

Standardised “EN 733” centrifugal pumps

 Clean water

 Industrial use


PERFORMANCE RANGE

- Flow rate up to **6000 l/min** (360 m³/h)
- Head up to **98 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 60335-1
IEC 60335-1
CEI 61-150

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



Pump body dimensions in compliance with **EN 733**

EU REGULATION N. 547/2012

INSTALLATION AND USE

- Water supply
- Pressure boosting
- Irrigation
- Water circulation in air-conditioning units
- Cleaning sets
- Firefighting sets
- Industrial applications
- Agricultural applications

The pump should be installed in an enclosed environment or sheltered from inclement weather.

OPTIONS AVAILABLE ON REQUEST

- Counter flange KIT complete with bolts, nuts and washers
- Special mechanical seal
- Other voltages or 60 Hz frequency
- Compatibility with hotter or colder liquids
- Compatibility with hotter or colder environments

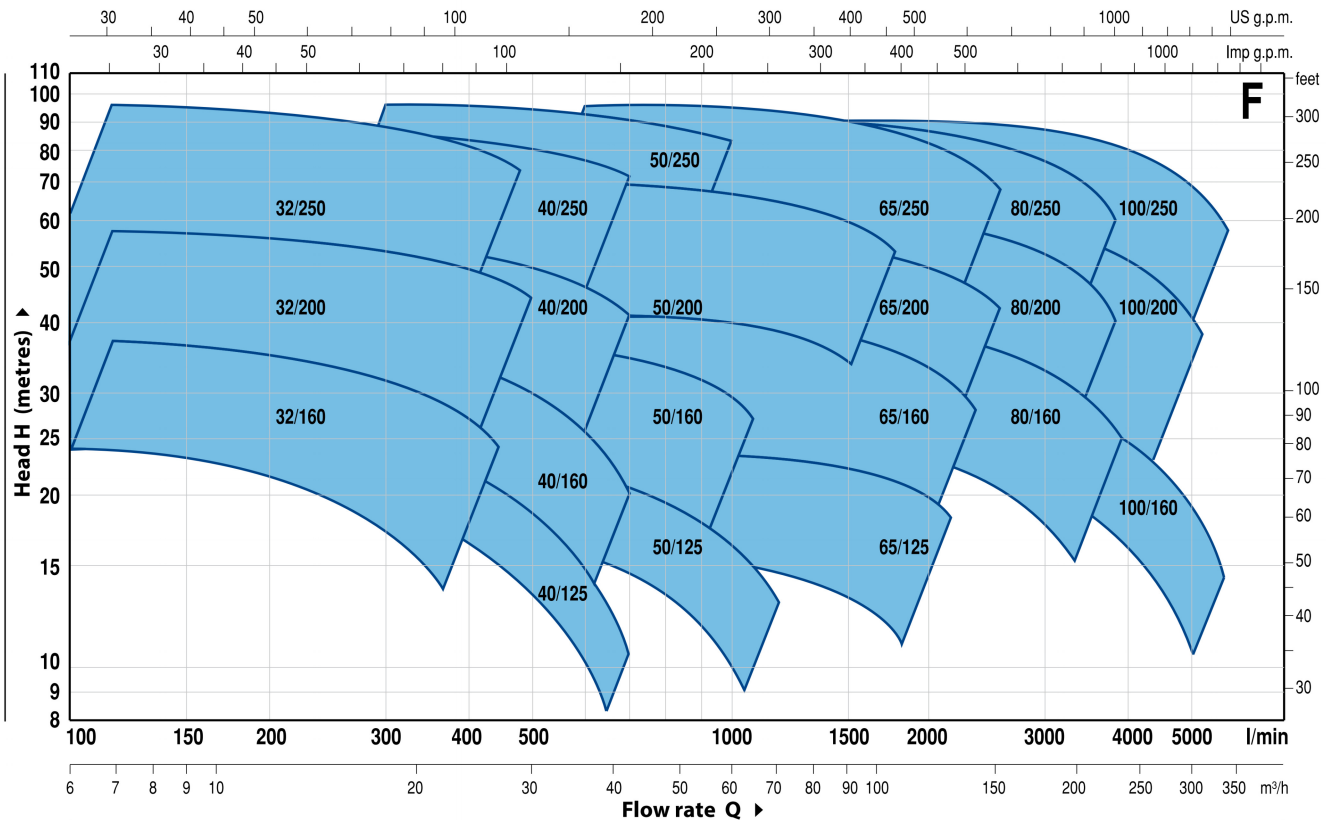
CERTIFICATIONS

Company with management system certified DNV
ISO 9001: QUALITY
ISO 14001: ENVIRONMENT



PERFORMANCE RANGE

50 Hz n = 2900 rpm



PERFORMANCE DATA

50 Hz n = 2900 rpm

MODEL	POWER (P ₂)		▲	PERFORMANCE	
	Three-phase	kW	HP	Q l/min	H metres
F 32/160C		1.5	2	100 ÷ 350	24 ÷ 14
F 32/160B		2.2	3	100 ÷ 400	30 ÷ 17
F 32/160A		3	4	100 ÷ 450	37 ÷ 24
F 32/200C		4	5.5	100 ÷ 450	44 ÷ 31.5
F 32/200B		5.5	7.5	100 ÷ 500	51 ÷ 36
F 32/200A		7.5	10	100 ÷ 500	57 ÷ 44
F 32/200BH		3	4	100 ÷ 300	45 ÷ 37
F 32/200AH		4	5.5	100 ÷ 320	55 ÷ 44
F 32/250C		9.2	12.5	100 ÷ 450	75 ÷ 60
F 32/250B		11	15	100 ÷ 500	87 ÷ 70
F 32/250A		15	20	100 ÷ 500	97 ÷ 80
F 40/125C		1.1	1.5	100 ÷ 550	16 ÷ 6
F 40/125B		1.5	2	100 ÷ 600	20.5 ÷ 9
F 40/125A		2.2	3	100 ÷ 700	26 ÷ 10
F 40/160C		2.2	3	100 ÷ 600	27 ÷ 14
F 40/160B		3	4	100 ÷ 600	32 ÷ 20
F 40/160A		4	5.5	100 ÷ 700	38 ÷ 20
F 40/200B		5.5	7.5	100 ÷ 700	47 ÷ 28
F 40/200A		7.5	10	100 ÷ 700	55 ÷ 41
F 40/250C		9.2	12.5	100 ÷ 700	64 ÷ 47
F 40/250B		11	15	100 ÷ 700	71 ÷ 55
F 40/250A		15	20	100 ÷ 700	88 ÷ 72
F 50/125C		2.2	3	300 ÷ 1200	17.5 ÷ 6
F 50/125B		3	4	300 ÷ 1200	20.7 ÷ 9
F 50/125A		4	5.5	300 ÷ 1200	23.5 ÷ 13
F 50/160C		4	5.5	300 ÷ 1000	27 ÷ 16
F 50/160B		5.5	7.5	300 ÷ 1100	32 ÷ 21
F 50/160A		7.5	10	300 ÷ 1100	37 ÷ 27
F 50/200C		11	15	400 ÷ 1700	44 ÷ 30
F 50/200B		15	20	400 ÷ 1700	52 ÷ 38
F 50/200A		18.5	25	400 ÷ 1800	61 ÷ 45
F 50/200AR		22	30	400 ÷ 1800	69 ÷ 53
F 50/250D		9.2	12.5	300 ÷ 900	51 ÷ 32
F 50/250C		11	15	300 ÷ 900	59 ÷ 42
F 50/250B		15	20	300 ÷ 1000	72 ÷ 59
F 50/250A		18.5	25	300 ÷ 1000	85 ÷ 73
F 50/250AR		22	30	300 ÷ 1000	95 ÷ 83

MODEL	POWER (P ₂)		▲	PERFORMANCE	
	Three-phase	kW	HP	Q l/min	H metres
F 65/125C		4	5.5	600 ÷ 1800	16 ÷ 11
F 65/125B		5.5	7.5	600 ÷ 2000	18 ÷ 13
F 65/125A		7.5	10	600 ÷ 2200	23 ÷ 18
F 65/160C		9.2	12.5	600 ÷ 2200	32 ÷ 22
F 65/160B		11	15	600 ÷ 2400	36.5 ÷ 23
F 65/160A		15	20	600 ÷ 2400	40.5 ÷ 28
F 65/200B		15	20	200 ÷ 2400	44 ÷ 30.5
F 65/200A		18.5	25	200 ÷ 2500	50 ÷ 36.5
F 65/200AR		22	30	200 ÷ 2600	57 ÷ 42
F 65/250C		30	40	400 ÷ 2350	76 ÷ 53
F 65/250B		37	50	400 ÷ 2500	87 ÷ 62
F 65/250A		45	60	400 ÷ 2600	95 ÷ 68
F 80/160D		11	15	500 ÷ 4000	25 ÷ 10
F 80/160C		15	20	500 ÷ 4000	30 ÷ 15
F 80/160B		18.5	25	500 ÷ 4000	35 ÷ 20
F 80/160A		22	30	500 ÷ 4000	40 ÷ 25
F 80/200B		30	40	500 ÷ 3650	56 ÷ 34.5
F 80/200A		37	50	500 ÷ 3900	62 ÷ 40
F 80/250B		45	60	600 ÷ 3600	77 ÷ 54
F 80/250A		55	75	600 ÷ 3900	88.5 ÷ 60
F 100/160C-N		15	20	1000 ÷ 5000	28.5 ÷ 11
F 100/160B-N		18.5	25	1000 ÷ 5500	32.5 ÷ 11
F 100/160A-N		22	30	1000 ÷ 6000	37 ÷ 13
F 100/200C		30	40	833 ÷ 4650	51 ÷ 28
F 100/200B		37	50	833 ÷ 4900	57 ÷ 33
F 100/200A		45	60	833 ÷ 5250	63 ÷ 38
F 100/250B		55	75	800 ÷ 5150	75 ÷ 48
F 100/250A		75	100	800 ÷ 5750	89 ÷ 58

Q = Flow rate

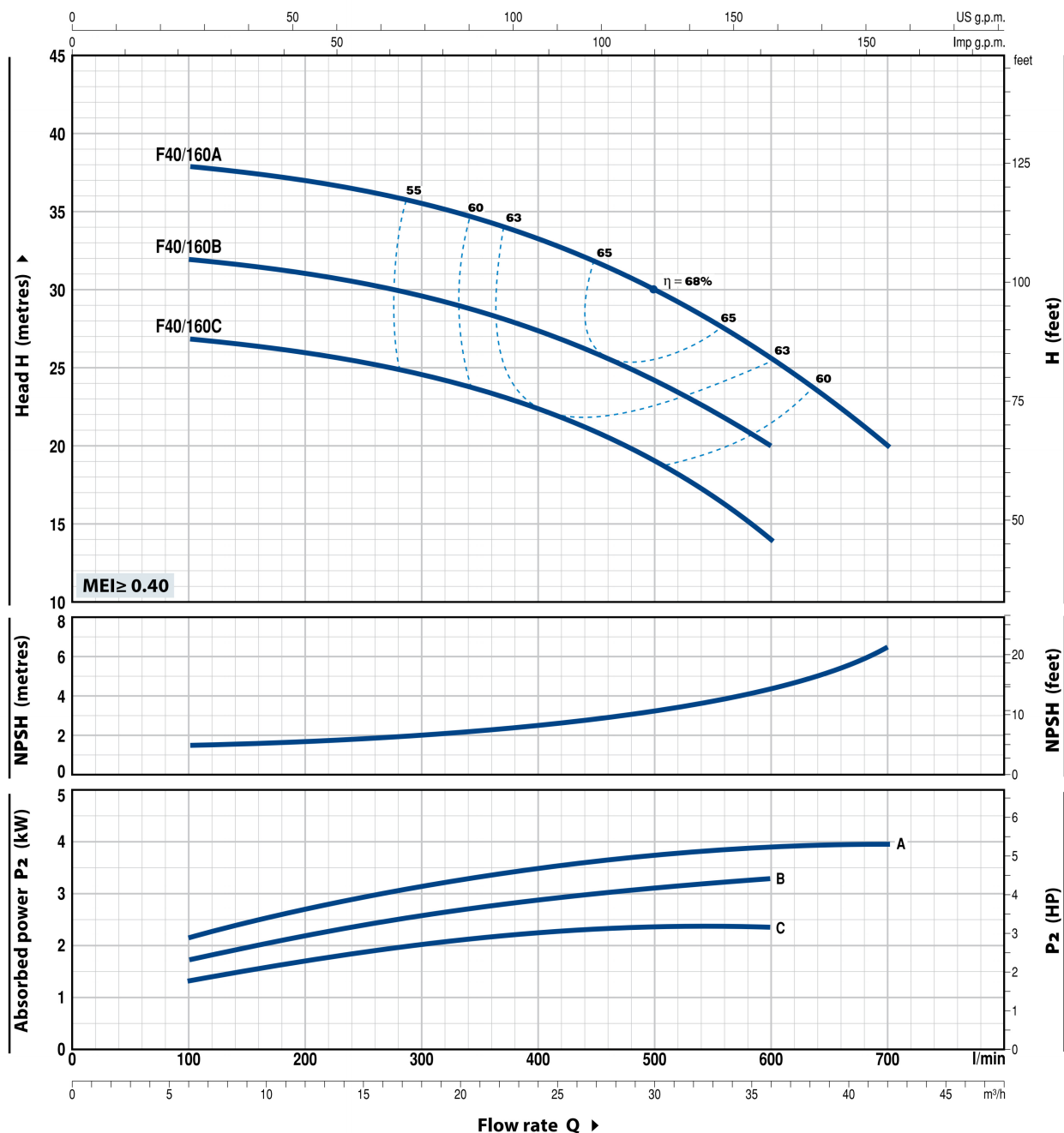
H = Total manometric head

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

▲ Performance class of the three-phase motor (IEC-60034-30)

CHARACTERISTIC CURVES AND PERFORMANCE DATA

50 Hz n= 2900 rpm HS= 0 m



MODEL		POWER (P ₂)		Q m³/h l/min	0	6	9	12	15	18	24	30	36	42
Single-phase	Three-phase	kW	HP		0	100	150	200	250	300	400	500	600	700
Fm 40/160C	F 40/160C	2.2	3	H metres	27	27	26.5	26	25.5	25	22.5	19	14	
–	F 40/160B	3	4		32	32	31.5	31	30.5	30	27.5	24	20	
–	F 40/160A	4	5.5		38	38	37.8	37	36.5	36	33.5	30	26	20

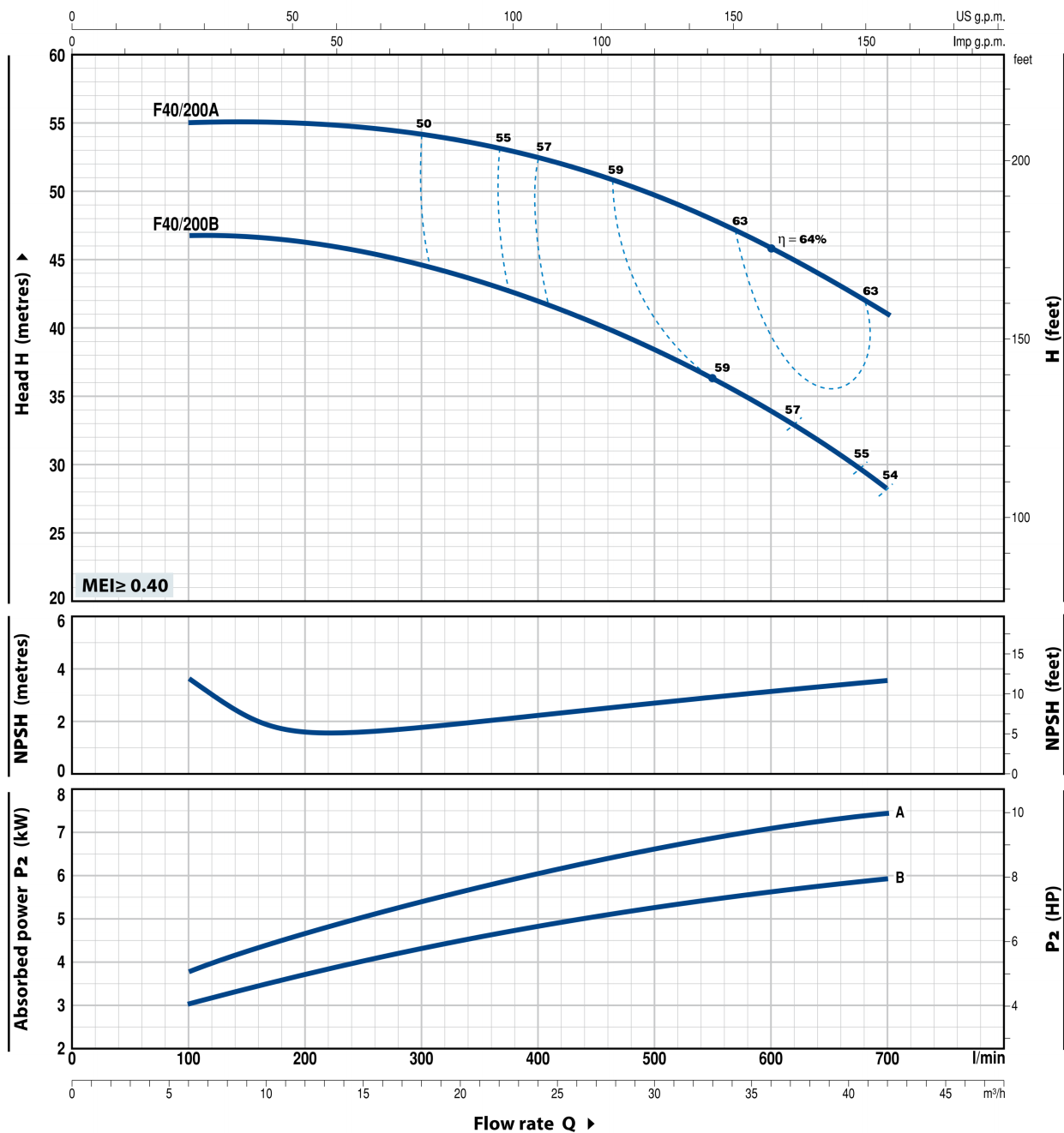
Q = Flow rate H = Total manometric head HS = Suction height

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

F40/200

CHARACTERISTIC CURVES AND PERFORMANCE DATA

50 Hz n= 2900 rpm HS= 0 m



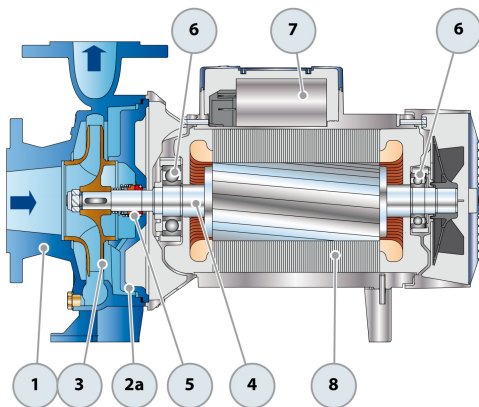
MODEL Three-phase	POWER (P ₂)		Q m³/h l/min	0	6	9	12	15	18	24	30	36	42
	kW	HP		0	100	150	200	250	300	400	500	600	700
F 40/200B	5.5	7.5	H metres	48	47	46.5	46	45.5	44.5	42	38	34	28
F 40/200A	7.5	10		56	55	55	55	54.5	54	52.5	49.5	46	41

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

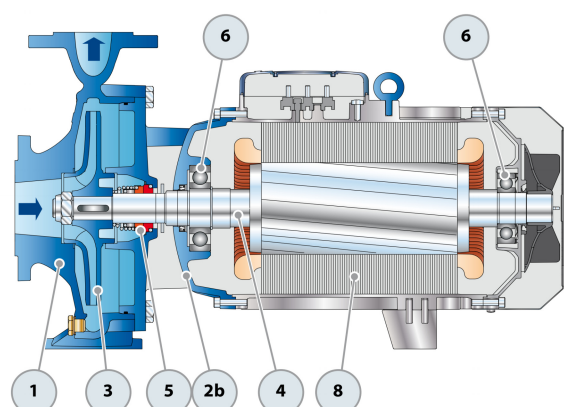
Tolerance of characteristic curves in compliance with EN ISO 9906 Grade 3B.

POS. COMPONENT CONSTRUCTION CHARACTERISTICS

1	PUMP BODY	Cast iron complete with flanged suction and delivery ports				
2a	BODY BACKPLATE	Cast iron for F32/160, F32/200, F40/125, F40/160, F40/200, F50/125, F50/160, F65/125				
2b	MOTOR BRACKET	Cast iron for F32/250, F40/250, F50/200, F50/250, F65/160, F65/200, F65/250, F80/160, F80/200, F80/250, F100/160, F100/200, F100/250				
3	IMPELLER	Brass for F32/160, F32/200, F40/125, F40/160, F40/200, F50/125, F50/160 Cast iron for F32/250, 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				
4	MOTOR SHAFT	Stainless steel EN 10088-3 - 1.4104				
5	MECHANICAL SEAL	Pump	Seal	Shaft	Materials	
		Model	Model	Diameter	<i>Stationary ring</i>	<i>Rotational ring</i>
		F32/160, F40/125, F40/160, 50/125	FN-20	Ø 20 mm	Graphite	Ceramic
		F32/200, F40/200, F50/160, F65/125	FN-24	Ø 24 mm	Graphite	Ceramic
		F50/200, F65/160, F65/200, F80/160, F100/160	FN-32 NU	Ø 32 mm	Graphite	Ceramic
		F32/250, F40/250, F50/250	FN-38	Ø 38 mm	Graphite	Ceramic
		F65/250, F80/200, F80/250B, F100/200	FN-40 NU	Ø 40 mm	Graphite	Ceramic
		F80/250A, F100/250	FH-45 NU	Ø 45 mm	Graphite	Ceramic
6	BEARINGS	Pump	Model	Pump	Model	
		F32/160C F40/160C	6206 ZZ-C3 / 6204 ZZ	F32/250 F50/200	6310 ZZ-C3 / 6308 ZZ-C3	
		F32/160B F50/125C		F40/250 F65/160		
		F40/125		F50/250 F80/160		
		Fm32/160B F32/160A	6206 ZZ-C3 / 6205 ZZ	F65/200 F100/160	6312 ZZ-C3 / 6212 ZZ-C3	
		Fm40/160C F40/160B		F65/250 F80/200		
		Fm50/125C F50/125B		F80/250B F100/200		
		F40/160A	6306 ZZ-C3 / 6206 ZZ-C3	F80/250A	6314 ZZ-C3 / 6313 ZZ-C3	
		F50/125A		F100/250		
		F32/200 F40/200	6307 ZZ-C3 / 6206 ZZ-C3			
		F50/160 F65/125				
7	CAPACITOR	Pump	Capacitance			
		Single-phase	(230 V or 240 V)			
		Fm32/160C	45	µF - 450 VL		
		Fm32/160B	70	µF - 450 VL		
		Fm40/125C	31.5	µF - 450 VL		
		Fm40/125B	45	µF - 450 VL		
		Fm40/160C	70	µF - 450 VL		
		Fm50/125C	70	µF - 450 VL		
8	ELECTRIC MOTOR	Fm: single-phase 230 V - 50 Hz with thermal overload protector incorporated into 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 ➡ The three-phase pumps are fitted with high performance motors up to P2=1.1kW in class IE2 and from P2=1.5kW in class IE3 (IEC 60034-30) – Insulation: class F – Protection: IP 55				



Single-phase version



Three-phase version

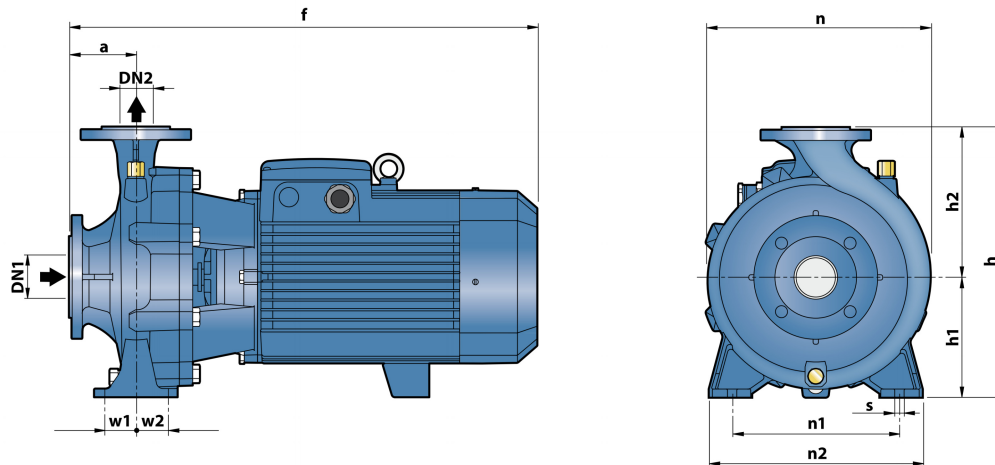
ABSORPTION

MODEL	VOLTAGE	
	230 V	240 V
Single-phase		
Fm 32/160C	11.0 A	10.0 A
Fm 32/160B	15.0 A	13.8 A
Fm 40/125C	8.6 A	7.8 A
Fm 40/125B	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		
	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 32/250C	–	17.2 A	9.9 A
F 32/250B	–	21.0 A	12.0 A
F 32/250A	–	27.0 A	15.6 A
F 40/125C	5.7 A	3.3 A	1.9 A
F 40/125B	7.5 A	4.3 A	2.5 A
F 40/125A	10.0 A	5.8 A	3.4 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	–	23.0 A	13.3 A
F 50/200B	–	29.5 A	17.0 A
F 50/200A	–	34.5 A	20.0 A
F 50/200AR	–	41.5 A	24.0 A

MODEL	VOLTAGE		
	230÷240 V	400÷415 V	690÷720 V
Three-phase			
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	–	31.0 A	18.0 A
F 65/200A	–	34.0 A	19.5 A
F 65/200AR	–	41.0 A	23.7 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-N	–	31.0 A	18.0 A
F 100/160B-N	–	36.0 A	21.0 A
F 100/160A-N	–	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	–	126.0 A	73.0 A

DIMENSIONS AND WEIGHT



MODEL		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	32.7	32.1							
Fm 32/160B	F 32/160B				448/412										37.5	33.4							
-	F 32/160A				448										-	37.4							
-	F 32/200C				469										-	46.4							
-	F 32/200B				515										340	160	180	270	-	48.4			
-	F 32/200A				469														-	56.9			
-	F 32/200BH				469														-	42.4			
-	F 32/200AH			469	-	46.4																	
-	F 32/250C			100	606	405	180	225	330	250	320	47.5	47.5		-	100.0							
-	F 32/250B				701										-	102.0							
-	F 32/250A				701										-	119.8							
Fm 40/125C	F 40/125C	65	40		80										421	252	112	140	244	160	210	35	35
Fm 40/125B	F 40/125B			448/412		33.0	31.5																
-	F 40/125A			448		-	33.0																
Fm 40/160C	F 40/160C			465		37.6	33.5																
-	F 40/160B			465		292	132	160	240	190	240	35	35	-	37.5								
-	F 40/160A			535										-	43.6								
-	F 40/200B			535										-	54.0								
-	F 40/200A			535	-									60.0									
-	F 40/250C			100	606	405	180	225	328	250	320	47.5	47.5	-	100.0								
-	F 40/250B				701									-	102.0								
-	F 40/250A				701									-	119.8								
Fm 50/125C	F 50/125C	65	50		100									465/431	292	132	160	242	190	240	35	35	37.3
-	F 50/125B			465		-	37.2																
-	F 50/125A			484		-	43.3																
-	F 50/160C			489		-	48.0																
-	F 50/160B			535		340	180	269	212	265	35	35	-	52.5									
-	F 50/160A			535									-	56.4									
-	F 50/200C			616		360	200	316	212	265	35	35	-	97.7									
-	F 50/200B			711									-	114.0									
-	F 50/200A			743		405	180	225	337	250	320	47.5	47.5	-									126.5
-	F 50/200AR			606										-									140.3
-	F 50/250D			606		405	180	225	337	250	320	47.5	47.5	-									101.3
-	F 50/250C	701	-	103.3																			
-	F 50/250B	80	65	125	733	340	160	180	291	212	280	47.5	47.5	-	120.4								
-	F 50/250A				511									-	134.3								
-	F 65/125C				557									-	53.5								
-	F 65/125B				621									360	200	300	212	280	47.5	47.5	-	56.8	
-	F 65/125A				716																-	63.3	
-	F 65/160C				719									405	180	225	340	250	320	47.5	47.5	-	98.3
-	F 65/160B				751																	-	99.3
-	F 65/160A				751									405	180	225	340	250	320	47.5	47.5	-	114.3
-	F 65/200B				751																	-	120.3
-	F 65/200A				751									405	180	225	340	250	320	47.5	47.5	-	132.9
-	F 65/200AR				751																	-	144.4
-	F 80/160D	100	80	125	652	405	180	225	330	250	320	60	60	18	-	103.8							
-	F 80/160C				747										-	115.6							
-	F 80/160B				779										-	133.1							
-	F 80/160A				779										-	144.6							
-	F 100/160C-N				758										-	126.3							
-	F 100/160B-N	125	100	125	758	480	200	280	362	280	360	60	60	18	-	136.3							
-	F 100/160A-N				790										-	151.3							