

# 2CP

## Centrifugal twin-impeller pumps

-  Clean water
-  Domestic use
-  Civil use
-  Industrial use



### PERFORMANCE RANGE

- Flow rate up to **450 l/min** (27 m<sup>3</sup>/h)
- Head up to **112 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. working pressure **10 bar**  
(**6 bar** for 2CP25/130N)
- 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



### CERTIFICATIONS

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



### INSTALLATION AND USE

Suitable for use with clean water and with liquids that are not chemically aggressive towards the materials from which the pump is made. The high performance and adaptability to a wide range of applications make them the ideal choice in domestic, civil and industrial applications, in particular for the distribution of water in combination with pressure tanks for boosting pressure in the network and for firefighting sets.

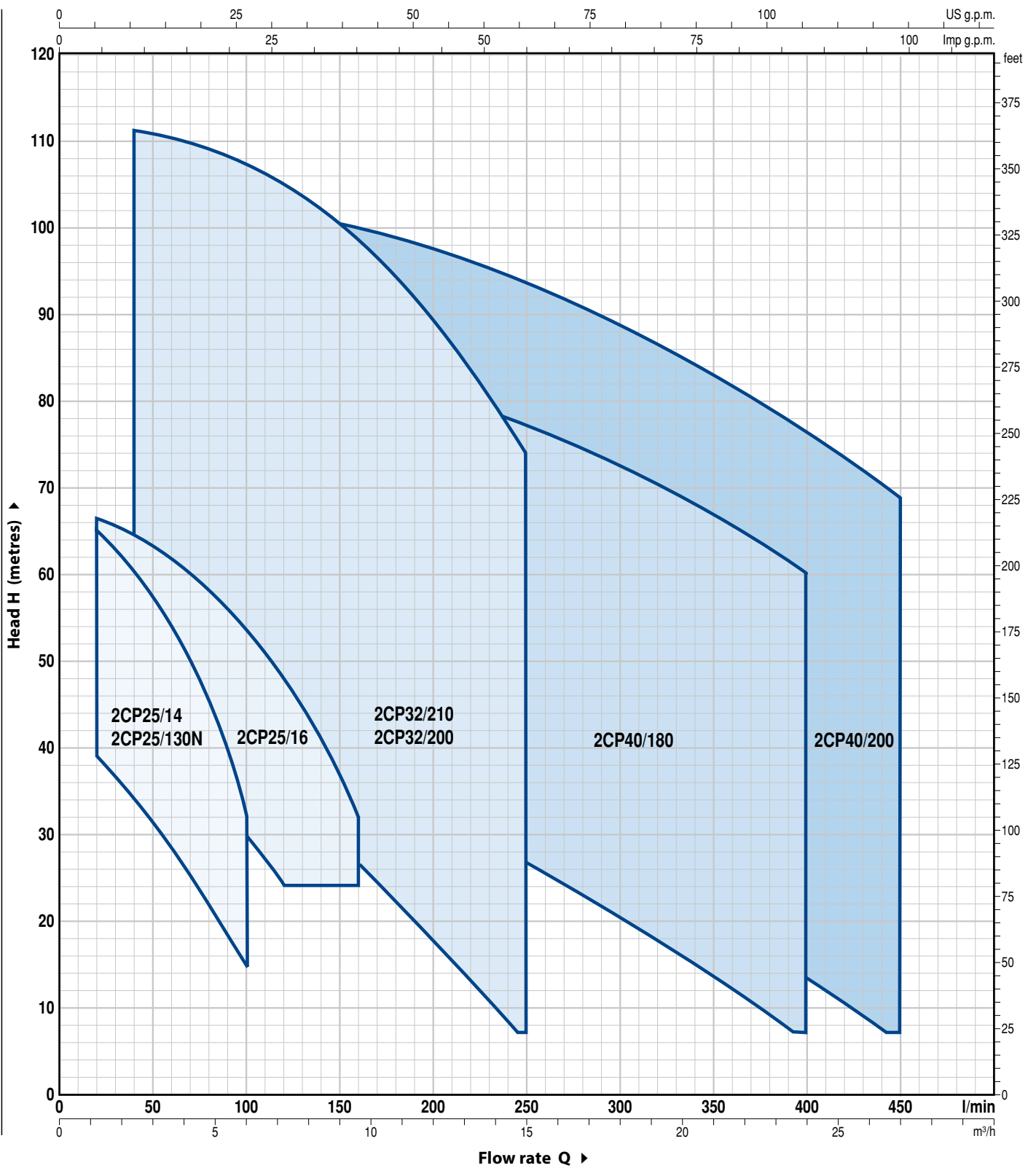
The pump should be installed in an enclosed environment or sheltered from inclement weather.

### OPTIONS AVAILABLE ON REQUEST

- Special mechanical seal
- Other voltages or 60 Hz frequency
- IPX5 class protection for:
  - 2CP32/200                      – 2CP40/180
  - 2CP32/210                      – 2CP40/200

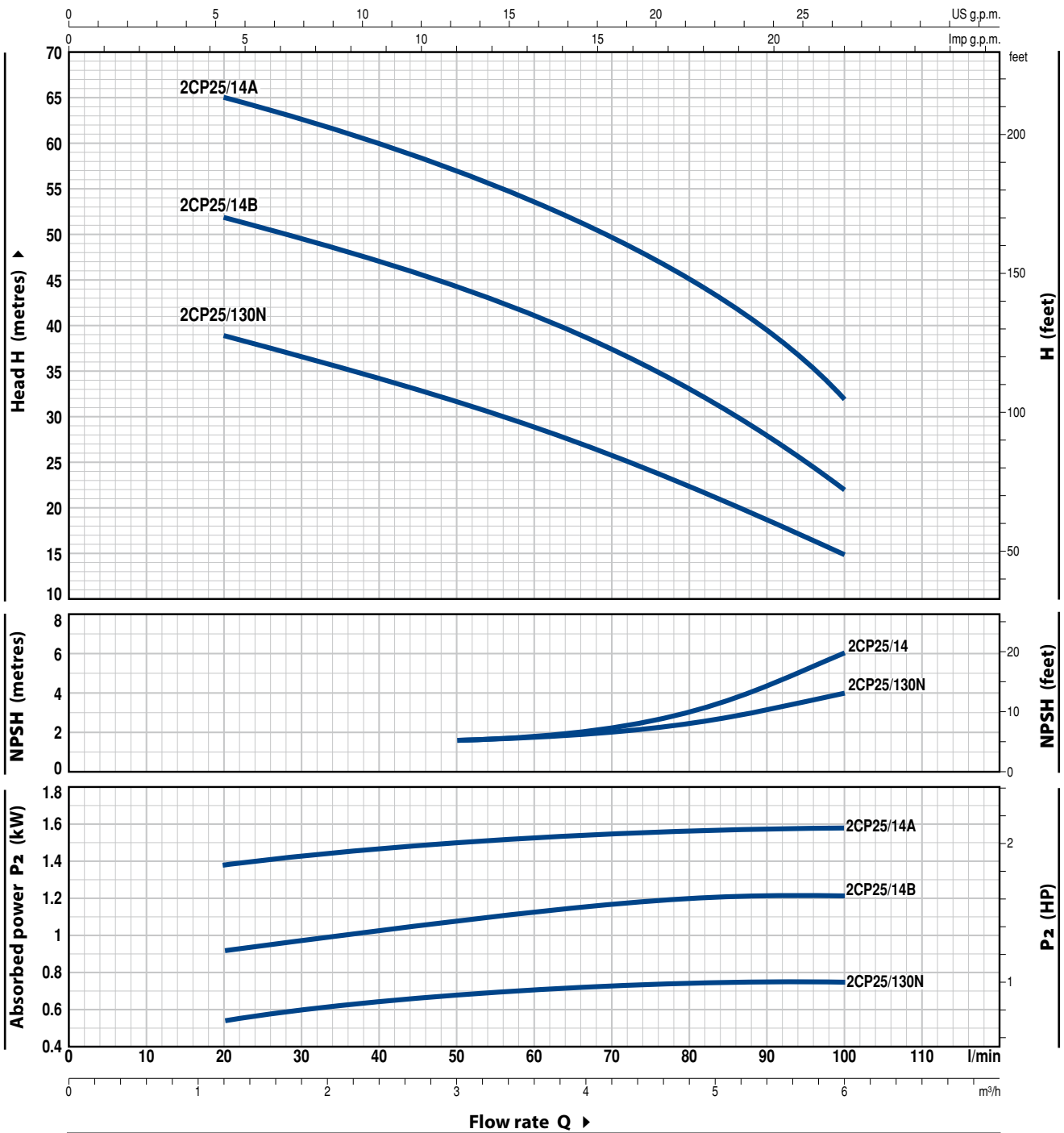
**PERFORMANCE RANGE**

50 Hz n= 2900 rpm HS= 0 m



## CHARACTERISTIC CURVES AND PERFORMANCE DATA

50 Hz n= 2900 rpm HS= 0 m



MODEL		POWER (P <sub>2</sub> )			Q										
Single-phase	Three-phase	kW	HP	▲		m <sup>3</sup> /h	0	1.2	1.8	2.4	3.0	3.6	4.2	4.8	5.4
					l/min	0	20	30	40	50	60	70	80	90	100
2CPm 25/130N	2CP 25/130N	0.75	1	IE2	H metres	42	39	37	34	31	28.5	25.5	22	18	15
2CPm 25/14B	2CP 25/14B	1.1	1.5			54	52	50	47.5	44.5	41	37	33	28	22
2CPm 25/14A	2CP 25/14A	1.5	2	IE3		67	65	62	60	57	54	50	45	40	32

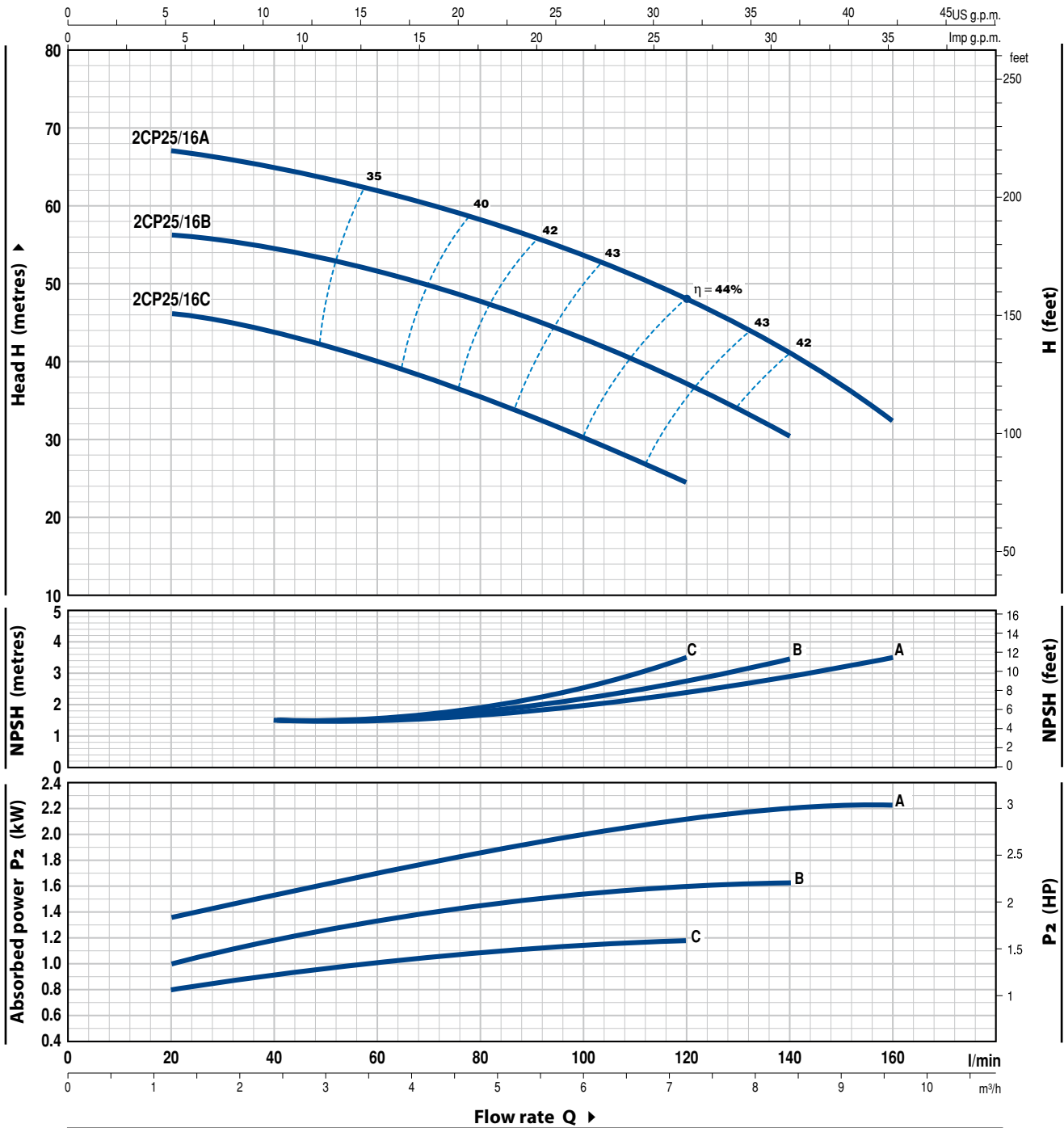
Q = Flow rate H = Total manometric head HS = Suction height

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 <sub>2</sub> )			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	7.2	8.4	9.6		
2CPm 25/16C	2CP 25/16C	1.1	1.5	IE2	l/min	0	20	30	40	50	60	70	80	90	100	110	120	140	160		
				IE3	H metres	47	46	45	44	42	40	38	35	33	30	27	24				
						58	56	55	54	53	51	49	47	45	43	40	37	30			
-						68	67	65.5	64.5	63	62	60	58	56	54	51	48	41	32		

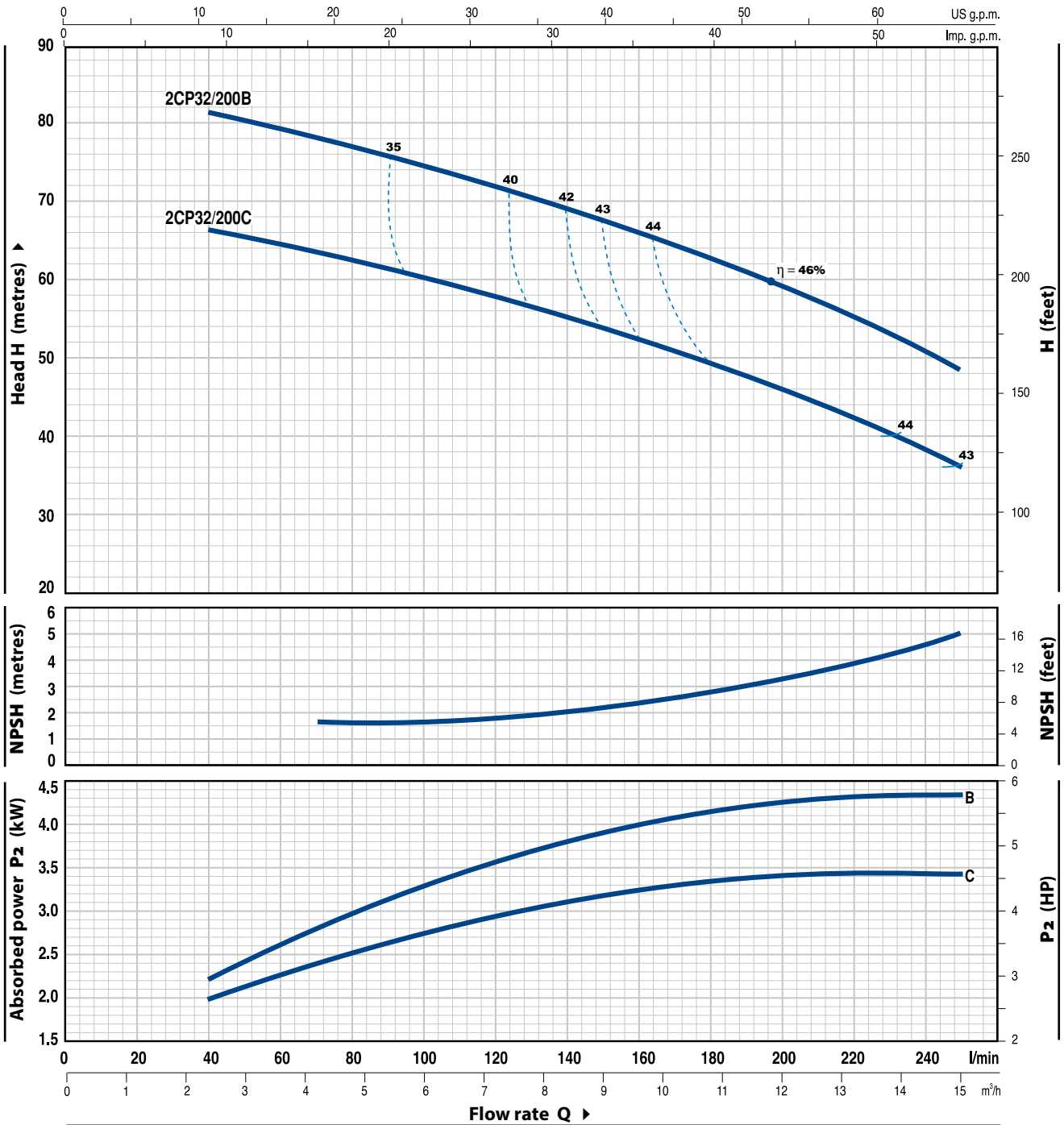
Q = Flow rate H = Total manometric head HS = Suction height

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 <sub>2</sub> )		▲	Q	Flow rate Q														
	kW	HP			m <sup>3</sup> /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
Three-phase				l/min	0	40	50	60	70	80	90	100	110	125	140	160	180	200	250
2CP 32/200C	3	4	IE3	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		85	81	80	79	78	77	76	75	74	72	69	66	62	58	49	

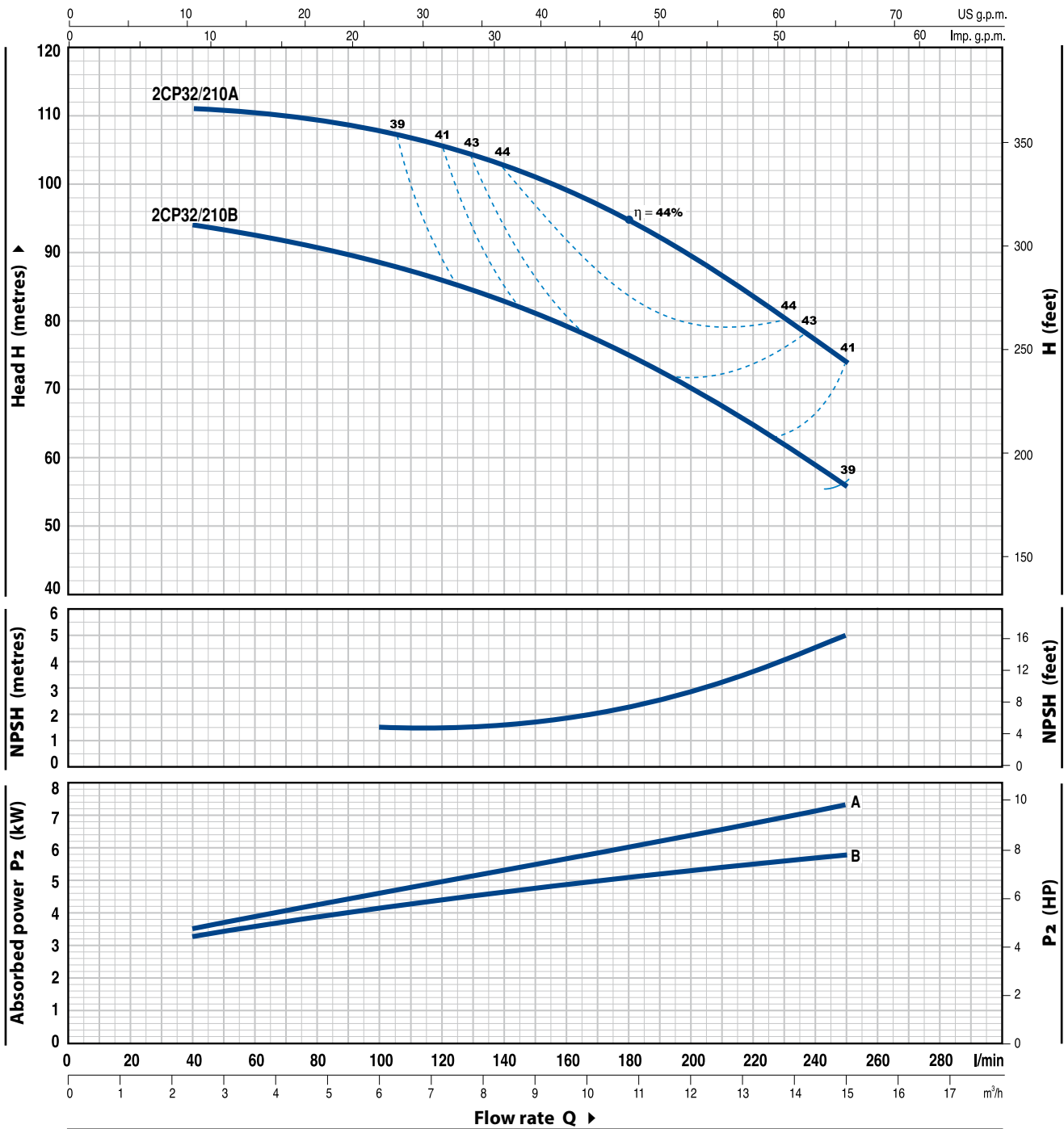
Q = Flow rate H = Total manometric head HS = Suction height

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 <sub>2</sub> )		▲	Q	Flow rate Q														
	kW	HP			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	IE3	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	

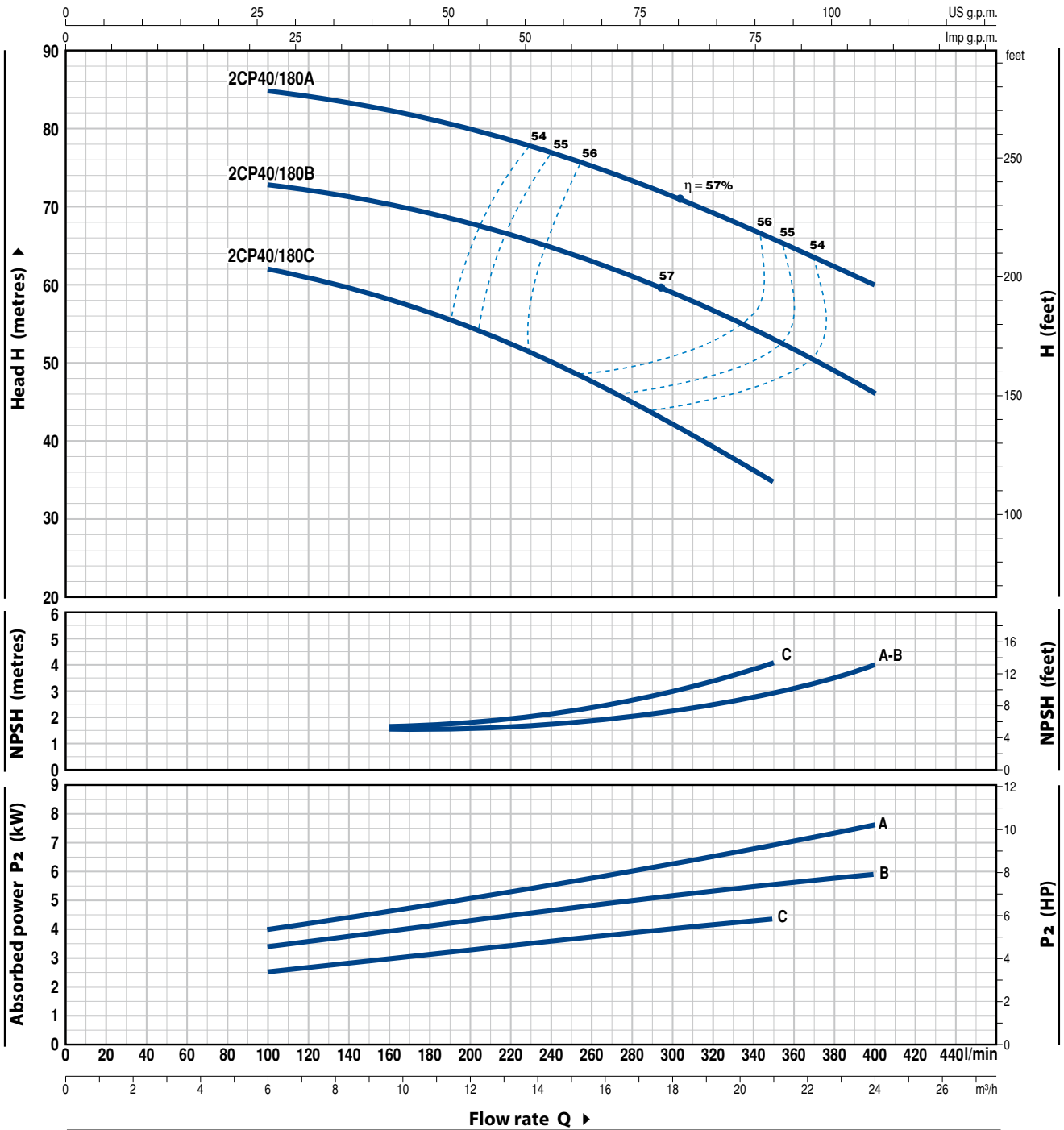
Q = Flow rate H = Total manometric head HS = Suction height

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 <sub>2</sub> )		▲	Q	m <sup>3</sup> /h														
	kW	HP			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					0	100	110	125	140	160	180	200	250	300	350	400			
2CP 40/180C	4	5.5	IE3	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			

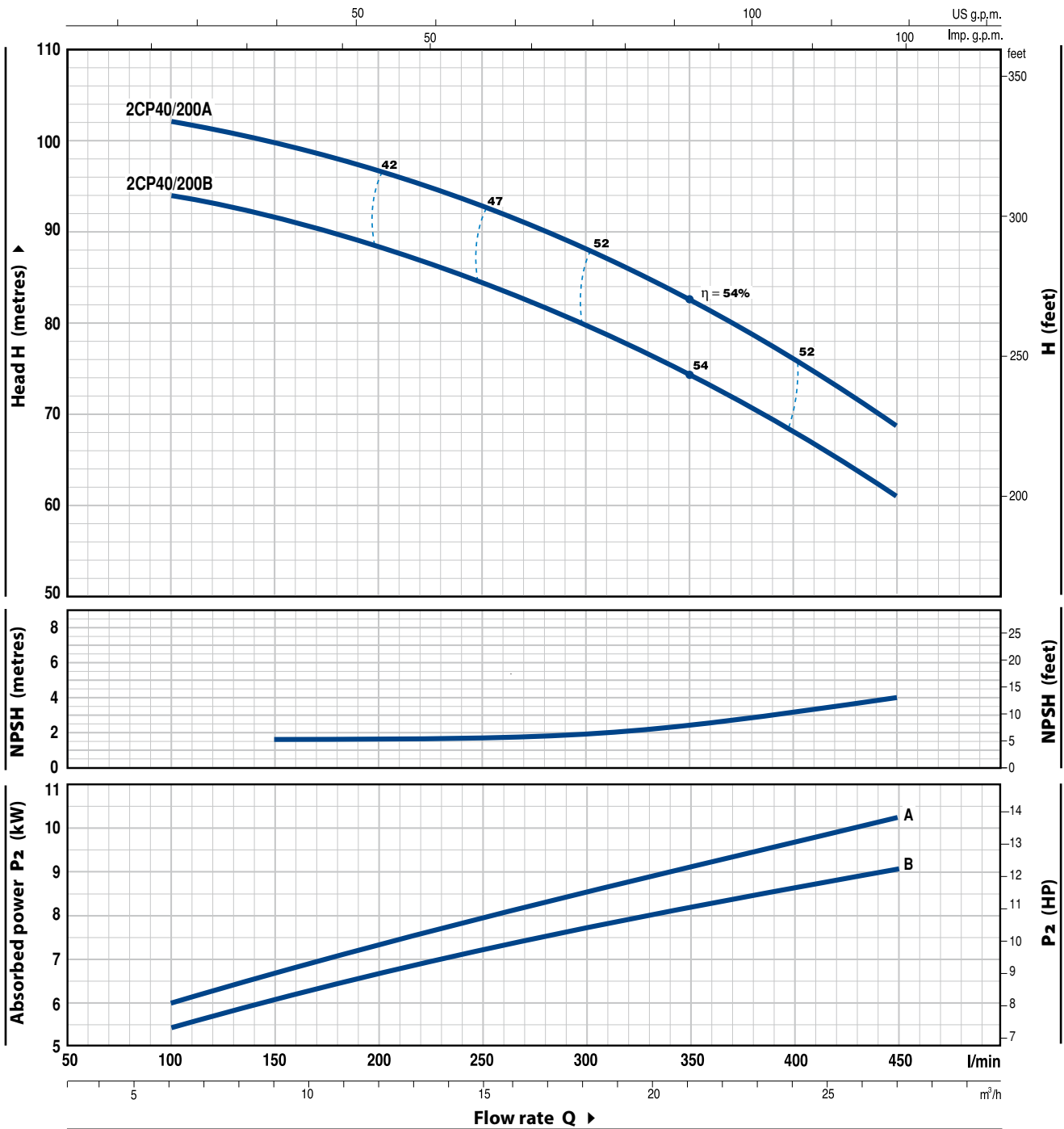
Q = Flow rate H = Total manometric head HS = Suction height

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 <sub>2</sub> )		▲	Q	Flow rate												
	kW	HP			0	6.0	9	10.8	12.0	15.0	18.0	21.0	24.0	27.0			
Three-phase				l/min	0	100	150	180	200	250	300	350	400	450			
2CP 40/200B	9.2	12.5	IE3	H metres	97	94	92	90	88	85	80	74	68	61			
2CP 40/200A	11	15		105	102	100	98	97	93	88	83	76	69				

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

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

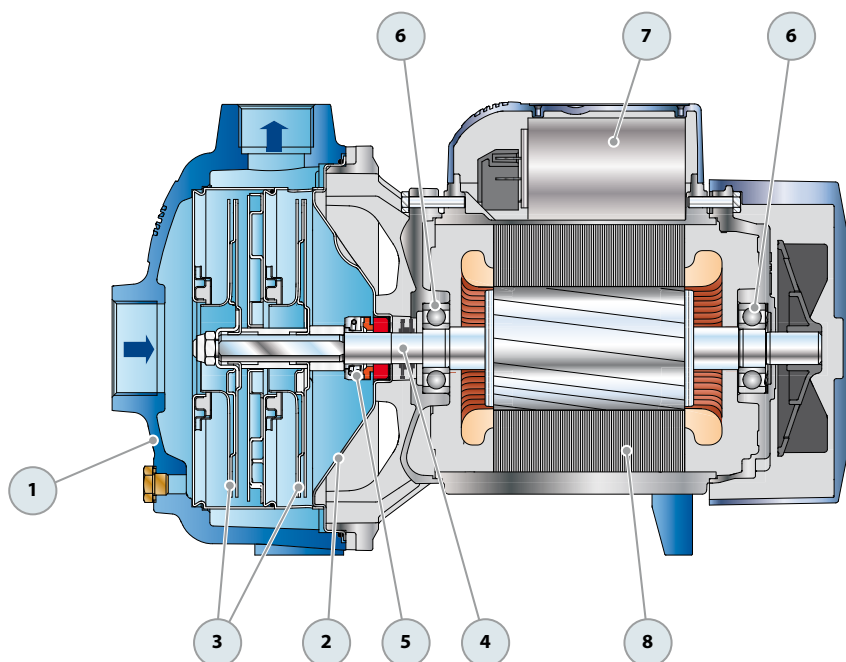
▲ Performance class of the three-phase motor (IEC-60034-30)



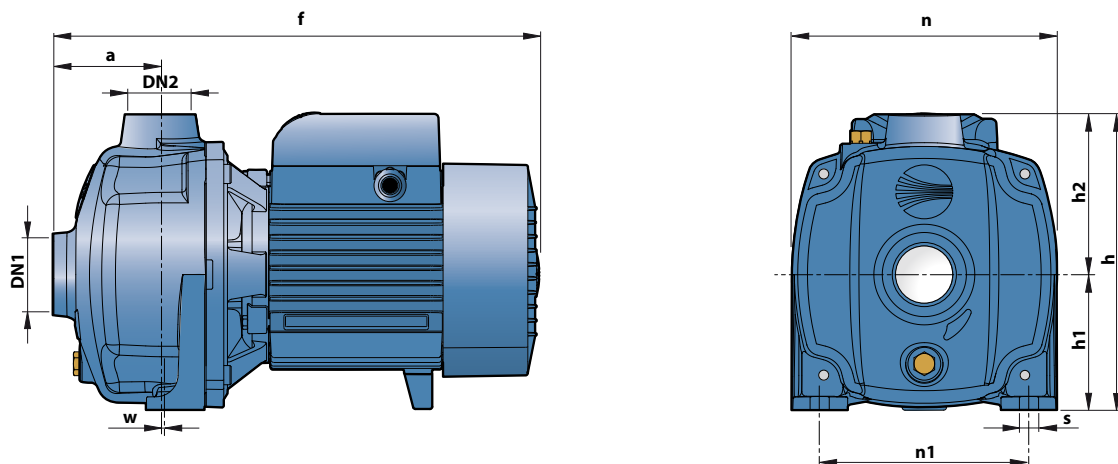
# 2CP 25/130N

## POS. COMPONENT CONSTRUCTION CHARACTERISTICS

1	<b>PUMP BODY</b>	Cast iron complete with threaded ports in compliance with ISO 228/1				
2	<b>BODY BACKPLATE</b>	Stainless steel AISI 304				
3	<b>IMPELLERS</b>	Stainless steel AISI 304				
4	<b>MOTOR SHAFT</b>	Stainless steel EN 10088-3 - 1.4104				
5	<b>MECHANICAL SEAL</b>	<i>Seal</i>	<i>Shaft</i>	<i>Materials</i>		
		<i>Model</i>	<i>Diameter</i>	<i>Stationary ring</i>	<i>Rotational ring</i>	<i>Elastomer</i>
		<b>AR-14</b>	<b>Ø 14 mm</b>	Ceramic	Graphite	NBR
6	<b>BEARINGS</b>	<b>6203 ZZ / 6203 ZZ</b>				
7	<b>CAPACITOR</b>	<i>Pump</i>	<i>Capacitance</i>			
		<i>Single-phase</i>	<i>(230 V or 240 V)</i>	<i>(110 V)</i>		
		<b>2CPm 25/130N</b>	<b>20 µF - 450 VL</b>	<b>60 µF - 300 VL</b>		
8	<b>ELECTRIC MOTOR</b>	<b>2CPm 25/130N:</b> single-phase 230 V - 50 Hz with thermal overload protector incorporated into the winding. <b>2CP 25/130N:</b> three-phase 230/400 V - 50 Hz. <b>⇒ The three-phase pumps are fitted with high performance motors in class IE2 (IEC 60034-30)</b> – Insulation: class F – Protection: IP X4				



## DIMENSIONS AND WEIGHT



MODEL		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	1¼"	1"	73	330	201	92	109	180	142	1	10	14.5	14.4

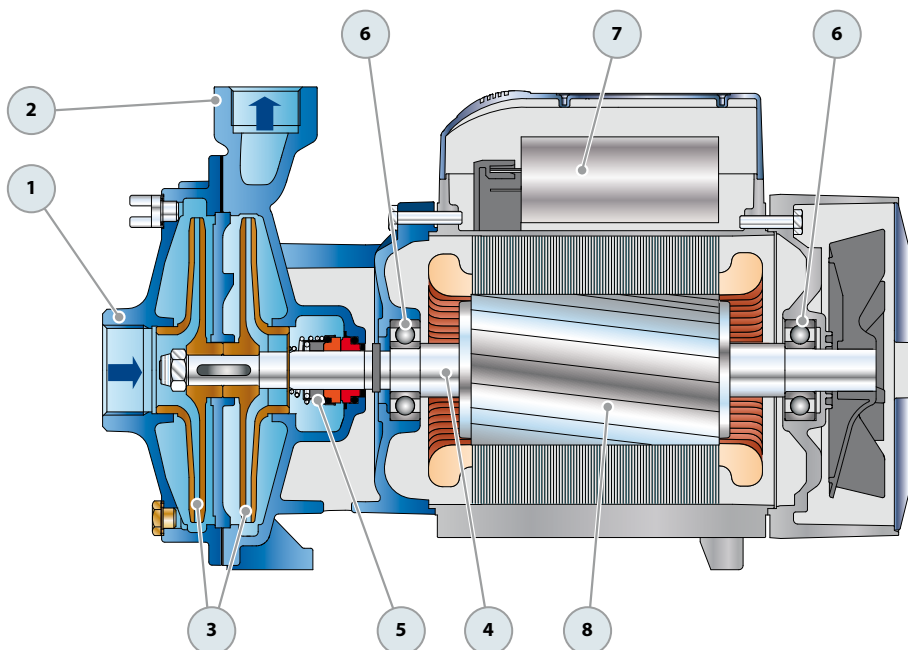
## ABSORPTION

MODEL	VOLTAGE		
	230 V	240 V	110 V
2CPm 25/130N	6.3 A	6.0 A	12.6 A

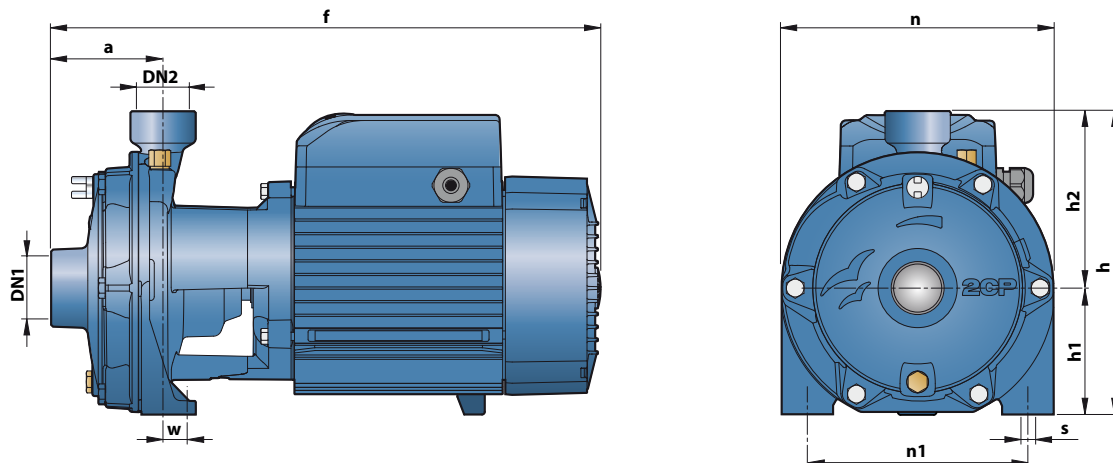
MODEL	VOLTAGE					
	230 V	400 V	690 V	240 V	415 V	720 V
2CP 25/130N	4.6 A	2.6 A	1.5 A	4.3 A	2.5 A	1.4 A

## POS. COMPONENT CONSTRUCTION CHARACTERISTICS

1	<b>SUCTION BODY</b>	Cast iron complete with threaded suction port in compliance with ISO 228/1					
2	<b>DELIVERY BODY</b>	Cast iron complete with threaded suction port in compliance with ISO 228/1					
3	<b>IMPELLERS</b>	Brass					
4	<b>MOTOR SHAFT</b>	Stainless steel EN 10088-3 - 1.4104					
5	<b>MECHANICAL SEAL</b>	<i>Pump</i>	<i>Seal</i>	<i>Shaft</i>	<i>Materials</i>		
		<i>Model</i>	<i>Model</i>	<i>Diameter</i>	<i>Stationary ring</i>	<i>Rotational ring</i>	<i>Elastomer</i>
		2CP 25/14	FN-18	Ø 18 mm	Graphite	Ceramic	NBR
		2CP 25/16					
		2CP 32/200	FN-20	Ø 20 mm	Graphite	Ceramic	NBR
		2CP 32/210					
		2CP 40/180	FN-24	Ø 24 mm	Graphite	Ceramic	NBR
2CP 40/200							
2CP 40/200	FN-32 NU	Ø 32 mm	Graphite	Ceramic	NBR		
6	<b>BEARINGS</b>	<i>Pump</i>	<i>Model</i>				
		2CP 25/14	6204 ZZ - C3 / 6204 ZZ - C3				
		2CP 25/16					
		2CP 32/200	6206 ZZ - C3 / 6206 ZZ - C3				
		2CP 32/210	6306 ZZ - C3 / 6206 ZZ - C3				
		2CP 40/180					
		2CP 40/200	6308 ZZ - C3 / 6308 ZZ - C3				
7	<b>CAPACITOR</b>	<i>Pump</i>	<i>Capacitance</i>				
		<i>Single-phase</i>	<i>(230 V or 240 V)</i>	<i>(110 V)</i>			
		2CPm 25/14B	25 µF - 450 VL	60 µF - 250 VL			
		2CPm 25/16C					
		2CPm 25/14A	45 µF - 450 VL	80 µF - 250 VL			
2CPm 25/16B							
8	<b>ELECTRIC MOTOR</b>	2CPm: single-phase 230 V - 50 Hz with thermal overload protector incorporated into the winding.					
		2CP: three-phase 230/400 V - 50 Hz up to 4 kW 400/690 V - 50 Hz from 5.5 to 11 kW					
<p>➔ <b>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)</b></p> <ul style="list-style-type: none"> <li>- Insulation: class F</li> <li>- Protection: IP X4</li> </ul>							



## DIMENSIONS AND WEIGHT



MODEL		PORTS		DIMENSIONS mm									kg							
Single-phase	Three-phase	DN1	DN2	a	f	h	h1	h2	n	n1	w	s	1~	3~						
2CPm 25/14B	2CP 25/14B	1 1/4"	1"	82	404	223	93	130	200	162	17	10	19.3	18.8						
2CPm 25/14A	2CP 25/14A					261	110	151	225	185	26	11	24.6	23.5						
2CPm 25/16C	2CP 25/16C					223	93	130	200	162	17	10	19.3	18.6						
2CPm 25/16B	2CP 25/16B					261	110	151	225	185	26	11	24.4	23.3						
-	2CP 25/16A					-	-	-	-	-	-	-	-	-	-	24.6				
-	2CP 32/200C	1 1/2"	1 1/4"	95	464	304	132	172	266	206	19	-	-	38.0						
-	2CP 32/200B					-	-	-	-	-	-	-	-	-	-	43.0				
-	2CP 32/210B					-	-	-	-	-	-	-	-	-	-	-	54.0			
-	2CP 32/210A	2"	1 1/2"	108	542	334	139	195	292	232	21	14	-	-						
-	2CP 40/180C					496	-	-	-				-	-	-	-	-	-	61.0	
-	2CP 40/180B					542	-	-	-				-	-	-	-	-	-	-	49.0
-	2CP 40/180A					-	-	-	-				-	-	-	-	-	-	-	54.0
-	2CP 40/200B					-	-	-	-				-	-	-	-	-	-	-	60.0
-	2CP 40/200A	110	566	355	160	195	298	-	-	-	-	-	-	90.0						
-	2CP 40/200A	-	-	-	-	-	-	-	-	-	-	-	-	91.0						

## ABSORPTION

MODEL	VOLTAGE		
Single-phase	230 V	240 V	110 V
2CPm 25/14B	7.7 A	7.4 A	15.5 A
2CPm 25/14A	10.5 A	10.0 A	21.0 A
2CPm 25/16C	7.7 A	7.4 A	15.5 A
2CPm 25/16B	10.0 A	9.6 A	20.0 A

MODEL	VOLTAGE					
Three-phase	230 V	400 V	690 V	240 V	415 V	720 V
2CP 25/14B	5.4 A	3.1 A	1.8 A	5.2 A	3.0 A	1.7 A
2CP 25/14A	6.9 A	4.0 A	2.3 A	6.6 A	3.8 A	2.2 A
2CP 25/16C	5.4 A	3.1 A	1.8 A	5.2 A	3.0 A	1.7 A
2CP 25/16B	6.9 A	4.0 A	2.3 A	6.6 A	3.8 A	2.2 A
2CP 25/16A	9.2 A	5.3 A	3.1 A	8.8 A	5.1 A	2.9 A
2CP 32/200C	12.8 A	7.4 A	4.3 A	12.3 A	7.1 A	4.1 A
2CP 32/200B	18.2 A	10.5 A	6.1 A	17.7 A	10.2 A	5.9 A
2CP 32/210B	21.7 A	12.5 A	7.2 A	19.9 A	11.5 A	6.7 A
2CP 32/210A	27.7 A	16.0 A	9.2 A	26.0 A	15.0 A	8.7 A
2CP 40/180C	17.0 A	9.8 A	5.7 A	16.5 A	9.5 A	5.5 A
2CP 40/180B	21.3 A	12.3 A	7.1 A	20.8 A	12.0 A	6.9 A
2CP 40/180A	26.7 A	15.4 A	8.9 A	26.0 A	15.0 A	8.7 A
2CP 40/200B	-	17.5 A	10.1 A	-	17.45 A	10.0 A
2CP 40/200A	-	20.0 A	11.6 A	-	19.9 A	11.5 A

## PALLETIZATION

MODEL		GROUPAGE	CONTAINER
Single-phase	Three-phase	n. pumps	n. pumps
2CPm 25/14B	2CP 25/14B	50	70
2CPm 25/14A	2CP 25/14A	50	70
2CPm 25/16C	2CP 25/16C	50	70
2CPm 25/16B	2CP 25/16B	50	70
-	2CP 25/16A	50	70
-	2CP 32/200C	18	24
-	2CP 32/200B	18	24
-	2CP 32/210B	12	16
-	2CP 32/210A	12	16
-	2CP 40/180C	12	16
-	2CP 40/180B	12	16
-	2CP 40/180A	12	16
-	2CP 40/200B	6	9
-	2CP 40/200A	6	9