



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

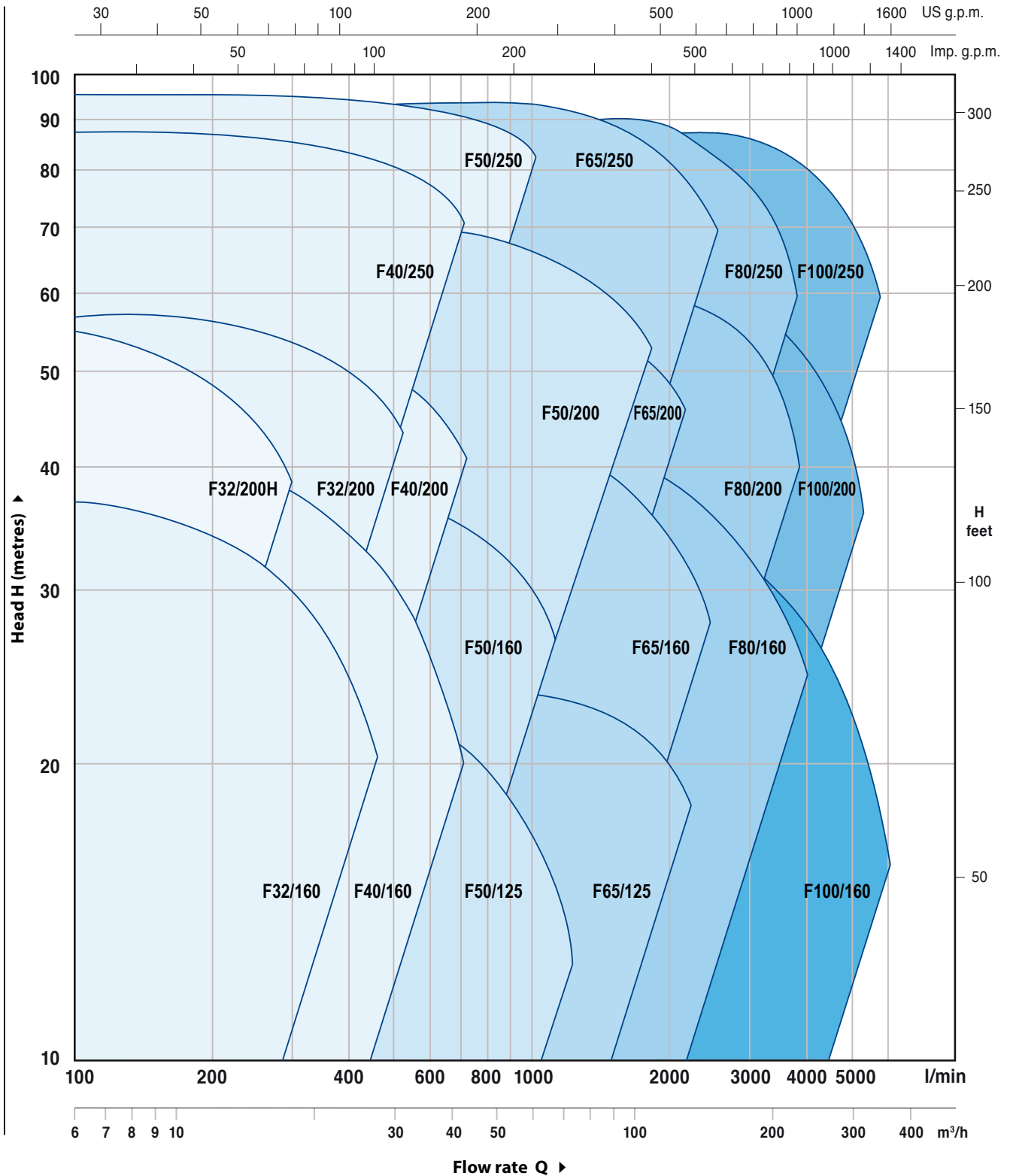
- Special mechanical seal
- Other voltages or 60 Hz frequency
- Compatibility with hotter or colder liquids
- Compatibility with hotter or colder ambients

GUARANTEE

2 years subject to terms and conditions

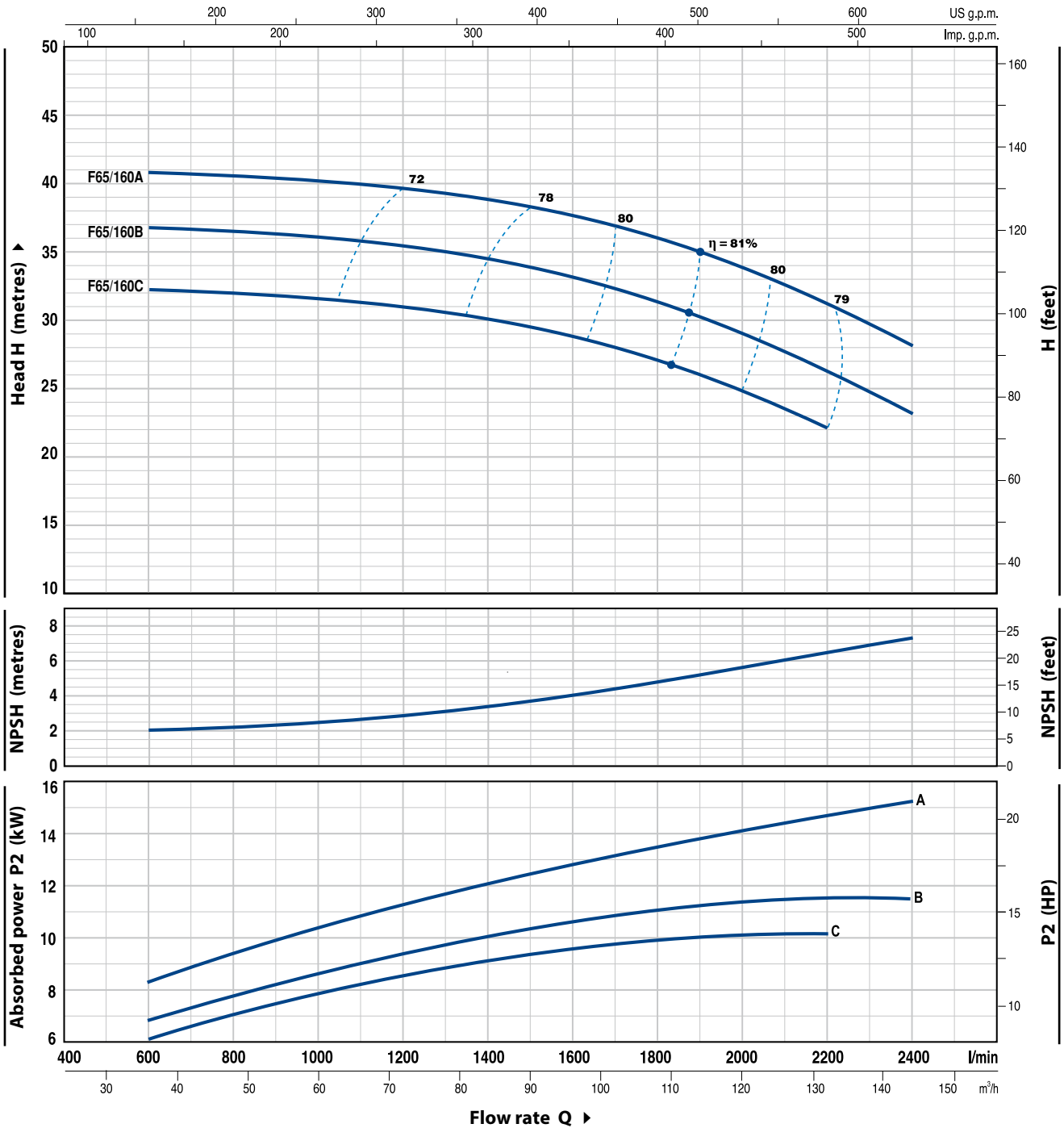
PERFORMANCE RANGE

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



CHARACTERISTIC CURVES AND PERFORMANCE DATA

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

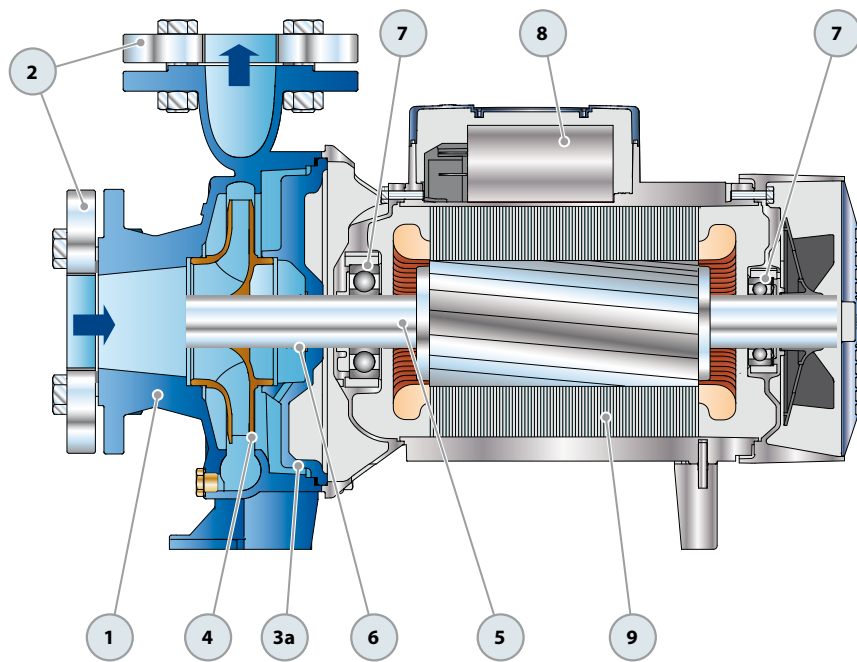


MODEL	POWER		Q	Flow rate													
	kW	HP		0	36	48	60	72	84	96	108	120	132	144			
Three-phase			l/min	0	600	800	1000	1200	1400	1600	1800	2000	2200	2400			
F 65/160C	9.2	12.5	H metres	32	32	32	32	32	30	29	27	25	22				
F 65/160B	11	15		37	36.5	36.5	36	35.5	34	33	31	29	26	23			
F 65/160A	15	20		41	40.5	40.5	40	39.5	39	37.5	36	34	31	28			

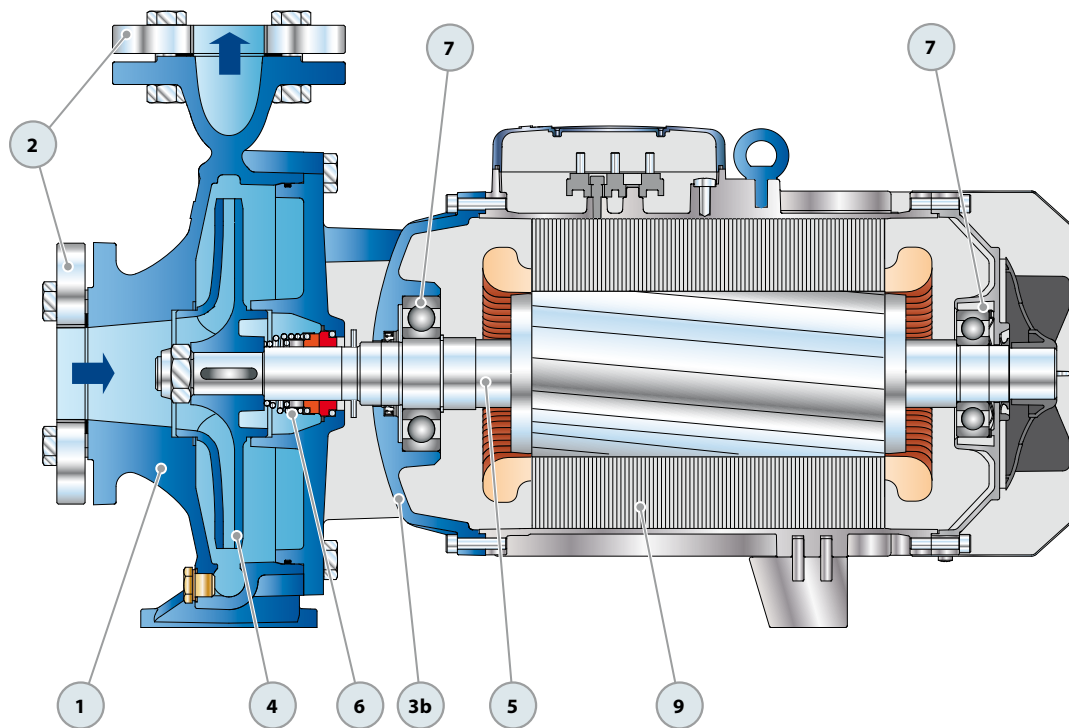
Q = Flow rate H = Total manometric head HS = Suction height

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	<i>Stationary ring</i>	<i>Rotational ring</i>	<i>Elastomer</i>
		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	F50/250 F80/200 FN-38	Ø 38 mm	Graphite	Ceramic	NBR
		F80/250B F80/250A	F100/200 F100/250 FN-40 FH-45 NU	Ø 40 mm Ø 45 mm	Graphite	Ceramic	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 Single-phase	Capacitance (230 V or 240 V)				
		Fm32/160B	70 µF 450 VL				
		Fm40/160C	70 µF 450 VL				
		Fm50/125C	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 ► Pumps fitted with the three-phase motor option offer IE2 (IEC 60034-30) class high performance – Insulation: F class – Protection: IPX5					

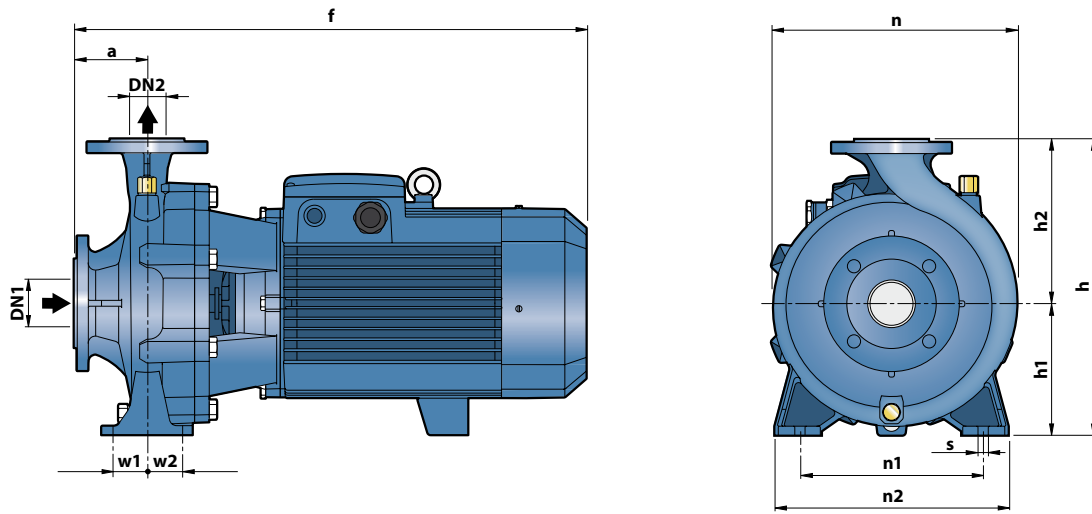


Single-phase version



Three-phase version

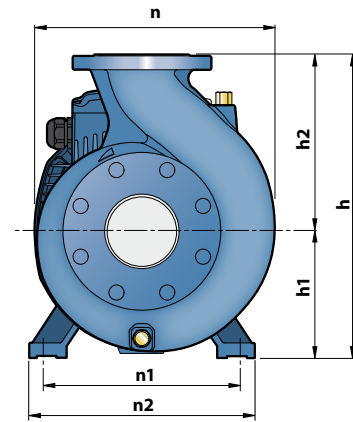
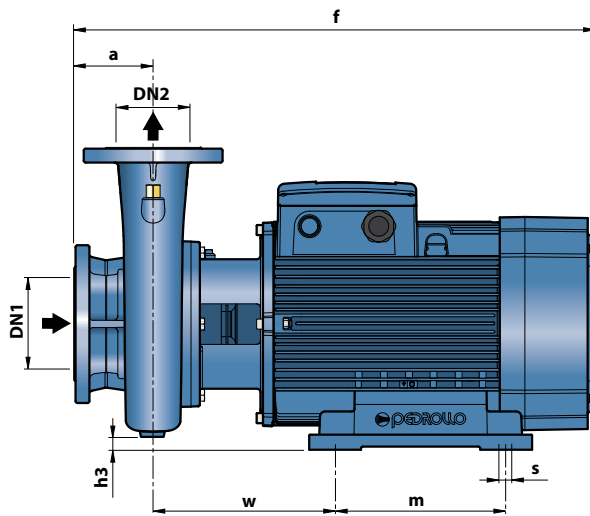
DIMENSIONS AND WEIGHT



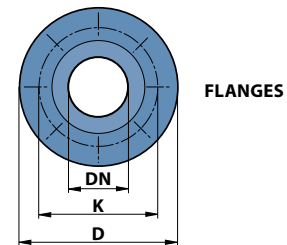
MODEL		PORTS		DIMENSIONS mm											kg *									
Single-phase	Three-phase	DN1	DN2	a	f	h	h1	h2	n	n1	n2	w1	w2	s	1~	3~								
-	F 32/160C	50	32	80	412	292	132	160	242	190	240	35	35	14	-	37.0								
Fm 32/160B	F 32/160B				42.6										38.5									
-	F 32/160A				431	-	42.6																	
-	F 32/200C				469	-	52.0																	
-	F 32/200B				515	340	160	180	270						-	57.0								
-	F 32/200A				469	-	61.0																	
-	F 32/200BH				-	-	47.9																	
-	F 32/200AH				-	-	51.1																	
Fm 40/160C	F 40/160C				65	40	80	412	292						132	160	240	212	265	47.5	47.5	14	43.9	40.0
-	F 40/160B							431															-	44.0
-	F 40/160A	465	-	50.1																				
-	F 40/200B	535	340	160				180	275	212	265	-	61.0											
-	F 40/200A	606	-	67.0																				
-	F 40/250C	701	405	180				225	328	250	320	47.5	47.5	-	103.0									
-	F 40/250B	431	-	109.0																				
-	F 40/250A	489	-	125.0																				
Fm 50/125C	F 50/125C	65	50	100				431	292	132	160	242	190	240	35	35	14						44.2	40.1
-	F 50/125B							450															-	44.1
-	F 50/125A				484	-	50.7																	
-	F 50/160C				489	-	55.0																	
-	F 50/160B				535	340	180	269	-	212	265	35						35	-	60.6				
-	F 50/160A				616	-	64.7																	
-	F 50/200C				711	360	160	200	316	-	212	265						-	106.0					
-	F 50/200B				743	-	128.0																	
-	F 50/200A				743	-	135.0																	
-	F 50/250D				606	-	147.0																	
-	F 50/250C	606	-	106.0																				
-	F 50/250B	701	405	180	225	337	250	320	-	-	113.4													
-	F 50/250A	733	-	129.6																				
-	F 50/250AR	733	-	146.0																				
-	F 65/125C	511	-	155.0																				
-	F 65/125B	557	340	180	291	-	212	280	47.5	47.5	-	62.7												
-	F 65/125A	621	-	66.8																				
-	F 65/160C	716	360	160	200	300	-	212	280	-	74.0													
-	F 65/160B	719	-	100.0																				
-	F 65/160A	751	-	106.5																				
-	F 65/200B	751	-	123.0																				
-	F 65/200A	751	-	128.0																				
-	F 65/200AR	751	-	125.0																				
-	F 80/160D	652	405	180	225	-	250	320	-	-	153.1													
-	F 80/160C	747	-	111.5																				
-	F 80/160B	779	-	126.0																				
-	F 80/160A	779	-	143.5																				
-	F 100/160C	758	480	200	280	362	280	360	60	60	18	-	139.0											
-	F 100/160B	790	-	153.7																				
-	F 100/160A	790	-	165.0																				

(*weight includes counterflanges)

DIMENSIONS AND WEIGHT



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

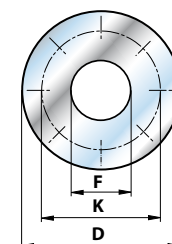


MODEL	PORTS		DIMENSIONS mm											kg *	
	DN1	DN2	a	f	h	h1	h2	h3	n	n1	n2	w	m		s
Three-phase															3~
F 65/250C	80	65	100	796	450	200	250	15	369	318	360	269.5	305	18.5	210.0
F 65/250B				847											230.0
F 65/250A				847											230.0
F 80/200B	100	80	125	824	430	280	25	360	318	360	269.5	305	18.5	212.0	
F 80/200A				875										222.5	
F 80/250B				872										245.0	
F 80/250A	125	100	140	1015	620	250	280	55	490	400	490	294	350	24	497.0
F 100/200C				824											208.5
F 100/200B				875											239.0
F 100/200A	125	100	140	875	480	200	280	0	391	318	360	269.5	305	18.5	240.0
F 100/250B				875											498.5
F 100/250A				875											498.5

(*weight includes counterflanges)

COUNTERFLANGES

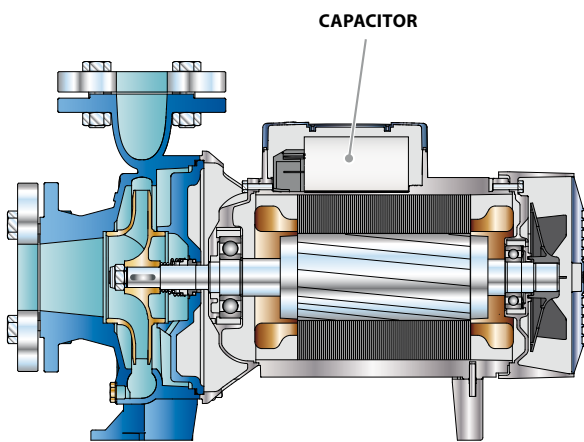
DN FLANGES	F COUNTERFLANGES	D mm	K mm	HOLES	
				N°	Ø (mm)
32	1¼"	140	100	4	18
40	1½"	150	110		
50	2"	165	125		
65	2½"	185	145		
80	3"	200	160	8	18
100	4"	220	180		
125	5"	250	210		



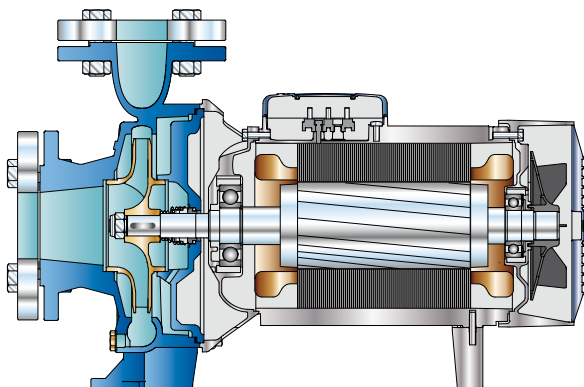
ABSORPTION

MODEL	VOLTAGE (single-phase)	
	230 V	240 V
Single-phase	230 V	240 V
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

MODEL	VOLTAGE (three-phase)		
	230÷240 V	400÷415 V	690÷720 V
Three-phase	230÷240 V	400÷415 V	690÷720 V
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



Single-phase version



Three-phase version

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.