



NOCCHI CATALOGUE ELECTRIC PUMPS AND BOOSTERS

50Hz

LEADER IN TECHNOLOGY FOR WATER

The Pentair Group ranks among the world's leading designers and manufacturers of innovative products and systems used anywhere for the treatment, handling and storage of water. The Group bases its activity and success on values such as continuous improvement, the continuous development of new products, high performance, expertise, business ethics and market leadership. The staff of the Pentair Group share personal values such as reliability, deep respect for people and the environment and a practical and correct method of work. The strong relationship with their Customers and the high quality standards allow the Pentair Group to be among the leading manufacturers of technologies and equipment for water treatment.



PUMPS

Vertical and horizontal centrifugal pumps, submersible pumps for domestic, commercial, agricultural and industrial use; drainage pumps for clear water and wastewater; Pressure boosters and fire fighting boosters, pumps for heating and cooling systems.



FILTRATION

Filtration systems for industrial, residential and commercial sectors; filter cartridges, components for the filtration of drinking water, pumps for motor homes and boats, pumps and accessories for industrial and food applications.



WATER TREATMENT

Valves for water conditioning control for domestic, commercial and industrial use; tanks and pressurized fibreglass expansion modules; tanks for the storage of water.



POOL

Complete range of equipment and accessories for pools; filters, pumps heating and lighting systems, cleaning equipment; metering and control systems, products and accessories for fountains and ponds.



NOCCHI

WATER ENERGY

WE PUT ENERGY INTO YOUR WATER

Founded in 1977, Nocchi is now part of the Pentair Group. For over 30 years the company has been engaged in the design and manufacture of PUMPS for water handling, providing their customers with quality products and functional solutions for every need. Within the broad Nocchi range, design studios and distributors specialized in plumbing and water heating systems can find products and systems that meet the needs of water supply and pressurization, in the field of residential and collective construction, irrigation and industry.



FIRE FIGHTING SYSTEMS AND PRESSURE BOOSTERS

Vertical and horizontal centrifugal pumps. Complete systems for the transfer and pressurization of water. Fire fighting boosters.



PUMPS FOR RESIDENTIAL USE

Submersible pumps, self-priming pumps, multi-stage centrifugal pumps and compact pumping systems for the supply of water to private homes, for the irrigation of gardens and for the recovery of rainwater.



PUMPS FOR DRAINAGE

Pumps for the transfer of clean water, dirty water, wastewater and sewage. Pumps intended for a variety of applications (water of basins, tanks, pumping stations...).



PUMPS FOR OPEN AND DRILLED WELLS

Submersible pumps for irrigation and the pumping of groundwater.

PENTAIR WATER ITALY: THE FACTORY IN PISA BECOMES 100% GREEN.



Thanks to the creation of a sophisticated PV system on the roof of the factory, the plant in Pisa has become the first environmentally-friendly Pentair factory, able to produce **100% of the energy needed for the productive activities.**

On a surface of 11,000 square metres, 4,100 solar panels have been installed, generating up to **1,280,000 kWh** every year.

Among the benefits is a reduction of CO2 emissions equal to **678,400 Kg.**

Customers are assured that the products coming from the factory in Pisa have been made using renewable energy.

The remarkable results achieved thanks to the installation of the solar panels can be seen in real time on the various displays located inside the factory.

In fact, each activity inside the factory of Pisa is continuously improved for maximum energy savings and minimum environmental impact.

In the light of the initiatives undertaken and of future plans, it can certainly be said that Pentair is a leader in the management of its activities with:

- Maximum respect to the environment
- Maximum energy savings
- Increased safety for workers
- Maximum respect to health

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NEW 2016

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SECTION 1

PUMPS WITH ELECTRONIC FREQUENCY CONVERTER

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NOCCHI CPS

ELECTRONIC FREQUENCY CONVERTER

EASY TO INSTALL, LOW POWER CONSUMPTION, COMPACT SIZE

CPS is an electronic device capable of changing the frequency of a pump. Integrated directly on the motor, it allows to adjust its speed so as to supply the same pressure at all times, even when the water demand changes. CPS is a compact, essential, reliable solution and it is easy to use; designed also to offer great comfort and benefits in applications in irrigation, greenhouses, light industries, fountains and water games.

The system consists of a pump and an electronic control system (inverter) which allows to keep the pressure constant in the system, reducing or increasing the speed of rotation of the pump. When the system pressure drops below the set threshold, the module starts the pump to restore to set-point pressure; therefore the speed of

rotation of the pump varies according to the water demand so, a greater demand will correspond to a higher speed, until the maximum speed set has been reached. If the water demand is lower, the speed of the pump will be reduced until the minimum speed set has been reached, after which, if the pressure does not continue to drop (that is more water demands) the pump will stop (Stand By) until a new cycle is started.



APPLICATIONS

- Pressurisation systems
- Water supply
- Industry
- Construction
- Washes

PROTECTION DEVICES

- Dry running
- Overcurrent
- Overtemperature of electronic devices
- Frost protection via external device

TECHNICAL SPECIFICATIONS

- Supply VOLT.: inverter 1x230 Vac ± 10 %.
- Inverter output VOLT.: 3x230 Vac ± 10 %
- Maximum rated power: 2.4 Kw
- Input frequency: 50/60 Hz + 3%
- Output maximum rated power: 8 Amp
- Degree of protection IP55 (if installed on motors with a degree of protection IP55 or above)
- Ambient temperature from +0°C to +40°C
- Waveform: sinusoidal
- Input filter complying with EMC directive
- Pressure transmitter 0 - 5 Volt - 0 - 10 Bar 0 - 20 Bar depending on the model of pump
- Set-point 2
- Serial interface connectivity RS 485
- Optional contacts 3 (external set-point, alarm, system inhibition)

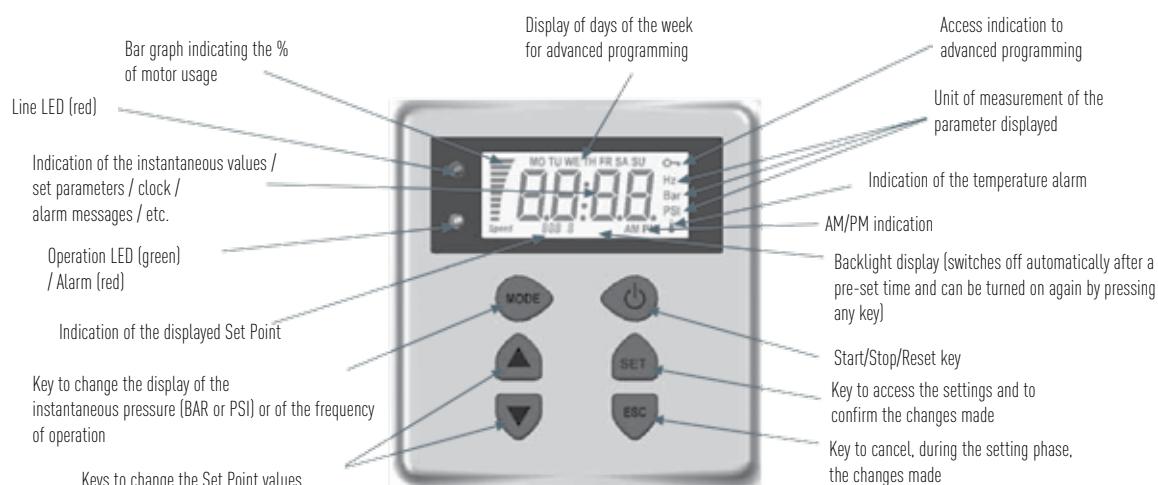
NOCCHI CPS

ELECTRONIC FREQUENCY CONVERTER

VERSIONS AVAILABLE

VERTICAL	HORIZONTAL	SELF-PRIMING
CPS10 MULTINOX VE+ 4	CPS10/DHI 2	CPS10/JET 1000
CPS10 MULTINOX VE+ 6	CPS10/DHI 4	
CPS10 MULTINOX VE+ 8	CPS10/DHR 4	
CPS10 PVM 1	CPS10/DHR 9	
CPS10 PVM 3	CPS10/DHR 9	
CPS10 PVM 5	Multi EVO-E 3	
CPS10 PVM 10	Multi EVO-E 5	
	Multi EVO-E 8	

CONTROL PANEL



- Backlight display (switches off automatically after a reset time and can be turned on again by pressing any key)
- Bar graph indicating the percentage of motor usage
- Display of days of the week
- Indication of the instantaneous values / set parameters / clock / alarm messages / etc.
- Access indication to programming
- Unit of measurement of the parameter displayed

NOCCHI Multi EVO-E

MULTISTAGE CENTRIFUGAL PUMPS WITH INVERTER

NEW 2016
PENTAIR



The system consists of a multi-stage centrifugal horizontal pump Multi EVO-E and an electronic control system (inverter) which allows to keep the pressure constant in the system, reducing or increasing the speed of rotation of the pump.

All models are certified for use with drinking water (ACS and DM174)

ADVANTAGES

The series Multi EVO-E pumps feature the following advantages:

- High reliability - thanks to the durable and innovative design
- Silent - more comfort for the user thanks to its silent operation
- Compact shape
- Many possible uses for the residential market
- Excellent priming ability



SPECIFICATIONS:

PUMP

- Hydraulic performance according to ISO 9906:2012 - Grade 3B
- Type of liquid: clean water without suspended solids or abrasive material
- Maximum temperature of the liquid 50°C
- Maximum operating pressure 8 bar
- Maximum intake height recommended 6m with foot valve

MOTOR

- Closed, air ventilated (TEFC)
- 2 poles, 50 Hz ($n=2850$ rpm)
- IE3 three-phase AC ($P2 \geq 0.75$ kW)
- Protection level: IP55
- Insulation class: F
- Maximum ambient temperature 40°C
- Single-phase power supply



APPLICATIONS

- Pressurising and supply
- Irrigation
- Use of rainwater
- Washing systems



NOCCHI Multi EVO-E

MULTISTAGE CENTRIFUGAL PUMPS WITH INVERTER

CONSTRUCTION FEATURES

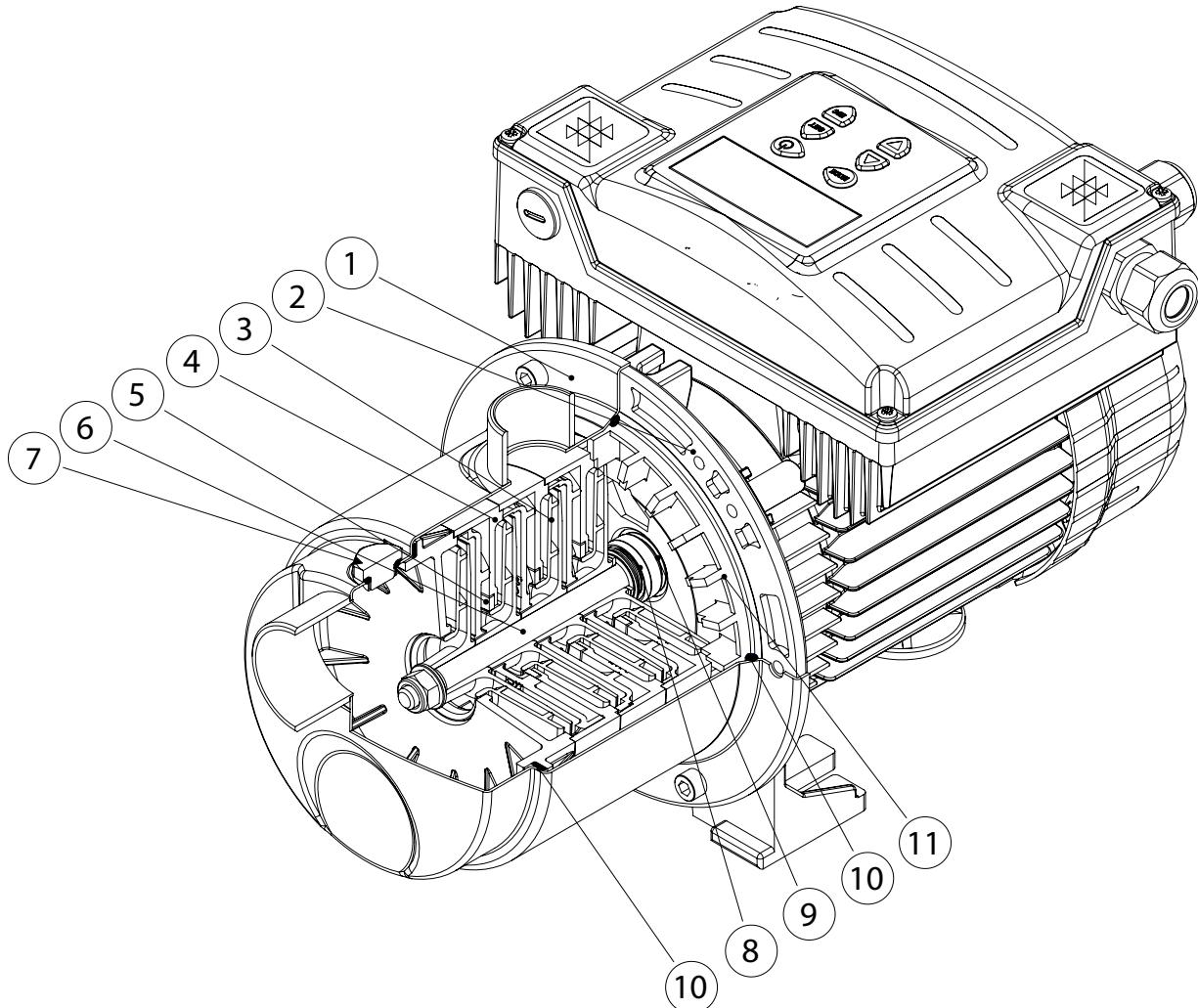


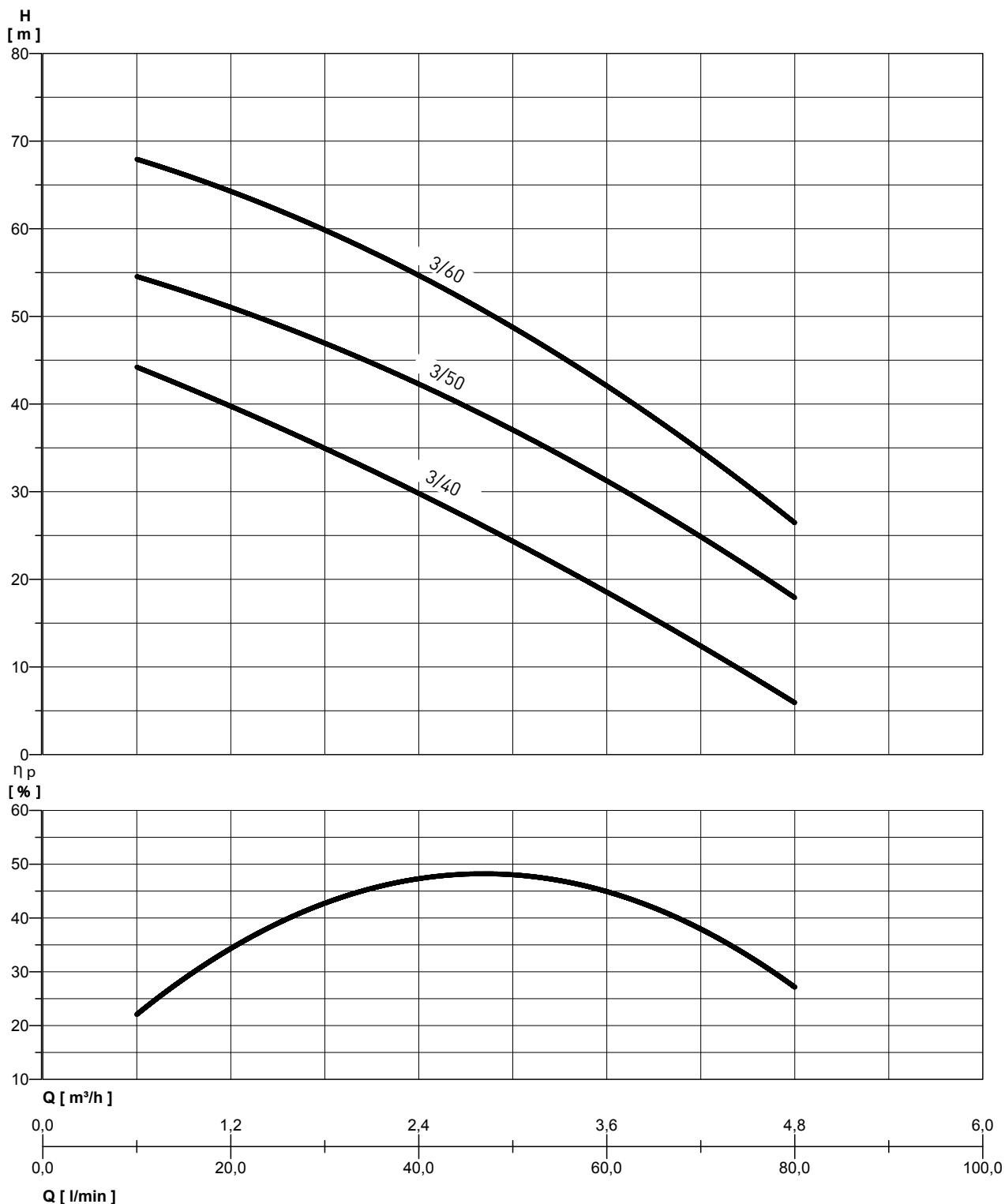
TABLE OF MATERIALS

Ref.	Component	Material
1	Pump body	Stainless steel Europe: EN10088-1 X5CrNi18-10 (1.4301) USA: AISI 304
2	Motor casing	Die-cast aluminium
3	Impeller	PPO reinforced with fibreglass
4	Diffuser	PPO reinforced with fibreglass
5	Wear ring	PTFE
6	Shaft (hydraulic part)	Stainless steel Europe: EN10088-1 X5CrNi18-10 (1.4301) USA: AISI 304
7	Inlet / outlet caps	Stainless steel Europe: EN10088-1 X8CrNiS18-9 (1.4305) USA: AISI 303
8	Mechanical seal	Carbon graphite / NBR / SS Europe: EN10088-1 X5CrNi18-10 (1.4301) USA: AISI 304
9	Counterface	Ceramic / NBR
10	Gaskets	NBR 70 Shore A
11	Seal holder plate	PPO reinforced with fibreglass

NOCCHI Multi EVO-E 3

MULTISTAGE CENTRIFUGAL PUMPS WITH INVERTER

HYDRAULIC PERFORMANCE

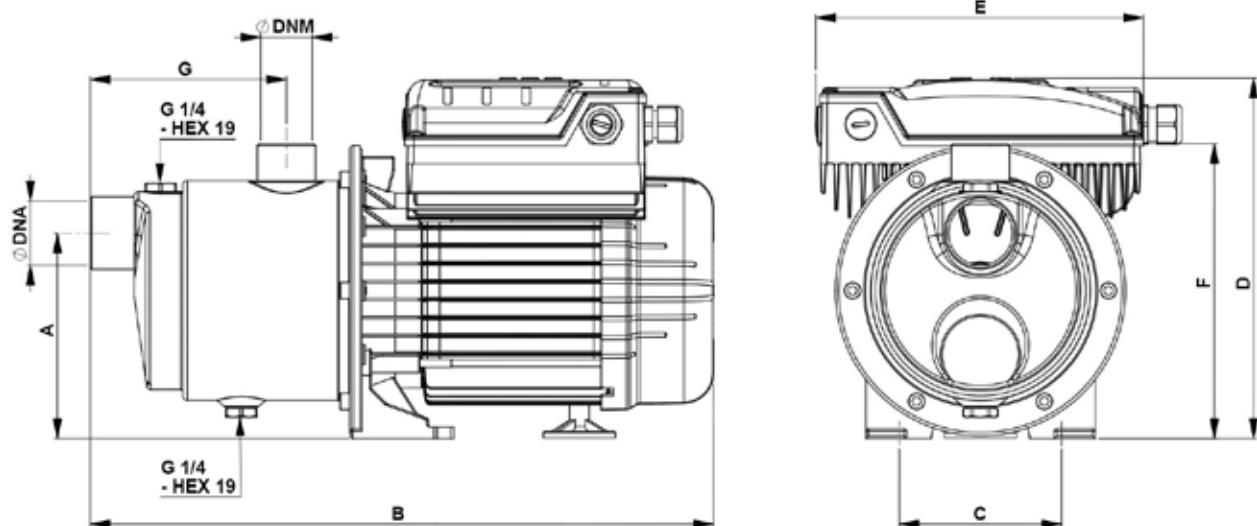


NOCCHI Multi EVO-E 3

MULTISTAGE CENTRIFUGAL PUMPS WITH INVERTER

PERFORMANCE TABLE

MODEL	Nominal power (P2)		Absorbed power (P1)		VOLT. (V)	In (A)	Q	l/min m³/h	10	20	30	40	50	60	80
	HP	kW	HP	kW					0.6	1.2	1.8	2.4	3	3.6	4.8
Multi EVO-E 3-40	0.74	0.55	1.1	0.8	1 ~ 230	5.3	total head in water column metres	44	40	35	30	24	18.5	6	
Multi EVO-E 3-50	1	0.75	1.34	1	1 ~ 230	7		54.5	51	47	42.5	37	31	18	
Multi EVO-E 3-60	1.27	0.95	1.8	1.35	1 ~ 230	8.7		68	64	60	55	48.5	42	26.5	



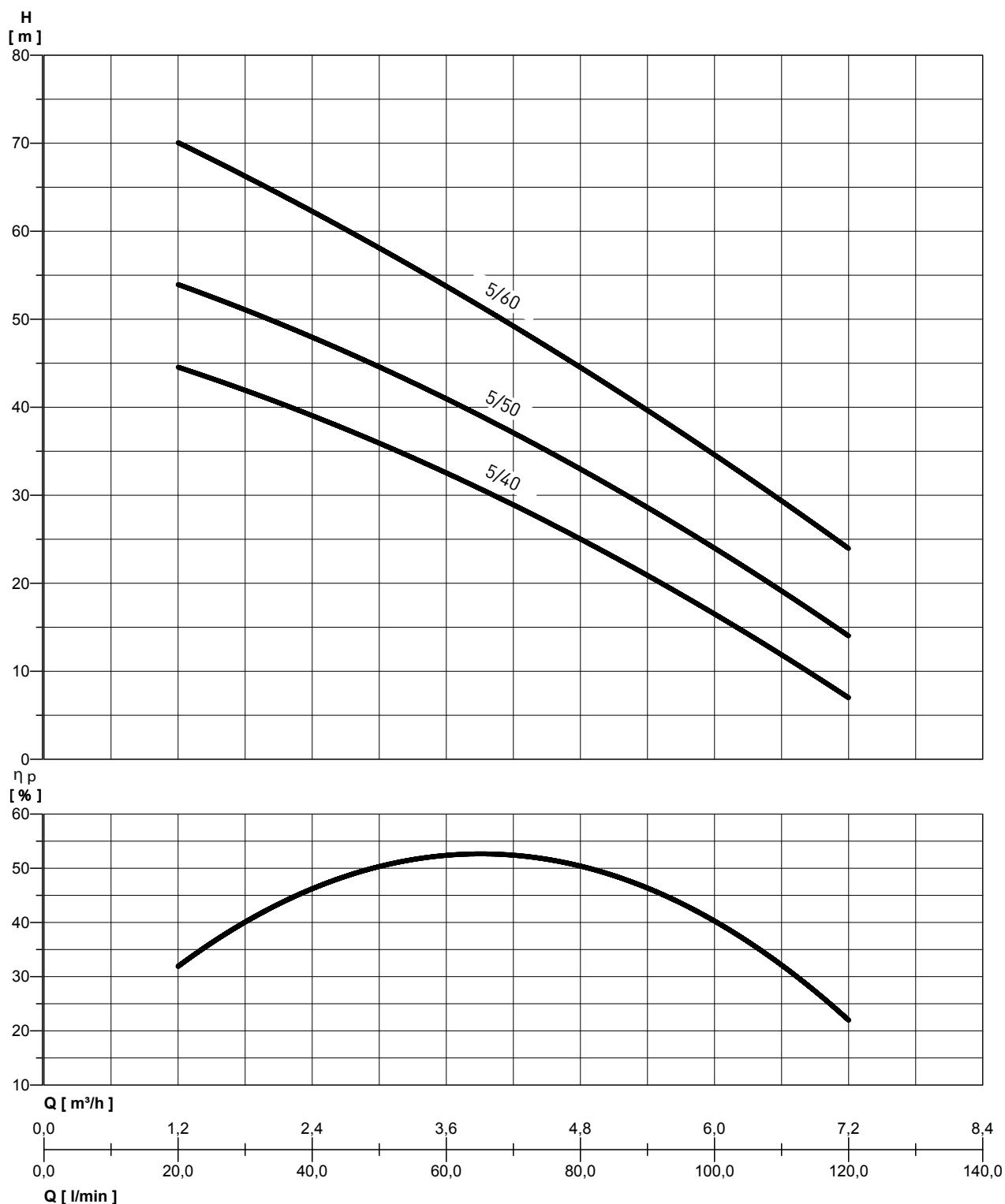
OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions mm.								WEIGHTS (Kg)	
	A	B	C	D	E	F	G	DNA	DNM	
Multi EVO-E 3-40	129	360	100	211	198	180	116	1"	1"	10
Multi EVO-E 3-50	129	377	100	220	198	180	116	1"	1"	12.1
Multi EVO-E 3-60	129	377	100	220	198	180	116	1"	1"	13.4

NOCCHI Multi EVO-E 5

MULTISTAGE CENTRIFUGAL PUMPS WITH INVERTER

HYDRAULIC PERFORMANCE

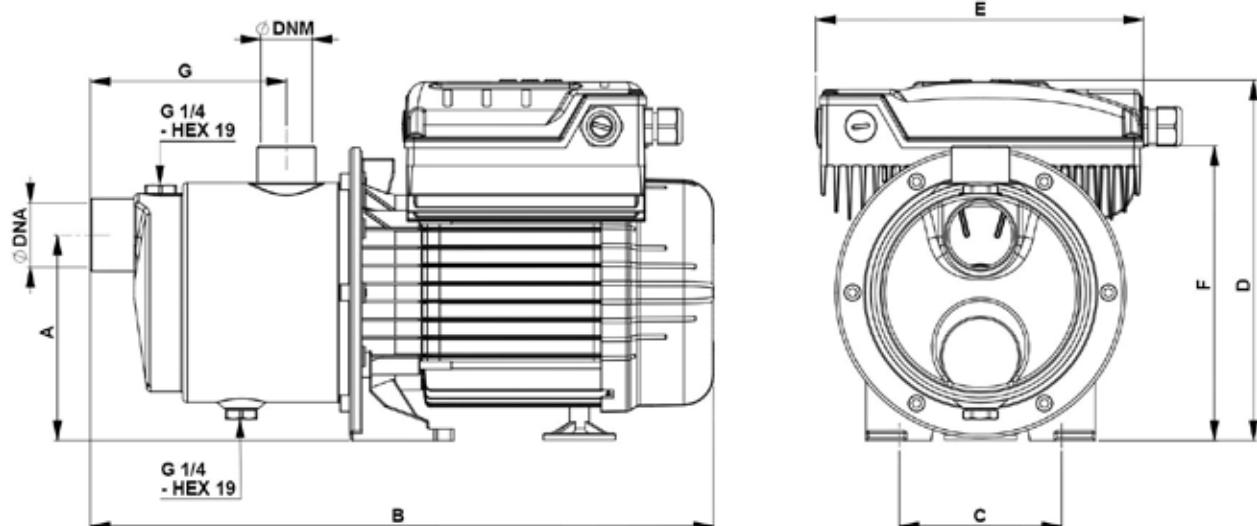


NOCCHI Multi EVO-E 5

MULTISTAGE CENTRIFUGAL PUMPS WITH INVERTER

PERFORMANCE TABLE

MODEL	Nominal power (P2)		Absorbed power (P1)		VOLT. (V)	In (A)	Q	l/min m³/h	20	30	40	50	60	80	100	120
	HP	kW	HP	kW					1.2	1.8	2.4	3	3.6	4.8	6	7.2
Multi EVO-E 5-40	1	0.75	1.34	1	1 ~ 230	7	total head in water column metres	44.5	42	39	36	32.5	25	16.5	7	
Multi EVO-E 5-50	1.2	0.9	1.68	1.25	1 ~ 230	8.5		54	51	48	44.5	41	33	24	14	
Multi EVO-E 5-60	1.74	1.3	2.4	1.8	1 ~ 230	11.5		70	66.5	62	58	54	44.5	34.5	24	



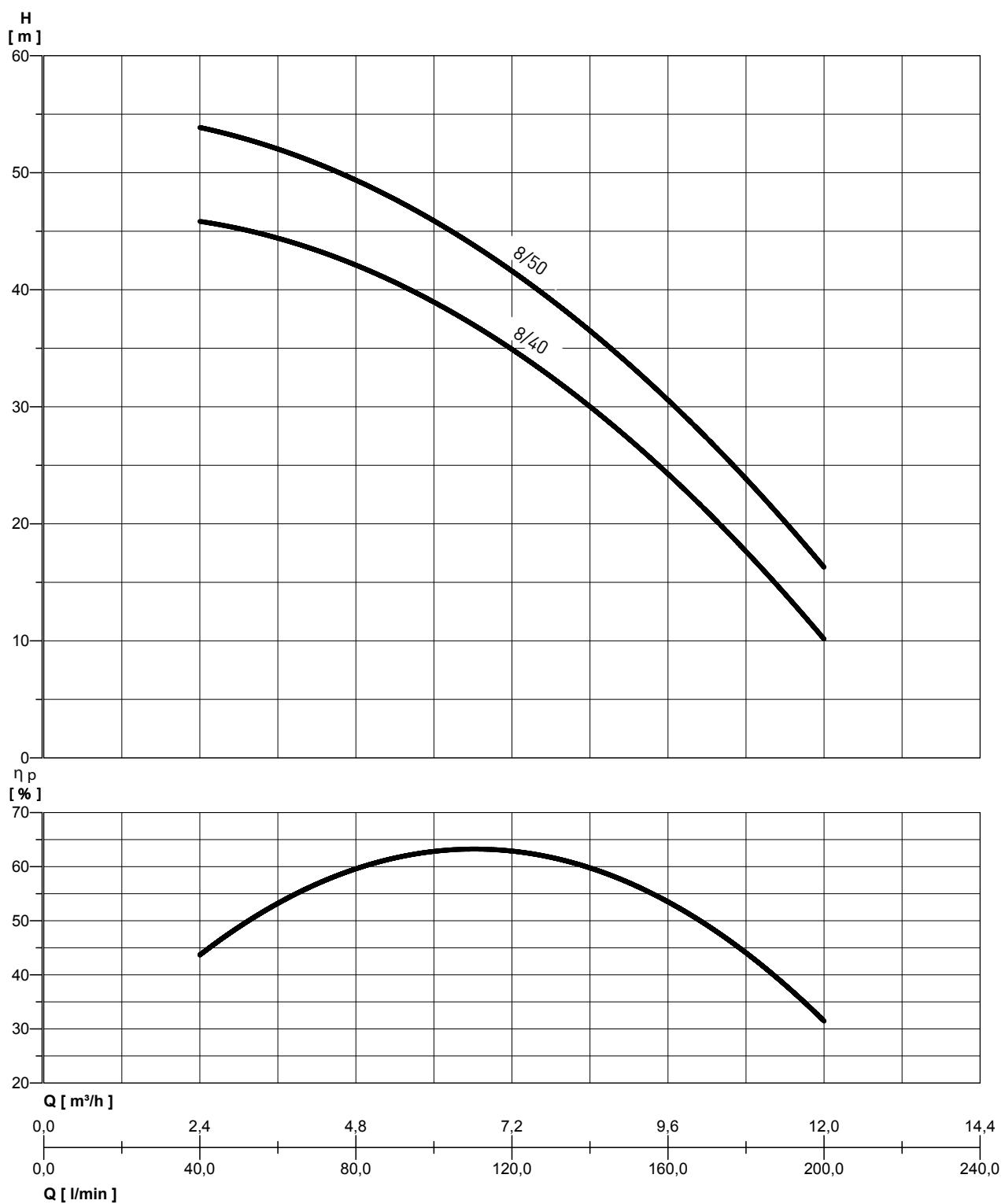
OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions mm.								WEIGHTS (Kg)	
	A	B	C	D	E	F	G	DNA	DNM	
Multi EVO-E 5-40 M	125	380	100	220	198	180	119	1"1/4	1"	12.2
Multi EVO-E 5-50 M	125	380	100	220	198	180	119	1"1/4	1"	13
Multi EVO-E 5-60 M	125	413	100	230	198	180	119	1"1/4	1"	14.5

NOCCHI Multi EVO-E 8

MULTISTAGE CENTRIFUGAL PUMPS WITH INVERTER

HYDRAULIC PERFORMANCE

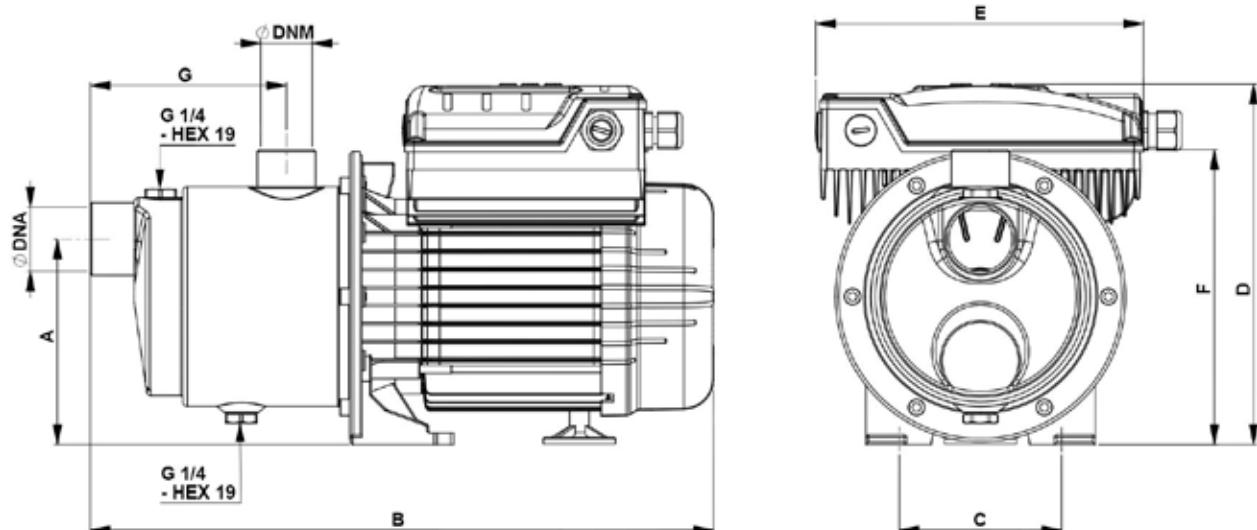


NOCCHI Multi EVO-E 8

MULTISTAGE CENTRIFUGAL PUMPS WITH INVERTER

PERFORMANCE TABLE

MODEL	Nominal power (P2)		Absorbed power (P1)		VOLT. (V)	In (A)	Q l/min	total head in water column metres	2.4	3	3.6	4.8	6	7.2	8.4	9.6	10.8	12
	HP	kW	HP	kW					2.4	3	3.6	4.8	6	7.2	8.4	9.6	10.8	12
Multi EVO-E 8-40	1.6	1.2	2.15	1.7	1 ~ 230	11			46	45	44.5	42	39	35	30	24	18	10
Multi EVO-E 8-50	1.9	1.4	2.7	2	1 ~ 230	13			54	53	52	49	46	42	36.5	30.5	23.5	16.5



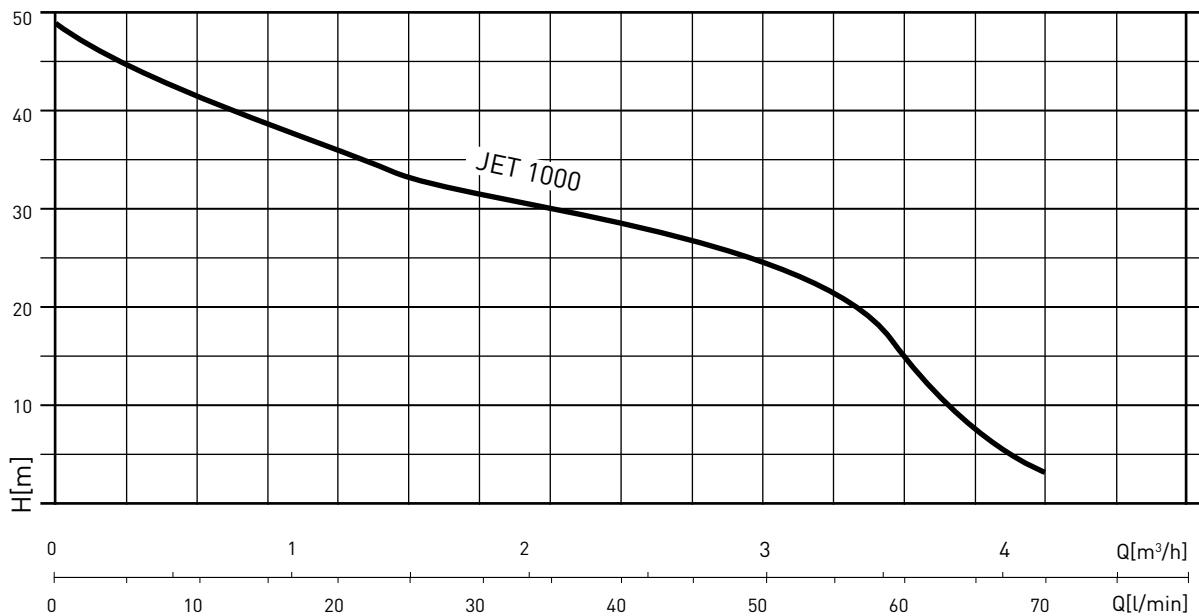
OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions mm.								WEIGHTS (Kg)	
	A	B	C	D	E	F	G	DNA	DNM	
Multi EVO-E 8-40 M	125	430	100	230	198	187	137	1"1/4	1"1/4	15
Multi EVO-E 8-50 M	125	430	100	230	198	187	137	1"1/4	1"1/4	16.7



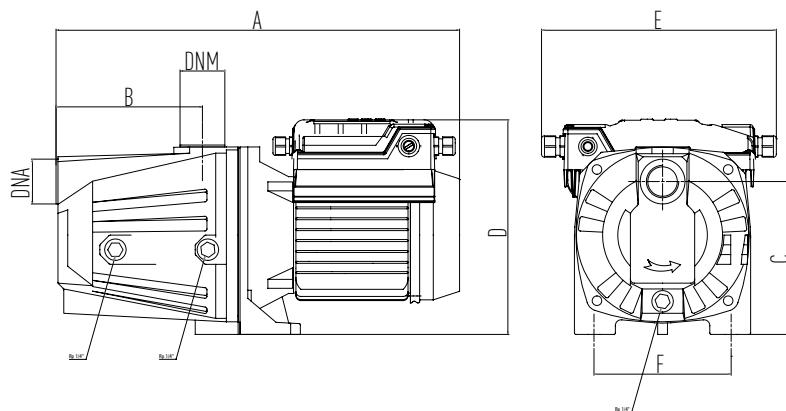
NOCCHI CPS10/JET ELECTRONIC FREQUENCY CONVERTER

HYDRAULIC PERFORMANCE



PERFORMANCE TABLE

MODEL	P2		VOLT. (V)	In (A)	Q	l/min	0	5	20	30	40	50	60	70
	HP	kW				m ³ /h	0	0.3	1.2	1.8	2.4	3	3.6	4.2
CPS10/JET 1000	1.36	1	1 ~ 230	6.5	m.c./m.c.w.	49	45	36	32	28	25	15	3	



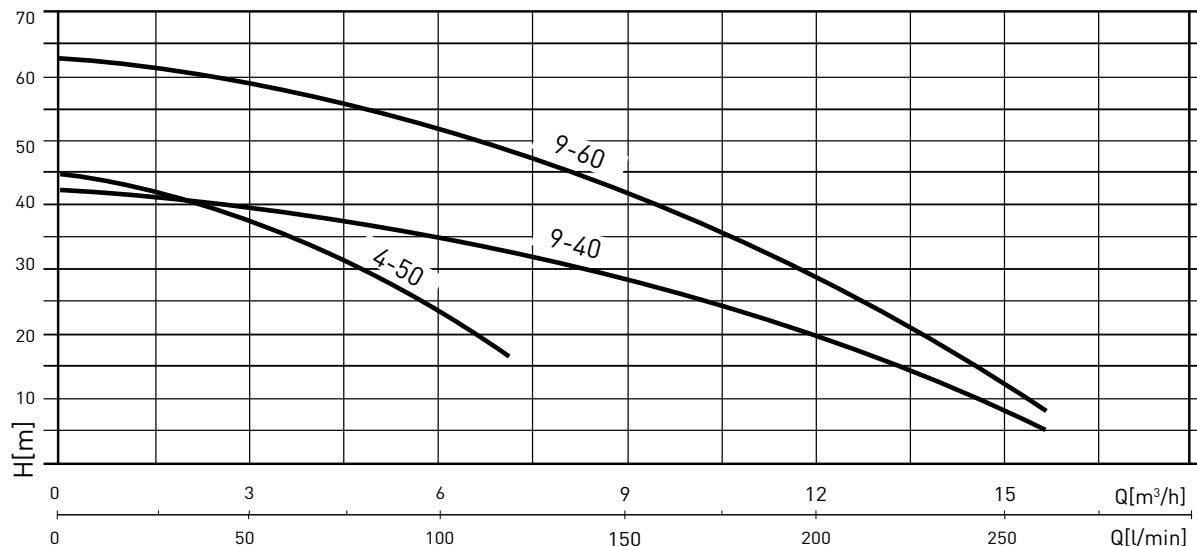
OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions mm.							WEIGHTS Kg
	A	B	C	D	E	DNA	DNM	
CPS10/JET 1000	400	147	160	260	195	1"	1"	20.8

NOCCHI CPS10/DHR

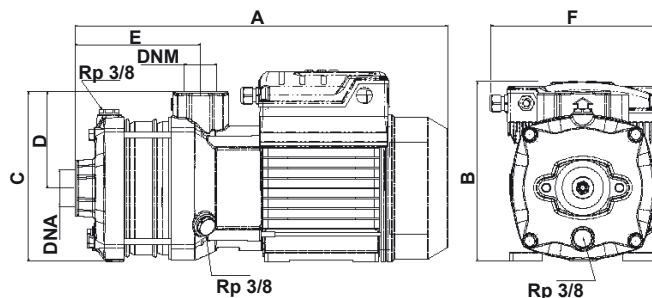
ELECTRONIC FREQUENCY CONVERTER

HYDRAULIC PERFORMANCE



PERFORMANCE TABLE

MODEL	P2		VOLT. (V)	In (A)	Q	l/min	0	40	60	80	100	120	160	200	240	260
	HP	kW														
CPS10/DHR 4-50	1.5	0.9	1 ~ 230	9.1			44	39	35	30	24	17				
CPS10/DHR 9-40	1.74	1.3	1 ~ 230	12.5			41.5	40	39	38	35	33	27	19	10	5
CPS10/DHR 9-60	2.4	1.8	1 ~ 230	15.8			62	60	58	56	52	49	40	29	14	6



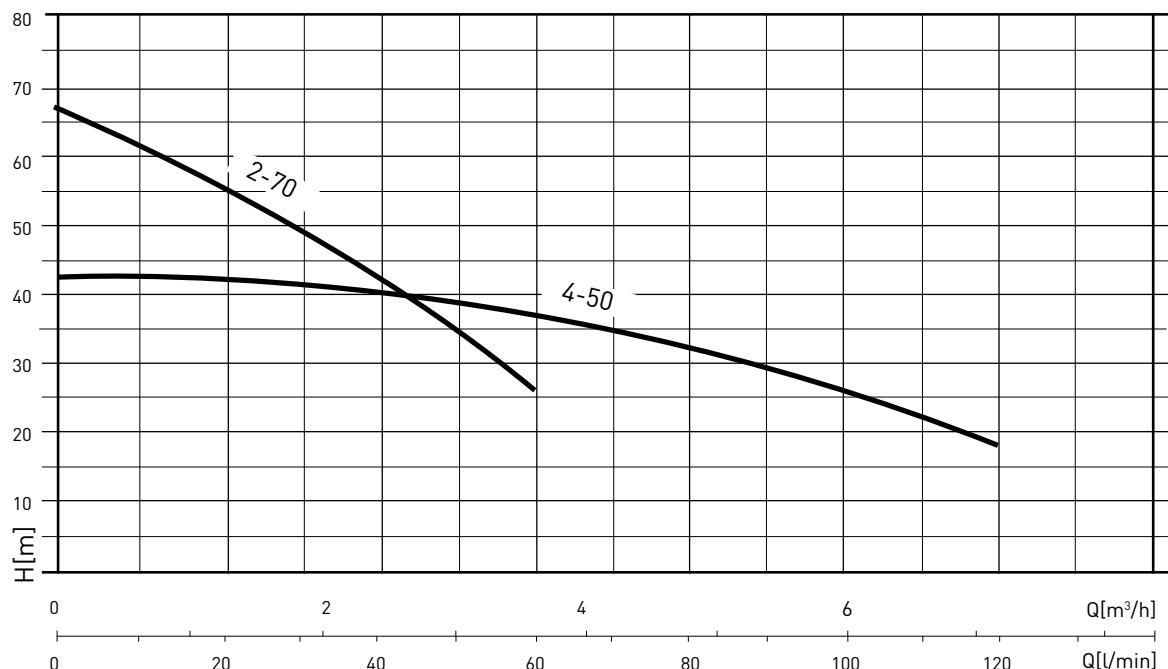
OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions mm.							WEIGHTS Kg
	A	B	C	D	E	F	DNA	
CPS10/DHR 4-50	445	225	155	65	190	232	1" 1/4	18
CPS10/DHR 9-40	408	215	185	105	137	232	1" 1/4	21.1
CPS10/DHR 9-60	468	215	185	105	198	232	1" 1/2	26

NOCCHI CPS10/DHI

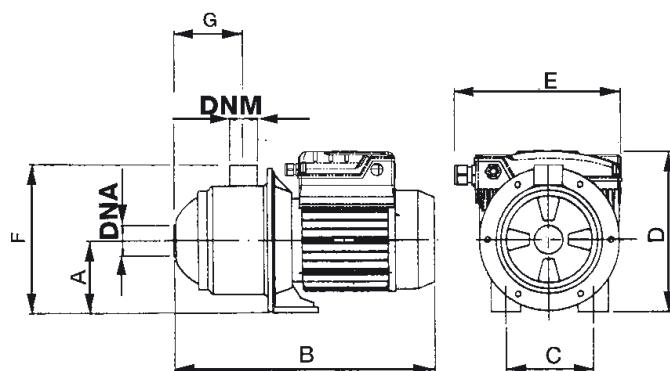
ELECTRONIC FREQUENCY CONVERTER

HYDRAULIC PERFORMANCE



PERFORMANCE TABLE

MODEL	P2		VOLT. (V)	In (A)	Q	l/min	0	10	20	30	40	50	60	80	100	120	
	HP	kW					m³/h	m.c.a./m.c.w.	0	0.6	1.2	1.8	2.4	3	3.6	4.8	6
CPS10/DHI 2-70	1.25	0.9	1 ~ 230	10.6			68		63	57	50	43	35	26			
CPS10/DHI 4-50	1.25	0.9	1 ~ 230	10.6			43					42	39	36	33	27	18



OVERALL DIMENSIONS AND WEIGHTS

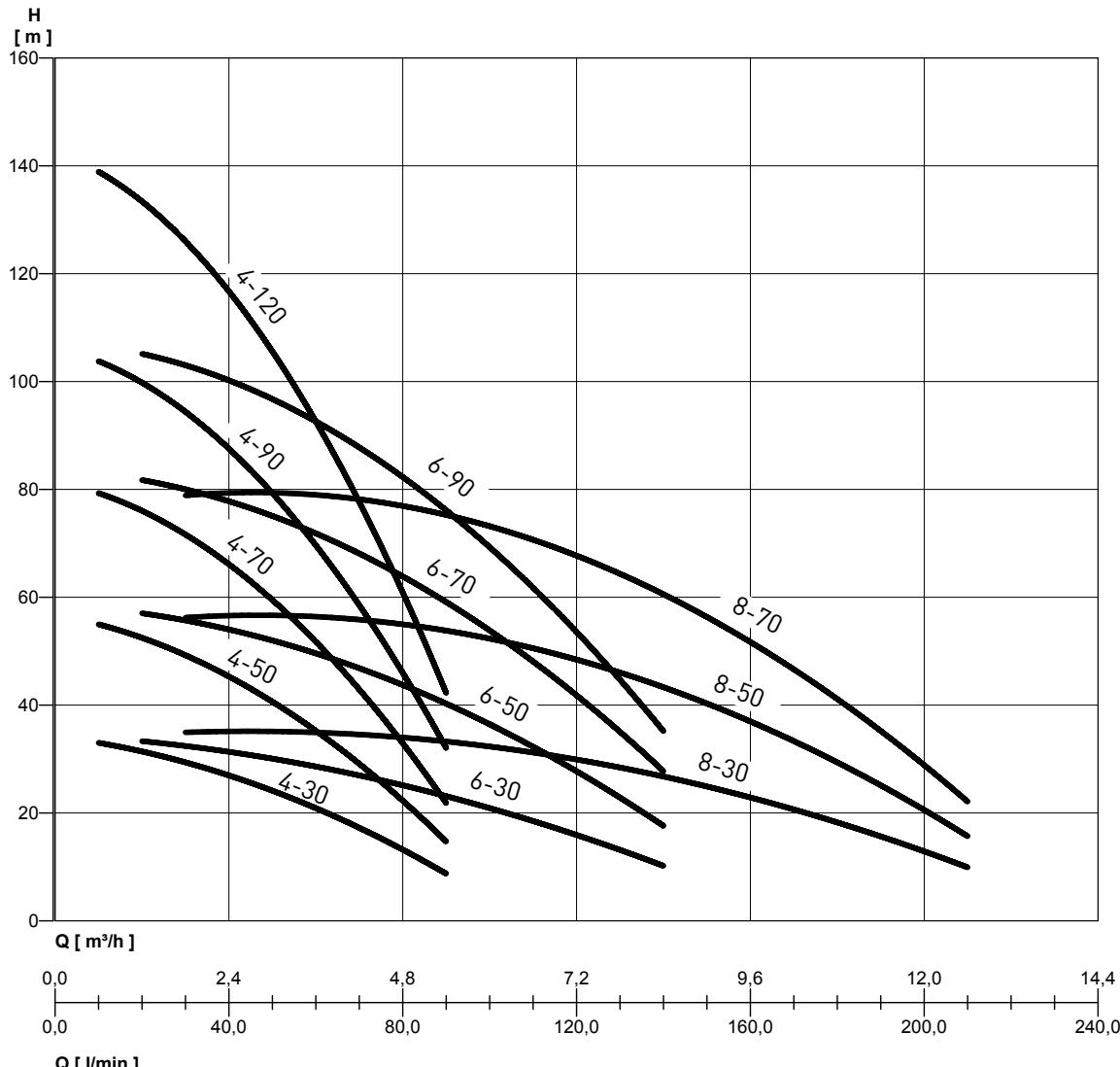
MODEL	Dimensions mm.									WEIGHTS Kg
	A	B	C	D	E	F	G	DNA	DNM	
CPS10/DHI 2-70	105	460	141	245	232	235	135	1" 1/4	1" 1/4	17.4
CPS10/DHI 4-50	105	460	141	245	232	235	135	1" 1/4	1" 1/4	17.4

NOCCHI CPS10 MULTINOX VE+

ELECTRONIC FREQUENCY CONVERTER



HYDRAULIC PERFORMANCE



MEI > 0.1 - Reference MEI > 0.70 - The information on the reference efficiency is available at the address: www.europump.org/efficiencycharts

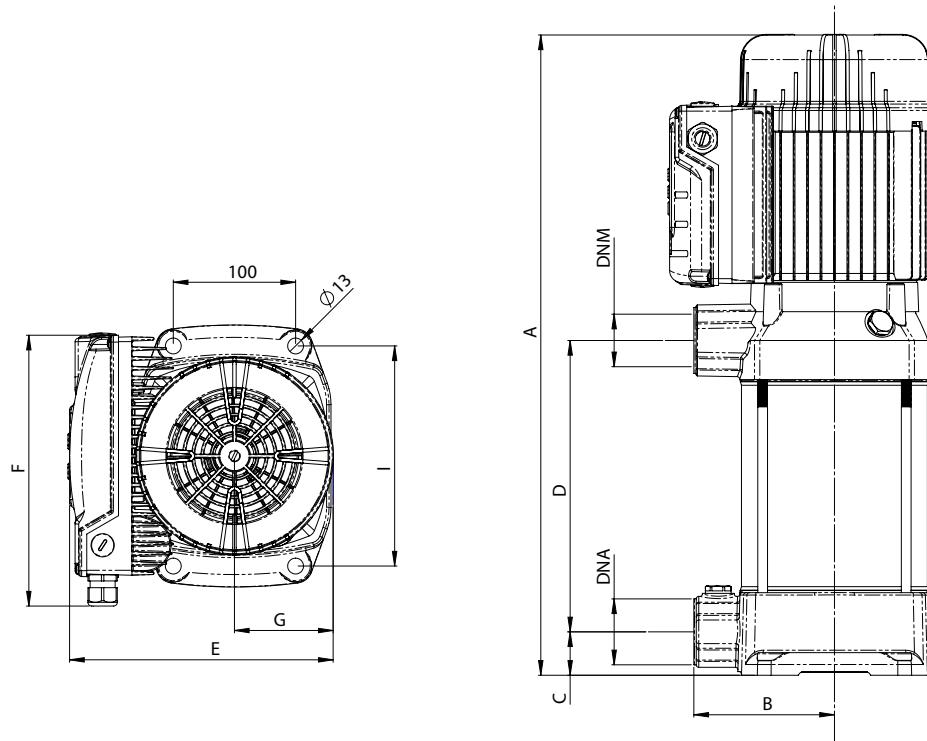
For the efficiency data see the PUMPS of the series MULTINOX-VE+

PERFORMANCE TABLE

MODEL	P2		VOLT. (V)	In (A)	Q	l/min m³/h	10	20	30	40	50	60	70	80	90	100	120	140	150	180	210
	HP	kW					0.6	1.2	2	2.4	3	3.6	4.2	5	5.4	6	7.2	8.4	9	11	13
CPS10 MULTINOX VE+ 4-30	0.68	0.5	1 ~ 230	4.4			33	31	30	27	24	21	17	13	9						
CPS10 MULTINOX VE+ 4-50	1.1	0.84	1 ~ 230	6.71			55	52	50	45	41	35	29	22	15						
CPS10 MULTINOX VE+ 4-70	1.6	1.17	1 ~ 230	9.39			79	76	72	67	59	51	43	33	22						
CPS10 MULTINOX VE+ 4-90	2	1.5	1 ~ 230	12.08			104	99	95	88	79	69	59	46	32						
CPS10 MULTINOX VE+ 4-120	3	2	1 ~ 230	16.3			138	134	127	117	105	92	78	60	43						
CPS10 MULTINOX VE+ 6-30	0.9	0.67	1 ~ 230	5.95				34	32	31	30	28	27	26	23	21	16	10			
CPS10 MULTINOX VE+ 6-50	1.5	1.1	1 ~ 230	9.02				58	56	53	51	49	47	44	41	37	28	17			
CPS10 MULTINOX VE+ 6-70	2	1.5	1 ~ 230	13.82				83	80	77	74	71	68	64	60	55	42	27			
CPS10 MULTINOX VE+ 6-90	3	2	1 ~ 230	15.75				107	103	99	95	92	87	83	77	71	54	34			
CPS10 MULTINOX VE+ 8-30	1.35	1	1 ~ 230	8.7				35	35	35	35	35	34	33	32	30	27	25	18	10	
CPS10 MULTINOX VE+ 8-50	2	1.5	1 ~ 230	14.4				57	57	56	56	56	54	53	52	50	45	40	28	16	
CPS10 MULTINOX VE+ 8-70	2.5	1.9	1 ~ 230	15.5				80	80	79	78	78	76	74	72	70	63	56	40	22	

NOCCHI CPS10 MULTINOX VE+ ELECTRONIC FREQUENCY CONVERTER

OVERALL DIMENSIONS AND WEIGHTS



OVERALL DIMENSIONS AND WEIGHTS

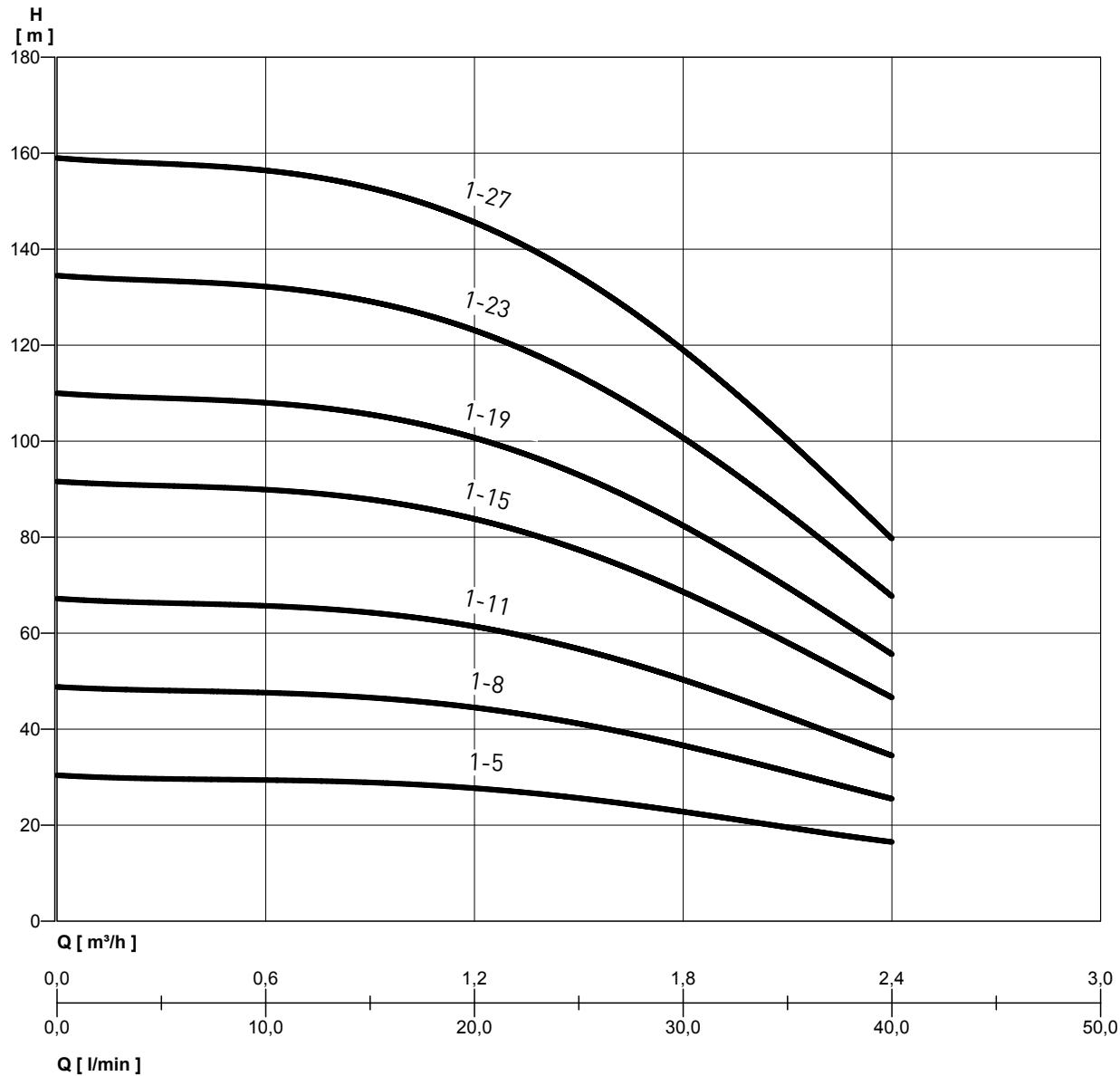
MODEL	Dimensions mm.										WEIGHTS Kg
	A	B	C	D	E	F	G	I	DNA	DNM	
CPS10 MULTINOX VE+ 4-30	416	115	35	130	213	220	80	180	1" 1/4	1" 1/4	21
CPS10 MULTINOX VE+ 4-50	470	115	35	184	213	220	80	180	1" 1/4	1" 1/4	25
CPS10 MULTINOX VE+ 4-70	524	115	35	238	213	220	80	180	1" 1/4	1" 1/4	29
CPS10 MULTINOX VE+ 4-90	578	115	35	292	213	220	80	180	1" 1/4	1" 1/4	30
CPS10 MULTINOX VE+ 4-120	660	115	35	373	213	220	80	180	1" 1/4	1" 1/4	32
CPS10 MULTINOX VE+ 6-30	416	115	35	130	213	220	80	180	1" 1/4	1" 1/4	21
CPS10 MULTINOX VE+ 6-50	470	115	35	184	213	220	80	180	1" 1/4	1" 1/4	25
CPS10 MULTINOX VE+ 6-70	524	115	35	238	213	220	80	180	1" 1/4	1" 1/4	29
CPS10 MULTINOX VE+ 6-90	578	115	35	292	213	220	80	180	1" 1/4	1" 1/4	30
CPS10 MULTINOX VE+ 8-30	416	115	35	130	213	220	80	180	1" 1/4	1" 1/4	21
CPS10 MULTINOX VE+ 8-50	470	115	35	184	213	220	80	180	1" 1/4	1" 1/4	25
CPS10 MULTINOX VE+ 8-70	524	115	35	373	213	220	80	180	1" 1/4	1" 1/4	41

NOCCHI CPS10 PVM

ELECTRONIC FREQUENCY CONVERTER



HYDRAULIC PERFORMANCE



MEI ≥ 0.4 - Reference MEI ≥ 0.70 - The information on the reference efficiency is available at the address: www.europump.org/efficiencycharts
For the efficiency data see the PUMPS of the series PVM

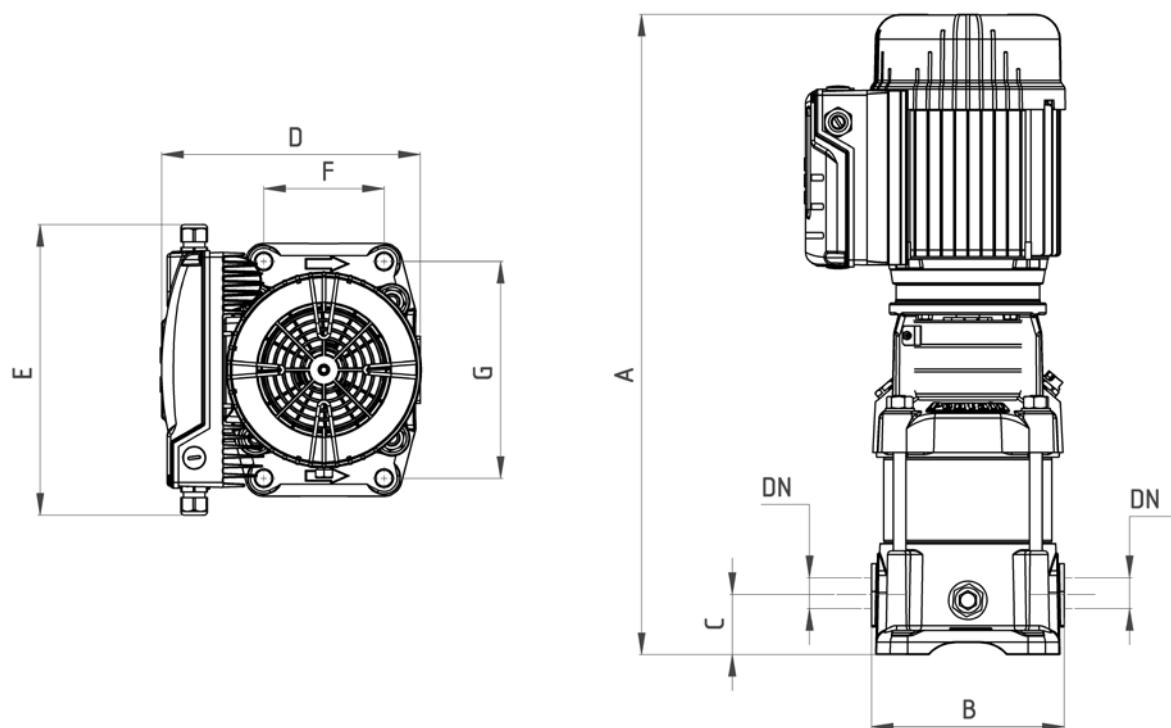
PERFORMANCE TABLE

MODEL	P2		VOLT. (V)	In (A)	Q	l/min	0	10	20	30	40
	HP	kW					m³/h	0	0.6	1.2	1.8
CPS10 PVM 1-5	0,5	0,4	1 ~ 230	2,7	m.c.a./m.c.w.	30,4	29,4	22,7	22,8	16,5	
CPS10 PVM 1-8	0,8	0,6				48,8	47,6	44,5	36,6	25,5	
CPS10 PVM 1-11	0,8	0,6				67,2	65,7	61,4	50,3	34,5	
CPS10 PVM 1-15	1	0,8				91,6	89,9	83,8	68,6	46,6	
CPS10 PVM 1-19	1,5	1,1				110	108	101	82,4	55,6	
CPS10 PVM 1-23	1,5	1,1				135	132	123	101	67,7	
CPS10 PVM 1-27	2	1,5				159	156	146	119	79,7	

NOCCHI CPS10 PVM

ELECTRONIC FREQUENCY CONVERTER

OVERALL DIMENSIONS AND WEIGHTS



OVERALL DIMENSIONS AND WEIGHTS

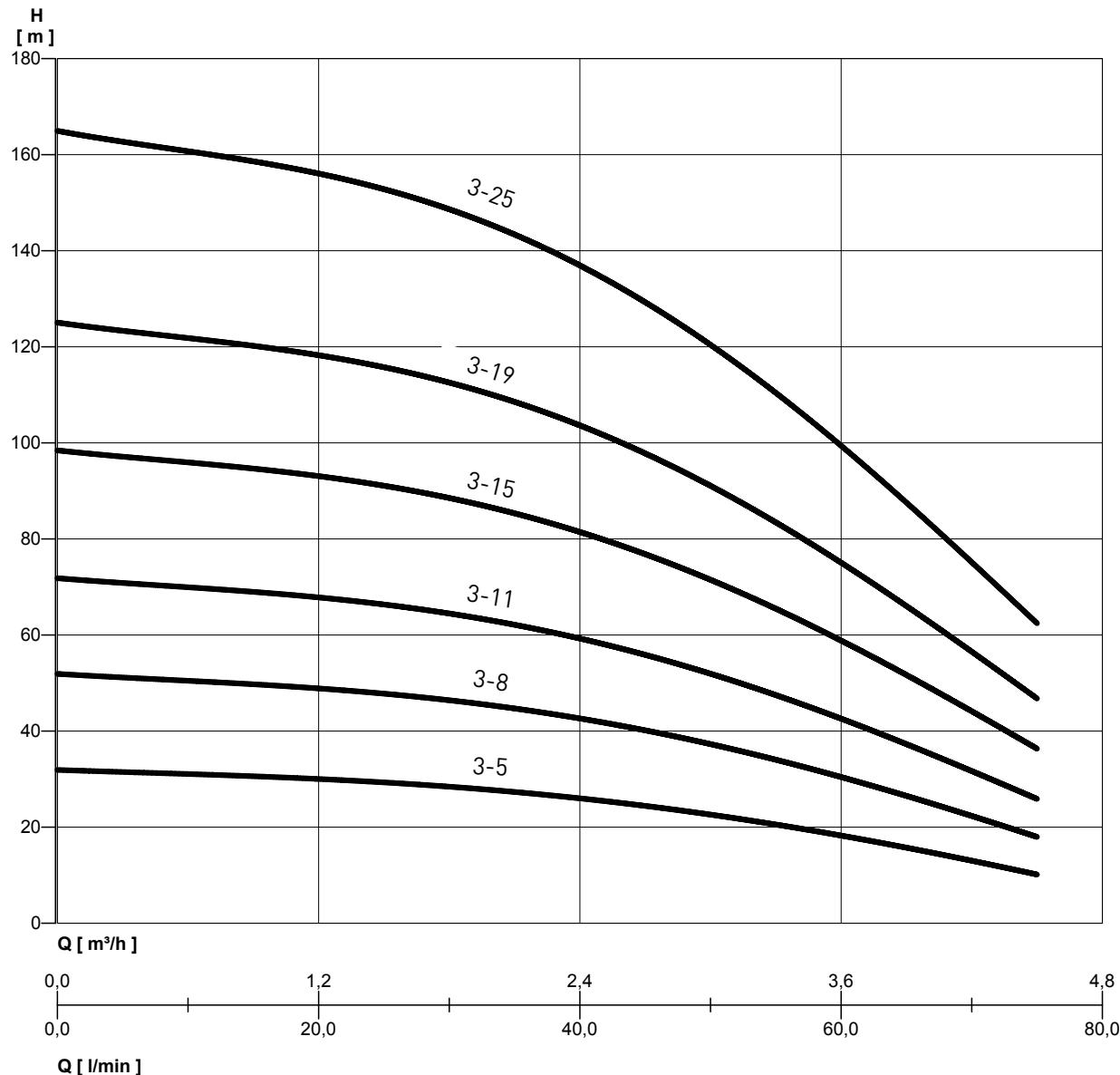
MODEL	Dimensions mm.								WEIGHTS Kg
	A	B	C	D	E	F	G	DN	
CPS10 PVM 1-5	510	250	75	135	232	100	180	DN 25/DN 32	29
CPS10 PVM 1-8	564	250	75	135	232	100	180	DN 25/DN 32	31
CPS10 PVM 1-11	618	250	75	135	232	100	180	DN 25/DN 32	32
CPS10 PVM 1-15	736	250	75	135	232	100	180	DN 25/DN 32	36
CPS10 PVM 1-19	808	250	75	135	232	100	180	DN 25/DN 32	38
CPS10 PVM 1-23	880	250	75	135	232	100	180	DN 25/DN 32	40
CPS10 PVM 1-27	1024	250	75	135	232	100	180	DN 25/DN 32	50

NOCCHI CPS10 PVM

ELECTRONIC FREQUENCY CONVERTER



HYDRAULIC PERFORMANCE



MEI > 0.4 - Reference MEI > 0.70 - The information on the reference efficiency is available at the address: www.europump.org/efficiencycharts
For the efficiency data see the PUMPS of the series PVM

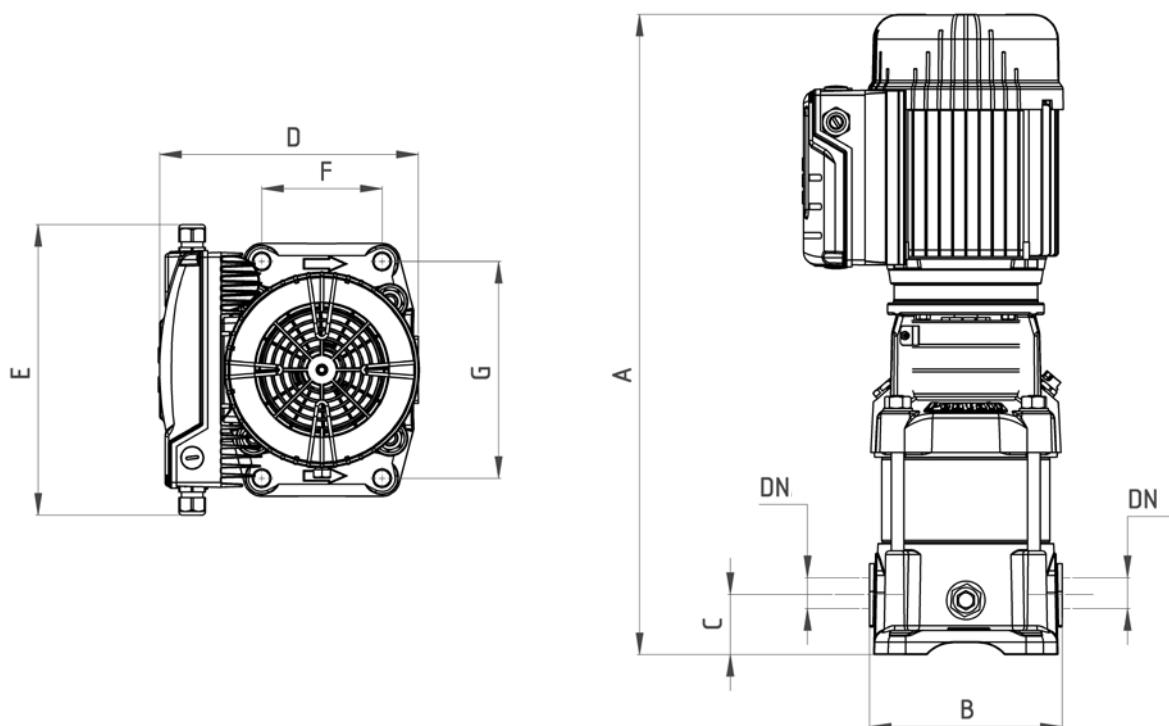
PERFORMANCE TABLE

MODEL	P2		VOLT. (V)	In (A)	Q	U/min										
	HP	kW					0	0.6	1.2	1.8	2.4	3.0	4.0	5.0	6.0	7.0
CPS10 PVM 3-5	0.5	0.4	1 - 230	3		m.c.a/m.c.w.	31.9	31.1	30	28.3	26.2	22.6	18	13.3	10	
CPS10 PVM 3-8	1	0.8		4.8			51.9	50.5	48.9	46.2	42.9	37.3	30.1	22.7	17.8	
CPS10 PVM 3-11	1.5	1.1		6.6			71.8	70	67.9	64.1	59.6	52.1	42.1	32.1	25.7	
CPS10 PVM 3-15	1.5	1.1		9			98.4	96	93.2	88	81.9	71.7	58.2	44.7	36.1	
CPS10 PVM 3-19	2	1.5		11			125	121.9	118	111.9	104	91.3	74.3	57.2	46.5	
CPS10 PVM 3-25	3	2.2		15			165	160.8	156	147.8	138	120.8	98.4	76	62.1	

NOCCHI CPS10 PVM

ELECTRONIC FREQUENCY CONVERTER

OVERALL DIMENSIONS AND WEIGHTS



OVERALL DIMENSIONS AND WEIGHTS

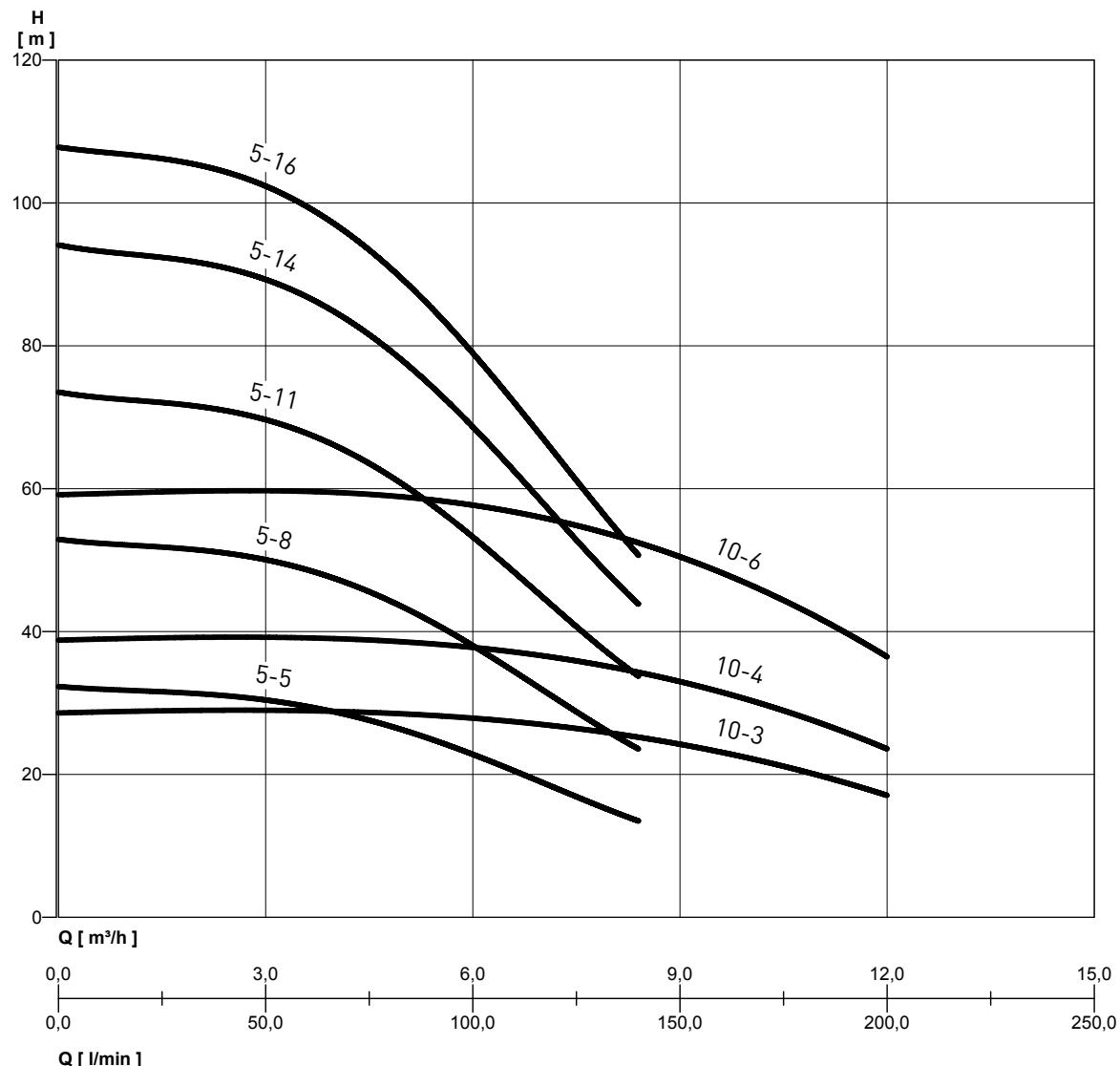
MODEL	Dimensions mm.								WEIGHTS Kg
	A	B	C	D	E	F	G	DN	
CPS10 PVM 3-5	510	510	510	510	510	510	510	DN 25/DN 32	29
CPS10 PVM 3-8	610	610	610	610	610	610	610	DN 25/DN 32	33
CPS10 PVM 3-11	664	664	664	664	664	664	664	DN 25/DN 32	35
CPS10 PVM 3-15	736	736	736	736	736	736	736	DN 25/DN 32	37
CPS10 PVM 3-19	880	880	880	880	880	880	880	DN 25/DN 32	47
CPS10 PVM 3-25	988	988	988	988	988	988	988	DN 25/DN 32	52

NOCCHI CPS10 PVM

ELECTRONIC FREQUENCY CONVERTER



HYDRAULIC PERFORMANCE



MEI > 0.4 - Reference MEI > 0.70 - The information on the reference efficiency is available at the address: www.europump.org/efficiencycharts
For the efficiency data see the PIIMPS of the series PVM

PERFORMANCE TABLE

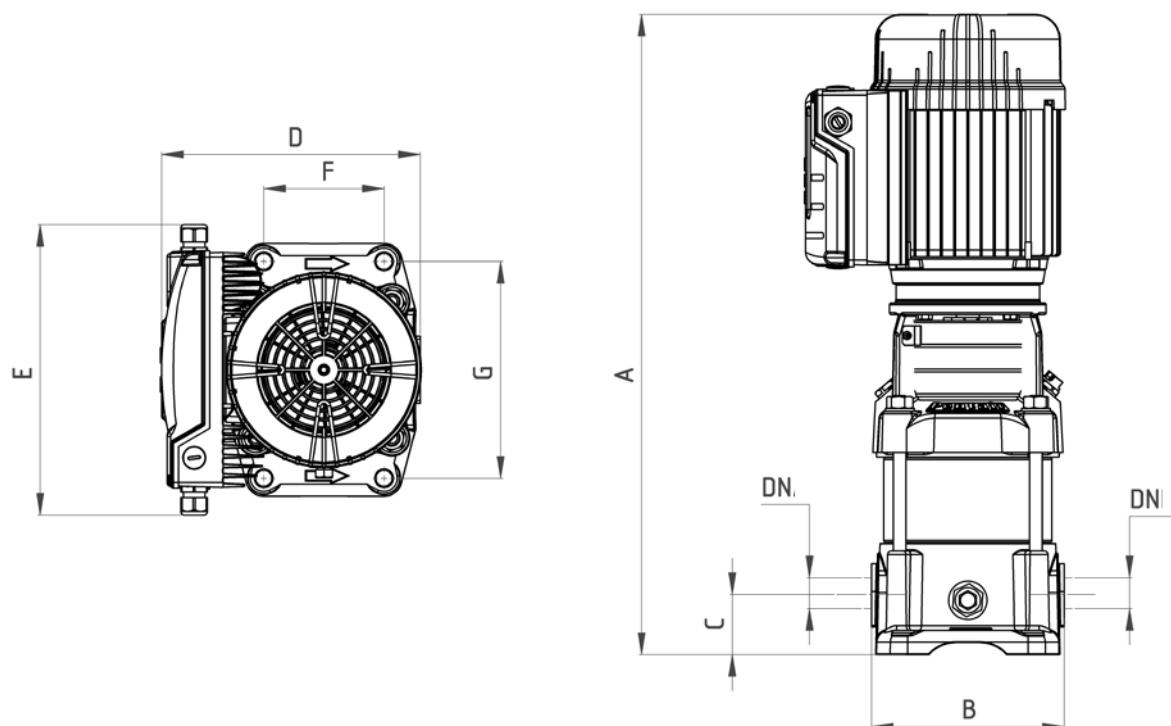
MODEL	P2		VOLT. (V)	In (A)	Q	l/min	0	40	60	80	100	120	140
	HP	kW					m³/h	0	2.4	3.6	4.8	6	7.2
CPS10 PVM 5-5	1	0.75	m³a/m.c.w.	1 ~ 230	5.4	32.3	31.1	29.4	26.8	22.9	18	13.5	
CPS10 PVM 5-8	1.5	1.1		1 ~ 230	8.7	52.9	51.1	48.5	44.3	38.2	30.5	23.6	
CPS10 PVM 5-11	3	2.2		1 ~ 230	12.0	73.5	71.1	67.5	61.8	53.5	43	33.8	
CPS10 PVM 5-14	3	2.2		1 ~ 230	15.2	94.1	91.1	86.6	79.4	68.9	55.8	43.9	
CPS10 PVM 5-16	3	2.2		1 ~ 230	17.4	108	104.5	99.3	91	79.1	64.7	50.7	

MODEL	P2		VOLT. (V)	In (A)	Q	l/min	0	25	50	75	100	125	150	175	200
	HP	kW				m ³ /h	0	1.5	3	4.5	6	7.5	9	10.5	12
CPS10 PVM 10-3	1.5	1.1	1 ~ 230	2.4	m <u>c</u> a/m <u>c</u> w.	28.6	28.9	29	28.7	27.8	26.4	24.4	21	17.1	
CPS10 PVM 10-4	2	1.5		3.2		38.8	39.1	39.2	38.9	37.7	35.8	33.2	28.8	23.6	
CPS10 PVM 10-6	3	2.2		4.8		59.2	59.4	59.8	59.4	57.5	54.7	50.8	44.2	36.5	

NOCCHI CPS10 PVM

ELECTRONIC FREQUENCY CONVERTER

OVERALL DIMENSIONS AND WEIGHTS



OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions mm.								WEIGHTS Kg
	A	B	C	D	E	F	G	DN	
CPS10 PVM 5-5	601	250	75	135	232	100	180	DN 25/DN 32	32
CPS10 PVM 5-8	682	250	75	135	232	100	180	DN 25/DN 32	35
CPS10 PVM 5-11	835	250	75	135	232	100	180	DN 25/DN 32	48
CPS10 PVM 5-14	916	250	75	135	232	100	180	DN 25/DN 32	50
CPS10 PVM 5-16	970	250	75	135	232	100	180	DN 25/DN 32	51
CPS10 PVM 10-3	612	280	80	160	232	130	215	DN 40	45
CPS10 PVM 10-4	714	280	80	160	232	130	215	DN 40	55
CPS10 PVM 10-6	774	280	80	160	232	130	215	DN 40	60

NOCCHI CPS3-10

THREE-PHASE ELECTRONIC FREQUENCY CONVERTER



EASY TO INSTALL, LOWE POWER CONSUMPTION, COMPACT SIZE

CPS 3-10 is an electronic device capable of changing the frequency of a pump. Integrated directly on the motor, it allows to adjust its speed so as to supply the same pressure at all times, even when the water demand changes. CPS represents a compact, essential and reliable solution which is easy to use; designed to offer great comfort and benefits in various applications such as: irrigation, pressurisation and water transfer, residential, commercial and industrial uses. The CPS range is characterised by a simple and elegant design with a Backlight graphic display which informs the user of the operating parameters in real time.

The operating principle is simple and effective. The CPS powers the electric motor of the pump on which it is mounted and, by means of a feedback system that uses a pressure transducer, it changes the supply frequency of the electric motor depending on the water demand in order to keep the output pressure of the pump constant,

the value of which is set on the device (set point). CPS ensures high levels of efficiency and greater flexibility in performance, ensuring a high energy saving and making the use of other control devices unnecessary. The range is equipped with multiple functions:

- Pressure measurement with the possibility to manage 2 independent levels adjustable by means of a time added internally or with an external connection;
- Start and stop;
- Internal clock;
- Calculation of the speed of the motor;
- Protection against dry running;
- Over and under current protection;
- Over and under VOLT. protection;



APPLICATIONS

- Pressurisation systems
- Water supply
- Industry
- Construction
- Washes

PROTECTION DEVICES

- Dry running
- Overcurrent
- Overtemperature of electronic devices
- Inhibition of the system via external contact

TECHNICAL SPECIFICATIONS

- Supply VOLT.: inverter 3x380 - 3x500 Vac ± 10% sinusoidal 50/60 Hz
- Inverter output VOLT.: 3x400 Vac ± 10 %
- Maximum rated power: 11 kW
- Input frequency: 50/60 Hz + 3%
- Output maximum rated power: 20 A
- Degree of protection IP55 [if installed on motors with a degree of protection IP55 or above]
- Ambient temperature from +0°C to +50°C
- Waveform: sinusoidal
- Input filter complying with EMC directive

- Pressure transmitter 0 - 5 Volt - 0 - 10 Bar 0 - 20 Bar depending on the model of pump
- Set-point 2
- Serial interface connectivity RS 485
- Optional contacts 3 [external set-point, alarm, system inhibition]

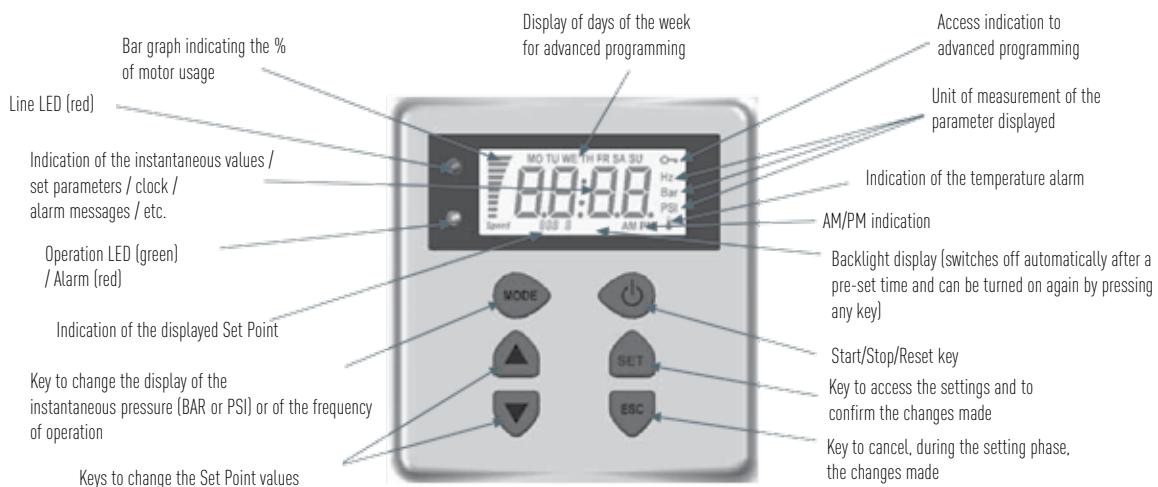
NOCCHI CPS3-10

THREE-PHASE ELECTRONIC FREQUENCY CONVERTER

VERSIONS AVAILABLE

VERTICAL
CPS3-10 MULTINOX VE+ 8
CPS3-10 PVM 5
CPS3-10 PVM 10
CPS3-10 PVM 15
CPS3-10 PVM 20
CPS3-10 PVM 32

CONTROL PANEL

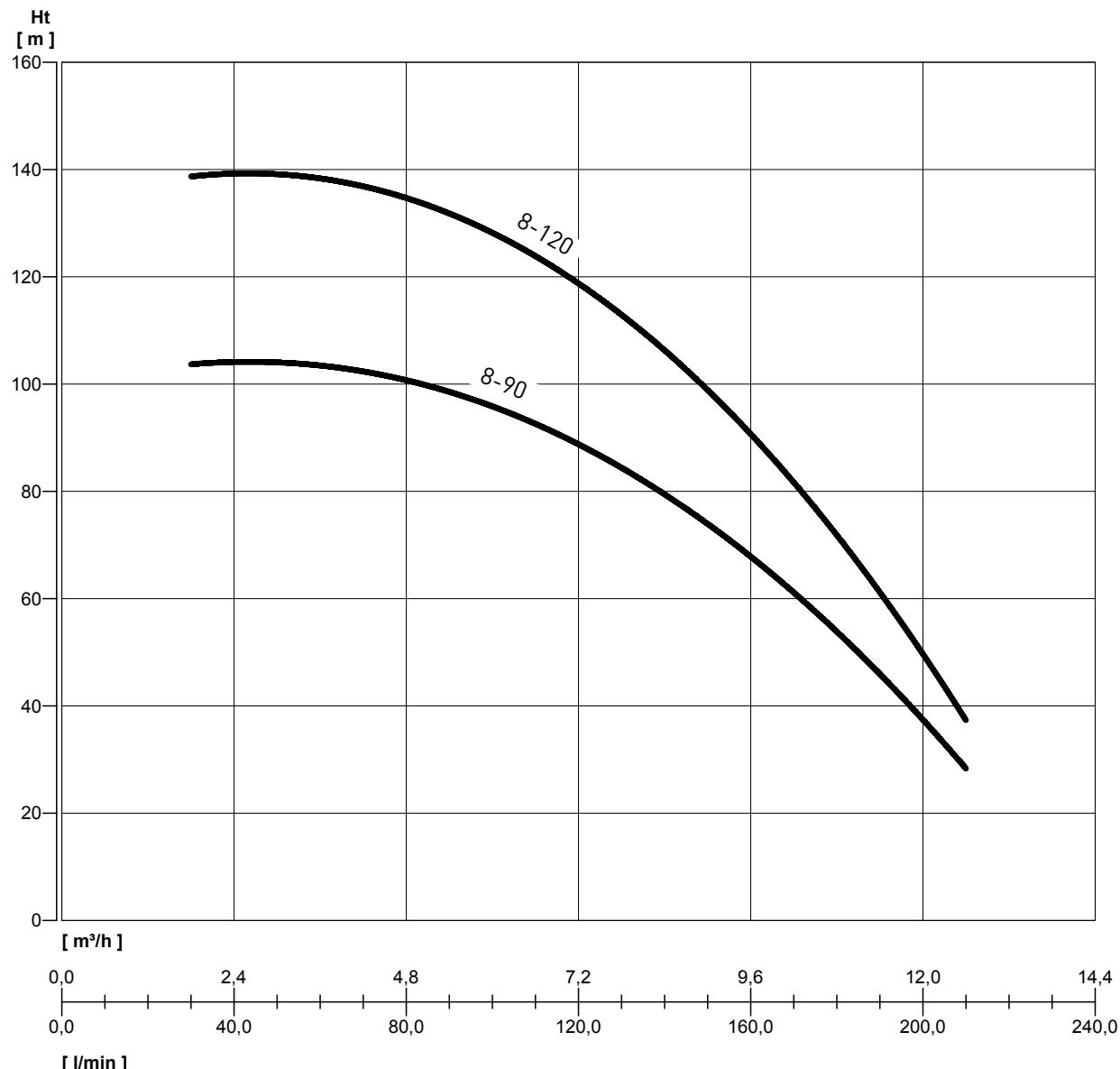


- Backlight display (switches off automatically after a reset time and can be turned on again by pressing any key)
- Bar graph indicating the percentage of motor usage
- Display of days of the week
- Indication of the instantaneous values / set parameters / clock / alarm messages / etc.
- Access indication to programming
- Unit of measurement of the parameter displayed

NOCCHI CPS3-10 MULTINOX VE +

THREE-PHASE ELECTRONIC FREQUENCY CONVERTER

HYDRAULIC PERFORMANCE



MEI ≥ 0.4 - Reference MEI ≥ 0.70 - The information on the reference efficiency is available at the address: www.europump.org/efficiencycharts
For the efficiency data see the PUMPS of the series MULTINOX-VE+

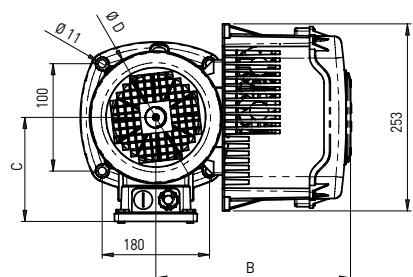
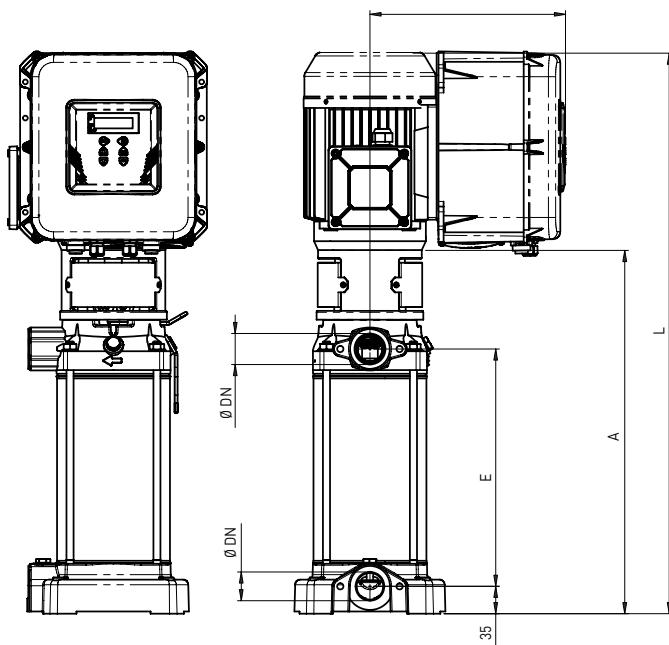
PERFORMANCE TABLE

MODEL	P2		VOLT. (V)	In (A)	Q	l/min	10	20	30	40	50	60	70	80	90	100	120	140	150	180	210	
	HP	kW					m^3/h	0.6	1.2	1.8	2.4	3	3.6	4.2	4.8	5.4	6	7.2	8.4	9	10.8	12.6
CPS3-10 MULTINOX VE+ 8-90	4	3	3 ~ 400	9.7						104	104	104	103	103	101	98	94	90	82	73	52	29
CPS3-10 MULTINOX VE+ 8-120	5.5	4	3 ~ 400	12.3						139	139	139	138	138	135	131	126	120	109	98	70	38

NOCCHI CPS3-10 MULTINOX VE+

THREE-PHASE ELECTRONIC FREQUENCY CONVERTER

OVERALL DIMENSIONS AND WEIGHTS



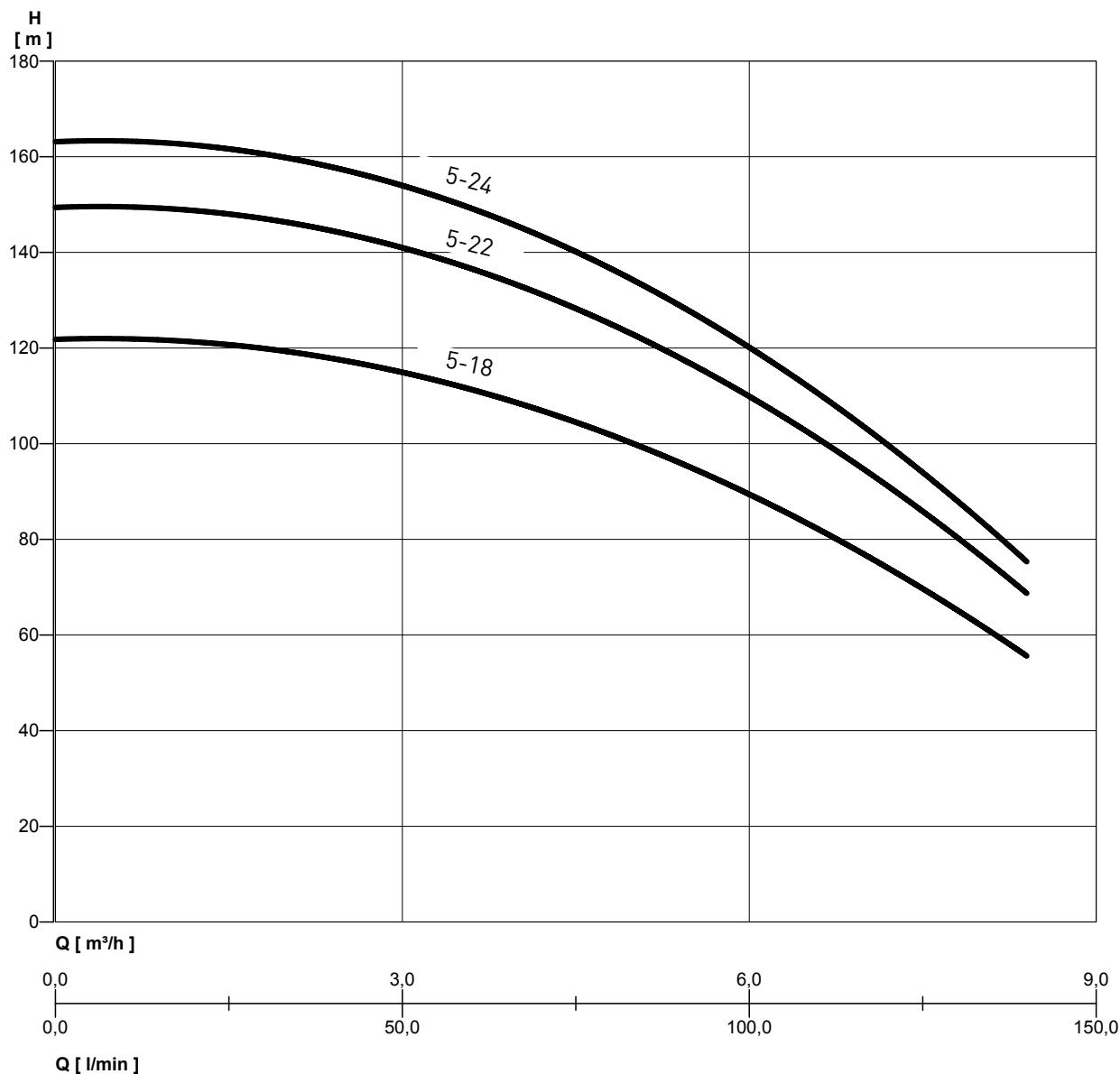
OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions mm.							WEIGHTS Kg
	A	B	C	D	E	L	DN	
CPS3-10 MULTINOX VE+ 8-90	463	265	140	177	292	730	1 1/4	42
CPS3-10 MULTINOX VE+ 8-120	544	275	145	198	373	855	1 1/4	45

NOCCHI CPS 3-10 PVM

THREE-PHASE ELECTRONIC FREQUENCY CONVERTER

HYDRAULIC PERFORMANCE



MEI > 0.4 - Reference MEI > 0.70 - The information on the reference efficiency is available at the address: www.europump.org/efficiencycharts
For the efficiency data see the PUMPS of the series PVM

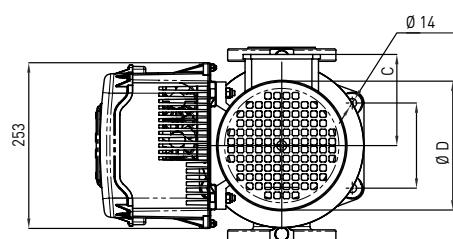
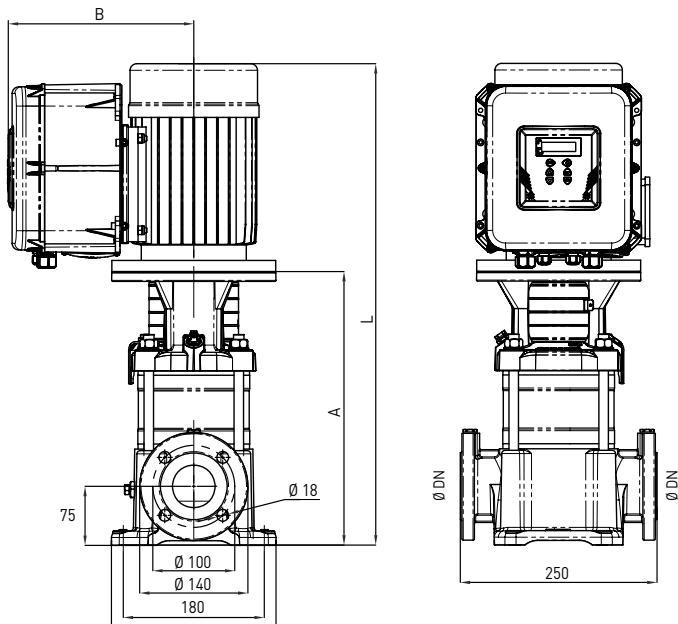
PERFORMANCE TABLE

MODEL	P2		VOLT. (V)	In (A)	Q	l/min	0	40	60	80	100	120	140
	HP	kW											
CPS3-10 PVM 5-18	4	3	3 ~ 400	6.1	m.c.a/m.c.w.	0	122	117.8	112	102.7	89.3	71.1	57.4
CPS3-10 PVM 5-22	5.5	4				2.4	149	144.5	137.4	126.1	110	87.6	70.9
CPS3-10 PVM 5-24	5.5	4				3.6	163	157.8	150.1	137.8	120	95.9	77.7

NOCCHI CPS 3-10 PVM

THREE-PHASE ELECTRONIC FREQUENCY CONVERTER

OVERALL DIMENSIONS AND WEIGHTS



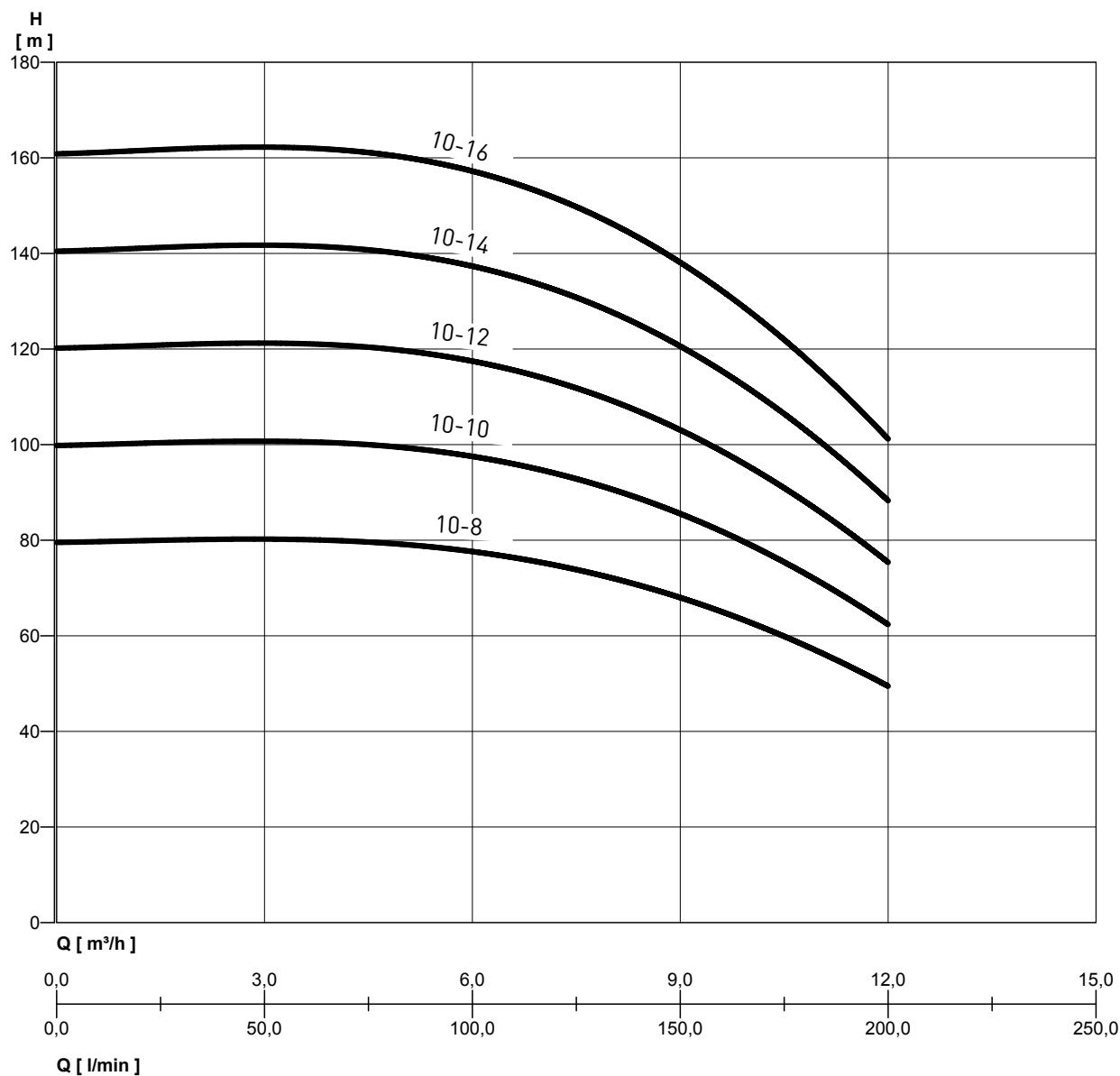
OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions mm.						WEIGHTS Kg
	A	B	C	D	L	DN	
CPS3-10 PVM 5-18	737	311	125	197	1053	DN 25/DN 32	59
CPS3-10 PVM 5-22	845	311	125	220	1071	DN 25/DN 32	65
CPS3-10 PVM 5-24	899	250	125	220	1225	DN 25/DN 32	66

NOCCHI CPS 3-10 PVM

THREE-PHASE ELECTRONIC FREQUENCY CONVERTER

HYDRAULIC PERFORMANCE



MEI ≥ 0.4 - Reference MEI ≥ 0.70 - The information on the reference efficiency is available at the address: www.europump.org/efficiencycharts
For the efficiency data see the PUMPS of the series PVM

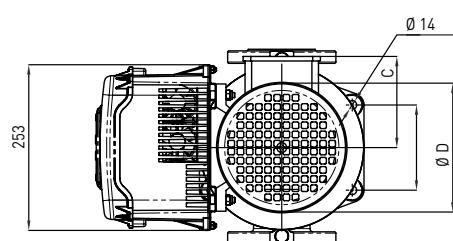
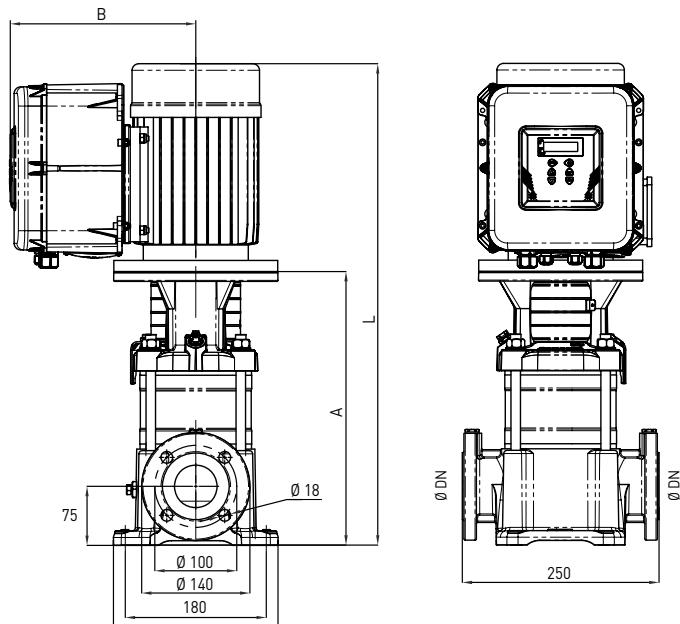
PERFORMANCE TABLE

MODEL	P2		VOLT. (V)	In (A)	Q	l/min										
	HP	kW					0	25	50	75	100	125	150	175	200	
						m³/h	0	1.5	3	4.5	6	7.5	9	10.5	12	
CPS3-10 PVM 10-8	4	3	3 ~ 400	6.4			79.6	79.8	80.3	79.9	77.4	73.6	68.4	59.7	49.5	
CPS3-10 PVM 10-10	5.5	4	3 ~ 400	8			99.9	100.1	101	100.3	97.2	92.6	86	75.2	62.4	
CPS3-10 PVM 10-12	5.5	4	3 ~ 400	9.6			120	120.5	121	120.8	117	111.5	104	90.7	75.4	
CPS3-10 PVM 10-14	7.5	5.5	3 ~ 400	11			141	140.8	142	141.2	137	130.4	121.2	106.2	88.3	
CPS3-10 PVM 10-16	7.5	5.5	3 ~ 400	13			161	161.2	163	161.7	157	149.3	139	121.7	101	

NOCCHI CPS 3-10 PVM

THREE-PHASE ELECTRONIC FREQUENCY CONVERTER

OVERALL DIMENSIONS AND WEIGHTS



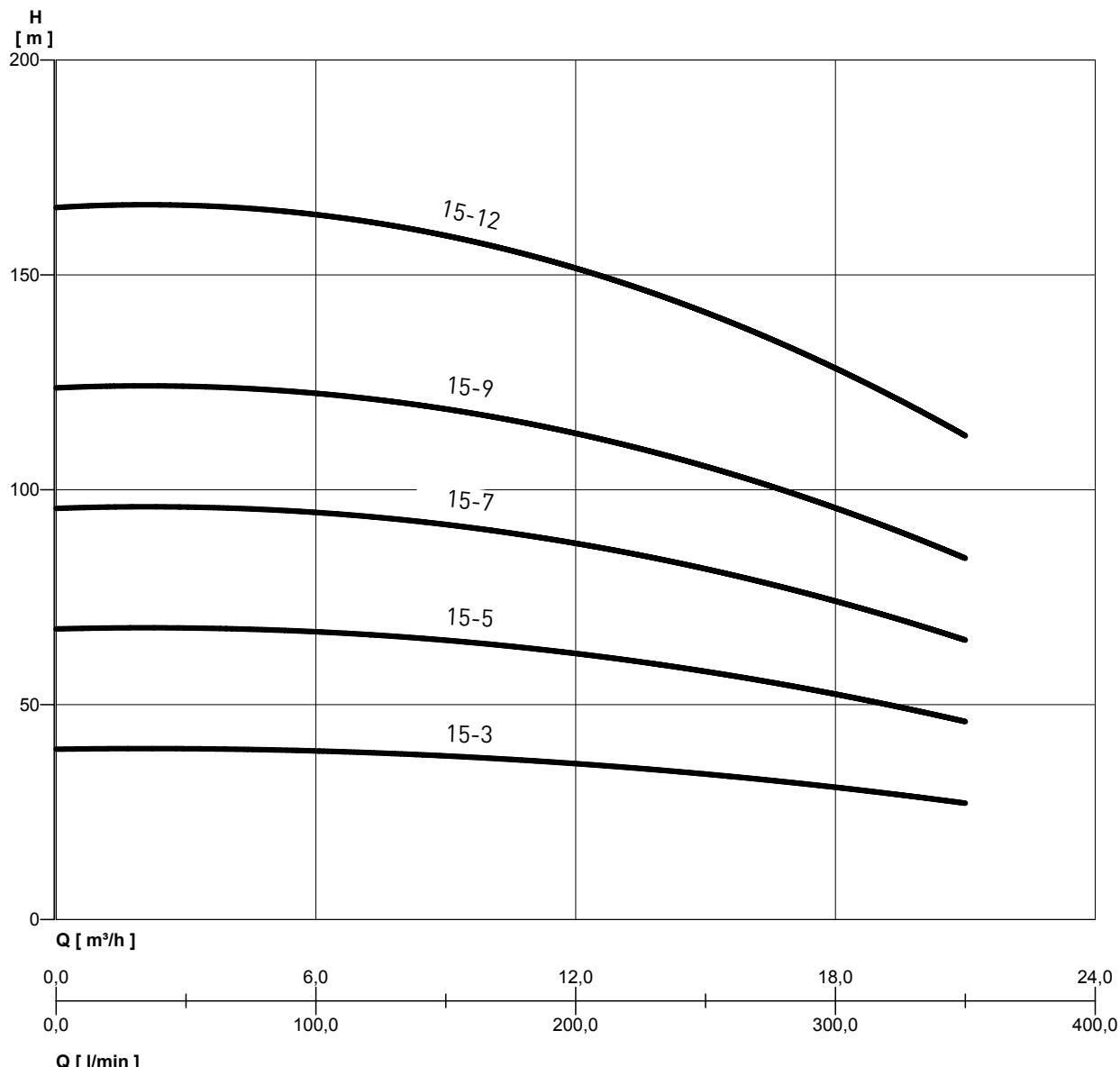
OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions mm.						WEIGHTS Kg
	A	B	C	D	L	DN	
CPS3-10 PVM 10-8	548	278	140	197	864	DN 40	70
CPS3-10 PVM 10-10	608	278	140	220	934	DN 40	75
CPS3-10 PVM 10-12	668	278	140	220	994	DN 40	77
CPS3-10 PVM 10-14	760	278	140	235	1122	DN 40	109
CPS3-10 PVM 10-16	820	278	140	235	1182	DN 40	111

NOCCHI CPS 3-10 PVM

THREE-PHASE ELECTRONIC FREQUENCY CONVERTER

HYDRAULIC PERFORMANCE



MEI ≥ 0.4 - Reference MEI ≥ 0.70 - The information on the reference efficiency is available at the address: www.europump.org/efficiencycharts
For the efficiency data see the PUMPS of the series PVM

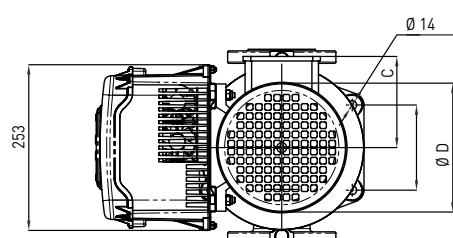
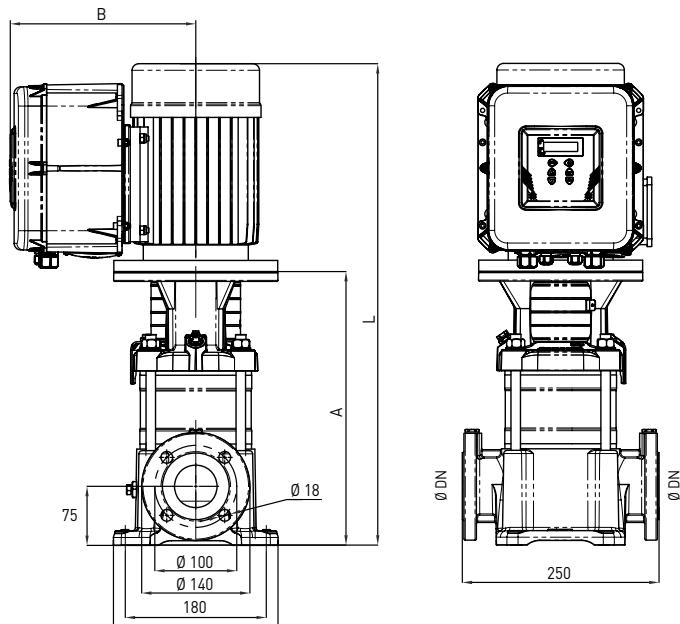
PERFORMANCE TABLE

MODEL	P2		VOLT. (V)	In (A)	Q	l/min	0	50	100	150	200	250	300	350
	HP	kW					m^3/h	0	3	6	9	12	15	18
CPS3-10 PVM 15-3	4	3	3 ~ 400	5.1	m.c.a./m.c.w.	39.8	39.6	39.2	37.8	36.3	34.1	31	26.8	
CPS3-10 PVM 15-5	5.5	4		8.5		68	67.4	66.9	64.7	62	58.1	52.7	45.7	
CPS3-10 PVM 15-7	7.5	5.5		12		96.2	95.3	94.7	91.6	87.7	82	74.4	64.6	
CPS3-10 PVM 15-9	10	7.5		15		124	123.2	122.4	118	113	106	96	83.6	
CPS3-10 PVM 15-12	15	11		20		167	165	163.9	159	152	142	129	112	

NOCCHI CPS 3-10 PVM

THREE-PHASE ELECTRONIC FREQUENCY CONVERTER

OVERALL DIMENSIONS AND WEIGHTS



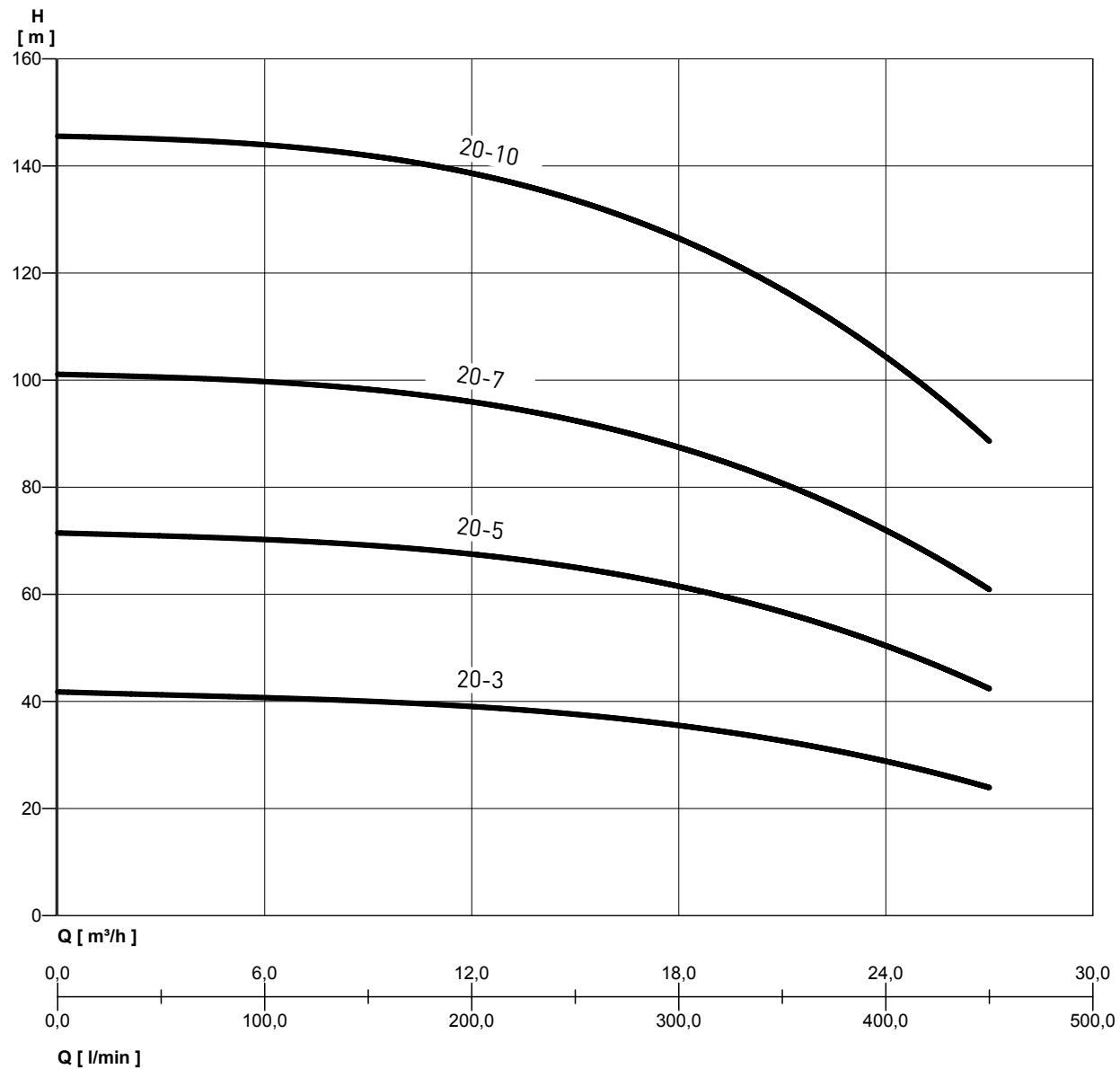
OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions mm.						WEIGHTS Kg
	A	B	C	D	L	DN	
CPS3-10 PVM 15-3	465	315	150	197	781	DN 50	70
CPS3-10 PVM 15-5	555	315	150	220	881	DN 50	76
CPS3-10 PVM 15-7	677	315	150	235	1039	DN 50	109
CPS3-10 PVM 15-9	767	315	150	235	1165	DN 50	118
CPS3-10 PVM 15-12	979	315	150	318	1484	DN 50	158

NOCCHI CPS 3-10 PVM

THREE-PHASE ELECTRONIC FREQUENCY CONVERTER

HYDRAULIC PERFORMANCE



MEI ≥ 0.4 - Reference MEI ≥ 0.70 - The information on the reference efficiency is available at the address: www.europump.org/efficiencycharts
For the efficiency data see the PUMPS of the series PVM

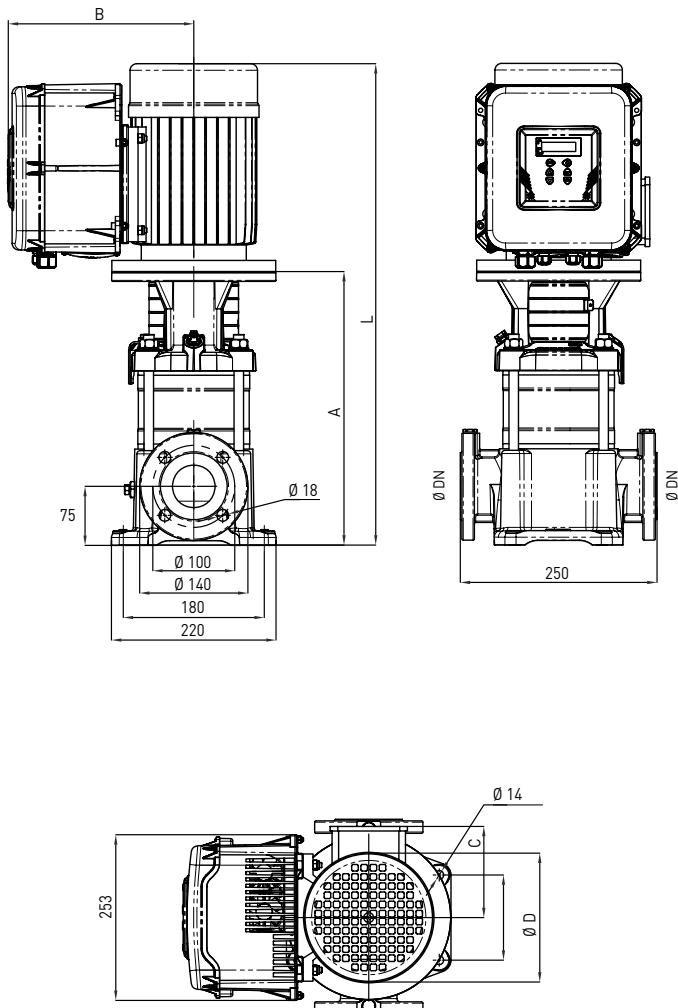
PERFORMANCE TABLE

MODEL	P2		VOLT. (V)	In (A)	Q	l/min	m^3/h	0	50	100	150	200	250	300	350	400	450
	HP	kW						0	3	6	9	12	15	18	21	24	27
CPS3-10 PVM 20-3	5.5	4	3 ~ 400	8.5	m.c.a/m.c.w.	41.8	41.2	40.8	39.9	39.1	37.5	35.6	33	29.3	24.1		
CPS3-10 PVM 20-5	7.5	5.5	3 ~ 400	11.9		71.6	70.7	70.3	69	67.7	64.9	61.7	57.2	52.4	42.8		
CPS3-10 PVM 20-7	10	7.5	3 ~ 400	15.3		101	100.3	99.7	98	96.3	92.4	87.7	81.3	74.6	61.5		
CPS3-10 PVM 20-10	15	11	3 ~ 400	20.4		146	144.6	144	141.6	139	133.6	127	117.6	106	89.5		

NOCCHI CPS 3-10 PVM

THREE-PHASE ELECTRONIC FREQUENCY CONVERTER

OVERALL DIMENSIONS AND WEIGHTS



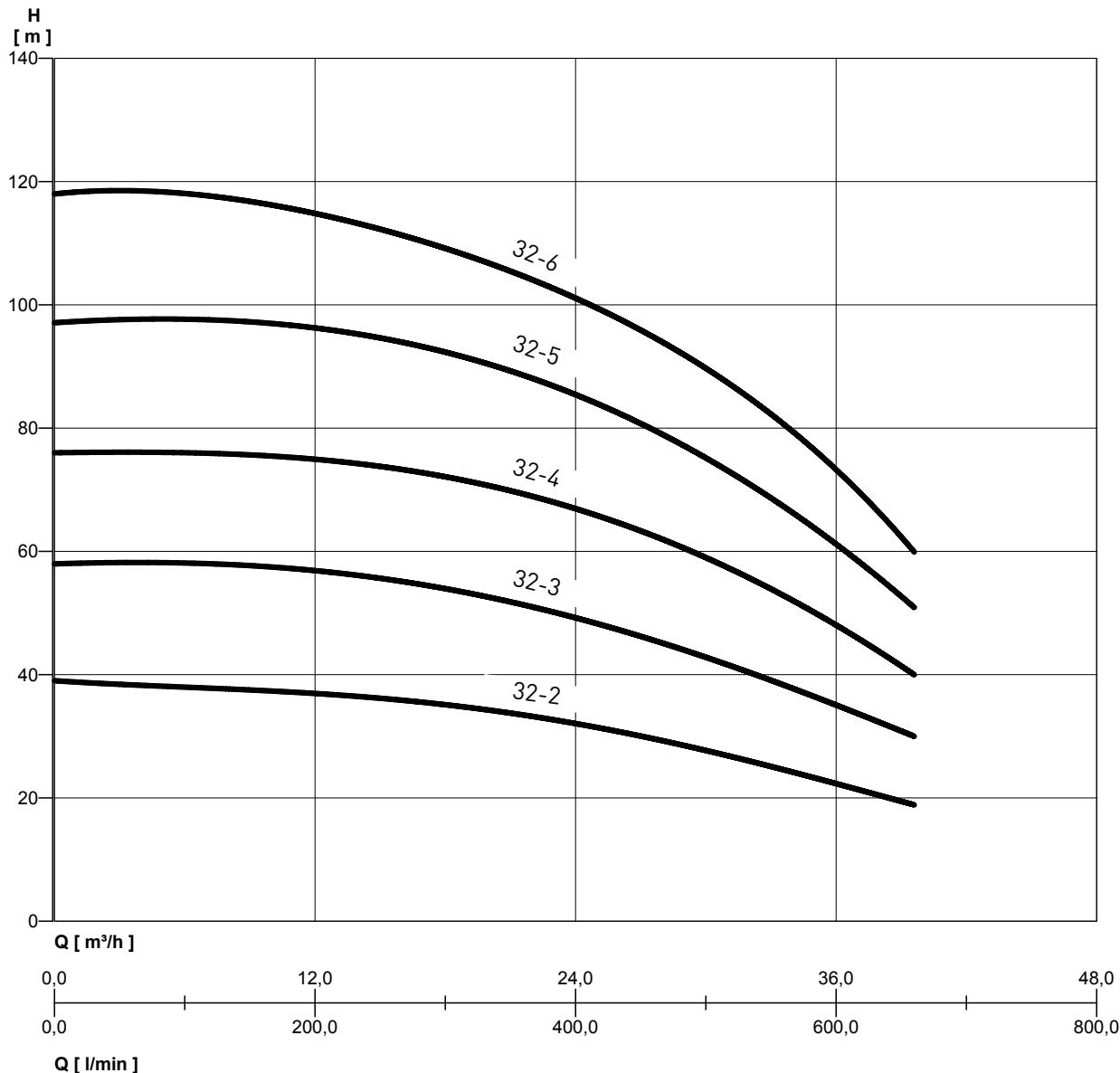
OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions mm.						WEIGHTS Kg
	A	B	C	D	L	DN	
CPS3-10 PVM 20-3	465	315	150	220	795	DN 50	73
CPS3-10 PVM 20-5	587	315	150	235	955	DN 50	106
CPS3-10 PVM 20-7	677	315	150	235	1083	DN 50	115
CPS3-10 PVM 20-10	889	315	150	318	1405	DN 50	155

NOCCHI CPS 3-10 PVM

THREE-PHASE ELECTRONIC FREQUENCY CONVERTER

HYDRAULIC PERFORMANCE



MEI > 0.4 - Reference MEI > 0.70 - The information on the reference efficiency is available at the address: www.europump.org/efficiencycharts
For the efficiency data see the PUMPS of the series PVM

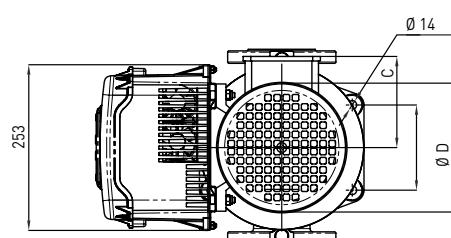
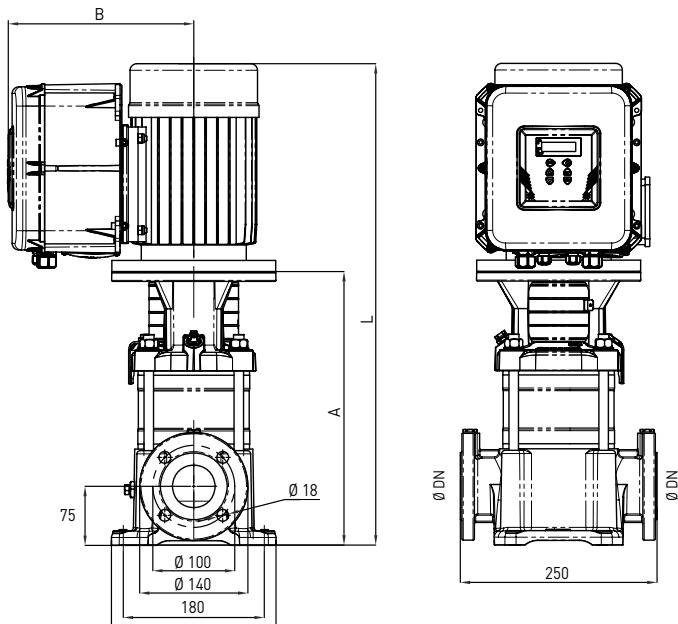
PERFORMANCE TABLE

MODEL	P2		VOLT. (V)	In (A)	Q	l/min	0	100	200	300	400	500	600	660
	HP	kW					m^3/h	0	6	12	18	24	30	36
CPS3-10 PVM 32-2	5.5	4	3 ~ 400	7.1	m.c.a./m.c.w.	39.2	38	37.7	36.2	33.8	29.8	24.2	19	
CPS3-10 PVM 32-3	7.5	5.5		10.7		58.7	58	57.4	55	51.5	45.5	37.2	30	
CPS3-10 PVM 32-4	10	7.5		14.3		78.2	76	77.1	73.9	69.2	61.2	50.3	40	
CPS3-10 PVM 32-5	15	11		17.8		97.8	98	96.8	92.7	86.8	76.9	63.3	51	
CPS3-10 PVM 32-6	15	11		21.4		117	118	117	112	105	92.6	76.3	60	

NOCCHI CPS 3-10 PVM

THREE-PHASE ELECTRONIC FREQUENCY CONVERTER

OVERALL DIMENSIONS AND WEIGHTS



OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions mm.						WEIGHTS Kg
	A	B	C	D	L	DN	
CPS3-10 PVM 32-2	574	315	160	220	900	DN 65	93
CPS3-10 PVM 32-3	644	315	160	235	1006	DN 65	115
CPS3-10 PVM 32-4	714	315	160	235	1112	DN 65	125
CPS3-10 PVM 32-5	894	315	160	318	1399	DN 65	168
CPS3-10 PVM 32-6	964	315	160	318	1469	DN 65	171



SECTION 2

SURFACE PUMPS

2

	JET CAST IRON SELF-PRIMING CENTRIFUGAL PUMPS	PAGE 47		CB TWO-STAGE HORIZONTAL CENTRIFUGAL PUMPS	PAGE 86
	JETINOX STAINLESS STEEL SELF-PRIMING CENTRIFUGAL PUMPS	PAGE 51		SSCX SINGLE STAGE CENTRIFUGAL PUMPS MADE OF STAINLESS STEEL AISI 304	PAGE 88
	MULTI EVO - A SELF-PRIMING MULTISTAGE CENTRIFUGAL PUMPS	PAGE 54		MULTINOX-VE+ VERTICAL MULTISTAGE CENTRIFUGAL PUMPS	PAGE 91
	MULTI EVO MULTISTAGE CENTRIFUGAL PUMPS	PAGE 62		PVM VERTICAL MULTISTAGE CENTRIFUGAL PUMPS	PAGE 99
	DHR HORIZONTAL MULTISTAGE CENTRIFUGAL PUMPS	PAGE 70		PVMI VERTICAL MULTISTAGE CENTRIFUGAL PUMPS	PAGE 99
	DHI AISI 316 HORIZONTAL MULTISTAGE CENTRIFUGAL PUMPS	PAGE 75		PVMX VERTICAL MULTISTAGE CENTRIFUGAL PUMPS	PAGE 99
	MULTI EVO-SP MULTISTAGE CENTRIFUGAL PUMPS - SPECIAL	PAGE 78		NRM MONOBLOC NORMALISED CENTRIFUGAL PUMPS - 2 AND 4 POLES	PAGE 132
	SWIMMEY SELF-PRIMING PUMPS FOR POOLS WITH PRE-FILTER	PAGE 82		NRB JOINT BASE NORMALISED CENTRIFUGAL PUMPS - 2 AND 4 POLES	PAGE 149
	CM SINGLE STAGE HORIZONTAL CENTRIFUGAL PUMPS	PAGE 84		PGA-DELTA OIL PUMPS FOR DIESEL TRANSFER	PAGE 164

ACCESSORIES

PAGE 397

NOCCHI JET

CAST IRON SELF-PRIMING PUMPS

STURDY, SELF-PRIMING, LARGE INTAKE CAPACITY

The self-priming pumps from the JET series combine the advantages of centrifugal pumps with the practicality of self-priming pumps. The Venturi tube system, with which the pumps are equipped, ensures excellent hydraulic performance and a considerable intake capacity, maintaining priming even in the presence of air bubbles or gases dissolved in the water.

MOTOR

- Closed, ventilated from outside.
- Degree of protection IP 44.
- Insulation class F.
- Single-phase power supply with capacitor permanently on and thermal protection built into the motor casing.
- Three-phase power supply with external protection provided by the user.
- Speed of rotation 2850 rpm.
- Continuous service.

APPLICATIONS

- Lifting and distribution of water in domestic systems in continuous or intermittent operation.
- Pressurisation systems.
- Washing, garden irrigation, supply to fountains, transfers.
- Lifting from wells or tanks.

USAGE DATA

- Type of liquid: clean water without suspended solids or abrasive material.
- Maximum temperature of the liquid 50°C.
- Maximum intake height recommended 8 m with foot valve.
- Maximum operating pressure: 6 bar. (10 bar for mod. 100 - 160)



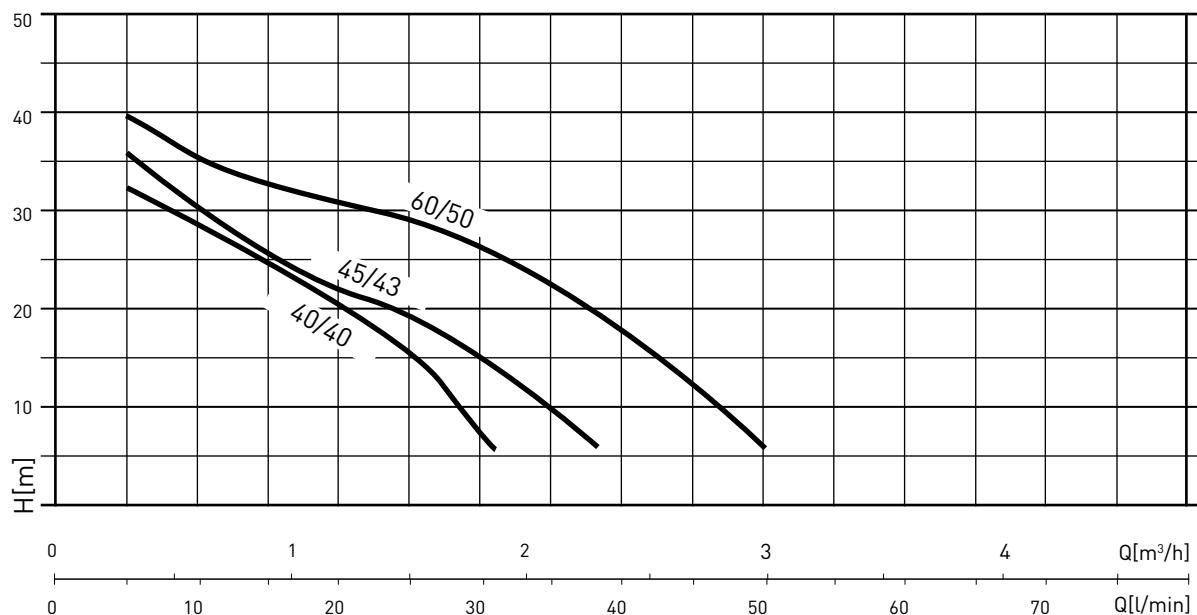
TABLE OF MATERIALS

Component	Material	
	NEW JET	JET
1 Pump body	Cast iron EN GJL 200	Cast iron EN GJL 200
2 Motor casing	Aluminium	Cast iron EN GJL 200
3 Impellers	Technopolymer with stainless steel shim ring X5 CrNi 1810 (AISI 304)	Technopolymer models 600-800-1000
		Moulded brass alloy models 100-160-800-1000
4 Diffuser-Venturi tube-nozzle	Monobloc group Technopolymer	Technopolymer
5 Motor shaft	Stainless steel X 12 CrNiS 1809 (AISI 416)	Stainless steel X 12 CrNiS 1809(AISI 416)
6 Mechanical seal	Graphite	Graphite
7 Counterface	Ceramic	Ceramic
8 Gaskets	NBR 70 shore	NBR 70 shore

NOCCHI JET

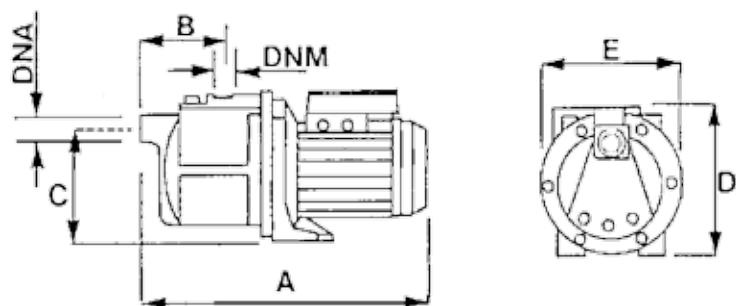
CAST IRON SELF-PRIMING PUMPS

HYDRAULIC PERFORMANCE



PERFORMANCE TABLE

MODEL	Motor power (P2)		Motor power (P1)		VOLT. (V)	I _n (A)	μF	Q l/min	0 m ³ /h	10 m ³ /h	20 m ³ /h	30 m ³ /h	40 m ³ /h	50 m ³ /h
	HP	kW	HP	kW										
NEWJET 40/40 M	0.5	0.37	0.8	0.6	1 ~ 230	3	6	m.c.a./m.c.w.	41	28	21	8		
NEWJET 45/43 M	0.5	0.37	0.8	0.6	1 ~ 230	3	8		43	30	23	16	1	
NEWJET 60/50 M	0.75	0.55	1.1	0.8	1 ~ 230	4	12.5		43	36	31	26	18	6



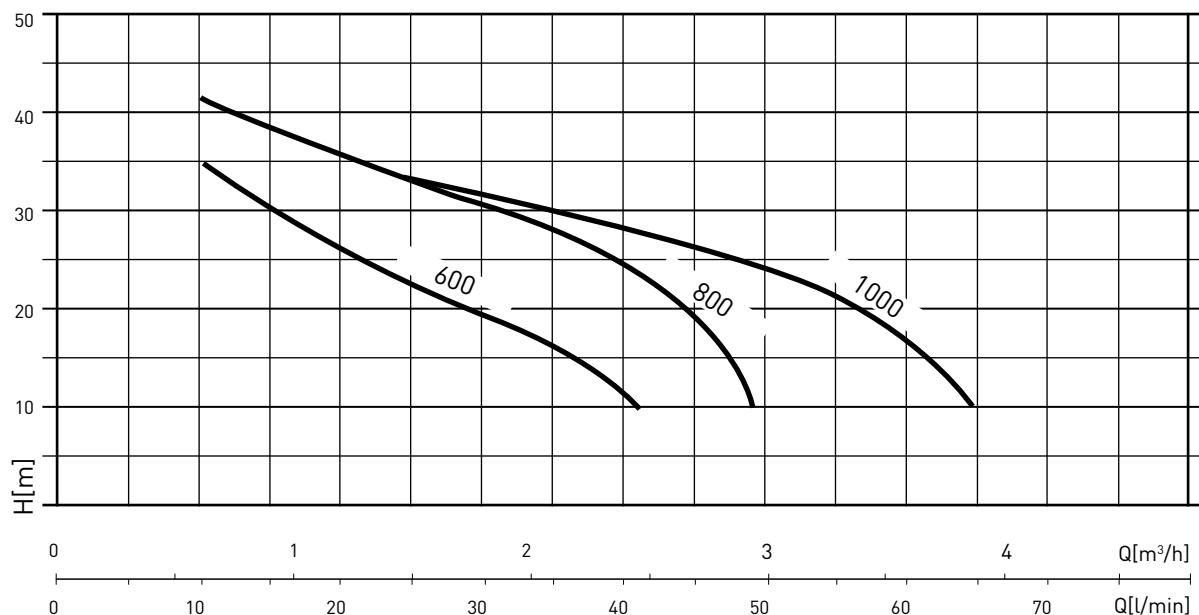
OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions mm.							WEIGHTS (Kg)
	A	B	C	D	E	DNA	DNM	
NEWJET 40/40	351	93	130	180	174	1"	1"	8.2
NEWJET 45/43	351	93	130	180	174	1"	1"	8.2
NEWJET 60/50	351	93	130	180	174	1"	1"	9

NOCCHI JET

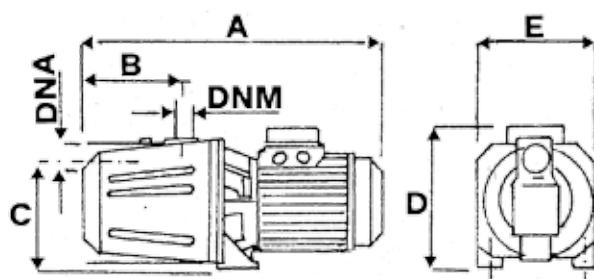
CAST IRON SELF-PRIMING PUMPS

HYDRAULIC PERFORMANCE



PERFORMANCE TABLE

MODEL	Motor power (P2)		Motor power (P1)		VOLT. (V)	In (A)	μF	Q	l/min	5	20	30	40	50	60	70
	HP	kW	HP	kW						0.3	1.2	1.8	2.4	3	3.6	4.2
JET 600 M JET 600 T	0.8	0.6	0.9	0.7	1 ~ 230 3 ~ 230/400	3.2 1.9-1.1	8	m.c.a./m.c.w.	38	25	20	11				
JET 800 M JET 800 T	1	0.75	1.3	1	1 ~ 230 3 ~ 230/400	4.5 3.6-2.1	12.5		44	36	31	27	7			
JET 1000 M JET 1000 T	1.36	1	1.5	1.1	1 ~ 230 3 ~ 230/400	5 3.8-2.2	16		45	36	32	28	25	15	3	



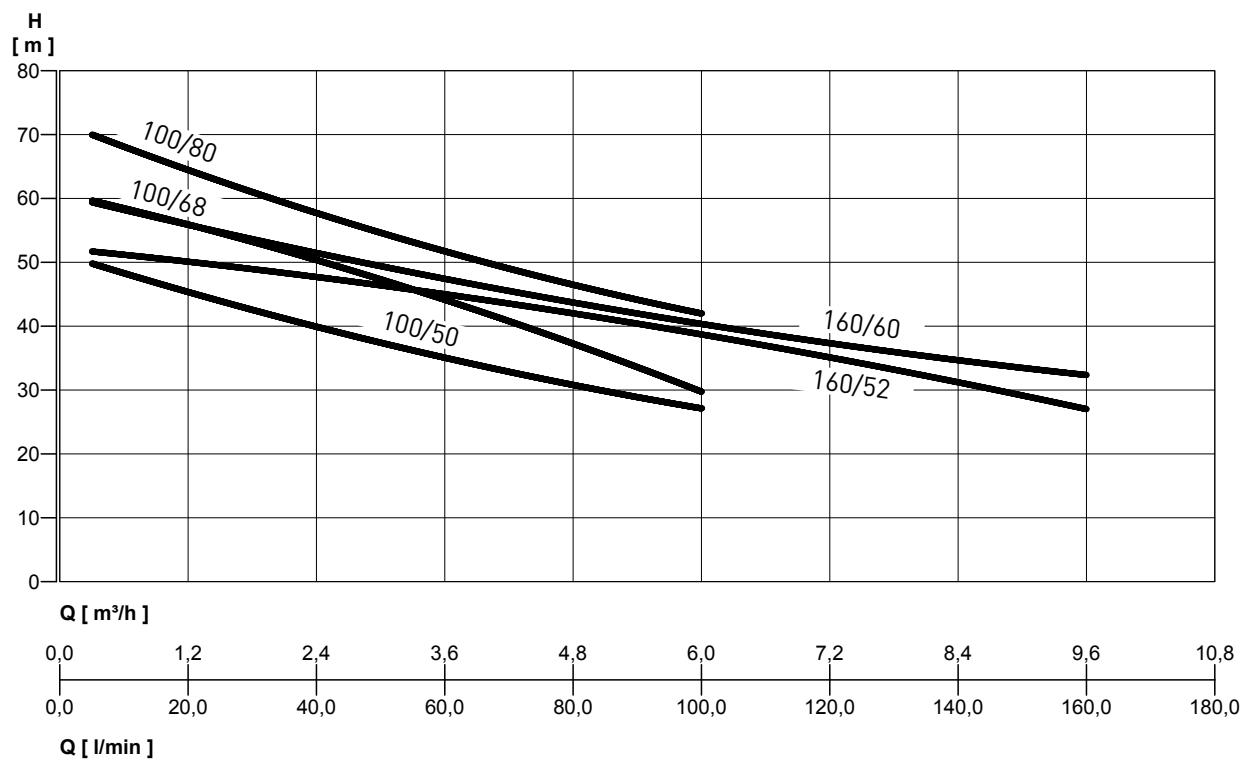
OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions mm.							WEIGHTS (Kg)
	A	B	C	D	E	DNA	DNM	
JET 600	400	147	160	190	182	1"	1"	13.7
JET 800	400	147	160	190	182	1"	1"	14.2
JET 1000	425	147	160	190	182	1"	1"	16.8

NOCCHI JET

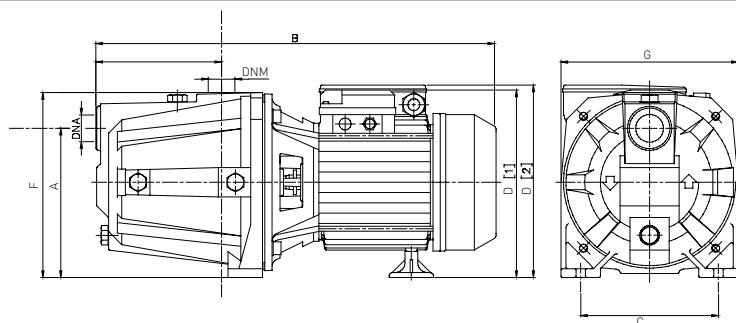
CAST IRON SELF-PRIMING PUMPS

HYDRAULIC PERFORMANCE



PERFORMANCE TABLE

MODEL	Motor power (P2)		Motor power (P1)		VOLT. (V)	In (A)	μ F	Q	l/min	5	20	40	60	80	100	130	160
	HP	kW	HP	kW						0.3	1.2	2.4	3.6	4.8	6	7.8	9.6
JET 100/50 M	1.5	1.1	2.2	1.7	1 ~ 230	8.1	35			50	45	40	35	31	27		
JET 100/50 T			2.4	1.8	3 ~ 230/400	5.5-3.2											
JET 100/68 M	2	1.5	2.8	2.1	1 ~ 230	9.8	40			60	55.5	49	47.5	34.5	30.5		
JET 100/68 T			2.4	2.8	3 ~ 230/400	5.5-3.2											
JET 100/80 T	3	2.2	3.5	2.6	3 ~ 230/400	8.1-4.7				70	64.3	58	51.5	46.5	42		
JET 160/52 M	2	1.5	3.1	2.3	1 ~ 230	10.5	40			52	49.5	48	45	42	38.7	33.2	27
JET 160/52 T			2.8	2.1	3 ~ 230/400	6.9-4.0											
JET 160/60 T	3	2.2	3.5	2.6	3 ~ 230/400	8.1-4.7				59	55.6	53	47	43.4	40	36	32.5



OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions mm.									WEIGHTS (Kg)
	A	B	C	D	E	F	G	DNA	DNM	
JET 100/50	170	508	180	247	220	223	157	1" 1/2	1"	25.5
JET 100/68 - 160/52	170	508	180	247	220	223	157	1" 1/2	1"	26.6
JET 100/80 - 160/60	170	508	180		220	223	157	1" 1/2	1"	28.1

NOCCHI JETINOX

STAINLESS STEEL SELF-PRIMING PUMPS

SELF-PRIMING, HIGH INTAKE CAPACITY

The self-priming pumps from the JETINOX series combine the advantages of centrifugal pumps with the practicality and quality of self-priming pumps. The Venturi tube system, with which the pumps are equipped, ensures excellent hydraulic performance and a considerable intake capacity, maintaining priming even in the presence of air bubbles or gases dissolved in the water.

MOTOR

- Closed, ventilated from outside.
- Degree of protection IP 44.
- Insulation class F.
- Single-phase power supply with capacitor always on.
- Thermal protection built into the motor casing.
- Speed of rotation 2850 rpm.
- Continuous service.

APPLICATIONS

- Lifting and distribution of water in domestic systems in continuous or intermittent operation.
- Pressurisation systems.
- Washing, garden irrigation, supply to fountains, transfers.
- Lifting from wells or tanks.

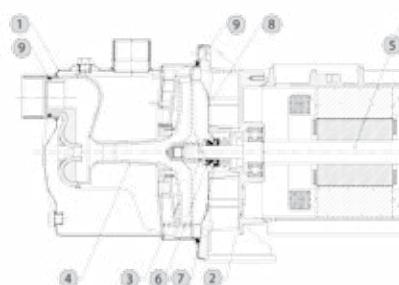
USAGE DATA

- Type of liquid: clean water without suspended solids or abrasive material.
- Maximum temperature of the liquid 50°C.
- Maximum intake height recommended 8 m with foot valve.
- Maximum operating pressure 6 bar.



TABLE OF MATERIALS

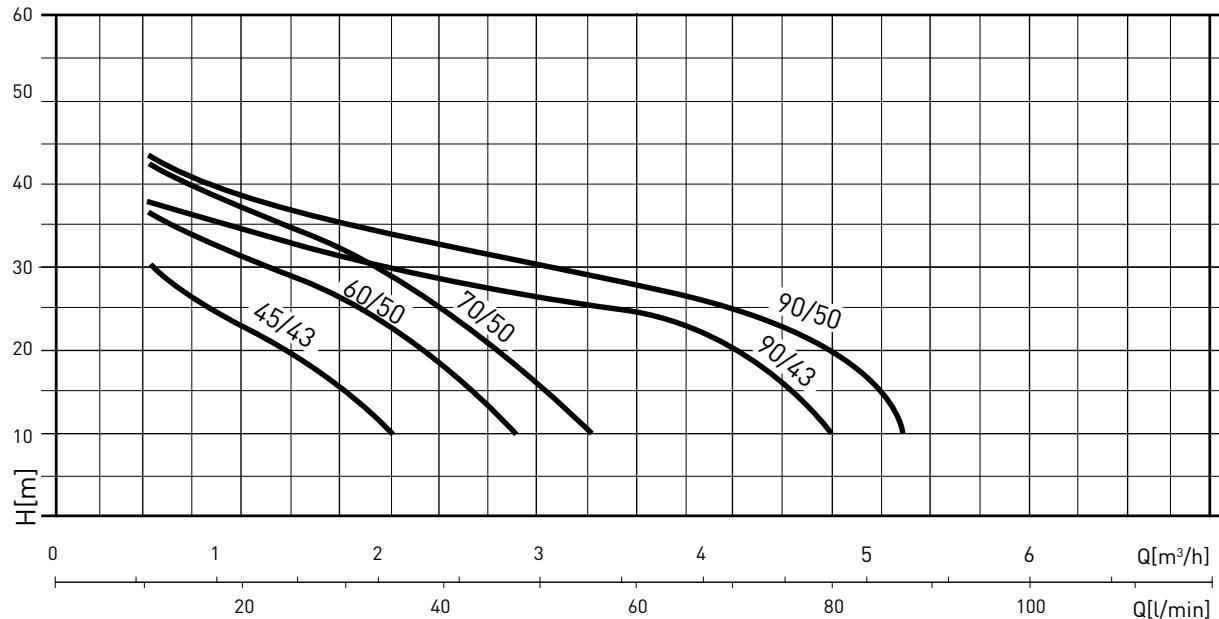
Component		Material
1	Pump body	Stainless steel X5 CrNi 1810 (AISI 304)
2	Motor casing	Die-cast aluminium
3	Impeller	Technopolymer with stainless steel shim ring
4	Diffuser monobloc group Venturi tube-nozzle	Technopolymer
5	Shaft	Stainless steel X 12 CrNiS 1809 (AISI 416)
6	Mechanical seal	Graphite
7	Counterface	Ceramic
8	Seal holder plate	Technopolymer (series 45-60-70) Stainless steel X5 CrNi 1810 (AISI 304) series 90
9	Gaskets	NBR 70 Shore



NOCCHI JETINOX

STAINLESS STEEL SELF-PRIMING PUMPS

HYDRAULIC PERFORMANCE



PERFORMANCE TABLE

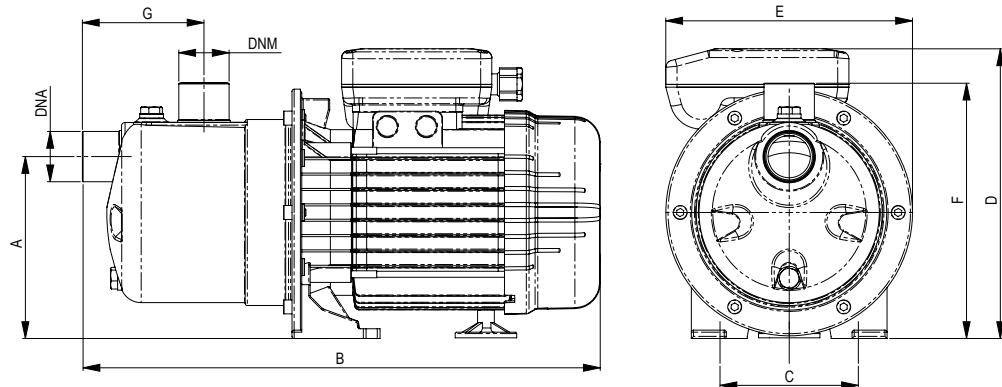
MODEL	Motor power (P2)		Motor power (P1)		VOLT. (V)	In (A)	μ F	Q	l/min	m^3/h	0	10	20	30	40	50	60	70	80
	HP	kW	HP	kW							0	0.6	1.2	1.8	2.4	3	3.6	4.2	4.8
JETINOX 45/43 M	0.5	0.37	0.8	0.6	1 ~ 230	3	8	m.c.a./m.c.w.	43	30	23	16	1						
JETINOX 60/50 M	0.75	0.55	1.1	0.8		4	12.5		46	36	31	26	18	6					
JETINOX 70/50 M	0.95	0.7	1.36	1.0		4.5	16		48	42.5	37.5	32	25	16.5	7				
JETINOX 90/43 M	1.0	0.75	1.8	1.3		6.5	20		43	38	34	32	29	27	25	21	10		
JETINOX 90/50 M	1.2	0.9	2	1.5		7	25		50	42	39	37	33	30	27	25	20		
JETINOX 60/50 C*	0.75	0.55	1.10	0.8		4	12.5		46	36	31	26	18	6					
JETINOX 70/50 C*	0.95	0.7	1.36	1.0		4.5	16		48	42.5	37.5	32	25	16.5	7				
JETINOX 90/43 C*	1.0	0.75	1.80	1.3		6.5	20		43	38	34	32	29	27	25	21	10		
JETINOX 90/50 C*	1.2	0.9	2	1.5		7	25		50	42	39	37	33	30	27	25	20		

* Version complete with handle, cable and schuko plug

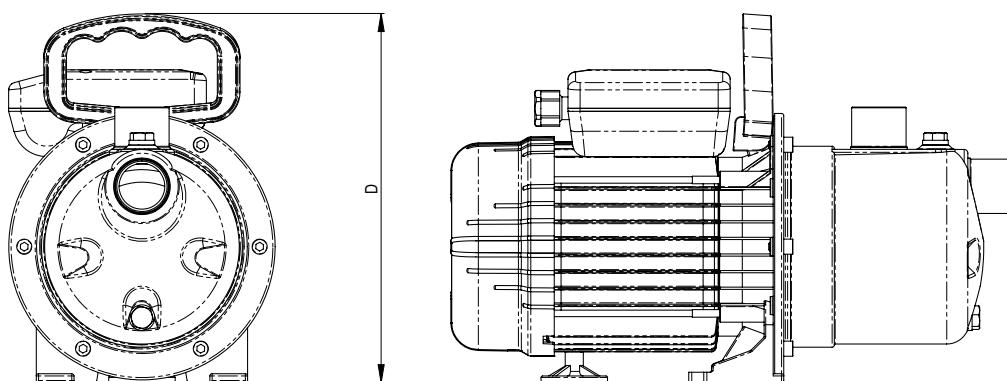
NOCCHI JETINOX

STAINLESS STEEL SELF-PRIMING PUMPS

DIMENSIONAL DRAWING



VERSION C



OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions mm.									WEIGHTS (Kg)
	A	B	C	D	E	F	G	DNA	DNM	
JETINOX 45/43	130	352	100	199	177	185	87	1" F	1" F	4.7
JETINOX 60/50	130	370	100	207	177	185	87	1" F	1" F	8.2
JETINOX 60/50 C*	130	370	100	245	177	185	87	1" F	1" F	8.2
JETINOX 70/50	143	351	100	207	177	200	76	1" F	1" F	9.5
JETINOX 70/50 C*	143	351	100	245	177	200	76	1" F	1" F	9.5
JETINOX 90/43	158	395	141	207	205	214	98	1" 1/4 M	1" F	11
JETINOX 90/43 C*	158	395	141	275	205	214	98	1" 1/4 M	1" F	11
JETINOX 90/50	158	425	141	230	218	214	98	1" 1/4 M	1" F	13
JETINOX 90/50 C*	158	425	141	275	218	214	98	1" 1/4 M	1" F	13

* Version complete with handle, cable and schuko plug

NOCCHI Multi EVO-A

SELF-PRIMING MULTISTAGE CENTRIFUGAL PUMPS

NEW 2016
PENTAIR



Multi EVO-A is a self-priming multi-stage centrifugal horizontal pump with an inlet with axial thread and an outlet with radial thread. The innovative, high efficiency hydraulic system is connected to a motor of the latest generation with a mechanical seal. All models are certified for use with drinking water (ACS and DM174).

ADVANTAGES

The Multi EVO series PUMPS feature the following advantages:

- High reliability - thanks to the durable and innovative design
- Silent - more comfort for the user thanks to its silent operation
- Compact shape
- Many possible uses for the residential market
- Excellent priming ability



SPECIFICATIONS:

PUMP

- Hydraulic performance according to ISO 9906:2012 - Grade 3B
- Type of liquid: clean water without suspended solids or abrasive material
- Maximum temperature of the liquid 50°C
- Maximum operating pressure 8 bar

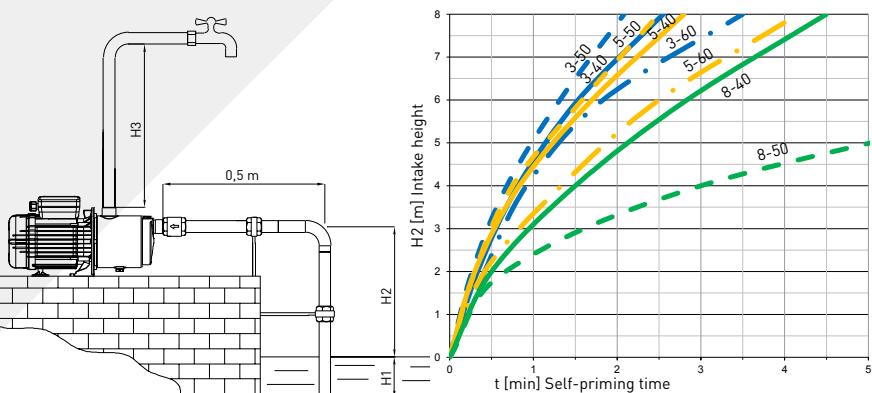
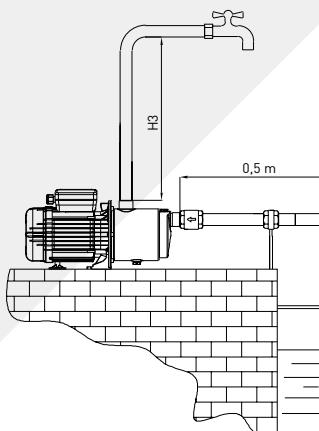
MOTOR

- Closed, air ventilated (TEFC)
- 2 poles, 50 Hz ($n=2850$ rpm)
- IE3 three-phase AC ($P_2 > 0.75$ kW)
- Protection level: IP55
- Insulation class: F
- Maximum ambient temperature 40°C
- Single-phase power supply with capacitor permanently on and thermal protection built into the motor casing.

SELF-PRIMING CAPACITY

H_2 [m], H_3 = vertical section
 $H_2, T = 20^\circ\text{C}$,
 $\text{Pa} = 1000 \text{ hPa (mbar)}$

H_2 [m]	H3 [m] minimum							
	3-40	3-50	3-60	5-40	5-50	5-60	8-40	8-50
2	0.15	0.15	0.15	0.15	0.15	0.15	0.25	0.3
4	0.15	0.15	0.35	0.15	0.15	0.35	0.25	0.6
6	0.15	0.15	0.55	0.15	0.15	0.65	0.3	
8	0.55	0.35	0.55	0.45	0.55	0.65	0.65	



APPLICATIONS

- Pressurising and supply
- Irrigation
- Use of rainwater
- Washing systems



NOCCHI Multi EVO-A

SELF-PRIMING MULTISTAGE CENTRIFUGAL PUMPS

CONSTRUCTION FEATURES

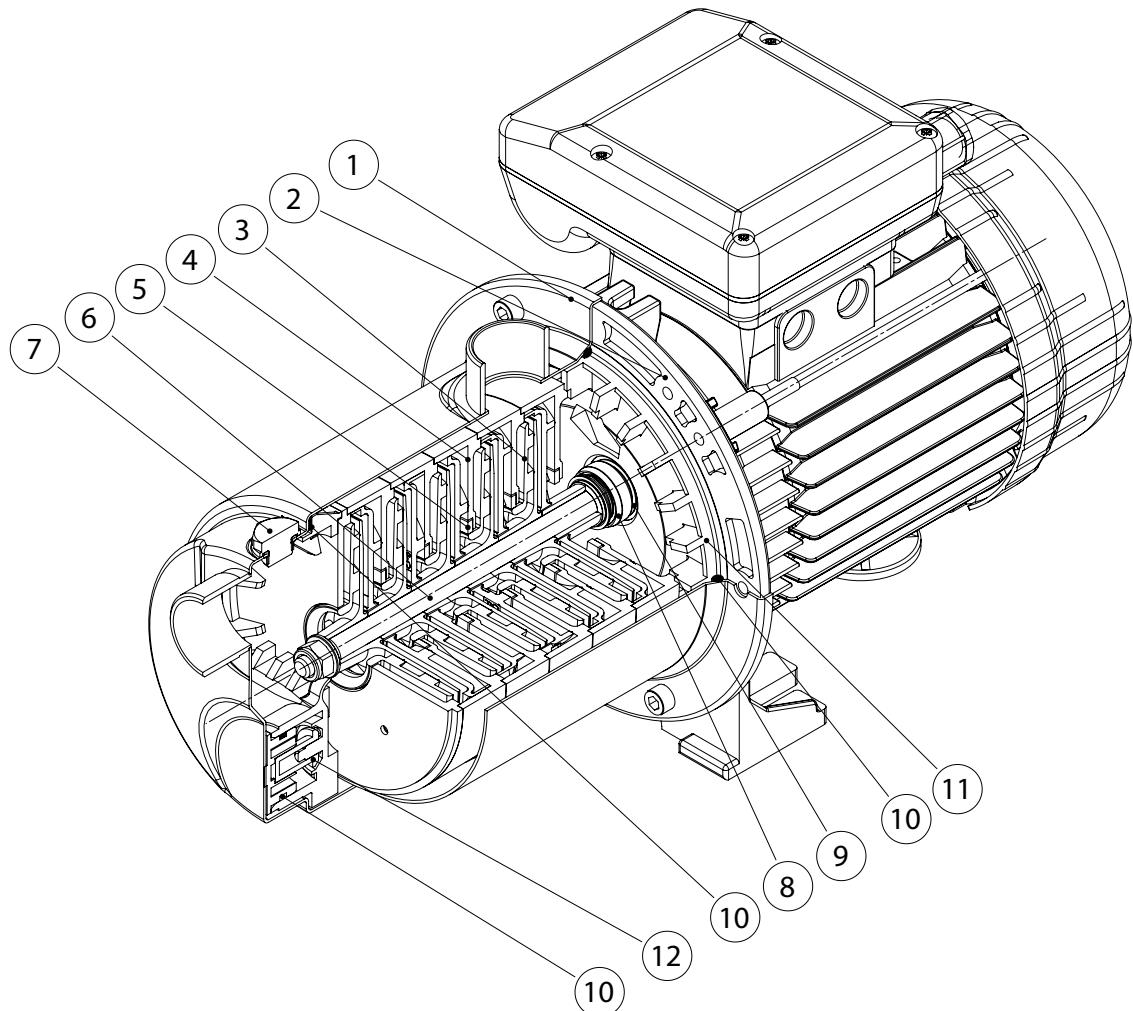


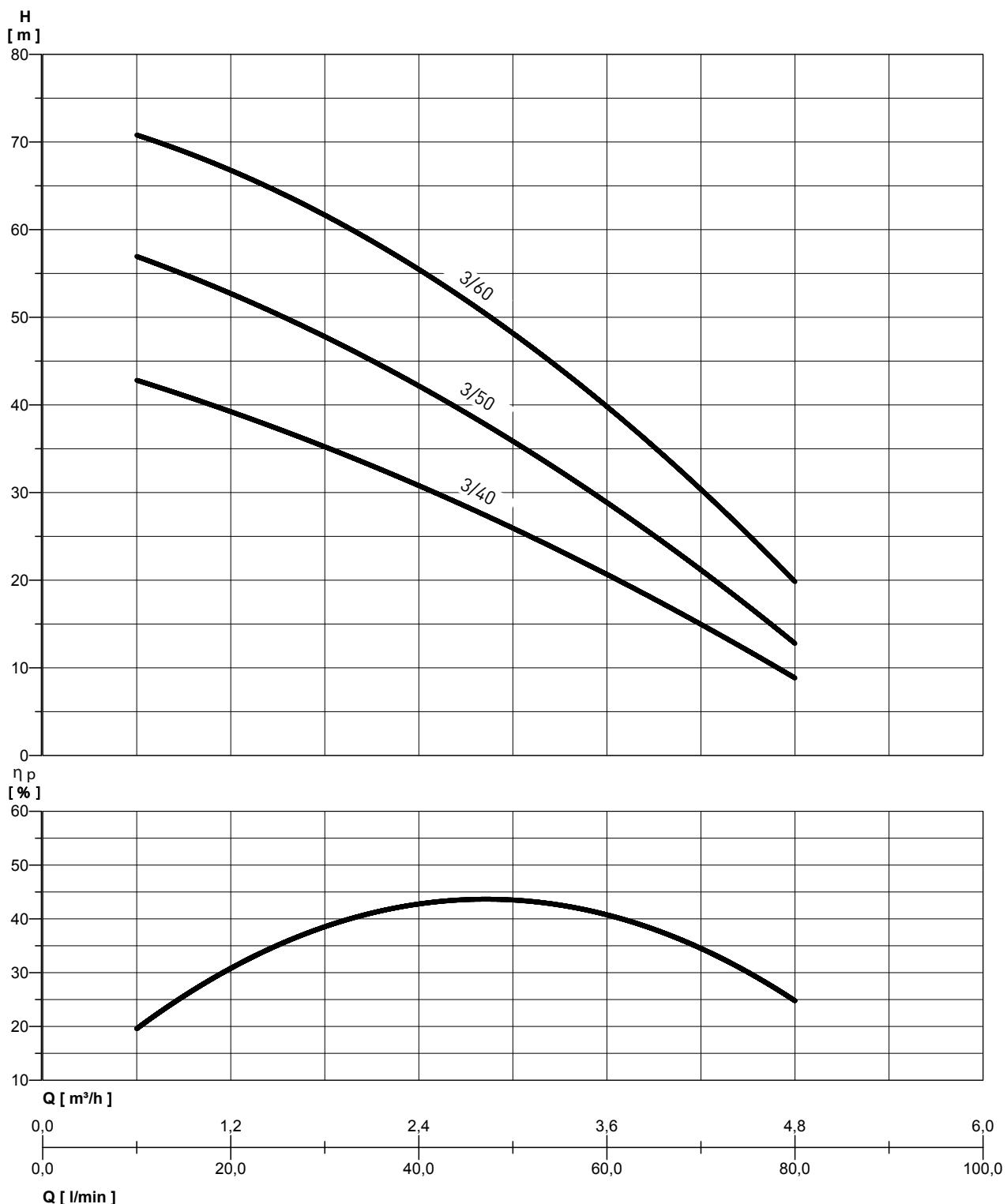
TABLE OF MATERIALS

Ref.	Component	Material
1	Pump body	Stainless steel Europe: EN10088-1 X5CrNi18-10 (1.4301) USA: AISI 304
2	Motor casing	Die-cast aluminium
3	Impeller	PPO reinforced with fibreglass
4	Diffuser	PPO reinforced with fibreglass
5	Wear ring	PTFE
6	Shaft (hydraulic part)	Stainless steel Europe: EN10088-1 X5CrNi18-10 (1.4301) USA: AISI 304
7	Inlet / outlet caps	Stainless steel Europe: EN10088-1 X8CrNiS18-9 (1.4305) USA: AISI 303
8	Mechanical seal	Carbon graphite / NBR / SS Europe: EN10088-1 X5CrNi18-10 (1.4301) USA: AISI 304
9	Counterface	Ceramic / NBR
10	Gaskets	NBR 70 Shore A
11	Seal holder plate	PPO reinforced with fibreglass
12	Priming valve	PPO reinforced with fibreglass

NOCCHI Multi EVO-A 3

SELF-PRIMING MULTISTAGE CENTRIFUGAL PUMPS

HYDRAULIC PERFORMANCE



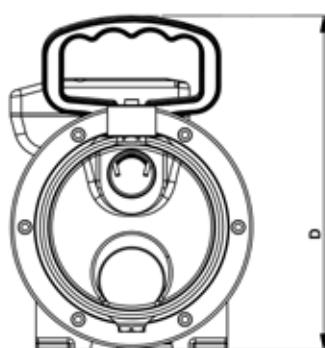
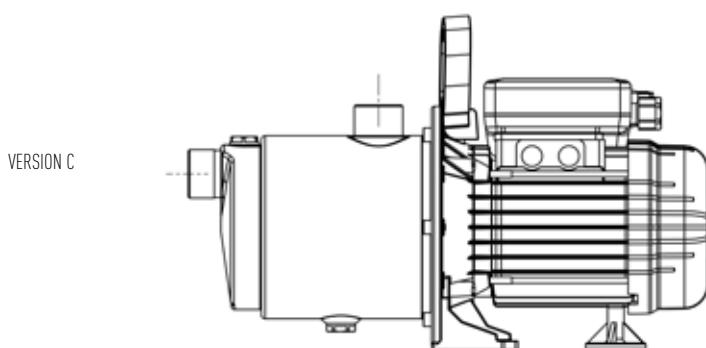
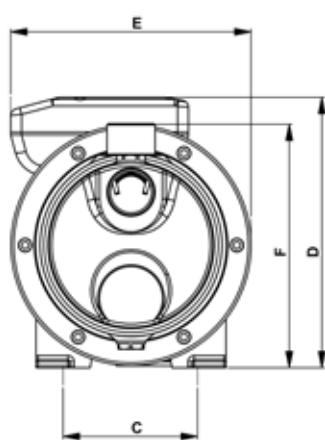
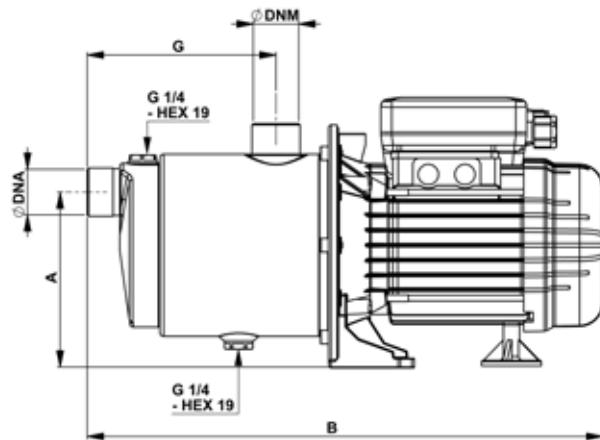
NOCCHI Multi EVO-A 3

SELF-PRIMING MULTISTAGE CENTRIFUGAL PUMPS

PERFORMANCE TABLE

MODEL	Nominal power (P2)		Absorbed power (P1)		VOLT. (V)	In (A)	μF	Q	l/min m ³ /h	10	20	30	40	50	60	80
	HP	kW	HP	kW						0.6	1.2	1.8	2.4	3	3.6	4.8
Multi EVO-A 3-40 M	0.68	0.51	1.1	0.8	1 ~ 230	3.7	12.5	total head in water column metres		42.5	39.5	35.5	31	25.5	20.5	9
Multi EVO-A 3-40 M-C *	0.68	0.51	1.1	0.8	1 ~ 230	3.7	12.5			56.5	53	48.5	42	35.5	28.6	13
Multi EVO-A 3-40 T	0.71	0.53	1.05	0.78	3 ~ 230/400	2.7 / 1.55	---			70.5	67	62	55.5	48	39.5	20
Multi EVO-A 3-50 M	0.94	0.7	1.34	1	1 ~ 230	4.4	16									
Multi EVO-A 3-50 T	0.94	0.7	1.34	1	3 ~ 230/400	3.3 / 1.9	---									
Multi EVO-A 3-60 M	1.2	0.9	1.68	1.25	1 ~ 230	5.7	20									
Multi EVO-A 3-60 T	1.1	0.82	1.57	1.17	3 ~ 230/400	3.5 - 2	---									

* Version with cable, handle and schuko plug.



OVERALL DIMENSIONS AND WEIGHTS

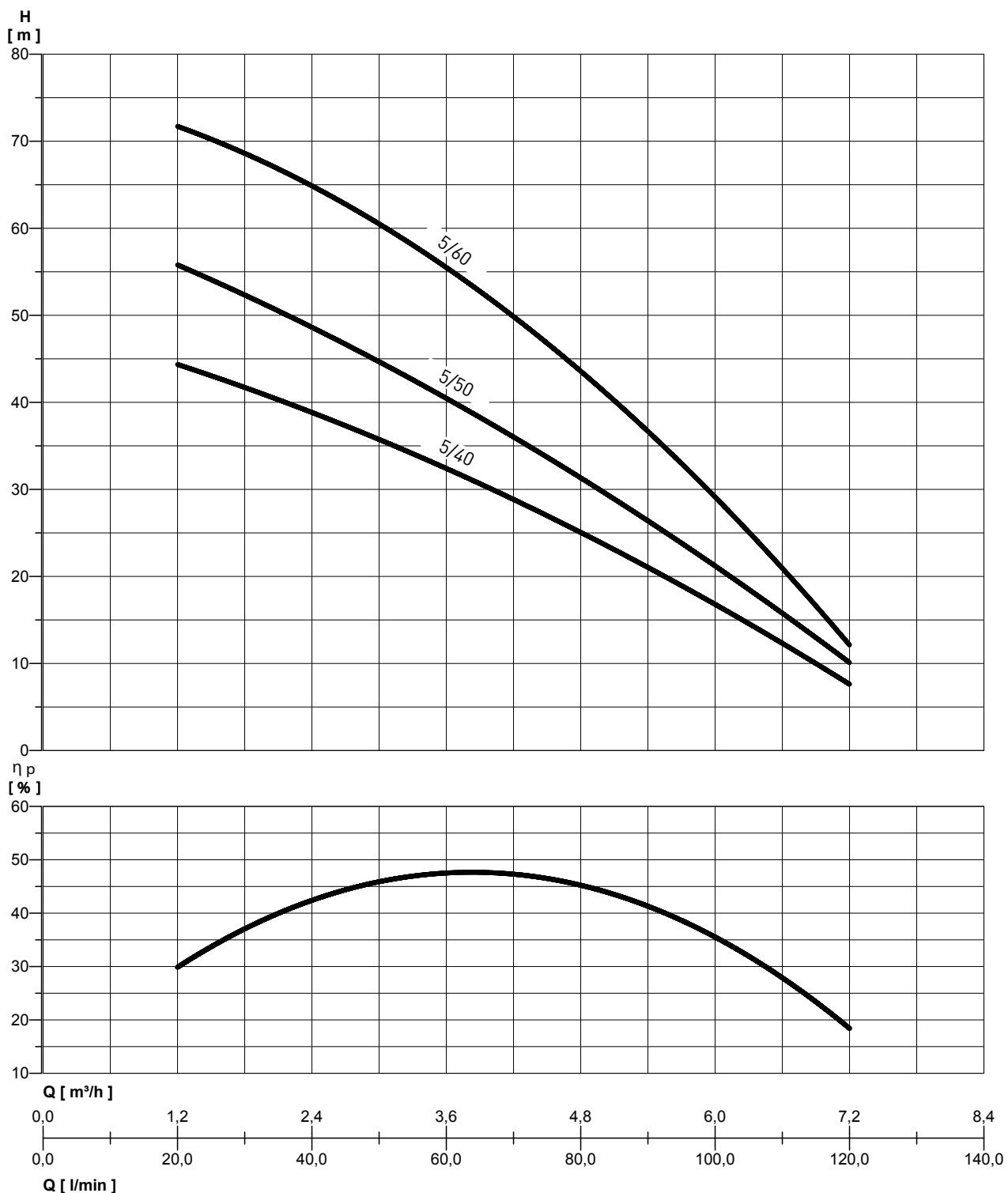
MODEL	Dimensions mm.									WEIGHTS (Kg)
	A	B	C	D	E	F	G	DNA	DNM	
Multi EVO-A 3-40 M	129	380	100	199	177	180	139	1"	1"	7.3
Multi EVO-A 3-40 T	129	380	100	199	177	180	139	1"	1"	7.3
Multi EVO-A 3-40 M-C*	129	380	100	245	177	180	139	1"	1"	7.6
Multi EVO-A 3-50 M	129	422	100	207	177	180	162	1"	1"	9.3
Multi EVO-A 3-50 T	129	422	100	207	177	180	162	1"	1"	9.3
Multi EVO-A 3-60 M	129	422	100	207	177	180	162	1"	1"	10.8
Multi EVO-A 3-60 T	129	422	100	207	177	180	162	1"	1"	10.8

* Version with cable, handle and schuko plug.

NOCCHI Multi EVO-A 5

SELF-PRIMING MULTISTAGE CENTRIFUGAL PUMPS

HYDRAULIC PERFORMANCE



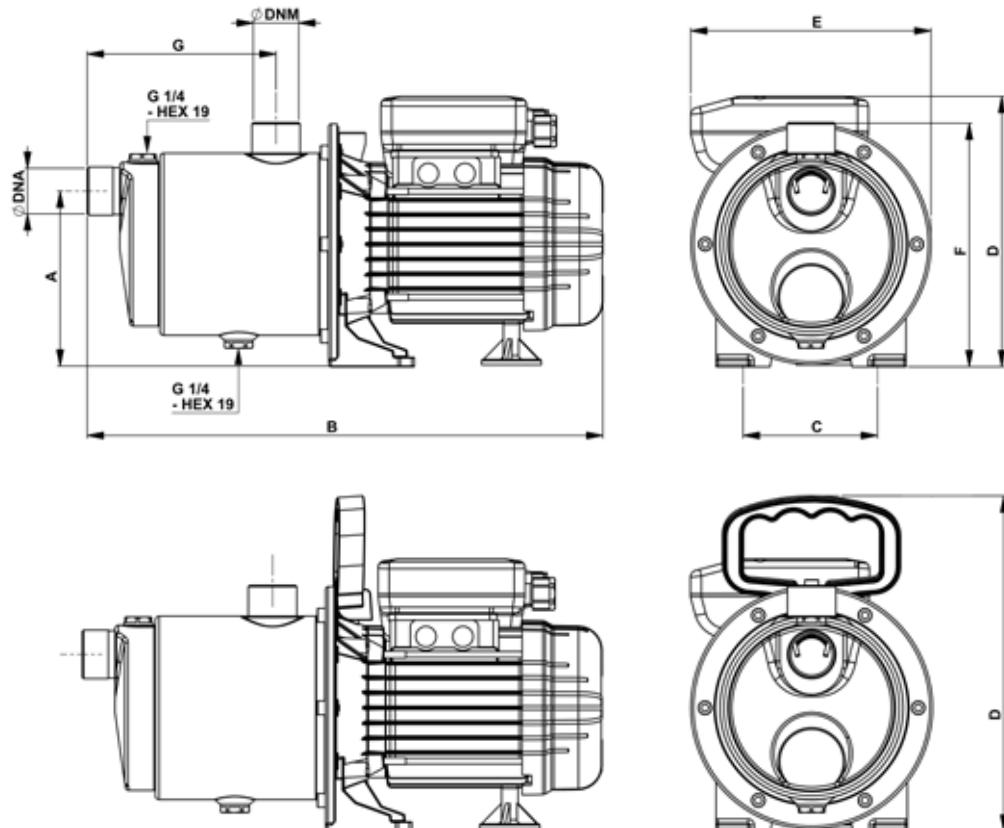
NOCCHI Multi EVO-A 5

SELF-PRIMING MULTISTAGE CENTRIFUGAL PUMPS

PERFORMANCE TABLE

MODEL	Nominal power (P2)		Absorbed power (P1)		VOLT. (V)	In (A)	μ F	Q	l/min	20	30	40	50	60	80	100	120
	HP	kW	HP	kW						m ³ /h	1.2	1.8	2.4	3	3.6	4.8	6
Multi EVO-A 5-40 M	1	0.75	1.5	1.1	1 ~ 230	4.7	16	total head in water column metres	44.5	41.5	39	35.5	32.5	25	17	7.5	
Multi EVO-A 5-40 T	1	0.75	1.5	1.1	3 ~ 230/400	3.4 / 2	---		56	52	48.5	45	40.5	31	21.5	10	
Multi EVO-A 5-50 M	1.27	0.95	1.8	1.35	1 ~ 230	6.2	20		71.5	68.5	65	61	55.5	43.5	28.5	12.5	
Multi EVO-A 5-50 M-C *	1.27	0.95	1.8	1.35	1 ~ 230	6.2	20										
Multi EVO-A 5-50 T	1.2	0.9	1.68	1.25	3 ~ 230/400	3.7 / 2.1	---										
Multi EVO-A 5-60 M	1.6	1.2	2.2	1.65	1 ~ 230	7.5	31.5										
Multi EVO-A 5-60 T	1.6	1.2	2.1	1.57	3 ~ 230/400	5.3 / 3.1	---										

* Version with cable, handle and schuko plug.



OVERALL DIMENSIONS AND WEIGHTS

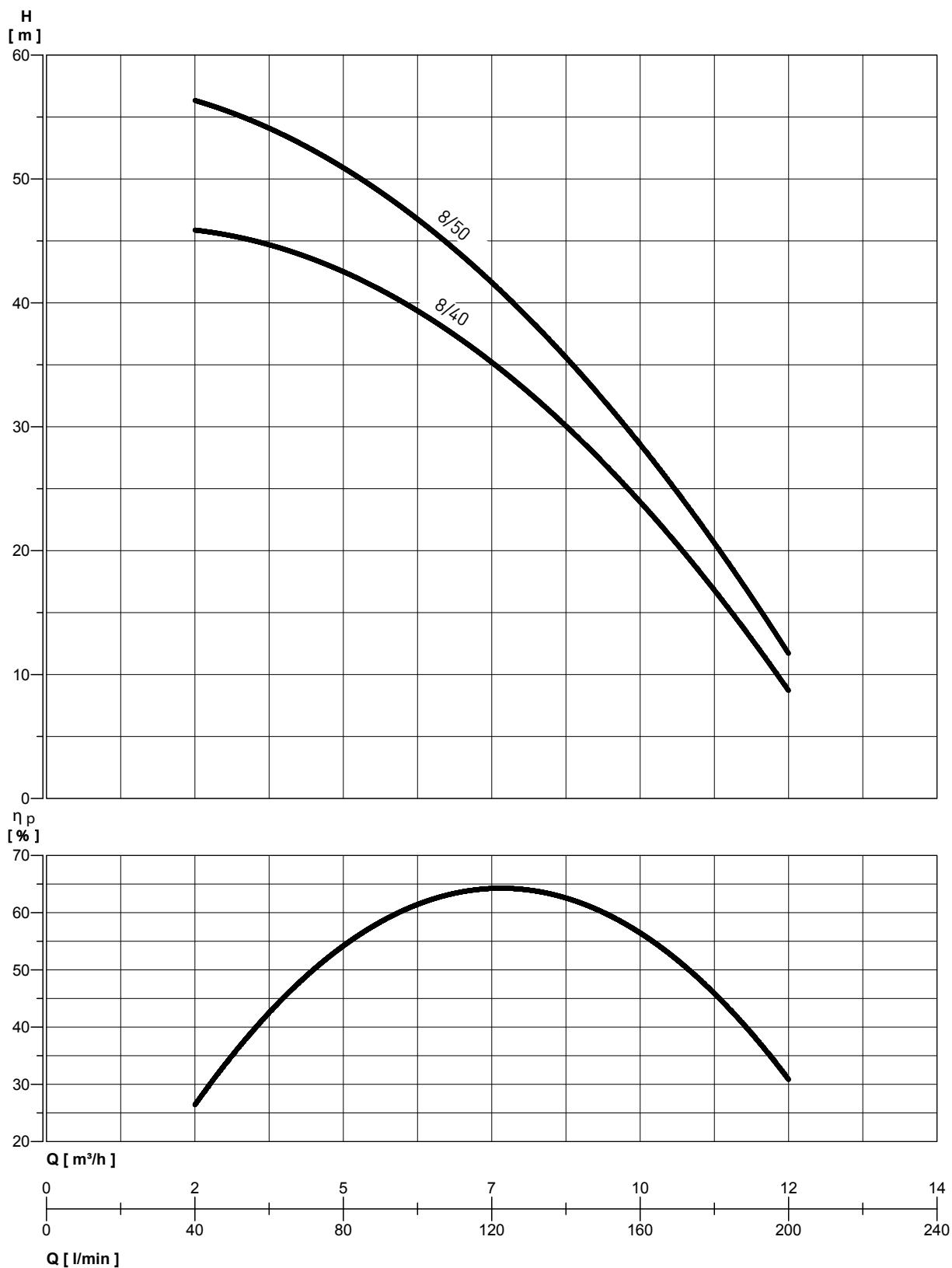
MODEL	Dimensions mm.									WEIGHTS (Kg)
	A	B	C	D	E	F	G	DNA	DNM	
Multi EVO-A 5-40 M	129	400	100	207	177	180	139	1"	1"	9
Multi EVO-A 5-40 T	129	400	100	207	177	180	139	1"	1"	9
Multi EVO-A 5-50 M	129	422	100	207	177	180	162	1"	1"	10.6
Multi EVO-A 5-50 T	129	422	100	207	177	180	162	1"	1"	10.6
Multi EVO-A 5-50 M-C *	129	422	100	245	177	180	162	1"	1"	11
Multi EVO-A 5-60 M	129	457	100	215	203	180	162	1"	1"	13.5
Multi EVO-A 5-60 T	129	457	100	215	177	180	162	1"	1"	13.5

* Version with cable, handle and schuko plug.

NOCCHI Multi EVO-A 8

SELF-PRIMING MULTISTAGE CENTRIFUGAL PUMPS

HYDRAULIC PERFORMANCE

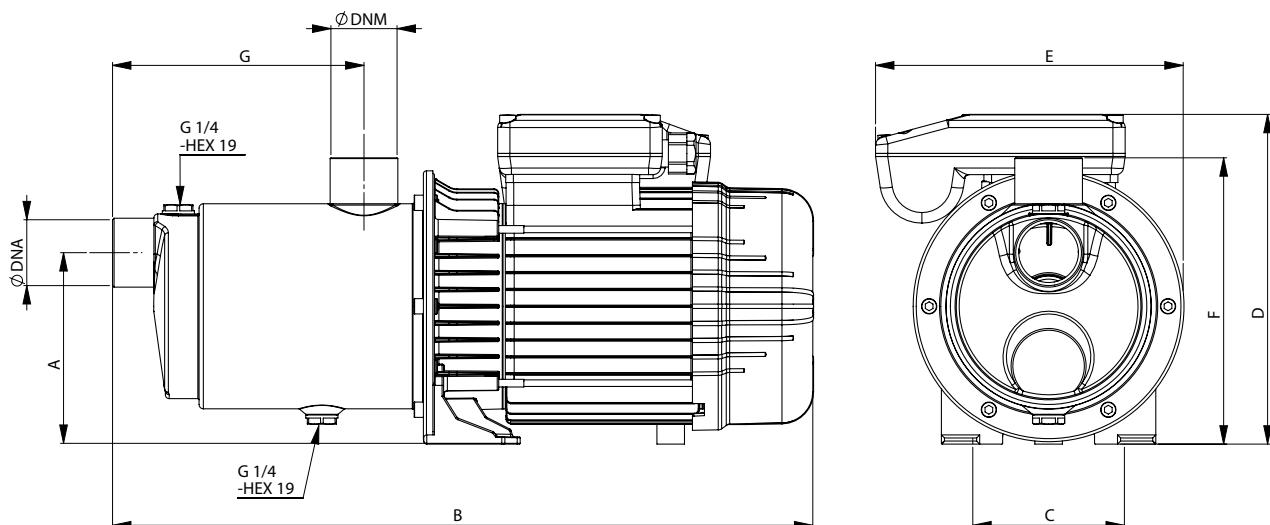


NOCCHI Multi EVO-A 8

SELF-PRIMING MULTISTAGE CENTRIFUGAL PUMPS

PERFORMANCE TABLE

MODEL	Nominal power (P2)		Absorbed power (P1)		VOLT. (V)	In (A)	μ F	Q	l/min	40	50	60	80	100	120	140	160	180	200
	HP	kW	HP	kW						m ³ /h	2.4	3	3.6	4.8	6	7.2	8.4	9.6	10.8
Multi EVO-A 8-40 M	1.6	1.2	2.23	1.66	1 ~ 230	7.7	31.5			46	46	45	42	40	36	30	24	17	9
Multi EVO-A 8-40 T	1.6	1.18	2	1.5	3 ~ 230/400	5 - 2.95	---			56.5	55	54	51	47	42	36	28	21	12
Multi EVO-A 8-50 M	1.9	1.4	2.7	2	1 ~ 230	9	35												
Multi EVO-A 8-50 T	1.9	1.4	2.6	1.95	3 ~ 230/400	6.7 - 4	---												



OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions mm.								WEIGHTS (Kg)	
	A	B	C	D	E	F	G	DNA	DNM	
Multi EVO-A 8-40 M	125	457	100	215	203	187	164	1" 1/4	1" 1/4	13.5
Multi EVO-A 8-40 T	125	457	100	215	177	187	164	1" 1/4	1" 1/4	13.5
Multi EVO-A 8-50 M	125	457	100	215	203	187	164	1" 1/4	1" 1/4	14.5
Multi EVO-A 8-50 T	125	457	100	215	177	187	164	1" 1/4	1" 1/4	14.5

NOCCHI Multi EVO MULTISTAGE CENTRIFUGAL PUMPS

NEW 2016
PENTAIR



Multi EVO-A is a multi-stage centrifugal horizontal pump with an inlet with axial thread and an outlet with radial thread. The innovative, high efficiency hydraulic system is connected to a motor of the latest generation with a mechanical seal.

All models are certified for use with drinking water (ACS and DM174)

ADVANTAGES

The Multi EVO series PUMPS feature the following advantages:

- Low energy consumption thanks to the highly efficient hydraulic system
- High efficiency
- High reliability - thanks to the durable and innovative design
- Silent - more comfort for the user thanks to its silent operation
- Compact shape
- Wide range



SPECIFICATIONS:

PUMP

- Hydraulic performance according to ISO 9906:2012 - Grade 3B
- Type of liquid: clean water without suspended solids or abrasive material
- Maximum temperature of the liquid 50°C
- Maximum operating pressure 8 bar
- Maximum intake height recommended 6m with foot valve

MOTOR

- Closed, air ventilated (TEFC)
- 2 poles, 50 Hz (n=2850 rpm)
- IE3 three-phase AC ($P_2 \geq 0.75 \text{ kW}$)
- Protection level: IP55
- Insulation class: F
- Maximum ambient temperature 40°C
- Single-phase power supply with capacitor permanently on and thermal protection built into the motor casing.



APPLICATIONS

- Pressurising and supply
- Irrigation
- Use of rainwater
- Washing systems



NOCCHI Multi EVO

MULTISTAGE CENTRIFUGAL PUMPS

CONSTRUCTION FEATURES

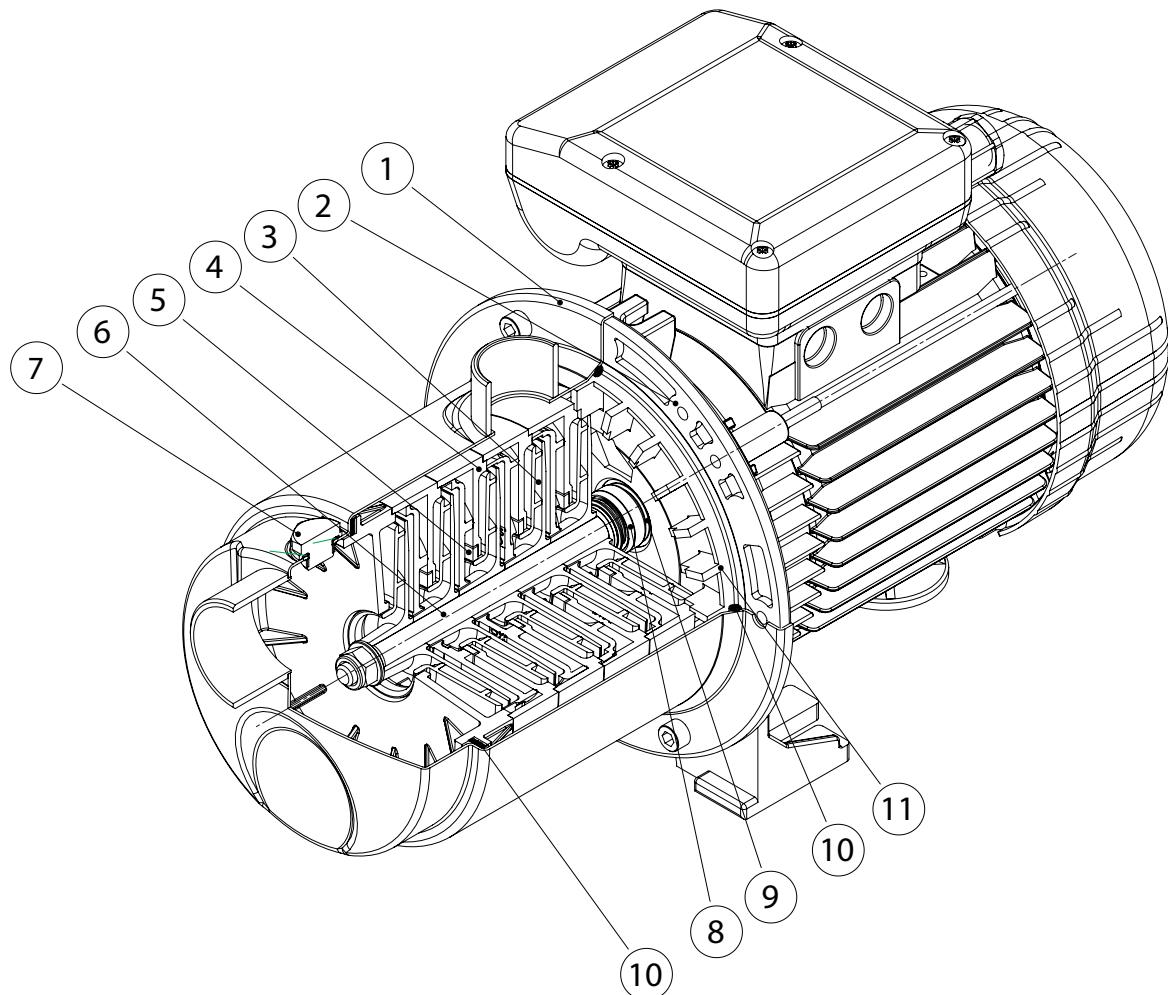


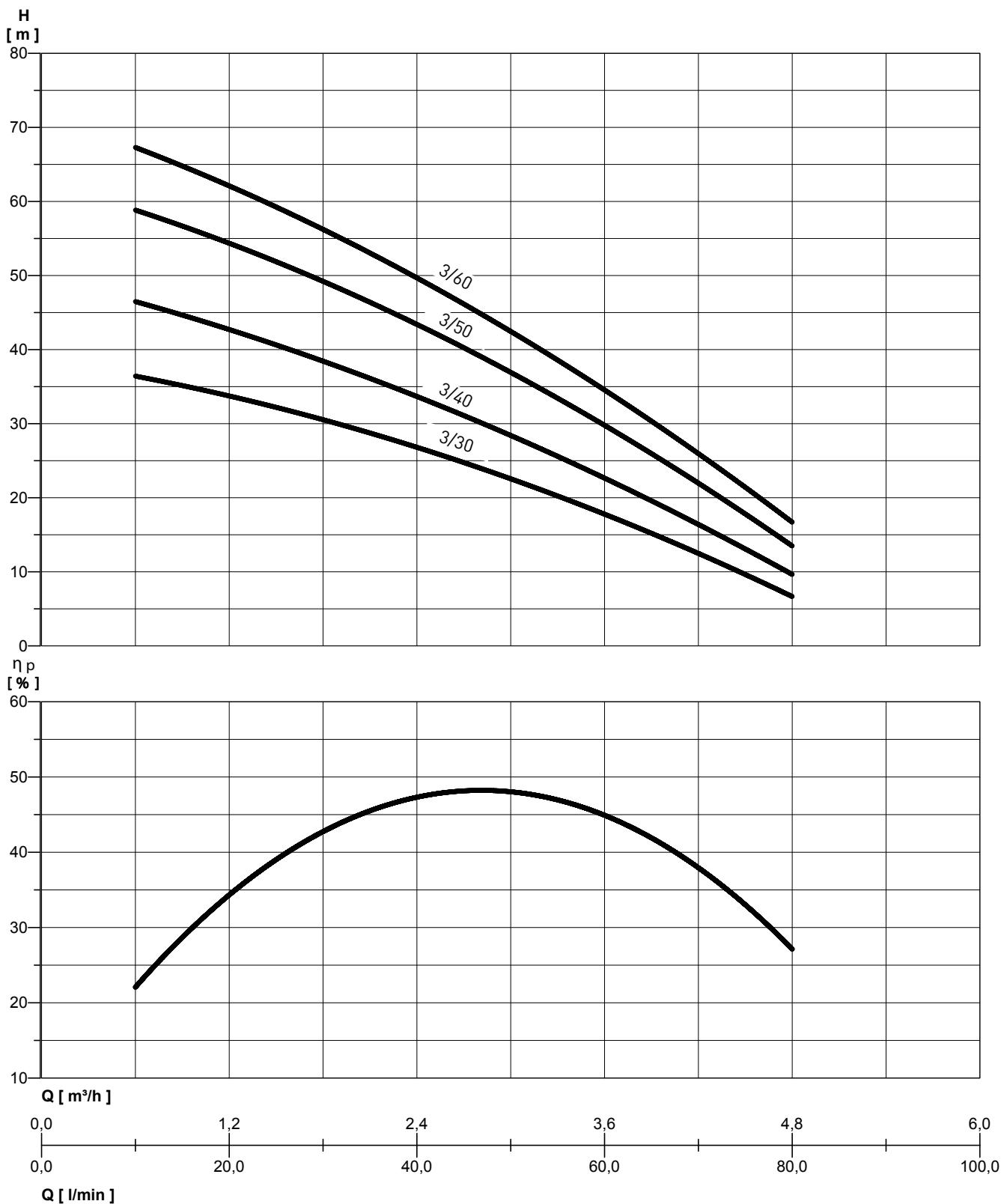
TABLE OF MATERIALS

Ref.	Component	Material
1	Pump body	Stainless steel Europe: EN10088-1 X5CrNi18-10 [1.4301] USA: AISI 304
2	Motor casing	Die-cast aluminium
3	Impeller	PPO reinforced with fibreglass
4	Diffuser	PPO reinforced with fibreglass
5	Wear ring	PTFE
6	Shaft (hydraulic part)	Stainless steel Europe: EN10088-1 X5CrNi18-10 [1.4301] USA: AISI 304
7	Inlet / outlet caps	Stainless steel Europe: EN10088-1 X8CrNiS18-9 [1.4305] USA: AISI 303
8	Mechanical seal	Carbon graphite / NBR / SS Europe: EN10088-1 X5CrNi18-10 [1.4301] USA: AISI 304
9	Counterface	Ceramic / NBR
10	Gaskets	NBR 70 Shore A
11	Seal holder plate	PPO reinforced with fibreglass

NOCCHI Multi EVO 3

MULTISTAGE CENTRIFUGAL PUMPS

HYDRAULIC PERFORMANCE

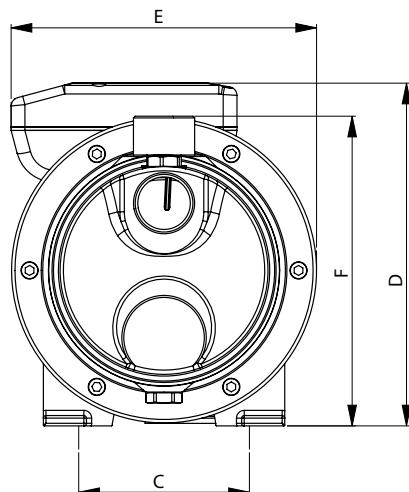
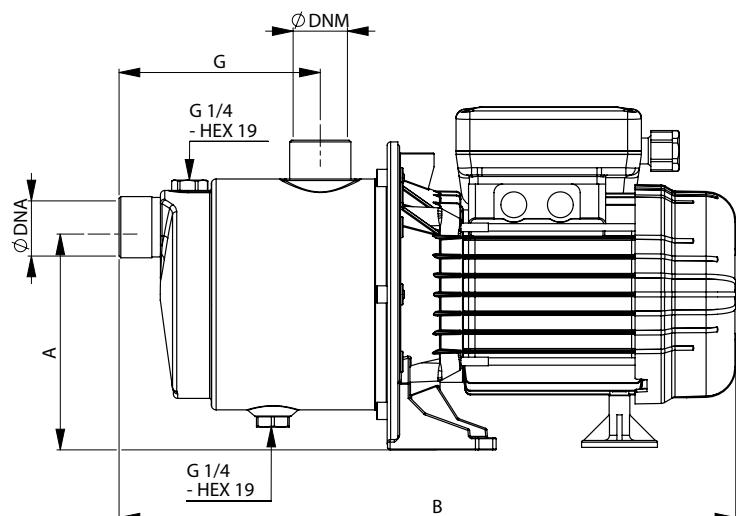


NOCCHI Multi EVO 3

MULTISTAGE CENTRIFUGAL PUMPS

PERFORMANCE TABLE

MODEL	Nominal power (P2)		Absorbed power (P1)		VOLT. (V)	In (A)	μ F	l/min	Q m^3/h	10	20	30	40	50	60	80
	HP	kW	HP	kW						0.6	1.2	1.8	2.4	3	3.6	4.8
Multi EVO 3-30 M	0.54	0.4	0.87	0.65	1 - 230	2.95	12.5	total head in water column metres		36	34	31	27	22.5	17	7
Multi EVO 3-30 T	0.54	0.4	0.87	0.65	3 - 230/400	2.3 / 1.3	---			46	43	39	34	28	22	10
Multi EVO 3-40 M	0.74	0.55	1.1	0.8	1 - 230	3.7	12.5			58	55	50	44	36	29	14
Multi EVO 3-40 T	0.71	0.53	1.05	0.78	3 - 230/400	2.7 / 1.55	---			67	62	57	50	42	34	17
Multi EVO 3-50 M	0.94	0.7	1.34	1	1 - 230	4.4	16									
Multi EVO 3-50 T	0.94	0.7	1.34	1	3 - 230/400	3.3 / 1.9	---									
Multi EVO 3-60 M	1.2	0.9	1.68	1.25	1 - 230	5.8	20									
Multi EVO 3-60 T	1.1	0.82	1.57	1.17	3 - 230/400	3.5 / 2	---									



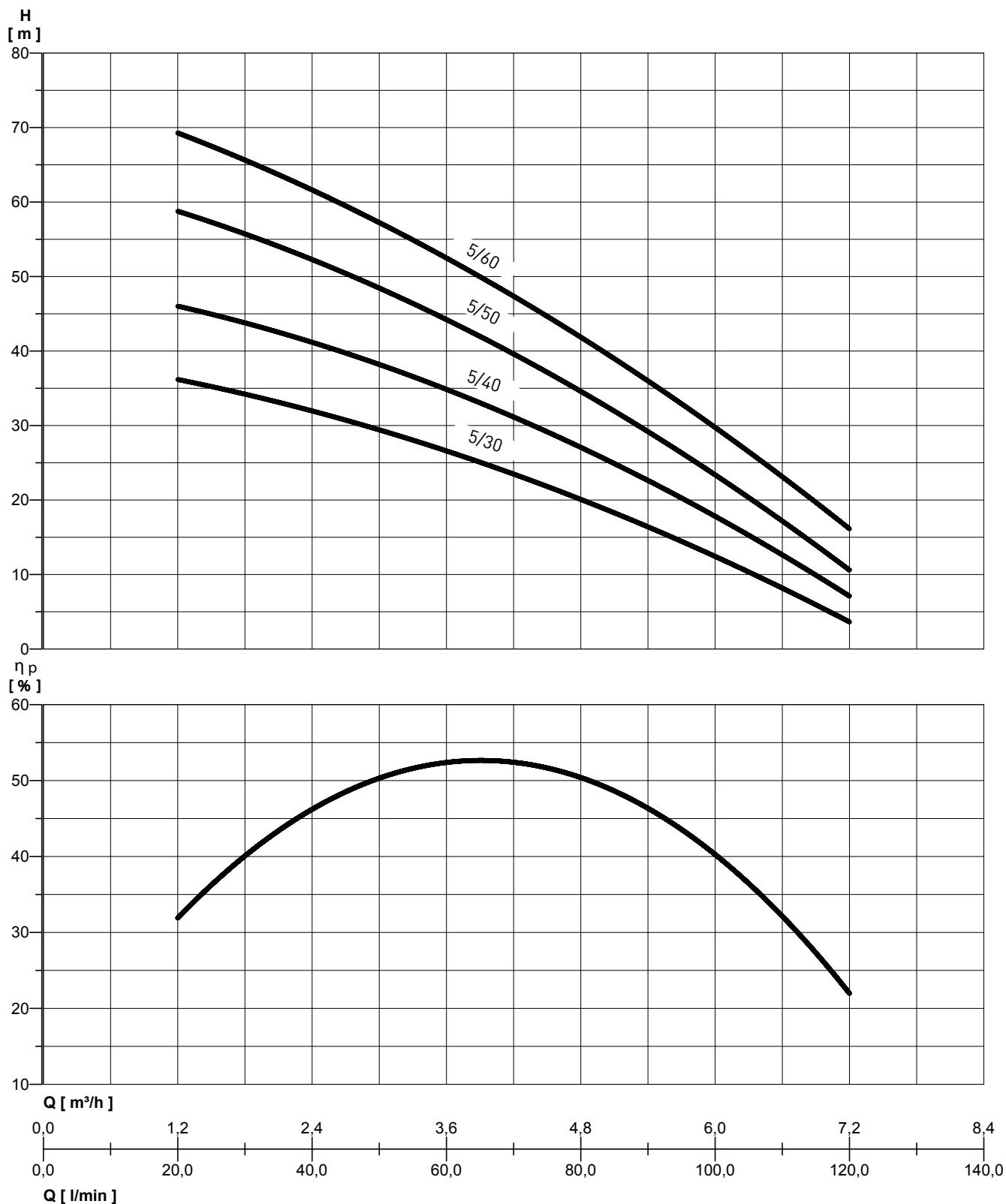
OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions mm.								WEIGHTS (Kg)	
	A	B	C	D	E	F	G	DNA	DNM	
Multi EVO 3-30 M	129	356	100	199	177	180	116	1"	1"	6.7
Multi EVO 3-30 T	129	356	100	199	177	180	116	1"	1"	6.7
Multi EVO 3-40 M	129	356	100	199	177	180	116	1"	1"	7.1
Multi EVO 3-40 T	129	356	100	199	177	180	116	1"	1"	7.1
Multi EVO 3-50 M	129	400	100	207	177	180	139	1"	1"	9.1
Multi EVO 3-50 T	129	400	100	207	177	180	139	1"	1"	9.1
Multi EVO 3-60 M	129	422	100	207	177	180	161	1"	1"	10.8
Multi EVO 3-60 T	129	422	100	207	177	180	161	1"	1"	10.8

NOCCHI Multi EVO 5

MULTISTAGE CENTRIFUGAL PUMPS

HYDRAULIC PERFORMANCE

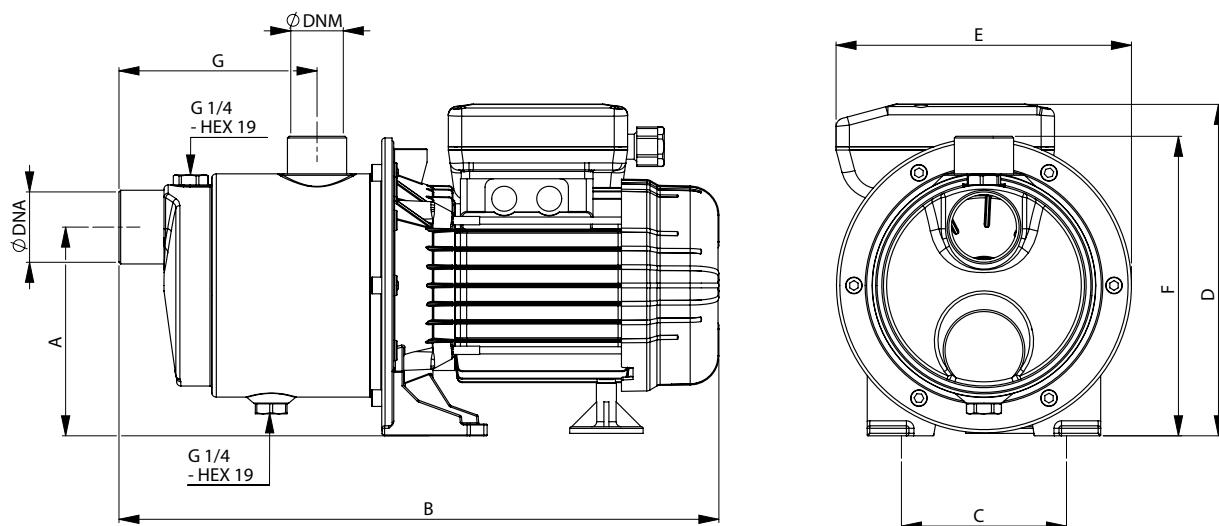


NOCCHI Multi EVO 5

MULTISTAGE CENTRIFUGAL PUMPS

PERFORMANCE TABLE

MODEL	Nominal power (P2)		Absorbed power (P1)		VOLT. (V)	In (A)	μ F	Q	l/min	m ³ /h	20	30	40	50	60	80	100	120
	HP	kW	HP	kW							1.2	1.8	2.4	3	3.6	4.8	6	7.2
Multi EVO 5-30 M	0.75	0.55	1.1	0.8	1 ~ 230	3.7	12.5				36	34	32	30	27	19.5	12	4
Multi EVO 5-30 T	0.71	0.53	1.05	0.78	3 ~ 230/400	2.7 / 1.55	---				46	44	41	38	35	27	18	7
Multi EVO 5-40 M	1	0.75	1.5	1.1	1 ~ 230	4.7	16				58	56	53	49	44	34	23	11
Multi EVO 5-40 T	1	0.75	1.5	1.1	3 ~ 230/400	3.5 / 2	---				69	66	62	57	52	42	30	16
Multi EVO 5-50 M	1.27	0.95	1.8	1.35	1 ~ 230	6.2	20											
Multi EVO 5-50 T	1.2	0.9	1.68	1.25	3 ~ 230/400	3.7 / 2.1	---											
Multi EVO 5-60 M	1.6	1.2	2.2	1.65	1 ~ 230	7.5	31.5											
Multi EVO 5-60 T	1.6	1.2	2.1	1.57	3 ~ 230/400	5.3 / 3.1	---											



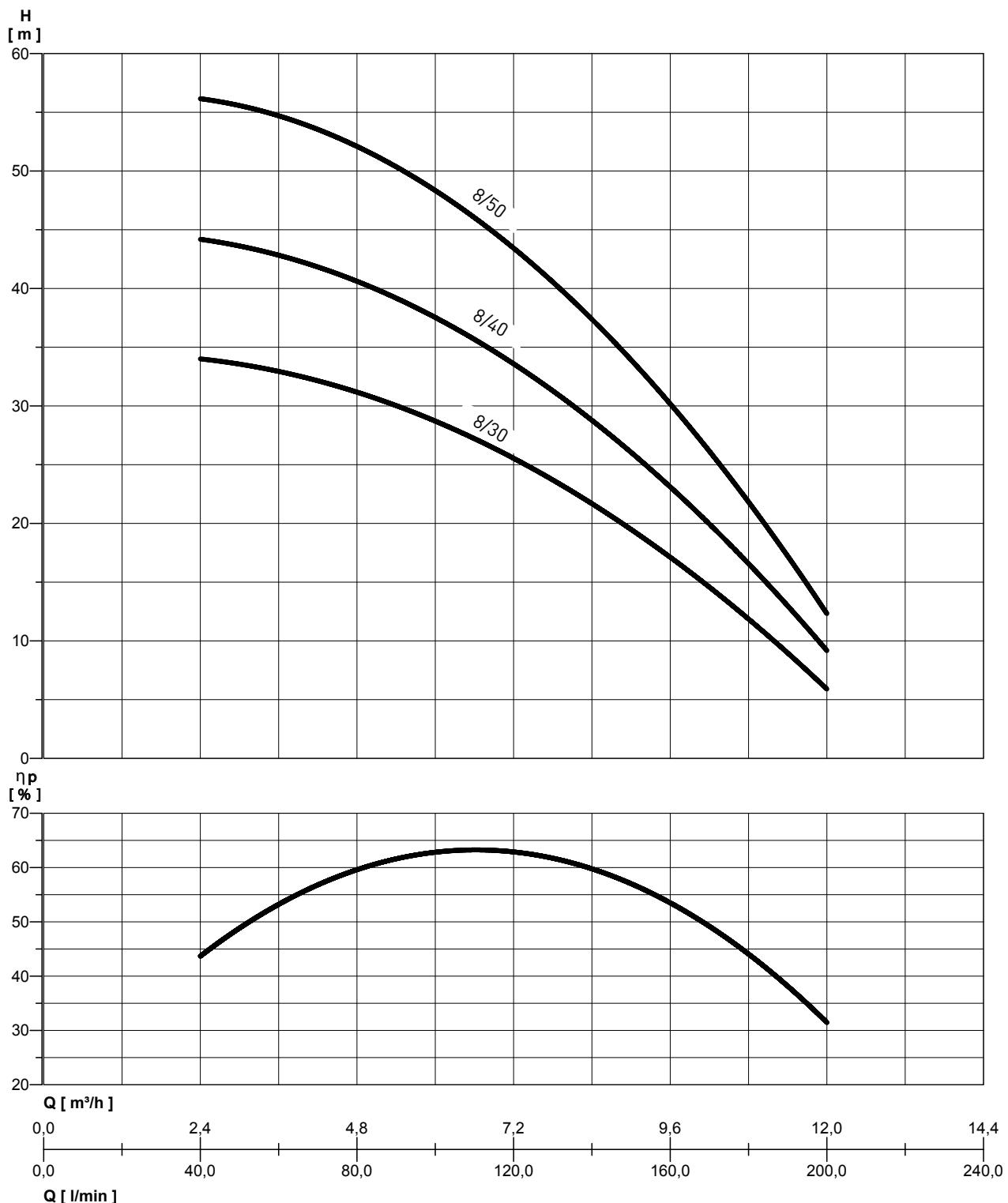
OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions mm.								WEIGHTS (Kg)
	A	B	C	D	E	F	G	DNM	
Multi EVO 5-30 M	125	360	100	199	177	180	119	1" 1/4	1" 7.1
Multi EVO 5-30 T	125	360	100	199	177	180	119	1" 1/4	1" 7.1
Multi EVO 5-40 M	125	380	100	207	177	180	119	1" 1/4	1" 8.8
Multi EVO 5-40 T	125	380	100	207	177	180	119	1" 1/4	1" 8.8
Multi EVO 5-50 M	125	402	100	207	177	180	142	1" 1/4	1" 10.4
Multi EVO 5-50 T	125	402	100	207	177	180	142	1" 1/4	1" 10.4
Multi EVO 5-60 M	125	457	100	215	203	180	164	1" 1/4	1" 13.5
Multi EVO 5-60 T	125	457	100	215	177	180	164	1" 1/4	1" 13.5

NOCCHI Multi EVO 8

MULTISTAGE CENTRIFUGAL PUMPS

HYDRAULIC PERFORMANCE

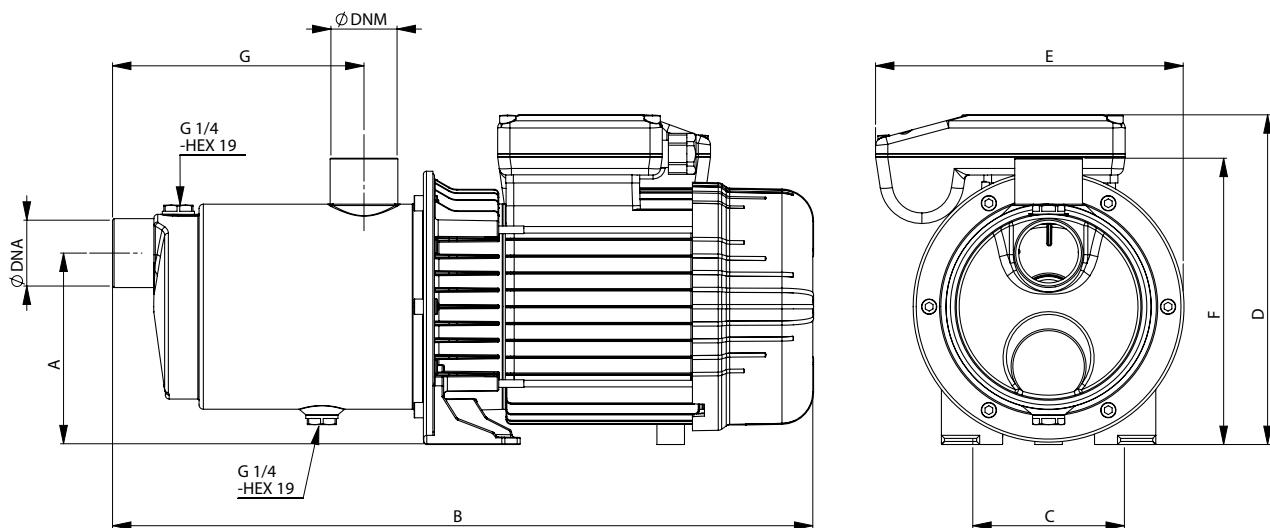


NOCCHI Multi EVO 8

MULTISTAGE CENTRIFUGAL PUMPS

PERFORMANCE TABLE

MODEL	Nominal power (P2)		Absorbed power (P1)		VOLT. (V)	In (A)	μ F	Q	l/min	40	60	80	100	120	140	160	180	200
	HP	kW	HP	kW														
Multi EVO 8-30 M	1.2	0.9	1.7	1.28	1 ~ 230	5.9	20	total head in water column metres	34	33.5	31	29	25.5	22	16.5	12	6	
Multi EVO 8-30 T	1.2	0.9	1.6	1.2	3 ~ 230/400	3.7 / 2.1	---			42.5	40.5	37.5	34	29	23	16	9.5	
Multi EVO 8-40 M	1.6	1.2	2.23	1.66	1 ~ 230	7.7	31.5			51.5	48.5	44	37.5	30	21.5	12.5		
Multi EVO 8-40 T	1.6	1.18	2	1.5	3 ~ 230/400	5 / 2.95	---		56.5	54.5	51.5	48.5	44					
Multi EVO 8-50 M	1.9	1.4	2.7	2	1 ~ 230	9	35											
Multi EVO 8-50 T	1.9	1.4	2.6	1.95	3 ~ 230/400	6.7 / 4	---											



OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions mm.								WEIGHTS (Kg)	
	A	B	C	D	E	F	G	DNA	DNM	
Multi EVO 8-30 M	125	398	100	207	177	187	137	1"1/4	1"1/4	10.5
Multi EVO 8-30 T	125	398	100	207	177	187	137	1"1/4	1"1/4	10.5
Multi EVO 8-40 M	125	430	100	215	203	187	137	1"1/4	1"1/4	13.4
Multi EVO 8-40 T	125	430	100	215	177	187	137	1"1/4	1"1/4	13.4
Multi EVO 8-50 M	125	457	100	215	203	187	164	1"1/4	1"1/4	14.5
Multi EVO 8-50 T	125	457	100	215	177	187	164	1"1/4	1"1/4	14.5

NOCCHI DHR

MULTISTAGE CENTRIFUGAL PUMPS

LOW ENERGY CONSUMPTION, EXTREMELY SILENT, IMPELLERS AND DIFFUSERS MADE OF STAINLESS STEEL AISI 304, THREADED PORTS SET FOR OVAL FITTINGS (RANGE DHR 9)

The DHR series pumps are horizontal centrifugal pumps, not self-priming. All the rotating parts that come into contact with the pumped liquid are made of stainless steel AISI 304.

USAGE DATA

- Type of liquid: clean water without suspended solids or abrasive material.
- Maximum temperature of the liquid 90°C.
- Maximum ambient temperature 50° C
- Maximum recommended intake height: 6 m with bottom valve (with temperature of the liquid at 50° C)
- Maximum operating pressure: 10 bar (with temp. of liquid 50°C)
6 bar (with temp. of liquid 90°C)

APPLICATIONS

- Lifting and distribution of water in domestic systems in continuous or intermittent operation.
- Pressurisation systems.
- Washing, irrigation, gardens, fountains.

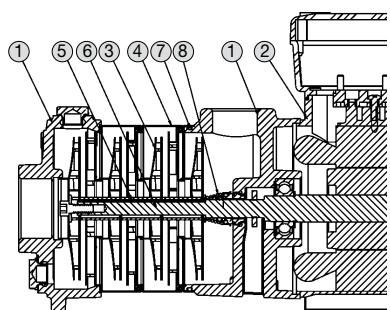
MOTOR

- Closed, ventilated from outside.
- Degree of protection IP 54.
- Insulation class F.
- Single-phase power supply with capacitor permanently on and thermal protection built into the motor casing.
- Three-phase power supply with external protection provided by the user.
- Speed of rotation 2850 rpm.
- Continuous service.
- Maximum ambient temperature 50°C



TABLE OF MATERIALS

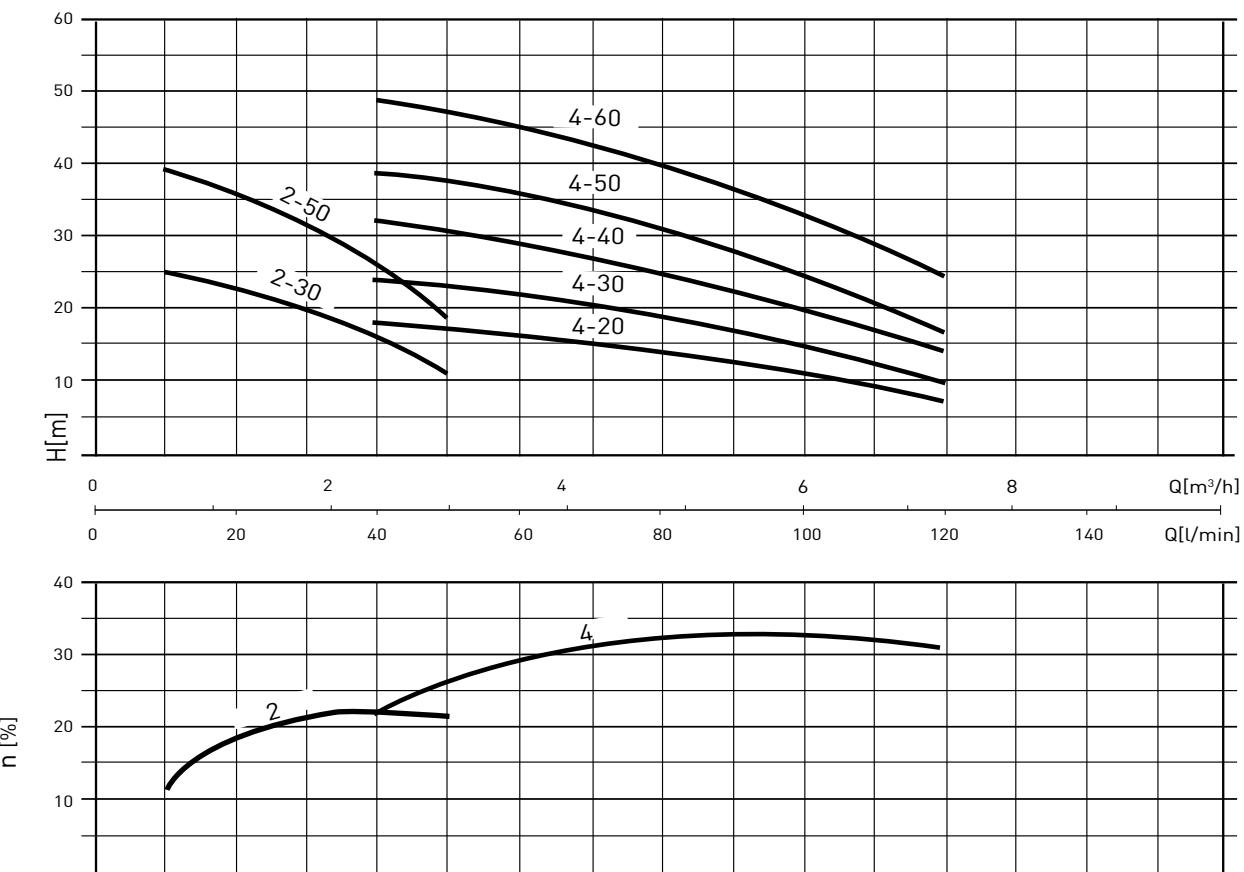
Component	Material
1 Intake and supply flange	Cast iron GJL 200 (ASTM Class 35)
2 Motor body	Cast aluminium
3 Impellers	Stainless steel X5CrNi18-10 (AISI 304)
4 Diffusers:	Stainless steel X5CrNi18-10 (AISI 304)
5 Sleeve	Stainless steel X5CrNi18-10 (AISI 304)
6 Shaft (part in contact with water)	Stainless steel X5CrNi18-10 (AISI 304)
7 Gaskets	NBR
8 Mechanical seal	Ceramic / Graphite / NBR



NOCCHI DHR 2 - DHR 4

MULTISTAGE CENTRIFUGAL PUMPS

HYDRAULIC PERFORMANCE



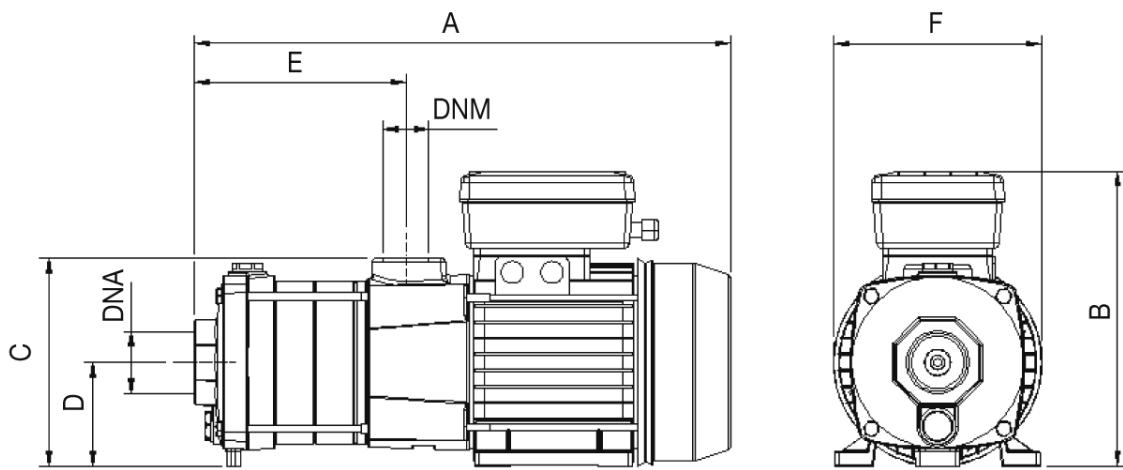
PERFORMANCE TABLE

MODEL	Nominal power (P2)		Absorbed power (P1)		VOLT. (V)	In (A)	μF.	Q	l/min	10	20	30	40	50	
	HP	kW	HP	kW						m³/h	0.6	1.2	1.8	2.4	3
DHR 2-30 M	0.40	0.30	0.7	0.52	1 ~ 230	2.6	12.5	m.c.a./m.c.w.	25	23	19	16	12		
DHR 2-30 T	0.40	0.30	0.67	0.50	3 ~ 230/400	1.9-1.1	-		25	23	19	16	12		
DHR 2-50 M	0.67	0.50	1	0.75	1 ~ 230	3.5	12.5		39	35	30	24	17		
DHR 2-50 T	0.67	0.50	1	0.75	3 ~ 230/400	2.5-1.8	-		39	35	30	24	17		
MODEL	Nominal power (P2)		Absorbed power (P1)		VOLT. (V)	In (A)	μF.	Q	l/min	40	50	60	80	100	120
	HP	kW	HP	kW						m³/h	2.4	3	3.6	4.8	6
DHR 4-20 M	0.50	0.37	0.75	0.55	1 ~ 230	2.7	12.5	m.c.a./m.c.w.	17	16	15	13	11	7	
DHR 4-20 T	0.50	0.37	0.78	0.53	3 ~ 230/400	2.1-1.2	-		17	16	15	13	11	7	
DHR 4-30 M	0.67	0.50	1.10	0.80	1 ~ 230	3.7	12.5		24	23	21	18	14	10	
DHR 4-30 T	0.67	0.50	1	0.75	3 ~ 230/400	2.5-1.4	-		24	23	21	18	14	10	
DHR 4-40 M	0.94	0.70	1.34	1	1 ~ 230	4.5	16		33	31	29	26	21	15	
DHR 4-40 T	0.94	0.70	1.34	1	3 ~ 230/400	3.2-1.9	-		33	31	29	26	21	15	
DHR 4-50 M	1.20	0.90	1.68	1.25	1 ~ 230	5.8	20		41	39	37	33	27	19	
DHR 4-50 T	1.20	0.90	1.55	1.15	3 ~ 230/400	3.4-2	-		41	39	37	33	27	19	
DHR 4-60 M	1.6	1.2	2	1.5	1 ~ 230	7	31.5		52	49	47	43	36	26	
DHR 4-60 T	1.6	1.2	2	1.5	3 ~ 230/400	5.4-3.1	-		52	49	47	43	36	26	

NOCCHI DHR 2/4

MULTISTAGE CENTRIFUGAL PUMPS

OVERALL DIMENSIONS AND WEIGHTS



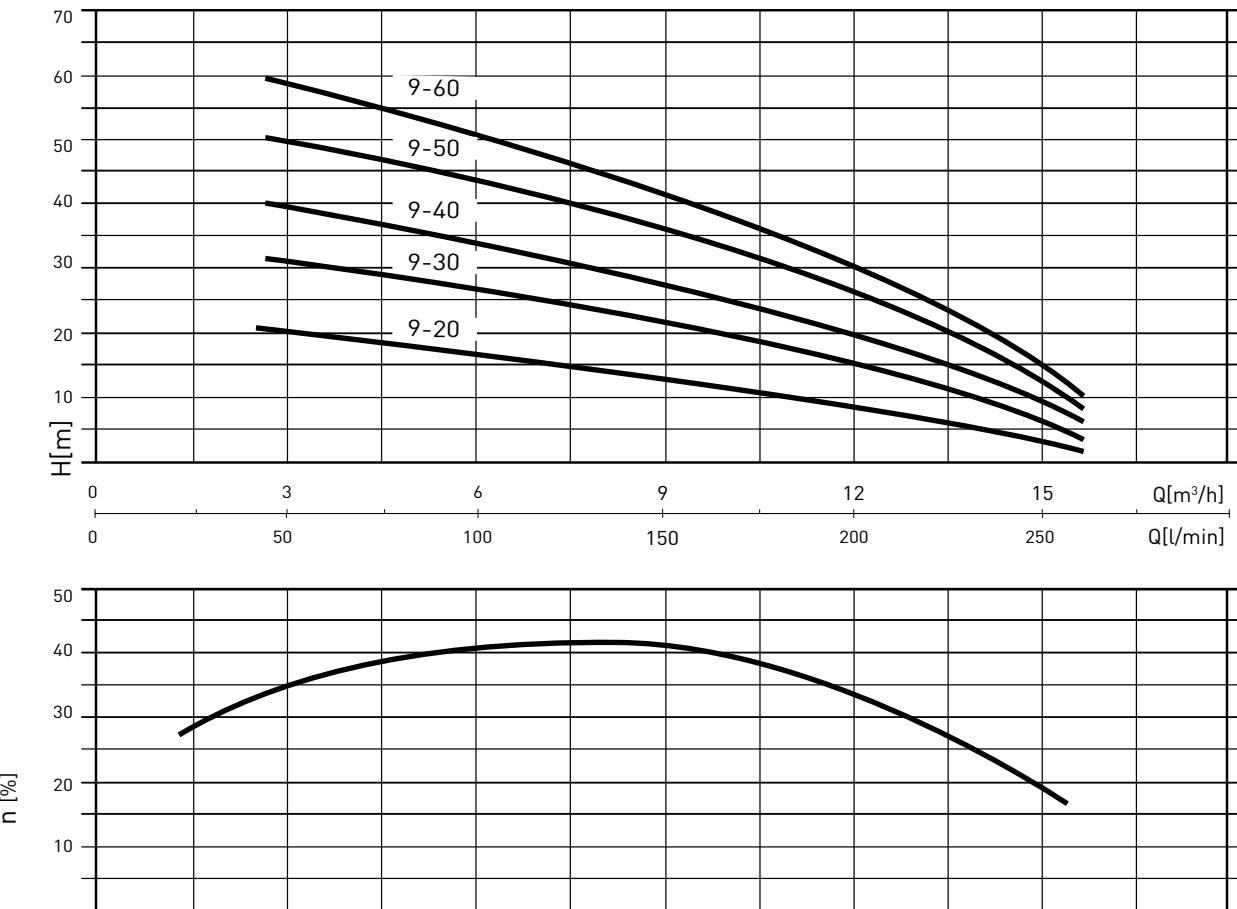
OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions in mm:								NET WEIGHTS (kg)
	A	B	C	D	E	F	DNA	DNM	
DHR 2-30	326	205/190	137.5	71	105	142	1"	1"	10.2
DHR 2-50	362	205/190	137.5	71	141	142	1"	1"	11.5
DHR 2-20	339	205/190	137.5	71	119	142	1" 1/4	1"	10.5
DHR 4-30	339	205/190	137.5	71	119	142	1" 1/4	1"	10.7
DHR 4-40v	366	205/190	137.5	71	146	142	1" 1/4	1"	12
DHR 4-50	394	205/190	137.5	71	173	142	1" 1/4	1"	13.9
DHR 4-60	445	230/209	149	80	200	160	1" 1/4	1"	17

NOCCHI DHR 9

MULTISTAGE CENTRIFUGAL PUMPS

HYDRAULIC PERFORMANCE



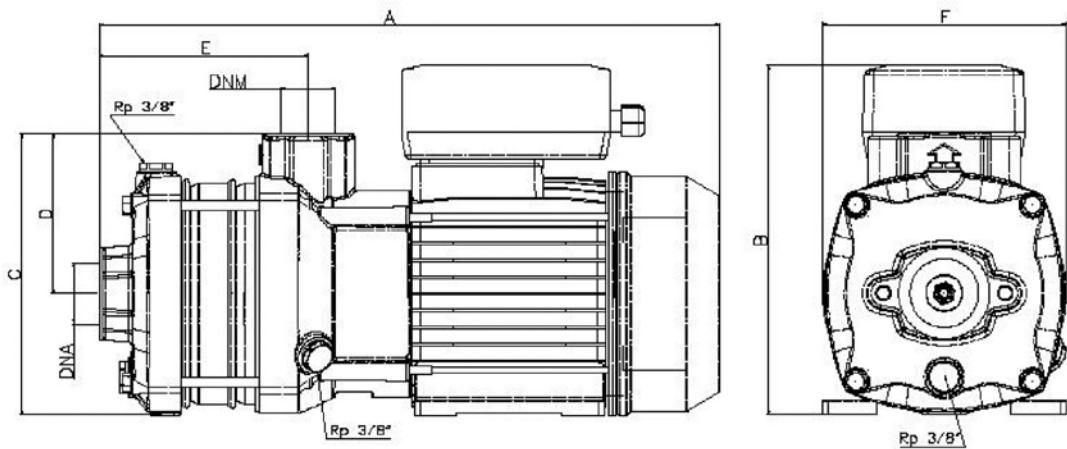
PERFORMANCE TABLE

MODEL	Nominal power (P2)		Absorbed power (P1)		VOLT. (V)	In (A)	μ F.	Q	l/min	m^3/h	40	80	120	160	200	240	260
	HP	kW	HP	kW							2.4	4.8	7.2	9.6	12	14.4	15.6
DHR 9-20 M	0.87	0.65	1.34	1	1 ~ 230	4.5	20				20	19	16	13	9	5	3
DHR 9-20 T	0.87	0.65	1.21	0.9	3 ~ 230/400	3 - 1.7					20	19	16	13	9	5	3
DHR 9-30 M	1.27	0.95	1.88	1.4	1 ~ 230	6	25				31	29	26	21	16	9	5
DHR 9-30 T	1.27	0.95	1.81	1.35	3 ~ 230/400	4.4 - 2.5					31	29	26	21	16	9	5
DHR 9-40 M	1.74	1.3	2.41	1.8	1 ~ 230	8	31.5				40	38	33	27	19	10	5
DHR 9-40 T	1.74	1.3	2.15	1.6	3 ~ 230/400	5.3 - 3					40	38	33	27	19	10	5
DHR 9-50 M	2.15	1.6	2.95	2.2	1 ~ 230	10	35				51	49	43	36	26	14	6
DHR 9-50 T	2.15	1.6	2.68	2	3 ~ 230/400	6.1 - 3.5					51	49	43	36	26	14	6
DHR 9-60 T	2.55	1.9	3.35	2.5	3 ~ 230/400	7.9 - 4.5					60	56	49	40	29	14	6

NOCCHI DHR 9

MULTISTAGE CENTRIFUGAL PUMPS

OVERALL DIMENSIONS AND WEIGHTS



OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions in mm:							NET WEIGHTS (kg)
	A	B	C	D	E	F	DNA	
DHR 9-20 M	378	196	185	105	107	160	1"1/2	17.5
DHR 9-20 T	378	227	185	105	107	160	1"1/2	18.8
DHR 9-30 M	378	196	185	105	107	160	1"1/2	17.1/4
DHR 9-30 T	378	227	185	105	107	160	1"1/2	19
DHR 9-40 M	408	196	185	105	137	160	1"1/2	20
DHR 9-40 T	408	227	185	105	137	160	1"1/2	22
DHR 9-50 M	438	196	185	105	168	160	1"1/2	22.5
DHR 9-50 T	438	227	185	105	168	160	1"1/2	23.5
DHR 9-60 T	468	196	185	105	198	160	1"1/2	24.1

NOCCHI DHI

MULTISTAGE CENTRIFUGAL PUMPS MADE OF STAINLESS STEEL AISI 316

The DHI series horizontal multi-stage centrifugal pumps have the following advantages: High hydraulic performance regarding pressure and capacity Minimum consumption of electricity. Extremely silent operation.

USAGE DATA

- Type of liquid: clean water without suspended solids or abrasive material.
- Maximum temperature of the liquid 90°C.
- Maximum recommended intake height 6 m with bottom valve (with max. temperature of the liquid at 50° C)
- Maximum operating pressure 10 bar. (with temp. of liquid 50°C) 6 bar (with temp. of liquid 90°C)

APPLICATIONS

- Handling of aggressive liquids.
- Lifting and distribution of water in domestic systems in continuous or intermittent operation.
- Pressurisation systems.
- Washing, irrigation, gardens, fountains.

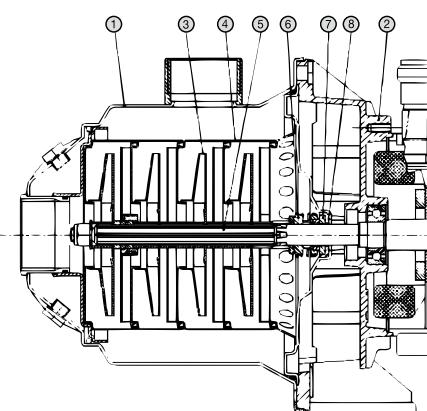


MOTOR

- Asynchronous motor
- Closed, ventilated from outside.
- Degree of protection IP 55.
- Insulation class F.
- Single-phase power supply with capacitor permanently on and thermal protection built into the motor casing.
- Three-phase power supply with external protection provided by the user.
- Speed of rotation 2850 rpm.
- Continuous service.

TABLE OF MATERIALS

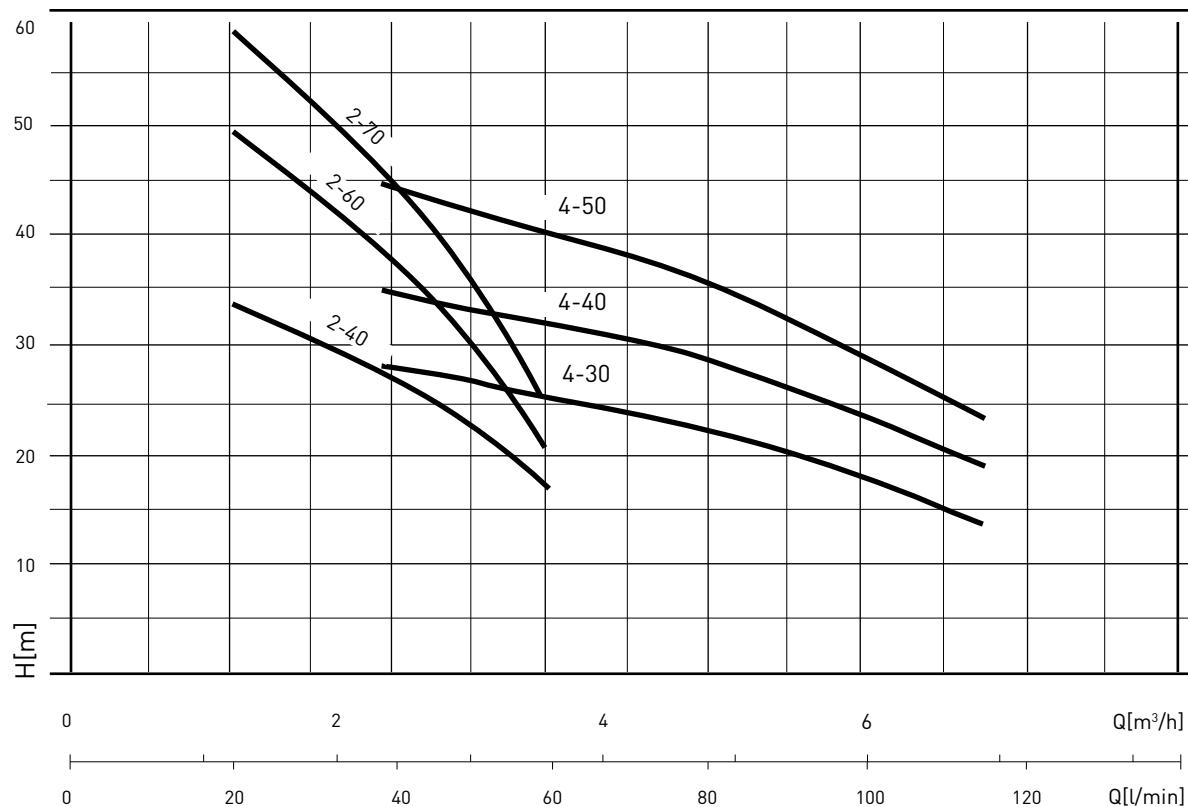
Component		Material
1	Pump body	Stainless steel X CrNiMo 17-12-03 (AISI 316)
2	Motor casing	Die-cast aluminium
3	Impeller	Stainless steel X CrNiMo 17-12-03 (AISI 316)
4	Intermediate chamber	Stainless steel X CrNiMo 17-12-03 (AISI 316)
5	Motor shaft	Stainless steel X CrNiMo 17-12-03 (AISI 316)
6	Mechanical seal	Graphite
7	Counterface	Ceramic
8	Seal-holding flange	Stainless steel X CrNiMo 17-12-03 (AISI 316)
	Gaskets	EPDM



NOCCHI DHI 2 - DHI 4

MULTISTAGE CENTRIFUGAL PUMPS MADE OF STAINLESS STEEL AISI 316

HYDRAULIC PERFORMANCE



PERFORMANCE TABLE

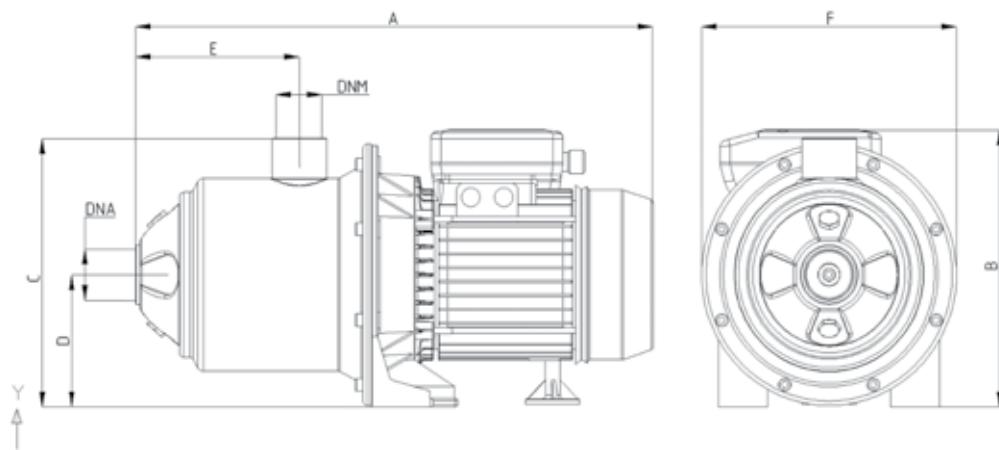
MODEL	Motor power (P1)		Absorbed power (P2)		VOLT. (V)	In (A)	μ F.	Q	l/min	10	20	30	40	50	60
	HP	kW	HP	kW						m^3/h	0.6	1.2	1.8	2.4	3
DHI 2-40 M	0.5	0.4	0.9	0.7	1 ~ 230	3.2	12.5	m.c.a./m.c.w.	36	34	31	27	22	17	
DHI 2-40 T	0.5	0.4	0.9	0.7	3 ~ 230/400	2.3 - 1.4	-		36	34	31	27	22	17	
DHI 2-60 M	0.8	0.6	1.2	0.9	1 ~ 230	4.1	16		53	49	43	37	30	21	
DHI 2-60 T	0.8	0.6	1.2	0.9	3 ~ 230/400	3 - 1.8	-		53	49	43	37	30	21	
DHI 2-70 M	1	0.78	1.5	1.1	1 ~ 230	5.2	20		63	58	52	44	36	26	
DHI 2-70 T	1	0.78	1.36	1	3 ~ 230/400	3 - 1.8	-		63	58	52	44	36	26	

MODEL	Motor power		Absorbed power		VOLT. (V)	In (A)	μ F.	Q	l/min	40	50	60	80	100	120
	HP	kW	HP	kW						2.4	3	3.6	4.8	6	7.2
DHI 4-30 M	0.67	0.5	1.1	0.8	1 ~ 230	3.6	12.5	m.c.a./m.c.w.	27	26	25	22	18	14	
DHI 4-30 T	0.67	0.5	1.1	0.8	3 ~ 230/400	2.9 - 1.7	-		27	26	25	22	18	14	
DHI 4-40 M	0.94	0.7	1.36	1	1 ~ 230	4.4	16		35	33	32	28	24	18	
DHI 4-40 T	0.94	0.7	1.36	1	3 ~ 230/400	3.3 - 2	-		35	33	32	28	24	18	
DHI 4-50 M	1.2	0.9	1.68	1.25	1 ~ 230	5.8	20		44	42	40	36	30	23	
DHI 4-50 T	1.2	0.9	1.6	1.2	3 ~ 230/400	3.3 - 2	-		44	42	40	36	30	23	

NOCCHI DHI 2 - DHI 4

MULTISTAGE CENTRIFUGAL PUMPS MADE OF STAINLESS STEEL AISI 316

OVERALL DIMENSIONS AND WEIGHTS



OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions in mm:							NET WEIGHTS (kg)
	A	B	C	D	E	F	DNA	
DHI 2-40	368	220	213.5	105	80	208	1" 1/4	11
DHI 2-60	396	220	213.5	105	108	208	1" 1/4	11.7
DHI 2-70	422	220	213.5	105	134	208	1" 1/4	14.1
DHI 4-30	368	220	213.5	105	80	208	1" 1/4	11.3
DHI 4-40	396	220	213.5	105	108	208	1" 1/4	12.1
DHI 4-50	422	220	213.5	105	134	208	1" 1/4	14

NOCCHI Multi EVO-SP

MULTISTAGE CENTRIFUGAL PUMPS - SPECIAL

NEW 2016
PENTAIR

IE3
MOTOR

Multi EVO-SP is a multi-stage centrifugal horizontal pump with an inlet with axial thread and an outlet with radial thread. The innovative, high efficiency hydraulic system is connected to a motor of the latest generation with a mechanical seal. Particularly suitable for the pumping of sea water and pool water.

ADVANTAGES

The Multi EVO-SP series PUMPS feature the following advantages:

- Strong and resistant to salt water, it is the perfect partner for all pool cleaning devices
- High reliability - thanks to the durable and innovative design
- Silent - more comfort for the user thanks to its silent operation
- Compact shape



SPECIFICATIONS:

PUMP

- Hydraulic performance according to ISO 9906:2012 - Grade 3B
- Type of liquid: clean water without suspended solids or abrasive material
- Maximum temperature of the liquid 50°C
- Maximum operating pressure 7 bar
- Maximum intake height recommended 6m with foot valve

MOTOR

- Closed, air ventilated (TEFC)
- 2 poles, 50 Hz ($n=2850$ rpm)
- IE3 three-phase AC ($P_2 \geq 0.75$ kW)
- Protection level: IP55
- Insulation class: F
- Single-phase power supply with capacitor permanently on and thermal protection built into the motor casing.



APPLICATIONS

- Pressurising and supply
- Irrigation
- Cleaning of pools with chlorinated water
- Cleaning of pools with sea water
- Pumping of aggressive liquids (compatibly with the type of materials)



NOCCHI Multi EVO-SP

MULTISTAGE CENTRIFUGAL PUMPS - SPECIAL

CONSTRUCTION FEATURES

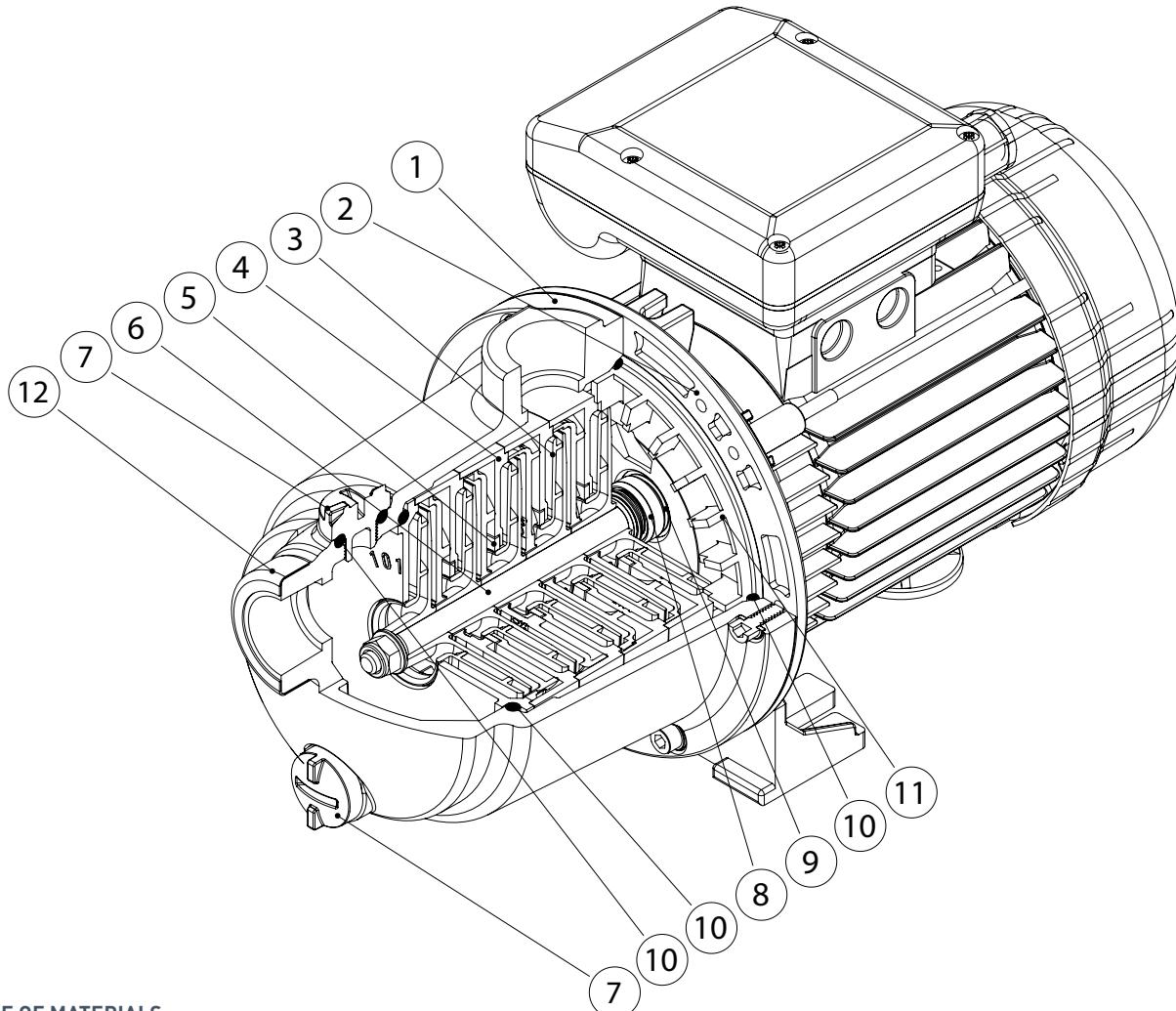


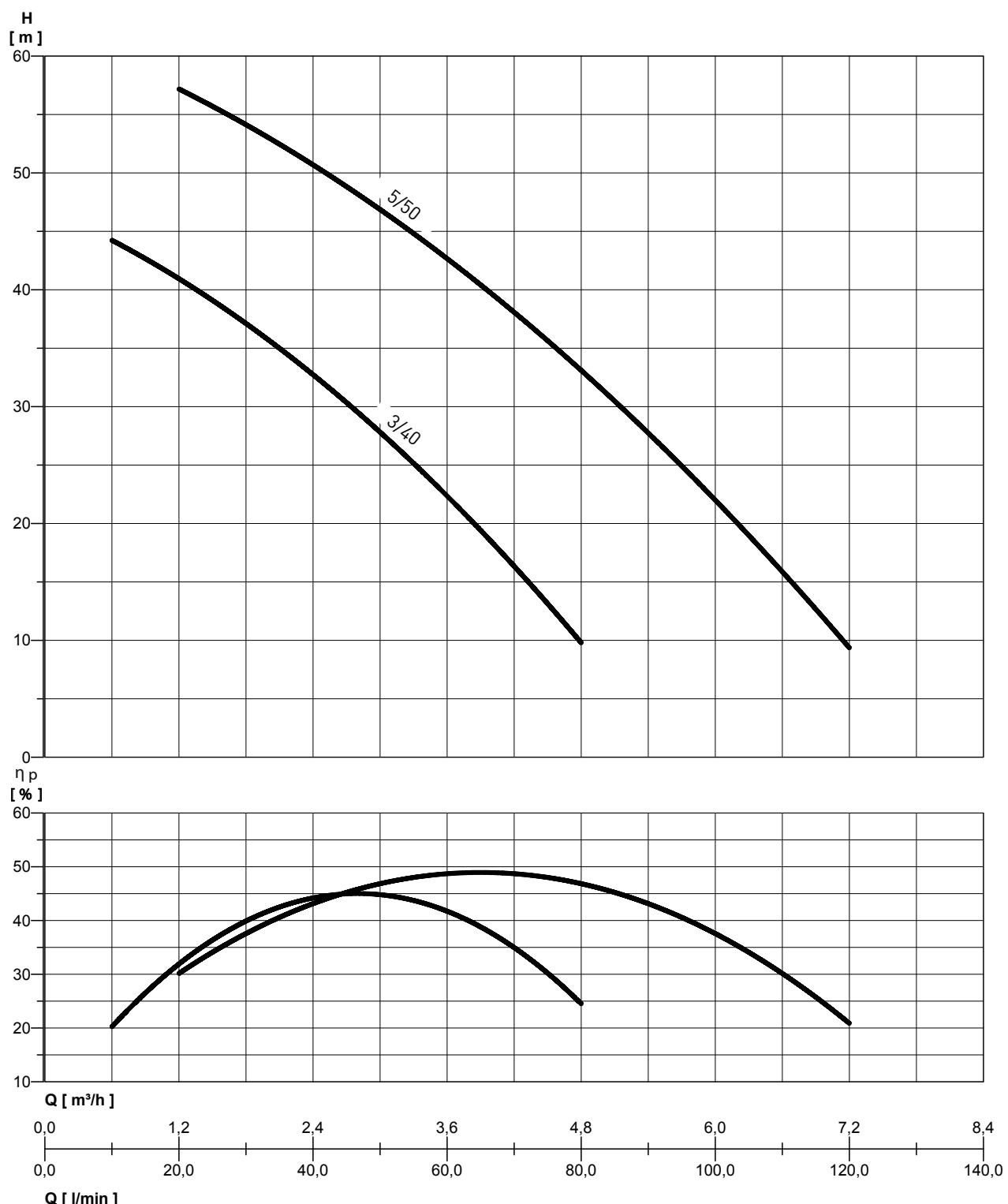
TABLE OF MATERIALS

Ref.	Component	Material
1	Pump body	PPO reinforced with fibreglass
2	Motor casing	Die-cast aluminium
3	Impeller	PPO reinforced with fibreglass
4	Diffuser	PPO reinforced with fibreglass
5	Wear ring	PTFE
6	Shaft (hydraulic part)	Stainless steel Europe: EN10088-1 X2CrNiMo17-12-2 (1.4404) USA: AISI 316
7	Inlet / outlet caps	Polyamide 6.6
8	Mechanical seal	Carbon graphite / NBR / SS Europe: EN10088-1 X2CrNiMo17-12-2 (1.4404) USA: AISI 316
9	Counterface	Ceramic / NBR
10	Gaskets	NBR 70 Shore A
11	Seal holder plate	PPO reinforced with fibreglass
12	Reinforcing ring	Stainless steel Europe: EN10088-1 X5CrNi18-10 (1.4301) USA: AISI 304

NOCCHI Multi EVO-SP 3 - 5

MULTISTAGE CENTRIFUGAL PUMPS - SPECIAL

HYDRAULIC PERFORMANCE

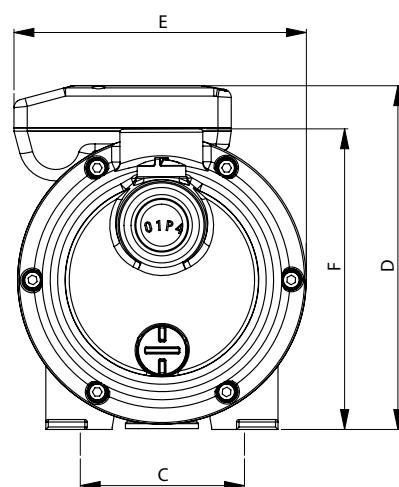
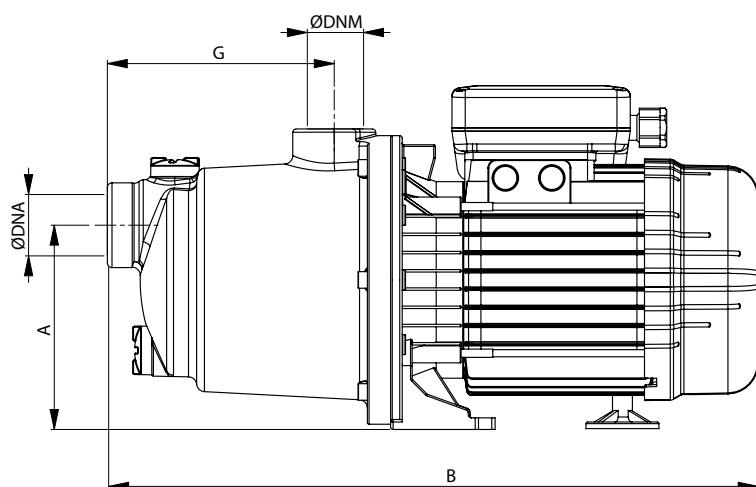


NOCCHI Multi EVO-SP 3 - 5

MULTISTAGE CENTRIFUGAL PUMPS - SPECIAL

PERFORMANCE TABLE

MODEL	Nominal power (P2)		Absorbed power (P1)		VOLT. (V)	In (A)	μ F	Q	l/min	10	20	30	40	50	60	80	100	120
	HP	kW	HP	kW						m ³ /h	0.6	1.2	1.8	2.4	3	3.6	4.8	6
Multi EVO-SP 3-40 M	0.74	0.55	1.1	0.8	1 ~ 230	3.7	12.5			44	41	37.5	33	27.5	22	10		
Multi EVO-SP 3-40 T	0.71	0.53	1.05	0.78	3 ~ 230/400	2.7 / 1.55	---			57	54	51	47	43	32.5	22	9.5	
Multi EVO-SP 5-50 M	1.27	0.95	1.8	1.35	1 ~ 230	6.2	20											
Multi EVO-SP 5-50 T	1.2	0.9	1.68	1.25	3 ~ 230/400	3.8 / 2.2	---											



OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions mm.								WEIGHTS (Kg)	
	A	B	C	D	E	F	G	DNA	DNM	
Multi EVO-SP 3-40 M	123	373	99	199	177	182	137	1"	1"	6.9
Multi EVO-SP 3-40 T	123	373	99	199	177	182	137	1"	1"	6.9
Multi EVO-SP 5-50 M	123	392	99	207	177	182	137	1"	1"	10.1
Multi EVO-SP 5-50 T	123	392	99	207	177	182	137	1"	1"	10.1

NOCCHI SWIMMEY

SELF-PRIMING PUMPS FOR POOLS WITH PRE-FILTER

The SWIMMEY series PUMPS are designed to achieve maximum reliability regarding filtering in the recirculation of water treated with chlorine.

MOTOR

- Closed, ventilated from outside.
- Degree of protection IP X5
- Insulation class F
- Single-phase power supply with capacitor permanently on and thermal protection built into the motor casing.
- Three-phase power supply with external protection provided by the user.
- Self-lubricating ball bearings.
- Speed of rotation 2850 rpm.
- Suitable for continuous use.



USAGE DATA

- Type of liquid: pool water treated with chlorine.
- Maximum temperature of the liquid 40°C.
- Maximum operating pressure: 2.5 bar.
- Maximum recommended intake height: 3 m with bottom valve.

APPLICATIONS

- Recirculation and filtration of water for pools and basins.

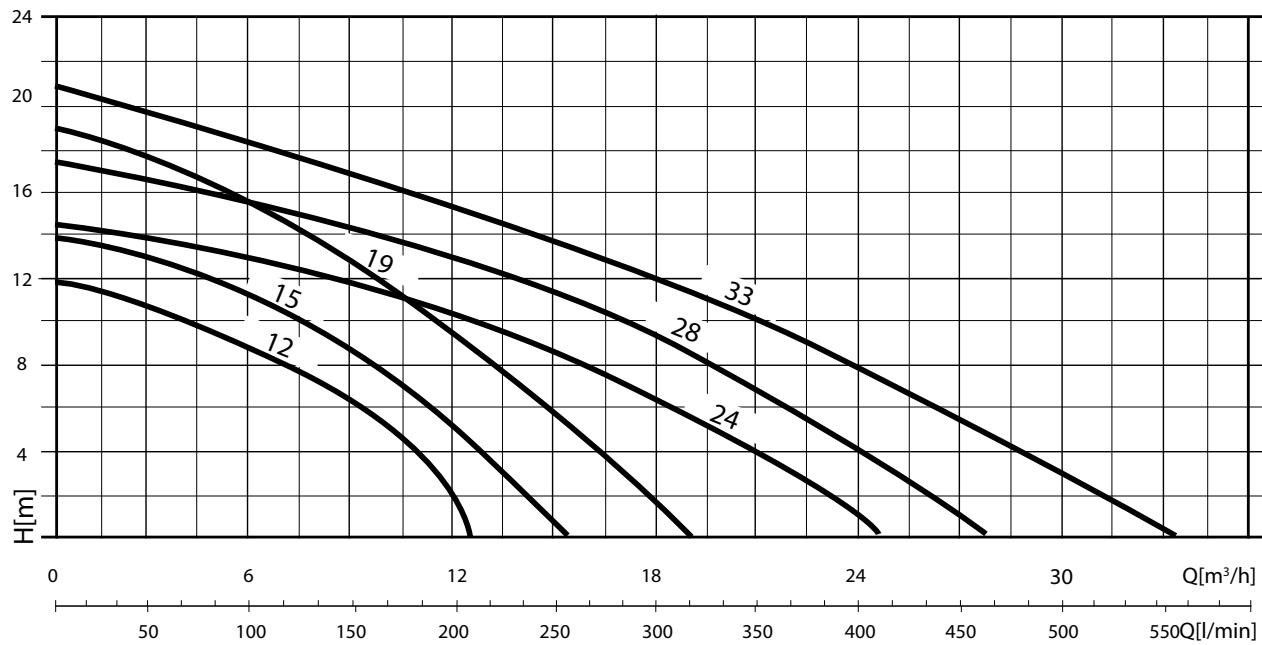
TABLE OF MATERIALS

Component	Material
Pump body	ABS
Pre-filter	ABS
Fittings (intake and supply)	ABS/PVC
Basket (large inspected via cover with screws)	Polyethylene HD
Impeller	Made of fibreglass reinforced Lexan (resistant to sand abrasion)
Diffuser	Made of fibreglass reinforced Lexan (resistant to sand abrasion)
Mechanical seal	Graphite
Counterface	Ceramic
Shaft	in stainless steel with insulating element
Supporting base	Polypropylene
Filter cover	in Lexan with Teflon treated O-Ring

NOCCHI SWIMMNEY

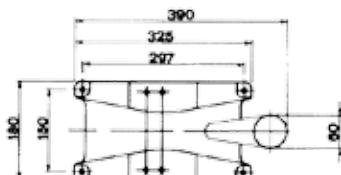
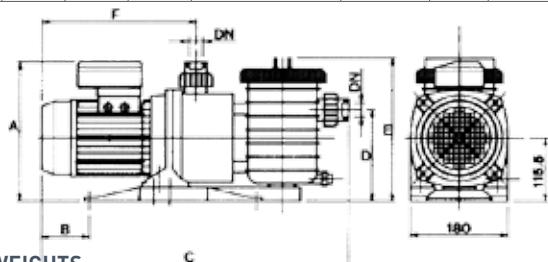
SELF-PRIMING PUMPS FOR POOLS WITH PRE-FILTER

HYDRAULIC PERFORMANCE



PERFORMANCE TABLE

MODEL	Motor power (P2)		Motor power (P1)		VOLT. (V)	In (A)	μF	Q	l/min	100	150	200	300	350	400	450	500
	HP	kW	HP	kW						6	9	12	18	21	24	27	30
SWIMMNEY 12 M	0.5	0.37	0.75	0.55	1 ~ 230 3 ~ 400	2.5 1.7-1	10			9	6	2					
SWIMMNEY 12 T										11	8.5	4.5					
SWIMMNEY 15 M	0.75	0.5	0.9	0.7	1 ~ 230 3 ~ 400	3 2.2-1.3	10			15.5	13	10	1.5				
SWIMMNEY 15 T										13	12	10.5	6	4	0.5		
SWIMMNEY 19 M	1	0.75	1.5	1.1	1 ~ 230 3 ~ 400	5 3.3-1.9	20			15.5	14.5	13	9	7	4.5	1.5	
SWIMMNEY 19 T										18.5	17	15.5	12	10.5	8	6	3.5
SWIMMNEY 24 M	1	0.75	1.5	1.1	1 ~ 230 3 ~ 400	4.8 3-1.7	20										
SWIMMNEY 24 T																	
SWIMMNEY 28 M	1.5	1.13	2	1.5	1 ~ 230 3 ~ 400	7 4.1-2.4	30										
SWIMMNEY 28 T																	
SWIMMNEY 33 M	2	1.5	2.55	1.9	1 ~ 230 3 ~ 400	8.5 6-3.6	35										
SWIMMNEY 33 T																	



OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions in mm:							WEIGHTS (Kg)
	A	B	C	D	E	F	DN	
SWIMMNEY 12	293	210	582	180	280	318	50	8
SWIMMNEY 15	293	210	582	180	280	318	50	8.5
SWIMMNEY 19	293	210	610	180	280	318	50	10.2
SWIMMNEY 24	293	210	610	180	280	318	50	11
SWIMMNEY 28	293	210	635	180	280	318	50	13
SWIMMNEY 33	293	210	635	180	280	318	50	14.5

NOCCHI CM

HORIZONTAL CENTRIFUGAL PUMPS



HIGHLY RELIABLE, STURDY, HIGH HYDRAULIC PERFORMANCE

The single-stage centrifugal pumps of the CM series are silent and feature high hydraulic performance.

APPLICATIONS

- Lifting from wells for irrigation.
- Pressurisation systems.
- Autoclaves for homes.
- Washing.

USAGE DATA

- Type of liquid: clear or slightly turbid non-abrasive water.
- Maximum temperature of the liquid 90°C (model CM 90/22 50°C).
- Maximum intake height recommended 5 m with foot valve.
- Maximum operating pressure:
6 bar for models HP 0.5.
8 bar for models HP 1 - 1.5 - 2.

MOTOR

- Closed, ventilated from outside.
- Degree of protection IP 44
- Insulation class F
- Single-phase power supply with capacitor permanently on and thermal protection built into the motor casing.
- Three-phase power supply with external protection provided by the user.
- Speed of rotation 2850 rpm.
- Continuous service.



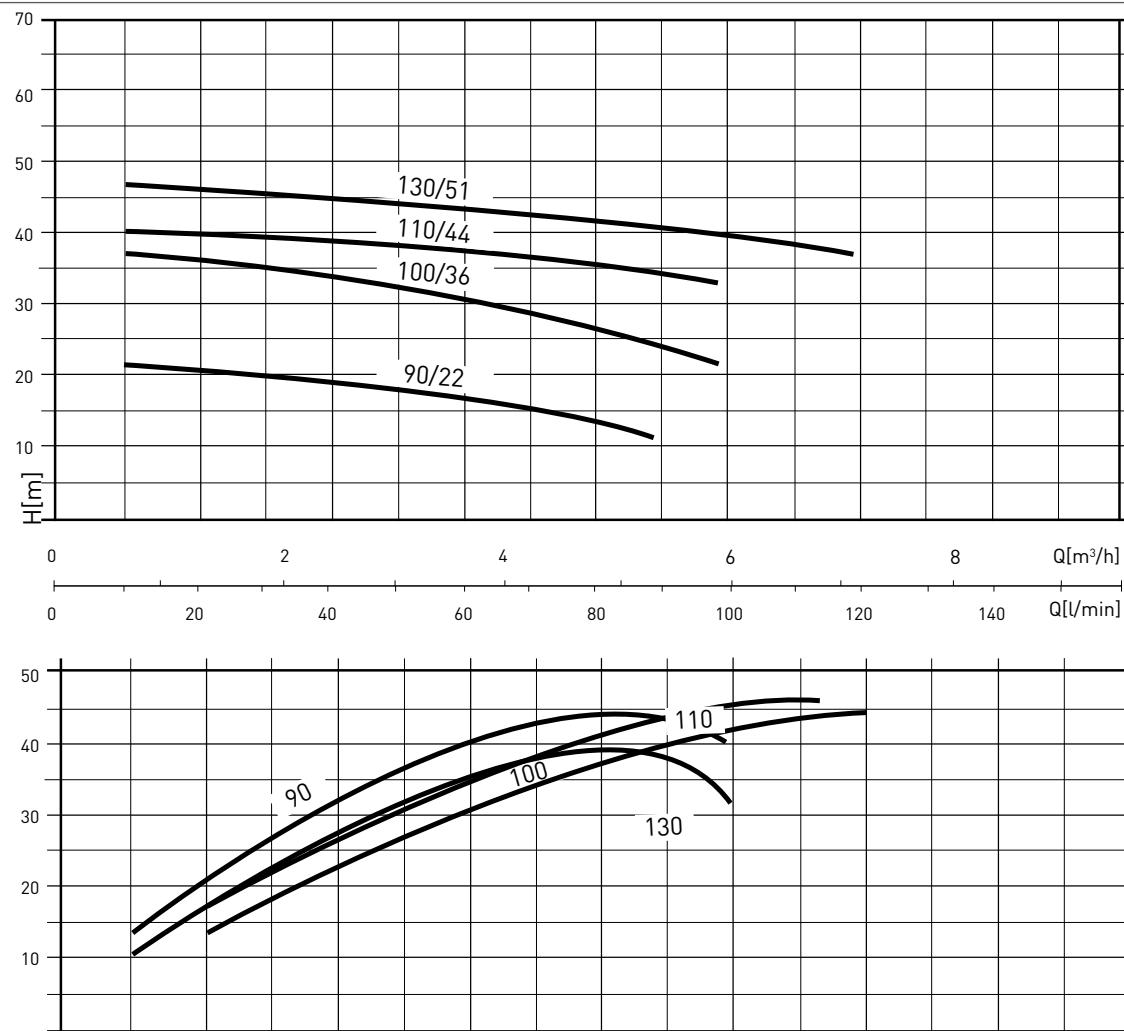
TABLE OF MATERIALS

Component	Material
Pump body	Cast iron EN GJL 200
Motor casing	Cast iron EN GJL 200
Impeller	Brass (CM 90/22 in technopolymer)
Motor shaft	Stainless steel X 12 CrNiS 1809 (AISI 416)
Mechanical seal	Graphite
Counterface	Ceramic
Gaskets	NBR 70 shore

NOCCHI CM

HORIZONTAL CENTRIFUGAL PUMPS

HYDRAULIC PERFORMANCE



MEI > 0.1 - Reference MEI > 0.70 - The information on the reference efficiency is available at the address: www.europump.org/efficiencycharts

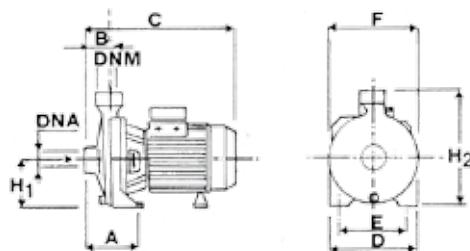
PERFORMANCE TABLE

MODEL	Motor power (P2)		Motor power (P1)		VOLT. (V)	In (A)	μ F	Q	l/min	10	30	50	80	100	120
	HP	kW	HP	kW						0.6	1.8	3	4.8	6	7.2
CM 90/22 M*	0.5	0.35	1	0.75	1 ~ 230 3 ~ 230/400	3.6 2.4-1.4	12.5			22	20	18	13		
CM 90/22 T*															
CM 100/36 M	1	0.75	1.7	1.25	1 ~ 230 3 ~ 230/400	5.5 3.8-2.2	20			35	33	31	26	22	
CM 100/36 T															
CM 110/44 M	1.5	1.1	2.3	1.7	1 ~ 230 3 ~ 230/400	8 5.5-3.2	35			41	40	39	36	34	
CM 110/44 T															
CM 130/51 M	2	1.5	3.2	2.4	1 ~ 230 3 ~ 230/400	10.3 6.9-4.0	40			47	46	45	42	40	38
CM 130/51 T															

* Technopolymer impeller

OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions mm.										WEIGHTS (Kg)
	A	B	C	D	E	F	H1	H2	DNA	DNM	
CM 90/22	75	43	267	150	110	160	82	202	1"	1"	6.5
CM 100/36	82	44	310	180	140	185	107	242	1"	1"	11
CM 110/44	88	45	350	194	155	200	100	252	1"1/4	1"	20
CM 130/51	88	45	361	220	180	225	115	285	1"1/4	1"	23



NOCCHI CB

TWO-STAGE CENTRIFUGAL PUMPS

HIGH HYDRAULIC PERFORMANCE

The two opposite impellers with balanced axial thrust allow for high efficiency, making them particularly suitable for civil and industrial use, autoclave boosters, etc.

APPLICATIONS

- Pressurisation systems.
- Small irrigation.
- Handling of non-aggressive liquids
- Washing systems

MOTOR

- Closed, ventilated from outside.
- Degree of protection IP 44
- Insulation class F
- Single-phase power supply with capacitor permanently on and thermal protection built into the motor casing.
- Three-phase power supply with external protection provided by the user.



USAGE DATA

- Type of liquid: clear or slightly turbid non-abrasive water.
- Maximum temperature of the liquid 40°C for 0.55 - 0.75 kW 90°C for 1.1 - 4.0 kW
- Maximum intake height recommended 5 m with foot valve.
- Maximum operating pressure: 6 bar for models kW 0.55 - 0.75 10 bar for models kW 1.1 - 4

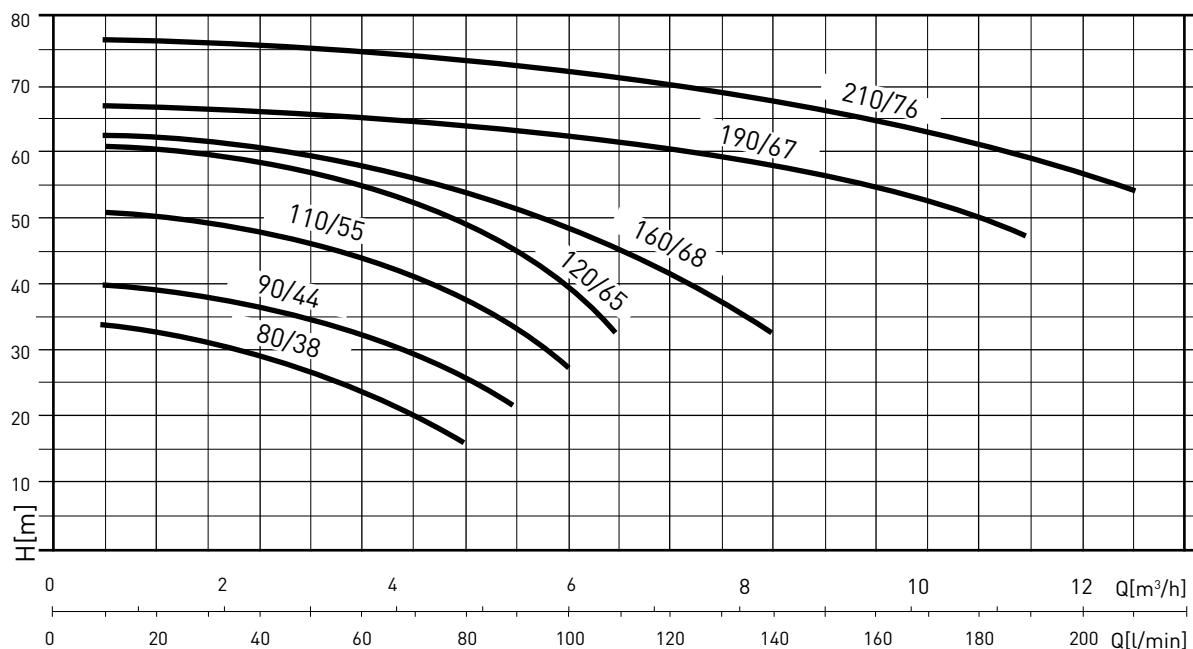
TABLE OF MATERIALS

Component	Material
Pump body	Cast iron EN GJL 200
Motor casing	Aluminium for models : kW 0.55 - 1.00 Cast iron for the rest of the range
Impeller	Technopolymer for models : kW 0.55 - 0.75 brass for the rest of the range
Intermediate disk	Cast iron
Motor shaft	AISI 303 for models : kW 1.1 - 1.5 - 2.2 AISI 304 for models : kW 3.0 - 4.0 AISI 416 for models : kW 0.55 - 0.75
Mechanical seal	Graphite
Counterface	Ceramic
Seal-holding disk	AISI 304 for models : kW 0.55 - 0.75 Cast iron for the rest of the range
Gaskets	NBR

NOCCHI CB

TWO-STAGE CENTRIFUGAL PUMPS

HYDRAULIC PERFORMANCE

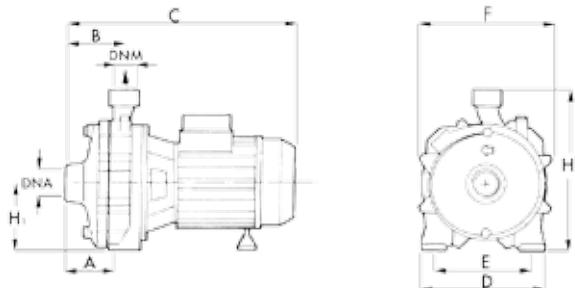


PERFORMANCE TABLE

MODEL	Motor power (P2)		Motor power (P1)		VOLT. (V)	In (A)	μ F	Q	l/min	20	40	50	80	90	100	110	140	170	190	210
	HP	kW	HP	kW						1.2	2.4	3.0	4.8	5.4	6.0	6.6	8.4	9.6	10.8	12.0
CB 80/38 M	0.75	0.55	1.5	1.1	1 ~ 230	5	1.6			33	30.2	27.9	17							
CB 80/38 T			1.4	1.1	3 ~ 220/380	3.4-2.0				39.5	37	35.2	27	21						
CB 90/44 M	1	0.74	1.9	1.4	1 ~ 230	6.1	20			50.8	48.8	47.1	38.4	33.4	27.5					
CB 90/44 T			1.2	0.9	3 ~ 230/400	2.9-1.7				60.5	58.6	56.9	49.8	46.5	40.3	32.5				
CB 110/55 M	1.5	1.1	2.5	1.9	1 ~ 230	8.6	35			60.5	59.3	54.1	51.6	48.4	44.6	32				
CB 110/55 T			2.4	1.8	3 ~ 230/400	5.5-3.2				67	64.8	63.9	62.5	62	58	53.5				
CB 120/65 M	2	1.5	3.2	2.4	1 ~ 230	10.8	40				76.5	73.9	72.9	71.8	70.5	66.8	62	58.3	54	
CB 120/65			2.8	2.1	3 ~ 230/400	6.9-4.0														
CB 160/68 T	3	2.2	3.5	2.6	3 ~ 230/400	8.1-4.7														
CB 190/67 T	4	3	5.5	4.1	3 ~ 230/400	12.5-7.2														
CB 210/76 T	5	4	6.1	4.6	3 ~ 230/400	15.1-8.7														

OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions mm.									WEIGHTS (Kg)
	A	B	C	D	E	F	H1	H2	DNA	
CB 80/38	58	73	336	180	140	183	97	227	1"	13.5
CB 90/44	58	73	336	180	140	183	97	227	1"	15
CB 110/55	66	86	394	195	155	209	110	265	1"1/4	25
CB 120/65	66	86	410	195	155	209	110	265	1"1/4	27
CB 160/68	66	86	410	195	155	194	110	265	1"1/4	27
CB 190/67	72	96	467	230	180	228	133	309	1"1/2	42.5
CB 210/76	72	96	467	230	180	228	133	309	1"1/4	46.3



NOCCHI SSCX

SINGLE STAGE MONOBLOC CENTRIFUGAL PUMPS WITH AXIAL INTAKE AND RADIAL SUPPLY

STAINLESS STEEL 304 IMPELLER AND DIFFUSER, HIGH HYDRAULIC PERFORMANCE, VERY RELIABLE

The horizontal single stage centrifugal pumps of the series SSCX are made of stainless steel AISI 304 with an asynchronous motor, 2 poles, self-ventilated. Recommended to pump clean water and chemically non-aggressive liquids in the domestic, agricultural and industrial sectors.

APPLICATIONS

- Pressurisation systems
- Irrigation
- Conveyance of water and non-aggressive liquids
- Gardening

VERSIONS

- Standard: mechanical seal in graphite / ceramic and seals in MBR
- Special: mechanical seal in silicon carbide/silicon carbide and Viton seals

USAGE DATA

- Type of liquid: water or chemically non-aggressive liquid, clean, without suspended solids.
- Maximum temperature of the liquid 90°C.
- Maximum operating pressure: 8 bar (PN8)

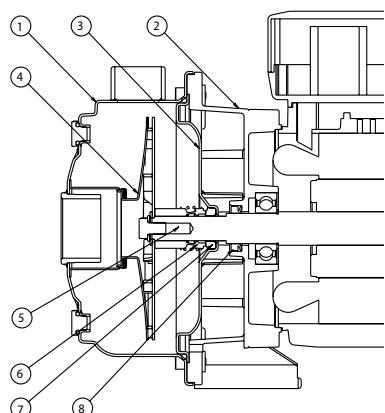
MOTOR

- Closed, ventilated from outside
- Degree of protection IP 55
- Insulation class F
- Single-phase power supply with capacitor permanently on and thermal protection built into the motor casing
- Three-phase power supply with protection provided by the user.
- Speed of rotation 2850 rpm
- Continuous service.



TABLE OF MATERIALS

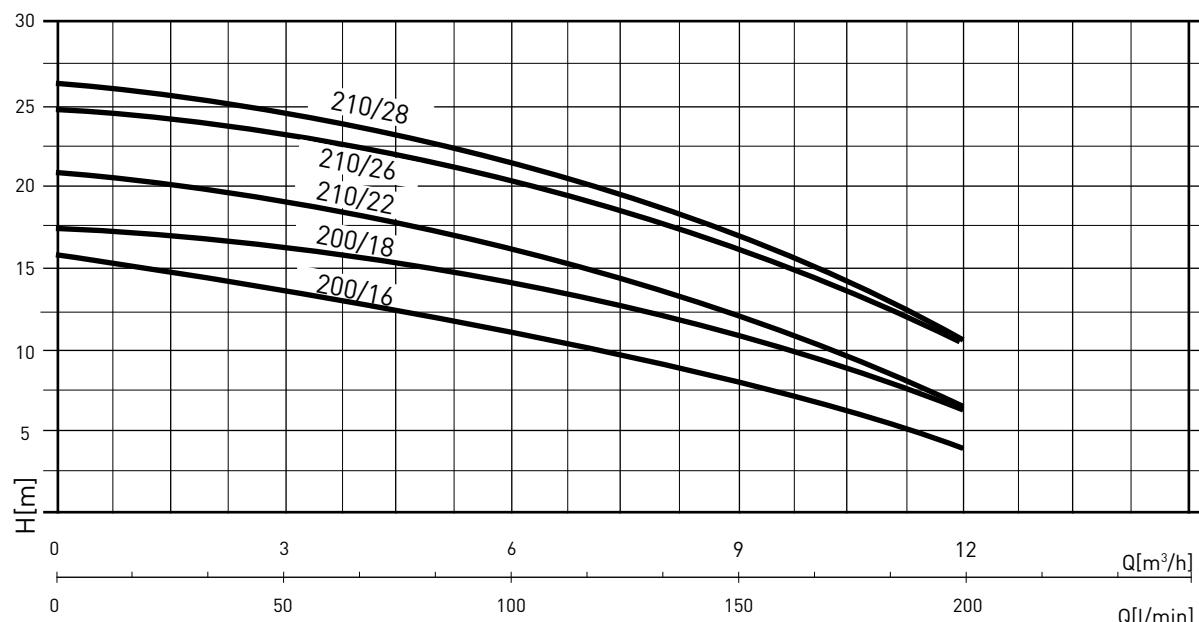
Component		Material
1	Pump body	Stainless steel X5 CrNi 18-10 EN1.4301 (AISI 304)
2	Motor casing	Aluminium AISI 12 UNI 5076
3	Seal-holding bottom plate	Stainless steel X5 CrNi 18-10 EN1.4301 (AISI 304)
4	Impeller	Stainless steel X5 CrNi 18-10 EN1.4301 (AISI 304)
5	Shaft (hydraulic part)	Stainless steel X5 CrNi 18-10 EN1.4301 (AISI 304)
6	Mechanical seal (rotating part)	Graphite or silicon carbide
7	Counterface (fixed part)	Ceramic or silicon carbide
8	Gaskets	NBR 70Shore or Viton



NOCCHI SSCX

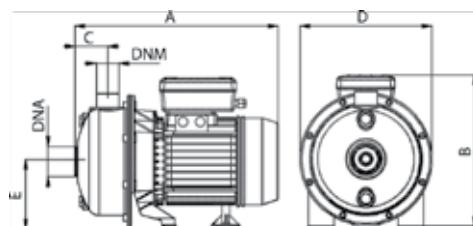
SINGLE STAGE MONOBLOC CENTRIFUGAL PUMPS WITH AXIAL INTAKE AND RADIAL SUPPLY

HYDRAULIC PERFORMANCE



PERFORMANCE TABLE

MODEL	Motor power (P2)		Motor power (P1)		VOLT. (V)	In (A)	μ F	Q	l/min	0	20	40	80	120	160	200
	HP	kW	HP	kW												
SSCX 200/16M SSCX 200/16T	0.75	0.55	1	0.75	1 ~ 230 3 ~ 230/400	3.5 3.1-1.8	12.5 -	mca / mcw	16	14.5	14	12.5	9.5	6.5	4	
SSCX 200/18M SSCX 200/18T	1	0.75	1.2	0.9		4 3.1-1.8	16 -		18	17	16	15	13	10.5	6	
SSCX 210/22M SSCX 210/22T	1.15	0.85	1.5	1.1		4.9 3.8-2.2	25 -		21.5	20	19	17	15	11	6	
SSCX 210/26M SSCX 210/26T	1.35	1	1.9	1.4		6.7 5.2-9	25 -		25.5	24	23	21.5	19	15.5	10	
SSCX 210/28M SSCX 210/28T	1.5	1.1	2.1	1.55		7.3 5.6-3.2	25 -		27	25.5	24.5	23	19.5	16	10	



OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions mm.							WEIGHTS (Kg)
	A	B	C	D	E	DNA	DNM	
SSCX 200/16	320	240	50.5	210	105	1" 1/4	1"	8.7
SSCX 200/18	320	240	50.5	210	105	1" 1/4	1"	9.5
SSCX 210/22	350	250	50.5	210	105	1" 1/4	1"	12.1
SSCX 210/26	350	250	50.5	210	105	1" 1/4	1"	13.6
SSCX 210/28	350	250	50.5	210	105	1" 1/4	1"	13.8



NOCCHI MULTINOX-VE+

VERTICAL MULTISTAGE CENTRIFUGAL PUMPS

HIGH HYDRAULIC EFFICIENCY, STRONG AND RESISTANT



The MULTINOX-VE+ series vertical multi-stage centrifugal pumps are particularly suitable for the realization of lifting boosters, especially in the cases where high efficiency and silence are required, with compact dimensions.

USAGE DATA

- Type of liquid: clean water without suspended solids or abrasive material.
- Maximum temperature of the liquid 50°C.
- Maximum intake height recommended 6 m with foot valve.
- Maximum operating pressure: 9 bar
- 12 bar (version MULTINOX-VE+ 4-90 e 6-90)
- 16 bar (version MULTINOX-VE+ 4-120)
- 20 bar (version MULTINOX-VE+ 8-90 e 8-120)

APPLICATIONS

- Lifting and distribution of water in domestic systems in continuous or intermittent operation.
- Pressurisation systems.
- Fire prevention systems.
- Washing, irrigation, gardens, fountains.

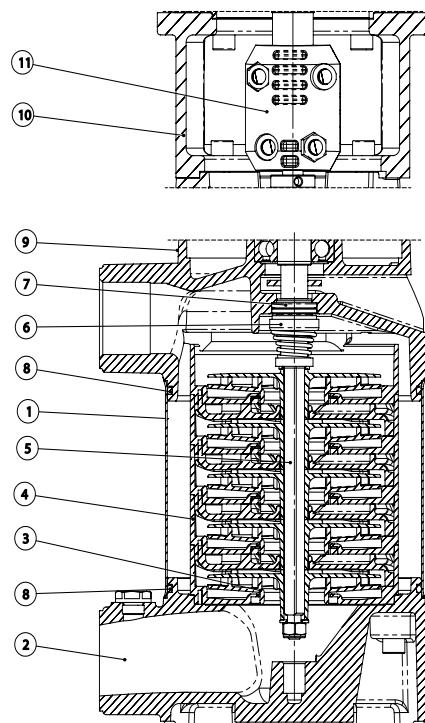
MOTOR

- Closed, ventilated from outside.
- Degree of protection:
IP44: MULTINOX-VE+ 8-30 a 8-70.
IP55: MULTINOX-VE+ 8-90 e 8-120
- Insulation class F.
- Motor efficiency:
IE2: MULTINOX-VE+ 8-30 a 8-70
IE3: MULTINOX-VE+ 8-90 e 8-120.
- Single-phase power supply with capacitor permanently on and thermal protection built into the motor casing.
- Three-phase power supply with external protection provided by the user.
- Speed of rotation 2850 rpm.
- Continuous service.



TABLE OF MATERIALS

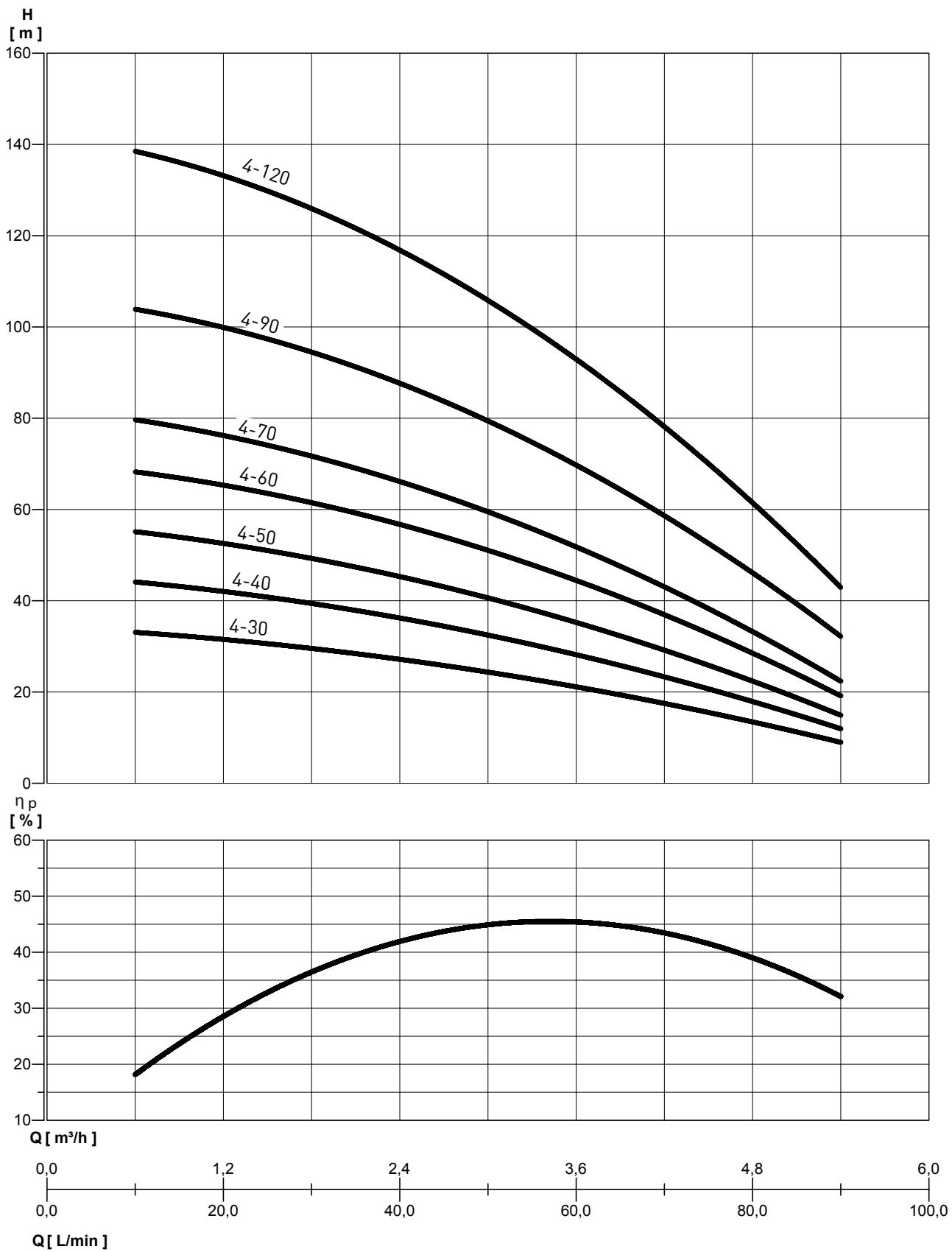
Component	Material
1 Sleeve (pump body)	Stainless steel EN 10088-1-X5 CrNi 1810 (AISI 304)
2 Intake flange	Cast iron EN GJL 200
3 Impellers	Technopolymer
4 Diffusers:	Technopolymer
5 Shaft (hydraulic part)	Stainless steel EN 10088-1-X5 CrNi 1810 (AISI 304)
6 Mechanical seal	Graphite/Silicon Carbide for MULTINOX-VE+ 8-90 and 8-120
7 Counterface	Aluminium Oxide / Graphite for MULTINOX-VE+ 8-90 and 8-120
8 Gaskets	Nitrile-Butadiene Rubber (NBR)
9 Motor support supply flange	Cast iron EN GJL 200
10 Motor bell	Cast iron EN GJL 200
11 Motor coupling	Aluminium alloy



NOCCHI MULTINOX-VE+

VERTICAL MULTISTAGE CENTRIFUGAL PUMPS

HYDRAULIC PERFORMANCE



Hydraulic performance in accordance with ISO 9906:2012 - Curves at 2900 rpm

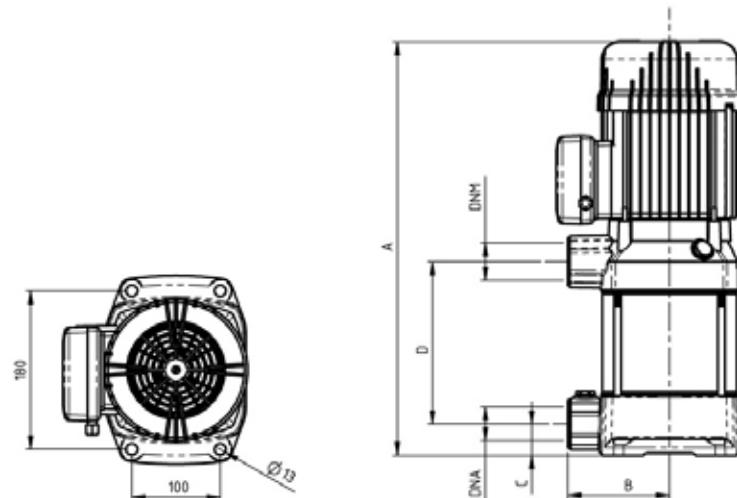
MEI > 0.4 - Reference MEI > 0.70 - The information on the reference efficiency is available at the address: www.europump.org/efficiencycharts

NOCCHI MULTINOX-VE+

VERTICAL MULTISTAGE CENTRIFUGAL PUMPS

PERFORMANCE TABLE

MODEL	Motor power (P2)		Motor power (P1)		VOLT. (V)	In (A)	μ F	Q	l/min m ³ /h	10	30	40	50	60	70	90
	HP	kW	HP	kW						0.6	1.8	2.4	3	3.6	4.2	5.4
MULTINOX VE+ 4-30 M MULTINOX VE+ 4-30 T	0.68	0.5	1.2 1	0.86 0.73	1 ~ 230 3 ~ 230/400	3.6 2.6-1.5	20	m.c.a. / m.c.w.		33	30	27	24	21	17	9
MULTINOX VE+ 4-40 M MULTINOX VE+ 4-40 T	0.91	0.67	1.4 1.3	1 0.97	1 ~ 230 3 ~ 230/400	4.4 3.1-1.8	20			44	40	36	32	28	23	12
MULTINOX VE+ 4-50 M MULTINOX VE+ 4-50 T	1.1	0.84	1.8 1.6	1.3 1.16	1 ~ 230 3 ~ 230/400	5.3 4-2.3	20	m.c.a. / m.c.w.		55	50	45	41	35	29	15
MULTINOX VE+ 4-60 M MULTINOX VE+ 4-60 T	1.4	1	2 1.9	1.5 1.4	1 ~ 230 3 ~ 230/400	6.6 4.3-2.5	25			68	62	57	51	44	37	19
MULTINOX VE+ 4-70 M MULTINOX VE+ 4-70 T	1.6	1.17	2.4 2.3	1.8 1.7	1 ~ 230 3 ~ 230/400	7.7 5-2.8	25	m.c.a. / m.c.w.		79	72	67	59	51	43	22
MULTINOX VE+ 4-90 T	2	1.5	2.6	1.9	3 ~ 230/400	7.1-4	104			95	88	79	69	59	32	
MULTINOX VE+ 4-120 T	3	2	3.7	2.7	3 ~ 230/400	8.5-4.8	m.c.a. / m.c.w.			138	127	117	105	92	78	43



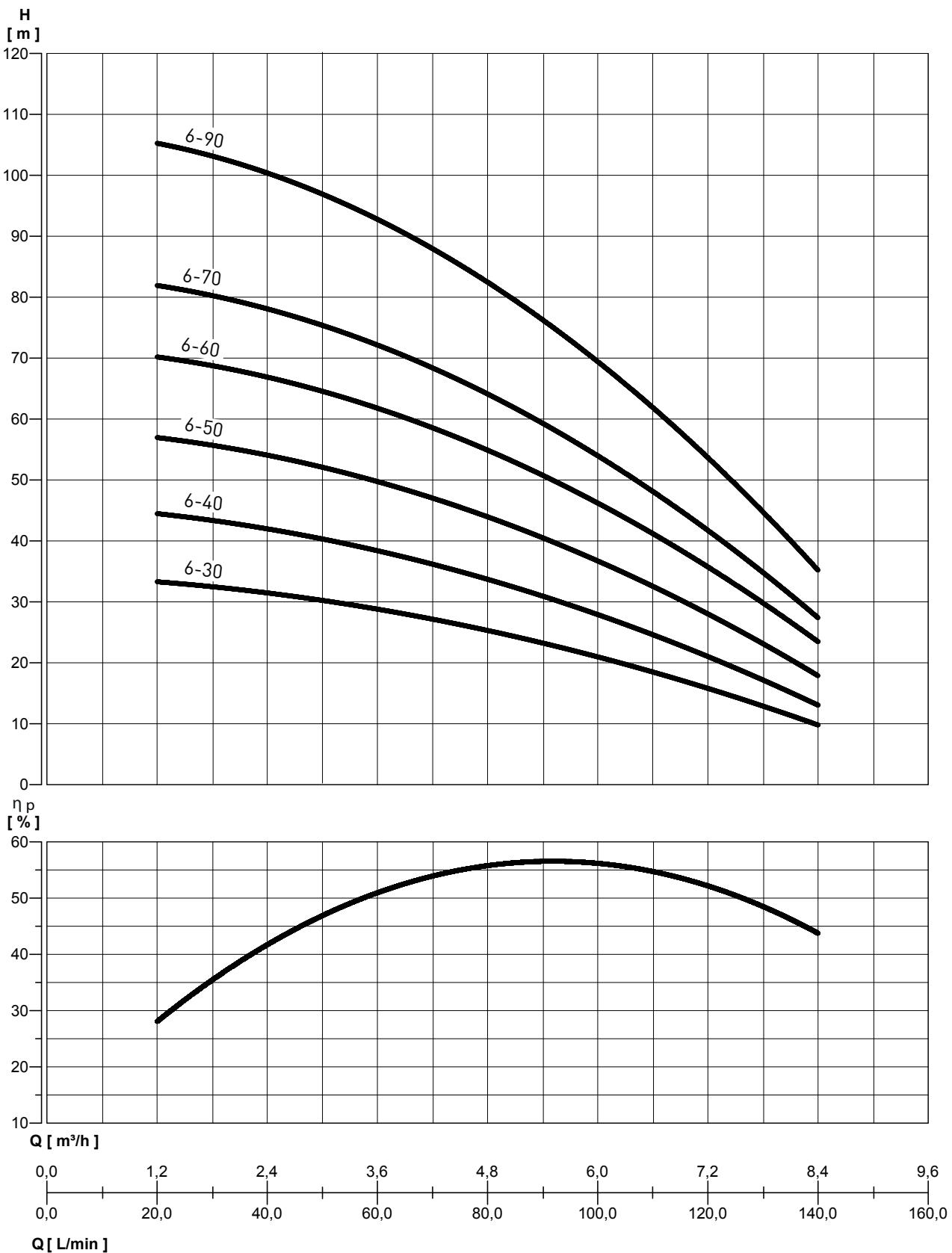
OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions (mm)						WEIGHTS (Kg)
	A	B	C	D	DNA	DNM	
MULTINOX VE+ 4-30	416	115	35	130	1" 1/4	1" 1/4	19
MULTINOX VE+ 4-40	443	115	35	157	1" 1/4	1" 1/4	21
MULTINOX VE+ 4-50	470	115	35	184	1" 1/4	1" 1/4	23
MULTINOX VE+ 4-60	497	115	35	211	1" 1/4	1" 1/4	25
MULTINOX VE+ 4-70	524	115	35	238	1" 1/4	1" 1/4	27
MULTINOX VE+ 4-90	578	115	35	292	1" 1/4	1" 1/4	28
MULTINOX VE+ 4-120	660	115	35	373	1" 1/4	1" 1/4	30

NOCCHI MULTINOX-VE+

VERTICAL MULTISTAGE CENTRIFUGAL PUMPS

HYDRAULIC PERFORMANCE



Hydraulic performance in accordance with ISO 9906:2012 - Curves at 2900 rpm

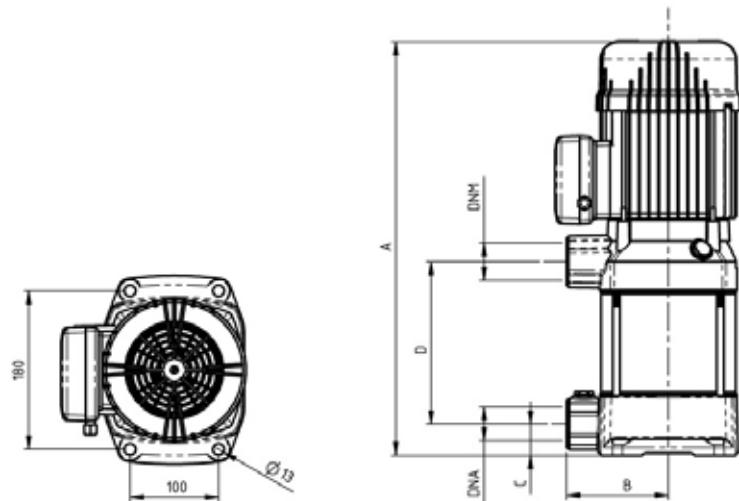
MEI ≥ 0.7 - Reference MEI ≥ 0.70 - The information on the reference efficiency is available at the address: www.europump.org/efficiencycharts

NOCCHI MULTINOX-VE+

VERTICAL MULTISTAGE CENTRIFUGAL PUMPS

PERFORMANCE TABLE

MODEL	Motor power (P2)		Motor power (P1)		VOLT. (V)	I _n (A)	μF	Q	l/min m ³ /h	20	40	60	80	100	120	140
	HP	kW	HP	kW						1.2	2.4	3.6	4.8	6	7.2	8.4
MULTINOX VE+ 6-30 M MULTINOX VE+ 6-30 T	0.9	0.67	1.4 1.3	1 0.97	1 ~ 230 3 ~ 230/400	4.4 3.1-1.8	20	m.c.a. / m.c.w.	34	31	28	26	21	16	10	
MULTINOX VE+ 6-40 M MULTINOX VE+ 6-40 T	1.2	0.9	1.9 1.6	1.36 1.2	1 ~ 230 3 ~ 230/400	6.4 2.3-4	25		45	41	38	34	28	21	13	
MULTINOX VE+ 6-50 M MULTINOX VE+ 6-50 T	1.50	1.1	2.2 1.9	1.6 1.4	1 ~ 230 3 ~ 230/400	7 4.7-2.6	35		58	53	49	44	37	28	17	
MULTINOX VE+ 6-60 M MULTINOX VE+ 6-60 T	1.8	1.3	2.6 2.3	1.9 1.7	1 ~ 230 3 ~ 230/400	8 5.3-3	35		71	66	61	55	47	36	23	
MULTINOX VE+ 6-70 T	2	1.5	2.7	2	3 ~ 230/400	7.2-3.8			83	77	71	64	55	42	27	
MULTINOX VE+ 6-90 T	3	2	3.5	2.6	3 ~ 230/400	8.2-4.5			107	99	92	83	71	54	34	



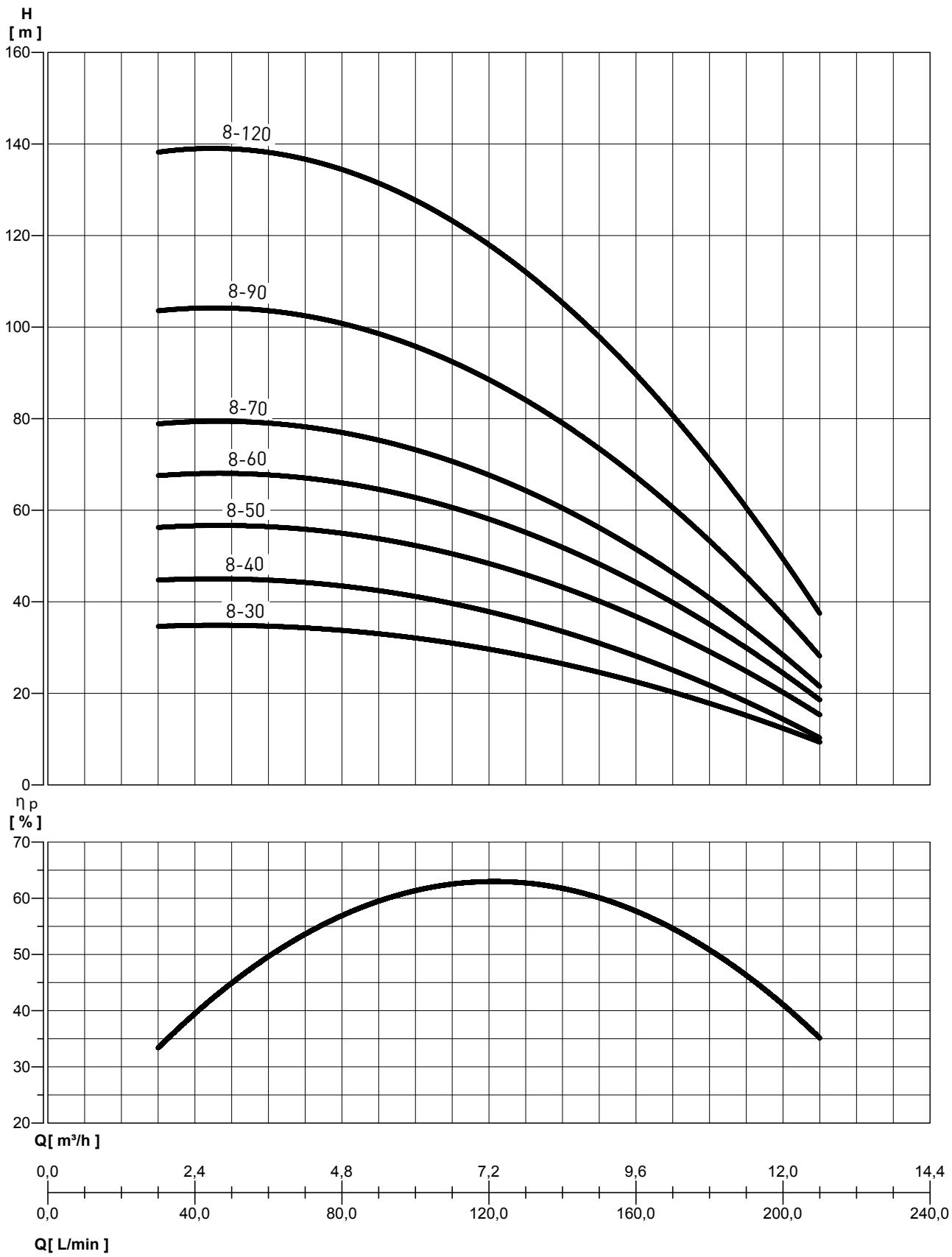
OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions (mm)						WEIGHTS (Kg)
	A	B	C	D	DNA	DNM	
MULTINOX VE+ 6-30	416	115	35	130	1" 1/4	1" 1/4	19
MULTINOX VE+ 6-40	443	115	35	157	1" 1/4	1" 1/4	21
MULTINOX VE+ 6-50	470	115	35	184	1" 1/4	1" 1/4	23
MULTINOX VE+ 6-60	497	115	35	211	1" 1/4	1" 1/4	25
MULTINOX VE+ 6-70	524	115	35	238	1" 1/4	1" 1/4	27
MULTINOX VE+ 6-90	578	115	35	292	1" 1/4	1" 1/4	28

NOCCHI MULTINOX-VE+

VERTICAL MULTISTAGE CENTRIFUGAL PUMPS

HYDRAULIC PERFORMANCE



Hydraulic performance in accordance with ISO 9906:2012 - Curves at 2900 rpm

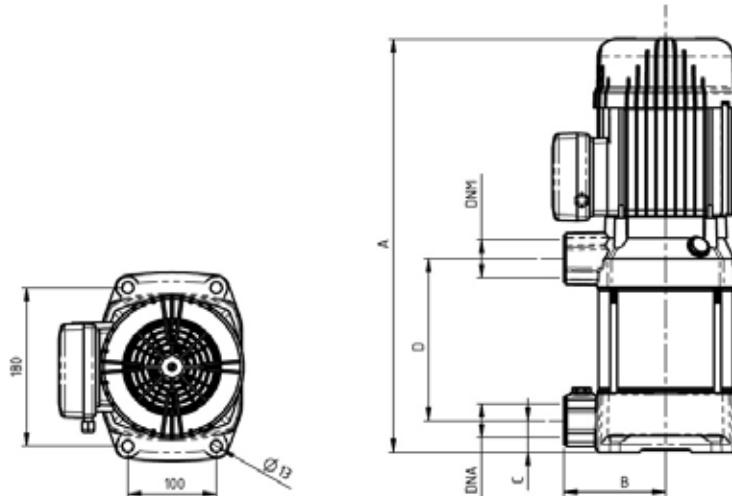
MEI ≥ 0.7 - Reference MEI ≥ 0.70 - The information on the reference efficiency is available at the address: www.europump.org/efficiencycharts

NOCCHI MULTINOX-VE+

VERTICAL MULTISTAGE CENTRIFUGAL PUMPS

PERFORMANCE TABLE

MODEL	Motor power (P2)		Motor power (P1)		VOLT. (V)	I _n (A)	μF	Q	l/min	30	60	90	120	150	180	210
	HP	kW	HP	kW						m ³ /h	1.8	3.6	5.4	7.2	9	10.8
MULTINOX VE+ 8-30 M	1.35	1	1.9	1.4	1 ~ 230	6.3	20			35	35	33	30	25	18	10
MULTINOX VE+ 8-30 T			1.7	1.3	3 ~ 230/400	4-2.3										
MULTINOX VE+ 8-40 M	1.6	1.2	2.3	1.7	1 ~ 230	7.8	25			45	44	42	39	32	20	11
MULTINOX VE+ 8-40 T			2.3	1.7	3 ~ 230/400	5.7-3.3										
MULTINOX VE+ 8-50 M	2	1.5	3	2.2	1 ~ 230	9.5	35			57	56	53	50	40	28	16
MULTINOX VE+ 8-50 T			2.8	2.1	3 ~ 230/400	6-3.7										
MULTINOX VE+ 8-60 T	2.3	1.7	3.3	2.4	3 ~ 230/400	6.7-4.7				68	67	64	60	48	34	19
MULTINOX VE+ 8-70 T	2.5	1.9	3.4	2.5	3 ~ 230/400	7-4.9				80	78	74	70	56	40	22
MULTINOX VE+ 8-90 T	4	3	4.4	3.2	3 ~ 230/400	10.2-5.9				104	103	98	90	73	52	29
MULTINOX VE+ 8-120 T	5.5	4	6.2	4.6	3 ~ 230/400	13.5-7.6				139	138	131	120	98	70	38



OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions (mm)						WEIGHTS (Kg)
	A	B	C	D	DNA	DNM	
MULTINOX VE+ 8-30	416	115	35	130	1" 1/4	1" 1/4	19
MULTINOX VE+ 8-40	443	115	35	157	1" 1/4	1" 1/4	21
MULTINOX VE+ 8-50	470	115	35	184	1" 1/4	1" 1/4	23
MULTINOX VE+ 8-60	497	115	35	211	1" 1/4	1" 1/4	25
MULTINOX VE+ 8-70	524	115	35	238	1" 1/4	1" 1/4	27
MULTINOX VE+ 8-90	730	115	35	292	1" 1/4	1" 1/4	36
MULTINOX VE+ 8-120	855	115	35	373	1" 1/4	1" 1/4	39



PVM/PVMI/PVMX

VERTICAL MULTISTAGE CENTRIFUGAL PUMPS

HIGH HYDRAULIC EFFICIENCY, MOTOR DESIGNED ACCORDING TO EN REGULATIONS



PVM, PVMI and PVMX are non self-priming vertical multi-stage pumps, with Victaulic or flanged fittings with inlets and outlets of the same size.

Construction of stages with impellers, chambers and outlet in stainless steel. Pump cardan shaft and motor shaft are directly coupled according to IEC standard.

All pumps are equipped with high

efficiency motors (IE3) and a cartridge-type mechanical seal for easy maintenance.

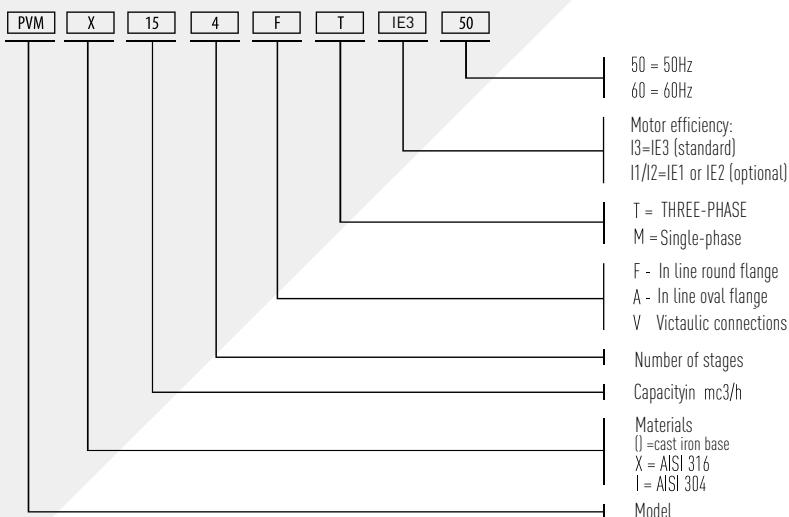
PVM, PVMI and PVMX pumps are available in different sizes and number of stages to provide the required flow and pressure.



APPLICATIONS

- Water supply
- Pressurisation systems
- Water treatment/filtration
- Irrigation
- High pressure washing
- Liquid transfer
- Fire protection systems
- Boiler feed

IDENTIFICATION CODE

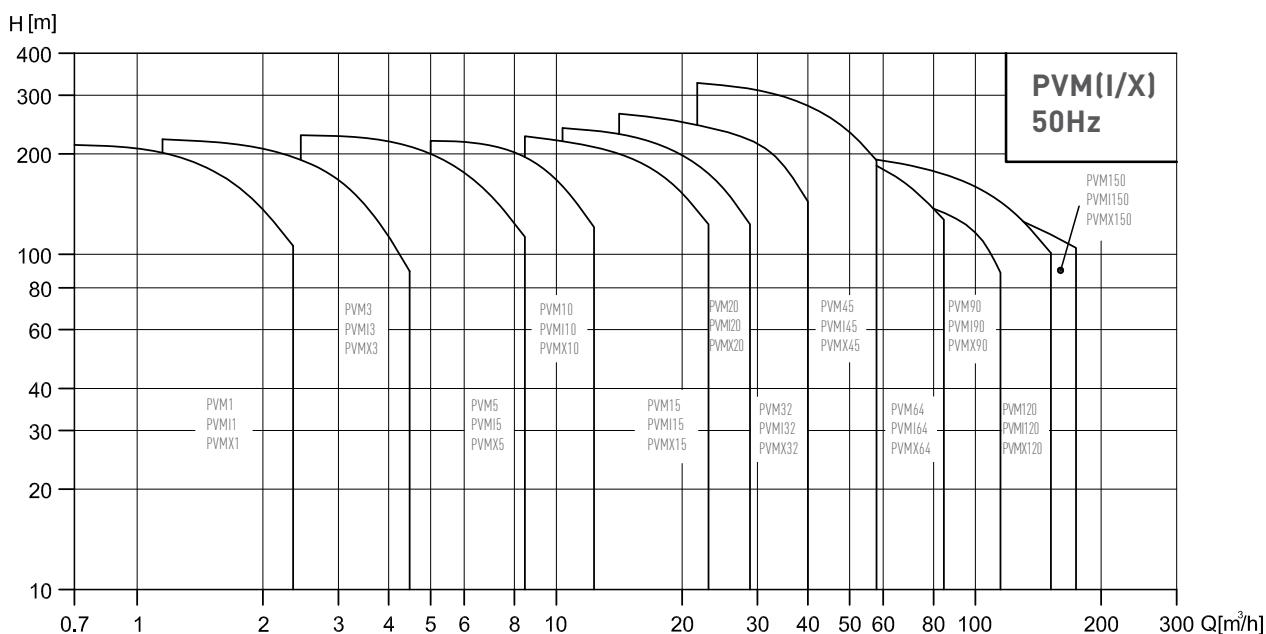


PENTAIR

PVM/PVMI/PVMX

VERTICAL MULTISTAGE CENTRIFUGAL PUMPS

PERFORMANCE RANGE



MOTOR

- Asynchronous electric motor with integrated stator and external ventilation
- The main dimensions conform to DIN and IEC regulations
- Energy efficiency: IE3 (motors IE1-IE2 available on request)
- Insulation class F
- Protection level IP55
- Maximum ambient temperature 50°C
- Speed of rotation 2900 rpm

TYPE OF MOTOR - 2 POLES				RATED CURRENT IN [A]	
[HP]	[KW]	Flange	Frame	3~230V	3~400V
0.5	0.37	B14	71	1.9	1.1
0.75	0.55		71	2.7	1.6
1	0.75		80	3.5	2.1
1.5	1.1		90S	5.2	3.0
2	1.5		90L	5.2	3.0
3	2.2		90L	8.0	4.6
4	3		100L	9.7	5.6
5.5	4		112M	12.2	7.0
				3~400V	3~690V
7.5	5.5	B5	132S	10.0	5.8
10	7.5		132S	13.1	7.6
15	11		160M	19.7	11.4
20	15		160M	26.7	15.5
25	18.5		160L	33.0	19.1
30	22		180M	40.8	23.7
40	30		200L	52.8	30.6
50	37		200L	65.6	38
60	45		225M	82.4	47.8
75	55		250M	93.6	54.3
100	75		280S	123.1	71.4

* The rated current values indicated refer to the standard motor configuration.
For details, contact Pentair in your country.

PENTAIR

PVM/PVMI/PVMX

VERTICAL MULTISTAGE CENTRIFUGAL PUMPS

PRODUCT DATA

PVM, PVMI, PVMX						
50Hz	1	3	5	10	15	20
Rated flow (m ³ /h)	0.7-2.4	1.2-4.5	2.5-8.5	5-13	8.5-23.5	10.5-29
Range of flow rate (m ³ /h)	21.5	23	24	21.5	23	24.3
Max. pressure (bar)	from -15°C to + 120°C					
Temperature of fluid	0.37-2.2	0.37-3	0.37-5.5	0.37-7.5	1.1-15	1.1-18.5
Motor power (kW)						
Version						
PVM: cast iron and stainless steel EN 1.4301/AISI 304	•	•	•	•	•	•
PVMI: stainless steel EN 1.4301/AISI 304	•	•	•	•	•	•
PVMX: stainless steel EN 1.4401/AISI 316	•	•	•	•	•	•
Motor						
Network connection 1~ (V/Hz) Permitted VOLT. range ± 10%	220-240 V 50 Hz					
Network connection 3~ (V/Hz) Permitted VOLT. range ± 10%	0.37-7.5 kW 220-240/380-415 V 50 Hz 11 kW 380-415 V 50 Hz					
Insulation class	F					
Protection class	IP 55					
Ambient temperature	50°C					
PVM pipe connection						
Flange	DN 25/DN 32	DN 25/DN 32	DN 25/DN 32	DN 40	DN 50	DN 50
PVMI/PVMX pipe connection						
Flange	DN 25/DN 32	DN 25/DN 32	DN 25/DN 32	DN 40	DN 50	DN 50
Victaulic connection	R1/4 DN32	R1/4 DN32	R1/4 DN32	R2 DN50	R2 DN50	R2 DN50
Mechanical seals						
SiC/SiC	Standard					
Gaskets						
EPDM	Standard					

PENTAIR

PVM/PVMI/PVMX

VERTICAL MULTISTAGE CENTRIFUGAL PUMPS

PRODUCT DATA

50Hz		PVM, PVMI, PVMX					
		32	45	64	90	120	150
Rated flow (m ³ /h)		15-40	22-58	30-85	45-120	60-160	75-180
Range of flow rate (m ³ /h)		27.5	33	21.8	20	20.4	18.7
Max. pressure (bar)					from -15°C to + 120°C		
Temperature of fluid		1.5-30	3-45	4-45	5.5-45	11-75	11-75
Motor power (kW)							
Version							
PVM: cast iron and stainless steel EN 1.4301/AISI 304		•	•	•	•	•	•
PVMI: stainless steel EN 1.4301/AISI 304		•	•	•	•	•	•
PVMX: stainless steel EN 1.4401/AISI 316		•	•	•	•	•	•
Motor							
Network connection 1~ (V/Hz) Permitted VOLT. range ± 10%					220-240 V 50 Hz		
Network connection 3~ (V/Hz) Permitted VOLT. range ± 10%					0.37-7.5 kW 220-240/380-415 V 50 Hz 11 kW 380-415 V 50 Hz		
Insulation class					F		
Protection class					IP 55		
Ambient temperature					50°C		
PVM pipe connection							
Flange		DN 65	DN 80	DN 100	DN 100	DN 125	DN 125
PVMI/PVMX pipe connection							
Flange		DN 65	DN 80	DN 100	DN 100	DN 125	DN 125
Victaulic connection		N/D	N/D	N/D	N/D	N/D	N/D
Mechanical seals							
SiC/SiC				Standard			
Gaskets							
EPDM				Standard			

PENTAIR

PVM/PVMI/PVMX

VERTICAL MULTISTAGE CENTRIFUGAL PUMPS

MAXIMUM OPERATING AND INPUT PRESSURES

STAGES	MAXIMUM OPERATING PRESSURE	STAGES	MAXIMUM INPUT PRESSURE
PVM-I-X 1			
2-36	25 bar	2-36	10 bar
PVM-I-X 3			
2-36	25 bar	2-29	10 bar
		31-36	15 bar
PVM-I-X 5			
2-36	25 bar	2-16	10 bar
		18-36	15 bar
PVM-I-X 10			
1-16	16 bar	1-6	8 bar
17-22	25 bar	7-22	10 bar
PVM-I-X 15			
1-10	16 bar	1-3	8 bar
12-17	25 bar	4-17	10 bar
PVM-I-X 20			
1-10	16 bar	1-3	8 bar
12-17	25 bar	4-17	10 bar
PVM-I-X 32			
[1-1]-7	16 bar	[1-1]-4	4 bar
(8-2)-14	30 bar	[5-2]-10	10 bar
		[11-2]-14	15 bar
PVM-I-X 45			
[1-1]-5	16 bar	[1-1]-2	4 bar
[6-2]-11	30 bar	[3-2]-5	10 bar
[12-2]-[13-2]	33 bar	[6-2]-[13-2]	15 bar
PVM-I-X 64			
[1-1]-5	16 bar	[1-1]-[2-2]	4 bar
(6-2)-[8-1]	30 bar	[2-1]-[4-2]	10 bar
		[4-1]-[8-1]	15 bar
PVM-I-X 90			
[1-1]-4	16 bar	[1-1]-1	4 bar
(5-2)-6	30 bar	[2-1]-[3-2]	10 bar
		3-6	15 bar
PVM-I-X 120			
1-7	30 bar	1-[2-1]	10 bar
		2-[5-1]	15 bar
		[6-1]-7	20 bar
PVM-I-X 150			
(1-1)-6	30 bar	[1-1]-1	10 bar
		[2-1]-[4-2]	15 bar
		[5-2]-6	20 bar

* Rule Input pressure + pressure against a closed valve < Max. Operating pressure

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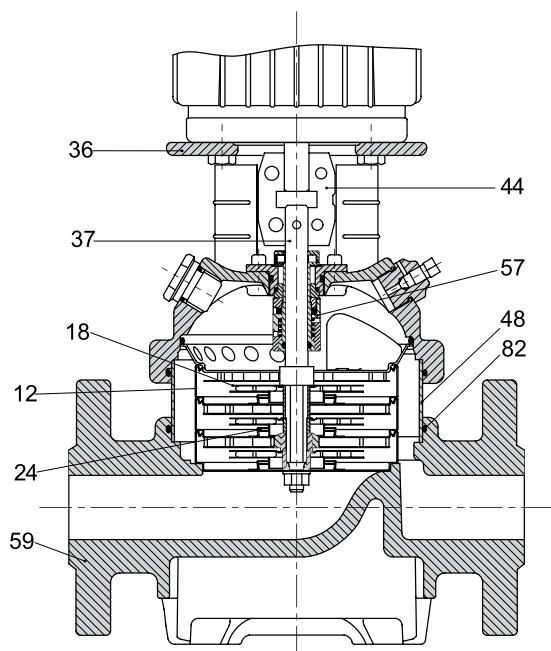
PVM/PVMI/PVMX

VERTICAL MULTISTAGE CENTRIFUGAL PUMPS

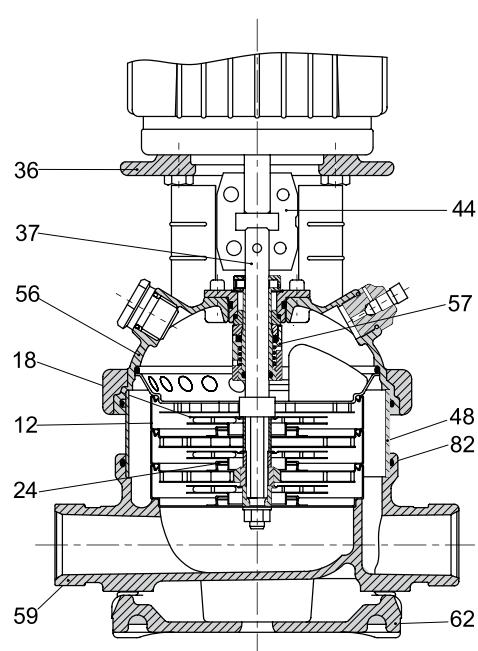
PUMP STRUCTURE

ITEM	NAME	MATERIAL	PVM 1, 3, 5, 10, 15, 20	PVMI 1, 3, 5, 10, 15, 20	PVMX 1, 3, 5, 10, 15, 20
36	Head of the pump	Cast iron	EN-GJL-200 ; ASTM 25B	EN-GJS-450-10 ; ASTM 65-45-12	EN-GJS-450-10 ; ASTM 65-45-12
56	Pump head cover	Stainless steel	N/D	1.4301 ; AISI 304	1.4401 ; AISI 316
18	Impeller	Stainless steel	1.4301 ; AISI 304	1.4301 ; AISI 304	1.4401 ; AISI 316
37	Shaft	Stainless steel	1.4057 ; AISI 431	1.4057 ; AISI 431	1.4401 ; AISI 316
48	Outer sleeve	Stainless steel	1.4301 ; AISI 304	1.4301 ; AISI 304	1.4401 ; AISI 316
82	O-ring for outer sleeve	EPDM	-	-	-
12	Chamber	Stainless steel	1.4301 ; AISI 304	1.4301 ; AISI 304	1.4401 ; AISI 316
24	Collar	PTFE	-	-	-
59	Base	Cast iron	EN-GJL-200 ; ASTM 25B	N/D	N/D
		Stainless steel	N/D	1.4301 ; AISI 304	1.4401 ; AISI 316
62	Base plate	Cast iron	N/D	EN-GJL-200 ; ASTM 25B	EN-GJL-200 ; ASTM 25B
44	Fitting	Fe-Cu-C	SINT C11 ; MPIF FC0525	SINT C11 ; MPIF FC0525	SINT C11 ; MPIF FC0525
57	Mechanical seal	Type of Cartridge	-	-	-

PVM - 1, 3, 5, 10, 15, 20



PVMI / X - 1, 3, 5, 10, 15, 20



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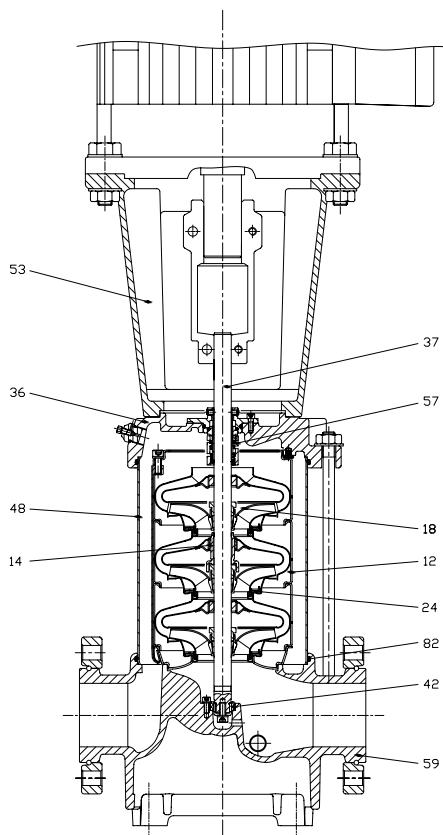
PVM/PVMI/PVMX

VERTICAL MULTISTAGE CENTRIFUGAL PUMPS

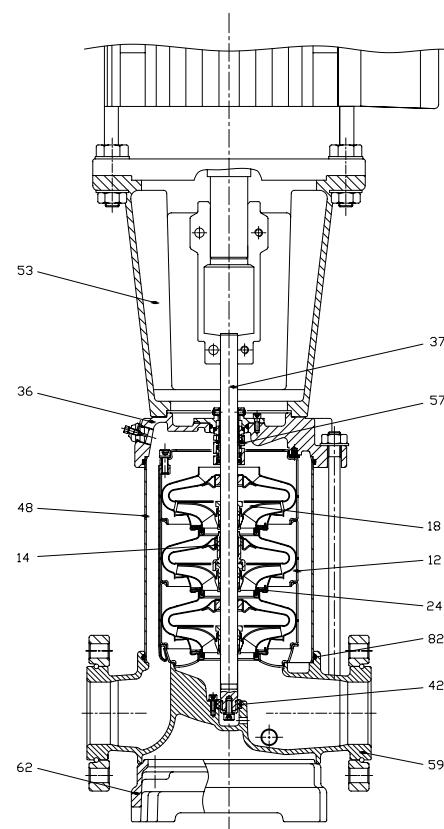
PUMP STRUCTURE

ITEM	NAME	MATERIAL	PVM 32, 45, 64, 90	PVMI 32, 45, 64, 90	PVMX 32, 45, 64, 90
36	Head of the pump	Cast iron	EN-GJL-250 ; ASTM 35B	N/D	N/D
		Stainless steel	N/D	1.4301 ; AISI 304	1.4401 ; AISI 316
53	Motor bracket	Stainless steel	EN-GJL-250 ; ASTM 35B	EN-GJL-250 ; ASTM 35B	EN-GJL-250 ; ASTM 35B
18	Impeller	Stainless steel	1.4301 ; AISI 304	1.4301 ; AISI 304	1.4401 ; AISI 316
37	Shaft	Stainless steel	1.4057 ; AISI 431	1.4057 ; AISI 431	1.4401 ; AISI 316
48	Outer sleeve	Stainless steel	1.4301 ; AISI 304	1.4301 ; AISI 304	1.4401 ; AISI 316
82	O-ring for outer sleeve	EPDM	-	-	-
12	Chamber	Stainless steel	1.4301 ; AISI 304	1.4301 ; AISI 304	1.4401 ; AISI 316
24	Collar	Carbon fiber + POB + PTFE	-	-	-
59	Base	Cast iron	EN-GJL-250 ; ASTM 35B	N/D	N/D
		Stainless steel	N/D	1.4301 ; AISI 304	1.4401 ; AISI 316
62	Base plate	Cast iron	N/D	EN-GJL-250 ; ASTM 35B	EN-GJL-250 ; ASTM 35B
57	Mechanical seal	Type of Cartridge	-	-	-
14	Ring of bearing	-	Bronze	POB + graphite + PTFE	-
42	Ring of lower bearing	Tungsten carbide / tungsten carbide	-	-	-

PVM - 32, 45, 64, 90



PVMI / X - 32, 45, 64, 90



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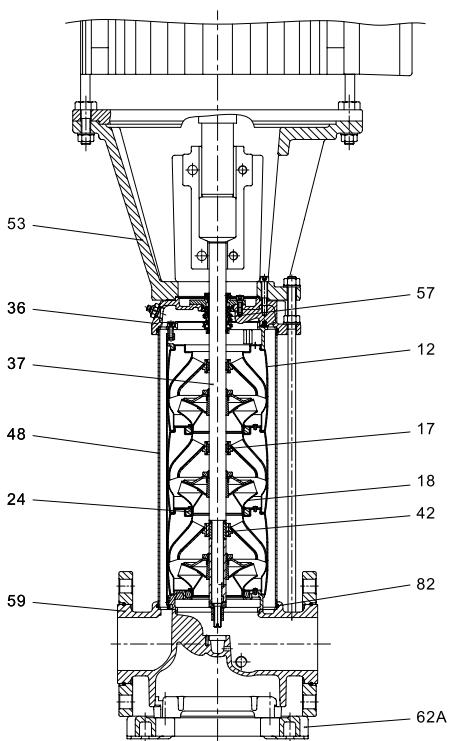
PVM/PVMI/PVMX

VERTICAL MULTISTAGE CENTRIFUGAL PUMPS

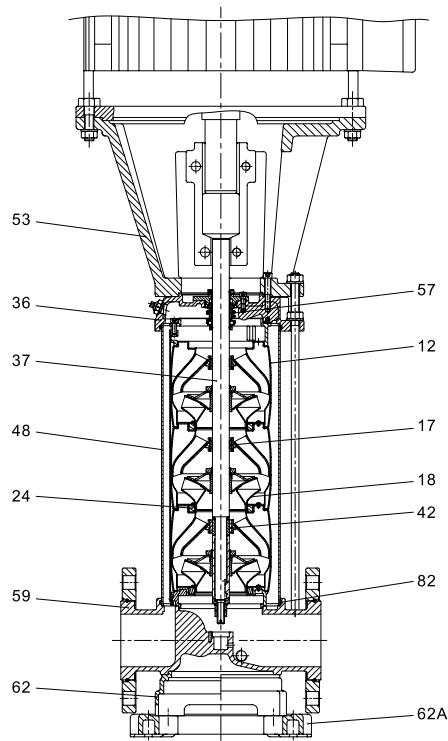
PUMP STRUCTURE

ITEM	NAME	MATERIAL	PVM 120, 150	PVMI 120, 150	PVMX 120, 150
36	Head of the pump	Cast iron	EN-GJL-250 ; ASTM 35B	N/D	N/D
		Stainless steel	N/D	1.4301 ; AISI 304	1.4401 ; AISI 316
53	Motor support (15HP-60HP)	Cast iron	EN-GJL-250 ; ASTM 35B	EN-GJL-250 ; ASTM 35B	EN-GJL-250 ; ASTM 35B
	Motor support (75HP-100HP)	Cast iron	EN-GJS-450-10 ; ASTM 65-45-12	EN-GJS-450-10 ; ASTM 65-45-12	EN-GJS-450-10 ; ASTM 65-45-12
17	Ring of bearing	PTFE	-	-	-
18	Impeller	Stainless steel	1.4301 ; AISI 304	1.4301 ; AISI 304	1.4401 ; AISI 316
37	Shaft	Stainless steel	1.4057 ; AISI 431	1.4057 ; AISI 431	1.4401 ; AISI 316
48	Outer sleeve	Stainless steel	1.4301 ; AISI 304	1.4301 ; AISI 304	1.4401 ; AISI 316
82	O-ring for outer sleeve	EPDM	-	-	-
12	Chamber	Stainless steel	1.4301 ; AISI 304	1.4301 ; AISI 304	1.4401 ; AISI 316
24	Collar	PTFE	-	-	-
59	Base	Cast iron	EN-GJL-250 ; ASTM 35B	N/D	N/D
		Stainless steel	N/D	1.4301 ; AISI 304	1.4401 ; AISI 316
62	Base plate	Cast iron	N/D	EN-GJS-450-10 ; ASTM 65-45-12	-
62A	Base plate	Cast iron	N/D	EN-GJS-450-10 ; ASTM 65-45-12	-
57	Mechanical seal	Type of Cartridge	EN-GJS-450-10 ; ASTM 65-45-12	-	-
14	Ring of bearing	-	Bronze	POB + graphite + PTFE	-
42	Ring of lower bearing	Tungsten carbide / tungsten carbide	-	-	-

PVM - 120, 150



PVMI / X - 120, 150



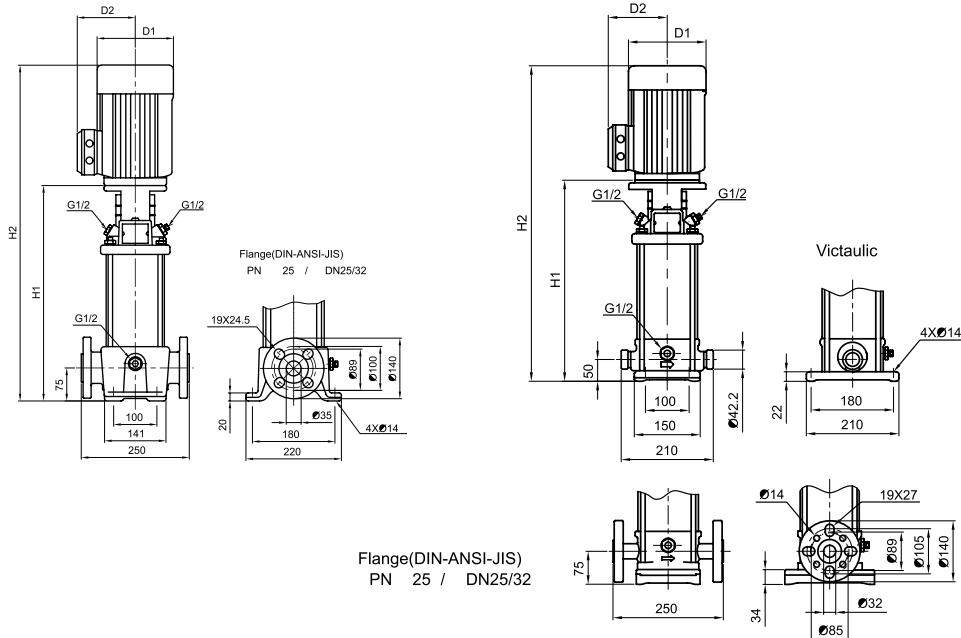
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PVM/PVMI/PVMX

VERTICAL MULTISTAGE CENTRIFUGAL PUMPS

OVERALL DIMENSIONS AND WEIGHTS

TYPE OF PUMP	MOTOR		PVM				PVMI - PVMX								
			Dimensions [mm]			Net weights [kg]	Dimensions [mm]				Net weights [kg]				
	P ₂		DIN flange		D1	D2	DIN Flange	Victaulic		DIN flange		D1	D2	Victaulic	DIN flange
	[HP]	[kW]	H1	H2				H1	H2	H1	H2				
PVM 1-2	0.5	0.37	279	474	141	115	23.4	257	452	282	477	141	115	19.3	20.2
PVM 1-3	0.5	0.37	279	474	141	115	23.4	257	452	282	477	141	115	19.3	20.3
PVM 1-4	0.5	0.37	297	492	141	115	23.8	275	470	300	495	141	115	19.7	20.6
PVM 1-5	0.5	0.37	315	510	141	115	24.2	293	488	318	513	141	115	20.1	21.0
PVM 1-6	0.5	0.37	333	528	141	115	24.5	311	506	336	531	141	115	20.4	21.4
PVM 1-7	0.5	0.37	351	546	141	115	24.9	329	524	354	549	141	115	20.8	21.7
PVM 1-8	0.75	0.55	369	564	141	115	25.8	347	542	372	567	141	115	21.7	22.6
PVM 1-9	0.75	0.55	387	582	141	115	26.1	365	560	390	585	141	115	22.0	23.0
PVM 1-10	0.75	0.55	405	600	141	115	26.5	383	578	408	603	141	115	22.4	23.3
PVM 1-11	0.75	0.55	423	618	141	115	26.9	401	596	426	621	141	115	22.8	23.7
PVM 1-12	1.0	0.75	447	682	141	115	29.4	425	660	450	685	141	115	25.2	26.1
PVM 1-13	1.0	0.75	465	700	141	115	29.8	443	678	468	703	141	115	25.6	26.5
PVM 1-15	1.0	0.75	501	736	141	115	30.5	479	714	504	739	141	115	26.3	27.2
PVM 1-17	1.5	1.1	537	772	141	115	32.3	515	750	540	775	141	115	28.1	29.1
PVM 1-19	1.5	1.1	573	808	141	115	33.1	551	786	576	811	141	115	28.8	29.8
PVM 1-21	1.5	1.1	609	844	141	115	33.8	587	822	612	847	141	115	29.6	30.6
PVM 1-23	1.5	1.1	645	880	141	115	34.6	623	858	648	883	141	115	30.4	31.3
PVM 1-25	2.0	1.5	697	964	180	138	44.0	675	942	700	991	180	138	39.8	40.8
PVM 1-27	2.0	1.5	733	1000	180	138	44.8	711	978	736	1027	180	138	40.6	41.5
PVM 1-30	2.0	1.5	787	1054	180	138	45.9	765	1032	790	1081	180	138	41.7	42.6
PVM 1-33	3.0	2.2	841	1108	180	138	49.9	819	1086	844	1135	180	138	45.6	46.6
PVM 1-36	3.0	2.2	895	1162	180	138	51.0	873	1140	898	1189	180	138	46.7	47.7

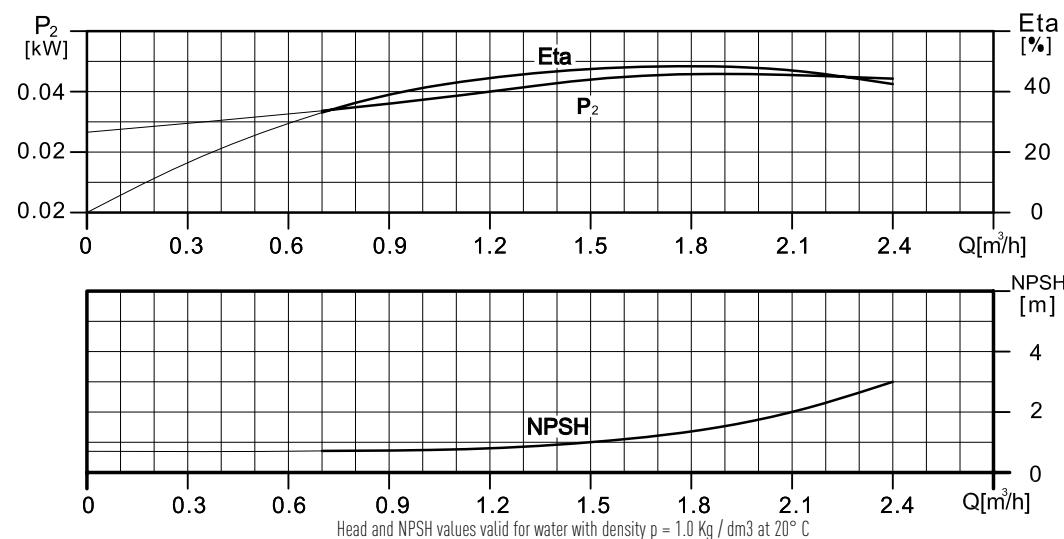
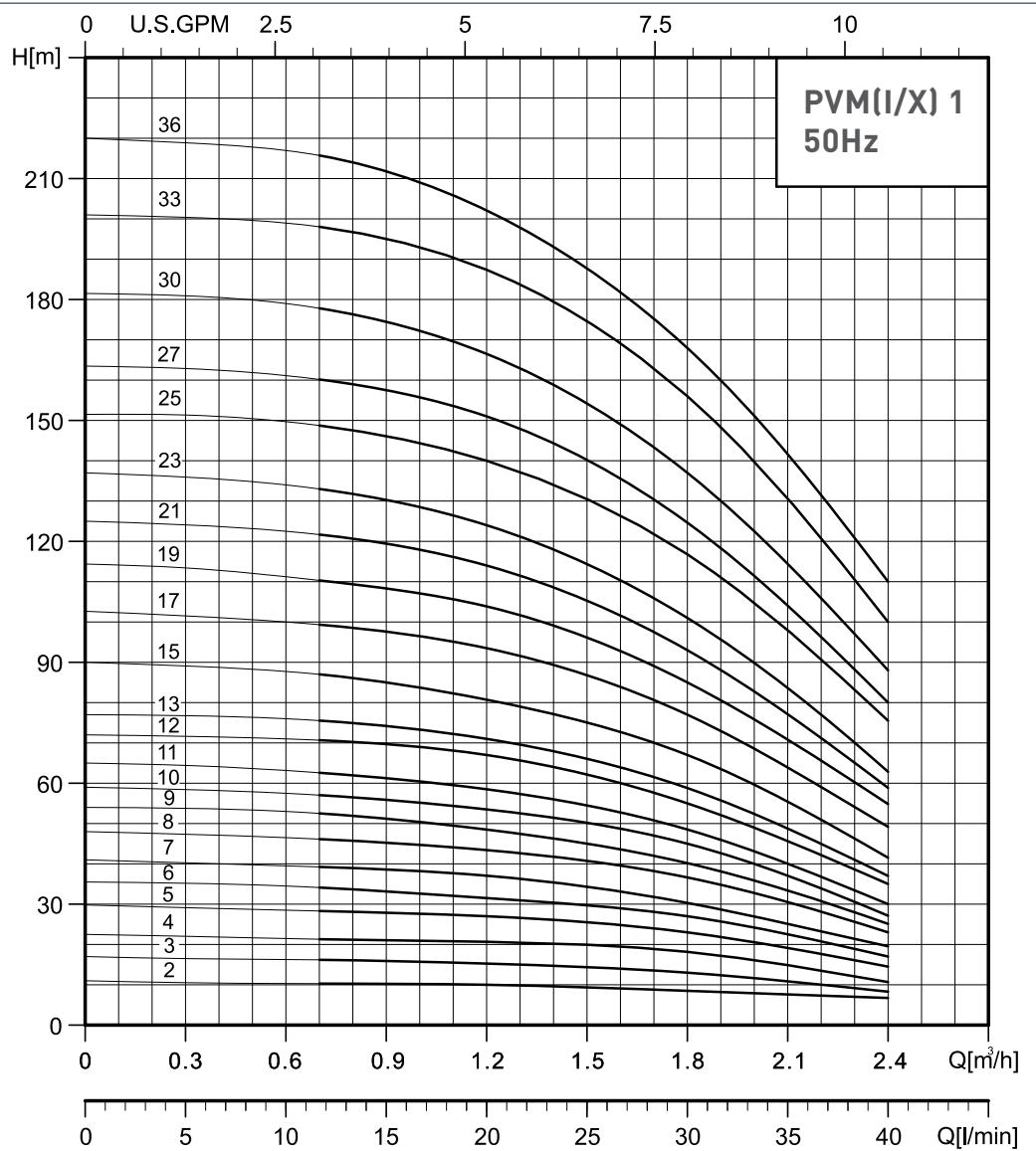


PENTAIR

PVM/PVMI/PVMX 1

VERTICAL MULTISTAGE CENTRIFUGAL PUMPS

HYDRAULIC PERFORMANCE



Head and NPSH values valid for water with density $\rho = 1.0 \text{ Kg} / \text{dm}^3$ at 20°C

PVM(I/X) 1

2900 rpm

50 Hz

ISO 9906 - Annex A

MEI > 0.4 - Reference MEI > 0.70 - The information on the reference efficiency is available at the address: www.europump.org/efficiencycharts

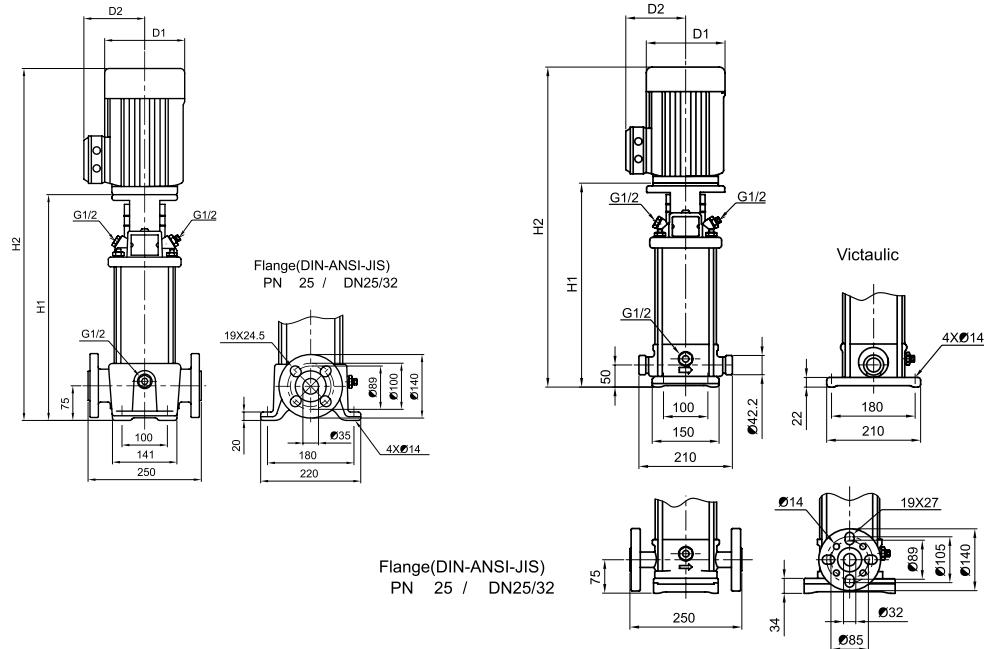
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PVM/PVMI/PVMX 3

VERTICAL MULTISTAGE CENTRIFUGAL PUMPS

DIMENSIONS OF PUMP

TYPE OF PUMP	MOTOR		PVM				PVMI - PVMX								
			Dimensions [mm]				Net weights [kg]	Dimensions [mm]				Net weights [kg]			
	P ₂		DIN flange		D1	D2	DIN Flange	Victaulic		DIN flange		D1	D2	Victaulic	DIN flange
	[HP]	[kW]	H1	H2				H1	H2	H1	H2				
PVM 3-2	0.5	0.37	279	474	141	115	23.4	257	452	282	477	141	115	19.3	20.2
PVM 3-3	0.5	0.37	279	474	141	115	23.4	257	452	282	477	141	115	19.3	20.3
PVM 3-4	0.5	0.37	297	492	141	115	23.8	275	470	300	495	141	115	19.7	20.6
PVM 3-5	0.5	0.37	315	510	141	115	24.2	293	488	318	513	141	115	20.1	21.0
PVM 3-6	0.75	0.55	333	528	141	115	25.0	311	506	336	531	141	115	20.9	21.9
PVM 3-7	0.75	0.55	351	546	141	115	25.4	329	524	354	549	141	115	21.3	22.2
PVM 3-8	1.0	0.75	375	610	141	115	27.9	353	588	378	613	141	115	23.7	24.6
PVM 3-9	1.0	0.75	393	628	141	115	28.3	371	606	396	631	141	115	24.0	25.0
PVM 3-10	1.0	0.75	411	646	141	115	28.7	389	624	414	649	141	115	24.4	25.4
PVM 3-11	1.5	1.1	429	664	141	115	30.2	407	642	432	667	141	115	25.9	26.9
PVM 3-12	1.5	1.1	447	682	141	115	30.5	425	660	450	685	141	115	26.3	27.2
PVM 3-13	1.5	1.1	465	700	141	115	30.9	443	678	468	703	141	115	26.7	27.6
PVM 3-15	1.5	1.1	501	736	141	115	31.6	479	714	504	739	141	115	27.4	28.3
PVM 3-17	2.0	1.5	553	820	180	138	41.0	531	798	180	138	177	141	36.9	37.8
PVM 3-19	2.0	1.5	589	856	180	138	41.8	567	834	180	138	177	141	37.6	38.5
PVM 3-21	3.0	2.2	625	892	180	138	45.3	603	870	180	138	177	141	41.2	42.1
PVM 3-23	3.0	2.2	661	928	180	138	46.1	639	906	180	138	177	141	41.9	42.9
PVM 3-25	3.0	2.2	697	964	180	138	46.8	675	942	180	138	177	141	42.6	43.6
PVM 3-27	3.0	2.2	733	1000	180	138	47.6	711	978	180	138	177	141	43.4	44.3
PVM 3-29	3.0	2.2	769	1036	180	138	48.3	747	1014	180	138	177	141	44.1	45.1
PVM 3-31	4.0	3.0	809	1130	194	145	56.6	787	1108	194	145	197	147	52.0	53.0
PVM 3-33	4.0	3.0	845	1166	194	145	57.4	823	1144	194	145	197	147	52.8	53.7
PVM 3-36	4.0	3.0	899	1220	194	145	58.5	877	1198	194	145	197	147	53.9	54.8

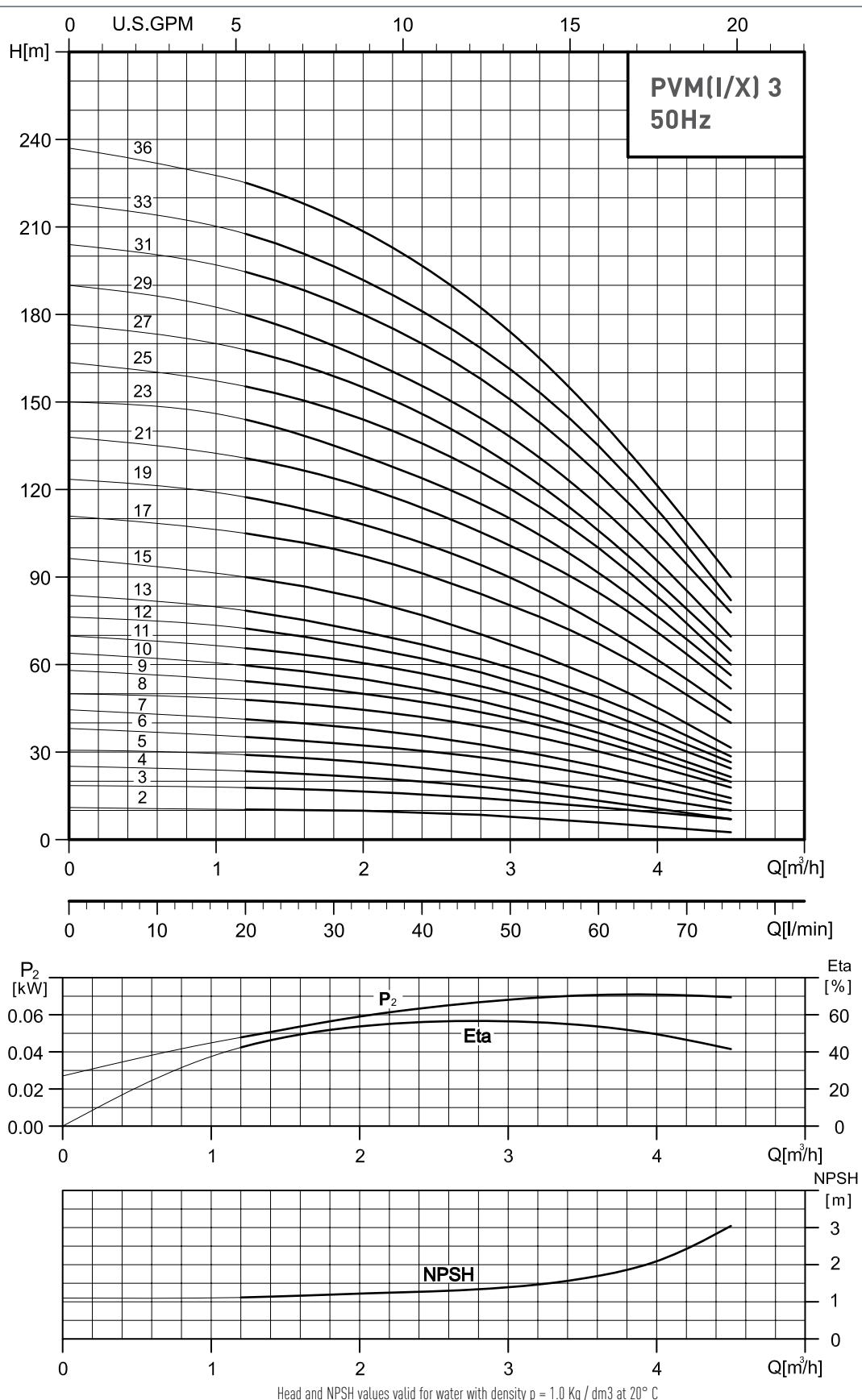


PENTAIR

PVM/PVMI/PVMX 3

VERTICAL MULTISTAGE CENTRIFUGAL PUMPS

HYDRAULIC PERFORMANCE



PVM(I/X) 3	2900 rpm	50 Hz	ISO 9906 - Annex A
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MEI ≥ 0.4 - Reference MEI ≥ 0.70 - The information on the reference efficiency is available at the address: www.europump.org/efficiencycharts

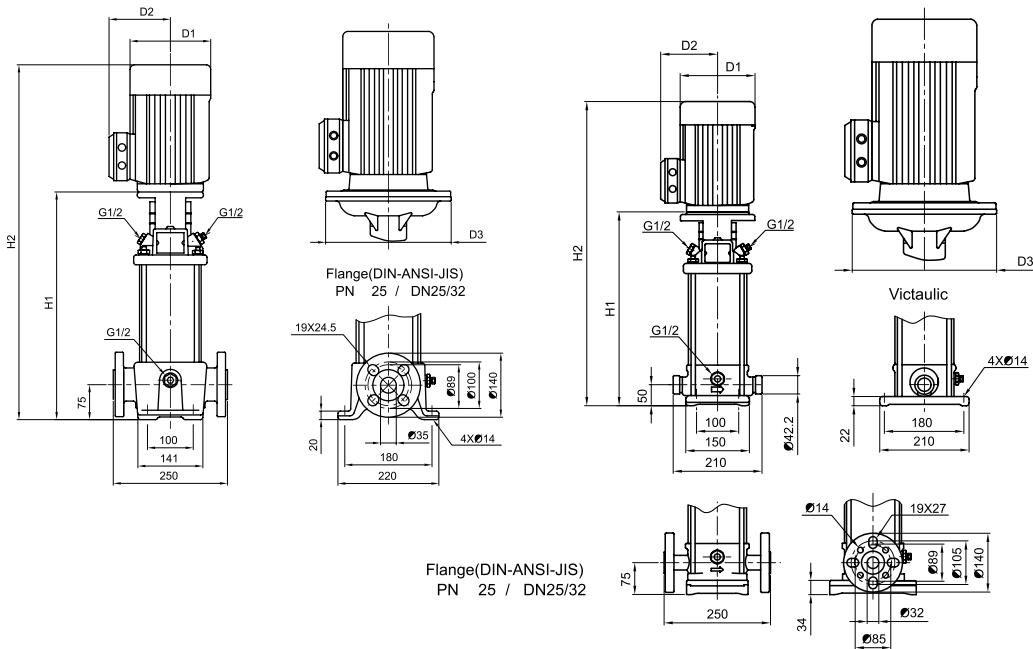
PENTAIR

PVM/PVMI/PVMX 5

VERTICAL MULTISTAGE CENTRIFUGAL PUMPS

DIMENSIONS OF PUMP

TYPE OF PUMP	MOTOR		PVM					PVMI - PVMX									
			Dimensions [mm]				Net weights [kg]	Dimensions [mm]				Net weights [kg]					
	P ₂		DIN flange		D1	D2	D3	DIN Flange	Victaulic		DIN flange		D1	D2	D3	Victaulic	DIN flange
	[HP]	[kW]	H1	H2					H1	H2	H1	H2					
PVM 5-2	0.5	0.37	279	474	141	115	—	23.3	257	452	282	477	141	115	—	19.2	20.1
PVM 5-3	0.75	0.55	306	501	141	115	—	24.2	284	479	309	504	141	115	—	20.3	21.2
PVM 5-4	0.75	0.55	333	528	141	115	—	24.8	311	506	336	531	141	115	—	20.8	21.8
PVM 5-5	1.0	0.75	366	601	141	115	—	27.4	344	579	369	604	141	115	—	23.4	24.3
PVM 5-6	1.5	1.1	393	628	141	115	—	29.1	371	606	396	631	141	115	—	25.1	26.0
PVM 5-7	1.5	1.1	420	655	141	115	—	29.6	398	633	423	658	141	115	—	25.6	26.5
PVM 5-8	1.5	1.1	447	682	141	115	—	30.1	425	660	450	685	141	115	—	26.1	27.1
PVM 5-9	2.0	1.5	490	757	180	138	—	39.3	468	759	493	760	180	138	—	35.4	36.4
PVM 5-10	2.0	1.5	517	784	180	138	—	39.9	495	786	520	787	180	138	—	36.0	36.9
PVM 5-11	3.0	2.2	544	811	180	138	—	43.2	522	813	547	814	180	138	—	39.3	40.3
PVM 5-12	3.0	2.2	571	838	180	138	—	43.7	549	840	574	841	180	138	—	39.9	40.8
PVM 5-13	3.0	2.2	598	865	180	138	—	44.2	576	867	601	868	180	138	—	40.4	41.4
PVM 5-14	3.0	2.2	625	892	180	138	—	44.8	603	894	628	895	180	138	—	41.0	41.9
PVM 5-15	3.0	2.2	652	919	180	138	—	45.2	630	921	655	922	180	138	—	41.5	42.5
PVM 5-16	3.0	2.2	679	946	180	138	—	45.8	657	948	682	949	180	138	—	42.1	43.0
PVM 5-18	4.0	3.0	737	1058	194	145	—	54.3	715	1031	740	1061	194	145	—	50.3	51.3
PVM 5-20	4.0	3.0	791	1112	194	145	—	55.5	769	1085	794	1115	194	145	—	51.6	52.5
PVM 5-22	5.5	4.0	845	1173	225	160	—	59.8	823	1149	848	1176	225	160	—	55.8	56.8
PVM 5-24	5.5	4.0	899	1227	225	160	—	60.8	877	1203	902	1230	225	160	—	56.9	57.8
PVM 5-26	5.5	4.0	953	1281	225	160	—	62.7	931	1257	956	1284	225	160	—	58.0	58.9
PVM 5-29	5.5	4.0	1034	1362	225	160	—	64.6	1012	1338	1037	1365	225	160	—	59.7	60.6
PVM 5-32	7.5	5.5	1145	1510	248	194	300	90.1	1123	1485	1148	1513	248	194	300	84.9	85.8
PVM 5-36	7.5	5.5	1253	1618	248	194	300	92.6	1231	1593	1256	1621	248	194	300	87.1	88.1

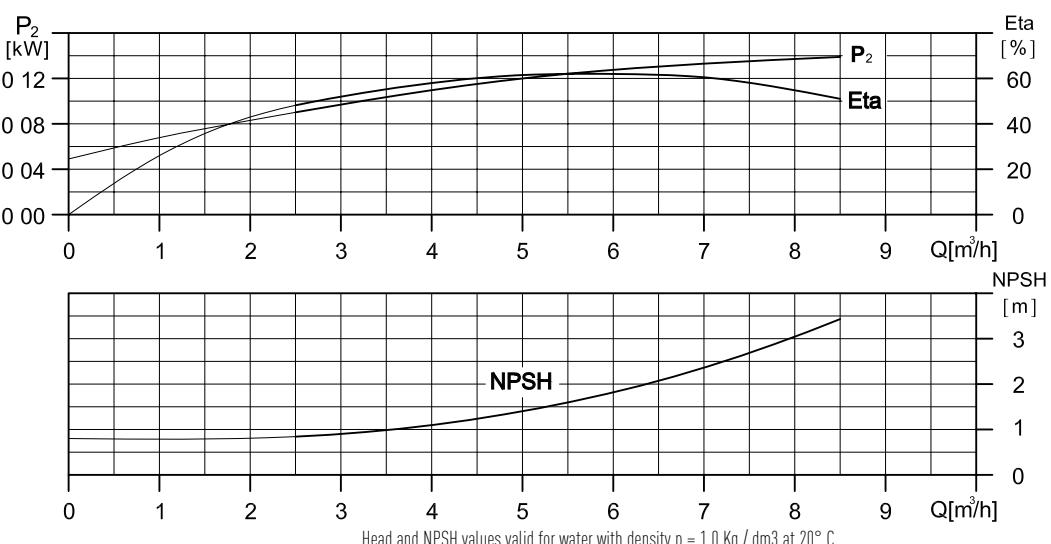
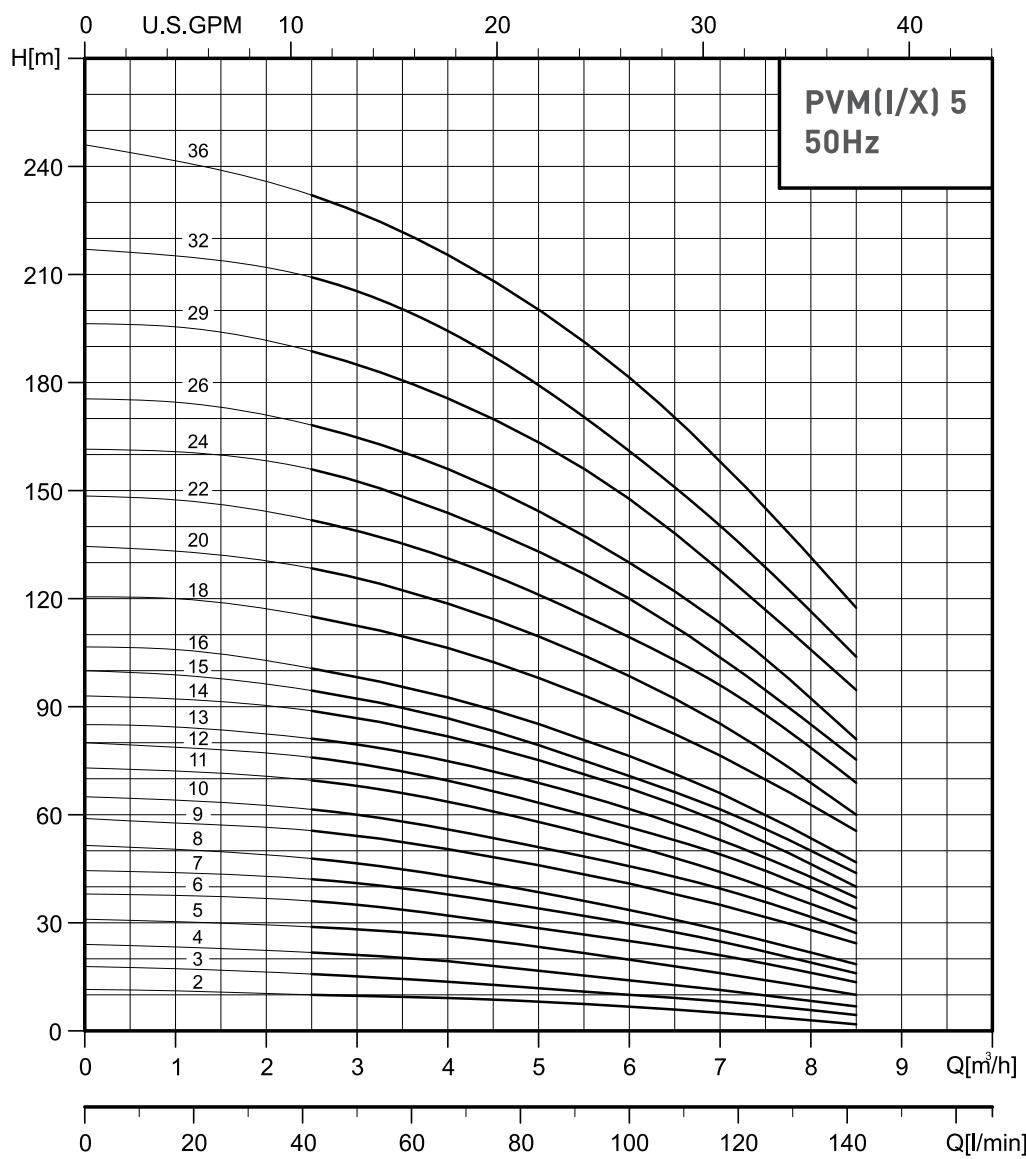


PENTAIR

PVM/PVMI/PVMX 5

VERTICAL MULTISTAGE CENTRIFUGAL PUMPS

HYDRAULIC PERFORMANCE



Head and NPSH values valid for water with density $\rho = 1.0 \text{ Kg} / \text{dm}^3$ at 20°C

PVM(I/X) 5	2900 rpm	50 Hz	ISO 9906 - Annex A
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MEI ≥ 0.4 - Reference MEI ≥ 0.70 - The information on the reference efficiency is available at the address: www.europump.org/efficiencycharts

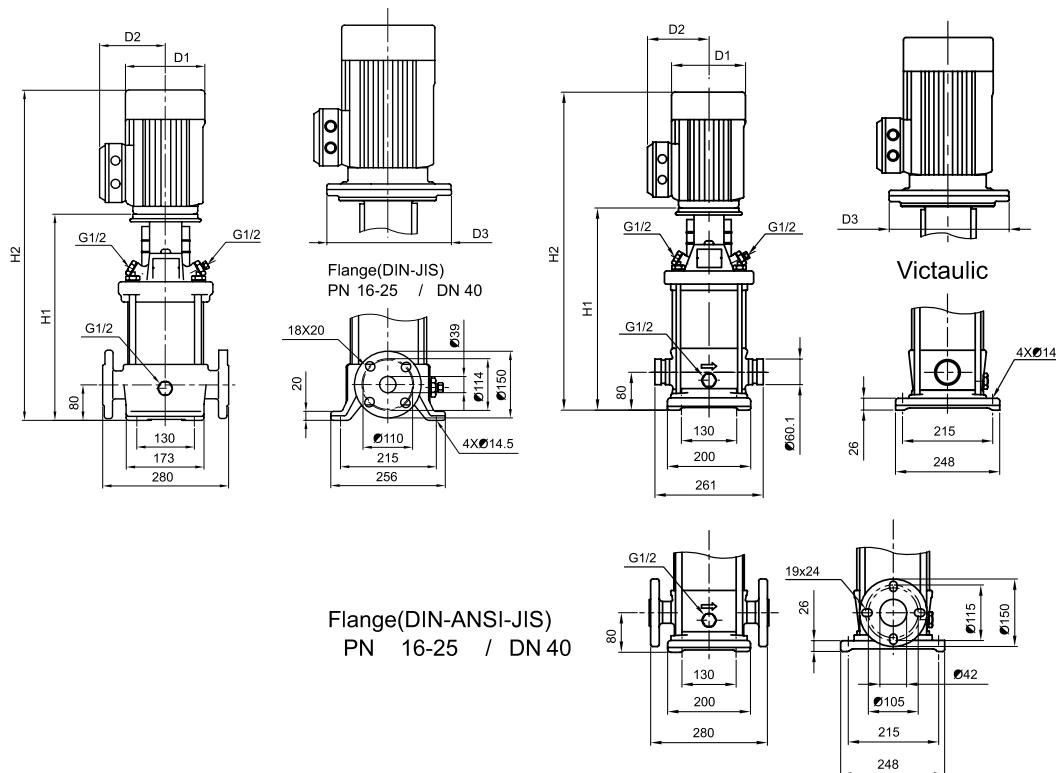
PENTAIR

PVM/PVMI/PVMX 10

VERTICAL MULTISTAGE CENTRIFUGAL PUMPS

DIMENSIONS OF PUMP

TYPE OF PUMP	MOTOR		PVM					PVMI - PVMX								Net weights [kg]		
			Dimensions [mm]				Net weights [kg]	Dimensions [mm]				Net weights [kg]						
	P ₂		DIN flange		D1	D2	D3	DIN Flange	Victaulic		DIN flange		D1	D2	D3	Victaulic	DIN flange	
	[HP]	[KW]	H1	H2					H1	H2	H1	H2						
PVM 10-1	0.5	0.37	343	538	141	115	—	35.9	353	548	353	548	141	115	—	31.6	31.4	
PVM 10-2	1	0.8	347	582	141	115	—	38.2	357	592	357	592	141	115	—	34.3	34.2	
PVM 10-3	1.5	1.1	377	612	141	115	—	40.3	387	622	387	622	141	115	—	36.4	36.3	
PVM 10-4	2	1.5	423	690	180	138	—	50.1	433	724	433	700	180	138	—	46.1	46.0	
PVM 10-5	3	2.2	453	720	180	138	—	53.9	463	754	463	730	180	138	—	50.0	49.8	
PVM 10-6	3	2.2	483	750	180	138	—	55.0	493	784	493	760	180	138	—	51.0	50.8	
PVM 10-7	4	3	518	839	194	145	—	63.8	528	844	528	849	194	145	—	59.1	58.9	
PVM 10-8	4	3	548	869	194	145	—	64.9	558	874	558	879	194	145	—	60.1	60.0	
PVM 10-9	4	3	578	899	194	145	—	65.9	588	904	588	909	194	145	—	61.1	61.0	
PVM 10-10	5.5	4	608	936	225	160	—	70.3	618	944	618	946	225	160	—	65.6	65.4	
PVM 10-12	5.5	4	668	996	225	160	—	72.4	678	1004	678	1006	225	160	—	67.6	67.5	
PVM 10-14	7.5	5.5	760	1125	248	194	300	104.1	770	1132	770	1135	248	194	300	100.4	100.3	
PVM 10-16	7.5	5.5	820	1185	248	194	300	106.2	830	1192	830	1195	248	194	300	102.5	102.4	
PVM 10-18	10	7.5	880	1265	248	194	300	113.6	890	1288	890	1275	248	194	300	110.9	110.8	
PVM 10-20	10	7.5	940	1325	248	194	300	116.7	950	1348	950	1335	248	194	300	113.0	112.8	
PVM 10-22	10	7.5	1000	1385	248	194	300	118.8	1010	1408	1010	1395	248	194	300	115.1	114.9	

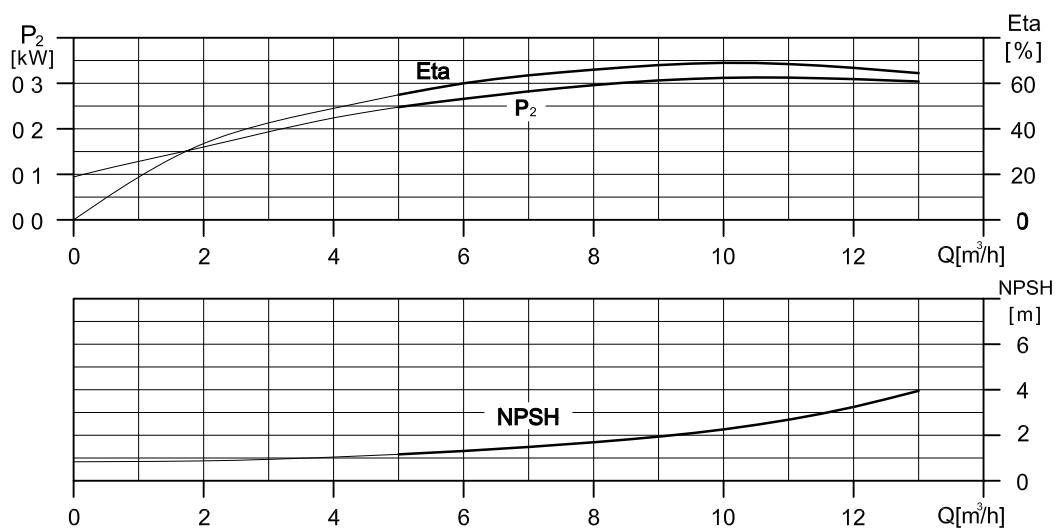
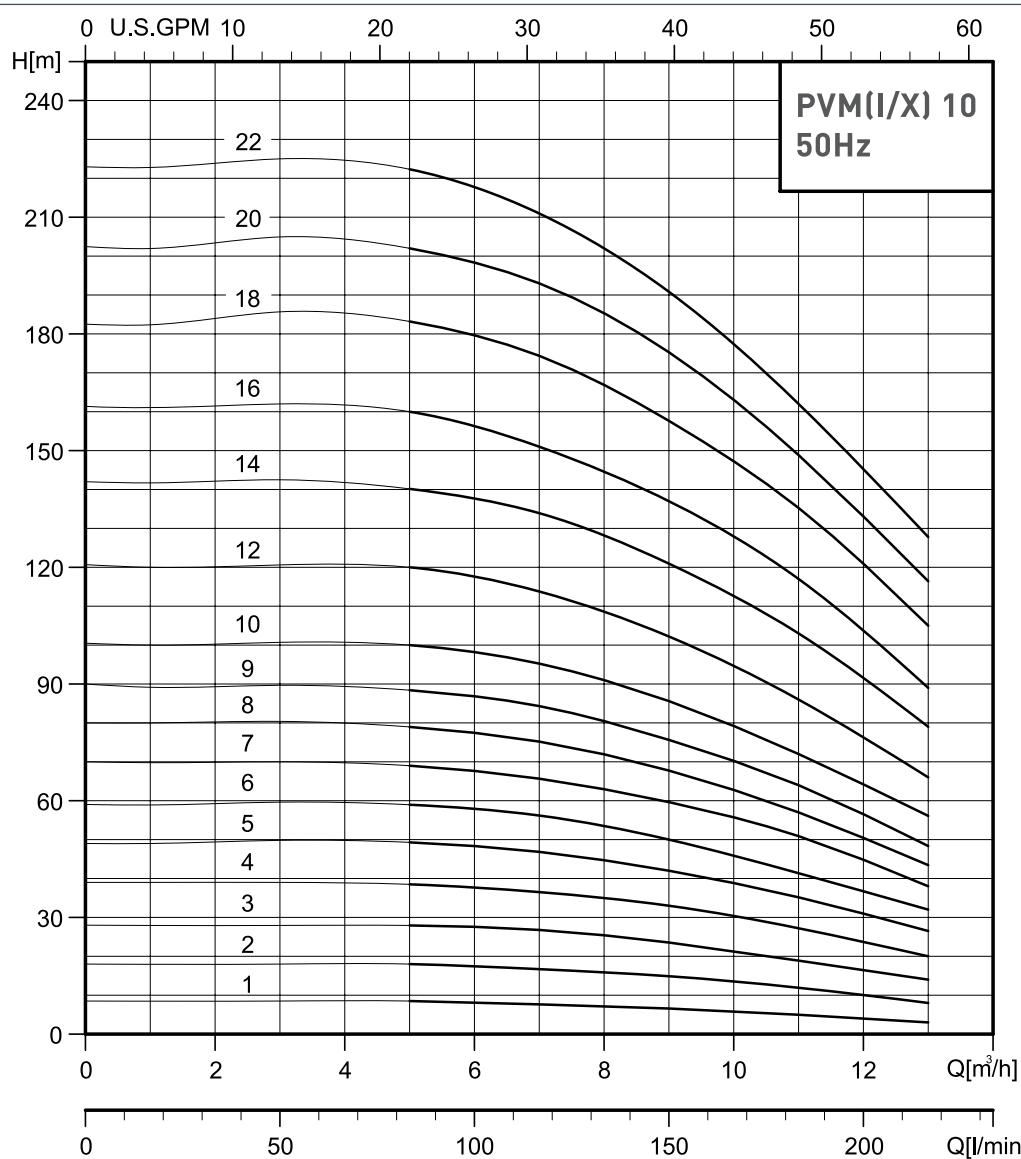


PENTAIR

PVM/PVMI/PVMX 10

VERTICAL MULTISTAGE CENTRIFUGAL PUMPS

HYDRAULIC PERFORMANCE



Head and NPSH values valid for water with density $\rho = 1.0 \text{ Kg} / \text{dm}^3$ at 20°C

PVM(I/X) 10

2900 rpm

50 Hz

ISO 9906 - Annex A

MEI > 0.4 - Reference MEI > 0.70 - The information on the reference efficiency is available at the address: www.europump.org/efficiencycharts

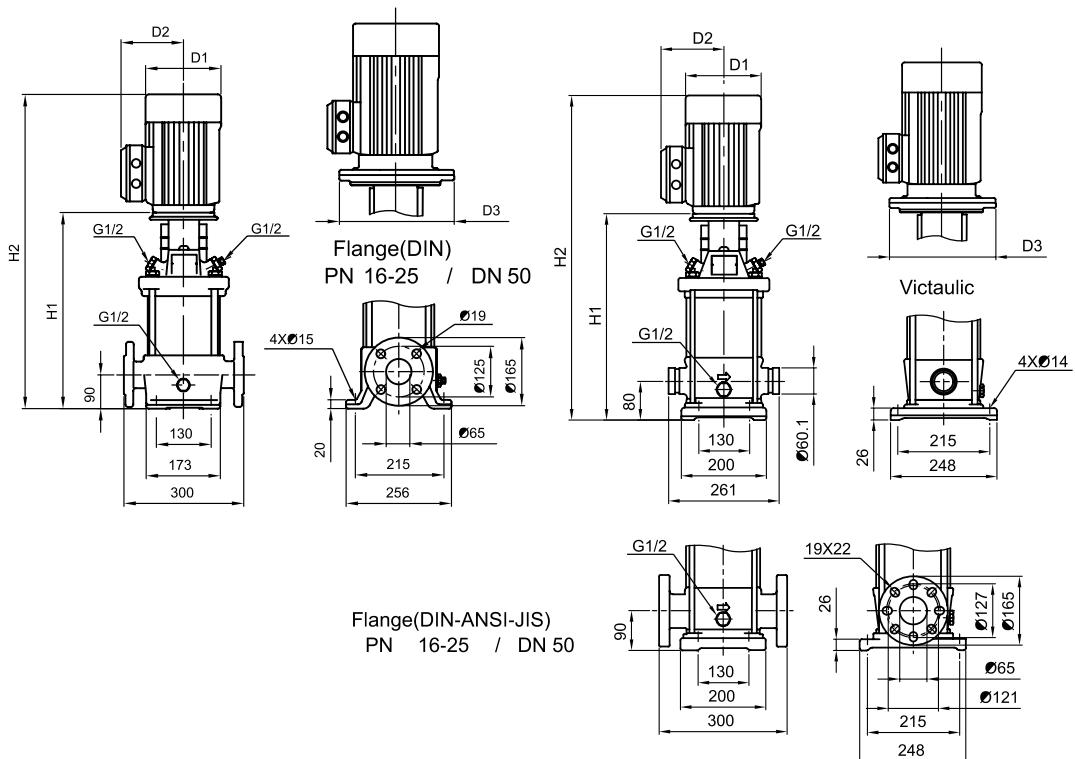
PENTAIR

PVM/PVMI/PVMX 15

VERTICAL MULTISTAGE CENTRIFUGAL PUMPS

DIMENSIONS OF PUMP

TYPE OF PUMP	MOTOR		PVM					PVMI - PVMX									
			Dimensions [mm]				Net weights [kg]	Dimensions [mm]				Net weights [kg]					
	P ₂		DIN flange		D1	D2	D3	DIN Flange	Victaulic		DIN flange		D1	D2	D3	Victaulic	DIN flange
	[HP]	[kW]	H1	H2					H1	H2	H1	H2					
PVM 15-1	1.5	1.1	400	635	141	115	—	43.8	387	622	397	632	141	115	—	36.0	36.6
PVM 15-2	3	2.2	415	682	180	138	—	55.7	403	694	413	680	180	138	—	47.7	48.3
PVM 15-3	4	3	465	786	194	145	—	64.9	453	769	463	784	194	145	—	56.1	56.7
PVM 15-4	5.5	4	510	838	225	160	—	69.7	498	824	508	836	225	160	—	61.0	61.6
PVM 15-5	5.5	4	555	883	225	160	—	71.2	543	869	553	881	225	160	—	62.4	63.0
PVM 15-6	7.5	5.5	632	997	248	194	300	102.3	620	982	630	995	248	194	300	94.6	95.3
PVM 15-7	7.5	5.5	677	1042	248	194	300	103.8	665	1027	675	1040	248	194	300	96.1	96.7
PVM 15-8	10	7.5	722	1107	248	194	300	111.8	710	1108	720	1105	248	194	300	104.1	104.7
PVM 15-9	10	7.5	767	1152	248	194	300	113.3	755	1153	765	1150	248	194	300	105.6	106.2
PVM 15-10	15	11	889	1387	317	238	350	150.0	877	1382	887	1385	317	238	350	142.7	143.3
PVM 15-12	15	11	979	1477	317	238	350	153.0	967	1472	977	1475	317	238	350	145.5	146.2
PVM 15-14	15	11	1069	1567	317	238	350	156.3	1057	1562	1067	1565	317	238	350	148.5	149.1
PVM 15-17	20	15	1204	1702	317	238	350	171.5	1192	1702	1202	1700	317	238	350	162.9	163.5

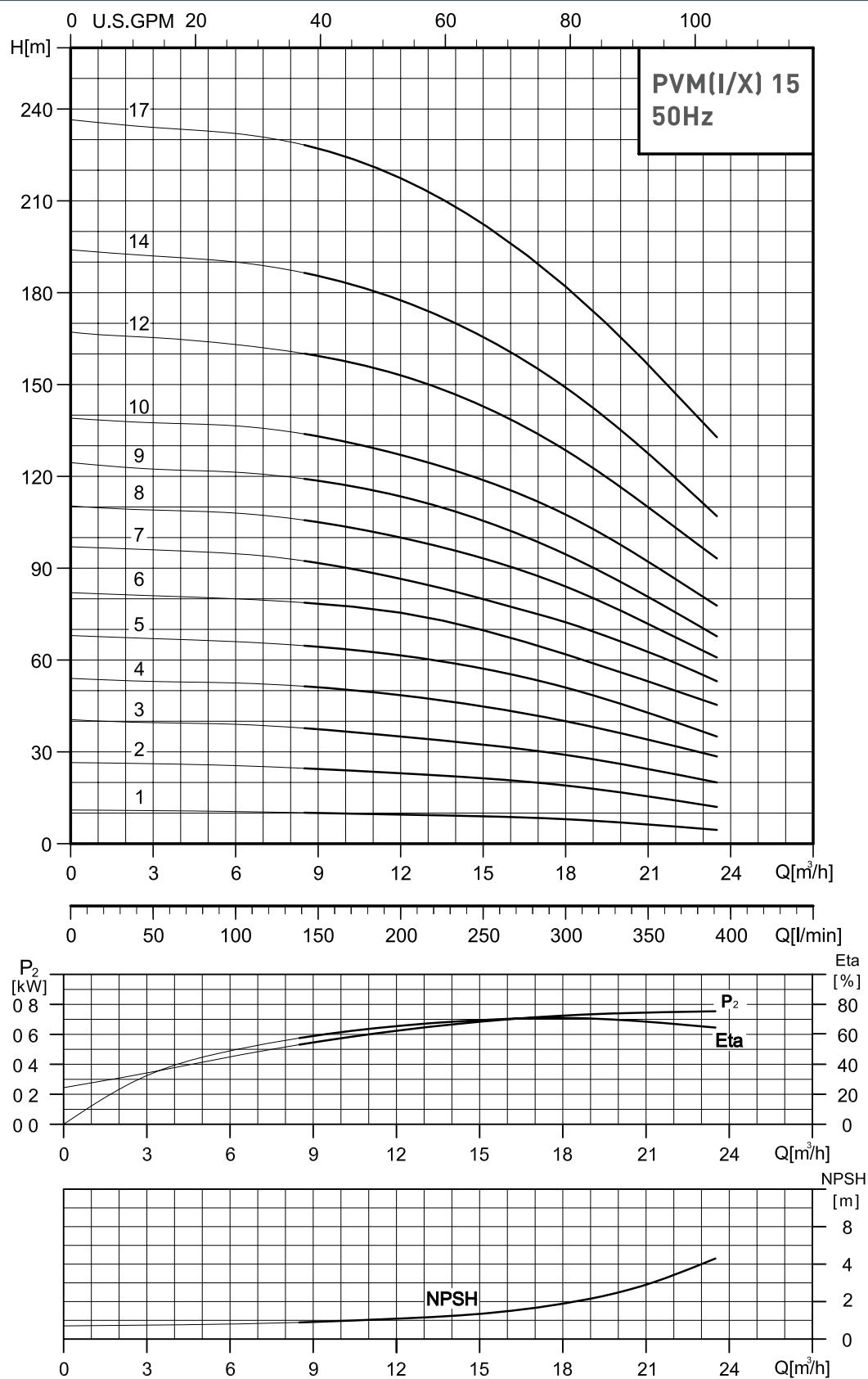


PENTAIR

PVM/PVMI/PVMX 15

VERTICAL MULTISTAGE CENTRIFUGAL PUMPS

HYDRAULIC PERFORMANCE



Head and NPSH values valid for water with density $\rho = 1.0 \text{ Kg / dm}^3$ at 20°C

PVM(I/X) 15

2900 rpm

50 Hz

ISO 9906 - Annex A

MEI > 0.4 - Reference MEI > 0.70 - The information on the reference efficiency is available at the address: www.europump.org/efficiencycharts

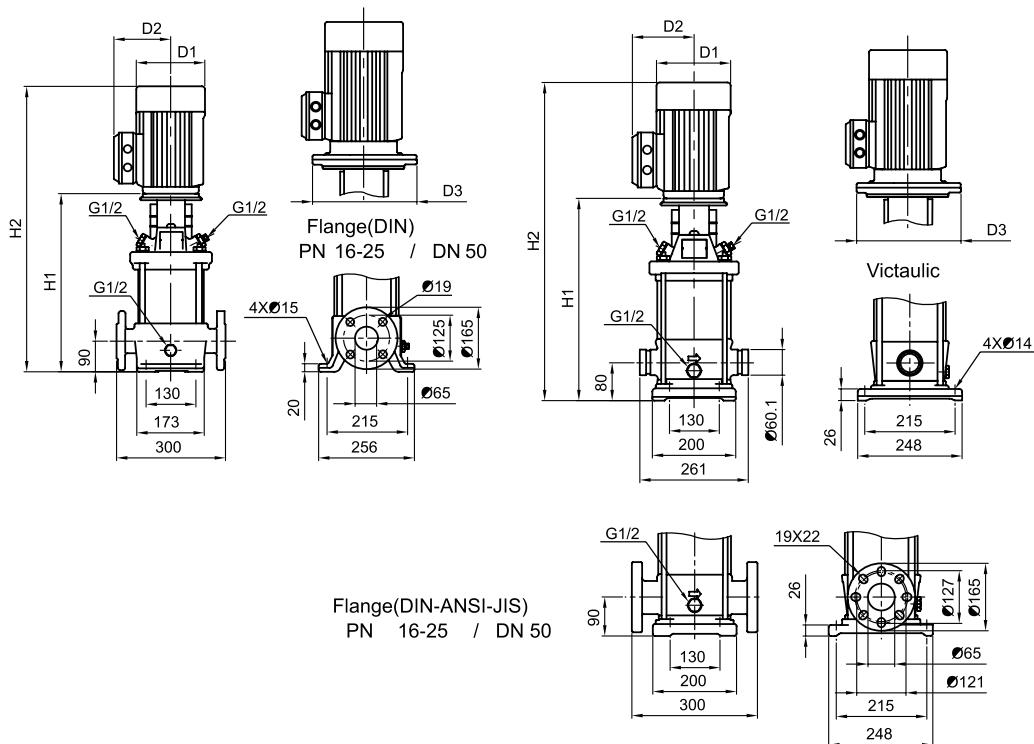
PENTAIR

PVM/PVMI/PVMX 20

VERTICAL MULTISTAGE CENTRIFUGAL PUMPS

DIMENSIONS OF PUMP

TYPE OF PUMP	MOTOR		PVM					PVMI - PVMX									
			Dimensions [mm]				Net weight [kg]	Dimensions [mm]				Net weight [kg]					
	P ₂		DIN flange		D1	D2	D3	DIN Flange	Victaulic		DIN flange		D1	D2	D3	Victaulic	DIN flange
	[HP]	[kW]	H1	H2					H1	H2	H1	H2					
PVM 20-1	1.5	1.1	400	636	141	115	—	43.9	387	623	397	632	141	115	—	36.0	36.6
PVM 20-2	3	2.2	415	682	180	138	—	55.7	403	696	413	680	180	138	—	47.7	48.3
PVM 20-3	5.5	4	465	793	225	160	—	68.3	453	783	463	791	225	160	—	59.5	60.2
PVM 20-4	7.5	5.5	542	907	248	194	300	99.4	530	898	540	905	248	194	300	91.7	92.3
PVM 20-5	7.5	5.5	587	952	248	194	300	100.8	575	943	585	950	248	194	300	93.2	93.8
PVM 20-6	10	7.5	632	1017	248	194	300	108.6	620	1026	630	1015	248	194	300	100.9	101.6
PVM 20-7	10	7.5	677	1062	248	194	300	110.1	665	1071	675	1060	248	194	300	102.4	103.0
PVM 20-8	15	11	799	1297	317	238	350	147.1	787	1303	797	1295	317	238	350	139.7	140.3
PVM 20-10	15	11	889	1387	317	238	350	150.0	877	1393	887	1385	317	238	350	142.7	143.3
PVM 20-12	20	15	979	1477	317	238	350	163.1	967	1492	977	1475	317	238	350	155.7	156.3
PVM 20-14	20	15	1069	1567	317	238	350	166.0	1057	1582	1067	1565	317	238	350	158.6	159.2
PVM 20-17	25	18.5	1204	1746	317	238	350	195.4	1192	1761	1202	1744	317	238	350	187.8	188.5

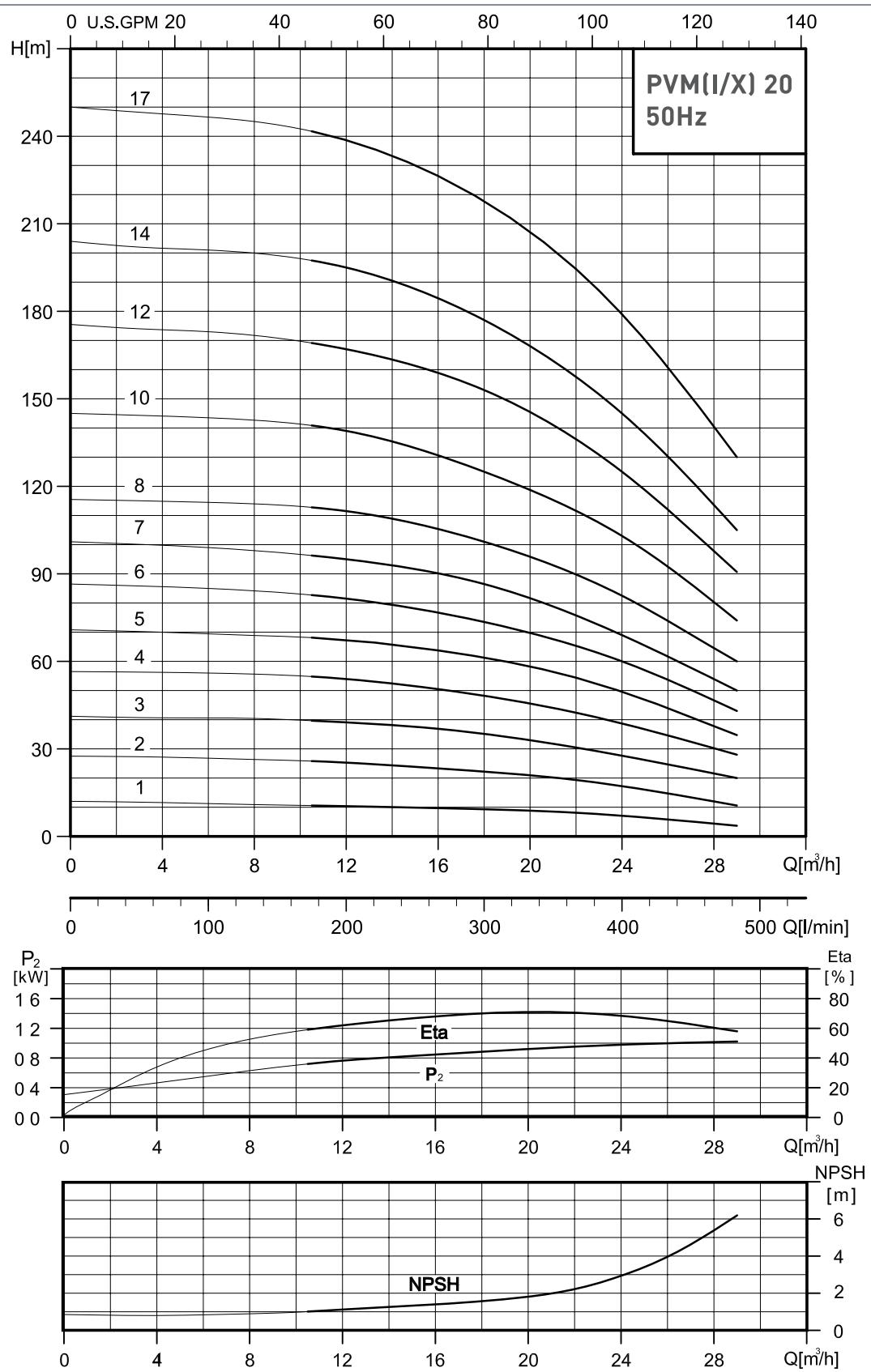


PENTAIR

PVM/PVMI/PVMX 20

VERTICAL MULTISTAGE CENTRIFUGAL PUMPS

HYDRAULIC PERFORMANCE



Head and NPSH values valid for water with density $\rho = 1.0 \text{ Kg} / \text{dm}^3$ at 20°C

PVM(I/X) 20

2900 rpm

50 Hz

ISO 9906 - Annex A

MEI > 0.4 - Reference MEI > 0.70 - The information on the reference efficiency is available at the address: www.europump.org/efficiencycharts

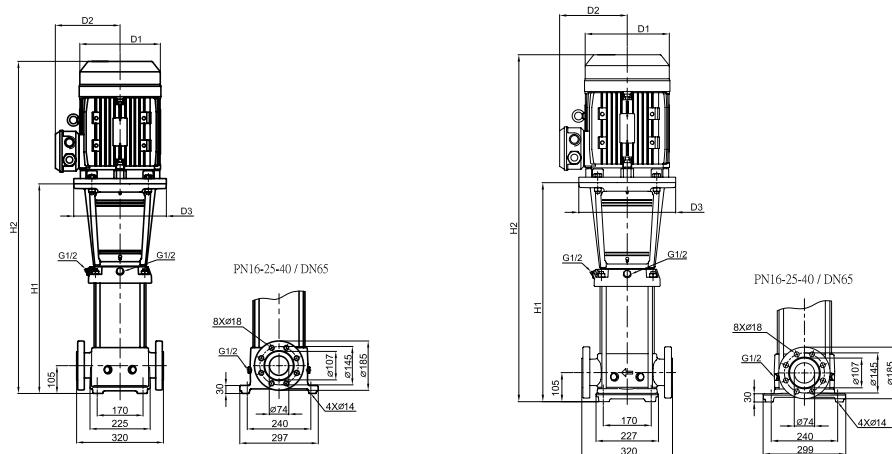
PENTAIR

PVM/PVMI/PVMX 32

VERTICAL MULTISTAGE CENTRIFUGAL PUMPS

DIMENSIONS OF PUMP

TYPE OF PUMP	MOTOR		PVM					PVMI - PVMX					Net weight [kg]	
			Dimensions [mm]			DIN Flange	D1	D2	D3	Dimensions [mm]				
	P ₂		DIN flange		H1					H1	H2	D1	D2	
	[HP]	[kW]	H1	H2								D3	DIN flange	
PVM 32-1-1	2	1.5	504	771	180	138	280	71.5	504	269	180	138	280	66.5
PVM 32-1	3	2.2	504	771	180	138	280	74.3	504	269	180	138	280	69.3
PVM 32-2-2	4	3	574	895	194	145	280	84.2	574	895	194	145	280	79.1
PVM 32-2	5.5	4	574	902	225	160	280	87.6	574	902	225	160	280	82.5
PVM 32-3-2	7.5	5.5	644	1009	248	194	300	110.2	644	1009	248	194	300	105.1
PVM 32-3	7.5	5.5	644	1009	248	194	300	110.2	644	1009	248	194	300	105.1
PVM 32-4-2	10	7.5	714	1099	248	194	300	119.5	714	1099	248	194	300	114.5
PVM 32-4	10	7.5	714	1099	248	194	300	119.5	714	1099	248	194	300	114.6
PVM 32-5-2	15	11	894	1392	317	238	350	163.3	894	1392	317	238	350	158.2
PVM 32-5	15	11	894	1392	317	238	350	163.3	894	1392	317	238	350	158.3
PVM 32-6-2	15	11	964	1462	317	238	350	166.3	964	1462	317	238	350	161.3
PVM 32-6	15	11	964	1462	317	238	350	166.3	964	1462	317	238	350	161.4
PVM 32-7-2	20	15	1034	1532	317	238	350	179.5	1034	1532	317	238	350	174.6
PVM 32-7	20	15	1034	1532	317	238	350	179.5	1034	1532	317	238	350	174.6
PVM 32-8-2	20	15	1104	1602	317	238	350	182.6	1104	1602	317	238	350	177.9
PVM 32-8	20	15	1104	1602	317	238	350	182.6	1104	1602	317	238	350	177.9
PVM 32-9-2	25	18.5	1174	1716	317	238	350	210.6	1174	1716	317	238	350	205.5
PVM 32-9	25	18.5	1174	1716	317	238	350	210.6	1174	1716	317	238	350	205.6
PVM 32-10-2	25	18.5	1244	1786	317	238	350	212.7	1244	1786	317	238	350	208.1
PVM 32-10	25	18.5	1244	1786	317	238	350	213.7	1244	1786	317	238	350	208.2
PVM 32-11-2	30	22	1314	1894	358	265	350	258.8	1314	1894	358	265	350	253.6
PVM 32-11	30	22	1314	1894	358	265	350	258.8	1314	1894	358	265	350	253.6
PVM 32-12-2	30	22	1384	1964	358	265	350	260.8	1384	1964	358	265	350	256.3
PVM 32-12	30	22	1384	1964	358	265	350	260.8	1384	1964	358	265	350	256.3
PVM 32-13-2	40	30	1454	2114	420	295	400	328.2	1454	2114	420	295	400	323.6
PVM 32-13	40	30	1454	2114	420	295	400	328.2	1454	2114	420	295	400	323.6
PVM 32-14-2	40	30	1524	2184	420	295	400	331.3	1524	2184	420	295	400	326.3
PVM 32-14	40	30	1524	2184	420	295	400	331.3	1524	2184	420	295	400	326.3

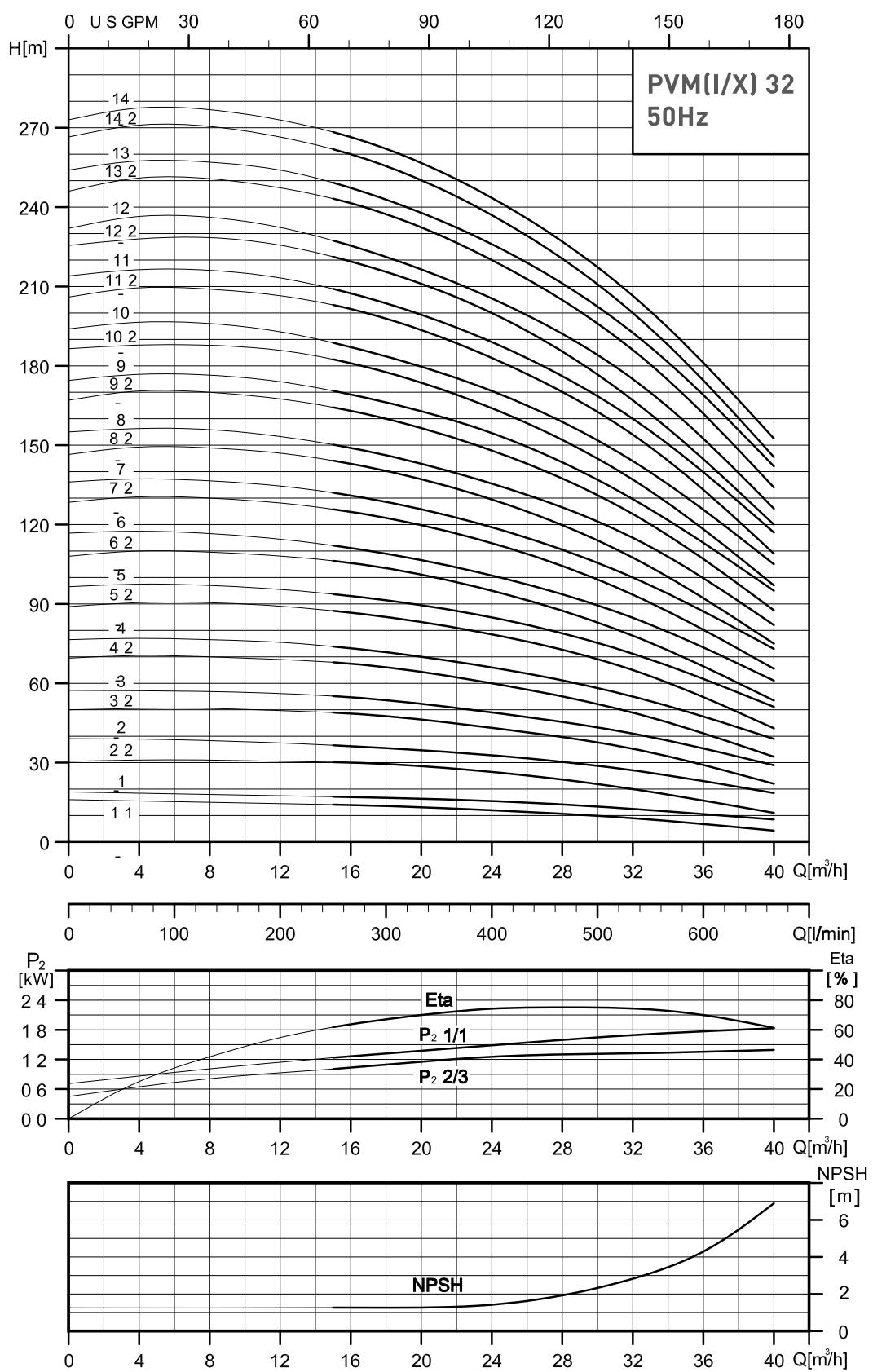


PENTAIR

PVM/PVMI/PVMX 32

VERTICAL MULTISTAGE CENTRIFUGAL PUMPS

HYDRAULIC PERFORMANCE



Head and NPSH values valid for water with density $\rho = 1.0 \text{ Kg} / \text{dm}^3$ at 20°C

PVM(I/X) 32

2900 rpm

50 Hz

ISO 9906 - Annex A

MEI > 0.4 - Reference MEI > 0.70 - The information on the reference efficiency is available at the address: www.europump.org/efficiencycharts

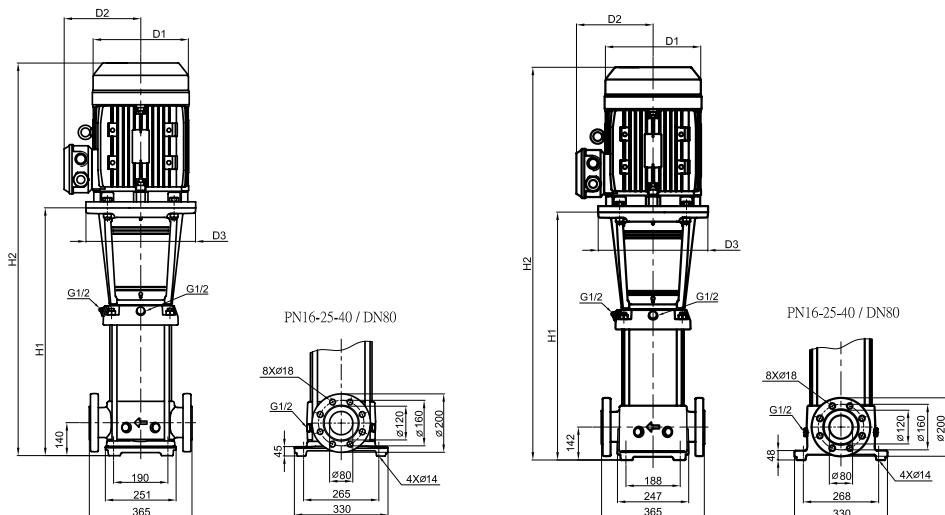
PENTAIR

PVM/PVMI/PVMX 45

VERTICAL MULTISTAGE CENTRIFUGAL PUMPS

DIMENSIONS OF PUMP

TYPE OF PUMP	MOTOR		PVM				PVMI - PVMX							
			Dimensions [mm]											
	P ₂		DIN flange		D1	D2	D3	DIN Flange	DIN flange		D1	D2	D3	DIN flange
	[HP]	[KW]	H1	H2					H1	H2				
PVM 45-1-1	4	3	560	324	194	145	280	91.7	559	880	194	145	280	82.9
PVM 45-1	5.5	4	560	889	160	225	280	95.1	559	887	160	225	280	86.3
PVM 45-2-2	7.5	5.5	640	1006	248	194	300	118.3	639	1004	248	194	300	109.5
PVM 45-2	10	7.5	640	1026	248	194	300	124.6	639	1024	248	194	300	115.8
PVM 45-3-2	15	11	830	1329	317	238	350	169.0	829	1327	317	238	350	160.2
PVM 45-3	15	11	830	1329	317	238	350	169.0	829	1327	317	238	350	160.2
PVM 45-4-2	20	15	910	1409	317	238	350	182.9	909	1407	317	238	350	174.1
PVM 45-4	20	15	910	1409	317	238	350	182.9	909	1407	317	238	350	174.1
PVM 45-5-2	25	18.5	990	1533	317	238	350	211.6	989	1531	317	238	350	202.8
PVM 45-5	25	18.5	990	1533	317	238	350	211.6	989	1531	317	238	350	202.8
PVM 45-6-2	30	22	1070	1650	358	265	350	258.1	1069	1649	358	265	350	249.3
PVM 45-6	30	22	1070	1650	358	265	350	258.1	1069	1649	358	265	350	249.3
PVM 45-7-2	40	30	1150	1810	420	295	400	326.4	1149	1809	420	295	400	317.7
PVM 45-7	40	30	1150	1810	420	295	400	326.5	1149	1809	420	295	400	317.7
PVM 45-8-2	40	30	1230	1890	420	295	400	330.2	1229	1889	420	295	400	321.4
PVM 45-8	40	30	1230	1890	420	295	400	331.3	1229	1889	420	295	400	321.5
PVM 45-9-2	40	30	1310	1970	420	295	400	334.0	1309	1969	420	295	400	325.2
PVM 45-9	50	37	1310	1970	420	295	400	347.0	1309	1969	420	295	400	338.2
PVM 45-10-2	50	37	1390	2050	420	295	400	350.7	1389	2049	420	295	400	341.9
PVM 45-10	50	37	1390	2050	420	295	400	350.7	1389	2049	420	295	400	341.9
PVM 45-11-2	60	45	1470	2160	470	325	450	412.5	1469	2159	470	325	450	403.7
PVM 45-11	60	45	1470	2160	470	325	450	412.5	1469	2159	470	325	450	403.7
PVM 45-12-2	60	45	1550	2240	470	325	450	416.2	1549	2239	470	325	450	407.4
PVM 45-12	60	45	1550	2240	470	325	450	416.2	1549	2239	470	325	450	407.4
PVM 45-13-2	60	45	1630	2320	470	325	450	419.9	1629	2319	470	325	450	411.1

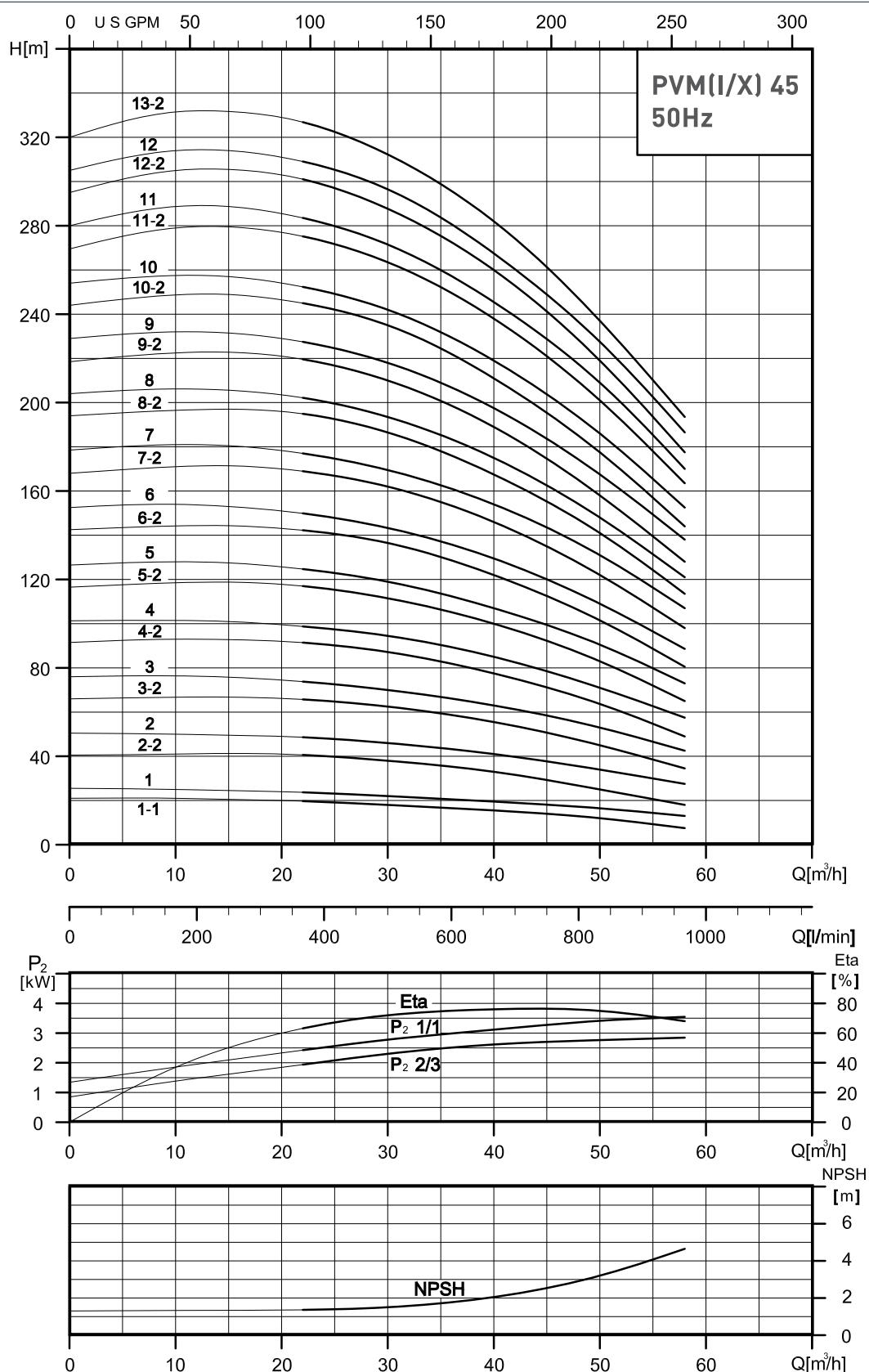


PENTAIR

PVM/PVMI/PVMX 45

VERTICAL MULTISTAGE CENTRIFUGAL PUMPS

HYDRAULIC PERFORMANCE



Head and NPSH values valid for water with density $\rho = 1.0 \text{ Kg} / \text{dm}^3$ at 20°C

PVM(I/X) 45	2900 rpm	50 Hz	ISO 9906 - Annex A
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MEI > 0.4 - Reference MEI > 0.70 - The information on the reference efficiency is available at the address: www.europump.org/efficiencycharts

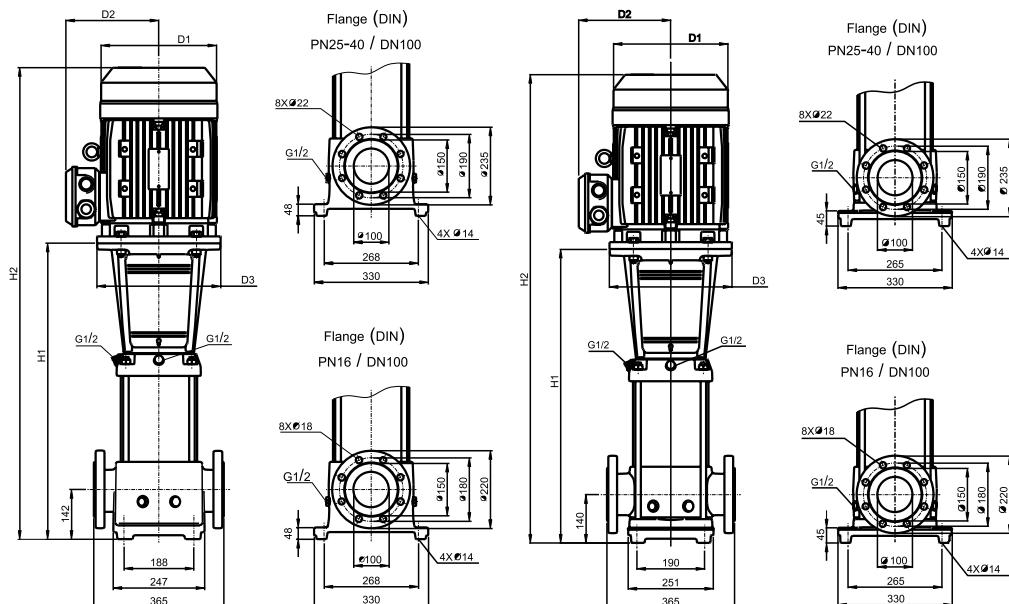
PENTAIR

PVM/PVMI/PVMX 64

VERTICAL MULTISTAGE CENTRIFUGAL PUMPS

DIMENSIONS OF PUMP

TYPE OF PUMP	MOTOR		PVM					PVMI - PVMX						
			Dimensions [mm]					Dimensions [mm]						
	P ₂		DIN flange		D1	D2	D3	DIN Flange	DIN flange		D1	D2	D3	DIN flange
	[HP]	[KW]	H1	H2					H1	H2				
PVM 64-1-1	5.5	4	563	891	225	160	280	88.9	563	891	225	160	280	81.8
PVM 64-1	7.5	5.5	563	928	248	194	300	108.3	563	928	248	194	300	101.3
PVM 64-2-2	10	7.5	646	1031	248	194	300	118.7	646	1031	248	194	300	111.7
PVM 64-2-1	15	11	756	1254	317	238	350	159.3	756	1254	317	238	350	152.3
PVM 64-2	15	11	756	1254	317	238	350	159.3	756	1254	317	238	350	152.3
PVM 64-3-2	20	15	838	1336	317	238	350	174.0	838	1336	317	238	350	166.5
PVM 64-3-1	20	15	838	1336	317	238	350	174.0	838	1336	317	238	350	166.5
PVM 64-3	25	18.5	838	1380	317	238	350	198.9	838	1380	317	238	350	191.4
PVM 64-4-2	25	18.5	920	1463	317	238	350	202.9	920	1463	317	238	350	195.4
PVM 64-4-1	30	22	920	1500	358	265	350	245.7	920	1500	358	265	350	238.1
PVM 64-4	30	22	920	1500	358	265	350	245.7	920	1500	358	265	350	238.1
PVM 64-5-2	40	30	1003	1663	420	295	400	314.3	1003	1663	420	295	400	306.7
PVM 64-5-1	40	30	1003	1663	420	295	400	314.3	1003	1663	420	295	400	306.7
PVM 64-5	40	30	1003	1663	420	295	400	314.3	1003	1663	420	295	400	306.7
PVM 64-6-2	40	30	1086	1746	420	295	400	318.2	1086	1746	420	295	400	310.7
PVM 64-6-1	50	37	1086	1746	420	295	400	331.2	1086	1746	420	295	400	323.7
PVM 64-6	50	37	1086	1746	420	295	400	331.2	1086	1746	420	295	400	323.7
PVM 64-7-2	50	37	1168	1828	420	295	400	335.3	1168	1828	420	295	400	327.7
PVM 64-7-1	50	37	1168	1828	420	295	400	335.3	1168	1828	420	295	400	327.7
PVM 64-7	60	45	1172	1862	470	325	450	393.4	1172	1862	470	325	450	385.8
PVM 64-8-2	60	45	1254	1944	470	325	450	397.5	1254	1944	470	325	450	390.0
PVM 64-8-1	60	45	1254	1944	470	325	450	397.5	1254	1944	470	325	450	390.0

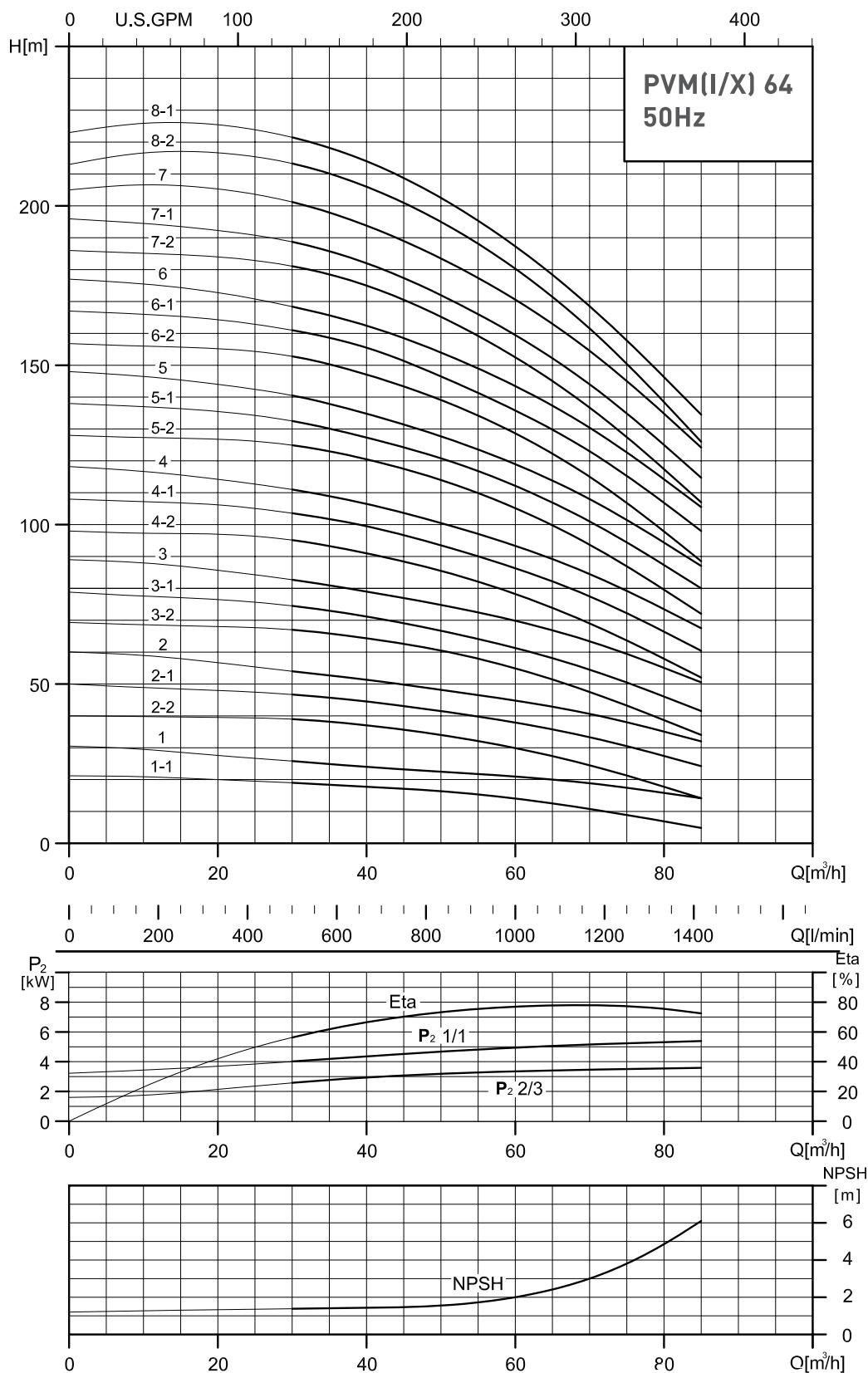


PENTAIR

PVM/PVMI/PVMX 64

VERTICAL MULTISTAGE CENTRIFUGAL PUMPS

HYDRAULIC PERFORMANCE



Head and NPSH values valid for water with density $\rho = 1.0 \text{ Kg} / \text{dm}^3$ at 20°C

PVM(I/X) 64	2900 rpm	50 Hz	ISO 9906 - Annex A
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MEI ≥ 0.4 - Reference MEI ≥ 0.70 - The information on the reference efficiency is available at the address: www.europump.org/efficiencycharts

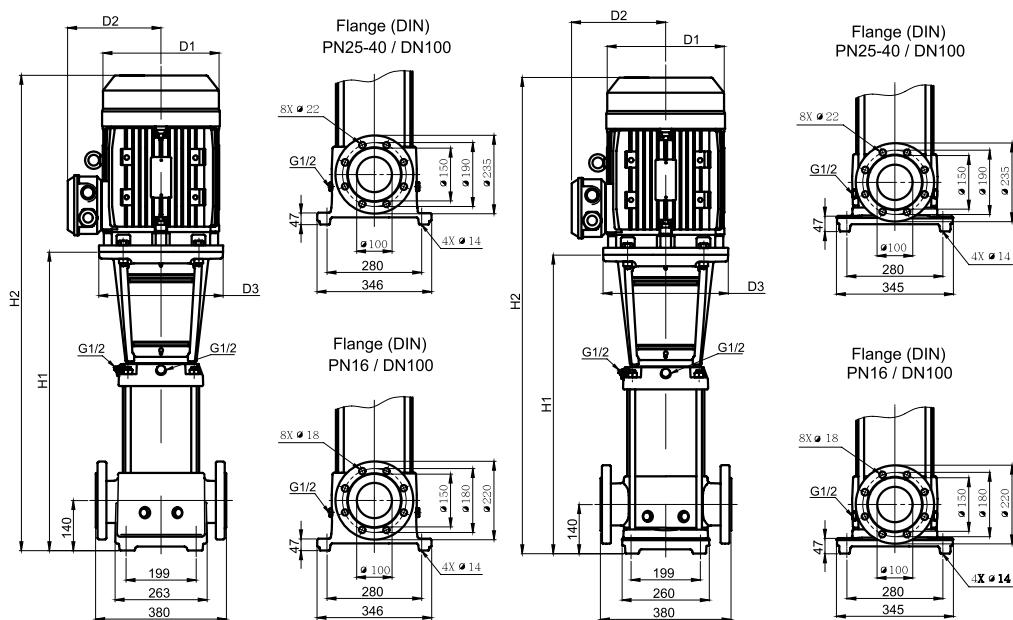
PENTAIR

PVM/PVMI/PVMX 90

VERTICAL MULTISTAGE CENTRIFUGAL PUMPS

DIMENSIONS OF PUMP

TYPE OF PUMP	MOTOR		PVM				PVMI - PVMX							
			Dimensions [mm]											
	P ₂		DIN flange		D1	D2	D3	DIN Flange	DIN flange		D1	D2	D3	DIN flange
	[HP]	[kW]	H1	H2					H1	H2				
PVM 90-1-1	7.5	5.5	572	937	248	194	300	122.2	576	941	248	194	300	112.1
PVM 90-1	10	7.5	572	957	248	194	300	128.5	576	961	248	194	300	118.4
PVM 90-2-2	15	11.0	774	1272	317	298	350	174.4	778	1276	317	298	350	164.2
PVM 90-2	20	15.0	774	1272	317	298	350	184.5	778	1276	317	298	350	174.3
PVM 90-3-2	25	18.5	866	1408	317	298	350	214.7	870	1412	317	298	350	204.4
PVM 90-3	30	22.0	866	1446	358	265	350	257.5	870	1450	358	265	350	247.2
PVM 90-4-2	40	30.0	958	1618	420	295	400	327.3	962	1622	420	295	400	316.9
PVM 90-4	40	30.0	958	1618	420	295	400	327.3	962	1622	420	295	400	316.9
PVM 90-5-2	50	37.0	1050	1710	420	295	400	346.9	1054	1714	420	295	400	336.9
PVM 90-5	50	37.0	1050	1710	420	295	400	346.9	1054	1714	420	295	400	337.0
PVM 90-6-2	60	45.0	1142	1832	470	325	450	410.2	1146	1836	470	325	450	400.0
PVM 90-6	60	45.0	1142	1832	470	325	450	410.3	1146	1836	470	325	450	400.1

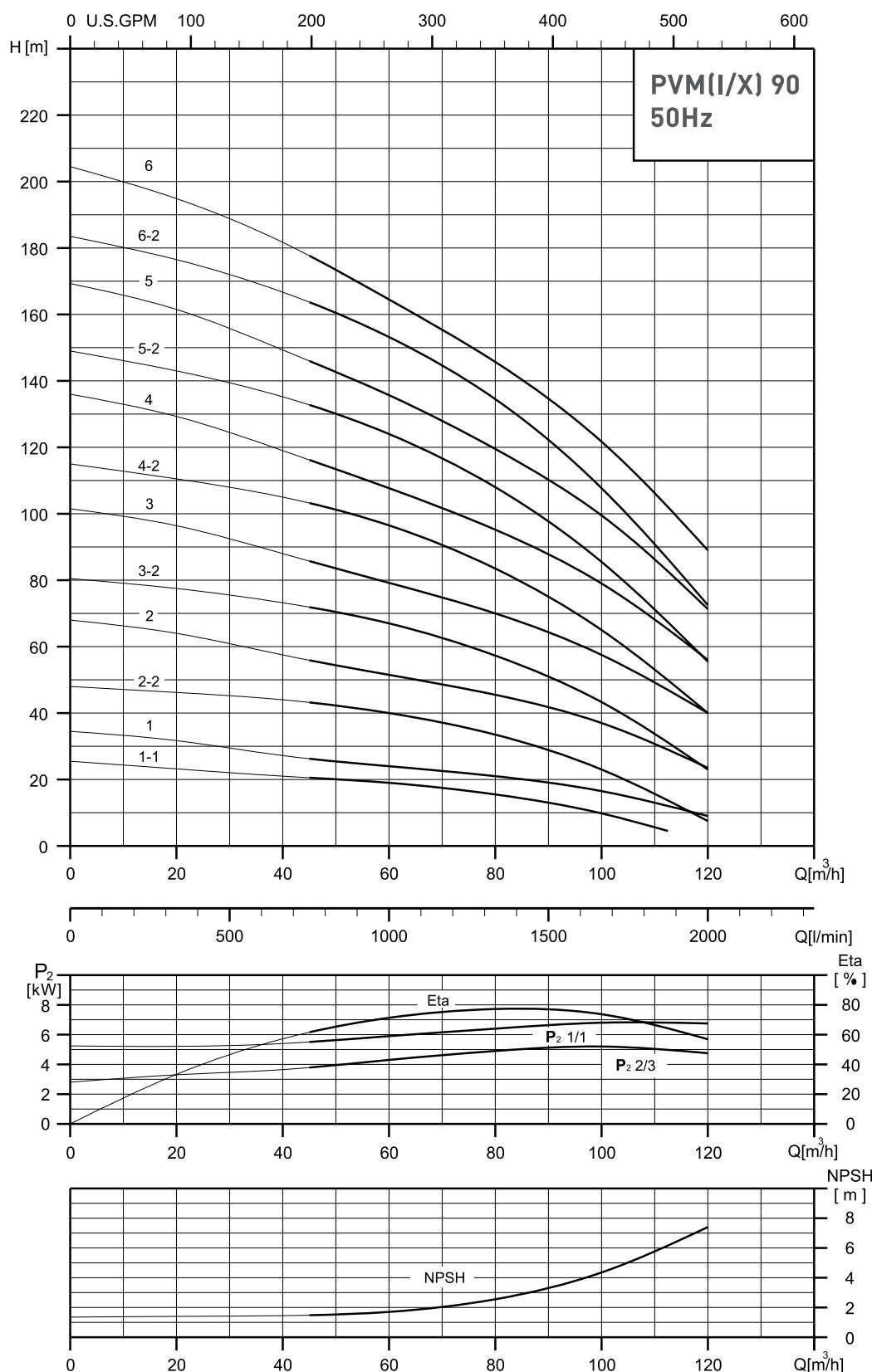


PENTAIR

PVM/PVMI/PVMX 90

VERTICAL MULTISTAGE CENTRIFUGAL PUMPS

HYDRAULIC PERFORMANCE



Head and NPSH values valid for water with density $\rho = 1.0 \text{ Kg} / \text{dm}^3$ at 20°C

PVM(I/X) 90	2900 rpm	50 Hz	ISO 9906 - Annex A
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MEI > 0.4 - Reference MEI > 0.70 - The information on the reference efficiency is available at the address: www.europump.org/efficiencycharts

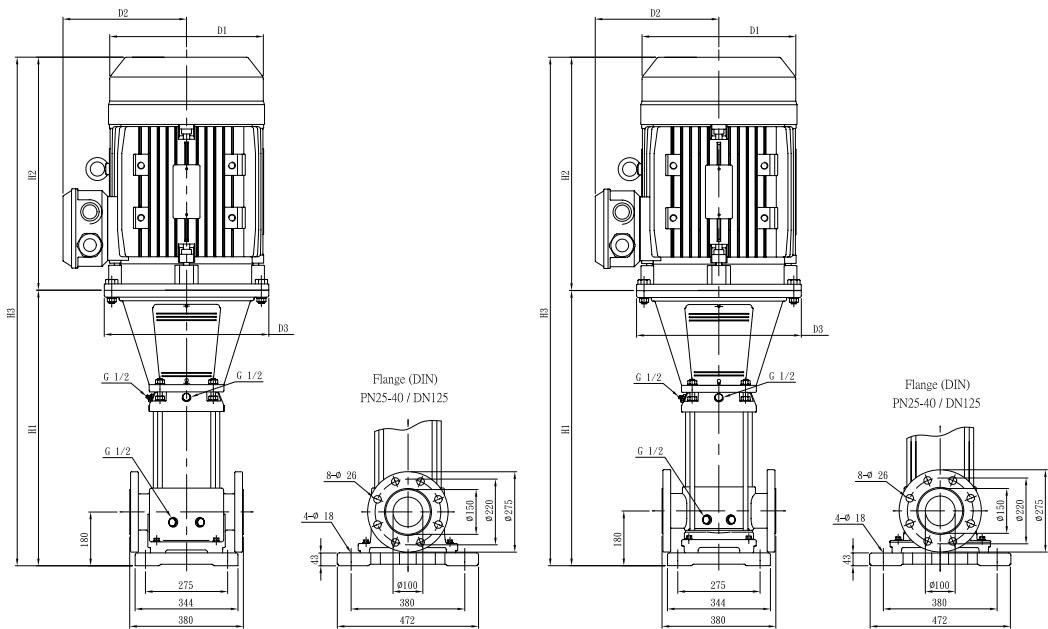
PENTAIR

PVM/PVMI/PVMX 120

VERTICAL MULTISTAGE CENTRIFUGAL PUMPS

DIMENSIONS OF PUMP

TYPE OF PUMP	MOTOR		PVM						PVMI - PVMX							
			Dimensions [mm]						Net weight [kg]	Dimensions [mm]						Net weight [kg]
	P ₂		DIN flange			D1	D2	D3	DIN Flange	DIN flange			D1	D2	D3	DIN flange
	[HP]	[kW]	H1	H2	H3					H1	H2	H3				
PVM 120-1	15	11	834.0	498	1332	317	238	350	200.1	837.0	498	1335	317	238	350	184.3
PVM 120-2-1	25	18.5	989.5	542	1532	317	238	350	245.1	992.5	542	1535	317	238	350	229.5
PVM 120-2	30	22.0	989.5	580	1569.5	358	265	350	291.8	992.5	580	1572.5	358	265	350	276.1
PVM 120-3	40	30.0	1145.0	660	1805.0	420	295	400	362.5	1149.0	660	1809.0	420	295	400	346.9
PVM 120-4-1	50	37.0	1300.5	660	1960.5	420	295	400	385.5	1303.5	660	1963.5	420	295	400	370.1
PVM 120-5-1	60	45.0	1460.0	690	2150.0	470	325	450	453.6	1463.0	690	2153.0	470	325	450	438.3
PVM 120-6-1	75	55.0	1641.5	770	2411.5	510	355	550	578.8	1644.5	770	2414.5	510	355	550	563.8
PVM 120-7	100	75.0	1797.0	845	2642.0	580	410	550	751.4	1800.0	845	2645.0	580	410	550	736.5

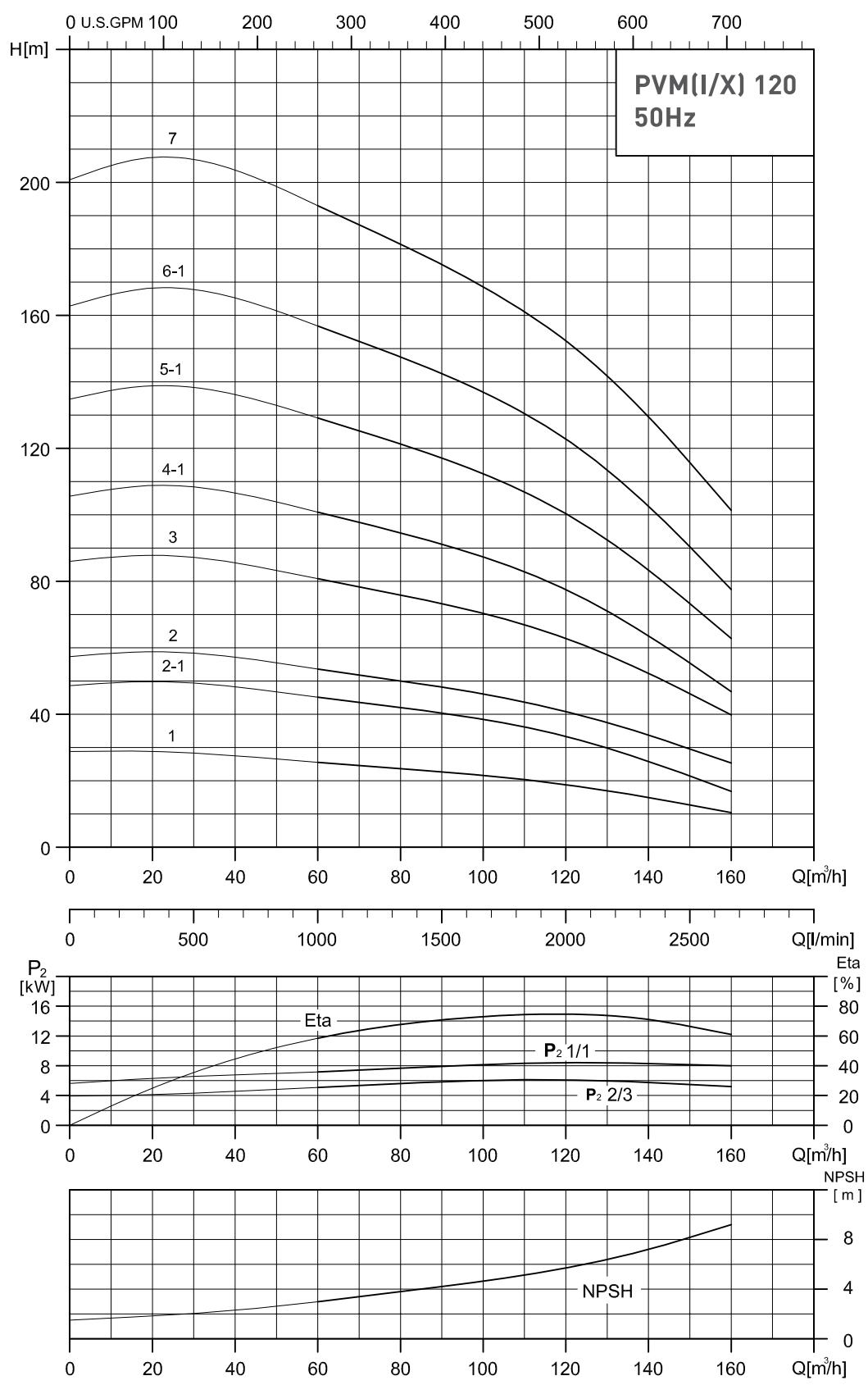


PENTAIR

PVM/PVMI/PVMX 120

VERTICAL MULTISTAGE CENTRIFUGAL PUMPS

HYDRAULIC PERFORMANCE



Head and NPSH values valid for water with density $\rho = 1.0 \text{ Kg / dm}^3$ at 20°C

PVM(I/X) 120

2900 rpm

50 Hz

ISO 9906 - Annex A

MEI ≥ 0.4 - Reference MEI ≥ 0.70 - The information on the reference efficiency is available at the address: www.europump.org/efficiencycharts

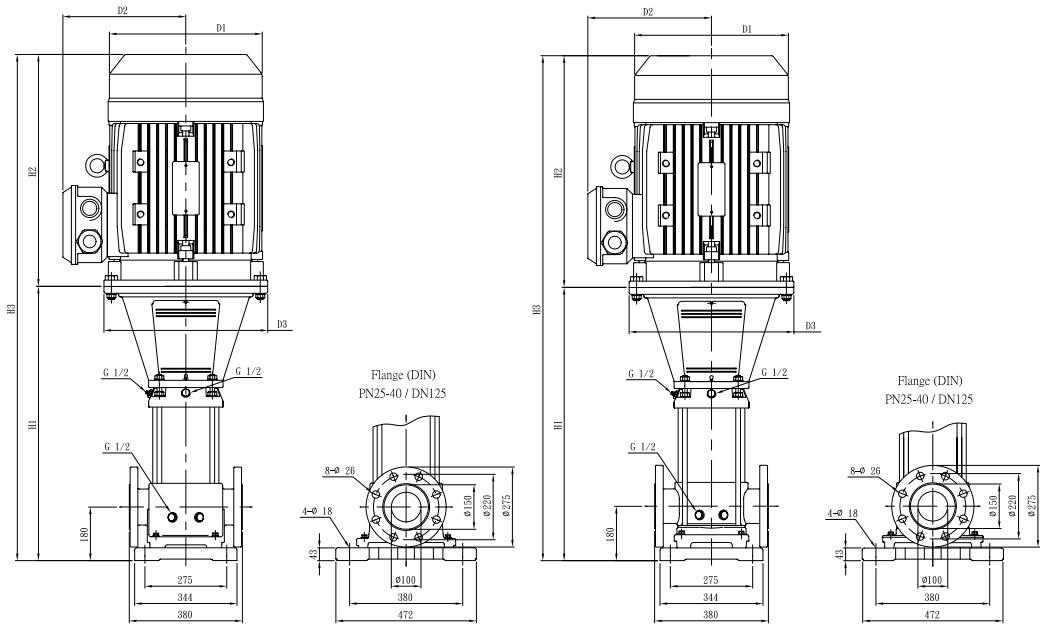
PENTAIR

PVM/PVMI/PVMX 150

VERTICAL MULTISTAGE CENTRIFUGAL PUMPS

DIMENSIONS OF PUMP

TYPE OF PUMP	MOTOR		PVM					PVMI - PVMX					Net weight [kg]			
			Dimensions [mm]			DIN Flange	H1	H2	H3	Dimensions [mm]						
	P ₂		DIN flange		D1	D2	D3			DIN flange		D1	D2	D3		
	[HP]	[KW]	H1	H2						H1	H2	H3		DIN flange		
PVM 150-1-1	15	11	834.0	498	1332	317	238	350	200.0	837	498	1335	317	238	350	173.4
PVM 150-1	20	15	834.0	542	1376	317	238	350	210.1	837	542	1379	317	238	350	183.5
PVM 150-2-1	30	22.0	989.5	580	1569.5	358	265	350	287.8	992.5	580	1572.5	358	265	350	271.6
PVM 150-3-2	40	30.0	1145.0	660	1805.0	420	295	400	362.3	1148	660	1808	420	295	400	346.2
PVM 150-3	50	37.0	1145.0	660	1805.0	420	295	400	375.4	1148	660	1808	420	295	400	359.2
PVM 150-4-1	60	45.0	1304.5	690	1994.5	470	325	450	443.4	1307.5	690	1997.5	470	325	450	427.4
PVM 150-5-2	75	55.0	1486.0	770	2256.0	510	355	550	568.7	1489	770	2259	510	355	550	552.8
PVM 150-6	100	75.0	1641.5	845	2486.5	580	410	550	741.0	1644.5	845	2489.5	580	410	550	725.5

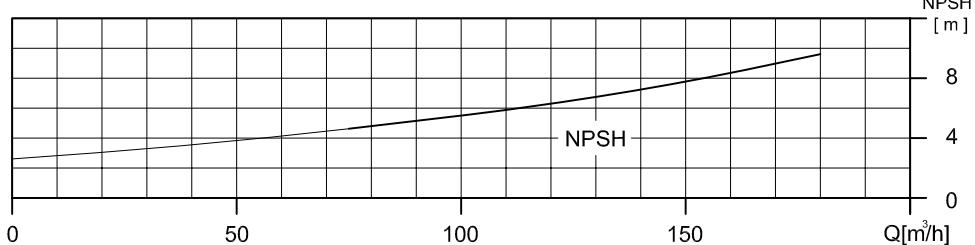
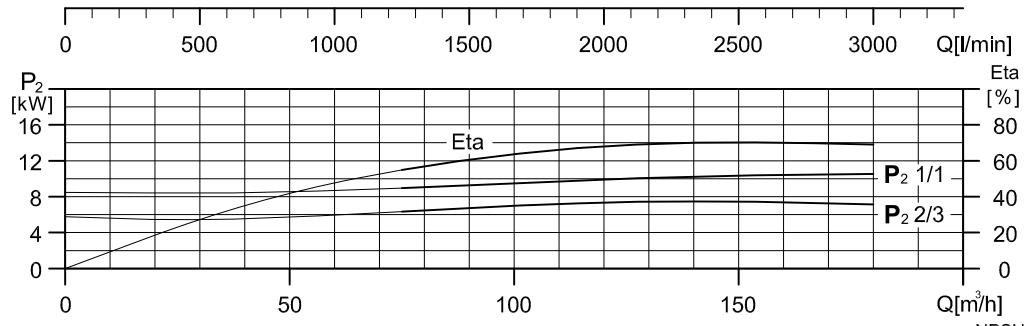
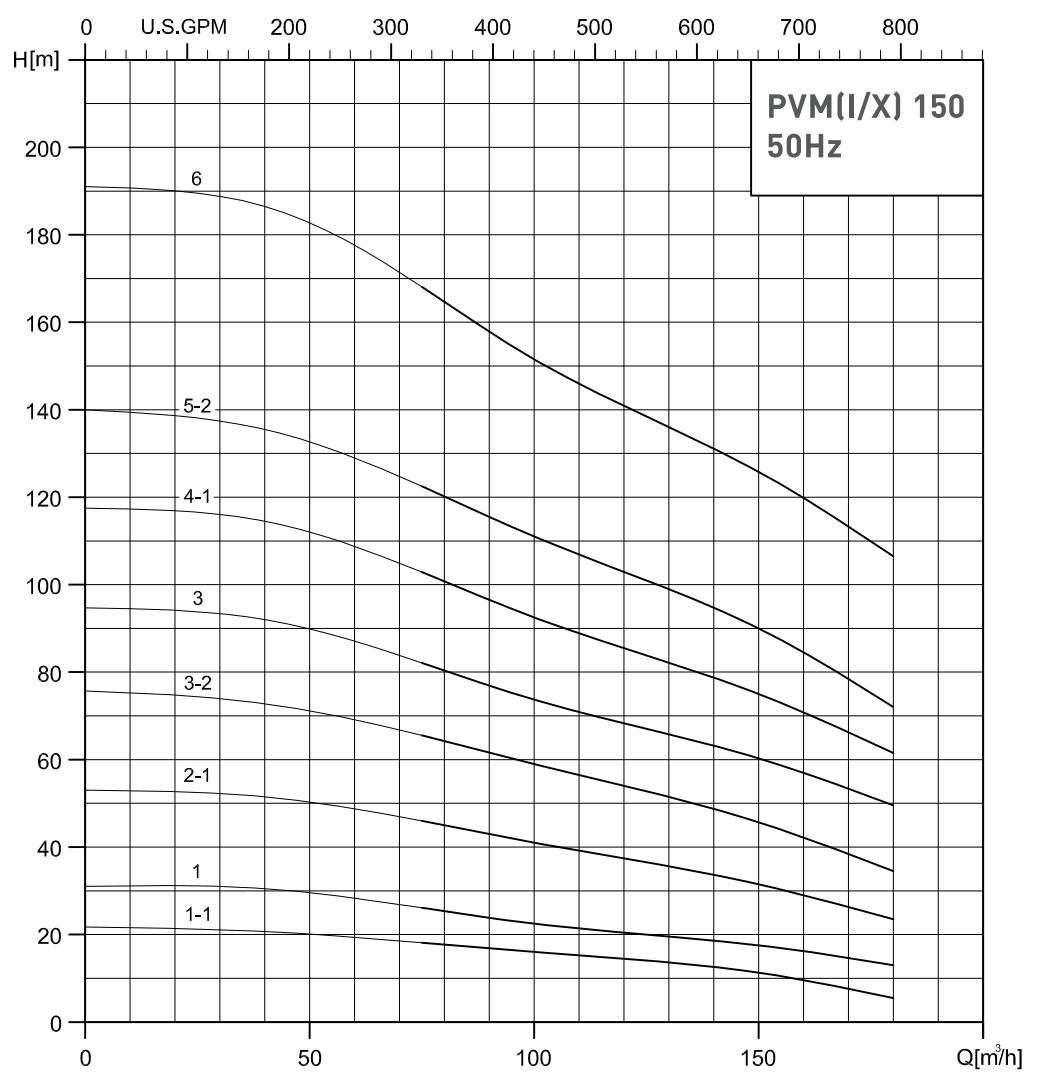


PENTAIR

PVM/PVMI/PVMX 150

VERTICAL MULTISTAGE CENTRIFUGAL PUMPS

HYDRAULIC PERFORMANCE



Head and NPSH values valid for water with density $\rho = 1.0 \text{ Kg} / \text{dm}^3$ at 20°C

PVM(I/X) 150

2900 rpm

50 Hz

ISO 9906 - Annex A

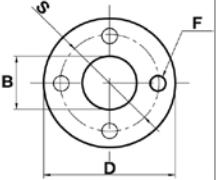
MEI > 0.4 - Reference MEI > 0.70 - The information on the reference efficiency is available at the address: www.europump.org/efficiencycharts

PENTAIR

PVM/PVMI/PVMX ACCESSORIES

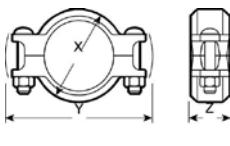
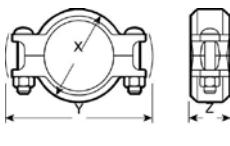
CIRCULAR COUNTERFLANGES

PVM/ PVMI / PVMX ACCESSORIES

COD. Steel	COD. AISI 304	COD. AISI 316	DESCR.		Mater.	Ext	Int	Nº Holes	D Holes	hole B Thread	PN	STANDARD
ZA010970	ZA011050	ZA011130	C.FLG DN25 PN25	 Pair of circular flanges complete with bolts and seals	STEEL / AISI 304 / AISI 316	115	85	4	14	DN25	25	UNI EN 1092-1
ZA010980	ZA011060	ZA011140	C.FLG DN32 PN25			140	100	4	18	DN32	25	UNI EN 1092-1
ZA010990	ZA011070	ZA011150	C.FLG DN40 PN25			150	110	4	18	DN40	25	UNI EN 1092-1
ZA011000	ZA011080	ZA011160	C.FLG DN50 PN25			165	125	4	18	DN50	25	UNI EN 1092-1
ZA011010	ZA011090	ZA011170	C.FLG DN65 PN25			185	145	8	18	DN65	25	UNI EN 1092-1
ZA011020	ZA011100	ZA011180	C.FLG DN80 PN25			200	160	8	18	DN80	25	UNI EN 1092-1
ZA011030	ZA011110	ZA011190	C.FLG DN100 PN16			220	180	8	18	DN100	16	UNI EN 1092-1
ZA011040	ZA011120	ZA011200	C.FLG DN100 PN25			235	190	8	22	DN100	25	UNI EN 1092-1

VICTAULIC FITTINGS

PVM/ PVMI / PVMX ACCESSORIES

COD.	DESCRIPTION		Pump	Material	Pressure PN	Dimensions			CONNECTION
						X	Y	Z	
ZA011210	Victaulic CPLG 1"-1/4"	 VICTAULIC fitting	PVMI 1/3/5	AISI 304	80	68	117	45	1" 1/4
ZA011220	Victaulic CPLG 2"		PVMI 10/15/20		70	87	133	48	2"
ZA011230	Victaulic CPLG 1"-1/4"	 VICTAULIC fitting	PVMX 1/3/5	AISI 316	80	68	117	45	1" 1/4
ZA011240	Victaulic CPLG 2"		PVMX 10/15/20		70	87	133	48	2"

Note: A set includes two coupling halves, a gasket, nuts and bolts

NOCCHI NRM

MONOBLOC NORMALISED CENTRIFUGAL PUMPS (2 AND 4 POLES)



STURDY AND RESISTANT, WIDE RANGE; HIGH HYDRAULIC PERFORMANCE

The PUMPS of the series NRM are single stage monobloc pumps with the hydraulic part-motor connection via a bell, with the pump body made in accordance with standard EN733/DIN24255.

The pumps can be installed in all positions, except in the position with the inlet facing upwards.

APPLICATIONS

- Heating and cooling systems
- Collection of water from lakes, rivers, wells
- Irrigation systems using rain
- Water supply systems, fire fighting systems, pressurisation systems.

MOTOR

- Induction, closed, ventilated
- Degree of protection: IP 55
- Insulation: class F
- Constructive shape: B3/B5
- Speed of rotation:

 - NRM4 1450 rpm
 - NRM2 2900 rpm

- Three-phase motor efficiency class: IE2 from 0.75 kW
IE3 from 7.5 kW

USAGE DATA

- Type of liquid: non-aggressive, non-explosive, free of solid particles and fibres.
- Hot water for heating.
- Coolants.
- Maximum ambient temperature: 40°C
- Temperature of pumped liquid -10°C +130°C
- Maximum operating pressure 10 bar

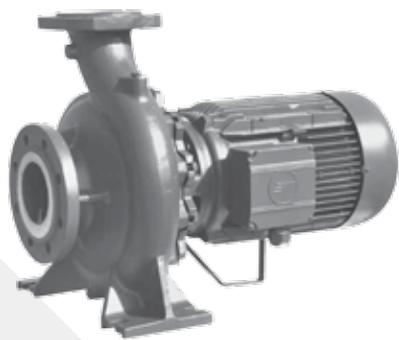


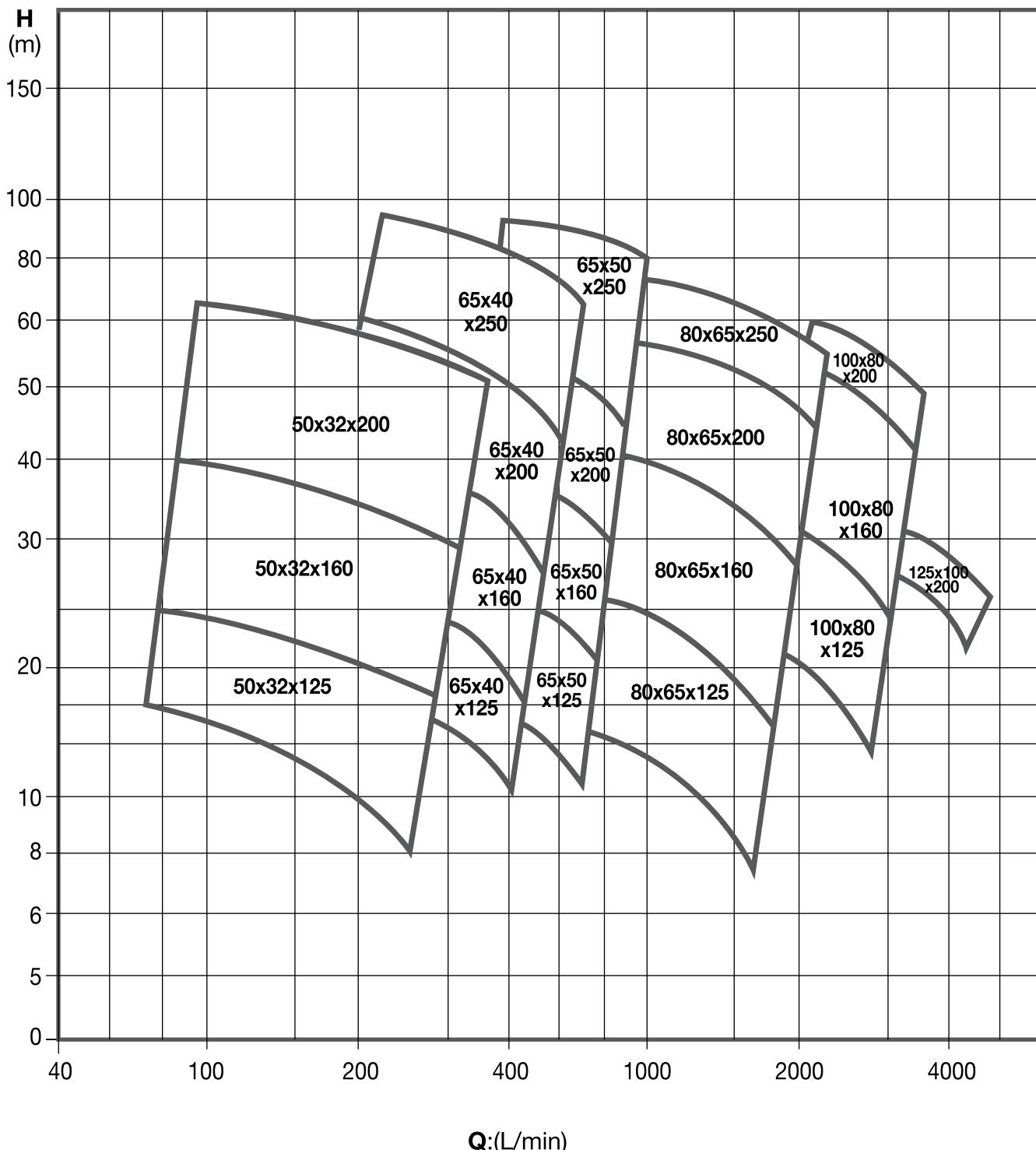
TABLE OF MATERIALS

Component		Material
1	Pump body	Cast iron EN GJL 200
2	Motor casing	Cast iron EN GJL 200
3	Impeller	Cast iron EN GJL 200 Aisi 304 on request
4	Shaft	AISI 420 Stainless Steel
5	Mechanical seal	Silicon carbide / Silicon carbide / NBR

NOCCI NRM2

MONOBLOC NORMALISED CENTRIFUGAL PUMPS (2 AND 4 POLES)

HYDRAULIC PERFORMANCE



NOCCHI NRM2 50x32

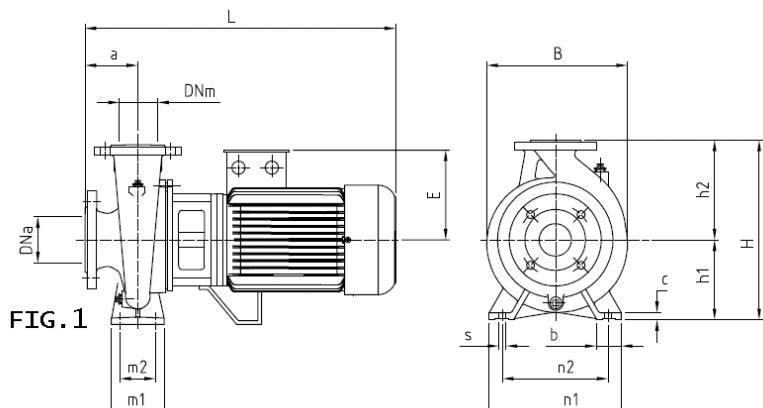
MONOBLOC NORMALISED CENTRIFUGAL PUMPS (2 AND 4 POLES)

PERFORMANCE TABLE

MOD.	P2		VOLT. (V)	In (A)	Q	l/min	100	125	150	175	200	225	250	275	300	350	400
	HP	kW					m³/h	6	7.5	9	10.5	12	13.5	15	16.5	18	21
NRM2 50x32x125C	1	0.75	230/400	1.7	m.c.a./m.c.w.	15.5	14.5	13.5	12.4	11.5	10.3	9	7.5	6			
NRM2 50x32x125B	1.5	1.1	230/400	2.5		20.5	20	19	18	17	16	15	13.5	11.5	7.5		
NRM2 50X32X125A	2	1.5	230/400	3.4		24.5	24	23.5	23	22	21	20	18.5	16.5	13		
NRM2 50X32X160C	3	2.2	230/400	4.4		28.5	28	27.5	26.5	25.5	24	23	21.5	20	15		
NRM2 50X32X160B	4	3	230/400	5.9		33.5	33	32.5	32	31	30	29	27.5	26	22.5		
NRM2 50X32X160A	4	3	230/400	5.9		38	37.5	37	36	35	34	33	31.5	30	26.5		
NRM2 50X32X200C	5.5	4	230/400	7.8		47	46.5	46	45	44	43	42	41	39.5	37.5	35	
NRM2 50X32X200C	5.5		400/690	7.8		55	54.5	54	53.5	53	52	51	49.5	48	45	42	
NRM2 50X32X200B	7.5	5.5	230/400	10.4		62	61.5	61	60	59.2	58.5	57.5	56.4	55	52.5	49	
NRM2 50X32X200B			400/690	10.4													
NRM2 50X32X200A	10	7.5	230/400	14.2													
NRM2 50X32X200A			400/690	14.2													

MEI > 0.1 - Reference MEI > 0.70 - The information on the reference efficiency is available at the address: www.europump.org/efficiencycharts

For efficiency characteristics see www.nocchi.it



"Flange UNI PN16"					
DN	a1	b1	c1	d1	e1
32	78	100	140	4	18
50	102	125	165	4	18

OVERALL DIMENSIONS AND WEIGHTS

MOD.	Motor	DNm	DNa	Dimensions mm.													weight (Kg)		
		PN16 mm	PN16 mm	Fig .	a	h1	h2	b	m1	m2	n1	n2	s	C	W	L ~	B	H	
NRM2 50x32x125C	71	32	50	1	80	112	140	50	100	70	190	140	14	12	-	421	200	252	23.3
NRM2 50x32x125B	80	32	50	1	80	112	140	50	100	70	190	140	14	12	-	421	200	252	23.6
NRM2 50X32X125A	80	32	50	1	80	112	140	50	100	70	190	140	14	12	-	421	200	252	25.9
NRM2 50X32X160C	80	32	50	1	80	132	160	50	100	70	240	190	14	12	-	426	240	292	31
NRM2 50X32X160B	100	32	50	1	80	132	160	50	100	70	240	190	14	12	-	495	240	292	36.5
NRM2 50X32X160A	100	32	50	1	80	132	160	50	100	70	240	190	14	12	-	495	240	292	38.5
NRM2 50X32X200C	100	32	50	1	80	160	180	50	100	70	240	190	14	12	-	495	240	340	46.9
NRM2 50X32X200B	112	32	50	1	80	160	180	50	100	70	240	190	14	12	-	517	240	340	51.1
NRM2 50X32X200A	112	32	50	1	80	160	180	50	100	70	240	190	14	12	-	539	240	340	59.6

NOCCHI NRM2 65x40

MONOBLOC NORMALISED CENTRIFUGAL PUMPS (2 AND 4 POLES)

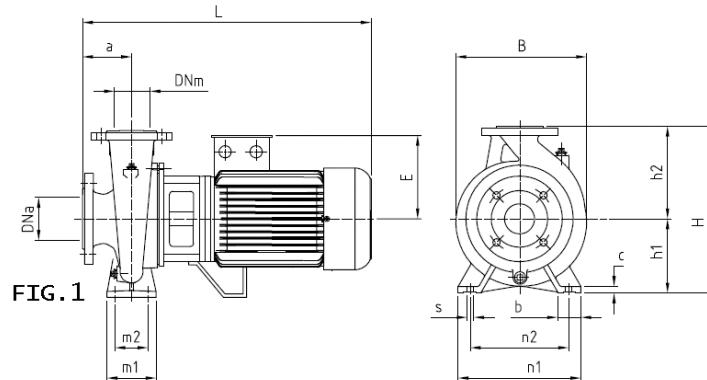
PERFORMANCE TABLE

MOD.	P2		VOLT. (V)	In (A)	Q m³/h	l/min	250	275	300	350	400	450	500	550	600	650	700
	HP	kW					15	16.5	18	21	24	27	30	33	36	39	42
NRM2 65X40X125C	2	1.5	230/400	3.4	mca./m.cw	15.5	15.3	15	14.1	13	11.8	10.5	9	7			
NRM2 65X40X125B	3	2.2	230/400	4.4		19	18.8	18.5	17.5	16.5	15.5	14.5	13	10.5			
NRM2 65X40X125A	4	3	230/400	5.9		24.5	24.3	24	23.5	23	22	20.5	19	17			
NRM2 65X40X160B	4	3	230/400	5.9		30	29.5	29	28	26.5	25	23	20.5	18			
NRM2 65X40X160A	5.5	4	230/400	7.8		36.5	36	35.5	34.5	33.5	32.5	31	29	27			
NRM2 65X40X160A			400/690	7.8		45.3	44.8	44	43	41.5	39	37	34	31			
NRM2 65X40X200C	7.5	5.5	230/400	10.4		51	50.5	50	49	47.5	45	42.5	40	37			
NRM2 65X40X200C			400/690	10.4		56.5	56	55.5	54.5	53	51	49	47	44			
NRM2 65X40X200B	10	7.5	230/400	14.2		69	68.5	68	66.5	65	63	61	59	57	54		
NRM2 65X40X200B			400/690	14.2		77	76.5	76	74.5	73	71	69	67	65	62.5	60	
NRM2 65X40X200A	10	7.5	230/400	14.2		90	89.8	89.2	88.2	87	85.3	83.2	80.7	78	75	71	
NRM2 65X40X200A			400/690	14.2													
NRM2 65X40X250D	15	11	230/400	19.8													
NRM2 65X40X250D			400/690	19.8													
NRM2 65X40X250C	20	15	400/690	27													
NRM2 65X40X250B	20	15	400/690	27													

MEI > 0.1 - Reference MEI > 0.70 - The information on the reference efficiency is available at the address: www.europump.org/efficiencycharts

For efficiency characteristics see www.nocchi.it

"Flange UNI PN16"					
DN	a1	b1	c1	d1	e1
40	83	110	150	4	18
65	122	145	185	4	18



OVERALL DIMENSIONS AND WEIGHTS

MOD.	Motor	DNm	DNa	Dimensions mm.													WEIGHTS (Kg)		
		PN16 mm	PN16 mm	Fig.	a	h1	h2	b	m1	m2	n1	n2	s	C	W	L~	B	H	
NRM2 65X40X125C	80	40	65	1	80	112	140	50	100	70	240	140	14	12	-	421	215	252	26.9
NRM2 65X40X125B	90	40	65	1	80	112	140	50	100	70	210	140	14	12	-	426	215	252	28
NRM2 65X40X125A	100	40	65	1	80	112	140	50	100	70	210	140	14	12	-	495	215	252	33.5
NRM2 65X40X160B	100	40	65	1	80	132	160	50	100	70	240	190	14	12	-	495	270	292	33.5
NRM2 65X40X160A	100	40	65	1	80	132	160	50	100	70	240	190	14	12	-	495	280	292	43.1
NRM2 65X40X200C	112	40	65	1	100	160	180	50	100	70	265	190	14	12	-	537	270	340	47.9
NRM2 65X40X200B	112	40	65	1	100	160	180	50	100	70	265	190	14	12	-	559	270	340	55.4
NRM2 65X40X200A	132	40	65	1	100	160	180	50	100	70	265	190	14	12	-	559	270	340	60.6
NRM2 65X40X250D	132	40	65	1	100	180	225	65	125	95	320	250	14	12	-	654	315	405	82.5
NRM2 65X40X250C	132	40	65	1	100	180	225	65	125	95	320	250	14	12	-	705	315	405	87
NRM2 65X40X250B	132	40	65	1	100	180	225	65	125	95	320	250	14	12	-	705	315	405	94

NOCCHI NRM2 65x50

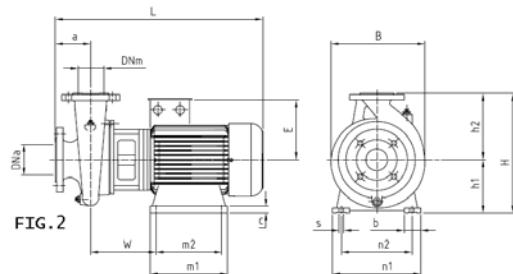
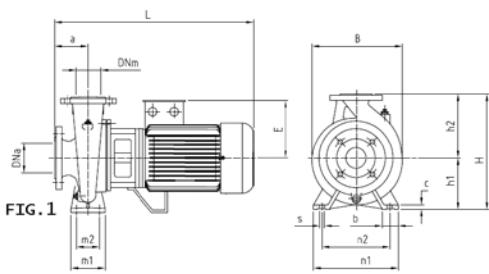
MONOBLOC NORMALISED CENTRIFUGAL PUMPS (2 AND 4 POLES)

PERFORMANCE TABLE

MOD.	P2		VOLT. (V)	In (A)	Q	l/min	400	450	500	550	600	650	700	750	800	900	1000	
	HP	kW					m ³ /h	24	27	30	33	36	39	42	45	48	54	60
NRM2 65X50X125C	3	2.2	230/400	4.4	m.c.a./m.c.w.	17	16.5	16	15.5	15	14	13	12	11	9			
NRM2 65X50X125B	4	3	230/400	5.9		21	20.5	20	19.5	19	18.3	17.5	16.8	16	14	12		
NRM2 65X50X125A	5.5	4	230/400	7.8		25.5	25.3	25	24.5	24	23.5	23	22.5	21.5	20	18		
NRM2 65X50X125A			400/690	7.8		32.5	32	31.5	31	30.5	30	29.5	29	28	26	23.5		
NRM2 65X50X160B	7.5	5.5	230/400	10.4		37	36.5	36	35.5	35	34.5	34	33.5	32.5	31	29		
NRM2 65X50X160B			400/690	10.4		51	50.5	50	49	48	47	45.5	44.5	43	39.5	37		
NRM2 65X50X160A	10	7.5	230/400	14.2		58	57.5	57	56	55	54	53	51.5	50	46.5	42.5		
NRM2 65X50X160A			400/690	14.2		72	71	70	69	68	67	66	64.5	63	60	56		
NRM2 65X50X200B	15	11	230/400	19.8		80.5	80	79.5	78.5	77.5	76.5	75.5	74.5	73.5	71	67.5		
NRM2 65X50X200B			400/690	19.8		92	91.8	91.5	91	90	89	88	87	86	83	80		
NRM2 65X50X200A	20	15	400/690	27														
NRM2 65X50X250D	20	15	400/690	27														
NRM2 65X50X250C	25	18.5	400/690	33.3														
NRM2 65X50X250B	30	22	400/690	38.6														

MEI > 0.1 - Reference MEI > 0.70 - The information on the reference efficiency is available at the address: www.europump.org/efficiencycharts
For efficiency characteristics see www.nocchi.it

"Flange UNI PN16"					
DN	a1	b1	c1	d1	e1
50	102	125	165	4	18
65	122	145	185	4	18



OVERALL DIMENSIONS AND WEIGHTS

MOD.	Motor	DNm	DNa	Dimensions mm.												WEIGHTS (Kg)			
		PN16 mm	PN16 mm	Fig.	a	h1	h2	b	m1	m2	n1	n2	s	c	w	L ~	B	H	
NRM2 65X50X125C	90	50	65	1	100	132	160	50	100	70	240	190	14	12	-	446	245	292	34.5
NRM2 65X50X125B	100	50	65	1	100	132	160	50	100	70	240	190	14	12	-	515	270	292	40
NRM2 65X50X125A	100	50	65	1	100	132	160	50	100	70	240	190	14	12	-	515	280	292	44.1
NRM2 65X50X160B	112	50	65	1	100	160	180	50	100	70	265	212	14	12	-	537	270	340	53.4
NRM2 65X50X160A	112	50	65	1	100	160	180	50	100	70	265	212	14	12	-	559	270	340	58.1
NRM2 65X50X200B	132	50	65	1	100	160	200	50	100	70	265	212	14	12	-	654	285	360	73.5
NRM2 65X50X200A	132	50	65	1	100	160	200	50	100	70	265	212	14	12	-	705	285	360	77
NRM2 65X50X250D	132	50	65	1	100	180	225	50	100	70	265	212	14	12	-	705	320	405	95
NRM2 65X50X250C	160	50	65	2	100	180	225	76	420	370	320	254	14	20	210	802	320	405	146
NRM2 65X50X250B	160	50	65	2	100	180	225	76	420	370	320	254	14	20	210	802	320	405	167

NOCCHI NRM2 80x65

MONOBLOC NORMALISED CENTRIFUGAL PUMPS (2 AND 4 POLES)

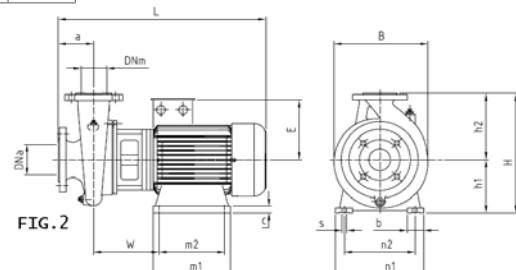
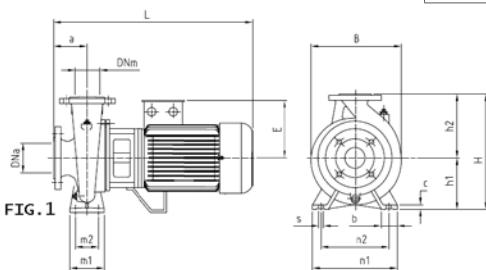
PERFORMANCE TABLE

MOD.	P2		VOLT. (V)	In (A)	Q	l/min m³/h	600	650	700	750	800	900	1000	1250	1500	1750	2000	2250		
	HP	kW					36	39	42	45	48	54	60	75	90	105	120	135		
NRM2 80X65X125C	5.5	4	230/400	7.8			17.5	17.3	17	16.5	16	15.5	14.5	12	9					
NRM2 80X65X125C			400/690	7.8																
NRM2 80X65X125B	7.5	5.5	230/400	10.4			21	20.8	20.6	20.3	20	19.5	19	17	14.5	11				
NRM2 80X65X125B			400/690	10.4																
NRM2 80X65X125A	10	7.5	230/400	14.2			25	24.8	24.6	24.3	24	23.5	23	21.5	19	16				
NRM2 80X65X125A			400/690	14.2																
NRM2 80X65X160C	15	11	230/400	19.8				30.5	30.3	30	29.5	29	26.5	24	20.5	16				
NRM2 80X65X160C			400/690	19.8																
NRM2 80X65X160B	20	15	400/690	27				36.5	36.3	36	35.5	34.5	33	30	27	23	19			
NRM2 80X65X160A	20	15	400/690	27					41	40.8	40.5	40	39.5	38	35.5	33	29	24		
NRM2 80X65X200D	20	15	400/690	27						44	43.5	43	41.5	39	35.5	31.5				
NRM2 80X65X200C	25	18.5	400/690	33.3							51	50	49.5	48.5	46.5	43.5	39.5	35		
NRM2 80X65X200B	30	22	400/690	38.6								57	56.5	56	55	53.5	51	48	42.5	
NRM2 80X65X250D	30	22	400/690	38.6									64	63.5	63	61	57	53		

MEI ≥ 0.1 - Reference MEI ≥ 0.70 - The information on the reference efficiency is available at the address: www.europump.org/efficiencycharts

For efficiency characteristics see www.nocchi.it

"Flange UNI PN16"					
DN	a1	b1	c1	d1	e1
65	122	145	185	4	18
80	138	160	200	8	18



OVERALL DIMENSIONS AND WEIGHTS

MOD.	Motor	DNm mm	DNa mm	Dimensions mm.													WEIGHTS (Kg)		
				PN16 mm	PN16 mm	Fig.	a	h1	h2	b	m1	m2	n1	n2	s	C	W	L ~	B
NRM2 80X65X125C	100	65	80	1	100	160	180	65	125	95	280	212	14	14	-	515	280	340	44.9
NRM2 80X65X125B	112	65	80	1	100	160	180	65	125	95	280	212	14	14	-	537	280	340	47.1
NRM2 80X65X125A	112	65	80	1	100	160	180	65	125	95	280	212	14	14	-	559	280	340	57.6
NRM2 80X65X160C	132	65	80	1	100	160	200	65	125	95	280	212	14	14	-	654	280	360	75.5
NRM2 80X65X160B	132	65	80	1	100	160	200	65	125	95	280	212	14	14	-	705	280	360	79
NRM2 80X65X160A	132	65	80	1	100	160	200	65	125	95	280	212	14	14	-	705	280	360	85
NRM2 80X65X200D	132	65	80	1	100	180	225	65	125	95	280	212	14	14	-	705	330	405	89.5
NRM2 80X65X200C	160	65	80	2	100	180	225	65	420	370	320	254	14	20	210	802	330	405	140
NRM2 80X65X200B	160	65	80	2	100	180	225	65	420	370	320	254	14	20	210	802	330	405	144
NRM2 80X65X250D	160	65	80	2	100	180	250	65	420	370	320	254	14	20	222	814	365	430	172

NOCCHI NRM2 100x80

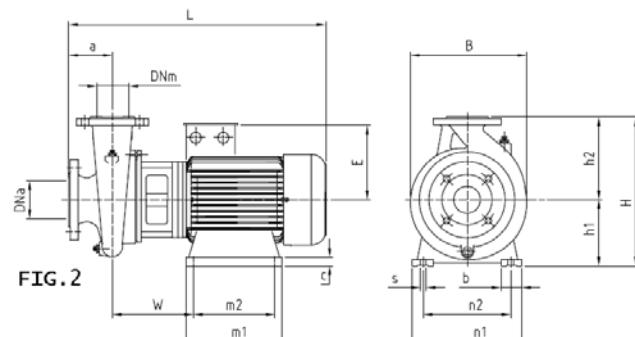
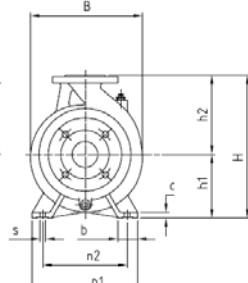
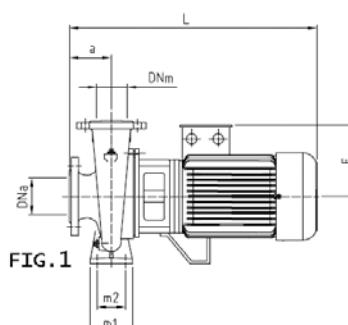
MONOBLOC NORMALISED CENTRIFUGAL PUMPS (2 AND 4 POLES)

PERFORMANCE TABLE

MOD.	P2		VOLT. (V)	In (A)	Q m³/h	l/min	1000	1250	1500	1750	2000	2250	2500	2750	3000
	HP	kW				60	75	90	105	120	135	150	165	180	
NRM2 100X80X160D	15	11	230/400	19.8	m.c.a./m.c.w.	24	23	22	21	19.5	18	16.5	15		
NRM2 100X80X160D			400/690	19.8		28.5	28	27	26	24.5	23	21.5	20	18.5	
NRM2 100X80X160C		15	400/690	27		34	33.3	32.5	31.8	31	29	27.5	26	24.5	
NRM2 100X80X160B		15	400/690	27		42	41	40	38.5	37	35	33	30.5		
NRM2 100X80X200D		18.5	400/690	33.3		47	46.5	45.5	44.5	43	41	39	37		
NRM2 100X80X200C		22	400/690	38.6											

MEI > 0.1 - Reference MEI > 0.70 - The information on the reference efficiency is available at the address: www.europump.org/efficiencycharts
 For efficiency characteristics see www.nocchi.it

"Flange UNI PN16"					
DN	a1	b1	c1	d1	e1
80	138	160	200	8	18
100	158	180	220	8	18



OVERALL DIMENSIONS AND WEIGHTS

MOD.	Motor	DNm	DNa	Dimensions mm.													weight (Kg)		
		PN16 mm	PN16 mm	Fig.	a	h1	h2	b	m1	m2	n1	n2	s	C	W	L ~	B	H	
NRM2 100X80X160D	132	80	100	1	125	180	225	65	125	95	320	250	14	14	-	679	315	405	79.5
NRM2 100X80X160C	132	80	100	1	125	180	225	65	125	95	320	250	14	14	-	730	315	405	83.5
NRM2 100X80X160B	132	80	100	1	125	180	225	65	125	95	320	250	14	14	-	730	315	405	90.5
NRM2 100X80X200D	160	80	100	2	125	180	250	65	120	370	320	254	14	20	222	839	360	430	150
NRM2 100X80X200C	160	80	100	2	125	180	250	65	120	370	320	254	14	20	222	839	360	430	192

NOCCHI NRM2 125x100

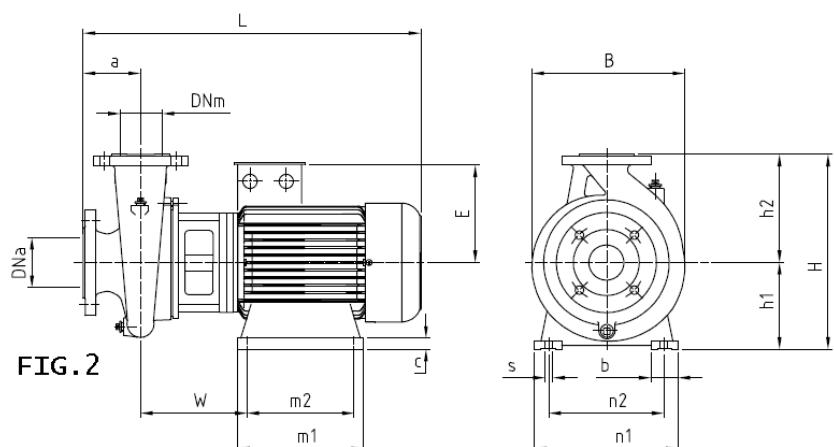
MONOBLOC NORMALISED CENTRIFUGAL PUMPS (2 AND 4 POLES)

PERFORMANCE TABLE

MOD.	P2		VOLT. (V)	In (A)	Q	l/min	1000	1250	1500	1750	2000	2250	2500	2750	3000	3500	4000
	HP	kW				m³/h	60	75	90	105	120	135	150	165	180	210	240
NRM2 125x100x200D	30	22	400/690	38.6	m.c.a / m.c.w				39	38	37	36	34.5	33	31.5	28	24

MEI ≥ 0.1 - Reference MEI ≥ 0.70 - The information on the reference efficiency is available at the address: www.europump.org/efficiencycharts
For efficiency characteristics see www.nocchi.it

"Flange UNI PN16"					
DN	a1	b1	c1	d1	e1
100	158	180	220	8	18
125	188	210	250	8	18



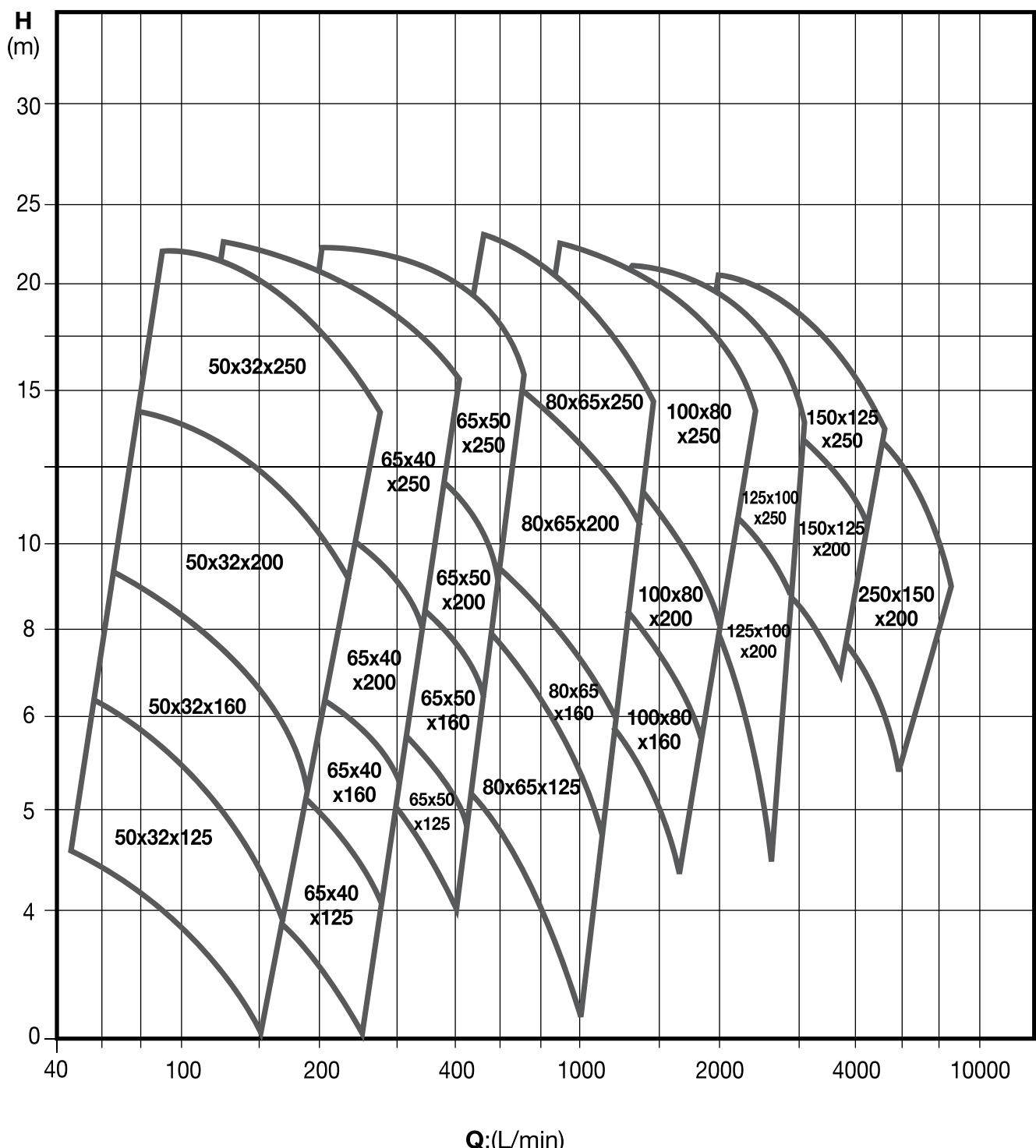
OVERALL DIMENSIONS AND WEIGHTS

MOD.	Motor	DNm	DNa	Dimensions mm.													WEIGHTS (Kg)		
		PN16 mm	PN16 mm	Fig.	a	h1	h2	b	m1	m2	n1	n2	s	C	W	L~	B	H	
NRM2 125x100x200D	160	100	125	2	125	180	280	65	420	370	320	254	14	20	222	839	380	460	160

NOCCHI NRM4

MONOBLOC NORMALISED CENTRIFUGAL PUMPS (2 AND 4 POLES)

HYDRAULIC PERFORMANCE



NOCCHI NRM4 50x32

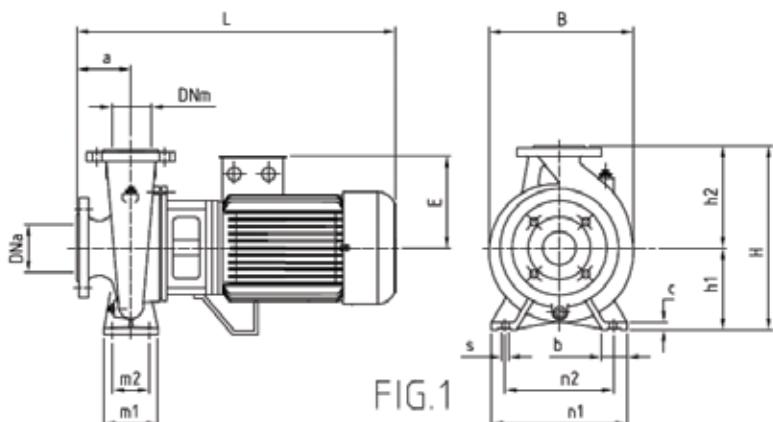
MONOBLOC NORMALISED CENTRIFUGAL PUMPS (2 AND 4 POLES)

PERFORMANCE TABLE

MOD.	P2		VOLT. (V)	In (A)	Q m³/h	l/min	50	75	100	125	150	175	200	225	250	275	300
	HP	kW					3	4.5	6	7.5	9	10.5	12	13.5	15	16.5	18
NRM4 50x32x125Y	0.33	0.25	230/400	0.9	m.c.a./m.c.w.	4.4	4	3.5	3	2.2							
NRM4 50x32x125X	0.33	0.25	230/400	0.9		6.2	6	5.8	5.2	4.5	3.9	3					
NRM4 50X32X160X	0.5	0.37	230/400	1.2		9.4	9.2	8.9	8.3	7.7	6.9	5.8	4.7				
NRM4 50X32X200Y	1	0.75	230/400	1.8		13	12.8	12.4	11.9	11.3	10.6	9.8	9	8	7	6	
NRM4 50X32X200X	1.5	1.1	230/400	2.5			14.5	14.3	13.8	13.3	12.7	11.8	10.9	10	9	8	

MEI > 0.1 - Reference MEI > 0.70 - The information on the reference efficiency is available at the address: www.europump.org/efficiencycharts
 For efficiency characteristics see www.nocchi.it

Flange UNI PN16"					
DN	a1	b1	c1	d1	e1
32	78	100	140	4	18
50	102	125	165	4	18



OVERALL DIMENSIONS AND WEIGHTS

MOD.	Motor	DNm	DNa	Dimensions mm.													WEIGHTS (Kg)		
		PN16 mm	PN16 mm	Fig.	a	b	c	m1	m2	n1	n2	s	h1	h2	H	B	L -	E -	
NRM4 50x32x125Y	71	32	50	1	80	50	12	100	70	190	140	14	112	140	252	205	405	110	19.5
NRM4 50x32x125X	71	32	50	1	80	50	12	100	70	190	140	14	112	140	252	205	405	110	19.5
NRM4 50X32X160X	71	32	50	1	80	50	12	100	70	240	190	14	132	160	292	240	405	110	23
NRM4 50X32X200Y	80	32	50	1	80	50	12	100	70	240	190	14	160	180	340	255	421	129	31.7
NRM4 50X32X200X	90	32	50	1	80	50	12	100	70	240	190	14	160	180	340	255	456	138	36.8

NOCCHI NRM4 65x40

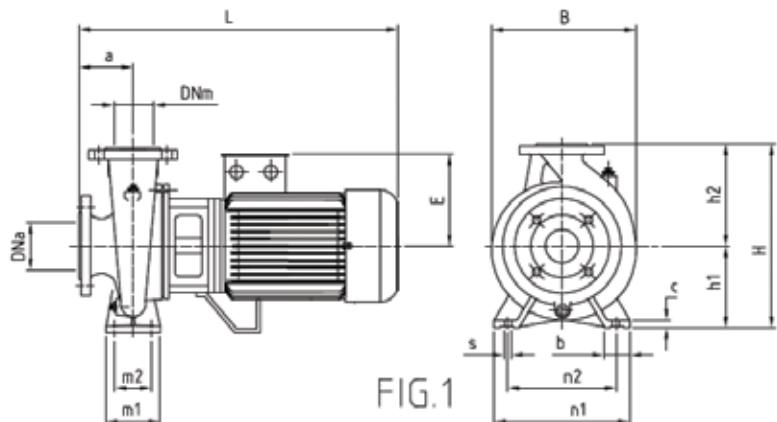
MONOBLOC NORMALISED CENTRIFUGAL PUMPS (2 AND 4 POLES)

PERFORMANCE TABLE

MOD.	P2		VOLT. (V)	In (A)	Q l/min m³/h	6	100	125	150	175	200	225	250	275	300	350	400
	HP	kW					7.5	9	10.5	12	13.5	15	16.5	18	21	24	
NRM4 65x40x125Y	0.33	0.25	230/400	0.9	m.c.a./m.c.w.	4.6	4.5	4.3	4.1	3.9	3.6	3.3	2.9	2.4			
NRM4 65x40x125X	0.5	0.37		1.2		6.3	6.2	6.1	6	5.8	5.5	5.2	4.9	4.4	3		
NRM4 65x40x160X	0.75	0.55		1.7		8.8	8.6	8.3	8	7.7	7.3	6.9	6.4	5.9	4.5		
NRM4 65x40x200Y	1.5	1.1		2.5		12.7	12.5	12.1	11.7	11.2	10.7	10.1	9.3	8.5	7		
NRM4 65x40x200X	1.5	1.1		2.5		14.2	14	13.8	13.4	13	12.5	11.8	11	10.2	8.3	6	
NRM4 65x40x250Y	2	1.5		3.4		18.3	18	17.7	17.4	17	16.6	16.2	15.6	15	13.7	12	
NRM4 65x40x250X	3	2.2		5.1		22.5	22.3	22	21.7	21.4	21	20.5	20	19.5	18.5	17	

MEI > 0.1 - Reference MEI > 0.70 - The information on the reference efficiency is available at the address: www.europump.org/efficiencycharts
 For efficiency characteristics see www.nocchi.it

"Flange UNI PN16"					
DN	a1	b1	c1	d1	e1
40	88	110	150	4	18
65	122	145	185	4	18



OVERALL DIMENSIONS AND WEIGHTS

MOD.	Motor	DNm	DNa	Dimensions mm.													WEIGHTS (Kg)		
		PN16 mm	PN16 mm	Fig.	a	b	c	m1	m2	n1	n2	s	h1	h2	H	B	L~	E~	
NRM4 65x40x125Y	71	40	65	1	80	50	12	100	70	210	160	14	112	140	252	230	405	110	20.5
NRM4 65x40x125X	71	40	65	1	80	50	12	100	70	210	160	14	112	140	252	230	405	110	21.5
NRM4 65x40x160X	71	40	65	1	80	50	12	100	70	240	190	14	132	160	292	230	405	110	25
NRM4 65x40x200Y	90	40	65	1	100	50	12	100	70	265	212	14	160	180	340	285	476	138	39.9
NRM4 65x40x200X	90	40	65	1	100	50	12	100	70	265	212	14	160	180	340	242	476	138	39.9
NRM4 65x40x250Y	90	40	65	1	100	65	12	125	95	320	250	14	180	225	405	325	476	138	49.4
NRM4 65x40x250X	100	40	65	1	100	65	12	125	95	320	250	14	180	225	405	325	415	145	56.9

NOCCHI NRM4 65x50

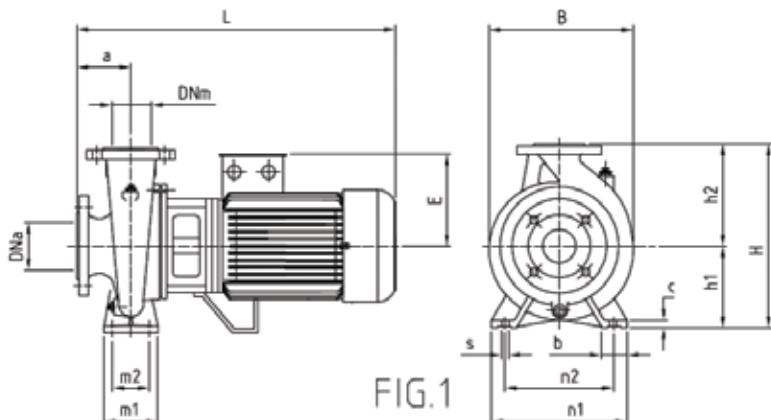
MONOBLOC NORMALISED CENTRIFUGAL PUMPS (2 AND 4 POLES)

PERFORMANCE TABLE

MOD.	P2		VOLT. (V)	In (A)	Q	l/min	150	175	200	225	250	275	300	350	400	450	500	550	600	650	700
	HP	kW					m ³ /h	9	10.5	12	13.5	15	16.5	18	21	24	27	30	33	36	39
NRM4 65x50x125Y	0.5	0.37	m.c.a./mc.w.	230/400	1.2		5.3	5.3	5.2	5.1	5	4.9	4.8	4.5	4.1	3.6	3				
NRM4 65x50x125X	0.75	0.55		230/400	1.7		6.4	6.3	6.2	6.1	6	5.9	5.8	5.5	5.2	4.9	4.4				
NRM4 65x50x160Y	1	0.75		230/400	1.8			8.2	8	7.9	7.8	7.7	7.4	7.1	6.6	5.8	5	4			
NRM4 65x50x160X	1.5	1.1		230/400	2.5			9	8.9	8.8	8.7	8.6	8.4	8.1	7.7	7.2	6.5	5.5			
NRM4 65x50x200Y	1.5	1.1		230/400	2.5			12.4	12.2	12	11.8	11.5	10.8	10	9	8	7	5.8			
NRM4 65x50x200X	2	1.5		230/400	3.4			14.3	14.2	14.1	14	13.7	13	12.3	11.3	10.2	9.1	7.8	6.4	5	
NRM4 65x50x250Y	3	2.2		230/400	5.1			18.5	18.3	18.1	17.8	17.5	17	16.2	15.5	14.5	13.5	12.5	11.2	10	
NRM4 65x50x250X	4	3		230/400	6.5			22.5	22.4	22.3	22.2	22	21.5	20.9	20.2	19.4	18.5	17.5	16.3	15	

MEI > 0.1 - Reference MEI > 0.70 - The information on the reference efficiency is available at the address: www.europump.org/efficiencycharts
For efficiency characteristics see www.nocchi.it

Flange UNI PN16"					
DN	a1	b1	c1	d1	e1
50	102	125	165	4	18
65	122	145	185	4	18



OVERALL DIMENSIONS AND WEIGHTS

MOD.	Motor	Dimensions mm.															WEIGHTS (Kg)		
		DNm PN16 mm	DNa PN16 mm	Fig.	a	b	c	m1	m2	n1	n2	s	h1	h2	H	B	L ~	E ~	
NRM4 65x50x125Y	71	50	65	1	100	50	12	100	70	240	190	14	132	160	292	246	425	110	25
NRM4 65x50x125X	71	50	65	1	100	50	12	100	70	240	190	14	132	160	292	246	425	110	26
NRM4 65x50x160Y	80	50	65	1	100	50	12	100	70	265	212	14	160	180	340	269	441	129	33.7
NRM4 65x50x160X	90	50	65	1	100	50	12	100	70	265	212	14	160	180	340	269	476	138	38.8
NRM4 65x50x200Y	90	50	65	1	100	50	12	100	70	265	250	14	160	200	360	285	476	138	41.9
NRM4 65x50x200X	90	50	65	1	100	50	12	100	70	265	212	14	160	200	360	285	476	138	41.9
NRM4 65x50x250Y	100	50	65	1	100	65	14	125	95	320	250	14	180	225	405	333	415	145	59.9
NRM4 65x50x250X	100	50	65	1	100	65	14	125	95	320	250	14	180	225	405	333	515	145	67

NOCCHI NRM4 80x65

MONOBLOC NORMALISED CENTRIFUGAL PUMPS (2 AND 4 POLES)

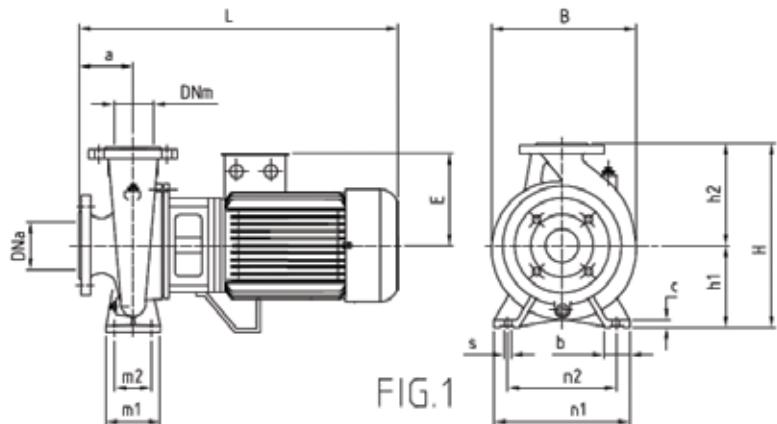
PERFORMANCE TABLE

MOD.	P2		VOLT. (V)	In (A)	Q	l/min m ³ /h	300	350	400	450	500	550	600	700	800	900	1000	1100	1200	1300	1400
	HP	kW					18	21	24	27	30	33	36	42	48	54	60	66	72	78	84
NRM4 80x65x125X	1	0.75	230/400	1.8			5.8	5.7	5.6	5.5	5.3	5.1	4.9	4.5	4						
NRM4 80x65x160Y	1.5	1.1	230/400	2.5			8.6	8.5	8.4	8.3	8.2	8.1	8	7.5	6.8	6	5				
NRM4 80x65x160X	2	1.5	230/400	3.4			10.2	10.1	10	9.9	9.8	9.6	9.4	9	8.5	7.7					
NRM4 80x65x200Y	3	2.2	230/400	5.1					12.5	12.4	12.3	12.2	12.1	11.7	11.1	10.5	9.6	8.5			
NRM4 80x65x200X	4	3	230/400	6.5						15.2	15.1	15	14.6	14.3	13.6	12.8	12	11			
NRM4 80x65x250Y	5.5	4	230/400	8.5							19.5	19.3	19.1	18.4	17.5	16.5	15.5	14	12.5	10.5	
NRM4 80x65x250Y			400/690	8.5																	
NRM4 80x65x250X	7.5	5.5	230/400	10.8							23	22.8	22.6	22.2	21.4	20.6	19.7	18.7	17.5	16	14
NRM4 80x65x250X			400/690	10.8																	

MEI > 0.1 - Reference MEI > 0.70 - The information on the reference efficiency is available at the address: www.europump.org/efficiencycharts

For efficiency characteristics see www.nocchi.it

"Flange UNI PN16"					
DN	a1	b1	c1	d1	e1
65	122	145	185	4	18
80	138	160	200	8	18



OVERALL DIMENSIONS AND WEIGHTS

MOD.	Motor	DNm	DNa	Dimensions mm.													WEIGHTS (Kg)		
		PN16 mm	PN16 mm	Fig.	a	b	c	m1	m2	n1	n2	s	h1	h2	H	B	L ~	E ~	
NRM4 80x65x125X	80	65	80	1	100	65	12	125	95	280	212	14	160	180	340	286	445	118	32
NRM4 80x65x160Y	90	65	80	1	100	65	12	125	95	280	212	14	160	200	360	288	485	149	37.5
NRM4 80x65x160X	90	65	80	1	100	65	12	125	95	280	212	14	160	200	360	288	485	149	40
NRM4 80x65x200Y	100	65	80	1	100	65	14	125	95	320	250	14	180	225	405	328	525	159	51
NRM4 80x65x200X	100	65	80	1	100	65	14	125	95	320	250	14	180	225	405	328	525	159	57
NRM4 80x65x250Y	112	65	80	1	100	80	14	160	120	360	280	14	200	250	450	365	535	159	80
NRM4 80x65x250X	132	65	80	1	100	80	14	160	120	360	280	14	200	250	450	365	640	184	90

NOCCHI NRM4 100x80

MONOBLOC NORMALISED CENTRIFUGAL PUMPS (2 AND 4 POLES)

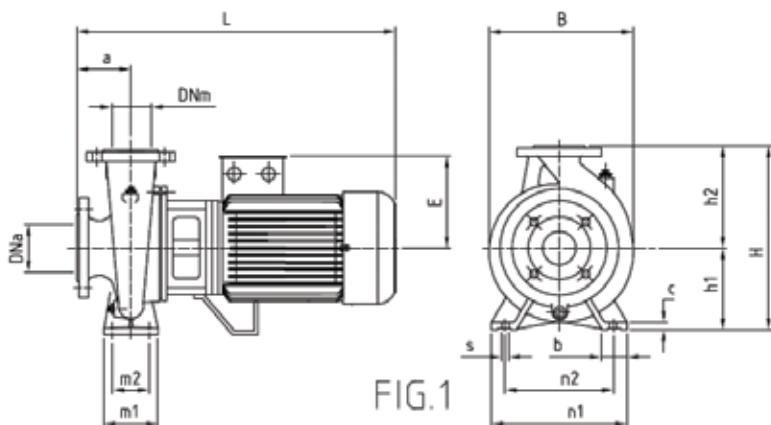
PERFORMANCE TABLE

MOD.	P2		VOLT. (V)	In (A)	Q	l/min m ³ /h	600	650	700	800	900	1000	1100	1200	1300	1400	1500	1750	2000	2250
	HP	kW					36	39	42	48	54	60	66	72	78	84	90	105	120	135
NRM4 100x80x160Y	2	1.5	230/400	3.4			7.7	7.6	7.5	7.3	7	6.7	6.4	6.1	5.8	5.4	5			
NRM4 100x80x160X	3	2.2	230/400	5.1			9.7	9.6	9.5	9.3	9	8.8	8.5	8.2	7.9	7.5	7.1	6		
NRM4 100x80x200Y	4	3	230/400	6.5			12	11.9	11.8	11.5	11.3	11	10.5	10	9.5	9	8.5	7		
NRM4 100x80x200X	5.5	4	230/400	8.5			14.5	14.4	14.2	14	13.8	13.5	13.1	12.7	12.2	11.6	11	9	6.5	
NRM4 100x80x200X			400/690	8.5																
NRM4 100x80x250Y	7.5	5.5	230/400	10.8							19	18.5	18	17.5	17	16.5	16	14	12	
NRM4 100x80x250Y			400/690	10.8																
NRM4 100x80x250X	10	7.5	230/400	14.4							22	21.9	21.7	21.2	20.8	20.5	20	18.5	16.8	14.5
NRM4 100x80x250X			400/690	14.4																

MEI > 0.1 - Reference MEI > 0.70 - The information on the reference efficiency is available at the address: www.europump.org/efficiencycharts

For efficiency characteristics see www.nocchi.it

"Flange UNI PN16"					
DN	a1	b1	c1	d1	e1
80	138	160	200	8	18
100	158	180	220	8	18



OVERALL DIMENSIONS AND WEIGHTS

MOD.	Motor	Dimensions mm.		Weights (Kg)															
		DNm PN16 mm	DNa PN16 mm	Fig.	a	b	c	m1	m2	n1	n2	s	h1	h2	H	B	L ~	E ~	
NRM4 100x80x160Y	90	80	100	1	125	65	14	125	95	320	250	14	180	225	405	330	501	138	46.9
NRM4 100x80x160X	100	80	100	1	125	65	14	125	95	320	250	14	180	225	405	330	440	145	53.9
NRM4 100x80x200Y	100	80	100	1	125	65	12	125	95	345	280	14	180	250	430	355	552	145	70
NRM4 100x80x200X	112	80	100	1	125	65	12	125	95	345	280	14	180	250	430	355	574	160	81.9
NRM4 100x80x250Y	132	80	100	1	125	80	14	160	120	400	315	18	200	280	480	400	631	194	113.1
NRM4 100x80x250X	132	80	100	1	125	80	14	160	120	400	315	18	200	280	480	400	671	194	127

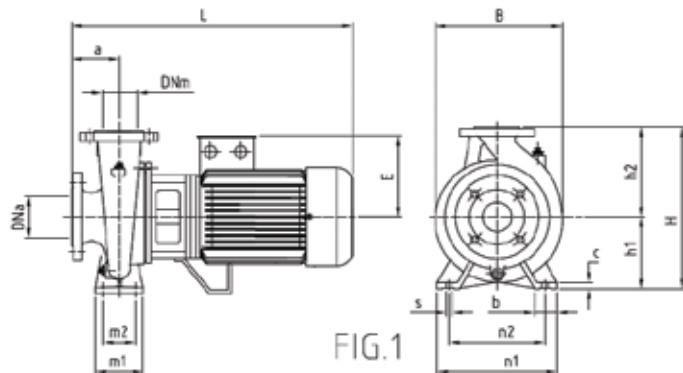
NOCCHI NRM4 125x100

MONOBLOC NORMALISED CENTRIFUGAL PUMPS (2 AND 4 POLES)

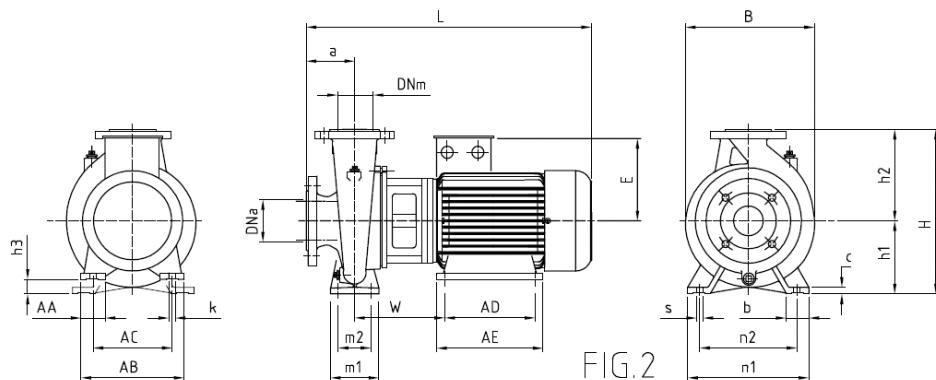
PERFORMANCE TABLE

MOD.	P2		VOLT. (V)	In (A)	Q	l/min m ³ /h	900	1000	1100	1200	1300	1400	1500	1750	2000	2250	2500	2750	3000
	HP	kW					54	60	66	72	78	84	90	105	120	135	150	165	180
NRM4 125x100x200Y	5.5	4	230/400	8.5	m.c.a./m.c.w.	12.4	12.2	12	11.8	11.6	11.4	11.2	10.3	9.3	8.2	6.8	4.8		
NRM4 125x100x200Y			400/690	8.5		14.5	14.4	14.2	14	13.8	13.6	13.4	12.8	12	11	10	8.5		
NRM4 125x100x200X		7.5	230/400	10.8															
NRM4 125x100x200X			400/690	10.8															
NRM4 125x100x250Y		10	230/400	14.4															
NRM4 125x100x250Y			400/690	14.4															
NRM4 125x100x250X		15	230/400	22															
NRM4 125x100x250X			400/690	22															

MEI > 0.1 - Reference MEI > 0.70 - The information on the reference efficiency is available at the address: www.europump.org/efficiencycharts
For efficiency characteristics see www.nocchi.it



Flange UNI PN16"					
DN	a1	b1	c1	d1	e1
65	122	145	185	4	18
80	138	160	200	8	18



OVERALL DIMENSIONS AND WEIGHTS

MOD.	Motor	DNm		DNa		Dimensions mm.																		Net weight [kg]			
		PN16 mm	PN16 mm	Fig.	a	b	c	m1	m2	n1	n2	s	h1	h2	h3	H	AA	AB	AC	AD	AE	k	W	B	L ~	E ~	
NRM4 125x100x200Y	112	100	125	1	125	80	14	160	120	360	280	18	200	280	-	480	-	-	-	-	-	-	385	574	160	79.9	
NRM4 125x100x200X	132	100	125	1	125	80	14	160	120	360	280	18	200	280	-	480	-	-	-	-	-	-	385	631	194	107.1	
NRM4 125x100x250Y	132	100	125	1	140	80	14	160	120	400	315	18	225	280	-	505	-	-	-	-	-	-	420	686	194	126	
NRM4 125x100x250X	160	100	125	2	140	80	14	160	120	400	315	18	225	280	65	505	76	320	254	210	270	14	191	420	779	238	161

NOCCHI NRM4 150x125

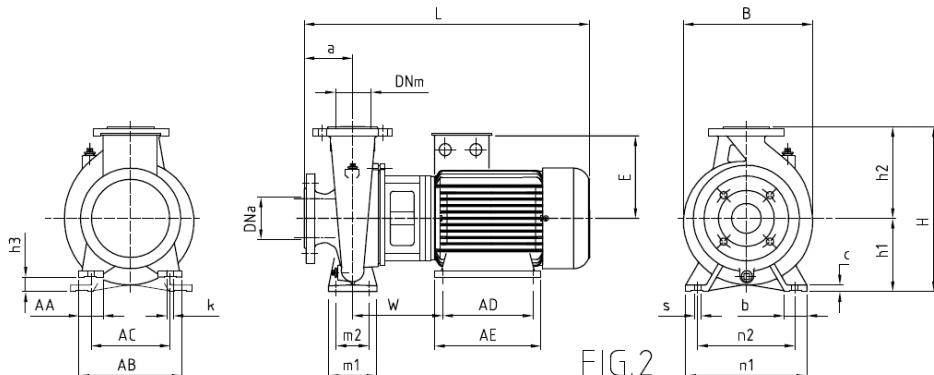
MONOBLOC NORMALISED CENTRIFUGAL PUMPS (2 AND 4 POLES)

PERFORMANCE TABLE

MOD.	P2		VOLT. (V)	In (A)	Q l/min m³/h	1800	2000	2500	3000	3500	4000	4500	5000
	HP	kW				108	120	150	180	210	240	270	300
NRM4 150x125x200W	7.5	5.5	400/690	10.8	mca./mcw	10.4	10.2	9.4	8.3	6.8			
NRM4 150x125x200Z	10	7.5				11.6	11.5	10.9	9.9	8.6	7		
NRM4 150x125x200Y	10	7.5				13	12.8	12.3	11.6	10.5	9.1	7.5	
NRM4 150x125x200X	15	11				14.3	14.2	13.8	13.2	12.3	11.1	9.6	8
NRM4 150x125x250Z	15	11				17	16.6	15.7	14.4	12.6			
NRM4 150x125x250Y	20	15					19.8	19	18	16.6	15		
NRM4 150x125x250X	20	15					20.8	19.7	18.6	17	15.2	13.2	

MEI > 0.1 - Reference MEI > 0.70 - The information on the reference efficiency is available at the address: www.europump.org/efficiencycharts
 For efficiency characteristics see www.nocchi.it

"Flange UNI PN16"					
DN	a1	b1	c1	d1	e1
65	122	145	185	4	18
80	138	160	200	8	18



OVERALL DIMENSIONS AND WEIGHTS

MOD.	Motor	DNm		DNA		Dimensions mm.																		Net weight [kg]			
		PN16 mm	PN16 mm	Fig.	a	b	c	m1	m2	n1	n2	s	h1	h2	h3	H	AA	AB	AC	AD	AE	k	W	B	L ~ E ~		
NRM4 150x125x200W	132	125	150	2	140	80	14	160	120	400	315	18	250	280	118	565	59	256	216	140	180	12	230	470	657	194	137.1
NRM4 150x125x200Z	132	125	150	2	140	80	14	160	120	400	315	18	250	315	118	565	59	256	216	178	218	12	241	470	697	194	148
NRM4 150x125x200Y	132	125	150	2	140	80	14	160	120	400	315	18	250	315	118	565	59	256	216	178	218	12	241	470	697	194	155
NRM4 150x125x200X	160	125	150	2	140	80	14	160	120	400	315	18	250	315	90	565	76	320	254	210	270	14	241	470	790	238	187
NRM4 150x125x250Z	160	125	150	2	140	80	16	160	120	400	315	18	250	355	90	605	76	320	254	210	270	14	260	470	790	238	197.5
NRM4 150x125x250Y	160	125	150	2	140	80	16	160	120	400	315	18	250	355	90	605	76	320	254	254	310	14	260	470	854	238	205
NRM4 150x125x250X	160	125	150	2	140	80	16	160	120	400	315	18	250	355	90	605	76	320	254	254	310	14	280	470	854	238	205

NOCCHI NRM4 200x150

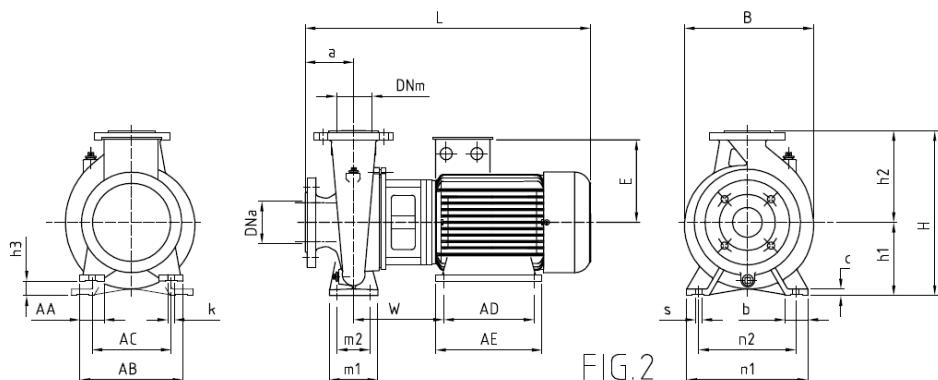
MONOBLOC NORMALISED CENTRIFUGAL PUMPS (2 AND 4 POLES)

PERFORMANCE TABLE

MOD.	P2		VOLT. (V)	In (A)	Q	l/min m ³ /h	2500	3000	3500	4000	4500	5000	5500	6000	6500
	HP	kW					150	180	210	240	270	300	330	360	390
NRM4 200x150x200W	7.5	5.5	400/690	14.4	m.c.a./m.c.w.	10.4	9.7	8.9	7.9	6.7	5.5				
NRM4 200x150x200Z	15	11				11.5	10.9	10.2	9.3	8.3	7	5.8			
NRM4 200x150x200Y	15	11				13.3	12.6		12	11.1	10.1	9	7.6		
NRM4 200x150x200X	20	15				14.5	14	13.2	12.5	11.6	10.6	9.4	8		

MEI > 0.1 - Reference MEI > 0.70 - The information on the reference efficiency is available at the address: www.europump.org/efficiencycharts
 For efficiency characteristics see www.nocchi.it

"Flange UNI PN16"					
DN	a1	b1	c1	d1	e1
65	122	145	185	4	18
80	138	160	200	8	18



OVERALL DIMENSIONS AND WEIGHTS

MOD.	Motor	Dimensions mm.																			Net weight [kg]						
		DNm mm	DNa mm	Fig.	a	b	c	m1	m2	n1	n2	s	h1	h2	h3	H	AA	AB	AC	AD	AE						
NRM4 200x150x200W	132	150	200	2	160	100	22	200	155	550	450	24	280	400	148	680	59	256	216	178	218	12	280	550	717	194	181
NRM4 200x150x200Z	160	150	200	2	160	100	22	200	155	550	450	24	280	400	120	680	76	320	254	210	270	14	241	550	810	238	210.5
NRM4 200x150x200Y	160	150	200	2	160	100	22	200	155	550	450	24	280	400	120	680	76	320	254	210	270	14	260	550	810	238	218
NRM4 200x150x200X	160	150	200	2	160	100	22	200	155	550	450	24	280	400	120	680	76	320	254	254	310	14	260	550	874	238	220

NOCCHI NRB

JOINT BASE NORMALISED CENTRIFUGAL PUMPS (2 AND 4 POLES)

STURDY AND RESISTANT, WIDE RANGE

The PUMPS of the series NRB are single stage centrifugal pumps with a horizontal axis and they are designed in accordance with standard EN733/DIN24255 so as to have the maximum interchangeability of the components. The impeller is balanced dynamically and hydraulically. The shaft is suitably oversized to ensure rigidity and it is supported by strong ball bearings lubricated with grease.

MOTOR

- Closed, ventilated from outside
- Degree of protection IP55
- Constructive shape B3
- Insulation class F
- Three-phase power supply
- Speed of rotation 2850 rpm.
- Continuous service.
- Three-phase motor efficiency class:
IE2 from 0.75 kW
IE3 from 7.5 kW

APPLICATIONS

- Aqueducts
- Irrigation
- Water supply
- Industrial applications

USAGE DATA

- Temperature of pumped liquid:
-10°C / +130°C
- Capacity up to 330 m³/h
- Head up to 95 m
- Max. intake pressure 4 bar
- Maximum operating pressure: 10 bar
- Operating temperature: -10°C / +130

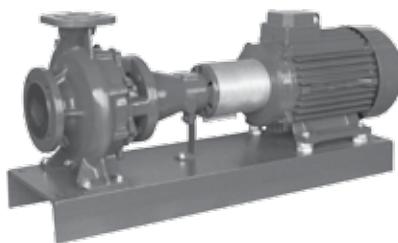


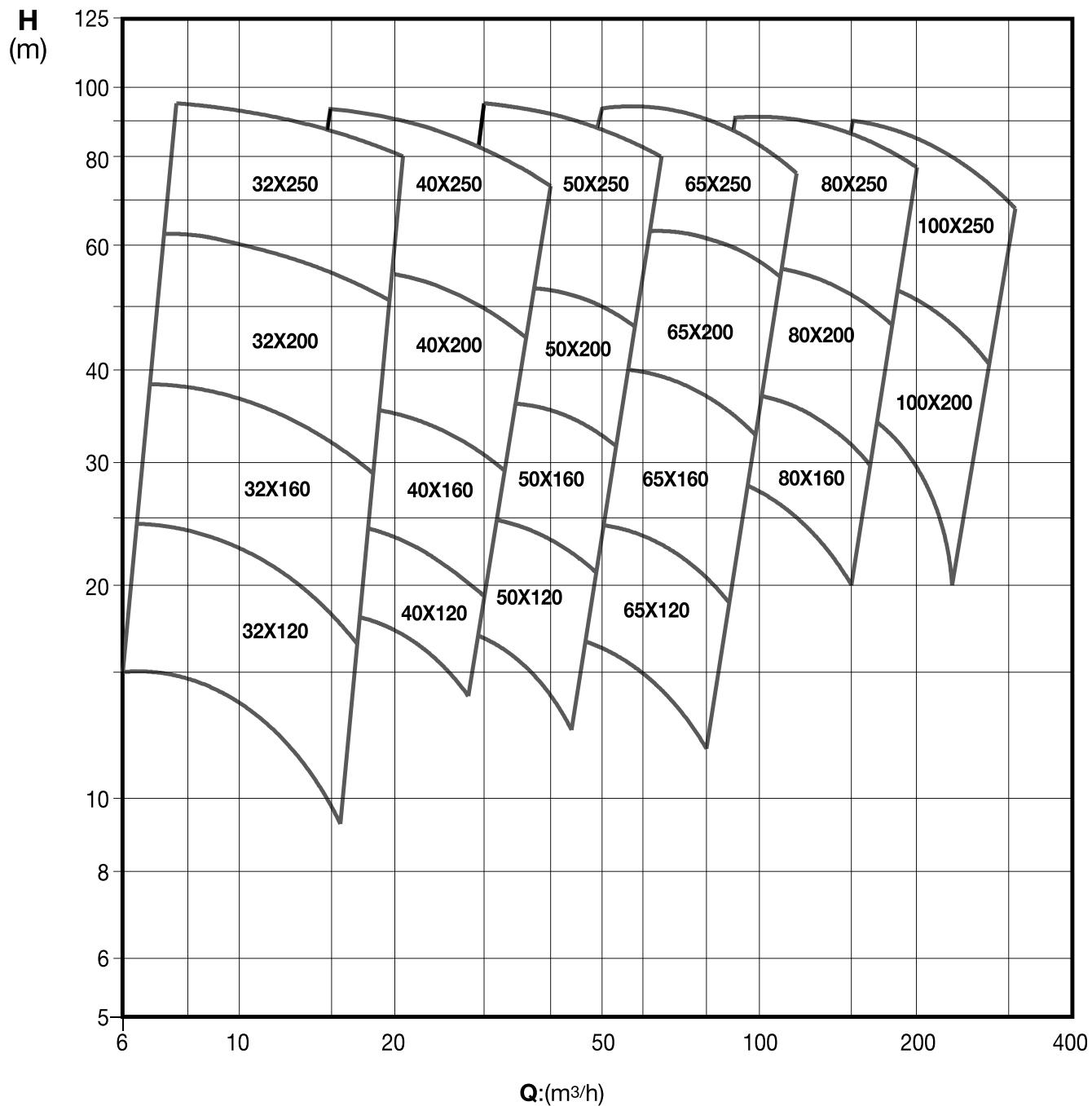
TABLE OF MATERIALS

Component	Material
Pump body	Cast iron EN GJL 200
Motor casing	Cast iron EN GJL 200 - Bronze (on request)
Cover of body	Cast iron EN GJL 200
Pump support	Cast iron EN GJL 200
Shaft	AISI 420 Stainless Steel
Mechanical seal	Ceramic/Graphite/EPDM - Carbide/Carbide/EPDM (on request)

NOCCHI NRB2

JOINT BASE NORMALISED CENTRIFUGAL PUMPS (2 AND 4 POLES)

HYDRAULIC PERFORMANCE



NOCCHI NRB2 32

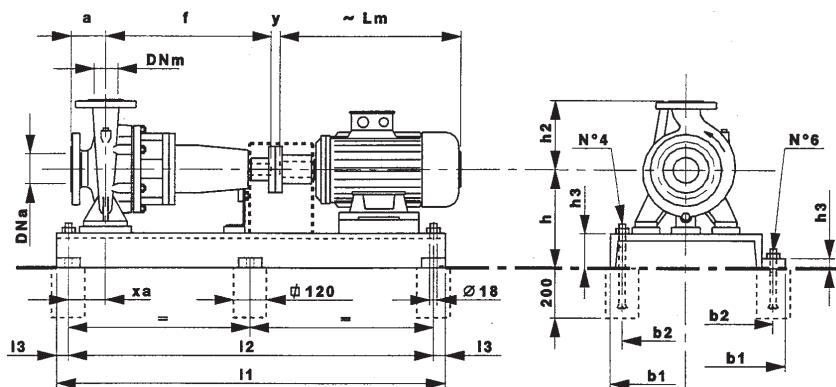
JOINT BASE NORMALISED CENTRIFUGAL PUMPS (2 AND 4 POLES)

PERFORMANCE TABLE

MOD.	P2		VOLT. (V)	In (A)	Q	l/min m³/h	100	150	225	250	300	350	400	450
	HP	kW					6	9	13.5	15	18	21	24	27
NRB2 32x120C	1	0.75	230/400	1.7			15.5	14.5	12	9				
NRB2 32x120B	1.5	1.1	230/400	2.3			21	20	18	15	11.5			
NRB2 32x120A	2	1.5	230/400	3			24.5	23.5	22	19.5	16.5	13		
NRB2 32x160C	3	2.2	230/400	4.3			31.5	30	28	25.5	22			
NRB2 32x160B	4	3	230/400	5.6			34.5	33.5	31.5	29	26			
NRB2 32X160A	4	3	230/400	5.6			38	36.5	35	32.5	30	26.5		
NRB2 32X200C	5.5	4	230/400	7.1			47.5	46.5	44.5	42.5	39	35		
NRB2 32X200B	7.5	5.5	400	9.9			56	55	53.5	51.5	49.5	46	42	37
NRB2 32X200A	10	7.5	400	13.7			61	60.5	59	57.5	55	52.5	49	45

MEI ≥ 0.1 - Reference MEI ≥ 0.70 - The information on the reference efficiency is available at the address: www.europump.org/efficiencycharts

For efficiency characteristics see www.nocchi.it



OVERALL DIMENSIONS AND WEIGHTS

MOD.	Motor			DNm	DNa	Dimensions mm.										WEIGHTS (Kg)	
	Type	Lm	Y			PN16 mm	PN16 mm	a	f	h2	b1	b2	l1	l2	l3	h	h3
NRB2 32x120A	90 S2	302	16	32	50	80	360	140	240	170	850	800	25	197	85	100	65
NRB2 32x120B	80 B2	280	16	32	50	80	360	140	240	170	850	800	25	197	85	100	63
NRB2 32x120C	80 A2	280	16	32	50	80	360	140	240	170	850	800	25	197	85	100	61
NRB2 32x160A	100 L2	369	22	32	50	80	360	140	240	170	850	800	25	217	85	100	80
NRB2 32x160B	90 L2	369	22	32	50	80	360	140	240	170	850	800	25	217	85	100	80
NRB2 32X160A	90 L2	327	16	32	50	80	360	140	240	170	850	800	25	217	85	100	74
NRB2 32X200A	112 MC2	386	22	32	50	80	360	140	240	170	850	800	25	245	85	100	98
NRB2 32X200B	112 MB2	386	22	32	50	80	360	140	240	170	850	800	25	245	85	100	95
NRB2 32X200C	112 M2	386	22	32	50	80	360	140	240	170	850	800	25	245	85	100	95

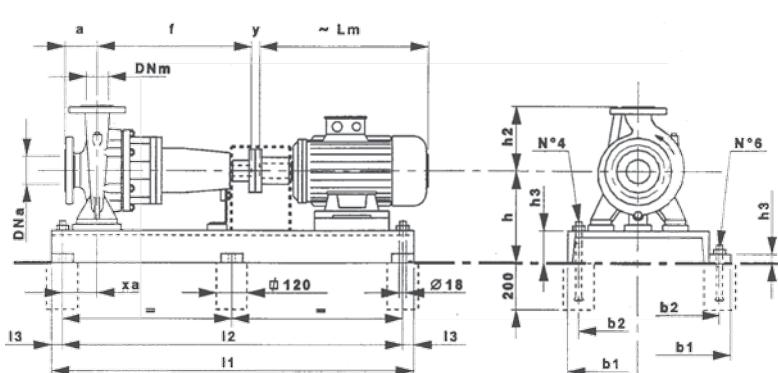
NOCCHI NRB2 40

JOINT BASE NORMALISED CENTRIFUGAL PUMPS (2 AND 4 POLES)

PERFORMANCE TABLE

MOD.	P2		VOLT. (V)	In (A)	Q	l/min m³/h	200	250	300	350	400	450	500	550	600	650	700	750
	HP	kW					12	15	18	21	24	27	30	33	36	39	42	45
NRB2 40x120C	2	1.5	230/400	3			18	17.5	17	15.5	14							
NRB2 40x120B	3	2.2	230/400	4.3			21.5	21	20.5	20	19	17.5	15.5					
NRB2 40x120A	4	3	230/400	5.6			25	24.5	24	23.5	23	22	20.5	18.5				
NRB2 40x160C	4	3	230/400	5.6			31	30	29	28	26.5	25	22.5	19.5				
NRB2 40x160B	5.5	4	230/400	7.1			34	33	32	31	30	28.5	26.5	24.5	21.5			
NRB2 40X160A	5.5	4	230/400	7.1			37	36.5	35.5	34.5	33.5	32.5	31	29	26.5			
NRB2 40X200C	7.5	5.5	400	9.9			43.5	43	42	40	38	36	33	29	24			
NRB2 40X200B	10	7.5	400	13.7			52	51	50	49	47	45	43	40	37	33	28	
NRB2 40X200A	15	11	400	19.4			57	56.5	55.5	54	53	51	49	47	44	41	37	
NRB2 40X250C	15	11	400	19.4			73	72	71	70	67.5	65	62	57	51	44		
NRB2 40X250B	20	15	400	26.1			82.5	82	81	80	79	77	75	72	68	63	56	
NRB2 40X250A	25	18.5	400	31.7			93	92.5	92	91	90	88	86	84	81	77	72	67

MEI > 0.1 - Reference MEI > 0.70 - The information on the reference efficiency is available at the address: www.europump.org/efficiencycharts
 For efficiency characteristics see www.nocchi.it



OVERALL DIMENSIONS AND WEIGHTS

MOD.	Motor			DNm	DNa	Dimensions mm.										WEIGHTS (Kg)	
	Type	Lm	Y	PN16 mm	PN16 mm	a	f	h2	b1	b2	l1	l2	l3	h	h3	xa	
NRB2 40x120A	100 L2	369	22	40	65	80	360	140	240	170	850	800	25	197	85	100	75
NRB2 40x120B	90 L2	327	16	40	65	80	360	140	240	170	850	800	25	197	85	100	69
NRB2 40x120C	90 S2	302	16	40	65	80	360	140	240	170	850	800	25	197	85	100	67
NRB2 40x160A	112 M2	386	22	40	65	80	360	160	240	170	850	800	25	217	85	100	91
NRB2 40x160B	112 M2	386	22	40	65	80	360	160	240	170	850	800	25	217	85	100	91
NRB2 40x160C	100 L2	369	22	40	65	80	360	160	240	170	850	800	25	217	85	100	81
NRB2 40X200A	132 MB2	498	24	40	65	100	360	180	280	210	950	900	25	255	95	100	128
NRB2 40X200B	112 MC2	386	22	40	65	100	360	180	280	210	950	900	25	255	95	100	112
NRB2 40X200C	112 MC2	386	22	40	65	100	360	180	280	210	950	900	25	255	95	100	109
NRB2 40X250A	160 L2	645	24	40	65	100	360	225	350	280	1120	1070	25	280	100	100	282
NRB2 40X250B	132 MD2	498	24	40	65	100	360	225	350	280	950	900	25	280	100	100	173
NRB2 40X250C	132 MD2	498	24	40	65	100	360	225	350	280	950	900	25	280	100	100	165

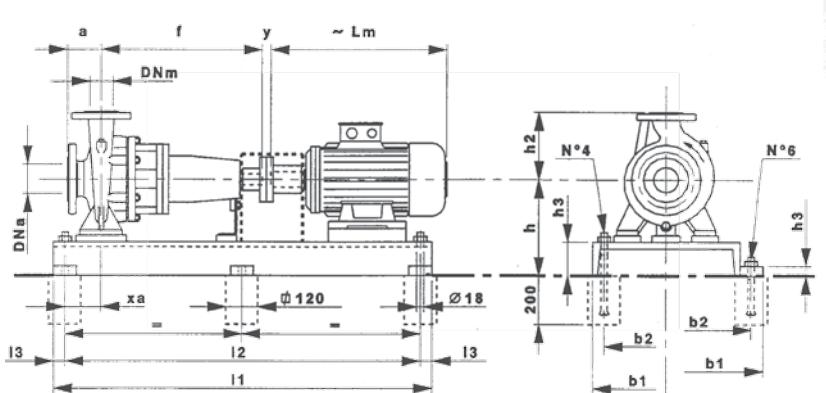
NOCCHI NRB2 50

JOINT BASE NORMALISED CENTRIFUGAL PUMPS (2 AND 4 POLES)

PERFORMANCE TABLE

MOD.	P2		VOLT. (V)	In (A)	Q	l/min	400	450	500	600	700	800	900	1000	1100	1200	1300
	HP	kW					m ³ /h	24	27	30	36	42	48	54	60	66	72
NRB2 50x120C	3	2.2	230/400	4.3	m.c.a./m.c.w.	18	17.5	17	15.5	13.5							
NRB2 50x120B	4	3	230/400	5.6		22	21.5	21	20	18.6	16.5						
NRB2 50x120A	5.5	4	230/400	7.1		25.5	25.2	24.9	24	23	21.5	19.5	17.5				
NRB2 50x160C	5.5	4	230/400	7.1		27.5	27	26.5	25.5	23.5	21						
NRB2 50x160B	7.5	5.5	400	9.9		33	32.5	32	31	29.5	27.5	25.5	22				
NRB2 50X160A	10	7.5	400	13.7		37	36.5	36	35	34	32.5	31	29	26			
NRB2 50X200C	10	7.5	400	13.7		47	46.5	45	43	40	36	31.5					
NRB2 50X200B	15	11	400	19.4		52.5	52	51.5	49.5	46.5	43.5	39.5	35				
NRB2 50X200A	15	11	400	19.4		57.5	57	56.5	55	53	50	46.5	43				
NRB2 50X250D	20	15	400	26.1		70	69.5	67.5	65	61.5	57.5	51					
NRB2 50X250C	25	18.5	400	31.7		77	76.5	75	72.5	69.5	66	61.5	55.5				
NRB2 50X250B	30	22	400	37.8		88	87.5	86	84	82	78.5	74.5	69				
NRB2 50x250A	40	30	400	50.7		94.5	94	93	91.5	89.5	86.5	83.5	80	75.5	70		

MEI > 0.1 - Reference MEI > 0.70 - The information on the reference efficiency is available at the address: www.europump.org/efficiencycharts
For efficiency characteristics see www.nocchi.it



OVERALL DIMENSIONS AND WEIGHTS

MOD.	Motor			DNm	DNA	Dimensions mm.										WEIGHTS (Kg)	
	Type	Lm	Y			PN16 mm	PN16 mm	a	f	h2	b1	b2	l1	l2	l3	h	h3
NRB2 50x120A	112 M2	386	22	50	65	100	360	160	240	170	850	800	25	217	85	100	90
NRB2 50x120B	100 L2	369	22	50	65	100	360	160	240	170	850	800	25	217	85	100	80
NRB2 50x120C	90 L2	327	16	50	65	100	360	160	240	170	850	800	25	217	85	100	74
NRB2 50x160A	112 MC2	386	22	50	65	100	360	180	280	210	950	900	25	255	95	100	108
NRB2 50x160B	112 MB2	386	22	50	65	100	360	180	280	210	950	900	25	255	95	100	105
NRB2 50X160C	112 M2	386	22	50	65	100	360	180	280	210	950	900	25	255	95	100	105
NRB2 50X200A	132 MC2	498	24	50	65	100	360	200	280	210	950	900	25	255	95	100	134
NRB2 50X200B	132 MB2	498	24	50	65	100	360	200	280	210	950	900	25	255	95	100	129
NRB2 50X200C	100 L2	386	22	50	65	100	360	200	280	210	950	900	25	255	95	100	113
NRB2 50X250A	112 MC2	775	28	50	65	100	360	225	400	330	1320	1270	25	310	110	100	394
NRB2 50X250B	200 LA2	670	28	50	65	100	360	225	400	330	1120	1070	25	290	110	100	316
NRB2 50X250C	180 M2	645	24	50	65	100	360	225	350	280	1120	1070	25	280	100	100	283
NRB2 50x250D	160 L2	498	24	50	65	100	360	225	350	280	950	900	25	280	100	100	185

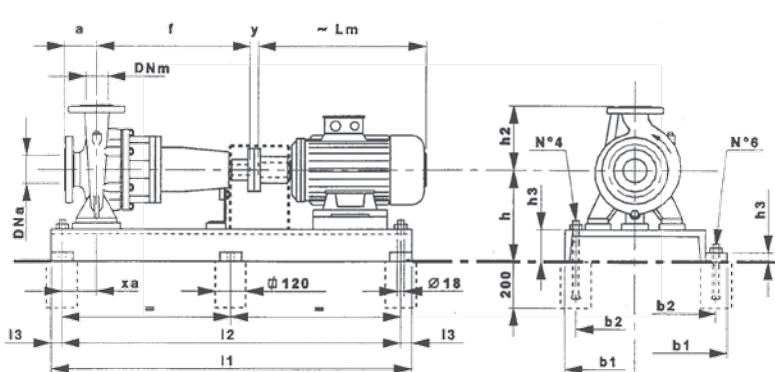
NOCCHI NRB2 65

JOINT BASE NORMALISED CENTRIFUGAL PUMPS (2 AND 4 POLES)

PERFORMANCE TABLE

MOD.	P2		VOLT. (V)	In (A)	Q	l/min m³/h	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1800	2000	2250
	HP	kW					36	42	48	54	60	66	72	78	84	90	96	108	120	135
NRB2 65x120C	5.5	4	230/400	7.1			18	17.6	17.2	16.6	15.8	15	14	12.5						
NRB2 65x120B	7.5	5.5	400	9.9			21.4	21.1	20.5	20.3	19.8	19.2	18.4	17.5	16.4					
NRB2 65x120A	10	7.5	400	13.7			23.6	23.4	23	22.6	22	21.5	20.7	20	19	17.6				
NRB2 65x160C	15	11	400	19.4			30.8	30	28.5	27.5	26.5	25.5	24.5	22.5	21					
NRB2 65X160B	15	11	400	19.4			33.8	33	32.5	32	31.5	30.5	29.5	28.5	27	25.5	22.5			
NRB2 65x160A	20	15	400	26.1			40.8	40	39.5	39	38.5	38	37.5	36.5	35.5	34.5	32	29		
NRB2 65X200C	25	18.5	400	31.7				51	50.6	50.4	50.2	50.1	49.7	48.6	47.5	46	43	39		
NRB2 65X200B	30	22	400	37.8				57.5	57	56.6	56.5	56.3	56	55.5	54.5	53.5	50.5	47.5	42.5	
NRB2 65X200A	40	30	400	50.7				62	61.7	61.5	61.3	61.1	61	60.5	60	59	57.5	55	50	
NRB2 65X250C	40	30	400	50.7				72	71.5	71	70	68.5	67	65	63.3	61.2	57			
NRB2 65X250B	50	37	400	62.4				82.5	82	81.5	80.5	79.5	78.5	77	75.5	70	70	65.5	59.5	
NRB2 65X250A	60	45	400	75.9				92.5	92	91.5	91	90	89	88	87	86	82	78	72.5	

MEI ≥ 0.1 - Reference MEI ≥ 0.70 - The information on the reference efficiency is available at the address: www.europump.org/efficiencycharts
 For efficiency characteristics see www.nocchi.it



OVERALL DIMENSIONS AND WEIGHTS

MOD.	Motor			DNm	DNa	Dimensions mm.										WEIGHTS (Kg)	
	Type	Lm	Y			PN16 mm	PN16 mm	a	f	h2	b1	b2	l1	l2	l3	h	h3
NRB2 65x120A	112 MC2	386	22	65	80	100	360	180	280	210	950	900	25	255	95	100	106
NRB2 65x120B	112 MB2	386	22	65	80	100	360	180	280	210	950	900	25	255	95	100	106
NRB2 65x120C	112 M2	386	22	65	80	100	360	180	280	210	950	900	25	255	95	100	106
NRB2 65x160A	132 MD2	498	24	65	80	100	360	200	280	210	950	900	25	255	95	100	142
NRB2 65x160B	132MC2	498	24	65	80	100	360	200	280	210	950	900	25	255	95	100	134
NRB2 65x160C	132 MB2	498	24	65	80	100	360	200	280	210	950	900	25	255	95	100	129
NRB2 65x200A	200 LA2	775	28	65	80	100	360	225	400	330	1320	1270	25	310	110	100	388
NRB2 65x200B	180 M2	670	28	65	80	100	360	225	400	330	1120	1070	25	290	110	100	310
NRB2 65x200C	160 L2	815	24	65	80	100	360	225	350	280	1120	1070	25	280	100	100	277
NRB2 65x250A	225 M2	775	33	65	80	100	470	250	580	540	1400	1300	50	335	20	100	543
NRB2 65x250B	200 LB2	815	28	65	80	100	470	250	400	330	1320	1270	25	310	110	125	419
NRB2 65x250C	200 LA2	775	28	65	80	100	470	250	400	330	1320	1270	25	310	110	125	399

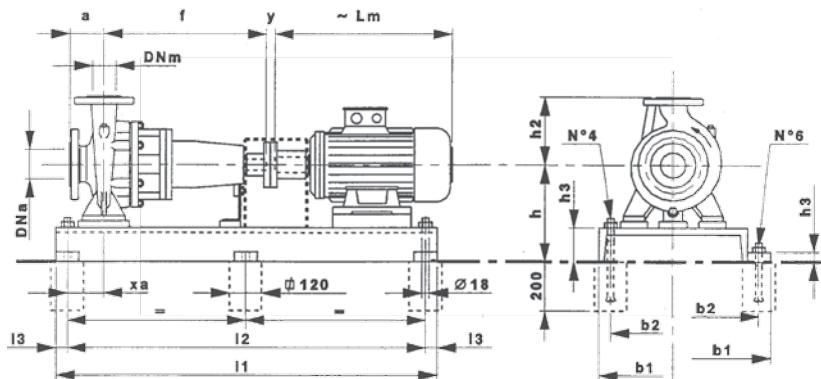
NOCCHI NRB2 80

JOINT BASE NORMALISED CENTRIFUGAL PUMPS (2 AND 4 POLES)

PERFORMANCE TABLE

MOD.	P2		VOLT. (V)	In (A)	Q m³/h	l/min	1200	1300	1400	1500	1600	1800	2000	2250	2500	2750	3000	3250	3500	4000
	HP	kW					72	78	84	90	96	108	120	135	150	165	180	195	210	240
NRB2 80x160C	15	11	400	19.4	m.c.a. / m.c.w	28.5	28	27.5	27	26.5	26	24.8	22.5	20						
NRB2 80x160B	20	15	400	26.1		33.6	33.5	33.4	33	32.5	32	31	29.5	28	24.5	23				
NRB2 80x160A	25	18.5	400	31.7		38	37.8	37.6	37.2	36.8	36.5	35.5	34.5	33	31.5	29	27			
NRB2 80x200C	30	22	400	37.8		44.6	44.5	44	43.5	43	42	40.5	38.5	36.5	33.5	31				
NRB2 80x200B	40	30	400	50.7		53	52.5	52	51.5	51	50.5	49.5	48	46	44	41.5	38.5			
NRB2 80x200A	50	37	400	62.4		58.5	58	57.5	57	56.5	56	55.5	54	52.5	50.5	48.5	46	43.5		
NRB2 80x250D	50	37	400	62.4						68	67.5	66.5	65	62.5	60	56	51			
NRB2 80x250C	60	45	400	75.9						74.6	74.5	73.5	72.5	70.5	68	65	61.5	57.5	53	
NRB2 80x250B	75	55	400	92						84	83.5	83	82	81	78.5	76	73.5	70	66	
NRB2 80x250A	100	75	400	127						90.5	90	89.5	89	87.5	86	84	81.5	78.5	75	66

MEI > 0.1 - Reference MEI > 0.70 - The information on the reference efficiency is available at the address: www.europump.org/efficiencycharts
 For efficiency characteristics see www.nocchi.it



OVERALL DIMENSIONS AND WEIGHTS

MOD.	Motor			DNm	DNa	Dimensions mm.												WEIGHTS (Kg)
	Type	Lm	Y			PN16 mm	PN16 mm	a	f	h2	b1	b2	l1	l2	l3	h	h3	xa
NRB2 80x160A	160 L2	645	24	80	100	125	360	350	280	210	1120	1070	25	280	100	100	278	
NRB2 80x160B	132 MD2	498	24	80	100	125	360	350	280	210	950	900	25	280	100	100	180	
NRB2 80x160C	132 MC2	498	24	80	100	125	360	350	280	210	950	900	25	280	100	100	172	
NRB2 80x200A	200 LB2	775	28	80	100	125	470	400	330	210	1320	1270	25	310	110	100	424	
NRB2 80x200B	200 LA2	775	28	80	100	125	470	400	330	210	1320	1270	25	310	110	100	404	
NRB2 80x200C	180 M2	670	28	80	100	125	470	400	330	210	1320	1270	25	290	110	100	341	
NRB2 80x250A	280 S2	1000	33	80	100	125	470	660	620	330	1600	1500	50	415	20	100	833	
NRB2 80x250B	250 L2	930	33	80	100	125	470	660	620	330	1600	1500	50	390	20	100	683	
NRB2 80x250C	225 M2	815	33	80	100	125	470	580	54	280	1400	1300	50	335	20	100	553	
NRB2 80x250D	200 LB2	775	28	80	100	125	470	330	330	540	1320	1320	25	310	110	125	5429	

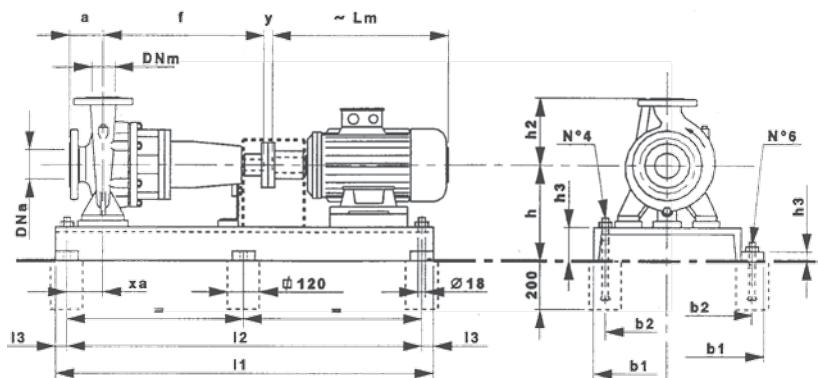
NOCCHI NRB2 100

JOINT BASE NORMALISED CENTRIFUGAL PUMPS (2 AND 4 POLES)

PERFORMANCE TABLE

MOD.	P2		VOLT. (V)	In (A)	Q	l/min m³/h	2000	2250	2500	2750	3000	3250	3500	4000	4500	5000	5500
	HP	kW					120	135	150	165	180	195	210	240	270	300	330
NRB2 100x200D	30	22	m.c.a./m.c.w.	400	37.8	m.c.a./m.c.w.	37.5	36.5	35	33.5	31.5	29	27	20.5			
NRB2 100x200C	40	30		400	50.7		45	44.5	43.5	42.5	41	39.5	37.5	33	27		
NRB2 100x200B	50	37		400	62.4		50.5	50	49.5	48.5	47.5	46.5	45	41.5	36.5	31	
NRB2 100X200A	60	45		400	75.9		55.5	55	54.5	54	53	52	51	48	43.5	38	
NRB2 100x250D	60	45		400	75.9		66.5	66	65	63.5	61.5	58.5	56	49.5			
NRB2 100X250C	75	55		400	92		73	72.5	72	71	69.5	68	66	61	53.5		
NRB2 100X250B	100	75		400	127		83	82.8	82.5	82	81	79.5	78	74	70	63	55
NRB2 100X250A	125	90		400	152		89.5	89.3	89	88.2	87.5	86.5	85.5	82.5	78	73	65

MEI > 0.1 - Reference MEI > 0.70 - The information on the reference efficiency is available at the address: www.europump.org/efficiencycharts
 For efficiency characteristics see www.nocchi.it



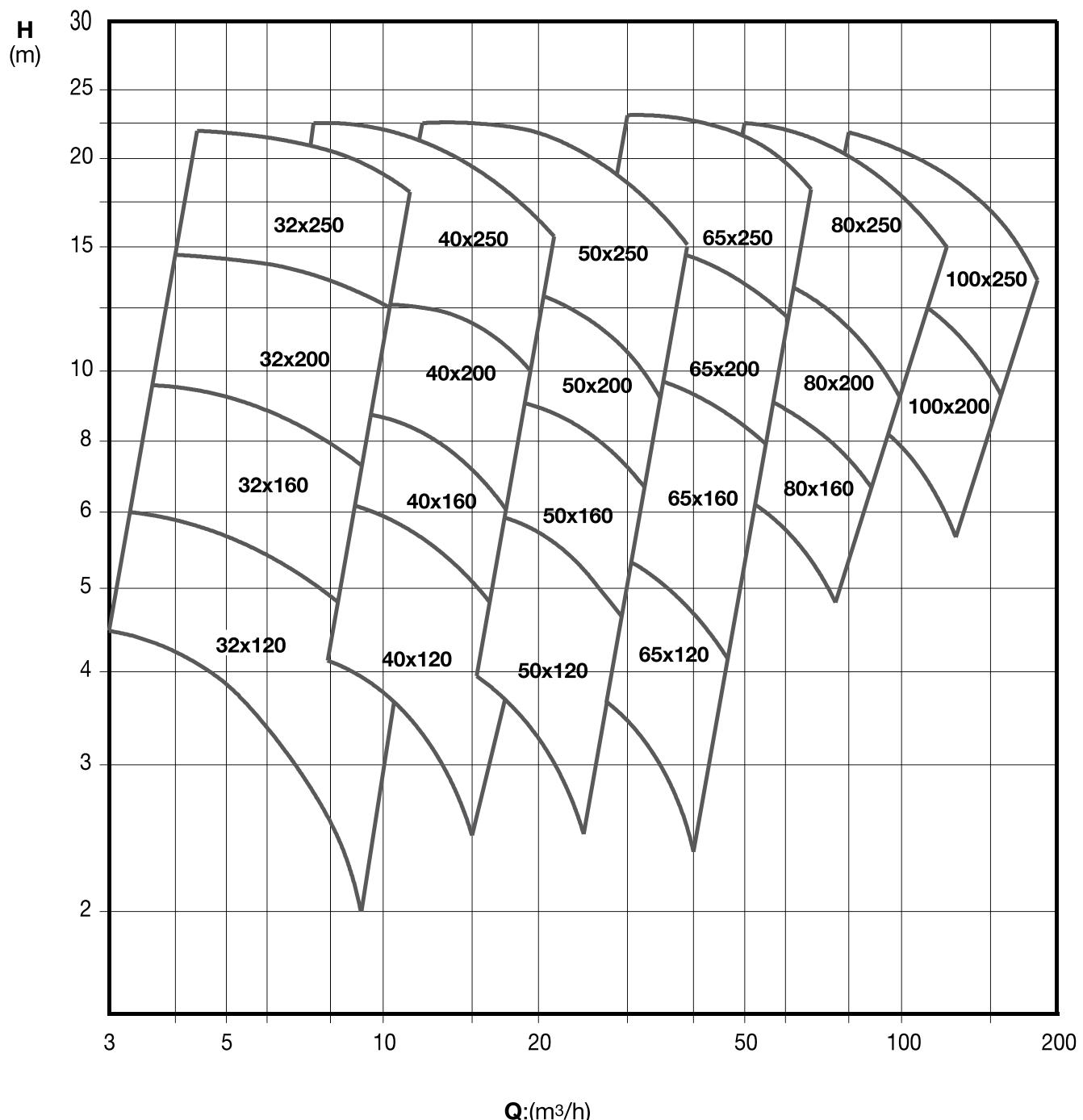
OVERALL DIMENSIONS AND WEIGHTS

MOD.	Dimensions mm.														WEIGHTS (Kg)		
	Type	Lm	Y	PN16 mm	PN16 mm	a	f	h2	b1	b2	l1	l2	l3	h	h3	xa	
NRB2 100x200A	225 M2	815	33	100	125	125	470	280	580	540	1400	1300	50	355	20	100	550
NRB2 100x200B	200 LB2	775	28	100	125	125	470	280	400	330	1320	1270	25	310	110	125	426
NRB2 100x200C	200 LA2	775	28	100	125	125	470	280	400	330	1320	1270	25	310	110	125	406
NRB2 100X200D	180 M2	670	28	100	125	125	470	280	400	330	1320	1270	25	310	110	125	365
NRB2 100x250A	280 M2	1050	33	100	125	140	470	280	660	620	1600	1500	50	415	20	100	883
NRB2 100X250B	280 S2	1000	33	100	125	140	470	280	660	620	1600	1500	50	415	20	100	837
NRB2 100X250C	250 M2	930	33	100	125	140	470	280	660	620	1600	1500	50	390	20	100	695
NRB2 100X250D	225 M2	815	33	100	125	140	470	280	580	540	1400	1300	50	355	20	100	557

NOCCHI NRB4

JOINT BASE NORMALISED CENTRIFUGAL PUMPS (2 AND 4 POLES)

HYDRAULIC PERFORMANCE



NOCCHI NRB4 32

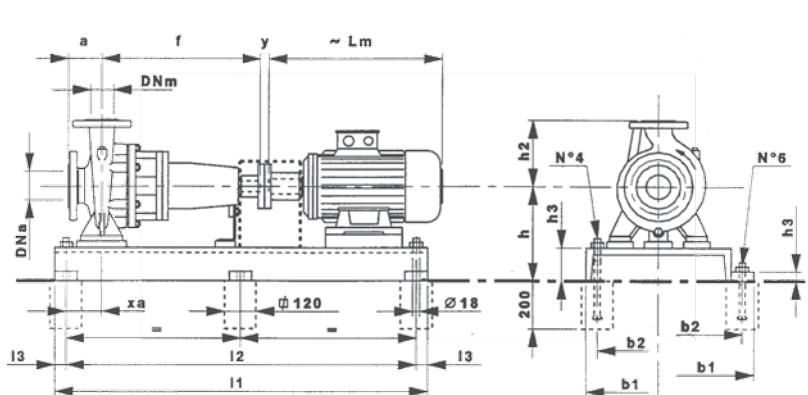
JOINT BASE NORMALISED CENTRIFUGAL PUMPS (2 AND 4 POLES)

PERFORMANCE TABLE

MOD.	P2		VOLT. (V)	In (A)	Q	U/min	50	75	100	125	150	175	200	225	250
	HP	kW					m³/h	3	4.5	6	7.5	9	11	12	14
NRB4 32x120C	0.33	0.25	230/400	0.9	m.c.a./mc.C.W.	4.5	4.3	3.8	3	2.1					
NRB4 32x120B	0.33	0.25					5.4	5.2	4.8	4.2	3.4	2.5			
NRB4 32x120A	0.33	0.25					6.2	6	5.8	5.3	4.6	3.8	2.9		
NRB4 32x160C	0.33	0.25					7.8	7.6	7.2	6.5	5.6	4.6			
NRB4 32x160B	0.5	0.37					8.6	7.9	8	7.5	6.7	5.7	4.6		
NRB4 32x160A	0.5	0.37					9.4	9.2	8.9	8.4	7.7	6.8	5.8		
NRB4 32x200C	0.75	0.55						11.2	10.8	10.2	9.5	8.6	7.5	6.5	
NRB4 32x200B	1	0.75						13.2	13	12.5	11.8	11.1	10.3	9.2	8.2
NRB4 32x200A	1.5	1.1						14.5	14.2	13.8	13.3	12.6	11.8	10.9	10

MEI > 0.1 - Reference MEI > 0.70 - The information on the reference efficiency is available at the address: www.europump.org/efficiencycharts

For efficiency characteristics see www.nocchi.it



OVERALL DIMENSIONS AND WEIGHTS

MOD.	Motor			DNm	DNa	Dimensions mm.										WEIGHTS (Kg)	
	Type	Lm	Y			PN16 mm	PN16 mm	a	f	h2	b1	b2	l1	l2	l3	h	h3
NRB4 32x120A	71 A4	244	16	32	50	80	360	140	240	170	850	800	25	197	85	100	59
NRB4 32x120B	71 A4	244	16	32	50	80	360	140	240	170	850	800	25	197	85	100	59
NRB4 32x120C	71 A4	244	16	32	50	80	360	140	240	170	850	800	25	197	85	100	59
NRB4 32x160A	71 B4	244	16	32	50	80	360	160	240	170	850	800	25	217	85	100	66
NRB4 32x160B	71 B4	244	16	32	50	80	360	160	240	170	850	800	25	217	85	100	66
NRB4 32x160C	71 B4	244	16	32	50	80	360	160	240	170	850	800	25	217	85	100	66
NRB4 32x200A	90 S4	302	16	32	50	80	360	180	240	170	850	800	25	245	85	100	77
NRB4 32x200B	80 B4	280	16	32	50	80	360	180	240	170	850	800	25	245	85	100	75
NRB4 32x200C	80 A4	280	16	32	50	80	360	180	240	170	850	800	25	245	85	100	73

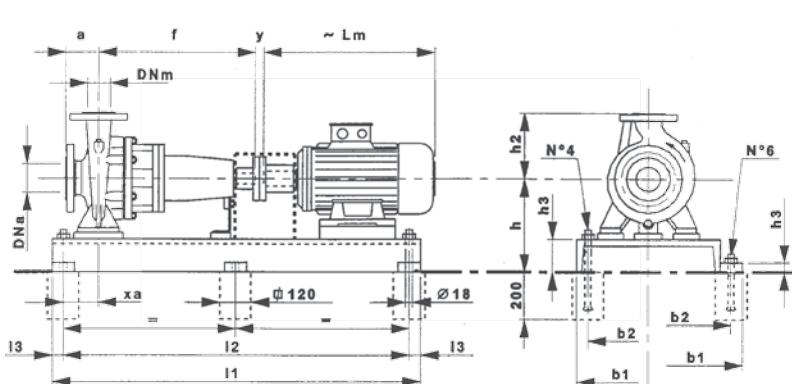
NOCCHI NRB4 40

JOINT BASE NORMALISED CENTRIFUGAL PUMPS (2 AND 4 POLES)

PERFORMANCE TABLE

MOD.	P2		VOLT. (V)	In (A)	Q	l/min m³/h	100	125	150	175	200	225	250	275	300	350	400	450
	HP	kW					6	7.5	9	10.5	12	13.5	15	16.5	18	21	24	27
NRB4 40x120C	0.33	0.25	230/400	0.9	m.c.a./m.c.w.	4.6	4.5	4.3	4	3.7	3.3	2.5						
NRB4 40x120B	0.5	0.37	230/400	1.2		5.4	5.3	5.2	5	4.8	4.5	4.1	3.5					
NRB4 40x120A	0.5	0.37	230/400	1.2		6.3	6.2	6.1	6	5.8	5.5	5.2	4.9	4.4				
NRB4 40x160C	0.5	0.37	230/400	1.2		7.3	7	6.7	6.4	6	5.5	4.9	4.3					
NRB4 40x160B	0.75	0.55	230/400	1.2		8	7.8	7.5	7.2	6.8	6.4	5.9	5.3	4.7				
NRB4 40x160A	0.75	0.55	230/400	1.2		8.8	8.6	8.4	8.1	7.7	7.3	6.8	6.3	5.8				
NRB4 40x200C	1	0.75	230/400	1.7		11	10.5	10	9.4	8.5	7.6	6.6	5.4					
NRB4 40x200B	1.5	1.1	230/400	2.5		12.8	12.5	12.1	11.6	11	10.2	9.3	8.4	6.2				
NRB4 40x200A	1.5	1.1	230/400	2.5		14	13.8	13.5	13	12.4	11.8	11	10.2	8.3				
NRB4 40x250C	2	1.5	230/400	3.2		17.2	17	16.6	16	15.3	14.5	14	13	10.6				
NRB4 40x250B	3	2.2	230/400	4.6		19.7	19.5	19.2	18.6	18	17.5	16.8	16	14	11.5			
NRB4 40x250A	3	2.2	230/400	4.6		22.3	22	21.7	21.4	21	20.3	19.6	19	17.5	15.5	13		

MEI > 0.1 - Reference MEI > 0.70 - The information on the reference efficiency is available at the address: www.europump.org/efficiencycharts
 For efficiency characteristics see www.nocchi.it



OVERALL DIMENSIONS AND WEIGHTS

MOD.	Motor			DNm	DNa	Dimensions mm.												WEIGHTS (Kg)
	Type	Lm	Y			PN16 mm	PN16 mm	a	f	h2	b1	b2	l1	l2	l3	h	h3	xa
NRB4 40x120A	71 B4	244	16	40	65	80	360	140	240	170	850	800	25	197	85	100	62	
NRB4 40x120B	71 B4	244	16	40	65	80	360	140	240	170	850	800	25	197	85	100	62	
NRB4 40x120C	71 A4	244	16	40	65	80	360	140	240	170	850	800	25	197	85	100	61	
NRB4 40x160A	80 A4	280	16	40	65	80	360	160	240	170	850	800	25	217	85	100	69	
NRB4 40x160B	80 A4	280	16	40	65	80	360	160	240	170	850	800	25	217	85	100	69	
NRB4 40x160C	71 B4	244	16	40	65	80	360	160	240	170	850	800	25	217	85	100	67	
NRB4 40x200CA	90 S4	302	16	40	65	100	360	180	280	210	950	900	25	255	95	100	91	
NRB4 40x200B	90 S4	302	16	40	65	100	360	180	280	210	950	900	25	255	95	100	91	
NRB4 40x200C	80 B4	280	16	40	65	100	360	180	280	210	950	900	25	255	95	100	89	
NRB4 40x250A	100 LA4	369	22	40	65	100	360	225	350	280	950	900	25	280	100	100	131	
NRB4 40x250B	100 LA4	369	22	40	65	100	360	225	350	280	950	900	25	280	100	100	131	
NRB4 40x250C	90 L4	327	16	40	65	100	360	225	350	280	950	900	25	280	100	100	124	

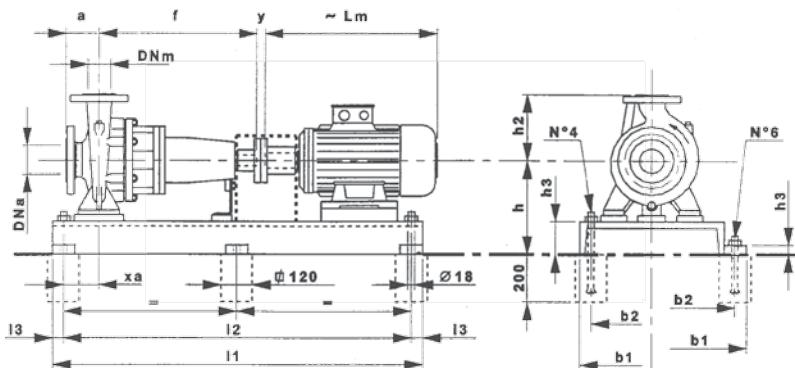
NOCCHI NRB4 50

JOINT BASE NORMALISED CENTRIFUGAL PUMPS (2 AND 4 POLES)

PERFORMANCE TABLE

MOD.	P2		VOLT. (V)	In (A)	Q	l/min	150	200	250	300	350	400	450	500	550	600	700
	HP	kW					m ³ /h	9	12	15	18	21	24	27	30	33	36
NRB4 50x120C	0.33	0.25	230/400	0.9			4.4	4.2	4	3.6	3.2	2.6					
NRB4 50x120B	0.5	0.37	230/400	1.2			5.3	5.1	4.9	4.7	4.4	4	3.5				
NRB4 50x120A	0.75	0.55	230/400	1.2			6.3	6.1	5.9	5.7	5.5	5.2	4.8				
NRB4 50x160C	0.75	0.55	230/400	1.2			6.8	6.6	6.3	5.9	5.3	4.4					
NRB4 50x160B	1	0.75	230/400	1.7			8	7.8	7.6	7.4	7	6.4	5.6				
NRB4 50x160A	1.5	1.1	230/400	2.5			9	8.8	8.6	8.4	8.2	7.7	7.1	6.4			
NRB4 50x200C	1.5	1.1	230/400	2.5			11.6	11.2	10.5	9.6	8.6	7.4	6.2				
NRB4 50x200B	1.5	1.1	230/400	2.5			13	12.6	12.2	11.3	10.4	9.4	8.2				
NRB4 50x200A	2	1.5	230/400	3.2			14.3	14.1	13.7	13.1	12.3	11.4	10.2	9	7.8		
NRB4 50x250D	3	2.2	230/400	4.6			16.8	16.4	15.8	15.1	14.2	13.2	11.9	10.5			
NRB4 50x250C	3	2.2	230/400	4.6			18.4	18	17.6	17	16.2	15.2	14.2	12.8	11.5		
NRB4 50x250B	4	3	230/400	6.1			21	20.6	20.2	19.7	19.1	18.3	17.4	16.4	15.2		
NRB4 50x250A	4	3	230/400	6.1			22.5	22.3	22	21.5	20.9	20.2	19.4	18.5	17.4	14.7	

MEI > 0.1 - Reference MEI > 0.70 - The information on the reference efficiency is available at the address: www.europump.org/efficiencycharts
For efficiency characteristics see www.nocchi.it



OVERALL DIMENSIONS AND WEIGHTS

MOD.	Dimensions mm.														WEIGHTS (Kg)		
	Type	Lm	Y	PN16 mm	PN16 mm	a	f	h2	b1	b2	l1	l2	l3	h	h3	xa	
NRB4 50x120A	80 A4	280	16	50	65	100	360	160	240	170	850	800	25	217	85	100	68
NRB4 50x120B	71 B4	244	16	50	65	100	360	160	240	170	850	800	25	217	85	100	66
NRB4 50x120AC	71 A4	244	16	50	65	100	360	160	240	170	850	800	25	217	85	100	65
NRB4 50x160A	90 S4	302	16	50	65	100	360	180	280	210	950	900	25	255	95	100	87
NRB4 50x160B	80 B4	280	16	50	65	100	360	180	280	210	950	900	25	255	95	100	85
NRB4 50x160C	80 A4	280	16	50	65	100	360	180	280	210	950	900	25	255	95	100	83
NRB4 50x200A	90 L4	327	16	50	65	100	360	200	280	210	950	900	25	255	95	100	93
NRB4 50x200B	90 S4	302	16	50	65	100	360	200	280	210	950	900	25	255	95	100	92
NRB4 50x200C	90 S4	302	16	50	65	100	360	200	280	210	950	900	25	255	95	100	92
NRB4 50x250A	100 LB4	369	22	50	65	100	360	225	350	280	950	900	25	280	100	100	135
NRB4 50x250B	100 LB4	369	22	50	65	100	360	225	350	280	950	900	25	280	100	100	135
NRB4 50x250C	100 LA4	369	22	50	65	100	360	225	350	280	950	900	25	280	100	100	132
NRB4 50x250D	100 LA4	369	22	50	65	100	360	225	350	280	950	900	25	280	100	100	132

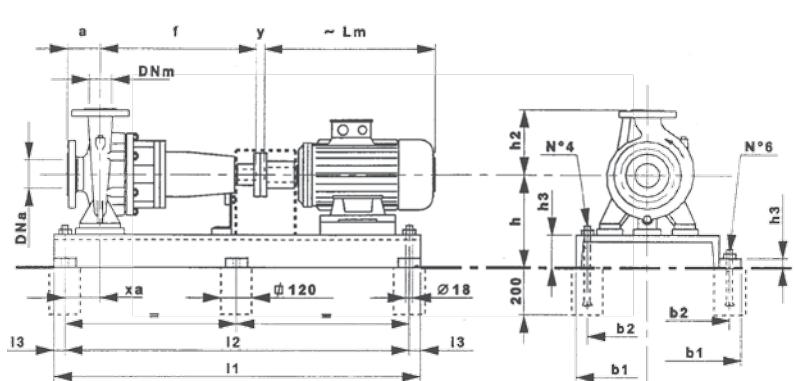
NOCCHI NRB4 65

JOINT BASE NORMALISED CENTRIFUGAL PUMPS (2 AND 4 POLES)

PERFORMANCE TABLE

MOD.	P2		VOLT. (V)	In (A)	Q m ³ /h	l/min	250	300	350	400	450	500	550	600	700	800	900	1000	1100	1200	1400	
	HP	kW					15	18	21	24	27	30	33	36	42	48	54	60	66	72	84	
NRB4 65x120C	0.75	0.55	230/400	1.2			4.2	4	3.9	3.8	3.7	3.5	3.3	3								
NRB4 65x120B	0.75	0.55	230/400	1.2			5	4.8	4.7	4.6	4.5	4.4	4.3	4.2	3.7							
NRB4 65x120A	1	0.75	230/400	1.7			5.6	5.5	5.4	5.3	5.2	5.1	4.9	4.5	4							
NRB4 65x160C	1.5	1.1	230/400	2.5			7.7	7.6	7.5	7.3	7.1	6.8	6.5	5.7	4.7							
NRB4 65x160B	1.5	1.1	230/400	2.5			8.5	8.4	8.3	8.2	8	7.8	7.6	6.9	5.9	4.9						
NRB4 65x160A	2	1.5	230/400	3.2			10.2	10.1	10	9.9	9.8	9.6	9.4	9	8.4	7.5	6.5					
NRB4 65x200C	3	2.2	230/400	4.6						12.3	12.2	12.1	12	11.9	11.5	10.8	10	9				
NRB4 65x200B	4	3	230/400	6.1						15	14.9	13.5	13.4	13.3	13.1	12.6	11.9	11	10			
NRB4 65x200A	4	3	230/400	6.1						13.7	13.6	14.8	14.7	14.6	14.4	14.1	13.5	12.8	12	11		
NRB4 65x250C	4	3	230/400	6.1							17.2	17	16.6	15.7	14.6	13.2	1.6					
NRB4 65x250B	5.5	4	230/400	7.7							20	19.7	19.4	18.8	18	16.8	15.6	14.3	12.5			
NRB4 65x250A	7.5	5.5	400	10.9							23	22.8	22.6	22.1	21.5	20.7	19.7	18.6	17.4	14		

MEI > 0.1 - Reference MEI > 0.70 - The information on the reference efficiency is available at the address: www.europump.org/efficiencycharts
 For efficiency characteristics see www.nocchi.it



OVERALL DIMENSIONS AND WEIGHTS

MOD.	Motor			DNm	DNA	Dimensions mm.											WEIGHTS (Kg)
	Type	Lm	Y			PN16 mm	PN16 mm	a	f	h2	b1	b2	l1	l2	l3	h	h3
NRB4 65x120A	80 B4	280	16	65	80	100	360	180	280	210	950	900	25	255	85	100	86
NRB4 65x120B	80 A4	280	16	65	80	100	360	180	280	210	950	900	25	255	85	100	84
NRB4 65x120C	80 A4	280	16	65	80	100	360	180	280	210	950	900	25	255	85	100	84
NRB4 65x160A	90 L4	327	16	65	80	100	360	200	280	210	950	900	25	255	85	100	93
NRB4 65x160B	90 S4	302	16	65	80	100	360	200	280	210	950	900	25	255	85	100	92
NRB4 65x160C	90 S4	302	16	65	80	100	360	200	280	210	950	900	25	255	85	100	92
NRB4 65x200A	100 LB4	369	22	65	80	100	360	225	350	280	950	900	25	280	95	100	129
NRB4 65x200B	100 LB4	369	22	65	80	100	360	225	350	280	950	900	25	280	95	100	129
NRB4 65x200C	100 LA4	369	22	65	80	100	360	225	350	280	950	900	25	280	95	100	126
NRB4 65x250A	112 MC4	386	22	65	80	100	470	225	400	330	1120	1070	25	310	100	125	181
NRB4 65x250B	112 M4	386	22	65	80	100	470	250	400	330	1120	1070	25	310	100	125	181
NRB4 65x250C	100 LB4	369	22	65	80	100	470	250	400	330	1120	1070	25	310	100	125	172

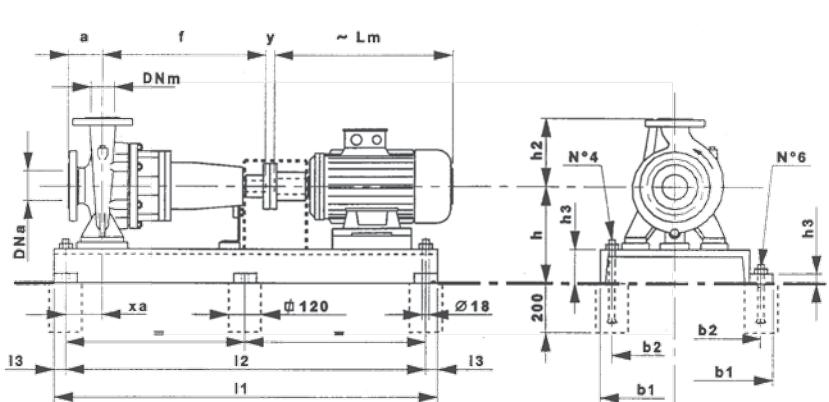
NOCCHI NRB4 80

JOINT BASE NORMALISED CENTRIFUGAL PUMPS (2 AND 4 POLES)

PERFORMANCE TABLE

MOD.	P2		VOLT. (V)	In (A)	Q	l/min m ³ /h	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1800	2000	2250
	HP	kW					36	42	48	54	60	66	72	78	84	90	96	108	120	135
NRB4 80x160C	2	1.5	230/400	3.2	mca / m.c.w.	7.1	6.9	6.6	6.3	6	5.7	5.2	4.8							
NRB4 80x160B	3	2.2	230/400	4.6		8.5	8.3	8.1	7.9	7.6	7.3	6.9	6.5	6.1	5.6					
NRB4 80x160A	3	2.2	230/400	4.6		9.6	9.4	9.2	9	8.8	8.5	8.2	7.9	7.5	7.1	6.6				
NRB4 80x200C	3	2.2	230/400	4.6		10.4	10	9.8	9.6	9	8.6	8	7.2	6.5						
NRB4 80x200B	4	3	230/400	6.1		12.5	12.3	12.1	11.8	11.4	11	10.6	10	9.4	8.8	7.2				
NRB4 80x200A	5.5	4	230/400	7.7		14.2	14	13.8	13.5	13.1	12.7	12.2	11.7	11.2	10.6	9.2	7.6			
NRB4 80x250D	7.5	5.5	400	10.9		16.3	16	15.7	15.4	14.9	14.4	13.7	13	12.3	11.5					
NRB4 80x250C	7.5	5.5	400	10.9		17.9	17.7	17.4	17	16.7	16.2	15.7	15	14.4	13.7	11.9				
NRB4 80x250B	10	7.5	400	14.5		20.5	20.3	20	19.7	19.4	19	18.6	18.1	17.6	17	15.6	13.9			
NRB4 80x250A	10	7.5	400	14.5		22.2	22	21.7	21.5	21.1	20.8	20.4	20	19.5	19	17.6	16.2	14		

MEI > 0.1 - Reference MEI > 0.70 - The information on the reference efficiency is available at the address: www.europump.org/efficiencycharts
For efficiency characteristics see www.nocchi.it



OVERALL DIMENSIONS AND WEIGHTS

MOD.	Motor			DNm	DNa	Dimensions mm.										WEIGHTS (Kg)	
	Type	Lm	Y	PN16 mm	PN16 mm	a	f	h2	b1	b2	I1	I2	I3	h	h3	xa	
NRB4 80x160A	100 LA4	369	22	80	100	125	360	225	350	280	950	900	25	280	100	100	127
NRB4 80x160B	100 LA4	369	22	80	100	125	360	225	350	280	950	900	25	280	100	100	127
NRB4 80x160C	90 L4	327	16	80	100	125	360	225	350	280	950	900	25	280	100	100	120
NRB4 80x200A	112 M4	386	22	80	100	125	470	250	350	280	1120	1070	25	280	100	100	166
NRB4 80x200B	112 M4	386	22	80	100	125	470	250	350	280	1120	1070	25	280	100	100	166
NRB4 80x200C	100 LB4	369	22	80	100	125	470	250	350	280	1120	1070	25	280	100	100	156
NRB4 80x250A	132 MA4	498	24	80	100	125	470	280	400	330	1120	1070	25	310	110	125	213
NRB4 80x250B	132 MA4	498	24	80	100	125	470	280	400	330	1120	1070	25	310	110	125	213
NRB4 80x250C	112 MC4	386	22	80	100	125	470	280	400	330	1120	1070	25	310	110	125	191
NRB4 80x250D	112 MC4	386	22	80	100	125	470	280	400	330	1120	1070	25	310	110	125	191

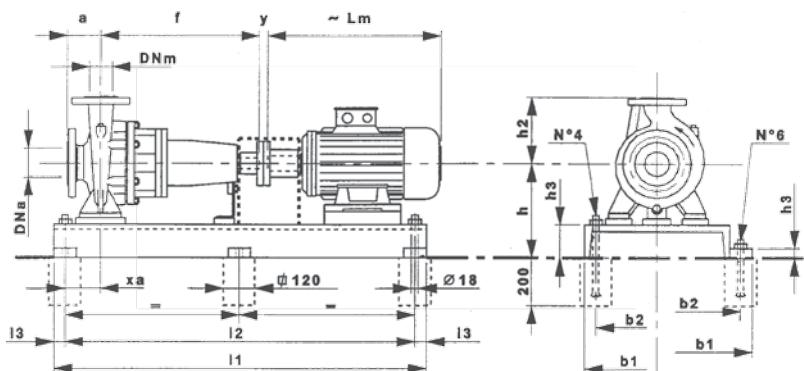
NOCCHI NRB4 100

JOINT BASE NORMALISED CENTRIFUGAL PUMPS (2 AND 4 POLES)

PERFORMANCE TABLE

MOD.	P2		VOLT. (V)	In (A)	Q m³/h	l/min	900	1000	1100	1200	1300	1400	1500	1600	1800	2000	2250	2500	2750	3000
	HP	kW					54	60	66	72	78	84	90	96	108	120	135	150	165	180
NRB4 100x200D	4	3	230/400	6.1	m.c.a./m.c.w.	9.8	9.6	9.4	9.1	8.8	8.5	8.1	7.7	6.9	6					
NRB4 100x200C	5.5	4	230/400	7.7		11.8	11.6	11.4	11.2	11	10.8	10.5	10.2	9.4	8.6	7.5				
NRB4 100x200B	7.5	5.5	400	10.9		13.2	13.1	12.9	12.7	12.5	12.3	12	11.7	11.1	10.3	9.3	8.2			
NRB4 100x200A	7.5	5.5	400	10.9		14.4	14.3	14.2	14	13.8	13.6	13.4	13.2	12.6	12	11	9.8	8.5		
NRB4 100x250D	7.5	5.5	400	10.9		16.4	16.2	15.9	15.6	15.3	14.9	14.4	13.2	11.9	9.8					
NRB4 100x250C	10	7.5	400	14.5		18	17.8	17.6	17.4	17.1	16.8	16.4	15.3	14.2	12.4	10.4				
NRB4 100x250B	15	11	400	20.7		20.4	20.3	20.2	20	19.8	19.6	19.3	18.6	17.7	16.2	14.5	12.4			
NRB4 100x250A	15	11	400	20.7		22	21.9	21.8	21.7	21.6	21.4	21.1	20.4	19.7	18.5	17	15	12.8		

MEI > 0.1 - Reference MEI > 0.70 - The information on the reference efficiency is available at the address: www.europump.org/efficiencycharts
 For efficiency characteristics see www.nocchi.it



OVERALL DIMENSIONS AND WEIGHTS

MOD.	Dimensions mm.														WEIGHTS (Kg)		
	Type	Lm	Y	PN16 mm	PN16 mm	a	f	h2	b1	b2	l1	l2	l3	h	h3	xa	
NRB4 100x200A	112 MC4	386	22	100	125	125	470	280	400	330	1120	1070	25	310	110	125	188
NRB4 100x200B	112 MC4	386	22	100	125	125	470	280	400	330	1120	1070	25	310	110	125	188
NRB4 100x200C	112 M4	386	22	100	125	125	470	280	400	330	1120	1070	25	310	110	125	188
NRB4 100x200D	100 LB4	369	22	100	125	125	470	280	400	330	1120	1070	25	310	110	125	179
NRB4 100x250A	132 MB4	498	24	100	125	140	470	280	400	330	1120	1070	25	355	110	125	227
NRB4 100x250B	132 MB4	498	24	100	125	140	470	280	400	330	1120	1070	25	355	110	125	227
NRB4 100x250C	132 MA4	498	24	100	125	140	470	280	400	330	1120	1070	25	355	110	125	225
NRB4 100x250D	112 MC4	386	22	100	125	140	470	280	400	330	1120	1070	25	355	110	125	203

NOCCHI P.G.A. - DELTA OIL

SELF-PRIMING LIQUID RING PUMPS SPECIFIC FOR DIESEL TRANSFER

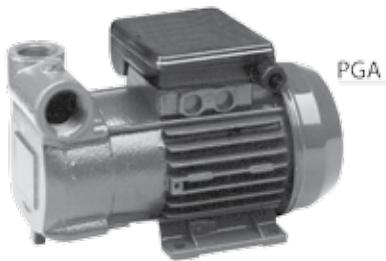
The pumps of the series PGA are particularly suitable for diesel transfer. Available in the version complete with power cable, switch and handle. Equipped with a safety tube for the discharge of any leakage.

APPLICATIONS

- Realization of distribution boosters.
- For diesel transfer on farms.
- Soil processing machines.
- Small pumping stations.

MOTOR

- Closed, ventilated from outside.
- Degree of protection IP 44
- Insulation class F
- Single-phase power supply with capacitor permanently on and thermal protection built into the motor casing.
- Three-phase power supply with external protection
- provided by the user.
- Speed of rotation 2850 rpm.
- Continuous service.



USAGE DATA

- Type of liquid: diesel.
- Maximum temperature of the liquid 50°C.
- Maximum intake height recommended 5 m with foot valve.
- Maximum operating pressure 6 bar.



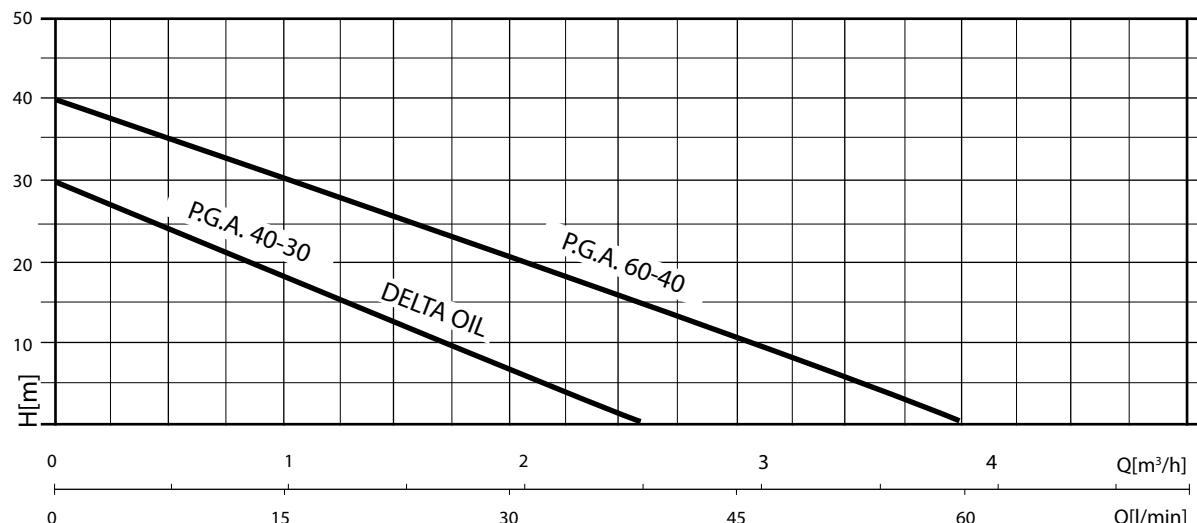
TABLE OF MATERIALS

Component	Material
Pump body	Cast iron ENGJL 200
Motor casing	Cast iron ENGJL 200
Impeller with wings	Brass
Motor shaft	Stainless steel X 12 CrNiS 1809 (AISI 416)
Mechanical seal	Graphite
Counterface	Ceramic
Gaskets	NBR 70 shore

NOCCHI P.G.A. - DELTA OIL

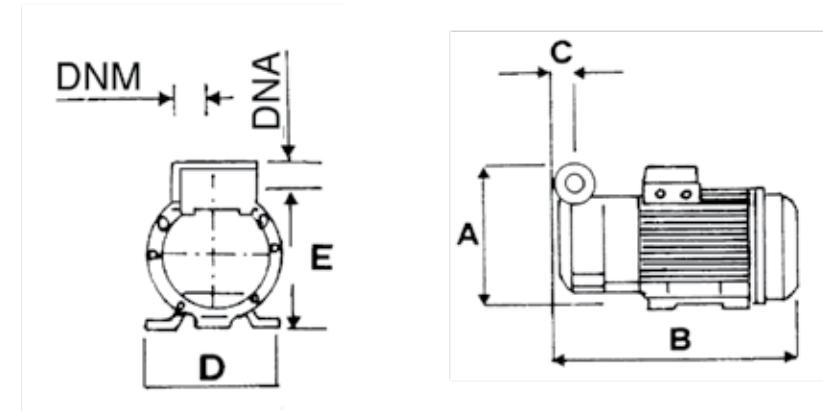
SELF-PRIMING LIQUID RING PUMPS SPECIFIC FOR DIESEL TRANSFER

HYDRAULIC PERFORMANCE



PERFORMANCE TABLE

MODEL	Motor power (P2)		Motor power (P1)		VOLT. (V)	In (A)	μ F	Q	l/min	5	10	15	25	35	45	60	
	HP	kW	HP	kW						m ³ /h	0.3	0.6	0.9	1.5	2.1	2.7	3.6
PGA 40 - 30 M	0.6	0.45	0.75	0.55	1 ~ 230 3 ~ 230/400	2.7 1.6-0.9	8	m ³ /h m.c.a./m.c.w.	28 39 28	28	23	18	13	5			
PGA 40 - 30 T										28	23	18	13	5			
PGA 60 - 40 M	0.8	0.6	1.2	0.9						39	34	32	25	18	12	12	
PGA 60 - 40 T										28	23	18	13	5			
DELTA OIL	0.6	0.45	0.75	0.55	1 ~ 230	2.7	8										



OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions in mm:							WEIGHTS (Kg)
	A	B	C	D	E	DNA	DNM	
PGA 40 - 30	141	255	20	120	119	3/4"	3/4"	6.2
PGA 60 - 40	148	260	24	120	123	1"	1"	8
DELTA OIL	141	255	20	120	119	3/4"	3/4"	7



SECTION 3

PUMPS FOR OPEN AND DRILLED WELLS



PRATIKA

MULTISTAGE SUBMERSIBLE PUMP

PAGE 168



SCM 4 PLUS

4" MULTISTAGE CENTRIFUGAL SUBMERSED PUMPS

PAGE 180



DOMINATOR 4 PLUS

MONOBLOC MULTISTAGE 4" SUBMERSED PUMPS

PAGE 170



4" MOTORS

ELECTRIC MOTORS FOR 4" SUBMERSED PUMPS

PAGE 188



DOMINATOR 5

MONOBLOC MULTISTAGE 5" SUBMERSED PUMPS MADE OF STAINLESS STEEL AISI 304

PAGE 173



CABLES AND FITTINGS

PAGE 189

New



DOMINATOR 5 RW

MULTISTAGE SUBMERSIBLE PUMP

PAGE 176

3

ACCESSORIES

PAGE 397

NOCCHI PRATIKA

MULTISTAGE CENTRIFUGAL SUBMERSIBLE PUMP FOR CLEAR WATER

Ø 32 MM ELBOW FITTING HOSE SUPPLIED, AUTOMATIC VERSION WITH FLOAT SWITCH.

PRATIKA submersible pumps are portable and ready to use for installation in traditional wells, water deposits, collection tanks, clear watercourses, lakes, etc.

APPLICATIONS

- Lifting of water from traditional wells.
- Installations in tanks inside homes for the pressurisation of domestic systems for drinking water.
- Small automatic systems for garden irrigation.
- Surface irrigation.

MOTOR

- Dry running.
- Degree of protection IP 68
- Insulation class F.
- Single-phase power supply with capacitor always on.
- Thermal protection built into the motor casing.
- Cable connection chamber completely insulated.
- Self-lubricating ball bearings.
- Speed of rotation 2850 rpm.
- Suitable for continuous use.

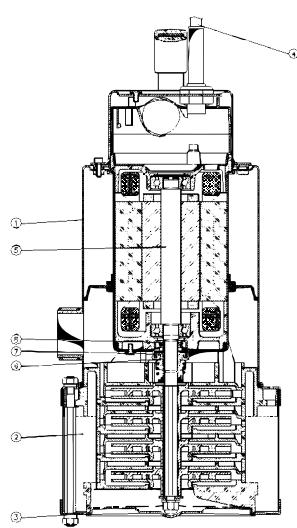


USAGE DATA

- Type of liquid: clean water without suspended solids or abrasive material.
- Maximum temperature of the liquid 40°C.
- Maximum immersion under the water level 10m.

TABLE OF MATERIALS

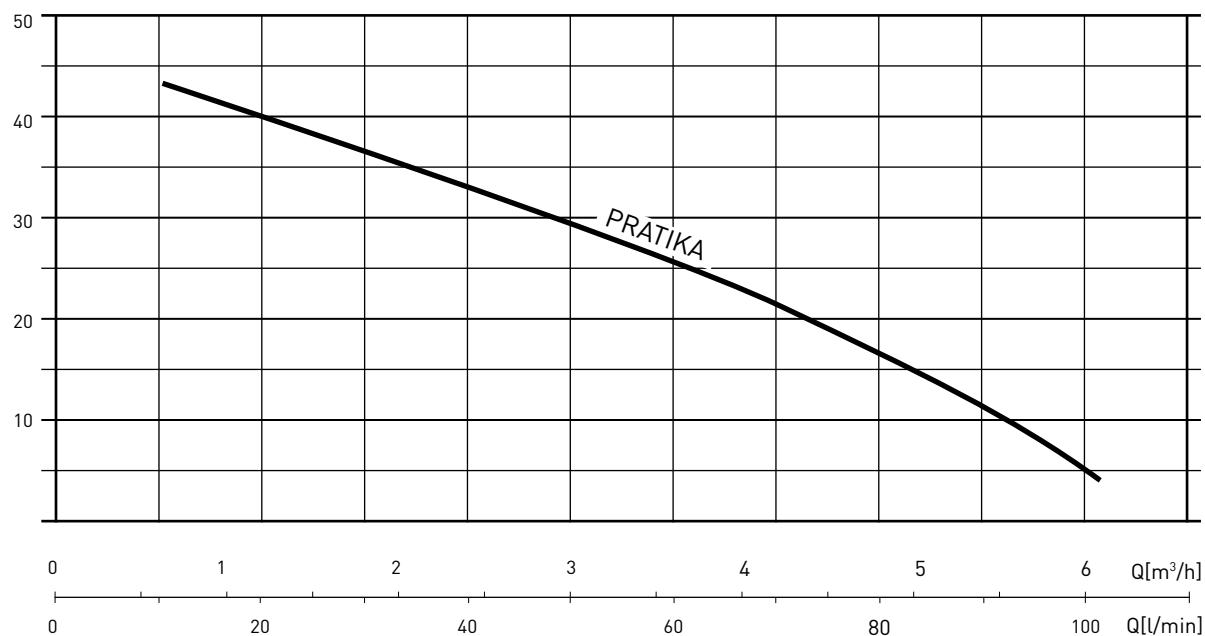
	Component	Material
1	Pump body	Stainless steel X5 CrNi 1810 (AISI 304)
2	Air inlet grille	Stainless steel X5 CrNi 1810 (AISI 304)
3	Air inlet base	Stainless steel X5 CrNi 1810 (AISI 304)
4	Supply cable	15 m H07 RN-F with Schuko plug
5	Shaft (hydraulic part)	Stainless steel X5 CrNi 1810 (AISI 304) with ceramic bushing in the points of wear of the seals.
6	Mechanical seal	Graphite
	Counterface	Ceramic
	Lip seal	In rubber NBR 70
8	Impellers	Technopolymer
9	Diffusers	Technopolymer



NOCCHI PRATIKA

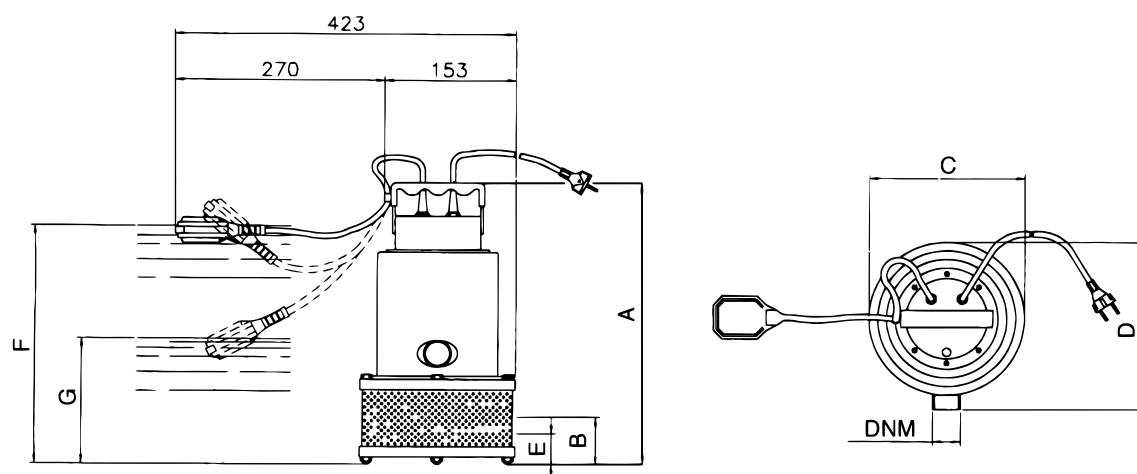
MULTISTAGE CENTRIFUGAL SUBMERSIBLE PUMP FOR CLEAR WATER

HYDRAULIC PERFORMANCE



PERFORMANCE TABLE

MODEL	Motor power (P2)		Motor power (P1)		VOLT. (V)	In (A)	μ F	Stages	Q	l/min	0	20	40	60	80	100	
	HP	kW	HP	kW							0	m³/h	m.l.w.	1.2	2.4	3.6	4.8
PRATIKA - MAN	1.1	0.8	1.6	1.2	1 ~ 230	5	16	4			46		39	31	23	12	3
PRATIKA - AUT																	



OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions mm.								WEIGHTS (Kg)	
	A	B	Ø C	D	Minimum drying level E*	Start F*	Stop G*	Free passage DNM		
PRATIKA	406	162	178	182	50/60	490	260	Ø 1.5	1" 1/4	9

NOCCHI DOMINATOR 4 PLUS

MULTISTAGE CENTRIFUGAL SUBMERSIBLE PUMP FOR CLEAR WATER Ø 4"



DOUBLE MECHANICAL SEAL, HYDRAULIC SYSTEM PARTICULARLY RESISTANT TO THE CORROSION ACTION OF SAND, INTEGRATED NON-RETURN VALVE

DOMINATOR 4 Plus submersible pumps with double mechanical seal are suitable for installations in traditional wells, water deposits, collection tanks, clear watercourses, lakes, etc. Nylon suspension rope (20 m) included.

APPLICATIONS

- Lifting of water from traditional wells.
- Installations in tanks inside homes for the pressurisation of systems.
- Small automatic systems for garden irrigation.
- Surface irrigation.

USAGE DATA

- Type of liquid: clean water without suspended solids or abrasive material.
- Maximum temperature of the liquid

40°C.

- Maximum immersion under the water level 17 m.

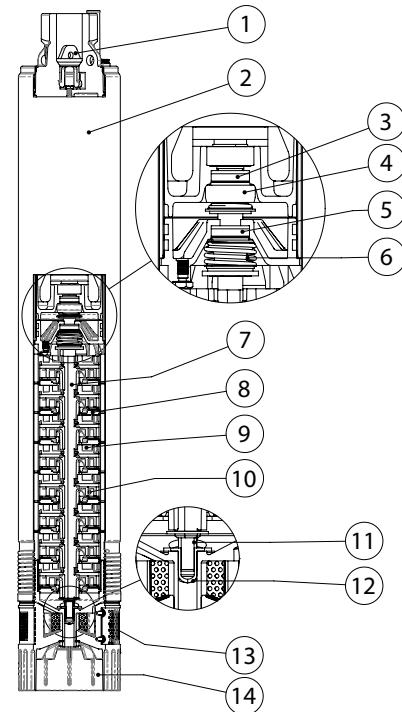
MOTOR

- Dry motor with body in stainless steel cooled by the pumped liquid.
- Degree of protection IP 68
- Insulation class F.
- Single-phase power supply with capacitor always on.
- Thermal protection built into the motor casing.
- Cable connection chamber completely insulated.
- Self-lubricating ball bearings.
- Speed of rotation 2850 rpm.
- Suitable for continuous use.



TABLE OF MATERIALS

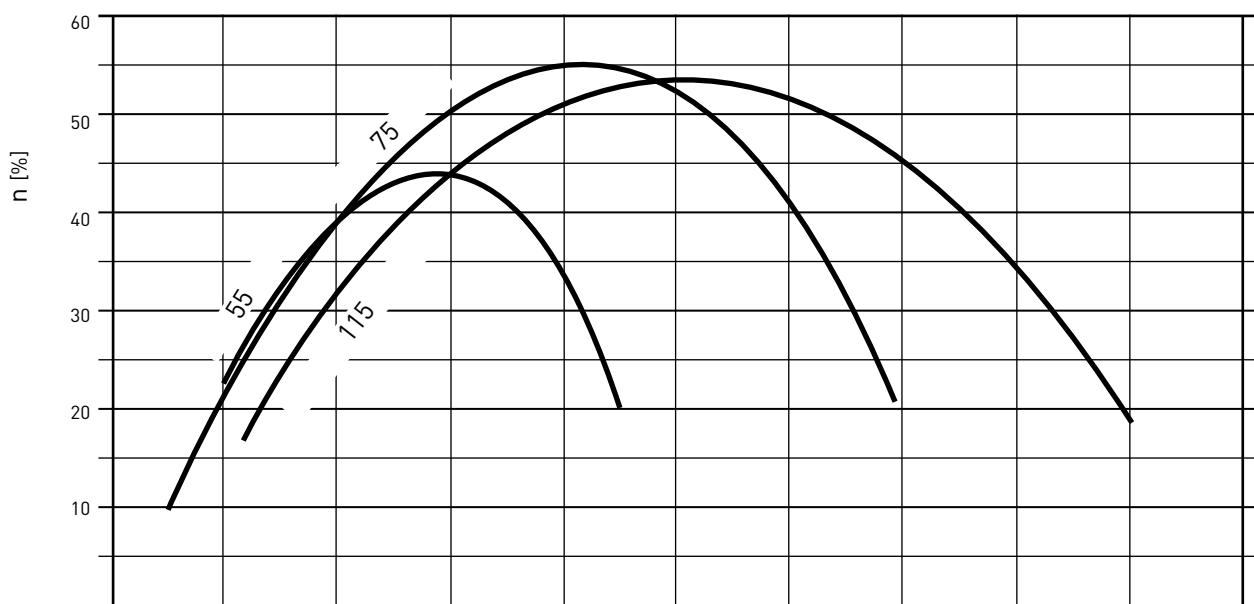
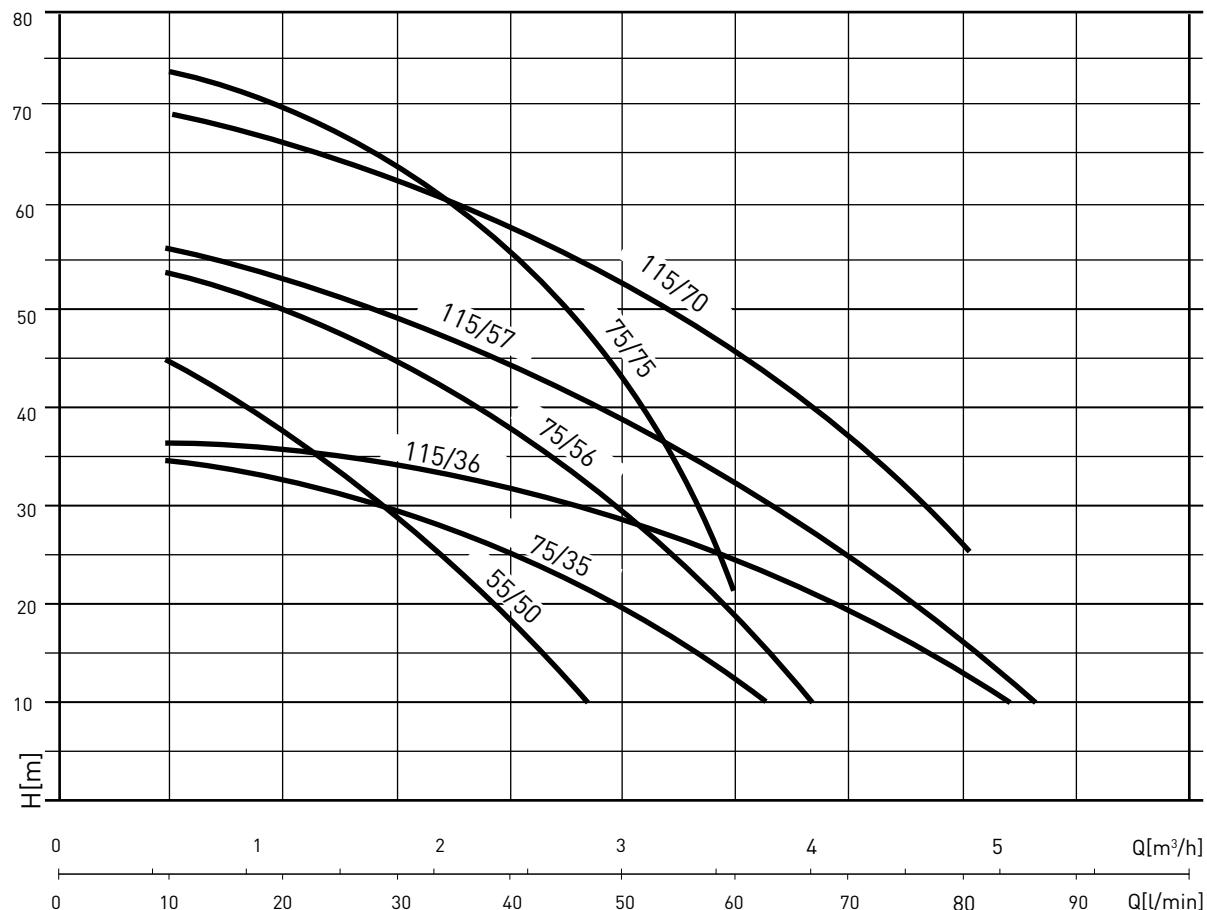
Component	Material
1 Non-return valve	Thermoplastic with NBR o-ring integrated
2 Pump body	Stainless steel Europe: EN10088-1 X 5 CrNi 1810 (1.4301) Usa: AISI 304
3 Mechanical seal - oil chamber fixed part	Aluminium oxide / NBR
4 Mechanical seal - oil chamber rotating part	Stainless steel Europe: EN10088-1 X 5 CrNi 1810 (1.4301) Usa: AISI 304 / NBR / Resin-impregnated carbon graphite
5 Mechanical seal - fixed part	Aluminium oxide / NBR
6 Mechanical seal - rotating part	Stainless steel Europe: EN10088-1 X 2 CrNiMo 17-12-2 (1.4404) USA: AISI 316 / NBR / Carbon graphite
7 Motor shaft	Immersed part - Europe: EN10088-1 X 8 CrNiS 18-9 (1.4305) USA: AISI 303/ Motor side - carbon steel
8 Diffuser cap	Polycarbonate with stainless steel insert Europe: EN10088-1 X 5 CrNi 1810 Usa: AISI 304 (1.4301)
9 Diffuser	Polycarbonate with ceramic insert
10 Impeller	Acetal resin
11 Bushing	Stainless steel Europe: EN10088-1 X 8 CrNiS 18-9 (1.4305) USA: AISI 303 with ceramic coating
12 Bearing	Self-lubricating Nylatron®
13 Intake filter	Stainless steel Europe: EN10088-1 X 6 Cr 17 (1.4016) USA: AISI 430
14 Base	PPO - Noryl™ GFN 2
- Supply cable	Type H07 RN-F - length 20 m
-	Thrust ring in each stage



NOCCHI DOMINATOR 4 PLUS

MULTISTAGE CENTRIFUGAL SUBMERSIBLE PUMP FOR CLEAR WATER Ø 4"

HYDRAULIC PERFORMANCE



MEI ≥ 0.4 - Reference MEI ≥ 0.70 - The information on the reference efficiency is available at the address: www.europump.org/efficiencycharts

NOCCHI DOMINATOR 4 PLUS

MULTISTAGE CENTRIFUGAL SUBMERSIBLE PUMP FOR CLEAR WATER Ø 4"

PERFORMANCE TABLE

MODEL	Motor power (P2)		Motor power (P1)		VOLT. (V)	In (A)	μ F	Stages	Q	l/min	0	20	40	60	80
	HP	kW	HP	kW						m ³ /h	0	1.2	2.4	3.6	4.8
DOMINATOR 4 PLUS 55/50 M	0.75	0.56	1.1	0.8	1 ~ 230	3.8	16	6	m.c.a. / m.c.w.	50	38.7	17			
DOMINATOR 4 PLUS 75/35 M	0.50	0.35	0.80	0.60		3	12.5	5		35	33	26	11		
DOMINATOR 4 PLUS 75/56 M	0.80	0.60	1	0.75		3.3	16	8		56	48.9	38.1	19		
DOMINATOR 4 PLUS 75/75 M	0.95	0.7	1.5	1.1		5	20	11		75	70	53	21.6		
DOMINATOR 4 PLUS 115/36 M	0.55	0.40	1	0.75		3.5	12.5	5		36	35	32	25	13	
DOMINATOR 4 PLUS 115/57 M	1	0.8	1.50	1.10		5	16	8		57	52	44.4	31.5	16.6	
DOMINATOR 4 PLUS 115/70 M	1.1	0.8	1.8	1.3		6	20	10		70	65	59	45.4	27	



OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions mm.				WEIGHTS (Kg)
	A	Ø C	Free passage	DNM	
DOMINATOR 4 PLUS 55/50 M	549	98	2 mm	1"1/4	10.4
DOMINATOR 4 PLUS 75/35 M	560	98	2 mm	1"1/4	10.2
DOMINATOR 4 PLUS 75/56 M	643	98	2 mm	1"1/4	10.8
DOMINATOR 4 PLUS 75/75 M	760	98	2 mm	1"1/4	12.5
DOMINATOR 4 PLUS 115/36 M	560	98	2 mm	1"1/4	10.2
DOMINATOR 4 PLUS 115/57 M	643	98	2 mm	1"1/4	10.8
DOMINATOR 4 PLUS 115/70 M	732	98	2 mm	1"1/4	12.5

NOCCHI DOMINATOR 5"

MULTISTAGE CENTRIFUGAL SUBMERSIBLE PUMP FOR CLEAR WATER

COMPLETELY IN STAINLESS STEEL

DOMINATOR 5" submersible pumps are suitable for installations in traditional wells, water deposits, collection tanks, clear watercourses, lakes, etc. Automatic version with float switch.

APPLICATIONS

- Lifting of water from traditional wells.
- Installations in tanks inside homes for the pressurisation of domestic systems for drinking water.
- Small automatic systems for garden irrigation.
- Surface irrigation.

MOTOR

- Dry motor with body in stainless steel cooled by the pumped liquid.
- Degree of protection IP 68
- Insulation class F.
- Single-phase power supply with capacitor always on.
- Thermal protection built into the motor casing.
- Cable connection chamber completely insulated.
- Self-lubricating ball bearings.
- Speed of rotation 2850 rpm.
- Suitable for continuous use.

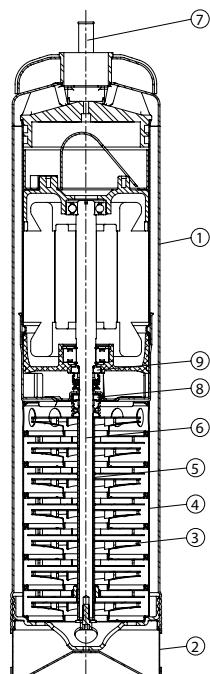


USAGE DATA

- Type of liquid: clean water without suspended solids or abrasive material.
- Maximum temperature of the liquid 40°C.
- Maximum immersion under the water level 17 m.

TABLE OF MATERIALS

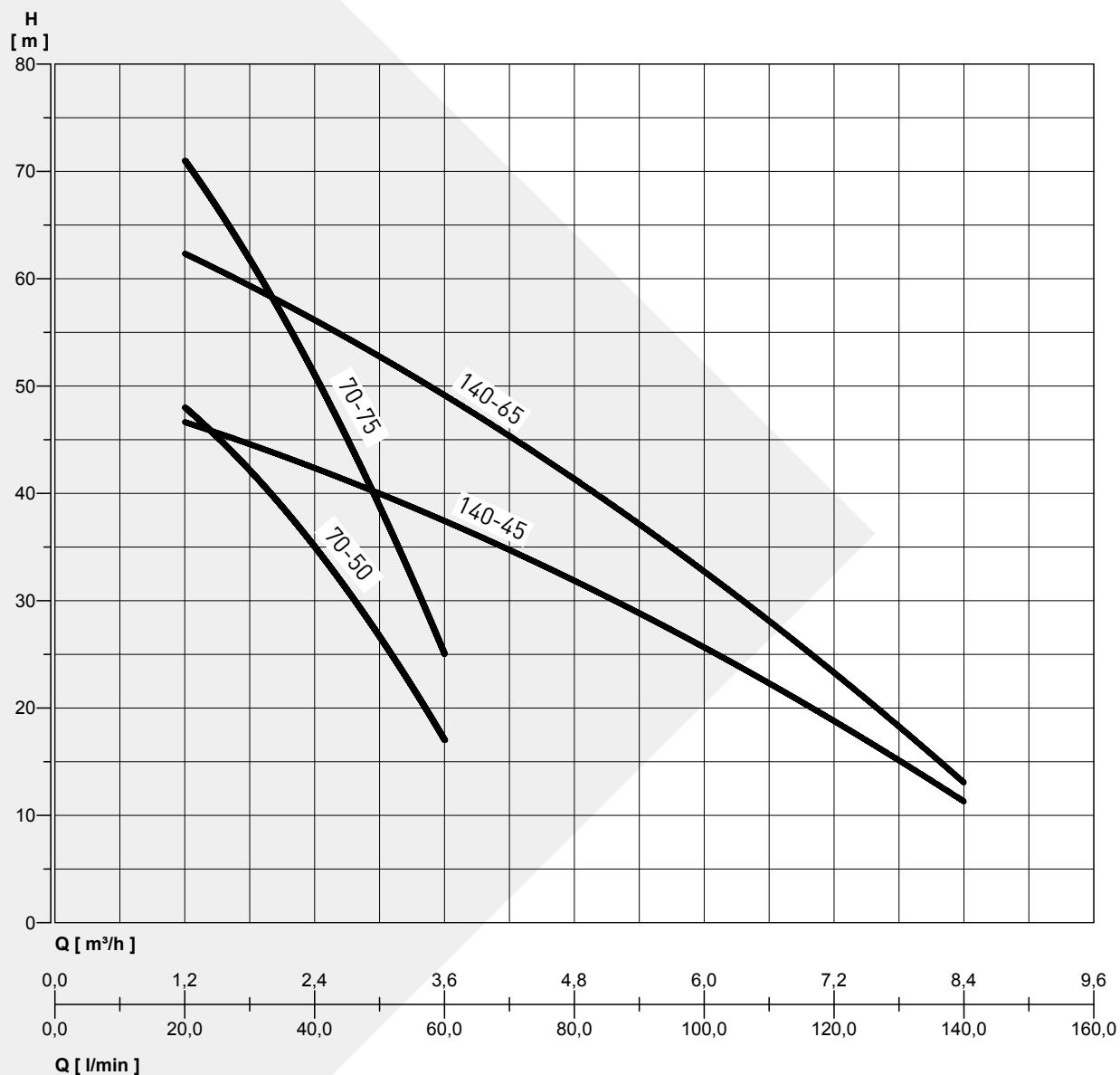
Component		Material
1	Pump body	Stainless steel X5 CrNi 1810 (AISI 304)
2	Air inlet grille	Stainless steel X5 CrNi 1810 (AISI 304)
3	Impellers	Stainless steel X5 CrNi 1810 (AISI 304)
4	Diffusers	Stainless steel X5 CrNi 1810 (AISI 304)
5	Spacer	Stainless steel X5 CrNi 1810 (AISI 304)
6	Motor shaft	Stainless steel X5 CrNi 1810 (AISI 304)
7	Supply cable	20 m H07 RN-F with plug
8	Mechanical seal	Graphite Lubricated in oil chamber
9	Counterface	Aluminium oxide



NOCCHI DOMINATOR 5"

MULTISTAGE CENTRIFUGAL SUBMERSIBLE PUMP FOR CLEAR WATER

HYDRAULIC PERFORMANCE

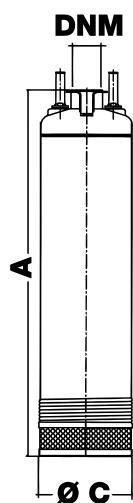


NOCCHI DOMINATOR 5"

MULTISTAGE CENTRIFUGAL SUBMERSIBLE PUMP FOR CLEAR WATER

PERFORMANCE TABLE

MODEL	Motor power (P2)		Motor power (P1)		VOLT. (V)	In (A)	μ F	Stages	Q	l/min	m ³ /h	0	20	40	60	80	100	120	140
	HP	kW	HP	kW								0	1.2	2.4	3.6	4.8	6	7.2	8.4
DOMINATOR 5" 70/50B M	0.8	0.6	1.2	0.9	1 ~ 230	4	16	6				55	48	35	17				
DOMINATOR 5" 70/50B M AUT					1 ~ 230	4	16												
DOMINATOR 5" 70/50B T					3 ~ 400	1.8	-												
DOMINATOR 5" 70/50B T					3 ~ 230	3	-												
DOMINATOR 5" 70/75B M	1.2	0.9	1.7	1.3	1 ~ 230	6	20	9				78	71	51	25				
DOMINATOR 5" 70/75B M AUT					1 ~ 230	6	20												
DOMINATOR 5" 70/75B T					3 ~ 400	2.1	-												
DOMINATOR 5" 70/75B T					3 ~ 230	3.7	-												
DOMINATOR 5" 140/45B M	1.1	0.8	1.6	1.2	1 ~ 230	5.5	16	5				50	47	42	37	32	26	19	11
DOMINATOR 5" 140/45B M AUT					1 ~ 230	5.5	16												
DOMINATOR 5" 140/45B T					3 ~ 400	2.2	-												
DOMINATOR 5" 140/45B T					3 ~ 230	3.8	-												
DOMINATOR 5" 140/65B M	1.5	1.1	2.1	1.6	1 ~ 230	7.2	20	7				68	63	55	49	42	33	23	13
DOMINATOR 5" 140/65B M AUT					1 ~ 230	7.2	20												
DOMINATOR 5" 140/65B T					3 ~ 400	2.5	-												
DOMINATOR 5" 140/65B T					3 ~ 230	4.4	-												



OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions mm.				WEIGHTS (Kg)
	A	Ø C	Free passage	DNM	
D 5" - 70/50	475	132	2 mm	1 1/4	13.7
D 5" - 70/75	530	132	2 mm	1 1/4	15.5
D 5" - 140/45	495	132	2 mm	1 1/4	14.2
D 5" - 140/65	550	132	2 mm	1 1/4	15.8

NOCCHI DOMINATOR 5 RW Pack

MULTISTAGE SUBMERSIBLE PUMP

NEW
2016


100% STAINLESS STEEL

DOMINATOR 5 RW Pack is a system consisting of a multi-stage submersible centrifugal pump complete with an on/off device, intake tube, floating filter and 20 m of nylon rope. Ready to use for applications using rain water.

USAGE DATA

- Type of liquid: clean water without suspended solids or abrasive material
- Maximum temperature of the liquid 40°C
- Maximum immersion under the water level 17 m.

MOTOR

- Dry motor with body in stainless steel cooled by the pumped liquid.
- Degree of protection IP 68
- Insulation class F
- Single-phase power supply with capacitor always on.
- Thermal protection built into the motor casing.
- Cable connection chamber completely insulated.
- Self-lubricating ball bearings.
- Speed of rotation 2850 rpm.
- Suitable for continuous use.



APPLICATIONS

- Lifting of water from wells and rainwater collection tanks

- Small automatic systems for garden irrigation

- Rainwater recovery systems
- Surface irrigation



NOCCHI DOMINATOR 5 RW Pack

MULTISTAGE SUBMERSIBLE PUMP

CONSTRUCTION FEATURES

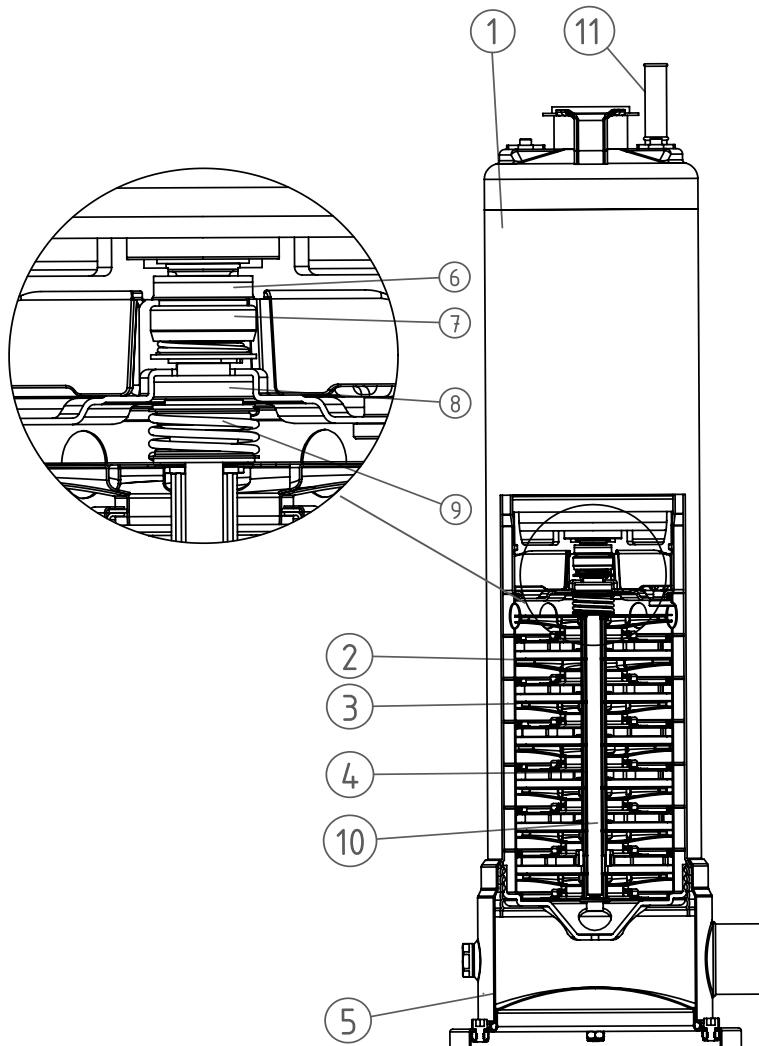


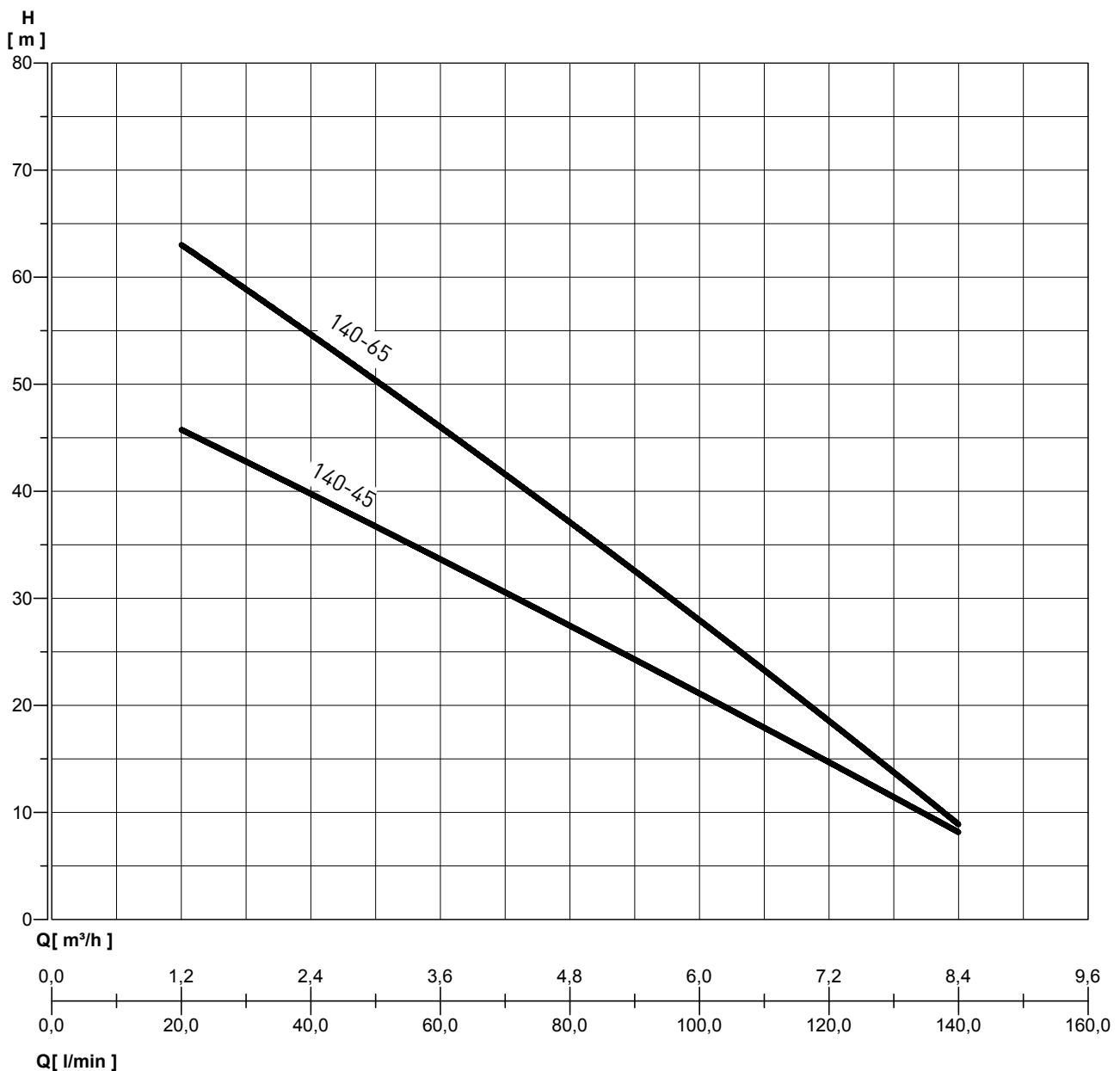
TABLE OF MATERIALS

Component		Material
1	Pump body	Stainless steel Europe: EN 10088-1 X5CrNi18-10 (1.4301) - USA: AISI 304
2	Impellers	Stainless steel Europe: EN 10088-1 X5CrNi18-10 (1.4301) - USA: AISI 304
3	Diffusers	Stainless steel Europe: EN 10088-1 X5CrNi18-10 (1.4301) - USA: AISI 304
4	Spacer	Stainless steel Europe: EN 10088-1 X5CrNi18-10 (1.4301) - USA: AISI 304
5	Base	Stainless steel Europe: EN 10088-1 X5CrNi18-10 (1.4301) - USA: AISI 304
6	Mechanical seal oil chamber - fixed part	Aluminium oxide / NBR
7	Mechanical seal - rotary part oil chamber	Stainless steel Europe: EN 10088-1 X5CrNi18-10 (1.4301) - USA: AISI 304 / NBR / Resin-impregnated graphite
8	Mechanical seal - fixed part	Aluminium oxide / NBR
9	Mechanical seal - rotating part	Stainless steel Europe: EN 10088-1 X2CrNiMo17-12-2 (1.4404) - USA: AISI 316L / NBR / Graphite
10	Motor shaft	Part in contact with the liquid - Stainless steel Europe: EN 10088-1 X5CrNi18-10 (1.4301)/ USA: AISI 304 Motor side - Graphite
11	Supply cable	Type H07 RN-F - Length 20 m

NOCCHI DOMINATOR 5 RW Pack

MULTISTAGE SUBMERSIBLE PUMP

HYDRAULIC PERFORMANCE

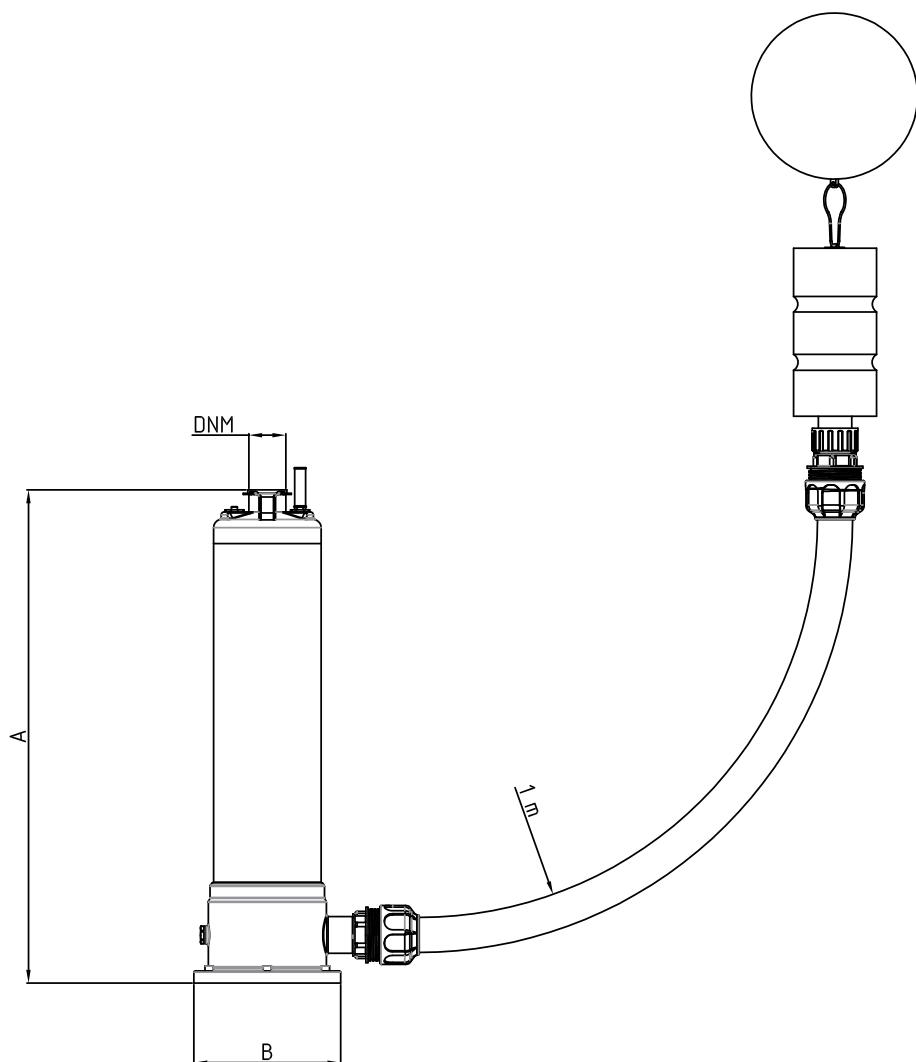


NOCCHI DOMINATOR 5 RW Pack

MULTISTAGE SUBMERSIBLE PUMP

PERFORMANCE TABLE

MODEL	Motor power (P2)		Motor power (P1)		VOLT. (V)	In (A)	μ F	Stages	Q	l/min m ³ /h	20	40	60	80	100	120	140
	HP	kW	HP	kW							1.2	2.4	3.6	4.8	6	7.2	8.4
DOMINATOR 5 140/45B M RW Pack	1.2	0.9	1.8	1.3	1 ~ 230	6	16	5			47	38	33	28	22	15	7.5
DOMINATOR 5 140/65B M RW Pack	1.6	1.2	2.2	1.7	1 ~ 230	7.7	20	7		m.c.a./m.c.w.	63	55	45	38	28	19	9



OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions (mm)				Weight (kg)
	A	\varnothing B	DNM	Free passage	
DOMINATOR 5 140/45B M RW Pack	540	176.5	1"1/4 female	2	20.4
DOMINATOR 5 140/65B M RW Pack	594	176.5	1"1/4 female	2	22

NOCCHI SCM 4 PLUS

4" MULTISTAGE CENTRIFUGAL SUBMERSED PUMPS COMPLETE WITH MOTOR

MAXIMUM RIGIDITY AND RESISTANCE TO WATER HAMMER, STRONG RESISTANCE TO THE ABRASIVE ACTION OF SAND, EXCELLENT HYDRAULIC EFFICIENCY

SCM 4 PLUS submersible pumps consist of a multi-stage pumping unit directly coupled to a submersed motor. Particularly suitable for lifting from deep wells with ø 4" (100 mm).

APPLICATIONS

- Lifting of water from boreholes.
- Automatic systems for garden irrigation.
- Irrigation for agricultural use.
- Aqueducts for drinking water.
- Lifting and supply of tanks and pressurisation autoclaves, for civil and industrial systems.

MOTOR

- Submersed 4" motor.
- Special resin impregnated sealed stator.
- Thrust bearings and bushings cooled with water.
- Extractable power cable about 1.75 m in length.
- Cooling in non-polluting water.
- Flange NEMA 4"
- Degree of protection IP 68
- Insulation class B.
- Speed of rotation 2850 rpm.
- Special mechanical seal with sand guard.

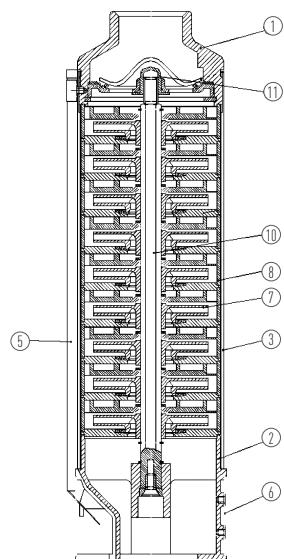


USAGE DATA

- Type of liquid: clean, non-aggressive, non-explosive, free of solid particles.
- Maximum temperature of the liquid 35°C.
- Max. start-ups per hour: 30.
- Motor protection with thermal relay provided by the user.

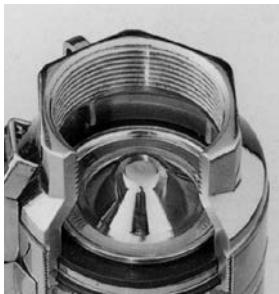
TABLE OF MATERIALS

Component		Material
1	Outlet	Stainless steel X5 CrNi1810 (AISI 304) casting
2	Intake flange	Stainless steel X5 CrNi1810 (AISI 304) casting
3	Pump body	Stainless steel X5 CrNi 1810 (AISI 304)
4	Non-return valve	Stainless steel X5 CrNi 1810 (AISI 304)
5	Cable protection conduit	Stainless steel X5 CrNi 1810 (Aisi 304)
6	Filter	Stainless steel X5 CrNi 1810 (Aisi 304)
7	Impellers	Acetal resin
8	Diffuser	Polycarbonate with ceramic insert at point of wear
9	Diffuser cap	Polycarbonate with ceramic insert at point of wear
10	Motor shaft	Hexagonal in stainless steel X10 CrNiS1809 (AISI 303) with ceramic insert at point of wear
11	Self-lubricating supply bearing	Polyamide molybdenum disulfide
-		Thrust ring in each stage



NOCCHI SCM 4 PLUS

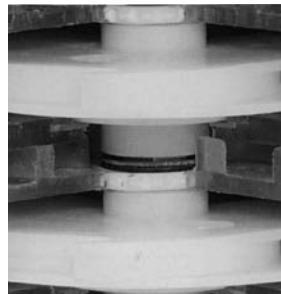
4" MULTISTAGE CENTRIFUGAL SUBMERSED PUMPS COMPLETE WITH MOTOR



Outlet made of stainless steel AISI 304 casting with a double inner conical profile with a stainless steel non-return valve and a double slot for a safety cable.

ADVANTAGES:

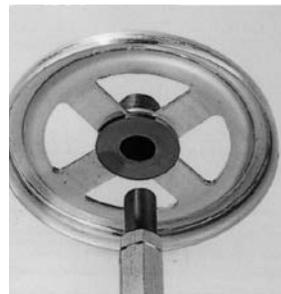
It eliminates the load losses offering maximum rigidity and great resistance to water hammers, thus protecting the pump.



Floating impeller with stainless steel inlet moulded with a diffuser cover. Thrust bearing inserted between the hub of the impeller and the diffuser consisting of 1 ceramic ring moulded with the diffuser and a free graphite ring. "International Patent"

ADVANTAGES:

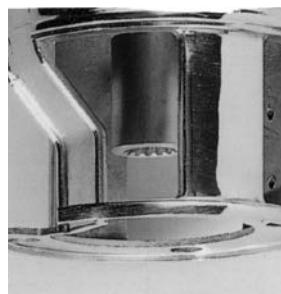
This extraordinary technological innovation determines a great increase of the yield as well as high resistance to the abrasive action of sand and to dry running.



Shaft guide bearing made with a self-lubricating closed bushing in polyamide molybdenum disulfide and shaft in stainless steel with ceramic insert at the point of wear.

ADVANTAGES:

It increases the life of the pump - protection against dry running - great resistance to sand.



Motor support and inlet made of stainless steel AISI 304 casting rigidly welded to the external sleeve made of stainless steel. Stainless steel intake grille



ADVANTAGES:

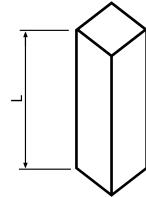
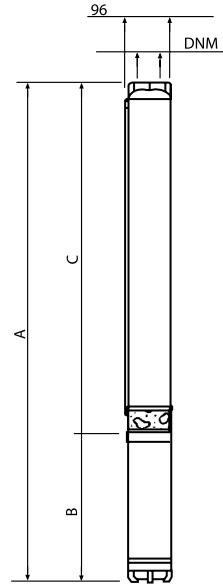
It eliminates the load losses offering maximum rigidity and great resistance to water hammers, thus protecting the pump.

NOCCHI SCM 4 PLUS

4" MULTISTAGE CENTRIFUGAL SUBMERSED PUMPS COMPLETE WITH MOTOR

TABLE TO CALCULATE THE LENGTH OF THE PUMPS

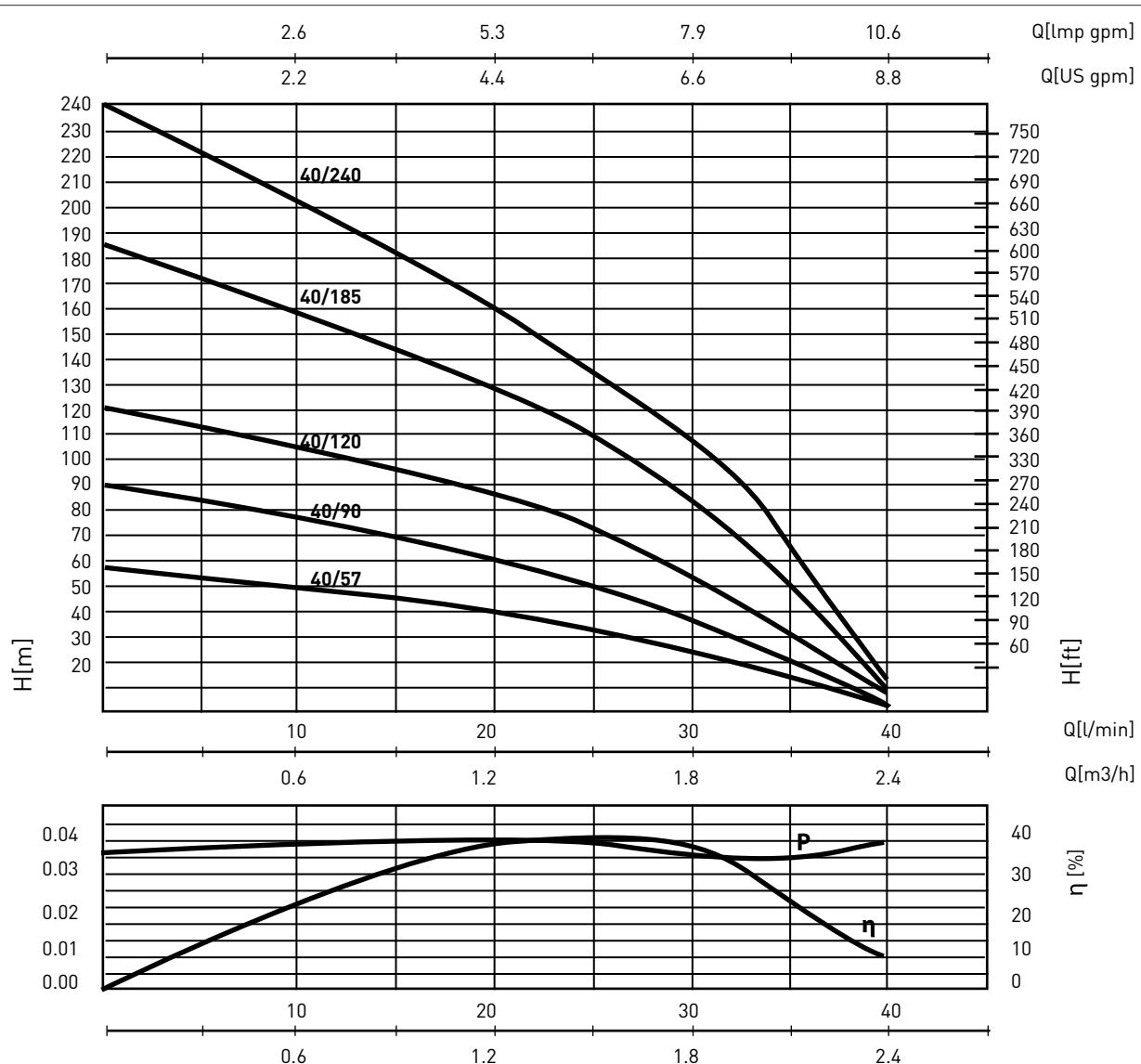
MODEL	A Total length mm	B Total length mm	C Total length mm	DNM	L Package length mm	Total weight (kg)
SCM 4 PLUS 40/57 M	584	250	334		610	11.8
SCM 4 PLUS 40/57 T	569	235	334		610	10.8
SCM 4 PLUS 40/90 M	711	265	446		800	14
SCM 4 PLUS 40/90 T	696	250	446		800	12.7
SCM 4 PLUS 40/120 M	853	295	558		960	16.1
SCM 4 PLUS 40/120 T	823	265	558		960	14.9
SCM 4 PLUS 40/185 M	1122	340	782		1330	19.2
SCM 4 PLUS 40/185 T	1077	295	782		1120	17.9
SCM 4 PLUS 40/240 M	1358	375	983		1580	22.2
SCM 4 PLUS 40/240 T	1323	340	983		1330	20.8
SCM 4 PLUS 55/50 M	517	250	267		610	11.3
SCM 4 PLUS 55/50 T	502	235	267		610	10.3
SCM 4 PLUS 55/80 M	622	265	357		800	13.1
SCM 4 PLUS 55/80 T	607	250	357		800	11.8
SCM 4 PLUS 55/105 M	696	295	401		800	14.9
SCM 4 PLUS 55/105 T	666	265	401		800	13.7
SCM 4 PLUS 55/160 M	875	340	535		960	17.3
SCM 4 PLUS 55/160 T	830	295	535		960	16
SCM 4 PLUS 55/200 M	1045	375	670		1120	19.8
SCM 4 PLUS 55/200 T	1010	340	670		1120	18.4
SCM 4 PLUS 55/300 T	1336	375	961		1580	22.3
SCM 4 PLUS 75/40 M	553	250	303	1"1/4	610	11.2
SCM 4 PLUS 75/40 T	538	235	303		610	10.2
SCM 4 PLUS 75/56 M	625	265	360		800	12.9
SCM 4 PLUS 75/56 T	610	250	360		800	11.6
SCM 4 PLUS 75/75 M	740	295	445		800	14.8
SCM 4 PLUS 75/75 T	710	265	445		800	13.6
SCM 4 PLUS 75/110 M	928	340	588		960	17.1
SCM 4 PLUS 75/110 T	883	295	588		960	15.8
SCM 4 PLUS 75/140 M	1077	375	702		1120	19.4
SCM 4 PLUS 75/140 T	1042	340	702		1120	18
SCM 4 PLUS 75/210 T	1391	375	1016		1580	21.5
SCM 4 PLUS 115/30 M	496	250	246		610	11
SCM 4 PLUS 115/30 T	481	235	246		610	10
SCM 4 PLUS 115/50 M	596	265	331		610	12.8
SCM 4 PLUS 115/50 T	581	250	331		610	11.5
SCM 4 PLUS 115/65 M	683	295	388		800	14.4
SCM 4 PLUS 115/65 T	653	265	388		800	13.2
SCM 4 PLUS 115/95 M	842	340	502		960	16.6
SCM 4 PLUS 115/95 T	797	295	502		960	15.3
SCM 4 PLUS 115/122 M	992	375	617		1120	18.8
SCM 4 PLUS 115/122 T	957	340	617		960	17.4
SCM 4 PLUS 115/185 T	1221	375	846		1330	20.8
SCM 4 PLUS 115/245 T	1582	480	1102		1870	25
SCM 4 PLUS 150/42 M	648	295	353	2"	800	14
SCM 4 PLUS 150/42 T	618	265	353		800	12.8
SCM 4 PLUS 150/64 M	803	340	463		960	16.1
SCM 4 PLUS 150/64 T	758	295	463		800	14.8
SCM 4 PLUS 150/84 M	948	375	573		960	18.3
SCM 4 PLUS 150/84 T	913	340	573		960	16.9
SCM 4 PLUS 150/120 T	1161	375	786		1330	20.1
SCM 4 PLUS 150/170 T	1523	480	1043		1580	24.2
SCM 4 PLUS 150/200 T	1781	555	1226		1870	33.1
SCM 4 PLUS 150/300 T	2378	675	1703		2590	42.3



NOCCHI SCM 4 PLUS 40

4" MULTISTAGE CENTRIFUGAL SUBMERSED PUMPS COMPLETE WITH MOTOR

HYDRAULIC PERFORMANCE



The power curve refers to the shaft power per stage. η_p % indicates the hydraulic yield of the pump

MEI > 0.4 - Reference MEI > 0.70 - The information on the reference efficiency is available at the address: www.europump.org/efficiencycharts

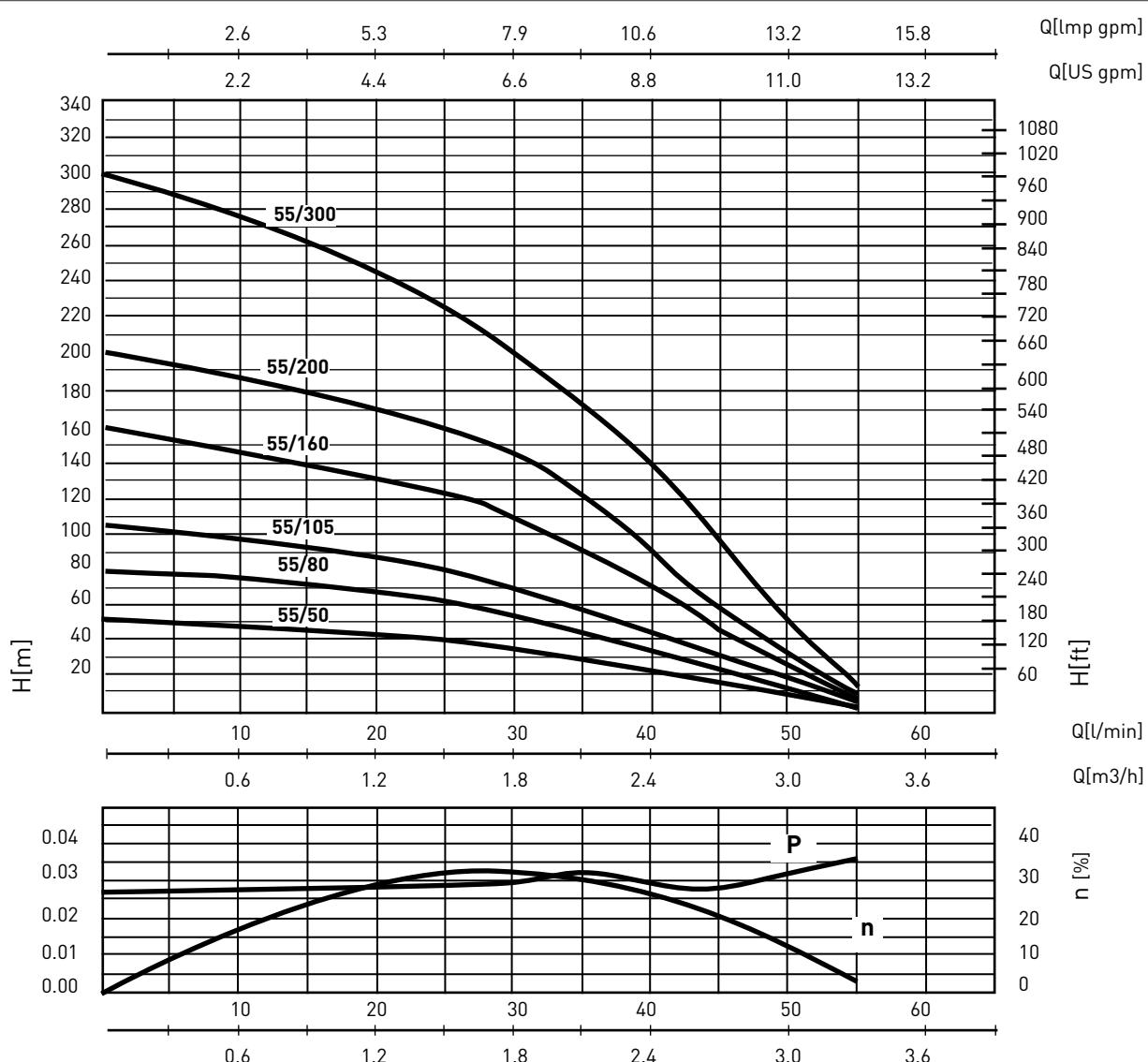
PERFORMANCE TABLE

MODEL	Nº Stages	Motor power		VOLT. (V)	In (A)	μ F	Q	l/min	10	20	30	40	\emptyset DNM
		HP	kW						0.6	1.2	1.8	2.4	
SCM 4 PLUS-40/57 M SCM 4 PLUS-40/57 T	9	0.5	0.37	1 ~ 230 3 ~ 400	3.4 1.2	16	m.c.a./m.c.w.	49	41	26	3	1"1/4	
SCM 4 PLUS-40/90 M SCM 4 PLUS-40/90 T	14	0.75	0.55	1 ~ 230 3 ~ 400	4.4 1.7	20		76	64	40	4		
SCM 4 PLUS-40/120 M SCM 4 PLUS-40/120 T	19	1	0.75	1 ~ 230 3 ~ 400	5.9 2.2	30		104	86	55	7		
SCM 4 PLUS-40/185 M SCM 4 PLUS-40/185 T	29	1.5	1.1	1 ~ 230 3 ~ 400	7.8 3	40		158	130	85	10		
SCM 4 PLUS-40/240 M SCM 4 PLUS-40/240 T	38	2	1.5	1 ~ 230 3 ~ 400	10.2 4	50		205	160	110	12		

NOCCHI SCM 4 PLUS 55

4" MULTISTAGE CENTRIFUGAL SUBMERSED PUMPS COMPLETE WITH MOTOR

HYDRAULIC PERFORMANCE



The power curve refers to the shaft power per stage. % indicates the hydraulic yield of the pump

MEI > 0.4 - Reference MEI > 0.70 - The information on the reference efficiency is available at the address: www.europump.org/efficiencycharts

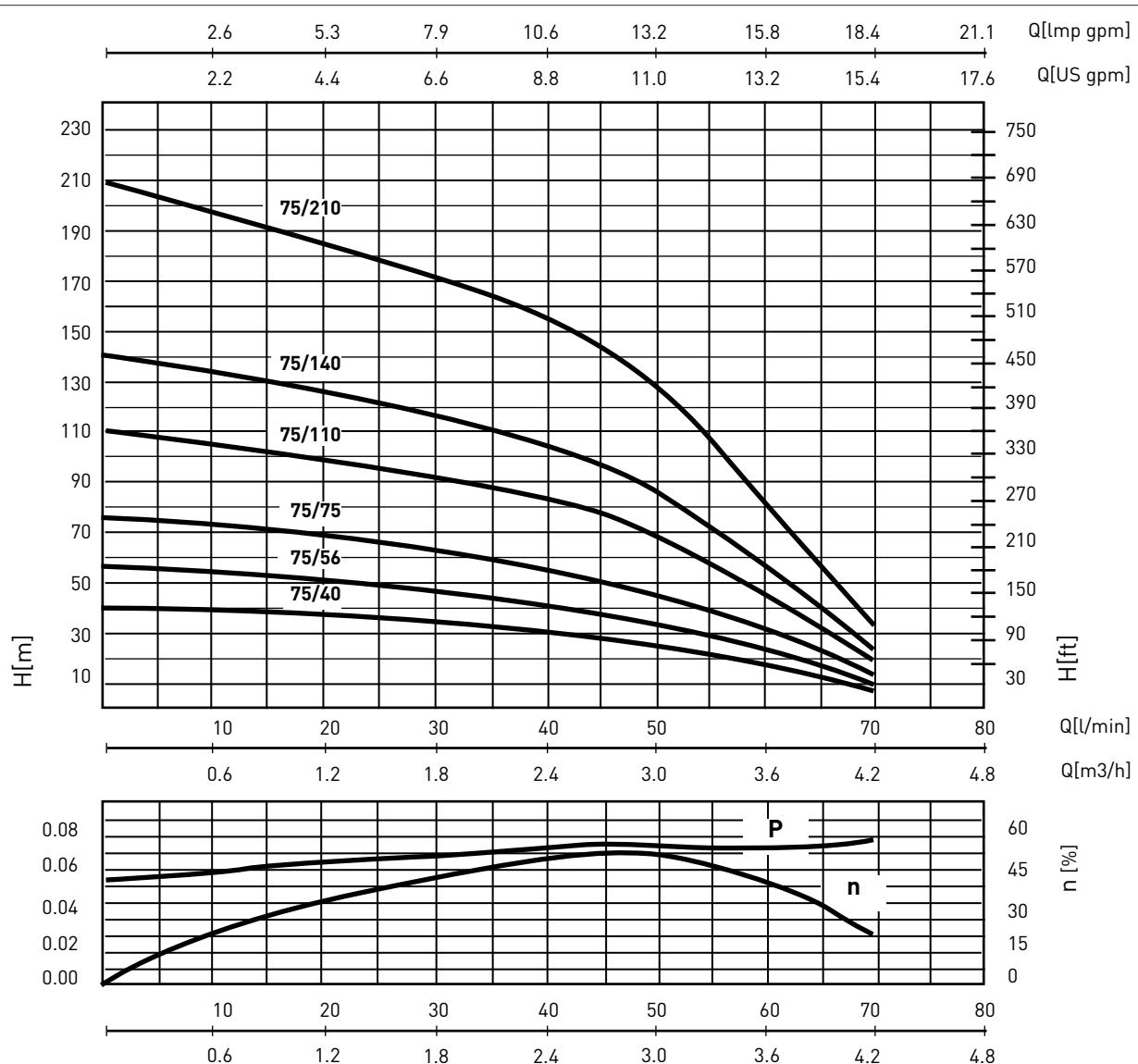
PERFORMANCE TABLE

MODEL	Nº Stages	Motor power		VOLT. (V)	In (A)	μ F.	Q	U/min	10					20					30					40					\emptyset DNM		
		HP	kW						m^3/h					m^3/h					m^3/h					m^3/h							
SCM 4 PLUS-55/50 M SCM 4 PLUS-55/50 T	6	0.5	0.37	1 ~ 230	3.4	16			47	42				36		23		8										1 1/4			
				3 ~ 400	1.2				75	66				55		35		12													
SCM 4 PLUS-55/80 M SCM 4 PLUS-55/80 T	10	0.75	0.55	1 ~ 230	4.4	20			98	87				72		46		12													
				3 ~ 400	1.7				145	132				110		70		24													
SCM 4 PLUS-55/105 M SCM 4 PLUS-55/105 T	12	1	0.75	1 ~ 230	5.9	30			187	169				145		90		30													
				3 ~ 400	2.2				278	244				200		140		50													
SCM 4 PLUS-55/160 M SCM 4 PLUS-55/160 T	18	1.5	1.1	1 ~ 230	7.8	40																									
				3 ~ 400	3																										
SCM 4 PLUS-55/200 M SCM 4 PLUS-55/200 T	24	2	1.5	1 ~ 230	10.2	50																									
				3 ~ 400	4																										
SCM 4 PLUS-55/300 T	37	3	2.2	3 ~ 400	5.6																										

NOCCHI SCM 4 PLUS 75

4" MULTISTAGE CENTRIFUGAL SUBMERSED PUMPS COMPLETE WITH MOTOR

HYDRAULIC PERFORMANCE



The power curve refers to the shaft power per stage. η_p % indicates the hydraulic yield of the pump

MEI > 0.4 - Reference MEI > 0.70 - The information on the reference efficiency is available at the address: www.europump.org/efficiencycharts

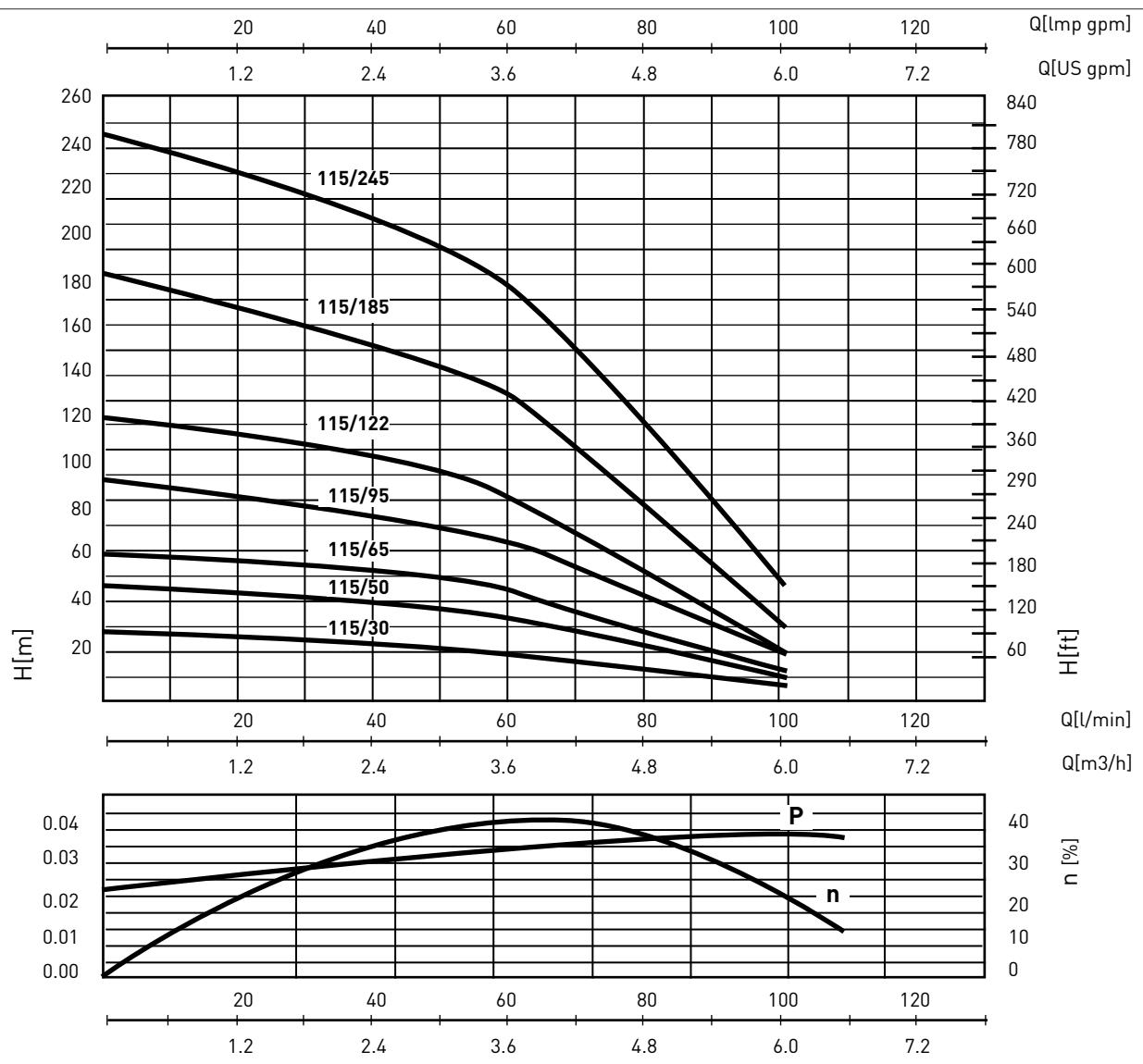
PERFORMANCE TABLE

MODEL	Nº Stages	Motor power		VOLT. (V)	In (A)	μF.	Q	l/min	20	30	40	50	60	Ø DNM	
		HP	kW						m³/h	1.2	1.8	2.4	3	3.6	
SCM 4 PLUS-75/40 M SCM 4 PLUS-75/40 T	6	0.5	0.37	1 - 230	3.4	16			36	33	28	23	15	1 1/4	
				3 - 400	1.2				50	45	40	32	21		
SCM 4 PLUS-75/56 M SCM 4 PLUS-75/56 T	8	0.75	0.55	1 - 230	4.4	20			67	62	55	45	30		
				3 - 400	1.7				100	92	82	68	44		
SCM 4 PLUS-75/75 M SCM 4 PLUS-75/75 T SCM 4 PLUS-75/75 T	11	1	0.75	1 - 230	5.9	30			127	116	105	86	57		
				3 - 400	2.2				186	170	155	130	80		
SCM 4 PLUS-75/110 M SCM 4 PLUS-75/110 T	16	1.5	1.1	1 - 230	7.8	40									
				3 - 400	3										
SCM 4 PLUS-75/140 M SCM 4 PLUS-75/140 T	20	2	1.5	1 - 230	10.2	50									
				3 - 400	4										
SCM 4 PLUS-75/210 T	30	3	2.2	3 - 400	5.6										

NOCCHI SCM 4 PLUS 115

4" MULTISTAGE CENTRIFUGAL SUBMERSED PUMPS COMPLETE WITH MOTOR

HYDRAULIC PERFORMANCE



The power curve refers to the shaft power per stage. $\eta_P\%$ indicates the hydraulic yield of the pump

MEI ≥ 0.4 - Reference MEI ≥ 0.70 - The information on the reference efficiency is available at the address: www.europump.org/efficiencycharts

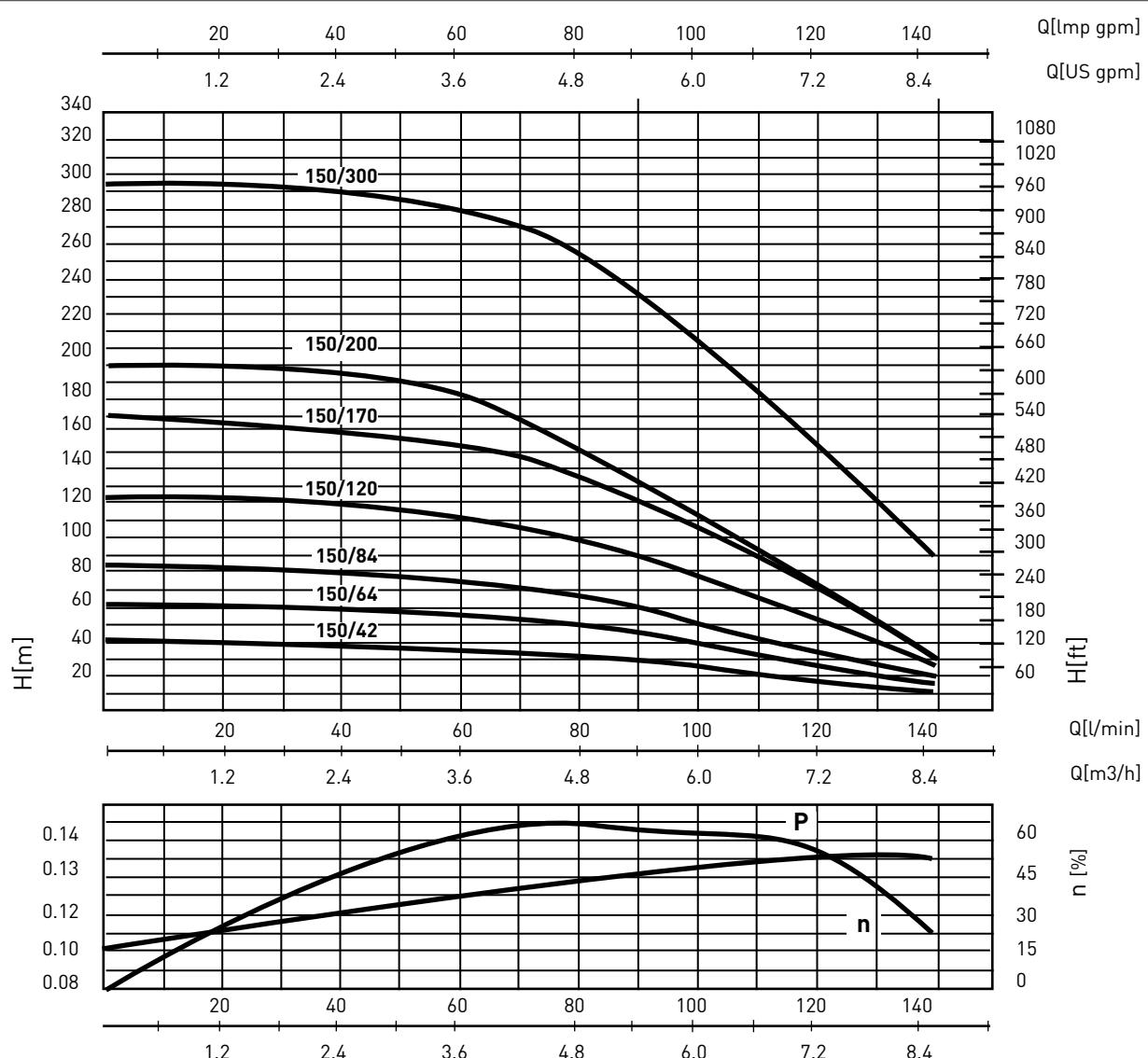
PERFORMANCE TABLE

MODEL	Nº Stages	Motor power		VOLT. (V)	In (A)	μ F.	Q	l/min	30	40	50	60	80	90	100	\emptyset DNM
		HP	kW						m^3/h	1.8	2.4	3	3.6	4.8	5.4	
SCM 4 PLUS-115/30 M	4	0.5	0.37	1 ~ 230	3.4	16			26	24	22	20	13	9	6.4	1"1/4
SCM 4 PLUS-115/30 T				3 ~ 400												
SCM 4 PLUS-115/50 M	7	0.75	0.55	1 ~ 230	4.4	20			46	43	40	36	23	16	10	
SCM 4 PLUS-115/50 T				3 ~ 400												
SCM 4 PLUS-115/65 M	9	1	0.75	1 ~ 230	5.9	30			58	55	51	46	29	20	11	
SCM 4 PLUS-115/65 T				3 ~ 400												
SCM 4 PLUS-115/65 T				3 ~ 230												
SCM 4 PLUS-115/95 M	13	1.5	1.1	1 ~ 230	7.8	40			83	80	74	67	43	30	18	
SCM 4 PLUS-115/95 T				3 ~ 400												
SCM 4 PLUS-115/95 T				3 ~ 230												
SCM 4 PLUS-115/122 M	17	2	1.5	1 ~ 230	10.2	50			109	106	98	88	55	38	21	
SCM 4 PLUS-115/122 T				3 ~ 400												
SCM 4 PLUS-115/185 T	24	3	2.2	3 ~ 400	5.6				160	153	143	130	85	58	31	
SCM 4 PLUS-115/245 T	33	4	3	3 ~ 400	7.5				218	210	198	179	118	84	47	

NOCCHI SCM 4 PLUS 150

4" MULTISTAGE CENTRIFUGAL SUBMERSED PUMPS COMPLETE WITH MOTOR

HYDRAULIC PERFORMANCE



The power curve refers to the shaft power per stage. η_p % indicates the hydraulic yield of the pump

MEI > 0.4 - Reference MEI > 0.70 - The information on the reference efficiency is available at the address: www.europump.org/efficiencycharts

PERFORMANCE TABLE

MODEL	Nº Stages	Motor power		VOLT. (V)	In (A)	μ F.	Q	l/min	40	50	60	80	100	120	140	\emptyset DNM
		HP	kW													
SCM 4 PLUS-150/42 M	6	1	0.75	1 ~ 230	5.9	30			38	37	36	33	26	17	10	2"
SCM 4 PLUS-150/42 T				3 ~ 400	2.2				59	58	57	50	39	27	15	
SCM 4 PLUS-150/42 T				3 ~ 230	3.8				80	78	75	64	50	34	20	
SCM 4 PLUS-150/64 M	9	1.5	1.1	1 ~ 230	7.8	40			116	113	108	96	77	53	26	
SCM 4 PLUS-150/64 T				3 ~ 400	3				160	157	152	134	106	69	30	
SCM 4 PLUS-150/64 T				3 ~ 230	5.2				191	188	179	152	112	71	32	
SCM 4 PLUS-150/84 M	12	2	1.5	1 ~ 230	10.2	50			292	290	285	252	210	155	82	
SCM 4 PLUS-150/84 T				3 ~ 400	4											
SCM 4 PLUS-150/84 T				3 ~ 230	6.9											
SCM 4 PLUS-150/120 T	17	3	2.2	3 ~ 400	5.6											
SCM 4 PLUS-150/170 T	24	4	3	3 ~ 400	7.5											
SCM 4 PLUS-150/200 T	29	5.5	4	3 ~ 400	10.1											
SCM 4 PLUS-150/300 T	42	7.5	5.5	3 ~ 400	13.6											

NOCCHI 4" MOTORS

ELECTRIC MOTORS Ø 4" FOR SUBMERSED PUMPS

4" SINGLE PHASE

Code	Model	V	Axial thrust N	kW	Hp	In A	I start A	RPM	CosØ	Ts/Tn	EFF %	C run µF	Weight KG	H mm	Length of cable mt
222P0590	4ESM kW0.37/Hp 0.5 1~230V 50Hz	1-230	1500	0.37	0.5	3.4	11	2850	0.91	0.65	58	16	6.8	250	1.75
222P0600	4ESM kW0.55/Hp 0.75 1~230V 50Hz	1-230	1500	0.55	0.75	4.4	16.6	2840	0.92	0.63	62	20	8.1	265	1.75
222P0610	4ESM kW0.75/Hp 1 1~230V 50Hz	1-230	1500	0.75	1	5.9	19.8	2860	0.94	0.62	65	30	10.6	295	1.75
222P0620	4ESM kW1.1/Hp 1.5 1~230V 50Hz	1-230	3000	1	1.5	7.8	29.5	2850	0.94	0.62	66	40	11.2	340	1.75
222P0630	4ESM kW1.5/Hp 2 1~230V 50Hz	1-230	3000	1.5	2	10.2	36.4	2850	0.95	0.61	68	50	14	375	1.75

4" THREE-PHASE

Code	Model	V	Axial thrust N	kW	Hp	In A	I start A	RPM	CosØ	Ts/Tn	EFF %	Weight KG	H mm	Length of cable mt
221P1190	4ESM kW0.37/Hp 0.5 3~400V 50Hz	3~400	1500	0.37	0.5	1.2	5.1	2840	0.73	2.1	63	5.8	235	1.75
221P1200	4ESM kW0.55/Hp 0.75 3~400V 50Hz	3~400	1500	0.55	0.75	1.7	6.5	2840	0.73	2	64	7	250	1.75
221P1210	4ESM kW0.75/Hp 1 3~230V 50Hz	3~230	1500	0.75	1	3.8	15.9	2840	0.75	1.9	67	8.3	265	1.75
221P1220	4ESM kW0.75/Hp 1 3~400V 50Hz	3~400	1500	0.75	1	2.2	9.2	2840	0.75	1.9	67	8.3	265	1.75
221P1230	4ESM kW1.1/Hp 1.5 3~230V 50Hz	3~230	1500	1.1	1.5	5.2	24.6	2840	0.76	2.3	71	10.9	295	1.75
221P1240	4ESM kW1.1/Hp 1.5 3~400V 50Hz	3~400	3000	1.1	1.5	3	14.2	2840	0.76	2.3	71	10.9	295	1.75
221P1360	4ESM kW1.5/Hp 2 3~230V 50Hz	3~230	3000	1.5	2	6.9	32	2830	0.78	2.1	72	11.4	340	1.75
221P1250	4ESM kW1.5/Hp 2 3~400V 50Hz	3~400	3000	1.5	2	4	18.5	2830	0.78	2.1	72	11.4	340	1.75
221P1260	4ESM kW2.2/Hp 3 3~400V 50Hz	3~400	3000	2.2	3	5.6	26.5	2830	0.79	2.4	74	14.2	375	2.5
221P1270	4ESM kW3/Hp 4 3~400V 50Hz	3~400	6500	3	4	7.5	34.3	2830	0.79	2.2	76	18.3	480	2.5
221P1280	4ESM kW4/Hp 5.5 3~400V 50Hz	3~400	6500	4	5.5	10.1	44	2840	0.77	2.3	75	23.4	555	2.5
221P1290	4ESM kW5.5/Hp 7.5 3~400V 50Hz	3~400	6500	5.5	7.5	13.6	62	2840	0.8	2.2	76	29.4	675	4

NOCCHI 4" MOTORS

CHOOSING THE ELECTRIC CABLE FOR SUBMERSED PUMPS



Motor 4ESM	HP	kW	CABLE SECTION (mm ²)					
			4X1	4X1.5	4X2.5	4X4	4X6	4X10
SINGLE PHASE 230V/50Hz	0.5	0.37	50	75	125			
	0.75	0.55	38	57	65	152		
	1	0.75	30	45	75	120	174	
	1.5	1.1	22	33	53	85	127	210
	2	1.5		23	38	63	92	154
	3	2.2			28	45	67	112
THREE-PHASE 400V/50Hz	0.5	0.37	240					
	0.75	0.55	164	246				
	1	0.75	133	200	333			
	1.5	1.1	97	146	244	390		
	2	1.5	72	109	180	290	435	
	3	2.2	51	78	130	207	310	516
	4	3	41	62	104	167	250	416
	5.5	4	31	46	77	124	186	310
	7.5	5.5		33	56	90	135	225
THREE-PHASE 230V/50Hz	0.5	0.37	90	135				
	0.75	0.55	60	90	150	240		
	1	0.75	47	71	118	190		
	1.5	1.1	35	52	87	140	210	
	2	1.5	26	40	66	106	160	266
	3	2.2		29	48	76	115	191
	4	3			37	60	90	150
	5.5	4			27	44	66	110
	7.5	5.5				32	48	80

CABLES AND FITTINGS

	ZA000420 ZA000430 ZA000440 ZA000450 ZA000460 ZA000470	CABLE 4X1 CABLE 4X1.5 CABLE 4X2.5 CABLE 4X4 CABLE 4X6 CABLE 4X10	NEOPRENE CABLE H07 RNF 4 1 SQ.MM WIRES NEOPRENE CABLE H07 RNF 4 1.5 SQ.MM WIRES NEOPRENE CABLE H07 RNF 4 2.5 SQ.MM WIRES NEOPRENE CABLE H07 RNF 4 4 SQ.MM WIRES NEOPRENE CABLE H07 RNF 4 6 SQ.MM WIRES NEOPRENE CABLE H07 RNF 4 10 SQ.MM WIRES
	ZA003370 ZA003390 ZA003380 ZA009410 ZA009430 ZA009450	JOINT KIT 2.5 JOINT KIT 6 JOINT KIT 10 JOINT 2.5 JOINT 6 JOINT 10	KIT FOR HEAT SHRINK JOINTS FOR CABLES UP TO 4 X 2.5 KIT FOR HEAT SHRINK JOINTS FOR CABLES UP TO 4 X 6 KIT FOR CASTING RESIN JOINTS FOR CABLES UP TO 4X10 HEAT SHRINK JOINT 1 - 2.5 sq.mm HEAT SHRINK JOINT 4 - 6 sq.mm CASTING RESIN JOINT UP TO 4 X 10 sq.mm



SECTION 4

PUMPS FOR DRAINAGE AND SEWAGE

**DP**

SUBMERSIBLE PUMP FOR THE DRAINAGE OF CLEAR WATER

PAGE 192**PRIOX**

STAINLESS STEEL SUBMERSIBLE PUMPS FOR WASTEWATER

PAGE 205**DPC**

SUBMERSIBLE PUMP FOR THE DRAINAGE OF CLEAR WATER

PAGE 194**MINIVORT P**

CAST IRON SUBMERSIBLE PUMPS FOR WASTEWATER 2-4 POLES

PAGE 210**DRENOX**

STAINLESS STEEL SUBMERSIBLE PUMPS FOR THE DRAINAGE OF CLEAR WATER

PAGE 196**MINIVORT PP**

CAST IRON SUBMERSIBLE PUMPS FOR WASTEWATER

PAGE 212**DPV**

SUBMERSIBLE PUMP FOR THE DRAINAGE OF DIRTY WATER

PAGE 199**VACUSYSTEM**

LIFTING STATIONS FOR WASTEWATER

PAGE 214**OMNIA**

STAINLESS STEEL SUBMERSIBLE PUMPS FOR THE DRAINAGE OF CLEAR WATER

PAGE 201**VERSAILLES**

SUBMERSIBLE PUMPS FOR FOUNTAINS AND WATER GAMES

PAGE 220**BIOX XS**

SUBMERSIBLE PUMP FOR DIRTY WATER

PAGE 203

ACCESSORIES

PAGE 397

NOCCHI DP

SUBMERSIBLE PUMP FOR THE DRAINAGE OF CLEAR WATER

COMPACT AND EASY TO HANDLE, EASILY TRANSPORTABLE FOR EMERGENCY USE

The submersible pumps of the DP series for clear water are designed for domestic use such as the drainage of infiltrated water, the collection of water from wells, basins or tanks. Hose connection supplied Ø 25-32. Automatic version (aut) equipped with float switch.

USAGE DATA

- Maximum temperature of the liquid 40°C
- Maximum immersion under the water level: 7 m
- Minimum drying level: 10 mm
- Free passage of solids: 6 mm

MOTOR

- Single phase asynchronous electric motor with capacitor always on and incorporated heat protection
- Degree of protection IP 68
- Insulation class F
- Cable connection chamber completely insulated
- Speed of rotation 2850 rpm

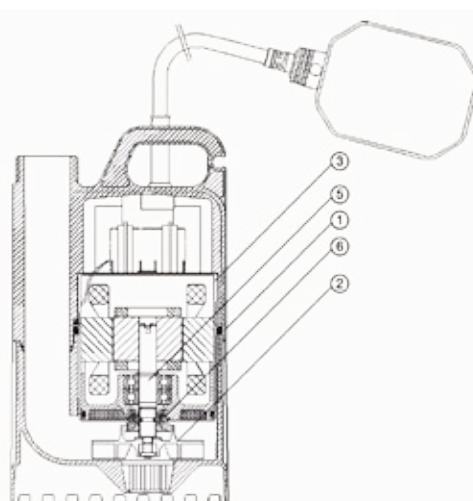


APPLICATIONS

- Drainage of infiltrated water, lifting of rainwater from grille or well
- Emptying of rooms, tanks and wells

TABLE OF MATERIALS

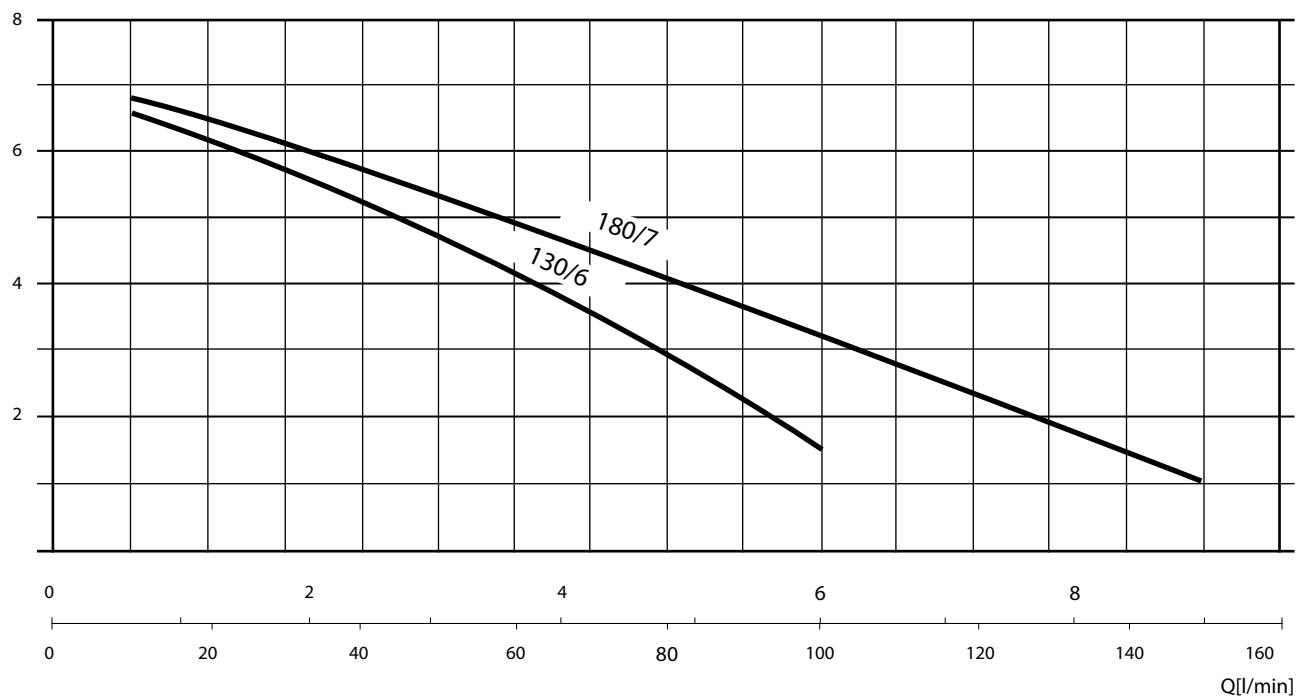
Component		Material
1	Pump body	Technopolymer
2	Impeller	Technopolymer
3	Motor body	Stainless steel X 8 CrNi 18-10 (AISI 304)
4	Supply cable	10 m H05 RN-F with plug
5	Motor shaft	Stainless steel X 12 CrS 13 (AISI 416) with ceramic insert at the points of wear of the seal
6	Seal	Double fixed seal in rubber NBR70 lubricated in oil chamber



NOCCHI DP

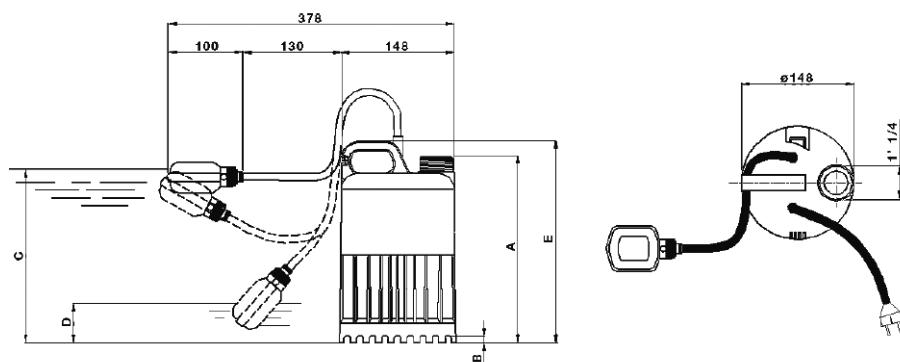
SUBMERSIBLE PUMP FOR THE DRAINAGE OF CLEAR WATER

HYDRAULIC PERFORMANCE



PERFORMANCE TABLE

MODEL	Motor power (P2)		VOLT. (V)	I _n (A)	μ F	Q	l/min	0	25	50	100	150
	HP	kW										
DP 130/6 DP 130/6 AUT.	0.4	0.3	1 - 230	1.4	6.3	m.c.a. m.c.w.	7	6	4.5	1.7		
DP 180/7 AUT.	0.5	0.37										



OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions mm.					WEIGHTS (Kg)
	A	B	C	D	E	
DP 130/6 AUT.	236	10	330	150	256	3.9
DP 180/7 AUT.	236	10	330	150	256	4.2

NOCCHI DPC

SUBMERSIBLE PUMP FOR THE DRAINAGE OF CLEAR WATER

COMPACT SIZE, INTEGRATED FLOAT, MANUAL-AUTOMATIC SWITCH, MINIMUM DRYING LEVEL 3 MM

The submersible pumps of the DPC series for clear water are designed for domestic use such as the drainage of infiltrated water, the collection of water from wells, basins or tanks. Swing non-return valve and hose connector adaptable for 3/4 or Ø 25-32 pipes included.

MOTOR

- Single phase asynchronous electric motor with capacitor always on and incorporated heat protection
- Degree of protection IP 68
- Insulation class F
- Cable connection chamber completely insulated
- Speed of rotation 2850 rpm

USAGE DATA

- Maximum temperature of the liquid 40°C
- Maximum immersion under the water level: 7 m
- Minimum drying level: 3 mm
- Free passage of solids: 5 mm

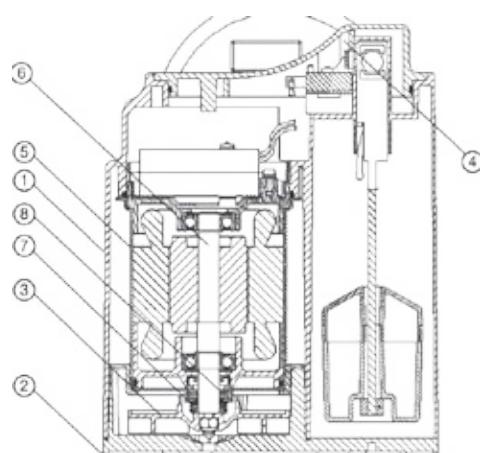


APPLICATIONS

- Drainage of infiltrated water, lifting of rainwater from grille or well
- Emptying of rooms, tanks and wells

TABLE OF MATERIALS

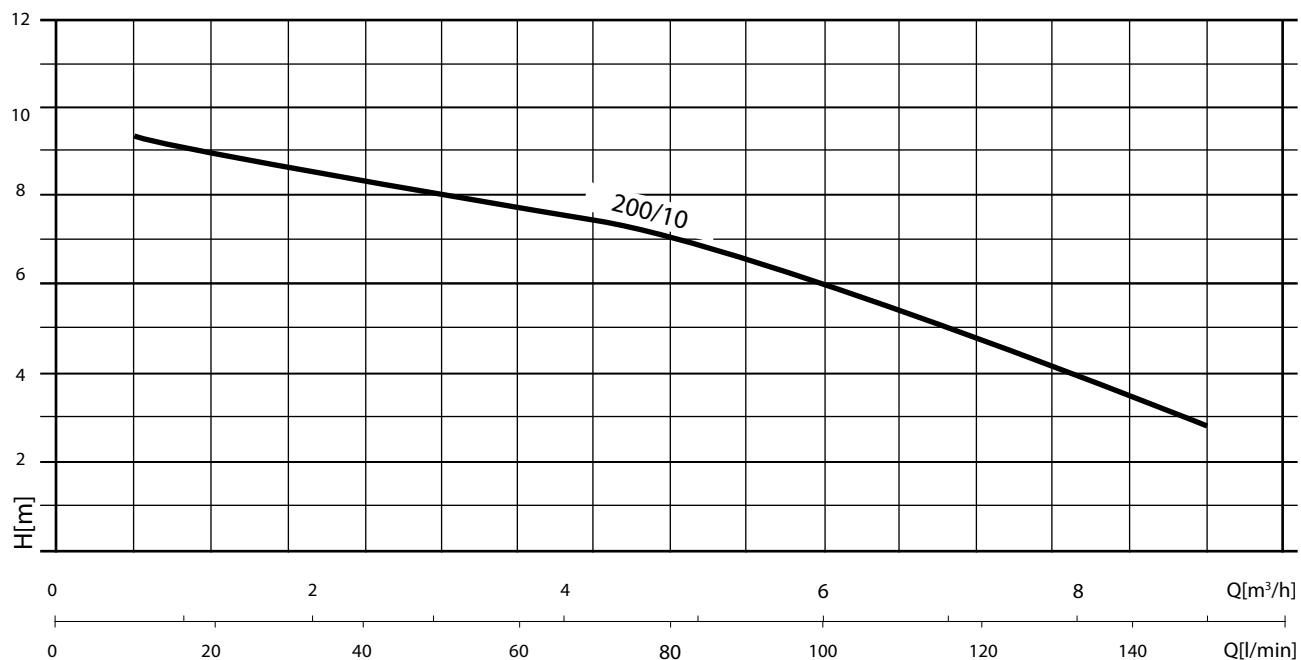
	Component	Material
1	Pump body	Technopolymer
2	Air inlet base	Technopolymer
3	Impeller	Technopolymer
4	Motor body	Stainless steel X 8 CrNi 18-10 (AISI 304)
5	Supply cable	10 m H05 RN-F with schuko plug
6	Motor shaft	Stainless steel X 8 CrNi 18-9 (AISI 303)
7	Mechanical seal	Graphite
8	Counterface	Ceramic
9	Secondary seal	Rubber NBR



NOCCHI DPC

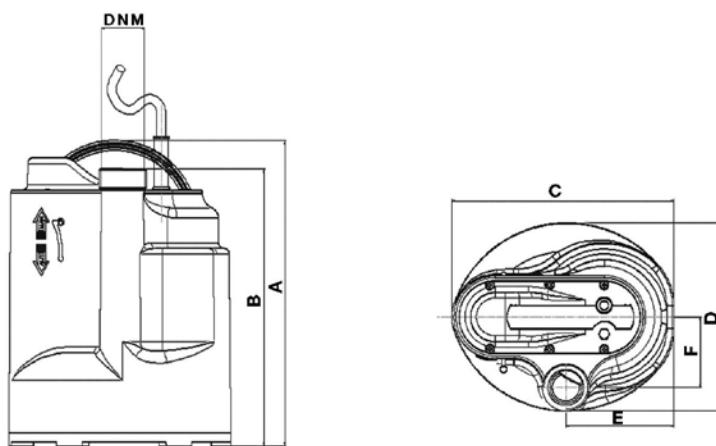
SUBMERSIBLE PUMP FOR THE DRAINAGE OF CLEAR WATER

HYDRAULIC PERFORMANCE



PERFORMANCE TABLE

MODEL	P1		VOLT. (V)	I _n (A)	μF	Q l/min	0 m ³ /h	25 m.c.a.	50 m.c.w.	100 0	150 6
	HP	kW									
DPC 200/10	0.87	0.65	1 ~ 230	2.9	8			10	8	6	4.6



OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions mm.							WEIGHTS (Kg)
	A	B	C	D	E	F	DNM	
DPC 200/10	273	148	200	170	97	63	1" 1/4	5.6

NOCCHI DRENOX

SUBMERSIBLE PUMP FOR THE DRAINAGE OF CLEAR WATER

The DRENOX series pumps are made completely with stainless steel AISI 304. The motor is cooled by means of a heat exchange chamber that allows the machine to operate for long periods not completely submerged. Elbow fitting hose Ø 32 mm supplied. Automatic version (aut) equipped with float switch.

MOTOR

- Dry motor with body in stainless steel.
- Degree of protection IP 68
- Insulation class F
- Single-phase power supply with capacitor permanently on and thermal protection built into the motor casing.
- Three-phase power supply with external protection provided by the user.
- Cable connection chamber completely insulated.
- Self-lubricating ball bearings.
- Speed of rotation 2850 rpm.

APPLICATIONS

- Drainage of infiltrated water, lifting of rainwater from grilles or wells, lifting of household wastewater, emptying of rooms, tanks and pools, industrial applications.
- Fountains and water games.
- Irrigation.

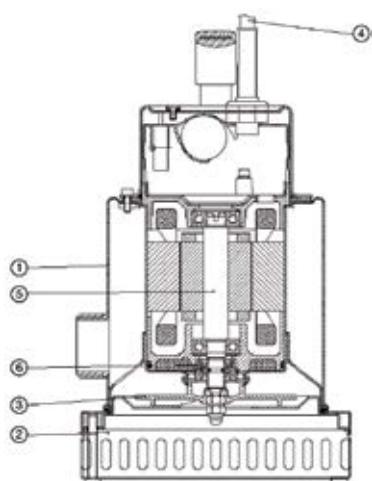


USAGE DATA

- Type of liquid: clear water partially dirty, non-aggressive liquids.
- Maximum temperature of the liquid 40°C.
- Maximum immersion under the water level 7 m.
- Minimum drying level 3 mm for model 80/7, 35 mm for the other models (in manual version)
- Free passage of solids 3 mm for model 80/7, 6 mm for the other models.

TABLE OF MATERIALS

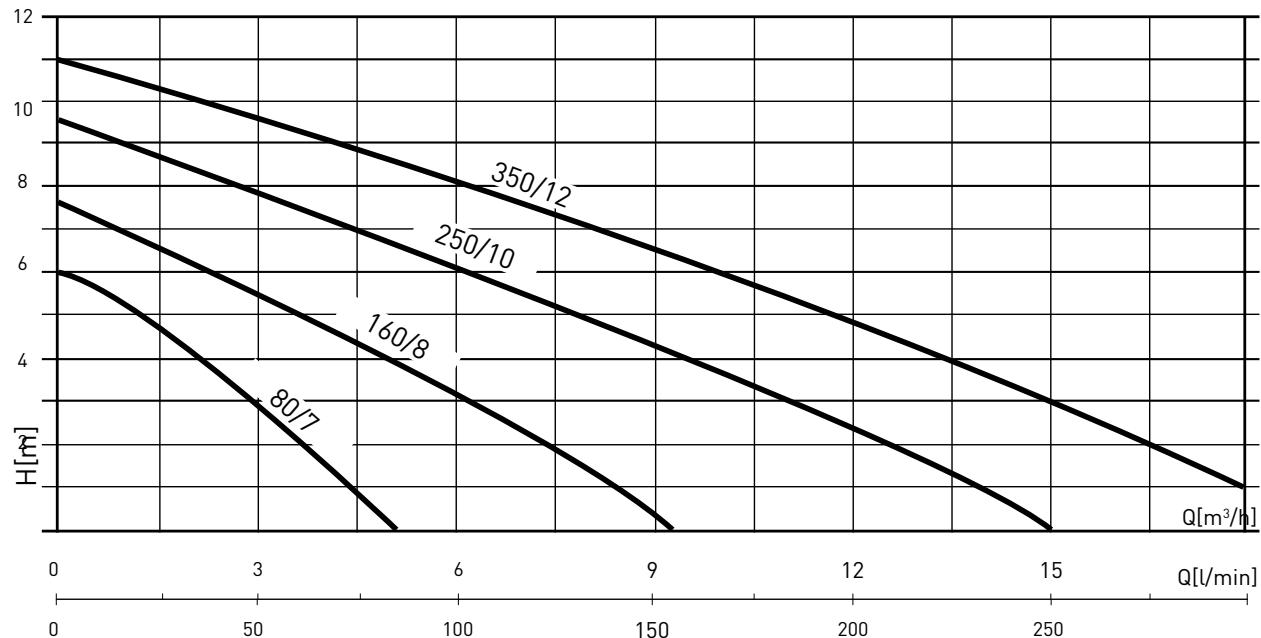
Component		Material
1	Pump body	Stainless steel X5 CrNi 1810 (AISI 304)
2	Air inlet grille	Stainless steel X5 CrNi 1810 (AISI 304)
3	Impeller	Stainless steel X5 CrNi 1810 (AISI 304) casting
4	Motor body	Stainless steel X 8 CrNi 18-10 (AISI 304)
5	Supply cable	10 m H07 RN-F with plug
6	Motor shaft	Stainless steel with ceramic inserts at the points of wear of the seal
7	Mechanical seal	Double fixed seal in rubber NBR70 with special sand guard V-ring. Lubricated in oil chamber



NOCCHI DRENOX

SUBMERSIBLE PUMP FOR THE DRAINAGE OF CLEAR WATER

HYDRAULIC PERFORMANCE



PERFORMANCE TABLE

MODEL	Motor power (P2)		Motor power (P1)		VOLT. (V)	In (A)	μ F	Q	l/min	10	40	60	80	120	160	240	300
	HP	kW	HP	kW						m ³ /h	0.6	2.4	3.6	4.8	7.2	9.6	14.4
DRENOX 80/7 DRENOX 80/7 AUT	0.3	0.2	0.4	0.3	1 ~ 230	1.3	6.3	m.c.a./m.c.w	5.4	3.3	1.8						
DRENOX 160/8 DRENOX 160/8 AUT	0.55	0.40	0.75	0.55		2.4	8		7	5.8	5	4.1	2.2				
DRENOX 250/10 DRENOX 250/10 AUT	0.75	0.55	1.2	0.9		4.5	10		9.4	8.5	7.6	7.2	5.1	4.0	1		
DRENOX 350/12 DRENOX 350/12 AUT	1.1	0.8	1.6	1.2		5.1	16		10.5	10	9.5	9	7.7	6.5	3.4	1	
DRENOX 350/12 T	1.1	0.8	1.6	1.2		2			10.5	10	9.5	9	7.7	6.5	3.4	1	

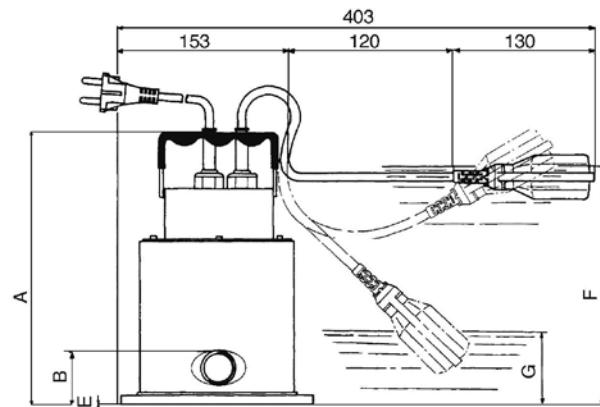
Automatic version equipped with float switch.

NOCCHI DRENOX

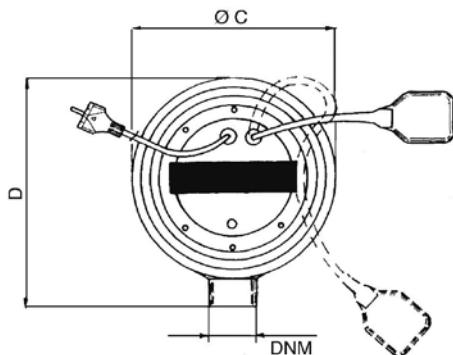
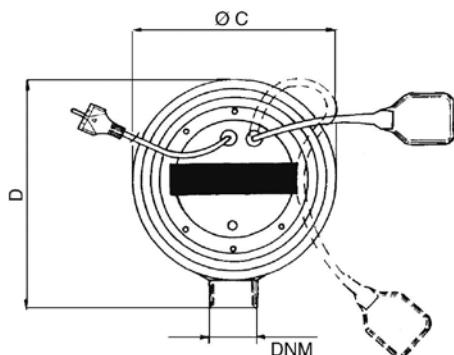
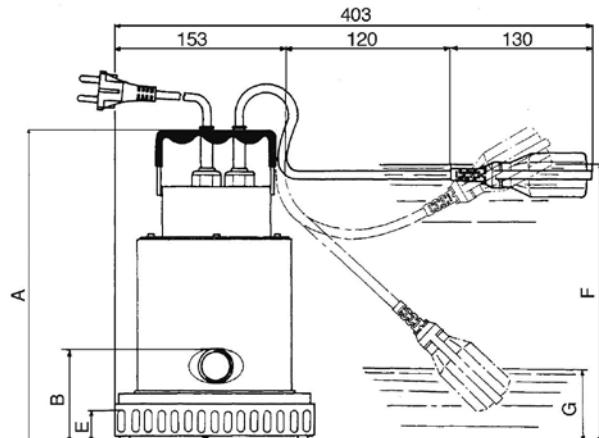
SUBMERSIBLE PUMP FOR THE DRAINAGE OF CLEAR WATER

HYDRAULIC PERFORMANCE

DRENOX 80/7



DRENOX 160/8 - 250/10 - 350/12



OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions mm.									WEIGHTS (Kg)
	A	B	C	D	Minimum drying level E*	Start F	Stop G	Free passage	DNM	
DRENOX 80/7	231	61	177	182	3	250	100	03	1" 1/4	5.7

* The connection and disconnection levels refer to the version with float switch - The minimum drying level refers to manual operation.

OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions mm.									WEIGHTS (Kg)
	A	B	C	D	Minimum drying level E*	Start F	Stop G	Free passage	DNM	
DRENOX 160/8	300	94	177	182	35	320	107	06	1" 1/4	6.5
DRENOX 250/10	338	94	177	182	35	351	111	06	1" 1/4	7
DRENOX 350/12	338	94	177	182	35	351	111	06	1" 1/4	8.5

* The connection and disconnection levels refer to the version with float switch. - The minimum drying level refers to manual operation.

NOCCHI DPV

SUBMERSIBLE PUMP FOR THE DRAINAGE OF DIRTY WATER

COMPACT AND EASY TO HANDLE, EASILY TRANSPORTABLE FOR EMERGENCY USE

The submersible pump DPV for dirty water is designed for domestic use; it can be used to handle water containing impurities up to 25 mm in diameter for the emptying of collection pits containing sewage. Hose connection supplied Ø 32.

Automatic version (aut) equipped with float switch.

MOTOR

- Single phase asynchronous electric motor with capacitor always on and incorporated heat protection
- Degree of protection IP 68
- Insulation class F
- Cable connection chamber completely insulated
- Speed of rotation 2850 rpm.

USAGE DATA

- Type of liquid: dirty water with suspended solids
- Maximum temperature of the liquid 40°C.
- Maximum immersion under the water level 7 m.
- Minimum drying level 35 mm
- Free passage of solids 25 mm

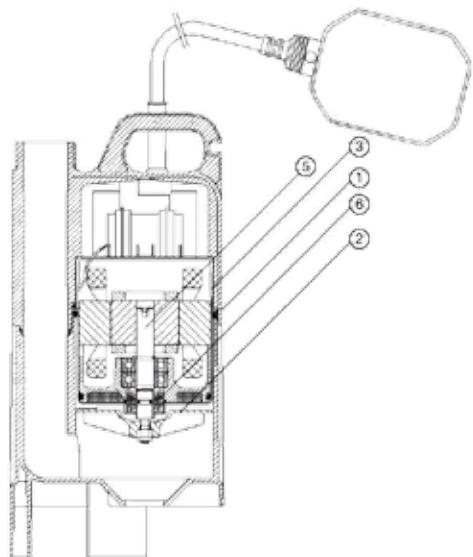


APPLICATIONS

- Drainage of dirty water of domestic use
- Emptying of rooms, tanks and wells

TABLE OF MATERIALS

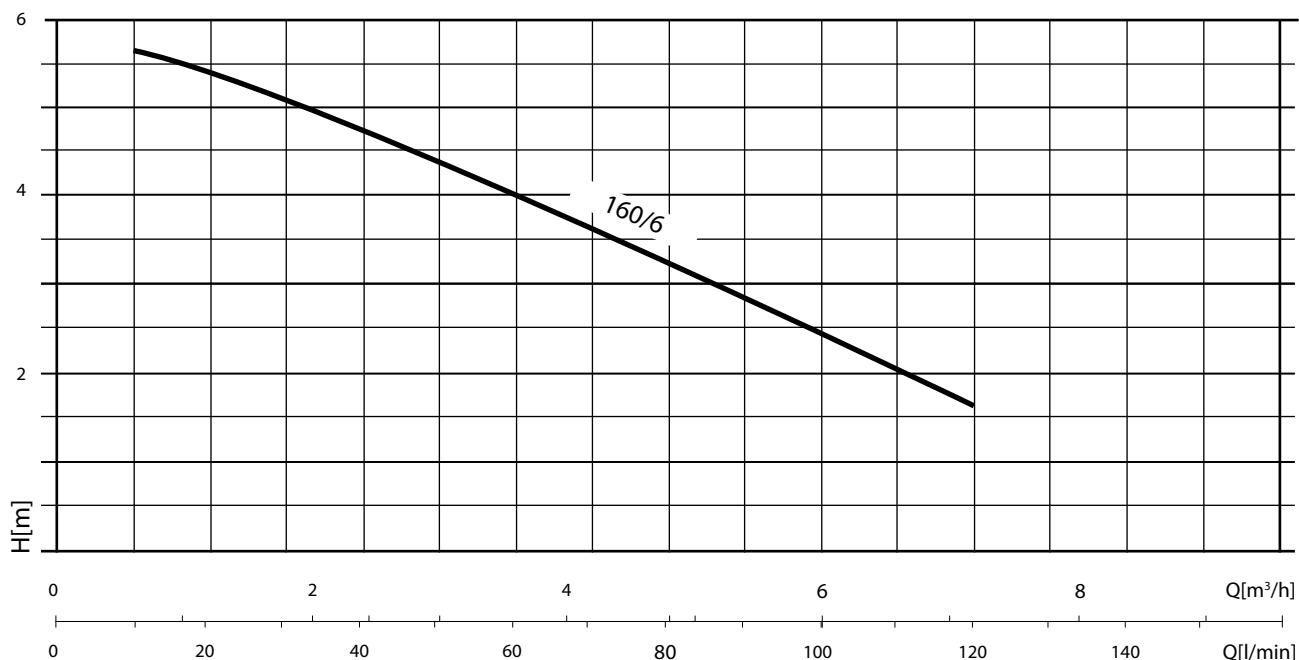
Component		Material
1	Pump body	Technopolymer
2	Impeller	Technopolymer
3	Motor body	Stainless steel X 8 CrNi 18-10 (AISI 304)
4	Supply cable	10 m H05 RN-F with plug
5	Motor shaft	Stainless steel X 12 CrS 13 (AISI 416) with ceramic insert at the points of wear of the seal
6	Seal	Double fixed seal in rubber NBR70 lubricated in oil chamber



NOCCHI DPV

SUBMERSIBLE PUMP FOR THE DRAINAGE OF DIRTY WATER

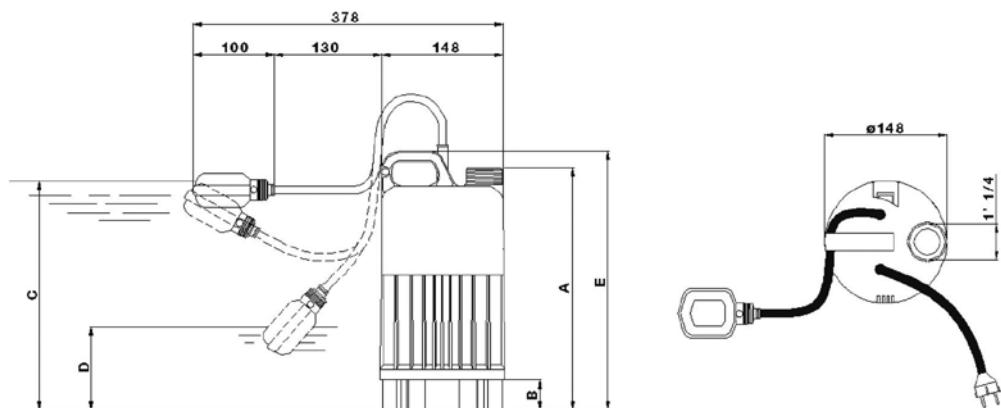
HYDRAULIC PERFORMANCE



PERFORMANCE TABLE

MODEL	P1		VOLT. (V)	I _n (A)	μF	Q	l/mn m ³ /h	0 m.c.a. m.c.w.	20	60	80	100
	HP	kW										
DPV 160/6 M DPV 160/6 AUT.*	0.56	0.41	1 ~ 230	1.9	10			6.5	5.4	4.2	3.3	2.4

* Automatic version equipped with float switch.



OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions mm.					WEIGHTS (Kg)
	A	B	C	D	E	
DPV 160/6 AUT	284	35	330	15	304	4.2

* The connection and disconnection levels refer to the version with float switch.
The minimum drying level refers to manual operation.

NOCCHI OMNIA

SUBMERSIBLE PUMPS FOR DIRTY WATER

The OMNIA series pumps are made completely with stainless steel AISI 304. The motor is cooled by means of a heat exchange chamber that allows the machine to operate for long periods not completely submerged. Hose connection Ø 32 mm supplied. Automatic version (aut) equipped with float switch.

MOTOR

- Dry motor with body in stainless steel.
- Degree of protection IP 68
- Insulation class F
- Single-phase power supply with capacitor always on.
- Thermal protection built into the motor casing.
- Cable connection chamber completely insulated.
- Self-lubricating ball bearings.
- Speed of rotation 2850 rpm.

APPLICATIONS

- Lifting of dirty water of domestic use, emptying of rooms, tanks and pools, industrial applications.
- Fountains and water games.
- Irrigation.

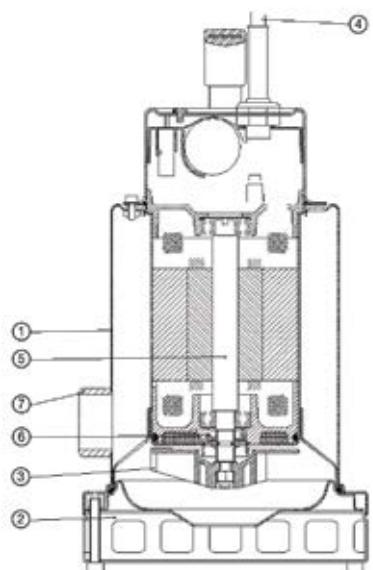
USAGE DATA

- Type of liquid: discharge water with solids.
- Maximum temperature of the liquid 40°C.
- Maximum immersion under the water level 7m.
- Minimum drying level 35 mm (in manual version).
- Free passage of solids 20 mm.



TABLE OF MATERIALS

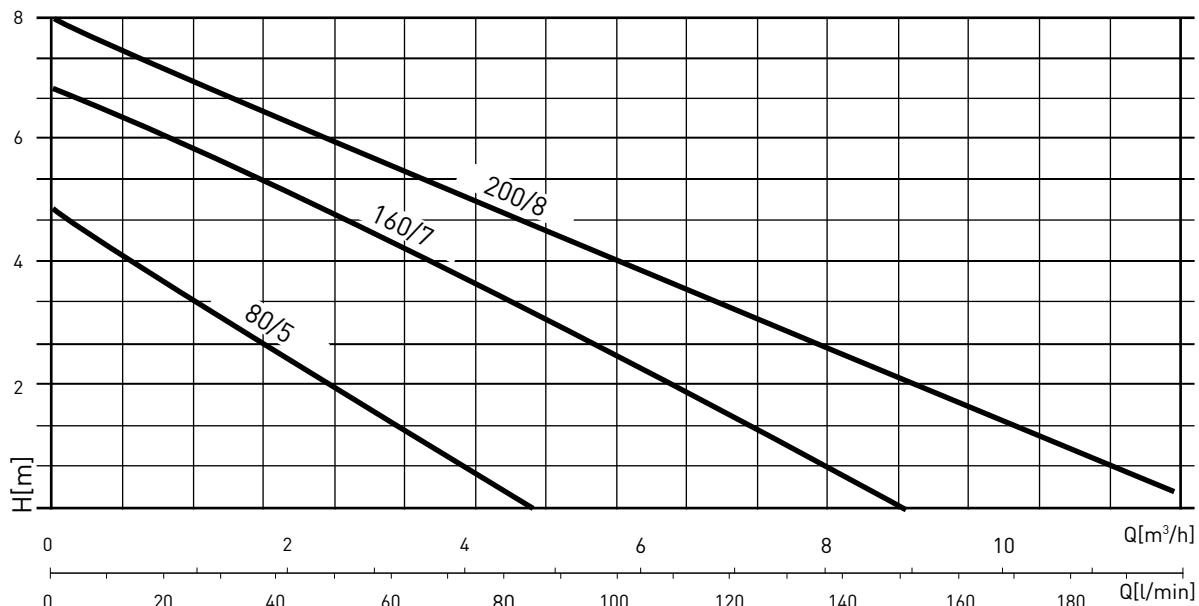
Component		Material
1	Pump body	Stainless steel X5 CrNi 1810 (AISI 304)
2	Impeller	Stainless steel X5 CrNi 1810 (AISI 304)
3	Motor body	Stainless steel X5 CrNi 1810 (AISI 304)
4	Supply cable	10 m H07 RN-F with plug
5	Motor shaft	Stainless steel X 12 CrNiS 1809 (AISI 416)
6	Seal	Double fixed seal in rubber NBR70 lubricated in oil chamber
7	Outlet	Male thread 1" 1/4 gas



NOCCHI OMNIA

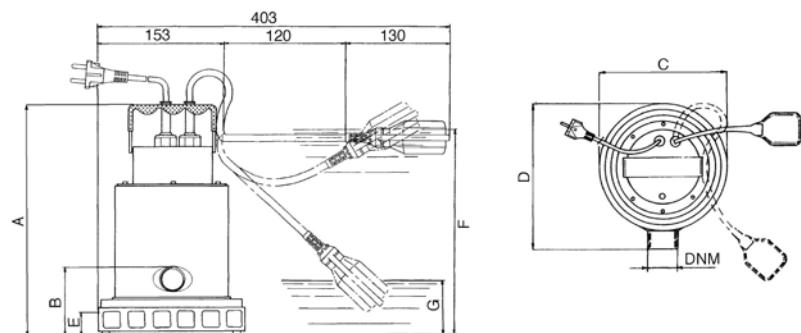
SUBMERSIBLE PUMPS FOR DIRTY WATER

HYDRAULIC PERFORMANCE



PERFORMANCE TABLE

MODEL	Motor power (P2)		Motor power (P1)		VOLT. (V)	In (A)	μF	Q l/min	l/min	10	40	70	100	140	200
	HP	kW	HP	kW						0.6	2.4	4.2	6	8.4	12
OMNIA 80/5 OMNIA 80/5 AUT	0.3	0.2	0.4	0.3	1 ~ 230	1.4	8	m.c.a./m.c.w.	4.1	2.7	1				
OMNIA 160/7 OMNIA 160/7 AUT	0.5	0.37	0.7	0.5	1 ~ 230	2.5	8			7	5.5	4	2.8	1	
OMNIA 200/8 OMNIA 200/8 AUT	0.7	0.5	1	0.75	1 ~ 230	3.2	8		7.8	6.3	5.4	4.1	2.7	0.5	



OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions mm.									WEIGHTS (Kg)
	A	B	C	D	Minimum drying level E*	Start F	Stop G	Free passage	DNM	
OMNIA 80/5	264	94	177	182	35	250	100	020	1" 1/4	6.1
OMNIA 160/7	300	94	177	182	35	320	107	020	1" 1/4	7
OMNIA 200/8	338	94	177	182	35	351	111	020	1" 1/4	8.5

** The connection and disconnection levels refer to the version with float switch. - The minimum drying level refers to manual operation.

NOCCHI BIOX XS

SUBMERSIBLE VORTEX SEWAGE PUMPS

MECHANICAL SEAL IN SILICON CARBIDE / SILICON CARBIDE

The BIOX XS series pumps are made completely with stainless steel AISI 304. They operate completely immersed in the liquid to be pumped which provides for the cooling of the motor from the outside. Made with a retreaded impeller on the principle of vortex operation. Automatic version equipped with float switch.

MOTOR

- Dry running.
- Degree of protection IP 68
- Insulation class F
- Single-phase power supply with capacitor permanently on and thermal protection built into the motor casing.
- Cable connection chamber completely insulated.
- Self-lubricating ball bearings.
- Speed of rotation 2850 rpm.

APPLICATIONS

- All lifting and emptying operations of dirty water with suspended solids.
- Lifting stations with one or more pumps for agricultural and civil use.
- Suitable for the emptying of infiltrated water
- Handling of dirty discharge water (toilets), emptying of wells and discharge in sewers.

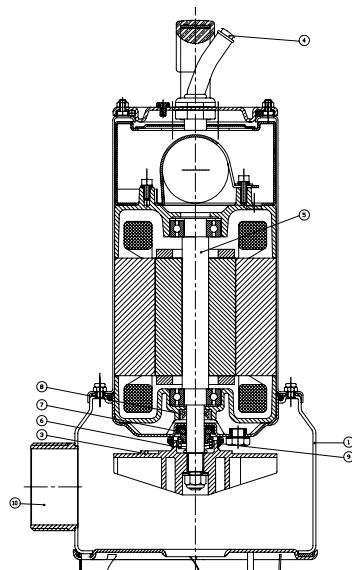
USAGE DATA

- Type of liquid: discharge water with solids.
- Maximum temperature of the liquid 40°C.
- Maximum immersion under the water level 7 m.
- Free passage of solids: 40 mm



TABLE OF MATERIALS

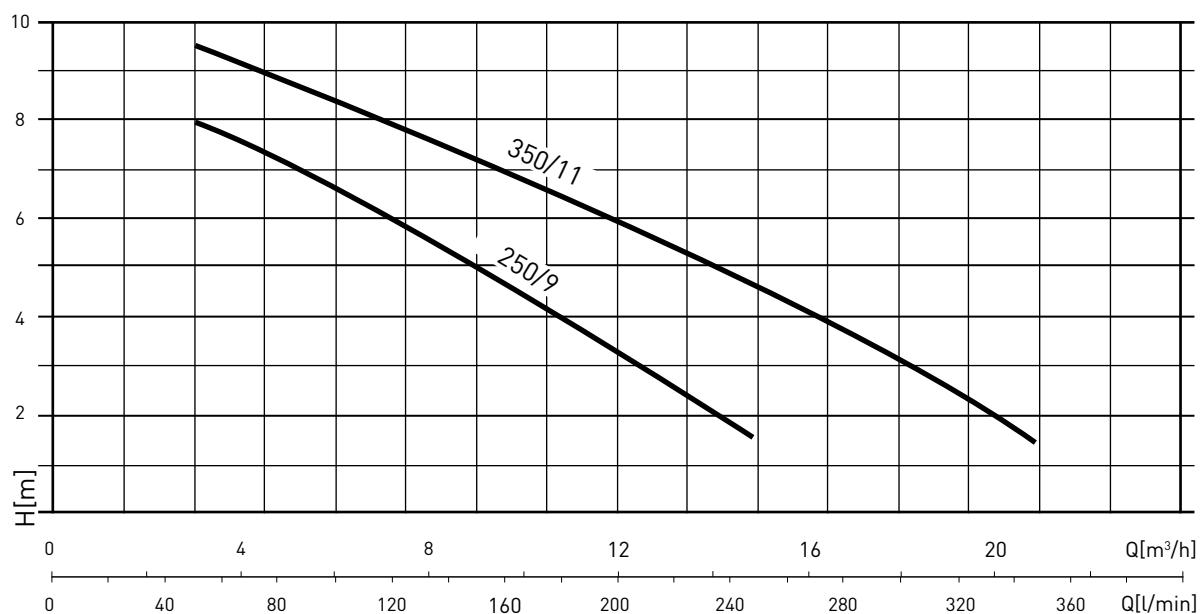
	Component	Material	
1	Pump body	Stainless steel X5 CrNi 1810 (AISI 304)	
2	Air inlet base	Stainless steel X5 CrNi 1810 (AISI 304)	
3	Impeller	Stainless steel X5 CrNi 1810 (AISI 304) casting	
4	Outlet	Thread	
5	Supply cable	10 m H07 RN-F with plug	
6	Motor shaft	Stainless steel X5 CrNiS 1809 (AISI 416)	
7	Mechanical seal	Silicon carbide	
8	Counterface	Silicon carbide	Lubricated in oil chamber
9	Secondary seal	rubber NBR lip seal	
10	Sand guard	Rubber NBR	



NOCCHI BIOX XS

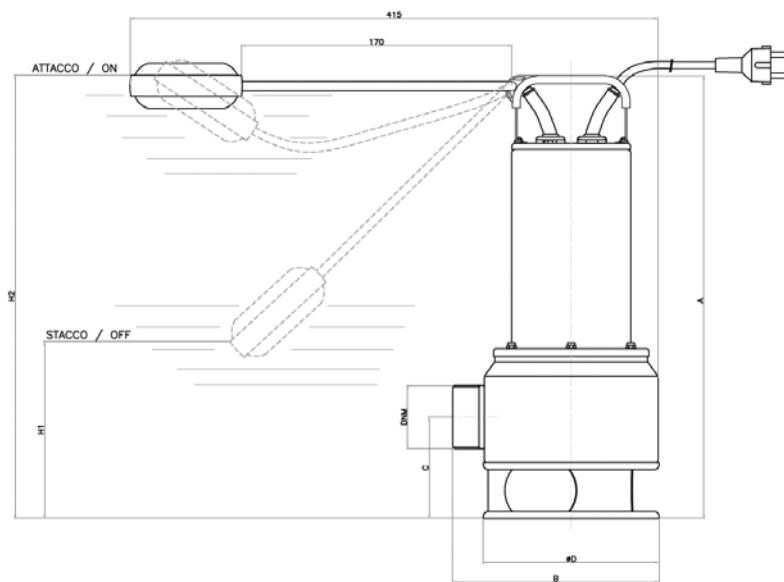
SUBMERSIBLE VORTEX SEWAGE PUMPS

HYDRAULIC PERFORMANCE



PERFORMANCE TABLE

MODEL	Motor power (P2)		Motor power (P1)		VOLT. (V)	In (A)	μ F	Q l/min	50	100	150	200	250	300	350
	HP	kW	HP	kW					m^3/h	3	6	9	12	15	18
BIOX 250/9 XS AUT	0.8	0.6	1.2	0.9	1 ~ 230	4.1	12.5	$m.c.a./m.c.w.$	8	6.6	5.1	3.4	1.6	-	-
BIOX 350/11 XS AUT	1.2	0.9	1.7	1.3	1 ~ 230	5.8	20		9.6	8.5	7.3	6	4.5	3	1.5



OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions mm.							WEIGHTS (Kg)
	A	B	C	D	DNM	H1	H2	
BIOX 250/9 XS AUT	389	196	96	168	1 1/2" GAS	250	370	9.8
BIOX 350/11 XS AUT	419	196	96	168	2" GAS	300	400	11.2

NOCCHI PRIOX

SUBMERSIBLE VORTEX SEWAGE PUMPS

The PRIOX series pumps are made completely with stainless steel AISI 304. They operate completely immersed in the liquid to be pumped which provides for the cooling of the motor from the outside. Made with a retreaded impeller on the principle of vortex operation. Automatic version (AUT) equipped with float switch.

MOTOR

- Dry running.
- Degree of protection IP 68
- Insulation class F
- Single-phase power supply with capacitor permanently on and thermal protection built into the motor casing.
- Cable connection chamber completely insulated.
- Self-lubricating ball bearings.
- Speed of rotation 2850 rpm.

APPLICATIONS

- All lifting and emptying operations of dirty water with suspended solids.
- Lifting stations with one or more pumps for agricultural and civil use.

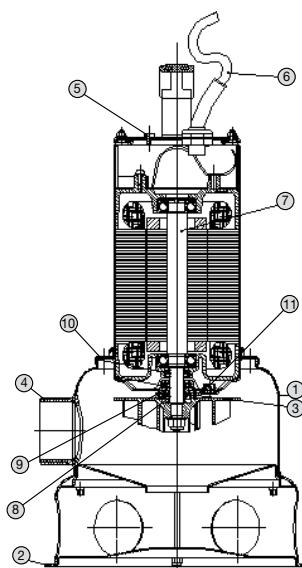
USAGE DATA

- Type of liquid: discharge water with solids.
- Maximum temperature of the liquid 40°C.
- Maximum immersion under the water level 7 m.
- Continuous operation (S1) only with submerged pump
- Minimum drying level 60 mm (in manual version).
- Free passage of solids: up to 40 mm or 50 mm as indicated in the table



TABLE OF MATERIALS

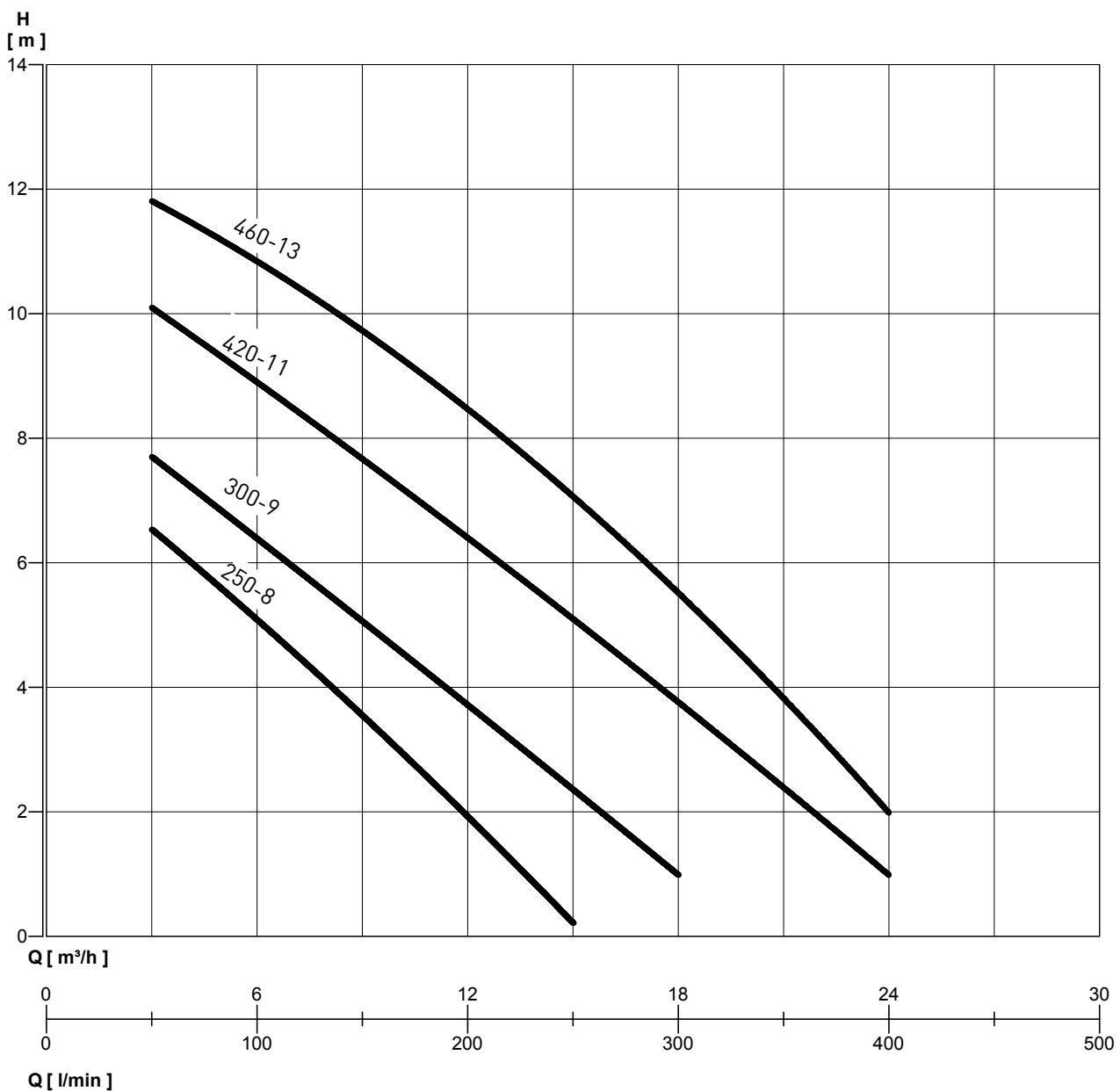
Component		Material
1	Pump body	Stainless steel Europe: EN 10088-1 X5CrNi18-10 (1.4301) - USA: AISI 304
2	Air inlet base	Stainless steel Europe: EN 10088-1 X5CrNi18-10 (1.4301) - USA: AISI 304
3	Impeller	Stainless steel X5 CrNi 1810 (AISI 304) casting
4	Outlet	Thread
5	Lid	Stainless steel casting (Priox 800/18)
6	Supply cable	10 m H07 RN-F with plug
7	Motor shaft	Stainless steel X12 CrS 13 EN 1.4005 (AISI 416)
8	Mechanical seal	Silicon carbide
9	Counterface	Silicon carbide
10	Secondary seal	rubber NBR lip seal
11	V-ring sand guard	Rubber NBR



NOCCHI PRIOX

SUBMERSIBLE VORTEX SEWAGE PUMPS

HYDRAULIC PERFORMANCE

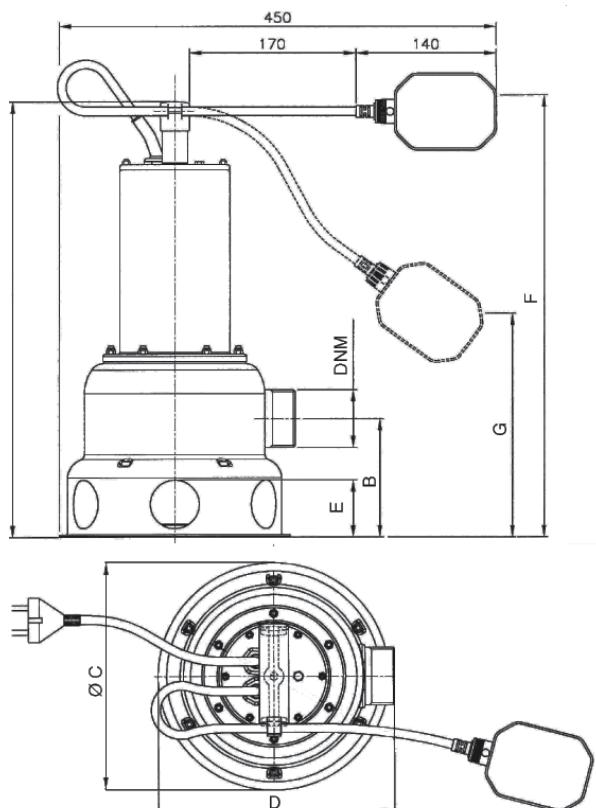


NOCCHI PRIOX

SUBMERSIBLE VORTEX SEWAGE PUMPS

PERFORMANCE TABLE

MODEL	Motor power (P2)		Motor power (P1)		VOLT. (V)	I _n (A)	μ F	Q	l/min m ³ /h	50	100	150	200	250	300	400
	HP	kW	HP	kW						3	6	9	12	15	18	24
PRIOX 250/8 M PRIOX 250/8 M AUT	0.75	0.55	1.1	0.8	1 ~ 230	3.6	14			6.5	5.2	3.4	2.0	0.2		
PRIOX 300/9 M PRIOX 300/9 M AUT	0.8	0.6	1.2	0.9	1 ~ 230	4.1	14			7.7	6.4	5	3.8	2.3	1	
PRIOX 300/9 T	0.8	0.6	1.2	0.9	3 ~ 400	1.55				10	9	7.8	6.3	5	3.8	1
PRIOX 420/11 M PRIOX 420/11 M AUT	1.2	0.9	1.8	1.3	1 ~ 230	6	20			11.8	10.8	9.8	8.5	7	5.5	2
PRIOX 420/11 T	1.2	0.9	1.8	1.3	3 ~ 400	2.3										
PRIOX 460/13 M PRIOX 460/13 M AUT	1.5	1.1	2.2	1.6	1 ~ 230	7.2	20									
PRIOX 460/13 T	1.4	1	2	1.45	3 ~ 400	2.4										



OVERALL DIMENSIONS AND WEIGHTS

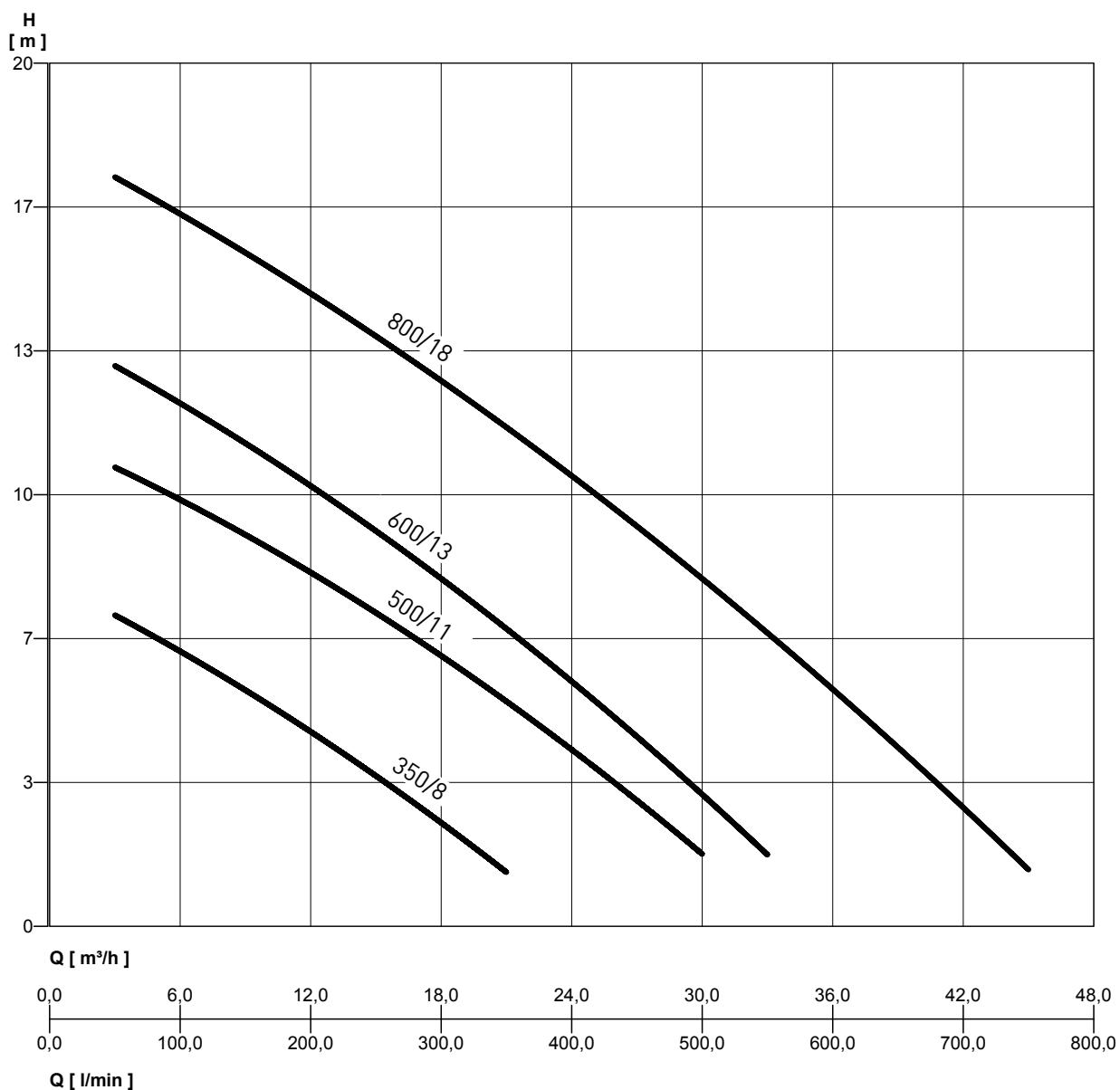
MODEL	Dimensions mm.									Total weights (Kg)
	A	B	C	D	Minimum drying level E*	Level ON F*	Level OFF G*	Free passage	DNM	
PRIOX 250/8	420	122.5	235	249	63	550	290	40	1 1/2"	9.4
PRIOX 300/9	420	122.5	235	249	63	550	290	40	2"	9.6
PRIOX 420/11	450	122.5	235	249	63	550	290	40	2"	11.2
PRIOX 460/13	450	122.5	235	249	63	580	320	40	2"	11.7

** The ON/OFF levels refer to the version with float switch. - The minimum drying level refers to manual operation.

NOCCHI PRIOX

SUBMERSIBLE VORTEX SEWAGE PUMPS

HYDRAULIC PERFORMANCE

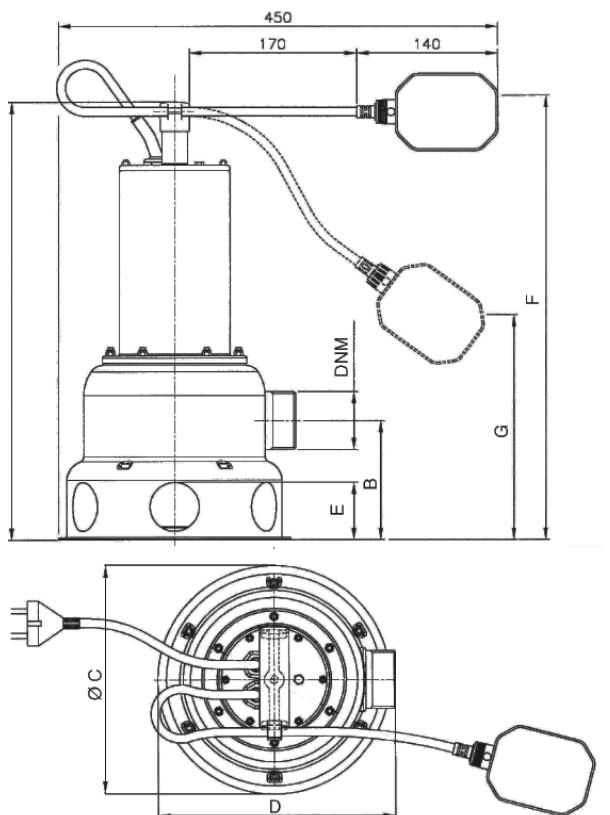


NOCCHI PRIOX

SUBMERSIBLE VORTEX SEWAGE PUMPS

PERFORMANCE TABLE

MODEL	Motor power (P2)		Motor power (P1)		VOLT. (V)	In (A)	μF	Q	l/min	50	100	150	200	250	300	350	400	500	550	600	650	700	750
	HP	kW	HP	kW						m ³ /h	3	6	9	12	15	18	24	30	33	36	39	42	45
PRIOX 50-350/8 M PRIOX 50-350/8 M AUT	0.9	0.65	1.36	1	1 ~ 230	3.8	14			7.2	6.4	5.5	4.4	3.5	2.5	1.2							
PRIOX 50-350/8 T	0.9	0.65	1.3	0.98	3 ~ 400	1.7				10.5	10	9.2	8.2	7.2	6.2	5.2	4.1	1.7					
PRIOX 50-500/11 M PRIOX 50-500/11 M AUT	1.4	1	2	1.55	1 ~ 230	7	20			12.8	12.2	11.3	10.3	9.3	8	6.8	5.5	3	1.8				
PRIOX 50-500/11 T	1.4	1	1.9	1.4	3 ~ 400	2.4				17.3	16.5	15.6	14.7	13.7	12.7	11.6	10.5	8	6.7	5.4	4	3	1.3
PRIOX 50-600/13 T	1.6	1.2	2.4	1.8	3 ~ 400	3.1																	
PRIOX 50-800/18 T	3.2	2.4	4	3	3 ~ 400	5.5																	



OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions mm.									DNM	Total weights (Kg)
	A	B	C	D	Minimum drying level E*	Level ON F*	Level OFF G*	Free passage			
PRIOX 50-350/8	420	122.5	235	249	63	550	290	50		2"	9.6
PRIOX 50-500/11	450	122.5	235	249	63	550	290	50		2"	11.7
PRIOX 50-600/13	450	122.5	235	249	63	580	320	50		2"	12.6
PRIOX 50-800/18	485	122.5	235	249	63	580	320	50		2"	20.2

** The ON/OFF levels refer to the version with float switch. - The minimum drying level refers to manual operation..

NOCCHI MINIVORT P

SUBMERSIBLE VORTEX SEWAGE PUMP

The MINIVORT P pumps are made completely with cast iron and are designed for continuous use in fixed installations. Made according to the principle of vortex operation with retracted impeller. Strong and reliable.

MOTOR

- Dry running.
- Degree of protection IP 68
- Insulation class F
- Single-phase power supply with capacitor permanently on and thermal protection built into the motor casing.
- Three-phase power supply with external protection provided by the user.
- Self-lubricating ball bearings.
- Speed of rotation 2850 rpm P2
- Speed of rotation 1450 rpm P4

APPLICATIONS

- Lifting and emptying of wastewater; civil and industrial sewage with suspended solids.
- Emptying of wells, septic tanks, handling of wastewater and sewage.
- Lifting stations with one or more pumps for industrial and civil use.

USAGE DATA

- Type of liquid: wastewater, sewage and drains
- Maximum temperature of the liquid 40°C
- Maximum immersion under the water level 7m.
- Minimum drying level 45 mm (in manual version).
- Free passage of solids 52 mm

CONSTRUCTION FEATURES

- Automatic single phase version with a float switch and an electrical panel in a watertight box including a capacitor, thermal protection and a manual/automatic switch. Power cable 10 m H07 RN-F.
- Three-phase version, power cable 10m H07 RN-F.
- Flanged outlet, with 2" female threaded square counter-flange.



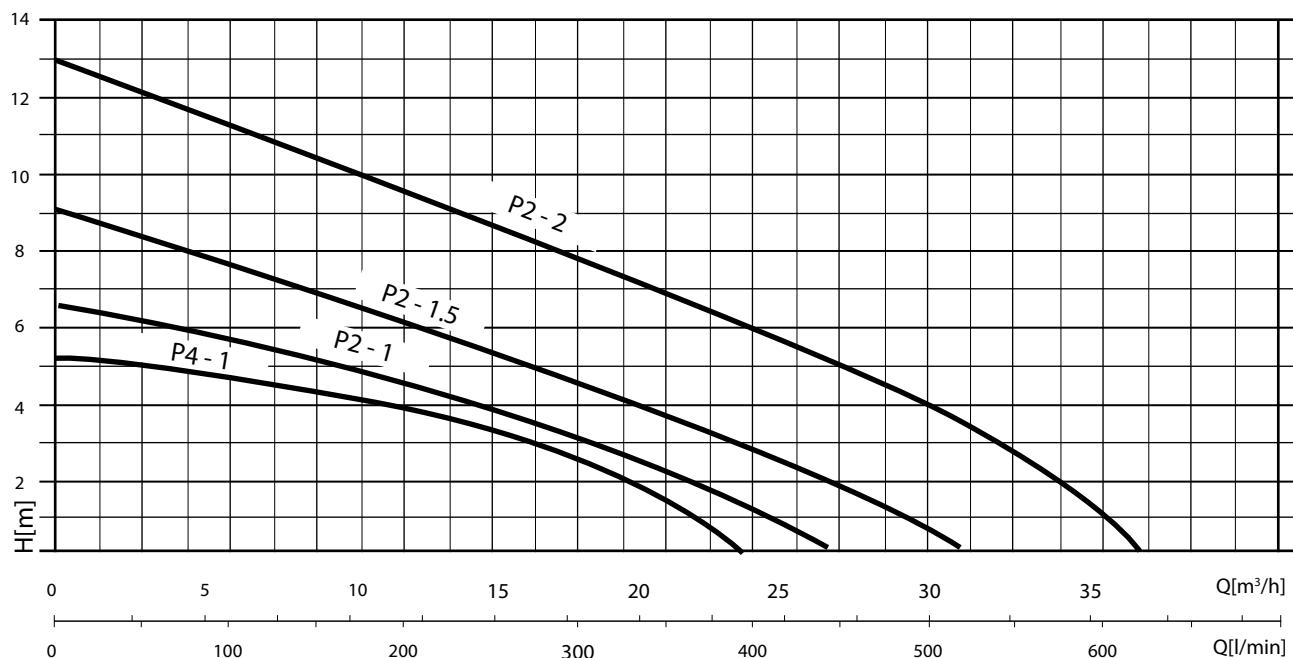
TABLE OF MATERIALS

Component		Material
1	Pump body	Grey cast iron EN GJL 200
2	Motor body	Grey cast iron EN GJL 200
3	Supporting base	Grey cast iron EN GJL 200
4	Impeller	Grey cast iron EN GJL 200
5	Motor shaft	Stainless steel X 12 CrNiS 1809 (AISI 416)
6	Mechanical seal	Lubricated in oil chamber
7	Counterface	
8	Lip seal	

NOCCHI MINIVORT P

SUBMERSIBLE VORTEX SEWAGE PUMP

HYDRAULIC PERFORMANCE



PERFORMANCE TABLE

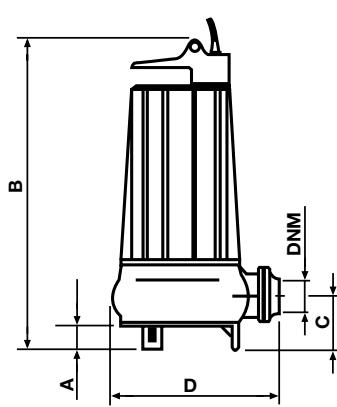
MODEL	Motor power (P2)		Motor power (P1)		VOLT. (V)	In (A)	μF	Q l/min	50	100	200	300	400	500
	HP	kW	HP	kW					m^3/h	3	6	12	18	24
MINIVORT P2 - 1 M	1	0.75	2	1.5	1 ~ 230	6.5	20	m.c.a./m.c.w.	6	5.4	4.1	3	1	0
MINIVORT P2 - 1 M AUT					1 ~ 230	6.5	20							
MINIVORT P2 - 1 T					3 ~ 400	2.3								
MINIVORT P2 - 1.5 M	1.5	1.1	2.2	1.6	1 ~ 230	7	25	m.c.a./m.c.w.	8.3	7.5	6.1	4.6	2.8	1
MINIVORT P2 - 1.5 M AUT					1 ~ 230	7	25							
MINIVORT P2 - 1.5 T					3 ~ 400	2.7								
MINIVORT P2 - 2 M	2	1.5	3	2.2	1 ~ 230	9.8	35	m.c.a./m.c.w.	12.1	11.3	9.8	8	6	3.7
MINIVORT P2 - 2 M AUT					1 ~ 230	9.8	35							
MINIVORT P2 - 2 T					3 ~ 400	3.2								
MINIVORT P4 - 1 M	1	0.75	1.7	1.25	1 ~ 230	5.5	25	m.c.a./m.c.w.	5	4.6	3.3	2.2		
MINIVORT P4 - 1 M AUT					1 ~ 230	5.5	25							
MINIVORT P4 - 1 T					3 ~ 400	2.3								

MINIVORT P2 : motor 2 poles 2850 rpm

MINIVORT P4 : motor 4 poles 1450 rpm

OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions mm.					Total weight (Kg)
	A	B	C	D	DNM	
MINIVORT P2-1	45	440	85	235	2"	27
MINIVORT P2-1.5	45	440	85	235	2"	27
MINIVORT P2-2	45	440	85	235	2"	28
MINIVORT P4-1	45	440	85	235	2"	27



NOCCHI MINIVORT PP

SUBMERSIBLE VORTEX SEWAGE PUMP

The MINIVORT PP pumps are made completely with cast iron and are designed for continuous use in fixed installations. Made according to the principle of vortex operation with retracted impeller.

MOTOR

- Dry running.
- Degree of protection IP 68
- Insulation class F
- Single-phase power supply with capacitor permanently on and thermal protection built into the motor casing.
- Three-phase power supply with external protection provided by the user.
- Self-lubricating ball bearings.
- Speed of rotation 2850 rpm.

APPLICATIONS

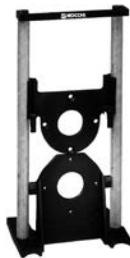
- Lifting and emptying of wastewater; civil and industrial sewage with suspended solids.
- Emptying of wells, septic tanks, handling of wastewater and sewage.
- Lifting stations with one or more pumps for industrial and civil use.
- On request, coupling foot to facilitate installation and maintenance.

USAGE DATA

- Type of liquid: wastewater, sewage and drains
- Maximum temperature of the liquid 40°C.
- Maximum immersion under the water level 7m.
- Minimum drying level 72 mm (in manual version).
- Free passage of solids 58 mm

CONSTRUCTION FEATURES

- Automatic single phase version with a float switch and an electrical panel in a watertight box including a capacitor, thermal protection and a manual/automatic switch.
- Power cable 10 m H07 RN-F.
- Three-phase version, power cable 10m H07 RN-F.
- Flanged outlet, with 2" female threaded round counter-flange.



OPTIONAL

- Cast iron coupling foot

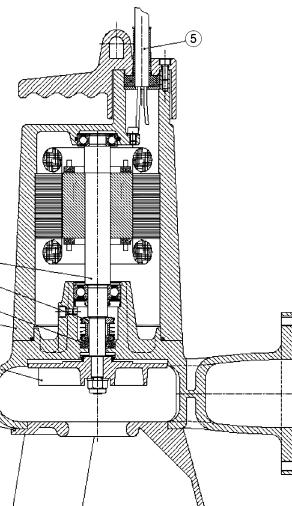


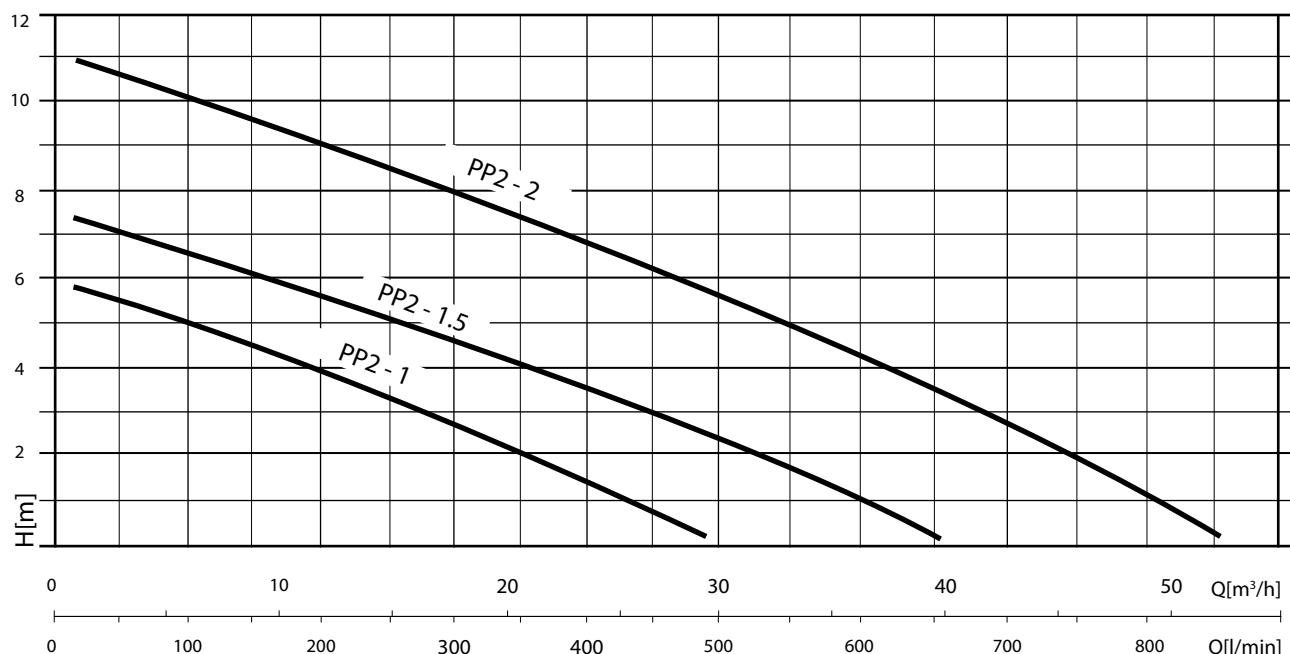
TABLE OF MATERIALS

Component		Material
1	Pump body	Grey cast iron EN GJL 200
2	Motor body	Grey cast iron EN GJL 200
3	Supporting base	Grey cast iron EN GJL 200
4	Impeller	Grey cast iron EN GJL 200
5	Supply cable	10 m H07 RN-F
6	Motor shaft	Stainless steel X 12 CrNiS 1809 (AISI 416)
7	Mechanical seal	Graphite
8	Counterface	Ceramic
9	Lip seal	Rubber NBR 70
		Lubricated in oil chamber

NOCCHI MINIVORT PP

SUBMERSIBLE VORTEX SEWAGE PUMP

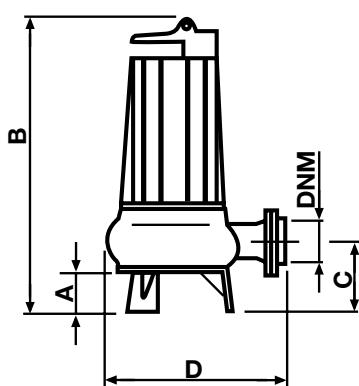
HYDRAULIC PERFORMANCE



MODEL	Motor power (P2)		Motor power (P1)		VOLT. (V)	In (A)	μ F	Q l/min	100	200	300	400	600	800
	HP	kW	HP	kW					6	12	18	24	36	48
									m³/h					
MINIVORT PP2 - 1 M MINIVORT PP2 - 1 M AUT* MINIVORT PP2 - 1 T	1	0.75	2	1.5	1 ~ 230 1 ~ 230 3 ~ 400	6.2	20	m.c.a. / m.c.w.	5	4	3	1.6		
MINIVORT PP2 - 1.5 M MINIVORT PP2 - 1.5 M AUT* MINIVORT PP2 - 1.5 T	1.6	1.2	2.5	1.8		8.2	25		6.7	5.7	4.6	3.3	1	
MINIVORT PP2 - 2 M MINIVORT PP2 - 2 M AUT* MINIVORT PP2 - 2 T	2	1.5	3	2.2		9.8	35		10	9.3	8.2	7	4.2	1

OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions mm.					Total weight (Kg)
	A	B	C	D	DNM	
MINIVORT PP2 - 1	72	475	115	325	2 1/2"	30
MINIVORT PP2 - 1.5	72	475	115	325	2 1/2"	31
MINIVORT PP2 - 2	72	475	115	325	2 1/2"	28



NOCCHI VACUSYSTEM

WASTEWATER COLLECTION AND LIFTING SYSTEMS

VACUSYSTEM 200 are automatic pumping stations already assembled and ready for use. Particularly suitable when the water coming from drains is collected at a lower level from the main sewer. Assembled with submersible pumps of the PRIOX series.

MOTOR

- Dry running.
- Degree of protection IP68
- Insulation class F
- Single-phase power supply with capacitor permanently on and thermal protection built into the motor casing.
- Cable connection chamber completely insulated
- Self-lubricating ball bearings
- Speed of rotation 2850 rpm.

USAGE DATA

- Type of liquid: wastewater with suspended solids of dimensions max. 40 mm
- Maximum temperature of the liquid 40°C
- Minimum drying level 60 mm
- Treadable cover

CONSTRUCTION FEATURES

- The standard pumping station consists of:
- Tank: in polyethylene with a capacity of 175 l, with a cover complete with gasket that ensures the seal of the liquid and any gas formations.
- DN 110 input manifolds, output in PVC 2" and vent pipe connection DN 50.
- Submersible pump PRIOX 300/9 M AUT, PRIOX 460/13 M AUT



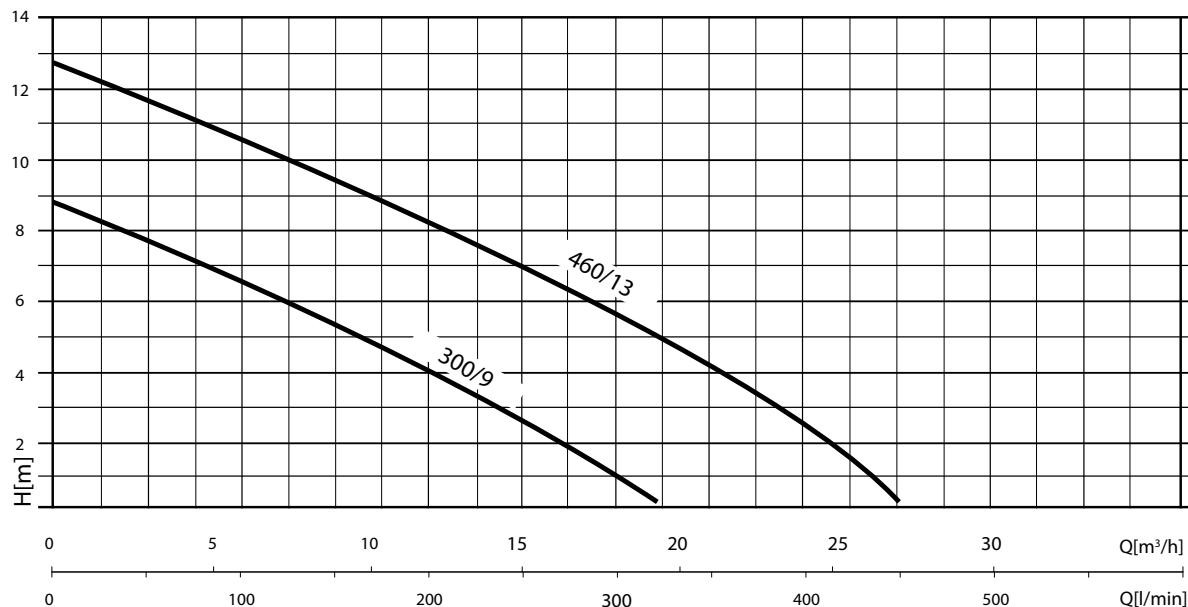
TABLE OF MATERIALS

Component		Material
1	Pump body	Stainless steel X5 CrNi 1810 (AISI 304)
2	Air inlet base	Stainless steel X5 CrNi 1810 (AISI 304)
3	Impeller	Stainless steel X5 CrNi 1810 (AISI 304) casting
4	Supply cable	10 m H07 RN-F
5	Motor shaft	Stainless steel X 12 CrNiS 1809 (AISI 416)
6	Mechanical seal	Graphite
7	Counterface	Ceramic
8	Secondary seal	rubber NBR lip seal
9	V-ring sand guard	Rubber NBR

NOCCHI VACUSYSTEM

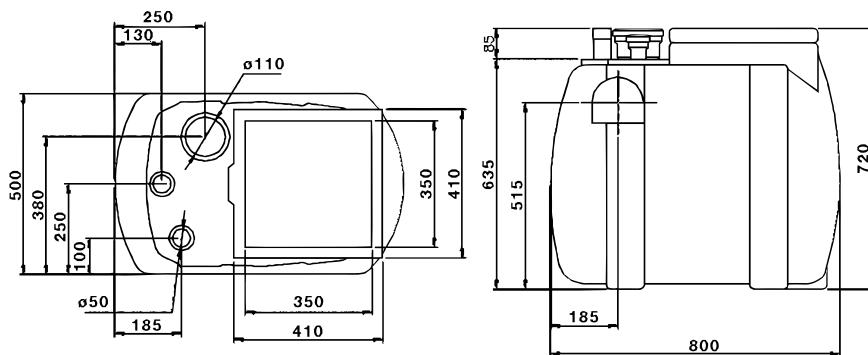
WASTEWATER COLLECTION AND LIFTING SYSTEMS

HYDRAULIC PERFORMANCE



PERFORMANCE TABLE

MODEL	Motor power (P2)		Motor power (P1)		VOLT. (V)	In (A)	μ F	Q l/min	50 m³/h	100 m³/h	150 m³/h	200 m³/h	150 l/min	300 l/min	400 l/min
	HP	kW	HP	kW											
VS 200-P 300	0.8	0.6	1.2	0.9	1~230	4.1	12.5	m.c.a./m.c.w.	7.7	6.4	5	3.8	2.3	1	
VS 200-P 460	1.4	1	2.2	1.6	1~230	7.2	20		11.8	10.8	9.8	8.5	7	5.5	2



OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions in mm:																Total weight (Kg)	
	A	B	C	D	E	F	G	H	I	L	M	N	O	P	Q	R	S	
VS 200 - P 300 M	500	380	250	100	185	250	130	410	350	800	410	350	635	515	720	185	85	27
VS 200 - P 460 M	500	380	250	100	185	250	130	410	350	800	410	350	635	515	720	185	85	29.2

NOCCHI VACUSYSTEM

WASTEWATER COLLECTION AND LIFTING SYSTEMS

DESCENT DEVICE

VACUSYSTEM 200 S are automatic pumping stations already assembled and ready for use. Particularly suitable when the water coming from drains is collected at a lower level from the main sewer. Assembled with submersible pumps of the PRIOX series.

MOTOR

- Dry running.
- Degree of protection IP68
- Insulation class F
- Single-phase power supply with capacitor permanently on and thermal protection built into the motor casing.
- Cable connection chamber completely insulated
- Self-lubricating ball bearings
- Speed of rotation 2850 rpm.

USAGE DATA

- Type of liquid: wastewater with suspended solids of dimensions max. 40 mm
- Maximum temperature of the liquid 40°C
- Minimum drying level 60 mm
- Treadable cover

CONSTRUCTION FEATURES

- Tank:
 - in polyethylene with a capacity of 175 l, with a cover complete with gasket that ensures the seal of the liquid and any gas formations.
- DN 110 input manifolds, output 2" and vent pipe connection DN 50.
- Descent device
- Electrical control and protection panel (for three-phase PUMPS)
- Float with 10 m cable 2x1 H07 RN-F (for three-phase PUMPS)
- Submersible pump: PRIOX 300/9 M AUT, PRIOX 460/13 M AUT, PRIOX 300/9 T, PRIOX 460/13 T



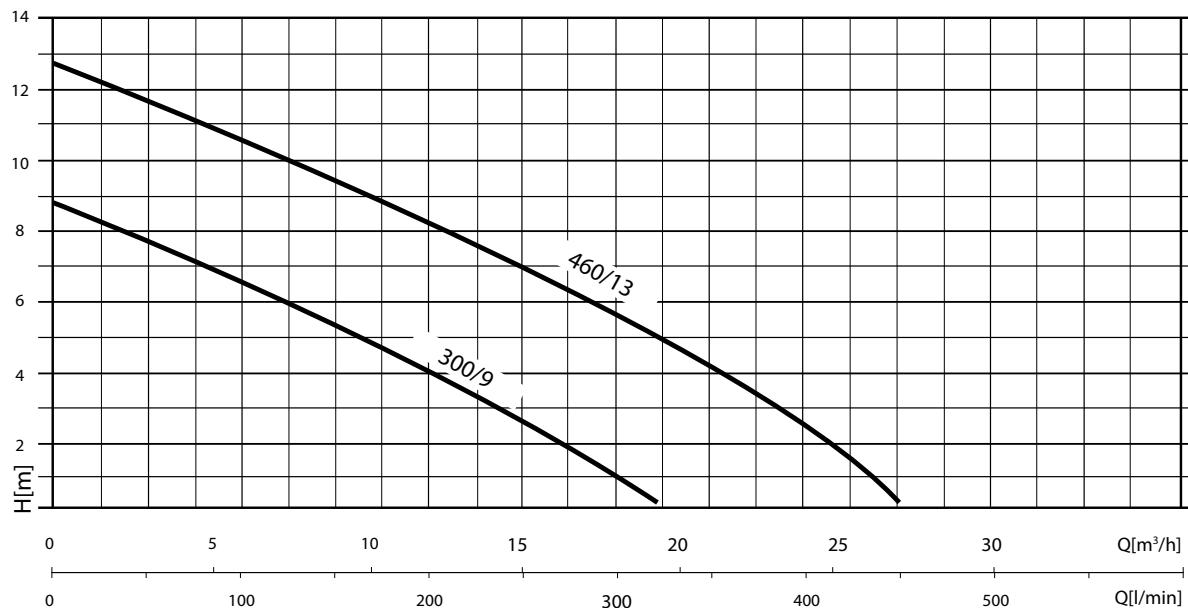
TABLE OF MATERIALS

Component		Material
1	Pump body	Stainless steel X5 CrNi 1810 (AISI 304)
2	Air inlet base	Stainless steel X5 CrNi 1810 (AISI 304)
3	Impeller	Stainless steel X5 CrNi 1810 (AISI 304) casting
4	Supply cable	10 m H07 RN-F
5	Motor shaft	Stainless steel X 12 CrNiS 1809 (AISI 416)
6	Mechanical seal	Silicon carbide
7	Counterface	Silicon carbide
8	Secondary seal	rubber NBR lip seal
9	V-ring sand guard	Rubber NBR

NOCCHI VACUSYSTEM

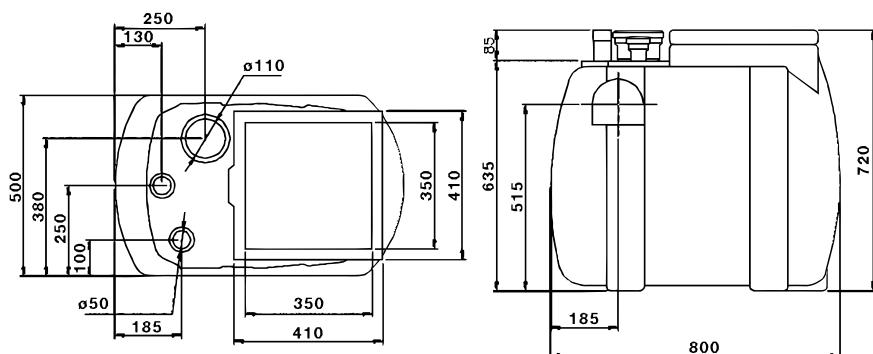
WASTEWATER COLLECTION AND LIFTING SYSTEMS

HYDRAULIC PERFORMANCE



PERFORMANCE TABLE

MODEL	Motor power (P2)		Motor power (P2)		VOLT. (V)	In (A)	μF	Q l/min	m^3/h	50	100	150	200	250	300	400
	HP	kW	HP	kW						3	6	9	12	15	18	24
VS 200 S-P 300 M	0.8	0.6	1.2	0.9	1 ~ 230	4.1	12.5	$m.c.a./m.c.m.$	7.7	6.4	5	3.8	2.3	1		
VS 200 S-P 300 T	0.8	0.6	1.2	0.9	3 ~ 400	1.55			7.7	6.4	5	3.8	2.3	1		
VS 200 S-P 460 M	1.4	1	2.2	1.6	1 ~ 230	7.2	20		11.8	10.8	9.8	8.5	7	5.5	2	
VS 200 S-P 460 T	1.4	1	2	1.45	3 ~ 400	2.4			11.8	10.8	9.8	8.5	7	5.5	2	



OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions in mm:															Total weight (Kg)		
	A	B	C	D	E	F	G	H	I	L	M	N	O	P	Q	R	S	
VS 200 S - P 300 M	500	380	250	100	185	250	130	410	350	800	410	350	635	515	720	185	85	37
VS 200 S - P 300 T	500	380	250	100	185	250	130	410	350	800	410	350	635	515	720	185	85	39
VS 200 S - P 460 M	500	380	250	100	185	250	130	410	350	800	410	350	635	515	720	185	85	38.8
VS 200 S - P 460 T	500	380	250	100	185	250	130	410	350	800	410	350	635	515	720	185	85	40.6

NOCCHI VACUSYSTEM

WASTEWATER COLLECTION AND LIFTING SYSTEMS

2 PUMPS, 2 DESCENT DEVICES, ELECTRICAL CONTROL AND PROTECTION PANEL

VACUSYSTEM 500 are automatic pumping stations already assembled and ready for use. Particularly suitable when the water coming from drains is collected at a lower level from the main sewer. Assembled with submersible pumps of the PRIOX series.

MOTOR

- Dry running.
- Degree of protection IP68
- Insulation class F
- Single-phase power supply with capacitor permanently on and thermal protection built into the motor casing.
- Cable connection chamber completely insulated
- Self-lubricating ball bearings
- Speed of rotation 2850 rpm.

USAGE DATA

- Type of liquid: wastewater with suspended solids of dimensions max. 40 mm
- Maximum temperature of the liquid 40°C
- Minimum drying level 60 mm
- Treadable cover



CONSTRUCTION FEATURES

- Tank:
in polyethylene with a capacity of 550 l, with a cover complete with gasket that ensures the seal of the liquid and any gas formations.
- DN 110 input manifolds, output 2" and vent pipe connection DN 50.
- Descent device
- Electrical control and protection panel (for three-phase PUMPS)
- Float with 10 m cable 2x1 H07 RN-F (for three-phase PUMPS)
- Submersible pump: PRIOX 300/9 M, PRIOX 460/13 M, PRIOX 300/9 T, PRIOX 460/13 T



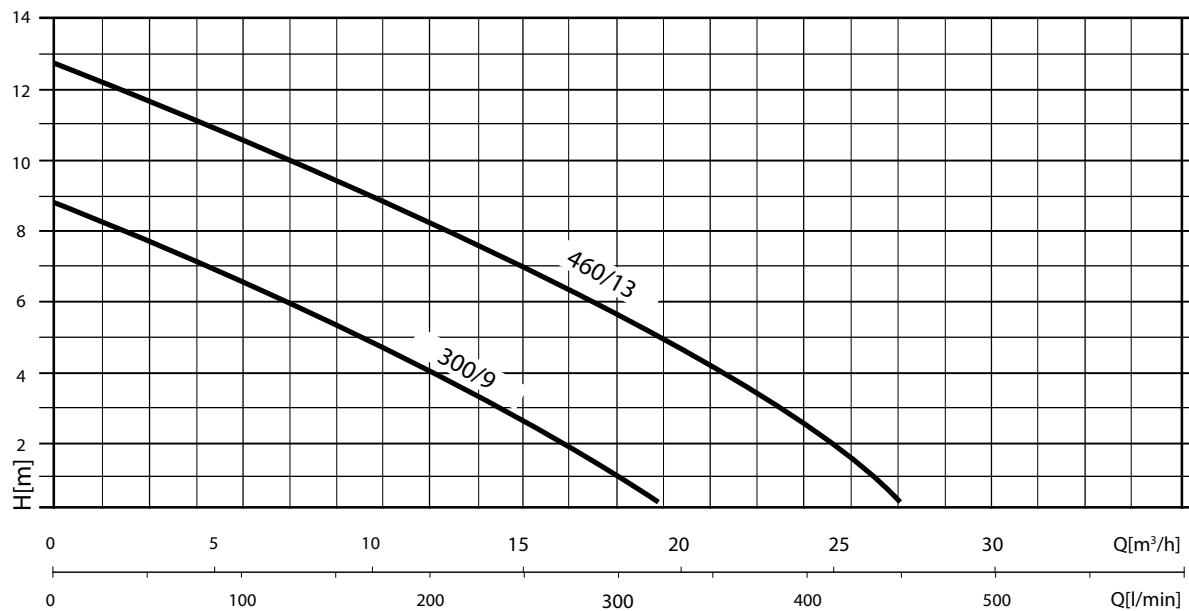
TABLE OF MATERIALS

	Component	Material
1	Pump body	Stainless steel X5 CrNi 1810 (AISI 304)
2	Air inlet base	Stainless steel X5 CrNi 1810 (AISI 304)
3	Impeller	Stainless steel X5 CrNi 1810 (AISI 304) casting
4	Supply cable	10 m H07 RN-F
5	Motor shaft	Stainless steel X 12 CrNiS 1809 (AISI 416)
6	Mechanical seal	Silicon carbide
7	Counterface	Silicon carbide
8	Secondary seal	rubber NBR lip seal
9	V-ring sand guard	Rubber NBR

NOCCHI VACUSYSTEM

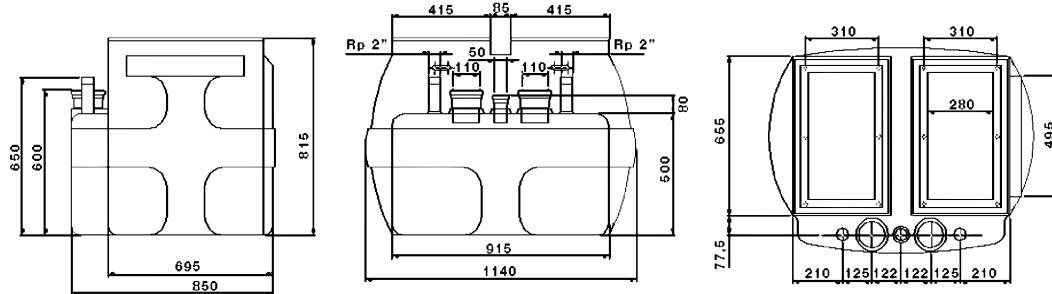
WASTEWATER COLLECTION AND LIFTING SYSTEMS

HYDRAULIC PERFORMANCE



PERFORMANCE TABLE

MODEL	Motor power (P2)		Motor power (P2)		VOLT. (V)	In (A)	μ F	Q	l/min	50	100	150	200	250	300	400
	HP	kW	HP	kW						3	6	9	12	15	18	24
VS 500 TWIN-P 300 M	0.8	0.6	1.2	0.9	1 ~ 230	4.1	12.5		7.7	6.4	5	3.8	2.3	1		
VS 500 TWIN-P 300 T	0.8	0.6	1.2	0.9	3 ~ 400	1.55			7.7	6.4	5	3.8	2.3	1		
VS 500 TWIN-P 460 M	1.4	1	2.2	1.6	1 ~ 230	7.2	20		11.8	10.8	9.8	8.5	7	5.5	2	
VS 500 TWIN-P 460 T	1.4	1	2	1.45	3 ~ 400	2.4			11.8	10.8	9.8	8.5	7	5.5	2	



OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions in mm:														Total weight (Kg)	
	A	B	C	D	E	F	G	H	I	L	M	N	O	P	Q	
VS 500 TWIN - P 300 M	650	600	695	850	915	500	80	815	415	1140	655	77.5	310	495	280	89.4
VS 500 TWIN - P 300 T	650	600	695	850	915	500	80	815	415	1140	655	77.5	310	495	280	89.4
VS 500 TWIN - P 460 M	650	600	695	850	915	500	80	815	415	1140	655	77.5	310	495	280	93.8
VS 500 TWIN - P 460 T	650	600	695	850	915	500	80	815	415	1140	655	77.5	310	495	280	93.8

NOCCHI VERSAILLES

SUBMERSIBLE PUMPS FOR FOUNTAINS AND WATER GAMES

The pumps of the VERSAILLES series have been designed for fountains, water games and waterfalls in water gardens.

USAGE DATA

- Type of liquid: clear water without solids.
- Maximum temperature of the liquid 40°C.
- Maximum immersion under the water level 7m.
- Free passage of solids 1.5 mm.
- For water games with smaller passages insert the sponge filter in the hydraulic part (optional).

MOTOR

- Dry motor with body in stainless steel.
- Degree of protection IP 68
- Insulation class F
- Single-phase power supply with capacitor always on.
- Thermal protection built into the motor casing.
- Cable connection chamber completely insulated.
- Self-lubricating ball bearings.
- Speed of rotation 2850 rpm.
- Suitable for continuous use.

APPLICATIONS

- Construction of fountains, water games, waterfalls in water gardens

OPTIONAL ACCESSORIES

- Vulcano: water game with water jets at three levels.
- Geyser: water game with one adjustable bubbling jet of water.
- Bell: water game in the shape of a bell, adjustable.
- Filters: spongy material, passages smaller than 1.5 mm to be used for all water games.

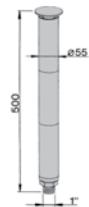
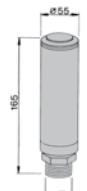
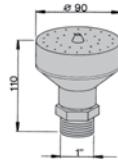
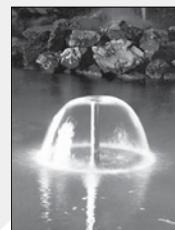


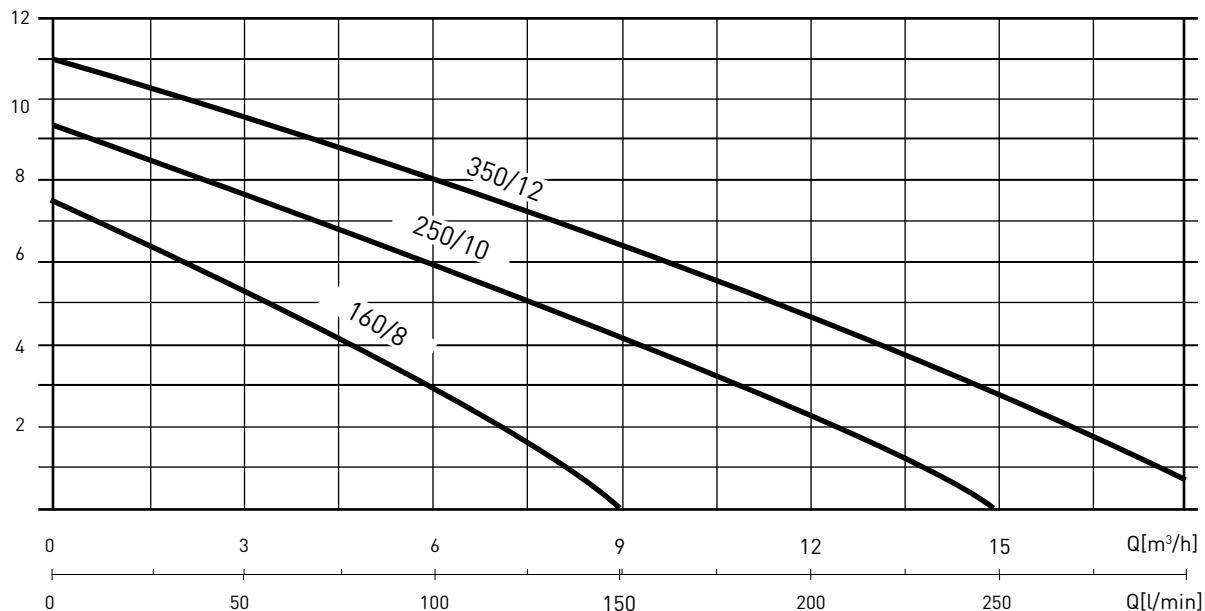
TABLE OF MATERIALS

Component	Material
Air inlet grille	Stainless steel X 5 CrNiS 1810 (AISI 304)
Base	Stainless steel X 5 CrNiS 1810 (AISI 304)
Pump body	Stainless steel X 5 CrNiS 1810 (AISI 304)
Impeller	Stainless steel X5 CrNi 1810 (AISI 304) casting
Supply cable	10m H07 RN-F with plug
Seal	Double fixed seal in rubber NBR 70 with special V-ring sand guard
Motor shaft	Stainless steel X 12 CrS 13 (AISI 416) with ceramic insert at the points of wear of the seal
Reducer 1" F	Plastic material

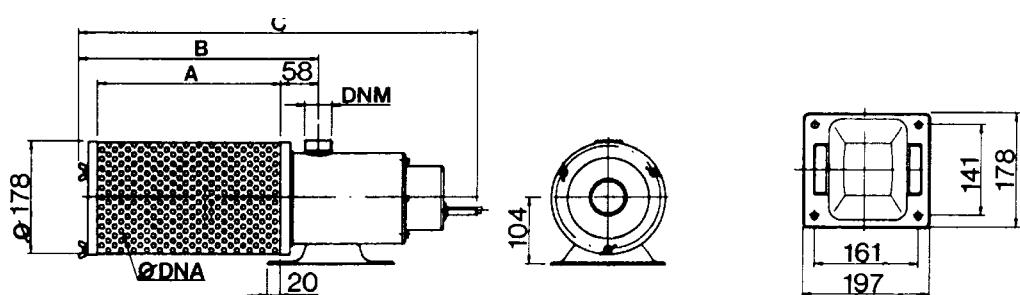
NOCCHI VERSAILLES

SUBMERSIBLE PUMPS FOR FOUNTAINS AND WATER GAMES

HYDRAULIC PERFORMANCE



MODEL	Motor power (P2)		Motor power (P1)		VOLT. (V)	In (A)	μ F	Q l/min	Diameter and height of water games in cm						
	HP	kW	HP	kW					VOLCANO	GEYSER	BELL				
VERSAILLES 160/8	0.5	0.37	0.6	0.45	1 ~ 230	2.2	8	m.c.a. / m.c.w.	Ø 180 - H 360	Ø 20 - H 110	Ø 90 - H 45				
VERSAILLES 250/10	0.75	0.5	0.9	0.7					Ø 200 - H 420	Ø 30 - H 180	Ø 95 - H 45				
VERSAILLES 350/12	1.1	0.8	1.6	1.2					Ø 200 - H 480	Ø 50 - H 230	Ø 100 - H 45				
VOLCANO															
GEYSER															
BELL															
FILTER 1 FOR MOD. 80/7 - 160/8															
FILTER 2 FOR MOD. 250/10 - 350/12															



OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions mm.					WEIGHTS (Kg)
	A	B	C	P.L.	DNM	
VERSAILLES 160/8	144	231	425	Ø 1.5	1" 1/4	7
VERSAILLES 250/10	285	372	620	Ø 1.5	1" 1/4	7.8
VERSAILLES 350/12	285	372	620	Ø 1.5	1" 1/4	9.3



SECTION 5

Pressure boosters

	FP/MULTI EVO-A PUMPS WITH ELECTRONIC CONTROL AND PROTECTION DEVICE		SENSORMAT PRESSURE BOOSTERS WITH TRANSDUCER CONTROL
	PAGE 224		PAGE 283
	AUTOJET PRESSURE BOOSTERS WITH ELECTRONIC CONTROL AND PROTECTION DEVICE		CPS20 PRESSURE BOOSTERS WITH TWO VARIABLE SPEED PUMPS
	PAGE 228		PAGE 300
	A-DHR PRESSURE BOOSTERS WITH ELECTRONIC CONTROL AND PROTECTION DEVICE		VARIO 1-20/MULTI EVO-E PRESSURE BOOSTERS WITH TWO VARIABLE SPEED PUMPS
	PAGE 230		PAGE 304
	WP/MULTI EVO-A PRESSURE BOOSTERS WITH HORIZONTAL EXPANSION MODULE		VARIO 1-20 PRESSURE BOOSTERS WITH TWO VARIABLE SPEED PUMPS
	PAGE 232		PAGE 312
	WATERPRESS PRESSURE BOOSTERS WITH HORIZONTAL EXPANSION MODULE		VARIO 3-20 THREE-PHASE PRESSURE BOOSTERS WITH TWO VARIABLE SPEED PUMPS
	PAGE 236		PAGE 322
	EASY20/MULTI EVO PRESSURE BOOSTERS WITH TWO PUMPS - PRESSURE SWITCH CONTROL		VARIO 3-30 THREE-PHASE PRESSURE BOOSTERS WITH THREE VARIABLE SPEED PUMPS
	PAGE 242		PAGE 337
	EASYBOOST RESIDENTIAL - PRESSURE BOOSTERS WITH PRESSURE SWITCH CONTROL		FREQUENCY CHANGER VARIABLE SPEED PRESSURE BOOSTERS
	PAGE 250		PAGE 350
	PRESSOMAT INDUSTRIAL - PRESSURE BOOSTERS WITH PRESSURE SWITCH CONTROL		
	PAGE 266		

ACCESSORIES

PAGE 397

NOCCHI FP/Multi EVO-A

PUMPS WITH ELECTRONIC CONTROL AND PROTECTION DEVICE

NEW 2016
PENTAIR

HIGH HYDRAULIC PERFORMANCE

Automatic unit to increase the pressure in the domestic water system. Consisting of a single phase pump like **Multi EVO-A** and of the electronic device FLUSSCONTROL BASIC, which controls the automatic operation of the pump and protects it in case of a lack of water. It comes assembled, wired, ready for

installation and use.

- High hydraulic performance regarding pressure and capacity
- Minimum consumption of electricity.
- Extremely silent operation.



ADVANTAGES

- Reduces water hammers
- Replaces the traditional system of the expansion module
- Requires no maintenance
- Protection in case of a lack of water
- Very easy to install and ready for use (Plug & Play).

SPECIFICATIONS:

PUMP

- Type of liquid: clean water without suspended solids or abrasive material
- Maximum temperature of the liquid 50°C
- Maximum recommended intake height: 6 m with bottom valve.
- Maximum operating pressure 8 bar

MOTOR

- Closed, ventilated from outside (TEFC)
- 2 poles, 50 Hz (n=2850 rpm)
- Degree of protection IP 55
- Insulation class F
- Single-phase power supply with capacitor permanently on and thermal protection built into the motor casing.
- Three-phase power supply with external protection provided by the user.



APPLICATIONS

- Lifting and distribution of water in domestic systems
- Pressurisation systems
- Irrigation
- Washing systems
- Recovery of rainwater



NOCCHI FP/Multi EVO-A

PUMPS WITH ELECTRONIC CONTROL AND PROTECTION DEVICE

CONSTRUCTION FEATURES

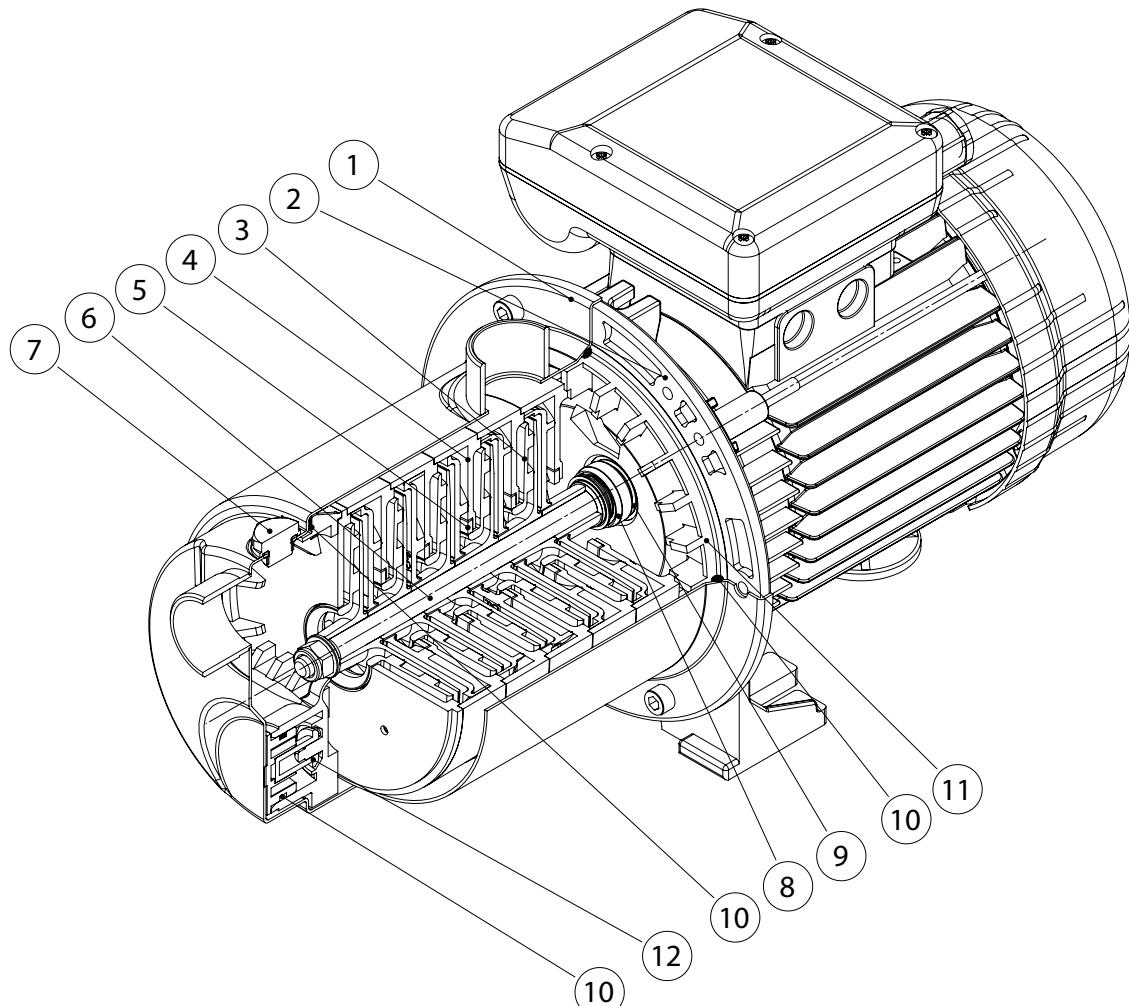


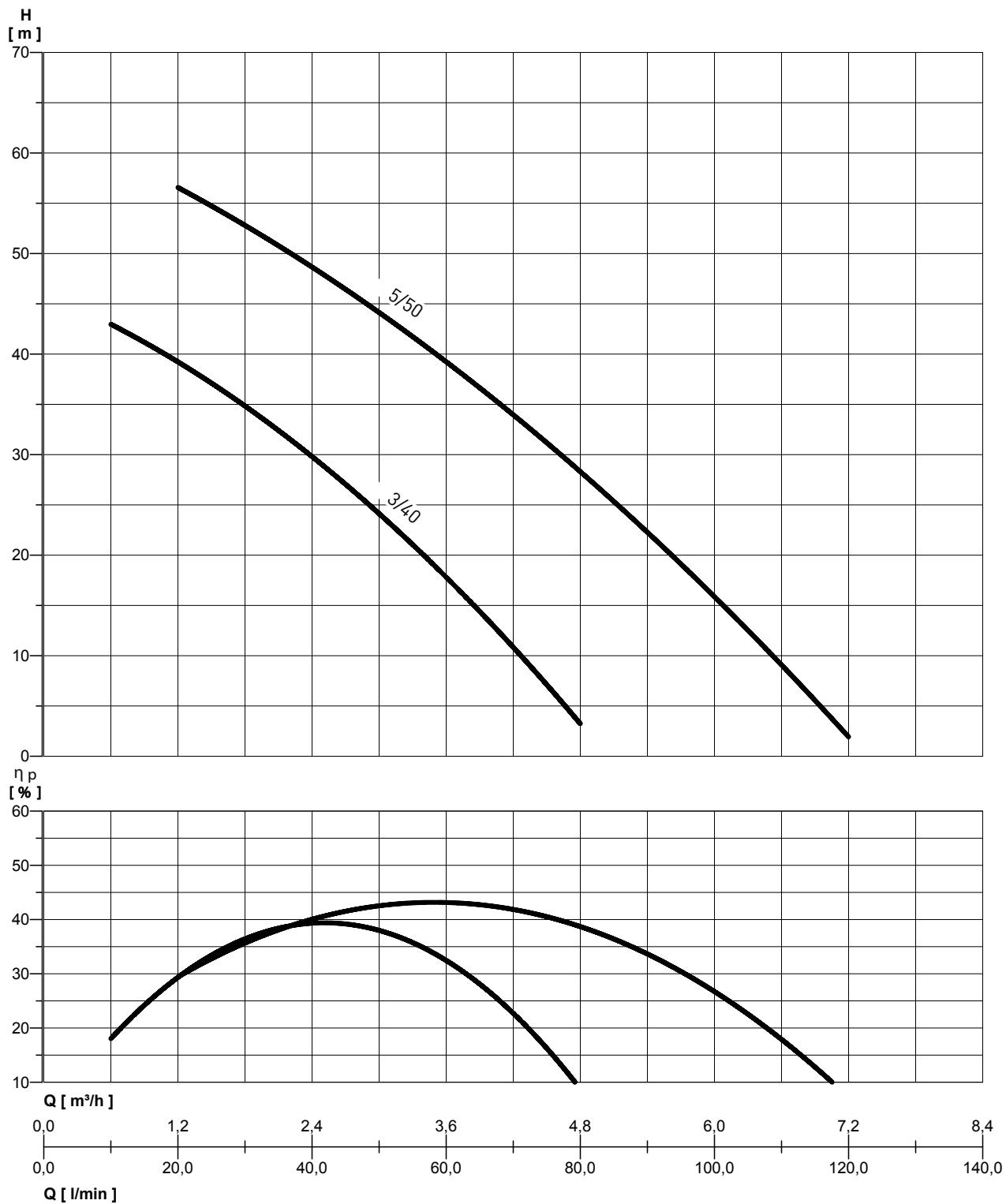
TABLE OF MATERIALS

Ref.	Component	Material
1	Pump body	Stainless steel Europe: EN10088-1 X5CrNi18-10 (1.4301) USA: AISI 304
2	Motor casing	Die-cast aluminium
3	Impeller	PPO reinforced with fibreglass
4	Diffuser	PPO reinforced with fibreglass
5	Wear ring	PTFE
6	Shaft (hydraulic part)	Stainless steel Europe: EN10088-1 X5CrNi18-10 (1.4301) USA: AISI 304
7	Inlet / outlet caps	Stainless steel Europe: EN10088-1 X8CrNiS18-9 (1.4305) USA: AISI 303
8	Mechanical seal	Carbon graphite / NBR / SS Europe: EN10088-1 X5CrNi18-10 (1.4301) USA: AISI 304
9	Counterface	Ceramic / NBR
10	Gaskets	NBR 70 Shore A
11	Seal holder plate	PPO reinforced with fibreglass
12	Priming valve	PPO reinforced with fibreglass

NOCCHI FP/Multi EVO-A 3 - 5

PUMPS WITH ELECTRONIC CONTROL AND PROTECTION DEVICE

HYDRAULIC PERFORMANCE

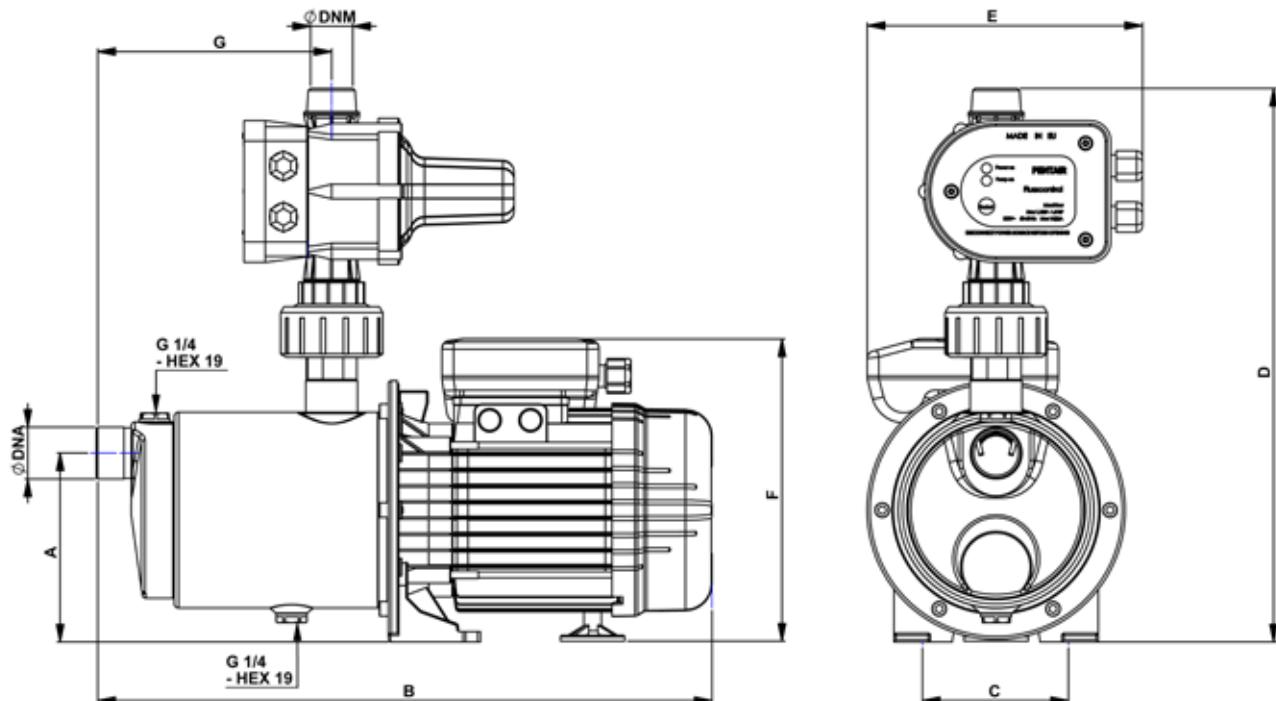


NOCCHI FP/Multi EVO-A 3 - 5

PUMPS WITH ELECTRONIC CONTROL AND PROTECTION DEVICE

PERFORMANCE TABLE

MODEL	Nominal power (P2)		Motor power (P1)		VOLT. (V)	In (A)	μF	Q	l/min m³/h	10	20	30	40	50	60	80	100	120
	HP	kW	HP	kW						0.6	1.2	1.8	2.4	3	3.6	4.8	6	7.2
FP/Multi EVO-A 3-40 M	0.74	0.55	1.1	0.8	1 ~ 230	3.7	12.5	total head in water column metres	42.5	39.5	35.5	30	23.5	17.5	3.5			
FP/Multi EVO-A 5-50 M	1.27	0.95	1.8	1.35	1 ~ 230	6.2	20			56	53	49	44.5	39.5	28	15	2.5	



OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions mm.									Total weight (Kg)
	A	B	C	D	E	F	G	DNA	DNM	
FP/Multi EVO-A 3-40 M	129	380	100	380	190	180	139	1"	1"	8.5
FP/Multi EVO-A 5-50 M	129	422	100	380	190	180	162	1"	1"	11.8

NOCCHI AUTOJET

PRESSURE BOOSTER WITH ELECTRONIC CONTROL AND PROTECTION DEVICE OF THE PUMP

Automatic unit to increase the pressure in the domestic water system. Consisting of a single phase pump like Jetinox and of the electronic device FLUSSCONTROL BASIC, which controls the automatic operation of the pump and protects it in case of a lack of water. It comes assembled, wired, ready for installation and use.

APPLICATIONS

- Lifting and distribution of water in domestic systems
- Pressurisation systems.
- Washing and irrigation.

ADVANTAGES

- Reduces water hammers
- Replaces the traditional system of the expansion module
- Requires no maintenance
- Protection in case of a lack of water
- Very easy to install
- Keeps the pressure constant during distribution

MOTOR

- Closed, ventilated from outside.
- Degree of protection IP 44.
- Insulation class F.
- Single-phase power supply with capacitor always on.
- Thermal protection built into the motor casing.
- Speed of rotation 2850 rpm.
- Continuous service.



CONSTRUCTION FEATURES

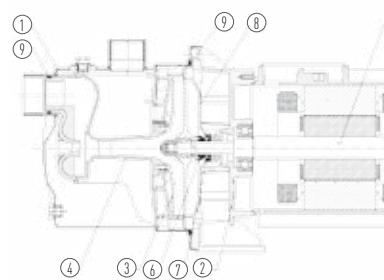
- Flusscontrol Basic:
- Maximum pressure 8 bar
- Maximum temperature 40°C
- Power cable 1.5 m H07 RN-F with plug.

USAGE DATA

- Type of liquid: clean water without suspended solids or abrasive material.
- Maximum temperature of the liquid 40°C.
- Maximum recommended intake height: 8 m with bottom valve.
- Maximum operating pressure: 6 bar.

TABLE OF MATERIALS

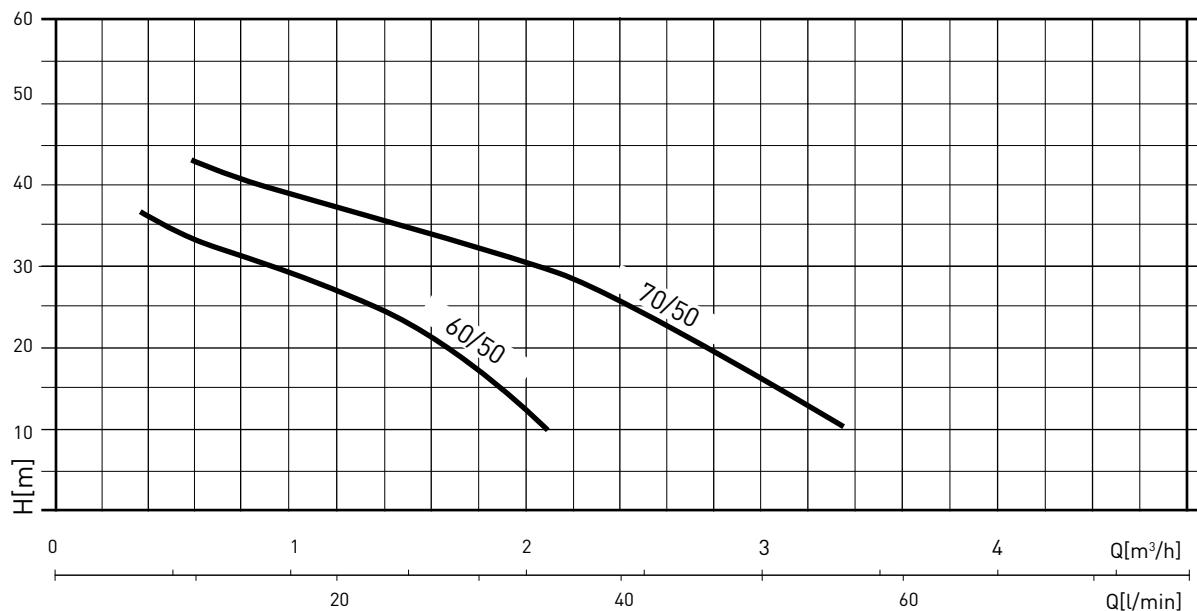
Component		Material
1	Pump body	Stainless steel X5 CrNi 1810 (AISI 304)
2	Motor casing	Die-cast aluminium
3	Impeller	Technopolymer with stainless steel shim ring
4	Diffuser monobloc group Venturi tube-nozzle	Technopolymer
5	Shaft	Stainless steel X 12 CrNiS 1809 (AISI 416)
6	Mechanical seal	Graphite
7	Counterface	Ceramic
8	Seal holder plate	Technopolymer (series 45-60-70) Stainless steel X5 CrNi 1810 (AISI 304) series 90
9	Gaskets	NBR 70 Shore



NOCCHI AUTOJET

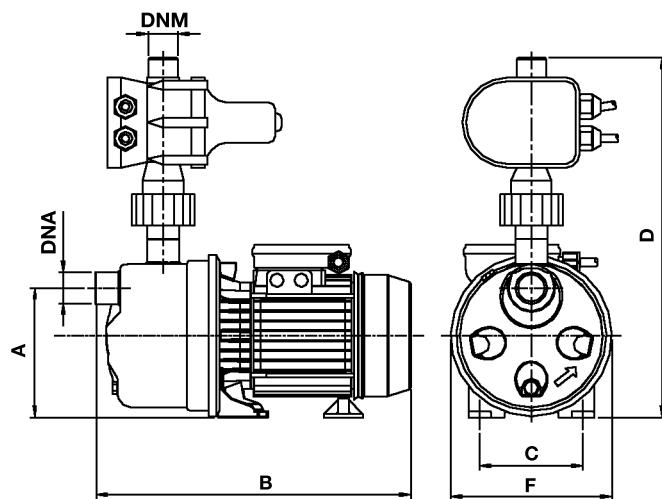
PRESSURE BOOSTER WITH ELECTRONIC CONTROL AND PROTECTION DEVICE OF THE PUMP

HYDRAULIC PERFORMANCE



PERFORMANCE TABLE

MODEL	Motor power (P2)		Motor power (P1)		VOLT. (V)	In (A)	μF	Q	l/min	0	10	20	30	40	50	60
	HP	kW	HP	kW												
AUTOJET 60/50	0.75	0.55	1.10	0.8	1~230	4	12.5	m.c.a./m.c.w.	46	36	31	26	18	6		
AUTOJET 70/50	0.95	0.7	1.36	1.0	1~230	4.5	16			48	42.5	37.5	32	25	16.5	7



OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions mm.							WEIGHTS (Kg)
	A	B	C	D	E	DNA	DNM	
AUTOJET 60/50	140	374	99	391	194	1" F	1" M	9.4
AUTOJET 70/50	144	351	99	397	195	1" F	1" M	10.7

NOCCHI A-DHR

PRESSURE BOOSTER WITH ELECTRONIC CONTROL AND PROTECTION DEVICE OF THE PUMP

Automatic unit to increase the pressure in the water system.

Consisting of a single phase pump like DHR and of the electronic device FLUSSCONTROL, which controls the automatic operation of the pump and protects it in case of a lack of water.

APPLICATIONS

- Lifting and distribution of water in domestic systems
- Pressurisation systems.
- Washing and irrigation.

CONSTRUCTION FEATURES

- Restart pressure not adjustable: 1.5 bar
- Temperature range of the liquid from 4°C to 65°C
- Power cable 1.5m H07 RN-F with schuko plug

USAGE DATA

- Type of liquid: clean water without suspended solids or abrasive material.
- Maximum recommended intake height: 6 m with bottom valve.
- Maximum operating pressure: 10 bar.

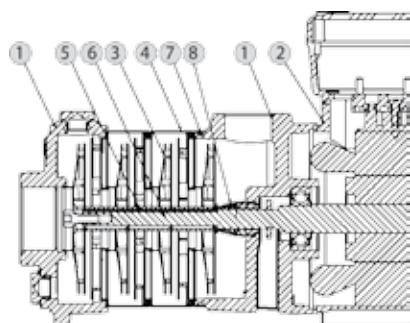


MOTOR

- Closed, ventilated from outside.
- Degree of protection IP 54.
- Insulation class F.
- Single-phase power supply with capacitor always on.
- Thermal protection built into the motor casing.
- Speed of rotation 2850 rpm.
- Continuous service.

TABLE OF MATERIALS

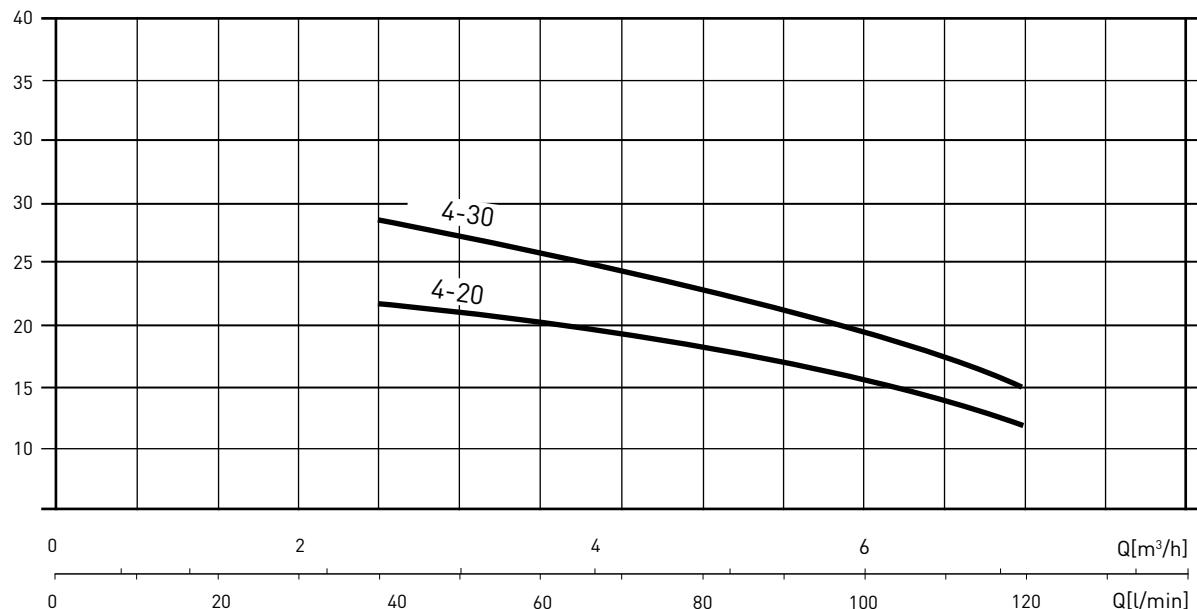
Component		Material
1	Pump body	Cast iron GJL 200 (ASTM Class 35)
2	Motor casing	Cast aluminium
3	Impellers	Stainless steel X5 CrNi18-10 (AISI 304)
4	Diffusers	Stainless steel X5 CrNi18-10 (AISI 304)
5	Sleeve	Stainless steel X5 CrNi18-10 (AISI 304)
6	Shaft	Stainless steel X5 CrNi18-10 (AISI 304)
7	Seals / Gaskets	NBR
8	Mechanical seal	Graphite / Ceramic



NOCCHI A-DHR

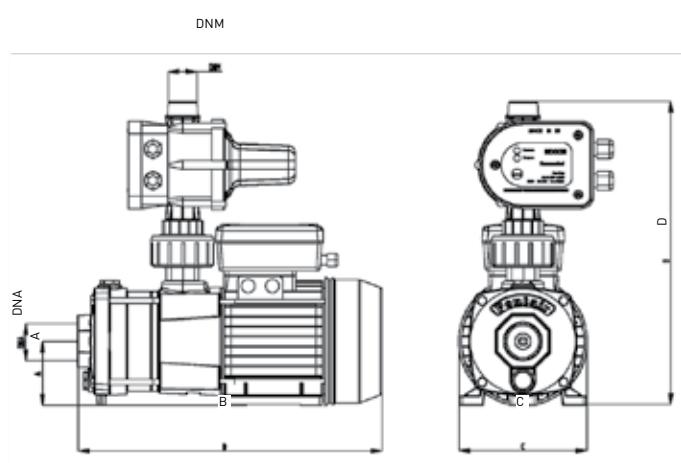
PRESSURE BOOSTER WITH ELECTRONIC CONTROL AND PROTECTION DEVICE OF THE PUMP

HYDRAULIC PERFORMANCE



PERFORMANCE TABLE

MODEL	Motor power (P2)		Motor power (P1)		VOLT. (V)	In (A)	μF	Q l/min	40	50	60	80	100	120
	HP	kW	HP	kW										
A-DHR 4-20 FB	0.50	0.37	0.80	0.60	1 ~ 230	2.9	12.5	m.c.a./m.c.w.	2.4	3	3.6	4.8	6	7.2
A-DHR 4-30 FB	0.70	0.50	1.10	0.80	1 ~ 230	3.7	12.5		17	16	15.5	13.5	11	7.5
								m.c.a./m.c.w.	23.5	22.5	21	18	14	10



OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions mm.						WEIGHTS (Kg)
	A	B	C	D	DNA	DNM	
A-DHR 4-20 FB	71	339	143	338	1" 1/4	1" M	11.5
A-DHR 4-30 FB	71	339	143	338	1" 1/4	1" M	11.7

NOCCHI WP/Multi EVO-A

PRESSURE BOOSTERS WITH HORIZONTAL EXPANSION TANK

NEW 2016
PENTAIR



The Pressure boosters WATERPRESS are made with self-priming multi-stage centrifugal pumps **Multi EVO-A**. They are supplied wired, complete with a 24 l or 50 l expansion module, ready for installation and use. All models are certified for use with drinking water (ACS)

ADVANTAGES

- Reduces water hammers
- Ideal as a water supply system in the building
- Ready to use
- Reduction of the starting frequency with the 50 l tank
- Very easy to install

CONSTRUCTION FEATURES

- Electromechanical pressure switch [max 6 bar] set at: min 2 ÷ max 3 bar.
- Pump start-up pressure adjustable from 1.5 to 3 bar
- Pressure gauge (6 bar).
- 5-way moulded brass plated connector.
- Expansion tanks:
 - 50 l expansion tank in painted steel (models WP / Multi EVO-A 3-40 M-50l and WP / Multi EVO-A 5-50 M-50 l).
 - 24 l expansion tank in painted steel (model WP / Multi EVO-A 3-40 M).
 - 24 l expansion tank in painted steel (model WP / Multi EVO-A 5-50 M-SS).
- Tuboflex hydraulic connection.
- Power cable 1.5 m H05 RN-F with plug

SPECIFICATIONS:

PUMP

- Type of liquid: clean water without suspended solids or abrasive material
- Maximum temperature of the liquid 50°C
- Maximum intake height 8 m with pump installed correctly
- Maximum operating pressure 8 bar



MOTOR

- Closed, ventilated from outside (TEFC)
- 2 poles, 50 Hz (n=2850 rpm)
- Degree of protection IP 55
- Insulation class F
- Single-phase power supply with capacitor permanently on and thermal protection built into the motor casing.
- Three-phase power supply with external protection provided by the user.



APPLICATIONS

- Lifting and distribution of water in domestic systems
- Pressurisation systems
- Irrigation
- Washing systems



NOCCHI WP/Multi EVO-A

PRESSURE BOOSTERS WITH HORIZONTAL EXPANSION TANK

CONSTRUCTION FEATURES

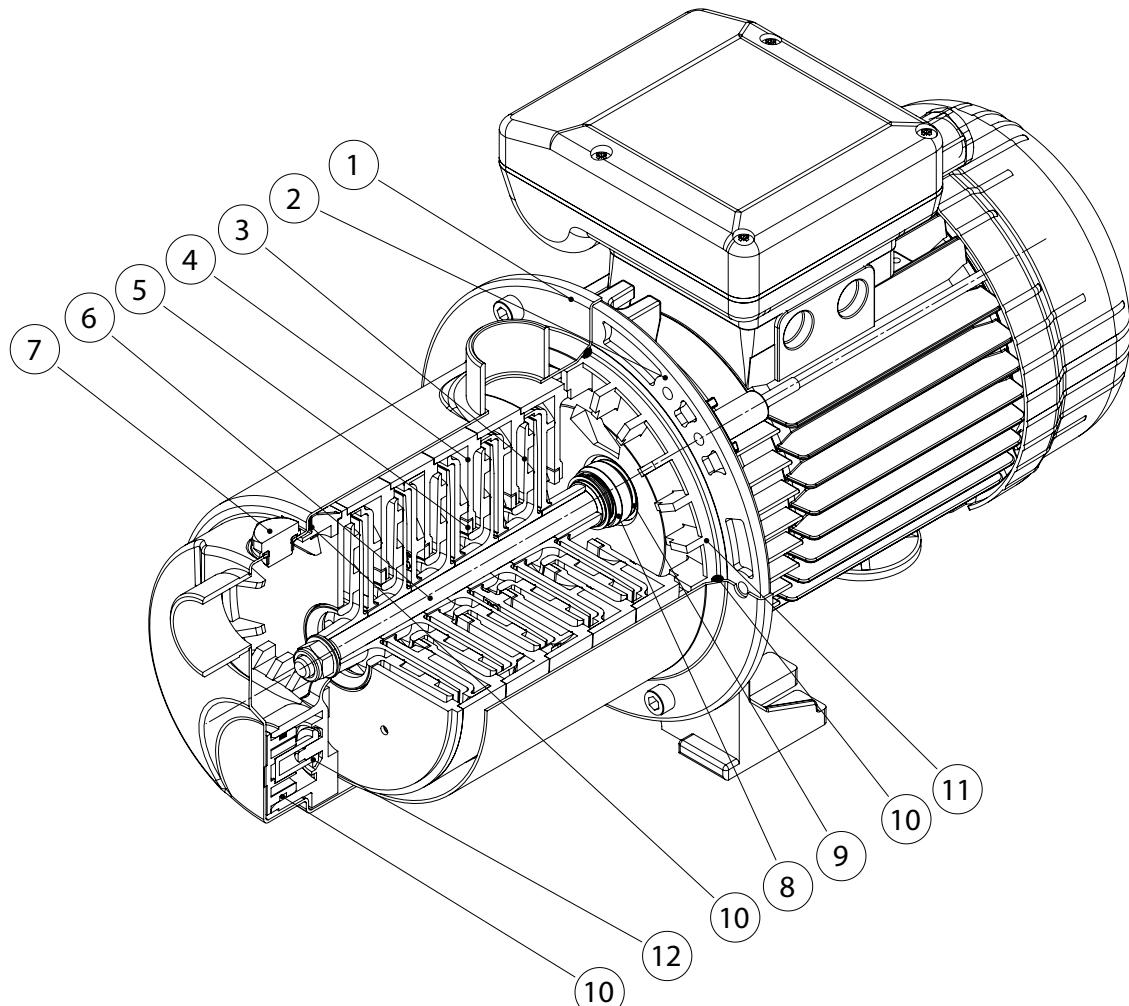


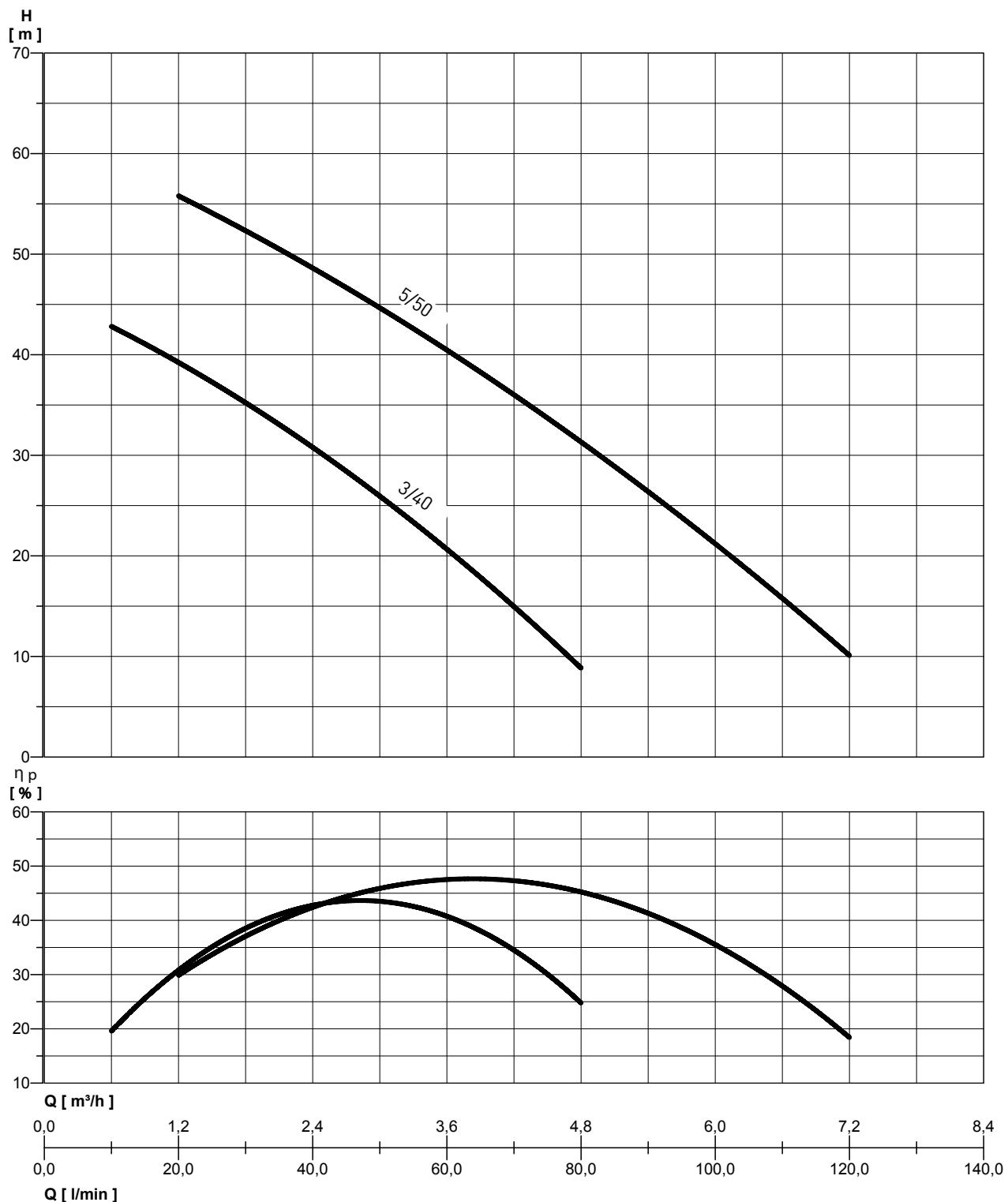
TABLE OF MATERIALS

Ref.	Component	Material
1	Pump body	Stainless steel Europe: EN10088-1 X5CrNi18-10 (1.4301) USA: AISI 304
2	Motor casing	Die-cast aluminium
3	Impeller	PPO reinforced with fibreglass
4	Diffuser	PPO reinforced with fibreglass
5	Wear ring	PTFE
6	Shaft (hydraulic part)	Stainless steel Europe: EN10088-1 X5CrNi18-10 (1.4301) USA: AISI 304
7	Inlet / outlet caps	Stainless steel Europe: EN10088-1 X8CrNiS18-9 (1.4305) USA: AISI 303
8	Mechanical seal	Carbon graphite / NBR / SS Europe: EN10088-1 X5CrNi18-10 (1.4301) USA: AISI 304
9	Counterface	Ceramic / NBR
10	Gaskets	NBR 70 Shore A
11	Seal holder plate	PPO reinforced with fibreglass
12	Priming valve	PPO reinforced with fibreglass

NOCCHI WP/Multi EVO-A 5

PRESSURE BOOSTERS WITH HORIZONTAL EXPANSION TANK

HYDRAULIC PERFORMANCE



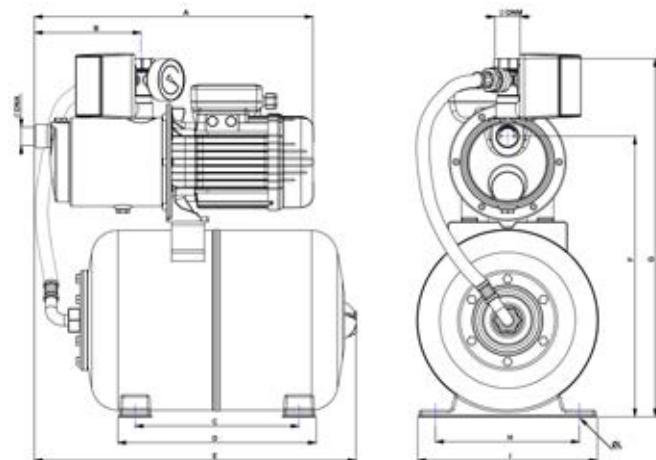
NOCCHI WP/Multi EVO-A 5

PRESSURE BOOSTERS WITH HORIZONTAL EXPANSION TANK

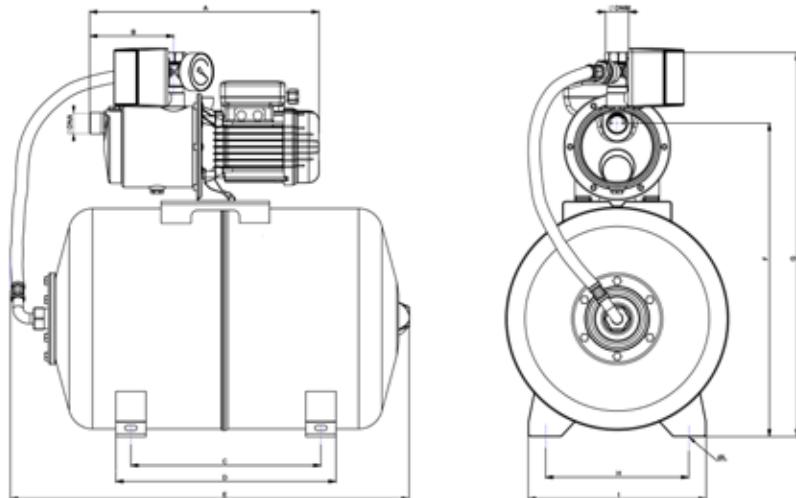
PERFORMANCE TABLE

MODEL	Nominal power (P2)		Absorbed power (P1)		VOLT. (V)	In (A)	μ F	Q	l/min	10	20	30	40	50	60	80	100	120
	HP	kW	HP	kW														
WP / Multi EVO-A 3-40 M	0.67	0.5	1.1	0.8	1 ~ 230	3.7	12.5	total head in water column metres	m^3/h	42.5	39.5	35.5	31	25.5	20.5	9		
WP / Multi EVO-A 3-40 M-50L	0.67	0.5	1.1	0.8	1 ~ 230	3.7	12.5			56	52	48.5	45	40.5	31	21.5	10	
WP / Multi EVO-A 5-50 M-SS	1.34	1	1.8	1.35	1 ~ 230	6.2	20											
WP / Multi EVO-A 5-50 M-50L	1.34	1	1.8	1.35	1 ~ 230	6.2	20											

24 l



50 l



OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions mm.												Total weight (Kg)
	A	B	C	D	E	F	G	H	I	L	DNA	DNM	
WP / Multi EVO-A 3-40 M	380	139	245	295	495	410	530	190	240	9	1"	1"	13.6
WP / Multi EVO-A 3-40 M-50L	380	139	315	365	660	520	640	242	295	9	1"	1"	18
WP / Multi EVO-A 5-50 M-SS	422	162	248	300	490	435	540	218	272	11	1"	1"	14
WP / Multi EVO-A 5-50 M-50L	422	162	215	365	660	520	640	242	295	9	1"	1"	20.5

NOCCHI WATERPRESS

PRESSURE BOOSTERS WITH 24 LT HORIZONTAL EXPANSION TANK

The Pressure boosters WATERPRESS are made with self-priming multi-stage centrifugal PUMPS of the JET series. They are supplied wired, complete with a 24 lt expansion tank, ready for installation and use.

APPLICATIONS

- Lifting and distribution of water in domestic systems
- Pressurisation systems and irrigation.

CONSTRUCTION FEATURES

- Pressure switch (max 6 bar) set at: min 2 ÷ max 3 bar.
- Pressure gauge (6 bar).
- 3-way moulded brass plated connector (model Waterpress 70/50).
- 24 lt expansion tank in painted steel with interchangeable rubber membrane for food.
- Tuboflex hydraulic connection.
- Power cable 1.5 m H05 RN-F with plug

USAGE DATA

- Type of liquid: clean water without suspended solids or abrasive material.
- Maximum temperature of the liquid 50°C.
- Maximum intake height recommended 8 m with foot valve.
- Maximum operating pressure: 6 bar.



MOTOR

- Closed, ventilated from outside.
- Degree of protection IP 44.
- Insulation class F.
- Single-phase power supply with capacitor always on.
- Thermal protection built into the motor casing.
- Speed of rotation 2850 rpm.
- Continuous service.



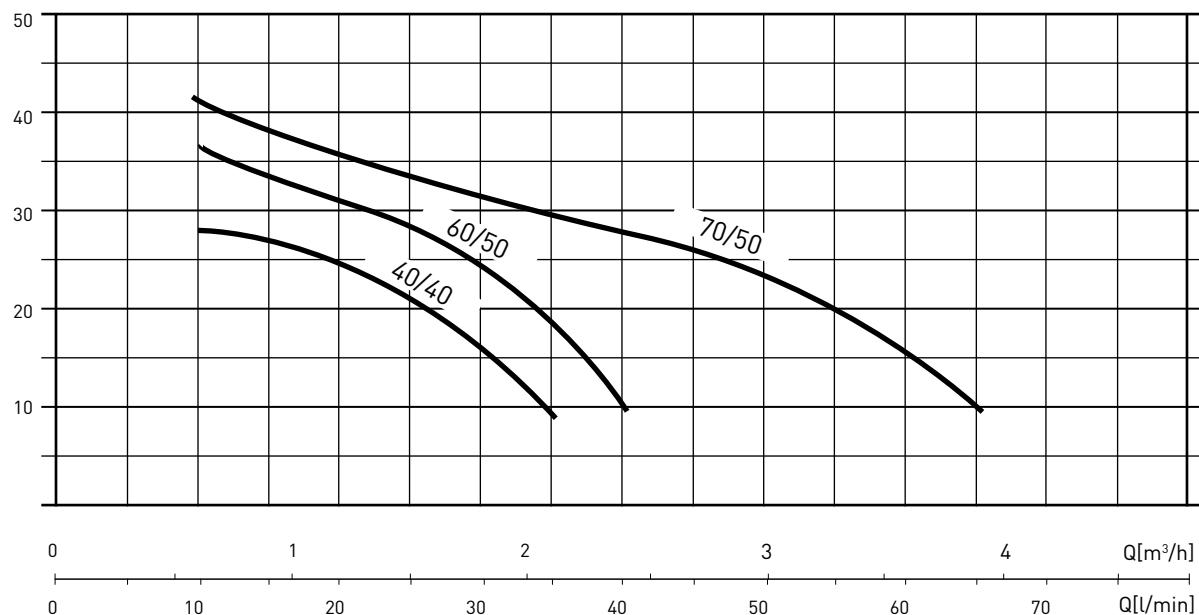
TABLE OF MATERIALS

Component	Material	
	WATERPRESS 40/40 - 60/50	WATERPRESS 70/50
Pump body	Cast iron EN GJL 200	Cast iron EN GJL 200
Motor casing	Aluminium	Cast iron EN GJL 200
Impellers	Technopolymer with stainless steel shim ring X5 CrNi 1810 (AISI 304)	Technopolymer
Diffuser-Venturi tube-nozzle	Monobloc group Technopolymer	Technopolymer
Motor shaft	Stainless steel X5 CrNi 1810 (AISI 304)	Stainless steel X5 CrNi 1810 (AISI 304)
Mechanical seal	Graphite	Graphite
Counterface	Ceramic	Ceramic
Gaskets	NBR 70 shore	NBR 70 shore

NOCCHI WATERPRESS

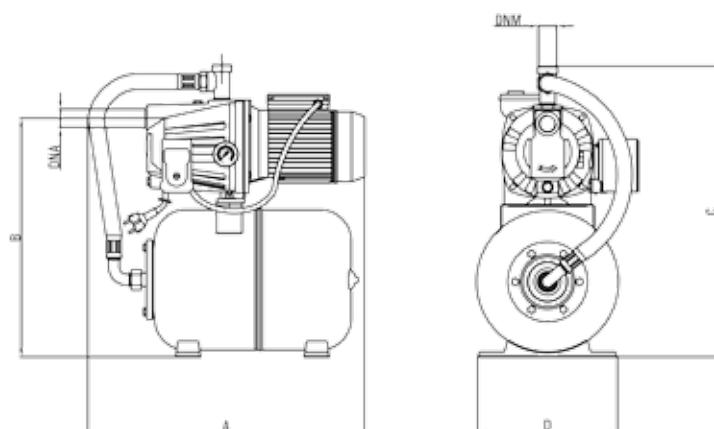
PRESSURE BOOSTERS WITH 24 LT HORIZONTAL EXPANSION TANK

HYDRAULIC PERFORMANCE



PERFORMANCE TABLE

MODEL	Motor power (P2)		Motor power (P1)		VOLT. (V)	In (A)	μ F	Q	l/min	0	10	20	30	40	50	60	70
	HP	kW	HP	kW													
WATERPRESS 40/40M	0.50	0.37	0.80	0.60	1 ~ 230	3	6	m.c.a./m.c.w.	41	28	21						
WATERPRESS 60/50	0.75	0.55	1.1	0.80	1 ~ 230	4	10		46	36	31	24	9	4			
WATERPRESS 70/50	1.36	1	1.5	1.1	1 ~ 230	5	16		49	41	36	32	28	25	15	3	



OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions mm.						WEIGHTS (Kg)
	A	B	C	D	DNA	DNM	
WATERPRESS 40/40	510	430	470	260	1" F	1" F	13.7
WATERPRESS 60/50	510	430	470	260	1" F	1" F	14.5
WATERPRESS 70/50	520	460	550	315	1" F	1" F	22.3

NOCCHI WATERPRESS INOX

PRESSURE BOOSTERS WITH 24 LT HORIZONTAL EXPANSION TANK

The Pressure boosters WATERPRESS INOX are made with a JETINOX type pump. They are supplied wired, complete with a 24 lt expansion tank, ready for installation and use.

APPLICATIONS

- Lifting and distribution of water in domestic systems
- Pressurisation systems.
- Washing and irrigation.

CONSTRUCTION FEATURES

- Pressure switch (max 6 bar) set at: min 2 ÷ max 3 bar.
- Pressure gauge (6 bar).
- 5-way moulded brass plated connector.
- 24 lt expansion module in painted steel with interchangeable rubber membrane for food.
- Tuboflex hydraulic connection.
- Power cable 1.5 m H05 RN-F with plug

USAGE DATA

- Type of liquid: clean water without suspended solids or abrasive material.
- Maximum temperature of the liquid 50°C.
- Maximum intake height recommended 8 m with foot valve.
- Maximum operating pressure: 6 bar.



MOTOR

- Closed, ventilated from outside.
- Degree of protection IP 44.
- Insulation class F.
- Single-phase power supply with capacitor always on.
- Thermal protection built into the motor casing.
- Speed of rotation 2850 rpm.
- Continuous service.

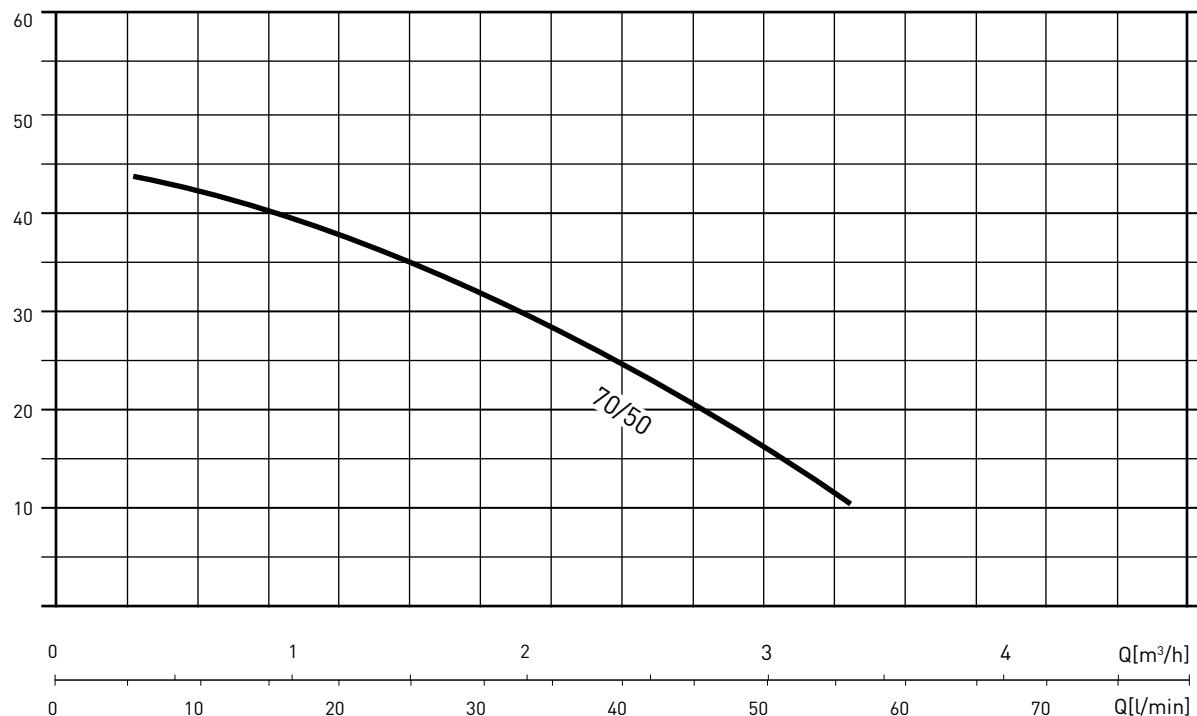
TABLE OF MATERIALS

Component	Material
WP INOX 70/50	
Pump body	Stainless steel X5 CrNi 1810 (Aisi 304)
Motor casing	Die-cast aluminium
Impellers	Technopolymer with stainless steel shim ring
Diffuser-Venturi tube-nozzle	Technopolymer
Shaft	Stainless steel X 12 CrNiS 1809 (AISI 416)
Mechanical seal	Graphite
Counterface	Ceramic
Gaskets	NBR 70 shore

NOCCHI WATERPRESS INOX

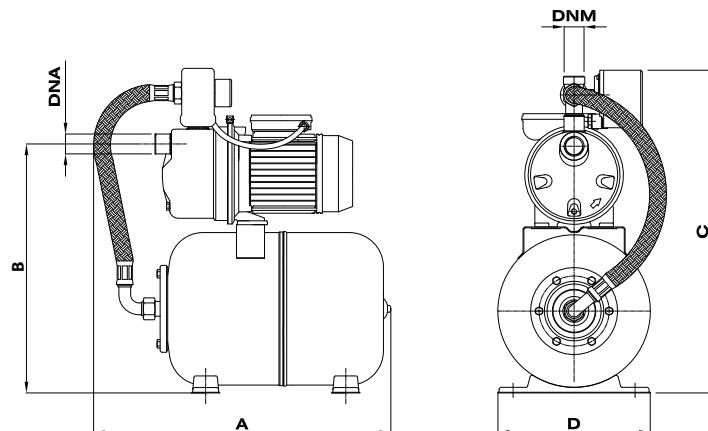
PRESSURE BOOSTERS WITH 24 LT HORIZONTAL EXPANSION TANK

HYDRAULIC PERFORMANCE



PERFORMANCE TABLE

MODEL	Motor power (P2)		Motor power (P1)		VOLT. (V)	In (A)	μ F	Q	I/min	0	20	40	60	80
	HP	kW	HP	kW					m³/h	0	1.2	2.4	3.6	4.8
WP INOX 70/50	0.95	0.7	1.36	1.0	1 ~ 230	4.5	16	m.c.a./m.c.w.	48	37.5	25	7		



OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions mm.						WEIGHTS (Kg)
	A	B	C	D	DNA	DNM	
WATERPRESS INOX 70/50	520	445	565	260	1" F	1" F	13.8

NOCCHI WATERPRESS SUPERINOX

PRESSURE BOOSTERS WITH 24 LT HORIZONTAL EXPANSION TANK

The Pressure boosters WATERPRESS SUPERINOX are made with a JETINOX self-priming centrifugal pump. They are supplied wired and complete with a stainless steel expansion tank.

APPLICATIONS

- Lifting and distribution of water in domestic systems
- Pressurisation systems.
- Washing and irrigation.

CONSTRUCTION FEATURES

- Pressure switch (max 6 bar) set at: min 2 ÷ max 3 bar.
- Pressure gauge (6 bar).
- 5-way moulded brass plated connector.
- 24 lt expansion tank in stainless steel with interchangeable rubber membrane for food.
- Tuboflex hydraulic connection.
- Power cable 1.5 m H05 RN-F with plug

USAGE DATA

- Type of liquid: clean water without suspended solids or abrasive material.
- Maximum temperature of the liquid 50°C.
- Maximum intake height recommended with foot valve. 8 m WP Superinox 60/50
- Maximum operating pressure: 6 m WP Superinox 60/50



MOTOR

- Closed, ventilated from outside.
- Degree of protection IP 44.
- Insulation class F.
- Single-phase power supply with capacitor always on.
- Thermal protection built into the motor casing.
- Speed of rotation 2850 rpm.
- Continuous service.

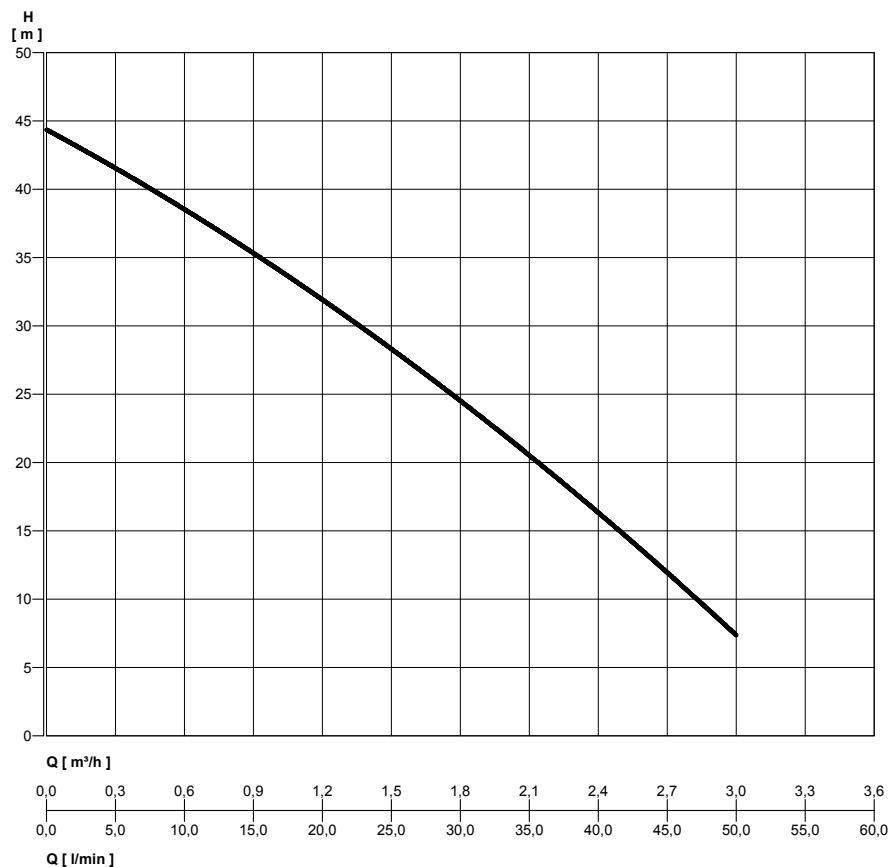
TABLE OF MATERIALS

Component	Material
	WP SUPERINOX 60/50
Pump body	Stainless steel X5 CrNi 1810 (AISI 304)
Motor casing	Die-cast aluminium
Impellers	Technopolymer with stainless steel shim ring
Diffuser-Venturi tube-nozzle	Technopolymer
Shaft	Stainless steel X 12 CrNiS 1809 (AISI 416)
Mechanical seal	Graphite
Counterface	Ceramic
Seal holder plate	Technopolymer
Gaskets	NBR 70 shore

NOCCHI WATERPRESS SUPERINOX

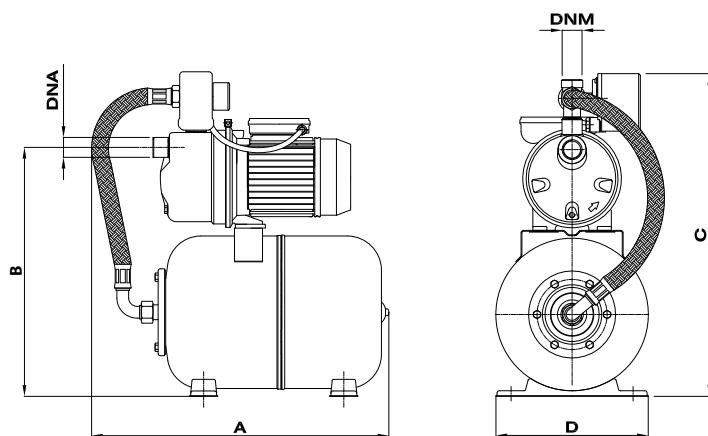
PRESSURE BOOSTERS WITH 24 LT HORIZONTAL EXPANSION TANK

HYDRAULIC PERFORMANCE



PERFORMANCE TABLE

MODEL	Motor power (P2)		Motor power (P1)		VOLT. (V)	In (A)	μ F	Q	l/min	0	10	20	30	40	50
	HP	kW	HP	kW											
WP SUPERINOX 60/50 C JET	0.75	0.55	1.1	0.8	1 ~ 230	4	12.5	m.c.a./m.c.w.	46	36	31	26	18	6	



OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions mm.						WEIGHTS (Kg)
	A	B	C	D	DNA	DNM	
WP SUPERINOX 60/50 C	530	425	550	280	1" F	1" F	11.2

NOCCHI EASY20/Multi EVO

PRESSURE BOOSTERS WITH TWO PUMPS WITH PRESSURE SWITCH CONTROL

NEW 2016
PENTAIR

IE3
MOTOR

COMPACT, STURDY, HIGH HYDRAULIC EFFICIENCY

They are boosters for the automatic pressurisation of water distribution systems with single phase power supply consisting of: 2 PUMPS, electrical panel, base, intake and Delivery manifolds, pressure switches, pressure gauge and check valve in supply.

DESCRIPTION OF OPERATION

The pumps are controlled by two pressure switches with adjustable settings, via an electrical panel with an electronic board for:

- the sequential start-up of the pumps
- the inversion of the start-up order
- the settings for protection against dry running
- timer (adjustable from 0 to 180")

When the network pressure reaches the value for the closing of the electrical contact of pressure switch n.1, a pump starts. If the pressure continues to drop,

once the value of the closing pressure of the second pressure switch has been reached, the other pump starts. When the value of the network pressure increases, the pressure switches open their contact causing the relative pump to stop. At the end of each cycle, the automatic inverter changes the starting order of the pumps (once pressure switch n.1 is associated to pump n.1; in the next cycle to pump n.2).



USAGE DATA	MULTIEVO
Maximum capacity (m³/h)	21
Maximum head (m.c.a.)	70
Maximum operating pressure	8 bar
Power supply VOLT.	1 ~ 230 / 3~400 V
Frequency	50 Hz
Degree of protection of control panel	IP55
Degree of protection of pump	IP55
Ambient temperature	40°C
Number of pumps	2



APPLICATIONS

• Lifting and distribution of water in domestic systems

- Pressurisation systems
- Washing systems

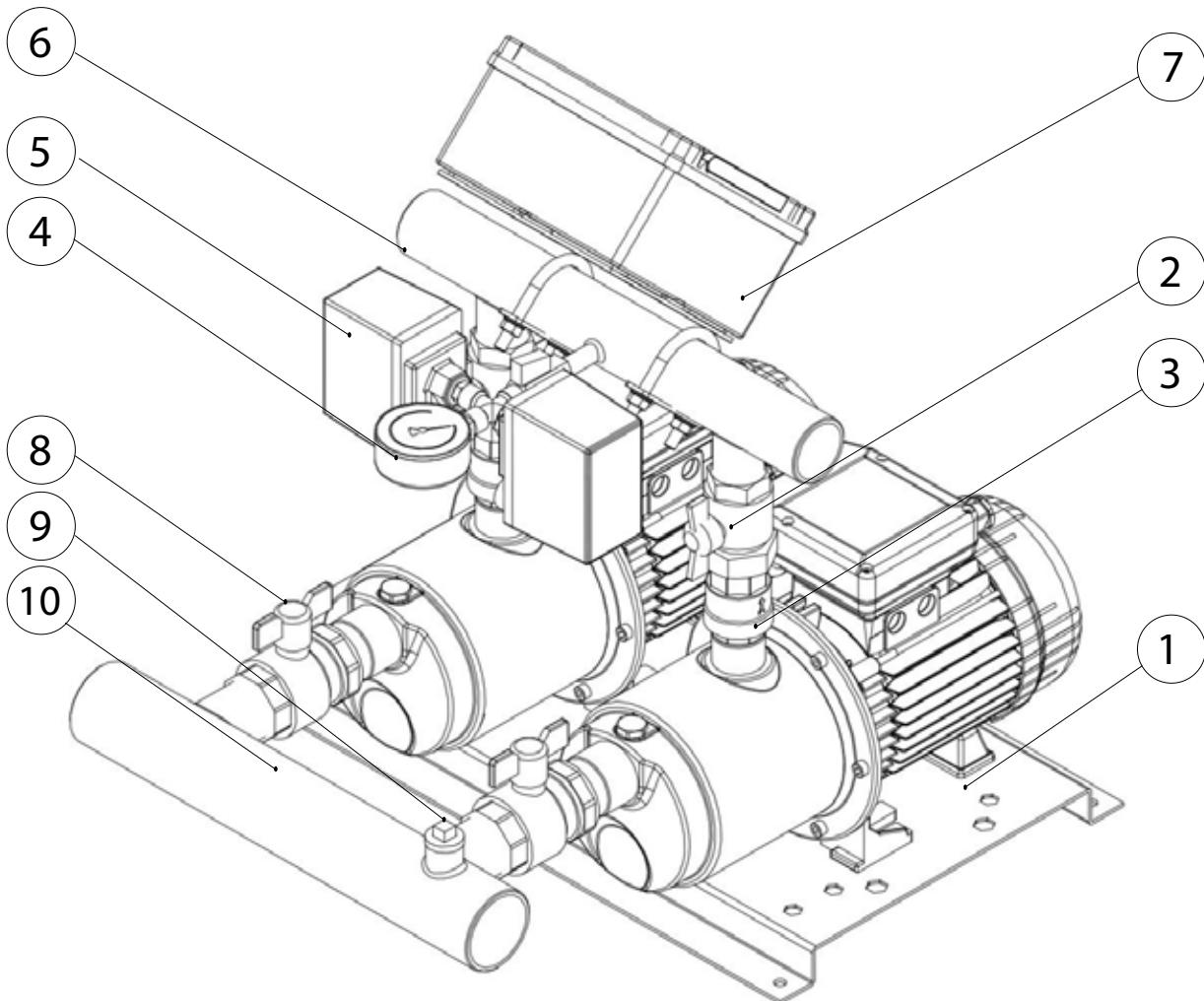
- Irrigation



NOCCHI EASY20/Multi EVO

PRESSURE BOOSTERS WITH TWO PUMPS WITH PRESSURE SWITCH CONTROL

CONSTRUCTION FEATURES



BASE

1. Base in galvanized metal

DELIVERY MANIFOLD

2. n. 2 brass ball valves
3. n. 2 check valves
4. n. 1 pressure gauges
5. n. 2 pressure switches
6. n. 1 galvanized steel manifold
7. n. 1 electrical panel

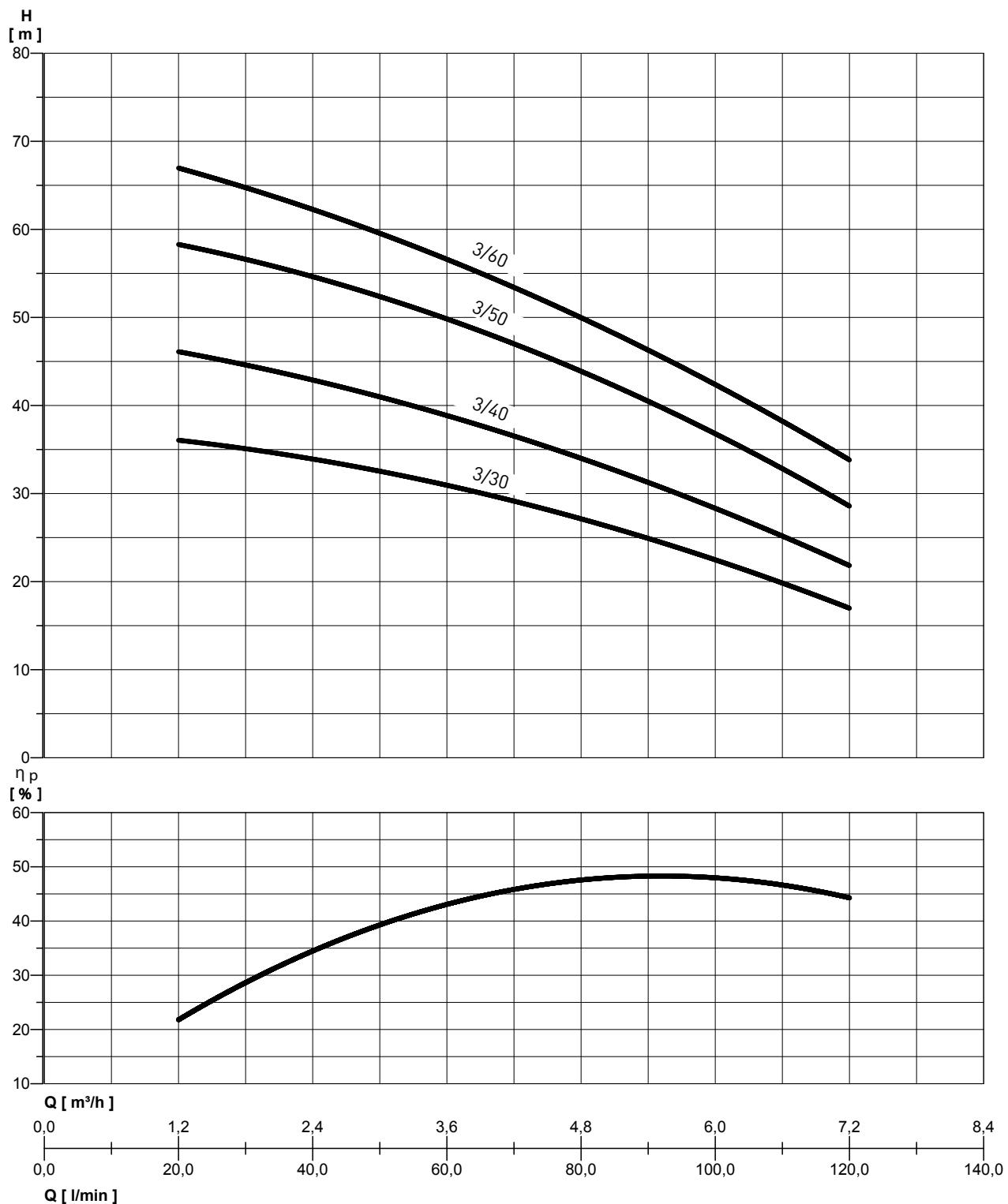
SUCTION MANIFOLD

8. n. 2 brass ball valves
9. n. 1 sleeve for water load
10. n. 1 galvanized steel manifold

NOCCHI EASY20/Multi EVO 3

PRESSURE BOOSTERS WITH TWO PUMPS WITH PRESSURE SWITCH CONTROL

HYDRAULIC PERFORMANCE



NOCCHI EASY20/Multi EVO 3

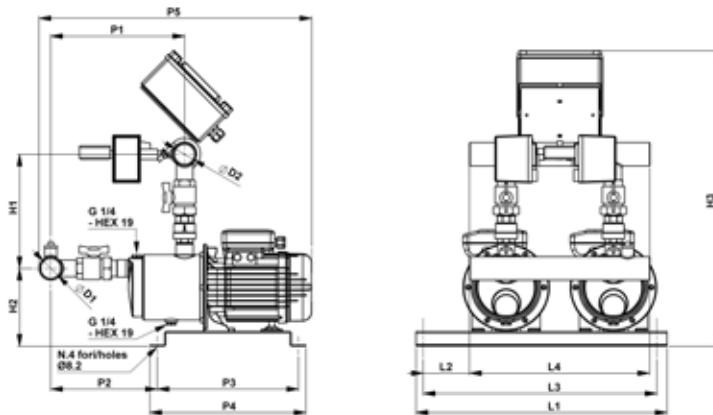
PRESSURE BOOSTERS WITH TWO PUMPS WITH PRESSURE SWITCH CONTROL

PERFORMANCE TABLE

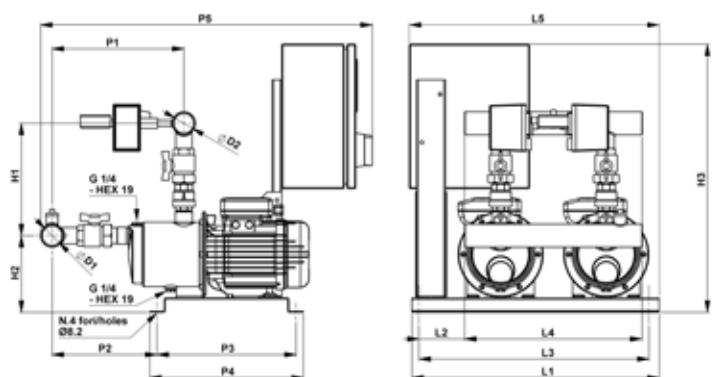
MODEL	Absorbed power (P1) kW	VOLT. (V)	Q	l/min m ³ /h	20	40	60	80	100	120
					1.2	2.4	3.6	4.8	6	7.2
EASY20/Multi EVO 3-30 M-GI	2 x 0.65	1 ~ 230	total head in water column metres		36	34	31	27	22.5	17
EASY20/Multi EVO 3-30 T-GI	2 x 0.65	3 ~ 400			46	43	39	34	28	22
EASY20/Multi EVO 3-40 M-GI	2 x 0.8	1 ~ 230			58	55	50	44	36	29
EASY20/Multi EVO 3-40 T-GI	2 x 0.78	3 ~ 400			67	62	57	50	42	34
EASY20/Multi EVO 3-50 M-GI	2 x 1	1 ~ 230								
EASY20/Multi EVO 3-50 T-GI	2 x 1	3 ~ 400								
EASY20/Multi EVO 3-60 M-GI	2 x 1.25	1 ~ 230								
EASY20/Multi EVO 3-60 T-GI	2 x 1.17	3 ~ 400								

For VOLT. values, see the data of the reference pump

Single-phase



Three-phase



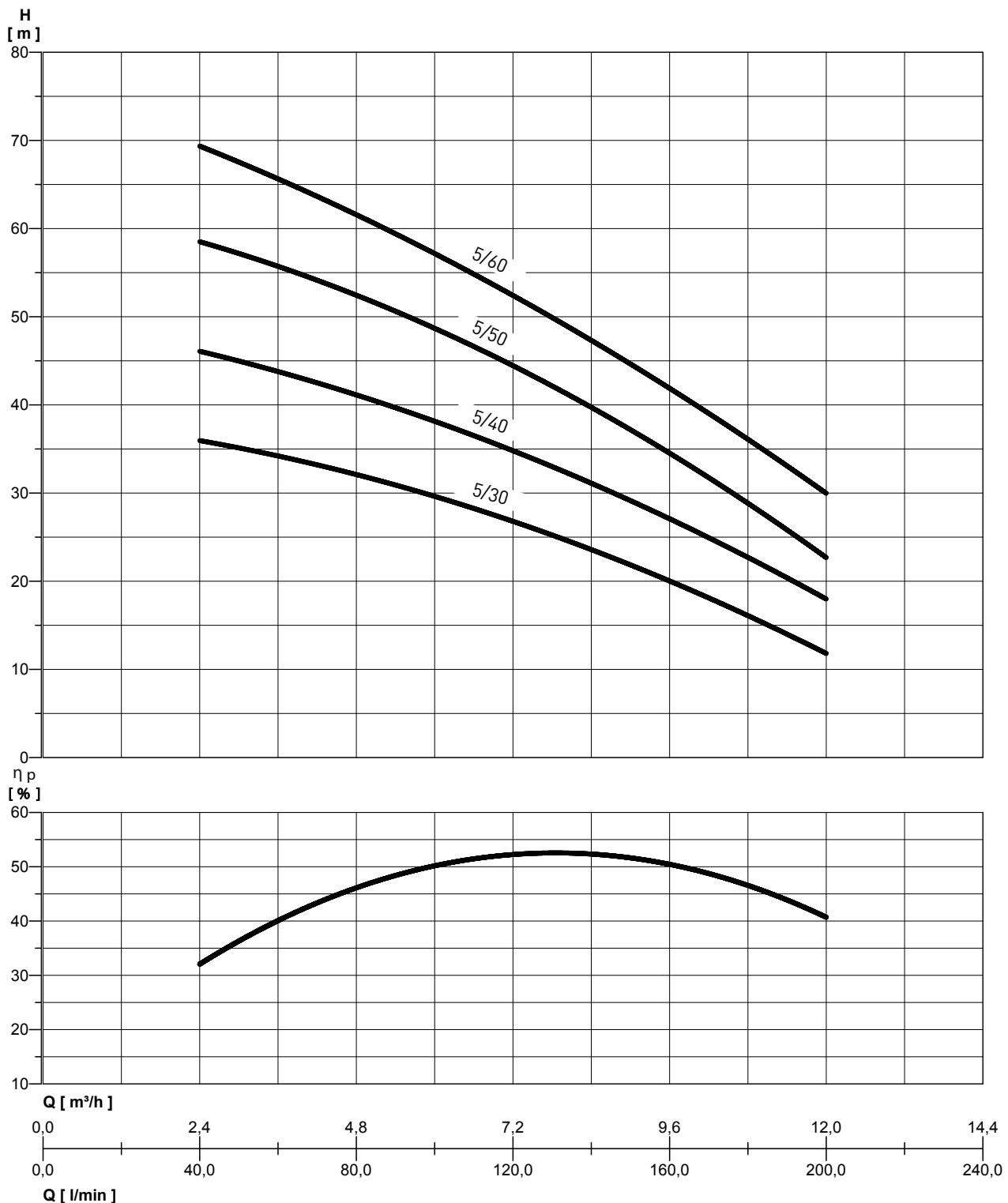
OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions mm.														Total weight (Kg)	
	L1	L2	L3	L4	L5	P1	P2	P3	P4	P5	H1	H2	H3	DNA	DNM	
EASY20/Multi EVO 3-30 M-GI	515	95	485	370	x	255	196	290	320	525	235	160	605	1"1/2	1"1/2	31
EASY20/Multi EVO 3-30 T-GI	515	95	485	370	520	255	196	290	320	670	235	160	560	1"1/2	1"1/2	37
EASY20/Multi EVO 3-40 M-GI	515	95	485	370	x	255	196	290	320	525	235	160	605	1"1/2	1"1/2	32
EASY20/Multi EVO 3-40 T-GI	515	95	485	370	520	255	196	290	320	670	235	160	560	1"1/2	1"1/2	38
EASY20/Multi EVO 3-50 M-GI	515	95	485	370	x	275	216	290	320	560	235	160	605	1"1/2	1"1/2	36
EASY20/Multi EVO 3-50 T-GI	515	95	485	370	520	275	216	290	320	690	235	160	560	1"1/2	1"1/2	42
EASY20/Multi EVO 3-60 M-GI	515	95	485	370	x	297	238	290	320	580	235	160	605	1"1/2	1"1/2	39.5
EASY20/Multi EVO 3-60 T-GI	515	95	485	370	520	297	238	290	320	715	235	160	560	1"1/2	1"1/2	45.5

NOCCHI EASY20/Multi EVO 5

PRESSURE BOOSTERS WITH TWO PUMPS WITH PRESSURE SWITCH CONTROL

HYDRAULIC PERFORMANCE



NOCCHI EASY20/Multi EVO 5

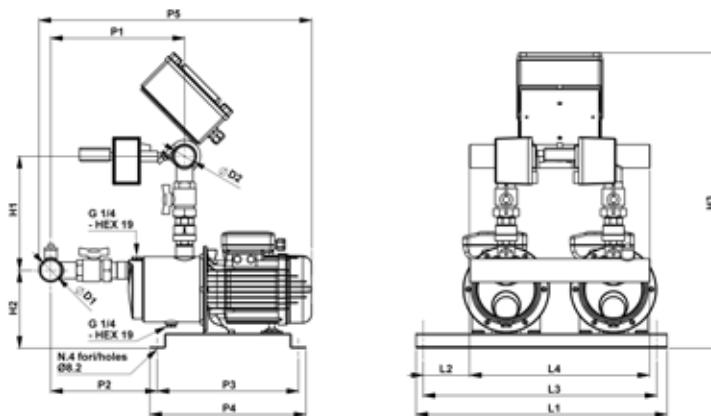
PRESSURE BOOSTERS WITH TWO PUMPS WITH PRESSURE SWITCH CONTROL

PERFORMANCE TABLE

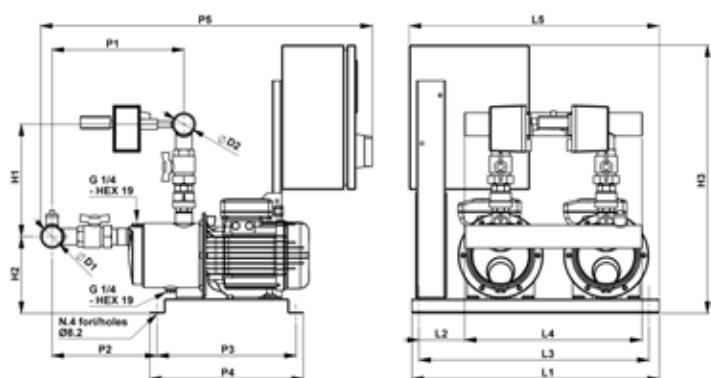
MODEL	Absorbed power (P1) kW	VOLT. (V)	Q m ³ /h	l/min	40	60	80	100	120	160	200
EASY20/Multi EVO 5-30 M-GI	2 x 0.8	1 ~ 230	total head in water column metres	36	34	32	30	27	19.5	12	
EASY20/Multi EVO 5-30 T-GI	2 x 0.78	3 ~ 400		46	44	41	38	35	27	18	
EASY20/Multi EVO 5-40 M-GI	2 x 1.1	1 ~ 230		58	56	53	49	44	34	23	
EASY20/Multi EVO 5-40 T-GI	2 x 1.1	3 ~ 400		69	66	62	57	52	42	30	
EASY20/Multi EVO 5-50 M-GI	2 x 1.35	1 ~ 230									
EASY20/Multi EVO 5-50 T-GI	2 x 1.25	3 ~ 400									
EASY20/Multi EVO 5-60 M-GI	2 x 1.65	1 ~ 230									
EASY20/Multi EVO 5-60 T-GI	2 x 1.57	3 ~ 400									

For VOLT. values, see the data of the reference pump

Single-phase



Three-phase



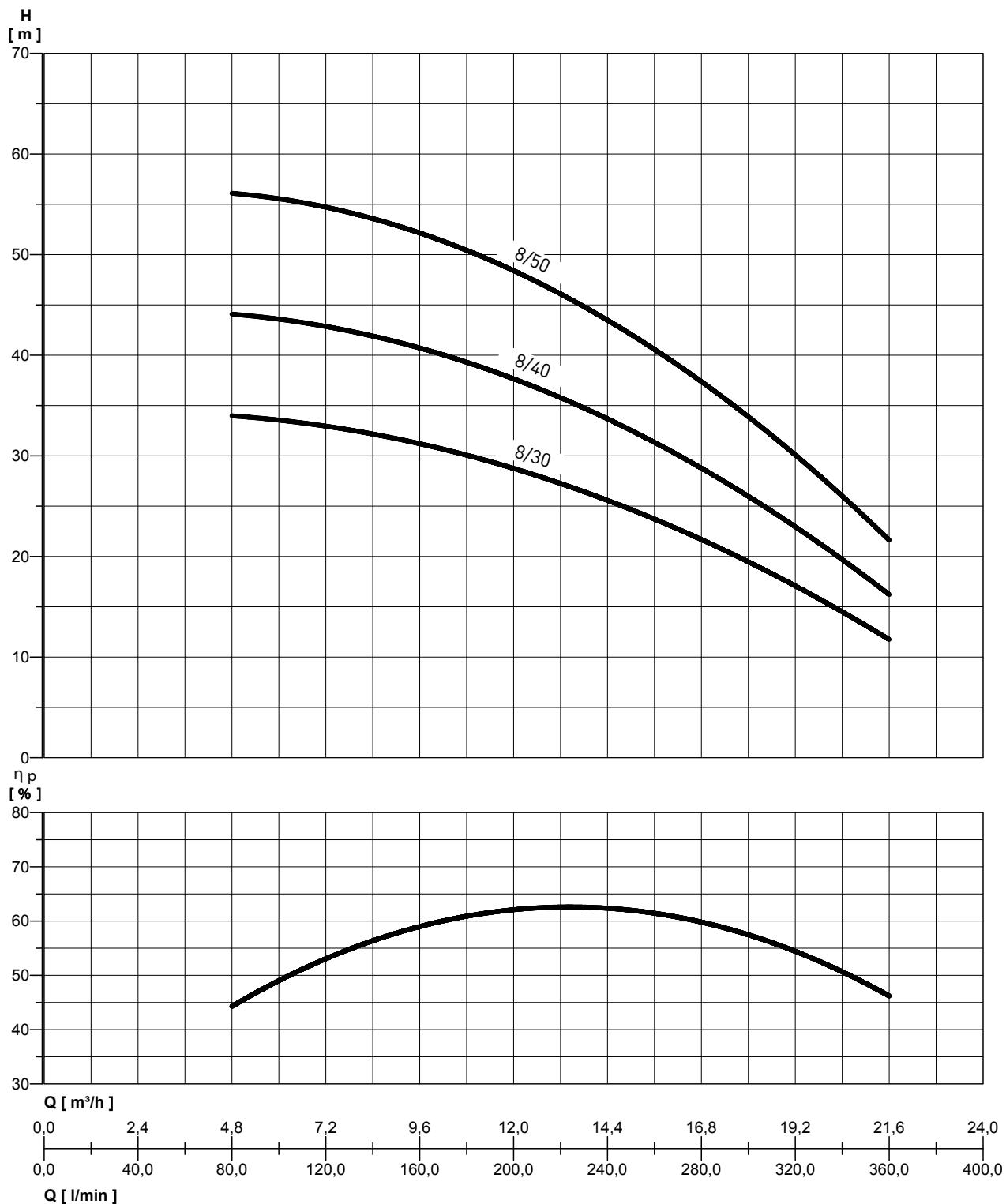
OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions mm.														Total weight (Kg)	
	L1	L2	L3	L4	L5	P1	P2	P3	P4	P5	H1	H2	H3	DNA	DNM	
EASY20/Multi EVO 5-30 M-GI	515	95	485	370	x	275	222	290	320	550	240	155	605	2"	1"1/2	33.5
EASY20/Multi EVO 5-30 T-GI	515	95	485	370	520	275	222	290	320	695	240	155	560	2"	1"1/2	39.5
EASY20/Multi EVO 5-40 M-GI	515	95	485	370	x	275	222	290	320	560	240	155	605	2"	1"1/2	37
EASY20/Multi EVO 5-40 T-GI	515	95	485	370	520	275	222	290	320	695	240	155	560	2"	1"1/2	43
EASY20/Multi EVO 5-50 M-GI	515	95	485	370	x	300	247	290	320	590	240	155	605	2"	1"1/2	40
EASY20/Multi EVO 5-50 T-GI	515	95	485	370	520	300	247	290	320	695	240	155	560	2"	1"1/2	46
EASY20/Multi EVO 5-60 M-GI	515	95	485	370	x	320	267	290	320	645	240	155	605	2"	1"1/2	46
EASY20/Multi EVO 5-60 T-GI	515	95	485	370	520	320	267	290	320	745	240	155	560	2"	1"1/2	52

NOCCHI EASY20/Multi EVO 8

PRESSURE BOOSTERS WITH TWO PUMPS WITH PRESSURE SWITCH CONTROL

HYDRAULIC PERFORMANCE



NOCCHI EASY20/Multi EVO 8

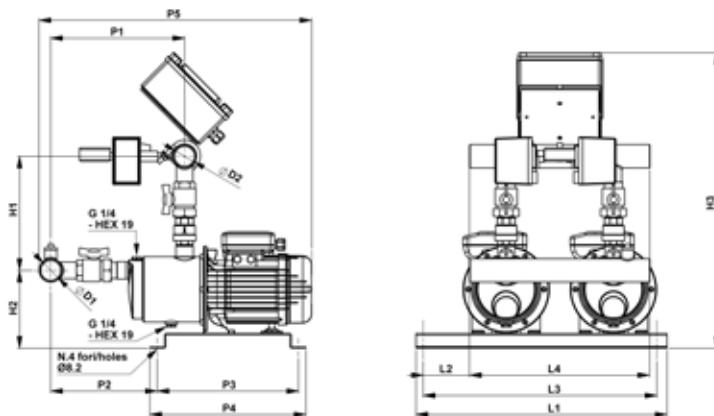
PRESSURE BOOSTERS WITH TWO PUMPS WITH PRESSURE SWITCH CONTROL

PERFORMANCE TABLE

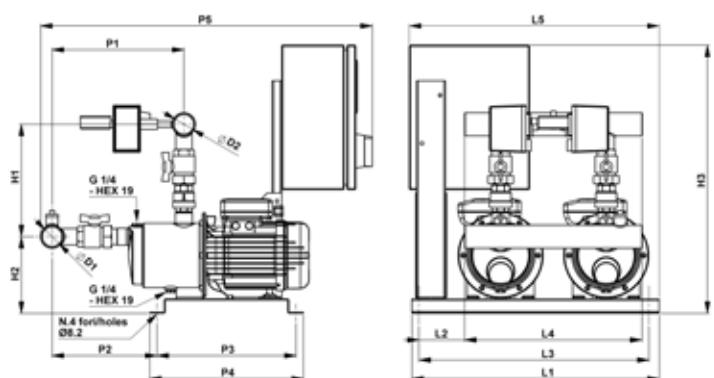
MODEL	Absorbed power (P1) kW	VOLT. (V)	Q	l/min m ³ /h	80	100	120	160	200	240	280	320	360
					4.8	6	7.2	9.6	12	14.4	16.8	19.2	21.6
EASY20/Multi EVO 8-30 M-GI	2 x 1.28	1 ~ 230	total head in water column metres	34	33.5	33	31	29	25.5	22	16.5	12	
EASY20/Multi EVO 8-30 T-GI	2 x 1.2	3 ~ 400		44.5	43.5	42.5	40.5	37.5	34	29	23	16	
EASY20/Multi EVO 8-40 M-GI	2 x 1.66	1 ~ 230		56.5	55.5	54.5	51.5	48.5	44.0	37.5	30.0	21.5	
EASY20/Multi EVO 8-40 T-GI	2 x 1.5	3 ~ 400											
EASY20/Multi EVO 8-50 M-GI	2 x 2	1 ~ 230											
EASY20/Multi EVO 8-50 T-GI	2 x 1.95	3 ~ 400											

For VOLT. values, see the data of the reference pump

Single-phase



Three-phase



OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions mm.														Total weight (Kg)	
	L1	L2	L3	L4	L5	P1	P2	P3	P4	P5	H1	H2	H3	DNA	DNM	
EASY20/Multi EVO 8-30 M-GI	515	95	485	370	x	296	240	290	320	585	292	155	660	2"	2"	42
EASY20/Multi EVO 8-30 T-GI	515	95	485	370	520	296	240	290	320	718	292	155	560	2"	2"	48
EASY20/Multi EVO 8-40 M-GI	515	95	485	370	x	296	240	290	320	620	292	155	660	2"	2"	48
EASY20/Multi EVO 8-40 T-GI	515	95	485	370	520	296	240	290	320	718	292	155	560	2"	2"	54
EASY20/Multi EVO 8-50 M-GI	515	95	485	370	x	325	275	290	320	645	292	155	660	2"	2"	50
EASY20/Multi EVO 8-50 T-GI	515	95	485	370	520	325	275	290	320	745	292	155	560	2"	2"	56

NOCCHI EASYBOOST

RESIDENTIAL - PRESSURE BOOSTERS WITH PRESSURE SWITCH CONTROL

COMPACT, STURDY, HIGH HYDRAULIC EFFICIENCY, RELIABLE

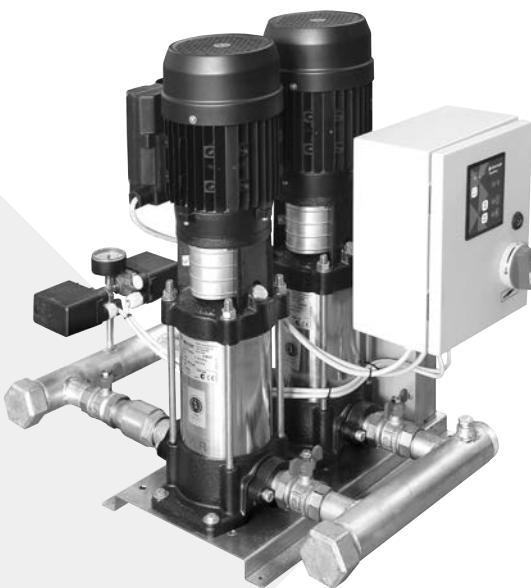
They are boosters for the automatic pressurisation of water distribution systems with single phase power supply consisting of: 2 PUMPS, electrical panel, base, intake and Delivery manifolds, pressure switches, pressure gauge and check valve in supply.

DESCRIPTION OF OPERATION

The pumps are controlled by two pressure switches with adjustable settings, via an electrical panel with an electronic board for:

- the sequential start-up of the pumps
- the inversion of the start-up order
- the settings for protection against dry running
- timer (adjustable from 0 to 180")

When the network pressure reaches the value for the closing of the electrical contact of pressure switch n.1, a pump starts. If the pressure continues to drop, once the value of the closing pressure of the second pressure switch has been reached, the other pump starts. When the value of the network pressure increases, the pressure switches open their contact causing the relative pump to stop. At the end of each cycle, the automatic inverter changes the starting order of the pumps (once pressure switch n.1 is associated to pump n.1; in the next cycle to pump n.2).



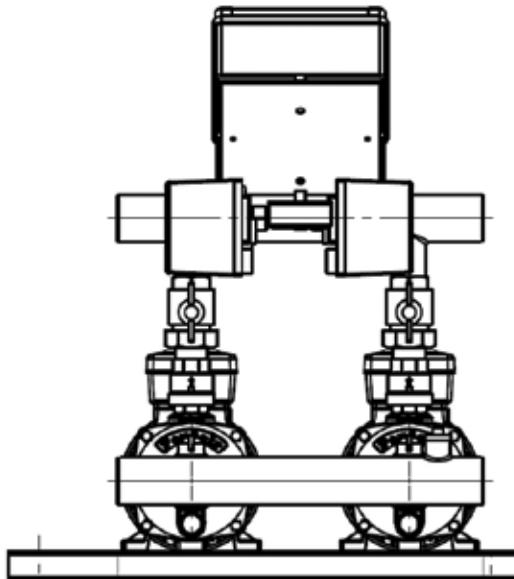
NUMBER OF PUMPS		MAXIMUM CAPACITY	
Main	Pilot	L/min	m³/h
2	-	from 200 to 480	from 12 to 28.8

NOCCHI EASYBOOST

PRESSURE BOOSTERS WITH PRESSURE SWITCH CONTROL

USAGE DATA

USAGE DATA	CB	DHR	MULTINOX VE +	PVM
Maximum capacity (m ³ /h)	16.8	28.8	25.2	17
Maximum head (m.c.a.)	60.5	63	140	110
Maximum operating pressure	9 bar	10 bar	14 bar	16 bar
Power supply VOLT.	1 - 230 / 3-400 V			
Frequency	50 Hz			
Degree of protection of control panel	IP55	IP54	IP55	IP54
Degree of protection of pump	IP44	IP55	IP44	IP55
Ambient temperature	40° C	50° C	50° C	50° C



PUMP

- n. 2 CB - Bi-rotating centrifugal horizontal axis
- n. 2 MULTINOX VE+ - Multicellular centrifugal vertical axis
- n. 2 DHR - Multicellular centrifugal vertical axis
- n. 2 PVM - Multicellular centrifugal vertical axis

SUCTION MANIFOLD

- n. 2 brass ball valves
- n. 1 sleeve for water load

BASE

- In galvanized metal

DELIVERY MANIFOLD

- n. 2 brass ball valves
- n. 2 check valves
- n. 1 pressure gauge
- n. 2 pressure switches

NOCCHI EASYBOOST

PRESSURE BOOSTERS WITH PRESSURE SWITCH CONTROL

SINGLE PHASE ELECTRICAL PANEL

ELECTRICAL PANEL

- Box in plastic material IP65
- Fuses
- Multifunctional electronic board with integrated transformer for the auxiliary circuit
- Start-up relay for each pump
- Protection against overload provided by the electronic board
- Trimmer to adjust the delay time from 0 to 180 seconds, after the opening of the contact of the pressure switch (for each pump)

SIGNALS AND CONTROLS

- Manual - Automatic button
- ON/OFF buttons for each pump
- LED indicating the presence of power
- LED indicating pump in operation
- LED indicating low level in the collection tank or pressure insufficient in the Suction manifold
- LEDs indicating manual or automatic operation
- BMS with contacts for each pump: pump on and overload

EXTRENL CONTROL DEVICES

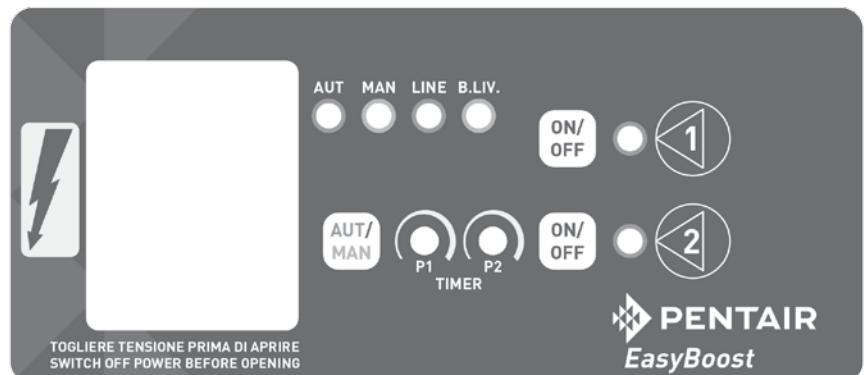
- Two adjustable differential pressure switches ON/OFF

EXTRENAL CONTROL DEVICES

- ON/OFF float switch, located in the water collection tank, or
- Reverse pressure switch inserted in the water supply duct (aqueduct)

MAIN FUNCTIONS

- Cyclic inversion of the start-up order of the pumps after each cycle end.
- ON/OFF control of the level of the tank or the pressure of the supply duct by means of a float switch or a different differential pressure switch.
- Adjustable timer for the pumps



NOCCHI EASYBOOST

PRESSURE BOOSTERS WITH PRESSURE SWITCH CONTROL

THREE-PHASE ELECTRICAL PANEL

ELECTRICAL PANEL

- Metal box IP54
- Main switch
- Electronic board
- Fuses and contactors for each pump
- Protection against overload provided by the electronic board
- Transformer with fuses for the auxiliary circuit

MAIN FUNCTIONS

- Cyclic inversion of the start-up order of the pumps after each cycle end.
- ON/OFF control of the level of the tank or the pressure of the supply duct by means of a float switch or a different differential pressure switch.
- Timer of the last pump settable from 0 to 180 seconds, after the opening of the pressure switch operation contact.

SIGNALS AND CONTROLS

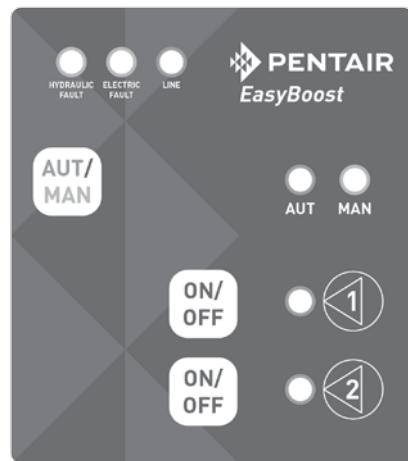
- M-0-T button
(Manual - 0 - Automatic)
- ON/OFF buttons for each pump
- LED indicating the presence of power
- LED indicating pump in operation
- LED indicating low level in the collection tank or pressure insufficient in the Suction manifold
- LED indicating overload
- LEDs indicating manual or automatic operation
- BMS with contacts for each pump: pump on, overload and no water alarm
- Communication RS232/RS485

EXTRENAL CONTROL DEVICES

- Two adjustable differential pressure switches ON/OFF

EXTRENAL CONTROL DEVICES

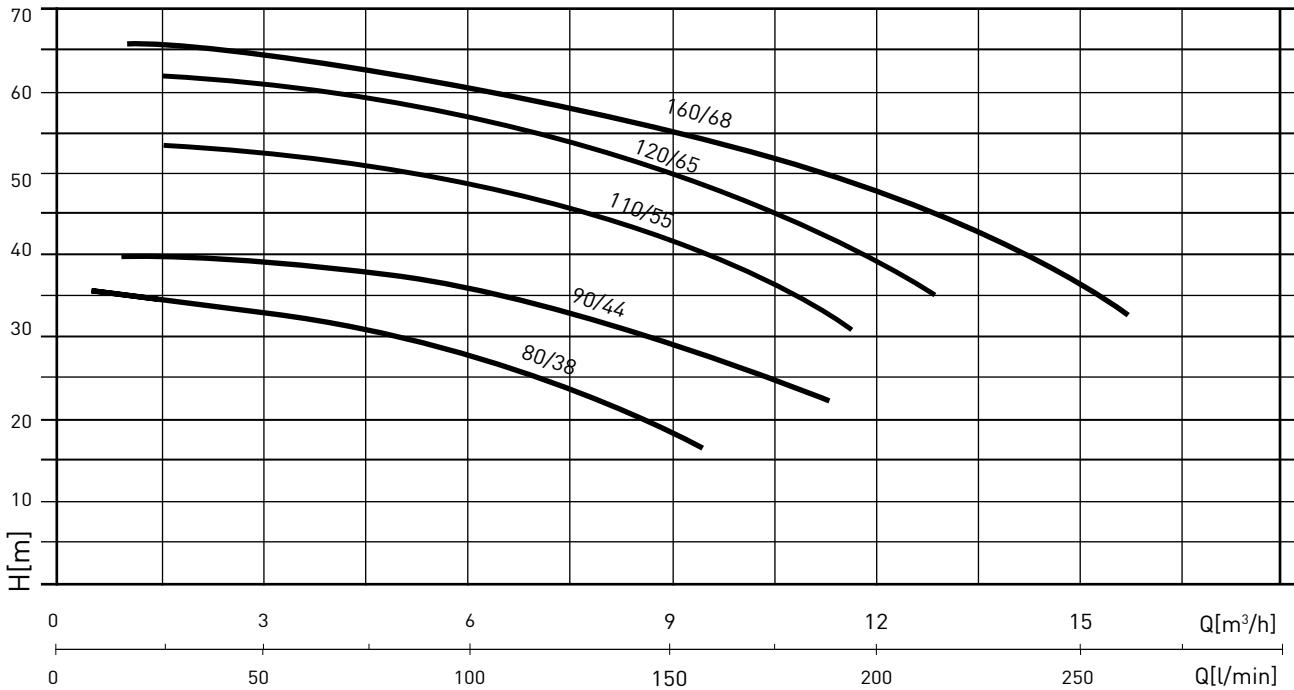
- ON/OFF float switch, located in the water collection tank, or
- Reverse pressure switch inserted in the water supply duct (aqueduct)



NOCCHI EASYBOOST - CB

PRESSURE BOOSTERS WITH PRESSURE SWITCH CONTROL

HYDRAULIC PERFORMANCE



PERFORMANCE TABLE

MODEL	kW	VOLT. (V)	l/min	40	80	100	160	180	200	220	280
				m³/h	2.4	4.8	6	9.6	10.8	12	13.2
EASY20/CB 80/38	2x0.55	1 ~ 230		33	30	28	17				
		3 ~ 400									
EASY20/CB 90/44	2x0.74	1 ~ 230		40	37	35	27	21			
		3 ~ 400									
EASY20/CB 110/55	2x1.1	1 ~ 230		51	49	47	38	33	28		
		3 ~ 400									
EASY20/CB 120/65	2x1.5	1 ~ 230		61	59	57	50	47	40	33	
		3 ~ 400									
EASY20/CB 160/68	2x2.20	3 ~ 400			61	59	54	52	49	45	32

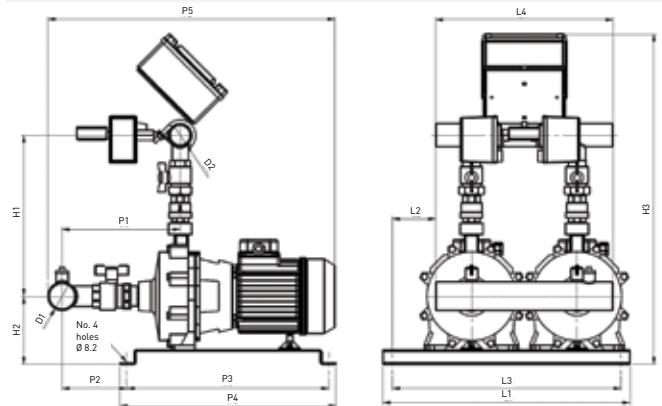
For VOLT. values, see the data of the reference pump

NOCCHI EASYBOOST - CB

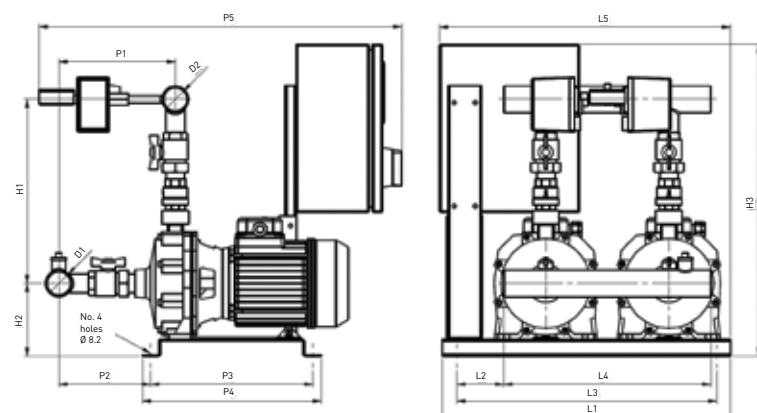
PRESSURE BOOSTERS WITH PRESSURE SWITCH CONTROL

OVERALL DIMENSIONS AND WEIGHTS

SINGLE PHASE



THREE-PHASE



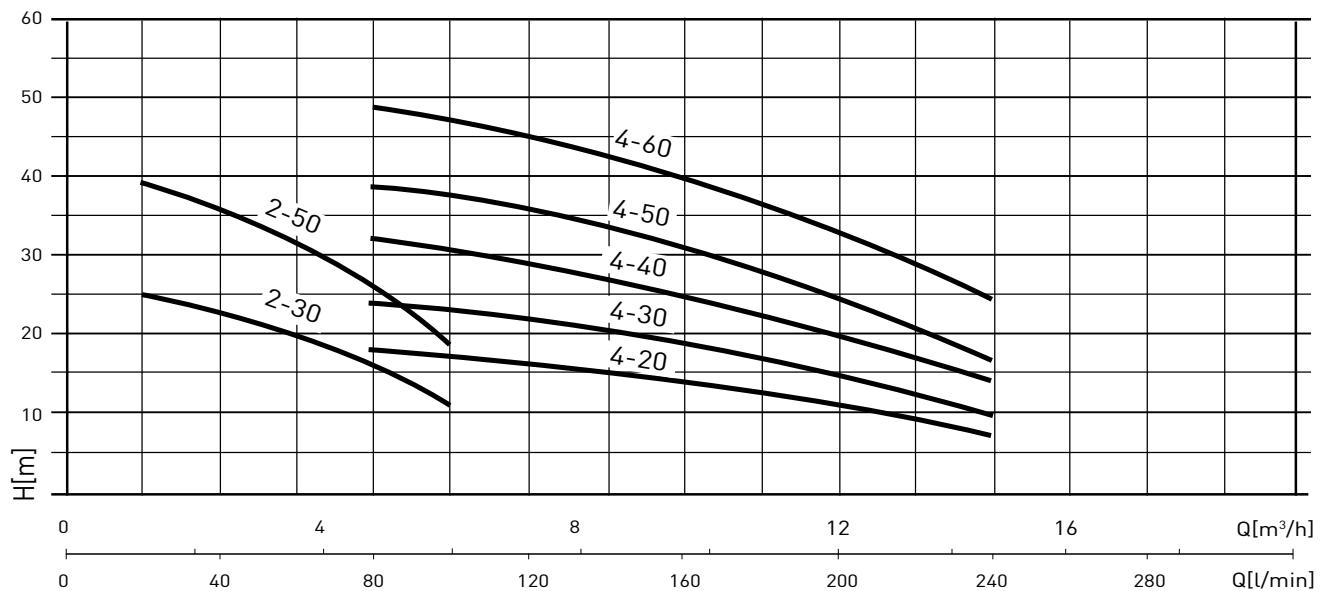
OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions mm.														WEIGHTS (Kg)		
	L1	L2	L3	L4	L5	P1	P2	P3	P4	P5	H1	H2	H3	D1	D2	220V	400V
EASY20/CB 80/38M-GI	515	95	485	370	X	209	165	290	320	542	328	130	671	1-1/2"	1-1/2"	34	40
EASY20/CB 80/38T-GI	515	95	485	370	520	209	165	290	320	652	328	130	560	1-1/2"	1-1/2"	34	40
EASY20/CB 90/44M-GI	515	95	485	370	X	209	165	290	320	542	328	130	671	1-1/2"	1-1/2"	42	48
EASY20/CB 90/44T-GI	515	95	485	370	520	209	165	290	320	652	328	130	560	1-1/2"	1-1/2"	42	48
EASY20/CB 110/55M-GI	515	95	485	370	X	246	135	420	450	600	335	142	690	2"	1-1/2"	62	68
EASY20/CB 110/55T-GI	515	95	485	370	520	246	135	420	450	758	335	142	560	2"	1-1/2"	62	68
EASY20/CB 120/65M-GI	515	95	485	370	X	246	135	420	450	600	335	142	690	2"	1-1/2"		70
EASY20/CB 120/65T-GI	515	95	485	370	520	246	135	420	450	758	335	142	560	2"	1-1/2"		70
EASY20/CB 160/68T-GI	515	95	485	370	520	246	135	420	450	758	335	142	560	2"	1-1/2"	63	69

NOCCHI EASYBOOST - DHR 2/4

SINGLE PHASE AND THREE-PHASE PRESSURE BOOSTERS WITH PRESSURE SWITCH CONTROL

HYDRAULIC PERFORMANCE



PERFORMANCE TABLE

MODEL	kW	VOLT. (V)	l/min m³ / h	20	60	80	100	160	200	240
				1.2	3.6	4.8	6	9.6	12	14.4
EASY20/DHR 2-30	2x0.30	1 ~ 230		25	19	16	12			
		3 ~ 400								
EASY20/DHR 2-50	2x0.50	1 ~ 230		39	30	23	16			
		3 ~ 400								
EASY20/DHR 4-20	2x0.37	1 ~ 230				17	16	13	11	7
		3 ~ 400								
EASY20/DHR 4-30	2x0.5	1 ~ 230				24	23	18	14	10
		3 ~ 400								
EASY20/DHR 4-40	2x0.70	1 ~ 230				32	30	25	20	14
		3 ~ 400								
EASY20/DHR 4-50	2x0.90	1 ~ 230				39	38	31	25	17
		3 ~ 400								
EASY20/DHR 4-60	2x1.2	1 ~ 230				49	47	41	34	25
		3 ~ 400								

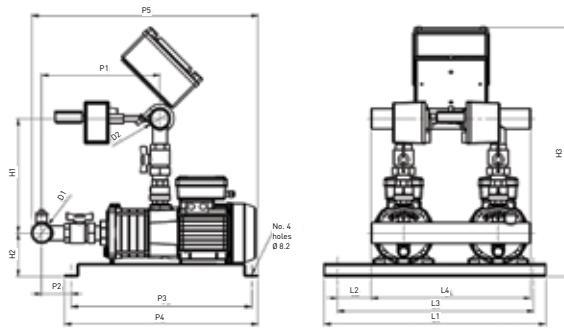
For VOLT. values, see the data of the reference pump

NOCCHI EASYBOOST - DHR 2/4

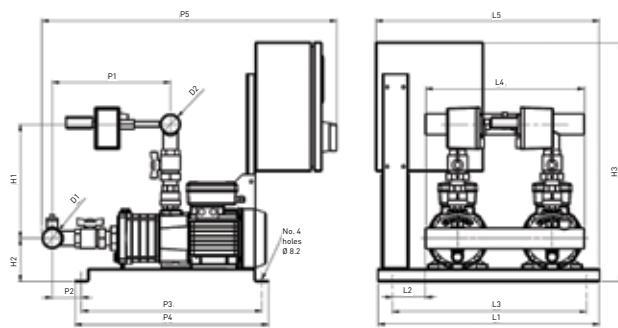
SINGLE PHASE AND THREE-PHASE PRESSURE BOOSTERS WITH PRESSURE SWITCH CONTROL

OVERALL DIMENSIONS AND WEIGHTS

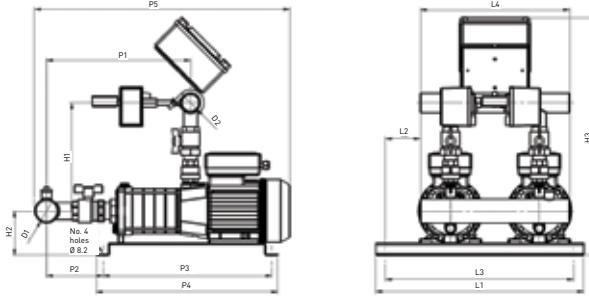
SINGLE PHASE - DHR 2



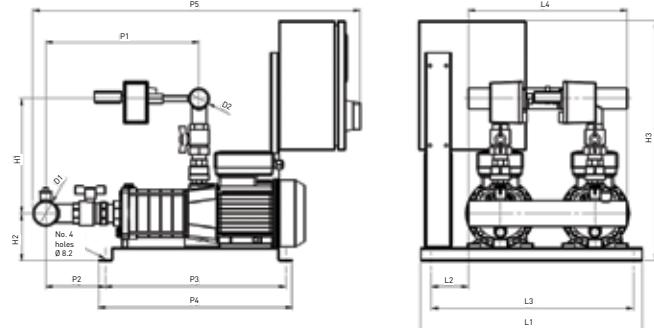
THREE-PHASE - DHR 2



SINGLE PHASE - DHR 4



THREE-PHASE - DHR 4



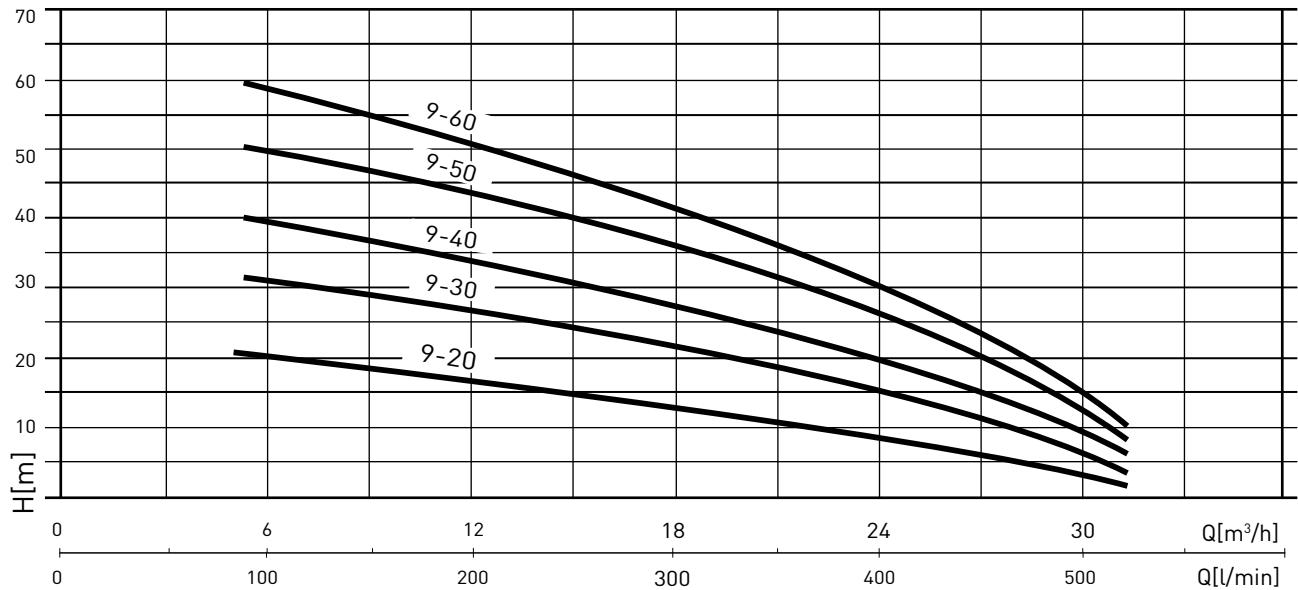
OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions mm.														WEIGHTS (Kg)		
	L1	L2	L3	L4	L5	P1	P2	P3	P4	P5	H1	H2	H3	D1	D2	220V	400V
EASY20/DHR 2-30M-GI	515	95	485	370	X	311	105	420	450	720	265	100	578	1-1/2"	1-1/2"	32	38
EASY20/DHR 2-30T-GI	515	95	485	370	520	311	105	420	450	723	265	100	560	1-1/2"	1-1/2"	32	38
EASY20/DHR 2-50M-GI	515	95	485	370	X	275	69	420	450	685	265	100	578	1-1/2"	1-1/2"	35	41
EASY20/DHR 2-50T-GI	515	95	485	370	520	275	69	420	450	687	265	100	560	1-1/2"	1-1/2"	35	41
EASY20/DHR 4-20M-GI	515	95	485	370	X	357	30	420	450	524	267	110	590	2"	1-1/2"	34	40
EASY20/DHR 4-20T-GI	515	95	485	370	520	357	30	420	450	654	267	110	560	2"	1-1/2"	34	40
EASY20/DHR 4-30M-GI	515	95	485	370	X	357	57	420	450	551	267	110	590	2"	1-1/2"	34	40
EASY20/DHR 4-30T-GI	515	95	485	370	520	357	57	420	450	681	267	110	560	2"	1-1/2"	34	40
EASY20/DHR 4-40M-GI	515	95	485	370	X	357	84	420	450	578	267	110	590	2"	1-1/2"	36	42
EASY20/DHR 4-40T-GI	515	95	485	370	520	357	84	420	450	708	267	110	560	2"	1-1/2"	36	42
EASY20/DHR 4-50M-GI	515	95	485	370	X	357	111	420	450	605	267	110	590	2"	1-1/2"	40	46
EASY20/DHR 4-50T-GI	515	95	485	370	520	357	111	420	450	735	267	110	560	2"	1-1/2"	40	46
EASY20/DHR 4-60M-GI	515	95	485	370	X	357	138	420	450	632	267	110	590	2"	1-1/2"	46	52
EASY20/DHR 4-60T-GI	515	95	485	370	520	357	138	420	450	762	267	110	560	2"	1-1/2"	46	52

NOCCHI EASYBOOST - DHR 9

PRESSURE BOOSTERS WITH PRESSURE SWITCH CONTROL

HYDRAULIC PERFORMANCE



PERFORMANCE TABLE

MODEL	kW	VOLT. (V)	U/min	80	160	240	320	400	480
				m³ / h	4.8	9.6	14.4	19.2	24
EASY20/DHR 9-20	2x0.65	1 ~ 230		20	19	16	13	9	5
		3 ~ 400							
EASY20/DHR 9-30	2x0.95	1 ~ 230		31	29	26	21	16	9
		3 ~ 400							
EASY20/DHR 9-40	2x1.3	1 ~ 230		40	38	33	27	19	10
		3 ~ 400							
EASY20/DHR 9-50	2x1.6	1 ~ 230		51	49	43	36	26	14
		3 ~ 400							
EASY20/DHR 9-60	2x1.9	3 ~ 400		60	56	49	40	29	14

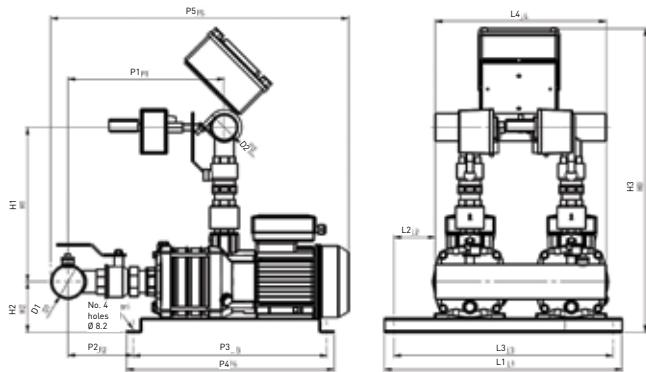
For VOLT. values, see the data of the reference pump

NOCCHI EASYBOOST - DHR 9

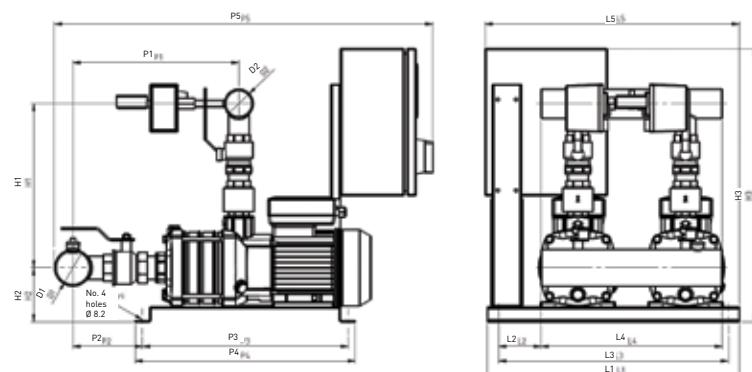
PRESSURE BOOSTERS WITH PRESSURE SWITCH CONTROL

OVERALL DIMENSIONS AND WEIGHTS

SINGLE PHASE



THREE-PHASE



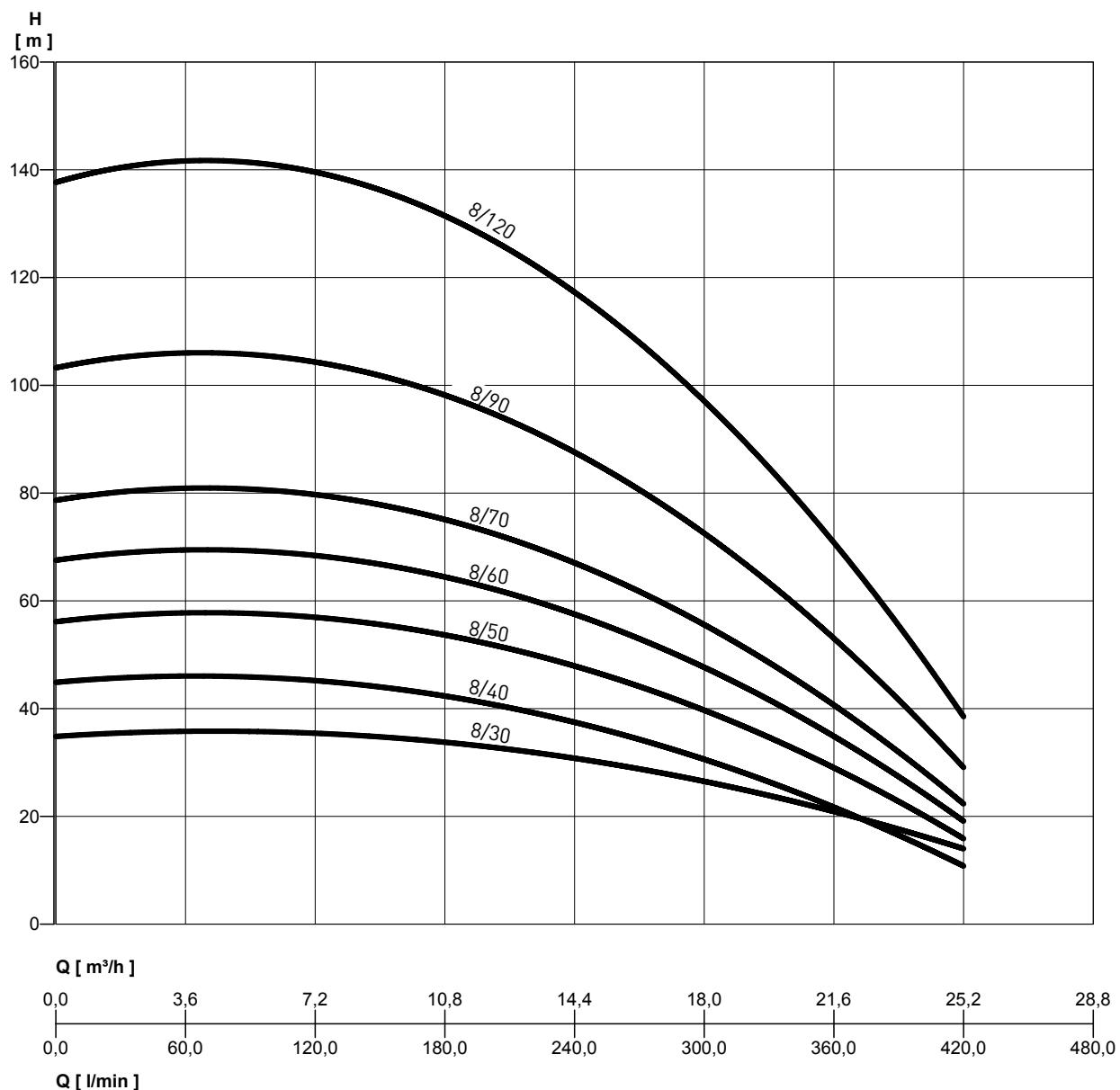
OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions mm.														Weight (Kg)	
	L1	L2	L3	L4	L5	P1	P2	P3	P4	P5	H1	H2	H3	D1	D2	
EASY20/DHR 9-20M-GI	515	95	485	370	X	280	82	420	450	588	110	335	660	2-1/2"	2"	54
EASY20/DHR 9-20T-GI	515	95	485	370	520	280	82	420	450	713	110	335	560	2-1/2"	2"	54
EASY20/DHR 9-30M-GI	515	95	485	370	X	280	82	420	450	588	110	335	660	2-1/2"	2"	55
EASY20/DHR 9-30T-GI	515	95	485	370	520	280	82	420	450	713	110	335	560	2-1/2"	2"	55
EASY20/DHR 9-40M-GI	515	95	485	370	X	310	112	420	450	618	110	335	660	2-1/2"	2"	57
EASY20/DHR 9-40T-GI	515	95	485	370	520	310	112	420	450	743	110	335	560	2-1/2"	2"	57
EASY20/DHR 9-50M-GI	515	95	485	370	X	340	142	420	450	648	110	335	660	2-1/2"	2"	62
EASY20/DHR 9-50T-GI	515	95	485	370	520	340	142	420	450	773	110	335	560	2-1/2"	2"	62
EASY20/DHR 9-60T-GI	515	95	485	370	520	370	172	420	450	803	110	335	560	2-1/2"	2"	65

NOCCHI EASYBOOST 20 MULTINOX VE +

PRESSURE BOOSTERS WITH PRESSURE SWITCH CONTROL

HYDRAULIC PERFORMANCE



PERFORMANCE TABLE

MODEL	P2	VOLT. (V)	l/min	0	60	120	180	240	300	360	420
	kW			m^3/h	0	3.6	7.2	10.8	14.4	18	21.6
EASY20 MULTINOX VE+ 8-30	2x1	1 ~ 230 3 ~ 400	m.c.a./m.c.w.	36	35	35	33	30	25	28	10
EASY20 MULTINOX VE+ 8-40	2x1.2			46	45	44	42	39	32	20	11
EASY20 MULTINOX VE+ 8-50	2x1.5			57	57	56	53	50	40	28	16
EASY20 MULTINOX VE+ 8-60	2x1.7			69	68	67	64	60	48	34	19
EASY20 MULTINOX VE+ 8-70	2x1.9			80	80	78	74	70	56	40	22
EASY20 MULTINOX VE+ 8-90	2x3			105	104	103	98	90	73	52	29
EASY20 MULTINOX VE+ 8-120	2x4			140	139	138	131	120	98	70	38

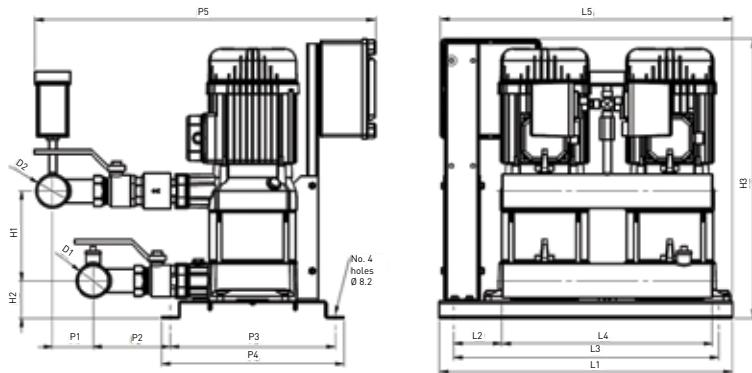
For VOLT. values, see the data of the reference pump

NOCCHI EASYBOOST 20 MULTINOX VE +

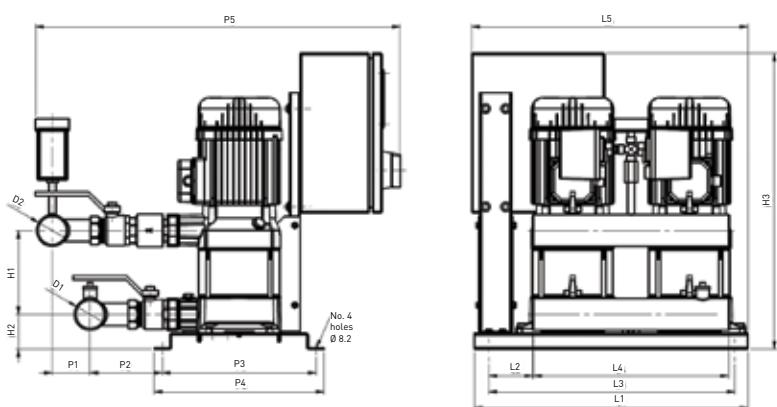
PRESSURE BOOSTERS WITH PRESSURE SWITCH CONTROL

OVERALL DIMENSIONS AND WEIGHTS

SINGLE PHASE



THREE-PHASE



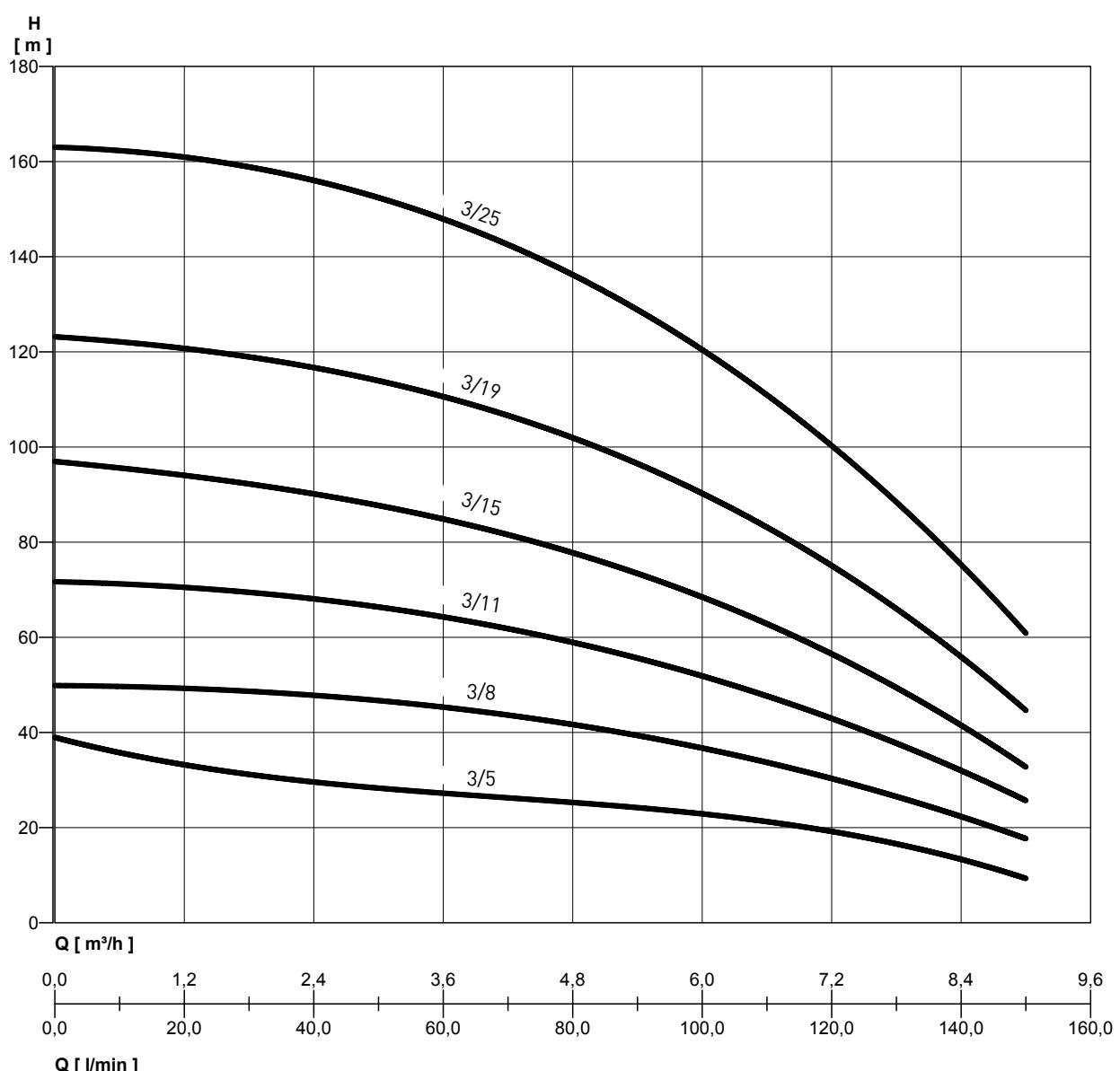
OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions mm.														Weight (Kg)	
	L1	L2	L3	L4	L5	P1	P2	P3	P4	P5	H1	H2	H3	D1	D2	
EASY20 MULTINOX VE+ 8-30 M	515	95	485	370	520	71	138	290	320	675	130	64	510	2"	2"	69
EASY20 MULTINOX VE+ 8-30 T	515	95	485	370	520	71	138	290	320	690	130	64	560	2"	2"	75
EASY20 MULTINOX VE+ 8-40 M	515	95	485	370	520	71	138	290	320	675	157	64	510	2"	2"	73
EASY20 MULTINOX VE+ 8-40 T	515	95	485	370	520	71	138	290	320	690	157	64	560	2"	2"	79
EASY20 MULTINOX VE+ 8-50 M	515	95	485	370	520	71	138	290	320	675	184	64	510	2"	2"	77
EASY20 MULTINOX VE+ 8-50 T	515	95	485	370	520	71	138	290	320	690	184	64	560	2"	2"	83
EASY20 MULTINOX VE+ 8-60 T	515	95	485	370	520	71	138	290	320	690	211	64	560	2"	2"	87
EASY20 MULTINOX VE+ 8-70 T	515	95	485	370	520	71	138	290	320	690	238	64	560	2"	2"	91
EASY20 MULTINOX VE+ 8-90 T	515	95	485	370	520	71	138	290	320	690	292	64	750	2"	2"	109
EASY20 MULTINOX VE+ 8-120 T	515	95	485	370	520	71	138	290	320	690	292	64	750	2"	2"	115

NOCCHI EASYBOOST 20 PVM

PRESSURE BOOSTERS WITH PRESSURE SWITCH CONTROL

HYDRAULIC PERFORMANCE



NOCCHI EASYBOOST 20 PVM

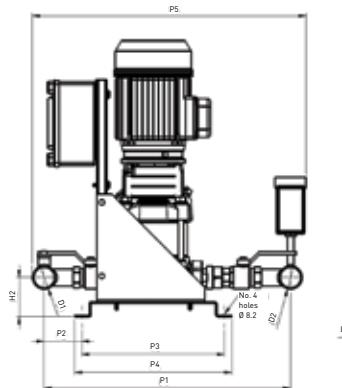
PRESSURE BOOSTERS WITH PRESSURE SWITCH CONTROL

PERFORMANCE TABLE

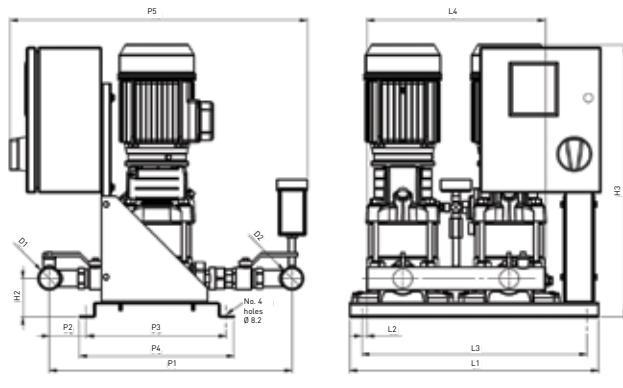
MODEL	P2	VOLT. (V)	l/min m³/h	0	20	40	60	80	100	120	140	150
	kW			0	1.2	2.4	3.6	4.8	6.0	7.2	8.4	9.0
EASY20 PVM 3-5	2x0.37	1 ~ 230 3 ~ 400	m.c.a/m.c.w.	40	31	30	28	26	23	18	13	10
EASY20 PVM 3-8	2x0.75			50	49	48	45	42	37	30	22	18
EASY20 PVM 3-11	2x1.1			72	70	68	64	60	52	42	32	26
EASY20 PVM 3-15	2x1.1			97	94	90	85	78	68	57	41	33
EASY20 PVM 3-19	2x1.5			123	121	117	110	102	90	76	55	45
EASY20 PVM 3-25	2x2.2			165	157	156	150	138	120	98	75	62

For VOLT. values, see the data of the reference pump

SINGLE PHASE



THREE-PHASE



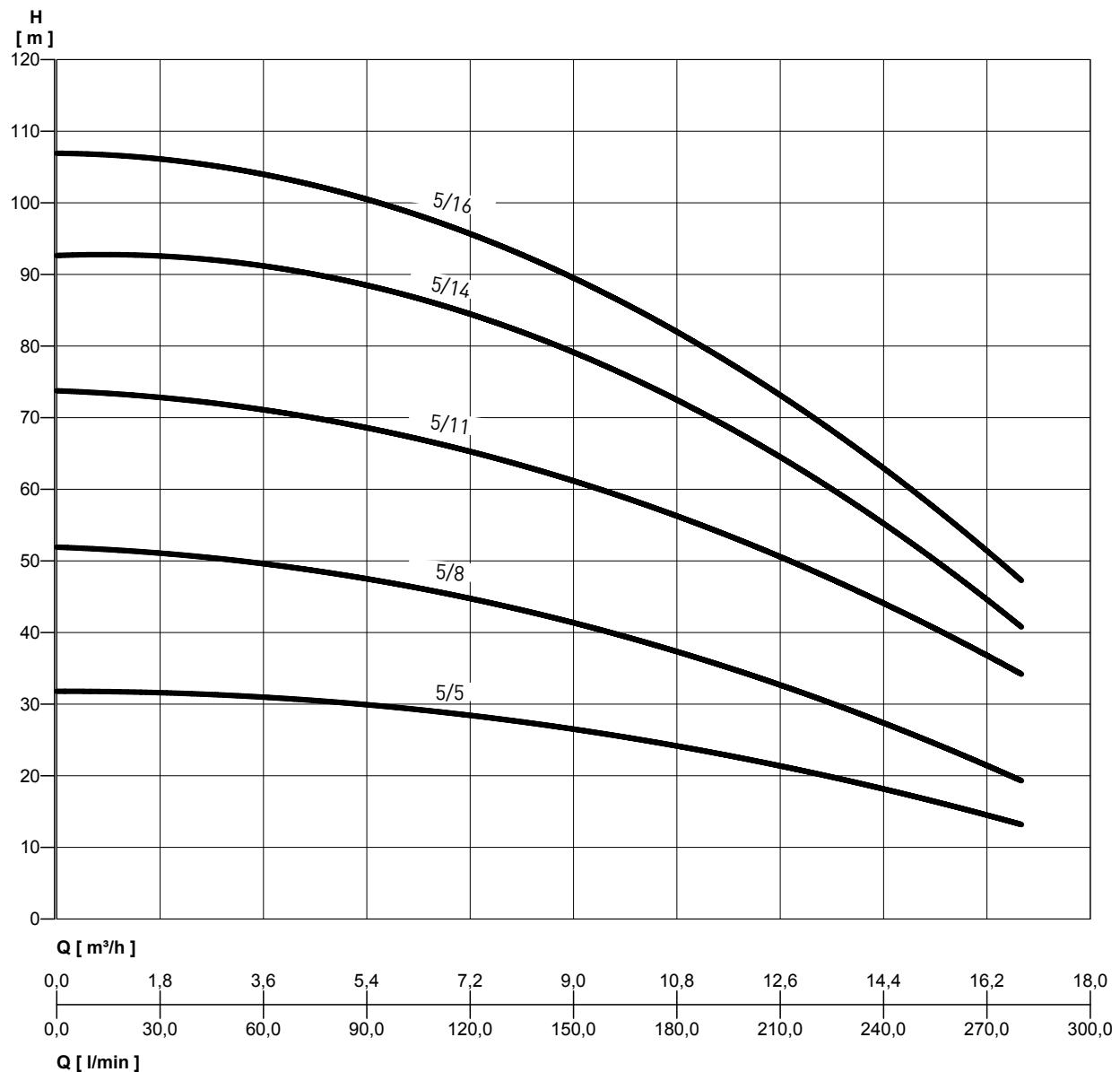
OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions mm.												Weight (Kg)	
	L1	L2	L3	L4	P1	P2	P3	P4	P5	H2	H3	D1	D2	
EASY20 PVM 3-5 M	515	95	485	370	508	80	290	320	562	80	510	1"1/2	1"1/2	64
EASY20 PVM 3-5 T	515	95	485	370	508	80	290	320	620	80	560	1"1/2	1"1/2	74
EASY20 PVM 3-8 M	515	95	485	370	508	80	290	320	562	80	510	1"1/2	1"1/2	74
EASY20 PVM 3-8 T	515	95	485	370	508	80	290	320	620	80	560	1"1/2	1"1/2	80
EASY20 PVM 3-11 M	515	95	485	370	508	80	290	320	562	80	580	1"1/2	1"1/2	90
EASY20 PVM 3-11 T	515	95	485	370	508	80	290	320	620	80	690	1"1/2	1"1/2	96
EASY20 PVM 3-15 M	515	95	485	370	508	80	290	320	562	80	655	1"1/2	1"1/2	94
EASY20 PVM 3-15 T	515	95	485	370	508	80	290	320	620	80	655	1"1/2	1"1/2	100
EASY20 PVM 3-19 M	515	95	485	370	508	80	290	320	562	80	775	1"1/2	1"1/2	108
EASY20 PVM 3-19 T	515	95	485	370	508	80	290	320	620	80	775	1"1/2	1"1/2	114
EASY20 PVM 3-25 T	515	95	485	370	508	80	290	320	620	80	825	1"1/2	1"1/2	130

NOCCHI EASYBOOST 20 PVM

PRESSURE BOOSTERS WITH PRESSURE SWITCH CONTROL

HYDRAULIC PERFORMANCE



NOCCHI EASYBOOST 20 PVM

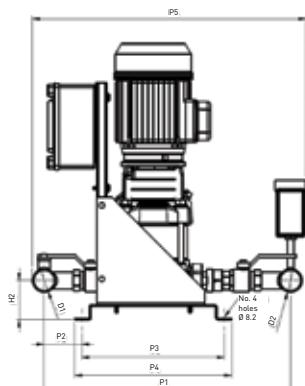
PRESSURE BOOSTERS WITH PRESSURE SWITCH CONTROL

PERFORMANCE TABLE

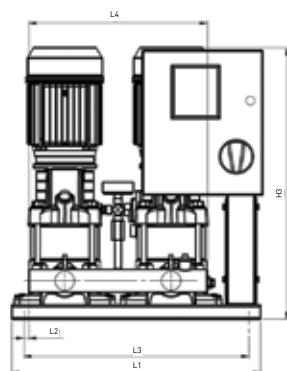
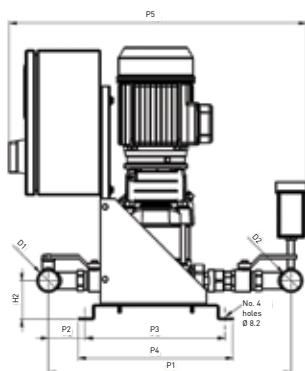
MODEL	P2 kW	VOLT. (V)	l/min	0	80	120	160	200	240	280
			m³/h	0	4.8	7.2	9.6	12	14.4	16.8
EASY20 PVM 5-5	2x0.75	1 ~ 230 3 ~ 400	m.c.a./m.c.w.	32	30	28	26	23	18	13
EASY20 PVM 5-8	2x1.1			52	48	45	40	34	28	19
EASY20 PVM 5-11	2x2.2			74	69	65	60	53	44	34
EASY20 PVM 5-14	2x2.2			93	89	84	77	68	56	40
EASY20 PVM 5-16	2x2.2			107	102	95	87	77	63	47

For VOLT. values, see the data of the reference pump

SINGLE PHASE



THREE-PHASE



OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions mm.												Weight (Kg)	
	L1	L2	L3	L4	P1	P2	P3	P4	P5	H2	H3	D1	D2	
EASY20 PVM 5-5 M	515	95	485	370	622	115	290	320	628	80	510	2"	2"	60
EASY20 PVM 5-5 T	515	95	485	370	622	115	290	320	697	80	560	2"	2"	70
EASY20 PVM 5-8 M	515	95	485	370	622	115	290	320	628	80	620	2"	2"	72
EASY20 PVM 5-8 T	515	95	485	370	622	115	290	320	697	80	620	2"	2"	80
EASY20 PVM 5-11 T	515	95	485	370	622	115	290	320	697	80	720	2"	2"	88
EASY20 PVM 5-14 T	515	95	485	370	622	115	290	320	697	80	765	2"	2"	100
EASY20 PVM 5-16 T	515	95	485	370	622	115	290	320	697	80	825	2"	2"	104

NOCCHI PRESSOMAT

INDUSTRIAL - PRESSURE BOOSTERS WITH PRESSURE SWITCH CONTROL

HIGH HYDRAULIC EFFICIENCY, STURDY, PIPING IN STAINLESS STEEL AISI 304

These are automatic pressure booster for the pressurisation of distribution networks with single phase and three-phase power supply.

The pumps are controlled by two differential pressure switches with adjustable settings, via an electrical panel with an analogue electronic board for:

- the sequential start-up of the pumps
- the inversion of the start-up order
- timer settable from 0 to 180", only for the three-phase version
- protection against dry running

When the network pressure reaches the value for the closing of the electrical contact of pressure switch n.1, a pump starts.

If the pressure continues to drop, once the value of the closing pressure of the second pressure switch has been reached, the other pump starts. When the value of the network pressure increases, the pressure switches open their contact causing the relative pump to stop.

At the end of each cycle, the automatic inverter changes the starting order of the pumps (once pressure switch n.1 is associated to pump n.1; in the next cycle to pump n.2).

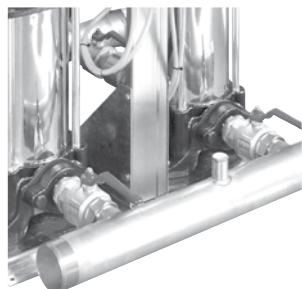
If the two pressure switches close at the same time, the electronic board will delay the start-up of the second pump avoiding abrupt changes in pressure and the overload of the power supply.



NUMBER OF PUMPS		MAXIMUM CAPACITY	
Main	Pilot	L/min	m³/h
2	-	1320	80

MATERIAL

USAGE DATA	PVM 3	PVM 5	PVM 10	PVM 15	PVM 20	PVM 32				
Maximum capacity (m³/h)	9	17	26	47	58	80				
Maximum head (m.c.a.)	160	160	160	125	145	120				
Maximum operating pressure	16 bar									
Power supply VOLT.:	1 ~ 230 / 3~400 V		3~400 V							
Ambient temperature	50 °C									
Degree of protection of pump	IP55									
Degree of protection of electrical panel	IP54									



NOCCHI PRESSOMAT

PRESSURE BOOSTERS WITH PRESSURE SWITCH CONTROL

PUMP

- n. 2 PVM
- Centrifugal, multicellular, vertical axis

BASE

- In galvanized metal
- Galvanized steel profiles

SUCTION MANIFOLD

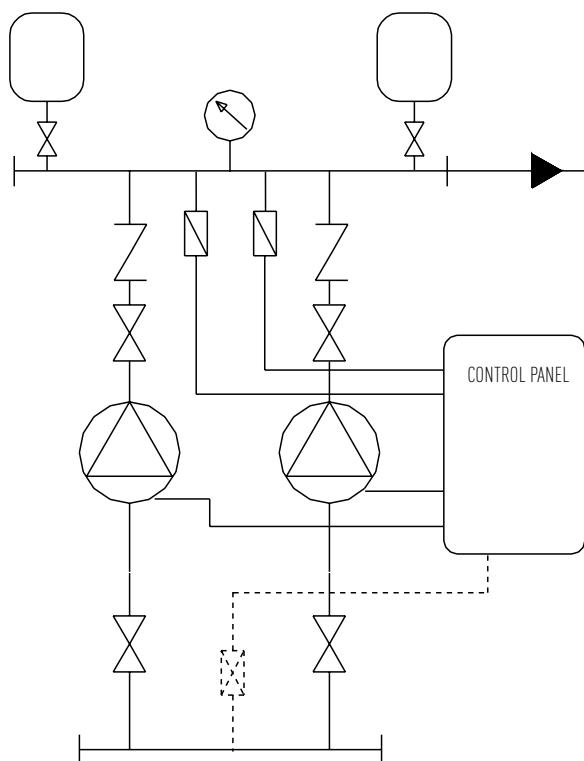
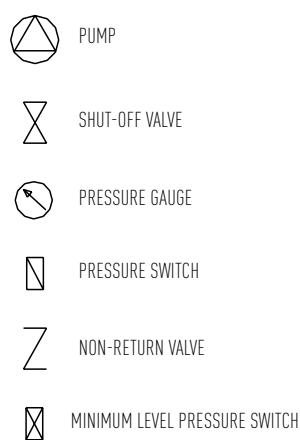
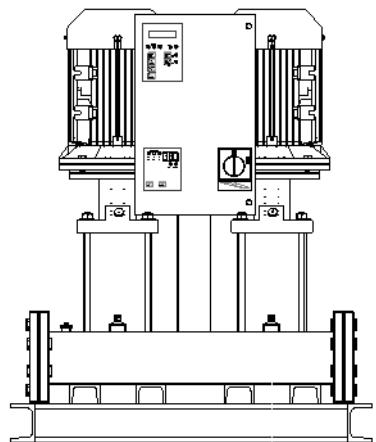
In steel AISI 304 with:

- n. 2 brass ball valves
- n. 2 check valves
- n. 1 sleeve for water load

DELIVERY MANIFOLD

In steel AISI 304 with:

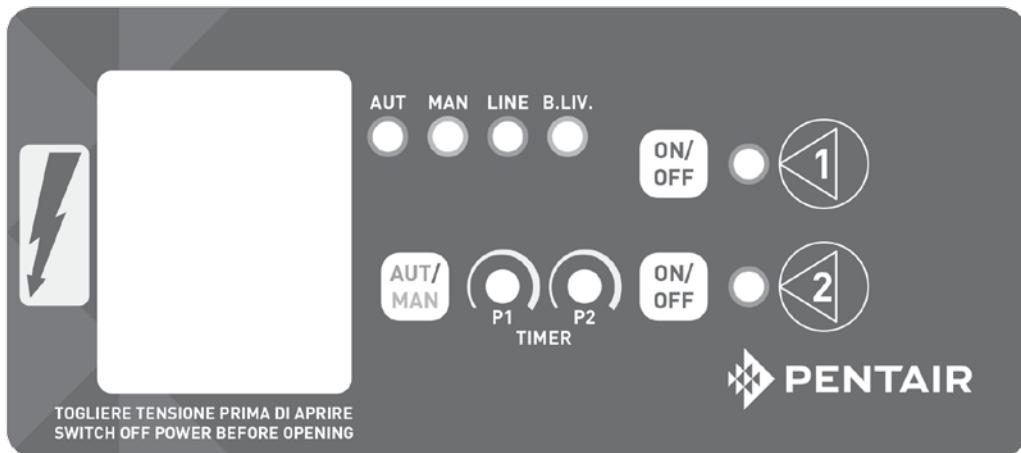
- n. 2 brass ball valves
- n. 1 pressure gauge
- n. 2 differential pressure switches



NOCHI PRESSOMAT

PRESSURE BOOSTERS WITH PRESSURE SWITCH CONTROL

SINGLE PHASE ELECTRICAL PANEL



ELECTRICAL PANEL

- Box in plastic material IP55
- Main circuit breaker
- Electronic control panel with manual - automatic buttons for each pump
- SML electronic board
- Pump start-up relay

SIGNALS AND CONTROLS

- LED indicating the presence of power.
- LED indicating the low water level in the tank or an insufficient pressure in the supply duct (aqueduct).
- LED indicating the operation of each pump.

EXTRENAL CONTROL DEVICES

- ON/OFF float switch, located in the water collection tank, or
- Reverse pressure switch inserted in the water supply duct (aqueduct)

MAIN FUNCTIONS

- Cyclic inversion of the start-up order of the pumps after each cycle end.
- ON/OFF control of the level of the tank or the pressure of the supply duct by means of a float switch or a different differential pressure switch.

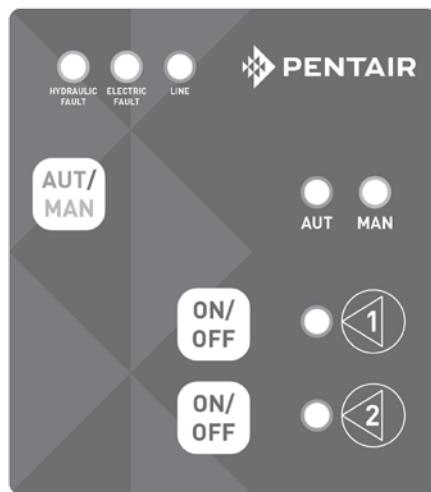
EXTRENAL CONTROL DEVICES

- Two adjustable differential pressure switches ON/OFF

NOCCHI PRESSOMAT

PRESSURE BOOSTERS WITH PRESSURE SWITCH CONTROL

THREE-PHASE ELECTRICAL PANEL



ELECTRICAL PANEL

- Box in metal IP54
- Main switch
- Keyboard with electronic board SA
- Fuses, contactor and thermal relay for each pump
- Transformer with fuses for the auxiliary circuit
- M-0-T switch for each pump
- Star-delta starter for motors above 7.5 kW

MAIN FUNCTIONS

- Cyclic inversion of the start-up order of the pumps after each cycle end.
- ON/OFF control of the level of the tank or the pressure of the supply duct by means of a float switch or a different differential pressure switch.
- Timer of the pumps settable from 0 to 180 seconds, after the opening of the pressure switch operation contact.

SIGNALS AND CONTROLS

- LED indicating the presence of power.
- LED indicating the low water level in the tank or an insufficient pressure in the supply duct (aqueduct).
- LED indicating the operation of each pump.
- LED indicating that one of the two thermal relays has tripped because of an overload.
- LED indicating manual or automatic operation.
- Buttons to select manual or automatic control.
- Buttons to start or stop each pump (manual operation).

EXTRENL CONTROL DEVICES

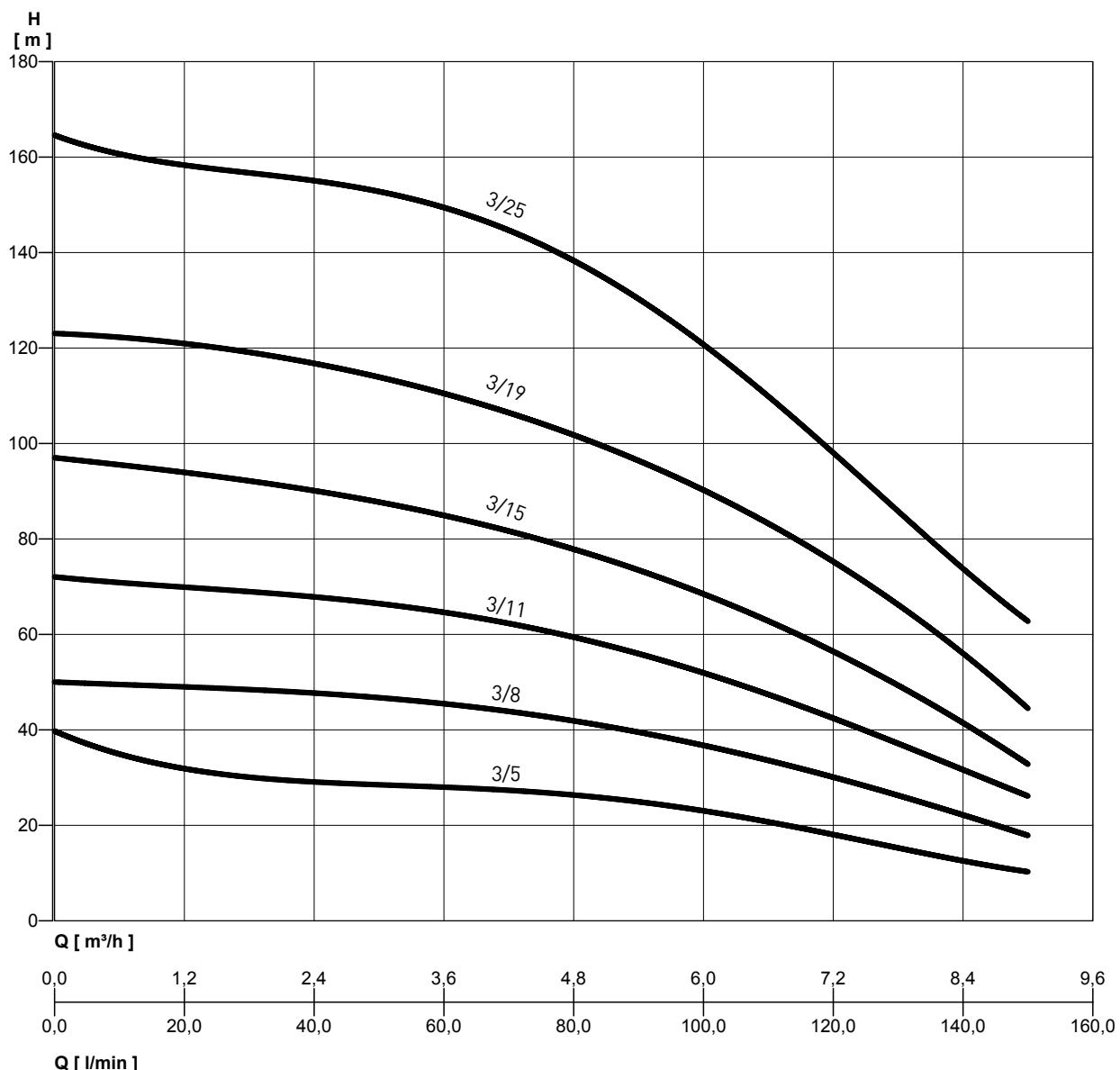
- ON/OFF float switch, located in the water collection tank, or
- 3 electrodes for the electronic control of the level of the tank, or
- Reverse pressure switch inserted in the water supply duct (aqueduct)

EXTRENL CONTROL DEVICES

- Two adjustable differential pressure switches ON/OFF

NOCCHI PMS20 PVM - PMD20 PVM PRESSURE BOOSTERS WITH PRESSURE SWITCH CONTROL

HYDRAULIC PERFORMANCE



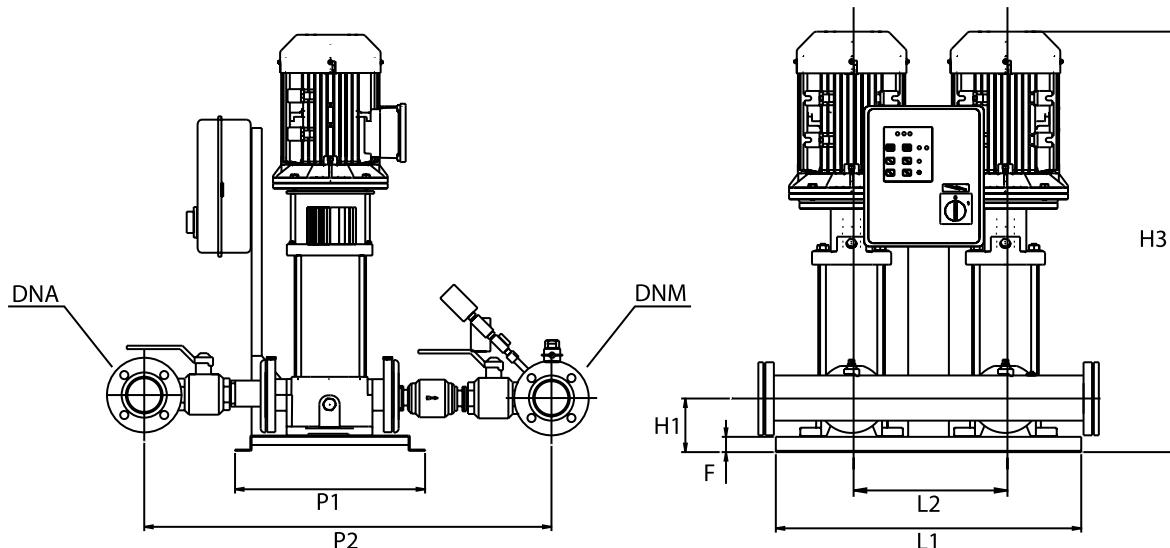
NOCCHI PMS20 PVM - PMD20 PVM

PRESSURE BOOSTERS WITH PRESSURE SWITCH CONTROL

PERFORMANCE TABLE

MODEL	P2	VOLT. (V)	Q	l/min m³/h	0	20	40	60	80	100	120	140	150
	kW				0	1	2	4	5	6	7	8	9
PMS20 PVM 3-5 PMD20 PVM 3-5	2x0.37	1 ~ 230 3 ~ 400	m.c.a./m.c.w.	40	31	30	28	26	23	18	13	10	
PMS20 PVM 3-5 PMD20 PVM 3-8	2x0.75			50	49	48	45	42	37	30	22	18	
PMS20 PVM 3-11 PMD20 PVM 3-11	2x1.1			72	70	68	64	60	52	42	32	26	
PMS20 PVM 3-15 PMD20 PVM 3-15	2x1.1			97	94	90	85	78	68	57	41	33	
PMS20 PVM 3-19 PMD20 PVM 3-19	2x1.5			123	121	117	110	102	90	76	55	45	
PMD20 PVM 3-25	2x2.2			165	157	156	150	138	120	98	75	62	

For VOLT. values, see the data of the reference pump

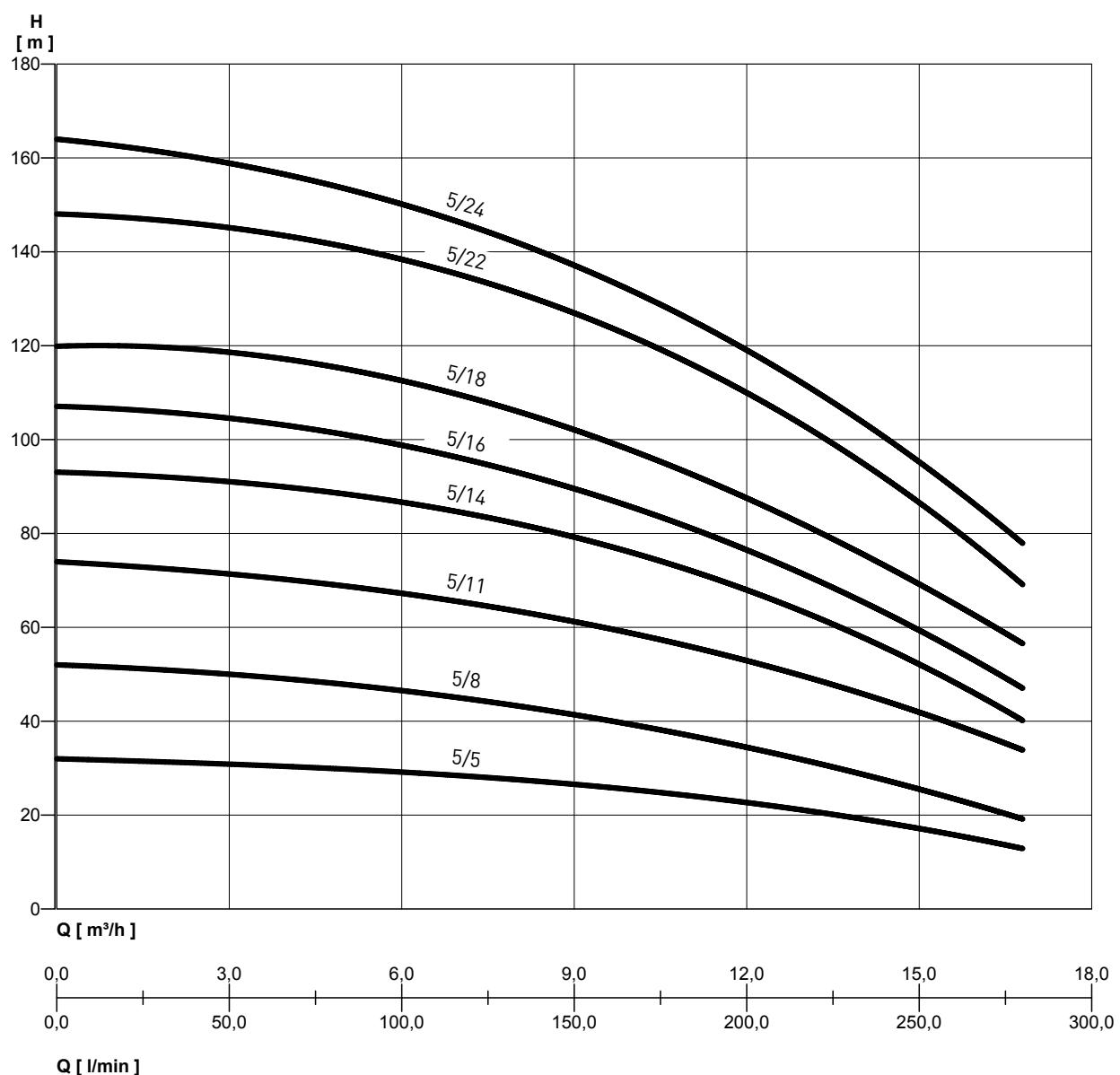


OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions in mm:								Weight (Kg)		
	L1	P1	P2	H1	H2	H3	DNA	DNM	F	L2	
PMS20 PVM 3-5	600	320	620	80	775	510	2"	2"	30	370	62
PMD20 PVM 3-5	600	320	620	80	775	510	2"	2"	30	370	72
PMS20 PVM 3-8	600	320	620	80	775	610	2"	2"	30	370	68
PMD20 PVM 3-8	600	320	620	80	775	610	2"	2"	30	370	74
PMS20 PVM 3-11	600	320	620	80	775	664	2"	2"	30	370	74
PMD20 PVM 3-11	600	320	620	80	775	664	2"	2"	30	370	80
PMS20 PVM 3-15	600	320	620	80	775	736	2"	2"	30	370	89
PMD20 PVM 3-15	600	320	620	80	775	736	2"	2"	30	370	95
PMS20 PVM 3-19	600	320	620	80	775	880	2"	2"	30	370	100
PMD20 PVM 3-19	600	320	620	80	775	880	2"	2"	30	370	106
PMD20 PVM 3-25	600	320	620	80	775	988	2"	2"	30	370	122

NOCCHI PMS20 PVM - PMD20 PVM PRESSURE BOOSTERS WITH PRESSURE SWITCH CONTROL

HYDRAULIC PERFORMANCE



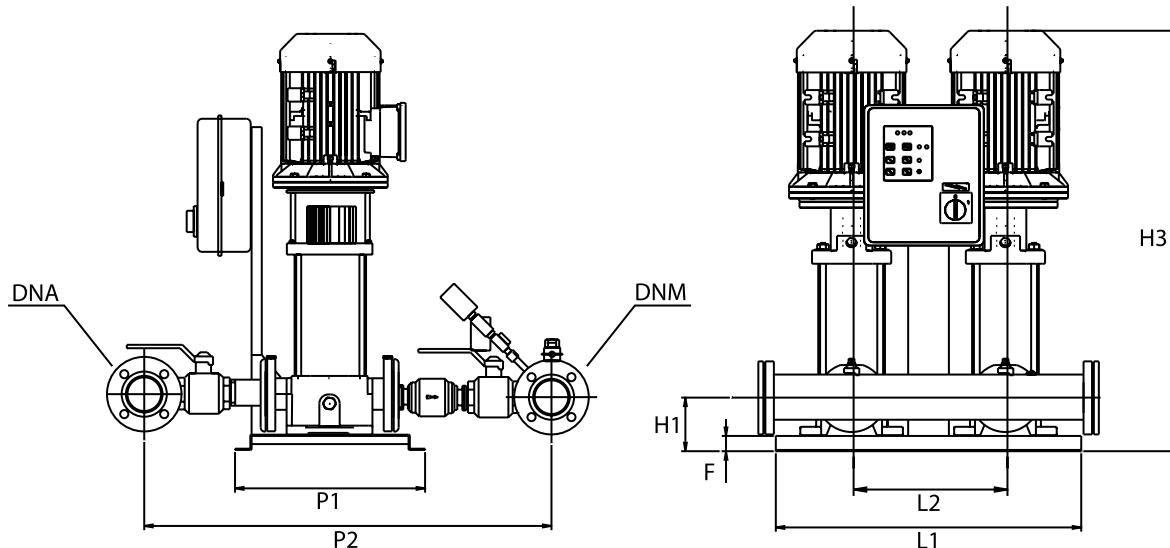
NOCCHI PMD20 PVM

PRESSURE BOOSTERS WITH PRESSURE SWITCH CONTROL

PERFORMANCE TABLE

MODEL	P2	VOLT. (V)	Q	l/min m³/h	0	80	120	160	200	240	280
	kW				0	4.8	7.2	9.6	12	14.4	16.8
PMS20 PVM 5-5 PMD20 PVM 5-5	2x0.75	1 ~ 230 3 ~ 400	m.c.a./m.c.w.	32	30	28	26	23	18	13	
PMS20 PVM 5-8 PMD20 PVM 5-8	2x1.1			52	48	45	40	34	28	19	
PMD20 PVM 5-11	2x2.2			74	69	65	60	53	44	34	
PMD20 PVM 5-14	2x2.2			93	89	84	77	68	56	40	
PMD20 PVM 5-16	2x2.2			107	102	95	87	77	63	47	
PMD20 PVM 5-18	2x3			120	115	109	100	88	72	57	
PMD20 PVM 5-22	2x4			148	142	134	124	110	92	69	
PMD20 PVM 5-24	2x4			164	154	146	133	120	100	78	

For VOLT. values, see the data of the reference pump



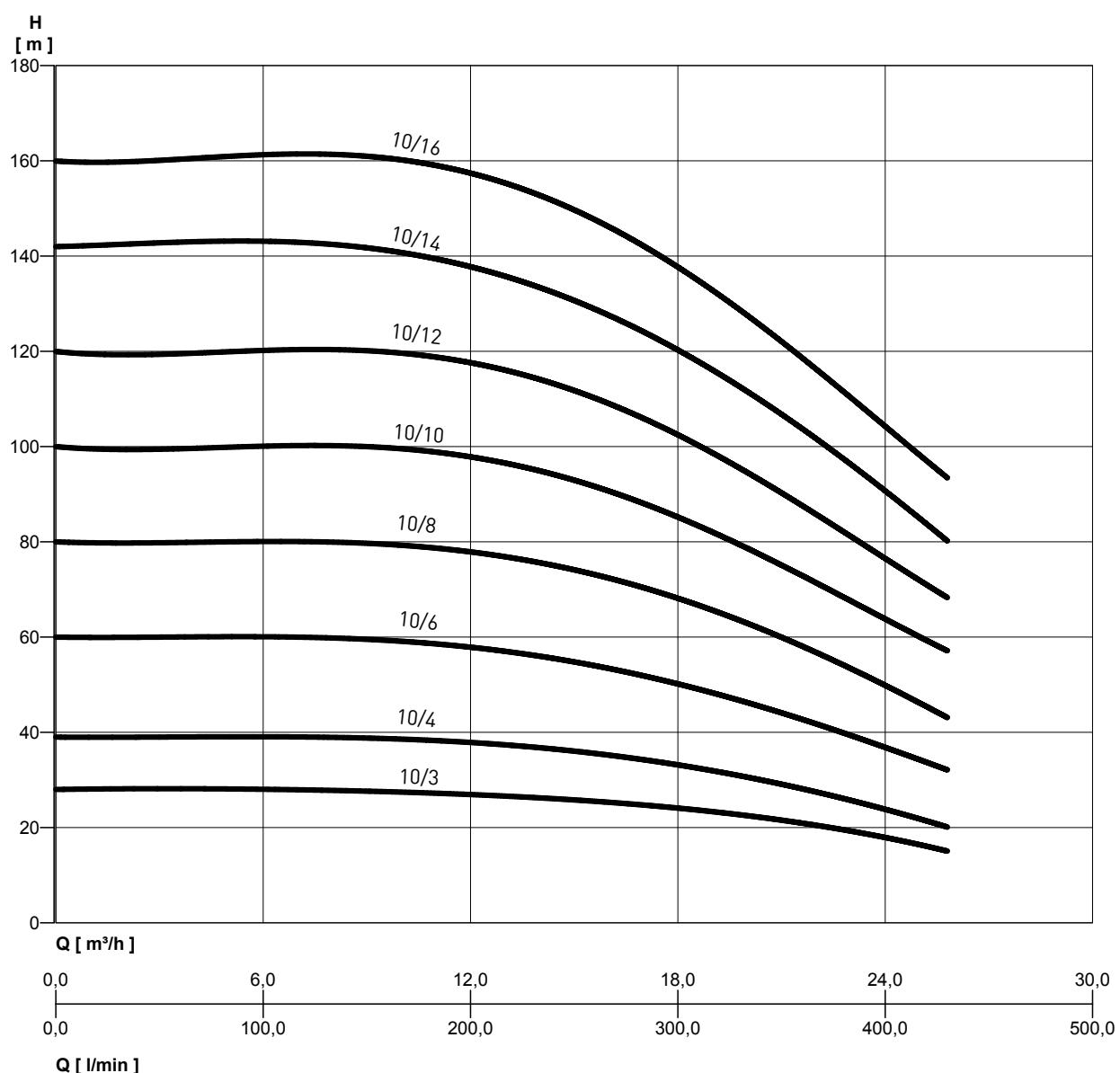
OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions mm.										Weight (Kg)
	L1	P1	P2	H1	H2	H3	DNA	DNM	F	L2	
PMS20 PVM 5-5	600	320	620	80	775	601	2"	2"	30	370	62
PMD20 PVM 5-5	600	320	620	80	775	601	2"	2"	30	370	72
PMS20 PVM 5-8	600	320	620	80	775	682	2"	2"	30	370	70
PMD20 PVM 5-8	600	320	620	80	775	682	2"	2"	30	370	78
PMD20 PVM 5-11	600	320	620	80	775	835	2"	2"	30	370	83
PMD20 PVM 5-14	600	320	620	80	775	916	2"	2"	30	370	90
PMD20 PVM 5-16	600	320	620	80	775	970	2"	2"	30	370	95
PMD20 PVM 5-18	600	320	620	80	775	1053	2"	2"	30	370	100
PMD20 PVM 5-22	600	320	620	80	775	1171	2"	2"	30	370	110
PMD20 PVM 5-24	600	320	620	80	775	1225	2"	2"	30	370	115

NOCCHI PMS20 PVM - PMD20 PVM

PRESSURE BOOSTERS WITH PRESSURE SWITCH CONTROL

HYDRAULIC PERFORMANCE



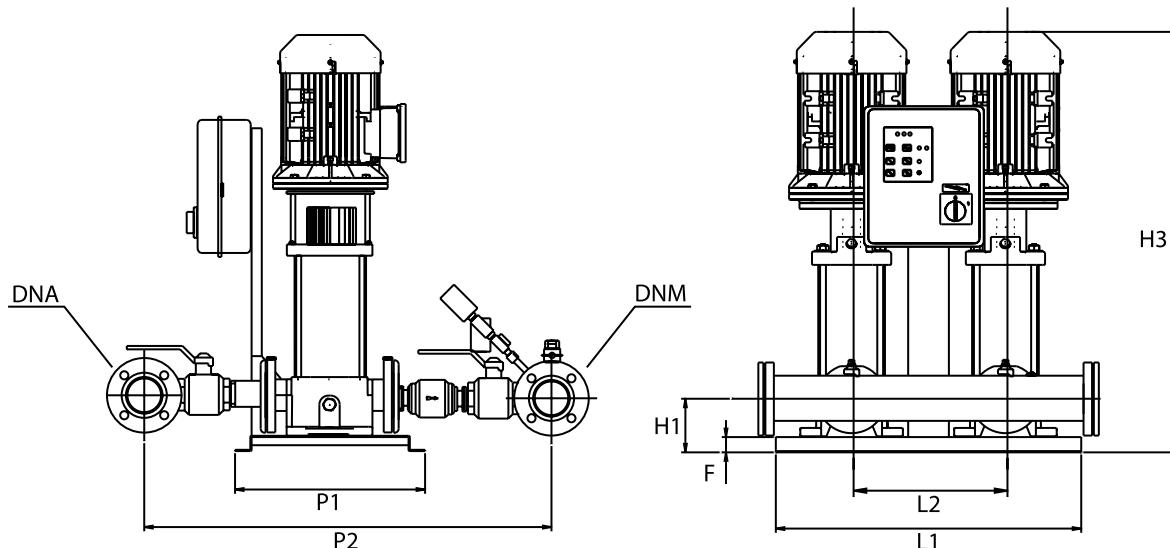
NOCCHI PMS20 PVM - PMD20 PVM

PRESSURE BOOSTERS WITH PRESSURE SWITCH CONTROL

PERFORMANCE TABLE

MODEL	P2	VOLT. (V)	Q	l/min m³/h	0	100	200	300	400	430		
	kW				0	6	12	18	24	26		
PMS20 PVM 10-3	2x1.1	1 ~ 230 3 ~ 400	m.c.a./mc.c.w		28	28	27	24	18	15		
PMD20 PVM 10-3					39	39	38	33	24	20		
PMS20 PVM 10-4		1 ~ 230 3 ~ 400			60	60	58	50	37	32		
PMD20 PVM 10-4					80	80	78	68	50	43		
PMD20 PVM 10-6		2x2.2			100	100	98	85	64	57		
PMD20 PVM 10-8		2x3			120	120	118	102	77	68		
PMD20 PVM 10-10		2x4			142	143	138	120	91	80		
PMD20 PVM 10-12		2x4			160	161	158	137	105	93		
PMD20 PVM 10-14	2x5.5	3 ~ 400										
PMD20 PVM 10-16		3 ~ 400										

For VOLT. values, see the data of the reference pump



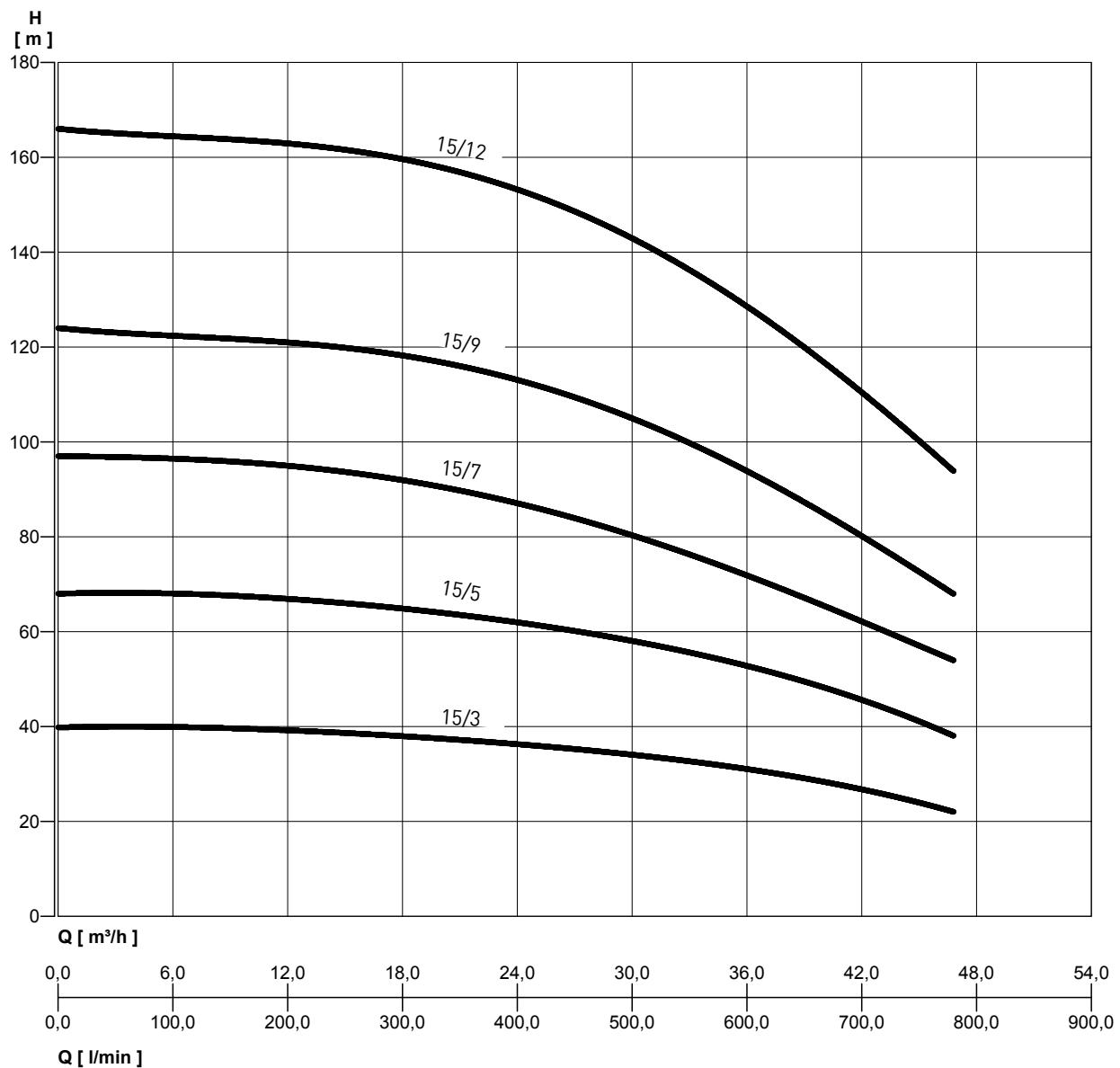
OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions mm.										Weight (Kg)
	L1	P1	P2	H1	H2	H3	DNA	DNM	F	L2	
PMS20 PVM 10-3	620	320	720	120	775	612	2" 1/2	2" 1/2	30	370	116
PMD20 PVM 10-3	620	320	720	120	775	612	2" 1/2	2" 1/2	30	370	106
PMS20 PVM 10-4	620	320	720	120	775	714	2" 1/2	2" 1/2	30	370	126
PMD20 PVM 10-4	620	320	720	120	775	714	2" 1/2	2" 1/2	30	370	114
PMD20 PVM 10-6	620	320	720	120	775	774	2" 1/2	2" 1/2	30	370	120
PMD20 PVM 10-8	680	320	720	120	775	864	2" 1/2	2" 1/2	30	370	136
PMD20 PVM 10-10	680	320	720	120	775	934	2" 1/2	2" 1/2	30	370	146
PMD20 PVM 10-12	680	320	720	120	775	994	2" 1/2	2" 1/2	30	370	160
PMD20 PVM 10-14	680	320	720	120	775	1122	2" 1/2	2" 1/2	30	370	170
PMD20 PVM 10-16	680	320	720	120	775	1182	2" 1/2	2" 1/2	30	370	180

NOCCHI PMD20 PVM

PRESSURE BOOSTERS WITH THREE-PHASE PRESSURE SWITCH CONTROL

HYDRAULIC PERFORMANCE



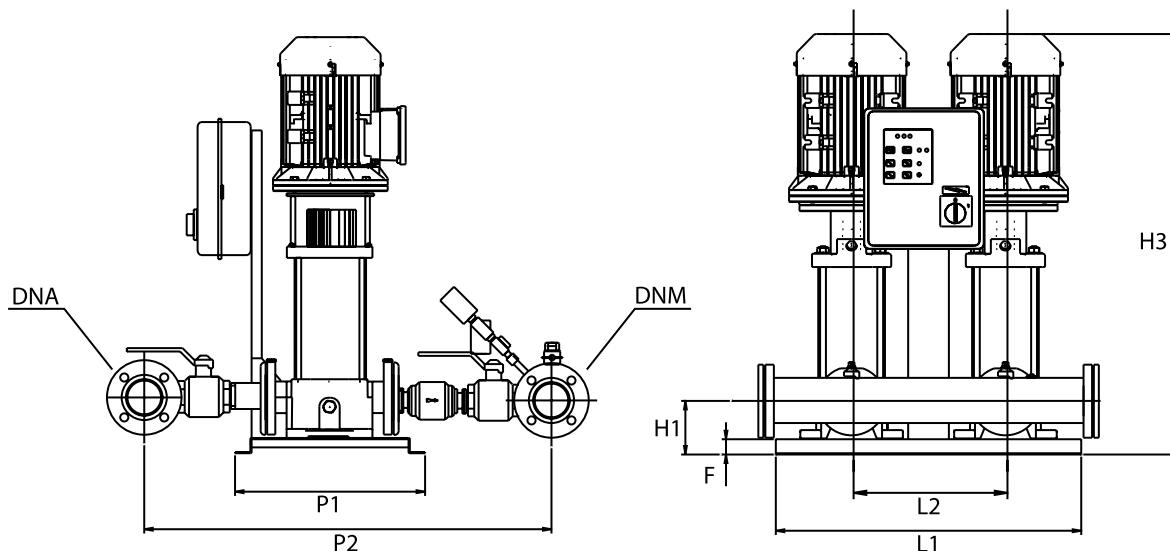
NOCCHI PMD20 PVM

PRESSURE BOOSTERS WITH THREE-PHASE PRESSURE SWITCH CONTROL

PERFORMANCE TABLE

MODEL	P2	VOLT. (V)	Q	l/min m³/h	0	200	400	600	700	780
	kW				0	12	24	36	42	47
PMD20 PVM 15-3	2x3	3 ~ 400	m.c.a./mc.w.	39.8	39.2	36.3	31	26.8	22	
PMD20 PVM 15-5	2x4			68	66.9	62	52.7	45.7	38	
PMD20 PVM 15-7	2x5.5			97	95	87	72	62	54	
PMD20 PVM 15-9	2x7.5			124	121	113	94	80	68	
PMY20 PVM 15-12	2x11			166	163	153	129	110	94	

For VOLT. values, see the data of the reference pump



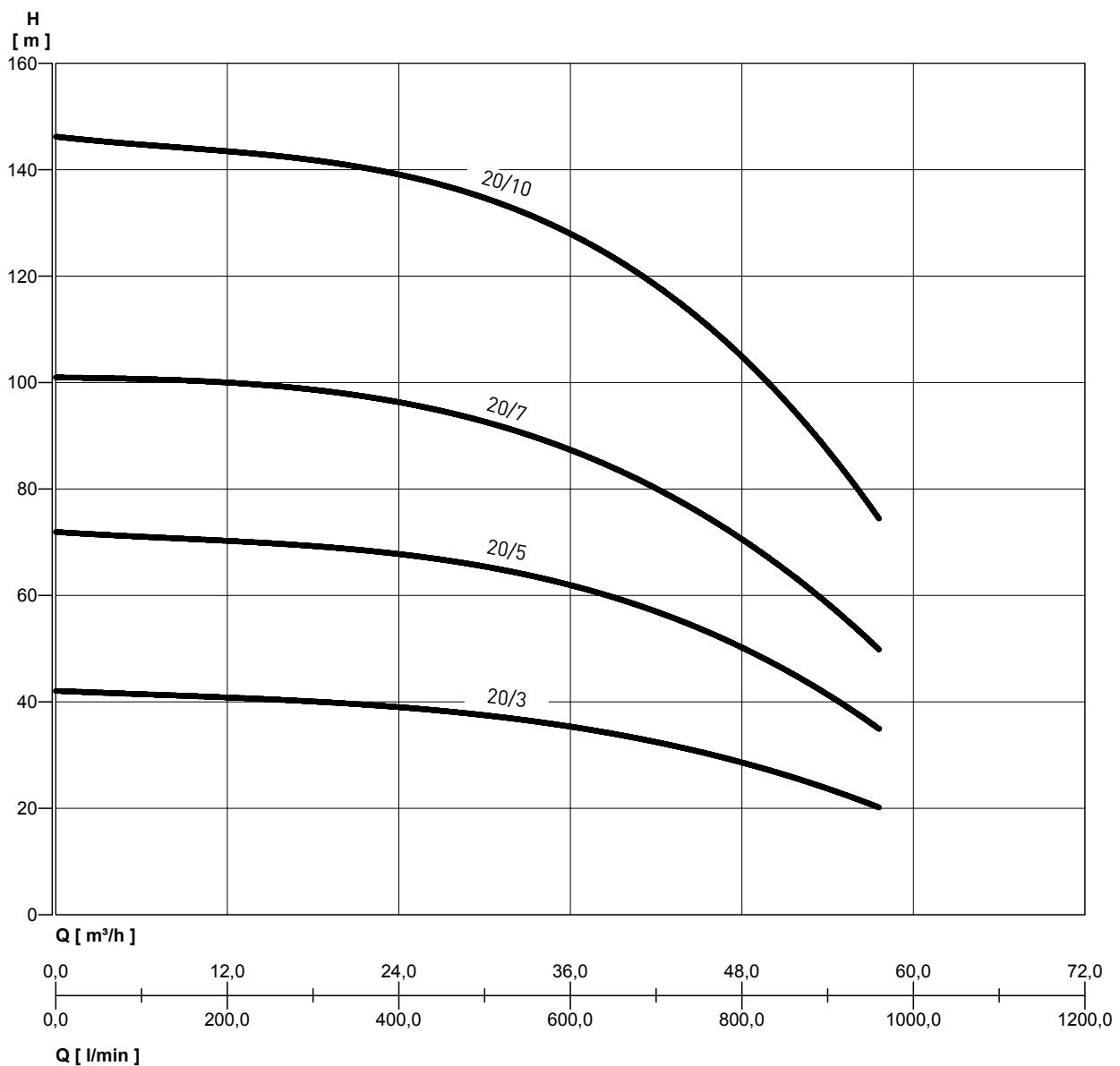
OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions mm.								Weight (Kg)	
	L1	P1	P2	H1	H3	DNA	DNM	F		
PMD20 PVM 15-3	620	380	860	120	781	3"	2" 1/2	30	370	175
PMD20 PVM 15-5	620	380	860	120	881	3"	2" 1/2	30	370	200
PMD20 PVM 15-7	620	380	860	120	1039	3"	2" 1/2	30	370	220
PMD20 PVM 15-9	620	380	860	120	1165	3"	2" 1/2	30	370	250
PMY20 PVM 15-12	620	380	860	120	1484	3"	2" 1/2	30	370	270

NOCCHI PMD20 PVM

PRESSURE BOOSTERS WITH THREE-PHASE PRESSURE SWITCH CONTROL

HYDRAULIC PERFORMANCE



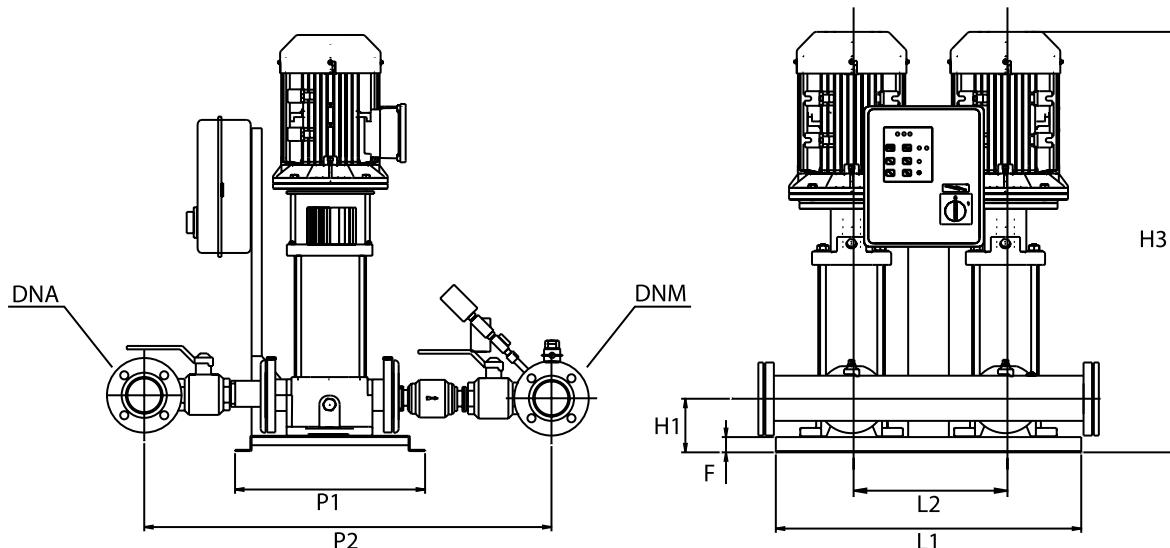
NOCCHI PMD20 PVM

PRESSURE BOOSTERS WITH THREE-PHASE PRESSURE SWITCH CONTROL

PERFORMANCE TABLE

MODEL	P2	VOLT. (V)	Q	l/min m³/h	0	200	400	600	800	960
	kW				0	12	24	36	48	57.6
PMD20 PVM 20-3	2x4	3 ~ 400	m.c.a. / m.c.w.	42	41	39	35	29	20	
PMD20 PVM 20-5	2x5.5			72	70	68	62	50	35	
PMD20 PVM 20-7	2x7.5			101	100	96	88	70	50	
PMY20 PVM 20-10	2x11			146	144	139	127	106	74	

For VOLT. values, see the data of the reference pump



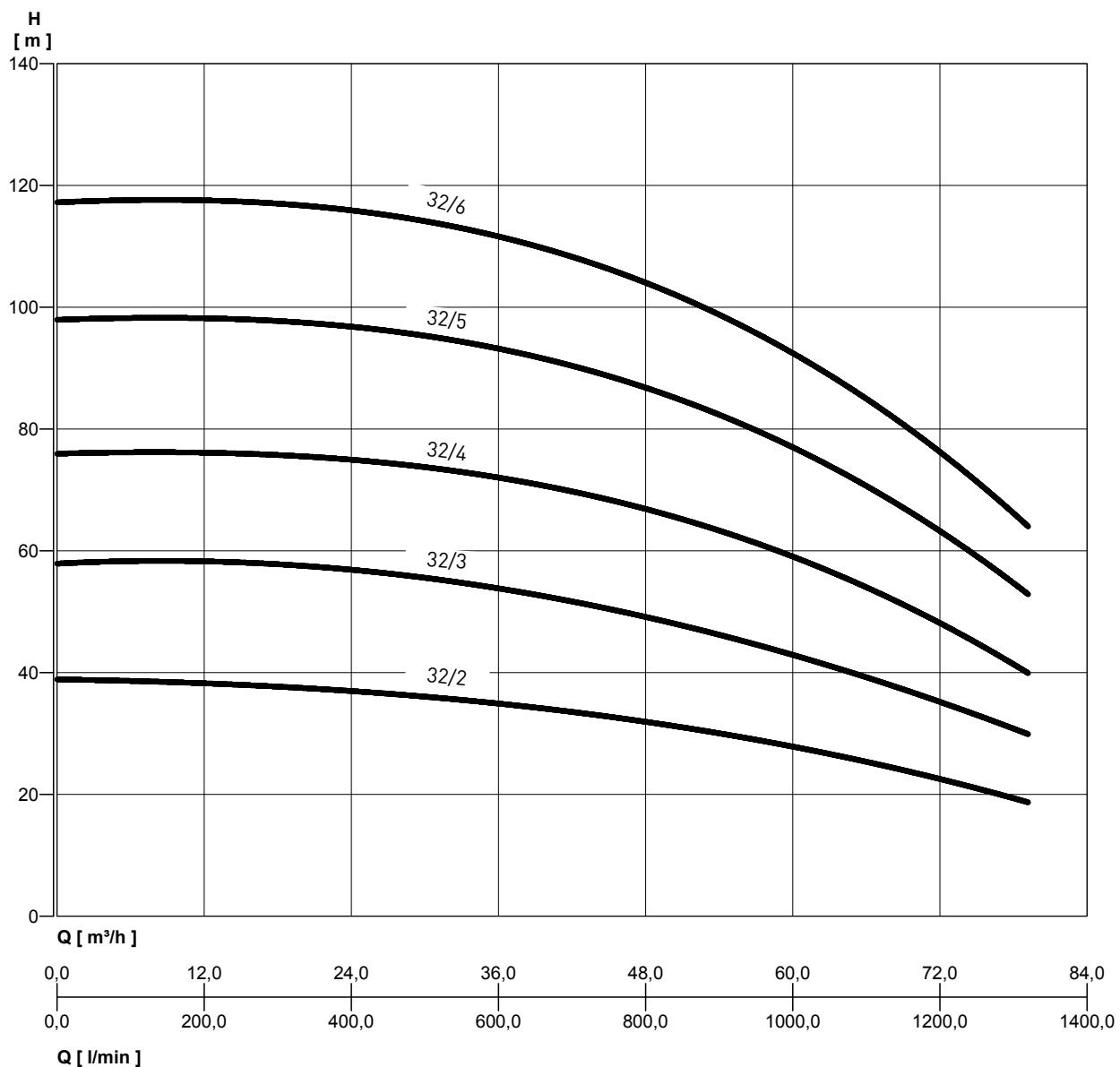
OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions mm.									Weight (Kg)
	L1	P1	P2	H1	H3	DNA	DNM	F	L2	
PMD20 PVM 20-3	620	380	860	120	795	3"	2" 1/2	30	370	181
PMD20 PVM 20-5	620	380	860	120	955	3"	2" 1/2	30	370	220
PMD20 PVM 20-7	620	380	860	180	1083	3"	2" 1/2	30	370	232
PMY20 PVM 20-10	620	380	860	180	1405	3"	2" 1/2	30	370	260

NOCCHI PMD20 PVM

PRESSURE BOOSTERS WITH THREE-PHASE PRESSURE SWITCH CONTROL

HYDRAULIC PERFORMANCE



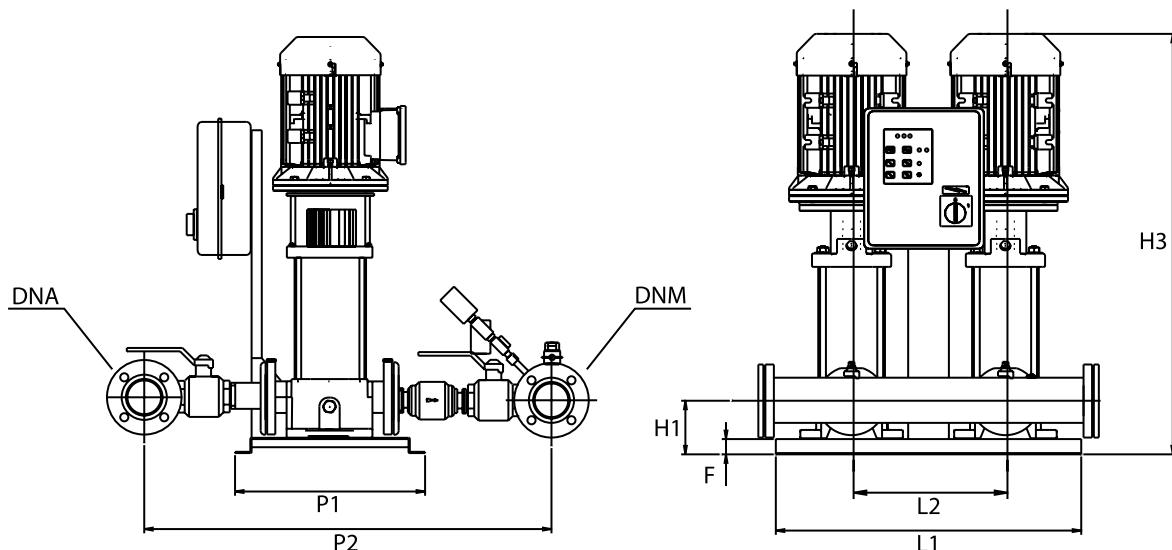
NOCCHI PMD20 PVM

PRESSURE BOOSTERS WITH THREE-PHASE PRESSURE SWITCH CONTROL

PERFORMANCE TABLE

MODEL	P2	VOLT. (V)	Q	I/min	0	200	400	600	800	1000	1200	1320
	kW			m ³ /h	0	12	24	36	48	60	72	79.2
PMD20 PVM 32-2	2x4	3 ~ 400	m.c.a./mcw.	39	38	37	35	32	28	22	19	
PMD20 PVM 32-3	2x5.5			58	58	57	54	49	43	35	30	
PMD20 PVM 32-4	2x7.5			76	76	75	72	67	59	48	40	
PMY20 PVM 32-5	2x11			98	98	97	93	87	77	63	53	
PMY20 PVM 32-6	2x11			117	118	116	111	104	93	76	64	

For VOLT. values, see the data of the reference pump



OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions mm.									Weight (Kg)
	L1	P1	P2	H1	H3	DNA	DNM	F	L2	
PMD20 PVM 32-2	860	700	1060	230	900	4"	3"	80	440	330
PMD20 PVM 32-3	860	700	1060	230	1006	4"	3"	80	440	350
PMD20 PVM 32-4	860	700	1060	230	1112	4"	3"	80	440	370
PMY20 PVM 32-5	860	700	1060	230	1399	4"	3"	80	440	390
PMY20 PVM 32-6	860	700	1060	230	1469	4"	3"	80	440	410

NOCCHI SENSORMAT

PRESSURE BOOSTERS WITH TRANSDUCER CONTROL

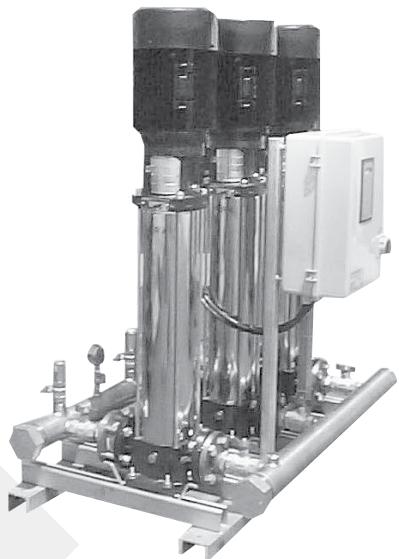
COMPACT, STURDY, HIGH HYDRAULIC PERFORMANCE, PIPING IN AISI 304

They are boosters for the automatic pressurisation of water distribution networks with three-phase power supply, controlled by a fixed speed transducer.

The pumps are controlled through an electrical panel equipped with an electronic board associated with an electronic transducer that detects the output pressure. Using the keyboard of the electrical panel, the configuration and calibration parameters of the unit

are entered (starting and stopping pressure of each pump, timer for each pump, etc...).

The pumps start and stop when the network pressure reaches the value assigned to them. At the end of each cycle, the automatic inverter changes the starting order of the pumps. In the event of heavy collections, the electronic board starts the pumps progressively, avoiding abrupt changes in the pressure and overload of the power supply.



NUMBER OF PUMPS		MAXIMUM CAPACITY	
Main	Pilot	L/min	m ³ /h
2	1	2000	120
3	-	2000	120
3	1	2667	160

USAGE DATA	MULTINOX - VE	PVM 15			PVM 32		
	SMD30	SMD21	SMD30	SMD31	SM.21	SM.30	SM.31
Maximum capacity (m ³ /h)	37.8	70.5	70.5	94	120	120	160
Maximum head (m.c.a.)	140	125	125	125	120	120	120
Maximum operating pressure	14 bar				16 bar		
Power supply VOLT.:					3-400 V		
Start direct pumps					Direct up t 7.5 kW - Start-Delta above 7.5 kW		
Ambient temperature					50° C		
Degree of protection of pump	IP44				IP55		
Degree of protection of electrical panel					IP54		

NOCCHI SENSOFORMAT

PRESSURE BOOSTERS WITH TRANSDUCER CONTROL

PUMP

MULTINOX-VE + / PVM:

- Centrifugal, multicellular, vertical axis

BASE

- Profile in galvanized steel

SUCTION MANIFOLD

In stainless steel AISI 304 with:

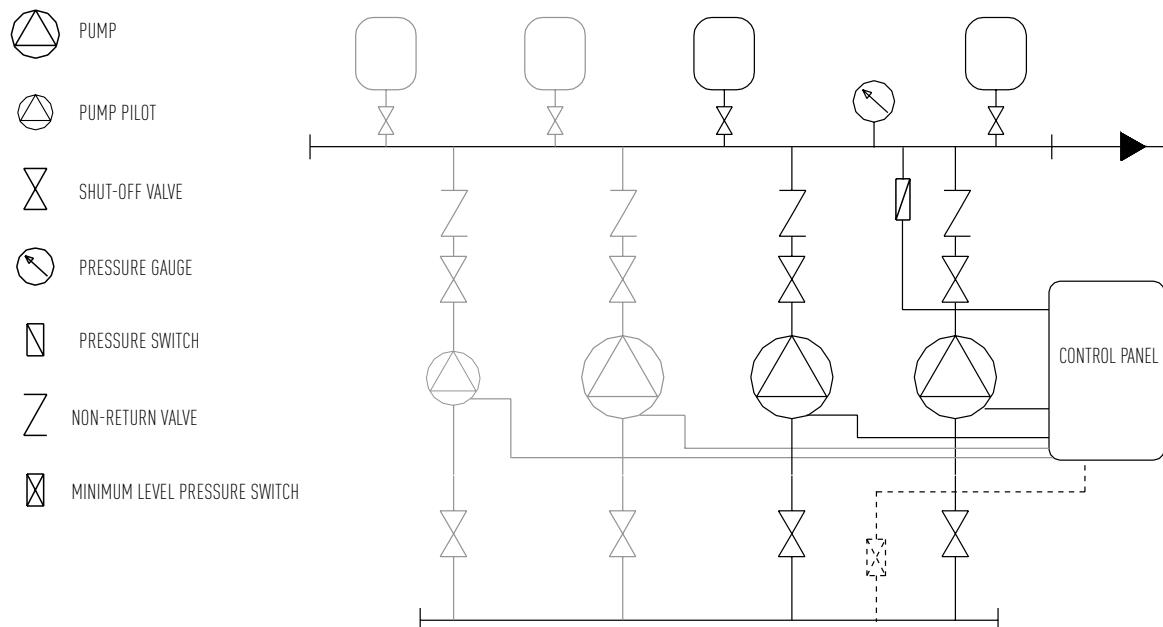
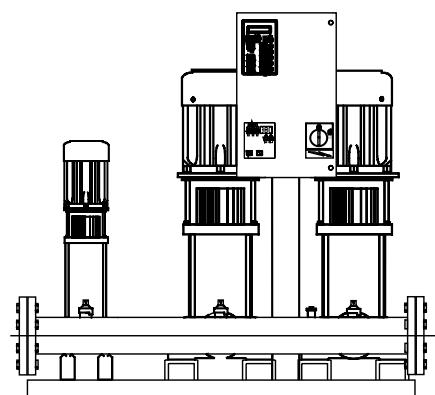
- n. 1 sleeve for water load
- n. 1 brass ball valve *
- n. 1 check valve *

DELIVERY MANIFOLD

in stainless steel AISI 304

- n. 1 pressure gauge
- n. 1 pressure transducer 0-5Volt – 0-10 Bar
- n. 1 brass ball valve *

* components for each pump installed



NOCCHI SENORMAT

PRESSURE BOOSTERS WITH TRANSDUCER CONTROL

THREE-PHASE ELECTRICAL PANEL



ELECTRICAL PANEL

- Box in metal IP54
- Main switch
- Keyboard with electronic board SA
- Fuses, contactor and thermal relay for each pump
- Transformer with fuses for the auxiliary circuit
- M-0-T switch for each pump
- Star-delta starter for motors above 7.5 kW

SIGNALS AND CONTROLS

- Liquid crystal display to indicate the operating parameters and to enter the configuration and calibration values.
- LED indicating the presence of power.
- LED indicating the low water level in the tank or an insufficient pressure in the supply duct (aqueduct).
- LED indicating that the thermal relays has tripped because of an overload.
- LED indicating manual or automatic operation.
- LED indicating the operation of each pump.
- Buttons to select manual or automatic control.
- Start - stop button for each pump when manual operation has been selected
- Button to enter the configuration parameters

MAIN FUNCTIONS

- Cyclic inversion of the start-up order of the pumps after each cycle end.
- Timer, adjustable from 0 to 255 seconds, for the operation of the pumps after the opening of the contact of the pressure switch or when the operating pressure has been reached.
- ON/OFF control of the level of the tank or the pressure of the supply duct by means of a float switch or a different differential pressure switch.
- Sequential control of the start-up of the pumps to prevent them from starting at the same time.

EXTERNAL CONTROL DEVICES

- A differential pressure switch that can be turned ON or OFF for each pump, or
- An electric pressure transducer (0-5 V)

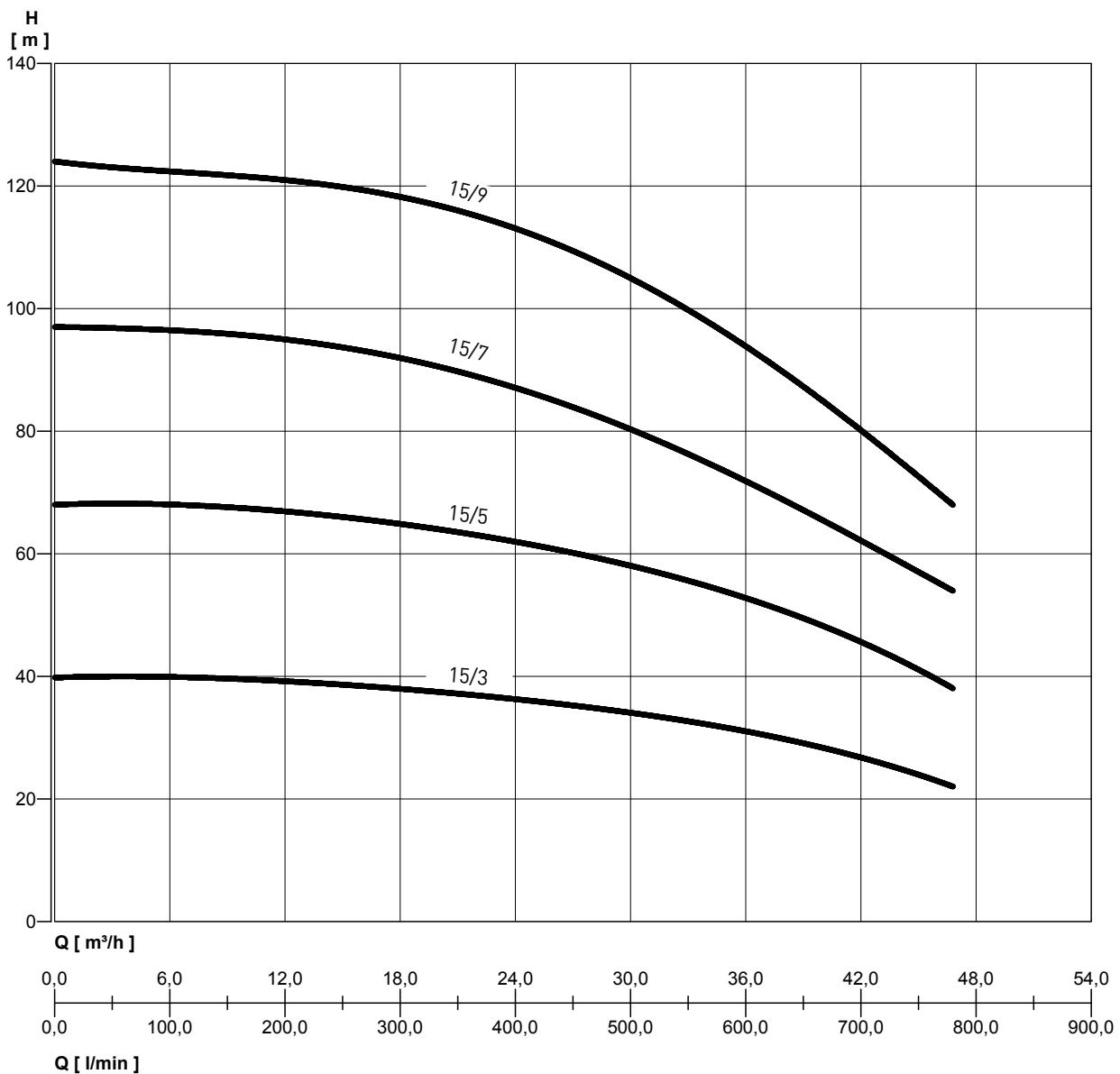
ACCESSORIES

Sensormat accessories available on request	SDM
	SMY
Float switch for protection against dry running	X
Differential pressure switch for exclusion in case of lack of network pressure	X
Electrodes for electronic level control	X
Membrane autoclaves	X

NOCCHI SMD21 PVM

PRESSURE BOOSTERS WITH TRANSDUCER CONTROL

HYDRAULIC PERFORMANCE

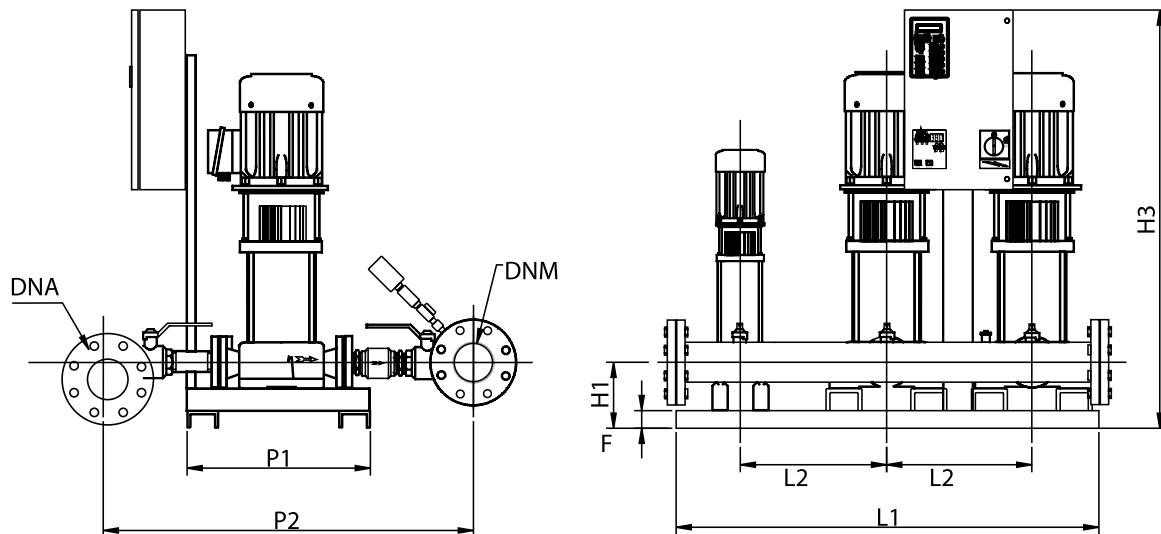


NOCCHI SMD21 PVM

PRESSURE BOOSTERS WITH TRANSDUCER CONTROL

PERFORMANCE TABLE

MODEL	P2	VOLT. (V)	Q	l/min m³/h	0	200	400	600	700	780
	kW				0	12	24	36	42	47
SMD21 PVM 15-3 + PVM 3-8	2x3	3 ~ 400	m.c.a./m.c.w.		39.8	39.2	36.3	31	26.8	22
SMD21 PVM 15-5 + PVM 3-15	2x4				68	66.9	62	52.7	45.7	38
SMD21 PVM 15-7 + PVM 3-19	2x5.5				97	95	87	72	62	54
SMD21 PVM 15-9 + PVM 3-25	2x7.5				124	121	113	94	80	68



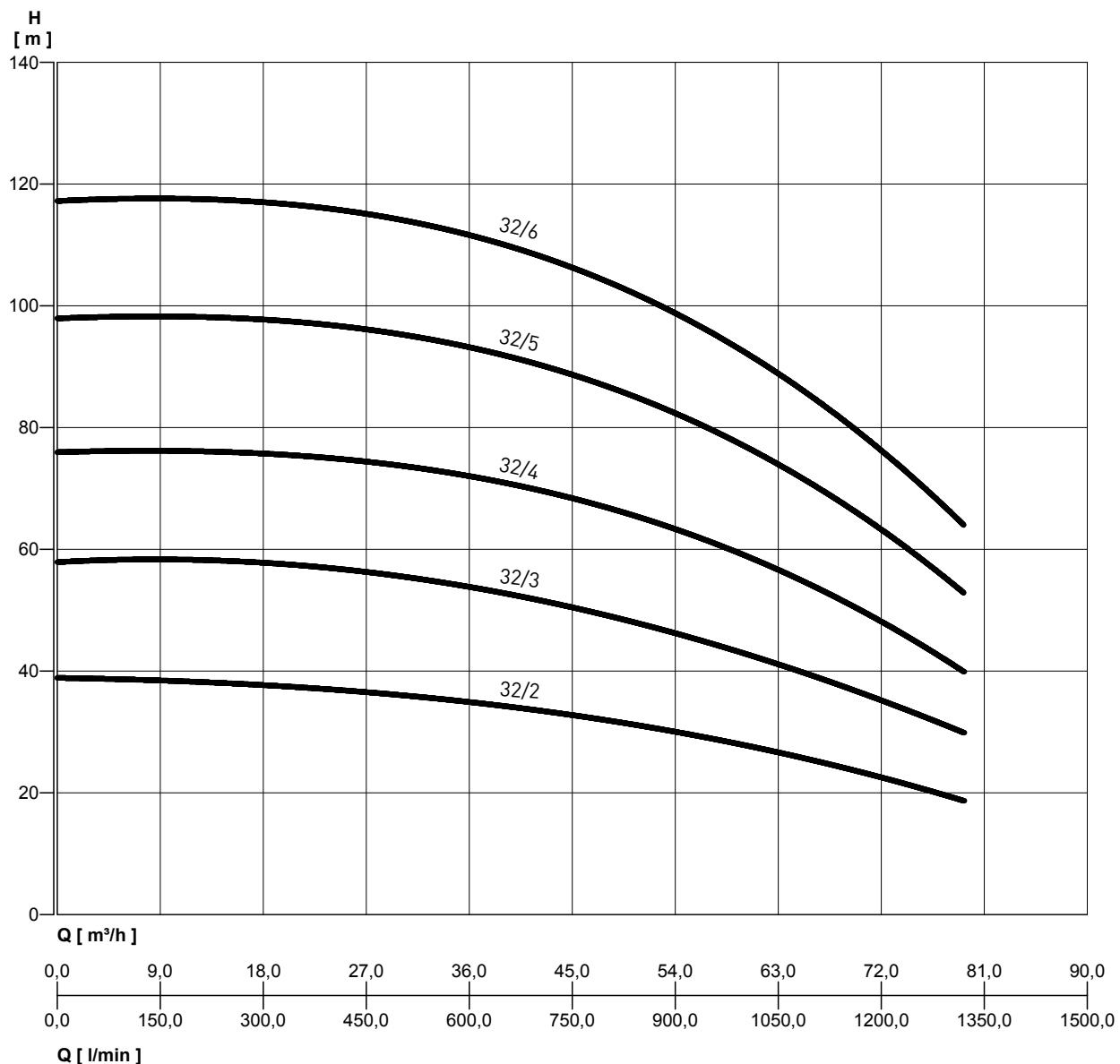
OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions mm.								WEIGHTS (Kg)	
	L1	P1	P2	H1	H3	DNA	DNM	F		
SMD21 PVM 15-3 + PVM 3-8	1100	610	860	180	1200	3"	3"	45	370	233
SMD21 PVM 15-5 + PVM 3-15	1100	610	860	180	1200	3"	3"	45	370	240
SMD21 PVM 15-7 + PVM 3-19	1100	610	860	180	1200	3"	3"	45	370	298
SMD21 PVM 15-9 + PVM 3-25	1100	610	860	180	1200	3"	3"	45	370	312

NOCCHI SM.21 PVM

PRESSURE BOOSTERS WITH TRANSDUCER CONTROL

HYDRAULIC PERFORMANCE

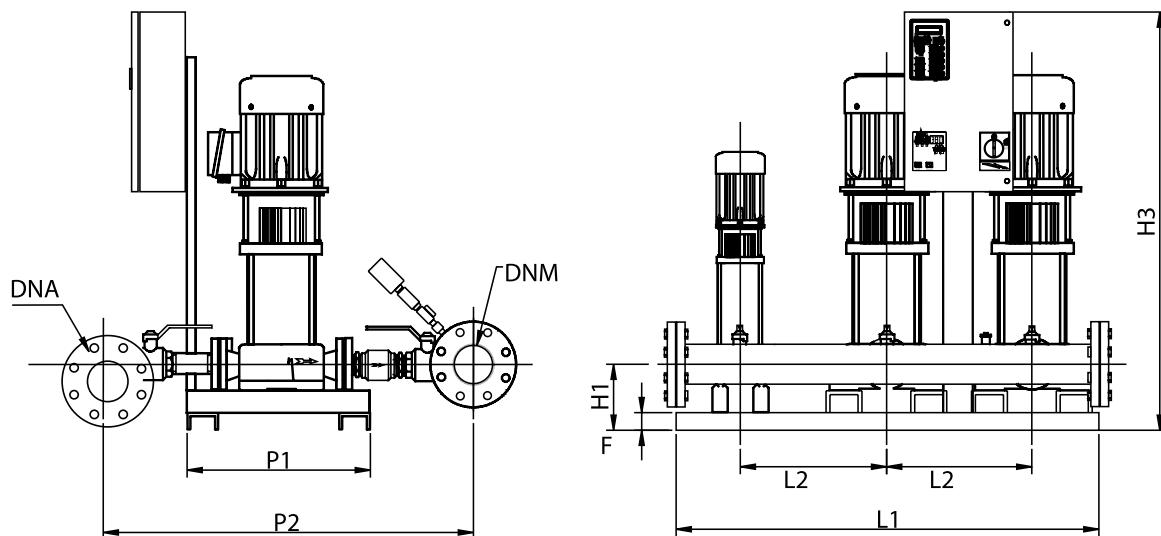


NOCCHI SM.21 PVM

PRESSURE BOOSTERS WITH TRANSDUCER CONTROL

PERFORMANCE TABLE

MODEL	P2	VOLT. (V)	Q	l/min m³/h	0	200	400	600	800	1000	1200	1320
	kW				0	12	24	36	48	60	72	79.2
SMD21 PVM 32-2 + PVM 3-8	2x4	3 ~ 400	m.c.a. / m.c.w.	39	38	37	35	32	28	22	19	
SMD21 PVM 32-3 + PVM 3-11	2x5.5			58	58	57	54	49	43	35	30	
SMD21 PVM 32-4 + PVM 3-15	2x7.5			76	76	75	72	67	59	48	40	
SMY21 PVM 32-5 + PVM 3-19	2x11			98	98	97	93	87	77	63	53	
SMY21 PVM 32-6 + PVM 3-19	2x11			117	118	116	111	104	93	76	64	



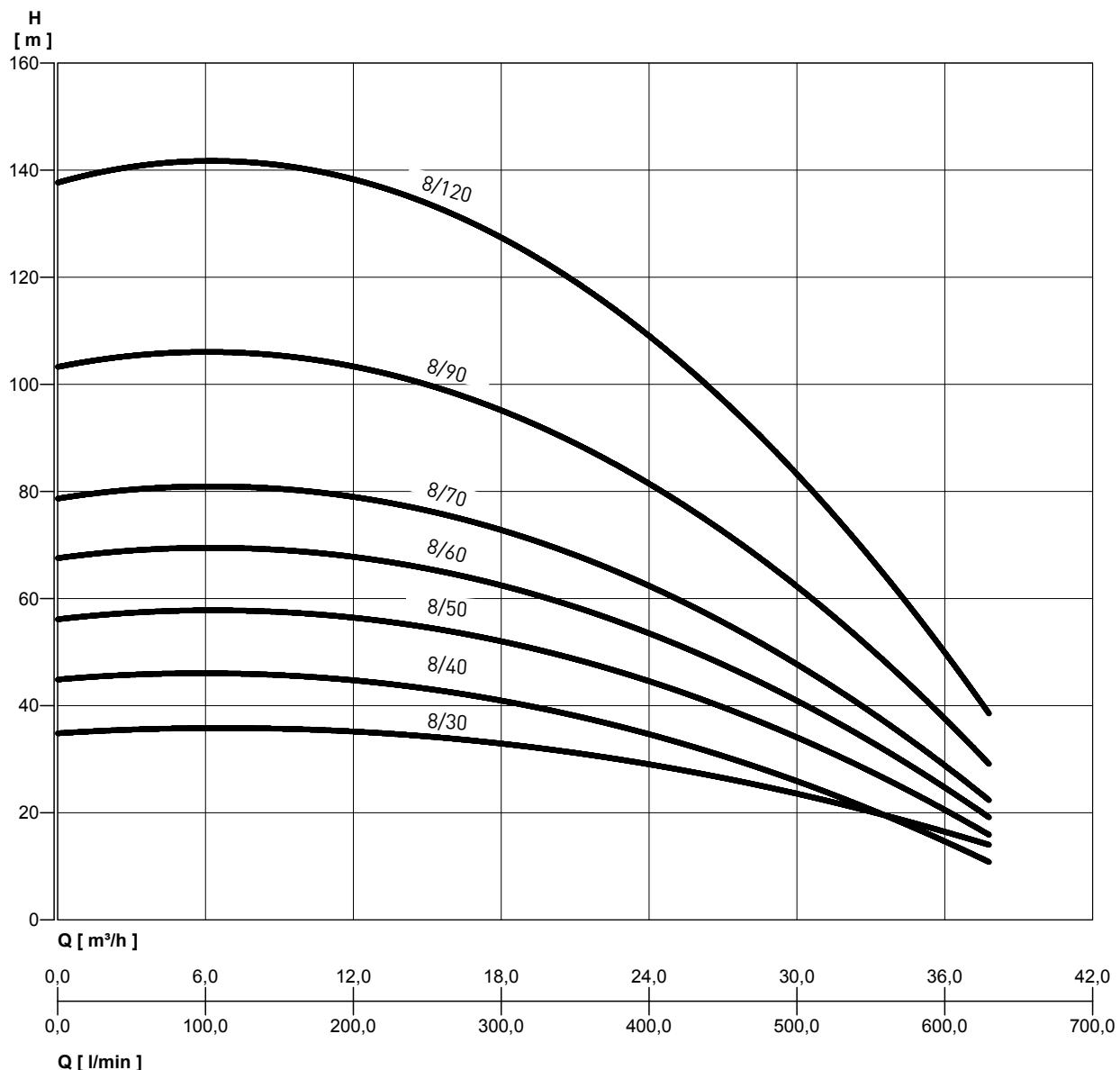
OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions mm.								WEIGHTS (Kg)	
	L1	P1	P2	H1	H3	DNA	DNM	F		
SMD21 PVM 32-2 + PVM 3-8	1300	700	1060	230	1520	4"	4"	80	440	380
SMD21 PVM 32-3 + PVM 3-11	1300	700	1060	230	1520	4"	4"	80	440	404
SMD21 PVM 32-4 + PVM 3-15	1300	700	1060	230	1520	4"	4"	80	440	424
SMY21 PVM 32-5 + PVM 3-19	1300	700	1060	230	1520	4"	4"	80	440	497
SMY21 PVM 32-6 + PVM 3-19	1300	700	1060	230	1520	4"	4"	80	440	548

NOCCHI SMD30 MULTINOX VE+

PRESSURE BOOSTERS WITH TRANSDUCER CONTROL

HYDRAULIC PERFORMANCE

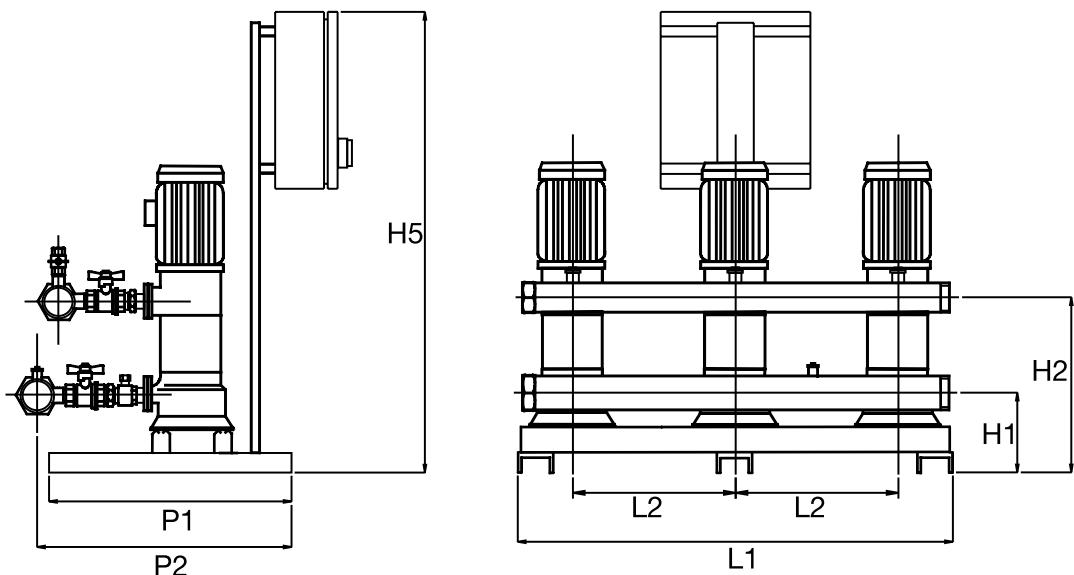


NOCCHI SMD30 MULTINOX VE+

PRESSURE BOOSTERS WITH TRANSDUCER CONTROL

PERFORMANCE TABLE

MODEL	kW	VOLT. (V)	I/1'	0	90	180	270	360	450	540	630
			mc / h	0	5.4	10.8	16.2	21.6	27	32.4	37.8
SMD30-MULTINOX VE+ 8-30	3x1	3 ~ 400	m.c.a./m.c.w.	36	35	35	33	30	25	28	10
SMD30-MULTINOX VE+ 8-40	3x1.2	3 ~ 400		46	45	44	42	39	32	20	11
SMD30-MULTINOX VE+ 8-50	3x1.5	3 ~ 400		57	57	56	53	50	40	28	16
SMD30-MULTINOX VE+ 8-60	3x1.7	3 ~ 400		69	68	67	64	60	48	34	19
SMD30-MULTINOX VE+ 8-70	3x1.9	3 ~ 400		80	80	78	74	70	56	40	22
SMD30-MULTINOX VE+ 8-90	3x3	3 ~ 400		105	104	103	98	90	73	52	29
SMD30-MULTINOX VE+ 8-120	3x4	3 ~ 400		140	139	138	131	120	98	70	38



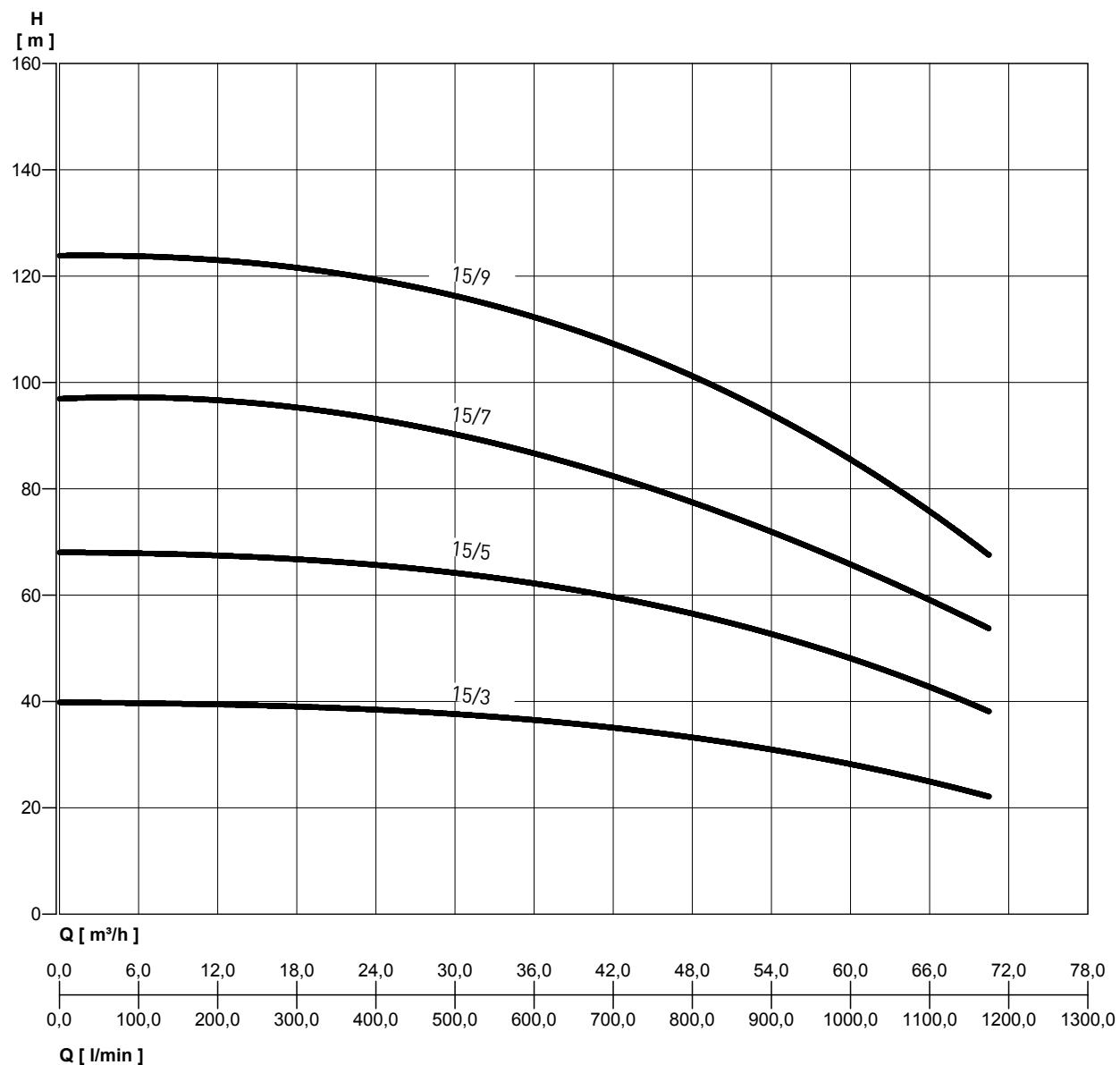
OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions mm.									WEIGHTS (Kg)
	L1	P1	P2	H1	H2	H5	DNA	DNM	L2	
SMD30-MULTINOX VE+ 8-30	1200	500	540	143	273	1100	3"	2 1/2	370	114
SMD30-MULTINOX VE+ 8-40	1200	500	540	143	300	1100	3"	2 1/2	370	126
SMD30-MULTINOX VE+ 8-50	1200	500	540	143	327	1100	3"	2 1/2	370	138
SMD30-MULTINOX VE+ 8-60	1200	500	540	143	354	1100	3"	2 1/2	370	144
SMD30-MULTINOX VE+ 8-70	1200	500	540	143	381	1100	3"	2 1/2	370	156
SMD30-MULTINOX VE+ 8-90	1200	500	540	143	435	1100	3"	2 1/2	370	160
SMD30-MULTINOX VE+ 8-120	1200	500	540	143	516	1100	3"	2 1/2	370	172

NOCCHI SMD30 PVM

PRESSURE BOOSTERS WITH TRANSDUCER CONTROL

HYDRAULIC PERFORMANCE

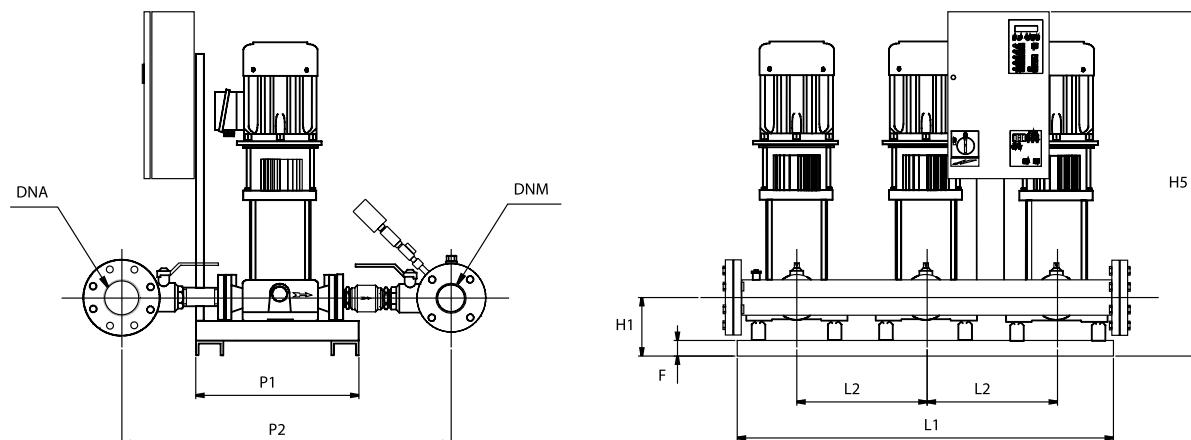


NOCCHI SMD30 PVM

PRESSURE BOOSTERS WITH TRANSDUCER CONTROL

PERFORMANCE TABLE

MODEL	P2	VOLT. (V)	Q	l/min m³/h	0	300	600	900	1050	1175
	kW				0	18	36	54	63	70.5
SMD30 PVM 15-3	3x3	3 ~ 400	m.c.a./m.c.w.	39.8	39.2	36.3	31	26.8	22	
SMD30 PVM 15-5	3x4	3 ~ 400		68	66.9	62	52.7	45.7	38	
SMD30 PVM 15-7	3x5.5	3 ~ 400		97	95	87	72	62	54	
SMD30 PVM 15-9	3x7.5	3 ~ 400		124	121	113	94	80	68	



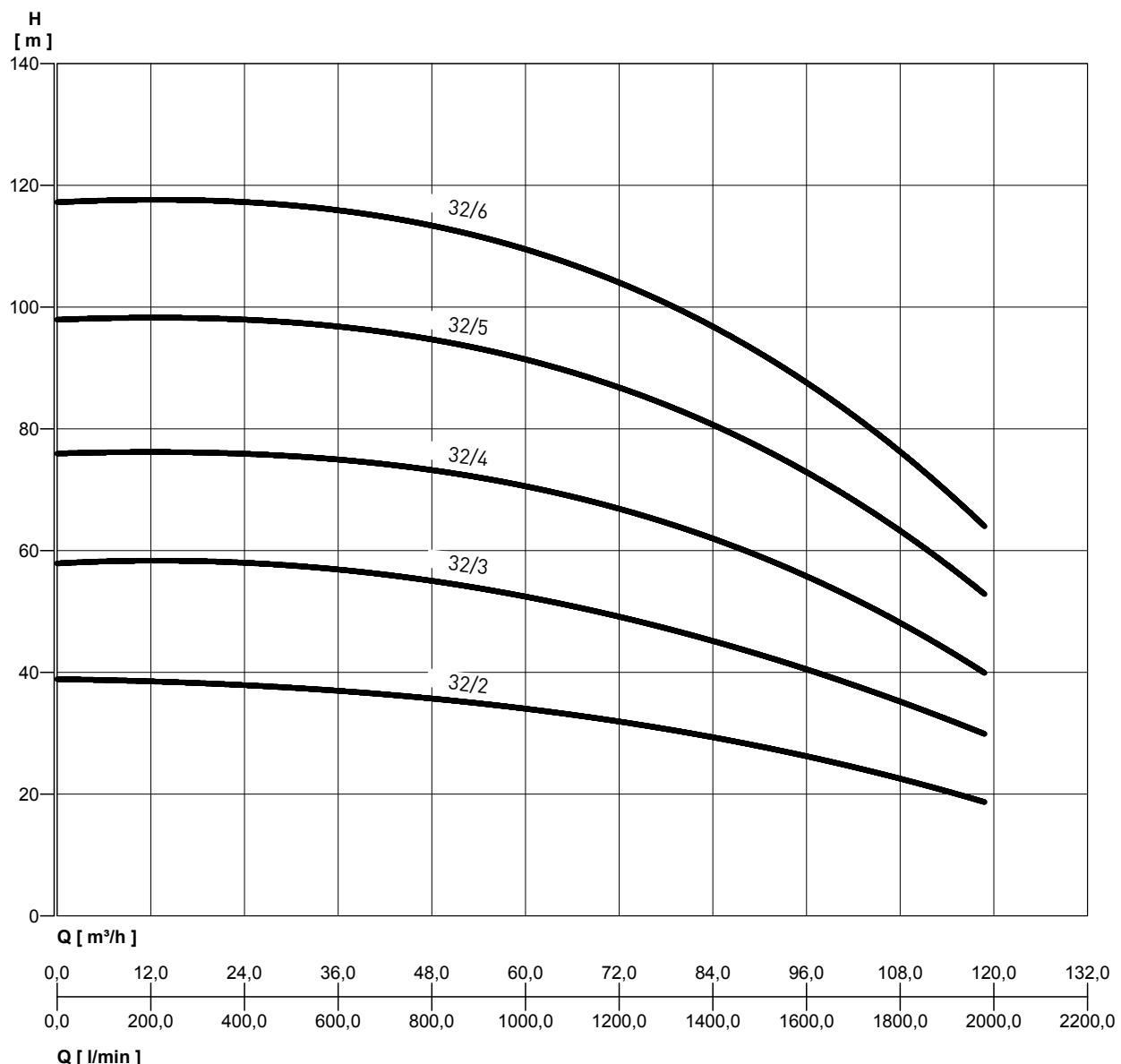
OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions mm.								WEIGHTS (Kg)	
	L1	P1	P2	H1	H5	DNA	DNM	F		
SMD30 PVM 15-3	1100	610	860	180	1200	4"	3"	45	370	264
SMD30 PVM 15-5	1100	610	860	180	1200	4"	3"	45	370	273
SMD30 PVM 15-7	1100	610	860	180	1200	4"	3"	45	370	348
SMD30 PVM 15-9	1100	610	860	180	1200	4"	3"	45	370	366

NOCCHI SM.30 PVM

PRESSURE BOOSTERS WITH TRANSDUCER CONTROL

HYDRAULIC PERFORMANCE

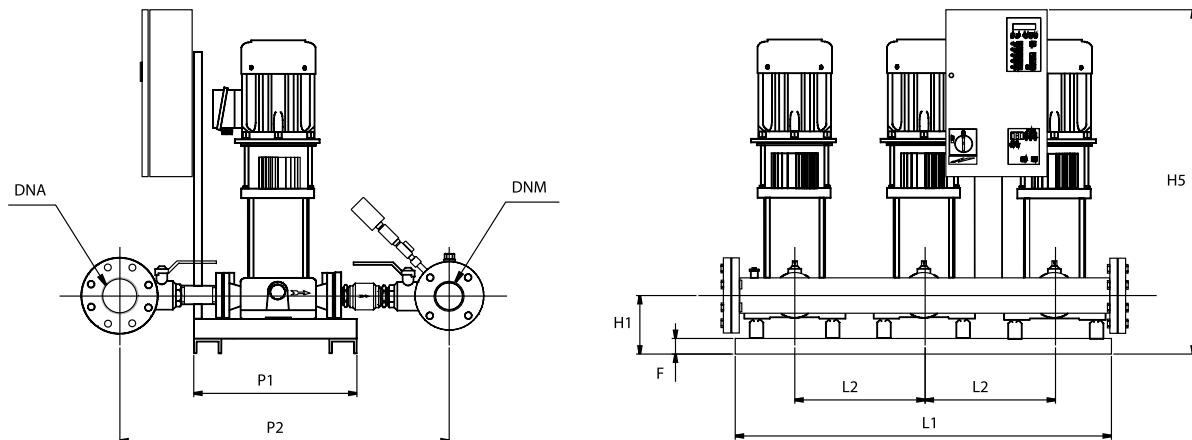


NOCCHI SM.30 PVM

PRESSURE BOOSTERS WITH TRANSDUCER CONTROL

PERFORMANCE TABLE

MODEL	P2	VOLT. (V)	Q	l/min m³/h	0	300	600	900	1200	1500	1800	1980
	kW				0	18	36	54	72	90	108	118.8
SMD30 PVM 32-2	3x4	3 ~ 400	m.c.a. / m.c.w.	39	38	37	35	32	28	22	19	
SMD30 PVM 32-3	3x5.5			58	58	57	54	49	43	35	30	
SMD30 PVM 32-4	3x7.5			76	76	75	72	67	59	48	40	
SMY30 PVM 32-5	3x11			98	98	97	93	87	77	63	53	
SMY30 PVM 32-6	3x11			117	118	116	111	104	93	76	64	



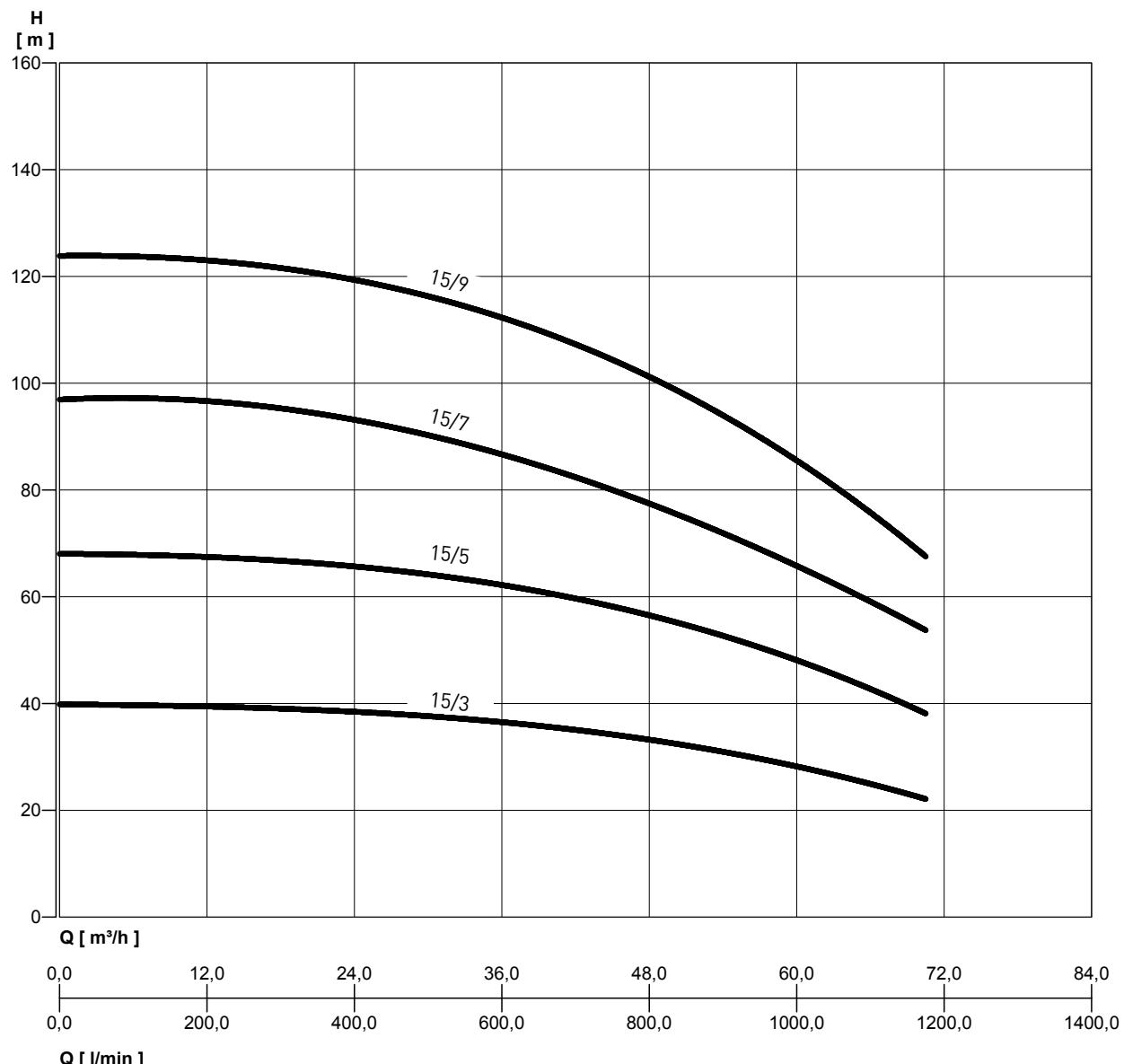
OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions mm.								WEIGHTS (Kg)	
	L1	P1	P2	H1	H5	DNA	DNM	F		
SMD30 PVM 32-2	1300	700	1060	230	1520	5"	4"	80	440	500
SMD30 PVM 32-3	1300	700	1060	230	1520	5"	4"	80	440	526
SMD30 PVM 32-4	1300	700	1060	230	1520	5"	4"	80	440	550
SMY30 PVM 32-5	1300	700	1060	230	1520	5"	4"	80	440	670
SMY30 PVM 32-6	1300	700	1060	230	1520	5"	4"	80	440	760

NOCCHI SMD31 PVM

PRESSURE BOOSTERS WITH TRANSDUCER CONTROL

HYDRAULIC PERFORMANCE

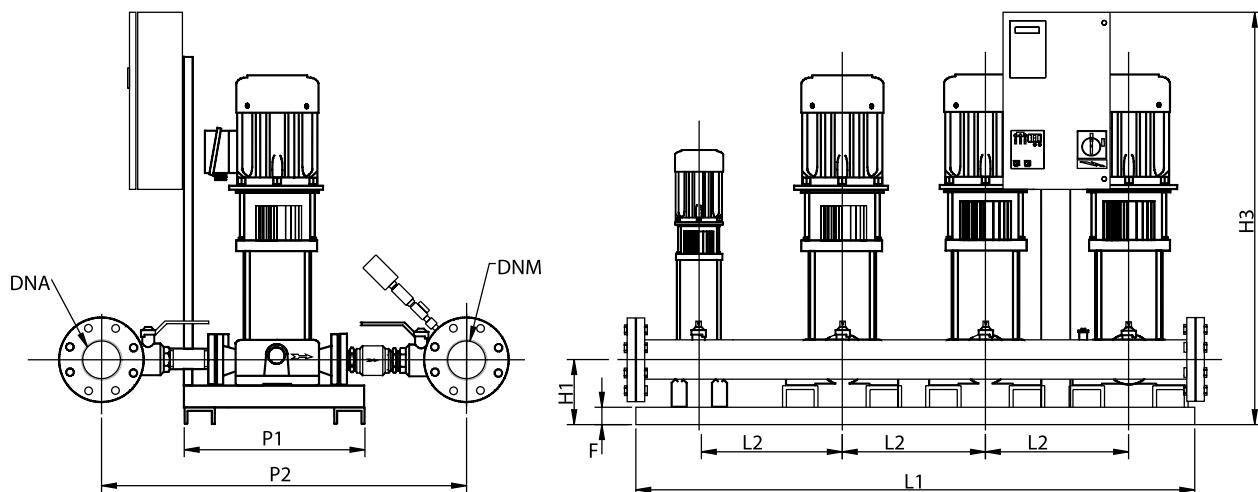


NOCCHI SMD31 PVM

PRESSURE BOOSTERS WITH TRANSDUCER CONTROL

PERFORMANCE TABLE

MODEL	P2	VOLT. (V)	Q	l/min m³/h	0	300	600	900	1050	1175
	kW				0	18	36	54	63	70.5
SMD31 PVM 15-3 + PVM 3-8	3x3	3 ~ 400	m.c.a./m.c.w.	39.8	39.2	36.3	31	26.8	22	
SMD31 PVM 15-5 + PVM 3-15	3x4			68	66.9	62	52.7	45.7	38	
SMD31 PVM 15-7 + PVM 3-19	3x5.5			97	95	87	72	62	54	
SMD31 PVM 15-9 + PVM 3-25	3x7.5			124	121	113	94	80	68	



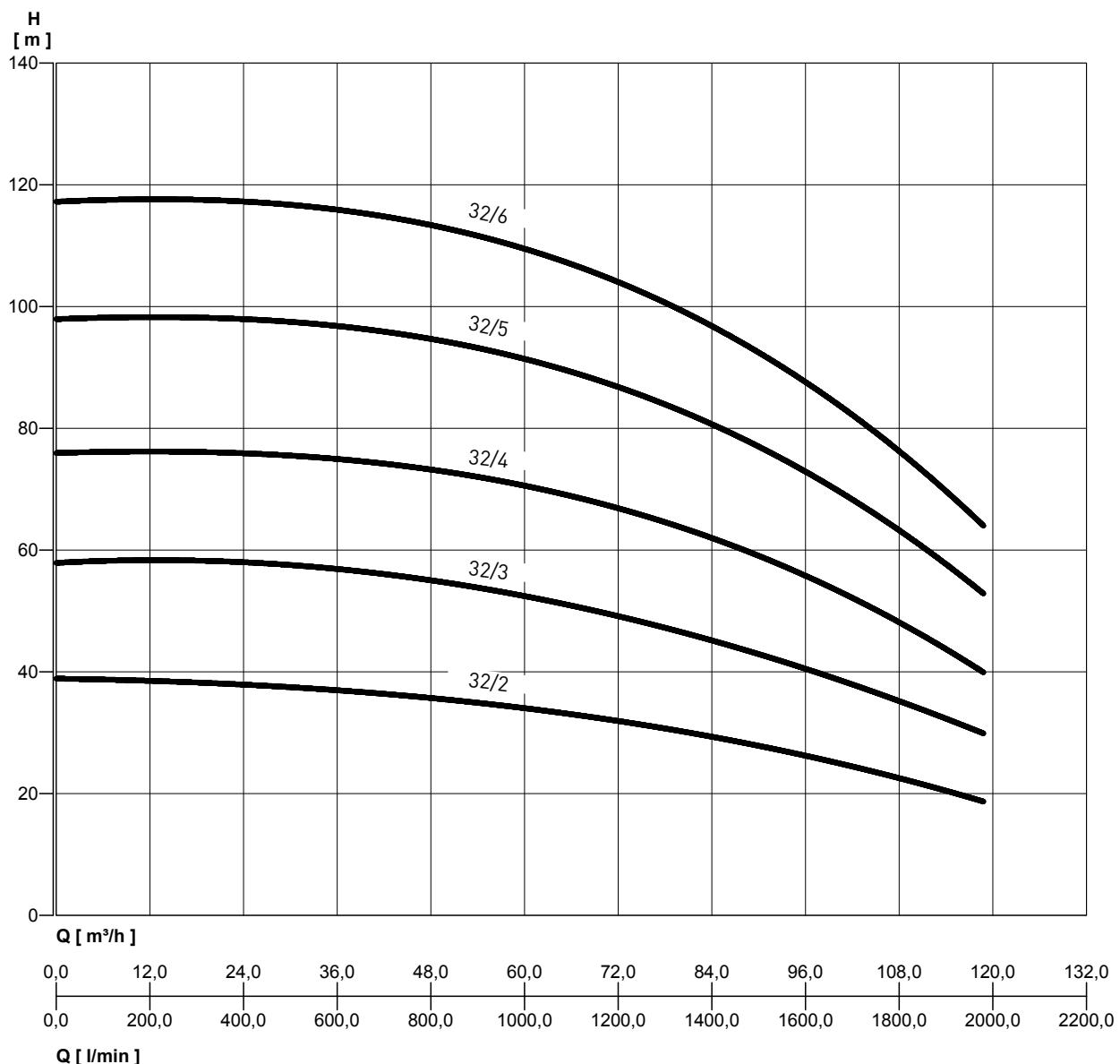
OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions mm.								WEIGHTS (Kg)	
	L1	P1	P2	H1	H3	DNA	DNM	F		
SMD31 PVM 15-3 + PVM 3-8	1500	610	860	180	1410	4"	4"	45	370	354
SMD31 PVM 15-5 + PVM 3-15	1500	610	860	180	1410	4"	4"	45	370	364
SMD31 PVM 15-7 + PVM 3-19	1500	610	860	180	1410	4"	4"	45	370	446
SMD31 PVM 15-9 + PVM 3-25	1500	610	860	180	1410	4"	4"	45	370	470

NOCCHI SM.31 PVM

PRESSURE BOOSTERS WITH TRANSDUCER CONTROL

HYDRAULIC PERFORMANCE

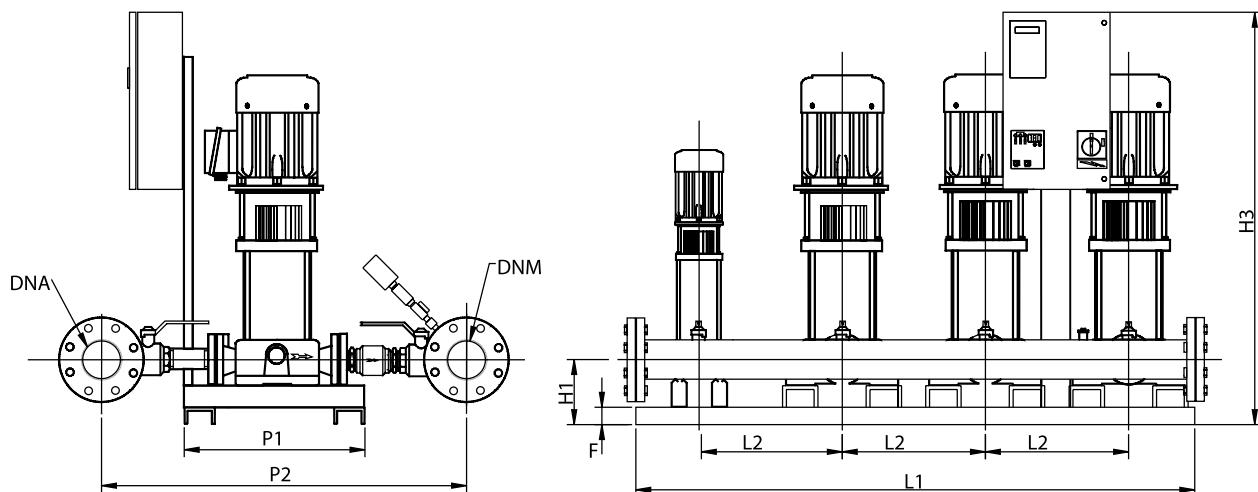


NOCCHI SM.31 PVM

PRESSURE BOOSTERS WITH TRANSDUCER CONTROL

PERFORMANCE TABLE

MODEL	P2	VOLT. (V)	Q	l/min	0	300	600	900	1200	1500	1800	1980
	kW				0	18	36	54	72	90	108	118.8
SMD31 PVM 32-2 + PVM 3-8	3x4	3 ~ 400	m.c.a./m.c.w.		39	38	37	35	32	28	22	19
SMD31 PVM 32-3 + PVM 3-11	3x5.5				58	58	57	54	49	43	35	30
SMD31 PVM 32-4 + PVM 3-15	3x7.5				76	76	75	72	67	59	48	40
SMY31 PVM 32-5 + PVM 3-19	3x11				98	98	97	93	87	77	63	53
SMY31 PVM 32-6 + PVM 3-19	3x11				117	118	116	111	104	93	76	64



OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions mm.									WEIGHTS (Kg)
	L1	P1	P2	H1	H3	DNA	DNM	F	L2	
SMD31 PVM 32-2 + PVM 3-8	1750	700	1060	230	1520	6"	5"	80	440	550
SMD31 PVM 32-3 + PVM 3-11	1750	700	1060	230	1520	6"	5"	80	440	591
SMD31 PVM 32-4 + PVM 3-15	1750	700	1060	230	1520	6"	5"	80	440	611
SMY31 PVM 32-5 + PVM 3-19	1750	700	1060	230	1520	6"	5"	80	440	715
SMY31 PVM 32-6 + PVM 3-19	1750	700	1060	230	1520	6"	5"	80	440	840

NOCCHI CPS20

PRESSURE BOOSTERS WITH TWO VARIABLE SPEED PUMPS

The new series of variable speed pressurisation boosters CPS20 represents a reliable solution which is easy to use, for residential and industrial applications. The system involves the installation in parallel of two inverters integrated directly on the motor of each pump installed. The two frequency converters communicate and alternate the starting order of each work cycle, always keeping the pressure constant in the distribution system.

APPLICATIONS

- Lifting and distribution of water in domestic systems
- Pressurisation systems
- Irrigation
- Industry
- Washes

TECHNICAL CHARACTERISTICS

- Supply VOLT.: inverter 1x230 Vac ± 10 %.
- Inverter output VOLT.: 3x230 Vac ± 10 %
- Maximum rated power: 2x2.4 kW
- Input frequency: 50/60 Hz + 3%
- Output maximum rated power: 8 Amp
- Degree of protection: IP54-DHR ; IP-44 JET, JETINOX
- Maximum temperature + 50°C
- Input filter complying with EMC directive
- Pressure transducer 0 - 5 Volt - 0 - 10 Bar
- Serial interface connectivity RS 485
- Optional contacts 3 (external set-point, alarm, system inhibition)

BASE

- in galvanized metal complete with rubber isolated pads

SUCTION MANIFOLD

- in galvanized steel with:
- N.2 brass ball valves

DELIVERY MANIFOLD

- in galvanized steel with:
- N.2 brass ball valves
 - N.1 pressure gauge
 - N.2 pressure sensors

Protection electrical panel with circuit breakers

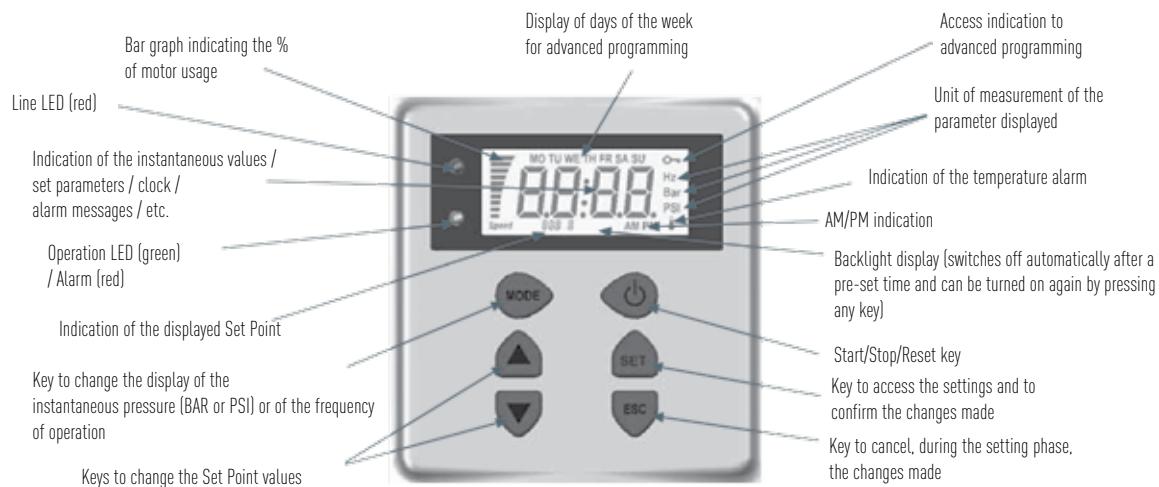


TYPE	MODEL	kW (P2)	Q1 l/m	Q2 l/m	H1 m	H2 m
HORIZONTAL	CPS20 JET 1000	2x1	10	140	42	20
	CPS20 JETINOX 90/50	2x0.9	20	160	44	3
	CPS20 DHR 2-50	2x0.5	20	100	25	12
	CPS20 DHR 4-50	2x0.7	80	240	39	17
	CPS20 DHR 4-60	2x1.1	80	240	49	25
	CPS20 DHR 9-40	2x1.3	80	480	40	10
	CPS20 DHR 9-60	2x1.9	804	80	60	14

NOCCHI CPS20

PRESSURE BOOSTERS WITH TWO VARIABLE SPEED PUMPS

CONTROL PANEL

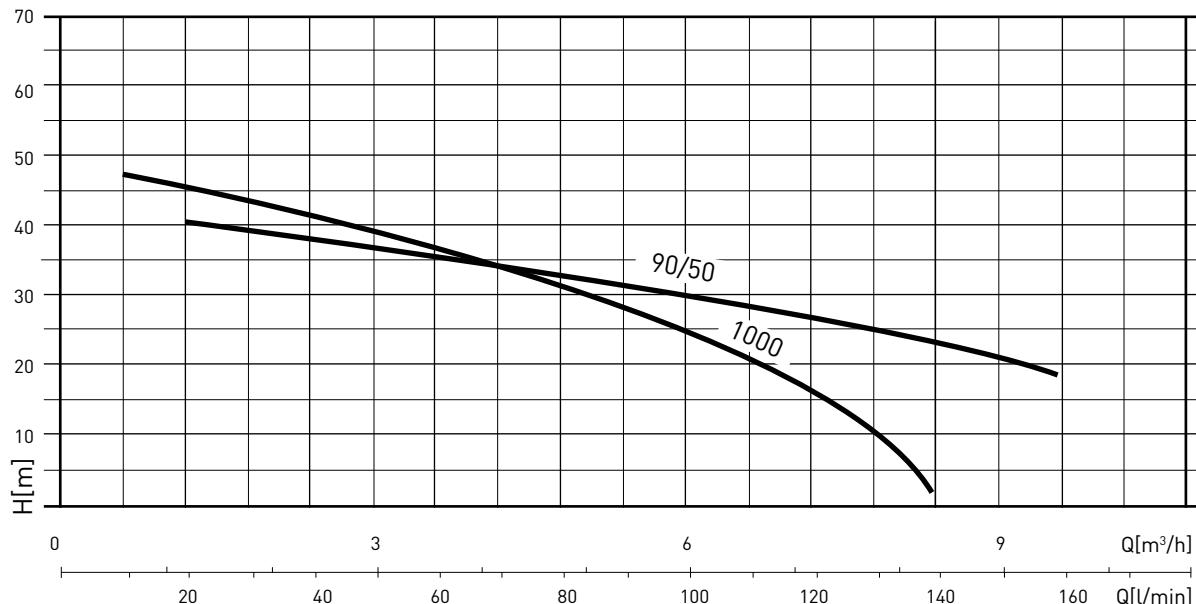


- Backlight display (switches off automatically after a pre-set time and can be turned on again by pressing any key)
- Bar graph indicating the percentage of motor usage
- Display of days of the week
- Indication of the instantaneous values / set parameters / clock / alarm messages / etc.
- Access indication to programming
- Unit of measurement of the parameter displayed

NOCCHI CPS20 JET - JETINOX

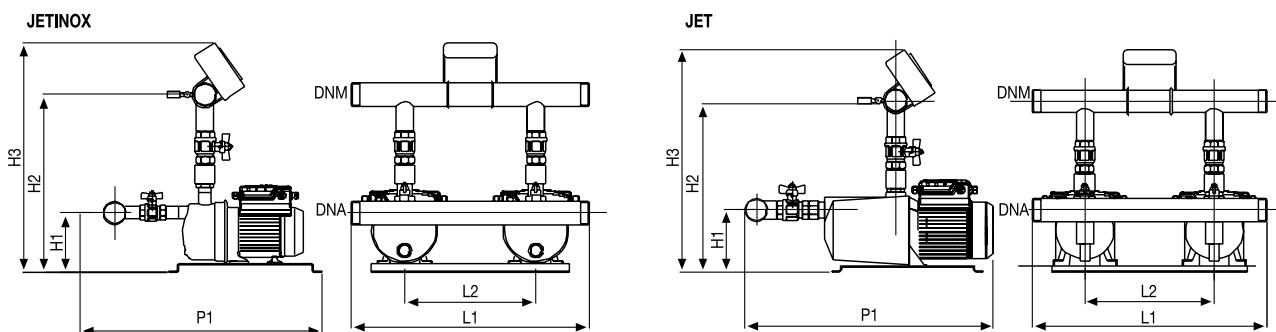
PRESSURE BOOSTERS WITH TWO VARIABLE SPEED PUMPS

HYDRAULIC PERFORMANCE



PERFORMANCE TABLE

MODEL	P1		VOLT. (V)	In (A)	Q	I/min	20	40	60	80	100	120	140	160
	HP	kW												
CPS20-JETINOX90/50	2x2	2x1.5	1 ~ 230	2x9			42	39	37	33	30	27	25	20
CPS20-JET 1000	2x1.5	2x1.1	1 ~ 230	2x7.7	m.c.a./m.c.w.		44	41	37	32	25	15	3	



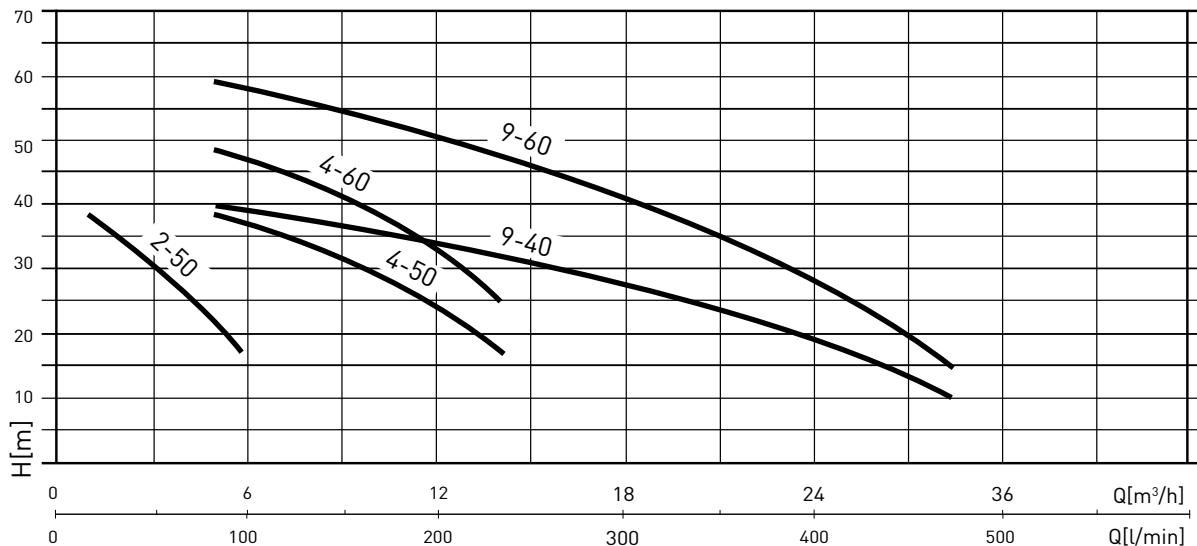
OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions mm.							WEIGHTS Kg	
	L1	L2	H1	H2	H3	P1	DNA	DNM	
CPS20 JETINOX90/50	460	320	40	243	450	740	2"	2"	70
CPS20 JET 1000	670	370	165	465	500	690	2"	2"	65

NOCCHI CPS20 DHR

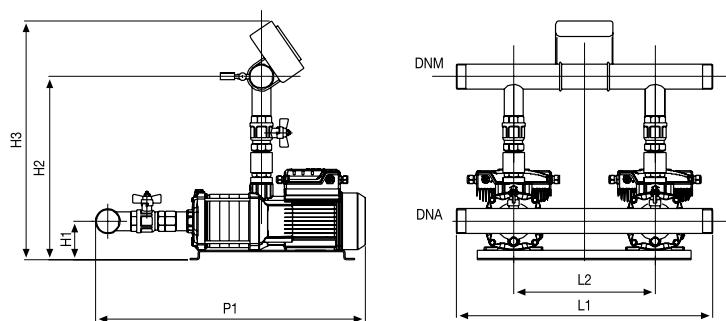
PRESSURE BOOSTERS WITH TWO VARIABLE SPEED PUMPS

HYDRAULIC PERFORMANCE



PERFORMANCE TABLE

MODEL	P1		VOLT. (V)	In (A)	Q m³/h	l/min	20	40	60	80	100	120	160	200	240	320	400	480
	HP	kW					1.2	2.4	3.6	4.8	6.0	7.2	9.6	12.0	14.4	19.2	24.0	28.8
CPS20/DHR 2-50	2x1	2x1.0	1 ~ 230	2x5.5		39	35	30	23	17								
CPS20/DHR 4-50	2x1.7	2x1.1	1 ~ 230	2x10.6					39	38	35	31	25	17				
CPS20/DHR 4-60	2x2.15	2x1.1	1 ~ 230	2x9.5					49	47	45	41	34	25				
CPS20/DHR 9-40	2x2.15	2x1.1	1 ~ 230	2x9.5					40	39	38	35	33	27	19	10		
CPS20/DHR 9-60	2x3.35	2x2.2	1 ~ 230	2x15.8					60	58	57	56	53	49	40	29	14	



OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions mm.								WEIGHTS Kg
	L1	L2	H1	H2	H3	P1	DNA	DNM	
CPS20/DHR 2-50	670	370	100	365	585	700	2 1/2	2"	57
CPS20/DHR 4-50	670	370	100	365	585	700	2 1/3	2"	62
CPS20/DHR 4-60	670	370	100	365	585	700	2 1/4	2"	68
CPS20/DHR 9-40	670	370	100	400	620	700	2 1/5	2"	77
CPS20/DHR 9-60	670	370	100	400	620	700	2 1/2	2"	89

NOCCHI VARIO 1-20/Multi EVO-E

PRESSURE BOOSTERS WITH TWO VARIABLE SPEED PUMPS

NEW 2016
PENTAIR

IE3
MOTOR

COMPACT, STURDY, HIGH HYDRAULIC EFFICIENCY

The new series of variable speed pressurisation boosters VARIO 1-20 represents a reliable solution which is easy to use, for residential and industrial applications. The system involves the installation in parallel of two inverters integrated directly on the motor of each pump installed. The two frequency converters communicate and alternate the starting order of each work cycle, always keeping the pressure constant in the distribution system.



USAGE DATA	MULTIEVO
Maximum capacity (m³/h)	21
Maximum head (m.c.a.)	70
Maximum operating pressure	8 bar
Power supply VOLT.:	1 ~ 230 V
Frequency	50 Hz
Degree of protection of control panel	IP55
Degree of protection of pump	IP55
Ambient temperature	40°C
Number of pumps	2



APPLICATIONS

- Lifting and distribution of water in domestic systems
- Pressurisation systems
- Washing systems

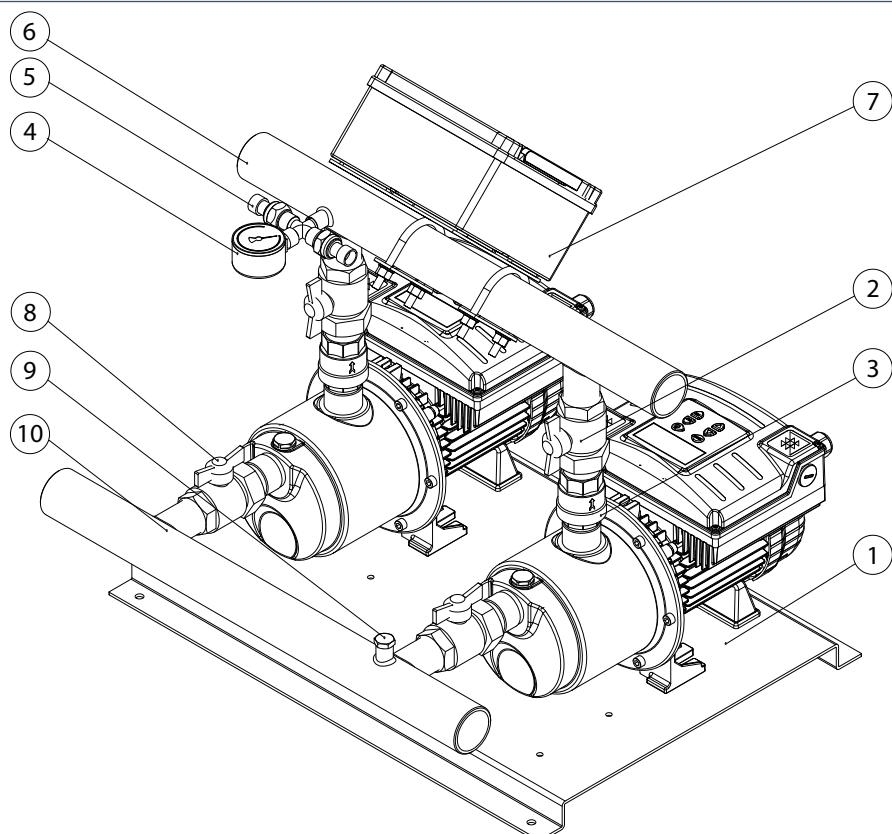
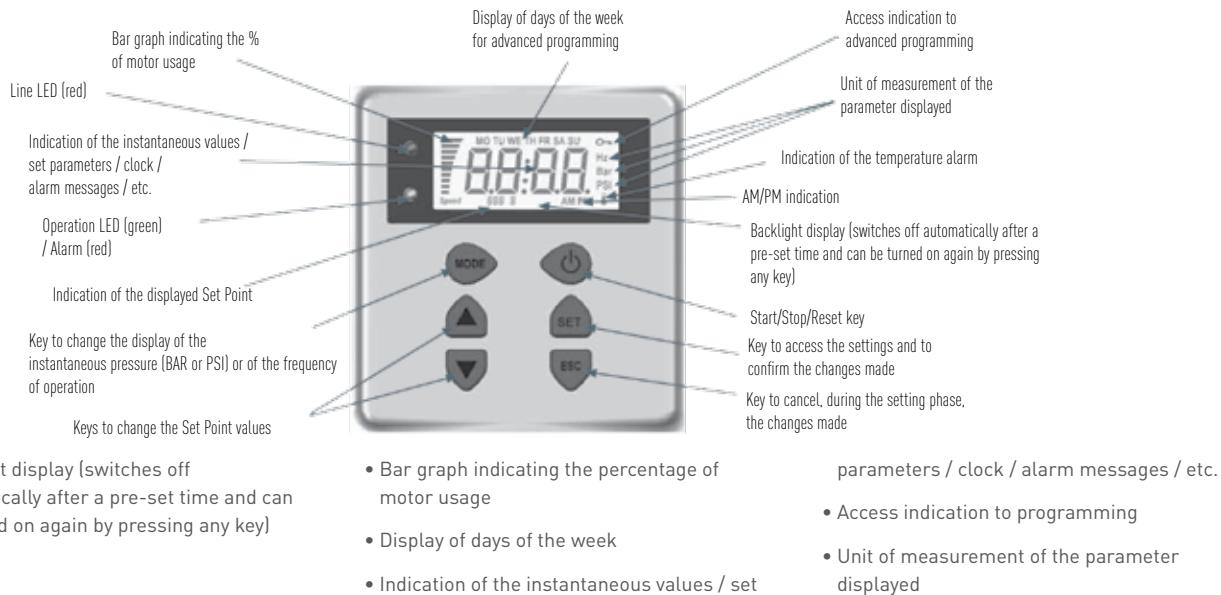
- Irrigation



NOCCHI VARIO 1-20/Multi EVO-E

PRESSURE BOOSTERS WITH TWO VARIABLE SPEED PUMPS

CONSTRUCTION FEATURES



BASE

1. Base in galvanized metal complete with rubber isolated pads

DELIVERY MANIFOLD

2. n. 2 brass ball valves
3. n. 2 check valves
4. n. 1 pressure gauges
5. n. 2 pressure sensors
6. n. 1 galvanized steel manifold
7. n. 1 protection electrical panel with circuit breakers

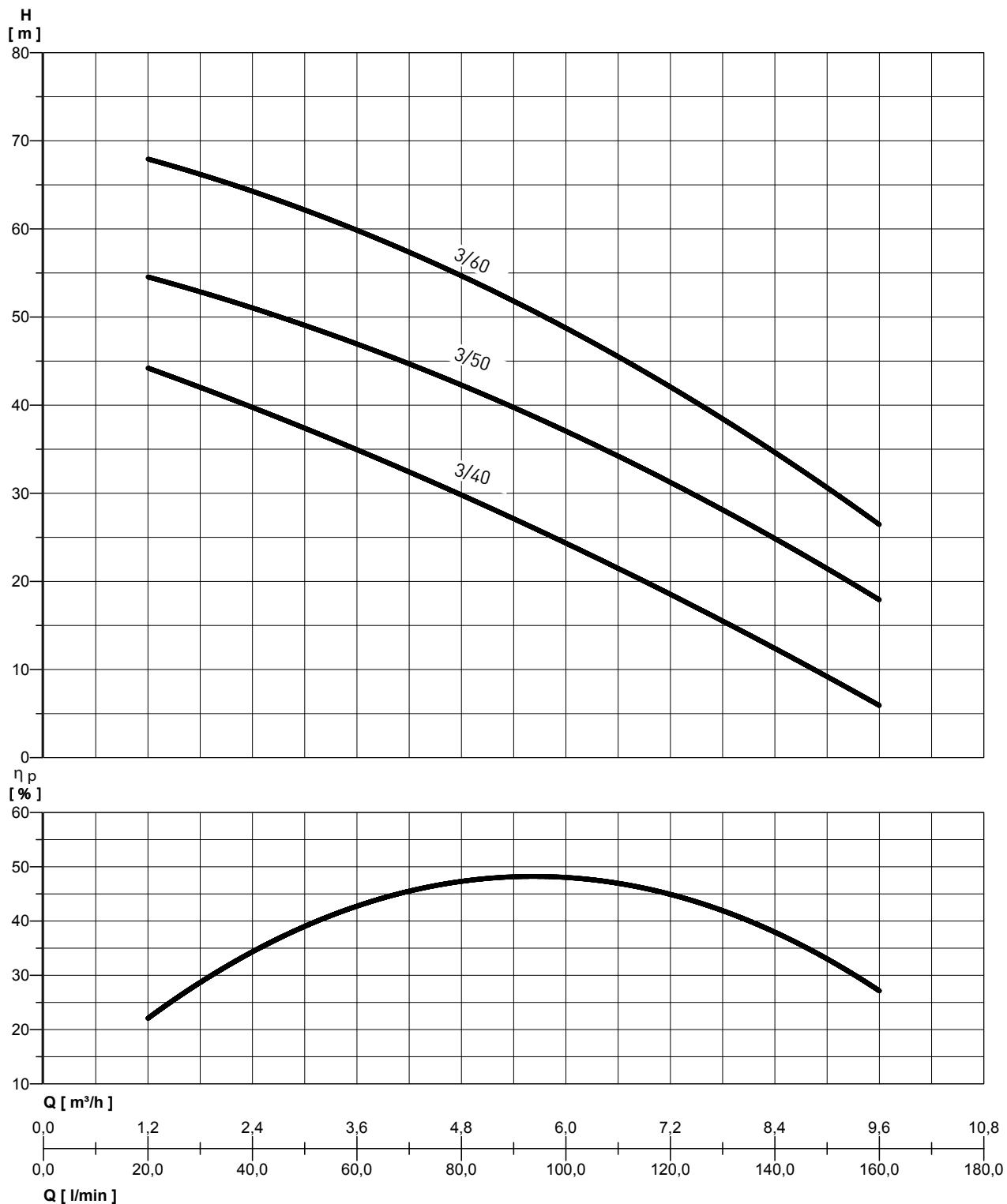
SUCTION MANIFOLD

8. n. 2 brass ball valves
9. n. 1 sleeve for water load
10. n. 1 galvanized steel manifold

NOCCHI VARIO 1-20/Multi EVO-E 3

PRESSURE BOOSTERS WITH TWO VARIABLE SPEED PUMPS

HYDRAULIC PERFORMANCE

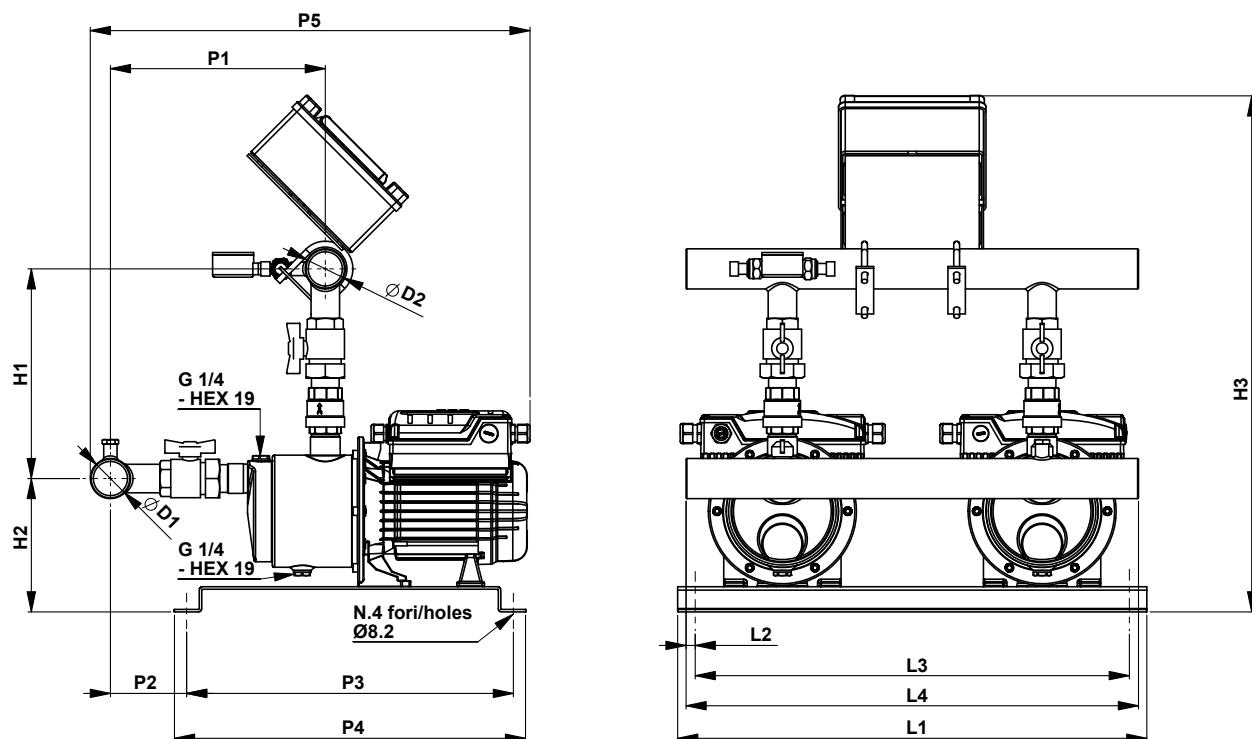


NOCCHI VARIO 1-20/Multi EVO-E 3

PRESSURE BOOSTERS WITH TWO VARIABLE SPEED PUMPS

PERFORMANCE TABLE

MODEL	Absorbed power (P1) kW	VOLT. (V)	I _n (A)	Q	l/min	20	40	60	80	100	120	160
				m ³ /h	1.2	2.4	3.6	4.8	6	7.2	9.6	
VARIO 1-20/Multi EVO-E 3-40	2 x 0.8	1 ~ 230	2 x 5.3			44	40	35	30	24	18.5	6
VARIO 1-20/Multi EVO-E 3-50	2 x 1	1 ~ 230	2 x 7	total head in water column metres		54.5	51	47	42.5	37	31	18
VARIO 1-20/Multi EVO-E 3-60	2 x 1.35	1 ~ 230	2 x 8.7			68	64	60	55	48.5	42	26.5



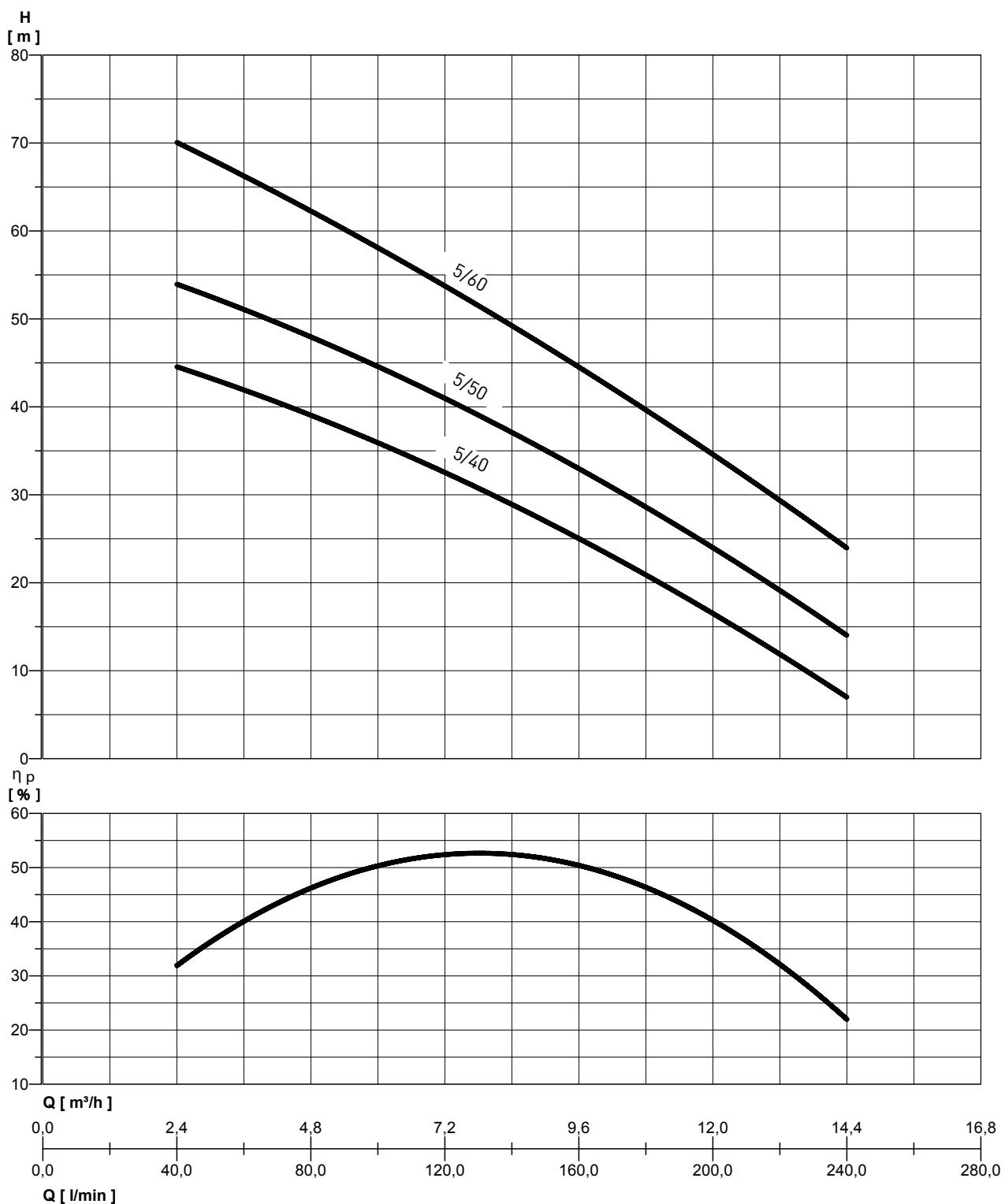
OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions mm.												WEIGHTS (Kg)		
	L1	L2	L3	L4	P1	P2	P3	P4	P5	H1	H2	H3	ØD1	ØD2	
VARIO 1-20/Multi EVO-E 3-40	560	15	510	540	257	91	390	420	523	250	160	615	1"1/2	1"1/2	45.6
VARIO 1-20/Multi EVO-E 3-50	560	15	510	540	280	113	390	420	567	250	160	615	1"1/2	1"1/2	49.6
VARIO 1-20/Multi EVO-E 3-60	560	15	510	540	302	136	390	420	589	250	160	615	1"1/2	1"1/2	53

NOCCHI VARIO 1-20/Multi EVO-E 5

PRESSURE BOOSTERS WITH TWO VARIABLE SPEED PUMPS

HYDRAULIC PERFORMANCE

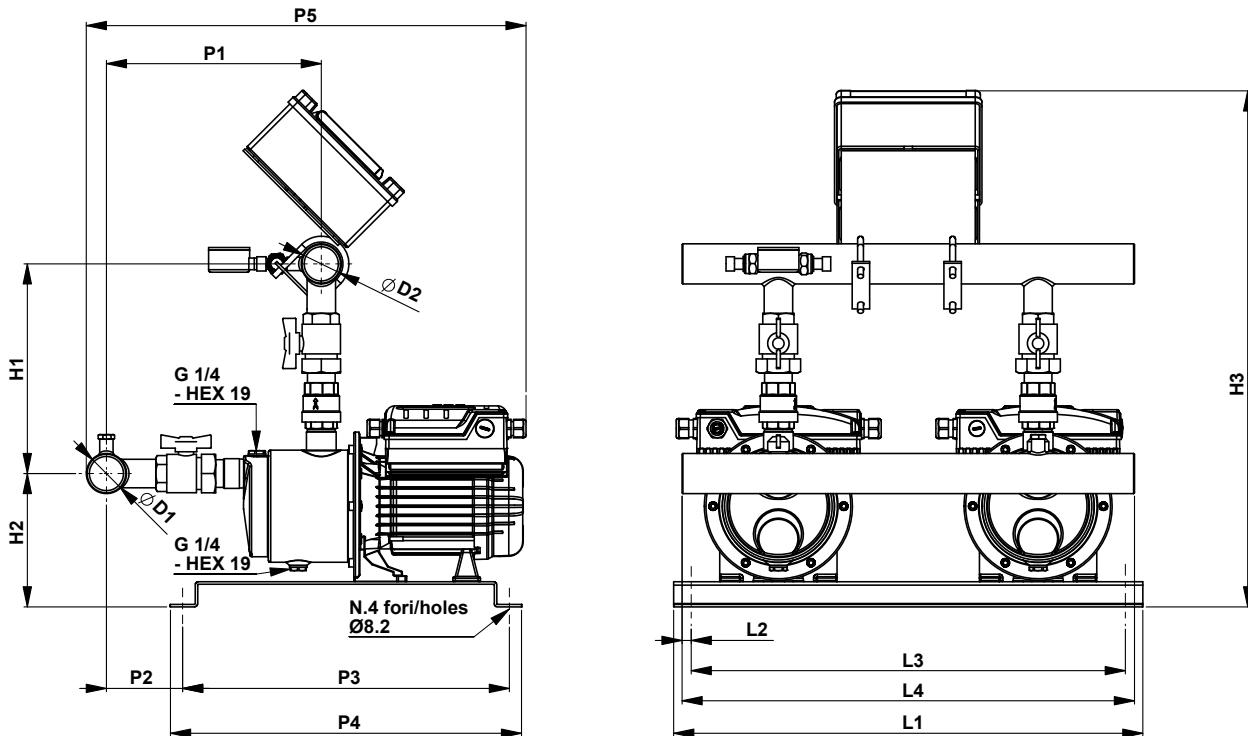


NOCCHI VARIO 1-20/Multi EVO-E 5

PRESSURE BOOSTERS WITH TWO VARIABLE SPEED PUMPS

PERFORMANCE TABLE

MODEL	Absorbed power (P1) kW	VOLT. (V)	In (A)	Q	l/min	40	60	80	100	120	160	200	240
					m³/h	2.4	3.6	4.8	6	7.2	9.6	12	14.4
VARIO 1-20/Multi EVO-E 5-40	2 x 1	1 ~ 230	2 x 7	total head in water column metres	44.5	42	39	36	32.5	25	16.5	7	
VARIO 1-20/Multi EVO-E 5-50	2 x 1.25	1 ~ 230	2 x 8.5		54	51	48	44.5	41	33	24	14	
VARIO 1-20/Multi EVO-E 5-60	2 x 1.8	1 ~ 230	2 x 11.5		70	66.5	62	58	54	44.5	34.5	24	



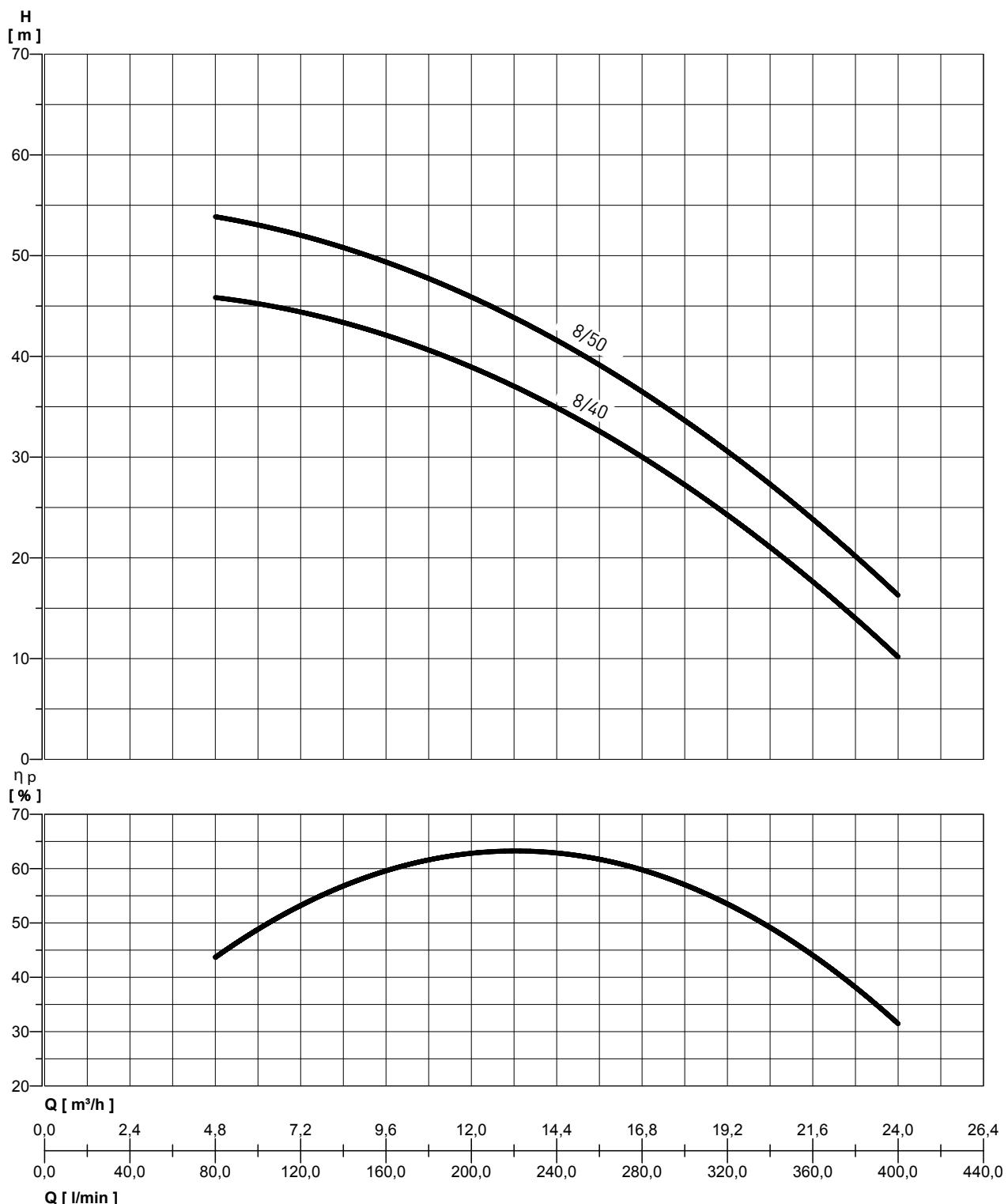
OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions mm.													WEIGHTS (Kg)	
	L1	L2	L3	L4	P1	P2	P3	P4	P5	H1	H2	H3	ØD1	ØD2	
VARIO 1-20/Multi EVO-E 5-40	560	15	510	540	283	119	390	420	574	255	155	615	2"	1"1/2	49
VARIO 1-20/Multi EVO-E 5-50	560	15	510	540	305	141	390	420	596	255	155	615	2"	1"1/2	52.2
VARIO 1-20/Multi EVO-E 5-60	560	15	510	540	327	163	390	420	653	255	155	615	2"	1"1/2	56.4

NOCCHI VARIO 1-20/Multi EVO-E 8

PRESSURE BOOSTERS WITH TWO VARIABLE SPEED PUMPS

HYDRAULIC PERFORMANCE

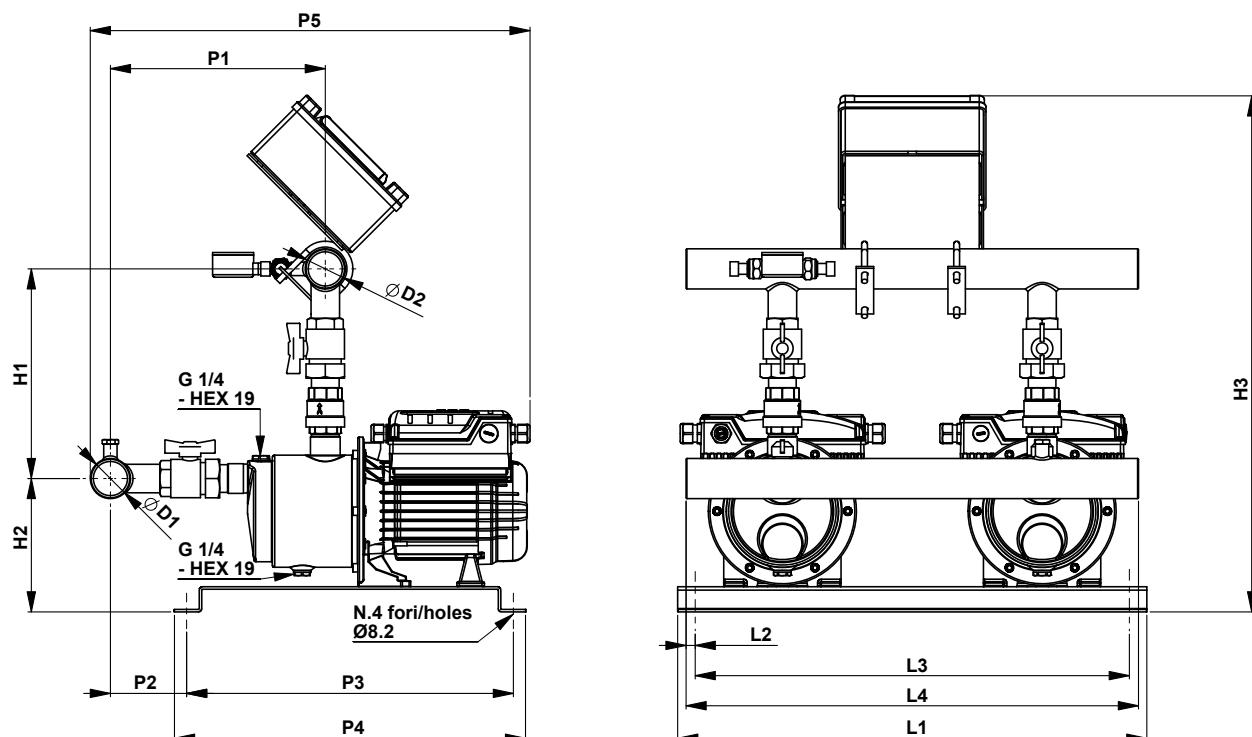


NOCCHI VARIO 1-20/Multi EVO-E 8

PRESSURE BOOSTERS WITH TWO VARIABLE SPEED PUMPS

PERFORMANCE TABLE

MODEL	Absorbed power (P1) kW	VOLT. (V)	I _n (A)	Q l/min	80 m ³ /h	100	120	160	200	240	280	320	360	400
VARIO 1-20/Multi EVO-E 8-40	2 x 1.6	1 ~ 230	2 x 10.2	total head in water column metres	46	45	44.5	42	39	35	30	24	18	10
VARIO 1-20/Multi EVO-E 8-50	2 x 2	1 ~ 230	2 x 12.5		54	53	52	49	46	42	36.5	30.5	23.5	16.5



OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions mm.													WEIGHTS (Kg)	
	L1	L2	L3	L4	P1	P2	P3	P4	P5	H1	H2	H3	ØD1	ØD2	
VARIO 1-20/Multi EVO-E 8-40	560	15	510	540	300	136	390	420	623	300	155	660	2"	2"	58
VARIO 1-20/Multi EVO-E 8-50	560	15	510	540	327	163	390	420	653	300	155	660	2"	2"	60.2

NOCCHI VARIO 1-20

PRESSURE BOOSTERS WITH TWO VARIABLE SPEED PUMPS

The new series of variable speed pressurisation boosters VARIO 1-20 represents a reliable solution which is easy to use, for residential and industrial applications. The system involves the installation in parallel of two inverters integrated directly on the motor of each pump installed. The two frequency converters communicate and alternate the starting order of each work cycle, always keeping the pressure constant in the distribution system.

APPLICATIONS

- Lifting and distribution of water in domestic systems
- Pressurisation systems
- Irrigation
- Industry
- Washes

BASE

- in galvanized metal complete with rubber isolated pads

SUCTION MANIFOLD

in galvanized steel with:

- N.2 brass ball valves

TECHNICAL CHARACTERISTICS

- Supply VOLT.: inverter 1x230 Vac ± 10 %.
- Inverter output VOLT.: 3x230 Vac ± 10 %
- Maximum rated power: 2x2.4 kW
- Input frequency: 50/60 Hz + 3%
- Output maximum rated power: 8 Amp
- Degree of protection: IP55 MULTINOX VE+ / PVM
- Maximum temperature + 50°C
- Input filter complying with EMC directive
- Pressure transducer 0 - 5 Volt - 0 - 10 Bar
- Serial interface connectivity RS 485
- Optional contacts 3 (external set-point, alarm, system inhibition)



DELIVERY MANIFOLD

in galvanized steel with:

- N.2 brass ball valves
- N.1 pressure gauge
- N.2 pressure sensors

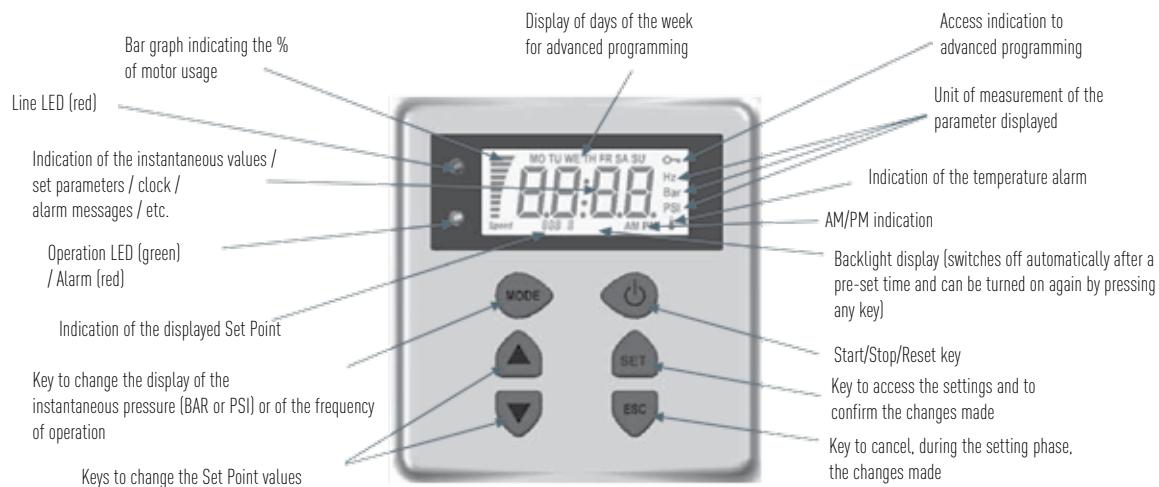
Protection electrical panel with circuit breakers

USAGE DATA	MULTINOX-VE+	PVM 1	PVM 3	PVM 5	PVM 10
Maximum capacity (m³/h)	25.2	4.8	9	17	26
Maximum head (m.c.a.)	80	160	160	110	60
Maximum operating pressure	14 bar		16 bar		
Power supply VOLT.:			1~230 V		
Ambient temperature			50° C		
Degree of protection of pump	IP44		IP55		
Degree of protection of electrical panel			IP54		

NOCCHI VARIO 1-20

PRESSURE BOOSTERS WITH TWO VARIABLE SPEED PUMPS

CONTROL PANEL

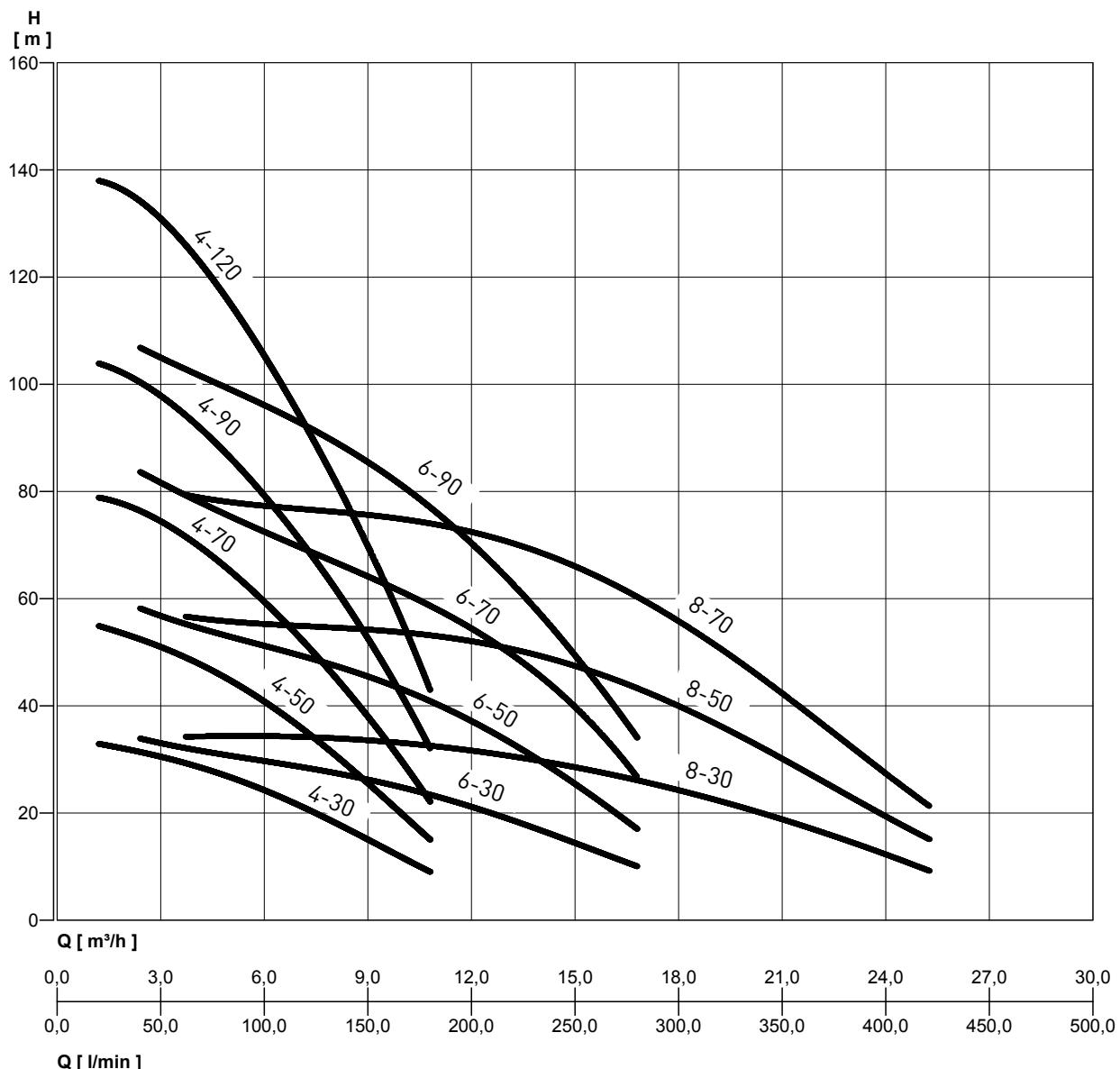


- Backlight display (switches off automatically after a pre-set time and can be turned on again by pressing any key)
- Bar graph indicating the percentage of motor usage
- Display of days of the week
- Indication of the instantaneous values / set parameters / clock / alarm messages / etc.
- Access indication to programming
- Unit of measurement of the parameter displayed

NOCHI VARIO 1-20 MULTINOX VE +

PRESSURE BOOSTERS WITH TWO VARIABLE SPEED PUMPS

HYDRAULIC PERFORMANCE

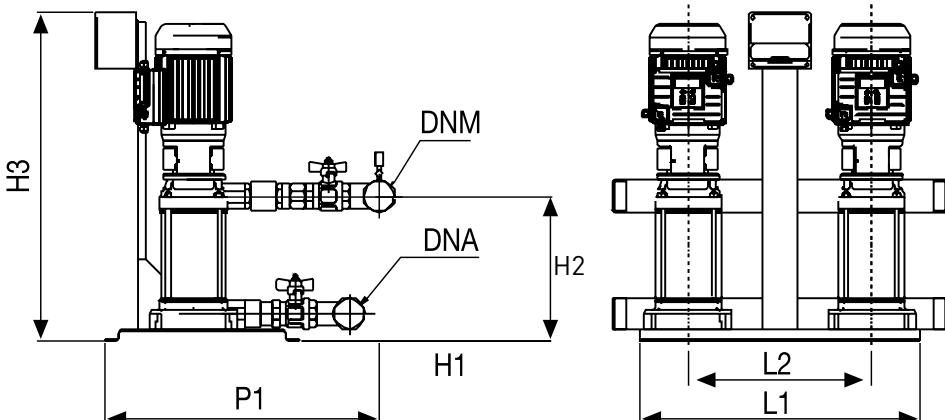


NOCCHI VARIO 1-20 MULTINOX VE + PRESSURE BOOSTERS WITH TWO VARIABLE SPEED PUMPS

PERFORMANCE TABLE

MODEL	P2	VOLT. (V)	In (A)	Q l/min m³/h	20	40	60	80	100	120	140	160	180	200	240	280	300	360	420
	kW				1.2	2.4	3.6	4.8	6	7.2	8.4	9.6	10.8	12	14.4	16.8	18	21.6	25.2
VARIO 1-20 MULTINOX VE+ 4-30	2x0.5	1 ~ 230	2x4.4		33	31	30	27	24	21	17	13	9						
VARIO 1-20 MULTINOX VE+ 4-50	2x0.84	1 ~ 230	2x6.71		55	52	50	45	41	35	29	22	15						
VARIO 1-20 MULTINOX VE+ 4-70	2x1.17	1 ~ 230	2x9.39		79	76	72	67	59	51	43	33	22						
VARIO 1-20 MULTINOX VE+ 4-90	2x1.5	1 ~ 230	2x12.08		104	100	95	88	79	69	59	46	32						
VARIO 1-20 MULTINOX VE+ 4-120	2x2	1 ~ 230	2x16.3		138	134	127	117	105	92	78	61	43						
VARIO 1-20 MULTINOX VE+ 6-30	2x0.67	1 ~ 230	2x5.95	mca/mcw.	34	32	31	30	28	27	26	23	21	16	10				
VARIO 1-20 MULTINOX VE+ 6-50	2x1.1	1 ~ 230	2x9.02		58	56	53	51	49	47	44	41	37	28	17				
VARIO 1-20 MULTINOX VE+ 6-70	2x1.5	1 ~ 230	2x13.82		83	80	77	76	61	68	64	59	55	42	27				
VARIO 1-20 MULTINOX VE+ 6-90	2x2	1 ~ 230	2x15.75		107	103	99	97	92	88	83	76	71	54	34				
VARIO 1-20 MULTINOX VE+ 8-30	2x1	1 ~ 230	2x8.7		35	35	35	35	35	35	34	33	32	30	27	25	18	10	
VARIO 1-20 MULTINOX VE+ 8-50	2x1.5	1 ~ 230	2x14.4		57	57	56	56	56	54	53	52	50	45	40	28	16		
VARIO 1-20 MULTINOX VE+ 8-70	2x1.9	1 ~ 230	2x15.5		80	79	78	78	77	75	74	73	70	60	56	40	22		

MULTINOX - VE



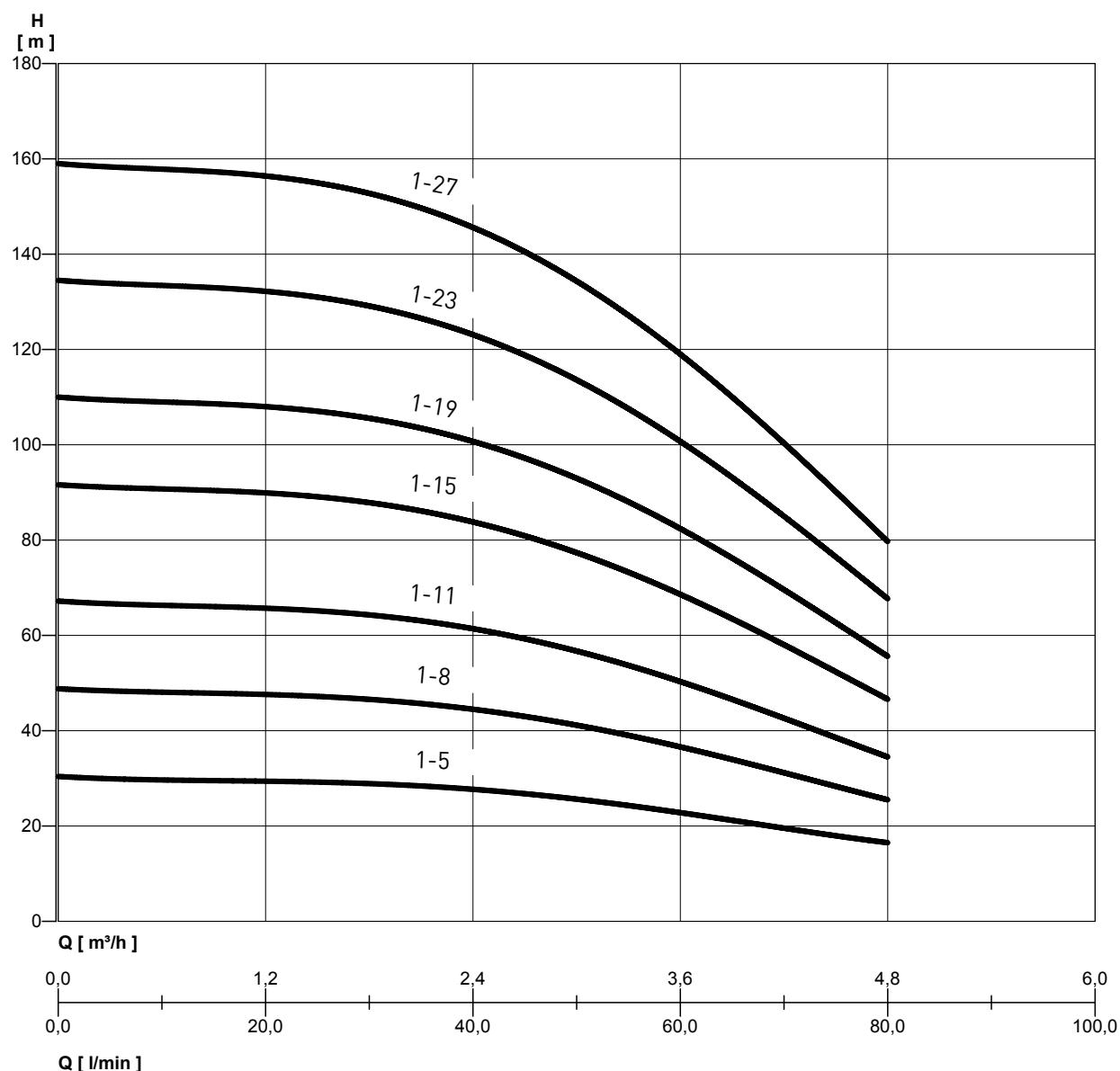
OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions mm.								WEIGHTS Kg
	L1	L2	H1	H2	H3	P1	DNA	DNM	
VARIO 1-20 MULTINOX VE+ 4-30	460	320	38	195	450	740	2"	2"	60
VARIO 1-20 MULTINOX VE+ 4-50	460	320	38	222	450	740	2"	2"	70
VARIO 1-20 MULTINOX VE+ 4-70	460	320	38	303	450	740	2"	2"	90
VARIO 1-20 MULTINOX VE+ 4-90	460	320	38	357	450	740	2"	2"	92
VARIO 1-20 MULTINOX VE+ 4-120	460	320	38	438	450	740	2"	2"	96
VARIO 1-20 MULTINOX VE+ 6-30	460	320	38	195	450	740	2"	2"	60
VARIO 1-20 MULTINOX VE+ 6-50	460	320	38	249	450	740	2"	2"	70
VARIO 1-20 MULTINOX VE+ 6-70	460	320	38	303	450	740	2"	2"	78
VARIO 1-20 MULTINOX VE+ 6-90	460	320	38	357	450	740	2"	2"	80
VARIO 1-20 MULTINOX VE+ 8-30	460	320	38	195	450	740	2"	2"	60
VARIO 1-20 MULTINOX VE+ 8-50	460	320	38	259	450	740	2"	2"	70
VARIO 1-20 MULTINOX VE+ 8-70	460	320	38	303	450	740	2"	2"	78

NOCCHI VARIO 1-20 PVM

PRESSURE BOOSTERS WITH TWO VARIABLE SPEED PUMPS

HYDRAULIC PERFORMANCE

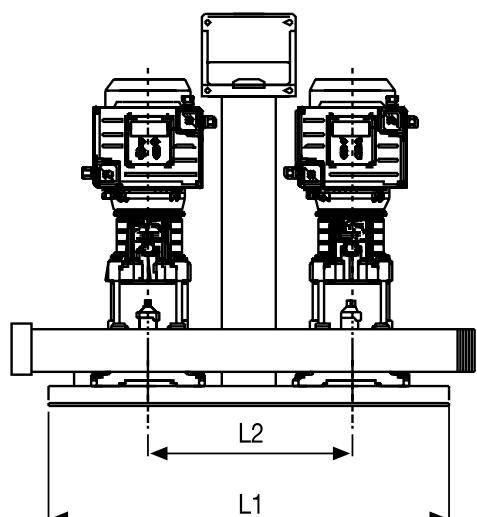
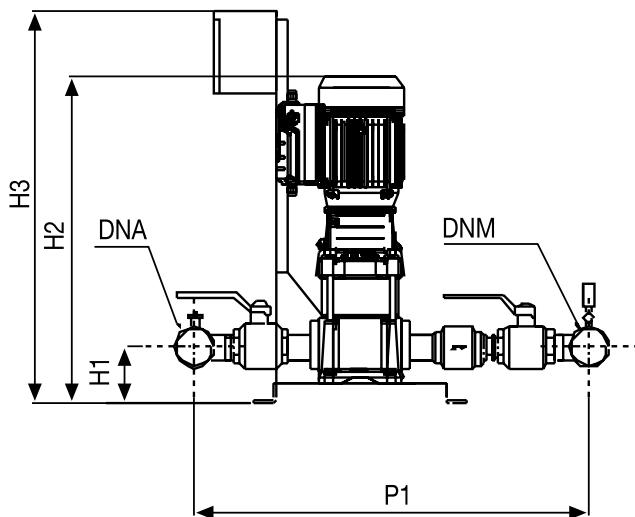


NOCCHI VARIO 1-20 PVM

PRESSURE BOOSTERS WITH TWO VARIABLE SPEED PUMPS

PERFORMANCE TABLE

MODEL	P2	VOLT. (V)	In (A)	Q	U/min	0	20	40	60	80
	kW				m ³ /h	0	1.2	2.4	3.6	4.8
VARIO1-20 PVM 1-5 F	2x0.37	1 ~ 230	2x2.7	m.c/d/m.c.w.	30.4	29.4	27.7	22.8	16.5	
VARIO1-20 PVM 1-8 F	2x0.55	1 ~ 230	2x4.1		48.8	47.6	44.5	36.6	25.5	
VARIO1-20 PVM 1-11 F	2x0.55	1 ~ 230	2x4.4		67.2	65.7	61.4	50.3	34.5	
VARIO1-20 PVM 1-15 F	2x0.75	1 ~ 230	2x5.8		91.6	89.9	83.8	68.6	46.6	
VARIO1-20 PVM 1-19 F	2x1.1	1 ~ 230	2x7.4		110	108	100.7	82.4	55.6	
VARIO1-20 PVM 1-23 F	2x1.1	1 ~ 230	2x8.3		134.5	132.2	123.1	100.7	67.7	
VARIO1-20 PVM 1-27 F	2x1.5	1 ~ 230	2x9.9		159	156.4	145.6	119	79.7	



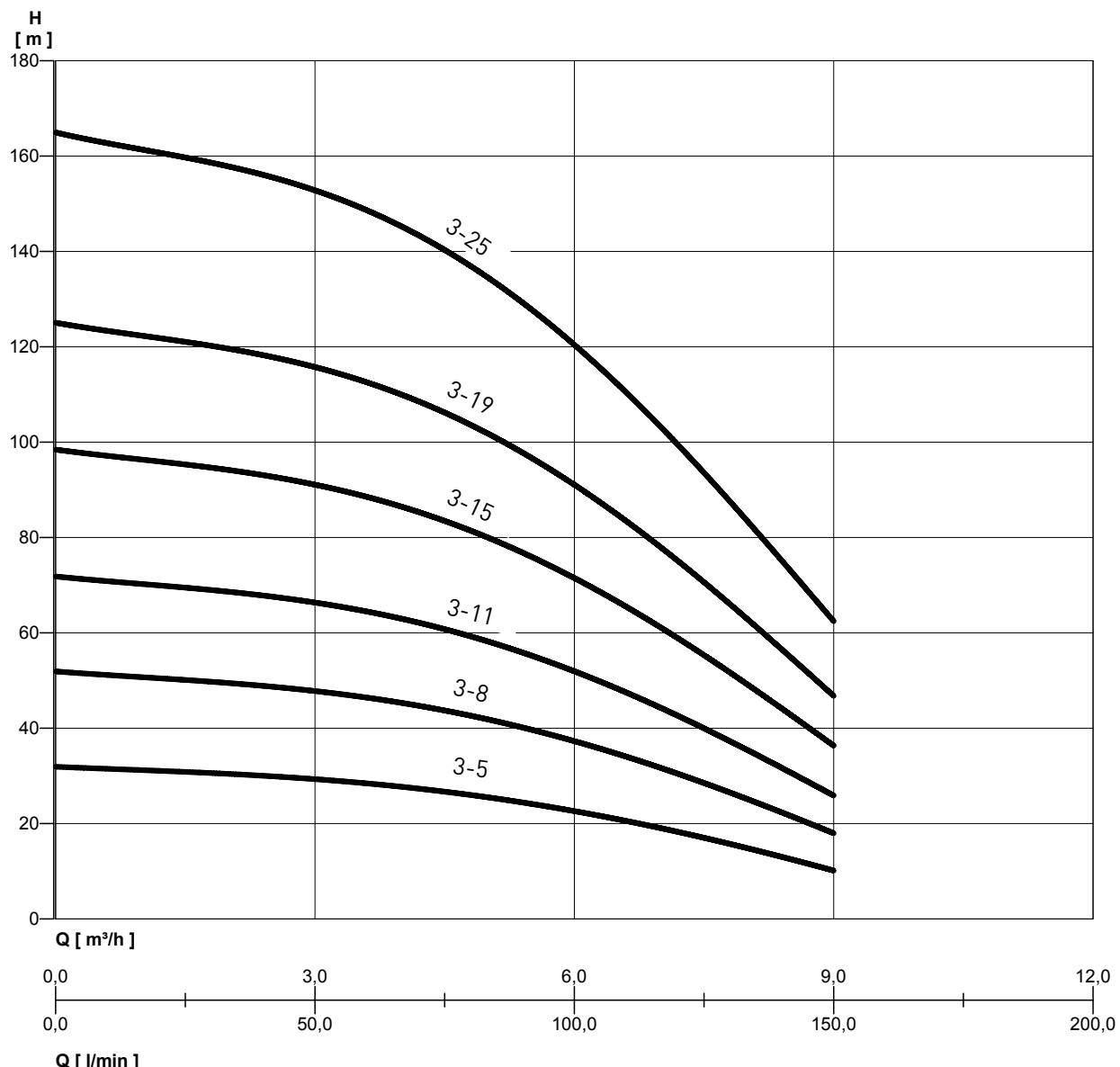
OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions mm.								WEIGHTS Kg
	L1	L2	H1	H2	H3	P1	DNA	DNM	
VARIO1-20 PVM 1-5 F	600	370	105	580	700	620	2"	2"	60
VARIO1-20 PVM 1-8 F	600	370	105	594	700	620	2"	2"	62
VARIO1-20 PVM 1-11 F	600	370	105	648	700	620	2"	2"	67
VARIO1-20 PVM 1-15 F	600	370	105	766	700	620	2"	2"	73
VARIO1-20 PVM 1-19 F	600	370	105	838	700	620	2"	2"	80
VARIO1-20 PVM 1-23 F	600	370	105	910	700	620	2"	2"	90
VARIO1-20 PVM 1-27 F	600	370	105	1030	700	620	2"	2"	94

NOCCHI VARIO 1-20 PVM

PRESSURE BOOSTERS WITH TWO VARIABLE SPEED PUMPS

HYDRAULIC PERFORMANCE

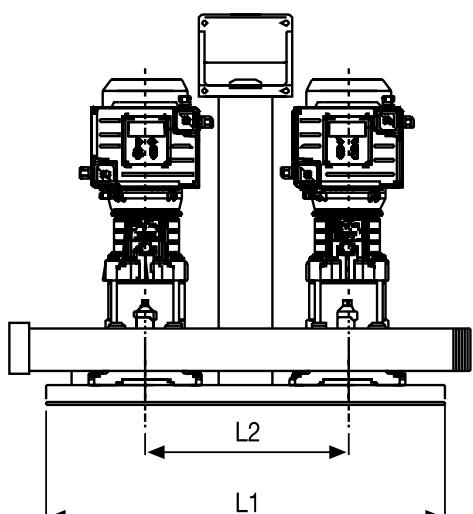
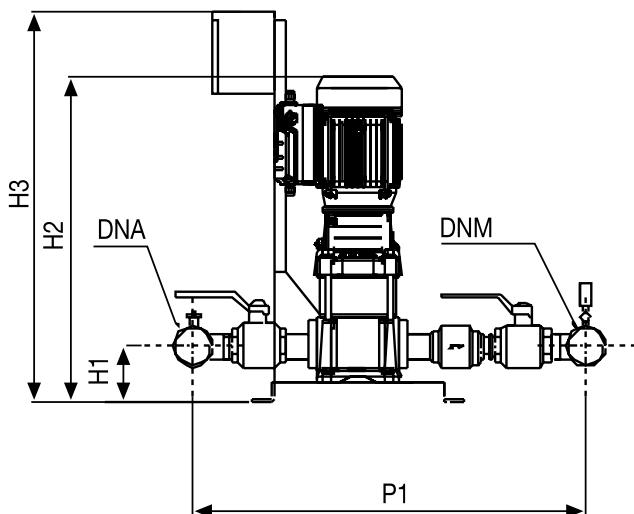


NOCCHI VARIO 1-20 PVM

PRESSURE BOOSTERS WITH TWO VARIABLE SPEED PUMPS

PERFORMANCE TABLE

MODEL	P2	VOLT. (V)	In (A)	Q	l/min m³/h	0	20	40	60	80	100	120	140	150
	kW					0	1.2	2.4	3.6	4.8	6	7.2	8.4	9
VARIO1-20 PVM 3-5 F	2x0.37	1 ~ 230	2x3	m.c.a./m.c.w.	31.9	31.1	30	28.3	26.2	22.6	18	13.3	10	
VARIO1-20 PVM 3-8 F	2x0.75	1 ~ 230	2x4.8		51.9	50.5	48.9	46.2	42.9	37.3	30.1	22.7	17.8	
VARIO1-20 PVM 3-11 F	2x1.1	1 ~ 230	2x6.6		71.8	70	67.9	64.1	59.6	52.1	42.1	32.1	25.7	
VARIO1-20 PVM 3-15 F	2x1.1	1 ~ 230	2x9		98.4	96	93.2	88	81.9	71.7	58.2	44.7	36.1	
VARIO1-20 PVM 3-19 F	2x1.5	1 ~ 230	2x11		125	121.9	118.4	111.9	104.2	91.3	74.3	57.2	46.5	
VARIO1-20 PVM 3-25 F	2x2.2	1 ~ 230	2x15		164.9	160.8	156.3	147.8	137.6	120.8	98.4	76	62.1	



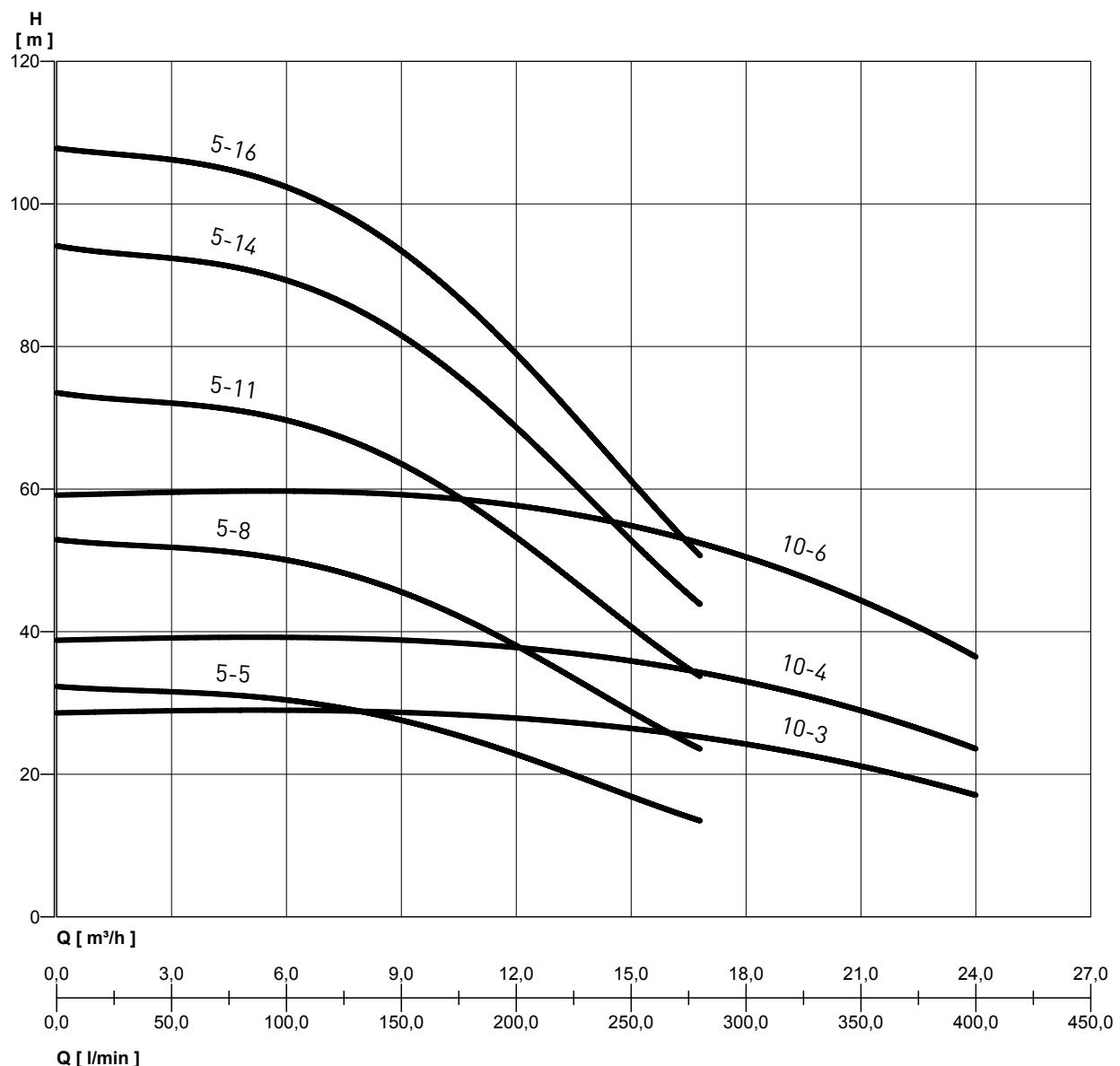
OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions mm.								WEIGHTS Kg
	L1	L2	H1	H2	H3	P1	DNA	DNM	
VARIO1-20 PVM 3-5 F	600	370	105	540	700	620	2"	2"	62
VARIO1-20 PVM 3-8 F	600	370	105	640	700	620	2"	2"	65
VARIO1-20 PVM 3-11 F	600	370	105	694	700	620	2"	2"	73
VARIO1-20 PVM 3-15 F	600	370	105	766	700	620	2"	2"	75
VARIO1-20 PVM 3-19 F	600	370	105	886	700	620	2"	2"	80
VARIO1-20 PVM 3-25 F	600	370	105	994	700	620	2"	2"	90

NOCCHI VARIO 1-20 PVM

PRESSURE BOOSTERS WITH TWO VARIABLE SPEED PUMPS

HYDRAULIC PERFORMANCE



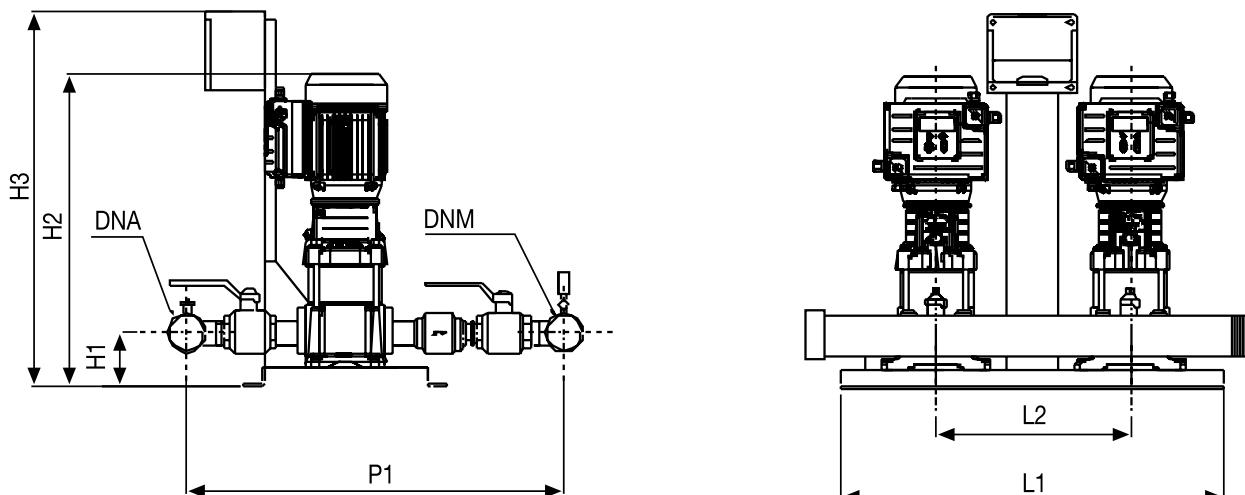
NOCCHI VARIO 1-20 PVM

PRESSURE BOOSTERS WITH TWO VARIABLE SPEED PUMPS

PERFORMANCE TABLE

MODEL	P2	VOLT. (V)	In (A)	Q m³/h	l/min m.c.a./m.c.w.	0	80	120	160	200	240	280
	kW					0	4.8	7.2	9.6	12	14.4	16.8
VARIO1-20 PVM 5-5 F	2x0.75	1 ~ 230	2x5.4	m.c.a./m.c.w.	32.3	31.1	29.4	26.8	22.9	18	13.5	
VARIO1-20 PVM 5-8 F	2x1.1	1 ~ 230	2x8.7		52.9	51.1	48.5	44.3	38.2	30.5	23.6	
VARIO1-20 PVM 5-11 F	2x2.2	1 ~ 230	2x12		73.5	71.1	67.5	61.8	53.5	43	33.8	
VARIO1-20 PVM 5-14 F	2x2.2	1 ~ 230	2x15.2		94.1	91.1	86.6	79.4	68.9	55.8	43.9	
VARIO1-20 PVM 5-16 F	2x2.2	1 ~ 230	2x17.4		107.8	104.5	99.3	91	79.1	64.7	50.7	

MODEL	P2	VOLT. (V)	In (A)	Q m³/h	l/min m.c.a./m.c.w.	0	50	100	150	200	250	300	350	400
	kW					0	3	6	9	12	15	18	21	24
VARIO1-20 PVM 10-3 F	2x1.1	1 ~ 230	2x2.4	m.c.a./m.c.w.	28.6	28.9	29	28.7	27.8	26.4	24.4	21	17.1	
VARIO1-20 PVM 10-4 F	2x1.5	1 ~ 230	2x3.2		38.8	39.1	39.2	38.9	37.7	35.8	33.2	28.8	23.6	
VARIO1-20 PVM 10-6 F	2x2.2	1 ~ 230	2x4.8		59.2	59.4	59.8	59.4	57.5	54.7	50.8	44.2	36.5	



OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions mm.								WEIGHTS Kg
	L1	L2	H1	H2	H3	P1	DNA	DNM	
VARIO1-20 PVM 5-5 F	600	370	105	631	810	660	2"	2"	76
VARIO1-20 PVM 5-8 F	600	370	105	712	810	660	2"	2"	80
VARIO1-20 PVM 5-11 F	600	370	105	841	810	660	2"	2"	92
VARIO1-20 PVM 5-14 F	600	370	105	922	810	660	2"	2"	98
VARIO1-20 PVM 5-16 F	600	370	105	976	810	660	2"	2"	100
VARIO1-20 PVM 10-3 F	620	370	100	612	820	700	2" 1/2	2" 1/2	100
VARIO1-20 PVM 10-4 F	620	370	100	714	820	700	2" 1/2	2" 1/2	110
VARIO1-20 PVM 10-6 F	620	370	100	714	820	700	2" 1/2	2" 1/2	120

NOCCHI VARIO 3-20

THREE-PHASE PRESSURE BOOSTERS WITH TWO VARIABLE SPEED PUMPS

EASY TO INSTALL, LOW POWER CONSUMPTION, VERSATILE OPERATION

The new series of variable speed pressurisation boosters VARIO3-20 represents a reliable solution which is easy to use, for residential and industrial applications. The system involves the installation of two PUMPS in parallel featuring electronic control. VARIO3 is an electronic device capable of changing the frequency of a pump. Integrated directly on the motor, it allows to adjust its speed so as to supply the same pressure at all times, even when the water demand changes. When the system pressure drops below the set threshold, the module starts the first pump of the unit to restore to set-point pressure; the speed of rotation of the pump varies according to the water demand so, a greater demand will correspond to a higher speed, until the

maximum speed set has been reached, after which, if the system requires greater performance, the module will activate the second pump to keep the pressure stable. As the water demand decreases, the speed of the last pump started is reduced, until it turns off. The module will keep the first pump on until the minimum set speed has been reached, after which, if there are no further pressure drops, the pump will be stopped. VARIO3-20 features five operating modes to meet the operating needs.



TECHNICAL CHARACTERISTICS

- Inverter supply VOLT.: 3x380-500 Vac
- Inverter output VOLT.: 3x380-500 Vac
- Maximum output power: 2X5.5 kW - 2x7.5 kW
- Input frequency: 50/60 Hz
- Output maximum rated power: 11.5 Amp - 16 Amp
- Degree of protection: IP55-PVM IP44-MULTINOX-VE+
- Max. ambient temperature: + 50°C

- Input filter complying with EMC directive
- Pressure transducer: 0-5 Volt 0-10 bar
- Connectivity: Serial interface RS 485
- Optional contacts: 3 (external set-point, alarm, system inhibition)

BASE

- in galvanized metal complete with rubber isolated pads

SUCTION MANIFOLD

- in stainless steel AISI 304 with 2 ball valves

DELIVERY MANIFOLD

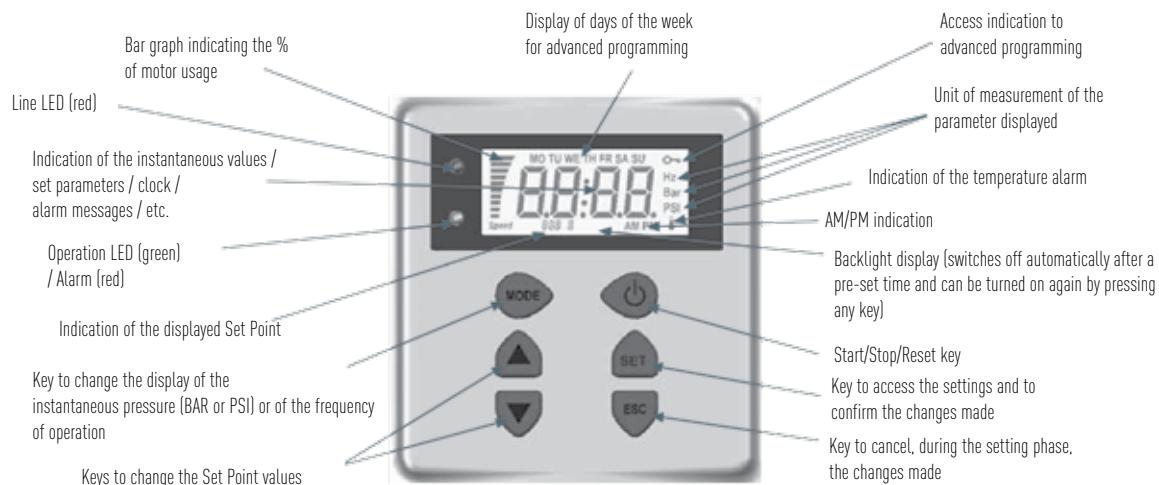
- In stainless steel AISI 304 with:
- n. 2 ball valves
- n. 2 check valves
- n. 1 pressure gauge
- n. 2 pressure sensors

USAGE DATA	MULTINOX-VE+	PVM 5	PVM 10	PVM 15	PVM 20	PVM 32
Maximum capacity (m ³ /h)	9	17	26	47	58	80
Maximum head (m.c.a.)	140	160	160	165	145	120
Maximum operating pressure	14 bar		16 bar			
Power supply VOLT.:			3~400 V			
Ambient temperature				50° C		
Degree of protection of pump	IP44			IP55		
Degree of protection of electrical panel				IP54		

NOCCHI VARIO 3-20

THREE-PHASE PRESSURE BOOSTERS WITH TWO VARIABLE SPEED PUMPS

CONTROL PANEL

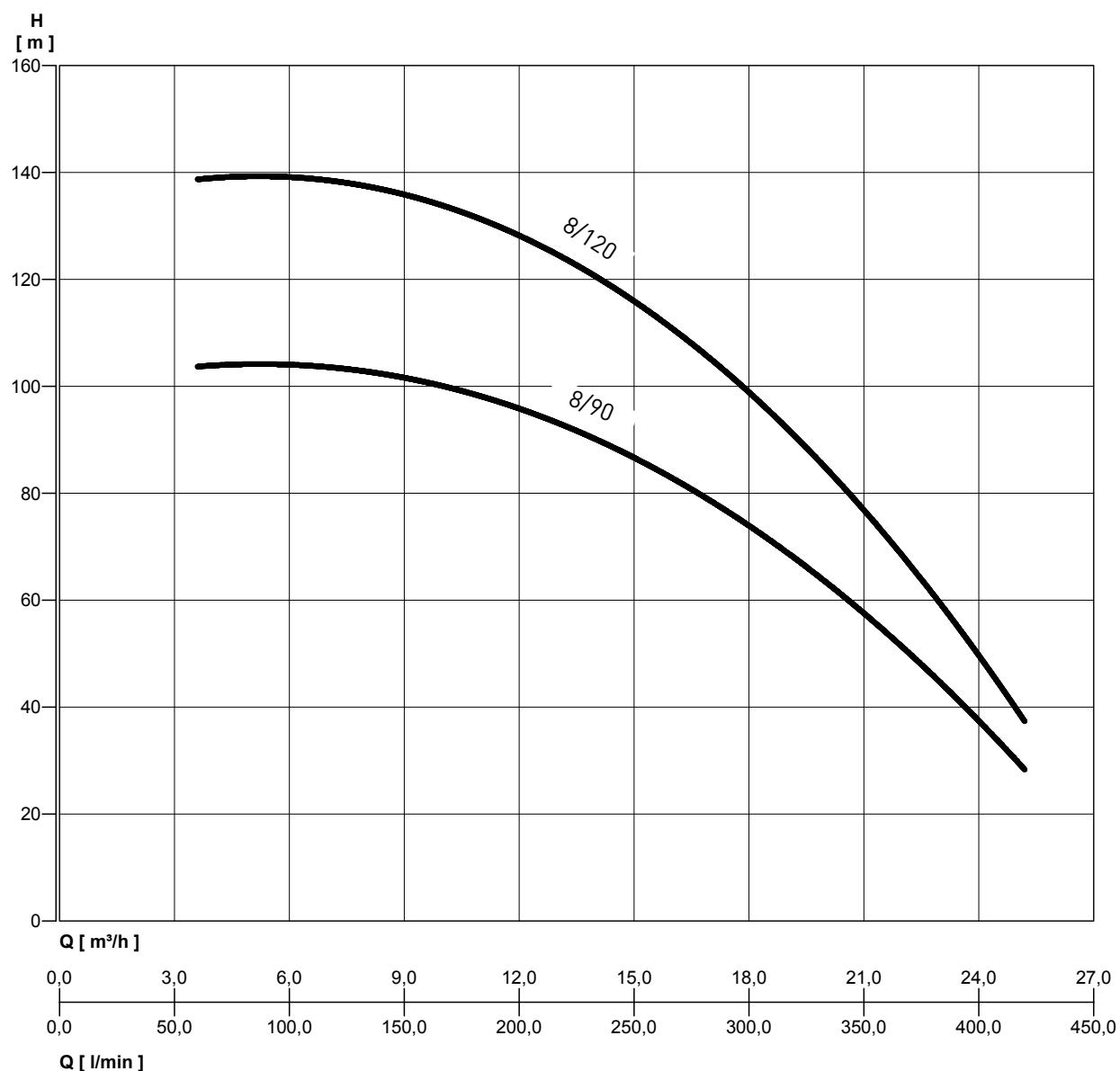


- Backlight display (switches off automatically after a pre-set time and can be turned on again by pressing any key)
- Bar graph indicating the percentage of motor usage
- Display of days of the week
- Indication of the instantaneous values / set parameters / clock / alarm messages / etc.
- Access indication to programming
- Unit of measurement of the parameter displayed

NOCCHI VARIO 3-20 MULTINOX VE+

THREE-PHASE PRESSURE BOOSTERS WITH TWO VARIABLE SPEED PUMPS

HYDRAULIC PERFORMANCE

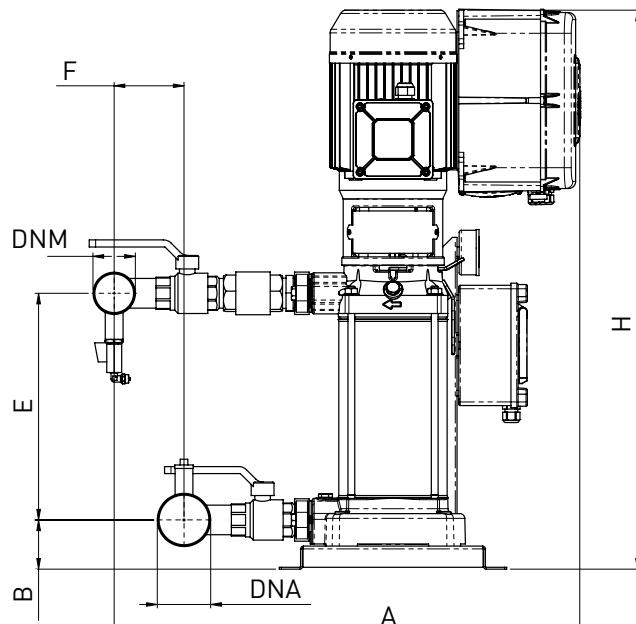
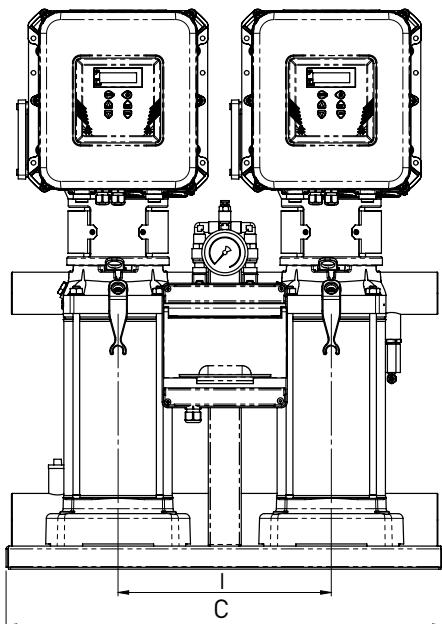


NOCCHI VARIO 3-20 MULTINOX VE+

THREE-PHASE PRESSURE BOOSTERS WITH TWO VARIABLE SPEED PUMPS

PERFORMANCE TABLE

MODEL	P2	VOLT. (V)	In (A)	Q	l/min	60	80	100	120	140	160	180	200	240	280	300	360	420
	kW					m³/h	3.6	4.8	6	7.2	8.4	9.6	10.8	12	14.4	16.8	18	21.6
Vario3-20 MULTINOX VE+ 8-90	2x3	3 ~ 400	2x9.7			104	104	104	103	103	101	98	94	90	82	73	52	29
Vario3-20 MULTINOX VE+ 8-120	2x4	3 ~ 400	2x12.3			139	139	139	138	138	135	131	126	120	109	98	70	38



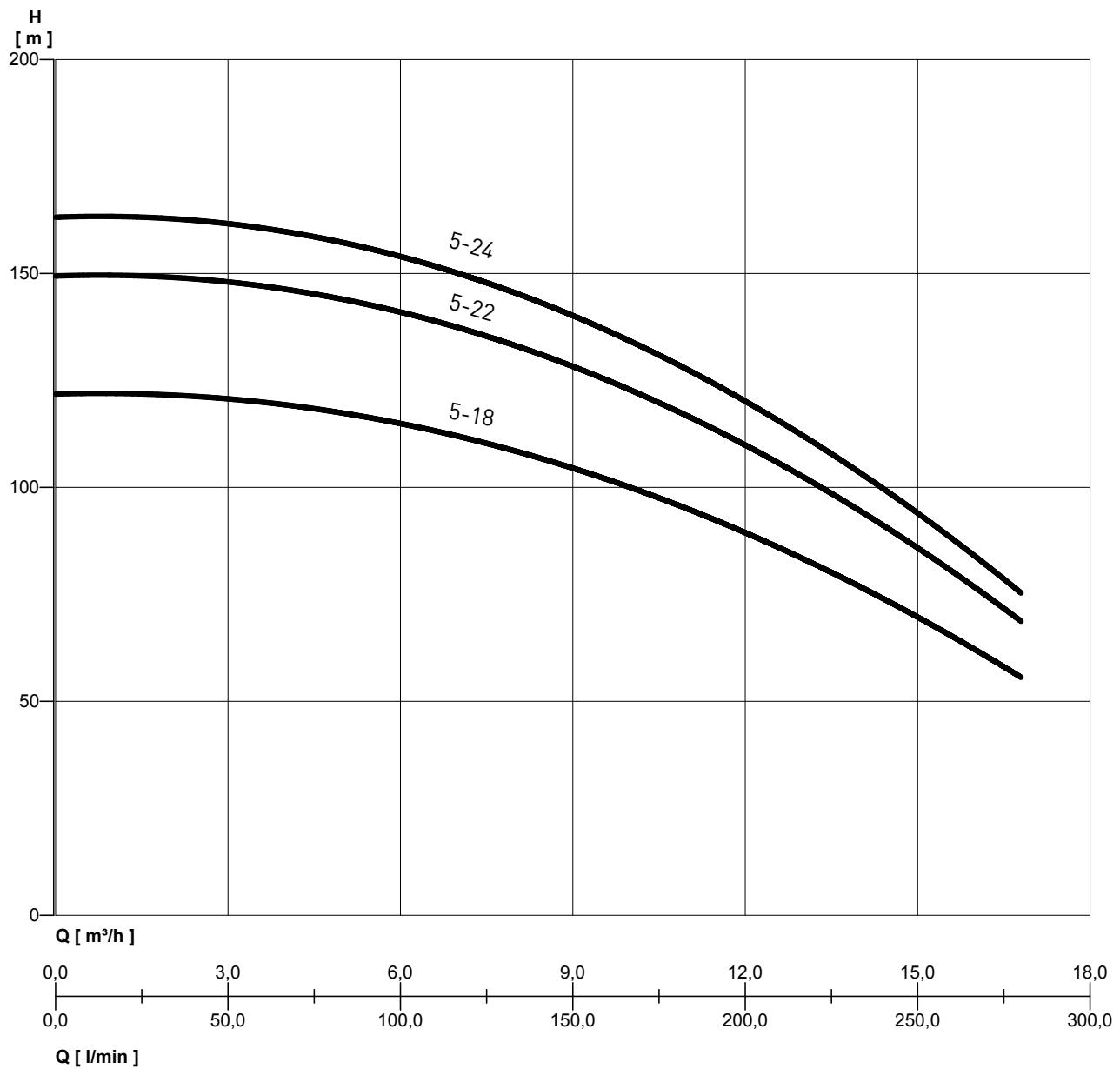
OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions mm.									WEIGHTS Kg
	A	B	C	E	F	H	I	DNA	DNM	
Vario3-20 MULTINOX VE+ 8-90	660	68	620	292	100	730	300	2"1/2	2"	110
Vario3-20 MULTINOX VE+ 8-120	660	68	620	373	100	855	300	2"1/2	2"	116

NOCCHI VARIO 3-20 PVM

THREE-PHASE PRESSURE BOOSTERS WITH TWO VARIABLE SPEED PUMPS

HYDRAULIC PERFORMANCE

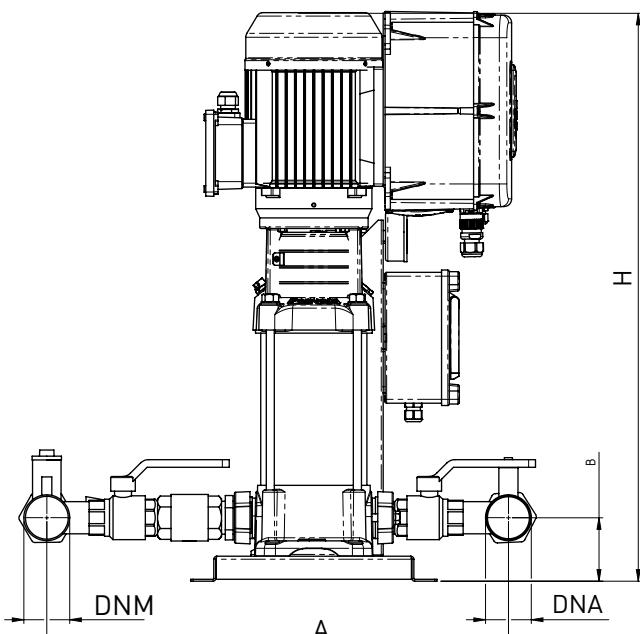
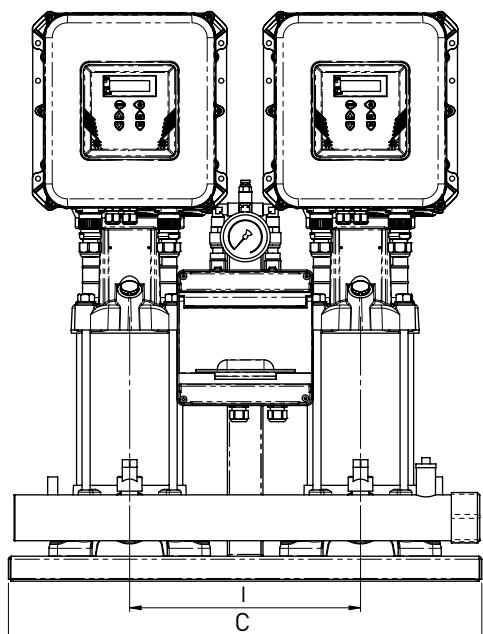


NOCCHI VARIO 3-20 PVM

THREE-PHASE PRESSURE BOOSTERS WITH TWO VARIABLE SPEED PUMPS

PERFORMANCE TABLE

MODEL	P2	VOLT. (V)	In (A)	Q	l/min m ³ /h	0	80	120	160	200	240	280
	kW					0	4.8	7.2	9.6	12	14.4	16.8
VARIO3-20 PVM 5-18 F	2x3	3 ~ 400	2x6.1	m.c.a./m.c.w.	121.5	117.8	112	102.7	89.3	71.1	57.4	
VARIO3-20 PVM 5-22 F	2x4	3 ~ 400	2x7.5		149	144.5	137.4	126.1	109.7	87.6	70.9	
VARIO3-20 PVM 5-24 F	2x4	3 ~ 400	2x8.2		162.7	157.8	150.1	137.8	119.9	95.9	77.7	



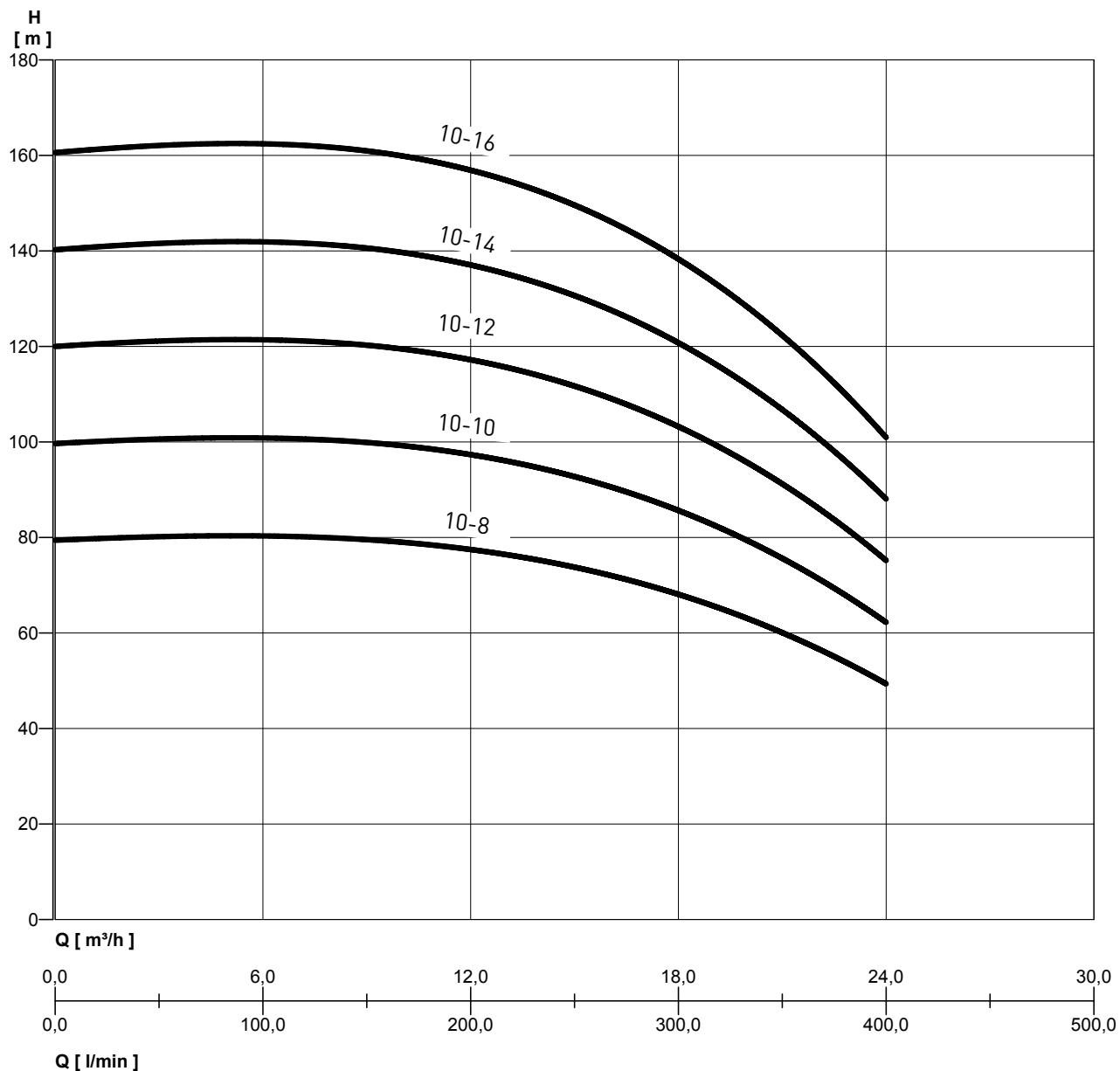
OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions mm.							WEIGHTS Kg
	A	B	C	H	I	DNA	DNM	
VARIO3-20 PVM 5-18 F	600	105	620	1088	300	2"	2"	142
VARIO3-20 PVM 5-22 F	600	105	620	1203	300	2"	2"	153
VARIO3-20 PVM 5-24 F	600	105	620	1257	300	2"	2"	155

NOCCHI VARIO 3-20 PVM

THREE-PHASE PRESSURE BOOSTERS WITH TWO VARIABLE SPEED PUMPS

HYDRAULIC PERFORMANCE

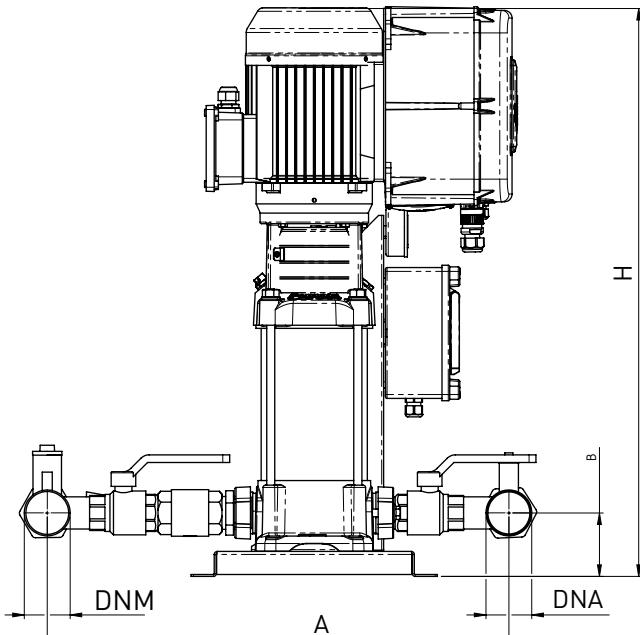
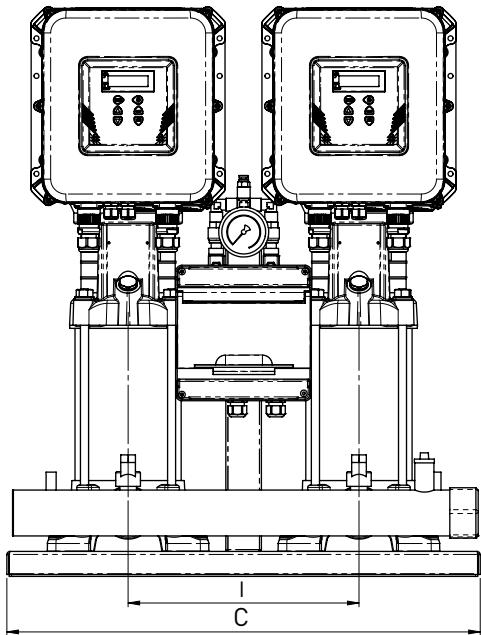


NOCCHI VARIO 3-20 PVM

THREE-PHASE PRESSURE BOOSTERS WITH TWO VARIABLE SPEED PUMPS

PERFORMANCE TABLE

MODEL	P2	VOLT. (V)	In (A)	Q	l/min m³/h	0	50	100	150	200	250	300	350	400
	kW					0	3	6	9	12	15	18	21	24
VARIO3-20 PVM 10-8 F	2x3	3 ~ 400	2x6.4	m.c.a./m.c.w.	79.6	79.8	80.3	79.9	77.4	73.6	68.4	59.7	49.5	
VARIO3-20 PVM 10-10 F	2x4	3 ~ 400	2x8		99.9	100.1	100.9	100.3	97.2	92.6	86	75.2	62.4	
VARIO3-20 PVM 10-12 F	2x4	3 ~ 400	2x9.6		120.3	120.5	121.4	120.8	117.1	111.5	103.6	90.7	75.4	
VARIO3-20 PVM 10-14 F	2x5.5	3 ~ 400	2x11		140.6	140.8	142	141.2	136.9	130.4	121.2	106.2	88.3	
VARIO3-20 PVM 10-16 F	2x5.5	3 ~ 400	2x13		161	161.2	162.5	161.7	156.7	149.3	138.8	121.7	101.2	



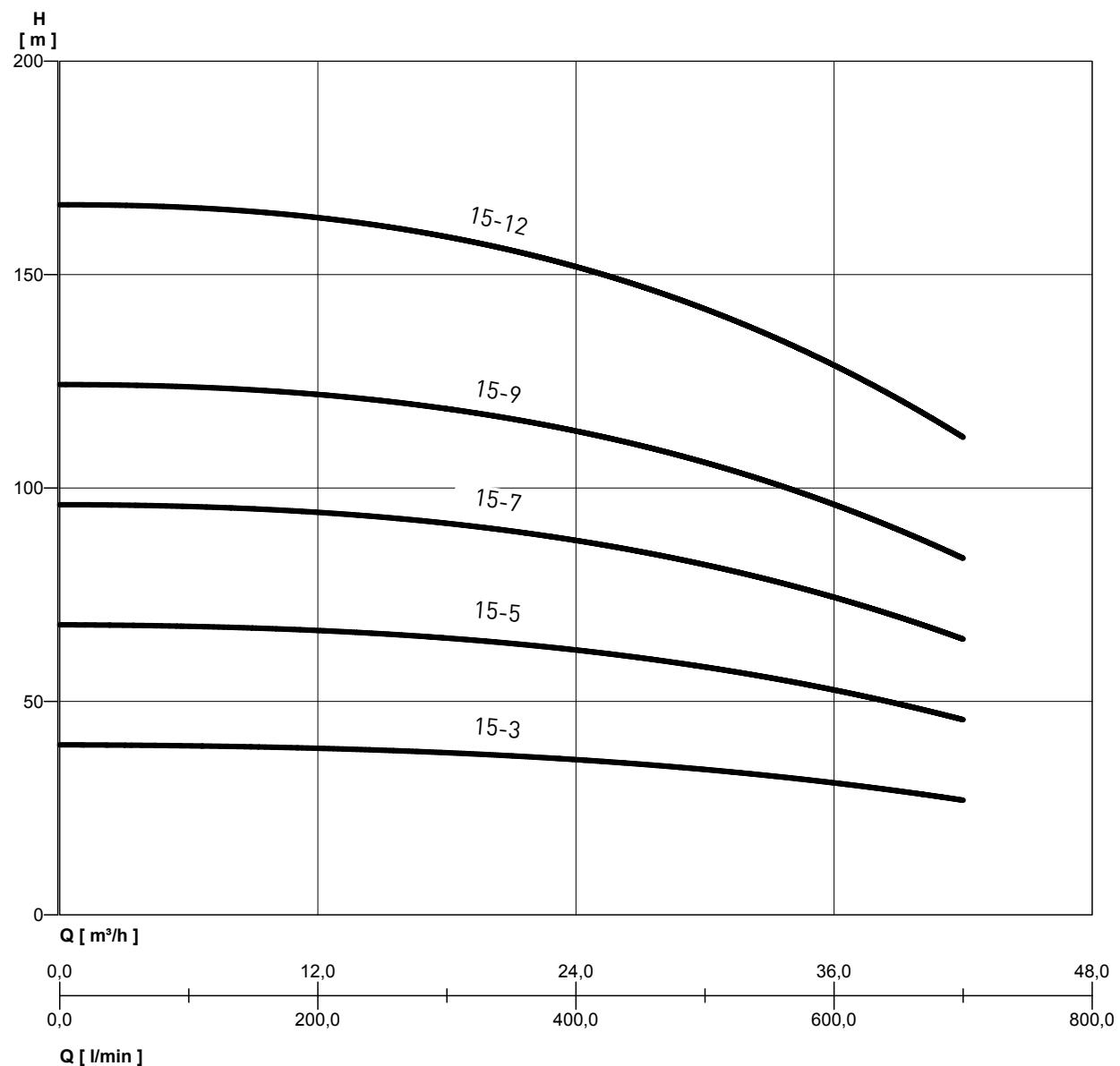
OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions mm.							WEIGHTS Kg
	A	B	C	H	I	DNA	DNM	
VARIO3-20 PVM 10-8 F	670	140	620	868	300	2" 1/2	2" 1/2	135
VARIO3-20 PVM 10-10 F	670	140	620	943	300	2" 1/2	2" 1/2	140
VARIO3-20 PVM 10-12 F	670	140	620	1003	300	2" 1/2	2" 1/2	145
VARIO3-20 PVM 10-14 F	670	140	620	1120	300	2" 1/2	2" 1/2	150
VARIO3-20 PVM 10-16 F	670	140	620	1180	300	2" 1/2	2" 1/2	155

NOCCHI VARIO 3-20 PVM

THREE-PHASE PRESSURE BOOSTERS WITH TWO VARIABLE SPEED PUMPS

HYDRAULIC PERFORMANCE

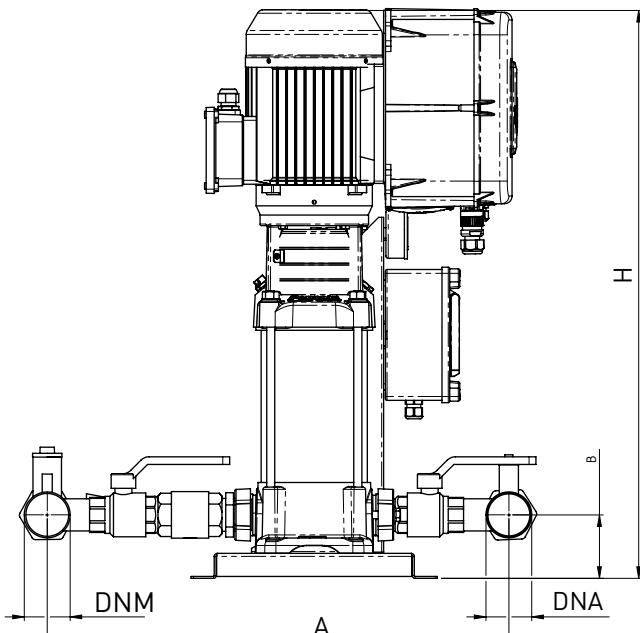
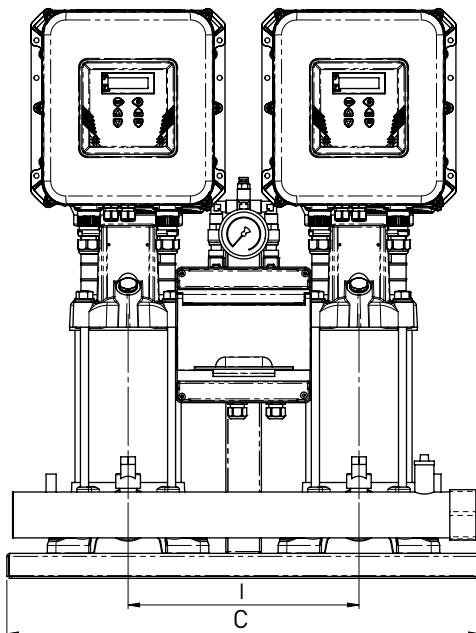


NOCCHI VARIO 3-20 PVM

THREE-PHASE PRESSURE BOOSTERS WITH TWO VARIABLE SPEED PUMPS

PERFORMANCE TABLE

MODEL	P2	VOLT. (V)	In (A)	Q m³/h	l/min m.c.a/m.c.w.	0	100	200	300	400	500	600	700
	kW					0	6	12	18	24	30	36	42
VARIO3-20 PVM 15-3 F	2x3	3 ~ 400	2x5.1		39.8	39.6	39.2	37.8	36.3	34.1	31	26.8	
VARIO3-20 PVM 15-5 F	2x4	3 ~ 400	2x8.5		68	67.4	66.9	64.7	62	58.1	52.7	45.7	
VARIO3-20 PVM 15-7 F	2x5.5	3 ~ 400	2x12		96.2	95.3	94.7	91.6	87.7	82	74.4	64.6	
VARIO3-20 PVM 15-9 F	2x7.5	3 ~ 400	2x15		124.4	123.2	122.4	118.4	113.4	106	96	83.6	
VARIO3-20 PVM 15-12 F	2x11	3 ~ 400	2x20		166.6	165	163.9	158.8	151.9	141.9	128.6	112	



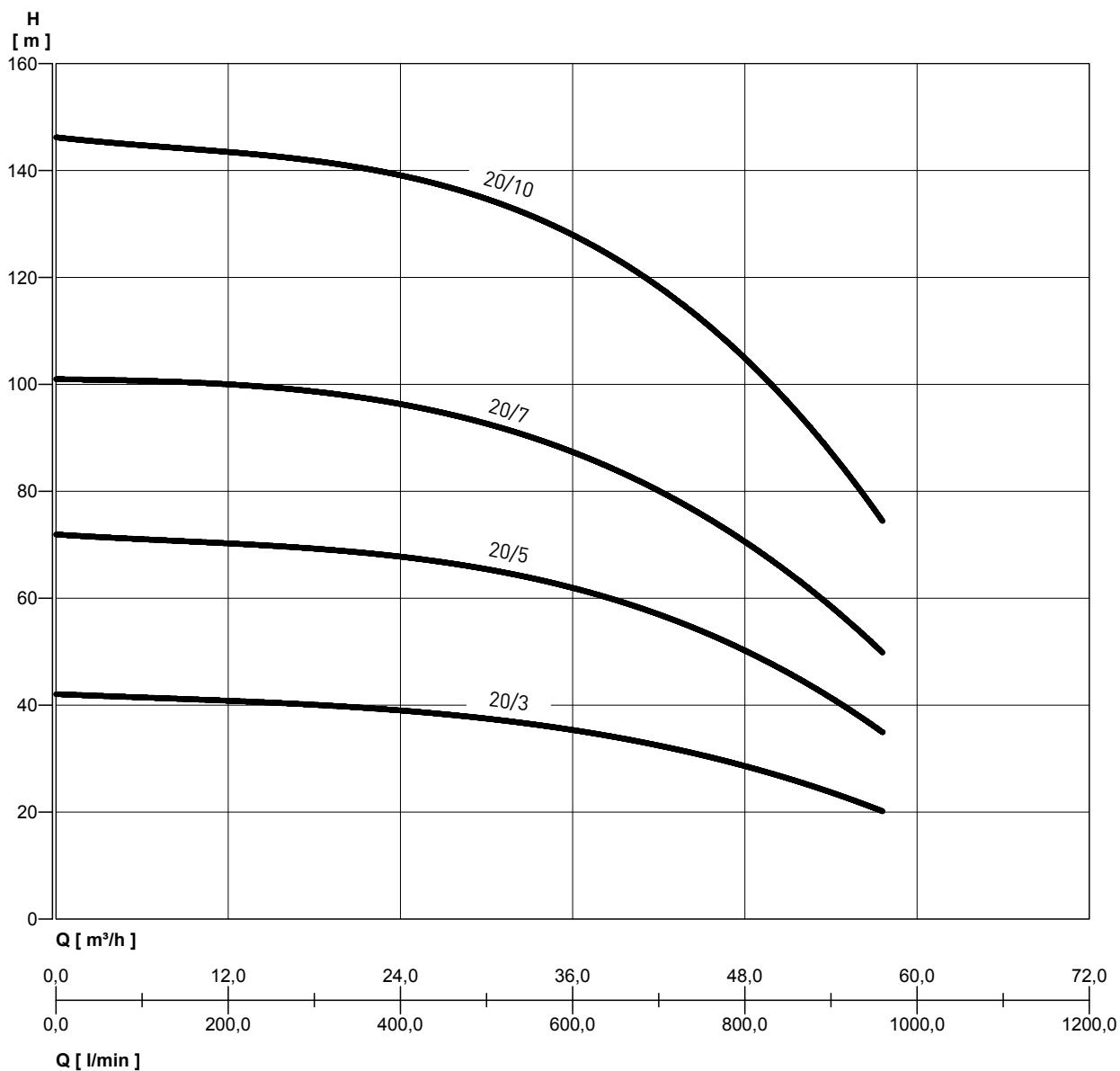
OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions mm.							WEIGHTS Kg
	A	B	C	H	I	DNA	DNM	
VARIO3-20 PVM 15-3 F	850	125	710	816	360	3"	3"	140
VARIO3-20 PVM 15-5 F	850	125	710	913	360	3"	3"	160
VARIO3-20 PVM 15-7 F	850	125	710	1072	360	3"	3"	210
VARIO3-20 PVM 15-9 F	850	125	710	1182	360	3"	3"	226
VARIO3-20 PVM 15-12 F	850	125	710	1507	360	3"	3"	250

NOCCHI VARIO 3-20 PVM

THREE-PHASE PRESSURE BOOSTERS WITH TWO VARIABLE SPEED PUMPS

HYDRAULIC PERFORMANCE

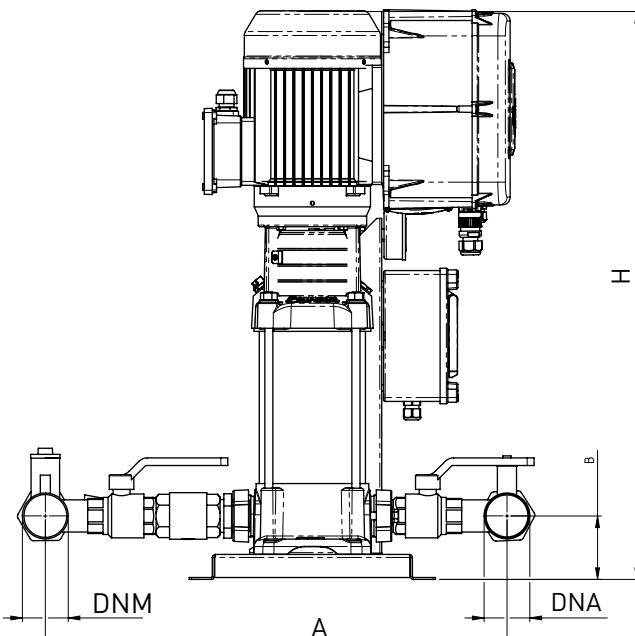
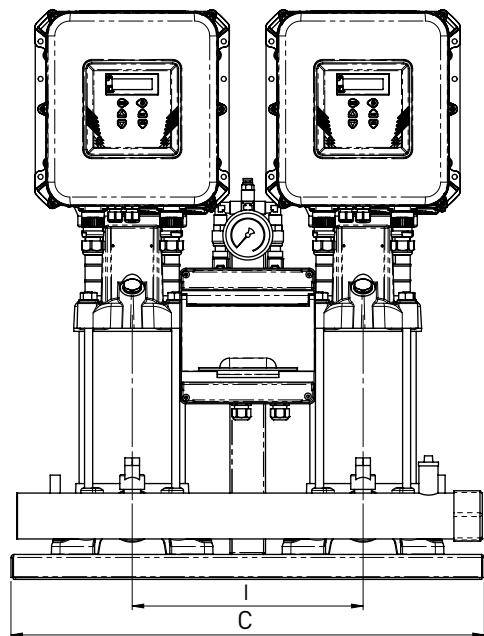


NOCCHI VARIO 3-20 PVM

THREE-PHASE PRESSURE BOOSTERS WITH TWO VARIABLE SPEED PUMPS

PERFORMANCE TABLE

MODEL	P2	VOLT. (V)	In (A)	Q	l/min m ³ /h	0	200	400	600	800	960
	kW					0	12	24	36	48	57.6
VARIO3-20 PVM 20-3 F	2x4	3 ~ 400	2x8.5	m.c.a. / m.c.w.	42	41	39	35	29	20	
VARIO3-20 PVM 20-5 F	2x5.5	3 ~ 400	2x11.9		72	70	68	62	50	35	
VARIO3-20 PVM 20-7 F	2x7.5	3 ~ 400	2x15.3		101	100	96	88	70	50	
VARIO3-20 PVM 20-10 F	2x11	3 ~ 400	2x20.4		146	144	139	127	106	74	



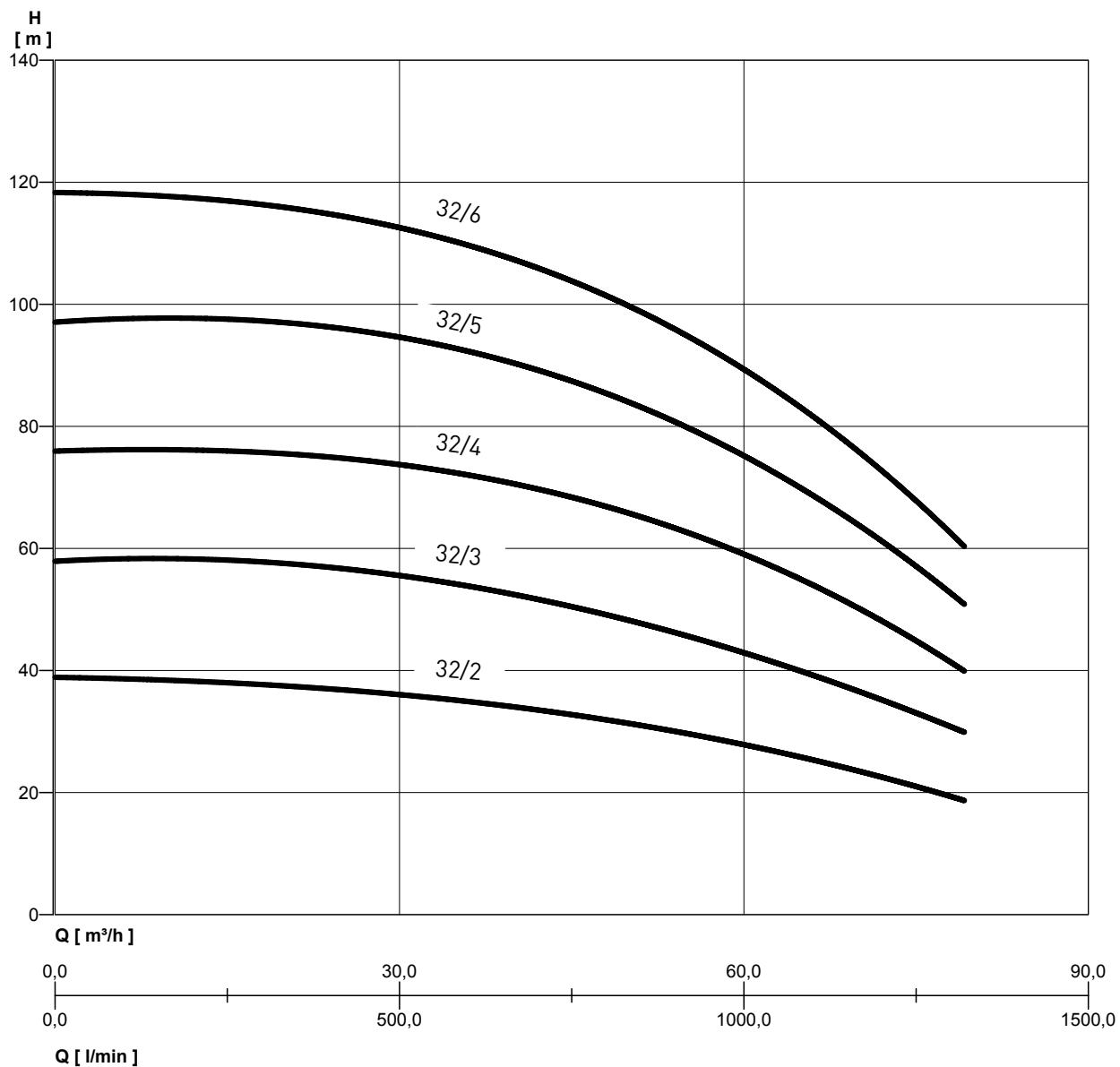
OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions mm.							WEIGHTS Kg
	A	B	C	H	I	DNA	DNM	
VARIO3-20 PVM 20-3 F	850	125	710	690	360	3"	3"	140
VARIO3-20 PVM 20-5 F	850	125	710	845	360	3"	3"	160
VARIO3-20 PVM 20-7 F	850	125	710	992	360	3"	3"	180
VARIO3-20 PVM 20-10 F	850	125	710	1122	360	3"	3"	210

NOCCHI VARIO 3-20 PVM

THREE-PHASE PRESSURE BOOSTERS WITH TWO VARIABLE SPEED PUMPS

HYDRAULIC PERFORMANCE

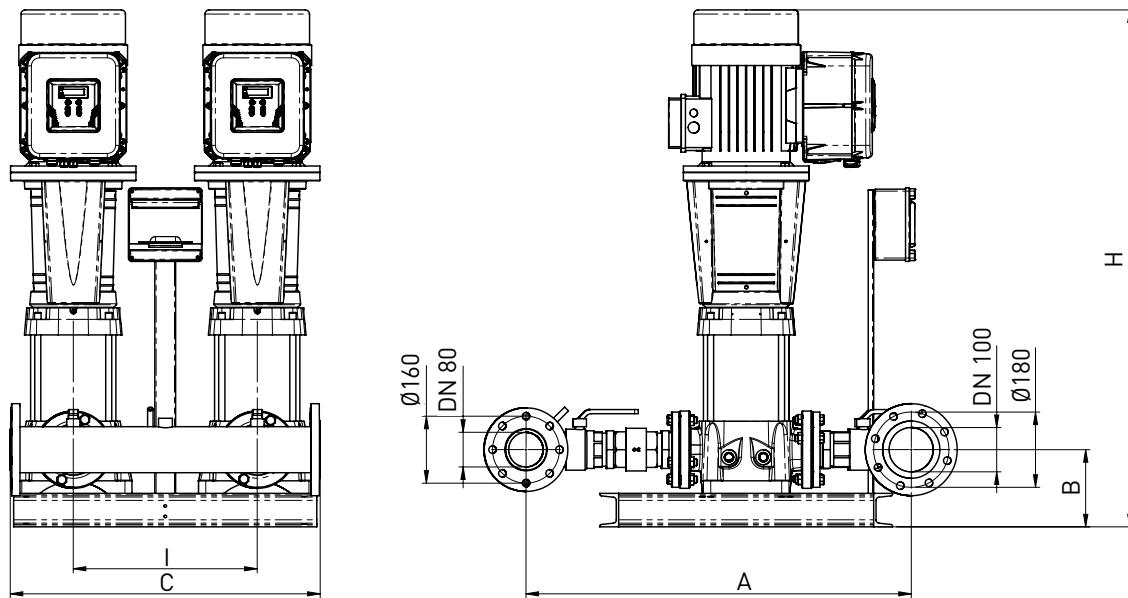


NOCCHI VARIO 3-20 PVM

THREE-PHASE PRESSURE BOOSTERS WITH TWO VARIABLE SPEED PUMPS

PERFORMANCE TABLE

MODEL	P2	VOLT. (V)	In (A)	Q	I/min	0	12	24	36	48	60	72	79.2
	kW				m³/h	0	200	400	600	800	1000	1200	1320
VARIO3-20 PVM 32-2 F	2x4	3 ~ 400	2x7.1	mca/mcw	39	38	37	35	32	28	22	19	
VARIO3-20 PVM 32-3 F	2x5.5	3 ~ 400	2x10.7		58	58	57	54	49	43	35	30	
VARIO3-20 PVM 32-4 F	2x7.5	3 ~ 400	2x14.3		76	76	75	72	67	59	48	40	
VARIO3-20 PVM 32-5 F	2x11	3 ~ 400	2x17.8		97	98	96	92	86	75	61	51	
VARIO3-20 PVM 32-6 F	2x11	3 ~ 400	2x21.4		118	118	115	109	101	90	73	60	



OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions mm.							WEIGHTS Kg
	A	B	C	H	I	DNA	DNM	
VARIO3-20 PVM 32-2 F	950	185	750	982	440	4"	3"	300
VARIO3-20 PVM 32-3 F	950	185	750	1089	440	4"	3"	320
VARIO3-20 PVM 32-4 F	950	185	750	1179	440	4"	3"	360
VARIO3-20 PVM 32-5 F	950	185	750	1472	440	4"	3"	380
VARIO3-20 PVM 32-6 F	950	185	750	1542	440	4"	3"	420

NOCCHI VARIO 3-30

THREE-PHASE PRESSURE BOOSTERS WITH THREE VARIABLE SPEED PUMPS

EASY TO INSTALL, LOW POWER CONSUMPTION, VERSATILE OPERATION

The new series of variable speed pressurisation boosters VARIO 3-30 represents a reliable solution which is easy to use, for residential and industrial applications. The systems involves the installation of three PUMPS in parallel featuring electronic control. VARIO3 is an electronic device capable of changing the frequency of an pump. Integrated directly on the motor, it allows to adjust its speed so as to supply the same pressure at all times, even when the water demand changes. When the system pressure drops below the set threshold, the module starts the first pump of the unit to restore to set-point pressure; the speed of rotation of the pump varies according to the water demand so, a greater demand will correspond to a higher speed, until the

maximum speed set has been reached, after which, if the system requires greater performance, the module will activate the second and then the third pump to keep the pressure stable. As the water demand decreases, the speed of the last pump started is reduced, until it turns off. The module will keep the first pump on until the minimum set speed has been reached, after which, if there are no further requests for water, the pump will be stopped. VARIO3-30 features five operating modes to meet the operating needs.



TECHNICAL CHARACTERISTICS

- Inverter supply VOLT.: 3x380-500 Vac
- Inverter output VOLT.: 3x380-500 Vac
- Maximum output power: 3X5.5 kW - 3x7.5 kW
- Input frequency: 50/60 Hz
- Output maximum rated power: 11.5 Amp - 16 Amp
- Degree of protection: IP55-PVM IP44-MULTINOX VE+
- Max. ambient temperature: + 50°C

- Input filter complying with EMC directive
- Pressure transducer: 0-5 Volt 0-10 bar
- Connectivity: Serial interface RS 485
- Optional contacts: 3 (external set-point, alarm, system inhibition)

BASE

- in galvanized metal complete with rubber isolated pads

SUCTION MANIFOLD

- in stainless steel AISI 304 with 2 ball valves

DELIVERY MANIFOLD

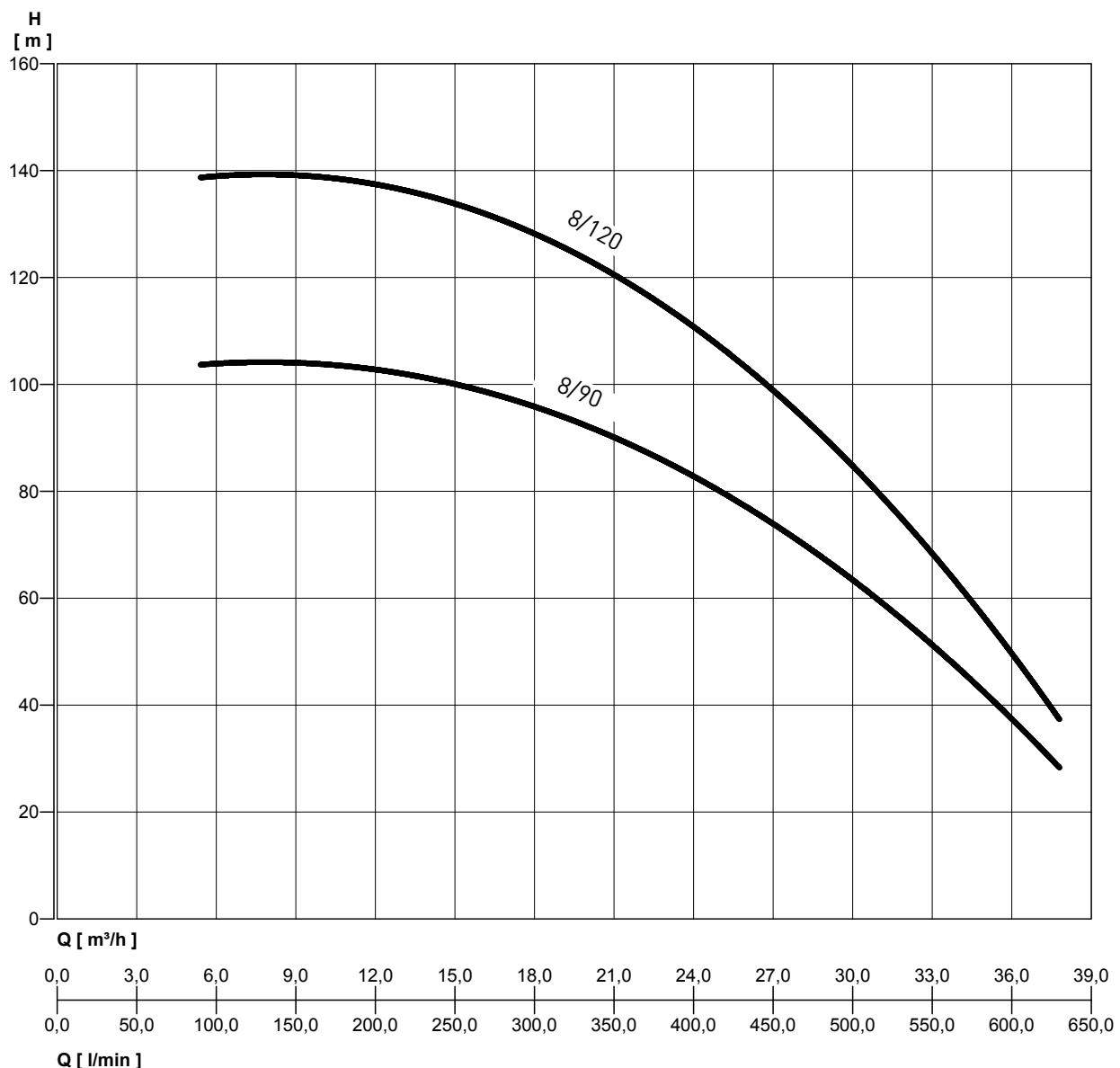
- In stainless steel AISI 304 with:
- n. 2 ball valves
- n. 2 check valves
- n. 1 pressure gauge
- n. 2 pressure sensors

USAGE DATA	MULTINOX-VE+	PVM 5	PVM 10	PVM 15	PVM 20	PVM 32
Maximum capacity (m ³ /h)	13.5	25.5	39	70.5	87	120
Maximum head (m.c.a.)	140	160	160	165	145	120
Maximum operating pressure	14 bar			16 bar		
Power supply VOLT.:			3-400 V			
Ambient temperature				50°C		
Degree of protection of pump	IP44			IP55		
Degree of protection of electrical panel				IP54		

NOCCHI VARIO 3-30 MULTINOX VE+

THREE-PHASE PRESSURE BOOSTERS WITH THREE VARIABLE SPEED PUMPS

HYDRAULIC PERFORMANCE

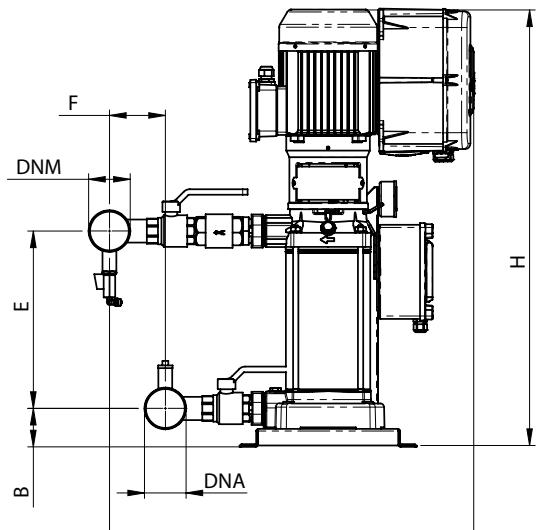
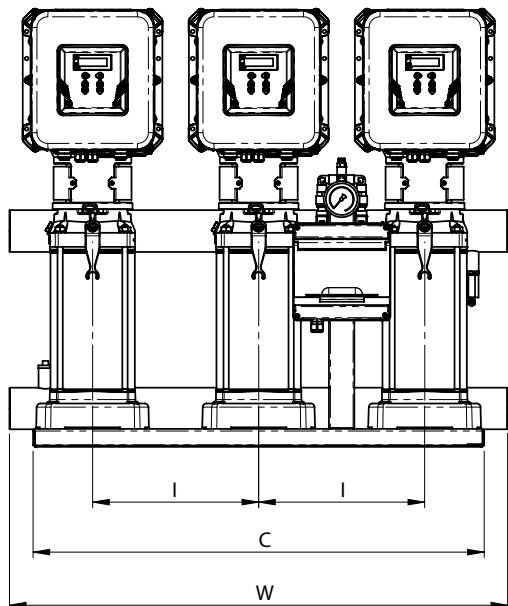


NOCCHI VARIO 3-30 MULTINOX VE+

THREE-PHASE PRESSURE BOOSTERS WITH THREE VARIABLE SPEED PUMPS

PERFORMANCE TABLE

MODEL	P2	VOLT. (V)	In (A)	Q l/min m³/h	30	60	90	120	150	180	210	240	270	300	360	420	450	540	630
	kW				1.8	3.6	5.4	7.2	9	10.8	12.6	14.4	16.2	18	21.6	25.2	27	32.4	37.8
VARIO3-30 MULTINOX VE+ 8-90	3x3	3 ~ 400	3x9.7	m.c.a./ m.c.w.			104	104	104	103	103	101	98	94	90	82	73	52	29
VARIO3-30 MULTINOX VE+ 8-120	3x4	3 ~ 400	3x12.3				139	139	139	138	138	135	131	126	120	109	98	70	38



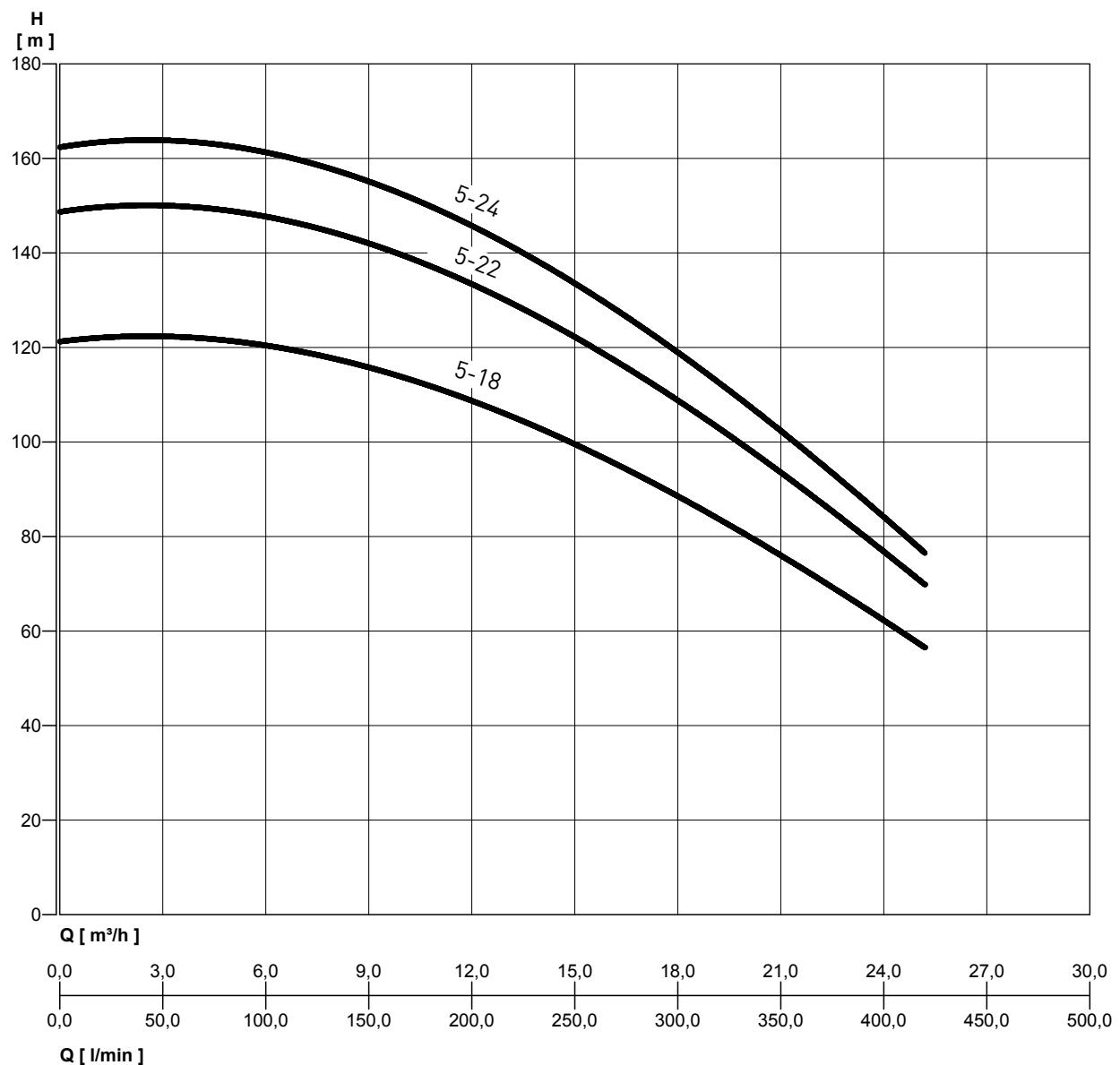
OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions mm.									WEIGHTS Kg
	A	B	C	E	H	I	W	DNA	DNM	
VARIO3-30 MULTINOX VE+ 8-90	660	68	820	292	730	300	900	2"1/2	2"	175
VARIO3-30 MULTINOX VE+ 8-120	660	68	820	373	855	300	900	2"1/2	2"	185

NOCCHI VARIO 3-30 PVM

THREE-PHASE PRESSURE BOOSTERS WITH THREE VARIABLE SPEED PUMPS

HYDRAULIC PERFORMANCE

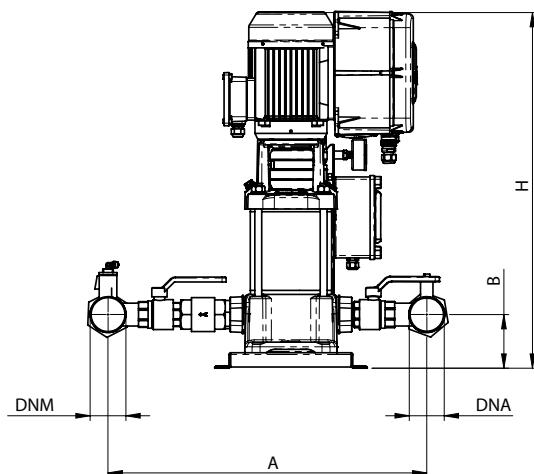
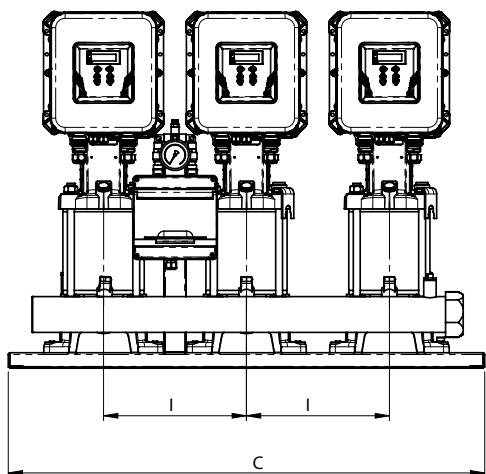


NOCCHI VARIO 3-30 PVM

THREE-PHASE PRESSURE BOOSTERS WITH THREE VARIABLE SPEED PUMPS

PERFORMANCE TABLE

MODEL	P2	VOLT. (V)	In (A)	Q	l/min m³/h	0	120	180	240	300	360	420
	kW					0	7.2	10.8	14.4	18	21.6	25.2
VARIO3-30 PVM 5-18 F	3x3	3 ~ 400	3x6.1	m.c.a/m.c.w	121.5	117.8	112	102.7	89.3	71.1	57.4	
VARIO3-30 PVM 5-22 F	3x4	3 ~ 400	3x7.5		149	144.5	137.4	126.1	109.7	87.6	70.9	
VARIO3-30 PVM 5-24 F	3x4	3 ~ 400	3x8.2		162.7	157.8	150.1	137.8	119.9	95.9	77.7	



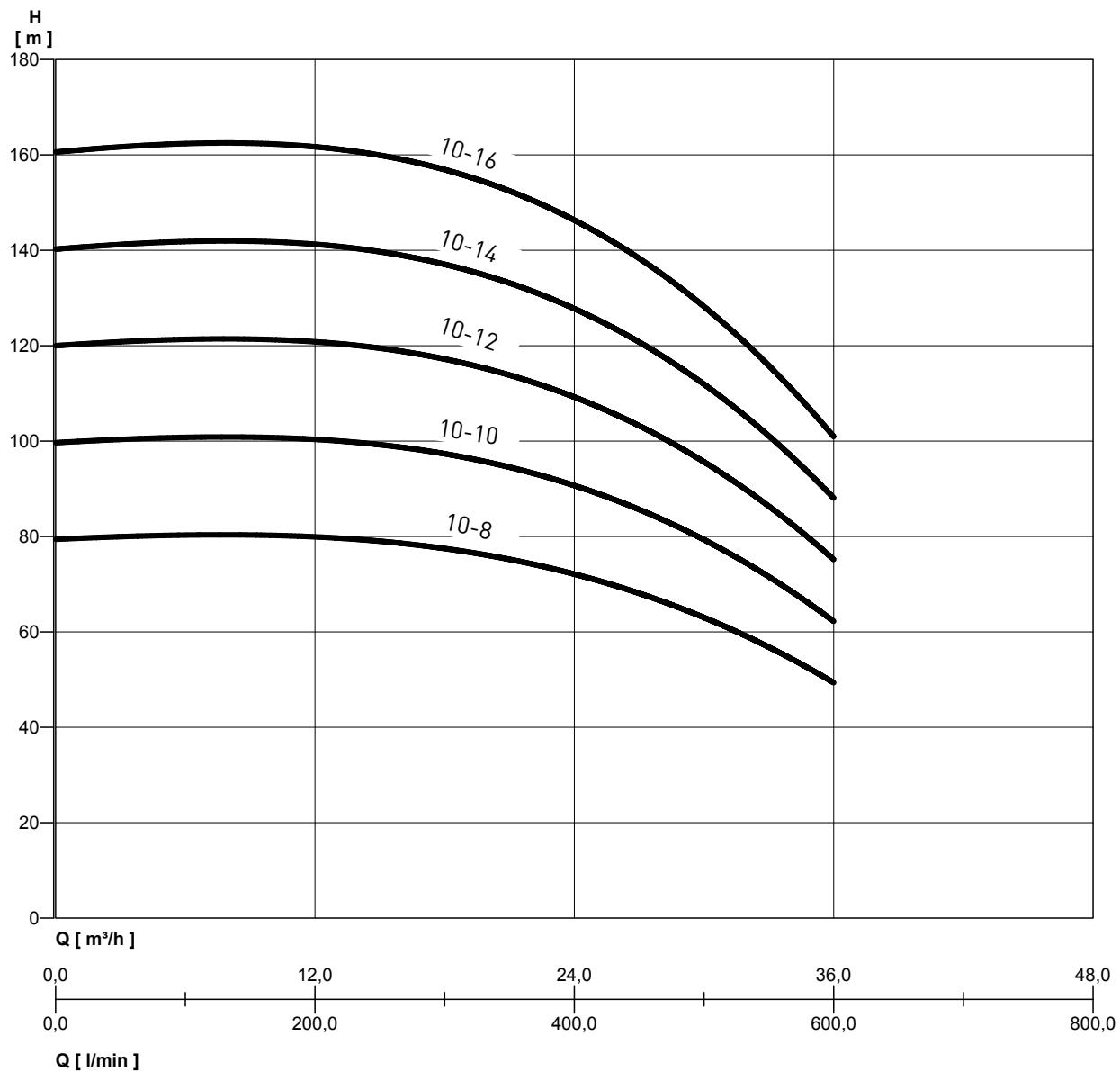
OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions mm.							WEIGHTS Kg
	A	B	C	H	I	DNA	DNM	
VARIO3-30 PVM 5-18 F	670	105	1000	1058	300	2"	2"	224
VARIO3-30 PVM 5-22 F	670	105	1000	1173	300	2"	2"	229
VARIO3-30 PVM 5-24 F	670	105	1000	1227	300	2"	2"	248

NOCCHI VARIO 3-30 PVM

THREE-PHASE PRESSURE BOOSTERS WITH THREE VARIABLE SPEED PUMPS

HYDRAULIC PERFORMANCE

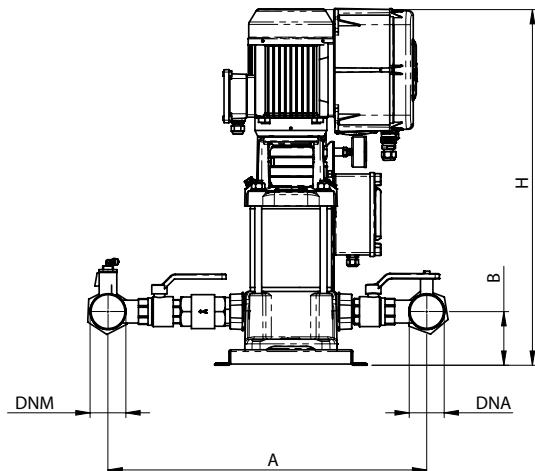
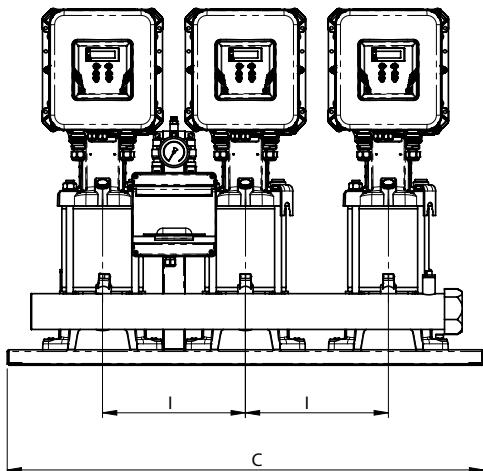


NOCCHI VARIO 3-30 PVM

THREE-PHASE PRESSURE BOOSTERS WITH THREE VARIABLE SPEED PUMPS

PERFORMANCE TABLE

MODEL	P2	VOLT. (V)	In (A)	Q	l/min	0	75	150	225	300	375	450	525	600
	kW				m ³ /h	0	4.5	9	13.5	18	22.5	27	31.5	36
VARIO3-30 PVM 10-8 F	3x3	3 ~ 400	3x6.4	m.c./m.c.w.	79.6	79.8	80.3	79.9	77.4	73.6	68.4	59.7	49.5	
VARIO3-30 PVM 10-10 F	3x4	3 ~ 400	3x8		99.9	100.1	100.9	100.3	97.2	92.6	86	75.2	62.4	
VARIO3-30 PVM 10-12 F	3x4	3 ~ 400	3x9.6		120.3	120.5	121.4	120.8	117.1	111.5	103.6	90.7	75.4	
VARIO3-30 PVM 10-14 F	3x5.5	3 ~ 400	3x11.2		140.6	140.8	142	141.2	136.9	130.4	121.2	106.2	88.3	
VARIO3-30 PVM 10-16 F	3x5.5	3 ~ 400	3x12.8		161	161.2	162.5	161.7	156.7	149.3	138.8	121.7	101.2	



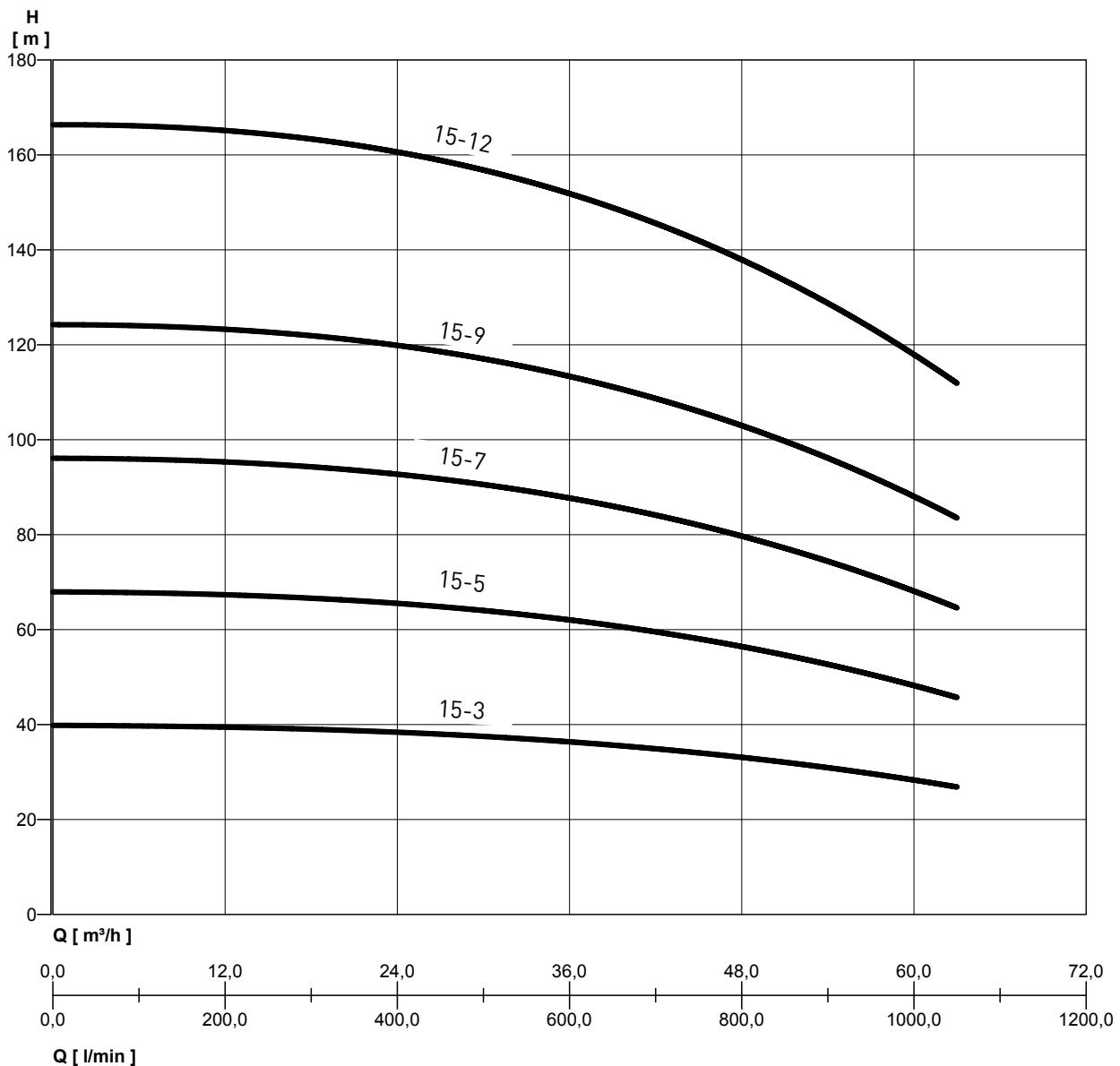
OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions mm.							WEIGHTS Kg
	A	B	C	H	I	DNA	DNM	
VARIO3-30 PVM 10-8 F	670	140	1000	869	300	2" 1/2	2" 1/2	220
VARIO3-30 PVM 10-10 F	670	140	1000	936	300	2" 1/2	2" 1/2	225
VARIO3-30 PVM 10-12 F	670	140	1000	996	300	2" 1/2	2" 1/2	235
VARIO3-30 PVM 10-14 F	670	140	1000	1125	300	2" 1/2	2" 1/2	335
VARIO3-30 PVM 10-16 F	670	140	1000	1185	300	2" 1/2	2" 1/2	345

NOCCHI VARIO 3-30 PVM

THREE-PHASE PRESSURE BOOSTERS WITH THREE VARIABLE SPEED PUMPS

HYDRAULIC PERFORMANCE

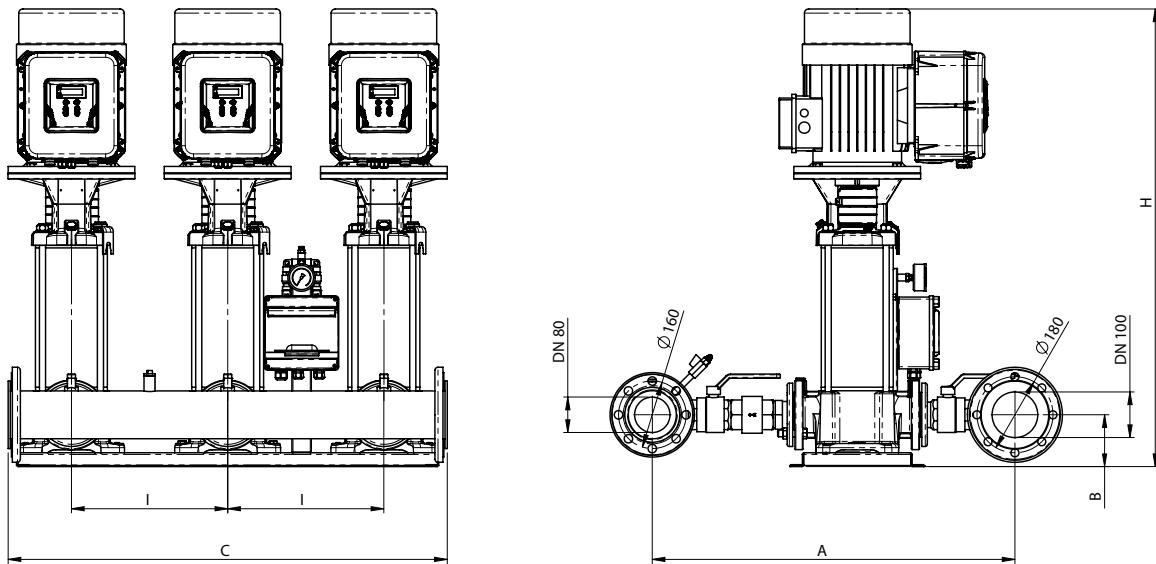


NOCCHI VARIO 3-30 PVM

THREE-PHASE PRESSURE BOOSTERS WITH THREE VARIABLE SPEED PUMPS

PERFORMANCE TABLE

MODEL	P2	VOLT. (V)	I _n (A)	Q l/min m ³ /h	m.c.a./m.c.w.	0	150	300	450	600	750	900	1050
	kW					0	9	18	27	36	45	54	63
VARIO3-30 PVM 15-3 F	3x3	3 ~ 400	3x5.1	m.c.a./m.c.w.	39.8	39.6	39.2	37.8	36.3	34.1	31	26.8	
VARIO3-30 PVM 15-5 F	3x4	3 ~ 400	3x8.5		68	67.4	66.9	64.7	62	58.1	52.7	45.7	
VARIO3-30 PVM 15-7 F	3x5.5	3 ~ 400	3x11.9		96.2	95.3	94.7	91.6	87.7	82	74.4	64.6	
VARIO3-30 PVM 15-9 F	3x7.5	3 ~ 400	3x15.3		124.4	123.2	122.4	118.4	113.4	106	96	83.6	
VARIO3-30 PVM 15-12 F	3x11	3 ~ 400	3x20.4		166.6	165	163.9	158.8	151.9	141.9	128.6	112	



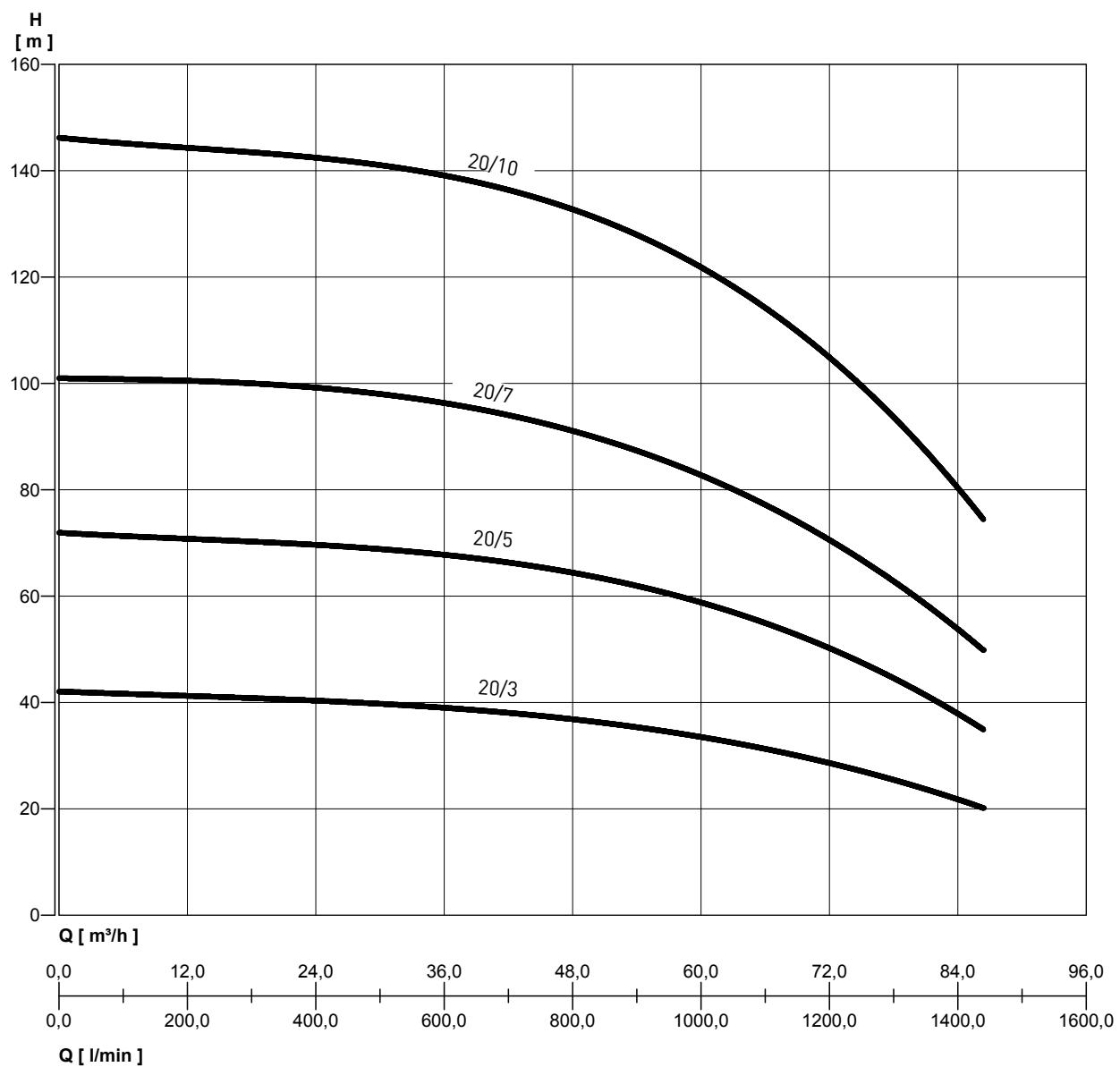
OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions mm.							WEIGHTS Kg
	A	B	C	H	I	DNA	DNM	
VARIO3-30 PVM 15-3 F	860	125	1040	786	370	3"	3"	207
VARIO3-30 PVM 15-5 F	860	125	1040	883	370	3"	3"	252
VARIO3-30 PVM 15-7 F	860	125	1040	1042	370	3"	3"	354
VARIO3-30 PVM 15-9 F	860	125	1040	1152	370	3"	3"	381
VARIO3-30 PVM 15-12 F	860	125	1040	1417	370	3"	3"	500

NOCCHI VARIO 3-30 PVM

THREE-PHASE PRESSURE BOOSTERS WITH THREE VARIABLE SPEED PUMPS

HYDRAULIC PERFORMANCE

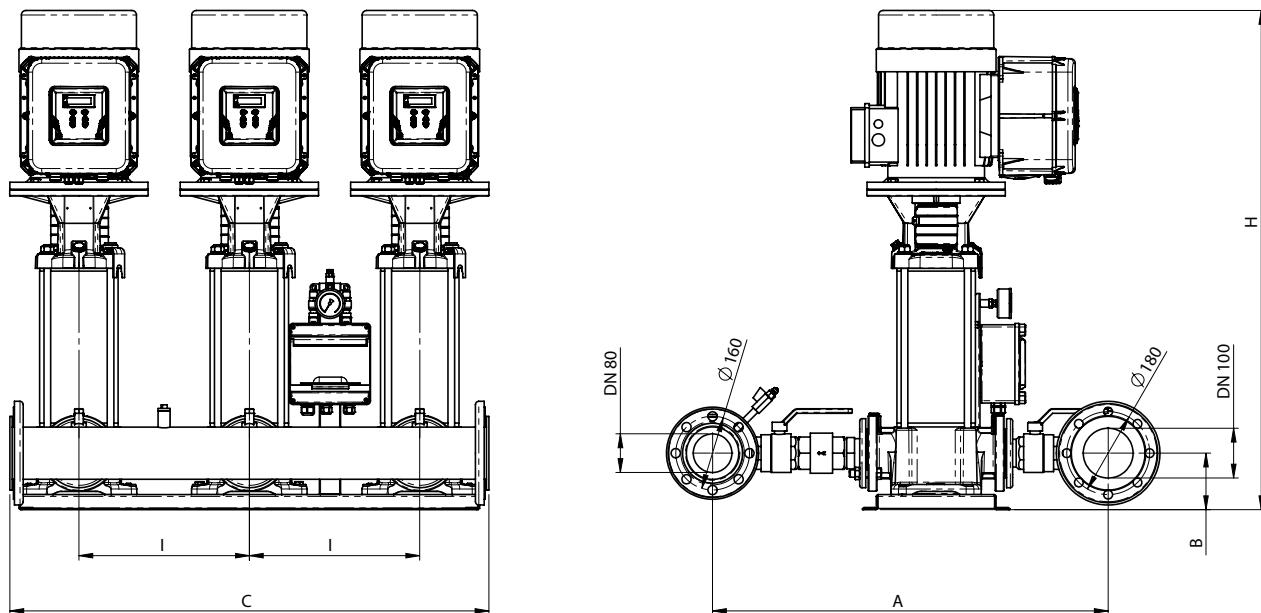


NOCCHI VARIO 3-30 PVM

THREE-PHASE PRESSURE BOOSTERS WITH THREE VARIABLE SPEED PUMPS

PERFORMANCE TABLE

MODEL	P2	VOLT. (V)	In (A)	Q	l/min m ³ /h	0	300	600	900	1200	1440
	kW					0	18	36	54	72	86.4
VARIO3-30 PVM 20-3 F	3x4	3 ~ 400	3x8.5	m.c.a. / m.c.w.	42	41	39	35	29	20	
VARIO3-30 PVM 20-5 F	3x5.5	3 ~ 400	3x11.9		72	70	68	62	50	35	
VARIO3-30 PVM 20-7 F	3x7.5	3 ~ 400	3x15.3		101	100	96	88	70	50	
VARIO3-30 PVM 20-10 F	3x11	3 ~ 400	3x20.4		146	144	139	127	106	74	



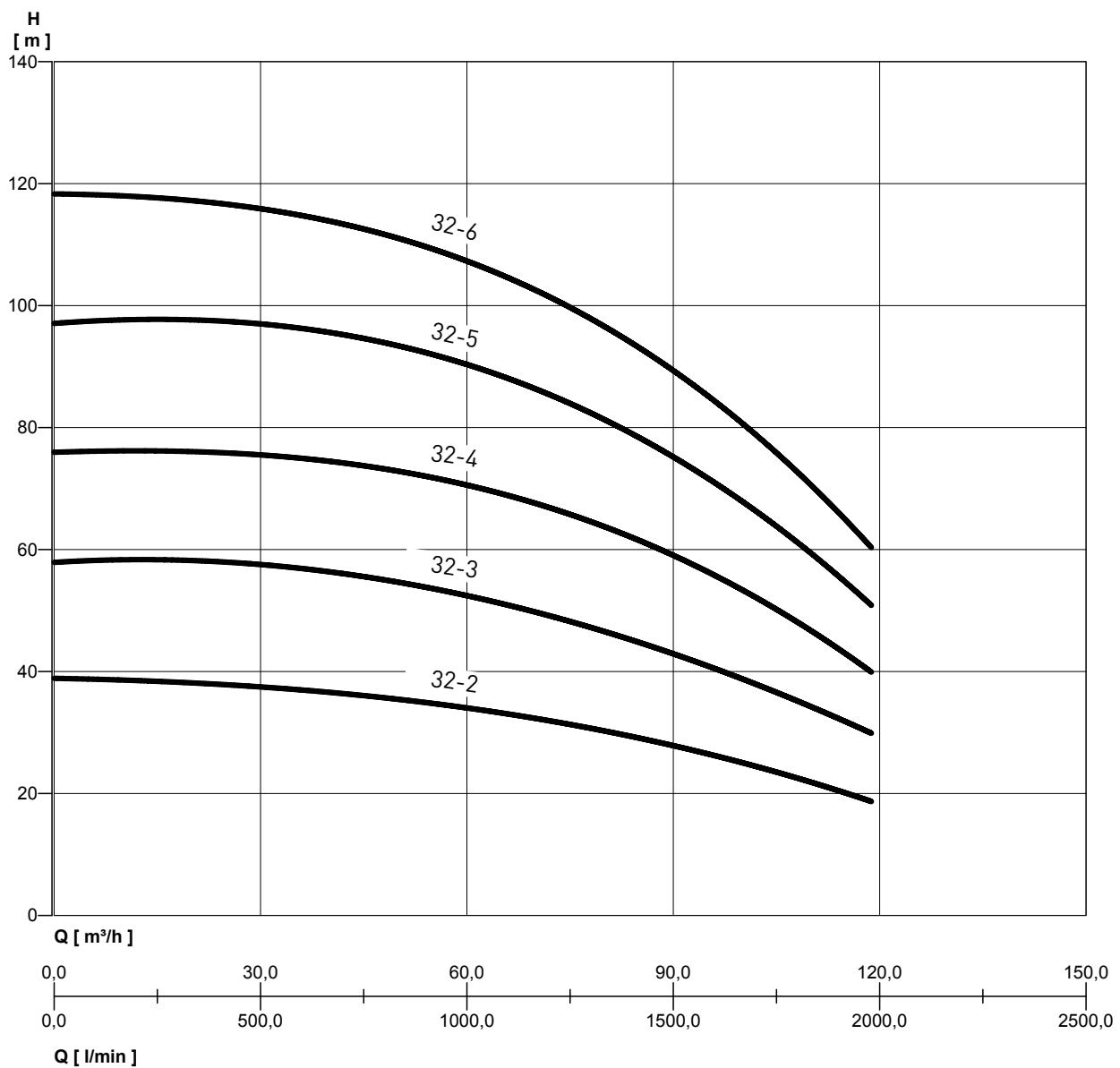
OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions mm.							WEIGHTS Kg
	A	B	C	H	I	DNA	DNM	
VARIO3-30 PVM 20-3 F	860	125	1040	793	370	3"	3"	243
VARIO3-30 PVM 20-5 F	860	125	1040	952	370	3"	3"	345
VARIO3-30 PVM 20-7 F	860	125	1040	1062	370	3"	3"	372
VARIO3-30 PVM 20-10 F	860	125	1040	1387	370	3"	3"	492

NOCCHI VARIO 3-30 PVM

THREE-PHASE PRESSURE BOOSTERS WITH THREE VARIABLE SPEED PUMPS

HYDRAULIC PERFORMANCE

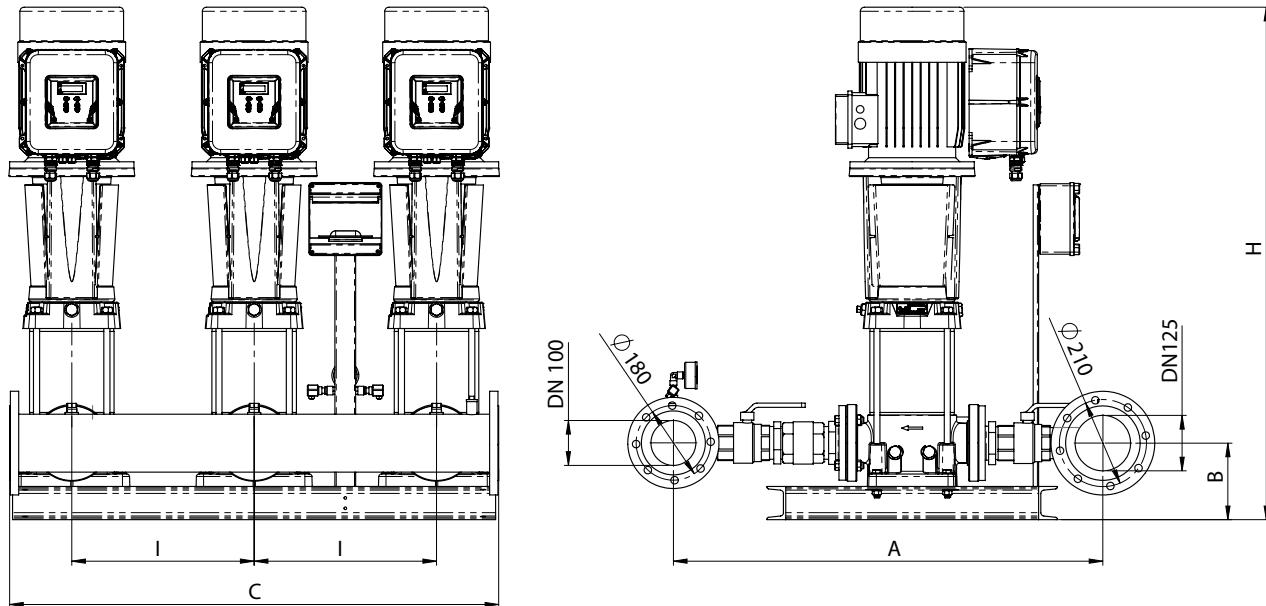


NOCCHI VARIO 3-30 PVM

THREE-PHASE PRESSURE BOOSTERS WITH THREE VARIABLE SPEED PUMPS

PERFORMANCE TABLE

MODEL	P2	VOLT. (V)	In (A)	Q	l/min m³/h	0	300	600	900	1200	1500	1800	1980
	kW					0	18	36	54	72	90	108	118.8
VARIO3-30 PVM 32-2 F	3x4	3 ~ 400	3x7.1	m.c.a./m.c.w.	39	38	37	35	32	28	22	19	
VARIO3-30 PVM 32-3 F	3x5.5	3 ~ 400	3x10.7		58	58	57	54	49	43	35	30	
VARIO3-30 PVM 32-4 F	3x7.5	3 ~ 400	3x14.3		76	76	75	72	67	59	48	40	
VARIO3-30 PVM 32-5 F	3x11	3 ~ 400	3x17.8		97	98	96	92	86	75	61	51	
VARIO3-30 PVM 32-6 F	3x11	3 ~ 400	3x21.4		118	118	115	109	101	90	73	60	



OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions mm.							WEIGHTS Kg
	A	B	C	H	I	DNA	DNM	
VARIO3-30 PVM 32-2 F	1040	185	1180	982	440	4"	3"	418
VARIO3-30 PVM 32-3 F	1040	185	1180	1089	440	4"	3"	485
VARIO3-30 PVM 32-4 F	1040	185	1180	1179	440	4"	3"	515
VARIO3-30 PVM 32-5 F	1040	185	1180	1472	440	4"	3"	644
VARIO3-30 PVM 32-6 F	1040	185	1180	1542	440	4"	3"	656

NOCCHI FREQUENCY CHANGER VARIABLE SPEED PRESSURE BOOSTERS

SILENT, CONSTANT PRESSURE, PIPING IN AISI 304, QUALITY FREQUENCY CONVERTER

They are boosters for the automatic pressurisation of water distribution networks with three-phase power supply, controlled by a variable speed transducer.

The speed of the first pump that starts is controlled by the inverter associated to an electronic board by means of a pressure transducer so as to keep the output pressure of the unit constant regardless of the quantity of water collected (within the capacity limit of the first pump).

When the quantity of water collected exceeds the capacity of the first pump, the second pump will start at a fixed speed, while the first one will continue to be modulated by the inverter. When the water is no longer collected, the pump controlled by the inverter will operate at a greater speed for a settable time to allow for the accumulation of a certain quantity of water under pressure which will prolong the pause period of the pump.



USAGE DATA	PVM 5		PVM 10			PVM 15			PVM 20			PVM 32		
	FCD20	FCD 20	FCD 30	FCD 40	FC. 20	FC. 30	FC. 40	FC. 20	FC. 30	FC. 40	FC. 20	FC. 30	FC. 40	
Maximum capacity (m³/h)	16.8	26	39	52	47	60.5	94	57.6	20	115.2	59.2	118.8	158.4	
Maximum head (m.c.a.)	164		160			166			146			117		
Maximum operating pressure								16 bar						
Power supply VOLT.:								3-400 V						
Start direct pumps								Direct up t 7.5 kW - Start-Delta above 7.5 kW						
Operating frequency								25 - 50 Hz						
Ambient temperature								40°C						
Degree of protection of pump								IP55						
Degree of protection of electrical panel								IP54						

SPECIFICATIONS

PUMP

PVM:

- Centrifugal, multicellular, vertical axis

BASE

- Profile in galvanized steel

SUCTION MANIFOLD

In stainless steel AISI 304 with:

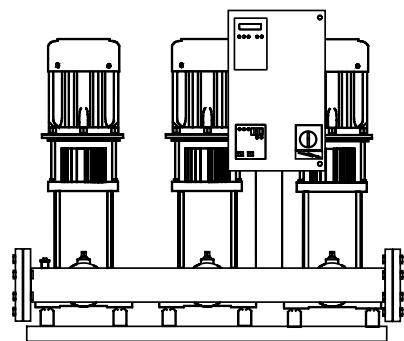
- n. 1 sleeve for water load
- n. 1 brass ball valve *
- n. 1 check valve *

DELIVERY MANIFOLD

In stainless steel AISI 304 with:

- n. 1 pressure gauge
- n. 1 pressure transducer 0-5Volt - 0-10 Bar
- n. 1 brass ball valve *

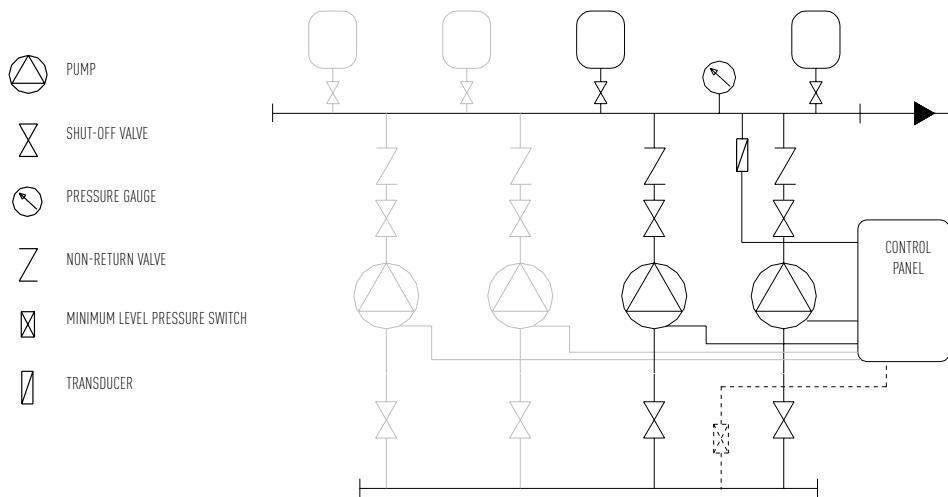
* components for each pump installed



NOCCHI FREQUENCY CHANGER

VARIABLE SPEED PRESSURE BOOSTERS

INSTALLATION DIAGRAM



CONTROL PANEL - ELECTR. PILOT



ELECTRICAL PANEL

- Box in metal IP54
- Main switch
- Keyboard with electronic board SA
- Fuses, contactor and thermal relay for each pump
- Transformer with fuses for the auxiliary circuit
- M-O-T switch for each pump
- Star-delta starter for motors above 7.5 kW

MAIN FUNCTIONS

- Cyclic inversion of the start-up order of the pumps after each cycle end.
- Timer, adjustable from 0 to 255 seconds, for the operation of the pumps after the opening of the contact of the pressure switch or when the operating pressure has been reached.
- ON/OFF control of the level of the tank or the pressure of the supply duct by means of a float switch or a different differential pressure switch.
- Sequential control of the start-up of the pumps to prevent them from starting at the same time.

SIGNALS AND CONTROLS

- Liquid crystal display to indicate the operating parameters and to enter the configuration and calibration values.
- LED indicating the presence of power.
- LED indicating the low water level in the tank or an insufficient pressure in the supply duct (aqueduct).
- LED indicating that the thermal relays have tripped because of an overload.
- LED indicating manual or automatic operation.
- LED indicating the operation of each pump.
- Buttons to select manual or automatic control.
- Start - stop button for each pump when manual operation has been selected
- Button to enter the configuration parameters

EXTRENL CONTROL DEVICES

- ON/OFF float switch, located in the water collection tank, or
- 3 electrodes for the electronic control of the level of the tank
- A reverse pressure switch inserted in the water supply duct (aqueduct)

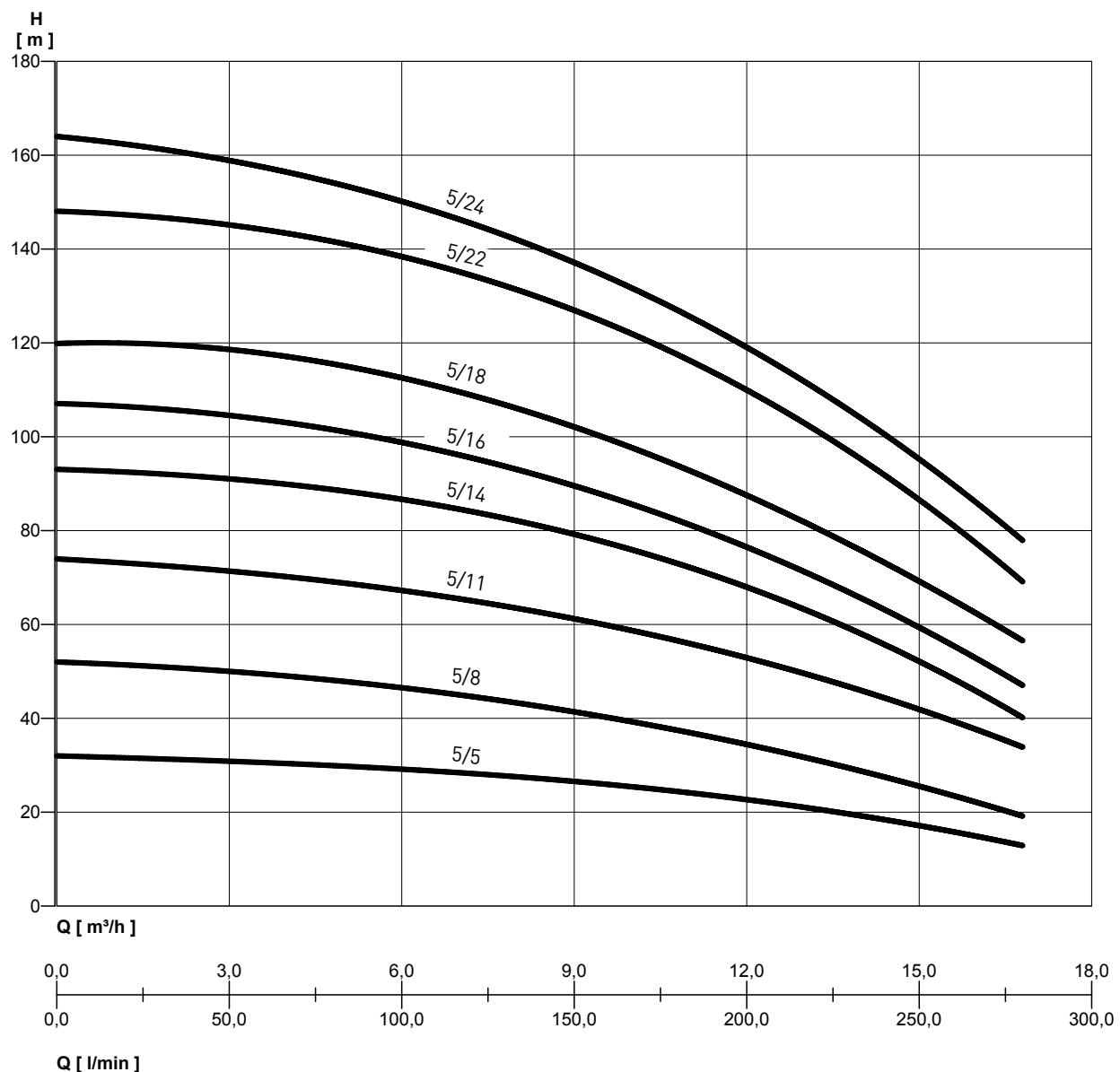
ACCESSORIES

Frequency changer accessories available on request	FCD
	FCY
Float switch for protection against dry running	X
Differential pressure switch for exclusion in case of lack of network pressure	X
Electrodes for electronic level control	X
Membrane autoclaves	X

NOCCHI FCD20 PVM

VARIABLE SPEED PRESSURE BOOSTERS

HYDRAULIC PERFORMANCE

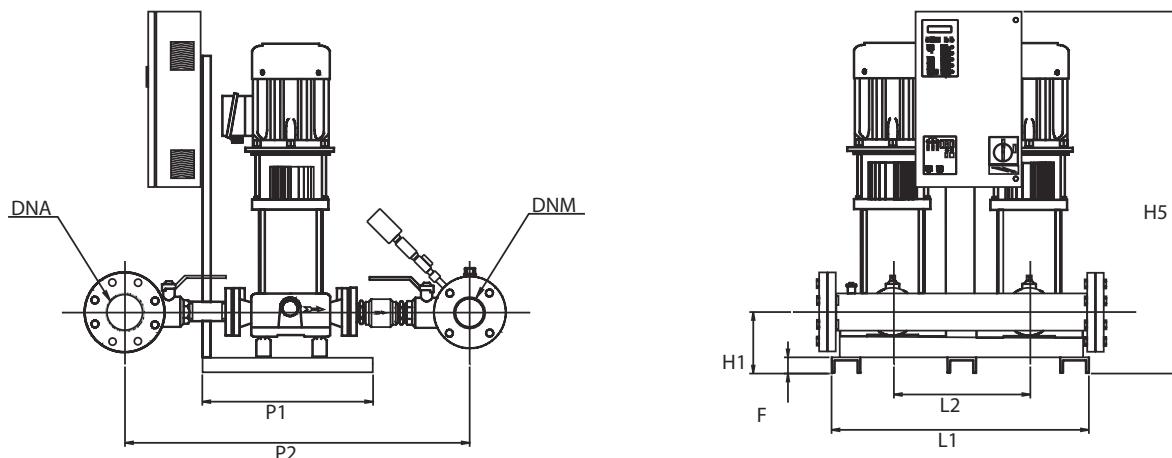


NOCCHI FCD20 PVM

VARIABLE SPEED PRESSURE BOOSTERS

HYDRAULIC PERFORMANCE

MODEL	P2	VOLT. (V)	I/min	0	80	120	160	200	240	280
	kW		m ³ / h	0	4.8	7.2	9.6	12	14.4	16.8
FCD20 PVM 5-5 F	2x0.75	3 ~ 400	m.c.a. / m.c.w.	32	30	28	26	23	18	13
FCD20 PVM 5-8 F	2x1.1			52	48	45	40	34	28	19
FCD20 PVM 5-11 F	2x2.2			74	69	65	60	53	44	34
FCD20 PVM 5-14 F	2x2.2			93	89	84	77	68	56	40
FCD20 PVM 5-16 F	2x2.2			107	102	95	87	77	63	47
FCD20 PVM 5-18 F	2x3			120	115	109	100	88	72	57
FCD20 PVM 5-22 F	2x4			148	142	134	124	110	92	69
FCD20 PVM 5-24 F	2x4			164	154	146	133	120	100	78



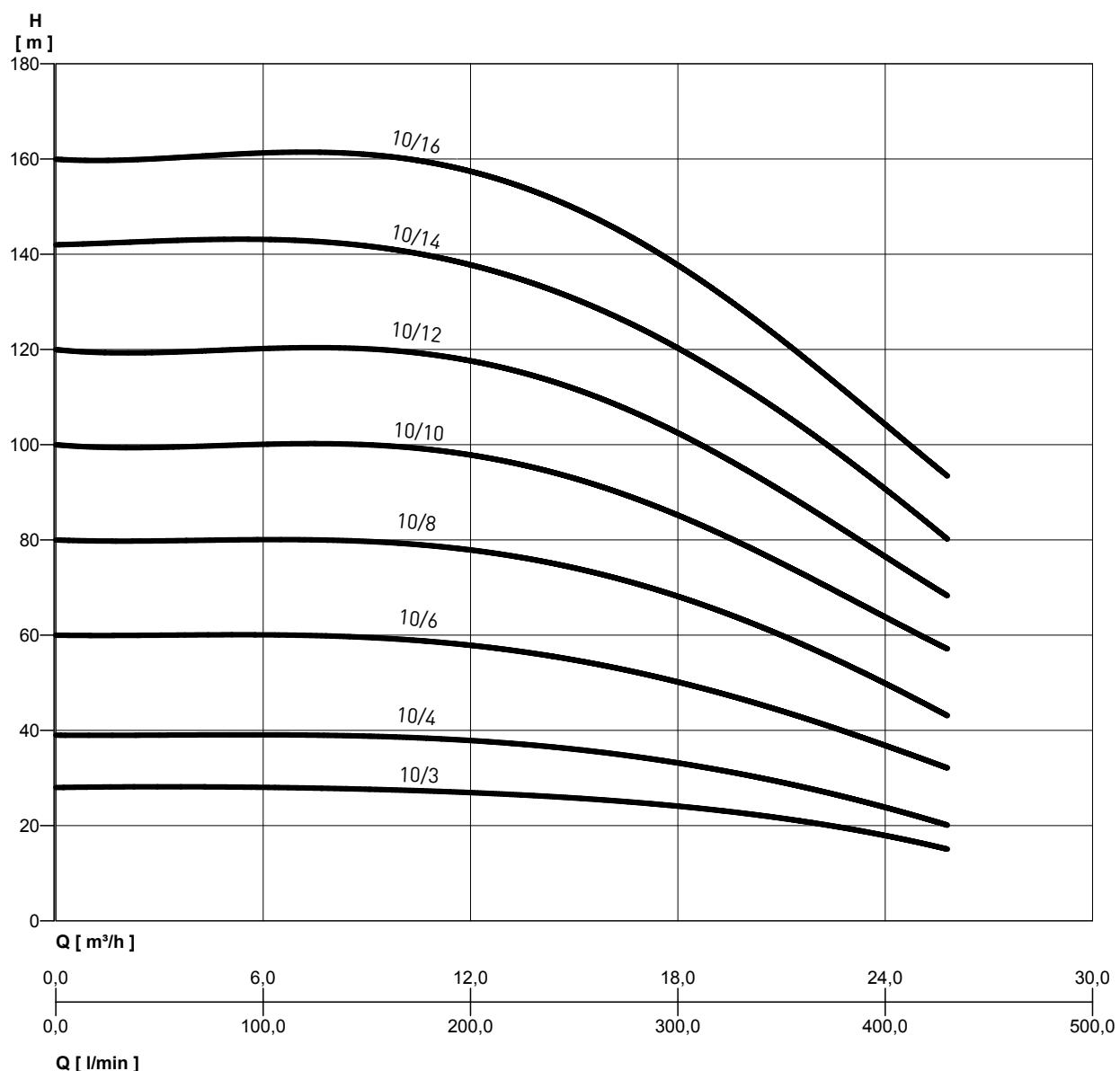
OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions mm.								WEIGHTS (Kg)	
	L1	P1	P2	H1	H5	DNA	DNM	F		
FCD20 PVM 5-5 F	680	500	620	150	1270	2"	2"	45	370	164
FCD20 PVM 5-8 F	680	500	620	150	1270	2"	2"	45	370	179
FCD20 PVM 5-11 F	680	500	620	150	1270	2"	2"	45	370	200
FCD20 PVM 5-14 F	680	500	620	150	1270	2"	2"	45	370	209
FCD20 PVM 5-16 F	680	500	620	150	1270	2"	2"	45	370	212
FCD20 PVM 5-18 F	680	500	620	150	1270	2"	2"	45	370	228
FCD20 PVM 5-22 F	680	500	620	150	1270	2"	2"	45	370	238
FCD20 PVM 5-24 F	680	500	620	150	1270	2"	2"	45	370	245

NOCCHI FCD20 PVM

VARIABLE SPEED PRESSURE BOOSTERS

HYDRAULIC PERFORMANCE

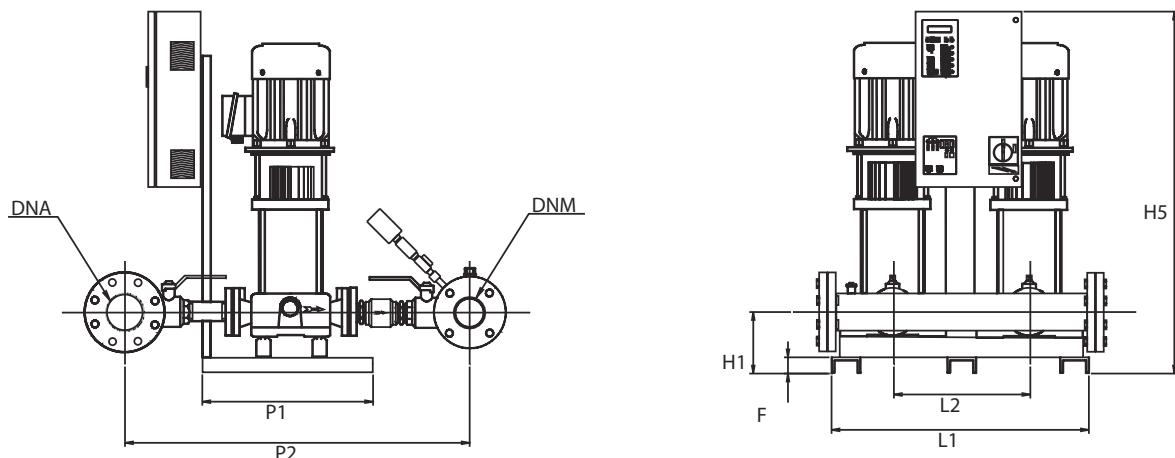


NOCCHI FCD20 PVM

VARIABLE SPEED PRESSURE BOOSTERS

HYDRAULIC PERFORMANCE

MODEL	P2	VOLT. (V)	l/min m ³ / h	0	100	200	300	400	430
	kW			0	6	12	18	24	26
FCD20 PVM 10-3 F	2x1.1	3 ~ 400	m.c.a. / m.c.w.	28	28	27	24	18	15
FCD20 PVM 10-4 F	2x1.5			39	39	38	33	24	20
FCD20 PVM 10-6 F	2x2.2			60	60	58	50	37	32
FCD20 PVM 10-8 F	2x3			80	80	78	68	50	43
FCD20 PVM 10-10 F	2x4			100	100	98	85	64	57
FCD20 PVM 10-12 F	2x4			120	120	118	102	77	68
FCD20 PVM 10-14 F	2x5.5			142	143	138	120	91	80
FCD20 PVM 10-16 F	2x5.5			160	161	158	137	105	93



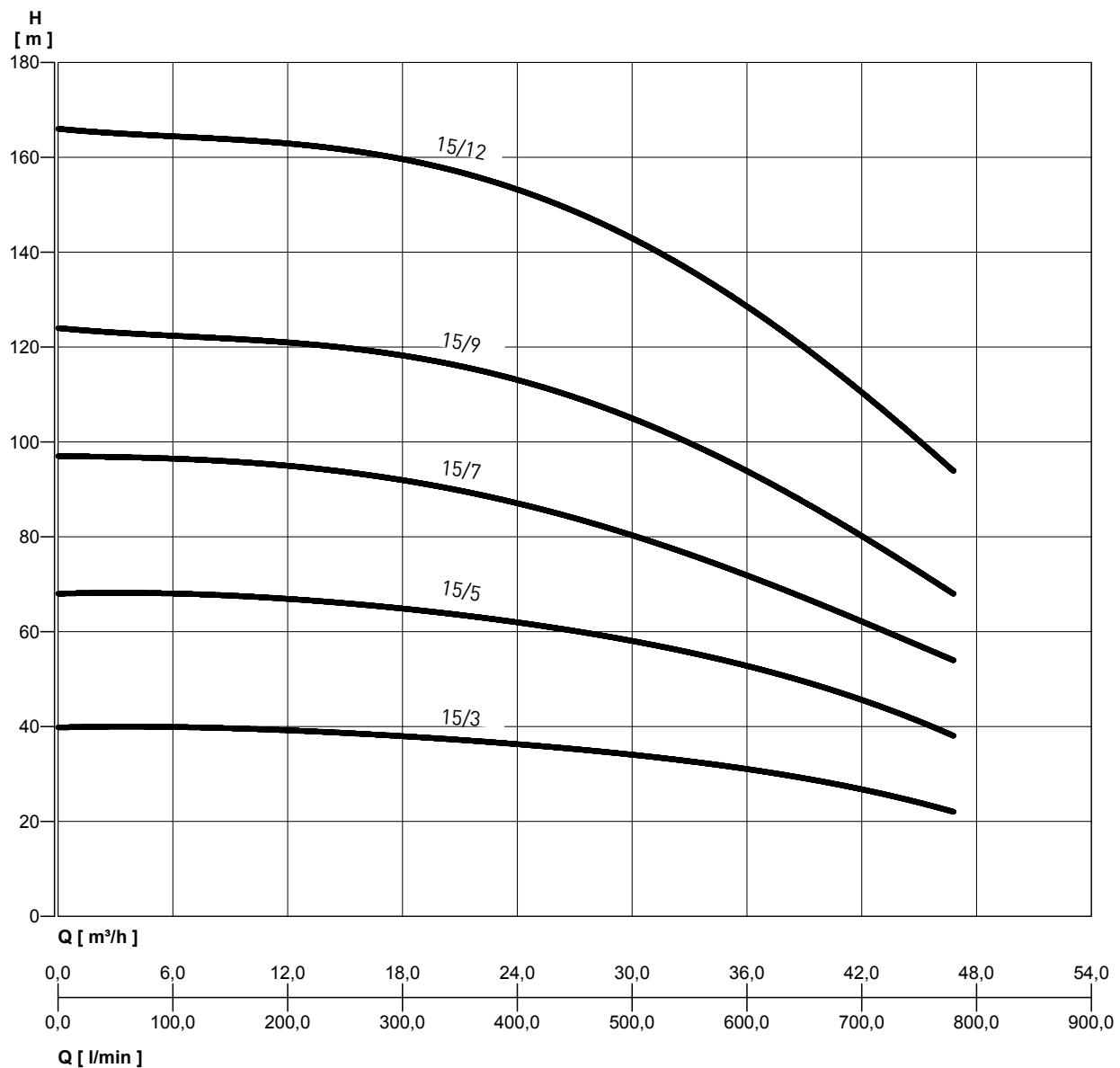
OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions mm.								WEIGHTS (Kg)	
	L1	P1	P2	H1	H5	DNA	DNM	F	L2	
FCD20 PVM 10-3 F	680	500	720	180	1270	2" 1/2	2" 1/2	45	370	208
FCD20 PVM 10-4 F	680	500	720	180	1270	2" 1/2	2" 1/2	45	370	224
FCD20 PVM 10-6 F	680	500	720	180	1270	2" 1/2	2" 1/2	45	370	230
FCD20 PVM 10-8 F	680	500	720	180	1270	2" 1/2	2" 1/2	45	370	246
FCD20 PVM 10-10 F	680	500	720	180	1270	2" 1/2	2" 1/2	45	370	248
FCD20 PVM 10-12 F	680	500	720	180	1270	2" 1/2	2" 1/2	45	370	253
FCD20 PVM 10-14 F	680	500	720	180	1270	2" 1/2	2" 1/2	45	370	273
FCD20 PVM 10-16 F	680	500	720	180	1270	2" 1/2	2" 1/2	45	370	280

NOCCHI FCD20 - FCY20 PVM

VARIABLE SPEED PRESSURE BOOSTERS

HYDRAULIC PERFORMANCE

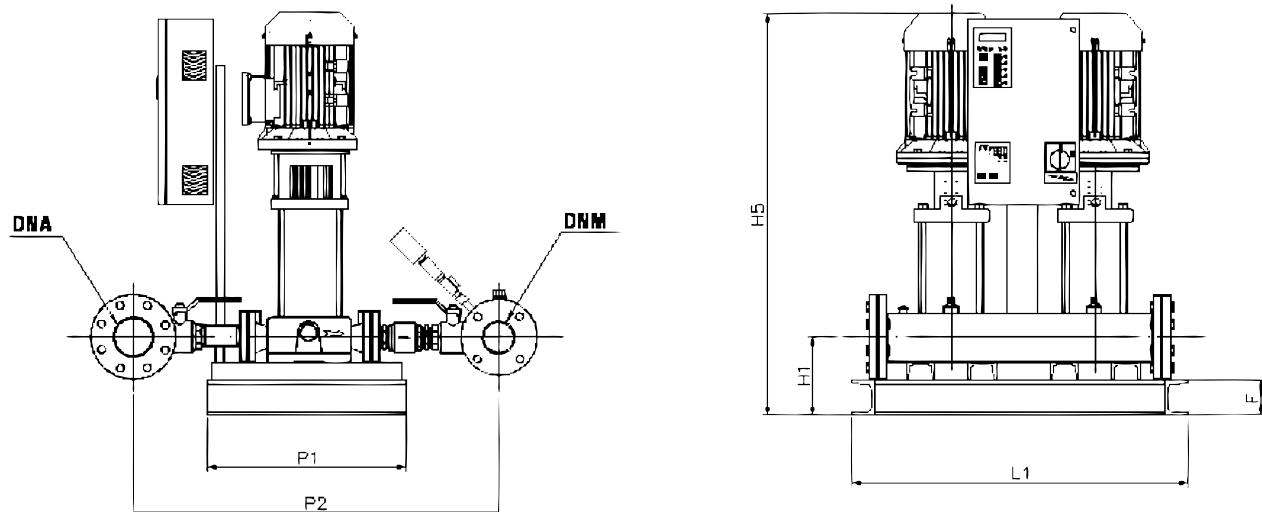


NOCCHI FCD20 - FCY20 PVM

VARIABLE SPEED PRESSURE BOOSTERS

HYDRAULIC PERFORMANCE

MODEL	P2	VOLT. (V)	l/min m³ / h	0	200	400	600	700	780
	kW			0	12	24	36	42	47
FCD20 PVM 15-3 F	2x3	3 ~ 400	m.c.a./m.c.w.	39.8	39.2	36.3	31	26.8	22
FCD20 PVM 15-5 F	2x4			68	66.9	62	52.7	45.7	38
FCD20 PVM 15-7 F	2x5.5			97	95	87	72	62	54
FCD20 PVM 15-9 F	2x7.5			124	121	113	94	80	68
FCY20 PVM 15-12 F	2x11			166	163	153	129	110	94



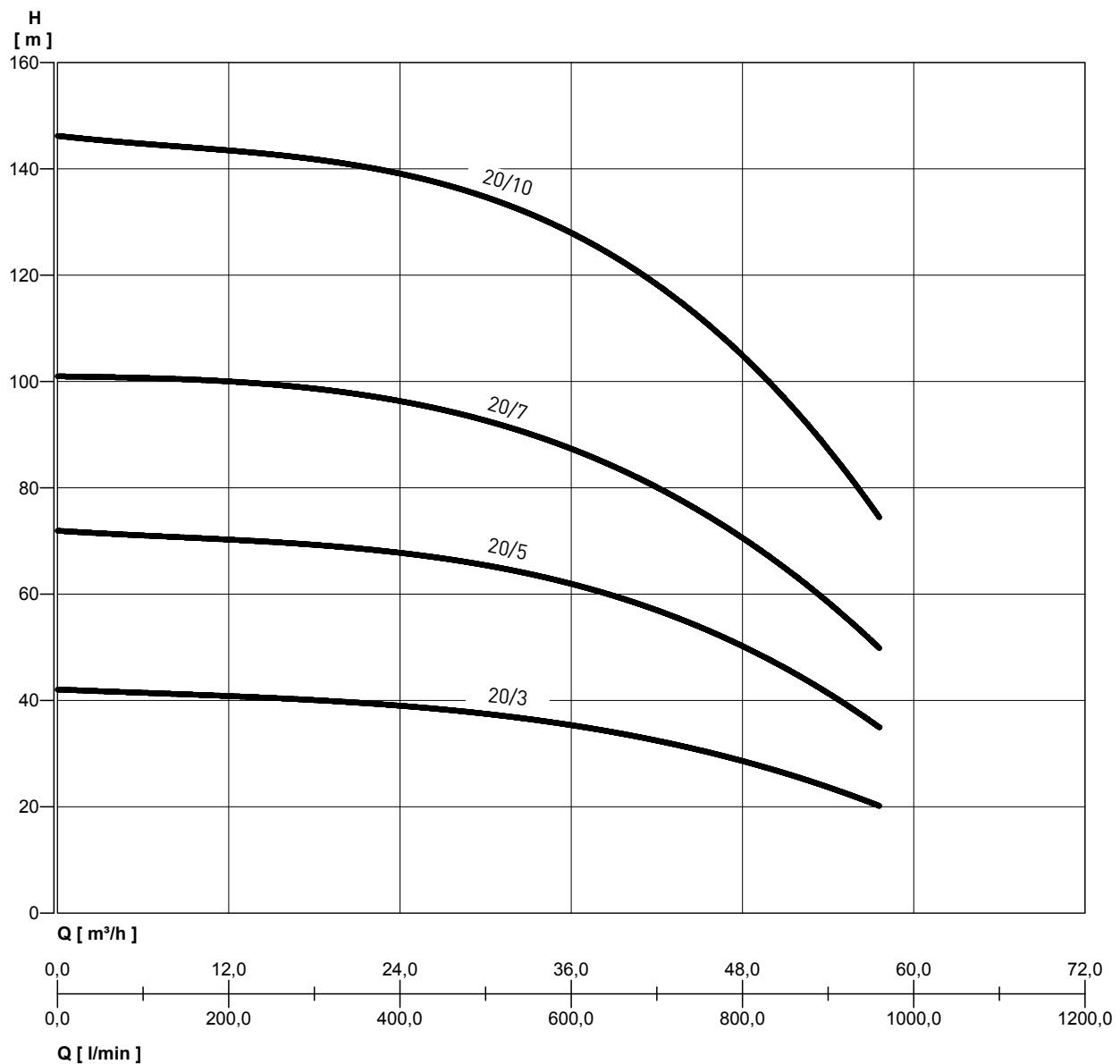
OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions mm.								WEIGHTS (Kg)	
	L1	P1	P2	H1	H5	DNA	DNM	F		
FCD20 PVM 15-3 F	730	610	860	190	1360	3"	2" 1/2	45	370	268
FCD20 PVM 15-5 F	730	610	860	190	1360	3"	2" 1/2	45	370	272
FCD20 PVM 15-7 F	730	610	860	190	1360	3"	2" 1/2	45	370	297
FCD20 PVM 15-9 F	730	610	860	190	1360	3"	2" 1/2	45	370	310
FCY20 PVM 15-12 F	730	610	860	190	1484	3"	2" 1/2	45	370	360

NOCCHI FCD20 - FCY20 PVM

VARIABLE SPEED PRESSURE BOOSTERS

HYDRAULIC PERFORMANCE

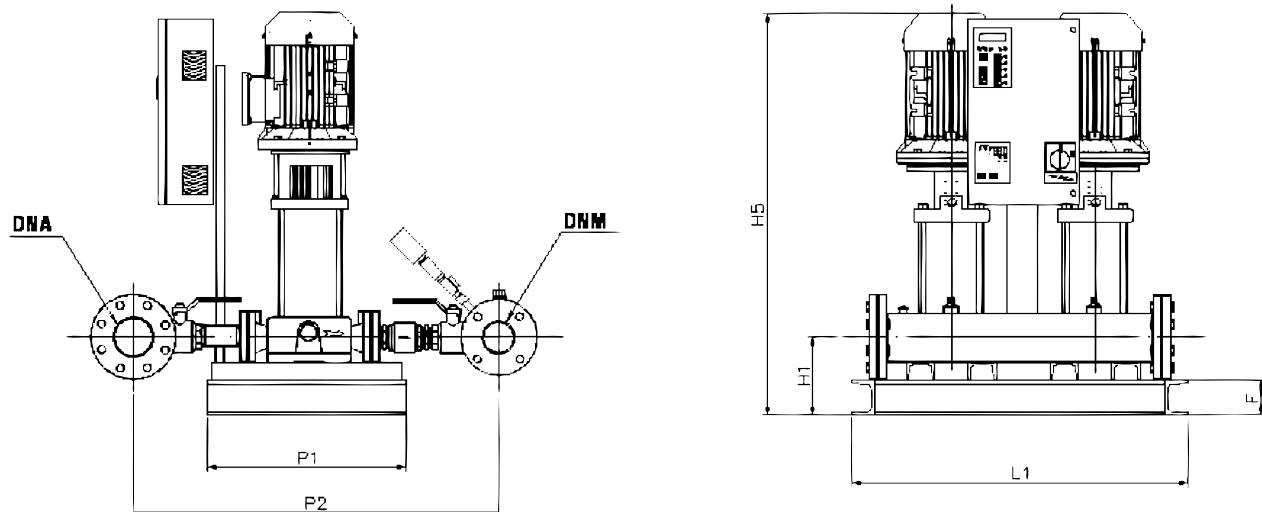


NOCCHI FCD20 - FCY20 PVM

VARIABLE SPEED PRESSURE BOOSTERS

HYDRAULIC PERFORMANCE

MODEL	P2	VOLT. (V)	Q	l/min m³/h	0	200	400	600	800	960
	kW				0	12	24	36	48	57.6
FCD20 PVM 20-3 F	2x4	3 ~ 400	m.c.a. / m.c.w.	42	41	39	35	29	20	
FCD20 PVM 20-5 F	2x5.5			72	70	68	62	50	35	
FCD20 PVM 20-7 F	2x7.5			101	100	96	88	70	50	
FCY20 PVM 20-10 F	2x11			146	144	139	127	106	74	

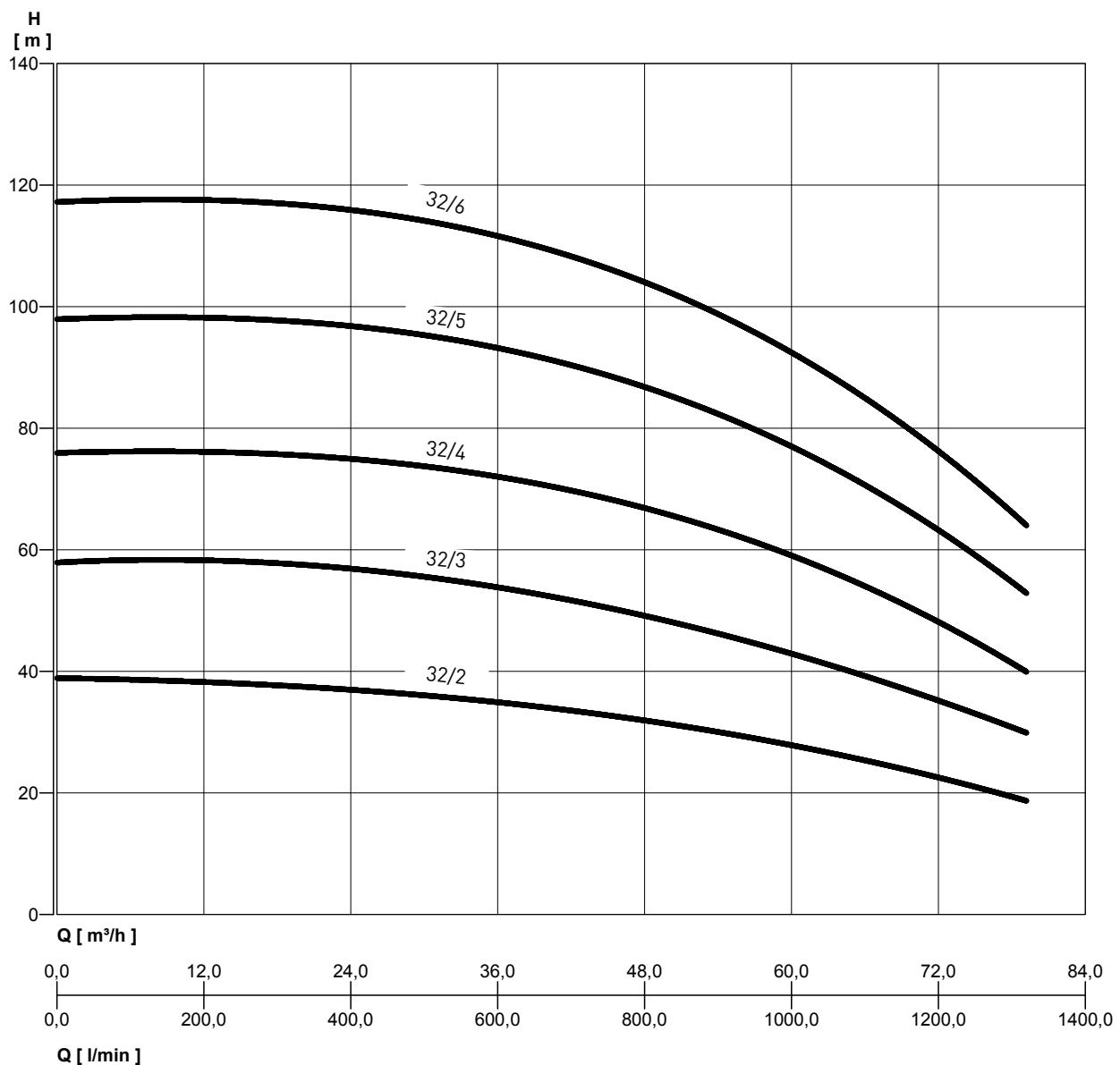


OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions mm.								WEIGHTS (Kg)	
	L1	P1	P2	H1	H5	DNA	DNM	F		
FCD20 PVM 20-3 F	730	610	860	190	1300	2" 1/2	2" 1/2	45	370	274
FCD20 PVM 20-5 F	730	610	860	190	1300	2" 1/2	2" 1/2	45	370	312
FCD20 PVM 20-7 F	730	610	860	190	1300	2" 1/2	2" 1/2	45	370	322
FCY20 PVM 20-10 F	730	610	860	190	1405	2" 1/2	2" 1/2	45	370	355

NOCCHI FCD20 - FCY20 PVM VARIABLE SPEED PRESSURE BOOSTERS

HYDRAULIC PERFORMANCE

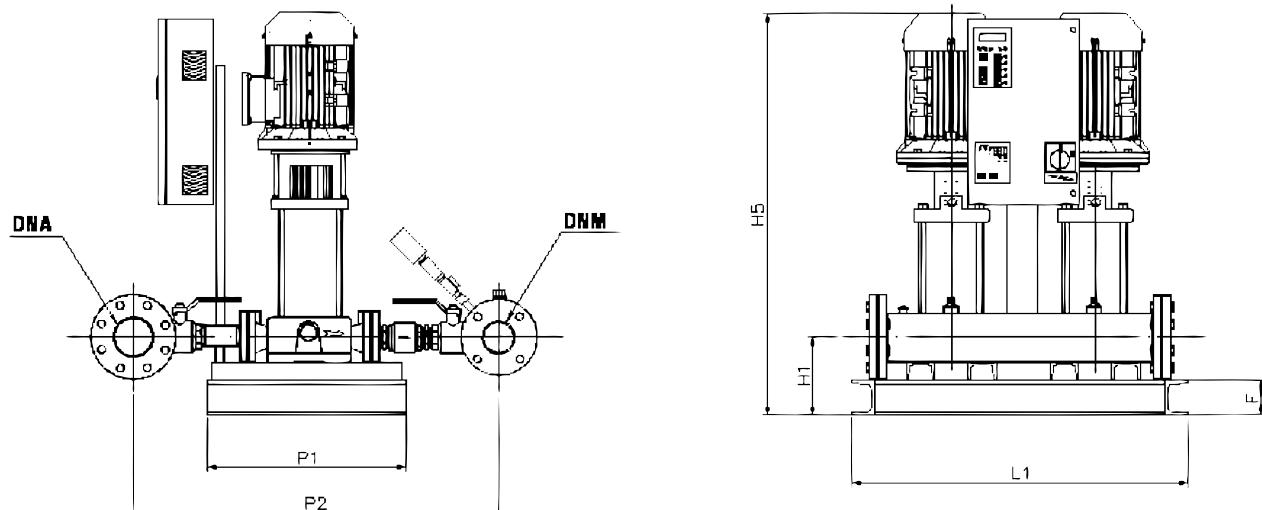


NOCCHI FCD20 - FCY20 PVM

VARIABLE SPEED PRESSURE BOOSTERS

HYDRAULIC PERFORMANCE

MODEL	P2	VOLT. (V)	l/min m³ / h	0	200	400	600	800	1000	1200	1320
	kW			0	12	24	36	48	60	72	79.2
FCD20 PVM 32-2 F	2x4	3 ~ 400	m.c.a./m.c.w.	39	38	37	35	32	28	22	19
FCD20 PVM 32-3 F	2x5.5			58	58	57	54	49	43	35	30
FCD20 PVM 32-4 F	2x7.5			76	76	75	72	67	59	48	40
FCY20 PVM 32-5 F	2x11			98	98	97	93	87	77	63	53
FCY20 PVM 32-6 F	2x11			117	118	116	111	104	93	76	64



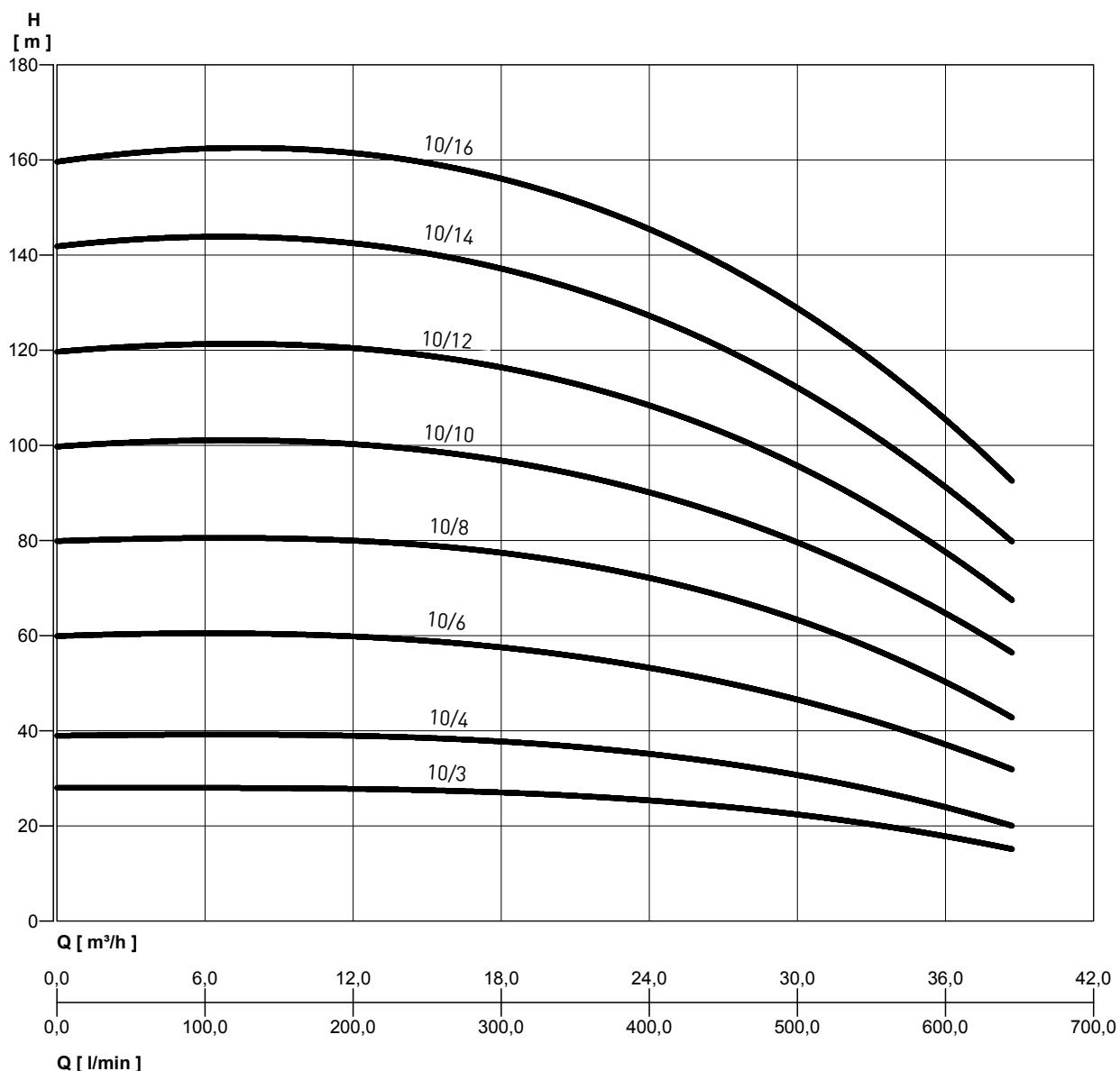
OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions mm.								WEIGHTS (Kg)	
	L1	P1	P2	H1	H5	DNA	DNM	F		
FCD20 PVM 32-2 F	860	700	1060	230	1420	4"	3"	80	440	420
FCD20 PVM 32-3 F	860	700	1060	230	1420	4"	3"	80	440	434
FCD20 PVM 32-4 F	860	700	1060	230	1420	4"	3"	80	440	460
FCY20 PVM 32-5 F	860	700	1060	230	1420	4"	3"	80	440	534
FCY20 PVM 32-6 F	860	700	1060	230	1469	4"	3"	80	440	570

NOCCHI FCD30 PVM

VARIABLE SPEED PRESSURE BOOSTERS

HYDRAULIC PERFORMANCE

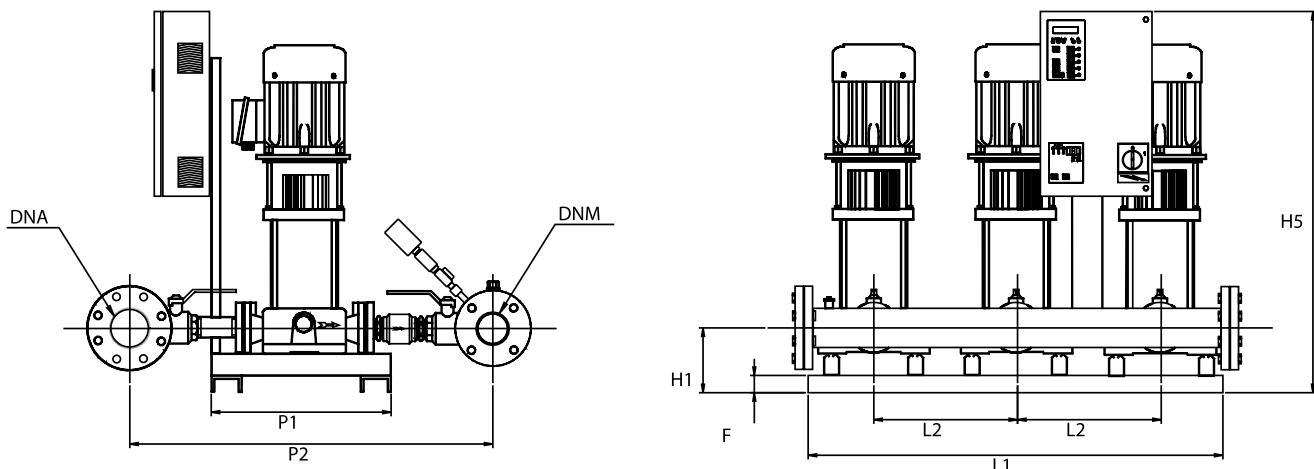


NOCCHI FCD30 PVM

VARIABLE SPEED PRESSURE BOOSTERS

HYDRAULIC PERFORMANCE

MODEL	P2	VOLT. (V)	Q	l/min m³/h	0	150	300	450	600	645
	kW				0	9	18	27	36	39
FCD30 PVM 10-3 F	3x1.1	3 ~ 400	m.c.a./m.c.w.	28	28	27	24	18	15	
FCD30 PVM 10-4 F	3x1.5			39	39	38	33	24	20	
FCD30 PVM 10-6 F	3x2.2			60	60	58	50	37	32	
FCD30 PVM 10-8 F	3x3			80	80	78	68	50	43	
FCD30 PVM 10-10 F	3x4			100	100	98	85	64	57	
FCD30 PVM 10-12 F	3x4			120	120	118	102	77	68	
FCD30 PVM 10-14 F	3x5.5			142	143	138	120	91	80	
FCD30 PVM 10-16 F	3x5.5			160	161	158	137	105	93	



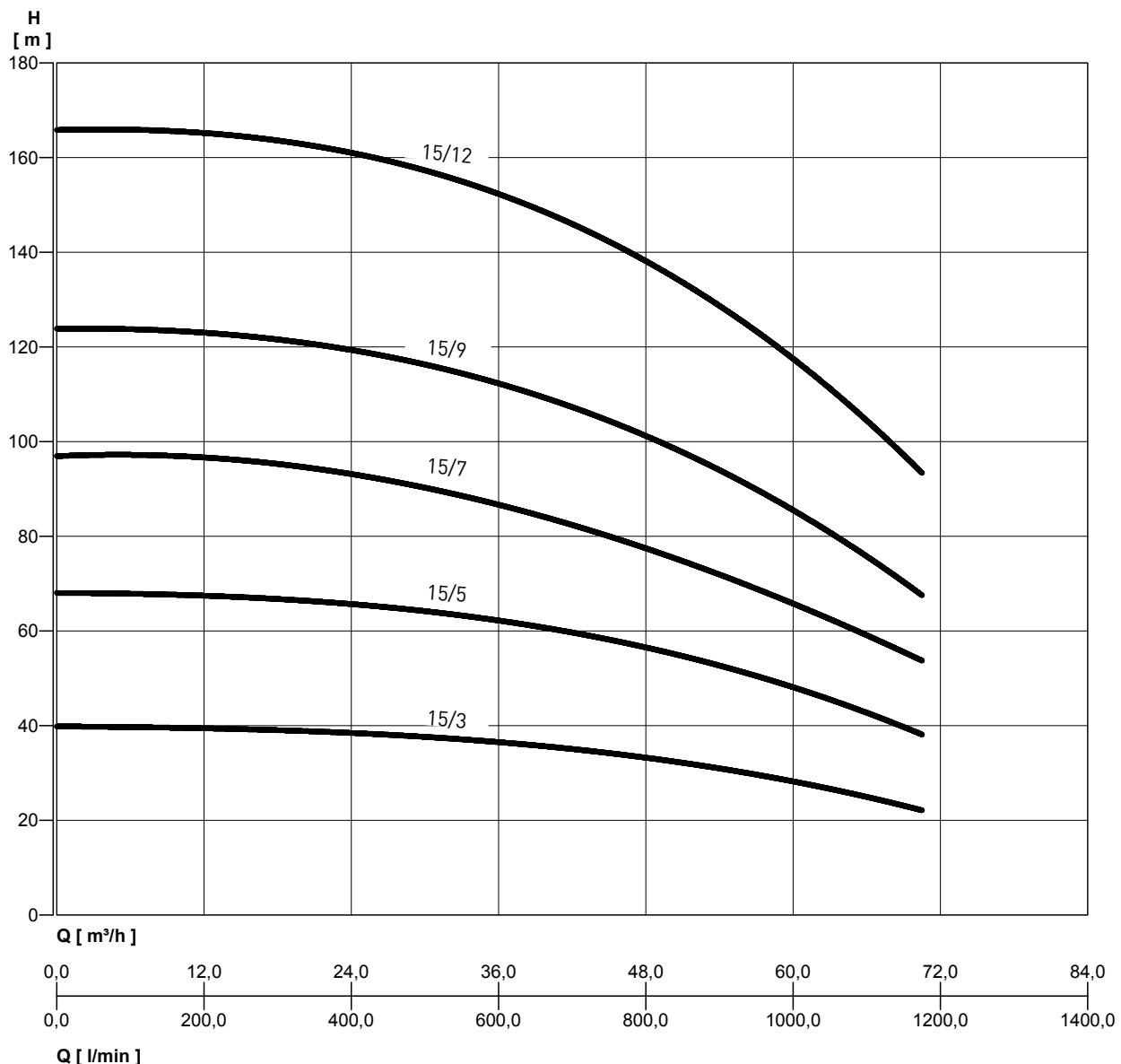
OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions mm.									WEIGHTS (Kg)
	L1	P1	P2	H1	H5	DNA	DNM	F	L2	
FCD30 PVM 10-3 F	1100	610	720	180	1400	3"	2" 1/2	45	370	258
FCD30 PVM 10-4 F	1100	610	720	180	1400	3"	2" 1/2	45	370	282
FCD30 PVM 10-6 F	1100	610	720	180	1400	3"	2" 1/2	45	370	291
FCD30 PVM 10-8 F	1100	610	720	180	1400	3"	2" 1/2	45	370	315
FCD30 PVM 10-10 F	1100	610	720	180	1400	3"	2" 1/2	45	370	318
FCD30 PVM 10-12 F	1100	610	720	180	1400	3"	2" 1/2	45	370	324
FCD30 PVM 10-14 F	1100	610	720	180	1400	3"	2" 1/2	45	370	354
FCD30 PVM 10-16 F	1100	610	720	180	1400	3"	2" 1/2	45	370	364

NOCCHI FCD30-FCY30 PVM

VARIABLE SPEED PRESSURE BOOSTERS

HYDRAULIC PERFORMANCE

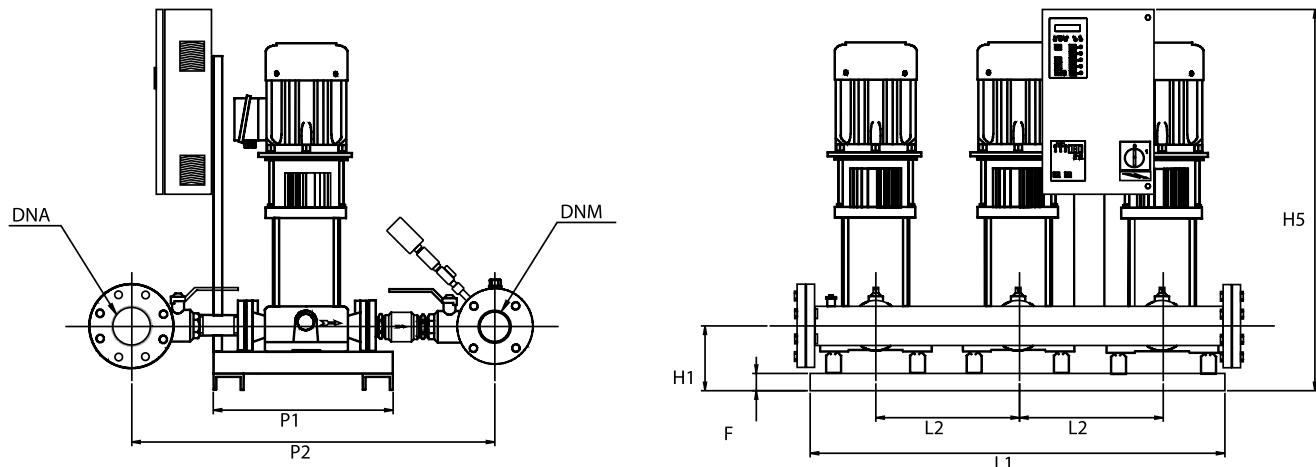


NOCCHI FCD30-FCY30 PVM

VARIABLE SPEED PRESSURE BOOSTERS

HYDRAULIC PERFORMANCE

MODEL	P2	VOLT. (V)	l/min m³ / h	0	300	600	900	1050	1175
	kW			0	18	36	54	63	70.5
FCD30 PVM 15-3 F	3x3	3 ~ 400	m.c.a./m.c.w.	39.8	39.2	36.3	31	26.8	22
FCD30 PVM 15-5 F	3x4			68	66.9	62	52.7	45.7	38
FCD30 PVM 15-7 F	3x5.5			97	95	87	72	62	54
FCD30 PVM 15-9 F	3x7.5			124	121	113	94	80	68
FCY30 PVM 15-12 F	3x11			166	163	153	129	110	94

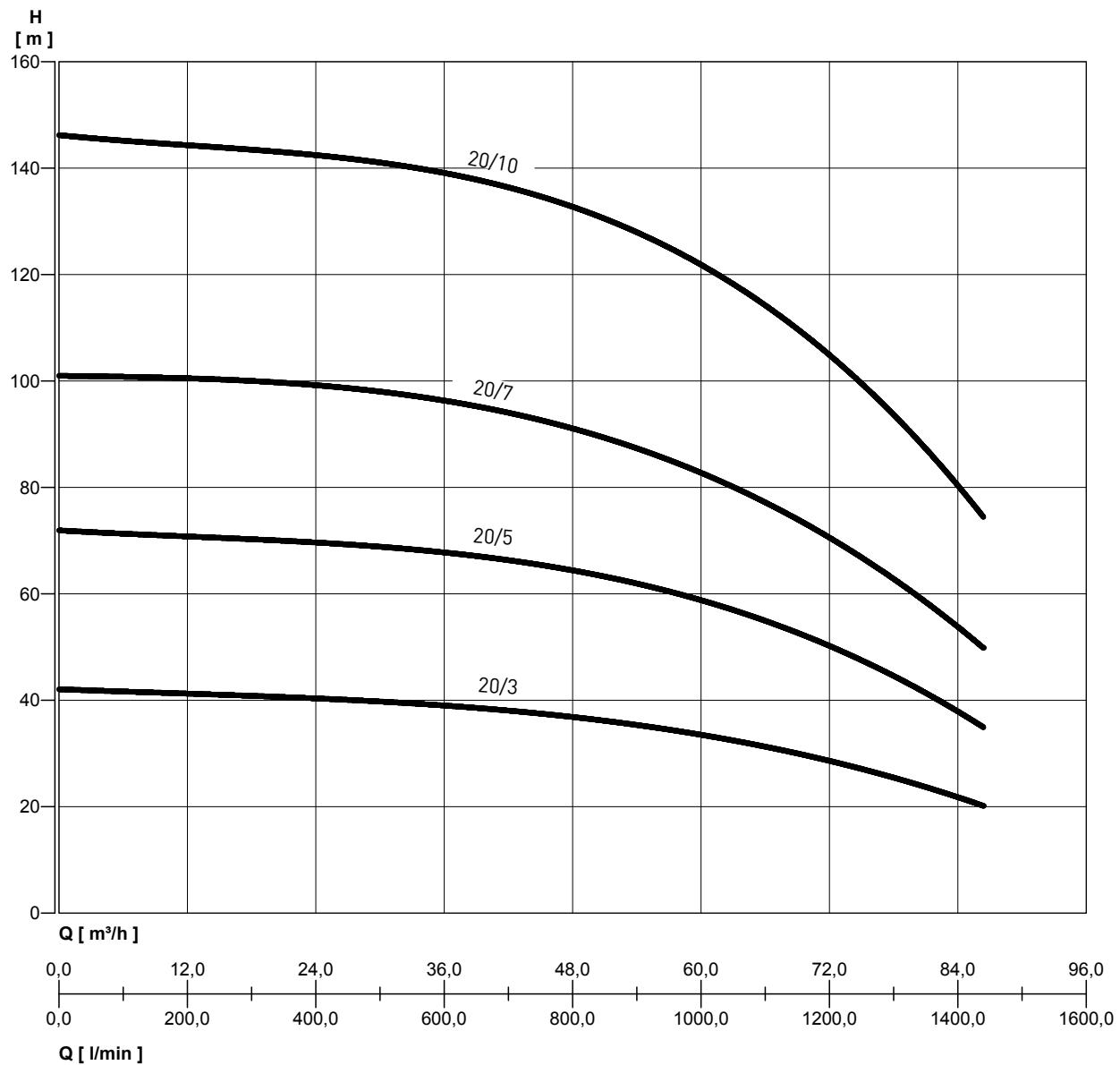


OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions mm.								WEIGHTS (Kg)	
	L1	P1	P2	H1	H5	DNA	DNM	F	L2	
FCD30 PVM 15-3 F	730	610	860	190	1360	3"	2" 1/2	45	370	330
FCD30 PVM 15-5 F	730	610	860	190	1360	3"	2" 1/2	45	370	375
FCD30 PVM 15-7 F	730	610	860	190	1360	3"	2" 1/2	45	370	431
FCD30 PVM 15-9 F	730	610	860	190	1360	3"	2" 1/2	45	370	460
FCY30 PVM 15-12 F	730	610	860	190	1484	3"	2" 1/2	45	370	540

NOCCHI FCD30-FCY30 PVM VARIABLE SPEED PRESSURE BOOSTERS

HYDRAULIC PERFORMANCE

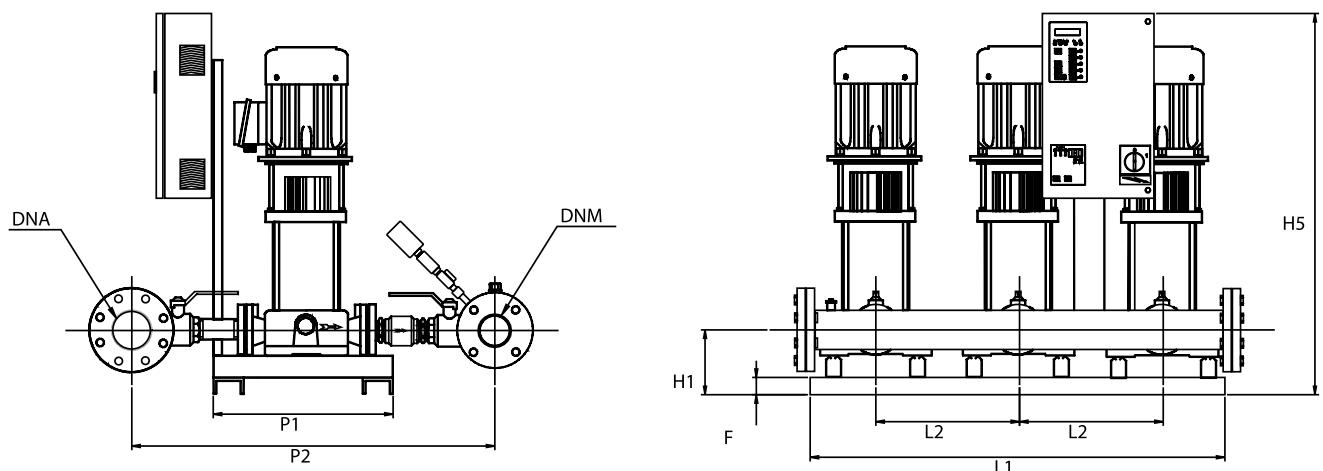


NOCCHI FCD30-FCY30 PVM

VARIABLE SPEED PRESSURE BOOSTERS

HYDRAULIC PERFORMANCE

MODEL	P2	VOLT. (V)	Q	l/min m³/h	0	300	600	900	1200	1440
	kW				0	18	36	54	72	86.4
FCD30 PVM 20-3 F	3x4	3 ~ 400	m.c.a. / m.c.w.	42	41	39	35	29	20	
FCD30 PVM 20-5 F	3x5.5			72	70	68	62	50	35	
FCD30 PVM 20-7 F	3x7.5			101	100	96	88	70	50	
FCY30 PVM 20-10 F	3x11			146	144	139	127	106	74	

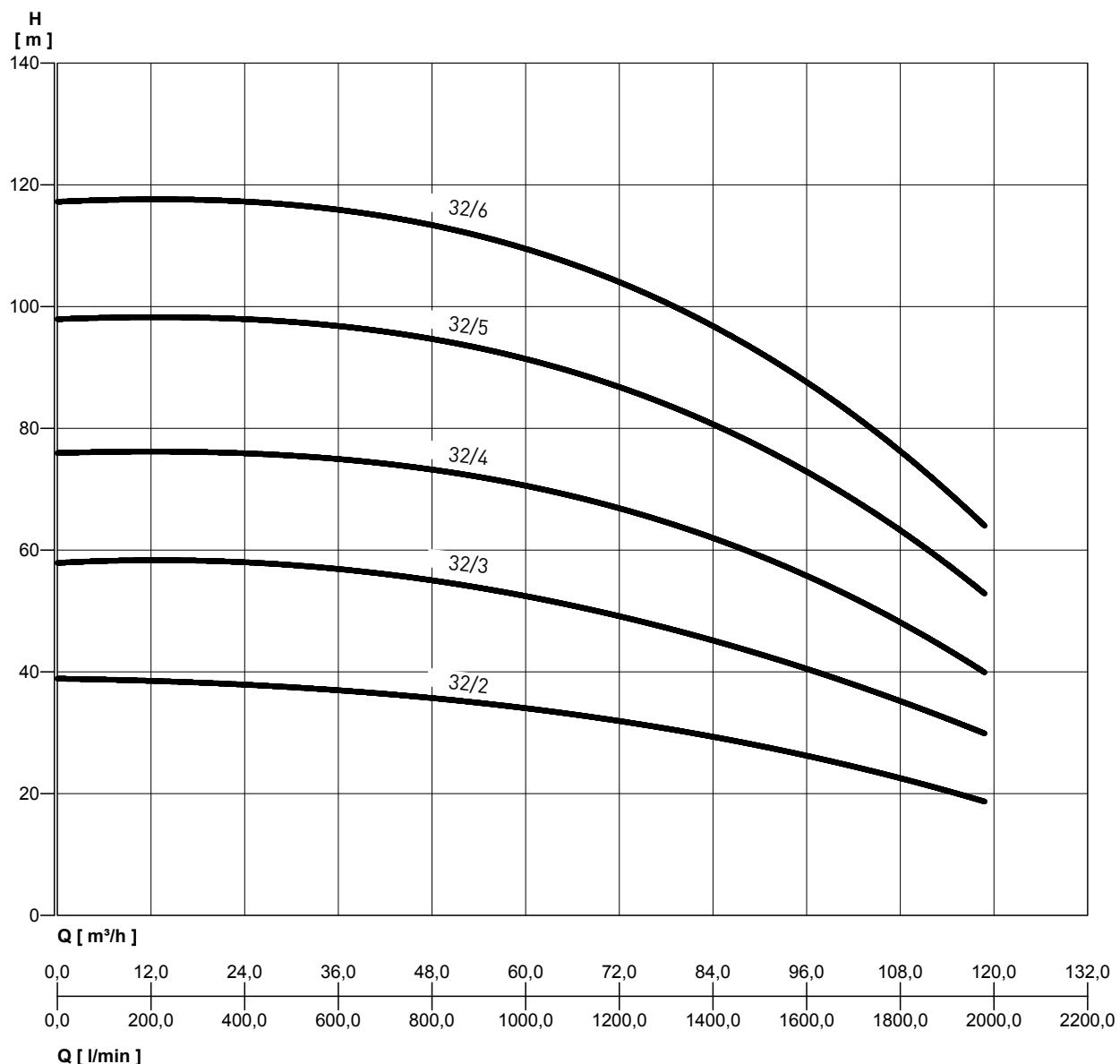


OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions mm.								WEIGHTS (Kg)	
	L1	P1	P2	H1	H5	DNA	DNM	F		
FCD30 PVM 20-3 F	730	610	860	190	1360	3"	2" 1/2	45	370	411
FCD30 PVM 20-5 F	730	610	860	190	1360	3"	2" 1/2	45	370	468
FCD30 PVM 20-7 F	730	610	860	190	1360	3"	2" 1/2	45	370	483
FCY30 PVM 20-10 F	730	610	860	190	1405	3"	2" 1/2	45	370	532

NOCCHI FCD30 - FCY30 PVM VARIABLE SPEED PRESSURE BOOSTERS

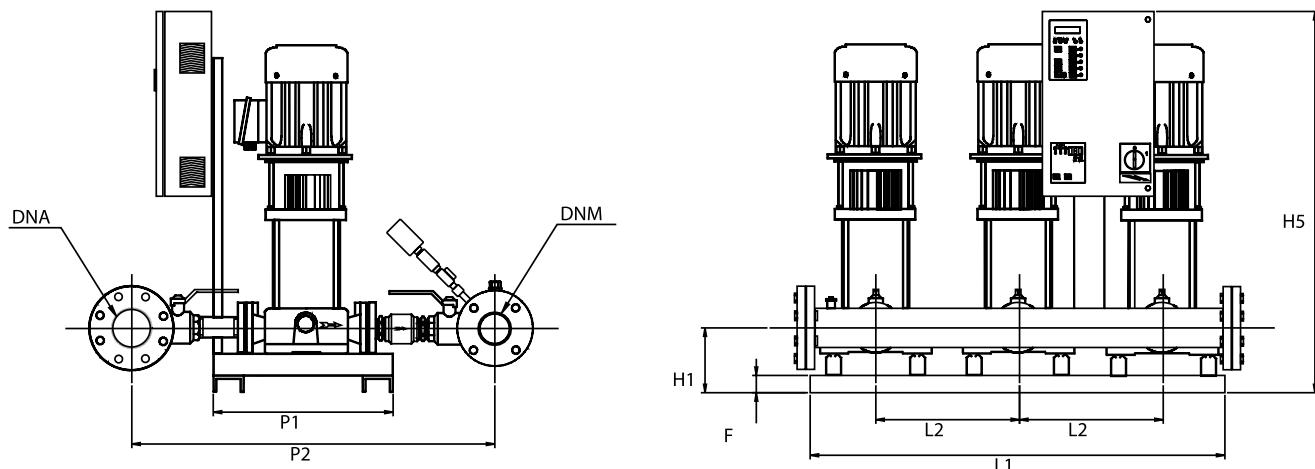
HYDRAULIC PERFORMANCE



NOCCHI FCD30 - FCY30 PVM VARIABLE SPEED PRESSURE BOOSTERS

HYDRAULIC PERFORMANCE

MODEL	P2	VOLT. (V)	l/min	0	300	600	900	1200	1500	1800	1980
	kW			m ³ / h	0	18	36	54	72	90	118.8
FCD30 PVM 32-2	3x4	3 ~ 400	m.c.a./m.c.w.	39	38	37	35	32	28	22	19
FCD30 PVM 32-3	3x5.5			58	58	57	54	49	43	35	30
FCD30 PVM 32-4	3x7.5			76	76	75	72	67	59	48	40
FCY30 PVM 32-5	3x11			98	98	97	93	87	77	63	53
FCY30 PVM 32-6	3x11			117	118	116	111	104	93	76	64



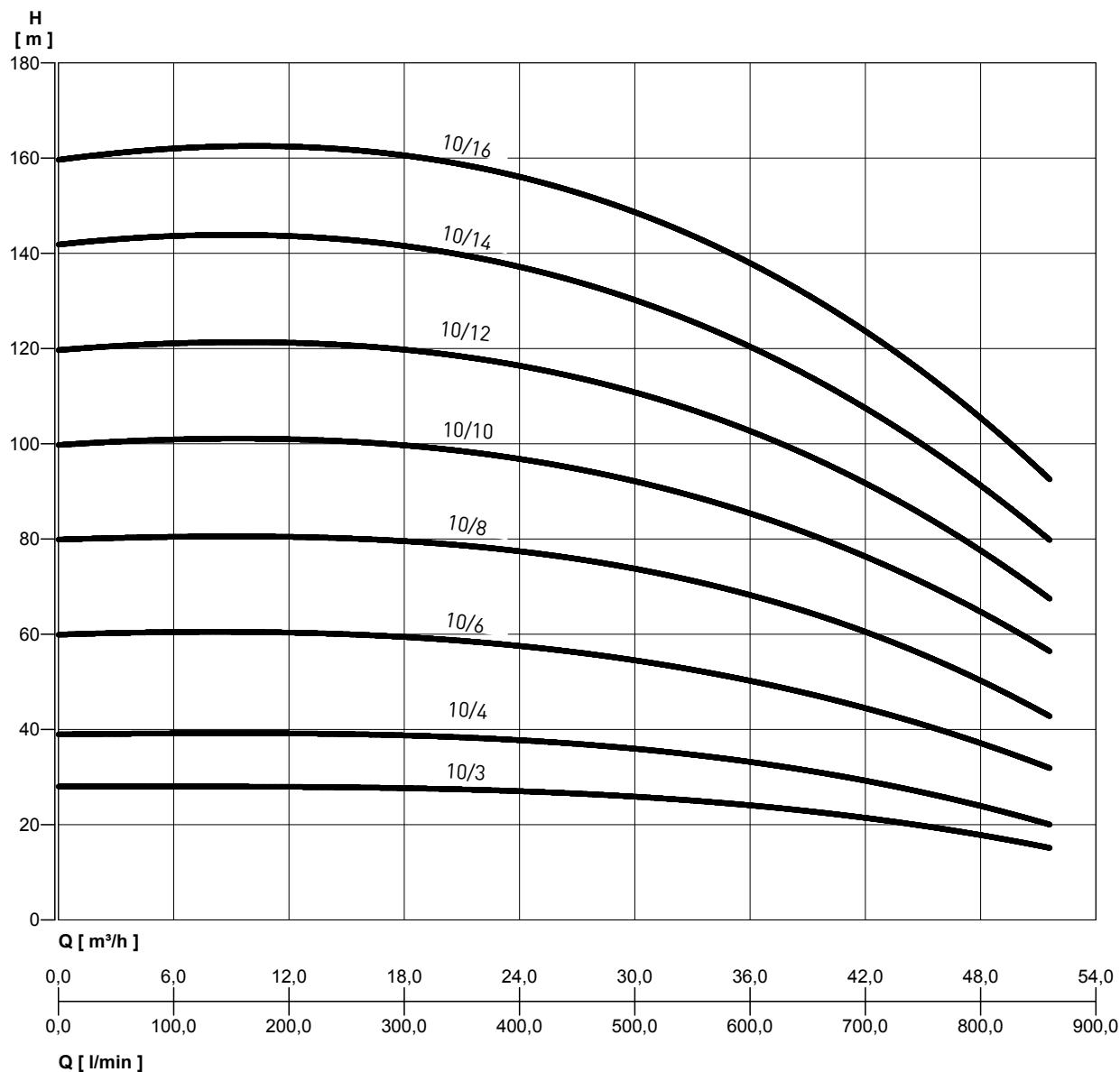
OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions mm.									WEIGHTS (Kg)
	L1	P1	P2	H1	H5	DNA	DNM	F	L2	
FCD30 PVM 32-2	1300	700	1060	230	1520	5"	3"	80	440	631
FCD30 PVM 32-3	1300	700	1060	230	1520	5"	3"	80	440	645
FCD30 PVM 32-4	1300	700	1060	230	1520	5"	3"	80	440	677
FCY30 PVM 32-5	1300	700	1060	230	1520	5"	3"	80	440	797
FCY30 PVM 32-6	1300	700	1060	230	1520	5"	3"	80	440	860

NOCCHI FCD40 PVM

VARIABLE SPEED PRESSURE BOOSTERS

HYDRAULIC PERFORMANCE

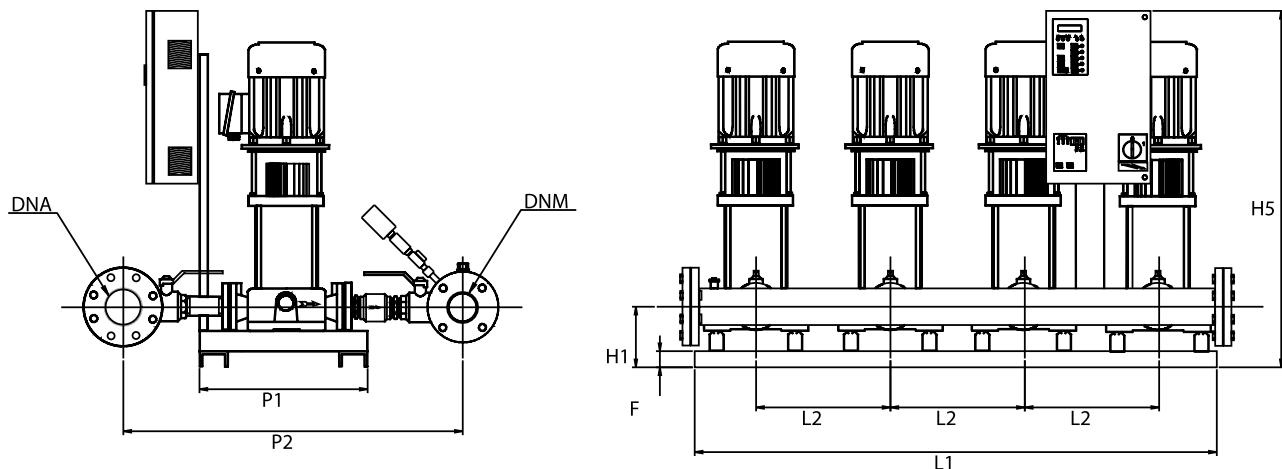


NOCCHI FCD40 PVM

VARIABLE SPEED PRESSURE BOOSTERS

HYDRAULIC PERFORMANCE

MODEL	P2	VOLT. (V)	Q	l/min	0	200	400	600	800	860
	kW			m ³ /h	0	12	24	36	48	52
FCD40 PVM 10-3 F	4x1.1	3 ~ 400	m.c.a./mc.w.	28	28	27	24	18	15	
FCD40 PVM 10-4 F	4x1.5			39	39	38	33	24	20	
FCD40 PVM 10-6 F	4x2.2			60	60	58	50	37	32	
FCD40 PVM 10-8 F	4x3			80	80	78	68	50	43	
FCD40 PVM 10-10 F	4x4			100	100	98	85	64	57	
FCD40 PVM 10-12 F	4x4			120	120	118	102	77	68	
FCD40 PVM 10-14 F	4x5.5			142	143	138	120	91	80	
FCD40 PVM 10-16 F	4x5.5			160	161	158	137	105	93	

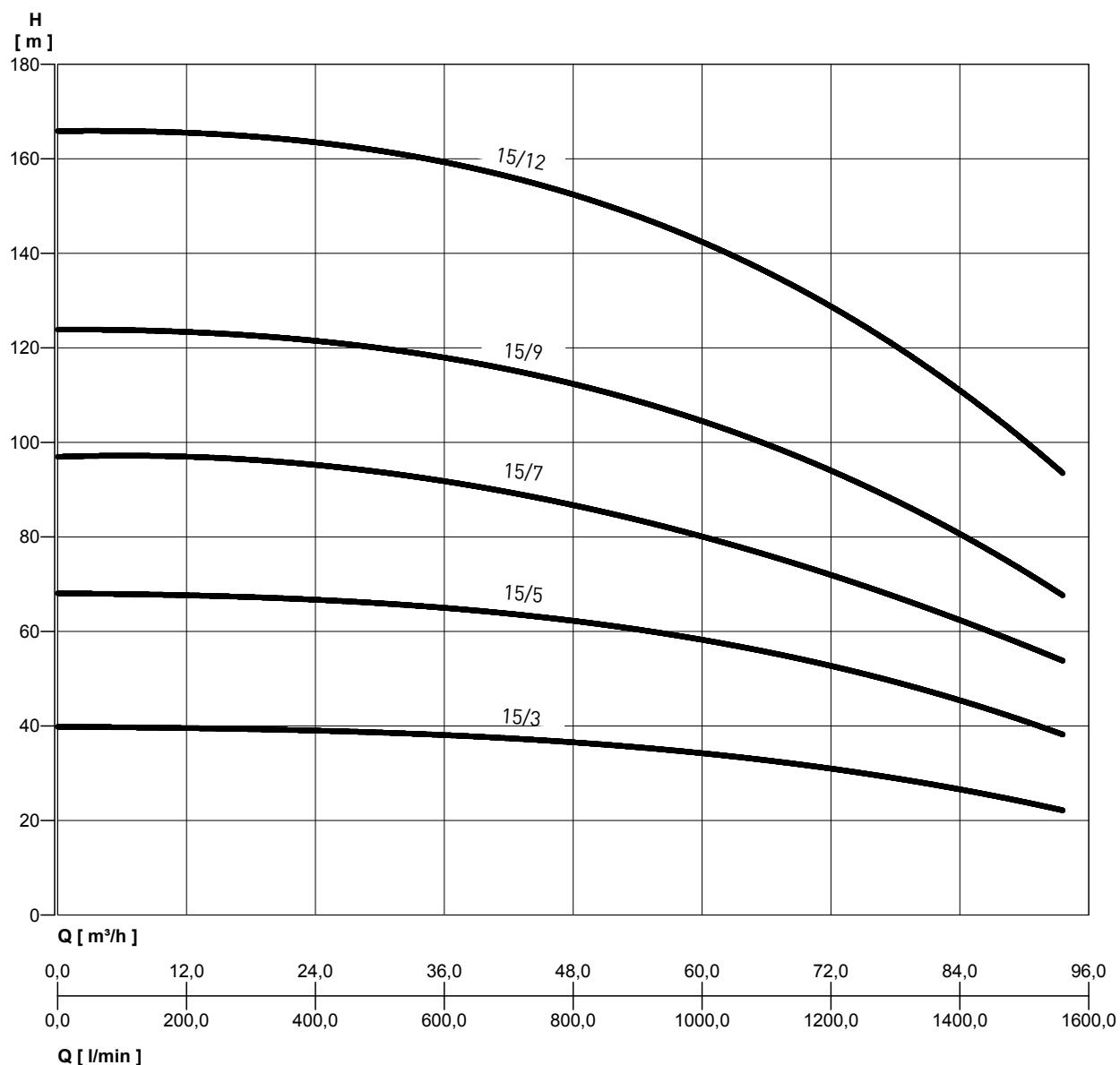


OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions mm.								WEIGHTS (Kg)	
	L1	P1	P2	H1	H5	DNA	DNM	F		
FCD40 PVM 10-3 F	1500	610	720	180	1300	3"	3"	45	370	314
FCD40 PVM 10-4 F	1500	610	720	180	1300	3"	3"	45	370	322
FCD40 PVM 10-6 F	1500	610	720	180	1300	3"	3"	45	370	358
FCD40 PVM 10-8 F	1500	610	720	180	1300	3"	3"	45	370	362
FCD40 PVM 10-10 F	1500	610	720	180	1300	3"	3"	45	370	366
FCD40 PVM 10-12 F	1500	610	720	180	1300	3"	3"	45	370	376
FCD40 PVM 10-14 F	1500	610	720	180	1300	3"	3"	45	370	316
FCD40 PVM 10-16 F	1500	610	720	180	1300	3"	3"	45	370	336

NOCCHI FCD40 - FCY40 PVM VARIABLE SPEED PRESSURE BOOSTERS

HYDRAULIC PERFORMANCE

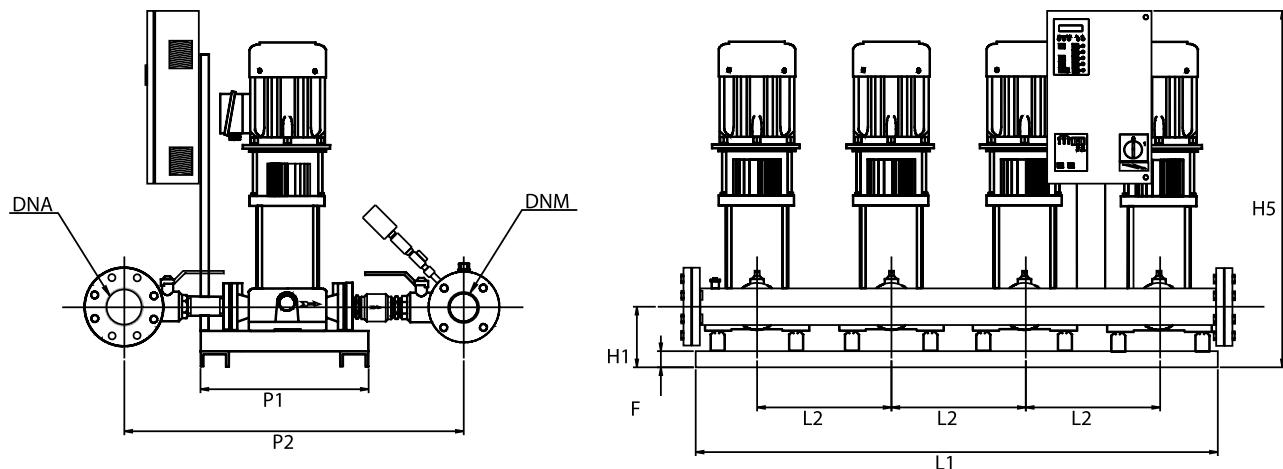


NOCCHI FCD40 - FCY40 PVM

VARIABLE SPEED PRESSURE BOOSTERS

HYDRAULIC PERFORMANCE

MODEL	P2	VOLT. (V)	Q	l/min m³/h	0	400	800	1200	1400	1560
	kW				0	24	48	72	84	94
FCD40 PVM 15-3 F	4x3	3 ~ 400	m.c.a. / m.c.w.	39.8	39.2	36.3	31	26.8	22	
FCD40 PVM 15-5 F	4x4			68	66.9	62	52.7	45.7	38	
FCD40 PVM 15-7 F	4x5.5			97	95	87	72	62	54	
FCD40 PVM 15-9 F	4x7.5			124	121	113	94	80	68	
FCY40 PVM 15-12 F	4x11			166	163	153	129	110	94	



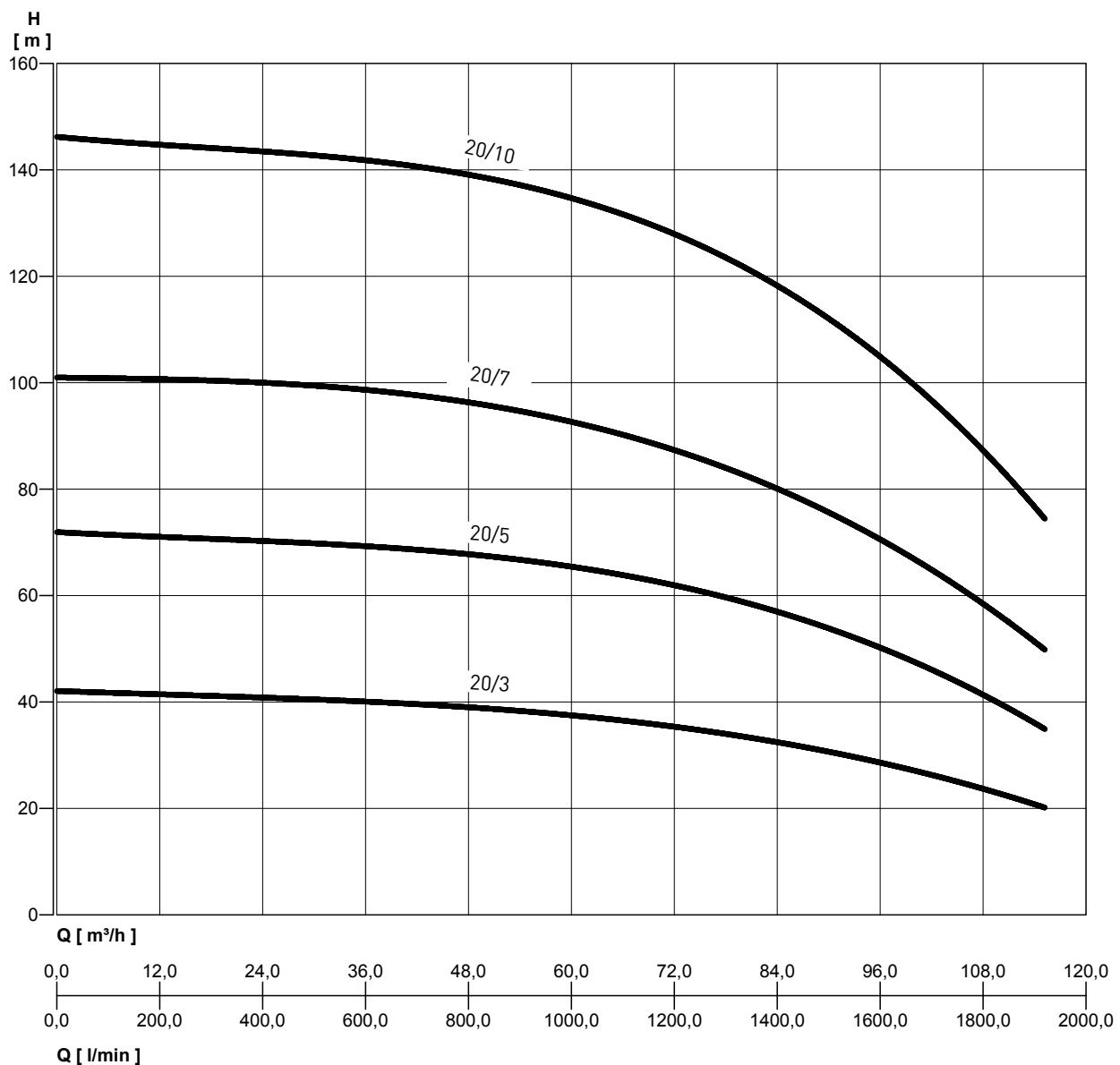
OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions mm.									WEIGHTS (Kg)
	L1	P1	P2	H1	H5	DNA	DNM	F	L2	
FCD40 PVM 15-3 F	1470	610	860	190	1520	5"	4"	45	370	393
FCD40 PVM 15-5 F	1470	610	860	190	1520	5"	4"	45	370	396
FCD40 PVM 15-7 F	1470	610	860	190	1520	5"	4"	45	370	423
FCD40 PVM 15-9 F	1470	610	860	190	1520	5"	4"	45	370	440
FCY40 PVM 15-12 F	1470	610	860	190	1520	5"	4"	45	370	460

NOCCHI FCD40 - FCY40 PVM

VARIABLE SPEED PRESSURE BOOSTERS

HYDRAULIC PERFORMANCE

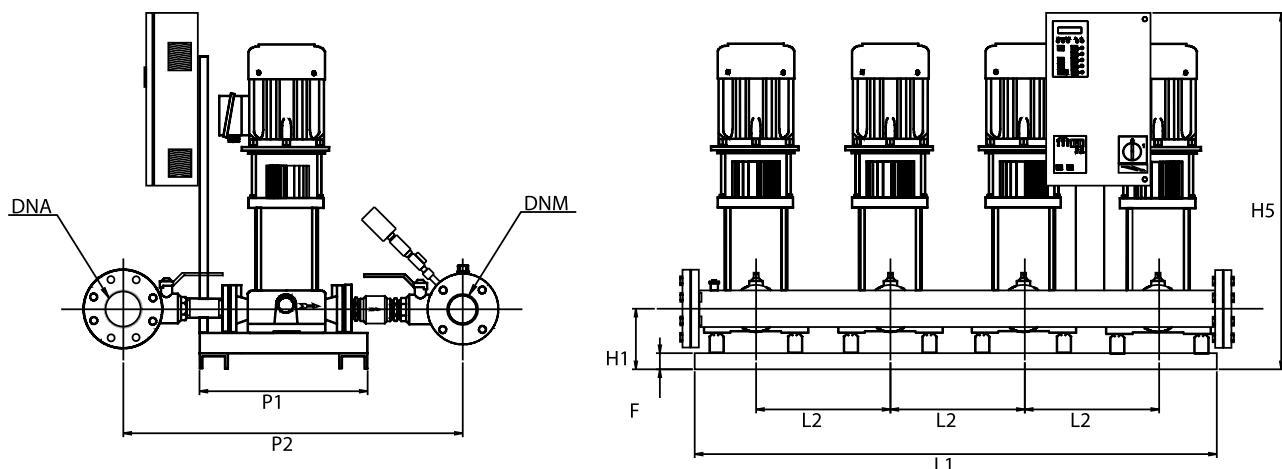


NOCCHI FCD40 - FCY40 PVM

VARIABLE SPEED PRESSURE BOOSTERS

HYDRAULIC PERFORMANCE

MODEL	P2	VOLT. (V)	Q m³/h	l/min m.c.a./m.c.w.	0	400	800	1200	1600	1920
	kW				0	24	48	72	96	115.2
FCD40 PVM 20-3 F	4x4	3 ~ 400	m.c.a./m.c.w.	42	41	39	35	29	20	
FCD40 PVM 20-5 F	4x5.5			72	70	68	62	50	35	
FCD40 PVM 20-7 F	4x7.5			101	100	96	88	70	50	
FCY40 PVM 20-10 F	4x11			146	144	139	127	106	74	

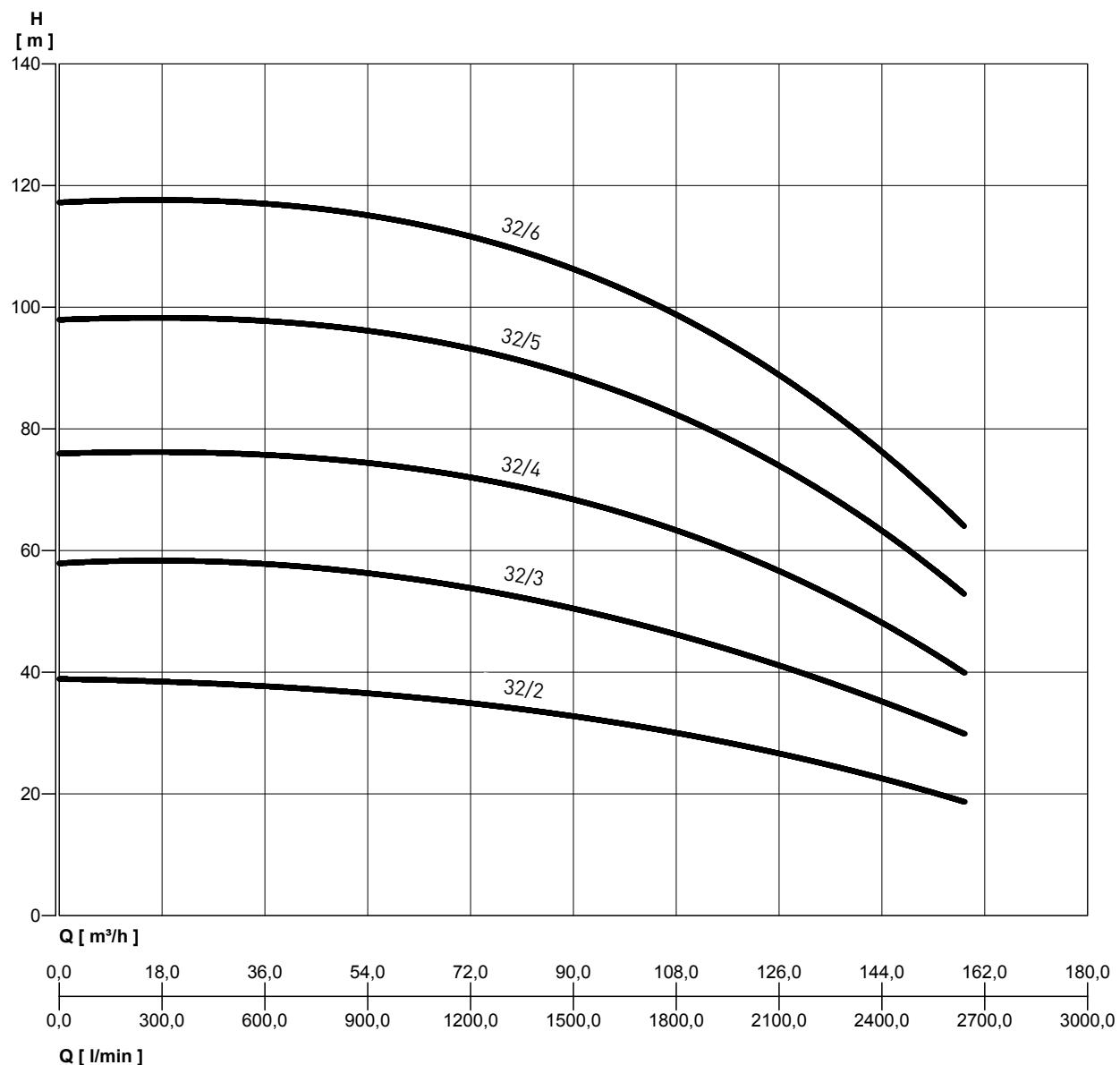


OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions mm.								WEIGHTS (Kg)	
	L1	P1	P2	H1	H5	DNA	DNM	F		
FCD40 PVM 20-3 F	1470	610	860	190	1520	5"	4"	45	370	423
FCD40 PVM 20-5 F	1470	610	860	190	1520	5"	4"	45	370	636
FCD40 PVM 20-7 F	1470	610	860	190	1520	5"	4"	45	370	573
FCY40 PVM 20-10 F	1470	610	860	190	1520	5"	4"	45	370	740

NOCCHI FCD40 - FCY40 PVM VARIABLE SPEED PRESSURE BOOSTERS

HYDRAULIC PERFORMANCE

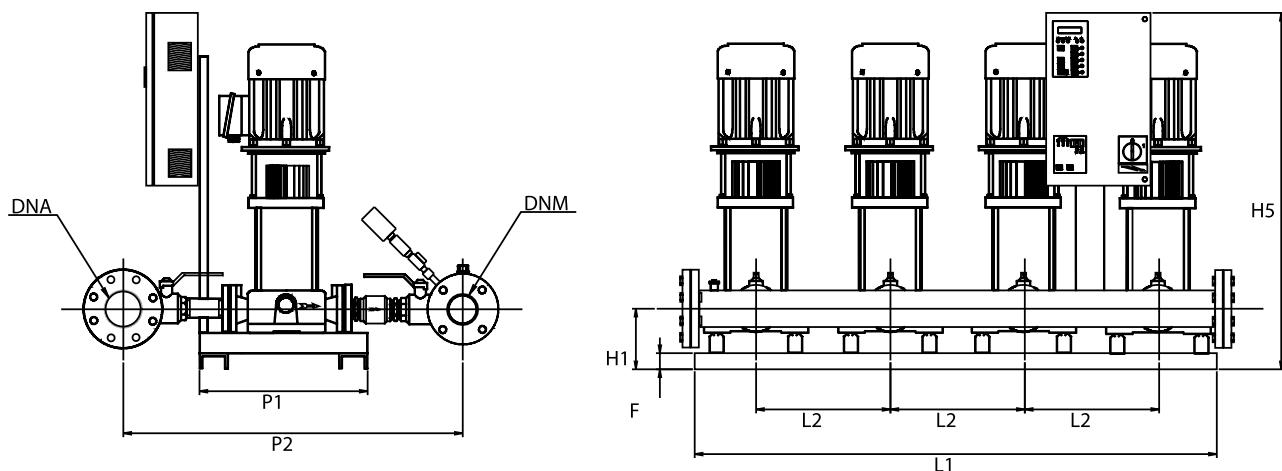


NOCCHI FCD40 - FCY40 PVM

VARIABLE SPEED PRESSURE BOOSTERS

HYDRAULIC PERFORMANCE

MODEL	P2	VOLT. (V)	Q	l/min m³/h	0	400	800	1200	1600	2000	2400	2640
	kW				0	24	48	72	96	120	144	158.4
FCD40 PVM 32-2 F	4x4	3 ~ 400	m.c.a./m.c.w.	39	38	37	35	32	28	22	19	
FCD40 PVM 32-3 F	4x5.5			58	58	57	54	49	43	35	30	
FCD40 PVM 32-4 F	4x7.5			76	76	75	72	67	59	48	40	
FCY40 PVM 32-5 F	4x11			98	98	97	93	87	77	63	53	
FCY40 PVM 32-6 F	4x11			117	118	116	111	104	93	76	64	



OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions mm.									WEIGHTS (Kg)
	L1	P1	P2	H1	H5	DNA	DNM	F	L2	
FCD40 PVM 32-2 F	1740	700	1060	230	1520	6"	5"	80	440	628
FCD40 PVM 32-3 F	1740	700	1060	230	1520	6"	5"	80	440	783
FCD40 PVM 32-4 F	1740	700	1060	230	1520	6"	5"	80	440	908
FCY40 PVM 32-5 F	1740	700	1060	230	1520	6"	5"	80	440	1066
FCY40 PVM 32-6 F	1740	700	1060	230	1520	6"	5"	80	440	1140

NOCCHI Pressure boosters

HOW TO CHOOSE A PRESSURE UNIT

The essential things you need to know to choose a pressure unit are: the water flow required at the time of maximum use, the total head of the pressure gauge.

The flow rate required can be observed in the average statistical value diagram below (Fig. n.1).

The calculation of the total head of the pressure gauge (corresponding to the minimum operating pressure of the unit) provides for three different cases: supply from storage facilities situated at the same level of the unit (A), supply from an aqueduct situated above the

unit (B), supply from a well situated below the unit (C).

Case [A]: add the maximum height of the collection point to the pressure value required in that point plus any pressure drops. (see example Fig. n. 2)

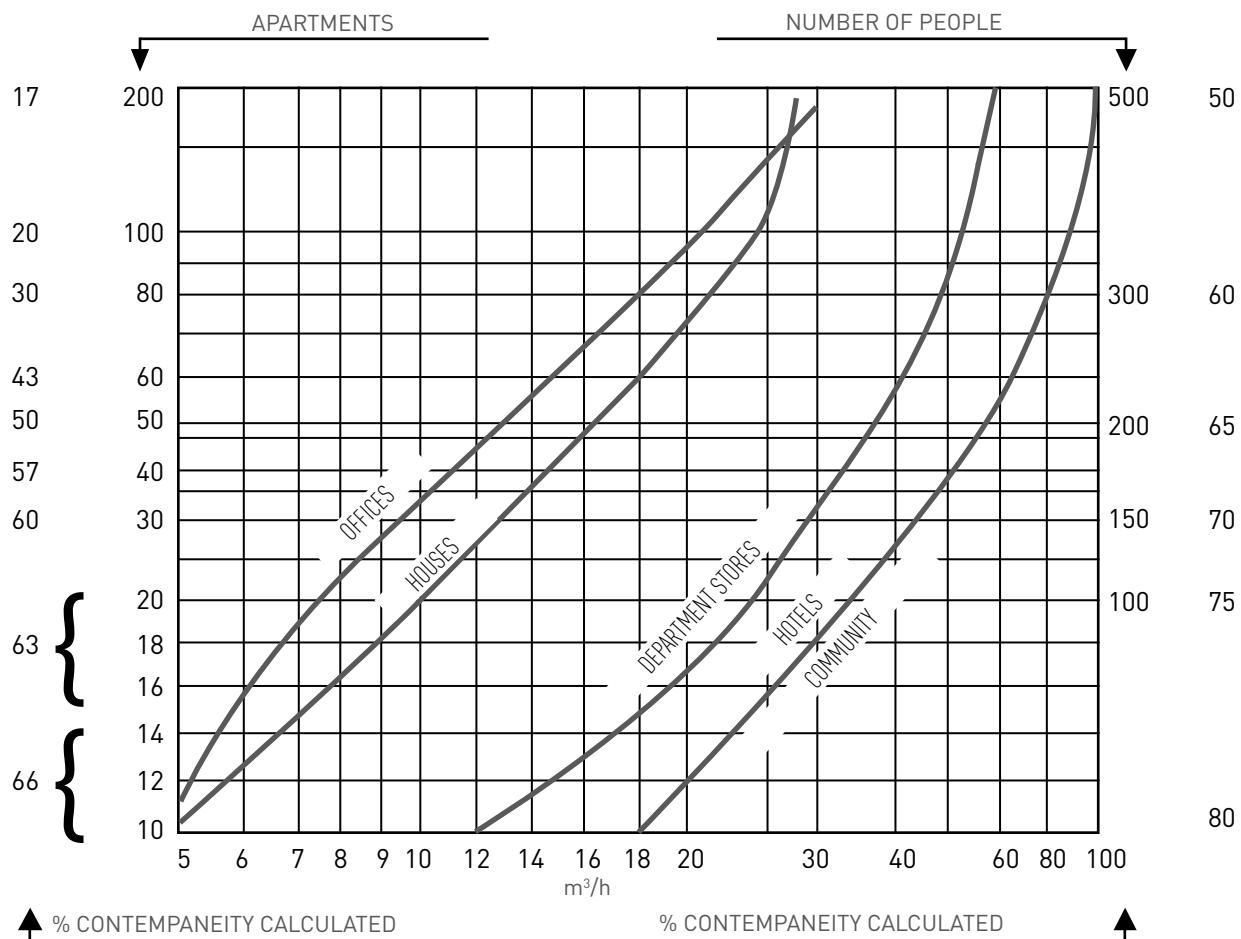
Case [B]: proceed as with case A, then deduct the value of the pressure of the aqueduct or the pressure developed during the descent from the storage tank. (see example Fig. n. 3)

Case [C]: proceed as with case A, then add the value in metres between the water level and the unit. (See Fig. n. 4). The data obtained, compared with the tables with the features of the

various autoclaveboosters shown in the catalogue will allow to choose the most suitable unit. Bear in mind that these tables consider a minimum pressure at the highest valve of 1.5 ATM.

They provide general information as it is not possible to consider the various particular conditions of use.

Fig. 1



BENDS FOR WC WITH BOXES
(FOR WC WITH STOPCOCK + 30%)

NOCCHI Pressure boosters

HOW TO CHOOSE A PRESSURE UNIT

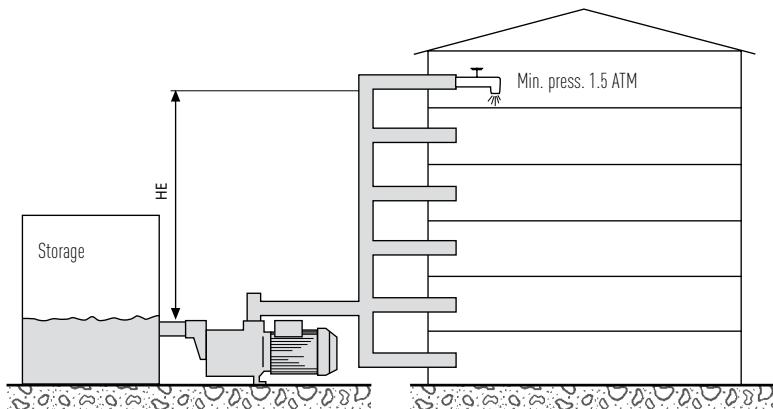


Fig. 2

CASE A

$$\begin{array}{rcl} \text{H building} & 18 + \\ \text{Minimum pressure} & 15 + \\ \text{Pressure drops} & 2 = \\ & \hline \\ & 35 \text{ Metres} \end{array}$$

HE = Height of building 18 m.

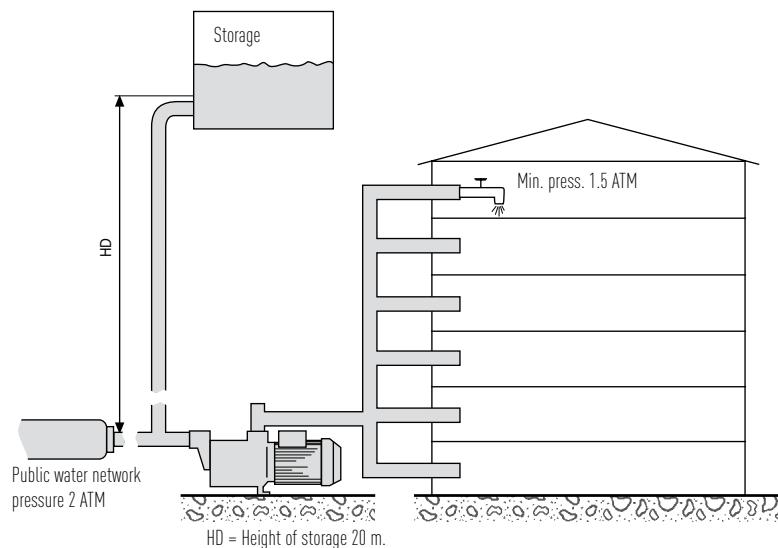


Fig. 3

CASE B

$$\begin{array}{rcl} \text{Required head} & 35 - \\ \text{Aqueduct pressure} & 20 = \\ & \hline \\ & 15 \text{ Metres} \end{array}$$

$$\begin{array}{rcl} \text{Metres} & 35 - \\ \text{Il tank} & 20 = \\ & \hline \\ & 15 \text{ Metres} \end{array}$$

HD = Height of storage 20 m.

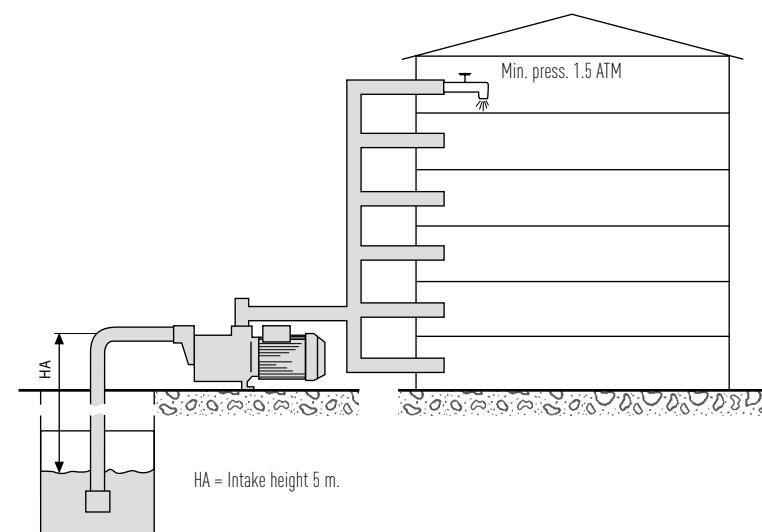


Fig. 4

CASE C

$$\begin{array}{rcl} \text{Required head} & 35 + \\ \text{Intake height} & 5 = \\ & \hline \\ & 40 \text{ Metres} \end{array}$$

HA = Intake height 5 m.

NOCCHI Pressure boosters

HOW TO CHOOSE A PRESSURE UNIT

PRESSURE DROP AND WATER SPEED TABLE

CAPACITY			GALVANIZED PIPING - NEW													
			NOMINAL DIAMETERS IN INCHES AND MILLIMETRES													
m ³ /h	l/min.	V/sec.	1/2" 15.75	3/4" 21.25	1" 27.00	1 1/4" 35.75	1 1/2" 41.25	2" 52.50	2 1/2" 68.00	3" 80.25	3 1/2" 92.50	4" 105.00	5" 130.00	6" 155.50		
0.6	10	0.16	0.855 9.910	0.470 2.407	0.292 0.784											
0.9	15	0.25	1.282 20.11	0.705 4.862	0.438 1.570	0.249 0.416										
1.2	20	0.33	1.710 33.53	0.940 8.035	0.584 2.588	0.331 0.677	0.249 0.346							Large numbers: Pressure drops in m per 100m of piping Small numbers: Water speed in m. / second		
1.5	25	0.42	2.138 49.93	1.174 11.91	0.730 3.834	0.415 1.004	0.312 0.510									
1.8	30	0.50	2.565 69.34	1.409 16.50	0.876 5.277	0.498 1.379	0.374 0.700	0.231 0.223								
2.1	35	0.58	2.993 91.54	1.644 21.75	1.022 6.949	0.581 1.811	0.436 0.914	0.269 0.291								
2.4	40	0.67		1.879 27.66	1.168 8.820	0.664 2.290	0.499 1.1160	0.308 0.368								
3.0	50	0.83		2.349 41.40	1.460 13.14	0.830 3.403	0.623 1.719	0.385 0.544	0.229 0.159							
3.6	60	1.00		2.819 57.74	1.751 18.28	0.996 4.718	0.748 2.375	0.462 0.751	0.275 0.218							
4.2	70	1.12		3.288 76.49	2.043 24.18	1.162 6.231	0.873 3.132	0.539 0.988	0.321 0.287	0.231 0.131						
4.8	80	1.33			2.335 30.87	1.328 7.940	0.997 3.988	0.616 1.254	0.376 0.363	0.263 0.164						
5.4	90	1.50			2.627 38.30	1.494 9.828	1.122 4.927	0.693 1.551	0.413 0.449	0.296 0.203						
6.0	100	1.67			2.919 46.49	1.660 11.90	1.247 5.972	0.770 1.875	0.459 0.542	0.329 0.244	0.248 0.124					
7.5	125	2.08			3.649 70.41	2.075 17.93	1.558 8.967	0.962 2.802	0.574 0.809	0.412 0.365	0.310 0.185	0.241 0.101				
9.0	150	2.50				2.490 25.11	1.870 12.53	1.154 3.903	0.688 1.124	0.494 0.506	0.372 0.256	0.289 0.140				
10.5	175	2.92				2.904 33.32	2.182 16.66	1.347 5.179	0.803 1.488	0.576 0.670	0.434 0.338	0.337 0.184				
12	200	3.33				3.319 42.75	2.493 21.36	1.539 6.624	0.918 1.901	0.659 0.855	0.496 0.431	0.385 0.234	0.251 0.084			
15	250	4.17				4.149 64.86	3.117 32.32	1.924 10.03	1.147 2.860	0.823 1.282	0.620 0.646	0.481 0.350	0.314 0.126			
18	300	5.00					3.740 45.52	2.309 14.04	1.377 4.009	0.988 1.792	0.744 0.903	0.577 0.488	0.377 0.175	0.263 0.074		
24	400	6.67					4.987 78.17	3.078 24.04	1.836 6.828	1.317 3.053	0.992 1.530	0.770 0.829	0.502 0.294	0.351 0.124		
30	500	8.33						3.848 36.71	2.295 10.40	1.647 4.622	1.240 2.315	0.962 1.254	0.628 0.445	0.439 0.187		
36	600	10.0						4.618 51.84	2.753 14.62	1.976 6.505	1.488 3.261	1.155 1.757	0.753 0.623	0.526 0.260		
42	700	11.7							3.212 19.52	2.306 8.693	1.736 4.356	1.347 2.345	0.879 0.831	0.614 0.347		
48	800	13.3							3.671 25.20	2.635 11.18	1.984 5.582	1.540 3.009	1.005 1.066	0.702 0.445		
54	900	15.0							4.130 31.51	2.964 13.97	2.232 6.983	1.732 3.762	1.130 1.328	0.790 0.555		

N.B.: - To assess the pressure drops in piping made of different materials, the value relating to the galvanized pipe must be multiplied by the following coefficients:

0.6 for PVC pipes

0.7 for aluminium pipes

0.8 for rolled steel pipes

1.3 for fiber cement pipes

NOCCHI Pressure boosters

HOW TO CHOOSE A PRESSURE UNIT

CAPACITY			GALVANIZED PIPING - NEW											
			NOMINAL DIAMETERS IN INCHES AND MILLIMETRES											
m³/h	lt./min.	lt./sec.	1/2" 15.75	3/4" 21.25	1" 27.00	1 1/4" 35.75	1 1/2" 41.25	2" 52.50	2 1/2" 68.00	3" 80.25	3 1/2" 92.50	4" 105.00	5" 130.00	6" 155.50
60	1000	16.7							4.589 38.43	3.294 17.06	2.480 8.521	1.925 4.595	1.256 1.616	0.877 0.674
75	1250	20.8								4.117 26.10	3.100 13.00	2.406 7.010	1.570 2.458	1.097 1.027
90	1500	25.0								4.941 36.97	3.720 18.42	2.887 9.892	2.197 3.458	1.316 1.444
105	1750	29.2									4.340 24.76	3.368 13.30	2.511 4.665	1.535 1.934
120	2000	33.3									4.960 31.94	3.850 17.16	3.139 5.995	1.754 2.496
150	2500	41.7										4.812 26.26	3.767 9.216	2.193 3.807
180	3000	50.0											5.023 13.05	2.632 5.417
240	4000	66.7												3.509 8.926
300	5000	83.3												4.386 14.42

N.B.: - To assess the pressure drops in piping made of different materials, the value relating to the galvanized pipe must be multiplied by the following coefficients:

0.6 for PVC pipes

0.7 for aluminium pipes

0.8 for rolled steel pipes

1.3 for fiber cement pipes



SECTION 6

ACCESSORIES

New



VSD

ELECTRONIC FREQUENCY CONVERTER

PAGE 384



EXPANSION TANKS

PAGE 395



FLUSSCONTROL

ELECTRONIC PRESSURE REGULATOR FOR
SINGLE-PHASE PUMPS

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ACCESSORIES

ACCESSORIES AND FILTERS

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CONTROL PANELS

PAGE 389

NOCCHI VSD ELECTRONIC FREQUENCY CONVERTER

NEW 2016


VSD (Variable Speed Drive) is a frequency converter that is able to change the speed of an electric pump thereby keeping pressure constant with variation of demand.

The control is possible via a pressure and a flow sensor connected to the inverter.

The advantages obtained from the installation of VSD are:

- Energy savings
- Constant output pressure with an increase of comfort for the final user
- Silent operation

PROTECTION DEVICES

- Protection against dry running
- Protection against overload
- Control and protection system against short circuits in the output phases
- Control and protection system in the event of over-VOLT. or under-VOLT.



VERSIONS

- **VSD Easy** controls a single-phase or three-phase pump, it is easy to install and set, it is only necessary to select the pressure set-point. The supply VOLT. of the device is single-phase 230V.
- **VSD** controls a three-phase pump

and it is able to communicate with another hydraulic device thanks to the installation of a communication cable. The supply VOLT. can be single phase 230V or three-phase 400V depending on the model.

OPERATIONAL FEATURES

- Inverter to manage a pump
- Frequency of use Hz: 50/60
- Protection index: IP55
- Maximum water temperature °C: 40
- Maximum ambient temperature °C: 50
- ART System (Automatic Reset Test). after the device has been turned off after the intervention of the protection system against dry running, the ART system will attempt to restore the water supply, by means of scheduled restarts.
- Automatic reset system after the accidental interruption of the power supply. The device maintains the configuration present before it stopped.
- Internal pressure transducer
- Power sensor
- Internal flow sensor
- Control panel with LCD display
- Operation control register: possibility to track the hours of operation, the number of start-ups and the connection to the power network.
- Alarm register: the number and all the types of alarm generated in the device.

CHARACTERISTICS RELATING TO THE MODELS VSD M/T and T/T only

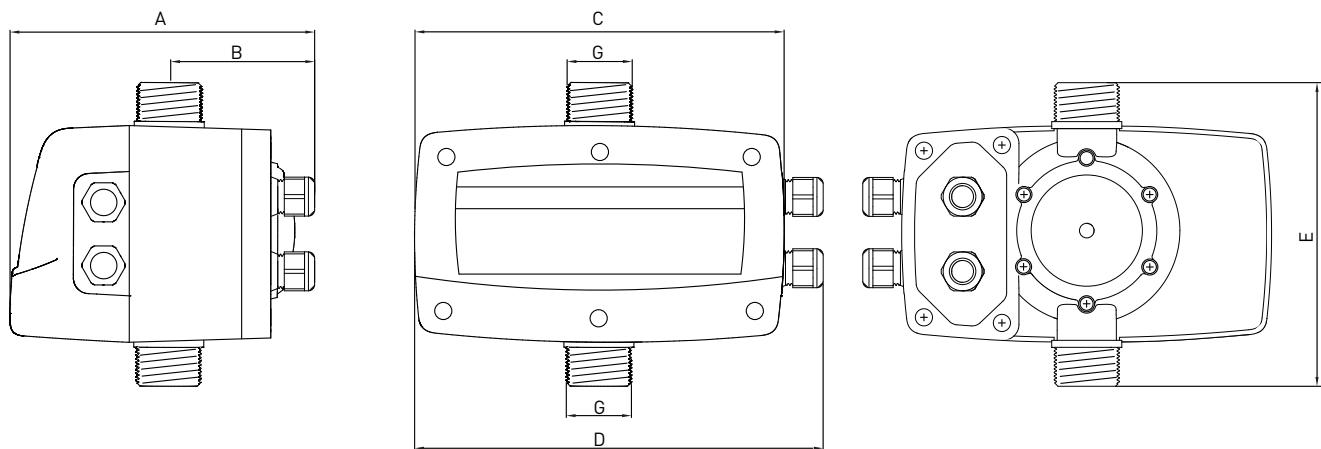
- They can be mounted together with another identical device using a MASTER-SLAVE operating system. The device configured as MASTER is the controller. The operation is alternating or parallel.
- Free contact to monitor the alarms displayed, generated by irregularities or system problems.
- Additional contact for the detection of the minimum water level in the intake tank; its use is optional and independent of the protection system against dry running.

NOCCHI VSD

ELECTRONIC FREQUENCY CONVERTER

TECHNICAL SPECIFICATIONS

MODEL	Supply VOLT. (V)	Pump supply (V)	Maximum current of pump (A)	Interface for use in parallel	Adjustable pressure (bar)	Maximum operating pressure (bar)	Maximum capacity (m ³ /h)
VSD EASY 9 M/M	1~230	1~230	9	NO	1-8	16	10
VSD EASY 6 M/T	1~230	3~230	6	NO	1-8	16	10
VSD EASY 10 M/T	1~230	3~230	10	NO	1-8	16	10
VSD 6 M/T	1~230	3~230	6	YES	0.5-12	16	10
VSD 10 M/T	1~230	3~230	10	YES	0.5-12	16	10
VSD 9 T/T	3~400	3~400	9	YES	0.5-12	16	15
VSD 14 T/T	3~400	3~400	14	YES	0.5-12	16	25



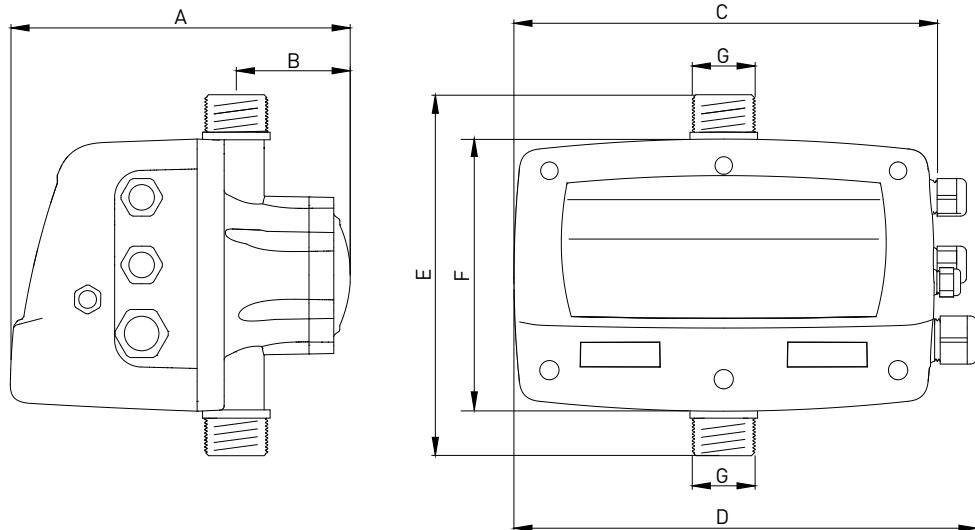
OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions (mm)						WEIGHTS (Kg)
	A	B	C	D	E	G	
VSD EASY 9 M/M	196	93	237	262	196	1" 1/4	2.5
VSD EASY 6 M/T	196	93	237	262	196	1" 1/4	2.5
VSD EASY 10 M/T	196	93	237	262	196	1" 1/4	2.5
VSD 6 M/T	196	93	237	262	196	1" 1/4	2.7
VSD 10 M/T	196	93	237	262	196	1" 1/4	2.7

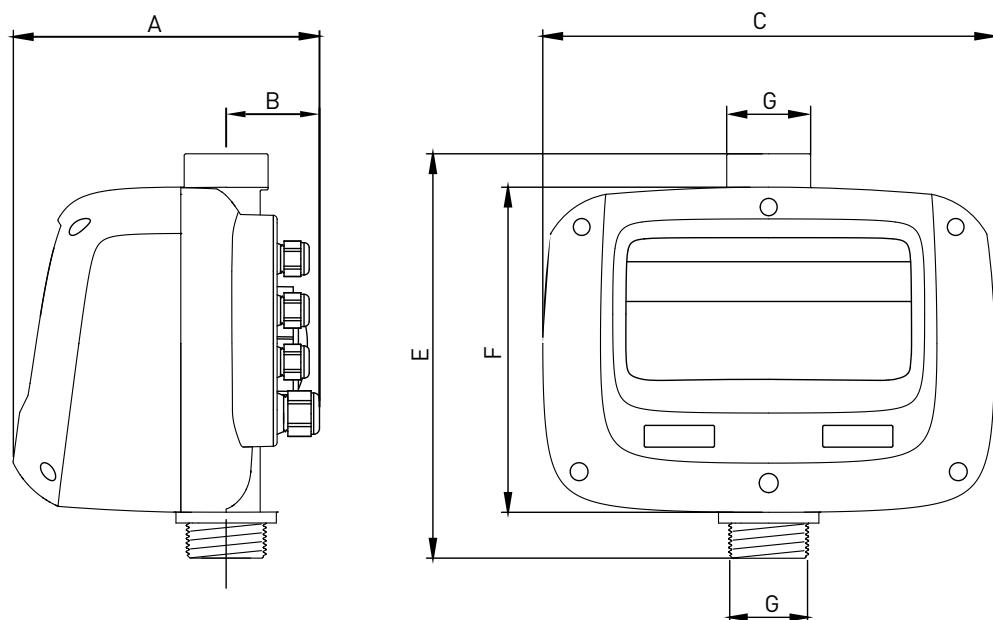
NOCCHI VSD

ELECTRONIC FREQUENCY CONVERTER

OVERALL DIMENSIONS AND WEIGHTS



MODEL	Dimensions (mm)						WEIGHTS (Kg)
	A	B	C	D	E	F	
VSD 9 T/T	226	76	280	~310	240	181	1" 1/4 4.3

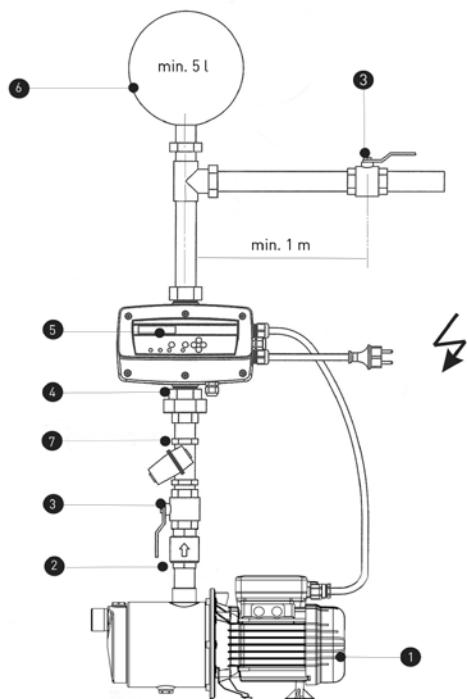


MODEL	Dimensions (mm)						WEIGHTS (Kg)
	A	B	C	E	F	G	
VSD 14 T/T	238	72	350	313	252	2"	6.1

NOCCHI VSD

ELECTRONIC FREQUENCY CONVERTER

INSTALLATION



REMARKS:

- A) The accessories 3, 4 and 7 are recommended but not essential.
B) In the case of expansion module 6, it is advisable to use it in installations where water hammers should be avoided.

- 1 - Pump
- 2 - Non-return valve
- 3 - Ball valve
- 4 - Rapid elbow joint
- 5 - VSD
- 6 - Expansion module
- 7 - Filter

COMPATIBLE PUMPS

MODELS	VSD EASY 9 M/M	VSD EASY 6 M/T	VSD EASY 10 M/T	VSD 6 M/T	VSD 10 M/T	VSD 9 T/T	VSD 14 T/T
PRATIKA	•						
DOMINATOR 4	•						
DOMINATOR 5	•	•		•		•	
SCM4 PLUS	•	•		•		•	•
MULTINOX VE+	•	•	•	•	•	•	
DHR	•	•	•	•	•	•	•
MULTINOX-XC	•	•		•		•	
MCX	•	•	•	•	•	•	
MAX	•	•		•			
MULTINOX-A	•	•	•	•	•	•	
JET / JETINOX	•	•		•			
MULTI EVO	•	•	•	•	•	•	
PVM/PVMI/PVMX	•	•	•	•	•	•	•

Choose the correct pump depending on the current and power. In the event of an extension of the power cable for the motor output, connect it to some network filters to be positioned near the VSD to make sure that the electromagnetic emission standards are met.

NOCCHI FLUSSCONTROL

ELECTRONIC PRESSURE REGULATOR FOR SINGLE-PHASE PUMPS

This device starts and stops the pump when the valve is opened and closed. In the event of no intake flow, the electronic system will block the pump protecting it from dry running.

Once the causes that led the pump to be blocked have been overcome, simply press the red Restart (reset) button to restore normal operation. In the event of a temporary power failure, the unit will reset automatically once powered again.

ADVANTAGES

- Reduces the effects of water hammer.
- Replaces the traditional system of the expansion module
- Requires no maintenance
- Protection in case of a lack of water
- Very easy to install
- Keeps the pressure constant during distribution



APPLICATIONS

- To start and stop single-phase surface or submerged PUMPS.
- Keeps the pressure constant during distribution
- Starts and stops the pump in function of the opening and closing the valve.

TECHNICAL SPECIFICATIONS

Description	Flusscontrol	Flusscontrol basic
Electrical supply	230 V single-phase	230 V single-phase
Maximum current	16 [8] A	16 [6] A
Maximum nominal power of the pump	1.5 kW [2 HP]	1.1 kW
Frequency	50-60 Hz	50-60 Hz
Degree of protection	IP 65	IP 65
Pressure drops with 6 m³/h capacity	0.95 bar	1.1 bar
Maximum pressure	10 bar	8 bar
Maximum temperature of the liquid	65° C	60° C
Maximum ambient temperature	40° C	40° C
WEIGHTS	1.07 Kg	0.8 Kg

NOCCHI QES PLUS

SINGLE PHASE ELECTRICAL PANEL TO CONTROL A SUBMERSED PUMP WITH DIRECT START

MAIN COMPONENTS

- Plastic casing IP 55
- Switch with circuit breaker
- Motorprotector with reset button
- Starting capacitor
- Terminal board
- Cable gland

OPERATION

- Manual via main switch
- Automatic via external remote control (pressure switch, float, etc...)

OPTIONAL ACCESSORIES

- Floats or Pressure switches (see table)

TECHNICAL SPECIFICATIONS

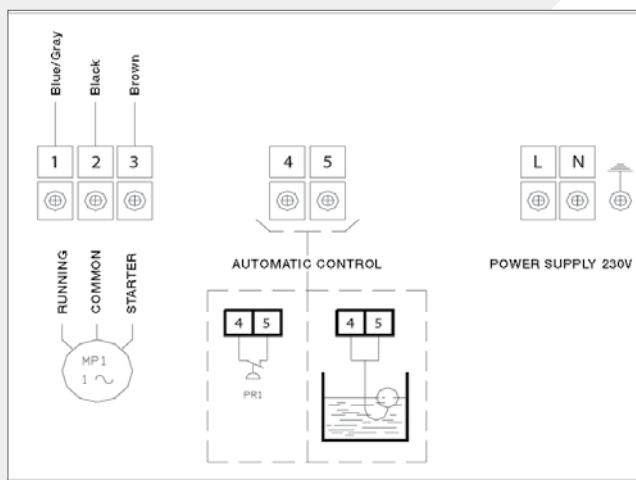
- Degree of protection: IP 55
- Power supply VOLT.: 230V/ 1F 50 Hz
- External dimensions: 115 - 185 - 65 mm
- WEIGHTS: Kg 0.6

LIMITS

- Ambient temperature: -5 / +40 °C
- Relative humidity: 50% at 40°C with no condensation.
- Reference standards: EN 60335-1 - EN 60439-1



MODEL	VOLT. (V)	Absorbed power (P1)		Field of application A	μ F	Compatible PUMPS
		min kW	max kW			
QES PLUS 10/37 M	230 1F	0.37	0.55	4	16	SCM 4" PLUS SCM 4 HF 4" MOTORS
QES PLUS 10/55 M	230 1F	0.55	0.75		20	
QES PLUS 10/75 M	230 1F	0.75	1		30	
QES PLUS 10/75 M	230 1F	0.75	1		35	
QES PLUS 10/110 M	230 1F	1.1	1.5		40	
QES PLUS 10/150 M	230 1F	1.5	2		50	



NOCCHI AT

THREE-PHASE ELECTRICAL PANEL TO CONTROL A SUBMERSED OR SURFACE PUMP WITH DIRECT START

MAIN COMPONENTS

- Plastic casing
- Set to control dry running with float, pressure switch or electropoles.
- Lights signalling presence of line

OPERATION

- Manual via MAN switch
- Automatic via external remote control (pressure switch, float, ...) and/or level control (filling, emptying, protection against dry running).

LIMITS

- Control via external enabling contact
- Ambient temperature from -5 to +40°C (limit provided for by standard EN 60439-1)
- Maximum relative humidity 50% at +40° C as long as there is no condensation (limit provided for by standard EN 60439-1)

TECHNICAL SPECIFICATIONS

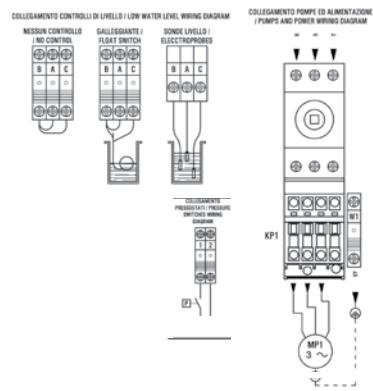
- Power supply VOLT.: 3 x 400 V
- Frequency 50/60 Hz
- Power from 0.37 to 7.5 kW
- Direct start of motors
- Motorprotector
- Degree of protection: IP54
- External dimensions: 260x195x180 mm
- WEIGHTS: 3.35 Kg

OPTIONAL ACCESSORIES

- ECL electrodes for level control
- Floats or pressure switches



MODEL	VOLT. (V)	Absorbed power (P1)		Field of application A		Compatible PUMPS	
		min kW	max kW	min	max	Surface	Submersed
Q. EL AT10 1-1.6 A 400V	3X400	0.37	0.55	1	1.6	VLR-VLRI-VLRX	
Q. EL AT10 1-2.5 A 400V	3X400	0.55	0.75	1.6	2.5	DHR-DHI-MCX	DOMINATOR 5"
Q. EL AT10 2.5-4 A 400V	3X400	0.75	1.5	2.5	4	MULTINOX-MAX	SCM 4" PLUS
Q. EL AT10 4-6.3 A 400V	3X400	1.5	2.2	4	6.3	MULTINOX-A	SCM 4 HF
Q. EL AT10 6.3-10 A 400V	3X400	2.2	4	6.6	10	MULTINOX-VE	4" MOTORS
Q. EL AT10-16 A 400V	3X400	4	7.5	10	16	JET-CM-CB-EP NRM	



NOCCHI ADRM

SINGLE-PHASE ELECTRICAL PANELS TO CONTROL ONE OR TWO DRAINAGE AND SEWAGE PUMPS

MAIN COMPONENTS

- Plastic casing IP54
- Main switch
- Fuse-holder with fuses for pump
- Fuse-holder with fuses for the auxiliary circuit
- Transformer for the auxiliary circuit
- Terminal board for the level control devices
- Cable gland
- LED indicating line
- LED indicating pump in operation
- LED for thermal lock
- Contactor with thermal relay

TECHNICAL SPECIFICATIONS

- Degree of protection: IP54
- Power supply VOLT.: 220V/240V 1F 50 Hz
- External dimensions: 220 - 270 - 185 mm

OPERATION

- Manual via MAN or AUT switch
- Automatic via float switch

LIMITS

- Ambient temperature: -5 / +40 °C
- Relative humidity: 50% at 40°C with no condensation.
- Reference standards: EN 60730 - EN 60439

ADRM 20

- Electronic warning and control device with start-up sequence inverter
- Electrical panel controlling two PUMPS
- WEIGHTS: Kg 7.5

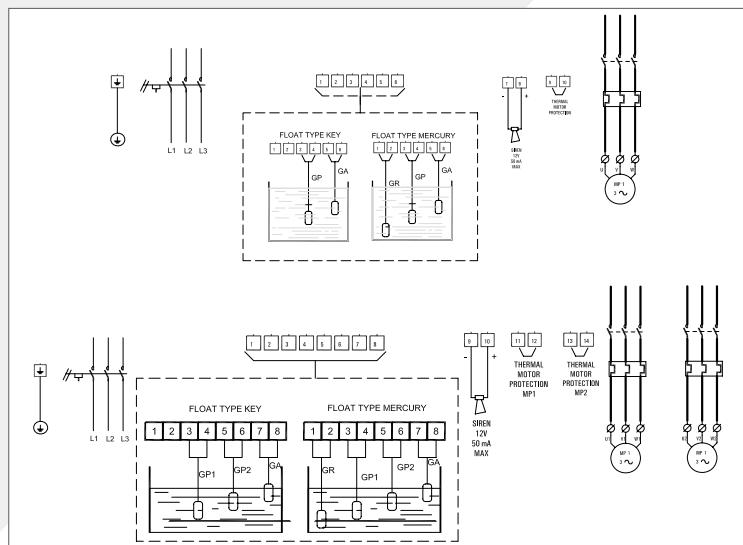
ADRM 10

- Electronic warning and control board
- Electrical panel controlling an pump
- WEIGHTS: Kg 5.5

OPTIONAL ACCESSORIES

- UZA00200 Optical and acoustic alarm
- CE040030 tabs for wall mounting
- Floats (see table)

MODEL	VOLT. (V)	Absorbed power (P1)		Field of application A		Compatible PUMPS
		kW	Hp	min	max	
Q.E. ADRM10/55	230 1F	0.55	0.75	2.5	4	
Q.E. ADRM10/75	230 1F	0.75	1	4	6.3	
Q.E. ADRM10/110	230 1F	1.1	1.5	6.3	10	
Q.E. ADRM10/150	230 1F	1.5	2	10	16	
Q.E. ADRM20/55	230 1F	2x0.55	2x0.75	2.5	4	
Q.E. ADRM20/75	230 1F	2x0.75	2x1	4	6.3	
Q.E. ADRM20/110	230 1F	2x1.1	2x1.5	6.3	10	
Q.E. ADRM20/150	230 1F	2x1.5	2x2	10	16	



NOCCHI ADRD

THREE-PHASE ELECTRICAL PANELS TO CONTROL ONE OR TWO DRAINAGE AND SEWAGE PUMPS

MAIN COMPONENTS

- Metal box IP54
- Main switch
- Fuse-holder with fuses for pump
- Fuse-holder with fuses for the auxiliary circuit
- Contactor with thermal relay
- Transformer for the auxiliary circuit
- Terminal board for the level control devices
- Cable gland
- LED indicating line
- LED indicating pump in operation
- LED for thermal lock

OPERATION

- Manual via MAN or AUT switch
- Automatic via float switch

OPTIONAL ACCESSORIES

- UZA00200 Optical and acoustic alarm
- CE040030 tabs for wall mounting
- Floats (see table)

LIMITS

- Ambient temperature: -5 / +40 °C
- Relative humidity: 50% at 40°C with no condensation.
- Reference standards: EN 60730 - EN 60439

ADRD 10

- Electronic warning and control board
- Electrical panel controlling an pump

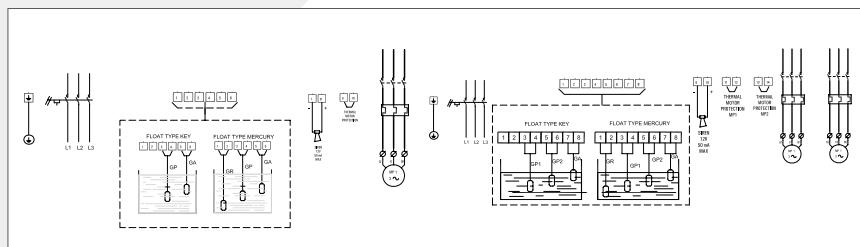
ADRD 20

- Electronic warning and control device with start-up sequence inverter
- Electrical panel controlling two PUMPS

TECHNICAL SPECIFICATIONS

- Degree of protection: IP54
- Power supply VOLT.: 400V 3F 50 Hz
- External dimensions: 220 - 270 - 185 mm
- WEIGHTS: Kg 5.5

MODEL	VOLT. (V)	Absorbed power (P1)		Field of application A		Compatible PUMPS
		kW	Hp	min	max	
Q.E. ADRD10/55	400 3F	0.55	0.75	1	1.6	
Q.E. ADRD10/110	400 3F	1.1	1.5	1.6	2.5	
Q.E. ADRD10/150	400 3F	1.5	2	2.5	4	
Q.E. ADRD10/300	400 3F	3	4	4	6.3	
Q.E. ADRD10/500	400 3F	5	6.7	6.3	10	
Q.E. ADRD10/750	400 3F	7.5	10	10	16	
Q.E. ADRD10/900	400 3F	9	12	13	19	
Q.E. ADRD20/55	400 3F	2x0.55	2x0.75	1	1.6	
Q.E. ADRD20/110	400 3F	2x1.1	2x1.5	1.6	2.5	
Q.E. ADRD20/150	400 3F	2x1.5	2x2	2.5	4	
Q.E. ADRD20/300	400 3F	2x3	2x4	4	6.3	
Q.E. ADRD20/500	400 3F	2x5	2x6.7	6.3	10	
Q.E. ADRD20/750	400 3F	2x7.5	2x10	10	16	



NOCCHI ADRY

THREE-PHASE ELECTRICAL PANELS TO CONTROL ONE OR TWO DRAINAGE AND SEWAGE PUMPS WITH STAR-DELTA START-UP

MAIN COMPONENTS

- Metal box IP54
- Main switch
- Fuse-holder with fuses for pump
- Fuse-holder with fuses for the auxiliary circuit
- Contactor with thermal relay
- Transformer for the auxiliary circuit
- Terminal board for the level control devices
- Cable gland
- Electronic board indicating Volt/Amp
- LED for thermal lock
- LED indicating pump in operation
- LED indicating line

TECHNICAL SPECIFICATIONS

- Degree of protection: IP54
- Power supply VOLT.: 400V 3F 50 Hz
- External dimensions: 500 - 750 - 250 mm

OPERATION

- Manual via MAN or AUT switch
- Automatic via float switch

LIMITS

- Ambient temperature: -5 / +40 °C
- Relative humidity: 50% at 40°C with no condensation.
- Reference standards: EN 60730 - EN 60439

ADRY 20

- Electronic warning and control device with start-up sequence inverter
- Electrical panel controlling two PUMPS
- WEIGHTS: Kg 15 - 85

ADRY 10

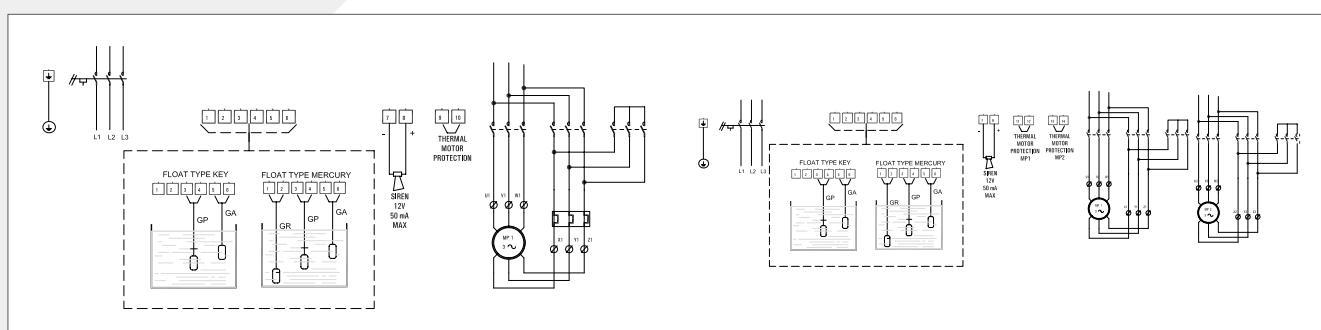
- Electronic board for command and control
- Electrical panel controlling an pump
- WEIGHTS: Kg 12 - 60

OPTIONAL ACCESSORIES

- UZA00200 Optical and acoustic alarm
- CE040020 tabs for wall mounting
- Floats (see table)

MODEL	VOLT. (V)	Absorbed power (P1)		Field of application A		Compatible PUMPS
		kW	Hp	min	max	
Q.E. ADRY10/900	400 3F	9	12	12.9	19	
Q.E. ADRY10/1100	400 3F	11	15	17.2	24.1	
Q.E. ADRY10/1500	400 3F	15	20	22.4	32.8	
Q.E. ADRY10/2200	400 3F	22	30	29.3	44.8	
Q.E. ADRY10/2500	400 3F	25	33.5	37.9	55.2	
Q.E. ADRY20/900	400 3F	2x9	2x12	12.9	19	
Q.E. ADRY20/1100	400 3F	2x11	2x15	17.2	24.1	
Q.E. ADRY20/1500	400 3F	2x15	2x20	22.4	32.8	
Q.E. ADRY20/2200	400 3F	2x22	2x30	29.3	44.8	
Q.E. ADRY20/2500	400 3F	2x25	2x33.5	37.9	55.2	

PUMPS for drain



NOCCHI ACCESSORIES FOR ELECTRICAL PANELS

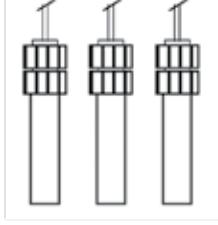
LEVEL ADJUSTMENT WITH COUNTERWEIGHTS

Key type level regulator for emptying and filling operations equipped with a 3 m or 10 m cable, suitable for use with clean water or featuring small amounts of suspended solids.

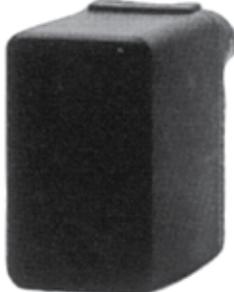
	MODEL	ELECTRICAL PANEL
	MICROSTART 3-3 Emptying/Filling	QES PLUS - AT
	MICROSTART 10-2 Filling	All panels that use external control
	MICROSTART 5-2 Filling	All panels that use external control
	MICROSTART 10-2 (PVC) Filling	All panels that use external control
	MICROSTART 10-3 Emptying/Filling	QES PLUS- AT

LEVEL ELECTRODES

Level electrodes particularly suitable for liquids that can be conducted at the max. temperature of 40°C. For the connection between the electrode and the panel, an insulated cable with a max. section of 4mm² and a max. length of 100m can be used.

	MODEL	ELECTRICAL PANEL
	ECL electrodes for level control	AT

PRESSURE SWITCHES

	MODEL	ELECTRICAL PANEL
	PN 5 ITL (6 Atm. Max)	QES PLUS -AT
	PN 12 ITL (12 Atm. Max)	QES PLUS -AT
	PN 6 TEL (6 Atm. Max)	QES PLUS -AT
	PN 12 TEL (12 Atm. Max)	QES PLUS -AT

NOCCHI EXPANSION TANKS

STAINLESS STEEL

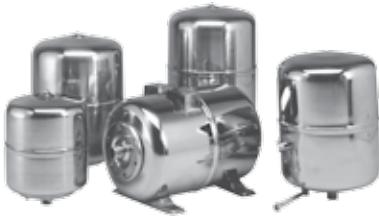
NOCCHI expansion TANKS are made of stainless steel AISI 304 in 7 models with the aim to meet all the requirements of civil and industrial systems and ensure the suitability of the product for use with food. Especially suitable for humid rooms CE certified.

HORIZONTAL

Interchangeable bromobutyl membrane with a capacity of 24 litres per membrane, with a bracket to mount the pump and a support foot. Pre-load 1.5 bar.

VERTICAL

Interchangeable bromobutyl membrane with a capacity of 8-20-24 litres . The latter also in the solution without membrane and with air supply. Pre-load 1.5 bar.



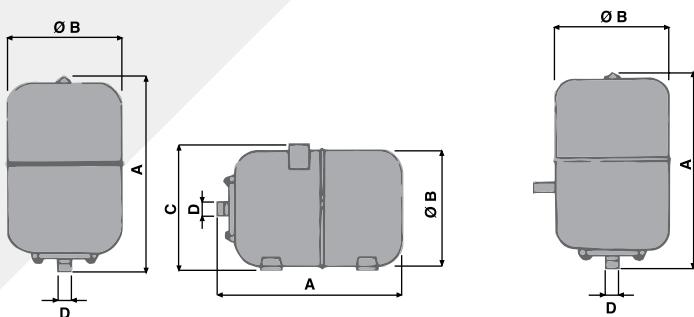
TECHNICAL SPECIFICATIONS

MODEL	Description	Type membrane	Feet bracket	Maximum operating pressure (bar)	Capacity lt
VES INOX N 8	expansion tanks 8 litres stainless steel vertical	Bromobutyl	-	8	8
VES INOX N 20	expansion tanks 20 litres stainless steel vertical	Bromobutyl	-	8	20
VES INOX N 24	expansion tanks 24 litres stainless steel vertical	Bromobutyl	-	8	24
VES INOX N 24 H	expansion tanks 24 litres stainless steel horizontal	Bromobutyl	yes	8	24
VAA 24	expansion tanks stainless steel 24 lt for air supply	-	-	8	24
-	air supply kit with hose	-	-	-	-



OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions mm.				WEIGHTS (Kg)
	A	Ø B	C	D	
N 8	280	226	-	1"	2.4
N 20	390	272	-	1"	3.3
N 24	430	272	-	1"	5
N 24 H	430	272	330	1"	4.2
VAA 24	430	272	443	1"	4.2



NOCCHI EXPANSION MODULES

PAINTED STEEL

TECHNICAL SPECIFICATIONS

MODEL	Description	Type membrane	Feet bracket	Maximum operating pressure (bar)	Capacity lt
VES 2	expansion tank 2 litres	Rubber for food use	-	6	2
VES 24 V	expansion tank 24 litres vertical	Rubber for food use	-	6	24
VES 24 H	expansion tank 24 litres horizontal	Rubber for food use	yes	6	24
VEC 60 V	expansion tank 60 litres vertical	Butyl rubber	yes	10	60
VEC 100 V	expansion tank 100 litres vertical	Butyl rubber	yes	10	100
VEC 200 V	expansion tank 200 litres vertical	Butyl rubber	yes	10	200
VEC 300 V	expansion tank 300 litres vertical	Butyl rubber	yes	10	300
VEC 500 V	expansion tank 500 litres vertical	Butyl rubber	yes	10	500

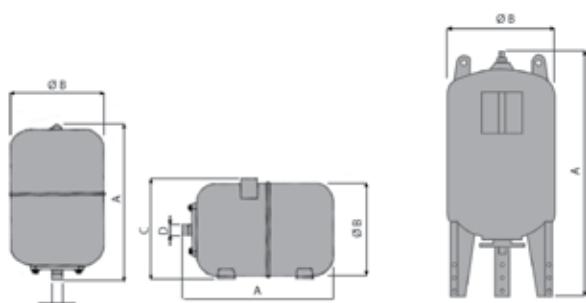
Expansion tanks for water lifting systems, in painted steel, from 2 to 500 litres, with interchangeable membrane.

Painted carbon steel flange.

CE certified. Preload: 1.5 bar in models from 2 to 24 lt - 2.0 bar in models from 60 to 500 lt CE Certified.

OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions mm.				WEIGHTS (Kg)
	A	Ø B	C	D	
VES 2	175	155	-	1" M	0.950
VES 24 V	415	295	-	1" M	4.1
VES 24 H	415	-	310	1" M	4.8
VEC 60 V	845	382	-	1" M	17.5
VEC 100 V	950	450	-	1" M	19
VEC 200 V	1225	550	-	1" 1/2 M	37
VEC 300 V	1405	630	-	1" 1/2 M	54
VEC 500 V	1550	780	-	1" 1/2 M	104



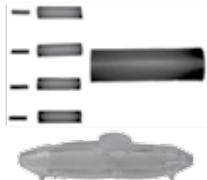
NOCCHI ACCESSORIES AND FILTERS

ACCESSORIES

	MODEL	ELECTRICAL PANEL
	PM 5 ITAL PM 12 ITAL PTI LP3 ITAL PT 6 TEL PT 12 TEL	PRESSURE SWITCH - 6 ATM MAX - ITALTECNICA PRESSURE SWITCH - 12 ATM MAX - ITALTECNICA PRESSURE SWITCH - REVERSE LP3 - 1/4" F ITALTECNICA PRESSURE SWITCH - 6 ATM MAX - TELEMECANIQUE PRESSURE SWITCH - 12 ATM MAX - TELEMECANIQUE
	MAR 6 MAP 6 MAR 10 MAP 10	PRESSURE GAUGE, RADIAL CONNECTION 6 ATM PRESSURE GAUGE, REAR RADIAL CONNECTION 6 ATM PRESSURE GAUGE, RADIAL CONNECTION 10 ATM PRESSURE GAUGE, REAR RADIAL CONNECTION 10 ATM
	TF 500 TF 600 TF 700 TF 800 GA 12 1/4	HOSE 1" x mm 500 M-F HOSE 1" x mm 600 M-F HOSE 1" x mm 700 M-F HOSE 1" x mm 800 M-F HOSE 1" 1/4 x mm 400 M-F
	R 3 V R5V	BRASS FITTING A 3 WAYS 1" BRASS FITTING A 5 WAYS 1"
	MBB MG S 2 MGS 24 MB 60 MB 100 MB 200 MB 300 MB 500	BROMOBUTYL MEMBRANE FOR STAINLESS STEEL EXPANSION MODULES RUBBER MEMBRANE FOR 2 LITRE EXPANSION MODULE RUBBER MEMBRANE FOR 24 LITRE EXPANSION MODULE BUTYL MEMBRANE FOR 60 LITRE EXPANSION MODULE BUTYL MEMBRANE FOR 100 LITRE EXPANSION MODULE BUTYL MEMBRANE FOR 200 LITRE EXPANSION MODULE BUTYL MEMBRANE FOR 300 LITRE EXPANSION MODULE BUTYL MEMBRANE FOR 500 LITRE EXPANSION MODULE
	KA4 KA7 NIPPLEX 1" M-M	INTAKE KIT, 4 m 1" WITH BOTTOM VALVE INTAKE KIT, 7 m 1" WITH BOTTOM VALVE MALE FITTING 1" FOR INTAKE KIT
	B1	BASE KIT MOULDED STAINLESS STEEL WITH SCREWS FOR MCX 80-120 AND JETINOX 45-60-70 MAX 80-120

NOCCHI ACCESSORIES AND FILTERS

ACCESSORIES

MODEL	ELECTRICAL PANEL
 VF 1" VFF 1" VFF 1" 1/4 VF 1" 1/2 VF 2" VAR 1" VAR 1" 1/4 VAR 1" 1/2 VAR 2" RVFF 2	PLASTIC BOTTOM VALVE 1" BRASS BOTTOM VALVE 1" WITH STAINLESS STEEL FILTER BRASS BOTTOM VALVE 1" 1/4 WITH STAINLESS STEEL FILTER BRASS BOTTOM VALVE 1" 1/2 WITH STAINLESS STEEL FILTER BRASS BOTTOM VALVE 2" WITH STAINLESS STEEL FILTER BRASS NON-RETURN VALVE 1" BRASS NON-RETURN VALVE 1" 1/4 BRASS NON-RETURN VALVE 1" 1/2 BRASS NON-RETURN VALVE 2" BALL VALVE WITH INTEGRAL PASSAGE 2" F
 VRP 1" 1/4 VRP 1" 1/2 VRP 2"	BALL CHECK VALVE STAINLESS STEEL 1" 1/4 F BALL CHECK VALVE STAINLESS STEEL 1" 1/2 F BALL CHECK VALVE STAINLESS STEEL 2" F
 MICROSTART 3-3 MICROSTART 10-3 MICROSTART 5-2 MICROSTART 10-2 MICROSTART S10-2 MICROSTART CP 15-3 CP	FLOAT 3 M. 3 WIRES, FOR EMPTYING/FILLING FLOAT 10 M. 3 WIRES, FOR EMPTYING/FILLING FLOAT 5 M. 2 WIRES, FOR EMPTYING H05 - RNF PVC FLOAT 10 M. 2 WIRES, FOR FILLING FLOAT 10 M. 2 WIRES, WITH PLUG AND SOCKET IN PVC FLOATING CABLE H07-RNF COUNTERWEIGHTS FOR FLOAT
 CABLE 4X1 CABLE 4X1.5 CABLE 4X2.5 CABLE 4X4 CABLE 4X6 CABLE 4X10	NEOPRENE CABLE H07 RNF 4 WIRES, 1 SQ.MM NEOPRENE CABLE H07 RNF 4 WIRES, 1.5 SQ.MM NEOPRENE CABLE H07 RNF 4 WIRES, 2.5 SQ.MM NEOPRENE CABLE H07 RNF 4 WIRES, 4 SQ.MM NEOPRENE CABLE H07 RNF 4 WIRES, 6 SQ.MM NEOPRENE CABLE H07 RNF 4 WIRES, 10 SQ.MM
 JOINT KIT 2.5 JOINT KIT 6 JOINT KIT 10 JOINT 2.5 JOINT 6 JOINT 10	JOINT KIT, HEAT SHRINK, FOR CABLES UP TO 4 X 2.5 JOINT KIT, HEAT SHRINK, FOR CABLES UP TO 4 X 6 JOINT KIT, CASTING RESIN JOINTS FOR CABLES UP TO 4X10 HEAT SHRINK JOINT 1 - 2.5 sq.mm HEAT SHRINK JOINT 4 - 6 sq.mm CASTING RESIN JOINT UP TO 4 X 10 sq.mm
 RCF 30 RCF 40 CRF 50	ELBOW HOSE CONNECTION 1" 1/4 FEMALE ø 30 mm ELBOW HOSE CONNECTION 1" 1/2 FEMALE ø 40 mm ELBOW HOSE CONNECTION 2" FEMALE ø 50 mm
	- FLANGE KIT GH DHR 9

NOCCHI ACCESSORIES AND FILTERS

CONTAINER FOR CARTRIDGES

	DESCRIPTION	Min. quantity
	CF 5" 1" CONNECTION	1
	CF 10" 1" CONNECTION	1
	CF 10" 1" 1/4 CONNECTION	1

FILTER CARTRIDGES

	DESCRIPTION	Nom. filtration µm	Min. quantity
	CARTRIDGE 5" FA (WRAPPED WIRE)	20	20
	CARTRIDGE 7" FA (WRAPPED WIRE) FOR FILTER CONN. 1"	20	20
	CARTRIDGE 7" NY (NYLON MESH) FOR FILTER CONN. 1"	60	20
	CARTRIDGE 10" FA (WRAPPED WIRE) FOR FILTER CONN. 1"	20	20
	CARTRIDGE 10" FA (WRAPPED WIRE) FOR FILTER CONN. 1" 1/4	20	20
	CARTRIDGE 10" NY (NYLON MESH) FOR FILTER CONN. 1"	60	20
	CARTRIDGE 10" NY (NYLON MESH) FOR FILTER CONN. 1" 1/4	60	20
	CARTRIDGE 10" CA (NYLON MESH) + ACTIVE CARBON DIAM. 1"	60	20
	CARTRIDGE 10" PL (CRYSTAL POLYPHOSPHATES) DIAM.	-	1

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