



PERFORMANCE RANGE

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

APPLICATION LIMITS

- Manometric suction lift up to **7 m**
- Liquid temperature between **-10 °C** and **+90 °C**
- Ambient temperature between **-10 °C** and **+40 °C**
- Max. pressure in pump body **10 bar** (PN10)
- Continuous service **S1**

CONSTRUCTION AND SAFETY STANDARDS

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



Pump body dimensions in compliance with **EN 733**
REGULATION (EU) N. 547/2012

CERTIFICATIONS



INSTALLATION AND USE

- Water supply
- Pressure boosting
- Irrigation
- Water circulation in climatisation sets
- Cleaning sets
- Firefighting sets
- Industrial applications
- Agricultural applications

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

OPTIONALS AVAILABLE ON REQUEST

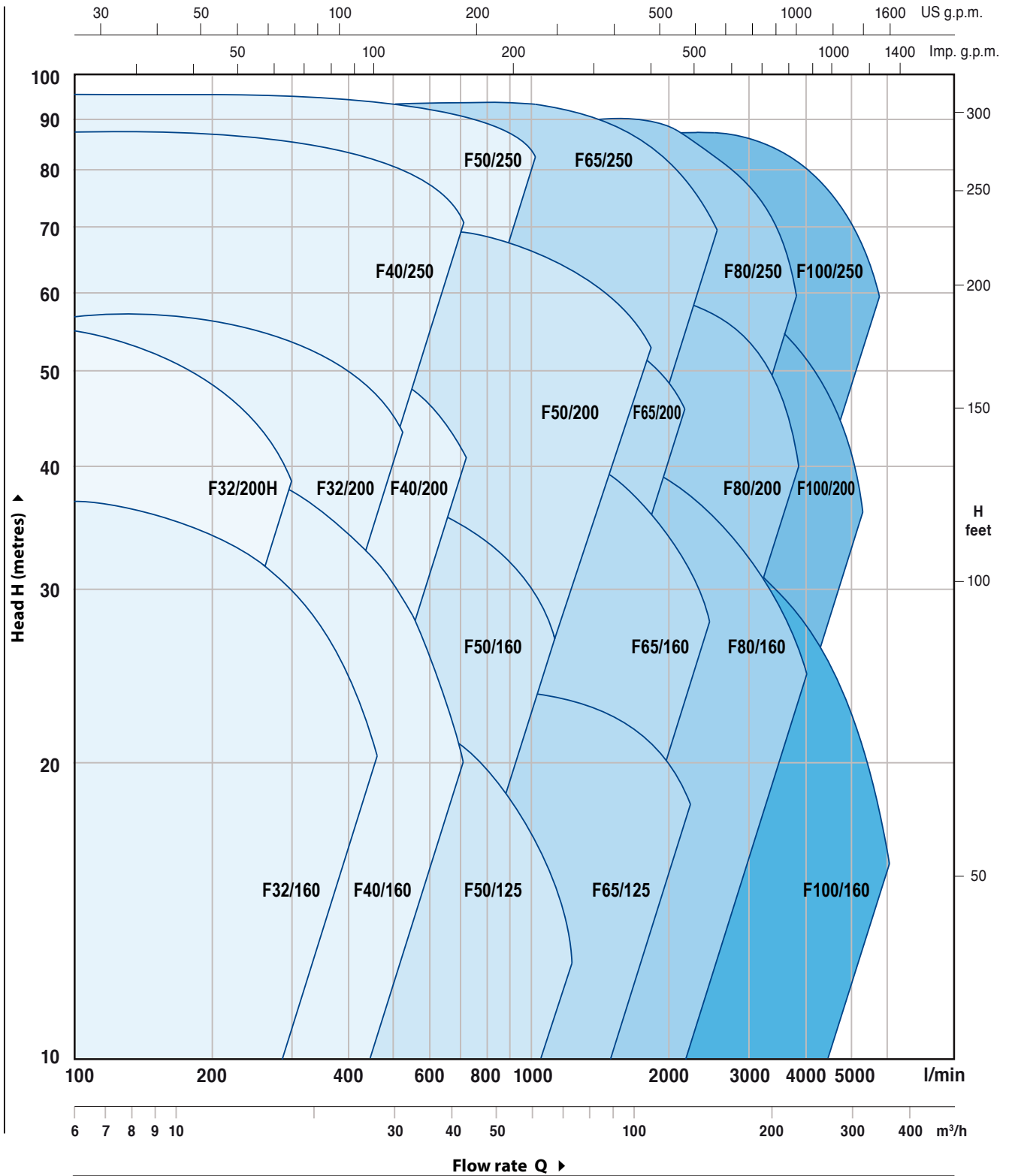
- Special mechanical seal
- Other voltages or 60 Hz frequency
- Compatibility with hotter or colder liquids
- Compatibility with hotter or colder ambients

GUARANTEE

2 years subject to terms and conditions

PERFORMANCE RANGE

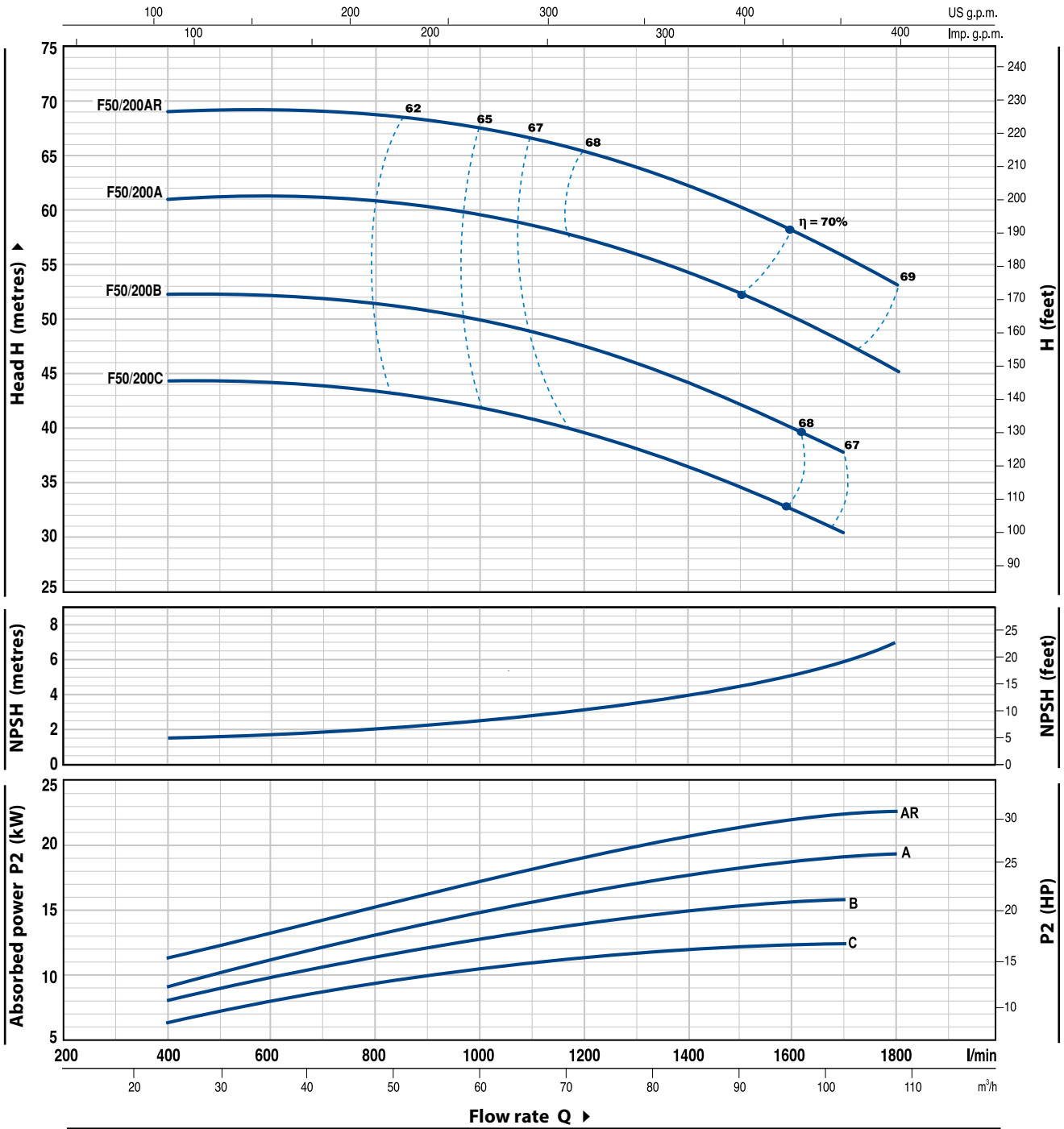
50 Hz n= 2900 1/min HS= 0 m



F50/200

CHARACTERISTIC CURVES AND PERFORMANCE DATA

50 Hz n= 2900 1/min HS= 0 m



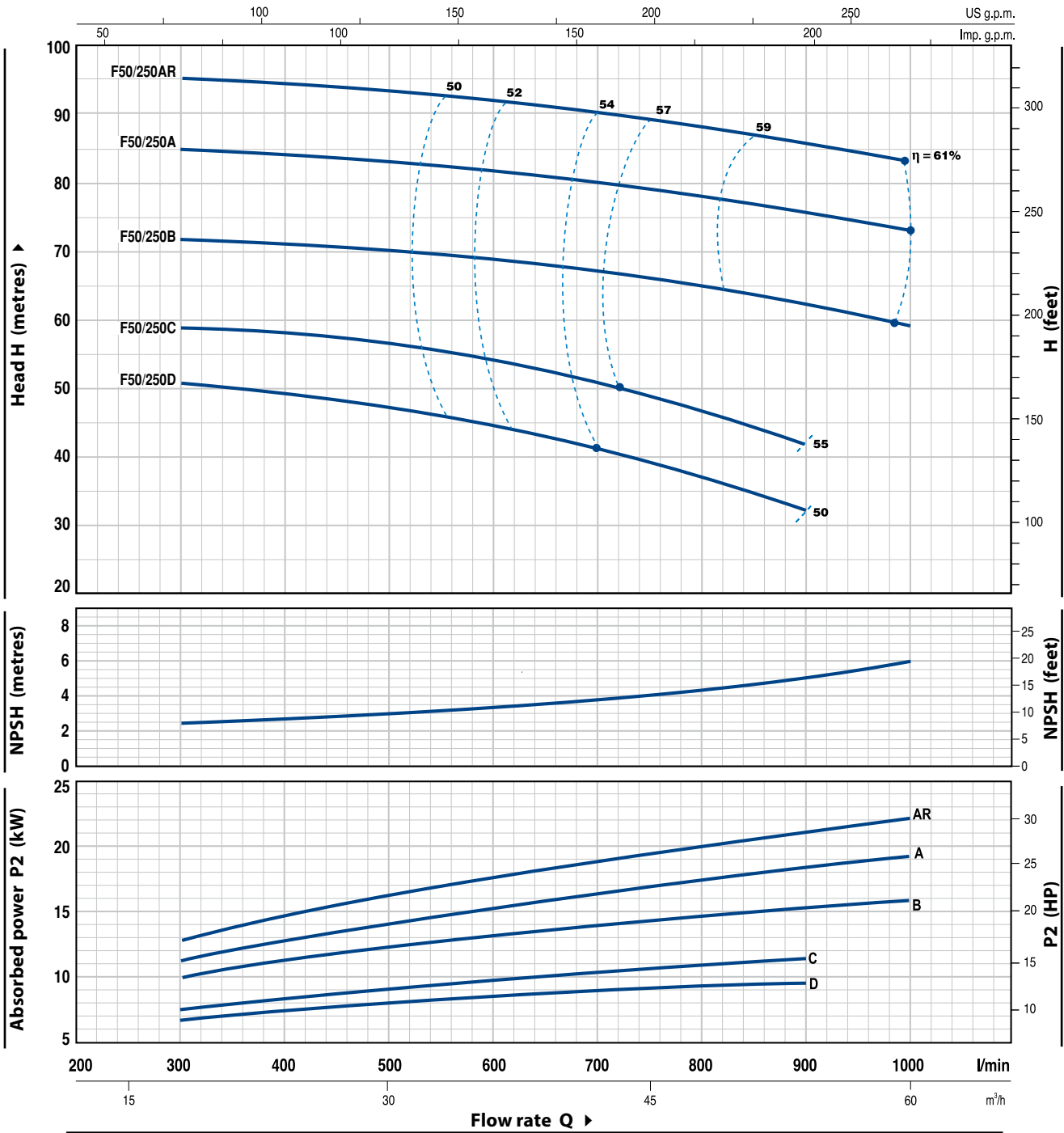
MODEL	POWER		Q	H metres											
	kW	HP		m ³ /h	24	36	48	60	72	84	96	102	108		
Three-phase			l/min	400	600	800	1000	1200	1400	1600	1700	1800			
F 50/200C	11	15		44	44	44	42	39	36	33	30				
F 50/200B	15	20		52	52	52	50	47	44	40	38				
F 50/200A	18.5	25		61	61	60.5	60	57	54	50	48	45			
F 50/200AR	22	30		69	69	68.5	68	65	62	58	56	53			

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

Tolerance of characteristic curves in compliance with EN ISO 9906 Grade 3.

CHARACTERISTIC CURVES AND PERFORMANCE DATA

50 Hz n= 2900 1/min HS= 0 m

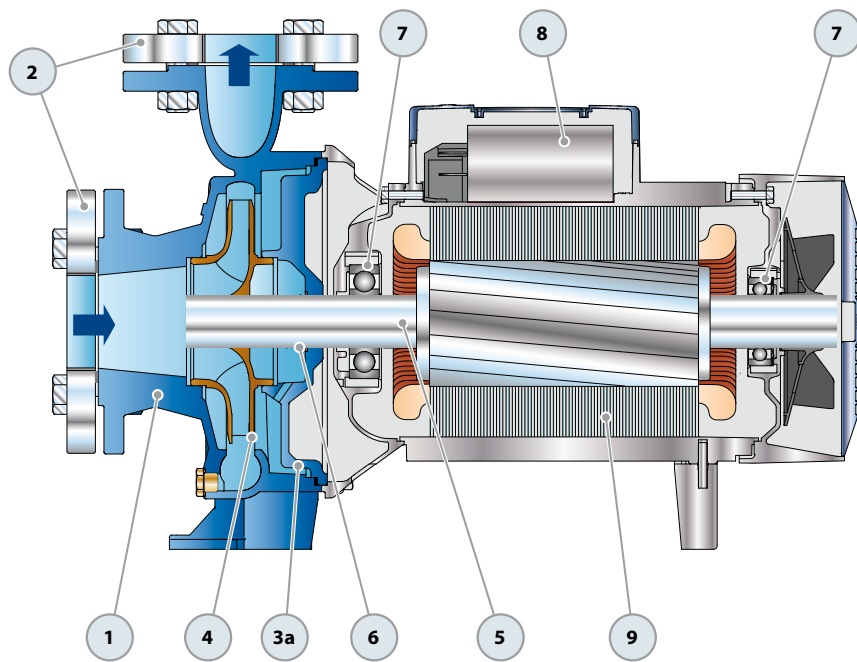


MODEL	POWER		Q	Flow rate											
	kW	HP		m ³ /h	0	18	24	30	36	42	48	54	60		
Three-phase			l/min	0	300	400	500	600	700	800	900	1000			
F 50/250D	9.2	12.5	H metres	51	51	49	47	44	41	37	32				
F 50/250C	11	15		59	59	58	57	54	51	47	42				
F 50/250B	15	20		72	72	71	70	69	67	65	62	59			
F 50/250A	18.5	25		85	85	84	83	82	80	78	76	73			
F 50/250AR	22	30		95	95	94	93	92	90	88	86	83			

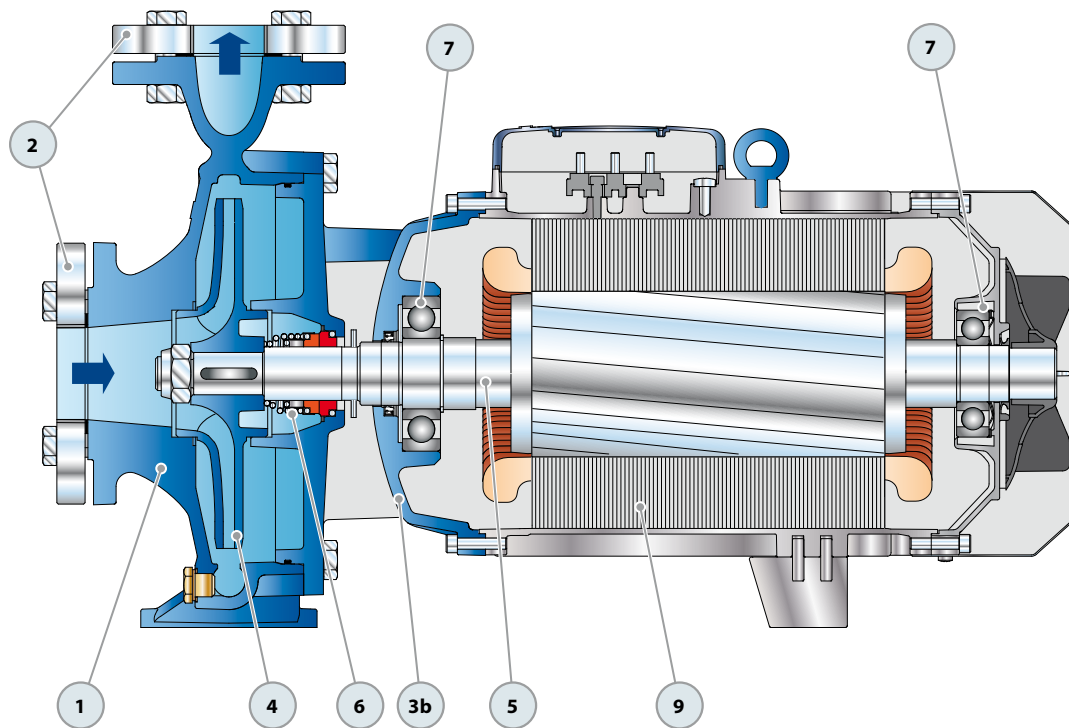
Q = Flow rate H = Total manometric head HS = Suction height

Tolerance of characteristic curves in compliance with EN ISO 9906 Grade 3.

POS.	COMPONENT	CONSTRUCTION CHARACTERISTICS						
1	PUMP BODY	Cast iron, complete with flanged suction and delivery ports						
2	COUNTERFLANGES	Steel, complete with ISO 228/1 thread						
3a	BODY BACKPLATE	Cast iron						
3b	MOTOR BRACKET	Cast iron						
4	IMPELLER	Brass for F32/160, F32/200, F40/160, F40/200, F50/125, F50/160 Cast iron for F40/250, F50/200, F50/250, F65/125, F65/160, F65/200, F65/250, F80/160, F80/200, F80/250, F100/160, F100/200, F100/250						
5	MOTOR SHAFT	Stainless steel EN 10088-3 - 1.4104						
6	MECHANICAL SEAL	Pump Model		Seal Model	Shaft Diameter	Materials Stationary ring Rotational ring Elastomer		
		F32/160 F50/125	F40/160	FN-20	Ø 20 mm	Graphite	Ceramic NBR	
		F32/200 F50/160	F40/200 F65/125	FN-24	Ø 24 mm	Graphite	Ceramic NBR	
		F50/200 F65/200 F100/160	F65/160 F80/160	FN-32 NU	Ø 32 mm	Graphite	Ceramic NBR	
		F40/250 F65/250 F80/250B F80/250A	F50/250 F80/200 F100/200 F100/250	FN-38 FN-40 FH-45 NU	Ø 38 mm Ø 40 mm Ø 45 mm	Graphite Graphite Graphite	Ceramic Ceramic Ceramic	NBR NBR NBR
		7 BEARINGS		Pump Model		Pump Model		
		F32/160C F32/160B F40/160C F50/125C	6206 ZZ - C3 / 6204 ZZ	F32/200 F40/200 F50/160 F65/125	6307 ZZ - C3 / 6206 ZZ - C3			
		Fm32/160B F32/160A Fm40/160C F40/160B Fm50/125C F50/125B	6206 ZZ - C3 / 6205 ZZ	F40/250 F50/200 F50/250 F65/160 F65/200 F80/160 F100/160	6310 ZZ - C3 / 6308 ZZ - C3			
F40/160A F50/125A	6306 ZZ - C3 / 6206 ZZ - C3	F65/250 F80/200 F80/250B F100/200	6312 ZZ - C3 / 6212 ZZ - C3					
		F80/250A F100/250	6314 ZZ - C3 / 6314 ZZ - C3					
8	CAPACITOR	Pump		Capacitance				
		Single-phase		(230 V or 240 V)				
		Fm32/160B		70 µF 450 VL				
		Fm40/160C Fm50/125C		70 µF 450 VL 70 µF 450 VL				
9	ELECTRIC MOTOR	Fm: single-phase 230 V - 50 Hz with thermal overload protector built-in to the winding (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 75 kW						
		<ul style="list-style-type: none"> ▣ Pumps fitted with the three-phase motor option offer IE2 (IEC 60034-30) class high performance – Insulation: F class – Protection: IPX5 						

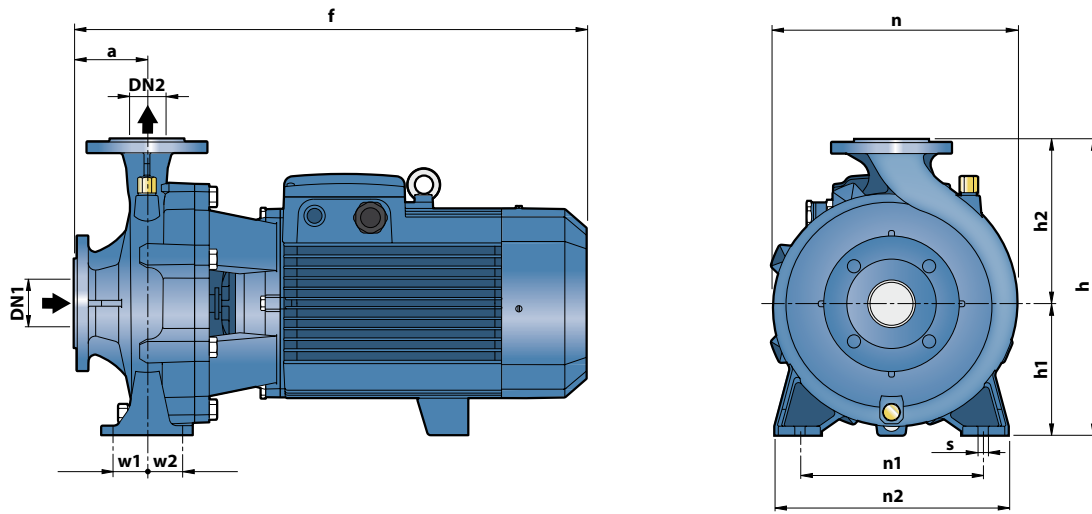


Single-phase version



Three-phase version

DIMENSIONS AND WEIGHT

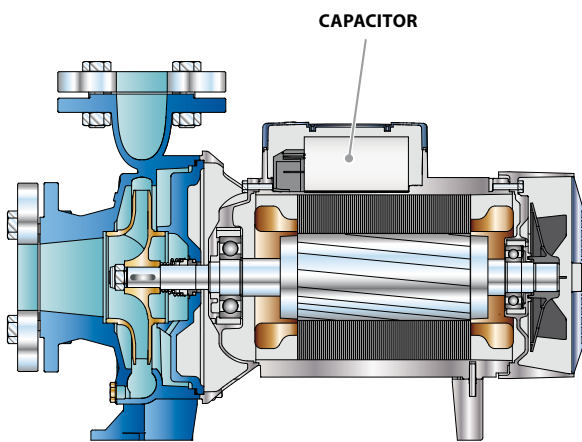


MODEL		PORTS		DIMENSIONS mm											kg *										
Single-phase	Three-phase	DN1	DN2	a	f	h	h1	h2	n	n1	n2	w1	w2	s	1~	3~									
-	F 32/160C	50	32	80	412	292	132	160	242	190	240	35	35	14	-	37.0									
Fm 32/160B	F 32/160B				42.6										38.5										
-	F 32/160A				431	340	160	180	270						270	270	270	270	270	270	270	270	270	270	270
-	F 32/200C				469																				
-	F 32/200B				515	340	160	180	270						270	270	270	270	270	270	270	270	270	270	270
-	F 32/200A				469																				
-	F 32/200BH				412	65	40	80	292						132	160	240	190	240	35	35	14	-	47.9	
-	F 32/200AH				431																		51.1		
Fm 40/160C	F 40/160C				465				43.9						40.0										
-	F 40/160B				535				340						160	180	275						212	265	212
-	F 40/160A	465	50.1																						
-	F 40/200B	535	340	160	180				275	212	265	212	265	212	265	212	265						212	265	212
-	F 40/200A	606																							
-	F 40/250C	606	405	180	225				328	250	320	250	320	250	320	250	320						250	320	250
-	F 40/250B	701																							
-	F 40/250A	701	65	50	100				405	180	225	328	250	320	47.5	47.5	14						-	109.0	
Fm 50/125C	F 50/125C	431				125.0																			
-	F 50/125B	450				292	132	160	242	190	240	190	240	190	240	190	240	190	240	190					
-	F 50/125A	484																			44.2	40.1			
-	F 50/160C	489				340	160	180	269	212	265	212	265	212	265	212	265	212	265	212					
-	F 50/160B	535																			60.6				
-	F 50/160A	616				360	160	200	316	212	265	212	265	212	265	212	265	212	265	212					
-	F 50/200C	711																			64.7				
-	F 50/200B	711				360	160	200	316	212	265	212	265	212	265	212	265	212	265	212					
-	F 50/200A	743																			128.0				
-	F 50/200AR	743	405	180	225	337	250	320	250	320	250	320	250	320	250	320	250								
-	F 50/250D	606																135.0							
-	F 50/250C	606	405	180	225	337	250	320	250	320	250	320	250	320	250	320	250								
-	F 50/250B	701																129.6							
-	F 50/250A	701	405	180	225	337	250	320	250	320	250	320	250	320	250	320	250								
-	F 50/250AR	733																146.0							
-	F 65/125C	511	340	160	180	291	212	280	212	280	212	280	212	280	212	280	212								
-	F 65/125B	557																62.7							
-	F 65/125A	557	360	160	200	300	212	280	212	280	212	280	212	280	212	280	212								
-	F 65/160C	621																66.8							
-	F 65/160B	716	360	160	200	300	212	280	212	280	212	280	212	280	212	280	212								
-	F 65/160A	716																74.0							
-	F 65/200B	719	405	180	225	330	250	320	250	320	250	320	250	320	250	320	250								
-	F 65/200A	751																100.0							
-	F 65/200AR	751	405	180	225	330	250	320	250	320	250	320	250	320	250	320	250								
-	F 80/160D	652																125.0							
-	F 80/160C	747	480	200	280	362	280	360	280	360	60	60	18	18	18	18	18								
-	F 80/160B	779																111.5							
-	F 80/160A	779	480	200	280	362	280	360	280	360	60	60	18	18	18	18	18								
-	F 100/160C	758																126.0							
-	F 100/160B	790	480	200	280	362	280	360	280	360	60	60	18	18	18	18	18								
-	F 100/160A	790																143.5							
-	F 100/160C	758	480	200	280	362	280	360	280	360	60	60	18	18	18	18	18								
-	F 100/160B	790																139.0							
-	F 100/160A	790	480	200	280	362	280	360	280	360	60	60	18	18	18	18	18								
-	F 100/160C	790																153.7							
-	F 100/160A	790	480	200	280	362	280	360	280	360	60	60	18	18	18	18	18								
-	F 100/160B	790																165.0							

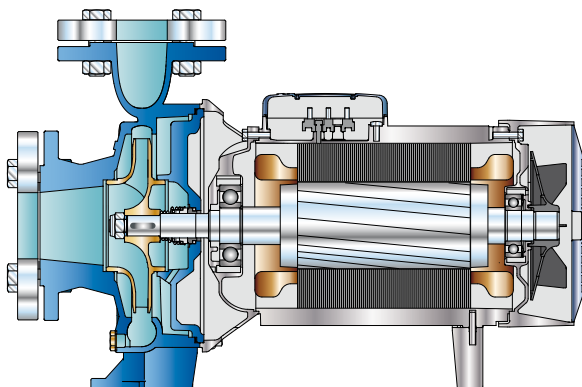
(*weight includes counterflanges)

ABSORPTION

MODEL	VOLTAGE (single-phase)	
	230 V	240 V
Single-phase		
Fm 32/160B	15.0 A	13.8 A
Fm 40/160C	15.0 A	13.8 A
Fm 50/125C	15.0 A	13.8 A



Single-phase version



Three-phase version

MODEL	VOLTAGE (three-phase)		
	230÷240 V	400÷415 V	690÷720 V
Three-phase			
F 32/160C	7.5 A	4.3 A	2.5 A
F 32/160B	10.0 A	5.8 A	3.4 A
F 32/160A	12.0 A	7.3 A	4.2 A
F 32/200C	17.9 A	10.3 A	5.9 A
F 32/200B	–	11.7 A	6.7 A
F 32/200A	–	14.9 A	8.6 A
F 32/200BH	12.6 A	7.3 A	4.2 A
F 32/200AH	15.4 A	8.9 A	5.1 A
F 40/160C	9.9 A	5.7 A	3.3 A
F 40/160B	12.0 A	6.9 A	4.0 A
F 40/160A	17.2 A	9.9 A	5.7 A
F 40/200B	–	12.6 A	7.3 A
F 40/200A	–	15.6 A	9.0 A
F 40/250C	–	21.0 A	12.1 A
F 40/250B	–	23.5 A	13.6 A
F 40/250A	–	30.5 A	17.6 A
F 50/125C	9.4 A	5.4 A	3.1 A
F 50/125B	12.0 A	6.9 A	4.0 A
F 50/125A	16.3 A	9.4 A	5.4 A
F 50/160C	15.8 A	9.1 A	5.3 A
F 50/160B	–	12.3 A	7.1 A
F 50/160A	–	15.5 A	8.9 A
F 50/200C	–	23 A	13.3 A
F 50/200B	–	29.5 A	17 A
F 50/200A	–	34.5 A	20 A
F 50/200AR	–	41.5 A	24 A
F 50/250D	–	17.2 A	9.9 A
F 50/250C	–	21.0 A	12.0 A
F 50/250B	–	27.0 A	15.6 A
F 50/250A	–	34.0 A	19.6 A
F 50/250AR	–	41.0 A	24.0 A
F 65/125C	17.5 A	10.0 A	5.8 A
F 65/125B	–	12.0 A	7.0 A
F 65/125A	–	16.5 A	9.5 A
F 65/160C	–	19.0 A	11.0 A
F 65/160B	–	23.0 A	13.5 A
F 65/160A	–	27.5 A	16.0 A
F 65/200B	–	30.0 A	17.3 A
F 65/200A	–	35.0 A	20.2 A
F 65/200AR	–	41.0 A	24.0 A
F 65/250C	–	53.0 A	31.0 A
F 65/250B	–	65.0 A	38.0 A
F 65/250A	–	79.0 A	46.0 A
F 80/160D	–	22.0 A	13.0 A
F 80/160C	–	29.0 A	17.0 A
F 80/160B	–	34.5 A	20.0 A
F 80/160A	–	39.0 A	22.5 A
F 80/200B	–	53.0 A	31.0 A
F 80/200A	–	65.0 A	38.0 A
F 80/250B	–	79.0 A	46.0 A
F 80/250A	–	98.0 A	57.0 A
F 100/160C	–	31.0 A	18.0 A
F 100/160B	–	36.0 A	21.0 A
F 100/160A	–	42.0 A	24.0 A
F 100/200C	–	53.0 A	31.0 A
F 100/200B	–	65.0 A	38.0 A
F 100/200A	–	79.0 A	46.0 A
F 100/250B	–	98.0 A	57.0 A
F 100/250A	–	126.0A	73.0 A

REGULATION (EU) N. 547/2012

- Minimum efficiency index $MEI \geq 0,10$ for water pumps according to the (EU) Regulation current from the 1th of January 2013.
- The benchmark for most efficient water pumps is $MEI \geq 0,70$.
- The efficiency of a pump with a trimmed impeller is usually lower than that of a pump with the full impeller diameter. The trimming of the impeller will adapt the pump to a fixed duty point, leading to reduced energy consumption. The minimum efficiency index (MEI) is based on the full impeller diameter.
- The operation of this water pump with variable duty points may be more efficient and economic when controlled, for example, by the use of a variable speed drive that matches the pump duty to the system.
- Information on benchmark efficiency is available www.europump.org/efficiencycharts.