

K TWIN-IMPELLER

TWIN-IMPELLER ELECTRIC PUMPS



TECHNICAL DATA

Operating range:

from 1,2 to 30 m³/h with head up to 97 metres.

Pumped liquid: clean, free of solids and abrasives, non-viscous, non-aggressive, non-crystallised and chemically neutral, with properties similar to water.

Liquid temperature range:

K 35/40, K 45/50,

K 35/100, K 40/100, K 55/100

:from -10 °C to +50 °C

K 55/50, K 66/100, K 90/100

K 70/300, K 80/300, K 70/400, K 80/400

:from -15 °C to +110 °C

Maximum ambient temperature: +40°C

Maximum operating pressure:

K 35/40, K 35/100, K 40/100

:6 bar (600 kPa)

K 45/50, K 55/50

:8 bar (800 kPa)

K 55/100, K 66/100

:10 bar (1000 kPa)

K 90/100, K 70/300, K 80/300, K 70/400, K 80/400

:12 bar (1200 kPa)

Protection class:

IP 55, IP 44 per K 35/40, K 45/50, K 55/50, K 35/100, K 40/100

Protection class at the terminal board: IP 55

Insulation class: F

Standard voltage:

single-phase 220-240 V / 50 Hz

three-phase 230-400 V / 50 Hz up to 4 kW included - 400 V Δ 50 Hz

from 5,5 kW

Installation: fixed, horizontal or vertical position, provided that the motor is always above the pump.

Special executions on requests: alternative voltages and frequencies.

APPLICATIONS

Twin-impeller centrifugal pump designed for the realisation of pressurization units in water systems and filling of pressure vessels.

Suitable for sprinkler systems and other general water supply uses.

CONSTRUCTION FEATURES OF THE PUMP

Pump body and motor support in cast iron.

Technopolymer impeller.

Carbon/ceramic mechanical seal.

CONSTRUCTION FEATURES OF THE MOTOR

Closed asynchronous type, external ventilation cooling.

Rotor running on permanently lubricated ball bearings, oversized to ensure low noise and durability.

Standard built-in thermo-amperometric protection. Capacitor permanently fitted on single phase versions.

For the protection of the three-phase motor, we recommend the use of remote overload cut-outs, in compliance with current local regulations.

Construction according to CEI 2-3.

IE2 motors as standard, from 0,75 kW to 5,5 kW - IE3 ≥ 7,5 kW

K TWIN-IMPELLER

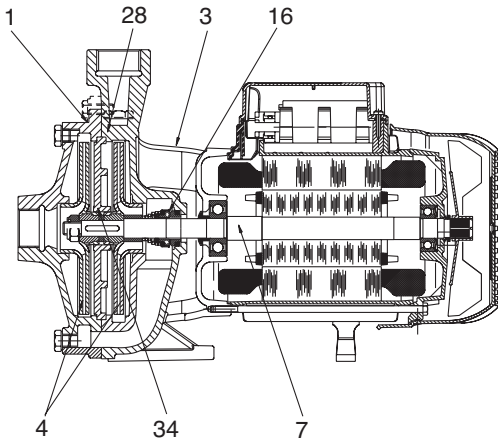
TWIN-IMPELLER ELECTRIC PUMPS

MATERIALS

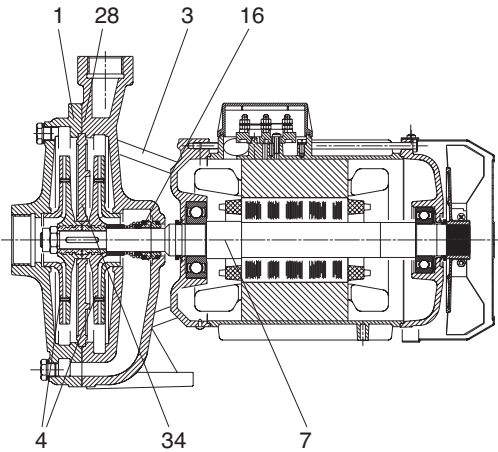
No.	PARTS*	MATERIALS	MODELS
1	PUMP BODY	CAST IRON 200 UNI ISO 185	
3	SUPPORT	CAST IRON 200 UNI ISO 185	
4	IMPELLER	TECHNOPOLYMER A	K 35/40; K 45/50; K 35/100; K 40/100; K 55/100
		TECHNOPOLYMER B	K 55/50; K 66/100; K 90/100; K 70/300; K 80/300; K 70/400; K 80/400
7	SHAFT WITH ROTOR	AISI 416 STAINLESS STEEL X12CRS13 UNI 6900/71	K 35/40
		AISI 303 STAINLESS STEEL X10CRNIS 1089 UNI 6900/71	K 45/50; K 55/50; K 35/100; K 40/100; K 55/100; K 66/100; K 90/100
		AISI 304 STAINLESS STEEL X5 1810 UNI 6900/71	K 70/300; K 80/300; K 70/400; K 80/400
16	MECHANICAL SEAL	CARBON / CERAMIC	
28	GASKET	NBR RUBBER	K 35/40; K 45/50; K 55/50; K 55/100; K 35/100; K 40/100
		GUARNITAL	K 66/100; K 90/100; K 70/300; K 80/300; K 70/400; K 80/400
34	INTERMEDIATE DISC	CAST IRON 200 UNI ISO 185	K 35/40; K 45/50; K 55/50; K 55/100; K 66/100; K 90/100; K 70/300; K 70/400; K 80/300; K 80/400

* In contact with the liquid

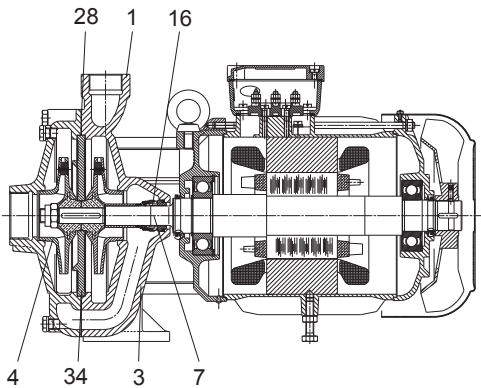
K 35/40



K 45/50 - K 55/50 - K 35/100 - K 40/100



K 55/100 - K 66/100 - K 90/100
K 70/300 - K 80/300
K 70/400 - K 80/400



K TWIN-IMPELLER RANGE

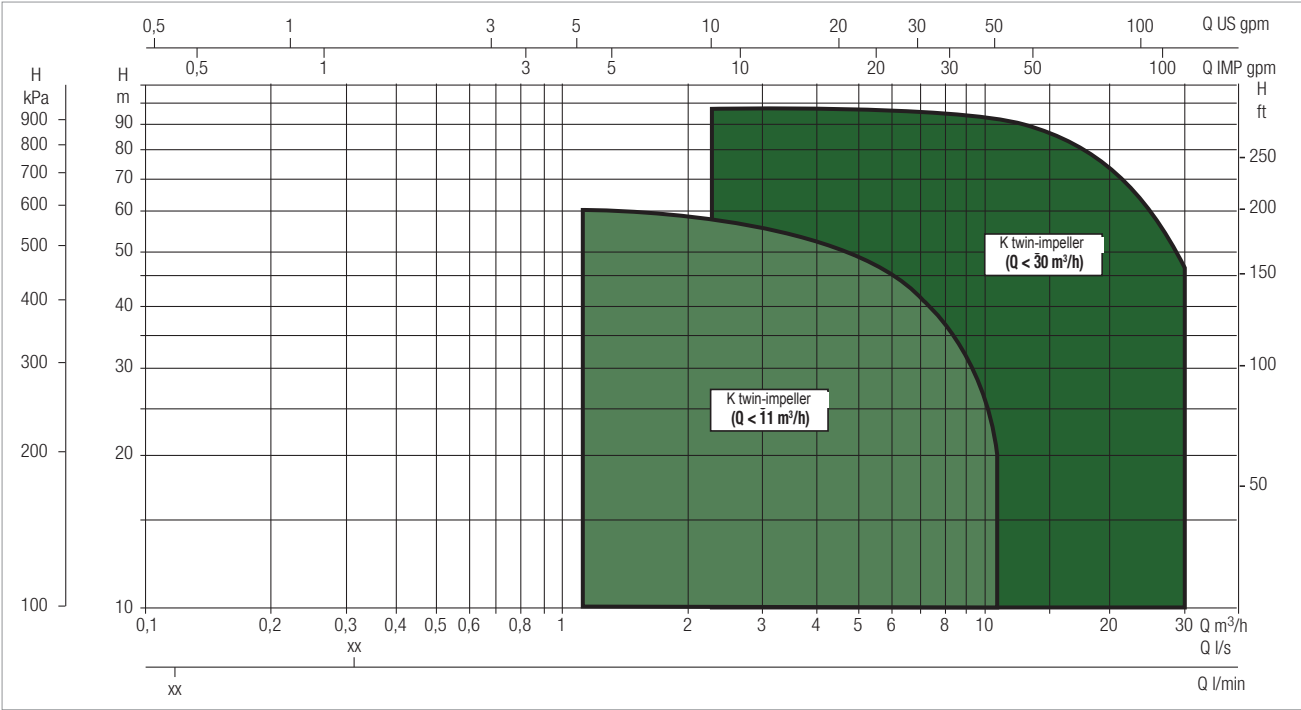
ELECTRIC PUMPS

CENTRIFUGAL PUMPS

PERFORMANCE RANGE

The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

GRAPHIC SELECTION TABLE

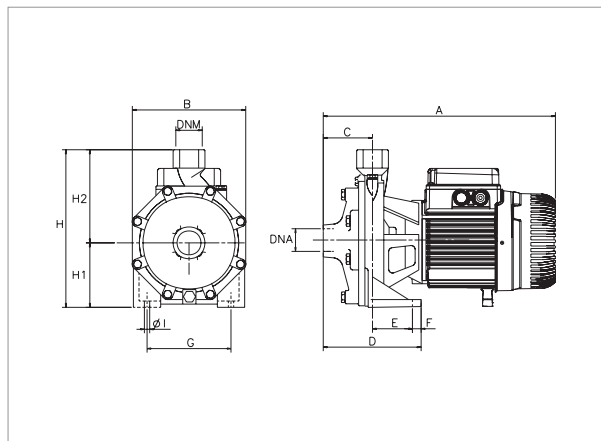


SELECTION TABLE

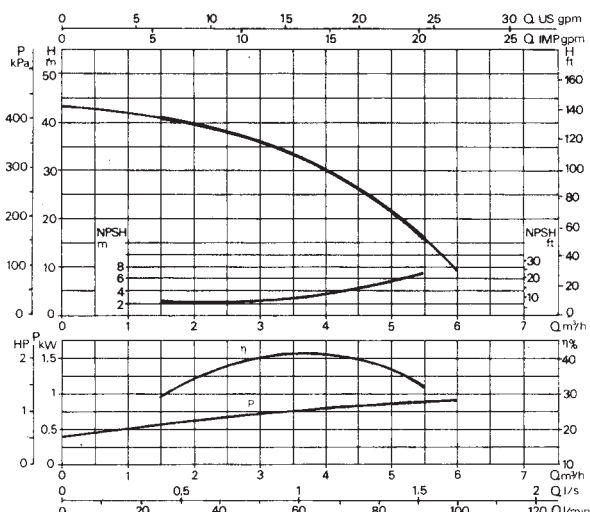
MODEL	Q= m³/h Q= l/min	0	1.2	1.8	2.4	3.6	4.8	6	7.2	9	9.6	10.8	12	15	18	24	30
		0	20	30	40	60	80	100	120	150	160	180	200	250	300	400	500
K 35/40 M-T	H (m)	43.5	41.5	40	38	33	23.5										
K 45/50 M-T		51	49	47.5	46	42	37	30									
K 55/50 M-T		62	60	58	57	52	45	34									
K 35/100 M-T		38.5			37.5	36.5	35	32	28.5	18.5	17.5						
K 40/100 M-T		44			43.4	42.5	41	39	35.7	29	26	18.5					
K 55/100 T		62			59.5	57	54.5	51	47	39	36						
K 66/100 T		73			70	67.5	64	60.5	57	49	47						
K 90/100 T		83.5			82	79.5	76.5	72.5	68	61	58						
K 70/300 T		76						74	73	72	71.5	70	69	65	60.5	43.5	
K 80/300 T		95						93	92.2	91	90.5	90	89.5	87	82	68	
K 70/400 T		86								84	83.2	82.5	82	79	76	65	47
K 80/400 T		97									95	94.5	94	92	89	80	64

K 35/40 - TWIN-IMPELLER CENTRIFUGAL ELECTRIC PUMPS FOR WATER SUPPLY IN DOMESTIC, CIVIL, AND INDUSTRIAL ENVIRONMENTS

Pumped liquid temperature range: from -10 °C to +50°C - Maximum ambient temperature: +40°C



The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

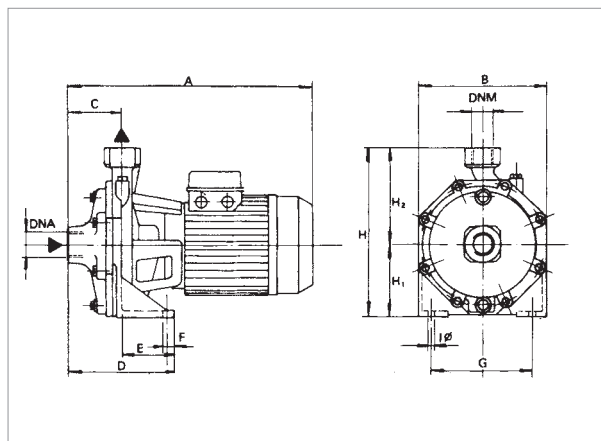


MODEL	POWER INPUT 50 Hz	P1 MAX kW	ELECTRICAL DATA							
			P2 NOMINAL		In A	MOTOR TYPE	I st. A	rpm n. 1/min.	CAPACITOR	
			kW	HP					μF	Vc
K 35/40 M	1x220-240 V ~	1.2	0.75	1	5.5	—	18.5	2800	20	450
K 35/40 T	3x230-400 V ~	1.2	0.75	1	3.8-2.2	IE2	22.14-12.8	2850	—	—

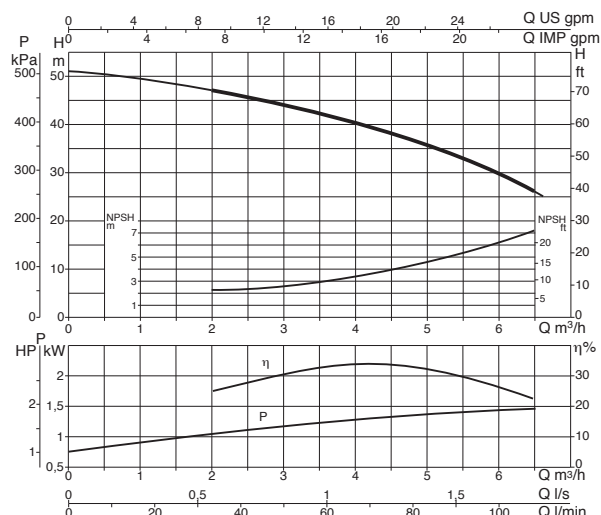
MODEL	A	B	C	D	E	F	G	ØI	H	H1	H2	DNA	DNM	PACKING DIMENSIONS			VOLUME (m ³)	WEIGHT kg
														L/A	L/B	H		
K 35/40	342	180	76	148	72	15	148	9.5	235	100	135	1" G	1" G	392	232	262	0.024	15.9

K 45/50 - TWIN-IMPELLER CENTRIFUGAL ELECTRIC PUMPS FOR WATER SUPPLY IN DOMESTIC, CIVIL, AND INDUSTRIAL ENVIRONMENTS

Pumped liquid temperature range: from -10 °C to +50°C - Maximum ambient temperature: +40°C



The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

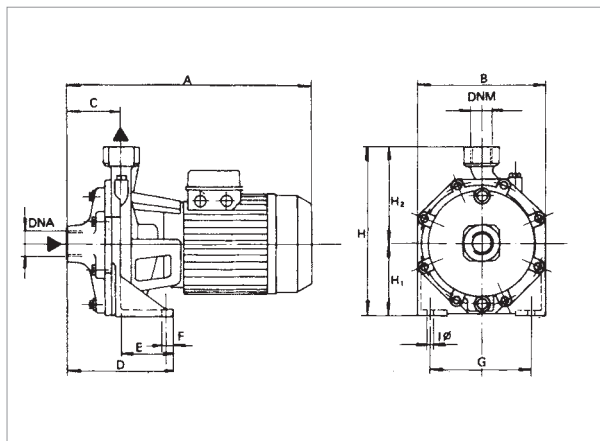


MODEL	POWER INPUT 50 Hz	P1 MAX kW	ELECTRICAL DATA							
			P2 NOMINAL		In A	MOTOR TYPE	I st. A	rpm n. 1/min.	CAPACITOR	
			kW	HP					μF	Vc
K 45/50 M	1x220-240 V ~	1.86	1.1	1.5	8.3	—	29.2	2800	31.5	450
K 45/50 T	3x230-400 V ~	1.96	1.1	1.5	7.2-4	IE2	31.1-18	2850	—	—

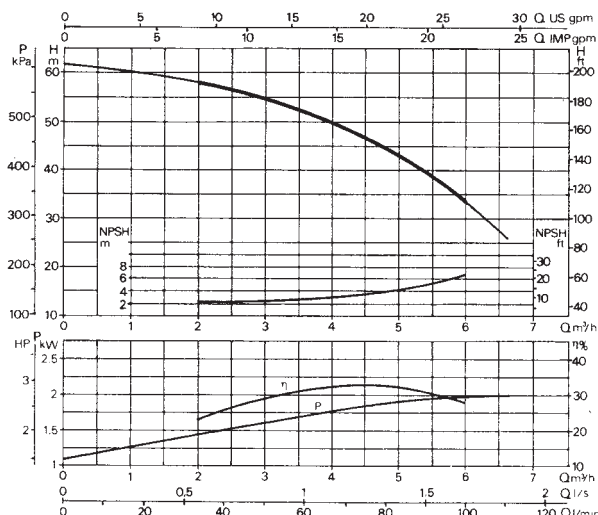
MODEL	A	B	C	D	E	F	G	ØI	H	H1	H2	DNA	DNM	PACKING DIMENSIONS			VOLUME (m ³)	WEIGHT kg
														L/A	L/B	H		
K 45/50	370	210	75	144	69	15	165	11.5	268	118	150	1 1/4" G	1" G	415	234	295	0.028	23.3

K 55/50 - TWIN-IMPELLER CENTRIFUGAL ELECTRIC PUMPS FOR WATER SUPPLY IN DOMESTIC, CIVIL, AND INDUSTRIAL ENVIRONMENTS

Pumped liquid temperature range: from -15 °C to +110 °C - Maximum ambient temperature: +40°C



The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

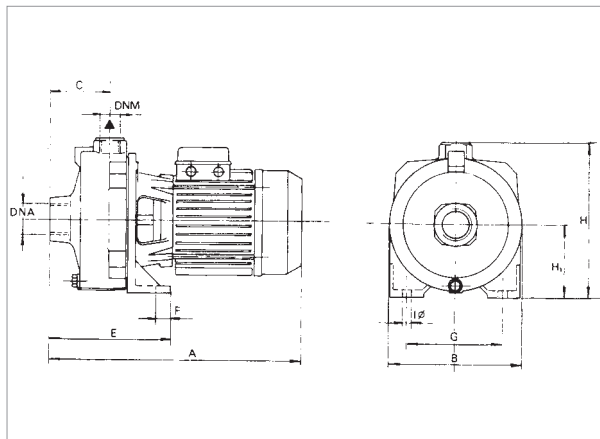


MODEL	POWER INPUT 50 Hz	P1 MAX kW	ELECTRICAL DATA							
			P2 NOMINAL		In A	MOTOR TYPE	I st. A	rpm n. 1/min.	CAPACITOR	
			kW	HP					μF	Vc
K 55/50 M	1x220-240 V ~	2.7	1.85	2.5	12.8	—	48	2850	40	450
K 55/50 T	3x230-400 V ~	2.5	1.85	2.5	8.4-4.8	IE2	37.6-21.7	2850	—	—

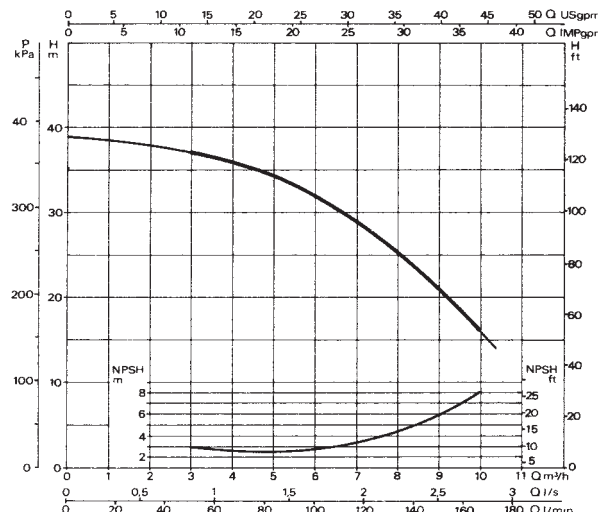
MODEL	A	B	C	D	E	F	G	ØI	H	H1	H2	DNa	DNM	PACKING DIMENSIONS			VOLUME (m ³)	WEIGHT kg
														L/A	L/B	H		
K 55/50	370	210	75	144	69	15	165	11.5	268	118	150	1 1/4" G	1" G	415	234	295	0.032	27.2

K 35/100 - TWIN-IMPELLER CENTRIFUGAL ELECTRIC PUMPS FOR WATER SUPPLY IN DOMESTIC, CIVIL, AND INDUSTRIAL ENVIRONMENTS

Pumped liquid temperature range: from -10 °C to +50°C - Maximum ambient temperature: +40°C



The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

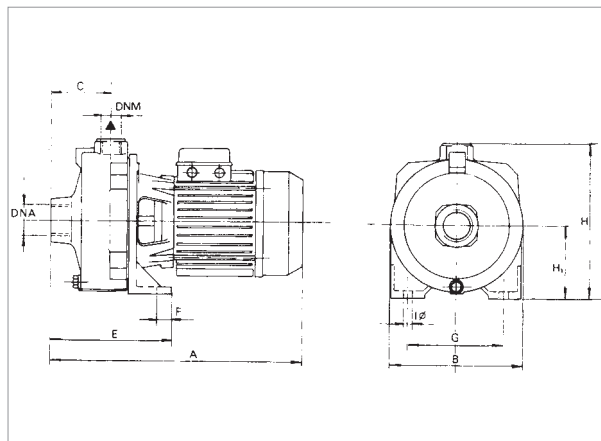


MODEL	POWER INPUT 50 Hz	P1 MAX kW	ELECTRICAL DATA							
			P2 NOMINAL		In A	MOTOR TYPE	I st. A	rpm n. 1/min.	CAPACITOR	
			kW	HP					μF	Vc
K 35/100 M	1x220-240 V ~	1.56	1.1	1.5	7.1	—	33	2780	25	450
K 35/100 T	3x230-400 V ~	1.65	1.1	1.5	6.5-3.5	IE2	21	2850	—	—

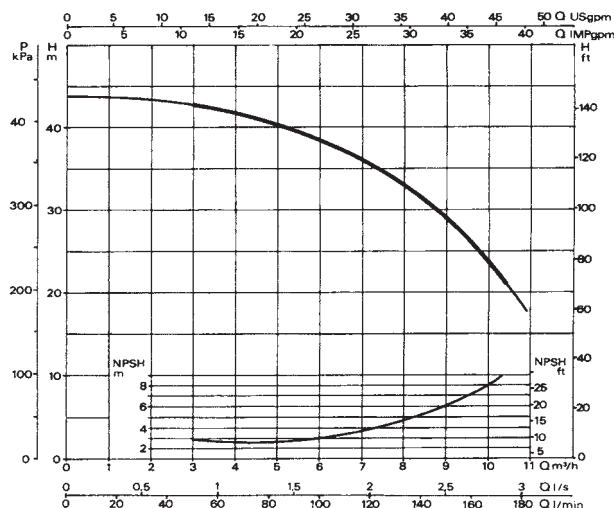
MODEL	A	B	C	E	F	G	ØI	H	H1	DNa	DNM	PACKING DIMENSIONS			VOLUME (m ³)	WEIGHT kg
												L/A	L/B	H		
K 35/100	387	205	88	169	20	145	11	233	108	1 1/2" G	1" G	415	234	295	0.028	22

K 40/100 - TWIN-IMPELLER CENTRIFUGAL ELECTRIC PUMPS FOR WATER SUPPLY IN DOMESTIC, CIVIL, AND INDUSTRIAL ENVIRONMENTS

Pumped liquid temperature range: from -10°C to 50°C - Maximum ambient temperature: +40°C



The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

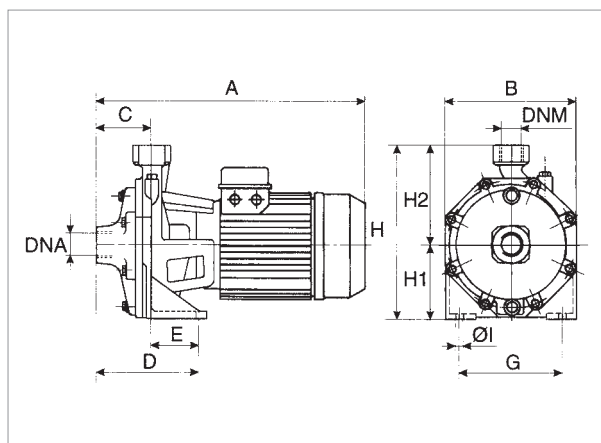


MODEL	POWER INPUT 50 Hz	P1 MAX kW	P2 NOMINAL		In A	MOTOR TYPE	I st. A	rpm n. 1/min.	CAPACITOR	
			kW	HP					μF	Vc
K 40/100 M	1x220-240 V ~	2	1.85	2.5	9	—	45	2850	40	450
K 40/100 T	3x230-400 V ~	2	1.85	2.5	7-4	IE2	22	2850	—	—

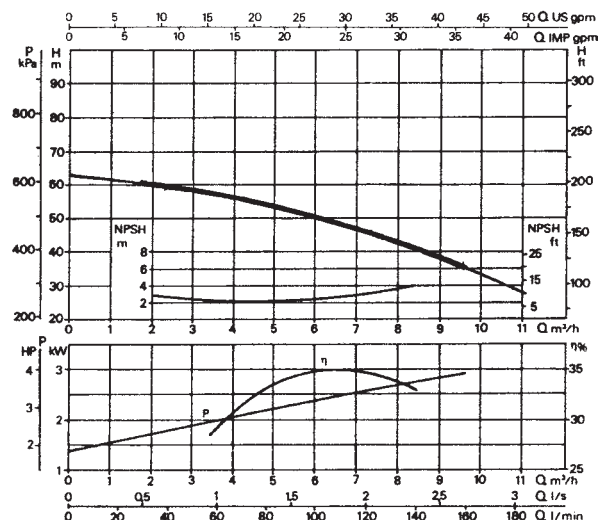
MODEL	A	B	C	D	E	F	G	ØI	H	H1	DNA	DNM	PACKING DIMENSIONS			VOLUME (m³)	WEIGHT kg
													L/A	L/B	H		
K 40/100 M	461	205	88	179	20	20	145	11	233	108	1 1/2" G	1" G	510	234	285	0.034	25.9
K 40/100 T	387	205	88	179	20	20	145	11	233	108	1 1/2" G	1" G	415	234	295	0.028	22

K 55/100 - TWIN-IMPELLER CENTRIFUGAL ELECTRIC PUMPS FOR WATER SUPPLY IN DOMESTIC, CIVIL, AND INDUSTRIAL ENVIRONMENTS

Pumped liquid temperature range: from -10 °C to +50°C - Maximum ambient temperature: +40°C



The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

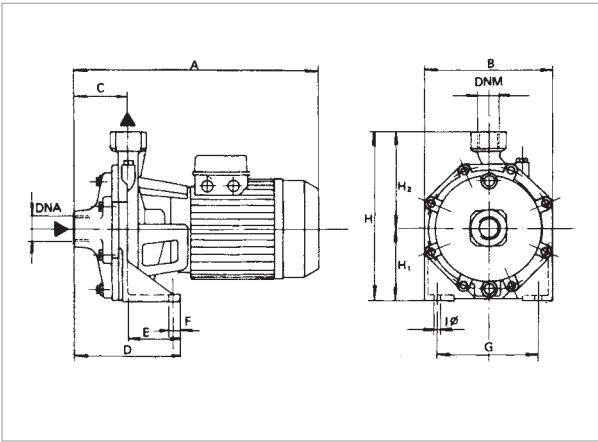


MODEL	POWER INPUT 50 Hz	P1 MAX kW	P2 NOMINAL		In A	MOTOR TYPE	I st. A	rpm n. 1/min.
			kW	HP				
K 55/100 T	3x230-400 V ~	3.9	2.2	3	11.6-6.7	IE2	67.5-39	2850

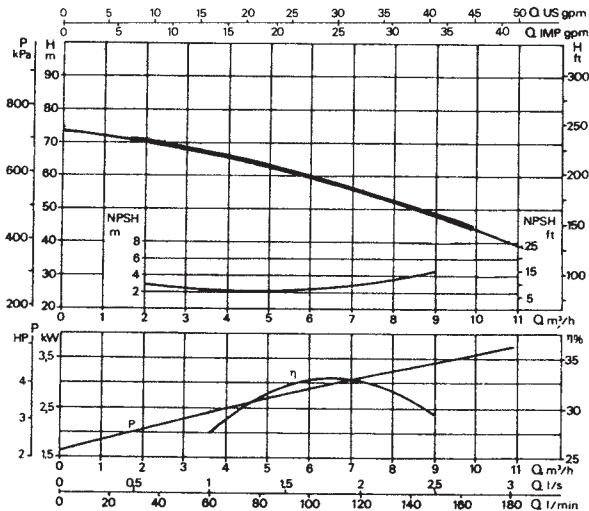
MODEL	A	B	C	D	E	F	G	ØI	H	H1	H2	DNA	DNM	PACKING DIMENSIONS			VOLUME (m³)	WEIGHT kg
														L/A	L/B	H		
K 55/100	450	256	88	160	72	18	200	14	312.5	140	172.5	1 1/2" G	1" G	500	274	333	0.045	38.1

K 66/100 - TWIN-IMPELLER CENTRIFUGAL ELECTRIC PUMPS FOR WATER SUPPLY IN DOMESTIC, CIVIL, AND INDUSTRIAL ENVIRONMENTS

Pumped liquid temperature range: from -15 °C to +110 °C - Maximum ambient temperature: +40°C



The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

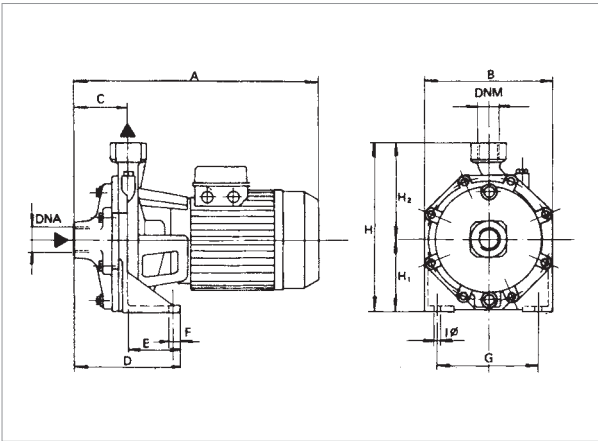


MODEL	ELECTRICAL DATA							
	POWER INPUT 50 Hz	P1 MAX kW	P2 NOMINAL		In A	MOTOR TYPE	I st. A	rpm n. 1/min.
			kW	HP				
K 66/100 T	3x230-400 V ~	4.7	3	4	14.6-8.4	IE2	103.8-60	2900

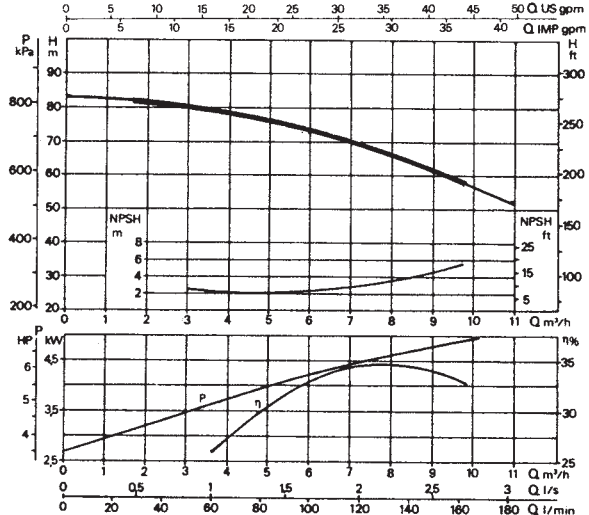
MODEL	A	B	C	D	E	F	G	ØI	H	H1	H2	DNA	DNM	PACKING DIMENSIONS			VOLUME (m³)	WEIGHT kg
														L/A	L/B	H		
K 66/100	450	256	88	160	72	18	200	14	312.5	140	172.5	1 1/2" G	1" G	500	274	333	0.045	40.7

K 90/100 - TWIN-IMPELLER CENTRIFUGAL ELECTRIC PUMPS FOR WATER SUPPLY IN DOMESTIC, CIVIL, AND INDUSTRIAL ENVIRONMENTS

Pumped liquid temperature range: from -15°C to +110°C - Maximum ambient temperature: +40°C



The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

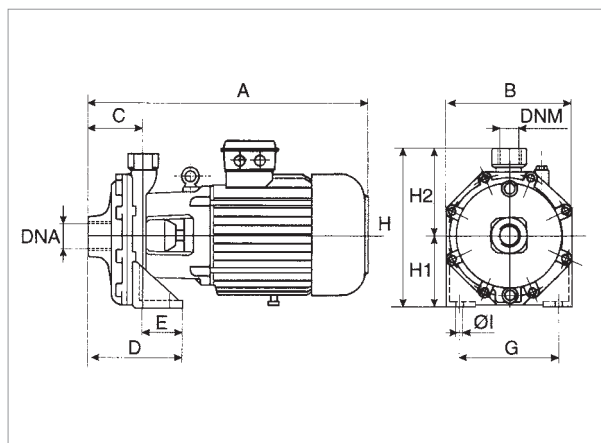


MODEL	ELECTRICAL DATA							
	POWER INPUT 50 Hz	P1 MAX kW	P2 NOMINAL		In A	MOTOR TYPE	I st. A	rpm n. 1/min.
			kW	HP				
K 90/100 T	3x230-400 V ~	5.4	4	5.5	16.5-9.5	IE2	103.8-60	2850

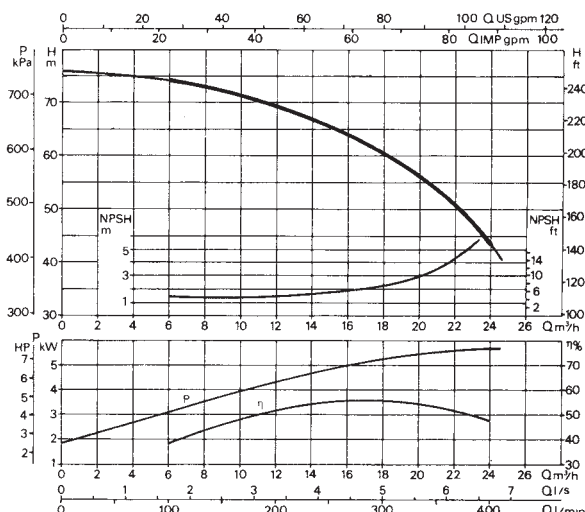
MODEL	A	B	C	D	E	F	G	ØI	H	H1	H2	DNA	DNM	PACKING DIMENSIONS			VOLUME (m³)	WEIGHT kg
														L/A	L/B	H		
K 90/100	450	256	88	160	72	18	200	14	312.5	140	172.5	1 1/2" G	1" G	500	274	333	0.045	44

K 70/300 - TWIN-IMPELLER CENTRIFUGAL ELECTRIC PUMPS FOR WATER SUPPLY IN DOMESTIC, CIVIL, AND INDUSTRIAL ENVIRONMENTS

Pumped liquid temperature range: from -15 °C to +110 °C - Maximum ambient temperature: +40°C



The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.



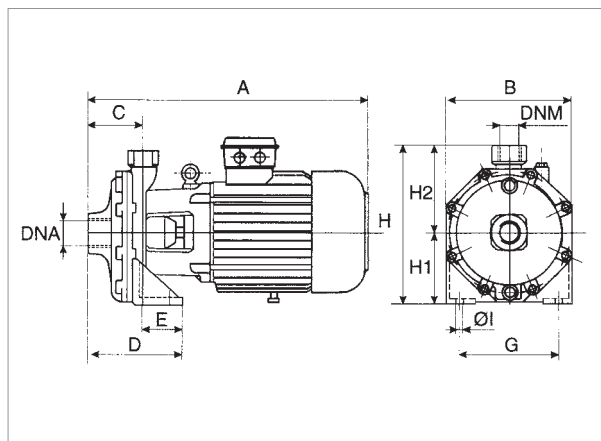
MODEL	ELECTRICAL DATA							
	POWER INPUT 50 Hz	P1 MAX kW	P2 NOMINAL		In A	MOTOR TYPE	I st. A	rpm n. 1/min.
			kW	HP				
K 70/300 T	3 x 230-400 V ~ 1	7.1	5.5	7.5	12.9	IE2	77.9	2900

MODEL	A	B	C	D	E	F	G	ØI	H	H1	H2	DNa	DNM	PACKING DIMENSIONS			VOLUME (m³)	WEIGHT kg
														L/A	L/B	H		
K 70/300	595	270	122	182	60	20	210	14	340	160	180	2" G	1 1/4" G	680	330	470	0.106	72

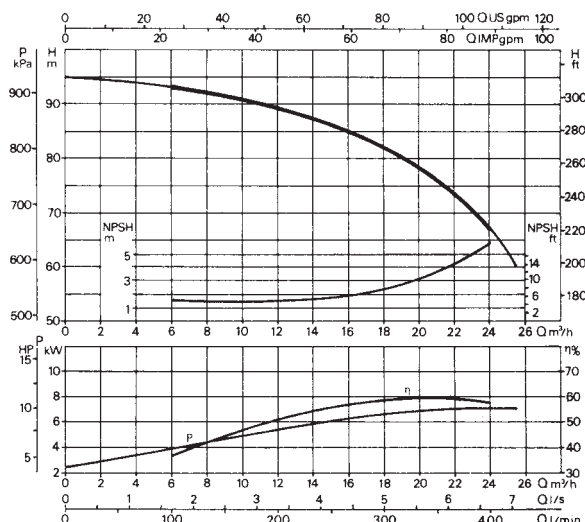
1 star start-up possible (★)

K 80/300 - TWIN-IMPELLER CENTRIFUGAL ELECTRIC PUMPS FOR WATER SUPPLY IN DOMESTIC, CIVIL, AND INDUSTRIAL ENVIRONMENTS

Pumped liquid temperature range: from -15 °C to +110 °C - Maximum ambient temperature: +40°C



The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.



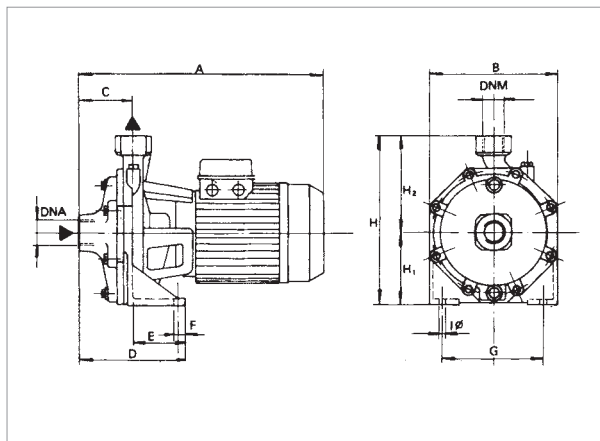
MODEL	ELECTRICAL DATA							
	POWER INPUT 50 Hz	P1 MAX kW	P2 NOMINAL		In A	MOTOR TYPE	I st. A	rpm n. 1/min.
			kW	HP				
K 80/300 T	3 x 230-400 V ~ 1	9.10	7.5	10	15.20	IE3	112	2910

MODEL	A	B	C	D	E	F	G	ØI	H	H1	H2	DNa	DNM	PACKING DIMENSIONS			VOLUME (m³)	WEIGHT kg
														L/A	L/B	H		
K 80/300	595	270	122	182	60	20	210	14	340	160	180	2" G	1 1/4" G	680	330	470	0.106	78.5

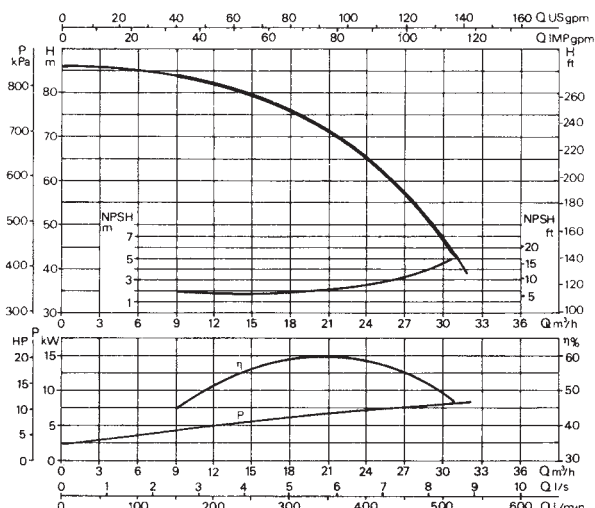
1 star start-up possible (★)

K 70/400 - TWIN-IMPELLER CENTRIFUGAL ELECTRIC PUMPS FOR WATER SUPPLY IN DOMESTIC, CIVIL, AND INDUSTRIAL ENVIRONMENTS

Pumped liquid temperature range: from -15 °C to +110 °C - Maximum ambient temperature: +40°C



The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.



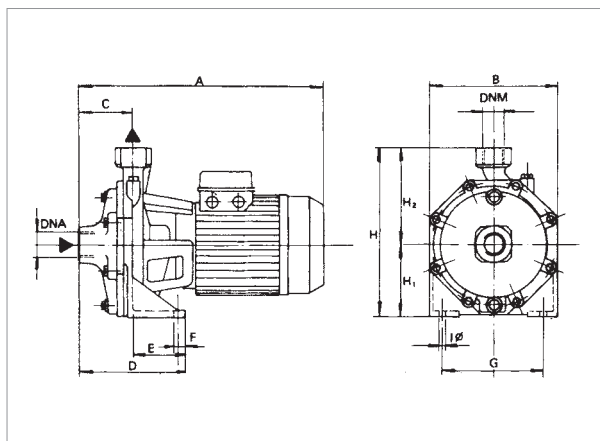
MODEL	POWER INPUT 50 Hz	P1 MAX kW	P2 NOMINAL		In A	MOTOR TYPE	I st. A	rpm n. 1/min.
			kW	HP				
K 70/400 T	3 x 230-400 V ~ 1	9.20	9.2	12.5	15.50	IE3	135	2930

MODEL	A	B	C	D	E	F	G	ØI	H	H1	H2	DNA	DNM	PACKING DIMENSIONS			VOLUME (m ³)	WEIGHT kg
														L/A	L/B	H		
K 70/400	635	270	122	182	60	20	210	14	340	160	180	2" G	1 1/4" G	680	330	470	0.106	74

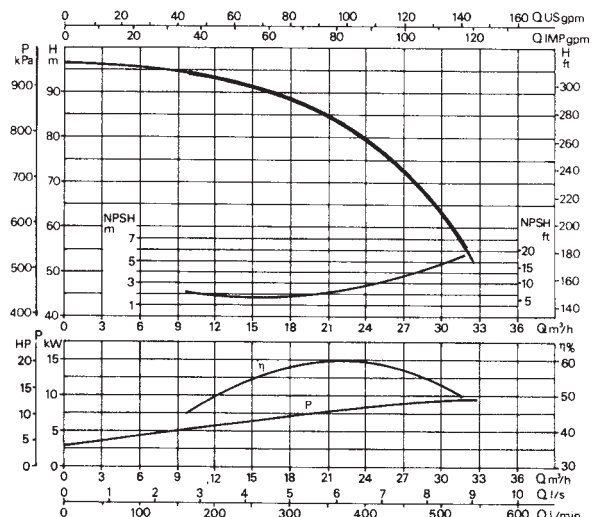
¹ star start-up possible (A)

K 80/400 - TWIN-IMPELLER CENTRIFUGAL ELECTRIC PUMPS FOR WATER SUPPLY IN DOMESTIC, CIVIL, AND INDUSTRIAL ENVIRONMENTS

Pumped liquid temperature range: from -15°C to +110°C - Maximum ambient temperature: +40°C



The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.



MODEL	POWER INPUT 50 Hz	P1 MAX kW	P2 NOMINAL		In A	MOTOR TYPE	I st. A	rpm n. 1/min.
			kW	HP				
K 80/400 T	3 x 230-400 V ~ 1	10.80	11	15	18.50	IE3	193	2940

MODEL	A	B	C	D	E	F	G	ØI	H	H1	H2	DNA	DNM	PACKING DIMENSIONS			VOLUME (m ³)	WEIGHT kg
														L/A	L/B	H		
K 80/400	635	270	122	182	60	20	210	14	340	160	180	2" G	1 1/4" G	680	330	470	0.106	78

¹ star start-up possible (A)