



GENERAL CATALOGUE 2005

 **PEDROLLO**[®]
... the spring of life



PEDROLLO S.p.A.

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Pedrollo's aim is to move water all over the world, with creativeness and passion. Our pumps are suitable for all purposes, easy to use, ecological, accessible to everyone, everywhere.

Our mission is to make water available everywhere, supporting life, development and comfort.





Organized on an area of 70,000 m² our company makes use of a production process characterised by a high level of technology and automation, putting it at the top of its sector both for the amount of investments and for the ability to ensure quality throughout the production process.

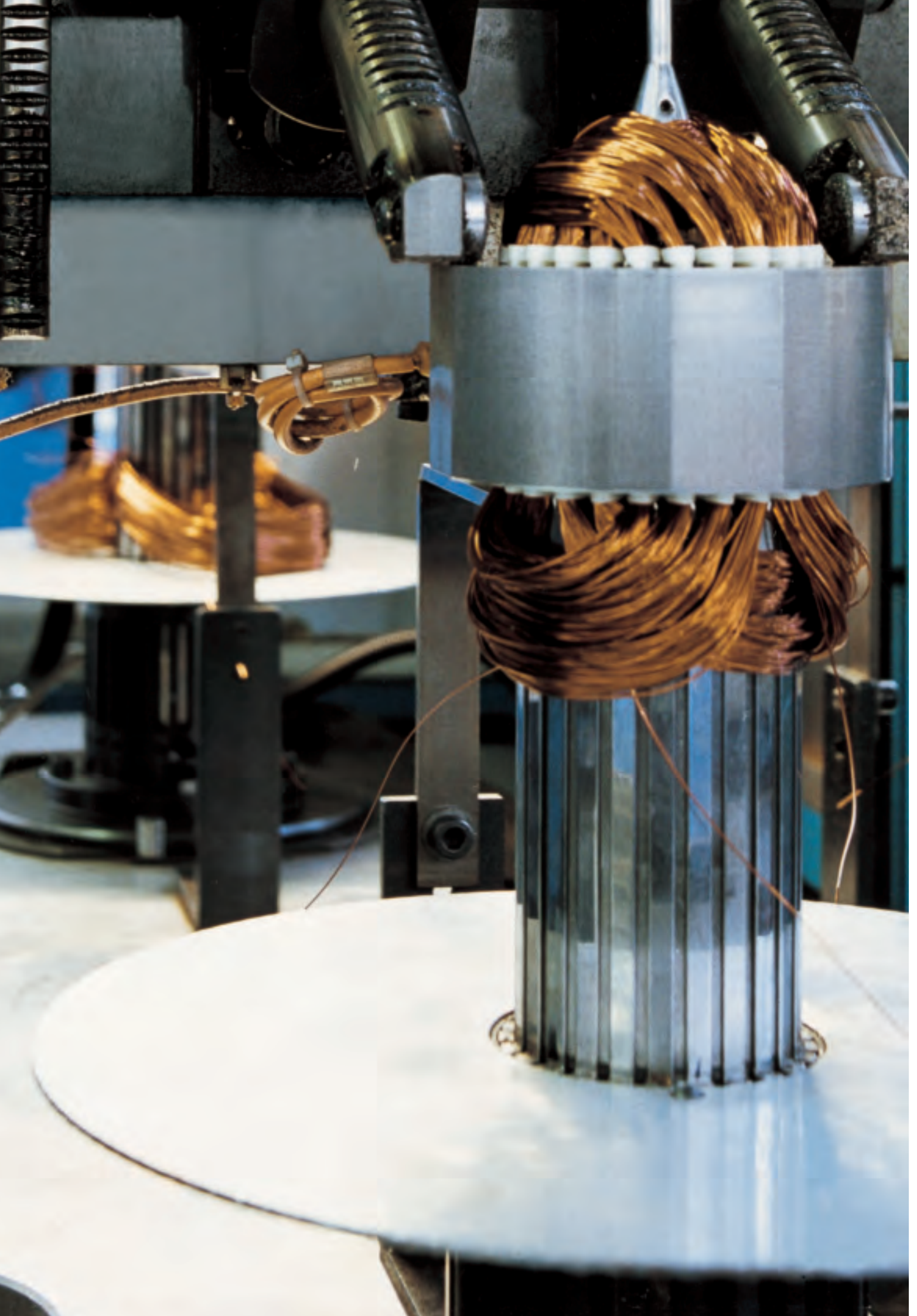
Pedrollo pumps are distributed in 160 countries, thus allowing our company to assume an international role that results in a yearly production of close to 2,000,000 units.

The range comprises more than 60 families of pumps (drainage pumps, submerged and surface pumps) covering the majority of applications in the domestic, civil, agricultural and industrial sectors.





A highly advanced research and development centre, endowed with the most sophisticated work tools, both hardware and software, allows the continuous updating of the existing range as well as the planning of new products using materials of the latest generation.



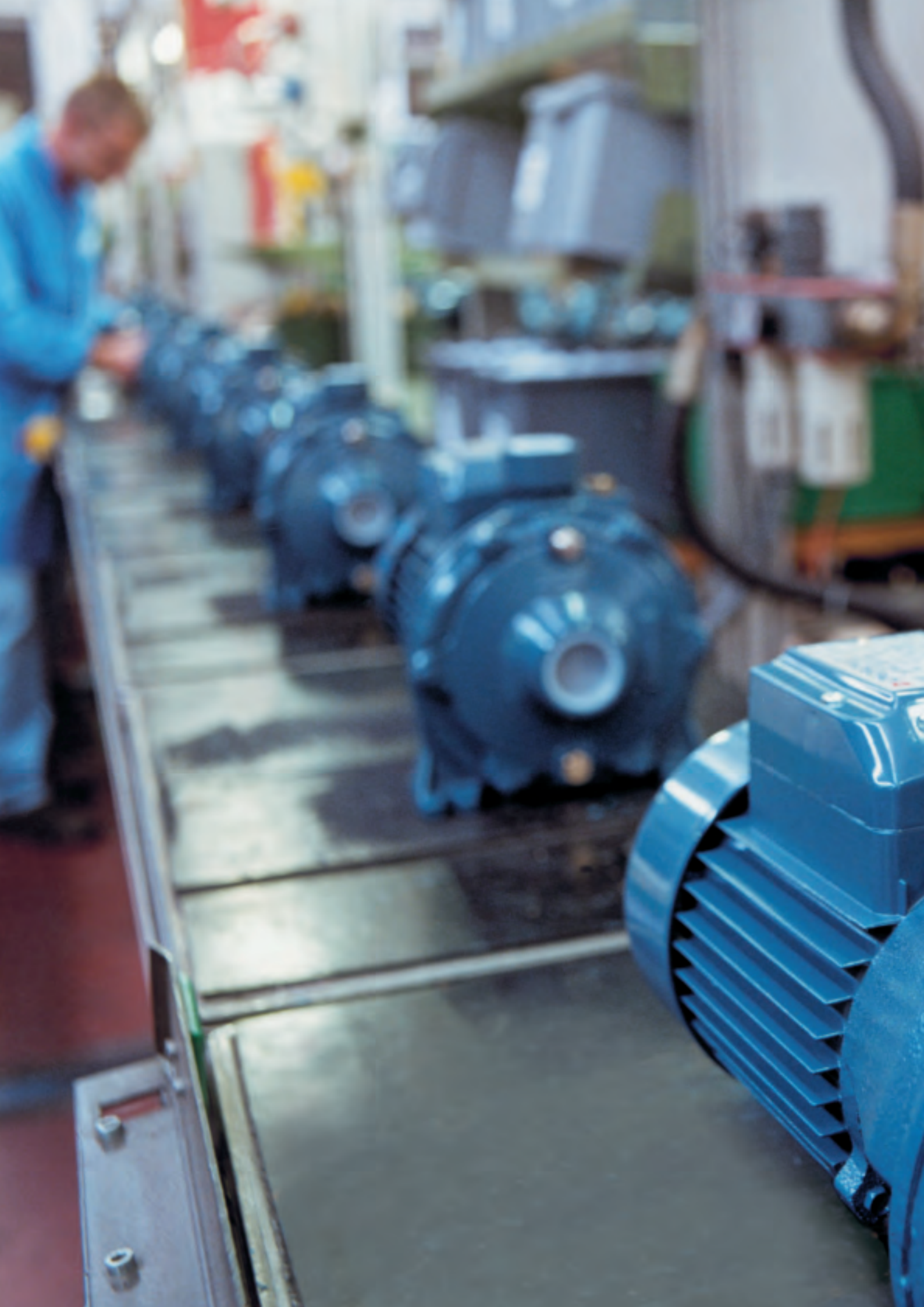


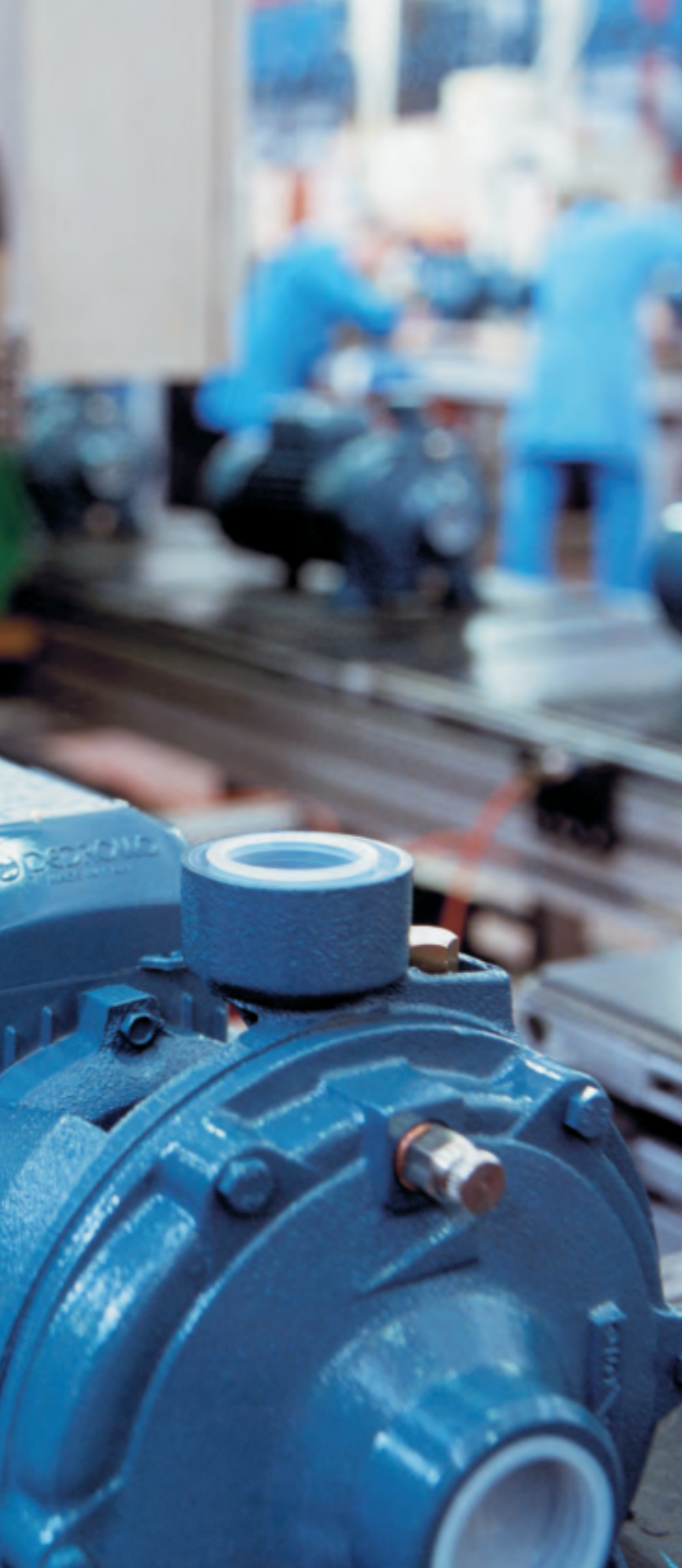
The heart of the pump is certainly the electric motor. It is therefore necessary to guarantee not only the best quality of the components used, but also that the execution of the various passages of the winding (insulation, coils, impregnation, etc.) is carried out using the most advanced automatic machines, to guarantee the precision and constancy of the various steps.





Before obtaining approval for the production phase, a technologically advanced test room, equipped with the latest test benches, allows strict electrical and hydraulic testing to ensure the quality and effectiveness of the design phase.





The final assembly of our pumps is carried out on automatic lines which guarantee maximum precision in the assembly phase and a high speed of execution, to ensure that the finished product is available in a short time.

1979 - GOLD MEDAL:

Awarded by the **Verona Chamber of Commerce** for having achieved a top level on the technical and commercial plain, in both the national and international field.

1993 - MARCO POLO Prize:

Awarded by the **Foreign Trade section of the Chamber of Commerce of the Veneto** as the best firm, having distinguished itself in 1992 for its economic growth in the international field.

1994 - GOLD MEDAL:

Awarded by the **Verona Chamber of Commerce** for having carried out considerable technical improvements in the firm.

1995 - COMPANY TO WATCH:

Awarded by the **DATABANK** as “company of the year” for the results achieved.

1997 - PUMP TO WATCH:

Awarded by the **DATABANK** to the **TOP** “submersible pump of the year” for its design and advanced technology.

2000 - PUMP TO WATCH:

Awarded by the **DATABANK** to the **4SR** “submerged pump of the year” for its advanced technological features.

2000 - QUALITY OF LIFE prize:

ERNST & YOUNG awarded the entrepreneur and the firm “for greater sensitivity to the company’s impact on the community and for the ability to integrate the growth of the company with continuous and coherent programmes for the support of culture, art, the environment and the social scene”. (Milan - Assolombarda)

2001 - ENTREPRENEUR OF THE YEAR Prize 2001:

ERNST & YOUNG awarded, at national level, the entrepreneur and the firm “for sensitivity to the social scene and continuous attention to the most needy populations, for the product which responds to the primary needs of man, such as certainly the availability of water”. (Milan - Assolombarda)

2002 - ENTERPRISE AND CULTURE Prize:

Prize of the **Italian Manufacturers’ Association**, awarded to the project with the highest social value. For efficacy in using culture as a primary resource of social communication and cooperation, in some economically handicapped and problematic countries on the world scene. (Naples - Palazzo Reale)

2002 - CREATIVITY AND INNOVATION Prize:

Awarded by the **Association of Industrialists of the province of Verona** for having achieved world leadership in the sector of pumps.

2003 - CEREC Prize:

Awarded by the **European Committee for the approach to Economy and Culture** for the “Pedrollo for life” project in favour of developing countries, in particular for the recovery of Albanian culture and for commitment in favour of the development of Bangladesh. (Naples - Palazzo Reale)

2004 - DOMUS MERCATORUM Prize:

Awarded by the **Verona Chamber of Commerce** for the development of new technologies, taking the company to the top world levels in the production of pumps for civil, industrial and agricultural applications.





PEDROLLO®

 **PEDROLLO®**
... the spring of life

PERIPHERAL**PK**

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**PQ**

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**PQ 3000**

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**PQA**

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**PV**

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CENTRIFUGAL**CP**page 28
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MULTI-STAGE**2CP**

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STAINLESS STEEL**AL-RED**

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**PRO-NGA**

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**JSW**

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**PLURIJET**

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**CK**

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**CKR**

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BRONZE**PK
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5SK**page 108
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ZD

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MC

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PVXC

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D

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COMBIPRESS



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MC

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MOTORS



VXC

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Km1 56+90

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ACCESSORIES

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RANGE OF PERFORMANCE

Flow rate up to 90 l/min (5.4 m³/h)
Head up to 100 m

LIMITS OF USE

Manometric suction lift up to 8 m
Liquid temperature up to + 60°C
Environment temperature up to + 40°C

CONSTRUCTION AND SAFETY STANDARDS

EN 60 335-1
IEC 335-1
CEI 61-150

EN 60034-1
IEC 34-1
CEI 2-3



INSTALLATION AND USE

They are recommended for pumping clean water without abrasive particles and liquids that are chemically non aggressive to the materials from which the pump is made.

FOR THEIR RELIABILITY, SIMPLICITY OF USE AND ECONOMY THEY ARE SUITABLE FOR DOMESTIC USE AND IN PARTICULAR FOR DISTRIBUTING WATER IN COMBINATION WITH SMALL PRESSURE SETS, FOR IRRIGATING GARDENS.

The pumps must be installed in enclosed places, or at least protected against inclement weather.

GUARANTEE 2 YEARS subject to our general terms of sale.

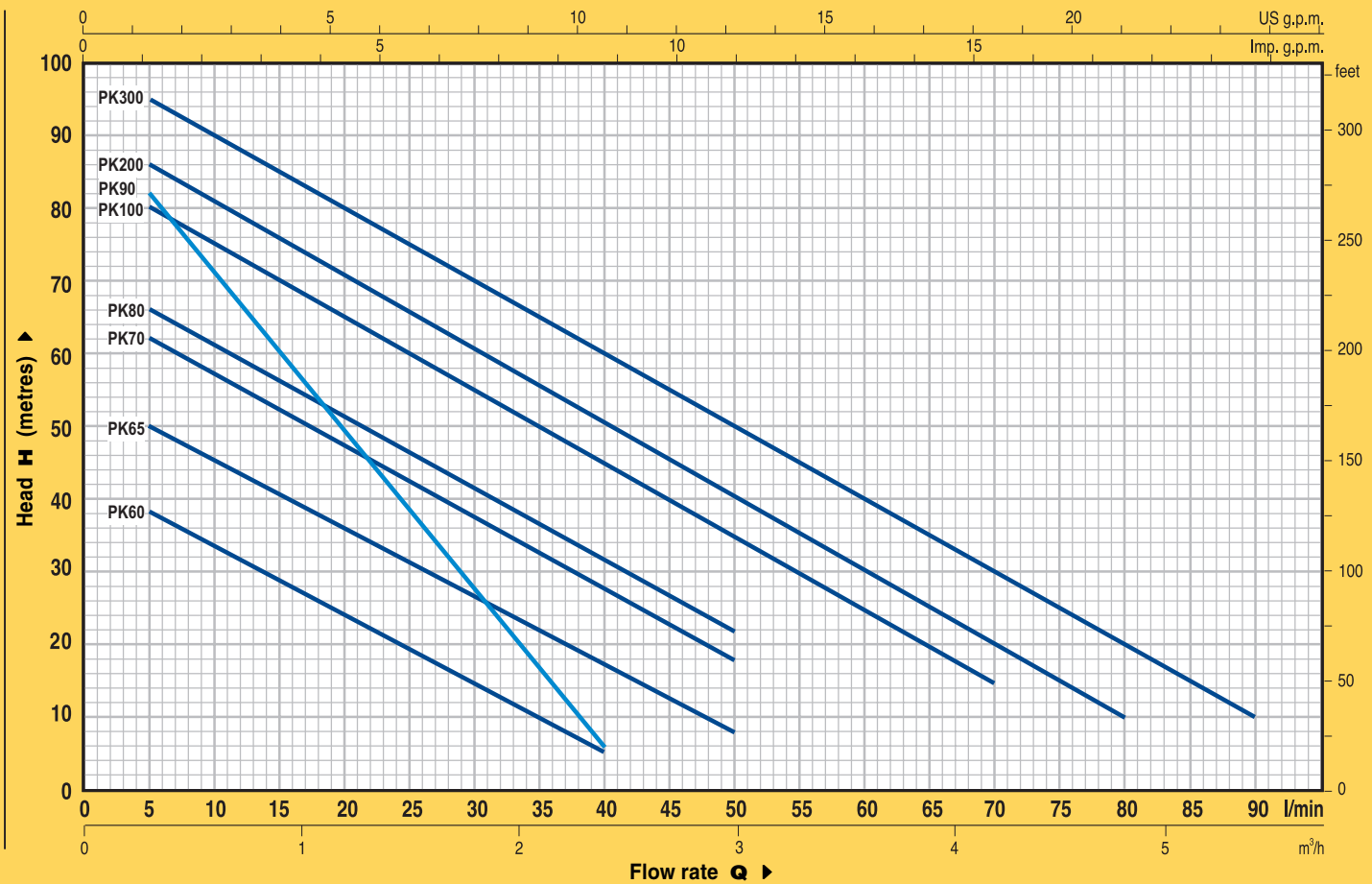
CONSTRUCTION CHARACTERISTICS

- **PUMP BODY:** cast iron, with threaded ports ISO 228/1.
- **MOTOR BRACKET (patent n° 1289150):** aluminium with brass insert; reduces starting difficulties due to seizure of the impeller after long periods of inactivity.
- **IMPELLER:** brass, of the type with radial peripheral vanes.
- **MOTOR SHAFT:** stainless steel EN 10088-3 - 1.4104.
- **MECHANICAL SEAL:** ceramic - graphite - NBR.
- **ELECTRIC MOTOR:** the pumps are close-coupled to a carefully matched PEDROLLO electric motor, quiet running, totally enclosed fan cooled (TEFC), suitable for continuous duty.
PKm: single-phase 230 V - 50 Hz with capacitor and thermal overload protector.
PK: three-phase 230/400 V- 50 Hz.
- **INSULATION:** class F. ● **PROTECTION:** IP 44.
- **REGISTERED MODEL n° 72753.**
- **PKm 60® is a REGISTERED TRADE MARK n° 602636.**

OPTIONS ON REQUEST

- ⇒ special mechanical seal
- ⇒ other voltages or frequency 60 Hz

CURVES AND PERFORMANCE DATA AT n= 2900 1/min

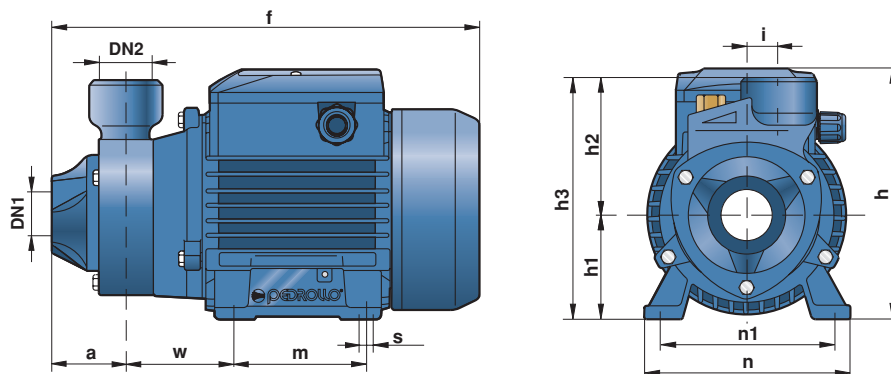


TYPE		POWER		Q	Flow rate																
Single-phase	Three-phase	kW	HP		m³/h	0	0.3	0.6	0.9	1.2	1.5	1.8	2.1	2.4	3.0	3.6	4.2	4.8	5.4		
PKm 60®	PK 60®	0.37	0.50	l/min	0	5	10	15	20	25	30	35	40	50	60	70	80	90			
PKm 65	PK 65	0.50	0.70	H metres	40	38	33.5	29	24	19.5	15	10	5								
PKm 70	PK 70	0.60	0.85		55	50	45.5	40.5	36	31	27	22	17	8							
PKm 80	PK 80	0.75	1		65	62	57	52	47	42	37	32	27	18							
PKm 90	PK 90	0.75	1		70	66	61	56	51	46	41	36.5	31	22							
PKm 100	PK 100	1.1	1.5		90	82	71	60	49	38	27	17	5								
PKm 200	PK 200	1.5	2		85	80	75	70	65	60	55	50	45	35	25	15					
—	PK 300	2.2	3		90	86	81	76	71	65.5	60	55	50	40	30	20	10				
					100	95	90	85	80	75	70	65	60	50	40	30	20	10			

Q = Flow rate H = Total manometric head

Tolerance of the performance curves according to EN ISO 9906 App. A.

DIMENSIONS AND WEIGHTS



TYPE		PORTS		DIMENSIONS mm												kg	
Single-phase	Three-phase	DN1	DN2	a	f	h	h1	h2	h3	i	m	n	n1	w	s	1~	3~
PKm 60®	PK 60®	1"	1"	42	243	152	63	75	138	20	80	120	100	55	7	5.3	5.3
PKm 65	PK 65			48	258/250			80	143							7.7	6.4
PKm 70	PK 70			55	285	85	156	10.1	9.2								
PKm 80	PK 80			58	288	85	166	10.3	9.9								
PKm 90	PK 90	3/4"	3/4"	58	288	179	71	95	166		90	138	112	62	9	15.0	13.1
PKm 100	PK 100	1"	1"	55	348	212	80	94	174		100	158	125	85	9	16.0	15.2
PKm 200	PK 200															16.0	15.2
—	PK 300															—	18.0

PKS self-priming pumps with peripheral impeller



RANGE OF PERFORMANCE

Flow rate up to 50 l/min (3 m³/h)
Head up to 70 m

LIMITS OF USE

Manometric suction lift up to 9 m
Liquid temperature up to + 60°C
Environment temperature up to + 40°C

CONSTRUCTION AND SAFETY STANDARDS

EN 60034-1
IEC 34-1
CEI 2-3



INSTALLATION AND USE

They are recommended for pumping clean water without abrasive particles and liquids that are chemically non aggressive to the materials from which the pump is made.

FOR THEIR COMPACTNESS, RELIABILITY AND ECONOMY THEY ARE SUITABLE FOR DOMESTIC USE AND IN PARTICULAR FOR DISTRIBUTING WATER IN COMBINATION WITH SMALL PRESSURE SETS, FOR IRRIGATING GARDENS, DRAWING WATER FROM TANKS OR WELLS DOWN TO A DEPTH OF 9 METRES AND IN ALL CASES WHERE THERE IS THE PRESENCE OF AIR OR GAS IN THE LIQUID TO BE PUMPED; the pump is provided with a check flap valve on the intake so that it is no longer necessary to fit a foot valve. The pumps must be installed in enclosed places, or at least protected against inclement weather.

GUARANTEE 2 YEARS subject to our general terms of sale.

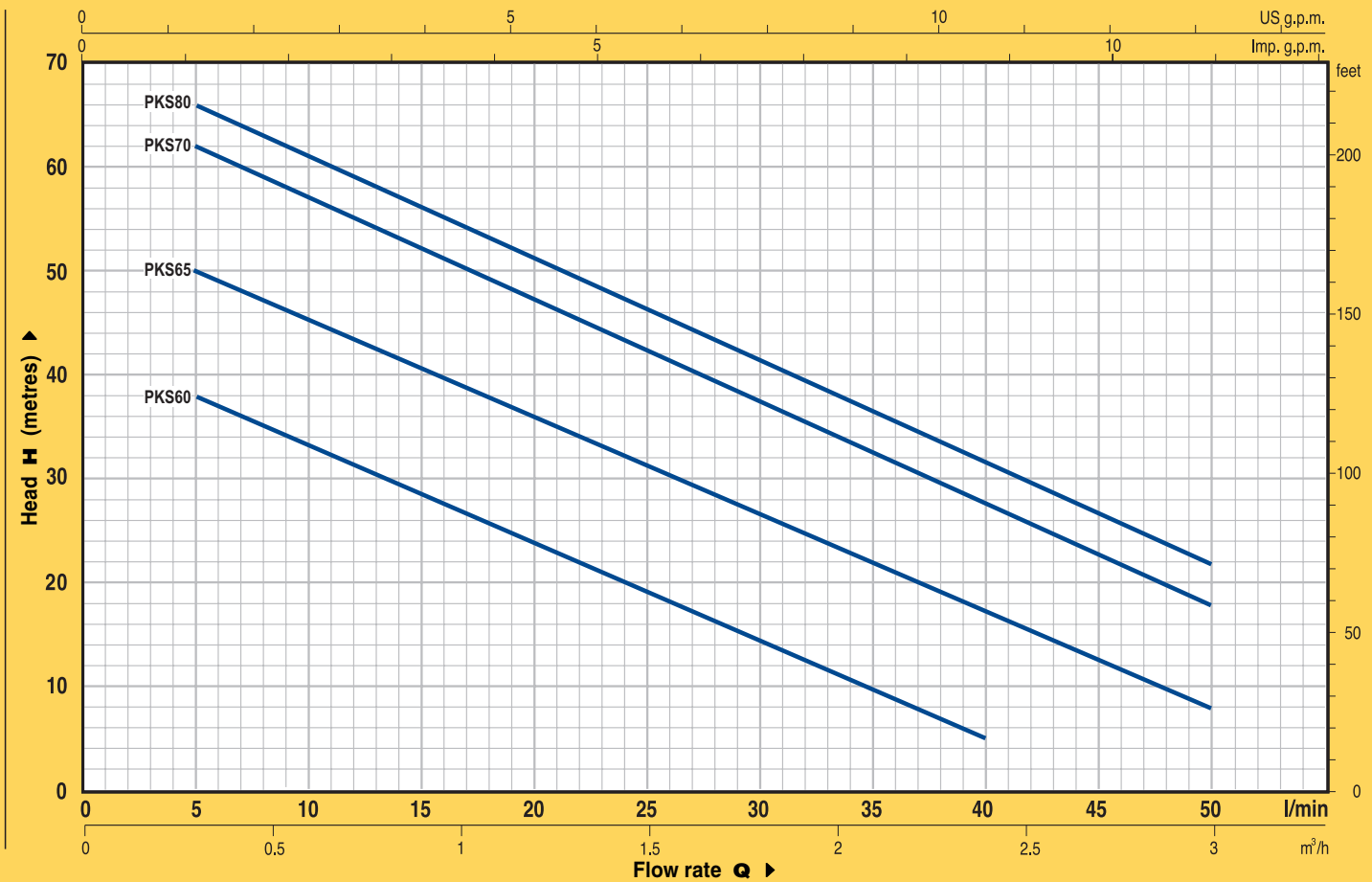
CONSTRUCTION CHARACTERISTICS

- **PUMP BODY:** cast iron, with threaded ports ISO 228/1.
- **CHECK FLAP VALVE:** incorporated in the suction port.
- **MOTOR BRACKET (patent n° 1289150):** aluminium with brass insert; reduces starting difficulties due to seizure of the impeller after long periods of inactivity.
- **IMPELLER:** brass, of the type with radial peripheral vanes.
- **MOTOR SHAFT:** stainless steel EN 10088-3 - 1.4104.
- **MECHANICAL SEAL:** ceramic - graphite - NBR.
- **ELECTRIC MOTOR:** the pumps are close-coupled to a carefully matched PEDROLLO electric motor, quiet running, totally enclosed fan cooled (TEFC), suitable for continuous duty.
PKSm: single-phase 230 V - 50 Hz with capacitor and thermal overload protector.
PKS: three-phase 230/400 V- 50 Hz
- **INSULATION:** class F. ● **PROTECTION:** IP 44.
- **REGISTERED MODEL n° 72753.**

OPTIONS ON REQUEST

- ⇒ special mechanical seal
- ⇒ other voltages or frequency 60 Hz

CURVES AND PERFORMANCE DATA AT n= 2900 1/min

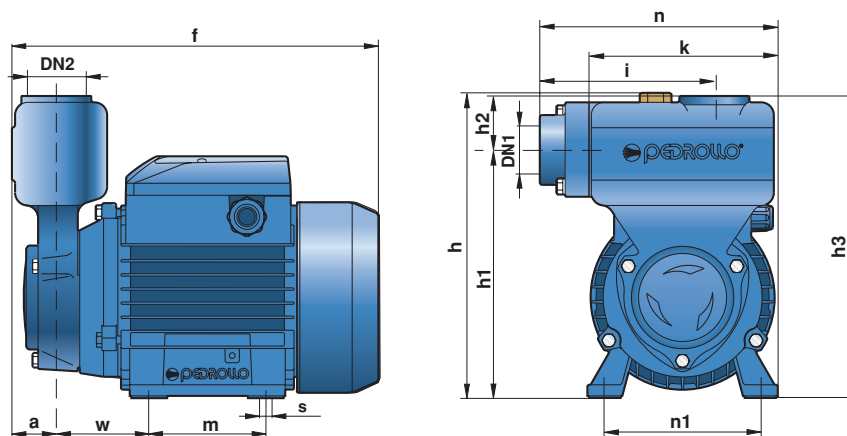


TYPE		POWER		Q	Flow rate												
Single-phase	Three-phase	kW	HP		m³/h	0	0.3	0.6	0.9	1.2	1.5	1.8	2.1	2.4	2.7	3.0	
PKSm 60	PKS 60	0.37	0.50	l/min	0	5	10	15	20	25	30	35	40	45	50		
PKSm 65	PKS 65	0.50	0.70	H metres	40	38	33.5	29	24	19.5	15	10	5				
PKSm 70	PKS 70	0.60	0.85		55	50	45.5	40.5	36	31	27	22	17	12.5	8		
PKSm 80	PKS 80	0.75	1		65	62	57	52	47	42	37	32	27	22	18		
					70	66	61	56	51	46	41	36.5	31	27	22		

Q = Flow rate H = Total manometric head

Tolerance of the performance curves according to EN ISO 9906 App. A.

DIMENSIONS AND WEIGHTS



TYPE		PORTS		DIMENSIONS mm													kg	
Single-phase	Three-phase	DN1	DN2	a	f	h	h1	h2	h3	i	m	n	k	n1	w	s	1~	3~
PKSm 60	PKS 60	1"	1"	29	230	192	156	34	190	110	80	150	120	100	55	7	6.1	6.1
PKSm 65	PKS 65				238/230												7.7	7.1
PKSm 70	PKS 70				260												10.7	9.6
PKSm 80	PKS 80				260												10.8	9.7



pumps with peripheral impeller
recommended for industrial uses



RANGE OF PERFORMANCE

Flow rate up to 90 l/min (5.4 m³/h)
Head up to 100 m

LIMITS OF USE

Manometric suction lift up to 8 m
Liquid temperature up to + 90°C
Environment temperature up to + 40°C

CONSTRUCTION AND SAFETY STANDARDS

EN 60034-1
IEC 34-1
CEI 2-3



INSTALLATION AND USE

They are recommended for pumping clean water without abrasive particles and liquids that are chemically non aggressive to the materials from which the pump is made.

THE HYDRAULIC CHARACTERISTICS OF THESE PUMPS, TOGETHER WITH THEIR COMPACTNESS, MAKE THEM SUITABLE FOR USE IN THE INDUSTRIAL SECTOR. The pumps must be installed in enclosed places, or at least protected against inclement weather.

GUARANTEE 2 YEARS subject to our general terms of sale.

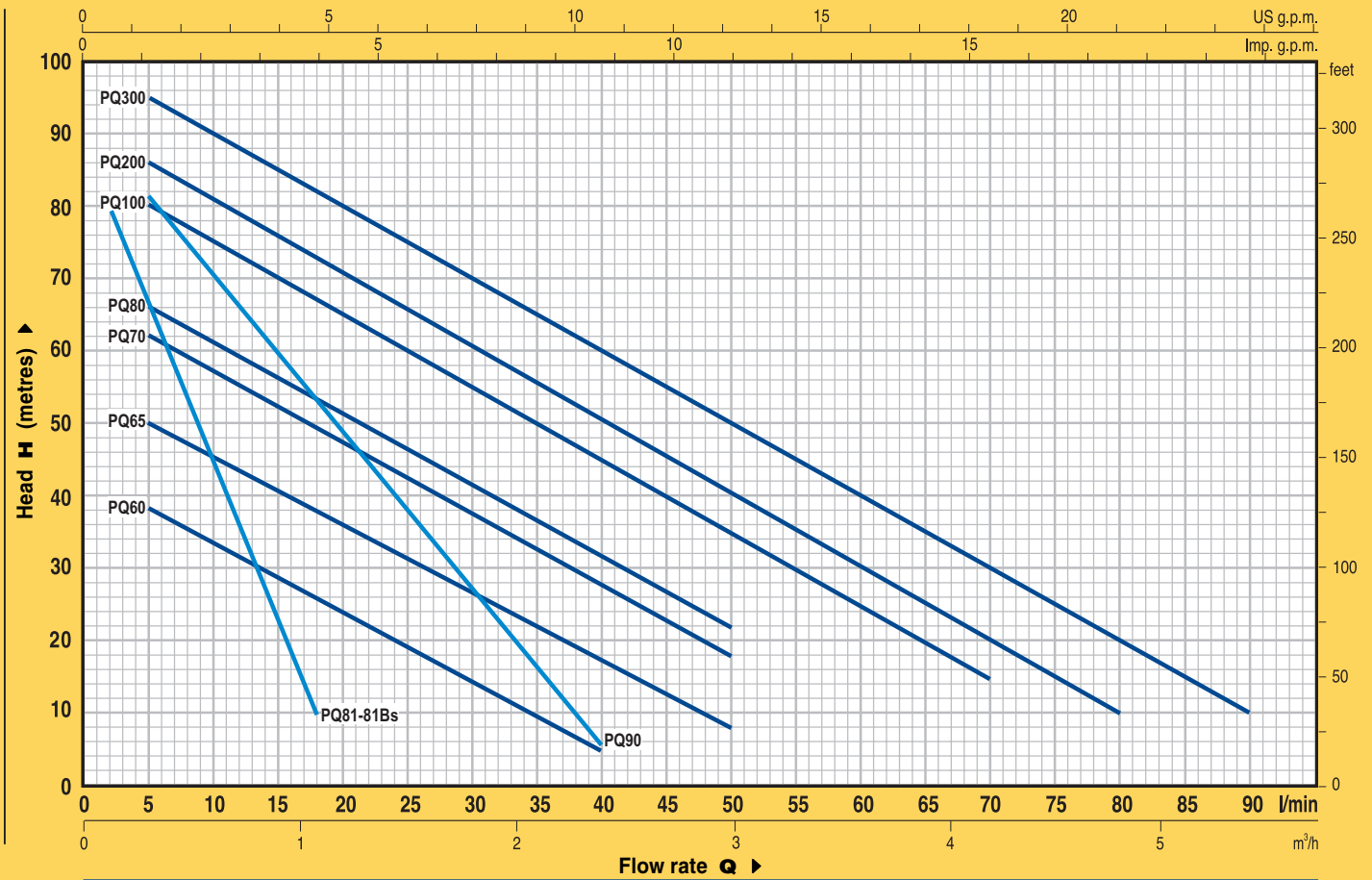
CONSTRUCTION CHARACTERISTICS

- **PUMP BODY:** cast iron, with threaded ports ISO 228/1.
- **PUMP BODY:** brass for PQ 81-Bs
- **MOTOR BRACKET (patent n° 1289150):** aluminium with brass insert; reduces starting difficulties due to seizure of the impeller after long periods of inactivity.
- **IMPELLER:** brass, of the type with radial peripheral vanes.
- **MOTOR SHAFT:** stainless steel EN 10088-3 - 1.4104.
- **MECHANICAL SEAL:** ceramic - graphite - NBR.
- **ELECTRIC MOTOR:** the pumps are close-coupled to a carefully matched PEDROLLO electric motor, quiet running, totally enclosed fan cooled (TEFC), suitable for continuous duty.
 - PQm: single-phase 230 V - 50 Hz with capacitor and thermal overload protector.
 - PQ: three-phase 230/400 V - 50 Hz.
- **INSULATION:** class F. ● **PROTECTION:** IP 44.
- **REGISTERED MODEL n° 72753**

OPTIONS ON REQUEST

- ⇒ pump shaft in stainless steel EN 10088-3 - 1.4401 (AISI 316)
- ⇒ special mechanical seal
- ⇒ protection IP 55
- ⇒ other voltages or frequency 60 Hz

CURVES AND PERFORMANCE DATA AT n= 2900 1/min



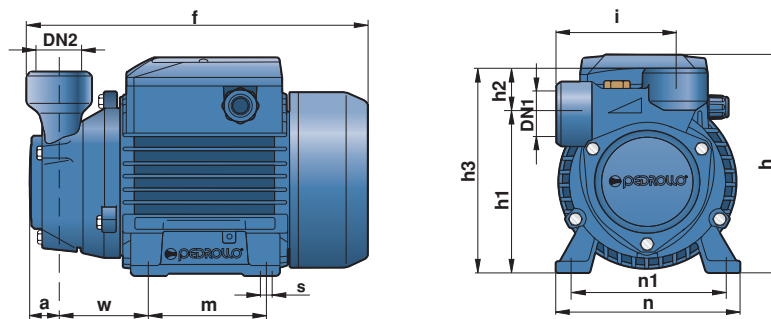
TYPE		POWER		Q	Flow rate															
Single-phase	Three-phase	kW	HP		m³/h	0	0.3	0.6	0.9	1.2	1.5	1.8	2.1	2.4	3.0	3.6	4.2	4.8	5.4	
PQm 60	PQ 60	0.37	0.50	l/min	0	5	10	15	20	25	30	35	40	50	60	70	80	90		
PQm 65	PQ 65	0.50	0.70	H metres	40	38	33.5	29	24	19.5	15	10	5							
PQm 70	PQ 70	0.60	0.85		55	50	45.5	40.5	36	31	27	22	17	8						
PQm 80	PQ 80	0.75	1		65	62	57	52	47	42	37	32	27	18						
PQm 90	PQ 90	0.75	1		70	66	61	56	51	46	41	36.5	31	22						
PQm 100	PQ 100	1.1	1.5		90	82	71	60	49	38	27	17	5							
PQm 200	PQ 200	1.5	2		85	80	75	70	65	60	55	50	45	35	25	15				
—	PQ 300	2.2	3		90	86	81	76	71	65.5	60	55	50	40	30	20	10			
					100	95	90	85	80	75	70	65	60	50	40	30	20	10		

TYPE		POWER		Q	Flow rate										
Single-phase	Three-phase	kW	HP		m³/h	0	0.12	0.24	0.36	0.48	0.60	0.72	0.84	0.96	1.08
PQm 81	PQ 81	0.50	0.70	l/min	0	2	4	6	8	10	12	14	16	18	
PQm 81-Bs	PQ 81-Bs	0.50	0.70	H metres	90	80	71	63	54	45	37	28	19	10	
					90	80	71	63	54	45	37	28	19	10	

Q = Flow rate H = Total manometric head

Tolerance of the performance curves according to EN ISO 9906 App. A.

DIMENSIONS AND WEIGHTS



TYPE		PORTS		DIMENSIONS mm												kg	
Single-phase	Three-phase	DN1	DN2	a	f	h	h1	h2	h3	i	m	n	n1	w	s	1~	3~
PQm 60	PQ 60	1"	1"	22	223	152	108	30	138	78	80	120	100	55	7	5.3	5.3
PQm 65	PQ 65				234/227		113		143					57		7.1	6.3
PQm 70	PQ 70				253		121		151					62		9.9	8.9
PQm 80	PQ 80															10.0	8.8
PQm 81	PQ 81	1/2"	1/2"	18	227/220	152	118	23	141	71	80	120	100	58	9	6.7	6.8
PQm 81-Bs	PQ 81-Bs															6.8	6.8
PQm 90	PQ 90	3/4"	3/4"	22	253	179	126	27	153	84	90	138	112	62	9	10.0	9.0
PQm 100	PQ 100															14.8	14.3
PQm 200	PQ 200	1"	1"	25	318	212	140	30	170	89	100	158	125	85	9	15.7	14.8
—	PQ 300															15.7	15.7

PQ3000

**pump with peripheral impeller
for industrial uses**



RANGE OF PERFORMANCE

Flow rate up to 50 l/min (3 m³/h)
Head up to 180 m

LIMITS OF USE

Manometric suction lift up to 8 m
Liquid temperature up to + 90°C
Environment temperature up to + 40°C

CONSTRUCTION AND SAFETY STANDARDS

EN 60034-1
IEC 34-1
CEI 2-3



INSTALLATION AND USE

It is recommended for pumping clean water without abrasive particles and liquids that are chemically non aggressive to the materials from which the pump is made. **THE HYDRAULIC CHARACTERISTICS OF THIS PUMP, TOGETHER WITH ITS COMPACTNESS AND STURDINESS, MAKE IT SUITABLE FOR USE IN THE INDUSTRIAL SECTOR.** The pump must be installed in enclosed places, or at least protected against inclement weather.

GUARANTEE 2 YEARS subject to our general terms of sale.

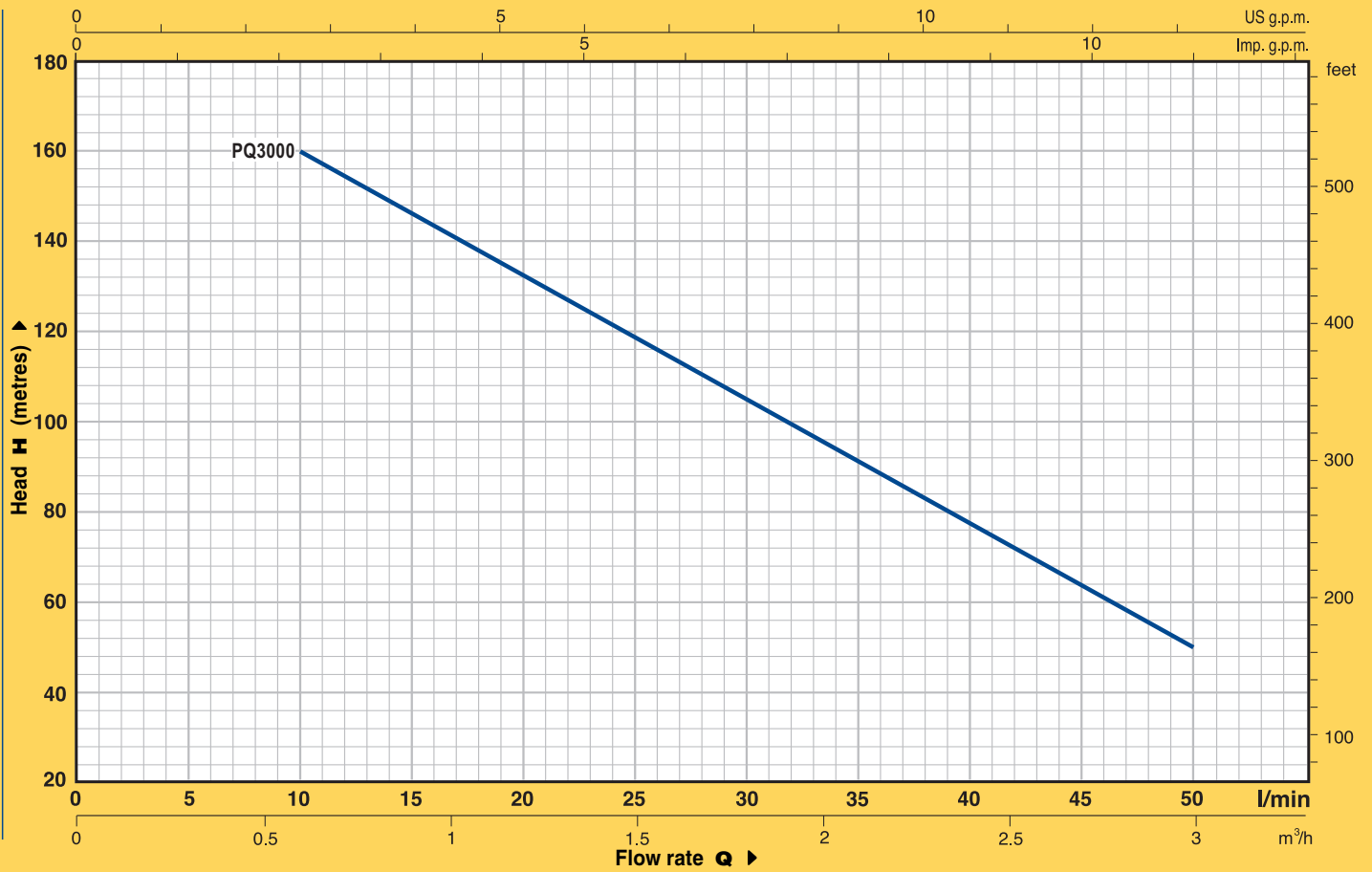
CONSTRUCTION CHARACTERISTICS

- **PUMP BODY:** cast iron, with threaded ports ISO 228/1.
- **BODY BACK-PLATE:** brass with front shim disk in **stainless steel**.
- **MOTOR BRACKET (patent n° 1289150):** aluminium with **brass and stainless steel** insert; eliminates seizure of the impeller after long periods of inactivity.
- **IMPELLER:** **bronze**, of the type with radial peripheral vanes.
- **MOTOR SHAFT:** **stainless steel EN 10088-3 - 1.4104**.
- **MECHANICAL SEAL:** **ceramic - graphite - NBR**.
- **ELECTRIC MOTOR:** the pumps are close-coupled to a carefully matched PEDROLLO electric motor, quiet running, totally enclosed fan cooled (TEFC), suitable for continuous duty.
PQ 3000: three-phase 230/400 V - 50 Hz.
- **INSULATION:** class H. ● **PROTECTION:** IP 55.

OPTIONS ON REQUEST

- ⇒ pump shaft in stainless steel **EN 10088-3 - 1.4401 (AISI 316)**
- ⇒ special mechanical seal
- ⇒ other voltages or frequency 60 Hz

CURVES AND PERFORMANCE DATA AT n= 2900 1/min

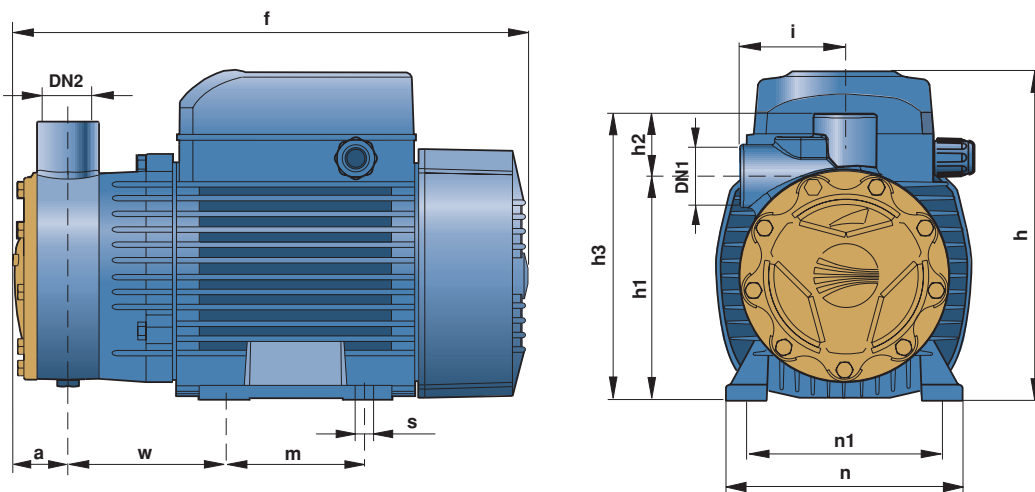


TYPE	POWER		Q											
	kW	HP		m³/h	0	0.6	0.9	1.2	1.5	1.8	2.1	2.4	2.7	3.0
Three-phase			l/min	0	10	15	20	25	30	35	40	45	50	
PQ 3000	2.2	3	H metres	180	160	145	132	118	105	92	78	63.5	50	

Q = Flow rate H = Total manometric head

Tolerance of the performance curves according to EN ISO 9906 App. A.

DIMENSIONS AND WEIGHTS



TYPE	PORTS		DIMENSIONS mm												kg
	DN1	DN2	a	f	h	h1	h2	h3	i	m	n	n1	w	s	
Three-phase															
PQ 3000	3/4"	3/4"	34	329	212	142	38	180	65	100	166	125	97	9	19.0



RANGE OF PERFORMANCE

Flow rate up to 50 l/min (3 m³/h)
Head up to 90 m

LIMITS OF USE

Manometric suction lift up to 8 m
Liquid temperature up to + 90°C
Environment temperature up to + 40°C

CONSTRUCTION AND SAFETY STANDARDS

EN 60034-1
IEC 34-1
CEI 2-3



INSTALLATION AND USE

They are recommended for pumping clean water without abrasive particles and liquids that are chemically non aggressive to the materials from which the pump is made. **NON-FERROUS CONSTRUCTION WITH WETTED PARTS IN HIGH PERFORMANCE TECHNOLOGY AND BRASS TO ELIMINATE THE POSSIBILITY OF CORROSION. CONSEQUENTLY THEY ARE RECOMMENDED FOR INDUSTRIAL APPLICATIONS INCLUDING COOLING, CONDITIONING AND BOILER FEED.**

The pumps must be installed in enclosed places, or at least protected against inclement weather.

GUARANTEE 2 YEARS subject to our general terms of sale.

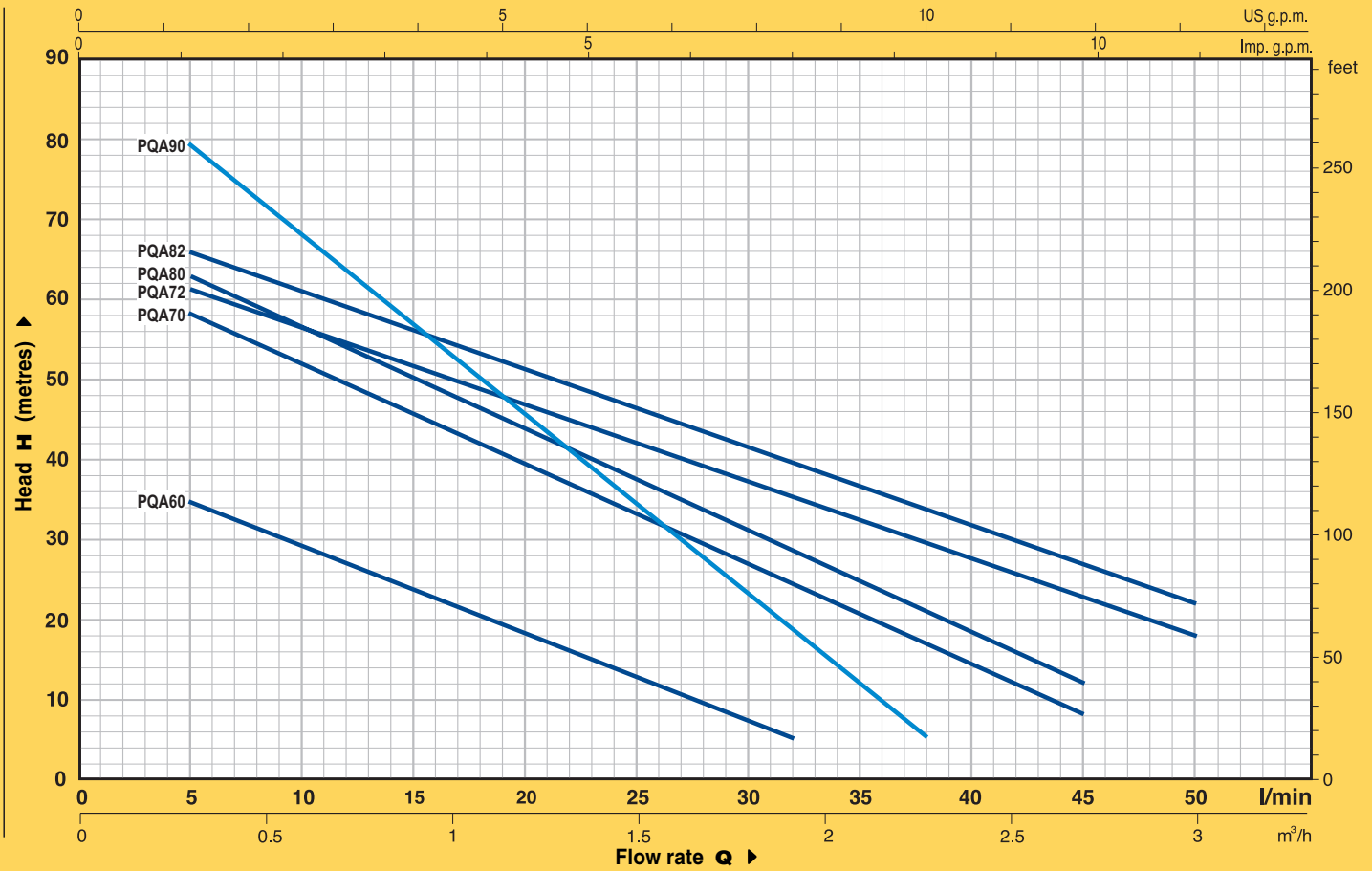
CONSTRUCTION CHARACTERISTICS

- **PUMP BODY:** high-performance technopolymer with metal threaded port insert ISO 228-1 for secure pipe connection without damage to the pump body.
- **BODY BACK-PLATE:** brass .
- **MOTOR BRACKET (patent n° 1289150):** aluminium with brass insert; eliminates seizure of the impeller after long periods of inactivity.
- **IMPELLER:** brass, of the type with radial peripheral vanes.
- **MOTOR SHAFT:** stainless steel EN 10088-3 - 1.4104.
- **MECHANICAL SEAL:** ceramic - graphite - NBR.
- **ELECTRIC MOTOR:** the pumps are close-coupled to a carefully matched PEDROLLO electric motor, quiet running, totally enclosed fan cooled (TEFC), suitable for continuous duty.
PQAm: single-phase 230 V - 50 Hz with capacitor and thermal overload protector.
PQA: three-phase 230/400 V - 50 Hz.
- **INSULATION:** class F. ● **PROTECTION:** IP 44.
- **REGISTERED MODEL**

OPTIONS ON REQUEST

- ⇒ pump shaft in stainless steel EN 10088-3 - 1.4401 (AISI 316)
- ⇒ special mechanical seal
- ⇒ protection IP 55
- ⇒ other voltages or frequency 60 Hz

CURVES AND PERFORMANCE DATA AT n= 2900 1/min

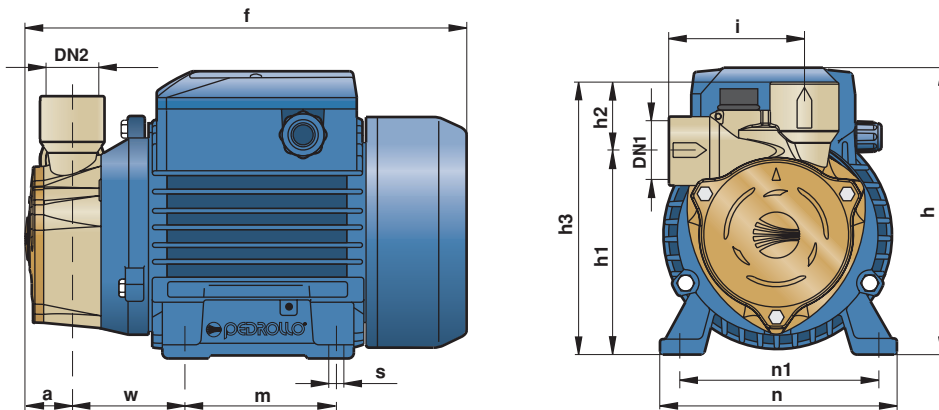


TYPE		POWER		Q	H metres													
Single-phase	Three-phase	kW	HP		m³/h	0	0.1	0.3	0.6	0.9	1.2	1.5	1.8	1.9	2.3	2.7	3.0	
				l/min	0	2	5	10	15	20	25	30	32	38	45	50		
PQAm 60	PQA 60	0.37	0.50	H metres	40	38	35	29	23.5	18	12.5	7	5					
PQAm 70	PQA 70	0.55	0.75		65	62	58	52	45.5	39.5	33	27	24	16.5	8			
PQAm 72	PQA 72	0.55	0.75		65	-	62	57	52	47	42	37.5	35.5	29.5	22.5	18		
PQAm 80	PQA 80	0.75	1		70	66	62	56	49.5	43	37	31	28	20.5	12			
PQAm 82	PQA 82	0.75	1		70	-	66	61	56	51	46	41.5	39.5	37.5	26.5	22		
PQAm 90	PQA 90	0.75	1		90	86	79	68	56.5	45.5	34	23	18.5	5				

Q = Flow rate H = Total manometric head

Tolerance of the performance curves according to EN ISO 9906 App. A.

DIMENSIONS AND WEIGHTS



TYPE		PORTS		DIMENSIONS mm													kg	
Single-phase	Three-phase	DN1	DN2	a	f	h	h1	h2	h3	i	m	n	n1	w	s	1~	3~	
PQAm 60	PQA 60	1/2"	1/2"	25	226	152	103	33	136	72.5	80	120	100	55	7	4.8	4.8	
PQAm 70	PQA 70	1/2"	1/2"				116.5	32.5	149							10.3	9.3	
PQAm 72	PQA 72	1"	1"	28	258	179	121	30	151	83	90	138	112	62	7	10.4	9.4	
PQAm 80	PQA 80	1/2"	1/2"				116.5	32.5	149							72.5	10.5	9.5
PQAm 82	PQA 82	1"	1"	27	257	121	30	151	83	76								
PQAm 90	PQA 90	1/2"	1/2"				35	156	10.5									9.5



pump with peripheral impeller
recommended for industrial applications



RANGE OF PERFORMANCE

Flow rate up to 10 l/min (0.6 m³/h)
Head up to 42 m

LIMITS OF USE

Manometric suction lift up to 8 m
Liquid temperature up to + 90°C
Environment temperature up to + 40°C

CONSTRUCTION AND SAFETY STANDARDS

EN 60034-1
IEC 34-1
CEI 2-3



INSTALLATION AND USE

They are recommended for pumping clean water without abrasive particles and liquids that are chemically non aggressive to the materials from which the pump is made.

THE CONSTRUCTION OF THIS PARTICULARLY COMPACT BRASS PUMP ELIMINATES THE POSSIBILITY OF RUST AND CORROSION. THIS MAKES IT SUITABLE FOR TRANSFERRING LIQUIDS IN THE MECHANICAL PROCESSING SECTOR, FOR CONTROLLING THE TEMPERATURE OF MOULDS, COOLING, CONDITIONING AND FOR BEVERAGE DISPENSING MACHINES.

The pump must be installed in enclosed places, or at least protected against inclement weather.

GUARANTEE 2 YEARS subject to our general terms of sale.

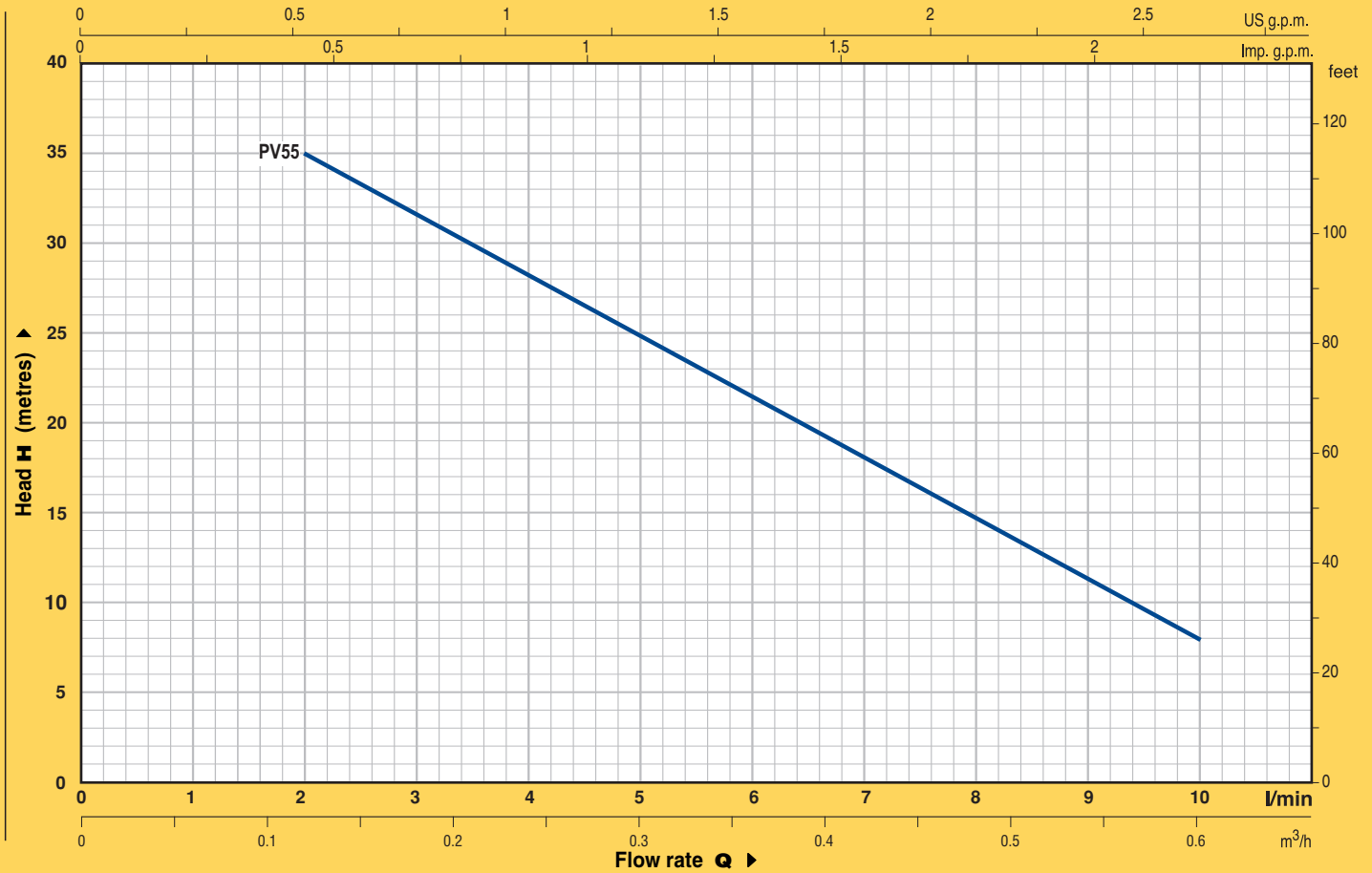
CONSTRUCTION CHARACTERISTICS

- **PUMP BODY:** brass, with threaded ports ISO 228/1.
- **MOTOR BRACKET (patent n° 1289150):** aluminium with brass insert; eliminates seizure of the impeller after long periods of inactivity.
- **IMPELLER:** brass, of the type with radial peripheral vanes.
- **MOTOR SHAFT:** stainless steel EN 10088-3 - 1.4104.
- **MECHANICAL SEAL:** ceramic - graphite - EPDM.
- **ELECTRIC MOTOR:** the pumps are close-coupled to a carefully matched PEDROLLO electric motor, quiet running, totally enclosed fan cooled (TEFC), suitable for continuous duty.
- **PVm:** single-phase 230 V - 50 Hz with capacitor and thermal overload protector.
- **PV:** three-phase 230/400 V - 50 Hz.
- **INSULATION:** class F. ● **PROTECTION:** IP 44.
- **REGISTERED MODEL**

OPTIONS ON REQUEST

- ⇒ pump shaft in stainless steel EN 10088-3 - 1.4401 (AISI 316)
- ⇒ special mechanical seal
- ⇒ pump body rotated 90° in anti-clockwise direction
- ⇒ protection IP 55
- ⇒ other voltages or frequency 60 Hz

CURVES AND PERFORMANCE DATA AT n= 2900 1/min

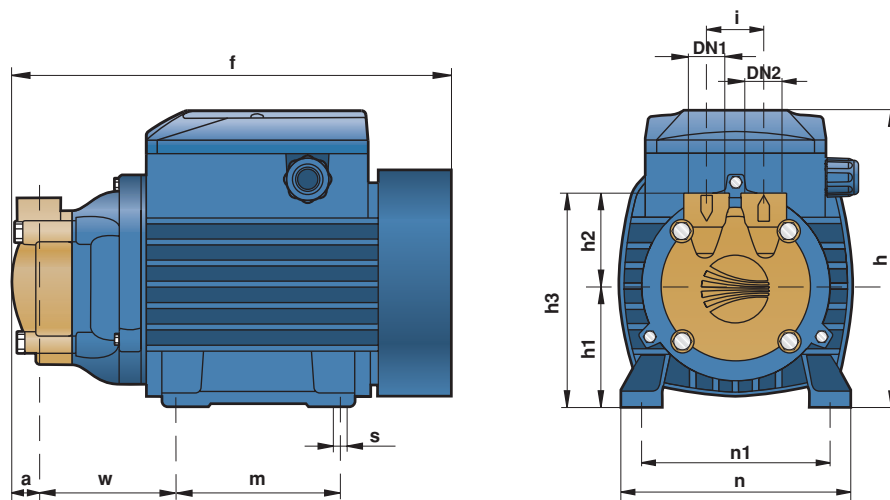


TYPE		POWER		Q	Flow rate										
Single-phase	Three-phase	kW	HP		m³/h	0	0.12	0.18	0.24	0.30	0.36	0.42	0.48	0.54	0.60
PVm 55	PV 55	0.18	0.25	l/min	0	2	3	4	5	6	7	8	9	10	
				H metres	42	35	31	28	25	21.5	18	14.5	11	8	

Q = Flow rate H = Total manometric head

Tolerance of the performance curves according to EN ISO 9906 App. A.

DIMENSIONS AND WEIGHTS



TYPE		PORTS		DIMENSIONS mm													kg	
Single-phase	Three-phase	DN1	DN2	a	f	h	h1	h2	h3	i	m	n	n1	w	s	1~	3~	
PVm 55	PV 55	1/4"	1/4"	10	203	141	56	42	98	25	72	110	90	67	6	4.1	4.1	



RANGE OF PERFORMANCE

Flow rate up to 160 l/min (9.6 m³/h)
Head up to 58 m

LIMITS OF USE

Manometric suction lift up to 7 m
Liquid temperature up to + 90°C
Liquid temperature up to + 40°C in the CPX version
(with technopolymer impeller)
Environment temperature up to + 40°C

CONSTRUCTION AND SAFETY STANDARDS

EN 60034-1
IEC 34-1
CEI 2-3



INSTALLATION AND USE

They are recommended for pumping clean water and liquids that are chemically non aggressive to the materials from which the pump is made. **RELIABLE AND MAINTENANCE FREE THEY ARE WIDELY USED IN THE DOMESTIC AND CIVIL SECTOR, IN PARTICULAR FOR WATER DISTRIBUTION IN COMBINATION WITH SMALL OR MEDIUM PRESSURE SETS, FOR TRANSFER IN GENERAL, FOR IRRIGATING GARDENS.**

The pumps must be installed in enclosed places, or at least protected against inclement weather.

GUARANTEE 2 YEARS subject to our general terms of sale.

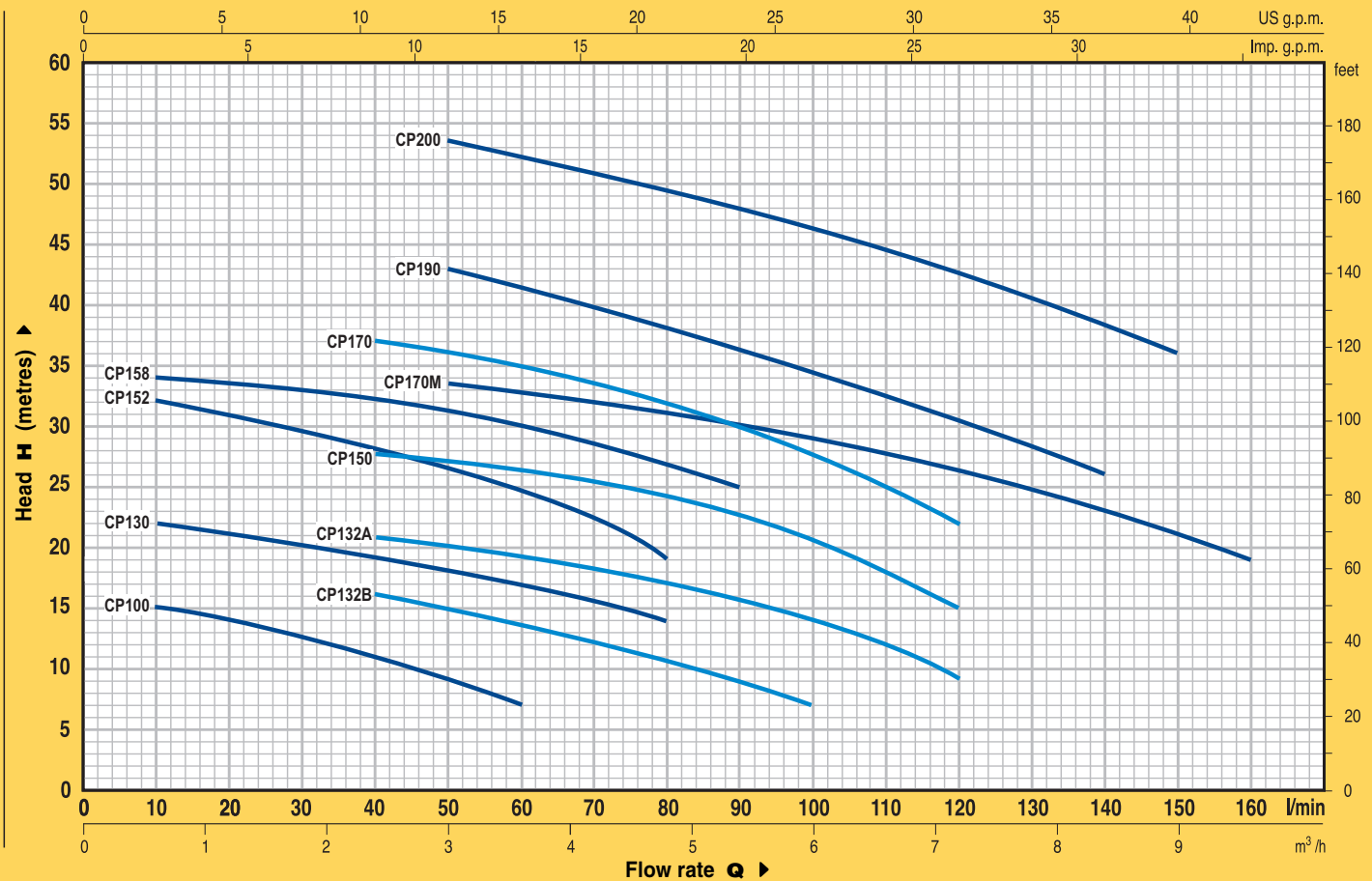
CONSTRUCTION CHARACTERISTICS

- **PUMP BODY:** cast iron, with threaded ports ISO 228/1.
- **BODY BACK-PLATE:** stainless steel AISI 304 or cast iron on higher powered models.
- **BRASS IMPELLER:**
CP 100-CP 132-CP 152-CP 150-CP 170-CP 190-CP 200
- **STAINLESS STEEL IMPELLER:**
CP 130-CP 158
- **MOTOR SHAFT:** stainless steel EN 10088-3 - 1.4104.
- **MECHANICAL SEAL:** ceramic - graphite - NBR.
- **ELECTRIC MOTOR:** the pumps are close-coupled to a carefully matched PEDROLLO electric motor, quiet running, totally enclosed fan cooled (TEFC), suitable for continuous duty.
CPm: single-phase 230 V - 50 Hz with capacitor and thermal overload protector built into the winding.
CP: three-phase 230/400 V - 50 Hz.
- **INSULATION:** class F. ● **PROTECTION:** IP 44.
- **REGISTERED MODEL n° 72753.**

OPTIONS ON REQUEST

- ⇒ impeller in **technopolymer** (CPm...X - CP...X)
- ⇒ special mechanical seal
- ⇒ other voltages or frequency 60 Hz

CURVES AND PERFORMANCE DATA AT n= 2900 1/min

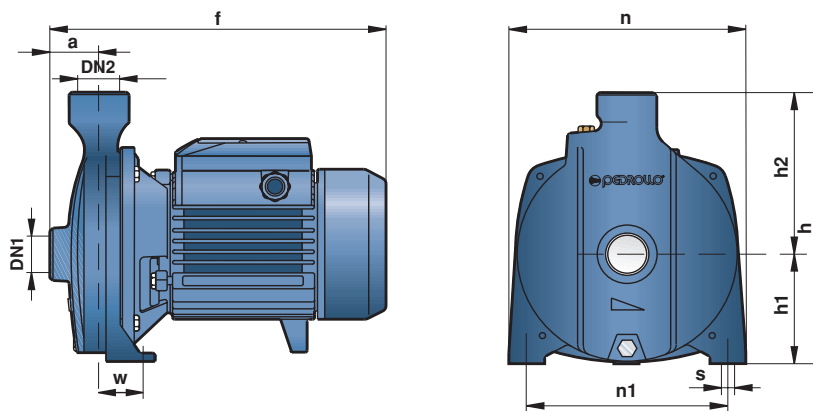


TYPE		POWER		Q	Flow rate																	
Single-phase	Three-phase	kW	HP		m³/h	0	0.6	1.2	1.8	2.4	3.0	3.6	4.2	4.8	5.4	6.0	6.6	7.2	7.8	8.4	9.0	9.6
CPm 100	CP 100	0.25	0.33	l/min	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	
CPm 130	CP 130	0.37	0.50	H metres	16	15	14	12.5	11	9	7											
CPm 132B	CP 132B	0.45	0.60		23	22	21	20	19	18	17	15.5	14									
CPm 132A	CP 132A	0.60	0.85		20	—	18	17	16	15	13.5	12	10.5	9	7							
CPm 152	CP 152	0.55	0.75		23	—	22	21.5	21	20	19	18	17	16	14	12	9					
CPm 150	CP 150	0.75	1		33	32	31	29.5	28.5	27	25	23	19									
CPm 158	CP 158	0.75	1		29.5	—	29	28.5	28	27.5	26.5	26	24.5	23	21	18	15					
CPm 170	CP 170	1.1	1.5		36	34	33.5	33	32.5	31.5	30	28.5	27	25								
CPm 170M	CP 170M	1.1	1.5		41	—	—	38	37	36	35	33.5	32	30	27.5	25	22					
CPm 190	CP 190	1.5	2		36	—	—	35	34.5	33.5	33	32	31	30	29	28	26.5	25	23	21	19	
—	CP 200	2.2	3		50	—	—	46	44.5	43	41.5	40	38	36	34.5	32.5	30.5	28	26			
					58	—	—	55	54.5	53.5	52	51	49.5	48	46	44.5	42.5	40.5	38.5	36		

Q = Flow rate H = Total manometric head

Tolerance of the performance curves according to EN ISO 9906 App. A.

DIMENSIONS AND WEIGHTS



TYPE		PORTS		DIMENSIONS mm								kg		
Single-phase	Three-phase	DN1	DN2	a	f	h	h1	h2	n	n1	w	s	1~	3~
CPm 100	CP 100	1"	1"	34	247	187	77	110	148	118	45	10	6.8	6.9
CPm 130	CP 130			259	205	82	123	165	135	41	7.8		7.6	
CPm 132B	CP 132B			266/259	82	123	165	135	41	8.0	7.5			
CPm 132A	CP 132A			8.4	8.1									
CPm 152	CP 152			11.5	11.5									
CPm 150	CP 150			12.5	11.3									
CPm 158	CP 158			12.1	11.6									
CPm 170-170M	CP 170-170M	1 1/4"	1"	51	367	260	110	150	206	165	44.5	11	19.2	18.5
CPm 190	CP 190			364	290	115	175	242	206	32.5	25.0		24.2	
—	CP 200			-	25.5									

AL-RED® stainless steel centrifugal pumps



RANGE OF PERFORMANCE

Maximum flow rate 160 l/min (9.6 m³/h)
Maximum head 23 m

LIMITS OF USE

Manometric suction lift up to 7 m
Liquid temperature up to + 90°C
Environment temperature up to + 55°C

CONSTRUCTION AND SAFETY STANDARDS

EN 60034-1
IEC 34-1
CEI 2-3



INSTALLATION AND USE

It is recommended for pumping clean water and liquids that are chemically non aggressive to the materials from which the pump is made.

THE CONSTRUCTION OF THESE CENTRIFUGAL PUMPS MAKES THEM SUITABLE FOR USE IN THE DOMESTIC, AGRICULTURAL AND INDUSTRIAL SECTOR. ALL THE WETTED PARTS ARE IN STAINLESS STEEL AISI 304 TO GUARANTEE TOTAL HYGIENE AND MAXIMUM RESISTANCE TO CORROSION.

The pump must be installed in enclosed places, or at least protected against inclement weather.

GUARANTEE 2 YEARS subject to our general terms of sale.

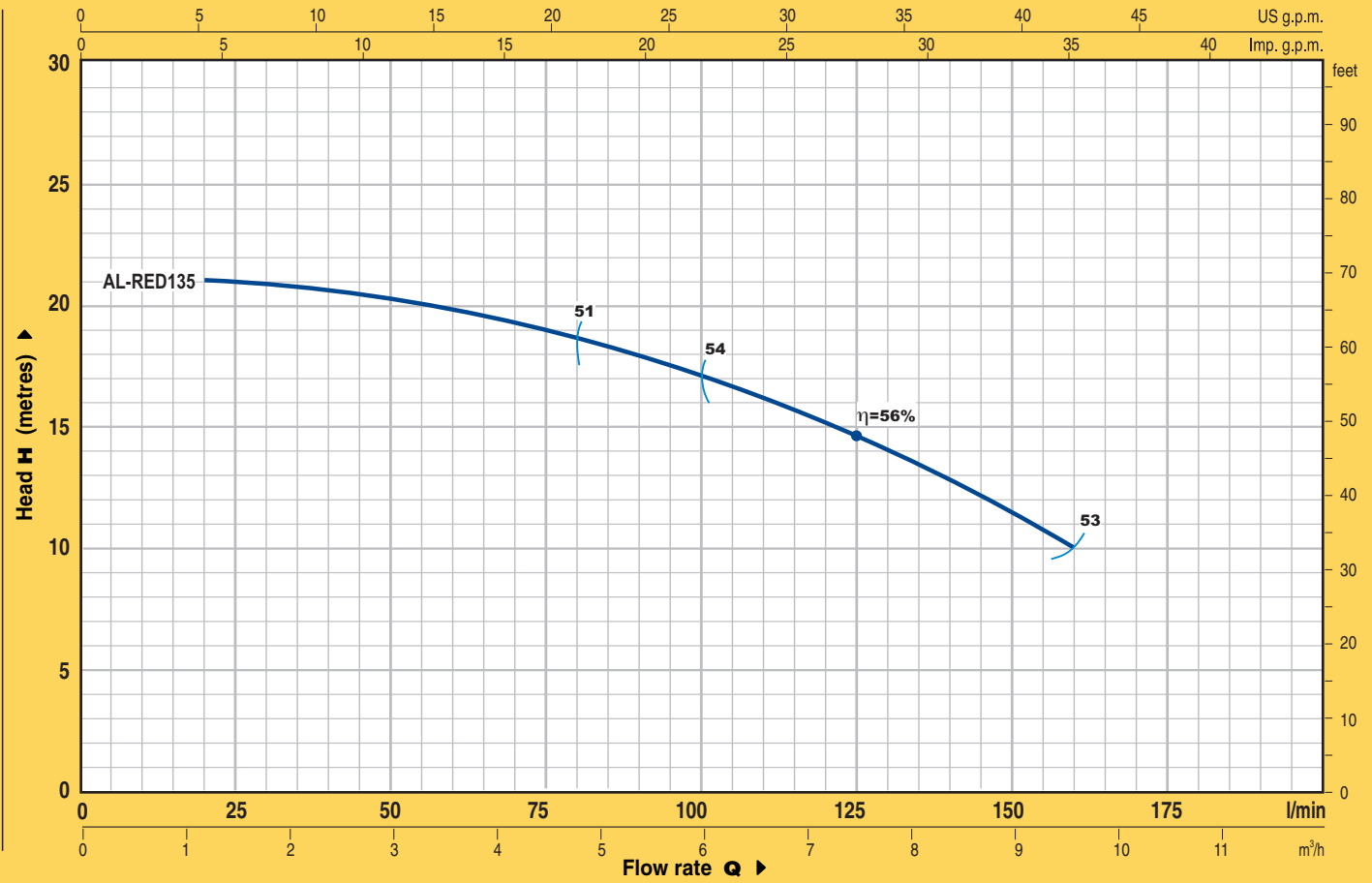
CONSTRUCTION CHARACTERISTICS

- **PUMP BODY:** stainless steel AISI 304, with threaded ports ISO 228/1.
- **BODY BACK-PLATE AND DIFFUSER:** AISI 304.
- **IMPELLER:** stainless steel AISI 304, of the type with centrifugal radial flow.
- **MOTOR SHAFT:** stainless steel EN 10088-3 - 1.4104.
- **MECHANICAL SEAL:** ceramic - graphite - NBR.
- **ELECTRIC MOTOR:** the pumps are close-coupled to a carefully matched PEDROLLO electric motor, quiet running, totally enclosed fan cooled (TEFC), suitable for continuous duty.
AL-RED 135m: single-phase 230 V - 50 Hz with capacitor and thermal overload protector.
AL-RED 135: three-phase 230/400 V - 50 Hz.
- **INSULATION :** class F. ● **PROTECTION:** IP 44.
- **REGISTERED MODEL n° 72753.**
- **AL-RED® is a REGISTERED TRADE MARK**

OPTIONS ON REQUEST

- ⇒ version in stainless steel EN 10088-3 - 1.4401 (AISI 316)
- ⇒ special mechanical seal
- ⇒ other voltages or frequency 60 Hz

CURVES AND PERFORMANCE DATA AT n= 2900 1/min

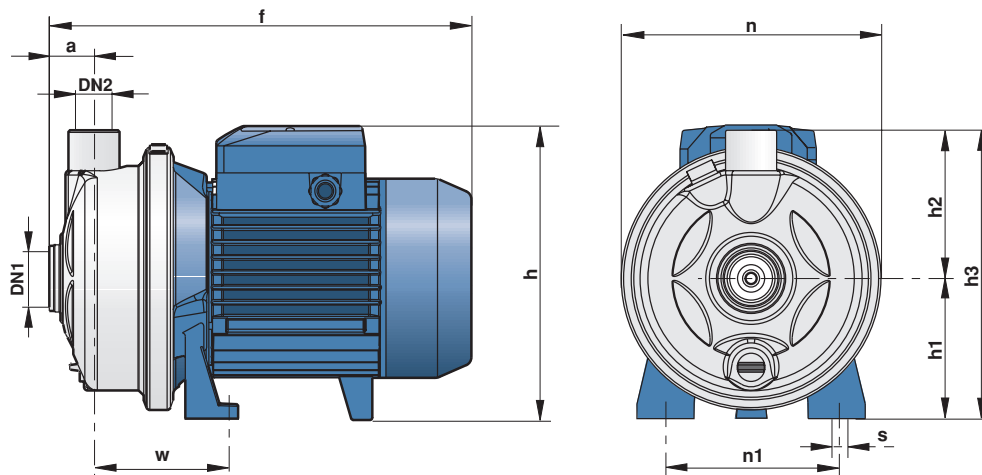


TYPE		POWER		Q	Flow rate										
Single-phase	Three-phase	kW	HP		m³/h	0	1.2	2.4	3.6	4.8	6.0	7.2	8.4	9.6	
AL-RED 135m	AL-RED 135	0.75	1	l/min	0	20	40	60	80	100	120	140	160		
				H metres	23	21	20.5	20	18.5	17	15	13	10		

Q = Flow rate H = Total manometric head

Tolerance of the performance curves according to EN ISO 9906 App. A.

DIMENSIONS AND WEIGHTS



TYPE		PORTS		DIMENSIONS mm										kg	
Single-phase	Three-phase	DN1	DN2	a	f	h	h1	h2	h3	n	n1	w	s	1~	3~
AL-RED 135m	AL-RED 135	1 1/4"	1"	31.5	295	206	97	103	200	182	115	93	10	9.1	9.1



close-coupled centrifugal pumps with threaded ports

Electric pumps with high efficiency motor for reduced energy consumption



RANGE OF PERFORMANCE

Flow rate up to 900 l/min (54 m³/h)
Head up to 75 m

LIMITS OF USE

Manometric suction lift up to 7 m
Liquid temperature up to + 90°C
Environment temperature up to + 40°C

CONSTRUCTION AND SAFETY STANDARDS

EN 60034-1
IEC 34-1
CEI 2-3



INSTALLATION AND USE

They are recommended for pumping clean water and liquids that are chemically non aggressive to the materials from which the pump is made. **RELIABLE AND MAINTENANCE FREE THEY ARE WIDELY USED IN THE CIVIL, AGRICULTURAL AND INDUSTRIAL SECTORS, FOR SUPPLYING WATER, FOR CONDITIONING OR COOLING SYSTEMS, FOR IRRIGATION, ETC.**

The pumps must be installed in enclosed places, or at least protected against inclement weather.

GUARANTEE 2 YEARS subject to our general terms of sale.

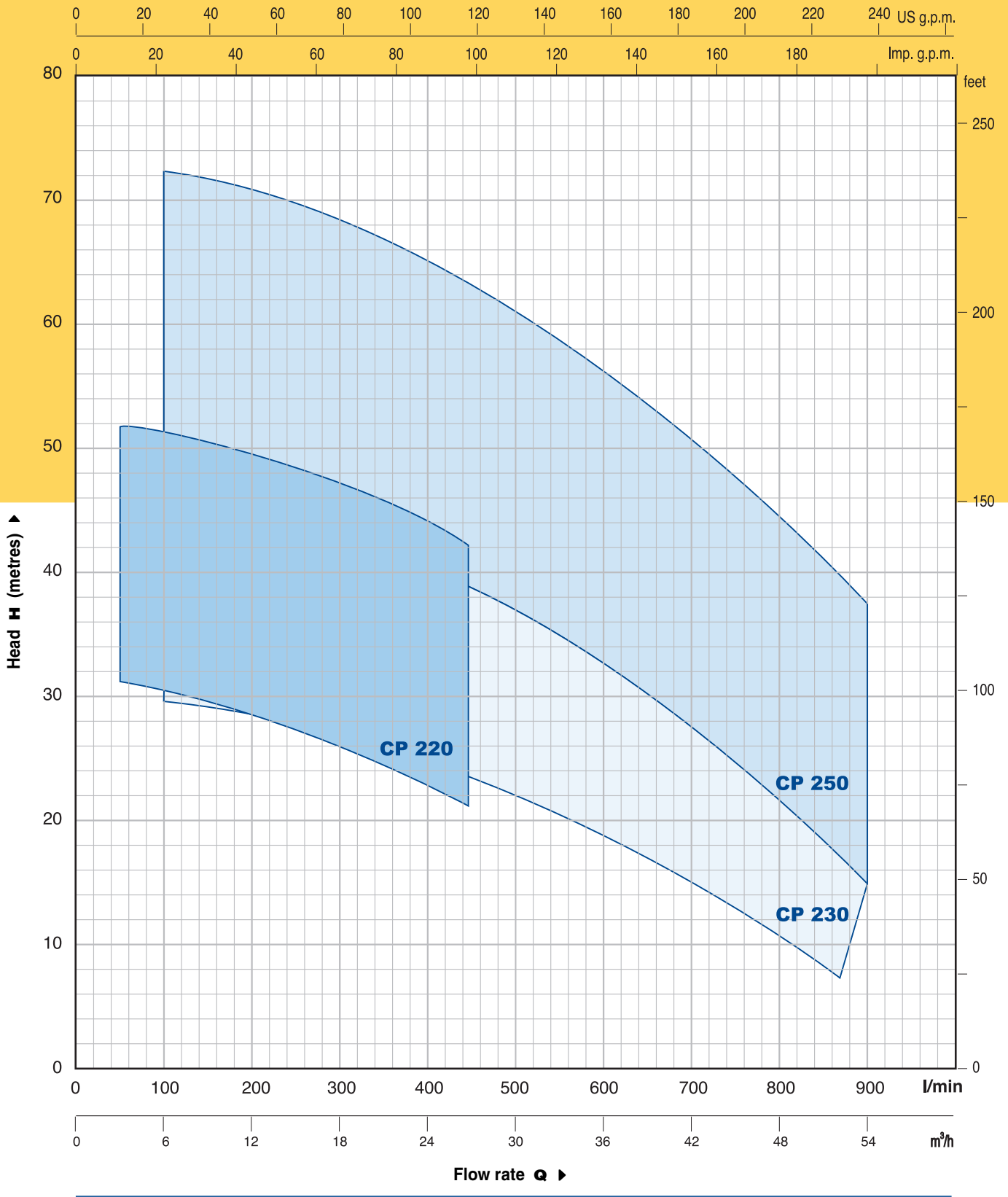
CONSTRUCTION CHARACTERISTICS

- **PUMP BODY:** cast iron, with threaded ports ISO 228/1.
- **BODY BACK-PLATE:** cast iron.
- **IMPELLER:** brass for pumps CP 220, CP 230.
- **IMPELLER:** cast iron for pumps CP 250.
- **MOTOR SHAFT:** stainless steel EN 10088-3 - 1.4104.
- **MECHANICAL SEAL:** ceramic - graphite - NBR.
- **ELECTRIC MOTOR:** the pumps are close-coupled to a carefully matched PEDROLLO electric motor, **with high efficiency (class "EFF1")**, quiet running, totally enclosed fan cooled (TEFC), suitable for continuous duty.
CP: three-phase 230/400 V - 50 Hz up to 4 kW.
400/690 V - 50 Hz from 5.5 to 11 kW.
- **INSULATION:** class F. ● **PROTECTION** IP 44.
- **REGISTERED MODEL** n° 72753
- **PATENTED ELECTRIC MOTOR**

OPTIONS ON REQUEST

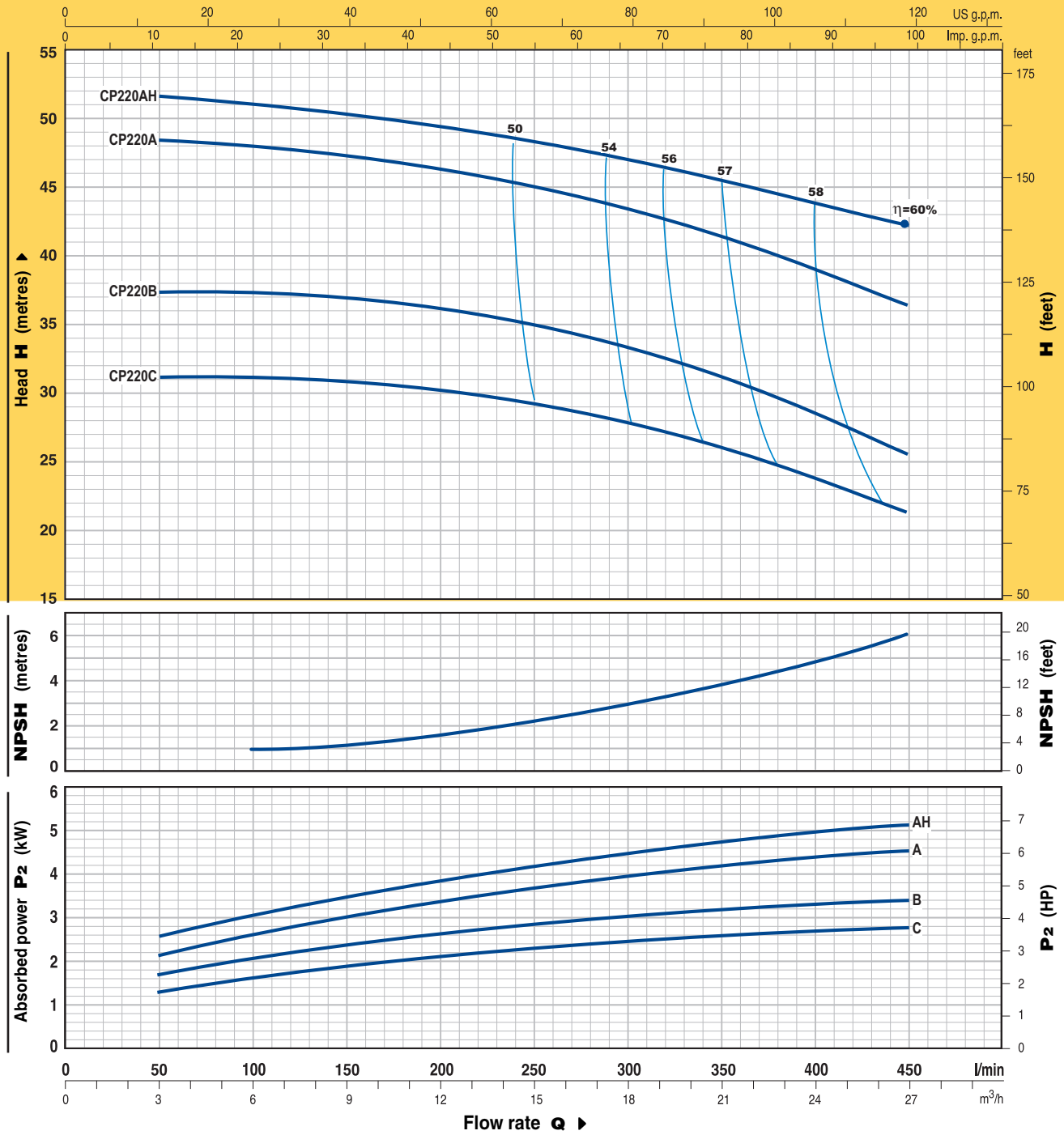
- ⇒ pump shaft in stainless steel EN 10088-3 - 1.4401 (AISI 316)
- ⇒ special mechanical seal
- ⇒ protection IP 55
- ⇒ other voltages or frequency 60 Hz

PERFORMANCE RANGE AT n= 2900 1/min



CP 220

CURVES AND PERFORMANCE DATA AT n= 2900 1/min



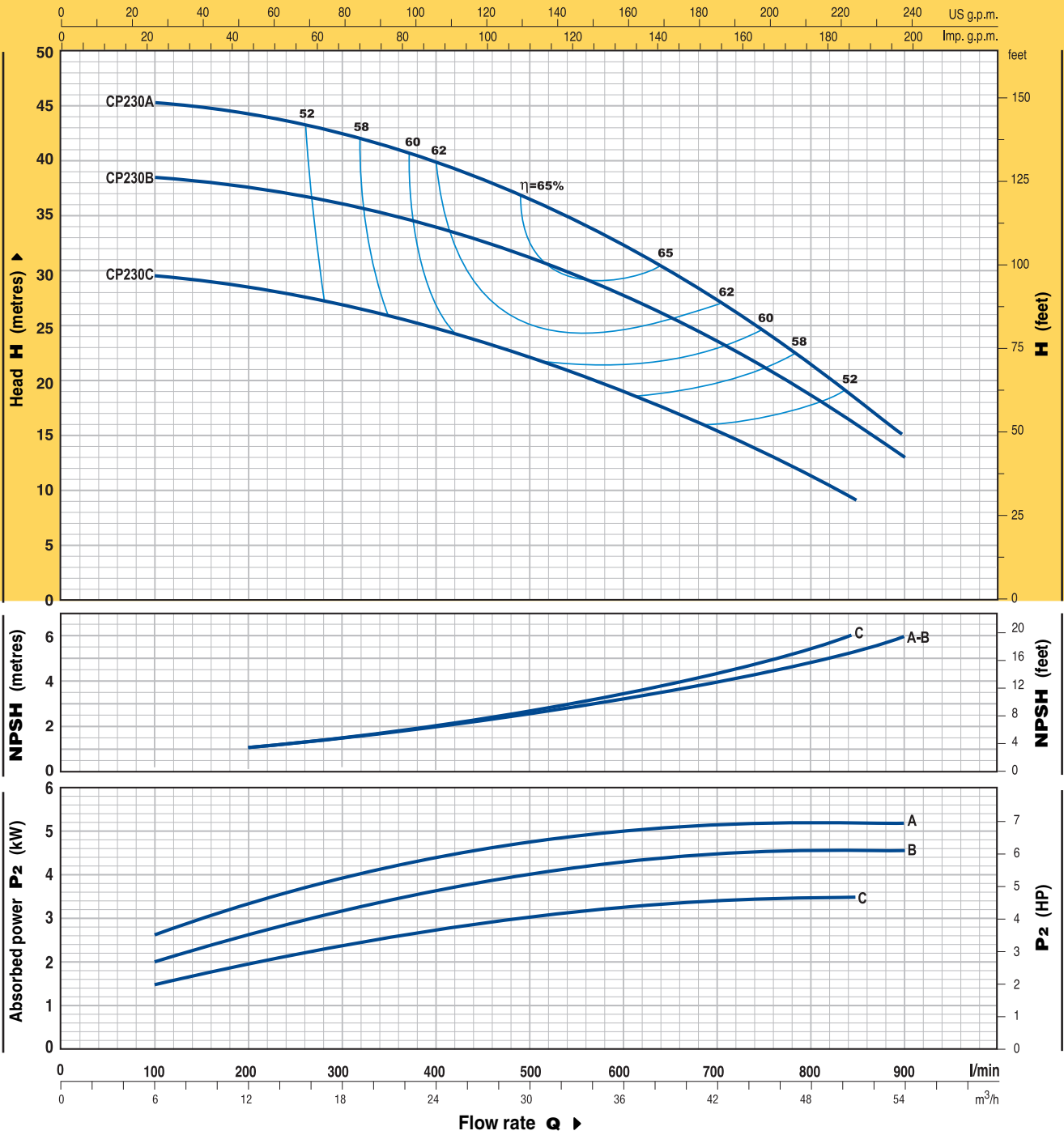
TYPE		POWER		Q	0	3	6	12	18	24	27
Single-phase	Three-phase	kW	HP		0	50	100	200	300	400	450
CPm 220C	CP 220C	2.2	3	H metres	32	31.5	31	30	28	24	21
CPm 220B	CP 220B	3	4		38	37.5	37	36	33.5	29	25
—	CP 220A	4	5.5		49	48.5	48	46	43.5	39.5	36
—	CP 220AH	5.5	7.5		52	51.5	51	49	47	44	42

Q = Flow rate H = Total manometric head

Tolerance of the performance curves according to EN ISO 9906 App. A.

CP 230

CURVES AND PERFORMANCE DATA AT n= 2900 1/min



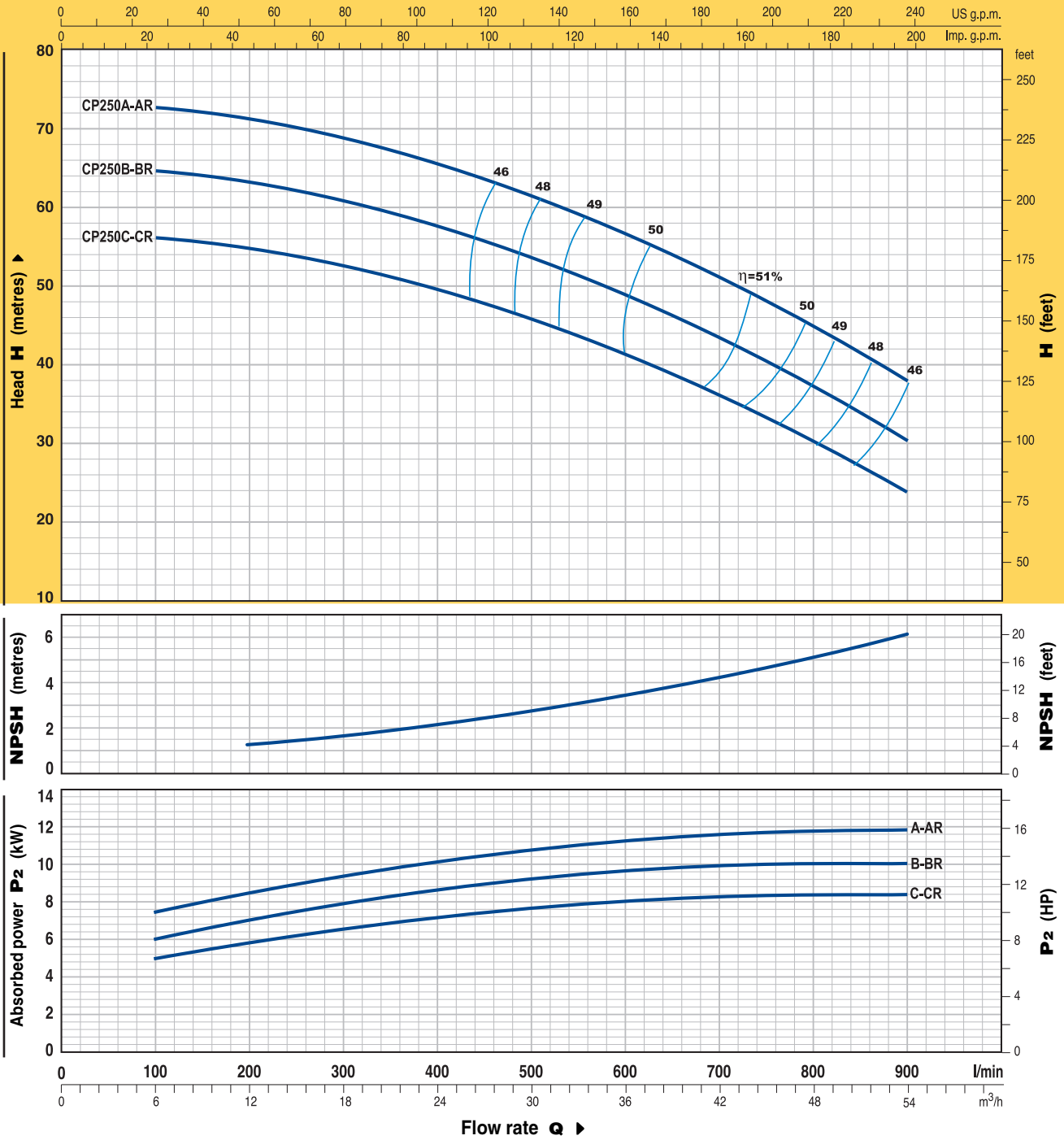
TYPE		POWER		Q	Flow rate																													
Single-phase	Three-phase	kW	HP		m³/h	0	6	12	18	24	30	36	42	48	51	54																		
CPm 230C	CP 230C	3	4	l/min	0	100	200	300	400	500	600	700	800	850	900																			
---	CP 230B	4	5.5	H metres	30	39	46	29.5	38.5	45.5	28.5	38	44.5	27	36	42	25	34	40	22	31	37	19.5	28	32.5	15.5	24	27.5	11.5	18.5	21.5	9	15	18
---	CP 230A	5.5	7.5		46	45.5	44.5	42	40	37	32.5	27.5	21.5	18	15																			

Q = Flow rate H = Total manometric head

Tolerance of the performance curves according to EN ISO 9906 App. A.

CP 250

CURVES AND PERFORMANCE DATA AT n= 2900 1/min

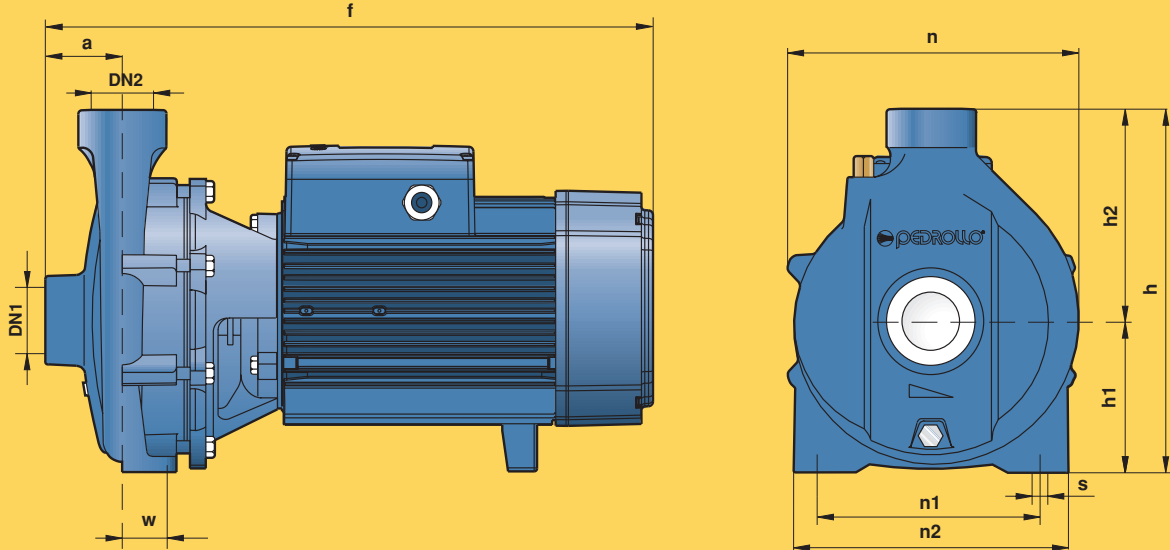


TYPE	POWER		Q	Flow rate											
	kW	HP		0	6	12	18	24	30	36	42	48	54		
Three-phase			l/min	0	100	200	300	400	500	600	700	800	900		
CP 250C	7.5	10	H metres	57	56	54.5	52.5	49.5	46	41.5	35.5	30	24		
CP 250B	9.2	12.5		66	65	62.5	60	57	53	49	43.5	37.5	30		
CP 250A	11	15		74	73	71	68	65	61	57	51	45	37		
CP 250CR	7.5	10		57	56	54.5	52.5	49.5	46	41.5	35.5	30	24		
CP 250BR	9.2	12.5		66	65	62.5	60	57	53	49	43.5	37.5	30		
CP 250AR	11	15		74	73	71	68	65	61	57	51	45	37		

Q = Flow rate H = Total manometric head

Tolerance of the performance curves according to EN ISO 9906 App. A.

DIMENSIONS AND WEIGHTS



TYPE		PORTS		DIMENSIONS mm										kg	
Single-phase	Three-phase	DN1	DN2	a	f	h	h1	h2	n	n1	n2	w	s	1~	3~
CPm 220C	CP 220C	2"	2"	70	421/402	315	132	183	255	170	230	40	14	33.3	30.5
CPm 220B	CP 220B				459/421	328/315	136/132	192/183	273/255	190/170	250/230			44.0	33.3
—	CP 220A				459	328	136	192	273	190	250			-	41.0
—	CP 220AH				505									-	47.6
CPm 230C	CP 230C				459/421	328/315	136/132	192/183	273/255	190/170	250/230			41.3	33.0
—	CP 230B				459	328	136	192	273	190	250			-	41.3
—	CP 230A			505	-							47.6			
—	CP 250C			507	65	392	160	232	322	230	294	45		-	74.0
—	CP 250B			571										-	96.0
—	CP 250A			534										-	103.0
—	CP 250CR	598	-	78.0											
—	CP 250BR	4"	3"	92	598	-	100.0								
—	CP 250AR					-	107.0								



RANGE OF PERFORMANCE

Flow rate up to 250 l/min (15 m³/h)
Head up to 57 m

LIMITS OF USE

Manometric suction lift up to 7 m
Liquid temperature up to + 90°C
Environment temperature up to + 40°C

CONSTRUCTION AND SAFETY STANDARDS

EN 60034-1
IEC 34-1
CEI 2-3



INSTALLATION AND USE

They are recommended for pumping clean water and liquids that are chemically non aggressive to the materials from which the pump is made. **THE PUMPS IN THIS SERIES ARE MADE TO STANDARDS EN 733 - DIN 24255 AND ARE SPECIFICALLY USED IN THE CIVIL, INDUSTRIAL OR AGRICULTURAL SECTORS WHERE THEIR CHARACTERISTICS OF STURDINESS AND RELIABILITY CAN BE BEST APPRECIATED.** The pumps must be installed in enclosed places, or at least protected against inclement weather.

GUARANTEE 2 YEARS subject to our general terms of sale.

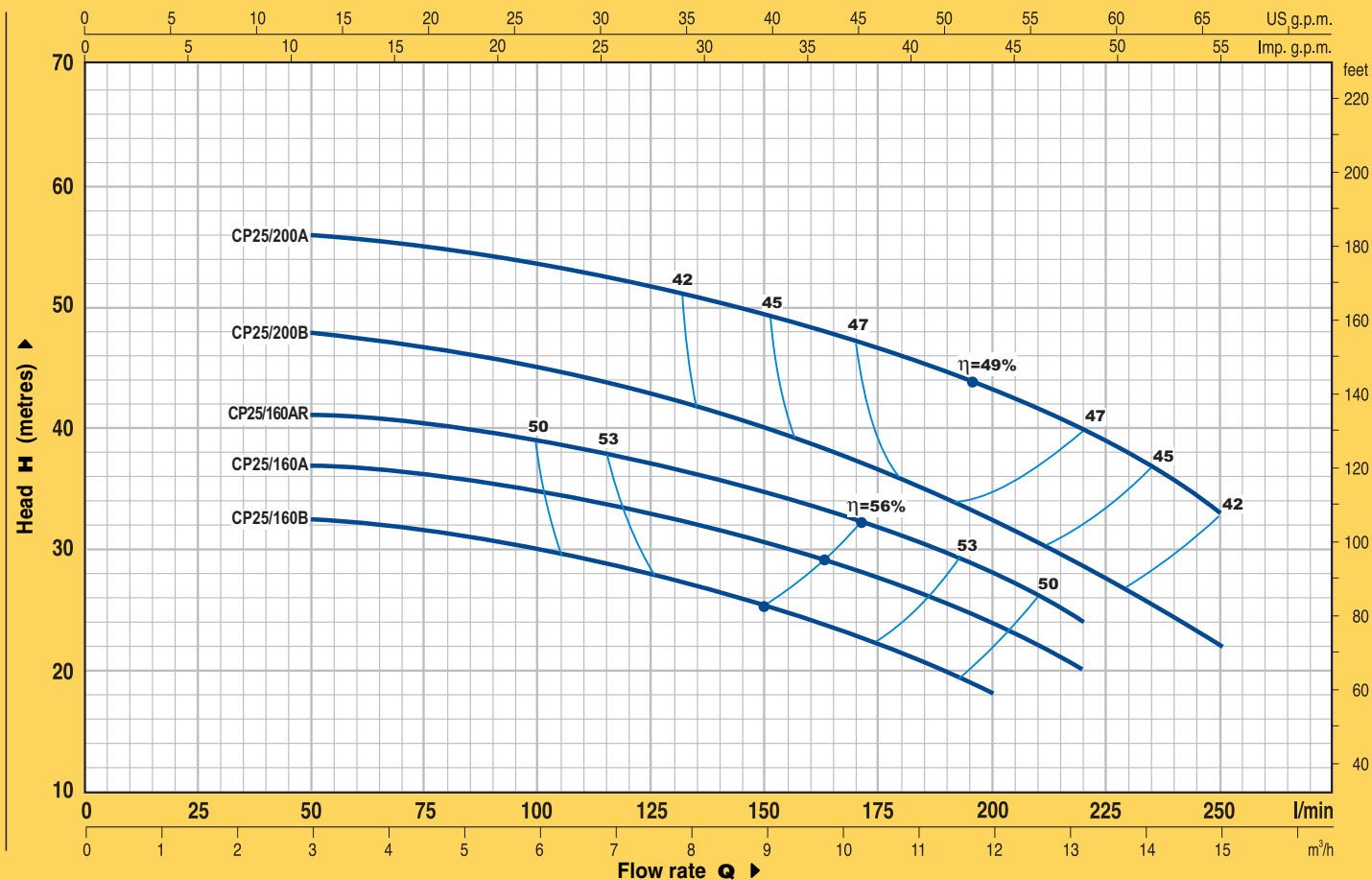
CONSTRUCTION CHARACTERISTICS

- **PUMP BODY:** cast iron, made to standards EN 733 - DIN 24255 and UNI 7467- NF E-44-111, with threaded ports ISO 228/1.
- **IMPELLER:** brass, of the type with centrifugal radial flow.
- **MOTOR SHAFT:** stainless steel EN 10088-3 - 1.4104.
- **MECHANICAL SEAL:** ceramic - graphite - NBR.
- **ELECTRIC MOTOR:** the pumps are close-coupled to a carefully matched PEDROLLO electric motor, quiet running, totally enclosed fan cooled (TEFC), suitable for continuous duty.
CPm: single-phase 230 V - 50 Hz with capacitor and thermal overload protector up to 1.5 kW.
CP: three-phase 230/400 V - 50 Hz.
- **INSULATION :** class F. ● **PROTECTION:** IP 44.

OPTIONS ON REQUEST

- ⇒ special mechanical seal
- ⇒ other voltages or frequency 60 Hz

CURVES AND PERFORMANCE DATA AT n= 2900 1/min

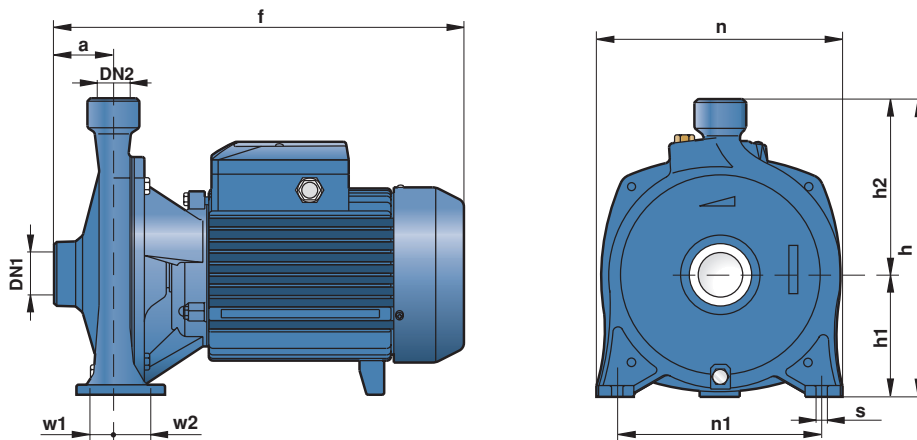


TYPE		POWER		Q	m ³ /h														
Single-phase	Three-phase	kW	HP		0	3.0	3.6	4.2	4.8	5.4	6.0	6.6	7.5	8.4	9.6	10.8	12.0	13.2	15.0
CPm 25/160B	CP 25/160B	1.1	1.5	0	50	60	70	80	90	100	110	125	140	160	180	200	220	250	
CPm 25/160A	CP 25/160A	1.5	2	33	32.5	32	31.5	31	30.5	30	29	28	26.5	24	21.5	18			
---	CP 25/160AR	2.2	3	38	37	36.8	36.5	36	35.5	35	34	33	31.5	29.5	27	24	20		
---	CP 25/160B	2.2	3	42	41	41	40.5	40	39.5	39	38	37	36	34	31	28	24		
CPm 25/200B	CP 25/200B	2.2	3	49	48	47.5	47	46.5	45.5	45	44	43	41	38.5	36	32	28	22	
---	CP 25/200A	3	4	57	56	55.8	55.5	55	54.5	53.5	53	52	50.5	48.5	46	43.5	40	33	

Q = Flow rate H = Total manometric head

Tolerance of the performance curves according to EN ISO 9906 App. A.

DIMENSIONS AND WEIGHTS



TYPE		PORTS		DIMENSIONS mm										kg	
Single-phase	Three-phase	DN1	DN2	a	f	h	h1	h2	n	n1	w1	w2	s	1~	3~
CPm 25/160B	CP 25/160B	1 1/2"	1"	56	386	260	105	155	206	150	27.5	27.5	10	20.7	18.7
CPm 25/160A	CP 25/160A													21.7	21.0
---	CP 25/160AR													-	21.8
CPm 25/200B	CP 25/200B	60		60	384/359	305	125	180	252	210	23.5	39.5	11	31.0	28.6
---	CP 25/200A													-	30.7



RANGE OF PERFORMANCE

Flow rate up to 600 l/min (36 m³/h)
Heads up to 39 m

LIMITS OF USE

Manometric suction lift up to 7 m
Liquid temperature up to + 90°C
Environment temperature up to + 40°C

CONSTRUCTION AND SAFETY STANDARDS

EN 60034-1
IEC 34-1
CEI 2-3



INSTALLATION AND USE

THE HF SERIES IS RECOMMENDED FOR CIVIL, AGRICULTURAL AND INDUSTRIAL APPLICATIONS. THE HIGH FLOW RATES AND CONTINUOUS RATING MAKE IT IDEAL FOR IRRIGATION WITH FLOWING AND SPRINKLING WATER, FOR DRAWING WATER FROM LAKES, RIVERS, WELLS, OR FOR INDUSTRIAL APPLICATIONS THAT NEED TO ACHIEVE LARGE FLOW RATES AT MEDIUM-LOW HEADS.

The pumps must be installed in enclosed places, or at least protected against inclement weather.

GUARANTEE 2 YEARS subject to our general terms of sale.

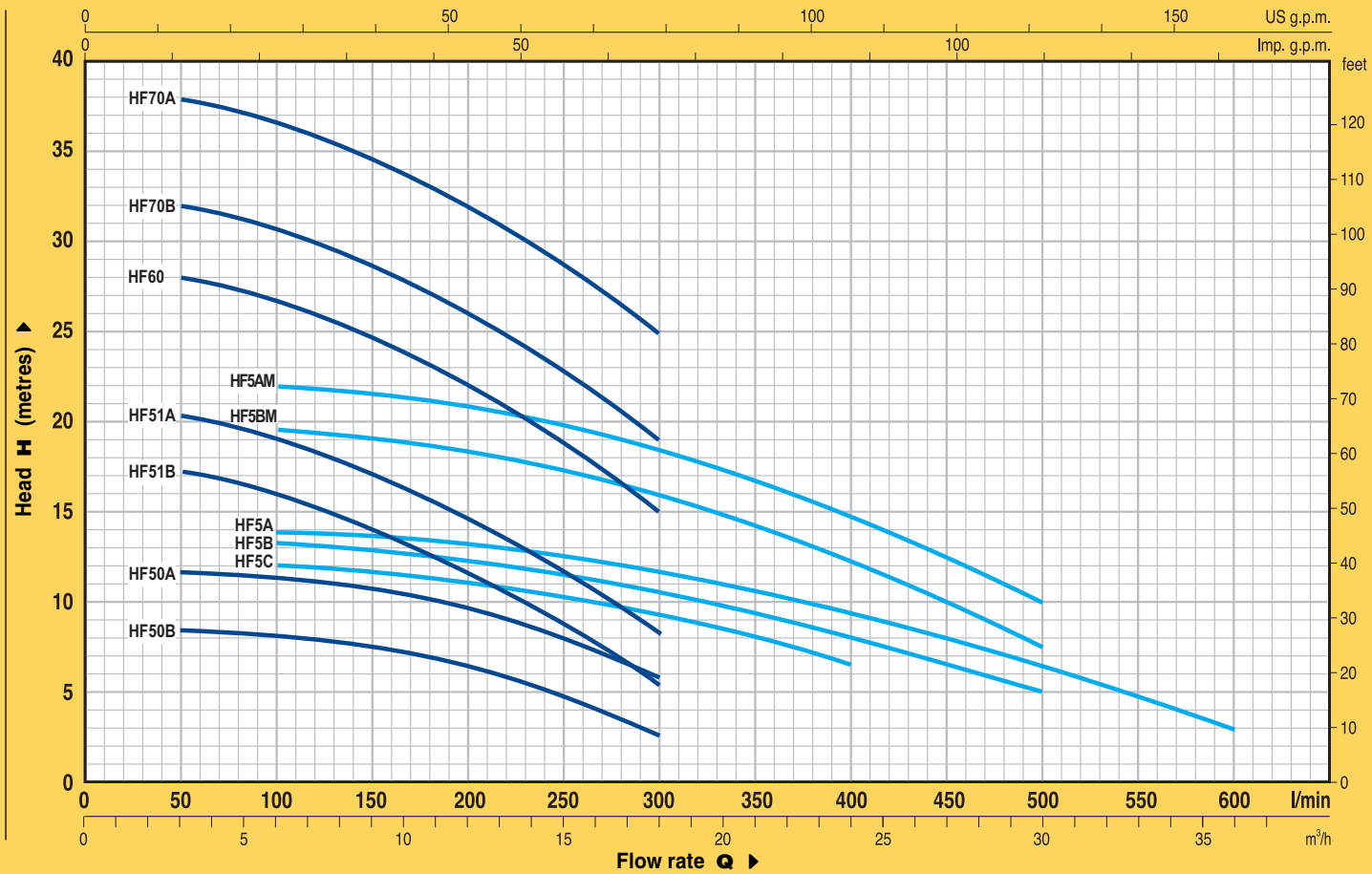
CONSTRUCTION CHARACTERISTICS

- **PUMP BODY:** cast iron, with threaded ports ISO 228/1.
- **IMPELLER:** brass, of the type with centrifugal radial flow.
- **MOTOR SHAFT:** stainless steel EN 10088-3 - 1.4104.
- **MECHANICAL SEAL:** ceramic - graphite - NBR.
- **ELECTRIC MOTOR:** the pumps are close-coupled to a carefully matched PEDROLLO electric motor, quiet running, totally enclosed fan cooled (TEFC), suitable for continuous duty.
 - HFm: single-phase 230 V - 50 Hz with capacitor and thermal overload protector.
 - HF: three-phase 230/400 V - 50 Hz.
- **INSULATION:** class F. ● **PROTECTION:** IP 44.

OPTIONS ON REQUEST

- ⇒ special mechanical seal
- ⇒ other voltages or frequency 60 Hz

CURVES AND PERFORMANCE DATA AT n= 2900 1/min

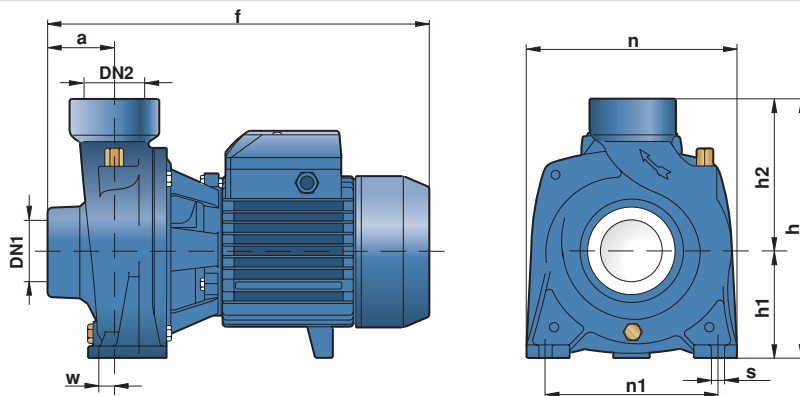


TYPE		POWER		Q	H metres												
Single-phase	Three-phase	kW	HP		m³/h	0	3	6	9	12	15	18	21	24	30	36	
HFm 50B	HF 50B	0.37	0.50	l/min	0	50	100	150	200	250	300	350	400	500	600		
HFm 50A	HF 50A	0.55	0.75	9	8.5	8.2	7.5	6.3	4.9	2.8							
HFm 51B	HF 51B	0.60	0.85	12	11.5	11.2	10.6	9.6	8	6							
HFm 51A	HF 51A	0.75	1	18.2	17.2	16	14	11.5	9	5.4							
HFm 60	HF 60	1.1	1.5	21.2	20.2	19	17	14.5	11.6	8.4							
HFm 70B	HF 70B	1.5	2	29	28	26.5	24.5	22	18.5	15							
	HF 70A	2.2	3	33	32	30.5	28.5	26	22.5	19							
	HF 70A	2.2	3	39	38	36.5	34.5	32	28.5	25							
HFm 5C	HF 5C	0.60	0.85	12.5	—	12	11.7	11	10.2	9.2	8	6.5					
HFm 5B	HF 5B	0.75	1	13.7	—	13.2	13	12.5	11.6	10.5	9.2	8	5				
HFm 5A	HF 5A	1.1	1.5	14.5	—	13.8	13.5	13.2	12.6	11.8	10.5	9.2	6.5	3			
HFm 5BM	HF 5BM	1.1	1.5	20.2	—	19.2	19	18	17	16	14	12	7.5				
HFm 5AM	HF 5AM	1.5	2	22.5	—	22	21.5	21	20	18.5	16.6	14.5	10				

Q = Flow rate H = Total manometric head

Tolerance of the performance curves according to EN ISO 9906 App. A.

DIMENSIONS AND WEIGHTS



TYPE		PORTS		DIMENSIONS mm									kg		
Single-phase	Three-phase	DN1	DN2	a	f	h	h1	h2	n	n1	w	s	1~	3~	
HFm 50B	HF 50B	1 1/2"	1 1/2"	45	276	200	82	118	165	135	1	10	8.3	8.2	
HFm 50A	HF 50A				283/276								8.9	8.4	
HFm 51B	HF 51B				300								15.5	15.1	
HFm 51A	HF 51A			48.5	373	225	92	133	190	160	4	12	12	13.0	12.1
HFm 60	HF 60													20.0	19.3
HFm 70B	HF 70B													22.2	21.6
	HF 70A	-	22.8												
HFm 5C	HF 5C	2"	2"	60	332	238	97	141	196	160	14	11	15.3	14.2	
HFm 5B	HF 5B												15.1	14.3	
HFm 5A	HF 5A												15.5	15.2	
HFm 5BM	HF 5BM												20.3	19.5	
HFm 5AM	HF 5AM	51	386	260	110	150	206			1			22.2	21.8	



RANGE OF PERFORMANCE

Flow rate up to 1800 l/min (108 m³/h)
Head up to 24.5 m

LIMITS OF USE

Manometric suction lift up to 7 m
Liquid temperature up to + 90°C
Environment temperature up to + 40°C

CONSTRUCTION AND SAFETY STANDARDS

EN 60034-1
IEC 34-1
CEI 2-3



INSTALLATION AND USE

THE **HF** SERIES IS RECOMMENDED FOR USE IN THE CIVIL, AGRICULTURAL AND INDUSTRIAL FIELD. THE HIGH FLOW RATES AND CONTINUOUS RATING MAKE IT IDEAL FOR IRRIGATION WITH FLOWING AND SPRINKLING WATER, FOR DRAWING WATER FROM LAKES, RIVERS, WELLS, OR FOR INDUSTRIAL APPLICATIONS THAT NEED TO ACHIEVE LARGE FLOW RATES AT MEDIUM-LOW HEADS.

The pumps must be installed in enclosed places, or at least protected against inclement weather.

GUARANTEE 2 YEARS subject to our general terms of sale.

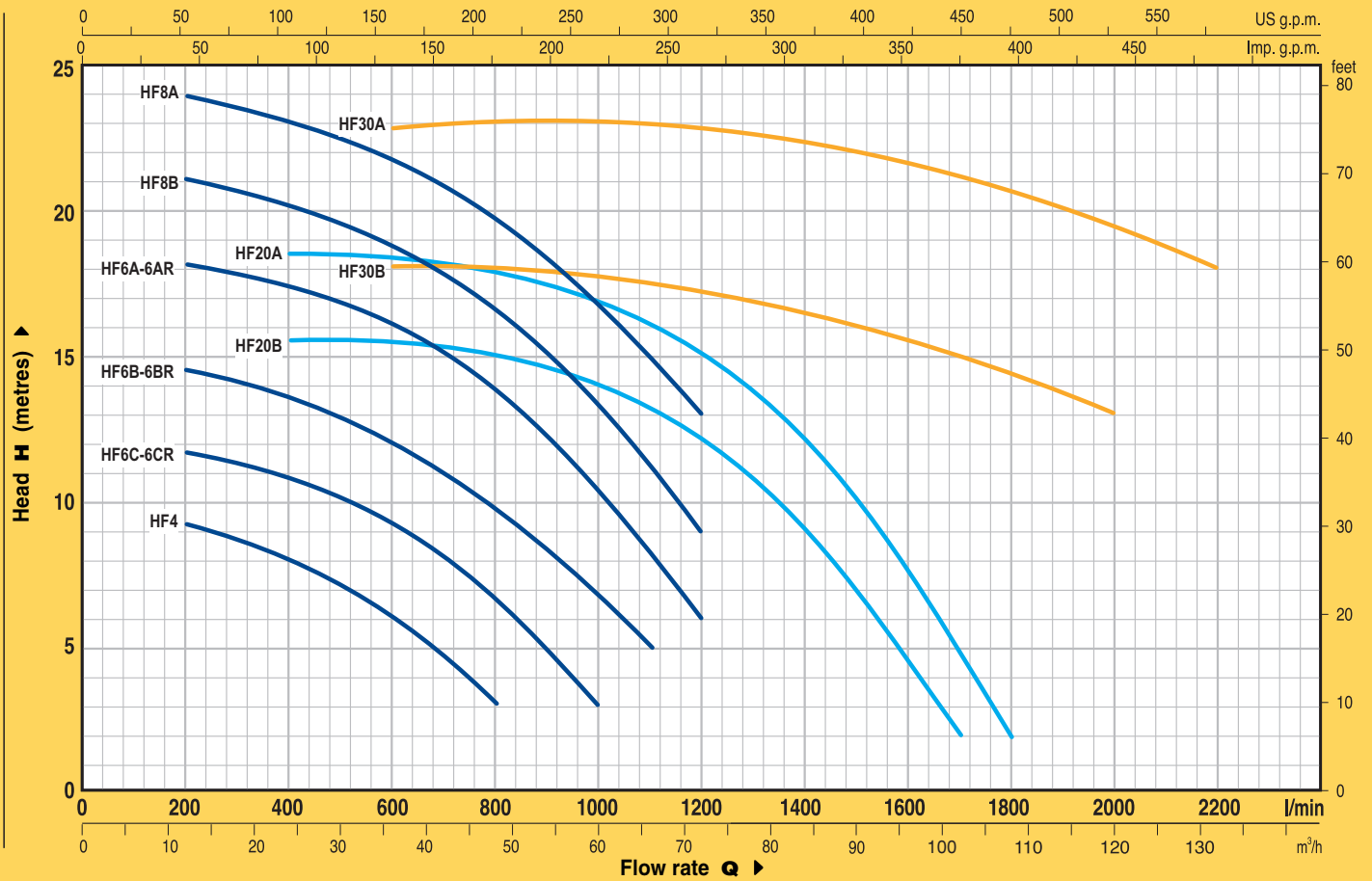
CONSTRUCTION CHARACTERISTICS

- **PUMP BODY:** cast iron, with threaded ports ISO 228/1.
- **IMPELLER:** brass, of the type with centrifugal radial flow.
- **MOTOR SHAFT:** stainless steel EN 10088-3 - 1.4104.
- **MECHANICAL SEAL:** ceramic - graphite - NBR.
- **ELECTRIC MOTOR:** the pumps are close-coupled to a carefully matched PEDROLLO electric motor, quiet running, totally enclosed fan cooled (TEFC), suitable for continuous duty.
 - HFm: single-phase 230 V - 50 Hz with capacitor and thermal overload protector.
 - HF: three-phase 230/400 V - 50 Hz.
- **INSULATION:** class F. ● **PROTECTION:** IP 44.

OPTIONS ON REQUEST

- ⇒ special mechanical seal
- ⇒ other voltages or frequency 60 Hz

CURVES AND PERFORMANCE DATA AT n= 2900 1/min

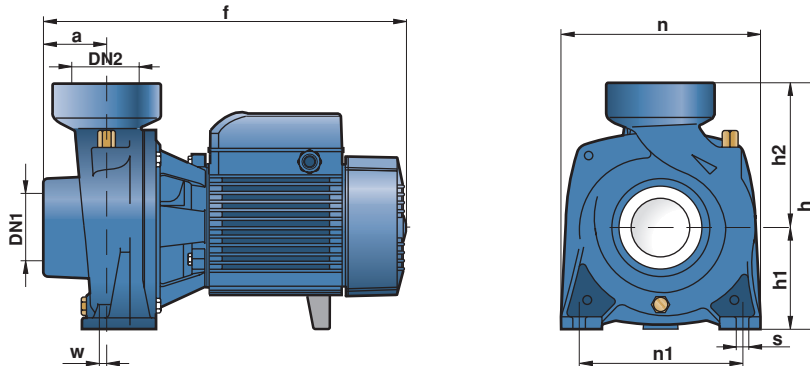


TYPE		POWER		Q	m ³ /h																
Single-phase	Three-phase	kW	HP		0	12	18	24	30	36	42	48	54	60	66	72	84	96	102	108	120
HFm 4	HF 4	0.75	1	0	200	300	400	500	600	700	800	900	1000	1100	1200	1400	1600	1700	1800	2000	2200
HFm 6C	HF 6C	1.1	1.5	10	9.3	8.7	8	7	6	4.7	3										
HFm 6B	HF 6B	1.5	2	11.9	11.7	11.3	10.7	10.2	9.2	8	6.7	5	3								
—	HF 6A	2.2	3	14.7	14.5	14	13.5	12.8	12	11	9.7	8.2	6.7	5							
HFm 6CR	HF 6CR	1.1	1.5	18.5	18.1	17.8	17.2	16.8	16	15	13.8	12.2	10.5	8.3	6						
HFm 6BR	HF 6BR	1.5	2	11.9	11.7	11.3	10.7	10.2	9.2	8	6.7	5	3								
—	HF 6AR	2.2	3	14.7	14.5	14	13.5	12.8	12	11	9.7	8.2	6.7	5							
HFm 8B	HF 8B	3	4	18.5	18.1	17.8	17.2	16.8	16	15	13.8	12.2	10.5	8.3	6						
—	HF 8A	4	5.5	21.5	21	20.7	20	19.5	18.8	17.8	16.5	15	13.5	11.2	9						
HFm 20B	HF 20B	3	4	24.5	24	23.5	23	22.5	21.8	20.8	19.5	18.3	16.8	15	13						
—	HF 20A	4	5.5	16	-	-	15.5	15.4	15.3	15.2	15	14.5	14	13	12	9	4.8	2			
—	HF 30B	5.5	7.5	19	-	-	18.5	18.4	18.3	18.2	18	17.5	17	16.2	15.2	12	7.8	5	2		
—	HF 30A	7.5	10	18	-	-	-	-	18	18	18	18	18	17.5	17	16.5	15.5	15	14.5	13	
—				23	-	-	-	-	23	23	23	23	23	22.5	22.5	22.5	22	21.5	21	19.5	18

Q = Flow rate H = Total manometric head

Tolerance of the performance curves according to EN ISO 9906 App. A.

DIMENSIONS AND WEIGHTS



TYPE		PORTS		DIMENSIONS mm									kg	
Single-phase	Three-phase	DN1	DN2	a	f	h	h1	h2	n	n1	w	s	1~	3~
HFm 4	HF 4	2 1/2"	2 1/2"	55	323	240					0	10	15.6	14.2
HFm 6C	HF 6C	3"	3"	68	411	312	120	192	240	190	6	12	28.1	26.2
HFm 6B	HF 6B												29.1	28.5
—	HF 6A												-	29.4
HFm 6CR	HF 6CR	4"	4"	70	413	370	132	180	245	190	30	14	29.7	29.2
HFm 6BR	HF 6BR												32.0	31.4
—	HF 6AR												-	32.3
HFm 8B	HF 8B												41.0	36.1
—	HF 8A	-	41.0											
HFm 20B	HF 20B	82	585	80	462/429	370	160	210	292	212	30	14	40.5	35.3
—	HF 20A												-	40.5
—	HF 30B												-	60.9
—	HF 30A												-	65.2



RANGE OF PERFORMANCE

Flow rate up to 1200 l/min (72 m³/h)
Head up to 22.5 m

LIMITS OF USE

Manometric suction lift up to 7 m
Liquid temperature up to + 90°C
Environment temperature up to + 40°C

CONSTRUCTION AND SAFETY STANDARDS

EN 60034-1
IEC 34-1
CEI 2-3



INSTALLATION AND USE

THE **NF** SERIES, FROM THE POINT OF VIEW OF BOTH PERFORMANCE AND MECHANICAL DIMENSIONS, HAS BEEN EXPRESSLY DESIGNED FOR USE IN THE CIVIL, AGRICULTURAL AND INDUSTRIAL FIELD. THE HIGH FLOW RATES AND CONTINUOUS RATING MAKE IT IDEAL FOR IRRIGATION WITH FLOWING AND SPRINKLING WATER, FOR DRAWING WATER FROM LAKES, RIVERS, WELLS, AND FOR TRANSFER IN GENERAL.

The pumps must be installed in enclosed places, or at least protected against inclement weather.

GUARANTEE 2 YEARS subject to our general terms of sale.

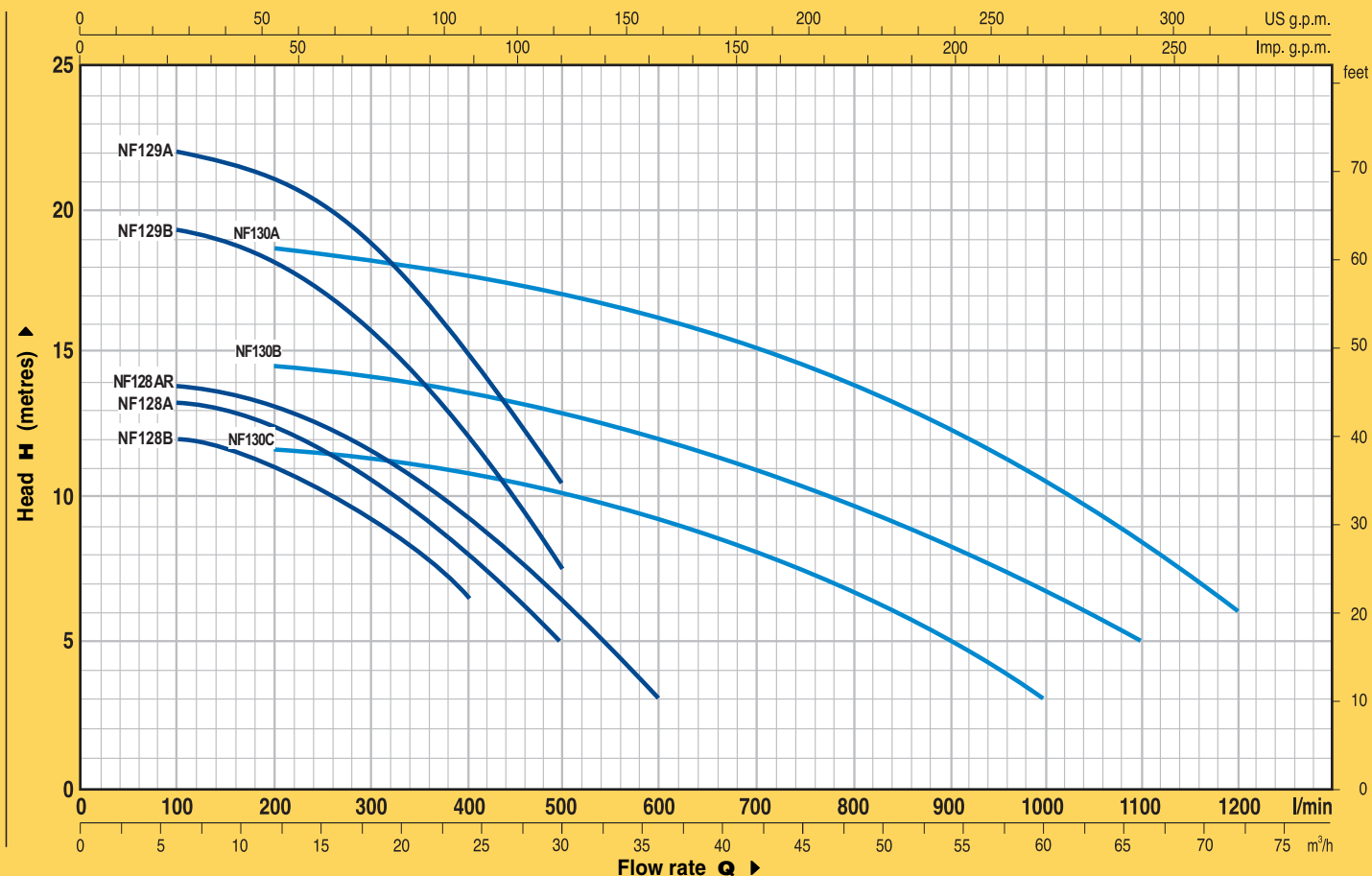
CONSTRUCTION CHARACTERISTICS

- **PUMP BODY:** cast iron, with threaded suction and delivery **FLANGES** ISO 228/1.
- **IMPELLER:** brass, of the type with centrifugal radial flow.
- **MOTOR SHAFT:** stainless steel EN 10088-3 - 1.4104.
- **MECHANICAL SEAL:** ceramic - graphite - NBR.
- **ELECTRIC MOTOR:** the pumps are close-coupled to a carefully matched PEDROLLO electric motor, quiet running, totally enclosed fan cooled (TEFC), suitable for continuous duty.
NFm: single-phase 230 V - 50 Hz with capacitor and thermal overload protector.
NF: three-phase 230/400 V - 50 Hz.
- **INSULATION:** class F. ● **PROTECTION:** IP 44.

OPTIONS ON REQUEST

- ⇒ special mechanical seal
- ⇒ other voltages or frequency 60 Hz

CURVES AND PERFORMANCE DATA AT n= 2900 1/min

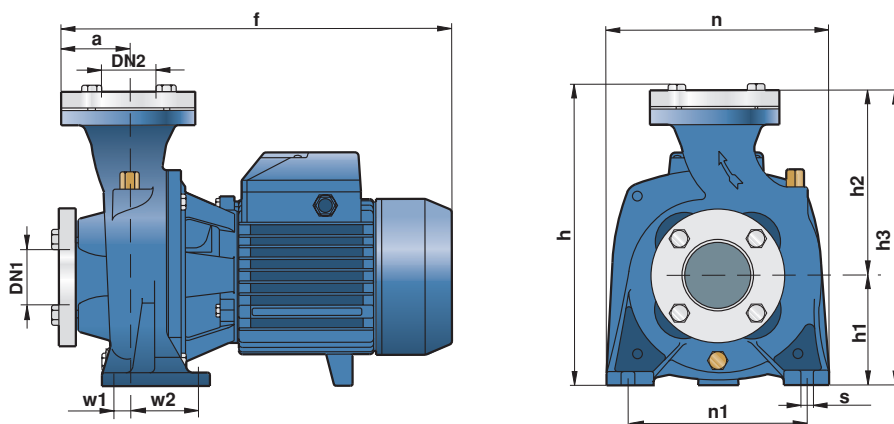


TYPE		POWER		Q	m³/h																
Single-phase	Three-phase	kW	HP		0	6	9	12	15	18	21	24	30	36	42	48	54	60	66	72	
NFm 128B	NF 128B	0.60	0.85	H metres	12.5	12	11.7	11	10.2	9.2	8	6.5									
NFm 128A	NF 128A	0.75	1		13.7	13.2	13	12.5	11.6	10.5	9.2	8	5								
NFm 128AR	NF 128AR	1.1	1.5		14.5	13.8	13.5	13.2	12.6	11.5	10.5	9.2	6.5	3							
NFm 129B	NF 129B	1.1	1.5		20.2	19.2	19	18	17	16	14	12	7.5								
NFm 129A	NF 129A	1.5	2		22.5	22	21.5	21	20	18.5	16.6	14.5	10								
NFm 130C	NF 130C	1.1	1.5		11.9	—	—	11.7	11.5	11.3	11.1	10.7	10.2	9.1	8	6.7	5	3			
NFm 130B	NF 130B	1.5	2		14.7	—	—	14.5	14.2	14	13.7	13.5	13.2	12	11	9.7	8.2	6.7	5		
—	NF 130A	2.2	3		18.5	—	—	18.1	18	17.8	17.5	17.2	16.8	16	15	13.8	12.2	10.5	8.3	6	

Q = Flow rate H = Total manometric head

Tolerance of the performance curves according to EN ISO 9906 App. A.

DIMENSIONS AND WEIGHTS



TYPE		PORTS		DIMENSIONS mm											kg*	
Single-phase	Three-phase	DN1	DN2	a	f	h	h1	h2	h3	n	n1	w1	w2	s	1~	3~
NFm 128B	NF 128B	2"	2"	65	344	271	97	167	264	196	160	8	60	12	19.8	17.1
NFm 128A	NF 128A														18.3	17.0
NFm 128AR	NF 128AR														18.3	18.3
NFm 129B	NF 129B														23.3	22.7
NFm 129A	NF 129A	3"	3"	56	398	276	110	159	269	206	190	1	62	11	26.0	24.6
NFm 130C	NF 130C														33.5	31.5
NFm 130B	NF 130B														34.4	33.4
—	NF 130A			71	416	320	120	193	313	240	190	6	66	12	-	34.6

(*weight includes counterflanges)

NGA centrifugal pumps with open impeller

Centrifugal pumps made of cast iron, equipped with open impeller, ideal for transferring liquids containing impurities.



RANGE OF PERFORMANCE

Flow rate up to 350 l/min (21 m³/h)

Head up to 20 m

LIMITS OF USE

Manometric suction lift up to 7 m

Liquid temperature up to + 90°C

Liquid temperature up to + 40°C in the NGAX version (with technopolymer impeller)

Environment temperature up to + 40°C

Passage of solid bodies Ø 10 mm

CONSTRUCTION AND SAFETY STANDARDS

EN 60034-1

IEC 34-1

CEI 2-3



INSTALLATION AND USE

They are recommended for pumping water and liquids that are chemically non aggressive to the materials from which the pump is made.

THE OPEN IMPELLER DESIGN ALLOWS THE PUMPING OF LIQUIDS WITH RELATIVELY HIGH LEVELS OF IMPURITIES WITHOUT RISK OF CLOGGING THE IMPELLER. FOR THIS REASON THE NGA SERIES ARE SUITABLE FOR USE IN INDUSTRY, FOR THE TRANSFER OF WATER FROM CANALS, RIVERS, RESERVOIRS, TANKS, ETC.

The pumps must be installed in enclosed places, or at least protected against inclement weather.

GUARANTEE 2 YEARS subject to our general terms of sale.

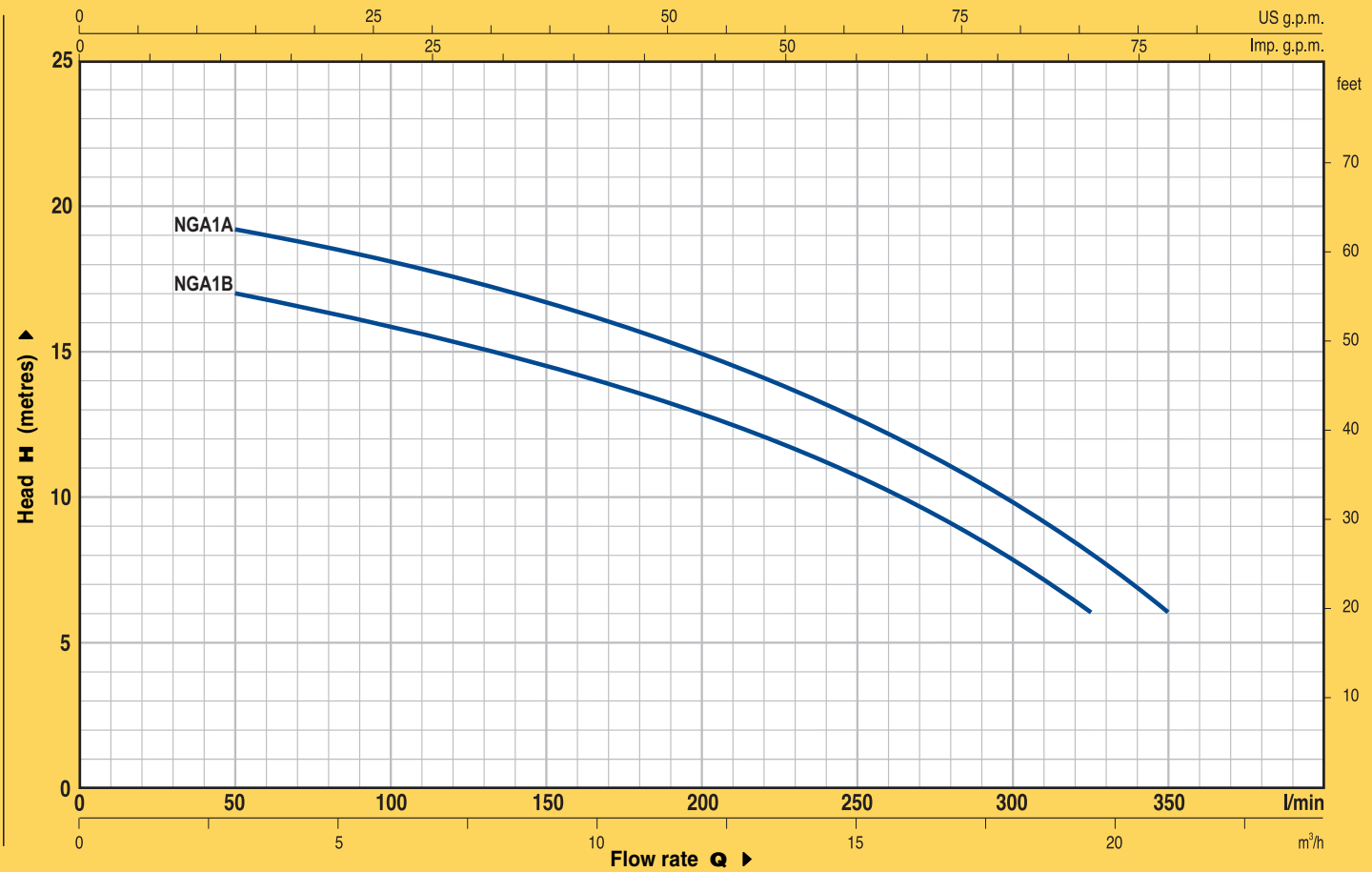
CONSTRUCTION CHARACTERISTICS

- **PUMP BODY:** cast iron, with threaded ports ISO 228/1.
- **BODY BACK-PLATE:** stainless steel AISI 304.
- **OPEN IMPELLER:** stainless steel AISI 316.
- **MOTOR SHAFT:** stainless steel EN 10088-3 - 1.4104.
- **MECHANICAL SEAL:** ceramic - graphite - NBR.
- **ELECTRIC MOTOR:** the pumps are close-coupled to a carefully matched PEDROLLO electric motor, quiet running, totally enclosed fan cooled (TEFC), suitable for continuous duty.
NGAm: single-phase 230V - 50 Hz with capacitor and thermal overload protector.
NGA: three-phase 230/400 V - 50 Hz.
- **INSULATION:** class F. ● **PROTECTION:** IP 44.

OPTIONS ON REQUEST

- ⇒ impeller in **technopolymer** (NGAm...X - NGA...X)
- ⇒ special mechanical seal
- ⇒ other voltages or frequency 60 Hz

CURVES AND PERFORMANCE DATA AT n= 2900 1/min

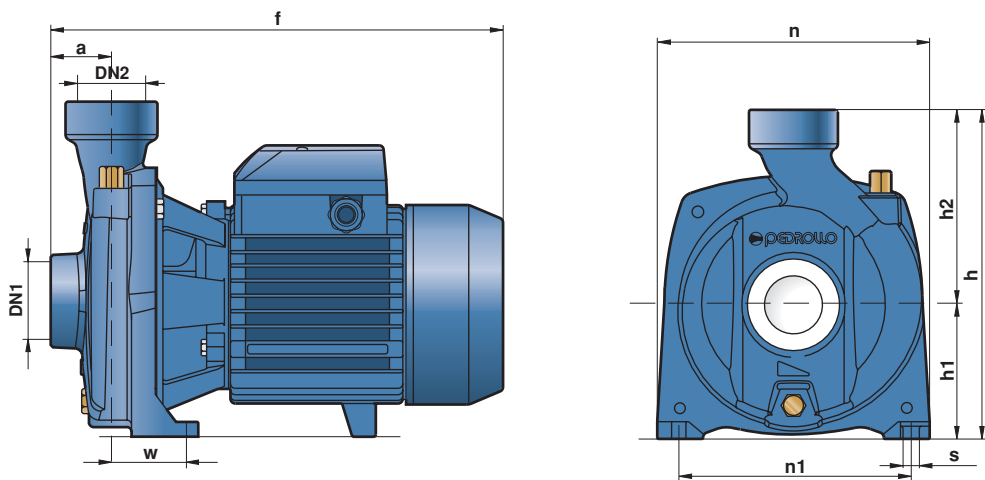


TYPE		POWER		Q	Flow rate									
Single-phase	Three-phase	kW	HP		m³/h	0	3	6	9	12	15	18	19.5	21
NGAm 1B	NGA 1B	0.55	0.75	l/min	0	50	100	150	200	250	300	325	350	
NGAm 1A	NGA 1A	0.75	1	H metres	18	17	16	14.5	13	10.5	8	6		
					20	19.5	18	16.5	15	12.5	10	8	6	

Q = Flow rate H = Total manometric head

Tolerance of the performance curves according to EN ISO 9906 App. A.

DIMENSIONS AND WEIGHTS



TYPE		PORTS		DIMENSIONS mm										kg	
Single-phase	Three-phase	DN1	DN2	a	f	h	h1	h2	n	n1	w	s	1~	3~	
NGAm 1B	NGA 1B	1 1/2"	1 1/2"	41	297	227	92	135	190	160	50	10	12.7	11.8	
NGAm 1A	NGA 1A												12.8	11.9	

Centrifugal pumps made of stainless steel AISI 316, equipped with an open impeller, ideal for transferring liquids containing impurities.



RANGE OF PERFORMANCE

Flow rate up to 350 l/min (21 m³/h)
Head up to 20 m

LIMITS OF USE

Manometric suction lift up to 7 m
Liquid temperature up to + 90°C
Environment temperature up to + 40°C
Passage of solid bodies Ø 10 mm

CONSTRUCTION AND SAFETY STANDARDS

EN 60034-1
IEC 34-1
CEI 2-3



INSTALLATION AND USE

They are recommended for pumping water and liquids that are chemically non aggressive to the materials from which the pump is made.

THE OPEN IMPELLER DESIGN ALLOWS THE PUMPING OF LIQUIDS WITH RELATIVELY HIGH LEVELS OF IMPURITIES WITHOUT RISK OF CLOGGING THE IMPELLER. FOR THIS REASON THE PRO-NGA SERIES ARE SUITABLE FOR USE IN SYSTEMS FOR WASHING FRUIT, VEGETABLES, FISH, SHELLFISH, MEAT, IN INDUSTRIAL SYSTEMS FOR WASHING METAL PARTS, GLASS CONTAINERS, AND FOR THE CIRCULATION OF COOLING LIQUIDS.

The pumps must be installed in enclosed places, or at least protected against inclement weather.

GUARANTEE 2 YEARS subject to our general terms of sale.

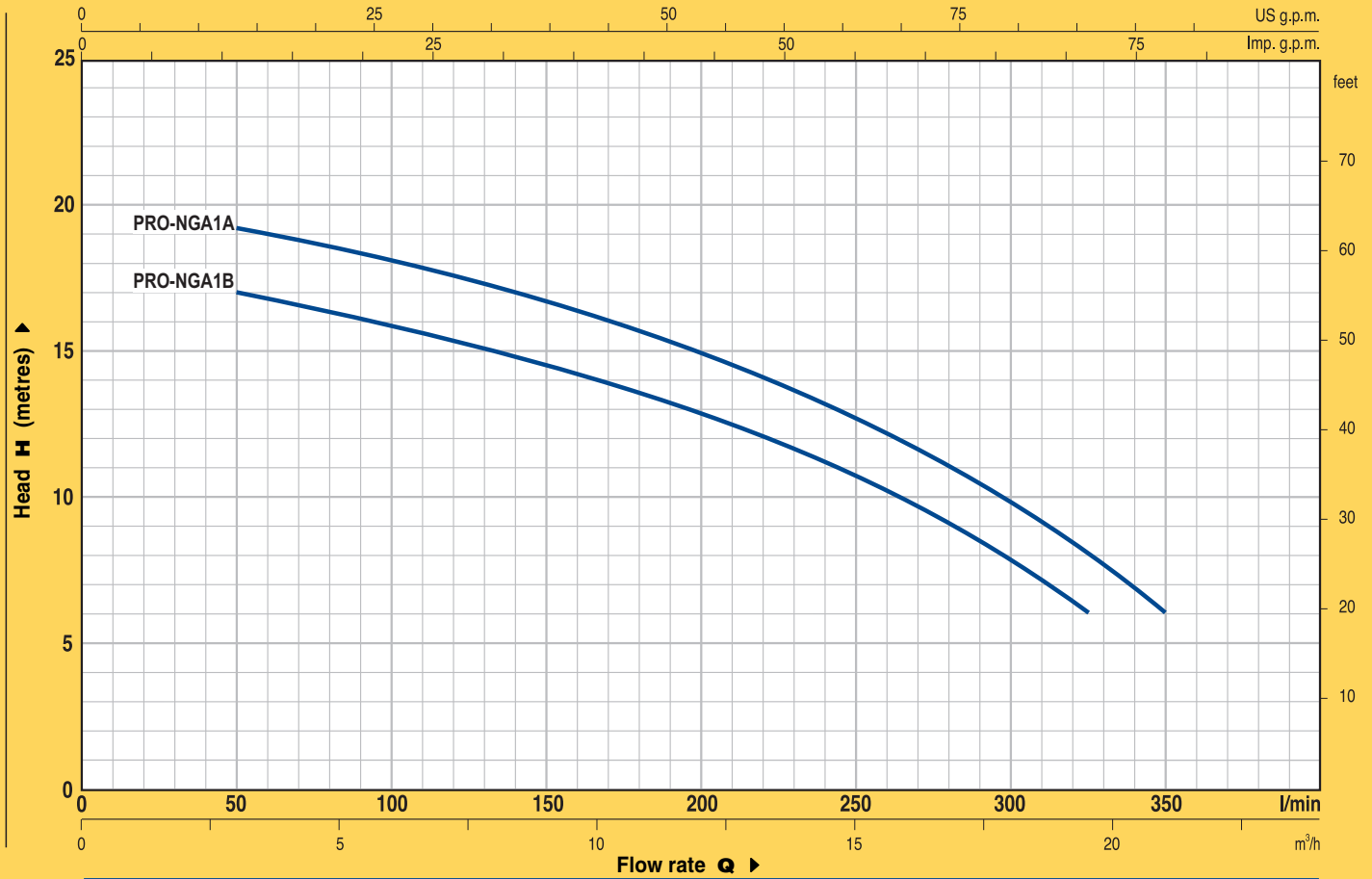
CONSTRUCTION CHARACTERISTICS

- **PUMP BODY:** stainless steel AISI 316, with threaded ports ISO 228/1.
- **BODY BACK-PLATE:** stainless steel AISI 316.
- **OPEN IMPELLER:** stainless steel AISI 316.
- **MOTOR SHAFT:** stainless steel AISI 316.
- **MECHANICAL SEAL:** ceramic - graphite - viton - AISI 316
- **ELECTRIC MOTOR:** the pumps are close-coupled to a carefully matched PEDROLLO electric motor, quiet running, totally enclosed fan cooled (TEFC), suitable for continuous duty.
PRO-NGAm: single-phase 230 V - 50 Hz with capacitor and thermal overload protector.
PRO-NGA: three-phase 230/400 V - 50 Hz.
- **INSULATION:** class F. ● **PROTECTION:** IP 44.

OPTIONS ON REQUEST

- ⇒ special mechanical seal
- ⇒ other voltages or frequency 60 Hz
- ⇒ protection IP 55

CURVES AND PERFORMANCE DATA AT n= 2900 1/min

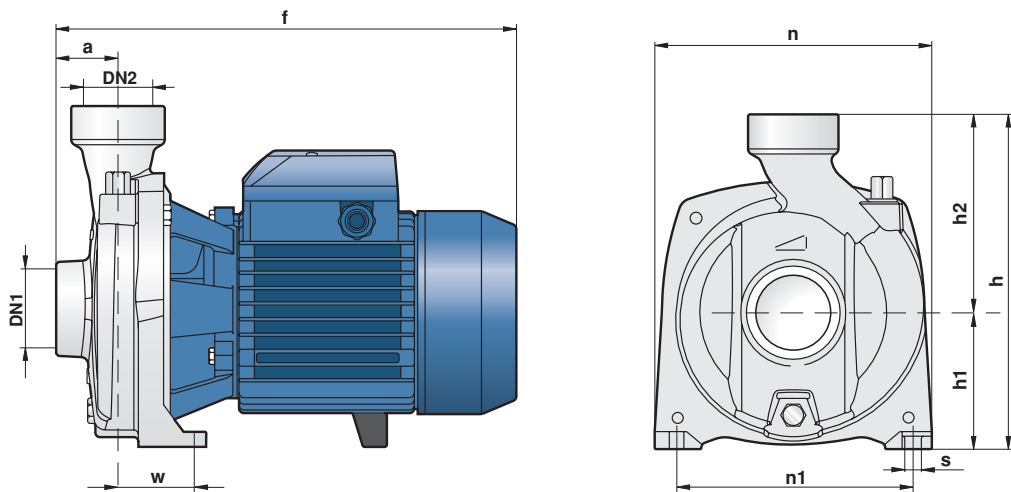


TYPE		POWER		Q	Flow rate									
Single-phase	Three-phase	kW	HP		m³/h	0	3	6	9	12	15	18	19.5	21
PRO-NGAm 1B	PRO-NGA 1B	0.55	0.75	l/min	0	50	100	150	200	250	300	325	350	
PRO-NGAm 1A	PRO-NGA 1A	0.75	1.00	H metres	18	17	16	14.5	13	10.5	8	6		
					20	19.5	18	16.5	15	12.5	10	8	6	

Q = Flow rate H = Total manometric head

Tolerance of the performance curves according to EN ISO 9906 App. A.

DIMENSIONS AND WEIGHTS



TYPE		PORTS		DIMENSIONS mm									kg	
Single-phase	Three-phase	DN1	DN2	a	f	h	h1	h2	n	n1	w	s	1~	3~
PRO-NGAm 1B	PRO-NGA 1B	1 1/2"	1 1/2"	41	297	227	92	135	190	160	50	10	13.0	12.0
PRO-NGAm 1A	PRO-NGA 1A	1 1/2"	1 1/2"										13.1	12.1

2CP

two stage centrifugal pumps

Two stage pumps recognised for their high efficiency, versatility and quiet running.



RANGE OF PERFORMANCE

Flow rate up to 400 l/min (24 m³/h)
Head up to 112 m

LIMITS OF USE

Manometric suction lift up to 7 m
Liquid temperature up to + 90°C
Liquid temperature up to + 40°C in the 2CPX version
(with technopolymer impeller)
Environment temperature up to + 40°C

CONSTRUCTION AND SAFETY STANDARDS

EN 60034-1
IEC 34-1
CEI 2-3



INSTALLATION AND USE

They are recommended for pumping clean water and liquids that are chemically non aggressive to the materials from which the pump is made. **THEIR HIGH EFFICIENCY AND ADAPTABILITY TO THE MOST VARIED, EVEN UNUSUAL APPLICATIONS, MAKE THEM THE IDEAL CHOICE IN THE DOMESTIC, CIVIL AND INDUSTRIAL FIELD; IN PARTICULAR FOR DISTRIBUTING WATER IN COMBINATION WITH PRESSURE SETS, FOR INCREASING PRESSURE IN THE MAINS, FOR FIRE-FIGHTING SETS.**

The pumps must be installed in enclosed places, or at least protected against inclement weather.

GUARANTEE 2 YEARS subject to our general terms of sale.

CONSTRUCTION CHARACTERISTICS

- **MOTOR SHAFT:** stainless steel EN 10088-3 - 1.4104.
- **MECHANICAL SEAL:** ceramic - graphite - NBR.
- **ELECTRIC MOTOR:** the pumps are close-coupled to a carefully matched PEDROLLO electric motor, **with high efficiency (class EFF1 for powers from 4 to 7.5 kW)**, quiet running, totally enclosed fan cooled (TEFC), suitable for continuous duty.
2CPm: single-phase 230 V - 50 Hz with capacitor and thermal overload protector (up to 1.5 kW).
2CP: three-phase 230/400 V - 50 Hz up to 4 kW.
400/690 V - 50 Hz from 5.5 to 7.5 kW.
- **INSULATION:** class F. ● **PROTECTION:** IP 44.

2CP 25/130N

- **PUMP BODY:** cast iron, with threaded ports ISO 228/1.
- **BODY BACK-PLATE:** stainless steel AISI 304.
- **IMPELLER:** stainless steel AISI 304 of the type with centrifugal radial flow.

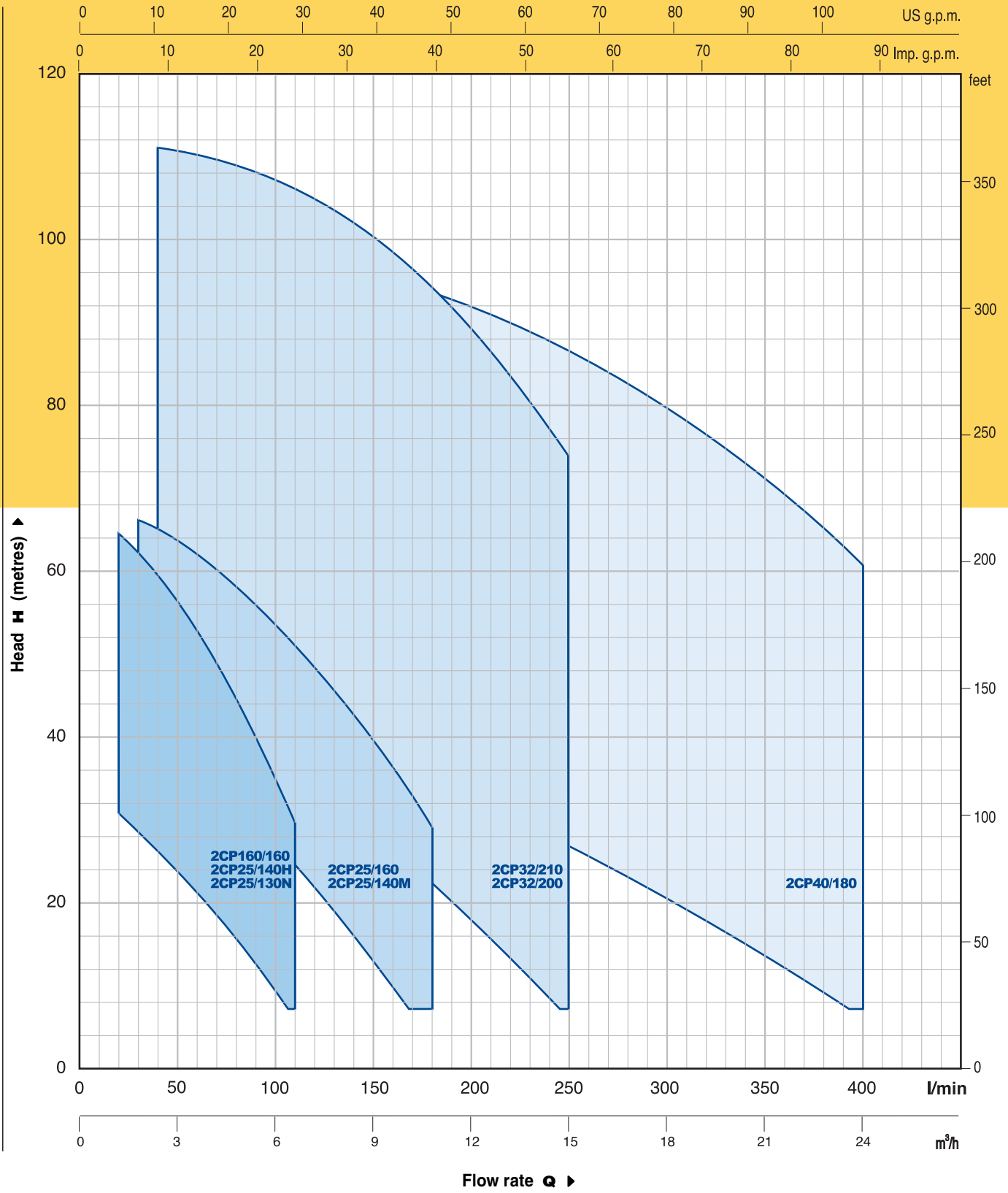
Other 2CP

- **PUMP BODY:** cast iron, with threaded ports ISO 228/1.
- **IMPELLERS:** brass, of the type with centrifugal radial flow.

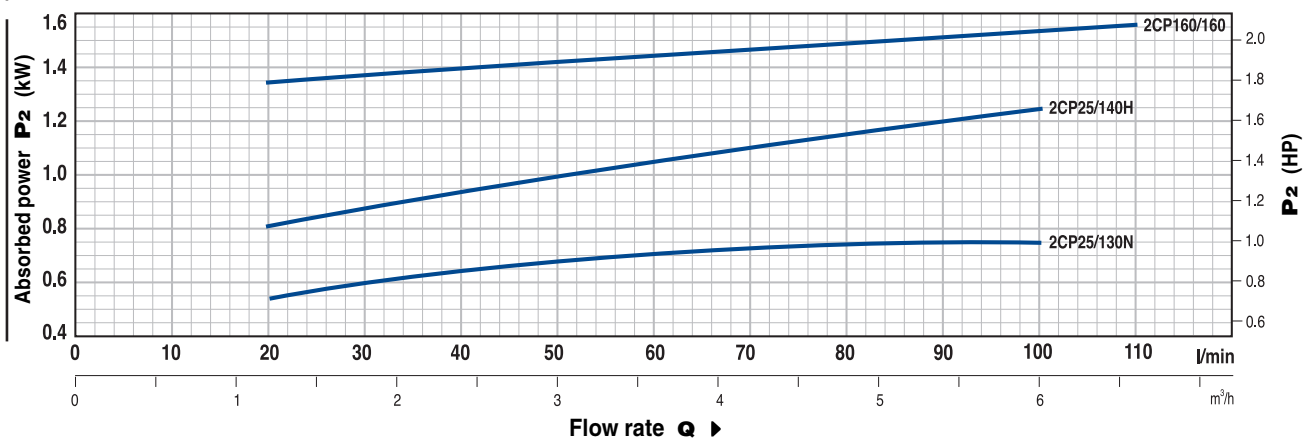
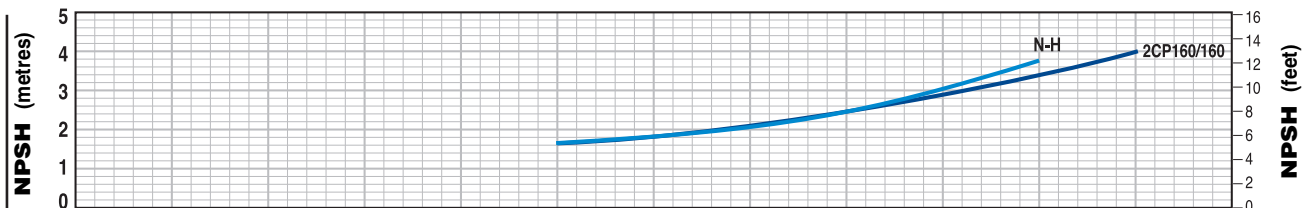
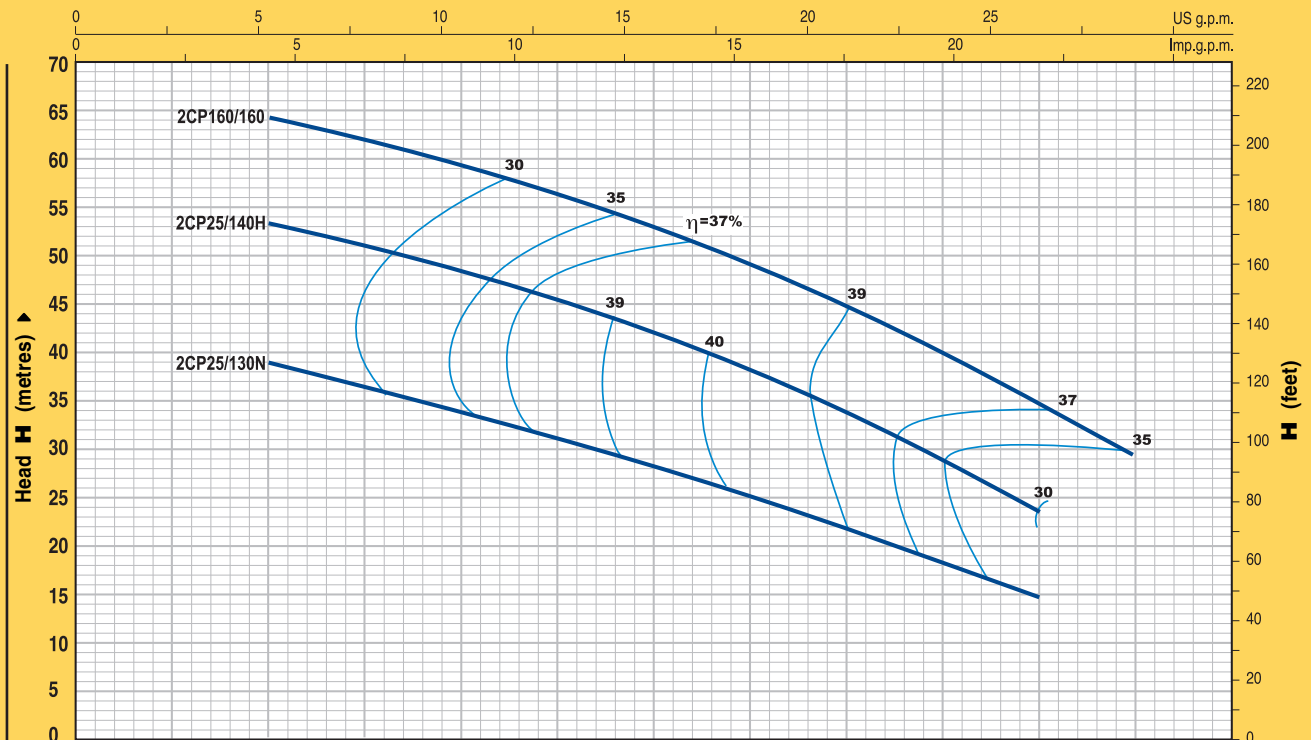
OPTIONS ON REQUEST

- ⇒ impeller in **technopolymer** (2CPm...X - 2CP...X)
- ⇒ special mechanical seal
- ⇒ other voltages or frequency 60 Hz

RANGE OF PERFORMANCE AT n= 2900 1/min



CURVES AND PERFORMANCE DATA AT n= 2900 1/min

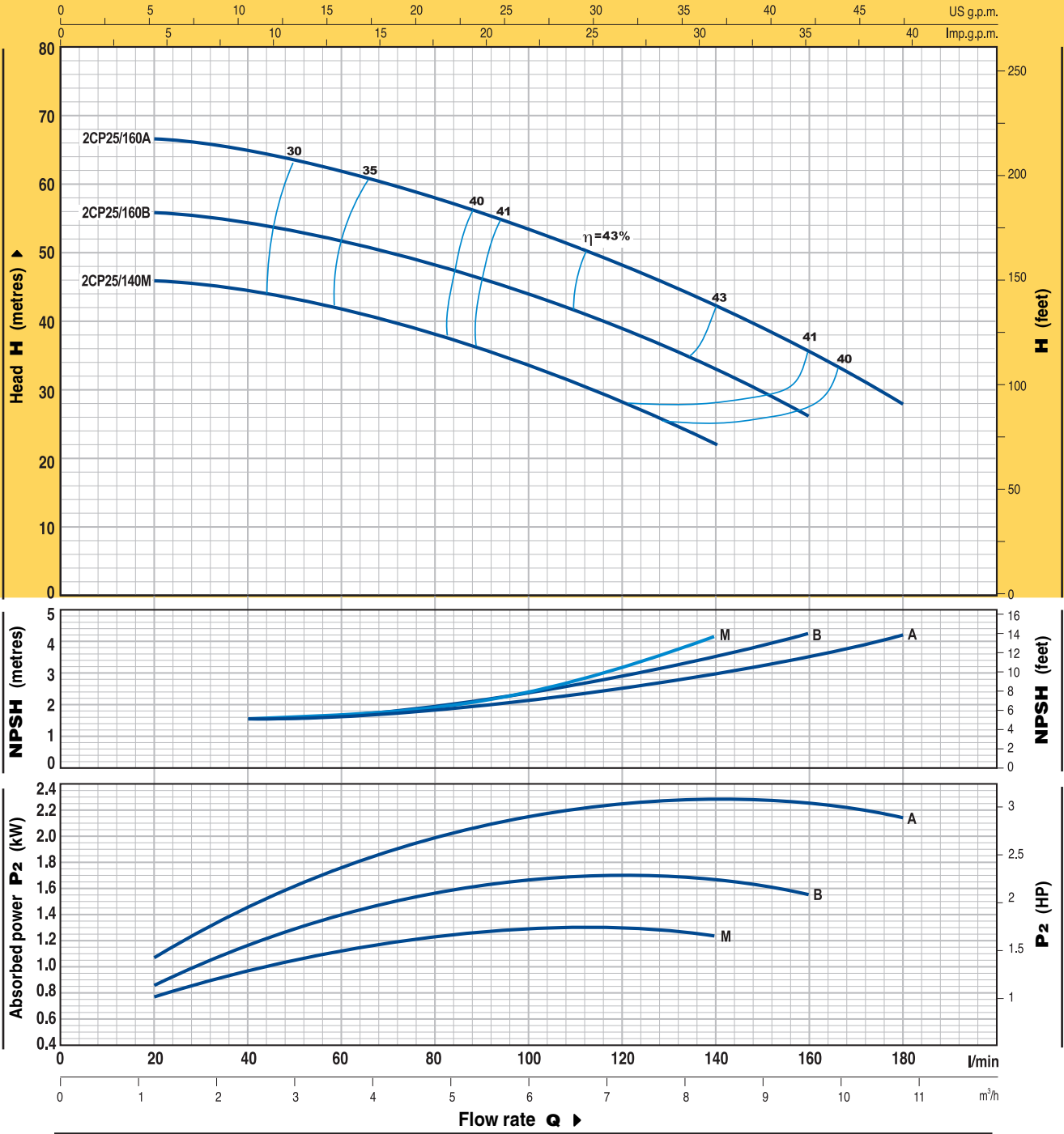


TYPE		POWER		Flow rate Q													
Single-phase	Three-phase	kW	HP	m³/h		0	1.2	1.8	2.4	3.0	3.6	4.2	4.8	5.4	6.0	6.6	
2CPm 25/130N	2CP 25/130N	0.75	1	l/min		0	20	30	40	50	60	70	80	90	100	110	
				H metres		42	39	37	34	31	28.5	25.5	22	18	15		
						54	53	51	49	46	42	38	34	29	24		
						66	64	62	60	57	53	49	44	39.5	35	30	

Q = Flow rate H = Total manometric head

Tolerance of the performance curves according to EN ISO 9906 App. A.

CURVES AND PERFORMANCE DATA AT n= 2900 1/min

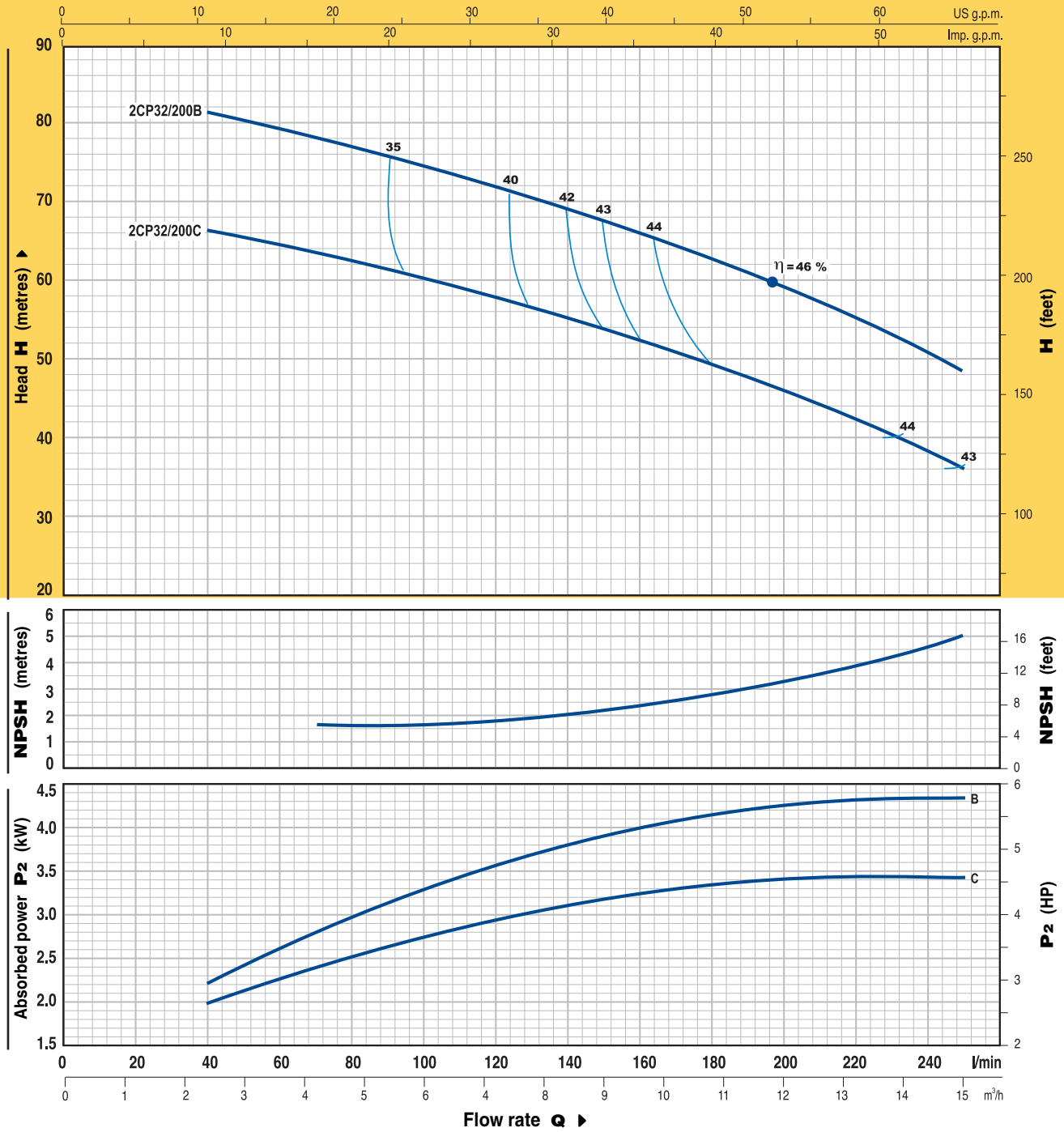


TYPE		POWER		Q	Flow rate															
Single-phase	Three-phase	kW	HP		0	1.2	1.8	2.4	3.0	3.6	4.2	4.8	5.4	6.0	6.6	7.5	8.4	9.6	10.8	
2CPm 25/140M	2CP 25/140M	1.1	1.5	l/min	0	20	30	40	50	60	70	80	90	100	110	125	140	160	180	
				H metres	47	46	45.5	44	43	42	41	38	36	34	31	27	22			
					58	56	55	54	53	52	50	48	46	44	41	37	33	26		
					68	66.5	65.5	65	63	62	60	58	56	54	51	47	42	35	28	

Q = Flow rate H = Total manometric head

Tolerance of the performance curves according to EN ISO 9906 App. A.

CURVES AND PERFORMANCE DATA AT n= 2900 1/min

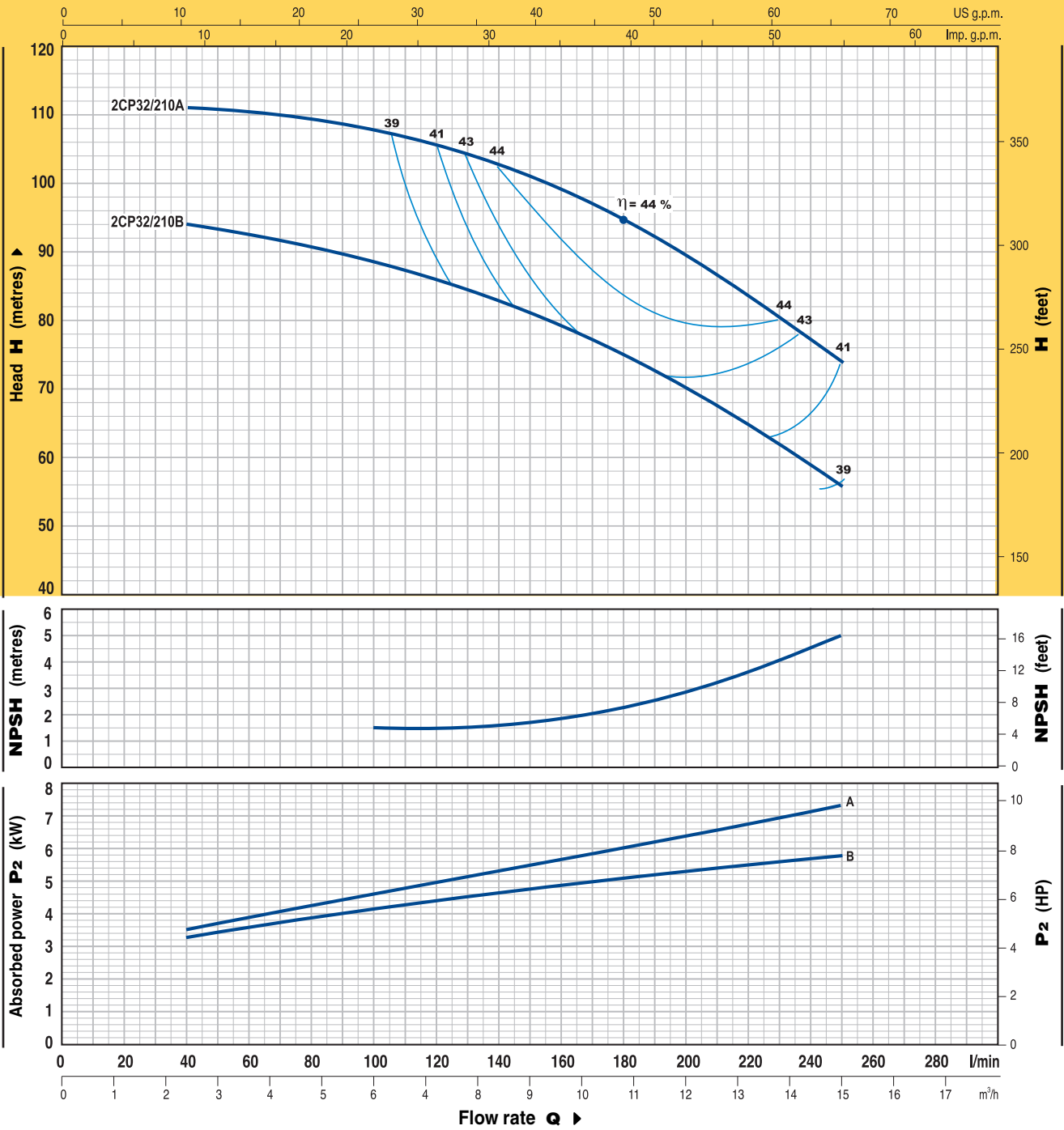


TYPE		POWER		Q	Flow rate														
Single-phase	Three-phase	kW	HP		m³/h	0	2.4	3.0	3.6	4.2	4.8	5.4	6.0	6.6	7.5	8.4	9.6	10.8	12.0
				l/min	0	40	50	60	70	80	90	100	110	125	140	160	180	200	250
	2CP 32/200C	3	4	H metres	70	66.5	65.5	65	64	63	62	60.5	59	57	55	52	49.5	46.5	36
	2CP 32/200B	4	5.5	H metres	85	81	80	79	78	77	76	75	74	72	69	66	62	58	49

Q = Flow rate H = Total manometric head

Tolerance of the performance curves according to EN ISO 9906 App. A.

CURVES AND PERFORMANCE DATA AT n= 2900 1/min

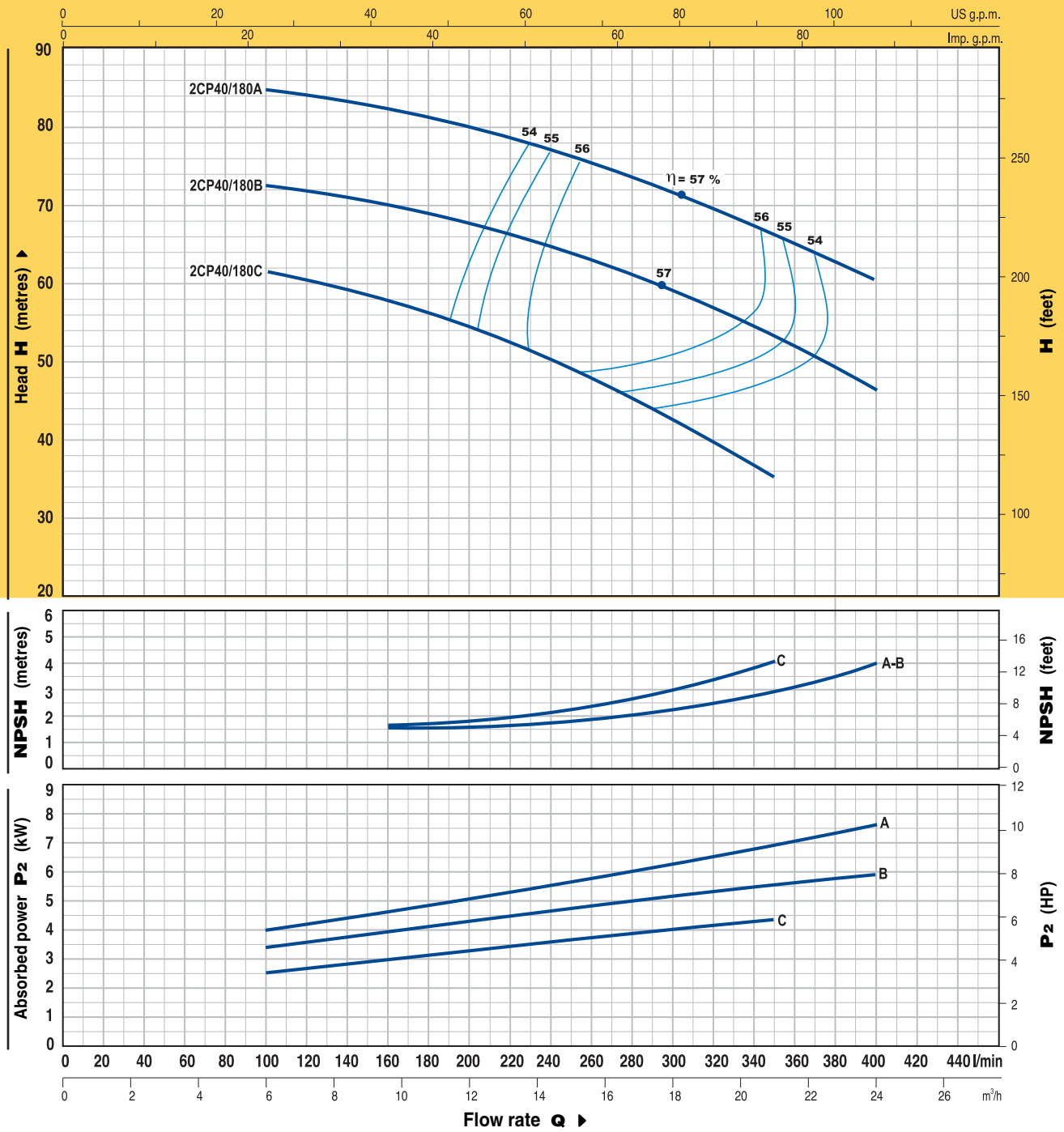


TYPE	POWER		Q	Flow rate															
	kW	HP		m ³ /h	0	2.4	3.0	3.6	4.2	4.8	5.4	6.0	6.6	7.5	8.4	9.6	10.8	12.0	15.0
Three-phase			l/min	0	40	50	60	70	80	90	100	110	125	140	160	180	200	250	
2CP 32/210B	5.5	7.5	H metres	94	94	93.5	93	92	91	90	89	87	85	83	79	75	70	56	
2CP 32/210A	7.5	10		112	111	110.8	110.5	110.3	110	109	108	107	105	102	99	94	89	74	

Q = Flow rate H = Total manometric head

Tolerance of the performance curves according to EN ISO 9906 App. A.

CURVES AND PERFORMANCE DATA AT n= 2900 1/min

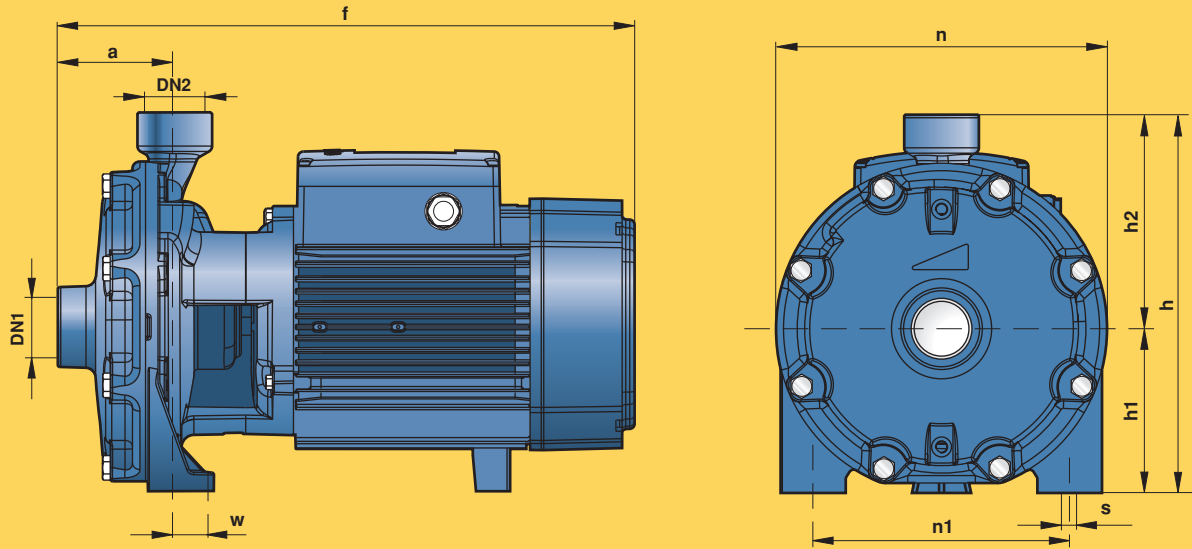


TYPE	POWER		Q	Flow rate												
	kW	HP		m³/h	0	6.0	6.6	7.5	8.4	9.6	10.8	12.0	15.0	18.0	21.0	24.0
Three-phase			l/min	0	100	110	125	140	160	180	200	250	300	350	400	
2CP 40/180C	4	5.5	H metres	64	62	61	60	59	58	56	54.5	49	43	35		
2CP 40/180B	5.5	7.5		76	73	72.5	72	71	70	69	67.5	64	59.5	54	46	
2CP 40/180A	7.5	10		88	85	84.5	84	83	82	81	79.5	76	72	67	60	

Q = Flow rate H = Total manometric head

Tolerance of the performance curves according to EN ISO 9906 App. A.

DIMENSIONS AND WEIGHTS



TYPE		PORTS		DIMENSIONS mm									kg			
Single-phase	Three-phase	DN1	DN2	a	f	h	h1	h2	n	n1	w	s	1~	3~		
2CPm 25/130N	2CP 25/130N	1 1/4"	1"	73	330	201	92	109	180	142	1	10	14.5	14.0		
2CPm 25/140H	2CP 25/140H			74	382	225	93	132	200	162	23		20.1	19.4		
2CPm 160/160	2CP 160/160			84	405	263	110	153	225	185	26	11	24.8	24.1		
2CPm 25/140M	2CP 25/140M			74	382	225	93	132	200	162	23	10	20.1	19.2		
2CPm 25/160B	2CP 25/160B	1 1/2"	1"	86	407	263	110	153	225	185	26	11	24.6	25.2		
—	2CP 25/160A			-	-	-	-	-	-	-	-	-	-	26.1		
2CPm 32/200C	2CP 32/200C	1 1/4"	1"	95	464	304	132	172	266	206	19	14	42.9	39.1		
—	2CP 32/200B			-	-	-	-	-	-	-	-		-	-	42.9	
—	2CP 32/210B			-	-	-	542	-	-	-	-		-	-	-	56.0
—	2CP 32/210A			-	-	-	496	334	139	195	292		232	21	-	61.7
—	2CP 40/180C	2"	1 1/2"	108	496	334	139	195	292	232	21	14	-	49.8		
—	2CP 40/180B				542								-	55.1		
—	2CP 40/180A				-								-	-	-	-

3-4CP

multi-stage centrifugal pumps

Particularly quiet running with high efficiency and low power consumption. Suitable for domestic applications.



RANGE OF PERFORMANCE

Flow rate up to 130 l/min (7.8 m³/h)
Head up to 50 m

LIMITS OF USE

Manometric suction lift up to 7 m
Liquid temperature up to + 40°C
Environment temperature up to + 40°C

CONSTRUCTION AND SAFETY STANDARDS

EN 60 335-1
IEC 335-1
CEI 61-150

EN 60034-1
IEC 34-1
CEI 2-3



INSTALLATION AND USE

They are recommended for pumping clean water and liquids that are chemically non aggressive to the materials from which the pump is made. **DUE TO THEIR RELIABILITY, QUIET RUNNING AND LOW MAINTENANCE, THEY ARE SUITABLE FOR DOMESTIC APPLICATIONS INCLUDING WATER SUPPLIES (AS A PRESSURE SET), GARDEN IRRIGATION, ETC.**

The pumps must be installed in enclosed places, or at least protected against inclement weather.

GUARANTEE 2 YEARS subject to our general terms of sale.

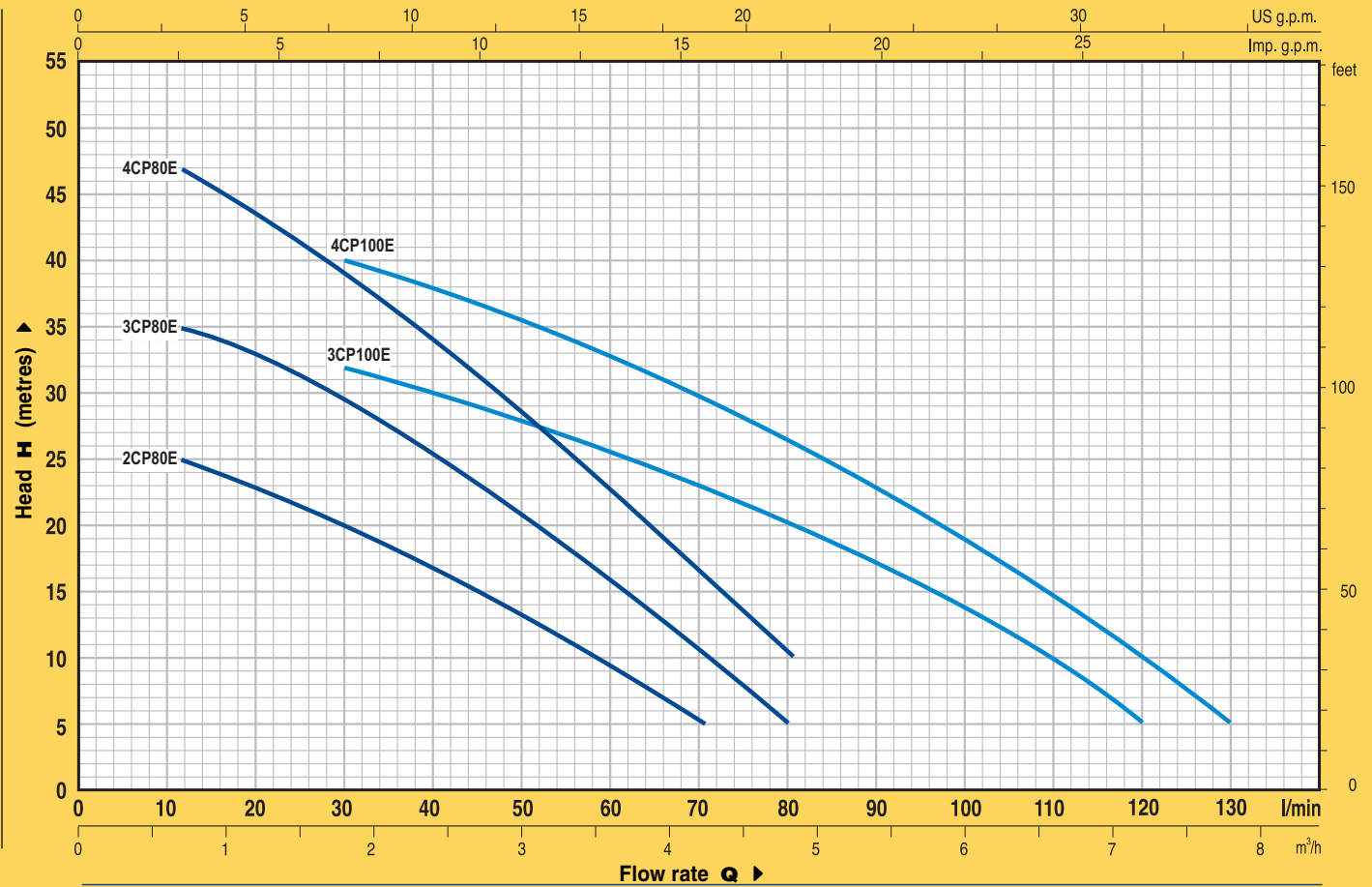
CONSTRUCTION CHARACTERISTICS

- **PUMP BODY:** cast iron, with threaded ports ISO 228/1.
- **BODY BACK-PLATE:** stainless steel AISI 304.
- **IMPELLERS:** of the type with centrifugal radial flow, made of technopolymer (approved for drinking water).
- **MOTOR SHAFT:** stainless steel EN 10088-3 - 1.4104
- **MECHANICAL SEAL:** ceramic - graphite - NBR.
- **ELECTRIC MOTOR:** the pumps are close-coupled to a carefully matched PEDROLLO electric motor, quiet running, totally enclosed fan cooled (TEFC), suitable for continuous duty..
2-3-4CPm: single-phase 230 V - 50 Hz with capacitor and thermal overload protector.
2-3-4CP: three-phase 230/400 V - 50 Hz.
- **INSULATION:** class F. ● **PROTECTION:** IP 44.
- **REGISTERED MODEL**

OPTIONS ON REQUEST

⇒ other voltages or frequency 60 Hz

CURVES AND PERFORMANCE DATA AT n= 2900 1/min

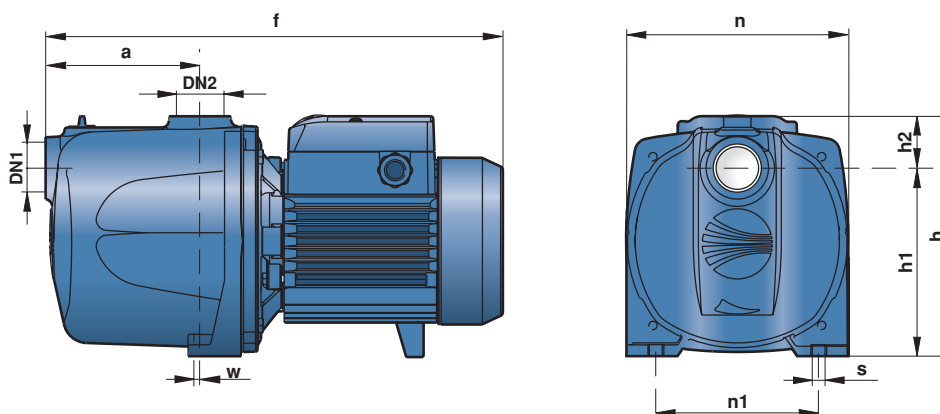


TYPE		POWER		Q	m³/h																
Single-phase	Three-phase	kW	HP		0	0.3	0.6	0.9	1.2	1.5	1.8	2.4	3.0	3.6	4.2	4.8	5.4	6.0	6.6	7.2	7.8
2CPm 80E	2CP 80E	0.37	0.50	0	5	10	15	20	25	30	40	50	60	70	80	90	100	110	120	130	
3CPm 80E	3CP 80E	0.45	0.60	27	26	25	24	22.5	21	20	16.5	13	9	5							
4CPm 80E	4CP 80E	0.60	0.85	38	36	35	34	33.5	31	29	25	20	15.5	10	5						
3CPm 100E	3CP 100E	0.60	0.85	50	48	47	45	43	40.5	38.5	33.5	28	22.5	16	10						
4CPm 100E	4CP 100E	0.75	1	36	35.5	35	34	33.5	32.5	32	30	28	26	23	20	17	13.5	10	5		
				46	45	44	43	42	41	40	38	35.5	33	30	26.5	22.5	19	15	10	5	

Q = Flow rate H = Total manometric head

Tolerance of the performance curves according to EN ISO 9906 App. A.

DIMENSIONS AND WEIGHTS



TYPE		PORTS		DIMENSIONS mm										kg	
Single-phase	Three-phase	DN1	DN2	a	f	h	h1	h2	n	n1	w	s	1~	3~	
2CPm 80E	2CP 80E	1"	1"	110	334	172	134	38	158	116	2	9	8.6	8.6	
3CPm 80E	3CP 80E			135	367/359								9.4	8.9	
4CPm 80E	4CP 80E			110	342/334								10.8	10.2	
3CPm 100E	3CP 100E			135	378	191	61	10.2	9.4						
4CPm 100E	4CP 100E							13.4	12.3						

3-4CR

multi-stage centrifugal pumps
stainless steel pump body

Particularly quiet running with high efficiency and low power consumption. Suitable for domestic applications.



RANGE OF PERFORMANCE

Flow rate up to 120 l/min (7.2 m³/h)
Head up to 50 m

LIMITS OF USE

Manometric suction lift up to 7 m
Liquid temperature up to + 40°C
Environment temperature up to + 40°C

CONSTRUCTION AND SAFETY STANDARDS

EN 60 335-1	EN 60034-1
IEC 335-1	IEC 34-1
CEI 61-150	CEI 2-3



INSTALLATION AND USE

They are recommended for pumping clean water and liquids that are chemically non aggressive to the materials from which the pump is made. **DUE TO THEIR RELIABILITY AND QUIET RUNNING, THEY ARE SUITABLE FOR DOMESTIC APPLICATIONS INCLUDING WATER SUPPLIES (AS A PRESSURE SET), GARDEN IRRIGATION, ETC.** The pumps must be installed in enclosed places, or at least protected against inclement weather.

GUARANTEE 2 YEARS subject to our general terms of sale.

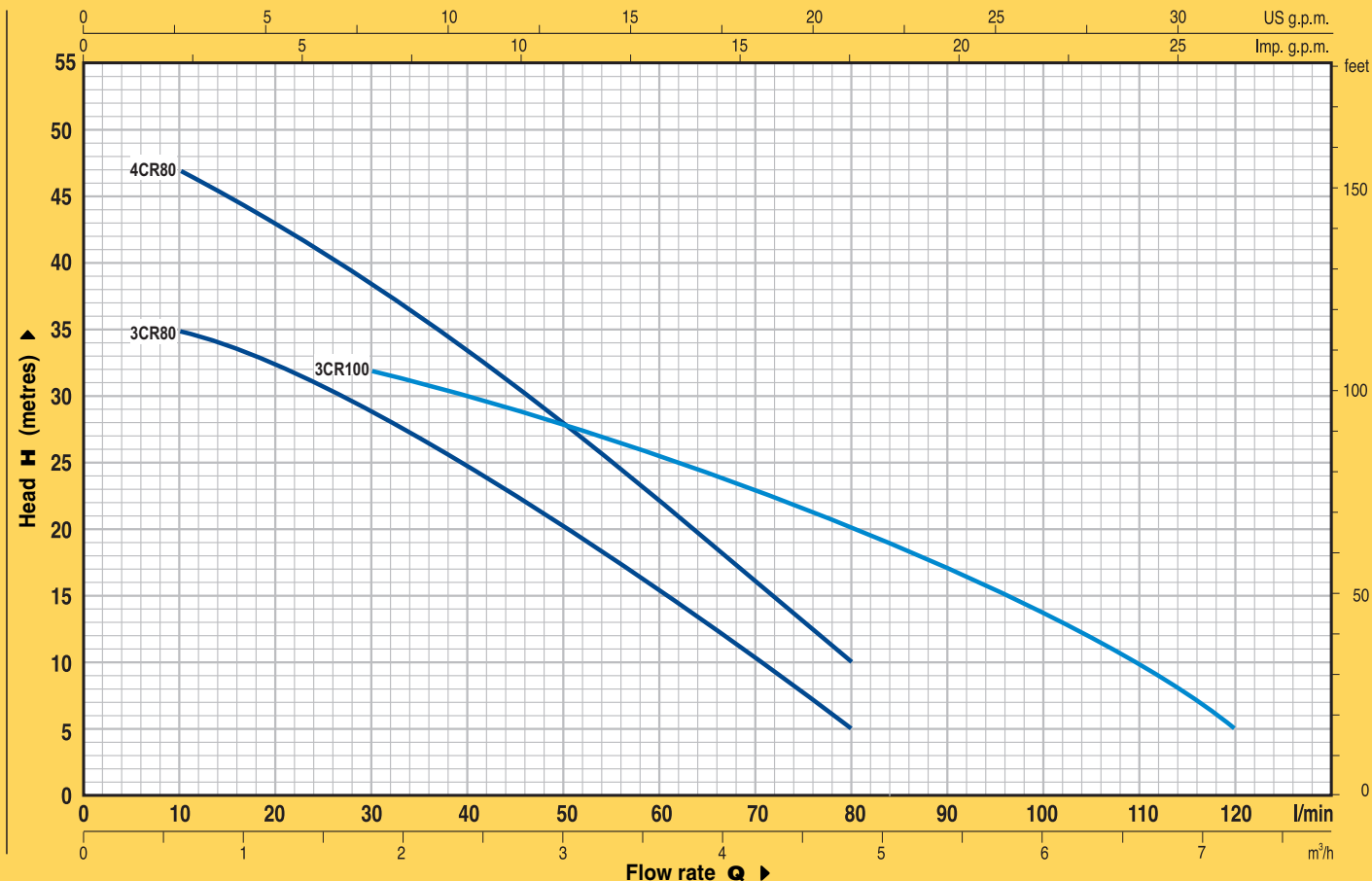
CONSTRUCTION CHARACTERISTICS

- **PUMP BODY:** stainless steel AISI 304, with threaded ports ISO 228/1.
- **BODY BACK-PLATE:** stainless steel AISI 304.
- **IMPELLERS:** of the type with centrifugal radial flow, made of technopolymer (approved for drinking water).
- **MOTOR SHAFT:** stainless steel EN 10088-3 - 1.4104.
- **MECHANICAL SEAL:** ceramic - graphite - NBR.
- **ELECTRIC MOTOR:** the pumps are close-coupled to a carefully matched PEDROLLO electric motor, quiet running, totally enclosed fan cooled (TEFC), suitable for continuous duty.
 - 3-4CRm: single-phase 230 V - 50 Hz with capacitor and thermal overload protector.
 - 3-4CR: three-phase 230/400 V - 50 Hz.
- **INSULATION:** class F. ● **PROTECTION:** IP 44.

OPTIONS ON REQUEST

- ⇒ special mechanical seal
- ⇒ other voltages or frequency 60 Hz

CURVES AND PERFORMANCE DATA AT n= 2900 1/min

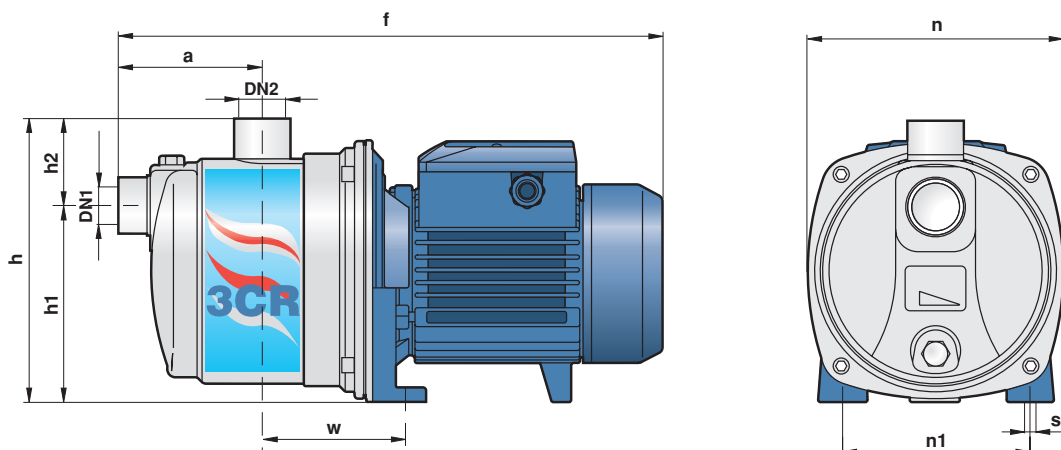


TYPE		POWER		Q	Flow rate																
Single-phase	Three-phase	kW	HP		m³/h	0	0.3	0.6	0.9	1.2	1.5	1.8	2.4	3.0	3.6	4.2	4.8	5.4	6.0	6.6	7.2
3CRm 80	3CR 80	0.45	0.60	l/min	0	5	10	15	20	25	30	40	50	60	70	80	90	100	110	120	
				H metres	38	36	35	34	32.5	31	29	25	20	15.5	10	5					
4CRm 80	4CR 80	0.60	0.85		50	48	47	45	43	40.5	38.5	33.5	28	22.5	16	10					
3CRm 100	3CR 100	0.60	0.85		36	35.5	35	34	33.5	32.5	32	30	28	25.5	23	20	17	13.5	10	5	

Q = Flow rate H = Total manometric head

Tolerance of the performance curves according to EN ISO 9906 App. A.

DIMENSIONS AND WEIGHTS



TYPE		PORTS		DIMENSIONS mm										kg	
Single-phase	Three-phase	DN1	DN2	a	f	h	h1	h2	n	n1	w	s	1~	3~	
3CRm 80	3CR 80	1"	1"	90	345	174	122	52	160	120	95	9	6.9	6.3	
4CRm 80	4CR 80				353/345								7.6	6.9	
3CRm 100	3CR 100				7.5								6.9		

JSW1 “JET” self-priming pumps



RANGE OF PERFORMANCE

Flow rate up to 50 l/min (3 m³/h)
Head up to 47 m

LIMITS OF USE

Manometric suction lift up to 9 m
Liquid temperature up to + 40°C
Environment temperature up to + 40°C

CONSTRUCTION AND SAFETY STANDARDS

EN 60 335-1
IEC 335-1
CEI 61-150

EN 60034-1
IEC 34-1
CEI 2-3



INSTALLATION AND USE

They are recommended for pumping clean water and liquids that are chemically non aggressive to the materials from which the pump is made. **JSW SELF-PRIMING PUMPS ARE DESIGNED FOR SUCTION LIFTS AND CAN BE POSITIONED ABOVE THE WATER SOURCE, INCLUDING APPLICATIONS WITH AIR ENTRAINED IN THE WATER. DUE TO THEIR RELIABILITY AND LOW MAINTENANCE, THEY ARE RECOMMENDED FOR DOMESTIC USE, INCLUDING WATER DISTRIBUTION (AS PART OF A PRESSURE SET), GARDEN IRRIGATION, ETC.**

The pumps must be installed in enclosed places, or at least protected against inclement weather.

GUARANTEE 2 YEARS subject to our general terms of sale.

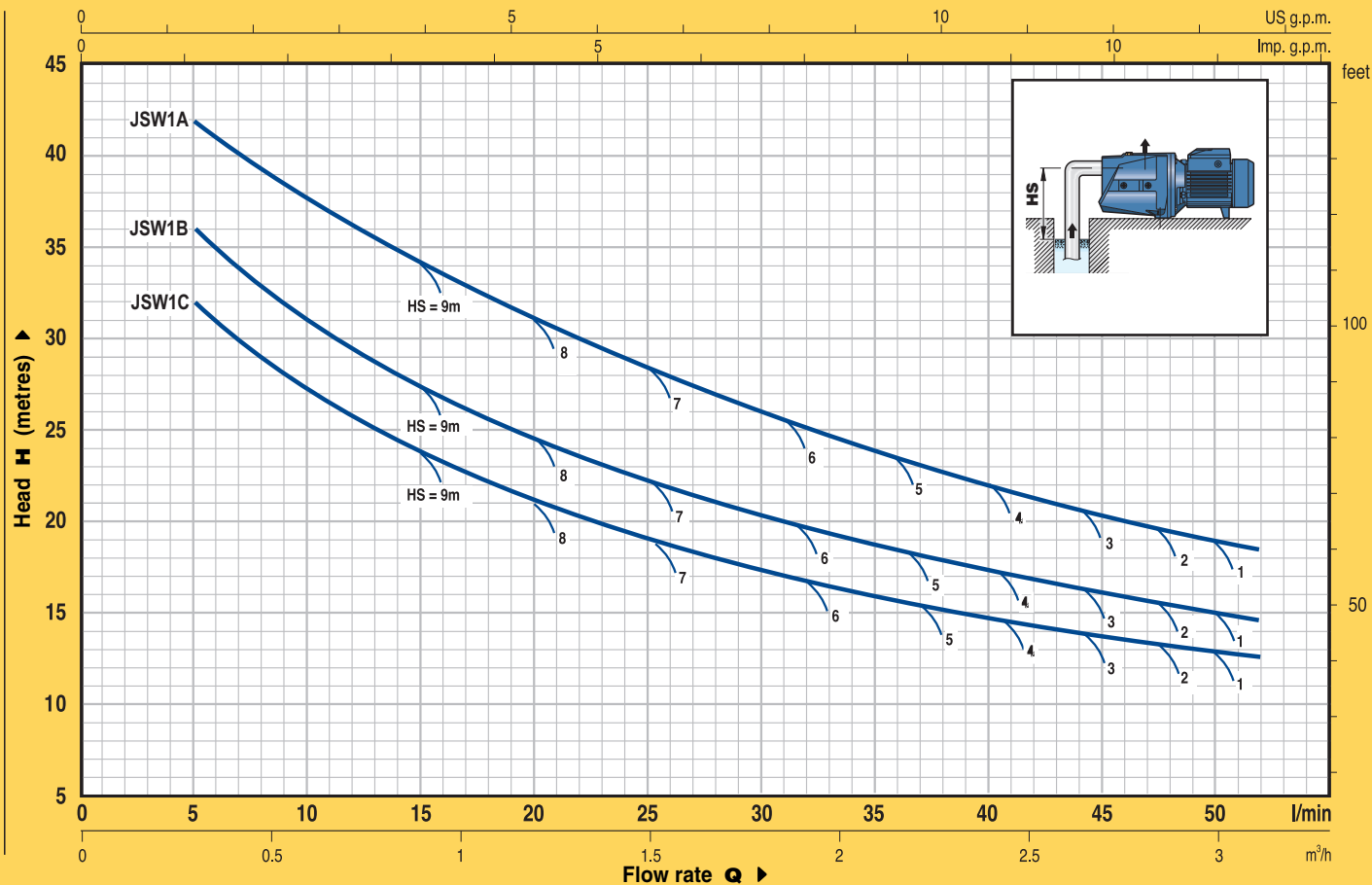
CONSTRUCTION CHARACTERISTICS

- **PUMP BODY:** cast iron, with threaded ports ISO 228/1.
- **BODY BACK-PLATE:** stainless steel AISI 304.
- **EJECTOR ASSEMBLY:** technopolymer (approved for drinking water).
- **IMPELLER:** brass.
- **MOTOR SHAFT:** stainless steel EN 10088-3 - 1.4104.
- **MECHANICAL SEAL:** ceramic - graphite -NBR.
- **ELECTRIC MOTOR:** the pumps are close-coupled to a carefully matched PEDROLLO electric motor, quiet running, totally enclosed fan cooled (TEFC), suitable for continuous duty..
JSWm: single-phase 230 V - 50 Hz with capacitor and thermal overload protector.
JSW: three-phase 230/400 V - 50 Hz.
- **INSULATION:** class F. ● **PROTECTION:** IP 44.
- **REGISTERED MODEL n° 72753.**

OPTIONS ON REQUEST

- ⇒ impeller in **technopolymer** (JSWm1...X - JSW1...X)
- ⇒ other voltages or frequency 60 Hz

CURVES AND PERFORMANCE DATA AT n= 2900 1/min

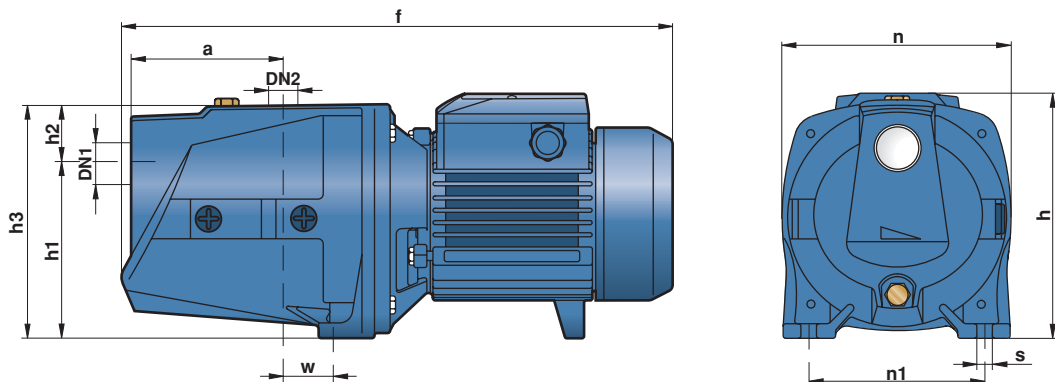


TYPE		POWER		Q	Flow rate												
Single-phase	Three-phase	kW	HP		m³/h	0	0.3	0.6	0.9	1.2	1.5	1.8	2.1	2.4	2.7	3.0	
JSWm 1C	JSW 1C	0.37	0.50	l/min	0	5	10	15	20	25	30	35	40	45	50		
				H metres	35	32	27	24	21	19	17	16	15	14	13		
					41	36	31	27	24	22	20	19	17	16	15		
					47	42	38	34	31	28.5	26	24	22	21.5	19		

Q = Flow rate H = Total manometric head

Tolerance of the performance curves according to EN ISO 9906 App. A.

DIMENSIONS AND WEIGHTS



TYPE		PORTS		DIMENSIONS mm										kg	
Single-phase	Three-phase	DN1	DN2	a	f	h	h1	h2	h3	n	n1	w	s	1~	3~
JSWm 1C	JSW 1C	1"	1"	115	379	171	127	33.5	160.5	160	124	24	10	9.3	9.1
JSWm 1B	JSW 1B				387/379									10.0	9.5
JSWm 1A	JSW 1A				10.2									10.1	

JSW2 “JET” self-priming pumps



RANGE OF PERFORMANCE

Flow rate up to 80 l/min (4.8 m³/h)
Head up to 70 m

LIMITS OF USE

Manometric suction lift up to 9 m
Liquid temperature up to + 40°C
Environment temperature up to + 40°C

CONSTRUCTION AND SAFETY STANDARDS

EN 60 335-1	EN 60034-1
IEC 335-1	IEC 34-1
CEI 61-150	CEI 2-3



INSTALLATION AND USE

They are recommended for pumping clean water and liquids that are chemically non aggressive to the materials from which the pump is made.

JSW SELF-PRIMING PUMPS ARE DESIGNED FOR SUCTION LIFTS AND CAN BE POSITIONED ABOVE THE WATER SOURCE, INCLUDING APPLICATIONS WITH AIR ENTRAINED IN THE WATER. DUE TO THEIR RELIABILITY AND LOW MAINTENANCE, THEY ARE RECOMMENDED FOR DOMESTIC USE, INCLUDING WATER DISTRIBUTION (AS PART OF A PRESSURE SET), GARDEN IRRIGATION, ETC.

The pumps must be installed in enclosed places, or at least protected against inclement weather.

GUARANTEE 2 YEARS subject to our general terms of sale.

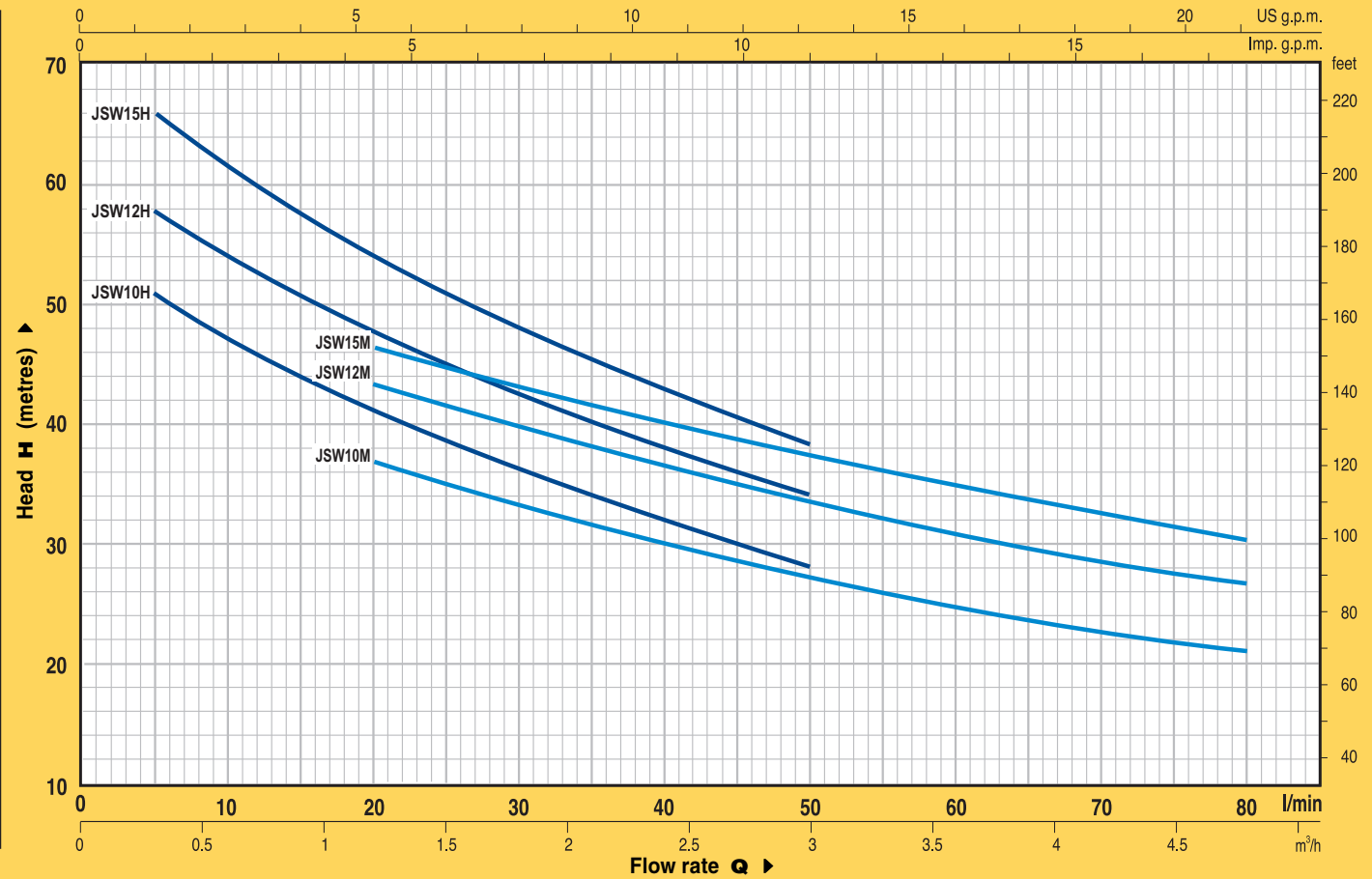
CONSTRUCTION CHARACTERISTICS

- **PUMP BODY:** cast iron, with threaded ports ISO 228/1.
- **BODY BACK-PLATE:** stainless steel AISI 304.
- **EJECTOR ASSEMBLY:** technopolymer (approved for drinking water).
- **IMPELLER:** brass.
- **MOTOR SHAFT:** stainless steel EN 10088-3 - 1.4104.
- **MECHANICAL SEAL:** ceramic - graphite -NBR.
- **ELECTRIC MOTOR:** the pumps are close-coupled to a carefully matched PEDROLLO electric motor, quiet running, totally enclosed fan cooled (TEFC), suitable for continuous duty.
JSWm: single-phase 230 V - 50 Hz with capacitor and thermal overload protector.
JSW: three-phase 230/400 V - 50 Hz.
- **INSULATION:** class F. ● **PROTECTION:** IP 44.
- **REGISTERED MODEL n° 72753.**

OPTIONS ON REQUEST

- ⇒ impeller in **technopolymer** (JSWm...X - JSW...X)
- ⇒ other voltages or frequency 60 Hz

CURVES AND PERFORMANCE DATA AT n= 2900 1/min

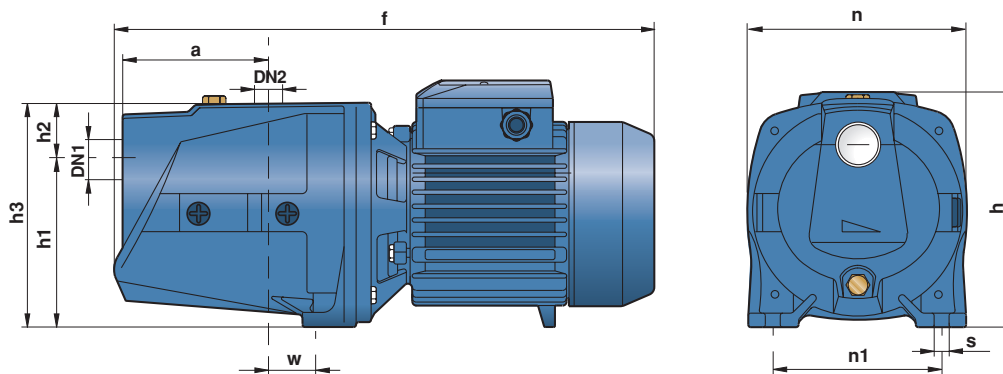


TYPE		POWER		Q	Flow rate														
Single-phase	Three-phase	kW	HP		m³/h	0	0.3	0.6	0.9	1.2	1.5	1.8	2.4	2.7	3.0	3.6	4.2	4.8	
JSWm 10H	JSW 10H	0.75	1	l/min	0	5	10	15	20	25	30	40	45	50	60	70	80		
JSWm 12H	JSW 12H	0.90	1.25	H metres	56	51	47	44	41	39	36	32	30	28					
JSWm 15H	JSW 15H	1.1	1.5		64	58	54	51	48	45	43	38	36	34					
JSWm 10M	JSW 10M	0.75	1		70	66	62	58	54	51	48	43	41	38					
JSWm 12M	JSW 12M	0.90	1.25		46	42	40	38	37	35	33	30	29	27	25	23	21		
JSWm 15M	JSW 15M	1.1	1.5		50	48	46	44	42	41	39	36	35	33	31	29	27		
					55	52	50	48	46	45	43	40	39	37	35	33	30		

Q = Flow rate H = Total manometric head

Tolerance of the performance curves according to EN ISO 9906 App. A.

DIMENSIONS AND WEIGHTS



TYPE		PORTS		DIMENSIONS mm										kg	
Single-phase	Three-phase	DN1	DN2	a	f	h	h1	h2	h3	n	n1	w	s	1~	3~
JSWm 10H	JSW 10H	1"	1"	113.5	402	201	147	35	182	180	142	22	10	13.7	13.8
JSWm 12H	JSW 12H													15.0	14.0
JSWm 15H	JSW 15H													15.2	14.2
JSWm 10M	JSW 10M													13.7	13.8
JSWm 12M	JSW 12M													15.0	14.0
JSWm 15M	JSW 15M													15.2	14.2

JSW3 “JET” self-priming pumps



RANGE OF PERFORMANCE

Flow rate up to 160 l/min (9.6 m³/h)
Head up to 96 m

LIMITS OF USE

Manometric suction lift up to 9 m
Liquid temperature up to + 40°C
Environment temperature up to + 40°C

CONSTRUCTION AND SAFETY STANDARDS

EN 60 335-1
IEC 335-1
CEI 61-150

EN 60034-1
IEC 34-1
CEI 2-3



INSTALLATION AND USE

They are recommended for pumping clean water and liquids that are chemically non aggressive to the materials from which the pump is made. **JSW SELF-PRIMING PUMPS ARE DESIGNED FOR SUCTION LIFTS AND CAN BE POSITIONED ABOVE THE WATER SOURCE, INCLUDING APPLICATIONS WITH AIR ENTRAINED IN THE WATER. DUE TO THEIR RELIABILITY AND LOW MAINTENANCE, THEY ARE RECOMMENDED FOR DOMESTIC USE, INCLUDING WATER DISTRIBUTION (AS PART OF A PRESSURE SET), GARDEN IRRIGATION, ETC.**

The pumps must be installed in enclosed places, or at least protected against inclement weather.

GUARANTEE 2 YEARS subject to our general terms of sale.

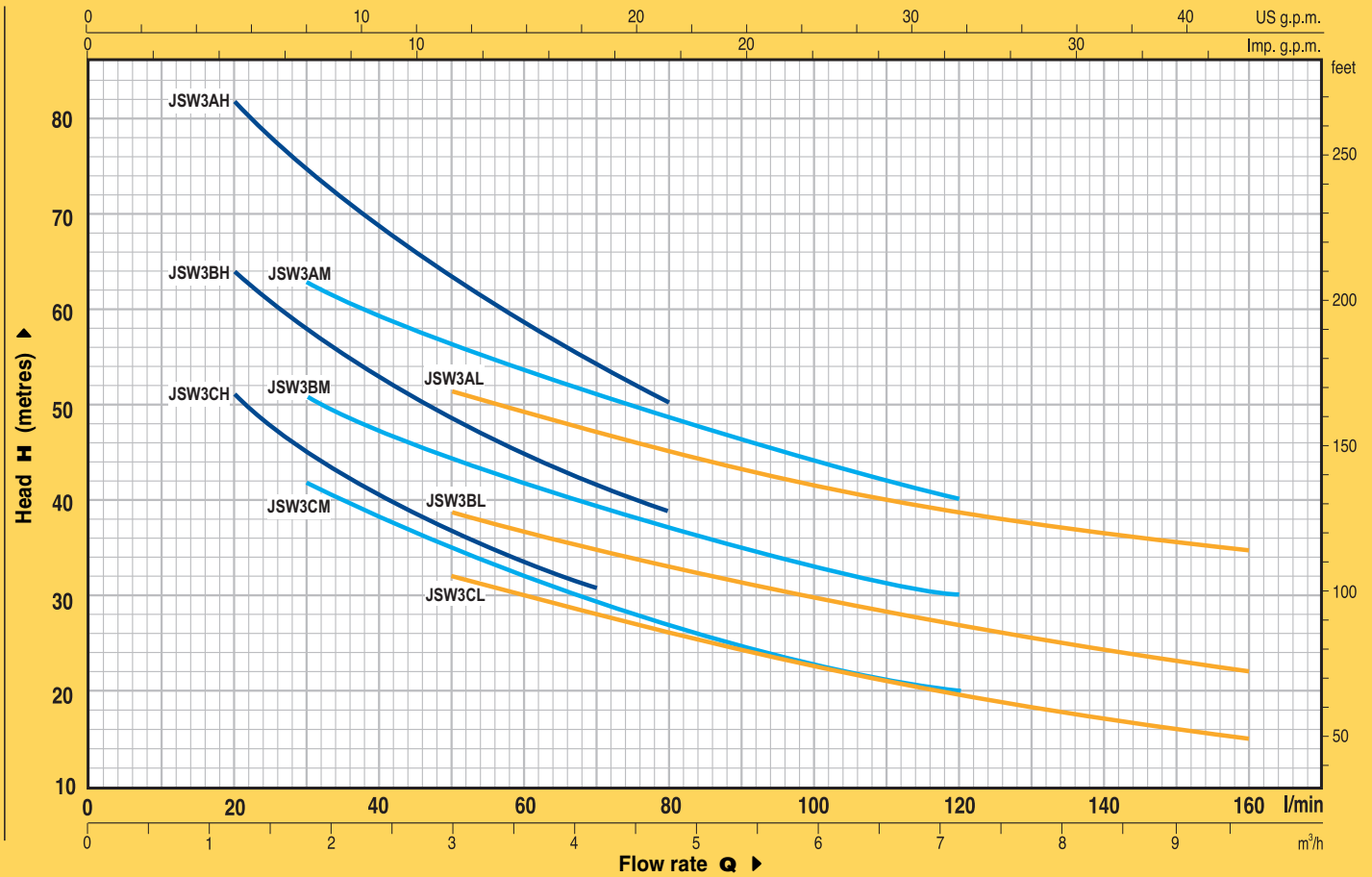
CONSTRUCTION CHARACTERISTICS

- **PUMP BODY:** cast iron, with threaded ports ISO 228/1.
- **BODY BACK-PLATE:** cast iron.
- **EJECTOR ASSEMBLY:** technopolymer (approved for drinking water).
- **IMPELLER:** brass.
- **MOTOR SHAFT:** stainless steel EN 10088-3 - 1.4104.
- **MECHANICAL SEAL:** ceramic - graphite - NBR.
- **ELECTRIC MOTOR:** the pumps are close-coupled to a carefully matched PEDROLLO electric motor, quiet running, totally enclosed fan cooled (TEFC), suitable for continuous duty.
JSWm: single-phase 230 V - 50 Hz with capacitor and thermal overload protector.
JSW: three-phase 230/400 V - 50 Hz.
- **INSULATION:** class F. ● **PROTECTION:** IP 44.
- **REGISTERED MODEL n° 72753.**

OPTIONS ON REQUEST

- ⇒ special mechanical seal
- ⇒ other voltages or frequency 60 Hz

CURVES AND PERFORMANCE DATA AT n= 2900 1/min

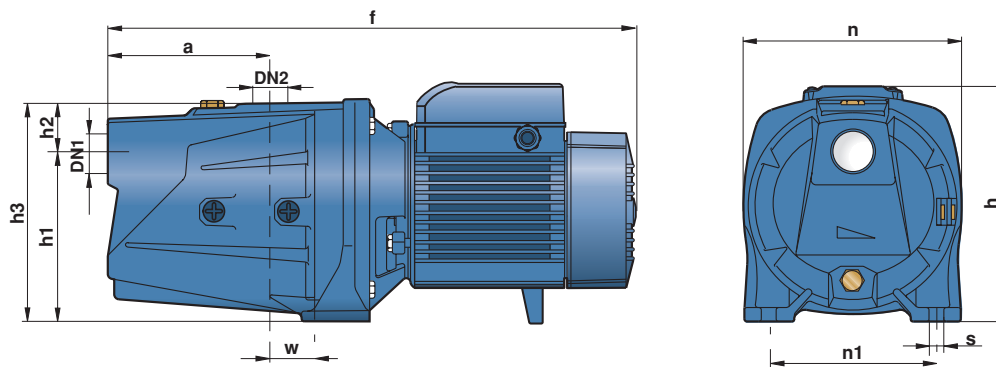


TYPE		POWER		Q	Flow rate																	
Single-phase	Three-phase	kW	HP		m³/h	0	0.6	0.9	1.2	1.5	1.8	2.1	2.4	2.7	3.0	3.6	4.2	4.8	6.0	7.2	8.4	9.6
				l/min	0	10	15	20	25	30	35	40	45	50	60	70	80	100	120	140	160	
JSWm 3CH	JSW 3CH	1.1	1.5	H metres	64	60	55	51	48	45	42.5	40	39	37	34	31						
JSWm 3BH	JSW 3BH	1.5	2		76	70	67	64	61	58	55.5	53	51	49	45	41	39					
---	JSW 3AH	2.2	3		96	90	86	82	79	75	71.5	69	66	64	58	54	50					
JSWm 3CM	JSW 3CM	1.1	1.5		52	50	48	45	44	42	40	38	37	35	32	29	27	23	20			
JSWm 3BM	JSW 3BM	1.5	2		60	58	56	54	52	51	49	47	46	45	42	39	37	33	30			
---	JSW 3AM	2.2	3		74	70	68	67	65	63	61	59	58	56	54	51	49	44	40			
JSWm 3CL	JSW 3CL	1.1	1.5		42	40	39	38	37	36	35	34	33	32	30	28	26	23	20	17	15	
JSWm 3BL	JSW 3BL	1.5	2		51	48	46	45	44	43	42	41	40	39	37	35	33	30	27	24	22	
---	JSW 3AL	2.2	3		62	60	58	57	56	55	54	53	52	51	49	47	45	42	39	36.5	35	

Q = Flow rate H = Total manometric head

Tolerance of the performance curves according to EN ISO 9906 App. A.

DIMENSIONS AND WEIGHTS



TYPE		PORTS		DIMENSIONS mm										kg	
Single-phase	Three-phase	DN1	DN2	a	f	h	h1	h2	h3	n	n1	w	s	1~	3~
JSWm 3CH	JSW 3CH	1 1/4"	1"	155	523	242	165	43	208	206	164	30	11	25.4	23.5
JSWm 3BH	JSW 3BH													26.5	25.7
---	JSW 3AH													-	26.8
JSWm 3CM	JSW 3CM													25.4	23.5
JSWm 3BM	JSW 3BM													26.5	25.7
---	JSW 3AM													-	26.8
JSWm 3CL	JSW 3CL													25.4	23.5
JSWm 3BL	JSW 3BL													26.5	25.7
---	JSW 3AL													-	26.8



RANGE OF PERFORMANCE

Flow rate up to 3600 l/h

LIMITS OF USE

Manometric suction lift up to 45 m

Liquid temperature up to + 40°C

Environment temperature up to + 40°C

CONSTRUCTION AND SAFETY STANDARDS

EN 60 335-1

EN 60034-1

IEC 335-1

IEC 34-1

CEI 61-150

CEI 2-3



INSTALLATION AND USE

JDW SELF-PRIMING PUMPS ARE DESIGNED FOR LIFTING WATER FROM DEPTHS GREATER THAN 9M, INCLUDING CASES WITH ENTRAINED AIR. THEY ARE RECOMMENDED FOR DOMESTIC USE INCLUDING WATER DISTRIBUTION (AS PART OF A PRESSURE SET), GARDEN IRRIGATION, ETC.

The pumps must be installed in enclosed places, or at least protected against inclement weather.

GUARANTEE 2 YEARS subject to our general terms of sale.

CONSTRUCTION CHARACTERISTICS

- **PUMP BODY:** cast iron, with threaded ports ISO 228/1.
- **EJECTOR BODY:** cast iron
- **NOZZLE, VENTURI AND DIFFUSER:** technopolymer.
- **IMPELLER:** brass.
- **MOTOR SHAFT:** stainless steel EN 10088-3 - 1.4104.
- **MECHANICAL SEAL:** ceramic - graphite - NBR.
- **ELECTRIC MOTOR:** the pumps are close-coupled to a carefully matched PEDROLLO electric motor, quiet running, totally enclosed fan cooled (TEFC), suitable for continuous duty..
JDWm: single-phase 230 V - 50 Hz with capacitor and thermal overload protector.
JDW: three-phase 230/400 V - 50 Hz.
- **INSULATION:** class F. ● **PROTECTION:** IP 44.

OPTIONS ON REQUEST

- ⇒ impeller in **technopolymer** (JDWm...X - JDW...X)
- ⇒ other voltages or frequency 60 Hz

DESCRIPTION

JDW m 1C / 30 - 4"

Series _____

Single-phase motor _____

Motor size _____

Type of nozzle and venturi _____

Min. well diameter in inches _____

3"

JDW self-priming pumps for 3" wells (with immersed ejector)



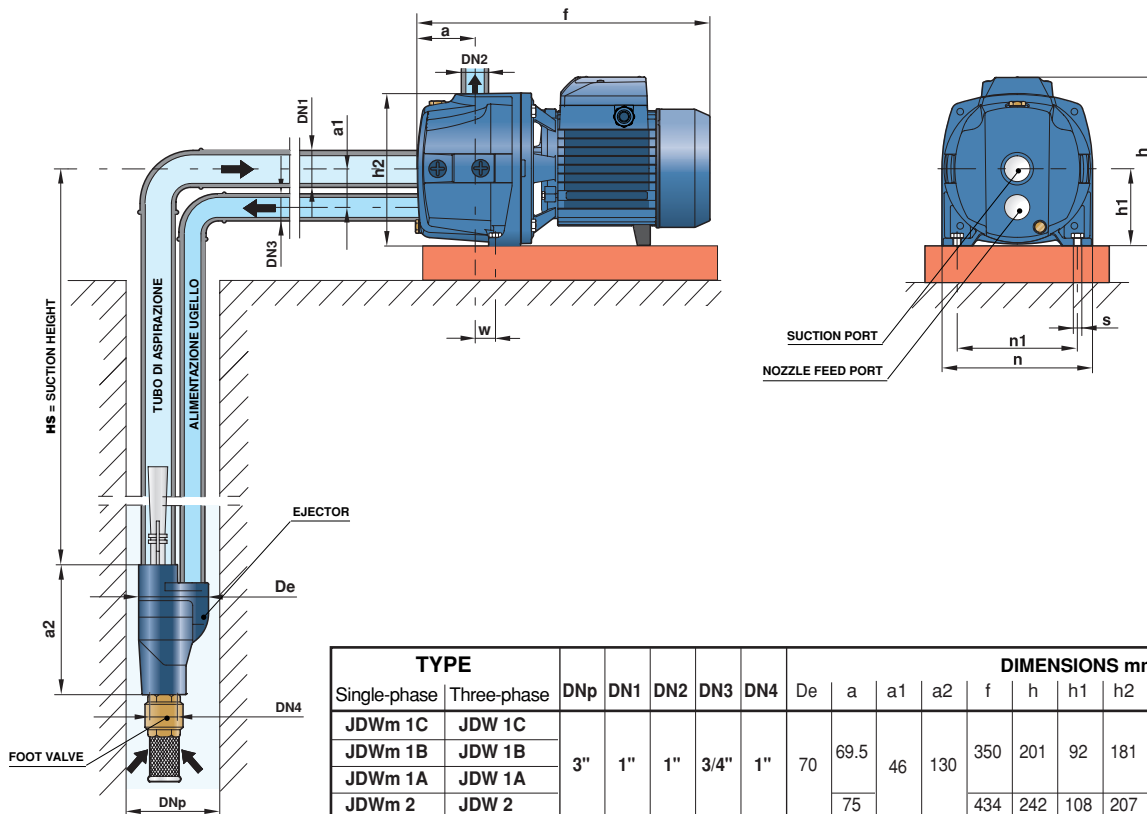
PERFORMANCE DATA AT n= 2900 1/min

TYPE		POWER		HS metres	FLOW RATE LITRES/HOUR								
Single-phase	Three-phase	kW	HP		0	120	240	360	480	600	720	840	960
TOTAL MANOMETRIC HEAD IN METRES													
JDWm 1C -3"	JDW 1C -3"	0.50	0.70	15	32	28	24	22	19	18	15		
JDWm 1B -3"	JDW 1B -3"	0.60	0.85		36	32	29	26	24	22	19	17	
JDWm 1A -3"	JDW 1A -3"	0.75	1		39	35	32	29	27	25	22	20	17
JDWm 2 -3"	JDW 2 -3"	1.1	1.5		61	56	51	46	42	38	35	33	30
JDWm 1C -3"	JDW 1C -3"	0.50	0.70	20	26	23	19	17					
JDWm 1B -3"	JDW 1B -3"	0.60	0.85		30	27	24	21	18				
JDWm 1A -3"	JDW 1A -3"	0.75	1		33	30	27	23	21	17			
JDWm 2 -3"	JDW 2 -3"	1.1	1.5		55	50	46	41	37	33	30		
JDWm 1C -3"	JDW 1C -3"	0.50	0.70	25	19	15							
JDWm 1B -3"	JDW 1B -3"	0.60	0.85		23	19							
JDWm 1A -3"	JDW 1A -3"	0.75	1		27	24	22						
JDWm 2 -3"	JDW 2 -3"	1.1	1.5		47	43	39	36	33				
JDWm 2 -3"	JDW 2 -3"	1.1	1.5	30	39	34	30						

HS = Suction height

Tolerance of the performance curves according to EN ISO 9906 App. A.

DIMENSIONS AND WEIGHTS



TYPE		DIMENSIONS mm																kg*		
Single-phase	Three-phase	DNp	DN1	DN2	DN3	DN4	De	a	a1	a2	f	h	h1	h2	n	n1	w	s	1~	3~
JDWm 1C	JDW 1C	3"	1"	1"	3/4"	1"	70	69.5	46	130	350	201	92	181	180	144	24	10	14.3	14.3
JDWm 1B	JDW 1B																		14.6	14.6
JDWm 1A	JDW 1A																		15.7	14.7
JDWm 2	JDW 2																		23.9	22.0

(*weight includes ejector)

2"

JDW self-priming pumps for 2" wells (with immersed ejector)



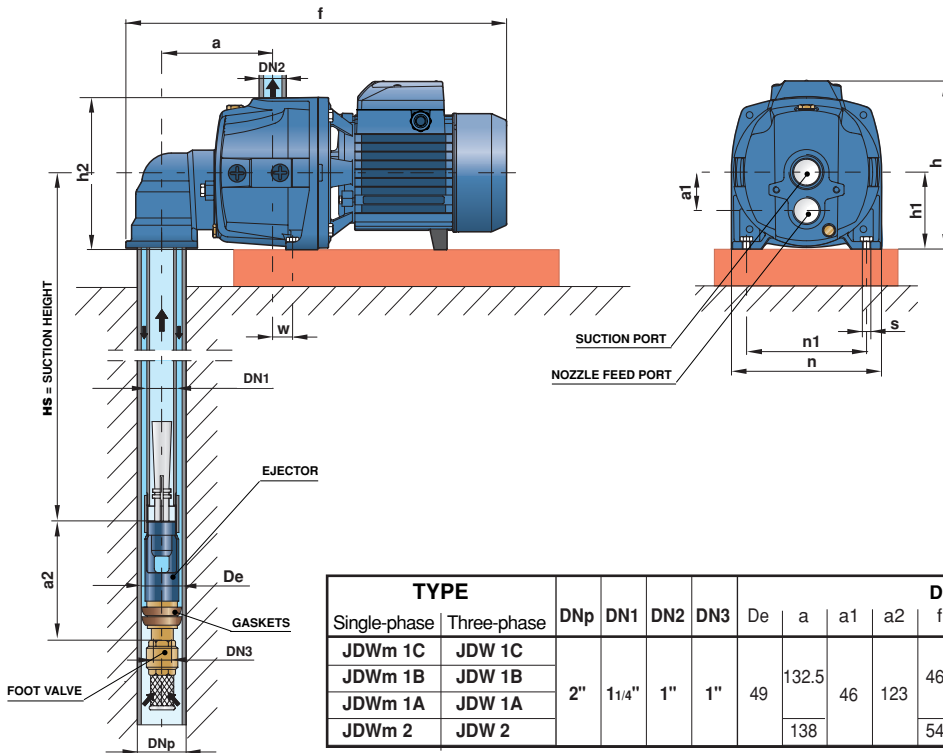
PERFORMANCE DATA AT n= 2900 1/min

TYPE		POWER		HS metres	FLOW RATE LITRES/HOUR										
Single-phase	Three-phase	kW	HP		0	120	240	360	480	600	720	840	960	1080	1200
					TOTAL MANOMETRIC HEAD IN METRES										
JDWm 1C -2"	JDW 1C -2"	0.50	0.70	15	46	42	37	34	30	28	25	22	19	17	
JDWm 1B -2"	JDW 1B -2"	0.60	0.85		50	46	42	39	35	32	30	27	24	21	19
JDWm 1A -2"	JDW 1A -2"	0.75	1		54	50	46	43	39	36	34	31	28	25	23
JDWm 2 -2"	JDW 2 -2"	1.1	1.5		85	78	74	70	66	61	57	53	48	44	40
JDWm 1C -2"	JDW 1C -2"	0.50	0.70	20	34	29	24	21	18	16	13	11			
JDWm 1B -2"	JDW 1B -2"	0.60	0.85		38	33	29	26	23	21	18	16	14		
JDWm 1A -2"	JDW 1A -2"	0.75	1		40	35	31	28	25	23	20	18	16		
JDWm 2 -2"	JDW 2 -2"	1.1	1.5		71	63	58	54	50	46	43	39	36	34	
JDWm 1C -2"	JDW 1C -2"	0.50	0.70	25	28	24	20	18	15	13					
JDWm 1B -2"	JDW 1B -2"	0.60	0.85		32	28	25	23	20	17	14				
JDWm 1A -2"	JDW 1A -2"	0.75	1		35	31	28	26	23	20	17				
JDWm 2 -2"	JDW 2 -2"	1.1	1.5		64	59	55	51	47	43	39	36			
JDWm 1C -2"	JDW 1C -2"	0.50	0.70	30	23	18	13								
JDWm 1B -2"	JDW 1B -2"	0.60	0.85		27	22	18	15							
JDWm 1A -2"	JDW 1A -2"	0.75	1		28	24	21	17							
JDWm 2 -2"	JDW 2 -2"	1.1	1.5		56	50	46	42	38	34	31				
JDWm 1B -2"	JDW 1B -2"	0.60	0.85	35	21	15									
JDWm 1A -2"	JDW 1A -2"	0.75	1		23	18	15								
JDWm 2 -2"	JDW 2 -2"	1.1	1.5		51	45	41	37	33						
JDWm 2 -2"	JDW 2 -2"	1.1	1.5		41	36	33								
JDWm 2 -2"	JDW 2 -2"	1.1	1.5	45	30										

HS = Suction height

Tolerance of the performance curves according to EN ISO 9906 App. A.

DIMENSIONS AND WEIGHTS



TYPE		DNp	DN1	DN2	DN3	De	DIMENSIONS mm										kg*		
Single-phase	Three-phase						a	a1	a2	f	h	h1	h2	n	n1	w	s	1~	3~
JDWm 1C	JDW 1C	2"	1 1/4"	1"	1"	49	132.5	46	123	460	201	92	181	180	144	24	10	15.9	15.9
JDWm 1B	JDW 1B									540	242	108	207	206	164	22		16.2	16.2
JDWm 1A	JDW 1A									540	242	108	207	206	164	22		17.3	16.3
JDWm 2	JDW 2									540	242	108	207	206	164	22		25.5	23.2

(*weight includes ejector and adaptor)



RANGE OF PERFORMANCE

Flow rate up to 80 l/min (4.8 m³/h)
Head up to 72 m

LIMITS OF USE

Manometric suction lift up to 9 m
Liquid temperature up to + 40°C
Environment temperature up to + 40°C

CONSTRUCTION AND SAFETY STANDARDS

EN 60 335-1	EN 60034-1
IEC 335-1	IEC 34-1
CEI 61-150	CEI 2-3



INSTALLATION AND USE

They are recommended for pumping clean water and liquids that are chemically non aggressive to the materials from which the pump is made.

JCR SELF-PRIMING PUMPS ARE DESIGNED FOR SUCTION LIFTS AND CAN BE POSITIONED ABOVE THE WATER SOURCE, INCLUDING APPLICATIONS WITH AIR ENTRAINED IN THE WATER. DUE TO THEIR RELIABILITY AND LOW MAINTENANCE, THEY ARE RECOMMENDED FOR DOMESTIC USE, INCLUDING WATER DISTRIBUTION (AS PART OF A PRESSURE SET), GARDEN IRRIGATION, ETC.

The pumps must be installed in enclosed places, or at least protected against inclement weather.

GUARANTEE 2 YEARS subject to our general terms of sale.

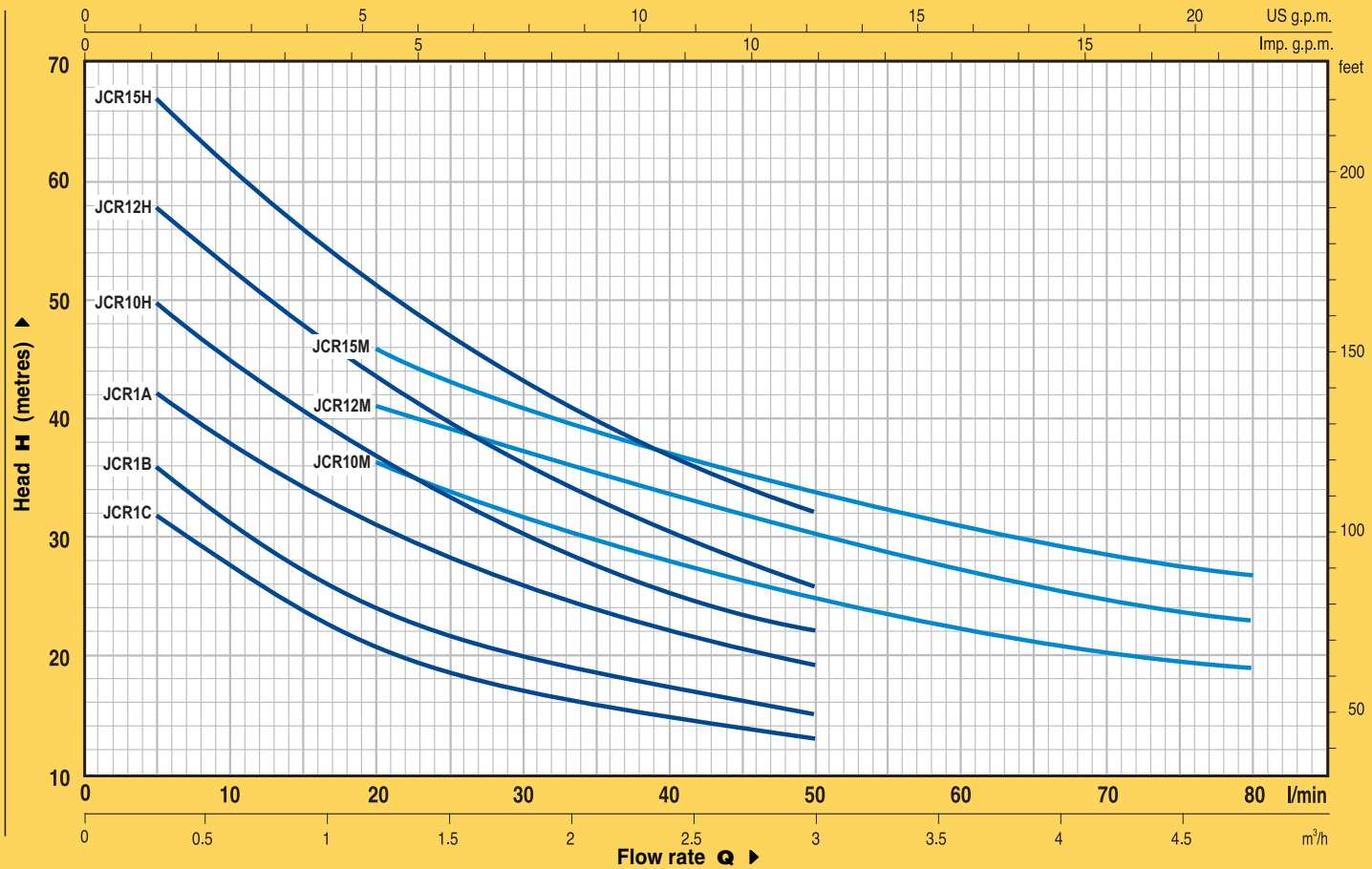
CONSTRUCTION CHARACTERISTICS

- **PUMP BODY:** stainless steel AISI 304, with threaded ports ISO 228/1.
- **BODY BACK-PLATE:** stainless steel AISI 304.
- **EJECTOR ASSEMBLY:** technopolymer (approved for drinking water).
- **IMPELLER:** technopolymer (for drinking water).
- **MOTOR SHAFT:** stainless steel EN 10088-3 - 1.4104
- **MECHANICAL SEAL:** ceramic - graphite - NBR.
- **ELECTRIC MOTOR:** the pumps are close-coupled to a carefully matched PEDROLLO electric motor, quiet running, totally enclosed fan cooled (TEFC), suitable for continuous duty..
JCRm: single-phase 230 V - 50 Hz with capacitor and thermal overload protector.
JCR: three-phase 230/400 V - 50 Hz.
- **INSULATION:** class F. ● **PROTECTION:** IP 44.

OPTIONS ON REQUEST

⇒ other voltages or frequency 60 Hz

CURVES AND PERFORMANCE DATA AT n= 2900 1/min

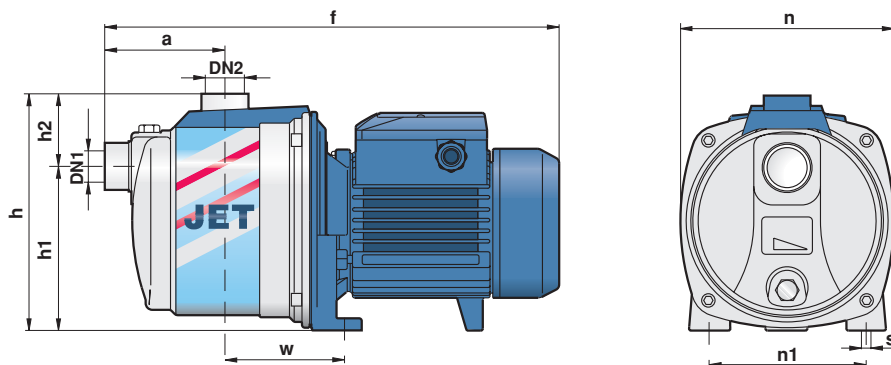


TYPE		POWER		Q	Flow rate															
Single-phase	Three-phase	kW	HP		m³/h	0	0.3	0.6	0.9	1.2	1.5	1.8	2.1	2.4	3.0	3.6	4.2	4.8		
JCRm 1C	JCR 1C	0.37	0.50	l/min	0	5	10	15	20	25	30	35	40	50	60	70	80			
JCRm 1B	JCR 1B	0.50	0.70	H metres	35	32	27	24	21	19	17	16	15	13						
JCRm 1A	JCR 1A	0.60	0.85		41	36	31	27	24	22	20	19	17	15						
JCRm 10H	JCR 10H	0.75	1		47	42	38	34	31	28.5	26	24	22	19						
JCRm 12H	JCR 12H	0.90	1.25		56	50	45	41	37	33	30	27	25	22						
JCRm 15H	JCR 15H	1.1	1.5		64	58	53	48	44	40	36	33	31	26						
JCRm 10M	JCR 10M	0.75	1		72	67	61	56	51	47	43	40	37	32						
JCRm 12M	JCR 12M	0.90	1.25		46	44	41	39	37	35	32	30	28	25	22	21	19			
JCRm 15M	JCR 15M	1.1	1.5		50	48	45	43	41	39	37	36	34	30	27	25	23			
					55	53	50	48	46	43	41	39	37	34	31	29	27			

Q = Flow rate H = Total manometric head

Tolerance of the performance curves according to EN ISO 9906 App. A.

DIMENSIONS AND WEIGHTS



TYPE		PORTS		DIMENSIONS mm									kg	
Single-phase	Three-phase	DN1	DN2	a	f	h	h1	h2	n	n1	w	s	1~	3~
JCRm 1C	JCR 1C	1"	1"	90	345	174	122	52	160	120	95	9	5.6	5.8
JCRm 1B	JCR 1B				353/345								5.7	6.0
JCRm 1A	JCR 1A				5.9								6.5	
JCRm 10H-M	JCR 10H-M	1 1/4"	1"	117	406	206	145	55	184	135	110	10	9.4	9.6
JCRm 12H-M	JCR 12H-M												10.5	9.6
JCRm 15H-M	JCR 15H-M												10.8	10.4

**New self-priming pumps,
quiet running, reliable,
high efficiency, patented.**



RANGE OF PERFORMANCE

Flow rate up to 200 l/min (12 m³/h)
Head up to 120 m

LIMITS OF USE

Manometric suction lift up to 9 m
Liquid temperature up to + 40°C
Environment temperature up to + 40°C

CONSTRUCTION AND SAFETY STANDARDS

EN 60 335-1	EN 60034-1
IEC 335-1	IEC 34-1
CEI 61-150	CEI 2-3



INSTALLATION AND USE

They are recommended for clean water and liquids that are chemically non aggressive to the materials from which the pump is made.

PLURIJET SELF-PRIMING PUMPS ARE DESIGNED FOR LIFTING WATER, EVEN IN CASES WITH ENTRAINED AIR. THEIR QUIET RUNNING, RELIABILITY AND LOW POWER CONSUMPTION MAKES THEM PARTICULARLY SUITABLE FOR DOMESTIC AND CIVIL USE, INCLUDING PRESSURISATION AND DISTRIBUTION OF WATER, IRRIGATION AND RAINWATER RECOVERY SYSTEMS.

The pumps must be installed in enclosed places, or at least protected against inclement weather.

GUARANTEE 2 YEARS subject to our general terms of sale.

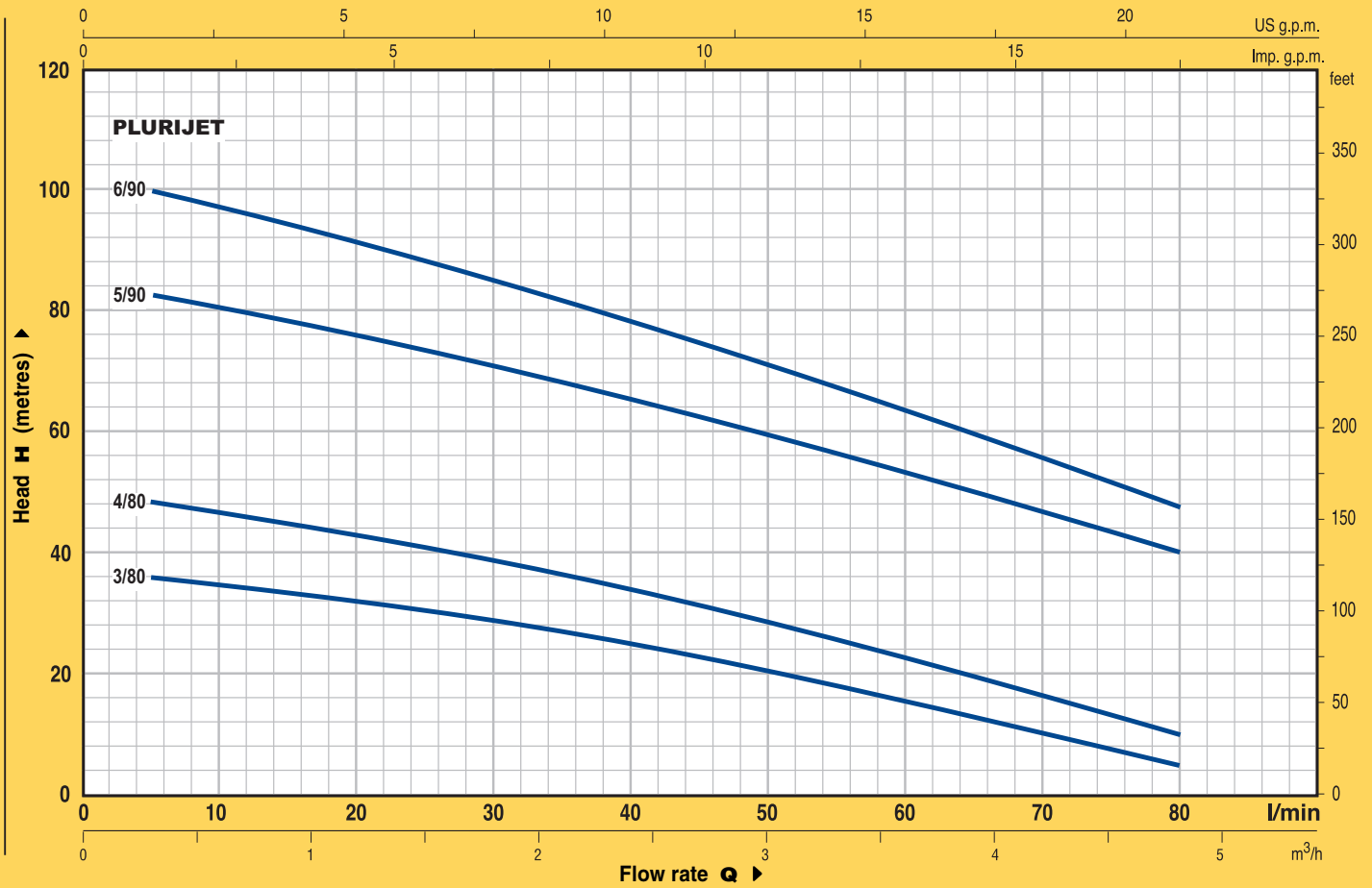
CONSTRUCTION CHARACTERISTICS

- **PUMP BODY:** cast iron and stainless steel AISI 304 (cast iron up to 0.75 kW), with threaded ports ISO 228/1.
- **IMPELLER:** technopolymer (approved for drinking water).
- **MOTOR SHAFT:** stainless steel EN 10088-3 - 1.4104
- **MECHANICAL SEAL:** ceramic - graphite - NBR.
- **ELECTRIC MOTOR:** the pumps are close-coupled to a carefully matched PEDROLLO electric motor, quiet running, totally enclosed fan cooled (TEFC), suitable for continuous duty.
PLURIJETm: single-phase 230 V - 50 Hz with capacitor and thermal overload protector.
PLURIJET: three-phase 230/400 V - 50 Hz.
- **INSULATION:** class F. ● **PROTECTION:** IP 44.
- **REGISTERED MODEL.**

OPTIONS ON REQUEST

- ⇒ version in stainless steel EN 10088-3 - 1.4401 (AISI 316)
- ⇒ other voltages or frequency 60 Hz

CURVES AND PERFORMANCE DATA AT n= 2900 1/min

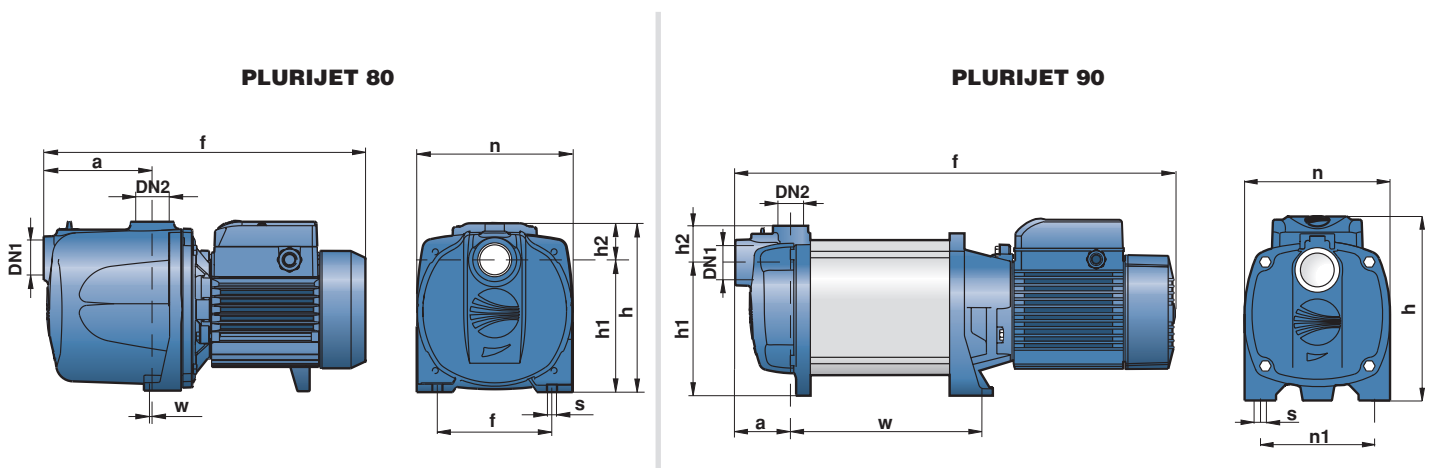


TYPE		POWER		Q	Flow rate												
Single-phase	Three-phase	kW	HP		m³/h	0	0.3	0.6	1.2	1.8	2.4	3.0	3.6	4.2	4.8		
PLURIJETm 3/80	PLURIJET 3/80	0.45	0.60	l/min	0	5	10	20	30	40	50	60	70	80			
PLURIJETm 4/80	PLURIJET 4/80	0.60	0.85	H metres	38	36	34.5	32	29	25	20	15.5	10.5	5			
PLURIJETm 5/90	PLURIJET 5/90	1.1	1.5		50	48	46.5	43	38.5	33.5	28	22.5	16.5	10			
PLURIJETm 6/90	PLURIJET 6/90	1.5	2		83	82	80	76	71	65	59	53	47	40			
					100	99	96	91.5	85	78	71	64	56	48			

Q = Flow rate H = Total manometric head

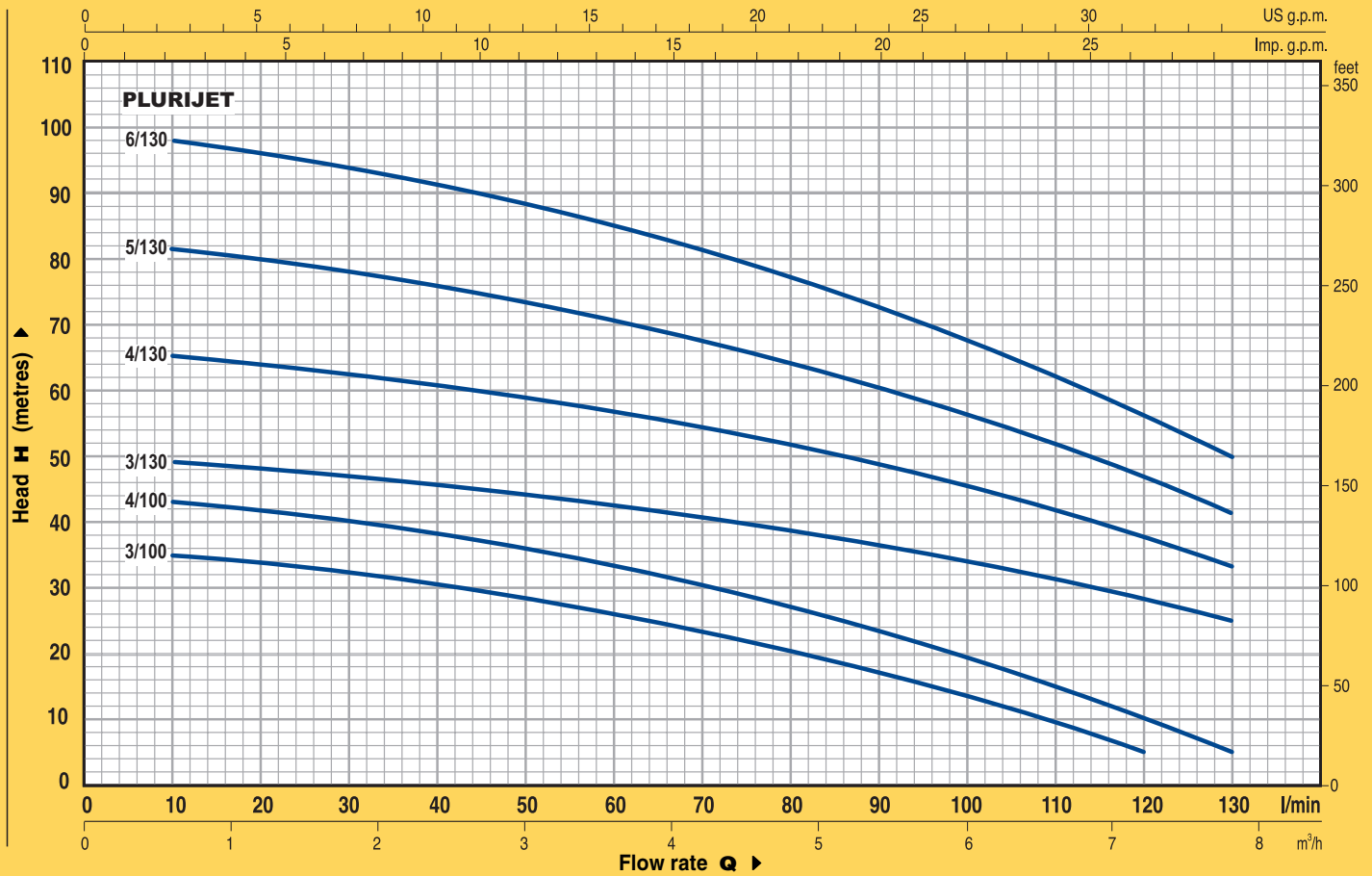
Tolerance of the performance curves according to EN ISO 9906 App. A.

DIMENSIONS AND WEIGHTS



TYPE		PORTS		DIMENSIONS mm										kg	
Single-phase	Three-phase	DN1	DN2	a	f	h	h1	h2	n	n1	w	s	1~	3~	
PLURIJETm 3/80	PLURIJET 3/80	1"	1"	110	334	172	134	38	158	116	2	9	9.4	8.9	
PLURIJETm 4/80	PLURIJET 4/80			135	367/359								10.8	10.2	
PLURIJETm 5/90	PLURIJET 5/90	1 1/4"	1"	69	634	230	153	46	185	145	304	10	25.5	23.5	
PLURIJETm 6/90	PLURIJET 6/90				665								335	27.5	27.0

CURVES AND PERFORMANCE DATA AT n= 2900 1/min

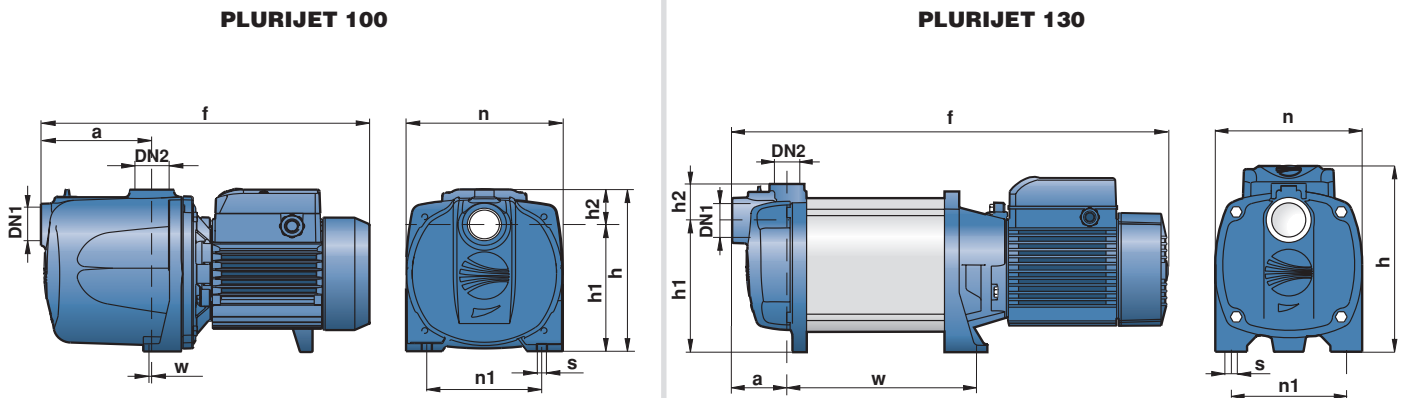


TYPE		POWER		Q	Flow rate												
Single-phase	Three-phase	kW	HP		m³/h	0	0.3	0.6	1.2	1.8	2.4	3.0	3.6	4.2	4.8	6.0	7.2
PLURIJETm 3/100	PLURIJET 3/100	0.60	0.85	l/min	0	5	10	20	30	40	50	60	70	80	100	120	130
PLURIJETm 4/100	PLURIJET 4/100	0.75	1	H metres	36	35.5	35	33.5	32	30	28	26	23	20	13.5	5	
PLURIJETm 3/130	PLURIJET 3/130	1.1	1.5		46	45	43	42	40	38	35.5	33	30	26.5	19	10	5
PLURIJETm 4/130	PLURIJET 4/130	1.5	2		50	49.5	49	48	47	45.5	44	42.5	40.5	38.5	34	28	25
PLURIJETm 5/130	PLURIJET 5/130	1.8	2.5		66	66	65	64	62	60.5	58.5	56.5	54	51	45	37	33
—	PLURIJET 6/130	2.2	3		83	82.5	81	80	78	75.5	73	70.5	67.5	64	56.5	46.5	41
—	—	—	—		100	99	98	96	94	91	88	85	81	77	68	56	50

Q = Flow rate H = Total manometric head

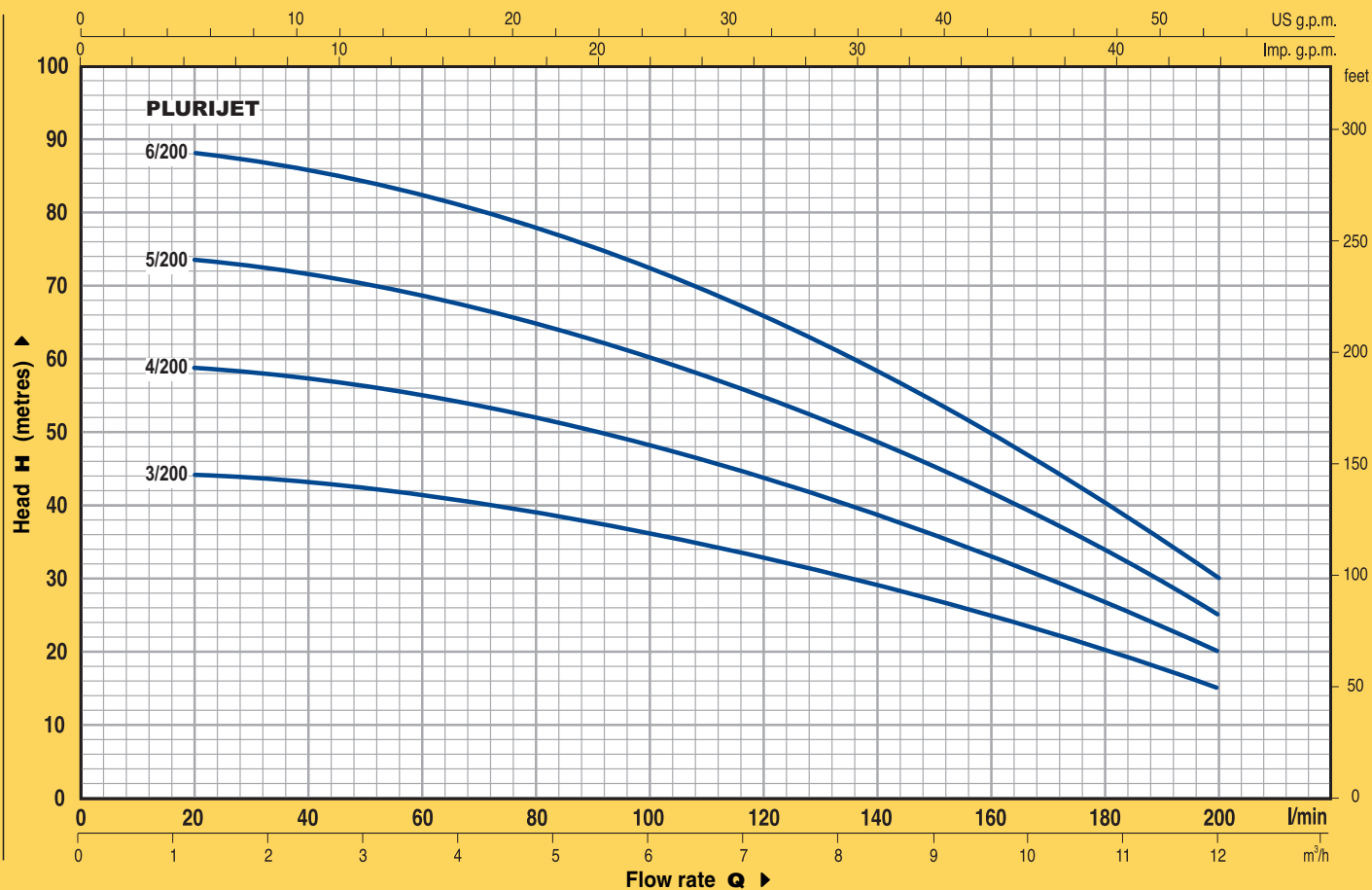
Tolerance of the performance curves according to EN ISO 9906 App. A.

DIMENSIONS AND WEIGHTS



TYPE		PORTS		DIMENSIONS mm									kg	
Single-phase	Three-phase	DN1	DN2	a	f	h	h1	h2	n	n1	w	s	1~	3~
PLURIJETm 3/100	PLURIJET 3/100	1"	1"	110	342/334	172	134	38	158	116	2	9	10.2	9.4
PLURIJETm 4/100	PLURIJET 4/100			135	378	191		61					13.4	12.3
PLURIJETm 3/130	PLURIJET 3/130	1 1/4"	1"	69	571	230	153	46	185	145	241	10	23.5	21.6
PLURIJETm 4/130	PLURIJET 4/130				602						272		25.9	25.0
PLURIJETm 5/130	PLURIJET 5/130				634						304		27.5	27.0
—	PLURIJET 6/130				665						335		-	29.0

CURVES AND PERFORMANCE DATA AT n= 2900 1/min

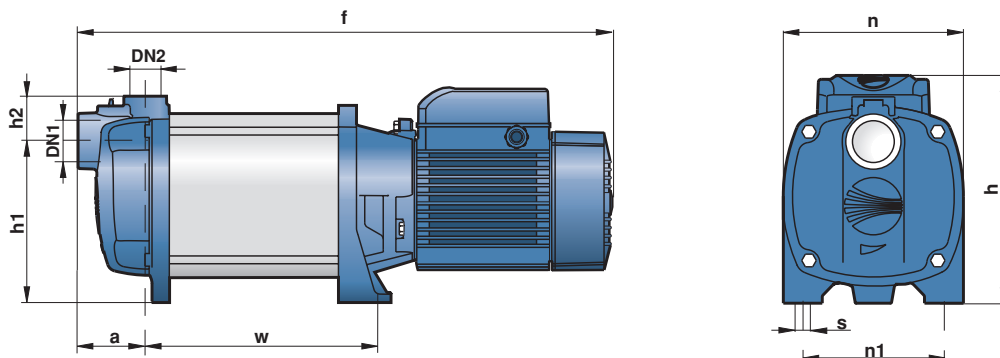


TYPE		POWER		Q	Flow rate													
Single-phase	Three-phase	kW	HP		m³/h	0	1.2	2.4	3.0	3.6	4.8	6.0	7.2	8.4	9.6	10.8	12.0	
				l/min	0	20	40	50	60	80	100	120	140	160	180	200		
PLURIJETm 3/200	PLURIJET 3/200	1.1	1.5	H metres	45	44	43	42	41	39	36	32.5	29	25	20	15		
PLURIJETm 4/200	PLURIJET 4/200	1.5	2		60	58	57	56	54.5	52	48	43	38.5	33	26.5	20		
PLURIJETm 5/200	PLURIJET 5/200	1.8	2.5		75	73	71.5	70	68	65	60	54	48	41.5	33	25		
—	PLURIJET 6/200	2.2	3		90	88	86	84	82	78	72	65	58	50	40	30		

Q = Flow rate H = Total manometric head

Tolerance of the performance curves according to EN ISO 9906 App. A.

DIMENSIONS AND WEIGHTS



TYPE		PORTS		DIMENSIONS mm										kg	
Single-phase	Three-phase	DN1	DN2	a	f	h	h1	h2	n	n1	w	s	1~	3~	
PLURIJETm 3/200	PLURIJET 3/200	1 1/4"	1"	69	571	230	153	46	185	145	241	10	23.5	21.6	
PLURIJETm 4/200	PLURIJET 4/200				602						272		25.9	25.0	
PLURIJETm 5/200	PLURIJET 5/200				634						304		27.5	27.0	
—	PLURIJET 6/200				665						335		-	29.0	

CK self-priming liquid ring pumps



RANGE OF PERFORMANCE

Flow rate up to 50 l/min (3 m³/h)
Head up to 51 m

LIMITS OF USE

Manometric suction lift up to 9 m
Liquid temperature up to + 90°C (+55°C for diesel fuel)
Environment temperature up to + 40°C

CONSTRUCTION AND SAFETY STANDARDS

EN 60 335-1
IEC 335-1
CEI 61-150

EN 60034-1
IEC 34-1
CEI 2-3



INSTALLATION AND USE

THEY ARE RECOMMENDED FOR PUMPING DIESEL FUEL, CLEAN WATER WITHOUT ABRASIVE PARTICLES AND LIQUIDS THAT ARE CHEMICALLY NON AGGRESSIVE TO THE MATERIALS FROM WHICH THE PUMP IS MADE. DUE TO THEIR OPERATING PRINCIPLE, THEY ARE IDEAL WHERE A COMPACT SELF-PRIMING PUMP IS NEEDED OR WHERE LIQUID SUPPLY IS IRREGULAR OR CONTAINS AIR. The pumps must be installed in enclosed places, or at least protected against inclement weather.

GUARANTEE 2 YEARS subject to our general terms of sale.

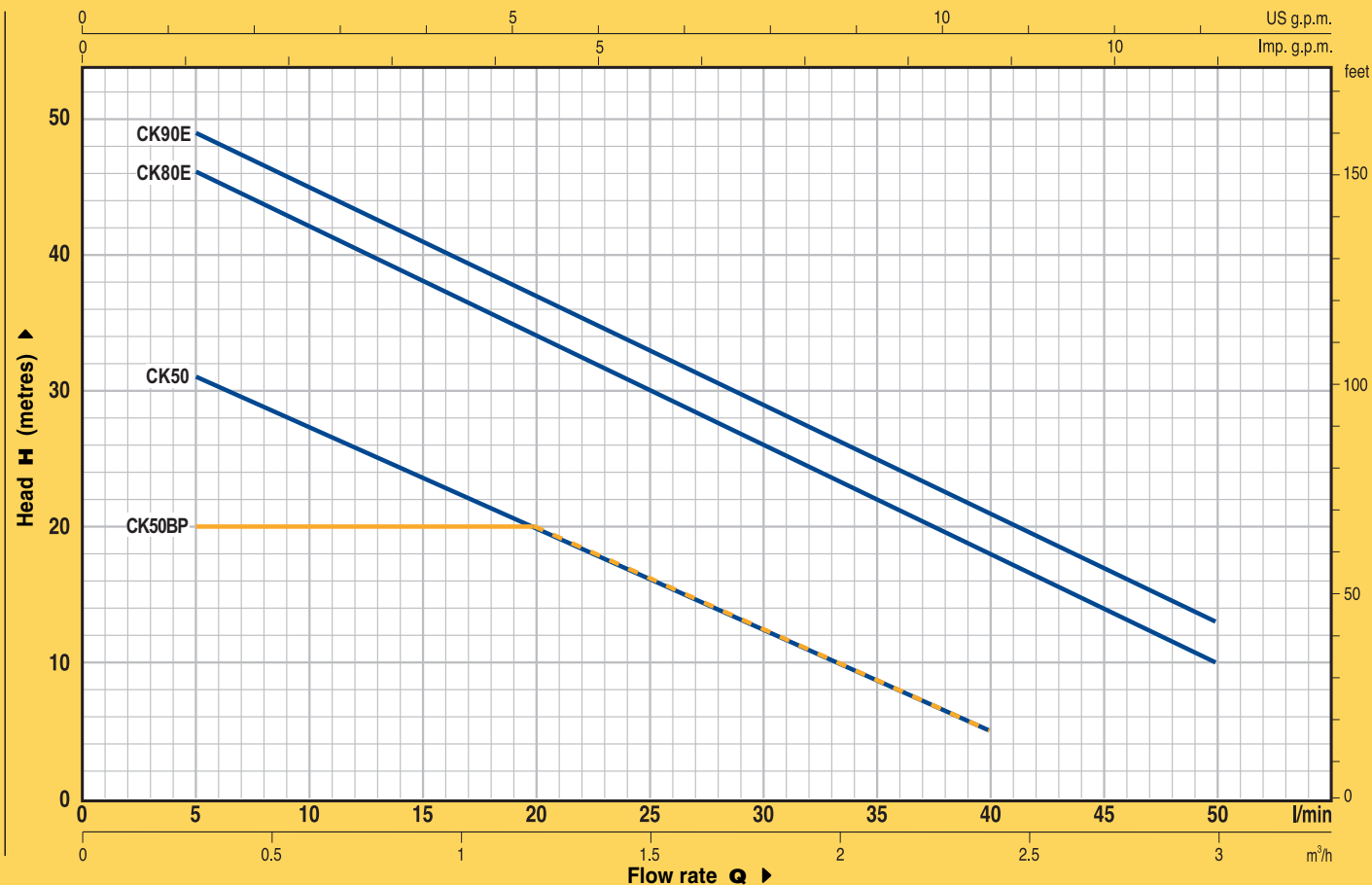
CONSTRUCTION CHARACTERISTICS

- **PUMP BODY:** cast iron, with threaded ports ISO 228/1.
- **MOTOR BRACKET (patent n° 1289150):** aluminium with brass insert; reduces starting difficulties due to seizure of the impeller after long periods of inactivity.
- **IMPELLER:** brass of the star type with open radial vanes.
- **MOTOR SHAFT:** stainless steel EN 10088-3 - 1.4104.
- **MECHANICAL SEAL:** ceramic - graphite - VITON.
- **ELECTRIC MOTOR:** the pumps are close-coupled to a carefully matched PEDROLLO electric motor, quiet running, totally enclosed fan cooled (TEFC), suitable for continuous duty.
CKm: single-phase 230 V - 50 Hz with capacitor and thermal overload protector.
CK: three-phase 230/400 V - 50 Hz.
- **INSULATION:** class F. ● **PROTECTION:** IP 44.
- **REGISTERED MODEL**

OPTIONS ON REQUEST

- ⇒ CKm/INT version with switch and power cable with Schuko plug
- ⇒ CKm 50-BP/NZ aluminium trigger dispensing nozzle and 4 metre spiral reinforced hose.
- ⇒ special mechanical seal
- ⇒ other voltages or frequency 60 Hz
- ⇒ protection IP 55

CURVES AND PERFORMANCE DATA AT n= 2900 1/min

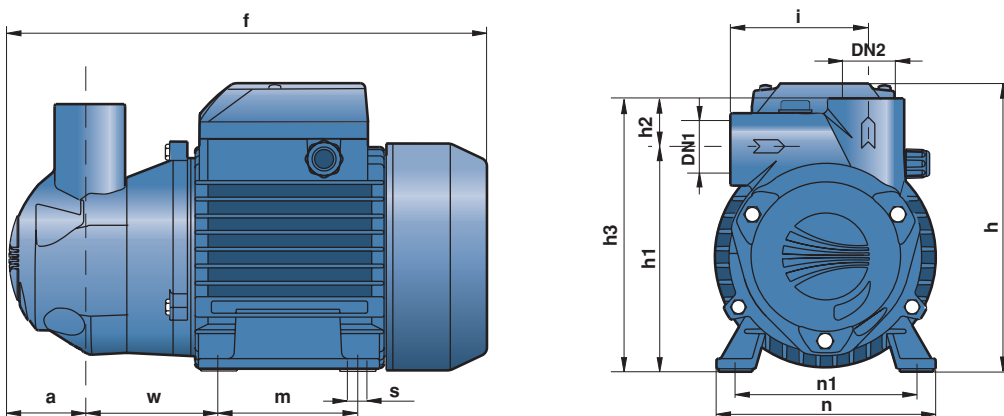


TYPE		POWER		Q	H metres										
Single-phase	Three-phase	kW	HP		m³/h	0	0.3	0.6	0.9	1.2	1.5	1.8	2.1	2.4	3.0
				l/min	0	5	10	15	20	25	30	35	40	50	
CKm 50	CK 50	0.37	0.50		35	31	27	24	20	16	13	9	5		
CKm 50-BP	CK 50-BP	0.25	0.33		20	20	20	20	20	16.5	13	9	5		
CKm 80-E	CK 80-E	0.60	0.85		48	46	42	38	34	30	26	22	18	10	
CKm 90-E	CK 90-E	0.75	1		51	49	45	41	37	33	29	25	21	13	

Q = Flow rate H = Total manometric head

Tolerance of the performance curves according to EN ISO 9906 App. A.

DIMENSIONS AND WEIGHTS



TYPE		PORTS		DIMENSIONS mm													kg	
Single-phase	Three-phase	DN1	DN2	a	f	h	h1	h2	h3	i	m	n	n1	w	s	1~	3~	
CKm 50	CK 50	3/4"	3/4"	41	260	159	128	25	153	75	80	120	100	69	7	7.3	6.8	
CKm 50-BP	CK 50-BP			44	263											11.6	10.8	
CKm 80-E	CK 80-E	1"	1"	50	296	179	136	31	167	81	90	134	112	77		11.8	11.0	
CKm 90-E	CK 90-E																	

CKR self-priming liquid ring pumps with double anti-seize inserts

Dependable priming and starting, even after long periods without use, thanks to anti seize inserts which prevent rusting around the impeller.



RANGE OF PERFORMANCE

Flow rate up to 50 l/min (3 m³/h)
Head up to 54 m

LIMITS OF USE

Manometric suction lift up to 9 m
Liquid temperature up to + 90°C (+55°C for diesel fuel)
Environment temperature up to + 40°C

CONSTRUCTION AND SAFETY STANDARDS

EN 60 335-1	EN 60034-1
IEC 335-1	IEC 34-1
CEI 61-150	CEI 2-3



INSTALLATION AND USE

THEY ARE RECOMMENDED FOR PUMPING CLEAN WATER OR LIQUIDS WITHOUT ABRASIVE PARTICLES AND LIQUIDS THAT ARE CHEMICALLY NON AGGRESSIVE TO THE MATERIALS FROM WHICH THE PUMP IS MADE.

DUE TO THEIR OPERATING PRINCIPLE, THEY ARE IDEAL WHERE A COMPACT SELF-PRIMING PUMP IS NEEDED OR WHERE LIQUID SUPPLY IS IRREGULAR OR CONTAINS AIR.

The pumps must be installed in enclosed places, or at least protected against inclement weather.

GUARANTEE 2 YEARS subject to our general terms of sale.

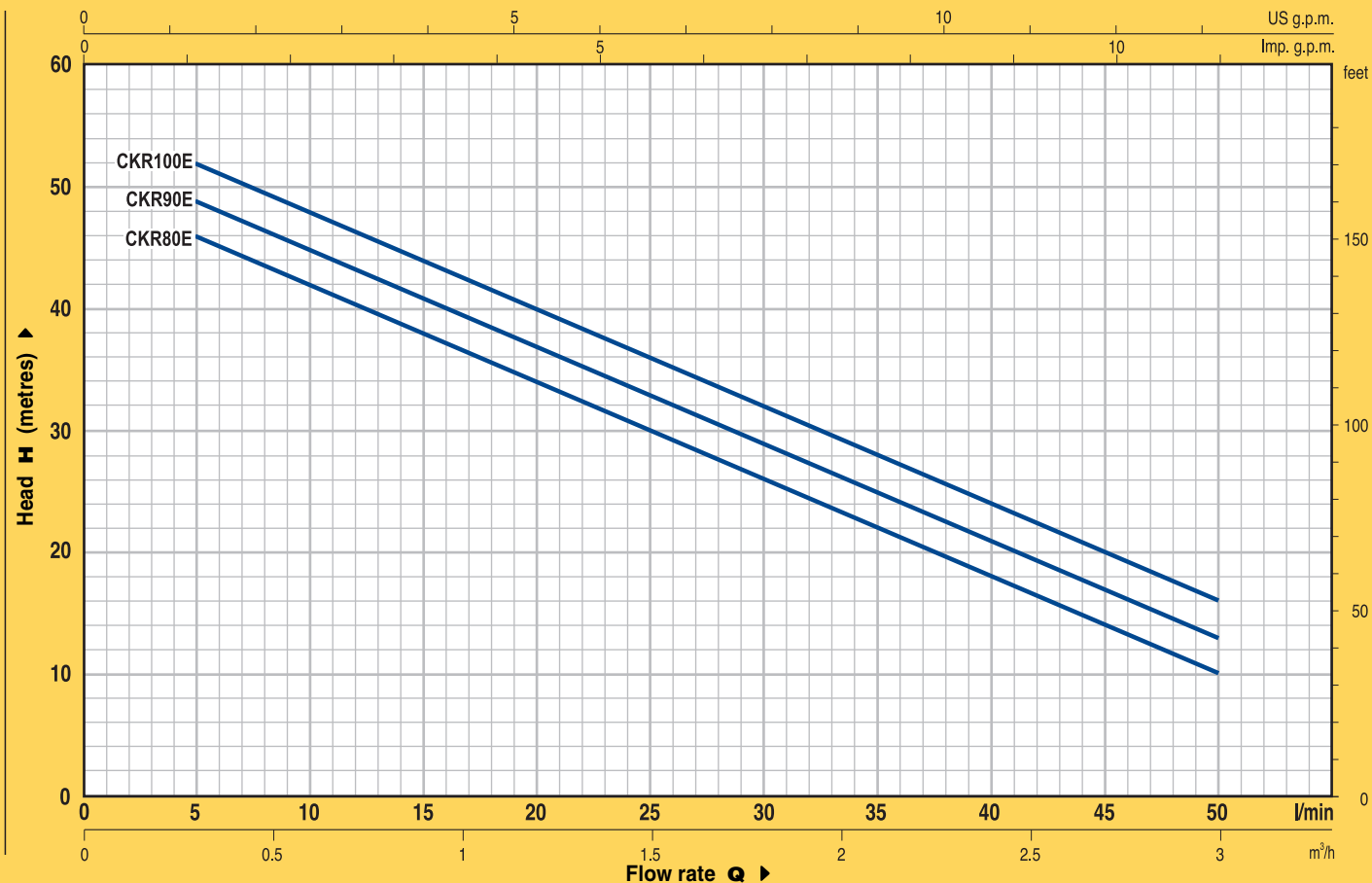
CONSTRUCTION CHARACTERISTICS

- **PUMP BODY:** cast iron with stainless steel insert to prevent the impeller seizing due to rust. Inlet ports threaded to ISO 228/1.
- **MOTOR BRACKET (patent n° 1289150):** aluminium with brass insert; eliminates starting difficulties due to seizure of the impeller after long periods of inactivity.
- **IMPELLER:** brass of the star type with open radial vanes.
- **MOTOR SHAFT:** stainless steel EN 10088-3 - 1.4104.
- **MECHANICAL SEAL:** ceramic - graphite - VITON.
- **ELECTRIC MOTOR:** the pumps are close-coupled to a carefully matched PEDROLLO electric motor, quiet running, totally enclosed fan cooled (TEFC), suitable for continuous duty..
CKRm: single-phase 230 V - 50 Hz with capacitor and thermal overload protector.
CKR: three-phase 230/400 V - 50 Hz.
- **INSULATION:** class F. ● **PROTECTION:** IP 44.
- **REGISTERED MODEL**

OPTIONS ON REQUEST

- ⇒ CKRm/INT version with switch and power cable with Schuko plug
- ⇒ special mechanical seal
- ⇒ other voltages or frequency 60 Hz
- ⇒ protection IP 55

CURVES AND PERFORMANCE DATA AT n= 2900 1/min

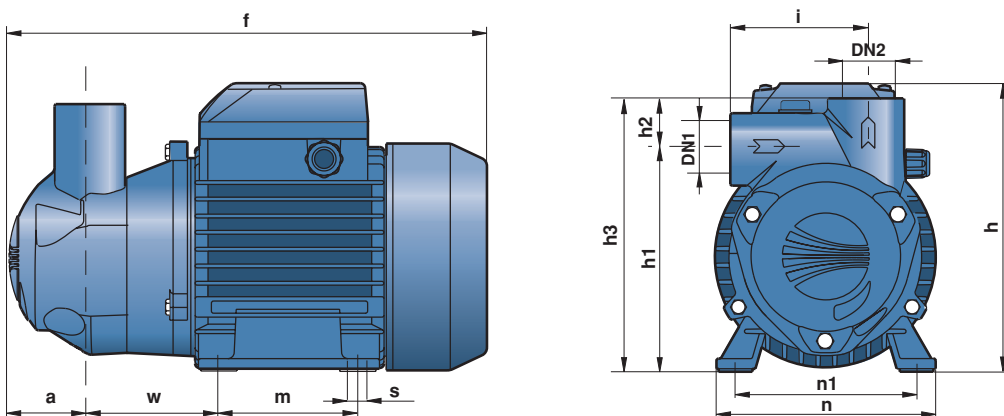


TYPE		POWER		Q	Flow rate										
Single-phase	Three-phase	kW	HP		m³/h	0	0.3	0.6	0.9	1.2	1.5	1.8	2.1	2.4	3.0
CKRm 80-E	CKR 80-E	0.60	0.85	l/min	0	5	10	15	20	25	30	35	40	50	
CKRm 90-E	CKR 90-E	0.75	1	H metres	48	46	42	38	34	30	26	22	18	10	
CKRm 100-E	CKR 100-E	0.90	1.25		51	49	45	41	37	33	29	25	21	13	
					54	52	48	44	40	36	32	28	24	16	

Q = Flow rate H = Total manometric head

Tolerance of the performance curves according to EN ISO 9906 App. A.

DIMENSIONS AND WEIGHTS



TYPE		PORTS		DIMENSIONS mm													kg	
Single-phase	Three-phase	DN1	DN2	a	f	h	h1	h2	h3	i	m	n	n1	w	s	1~	3~	
CKRm 80-E	CKR 80-E	1"	1"	50	296	179	136	31	167	81	90	134	112	77	7	11.6	10.8	
CKRm 90-E	CKR 90-E															11.8	11.0	
CKRm 100-E	CKR 100-E															11.8	12.0	



standardised centrifugal pumps to EN 733 - DIN 24255

New patented motor design, high efficiency class EFF1, for maximum energy saving.



RANGE OF PERFORMANCE

Flow rate up to 6000 l/min (360 m³/h)
Head up to 95 m

LIMITS OF USE

Manometric suction lift up to 7 m
Liquid temperature from -10°C to + 90°C
Environment temperature from -10°C to + 40°C
Max. pressure in the pump body 10 bar (PN10)

CONSTRUCTION AND SAFETY STANDARDS

EN 60034-1
IEC 34-1
CEI 2-3



INSTALLATION AND USE

They are recommended for pumping clean water and liquids that are chemically non aggressive to the materials from which the pump is made. **THIS SERIES IS SUITABLE FOR SUPPLYING AND MOVING WATER, IN COOLING, HEATING, CIRCULATING AND CONDITIONING SYSTEMS, FOR FIRE FIGHTING, IRRIGATION, INDUSTRIAL AND AGRICULTURAL APPLICATIONS.**

Manufacture in accordance with dimensional standards EN 733 - DIN 24255 ensures models are fully interchangeable. The design allows the pump body to be removed without disconnecting it from the pipes (**back pull out**).

The pumps must be installed in enclosed places, or at least protected against inclement weather.

GUARANTEE 2 YEARS subject to our general terms of sale.

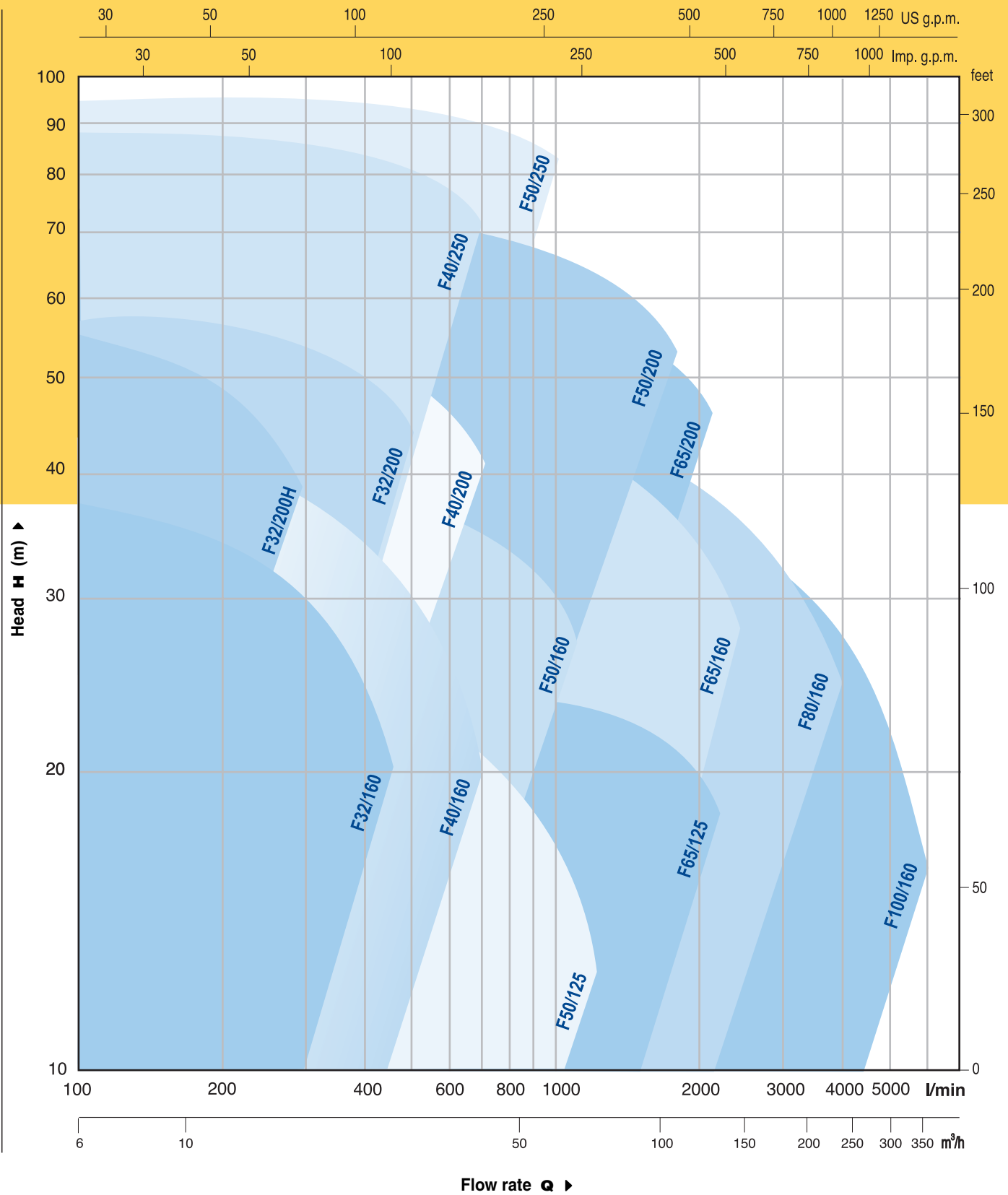
CONSTRUCTION CHARACTERISTICS

- **PUMP BODY: cast iron**, complies with dimensional standards EN 733 - DIN 24255 and UNI 7467-NF E-44-111, with flanged suction and delivery ports complete with threaded steel counterflanges.
- **BODY BACK-PLATE: cast iron.**
- **IMPELLER: brass** for models F32/160, F32/200, F40/160, F40/200, F50/125 e F50/160.
- **IMPELLER: cast iron** for models F40/250, F50/200, F50/250, F65/125, F65/160, F65/200, F80/160, F100/160
- **MOTOR SHAFT: stainless steel EN 10088-3 - 1.4104.**
- **MECHANICAL SEAL: ceramic - graphite - NBR.**
- **ELECTRIC MOTOR:** the pumps are close-coupled to a carefully matched PEDROLLO electric motor, asynchronous type **with high efficiency (class EFF1 for powers from 4 to 22 kW)**, quiet running, totally enclosed fan cooled (TEFC), suitable for continuous duty.
 - Fm:** single-phase 230 V - 50 Hz with capacitor and thermal overload protector (up to 1.5 kW).
 - F:** three-phase 230/400 V - 50 Hz up to 4 kW. 400/690 V - 50 Hz from 5.5 to 22 kW.
- **INSULATION: class F.** ● **PROTECTION: IP 44.**

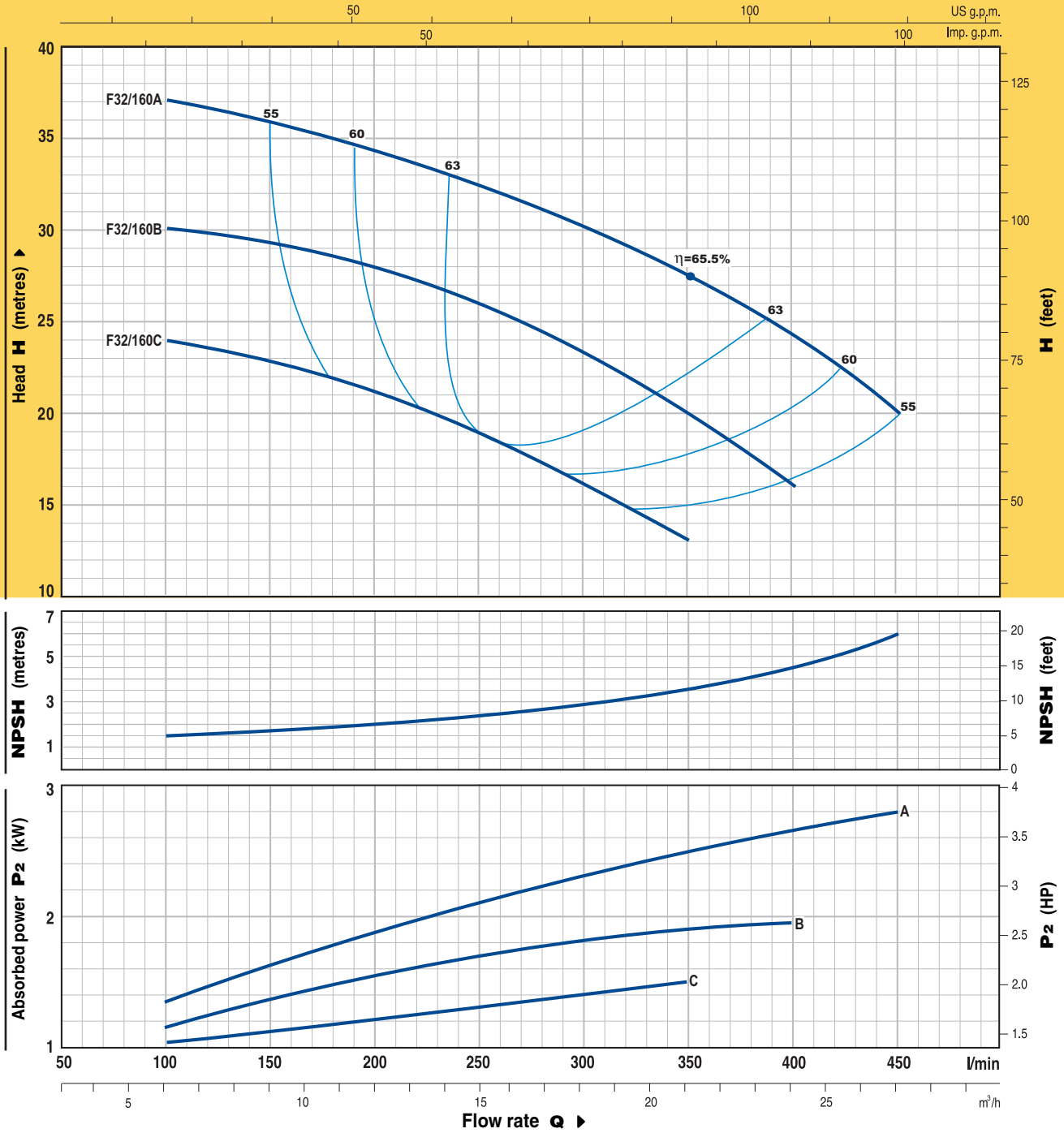
OPTIONS ON REQUEST

- ⇒ pump shaft in stainless steel EN 10088-3 - 1.4401 (AISI 316)
- ⇒ special mechanical seal
- ⇒ other voltages or frequency 60 Hz
- ⇒ protection IP 55
- ⇒ for liquids with higher or lower temperatures
- ⇒ for environments with higher or lower temperatures

RANGE OF PERFORMANCE AT n= 2900 1/min



CURVES AND PERFORMANCE DATA AT n= 2900 1/min

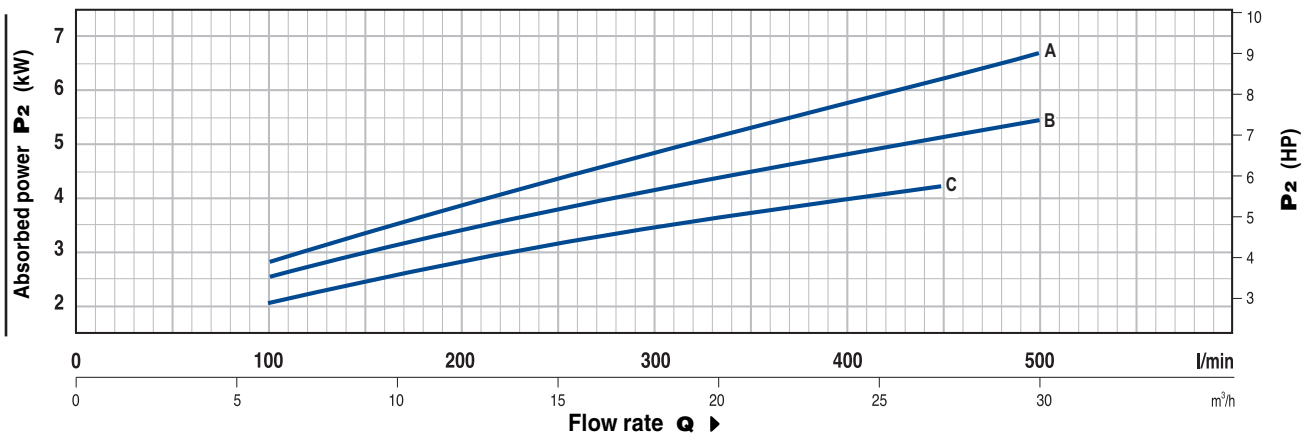
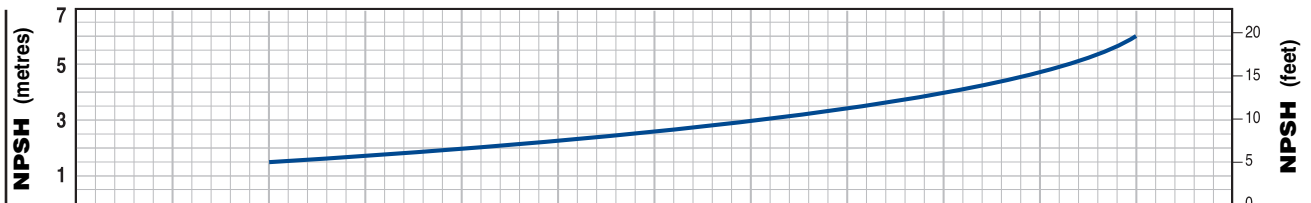
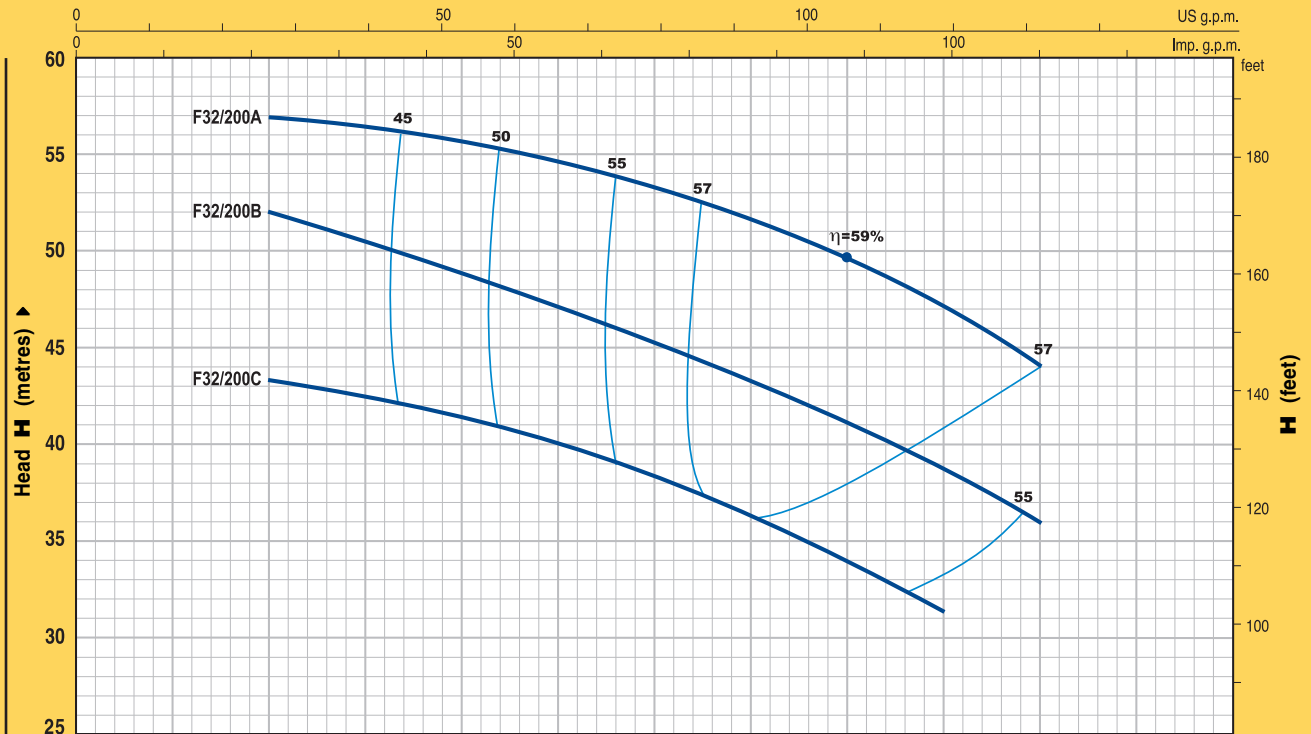


TYPE		POWER		Q	Flow rate										
Single-phase	Three-phase	kW	HP		0	6	9	12	15	18	21	24	27		
Fm 32/160C	F 32/160C	1.5	2	H metres	0	100	150	200	250	300	350	400	450		
Fm 32/160B	F 32/160B	2.2	3		25	24	23	21	19	16	13				
Fm 32/160A	F 32/160A	3	4		31	30	29	28	26	23.5	20	16			
					38	37	36	34	32	30	27.5	24	20		

Q = Flow rate H = Total manometric head

Tolerance of the performance curves according to EN ISO 9906 App. A.

CURVES AND PERFORMANCE DATA AT n= 2900 1/min

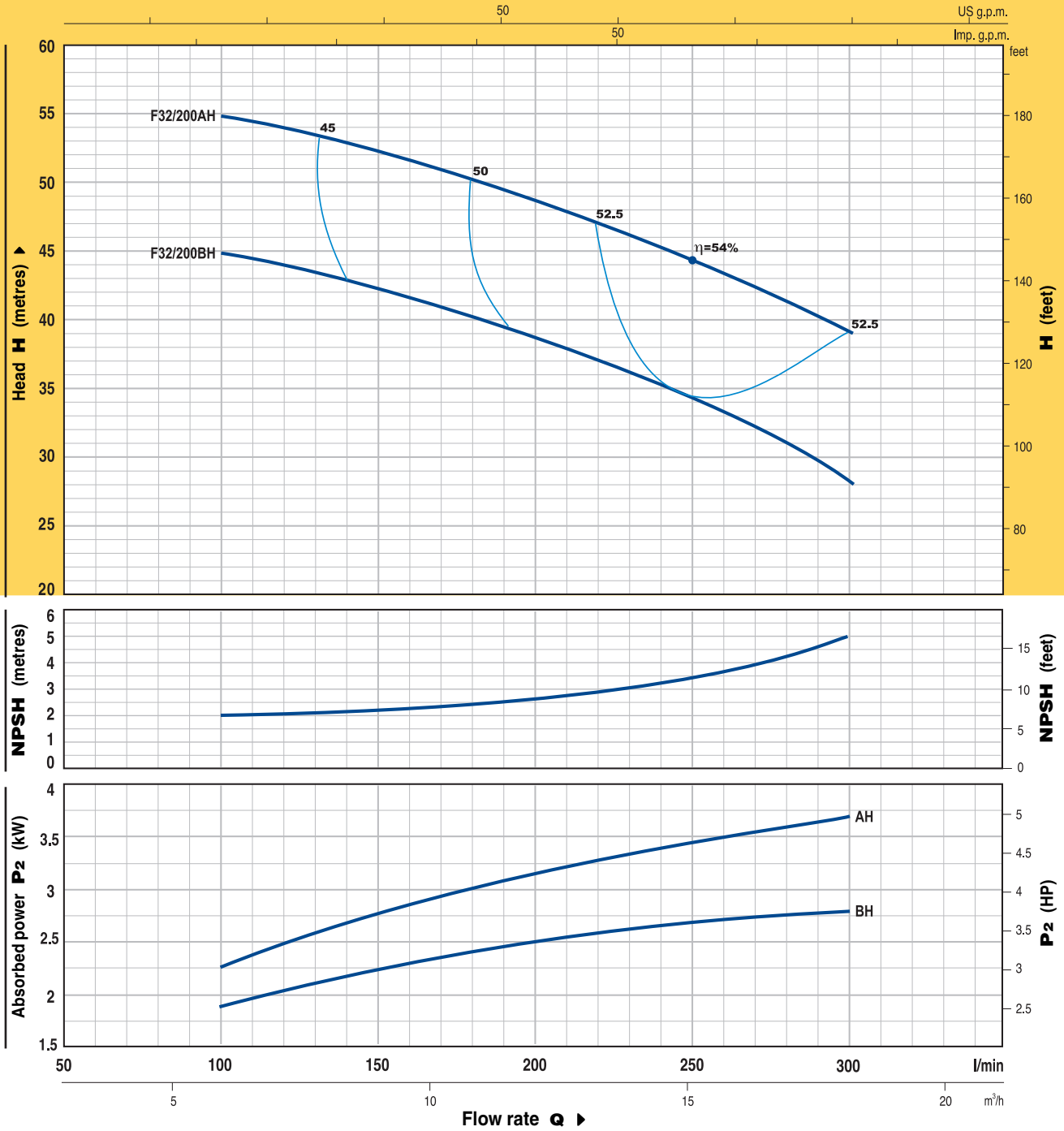


TYPE	POWER		Q	Flow rate											
	kW	HP		0	6	9	12	15	18	21	24	27	30		
Three-phase			l/min	0	100	150	200	250	300	350	400	450	500		
F 32/200C	4	5.5	H metres	46	44	43	41.5	40	38	36	34	31.5			
F 32/200B	5.5	7.5		54	52	50.5	49	47	45	43	41	38.5	36		
F 32/200A	7.5	10		60	57	56.5	56	55	53	52	50	47	44		

Q = Flow rate H = Total manometric head

Tolerance of the performance curves according to EN ISO 9906 App. A.

CURVES AND PERFORMANCE DATA AT n= 2900 1/min

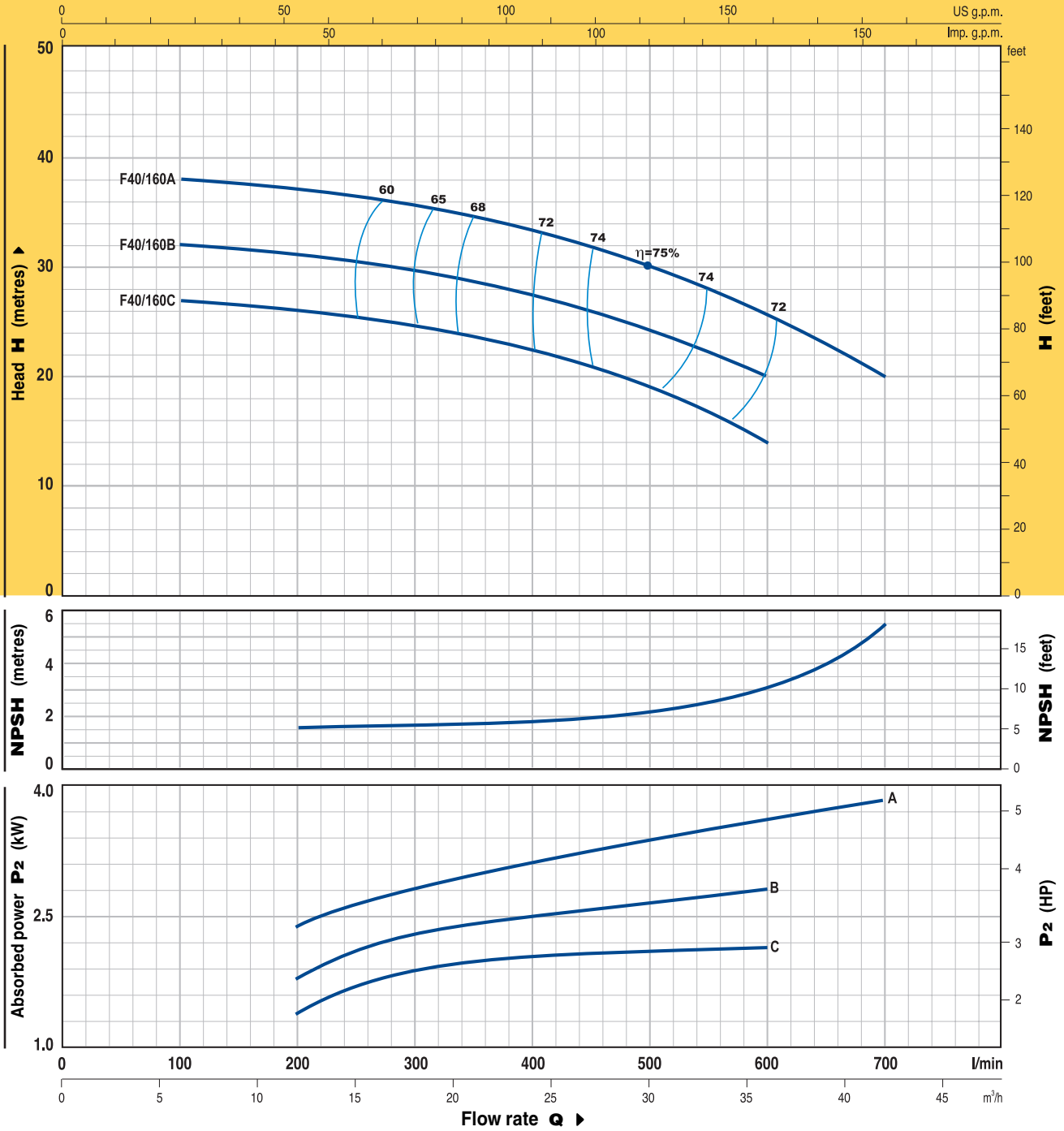


TYPE		POWER		Q	Flow rate					
Single-phase	Three-phase	kW	HP		0	6	9	12	15	18
Fm 32/200BH	F 32/200BH	3	4	l/min	49	45	42	39	34	28
—	F 32/200AH	4	5.5	H metres	59	55	52	49	44	38

Q = Flow rate H = Total manometric head

Tolerance of the performance curves according to EN ISO 9906 App. A.

CURVES AND PERFORMANCE DATA AT n= 2900 1/min

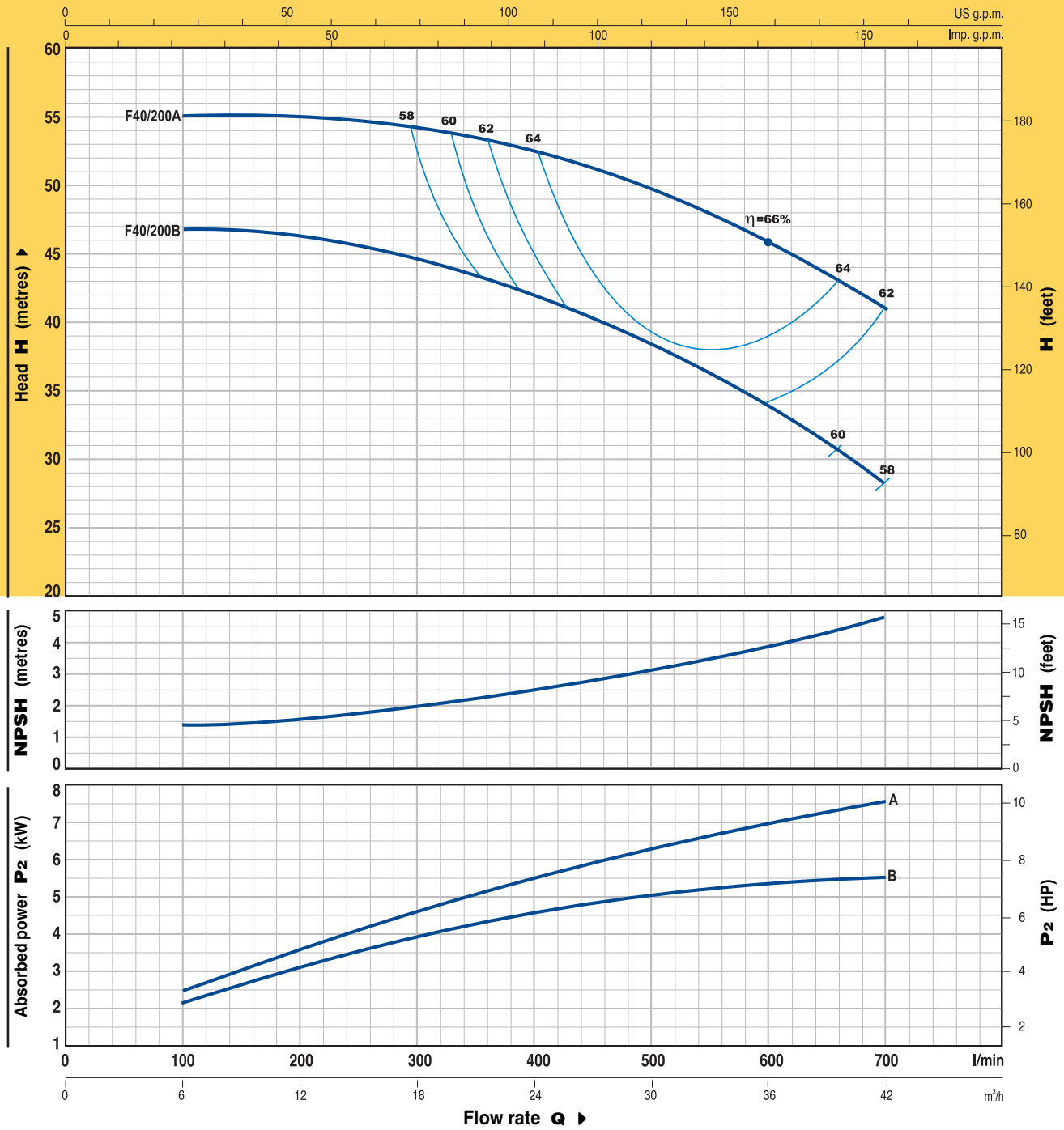


TYPE		POWER		Q	Flow rate											
Single-phase	Three-phase	kW	HP		0	6	9	12	15	18	24	30	36	42		
Fm 40/160C	F 40/160C	2.2	3	H metres	0	100	150	200	250	300	400	500	600	700		
Fm 40/160B	F 40/160B	3	4		27	27	26.5	26	25.5	25	22.5	19	14			
—	F 40/160A	4	5.5		32	32	31.5	31	30.5	30	27.5	24	20			
					38	38	37.8	37	36.5	36	33.5	30	26	20		

Q = Flow rate H = Total manometric head

Tolerance of the performance curves according to EN ISO 9906 App. A.

CURVES AND PERFORMANCE DATA AT n= 2900 1/min

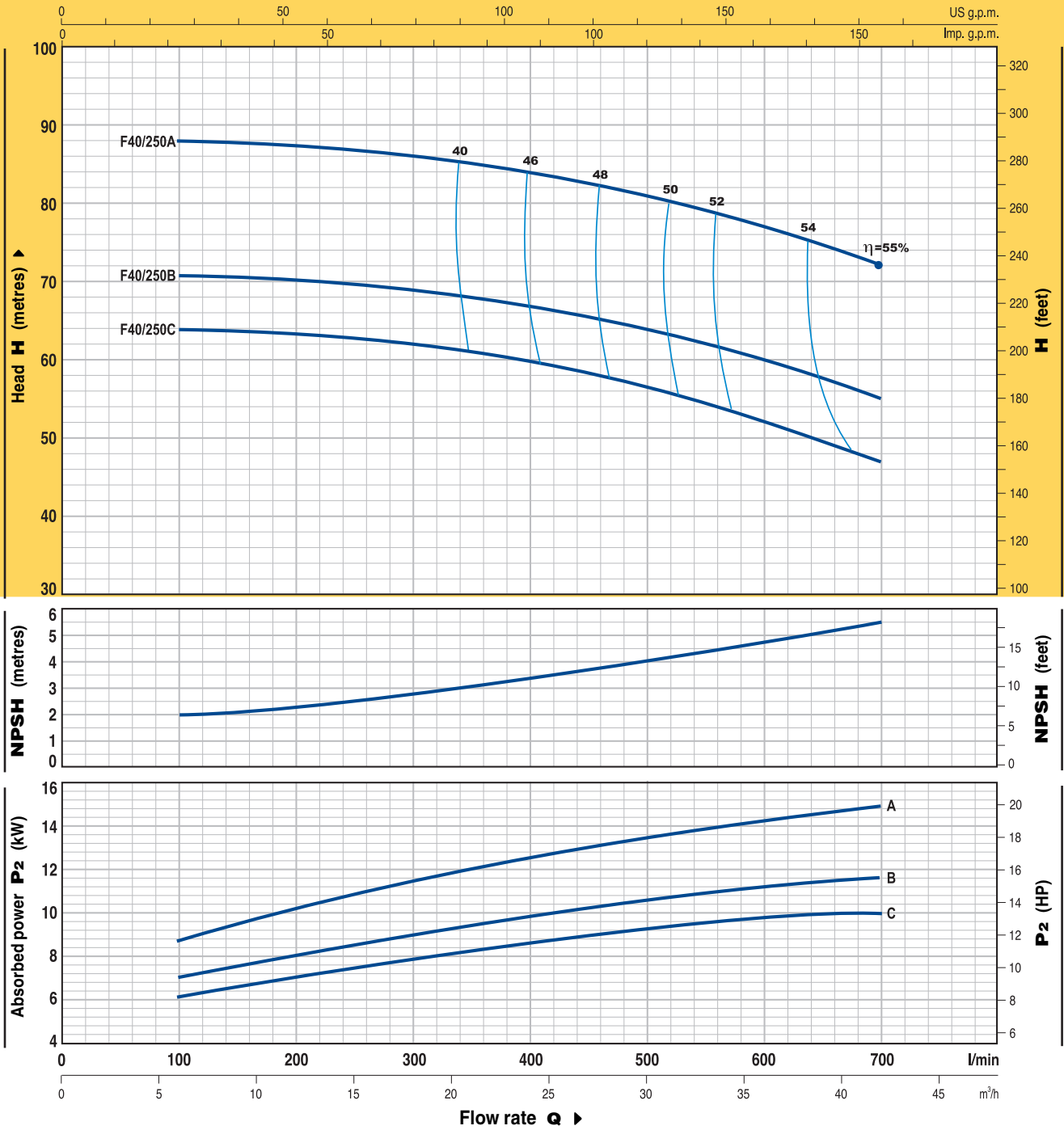


TYPE	POWER		Q	Flow rate											
	kW	HP		m³/h	0	6	9	12	15	18	24	30	36	42	
Three-phase				0	100	150	200	250	300	400	500	600	700		
F 40/200B	5.5	7.5	H metres	48	47	46.5	46	45.5	44.5	42	38	34	28		
F 40/200A	7.5	10		56	55	55	55	54.5	54	52.5	49.5	46	41		

Q = Flow rate H = Total manometric head

Tolerance of the performance curves according to EN ISO 9906 App. A.

CURVES AND PERFORMANCE DATA AT n= 2900 1/min

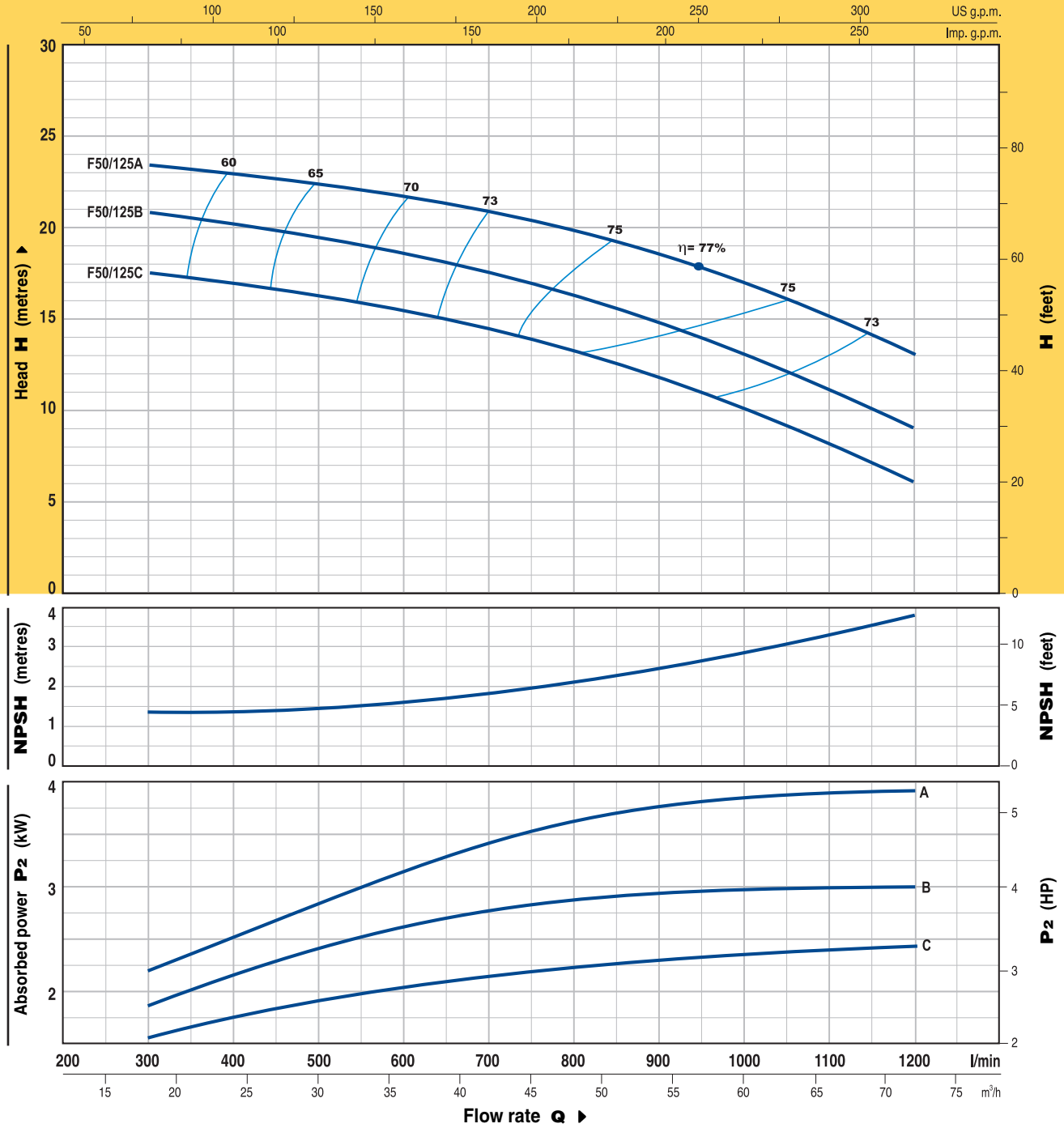


TYPE	POWER		Q	Flow rate											
	kW	HP		m ³ /h	0	6	9	12	15	18	24	30	36	42	
Three-phase			l/min	0	100	150	200	250	300	400	500	600	700		
F 40/250C	9.2	12.5	H metres	64	64	63.5	63	62.5	62	60	56.5	52.5	47		
F 40/250B	11	15		71	71	70.5	70	69.5	69	67	64	60	55		
F 40/250A	15	20		88	88	87.5	87	86.5	86	84	81	77	72		

Q = Flow rate H = Total manometric head

Tolerance of the performance curves according to EN ISO 9906 App. A.

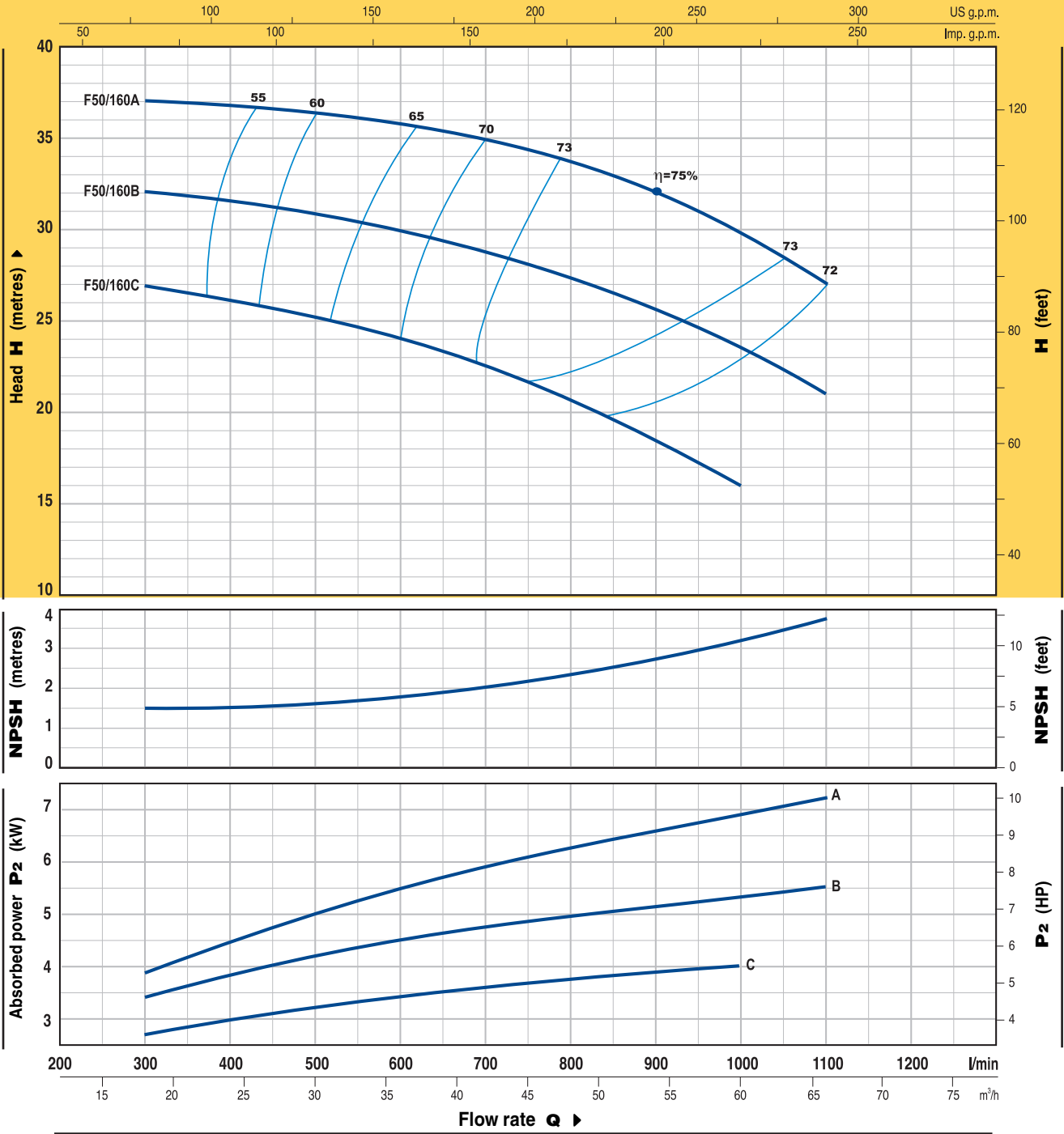
CURVES AND PERFORMANCE DATA AT n= 2900 1/min



TYPE		POWER		Q m³/h l/min	0	18	24	30	36	42	48	54	60	66	72
Single-phase	Three-phase	kW	HP		0	300	400	500	600	700	800	900	1000	1100	1200
Fm 50/125C	F 50/125C	2.2	3	H metres	18.5	17.5	17	16.5	15.5	14.8	13.5	12	10.5	8.2	6
Fm 50/125B	F 50/125B	3	4		21.5	20.7	20	19.5	18.8	17.8	16.5	15	13.5	11.2	9
—	F 50/125A	4	5.5		24.5	23.5	23	22.5	21.8	20.8	19.5	18.3	16.8	15	13

Q = Flow rate H = Total manometric head Tolerance of the performance curves according to EN ISO 9906 App. A.

CURVES AND PERFORMANCE DATA AT n= 2900 1/min

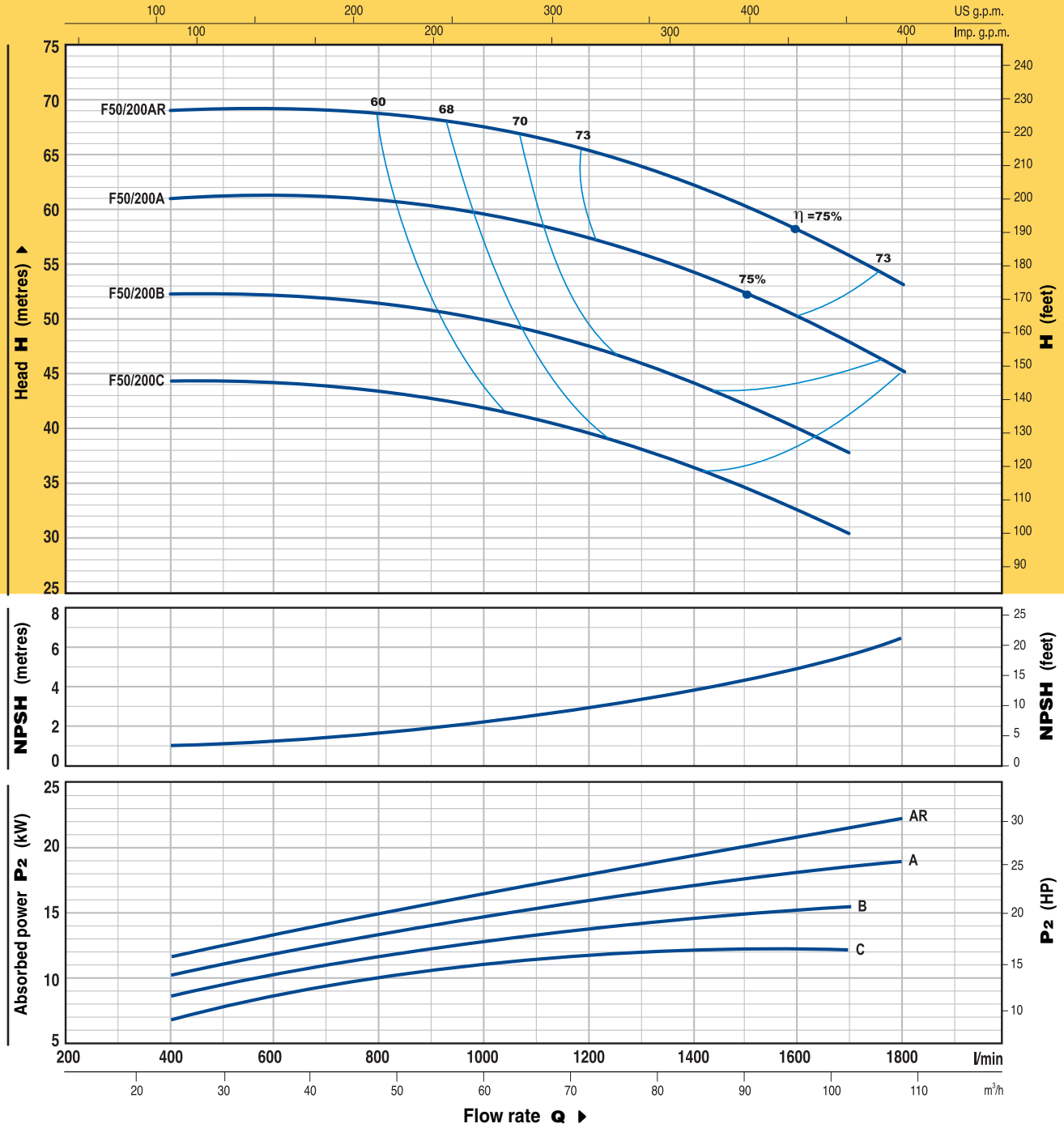


TYPE	POWER		Q	Flow rate												
	kW	HP		0	18	24	30	36	42	48	54	60	66			
Three-phase			Q	0	300	400	500	600	700	800	900	1000	1100			
F 50/160C	4	5.5	H metres	27	27	26.5	25	24.5	23	20	18.5	16				
F 50/160B	5.5	7.5		33	32	31.7	31	30	29	27	26	24	21			
F 50/160A	7.5	10		38	37	36.8	36.5	36	34	33	32	30	27			

Q = Flow rate H = Total manometric head

Tolerance of the performance curves according to EN ISO 9906 App. A.

CURVES AND PERFORMANCE DATA AT n= 2900 1/min

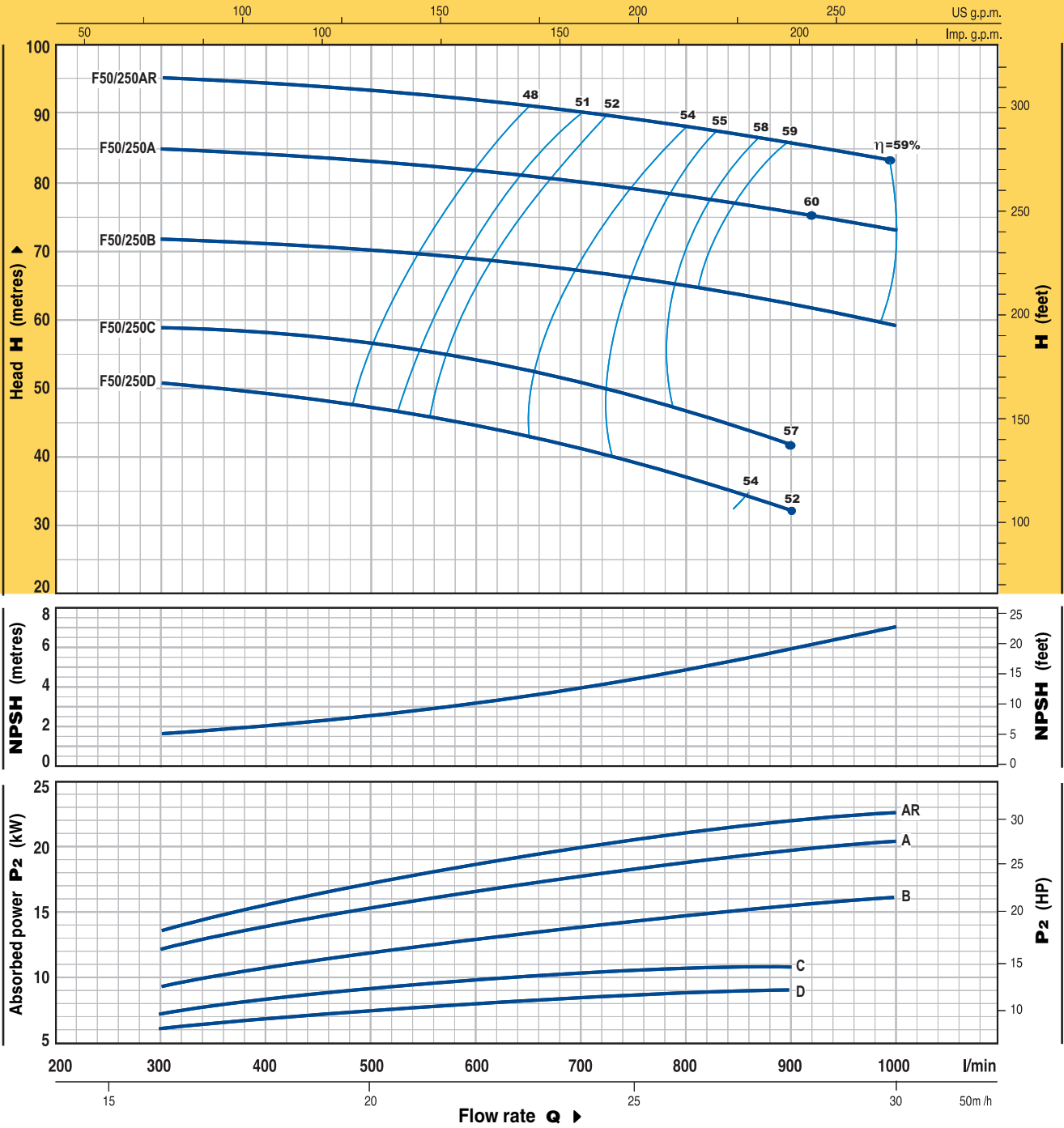


TYPE	POWER		Q	Flow rate										
	kW	HP		m³/h	24	36	48	60	72	84	96	102	108	
Three-phase			l/min	400	600	800	1000	1200	1400	1600	1700	1800		
F 50/200C	11	15	H metres	44	44	44	42	39	36	33	30			
F 50/200B	15	20		52	52	52	50	47	44	40	38			
F 50/200A	18.5	25		61	61	60.5	60	57	54	50	48	45		
F 50/200AR	22	30		69	69	68.5	68	65	62	58	56	53		

Q = Flow rate H = Total manometric head

Tolerance of the performance curves according to EN ISO 9906 App. A.

CURVES AND PERFORMANCE DATA AT n= 2900 1/min

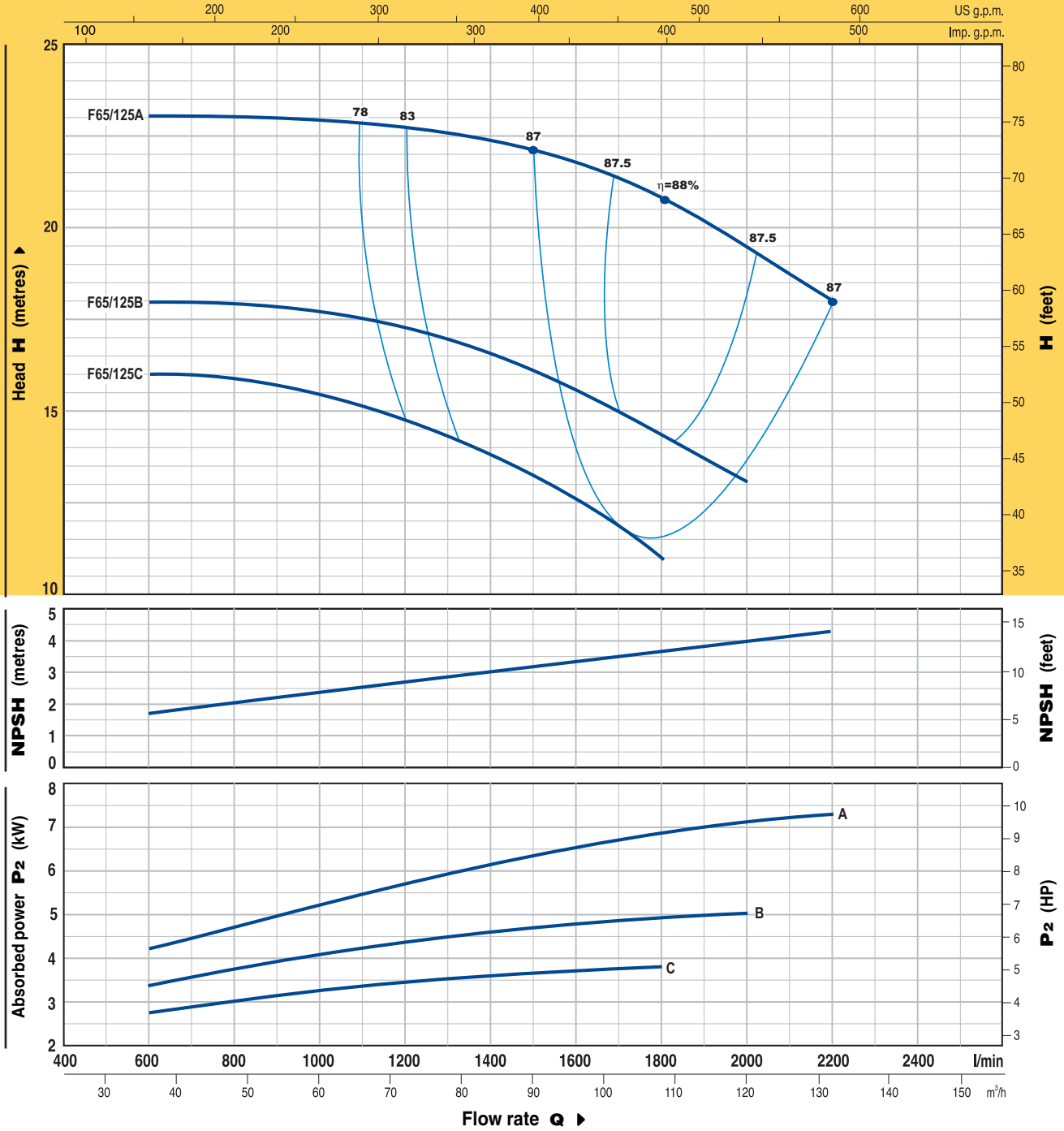


TYPE	POWER		Q	Flow rate											
	kW	HP		0	18	24	30	36	42	48	54	60			
Three-phase				0	300	400	500	600	700	800	900	1000			
F 50/250D	9.2	12.5	H metres	51	51	49	47	44	41	37	32				
F 50/250C	11	15		59	59	58	57	54	51	47	42				
F 50/250B	15	20		72	72	71	70	69	67	65	62	59			
F 50/250A	18.5	25		85	85	84	83	82	80	78	76	73			
F 50/250AR	22	30		95	95	94	93	92	90	88	86	83			

Q = Flow rate H = Total manometric head

Tolerance of the performance curves according to EN ISO 9906 App. A.

CURVES AND PERFORMANCE DATA AT n= 2900 1/min

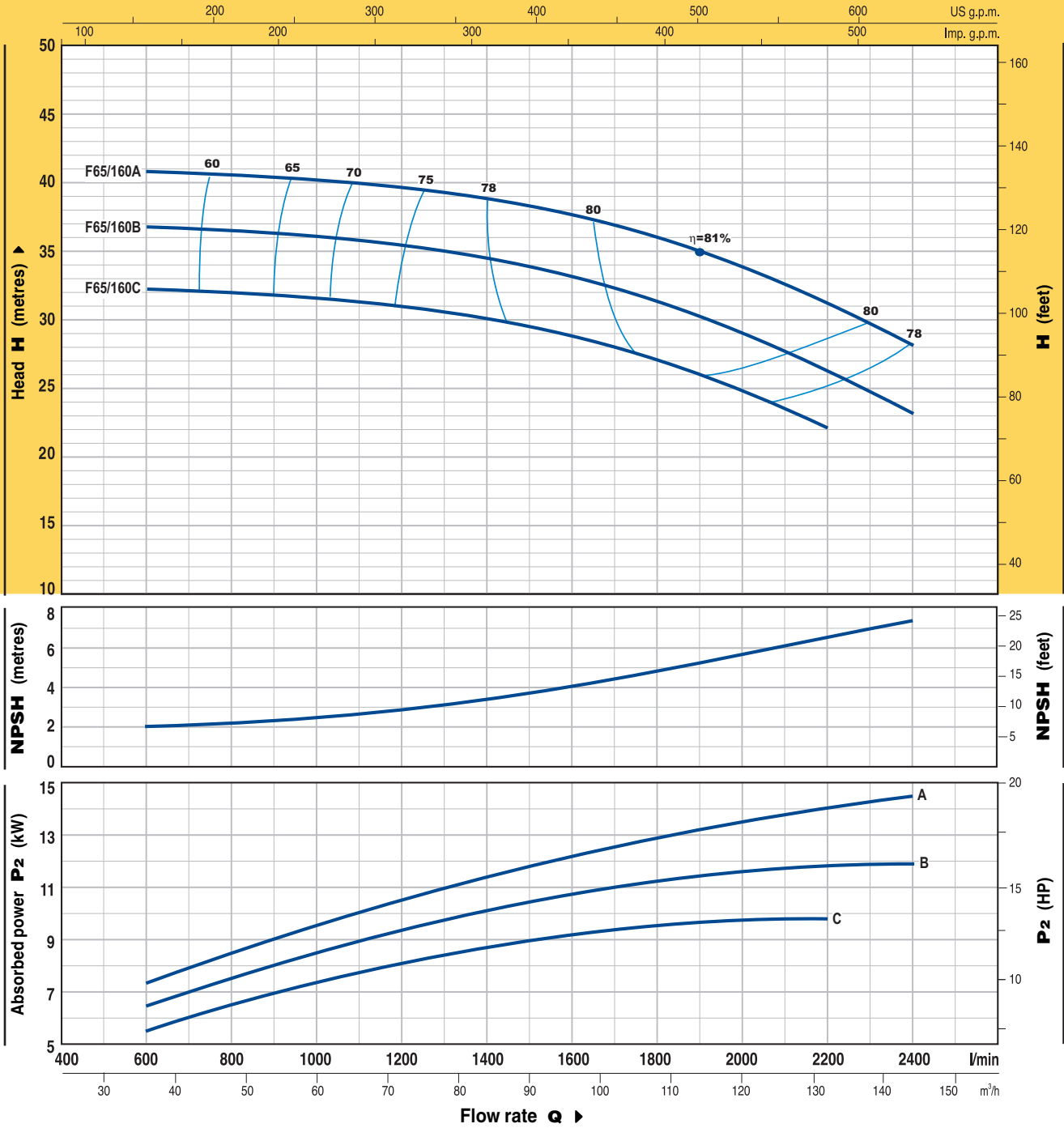


TYPE	POWER		Q	Flow rate											
	kW	HP		m³/h	0	36	48	60	72	84	96	108	120	132	
Three-phase			l/min	0	600	800	1000	1200	1400	1600	1800	2000	2200		
F 65/125C	4	5.5	H metres	16	16	16	15.5	14.5	13.5	12.5	11				
F 65/125B	5.5	7.5		18	18	18	18	17	16.5	15.5	14.5	13			
F 65/125A	7.5	10		23	23	23	23	22.5	22.5	22	21	19.5	18		

Q = Flow rate H = Total manometric head

Tolerance of the performance curves according to EN ISO 9906 App. A.

CURVES AND PERFORMANCE DATA AT n= 2900 1/min

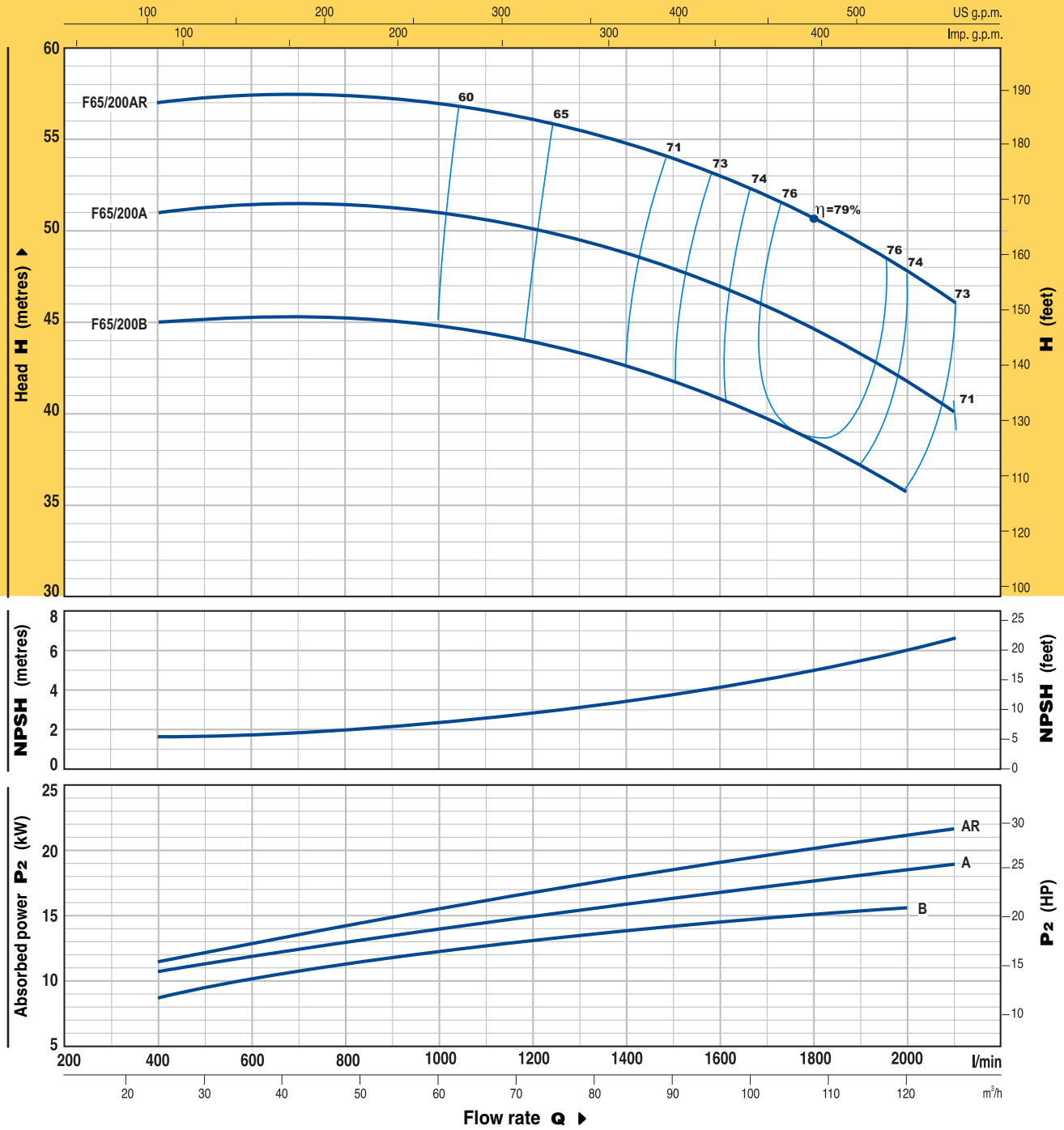


TYPE	POWER		Q	Flow rate											
	kW	HP		m ³ /h	0	36	48	60	72	84	96	108	120	132	144
Three-phase			l/min	0	600	800	1000	1200	1400	1600	1800	2000	2200	2400	
F 65/160C	9.2	12.5	H metres	32	32	32	32	32	30	29	27	25	22		
F 65/160B	11	15		37	36.5	36.5	36	35.5	34	33	31	29	26	23	
F 65/160A	15	20		41	40.5	40.5	40	35.5	39	37.5	36	34	31	28	

Q = Flow rate H = Total manometric head

Tolerance of the performance curves according to EN ISO 9906 App. A.

CURVES AND PERFORMANCE DATA AT n= 2900 1/min

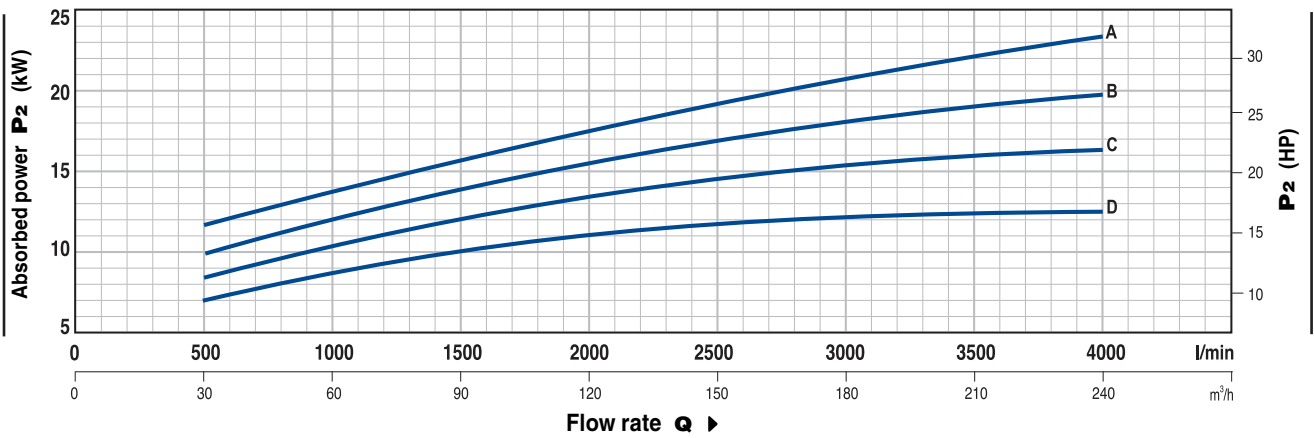
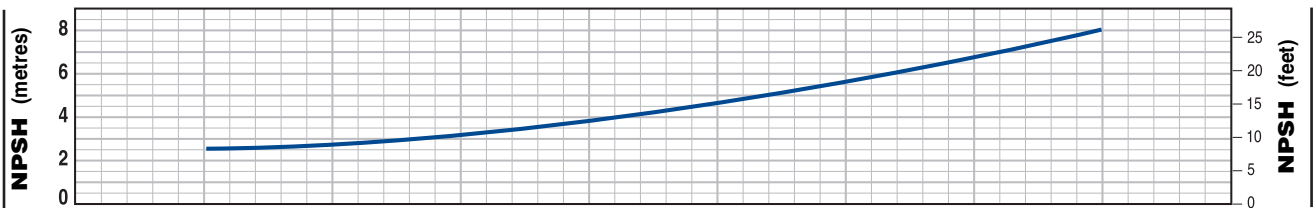
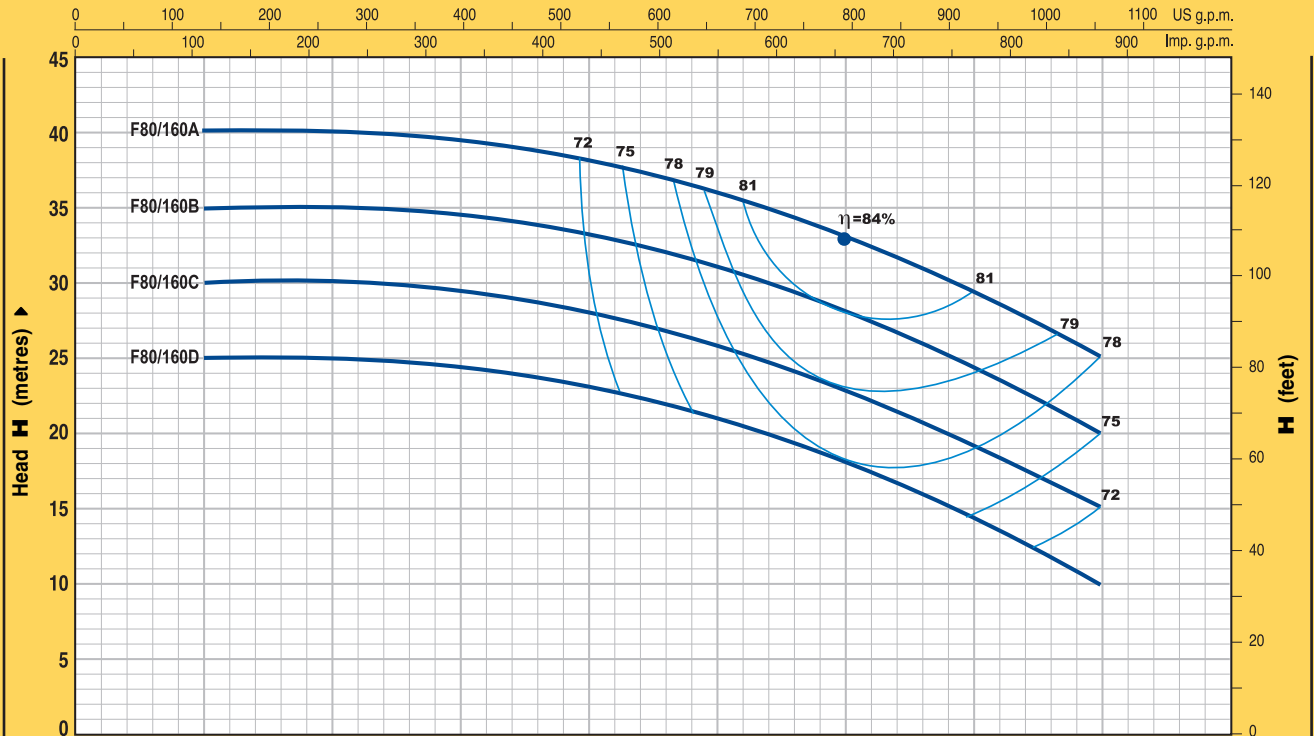


TYPE	POWER		Q	24	36	48	60	72	84	96	108	120	126
	kW	HP		l/min	400	600	800	1000	1200	1400	1600	1800	2000
F 65/200B	15	20	H metres	45	45	45	45	44	42.5	41	38.5	35.5	
F 65/200A	18.5	25		51	51	51	51	50	49	47	44.5	41.5	40
F 65/200AR	22	30		57	57	57	57	56	55	53	50.5	47.5	46

Q = Flow rate H = Total manometric head

Tolerance of the performance curves according to EN ISO 9906 App. A.

CURVES AND PERFORMANCE DATA AT n= 2900 1/min

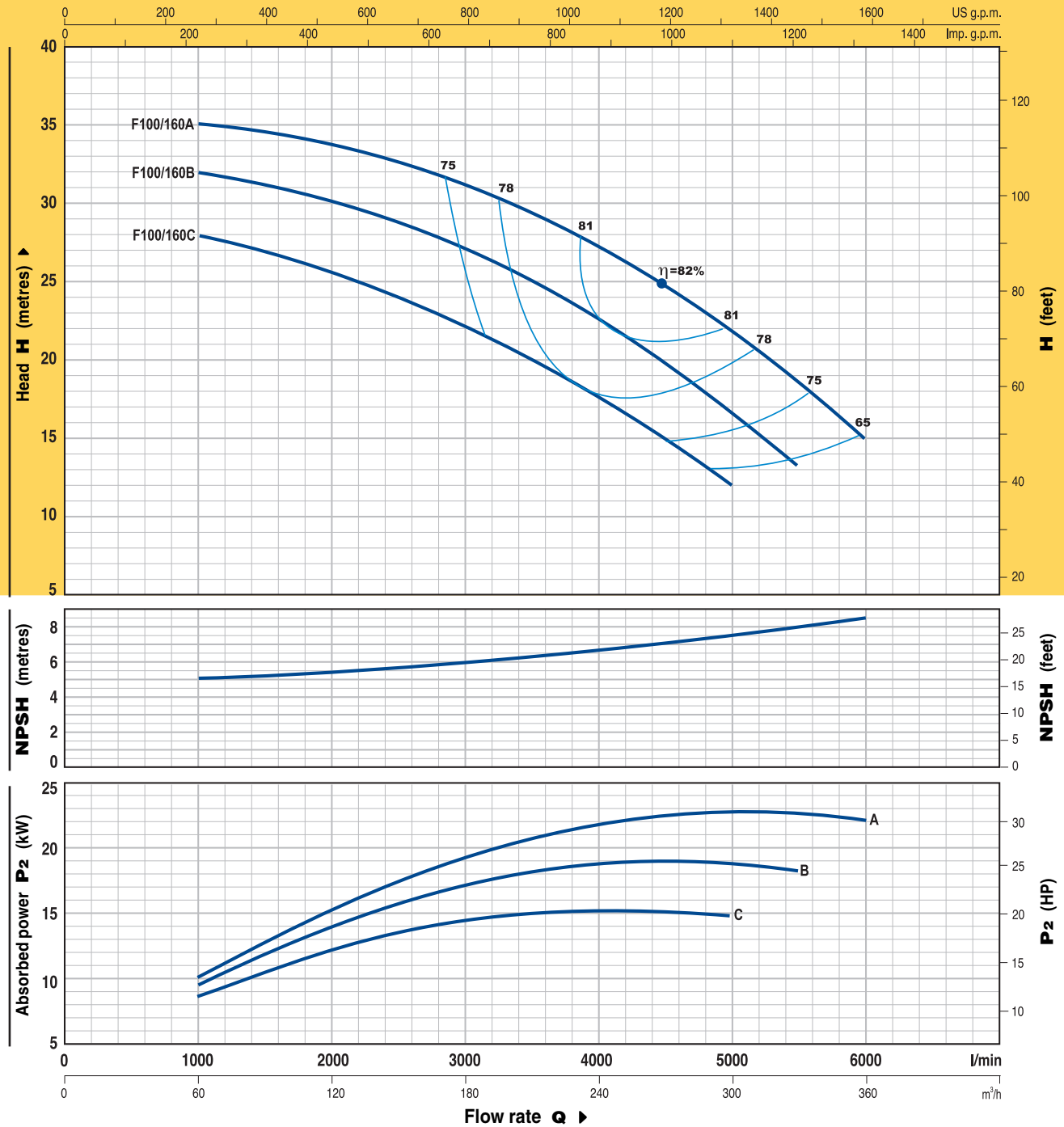


TYPE	POWER		Q	Flow rate												
	kW	HP		0	30	60	90	120	150	180	210	240				
Three-phase				0	500	1000	1500	2000	2500	3000	3500	4000				
F 80/160D	11	15	H metres	25	25	25	24.5	23.5	21	18	14.5	10				
F 80/160C	15	20		30	30	30	29.5	28.5	26	23	19.5	15				
F 80/160B	18.5	25		35	35	35	34.5	33.5	31	28	24.5	20				
F 80/160A	22	30		40	40	40	39.5	38.5	36	33	29.5	25				

Q = Flow rate H = Total manometric head

Tolerance of the performance curves according to EN ISO 9906 App. A.

CURVES AND PERFORMANCE DATA AT n= 2900 1/min

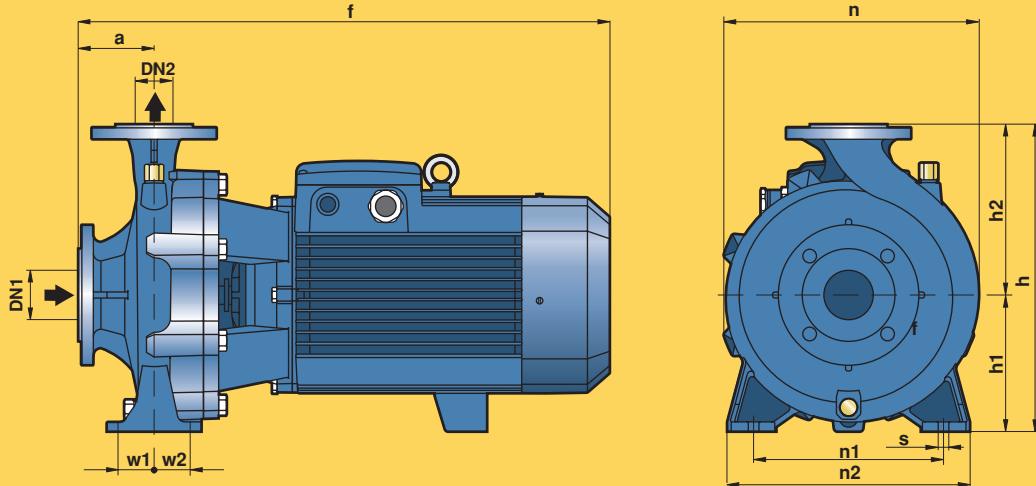


TYPE	POWER		Q	Flow rate											
	kW	HP		m ³ /h	0	60	120	180	240	270	300	330	360		
Three-phase			l/min	0	1000	2000	3000	4000	4500	5000	5500	6000			
F 100/160C	15	20	H metres	28	28	25.5	22	17.5	15	12					
F 100/160B	18.5	25		32	32	30	27	22.5	19.5	17	13				
F 100/160A	22	30		35	35	34	31	27	24.5	22	18	15			

Q = Flow rate H = Total manometric head

Tolerance of the performance curves according to EN ISO 9906 App. A.

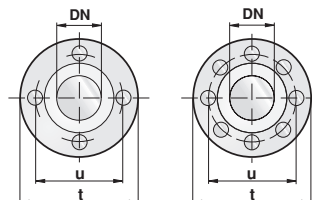
DIMENSIONS AND WEIGHTS



TYPE		PORTS		DIMENSIONS mm											kg*													
Single-phase	Three-phase	DN1	DN2	a	f	h	h1	h2	n	n1	n2	w1	w2	s	1~	3~												
Fm 32/160C	F 32/160C	50	32	80	412	292	132	160	242	190	240	35	35	14	39.2	38.4												
Fm 32/160B	F 32/160B				431/412										42.6	39.2												
Fm 32/160A	F 32/160A				465/431										49.2	42.6												
---	F 32/200C				469										-	52.1												
---	F 32/200B				515										-	57.0												
---	F 32/200A				469										-	63.0												
Fm 32/200BH	F 32/200BH				431/412										53.8	48.5												
---	F 32/200AH				465/431										-	52.8												
Fm 40/160C	F 40/160C				65										40	80	431/412	292	132	160	240	212	265	47.5	47.5	14	43.9	41.2
Fm 40/160B	F 40/160B																465/431										50.5	43.9
---	F 40/160A	465	-	50.5																								
---	F 40/200B	535	-	61.4																								
---	F 40/200A	535	-	65.9																								
---	F 40/250C	606	-	108.0																								
---	F 40/250B	701	-	115.0																								
---	F 40/250A	450/431	-	132.0																								
Fm 50/125C	F 50/125C	65	50	100		484	292	132	160	242	190	240	35	35			14										44.2	41.4
Fm 50/125B	F 50/125B					484																					50.5	44.2
---	F 50/125A				489	-									50.5													
---	F 50/160C				535	-									55.5													
---	F 50/160B				535	-									60.5													
---	F 50/160A				616	-									65.0													
---	F 50/200C				711	-									105.3													
---	F 50/200B				711	-									121.7													
---	F 50/200A				743	-									134.2													
---	F 50/200AR				743	-									145.7													
---	F 50/250D	606	-	111.0																								
---	F 50/250C	701	-	118.0																								
---	F 50/250B	701	-	135.0																								
---	F 50/250A	733	-	148.0																								
---	F 50/250AR	733	-	159.5																								
---	F 65/125C	80	65	125	511	340	160	180	291	212	280	47.5	47.5	14	-	62.0												
---	F 65/125B				557										-	67.7												
---	F 65/125A				621										-	72.0												
---	F 65/160C				621										-	100.0												
---	F 65/160B				360										-	107.0												
---	F 65/160A				716										-	123.0												
---	F 65/200B				719										-	128.0												
---	F 65/200A				719										-	141.5												
---	F 65/200AR				751										-	153.0												
---	F 80/160D				652										-	112.5												
---	F 80/160C	747	-	129.5																								
---	F 80/160B	747	-	142.5																								
---	F 80/160A	779	-	154.0																								
---	F 100/160C	125	100	125	758	480	200	280	362	280	360	60	60	18	-	141.2												
---	F 100/160B				790										-	153.7												
---	F 100/160A				790										-	165.2												

(*weight includes counterflanges)

DN FLANGES	t mm	u mm	HOLES	
mm			N°	Ø (mm)
32	140	100	4	18
40	150	110		
50	165	125		
65	185	145		
80	200	160		
100	220	180	8	18
125	250	210		



Bz pumps with bronze body



RANGE OF PERFORMANCE

Flow rate up to 90 l/min (5.4 m³/h)
Head up to 55 m.

LIMITS OF USE

Liquid temperature up to + 90°C
Environment temperature up to + 40°C

CONSTRUCTION AND SAFETY STANDARDS

EN 60034-1
IEC 34-1
CEI 2-3



INSTALLATION AND USE

They are recommended for pumping clean water without abrasive particles and liquids that are chemically non aggressive to the materials from which the pump is made. **THE NON-FERROUS CONSTRUCTION GUARANTEES AGAINST RUST AND OXIDATION. THE COMPACT DESIGN AND HYDRAULIC CHARACTERISTICS SUIT INDUSTRIAL APPLICATIONS INCLUDING COOLING AND CONDITIONING SYSTEMS.**

The pumps must be installed in enclosed places, or at least protected against inclement weather.

GUARANTEE 2 YEARS subject to our general terms of sale.

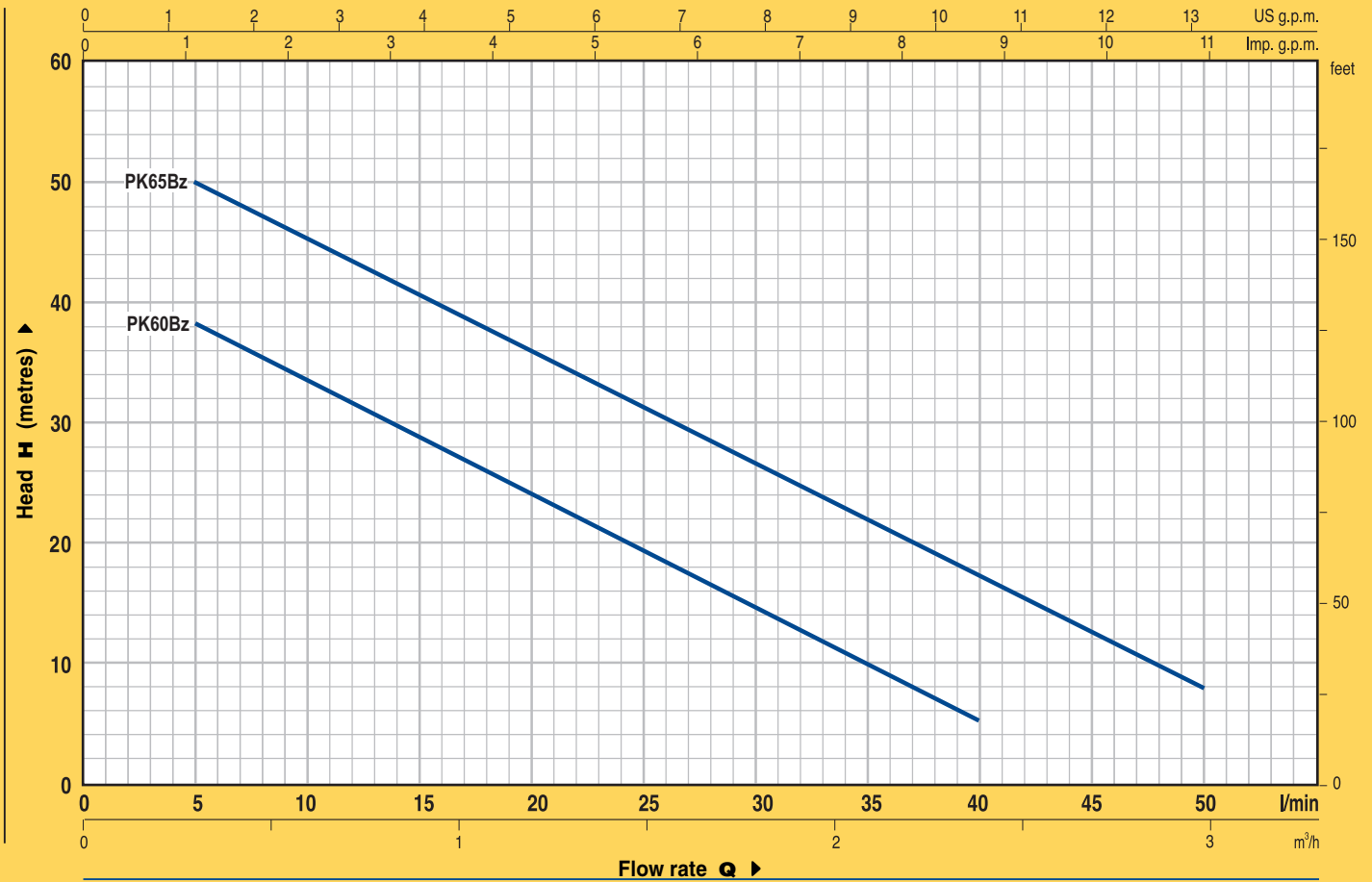
CONSTRUCTION CHARACTERISTICS

- **PUMP BODY:** bronze, with threaded ports ISO 228/1.
- **MOTOR BRACKET** (patent n° 1289150) PK-Bz, PQ-Bz: aluminium with brass front insert.
- **BODY BACK-PLATE:** CP-Bz: stainless steel AISI 316.
- **IMPELLER:** PK-Bz, PQ-Bz: brass.
CP-Bz: stainless steel AISI 316
- **MOTOR SHAFT:** stainless steel AISI 316.
- **MECHANICAL SEAL:** ceramic - graphite - VITON.
- **ELECTRIC MOTOR:** induction motor, for continuous duty.
Single-phase: 230 V - 50 Hz with capacitor and thermal overload protector.
Three-phase: 230/400 V - 50 Hz.
- **INSULATION:** class F. ● **PROTECTION:** IP 44.

OPTIONS ON REQUEST

- ⇒ special mechanical seal
- ⇒ other voltages or frequency 60 Hz
- ⇒ protection IP 55
- ⇒ for liquids with higher temperatures
- ⇒ for environments with higher temperatures

CURVES AND PERFORMANCE DATA AT n= 2900 1/min

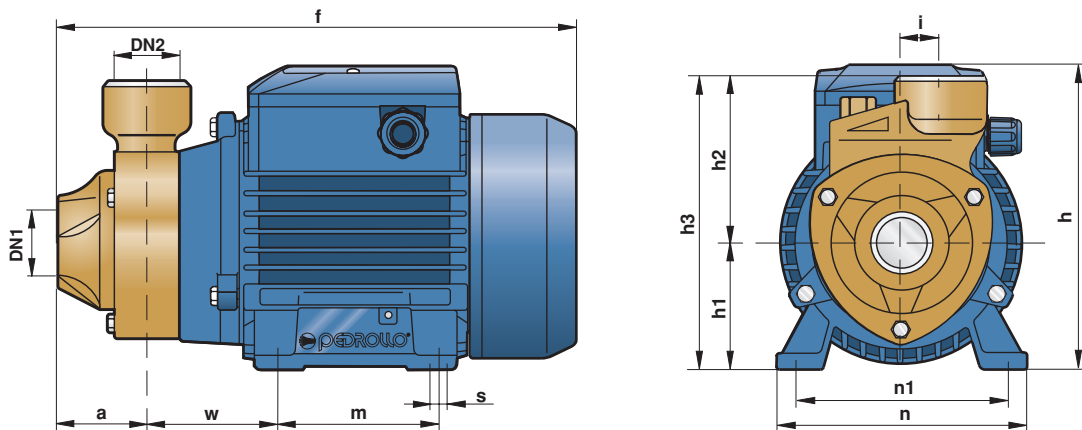


TYPE		POWER		Q	Flow rate									
Single-phase	Three-phase	kW	HP		m³/h	0	0.3	0.6	0.9	1.2	1.5	1.8	2.1	2.4
PKm 60-Bz	PK 60-Bz	0.37	0.50	l/min	0	5	10	15	20	25	30	35	40	50
PKm 65-Bz	PK 65-Bz	0.50	0.70	H metres	40	38	33.5	29	24	19.5	15	10	5	
					55	50	45.5	40.5	36	31	27	22	17	8

Q = Flow rate H = Total manometric head

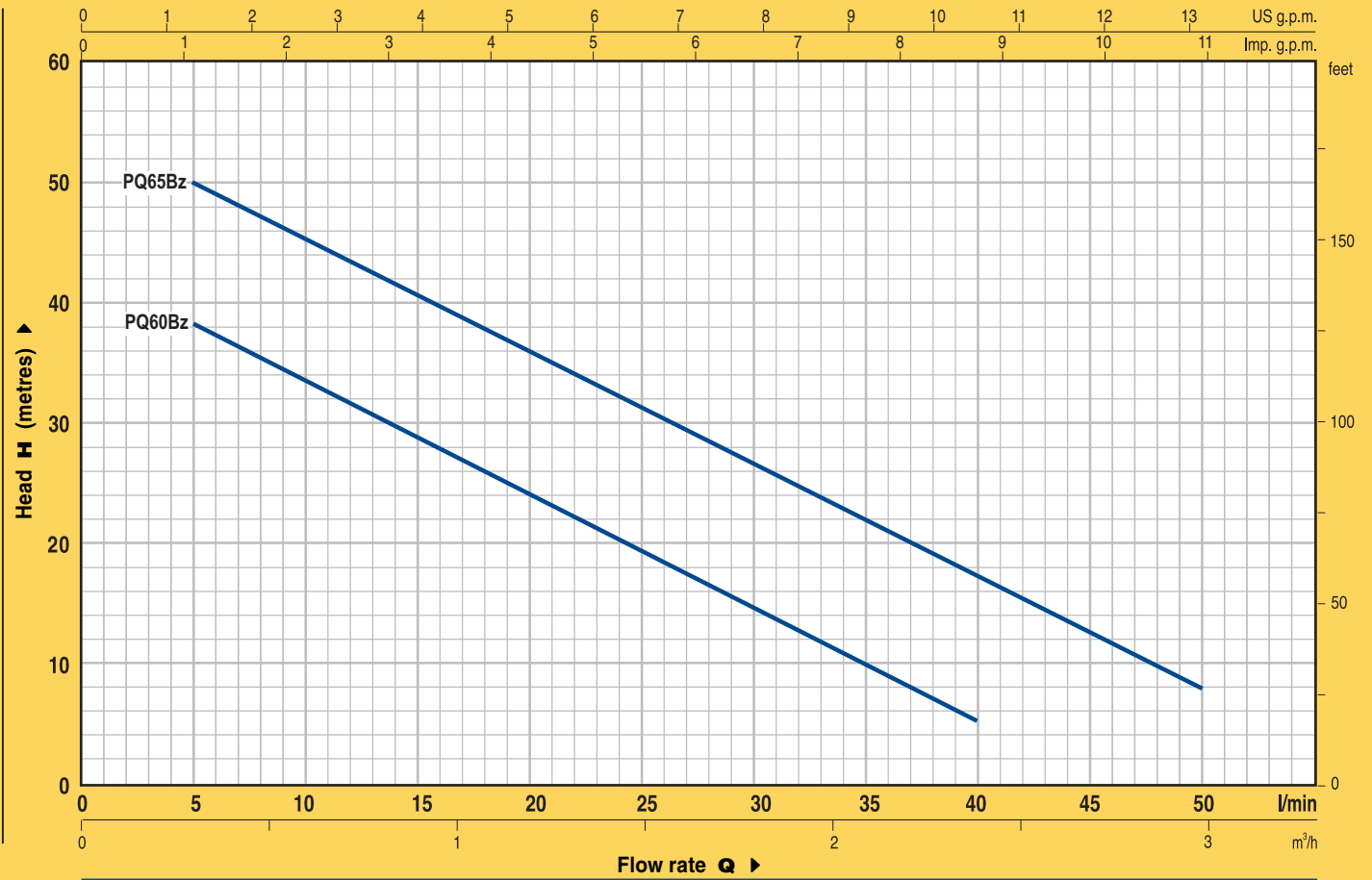
Tolerance of the performance curves according to EN ISO 9906 App. A.

DIMENSIONS AND WEIGHTS



TYPE		PORTS		DIMENSIONS mm												kg	
Single-phase	Three-phase	DN1	DN2	a	f	h	h1	h2	h3	i	m	n	n1	w	s	1~	3~
PKm 60-Bz	PK 60-Bz	1"	1"	42	243	152	63	75	138	20	80	120	100	55	7	5.7	5.7
PKm 65-Bz	PK 65-Bz	1"	1"	48	258/250	152	63	80	143	20	80	120	100	55	7	8.1	6.8

CURVES AND PERFORMANCE DATA AT n= 2900 1/min

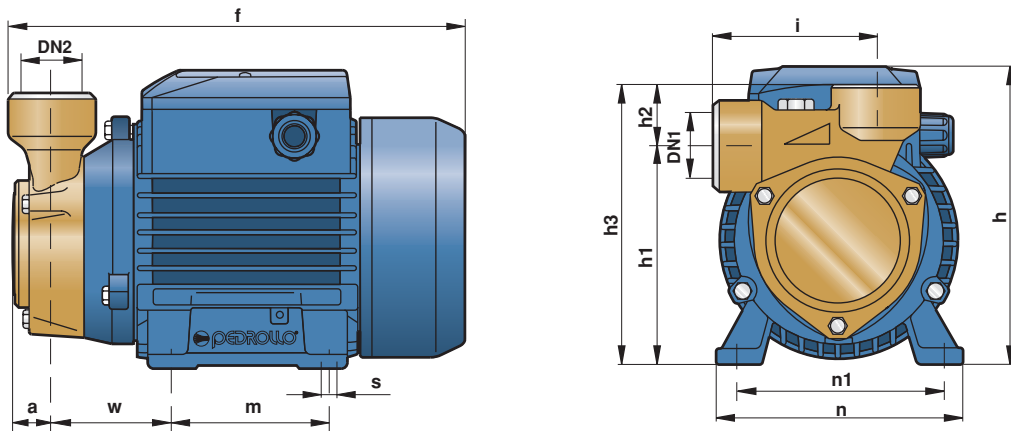


TYPE		POWER		Q	Flow rate										
Single-phase	Three-phase	kW	HP		m³/h	0	0.3	0.6	0.9	1.2	1.5	1.8	2.1	2.4	3.0
PQm 60-Bz	PQ 60-Bz	0.37	0.50	l/min	0	5	10	15	20	25	30	35	40	50	
PQm 65-Bz	PQ 65-Bz	0.50	0.70	H metres	40	38	33.5	29	24	19.5	15	10	5		
					55	50	45.5	40.5	36	31	27	22	17	8	

Q = Flow rate H = Total manometric head

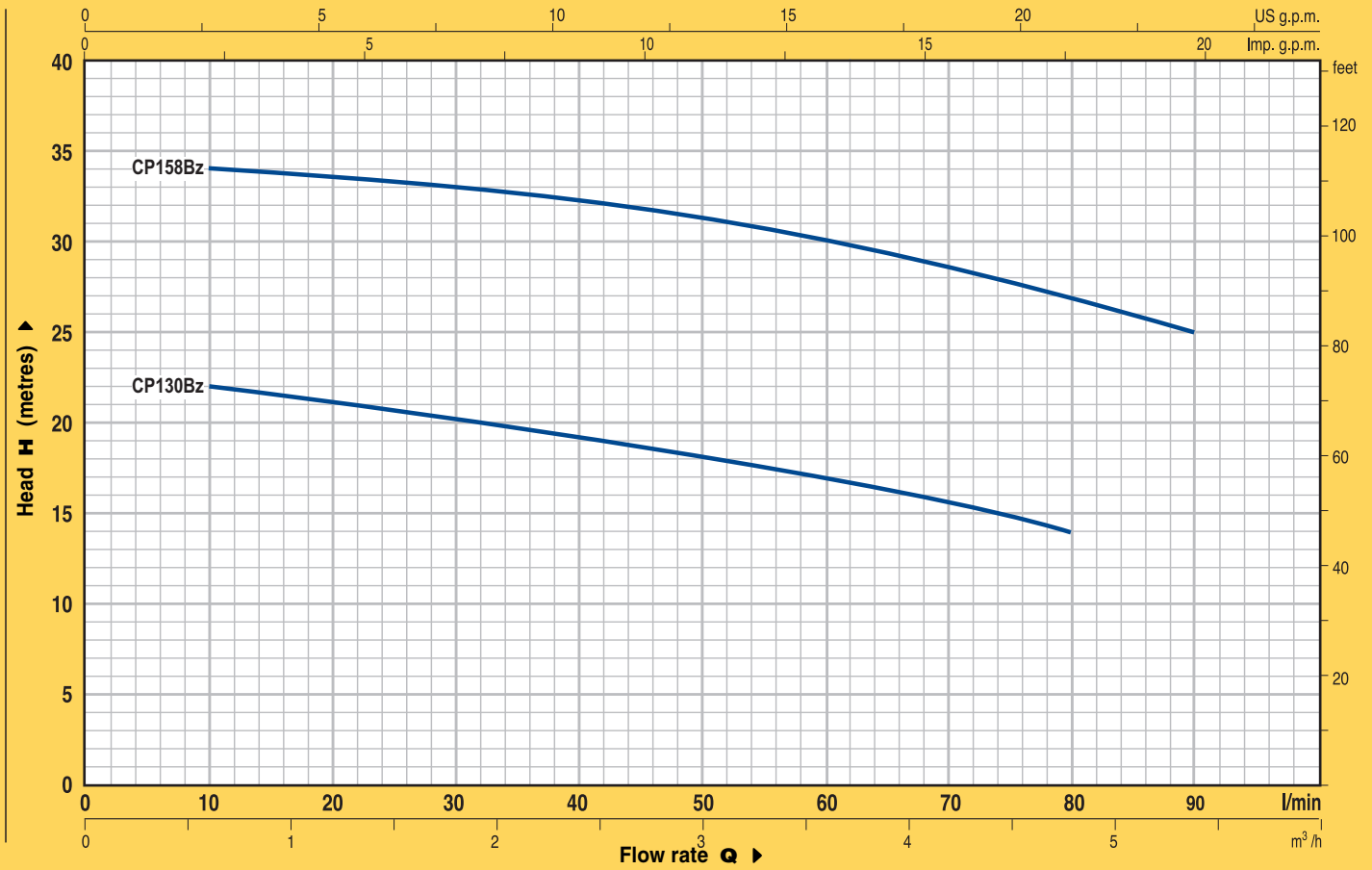
Tolerance of the performance curves according to EN ISO 9906 App. A.

DIMENSIONS AND WEIGHTS



TYPE		PORTS		DIMENSIONS mm												kg	
Single-phase	Three-phase	DN1	DN2	a	f	h	h1	h2	h3	i	m	n	n1	w	s	1~	3~
PQm 60-Bz	PQ 60-Bz	1"	1"	22	223	152	108	30	138	78	80	120	100	55	7	5.5	5.5
PQm 65-Bz	PQ 65-Bz				234/227		113		143					57		7.4	6.6

CURVES AND PERFORMANCE DATA AT n= 2900 1/min

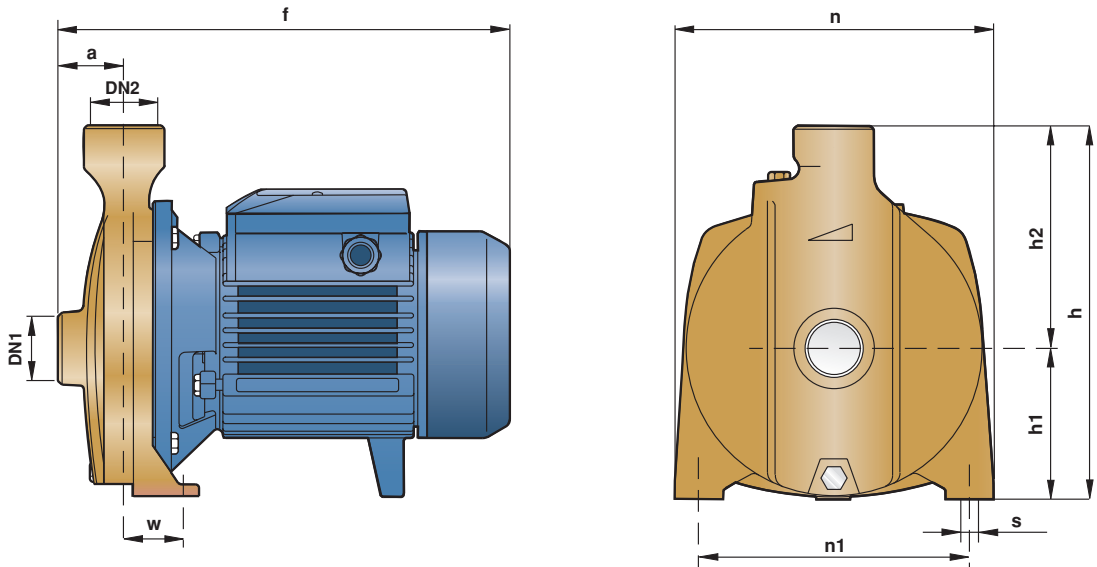


TYPE		POWER		Q	Flow rate									
Single-phase	Trifase	kW	HP		m³/h	0	0.6	1.2	1.8	2.4	3.0	3.6	4.2	4.8
CPm 130-Bz	CP 130-Bz	0.37	0.50	l/min	0	10	20	30	40	50	60	70	80	90
CPm 158-Bz	CP 158-Bz	0.75	1	H metres	23	22	21	20	19	18	17	15.5	14	12.5

Q = Flow rate H = Total manometric head

Tolerance of the performance curves according to EN ISO 9906 App. A.

DIMENSIONS AND WEIGHTS



TYPE		PORTS		DIMENSIONS mm										kg	
Single-phase	Three-phase	DN1	DN2	a	f	h	h1	h2	n	n1	w	s	1~	3~	
CPm 130-Bz	CP 130-Bz	1"	1"	42	259	205	82	123	165	135	41	10	8.5	8.3	
CPm 158-Bz	CP 158-Bz	1"	1"	42	285	240	92	148	190	160	38	10	12.8	12.3	

BETTY

portable self-priming pumps



RANGE OF PERFORMANCE

Flow range up to 50 l/min (3 m³/h)
Head up to 70 m

LIMITS OF USE

Manometric suction lift up to 9 m
Liquid temperature up to + 40°C
Environment temperature up to + 40°C

CONSTRUCTION AND SAFETY STANDARDS

EN 60 335-1	EN 60034-1
IEC 335-1	IEC 34-1
CEI 61-150	CEI 2-3



INSTALLATION AND USE

PORTABLE SELF-PRIMING PUMPS CAPABLE OF CLEARING ENTRAINED AIR FROM THE SUCTION PIPE. RECOMMENDED FOR GARDENING, VEGETABLE GARDENS, WASHING AND HOBBY APPLICATIONS THEY ARE SUITABLE FOR USE WITH ANY LIQUIDS COMPATIBLE WITH THE MATERIALS OF CONSTRUCTION.

GUARANTEE 2 YEARS subject to our general terms of sale.

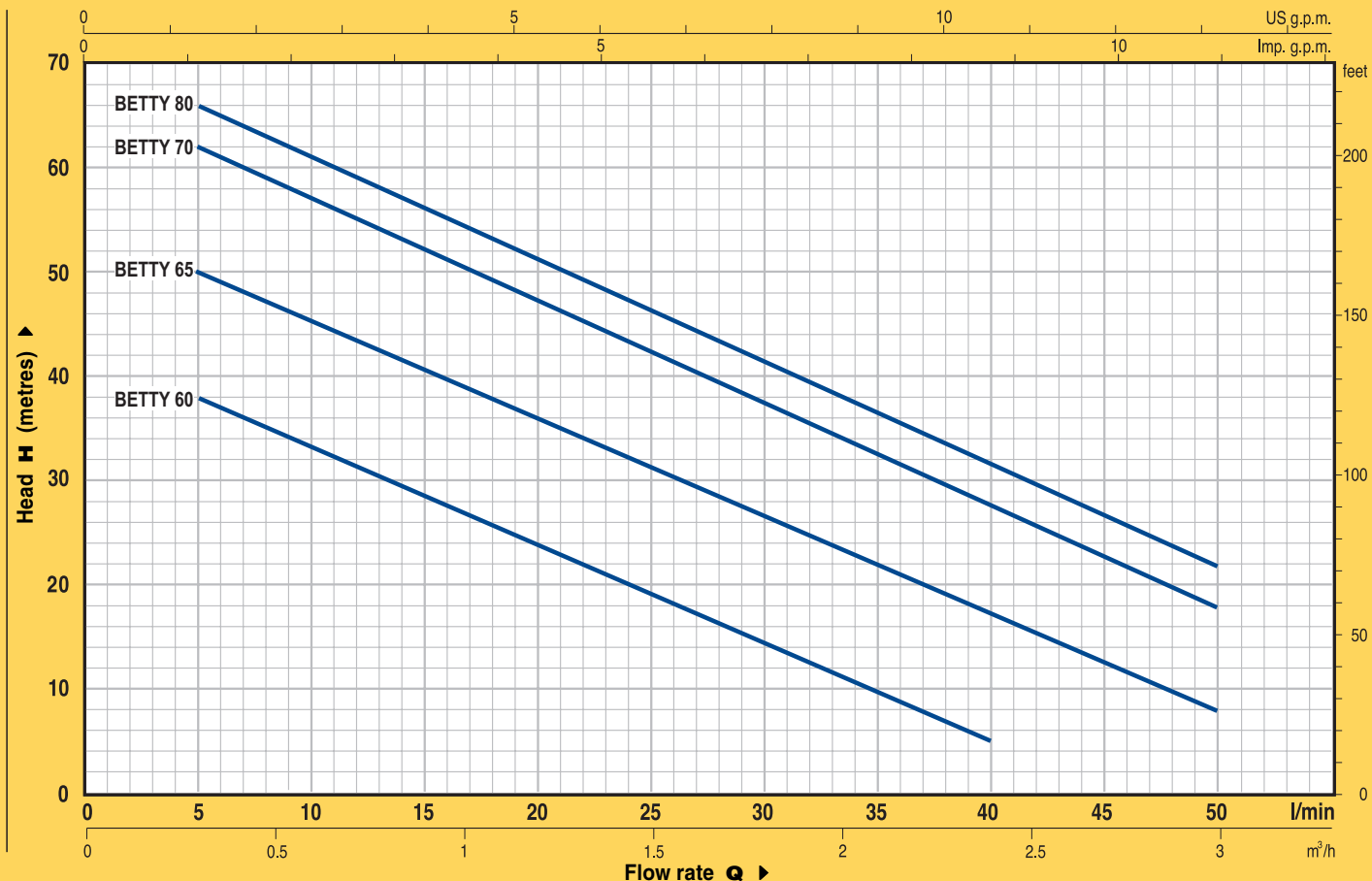
CONSTRUCTION CHARACTERISTICS

- PUMP BODY: BETTY: cast iron;
BETTINOX: stainless steel AISI 304.
- BETTY 60, 65, 70, 80: CHECK FLAP VALVE built into the suction port.
- IMPELLER:
BETTY 60, 65, 70, 80: brass, type with radial peripheral vanes;
BETTY 1, 2, 3
BETTINOX: technopolymer, centrifugal type.
- MOTOR SHAFT: stainless steel EN 10088-3 - 1.4104.
- MECHANICAL SEAL: ceramic - graphite - NBR.
- ELECTRIC MOTOR: induction motor, for continuous duty.
Single-phase: 230 V - 50 Hz with capacitor and thermal overload protector.
- INSULATION: class F. ● PROTECTION: IP 44.

STANDARD FEATURES:

BETTY Carrying handle.
Hosetails Ø 20 mm.
1.5 m power cable with Schuko plug.

CURVES AND PERFORMANCE DATA AT n= 2900 1/min

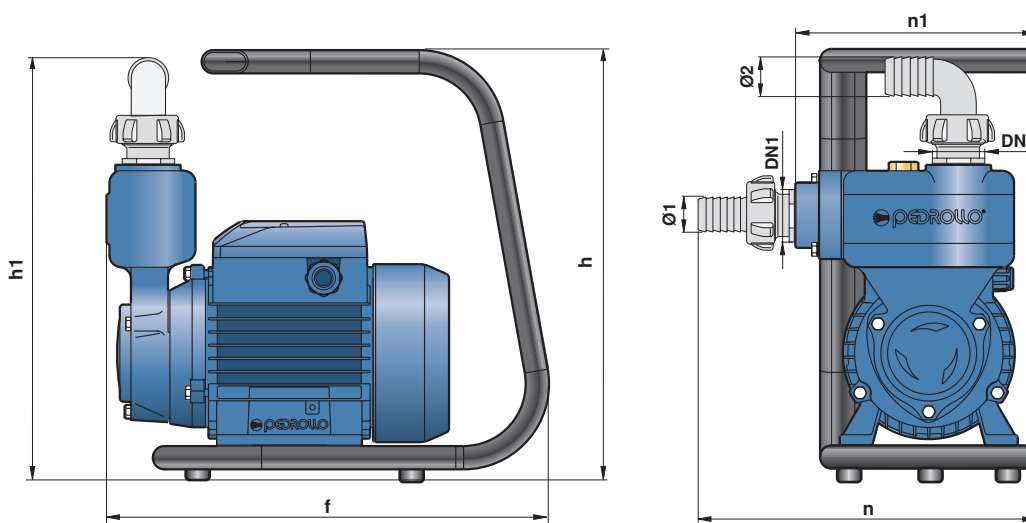


TYPE	POWER		Q	Flow rate												
	kW	HP		m³/h	0	0.3	0.6	0.9	1.2	1.5	1.8	2.1	2.4	2.7	3.0	
Single-phase			l/min	0	5	10	15	20	25	30	35	40	45	50		
BETTY 60	0.37	0.50	H metres	40	38	33.5	29	24	19.5	15	10	5				
BETTY 65	0.50	0.70		55	50	45.5	40.5	36	31	27	22	17	12.5	8		
BETTY 70	0.60	0.85		65	62	57	52	47	42	37	32	27	22	18		
BETTY 80	0.75	1		70	66	61	56	51	46	41	36.5	31	27	22		

Q = Flow rate H = Total manometric head

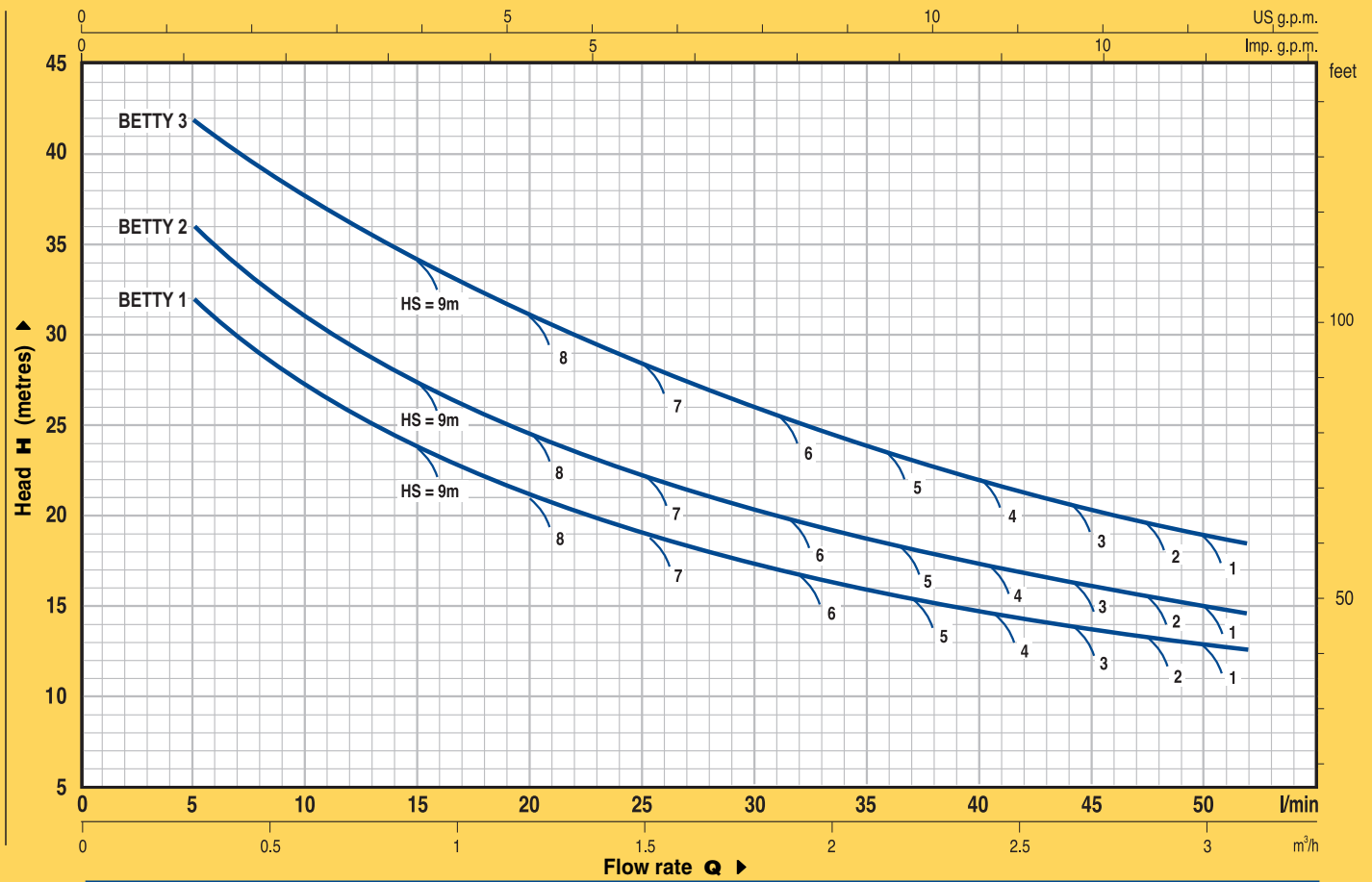
Tolerance of the performance curves according to EN ISO 9906 App. A.

DIMENSIONS AND WEIGHTS



TYPE	PORTS		DIMENSIONS mm							kg
	DN1	DN2	Ø1	Ø2	f	h	h1	n	n1	
Single-phase										
BETTY 60	1"	1"	20	20	270	273	267	220	160	7.9
BETTY 65					277					9.5
BETTY 70					12.6					
BETTY 80					12.8					

CURVES AND PERFORMANCE DATA AT n= 2900 1/min

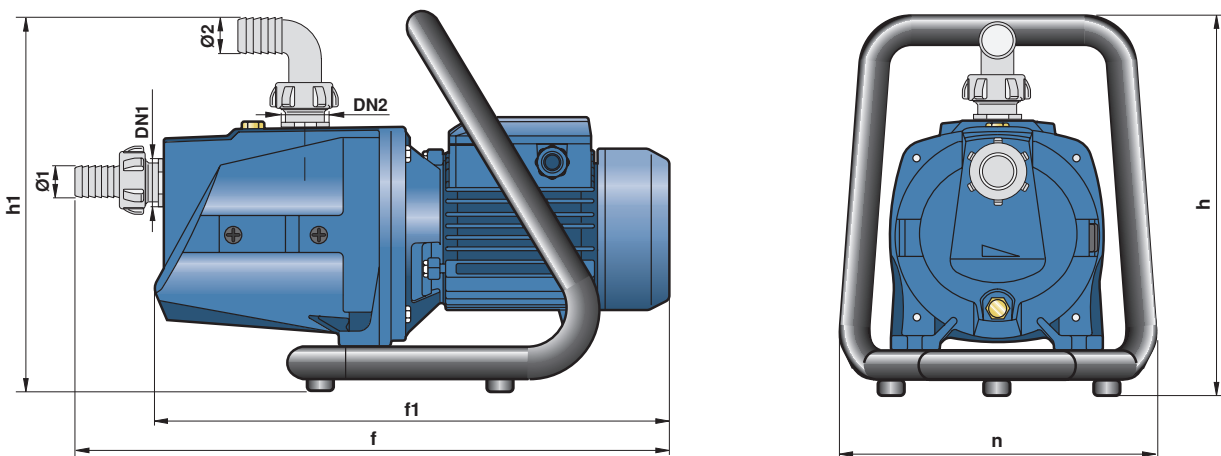


TYPE	POWER		Q	Flow rate											
	kW	HP		0	0.3	0.6	0.9	1.2	1.5	1.8	2.1	2.4	2.7	3.0	
Single-phase				0	5	10	15	20	25	30	35	40	45	50	
BETTY 1	0.37	0.50	H metres	35	32	27	24	21	19	17	16	15	14	13	
BETTY 2	0.50	0.70		41	36	31	27	24	22	20	19	17	16	15	
BETTY 3	0.60	0.85		47	42	38	34	31	28.5	26	24	22	21.5	19	

Q = Flow rate H = Total manometric head Hs = Suction height

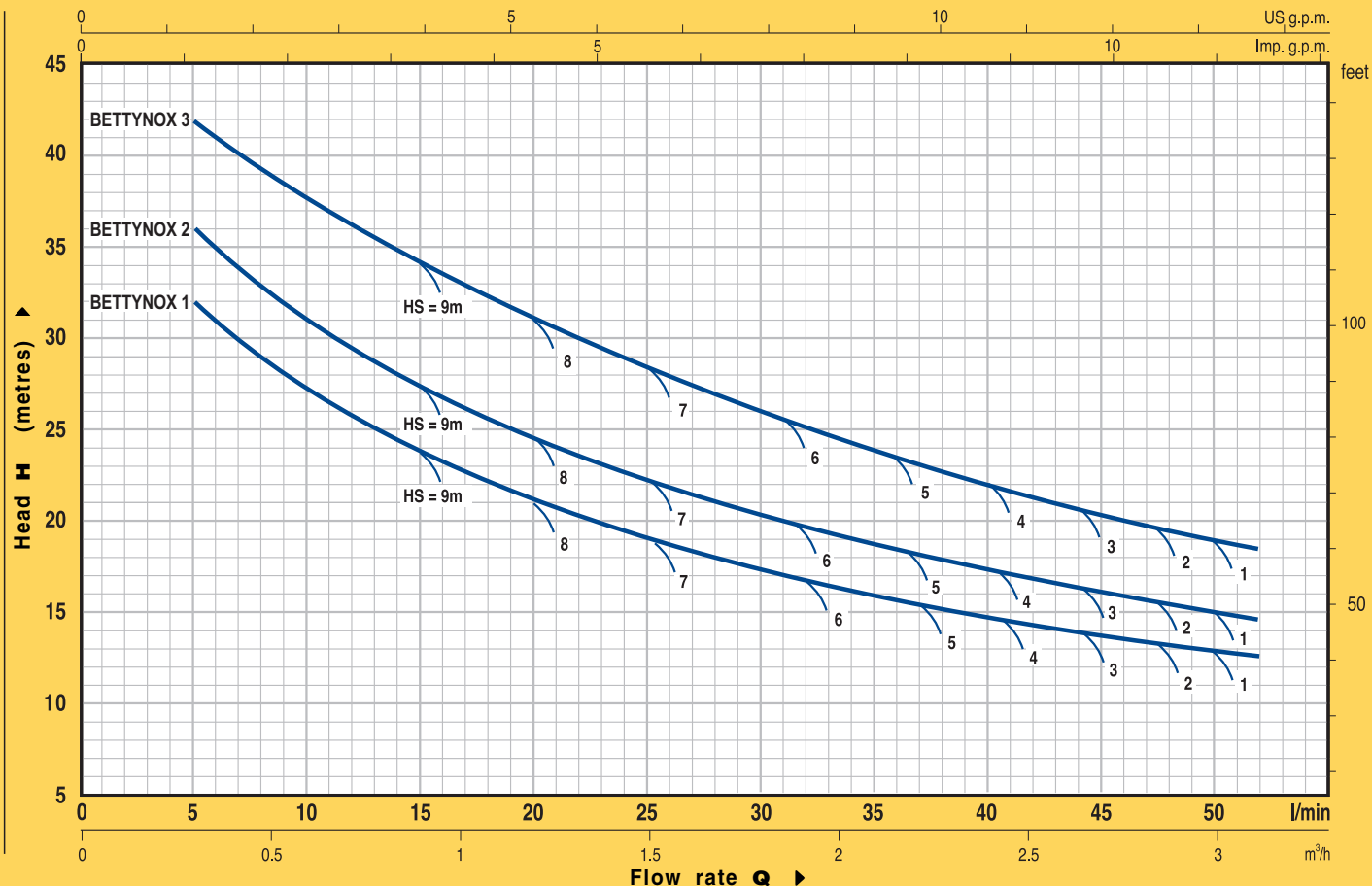
Tolerance of the performance curves according to EN ISO 9906 App. A.

DIMENSIONS AND WEIGHTS



TYPE	PORTS		DIMENSIONS mm						kg	
	DN1	DN2	Ø1	Ø2	f	f1	h	h1		n
BETTY 1	1"	1"	20	20	439	379	260	255	230	10.0
BETTY 2					447	387				10.7
BETTY 3										10.9

CURVES AND PERFORMANCE DATA AT n= 2900 1/min

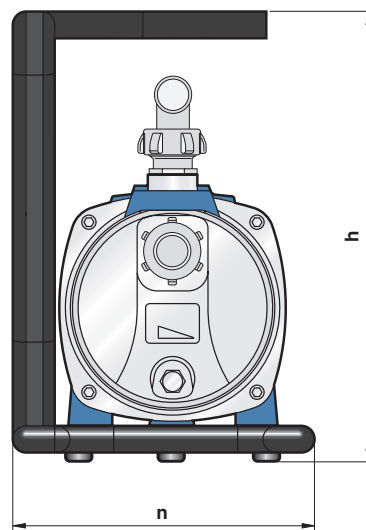
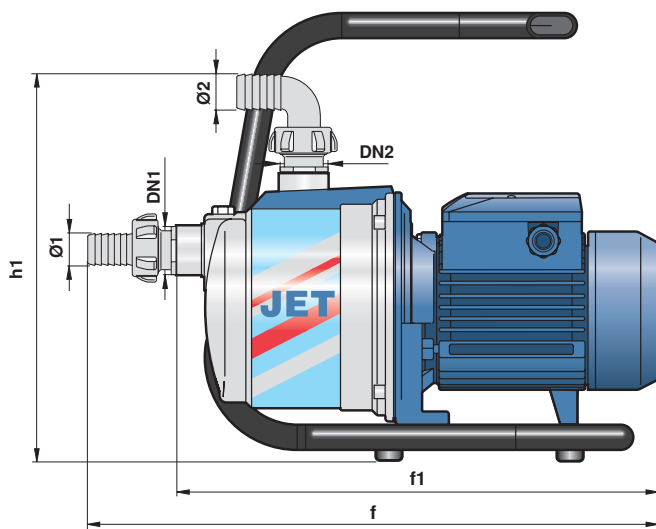


TYPE	POWER		Q	Flow rate												
	kW	HP		m³/h	0	0.3	0.6	0.9	1.2	1.5	1.8	2.1	2.4	2.7	3.0	
Single-phase			l/min	0	5	10	15	20	25	30	35	40	45	50		
BETTYNOX 1	0.37	0.50	H metres	35	32	27	24	21	19	17	16	15	14	13		
BETTYNOX 2	0.50	0.70		41	36	31	27	24	22	20	19	17	16	15		
BETTYNOX 3	0.60	0.85		47	42	38	34	31	28.5	26	24	22	21.5	19		

Q = Flow rate H = Total manometric head Hs = Suction height

Tolerance of the performance curves according to EN ISO 9906 App. A.

DIMENSIONS AND WEIGHTS



TYPE	PORTS		DIMENSIONS mm							kg
	DN1	DN2	Ø1	Ø2	f	f1	h	h1	n	
Single-phase										
BETTYNOX 1	1"	1"	20	20	405	345	270	260	198	7.9
BETTYNOX 2					413	353				8.0
BETTYNOX 3					413	353				9.2

4SK 4" submerged pump with peripheral impeller

Stainless steel submersible pump with peripheral impeller and anti-seize system. Standard version includes 10 m power cable and integral capacitor for ease of installation.



RANGE OF PERFORMANCE

Flow rate up to 50 l/min (3.0 m³/h)
Head up to 68 m

LIMITS OF USE

Submersion depth up to 40 m
Liquid temperature up to + 40°C

CONSTRUCTION AND SAFETY STANDARDS

EN 60 335-1	EN 60034-1
IEC 335-1	IEC 34-1
CEI 61-150	CEI 2-3



INSTALLATION AND USE

It is recommended for pumping clean water without abrasive particles and liquids that are chemically non aggressive to the materials from which the pump is made. **COMPACT AND ECONOMICAL, IT IS RECOMMENDED FOR DOMESTIC APPLICATIONS INCLUDING WATER SUPPLIES AND IRRIGATION.**

GUARANTEE 2 YEARS subject to our general terms of sale.

CONSTRUCTION CHARACTERISTICS

- DELIVERY BODY: stainless steel AISI 304.
- IMPELLER HOUSING WITH PATENTED DOUBLE ANTI-SEIZE INSERTS.
- IMPELLER: brass, type with radial peripheral vanes.
- MOTOR JACKET: stainless steel AISI 304.
- MOTOR SHAFT: stainless steel EN 10088-3 - 1.4104.
- MOTOR: asynchronous, dry rewindable stator, for continuous duty
4SKm: single-phase 220÷240 V - 50 Hz.
- INSULATION: class F. ● PROTEZIONE: IP 68.
- MECHANICAL SEAL: ceramic - graphite - NBR.

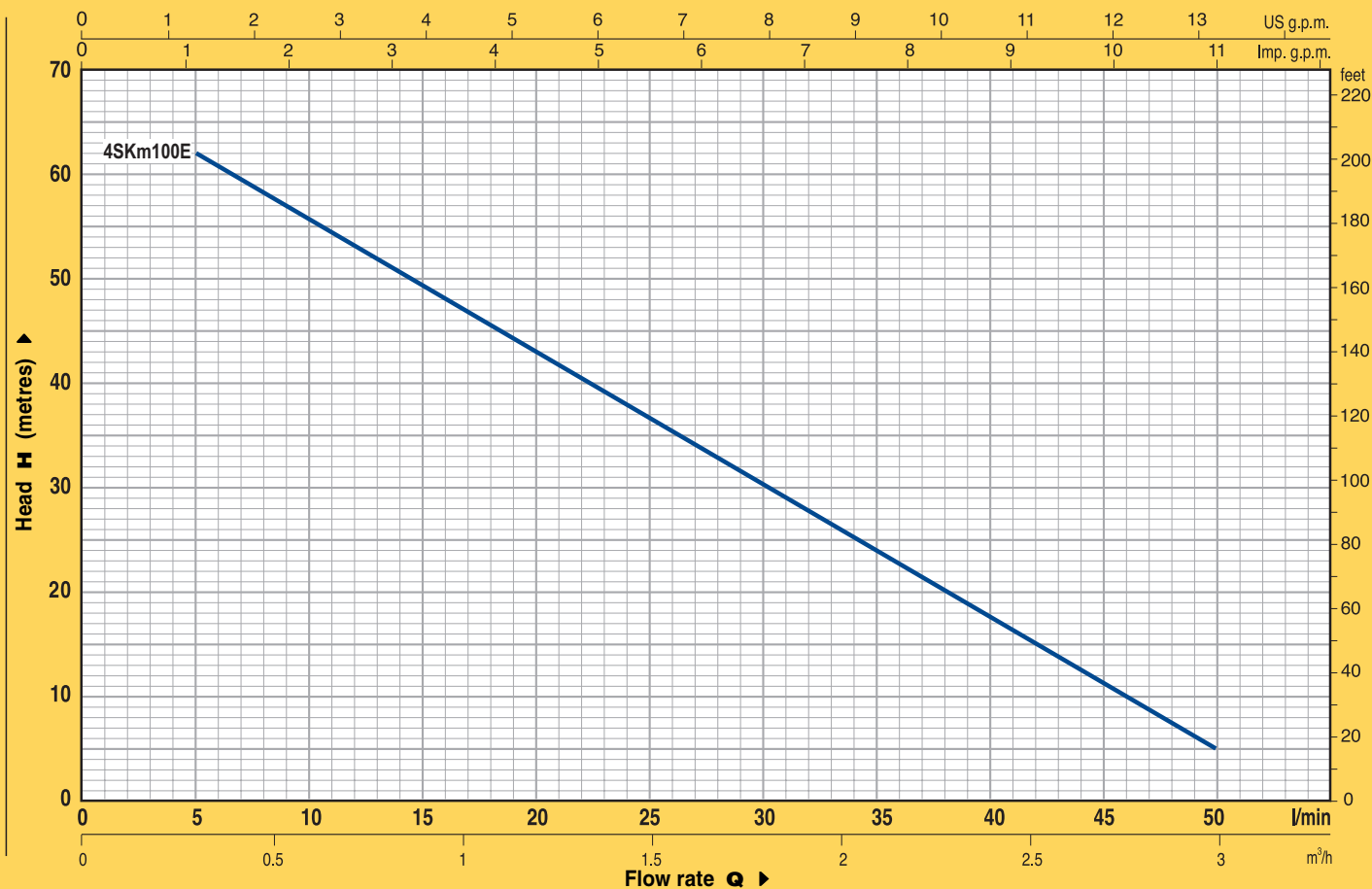
STANDARD FEATURES:

4SKm Thermal overload protector.
Internal capacitor
Flat type 10 metre power cable.

OPTIONS ON REQUEST

- ⇒ 20 metre power cable
- ⇒ other voltages or frequency 60 Hz

CURVES AND PERFORMANCE DATA AT n= 2900 1/min

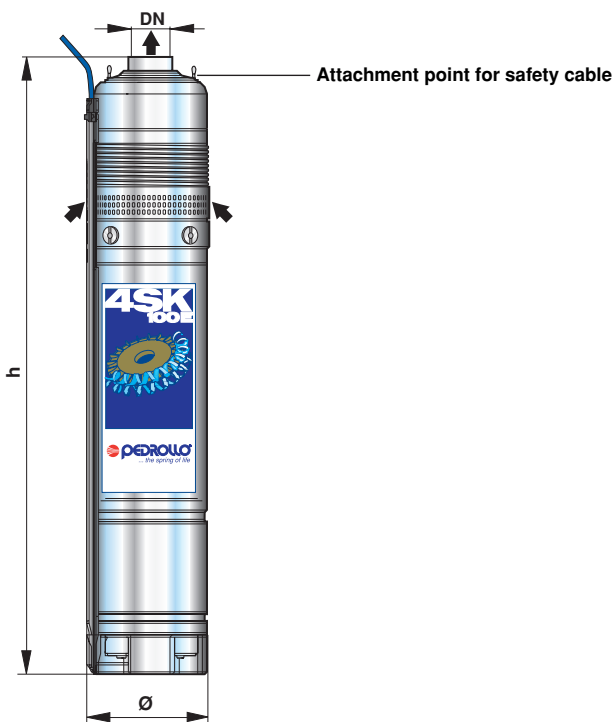


TYPE	POWER		Q	0	0.3	0.6	0.9	1.2	1.5	1.8	2.1	2.4	3.0
	kW	HP		0	5	10	15	20	25	30	35	40	50
Single-phase			l/min										
4SKm 100E	0.75	1	H metres	68	62	55	49	43	37	30	24	17	5

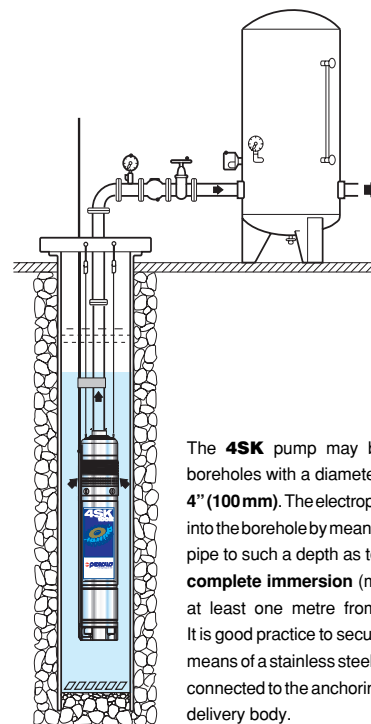
Q = Flow rate H = Total manometric head

Tolerance of the performance curves according to EN ISO 9906 App. A.

DIMENSIONS AND WEIGHTS



Typical installation



The **4SK** pump may be installed in boreholes with a diameter not less than **4" (100 mm)**. The electropump is lowered into the borehole by means of the delivery pipe to such a depth as to guarantee its **complete immersion** (min. 50 cm and at least one metre from the bottom). It is good practice to secure the pump by means of a stainless steel or nylon cable, connected to the anchoring points on the delivery body.

TYPE	PORT DN	DIMENSIONS mm		kg
		Ø	h	
Single-phase				
4SKm 100E	1"	99.5	500	13.1

Submerged pumps with peripheral impeller and patented anti-seize system (guarantees pump operation even after long periods of inactivity).



RANGE OF PERFORMANCE

Flow rate up to 80 l/min (4.8 m³/h)
Head up to 77 m

LIMITS OF USE

Submersion depth up to 40 m
Liquid temperature up to + 40°C

CONSTRUCTION AND SAFETY STANDARDS

EN 60 335-1	EN 60034-1	CE
IEC 335-1	IEC 34-1	
CEI 61-150	CEI 2-3	

INSTALLATION AND USE

They are recommended for pumping clean water without abrasive particles and liquids that are chemically non aggressive to the materials from which the pump is made. **COMPACT AND ECONOMICAL, THEY ARE RECOMMENDED FOR DOMESTIC APPLICATIONS INCLUDING WATER SUPPLIES AND IRRIGATION.**

GUARANTEE 2 YEARS subject to our general terms of sale.

CONSTRUCTION CHARACTERISTICS

- **DELIVERY BODY:** brass with double anti-seize inserts
- **IMPELLER:** brass, type with radial peripheral vanes.
- **MOTOR JACKET:** stainless steel AISI 304.
- **MOTOR SHAFT:** stainless steel EN 10088-3 - 1.4104.
- **MOTOR:** asynchronous, for continuous duty, may be removed and rewound, in an oil bath.
5SKm: single-phase 220÷240 V - 50 Hz.
- **INSULATION:** class F. ● **PROTECTION IP 68.**
- **MECHANICAL SEAL:** stainless steel - graphite - NBR.

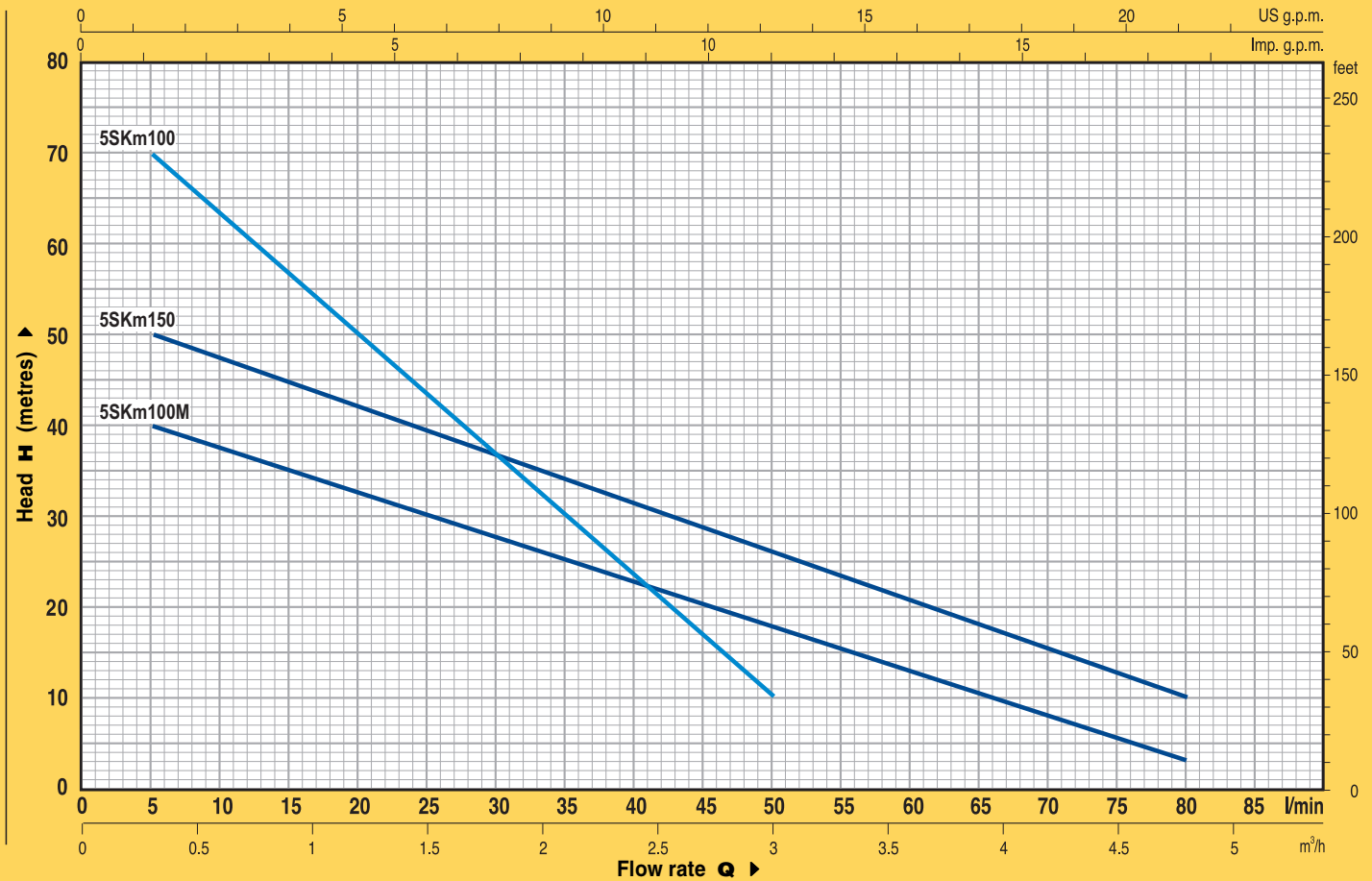
STANDARD FEATURES:

- 5SKm** Check valve.
20 metre neoprene power cable type "H07 RN-F" with removable connector.
Control box with double pole power switch, capacitor and motor overload protector with manual reset.

OPTIONS ON REQUEST

⇒ other voltages or frequency 60 Hz

CURVES AND PERFORMANCE DATA AT n= 2900 1/min

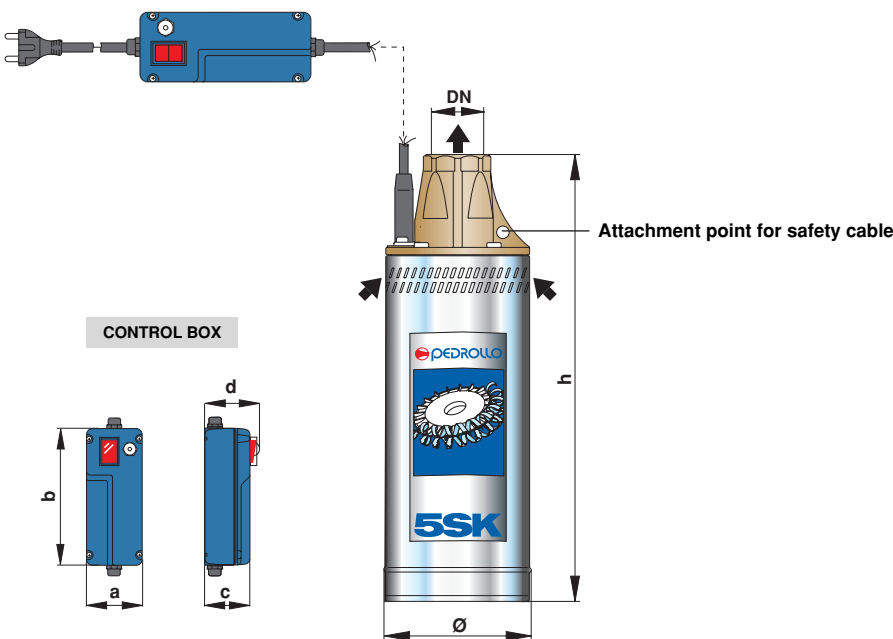


TYPE	POWER		Q	Flow rate															
	kW	HP		m ³ /h	0	0.3	0.6	0.9	1.2	1.5	1.8	2.1	2.4	3.0	3.6	4.2	4.8		
Single-phase			l/min	0	5	10	15	20	25	30	35	40	50	60	70	80			
5SKm 100	0.75	1	H metres	77	70	63.5	57	50	43.5	37	30	23	10						
5SKm 100M	0.75	1		42	40	37.5	35	32.5	30	27.5	25	22.5	17.5	13	8	3			
5SKm 150	1.1	1.5		53	50	47.5	45	42	39	37	34	31	26	21	15	10			

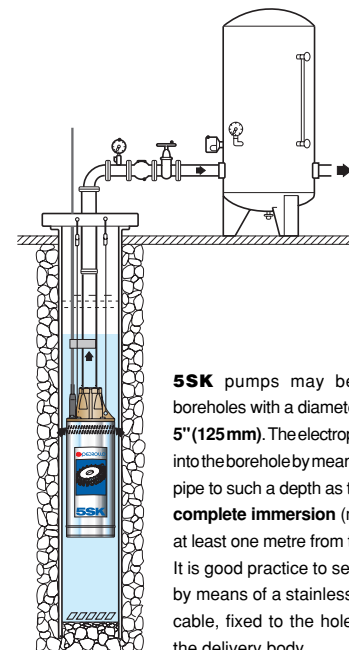
Q = Flow rate H = Total manometric head

Tolerance of the performance curves according to EN ISO 9906 App. A.

DIMENSIONS AND WEIGHTS



Typical installation



5SK pumps may be installed in boreholes with a diameter not less than **5" (125mm)**. The electropump is lowered into the borehole by means of the delivery pipe to such a depth as to guarantee its **complete immersion** (min. 50 cm and at least one metre from the bottom).

It is good practice to secure the pump by means of a stainless steel or nylon cable, fixed to the holes provided on the delivery body.

TYPE	PORT DN	DIMENSIONS mm						kg
Single-phase		Ø	h	a	b	c	d	
5SKm 100	1 1/4"	120	313	81	200	66	85	14.9
5SKm 100M								16.4
5SKm 150								16.4



RANGE OF PERFORMANCE

Flow rate up to 100 l/min (6 m³/h)
Head up to 42 m

LIMITS OF USE

Submersion depth up to 10 m
Liquid temperature up to + 40°C
Maximum sand content 50 g/m³
Emptying level up to 30 mm from the bottom

CONSTRUCTION AND SAFETY STANDARDS

EN 60 335-1	EN 60034-1
IEC 335-1	IEC 34-1
CEI 61-150	CEI 2-3



INSTALLATION AND USE

THEY ARE RECOMMENDED FOR PUMPING CLEAN WATER WITH A SAND CONTENT NO HIGHER THAN 50 g/m³. THEIR HIGH EFFICIENCY AND RELIABILITY MAKES THEM SUITABLE FOR SUPPLYING DOMESTIC WATER FROM TANKS, RESERVOIRS OR RELATIVELY DEEP WELLS, DRAWING RAINWATER FROM CISTERNS, WATERING BY HAND OR FEEDING.

GUARANTEE 2 YEARS subject to our general terms of sale.

CONSTRUCTION CHARACTERISTICS

- **DELIVERY BODY AND SUCTION GRID:** glass filled technopolymer, particularly resistant to impact and corrosion, with threaded port ISO 228/1.
- **IMPELLERS and DIFFUSERS:** technopolymer.
- **DIFFUSER CONTAINER:** stainless steel AISI 304.
- **MOTOR SUPPORT:** stainless steel AISI 304.
- **MOTOR SHAFT:** stainless steel EN 10088-3 - 1.4104.
- **DOUBLE SEAL:** mechanical seal ceramic -silicon carbide-NBR, with oil barrier chamber and inner lip seal to protect the seal in the event of dry running.
- **MOTOR:** asynchronous, for continuous duty.
TOP MULTI: single-phase 220÷240 V - 50 Hz with capacitor and thermal overload protector.
- **INSULATION:** class F. ● **PROTECTION:** IP 68.
- **REGISTERED MODEL n° 72765.**

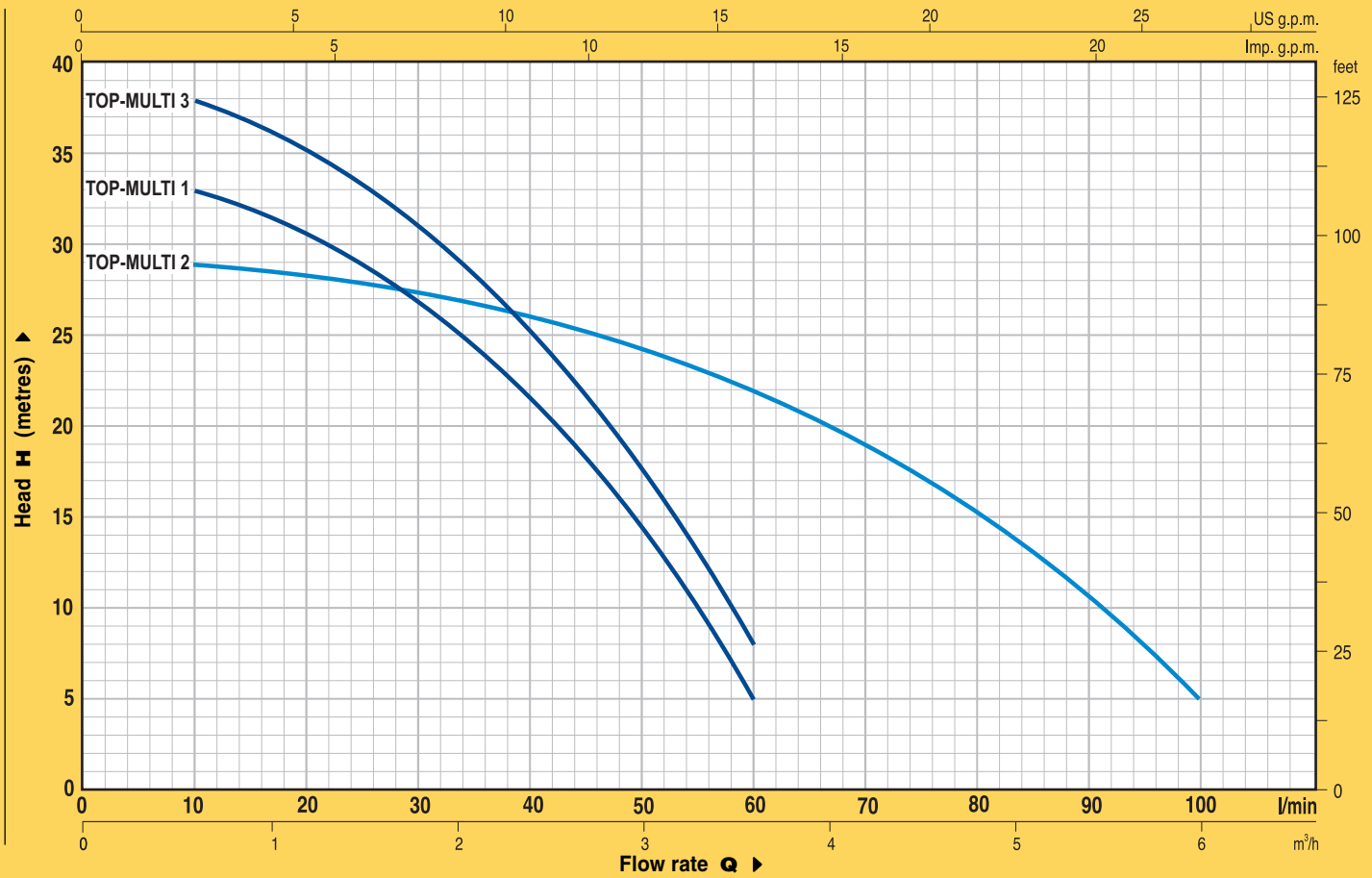
STANDARD FEATURES:

TOP-MULTI Float switch
Neoprene power cable "H05 RN-F" length 10 metres with Schuko plug.
Hosetail.
Coupling with non-return valve.

OPTIONS ON REQUEST

⇒ other voltages or frequency 60 Hz

CURVES AND PERFORMANCE DATA AT n= 2900 1/min

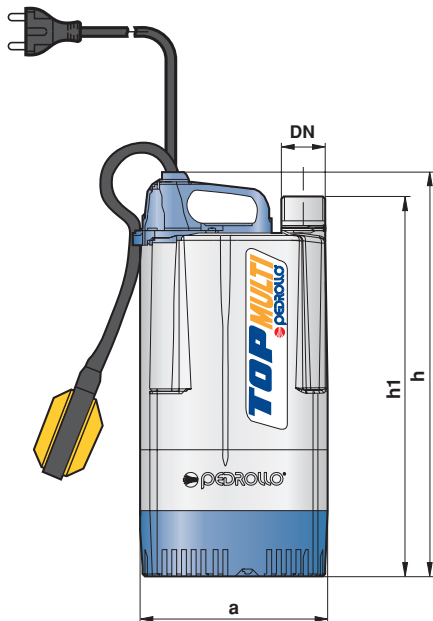


TYPE	POWER		Q	Flow rate												
	kW	HP		m³/h	0	0.6	1.2	1.8	2.4	3.0	3.6	4.2	4.8	5.4	6.0	
Single-phase				0	10	20	30	40	50	60	70	80	90	100		
TOP - MULTI 1	0.37	0.50	H metres	36	33	30.5	26.5	21.5	14.5	5						
TOP - MULTI 2	0.55	0.75		30	29	28	27	26	24	22	19	15	10.5	5		
TOP - MULTI 3	0.55	0.75		42	38	35	31	25	17.5	8						

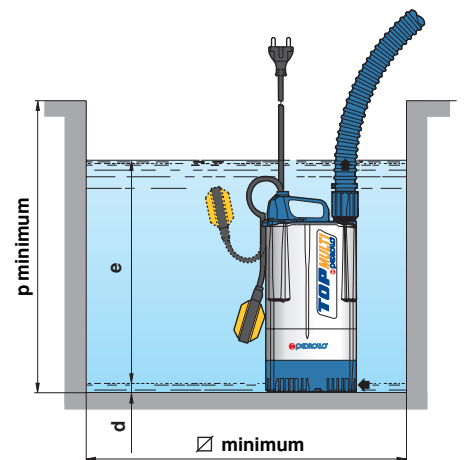
Q = Flow rate H = Total manometric head

Tolerance of the performance curves according to EN ISO 9906 App. A.

DIMENSIONS AND WEIGHTS



Typical portable application



TYPE	PORT DN	N° stages	DIMENSIONS mm							kg
			a	h	h1	d	e	p	∅	
TOP - MULTI 1	1 1/4"	6	176	380	345	30		350	350	8.4
TOP - MULTI 2		5								8.1
TOP - MULTI 3		7								400

SUMO 2 multi-stage submerged pumps

The best combination of performance, reliability and quiet running, robust and easy to use.



RANGE OF PERFORMANCE

Flow rate up to 80 l/min (4.8 m³/h)
Head up to 105 m

LIMITS OF USE

Liquid temperature up to +40°C
Maximum sand content 50 g/m³
Submersion depth up to 20 m

CONSTRUCTION AND SAFETY STANDARDS

EN 60 335-1	EN 60034-1
IEC 335-1	IEC 34-1
CEI 61-150	CEI 2-3



INSTALLATION AND USE

THEIR HIGH EFFICIENCY AND RELIABILITY MAKE THEM SUITABLE FOR PUMPING CLEAN WATER IN DOMESTIC, CIVIL AND AGRICULTURAL APPLICATIONS, FOR DISTRIBUTING WATER IN COMBINATION WITH PRESSURE SETS, FOR IRRIGATING GARDENS, BOOSTING PRESSURE, ETC.

GUARANTEE 2 YEARS subject to our general terms of sale.

CONSTRUCTION CHARACTERISTICS

- **OUTER CASE AND MOTOR SUPPORT:** stainless steel AISI 304
- **IMPELLERS AND DIFFUSERS:** technopolymer.
- **DIAPHRAGMS:** stainless steel AISI 304, complete with anti-wear rings.
- **MOTOR SHAFT:** stainless steel EN 10088-3 - 1.4104.
- **DOUBLE SEAL:** mechanical seal silicon carbide-NBR, with oil barrier chamber and inner lip seal to protect the seal in the event of dry running.
- **SCREWS AND FILTER:** stainless steel AISI 304.
- **MOTOR:** asynchronous for continuous duty.
SUMOm 2: single-phase 220÷240 V - 50 Hz with thermal overload protector built into windings below 1.5 kW. The 1.8 kW motor has an external overload protector (with manual reset) incorporated into the control box.
SUMO 2: three-phase 380÷415 V - 50 Hz.
- **INSULATION:** class F. ● **PROTECTION:** IP 68.

STANDARD FEATURES:

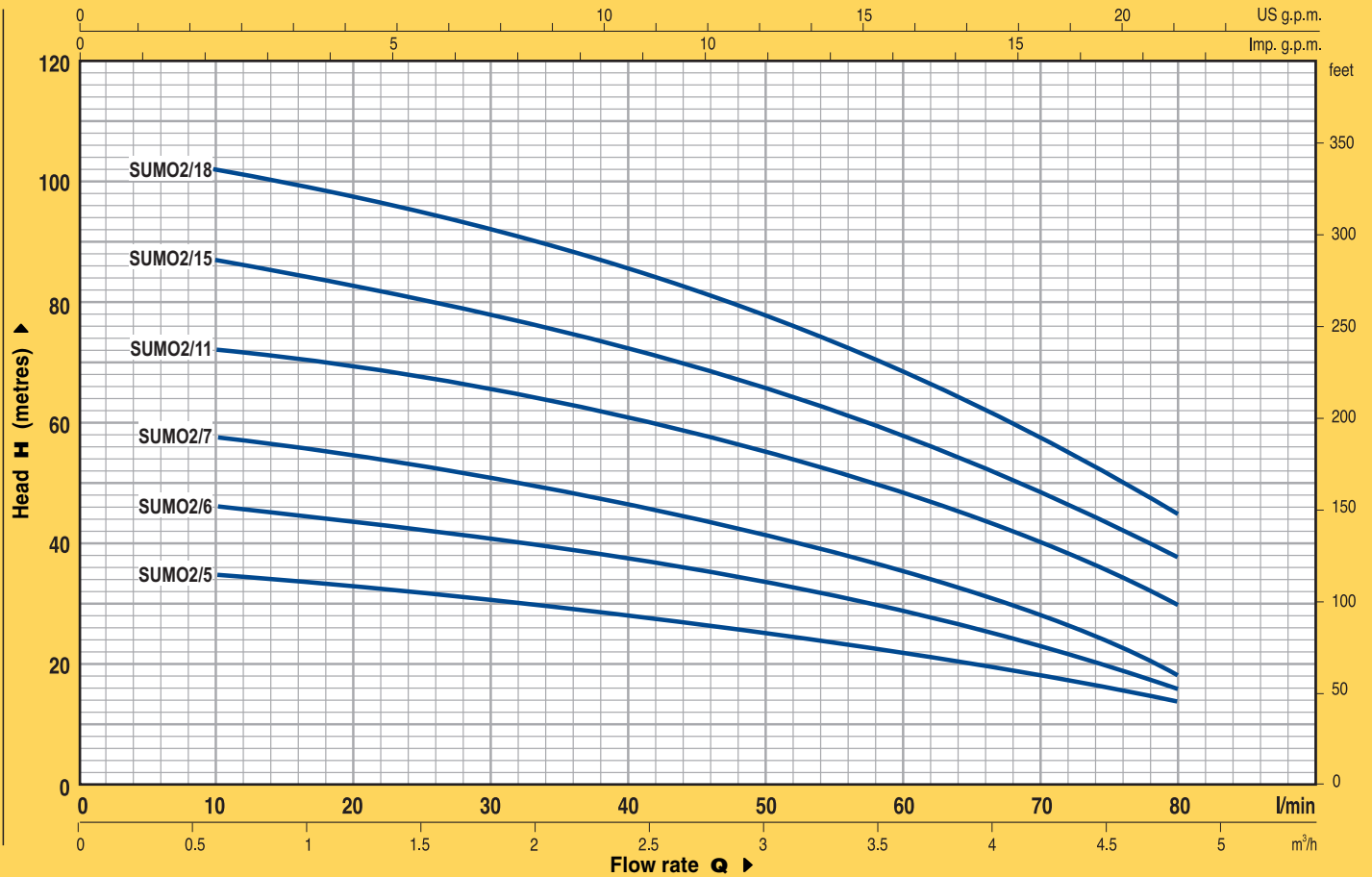
SUMOm 2 (single-phase) control box with capacitor
20 m power cable type "H07 RN-F" with removable connector and Schuko plug.

SUMO 2 (three-phase) 20 m power cable type
"H07 RN-F" with removable connector.

OPTIONS ON REQUEST

- ⇒ **economy version** 10 m power cable and capacitor, (without control box)
- ⇒ single-phase pumps with external float switch (SUMOm 2...- GE)
- ⇒ other voltages or frequency 60 Hz

CURVES AND PERFORMANCE DATA AT n= 2900 1/min



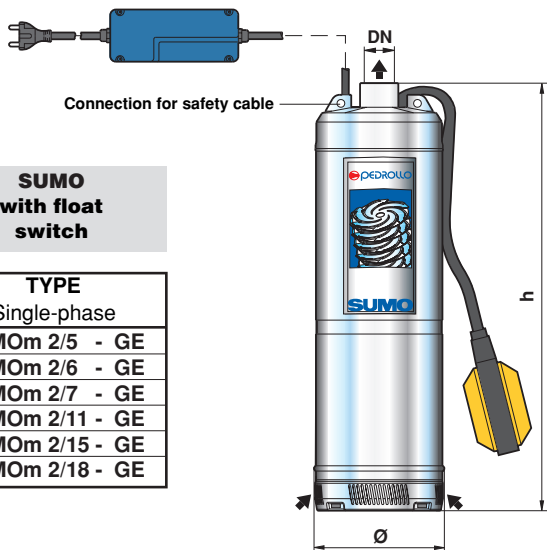
TYPE		POWER		Q	Flow rate														
Single-phase	Three-phase	kW	HP		m³/h	0	0.6	1.2	1.8	2.4	2.7	3.0	3.3	3.6	3.9	4.2	4.5	4.8	
				l/min	0	10	20	30	40	45	50	55	60	65	70	75	80		
SUMOm 2/5	—	0.45	0.6	H metres	36	35	33	31	28	26	25	23	22	20	18	16	14		
SUMOm 2/6	—	0.55	0.75		48	46	44	41	37.5	35	34	31	29	26	23	19.5	16		
SUMOm 2/7	SUMO 2/7	0.75	1		60	58	55	51	47	44	42	38	36	32	28	23	18		
SUMOm 2/11	SUMO 2/11	1.1	1.5		75	72	70	66	61	58	55	52	48	44	40	35	30		
SUMOm 2/15	SUMO 2/15	1.5	2		90	87	83	78	73	70	66	62	58	53	48	44	38		
SUMOm 2/18	SUMO 2/18	1.8	2.5		105	102	98	92	85	82	78	73	68	63	57	50	45		

Q = Flow rate H = Total manometric head

Tolerance of the performance curves according to EN ISO 9906 App. A.

DIMENSIONS AND WEIGHTS

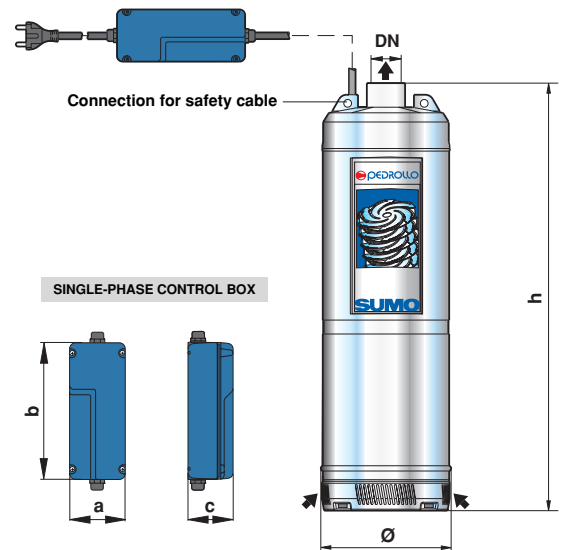
Single-phase with float switch



SUMO with float switch

TYPE
Single-phase
SUMOm 2/5 - GE
SUMOm 2/6 - GE
SUMOm 2/7 - GE
SUMOm 2/11 - GE
SUMOm 2/15 - GE
SUMOm 2/18 - GE

Single-phase with control box



SINGLE-PHASE CONTROL BOX

TYPE		PORT DN	N° stages	Ø	DIMENSIONS mm			kg	
Single-phase	Three-phase				a	b	c	1~	3~
SUMOm 2/5	—	1 1/4"	3	135	81	200	66	11.9	-
SUMOm 2/6	—		4					14.0	-
SUMOm 2/7	SUMO 2/7		5					17.3	15.8
SUMOm 2/11	SUMO 2/11		6	543				24.5	22.8
SUMOm 2/15	SUMO 2/15			573				25.4	23.8
SUMOm 2/18	SUMO 2/18			648				31.2	27.1

SUMO 4 multi-stage submerged pumps

The perfect combination of performance, reliability and quiet running, robust and easy to use.



RANGE OF PERFORMANCE

Flow rate up to 120 l/min (7.2 m³/h)
Head up to 105 m

LIMITS OF USE

Liquid temperature up to +40°C
Maximum sand content 50 g/m³
Submersion depth up to 20 m

CONSTRUCTION AND SAFETY STANDARDS

EN 60 335-1	EN 60034-1
IEC 335-1	IEC 34-1
CEI 61-150	CEI 2-3



INSTALLATION AND USE

THEIR HIGH EFFICIENCY AND RELIABILITY MAKE THEM SUITABLE FOR PUMPING CLEAN WATER IN DOMESTIC, CIVIL AND AGRICULTURAL APPLICATIONS, FOR DISTRIBUTING WATER IN COMBINATION WITH PRESSURE SETS, FOR IRRIGATING GARDENS, BOOSTING PRESSURE, ETC.

GUARANTEE 2 YEARS subject to our general terms of sale.

CONSTRUCTION CHARACTERISTICS

- **OUTER CASE AND MOTOR SUPPORT:** stainless steel AISI 304
- **IMPELLERS AND DIFFUSERS:** technopolymer.
- **DIAPHRAGMS:** stainless steel AISI 304, complete with anti-wear rings.
- **MOTOR SHAFT:** stainless steel EN 10088-3 - 1.4104.
- **DOUBLE SEAL:** mechanical seal silicon carbide-NBR, with oil barrier chamber and inner lip seal to protect the seal in the event of dry running.
- **SCREWS AND FILTER:** stainless steel AISI 304.
- **MOTOR** asynchronous for continuous duty.
 - SUMOm 4:** single-phase 220÷240 V - 50 Hz with thermal overload protector built into windings below 1.5 kW. The 1.8 kW motor has an external overload protector (with manual reset) incorporated into the control box.
 - SUMO 4:** three-phase 380÷415 V - 50 Hz.
- **INSULATION:** class F. ● **PROTECTION:** IP 68.

STANDARD FEATURES:

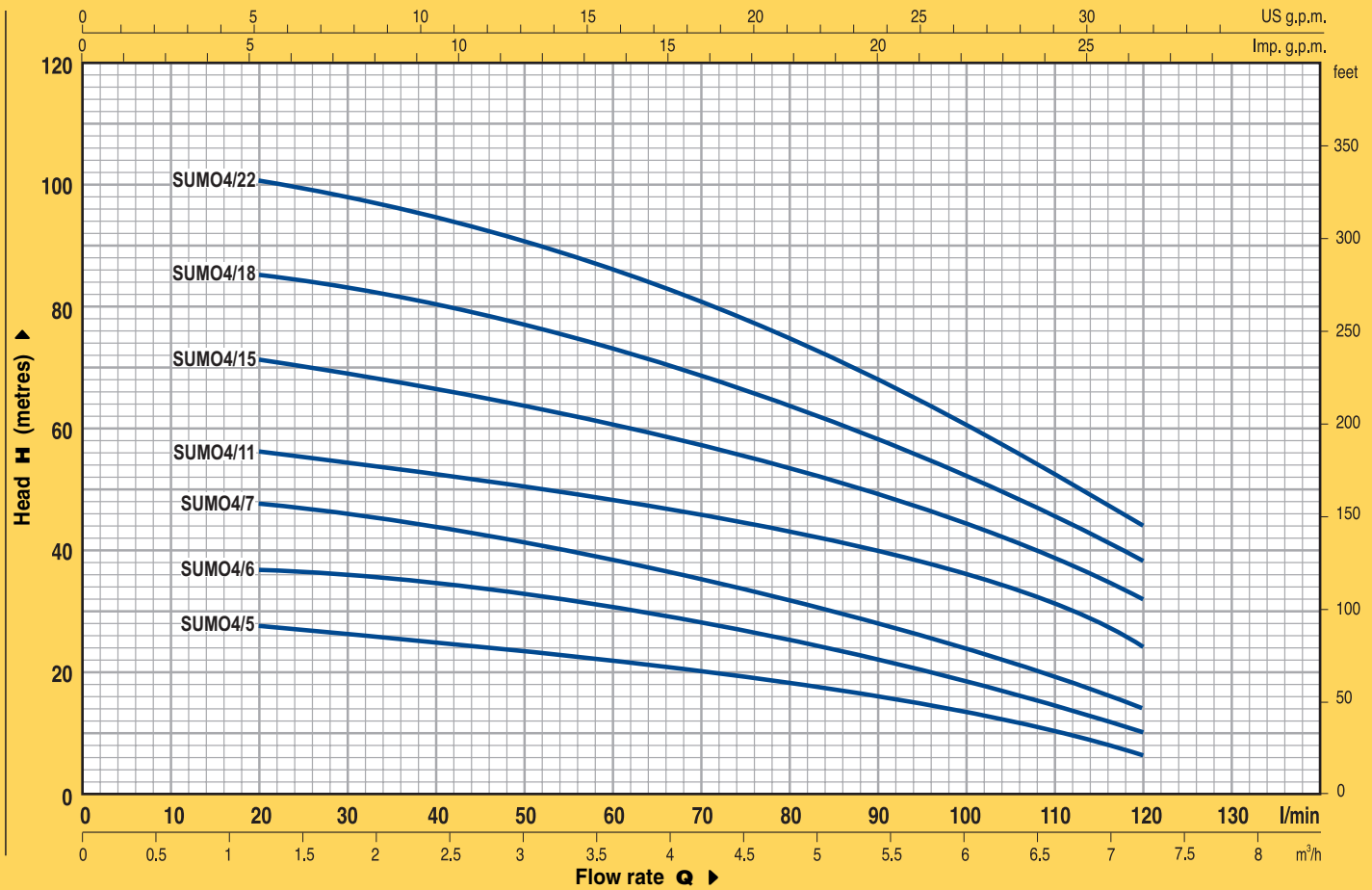
SUMOm 4 (single-phase) Control box with capacitor
20 m power cable type "H07 RN-F" with removable connector and Schuko plug.

SUMO 4 (three-phase) 20 m power cable type
"H07 RN-F" with removable connector.

OPTIONS ON REQUEST

- ⇒ **economy version** 10 m power cable and capacitor, (without control box)
- ⇒ single-phase pumps with external float switch (SUMOm 2...- GE)
- ⇒ other voltages or frequency 60 Hz

CURVES AND PERFORMANCE DATA AT n= 2900 1/min



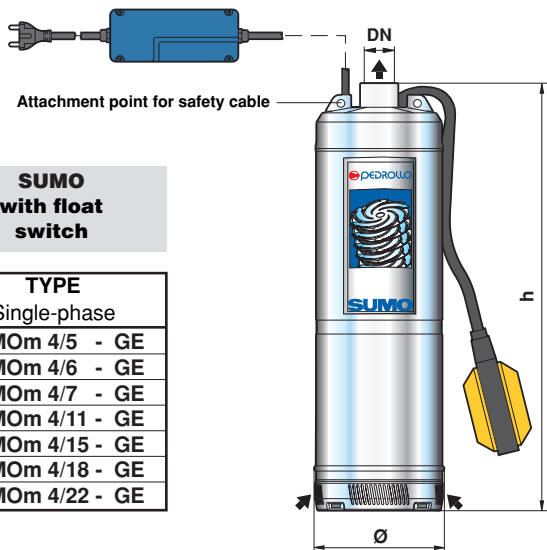
TYPE		POWER		Q	H metres													
Single-phase	Three-phase	kW	HP		m³/h	0	1.2	1.8	2.4	3.0	3.6	4.2	4.8	5.4	6.0	6.6	7.2	
				l/min	0	20	30	40	50	60	70	80	90	100	110	120		
SUMOm 4/5	—	0.45	0.6	30	27	26	25	24	22.5	20.5	18	15.5	13	10	7			
SUMOm 4/6	—	0.55	0.75	40	37	36	34.5	32.5	30	28	25	21.5	18.5	14.5	10			
SUMOm 4/7	SUMO 4/7	0.75	1	50	48	46	44	41	38	35	32	28	24	19	14			
SUMOm 4/11	SUMO 4/11	1.1	1.5	60	56	54	52	50	48	46	43	39	36	31	24			
SUMOm 4/15	SUMO 4/15	1.5	2	75	72	69	66	64	60	57	53	48	43	38	32			
SUMOm 4/18	SUMO 4/18	1.8	2.5	90	85	83	79	76	73	68	64	58	52	44	38			
SUMOm 4/22	SUMO 4/22	2.2	3	105	101	98	94	90	86	80	75	67	60	52	44			

Q = Flow rate H = Total manometric head

Tolerance of the performance curves according to EN ISO 9906 App. A.

DIMENSIONS AND WEIGHTS

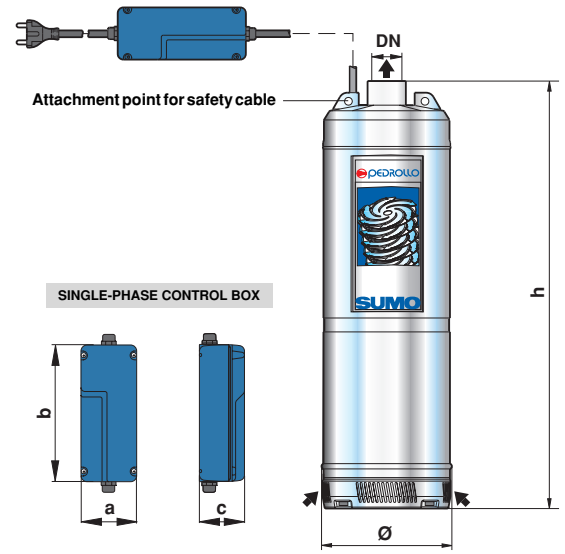
Single-phase with float switch



SUMO with float switch

TYPE
Single-phase
SUMOm 4/5 - GE
SUMOm 4/6 - GE
SUMOm 4/7 - GE
SUMOm 4/11 - GE
SUMOm 4/15 - GE
SUMOm 4/18 - GE
SUMOm 4/22 - GE

Single-phase with control box



TYPE		PORT DN	N° stages	DIMENSIONS mm				kg		
Single-phase	Three-phase			Ø	h	a	b	c	1~	3~
SUMOm 4/5	—	1 1/4"	3	135	384	81	200	66	11.9	-
SUMOm 4/6	—		4		458				14.0	-
SUMOm 4/7	SUMO 4/7		5		482				17.3	15.8
SUMOm 4/11	SUMO 4/11		4	513	23.4				21.4	
SUMOm 4/15	SUMO 4/15		5	543	24.5				22.8	
SUMOm 4/18	SUMO 4/18		6	573	25.4				23.8	
SUMOm 4/22	SUMO 4/22		7	648	31.0				27.1	

VL2 vertical multi-stage pumps

Robust vertical multi-stage pumps in stainless steel, distinguished by their high efficiency and particularly quiet operation.



RANGE OF PERFORMANCE

Flow rate up to 80 l/min (4.8 m³/h)
Head up to 105 m

LIMITS OF USE

Manometric suction lift up to 7 m
Liquid temperature up to + 40°C

CONSTRUCTION AND SAFETY STANDARDS

EN 60 335-1	EN 60034-1
IEC 335-1	IEC 34-1
CEI 61-150	CEI 2-3



INSTALLATION AND USE

They are recommended for pumping clean water and liquids that are chemically non aggressive to the materials from which the pump is made. **THEIR RELIABILITY AND QUIET RUNNING MAKE THEM SUITABLE FOR DOMESTIC AND CIVIL APPLICATIONS, BECAUSE THE PUMP IS FULLY SUBMERSIBLE WITH THE MOTOR COOLED BY THE PUMPED LIQUID, IT CAN BE USED SAFELY IN WET ENVIRONMENTS AND IN SPACES WITH INSUFFICIENT VENTILATION.**

GUARANTEE 2 YEARS subject to our general terms of sale.

CONSTRUCTION CHARACTERISTICS

- **OUTER CASE AND MOTOR SUPPORT:** stainless steel AISI 304 case with threaded ports ISO 228-1.
- **IMPELLERS AND DIFFUSERS:** technopolymer.
- **DIAPHRAGMS:** stainless steel AISI 304, complete with anti-wear rings.
- **MOTOR SHAFT:** stainless steel EN 10088-3 - 1.4104.
- **DOUBLE SEAL:** mechanical seal silicon carbide-NBR, with oil barrier chamber and inner lip seal to protect the seal in the event of dry running.
- **SCREWS:** stainless steel AISI 304.
- **MOTOR:** electric, asynchronous for continuous duty.
VLm 2: single-phase 220÷240 V - 50 Hz with thermal overload protector built into windings below 1.5 kW. The 1.8 kW motor has an external (with manual reset) incorporated into the control box.
VL 2: three-phase 380÷415 V - 50 Hz.
- **INSULATION:** class F. ● **PROTECTION:** IP 68.

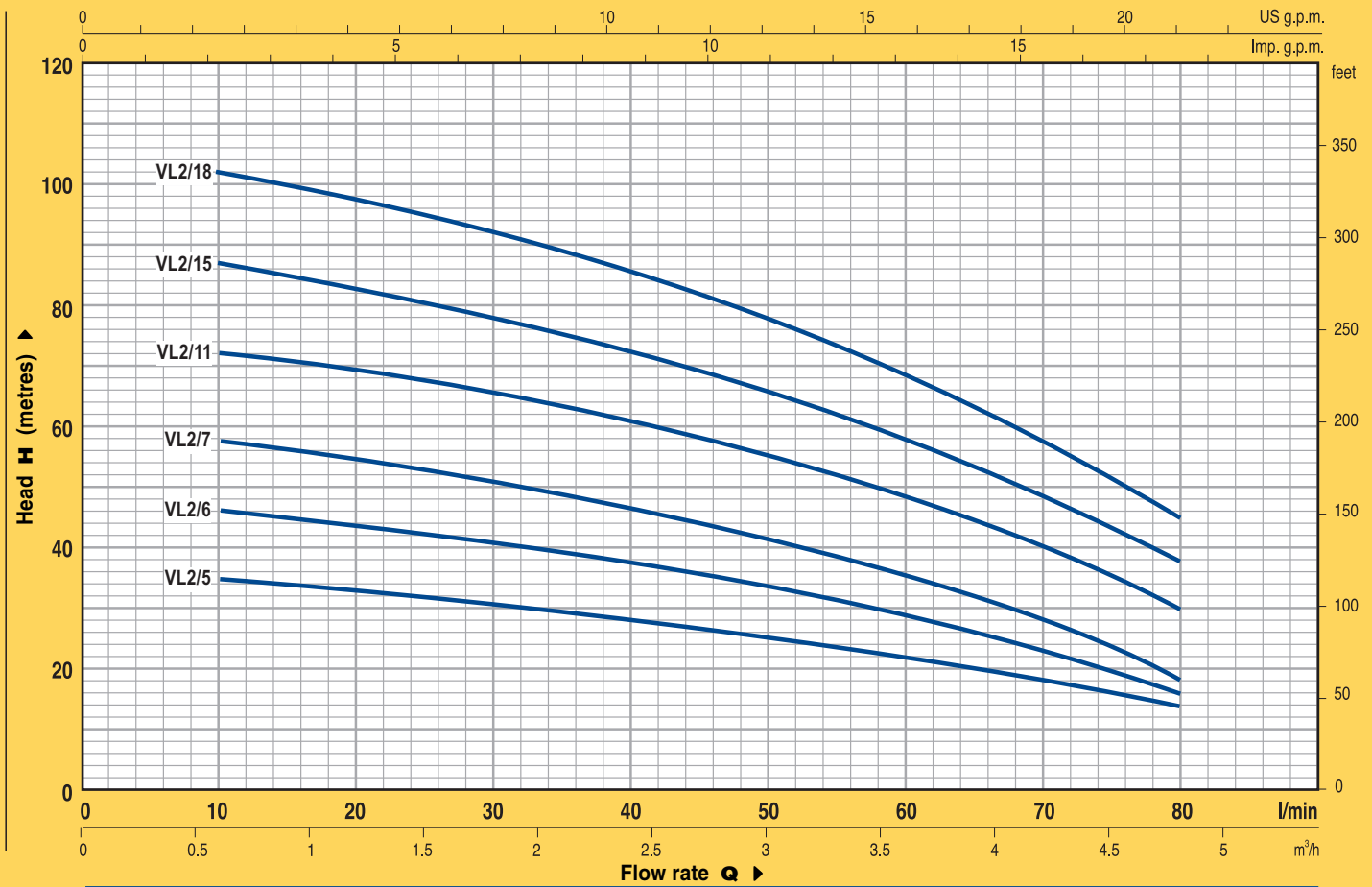
STANDARD FEATURES:

- VLm 2** (single-phase) 2 m power cable type "H07 RN-F" with removable connector. Control box with capacitor and Schuko plug
- VL 2** (three-phase) 2 m power cable type "H07 RN-F" with removable connector.

OPTIONS ON REQUEST

⇒ other voltages or frequency 60 Hz

CURVES AND PERFORMANCE DATA AT n= 2900 1/min

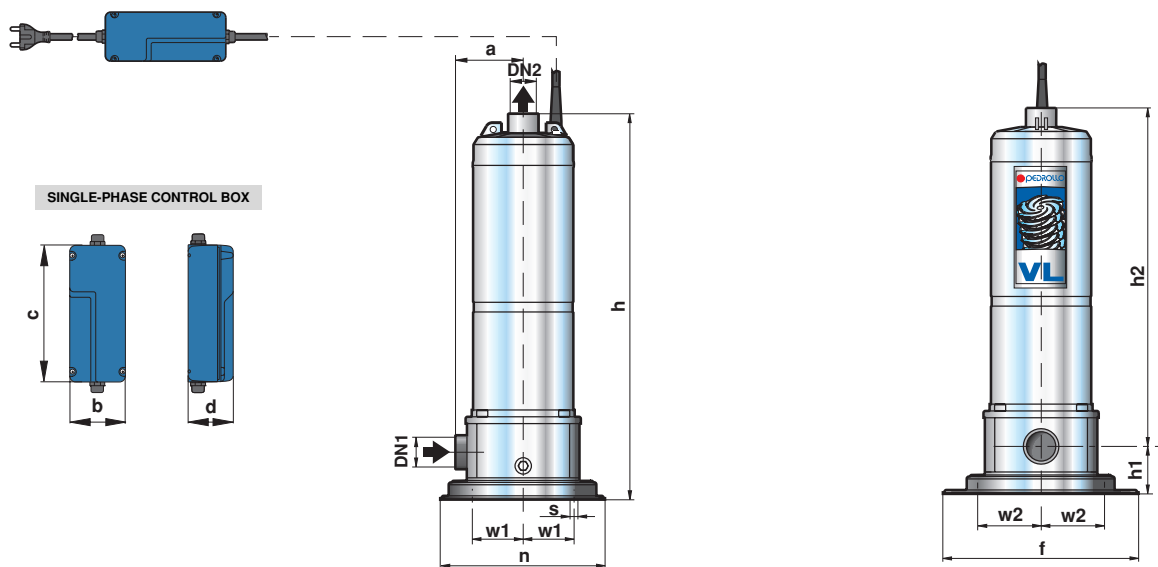


TYPE		POWER		Q	Flow rate														
Single-phase	Three-phase	kW	HP		m³/h	0	0.6	1.2	1.8	2.4	2.7	3.0	3.3	3.6	3.9	4.2	4.5	4.8	
VLm 2/5	—	0.45	0.6	l/min	0	10	20	30	40	45	50	55	60	65	70	75	80		
VLm 2/6	—	0.55	0.75	H metres	36	35	33	31	28	26	25	23	22	20	18	16	14		
VLm 2/7	VL 2/7	0.75	1		48	46	44	41	37.5	35	34	31	29	26	23	19.5	16		
VLm 2/11	VL 2/11	1.1	1.5		60	58	55	51	47	44	42	38	36	32	28	23	18		
VLm 2/15	VL 2/15	1.5	2		75	72	70	66	61	58	55	52	48	44	40	35	30		
VLm 2/18	VL 2/18	1.8	2.5		90	87	83	78	73	70	66	62	58	53	48	44	38		
					105	102	98	92	85	82	78	73	68	63	57	50	45		

Q = Flow rate H = Total manometric head

Tolerance of the performance curves according to EN ISO 9906 App. A.

DIMENSIONS AND WEIGHTS



TYPE		PORTS		N° stages	DIMENSIONS mm											kg		
Single-phase	Three-phase	DN1	DN2		a	b	c	d	f	h	h1	h2	n	w1	w2	s	1~	3~
VLm 2/5	—	1 1/4"	1 1/4"	3	90	81	200	66	223	432	50	382	183	62	88.5	11	10.9	-
VLm 2/6	—			4						506		456					13.0	-
VLm 2/7	VL 2/7			5						530		480					16.3	14.8
VLm 2/11	VL 2/11	1 1/2"	1 1/4"	6	100	81	200	66	223	603	60	543	183	62	88.5	11	24.1	22.4
VLm 2/15	VL 2/15			7						633		573					25.0	23.4
VLm 2/18	VL 2/18			7						708		648					30.8	26.7

VL4 vertical multi-stage pumps

Robust vertical multi-stage pumps in stainless steel, distinguished by their high efficiency and particularly quiet operation.



RANGE OF PERFORMANCE

Flow rate up to 120 l/min (7.2 m³/h)
Head up to 105 m

LIMITS OF USE

Manometric suction lift up to 7 m
Liquid temperature up to + 40°C

CONSTRUCTION AND SAFETY STANDARDS

EN 60 335-1
IEC 335-1
CEI 61-150

EN 60034-1
IEC 34-1
CEI 2-3



INSTALLATION AND USE

They are recommended for pumping clean water and liquids that are chemically non aggressive to the materials from which the pump is made. **THEIR RELIABILITY AND QUIET RUNNING MAKE THEM SUITABLE FOR DOMESTIC AND CIVIL APPLICATIONS, BECAUSE THE PUMP IS FULLY SUBMERSIBLE WITH THE MOTOR COOLED BY THE PUMPED LIQUID, IT CAN BE USED SAFELY IN WET ENVIRONMENTS AND IN SPACES WITH INSUFFICIENT VENTILATION.**

GUARANTEE 2 YEARS subject to our general terms of sale.

CONSTRUCTION CHARACTERISTICS

- **OUTER CASE AND MOTOR SUPPORT:** stainless steel AISI 304 case with threaded ports ISO 228-1.
- **IMPELLERS AND DIFFUSERS:** technopolymer.
- **DIAPHRAGMS:** stainless steel AISI 304, complete with anti-wear rings.
- **MOTOR SHAFT:** stainless steel EN 10088-3 - 1.4104.
- **DOUBLE SEAL:** mechanical seal silicon carbide-NBR, with oil barrier chamber and inner lip seal to protect the seal in the event of dry running.
- **SCREWS:** stainless steel AISI 304.
- **MOTOR:** electric, asynchronous for continuous duty.
 - VLm 4: single-phase 220÷240 V - 50 Hz with thermal overload protector built into windings below 1.5 kW. The 1.8 kW motor has an external overload protector (with manual reset) incorporated into the control box.
 - VL 4: three-phase 380÷415 V - 50 Hz.
- **INSULATION:** class F. ● **PROTECTION:** IP 68.

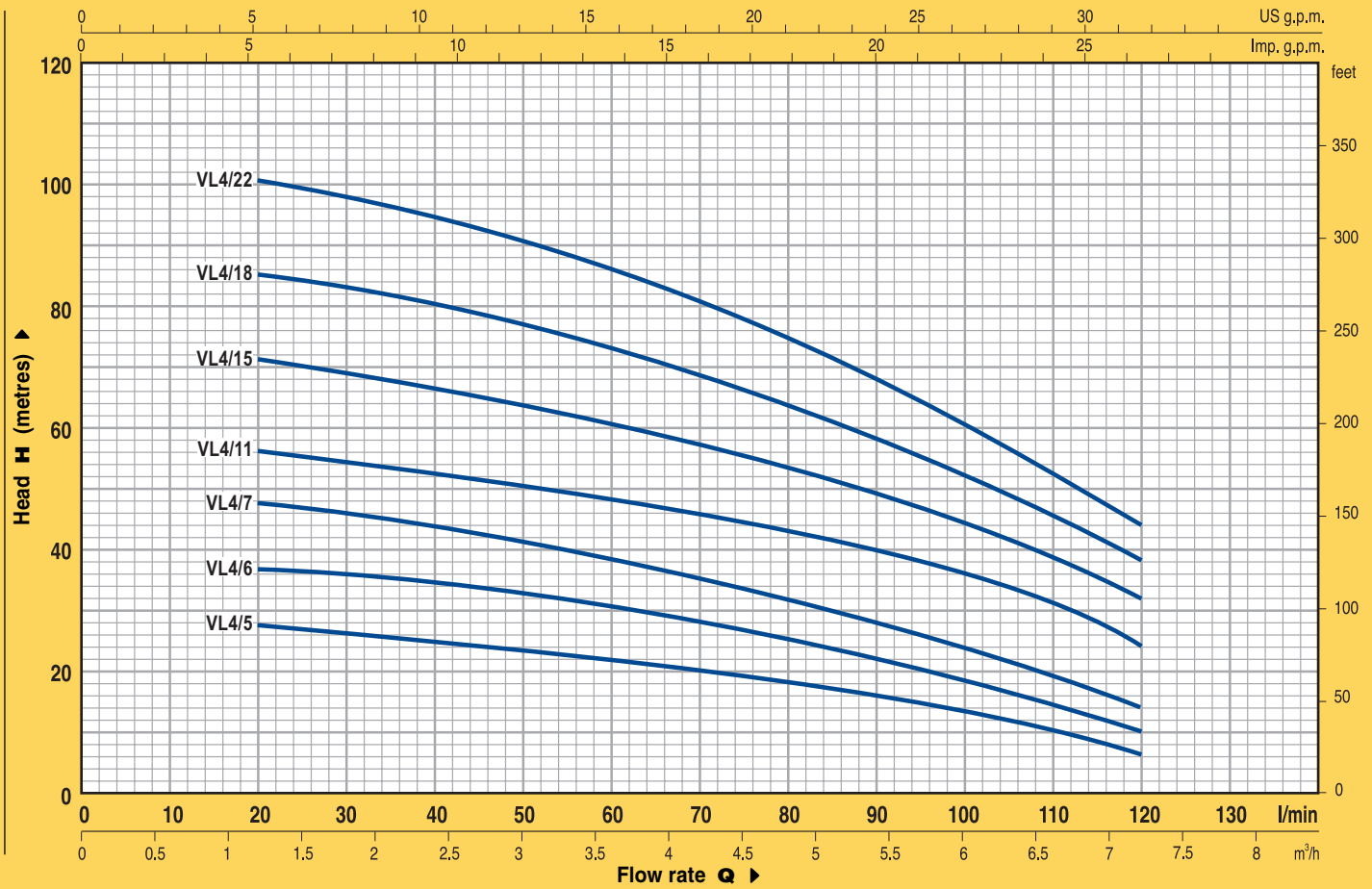
STANDARD FEATURES:

- VLm 4** (single-phase) 2 mt power cable type "H07 RN-F" with removable connector. Control box with capacitor and Schuko plug.
- VL 4** (three-phase) 2 mt power cable type "H07 RN-F" with removable connector.

OPTIONS ON REQUEST

⇒ other voltages or frequency 60 Hz

CURVES AND PERFORMANCE DATA AT n= 2900 1/min

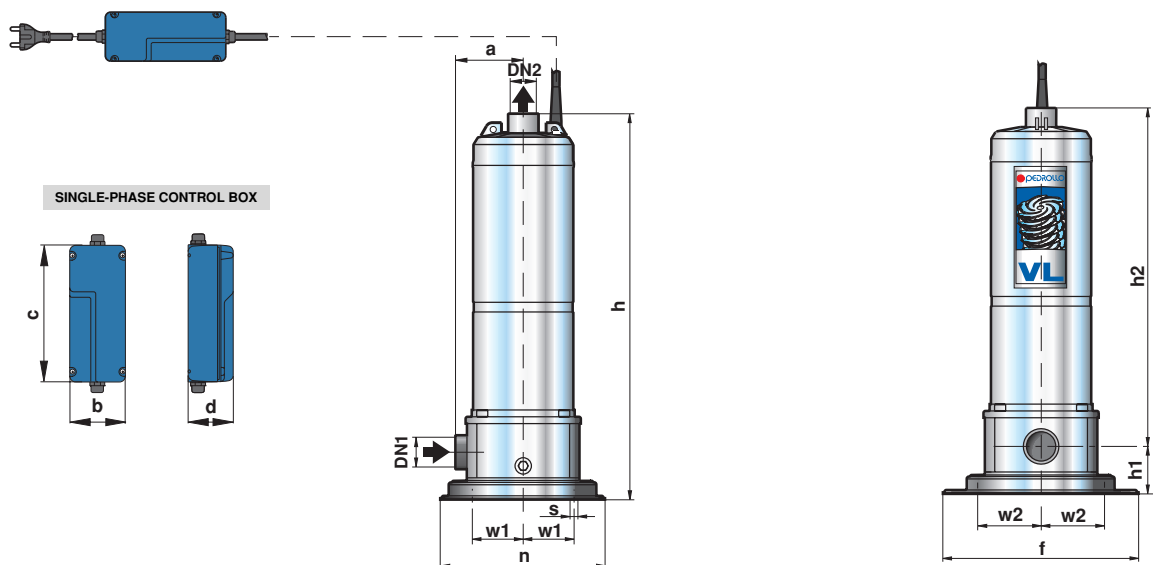


TYPE		POWER		Q	H metres											
Single-phase	Three-phase	kW	HP		m³/h	0	1.2	1.8	2.4	3.0	3.6	4.2	4.8	5.4	6.0	6.6
				l/min	0	20	30	40	50	60	70	80	90	100	110	120
VLm 4/5	—	0.45	0.6		30	27	26	25	24	22.5	20.5	18	15.5	13	10	7
VLm 4/6	—	0.55	0.75		40	37	36	34.5	32.5	30	28	25	21.5	18.5	14.5	10
VLm 4/7	VL 4/7	0.75	1		50	48	46	44	41	38	35	32	28	24	19	14
VLm 4/11	VL 4/11	1.1	1.5		60	56	54	52	50	48	46	43	39	36	31	24
VLm 4/15	VL 4/15	1.5	2		75	72	69	66	64	60	57	53	48	43	38	32
VLm 4/18	VL 4/18	1.8	2.5		90	85	83	79	76	73	68	64	58	52	44	38
VLm 4/22	VL 4/22	2.2	3		105	101	98	94	90	86	80	75	67	60	52	44

Q = Flow rate H = Total manometric head

Tolerance of the performance curves according to EN ISO 9906 App. A.

DIMENSIONS AND WEIGHTS



TYPE		PORTS		N° stages	DIMENSIONS mm												kg	
Single-phase	Three-phase	DN1	DN2		a	b	c	d	f	h	h1	h2	n	w1	w2	s	1~	3~
VLm 4/5	—	1 1/4"	1 1/4"	3	90	81	200	66	223	432	50	382	183	62	88.5	11	10.9	-
VLm 4/6	—			4						506		456					13.0	-
VLm 4/7	VL 4/7			5						530		480					16.3	14.8
VLm 4/11	VL 4/11	1 1/2"	1 1/2"	4	100	81	200	66	223	573	60	513	183	62	88.5	11	23.0	21.0
VLm 4/15	VL 4/15			5						603		543					24.1	22.4
VLm 4/18	VL 4/18			6						633		573					25.0	23.4
VLm 4/22	VL 4/22			7						708		648					30.7	26.7

VLE2 “in-line” multi-stage pumps

Compact multi-stage pumps, in stainless steel, with suction and delivery ports “in line”. They can be installed in a horizontal or vertical position, or completely submerged. The enclosed design also eliminates any possibility of water escaping.



RANGE OF PERFORMANCE

Maximum flow rate 80 l/min (4.8 m³/h)
Head up to 105 m

LIMITS OF USE

Manometric suction lift up to 7 m
Liquid temperature up to + 40°C

CONSTRUCTION AND SAFETY STANDARDS

EN 60 335-1
IEC 335-1
CEI 61-150

EN 60034-1
IEC 34-1
CEI 2-3



INSTALLATION AND USE

They are recommended for pumping clean water and liquids that are chemically non aggressive to the materials from which the pump is made. **THEIR RELIABILITY AND QUIET RUNNING MAKE THEM SUITABLE FOR DOMESTIC AND CIVIL APPLICATIONS AND, BECAUSE THE PUMP IS FULLY SUBMERSIBLE WITH THE MOTOR COOLED BY THE PUMPED LIQUID, IT CAN BE USED SAFELY IN WET AREAS AND IN SPACES WITH INSUFFICIENT VENTILATION. THE ENCLOSED DESIGN ALSO ELIMINATES THE POSSIBILITY OF WATER ESCAPING AS A RESULT OF SEAL FAILURE, MAKING IT SUITABLE FOR USE IN CARPETED OR OTHER DELICATE ENVIRONMENTS.**

GUARANTEE 2 YEARS subject to our general terms of sale.

CONSTRUCTION CHARACTERISTICS

- **OUTER CASE AND MOTOR SUPPORT:** stainless steel AISI 304 case with threaded ports ISO 228-1.
- **IMPELLERS AND DIFFUSORS:** technopolymer.
- **DIAPHRAGMS:** stainless steel AISI 304, complete with anti-wear rings.
- **MOTOR SHAFT:** stainless steel EN 10088-3 - 1.4104.
- **DOUBLE SEAL:** mechanical seal silicon carbide-NBR, with oil barrier chamber and inner lip seal to protect the seal in the event of dry running.
- **SCREWS:** stainless steel AISI 304.
- **MOTOR:** electric, asynchronous for continuous duty.
VLEm 2: single-phase 220÷240 V - 50 Hz with thermal overload protector built into windings below 1.5 kW. The 1.8 kW motor has an external overload protector (with manual reset) incorporated into the control box.
VLE 2: three-phase 380÷415 V - 50 Hz.
- **INSULATION:** class F. ● **PROTECTION:** IP 68.

STANDARD FEATURES:

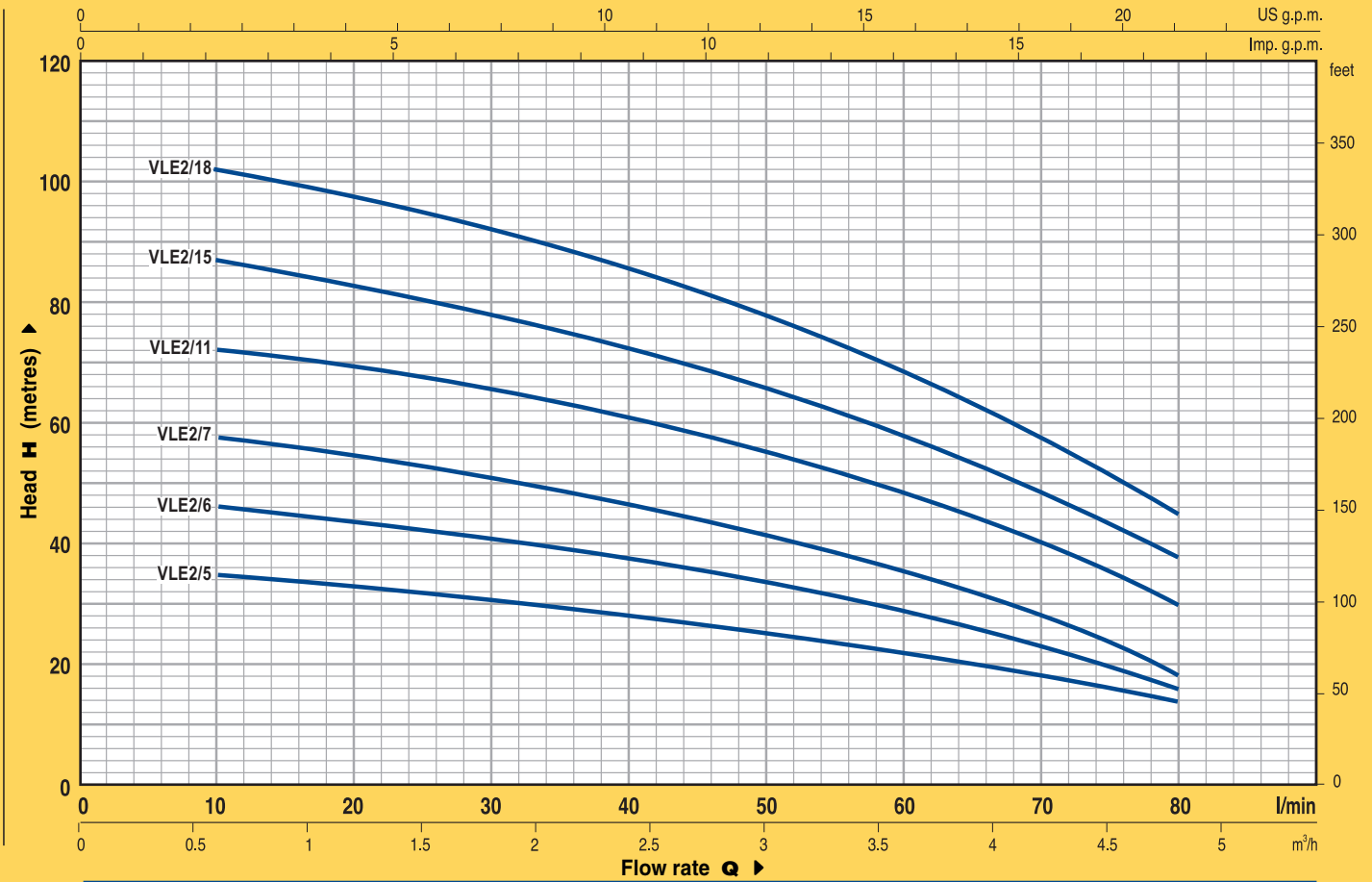
VLEm 2 (single-phase) 2 mt power cable type “H07 RN-F” with removable connector.
Control box with capacitor and Schuko plug.

VLE 2 (three-phase) 2 mt power cable type “H07 RN-F” with removable connector.

OPTIONS ON REQUEST

⇒ other voltages or frequency 60 Hz

CURVES AND PERFORMANCE DATA AT n= 2900 1/min



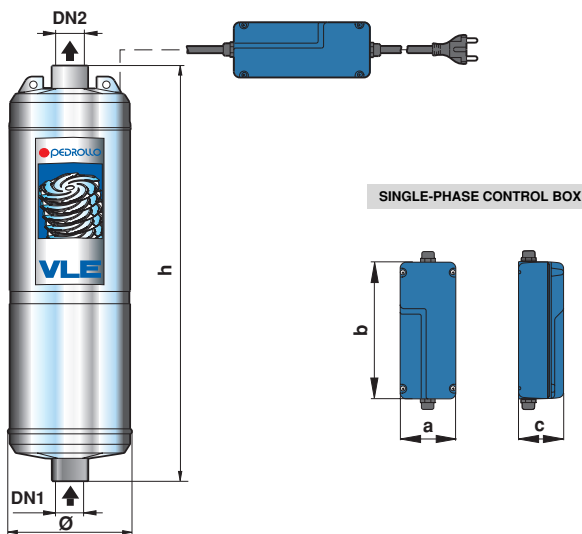
TYPE		POWER		Q	Flow rate															
Single-phase	Three-phase	kW	HP		m³/h	0	0.6	1.2	1.8	2.4	2.7	3.0	3.3	3.6	3.9	4.2	4.5	4.8		
				l/min	0	10	20	30	40	45	50	55	60	65	70	75	80			
VLEm 2/5	—	0.45	0.6	H metres	36	35	33	31	28	26	25	23	22	20	18	16	14			
VLEm 2/6	—	0.55	0.75		48	46	44	41	37.5	35	34	31	29	26	23	19.5	16			
VLEm 2/7	VLE 2/7	0.75	1		60	58	55	51	47	44	42	38	36	32	28	23	18			
VLEm 2/11	VLE 2/11	1.1	1.5		75	72	70	66	61	58	55	52	48	44	40	35	30			
VLEm 2/15	VLE 2/15	1.5	2		90	87	83	78	73	70	66	62	58	53	48	44	38			
VLEm 2/18	VLE 2/18	1.8	2.5		105	102	98	92	85	82	78	73	68	63	57	50	45			

Q = Flow rate H = Total manometric head

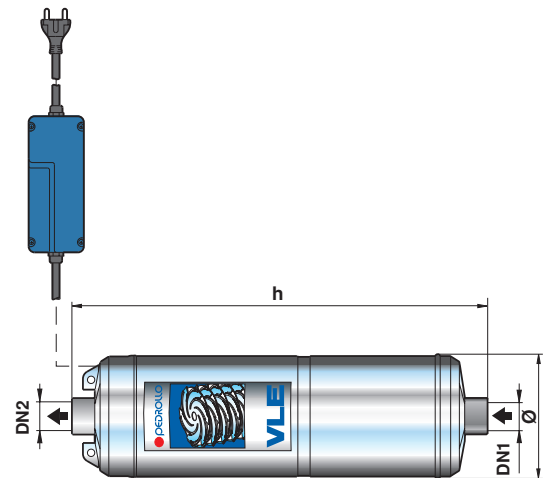
Tolerance of the performance curves according to EN ISO 9906 App. A.

DIMENSIONS AND WEIGHTS

Vertical installation



Horizontal installation



TYPE		PORTS DN	N° stages	DIMENSIONS mm					kg	
Single-phase	Three-phase			Ø	h	a	b	c	1~	3~
VLEm 2/5	—	1 1/4"	3	135	81	200	66	8.4	-	
VLEm 2/6	—		4					471	10.5	-
VLEm 2/7	VLE 2/7		5					495	13.8	12.3
VLEm 2/11	VLE 2/11		6	153				547	20.6	18.9
VLEm 2/15	VLE 2/15							577	21.5	19.9
VLEm 2/18	VLE 2/18							652	27.3	23.2

VLE4 “in-line” multi-stage pumps

Compact multi-stage pumps in stainless steel, with suction and delivery ports “in line”. They can be installed in a horizontal or vertical position or when completely submerged. The enclosed design also eliminates any possibility of water escaping.



RANGE OF PERFORMANCE

Flow rate up to 120 l/min (7.2 m³/h)
Head up to 105 m

LIMITS OF USE

Manometric suction lift up to 7 m
Liquid temperature up to + 40°C

CONSTRUCTION AND SAFETY STANDARDS

EN 60 335-1
IEC 335-1
CEI 61-150

EN 60034-1
IEC 34-1
CEI 2-3



INSTALLATION AND USE

They are recommended for pumping clean water and liquids that are chemically non aggressive to the materials from which the pump is made. **THEIR RELIABILITY AND QUIET RUNNING MAKE THEM SUITABLE FOR DOMESTIC AND CIVIL APPLICATIONS AND, BECAUSE THE PUMP IS FULLY SUBMERSIBLE WITH THE MOTOR COOLED BY THE PUMPED LIQUID, IT CAN BE USED SAFELY IN WET AREAS AND IN SPACES WITH INSUFFICIENT VENTILATION. THE ENCLOSED DESIGN ALSO ELIMINATES THE POSSIBILITY OF WATER ESCAPING AS A RESULT OF SEAL FAILURE, MAKING IT SUITABLE FOR USE IN CARPETED OR OTHER DELICATE ENVIRONMENTS.**

GUARANTEE 2 YEARS subject to our general terms of sale.

CONSTRUCTION CHARACTERISTICS

- **OUTER CASE AND MOTOR SUPPORT:** stainless steel AISI 304 case with threaded ports ISO 228-1.
- **IMPELLERS AND DIFFUSERS:** technopolymer.
- **DIAPHRAGMS:** stainless steel AISI 304, complete with anti-wear rings.
- **MOTOR SHAFT:** stainless steel EN 10088-3 - 1.4104.
- **DOUBLE SEAL:** mechanical seal silicon carbide-NBR, with oil barrier chamber and inner lip seal to protect the seal in the event of dry running.
- **SCREWS:** stainless steel AISI 304.
- **MOTOR:** electric, asynchronous for continuous duty.
 - VLm 4: single-phase 220÷240V - 50 Hz with thermal overload protector built into windings below 1.5 kW. The 1.8 kW motor has an external overload protector (with manual reset) incorporated into the control box.
 - VL 4: three-phase 380÷415 V - 50 Hz.
- **INSULATION:** class F. ● **PROTECTION:** IP 68.

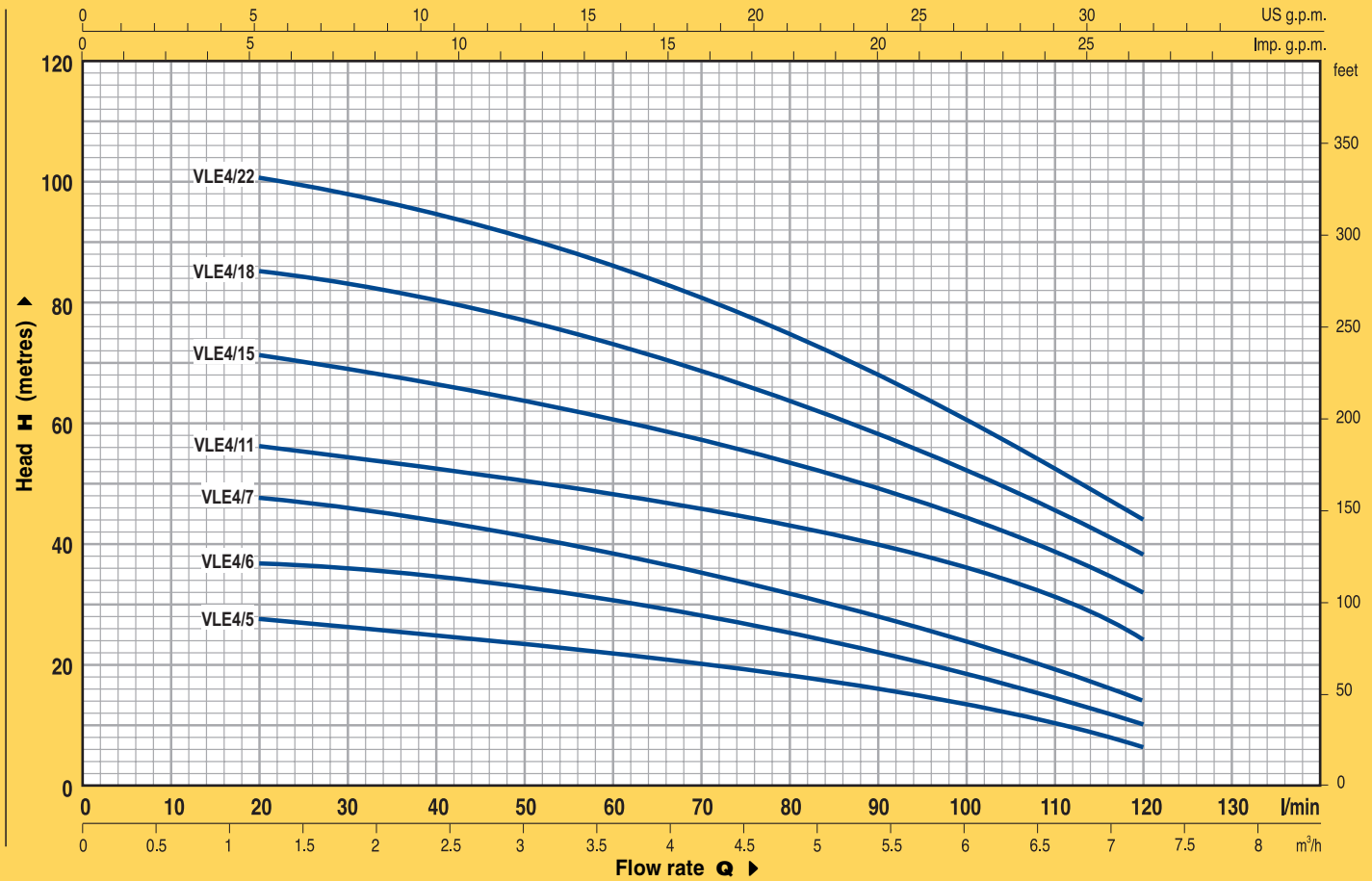
STANDARD FEATURES:

- VLm 4** (single-phase) 2 mt power cable type “H07 RN-F” with removable connector. Control box with capacitor and Schuko plug.
- VL 4** (three-phase) 2 mt power cable type “H07 RN-F” with removable connector.

OPTIONS ON REQUEST

⇒ other voltages or frequency 60 Hz

CURVES AND PERFORMANCE DATA AT n= 2900 1/min

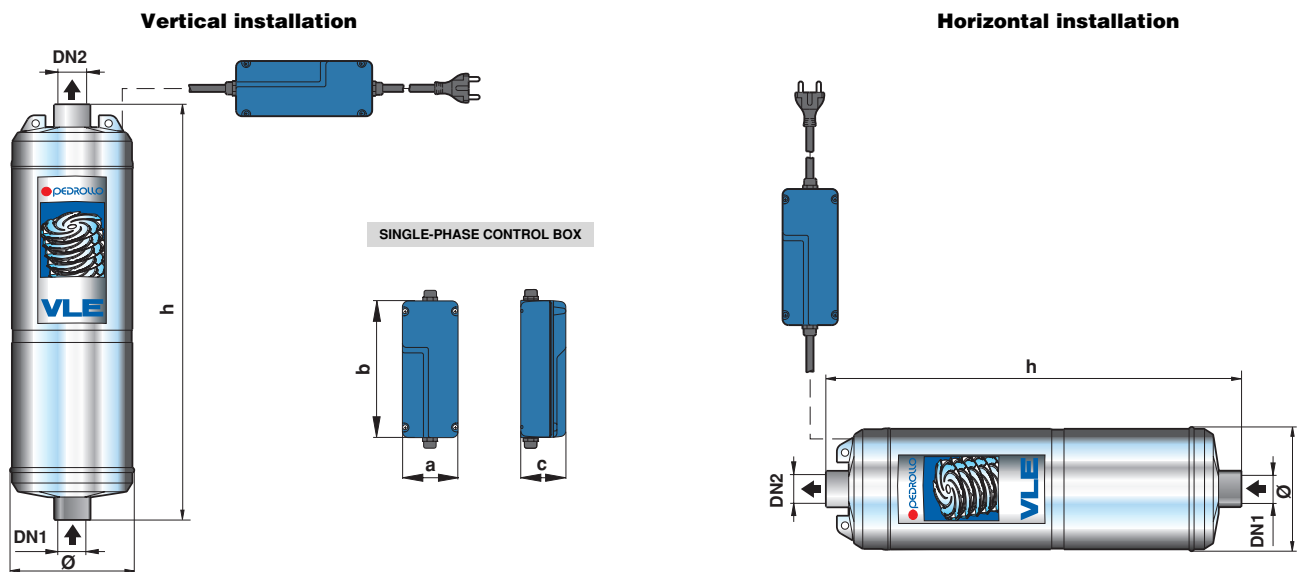


TYPE		POWER		Q	H metres															
Single-phase	Three-phase	kW	HP		m³/h	0	1.2	1.8	2.4	3.0	3.6	4.2	4.8	5.4	6.0	6.6	7.2			
				l/min	0	20	30	40	50	60	70	80	90	100	110	120				
VLEm 4/5	—	0.45	0.6		30	27	26	25	24	22.5	20.5	18	15.5	13	10	7				
VLEm 4/6	—	0.55	0.75		40	37	36	34.5	32.5	30	28	25	21.5	18.5	14.5	10				
VLEm 4/7	VLE 4/7	0.75	1		50	48	46	44	41	38	35	32	28	24	19	14				
VLEm 4/11	VLE 4/11	1.1	1.5		60	56	54	52	50	48	46	43	39	36	31	24				
VLEm 4/15	VLE 4/15	1.5	2		75	72	69	66	64	60	57	53	48	43	38	32				
VLEm 4/18	VLE 4/18	1.8	2.5		90	85	83	79	76	73	68	64	58	52	44	38				
VLEm 4/22	VLE 4/22	2.2	3		105	101	98	94	90	86	80	75	67	60	52	44				

Q = Flow rate H = Total manometric head

Tolerance of the performance curves according to EN ISO 9906 App. A.

DIMENSIONS AND WEIGHTS



TYPE		PORTS DN	N° stages	DIMENSIONS mm					kg	
Single-phase	Three-phase			Ø	h	a	b	c	1~	3~
VLEm 4/5	—	1 1/4"	3	135	397	81	200	66	8.4	-
VLEm 4/6	—		4		471				10.5	-
VLEm 4/7	VLE 4/7		5		495				13.8	12.3
VLEm 4/11	VLE 4/11		4	153	517				19.5	17.5
VLEm 4/15	VLE 4/15		5		547				20.6	18.9
VLEm 4/18	VLE 4/18		6		577				21.5	19.9
VLEm 4/22	VLE 4/22		7		652				27.2	23.2

4BLOCK

4" monoblock submersible pumps sand-resistant

4" monoblock submersible pumps designed as a more economic alternative to traditional borehole pumps without loss of performance and reliability. Supplied with integral capacitor and 20 m power cable for ease of installation.



RANGE OF PERFORMANCE

Flow rate up to 150 l/min (9 m³/h)
Head up to 135 m

LIMITS OF USE

Liquid temperature up to +30°C
Maximum sand content 150 g/m³
Submersion depth up to 40 m

CONSTRUCTION AND SAFETY STANDARDS

EN 60 335-1 EN 60034-1
IEC 335-1 IEC 34-1
CEI 61-150 CEI 2-3



INSTALLATION AND USE

THEY ARE RECOMMENDED FOR PUMPING CLEAN WATER WITH A SAND CONTENT OF UP TO 150 g/m³. DUE TO THEIR HIGH EFFICIENCY AND RELIABILITY, THEY ARE RECOMMENDED FOR DOMESTIC WATER SUPPLIES AS PART OF A PRESSURE SET, OR FOR IRRIGATION.

GUARANTEE 2 YEARS subject to our general terms of sale.

CONSTRUCTION CHARACTERISTICS

- DELIVERY BODY: stainless steel AISI 304 with threaded port ISO 228-1.
- CASE: stainless steel AISI 304.
- IMPELLERS AND DIFFUSERS: technopolymer.
- DIFFUSER HOUSING: stainless steel AISI 304.
- PUMP SHAFT: stainless steel AISI 304.
- PUMP BEARINGS: housing in special technopolymer with stainless steel AISI 316 shaft bushes, chrome oxide coated to resist sand.
- DRIVE COUPLING: stainless steel AISI 316L.
- SCREWS AND CABLE COVER: stainless steel AISI 304.
- MOTOR SHAFT: stainless steel AISI 316 (EN 10088-3 - 1.4104 up to 0.75 kW).
- MOTOR: submersible for continuous duty (dry rewindable).
4BLOCKm: single-phase 220÷240 V - 50 Hz.
4BLOCK: three-phase 380÷415 V - 50 Hz.
- INSULATION: class F. ● PROTECTION: IP 68.
- CHECK VALVE: built into the delivery body.
- DOUBLESEAL: mechanical seal ceramic-graphite-NBR with oil barrier chamber and inner lip seal to protect the seal in the event of dry running.

STANDARD FEATURES:

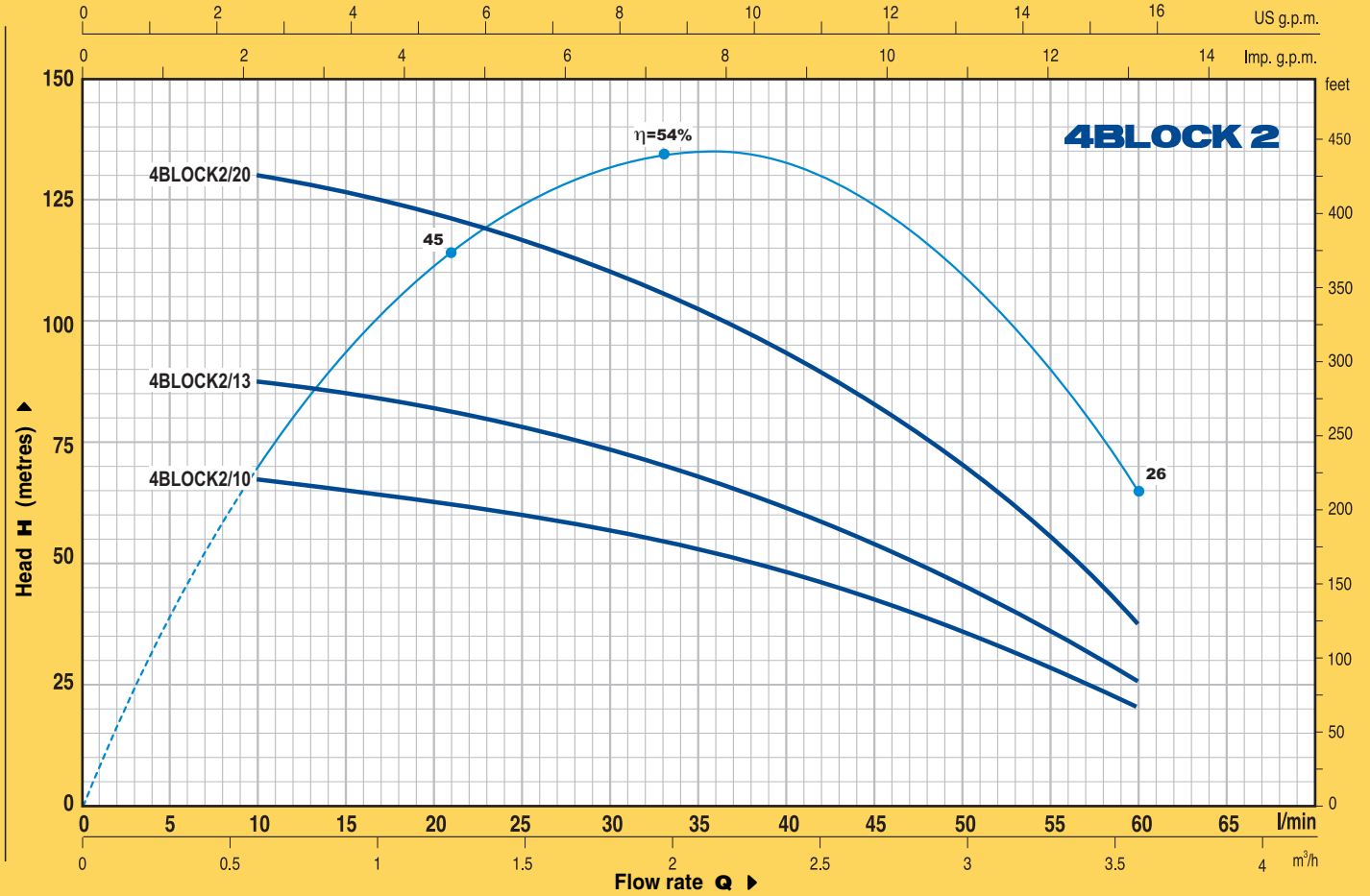
4BLOCKm (single-phase) Motor thermal protection built into the winding.
Internal capacitor.
20 metre flat power cable.

4BLOCK (three-phase) 20 metre flat power cable.

OPTIONS ON REQUEST

- ⇒ 30 metre power cable
- ⇒ other voltages or frequency 60 Hz

CURVES AND PERFORMANCE DATA AT n= 2900 1/min

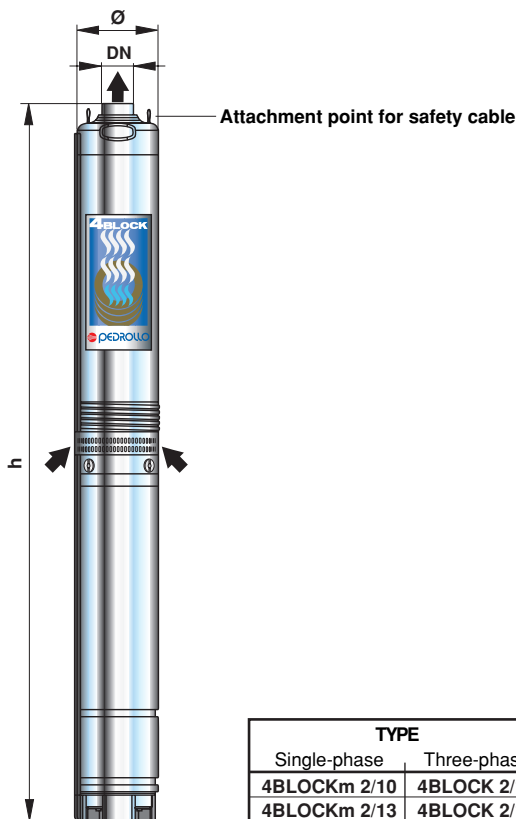


TYPE		POWER		Q	Flow rate						
Single-phase	Three-phase	kW	HP		m³/h	0.6	1.2	1.8	2.4	3.0	3.6
4BLOCKm 2/10	4BLOCK 2/10	0.55	0.75	l/min	0	10	20	30	40	50	60
4BLOCKm 2/13	4BLOCK 2/13	0.75	1	H metres	70	68	63	57	48	36	20
4BLOCKm 2/20	4BLOCK 2/20	1.1	1.5		90	88	82	74	62	46	26
					135	130	122	111	93	71	39

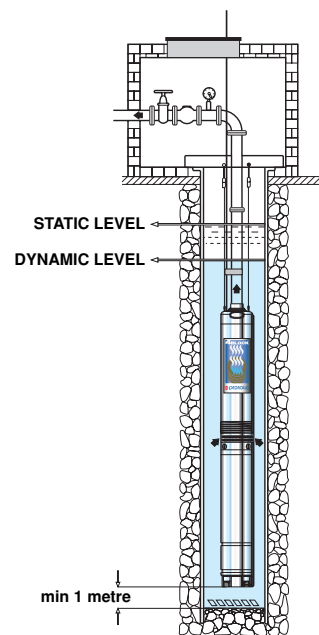
Q = Flow rate H = Total manometric head

Tolerance of the performance curves according to EN ISO 9906 App. A.

DIMENSIONS AND WEIGHTS

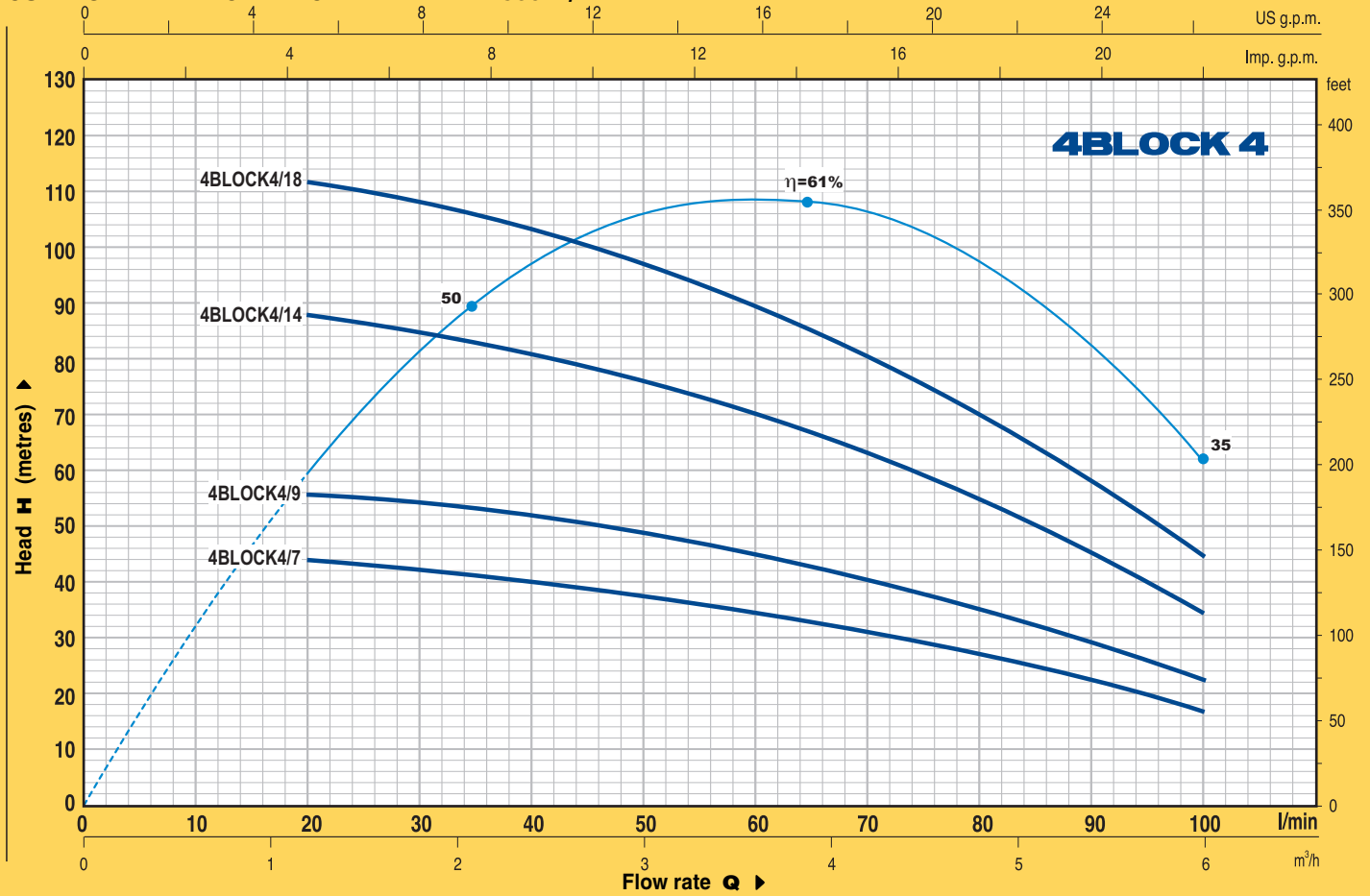


Typical installation



TYPE		PORTS DN	DIMENSIONS mm	kg								
Single-phase	Three-phase			1~	3~							
4BLOCKm 2/10	4BLOCK 2/10	1 1/4"	Ø	h								
4BLOCKm 2/13	4BLOCK 2/13					10	99.5	693/668	10.2	9.0		
4BLOCKm 2/20	4BLOCK 2/20					13	99.5	774/749	11.7	10.6		
								20	99.5	987/927	14.9	12.5

CURVES AND PERFORMANCE DATA AT n= 2900 1/min

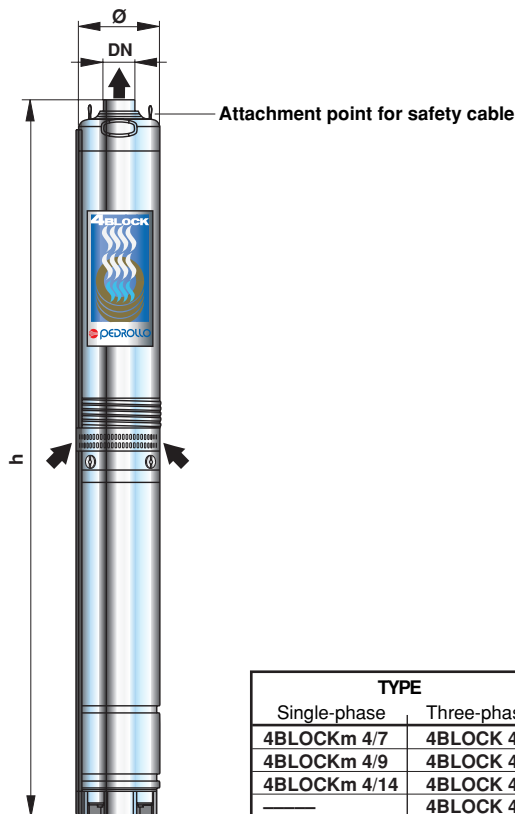


TYPE		POWER		Q	Flow rate												
Single-phase	Three-phase	kW	HP		0	1.2	1.8	2.4	3.0	3.6	4.2	4.8	5.4	6.0			
4BLOCKm 4/7	4BLOCK 4/7	0.55	0.75	H metres	0	20	30	40	50	60	70	80	90	100			
4BLOCKm 4/9	4BLOCK 4/9	0.75	1		46	44	42	40	38	35	31.5	27	23	17			
4BLOCKm 4/14	4BLOCK 4/14	1.1	1.5		60	56	54.5	52	49	45	40.5	35	29	23			
—	4BLOCK 4/18	1.5	2		92	88	85	81	76	70	63	54.5	45	35			
—	4BLOCK 4/18	1.5	2		120	112	109	104	98	90	81	70	58	45			

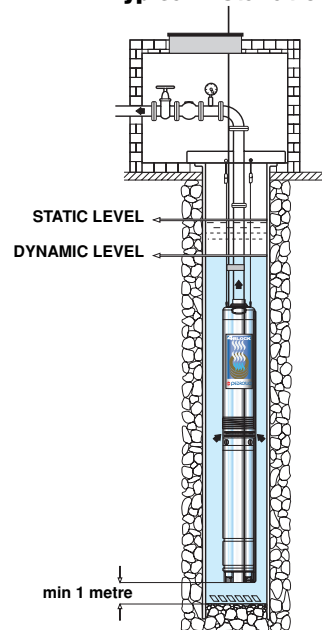
Q = Flow rate H = Total manometric head

Tolerance of the performance curves according to EN ISO 9906 App. A.

DIMENSIONS AND WEIGHTS

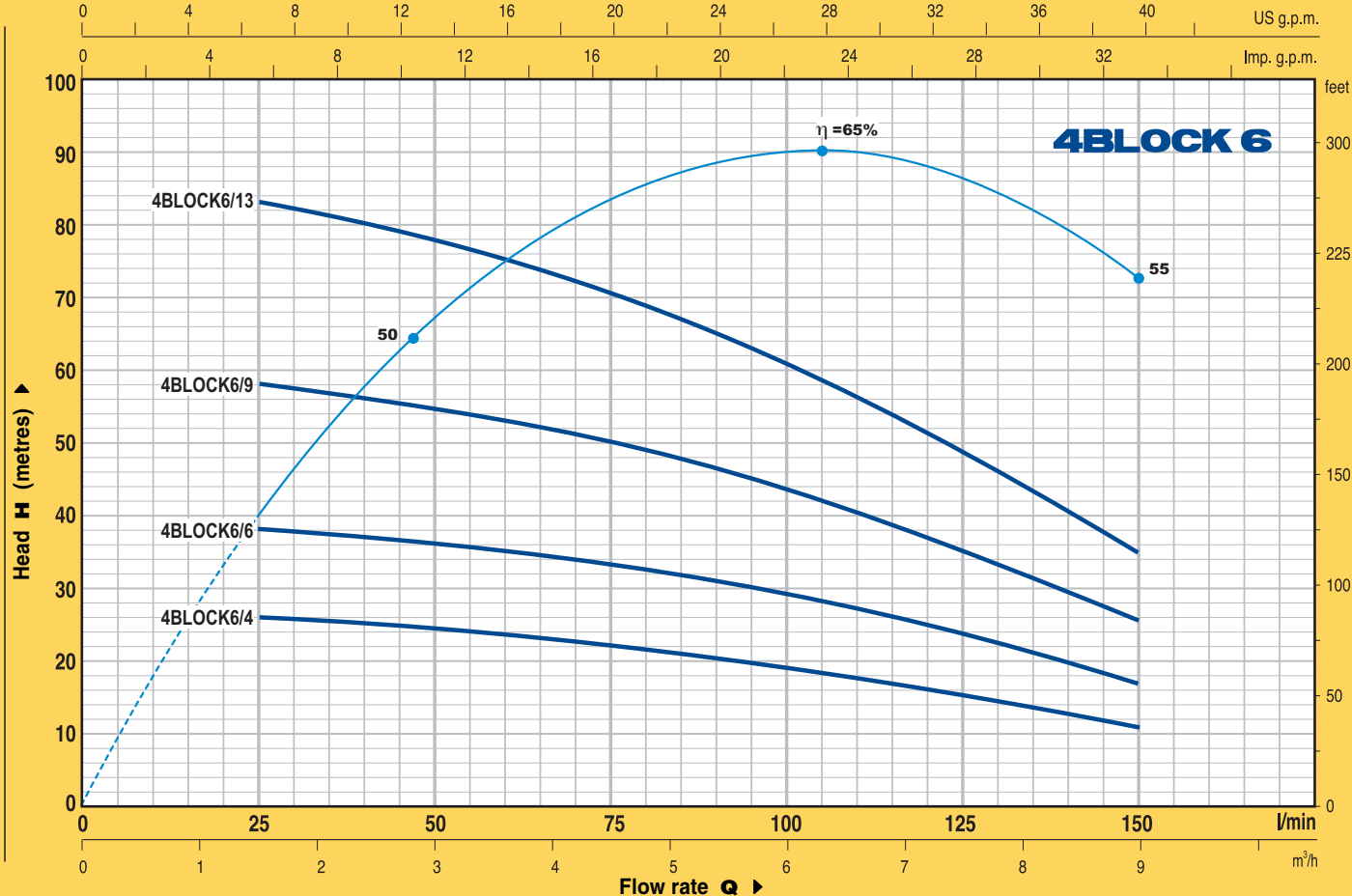


Typical installation



TYPE		PORTS DN	N° stages	DIMENSIONS mm		kg	
Single-phase	Three-phase			Ø	h	1~	3~
4BLOCKm 4/7	4BLOCK 4/7	1 1/4"	7	99.5	663/638	9.9	8.7
4BLOCKm 4/9	4BLOCK 4/9		9		732/707	11.3	10.2
4BLOCKm 4/14	4BLOCK 4/14		14		901/841	14.3	11.9
—	4BLOCK 4/18		18		—/1014	-	15.0

CURVES AND PERFORMANCE DATA AT n= 2900 1/min

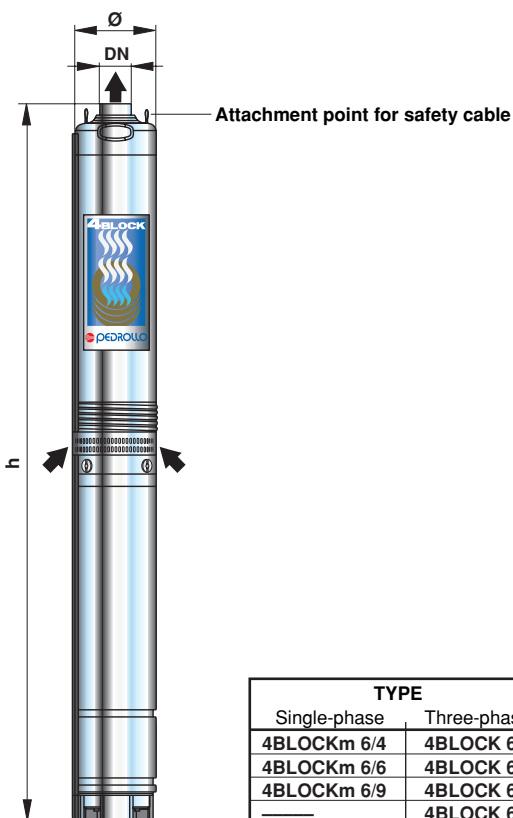


TYPE		POWER		Q	Flow rate							
Single-phase	Three-phase	kW	HP		0	1.5	3.0	4.5	6.0	7.5	9.0	
4BLOCKm 6/4	4BLOCK 6/4	0.55	0.75	l/min	0	25	50	75	100	125	150	
4BLOCKm 6/6	4BLOCK 6/6	0.75	1	H metres	27	26	24	22	19	15	11	
4BLOCKm 6/9	4BLOCK 6/9	1.1	1.5		40	38	36	33	29	24	17	
—	4BLOCK 6/13	1.5	2		61	58	54	50	44	35	26	
—	—	—	—		87	83	78	71	61	49	35	

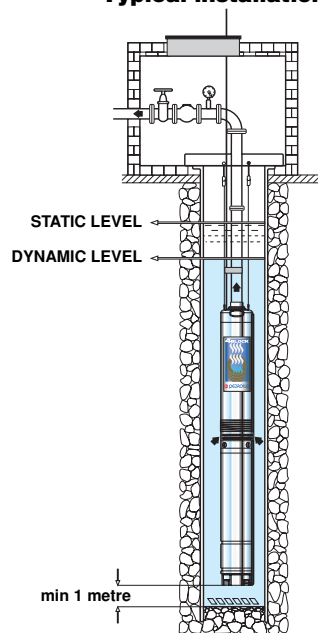
Q = Flow rate H = Total manometric head

Tolerance of the performance curves according to EN ISO 9906 App. A.

DIMENSIONS AND WEIGHTS



Typical installation



TYPE		PORTS DN	N° stages	DIMENSIONS mm		kg	
Single-phase	Three-phase			Ø	h	1~	3~
4BLOCKm 6/4	4BLOCK 6/4	1 1/4"	4	99.5	629/604	9.7	8.5
4BLOCKm 6/6	4BLOCK 6/6		6		714/689	11.3	10.2
4BLOCKm 6/9	4BLOCK 6/9		9		864/804	13.9	11.5
—	4BLOCK 6/13		13		—/1008	-	15.4

4SR

4" submersible pumps sand-resistant

The combination of a hydraulic design with floating impellers and the materials used allows the pump to handle sand content of up to 150 g/m³ without risk of blockage or premature wear.



RANGE OF PERFORMANCE

Flow rate up to 375 l/min (22.5 m³/h)
Head up to 525 m

LIMITS OF USE

Liquid temperature up to +30°C
Maximum sand content 150 g/m³
Starts/hour: 20 at regular intervals

CONSTRUCTION AND SAFETY STANDARDS

EN 60 335-1 EN 60034-1
IEC 335-1 IEC 34-1
CEI 61-150 CEI 2-3



INSTALLATION AND USE

THEY ARE RECOMMENDED FOR PUMPING CLEAN WATER WITH A SAND CONTENT NO HIGHER THAN 150 g/m³. THEIR HIGH EFFICIENCY AND RELIABILITY MAKE THEM SUITABLE FOR USE IN THE DOMESTIC, CIVIL AND INDUSTRIAL SECTORS, INCLUDING FOR WATER SUPPLIES AS PART OF A PRESSURE SET, IRRIGATION, WASHDOWN SYSTEMS, PRESSURE BOOSTING AND FIRE FIGHTING SYSTEMS.

GUARANTEE 2 YEARS subject to our general terms of sale.

CONSTRUCTION CHARACTERISTICS

- DELIVERY BODY AND MOTOR BRACKET: stainless steel AISI 304.
- NON-RETURN VALVE: stainless steel AISI 304.
- IMPELLERS AND DIFFUSERS: technopolymer.
- DIFFUSER HOUSING: stainless steel AISI 304.
- PUMP CASING: stainless steel AISI 304.
- PUMP SHAFT: stainless steel AISI 304.
- PUMP BEARINGS: housing in special technopolymer with stainless steel AISI 316 shaft bushes, chrome oxide coated to resist sand.
- DRIVE COUPLING: stainless steel AISI 316L up to 2.2 kW; stainless steel AISI 304 for higher powers.
- SCREWS, FILTER AND CABLE COVER: stainless steel AISI 304.
- MOTOR: Pedrollo 4" submersible electric motor.
4SRm: single-phase 220÷230 V - 50 Hz.
4SR: three-phase 380÷415 V - 50 Hz.
- PROTECTION: IP 68.

STANDARD FEATURES:

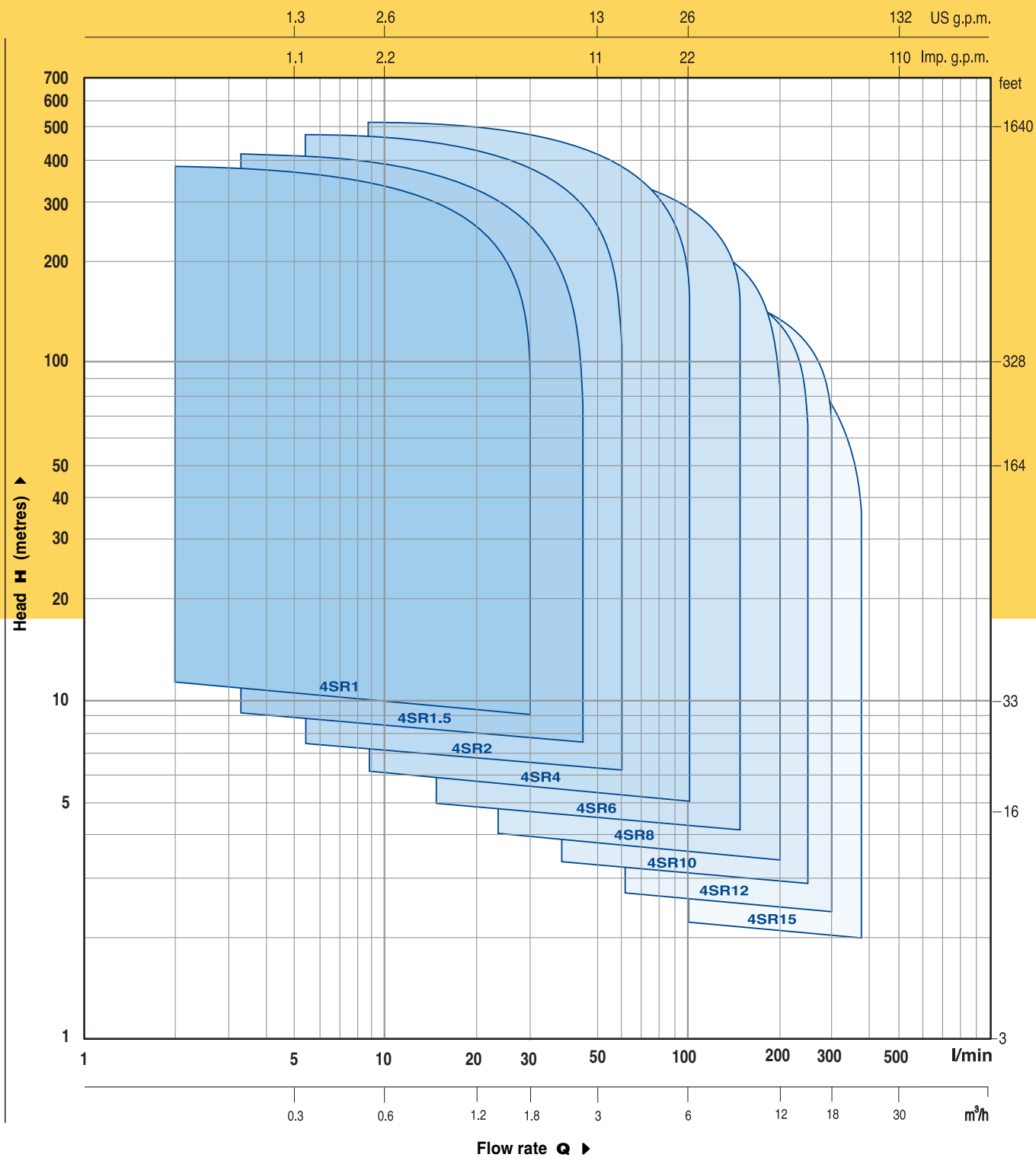
4SRm (single-phase) Power cable 1.5 metres long (2.5 metres for motors over 3 kW). Capacitor supplied loose with Pedrollo motors.

4SR (three-phase) Power cable 1.5 metres long (2.5 metres for powers higher than 3 kW).

OPTIONS ON REQUEST

- ⇒ pumps for water with a sand content higher than 150 g/m³
- ⇒ pumps for sea water
- ⇒ Franklin Electric 4" submersible electric motor
- ⇒ other voltages or frequency 60 Hz

RANGE OF PERFORMANCE AT n= 2900 1/min

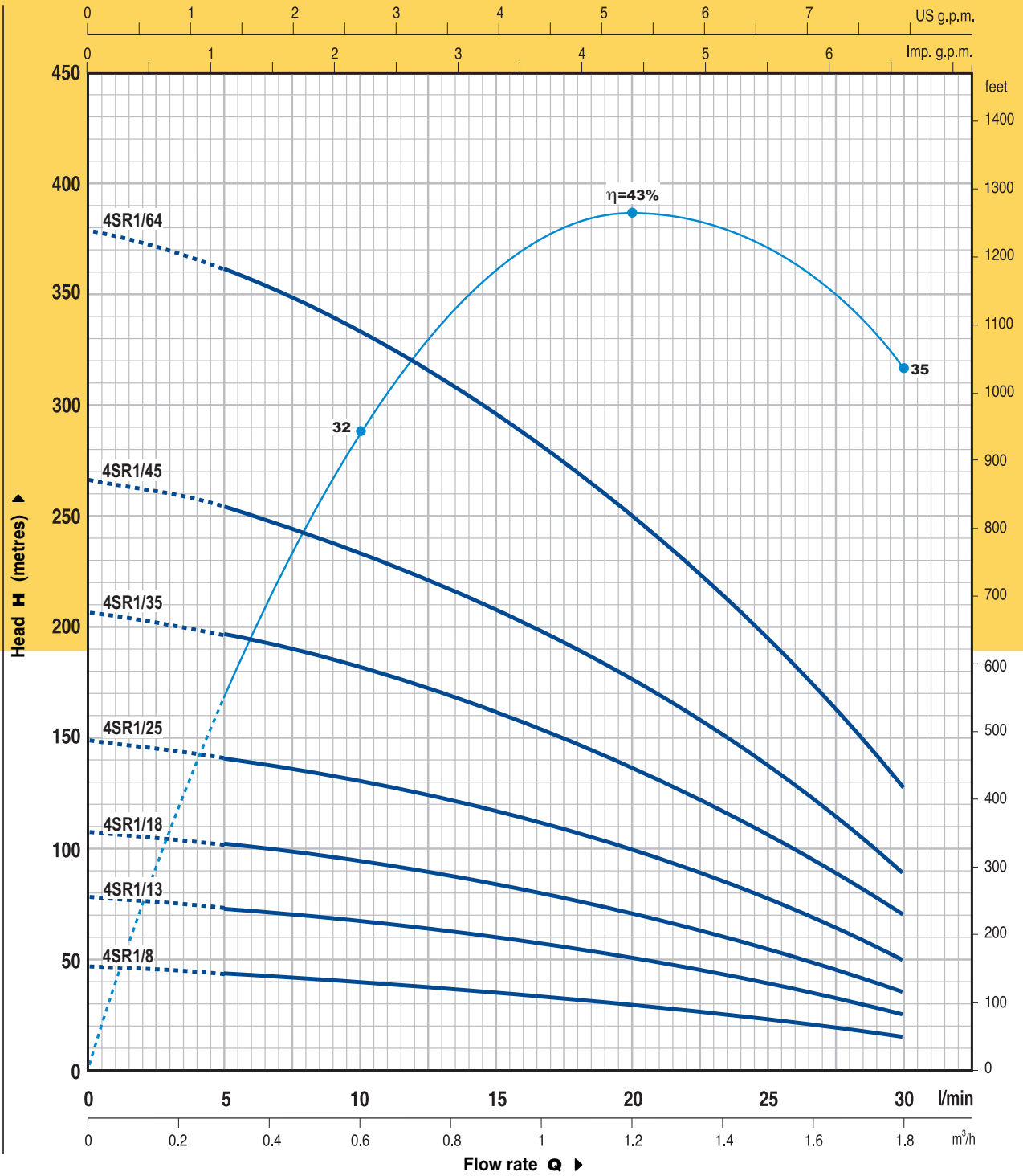


DESCRIPTION

4 SR 1 m / 13
 Borehole diameter in inches _____
 Series _____
 Flow rate in m³/h in the point of highest efficiency _____
 Single-phase motor _____
 Number of stages _____

4SR1

CURVES AND PERFORMANCE DATA AT n= 2900 1/min



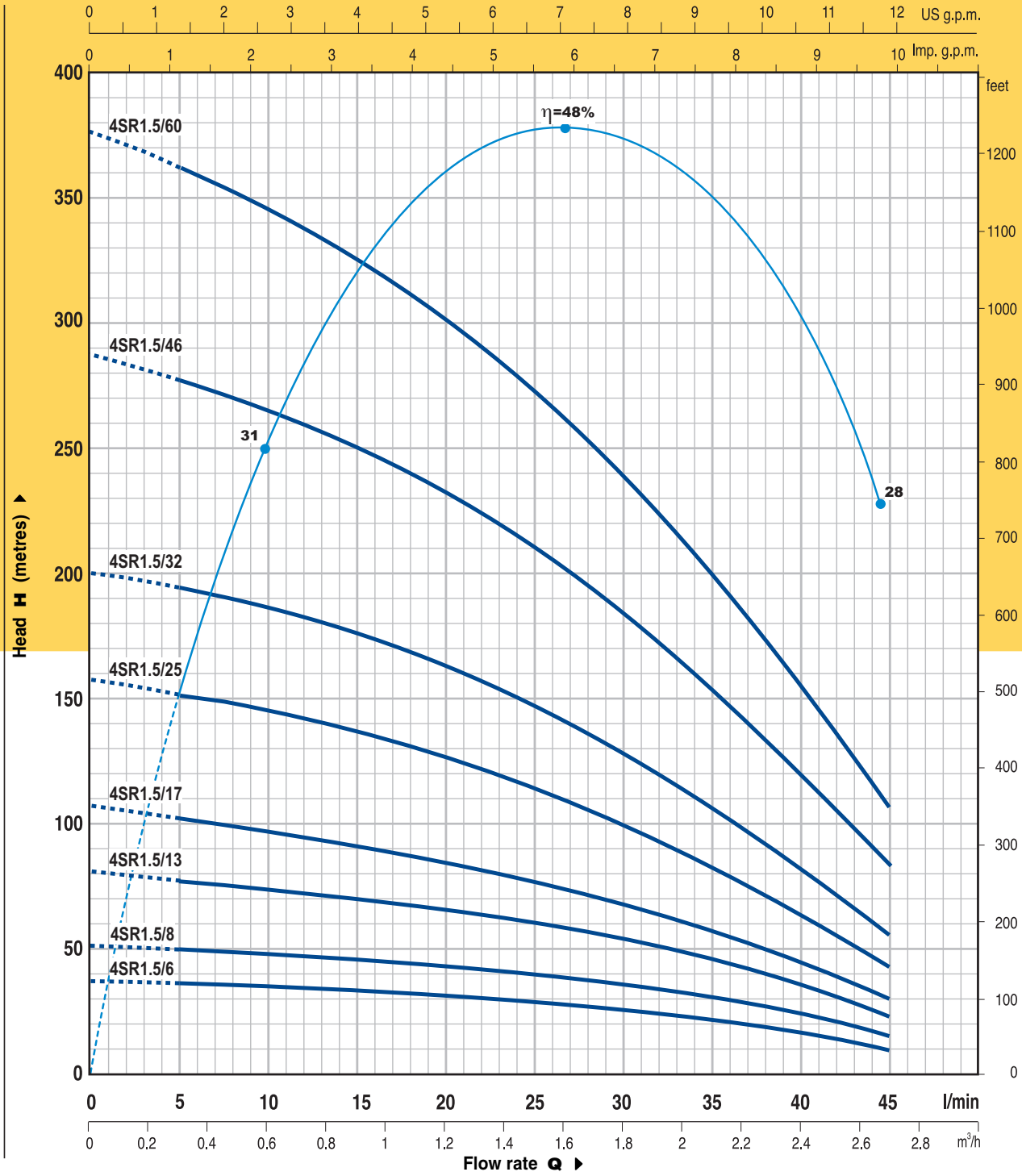
TYPE		POWER		Q	H metres						
Single-phase	Three-phase	kW	HP		0	0.3	0.6	0.9	1.2	1.5	1.8
				l/min	0	5	10	15	20	25	30
4SR1m/8	—	0.25	0.33	H metres	47	45	42	37	31	24	16
4SR1m/13	4SR1/13	0.37	0.50		77	73	67	60	51	40	26
4SR1m/18	4SR1/18	0.55	0.75		107	101	93	83	71	55	36
4SR1m/25	4SR1/25	0.75	1		148	140	129	115	98	77	50
4SR1m/35	4SR1/35	1.1	1.5		206	197	182	161	136	107	70
4SR1m/45	4SR1/45	1.5	2		266	254	234	207	176	137	90
4SR1m/64	4SR1/64	2.2	3		379	362	332	295	250	195	128

Q = Flow rate H = Total manometric head

Tolerance of the performance curves according to EN ISO 9906 App. A.

4SR1.5

CURVES AND PERFORMANCE DATA AT $n= 2900$ 1/min



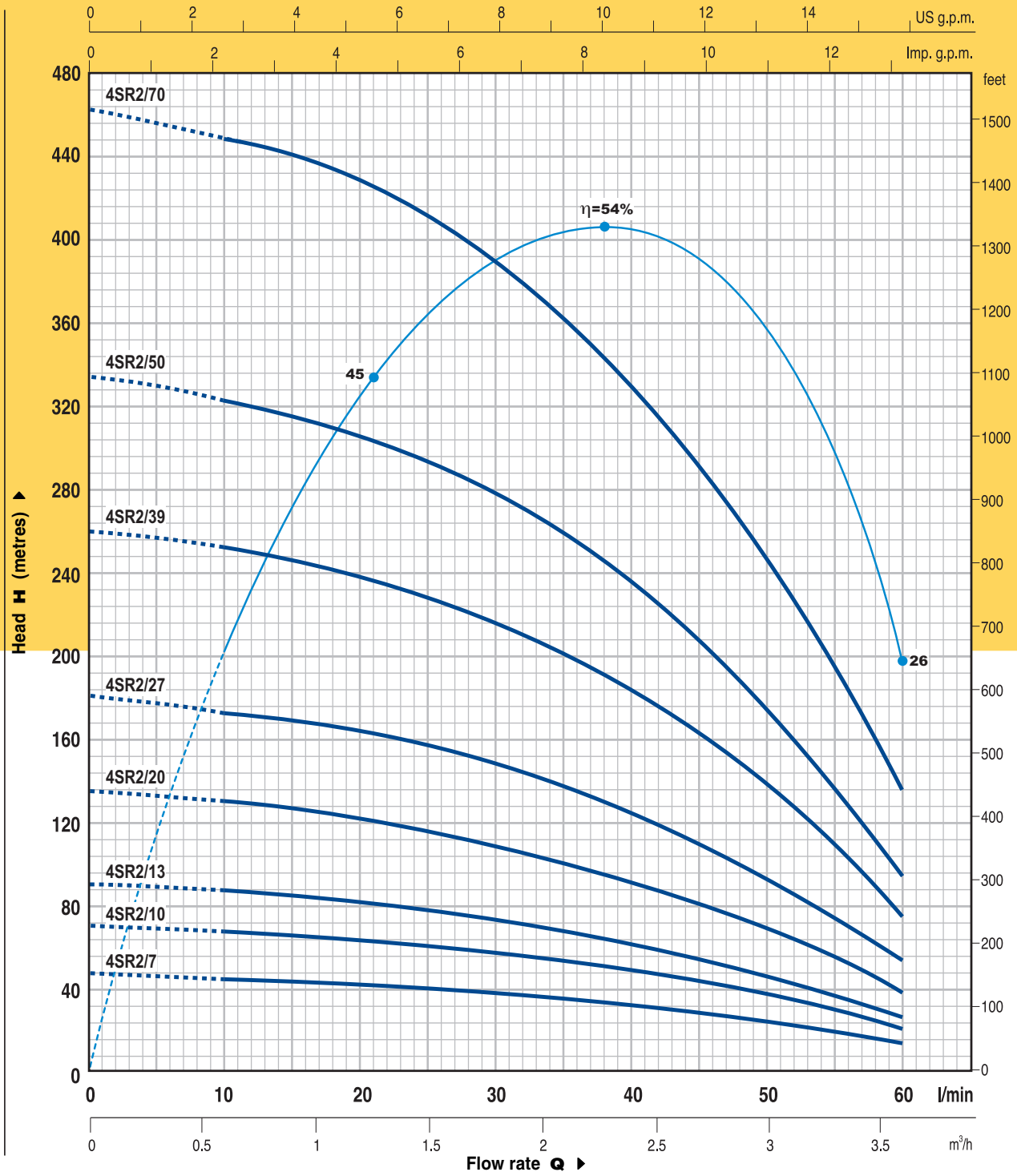
TYPE		POWER		Q	H metres										
Single-phase	Three-phase	kW	HP		0	0.3	0.6	0.9	1.2	1.5	1.8	2.1	2.4	2.7	
				l/min	0	5	10	15	20	25	30	35	40	45	
4SR1.5m/6	—	0.25	0.33	H metres	38	36	34	33	30	27	24	20	15	11	
4SR1.5m/8	4SR1.5/8	0.37	0.50		50	48	46	44	40	36	32	26	20	14	
4SR1.5m/13	4SR1.5/13	0.55	0.75		81	78	75	71	66	59	52	43	33	23	
4SR1.5m/17	4SR1.5/17	0.75	1		106	102	98	93	86	78	68	56	43	30	
4SR1.5m/25	4SR1.5/25	1.1	1.5		156	151	144	136	127	115	100	83	64	45	
4SR1.5m/32	4SR1.5/32	1.5	2		200	193	184	175	162	147	128	106	82	58	
4SR1.5m/46	4SR1.5/46	2.2	3		288	277	265	250	233	211	184	153	117	83	
—	4SR1.5/60	3	4		375	362	346	328	304	276	241	199	153	108	

Q = Flow rate H = Total manometric head

Tolerance of the performance curves according to EN ISO 9906 App. A.

4SR2

CURVES AND PERFORMANCE DATA AT n= 2900 1/min



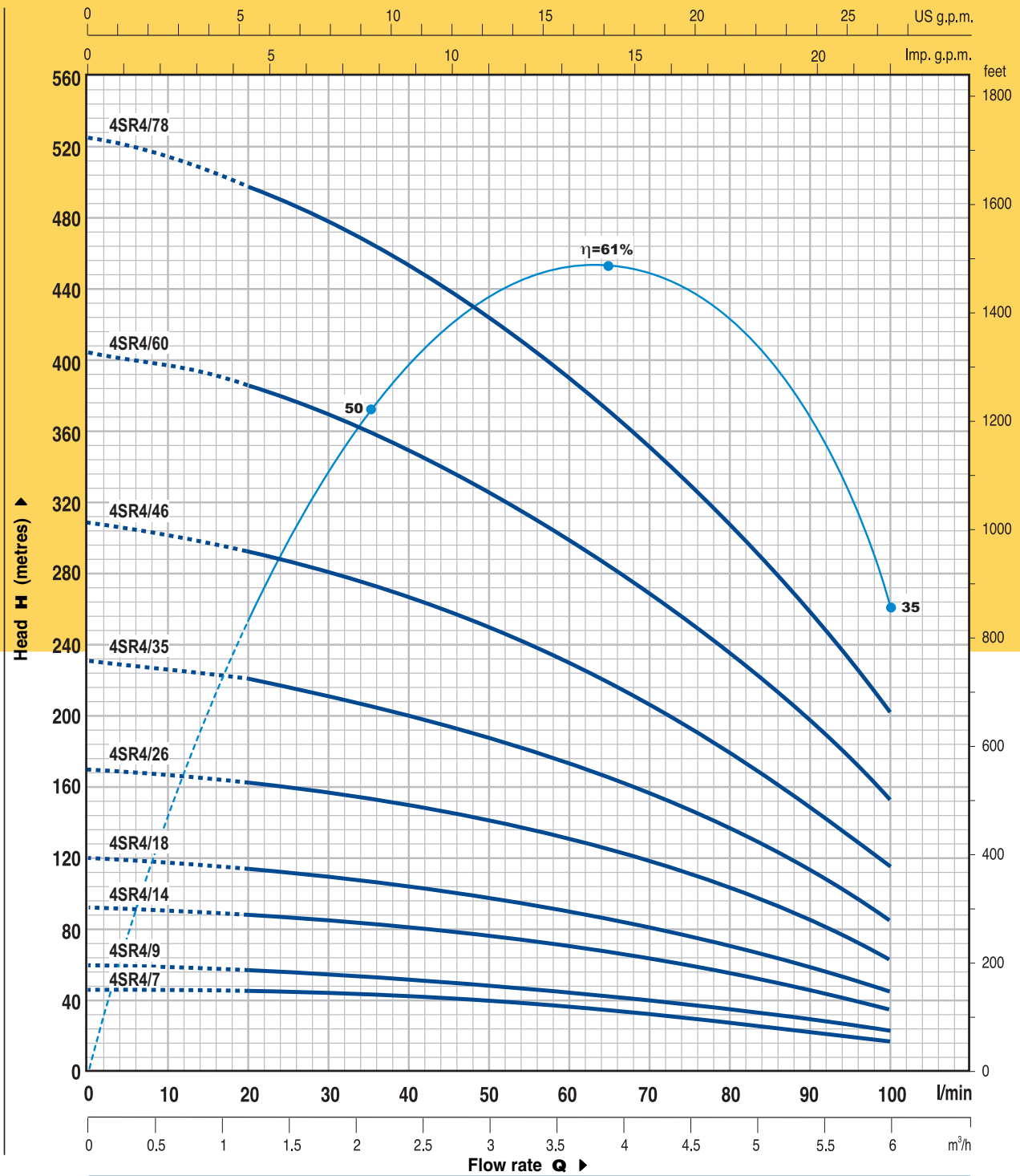
TYPE		POWER		Q	Flow rate (l/min)						
Single-phase	Three-phase	kW	HP		0	0.6	1.2	1.8	2.4	3.0	3.6
4SR2m/7	4SR2/7	0.37	0.50	H metres	0	10	20	30	40	50	60
4SR2m/10	4SR2/10	0.55	0.75		48	46	44	39	33	25	14
4SR2m/13	4SR2/13	0.75	1		70	68	63	57	48	36	20
4SR2m/20	4SR2/20	1.1	1.5		90	88	82	74	62	46	26
4SR2m/27	4SR2/27	1.5	2		135	130	122	111	93	71	39
4SR2m/39	4SR2/39	2.2	3		180	173	164	150	126	96	52
—	4SR2/50	3	4		260	250	238	216	183	138	75
—	4SR2/70	4	5.5		335	322	306	277	235	177	96
				465	448	427	388	328	248	135	

Q = Flow rate H = Total manometric head

Tolerance of the performance curves according to EN ISO 9906 App. A.

4SR4

CURVES AND PERFORMANCE DATA AT n= 2900 1/min



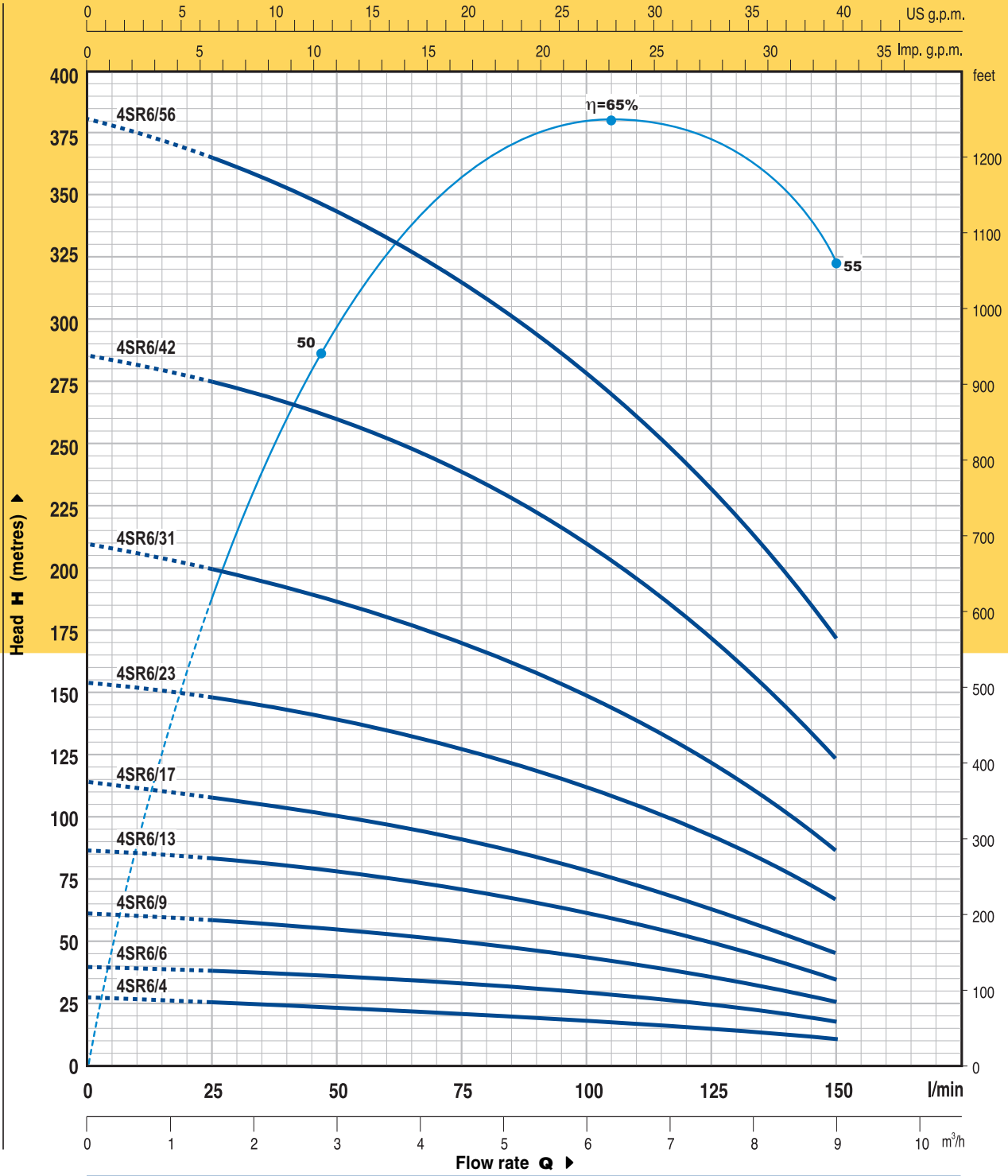
TYPE		POWER		Q	Flow rate (l/min)										
Single-phase	Three-phase	kW	HP		0	1.2	1.8	2.4	3.0	3.6	4.2	4.8	5.4	6.0	
4SR4m/7	4SR4/7	0.55	0.75	H metres	0	20	30	40	50	60	70	80	90	100	
4SR4m/9	4SR4/9	0.75	1		46	44	42	40	38	35	32	28	23	17	
4SR4m/14	4SR4/14	1.1	1.5		60	56	55	52	49	45	40	35	29	23	
4SR4m/18	4SR4/18	1.5	2		92	88	85	81	76	70	63	55	45	35	
4SR4m/26	4SR4/26	2.2	3		120	112	109	104	98	90	81	70	58	45	
---	4SR4/35	3	4		170	162	157	150	141	130	116	101	84	63	
---	4SR4/46	4	5.5		230	220	211	202	190	175	157	137	113	85	
---	4SR4/60	5.5	7.5		308	293	280	269	249	230	205	181	151	117	
---	4SR4/78	7.5	10		405	385	370	350	325	300	270	235	195	155	
---	4SR4/78	7.5	10		525	495	475	450	425	390	350	305	255	200	

Q = Flow rate H = Total manometric head

Tolerance of the performance curves according to EN ISO 9906 App. A.

4SR6

CURVES AND PERFORMANCE DATA AT n= 2900 1/min



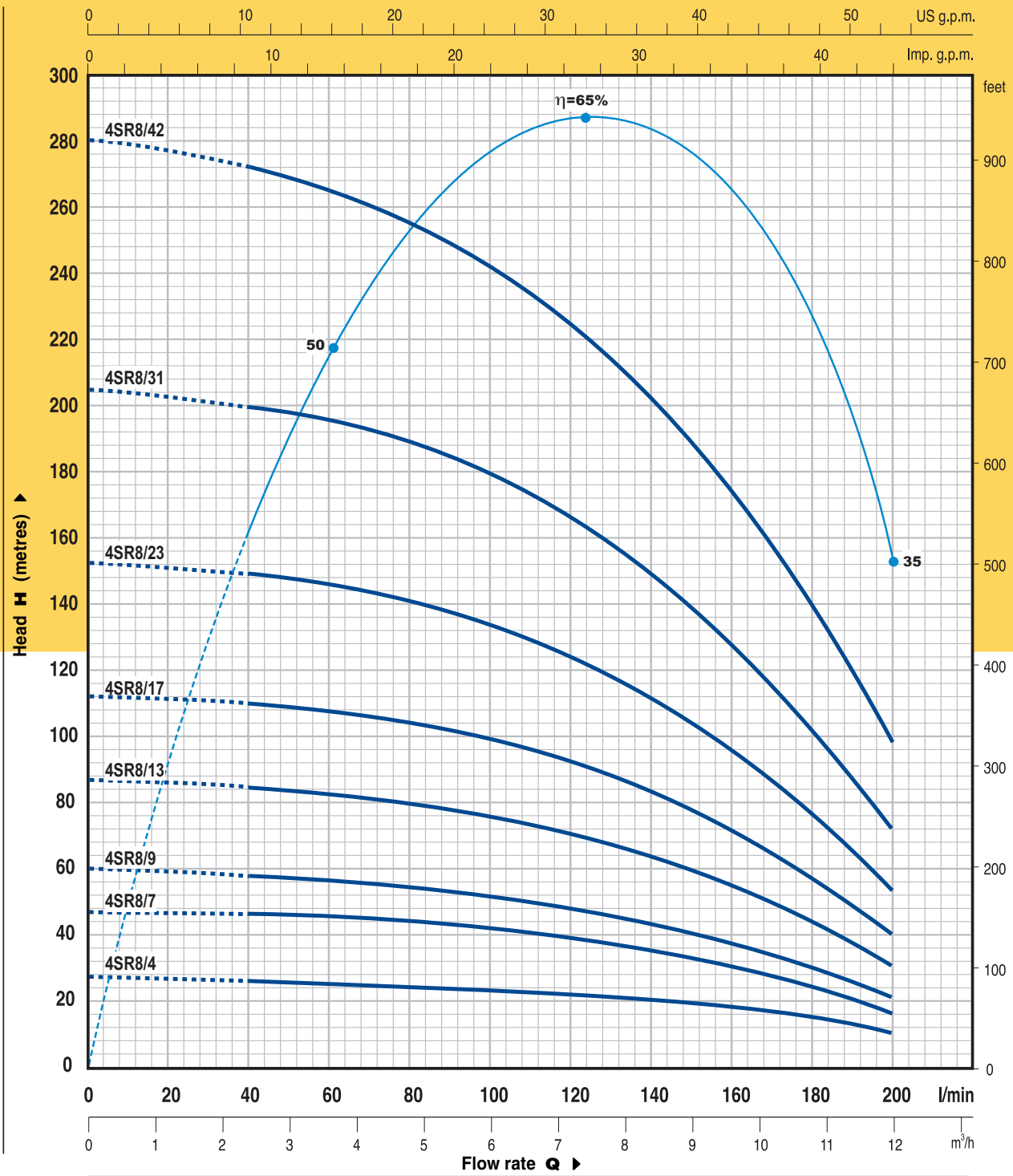
TYPE		POWER		Q	Flow rate (l/min)						
Single-phase	Three-phase	kW	HP		0	1.5	3.0	4.5	6.0	7.5	9.0
4SR6m/4	4SR6/4	0.55	0.75	H metres	27	26	24	22	19	15	11
4SR6m/6	4SR6/6	0.75	1		40	38	36	33	29	24	17
4SR6m/9	4SR6/9	1.1	1.5		61	58	54	50	44	35	26
4SR6m/13	4SR6/13	1.5	2		87	83	78	71	61	49	35
4SR6m/17	4SR6/17	2.2	3		114	107	100	91	79	62	45
—	4SR6/23	3	4		154	148	138	128	112	92	67
—	4SR6/31	4	5.5		210	200	186	170	149	121	86
—	4SR6/42	5.5	7.5		285	276	258	240	212	170	124
—	4SR6/56	7.5	10		380	365	340	315	280	233	173

Q = Flow rate H = Total manometric head

Tolerance of the performance curves according to EN ISO 9906 App. A.

4SR8

CURVES AND PERFORMANCE DATA AT n= 2900 1/min



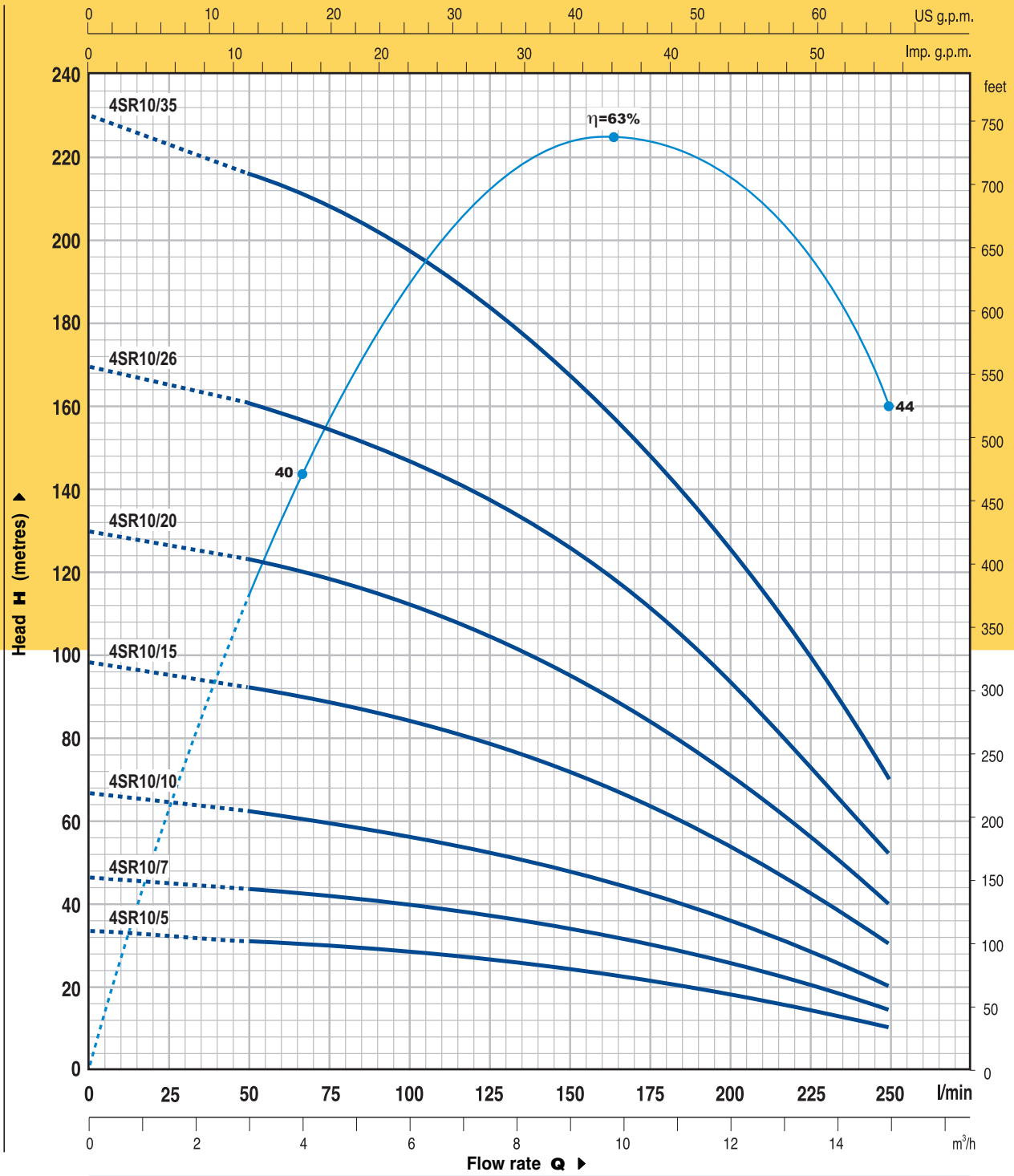
TYPE		POWER		Q	H metres											
Single-phase	Three-phase	kW	HP		m³/h	0	2.4	3.6	4.8	6.0	7.2	8.4	9.6	10.8	12.0	
				l/min	0	40	60	80	100	120	140	160	180	200		
4SR8m/4	4SR8/4	0.75	1	H metres	27	26	25	24	23	22	20	17	13	10		
4SR8m/7	4SR8/7	1.1	1.5		47	46	45	43	41	38	34	29	23	16		
4SR8m/9	4SR8/9	1.5	2		60	58	57	55	52	48	43	37	30	21		
4SR8m/13	4SR8/13	2.2	3		87	85	83	80	76	70	63	54	43	30		
—	4SR8/17	3	4		112	110	108	104	99	92	82	70	56	40		
—	4SR8/23	4	5.5		153	150	146	141	134	124	111	95	76	53		
—	4SR8/31	5.5	7.5		205	200	196	190	181	167	149	128	103	72		
—	4SR8/42	7.5	10		280	272	266	257	244	225	202	175	140	98		

Q = Flow rate H = Total manometric head

Tolerance of the performance curves according to EN ISO 9906 App. A.

4SR10

CURVES AND PERFORMANCE DATA AT n= 2900 1/min



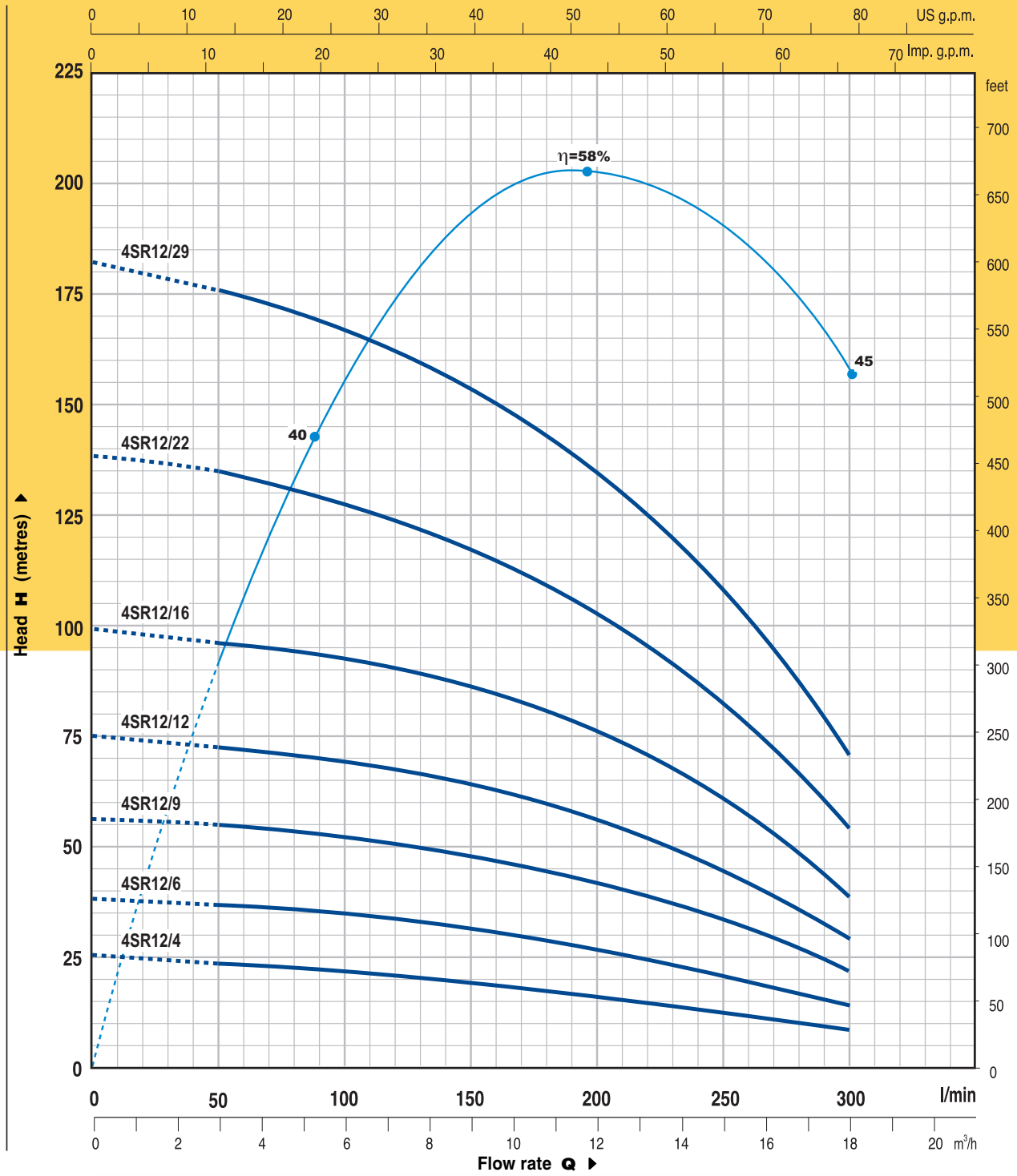
TYPE		POWER		Q	Flow rate (l/min)										
Single-phase	Three-phase	kW	HP		0	3.0	4.5	6.0	7.5	9.0	10.5	12	13.5	15.0	
4SR10m/5	4SR10/5	1.1	1.5	H metres	0	50	75	100	125	150	175	200	225	250	
4SR10m/7	4SR10/7	1.5	2		33	31	30	28	26	24	21	18	14	10	
4SR10m/10	4SR10/10	2.2	3		46	43	41	39	37	34	30	25	20	15	
—	4SR10/15	3	4		66	62	59	56	53	48	42	36	28	20	
—	4SR10/20	4	5.5		98	92	88	84	79	72	64	53	42	30	
—	4SR10/26	5.5	7.5		130	123	118	112	106	96	85	71	56	40	
—	4SR10/35	7.5	10		170	160	154	147	138	126	110	94	72	52	
—	—	—	—		230	216	208	197	184	168	148	126	100	70	

Q = Flow rate H = Total manometric head

Tolerance of the performance curves according to EN ISO 9906 App. A.

4SR12

CURVES AND PERFORMANCE DATA AT n= 2900 1/min



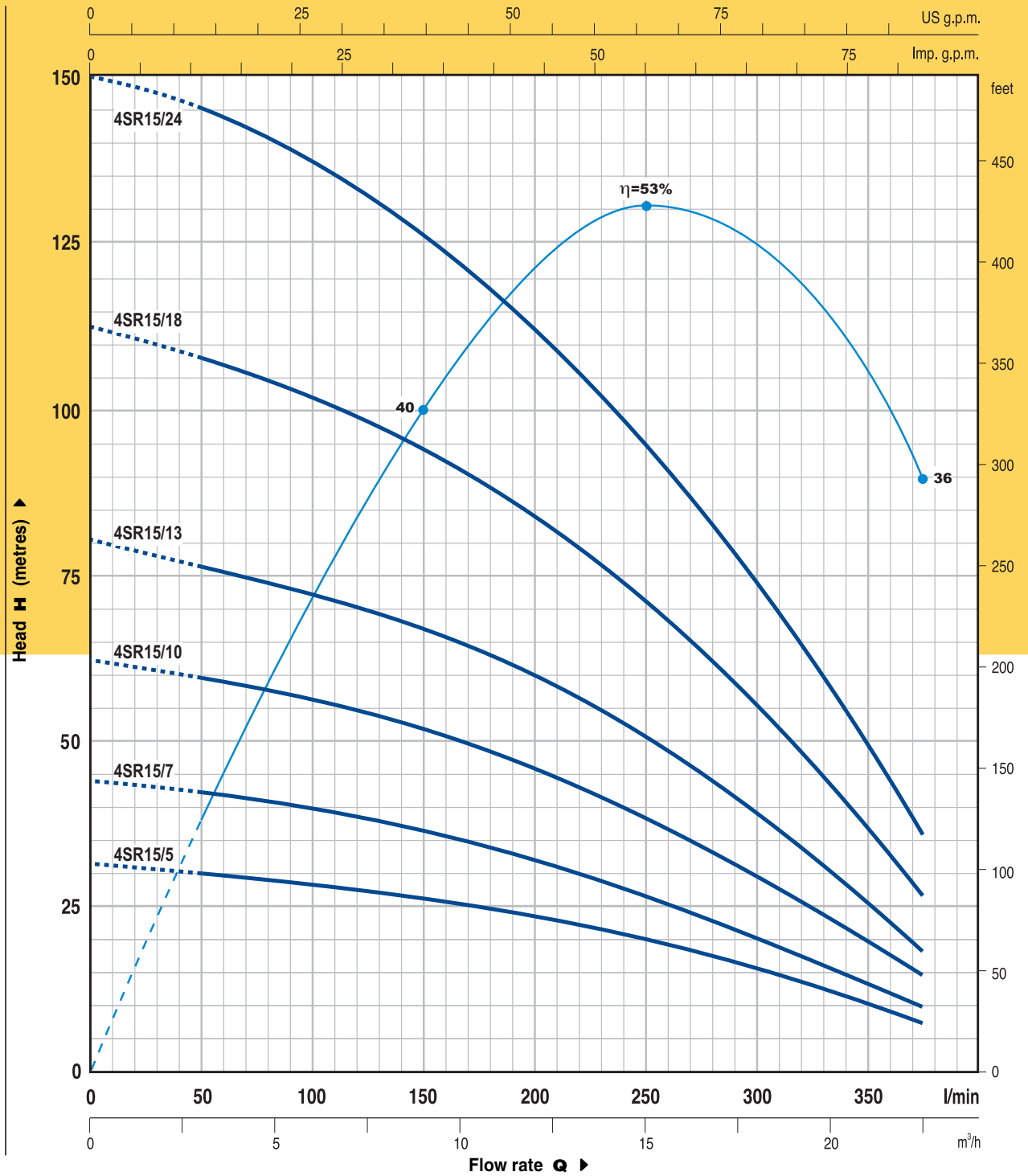
TYPE		POWER		Q	m ³ /h										
Single-phase	Three-phase	kW	HP		0	3.0	6.0	9.0	12.0	13.2	14.4	15.6	16.8	18.0	
4SR12m/4	4SR12/4	1.1	1.5	H metres	0	50	100	150	200	220	240	260	280	300	
4SR12m/6	4SR12/6	1.5	2		25	24	22	19	16	15	14	12	11	8	
4SR12m/9	4SR12/9	2.2	3		38	37	35	32	28	26	24	21	18	14	
—	4SR12/12	3	4		56	55	52	48	42	39	36	32	27	22	
—	4SR12/16	4	5.5		75	73	69	64	56	52	48	43	36	29	
—	4SR12/22	5.5	7.5		100	97	93	86	75	70	64	57	48	38	
—	4SR12/29	7.5	10		138	135	127	118	103	96	88	78	66	53	
					182	176	167	155	135	126	116	103	88	71	

Q = Flow rate H = Total manometric head

Tolerance of the performance curves according to EN ISO 9906 App. A.

4SR15

CURVES AND PERFORMANCE DATA AT $n = 2900$ 1/min

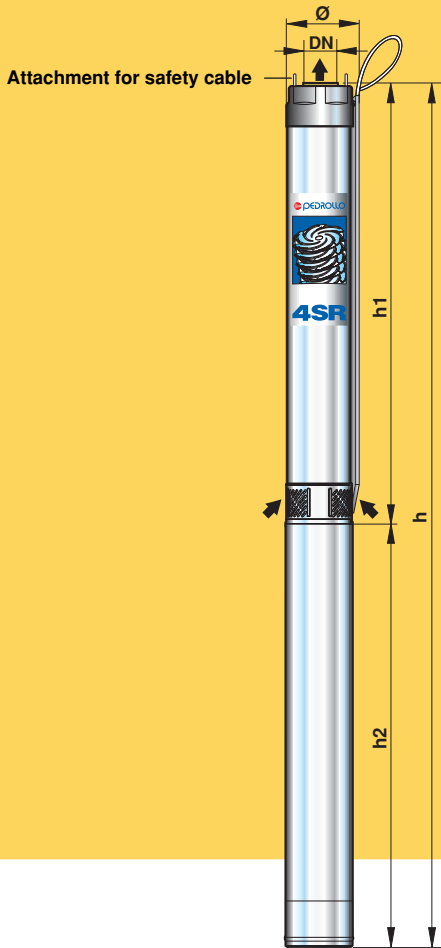


TYPE		POWER		Q	H metres									
Single-phase	Three-phase	kW	HP		0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	22.5	
				l/min	0	50	100	150	200	250	300	350	375	
4SR15m/5	4SR15/5	1.5	2	H metres	31	30	28	26	23	20	15	10	7.5	
4SR15m/7	4SR15/7	2.2	3		44	42	40	37	32	27	20	13	10	
—	4SR15/10	3	4		62	60	57	52	46	38	30	20	15	
—	4SR15/13	4	5.5		80	77	72	68	60	50	40	25	19	
—	4SR15/18	5.5	7.5		112	108	102	95	85	71	55	37	27	
—	4SR15/24	7.5	10		150	145	138	126	112	95	75	50	36	

Q = Flow rate H = Total manometric head

Tolerance of the performance curves according to EN ISO 9906 App. A.

4SR 4" submersible pumps with PEDROLLO motors

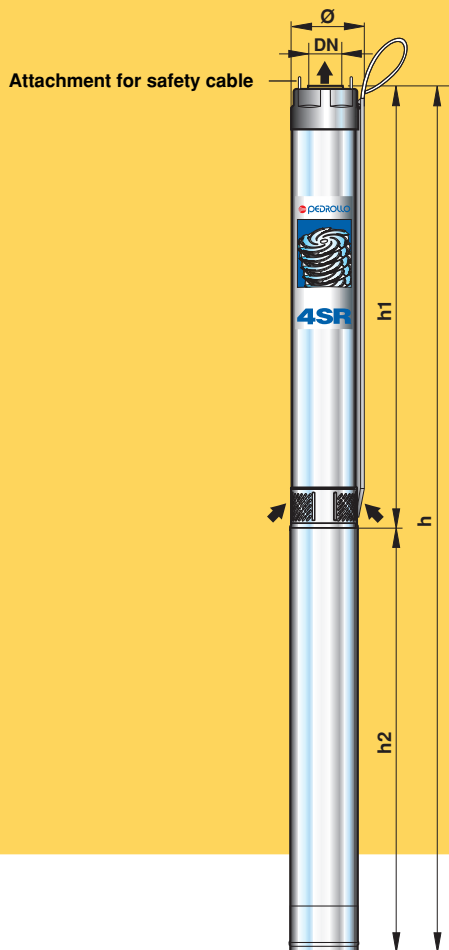


DIMENSIONS AND WEIGHTS

TYPE Single-phase	PORT DN	Ø	DIMENSIONS mm			kg 1~
			h1	h2	h	
4SR1m/8 - PD	1 1/4"	98	310	294	604	9.3
4SR1m/13 - PD			402	294	696	11.1
4SR1m/18 - PD			519	319	838	13.3
4SR1m/25 - PD			648	344	992	15.8
4SR1m/35 - PD			858	404	1262	21.8
4SR1m/45 - PD			1065	454	1519	25.6
4SR1m/64 - PD			1516	600	2116	35.4
4SR1.5m/6 - PD			273	294	567	9.0
4SR1.5m/8 - PD			310	294	604	12.6
4SR1.5m/13 - PD			402	319	721	14.5
4SR1.5m/17 - PD			501	344	845	16.7
4SR1.5m/25 - PD			648	404	1052	20.0
4SR1.5m/32 - PD			802	454	1256	23.7
4SR1.5m/46 - PD			1134	600	1734	31.4
4SR2m/7 - PD			291	294	585	12.4
4SR2m/10 - PD			347	319	666	13.2
4SR2m/13 - PD			402	344	746	15.8
4SR2m/20 - PD			556	404	960	19.0
4SR2m/27 - PD			685	454	1139	22.6
4SR2m/39 - PD			931	600	1531	29.9
4SR4m/7 - PD			316	319	635	13.5
4SR4m/9 - PD			360	344	704	15.3
4SR4m/14 - PD			470	404	874	18.0
4SR4m/18 - PD			582	454	1036	21.3
4SR4m/26 - PD	758	600	1358	27.7		
4SR6m/4 - PD	2"	98	282	319	601	13.1
4SR6m/6 - PD			342	344	686	14.9
4SR6m/9 - PD			432	404	836	17.4
4SR6m/13 - PD			577	454	1031	20.8
4SR6m/17 - PD			696	600	1296	26.6
4SR8m/4 - PD			282	344	626	14.4
4SR8m/7 - PD			372	404	776	16.8
4SR8m/9 - PD			432	454	886	19.6
4SR8m/13 - PD			577	600	1177	25.5
4SR10m/5 - PD			417	404	821	17.1
4SR10m/7 - PD			519	454	973	20.1
4SR10m/10 - PD			710	600	1310	26.3
4SR12m/4 - PD			366	404	770	16.7
4SR12m/6 - PD			470	454	924	19.7
4SR12m/9 - PD			659	600	1259	25.9
4SR15m/5 - PD			422	454	876	19.2
4SR15m/7 - PD			526	600	1126	25.5

TYPE Three-phase	PORT DN	DIMENSIONS mm			kg 3~	
		Ø	h1	h2		h
4SR1/13 - PD	1 1/4"	98	402	294	696	11.1
4SR1/18 - PD			519	294	813	12.1
4SR1/25 - PD			648	319	967	14.7
4SR1/35 - PD			858	344	1202	19.4
4SR1/45 - PD			1065	404	1469	23.4
4SR1/64 - PD			1516	454	1970	30.7
4SR1.5/8 - PD			310	294	604	11.6
4SR1.5/13 - PD			402	294	696	13.5
4SR1.5/17 - PD			501	319	820	15.4
4SR1.5/25 - PD			648	344	992	18.3
4SR1.5/32 - PD			802	404	1206	21.5
4SR1.5/46 - PD			1134	454	1588	26.7
4SR1.5/60 - PD			1442	560	2002	32.4
4SR2/7 - PD			291	294	585	11.4
4SR2/10 - PD			347	294	641	12.9
4SR2/13 - PD			402	319	721	14.5
4SR2/20 - PD			556	344	900	17.3
4SR2/27 - PD			685	404	1089	20.4
4SR2/39 - PD			931	454	1385	25.2
4SR2/50 - PD			1208	560	1768	25.0
4SR2/70 - PD			1626	660	2286	25.0
4SR4/7 - PD			316	294	610	12.5
4SR4/9 - PD			360	319	679	14.0
4SR4/14 - PD			470	344	814	16.3
4SR4/18 - PD	582	404	986	19.1		
4SR4/26 - PD	758	454	1212	23.0		
4SR4/35 - PD	980	560	1540	26.8		
4SR4/46 - PD	1295	660	1955	33.9		
4SR4/60 - PD	1652	745	2397	41.5		
4SR4/78 - PD	2097	850	2947	56.8		
4SR6/4 - PD	2"	98	282	294	576	12.1
4SR6/6 - PD			342	319	661	13.6
4SR6/9 - PD			432	344	776	15.7
4SR6/13 - PD			577	404	981	18.6
4SR6/17 - PD			696	454	1150	21.9
4SR6/23 - PD			901	560	1461	25.3
4SR6/31 - PD			1165	660	1825	33.6
4SR6/42 - PD			1519	745	2264	38.1
4SR6/56 - PD			2063	850	2913	47.0
4SR8/4 - PD			282	319	601	13.1
4SR8/7 - PD			372	344	716	15.1
4SR8/9 - PD			432	404	836	17.4
4SR8/13 - PD			577	454	1031	20.8
4SR8/17 - PD			696	560	1256	23.4
4SR8/23 - PD			901	660	1561	24.5
4SR8/31 - PD			1165	745	1910	37.2
4SR8/42 - PD			1519	850	2369	44.2
4SR10/5 - PD			417	344	761	15.4
4SR10/7 - PD			519	404	923	17.9
4SR10/10 - PD			710	454	1164	21.6
4SR10/15 - PD			1002	560	1562	25.6
4SR10/20 - PD			1257	660	1917	33.9
4SR10/26 - PD			1600	745	2345	38.1
4SR10/35 - PD			2096	850	2946	53.0
4SR12/4 - PD	366	344	710	15.0		
4SR12/6 - PD	470	404	874	17.5		
4SR12/9 - PD	659	454	1113	21.2		
4SR12/12 - PD	811	560	1371	24.1		
4SR12/16 - PD	1053	660	1713	33.2		
4SR12/22 - PD	1358	745	2103	38.4		
4SR12/29 - PD	1752	850	2602	46.5		
4SR15/5 - PD	422	404	826	17.0		
4SR15/7 - PD	526	454	980	20.8		
4SR15/10 - PD	720	560	1280	23.1		
4SR15/13 - PD	875	660	1535	30.0		
4SR15/18 - PD	1173	745	1918	36.5		
4SR15/24 - PD	1522	850	2372	43.0		

4SR 4" submersible pumps with FRANKLIN ELECTRIC® motors

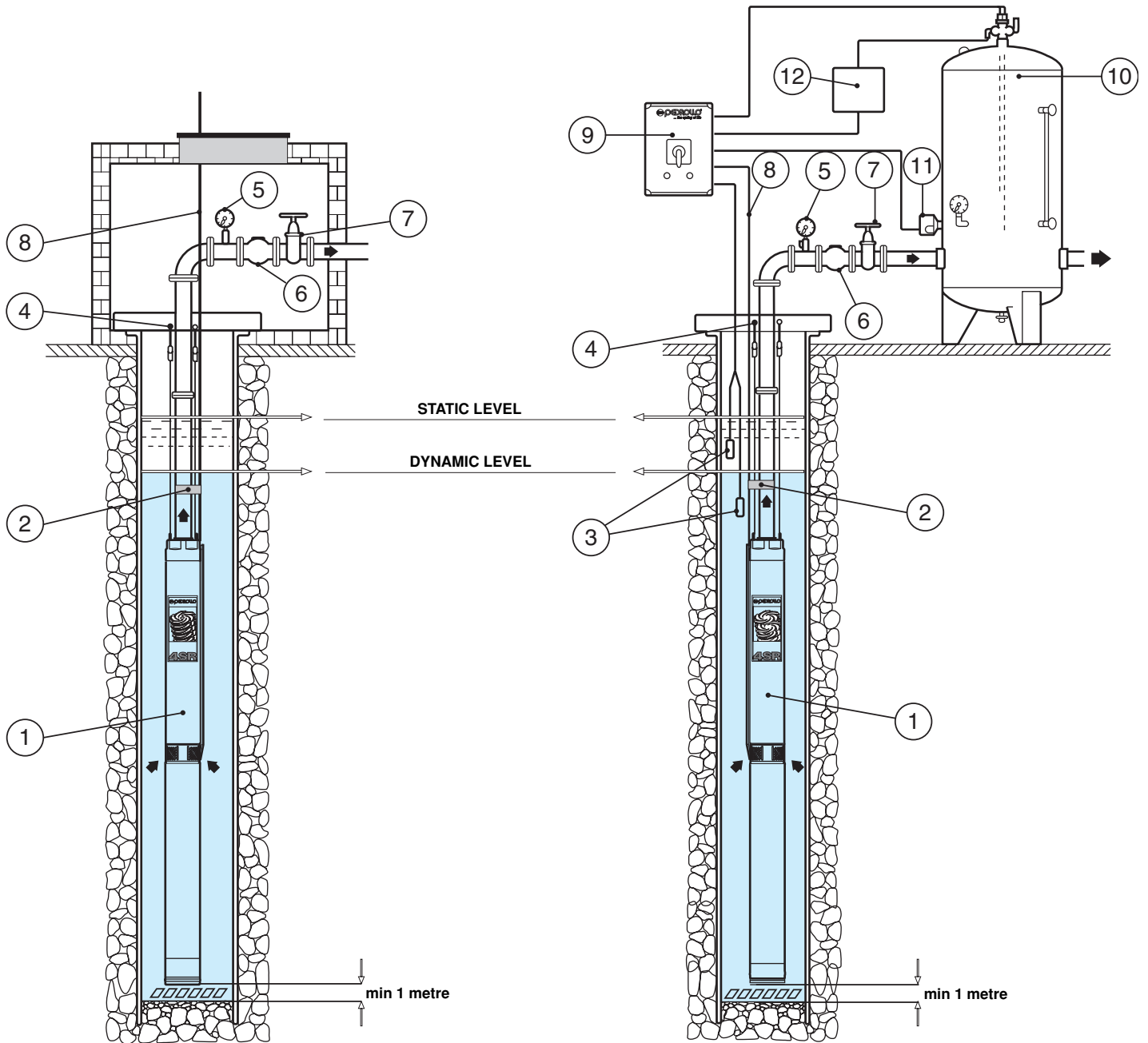


DIMENSIONS AND WEIGHTS

TYPE Single-phase	PORT DN	Ø	DIMENSIONS mm			kg 1~		
			h1	h2	h			
4SR1m/8 - FK	1 1/4"	98	310	223	533	11.2		
4SR1m/13 - FK			402	242	644	13.0		
4SR1m/18 - FK			519	271	790	15.3		
4SR1m/25 - FK			648	299	947	18.1		
4SR1m/35 - FK			858	327	1185	23.0		
4SR1m/45 - FK			1065	356	1421	25.9		
4SR1m/64 - FK			1516	461	1977	35.6		
4SR1.5m/6 - FK			273	223	496	10.9		
4SR1.5m/8 - FK			310	242	552	12.1		
4SR1.5m/13 - FK			402	271	673	14.2		
4SR1.5m/17 - FK			501	299	800	16.6		
4SR1.5m/25 - FK			648	327	975	19.9		
4SR1.5m/32 - FK			802	356	1158	23.3		
4SR1.5m/46 - FK			1134	461	1595	31.6		
4SR2m/7 - FK			291	242	533	11.9		
4SR2m/10 - FK			347	271	618	13.6		
4SR2m/13 - FK			402	299	701	15.7		
4SR2m/20 - FK			556	327	883	19.8		
4SR2m/27 - FK			685	356	1041	21.5		
4SR2m/39 - FK			931	461	1392	28.9		
4SR4m/7 - FK			2"	98	316	271	587	13.2
4SR4m/9 - FK					360	299	659	15.2
4SR4m/14 - FK					470	327	797	18.8
4SR4m/18 - FK					582	356	938	20.9
4SR4m/26 - FK	758	461			1219	26.7		
4SR6m/4 - FK	282	271			553	12.8		
4SR6m/6 - FK	342	299			641	14.8		
4SR6m/9 - FK	432	327			759	18.2		
4SR6m/13 - FK	577	356			933	20.4		
4SR6m/17 - FK	696	461			1157	25.6		
4SR8m/4 - FK	282	299			581	14.3		
4SR8m/7 - FK	372	327			699	17.6		
4SR8m/9 - FK	432	356			788	19.2		
4SR8m/13 - FK	577	461			1038	25.6		
4SR10m/5 - FK	417	327			744	17.9		
4SR10m/7 - FK	519	356			875	19.7		
4SR10m/10 - FK	710	461			1171	25.3		
4SR12m/4 - FK	366	327			693	17.5		
4SR12m/6 - FK	470	356			826	19.3		
4SR12m/9 - FK	659	461			1120	24.9		
4SR15m/5 - FK	422	356			778	18.8		
4SR15m/7 - FK	526	461			987	23.8		

TYPE Trefazor	PORT DN	Ø	DIMENSIONS mm			kg 3~		
			h1	h2	h			
4SR1/13 - FK	1 1/4"	98	402	223	625	11.7		
4SR1/18 - FK			519	242	761	13.6		
4SR1/25 - FK			648	271	919	16.2		
4SR1/35 - FK			858	299	1157	21.2		
4SR1/45 - FK			1065	327	1392	24.0		
4SR1/64 - FK			1516	356	1872	30.5		
4SR1.5/8 - FK			310	223	533	11.3		
4SR1.5/13 - FK			402	242	644	13.0		
4SR1.5/17 - FK			501	271	772	15.2		
4SR1.5/25 - FK			648	299	947	18.3		
4SR1.5/32 - FK			802	327	1129	20.9		
4SR1.5/46 - FK			1134	356	1490	26.5		
4SR1.5/60 - FK			1442	423	1865	32.8		
4SR2/7 - FK			291	223	514	11.1		
4SR2/10 - FK			347	242	589	12.5		
4SR2/13 - FK			402	271	673	14.3		
4SR2/20 - FK			556	299	855	17.2		
4SR2/27 - FK			685	327	1012	20.4		
4SR2/39 - FK			931	356	1287	23.8		
4SR2/50 - FK			1208	423	1631	22.8		
4SR2/70 - FK			1626	584	2210	22.8		
4SR4/7 - FK			316	242	558	12.1		
4SR4/9 - FK			360	271	631	13.8		
4SR4/14 - FK			470	299	769	16.2		
4SR4/18 - FK			582	327	909	18.5		
4SR4/26 - FK			758	356	1114	21.6		
4SR4/35 - FK			980	423	1403	26.9		
4SR4/46 - FK			1295	584	1879	36.5		
4SR4/60 - FK			1652	698	2350	45.8		
4SR4/78 - FK			2097	774	2871	59.8		
4SR6/4 - FK			2"	98	282	242	524	11.6
4SR6/6 - FK					342	271	613	13.4
4SR6/9 - FK	432	299			731	15.5		
4SR6/13 - FK	577	327			904	18.0		
4SR6/17 - FK	696	356			1052	20.5		
4SR6/23 - FK	901	423			1324	25.4		
4SR6/31 - FK	1165	584			1749	33.4		
4SR6/42 - FK	1519	698			2217	42.5		
4SR6/56 - FK	2063	774			2837	47.2		
4SR8/4 - FK	282	271			553	12.9		
4SR8/7 - FK	372	299			671	15.0		
4SR8/9 - FK	432	327			759	16.8		
4SR8/13 - FK	577	356			933	19.4		
4SR8/17 - FK	696	423			1119	23.5		
4SR8/23 - FK	901	584			1485	31.0		
4SR8/31 - FK	1165	698			1863	38.9		
4SR8/42 - FK	1519	774			2293	47.2		
4SR10/5 - FK	417	299			716	15.2		
4SR10/7 - FK	519	327			846	17.3		
4SR10/10 - FK	710	356			1066	20.2		
4SR10/15 - FK	1002	423			1425	25.7		
4SR10/20 - FK	1257	584			1841	33.7		
4SR10/26 - FK	1600	698			2298	42.5		
4SR10/35 - FK	2096	774			2870	56.0		
4SR12/4 - FK	366	299	665	14.8				
4SR12/6 - FK	470	327	797	16.9				
4SR12/9 - FK	659	356	1015	19.8				
4SR12/12 - FK	811	423	1234	24.2				
4SR12/16 - FK	1053	584	1637	31.8				
4SR12/22 - FK	1358	698	2056	40.1				
4SR12/29 - FK	1752	774	2526	48.4				
4SR15/5 - FK	422	327	749	16.4				
4SR15/7 - FK	526	356	882	18.7				
4SR15/10 - FK	720	423	1143	23.2				
4SR15/13 - FK	875	584	1459	30.2				
4SR15/18 - FK	1173	698	1871	38.2				
4SR15/24 - FK	1522	774	2296	46.0				

EXAMPLES OF INSTALLATION



- 1) 4SR submersible pump
- 2) Clamps for securing the power cable
- 3) Level control probes for dry run protection
- 4) Anchorage of the pump support cables to the cover of the borehole
- 5) Pressure gauge
- 6) Non return valve

- 7) Flow rate regulating gate valve
- 8) Electric power cable
- 9) Control panel with level probes
- 10) Pressure vessel
- 11) Pressure switch
- 12) Electrovalve/electrocompressor

4SR pumps may be installed in boreholes with a diameter not less than 4" (100 mm). The pump is lowered into the borehole by means of the delivery pipe to such a depth as to guarantee its complete immersion (min. 50 cm and at least one metre from the bottom of the borehole) even during operation, when a lowering of the level of liquid in the borehole may occur. When the pump is installed in a borehole, it is recommended to secure it with a stainless steel or nylon cable, connected to the holes provided on the delivery body.

Innovative mechanical and fluid-dynamic design has produced the new 6SR, manufactured in selected materials for the best combination of reliability, performance and durability.

The glass reinforced technopolymer impeller is covered in a specially developed rubber within a sturdy stainless steel housing for maximum resistance to erosion and corrosion.



RANGE OF PERFORMANCE

Flow rate up to 1000 l/min (60 m³/h)
Head up to 390 m

LIMITS OF USE

Liquid temperature up to +30°C
Sand content up to 100 g/m³
Starts/hour: 20 at regular intervals

CONSTRUCTION AND SAFETY STANDARDS

EN 60034-1
IEC 34-1
CEI 2-3



INSTALLATION AND USE

THEY ARE RECOMMENDED FOR PUMPING CLEAN WATER WITH A SAND CONTENT NO HIGHER THAN **100 g/m³**. THEIR HIGH EFFICIENCY AND RELIABILITY MAKE THEM SUITABLE FOR USE IN THE DOMESTIC, CIVIL AND INDUSTRIAL SECTORS, INCLUDING FOR WATER SUPPLIES AS PART OF A PRESSURE SET, IRRIGATION, WASHDOWN SYSTEMS, PRESSURE BOOSTING AND FIRE FIGHTING SYSTEMS.

GUARANTEE 2 YEARS subject to our general terms of sale.

CONSTRUCTION CHARACTERISTICS

- **DELIVERY BODY:** stainless steel AISI 304 for 6SR36-44, nickel-plated cast iron for 6SR9-12-18-27 with 3" gas threaded port UNI ISO 228-1.

- **NON-RETURN VALVE:** stainless steel AISI 304.
- **IMPELLERS:** glass filled technopolymer covered with special rubber
- **DIFFUSER HOUSING:** stainless steel AISI 304.
- **DIFFUSERS:** technopolymer reinforced with glass fibre .
- **PUMP CASING:** stainless steel AISI 304.
- **PUMP SHAFT:** stainless steel AISI 304.
- **PUMP BEARINGS:** housing in special technopolymer with stainless steel AISI 316 shaft bushes, **chrome oxide coated** to resist sand.
- **MOTOR BRACKET:** nickel-plated cast iron, dimensions to NEMA standards.
- **DRIVE COUPLING:** stainless steel AISI 420.
- **SCREWS, FILTER AND CABLE COVER:** stainless steel AISI 304.
- **MOTOR:** Pedrollo 4" submerged electric motor (up to 3 kW)
Pedrollo 6" submerged electric motor (from 4 to 30 kW)
6SR: three-phase 380-415 V - 50 Hz.
- **PROTECTION:** IP 68.

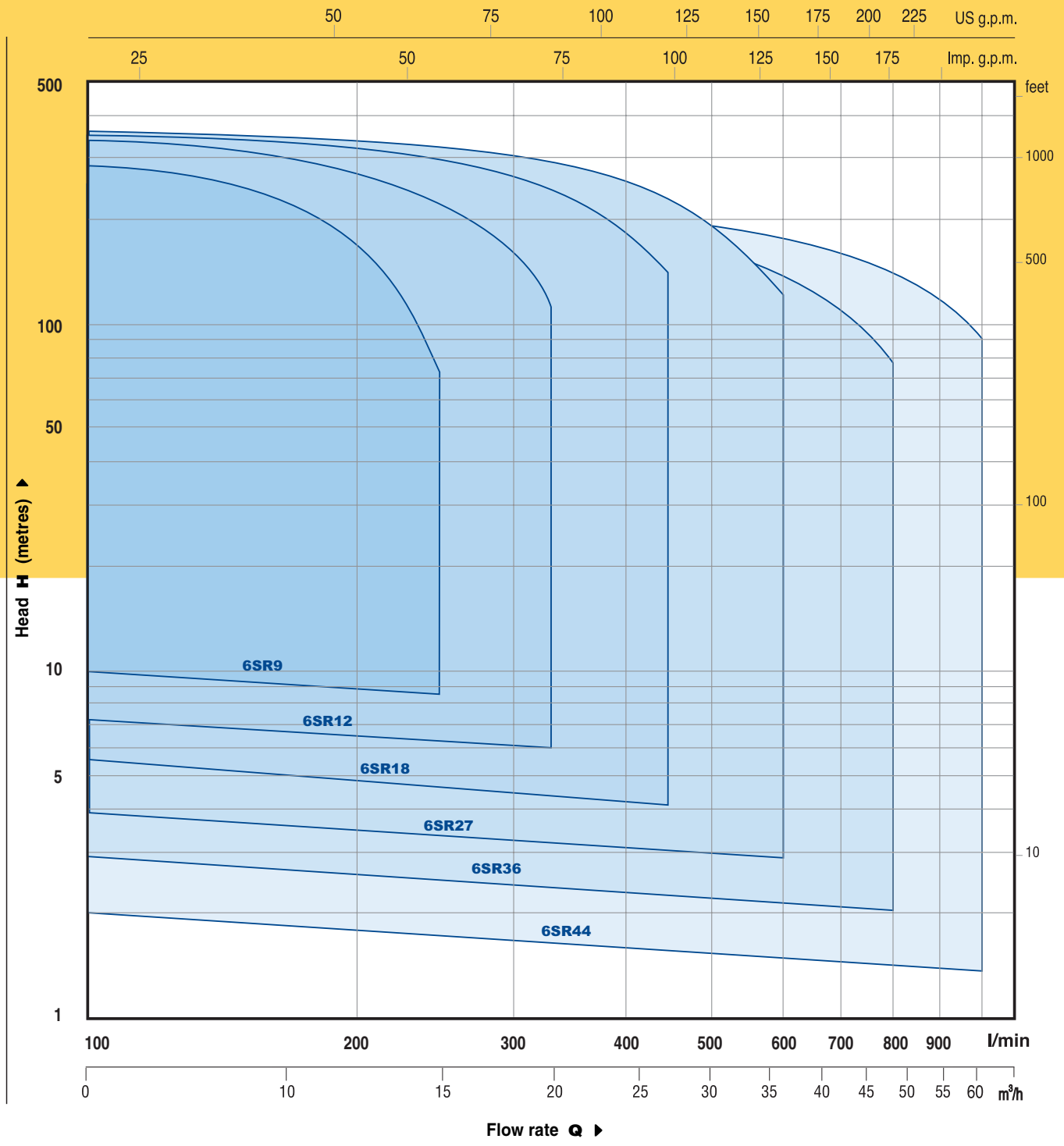
STANDARD FEATURES:

- 6SR** Available in three-phase only.
4" motors have 1.5m power cable
6" motors have 4m power cable

OPTIONS ON REQUEST

- ⇒ Pedrollo 4" submerged electric motor (up to 7.5 kW)
- ⇒ Franklin Electric® 4" submerged electric motor (up to 7.5 kW)
- ⇒ Franklin Electric® 6" submerged electric motor
- ⇒ two cable covers to suit dual voltage ⚡/▲ (star/ delta)
- ⇒ dual voltage motor: 230/400 V or 400/690 V ⚡/▲ (star/delta) (from 7.5 kW to 37 kW)
- ⇒ other voltages or frequency 60 Hz

RANGE OF PERFORMANCE AT n= 2900 1/min

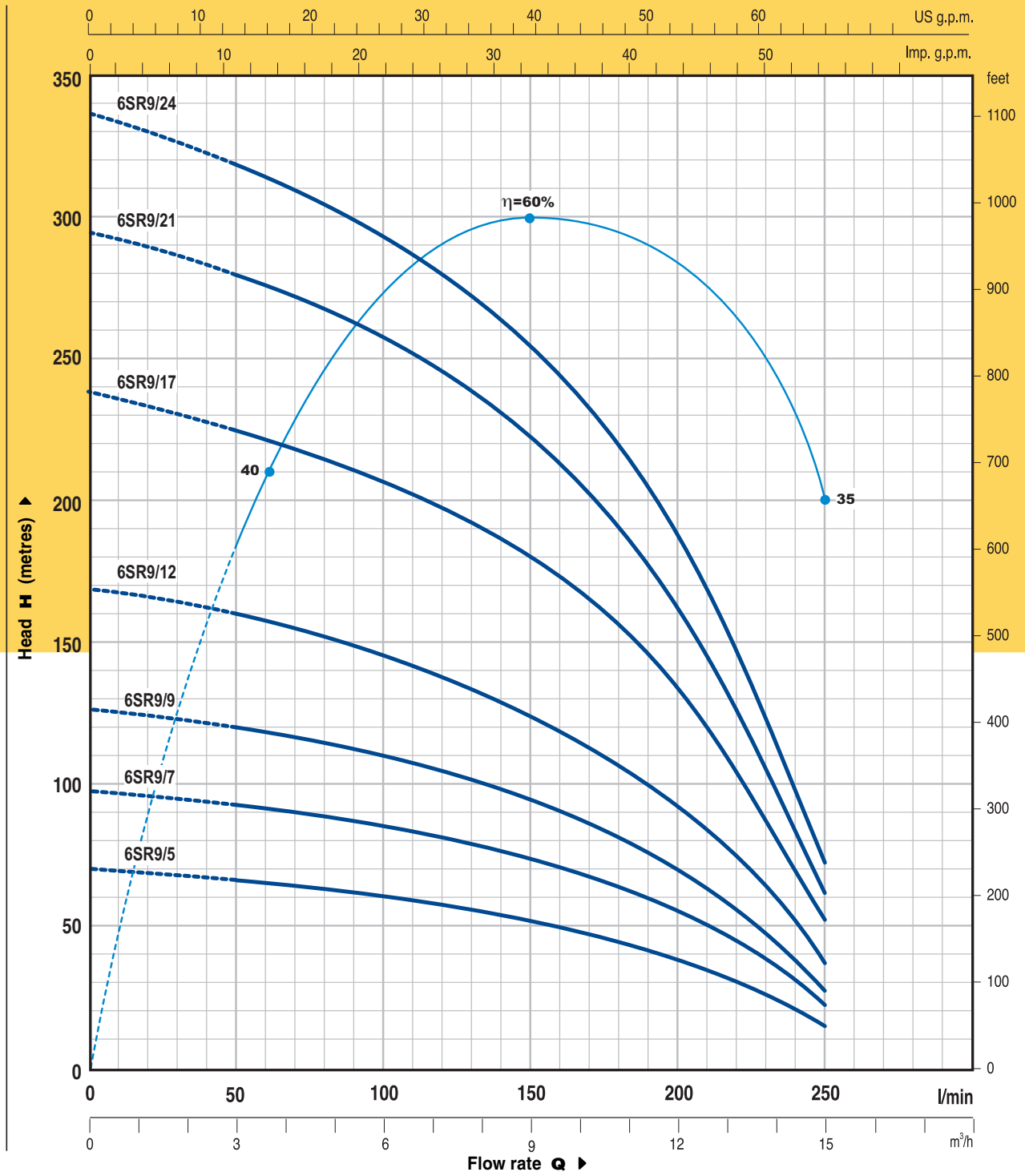


DESCRIPTION

6 SR 9 / 12

Borehole diameter in inches _____
 Series _____
 Flow rate in m³/h in the point of highest efficiency _____
 Number of stages _____

CURVES AND PERFORMANCE DATA AT n= 2900 1/min



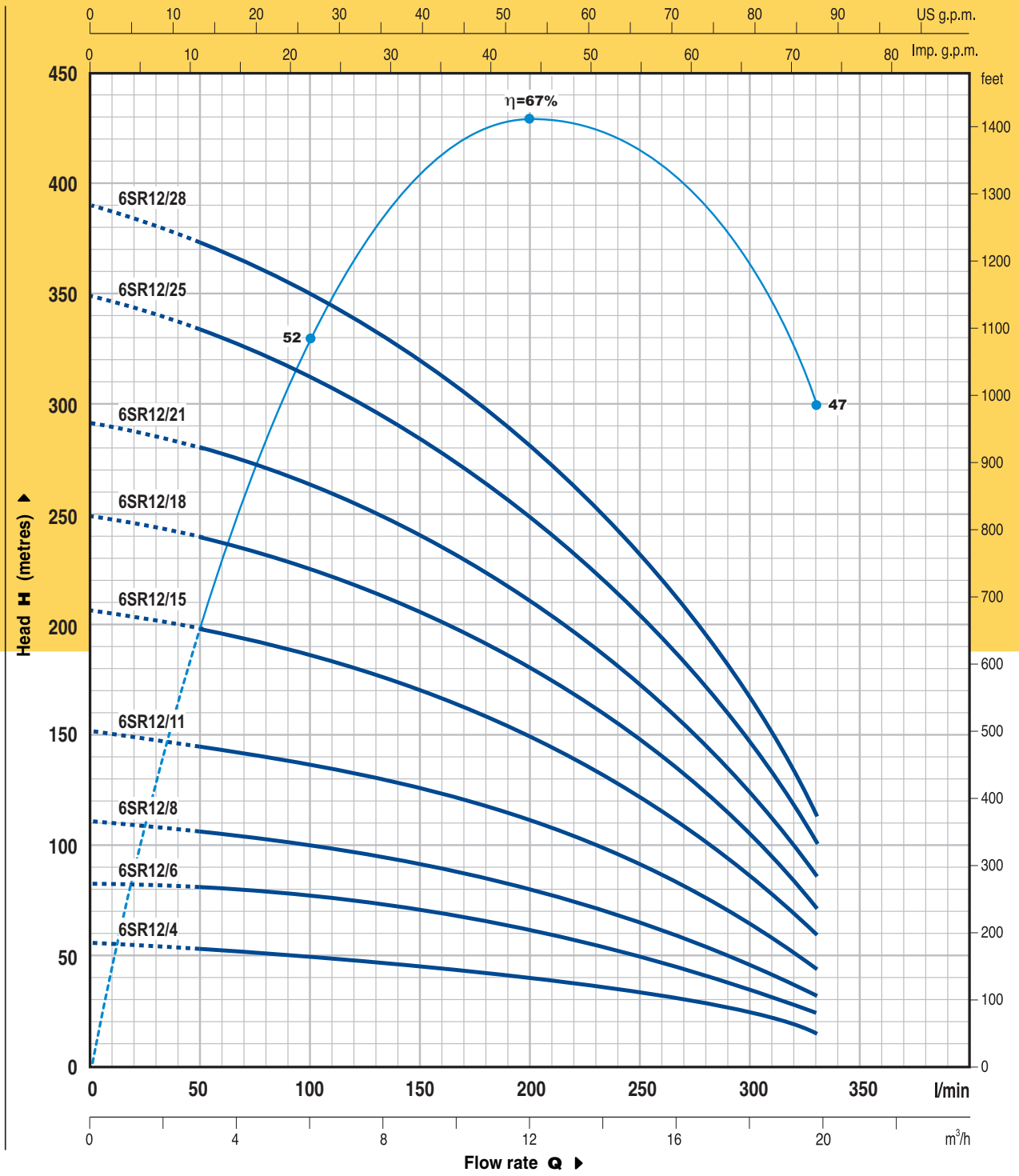
TYPE	POWER		Q	0	3	6	9	12	15
	kW	HP		0	50	100	150	200	250
Three-phase									
6SR9/5	2.2	3	H metres	70	66	61	53	38	15
6SR9/7	3	4		98	92	85	74	53	21
6SR9/9	4	5.5		126	119	110	95	68	27
6SR9/12	5.5	7.5		168	158	146	127	91	36
6SR9/17	7.5	10		238	224	207	180	129	51
6SR9/21	9.2	12.5		294	278	256	222	160	63
6SR9/24	11	15		336	317	293	255	182	72

Q = Flow rate H = Total manometric head

Tolerance of the performance curves according to EN ISO 9906 App. A.

6SR12

CURVES AND PERFORMANCE DATA AT n= 2900 1/min



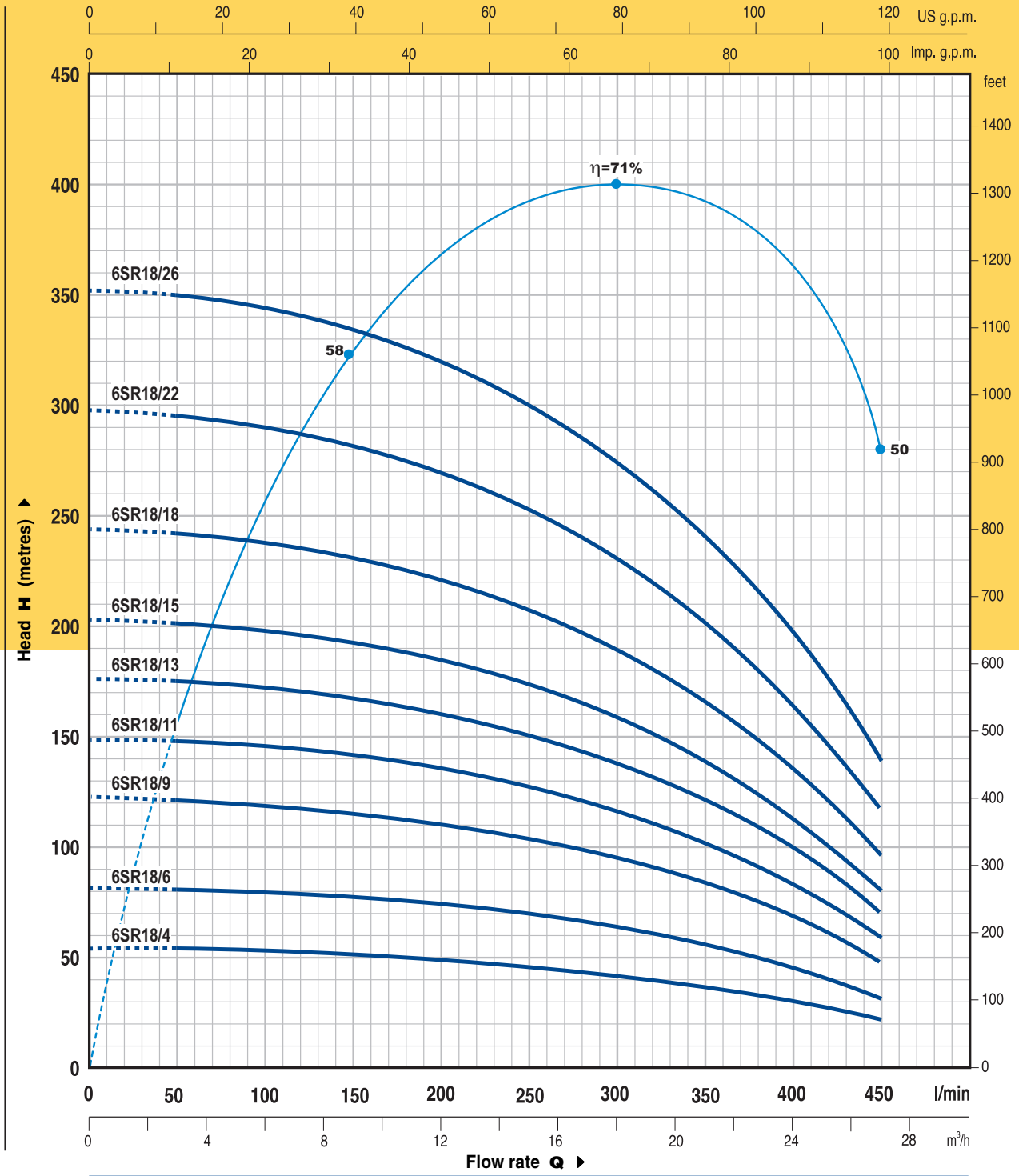
TYPE Three-phase	POWER		Q m ³ /h l/min	0	3.0	6.0	9.0	12.0	15.0	18.0	19.8
	kW	HP		0	50	100	150	200	250	300	330
6SR12/4	2.2	3	H metres	56	53	50	46	40	33	24	16
6SR12/6	3	4		84	80	79	69	60	50	36	24
6SR12/8	4	5.5		111	106	100	91	80	66	47	32
6SR12/11	5.5	7.5		153	146	138	125	110	91	65	44
6SR12/15	7.5	10		208	199	189	171	150	124	88	60
6SR12/18	9.2	12.5		250	239	225	205	180	149	106	72
6SR12/21	11	15		292	279	263	239	210	174	124	84
6SR12/25	13	17.5		349	331	313	285	250	206	147	100
6SR12/28	15	20		390	371	350	319	280	231	165	112

Q = Flow rate H = Total manometric head

Tolerance of the performance curves according to EN ISO 9906 App. A.

6SR18

CURVES AND PERFORMANCE DATA AT n= 2900 1/min



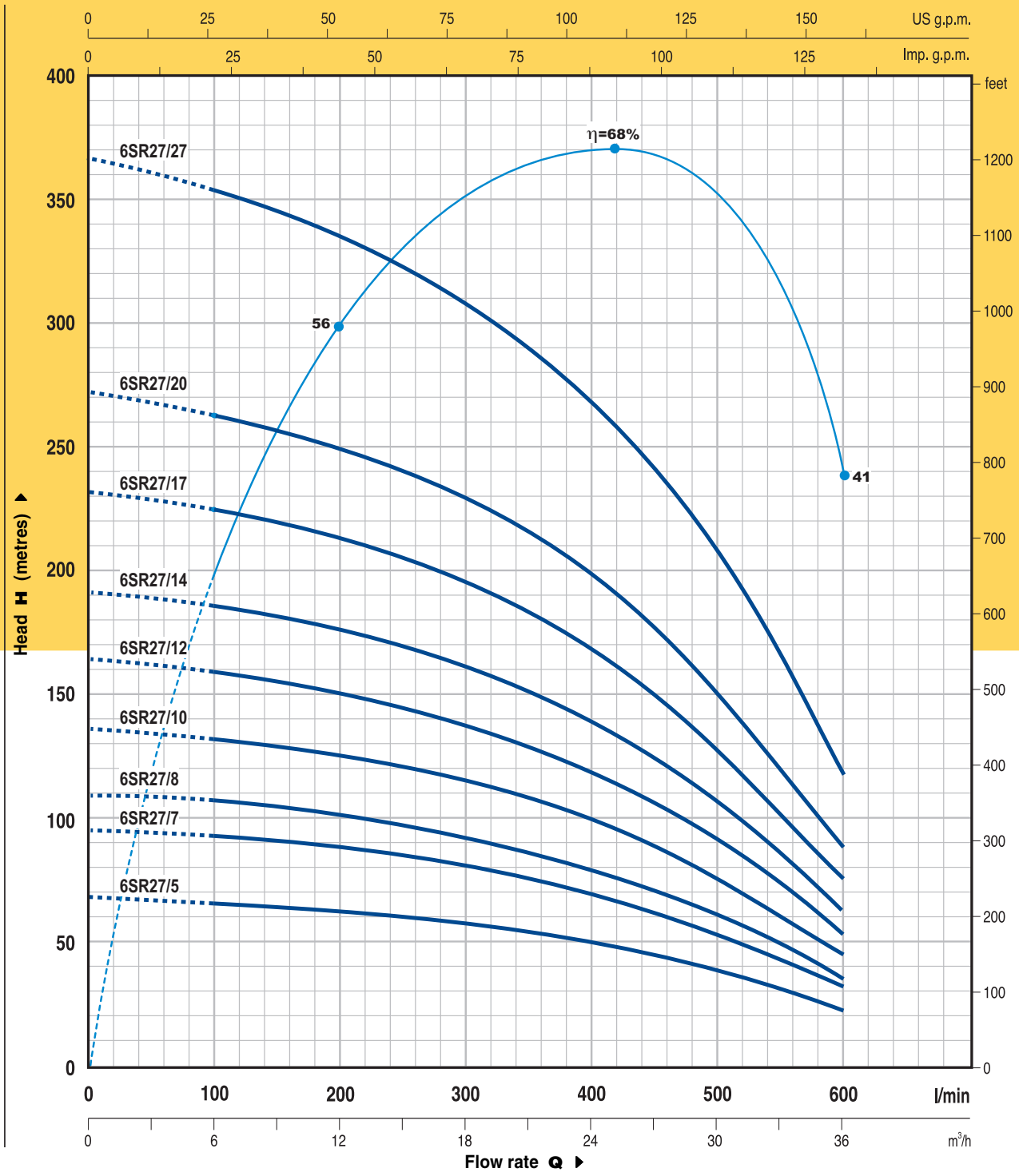
TYPE	POWER		Q	H metres												
	kW	HP		0	3	6	9	12	15	18	21	24	27			
Three-phase			l/min	0	50	100	150	200	250	300	350	400	450			
6SR18/4	4	5.5		54	53.8	53	51	49	46	42	37	30	22			
6SR18/6	5.5	7.5		81	80.5	79	77	74	69	63	55	45	32			
6SR18/9	7.5	10		122	121	119	116	111	103	94	83	68	48			
6SR18/11	9.2	12.5		149	148	145.5	141	135	126	115	101	83	59			
6SR18/13	11	15		176	175	172	167	160	149	136	120	98	70			
6SR18/15	13	17.5		203	202	199	193	185	172	157	138	113	80			
6SR18/18	15	20		244	242	238	231	221	206	188	165	135	96			
6SR18/22	18.5	25		298	296	291	282	270	252	230	202	165	118			
6SR18/26	22	30		352	350	344	334	320	298	272	239	195	139			

Q = Flow rate H = Total manometric head

Tolerance of the performance curves according to EN ISO 9906 App. A.

6SR27

CURVES AND PERFORMANCE DATA AT n= 2900 1/min



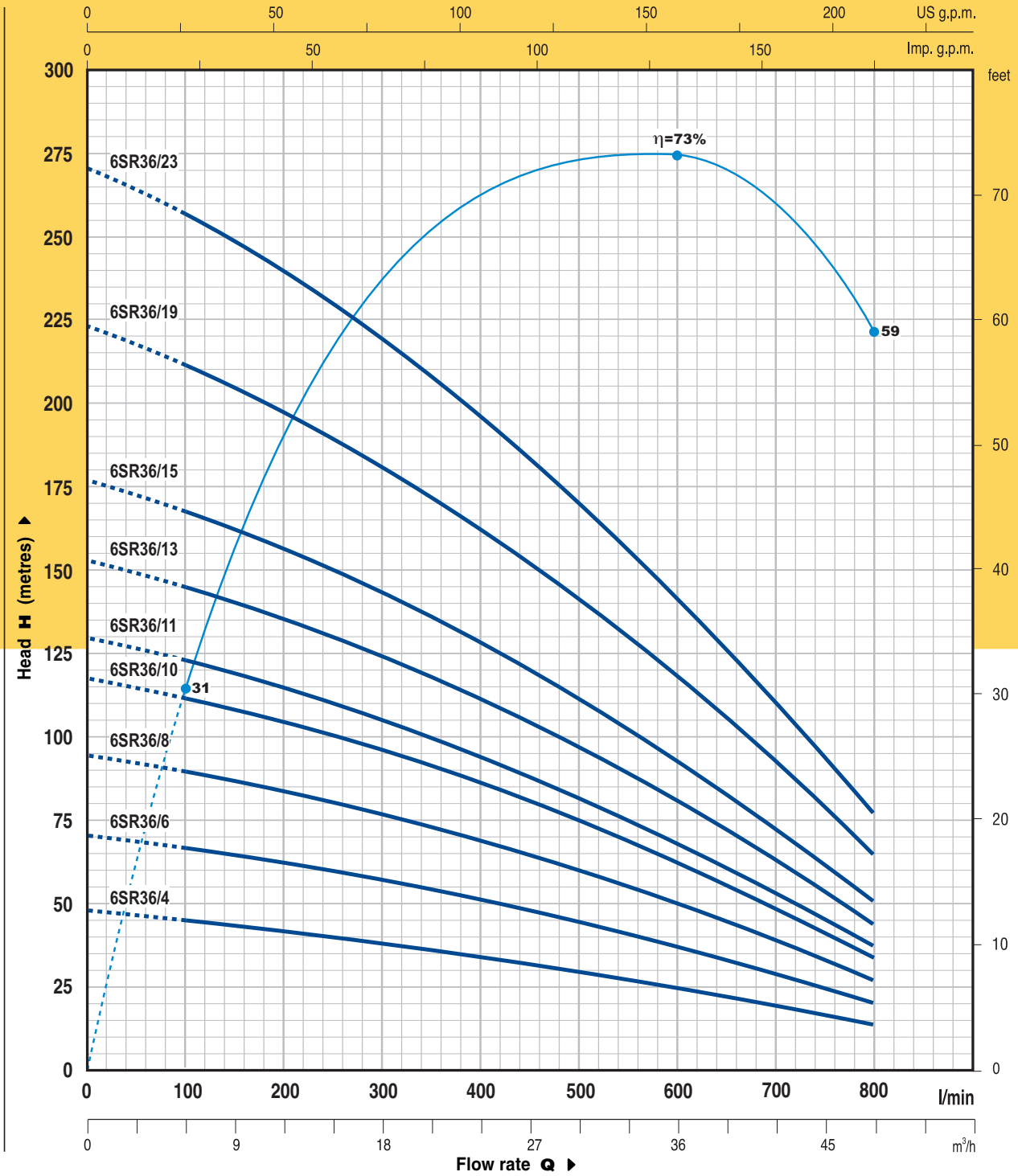
TYPE	POWER		Q	Flow rate								
	kW	HP		0	6	12	18	24	30	36		
Three-phase				0	6	12	18	24	30	36		
				0	100	200	300	400	500	600		
6SR27/5	5.5	7.5	H metres	68	66	62	57	50	37	22		
6SR27/7	7.5	10		95	92	87	80	70	52	31		
6SR27/8	9.2	12.5		109	106	99	91	80	59	35		
6SR27/10	11	15		136	132	124	114	100	74	44		
6SR27/12	13	17.5		164	159	149	137	120	89	53		
6SR27/14	15	20		191	185	174	160	140	104	62		
6SR27/17	18.5	25		231	224	211	194	170	126	75		
6SR27/20	22	30		272	264	248	228	200	148	88		
6SR27/27	30	40		367	356	335	308	270	205	119		

Q = Flow rate H = Total manometric head

Tolerance of the performance curves according to EN ISO 9906 App. A.

6SR36

CURVES AND PERFORMANCE DATA AT n= 2900 1/min



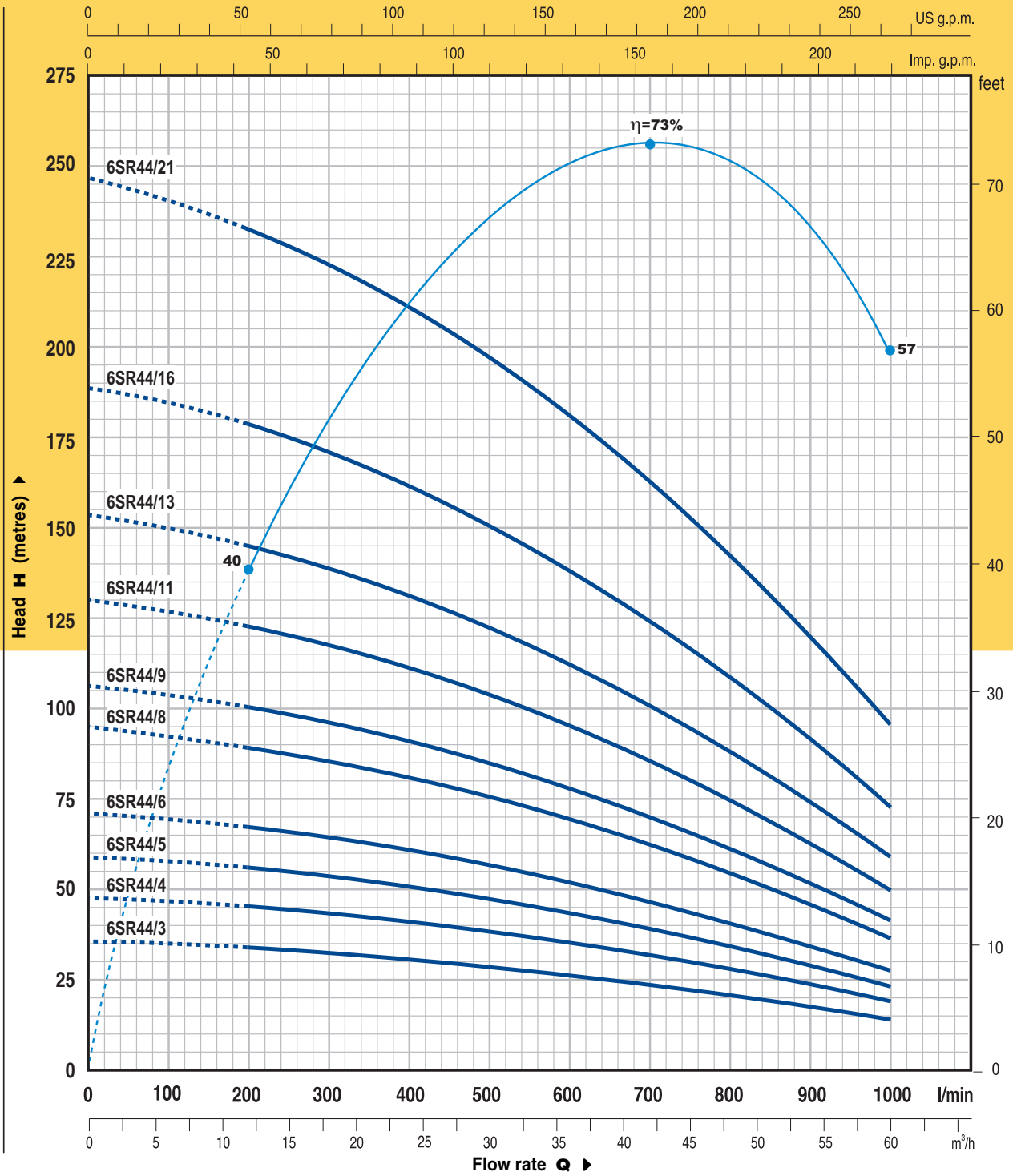
TYPE	POWER		Q l/min	m³/h											
	kW	HP		0	6	12	18	24	30	36	42	48			
Three-phase				0	100	200	300	400	500	600	700	800			
6SR36/4	4	5.5	H metres	47	45	42	38	34	29	25	19	14			
6SR36/6	5.5	7.5		70	67	63	57	51	44	37	29	20			
6SR36/8	7.5	10		94	89	84	76	68	59	50	39	27			
6SR36/10	9.2	12.5		117	111	105	95	85	74	62	48	34			
6SR36/11	11	15		129	123	115	105	93	81	68	53	37			
6SR36/13	13	17.5		152	145	136	124	110	96	81	63	44			
6SR36/15	15	20		176	167	157	143	127	110	93	72	51			
6SR36/19	18.5	25		222	212	199	181	161	140	118	92	65			
6SR36/23	22	30		269	256	241	219	195	169	143	111	78			

Q = Flow rate H = Total manometric head

Tolerance of the performance curves according to EN ISO 9906 App. A.

6SR44

CURVES AND PERFORMANCE DATA AT n= 2900 1/min



TYPE	POWER		Q m ³ /h l/min	H metres										
	kW	HP		0	12	18	24	30	36	42	48	54	60	
Three-phase				0	200	300	400	500	600	700	800	900	1000	
6SR44/3	4	5.5	35	33	31	30	28	26	23	20	17	13		
6SR44/4	5.5	7.5	47	44	42	40	37	34	31	27	23	18		
6SR44/5	7.5	10	58	54	52	49	46	43	38	33	28	22		
6SR44/6	9.2	12.5	70	65	62	59	56	51	46	40	34	26		
6SR44/8	11	15	93	87	83	79	74	68	61	53	45	35		
6SR44/9	13	17.5	105	98	93	89	83	77	69	60	51	39		
6SR44/11	15	20	128	120	114	109	102	94	84	73	62	48		
6SR44/13	18.5	25	151	141	135	128	120	111	99	86	73	57		
6SR44/16	22	30	186	174	166	158	148	136	122	106	90	70		
6SR44/21	30	40	244	228	218	207	194	179	160	139	118	92		

Q = Flow rate H = Total manometric head

Tolerance of the performance curves according to EN ISO 9906 App. A.

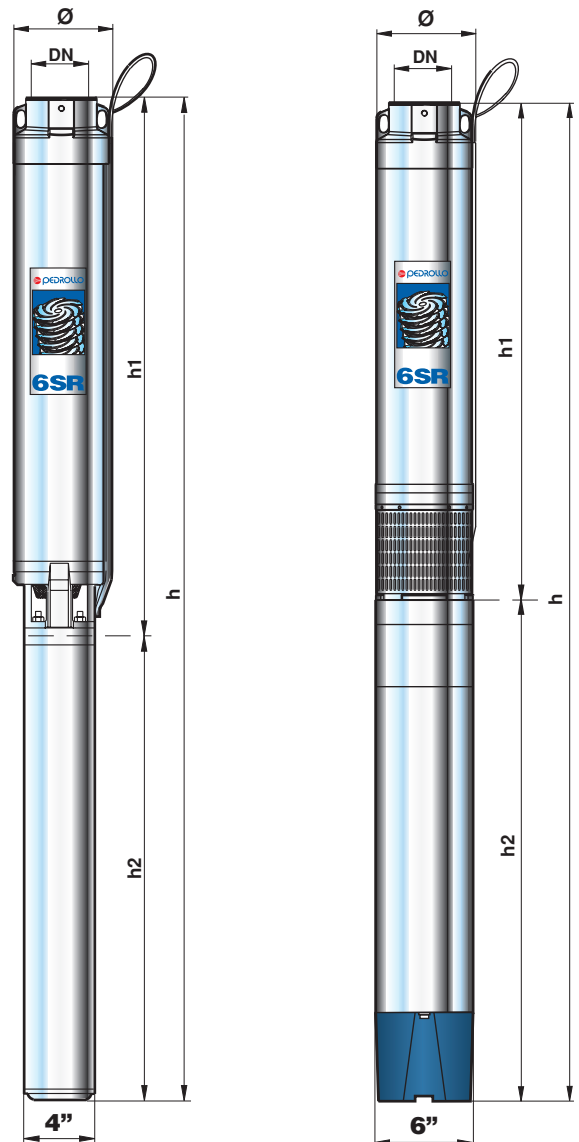
versions with 4" motors - A -

TYPE Trhee-phase	PORT DN	Ø	DIMENSIONS mm			kg
			h1	h2	h	
6 SR 9/5 LR -PD	3"	137	571	454	1025	31.3
6 SR 9/7 LR -PD			658	560	1218	34.8
6 SR 9/9 LR -PD			745	660	1405	42.4
6 SR 9/12 LR -PD			875	745	1620	49.3
6 SR 9/17 LR -PD			1137	850	1987	56.4
6 SR 12/4 LR -PD			528	454	982	30.3
6 SR 12/6 LR -PD			615	560	1175	33.8
6 SR 12/8 LR -PD			702	660	1362	41.5
6 SR 12/11 LR -PD			832	745	1577	48.3
6 SR 12/15 LR -PD			1051	850	1901	54.7
6 SR 18/4 LR -PD			528	660	1188	37.3
6 SR 18/6 LR -PD			615	745	1360	43.2
6 SR 18/9 LR -PD			746	850	1596	49.0
6 SR 27/5 LR -PD			619	745	1364	43.0
6 SR 27/7 LR -PD			725	850	1575	47.6

versions with 6" motors - B -

TYPE Trhee-phase	PORT DN	Ø	DIMENSIONS mm			kg		
			h1	h2	h			
6 SR 9/9 - PD	3"	146.5	776	599	1375	54.5		
6 SR 9/12 - PD			906	629	1535	59.2		
6 SR 9/17 - PD			1168	659	1827	67.4		
6 SR 9/21 - PD			1341	689	2030	80.1		
6 SR 9/24 - PD			1472	719	2191	86.3		
6 SR 12/8 - PD			732	599	1331	53.6		
6 SR 12/11 - PD			862	629	1491	60.4		
6 SR 12/15 - PD			1081	659	1740	65.7		
6 SR 12/18 - PD			1211	689	1900	71.4		
6 SR 12/21 - PD			1341	719	2060	83.2		
6 SR 12/25 - PD			1515	754	2269	89.5		
6 SR 12/28 - PD			1645	784	2429	94.6		
6 SR 18/4 - PD			559	599	1158	49.9		
6 SR 18/6 - PD			645	629	1274	53.7		
6 SR 18/9 - PD			776	659	1435	60.0		
6 SR 18/11 - PD			862	689	1551	66.2		
6 SR 18/13 - PD			994	719	1713	71.0		
6 SR 18/15 - PD			1081	754	1835	73.4		
6 SR 18/18 - PD			1211	784	1995	84.1		
6 SR 18/22 - PD			1385	844	2229	92.3		
6 SR 18/26 - PD			1558	904	2462	102.6		
6 SR 27/5 - PD			649	629	1278	53.5		
6 SR 27/7 - PD			755	659	1414	58.6		
6 SR 27/8 - PD			808	689	1497	62.6		
6 SR 27/10 - PD			914	719	1633	68.4		
6 SR 27/12 - PD			1065	754	1819	72.5		
6 SR 27/14 - PD			1171	784	1955	82.1		
6 SR 27/17 - PD			1329	844	2173	90.1		
6 SR 27/20 - PD			1488	904	2392	99.9		
6 SR 27/27 - PD			1858	1029	2887	129.4		
6 SR 36/4 - PD			3"	149.5	823	599	1422	55.4
6 SR 36/6 - PD					1049	629	1678	62.1
6 SR 36/8 - PD	1275	659			1934	69.2		
6 SR 36/10 - PD	1501	689			2190	76.2		
6 SR 36/11 - PD	1614	719			2333	81.2		
6 SR 36/13 - PD	1840	754			2594	87.2		
6 SR 36/15 - PD	2066	784			2850	93.3		
6 SR 36/19 - PD	2518	844			3362	105.4		
6 SR 36/23 - PD	2970	904			387	119.4		
6 SR 44/3 - PD	710	599			1309	54.0		
6 SR 44/4 - PD	823	629			1452	57.4		
6 SR 44/5 - PD	936	659			1595	63.1		
6 SR 44/6 - PD	1049	689			1738	68.1		
6 SR 44/8 - PD	1275	719			1994	75.2		
6 SR 44/9 - PD	1388	754			2142	79.2		
6 SR 44/11 - PD	1614	784			2398	85.2		
6 SR 44/13 - PD	1840	844			2684	98.2		
6 SR 44/16 - PD	2179	904			3083	103.3		
6 SR 44/21 - PD	2744	1029	3773	136.4				

DIMENSIONS AND WEIGHTS

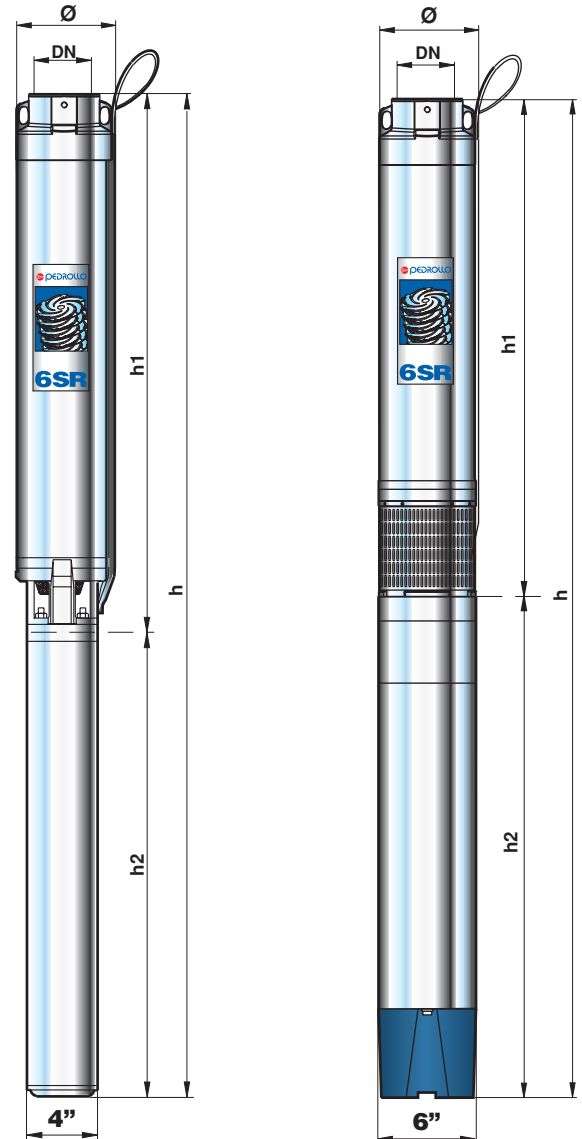


- A -

- B -

versions with 4" motors - A -

TYPE Three-phase	PORT DN	Ø	DIMENSIONS mm			kg
			h1	h2	h	
6 SR 9/5 LR - FK	3"	137	571	356	927	26.6
6 SR 9/7 LR - FK			658	423	1081	31.4
6 SR 9/9 LR - FK			745	584	132	38.8
6 SR 9/12 LR - FK			875	698	1573	47.0
6 SR 9/17 LR - FK			1137	774	1911	59.4
6 SR 12/4 LR - FK			528	356	884	25.7
6 SR 12/6 LR - FK			615	423	1038	30.5
6 SR 12/8 LR - FK			702	584	1286	37.9
6 SR 12/11 LR - FK			832	698	1530	46.1
6 SR 12/15 LR - FK			1051	774	1825	57.7
6 SR 18/4 LR - FK			528	584	1112	34.3
6 SR 18/6 LR - FK			615	698	1313	41.6
6 SR 18/9 LR - FK			746	774	1520	52.0
6 SR 27/5 LR - FK			619	698	1317	41.4
6 SR 27/7 LR - FK			725	774	1499	50.6

DIMENSIONS AND WEIGHTS

- A -
- B -
versions with 6" motors - B -

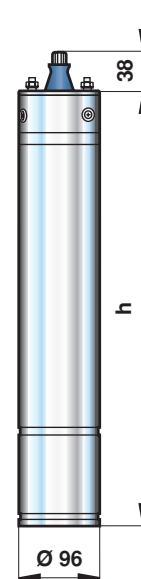
TYPE Three-phase	PORT DN	Ø	DIMENSIONS mm			kg
			h1	h2	h	
6 SR 9/9 - FK	3"	143.5	776	582	1358	56.0
6 SR 9/12 - FK			906	615	1521	62.3
6 SR 9/17 - FK			1168	647	1815	71.6
6 SR 9/21 - FK			1341	679	2020	83.6
6 SR 9/24 - FK			1472	712	2184	90.2
6 SR 12/8 - FK			732	582	1314	55.1
6 SR 12/11 - FK			862	615	1477	63.5
6 SR 12/15 - FK			1081	647	1728	69.9
6 SR 12/18 - FK			1211	679	1890	74.9
6 SR 12/21 - FK			1341	712	2053	87.1
6 SR 12/25 - FK			1515	777	2292	97.2
6 SR 12/28 - FK			1645	777	2422	100.3
6 SR 18/4 - FK			559	582	1141	51.4
6 SR 18/6 - FK			645	615	1260	56.8
6 SR 18/9 - FK			776	647	1423	64.2
6 SR 18/11 - FK			862	679	1541	69.7
6 SR 18/13 - FK			994	712	1706	74.9
6 SR 18/15 - FK			1081	777	1858	81.1
6 SR 18/18 - FK			1211	777	1988	89.8
6 SR 18/22 - FK			1385	842	2227	100.6
6 SR 18/26 - FK			1558	907	2465	110.9
6 SR 27/5 - FK			649	615	1264	56.6
6 SR 27/7 - FK			755	647	1402	62.8
6 SR 27/8 - FK			808	679	1487	66.1
6 SR 27/10 - FK		914	712	1626	72.3	
6 SR 27/12 - FK		1065	777	1842	80.2	
6 SR 27/14 - FK		1171	777	1948	87.8	
6 SR 27/17 - FK		1329	842	2171	98.4	
6 SR 27/20 - FK		1488	907	2395	108.2	
6 SR 27/27 - FK		1858	1037	2895	131.3	
6 SR 36/4 - FK		823	582	1405	56.9	
6 SR 36/6 - FK		1049	615	1664	65.2	
6 SR 36/8 - FK	1275	647	1922	73.4		
6 SR 36/10 - FK	1501	679	2180	79.7		
6 SR 36/11 - FK	1614	712	2326	85.1		
6 SR 36/13 - FK	1840	777	2617	94.9		
6 SR 36/15 - FK	2066	777	2843	99.0		
6 SR 36/19 - FK	2518	842	3360	113.7		
6 SR 36/23 - FK	2970	907	3877	127.7		
6 SR 44/3 - FK	710	582	1292	55.5		
6 SR 44/4 - FK	823	615	1438	60.5		
6 SR 44/5 - FK	936	647	1583	67.3		
6 SR 44/6 - FK	1049	679	1728	71.6		
6 SR 44/8 - FK	1275	712	1987	79.1		
6 SR 44/9 - FK	1388	777	2165	86.9		
6 SR 44/11 - FK	1614	777	2391	90.9		
6 SR 44/13 - FK	1840	842	2682	101.5		
6 SR 44/16 - FK	2179	907	3086	111.6		
6 SR 44/21 - FK	2744	1037	3781	138.3		

4PD

PEDROLLO 4" SUBMERSIBLE ELECTRIC MOTORS

- 1 ~ -

TYPE Single-phase 230 V / 50 Hz	Rated power P2		Axial load N	Revs 1/min	Rated current A	Starting current A	Efficiency η	Power factor $\cos \varphi$	Starting torque Rated torque	Capacitor (Vc=450V) μF	h mm	Weight kg
	kW	HP										
4PDm / 0.50	0.37	0.50	1500	2810	3.1	8.5	64%	0.85	0.70	16	294	6.8
4PDm / 0.75	0.55	0.75		2820	4.2	14.5	66%	0.86	0.75	20	319	8.0
4PDm / 1	0.75	1		2840	6.4	20.5	68%	0.84	0.79	31.5	344	9.1
4PDm / 1.5	1.1	1.5	2500	2840	8.3	27	70%	0.85	0.78	40	404	11.5
4PDm / 2	1.5	2		2850	10.8	34	71%	0.85	0.76	55	454	13.7
4PDm / 3	2.2	3		2820	15.3	47	69%	0.81	0.58	75	600	18.4



PEDROLLO 4" SUBMERSIBLE ELECTRIC MOTORS

- 3 ~ -

TYPE Three-phase 400 V / 50 Hz	Rated power P2		Axial load N	Revs 1/min	Rated current A	Starting current A	Efficiency η	Power factor $\cos \varphi$	Starting torque Rated torque	h mm	Weight kg
	kW	HP									
4PD / 0.50	0.37	0.50	1500	2815	1.2	4.5	67%	0.68	2.20	294	6.8
4PD / 0.75	0.55	0.75		2815	1.7	6.4	69%	0.69	2.00	294	6.8
4PD / 1	0.75	1		2820	2.1	8	70%	0.74	2.30	319	8.0
4PD / 1.5	1.1	1.5	2500	2835	2.9	12	73%	0.75	2.60	344	9.1
4PD / 2	1.5	2		2830	4.1	16.5	75%	0.75	2.80	404	11.5
4PD / 3	2.2	3		2840	5.6	23	76%	0.75	3.10	454	13.7
4PD / 4	3	4	4500	2830	7.4	35.2	77%	0.76	3.20	560	16.1
4PD / 5.5	4	5.5		2840	9.9	45	79%	0.75	2.44	660	21.5
4PD / 7.5	5.5	7.5		2830	12.9	62	79%	0.76	2.10	745	25.0
4PD / 10	7.5	10	2840	18.2	94.3	80%	0.75	2.73	850	30.0	

PEDROLLO rewindable submersible motors, oil filled, suitable for food use, 50 Hz (n=2900 1/min)

Insulation: class F. - Protection: IP 68.

Power cable: 1.5 metres (2.5 metres for powers higher than 3 kW) submersible type, approved for drinking water.

LIMITS OF USE:

Water temperature: up to +30 °C

Starts/hour: 25 at regular intervals

Cooling: water flow rate not less than 5 cm/s

6PD

PEDROLLO 6" SUBMERSIBLE ELECTRIC MOTORS

- 3 ~ -

TYPE Three-phase 400 V / 50 Hz	Rated power P2		Axial load N	Revs 1/min	Rated current A	Starting current A	Efficiency η	Power factor $\cos \varphi$	Starting torque Rated torque	h mm	Weight kg
	kW	HP									
6PD / 5.5	4	5.5	10000	2830	9	41.6	79%	0.82	1.8	599	36.0
6PD / 7.5	5.5	7.5		2840	12.5	64	80%	0.82	2	629	38.0
6PD / 10	7.5	10		2850	16	83	81%	0.84	2	659	41.0
6PD / 12.5	9.2	12.5		2830	19.2	104	82%	0.85	2.3	689	44.0
6PD / 15	11	15		2840	22.9	127	82%	0.85	2.2	719	47.0
6PD / 17.5	13	17.5		2820	27	146	83%	0.84	2.1	754	49.0
6PD / 20	15	20		2825	31.1	168	83%	0.84	2.1	784	51.0
6PD / 25	18.5	25		2870	37.8	227	84%	0.83	2.4	844	55.0
6PD / 30	22	30		2810	43.9	260	85%	0.85	2.5	904	61.0
6PD / 40	30	40		20000	2820	62.7	388	85%	0.82	2.7	1029
6PD / 50	37	50	2840		74.4	418	86%	0.84	2.4	1189	98.0

PEDROLLO rewindable submersible motors, oil filled, suitable for food use, 50 Hz (n=2900 1/min)

Insulation: class F. - Protection: IP 68.

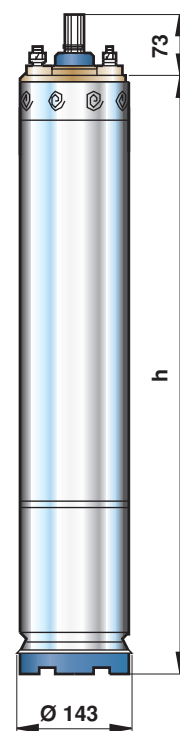
Power cable: 4 metres long, submersible type, approved for drinking water.

LIMITS OF USE:

Water temperature: up to +30 °C

Starts/hour: 20 at regular intervals

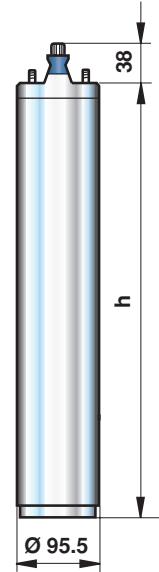
Cooling: water flow rate not less than 16 cm/s



4FK

FRANKLIN E. 4" SUBMERSIBLE ELECTRIC MOTORS - 1~ -

TYPE Single-phase 230 V / 50 Hz	Rated power P2		Axial load N	Revs 1/min	Rated current A	Starting current A	Efficiency η	Power factor cos φ	Starting torque Rated torque	Capacitor (Vc=450V) μF	h mm	Weight kg
	kW	HP										
4FKm / 0.50	0.37	0.50	1500	2860	3.4	11.2	53%	0.93	0.84	16	242	8.7
4FKm / 0.75	0.55	0.75		2855	4.3	15.9	63%	0.94	0.76	20	271	10.0
4FKm / 1	0.75	1		2855	5.7	21.1	60%	0.98	0.89	31.5	299	11.4
4FKm / 1.5	1.1	1.5	3000	2855	8.6	31.8	62%	0.94	0.84	40	327	12.7
4FKm / 2	1.5	2		2825	10.6	35	66%	0.95	0.73	55	356	14.0
4FKm / 3	2.2	3	4000	2840	15.5	56.7	66%	0.97	0.65	70	461	18.6



FRANKLIN E. 4" SUBMERSIBLE ELECTRIC MOTORS - 3~ -

TYPE Three-phase 400 V / 50 Hz	Rated power P2		Axial load N	Revs 1/min	Rated current A	Starting current A	Efficiency η	Power factor cos φ	Starting torque Rated torque	h mm	Weight kg
	kW	HP									
4FK / 0.50	0.37	0.50	1500	2815	1.1	4.8	66%	0.70	2.1	223	7.4
4FK / 0.75	0.55	0.75		2815	1.6	6.4	67%	0.75	1.9	242	8.3
4FK / 1	0.75	1		2820	2.1	9.3	69%	0.75	2.1	271	9.5
4FK / 1.5	1.1	1.5	2500	2835	3	14.4	73%	0.76	2.8	299	10.9
4FK / 2	1.5	2		2830	4	19.2	73%	0.76	2.5	327	12.1
4FK / 3	2.2	3		2840	5.9	28.9	75%	0.75	3.1	356	13.5
4FK / 4	3	4	4500	2830	7.8	41.3	76%	0.75	3.2	423	16.5
4FK / 5.5	4	5.5		2840	10	58	78%	0.78	3.4	584	24.1
4FK / 7.5	5.5	7.5		2830	13.7	75.4	76%	0.79	2.8	698	29.4
4FK / 10	7.5	10	2840	18.4	101.2	74%	0.79	3.6	774	33.0	

FRANKLIN ELECTRIC resin-impregnated submersible motors, 50 Hz (n=2900 1/min)

Insulation: class F. - Protection: IP 68.

Power cable: 1.5 metres (2.5 metres for powers higher than 3 kW) submersible type, approved for drinking water.

LIMITS OF USE:

Water temperature: maximum 30 °C

Starts/hour: 20 at regular intervals

Cooling: water flow rate not less than 8 cm/s

6FK

FRANKLIN E. 6" SUBMERSIBLE ELECTRIC MOTORS - 3~ -

TYPE Three-phase 400 V / 50 Hz	Rated power P2		Axial load N	Revs 1/min	Rated current A	Starting current A	Efficiency η	Power factor cos φ	Starting torque Rated torque	h mm	Weight kg	
	kW	HP										
6FK / 5.5	4	5.5	15500	2860	9.3	43	78%	0.82	1.6	582	37.5	
6FK / 7.5	5.5	7.5		2870	12.5	64	79%	0.82	1.9	615	41.1	
6FK / 10	7.5	10		2860	16	83	79%	0.86	1.9	647	45.2	
6FK / 12.5	9.2	12.5		2870	20.7	112	81%	0.80	2.2	679	47.5	
6FK / 15	11	15		2860	23.3	129	81%	0.85	2.1	712	50.9	
6FK / 20	15	20		2860	31.3	169	81%	0.85	2.1	777	56.7	
6FK / 25	18.5	25		2850	38.5	231	82%	0.85	2.5	842	63.3	
6FK / 30	22	30		2860	45.3	268	83%	0.86	2.4	907	69.3	
6FK / 40	30	40		27500	2860	63.5	393	83%	0.84	2.6	1037	83.9
6FK / 50	37	50			2880	73	410	84.5%	0.87	2.3	1405	135.0
6FK / 60	44	60	2870		93.9	514	86%	0.84	2.2	1558	148.0	

FRANKLIN ELECTRIC resin-impregnated submersible motors, 50 Hz (n=2900 1/min)

Insulation: class F. - Protection: IP 68.

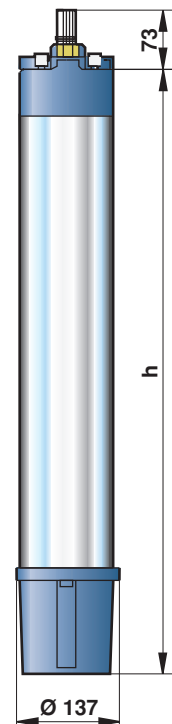
Power cable: 4 metres long, submersible type, approved for drinking water.

LIMITS OF USE:

Water temperature: maximum 30 °C

Starts/hour: 20 at regular intervals

Cooling: water flow rate not less than 16 cm/s



Already recognised for their innovative design and safety features, TOP pumps combine a stainless steel internal motor housing with technologically advanced materials to give an exceptionally robust construction.



RANGE OF PERFORMANCE

Flow rate up to 400 l/min (24 m³/h)

Head up to 14.5 m

LIMITS OF USE

Depth up to 5 metres (3 metres up to 0.55 kW)

Liquid temperature up to + 40°C

(+90°C for a maximum period of 3 minutes)

Passage of solid bodies up to Ø 10 mm

Drainage level:

14 mm from the bottom for TOP 1-2-3

30 mm from the bottom for TOP 4-5

CONSTRUCTION AND SAFETY STANDARDS

EN 60 335-1

EN 60034-1

IEC 335-1

IEC 34-1

CEI 61-150

CEI 2-3



INSTALLATION AND USE

THE TOP SERIES IS SUITABLE FOR DRAINING CLEAR WATER WITHOUT ABRASIVE PARTICLES. THE CONSTRUCTION GUARANTEES SIMPLE AND SAFE OPERATION DUE TO THE COMPLETE COOLING OF THE MOTOR BY THE PUMPED WATER AND THE DOUBLE SEAL DESIGN. THEY ARE RECOMMENDED FOR EMERGENCY DRAINING OF SMALL FLOODED AREAS (ROOMS, CELLARS, GARAGES), FOR THE DISPOSAL OF WASTE WATER IN THE HOME (DISHWASHER, WASHING MACHINE) AND FOR EMPTYING DRAINAGE TRAPS.

GUARANTEE 2 YEARS subject to our general terms of sale.

CONSTRUCTION CHARACTERISTICS

- **DELIVERY BODY:** glass filled **technopolymer**, particularly resistant to impact and corrosion, with threaded port ISO 228/1.
- **SUCTION GRID:** **technopolymer**.
- **IMPELLER:** open type in **technopolymer**.
- **MOTOR SUPPORT:** **stainless steel AISI 304**.
- **MOTOR SHAFT:** **stainless steel EN 10088-3 - 1.4104**.
- **DOUBLE SEAL:** mechanical seal ceramic -graphite - NBR, with oil barrier chamber and inner lip seal to protect the seal in the event of dry running.
- **MOTOR:** submersible asynchronous single-phase for continuous duty.
TOP: single-phase 220÷240 V - 50 Hz with capacitor and thermal overload protector built into the winding.
- **INSULATION:** class F. ● **PROTECTION:** IP 68.
- **REGISTERED MODEL n° 72765.**

STANDARD FEATURES:

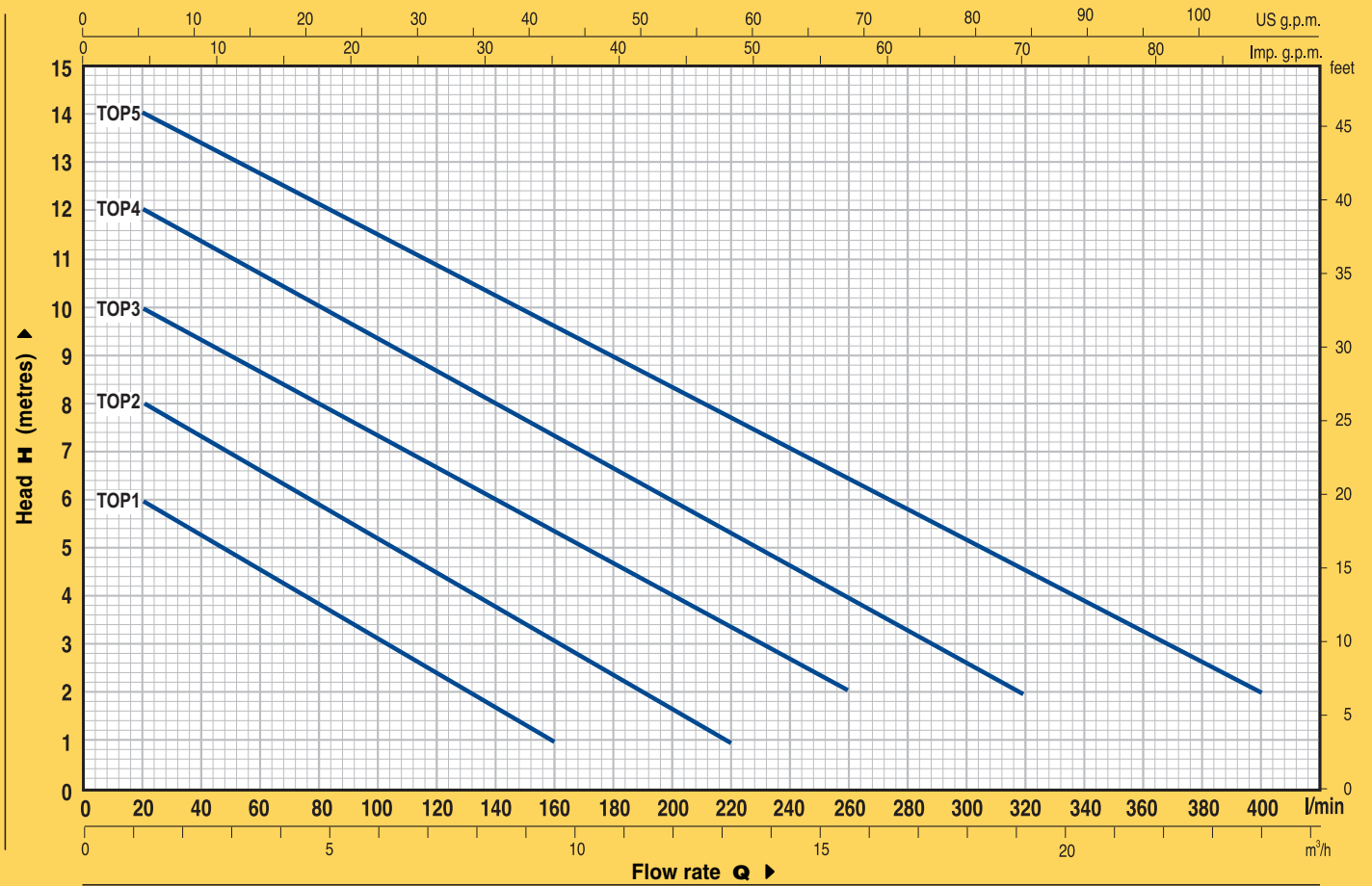
TOP 1-2-3 (single-phase) Float switch.
Hosetail.
Power cable in neoprene "H05 RN-F"
length 5 metres with Schuko plug.

TOP 4-5 (single-phase) Float switch.
① Hosetail.
② Coupling with flap valve.
Neoprene power cable "H05 RN-F" length 10 metres with Schuko plug.

OPTIONS ON REQUEST

- ⇒ pumps for aggressive liquids **TOP - LA**
- ⇒ special mechanical seal
- ⇒ 10 metre power cable.
N.B. required for outdoor use to comply with standard EN 60335-2-41
- ⇒ versions without float switch
- ⇒ other voltages or frequency 60 Hz

CURVES AND PERFORMANCE DATA AT n= 2900 1/min



TYPE	POWER		Q	Flow rate																							
	kW	HP		m³/h	0	1.2	2.4	3.6	4.8	6.0	7.2	8.4	9.6	10.8	12	13.2	14.4	15.6	16.8	18.0	19.2	20.4	21.6	22.8	24		
Single-phase			l/min	0	20	40	60	80	100	120	140	160	180	200	220	240	260	280	300	320	340	360	380	400			
TOP 1	0.25	0.33	H metres	7	6	5.5	4.5	4	3	2.5	1.5	1															
TOP 2	0.37	0.50		9	8	7.5	6.5	6	5.5	4.5	4	3	2.5	1.8	1												
TOP 3	0.55	0.75		10.5	10	9	8.8	8	7.5	6.5	6	5.5	4.8	4	3.5	2.5	2										
TOP 4	0.75	1		12.6	12	11.5	10.7	10	9.3	8.7	8	7.3	6.7	6	5.3	4.7	4	3.3	2.7	2							
TOP 5	0.92	1.25		14.5	14	13.5	12.7	12.1	11.5	10.8	10.2	9.6	8.9	8.3	7.7	7.1	6.4	5.8	5.2	4.5	3.9	3.3	2.6	2			

Q = Flow rate H = Total manometric head

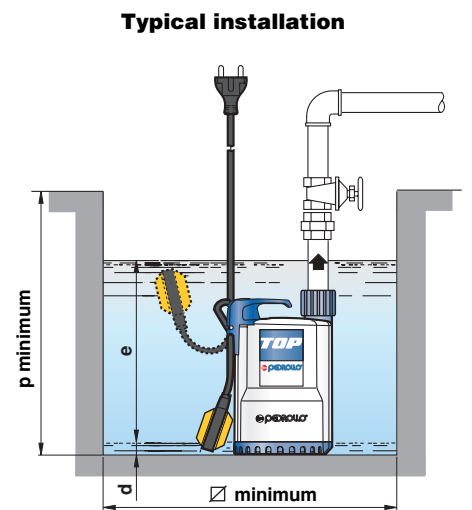
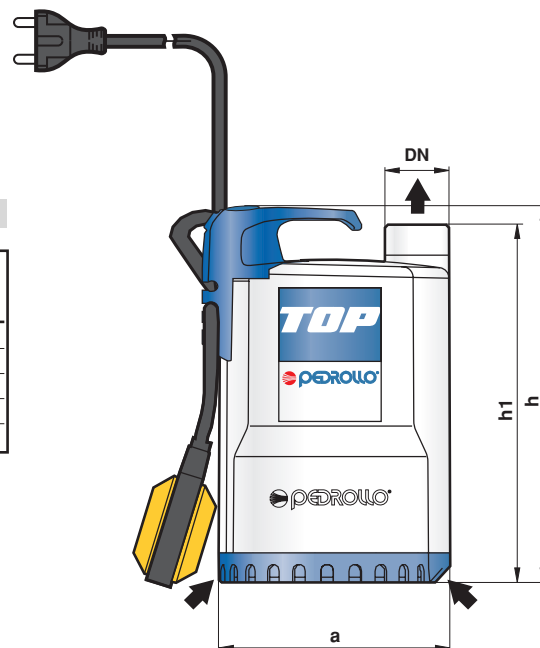
Tolerance of the performance curves according to EN ISO 9906 App. A.

DIMENSIONS AND WEIGHTS

TOP-LA* for aggressive liquids

TYPE
Single-phase
TOP 1 - LA
TOP 2 - LA
TOP 3 - LA
TOP 4 - LA
TOP 5 - LA

* Wetted metal parts in AISI 316 stainless steel.



TYPE	PORT DN	DIMENSIONS mm							kg
		a	h	h1	d	e	p	Ø	
TOP 1	1"	152	232	217	14	adjustable	350	350	4.1
TOP 2	1 1/4"		257	237					5.0
TOP 3	1 1/4"		287	267					6.4
TOP 4	1 1/2"	204	334	310	21		450	450	9.8
TOP 5									10.8

TOP FLOOR

DRAINAGE submersible pumps for clear water

The particular constructive design of the TOP FLOOR pump allows draining down to a level of 2 mm above the floor.



RANGE OF PERFORMANCE

Flow rate up to 220 l/min (13.2 m³/h)
Head up to 9 m

LIMITS OF USE

Depth up to 3 m
Liquid temperature up to +40°C
(+90° C for a maximum period of 3 minutes)
Passage of solid bodies up to Ø 5 mm
Drainage level 2 mm from the bottom

CONSTRUCTION AND SAFETY STANDARDS

EN 60 335-1 EN 60034-1
IEC 335-1 IEC 34-1
CEI 61-150 CEI 2-3



INSTALLATION AND USE

THE TOP-FLOOR SERIES IS SUITABLE FOR DRAINING CLEAR WATER WITHOUT ABRASIVE PARTICLES. THEIR ABILITY TO DRAIN WATER DOWN TO 2 MILLIMETRES FROM THE FLOOR MAKES THEM IDEAL FOR EMERGENCY DOMESTIC USE FOR SMALL FLOODED AREAS AND IN ALL THOSE APPLICATIONS WHERE MAXIMUM DRAINAGE IS REQUIRED.

GUARANTEE 2 YEARS subject to our general terms of sale.

CONSTRUCTION CHARACTERISTICS

- **DELIVERY BODY:** glass filled **technopolymer**, particularly resistant to impact and corrosion, with threaded port ISO 228/1.
- **SUCTION GRID:** **technopolymer**.
- **IMPELLER:** open type in **technopolymer**.
- **MOTOR SUPPORT:** **stainless steel AISI 304**.
- **MOTOR SHAFT:** **stainless steel EN 10088-3 - 1.4104**.
- **DOUBLE SEAL:** mechanical seal **ceramic - graphite - NBR**, with oil barrier chamber and inner lip seal to protect the seal in the event of dry running.
- **MOTOR:** submersible asynchronous single-phase for continuous duty.
TOP-FLOOR: single-phase 220÷240 V - 50 Hz with capacitor and thermal overload protector.
- **INSULATION:** class F. ● **PROTECTION:** IP 68.
- **REGISTERED MODEL n° 72765**

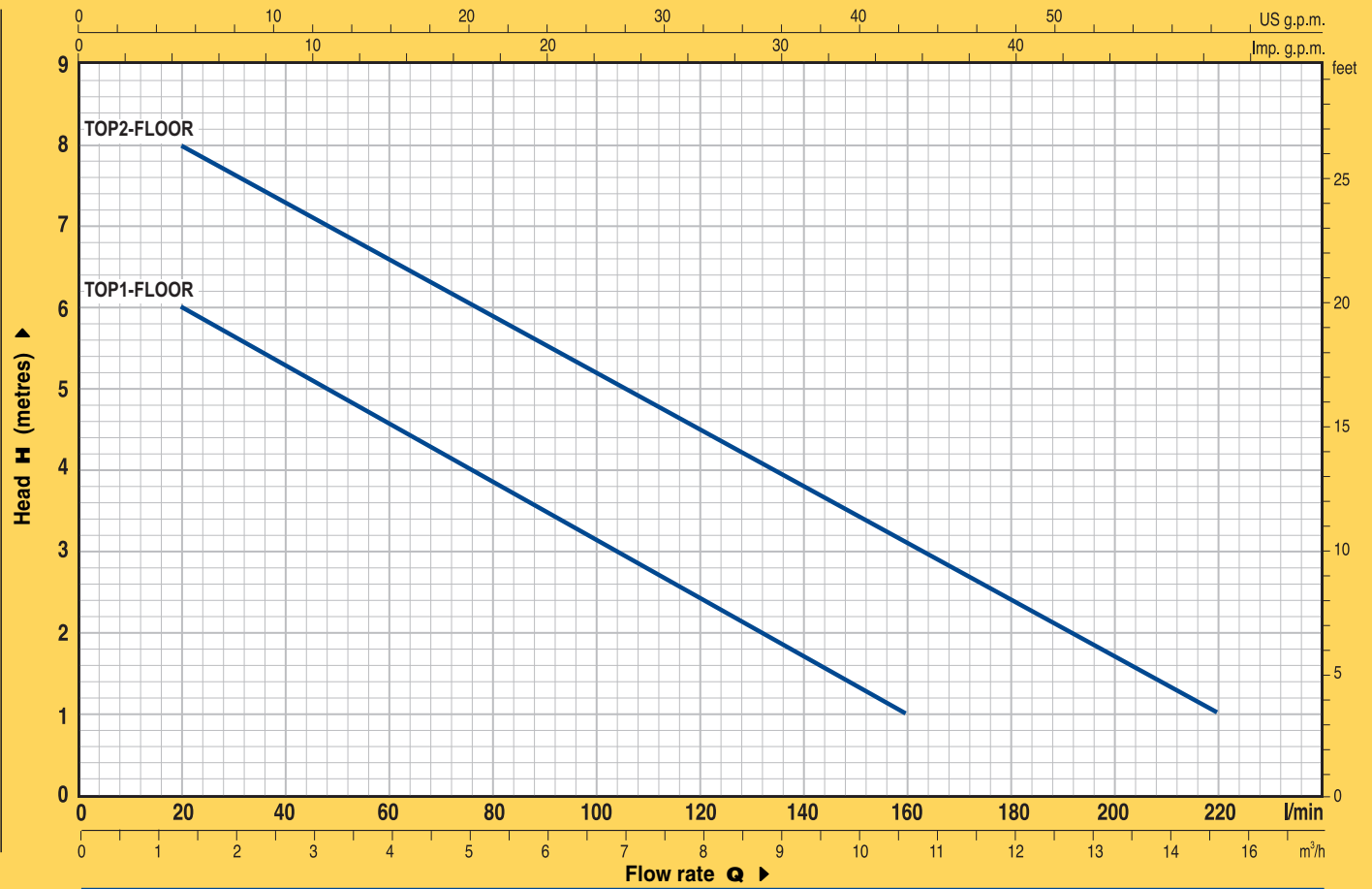
STANDARD FEATURES:

TOP-FLOOR Neoprene power cable "H05 RN-F" length **5 metres** with Schuko plug. Hosetail.

OPTIONS ON REQUEST

- ⇒ versions with external float switch
- ⇒ special mechanical seal
- ⇒ 10 metre power cable.
N.B. required for outdoor use to comply with standard EN 60335-2-41
- ⇒ other voltages or frequency 60 Hz

CURVES AND PERFORMANCE DATA AT n= 2900 1/min

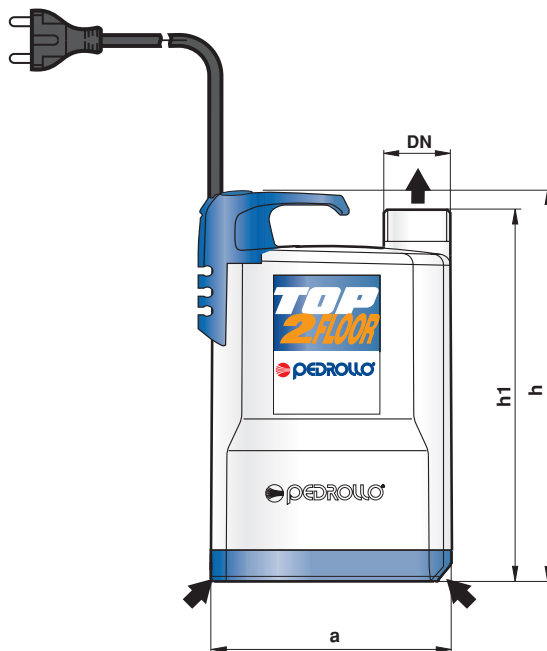


TYPE	POWER		Q	Flow rate												
	kW	HP		m³/h	0	1.2	2.4	3.6	4.8	6.0	7.2	8.4	9.6	10.8	12.0	13.2
Single-phase			l/min	0	20	40	60	80	100	120	140	160	180	200	220	
TOP1 - FLOOR	0.25	0.33	H metres	7	6	5.5	4.5	4	3	2.5	1.5	1				
TOP2 - FLOOR	0.37	0.50		9	8	7.5	6.5	6	5.5	4.5	4	3	2.5	1.8	1	

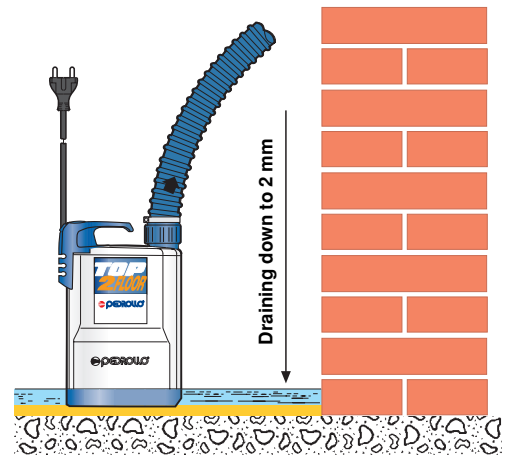
Q = Flow rate H = Total manometric head

Tolerance of the performance curves according to EN ISO 9906 App. A.

DIMENSIONS AND WEIGHTS



Typical installation



TYPE	PORT DN	DIMENSIONS mm			Minimum drying level	kg
		a	h	h1		
TOP1 - FLOOR	1"	152	232	217	2 mm	3.9
TOP2 - FLOOR	1 1/4"		257	237		4.9

TOP VORTEX

VORTEX submersible pumps for dirty water

Thanks to the proven VORTEX system, this submersible pump allows the clearing of dirty water containing suspended solid bodies without any risk of clogging the impeller.



RANGE OF PERFORMANCE

Flow rate up to 180 l/min (10.8 m³/h)
Head up to 7 m

LIMITS OF USE

Depth up to 3 m
Liquid temperature up to + 40°C
(+90° C for a maximum period of 3 minutes)
Passage of solid bodies up to Ø 20 mm
Drainage level 25 mm from the bottom

CONSTRUCTION AND SAFETY STANDARDS

EN 60 335-1	EN 60034-1	CE
IEC 335-1	IEC 34-1	
CEI 61-150	CEI 2-3	

INSTALLATION AND USE

THE TOP-VORTEX PUMP IS SUITABLE FOR DRAINING DIRTY WATER THAT IS CHEMICALLY NON AGGRESSIVE. THE CONSTRUCTION GUARANTEES SIMPLE AND SAFE OPERATION DUE TO THE COMPLETE COOLING OF THE MOTOR BY THE PUMPED WATER AND THE DOUBLE SEAL DESIGN.

IT IS RECOMMENDED FOR DOMESTIC USE, FOR THE CLEARING OF DIRTY WATER, FOR EMPTYING TANKS, DOMESTIC DRAINS AND COLLECTION TRAPS, EVEN WITH SUSPENDED SOLID BODIES WITH DIMENSIONS UP TO Ø 20 mm.

GUARANTEE 2 YEARS subject to our general terms of sale.

CONSTRUCTION CHARACTERISTICS

- **DELIVERY BODY:** glass filled technopolymer, particularly resistant to impact and corrosion, with threaded port ISO 228/1.
- **SUCTION GRID:** technopolymer.
- **IMPELLER:** technopolymer.
- **MOTOR SUPPORT:** stainless steel AISI 304.
- **MOTOR SHAFT:** stainless steel EN 10088-3 - 1.4104.
- **DOUBLE SEAL:** mechanical seal ceramic - graphite - NBR, with oil barrier chamber and inner lip seal to protect the seal in the event of dry running.
- **MOTOR:** submersible asynchronous single-phase for continuous duty. **TOP-VORTEX:** single-phase 220÷240 V - 50 Hz with capacitor and thermal overload protector.
- **INSULATION:** class F. ● **PROTECTION:** IP 68.
- **REGISTERED MODEL n° 72765**

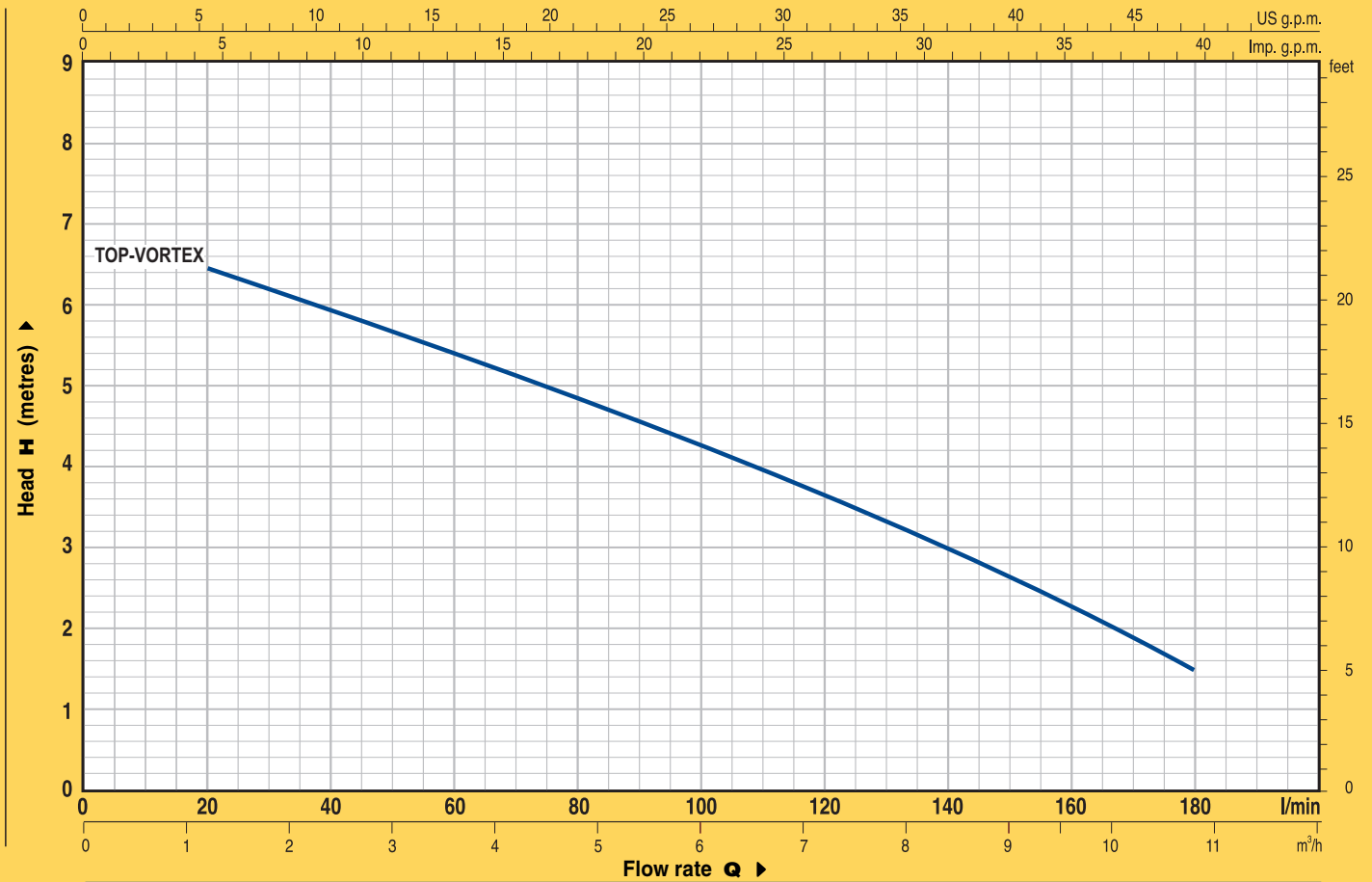
STANDARD FEATURES:

TOP-VORTEX Float switch.
Hosetail.
Neoprene power cable "H05 RN-F"
length **5 metres** with Schuko plug.

OPTIONS ON REQUEST

- ⇒ special mechanical seal
- ⇒ 10 metre power cable.
N.B. required for outdoor use to comply with standard EN 60335-2-41
- ⇒ other voltages or frequency 60 Hz

CURVES AND PERFORMANCE DATA AT n= 2900 1/min

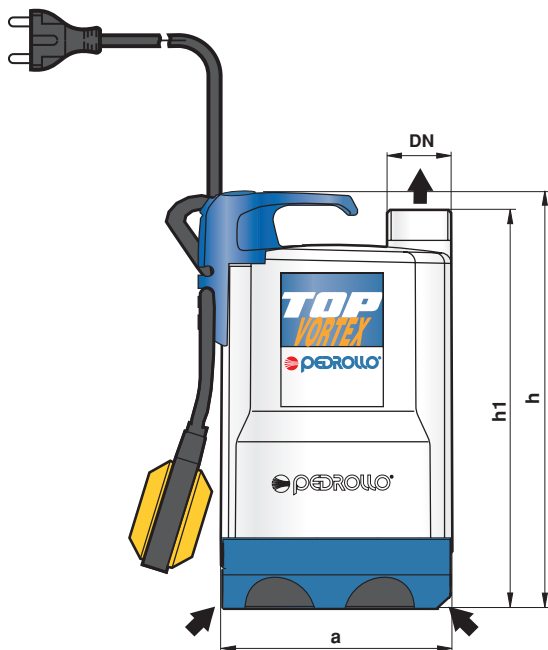


TYPE	POWER		Q	0	1.2	2.4	3.6	4.8	6.0	7.2	8.4	9.6	10.8
	kW	HP		0	20	40	60	80	100	120	140	160	180
Single-phase			m³/h										
TOP - VORTEX	0.37	0.50	l/min	7	6.5	6	5.4	4.8	4.2	3.5	3	2.5	1.5

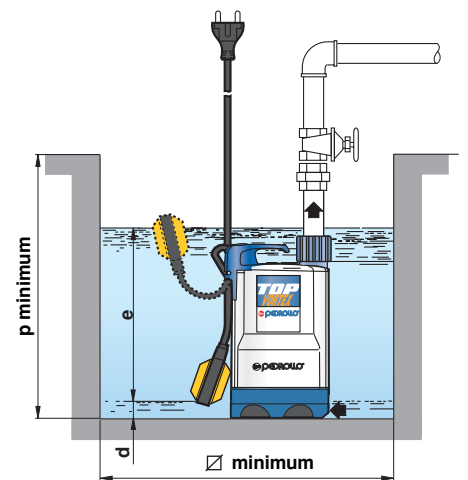
Q = Flow rate H = Total manometric head

Tolerance of the performance curves according to EN ISO 9906 App. A.

DIMENSIONS AND WEIGHTS



Typical installation



TYPE	PORT DN	DIMENSIONS mm							kg
		a	h	h1	d	e	p	∅	
Single-phase									
TOP - VORTEX	1 1/4"	152	288	268	25		350	350	5.0

RX DRAINAGE submersible pumps for clear water

Robust high-quality submersible pumps in stainless steel, for drainage of clear water. Recommended for fixed installations or for draining domestic water or rainwater, and for emptying tanks or reservoirs.



RANGE OF PERFORMANCE

Flow rate up to 300 l/min (18 m³/h)
Head up to 23 m

LIMITS OF USE

Depth up to 10 m
Liquid temperature up to + 50°C
Liquid temperature up to + 60°C for intermittent duty.
Liquid temperature up to + 90°C for intermittent duty maximum 3 minutes.
Passage of solid bodies up to Ø 10 mm
Drainage level:
14 mm from the bottom for RX 1-2
30 mm from the bottom for RX 3-4-5

CONSTRUCTION AND SAFETY STANDARDS

EN 60 335-1	EN 60034-1	CE
IEC 335-1	IEC 34-1	
CEI 61-150	CEI 2-3	

INSTALLATION AND USE

RX PUMPS ARE SUITABLE FOR DRAINING CLEAR WATER WITHOUT ABRASIVE PARTICLES. THE CONSTRUCTION GUARANTEES SIMPLE AND SAFE OPERATION DUE TO THE COMPLETE COOLING OF THE MOTOR BY THE PUMPED WATER, AND THE DOUBLE SEAL DESIGN. THEY ARE RECOMMENDED FOR FIXED INSTALLATIONS, EMERGENCY DRAINING OF SMALL FLOODED AREAS (BASEMENT ROOMS, CELLARS, GARAGES), FOR DISPOSAL OF DIRTY WATER USED IN THE HOME BY WASHING MACHINES AND DISHWASHERS AND FOR DRAINING COLLECTION TRAPS.

GUARANTEE 2 YEARS subject to our general terms of sale.

CONSTRUCTION CHARACTERISTICS

- **DELIVERY BODY:** stainless steel AISI 304, with threaded port ISO 228/1.
- **SUCTION GRID:** stainless steel AISI 304.
- **IMPELLER:** stainless steel AISI 304.
- **MOTOR SUPPORT:** stainless steel AISI 304.
- **MOTOR SHAFT:** stainless steel EN 10088-3 - 1.4104.
- **DOUBLE SEAL:** mechanical seal ceramic - graphite - NBR, with oil barrier chamber and inner lip seal to protect the seal in the event of dry running.
- **MOTOR:** submersible asynchronous single-phase for continuous duty.
RXm: single-phase 220±240 V - 50 Hz with capacitor and thermal overload protector.
RX: three-phase 380±415 V - 50 Hz.
- **INSULATION:** class F. ● **PROTECTION:** IP 68.
- **REGISTERED MODEL.**

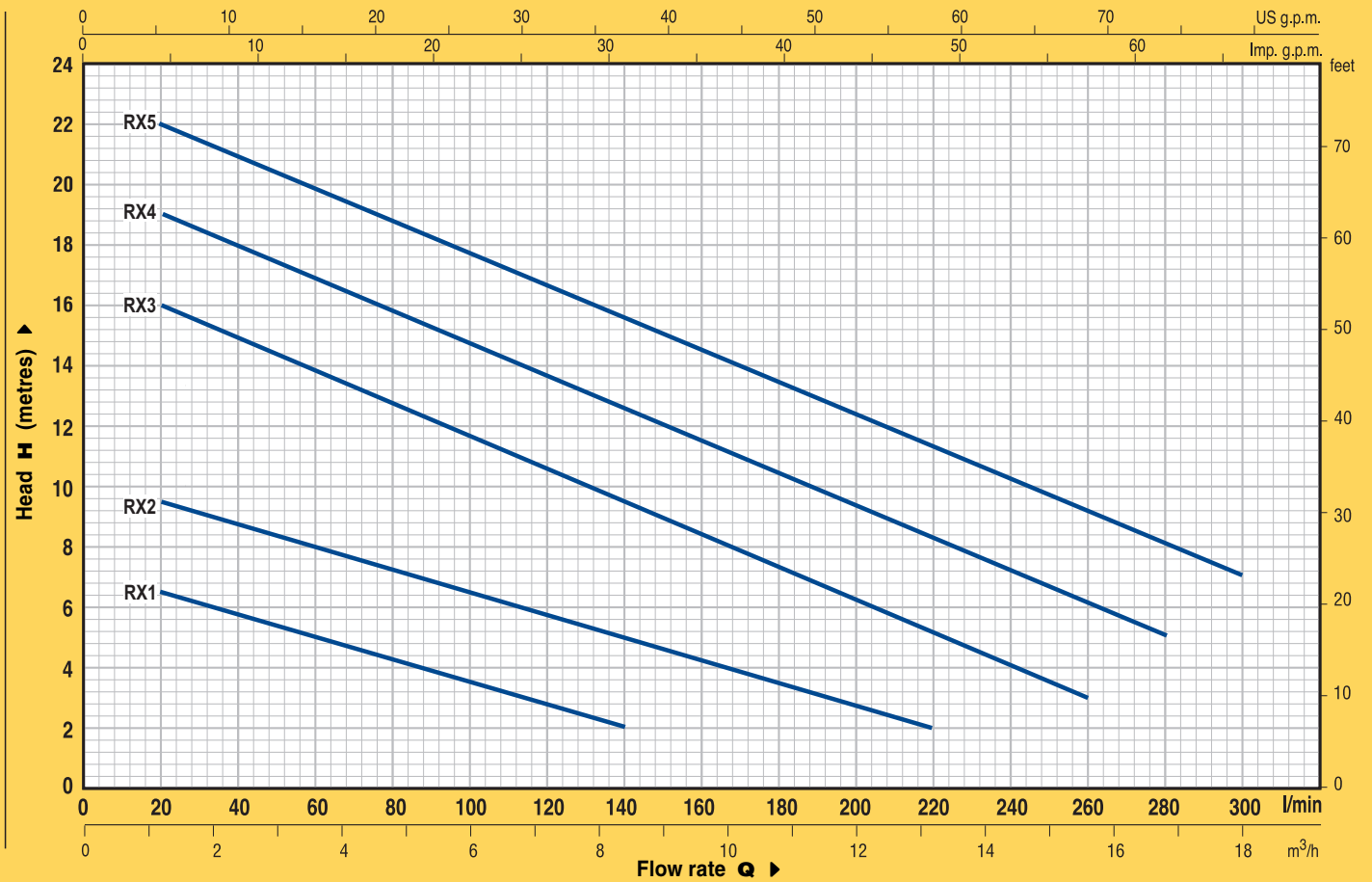
STANDARD FEATURES:

- RXm** (single-phase) float switch.
Neoprene power cable "H05 RN-F"
length **5 metres** with Schuko plug.
- RX** (three-phase) Neoprene power cable "H05 RN-F"
length **5 metres**.

OPTIONS ON REQUEST

- ⇒ special mechanical seal
- ⇒ 10 metre power cable.
N.B. required for outdoor use to comply with standard EN 60335-2-41
- ⇒ control box for three-phase electropumps 1.1 kW
- ⇒ single-phase versions without float switch
- ⇒ other voltages or frequency 60 Hz

CURVES AND PERFORMANCE DATA AT n= 2900 1/min

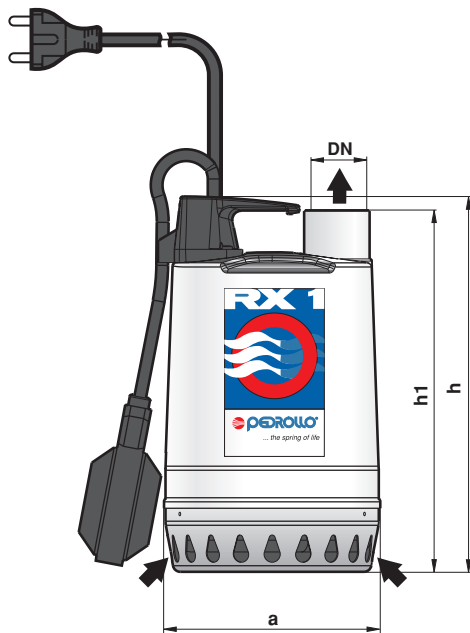


TYPE		POWER		Q	Flow rate																	
Single-phase	Three-phase	kW	HP		m³/h	0	1.2	2.4	3.6	4.8	6.0	7.2	8.4	9.6	10.8	12.0	13.2	14.4	15.6	16.8	18.0	
				l/min	0	20	40	60	80	100	120	140	160	180	200	220	240	260	280	300		
RXm 1	-	0.25	0.33	H metres	7.5	6.5	5.8	5	4.3	3.5	2.8	2										
RXm 2	RX 2	0.37	0.50		10	9.5	8.8	8	7.3	6.5	5.8	5	4.3	3.5	2.8	2						
RXm 3	RX 3	0.55	0.75		17	16	15	13.8	12.8	11.7	10.5	9.5	8.5	7.3	6.3	5.2	4	3				
RXm 4	RX 4	0.75	1		20	19	18	16.8	15.8	14.7	13.5	12.5	11.5	10.5	9.3	8.2	7.2	6	5			
RXm 5	RX 5	1.1	1.5		23	22	21	20	18.8	17.7	16.5	15.5	14.5	13.5	12.4	11.3	10.2	9	8	7		

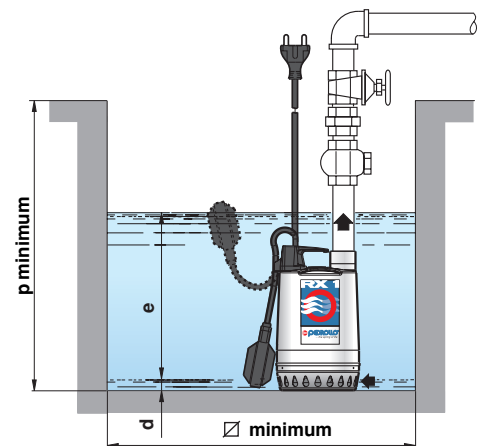
Q = Flow rate H = Total manometric head

Tolerance of the performance curves according to EN ISO 9906 App. A.

DIMENSIONS AND WEIGHTS



Typical single-phase installation



TYPE		PORT DN	DIMENSIONS mm							kg	
Single-phase	Three-phase		a	h	h1	d	e	p	∅	1~	3~
RXm 1	-	1 1/4"	147	255	247	17	adjustable	350	350	4.7	-
RXm 2	RX 2									5.7	5.5
RXm 3	RX 3									12.0	10.7
RXm 4	RX 4	1 1/2"	215	355	336	30	adjustable	500	500	13.0	11.7
RXm 5	RX 5									14.0	12.7

Robust high-quality VORTEX submersible pumps in stainless steel. The proven VORTEX system allows the clearing of dirty water containing suspended solids.



RANGE OF PERFORMANCE

Flow rate up to 450 l/min (27 m³/h)

Head up to 14.5 m

LIMITS OF USE

Depth up to 10 m

Liquid temperature up to + 50°C

Liquid temperature up to + 60°C for intermittent duty.

Liquid temperature up to + 90°C for intermittent duty maximum 3 minutes.

Passage of solid bodies:

up to 20 mm for RX2 - up to 40 mm for RX3-4-5

Drainage level from the bottom:

25 mm for RX2 - 40 mm for RX3-4-5

CONSTRUCTION AND SAFETY STANDARDS

EN 60 335-1

EN 60034-1

IEC 335-1

IEC 34-1

CEI 61-150

CEI 2-3



INSTALLATION AND USE

RX-VORTEX PUMPS ARE SUITABLE FOR DRAINING DIRTY WATER. THE CONSTRUCTION GUARANTEES SIMPLE AND SAFE OPERATION, DUE TO THE COMPLETE COOLING OF THE MOTOR BY THE PUMPED WATER. THEY ARE RECOMMENDED FOR DOMESTIC USE, FOR DRAINING DIRTY WATER CONTAINING SUSPENDED SOLIDS.

GUARANTEE 2 YEARS subject to our general terms of sale.

CONSTRUCTION CHARACTERISTICS

- **DELIVERY BODY:** stainless steel AISI 304, with threaded port ISO 228/1.
- **SUCTION GRID:** stainless steel AISI 304.
- **IMPELLER:** stainless steel AISI 304.
- **MOTOR SUPPORT:** stainless steel AISI 304.
- **MOTOR SHAFT:** stainless steel EN 10088-3 - 1.4104.
- **DOUBLE SEAL:** mechanical seal silicon carbide - NBR, with oil barrier chamber and inner lip seal to protect the seal in the event of dry running.
- **MOTOR:** submersible asynchronous single-phase for continuous duty.
RXm: single-phase 220÷240 V - 50 Hz with capacitor and thermal overload protector.
RX: three-phase 380÷415 V - 50 Hz.
- **INSULATION:** class F. ● **PROTECTION:** IP 68.
- **REGISTERED MODEL.**

STANDARD FEATURES:

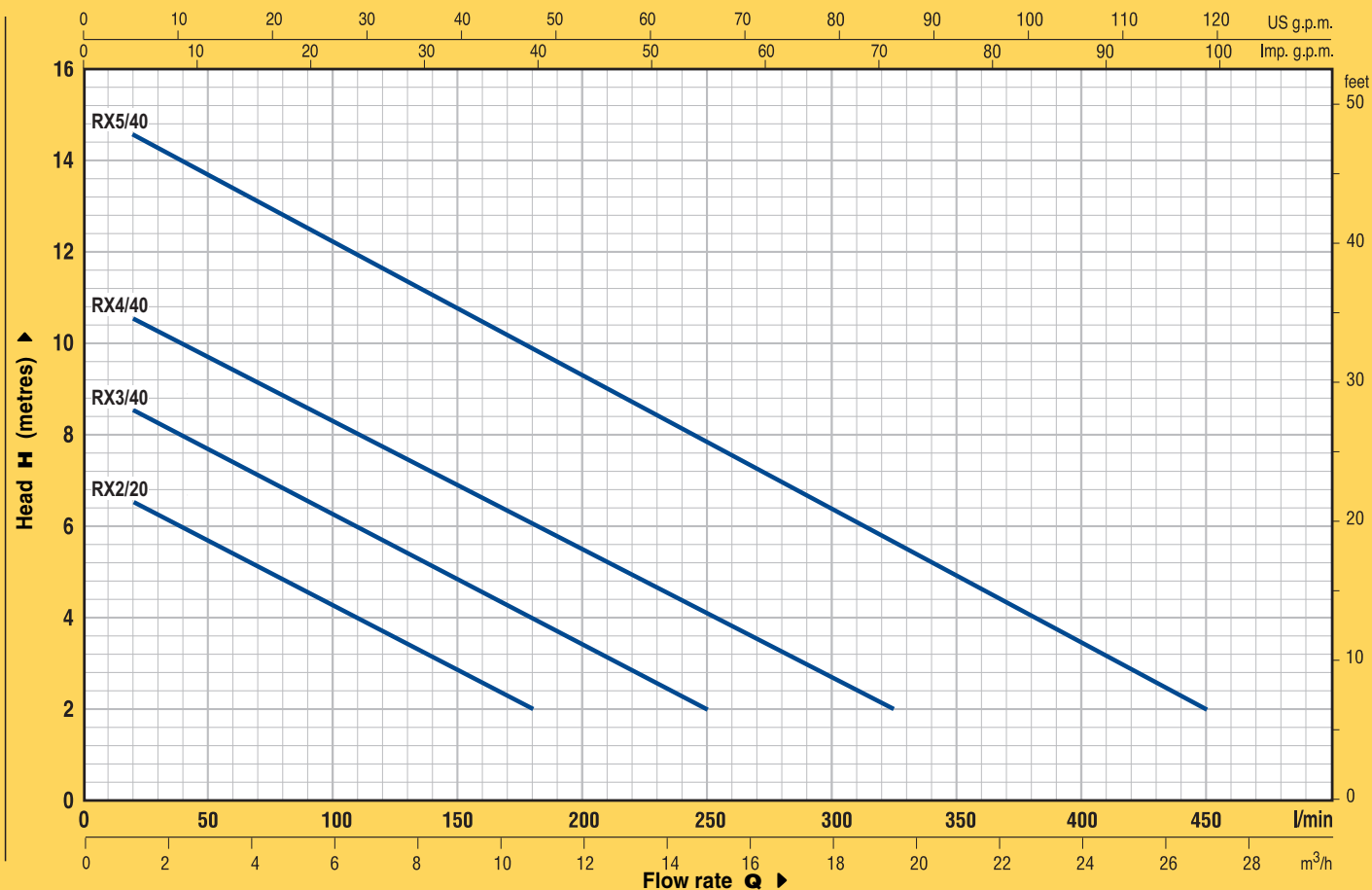
RXm (single-phase) float switch.
Neoprene power cable "H05 RN-F"
length **5 metres** with Schuko plug.

RX (three-phase) Neoprene power cable "H05 RN-F"
length **5 metres**.

OPTIONS ON REQUEST

- ⇒ special mechanical seal
- ⇒ 10 metre power cable.
N.B. required for outdoor use to comply with standard EN 60335-2-41
- ⇒ control box for three-phase pumps 1.1 kW
- ⇒ single-phase versions without float switch
- ⇒ other voltages or frequency 60 Hz

CURVES AND PERFORMANCE DATA AT n= 2900 1/min

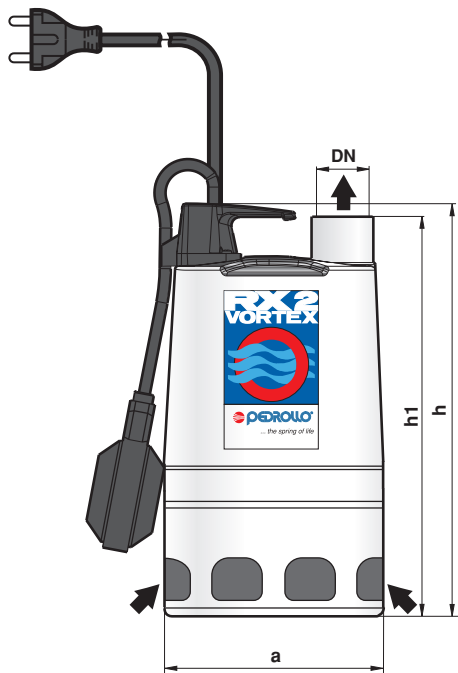


TYPE		POWER		Q	Flow rate																
Single-phase	Three-phase	kW	HP		m³/h	0	1.2	2.4	3.6	4.8	6	7.2	8.4	9.6	10.8	12	15	18	19.5	21	24
RXm 2/20	RX 2/20	0.37	0.50	l/min	0	20	40	60	80	100	120	140	160	180	200	250	300	325	350	400	450
RXm 3/40	RX 3/40	0.55	0.75	H metres	7	6.5	6	5.4	4.8	4.3	3.7	3.1	2.5	2							
RXm 4/40	RX 4/40	0.75	1		9	8.5	8	7.4	6.8	6.3	5.7	5.1	4.5	4	3.4	2					
RXm 5/40	RX 5/40	1.1	1.5		11	10.5	10	9.4	8.8	8.3	7.7	7.1	6.6	6	5.5	4	2.7	2			
					15	14.5	14	13.3	12.8	12.2	11.6	11	10.4	9.8	9.2	7.8	6.3	5.6	4.9	3.5	2

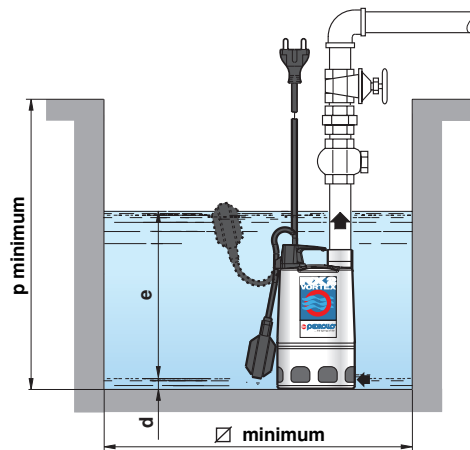
Q = Flow rate H = Total manometric head

Tolerance of the performance curves according to EN ISO 9906 App. A.

DIMENSIONS AND WEIGHTS



Typical single-phase installation



TYPE		PORT DN	DIMENSIONS mm						kg		
Single-phase	Three-phase		a	h	h1	d	e	p	∅	1~	3~
RXm 2/20	RX 2/20	1 1/4"	147	286	278	25	adjustable	350	350	5.9	5.7
RXm 3/40	RX 3/40									12.4	11.1
RXm 4/40	RX 4/40									13.4	12.1
RXm 5/40	RX 5/40	1 1/2"	215	405	386	40	adjustable	500	500	14.4	13.1



DRAINAGE submersible pumps for clear water

Submersible pumps for domestic use, economic, compact and reliable. Recommended for draining clear or slightly dirty water.



RANGE OF PERFORMANCE

Flow rate up to 300 l/min (18 m³/h)
Head up to 14 m

LIMITS OF USE

Depth up to 5 m
Liquid temperature up to + 40°C
Passage of suspended solid bodies up to Ø 10 mm
Drainage level 15 mm from the bottom
For continuous duty: minimum immersion 180 mm from pump base

CONSTRUCTION AND SAFETY STANDARDS

EN 60 335-1	EN 60034-1	
IEC 335-1	IEC 34-1	
CEI 61-150	CEI 2-3	

INSTALLATION AND USE

DESIGNED FOR DRAINING CLEAR OR SLIGHTLY DIRTY WATER, THEY ARE SUITABLE FOR DOMESTIC USE, FOR DRAINING FLOODED AREAS SUCH AS CELLARS AND FOR EMPTYING TANKS AND RESERVOIRS; THEY ARE OUTSTANDING IN BOTH THEIR SIMPLICITY OF INSTALLATION AND THEIR RELIABILITY IN FIXED INSTALLATIONS WITH AUTOMATIC OPERATION.

GUARANTEE 2 YEARS subject to our general terms of sale.

CONSTRUCTION CHARACTERISTICS

- DELIVERY BODY: cast iron, with threaded port ISO 228/1.
- MOTOR CASING: stainless steel AISI 304.
- SUCTION GRID: stainless steel AISI 304.
- IMPELLER: open type, in technopolymer.
- MOTOR SHAFT: stainless steel EN 10088-3 - 1.4104.
- MECHANICAL SEAL: ceramic - graphite - NBR.
- MOTOR: submersible asynchronous single-phase for continuous duty.
ZDm: single-phase 220÷240 V - 50 Hz with capacitor and thermal overload protector.
- INSULATION: class F. ● PROTECTION: IP 68.

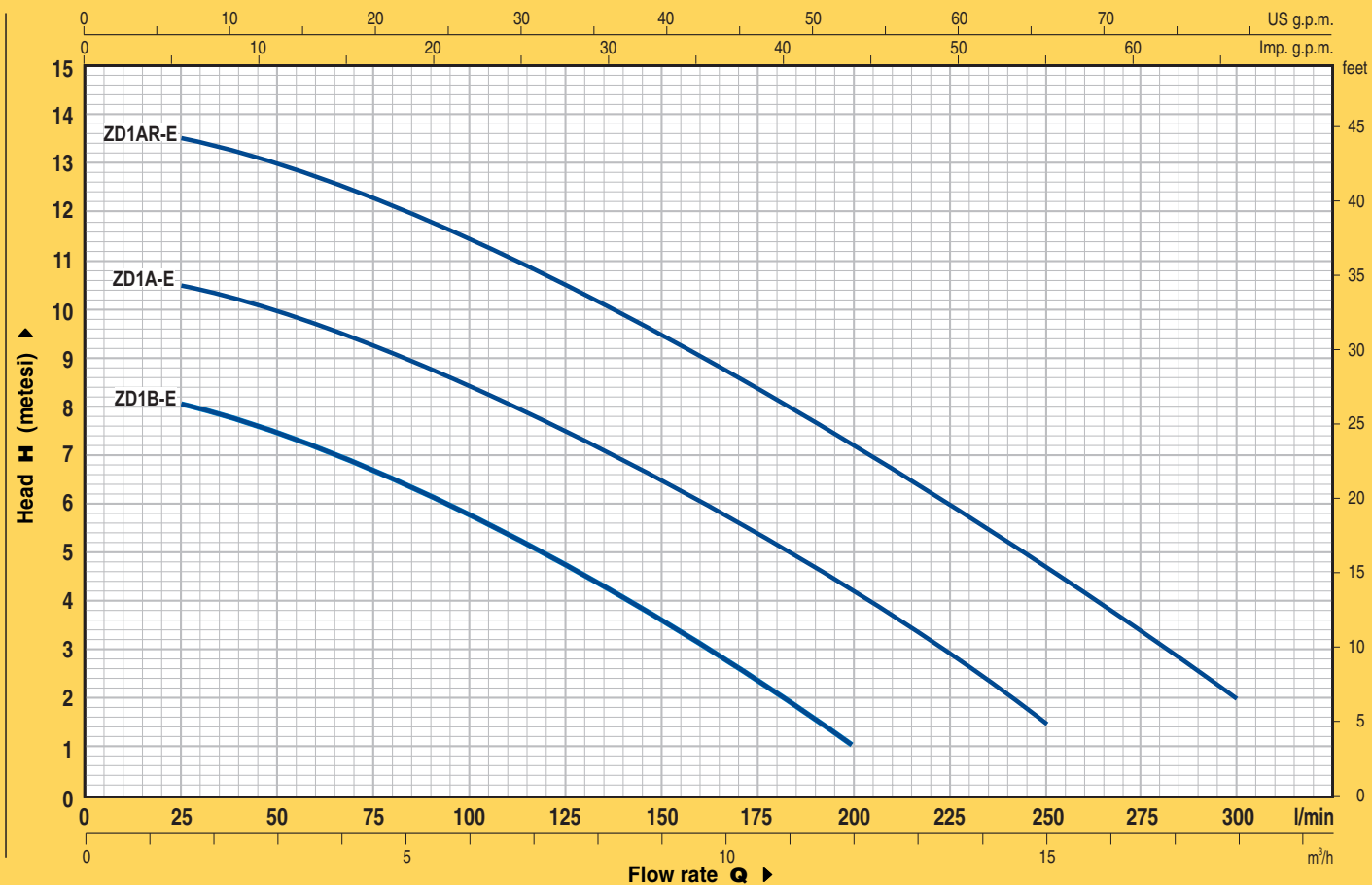
STANDARD FEATURES:

ZDm Float switch.
Neoprene power cable "H07 RN-F"
length **5 metres** with Schuko plug.

OPTIONS ON REQUEST

- ⇒ special mechanical seal
- ⇒ 10 metre power cable.
N.B. required for outdoor use to comply with standard EN 60335-2-41
- ⇒ versions without float switch
- ⇒ other voltages or frequency 60 Hz

CURVES AND PERFORMANCE DATA AT n= 2900 1/min

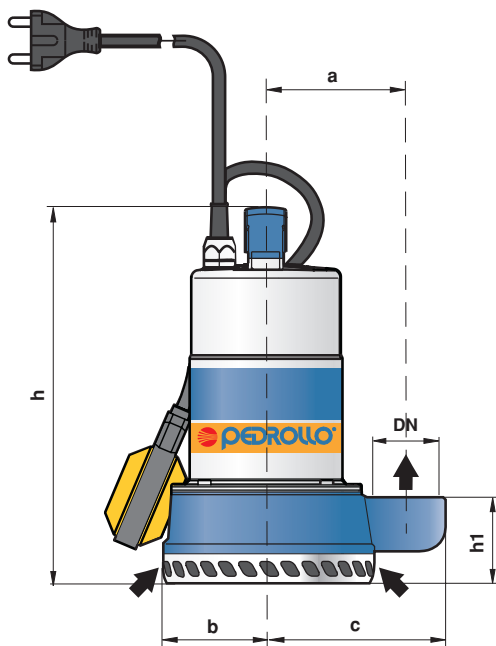


TYPE	POWER		Q	Flow rate														
	kW	HP		m³/h	0	1.5	3.0	4.5	6.0	7.5	9.0	10.5	12.0	13.5	15.0	16.5	18.0	
Single-phase			l/min	0	25	50	75	100	125	150	175	200	225	250	275	300		
ZDm 1B-E	0.37	0.50	H metres	8.5	8	7.5	6.5	5.5	4.8	3.5	2.5	1						
ZDm 1A-E	0.50	0.70		11	10.5	10	9	8.5	7.5	6.5	5.5	4	2.5	1.5				
ZDm 1AR-E	0.60	0.85		14	13.5	13	12.2	11.5	10.5	9.5	8.3	7	5.7	4.5	3.2	2		

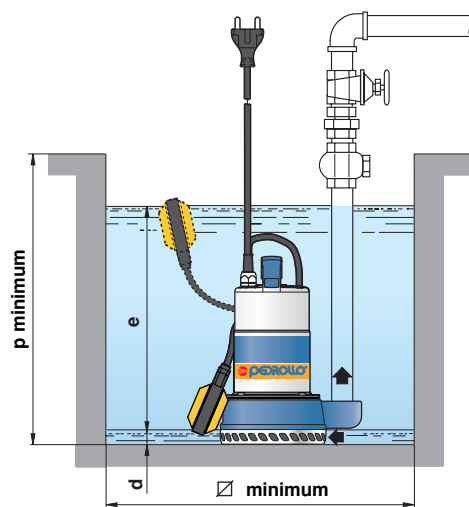
Q = Flow rate H = Total manometric head

Tolerance of the performance curves according to EN ISO 9906 App. A.

DIMENSIONS AND WEIGHTS



Typical installation



TYPE	PORT DN	DIMENSIONS mm									kg
		a	b	c	h	h1	d	e	p	∅	
Single-phase											
ZDm 1B-E	1 1/2"	110	81	142	310	66	15	adjustable	450	450	9.8
ZDm 1A-E											10.4
ZDm 1AR-E											11.3



VORTEX submersible pumps for very dirty water

VORTEX submersible pumps, economic, compact, reliable, recommended for domestic use. The proven VORTEX system allows the clearing of dirty water containing suspended solid bodies.



RANGE OF PERFORMANCE

Flow rate up to 300 l/min (18 m³/h)
Head up to 10 m

LIMITS OF USE

Depth up to 5 m
Liquid temperature up to + 40°C
Passage of suspended solid bodies up to Ø 40 mm
Drainage level 40 mm from the bottom
For continuous duty: minimum immersion 240 mm from pump base

CONSTRUCTION AND SAFETY STANDARDS

EN 60 335-1	EN 60034-1	
IEC 335-1	IEC 34-1	
CEI 61-150	CEI 2-3	

INSTALLATION AND USE

ZX PUMPS ARE RECOMMENDED FOR DRAINING WASTE WATER IN THE DOMESTIC SECTOR, FOR CLEARING DIRTY WATER, EVEN CONTAINING SUSPENDED SOLID BODIES WITH DIMENSIONS UP TO Ø 40 mm. THEY ARE OUTSTANDING IN BOTH THEIR SIMPLICITY OF INSTALLATION AND THEIR RELIABILITY IN FIXED INSTALLATIONS WITH AUTOMATIC OPERATION.

GUARANTEE 2 YEARS subject to our general terms of sale.

CONSTRUCTION CHARACTERISTICS

- DELIVERY BODY: cast iron, with threaded port ISO 228/1.
- MOTOR CASING: stainless steel AISI 304.
- IMPELLER: open type, in glass filled technopolymer.
- MOTOR SHAFT: stainless steel EN 10088-3 - 1.4104.
- MECHANICAL SEAL: ceramic - graphite - NBR.
- MOTOR: submersible asynchronous single-phase for continuous duty.
ZXm: single-phase 220÷240 V - 50 Hz with capacitor and thermal overload protector.
- INSULATION: class F. ● PROTECTION: IP 68.

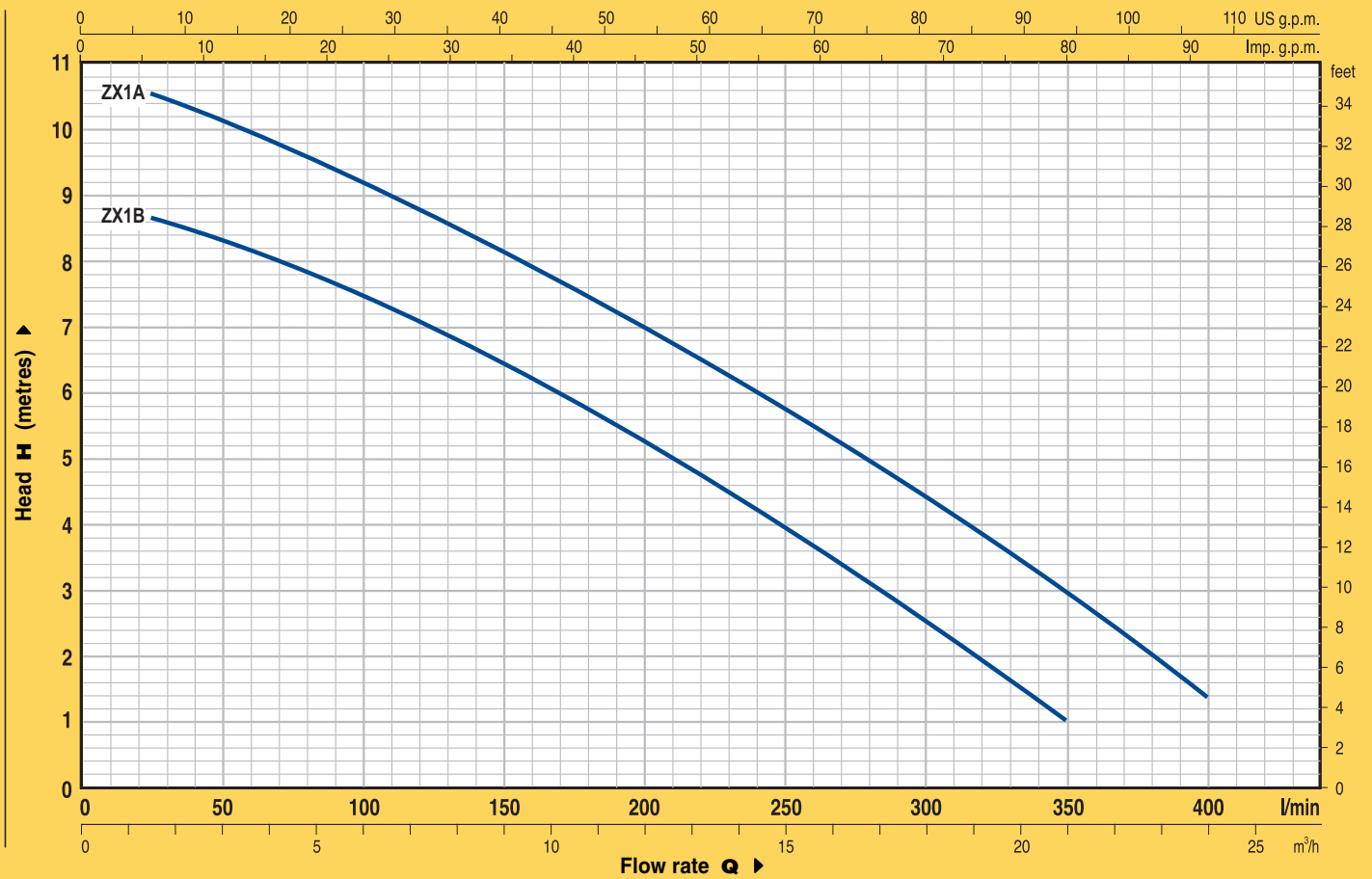
STANDARD FEATURES:

ZXm Float switch.
Neoprene power cable "H07 RN-F"
length **5 metres** with Schuko plug.

OPTIONS ON REQUEST

- ⇒ special mechanical seal
10 metre power cable.
N.B. required for outdoor use to comply with standard EN 60335-2-41
versions without float switch
- ⇒ other voltages or frequency 60 Hz

CURVES AND PERFORMANCE DATA AT n= 2900 1/min

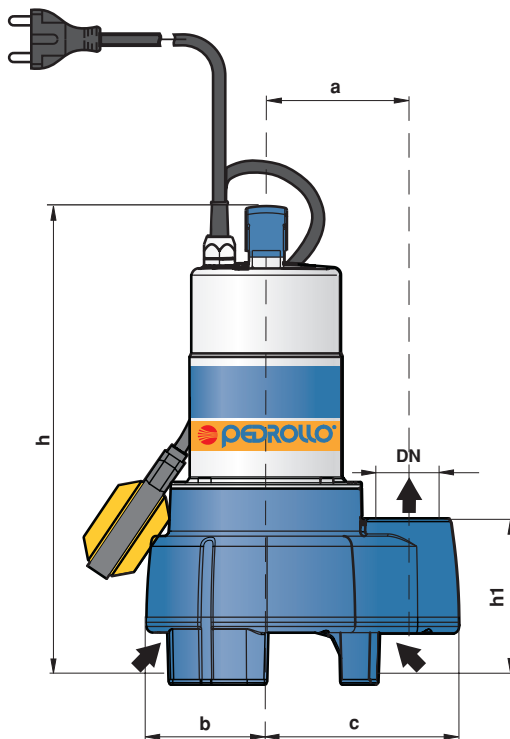


TYPE	POWER		Q	Flow rate												
	kW	HP		m³/h	0	1.5	3.0	4.5	6.0	9.0	12.0	15.0	18.0	21.0	24.0	
Single-phase			l/min	0	25	50	75	100	150	200	250	300	350	400		
ZXm 1B/40	0.50	0.70	H metres	9	8.5	8.3	8	7.5	6.5	5.2	4	2.5	1			
ZXm 1A/40	0.60	0.85		11	10.5	10	9.5	9.2	8.2	7	5.7	4.3	2.8	1.5		

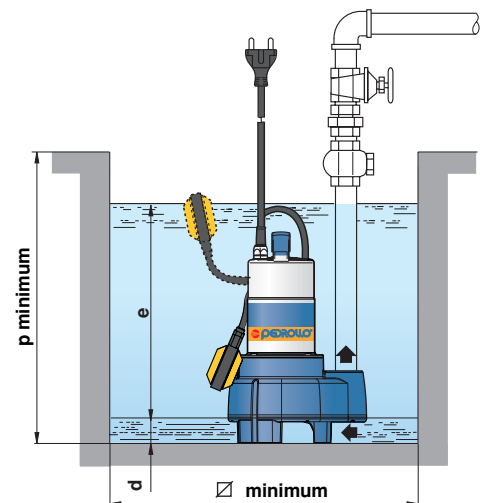
Q = Flow rate H = Total manometric head

Tolerance of the performance curves according to EN ISO 9906 App. A.

DIMENSIONS AND WEIGHTS



Typical installation



TYPE	PORT DN	passage of solid bodies	DIMENSIONS mm									kg	
			a	b	c	h	h1	d	e	p	Ø		
Single-phase													
ZXm 1B/40	1 1/2"	Ø 40 mm	110	93	150	372	128	40	adjustable	450	450	10.8	
ZXm 1A/40												12.4	



DRAINAGE submersible pumps for clear or slightly dirty water

DRAINAGE submersible pumps for professional use, particularly reliable with generous motor specification and hard-faced mechanical seal.



RANGE OF PERFORMANCE

Flow rate up to 400 l/min (24 m³/h)
Head up to 27 m

LIMITS OF USE

Depth up to 5 m
Liquid temperature up to + 40°C
Passage of suspended solid bodies up to Ø 10 mm
Drainage level 15 mm from the bottom
For continuous duty: minimum immersion 220 mm from pump base

CONSTRUCTION AND SAFETY STANDARDS

EN 60 335-1	EN 60034-1
IEC 335-1	IEC 34-1
CEI 61-150	CEI 2-3



INSTALLATION AND USE

DESIGNED FOR DRAINING CLEAR OR SLIGHTLY DIRTY WATER WITH SMALL SOLIDS, THEY ARE RECOMMENDED FOR DOMESTIC, CIVIL AND PROFESSIONAL USE, FOR DRAINING FLOODED AREAS SUCH AS CELLARS AND GARAGES OR FOR EMPTYING SWIMMING POOLS OR TANKS AND FOR DISPOSING OF NON-SEWAGE WASTE WATER. THESE PUMPS ARE OUTSTANDING IN THEIR RELIABILITY IN FIXED INSTALLATIONS WITH AUTOMATIC OPERATION.

GUARANTEE 2 YEARS subject to our general terms of sale.

CONSTRUCTION CHARACTERISTICS

- DELIVERY BODY: cast iron, with threaded port ISO 228/1.
- MOTOR CASING: stainless steel AISI 304.
- SUCTION GRID: stainless steel AISI 304.
- IMPELLER: open type, in glass filled technopolymer
- MOTOR SHAFT: stainless steel EN 10088-3 - 1.4104.
- DOUBLE SEAL: mechanical seal silicon carbide - NBR, with oil barrier chamber and inner lip seal to protect the seal in the event of dry running.
- MOTOR: submersible asynchronous for continuous duty.
Dm: single-phase 220÷240 V - 50 Hz with capacitor and thermal overload protector.
D: three-phase 380÷415 V - 50 Hz.
- INSULATION: class F. ● PROTECTION: IP 68.

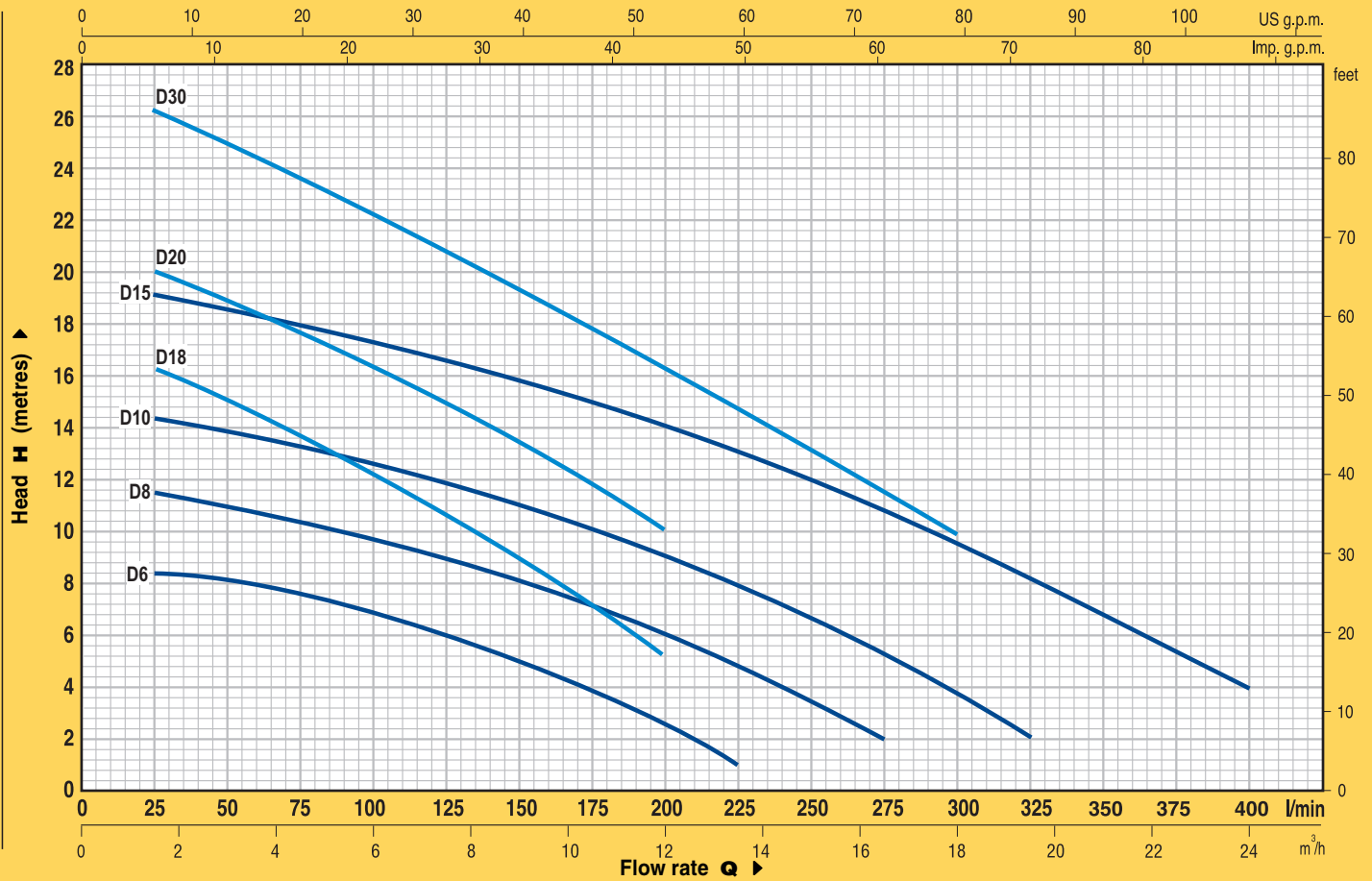
STANDARD FEATURES:

- Dm** (single-phase) Float switch.
Neoprene power cable "H07 RN-F"
length **5 metres** with Schuko plug.
- D** (three-phase) Neoprene power cable "H07 RN-F"
length **5 metres**.

OPTIONS ON REQUEST

- ⇒ 10 metre power cable.
N.B. required for outdoor use to comply with standard EN 60335-2-41
- ⇒ control box for three-phase pumps 1.1 kW
- ⇒ single-phase pumps without float switch
- ⇒ other voltages or frequency 60 Hz

CURVES AND PERFORMANCE DATA AT n= 2900 1/min

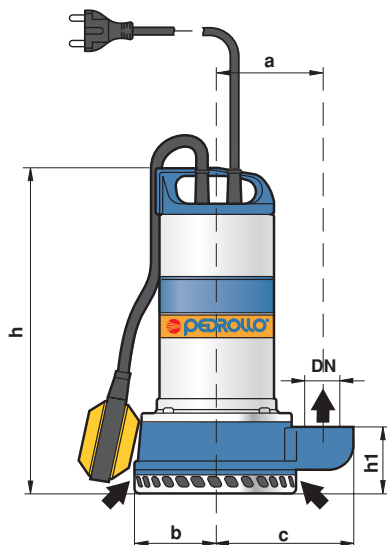


TYPE		POWER		Q	H metres																
Single-phase	Three-phase	kW	HP		m³/h	0	1.5	3.0	4.5	6.0	7.5	9.0	10.5	12.0	13.5	15.0	16.5	18.0	19.5	21.0	24.0
Dm 6	—	0.45	0.60	l/min	0	25	50	75	100	125	150	175	200	225	250	275	300	325	350	400	
Dm 8	—	0.60	0.85	H metres	9	8.5	8	7.5	6.8	6	5.2	4	2.6	1							
Dm 10	D 10	0.75	1		12	11.5	11	10.5	9.8	9	8.2	7.2	6	4.8	3.5	2					
Dm 15	D 15	1.1	1.5		15	14.5	14	13.2	12.5	11.8	11	10	9	8	6.8	5.4	3.5	2			
Dm 18	—	0.6	0.85		19.5	19	18.5	18	17.5	16.5	16	15	14	13	11.8	10.5	9.2	8	7	4	
Dm 20	D 20	0.75	1		17	16.5	15	13.5	12	10.7	9	7.7	5								
Dm 20	D 20	0.75	1		21	20	19	17.5	16	15	13.5	12	10								
Dm 30	D 30	1.1	1.5		27	26	25	23.5	22	21	19.5	18	16	14.5	13	11.5	10				

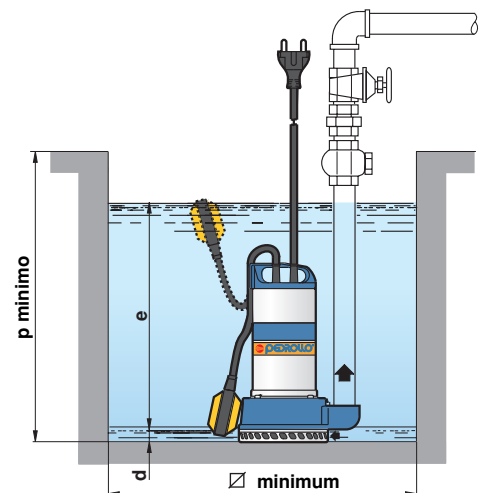
Q = Flow rate H = Total manometric head

Tolerance of the performance curves according to EN ISO 9906 App. A.

DIMENSIONS AND WEIGHTS



Typical single-phase installation



TYPE		PORT DN	DIMENSIONS mm								kg		
Single-phase	Three-phase		a	b	c	h	h1	d	e	p	Ø	1~	3~
Dm 6	—	1 1/2"	105	81	136	320	66	15	adjustable	500	500	10.6	-
Dm 8	—											11.9	-
Dm 10	D 10											13.0	11.9
Dm 15	D 15		15.2	14.1									
Dm 18	—		12.0	-									
Dm 20	D 20		13.0	11.9									
Dm 20	D 20	15.2	14.1										
Dm 30	D 30	110	90	140	340	80						15.2	14.1

VX

VORTEX submersible pumps for sewage water

VORTEX submersible pumps for professional use, particularly reliable with generous motor specification and hard-faced mechanical seal. The proven VORTEX system allows the clearing of dirty water containing suspended solids.



RANGE OF PERFORMANCE

Flow rate up to 500 l/min (30 m³/h)
Head up to 15 m

LIMITS OF USE

Depth up to 5 m
Liquid temperature up to + 40°C
Passage of suspended solid bodies up to Ø 50 mm
For continuous duty: minimum immersion 290 mm from pump base

CONSTRUCTION AND SAFETY STANDARDS

EN 60 335-1	EN 60034-1
IEC 335-1	IEC 34-1
CEI 61-150	CEI 2-3



INSTALLATION AND USE

THEY ARE RECOMMENDED FOR DOMESTIC, CIVIL AND INDUSTRIAL USE, IN APPLICATIONS WHERE THE WATER CONTAINS SUSPENDED SOLIDS WITH DIMENSIONS UP TO Ø 50 mm. THEIR USE IS RECOMMENDED FOR DRYING FLOODED AREAS SUCH AS CELLARS, UNDERGROUND CAR PARKS, CAR WASHING AREAS, OR DOMESTIC DRAINS AND FOR EMPTYING CESSPITS OR SEWAGE DISPOSAL. THESE PUMPS ARE OUTSTANDING IN THEIR RELIABILITY IN FIXED INSTALLATIONS WITH AUTOMATIC OPERATION.

GUARANTEE 2 YEARS subject to our general terms of sale.

CONSTRUCTION CHARACTERISTICS

- DELIVERY BODY: cast iron, with threaded port ISO 228/1.
- MOTOR CASING: stainless steel AISI 304.
- BASE: stainless steel AISI 304.
- IMPELLER: stainless steel AISI 304.
- MOTOR SHAFT: stainless steel EN 10088-3 - 1.4104.
- DOUBLE SEAL: mechanical seal silicon carbide - NBR, with oil barrier chamber and inner lip seal to protect the seal in the event of dry running.
- MOTOR: submersible asynchronous for continuous duty.
 - VXm: single-phase 220÷240 V - 50 Hz with capacitor and thermal overload protector.
 - VX: three-phase 380÷415 V - 50 Hz.
- INSULATION: class F. ● PROTECTION: IP 68.

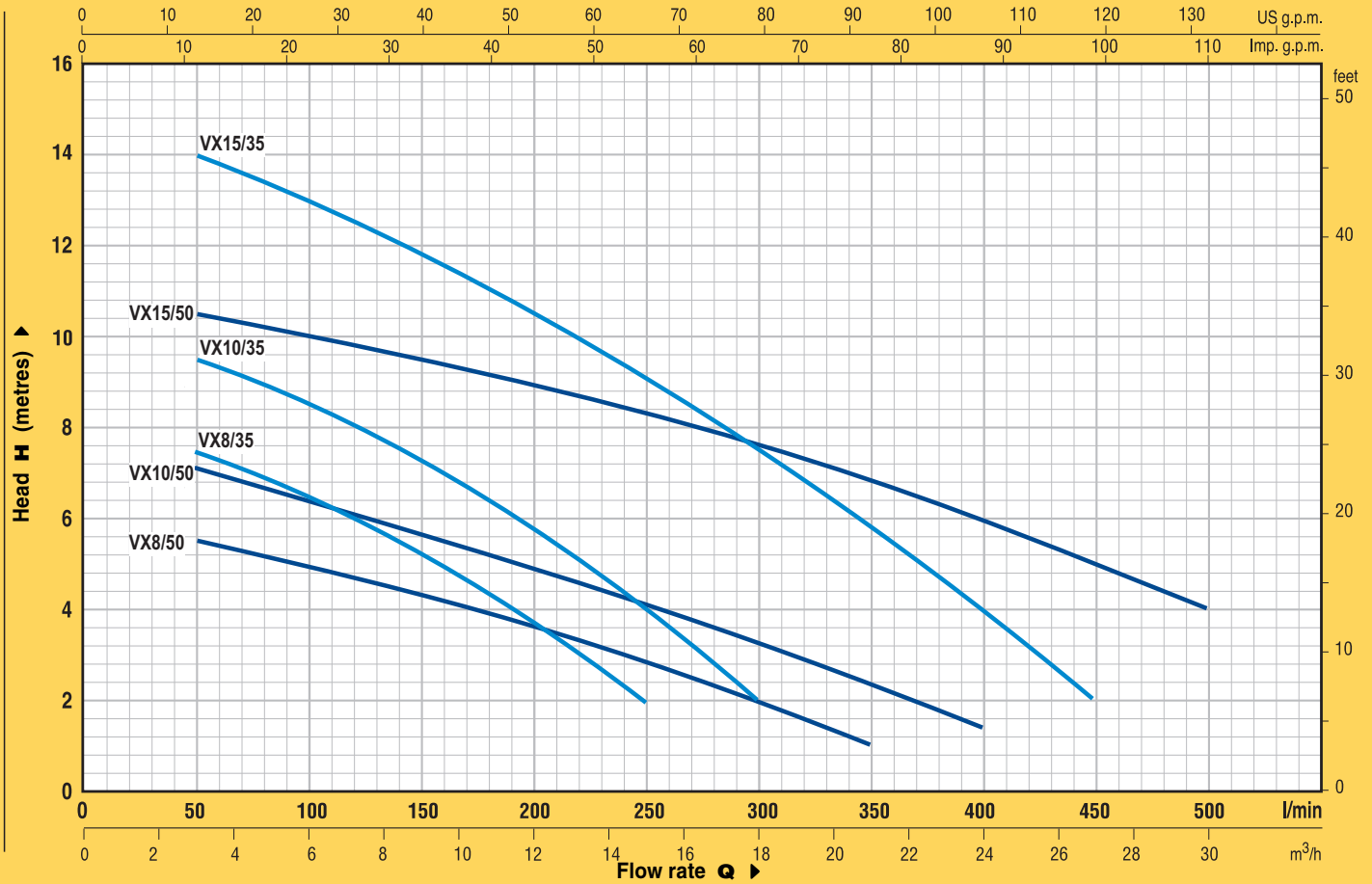
STANDARD FEATURES:

- VXm** (single-phase) Float switch.
Neoprene power cable "H07 RN-F"
length **5 metres** with Schuko plug.
- VX** (three-phase) Neoprene power cable "H07 RN-F"
length **5 metres**.

OPTIONS ON REQUEST

- ⇒ 10 metre power cable.
N.B. required for outdoor use to comply to standard EN 60335-2-41
- ⇒ control panel for three-phase pumps 1.1 kW
- ⇒ single-phase pumps without float switch
- ⇒ other voltages or frequency 60 Hz

CURVES AND PERFORMANCE DATA AT n= 2900 1/min

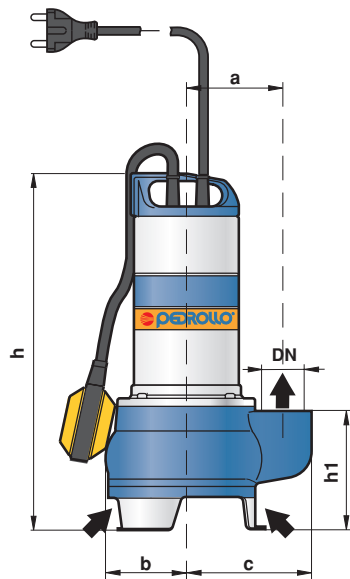


TYPE		POWER		Q	H metres												
Single-phase	Three-phase	kW	HP		m³/h	0	3	6	9	12	15	18	21	24	27	30	
				l/min	0	50	100	150	200	250	300	350	400	450	500		
VXm 8/35	—	0.60	0.85	H metres	8.4	7.5	6.5	5.2	3.7	2							
VXm 10/35	VX 10/35	0.75	1		10	9.5	8.5	7.2	5.8	4	2						
VXm 15/35	VX 15/35	1.1	1.5		15	14	13	11.8	10.5	9	7.5	6	4	2			
VXm 8/50	—	0.60	0.85		6	5.5	5	4.4	3.6	2.8	2	1					
VXm 10/50	VX 10/50	0.75	1		7.5	7	6.5	5.8	5	4	3.2	2.4	1.5				
VXm 15/50	VX 15/50	1.1	1.5		11	10.5	10	9.5	9	8.3	7.5	6.8	6	5	4		

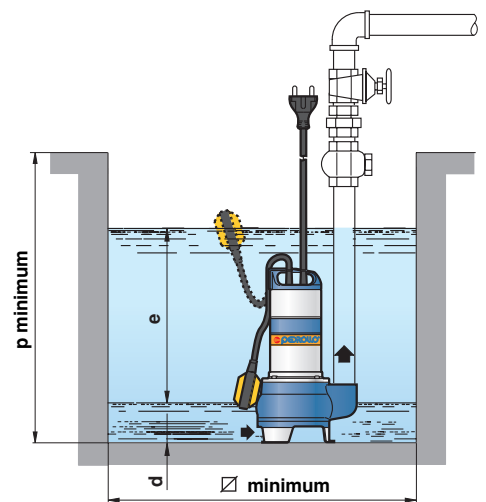
Q = Flow rate H = Total manometric head

Tolerance of the performance curves according to EN ISO 9906 App. A.

DIMENSIONS AND WEIGHTS



Typical single-phase installation



TYPE		PORT DN	passage of solid bodies	DIMENSIONS mm										kg	
Single-phase	Three-phase			a	b	c	h	h1	d	e	p	Ø	1~	3~	
VXm 8/35	—	1 1/2"	Ø 35 mm	105	87	137	380	123	40	55	adjustable	500	500	12.4	-
VXm 10/35	VX 10/35													13.5	12.1
VXm 15/35	VX 15/35													15.7	14.6
VXm 8/50	—	2"	Ø 50 mm	110	90	150	410	153	65	55	adjustable	500	500	13.4	-
VXm 10/50	VX 10/50													13.9	12.1
VXm 15/50	VX 15/50													16.1	15.0

DOUBLE-CHANNEL submersible pumps for professional use. Particularly efficient and reliable, with generous motor specification and hard-faced mechanical seal.



RANGE OF PERFORMANCE

Flow rate up to 800 l/min (48 m³/h)
Head up to 15 m

LIMITS OF USE

Depth up to 5 m
Liquid temperature up to + 40°C
Passage of suspended solid bodies up to Ø 50 mm
For continuous duty: minimum immersion 290 mm from pump base

CONSTRUCTION AND SAFETY STANDARDS

EN 60 335-1
IEC 335-1
CEI 61-150

EN 60034-1
IEC 34-1
CEI 2-3



INSTALLATION AND USE

MC SUBMERSIBLE PUMPS ARE RECOMMENDED FOR DRAINING DIRTY WATER AND SEWAGE IN THE DOMESTIC AND CIVIL SECTORS. THEY ARE EQUIPPED WITH A "DOUBLE-CHANNEL" STAINLESS STEEL IMPELLER WHICH ALLOWS THE PUMPING OF LIQUIDS CONTAINING SUSPENDED SOLID BODIES WITH DIMENSIONS UP TO Ø 50 mm AND SHORT FIBRES. THEY ARE IDEAL FOR PUMPING DRAINAGE WATER, SEWAGE OR WASTE WATER FOR A SINGLE DWELLING, AND FOR CLEARING SUFACE OR NUISANCE WATER, EVEN IF MUDDY. THESE PUMPS ARE OUTSTANDING IN THEIR RELIABILITY IN FIXED INSTALLATIONS WITH AUTOMATIC OPERATION.

GUARANTEE 2 YEARS subject to our general terms of sale.

CONSTRUCTION CHARACTERISTICS

- DELIVERY BODY: cast iron, with threaded port ISO 228/1.
- MOTOR CASING: stainless steel AISI 304.
- BASE: stainless steel AISI 304.
- IMPELLER: double-channel in stainless steel AISI 304.
- MOTOR SHAFT: stainless steel EN 10088-3 - 1.4104.
- DOUBLE SEAL: mechanical seal silicon carbide - NBR, with oil barrier chamber and inner lip seal to protect the seal in the event of dry running.
- MOTOR: submersible asynchronous for continuous duty.
MCm: single-phase 220÷240 V - 50 Hz with capacitor and thermal overload protector.
MC: three-phase 380÷415 V - 50 Hz.
- INSULATION: class F. ● PROTECTION: IP 68.

STANDARD FEATURES:

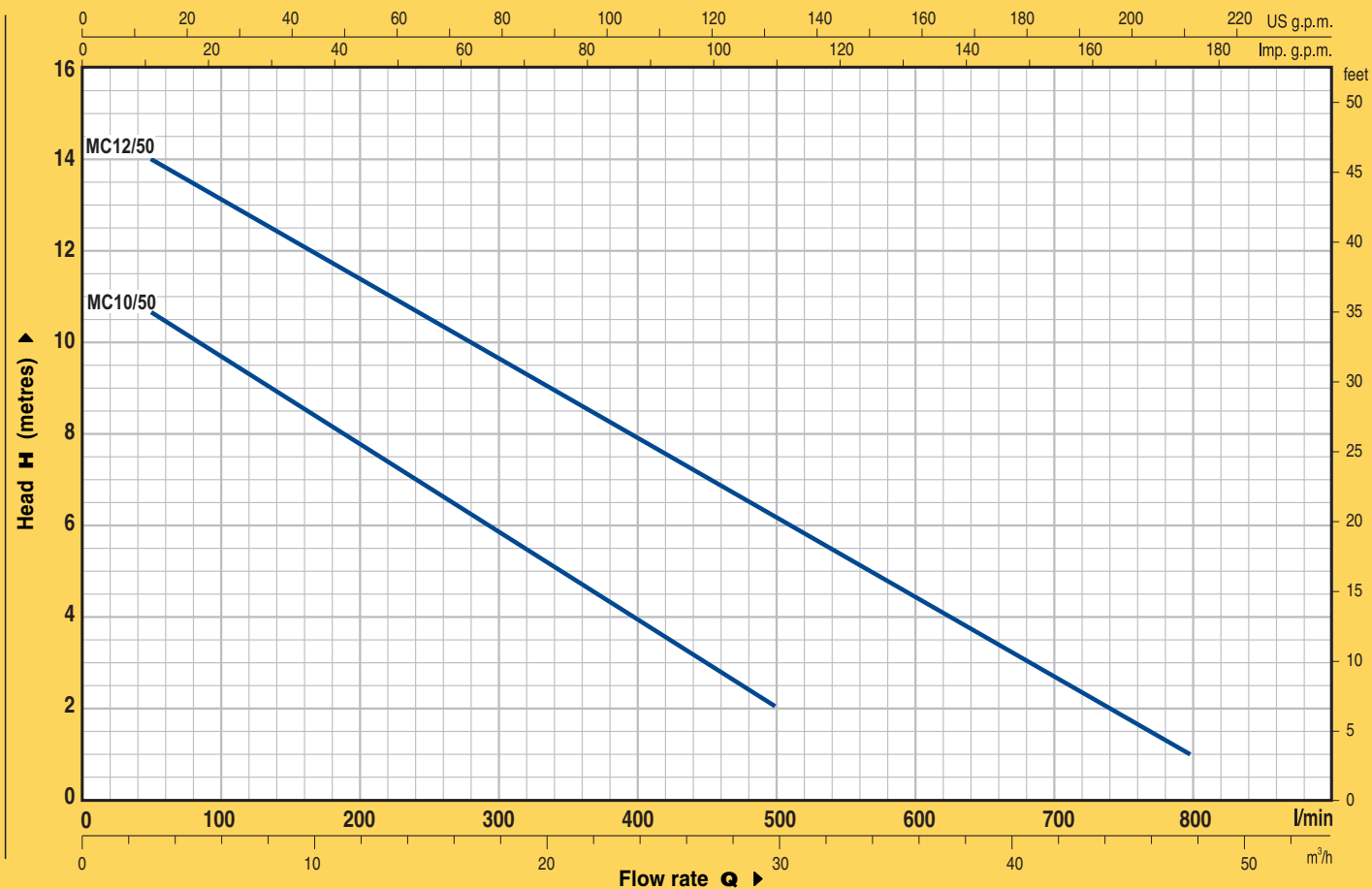
MCm (single-phase) Float switch.
Neoprene power cable "H07 RN-F"
length **5 metres** with Schuko plug.

MC (three-phase) Neoprene power cable "H07 RN-F"
length **5 metres**.

OPTIONS ON REQUEST

- ⇒ 10 metre power cable.
N.B. required for outdoor use to comply with standard EN 60335-2-41
- ⇒ control box for three-phase pumps 1.1 kW
- ⇒ single-phase pumps without float switch
- ⇒ other voltages or frequency 60 Hz

CURVES AND PERFORMANCE DATA AT n= 2900 1/min

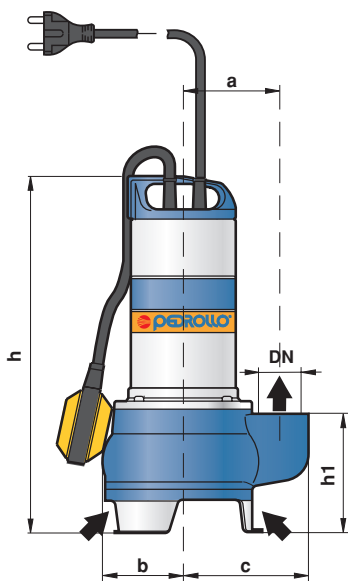


TYPE		POWER		Q	Flow rate														
Single-phase	Three-phase	kW	HP		m³/h	0	3	6	9	12	15	18	21	24	27	30	36	42	48
MCm 10/50	MC 10/50	0.75	1	l/min	0	50	100	150	200	250	300	350	400	450	500	600	700	800	
MCm 12/50	MC 12/50	1.1	1.5	H metres	12	10.7	9.7	8.7	7.8	6.8	5.9	5	4	3	2				
					15	14	13	12.3	11.5	10.5	9.7	8.8	8	7	6.2	4.5	2.7	1	

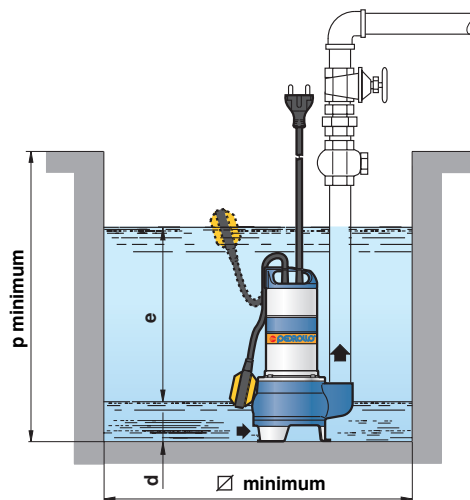
Q = Flow rate H = Total manometric head

Tolerance of the performance curves according to EN ISO 9906 App. A.

DIMENSIONS AND WEIGHTS



Typical single-phase installation



TYPE		PORT DN	passage of solid bodies	DIMENSIONS mm									kg	
Single-phase	Three-phase			a	b	c	h	h1	d	e	p	Ø	1~	3~
MCm 10/50	MC 10/50	2"	Ø 50 mm	110	90	150	410	153	55	adjustable	500	500	14.3	13.3
MCm 12/50	MC 12/50			120	97	163	430	158	65				16.5	14.3

VORTEX stainless steel submersible pumps for professional use, particularly reliable with generous motor specification and hard-faced mechanical seal. The proven VORTEX system allows the clearing of dirty water containing suspended solids.



RANGE OF PERFORMANCE

Flow rate up to 400 l/min (24 m³/h)
Head up to 10 m

LIMITS OF USE

Depth up to 5 m
Liquid temperature up to + 40°C
Passage of suspended solid bodies up to Ø 50 mm
For continuous duty: minimum immersion 280 mm from pump base.

CONSTRUCTION AND SAFETY STANDARDS

EN 60 335-1	EN 60034-1
IEC 335-1	IEC 34-1
CEI 61-150	CEI 2-3



INSTALLATION AND USE

THEY ARE RECOMMENDED FOR DRAINING WASTE WATER IN THE DOMESTIC, CIVIL AND INDUSTRIAL SECTORS, IN APPLICATIONS WHERE THE WATER CONTAINS SUSPENDED SOLIDS WITH DIMENSIONS UP TO Ø 50 mm. THEIR USE IS RECOMMENDED FOR DRYING FLOODED AREAS SUCH AS CELLARS, UNDERGROUND CAR PARKS, CAR WASHING AREAS AND FOR EMPTYING CESSPITS OR SEWAGE DISPOSAL.

THESE PUMPS ARE OUTSTANDING IN THEIR RELIABILITY IN FIXED INSTALLATIONS WITH AUTOMATIC OPERATION.

GUARANTEE 2 YEARS subject to our general terms of sale.

CONSTRUCTION CHARACTERISTICS

- **DELIVERY BODY:** stainless steel AISI 304, with threaded port ISO 228/1.
- **MOTOR CASING AND BASE:** stainless steel AISI 304.
- **IMPELLER:** stainless steel AISI 304.
- **MOTOR SHAFT:** stainless steel AISI 316.
- **DOUBLE SEAL:** mechanical seal silicon carbide - NBR - stainless steel AISI 316, with oil barrier chamber and inner lip seal to protect the seal in the event of dry running.
- **MOTOR:** submersible asynchronous for continuous duty.
VXm-I: single-phase 220÷240 V - 50 Hz with capacitor and thermal overload protector .
VX-I: three-phase 380÷415 V - 50 Hz.
- **INSULATION:** class F. ● **PROTECTION:** IP 68.

STANDARD FEATURES:

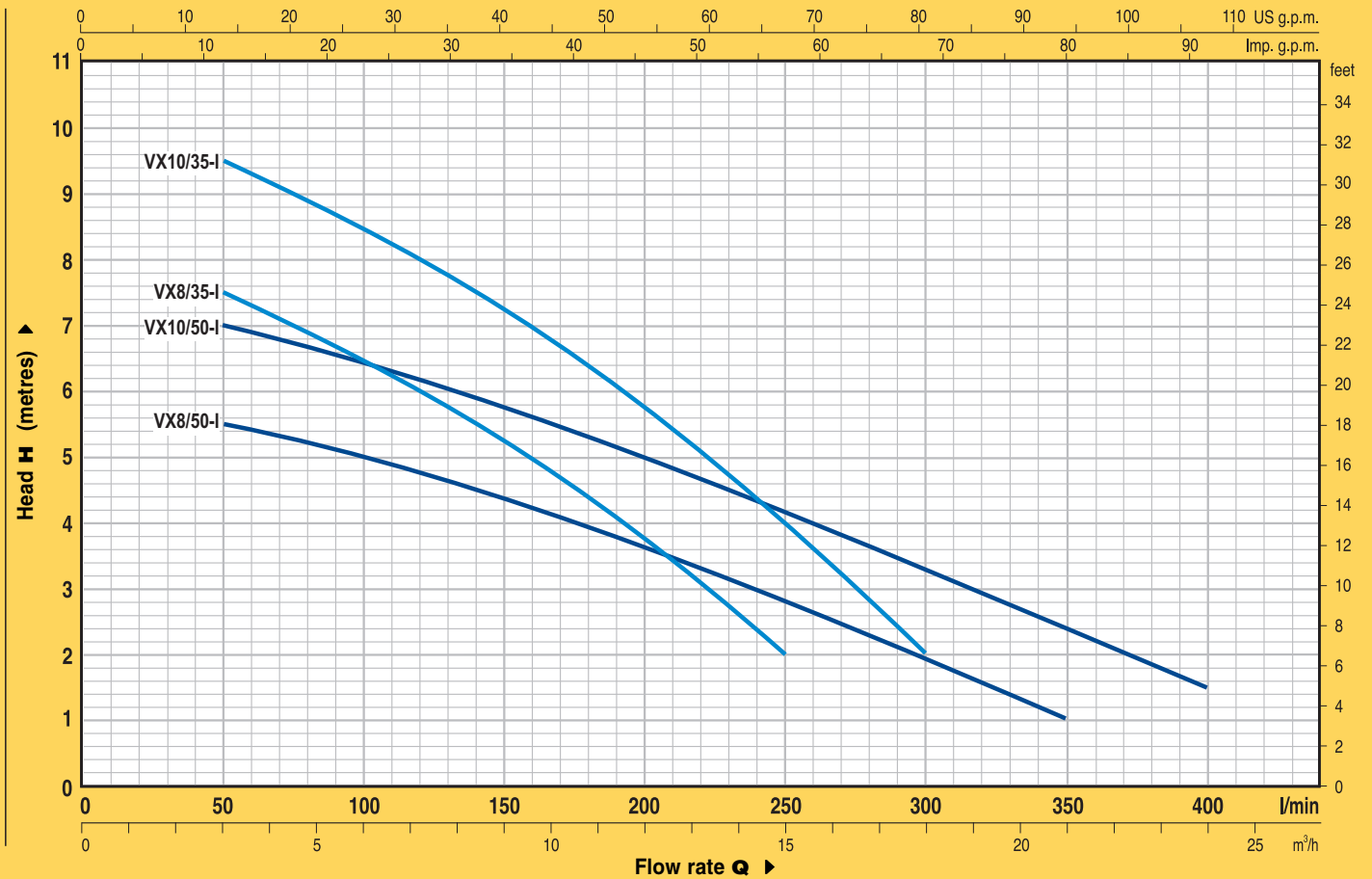
VXm-I (single-phase) Flow switch.
Neoprene power cable "H07 RN-F"
length **5 metres with** Schuko plug.

VX-I (three-phase) Neoprene power cable "H07 RN-F"
length **5 metres.**

OPTIONS ON REQUEST

- ⇒ 10 metre power cable.
- ⇒ N.B. required for outdoor use to comply with standard EN 60335-2-41
- ⇒ single-phase pumps without float switch
- ⇒ other voltages or frequency 60 Hz

CURVES AND PERFORMANCE DATA AT n= 2900 1/min

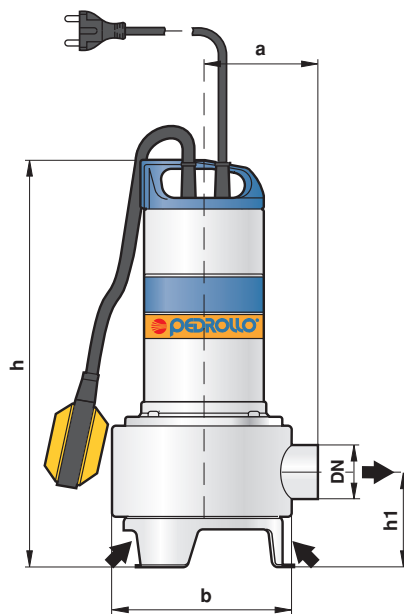


TYPE		POWER		Q	H metres									
Single-phase	Three-phase	kW	HP		m³/h	0	3	6	9	12	15	18	21	24
				l/min	0	50	100	150	200	250	300	350	400	
VXm 8/35-I	—	0.60	0.85	H metres	8.4	7.5	6.5	5.2	3.7	2				
VXm 10/35-I	VX 10/35-I	0.75	1		10	9.5	8.5	7.2	5.8	4	2			
VXm 8/50-I	—	0.60	0.85		6	5.5	5	4.4	3.6	2.8	2	1		
VXm 10/50-I	VX 10/50-I	0.75	1		7.5	7	6.5	5.8	5	4	3.2	2.4	1.5	

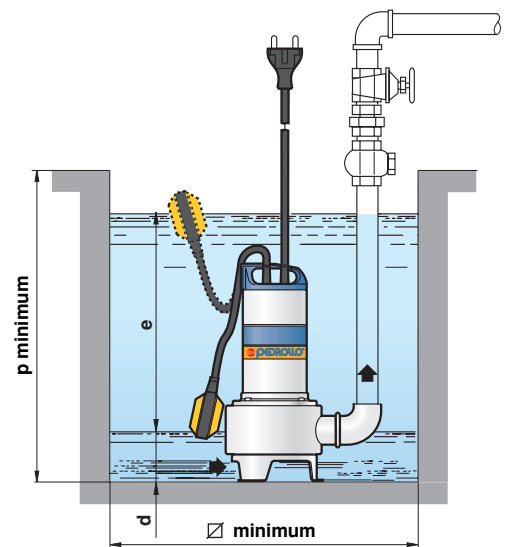
Q = Flow rate H = Total manometric head

Tolerance of the performance curves according to EN ISO 9906 App. A.

DIMENSIONS AND WEIGHTS



Typical single-phase installation



TYPE		PORT DN	passage of solid bodies	DIMENSIONS mm								kg	
Single-phase	Three-phase			a	b	h	h1	d	e	p	Ø	1~	3~
VXm 8/35-I	—	1 1/2"	Ø 35 mm	108	166	380	87	40	adjustable	500	500	9.7	-
VXm 10/35-I	VX 10/35-I			118		410	108	55				9.6	9.3
VXm 8/50-I	—	2"	Ø 50 mm	118	166	410	108	55	adjustable	500	500	12.8	-
VXm 10/50-I	VX 10/50-I			118		410	108	55				10.7	9.7

DOUBLE-CHANNEL stainless steel submersible pumps for professional use. Particularly efficient and reliable, with generous motor specification and hard-faced mechanical seal.



RANGE OF PERFORMANCE

Flow rate up to 800 l/min (48 m³/h)
Head up to 15 m

LIMITS OF USE

Depth up to 5 m
Liquid temperature up to + 40°C
Passage of suspended solid bodies up to Ø 50 mm
For continuous duty: minimum immersion 280 mm from pump base

CONSTRUCTION AND SAFETY STANDARDS

EN 60 335-1
IEC 335-1
CEI 61-150

EN 60034-1
IEC 34-1
CEI 2-3



INSTALLATION AND USE

MC-I SUBMERSIBLE PUMPS ARE RECOMMENDED FOR DRAINING DIRTY WATER AND SEWAGE IN THE DOMESTIC AND CIVIL SECTORS. THEY ARE EQUIPPED WITH A "DOUBLE-CHANNEL" STAINLESS STEEL IMPELLER WHICH ALLOWS THE PUMPING OF LIQUIDS CONTAINING SUSPENDED SOLID BODIES WITH DIMENSIONS UP TO Ø 50 mm AND SHORT FIBRES. THEY ARE IDEAL FOR PUMPING DRAINAGE WATER, SEWAGE OR WASTE WATER FOR A SINGLE DWELLING, AND FOR CLEARING SUFACE OR NUISANCE WATER, EVEN IF MUDDY. THESE PUMPS ARE OUTSTANDING IN THEIR RELIABILITY IN FIXED INSTALLATIONS WITH AUTOMATIC OPERATION.

GUARANTEE 2 YEARS subject to our general terms of sale.

CONSTRUCTION CHARACTERISTICS

- **DELIVERY BODY:** stainless steel AISI 304, with threaded port ISO 228/1.
- **MOTOR CASING AND BASE:** stainless steel AISI 304.
- **IMPELLER:** double-channel, in stainless steel AISI 304.
- **MOTOR SHAFT:** stainless steel AISI 316.
- **DOUBLE SEAL:** mechanical seal silicon carbide - NBR - stainless steel AISI 316, with oil barrier chamber and inner lip seal to protect the seal in the event of dry running. .
- **MOTOR:** submersible asynchronous for continuous duty.
MCm-I: single-phase 220÷240 V - 50 Hz with capacitor and thermal overload protector.
MC-I: three-phase 380÷415V - 50 Hz.
- **INSULACION:** class F. ● **PROTECTION:** IP 68.

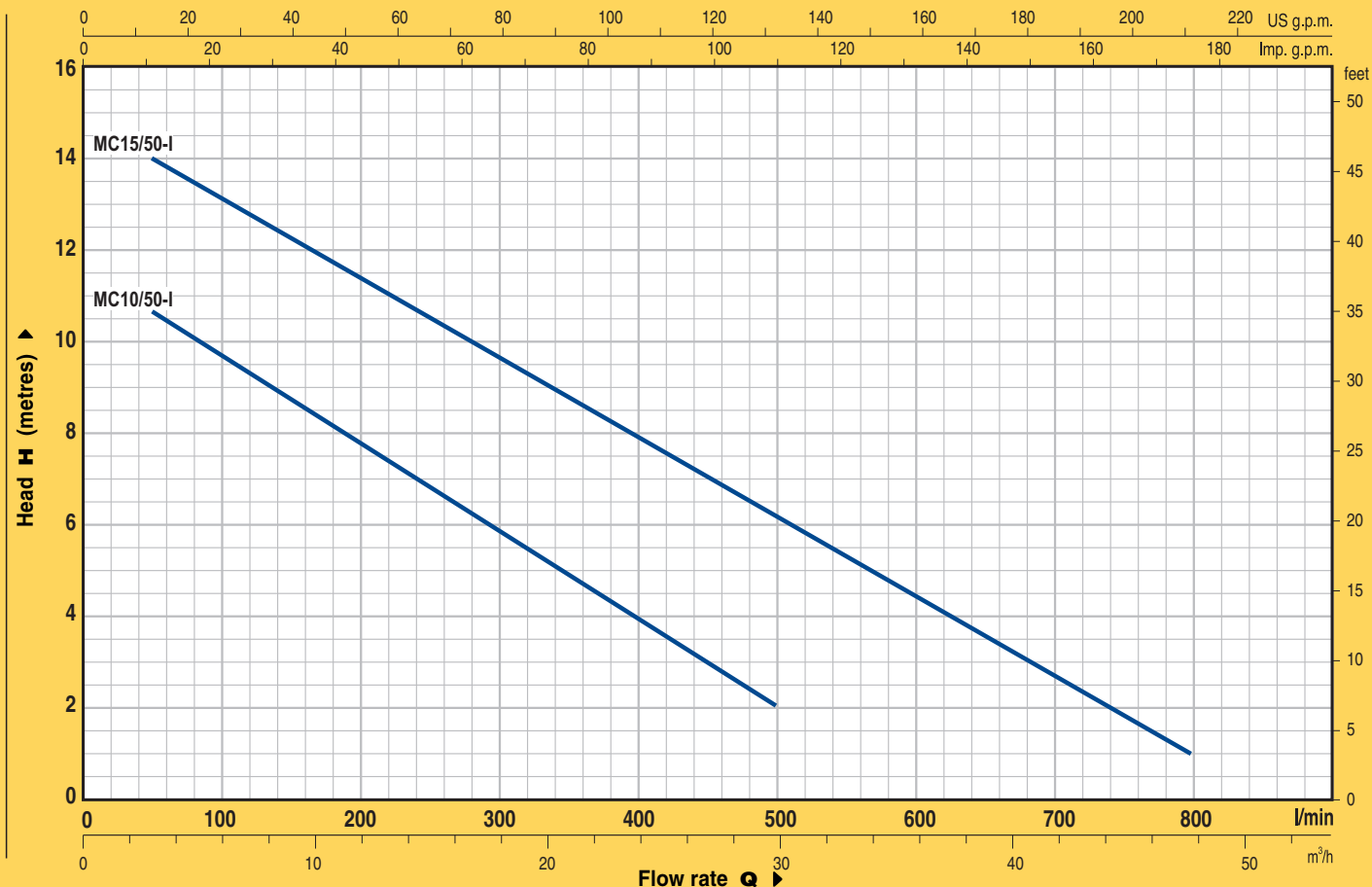
STANDARD FEATURES:

- MCm-I** (single-phase) Float switch.
Neoprene power cable "H07 RN-F"
length **5 metres with** Schuko plug.
- MC-I** (three-phase) Neoprene power cable "H07 RN-F"
length **5 metres.**

OPTIONS ON REQUEST

- ⇒ 10 metre power cable.
N.B. required for outdoor use to comply with standard EN 60335-2-41
- ⇒ control box for three-phase pumps 1.1 kW
- ⇒ single-phase pumps without float switch
- ⇒ other voltages or frequency 60 Hz

CURVES AND PERFORMANCE DATA AT n= 2900 1/min

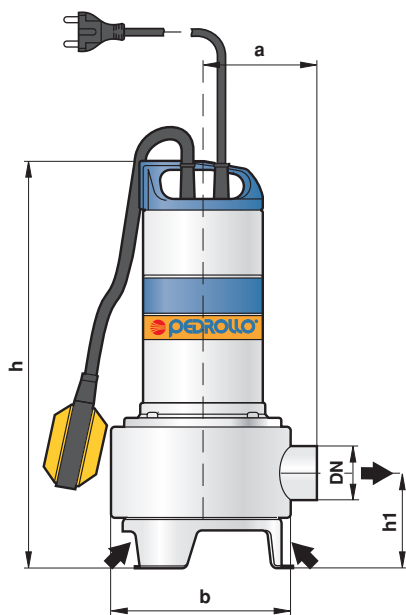


TYPE		POWER		Q	Flow rate														
Single-phase	Three-phase	kW	HP		m³/h	0	3	6	9	12	15	18	21	24	27	30	36	42	48
MCm 10/50-I	MC 10/50-I	0.75	1	l/min	0	50	100	150	200	250	300	350	400	450	500	600	700	800	
—	MC 15/50-I	1.1	1.5	H metres	12	10.7	9.7	8.7	7.8	6.8	5.9	5	4	3	2	—	—	—	
—	—	—	—	—	15	14	13	12.3	11.5	10.5	9.7	8.8	8	7	6.2	4.5	2.7	1	

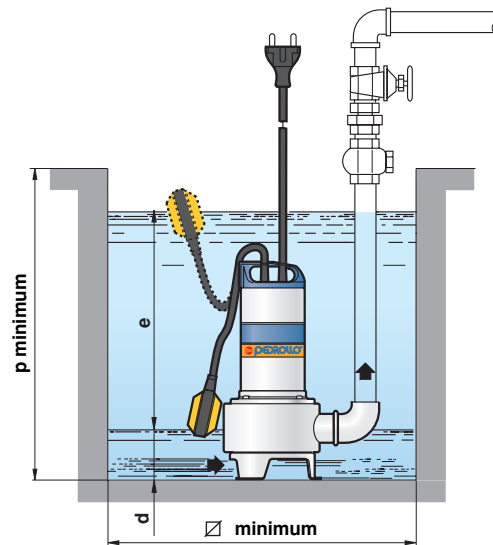
Q = Flow rate H = Total manometric head

Tolerance of the performance curves according to EN ISO 9906 App. A.

DIMENSIONS AND WEIGHTS



Typical single-phase installation



TYPE		PORT DN	passage of solid bodies	DIMENSIONS mm								kg	
Single-phase	Three-phase			a	b	h	h1	d	e	p	∅	1~	3~
MCm 10/50-I	MC 10/50-I	2"	∅ 50 mm	118	166	410	109	55	adjustable	500	500	12.8	9.8
—	MC 15/50-I											-	12.8



DRAINAGE submersible pumps for clear or slightly dirty water

DRAINAGE submersible pumps in cast iron, particularly robust and reliable. Ideal for fixed installations.



RANGE OF PERFORMANCE

Flow rate up to 400 l/min (24 m³/h)
Head up to 27 m

LIMITS OF USE

Depth up to 10 m
Liquid temperature up to + 40°C
Passage of suspended solid bodies up to Ø 10 mm
Drainage level to 15 mm from the bottom
For continuous duty: minimum immersion 210 mm from pump base

CONSTRUCTION AND SAFETY STANDARDS

EN 60034-1
IEC 34-1
CEI 2-3



INSTALLATION AND USE

DC SUBMERSIBLE PUMPS, MADE OF EXCEPTIONALLY STURDY HEAVY-GAUGE CAST IRON, RESISTANT TO ABRASION AND LONG-LASTING, ARE RECOMMENDED FOR DRAINING CLEAR OR SLIGHTLY DIRTY WATER AND FOR DISPOSING OF NON-SEWAGE WASTE WATER; THEY ARE OUTSTANDING BOTH IN THEIR STURDINESS AND THEIR RELIABILITY IN FIXED INSTALLATIONS WITH AUTOMATIC OPERATION.

GUARANTEE 2 YEARS subject to our general terms of sale.

CONSTRUCTION CHARACTERISTICS

- **PUMP BODY:** cast iron, with threaded port ISO 228/1.
- **MOTOR CASING:** cast iron.
- **SUCTION GRID:** stainless steel AISI 304.
- **IMPELLER:** cast iron.
- **MOTOR SHAFT:** stainless steel EN 10088-3 - 1.4104.
- **DOUBLE SEAL:** mechanical seal silicon carbide - NBR, with oil barrier chamber and inner lip seal to protect the seal in the event of dry running.
- **MOTOR:** submersible asynchronous for continuous duty.
DCm: single-phase 220÷240 V - 50 Hz with thermal overload protector.
DC: three-phase 380÷415 V - 50 Hz.
- **INSULATION:** class F. ● **PROTECTION:** IP 68.

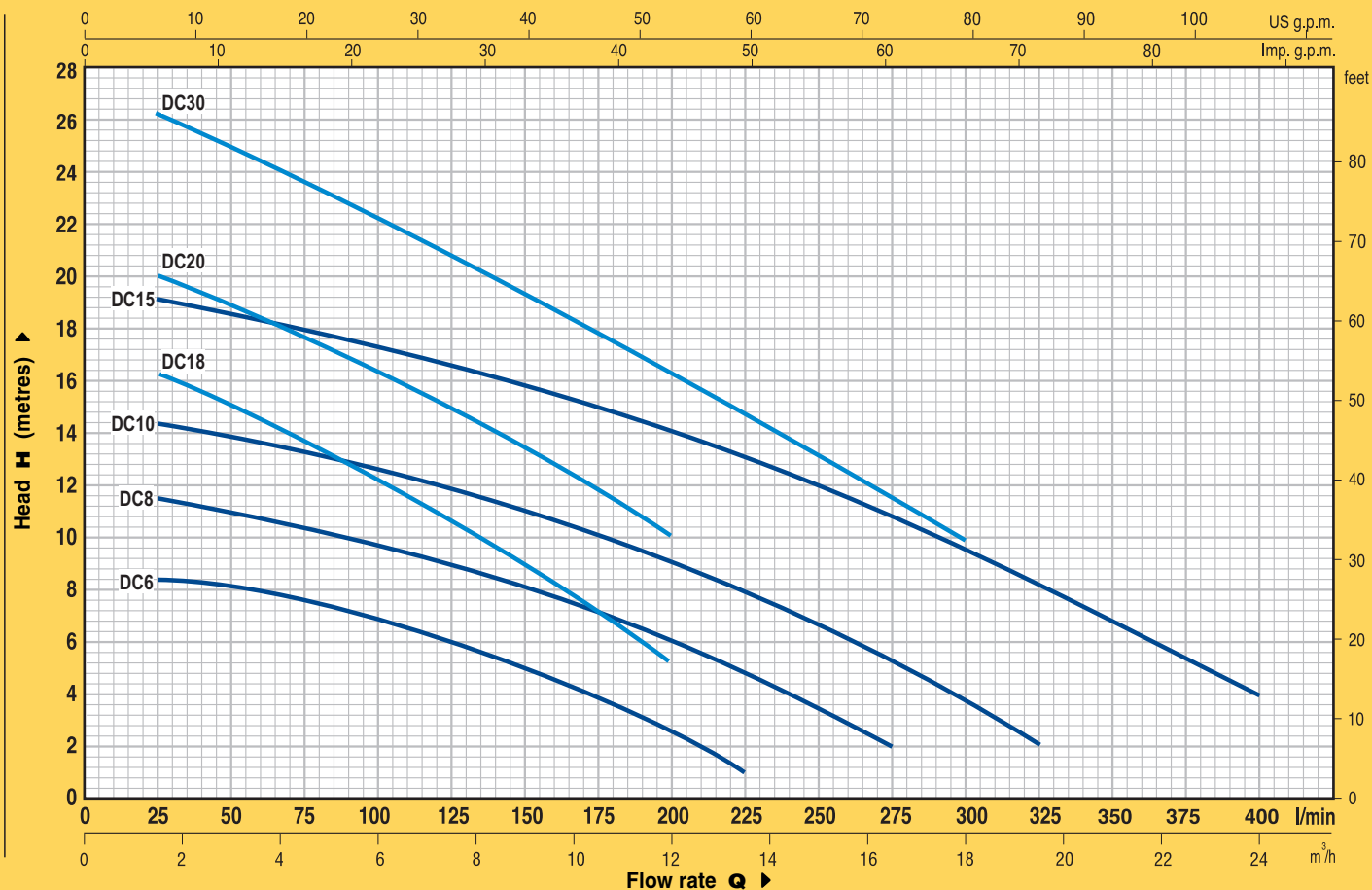
STANDARD FEATURES:

- DCm** (single-phase) Float switch.
Neoprene power cable "H07 RN-F"
length **10 metres** with Schuko plug.
Electric panel with capacitor.
- DC** (three-phase) Neoprene power cable "H07 RN-F"
length **10 metres**.

OPTIONS ON REQUEST

- ⇒ control box for three-phase pumps 1.1 kW
- ⇒ single-phase pumps without float switch
- ⇒ other voltages or frequency 60 Hz

CURVES AND PERFORMANCE DATA AT n= 2900 1/min

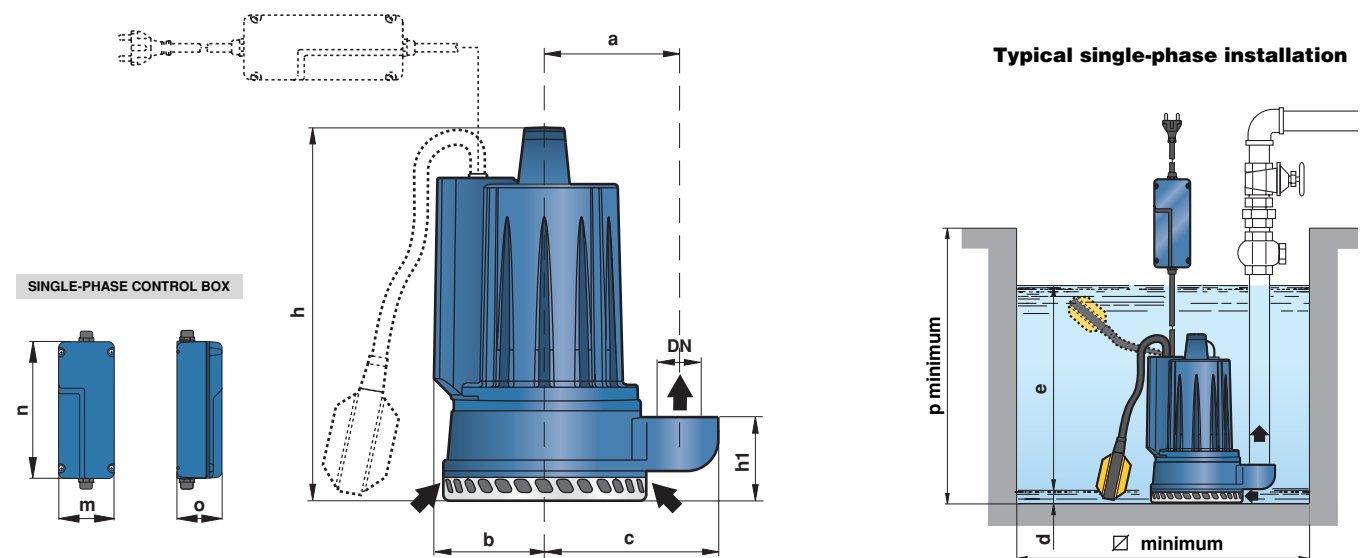


TYPE		POWER		Q	m³/h															
Single-phase	Three-phase	kW	HP		0	1.5	3.0	4.5	6.0	7.5	9.0	10.5	12.0	13.5	15.0	16.5	18.0	19.5	21.0	24.0
DCm 6	—	0.45	0.60	0	25	50	75	100	125	150	175	200	225	250	275	300	325	350	400	
DCm 8	—	0.60	0.85	H metres	9	8.5	8	7.5	6.8	6	5.2	4	2.6	1						
DCm 10	DC 10	0.75	1		12	11.5	11	10.5	9.8	9	8.2	7.2	6	4.8	3.5	2				
DCm 15	DC 15	1.1	1.5		15	14.5	14	13.2	12.5	11.8	11	10	9	8	6.8	5.4	3.5	2		
DCm 18	—	0.6	0.85		19.5	19	18.5	18	17.5	16.5	16	15	14	13	11.8	10.5	9.2	8	7	4
DCm 20	DC 20	0.75	1		17	16.5	15	13.5	12	10.7	9	7.7	5							
DCm 20	DC 20	0.75	1		21	20	19	17.5	16	15	13.5	12	10							
DCm 30	DC 30	1.1	1.5		27	26	25	23.5	22	21	19.5	18	16	14.5	13	11.5	10			

Q = Flow rate H = Total manometric head

Tolerance of the performance curves according to EN ISO 9906 App. A.

DIMENSIONS AND WEIGHTS



TYPE		PORT DN	DIMENSIONS mm											kg		
Single-phase	Three-phase		a	b	c	h	h1	m	n	o	d	e	p	Ø	1~	3~
DCm 6	—	1 1/2"	105	90	136	285	66	81	200	66	15	adjustable	500	500	14.8	3~
DCm 8	—				16.1	-										
DCm 10	DC10				17.1	16.1										
DCm 15	DC15		19.3	18.2												
DCm 18	—		16.1	-												
DCm 20	DC 20		17.1	16.1												
DCm 30	DC 30		19.3	18.2												

VORTEX submersible pumps made of cast iron, particularly robust and reliable, ideal for fixed installations. The proven VORTEX system allows the clearing of dirty water containing suspended solids.



RANGE OF PERFORMANCE

Flow rate up to 500 l/min (30 m³/h)
Head up to 15 m

LIMITS OF USE

Depth up to 10 m
Liquid temperature up to + 40°C
Passage of solid bodies max Ø 35 mm for VXC/35
Passage of solid bodies max Ø 45 mm for VXC/45
For continuous duty: minimum immersion 290 mm from pump base

CONSTRUCTION AND SAFETY STANDARDS

EN 60034-1
IEC 34-1
CEI 2-3



INSTALLATION AND USE

THE PUMPS IN THE **VXC SERIES ARE MADE OF EXCEPTIONALLY ROBUST HEAVY-GAUGE CAST IRON, RESISTANT TO ABRASION AND ARE EQUIPPED WITH A VORTEX TYPE IMPELLER. THEY ARE RECOMMENDED FOR DRAINING WASTE WATER CONTAINING SUSPENDED SOLID BODIES, SEWAGE AND WATER MIXED WITH MUD.**

GUARANTEE 2 YEARS subject to our general terms of sale.

CONSTRUCTION CHARACTERISTICS

- **PUMP BODY:** cast iron, with threaded port ISO 228/1.
- **MOTOR CASING AND BASE:** cast iron.
- **IMPELLER:** stainless steel AISI 304.
- **MOTOR SHAFT:** stainless steel EN 10088-3 - 1.4104.
- **DOUBLE SEAL:** mechanical seal silicon carbide - NBR, with oil barrier chamber and inner lip seal to protect the seal in the event of dry running.
- **MOTOR:** submersible asynchronous for continuous duty.
VXCm: single-phase 220÷240 V - 50 Hz with thermal overload protector.
VXC: three-phase 380÷415 V - 50 Hz.
- **INSULATION:** class F. ● **PROTECTION:** IP 68.

STANDARD FEATURES:

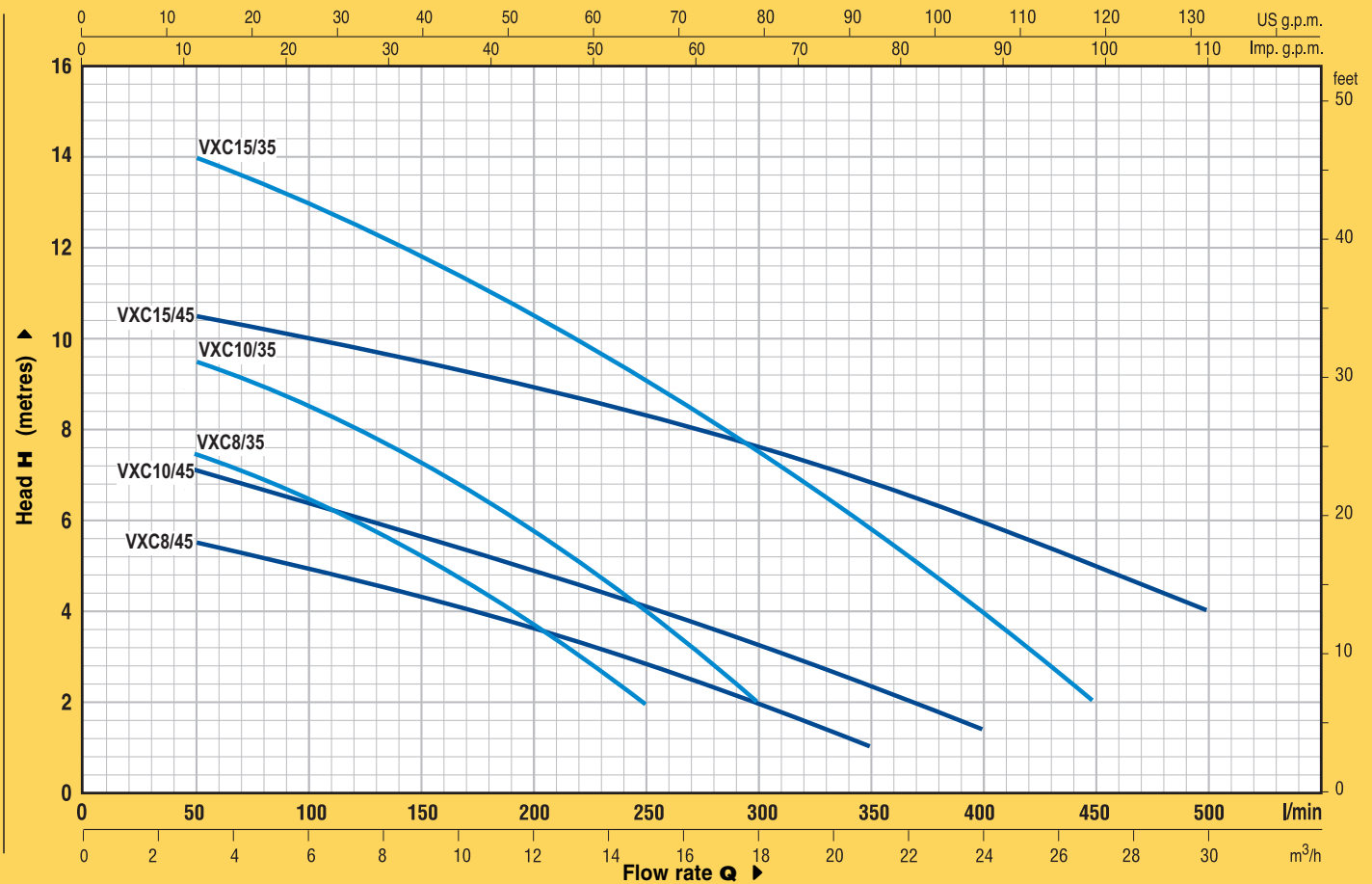
VXCm (single-phase) Float switch.
Neoprene power cable "H07 RN-F"
length **10 metres** with Schuko plug.
Control box with capacitor (Protection IP 64).

VXC (three-phase) Neoprene power cable "H07 RN-F"
length **10 metres**.

OPTIONS ON REQUEST

- ⇒ control box for three-phase pumps 1.1 kW
- ⇒ single-phase pumps without float switch
- ⇒ other voltages or frequency 60 Hz

CURVES AND PERFORMANCE DATA AT n= 2900 1/min

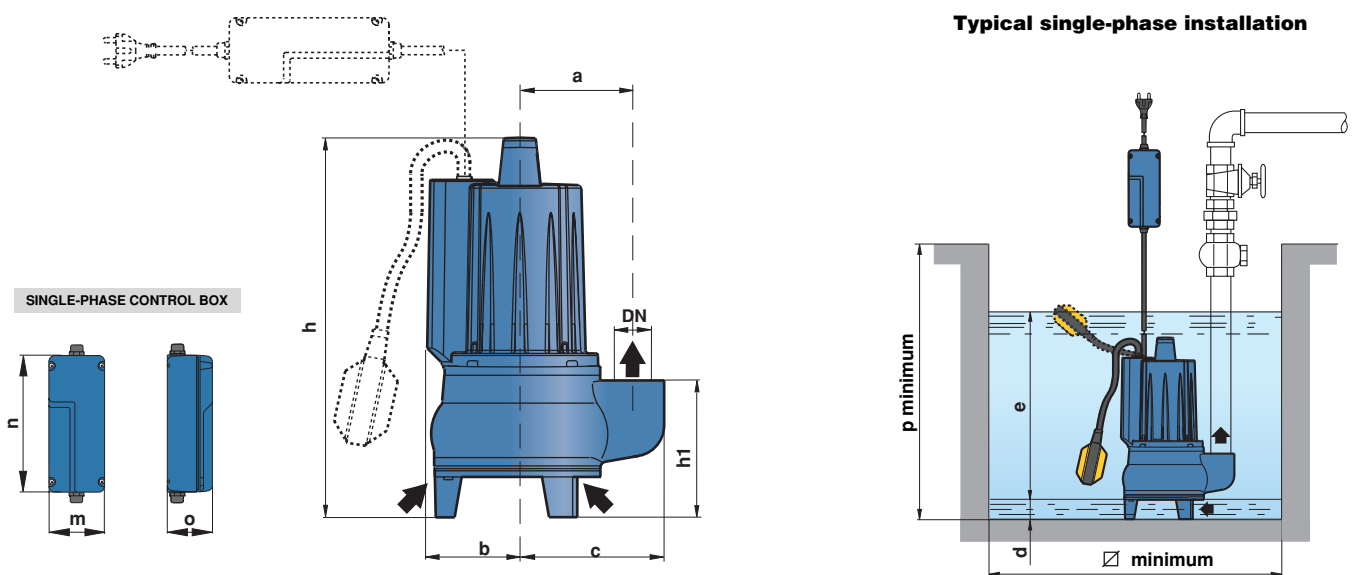


TYPE		POWER		Q	H metres												
Single-phase	Three-phase	kW	HP		m³/h	0	3	6	9	12	15	18	21	24	27	30	
VXCm 8/35	—	0.60	0.85	0	8.4	7.5	6.5	5.2	3.7	2							
VXCm 10/35	VXC 10/35	0.75	1	3	10	9.5	8.5	7.2	5.8	4	2						
VXCm 15/35	VXC 15/35	1.1	1.5	6	15	14	13	11.8	10.5	9	7.5	6	4	2			
VXCm 8/45	—	0.60	0.85	9	6	5.5	5	4.4	3.6	2.8	2	1					
VXCm 10/45	VXC 10/45	0.75	1	12	7.5	7	6.5	5.8	5	4	3.2	2.4	1.5				
VXCm 15/45	VXC 15/45	1.1	1.5	15	11	10.5	10	9.5	9	8.3	7.5	6.8	6	5	4		

Q = Flow rate H = Total manometric head

Tolerance of the performance curves according to EN ISO 9906 App. A.

DIMENSIONS AND WEIGHTS



TYPE		PORT DN	passage of solid bodies	DIMENSIONS mm											kg		
Single-phase	Three-phase			a	b	c	h	h1	m	n	o	d	e	p	∅	1~	3~
VXCm 8/35	—	1 1/2"	∅ 35 mm	105	90	137	350	123	81	200	66	40	adjustable	500	500	17.0	-
VXCm 10/35	VXC 10/35			92	143	370	133	18.7								17.1	
VXCm 15/35	VXC 15/35			90	150	375	148	20.9								19.8	
VXCm 8/45	—	2"	∅ 45 mm	110	90	150	375	148	81	200	66	55	adjustable	500	500	18.0	-
VXCm 10/45	VXC 10/45			120	97	163	395	153								19.7	18.0
VXCm 15/45	VXC 15/45			120	97	163	395	153								21.9	20.8



DOUBLE-CHANNEL submersible pumps for sewage water

DOUBLE-CHANNEL cast iron submersible pumps for professional use. Particularly efficient and reliable, with generous motor specification and hard-faced mechanical seal.



RANGE OF PERFORMANCE

Flow rate up to 800 l/min (48 m³/h)

Head up to 15 m

LIMITS OF USE

Depth up to 10 m

Liquid temperature up to + 40°C

Passage of suspended solid bodies up to Ø 45 mm

For continuous duty: minimum immersion 290 mm from pump base

CONSTRUCTION AND SAFETY STANDARDS

EN 60034-1

IEC 34-1

CEI 2-3



INSTALLATION AND USE

THE PUMPS IN THE MC SERIES ARE MADE OF EXCEPTIONALLY ROBUST HEAVY-GAUGE CAST IRON, RESISTANT TO ABRASION AND LONG-LASTING. THEY ARE EQUIPPED WITH A **DOUBLE-CHANNEL IMPELLER** WHICH ALLOWS THE DRAINAGE OF LIQUIDS CONTAINING SUSPENDED SOLID BODIES WITH DIMENSIONS UP TO Ø 45 mm AND SHORT FIBRES. THEY ARE IDEAL FOR PUMPING DRAINAGE WATER AND SEWAGE, WASTE WATER INCLUDING WATER MIXED WITH MUD, GROUNDWATER AND SURFACE WATER IN APPLICATIONS SUCH AS: CONDOMINIUMS, MULTI-STOREY AND UNDERGROUND CAR PARKS, WASHING AREAS AND INDUSTRY.

GUARANTEE 2 YEARS subject to our general terms of sale.

CONSTRUCTION CHARACTERISTICS

- **PUMP BODY:** cast iron, with threaded port ISO 228/1.
- **MOTOR CASING AND BASE:** cast iron.
- **IMPELLER:** double-channel, in stainless steel AISI 304.
- **MOTOR SHAFT:** stainless steel EN 10088-3 - 1.4104.
- **DOUBLE SEAL:** mechanical seal silicon carbide - NBR, with oil barrier chamber and inner lip seal to protect the seal in the event of dry running.
- **MOTOR:** submersible asynchronous for continuous duty.
MCm: single-phase 220÷240 V - 50 Hz with thermal overload protector.
MC: three-phase 380÷415 V - 50 Hz.
- **INSULATION:** class F. ● **PROTECTION:** IP 68.

STANDARD FEATURES:

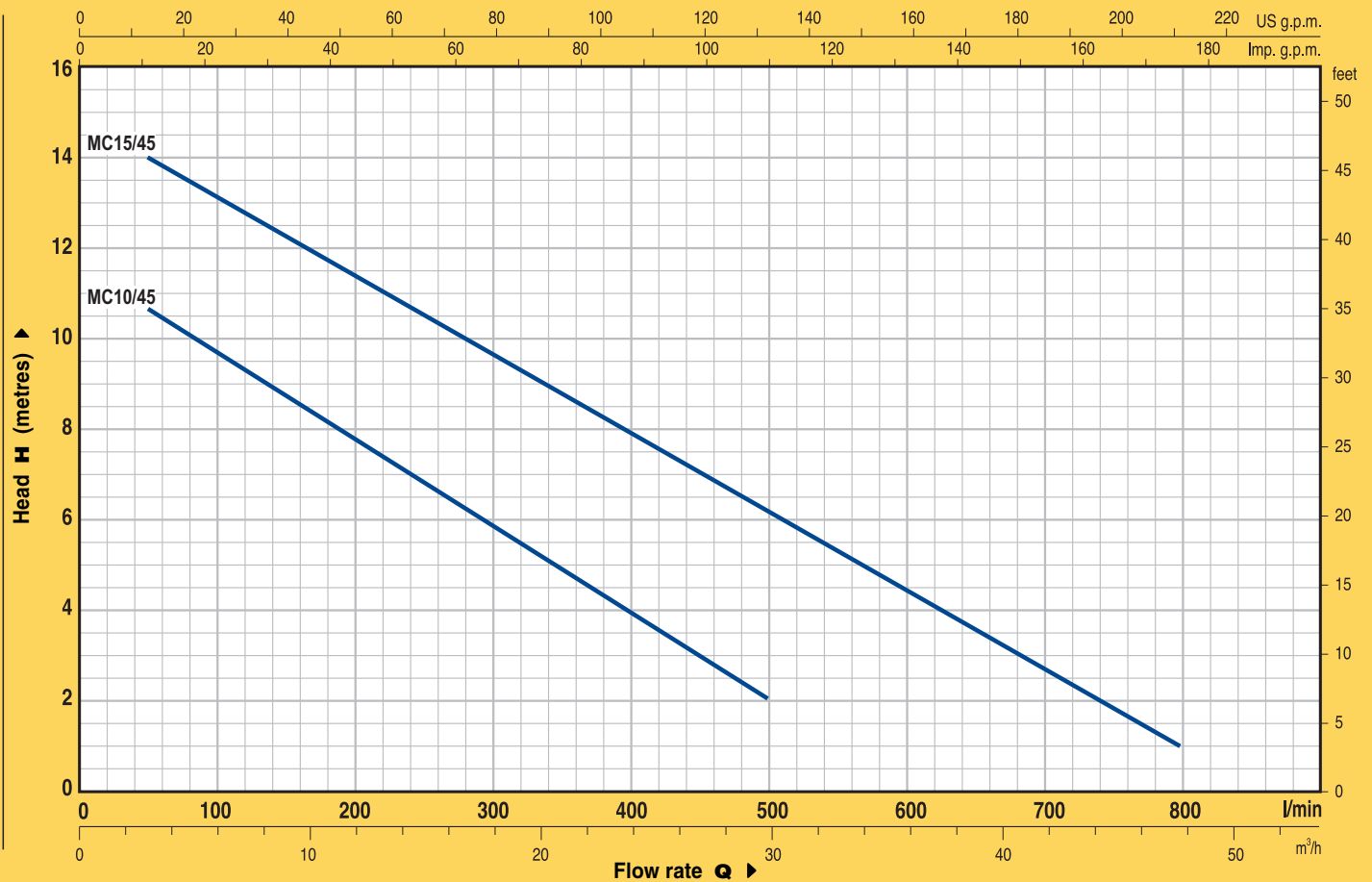
MCm (single-phase) Float switch.
 Neoprene power cable "H07 RN-F"
 length **10 metres** with Schuko plug.
 Control box with condenser.

MC (three-phase) Neoprene power cable "H07 RN-F"
 length **10 metres**.

OPTIONS ON REQUEST

- ⇒ control box for three-phase pumps 1.1 kW
- ⇒ single-phase pumps without float switch
- ⇒ other voltages or frequency 60 Hz

CURVES AND PERFORMANCE DATA AT n= 2900 1/min

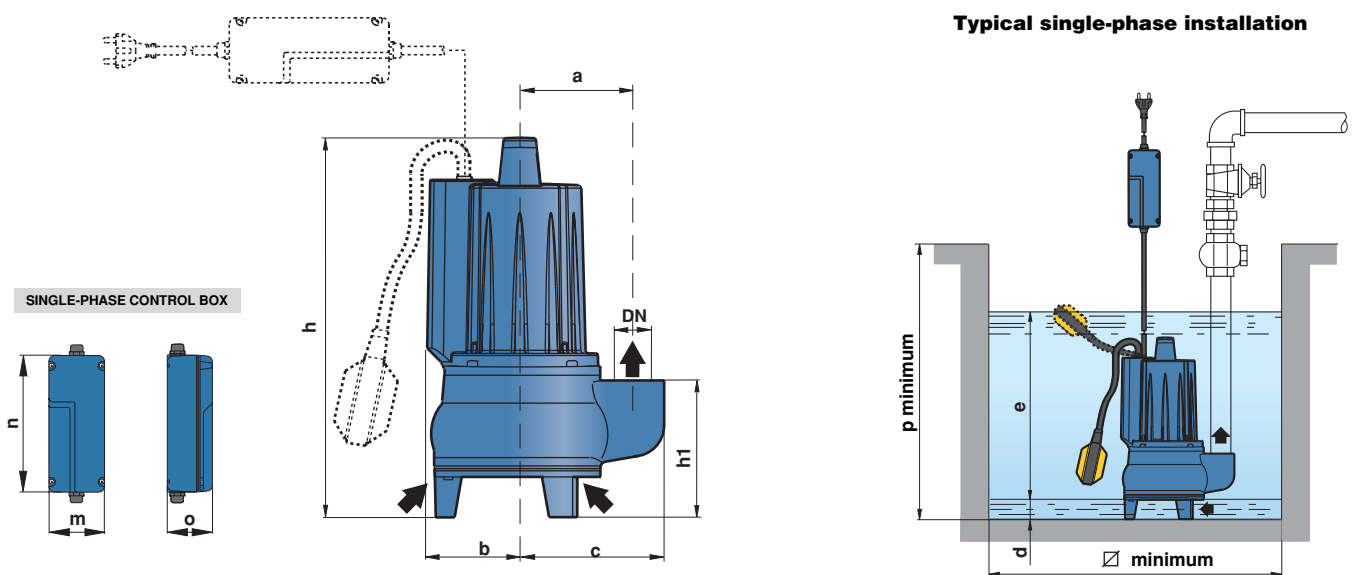


TYPE		POWER		Q	Flow rate														
Single-phase	Three-phase	kW	HP		m³/h	0	3	6	9	12	15	18	21	24	27	30	36	42	48
MCm 10/45	MC 10/45	0.75	1	l/min	0	50	100	150	200	250	300	350	400	450	500	600	700	800	
MCm 15/45	MC 15/45	1.1	1.5	H metres	12	10.7	9.7	8.7	7.8	6.8	5.9	5	4	3	2	4.5	2.7	1	

Q = Flow rate H = Total manometric head

Tolerance of the performance curves according to EN ISO 9906 App. A.

DIMENSIONS AND WEIGHTS



TYPE		PORT DN	passage of solid bodies	DIMENSIONS mm											kg		
Single-phase	Three-phase			a	b	c	h	h1	m	n	o	d	e	p	∅	1~	3~
MCm 10/45	MC 10/45	2"	∅ 45 mm	110	90	150	375	148	81	200	66	55	adjustable	500	500	19.9	18.3
MCm 15/45	MC 15/45			120	97	163	395	153								22.1	21.0

VORTEX submersible pumps in cast iron, particularly robust and reliable, intended for continuous heavy duty use in fixed installations, in building services and industry. Recommended for sewage and waste water of all types with solid impurities.



RANGE OF PERFORMANCE

Flow rate up to 1200 l/min (72 m³/h)
Head up to 16 m

LIMITS OF USE

Depth up to 10 m
Liquid temperature up to + 40°C
Passage of solid bodies max Ø 50 mm for VXC 15-20-30/50
Passage of solid bodies max Ø 70 mm for VXC 15-20-30/70
For continuous duty: minimum immersion 420 mm from pump base

CONSTRUCTION AND SAFETY STANDARDS

EN 60034-1
IEC 34-1
CEI 2-3



INSTALLATION AND USE

VXC SERIES PUMPS ARE MADE OF EXCEPTIONALLY ROBUST HEAVY-GAUGE CAST IRON, RESISTANT TO ABRASION AND LONG-LASTING, AND HAVE A VORTEX TYPE IMPELLER. THEY ARE SUITABLE FOR SEWAGE, WASTE WATER AND SLUDGE, INCLUDING WATER CONTAINING SOLIDS OR MUD. THEY ARE IDEAL FOR SEWAGE INSTALLATION, TUNNELS AND OTHER EXCAVATIONS, UNDERGROUND CAR PARKS AND SIMILAR APPLICATIONS.

GUARANTEE 2 YEARS subject to our general terms of sale.

CONSTRUCTION CHARACTERISTICS

- **PUMP BODY, MOTOR CASING:** cast iron.
- **IMPELLER:** cast iron.
- **BASE:** stainless steel AISI 304.
- **MOTOR SHAFT:** stainless steel EN 10088-3 - 1.4057.
- **DOUBLE SEAL:** mechanical seal silicon carbide - widia -NBR, with oil barrier chamber and inner lip seal to protect the seal in the event of dry running.
- **MOTOR:** submersible asynchronous, 2 pole, for continuous duty.
VXCm: single-phase 220÷240 V - 50 Hz
Models up to 1.5 kW have built in thermal protection
- 2.2 kW single-phase versions have a thermal protector provided in the winding for connection to the control box.
VXC: three-phase 380÷415 V - 50 Hz.
- Thermal protectors are provided in the winding for connection to the external control panel
- **INSULATION:** class F. ● **PROTECTION:** IP 68.

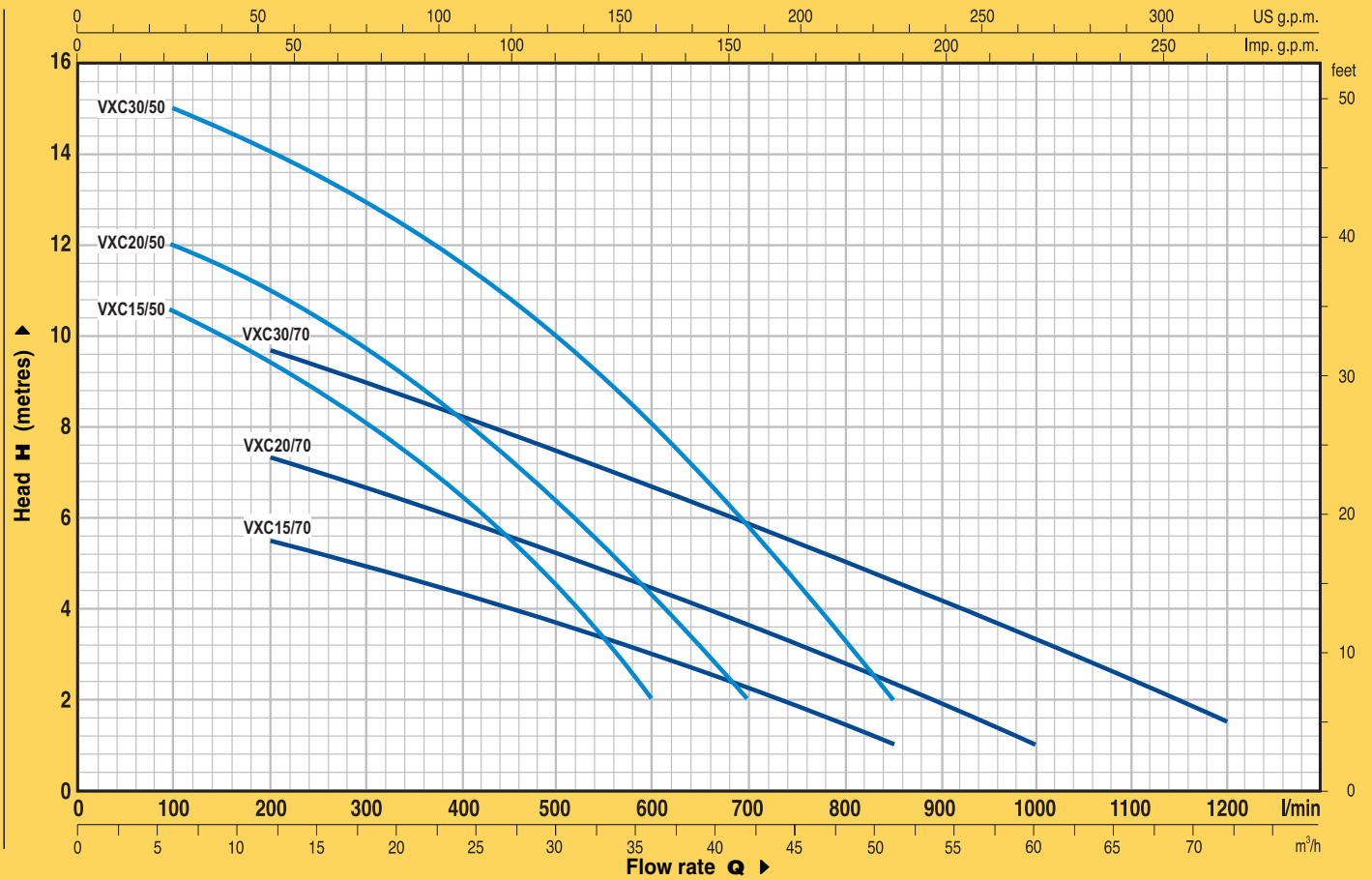
STANDARD FEATURES:

- VXCm** (single-phase) Float switch.
10m "H07 RN-F" submersible power cable with Schuko plug.
1.1 to 1.5 kW models are supplied with control box with capacitor and manual reset motor protector.
2.2 kW models are supplied with control box type QES 300 MONO.
- VXC** (three-phase) **10m** "H07 RN-F" neoprene power cable

OPTIONS ON REQUEST

- ⇒ control box for three-phase pumps
- ⇒ dual voltage: 230/400 V or 400/690 V
- ⇒ single-phase versions without float switch
- ⇒ other voltages or frequency 60 Hz

CURVES AND PERFORMANCE DATA AT n= 2900 1/min

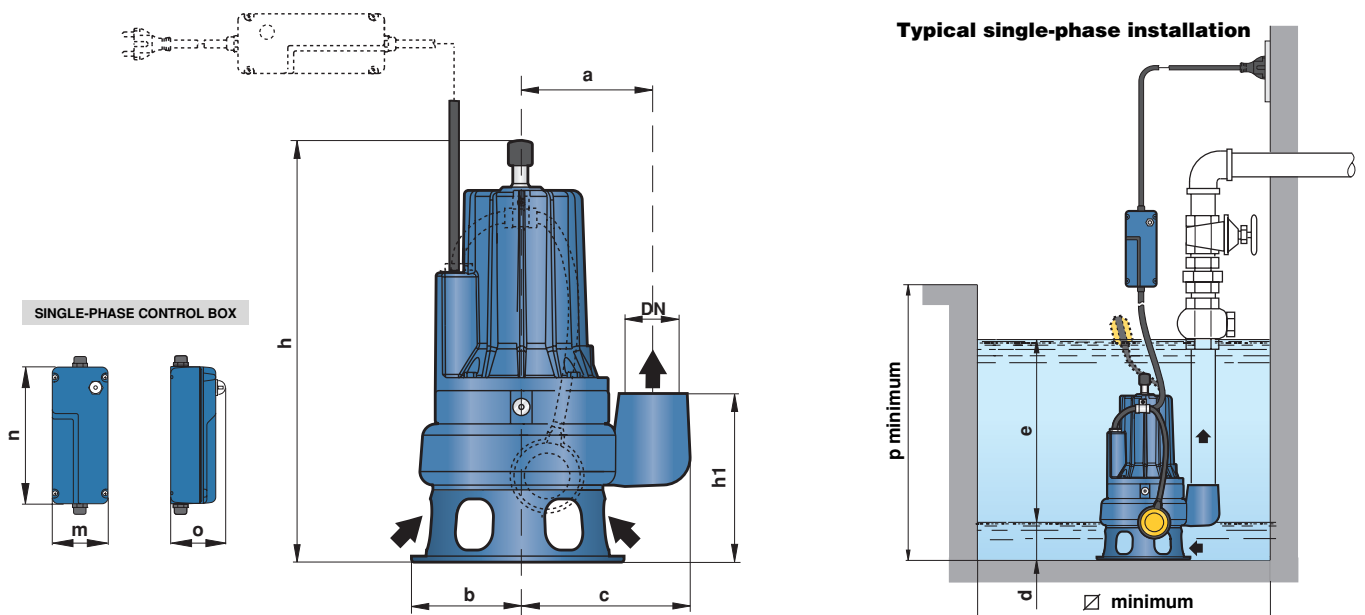


TYPE		POWER		Q	Flow rate																
Single-phase	Three-phase	kW	HP		m³/h	0	6	12	18	21	24	30	36	42	48	51	54	60	66	72	
VXCm 15/50	VXC 15/50	1.1	1.5	H metres	0	100	200	300	350	400	500	600	700	800	850	900	1000	1100	1200		
VXCm 20/50	VXC 20/50	1.5	2		11.5	10.5	9.5	8.2	7.2	6.5	4.5	2									
VXCm 30/50	VXC 30/50	2.2	3		13	12	11	9.5	9	8	6.5	4.5	2								
VXCm 15/70	VXC 15/70	1.1	1.5		16	15	14	13	12.3	11.5	10	8	5.9	3.3	2						
VXCm 20/70	VXC 20/70	1.5	2		6.5	—	5.5	5	4.7	4.4	3.7	3	2.2	1.5	1						
VXCm 30/70	VXC 30/70	2.2	3		8.5	—	7.4	6.7	6.3	6	5.2	4.5	3.6	2.8	2.4	2	1				
					11	—	9.7	9	8.6	8.2	7.5	6.7	5.8	5	4.6	4.2	3.3	2.5	1.5		

Q = Flow rate H = Total manometric head

Tolerance of the performance curves according to EN ISO 9906 App. A.

DIMENSIONS AND WEIGHTS



TYPE		PORT DN	passage of solid bodies	DIMENSIONS mm											kg		
Single-phase	Three-phase			a	b	c	h	h1	m	n	o	d	e	p	∅	1~	3~
VXCm 15/50	VXC 15/50	2 1/2"	∅ 50 mm	162	135	212	490	188	81	200	85	75	adjustable	800	800	33.3	31.0
VXCm 20/50	VXC 20/50						500/490									40.7	33.3
VXCm 30/50	VXC 30/50						530									40.7	34.8
VXCm 15/70	VXC 15/70	3"	∅ 70 mm	180	150	240	530	230	81	200	85	85	adjustable	800	800	38.9	36.6
VXCm 20/70	VXC 20/70						540/530									40.8	38.9
VXCm 30/70	VXC 30/70						540/530									47.0	41.1

SINGLE-CHANNEL submersible pumps highly efficient and particularly robust and reliable. Ideal for fixed installations or for continuous heavy duty use, recommended for sewage and waste water with solid impurities in building services or industrial applications.



RANGE OF PERFORMANCE

Flow rate up to 1600 l/min (96 m³/h)
Head up to 24 m

LIMITS OF USE

Depth up to 10 m
Liquid temperature up to + 40°C
Passage of solid bodies max Ø 50 mm for MC 15-20-30/50
Passage of solid bodies max Ø 70 mm for MC 30/70
For continuous duty: minimum immersion 420 mm from pump base

CONSTRUCTION AND SAFETY STANDARDS

EN 60034-1
IEC 34-1
CEI 2-3



INSTALLATION AND USE

MC SERIES PUMPS ARE MADE OF EXCEPTIONALLY ROBUST HEAVY GAUGE CAST IRON, ABRASION RESISTANT AND LONG-LASTING, WITH A **SINGLE-CHANNEL IMPELLER** WHICH CAN HANDLE LIQUIDS WITH SUSPENDED SOLIDS AND SHORT FIBRES. THEY ARE IDEAL FOR SEWAGE, WASTE AND GROUND WATER, EVEN WITH SOLIDS OR MUD, AND ARE THEREFORE RECOMMENDED FOR BUILDING OR INDUSTRIAL EFFLUENT AND DRAINAGE OF LARGE AREAS SUCH AS CAR PARKS.

GUARANTEE 2 YEARS subject to our general terms of sale.

CONSTRUCTION CHARACTERISTICS

- **PUMP BODY, MOTOR CASING:** cast iron.
- **IMPELLER:** single-channel, in cast iron.
- **BASE:** stainless steel AISI 304.
- **MOTOR SHAFT:** stainless steel EN 10088-3 - 1.4057.
- **DOUBLE SEAL:** mechanical seal silicon carbide - widia - NBR, with oil barrier chamber and inner lip seal to protect the seal in the event of dry running.
- **MOTOR:** submersible asynchronous, 2 pole, for continuous duty.
MCm: single-phase 220÷240 V - 50 Hz
 Models up to 1.5 kW have built in thermal protection
 - 2.2 kW single-phase versions have a thermal protector provided in the winding for connection to the control box.
MC: three-phase 380÷415 V - 50 Hz.
 - Thermal protectors are provided in the winding for connection to the external control panel
- **INSULATION:** class F. ● **PROTECTION:** IP 68.

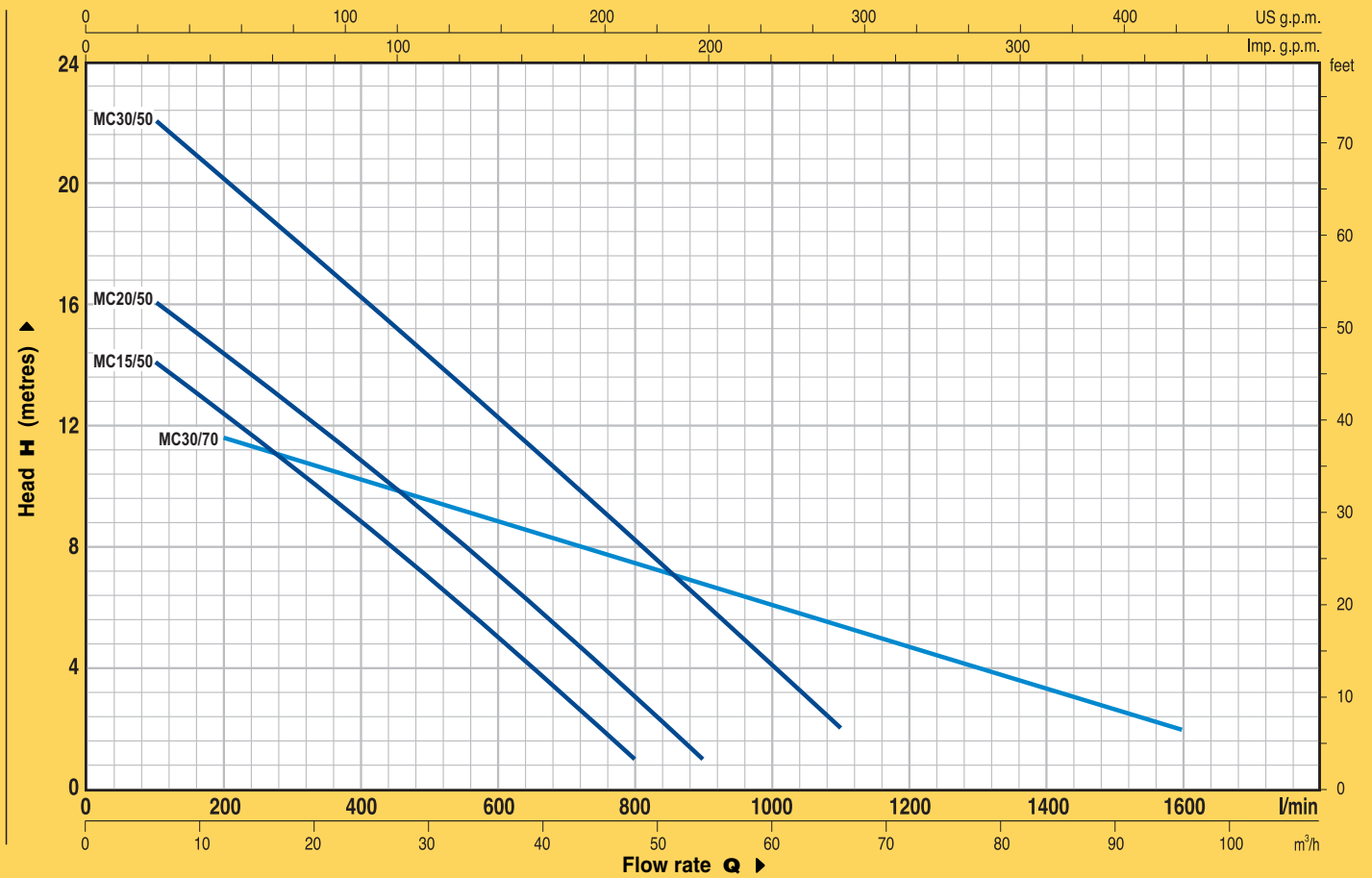
STANDARD FEATURES:

- MCm** (single-phase) Float switch.
10m "H07 RN-F" submersible power cable with Schuko plug.
 1.1 to 1.5 kW models are supplied with control box with capacitor and manual reset motor protector.
 2.2 kW models are supplied with control box type QES 300 MONO.
- MC** (three-phase) **10m** "H07 RN-F" neoprene power cable

OPTIONS ON REQUEST

- ⇒ control box for three-phase pumps
- ⇒ dual voltage: 230/400 V or 400/690 V
- ⇒ single-phase versions without float switch
- ⇒ other voltages or frequency 60 Hz

CURVES AND PERFORMANCE DATA AT n= 2900 1/min

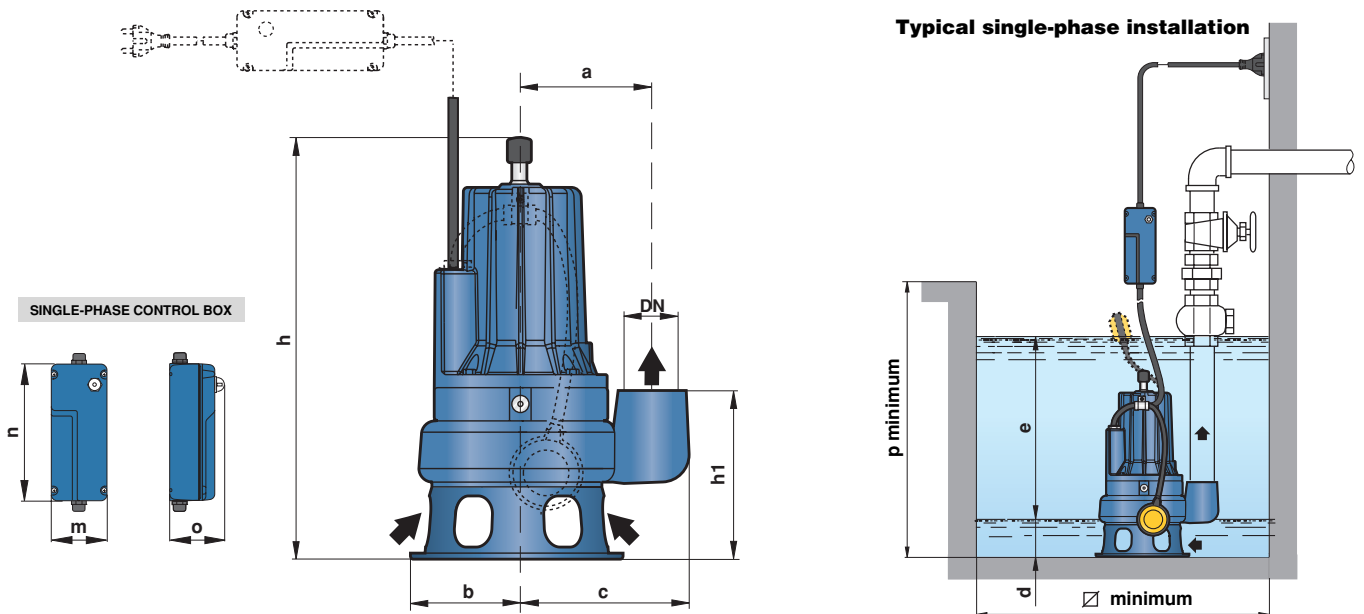


TYPE		POWER		Q	Flow rate															
Single-phase	Three-phase	kW	HP		m³/h	0	3	6	12	18	24	30	36	42	48	54	60	66	72	84
MCm 15/50	MC 15/50	1.1	1.5	l/min	0	50	100	200	300	400	500	600	700	800	900	1000	1100	1200	1400	1600
MCm 20/50	MC 20/50	1.5	2	H metres	16	—	14	12.5	10.5	8.5	7	5	3	1						
MCm 30/50	MC 30/50	2.2	3		18	—	16	14	12.5	10.5	9	7	5	3	1					
MCm 30/70	MC 30/70	2.2	3		24	—	22	20	18	16	14	12	10	8	6	4	2			
					13	—	—	11.5	11	10.2	9.5	8.8	8.2	7.6	6.8	6	5.3	4.8	3.2	2

Q = Flow rate H = Total manometric head

Tolerance of the performance curves according to EN ISO 9906 App. A.

DIMENSIONS AND WEIGHTS



TYPE		PORT DN	passage of solid bodies	DIMENSIONS mm													kg	
Single-phase	Three-phase			a	b	c	h	h1	m	n	o	d	e	p	Ø	1~	3~	
MCm 15/50	MC 15/50	2 1/2"	Ø 50 mm	162	135	212	490	188	81	200	85	75	regolabile	800	800	34.0	31.8	
MCm 20/50	MC 20/50			180	150	240	500/490									35.7	34.0	
MCm 30/50	MC 30/50			180	150	240	540/530									41.7	35.8	
MCm 30/70	MC 30/70	3"	Ø 70 mm	180	150	240	540/530	230				85				48.0	42.1	

stationary version

PVXC series pumps are supplied complete with base pedestal elbow (with mating flange), pump slide bracket and guide tube top support, for fixed sewer installations.



RANGE OF PERFORMANCE

Flow rate up to 1200 l/min (72 m³/h)
Head up to 16 m

LIMITS OF USE

Depth up to 10 m
Liquid temperature up to + 40°C
Passage of solid bodies max Ø 50 mm for PVXC 15-20-30/50
Passage of solid bodies max Ø 70 mm for PVXC 15-20-30/70
For continuous duty: minimum immersion 430 mm from pump base

CONSTRUCTION AND SAFETY STANDARDS

EN 60034-1
IEC 34-1
CEI 2-3



INSTALLATION AND USE

PVXC SERIES PUMPS ARE MADE OF EXCEPTIONALLY ROBUST HEAVY GAUGE CAST IRON, RESISTANT TO ABRASION AND LONG LASTING, AND HAVE A VORTEX TYPE IMPELLER. THEY ARE SUITABLE FOR SEWAGE, WASTE WATER AND SLUDGE, INCLUDING WATER CONTAINING SOLIDS OR MUD. THEY ARE IDEAL FOR FIXED SEWAGE INSTALLATIONS, TUNNELS, UNDERGROUND CARPARKS, SUMPS AND SIMILAR APPLICATIONS.

GUARANTEE 2 YEARS subject to our general terms of sale.

CONSTRUCTION CHARACTERISTICS

- **PUMP BODY, MOTOR CASING AND BASE PEDESTAL:** cast iron.
- **IMPELLER:** cast iron.
- **BASE:** stainless steel AISI 304.
- **MOTOR SHAFT:** stainless steel EN 10088-3 - 1.4057.
- **DOUBLE SEAL:** mechanical seal silicon carbide - widia - NBR, with oil barrier chamber and inner lip seal to protect the seal in the event of dry running.
- **MOTOR:** submersible asynchronous, 2 pole, for continuous duty.
 - PVXCm: single-phase 220÷240 V - 50 Hz
 - Models up to 1.5 kW have built in thermal protection
 - 2.2 kW single-phase versions have a thermal protector provided in the winding for connection to the control box.
 - PVXC: three-phase 380÷415 V - 50 Hz.
 - Thermal protectors are provided in the winding for connection to the external control panel
- **INSULATION:** class F. ● **PROTECTION:** IP 68.

STANDARD FEATURES:

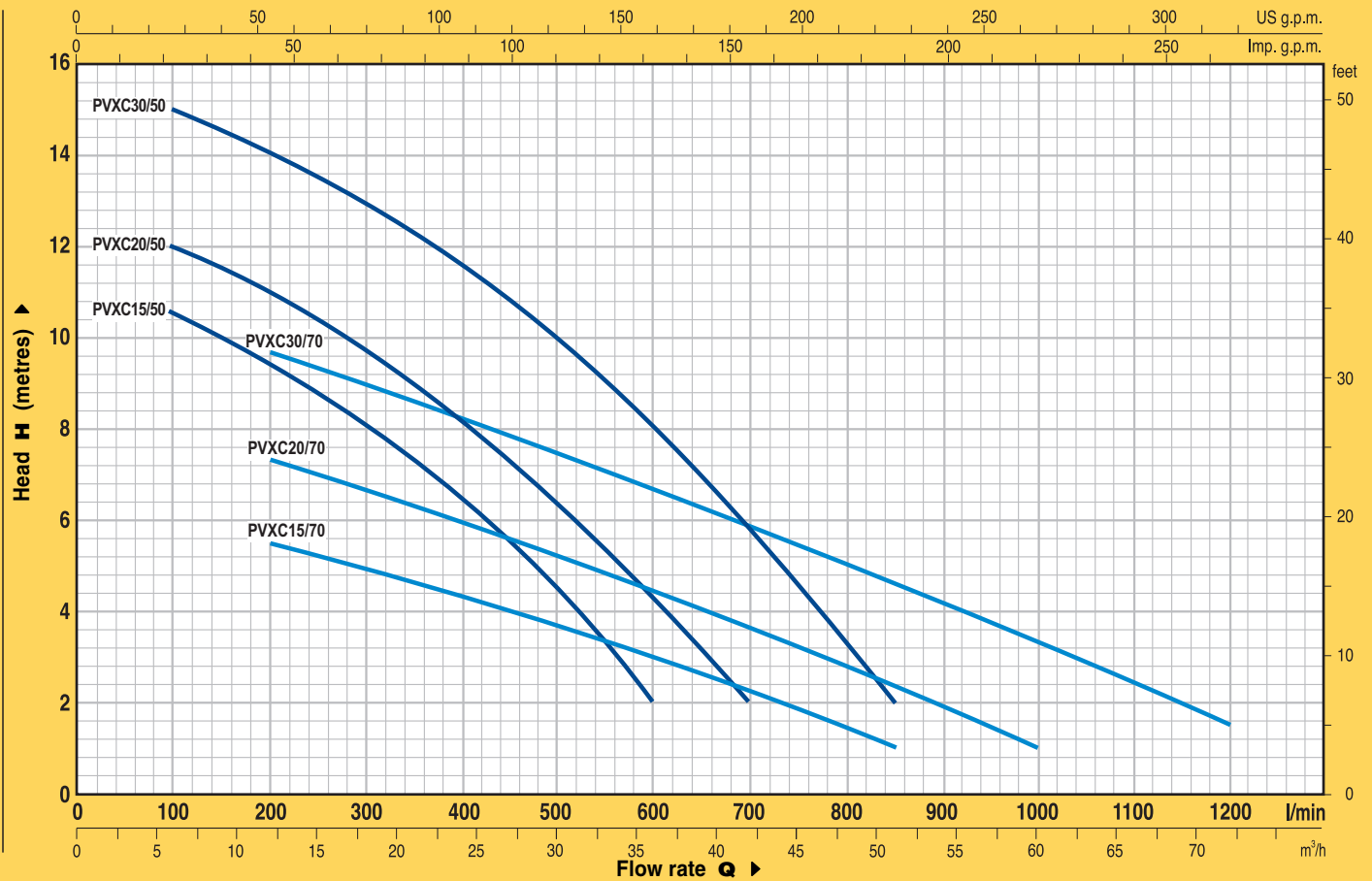
Base pedestal elbow (duct foot)
Threaded delivery counterflange
Top supports for guide tubes

- **PVXCm** (single-phase) Float switch.
 - 10m** "H07 RN-F" submersible power cable with Schuko plug.
 - 1.1 to 1.5 kW models are supplied with control box with capacitor and manual reset motor protector.
 - 2.2 kW models are supplied with control box type QES 300 MONO.
- **PVXC** (three-phase) **10m** "H07 RN-F" neoprene power cable

OPTIONS ON REQUEST

- ⇒ control box for three-phase pumps
- ⇒ dual voltage: 230/400 V or 400/690 V
- ⇒ single-phase versions without float switch
- ⇒ other voltages or frequency 60 Hz

CURVES AND PERFORMANCE DATA AT n= 2900 1/min

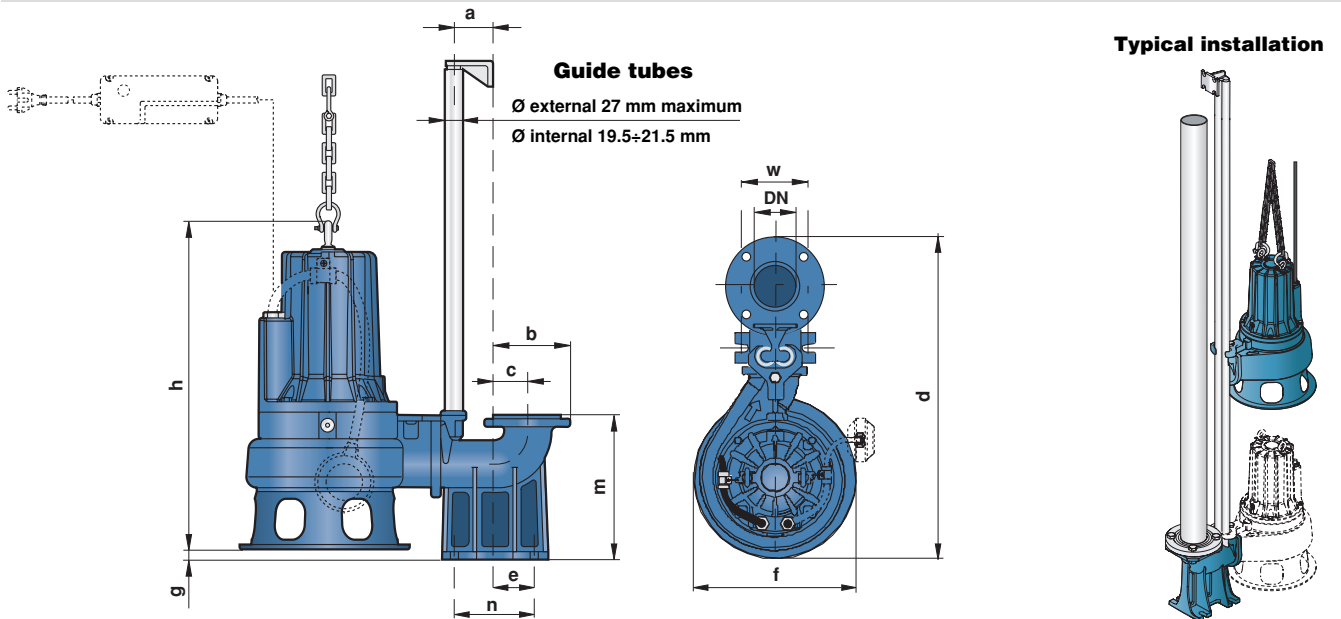


TYPE		POWER		Q	H metres																		
Single-phase	Three-phase	kW	HP		m³/h	0	6	12	18	21	24	27	30	36	42	48	51	54	60	66	72		
				l/min	0	100	200	300	350	400	450	500	600	700	800	850	900	1000	1100	1200			
PVXCm 15/50	PVXC 15/50	1.1	1.5	H metres	11.5	10.5	9.5	8.2	7.2	6.5	5.6	4.5	2										
PVXCm 20/50	PVXC 20/50	1.5	2		13	12	11	9.5	9	8	7.2	6.5	4.5	2									
PVXCm 30/50	PVXC 30/50	2.2	3		16	15	14	13	12.3	11.5	10.8	10	8	5.9	3.3	2							
PVXCm 15/70	PVXC 15/70	1.1	1.5		6.5	—	5.5	5	4.7	4.4	4	3.7	3	2.2	1.5	1							
PVXCm 20/70	PVXC 20/70	1.5	2		8.5	—	7.4	6.7	6.3	6	5.6	5.2	4.5	3.6	2.8	2.4	2	1					
PVXCm 30/70	PVXC 30/70	2.2	3		11	—	9.7	9	8.6	8.2	7.8	7.5	6.7	5.8	5	4.6	4.2	3.3	2.5	1.5			

Q = Flow rate H = Total manometric head

Tolerance of the performance curves according to EN ISO 9906 App. A.

DIMENSIONS AND WEIGHTS



TYPE		PORT DN	passage of solid bodies	DIMENSIONS mm									kg*			
Single-phase	Three-phase			a	b	c	d	e	f	g	h	m	n	w	1~	3~
PVXCm 15/50	PVXC 15/50	2 1/2"	Ø 50 mm	60	116	51	501	62	270	10	387	200	120	72	42.0	40.0
PVXCm 20/50	PVXC 20/50										397/387				43.8	42.3
PVXCm 30/50	PVXC 30/50										405				49.7	43.8
PVXCm 15/70	PVXC 15/70	3"	Ø 70 mm	150	70	585	95	300	10	405	256	150	92	53.0	50.7	
PVXCm 20/70	PVXC 20/70									415/405				54.9	53.0	
PVXCm 30/70	PVXC 30/70									415/405				61.1	55.2	

(*weight including counterflange)

stationary version

PMC series pumps are supplied complete with base pedestal elbow (with mating flange), pump slide bracket and guide tube top support, for fixed sewer installations.



RANGE OF PERFORMANCE

Flow rate up to 1600 l/min (96 m³/h)
Head up to 24 m

LIMITS OF USE

Depth up to 10 m
Liquid temperature up to + 40°C
Passage of solid bodies max Ø 50 mm for PMC 15-20-30/50
Passage of solid bodies max Ø 70 mm for PMC 30/70
For continuous duty: minimum immersion 430 mm from pump base

CONSTRUCTION AND SAFETY STANDARDS

EN 60034-1
IEC 34-1
CEI 2-3



INSTALLATION AND USE

PMC SERIES PUMPS ARE MADE OF EXCEPTIONALLY ROBUST HEAVY GAUGE CAST IRON, ABRASION RESISTANT AND LONG-LASTING, WITH A **SINGLE-CHANNEL IMPELLER** WHICH CAN HANDLE LIQUIDS WITH SUSPENDED SOLIDS AND SHORT FIBRES. THEY ARE IDEAL FOR SEWAGE, WASTE AND GROUND WATER, EVEN WITH SOLIDS OR MUD, AND ARE THEREFORE RECOMMENDED FOR BUILDING OR INDUSTRIAL EFFLUENT AND DRAINAGE OF LARGE AREAS SUCH AS CAR PARKS.

GUARANTEE 2 YEARS subject to our general terms of sale.

CONSTRUCTION CHARACTERISTICS

- **PUMP BODY, MOTOR CASING AND BASE PEDESTAL:** cast iron.
- **IMPELLER:** single-channel, in cast iron.
- **BASE:** stainless steel AISI 304.
- **MOTOR SHAFT:** stainless steel EN 10088-3 - 1.4057.
- **DOUBLE SEAL:** mechanical seal silicon carbide - widia - NBR, with oil barrier chamber and inner lip seal to protect the seal in the event of dry running.
- **MOTOR:** submersible asynchronous, 2 pole, for continuous duty.
 - **PMCm:** single-phase 220÷240 V - 50 Hz
Models up to 1.5 kW have built in thermal protection
- 2.2 kW single-phase versions have a thermal protector provided in the winding for connection to the control box.
 - **PMC:** three-phase 380÷415 V - 50 Hz.
- Thermal protectors are provided in the winding for connection to the external control panel
- **INSULATION:** class F. ● **PROTECTION:** IP 68.

STANDARD FEATURES:

Base pedestal elbow (duct foot)
Threaded delivery counterflange
Top supports for guide tubes

PMCm (single-phase) Float switch.

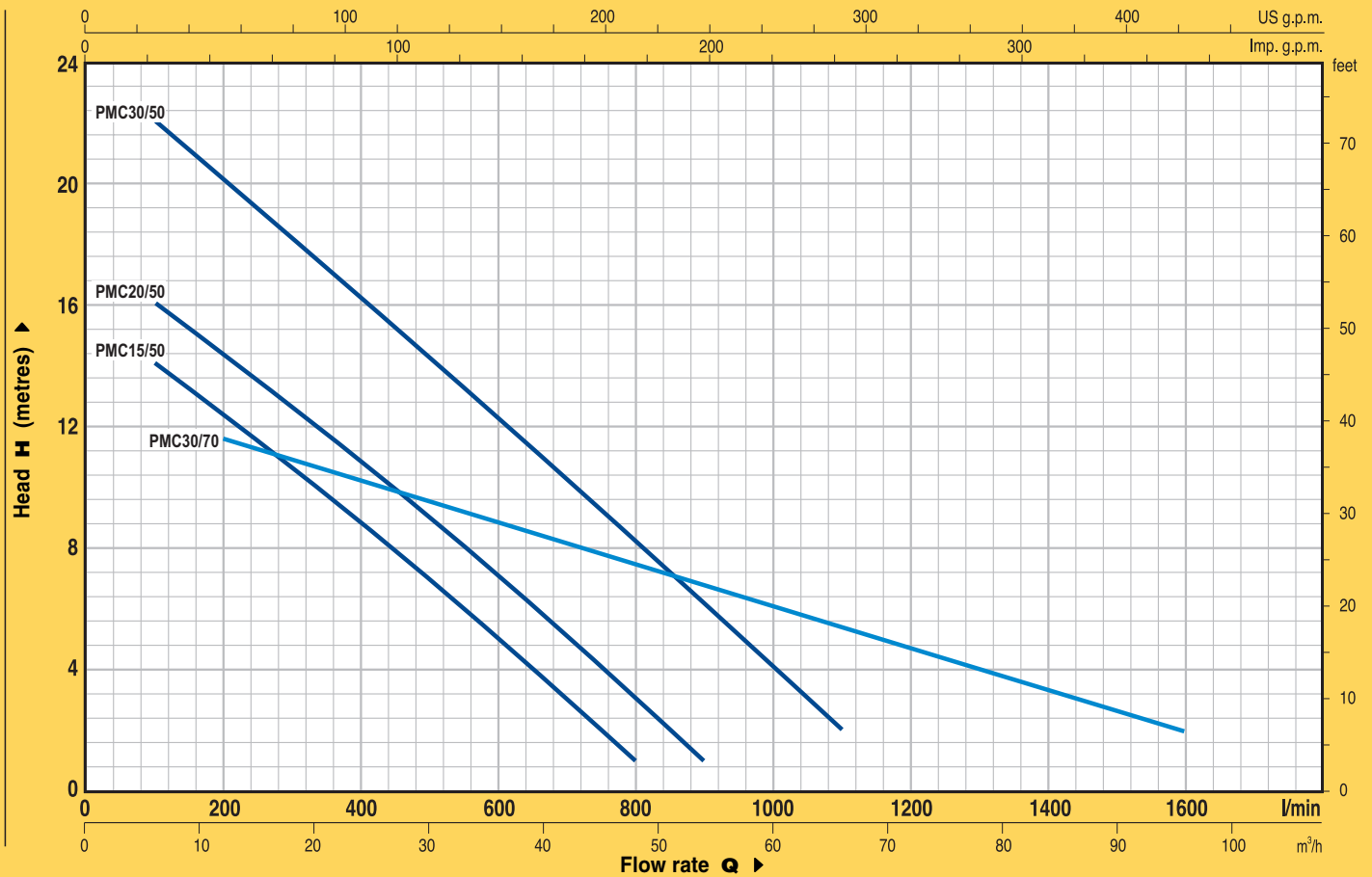
10m "H07 RN-F" submersible power cable with Schuko plug.
1.1 to 1.5 kW models are supplied with control box with capacitor and manual reset motor protector.
2.2 kW models are supplied with control box type QES 300 MONO.

PMC (three-phase) **10m** "H07 RN-F" neoprene power cable

OPTIONS ON REQUEST

- ⇒ control box for three-phase pumps
- ⇒ dual voltage: 230/400 V or 400/690 V
- ⇒ single-phase versions without float switch
- ⇒ other voltages or frequency 60 Hz

CURVES AND PERFORMANCE DATA AT n= 2900 1/min

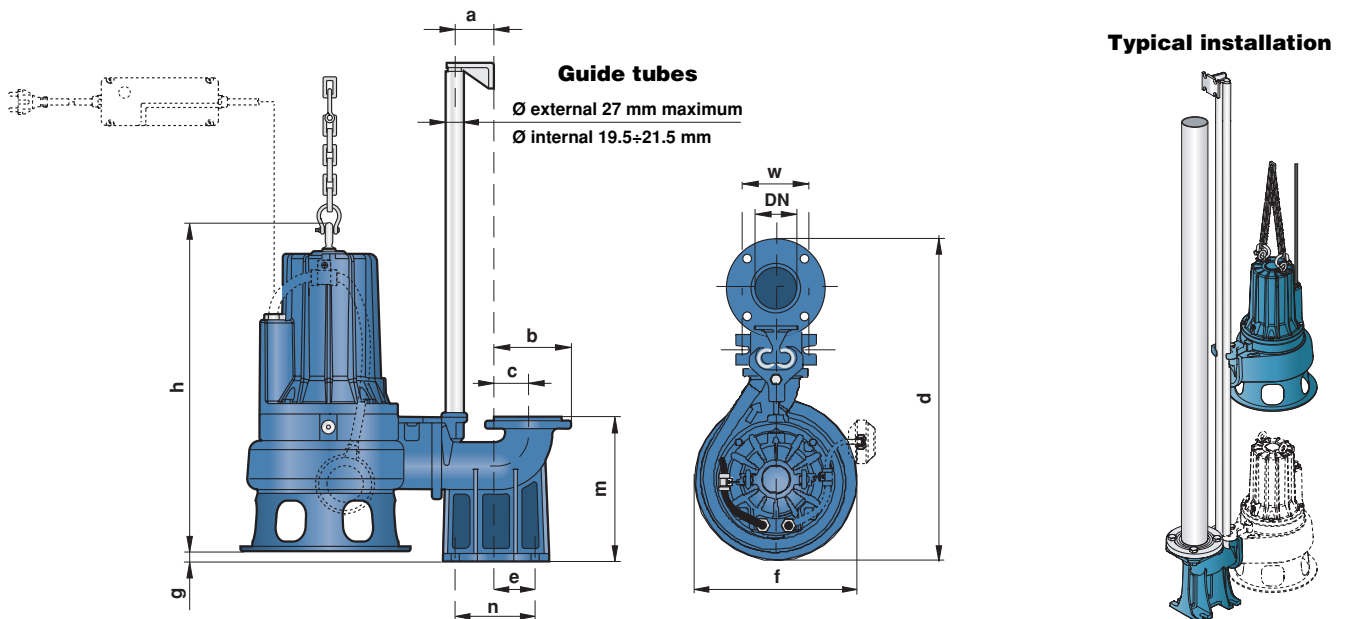


TYPE		POWER		Q	Flow rate																	
Single-phase	Three-phase	kW	HP		m³/h	0	6	12	15	18	24	30	36	42	48	54	60	66	72	84	96	
PMCm 15/50	PMC 15/50	1.1	1.5	H metres	0	100	200	250	300	400	500	600	700	800	900	1000	1100	1200	1400	1600		
PMCm 20/50	PMC 20/50	1.5	2		16	14	12.5	11.5	10.5	8.5	7	5	3	1								
PMCm 30/50	PMC 30/50	2.2	3		18	16	14	13	12.5	10.5	9	7	5	3	1							
PMCm 30/70	PMC 30/70	2.2	3		24	22	20	19	18	16	14	12	10	8	6	4	2					
					13	—	11.5	11.2	11	10.2	9.5	8.8	8.2	7.6	6.8	6	5.3	4.8	3.2	2		

Q = Flow rate H = Total manometric head

Tolerance of the performance curves according to EN ISO 9906 App. A.

DIMENSIONS AND WEIGHTS



TYPE		PORT DN	passage of solid bodies	DIMENSIONS mm										kg*		
Single-phase	Three-phase			a	b	c	d	e	f	g	h	m	n	w	1~	3~
PMCm 15/50	PMC 15/50	2 1/2"	Ø 50 mm	60	116	51	501	62	270	10	387	200	120	72	43.0	40.8
PMCm 20/50	PMC 20/50										397/387				44.7	43.0
PMCm 30/50	PMC 30/50										415/405				50.7	44.8
PMCm 30/70	PMC 30/70	3"	Ø 70 mm		150	70	585	95	300		256	150	92	62.0	56.1	

(*weight including counterflange)

EASYPUMP

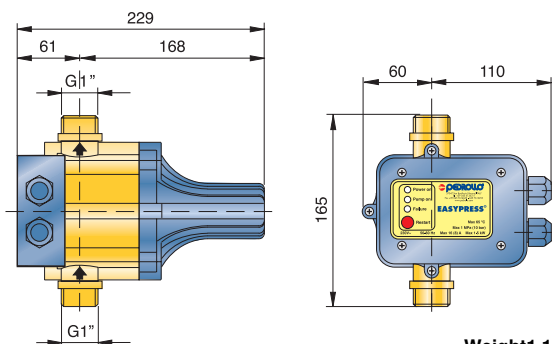
Pumps with electronic controller

Domestic pumps with a pressure sensing electronic controller for automatic operation; the pump operates as required as a tap is opened or closed. The controller also provides protection for the pump against dry running.



TYPE	POWER	
	kW	HP
Single-phase		
PKm 60 - EP	0.37	0.50
PKm 65 - EP	0.50	0.70
PKm 70 - EP	0.60	0.85
PKm 80 - EP	0.75	1
PKm 100 - EP	1.1	1.5
PKSm 60 - EP	0.37	0.50
PKSm 65 - EP	0.50	0.70
PKSm 70 - EP	0.60	0.85
PKSm 80 - EP	0.75	1
CPm 150 - EP	0.75	1
CPm 158 - EP	0.75	1
CPm 170 - EP	1.1	1.5
CPm 170M - EP	1.1	1.5
2CPm 25/130N - EP	0.75	1
2CPm 25/140H - EP	1.1	1.5
2CPm 25/140M - EP	1.1	1.5
2CPm 80E - EP	0.37	0.50
3CPm 80E - EP	0.45	0.60
4CPm 80E - EP	0.60	0.85
3CPm 100E - EP	0.60	0.85
4CPm 100E - EP	0.75	1
JSWm 1C - EP	0.37	0.50
JSWm 1B - EP	0.50	0.70
JSWm 1A - EP	0.60	0.85
JSWm 10H - EP	0.75	1
JSWm 12H - EP	0.90	1.25
JSWm 15H - EP	1.1	1.5
JSWm 10M - EP	0.75	1
JSWm 12M - EP	0.90	1.25
JSWm 15M - EP	1.1	1.5
JSWm 3CH - EP	1.1	1.5
JSWm 3CM - EP	1.1	1.5
JSWm 3CL - EP	1.1	1.5
PLURIJETm 3/80 - EP	0.45	0.60
PLURIJETm 4/80 - EP	0.60	0.85
PLURIJETm 3/100 - EP	0.60	0.85
PLURIJETm 4/100 - EP	0.75	1

DIMENSIONS mm



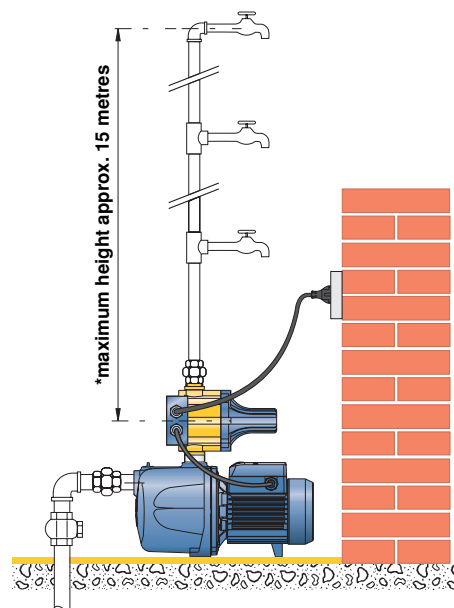
Weight 1.1 kg

Typical installation

COMPONENTS

- Single-phase electropump 230V - 50Hz
- EASYPRESS controller
- 1.5 metre cable with Schuko plug

* For correct operation of the EASYPRESS device, the height of the column of water must not exceed 15 metres.



PR Pumps with pressure switch sub-assembly

Pumps with pressure switch sub-assembly
- ready to be connected to a pressure vessel
for automatic operation.



PERFORMANCE

TYPE	PORTS		POWER		FLOW RATE (1) Q l/min	SETTING (2) bar
	suc.	deliv.	kW	HP		
Single-phase						
PKm 60 - PR	1"	1"	0.37	0.50	32	1.4 ÷ 2.8
PKm 65 - PR	1"	1"	0.50	0.70	40	1.5 ÷ 3.0
PKm 70 - PR	1"	1"	0.60	0.85	50	1.8 ÷ 3.2
PKm 80 - PR	1"	1"	0.75	1	50	2.2 ÷ 3.6
PKSm 60 - PR	1"	1"	0.37	0.50	32	1.4 ÷ 2.8
PKSm 65 - PR	1"	1"	0.50	0.70	40	1.5 ÷ 3.0
PKSm 70 - PR	1"	1"	0.60	0.85	50	1.8 ÷ 3.2
PKSm 80 - PR	1"	1"	0.75	1	50	2.2 ÷ 3.6
CPm 158 - PR	1"	1"	0.75	1	90	1.8 ÷ 3.2
2CPm 25/130N - PR	1 1/4"	1"	0.75	1	100	1.4 ÷ 2.8
2CPm 25/140H - PR	1 1/4"	1"	1.1	1.5	100	2.2 ÷ 3.6
2CPm 25/140M - PR	1 1/2"	1"	1.1	1.5	140	2.2 ÷ 3.6
2CPm 80E - PR	1"	1"	0.37	0.50	50	1.0 ÷ 2.2
3CPm 80E - PR	1"	1"	0.45	0.60	60	1.4 ÷ 2.8
4CPm 80E - PR	1"	1"	0.60	0.85	60	2.2 ÷ 3.6
3CPm 100E - PR	1"	1"	0.60	0.85	100	1.4 ÷ 2.8
4CPm 100E - PR	1"	1"	0.75	1	100	2.0 ÷ 3.5
JSWm 1C - PR	1"	1"	0.37	0.50	45	1.2 ÷ 2.6
JSWm 1B - PR	1"	1"	0.50	0.70	50	1.4 ÷ 2.8
JSWm 1A - PR	1"	1"	0.60	0.85	50	1.8 ÷ 3.2
JSWm 10H - PR	1"	1"	0.75	1	50	2.0 ÷ 3.4
JSWm 12H - PR	1"	1"	0.90	1.25	50	2.5 ÷ 4.0
JSWm 15H - PR	1"	1"	1.1	1.5	50	3.0 ÷ 4.5
JSWm 10M - PR	1"	1"	0.75	1	80	1.4 ÷ 2.8
JSWm 12M - PR	1"	1"	0.90	1.25	80	2.0 ÷ 3.5
JSWm 15M - PR	1"	1"	1.1	1.5	80	2.5 ÷ 4.0
JSWm 3CH - PR	1 1/4"	1"	1.1	1.5	70	3.0 ÷ 4.5
JSWm 3CM - PR	1 1/4"	1"	1.1	1.5	120	2.0 ÷ 3.5
JSWm 3CL - PR	1 1/4"	1"	1.1	1.5	160	1.4 ÷ 2.8
JCRm 1C - PR	1"	1"	0.37	0.50	50	1.2 ÷ 2.6
JCRm 1B - PR	1"	1"	0.50	0.70	50	1.4 ÷ 2.8
JCRm 1A - PR	1"	1"	0.60	0.85	50	1.8 ÷ 3.2
JCRm 10H - PR	1 1/4"	1"	0.75	1	50	2.0 ÷ 3.4
JCRm 12H - PR	1 1/4"	1"	0.90	1.25	50	2.4 ÷ 3.8
JCRm 15H - PR	1 1/4"	1"	1.1	1.5	50	3.0 ÷ 4.0
JCRm 10M - PR	1 1/4"	1"	0.75	1	80	1.4 ÷ 2.8
JCRm 12M - PR	1 1/4"	1"	0.90	1.25	80	2.0 ÷ 3.5
JCRm 15M - PR	1 1/4"	1"	1.1	1.5	80	2.5 ÷ 4.0

(1) Maximum flow rate with the minimum recommended pressure switch setting

(2) Pressure switch recommended range

PR COMPONENTS

- Single-phase pump 230V - 50Hz
- Pressure switch
- Pressure gauge
- 3 or 5-way brass connector
- 1.5 metre cable with Schuko plug



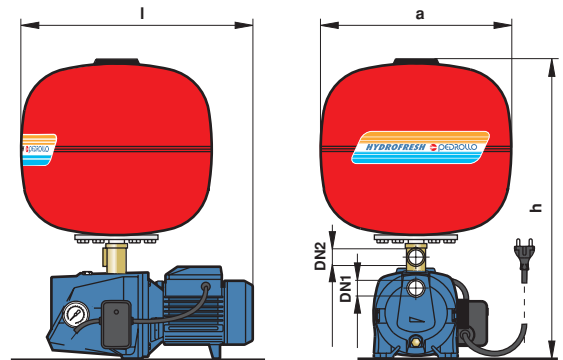
HYDROFRESH-24 SF

Small pressure sets with 24 litre spherical vessel, for automatic operation. Suitable for the supply of pressurised water in the home or in holiday homes.



PERFORMANCE AND DIMENSIONS

TYPE	PORTS		POWER		FLOW RATE (1)	SETTING (recommended)		DIMENSIONS		
	suc.	deliv.	kW	HP		min	max	l	a	h
Single-phase					l/min					
PKm 60 - 24 SF	1"	1"	0.37	0.50	32	1.4	2.8	381	360	513
PKm 65 - 24 SF	1"	1"	0.50	0.70	40	1.5	3.0	389	360	518
PKm 70 - 24 SF	1"	1"	0.60	0.85	50	1.8	3.2	409	360	531
PKm 80 - 24 SF	1"	1"	0.75	1	50	2.2	3.6	409	360	531
PKm 100 - 24 SF	1"	1"	1.1	1.5	50	3.5	4.5	447	360	549
PKSm 60 - 24 SF	1"	1"	0.37	0.50	32	1.4	2.8	381	360	565
PKSm 65 - 24 SF	1"	1"	0.50	0.70	40	1.5	3.0	389	360	565
PKSm 70 - 24 SF	1"	1"	0.60	0.85	50	1.8	3.2	409	360	577
PKSm 80 - 24 SF	1"	1"	0.75	1	50	2.2	3.6	409	360	577
CPm 152 - 24 SF	1"	1"	0.55	0.75	80	1.4	2.8	434	360	617
CPm 158 - 24 SF	1"	1"	0.75	1	90	1.8	3.2	434	360	617
CPm 170 - 24 SF	1 1/4"	1"	1.1	1.5	120	2.2	3.5	470	360	635
CPm 170M-24 SF	1 1/4"	1"	1.1	1.5	150	2.0	3.5	470	360	635
2CPm 25/130N - 24 SF	1 1/4"	1"	0.75	1	100	1.4	2.8	437	360	576
2CPm 25/140H - 24 SF	1 1/4"	1"	1.1	1.5	100	2.2	3.6	462	360	599
2CPm 25/140M - 24 SF	1 1/2"	1"	1.1	1.5	140	2.2	3.6	462	360	599
3CPm 80E - 24 SF	1"	1"	0.45	0.60	60	1.4	2.8	401	360	550
4CPm 80E - 24 SF	1"	1"	0.60	0.85	60	2.2	3.6	408	360	550
3CPm 100E- 24 SF	1"	1"	0.60	0.85	100	1.4	2.8	408	360	550
4CPm 100E- 24 SF	1"	1"	0.75	1	100	2	3.5	423	360	550
3CRm 80 - 24 SF	1"	1"	0.45	0.60	60	1.4	2.8	435	360	548
4CRm 80 - 24 SF	1"	1"	0.60	0.85	60	2.2	3.6	443	360	548
3CRm 100 - 24 SF	1"	1"	0.60	0.85	100	1.4	2.8	423	360	548
JSWm 1C - 24 SF	1"	1"	0.37	0.50	45	1.2	2.6	434	360	536
JSWm 1B - 24 SF	1"	1"	0.50	0.70	50	1.4	2.8	434	360	536
JSWm 1A - 24 SF	1"	1"	0.60	0.85	50	1.8	3.2	441	360	536
JSWm 10H - 24 SF	1"	1"	0.75	1	50	2.0	3.2	460	360	555
JSWm 12H - 24 SF	1"	1"	0.90	1.25	50	2.5	4.0	460	360	555
JSWm 15H - 24 SF	1"	1"	1.1	1.5	50	3.0	4.5	460	360	555
JSWm 10M - 24 SF	1"	1"	0.75	1	80	1.4	2.8	460	360	555
JSWm 12M - 24 SF	1"	1"	0.90	1.25	80	2.0	3.5	460	360	555
JSWm 15M - 24 SF	1"	1"	1.1	1.5	80	2.5	4.0	460	360	555
JSWm 3CH- 24 SF	1 1/4"	1"	1.1	1.5	70	3.0	4.5	522	360	583
JSWm 3CM- 24 SF	1 1/4"	1"	1.1	1.5	120	2.0	3.5	522	360	583
JSWm 3CL - 24 SF	1 1/4"	1"	1.1	1.5	160	1.4	2.8	522	360	583
JCRm 1C - 24 SF	1"	1"	0.37	0.50	50	1.2	2.6	435	360	548
JCRm 1B - 24 SF	1"	1"	0.50	0.70	50	1.4	2.8	435	360	548
JCRm 1A - 24 SF	1"	1"	0.60	0.85	50	1.8	3.2	443	360	548
JCRm 10H - 24 SF	1 1/4"	1"	0.75	1	50	2.0	3.4	460	360	579
JCRm 12H - 24 SF	1 1/4"	1"	0.90	1.25	50	2.4	3.8	460	360	579
JCRm 15H - 24 SF	1 1/4"	1"	1.1	1.5	50	3.0	4.0	460	360	579
JCRm 10M - 24 SF	1 1/4"	1"	0.75	1	80	1.4	2.8	460	360	579
JCRm 12M - 24 SF	1 1/4"	1"	0.90	1.25	80	2.0	3.5	460	360	579
JCRm 15M - 24 SF	1 1/4"	1"	1.1	1.5	80	2.5	4.0	460	360	579



HYDROFRESH 24 SF COMPONENTS

- Single-phase pump 230 V - 50 Hz
- 24 litre spherical vessel
- Pressure switch "SQUARE-D"
- Pressure gauge
- 3 or 5-way brass connector
- 1.5 metre cable with Schuko plug

- (1) Maximum flow rate with the minimum recommended pressure switch settings
- (2) Pressure switch recommended rate

N.B. The pre-charge of air in diaphragm tanks must be set to a value 0.2 bar lower than the minimum setting of the pressure switch.

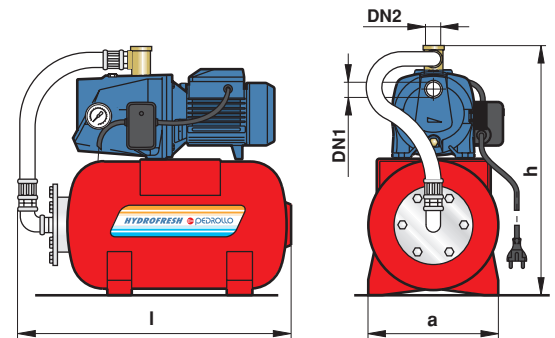
HYDROFRESH-24CL

Small pressure sets with 20 litre cylindrical vessel, for automatic operation. Suitable for the supply of pressurised water in the home or in holiday homes.



PERFORMANCE AND DIMENSIONS

TYPE	PORTS		POWER		FLOW RATE (1) l/min	SETTING (recommended) (2)		DIMENSIONS		
	suc.	deliv.	kW	HP		min	max	l	a	h
Single-phase										
PKm 60 - 24 CL	1"	1"	0.37	0.50	32	1.4	2.8	540	255	475
PKm 65 - 24 CL	1"	1"	0.50	0.70	40	1.5	3.0	540	255	480
PKm 70 - 24 CL	1"	1"	0.60	0.85	50	1.8	3.2	540	255	490
PKm 80 - 24 CL	1"	1"	0.75	1	50	2.2	3.6	540	255	490
PKm 100 - 24 CL	1"	1"	1.1	1.5	50	3.5	4.5	540	255	510
PKSm 60 - 24 CL	1"	1"	0.37	0.50	32	1.4	2.8	540	255	540
PKSm 65 - 24 CL	1"	1"	0.50	0.70	40	1.5	3.0	540	255	540
PKSm 70 - 24 CL	1"	1"	0.60	0.85	50	1.8	3.2	540	255	550
PKSm 80 - 24 CL	1"	1"	0.75	1	50	2.2	3.6	540	255	550
CPm 152 - 24 CL	1"	1"	0.55	0.75	80	1.4	2.8	540	255	580
CPm 158 - 24 CL	1"	1"	0.75	1	90	1.8	3.2	540	255	580
CPm 170 - 24 CL	1 1/4"	1"	1.1	1.5	120	2.2	3.5	540	255	595
CPm 170M-24 CL	1 1/4"	1"	1.1	1.5	150	2.0	3.5	540	255	595
2CPm 25/130N - 24 CL	1 1/4"	1"	0.75	1	100	1.4	2.8	540	255	538
2CPm 25/140H - 24 CL	1 1/4"	1"	1.1	1.5	100	2.2	3.6	540	255	562
2CPm 25/140M - 24 CL	1 1/2"	1"	1.1	1.5	140	2.2	3.6	540	255	562
3CPm 80E - 24 CL	1"	1"	0.45	0.60	60	1.4	2.8	540	255	510
4CPm 80E - 24 CL	1"	1"	0.60	0.85	60	2.2	3.6	540	255	510
3CPm 100E - 24 CL	1"	1"	0.60	0.85	100	1.4	2.8	540	255	510
4CPm 100E - 24 CL	1"	1"	0.75	1	100	2	3.5	540	255	510
3CRm 80 - 24 CL	1"	1"	0.45	0.60	60	1.4	2.8	540	255	509
4CRm 80 - 24 CL	1"	1"	0.60	0.85	60	2.2	3.6	540	255	509
3CRm 100 - 24 CL	1"	1"	0.60	0.85	100	1.4	2.8	540	255	509
JSWm 1C - 24 CL	1"	1"	0.37	0.50	45	1.2	2.6	540	265	497
JSWm 1B - 24 CL	1"	1"	0.50	0.70	50	1.4	2.8	540	265	497
JSWm 1A - 24 CL	1"	1"	0.60	0.85	50	1.8	3.2	540	265	497
JSWm 10H - 24 CL	1"	1"	0.75	1	50	2.0	3.2	540	315	515
JSWm 12H - 24 CL	1"	1"	0.90	1.25	50	2.5	4.0	540	315	515
JSWm 15H - 24 CL	1"	1"	1.1	1.5	50	3.0	4.5	540	315	515
JSWm 10M - 24 CL	1"	1"	0.75	1	80	1.4	2.8	540	315	515
JSWm 12M - 24 CL	1"	1"	0.90	1.25	80	2.0	3.5	540	315	515
JSWm 15M - 24 CL	1"	1"	1.1	1.5	80	2.5	4.0	540	315	515
JSWm 3CH - 24 CL	1 1/4"	1"	1.1	1.5	70	3.0	4.5	540	290	545
JSWm 3CM - 24 CL	1 1/4"	1"	1.1	1.5	120	2.0	3.5	540	290	545
JSWm 3CL - 24 CL	1 1/4"	1"	1.1	1.5	160	1.4	2.8	540	290	545
JCRm 1C - 24 CL	1"	1"	0.37	0.50	50	1.2	2.6	540	255	509
JCRm 1B - 24 CL	1"	1"	0.50	0.70	50	1.4	2.8	540	255	509
JCRm 1A - 24 CL	1"	1"	0.60	0.85	50	1.8	3.2	540	255	509
JCRm 10H - 24 CL	1 1/4"	1"	0.75	1	50	2.0	3.4	540	255	539
JCRm 12H - 24 CL	1 1/4"	1"	0.90	1.25	50	2.4	3.8	540	255	539
JCRm 15H - 24 CL	1 1/4"	1"	1.1	1.5	50	3.0	4.0	540	255	539
JCRm 10M - 24 CL	1 1/4"	1"	0.75	1	80	1.4	2.8	540	255	539
JCRm 12M - 24 CL	1 1/4"	1"	0.90	1.25	80	2.0	3.5	540	255	539
JCRm 15M - 24 CL	1 1/4"	1"	1.1	1.5	80	2.5	4.0	540	255	539



HYDROFRESH 24 CL COMPONENTS

- Single-phase pump
- 20 litre cylindrical vessel
- Hose
- Pressure switch "SQUARE-D"
- Pressure gauge
- 3 or 5-way brass connector
- 1.5 metre cable with Schuko plug

(1) Maximum flow rate with the minimum recommended pressure switch setting

(2) Pressure switch recommended rate

N.B. The pre-charge of air in diaphragm tanks must be set to a value 0.2 bar lower than the minimum setting of the pressure switch.

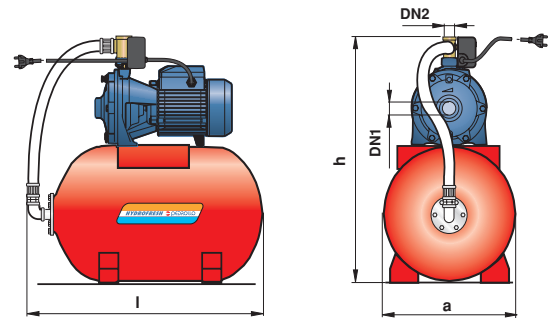
HYDROFRESH-60CL

Pressure sets with 60 litre cylindrical vessel, for automatic operation. Suitable for the supply of pressurised water in the home.



PERFORMANCE AND DIMENSIONS

TYPE	PORTS		POWER		FLOW RATE (1) l/min	SETTING (recommended) (2)		DIMENSIONS		
	suc.	deliv.	kW	HP		min	max	mm		
Single-phase								l	a	h
PKSm 80 - 60 CL	1"	1"	0.75	1	50	2.2	3.6	750	380	630
CPm 158 - 60 CL	1"	1"	0.75	1	90	1.8	3.2	750	380	720
CPm 170 - 60 CL	1 1/4"	1"	1.1	1.5	120	2.2	3.5	750	380	735
CPm 170M-60 CL	1 1/4"	1"	1.1	1.5	150	2.0	3.5	750	380	735
2CPm 25/130N - 60 CL	1 1/4"	1"	0.75	1	100	1.4	2.8	750	380	678
2CPm 25/140H - 60 CL	1 1/4"	1"	1.1	1.5	100	2.2	3.6	750	380	702
2CPm 25/140M - 60 CL	1 1/2"	1"	1.1	1.5	140	2.2	3.6	750	380	702
4CPm 100E- 60 CL	1"	1"	0.75	1	100	2	3.5	750	380	650
JSWm 10H - 60 CL	1"	1"	0.75	1	50	2.0	3.2	750	380	655
JSWm 12H - 60 CL	1"	1"	0.90	1.25	50	2.5	4.0	750	380	655
JSWm 15H - 60 CL	1"	1"	1.1	1.5	50	3.0	4.5	750	380	655
JSWm 10M - 60 CL	1"	1"	0.75	1	80	1.4	2.8	750	380	655
JSWm 12M - 60 CL	1"	1"	0.90	1.25	80	2.0	3.5	750	380	655
JSWm 15M - 60 CL	1"	1"	1.1	1.5	80	2.5	4.0	750	380	655
JSWm 3CH- 60 CL	1 1/4"	1"	1.1	1.5	70	3.0	4.5	750	380	685
JSWm 3CM- 60 CL	1 1/4"	1"	1.1	1.5	120	2.0	3.5	750	380	685
JSWm 3CL - 60 CL	1 1/4"	1"	1.1	1.5	160	1.4	2.8	750	380	685
JCRm 10H - 60 CL	1 1/4"	1"	0.75	1	50	2.0	3.4	750	380	679
JCRm 12H - 60 CL	1 1/4"	1"	0.90	1.25	50	2.4	3.8	750	380	679
JCRm 15H - 60 CL	1 1/4"	1"	1.1	1.5	50	3.0	4.0	750	380	679
JCRm 10M - 60 CL	1 1/4"	1"	0.75	1	80	1.4	2.8	750	380	679
JCRm 12M - 60 CL	1 1/4"	1"	0.90	1.25	80	2.0	3.5	750	380	679
JCRm 15M - 60 CL	1 1/4"	1"	1.1	1.5	80	2.5	4.0	750	380	679



HYDROFRESH60CLCOMPONENTS

- Single-phase pump
- 60 litre cylindrical vessel
- Hose
- Pressure switch "SQUARE-D"
- Pressure gauge
- 3 or 5-way brass connector
- 1.5 metre cable with Schuko plug

(1) Maximum flow rate with the minimum recommended pressure switch setting

(2) Pressure switch recommended rate

N.B. The pre-charge of air in diaphragm tanks must be set to a value 0.2 bar lower than the minimum setting of the pressure switch.

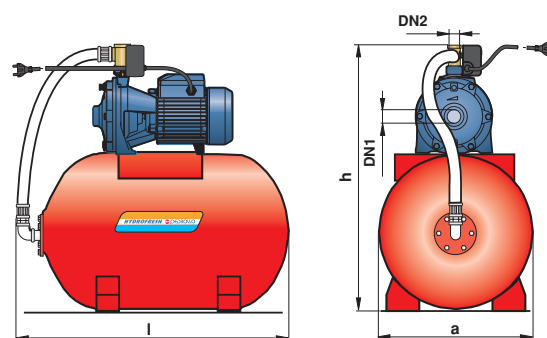
HYDROFRESH - 100 CL

Pressure sets with 100 litre cylindrical vessel, for automatic operation. Suitable for the supply of pressurised water in the home.



PERFORMANCE AND DIMENSIONS

TYPE	PORTS		POWER		FLOW RATE (1) l/min	SETTING (recommended) (2)		DIMENSIONS		
	suc.	deliv.	kW	HP		min	max	l	a	h
CPm 170 - 100 CL	1 1/4"	1"	1.1	1.5	120	2.2	3.5	860	450	800
CPm 170M - 100 CL	1 1/4"	1"	1.1	1.5	150	2.0	3.5	860	450	800
2CPm 25/130N - 100 CL	1 1/4"	1"	0.75	1	100	1.4	2.8	860	450	743
2CPm 25/140H - 100 CL	1 1/4"	1"	1.1	1.5	100	2.2	3.6	860	450	767
2CPm 25/140M - 100 CL	1 1/2"	1"	1.1	1.5	140	2.2	3.6	860	450	767
4CPm 100E - 100 CL	1"	1"	0.75	1	100	2	3.5	860	450	715
JSWm 10H - 100 CL	1"	1"	0.75	1	50	2.0	3.2	860	450	720
JSWm 12H - 100 CL	1"	1"	0.90	1.25	50	2.5	4.0	860	450	720
JSWm 15H - 100 CL	1"	1"	1.1	1.5	50	3.0	4.5	860	450	720
JSWm 10M - 100 CL	1"	1"	0.75	1	80	1.4	2.8	860	450	720
JSWm 12M - 100 CL	1"	1"	0.90	1.25	80	2.0	3.5	860	450	720
JSWm 15M - 100 CL	1"	1"	1.1	1.5	80	2.5	4.0	860	450	720
JSWm 3CH - 100 CL	1 1/4"	1"	1.1	1.5	70	3.0	4.5	860	450	750
JSWm 3CM - 100 CL	1 1/4"	1"	1.1	1.5	120	2.0	3.5	860	450	750
JSWm 3CL - 100 CL	1 1/4"	1"	1.1	1.5	160	1.4	2.8	860	450	750
JCRm 10H - 100 CL	1 1/4"	1"	0.75	1	50	2.0	3.4	860	450	744
JCRm 12H - 100 CL	1 1/4"	1"	0.90	1.25	50	2.4	3.8	860	450	744
JCRm 15H - 100 CL	1 1/4"	1"	1.1	1.5	50	3.0	4.0	860	450	744
JCRm 10M - 100 CL	1 1/4"	1"	0.75	1	80	1.4	2.8	860	450	744
JCRm 12M - 100 CL	1 1/4"	1"	0.90	1.25	80	2.0	3.5	860	450	744
JCRm 15M - 100 CL	1 1/4"	1"	1.1	1.5	80	2.5	4.0	860	450	744



HYDROFRESH 100 CL COMPONENTS

- Single-phase pump
- 100 litre cylindrical vessel
- Hose
- Pressure switch "SQUARE-D"
- Pressure gauge
- 3 or 5-way brass connector
- 1.5 metre cable with Schuko plug

(1) Maximum flow rate with the minimum recommended pressure switch setting

(2) Pressure switch recommended rate

N.B. The pre-charge of air in diaphragm tanks must be set to a value 0.2 bar lower than the minimum setting of the pressure switch.

COMBIPRESS

Pressure Boosting Sets



CB2-F



CB2-VL



CB2-CP



CB2-2CP



CB2-JSW

COMBIPRESS are twin pump sets for water pressurisation, with a range to suit the requirements of domestic, civil agricultural and industrial applications.

PRINCIPLE OF OPERATION

COMBIPRESS pressure booster sets are pre-assembled ready for installation.

The sets operate as "duty-assist", with one or both pumps starting automatically in succession as demand for water increases. This system is energy efficient as it only starts the pumps necessary to meet the demand. The lead pump is alternated automatically by the control panel.

USE

Clean water and chemically non aggressive liquids.

- **Water supply:** pressure boosting for industry, condominiums, hotels, communities, water treatment plants, camping sites, schools, hospitals, barracks, etc.

- **Irrigation:** football and sports grounds, golf courses, agriculture and artificial snow systems.

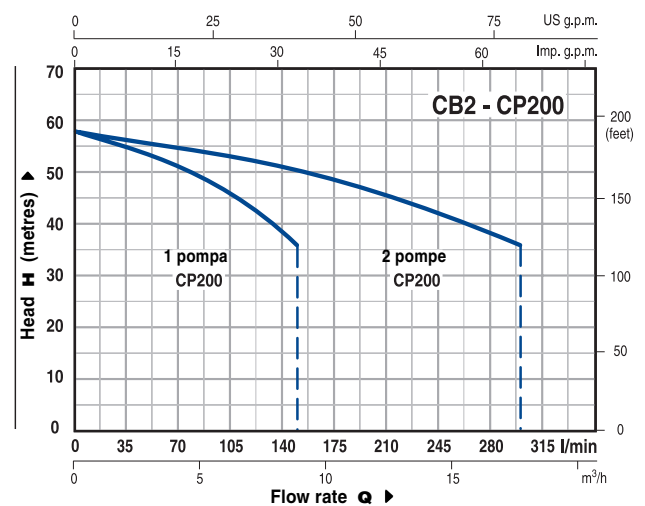
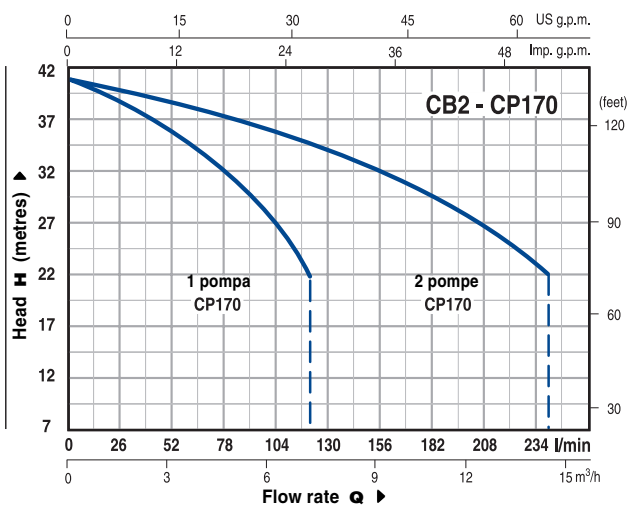
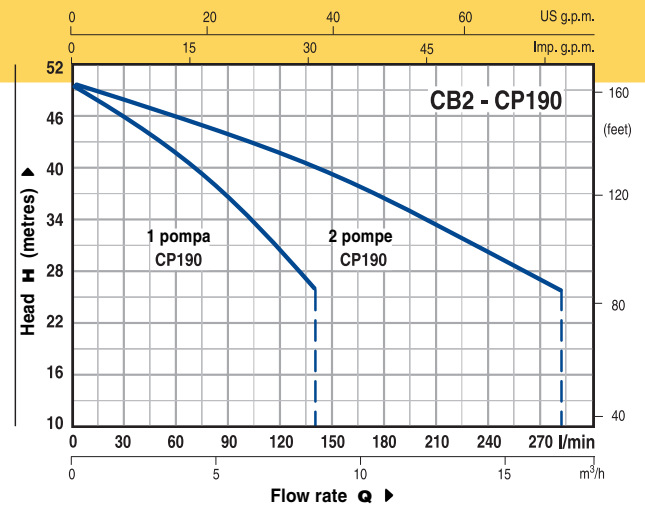
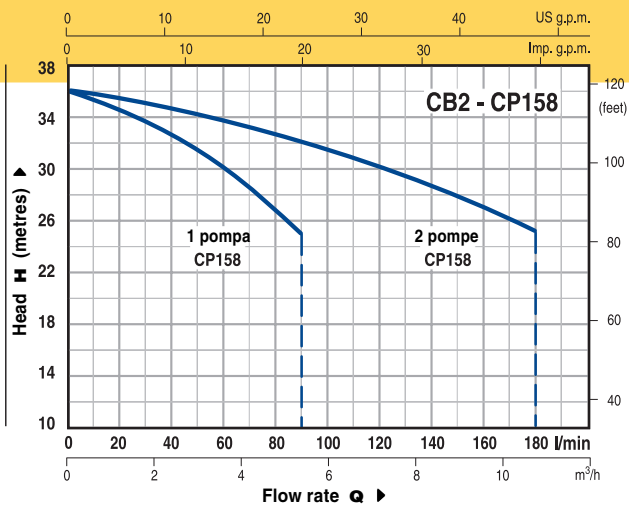
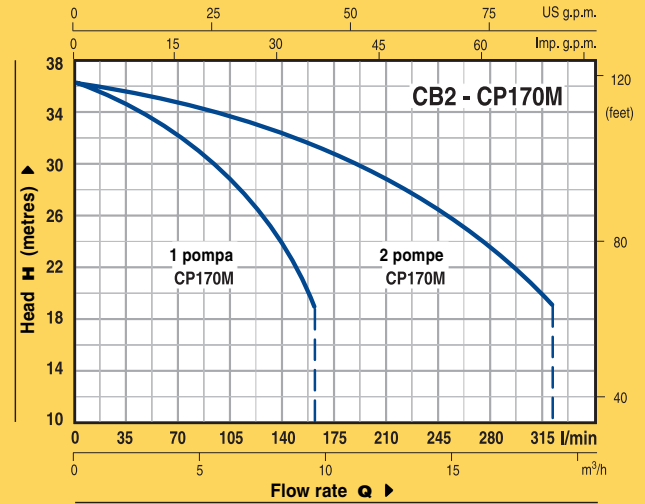
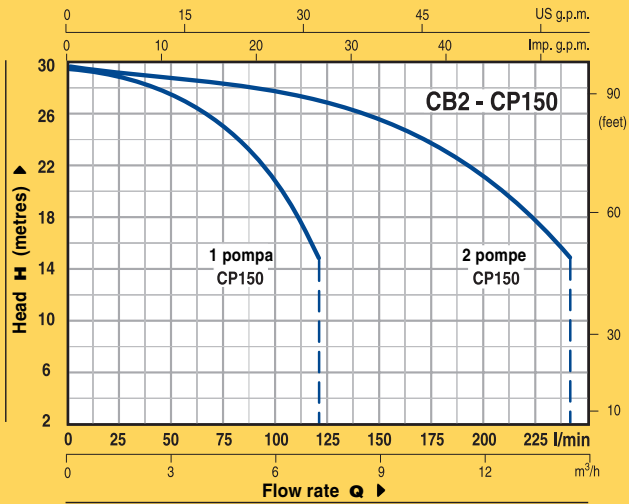
GUARANTEE 2 YEARS subject to our general terms of sale.

CONSTRUCTION CHARACTERISTICS

- **PUMPS** complete with suction and delivery manifolds, ball valves and non return valves.
 - **BASE** made of powder-painted metal sections.
 - Control systems pre-installed on the delivery manifold, comprising of pressure gauge, connection for pressure vessel (not supplied), and two user adjustable pressure switches. The factory settings are shown in the following tables.
 - **CONTROL PANEL** with door interlocked power switch, low voltage pressure switch control circuit, automatic pump changeover, thermal motor protector and "anti-bounce" system to ensure that the pumps run for an acceptable period once started.
- CB2m:** single-phase 230 V - 50 Hz including capacitor, and with integral thermal overload protection.
- CB2:** three-phase 230/400 V - 50 Hz up to 4 kW.
400/690 V - 50 Hz from 5.5 to 18.5 kW.

CB2 - CP sets with two single-stage centrifugal pumps

CURVES AND PERFORMANCE DATA AT n= 2900 1/min



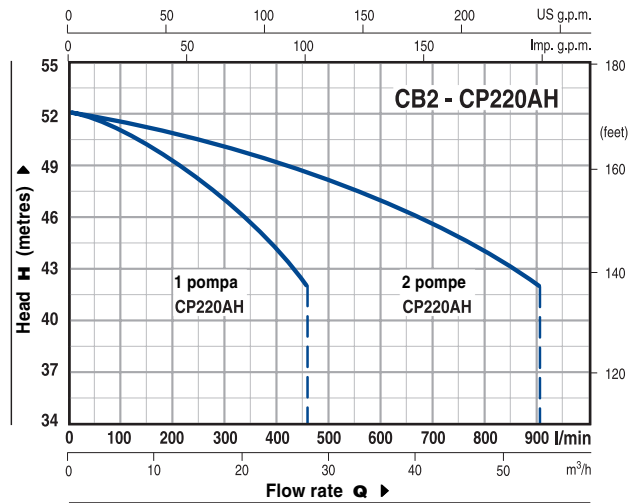
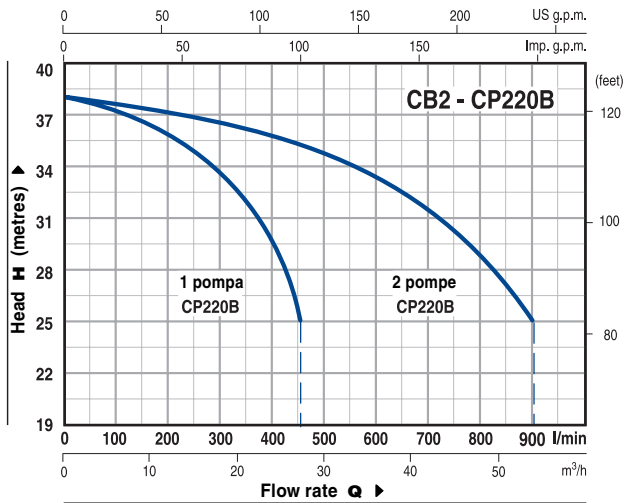
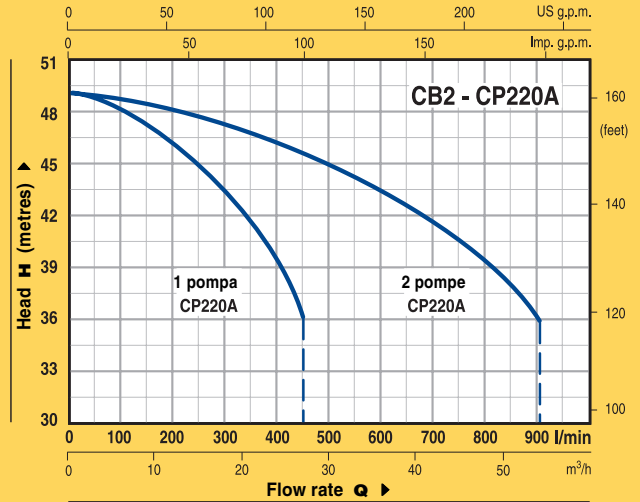
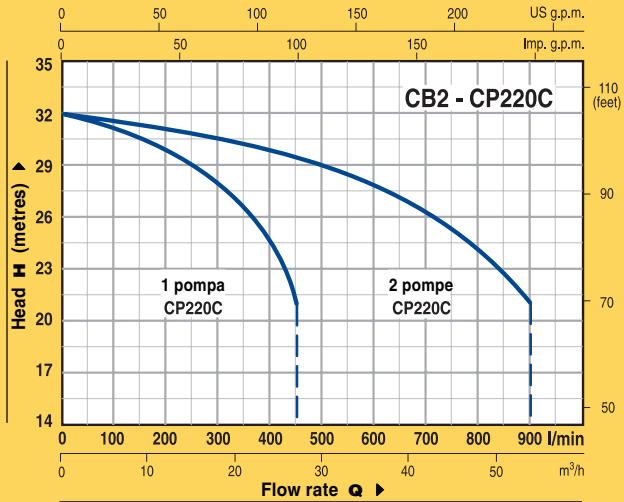
Tolerance of the performance curves according to EN ISO 9906 App. A.

TYPE		POWER		MAXIMUM FLOW RATE*		MAXIMUM HEAD	PRESSURE SWITCH FACTORY SETTING	
Single-phase	Three-phase	kW	HP	m³/h	l/min	metres	- 1 - bar	- 2 - bar
CB2 - CPm 150	CB2 - CP 150	0.75 + 0.75	1 + 1	14.4	240	29.5	1.5÷2.5	1÷2
CB2 - CPm 158	CB2 - CP 158	0.75 + 0.75	1 + 1	10.8	180	36	2÷3	1.5÷2.5
CB2 - CPm 170	CB2 - CP 170	1.1 + 1.1	1.5 + 1.5	14.4	240	41	2÷3	1.5÷2.5
CB2 - CPm 170M	CB2 - CP 170M	1.1 + 1.1	1.5 + 1.5	19.2	320	36	2÷3	1.5÷2.5
CB2 - CPm 190	CB2 - CP 190	1.5 + 1.5	2 + 2	16.8	280	50	3÷4	2.5÷3.5
—	CB2 - CP 200	2.2 + 2.2	3 + 3	18	300	58	4÷5	3.5÷4.5

* Indicates the maximum flow rate of the two pumps, for the minimum setting pressure of the pressure switch - 2 -

CB2 - CP sets with two single-stage centrifugal pumps

CURVES AND PERFORMANCE DATA AT n= 2900 1/min



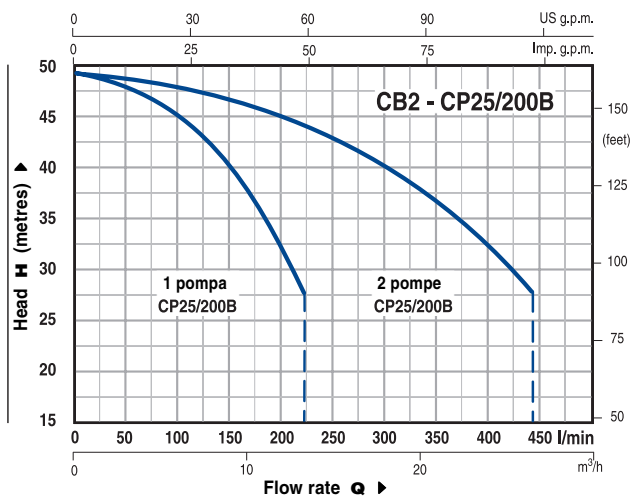
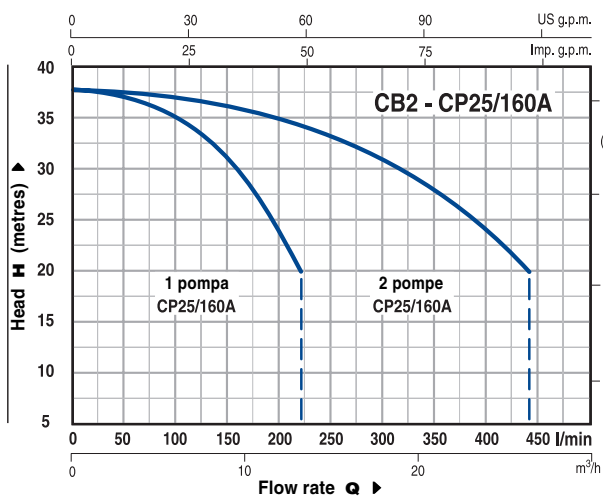
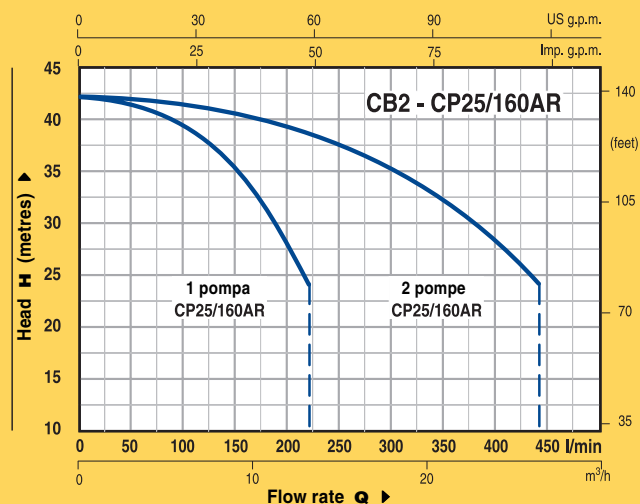
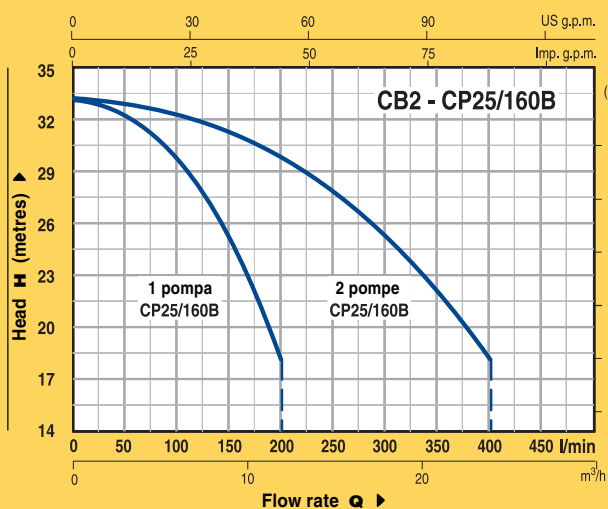
Tolerance of the performance curves according to EN ISO 9906 App. A.

TYPE	POWER		MAXIMUM FLOW RATE*		MAXIMUM HEAD metres	PRESSURE SWITCH FACTORY SETTING	
	kW	HP	m³/h	l/min		- 1 - bar	- 2 - bar
Three-phase							
CB2 - CP 220C	2.2 + 2.2	3 + 3	54	900	32	1.5÷2.5	1÷2
CB2 - CP 220B	3 + 3	4 + 4	54	900	38	2.5÷3.5	2÷3
CB2 - CP 220A	4 + 4	5.5 + 5.5	54	900	49	3÷4	2.5÷3.5
CB2 - CP 220AH	5.5 + 5.5	7.5 + 7.5	54	900	52	3.5÷4.5	3÷4

* Indicates the maximum flow rate of the two pumps, for the minimum setting pressure of the pressure switch - 2 -

CB2 - CP sets with two single-stage centrifugal pumps

CURVES AND PERFORMANCE DATA AT n= 2900 1/min



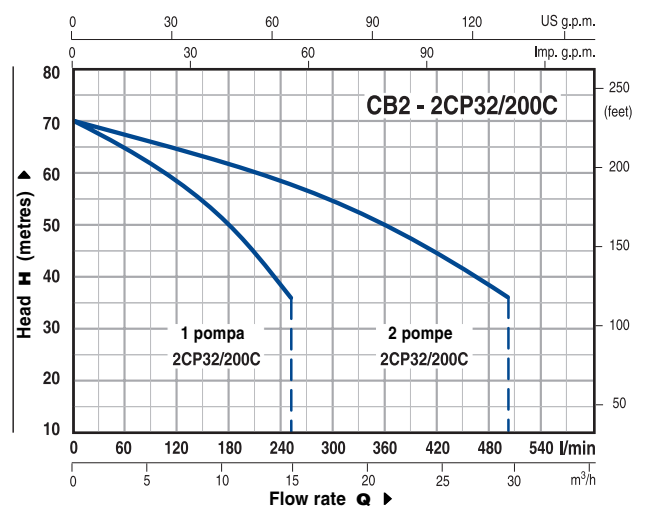
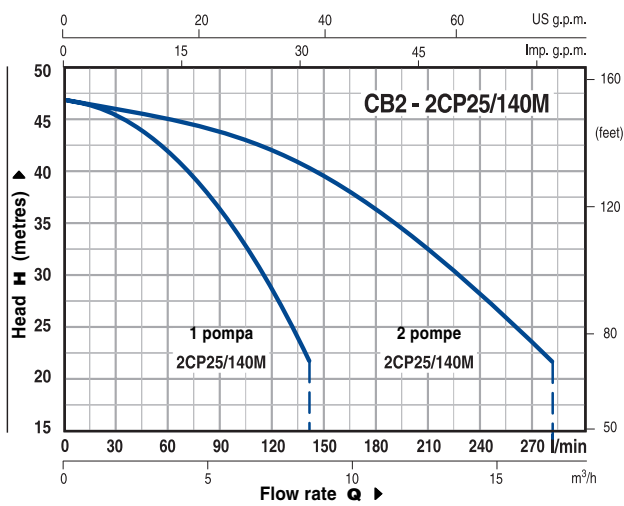
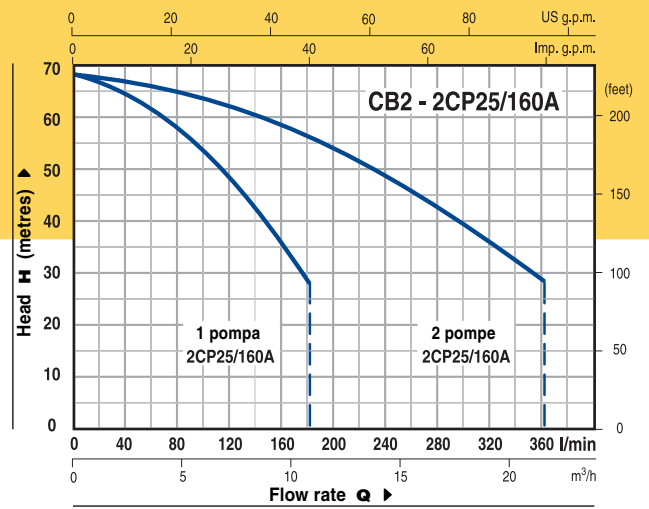
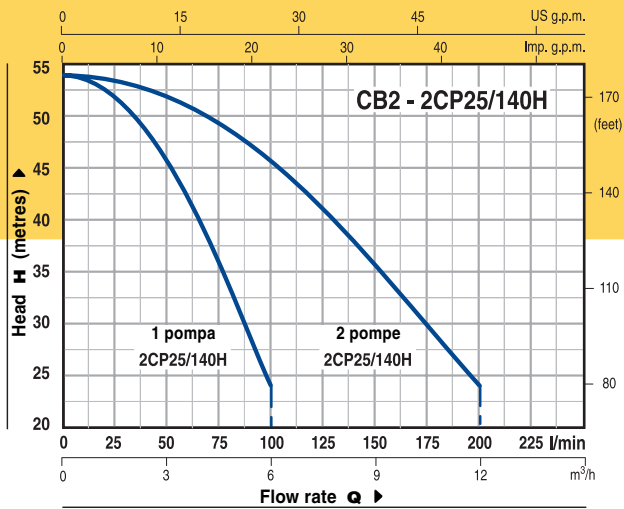
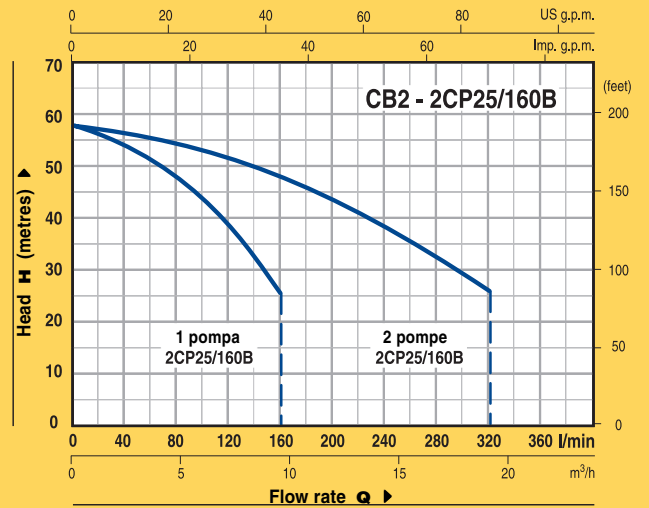
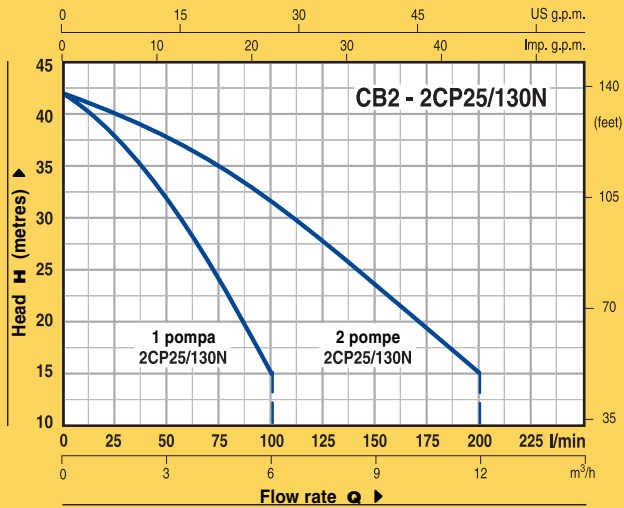
Tolerance of the performance curves according to EN ISO 9906 App. A.

TYPE		POWER		MAXIMUM FLOW RATE*		MAXIMUM HEAD	PRESSURE SWITCH FACTORY SETTING	
Single-phase	Three-phase	kW	HP	m³/h	l/min	metres	- 1 - bar	- 2 - bar
CB2 - CPm 25/160B	CB2 - CP 25/160B	1.1 + 1.1	1.5 + 1.5	24	400	33	1.5÷2.5	1÷2
CB2 - CPm 25/160A	CB2 - CP 25/160A	1.5 + 1.5	2 + 2	26.4	440	38	2÷3	1.5÷2.5
	CB2 - CP 25/160AR	2.2 + 2.2	3 + 3	26.4	440	42	2.5÷3.5	2÷3
CB2 - CPm 25/200B	CB2 - CP 25/200B	2.2 + 2.2	3 + 3	26.4	440	49	3.5÷4.5	3÷4

* Indicates the maximum flow rate of the two pumps, for the minimum setting pressure of the pressure switch - 2 -

CB2 - 2CP sets with two twin-stage centrifugal pumps

CURVES AND PERFORMANCE DATA AT n= 2900 1/min



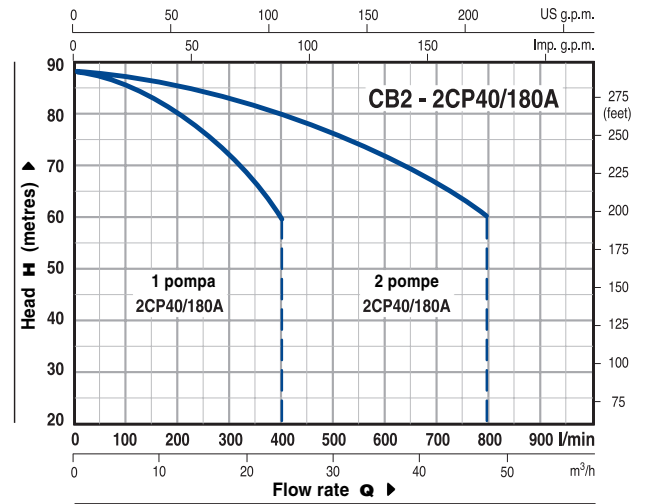
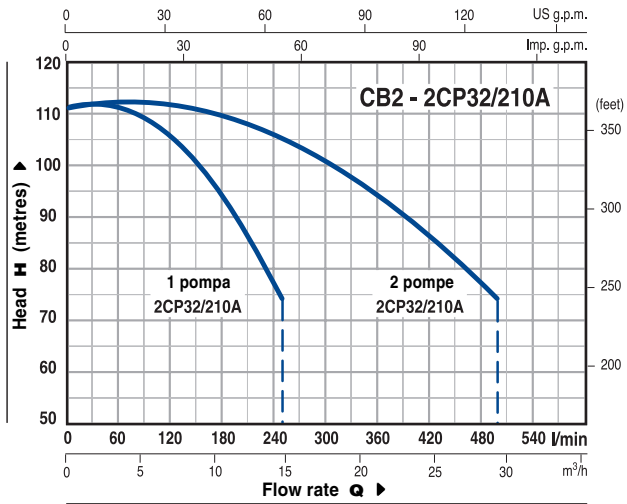
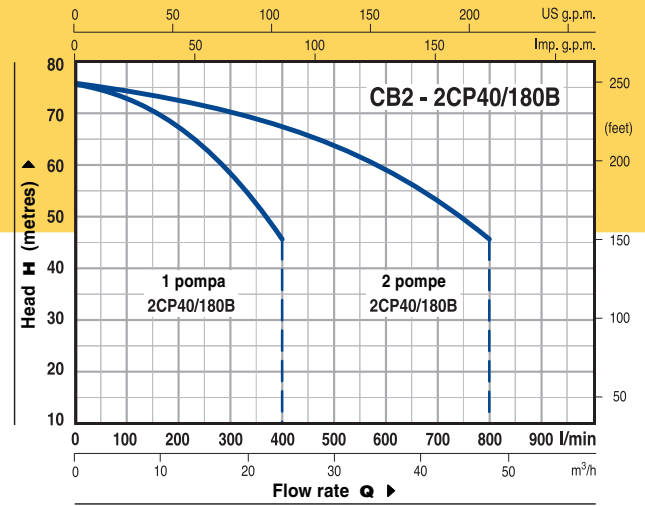
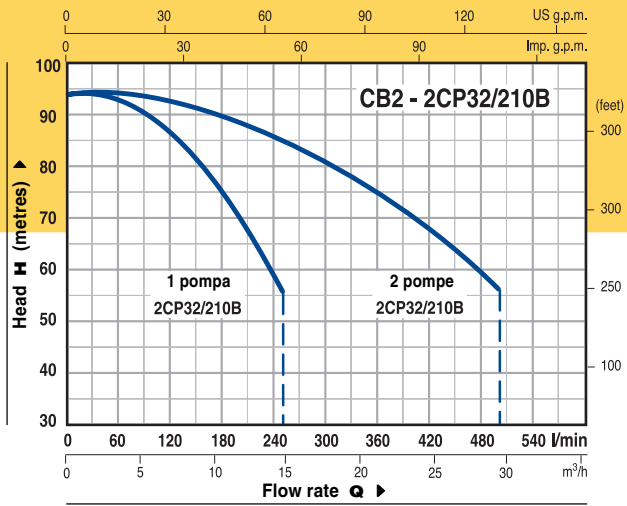
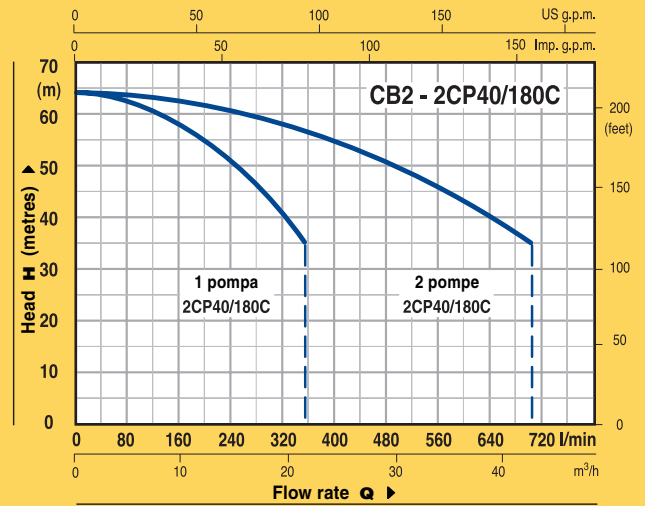
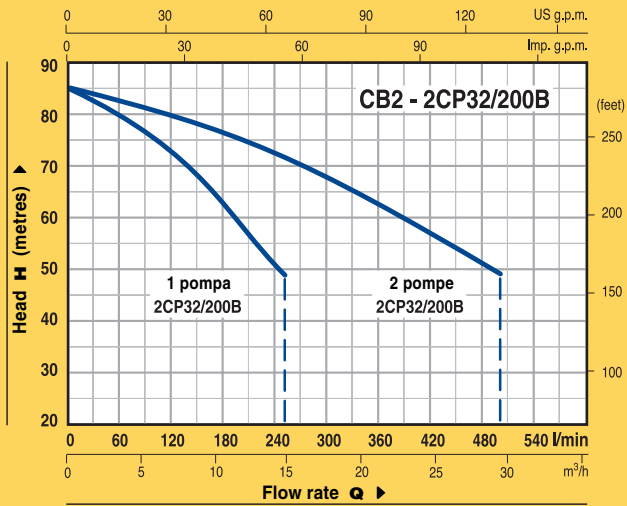
Tolerance of the performance curves according to EN ISO 9906 App. A.

TYPE		POWER		MAXIMUM FLOW RATE*		MAXIMUM HEAD	PRESSURE SWITCH FACTORY SETTING	
Single-phase	Three-phase	kW	HP	m³/h	l/min	metres	- 1 - bar	- 2 - bar
CB2 - 2CPm 25/130N	CB2 - 2CP 25/130N	0.75 + 0.75	1 + 1	12	200	42	2÷3	1.5±2.5
CB2 - 2CPm 25/140H	CB2 - 2CP 25/140H	1.1 + 1.1	1.5 + 1.5	10.8	180	54	3.5÷4.5	3÷4
CB2 - 2CPm 25/140M	CB2 - 2CP 25/140M	1.1 + 1.1	1.5 + 1.5	15	250	47	3÷4	2.5±3.5
CB2 - 2CPm 25/160B	CB2 - 2CP 25/160B	1.5 + 1.5	2 + 2	18	300	58	3.5÷4.5	3÷4
—	CB2 - 2CP 25/160A	2.2 + 2.2	3 + 3	19.2	320	68	4÷5	3.5±4.5
—	CB2 - 2CP 32/200C	3 + 3	4 + 4	27.6	460	70	4.5÷5.5	4÷5

* Indicates the maximum flow rate of the two pumps, for the minimum setting pressure of the pressure switch - 2 -

CB2 - 2CP sets with two twin-stage centrifugal pumps

CURVES AND PERFORMANCE DATA AT n= 2900 1/min



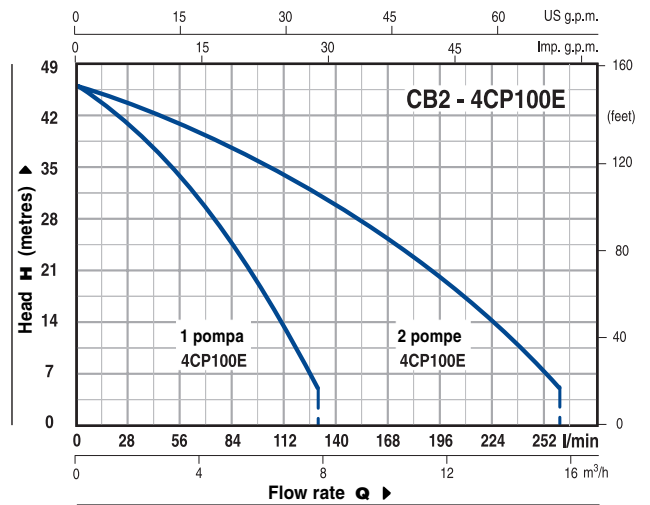
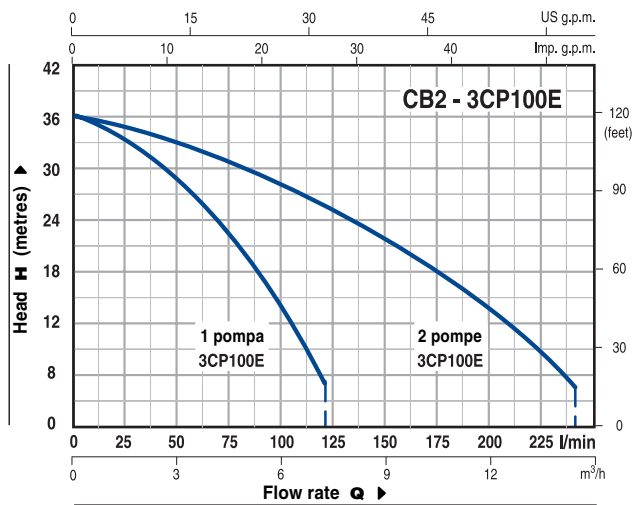
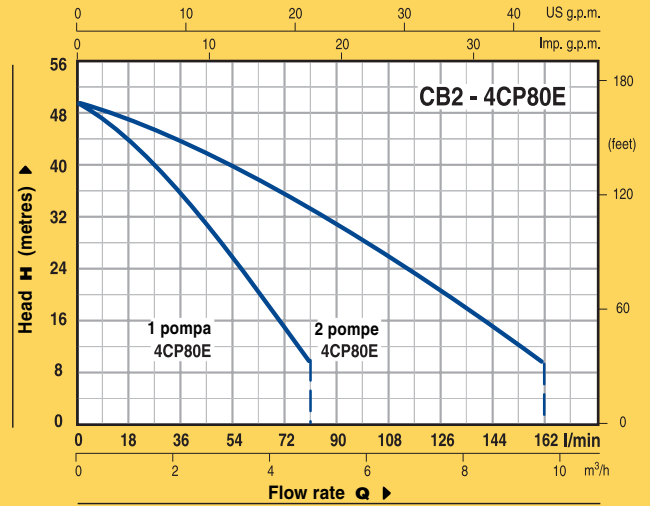
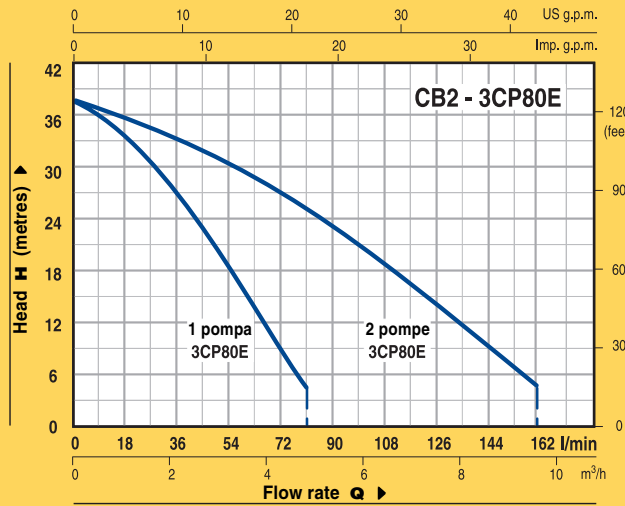
Tolerance of the performance curves according to EN ISO 9906 App. A.

TYPE	POWER		MAXIMUM FLOW RATE*		MAXIMUM HEAD metres	PRESSURE SWITCH FACTORY SETTING	
	kW	HP	m³/h	l/min		- 1 - bar	- 2 - bar
Three-phase							
CB2 - 2CP 32/200B	4 + 4	5.5 + 5.5	27.6	460	85	6±7	5.5÷6.5
CB2 - 2CP 32/210B	5.5 + 5.5	7.5 + 7.5	26.4	440	94	7±8	6.5÷7.5
CB2 - 2CP 32/210A	7.5 + 7.5	10 + 10	26.4	440	112	9±10	8.5÷9.5
CB2 - 2CP 40/180C	4.0 + 4.0	5.5 + 5.5	38.4	640	64	4.5±5.5	4±5
CB2 - 2CP 40/180B	5.5 + 5.5	7.5 + 7.5	48	800	76	5±6	4.5±5.5
CB2 - 2CP 40/180A	7.5 + 7.5	10 + 10	48	800	88	6±7	5.5±6.5

* Indicates the maximum flow rate of the two pumps, for the minimum setting pressure of the pressure switch - 2 -

CB2 - 3-4CP sets with two multi-stage pumps

CURVES AND PERFORMANCE DATA AT n= 2900 1/min



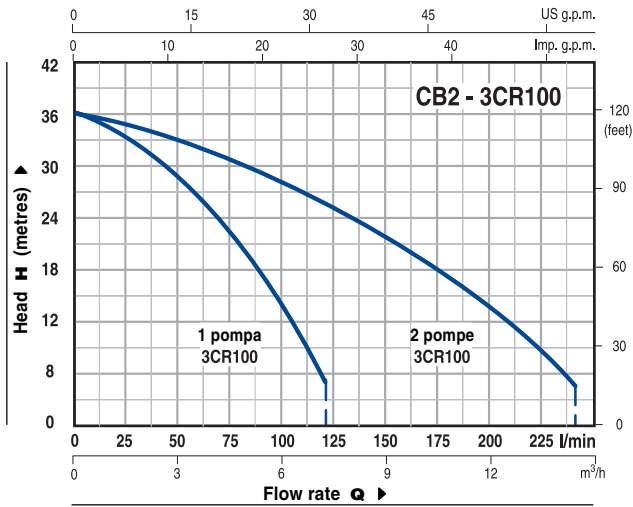
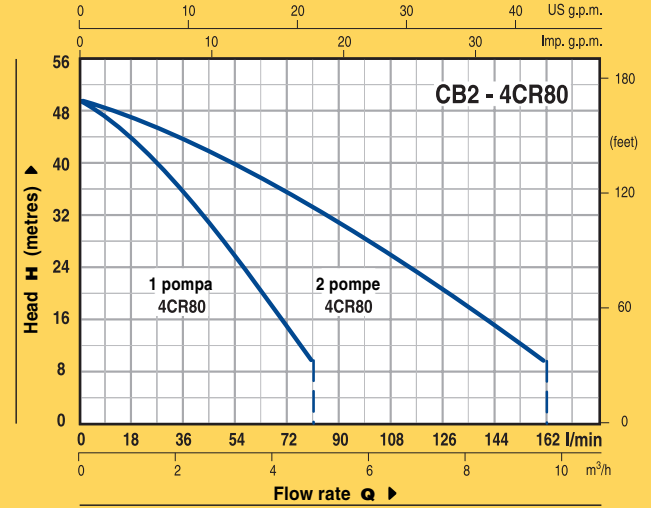
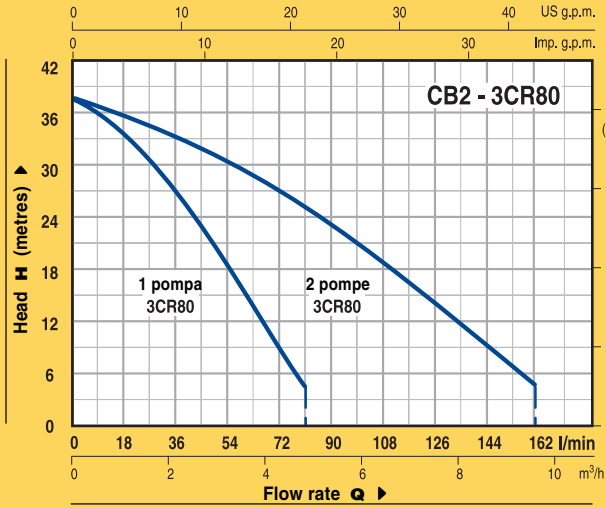
Tolerance of the performance curves according to EN ISO 9906 App. A.

TYPE	POWER		MAXIMUM FLOW RATE*		MAXIMUM HEAD metres	PRESSURE SWITCH FACTORY SETTING	
	kW	HP	m ³ /h	l/min		- 1 - bar	- 2 - bar
Single-phase							
CB2 - 3CPm 80E	0.45 + 0.45	0.60 + 0.60	7.2	120	38	2÷3	1.5÷2.5
CB2 - 3CPm 100E	0.60 + 0.60	0.85 + 0.85	12	200	36	2÷3	1.5÷2.5
CB2 - 4CPm 80E	0.60 + 0.60	0.85 + 0.85	7.2	120	50	3÷4	2.5÷3.5
CB2 - 4CPm 100E	0.75 + 0.75	1 + 1	10.8	180	46	3÷4	2.5÷3.5

* Indicates the maximum flow rate of the two pumps, for the minimum setting pressure of the pressure switch - 2 -

CB2 - 3-4CR sets with two multi-stage pumps

CURVES AND PERFORMANCE DATA AT n= 2900 1/min



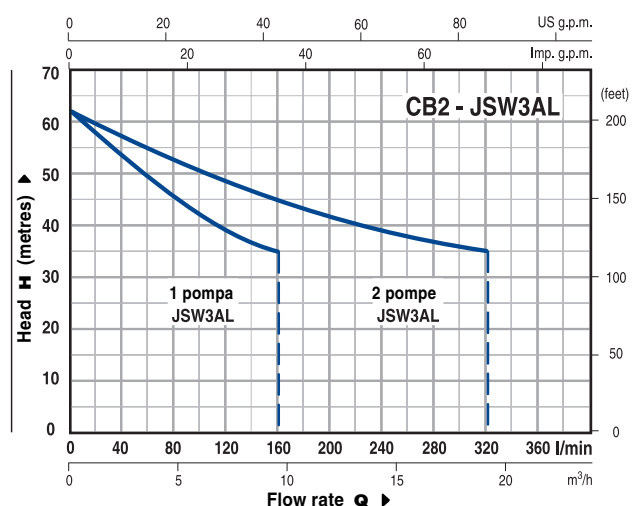
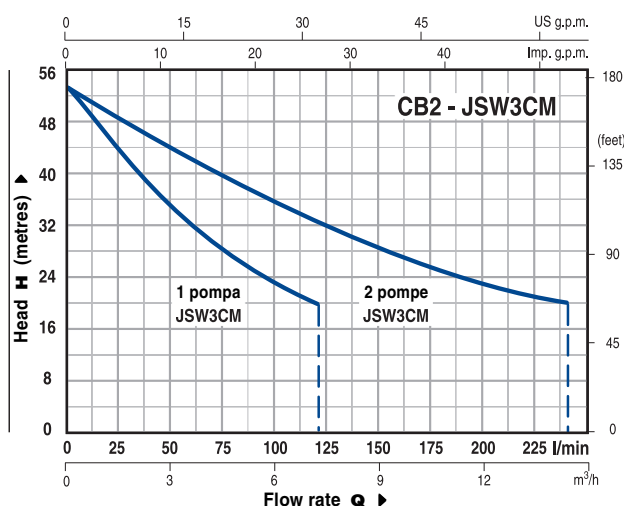
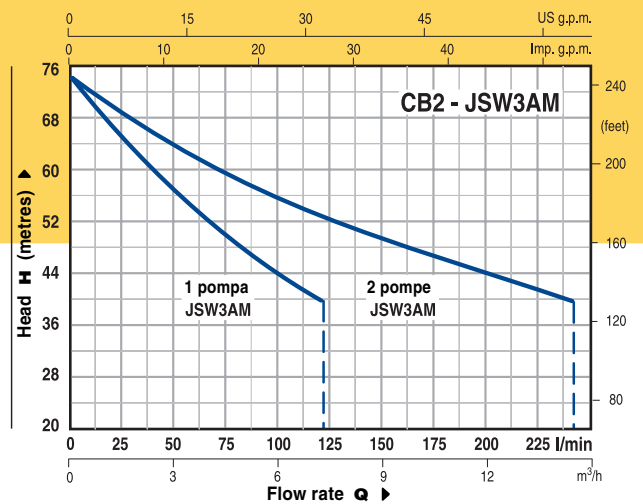
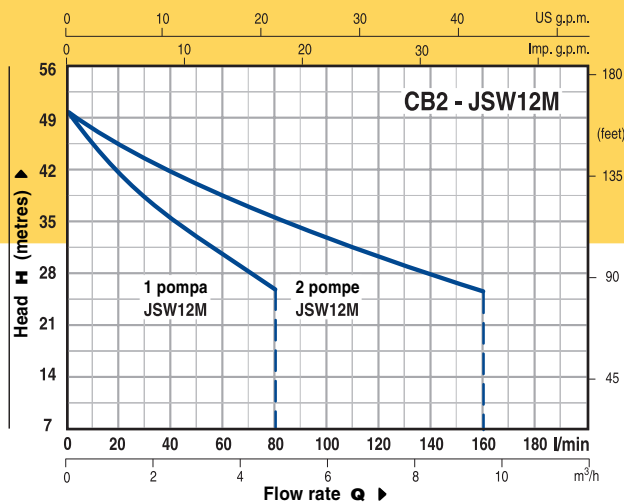
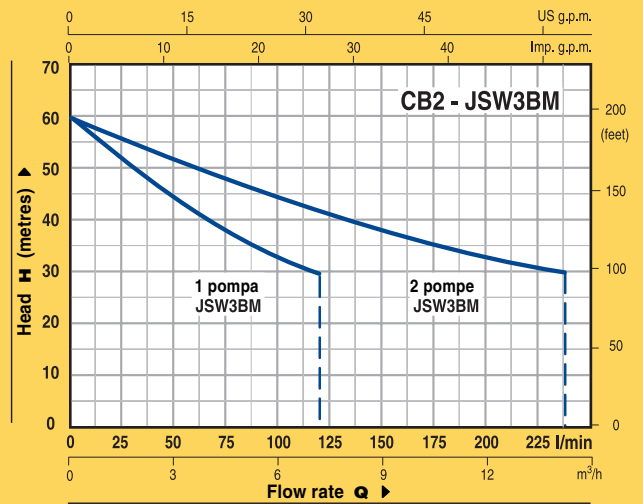
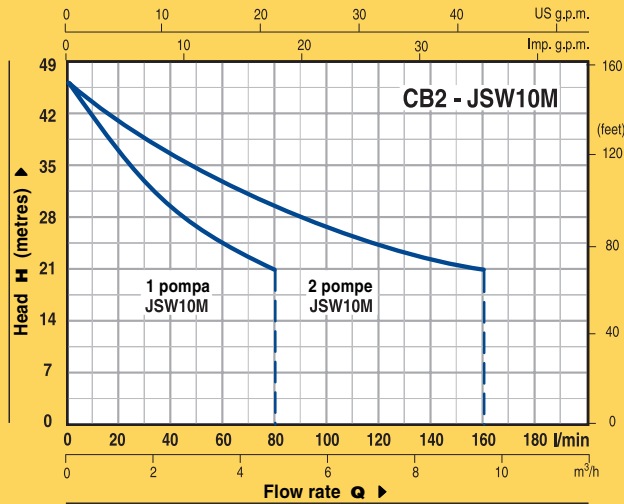
Tolerance of the performance curves according to EN ISO 9906 App. A.

TYPE	POWER		MAXIMUM FLOW RATE*		MAXIMUM HEAD metres	PRESSURE SWITCH FACTORY SETTING	
	kW	HP	m³/h	l/min		- 1 - bar	- 2 - bar
Single-phase CB2 - 3CRm 80	0.45 + 0.45	0.60 + 0.60	7.2	120	38	2÷3	1.5÷2.5
CB2 - 3CRm 100	0.60 + 0.60	0.85 + 0.85	12	200	36	2÷3	1.5÷2.5
CB2 - 4CRm 80	0.60 + 0.60	0.85 + 0.85	7.2	120	50	3÷4	2.5÷3.5

* Indicates the maximum flow rate of the two pumps, for the minimum setting pressure of the pressure switch - 2 -

CB2 - JSW sets with two self-priming pumps

CURVES AND PERFORMANCE DATA AT n= 2900 1/min



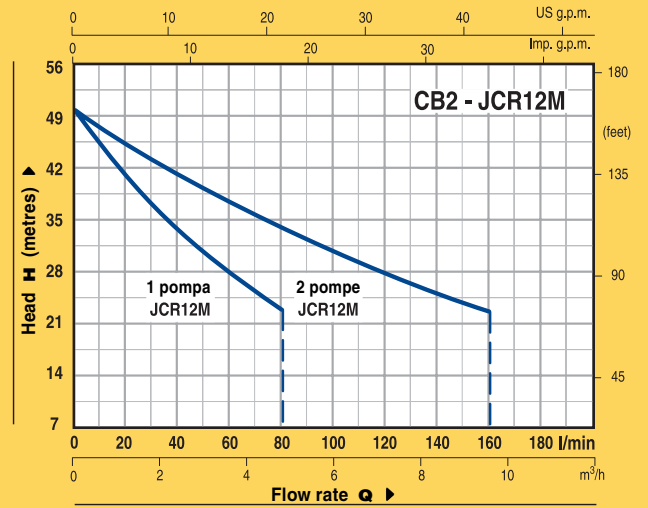
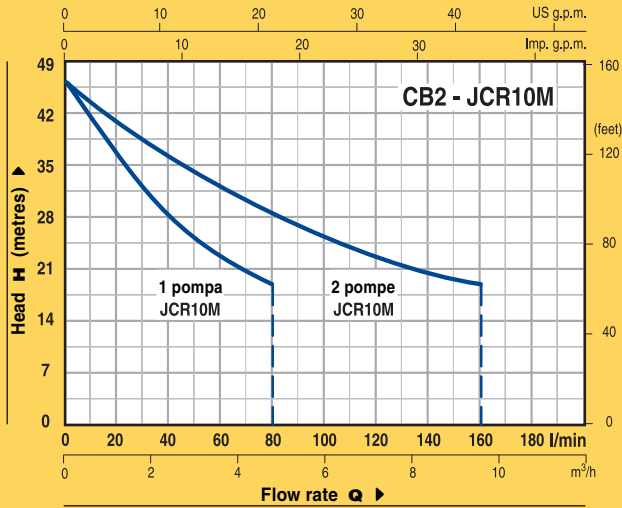
Tolerance of the performance curves according to EN ISO 9906 App. A.

TYPE		POWER		MAXIMUM FLOW RATE*		MAXIMUM HEAD	PRESSURE SWITCH FACTORY SETTING	
Single-phase	Three-phase	kW	HP	m³/h	l/min	metres	- 1 - bar	- 2 - bar
CB2 - JSWm 10M	—	0.75 + 0.75	1 + 1	9.6	160	46	2÷3	1.5÷2.5
CB2 - JSWm 12M	—	0.90 + 0.90	1.25 + 1.25	9.6	160	50	2.5÷3.5	2÷3
CB2 - JSWm 3CM	CB2 - JSW 3CM	1.1 + 1.1	1.5 + 1.5	12	200	52	3÷4	2.5÷3.5
CB2 - JSWm 3BM	CB2 - JSW 3BM	1.5 + 1.5	2 + 2	14.4	240	60	3.5÷4.5	3÷4
—	CB2 - JSW 3AM	2.2 + 2.2	3 + 3	14.4	240	74	4÷5	3.5÷4.5
—	CB2 - JSW 3AL	2.2 + 2.2	3 + 3	19.2	320	62	4÷5	3.5÷4.5

* Indicates the maximum flow rate of the two pumps, for the minimum setting pressure of the pressure switch - 2 -

CB2 - JCR sets with two self-priming pumps

CURVES AND PERFORMANCE DATA AT n= 2900 1/min



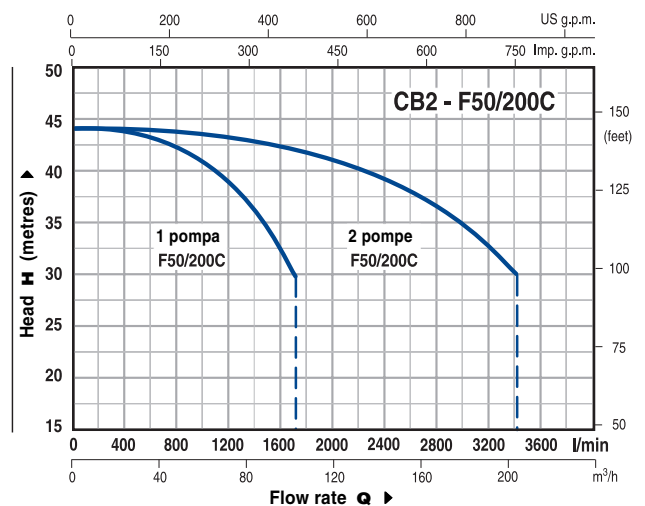
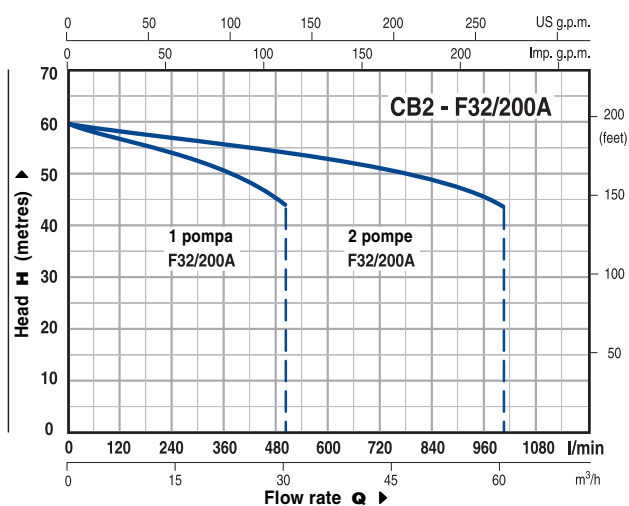
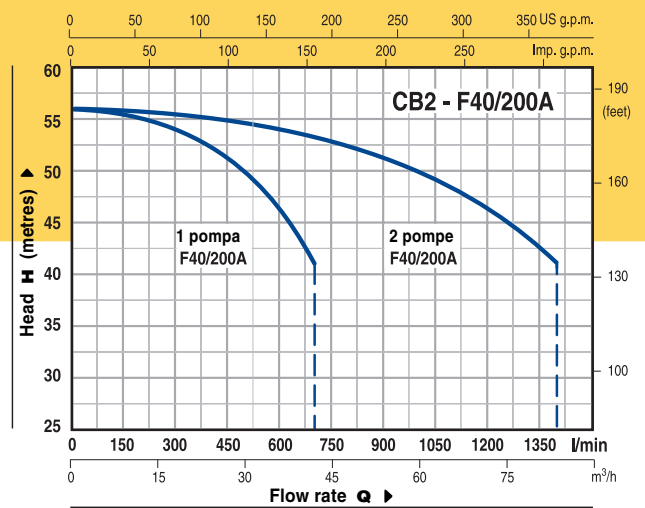
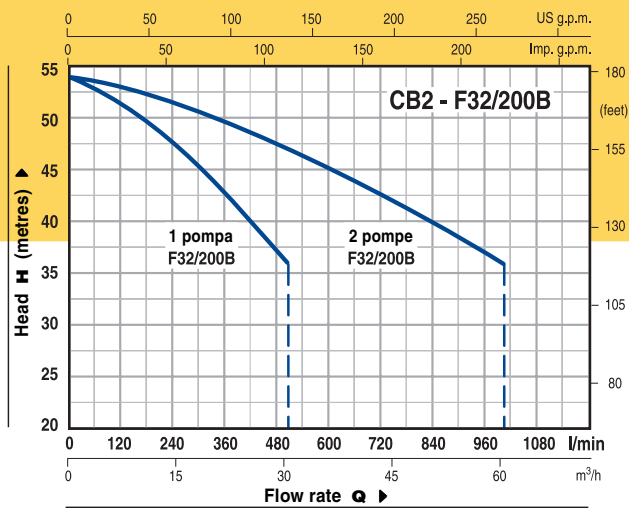
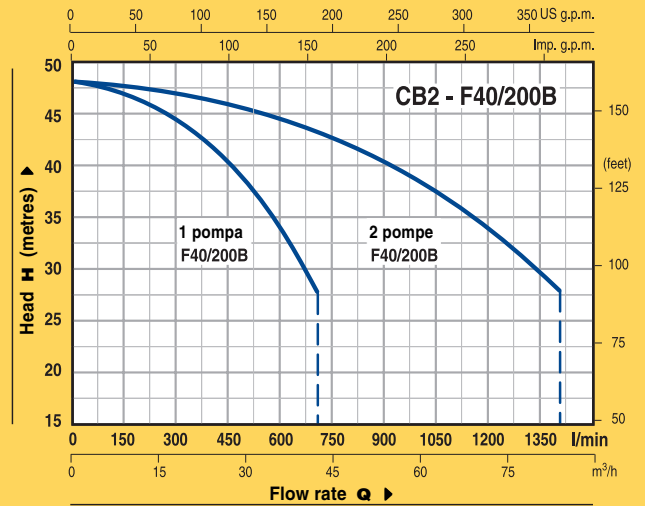
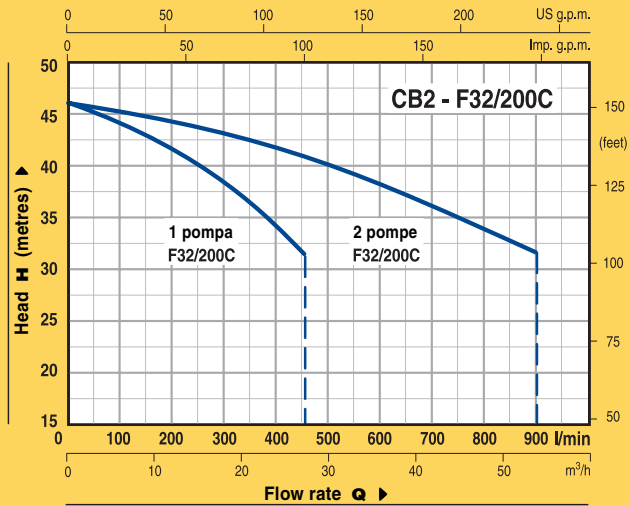
Tolerance of the performance curves according to EN ISO 9906 App. A.

TYPE	POWER		MAXIMUM FLOW RATE*		MAXIMUM HEAD metres	PRESSURE SWITCH FACTORY SETTING	
	kW	HP	m³/h	l/min		- 1 - bar	- 2 - bar
Single-phase							
CB2 - JCRm 10M	0.75 + 0.75	1 + 1	9.6	160	46	2÷3	1.5÷2.5
CB2 - JCRm 12M	0.90 + 0.90	1.25 + 1.25	9.6	160	50	2.5÷3.5	2÷3

* Indicates the maximum flow rate of the two pumps, for the minimum setting pressure of the pressure switch - 2 -

CB2 - F sets with two single-stage centrifugal pumps

CURVES AND PERFORMANCE DATA AT n= 2900 1/min



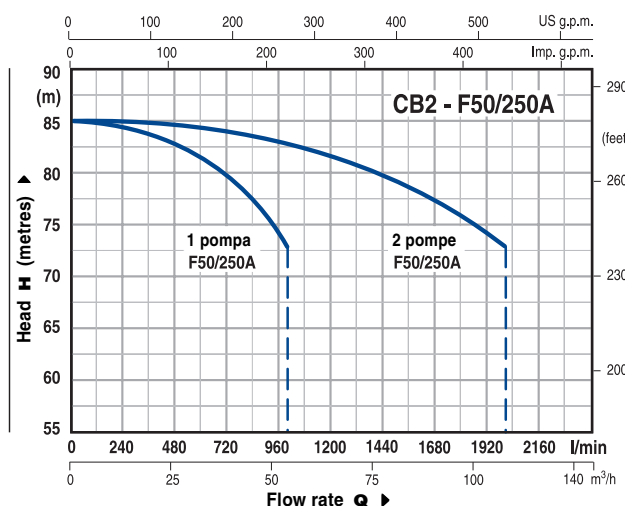
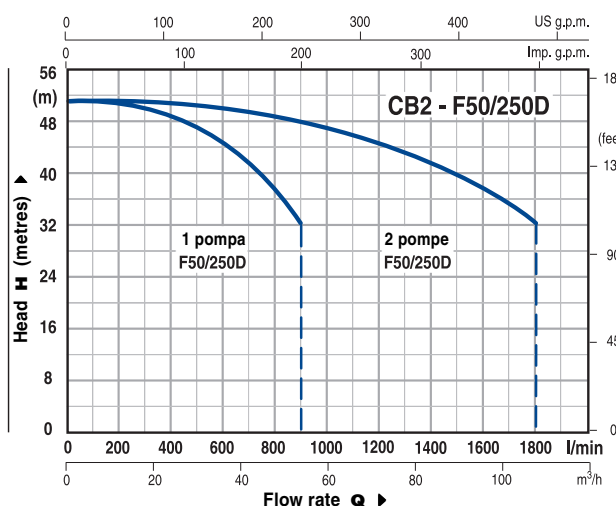
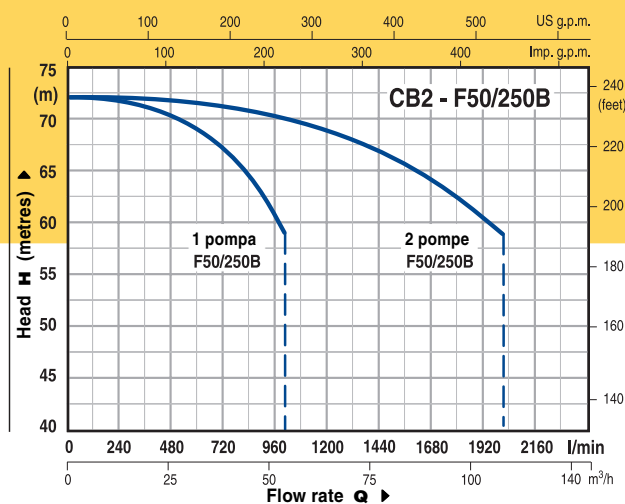
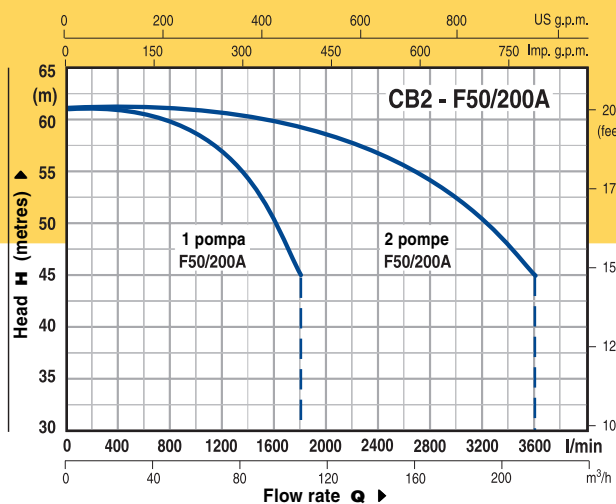
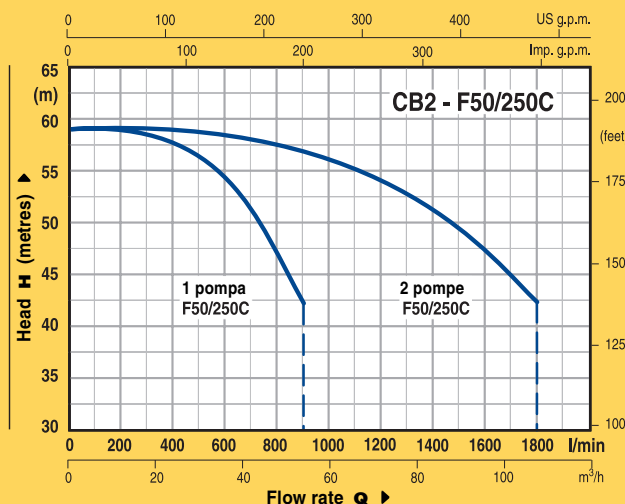
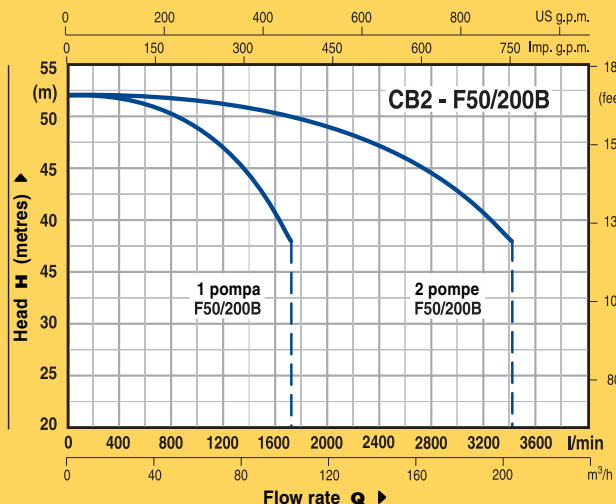
Tolerance of the performance curves according to EN ISO 9906 App. A.

TYPE	POWER		MAXIMUM FLOW RATE*		MAXIMUM HEAD metres	PRESSURE SWITCH FACTORY SETTING	
	kW	HP	m³/h	l/min		- 1 - bar	- 2 - bar
Three-phase							
CB2 - F 32/200C	4 + 4	5.5 + 5.5	54	900	46	3÷4	2.5÷3.5
CB2 - F 32/200B	5.5 + 5.5	7.5 + 7.5	60	1000	54	3.5÷4.5	3÷4
CB2 - F 32/200A	7.5 + 7.5	10 + 10	60	1000	60	4.5÷5.5	4÷5
CB2 - F 40/200B	5.5 + 5.5	7.5 + 7.5	84	1400	48	3÷4	2.5÷3.5
CB2 - F 40/200A	7.5 + 7.5	10 + 10	84	1400	56	3.5÷4.5	3÷4
CB2 - F 50/200C	11 + 11	15 + 15	204	3400	44	3÷4	2.5÷3.5

* Indicates the maximum flow rate of the two pumps, for the minimum setting pressure of the pressure switch - 2 -

CB2 - F sets with two single-stage centrifugal pumps

CURVES AND PERFORMANCE DATA AT n= 2900 1/min



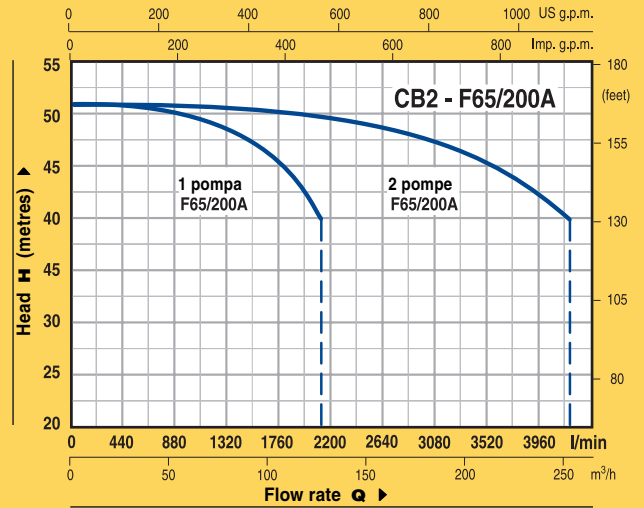
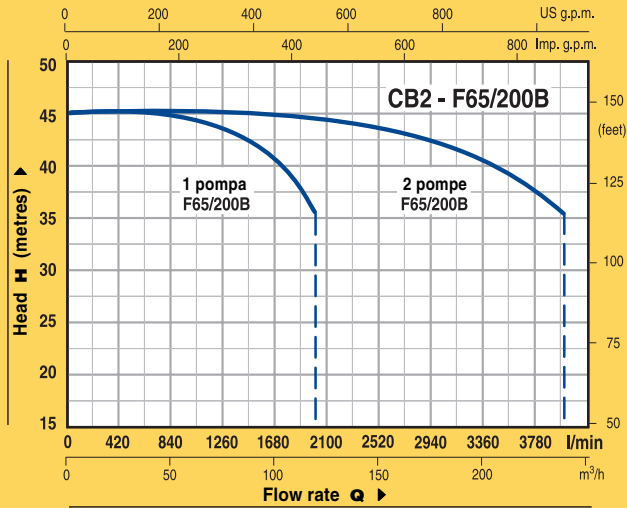
Tolerance of the performance curves according to EN ISO 9906 App. A.

TYPE	POWER		MAXIMUM FLOW RATE*		MAXIMUM HEAD metres	PRESSURE SWITCH FACTORY SETTING	
	kW	HP	m³/h	l/min		- 1 - bar	- 2 - bar
Three-phase							
CB2 - F 50/200B	15 + 15	20 + 20	204	3400	52	3.5÷4.5	3÷4
CB2 - F 50/200A	18.5 + 18.5	25 + 25	216	3600	61	4.5÷5.5	4÷5
CB2 - F 50/250D	9.2 + 9.2	12.5 + 12.5	108	1800	51	3.5÷4.5	3÷4
CB2 - F 50/250C	11 + 11	15 + 15	108	1800	59	4.5÷5.5	4÷5
CB2 - F 50/250B	15 + 15	20 + 20	120	2000	72	5.5÷6.5	5÷6
CB2 - F 50/250A	18.5 + 18.5	25 + 25	120	2000	85	7÷8	6.5÷7.5

* Indicates the maximum flow rate of the two pumps, for the minimum setting pressure of the pressure switch - 2 -

CB2 - F sets with two single-stage centrifugal pumps

CURVES AND PERFORMANCE DATA AT n= 2900 1/min



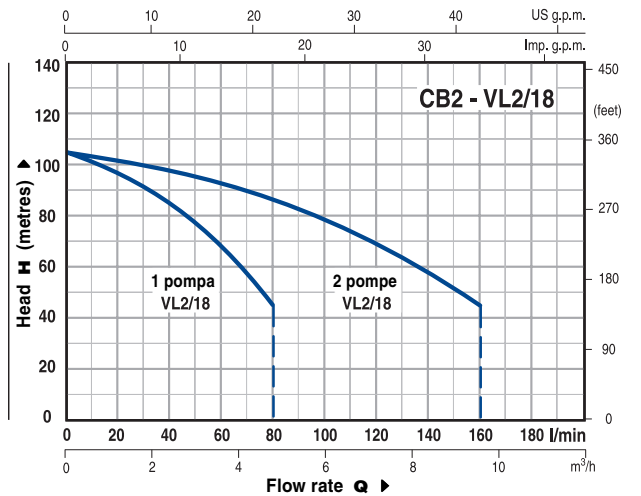
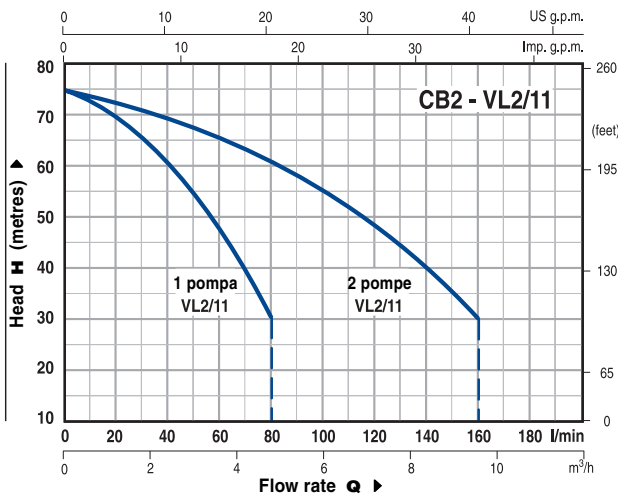
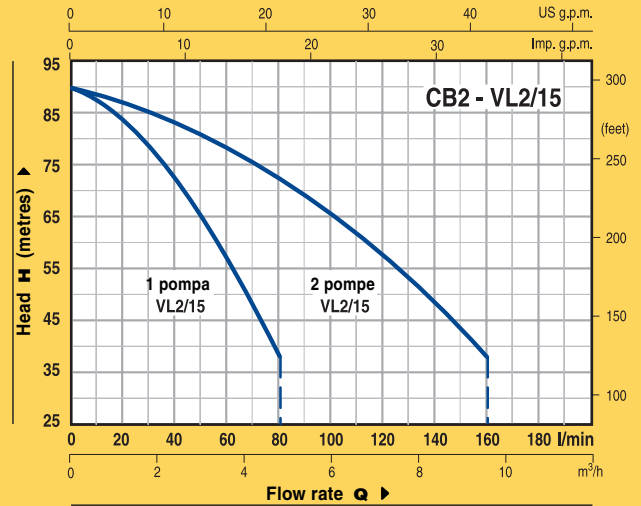
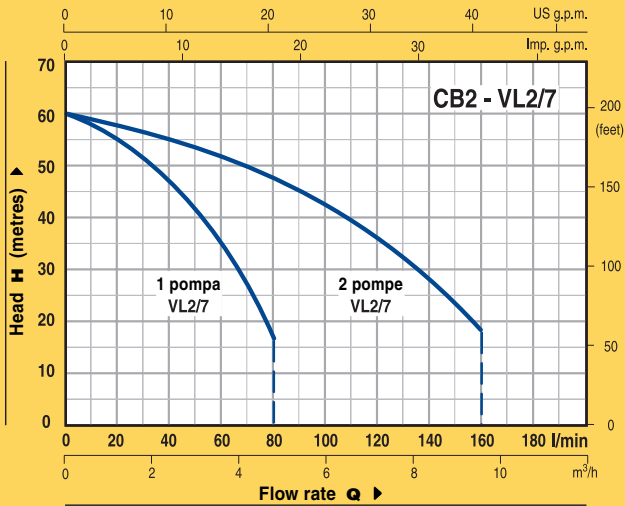
Tolerance of the performance curves according to EN ISO 9906 App. A.

TYPE	POWER		MAXIMUM FLOW RATE*		MAXIMUM HEAD metres	PRESSURE SWITCH FACTORY SETTING	
	kW	HP	m³/h	l/min		- 1 - bar	- 2 - bar
Three-phase							
CB2 - F 65/200B	15 + 15	20 + 20	240	4000	45	3÷4	2.5÷3.5
CB2 - F 65/200A	18.5 + 18.5	25 + 25	252	4200	51	3.5÷4.5	3÷4

* Indicates the maximum flow rate of the two pumps, for the minimum setting pressure of the pressure switch - 2 -

CB2 - VL sets with two vertical multi-stage pumps

CURVES AND PERFORMANCE DATA AT n= 2900 1/min



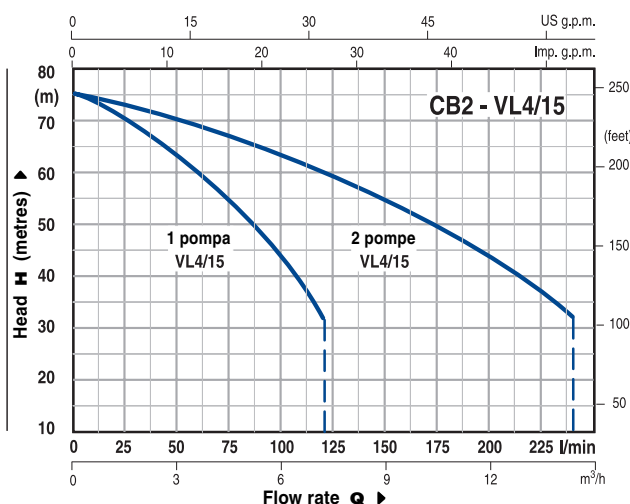
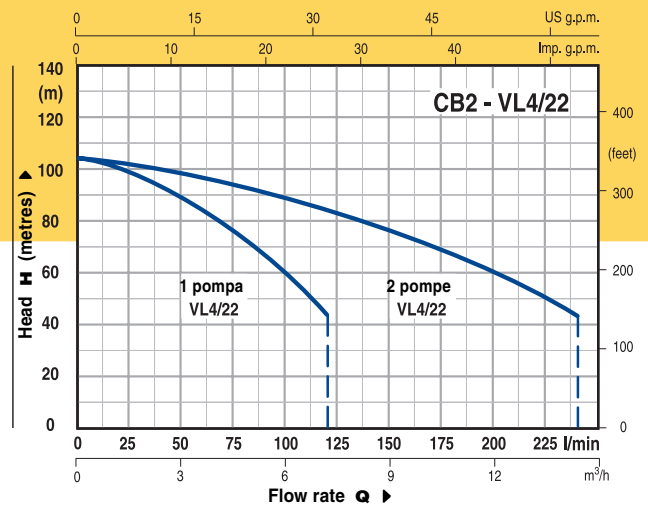
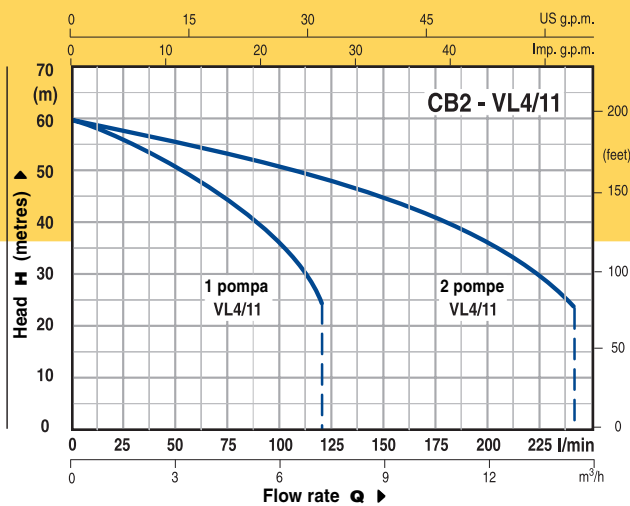
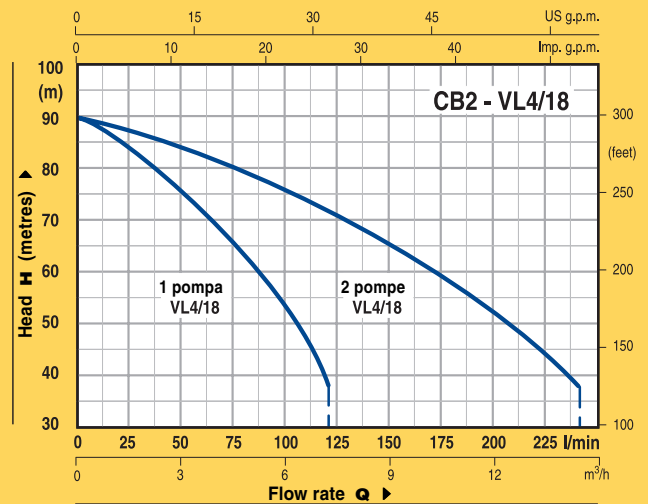
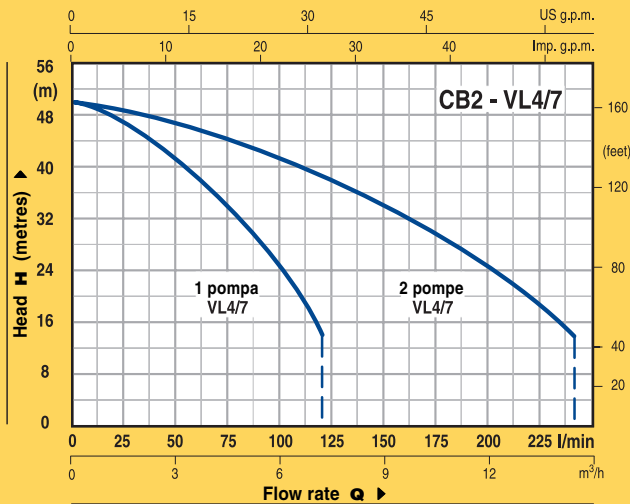
Tolerance of the performance curves according to EN ISO 9906 App. A.

TYPE		POWER		MAXIMUM FLOW RATE*		MAXIMUM HEAD metres	PRESSURE SWITCH FACTORY SETTING	
Single-phase	Three-phase	kW	HP	m³/h	l/min		- 1 - bar	- 2 - bar
CB2 - VLm 2/7	CB2 - VL 2/7	0.75 + 0.75	1 + 1	7.8	130	60	3.5÷4.5	3÷4
CB2 - VLm 2/11	CB2 - VL 2/11	1.1 + 1.1	1.5 + 1.5	7.8	130	75	5÷6	4.5÷5.5
CB2 - VLm 2/15	CB2 - VL 2/15	1.5 + 1.5	2 + 2	7.2	120	90	6.5÷7.5	6÷7
CB2 - VLm 2/18	CB2 - VL 2/18	1.8 + 1.8	2.5 + 2.5	7.2	120	105	7÷8	6.5÷7.5

* Indicates the maximum flow rate of the two pumps, for the minimum setting pressure of the pressure switch - 2 -

CB2 - VL sets with two vertical multi-stage pumps

CURVES AND PERFORMANCE DATA AT n= 2900 1/min

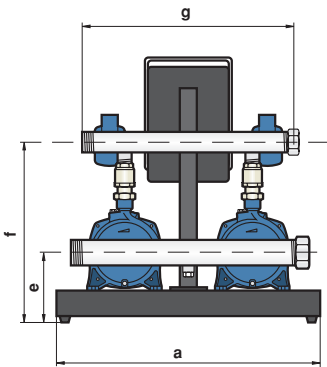


Tolerance of the performance curves according to EN ISO 9906 App. A.

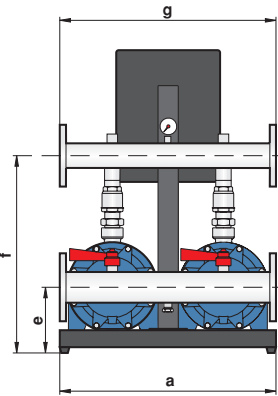
TYPE		POWER		MAXIMUM FLOW RATE*		MAXIMUM HEAD	PRESSURE SWITCH FACTORY SETTING	
Single-phase	Three-phase	kW	HP	m³/h	l/min	metres	- 1 - bar	- 2 - bar
CB2 - VLm 4/7	CB2 - VL 4/7	0.75 + 0.75	1 + 1	13.2	220	50	2.5÷3.5	2÷3
CB2 - VLm 4/11	CB2 - VL 4/11	1.1 + 1.1	1.5 + 1.5	13.2	220	60	3.5÷4.5	3÷4
CB2 - VLm 4/15	CB2 - VL 4/15	1.5 + 1.5	2 + 2	12	200	75	4.5÷5.5	4÷5
CB2 - VLm 4/18	CB2 - VL 4/18	1.8 + 1.8	2.5 + 2.5	10.8	180	90	6÷7	5.5÷6.5
—	CB2 - VL 4/22	2.2 + 2.2	3 + 3	10.8	180	105	7÷8	6.5÷7.5

* Indicates the maximum flow rate of the two pumps, for the minimum setting pressure of the pressure switch - 2 -

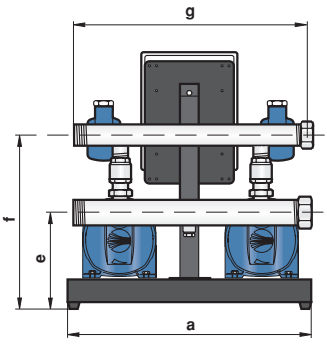
DIMENSIONS AND WEIGHTS



CB2 - CP



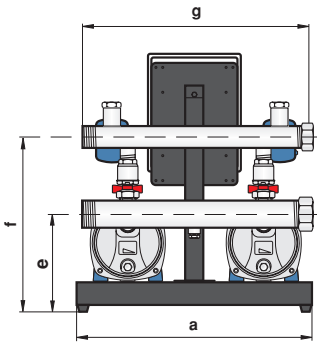
CB2 - 2CP



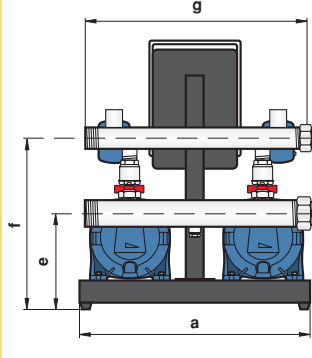
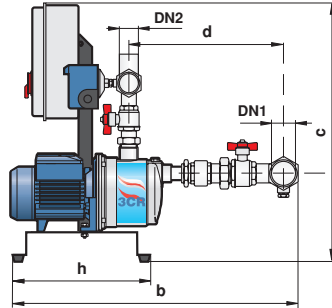
CB2 - 3-4CP

TYPE		PORTS		DIMENSIONS mm								kg	
Single-phase	Three-phase	DN1	DN2	a	b	c	d	e	f	g	h	1~	3~
CB2 - CPm 150	CB2 - CP 150	1 1/2"	1 1/2"	520	560	620	255	160	450	500	305	45.0	43.8
CB2 - CPm 158	CB2 - CP 158											45.0	45.5
CB2 - CPm 170	CB2 - CP 170	2"	1 1/2"	615	625	630	280	190	480	500	370	65.0	64.3
CB2 - CPm 170M	CB2 - CP 170M						65.0					64.3	
CB2 - CPm 190	CB2 - CP 190	100	80	700	1000	780	300	220	650	700	560	77.0	76.0
—	CB2 - CP 200						-					80.0	
—	CB2 - CP 220C	100	80	700	1000	780	430	220	650	700	560	-	173.0
—	CB2 - CP 220B											-	175.0
—	CB2 - CP 220A	100	80	700	1000	780	430	220	650	700	560	-	181.0
—	CB2 - CP 220AH											-	181.0
CB2 - CPm 25/160B	CB2 - CP 25/160B	2"	1 1/2"	615	645	630	320	180	480	500	370	70.0	69.0
CB2 - CPm 25/160A	CB2 - CP 25/160A											70.0	69.0
—	CB2 - CP 25/160AR	1 1/2"	1 1/2"	520	600	620	300	155	420	500	305	-	70.0
CB2 - CPm 25/200B	CB2 - CP 25/200B											85.5	83.0
CB2 - 2CPm 25/130N	CB2 - 2CP 25/130N	2"	1 1/2"	615	595	630	330	170	455	500	370	51.0	50.5
CB2 - 2CPm 25/140H	CB2 - 2CP 25/140H											67.5	67.0
CB2 - 2CPm 25/140M	CB2 - 2CP 25/140M	2"	1 1/2"	615	596	630	350	190	445	500	370	67.5	67.0
CB2 - 2CPm 25/160B	CB2 - 2CP 25/160B											67.5	67.0
—	CB2 - 2CP 25/160A	100	80	700	625	780	385	130	490	700	565	77.5	77.0
—	CB2 - 2CP 25/160C											-	80.0
—	CB2 - 2CP 32/200C	3"	2"	700	910	780	400	200	600	700	565	-	119.0
—	CB2 - 2CP 32/200B											-	125.0
—	CB2 - 2CP 32/210B	100	80	700	920	895	430	200	590	700	565	-	156.0
—	CB2 - 2CP 32/210A											-	163.0
—	CB2 - 2CP 40/180C	100	80	700	980	780	420	210	610	700	565	-	175.0
—	CB2 - 2CP 40/180B											-	185.0
—	CB2 - 2CP 40/180A	100	80	700	980	780	420	210	610	700	565	-	195.0
—	CB2 - 2CP 40/180A											-	195.0
CB2 - 3CPm 80E	—	1 1/2"	1 1/2"	520	600	620	300	155	420	500	305	51.0	-
CB2 - 3CPm 100E	—				596	630	350	170	445			67.5	-
CB2 - 4CPm 80E	—	1 1/2"	1 1/2"	520	595	630	330	170	455	500	305	67.5	-
CB2 - 4CPm 100E	—				670	630	340	190	495			77.5	-

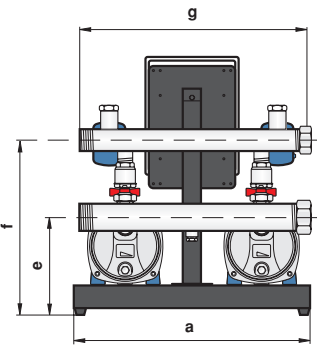
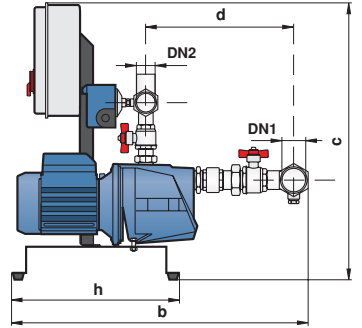
DIMENSIONS AND WEIGHTS



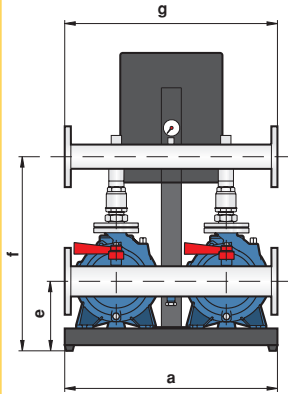
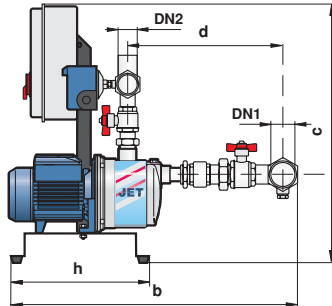
CB2 - 3-4CR



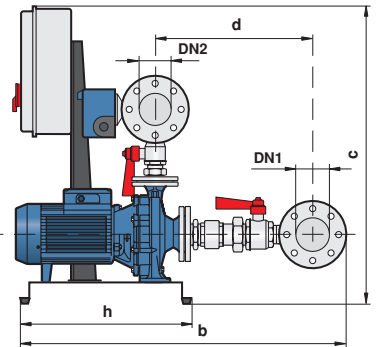
CB2 - JSW



CB2 - JCR

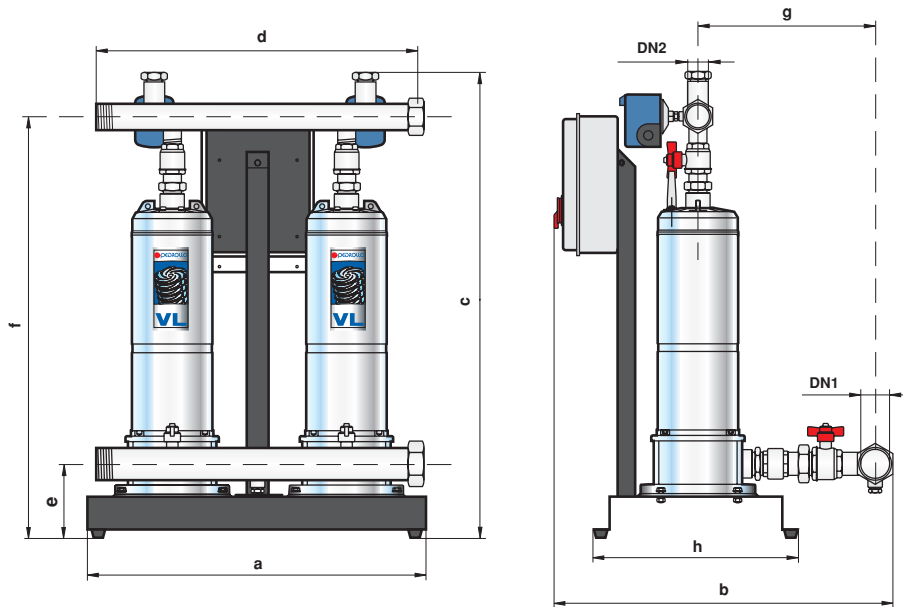


CB2 - F



TYPE		PORTS		DIMENSIONS mm								kg	
Single-phase	Three-phase	DN1	DN2	a	b	c	d	e	f	g	h	1~	3~
CB2 - 3CRm 80	—	1 1/2"	1 1/2"	520	600	620	300	155	420	500	305	51.0	-
CB2 - 3CRm100	—				596	630	350	170	445			67.5	-
CB2 - 4CRm 80	—				595	—	330	455	67.5			-	
CB2 - JSWm 10M	—				630	—	340	400	48.0			-	
CB2 - JSWm 12M	—	2"	1 1/2"	520	710	620	400	230	425	500	305	48.0	-
CB2 - JSWm 3CM	CB2 - JSW 3CM											78.5	76.5
CB2 - JSWm 3BM	CB2 - JSW 3BM											78.5	76.5
—	CB2 - JSW 3AM											-	78.5
—	CB2 - JSW 3AL	-	78.5										
CB2 - JCRm 10M	—	1 1/2"	1 1/2"	520	700	—	350	210	420	500	305	41.0	-
CB2 - JCRm 12M	—											41.0	-
—	CB2 - F 32/200C	100	80	700	910	780	440	230	660	700	565	-	161.0
—	CB2 - F 32/200B											-	173.0
—	CB2 - F 32/200A											-	181.0
—	CB2 - F 40/200B											-	182.0
—	CB2 - F 40/200A	125	100	800	920	780	—	—	—	700	700	-	189.0
—	CB2 - F 50/200C											-	383.0
—	CB2 - F 50/200B											-	415.0
—	CB2 - F 50/200A											-	440.0
—	CB2 - F 50/250D	125	100	800	1200	1330	450	310	725	800	700	-	398.0
—	CB2 - F 50/250C											-	408.0
—	CB2 - F 50/250B											-	442.0
—	CB2 - F 50/250A											-	468.0
—	CB2 - F 65/200B	150	125	800	1300	—	520	320	800	780	700	-	455.0
—	CB2 - F 65/200A											-	475.0

DIMENSIONS AND WEIGHTS



CB2 - VL

TYPE		PORTS		DIMENSIONS mm								kg	
Single-phase	Three-phase	DN1	DN2	a	b	c	d	e	f	g	h	1~	3~
CB2 - VLm 2/7	CB2 - VL 2/7	2"	2"	615	700	835	500	130	765	350	370	65.3	63.8
CB2 - VLm 2/11	CB2 - VL 2/11					908			838			76.0	71.0
CB2 - VLm 2/15	CB2 - VL 2/15					938			868			78.0	74.0
CB2 - VLm 2/18	CB2 - VL 2/18					1000		943	80.0			76.0	
CB2 - VLm 4/7	CB2 - VL 4/7					835		765	65.3			63.8	
CB2 - VLm 4/11	CB2 - VL 4/11					880		810	75.0			70.0	
CB2 - VLm 4/15	CB2 - VL 4/15					140		868	77.0			73.0	
CB2 - VLm 4/18	CB2 - VL 4/18							938	868			79.0	75.0
—	CB2 - VL 4/22							1000	943			-	87.0

Km1 asynchronous single-phase electric motors

Asynchronous single-phase electric motors, high quality, robust and with high efficiencies.



RATED POWERS AT 50 Hz

0.25 ÷ 2.2 kW (0.33 ÷ 3 HP) 2 pole

0.37 ÷ 1.5 kW (0.50 ÷ 2 HP) 4 pole

LIMITS OF USE

Rated voltage $\pm 5\%$

Environment temperature up to $+40\text{ }^{\circ}\text{C}$

Altitude up to 1000 metres a.s.l.

CONSTRUCTION AND SAFETY STANDARDS

EN 60034-1

IEC 34-1

CEI 2-3



GUARANTEE 2 YEARS subject to our general terms of sale.

CONSTRUCTION CHARACTERISTICS

- **MOTOR:** The asynchronous single-phase motors of the **Km1** series are of closed type, with external ventilation and permanent capacitor, suitable for continuous duty.

- the motor casing is made of die-cast aluminium with a top terminal box containing the capacitor and power cable connections.
- the stator pack is made of magnetic sheet metal with a low loss figure.
- the stator is machine wound using class H double insulated wire with the head precision tied and shaped. Resin impregnation is carried out in a continuous automated process using class F polyester resin for reliable insulation and optimum heat transmission.

- **MOTOR CASING:** aluminium
 - **SHIELDS:** die-cast aluminium.
 - **SHIELD:** fan end in technopolymer for motor H 56.
 - **FAN:** in glass-filled thermoplastic.
 - **ROTOR:** die-cast, dynamically balanced, with shielded bearings, greased for life.
 - **TERMINAL BOX:** with cable clamp.
 - **CAPACITOR:** permanent, to standard VDE-IMQ.
 - **INSULATION:** class F.
 - **PROTECTION:** IP 44 complying with IEC 34-5
 - **BALANCING:** complying degree N of standard IEC 34-14.
 - **PAINTING:** the surface protection of the motor is obtained through a process of pickling, phosphating, passivation and a two coat electrostatic paint, oven cured.
- Km 1:** single-phase 230 V - 50 Hz.

OPTIONS ON REQUEST

- ⇒ protection IP 55
- ⇒ different voltages
- ⇒ motors for frequency 60 Hz

TECHNICAL CHARACTERISTICS

TYPE	Rated power		Revs 1/min	Rated current A	Condenser capacity μF	Power factor cos φ	Yield η	Static torque	Static current	J kgm ²	WEIGHT kg
	kW	HP						Rated torque	Rated current		

2 POLE SINGLE-PHASE - 230 V - 50 Hz

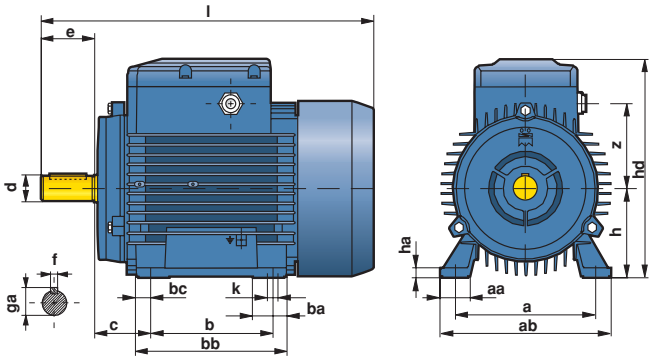
Km1 - 56 A/2	0.25	0.33	2730	1.8	8	0.90	63%	0.70	2.5	0.00020	3.35
Km1 - 63 B/2	0.37	0.50	2730	2.75	12.5	0.90	67%	0.70	3.1	0.00035	4.6
Km1 - 71 A/2	0.37	0.50	2800	3.0	10	0.83	65%	0.72	3.4	0.00045	6.8
Km1 - 71 B/2	0.55	0.75	2800	4.2	20	0.86	66%	0.70	3.0	0.00053	8.0
Km1 - 71 C/2	0.75	1	2800	5.2	25	0.93	68%	0.71	3.2	0.00058	8.0
Km1 - 80 B/2	1.1	1.5	2800	7.5	35	0.90	72%	0.77	3.3	0.00120	11.6
Km1 - 80 C/2	1.5	2	2800	9.7	45	0.93	74%	0.70	3.5	0.00140	12.6
Km1 - 90 S/2	1.5	2	2850	9.6	45	0.93	74%	0.72	3.6	0.00130	15.7
Km1 - 90 LB/2	2.2	3	2840	16.0	50	0.83	76%	0.70	3.6	0.00260	17.2

4 POLE SINGLE-PHASE - 230 V - 50 Hz

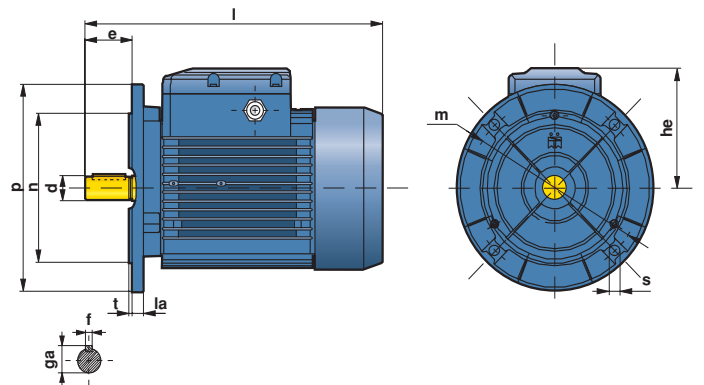
Km1 - 71 B/4	0.37	0.50	1380	3.1	14	0.91	62%	0.75	2.6	0.00073	7.8
Km1 - 80 A/4	0.55	0.75	1400	4.5	20	0.93	62%	0.78	2.6	0.00220	9.8
Km1 - 80 B/4	0.75	1	1400	5.5	25	0.95	65%	0.73	2.7	0.00280	11.5
Km1 - 90 S/4	1.1	1.5	1420	7.8	31.5	0.98	67%	0.72	2.6	0.00370	14.0
Km1 - 90 LA/4	1.5	2	1420	10.8	40	0.95	70%	0.75	2.8	0.00490	17.0

DIMENSIONS

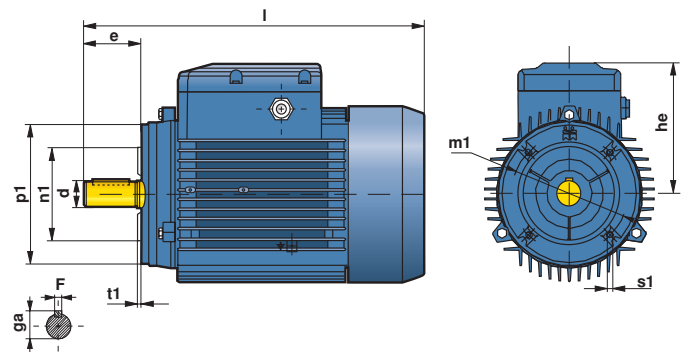
FRAME SIZE B3 (IM 1001)



FRAME SIZE B5 (IM 3001)



FRAME SIZE B14 (IM 3601)



Italian
Electrical
Committee

Authorisation n° prot. 1064 / 27.3.87

TYPE		DIMENSIONS mm																													
2 Pole	4 Pole	a	aa	ab	b	ba	bb	bc	c	d	e	f	ga	h	ha	hd	he	k	l	la	m	m1	n	n1	p	p1	s	s1	t	t1	z
Km1-56 A/2	—	90	20	110	71	20	90	10.5	36	9	20	3	10.2	56	8	121	65	14	181	8	100	65	80	50	120	80	7	M5	3	2.5	45
Km1-63 B/2	—	100	22	120	80	23.5	98	9	40	11	23	4	12.5	63	8	152	91	7	209	9	115	75	95	60	140	90	9	M5	3	2.5	49.5
Km1-71 A/2	—	112	23	134	90	24.5	110	10	45	14	30	5	16	71	8	162.5	91.5	7	243	9	130	85	110	70	160	105	9.5	M6	3.5	2.5	61
Km1-71 B/2	Km1-71 B/4	112	23	134	90	24.5	110	10	45	14	30	5	16	71	8	162.5	91.5	7	243	9	130	85	110	70	160	105	9.5	M6	3.5	2.5	61
Km1-71 C/2	—	112	23	134	90	24.5	110	10	45	14	30	5	16	71	8	162.5	91.5	7	243	9	130	85	110	70	160	105	9.5	M6	3.5	2.5	61
—	Km1-80 A/4	125	27.5	152	100	32	124	12	50	19	40	6	21.5	80	10	202.5	122.5	9	279	10.5	165	100	130	80	200	120	11.5	M6	3.5	3	69
—	Km1-80 B/4	125	27.5	152	100	32	124	12	50	19	40	6	21.5	80	10	202.5	122.5	9	279	10.5	165	100	130	80	200	120	11.5	M6	3.5	3	69
Km1-80 B/2	—	125	27.5	152	100	32	124	12	50	19	40	6	21.5	80	10	202.5	122.5	9	299	10.5	165	100	130	80	200	120	11.5	M6	3.5	3	69
Km1-80 C/2	—	125	27.5	152	100	32	124	12	50	19	40	6	21.5	80	10	202.5	122.5	9	299	10.5	165	100	130	80	200	120	11.5	M6	3.5	3	69
Km1-90 S/2	Km1-90 S/4	140	30	170	100	32.5	125	12.5	56	24	50	8	27	90	10	218.5	128.5	9	297	10	165	115	130	95	200	140	11.5	M8	3.5	3	75
—	Km1-90 LA/4	140	30	170	125	32.5	150	12.5	56	24	50	8	27	90	10	218.5	128.5	9	322	10	165	115	130	95	200	140	11.5	M8	3.5	3	75
Km1-90 LB/2	—	140	30	170	125	32.5	150	12.5	56	24	50	8	27	90	10	218.5	128.5	9	322	10	165	115	130	95	200	140	11.5	M8	3.5	3	75

ACCESSORIES



SPHERICAL TANK

TYPE	FITTING	CAPACITY
24 SF	1"	24 litres

Maximum working pressure 8 bar.
Replaceable diaphragm in butyl rubber.



CYLINDRICAL TANKS

TYPE	FITTING	CAPACITY
24 CL	1"	20 litres
60 CL	1"	60 litres
100 CL	1"	100 litres
200 CL	1 1/2"	200 litres
300 CL	1 1/2"	300 litres

Maximum working pressure 10 bar.
Replaceable diaphragm in butyl rubber.



VERTICAL TANKS

TYPE	FITTING	CAPACITY
8 VT	1"	8 litres
18 VT	1"	18 litres
60 VT	1"	60 litres
100 VT	1"	100 litres
200 VT	1 1/2"	200 litres
300 VT	1 1/2"	300 litres
500 VT	1 1/2"	500 litres

Maximum working pressure 10 bar.
Replaceable diaphragm in butyl rubber.



SPHERICAL KIT

TYPE KS 24

24 litre spherical tank

pressure gauge 0 ÷ 6 bar

5-way fitting - 1" gas

pressure switch "SQUARE D"

Maximum working pressure 8 bar.
Replaceable diaphragm in butyl rubber.

ACCESSORIES



CYLINDRICAL KIT

TYPE KC 24	TYPE KC 60
20 litre cylindrical tank	60 litre cylindrical tank
pressure gauge 0 ÷ 6 bar	pressure gauge 0 ÷ 6 bar
5-way fitting - 1" gas	5-way fitting - 1" gas
pressure switch "SQUARE D"	pressure switch "SQUARE D"
hose 1" gas (600 mm)	hose 1" gas (600 mm)

Maximum working pressure 10 bar.
Replaceable diaphragm in butyl rubber.



AUTOMATIC AIR FEEDERS

TYPE	SUITABLE FOR TANKS:
AIRFLO 1	100 ÷ 500 litres
AIRFLO 2	600 ÷ 1000 litres

Automatic air feeders suitable for maintaining the air cushion in pressure vessels without diaphragm



3-WAY NIPPLE FOR AIR FEEDERS

TYPE	FITTING	DOUBLE CENTRAL FITTING
NA 1.00	1" x 1"	1/2" x 1/4" (male/female)
NA 1.25	1 1/4" x 1 1/4"	1/2" x 1/4" (male/female)
NA 1.50	1 1/2" x 1 1/2"	1/2" x 1/4" (male/female)
NA 2.00	2" x 2"	1/2" x 1/4" (male/female)

3-way brass fittings for connections with air feeders (AIRFLO)



PRESSURE SWITCHES

TYPE	MANUFACTURER	STANDARD SETTING*
FSG2	SQUARE D	1.4 ÷ 2.8 bar
FYG 22	SQUARE D	5.4 ÷ 7.0 bar
FYG 32	SQUARE D	8 ÷ 10.5 bar
PM/5	ITALTECNICA	1.4 ÷ 2.8 bar
PM/5 SK ⁽¹⁾	ITALTECNICA	1.4 ÷ 2.8 bar

* Adjustable

(1) Approved pressure switch    

ACCESSORIES



PRESSURE GAUGES

TYPE	FITTING	DIAMETER	SCALE
MC 6	1/4" - central	50 mm	0 ÷ 6 bar
MR 6	1/4" - radial	63 mm	0 ÷ 6 bar
MR 10	1/4" - radial	63 mm	0 ÷ 10 bar

PRESSURE GAUGES GLYCERINE FILLED

TYPE	FITTING	DIAMETER	SCALE
MCG 6	1/4" - central	50 mm	0 ÷ 6 bar
MRG 6	1/4" - radial	63 mm	0 ÷ 6 bar
MRG 10	1/4" - radial	63 mm	0 ÷ 10 bar



3 - 5 WAY FITTINGS

TYPE	FITTING
R 3 - 3 way	1"
R 5 - 5 way	1"

R 3: three-way fittings in moulded brass with 1" gas connections

R 5: five-way fittings in moulded brass with 1" gas and 1/4" gas connections.



HOSES

TYPE	PIPE	FITTINGS	LENGTH
TF 5	1"	1" X 1"	500 mm
TF 6	1"	1" X 1"	600 mm
TF 10	1"	1" X 1"	1000 mm

Hoses with 1" gas male/female fittings, in non-toxic EPDM rubber reinforced on the outside with blue spiral galvanised steel wire suitable for cold water.
Maximum working pressure 10 bar.



HOSES COMPLETE WITH ELBOW

TYPE	PIPE	FITTINGS	LENGTH
TFG 5	3/4"	1" X 1"	500 mm
TFG 6	1"	1" X 1"	600 mm

Hoses with 1" gas male/female fittings, in non-toxic EPDM rubber reinforced on the outside with blue spiral galvanised steel wire suitable for cold water.
Maximum working pressure 10 bar.

ACCESSORIES

*ELECTRONIC PUMP CONTROLLERS execution C € approved  



TYPE	VOLT	Hz	CURRENT	FITTINGS	FLOW RATE
EKO EASYPRESS	230 ±10%	50/60	max 6 A	1" x 1"	8 m³/h

The pressure generated by the pump must be minimum 2.5 bar and maximum 10 bar.
The column of water between the appliance and the highest user must not exceed 6 metres.
Liquid temperature up to +60°C. Protection IP 65.



TYPE	VOLT	Hz	CURRENT	FITTINGS	FLOW RATE
EASYPRESS	230 ±10%	50/60	max 8 A	1" x 1"	10 m³/h

The pressure generated by the pump must be minimum 3 bar and maximum 10 bar.
The column of water between the appliance and the highest user must not exceed 15 metres.
Liquid temperature up to +65°C. Protection IP 65.



TYPE	VOLT	Hz	CURRENT	FITTINGS	FLOW RATE
MAXI EASYPRESS	230 ±10%	50/60	max 16 A	1 1/4" x 1 1/4"	12 m³/h

The pressure generated by the pump must be minimum 3 bar and maximum 10 bar.
The column of water between the appliance and the highest user must not exceed 15 metres.
Liquid temperature up to +65°C. Protection IP 65.



TYPE	VOLT	Hz	CURRENT	FITTINGS	FLOW RATE
EASYPRESS VARIO	230 ±10%	50/60	max 16 A	1 1/4" x 1 1/4"	12 m³/h

Electronic device with possibility of manually regulating the system pressure from 3 to 6.5 bar (complete with pressure gauge).

For the system pressure regulated at 3 bar the pressure generated by the pump must be minimum 4.5 bar and maximum 12 bar and the column of water between the appliance and the highest user must not exceed 12 metres; for the system pressure regulated at 6.5 bar the pressure generated by the pump must be minimum 8 bar and maximum 12 bar and the column of water between the appliance and the highest user must not exceed 45 metres.
Liquid temperature up to +65°C. Protection IP 65.

* Electronic devices for starting (when the tap is turned on) and stopping (when the tap is turned off) single-phase pumps. In the event of lack of water, they automatically stop the pump.

ACCESSORIES



FLOATS

(APPROVED V.D.E.- I.M.Q.)

TYPE	CABLE	LENGTH
0315/3	H07 RN-F or PVC	3 metres
0315/5	H07 RN-F or PVC	5 metres
0315/10	H07 RN-F or PVC	10 metres

With H07 RN-F cable: floats with single function (emptying) and 10 A switch.
With PVC cable: floats with dual function (emptying and filling) and 10 A switch.

TYPE	CABLE	LENGTH
T 80/3	H07 RN-F or PVC	3 metres
T 80/5	H07 RN-F or PVC	5 metres
T 80/10	H07 RN-F or PVC	10 metres

With H07 RN-F cable: floats with single function (emptying), with double watertight protection chamber and 10 A switch.
With PVC cable: floats with dual function (emptying and filling). Double watertight protection chamber and 10 A switch.

TYPE	CABLE	LENGTH
SMALL 3	H07 RN-F or PVC	3 metres
SMALL 5	H07 RN-F or PVC	5 metres

With H07 RN-F cable: floats with single function (emptying), with simple protection and 20 A switch.
With PVC cable: floats with dual function (emptying and filling). With simple protection and 20 A switch.

FLOATS WITH PLUG SOCKET

(APPROVED V.D.E.- I.M.Q.)

TYPE	CABLE	LENGTH
0315 SI/3	H07 RN-F	3 metres
0315 SI/5	H07 RN-F	5 metres
0315 SI/10	H07 RN-F	10 metres

Floats with emptying function and 10 A switch.

TYPE	CABLE	LENGTH
T 80 SI/3	H07 RN-F	3 metres
T 80 SI/5	H07 RN-F	5 metres
T 80 SI/10	H07 RN-F	10 metres

Floats with emptying function, with double watertight protection chamber and 10 A switch.

TYPE	CABLE	LENGTH
SMALL SI/3	H07 RN-F	3 metres
SMALL SI/5	H07 RN-F	5 metres
SMALL SI/10	H07 RN-F	10 metres

Floats with emptying function, with simple protection and 20 A switch.

ACCESSORIES



FOOT VALVES

TYPE	FITTINGS
VF 0.5	1/2"
VF 0.75	3/4"
VF 1	1"
VF 1.25	1 1/4"
VF 1.5	1 1/2"
VF 2	2"

Brass foot valves, stainless steel suction filter.



CHECK VALVES

TYPE	FITTINGS
VR 0.5	1/2"
VR 0.75	3/4"
VR 1	1"
VR 1.25	1 1/4"
VR 1.5	1 1/2"
VR 2	2"

Brass check valves.



BALL CHECK VALVES WITH THREADED FITTINGS

TYPE	FITTINGS
VR-FT 1.25	1 1/4"
VR-FT 1.5	1 1/2"
VR-FT 2	2"

Check valves for submersible pumps (sewage and waste water).



BALL CHECK VALVES WITH FLANGED FITTINGS

TYPE	FITTINGS
VR-FF DN 65	Ø 65 mm
VR-FF DN 80	Ø 80 mm

Check valves for submersible pumps (sewage and waste water).

ACCESSORIES



FILTER HOLDERS WITH PLASTIC HEAD

TYPE	CARTRIDGE HEIGHT	THREADED FITTINGS
MEDIUM - F 0.75	5"	3/4"
MEDIUM - F 1	5"	1"
JUNIOR - F 0.75	7"	3/4"
JUNIOR - F 1	7"	1"
SENIOR - F 0.75	10"	3/4"
SENIOR - F 1	10"	1"

Maximum working pressure 5 bar (at temp. +20°C)

Maximum temperature + 45°C (at pressure 2 bar).

- Filter holder for **RL**, **FA** and **LA** cartridges.



FILTER HOLDERS WITH BRASS HEAD AND AIR VENT

TYPE	CARTRIDGE HEIGHT	THREADED FITTINGS
MEDIUM - K 0.75	5"	3/4"
MEDIUM - K 1	5"	1"
JUNIOR - K 0.75	7"	3/4"
JUNIOR - K 1	7"	1"
SENIOR - K 0.75 / K 1	10"	3/4" / 1"
SENIOR - K 1.5 / K 2	10"	1 1/2" / 2"

Maximum working pressure 10 bar (at temp. +20°C)

Maximum temperature + 50°C (at pressure 3 bar).

- Filter holder for **RL** and **FA** (K 0.75, K 1) cartridges.



MOBILE FILTER

TYPE	CARTRIDGE HEIGHT	CARTRIDGE
DEPURAL 10	10"	RL 10, FA 10, HA 10

Head in ABS for use with foodstuffs. Cup in AS for use with foodstuffs.

It is suitable for connection by means of a hose to any tap in order to supply filtered water, free from impurities.



WRENCHES FOR FILTER HOLDERS

TYPE	FILTER HOLDER
WRENCH F	F
WRENCH K	K
WRENCH DEPURAL	DEPURAL 10

Suitable for fitting and removing the cartridge from the filter holder.

ACCESSORIES



POLYESTER FILTER CARTRIDGES

TYPE	FILTRATION	HEIGHT
RL 5	50 μ	5"
RL 7	50 μ	7"
RL 10	50 μ	10"

Cartridge suitable for filter holders type **F - K - DEPURAL 10**.



POLYPROPYLENE FILTER CARTRIDGES

TYPE	FILTRATION	HEIGHT
FA 5	50 μ	5"
FA 7	50 μ	7"
FA 10	50 μ	10"

Cartridge suitable for filter holders type **F - K 0.75 - K 1 - DEPURAL 10**.



FILTER CARTRIDGE WITH POLYPHOSPHATE CRYSTALS

TYPE	HEIGHT
HA 10	10"

Cartridge suitable for filter holders type **DEPURAL 10**.

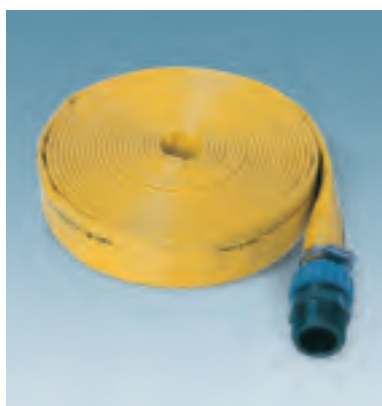


FILTER CARTRIDGE WITH ACTIVATED CARBON

TYPE	HEIGHT
LA 10	10"

Cartridge suitable for filter holders type **F - K 0.75 - K 1**.

ACCESSORIES



FLAT PVC HOSE

TYPE	FITTING	LENGTHS
TP 1.25	1 1/4"	5 - 10 - 20 metres
TP 1.50	1 1/2"	5 - 10 - 20 metres
TP 2.00	2"	5 - 10 - 20 metres
TP 2.50	2 1/2"	5 - 10 - 20 metres
TP 3.00	3"	5 - 10 - 20 metres

Plasticized flat delivery hose, complete with PVC hoesetail, resistant to abrasion and to atmospheric agents. Ideal for irrigation even with fertilisers and for draining water in combination with DRAINAGE PUMPS.



SUCTION HOSE

TYPE	FITTING	LENGTH
GARDEN KIT	1"	7 metres

Hose, complete with foot valve.
RECOMMENDED FOR PORTABLE GARDEN PUMPS, BETTY TYPE



MECHANICAL FLOW METER

TYPE	MAXIMUM FLOW RATE	MAXIMUM PRESSURE	FITTINGS
MT 1	80 l/min	3.5 bar	1" x 1"

Mechanical flow meter for private use, suitable for measuring diesel fuel.
RECOMMENDED FOR USE WITH TYPE CK PUMPS



DISPENSING NOZZLE WITH HOSE

TYPE	ELBOW FITTING
NZ 0.75	3/4"
NZ 1.00	1"

Aluminium dispensing nozzle complete with hose, reinforced with steel spiral, 4 metres long, with threaded fittings.
RECOMMENDED FOR USE WITH TYPE CK PUMPS

ACCESSORIES



STRAIGHT HOSETAIL FITTINGS

TYPE	Ø HOSETAIL	THREADED FITTING
RP 0.75	25 mm	3/4"
RP 1	30 mm	1"
RP 1.25	35 mm	1 1/4"
RP 1.5	40 mm	1 1/2"
RP 2	50 mm	2"

Nylon fittings.



CURVED HOSETAIL FITTINGS

TYPE	Ø HOSETAIL	THREADED FITTING
RPG 0.75	25 mm	3/4"
RPG 1	30 mm	1"
RPG 1.25	35 mm	1 1/4"
RPG 1.5	40 mm	1 1/2"
RPG 2	50 mm	2"

Nylon fittings.



TEFLON TAPE FOR HYDRAULIC JOINS

TYPE	LENGTH
TFN 1	12 metres
TFN 2	50 metres



PAINT AEROSOL

TYPE	COLOUR	CAPACITY
SPRAY 1	pedrollo blue	400 ml

ACCESSORIES



CAPACITORS FOR SURFACE PUMPS

TYPE	CAPACITY	VOLTAGE	FREQUENCY
06 F	6.3 μ F	450 V	50 \div 60 Hz
10 F	10 μ F	450 V	50 \div 60 Hz
12 F	12.5 μ F	450 V	50 \div 60 Hz
14 F	14 μ F	450 V	50 \div 60 Hz
16 F	16 μ F	450 V	50 \div 60 Hz
16 F	16 μ F	250 V	50 \div 60 Hz
20 F	20 μ F	450 V	50 \div 60 Hz
20 F	20 μ F	250 V	50 \div 60 Hz
25 F	25 μ F	450 V	50 \div 60 Hz
25 F	25 μ F	250 V	50 \div 60 Hz
30 F	30 μ F	450 V	50 \div 60 Hz
30 F	30 μ F	250 V	50 \div 60 Hz
31 F	31.5 μ F	450 V	50 \div 60 Hz
40 F	40 μ F	450 V	50 \div 60 Hz
45 F	45 μ F	450 V	50 \div 60 Hz
50 F	50 μ F	450 V	50 \div 60 Hz
55 F	55 μ F	450 V	50 \div 60 Hz
60 F	60 μ F	450 V	50 \div 60 Hz
70 F	70 μ F	450 V	50 \div 60 Hz
80 F	80 μ F	450 V	50 \div 60 Hz
80 F	80 μ F	250 V	50 \div 60 Hz

- Capacitors with **CE** marking and **VDE-IMQ** approval



CAPACITORS FOR SUBMERSIBLE PUMPS

TYPE	CAPACITY	VOLTAGE	FREQUENCY
08 C	8 μ F	450 V	50 \div 60 Hz
10 C	10 μ F	450 V	50 \div 60 Hz
12 C	12.5 μ F	450 V	50 \div 60 Hz
14 C	14 μ F	450 V	50 \div 60 Hz
16 C	16 μ F	450 V	50 \div 60 Hz
20 C	20 μ F	450 V	50 \div 60 Hz
25 C	25 μ F	450 V	50 \div 60 Hz
30 C	30 μ F	450 V	50 \div 60 Hz
30 C	30 μ F	250 V	50 \div 60 Hz
31 C	31.5 μ F	450 V	50 \div 60 Hz
35 C	35 μ F	450 V	50 \div 60 Hz
40 C	40 μ F	450 V	50 \div 60 Hz
45 C	45 μ F	450 V	50 \div 60 Hz
50 C	50 μ F	450 V	50 \div 60 Hz
60 C	60 μ F	250 V	50 \div 60 Hz
75 C	75 μ F	450 V	50 \div 60 Hz
80 C	80 μ F	250 V	50 \div 60 Hz

- Capacitors with **CE** marking and **VDE-IMQ** approval

ACCESSORIES



BEARINGS

TYPE	INTERNAL PLAY	DIMENSIONS
6201 ZZ	Normal	12 x 32 x 10 mm
6201 ZZ	C3 (increased)	12 x 32 x 10 mm
6202 ZZ	Normal	15 x 35 x 11 mm
6203	Normal	17 x 40 x 12 mm
6203 ZZ	Normal	17 x 40 x 12 mm
6203 ZZ	C3 (increased)	17 x 40 x 12 mm
6203 2RS	Normal	17 x 40 x 12 mm
6204 ZZ	Normal	20 x 47 x 14 mm
6204 ZZ	C3 (increased)	20 x 47 x 14 mm
6205 ZZ	Normal	25 x 52 x 15 mm
6206 ZZ	C3 (increased)	30 x 62 x 16 mm
6304 ZZ	Normal	20 x 52 x 15 mm
6304 ZZ	C3 (increased)	20 x 52 x 15 mm
6304 2RS	Normal	20 x 52 x 15 mm
6306 ZZ	C3 (increased)	30 x 72 x 19 mm
6307 ZZ	C3 (increased)	35 x 80 x 21 mm
6308 ZZ	C3 (increased)	40 x 90 x 23 mm
6310 ZZ	C3 (increased)	40 x 90 x 23 mm
7203 B	Normal	17 x 40 x 12 mm
7303 B	Normal	17 x 47 x 14 mm



SEALS FOR SURFACE PUMPS

TYPE	MATERIALS				SHAFT
	Fixed ring	Rotating ring	Elastomer	Spring	
AR 12	Ceramic	Graphite	NBR	AISI 304	Ø 12 mm
AR 13					Ø 13 mm
AR 14					Ø 14 mm
PNL 12				AISI 316	Ø 12 mm
FN 14					Ø 14 mm
FN 18					Ø 18 mm
FN 18 NU (Dimensions DIN 24960)					Ø 18 mm
FN 20					Ø 20 mm
FN 24					Ø 24 mm
FN 32 NU (Dimensions DIN 24960)					Ø 32 mm
FN 38	Ø 38 mm				

SEALS FOR SUBMERSIBLE PUMPS

TYPE	MATERIALS				SHAFT
	Fixed ring	Rotating ring	Elastomer	Spring	
AR 12/R	Ceramic	Graphite	NBR	AISI 304	Ø 12 mm
AR 13/R		Carburundum			Ø 13 mm
PNL 16		Graphite		AISI 316	Ø 16 mm
FN 20 DV	Carburundum	Ø 20 mm			
RN 15/17	Graphite	AISI 431		AISI 431	Ø 17 mm
MG1S1/14	Carburundum	Carburundum		AISI 316	Ø 14 mm
MG1S2/14	Ceramic	Graphite			Ø 14 mm

Special mechanical seals on request.

ACCESSORIES



CABLE FOR LEVEL PROBES

TYPE	SECTION	WEIGHT PER METRE
CSL	1.5 mm ²	0.019 kg



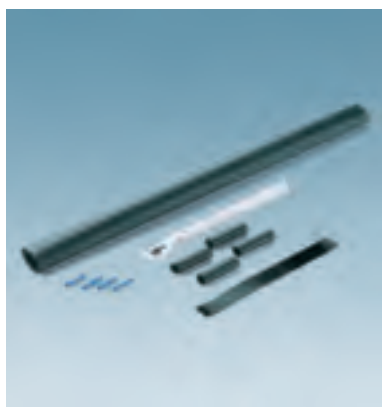
CABLES FOR SUBMERSIBLE PUMPS

TYPE	WEIGHT PER METRE
4 x 1 mm ² H07 RN-F	0,165 kg
4 x 1.5 mm ² H07 RN-F	0,205 kg
4 x 2.5 mm ² H07 RN-F	0,290 kg
4 x 4 mm ² H07 RN-F	0,420 kg
4 x 6 mm ² H07 RN-F	0,505 kg
4 x 10 mm ² H07 RN-F	1,030 kg
4 x 16 mm ² H07 RN-F	2,050 kg



"3M" RESIN JOINT KIT FOR ELECTRIC CABLES

TYPE	No. OF CORES	CABLE SECTION	Ø EXT. JUNCTION
RPS 1	4	1 ÷ 2.5 mm ²	Ø 32 mm
RPS 2	4	1 ÷ 10 mm ²	Ø 42 mm
RPS 3	4	4 ÷ 16 mm ²	Ø 48 mm
RPS 4	4	14 ÷ 25 mm ²	Ø 60 mm
RPS 5	4	16 ÷ 35 mm ²	Ø 65 mm
RPS 6	4	35 ÷ 95 mm ²	Ø 80 mm



"3M" HEAT-SHRINK JOINT KIT FOR ELECTRIC CABLES

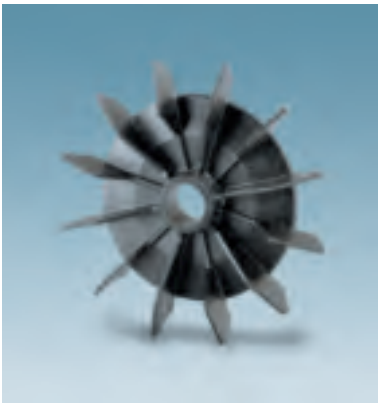
TYPE	No. OF CORES	CABLE SECTION
GPS 1	4	1 ÷ 2.5 mm ²
GPS 2	4	4 ÷ 6 mm ²
GPS 3	4	10 mm ²
GPS 4	4	16 mm ²
GPS 5	4	25 mm ²
GPS 6	4	35 mm ²

ACCESSORIES



CABLES WITH PLUG FOR SINGLE-PHASE SURFACE PUMPS

TYPE	CABLE SECTION	LENGTH	PLUG
H05 VV-F (PVC)	3 x 0.75 mm ²	150 cm	Schuko
H07 RN-F (NEOPRENE)	3 x 1 mm ²	150 cm	Schuko



FANS

TYPE	DIMENSIONS	SHAFT DIAMETER
14VN05	85 x 18 mm	12 mm
14VN06	104 x 21 mm	12 mm
14VN07	125 x 24 mm	14.5 mm
14VN08	138 x 27 mm	20 mm
14VN08L	138 x 27 mm	20 mm
14VN09	162 x 32 mm	24 mm
14VN10	176 x 38 mm	28 mm
14VN1062	155 x 37 mm	28 mm
14VN13	165 x 45 mm	36 mm

ELECTRIC PANEL



FOR 4" SINGLE-PHASE BOREHOLE PUMPS

TYPE	MOTOR POWER		CAPACITOR μF	RATED CURRENT
	kW	HP		
QEM 033	0.25	0.33	12.5	3.5 A
QEM 050	0.37	0.50	16	4.5 A
QEM 075	0.55	0.75	20	6 A
QEM 100	0.75	1	30	7 A
QEM 150	1.1	1.5	40	11 A
QEM 200	1.5	2	50	13 A
QEM 300	2.2	3	75	18 A

- Single-phase 220 ÷ 230V 50 Hz

The control panel is supplied in a flame retardant plastic box; it protects the pump against overloads and short circuits and may be connected to a float or a pressure switch.

COMPONENTS:

- Isolating switch with fuse • Start-stop switch • Terminals for connecting the pump and a float or a pressure switch
- Thermal protection with manual reset • Green pump running lamp

For a correct choice of control panel, ensure that the current absorbed by the pump corresponds to the values in the table.



FOR 4" AND 6" THREE-PHASE BOREHOLE PUMPS

TYPE	MOTOR POWER		RATED CURRENT
	kW	HP	
QET 050	0.37	0.50	1.7 A
QET 075	0.55	0.75	2 A
QET 100	0.75	1	2.5 A
QET 150	1.1	1.5	3.9 A
QET 200	1.5	2	4.8 A
QET 300	2.2	3	7 A
QET 400	3	4	9 A
QET 550	4	5.5	11.5 A
QET 750	5.5	7.5	15.5 A
QET 1000	7.5	10	21.5 A
QET 1250	9.2	12.5	23.5 A
QET 1500	11	15	27.5 A
QET 1750	13	17.5	31.5 A
QET 2000	15	20	36 A
QET 2500	18.5	25	45 A
QET 3000	22	30	54 A
QET 4000	30	40	68 A

- Three-phase 380 ÷ 415V 50 Hz

The control panel is supplied in a flame retardant plastic box; it protects the pump against overloads and short circuits and has a selector for manual or automatic operation (with float, pressure switch, etc.).

COMPONENTS:

- Isolating switch with fuse • Selector for manual or automatic operation • Three-pole contactor • Adjustable three-pole thermal relay with manual reset • Terminals for connecting the pump and a float or a pressure switch
- Green pump running lamp.

For a correct choice of control panel, ensure that the current absorbed by the pump corresponds to the values in the table.

ELECTRIC PANEL



FOR 4" SINGLE-PHASE PUMPS WITH LEVEL PROBES

TYPE	MOTOR CURRENT		CAPACITOR μF	RATED CURRENT
	kW	HP		
QSM 033	0.25	0.33	12.5	3.5 A
QSM 050	0.37	0.50	16	4.5 A
QSM 075	0.55	0.75	20	6 A
QSM 100	0.75	1	30	7 A
QSM 150	1.1	1.5	40	11 A
QSM 200	1.5	2	50	13 A
QSM 300	2.2	3	75	17.5 A

- Single-phase 220 ÷ 230V 50 Hz

The control panel is supplied in a flame retardant plastic box; it protects the pump against overloads and short circuits. It has a selector for manual or automatic operation (with float, pressure switch, etc.) and may be connected to level probes that protect the pump against dry operation.

COMPONENTS:

• Isolating switch with fuse • Selector for manual or automatic operation • Three-pole contactor • Thermal protection with manual reset • Capacitor • Terminals for connecting the pump, a float or a pressure switch, and the level probes • Green pump running lamp • Red cut-out warning lamp • Level probes (the CSL type cables for connection of the probes are excluded)

For a correct choice of control panel, ensure that the current absorbed by the pump corresponds to the values in the table.



FOR 4" AND 6" THREE-PHASE PUMPS WITH LEVEL PROBES

TYPE	MOTOR POWER		RATED CURRENT
	kW	HP	
QST 050	0.37	0.50	1.7 A
QST 075	0.55	0.75	2 A
QST 100	0.75	1	2.5 A
QST 150	1.1	1.5	3.9 A
QST 200	1.5	2	4.8 A
QST 300	2.2	3	7 A
QST 400	3	4	9 A
QST 550	4	5.5	11.5 A
QST 750	5.5	7.5	15.5 A
QST 1000	7.5	10	21.5 A
QST 1250	9.2	12.5	23.5 A
QST 1500	11	15	27.5 A
QST 1750	13	17.5	31.5 A
QST 2000	15	20	36 A
QST 2500	18.5	25	45 A
QST 3000	22	30	54 A

- Three-phase 380 ÷ 415V 50 Hz

The control panel is supplied in a flame retardant plastic box; it protects the pump against overloads and short circuits. It has a selector for manual or automatic operation (with float, pressure switch, etc.) and may be connected to level probes that protect the pump against dry operation.

COMPONENTS:

• Isolating switch with fuse • Selector for manual or automatic operation • Three-pole connector • Adjustable three-pole thermal relay with manual reset • Terminals for connecting the pump, a float or a pressure switch and the level probes • Green pump running lamp • Red cut-out warning lamp • Level probes (the CSL type cables for connection of the probes are excluded)

For a correct choice of control panel, ensure that the current absorbed by the pump corresponds to the values in the table.

ELECTRIC PANEL



CURRENT SENSING - FOR 4" AND 6" BOREHOLE PUMPS

TYPE	ADJUSTABLE POWER		VOLTAGE	RATED CURRENT
	kW	HP		
EVOLUTION MONO	from 0.37 to 2.2	from 0.5 to 3	single-phase	from 2 to 16 A
EVOLUTION TRI/1	from 0.55 to 7.5	from 0.75 to 10	three-phase	from 2 to 15 A
EVOLUTION TRI/2	from 7.5 to 10	from 10 to 15	three-phase	from 16 to 24 A

- Single-phase 220 ÷ 230V 50 Hz

- Three-phase 380 ÷ 415V 50 Hz

Contained within a flame retardant enclosure, the Evolution offers protection against overloads and short circuits, and monitors the power factor (cosφ) to protect the pump against dry running without the need for level probes. There is also a connection provided for an external float or pressure switch.

COMPONENTS:

- Isolating switch with fuse • Start-stop switch with door interlock • Trimmer controls for user adjustment of the electronic protectors • Three-pole contactor (three-phase versions only) • Terminals for connecting the pump • Terminals for connecting a float or pressure switch • External display with warning led.

N.B. For single-phase models, the capacitor is not included and should be selected to suit the pump.

For a correct choice of control panel, ensure that the current absorbed by the pump corresponds to the values in the table.



FOR SINGLE -PHASE DRAINAGE PUMPS

TYPE	MOTOR POWER		CAPACITOR µF	RATED CURRENT
	kW	HP		
QES 300 MONO	2.2	3	60	16 A

- Single-phase 220 ÷ 230V 50 Hz

Contained within a flame retardant IP55 enclosure, the panel protects the pump against overloads and short circuits. It also has provision for the connection of the thermal cut-outs provided in the winding of drainage pump models VXCm30, PVXCm30, MCm30, PMCM30.

COMPONENTS:

- Isolating switch with fuse • Start-stop switch • Three-pole contactor • Adjustable three-pole thermal relay with manual reset • Capacitor • Terminals for connecting the pump • Terminals for connecting pump thermal protection circuits • Green pump running lamp • Red cut-out warning lamp.

COMPONENTS ON REQUEST:

- Auxiliary contacts for level alarm • Red high level warning lamp • Output (230V) for external warning lamp/sounder.

For a correct choice of control panel, ensure that the current absorbed by the pump corresponds to the values in the table.



FOR THREE-PHASE DRAINAGE PUMPS

TYPE	MOTOR POWER		RATED CURRENT
	kW	HP	
QES 150	1.1	1.5	4.2 A
QES 200	1.5	2	5.2 A
QES 300	2.2	3	6.5 A

- Three-phase 380 ÷ 415V 50 Hz

Contained within a flame retardant IP55 enclosure, the panel protects the pump against overloads and short circuits. It has a selector for manual or automatic (floatswitch) operation and provision for the connection of the thermal protection circuit provided in pump models VXC, PVXC, MC, PMC.

COMPONENTS:

- Isolating switch with fuses • Selector for manual or automatic operation • Three-pole contactor • Adjustable three-pole thermal relay with manual reset • Terminals for connecting the pump • Terminals for connecting the pump thermal protection circuit (VXC, PVXC, MC, PMC) • Terminals for connecting the float • Green pump running lamp

For a correct choice of control panel, ensure that the current absorbed by the pump corresponds to the values in the table.

CABLE SIZES FOR SUBMERSIBLE MOTORS

SINGLE-PHASE 230 V - 50 Hz

MOTOR POWER		cable section in mm ²						
		4 x 1	4 x 1.5	4 x 2.5	4 x 4	4 x 6	4 x 10	4 x 16
kW	HP	maximum cable length in metres						
0,25	0,33	70	105	170				
0,37	0,50	60	90	140				
0,55	0,75	45	70	110	180			
0,75	1	35	50	85	140	210		
1,1	1,5	25	35	60	95	145	240	
1,5	2		30	45	75	115	190	305
2,2	3			30	50	75	125	200

THREE-PHASE 230 V - 50 Hz

MOTOR POWER		cable section in mm ²										
		4 x 1	4 x 1.5	4 x 2.5	4 x 4	4 x 6	4 x 10	4 x 16	4 x 25	4 x 35	4 x 50	4 x 70
kW	HP	maximum cable length in metres										
0,37	0,50	100	152	255								
0,55	0,75	83	126	210	338							
0,75	1	65	99	165	265	405						
1,1	1,5	48	72	120	192	292	485					
1,5	2		53	88	142	215	360					
2,2	3			60	97	147	245	392				
3	4			47	73	110	183	295	510			
4	5,5				55	83	138	220	380			
5,5	7,5					60	100	160	275	385		
7,5	10					45	73	114	195	275	395	
9,2	12,5						64	100	157	220	315	
11	15						54	87	135	190	270	378
13	17,5							75	117	164	236	330
15	20							65	102	144	205	287
18,5	25								82	114	162	225
22	30								69	95	137	190
30	40									70	102	142

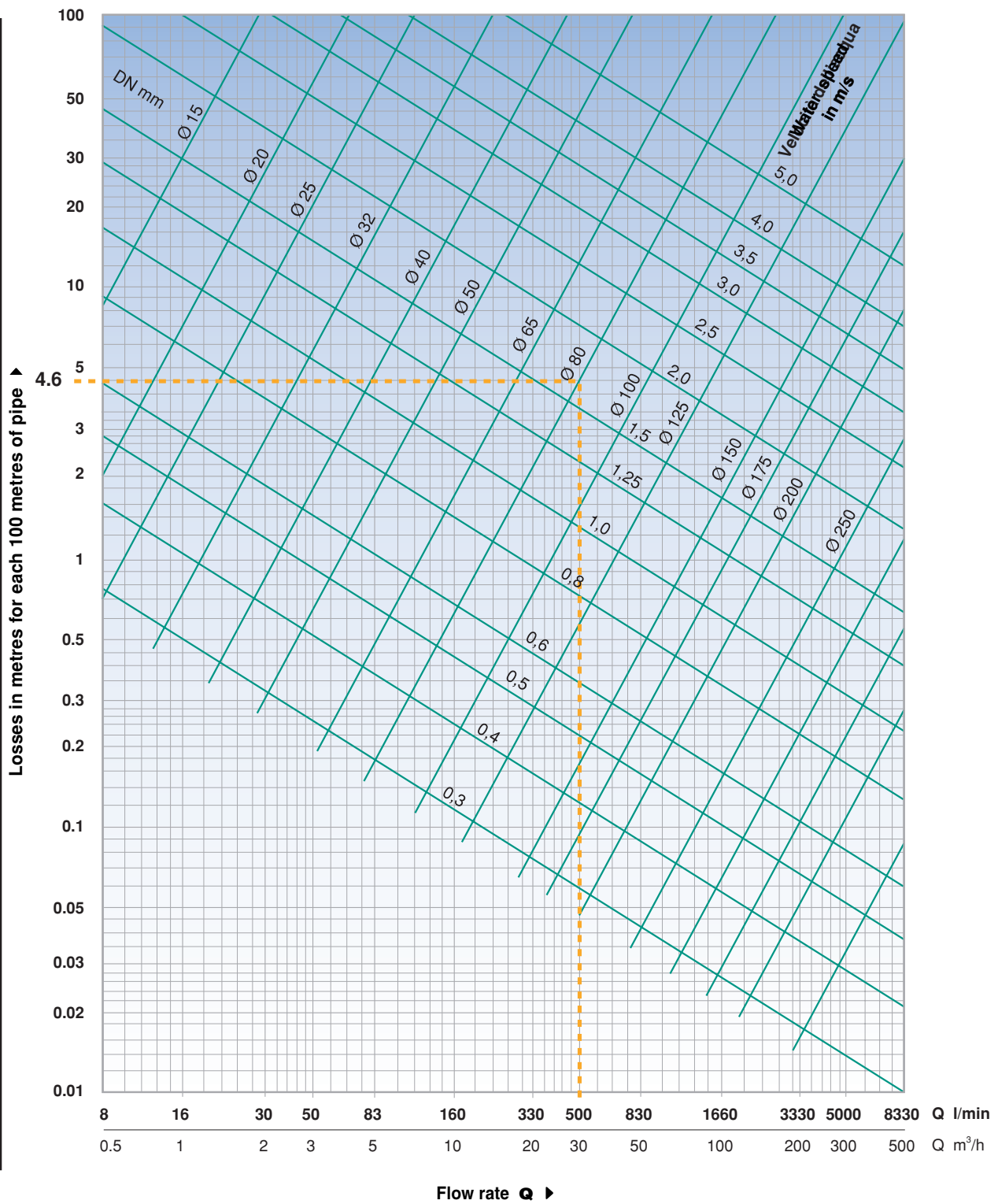
THREE-PHASE 400 V - 50 Hz

MOTOR POWER		cable section in mm ²										
		4 x 1	4 x 1.5	4 x 2.5	4 x 4	4 x 6	4 x 10	4 x 16	4 x 25	4 x 35	4 x 50	4 x 70
kW	HP	maximum cable length in metres										
0,37	0,50	300										
0,55	0,75	250	380									
0,75	1	195	295									
1,1	1,5	145	215	360								
1,5	2	105	160	265	425							
2,2	3	70	110	180	290	440						
3	4	55	85	140	220	330						
4	5,5	40	60	105	165	250	415					
5,5	7,5		45	75	120	180	300	480				
7,5	10		35	55	95	135	220	340	585			
9,2	12,5			47	75	115	190	300	470			
11	15			40	65	95	160	260	405			
13	17,5				60	85	140	225	350	490		
15	20				50	75	125	195	305	430		
18,5	25					58	100	155	245	340	485	
22	30					49	85	130	205	285	410	570
30	40					36	63	96	152	210	305	425

Voltage drop 3% - Maximum environment temperature + 30 °C

DIAGRAM OF LOAD LOSSES

For straight pipes 15-250 mm internal diameter and flow rate from 8 to 8330 l/min.



The data in the table refer to cold water and to liquids with the same kinematic viscosity, for new cast iron pipes. The losses (h_v) shown in the table must be multiplied by: **0.8** for new steel pipes, **1.25** for old and slightly rusty iron pipes, and **1.7** for heavily corroded pipes - for which the reduction in actual bore should also be considered.

EXAMPLE: Flow rate data $Q = 500$ l/min, new steel pipe $\varnothing 80$ mm, pipe length 50 m.
Find the flow rate on the horizontal axis and continue vertically until you meet the line DN 80 mm.
The load losses can then be read on the vertical axis.

$h_v = 4.6$ m every 100 m of pipe.

$h_{v1} = 4.6 \times 0.8 = 3.68$ m/100 (steel pipe).

To consider the real length of the pipe:

$h_{v2} = 3.68 \times 50:100 = 1.84$ m (for 50 m of pipe).

The speed of flow is determined considering the point of intersection which is between the oblique lines with value 1.5-2 m/sec.

So in the case considered that gives: **C = 1.7 metres/sec.**

CONVERSION OF UNITS OF MEASUREMENT

LENGTH

millimetre mm	centimetre cm	metre m	inch in	foot ft	yard yd
1	0.1	0.001	0.0394	0.0033	0.0011
10	1	0.01	0.3937	0.0328	0.0109
1000	100	1	39.3701	3.2808	1.0936
25.4	2.54	0.0254	1	0.0833	0.0278
304.8	30.48	0.3048	12	1	0.3333
914.4	91.44	0.9144	36	3	1

1 kilometre = 1000 metres = 0.62137 miles - 1 mile = 1609.34 metres = 1.60934 kilometres

VOLUME

cubic metre m ³	litre l	millilitre ml	imperial gallon Imp. gal	US gallon US gal	cubic foot ft ³
1	1000	1 x 10 ⁶	220	264.2	35.3147
0.001	1	1000	0.22	0.2642	0.0353
1 x 10 ⁻⁶	0.001	1	2.2 x 10 ⁻⁴	2.642 x 10 ⁻⁴	3.53 x 10 ⁻⁵
0.00455	4.546	4546	1	1.201	0.1605
0.00378	3.785	3785	0.8327	1	0.1337
0.0283	28.317	28.317	6.2288	7.4805	1

WEIGHT

kilogram kg	pound lb	hundredweight cwt	ton t	long ton tn	short ton sh. tn
1	2.205	0.0197	0.001	9.84 x 10 ⁻⁴	0.0011
0.454	1	0.0089	4.54 x 10 ⁻⁴	4.46 x 10 ⁻⁴	5.0 x 10 ⁻⁴
50.802	112	1	0.0508	0.05	0.056
1000	2204.6	19.684	1	0.9842	1.1023
1016	2240	20	1.0161	1	1.102
907.2	2000	17.857	0.9072	0.8929	1

VOLUMETRIC FLOW RATE

litres second l/s	litres minute l/min	cubic metres hour m ³ /h	cubic feet hour ft ³ /h	cubic feet minute ft ³ /min	Imp. gal. minute Imp. gal/min	US gal. minute US gal/min	US barrel day (oil) US barrel/g
1	60	3.6	127.133	2.1189	13.2	15.85	543.439
0.017	1	0.06	2.1189	0.0353	0.22	0.264	9.057
0.278	16.667	1	35.3147	0.5886	3.666	4.403	150.955
0.008	0.472	0.0283	1	0.0167	0.104	0.125	4.275
0.472	28.317	1.6990	60	1	6.229	7.480	256.475
0.076	4.546	0.2728	9.6326	0.1605	1	1.201	41.175
0.063	3.785	0.2271	8.0209	0.1337	0.833	1	34.286
0.002	0.110	0.0066	0.2339	0.0039	0.024	0.029	1

PRESSURE AND HEAD

Newton square metre N/m ² (Pa)	kiloPascal kPa	bar bar	kilogram force square centimetre kgf/cm ²	pound force square inch psi	foot of water ft H ₂ O	metre of water m H ₂ O	millimetre mercury mm Hg	inch mercury In Hg
1	0.001	1 x 10 ⁵	1.02 x 10 ⁵	1.45 x 10 ⁻⁴	3.35 x 10 ⁻⁴	1.02 x 10 ⁻⁴	0.0075	2.95 x 10 ⁻⁴
1000	1	0.01	1.02 x 10 ⁵	0.145	0.335	0.102	7.5	0.295
100000	100	1	1.02	14.5	33.52	10.2	750.1	29.53
98067	98.07	0.981	1	14.22	32.81	10	735.6	28.96
6895	6.895	0.069	0.0703	1	2.31	0.703	51.72	2.036
2984	2.984	0.03	0.0305	0.433	1	0.305	22.42	0.882
9789	9.789	0.098	0.1	1.42	3.28	1	73.42	2.891
133.3	0.133	0.0013	0.0014	0.019	0.045	0.014	1	0.039
3386	3.386	0.0338	0.0345	0.491	1.133	0.345	25.4	1

NOTES

