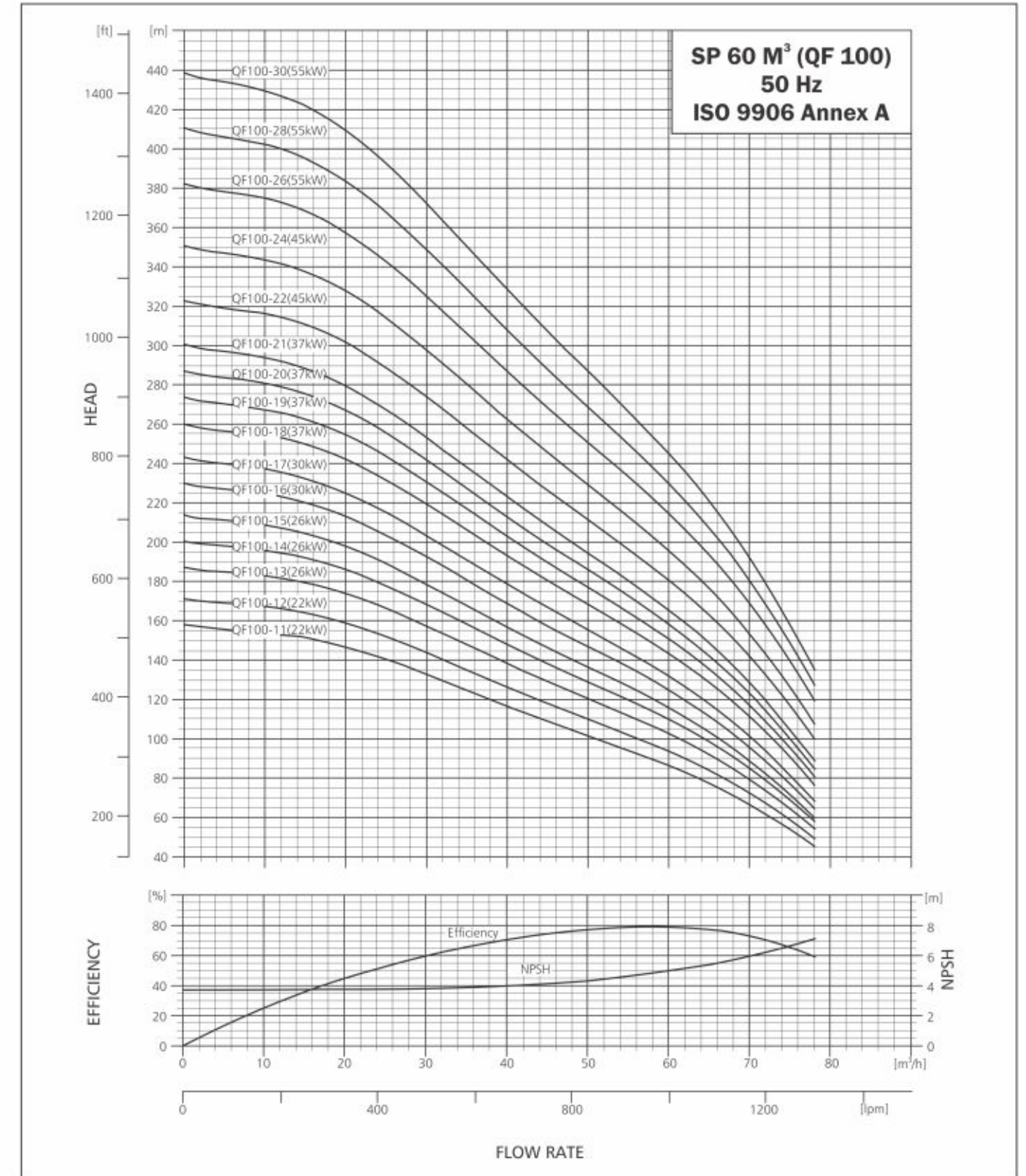
PERFORMANCE CURVE

SUBMERSIBLE PUMP QF 100



PERFORMANCE CURVE

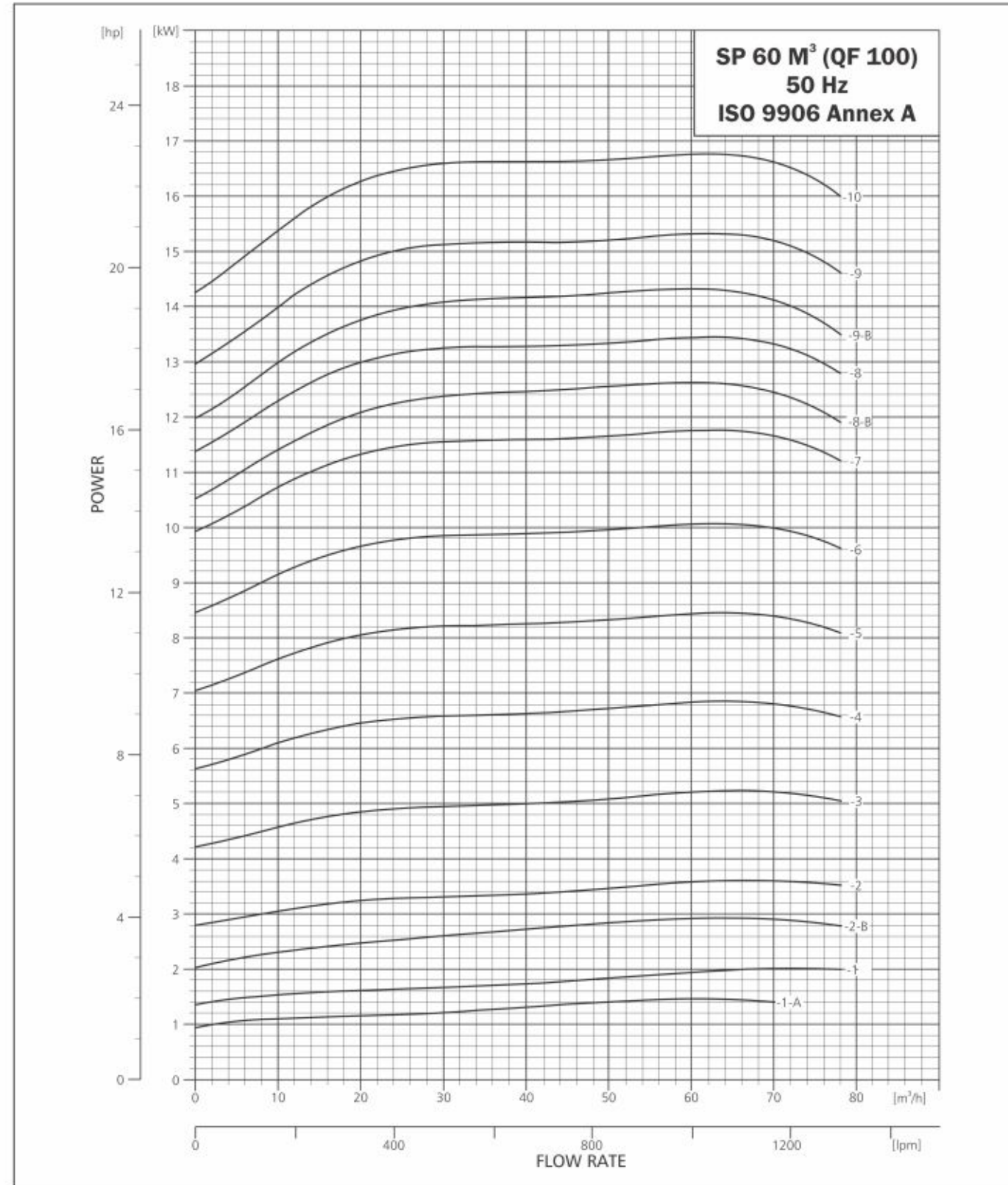
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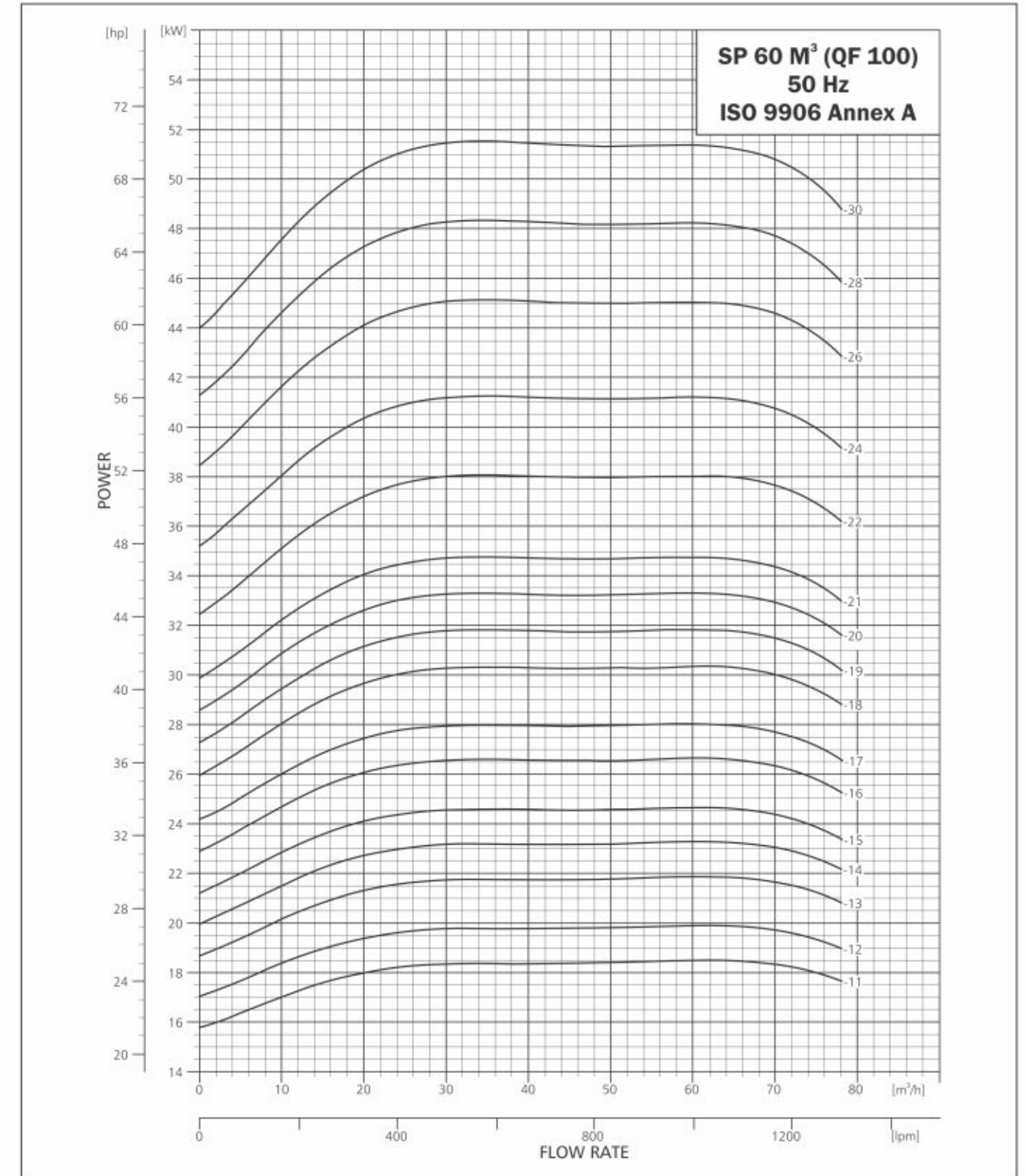
PERFORMANCE CURVE

SUBMERSIBLE PUMP QF 100



PERFORMANCE CURVE

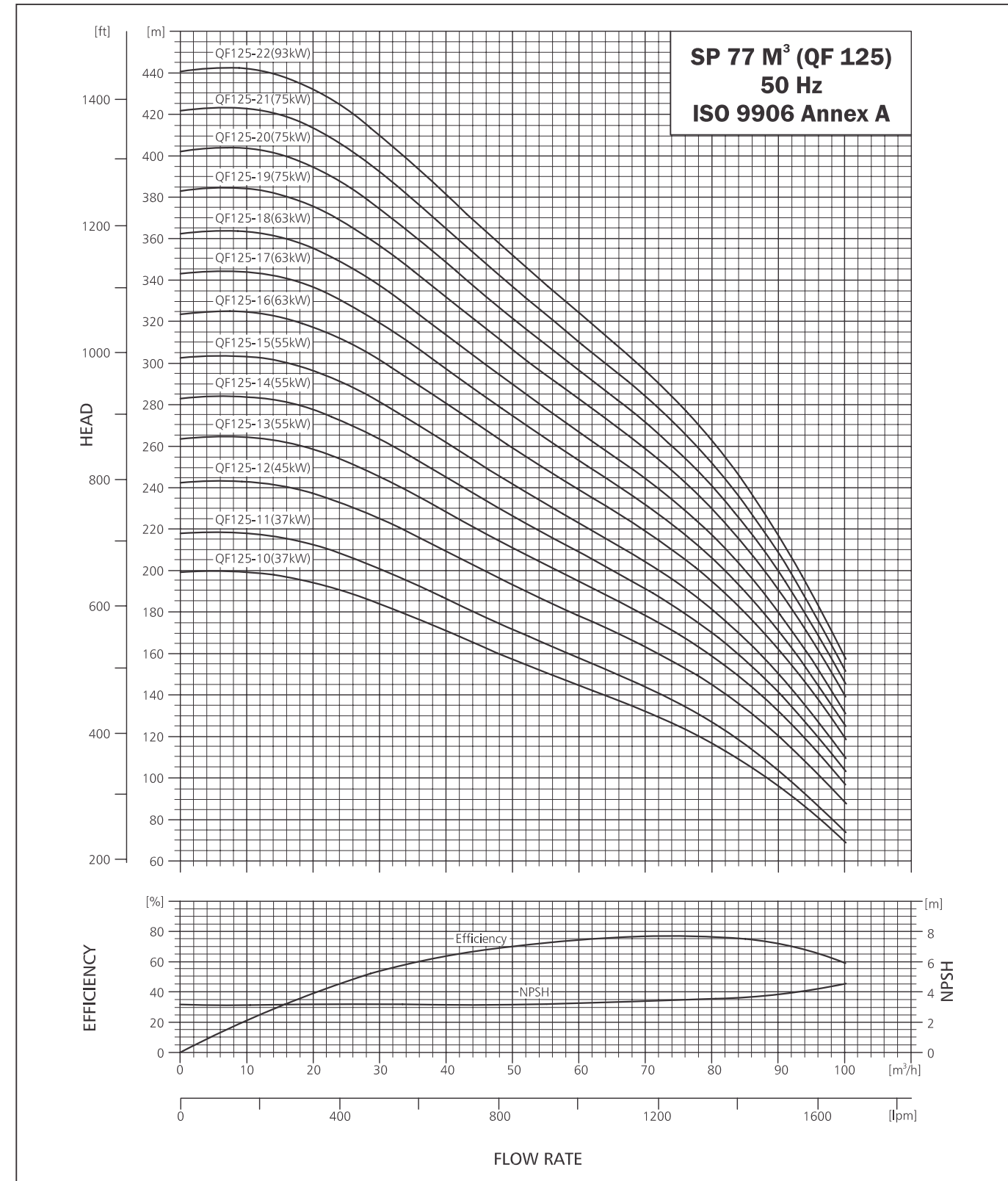
SUBMERSIBLE PUMP QF 100



PERFORMANCE CURVE

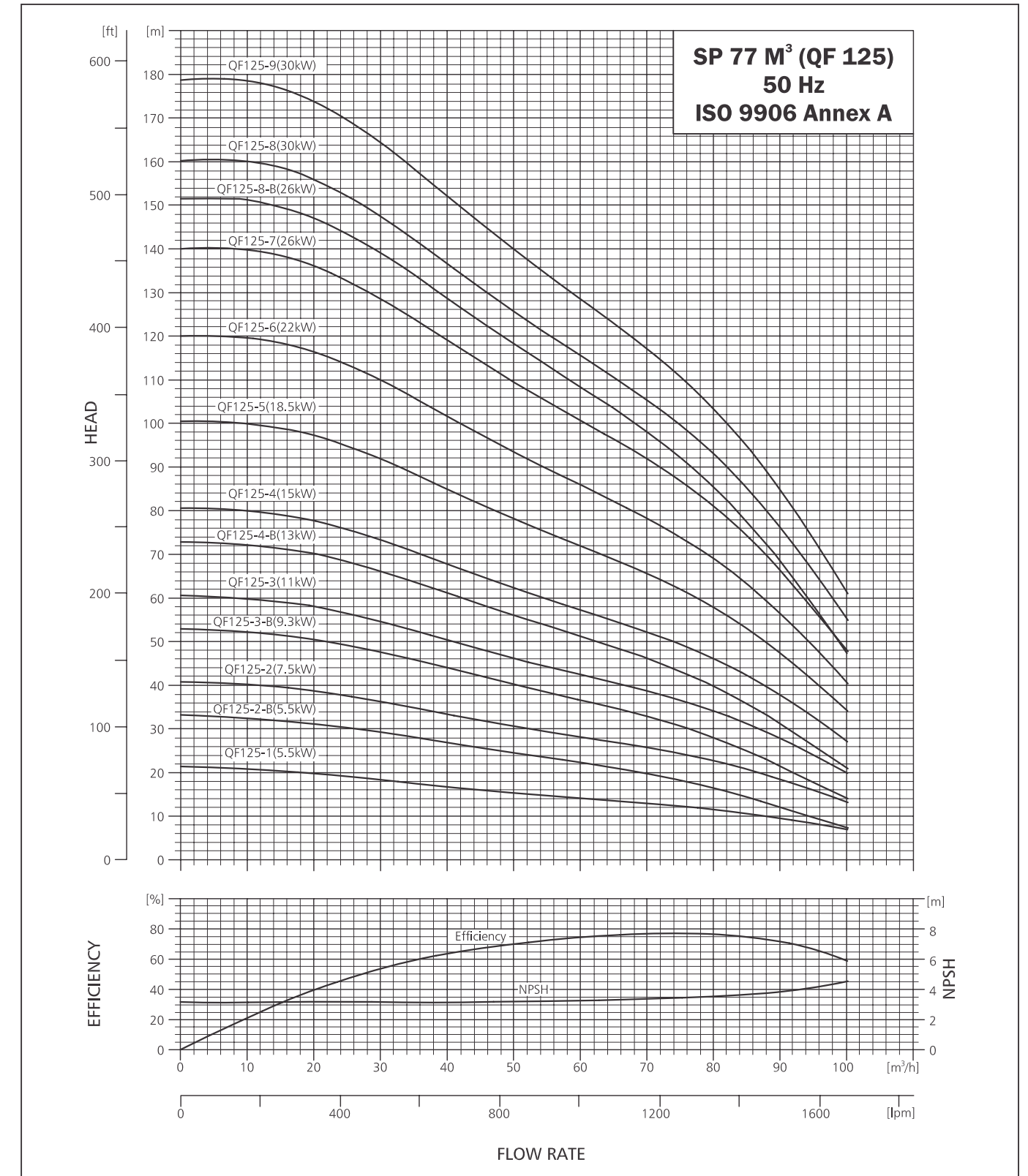


SUBMERSIBLE PUMP QF 125



PERFORMANCE CURVE

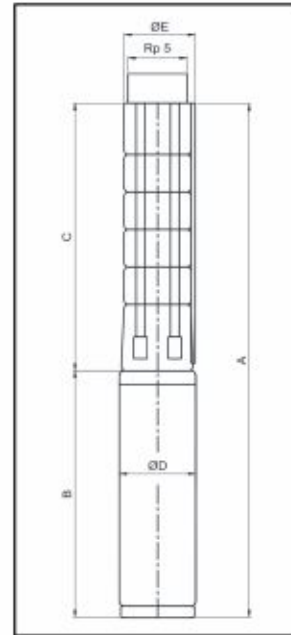
SUBMERSIBLE PUMP QF 125



TECHNICAL DATA

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	MATASF150	5.5	1325	626	178	186	1325	626	180	185	699	142	21	48
QF125-2-B	MATASF150	5.5	1453	754	178	186	1453	754	180	185	699	142	24	48
QF125-2	MATASF150	7.5	1473	754	178	186	1473	754	180	185	719	142	24	50
QF125-3-B	MATASF150	9.3	1631	882	178	186	1631	882	180	185	749	142	28	53
QF125-3	MATASF150	11	1661	882	178	186	1661	882	180	185	779	142	28	56
QF125-4-B	MATASF150	13	1839	1010	178	186	1839	1010	180	185	829	142	31	61
QF125-4	MATASF150	15	1884	1010	178	186	1884	1010	180	185	874	142	31	66
QF125-5	MATASF150	18.5	2057	1138	178	186	2057	1138	180	185	919	142	35	70
QF125-6	MATASF150	22	2275	1266	178	186	2275	1266	180	185	1009	142	38	79
QF125-7	MATASF150	26	2508	1394	178	186	2508	1394	180	185	1114	142	42	90
QF125-8-B	MATASF150	26	2636	1522	178	186	2636	1522	180	185	1114	142	46	90
QF125-8	MATASF150	30	2736	1522	178	186	2736	1522	180	185	1214	142	46	100
QF125-9	MATASF150	30	2864	1650	178	186	2864	1650	180	185	1214	142	49	100
QF125-8	MATASF200	30	2662	1522	200	205	2662	1522	210	210	1140	195	46	140
QF125-9	MATASF200	30	2790	1650	200	205	2790	1650	210	210	1140	195	50	140
QF125-10	MATASF200	37	2918	1778	200	205	2918	1778	210	210	1140	195	53	140
QF125-11	MATASF200	37	3046	1906	200	205	3046	1906	210	210	1140	195	57	140
QF125-12	MATASF200	45	3264	2034	200	205	3264	2034	210	210	1230	195	60	156
QF125-13	MATASF200	55	3502	2162	200	205	3502	2162	210	210	1340	195	64	179
QF125-14	MATASF200	55	3630	2290	200	205	3630	2290	210	210	1340	195	68	179
QF125-15	MATASF200	55	3758	2418	200	205	3758	2418	210	210	1340	195	71	179
QF125-16	MATASF200	63	4016	2546	200	205	4016	2546	210	210	1470	195	75	198
QF125-17	MATASF200	63	4144	2674	200	205	4144	2674	210	210	1470	195	78	198
QF125-18	MATASF200	63	4272	2802	200	205	4272	2802	210	210	1470	195	82	198
QF125-19	MATASF200	75	4490	2930	200	205	4490	2930	210	210	1560	195	85	215
QF125-20	MATASF200	75	4618	3058	200	205	4618	3058	210	210	1560	195	89	215
QF125-21	MATASF200	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

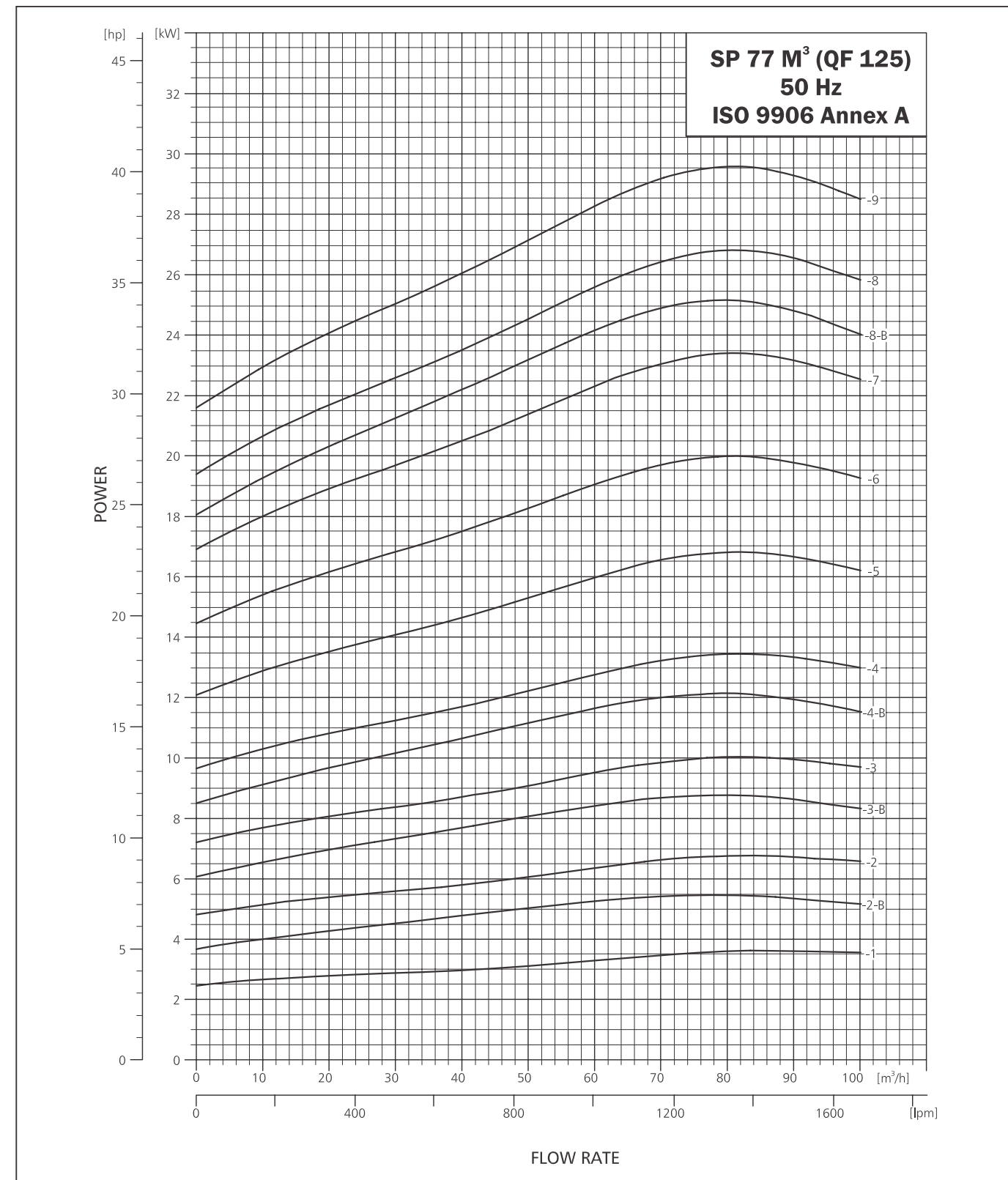
SUBMERSIBLE PUMP QF 125

PERFORMANCE TABLE QF 125

QF-125		MOTOR RATING		DISCHARGE (Q)															
				m <sup>3</sup> /h		0	10	20	30	40	50	60	70	80	90	100			
				1/min.		0	166.7	333.3	500	666.7	833.3	1000	1167	1333	1500	1666.7			
MODEL	MATERIAL CODE		[kW]	[HP]	TOTAL HEAD IN (m)														
	6x8	8x8																	
QF 125 - 1	9000003280	-	5.5	7.5	21	21	20	18	17	15	14	13	12	10	7				
QF 125 - 2-B	9000003301	-	5.5	7.5	33	32	31	29	27	25	22	20	16	12	7				
QF 125 - 2	9000003296	-	7.5	10	41	40	39	36	33	31	28	26	23	18	13				
QF 125 - 3-B	9000003307	-	9.3	125	53	52	51	48	44	40	37	33	28	22	14				
QF 125 - 3	9000003304	-	11	15	61	60	58	55	50	46	42	39	34	28	20				
QF 125 - 4-B	9000003310	-	13	18	73	72	70	66	61	56	51	46	40	31	21				
QF 125 - 4	9000003308	-	15	20	81	80	78	73	68	62	57	52	46	38	27				
QF 125 - 5	9000003311	-	18.5	25	100	100	97	92	85	78	72	66	58	47	34				
QF 125 - 6	9000003313	-	22	30	120	120	116	110	102	94	86	78	69	56	41				
QF 125 - 7	9000003316	-	26	35	140	140	136	129	119	110	101	92	81	66	48				
QF 125 - 8-B	9000003321	-	26	35	152	151	147	139	129	118	108	98	85	68	47				
QF 125 - 8	9000003319	9000003320	30	40	160	160	156	147	137	126	116	105	93	76	55				
QF 125 - 9	9000003322	9000003323	30	40	179	179	174	164	152	140	129	117	103	85	61				
QF 125 - 10	9000008136	9000003282	37	50	200	199	194	184	171	157	145	132	117	96	69				
QF 125 - 11	9000003284	9000003285	37	50	218	218	212	201	186	172	158	144	127	104	74				
QF 125 - 12	-	9000003287	45	60	242	243	237	225	209	193	178	163	145	120	88				
QF 125 - 13	-	9000003289	55	75	264	264	258	245	228	211	195	178	159	132	98				
QF 125 - 14	-	9000003290	55	75	283	284	277	263	245	226	209	191	170	141	104				
QF 125 - 15	-	9000003291	55	75	303	303	296	281	262	242	223	204	181	150	110				
QF 125 - 16	-	9000003292	63	85	324	325	317	301	281	259	239	219	195	162	119				
QF 125 - 17	-	9000003293	63	85	343	344	336	319	297	274	253	232	206	171	126				
QF 125 - 18	-	9000003294	63	85	363	363	355	337	314	290	267	244	217	180	132				
QF 125 - 19	-	9000003295	75	100	383	384	376	357	332	307	283	259	230	191	140				
QF 125 - 20	-	9000003297	75	100	402	404	395	375	349	322	297	271	241	200	146				
QF 125 - 21	-	9000003298	75	100	422	424	415	393	366	338	310	285	253	208	153				
QF 125 - 22	-	9000003299	93	125	441	442	432	410	382	351	324	298	263	216	161				

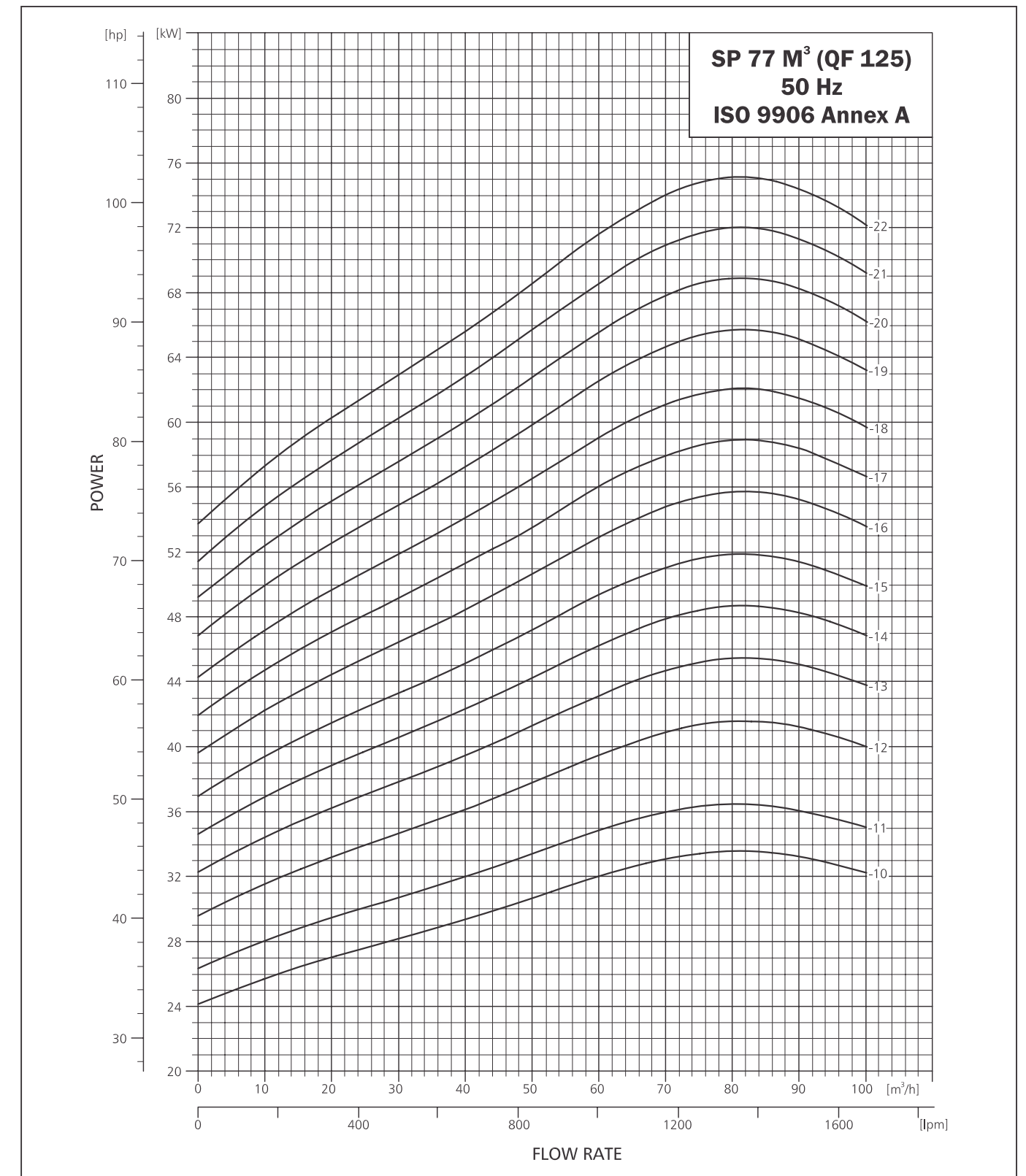
PERFORMANCE CURVE

SUBMERSIBLE PUMP QF 125



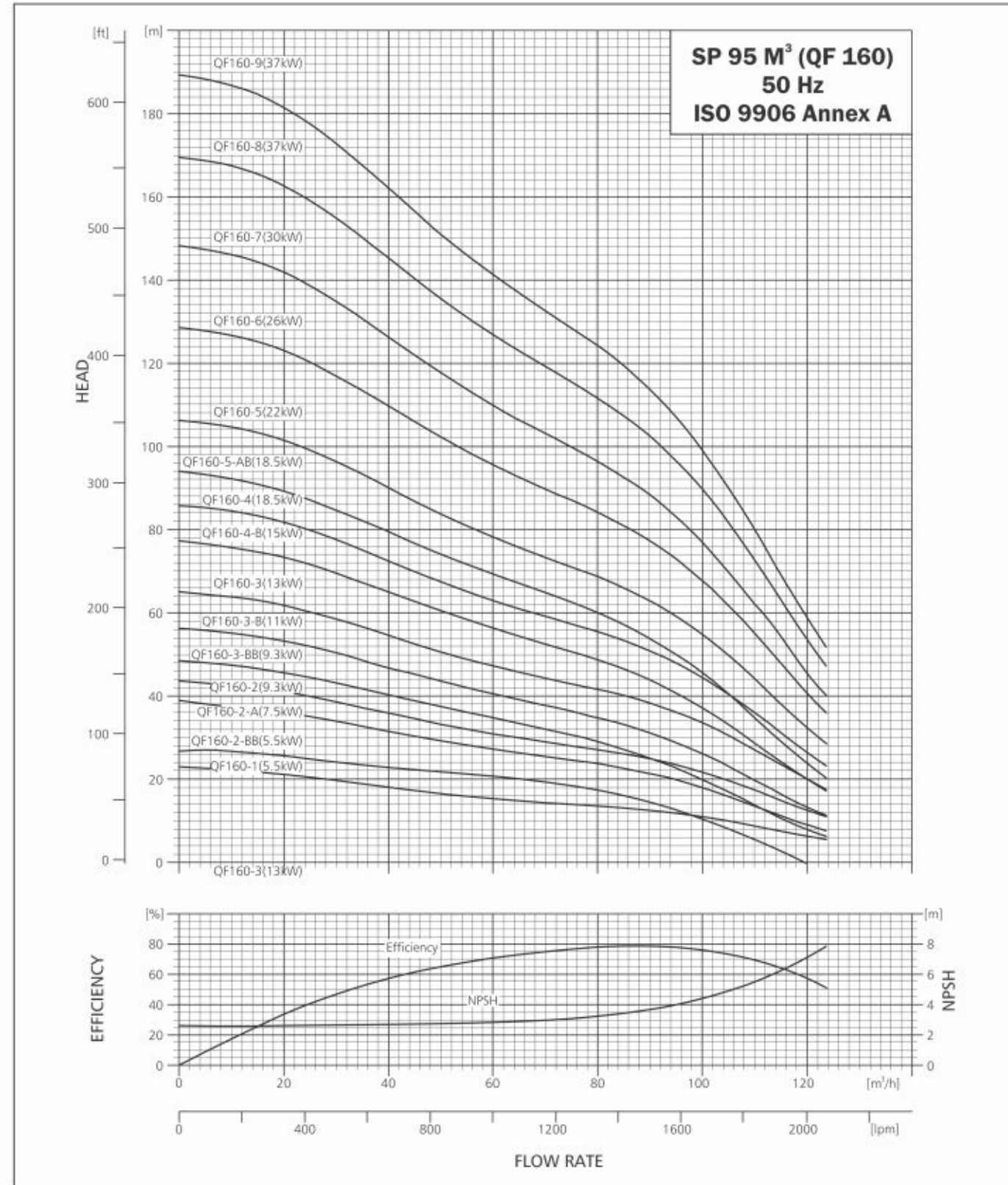
PERFORMANCE CURVE

SUBMERSIBLE PUMP QF 125



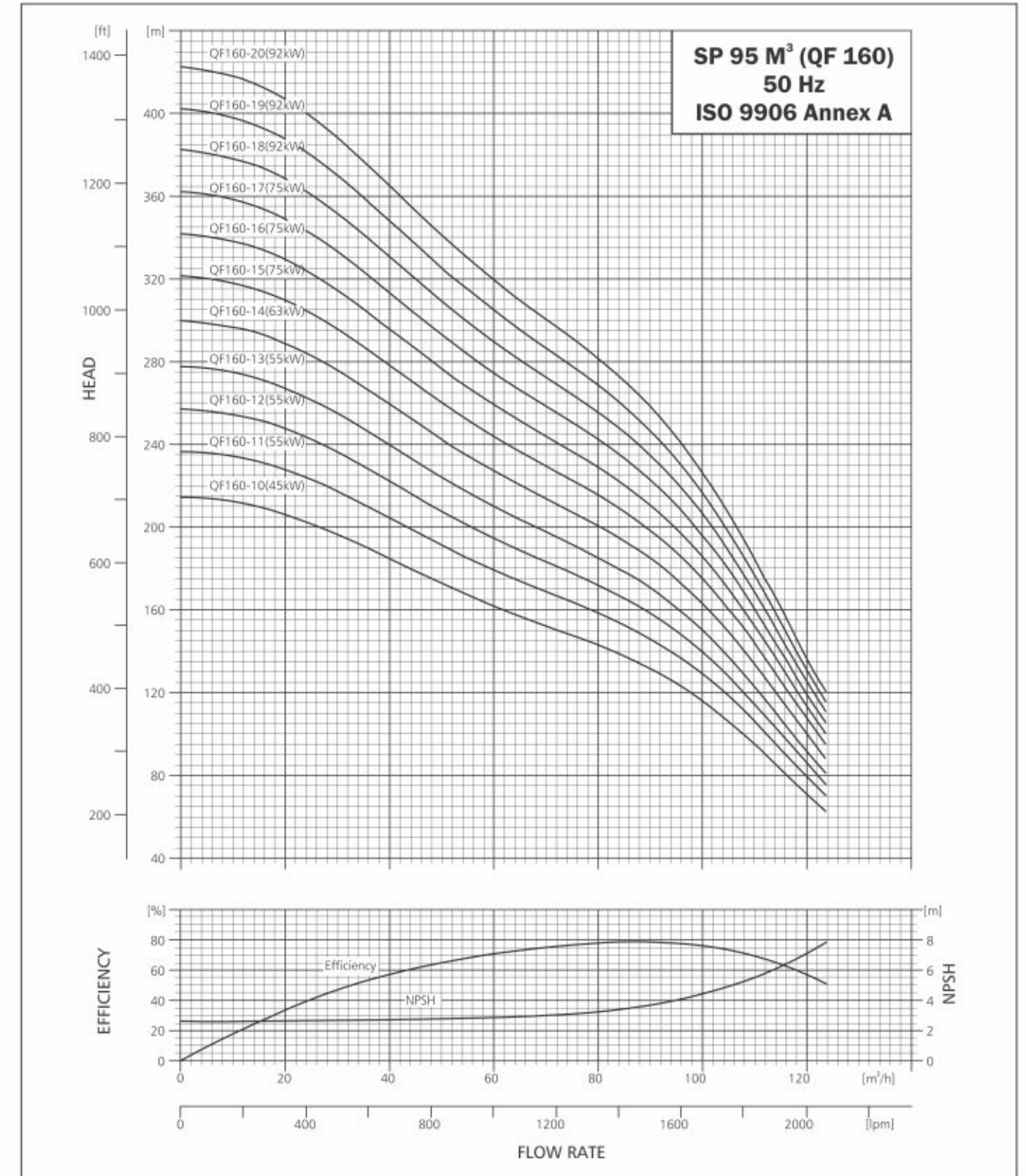
PERFORMANCE CURVE

SUBMERSIBLE PUMP QF 160



PERFORMANCE CURVE

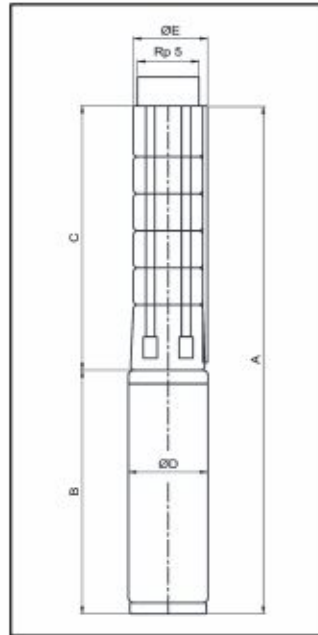
SUBMERSIBLE PUMP QF 160



**TECHNICAL DATA**

**SUBMERSIBLE PUMP QF 160**

**DIMENSIONS AND WEIGHTS**



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

**TECHNICAL DATA QF 160**

PUMP TYPE	MOTOR TYPE	POWER (kW)	DIMENSIONS (MM)										NET WEIGHT (KG)	
			RP 5" CONNECTION				RP 5" FLANGE				B	D	PUMP	MOTOR
			A	C	E*	E**	A	C	E*	E**				
QF160-1	MATASF150	5.5	1325	626	178	186	1325	626	180	185	699	143	21	48
QF160-2-BB	MATASF150	5.5	1453	754	178	186	1453	754	180	185	699	143	24	48
QF160-2-A	MATASF150	7.5	1453	754	178	186	1453	754	180	185	699	143	24	50
QF160-2	MATASF150	9.3	1503	754	178	186	1503	754	180	185	749	143	24	53
QF160-3-BB	MATASF150	9.3	1631	882	178	186	1631	882	180	185	749	143	28	53
QF160-3-B	MATASF150	11	1661	882	178	186	1661	882	180	185	779	143	28	56
QF160-3	MATASF150	13	1711	882	178	186	1711	882	180	185	829	143	28	61
QF160-4-B	MATASF150	15	1884	1010	178	186	1884	1010	180	185	874	143	31	66
QF160-4	MATASF150	18.5	1929	1010	178	186	1929	1010	180	185	919	143	31	70
QF160-5-AB	MATASF150	18.5	2057	1138	178	186	2057	1138	180	185	919	143	35	70
QF160-5	MATASF150	22	2147	1138	178	186	2147	1138	180	185	1009	143	35	79
QF160-6	MATASF150	26	2380	1266	178	186	2380	1266	180	185	1114	143	38	90
QF160-7	MATASF150	30	2608	1394	178	186	2608	1394	180	185	1214	143	38	100
QF160-7	MATASF200	30	2534	1394	196	204	2534	1394	210	210	1140	195	42	140
QF160-8	MATASF200	37	2662	1522	196	204	2662	1522	210	210	1140	195	46	140
QF160-9	MATASF200	37	2880	1650	196	204	2880	1650	210	210	1230	195	49	140
QF160-10	MATASF200	45	3008	1778	196	204	3008	1778	210	210	1230	195	53	156
QF160-11	MATASF200	55	3246	1906	196	204	3246	1906	210	210	1340	195	56	179
QF160-12	MATASF200	55	3374	2034	196	204	3374	2034	210	210	1340	195	60	179
QF160-13	MATASF200	55	3502	2162	196	204	3502	2162	210	210	1340	195	63	179
QF160-14	MATASF200	63	3760	2290	196	204	3760	2290	210	210	1470	195	67	179
QF160-15	MATASF200	75	3978	2418	196	204	-	-	-	-	1560	195	71	215
QF160-16	MATASF200	75	4106	2546	196	204	-	-	-	-	1560	195	74	215
QF160-17	MATASF200	75	4234	2674	196	204	-	-	-	-	1560	195	78	215
QF160-18	MATASF200	92	4542	2802	196	204	-	-	-	-	1740	195	81	247
QF160-19	MATASF200	92	4670	2930	196	204	-	-	-	-	1740	195	85	247
QF160-20	MATASF200	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**

**SUBMERSIBLE PUMP QF 160**

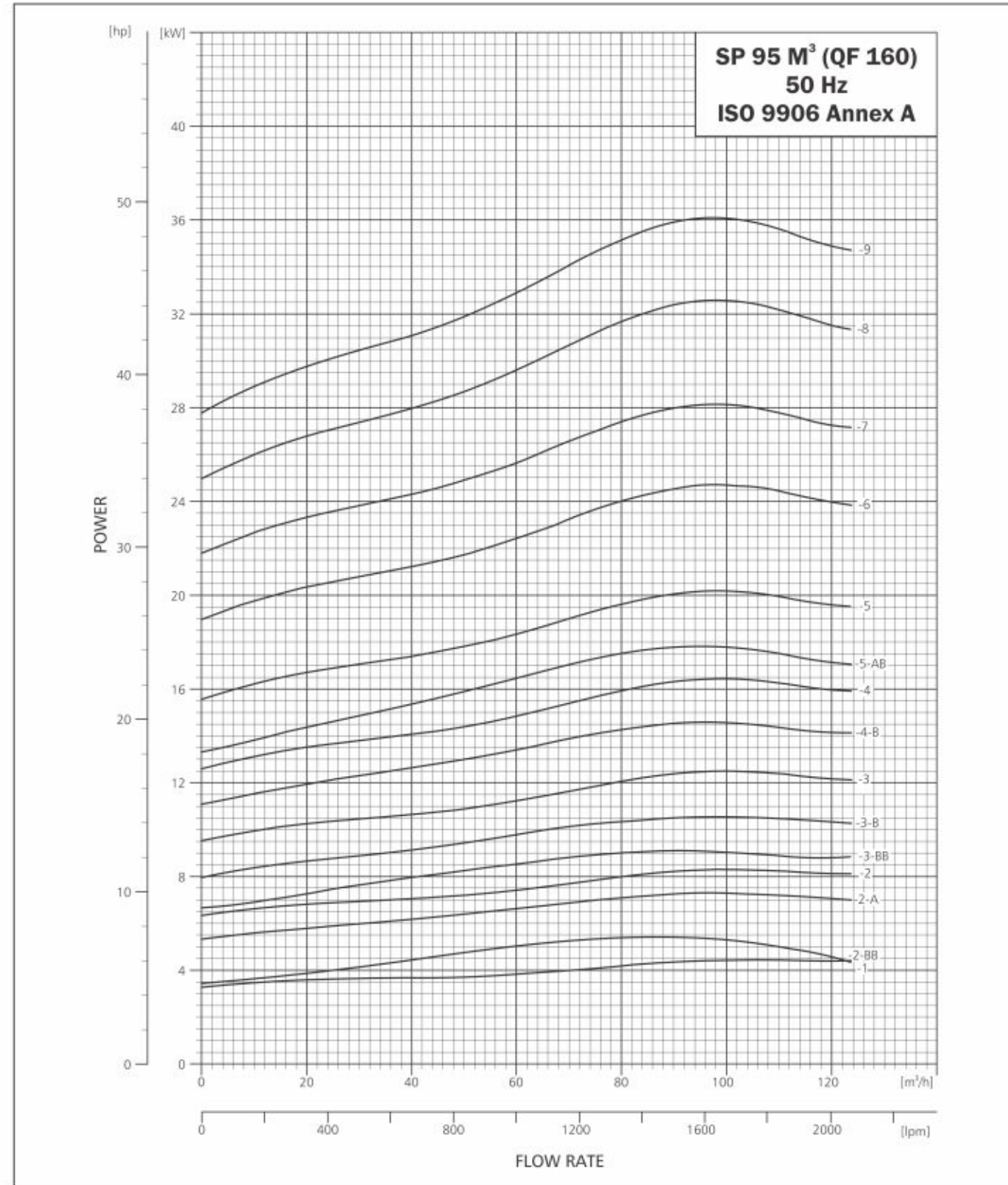
**PERFORMANCE TABLE QF 160**

QF-160		m <sup>3</sup> /h 1/min.		DISCHARGE (Q)																
				0	10	20	30	40	50	60	70	80	90	100	110	120	122			
MODEL	MATERIAL CODE		MOTOR RATING		TOTAL HEAD IN (m)															
	6x8	8x8	[kW]	[HP]	0	167	333	500	667	833	1000	1167	1333	1500	1667	1833	2000	2033		
QF160-1	9000003326	-	5.5	7.5	23	22	21	20	18	17	15	14	13	13	11	9	6	6		
QF160-2-BB	9000003353	-	5.5	7.5	27	27	26	24	23	22	21	19	17	14	10	5	0	-		
QF160-2-A	9000003347	-	7.5	10	39	37	36	34	32	29	27	26	24	21	18	14	9	8		
QF160-2	9000003345	-	9.3	12.5	44	43	41	39	36	33	31	29	27	25	22	17	13	12		
QF160-3-BB	9000003358	-	9.3	12.5	49	47	46	43	40	37	35	32	29	25	20	14	8	7		
QF160-3-B	9000003357	-	11	15	56	55	53	50	47	44	41	38	35	31	26	20	13	12		
QF160-3	9000003355	-	13	17.5	65	64	62	58	55	51	47	44	42	38	33	27	20	19		
QF160-4-B	9000003363	-	15	20	77	76	73	70	65	60	56	53	49	44	37	29	20	18		
QF160-4	9000003360	-	18.5	25	86	84	82	78	73	67	63	59	55	51	44	36	26	25		
QF160-5-AB	9000003368	-	18.5	25	94	92	89	85	79	74	69	65	60	54	45	35	24	22		
QF160-5	9000003365	-	22	30	106	105	101	96	90	84	78	73	69	63	55	44	32	30		
QF160-6	9000003372	-	26	35	129	127	123	117	110	102	96	90	84	77	68	55	41	38		
QF160-7	9000003377	-	30	40	148	146	142	135	126	118	110	103	96	88	77	62	46	43		
QF160-8	9000003380	9000003382	37	50	170	167	163	155	145	136	127	119	112	102	90	73	54	50		
QF160-9	9000011943	9000003384	37	50	189	187	182	173	162	151	141	133	124	114	99	80	59	55		
QF160-10	-	9000003328	45	60	214	212	206	197	185	173	162	152	143	132	116	95	71	66		
QF160-11	-	9000003330	55	75	237	234	228	217	205	191	179	169	158	146	129	106	79	74		
QF160-12	-	9000003332	55	75	257	254	248	236	222	208	195	183	172	158	140	115	86	80		
QF160-13	-	9000003334	55	75	278	275	267	255	240	224	210	198	185	170	150	123	92	86		
QF160-14	-	9000003335	63	85	300	297	289	276	259	243	227	214	201	185	163	134	100	93		
QF160-15	-	9000003336	75	100	321	318	310	296	278	260	244	230	215	198	175	144	107	100		
QF160-16	-	9000003337	75	100	342	338	329	314	296	277	259	244	229	211	186	152	114	106		
QF160-17	-	9000003338	75	100	362	358	349	333	313	293	275	258	242	223	196	160	120	112		
QF160-18	-	9000003339	92	125	382	378	368	352	331	309	290	272	255	235	206	169	125	117		
QF160-19	-	9000003340	92	125	402	398	388	370	348	325	305	287	269	247	216	177	131	122		
QF160-20	-	9000003346	92	125	423	418	407	388	365	341	320	301	281	258	226	184	137	128		



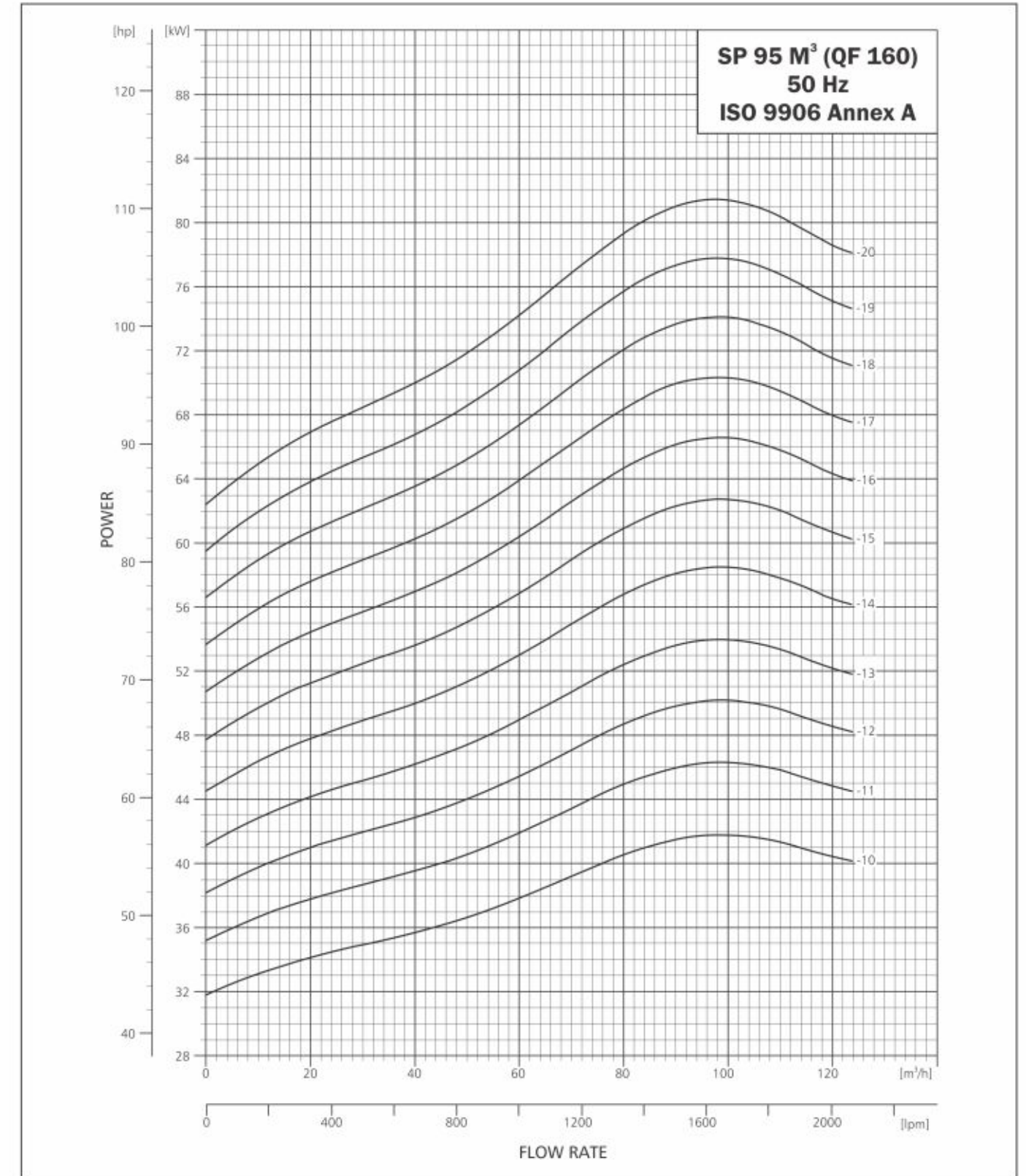
PERFORMANCE CURVE

SUBMERSIBLE PUMP QF 160



PERFORMANCE CURVE

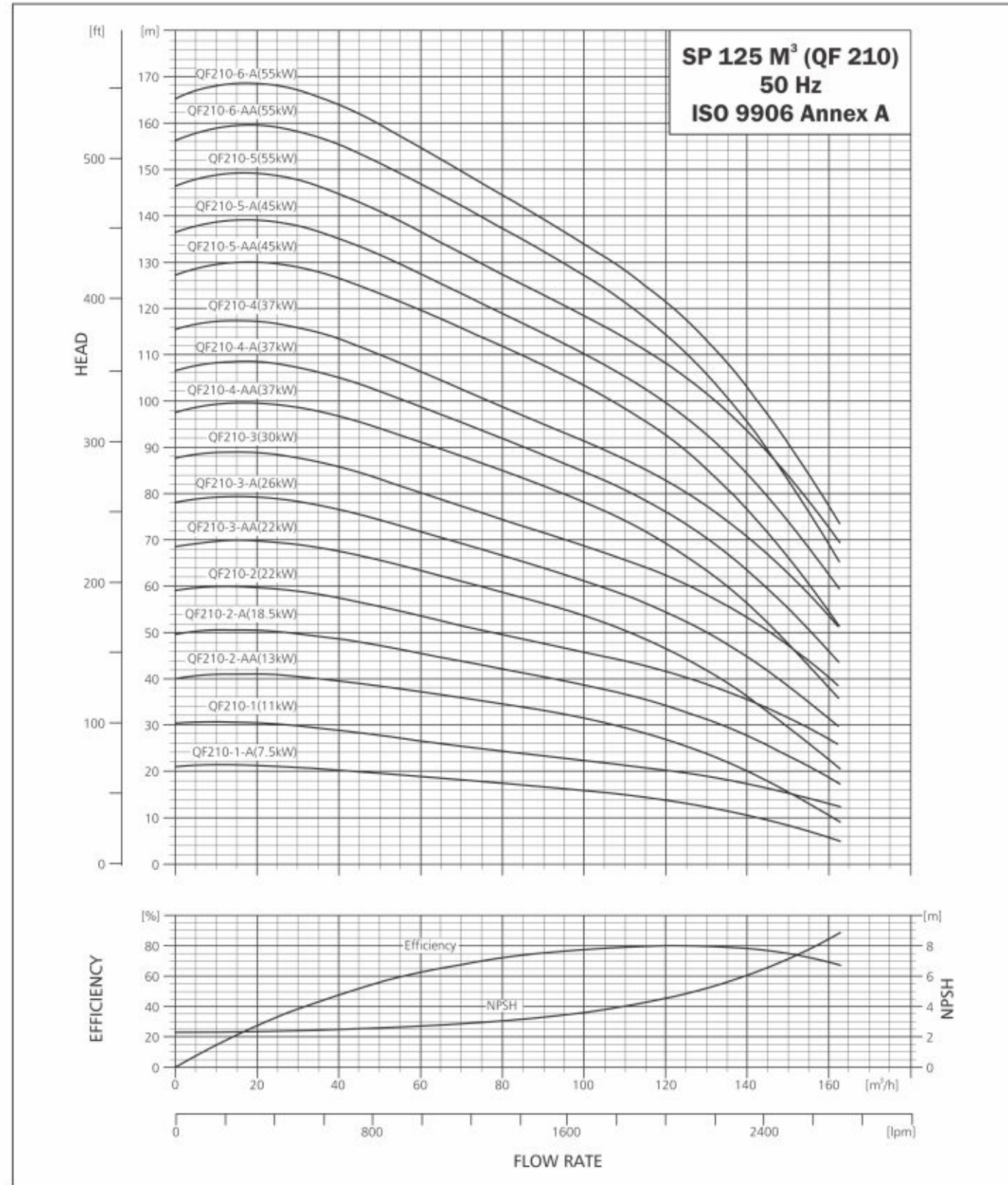
SUBMERSIBLE PUMP QF 160



PERFORMANCE CURVE

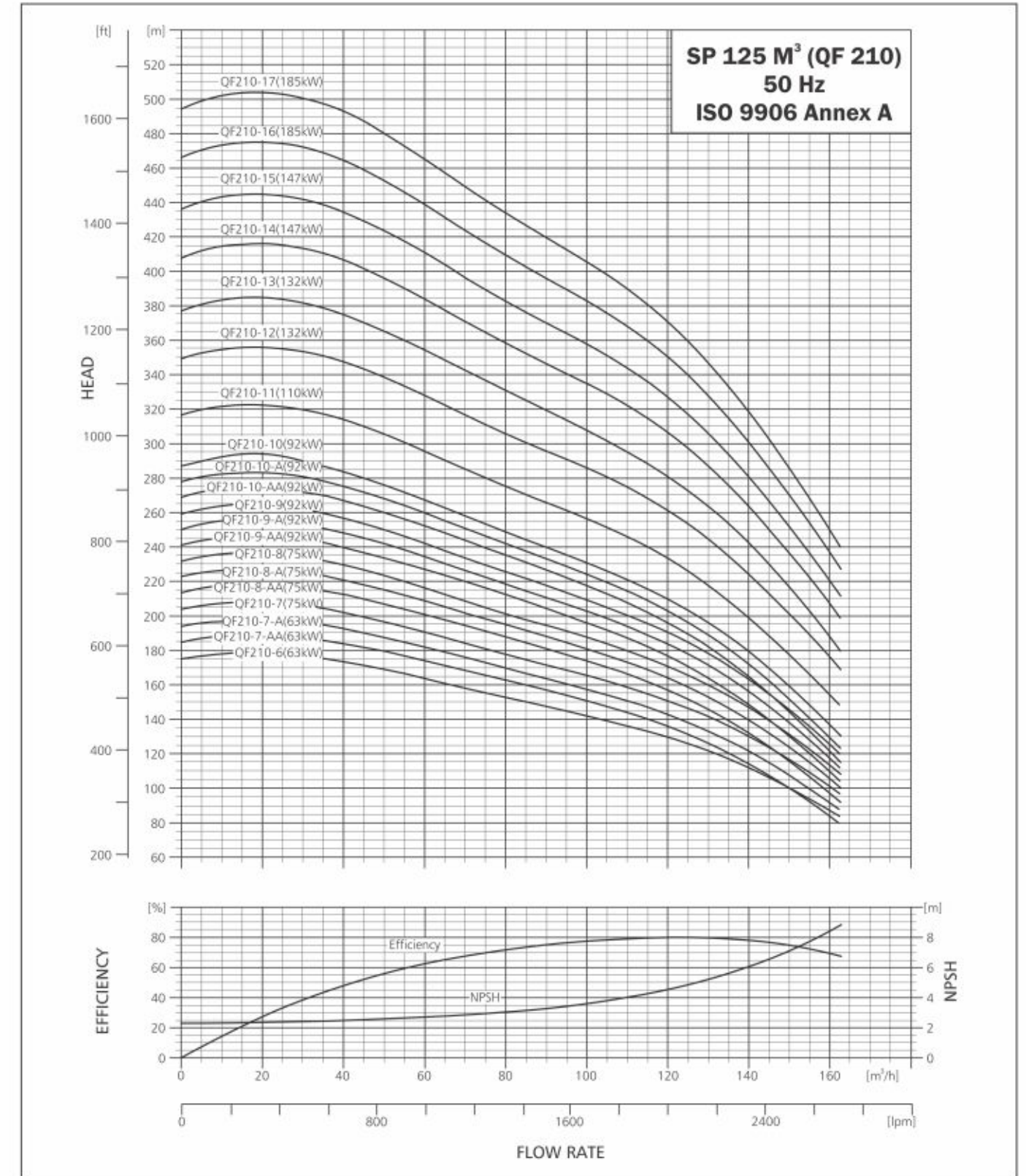


SUBMERSIBLE PUMP QF 210



PERFORMANCE CURVE

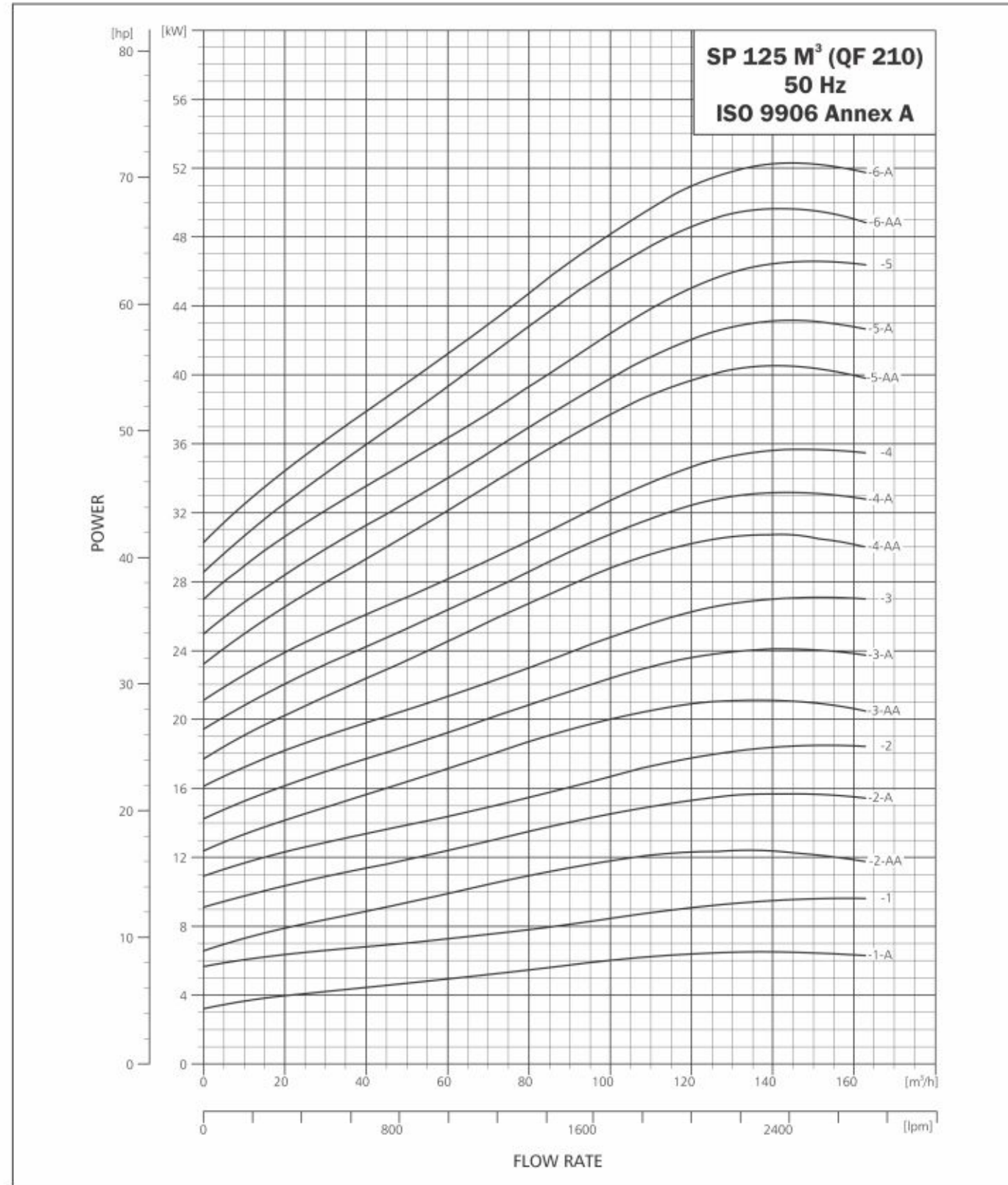
SUBMERSIBLE PUMP QF 210





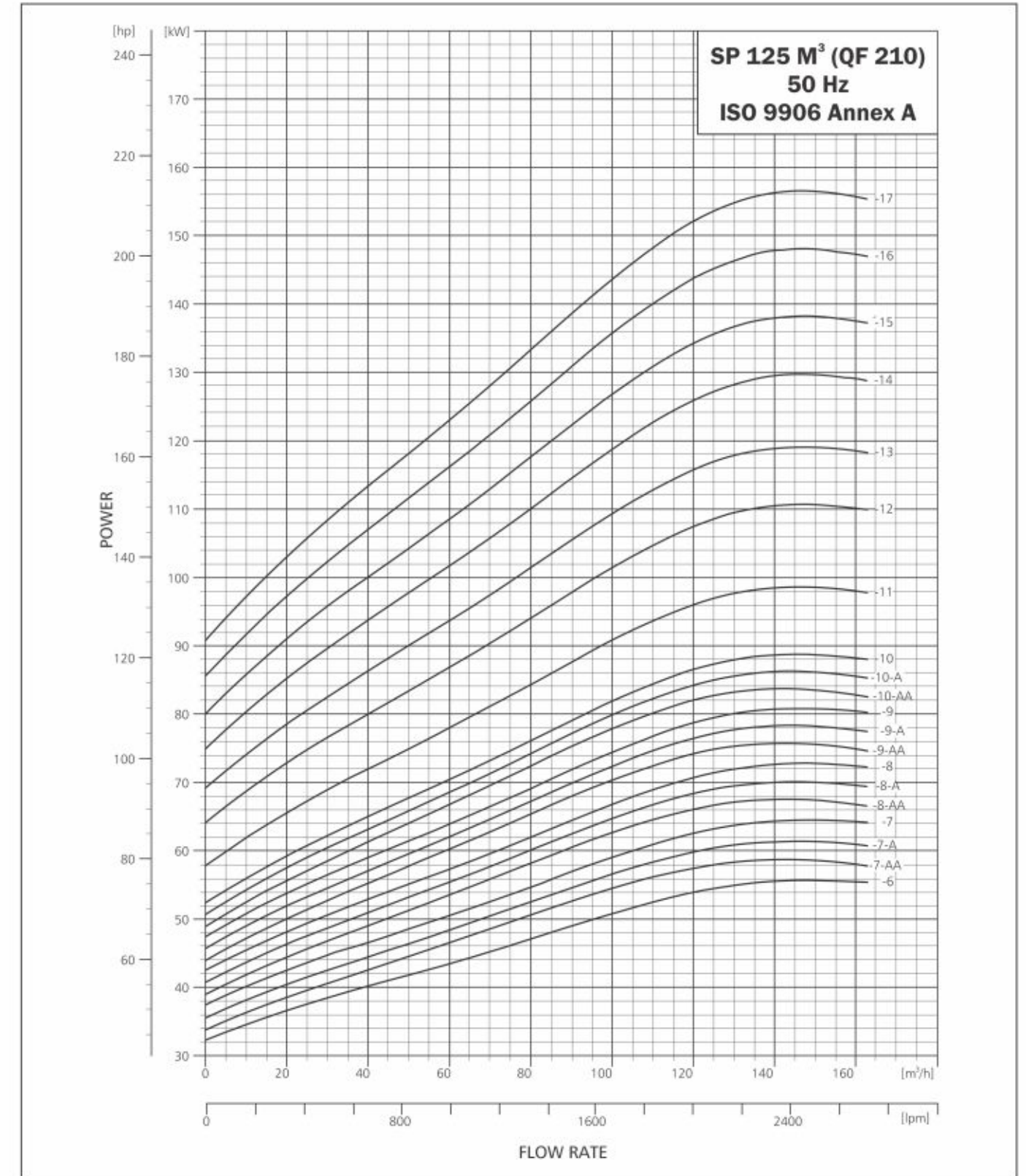
PERFORMANCE CURVE

SUBMERSIBLE PUMP QF 210



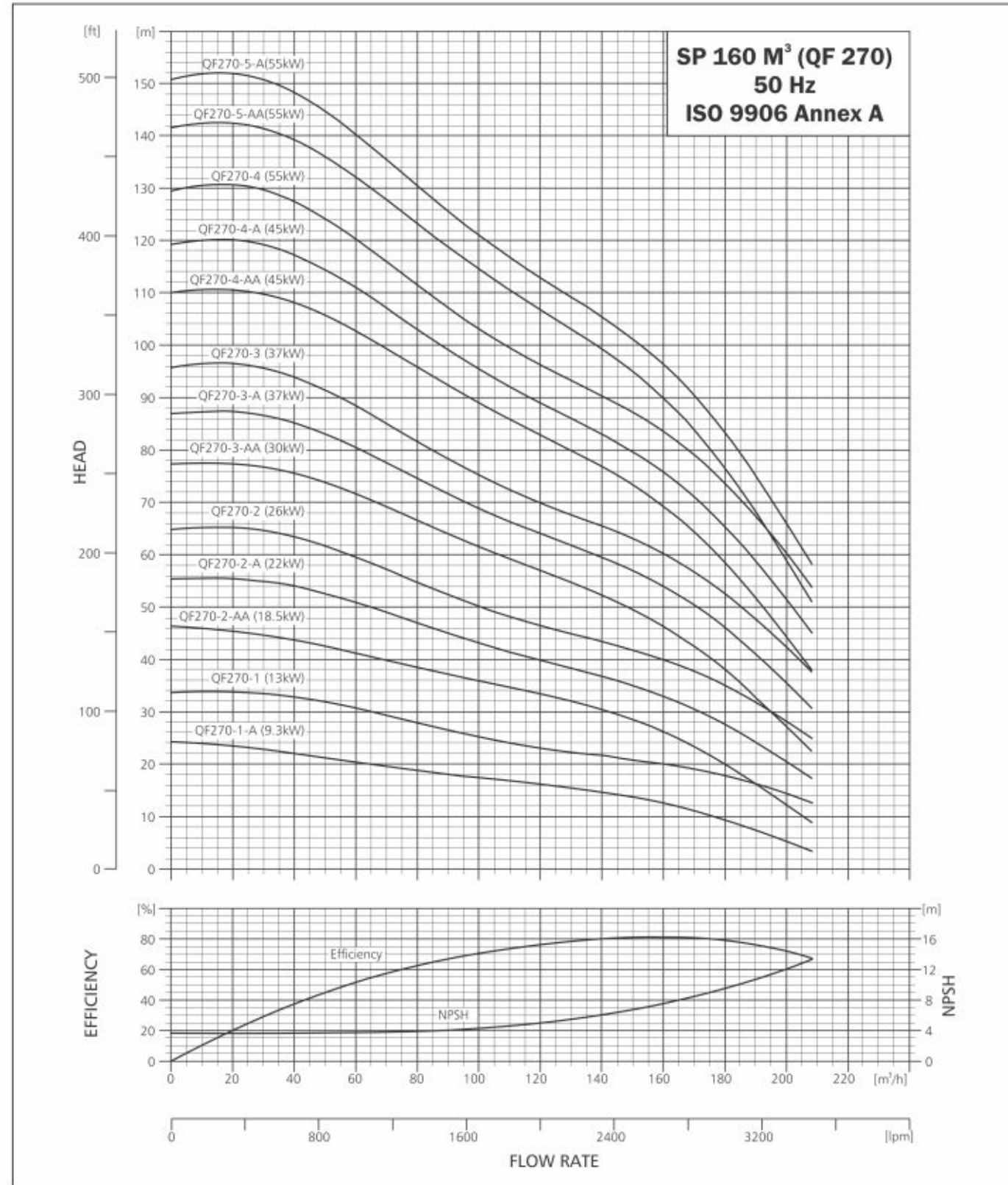
PERFORMANCE CURVE

SUBMERSIBLE PUMP QF 210



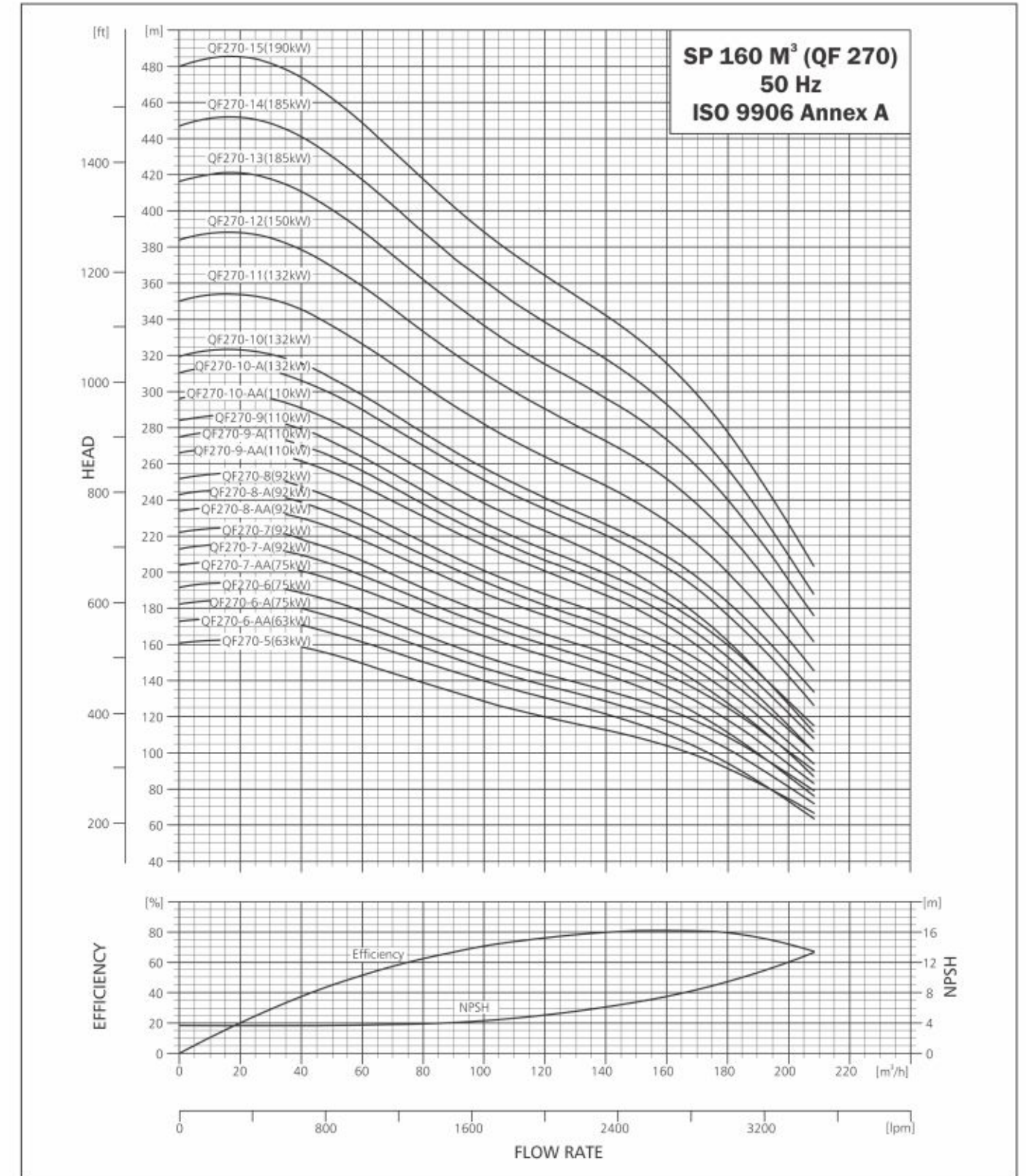
PERFORMANCE CURVE

SUBMERSIBLE PUMP QF 270



PERFORMANCE CURVE

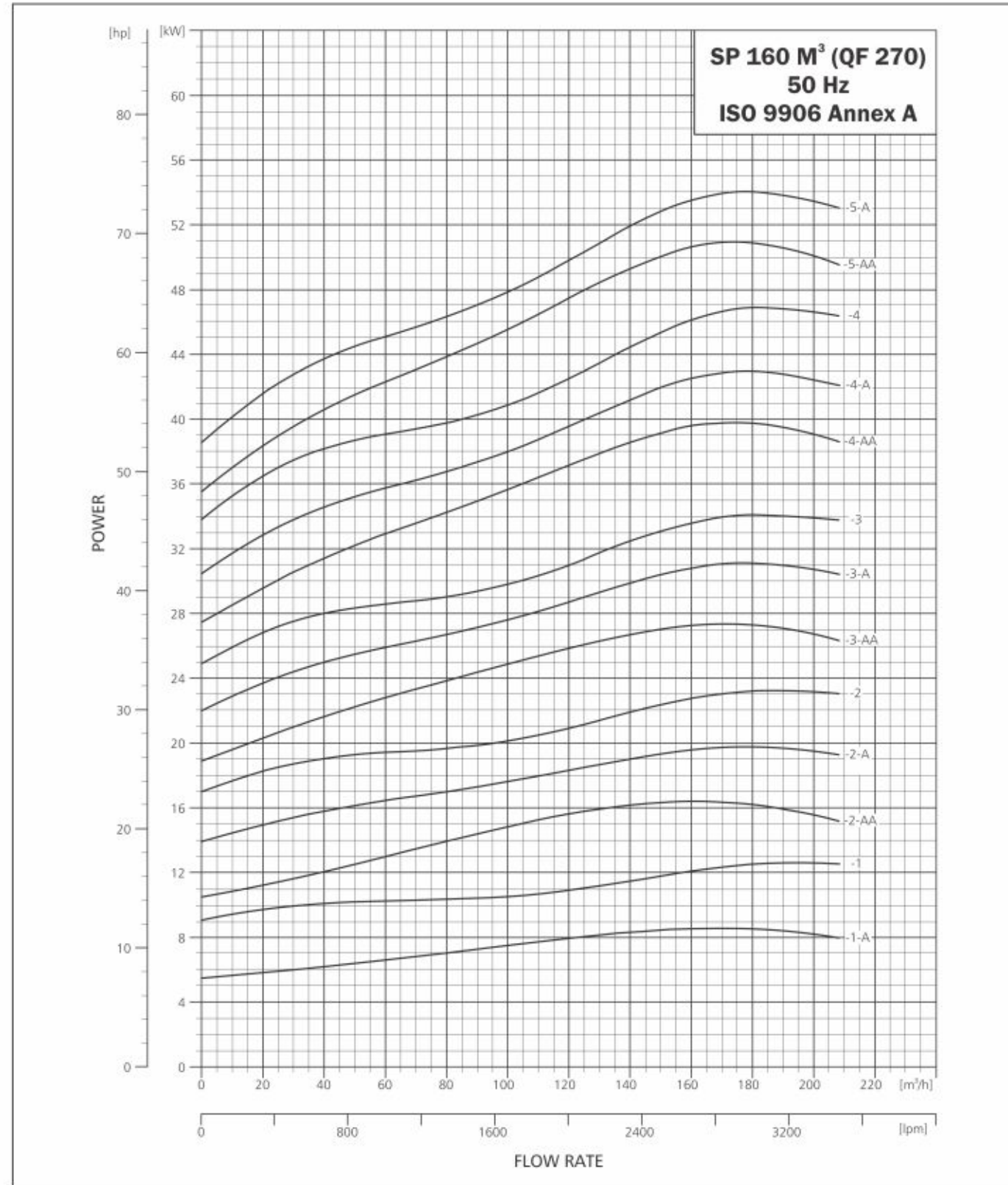
SUBMERSIBLE PUMP QF 270





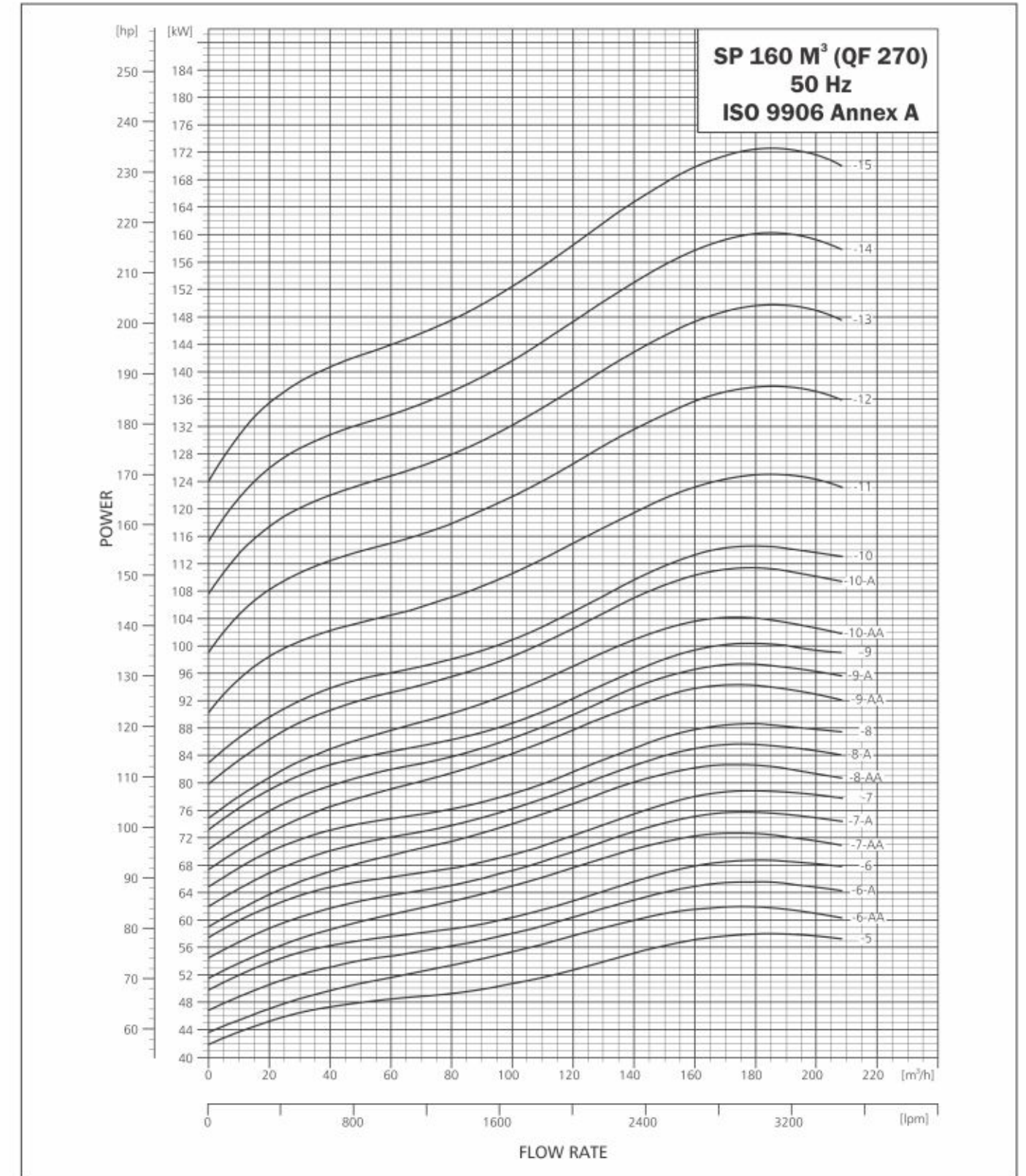
PERFORMANCE CURVE

SUBMERSIBLE PUMP QF 270



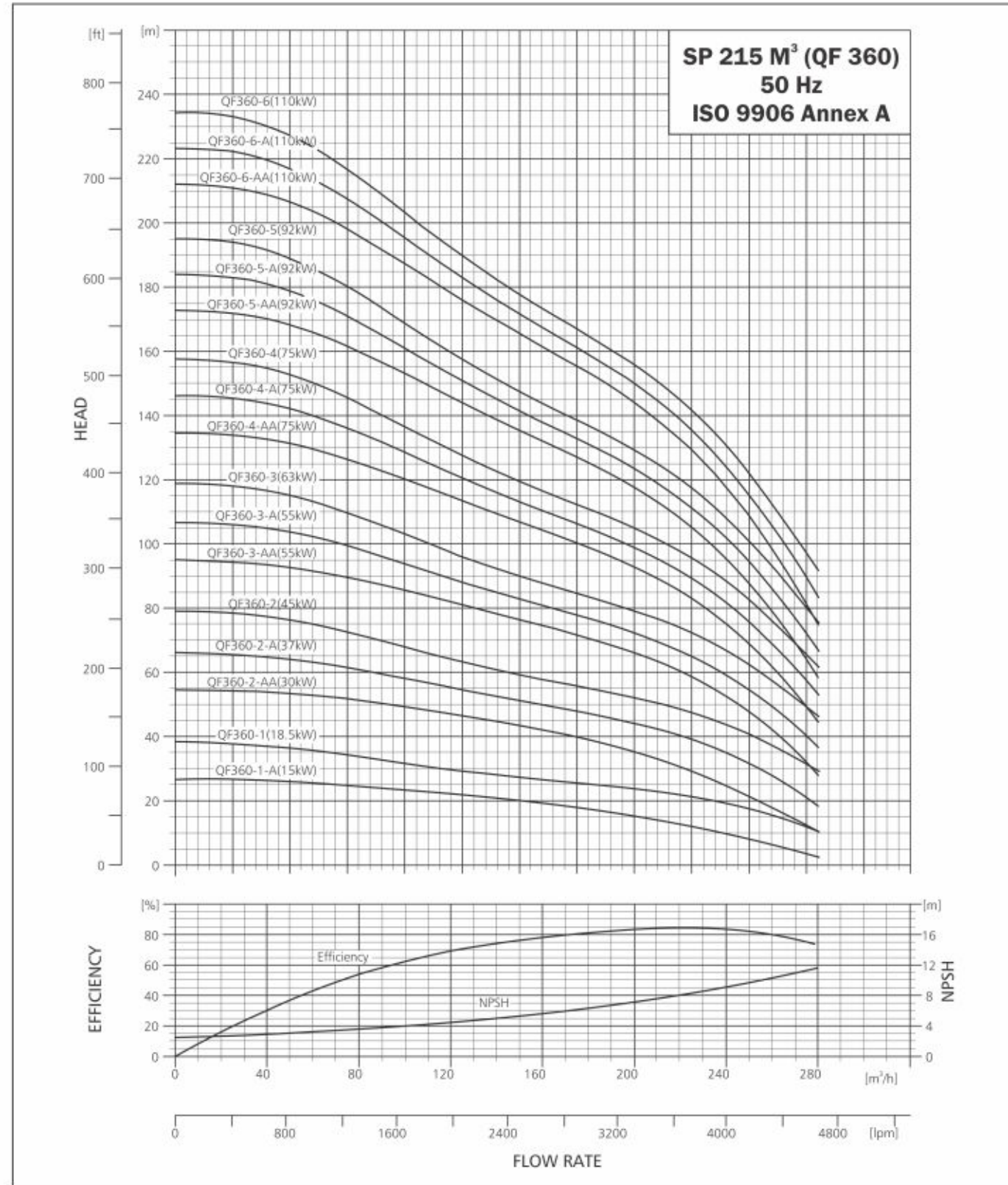
PERFORMANCE CURVE

SUBMERSIBLE PUMP QF 270



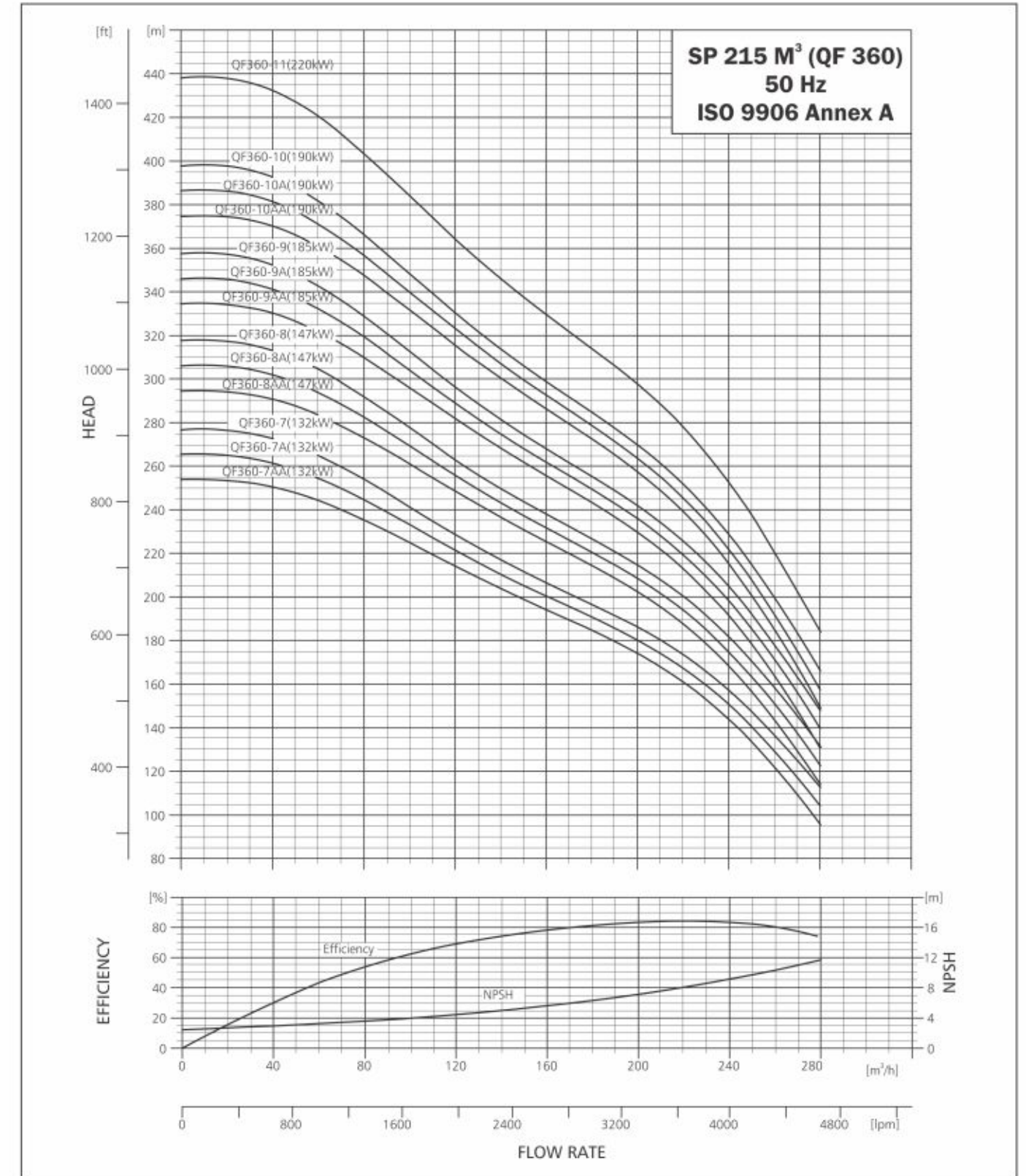
PERFORMANCE CURVE

SUBMERSIBLE PUMP QF 360



PERFORMANCE CURVE

SUBMERSIBLE PUMP QF 360



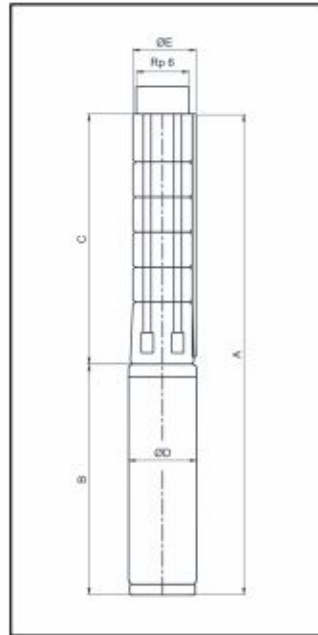


TECHNICAL DATA



SUBMERSIBLE PUMP QF 360

DIMENSIONS AND WEIGHTS



TECHNICAL DATA QF 360

PUMP TYPE	MOTOR		DIMENSIONS (MM)										NET WEIGHT (KG)	
	TYPE	POWER (kW)	RP 6" CONNECTION				6" FLANGE				B	D	PUMP	MOTOR
			A	C	E*	E**	A	C	E*	E**				
QF360-1-A	MATASF 150	15	1482	608	241	247	1482	608	241	247	874	143	28	66
QF360-1	MATASF 150	18.5	1527	608	241	247	1527	608	241	247	919	143	28	70
QF360-2-AA	MATASF 150	30	1998	784	241	247	1998	784	241	247	1214	143	56	100
QF360-2-AA	MATASF 200	30	1924	784	241	247	1924	784	241	247	1140	195	56	140
QF360-2-A	MATASF 200	37	1924	784	241	247	1924	784	241	247	1140	195	56	140
QF360-2	MATASF 200	45	2014	784	241	247	2014	784	241	247	1230	195	56	156
QF360-3-AA	MATASF 200	55	2300	960	241	247	2300	960	241	247	1340	195	84	179
QF360-3-A	MATASF 200	55	2300	960	241	247	2300	960	241	247	1340	195	84	179
QF360-3	MATASF 200	63	2430	960	241	247	2430	960	241	247	1470	195	84	198
QF360-4-AA	MATASF 200	75	2696	1136	241	247	2696	1136	241	247	1560	195	111	215
QF360-4-A	MATASF 200	75	2696	1136	241	247	2696	1136	241	247	1560	195	111	215
QF360-4	MATASF 200	75	2696	1136	241	247	2696	1136	241	247	1560	195	111	215
QF360-5-AA	MATASF 200	92	3052	1312	241	247	3052	1312	241	247	1740	195	139	247
QF360-5-A	MATASF 200	92	3052	1312	241	247	3052	1312	241	247	1740	195	139	247
QF360-5	MATASF 200	92	3052	1312	241	247	3052	1312	241	247	1740	195	139	247
QF360-6-AA	MATASF 10"	110	4249	1488	241	247	4249	1488	241	247	2761	237	167	315
QF360-6-A	MATASF 10"	110	4249	1488	241	247	4249	1488	241	247	2761	237	167	315
QF360-6	MATASF 10"	110	4249	1488	241	247	4249	1488	241	247	2761	237	167	315
QF360-7-AA	MATASF 10"	132	4685	1664	241	247	-	-	-	-	3021	237	195	362
QF360-7-A	MATASF 10"	132	4685	1664	241	247	-	-	-	-	3021	237	195	362
QF360-7	MATASF 10"	132	4685	1664	241	247	-	-	-	-	3021	237	195	362
QF360-8-AA	MATASF 10"	147	5081	1840	241	247	-	-	-	-	3241	237	223	413
QF360-8-A	MATASF 10"	147	5081	1840	241	247	-	-	-	-	3241	237	223	413
QF360-8	MATASF 10"	147	5081	1840	276	276	-	-	-	-	3241	237	223	413
QF360-9-AA	MATASF 10"	185	5557	2016	276	276	-	-	-	-	3541	237	251	449
QF360-9-A	MATASF 10"	185	5557	2016	276	276	-	-	-	-	3541	237	251	449
QF360-9	MATASF 10"	185	5557	2016	276	276	-	-	-	-	3541	237	251	449
QF360-10-AA	MOTOR 12"	190	4172	2192	276	276	-	-	-	-	1980	286	278	632
QF360-10-A	MOTOR 12"	190	4172	2192	286	286	-	-	-	-	1980	286	278	632
QF360-10	MOTOR 12"	190	4172	2192	286	286	-	-	-	-	1980	286	278	632
QF360-11	MOTOR 12"	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

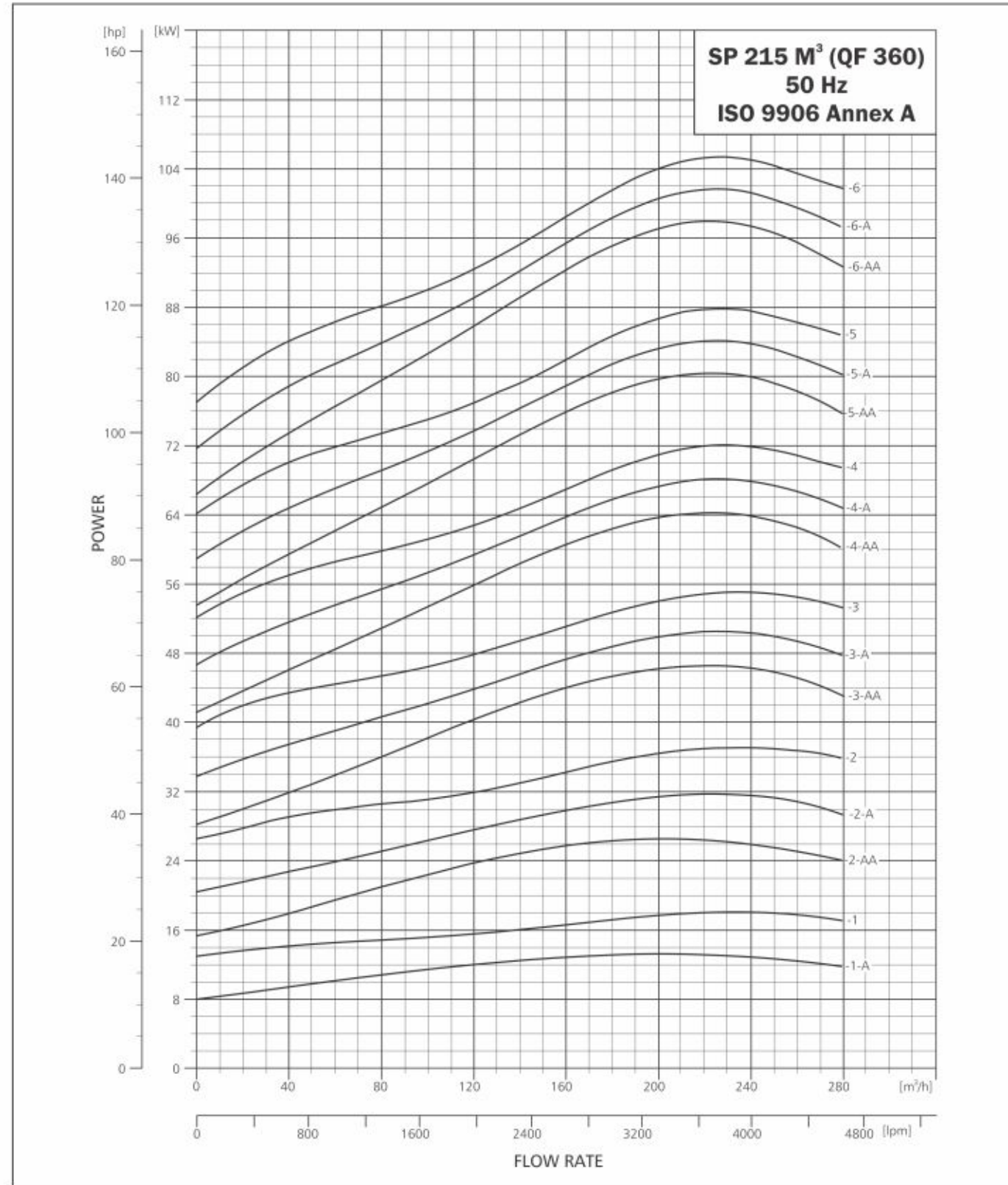
SUBMERSIBLE PUMP QF 360

PERFORMANCE TABLE QF 360

QF-360		DISCHARGE (Q)																								
		m <sup>3</sup> /h		0	90	110	130	150	170	180	190	200	210	220	230	240	250	260	270	280						
		l/min.		0	1500	1833	2167	2500	2833	3000	3167	3333	3500	3667	3833	4000	4167	4333	4500	4667						
MODEL	MATERIAL CODE				MOTOR RATING		TOTAL HEAD IN (m)																			
	6x12	8x12	10x12	12x12	[kW]	[HP]	15	20	27	24	23	22	20	18	17	16	15	14	13	11	10	8	6	4	3	
QF 360-1A	9000003524	-	-	-	15	20	27	24	23	22	20	18	17	16	15	14	13	11	10	8	6	4	3			
QF 360-1	9000003513	-	-	-	18.5	25	38	33	31	29	27	26	25	24	24	23	22	21	19	18	16	13	11			
QF 360-2AA	9000010313	9000003534	-	-	30	40	55	50	48	46	43	41	39	37	35	33	31	28	25	21	18	14	11			
QF 360-2A	9000003529	9000003530	-	-	37	50	66	59	57	54	51	49	47	46	44	42	40	38	35	32	28	23	18			
QF 360-2	-	9000003526	-	-	45	60	79	70	66	62	59	56	55	54	52	50	49	46	44	41	37	34	30			
QF 360-3AA	-	9000003543	-	-	55	75	95	87	84	80	76	73	71	69	66	63	60	57	53	48	42	36	28			
QF 360-3A	-	9000003540	-	-	55	75	107	96	92	87	83	79	77	75	72	70	67	63	59	55	49	43	37			
QF 360-3	-	9000003537	-	-	63	85	119	106	100	95	90	86	84	81	79	77	74	71	67	62	58	52	46			
QF 360-4AA	-	9000003552	-	-	75	100	135	123	117	112	107	102	99	96	93	89	85	80	75	69	62	54	45			
QF 360-4A	-	9000003549	-	-	75	100	146	132	125	119	113	108	105	102	99	95	91	87	82	76	69	61	53			
QF 360-4	-	9000003546	-	-	75	100	158	140	133	126	119	114	111	108	105	102	98	93	88	82	76	69	62			
QF 360-5AA	-	9000003562	-	-	92	125	173	157	149	142	135	129	125	122	118	113	108	102	95	88	79	69	59			
QF 360-5A	-	9000003559	-	-	92	125	184	165	157	149	141	135	131	127	123	119	114	108	102	94	86	77	67			
QF 360-5	-	9000003555	-	-	92	125	195	173	164	155	148	140	137	133	129	125	120	114	108	101	93	84	76			
QF 360-6AA	-	-	-	-	110	150	212	192	183	174	166	157	153	149	144	139	133	126	118	109	98	87	75			
QF 360-6A	-	-	9000017871	-	110	150	223	200	190	181	172	163	159	155	150	145	139	132	124	115	105	95	83			
QF 360-6	-	-	9000003565	-	110	150	234	209	198	187	178	169	165	160	156	151	145	138	130	122	112	102	92			
QF 360-7AA	-	-	9000003578	-	132	177	254	230	220	209	199	190	185	180	174	168	161	153	144	134	122	109	96			
QF 360-7A	-	-	9000003576	-	132	177	265	239	227	216	205	196	191	186	180	174	167	159	151	141	129	117	104			
QF 360-7	-	-	9000003574	-	132	177	277	248	235	223	212	202	197	192	186	180	174	166	157	147	137	125	113			
QF 360-8AA	-	-	9000003584	-	147	204	295	267	255	242	231	220	214	209	202	195	188	179	168	157	144	129	114			
QF 360-8A	-	-	9000003582	-	147	204	306	276	263	249	237	226	221	215	209	202	194	185	175	164	151	137	123			
QF 360-8	-	-	9000003580	-	147	204	318	285	270	256	244	232	227	221	215	208	200	192	182	171	158	145	131			
QF 360-9AA	-	-	9000003590	-	185	252	334	303	289	275	262	249	243	237	230	222	213	203	191	178	164	148	131			
QF 360-9A	-	-	9000003588	-	185	252	346	312	297	282	268	256	249	243	236	228	219	209	198	185	171	156	140			
QF 360-9	-	-	9000003586	-	185	252	358	321	305	289	275	262	255	249	242	234	226	216	205	192	179	164	148			
QF 360-10AA	-	-	-	9000003519	190	260	375	340	324	308	293	279	272	265	257	249	239	228	215	201	185	168	149			
QF 360-10A	-	-	-	9000003517	190	260	386	349	331	315	300	286	279	271	264	255	245	234	222	208	192	175	158			
QF 360-10	-	-	-	9000003515	190	260	398	357	339	322	306	292	285	277	270	261	252	241	229	215	200	183	166			

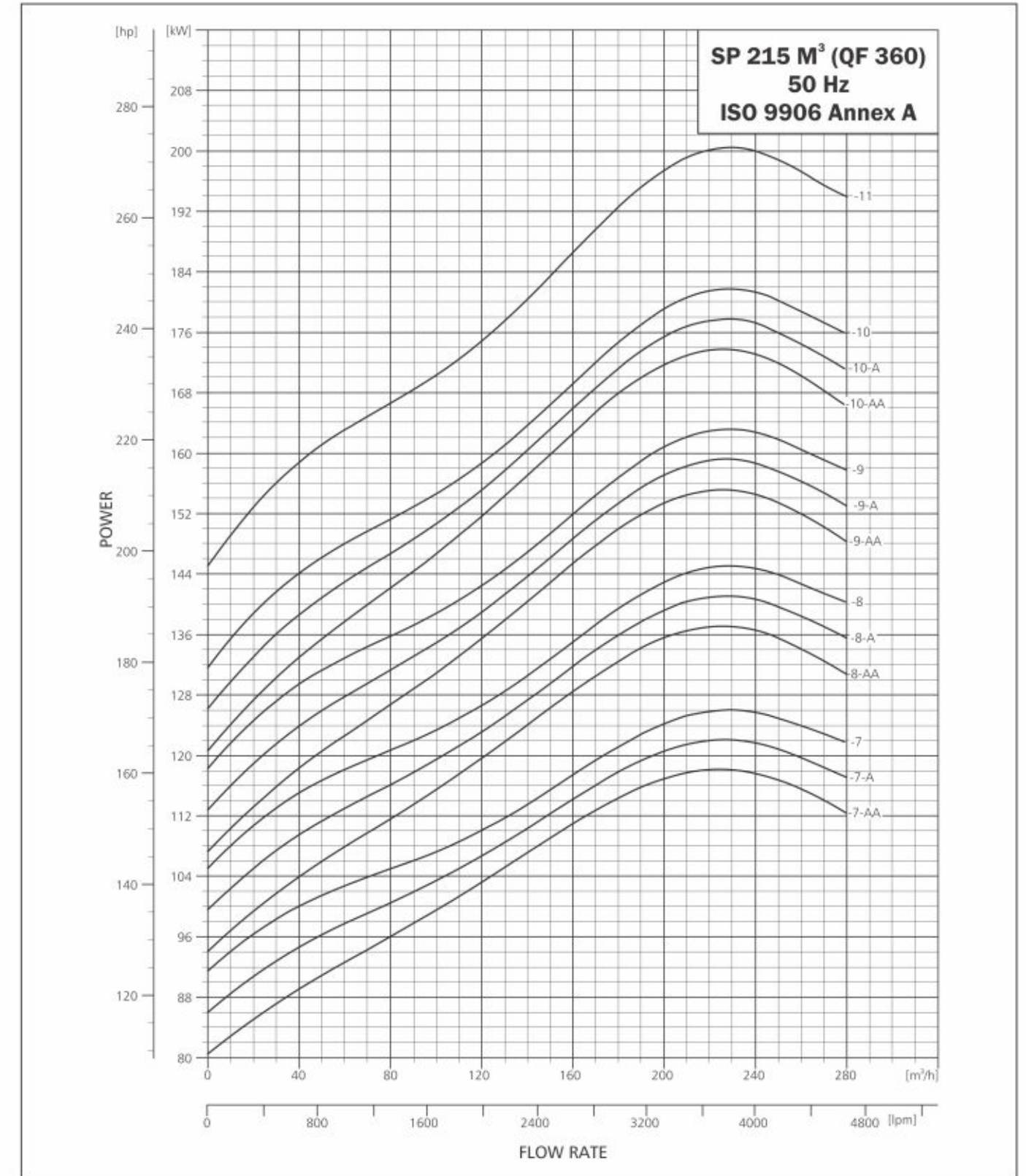
PERFORMANCE CURVE

SUBMERSIBLE PUMP QF 360



PERFORMANCE CURVE

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

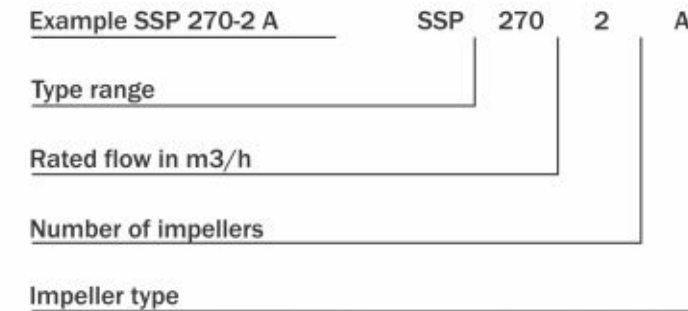
MOTOR RANGE

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**

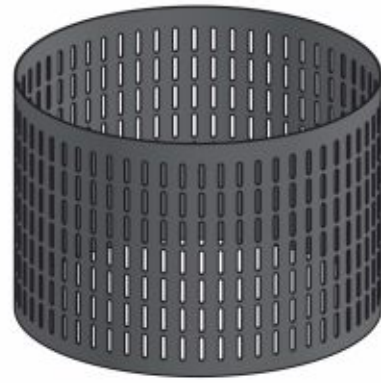
**Bearings with sand channels**

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)**

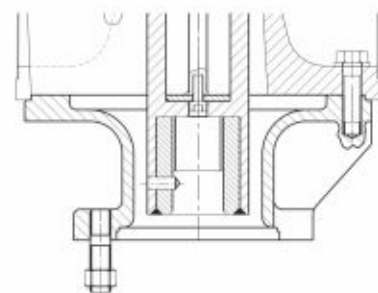
The inlet strainer prevents particles over a certain size from entering and damaging the pump.



(Fig. no. 1)

**PROTECTION AGAINST UPTHRUST (Fig. no.2)**

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



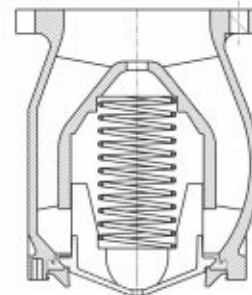
(Fig. no. 2)

**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)**

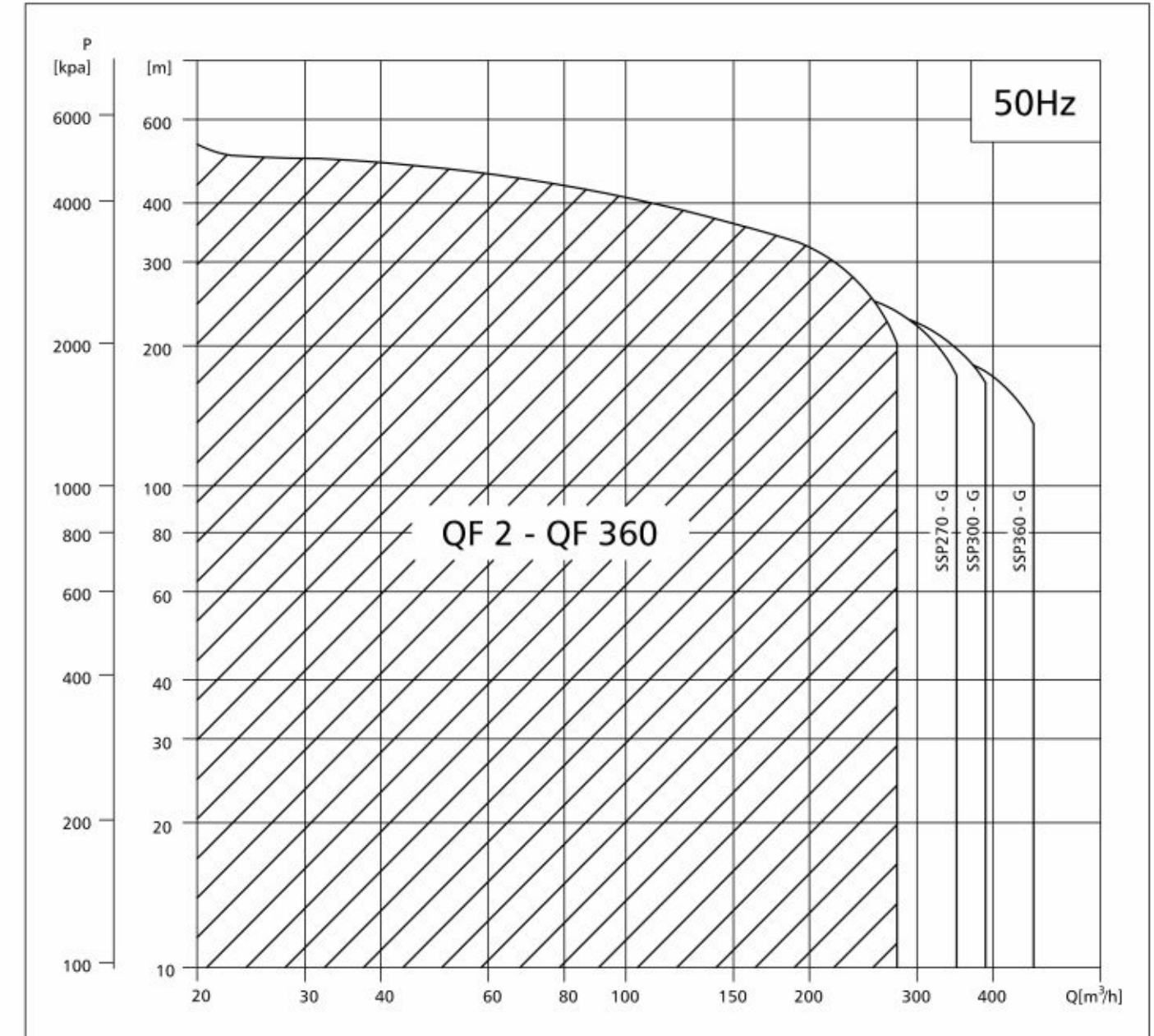
All pumps have a replaceable neck ring in each chamber.

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



(Fig. no. 4)

**PERFORMANCE RANGE**

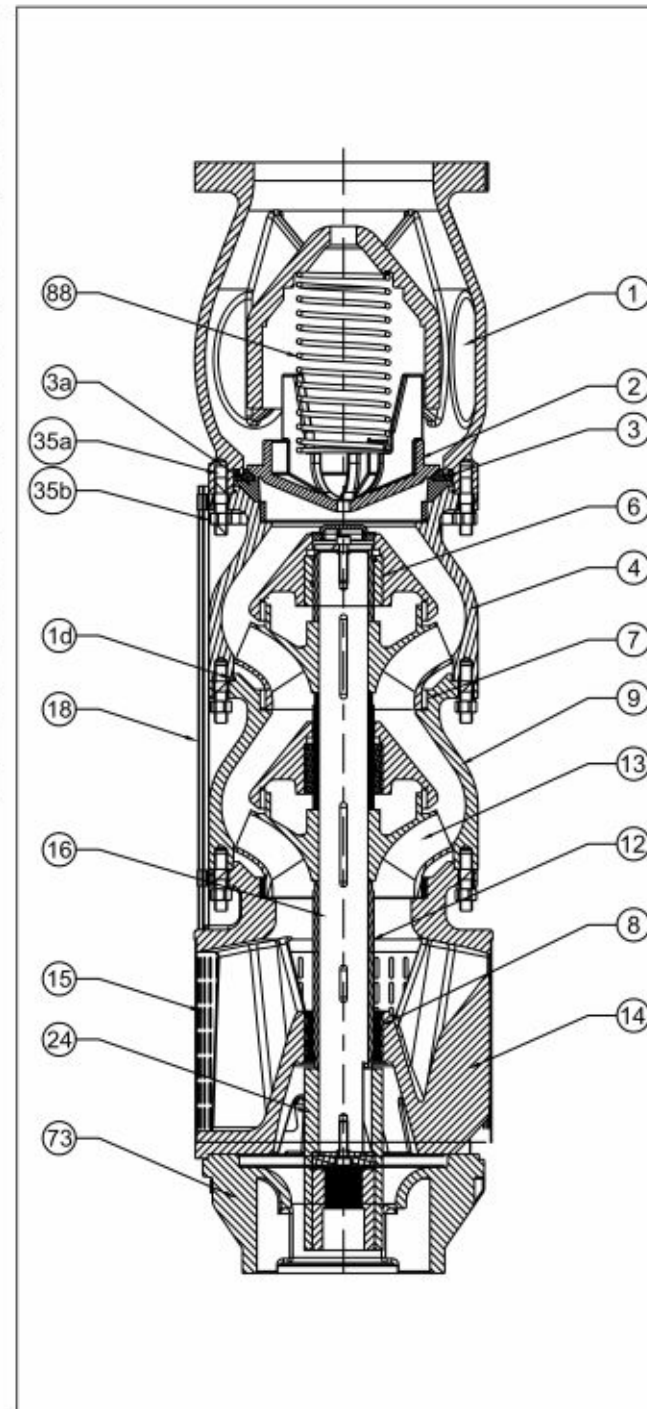


SUBMERSIBLE PUMP SSP-270

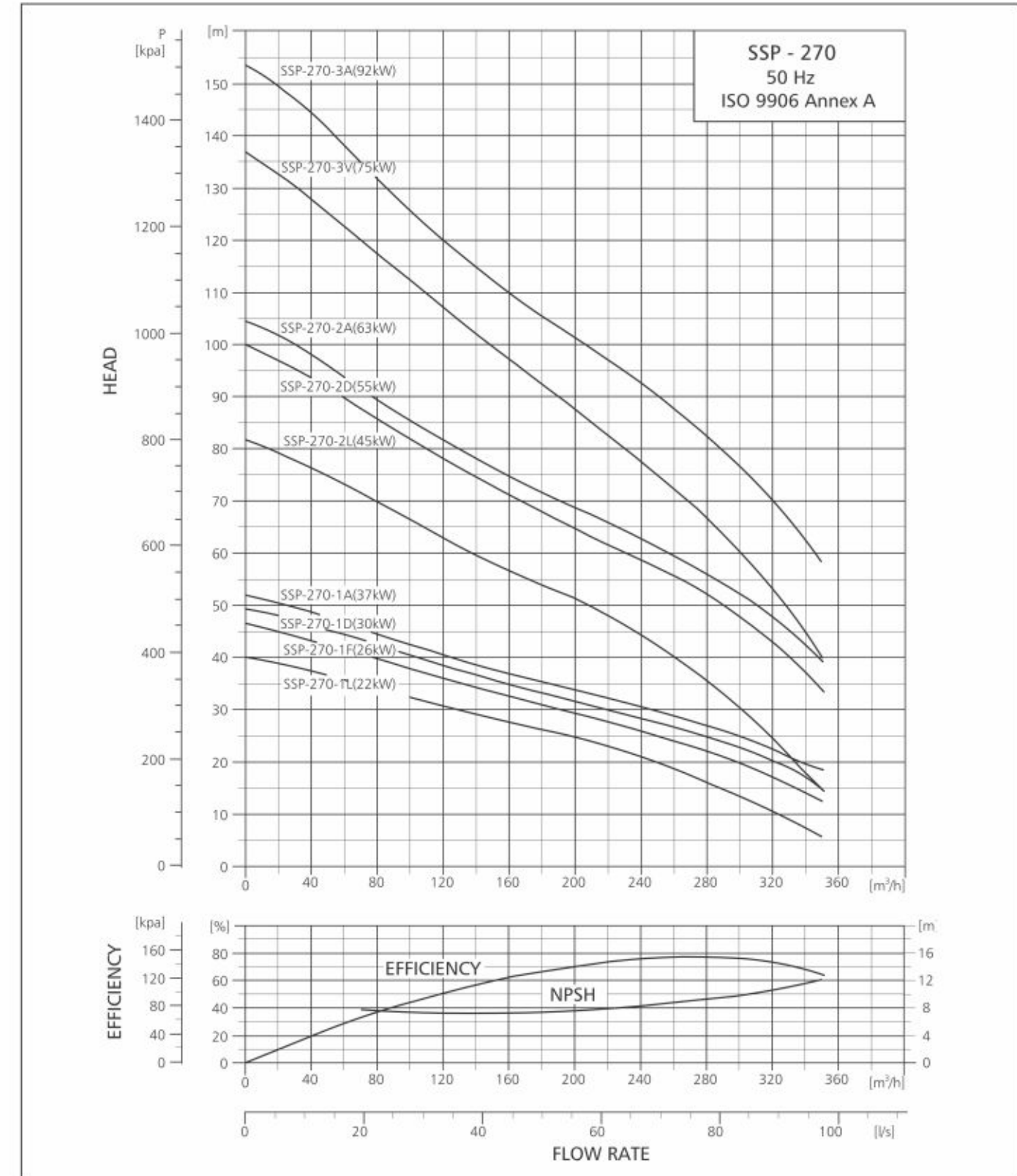
MATERIAL SPECIFICATION SSP-270

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

SECTIONAL VIEW OF SSP-270 PUMP ASSLY

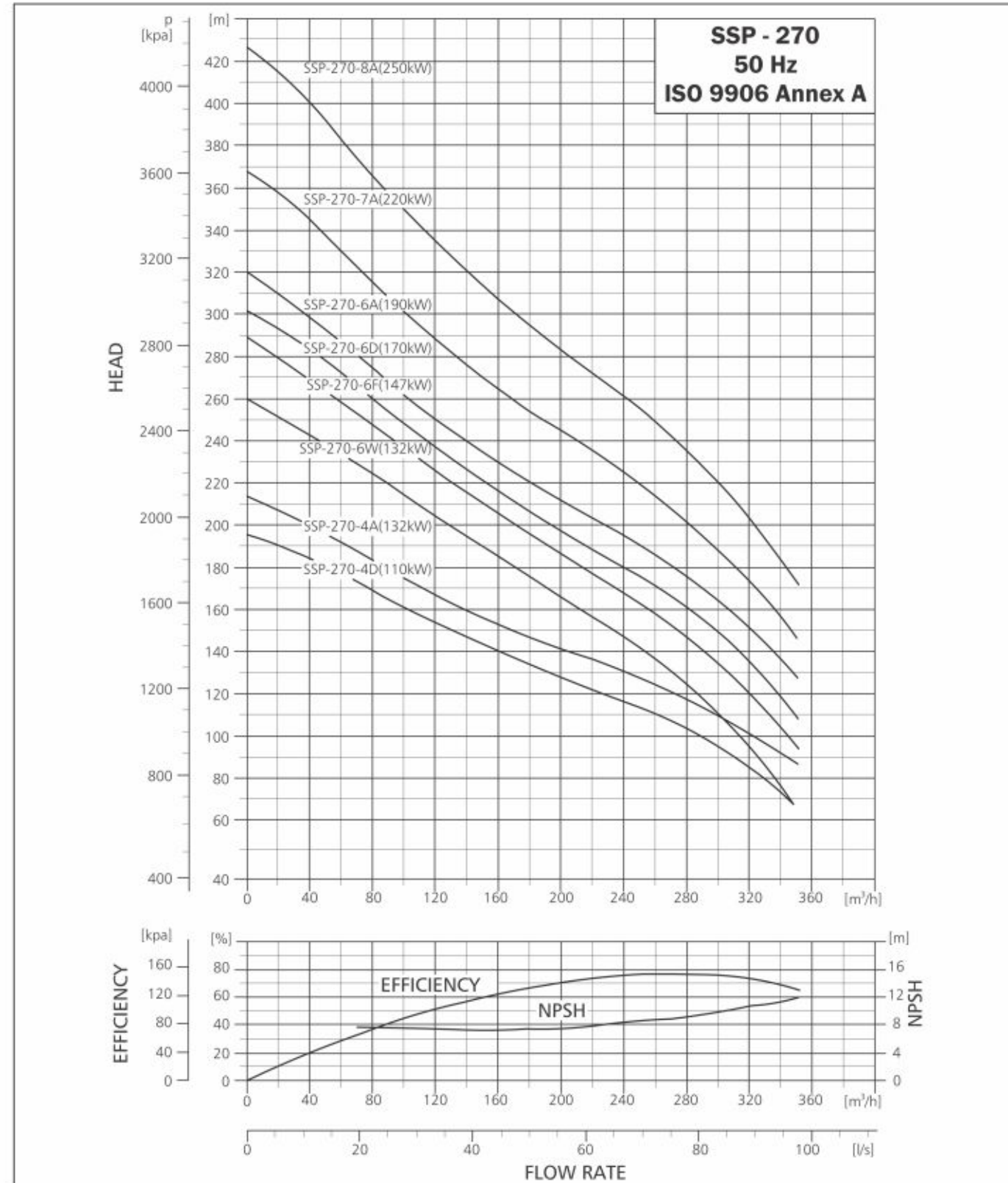


SUBMERSIBLE PUMP SSP-270



**PERFORMANCE CURVE**

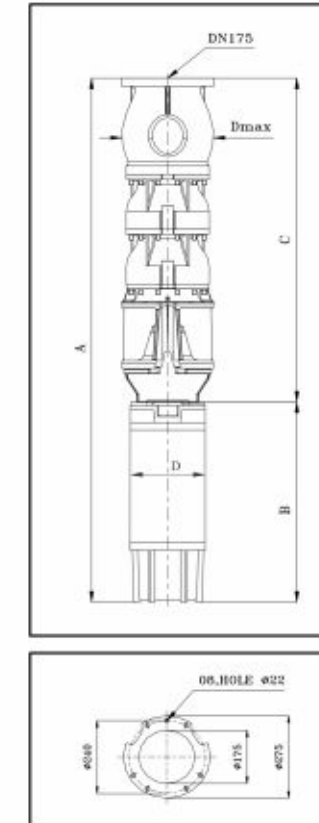
**SUBMERSIBLE PUMP SSP-270**



**TECHNICAL DATA**

**SUBMERSIBLE PUMP SSP-270**

**DIMENSIONS AND WEIGHTS**



PUMP TYPE	MOTOR		DIMENSIONS (MM)				NET WEIGHT (KG) PUMPS SET
	TYPE	POWER (kW)	C	B	A	D	
SSP 270-1L	MATSF8"	22	885	1040	1925	192	266
SSP 270-1F	MATSF8"	26	885	1140	2025	192	274
SSP 270-1D	MATSF8"	30	885	1140	2025	192	286
SSP 270-1A	MATSF8"	37	885	1140	2025	192	296
SSP 270-2L	MATSF8"	45	1065	1230	2295	192	342
SSP 270-2D	MATSF8"	55	1065	1340	2405	192	357
SSP 270-2A	MATSF8"	63	1065	1470	2535	192	383
SSP 270-3V	MATSF8"	75	1245	1560	2805	192	427
SSP 270-3A	MATSF8"	93	1245	1740	2985	192	473
SSP 270-4D	MATSF8"	110	1425	1920	3345	192	523
SSP 270-4D	MATSF10"	110	1425	2761	4186	237	605
SSP 270-4A	MATSF10"	132	1425	3021	4446	237	655
SSP 270-6W	MATSF10"	132	1785	3021	4806	237	705
SSP 270-6F	MATSF10"	147	1785	3241	5026	237	770
SSP 270-6D	MATSF12"	170	1785	3541	5326	286	890
SSP 270-6A	MATSF12"	190	1785	3541	5326	286	935
SSP 270-7A	MATSF12"	220	1965	3893	5858	286	1010
SSP 270-8A	MATSF12"	250	2145	4893	6438	286	1100

Dmax (6",8",10" and 12") :290mm

**PERFORMANCE TABLE SSP 270**

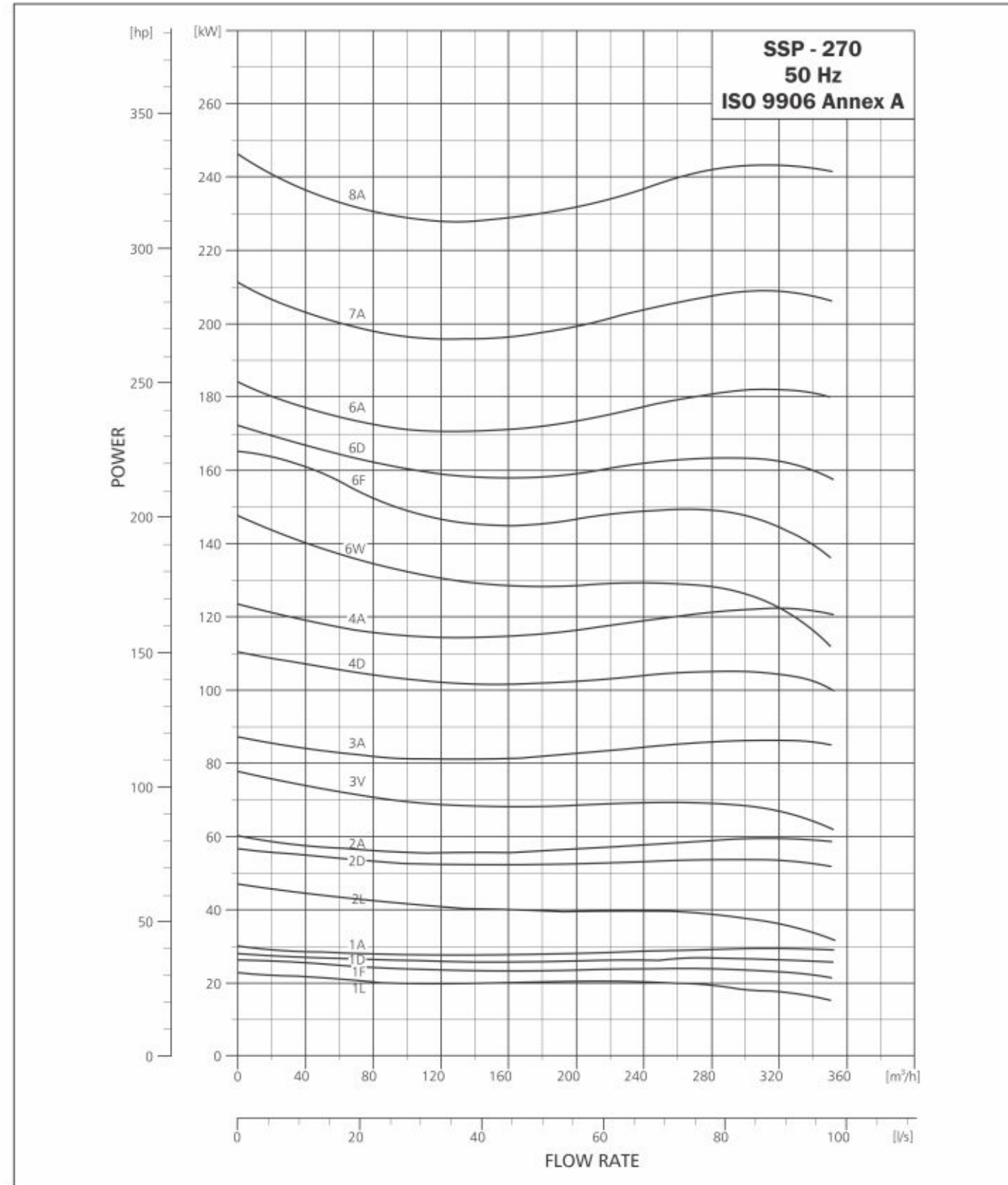
SSP 270		DISCHARGE (Q)																						
		m³/h		0	40	80	120	160	200	240	280	320	l/min.		0	668	1336	2004	2672	3340	4008	4676	5344	
MODEL	MATERIAL				MOTOR RATING		TOTAL HEAD IN (m)																	
	6" joining	8" joining	10" joining	12" joining	[kW]	[HP]	40	38	34	31	28	25	21	17	10	40	38	34	31	28	25	21	17	10
SSP270-1 L	9000010964	-	-	-	22	30	40	38	34	31	28	25	21	17	10	40	38	34	31	28	25	21	17	10
SSP270-1F	9000010961	-	-	-	26	35	47	43	40	37	33	29	27	23	18	47	43	40	37	33	29	27	23	18
SSP270-1D	9000010962	-	-	-	30	40	49	47	43	38	35	32	29	25	20	49	47	43	38	35	32	29	25	20
SSP270-1A	9000010963	-	-	-	37	50	52	49	45	41	37	33	30	27	23	52	49	45	41	37	33	30	27	23
SSP270-2L	-	9000018456	-	-	45	60	82	77	69	63	57	52	44	35	25	82	77	69	63	57	52	44	35	25
SSP270-2D	-	9000010965	-	-	55	75	100	93	86	78	72	65	58	52	43	100	93	86	78	72	65	58	52	43
SSP270-2A	-	9000010966	-	-	63	85	104	98	88	82	75	68	62	56	48	104	98	88	82	75	68	62	56	48
SSP270-3V	-	9000010967	-	-	75	100	137	128	117	107	97	87	77	67	53	137	128	117	107	97	87	77	67	53
SSP270-3A	-	9000010968	-	-	92	125	153	144	133	121	111	102	93	83	71	153	144	133	121	111	102	93	83	71
SSP270-4D	-	-	9000010969	-	110	150	195	185	170	155	141	127	117	104	87	195	185	170	155	141	127	117	104	87
SSP270-4A	-	-	9000010970	-	132	177	213	200	184	168	152	142	130	107	100	213	200	184	168	152	142	130	107	100
SSP270-6W	-	-	9000010971	-	132	177	260	243	225	205	185	166	157	123	96	260	243	225	205	185	166	157	123	96
SSP270-6F	-	-	9000010972	-	147	197	289	268	248	226	205	186	168	147	120	289	268	248	226	205	186	168	147	120
SSP270-6D	-	-	9000010973	-	170	252	302	285	260	238	217	197	180	161	135	302	285	260	238	217	197	180	161	135
SSP270-6A	-	-	9000010974	-	190	252	320	298	275	250	230	212	195	174	151	320	298	275	250	230	212	195	174	151
SSP270-7A	-	-	-	9000010975	220	295	367	346	315	290	264	245	225	201	173	367	346	315	290	264	245	225	201	173
SSP270-8A	-	-	-	9000010976	250	335	425	400	366	335	308	283	261	235	204	425	400	366	335	308	283	261	235	204

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

PERFORMANCE CURVE

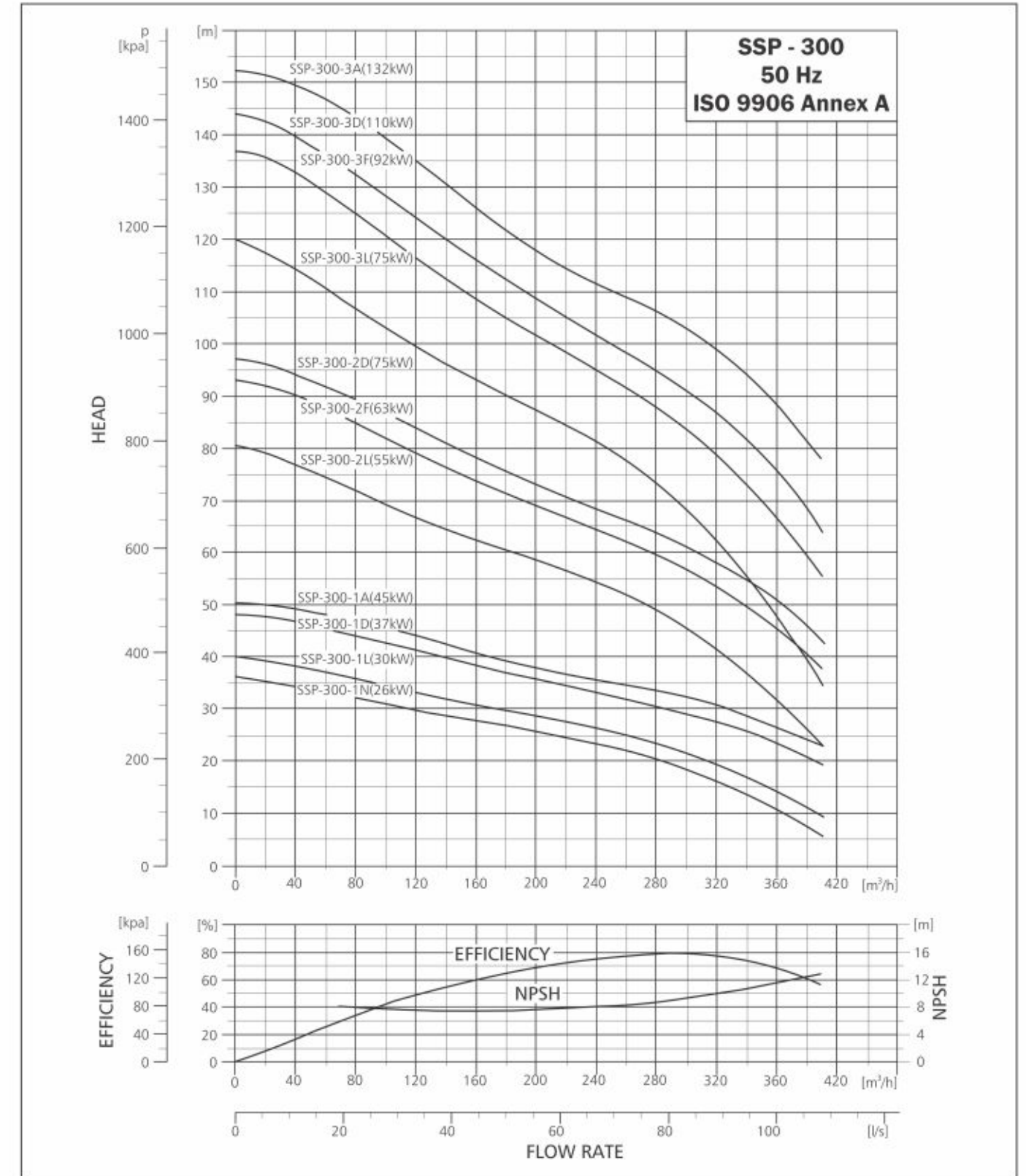


SUBMERSIBLE PUMP SSP-270



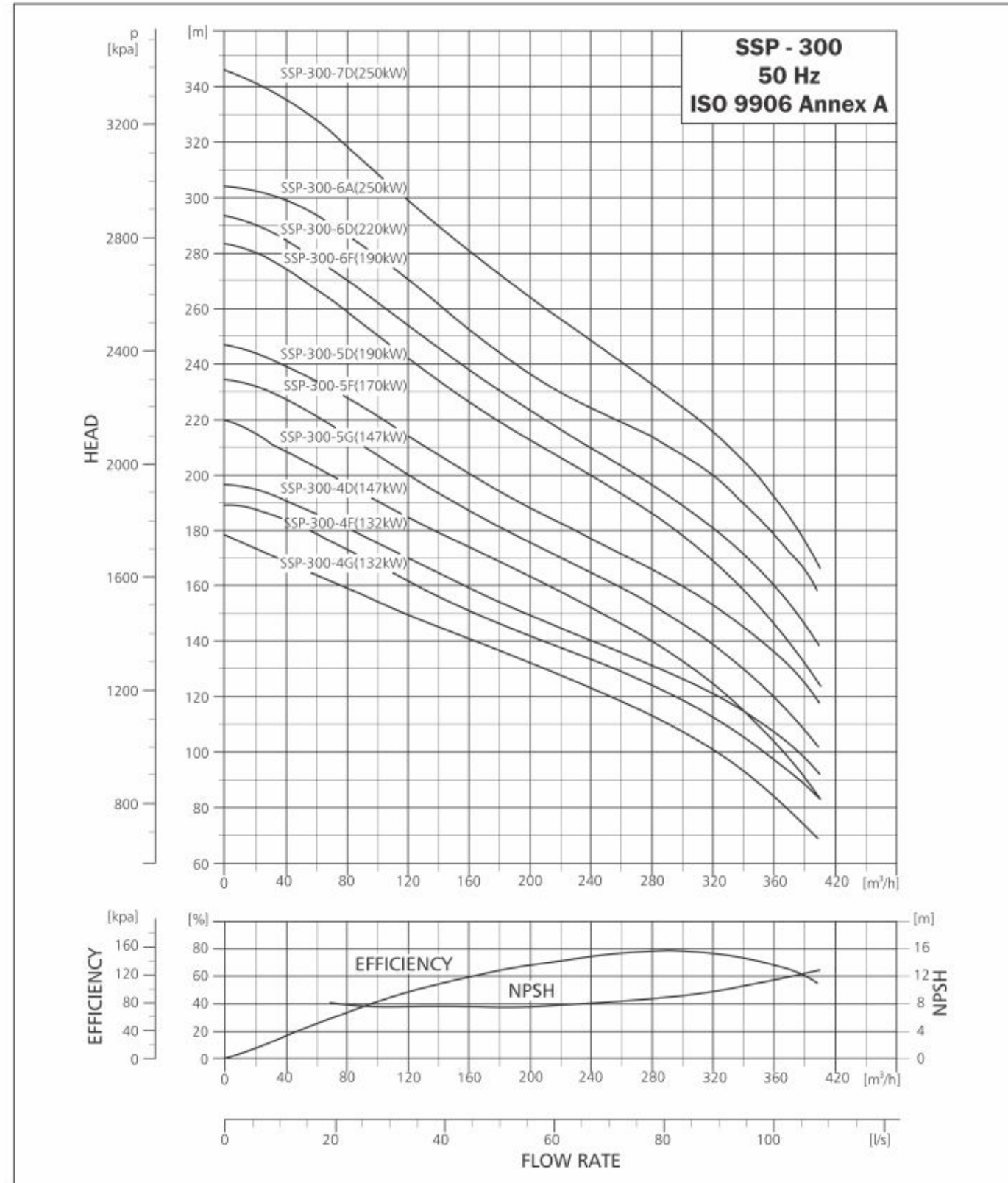
PERFORMANCE CURVE

SUBMERSIBLE PUMP SSP-300



PERFORMANCE CURVE

SUBMERSIBLE PUMP SSP-300

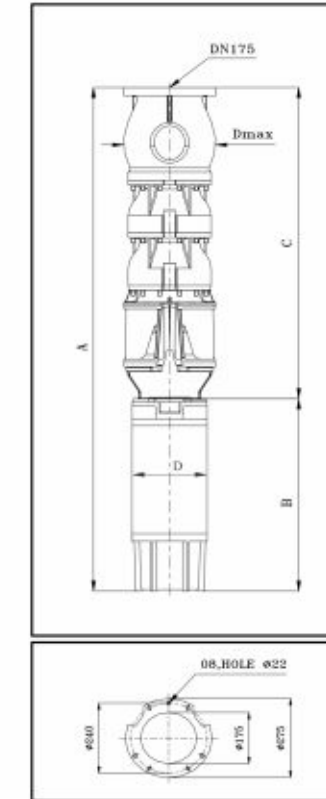


TECHNICAL DATA



SUBMERSIBLE PUMP SSP-300

DIMENSIONS AND WEIGHTS



TECHNICAL DATA SSP-300

PUMP TYPE	MOTOR		DIMENSIONS (MM)				NET WEIGHT (KG) PUMPS SET
	TYPE	POWER (kW)	C	B	A	D	
SSP300-1N	MATSF8"	26	885	1085	1970	192	266
SSP300-1L	MATSF8"	30	885	1140	2025	192	286
SSP300-1D	MATSF8"	37	885	1140	2025	192	296
SSP300-1A	MATSF8"	45	885	1230	2115	192	317
SSP300-2L	MATSF8"	55	1065	1340	2405	192	357
SSP300-2F	MATSF8"	63	1065	1470	2535	192	383
SSP300-2D	MATSF8"	75	1065	1560	2625	192	402
SSP300-3L	MATSF8"	75	1245	1560	2805	192	427
SSP300-3F	MATSF8"	92	1245	1740	2985	192	473
SSP300-3D	MATSF8"	110	1245	1934	3179	192	523
SSP300-3D	MATSF10"	110	1245	1529	2774	237	580
SSP300-3A	MATSF10"	132	1245	1659	2904	237	630
SSP300-4G	MATSF10"	132	1425	1659	3084	237	655
SSP300-4F	MATSF10"	132	1425	1659	3084	237	655
SSP300-4D	MATSF10"	147	1425	1769	3194	237	720
SSP300-5G	MATSF10"	147	1605	1769	3374	237	745
SSP300-5F	MATSF12"	170	1605	1919	3524	286	865
SSP300-5D	MATSF12"	190	1605	1743	3348	286	910
SSP300-6F	MATSF12"	190	1785	1743	3528	286	935
SSP300-6D	MATSF12"	220	1785	1743	3528	286	985
SSP300-6A	MATSF12"	250	1785	1893	3678	286	1060
SSP300-7D	MATSF12"	250	1965	1893	3858	286	1085

Dmax (6",8",10" and 12"):290mm

PERFORMANCE TABLE SSP 300

MODEL	SSP 300				MOTOR RATING		DISCHARGE (Q)												
	MATERIAL				[kW]	[HP]	TOTAL HEAD IN (m)												
	6" joining	8" joining	10" joining	12" joining			0	40	80	120	160	200	240	280	320	360			
SSP300-1 N	-	-	-	-	26	35	37	34	32	29	28	26	23	21	16	11			
SSP300-1L	9000010978	-	-	-	30	40	40	38	36	33	31	27	27	24	19	14			
SSP300-1D	9000014266	-	-	-	37	50	47	47	44	42	38	36	34	31	28	24			
SSP300-1A	-	9000010980	-	-	45	60	50	49	46	44	41	38	36	33	31	26			
SSP300-2L	-	9000010981	-	-	55	75	82	77	72	66	62	58	54	49	41	31			
SSP300-2F	-	9000010982	-	-	63	85	93	92	85	78	73	68	64	59	53	51			
SSP300-2D	-	9000010983	-	-	75	100	97	94	89	84	77	73	68	64	58	46			
SSP300-3L	-	9000010984	-	-	75	100	120	114	107	99	93	87	81	74	62	47			
SSP300-3F	-	9000010985	-	-	92	125	137	136	125	118	108	103	95	87	78	66			
SSP300-3D	-	-	9000010986	-	110	150	148	140	133	124	117	109	103	95	87	76			
SSP300-3A	-	-	9000013929	-	132	177	152	148	143	135	126	117	112	107	98	88			
SSP300-4G	-	-	9000010988	-	132	177	179	170	158	150	141	132	123	114	101	84			
SSP300-4F	-	-	9000010989	-	132	177	189	183	173	162	151	142	134	124	112	98			
SSP300-4D	-	-	9000010990	-	147	197	196	192	182	170	159	149	140	131	121	108			
SSP300-5G	-	-	9000010991	-	147	197	220	208	195	184	174	163	152	140	124	104			
SSP300-5F	-	-	9000010992	-	170	252	234	228	213	200	187	176	165	154	139	120			
SSP300-5D	-	-	-	9000010993	190	252	248	239	224	214	201	188	178	166	154	136			
SSP300-6F	-	-	-	9000010994	190	252	283	272	258	242	226	212	200	186	169	148			
SSP300-6D	-	-	-	9000010995	220	295	294	285	270	254	238	223	210	196	181	160			
SSP300-6A	-	-	-	9000010996	250	335	304	299	288	270	252	237	225	214	200	179			
SSP300-7D	-	-	-	9000010997	250	335	345	335	318	300	281	264	248	232	215	192			

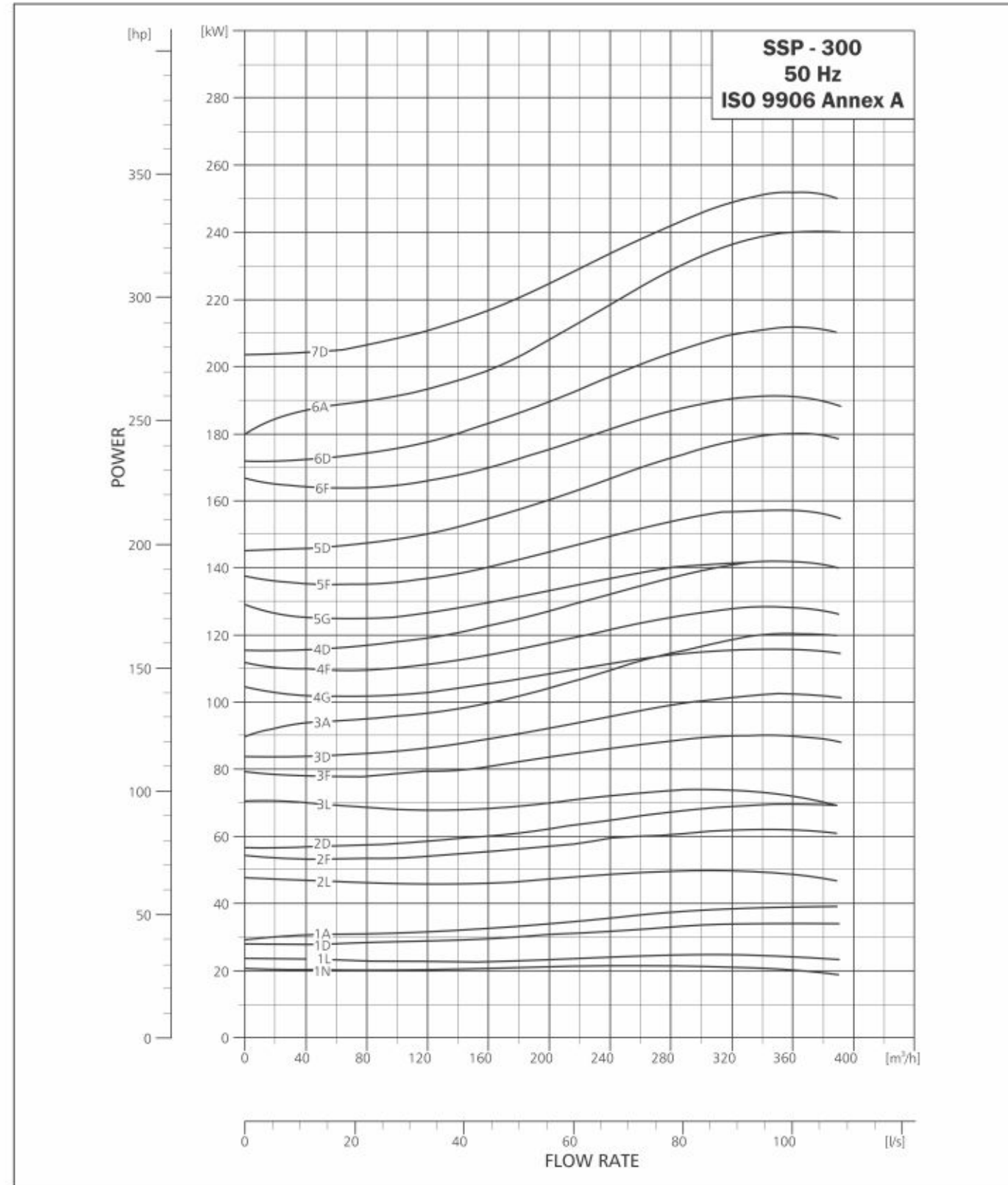
This Performance Table is Approximate as a Performance Curve  
Technical Change without notice



PERFORMANCE CURVE

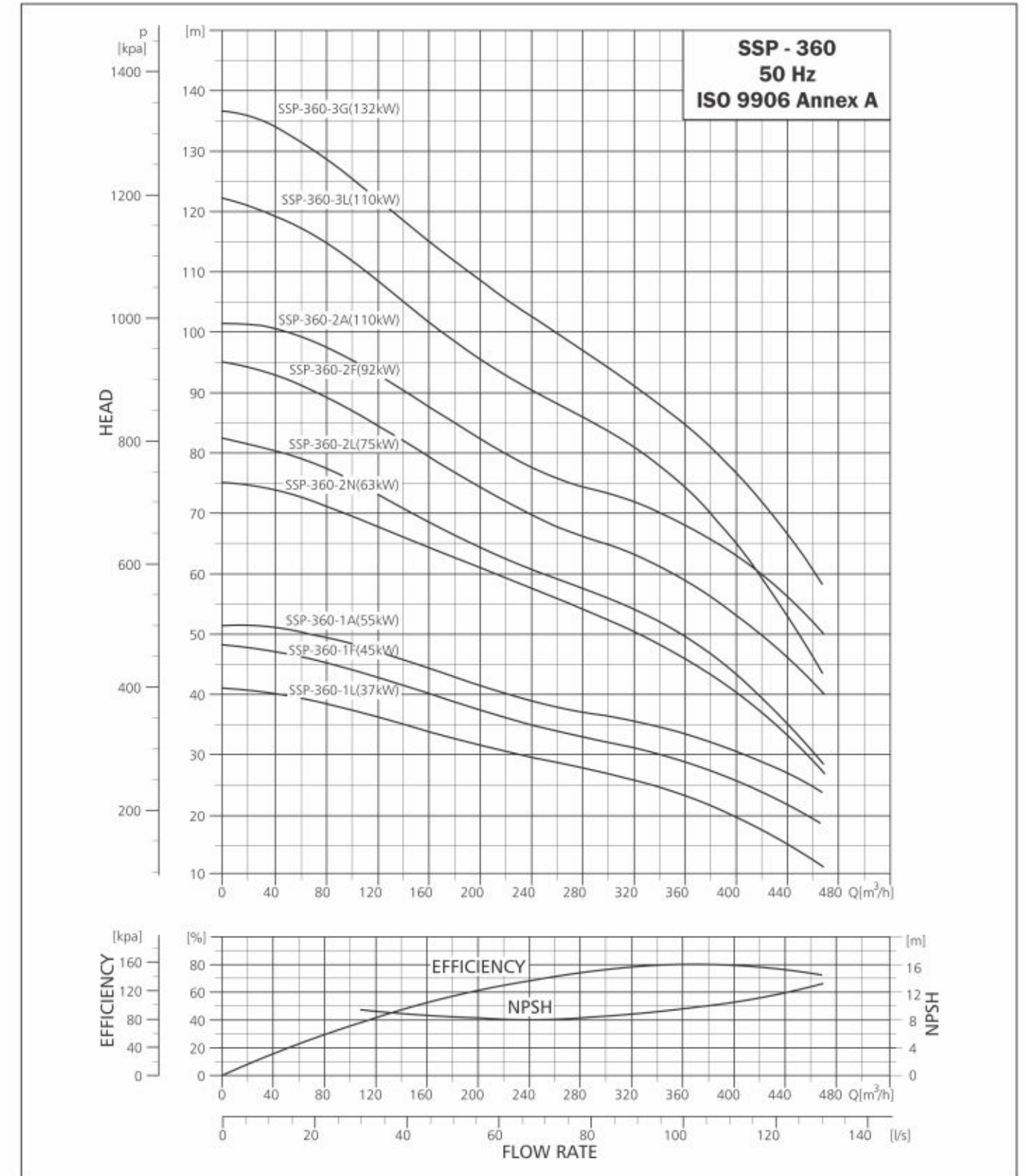


SUBMERSIBLE PUMP SSP-300



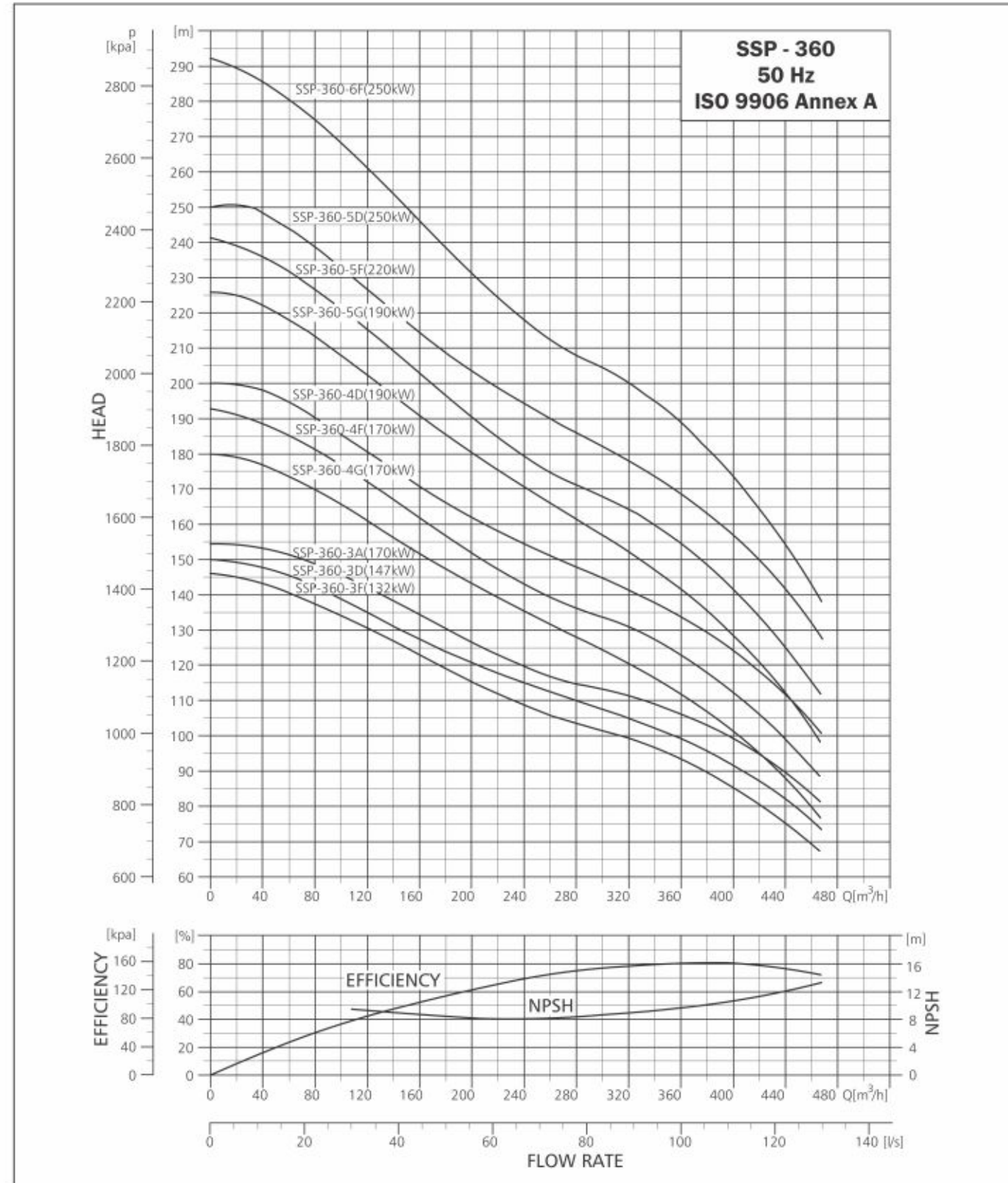
PERFORMANCE CURVE

SUBMERSIBLE PUMP SSP-360



PERFORMANCE CURVE

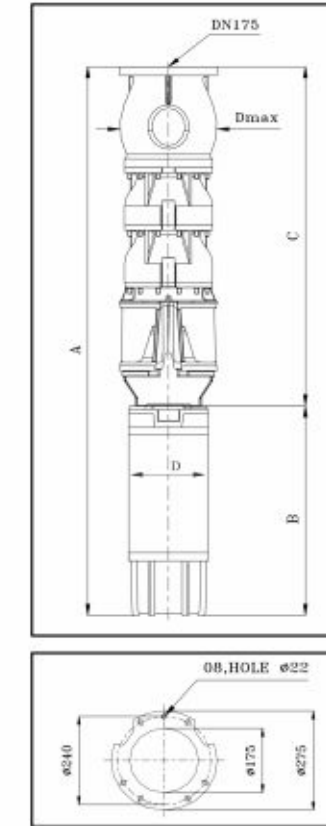
SUBMERSIBLE PUMP SSP-360



TECHNICAL DATA

SUBMERSIBLE PUMP SSP-360

DIMENSIONS AND WEIGHTS



TECHNICAL DATA SSP-360

PUMP TYPE	MOTOR		DIMENSIONS (MM)				NET WEIGHT (KG)
	TYPE	POWER (kW)	C	B	A	D	
SSP360-1L	MATSF8"	37	885	1140	2025	192	296
SSP360-1F	MATSF8"	45	885	1230	2115	192	317
SSP360-1A	MATSF8"	55	885	1340	2225	192	332
SSP360-2N	MATSF8"	63	1065	1470	2535	192	383
SSP360-2L	MATSF8"	75	1065	1560	2625	192	402
SSP360-2F	MATSF8"	92	1065	1740	2805	192	448
SSP360-2A	MATSF8"	110	1065	1529	2594	192	498
SSP360-3L	MATSF8"	110	1245	1529	2774	192	523
SSP360-2A	MATSF10"	110	1065	1499	2564	237	555
SSP360-3L	MATSF10"	110	1245	1499	2744	237	580
SSP360-3G	MATSF10"	132	1245	1659	2904	237	630
SSP360-3F	MATSF10"	132	1245	1659	2904	237	630
SSP360-3D	MATSF10"	147	1245	1769	3014	237	695
SSP360-3A	MATSF12"	147	1245	1919	3164	286	805
SSP360-4G	MATSF12"	170	1425	1919	3344	286	840
SSP360-4F	MATSF12"	170	1425	1919	3344	286	840
SSP360-4D	MATSF12"	185	1425	1919	3344	286	885
SSP360-5G	MATSF12"	185	1605	1919	3524	286	910
SSP360-5F	MOTOR12"	220	1605	1893	3498	286	960
SSP360-5D	MOTOR12"	250	1605	1893	3498	286	1035
SSP360-6F	MOTOR12"	250	1785	1893	3678	286	106

Dmax (6",8",10" and 12") :290mm

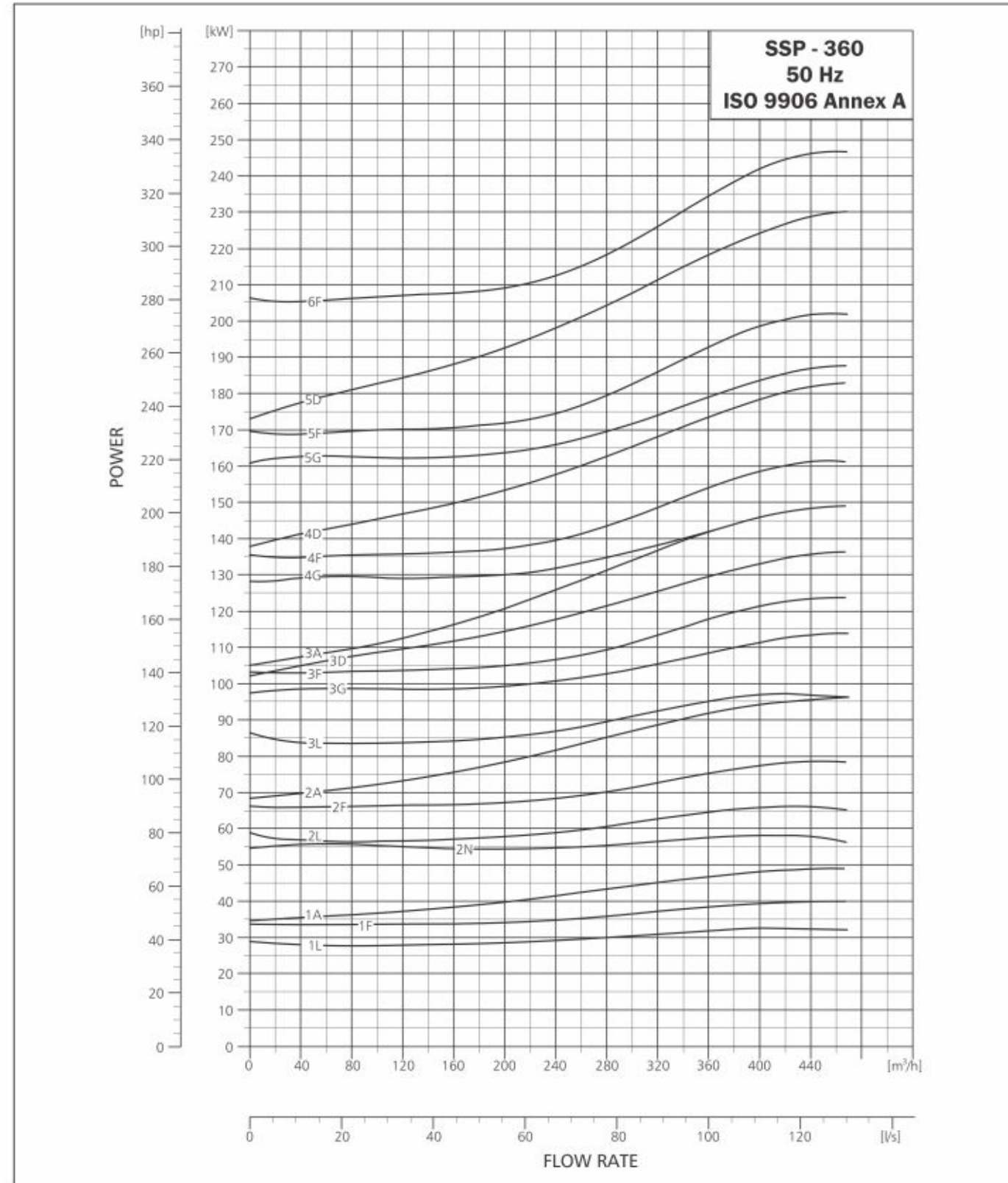
PERFORMANCE TABLE SSP 360

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						
MODEL	MATERIAL				MOTOR RATING		TOTAL HEAD IN (m)													
	6" joining	8" joining	10" joining	12" joining	[kW]	[HP]	41	40	38	36	34	31	29	28	26	23	20	15		
SSP360-1L	9000010998	-	-	-	37	50	41	40	38	36	34	31	29	28	26	23	20	15		
SSP360-1F	-	9000010999	-	-	45	60	47	47	45	42	40	37	35	33	31	28	26	21		
SSP360-1A	-	9000011000	-	-	55	75	51	51	48	47	44	41	38	37	36	33	31	26		
SSP360-2N	-	9000011001	-	-	63	85	75	73	72	67	64	59	57	54	50	46	40	34		
SSP360-2L	-	9000011002	-	-	75	100	82	81	76	73	69	61	61	57	54	49	43	35		
SSP360-2F	-	9000011003	-	-	92	125	95	93	89	84	79	74	70	67	63	59	54	47		
SSP360-2A	-	-	9000011004	-	110	150	102	101	97	93	88	83	78	74	72	68	64	57		
SSP360-3L	-	-	9000011005	-	110	150	123	119	115	109	103	96	91	86	82	75	66	53		
SSP360-3G	-	-	9000011006	-	132	177	137	134	128	122	115	108	103	97	92	85	76	67		
SSP360-3F	-	-	9000011007	-	132	177	146	143	138	133	123	114	109	103	99	94	85	75		
SSP360-3D	-	-	9000011008	-	147	197	150	148	143	135	127	121	115	110	105	99	92	82		
SSP360-3A	-	-	9000011009	-	170	197	155	154	149	143	135	127	120	115	112	106	99	90		
SSP360-4G	-	-	9000011010	-	170	230	180	176	170	161	152	143	135	128	120	112	101	88		
SSP360-4F	-	-	9000011011	-	170	230	193	188	182	172	162	152	143	136	131	123	112	99		
SSP360-4D	-	-	9000011012	-	185	252	200	198	190	180	171	162	154	147	141	134	124	112		
SSP360-5G	-	-	9000011013	-	190	252	226	222	212	202	191	180	170	161	152	141	128	111		
SSP360-5F	-	-	-	9000011014	220	295	243	236	220	215	203	190	180	171	164	158	141	125		
SSP360-5D	-	-	-	9000011015	250	335	250	248	239	226	214	204	195	186	178	168	156	141		
SSP360-6F	-	-	-	9000011016	250	335	292	286	275	260	246	231	218	208	200	189	174	154		

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

PERFORMANCE CURVE

SUBMERSIBLE PUMP SSP-360



SUBMERSIBLE MOTORS

SINGLE PHASE PERFORMANCE DATA 50 HZ

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

\*PERFORMANCE IS TYPICALLY GUARANTEED

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

\*PERFORMANCE IS TYPICALLY GUARANTEED



**SUBMERSIBLE MOTORS**

**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>L</sub> [A]	η(Eff.)[%] at % load			COS Φ ( PF.) at % load			T <sub>n</sub> [Nm]	T <sub>L</sub> [Nm]
							50	75	100	50	75	100		
							40	30	45000	380	2880	63		
			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



**SUBMERSIBLE MOTORS**

**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>L</sub> [A]	η(Eff.)[%] at % load			COS Φ ( PF.) at % load			T <sub>n</sub> [Nm]	T <sub>L</sub> [Nm]
							50	75	100	50	75	100		
							5.5	4.0	15500	380	2860	11.7		
			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

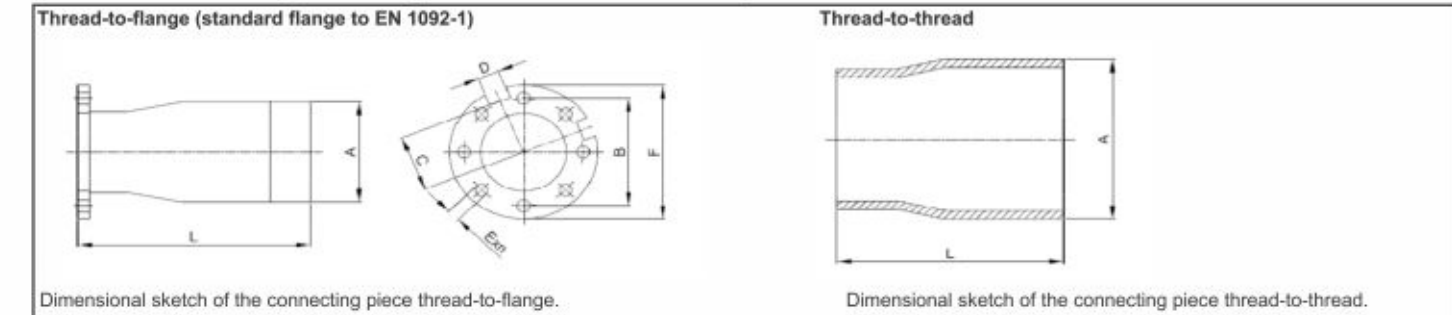
MTSF 10" REWINDABLE MOTORS PERFORMANCE DATA 50 HZ

MTSF 10" REWINDABLE MOTORS PERFORMANCE DATA 50 Hz														
P <sub>v</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.)[%] at % load			COS Φ ( PF.) at % load			T <sub>n</sub> [Nm]	T <sub>a</sub> [Nm]
							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	∅19	∅165	170	60	90	4
		R 2 1/2 → DN 65 PN 16/40	R 2 1/2	145	71	30	∅19	∅185	170	22.5	45	8
		R 2 1/2 → DN 80 PN 16/40	R 2 1/2	160	82.5	40	∅19	∅200	170	22.5	45	8
QF-50	Rp 3	R 3 → DN 65 PN 16/40	R 3	145	71	30	∅19	∅185	170	22.5	45	8
		R 3 → DN 80 PN 16/40	R 3	160	82.5	40	∅19	∅200	170	22.5	45	8
		R 3 → DN 100 PN 16/40	R 3	180/190	100	40	∅19/∅23	∅235	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	∅19	∅185	170	22.5	45	8
		R 3 → DN 80 PN 16/40	R 3	160	82.5	40	∅19	∅200	170	22.5	45	8
		R 3 → DN 100 PN 16/40	R 3	180/190	100	40	∅19/∅23	∅235	170	22.5	45	8
		R 4 → DN 100 PN 16/40	R 4	180/190	100	40	∅19/∅23	∅235	180	22.5	45	8
QF-125 QF-160	Rp 5	R 5 → DN 100 PN 16/40	R 5	180/190	82	35	∅19/∅23	∅235	195	22.5	45	8
		R 5 → DN 125 PN 16/40	R 5	210/220	99	37	∅19/∅28	∅270	195	22.5	45	8
		R 5 → DN 150 PN 16/40	R 5	240/250	115	36	∅23/∅28	∅300	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	∅19/∅28	∅270	195	22.5	45	8
		R 6 → DN 150 PN 16/40	R 6	240/250	114	36	∅23/∅28	∅300	195	22.5	45	8
		R 6 → DN 200 PN 16	R 6	295	134	36	∅23	∅340	195	15	30	12
		R 6 → DN 200 PN 40	R 6	320	151	36	∅31	∅375	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



