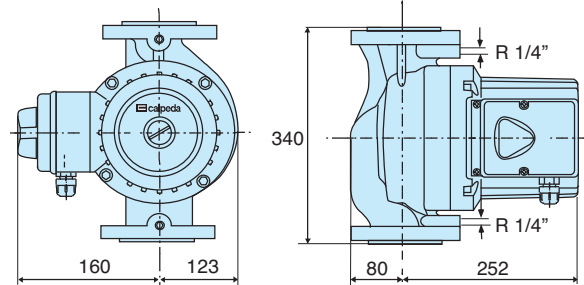
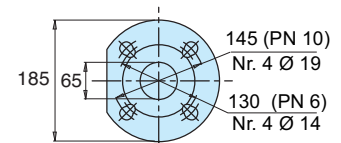
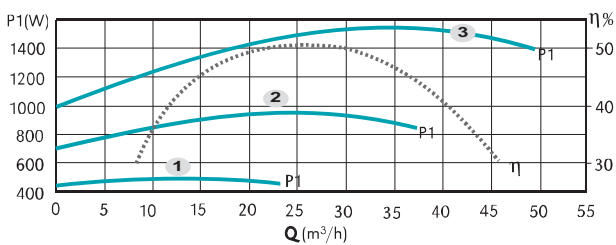
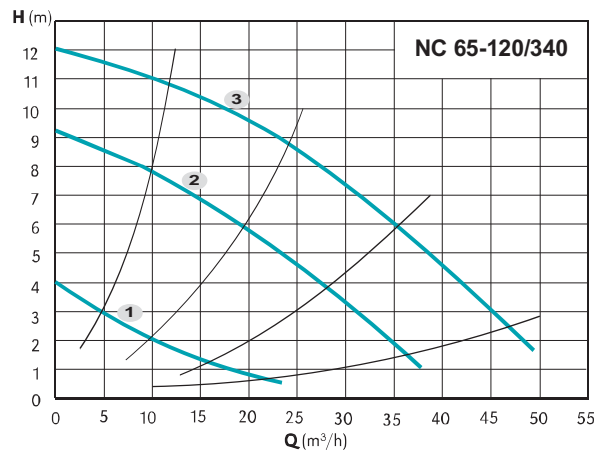
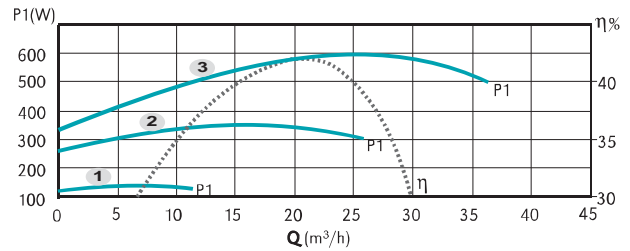
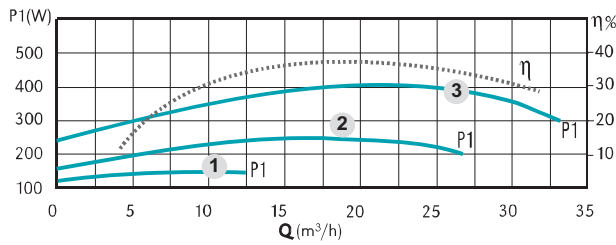
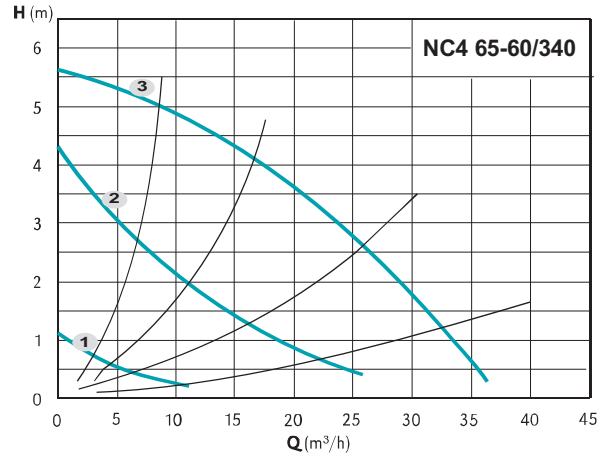
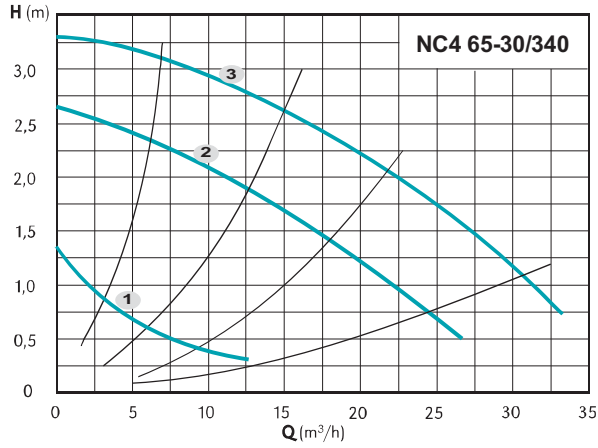
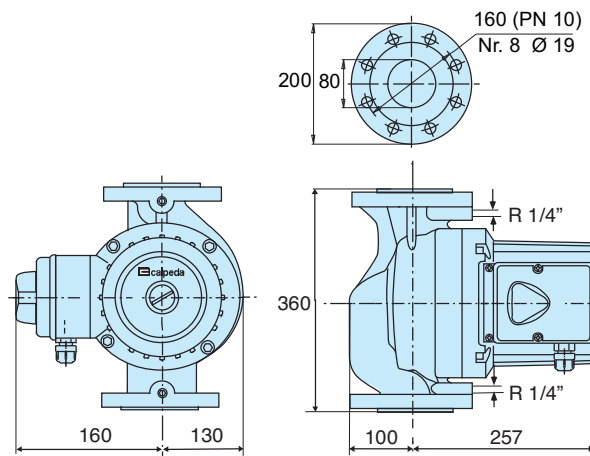
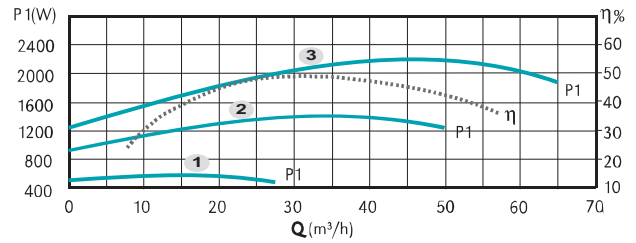
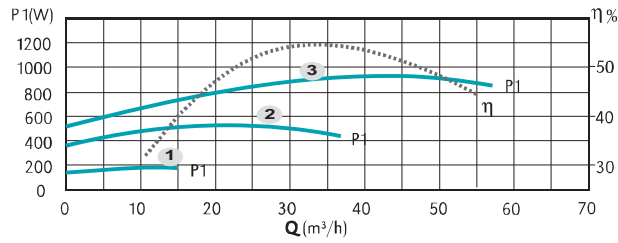
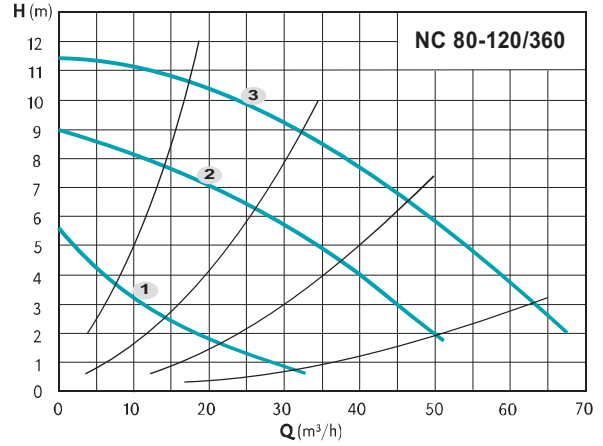
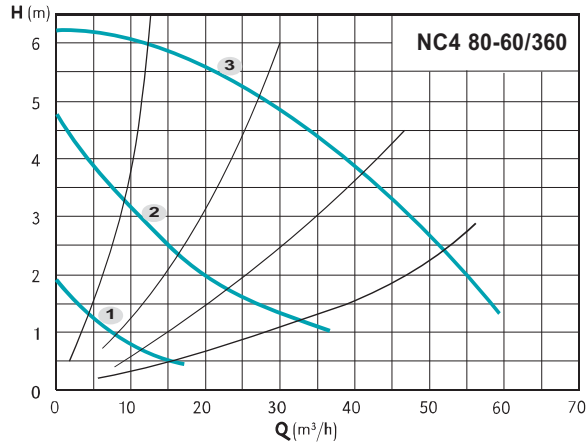


### Characteristic curves, dimensions and weights



TYPE	DN	PN	N° Poli		1/min	P1 (W)	3x 400 V [A]	[kg]
			2	4				
NC4 65-30/340	65	6/10	✓	3	1430	400	1,10	29,0
				2	1150	260	0,50	
				1	600	120	0,22	
NC4 65-60/340	65	6/10	✓	3	1370	600	1,25	29,0
				2	950	360	0,64	
				1	450	120	0,22	
NC 65-120/340	65	6/10	✓	3	2810	1560	2,80	31,0
				2	2200	960	1,70	
				1	1250	460	0,84	

### Characteristic curves, dimensions and weights



TYPE	DN   PN		N° Poli		Pos.	1/min	P1 (W)	3x 400 V [A]	[kg]
	80	10	2	4					
NC4 80-60/360	80	10	✓		3	1350	960	2,20	33,5
					2	1000	560	1,10	
					1	600	200	0,38	
NC 80-120/360	80	10	✓		3	2800	2200	3,80	34,5
					2	2160	1400	2,40	
					1	1200	550	1,05	



### Construction

Pump casing with suction and delivery connections with the same diameter and on the same axis (in-line).

#### Materials:

Pump casing	Cast iron
Impeller	Stainless steel
Shaft	Stainless steel

### Applications

For clean liquids, without abrasives, which are non-aggressive for the pump materials (contents of solids up to 0.2%).  
 For heating, conditioning, cooling and circulation plants.  
 For civil and industrial applications.  
 When low noise operation is required.

### Operating conditions

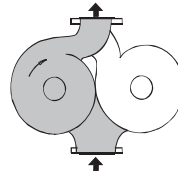
Liquid temperature from -10 °C to +120 °C (in short-time duty up to + 140 °C).  
 Ambient temperature up to 40 °C.  
 Maximum glycol quantity: 50% (Mixture with more than 20% glycol content require rechecking of the pumping data).  
 Maximum permissible working pressure 6/10 bar.

TYPE	Minimum suction pressure: bar		
	Temperature		
	50 °C	80 °C	110 °C
NCD 40	0,05	0,8	1,4
NCD 50	0,3	1	1,6
NCD 65	0,3	1	1,6
NCD 80	0,3	1	1,6

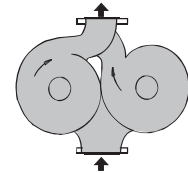
### Motor

2-4-pole induction motor, 50 Hz.  
 Three adjustable speeds.  
**NCD**: three-phase 230V or 400 V.  
**NCDM**: single-phase 230 V.  
 Insulation class H.  
 Protection IP 43.

### Operation

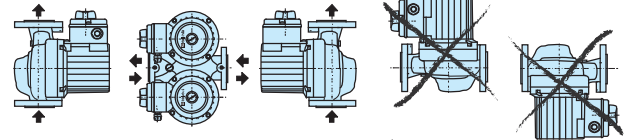


**Single operation**  
 Operation of a single pump choosed by the customer, with the second pump on stand-by

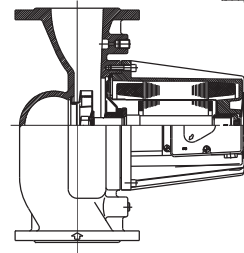


**Double operation**  
 Operation in parallel of the two pumps

### Installation



### Cross section drawings

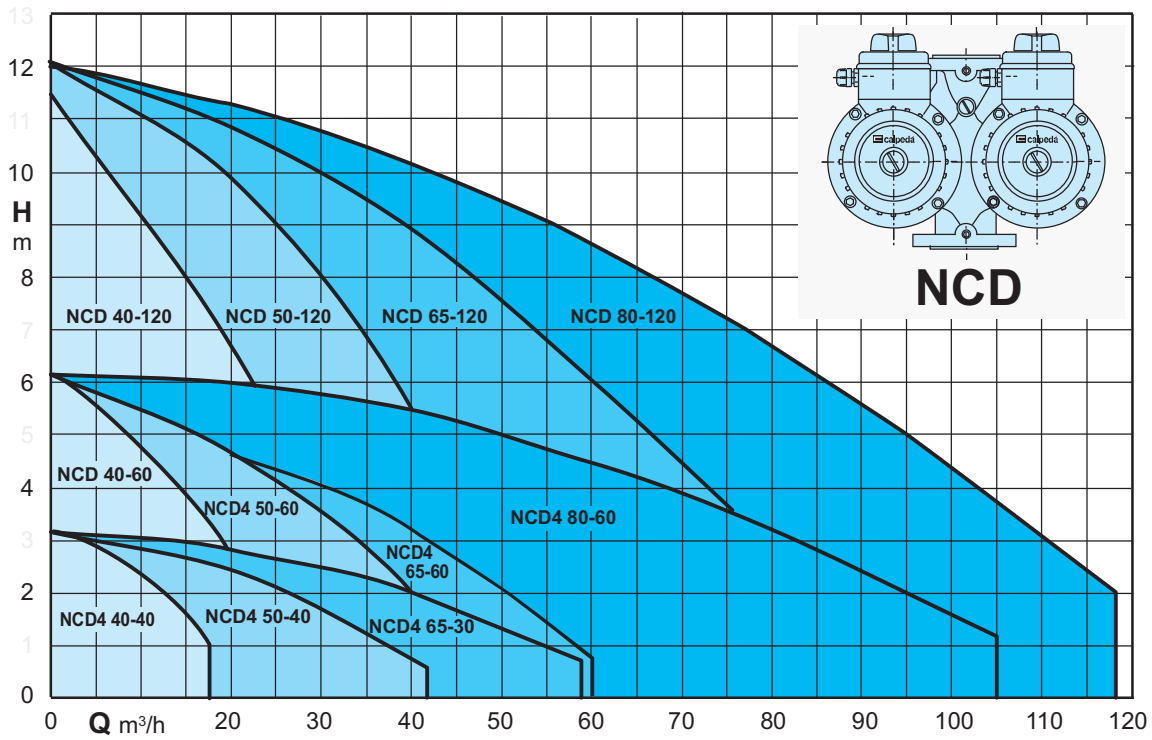


### Designation

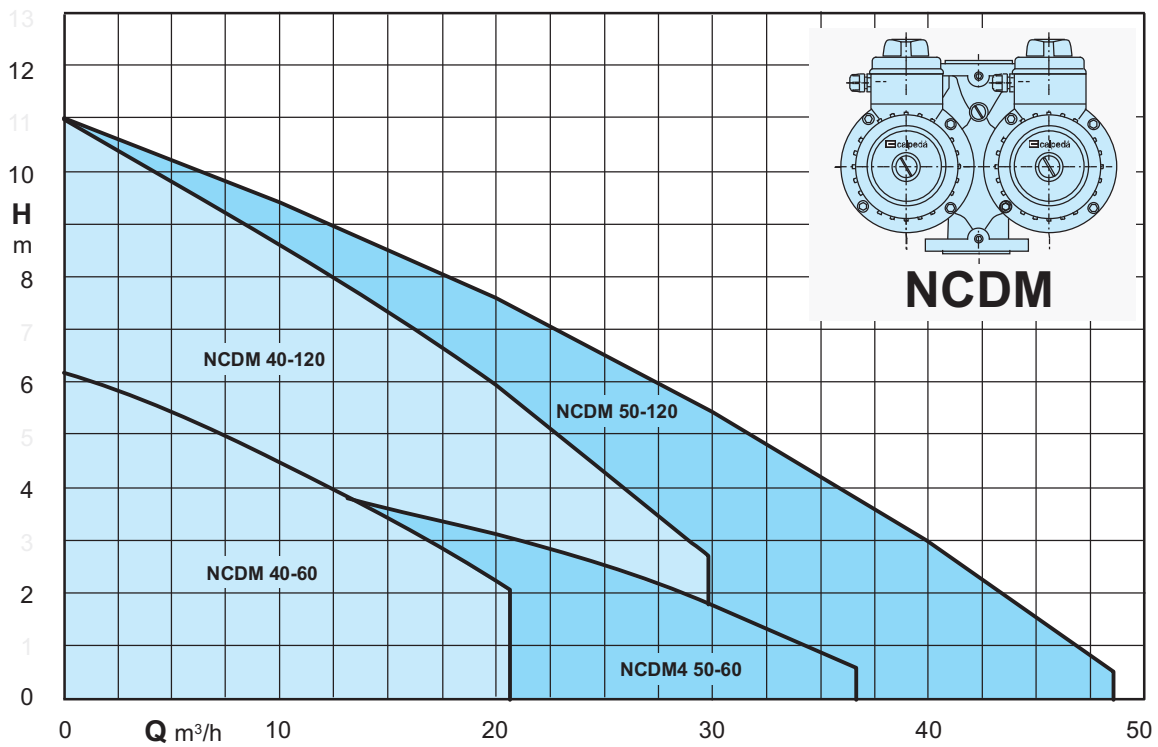
NC D (M) 4 40 - 60 / 250

Series \_\_\_\_\_  
 Twin pumps version \_\_\_\_\_  
 Single-phase motor \_\_\_\_\_  
 4-pole motor \_\_\_\_\_  
 DN ports in mm \_\_\_\_\_  
 Max. head in dm \_\_\_\_\_  
 connection size mm \_\_\_\_\_

## Coverage chart

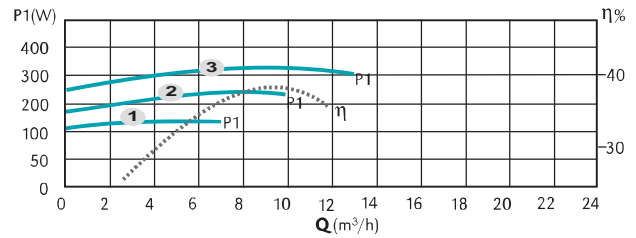
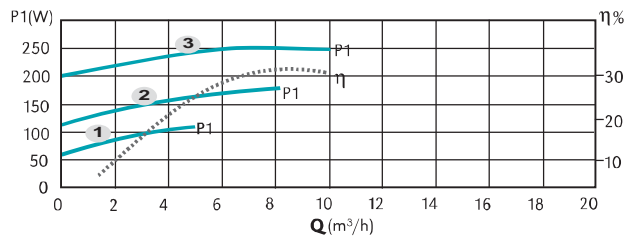
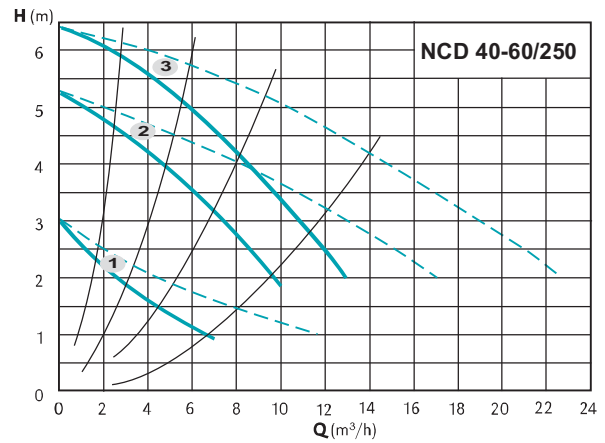
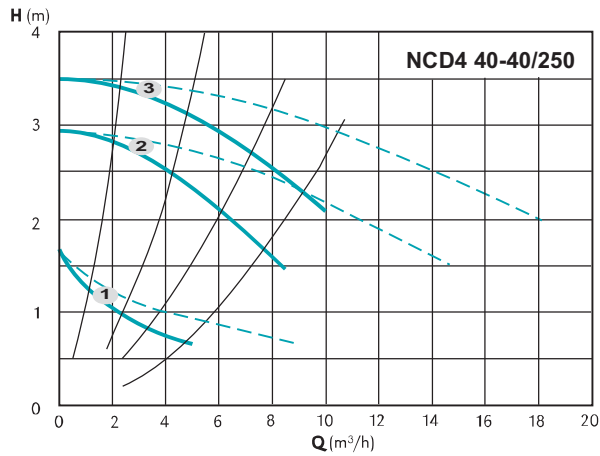


Tolerances according to ISO 9906, annex A.



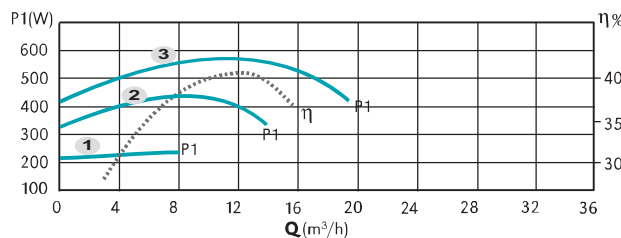
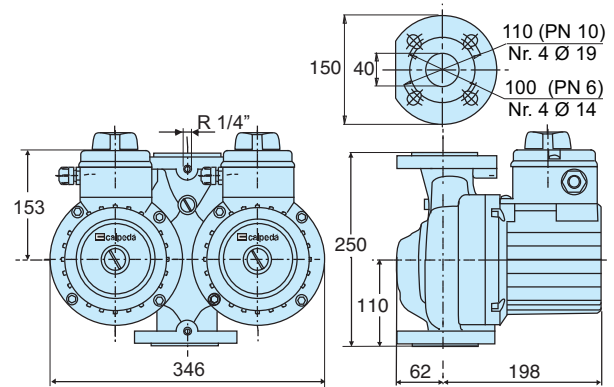
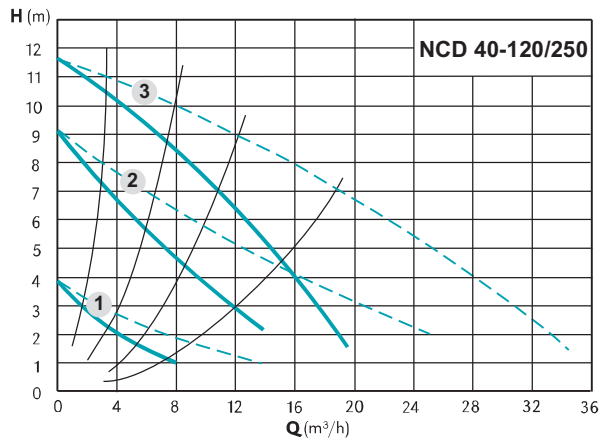
Tolerances according to ISO 9906, annex A.

### Characteristic curves, dimensions and weights



— Single operation  
- - - Operation in parallel

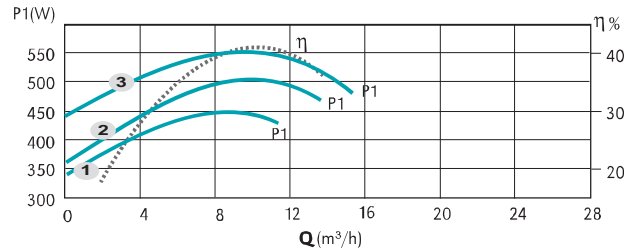
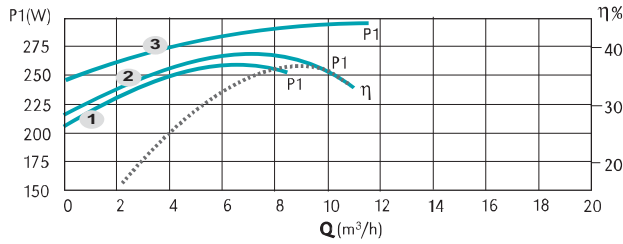
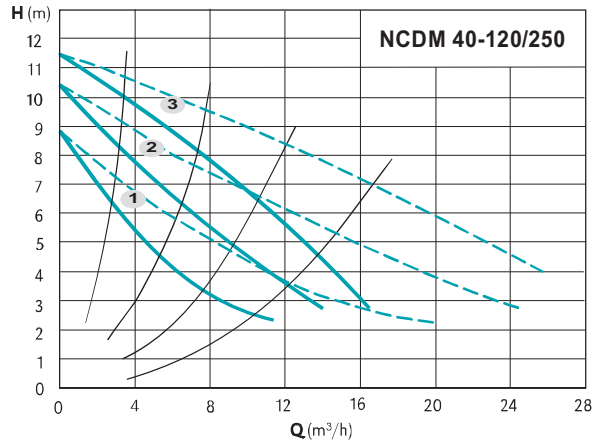
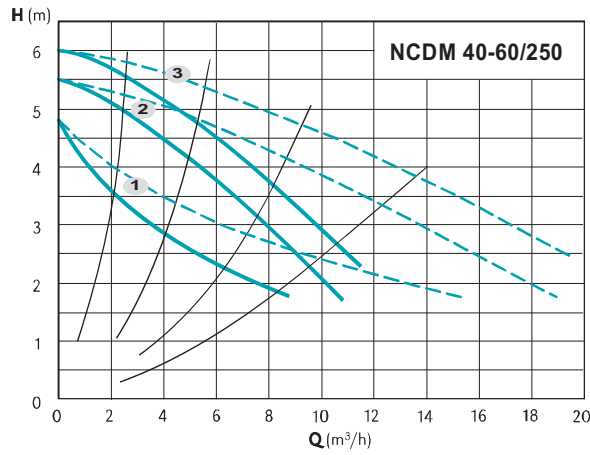
— Single operation  
- - - Operation in parallel



— Single operation  
- - - Operation in parallel

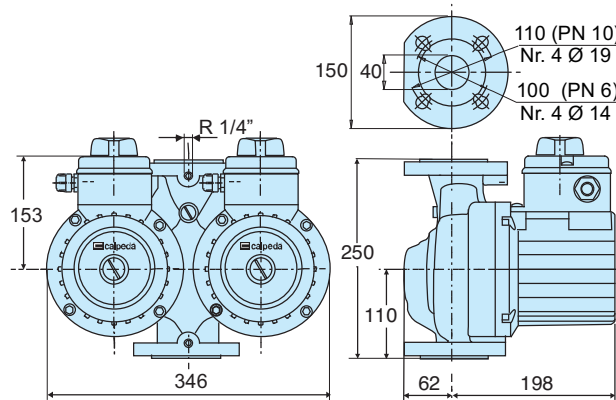
TYPE	DN	PN	N° Poli 2   4	Pos.	1/min	P1 (W)	3x 400 V [A]	[kg]
NCD4 40-40/250	40	6/10	✓	3	1440	240	0,76	34,0
				2	1200	160	0,24	
				1	660	100	0,11	
NCD 40-60/250	40	6/10	✓	3	2790	320	0,74	35,0
				2	2240	240	0,36	
				1	1440	140	0,18	
NCD 40-120/250	40	6/10	✓	3	2820	560	1,16	35,0
				2	2200	400	0,64	
				1	1250	220	0,26	

### Characteristic curves, dimensions and weights



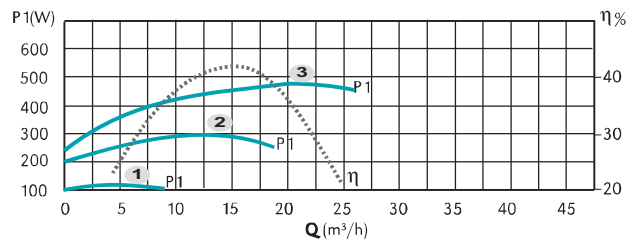
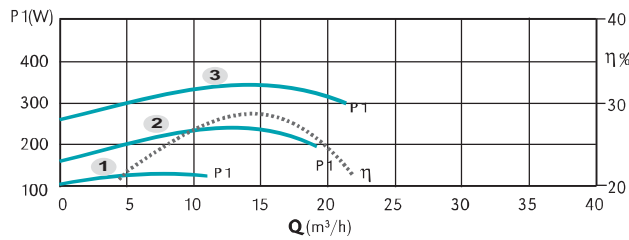
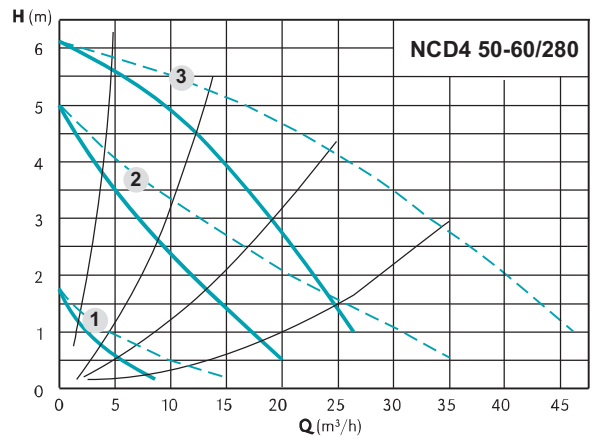
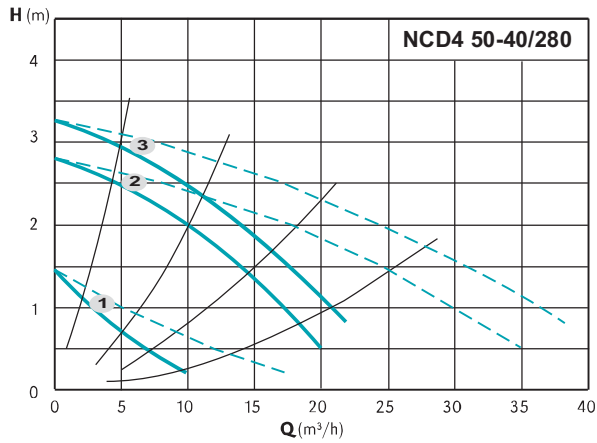
——— Single operation  
- - - - - Operation in parallel

——— Single operation  
- - - - - Operation in parallel



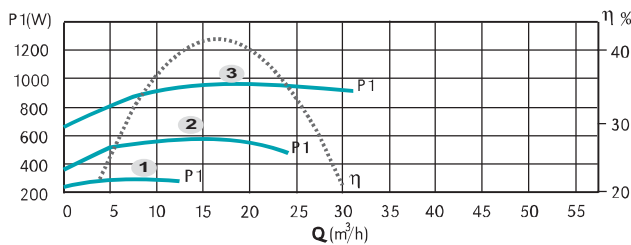
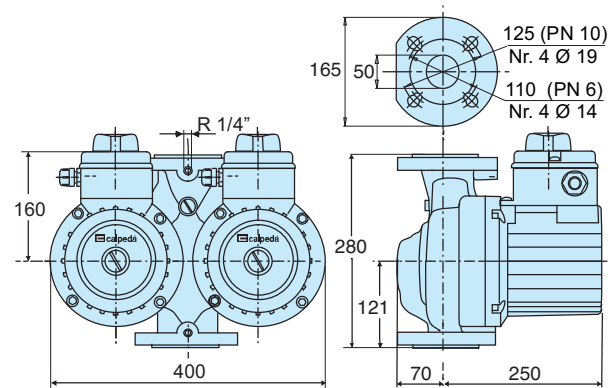
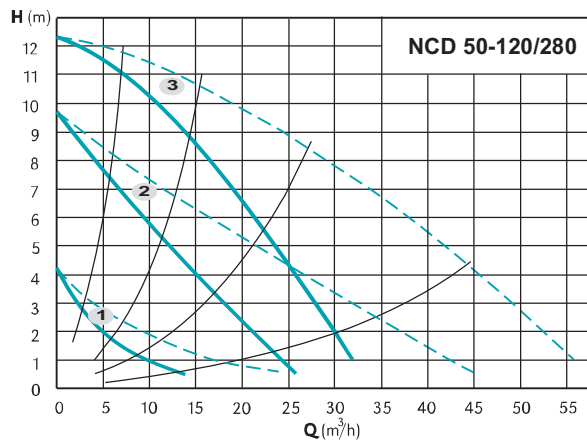
TYPE	DN   PN	N° Poli		Pos.	1/min	P1 (W)	1x 230 V [A]	[kg]
		2	4					
NCDM 40-60/250	40   6/10	✓		3	2690	285	1,20	35,0
				2	2360	245	1,18	
				1	1820	225	1,15	
NCDM 40-120/250	40   6/10	✓		3	2755	550	2,35	35,0
				2	2100	475	2,30	
				1	1270	355	1,85	

### Characteristic curves, dimensions and weights



— Single operation  
- - - Operation in parallel

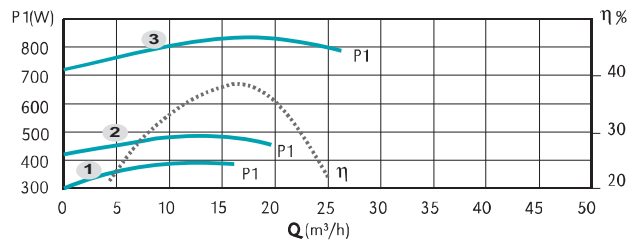
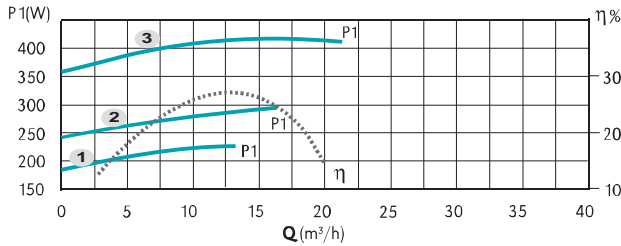
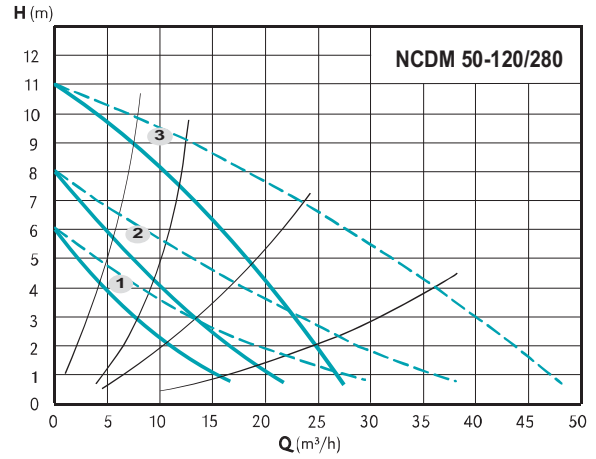
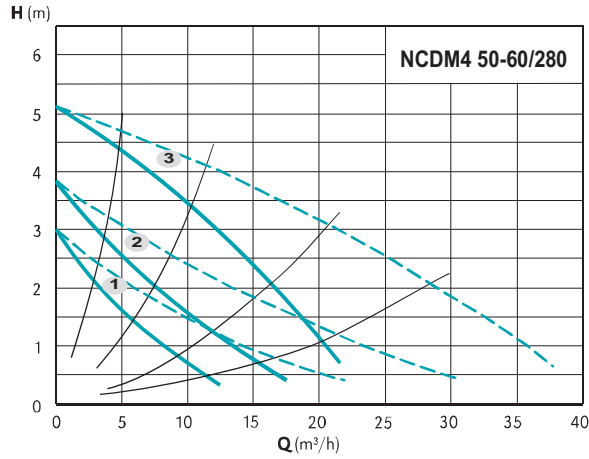
— Single operation  
- - - Operation in parallel



— Single operation  
- - - Operation in parallel

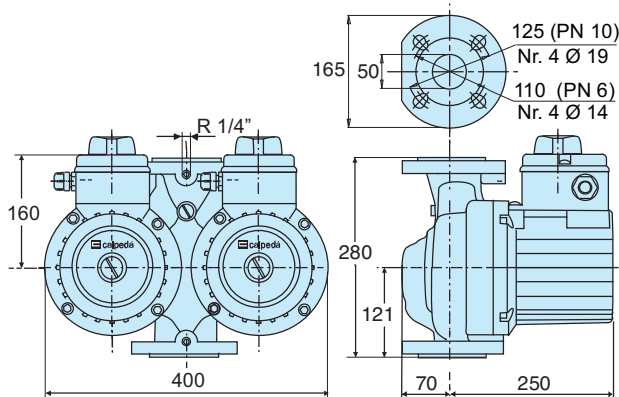
TYPE	DN	PN	N° Poli 2   4	Pos.	1/min	P1 (W)	3x 400 V [A]	[kg]
NCD4 50-40/280	50	6/10	✓	3	1450	340	1,05	44,0
				2	1220	240	0,44	
				1	620	120	0,22	
NCD4 50-60/280	50	6/10	✓	3	1400	470	1,15	44,0
				2	1000	300	0,55	
				1	560	100	0,20	
NCD 50-120/280	50	6/10	✓	3	2800	950	1,73	44,0
				2	2330	540	1,05	
				1	1270	265	0,46	

### Characteristic curves, dimensions and weights



——— Single operation  
- - - - - Operation in parallel

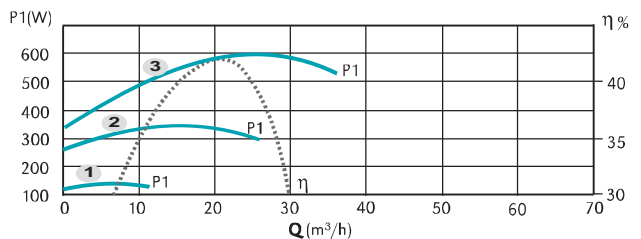
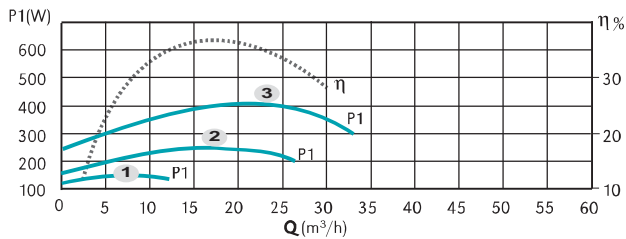
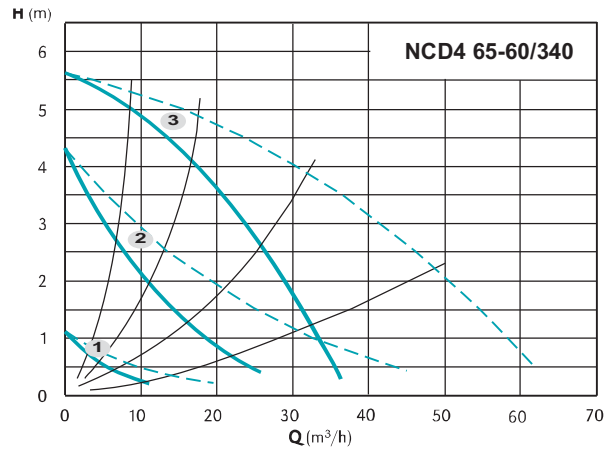
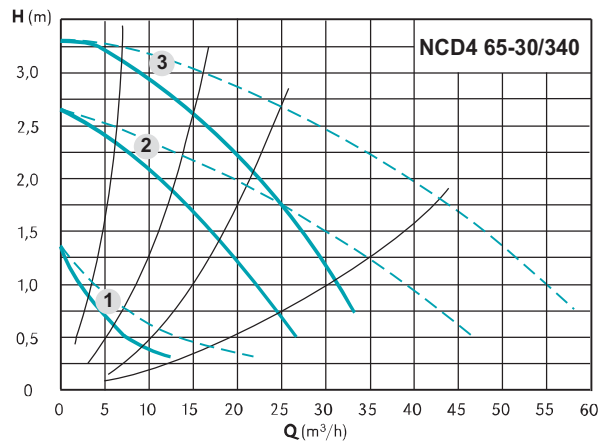
——— Single operation  
- - - - - Operation in parallel



TYPE	DN   PN		N° Poli		Pos.	1/min	P1 (W)	1x 230 V [A]	[kg]
	50	6/10	2	4					
NCDM4 50-60/280			✓		3	1260	415	1,8	44,0
					2	1030	300	1,3	
					1	740	230	1,0	
NCDM 50-120/280				✓	3	2720	830	3,6	44,0
					2	1870	480	2,1	
					1	1450	390	1,7	

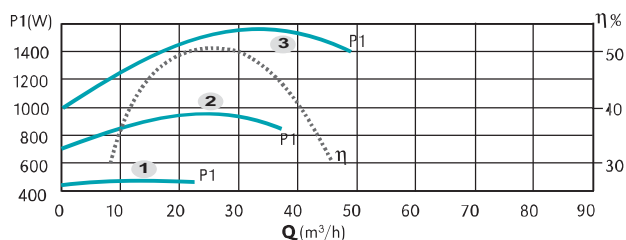
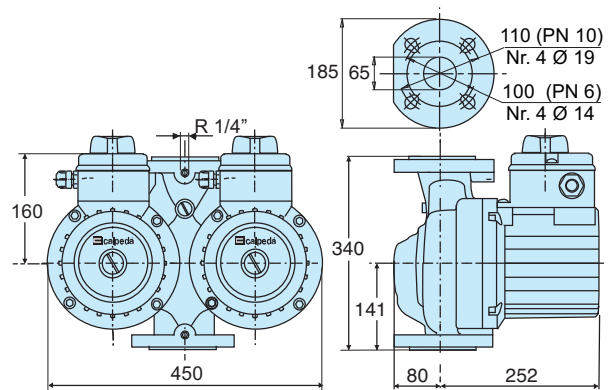
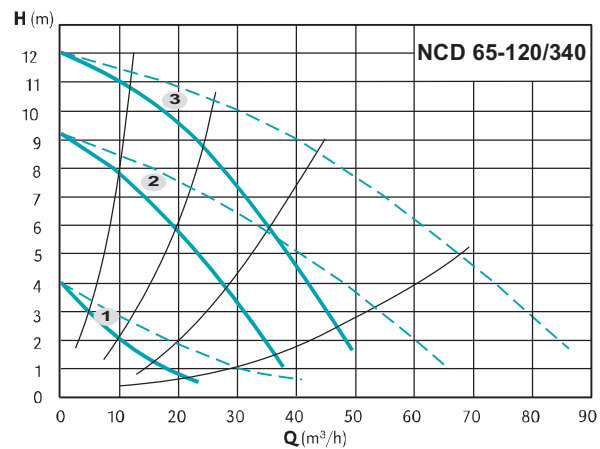


### Characteristic curves, dimensions and weights



— Single operation  
- - - Operation in parallel

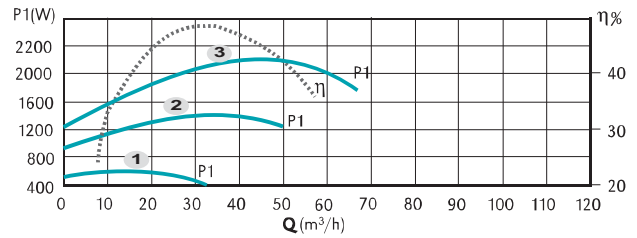
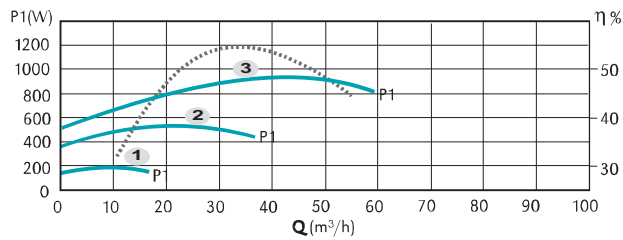
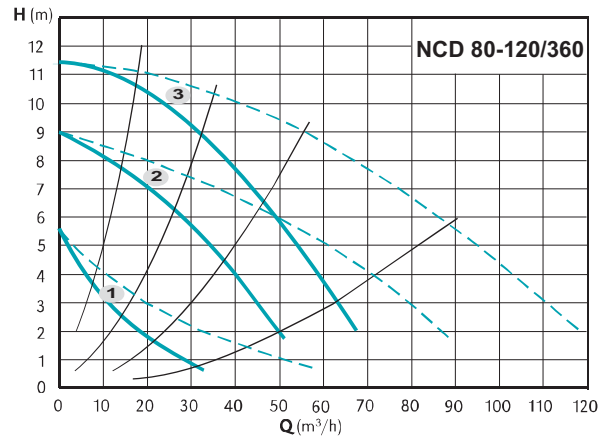
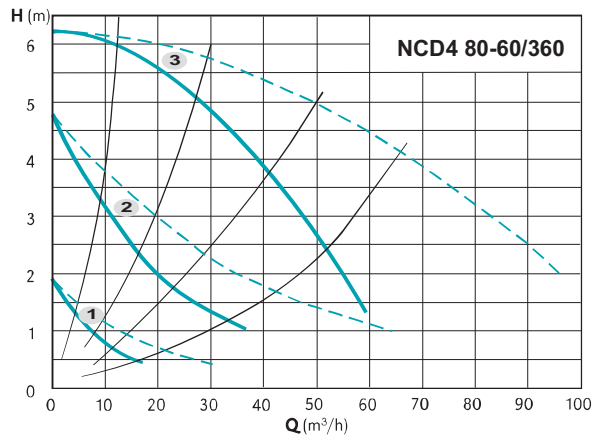
— Single operation  
- - - Operation in parallel



— Single operation  
- - - Operation in parallel

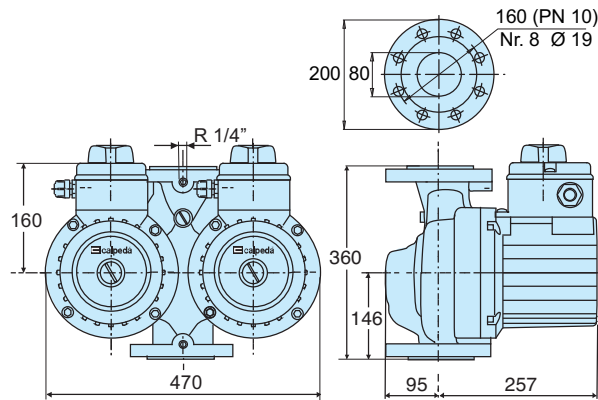
TYPE	DN	PN	N° Poli 2   4	Pos.	1/min	P1 (W)	3x 400 V [A]	[kg]
NCD4 65-30/340	65	6/10	✓	3	1430	400	1,10	49,0
				2	1150	260	0,50	
				1	600	120	0,22	
NCD4 65-60/340	65	6/10	✓	3	1370	600	1,25	49,0
				2	950	360	0,64	
				1	450	120	0,22	
NCD 65-120/340	65	6/10	✓	3	2810	1560	2,80	54,0
				2	2200	960	1,70	
				1	1250	460	0,84	

### Characteristic curves, dimensions and weights



Single operation  
 Operation in parallel

Single operation  
 Operation in parallel



TYPE	DN	PN	N° Poli		1/min	P1 (W)	3x 400 V [A]	[kg]
			2	4				
NCD4 80-60/360	80	10	✓	3	1350	960	2,20	60,0
				2	1000	560	1,10	
				1	600	200	0,38	
NCD 80-120/360	80	10	✓	3	2800	2200	3,80	62,0
				2	2160	1400	2,40	
				1	1200	550	1,05	

# IDROMAT 3-4

Electronic regulator for pumps



## Construction

Regulation device for pump control equipped with flow and pressure sensor connected to an electronic system.  
Inlet and delivery connection ports of the same diameter (G1).  
Built-in check valve.  
Pressure gauge 0-10 bar supplied as standard for all the models.  
Automatic reset function in IDROMAT4 for the reset of the system without manual operation.

## Applications

Automatic control of pumps for water supply and increase of network pressure.

**Control of starting/stopping of the pump** when cocks are opened/closed.

### For protection of the pump:

- against dry running;
- against the risk of operation without water at the inlet (caused by a lack of water inflow in the inlet pipe under positive suction head, by a non-immersed suction pipe, by excessive suctionlift or by air entering the suction pipe);
- against operation with closed connection ports.

## Operating conditions

TYPE	Switching-on pressure	Pump head
<b>IDROMAT 3-12</b>	1,2 bar	> 20 m
<b>IDROMAT 3-15</b>	1,5 bar	> 23 m
<b>IDROMAT 3-22</b>	2,2 bar	> 30 m
<b>IDROMAT 3-30</b>	3,0 bar	> 40 m
<b>IDROMAT 4</b>	adjustable	(1)

(1) 1,5 bar more than the expected restart pressure

For pumps with delivery up to 10 m<sup>3</sup>/h.  
Maximum working pressure: 10 bar.  
Liquid temperature up to 60 °C.  
Mains voltage: 230 V ±10%, single-phase.  
Frequency: 50 - 60 Hz.  
Protection: IP 65.

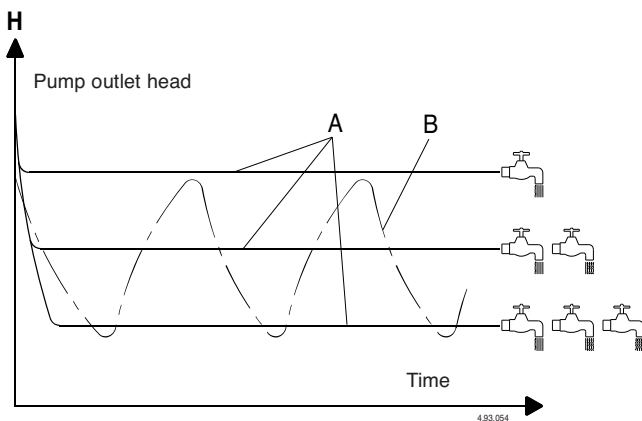
Current values:

- 8A max during operation (16A max at start-up) for IDROMAT 3;
- 16A max during operation (30A max at start-up) for IDROMAT 4

## Materials

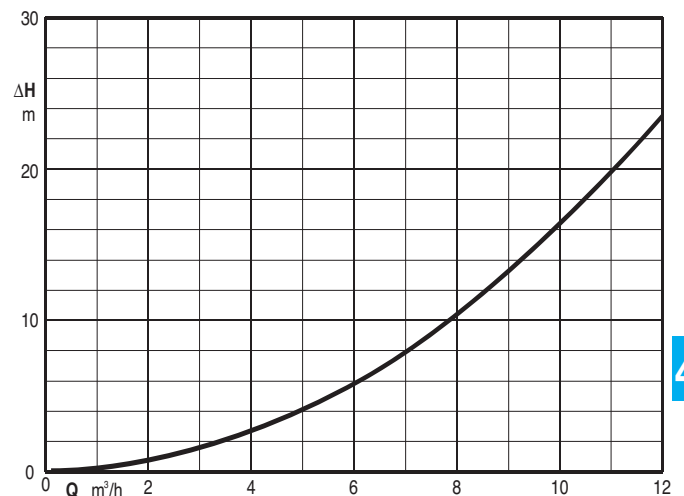
Component	<b>IDROMAT 3-4</b>
Housing	Polyamide PA 6 G.F. reinforced
Membrane	Natural rubber

## Comparison of pressure values



A = operation with **IDROMAT** = constant pressure;  
B = operation with traditional vessel and pressure switch system.

## Diagram of head loss



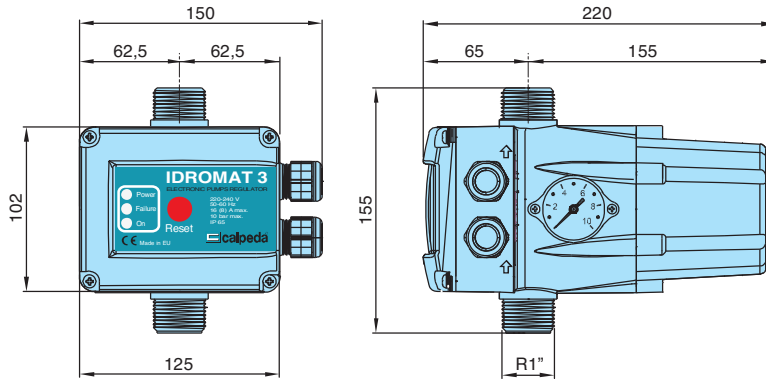
$\Delta H$  = Head loss in meters

## Dimensions and weights

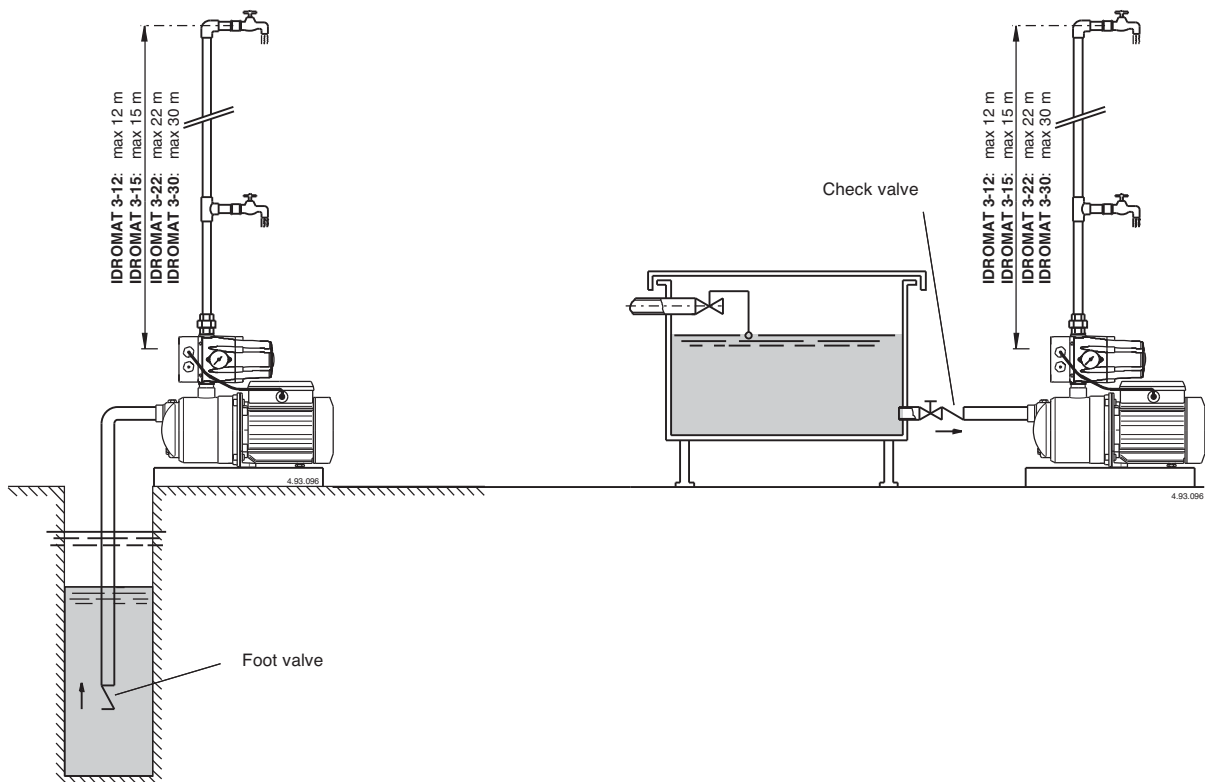
### Weights

IDROMAT 3 kg 1,17

IDROMAT 4 kg 1,35



## Installation example





### Benefits

#### CONSTANT PRESSURE

The easymat via a frequency inverter keeps the pressure constant as the flow demand changes.

#### ENERGY SAVING

The variable speed operation ensures that only the energy required by the plant at any instant is used.

#### SYSTEM RELIABILITY

Because the easymat is independent of the pumped liquid it's operation is not affected by fluid impurity.

A float switch can also be integrated to further protect against dry running.

#### FLEXIBILITY

Thanks to its patented design the easymat does not come into contact with the pumped fluid. This provides for more flexibility during installation eliminating the need for pipe-work modifications or the installation of isolating valves.

#### EASY TO USE

The easymat has a clear display making it very simple to set-up.

#### CASCADE CONTROL MODE

The system flexibility allows via a microprocessor for cascade operation of two easymat's via one pressure transducer.

### Construction

Variable speed system driven by frequency converter, for the pressure control in domestic and residential plants.

The system is connected to the delivery pipe providing for simple installation and better cooling (patented) making the unit more compact and easy to assemble.

Easymat is supplied with one pressure transducer, G 1/4 connection and 1.5 m cable length.

### Applications

Automatic frequency inverter control for use on pumps to increase network pressure.

The system maintains constant pressure whilst the controlling the pump operation against changing system demand.

#### For protection of the pumps:

- Against dry running
- Against operations with closed connection ports
- Against overcurrent of the motor
- Against overvoltage and undervoltage of the power supply

### Operating conditions

**EASYMAT MM** - Input voltage: 1~ 230V  $\pm 10\%$

- Output voltage: 1~ 230V

**EASYMAT MT** - Input voltage: 1~ 230V  $\pm 10\%$

- Output voltage: 3~ 230V

Input frequency: 50-60 Hz

Output frequency: up to 70 Hz

Protection: IP55

Max Ambient temperature: 40°C

Max liquid temperature: 50 °C (40°C for 7,5MT, 8,5MM)

Minimum Flow: 3 l/min

Altitude: no higher than 1000 m, inside a closed environment.

### Construction

(Standard execution)

The system comprises of:

- Frequency converter.
- Pressure transducer.
- Pipe housing.
- Fixing screws.
- Terminal board.
- Cable glands.
- Multi-hole gaskets.

### Type

Type (single-phase)	Frequency converter max current output A	Standard power motor 230V kW
Easymat 5MM	5	0,37 - 0,55
Easymat 8,5MM	8,5	0,75 - 1,1

Type (three-phase)	Frequency converter max current output A	Standard power motor 230V kW
Easymat 5MT	5	0,75 - 1,1
Easymat 7,5MT	7,5	1,5 - 1,8

### Control Panel

Easymat is equipped with a control panel for simple system programming and parameter monitoring.

The **2 scroll buttons** are used to scroll the different operating parameters that EASYMAT can show.

At the same time you can use the 2 scroll buttons to move in the set up menu and to change the different options.

The **LCD custom display** gives an easy overview of the system situation and of the operating parameters.

The icons on the top and below the display area explain in which way EASYMAT is working and if there are problems on the system.

Le icone sopra e sotto l'area del display spiegano in quale modo EASYMAT sta lavorando e se ci sono alcuni problemi nel sistema.

The four set-up buttons allow the operator to move between and set-up the menu's and to start and stop the pump. The symbols help to make the function of each button clear.

With these 4 buttons and the 2 scroll buttons you can manage all the set-up and operating parameters without the use of an other control panel or computer.



4.93.410

### Display LCD



The integrated LCD custom display gives you an easy overview of the system situation and operating parameters.



#### DISPLAY AREA

The display area gives the status of the parameters of the pump.

The **OPERATING ICONS** show in which mode the system is operating:



#### Constant pressure mode

The system keeps the pressure constant when the quantity of water requested by the user changes. The user can choose the operating pressure according his needs.



#### Fixed speed mode

The system works at a fixed speed that user can choose according his needs.

The **SYSTEM ICONS** show in which way the system is operating:



#### Auto Mode

The icon shows that the system is operating in auto mode (constant pressure mode), the constant pressure mode it is indicated by the icon on the lower part of the display.



#### Manual Mode

The icon show that the system is operating in manual mode (fixed speed mode), with the navigation buttons the user can change the speed, the fixed speed mode is indicated by the icon on the lower part of the display.



#### Set-up Mode

The icon shows that the set-up menu is activated, in this mode it is possible to change all the operating parameters of the EASYMAT. With the navigations buttons it is possible to scroll the parameters and, if necessary, change them.



#### Sensor State

indicates the state of the pressure transducer connected to the EASYMAT, if lit it indicates that the pressure transducer is working, if it is blinking there is a fault or a incorrect connection of the pressure transducer.



#### Alarm

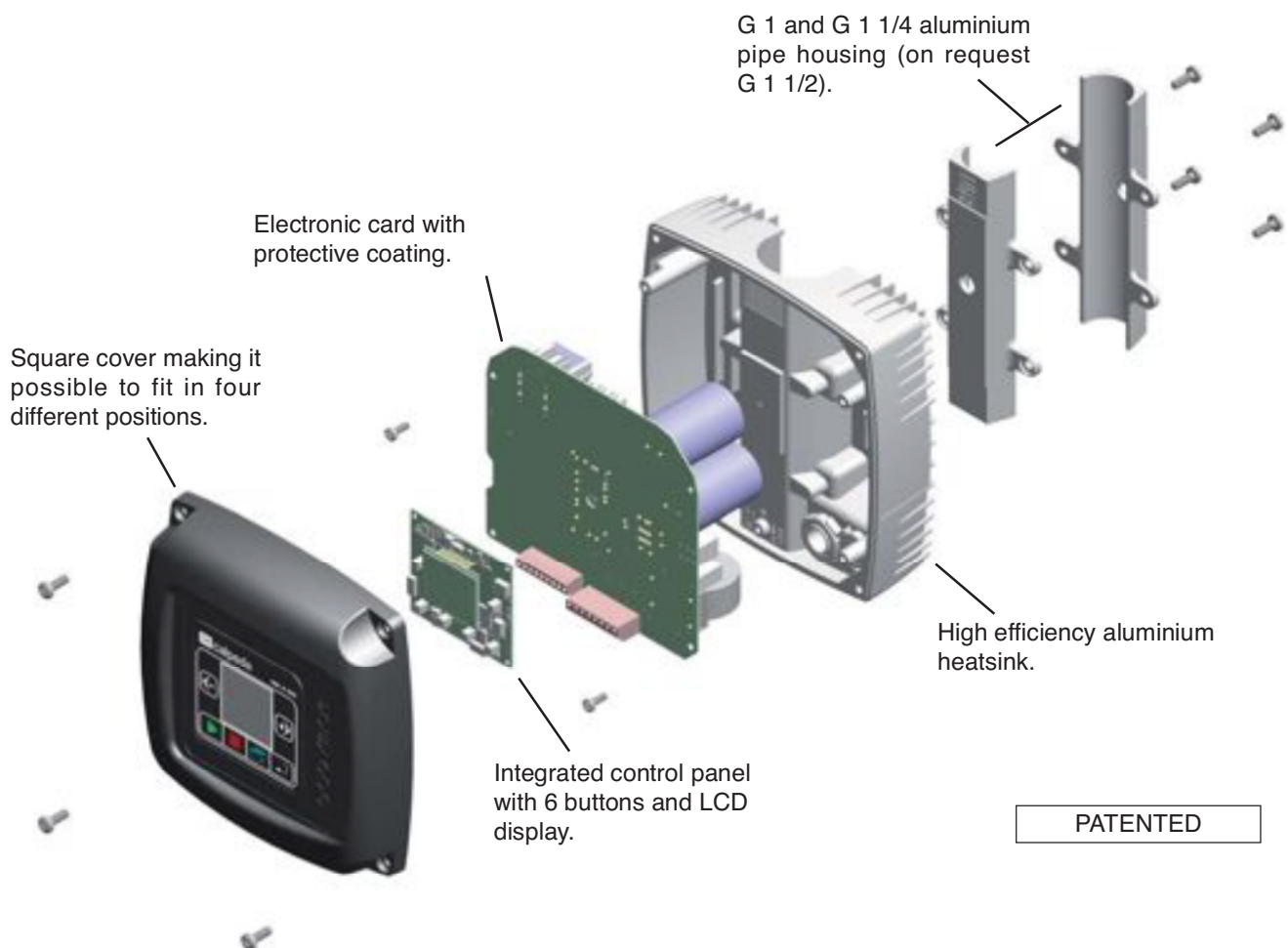
It indicates that there is a fault on the system, the error number appears on the display area.



#### Cascade Mode

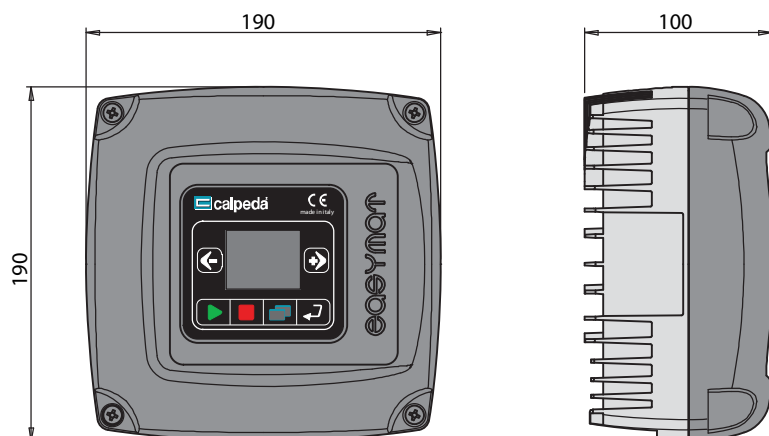
It indicates that the multi-pump mode (up to 2 pumps) is working, the upper icon shows if the pump connected with the frequency converter is running or is in stand-by, the lower icon indicates if the pump is the master pump (the icon is lit) or the slave pump (the icon is blinking).

## Overview



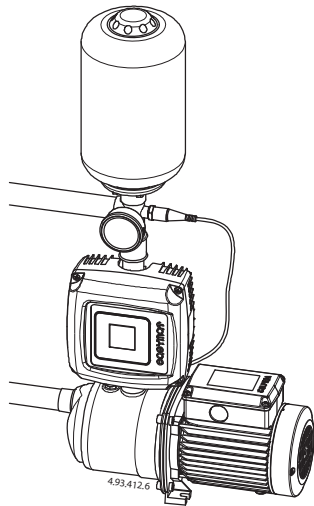
## Dimensions and weights

**Weight** kg 1,9

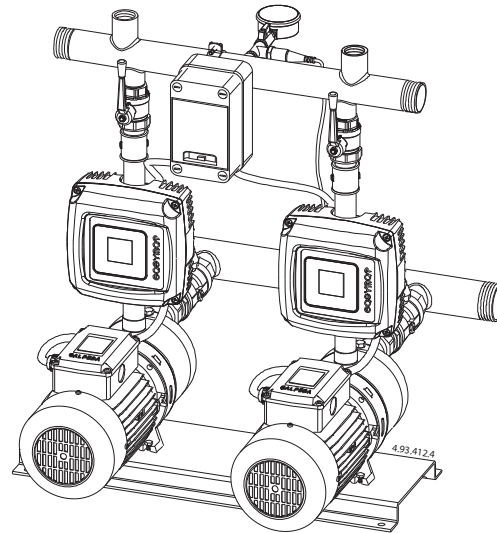


## Installation example

One pump installation scheme

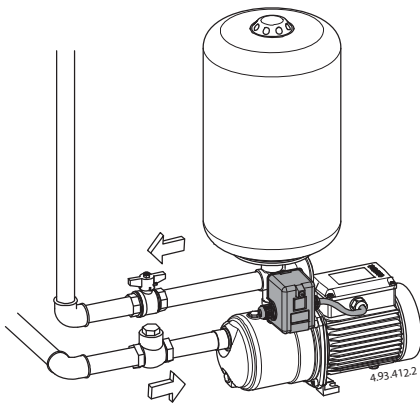


Two pumps installation scheme



## Plant conversion scheme

Existing fixed speed version

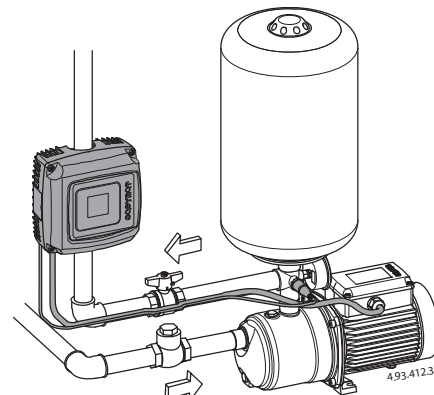


With EASYMAT it is easy to create a variable speed system starting from an existing fixed speed system without disturbing the existing pipe-work.

To create the variable speed system it is only necessary to:

- Disconnect the pressure switch from the system and, in the same housing connect the pressure transducer.
- Connect EASYMAT to the pipe.
- Connect EASYMAT to electric motor.
- Connect the supply cable to the electric grid.

Variable speed system version





# Pressure Boosting Sets

Fixed speed pump units

Variable speed pump units with frequency converter



pag. 428



**MINIMAT, TURBOMAT  
CENTRIMAT, GETTOMAT**

Small automatic water systems with 1 pump series  
**CT, CA, T, TP, MGP, NM, NG, NGL  
MXH, MXP, NGX, MXA**

pag. 481



**BS1V1F, BS2V**

Variable speed pump (on-board frequency converter) pressure boosting sets for civil use with 2 MXVE

pag. 437



**EASYMAT**

Constant pressure boosting sets with Easymat frequency converter with 1 or 2  
**MGP, MXP, MXH, MXSU, MXVB, 4SDF**

pag. 485



**BS3F**

Fixed speed pump pressure boosting sets for civil use with 3 MXVB, MXV

**BS1V2F, BS3V**

Variable speed pump pressure boosting sets for civil use with 3 MXVB, MXV

pag. 451



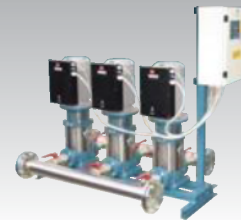
**BS2F**

Fixed speed pump pressure boosting sets for domestic use with 2  
**MXH, MXP, MGP, NM, NG, NGL, NGX**

**BS1V1F, BS2V**

Variable speed pump pressure boosting sets for domestic use with 2 MXH, MXP, MGP, NM

pag. 494



**BS1V2F, BS3V**

Variable speed pump (on-board frequency converter) pressure boosting sets for civil use with 3 MXVE

pag. 466



**BS2F**

Fixed speed pump Pressure boosting sets for domestic use with 2 MXSU

**BS1V1F, BS2V**

Variable speed pump pressure boosting sets for domestic use with 2 MXSU

pag. 498



**BS2F**

Fixed speed pump pressure boosting sets for civil use with 2 NM, NMD

**BS1V1F, BS2V**

Variable speed pump pressure boosting sets for civil use with 2 NM, NMD

pag. 469



**BS3F**

Fixed speed pump Pressure boosting sets for domestic use with 3 MXSU

**BS1V2F, BS3V**

Variable speed pump pressure boosting sets for domestic use with 3 MXSU

pag. 511



**BS3F**

Fixed speed pump pressure boosting sets for civil use with 3 NM

**BS1V2F, BS3V**

Variable speed pump pressure boosting sets for civil use with 3 NM

pag. 472



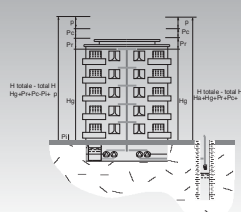
**BS2F**

Fixed speed pump pressure boosting sets for civil use with 2 MXVB, MXV

**BS1V1F, BS2V**

Variable speed pump pressure boosting sets for civil use with 2 MXVB, MXV

pag. 571

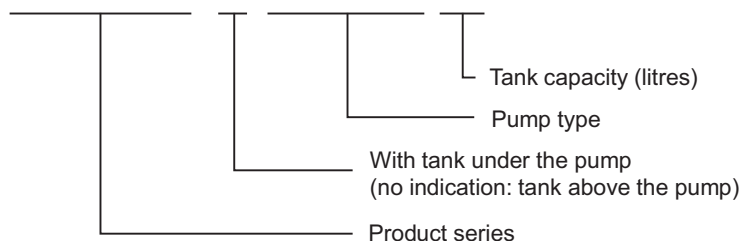


**CHOOSING A  
PRESSURE-BOOSTING  
PLANT**

## Designation

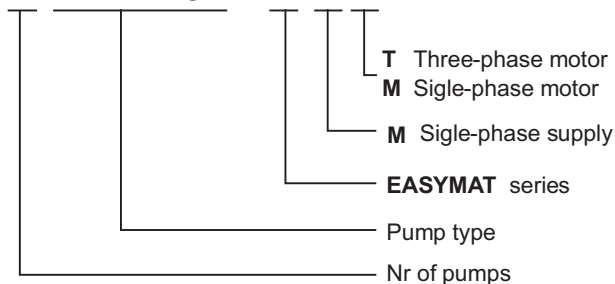
**CENTRIMAT 1/1 MXH 205E /20**

**CENTRIMAT      MXH 205E /24**



**2 MXH 204 - E MT**

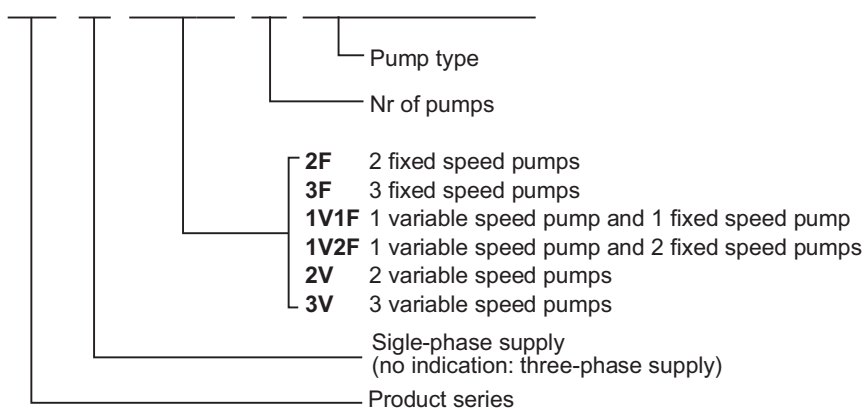
**2 MXH 204 - E MM**



**BS M 2V      2 MXV 25/204**

**BS M 1V 1F 2 MXV 25/204**

**BS M      2F 2 MXV 25/204**



To select a Pressure Boosting Set see chap. 51 technical appendix at page 571.  
**Per gruppi con 4, 5 e 6 pompe contattare il Ns. ufficio tecnico/commerciale.**

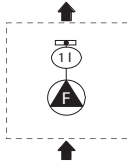
# Operation

## MINIMAT

with 1 fixed speed pump

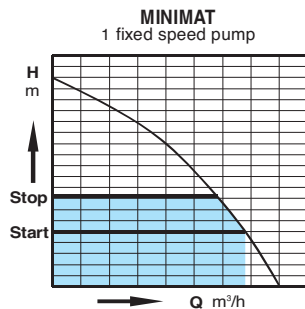
### Construction

Small pressure boosting sets with automatic operation, consisting of pump, pressure switch and 1 litre diaphragm tank.



### Operation

Pump is directly driven by the pressure switch.



## TURBOMAT, CENTRIMAT, GETTOMAT

with 1 fixed speed pump

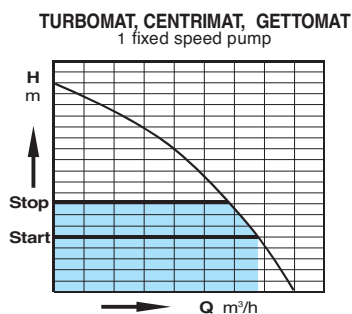
### Construction

Small pressure boosting sets with automatic operation, consisting of with pump, pressure switch, pressure gauge and diaphragm tank (24litres if above the pump, 20litres if under the pump).



### Operation

Pump is directly driven by the pressure switch..

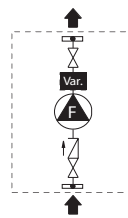


## EASYMAT

with 1 variable speed pump

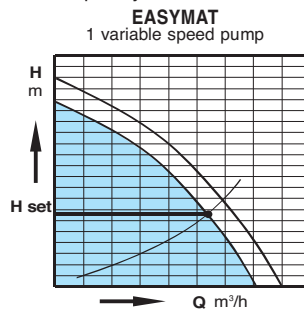
### Construction

Pressure boosting sets with automatic operation and constant pressure, consisting of a variable speed pump driven by Easymat frequency converter, with gate and non-return valves, pressure gauge, 8 litres diaphragm tank (on request).



### Operation

Variable speed pump is directly driven by Variomat frequency converter.

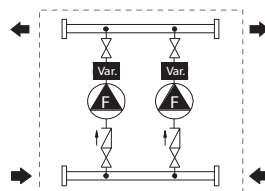


## EASYMAT

with 2 variable speed pumps

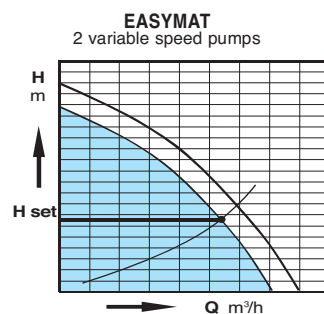
### Construction

Pressure boosting sets with automatic operation and constant pressure, made up with 2 variable speed pumps on a common baseplate driven by Easymat frequency converter, with suction and delivery manifolds, gate and non-return valves, pressure gauge, 8 litres diaphragm tank and control panel with two magnetothermal switches.



### Operation

Pumps starting in a cascade sequence, with changeover of pump starting sequence.



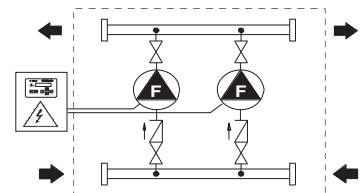
## BSF

with fixed speed pumps

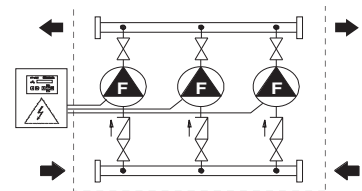
### Construction

Pressure boosting sets with automatic operation, consisting in 2 and 3 pumps on a common baseplate, with suction and delivery manifolds, gate and non-return valves, pressure switches, pressure gauge, control panel and from 100 to 1000 litres diaphragm tank (on request).

**BS 2F**  
2 fixed speed pumps



**BS 3F**  
3 fixed speed pumps

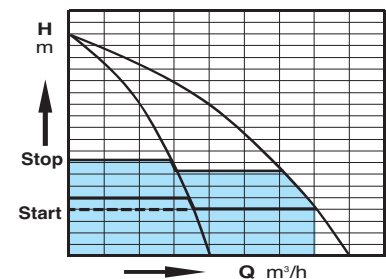


### Operation

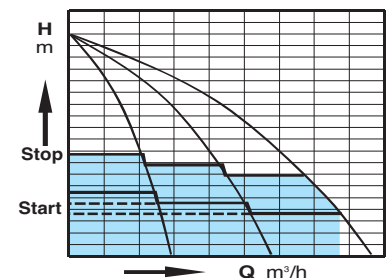
The control panel, with electronic card, manages the pump operation, the changeover of pump starting sequence and it stops the system when there is no air in the tank (patented system).

Pumps starting in a cascade sequence, with a signal from the pressure switches.

**BS 2F**  
2 fixed speed pumps



**BS 3F**  
3 fixed speed pumps



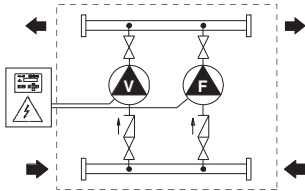
### BSV.F.

with variable and fixed speed pumps (frequency converter into the control panel)

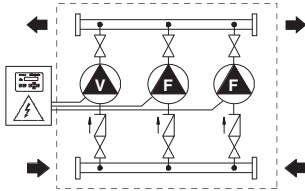
#### Construction

Pressure boosting sets with automatic operation, consisting of 1 variable speed pump with frequency converter into the control panel and from 1 to 5 fixed speed pumps, assembled on a common baseplate, with suction and delivery manifolds, gate and non-return valves, pressure gauge, control panel and 20 litres diaphragm tank (on request).

**BS 1V1F**  
2 pumps: 1 variable  
1 fixed



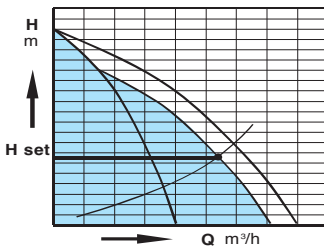
**BS 1V2F**  
3 pumps: 1 variable  
2 fixed



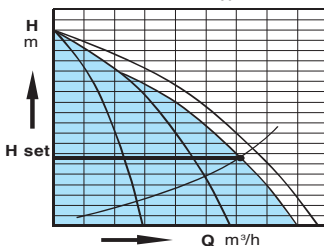
#### Operation

The control panel, with electronic card, manages the pump operation, the changeover of fixed speed pumps starting sequence. Pumps starting is in a cascade sequence, with a signal from the pressure transducer. Constant pressure is guaranteed by the variable speed pumps, while fixed speed pumps start when the request is higher than the capacity of the variable speed pump.

**BS 1V1F**  
2 pumps: 1 variable  
1 fixed



**BS 1V2F**  
3 pumps: 1 variable  
2 fixed



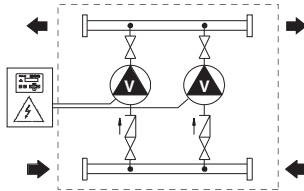
### BSV

with variable speed pumps (frequency converter into the control panel)

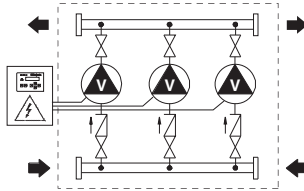
#### Construction

Pressure boosting sets with automatic operation, consisting of variable speed pumps (from 1 to 6) with frequency converter on the control panel, assembled on a common baseplate, with suction and delivery manifolds, gate and non-return valves, pressure transducer, pressure gauge, control panel and 20 litres diaphragm tank (on request).

**BS 2V**  
2 variable speed pumps



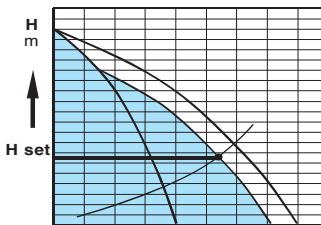
**BS 3V**  
3 variable speed pumps



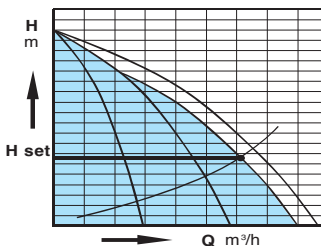
#### Operation

The control panel, with electronic card, manages the pump operation, the changeover of pumps starting sequence. Pumps starting in a cascade sequence, with a signal from the pressure transducer.

**BS 2V**  
2 variable speed pumps



**BS 3V**  
3 variable speed pumps



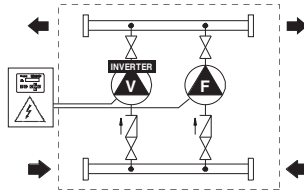
### BSV.F.

with variable speed pumps (on board frequency converter)

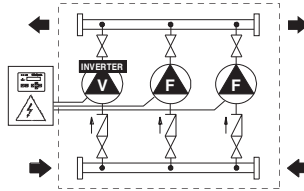
#### Construction

Pressure boosting sets with automatic operation, consisting of 1 variable speed pump with frequency converter into the control panel and from 1 to 5 fixed speed pumps, assembled on a common baseplate, with suction and delivery manifolds, gate and non-return valves, pressure gauge, control panel and 20 litres diaphragm tank (on request).

**BS 1V1F**  
2 pumps: 1 variable  
1 fixed



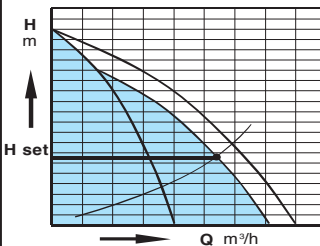
**BS 1V2F**  
3 pumps: 1 variable  
2 fixed



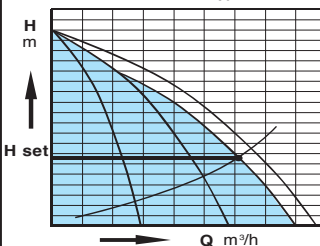
#### Operation

The control panel, with electronic card, manages the pump operation, the changeover of fixed speed pumps starting sequence. Pumps starting is in a cascade sequence, with a signal from the pressure transducer. Constant pressure is guaranteed by the variable speed pumps, while fixed speed pumps start when the request is higher than the capacity of the variable speed pump.

**BS 1V1F**  
2 pumps: 1 variable  
1 fixed



**BS 1V2F**  
3 pumps: 1 variable  
2 fixed



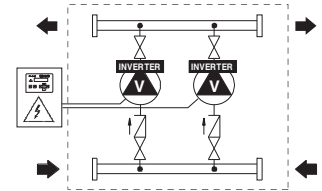
### BSV

with variable speed pumps (on board frequency converter)

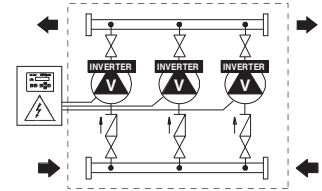
#### Construction

Pressure boosting sets with automatic operation, consisting of variable speed pumps (from 1 to 6) with frequency converter on the control panel, assembled on a common baseplate, with suction and delivery manifolds, gate and non-return valves, pressure gauge, control panel and 20 litres diaphragm tank (on request).

**BS 2V**  
2 variable speed pumps



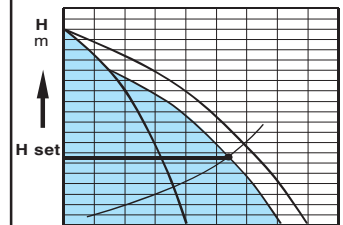
**BS 3V**  
3 variable speed pumps



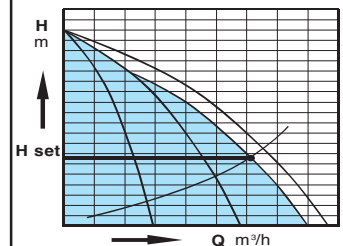
#### Operation

The control panel, with electronic card, manages the pump operation, the changeover of pumps starting sequence. Pumps starting in a cascade sequence, with a signal from the pressure transducer.

**BS 2V**  
2 variable speed pumps



**BS 3V**  
3 variable speed pumps



## Fixed speed pump units

### New electrical control panels for fixed speed pump units.

New electrical control panels for pressurisation units, all with electronic card with microprocessors, for managing pump operation.

**The microprocessor** carries out continuous secure checks during all the various work phases of the pumps and incorporates all necessary functions, thus reducing electrical and electronic components inside the panel.

#### In particular:

- pumps starting in a cascade sequence according to water demand.
- changeover of pump starting sequence.
- delay start-up of the 2nd/3rd pump in case of breakdown of pressure switch 1 or after a power cut.
- avoid pump starting in case of water hammering.
- activate the alarm when pressure 1 fails.
- activate the alarm when air cushion in the vessel drops.
- stop the pump when air cushion is over\*.

\* Patent pending

### Maximum clarity for all signals

The status of the unit can easily be identified on the front of the electronic card with the following signals:

- Power on led.
- No water led.
- Failure led.
- Pump running led (1 for each pump).
- Thermal block led (1 for each pump).
- Pump automatic operation led (1 for each pump).
- Pump stop led (1 for each pump).

### Maximum simplicity of control

The front of electronic card features the following signals and controls:

- AUT-STOP push-button (1 for each pump)
- MAN push-button (1 for each pump)
- RESET push-button.

### Optional remote control

The new panels have been designed to remotely reproduce all the electronic card signals (excluding the buttons), using RC 100 - RC 200 - RC 300 panels, connected with a simple two-pole cable.

The RA 100 panel enables a remote warning light and acoustic signal.

### Control panel for units up to 6 pumps

Using the MPS 6000 (Multi Pumps System) electronic card it is possible to control pressure units up to a maximum of 6 fixed speed pumps with a single pressure calibration.

### Automatic air supply systems

The pump control panels are completed by microprocessor controlled systems for automatic air supply in the pressure vessels by means of a compressor or solenoid valve.

### Operation

For booster sets made up to three pumps: according to the pressure decrease in the system, the pressure switches make the pumps to start in cascade mode and the starting changeover is made by the microprocessor.

For sets made of 4, 5, 6 pumps: Operation controlled by a microprocessor with signal from a pressure transducer. The pumps operate with only one pressure setting.



## Variable speed pump units with frequency converter

### New electrical control panels for variable speed pump units.

New electrical control panels for pressurisation units with variable speed pumps.

These are indispensable in all those cases where constant pressure is required and when high pressure pumps are being controlled.

All the various working phases are managed and controlled by the MPS 6000 (Multi Pumps System) electronic card with microprocessor, which can operate up to 6 pumps working simultaneously.

### Maximum clarity of signals

All the various calibration parameters appear as messages on the display of the MPS 6000 electronic card.

If there are any faults or defects a message appears on the display giving details of the problem.

### Possibility of remote control

The pump status can be displayed and the unit can be controlled by means of a special computer program.

It is possible to obtain a remote warning light and acoustic signal on the RA 100 panel.

### Constant or increased pressure

All the pumps can work with the same pressure value (set point), or, for systems with high head losses, the pressure can be increased depending on the number of pumps operating.

### Silent operation

Motors working at reduced speed and check valves that close gradually mean that operation is particularly quiet.

### Long life for pumps

All the mechanical components of the pumps and motors are stressed to a minimum, due to the variable speed operation.

### Energy savings

The motors consume only the precise level of power necessary moment to moment, in order to supply the quantity of water required by the system.

### No more high capacity vessels

The use of inverters means that high capacity pressure vessels and membrane vessels are no longer necessary. Even units with high flowrate pumps only require a small number of 20 litre membrane vessels.

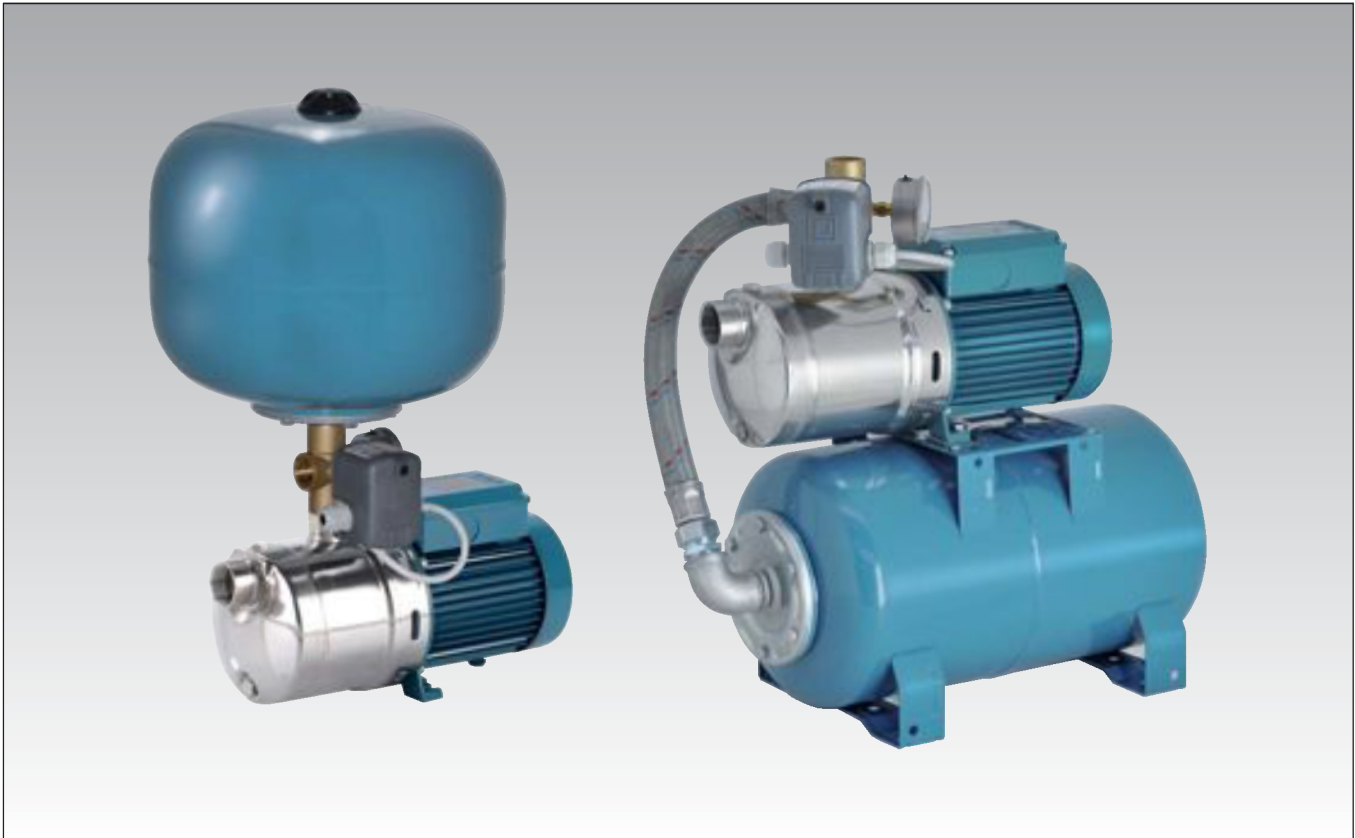
### Great versatility

The great versatility of the MPS 6000 electronic card enables the construction of special units with operational logics different from those of normal pressurisation units, depending on the requirements and characteristics of the systems.

### Operation

Depending on water consumption, one or more pumps are activated, all at variable speed, in order to guarantee the quantity of water required at the set pressure.





## Construction

Compact, automatic autoclaves for household water feeding, consisting of:

- close-coupled pump
- membrane tank
- pressure switch
- pressure gauge (excluding MINIMAT)
- special connector
- flexible pipe for systems with pump over the vessel

## Operation

According to the decrease or increase of pressure, the pressure switch determines when the pump will start or stop.

## Applications

For drawing water out a well.

As pressure boosting pump for central water systems with thermal protector (follow specifications if increasing network pressure).

## Motors

2-pole induction motors, 50 Hz, n=2900 rpm.

Three-phase 230/400V  $\pm$  10%.

Single-phase 230V  $\pm$  10%, with thermal protector.

Insulation class F.

Protection IP 54.

Constructed in accordance with: IEC 60034.

Other voltages and frequencies on request.

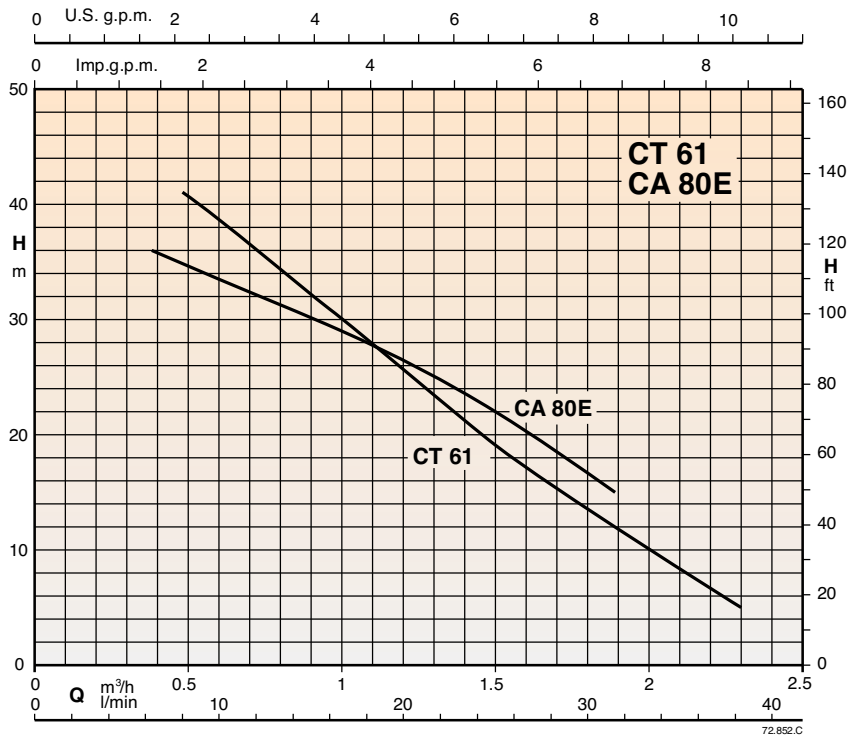
## Vessels

Spherical with capacity 24 litres, or cylindrical with capacity 20 litres, membrane type, air preordaining with pressure 0,2 bar below the minimum pressure switch rating.

Capacity of the MINIMAT vessel 1 liter.

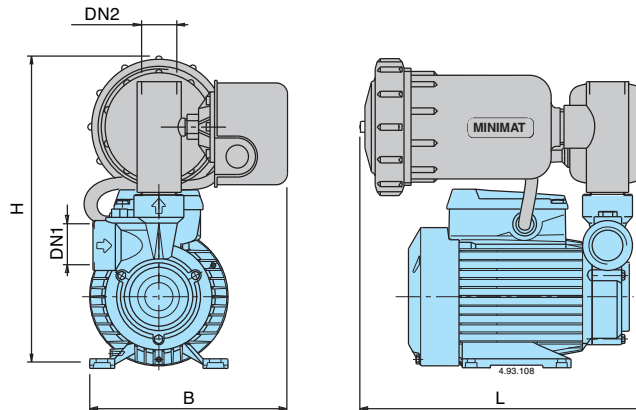


## Coverage chart



## Characteristic, dimensions and weights

### MINIMAT

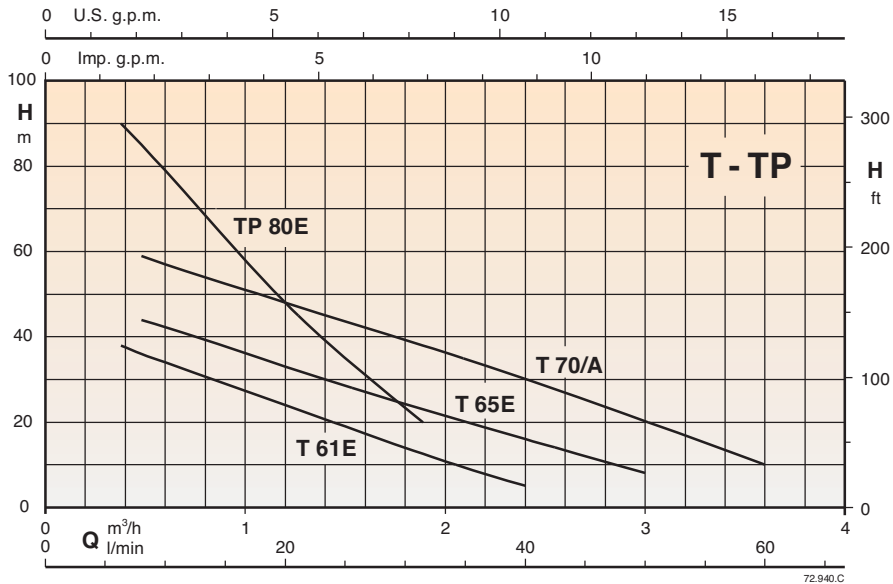


### MINIMAT

3~ 230/400V	1~ 230V	kW	HP	Q max* l/min	Pres. switch bar	DN1	DN2	mm			kg
								B	L	H	
CT 61/1	CTM 61/1	0,33	0,45	30	1,4÷2,8	G1	G1	180	255	280	8
CA 80E/1	CAM 80E/1	0,45	0,6	32	1,4÷2,8	G 3/4	G1	180	255	330	11,5

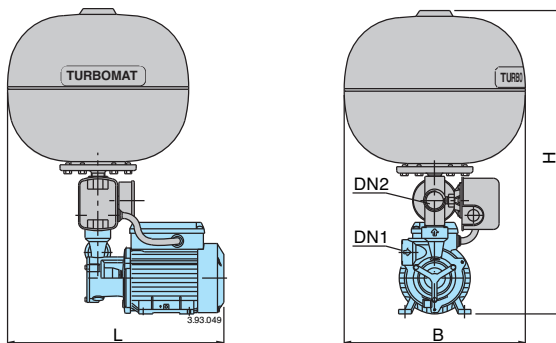
\* Maximum pump flow at minimum set pressure of pressure switch.

## Coverage chart

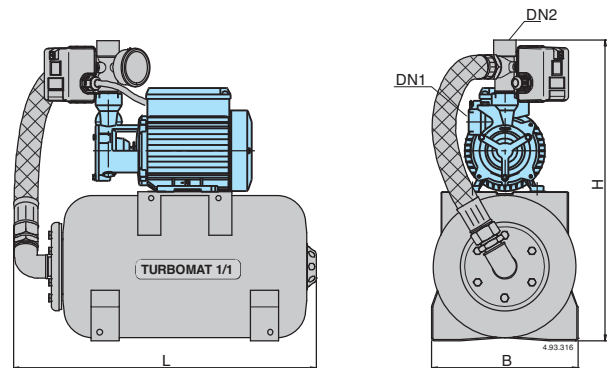


## Characteristic, dimensions and weights

### TURBOMAT



### TURBOMAT 1/1



### TURBOMAT

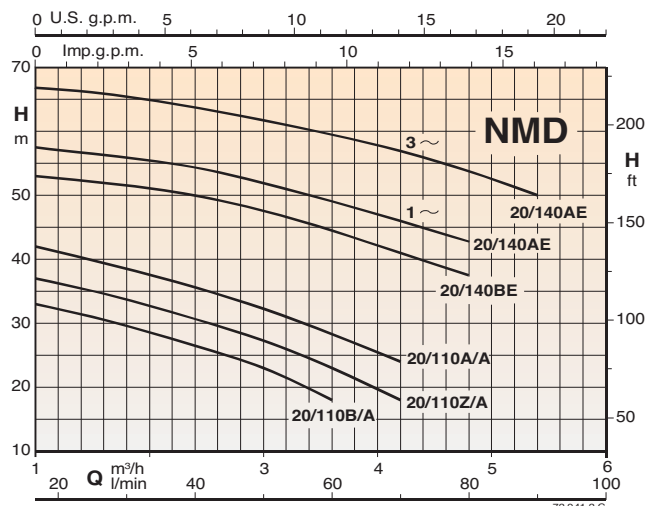
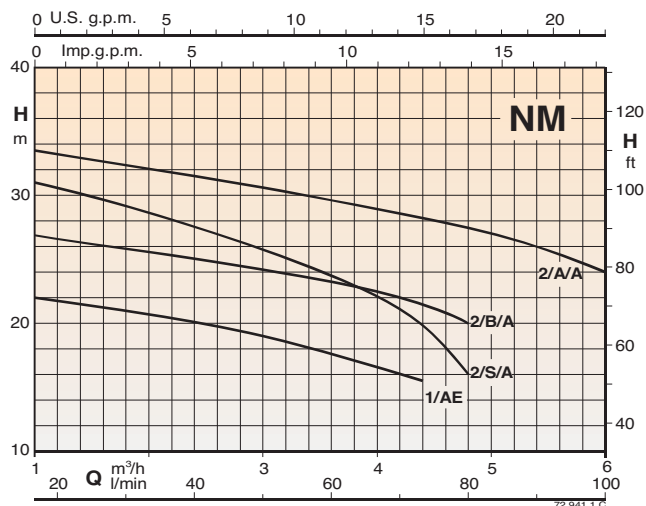
3~ 230/400V	1~ 230V	kW	HP	Q max* l/min	Pres. switch bar	DN1	DN2	mm			kg
								B	L	H	
T 61E/24	TM 61E/24	0,33	0,45	32	1,4÷2,8	G1	G1	360	400	560	13,3
T 65E/24	TM 65E/24	0,45	0,6	43	1,4÷2,8	G1	G1		400	560	13,3
T 70/A/24	TM 70/A/24	0,75	1	50	2,0÷3,5	G1	G1		430	575	17,7
TP 80E/24	TPM 80E/24	0,75	1	22	4,0÷6,0	G 3/4	G1		485	575	22

### TURBOMAT 1/1

3~ 230/400V	1~ 230 V	kW	HP	Q max* l/min	Pres. switch bar	DN1	DN2	mm			kg
								B	L	H	
T 61E/20	TM 61E/20	0,33	0,45	32	1,4÷2,8	G1	G1	255	530	508	25
T 65E/20	TM 65E/20	0,45	0,6	43	1,4÷2,8	G1	G1			508	25
T 70/A/20	TM 70/A/20	0,75	1	50	2,0÷3,5	G1	G1			526	29
TP 80E/20	TPM 80E/20	0,75	1	22	4,0÷6,0	G 3/4	G1			526	32,2

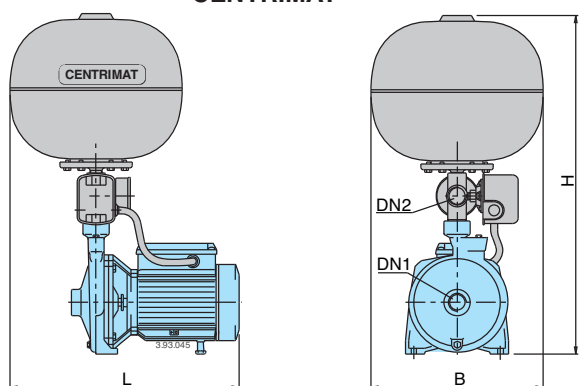
\* Maximum pump flow at minimum set pressure of pressure switch.

## Coverage chart

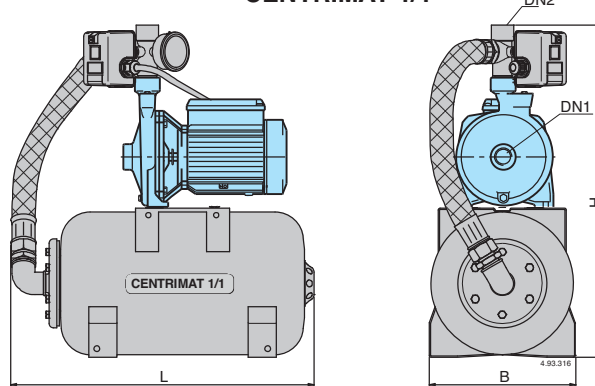


## Characteristic, dimensions and weights

CENTRIMAT



CENTRIMAT 1/1



### CENTRIMAT

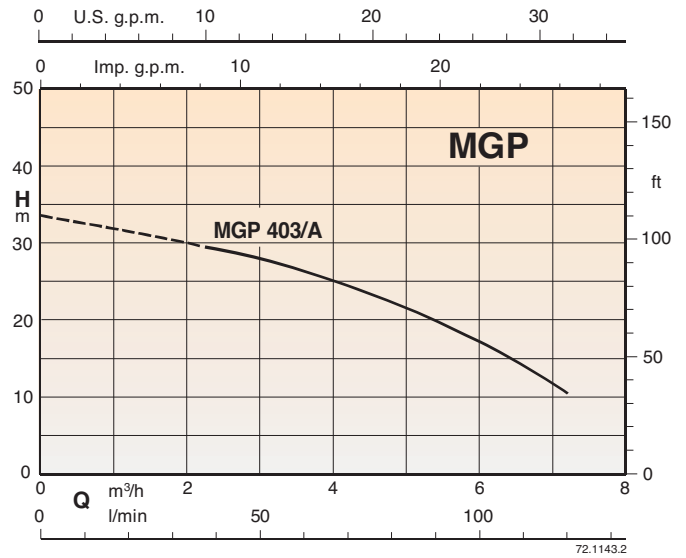
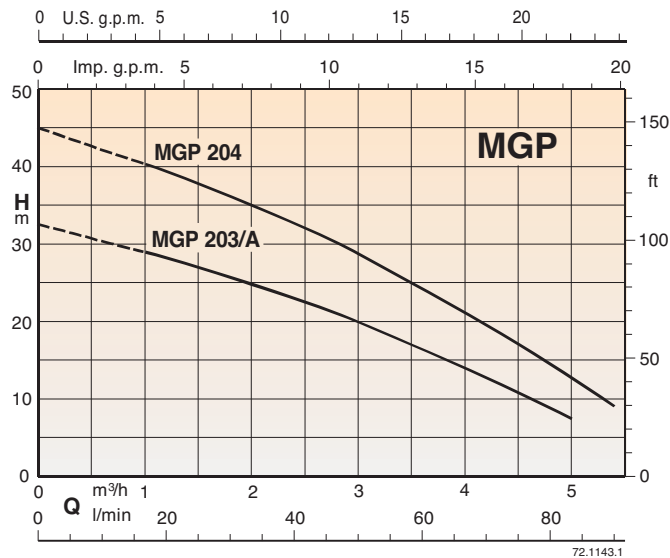
3~ 230/400V	1~ 230V	kW	HP	Q max* l/min	Pres. switch bar	DN1	DN2	mm			kg
								B	L	H	
NM 1/AE/24	NMM 1/AE/24	0,37	0,5	73	1,0÷1,8	G1	G1	360	400	620	17,7
NM 2/B/A/24	NMM 2/B/A/24	0,55	0,75	80	1,4÷2,4	G1	G1		440	650	21,4
NM 2/S/A/24	NMM 2/S/A/24	0,55	0,75	80	1,4÷2,8	G1	G1		440	650	21,5
NM 2/A/A/24	NMM 2/A/A/24	0,75	1	100	2,0÷3,0	G1	G1		440	650	22,7
NMD 20/110B/A/24	NMDM 20/110B/A/24	0,45	0,6	60	1,4÷2,8	G 1 1/4	G1		430	635	21,2
NMD 20/110Z/A/24	NMDM 20/110Z/A/24	0,55	0,75	70	1,8÷3,2	G 1 1/4	G1		430	635	22,3
NMD 20/110A/A/24	NMDM 20/110A/A/24	0,75	1	70	2,2÷3,6	G 1 1/4	G1		430	635	23,4
NMD 20/140BE/24	NMDM 20/140BE/24	1,1	1,5	80	3,5÷5,0	G 1 1/4	G1		510	670	30,7
NMD 20/140AE/24	NMDM 20/140AE/24	1,5	2	80	3,4÷5,4	G 1 1/4	G1		510	670	33
		1,5	2	90	4,4÷6,4	G 1 1/4	G1		510	670	32

### CENTRIMAT 1/1

3~ 230/400V	1~ 230V	kW	HP	Q max* l/min	Pres. switch bar	DN1	DN2	mm			kg
								B	L	H	
NM 1/AE/20	NMM 1/AE/20	0,37	0,5	73	1,0÷1,8	G1	G1	255	530	567	18,5
NM 2/B/A/20	NMM 2/B/A/20	0,55	0,75	80	1,4÷2,4	G1	G1			600	22,2
NM 2/S/A/20	NMM 2/S/A/20	0,55	0,75	80	1,4÷2,8	G1	G1			600	22,3
NM 2/A/A/20	NMM 2/A/A/20	0,75	1	100	2,0÷3,0	G1	G1			600	23,5
NMD 20/110B/A/20	NMDM 20/110B/A/20	0,45	0,6	60	1,4÷2,8	G 1 1/4	G1			582	22
NMD 20/110Z/A/20	NMDM 20/110Z/A/20	0,55	0,75	70	1,8÷3,2	G 1 1/4	G1			582	23,1
NMD 20/110A/A/20	NMDM 20/110A/A/20	0,75	1	70	2,2÷3,6	G 1 1/4	G1			582	24,2
NMD 20/140BE/20	NMDM 20/140BE/20	1,1	1,5	80	3,5÷5,0	G 1 1/4	G1			619	31,5
NMD 20/140AE/20	NMDM 20/140AE/20	1,5	2	80	3,4÷5,4	G 1 1/4	G1			619	33
		1,5	2	90	4,4÷6,4	G 1 1/4	G1			619	32

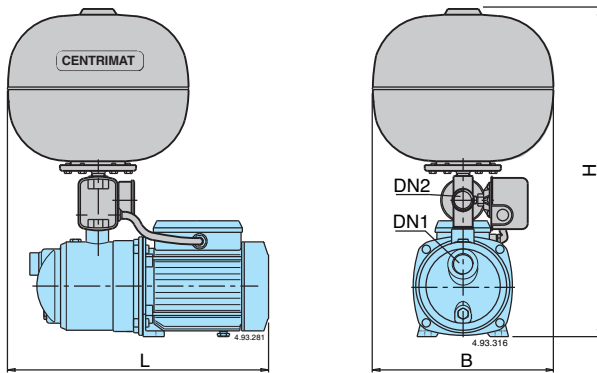
\* Maximum pump flow at minimum set pressure of pressure switch.

### Coverage chart

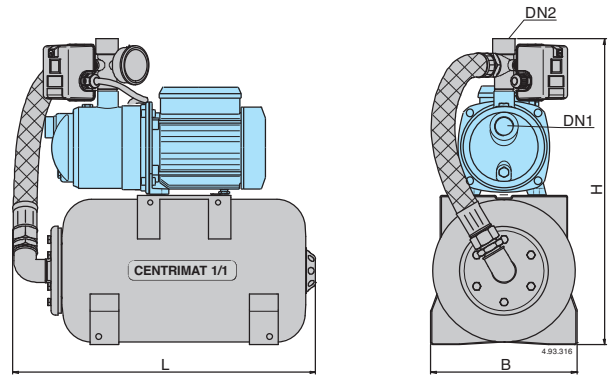


### Characteristic, dimensions and weights

#### CENTRIMAT



#### CENTRIMAT 1/1



#### CENTRIMAT

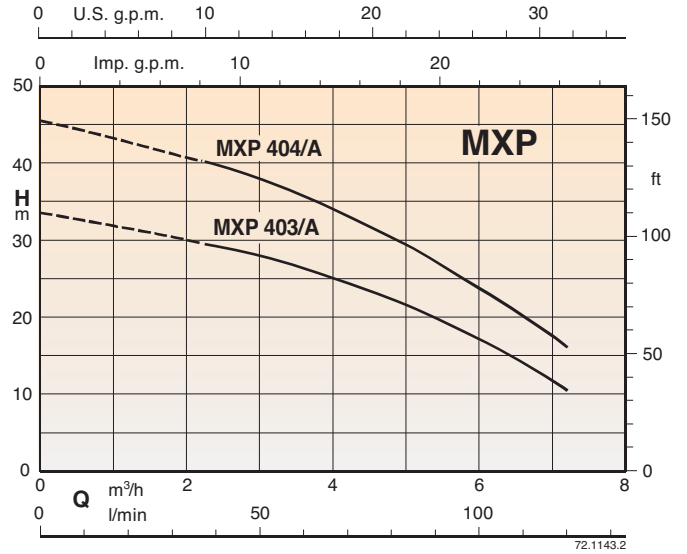
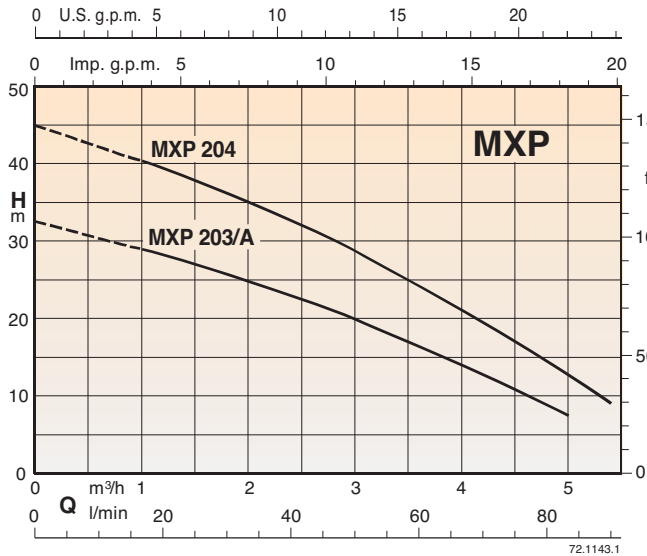
3~ 230/400V	1~ 230V	kW	HP	Q max* l/min	Pres. switch bar	DN1	DN2	mm			kg
								B	L	H	
MGP 203/24	MGPM 203/24	0,45	0,6	65	1,2÷2,4	G 1	G1	360	427	583	14
MGP 204/24	MGPM 204/24	0,55	0,75	70	2,0÷3,5	G 1	G1		456	583	15
MGP 403/24	MGPM 403/24	0,55	0,75	110	1,2÷2,4	G 1	G1		456	583	15

#### CENTRIMAT 1/1

3~ 230/400V	1~ 230V	kW	HP	Q max* l/min	Pres. switch bar	DN1	DN2	mm			kg
								B	L	H	
MGP 203/20	MGPM 203/20	0,45	0,6	65	1,2÷2,4	G 1	G1	255	530	516	15
MGP 204/20	MGPM 204/20	0,55	0,75	70	2,0÷3,5	G 1	G1		530	516	16
MGP 403/20	MGPM 403/20	0,55	0,75	110	1,2÷2,4	G 1	G1		530	516	16

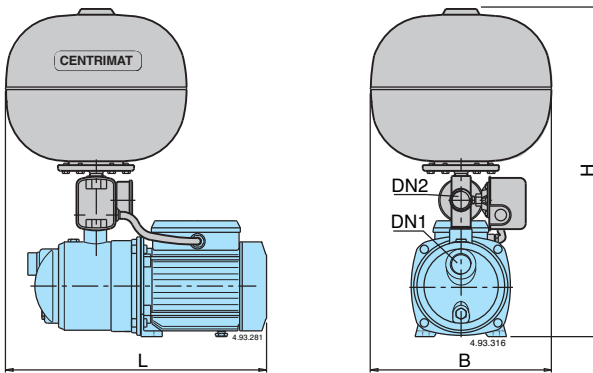
\* Maximum pump flow at minimum set pressure of pressure switch.

## Coverage chart

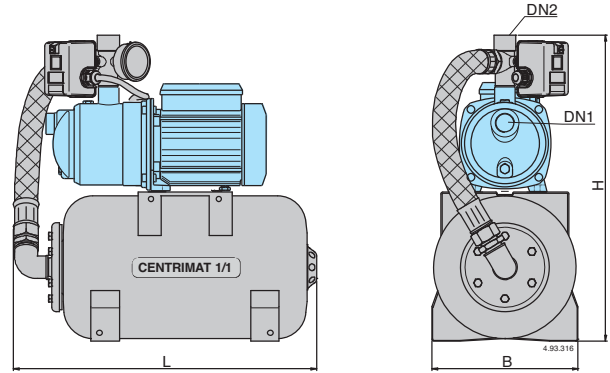


## Characteristic, dimensions and weights

### CENTRIMAT



### CENTRIMAT 1/1



### CENTRIMAT

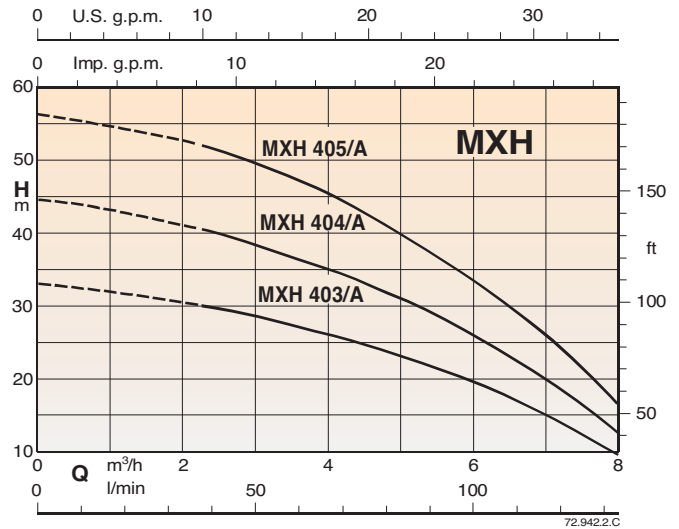
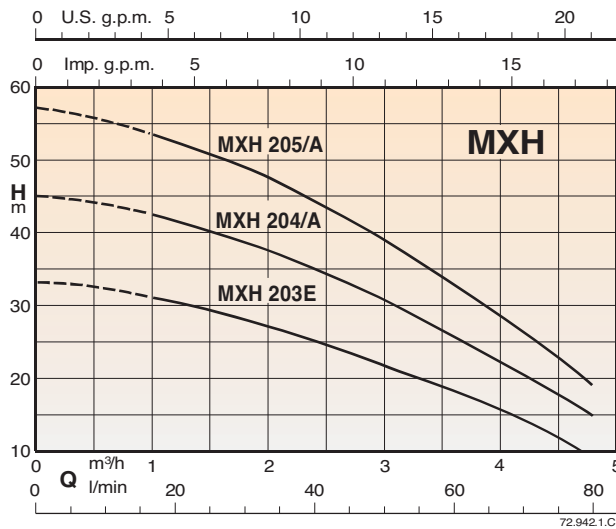
3~ 230/400V	1~ 230V	kW	HP	Q max* l/min	Pres. switch bar	DN1	DN2	mm			kg
								B	L	H	
MXP 203/24	MXPM 203/24	0,45	0,6	65	1,2÷2,4	G 1	G1	360	427	583	14
MXP 204/A/24	MXPM 204/A/24	0,55	0,75	70	2,0÷3,5	G 1	G1		456	583	15
MXP 403/A/24	MXPM 403/A/24	0,55	0,75	110	1,5÷2,7	G 1	G1		456	583	15
MXP 404/A/24	MXPM 404/A/24	0,75	1	110	2,0÷3,5	G 1	G1		456	583	16

### CENTRIMAT 1/1

3~ 230/400V	1~ 230V	kW	HP	Q max* l/min	Pres. switch bar	DN1	DN2	mm			kg
								B	L	H	
MXP 203/20	MXPM 203/20	0,45	0,6	65	1,2÷2,4	G 1	G1	255	530	532	15
MXP 204/A/20	MXPM 204/A/20	0,55	0,75	70	2,0÷3,5	G 1	G1		530	532	16
MXP 403/A/20	MXPM 403/A/20	0,55	0,75	110	1,5÷2,7	G 1	G1		530	532	16
MXP 404/A/20	MXPM 404/A/20	0,75	1	110	2,0÷3,5	G 1	G1		530	532	17

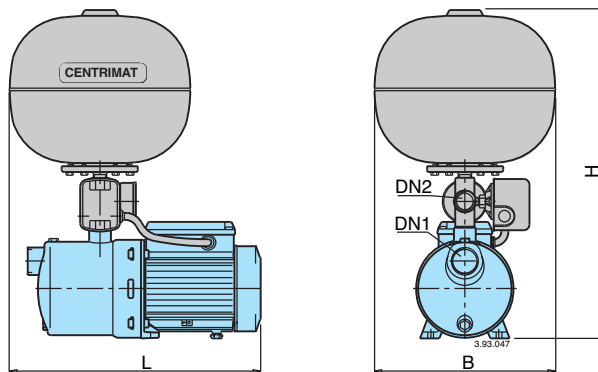
\* Maximum pump flow at minimum set pressure of pressure switch.

## Coverage chart

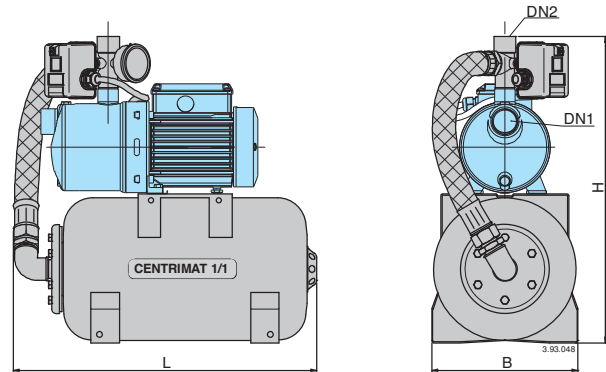


## Characteristic, dimensions and weights

### CENTRIMAT



### CENTRIMAT 1/1



### CENTRIMAT

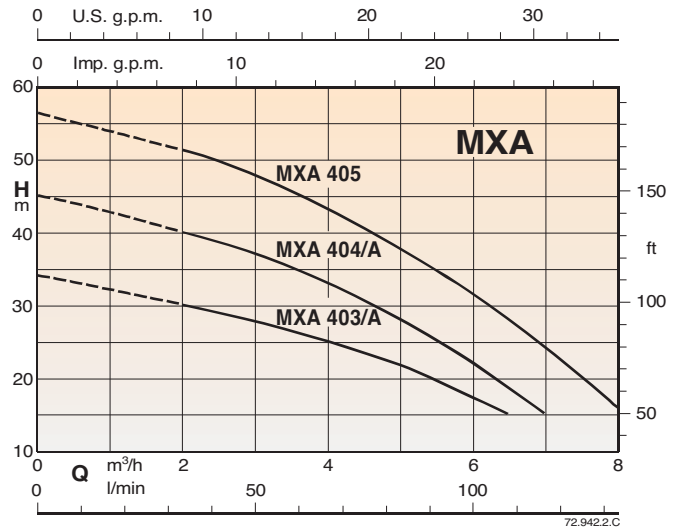
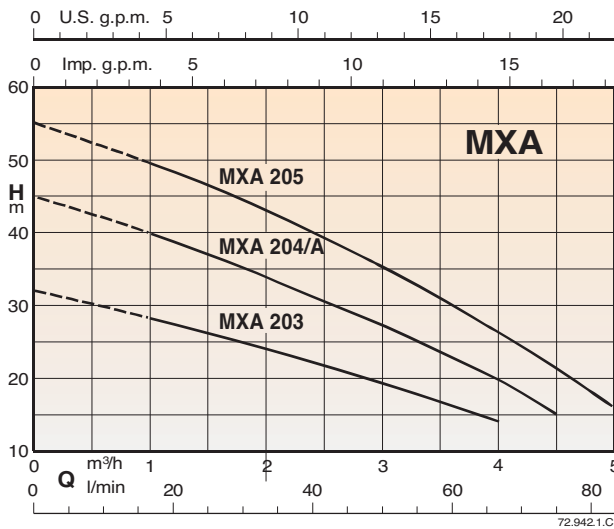
3~ 230/400V	1~ 230V	kW	HP	Q max* l/min	Pres. switch bar	DN1	DN2	mm			kg
								B	L	H	
MXH 203E/24	MXHM 203E/24	0,45	0,6	70	1,4÷2,8	G 1 1/4	G1	360	417	590	15
MXH 204/A/24	MXHM 204/A/24	0,55	0,75	62	2,5÷4,0	G 1 1/4	G1		443	590	16,5
MXH 205/A/24	MXHM 205/A/24	0,75	1	65	2,5÷4,5	G 1 1/4	G1		443	590	18
MXH 403/A/24	MXHM 403/A/24	0,55	0,75	120	1,5÷2,7	G 1 1/4	G1		443	590	16
MXH 404/A/24	MXHM 404/A/24	0,75	1	110	2,0÷3,5	G 1 1/4	G1		443	590	17,5
MXH 405/B/24	MXHM 405/24	1,1	1,5	115	2,5÷4,5	G 1 1/4	G1		502	590	23,5
		1,1	1,5	115	2,5÷4,5	G 1 1/4	G1	443	590	18,5	

### CENTRIMAT 1/1

3~ 230/400V	1~ 230V	kW	HP	Q max* l/min	Pres. switch bar	DN1	DN2	mm			kg
								B	L	H	
MXH 203E/20	MXHM 203E/20	0,45	0,6	70	1,4÷2,8	G 1 1/4	G1	255	530	540	16
MXH 204/A/20	MXHM 204/A/20	0,55	0,75	62	2,5÷4,0	G 1 1/4	G1		530	540	17,5
MXH 205/A/20	MXHM 205/A/20	0,75	1	65	2,5÷4,5	G 1 1/4	G1		530	540	19
MXH 403/A/20	MXHM 403/A/20	0,55	0,75	120	1,5÷2,7	G 1 1/4	G1		530	540	17
MXH 404/A/20	MXHM 404/A/20	0,75	1	110	2,0÷3,5	G 1 1/4	G1		530	540	18,5
MXH 405/B/20	MXHM 405/20	1,1	1,5	115	2,5÷4,5	G 1 1/4	G1		530	540	24,5
		1,1	1,5	115	2,5÷4,5	G 1 1/4	G1	530	540	19,5	

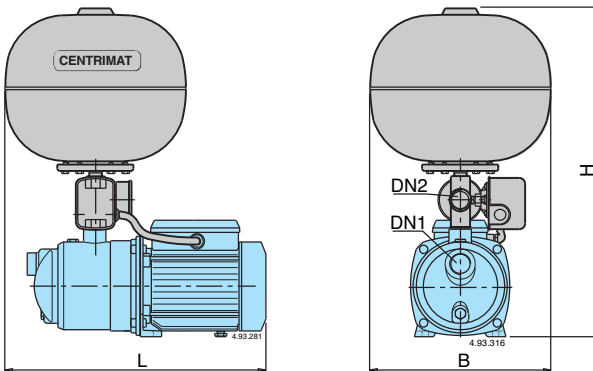
\* Maximum pump flow at minimum set pressure of pressure switch.

## Coverage chart

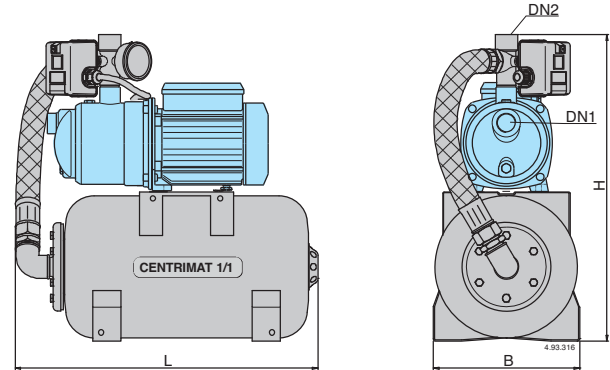


## Characteristic, dimensions and weights

### CENTRIMAT



### CENTRIMAT 1/1



### CENTRIMAT

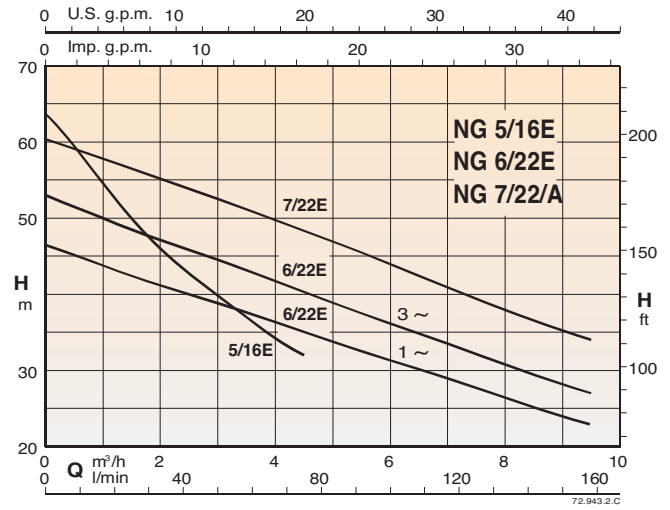
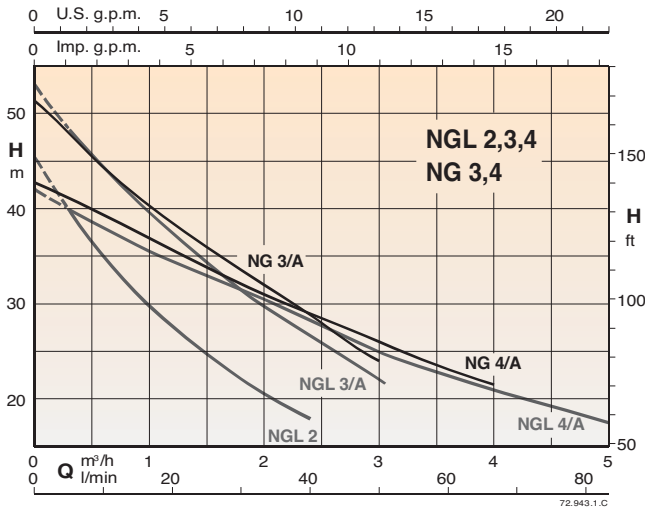
3~ 230/400V	1~ 230V	kW	HP	Q max* l/min	Pres. switch bar	DN1	DN2	mm			kg
								B	L	H	
MXA 203/24	MXAM 203/24	0,45	0,6	62	1,2÷2,4	G 1	G1	360	427	583	13
MXA 204/A/24	MXAM 204/A/24	0,55	0,75	66	2,0÷3,5	G 1	G1		456	583	16
MXA 205/24	MXAM 205/24	0,75	1	66	2,5÷4,5	G 1 1/4	G1		529	626	22
MXA 403/A/24	MXAM 403/A/24	0,55	0,75	108	1,5÷2,7	G 1	G1		456	583	16
MXA 404/A/24	MXAM 404/A/24	0,75	1	108	2,0÷3,5	G 1	G1		456	583	17
MXA 405/24	MXAM 405/24	1,1	1,5	105	2,5÷4,5	G 1 1/4	G1		529	626	23

### CENTRIMAT 1/1

3~ 230/400V	1~ 230V	kW	HP	Q max* l/min	Pres. switch bar	DN1	DN2	mm			kg
								B	L	H	
MXA 203/20	MXAM 203/20	0,45	0,6	62	1,2÷2,4	G 1	G1	255	530	532	14
MXA 204/A/20	MXAM 204/A/20	0,55	0,75	66	2,0÷3,5	G 1	G1		530	532	17
MXA 205/20	MXAM 205/20	0,75	1	66	2,5÷4,5	G 1 1/4	G1		530	575	23
MXA 403/A/20	MXAM 403/A/20	0,55	0,75	108	1,5÷2,7	G 1	G1		530	532	17
MXA 404/A/20	MXAM 404/A/20	0,75	1	108	2,0÷3,5	G 1	G1		530	532	18
MXA 405/20	MXAM 405/20	1,1	1,5	105	2,5÷4,5	G 1 1/4	G1		530	575	24

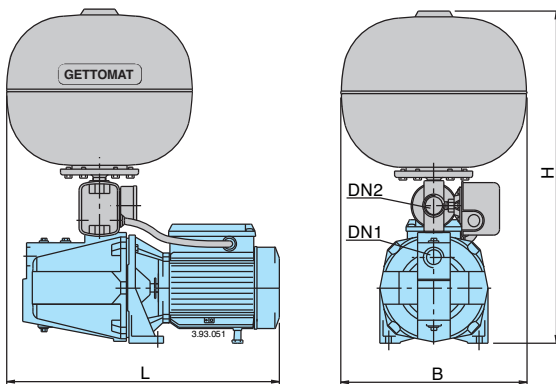
\* Maximum pump flow at minimum set pressure of pressure switch.

### Coverage chart

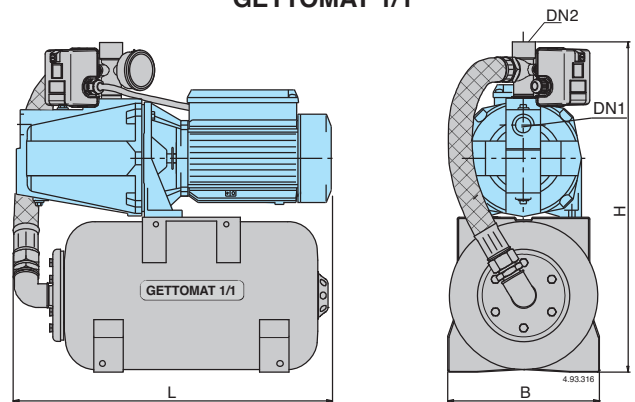


### Characteristic, dimensions and weights

GETTOMAT



GETTOMAT 1/1



### GETTOMAT

3~ 230/400V	1~ 230V	kW	HP	Q max * l/min	Pres. switch bar	DN1	DN2	mm			kg
								B	L	H	
NGL 2/24	NGLM 2/24	0,45	0,6	35	2,0-3,5	G 1	G1	360	427	583	14,5
NGL 3/A/24	NGLM 3/A/24	0,55	0,75	45	2,5-4,0	G 1	G1		456	583	16,5
NGL 4/A/24	NGLM 4/A/24	0,75	1	72	2,0-3,5	G 1	G1		456	583	17,5
NG 3/A/24	NGM 3/A/24	0,55	0,75	50	2,5-4,0	G1	G1		610	25,1	
NG 4/A/24	NGM 4/A/24	0,75	1	65	2,0-3,5	G1	G1		610	28,9	
NG 5/16E/24	NGM 5/16E/24	1,1	1,5	65	3,5-5,0	G 11/2	G1		650	35,5	
	NGM 6/22E/24	1,5	2	140	2,5-4,0	G 11/2	G1		650	37,5	
NG 6/22E/24		1,5	2	140	2,5-4,5	G 11/2	G1		650	37,5	
NG 7/22/A/24	-	2,2	3	150	3,5-5,0	G 11/2	G1		650	39,5	

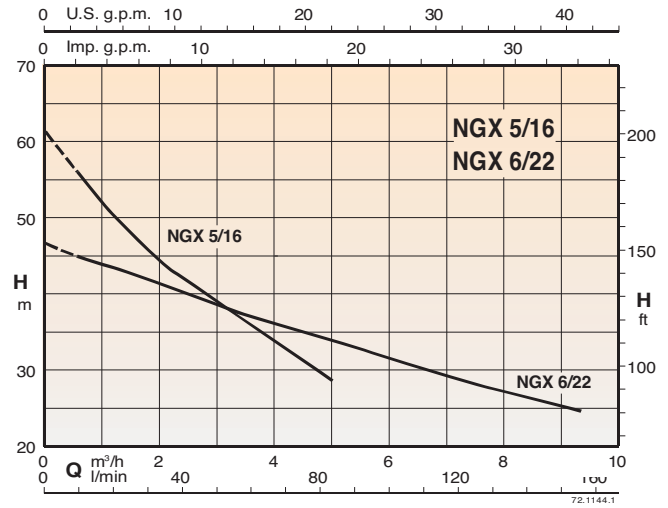
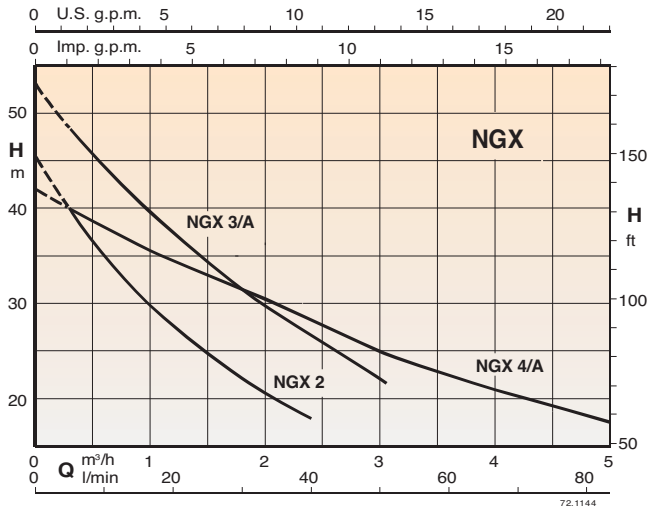
### GETTOMAT 1/1

3~ 230/400V	1~ 230V	kW	HP	Q max * l/min	Pres. switch bar	DN1	DN2	mm			kg
								B	L	H	
NGL 2/20	NGLM 2/20	0,45	0,6	35	2,0-3,5	G 1	G1	255	516	15,5	
NGL 3/A/20	NGLM 3/A/20	0,55	0,75	45	2,5-4,0	G 1	G1		516	17,5	
NGL 4/A/20	NGLM 4/A/20	0,75	1	72	2,0-3,5	G 1	G1		530	18,5	
NG 3/A/20	NGM 3/A/20	0,55	0,75	50	2,5-4,0	G1	G1		548	26	
NG 4/A/20	NGM 4/A/20	0,75	1	65	2,0-3,5	G1	G1		548	29,7	
NG 5/16E/20	NGM 5/16E/20	1,1	1,5	65	3,5-5,0	G 11/2	G1		577	36,2	
	NGM 6/22E/20	1,5	2	140	2,5-4,0	G 11/2	G1		580	37,5	
NG 6/22E/20		1,5	2	140	2,5-4,5	G 11/2	G1		577	38,5	
NG 7/22/A/20	-	2,2	3	150	3,5-5,0	G 11/2	G1		600	57,7	40

\* Maximum pump flow at minimum set pressure of pressure switch.

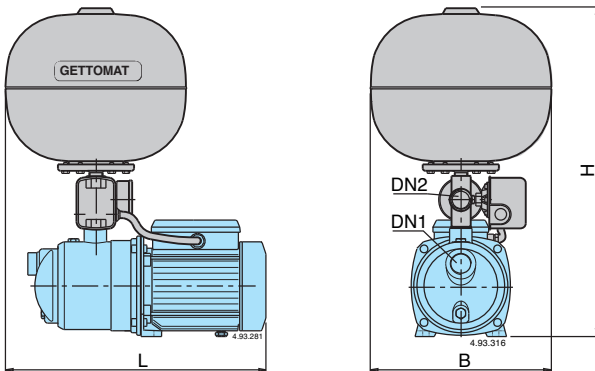


### Coverage chart

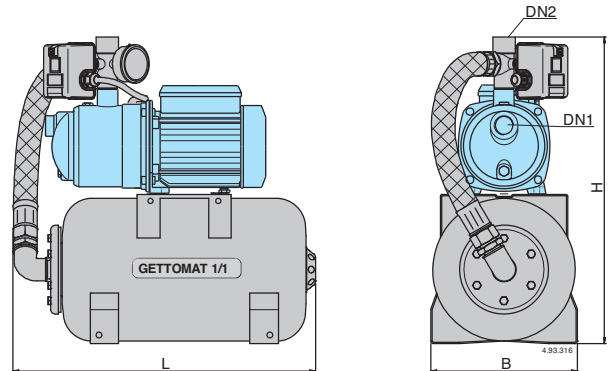


### Characteristic, dimensions and weights

GETTOMAT



GETTOMAT 1/1



### GETTOMAT

3~ 230/400V	1~ 230V	kW	HP	Q max* l/min	Pres. switch bar	DN1	DN2	mm			kg
								B	L	H	
NGX 2/24	NGXM 2/24	0,45	0,6	35	2,0÷3,5	G 1	G1	427	583	14,5	
NGX 3/A/24	NGXM 3/A/24	0,55	0,75	45	2,5÷4,0	G 1	G1	456	583	16,5	
NGX 4/A/24	NGXM 4/A/24	0,75	1	72	2,0÷3,5	G 1	G1	360	456	583	17,5
NGX 5/16/24	NGXM 5/16/24	1,1	1,5	62	3,5÷5,0	G 1 1/4	G1	528	626	23,5	
NGX 6/22/24	NGXM 6/22/24	1,5	2	150	2,5÷4,0	G 1 1/4	G1	528	626	25,5	

### GETTOMAT 1/1

3~ 230/400V	1~ 230V	kW	HP	Q max* l/min	Pres. switch bar	DN1	DN2	mm			kg
								B	L	H	
NGX 2/20	NGXM 2/20	0,45	0,6	35	2,0÷3,5	G 1	G1	530	532	15,5	
NGX 3/A/20	NGXM 3/A/20	0,55	0,75	45	2,5÷4,0	G 1	G1	530	532	17,5	
NGX 4/A/20	NGXM 4/A/20	0,75	1	72	2,0÷3,5	G 1	G1	255	530	532	18,5
NGX 5/16/20	NGXM 5/16/20	1,1	1,5	62	3,5÷5,0	G 1 1/4	G1	530	575	24,5	
NGX 6/22/20	NGXM 6/22/20	1,5	2	150	2,5÷4,0	G 1 1/4	G1	530	575	26,5	

\* Maximum pump flow at minimum set pressure of pressure switch.



## Execution

Constant pressure boosting sets with one pump and EASYMAT frequency converter  
Ball valve and non return valve on suction side, ball valve and pressure gauge on delivery side  
Suitable for installation of a 8-lt cylindrical pressure vessel on delivery side

### EASYMAT device:

Frequency converter installed directly on the pump delivery pipe and water cooled (patented).

Only three parameters to set at starting:

- Maximum motor current
- Working frequency
- Working pressure

### Possibility to display:

- Pressure of the system
- Working frequency
- Absorbed current
- Alarms

## Operation

### CONSTANT PRESSURE MODE:

the system keeps the pressure constant when the quantity of water requested by the user changes.  
According to the water consumption, the pump at variable speed ensures the required water quantity at the set pressure

### FIXED SPEED MODE:

the system works at a fixed speed that user can choose according to his need.

## Applications

For drawing water out of a well

As pressure boosting pump for central water systems with low pressure (follow local specifications if increasing network pressure)

## Motors

2-pole induction motors, 50Hz, n=2900 rpm, suitable for operation with frequency converter

- Single-phase 230V +/-10%
- Three-phase 230V +/-10%

Class F insulation

IP 54 protection

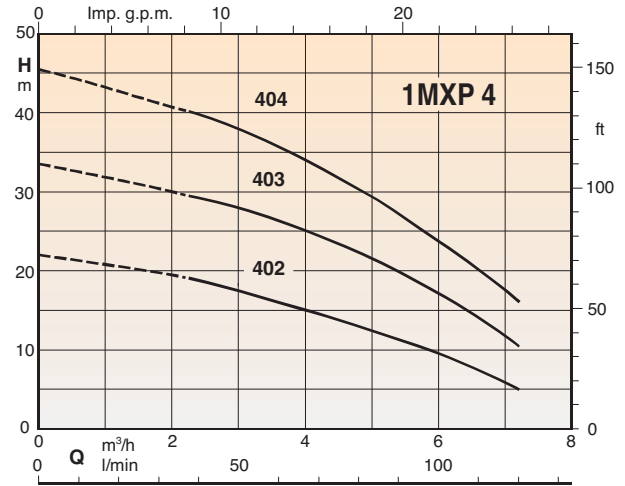
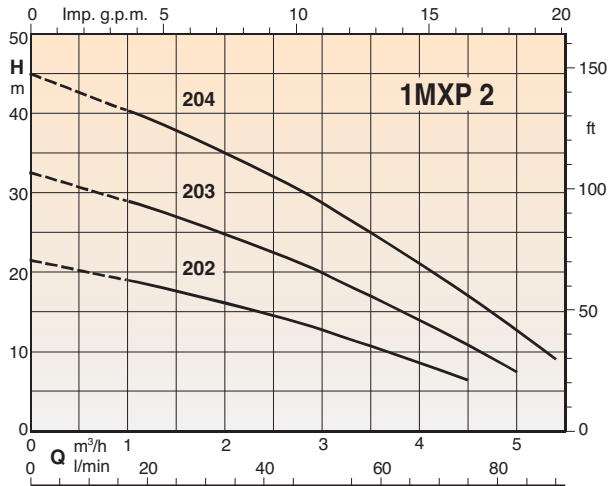
Execution according IEC 60034

Other voltages on demand

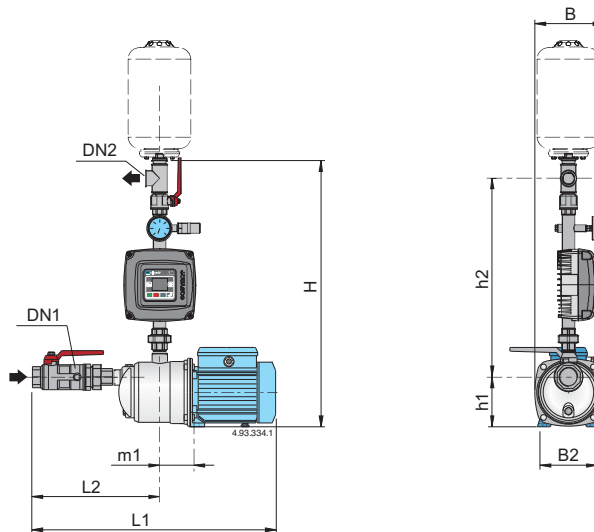
## Pressure vessels (on demand)

Cylindrical with capacity 8 liters, membrane type, air precharged

## Coverage chart

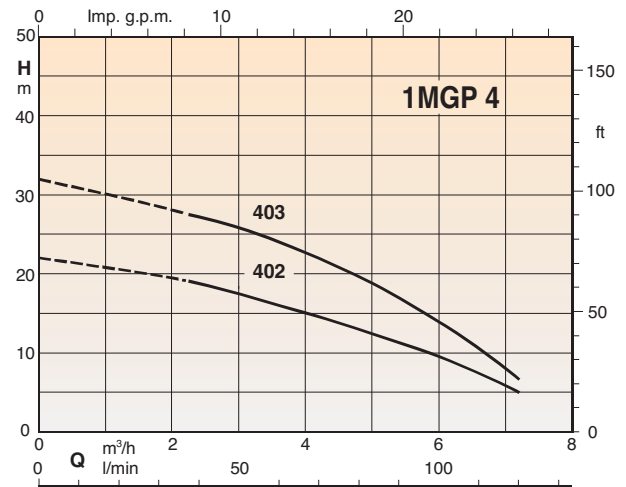
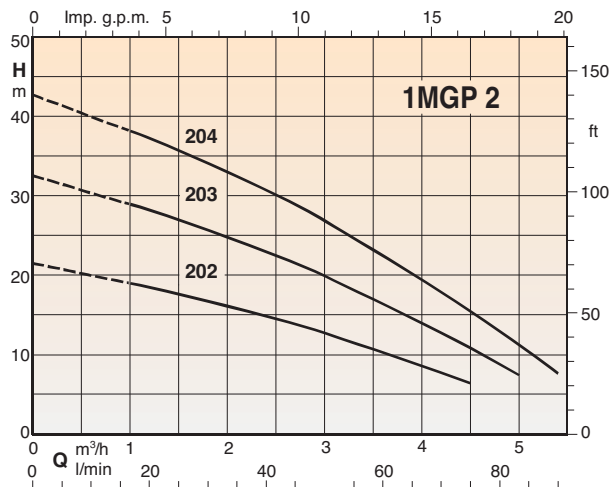


## Characteristic and dimensions

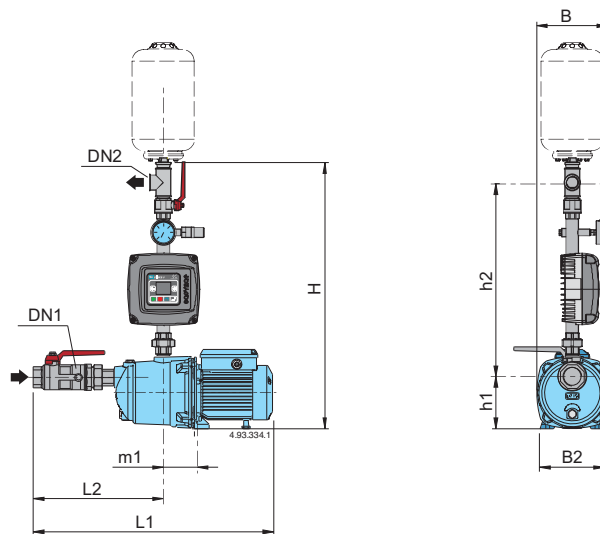


	Mains: 1~ 230V Motor: 3~ 230V		Mains: 1~ 230V Motor: 1~ 230V		P <sub>2</sub>		DN1	DN2	mm								
	A	A	A	A	kW	HP			H	h1	h2	L1	L2	m1	B	B2	
1MXP 202-EMT	2,1	1,7	1MXPM 202-EMM	2,3	0,33	0,45											
1MXP 203-EMT	3,2	2,4	1MXPM 203-EMM	3	0,45	0,6	G 1	G 1	680	127	495	516	269	95	165	146	
1MXP 204/A-EMT	4	2,8	1MXPM 204/A-EMM	4,2	0,55	0,75											
1MXP 402-EMT	3,2	2,4	1MXPM 402-EMM	3	0,45	0,6											
1MXP 403/A-EMT	4	2,8	1MXPM 403/A-EMM	4,2	0,55	0,75	G 1	G 1	680	127	495	545	269	95	165	146	
1MXP 404/A-EMT	5	3,5	1MXPM 404/A-EMM	5,4	0,75	1											

## Coverage chart

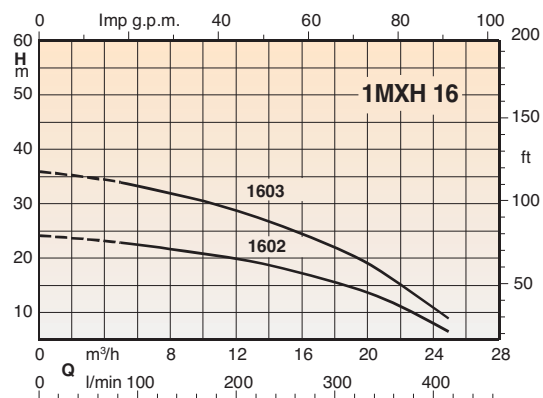
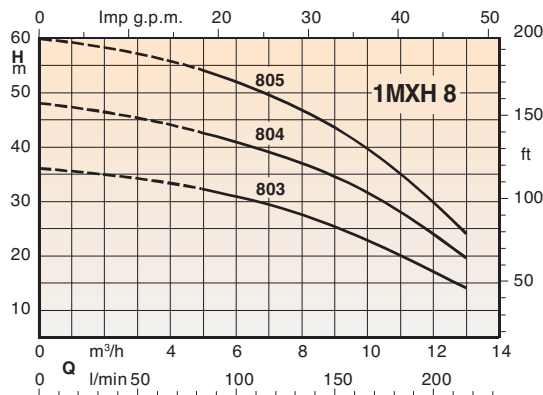
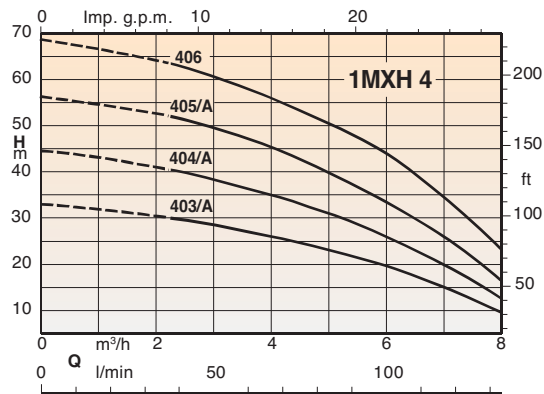
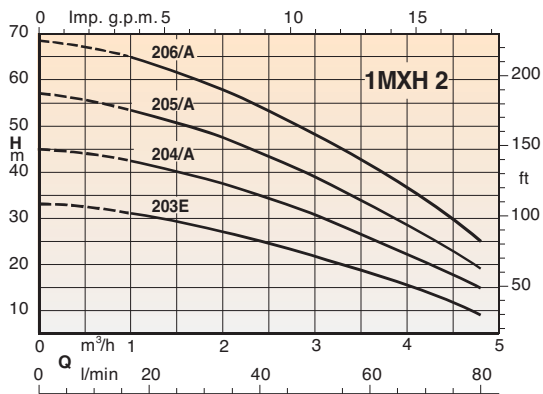


## Characteristic and dimensions

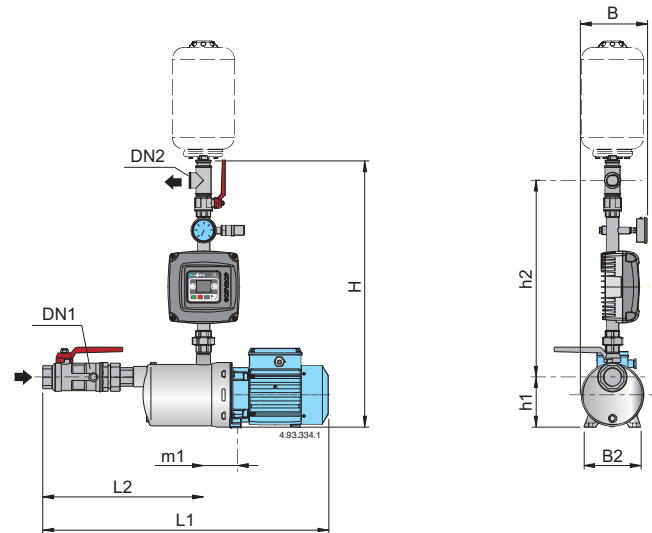


Mains: 1~ 230V Motor: 3~ 230V	mains A	motor A	Mains: 1~ 230V Motor: 1~ 230V	A	P <sub>2</sub>		DN1	DN2	mm							
					kW	HP			H	h1	h2	L1	L2	m1	B	B2
1MGP 202-EMT	2,1	1,7	1MGPM 202-EMM	2,3	0,33	0,45	G 1	G 1	685	116	504	516	269	95	165	146
1MGP 203-EMT	3,2	2,4	1MGPM 203-EMM	3	0,45	0,6										
1MGP 204-EMT	4	2,8	1MGPM 204-EMM	3,3	0,55	0,75										
1MGP 402-EMT	3,2	2,4	1MGPM 402-EMM	3	0,45	0,6	G 1	G 1	685	116	504	516	269	95	165	146
1MGP 403-EMT	4,3	3	1MGPM 403-EMM	3,5	0,55	0,75										

## Coverage chart

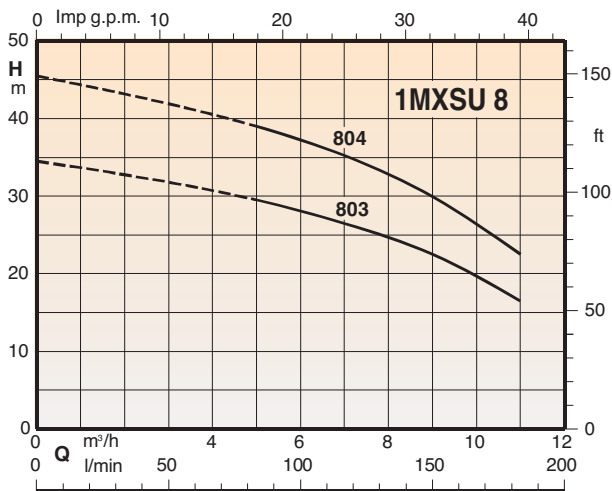
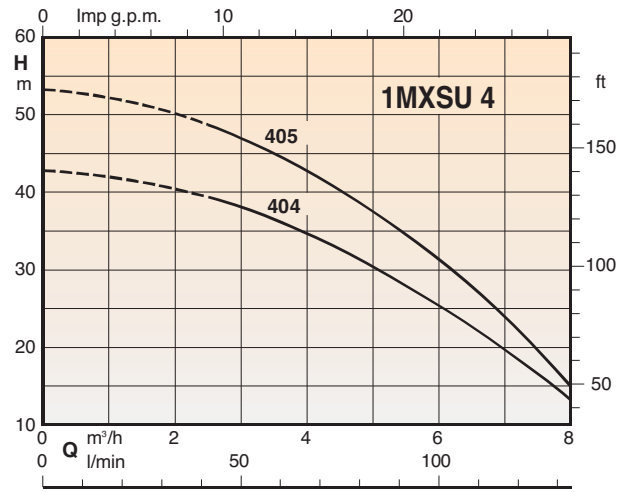
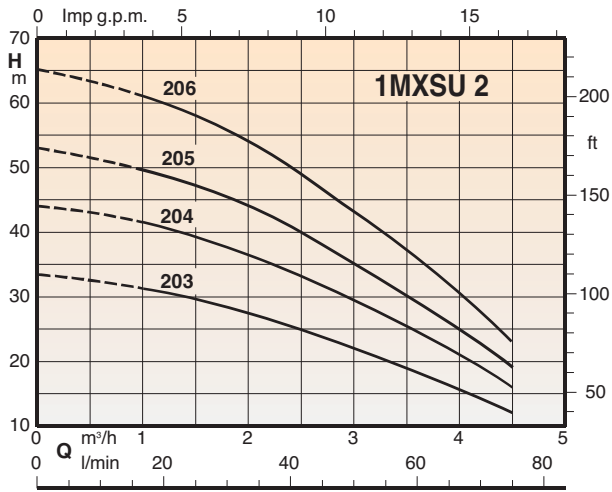


## Characteristic and dimensions

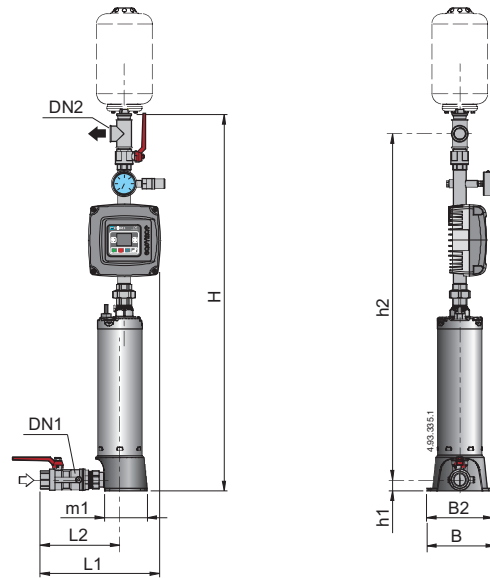


	Mains: 1~230V Motor: 3~230V		Mains: 1~230V Motor: 1~230V		P <sub>2</sub>		DN1	DN2	H	h1	h2	mm				
	A	A	A	A	kW	HP						L1	L2	m1	B	B2
1MXH 203E-EMT	3,2	2,4	1MXHM 203E-EMM	3	0,45	0,6	G 1 1/4	G 1	708	127	516	511	274	88	165	146
1MXH 204/A-EMT	4	2,8	1MXHM 204/A-EMM	4,2	0,55	0,75						561	298			
1MXH 205/A-EMT	5	3,5	1MXHM 205/A-EMM	5,4	0,75	1						585	322			
1MXH 206/B-EMT	6,3	4,7	1MXHM 206-EMM	7,4	1,1	1,5						609	346			
1MXH 403/A-EMT	4	2,8	1MXHM 403/A-EMM	4,2	0,55	0,75	G 1 1/4	G 1	708	127	516	537	274	88	165	146
1MXH 404/A-EMT	5	3,5	1MXHM 404/A-EMM	5,4	0,75	1						561	298			
1MXH 405/B-EMT	6,7	4,7	1MXHM 405-EMM	7,4	1,1	1,5						585	322			
1MXH 406-EMT	8	6,2			1,5	2						680	346			
1MXH 803-EMT	7,1	5	1MXHM 803-EMM	7,4	1,1	1,5	G 1 1/2	G 1	708	127	516	657	323	88	165	146
1MXH 804-EMT	8,6	6,2			1,5	2						687	353			
1MXH 805/A-EMT	10,7	7,5			1,8	2,5						717	383			
1MXH 1602-EMT	9,1	6,2			1,5	2	G 2	G 1 1/2	750	117	560	752	404	101	165	146
1MXH 1603/A-EMT	10,7	7,5			1,8	2,5						752	404			

## Coverage chart

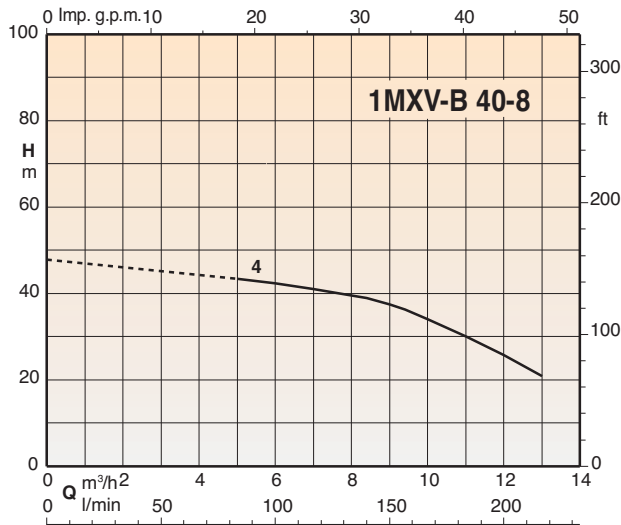
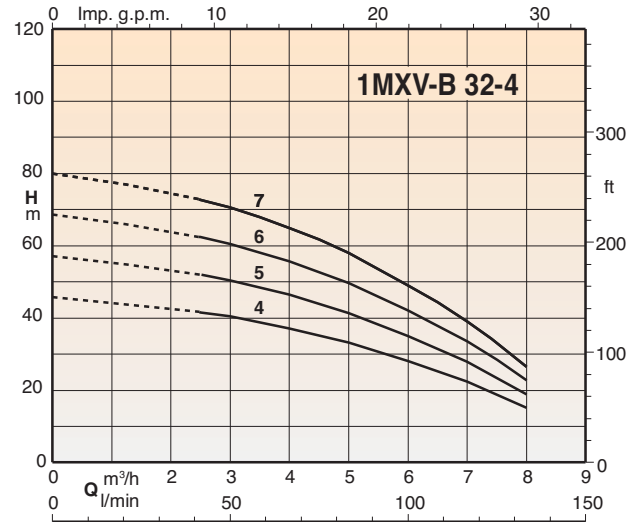
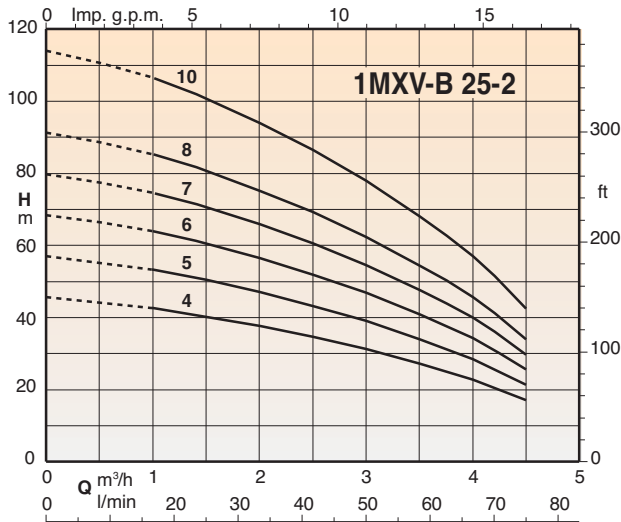


## Characteristic and dimensions

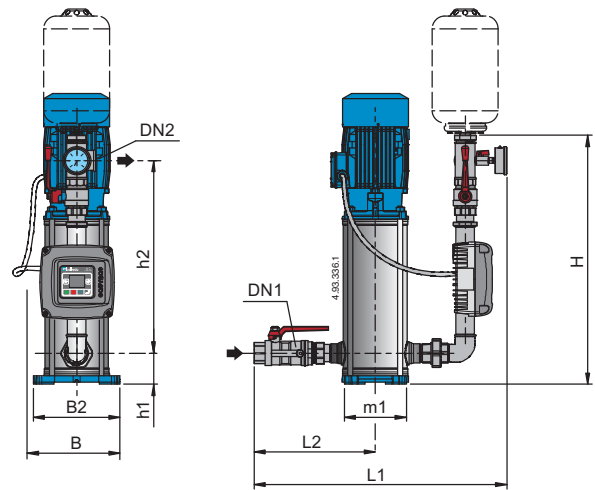


Mains: 1~ 230V Motor: 3~ 230V	mains		Mains: 1~ 230V Motor: 1~ 230V	P <sub>2</sub>		mm											
	A	A		A	kW	HP	DN1	DN2	H	h1	h2	L1	L2	m1	B	B2	
1MXSU 204/A-EMT	3,9	2,7	1MXSUM 204/A-EMM	4,1	0,55	0,75			1071	973							
1MXSU 205/A-EMT	4,7	3,3	1MXSUM 205/A-EMM	5	0,75	1	G 1 1/4	G 1 1/4	1095	32	997	304	225	123	190	190	
1MXSU 206/A-EMT	5,4	3,8			0,9	1,2			1119	1021							
1MXSU 404/A-EMT	5,4	3,8			0,9	1,2	G 1 1/4	G 1 1/4	1071	32	973	304	225	123	190	190	
1MXSU 405/A-EMT	6,4	4,5			1,1	1,5			1095	32	997	304	225	123	190	190	
1MXSU 803/A-EMT	6,4	4,5			1,1	1,5	G 1 1/4	G 1 1/4	1095	32	997	304	225	123	190	190	
1MXSU 804/A-EMT	9,4	6,6			1,5	2			1095	32	997	304	225	123	190	190	

## Coverage chart

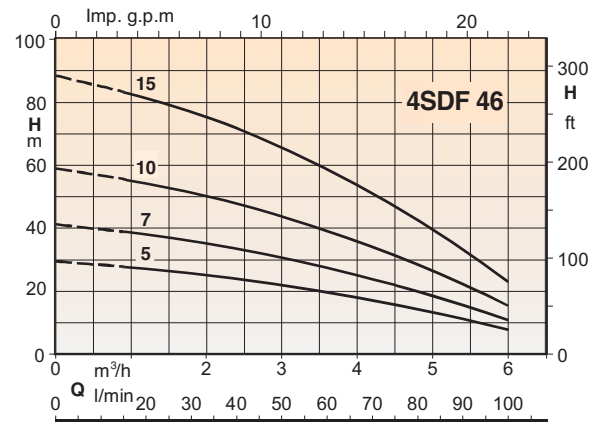
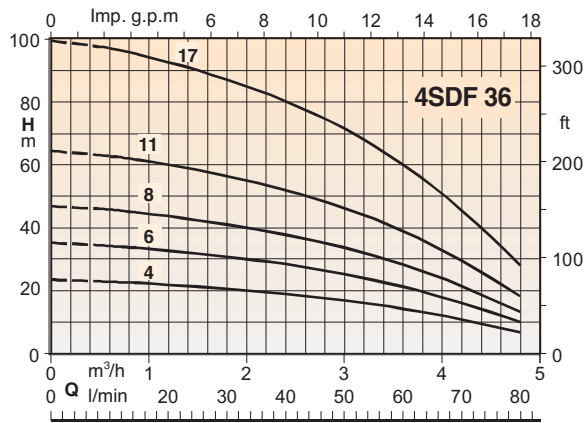
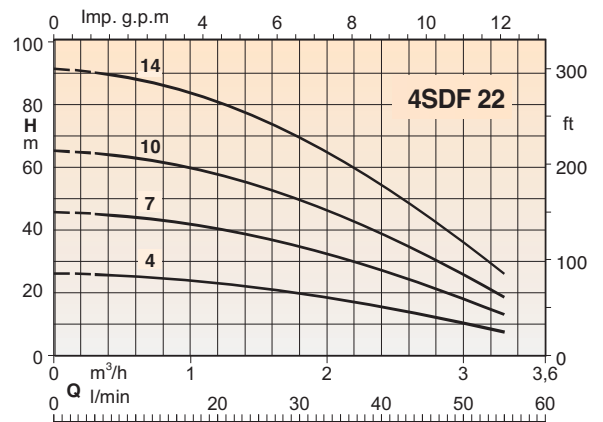
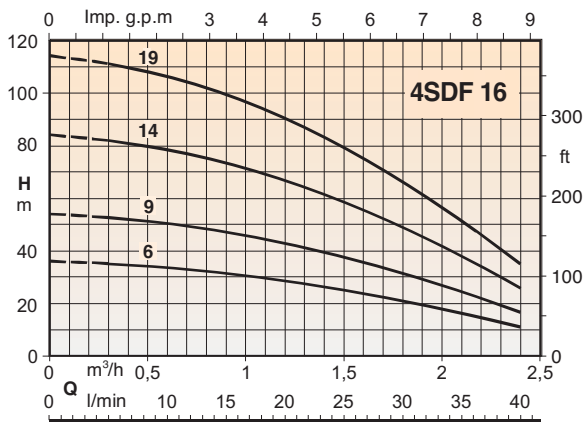


## Characteristic and dimensions



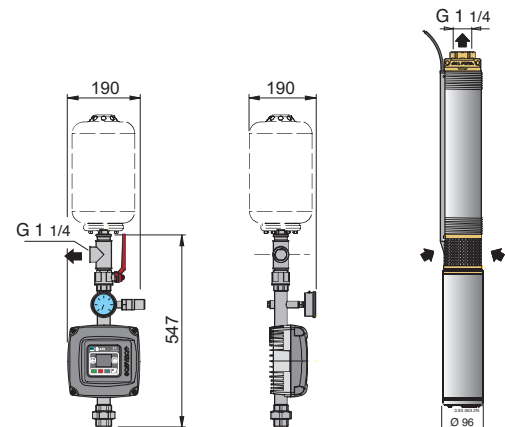
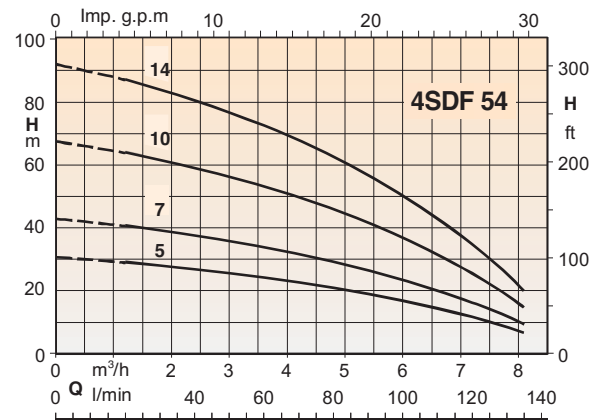
Mains: 1~ 230V Motor: 3~ 230V	mains A	motor A	Mains: 1~ 230V Motor: 1~ 230V	A	P <sub>2</sub>		DN1	DN2	mm							
					kW	HP			H	h1	h2	L1	L2	m1	B	B2
1MXV-B 25-204-EMT	5,4	3,3	1MXV-BM 25-204-EMM	5,8	0,75	1	G 1	G 1	577	75	437	588	262	150	218	210
1MXV-B 25-205-EMT	5,4	3,3	1MXV-BM 25-205-EMM	5,8	0,75	1										
1MXV-B 25-206-EMT	7,1	4,7	1MXV-BM 25-206-EMM	7,4	1,1	1,5										
1MXV-B 25-207-EMT	7,1	4,7	1MXV-BM 25-207-EMM	7,4	1,1	1,5										
1MXV-B 25-208-EMT	10,8	7,5			1,5	2										
1MXV-B 25-210-EMT	10,8	7,5			1,5	2										
1MXV-B 32-404-EMT	7,1	4,7	1MXV-BM 32-404-EMM	7,4	1,1	1,5	G 1 1/4	G 1 1/4	600	75	458	633	288	150	218	210
1MXV-B 32-405-EMT	7,1	4,7	1MXV-BM 32-405-EMM	7,4	1,1	1,5										
1MXV-B 32-406-EMT	10,8	7,5			1,5	2										
1MXV-B 32-407-EMT	10,8	7,5			1,5	2										
1MXV-B 40-804-EMT	10,8	7,5			1,5	2	G 1 1/2	G 1 1/2	623	80	470	675	318	190	246	246

## Coverage chart



## Characteristic and dimensions

	Mains: 1~ 230V Motor: 3~ 230V		P <sub>2</sub>	
	mains A	motor A	kW	HP
4SDF 16/6E-EMT	2.5	1.9	0.37	0.5
4SDF 16/9E-EMT	2.5	1.9	0.37	0.5
4SDF 16/14E-EMT	3.7	2.8	0.55	0.75
4SDF 16/19E-EMT	4.8	3.5	0.75	1
4SDF 22/4E-EMT	2.5	1.9	0.37	0.5
4SDF 22/7E-EMT	2.5	1.9	0.37	0.5
4SDF 22/10E-EMT	3.7	2.8	0.55	0.75
4SDF 22/14E-EMT	4.8	3.5	0.75	1
4SDF 36/4E-EMT	2.5	1.9	0.37	0.5
4SDF 36/6E-EMT	2.5	1.9	0.37	0.5
4SDF 36/8E-EMT	3.7	2.8	0.55	0.75
4SDF 36/11E-EMT	4.8	3.5	0.75	1
4SDF 36/17E-EMT	6.8	4.9	1.1	1.5
4SDF 46/5E-EMT	2.5	1.9	0.37	0.5
4SDF 46/7E-EMT	3.7	2.8	0.55	0.75
4SDF 46/10E-EMT	4.8	3.5	0.75	1
4SDF 46/15E-EMT	6.8	4.9	1.1	1.5
4SDF 54/5E-EMT	3.7	2.8	0.55	0.75
4SDF 54/7E-EMT	4.8	3.5	0.75	1
4SDF 54/10E-EMT	6.8	4.9	1.1	1.5
4SDF 54/14E-EMT	9.5	6.8	1.5	2







## Execution

Constant pressure boosting sets with **EASYMAT** frequency converter made of two pumps, ball valve and non return valve on suction side, ball valve and pressure gauge on delivery side.

Suction and delivery manifolds in stainless steel AISI 304.

Suitable for installation of a 8-lt cylindrical pressure vessel on delivery side.

### **EASYMAT** device:

Frequency converter installed directly on the pump delivery pipe and water cooled (patented).

Only three parameters to set at starting:

- Maximum motor current
- Working frequency
- Working pressure

### Possibility to display:

- Pressure of the system
- Working frequency
- Absorbed current
- Alarms

## Operation



According to the water consumption, one or more pumps starts, all at variable speed, to ensure the required water quantity at the set pressure.

### **CONSTANT PRESSURE MODE:**

the system keeps the pressure constant when the quantity of water requested by the user changes.



### **FIXED SPEED MODE:**

the system works at a fixed speed that user can choose according to his need.

## Applications

For drawing water out of a well

As pressure boosting pump for central water systems with low pressure (follow local specifications if increasing network pressure)

## Motors

2-pole induction motors, 50Hz, n=2900 rpm, suitable for operation with frequency converter

- Single-phase 230V +/-10%

- Three-phase 230V +/-10%

Class F insulation

IP 54 protection

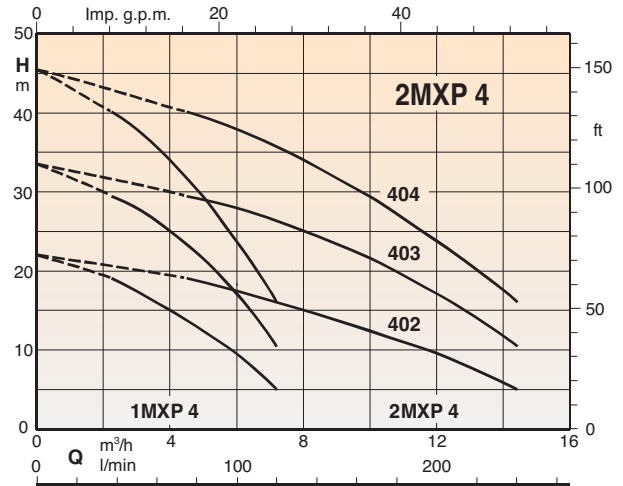
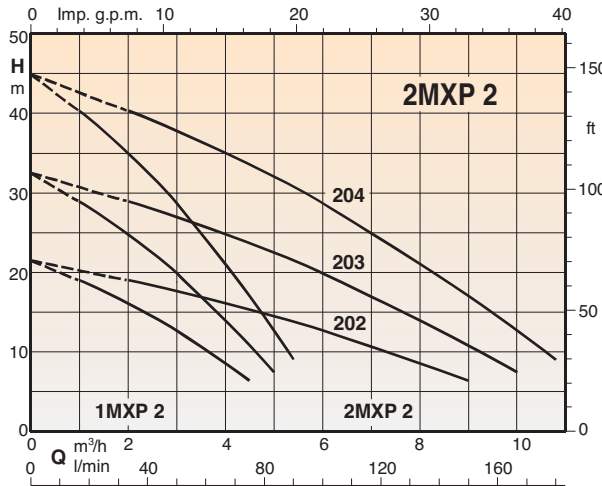
Execution according IEC 60034

Other voltages on demand

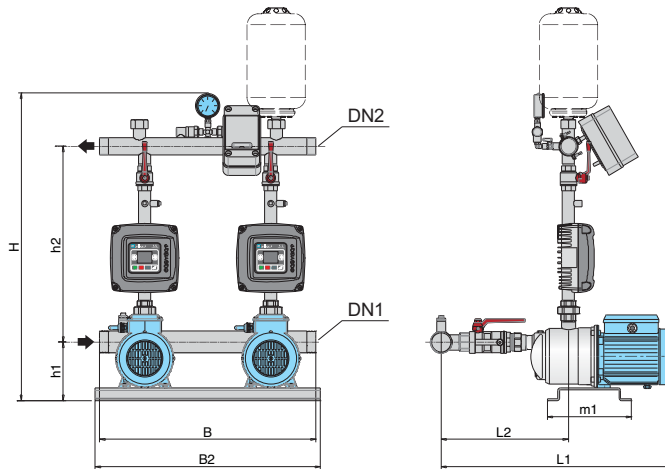
## Pressure vessels (on demand)

Cylindrical with capacity 8 liters, membrane type, air precharged

## Coverage chart

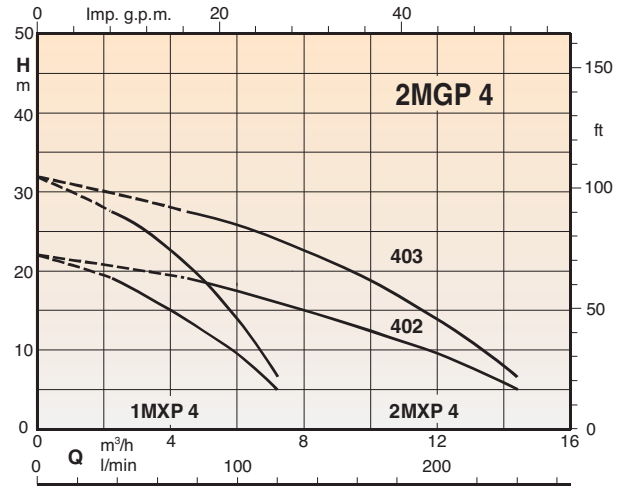
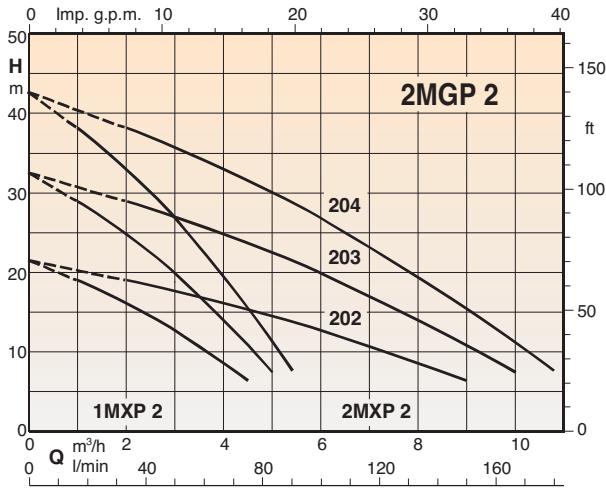


## Characteristic and dimensions

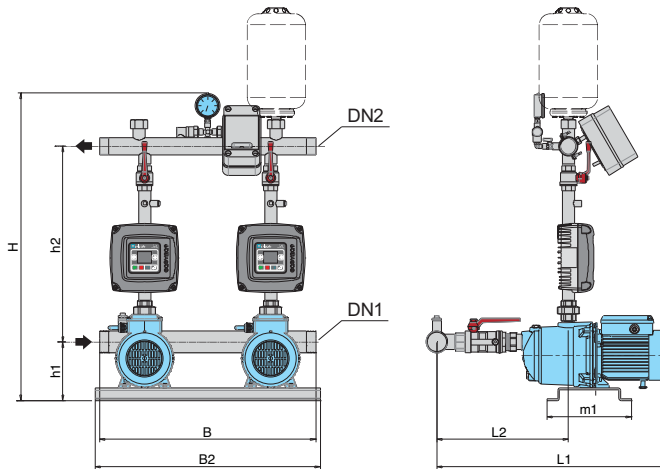


Mains: 1~ 230V Motor: 3~ 230V	mains A	motor A	Mains: 1~ 230V Motor: 1~ 230V	P <sub>2</sub>		DN1	DN2	mm								
				A	kW			HP	H	h1	h2	L1	L2	m1	B	B2
2MXP 202-EMT	2 x 2,1	2 x 1,7	2MXPM 202-EMM	2 x 2,3	2 x 0,33	2 x 0,45	G 2	G 1 1/2	841	150	510	573	326	240	600	625
2MXP 203-EMT	2 x 3,2	2 x 2,4	2MXPM 203-EMM	2 x 3	2 x 0,45	2 x 0,6						602				
2MXP 204/A-EMT	2 x 4	2 x 2,8	2MXPM 204/A-EMM	2 x 4,2	2 x 0,55	2 x 0,75						602				
2MXP 402-EMT	2 x 3,2	2 x 2,4	2MXPM 402-EMM	2 x 3	2 x 0,45	2 x 0,6	G 2	G 1 1/2	841	150	510	573	326	240	600	625
2MXP 403/A-EMT	2 x 4	2 x 2,8	2MXPM 403/A-EMM	2 x 4,2	2 x 0,55	2 x 0,75						602				
2MXP 404/A-EMT	2 x 5	2 x 3,5	2MXPM 404/A-EMM	2 x 5,4	2 x 0,75	2 x 1						602				

## Coverage chart

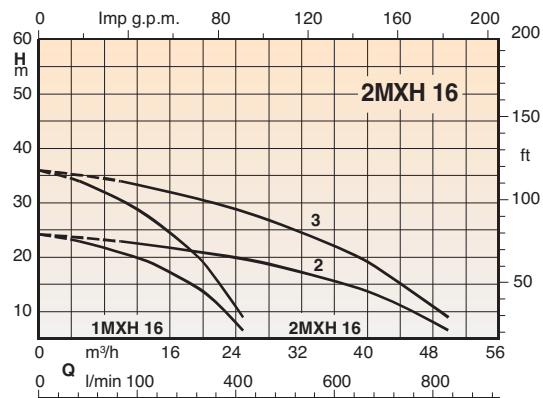
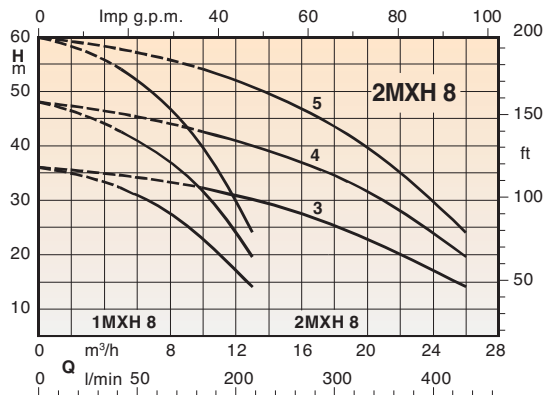
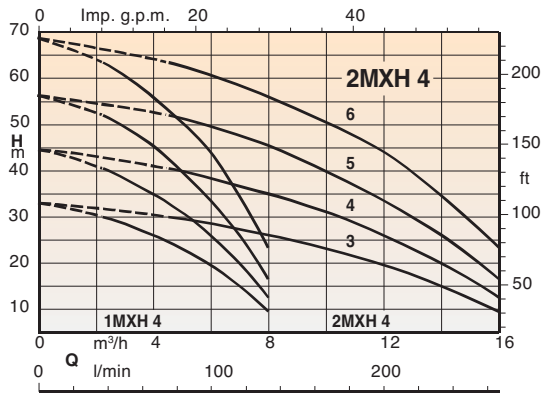
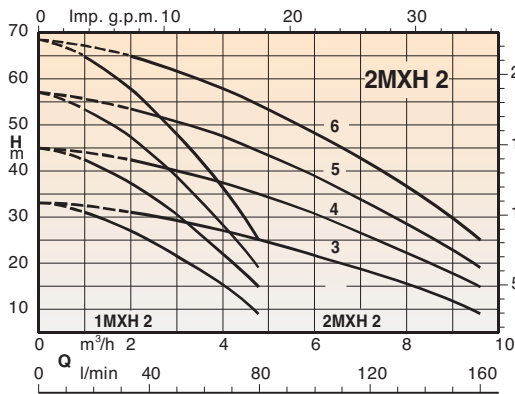


## Characteristic and dimensions

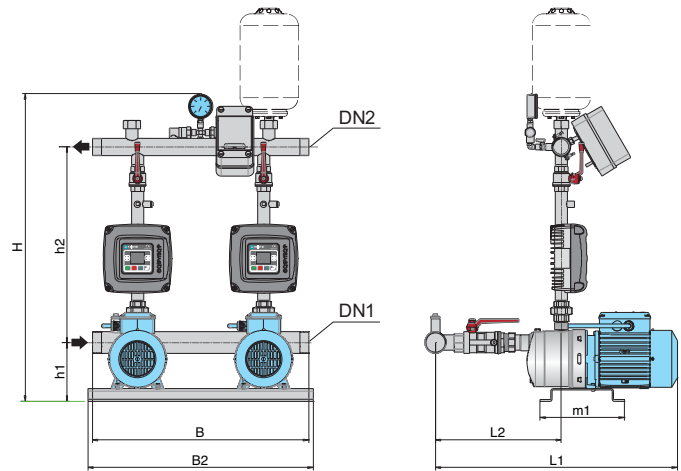


	Mains: 1~ 230V Motor: 3~ 230V		Mains: 1~ 230V Motor: 1~ 230V		P <sub>2</sub>		DN1	DN2	mm							
	mains A	motor A	A	A	kW	HP			H	h1	h2	L1	L2	m1	B	B2
2MGP 202-EMT	2 x 2,1	2 x 1,7	2MGPM 202-EMM	2 x 2,3	2 x 0,33	2 x 0,45										
2MGP 203-EMT	2 x 3,2	2 x 2,4	2MGPM 203-EMM	2 x 3	2 x 0,45	2 x 0,6	G 2	G 1 1/2	825	150	494	573	326	240	600	625
2MGP 204-EMT	2 x 4	2 x 2,8	2MGPM 204-EMM	2 x 3,3	2 x 0,55	2 x 0,75										
2MGP 402-EMT	2 x 3,2	2 x 2,4	2MGPM 402-EMM	2 x 3	2 x 0,45	2 x 0,6	G 2	G 1 1/2	825	150	494	573	326	240	600	625
2MGP 403-EMT	2 x 4,3	2 x 3	2MGPM 403-EMM	2 x 3,5	2 x 0,55	2 x 0,75										

## Coverage chart

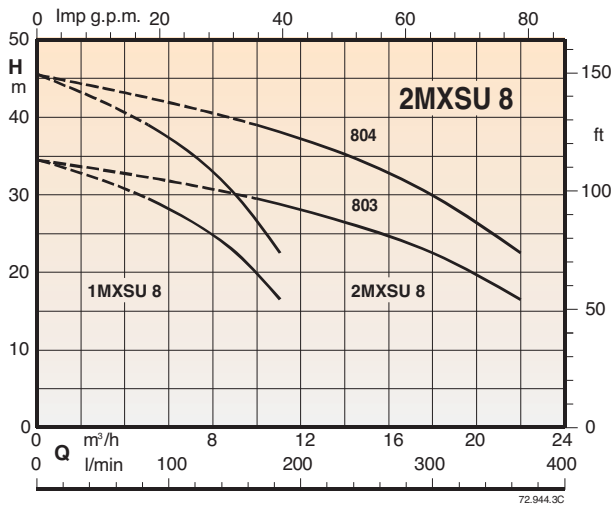
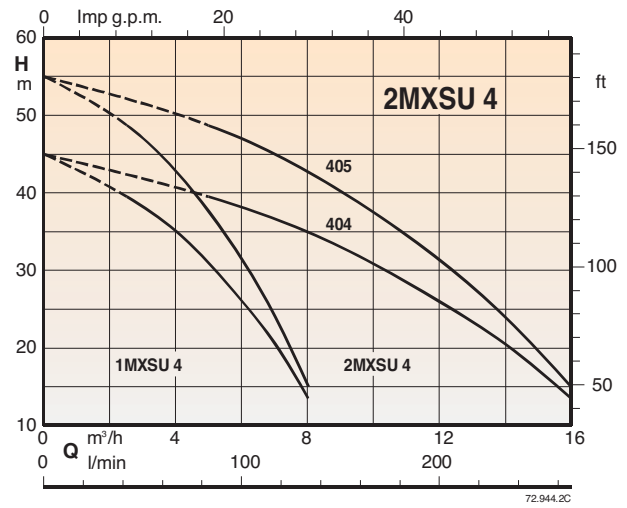
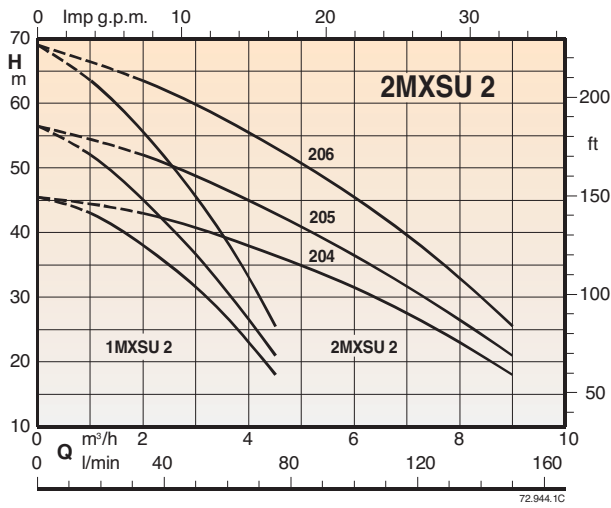


## Characteristic and dimensions

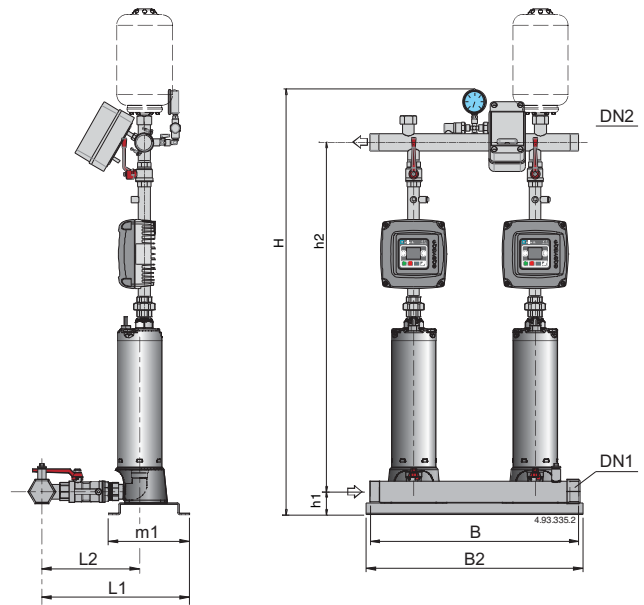


Mains: 1~ 230V Motor: 3~ 230V	mains A	motor A	Mains: 1~ 230V Motor: 1~ 230V	A	P <sub>2</sub>		DN1	DN2	mm									
					kW	HP			H	h1	h2	L1	L2	m1	B	B2		
2MXH 203E-EMT	2 x 3,2	2 x 2,4	2MXHM 203E-EMM	2 x 3	2 x 0,45	2 x 0,6							563	326				
2MXH 204/A-EMT	2 x 4	2 x 2,8	2MXHM 204/A-EMM	2 x 4,2	2 x 0,55	2 x 0,75							613	350				
2MXH 205/A-EMT	2 x 5	2 x 3,5	2MXHM 205/A-EMM	2 x 5,4	2 x 0,75	2 x 1	G 2	G 1 1/2	848	161	506		637	374	240	600	625	
2MXH 206/B-EMT	2 x 6,3	2 x 4,7	2MXHM 206-EMM	2 x 7,4	2 x 1,1	2 x 1,5							661	398				
2MXH 403/A-EMT	2 x 4	2 x 2,8	2MXHM 403/A-EMM	2 x 4,2	2 x 0,55	2 x 0,75							589	326				
2MXH 404/A-EMT	2 x 5	2 x 3,5	2MXHM 404/A-EMM	2 x 5,4	2 x 0,75	2 x 1	G 2	G 1 1/2	848	161	506		613	350	240	600	625	
2MXH 405/B-EMT	2 x 6,7	2 x 4,7	2MXHM 405-EMM	2 x 7,4	2 x 1,1	2 x 1,5							637	374				
2MXH 406-EMT	2 x 8	2 x 6,2			2 x 1,5	2 x 2							732	398				
2MXH 803-EMT	2 x 7,1	2 x 5	2MXHM 803-EMM	2 x 7,4	2 x 1,1	2 x 1,5							727	393				
2MXH 804-EMT	2 x 8,6	2 x 6,2			2 x 1,5	2 x 2	G 2 1/2	G 2	854	161	512		757	423	240	600	625	
2MXH 805/A-EMT	2 x 10,7	2 x 7,5			2 x 1,8	2 x 2,5							787	453				
2MXH 1602-EMT	2 x 9,1	2 x 6,2			2 x 1,5	2 x 2							829	481	240	600	625	
2MXH 1603/A-EMT	2 x 10,7	2 x 7,5			2 x 1,8	2 x 2,5	G 3	G 2 1/2	882	151	551		829	481				

## Coverage chart

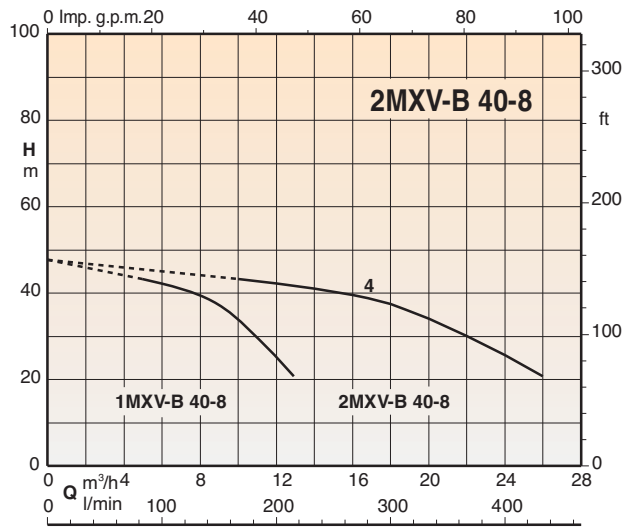
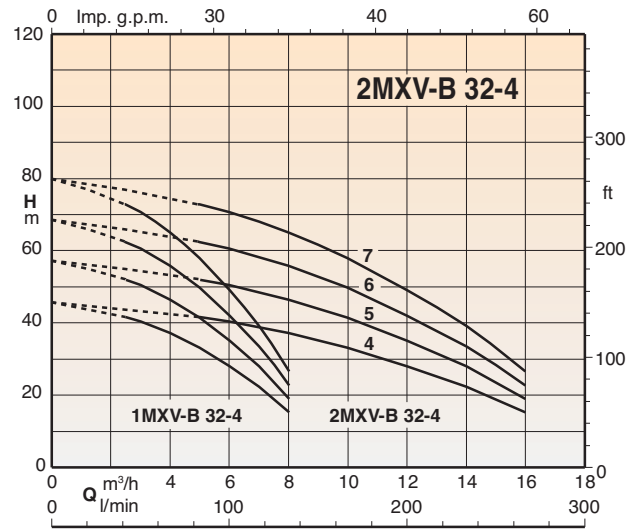
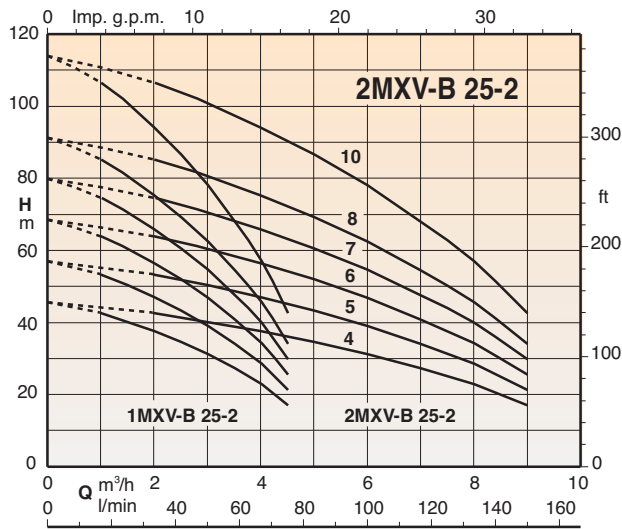


## Characteristic and dimensions

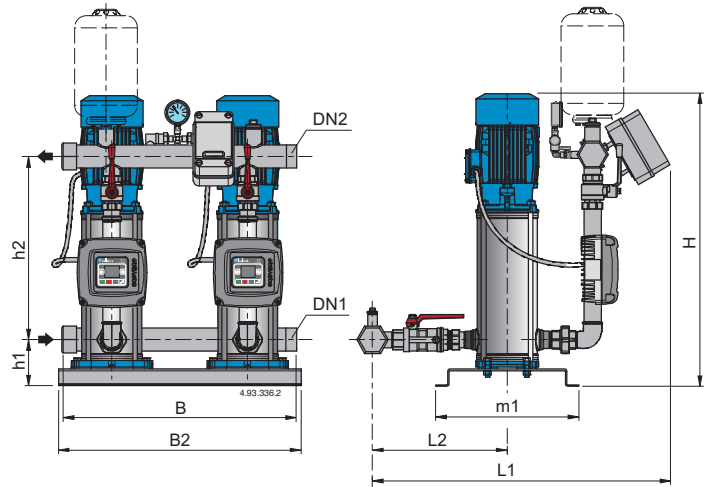


Mains: 1~ 230V Motor: 3~ 230V	mains A	motor A	Mains: 1~ 230V Motor: 1~ 230V	P <sub>2</sub>		DN1	DN2	mm									
				A	kW			HP	H	h1	h2	L1	L2	m1	B	B2	
2MXSU 204/A-EMT	2 x 3,9	2 x 2,7	2MXSUM 204/A-EMM	2 x 4,1	2 x 0,55	2 x 0,75			1205		958						
2MXSU 205/A-EMT	2 x 4,7	2 x 3,3	2MXSUM 205/A-EMM	2 x 5	2 x 0,75	2 x 1	G 2	G 2	1229	66	982	417	277	240	600	625	
2MXSU 206/A-EMT	2 x 5,4	2 x 3,8			2 x 0,9	2 x 1,2			1253		1006						
2MXSU 404/A-EMT	2 x 5,4	2 x 3,8			2 x 0,9	2 x 1,2	G 2	G 2	1205		958						
2MXSU 405/A-EMT	2 x 6,4	2 x 4,5			2 x 1,1	2 x 1,5	G 2	G 2	1229	66	982	417	277	240	600	625	
2MXSU 803/A-EMT	2 x 6,4	2 x 4,5			2 x 1,1	2 x 1,5	G 2	G 2	1229		982						
2MXSU 804/A-EMT	2 x 9,4	2 x 6,6			2 x 1,5	2 x 2			1229		982						

## Coverage chart



## Characteristic and dimensions



Mains: 1~ 230V Motor: 3~ 230V	mains		Mains: 1~ 230V Motor: 1~ 230V	A	P <sub>2</sub>		DN1	DN2	mm							
	A	motor A			kW	HP			H	h1	h2	L1	L2	m1	B	B2
2MXV-B 25-204-EMT	2 x 5,4	2 x 3,3	2MXV-BM 25-204-EMM	2 x 5,8	2 x 0,75	2 x 1	G 1 1/2	G 1 1/2	727	119	461	501	315	365	600	625
2MXV-B 25-205-EMT	2 x 5,4	2 x 3,3	2MXV-BM 25-205-EMM	2 x 5,8	2 x 0,75	2 x 1										
2MXV-B 25-206-EMT	2 x 7,1	2 x 4,7	2MXV-BM 25-206-EMM	2 x 7,4	2 x 1,1	2 x 1,5										
2MXV-B 25-207-EMT	2 x 7,1	2 x 4,7	2MXV-BM 25-207-EMM	2 x 7,4	2 x 1,1	2 x 1,5										
2MXV-B 25-208-EMT	2 x 10,8	2 x 7,5			2 x 1,5	2 x 2										
2MXV-B 25-210-EMT	2 x 10,8	2 x 7,5			2 x 1,5	2 x 2										
2MXV-B 32-404-EMT	2 x 7,1	2 x 4,7	2MXV-BM 32-404-EMM	2 x 7,4	2 x 1,1	2 x 1,5	G 2	G 2	743	119	477	544	340	365	600	625
2MXV-B 32-405-EMT	2 x 7,1	2 x 4,7	2MXV-BM 32-405-EMM	2 x 7,4	2 x 1,1	2 x 1,5										
2MXV-B 32-406-EMT	2 x 10,8	2 x 7,5			2 x 1,5	2 x 2										
2MXV-B 32-407-EMT	2 x 10,8	2 x 7,5			2 x 1,5	2 x 2										
2MXV-B 40-804-EMT	2 x 10,8	2 x 7,5			2 x 1,5	2 x 2	G 2 1/2	G 2 1/2	765	124	495	598	388	365	600	625

# 2 MX.., 2 NM, 2 NMD, 2 NG..



Pressure boosting sets for domestic use with two electric pumps  
Fixed speed pump or **Variable speed pump (frequency converter)**



## Construction

Automatic pressure boosting plant consisting of two pumps complete with ball, non return valve on the suction side and ball valves on the discharge side.

Suction and delivery manifolds are in AISI 304 stainless steel.

Connections are located on the delivery manifold for the installation of two 20 litres cylindrical vessels.

### Electrical control boards:

- with microprocessor for fixed speed pump units (see page 422).
- with frequency converter for variable speed pump units (see page 423).

The unit includes one pressure gauge and two adjustable differential pressure switches or pressure transducer (for sets with frequency converter).

## Operation

### BS 2F Fixed speed pump

Depending on the reduction of the pressure in the system, the pressure switches determine the starting up of the pumps in sequence and the microprocessor alternates the starts.

### BS1V1F Pumps at variable speed with one frequency converter

According to the water consumption, one or more pumps start, one at variable speed and the others at fixed speed, to grant the water quantity required at the set pressure.

### BS2V Pumps at variable speed with two frequency converter

Depending on water consumption, one or more pumps are activated, all at variable speed, in order to guarantee the quantity of water required at the set pressure.

## Applications

For drawing water out a well.

As pressure boosting pump to increase water pressure when needed (follow local rules).

## Motors

2-pole induction motors, 50 Hz,  $n = 2900$  rpm.

- Three-phase 230/400V  $\pm 10\%$  up to 3 kW, suitable for operation with frequency converter;  
400/690V  $\pm 10\%$  for 4 kW, suitable for operation with frequency converter;
- Single-phase 230 V  $\pm 10\%$ , with thermal protector.

Insulation class F.

Protection IP 54.

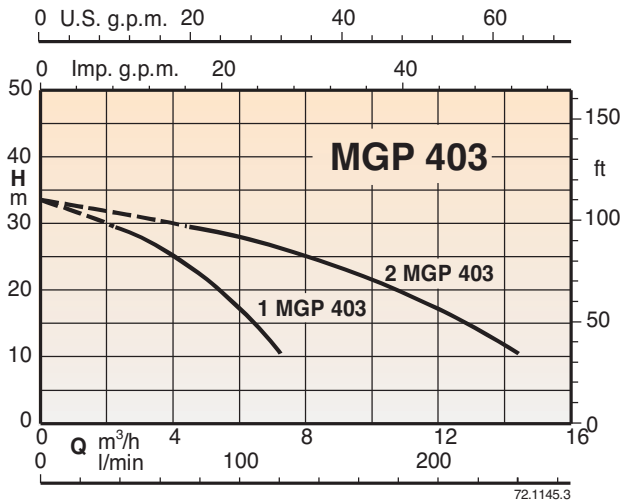
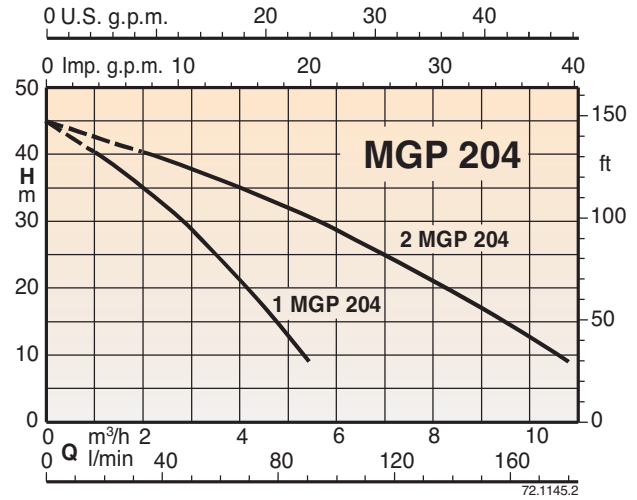
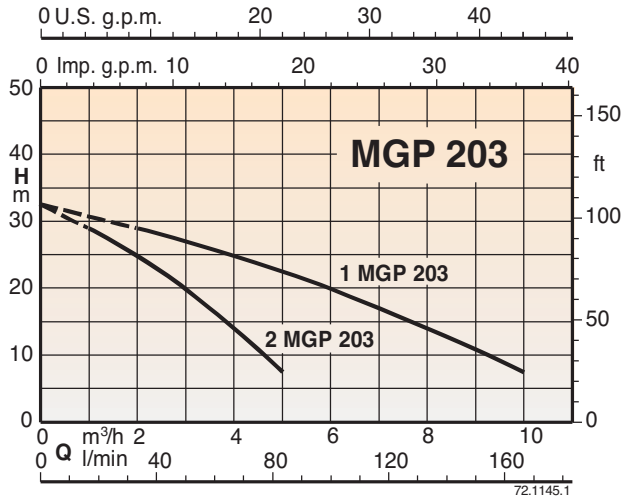
Constructed in accordance with: IEC 60034.

Other voltages and frequencies on request.

## Vessels (on request)

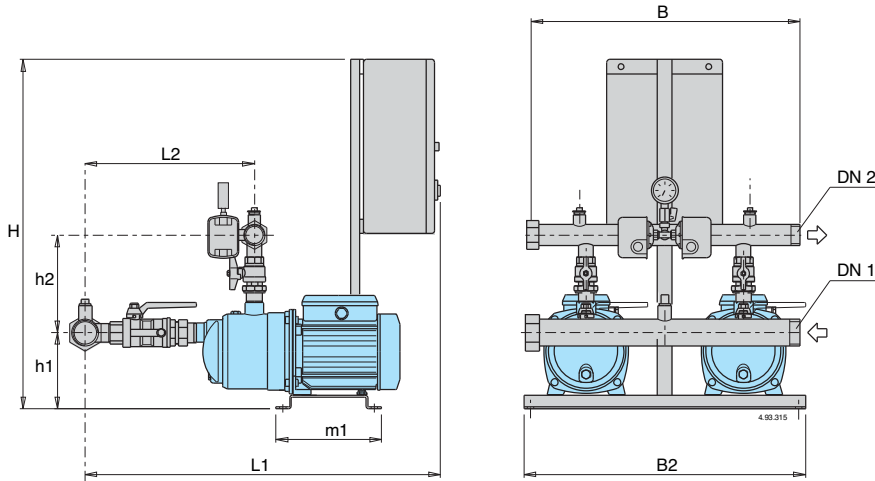
Cylindrical with capacity 20 litres, membrane type, air precharged.

## Coverage chart





## Characteristic, dimensions and weights



### BS2F BSM2F

Mains: 400V 3~ Motor: 400V 3~	Mains: 230V 1~ Motor: 230V 1~	Motor		Q max* l/min	Pres. switch setting		Manifolds		mm								Weight kg	Vessel	
		kW	HP		bar	bar	DN1	DN2	H	h1	h2	L1	L2	m1	B2	B		Mem. litre	Vessel litre
<b>BS2F 2MGP 203</b>	<b>BSM2F 2MGPM 203</b>	0,45+0,45	0,6+0,6	155	1,4±2,6	1,0±2,2	G 2	G 1/2	840	151	206	793	355	235	625	600	41	24x2	100
<b>BS2F 2MGP 204</b>	<b>BSM2F 2MGPM 204</b>	0,55+0,55	0,75+0,75	160	2,0±3,2	1,5±2,7	G 2	G 1/2	840	151	206	793	355				46	24x2	100
<b>BS2F 2MGP 403</b>	<b>BSM2F 2MGPM 403</b>	0,55+0,55	0,75+0,75	230	1,2±2,4	0,9±2,1	G 2	G 1/2	840	151	206	793	355				46	24x2	100

\* Maximum pumps flow at minimum set pressure of 2<sup>nd</sup> pressure switch.

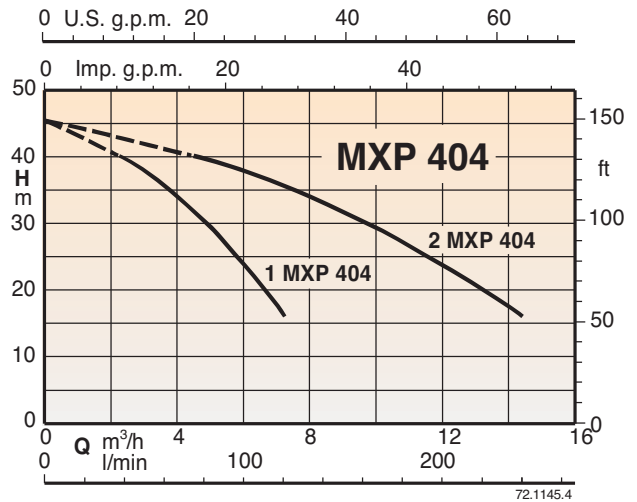
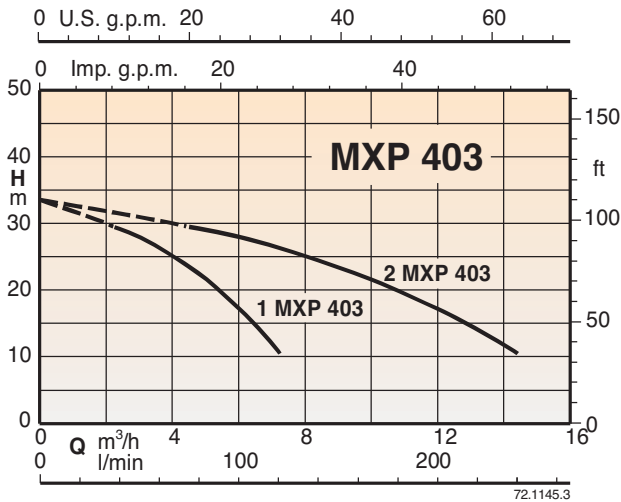
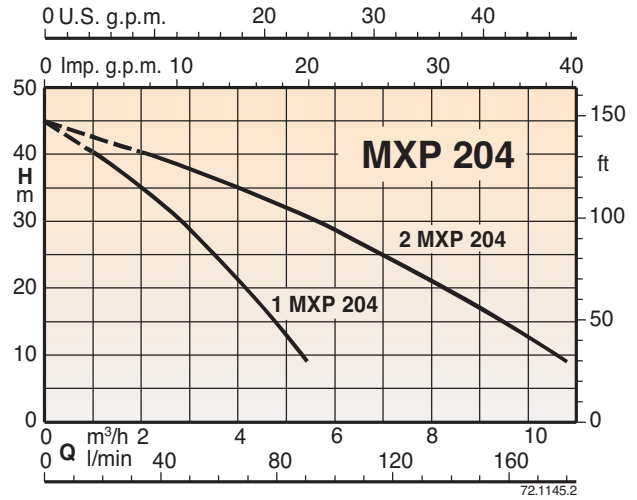
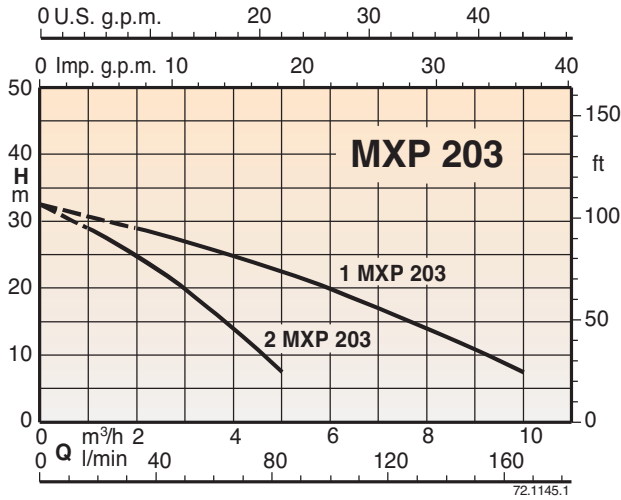
### BS1V1F BSM1V1F

Mains: 400V 3~ Motor: 400V 3~	Mains: 230V 1~ Motor: 230V 3~ and 230V 1~	Motor		Manifolds		mm								Weight kg	Vessel Membrane litre	
		kW	HP	DN1	DN2	H	h1	h2	L1	L2	m1	B2	B			
<b>BS1V1F 2MGP 203</b>	<b>BSM1V1F 2MGPM 203</b>	0,45+0,45	0,6+0,6	G 2	G 1/2	1100	151	206	793	355	235	625	600	41	24x2	
<b>BS1V1F 2MGP 204</b>	<b>BSM1V1F 2MGPM 204</b>	0,55+0,55	0,75+0,75	G 2	G 1/2	1100	151	206	793	355				46	24x2	
<b>BS1V1F 2MGP 403</b>	<b>BSM1V1F 2MGPM 403</b>	0,55+0,55	0,75+0,75	G 2	G 1/2	1100	151	206	793	355				46	24x2	

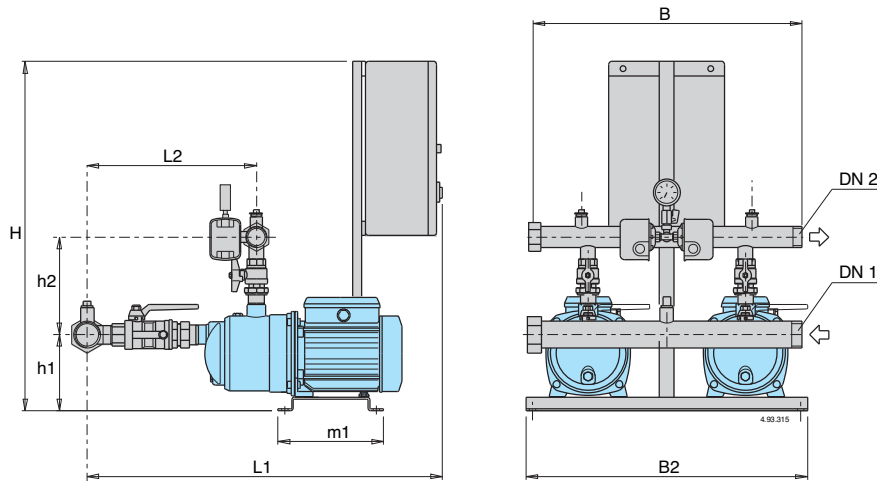
### BS2V BSM2V

Mains: 400V 3~ Motor: 400V 3~	Mains: 230V 1~ Motor: 230V 3~	Motor		Manifolds		mm								Weight kg	Vessel Membrane litre	
		kW	HP	DN1	DN2	H	h1	h2	L1	L2	m1	B2	B			
<b>BS2V 2MGP 203</b>	<b>BSM2V 2MGPM 203</b>	0,45+0,45	0,6+0,6	G 2	G 1/2	1100	151	206	793	355	235	625	600	41	24x2	
<b>BS2V 2MGP 204</b>	<b>BSM2V 2MGPM 204</b>	0,55+0,55	0,75+0,75	G 2	G 1/2	1100	151	206	793	355				46	24x2	
<b>BS2V 2MGP 403</b>	<b>BSM2V 2MGPM 403</b>	0,55+0,55	0,75+0,75	G 2	G 1/2	1100	151	206	793	355				46	24x2	

## Coverage chart



## Characteristic, dimensions and weights



### BS2F BSM2F

Mains: 400V 3~ Motor: 400V 3~	Mains: 230V 1~ Motor: 230V 1~	Motor		Q <sub>max</sub> * l/min	Pres. switch setting		Manifolds		mm								Weight kg	Vessel	
		kW	HP		bar	bar	DN1	DN2	H	h1	h2	L1	L2	m1	B2	B		Mem. litre	Vessel litre
BS2F 2MXP 203	BSM2F 2MXPM 203	0,45+0,45	0,6+0,6	155	1,4÷2,6	1,0÷2,2	G 2	G 1/2	840	151	206	793	355	235	625	600	41	24x2	100
BS2F 2MXP 204/A	BSM2F 2MXPM 204/A	0,55+0,55	0,75+0,75	160	2,0÷3,2	1,5÷2,7	G 2	G 1/2	840	151	206	793	355				46	24x2	100
BS2F 2MXP 403/A	BSM2F 2MXPM 403/A	0,55+0,55	0,75+0,75	230	1,5÷2,7	1,2÷2,4	G 2	G 1/2	840	151	206	793	355				46	24x2	100
BS2F 2MXP 404/A	BSM2F 2MXPM 404/A	0,75+0,75	1+1	220	2,4÷3,6	2,0÷3,2	G 2	G 1/2	840	151	206	793	355				48	80	200

\* Maximum pumps flow at minimum set pressure of 2<sup>nd</sup> pressure switch.

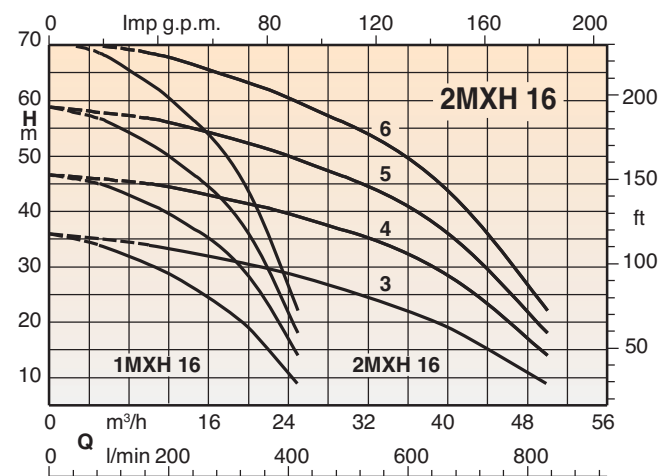
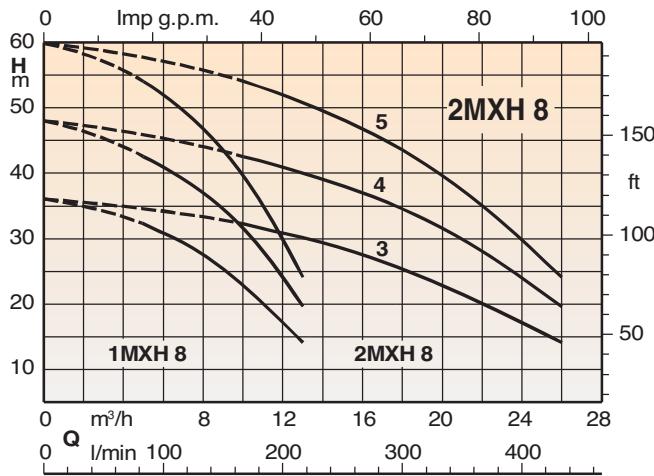
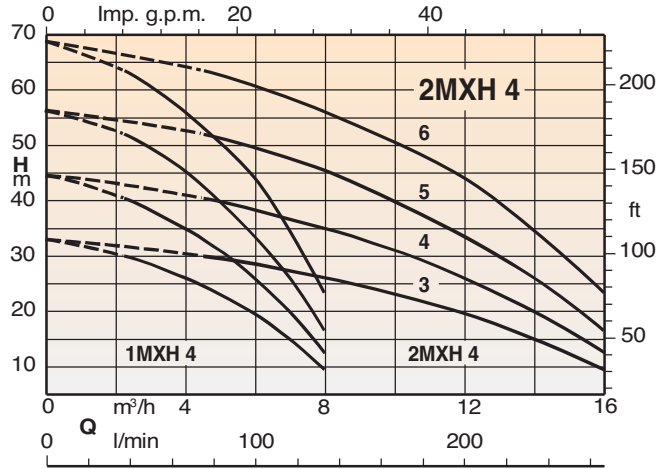
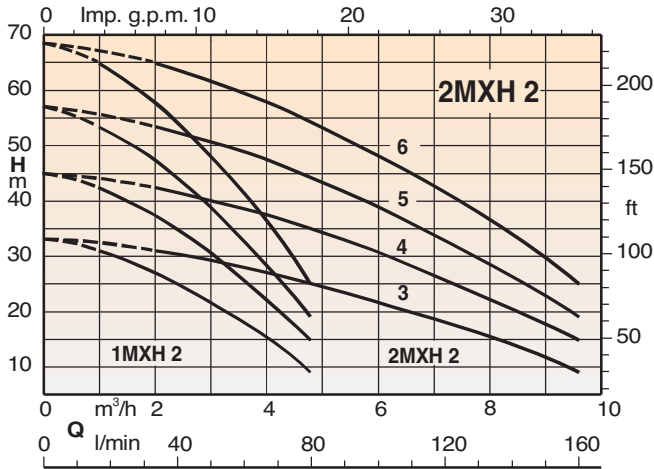
### BS1V1F BSM1V1F

Mains: 400V 3~ Motor: 400V 3~	Mains: 230V 1~ Motor: 230V 3~ and 230V 1~	Motor		Manifolds		mm								Weight kg	Vessel	
		kW	HP	DN1	DN2	H	h1	h2	L1	L2	m1	B2	B		Mem. litre	Vessel litre
BS1V1F 2MXP 203	BSM1V1F 2MXPM 203	0,45+0,45	0,6+0,6	G 2	G 1/2	1100	151	206	793	355	235	625	600	41	24x2	
BS1V1F 2MXP 204/A	BSM1V1F 2MXPM 204/A	0,55+0,55	0,75+0,75	G 2	G 1/2	1100	151	206	793	355				46	24x2	
BS1V1F 2MXP 403/A	BSM1V1F 2MXPM 403/A	0,55+0,55	0,75+0,75	G 2	G 1/2	1100	151	206	793	355				46	24x2	
BS1V1F 2MXP 404/A	BSM1V1F 2MXPM 404/A	0,75+0,75	1+1	G 2	G 1/2	1100	151	206	793	355				48	24x2	

### BS2V BSM2V

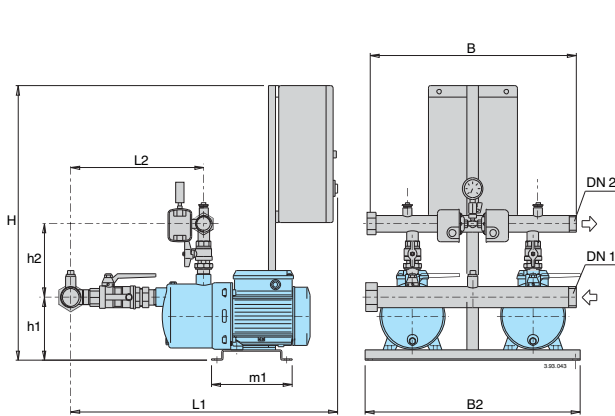
Mains: 400V 3~ Motor: 400V 3~	Mains: 230V 1~ Motor: 230V 3~	Motor		Manifolds		mm								Weight kg	Vessel	
		kW	HP	DN1	DN2	H	h1	h2	L1	L2	m1	B2	B		Mem. litre	Vessel litre
BS2V 2MXP 203	BSM2V 2MXPM 203	0,45+0,45	0,6+0,6	G 2	G 1/2	1100	151	206	793	355	235	625	600	41	24x2	
BS2V 2MXP 204/A	BSM2V 2MXPM 204/A	0,55+0,55	0,75+0,75	G 2	G 1/2	1100	151	206	793	355				46	24x2	
BS2V 2MXP 403/A	BSM2V 2MXPM 403/A	0,55+0,55	0,75+0,75	G 2	G 1/2	1100	151	206	793	355				46	24x2	
BS2V 2MXP 404/A	BSM2V 2MXPM 404/A	0,75+0,75	1+1	G 2	G 1/2	1100	151	206	793	355				48	24x2	

## Coverage chart

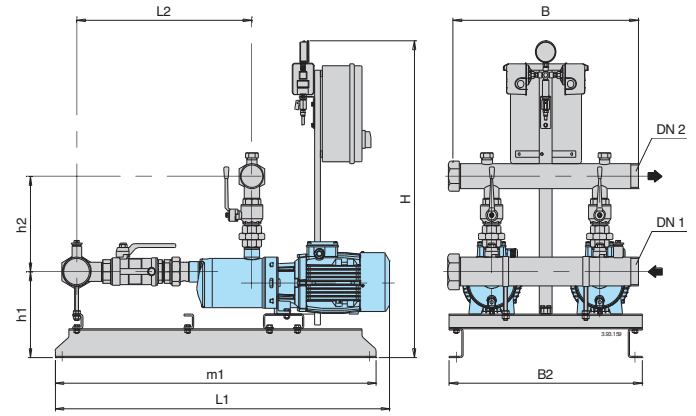


## Characteristic, dimensions and weights

### BS.. 2MXH 2,4,8



### BS.. 2MXH 16



### BS2F BSM2F

Mains: 400V 3~ Motor: 400V 3~	Mains: 230V 1~ Motor: 230V 1~	Motor		Q max* l/min	Pres. switch setting		Manifolds		mm							Weight kg	Vessel		
		kW	HP		bar	bar	DN1	DN2	H	h1	h2	L1	L2	m1	B2		B	Mem. litre	Vessel litre
BS2F 2MXH 203E	BSM2F 2MXHM 203E	0,45+0,45	0,6+0,6	140	1,4±2,8	1,0±2,4	G 2	G 11/2	840	162	202	773	335				42	24x2	100
BS2F 2MXH 204/A	BSM2F 2MXHM 204/A	0,55+0,55	0,75+0,75	130	2,8±4,0	2,4±3,6	G 2	G 11/2	840	162	202	796	358				47	24x2	100
BS2F 2MXH 205/A	BSM2F 2MXHM 205/A	0,75+0,75	1+1	130	3,5±5,0	3,0±4,5	G 2	G 11/2	840	162	202	820	382				50	24x2	100
BS2F 2MXH 206/B	BSM2F 2MXHM 206	1,1+1,1	1,5+1,5	130	4,0±6,0	3,5±5,5	G 2	G 11/2	840	162	202	845	406				54	24x2	100
BS2F 2MXH 403/A	BSM2F 2MXHM 403/A	0,55+0,55	0,75+0,75	240	1,4±2,6	1,0±2,2	G 2	G 11/2	840	162	202	773	335				46	24x2	100
BS2F 2MXH 404/A	BSM2F 2MXHM 404/A	0,75+0,75	1+1	220	2,4±3,6	2,0±3,2	G 2	G 11/2	840	162	202	796	358				49	60	100
BS2F 2MXH 405/B	BSM2F 2MXHM 405	1,1+1,1	1,5+1,5	220	3,4±4,9	3,0±4,5	G 2	G 11/2	840	162	202	820	382	235	625	600	53	80	200
BS2F 2MXH 406E	BSM2F 2MXHM 406	1,5+1,5	2+2	220	4,0±6,0	3,5±5,5	G 2	G 11/2	840	162	202	845	406				57	100	300
BS2F 2MXH 803	BSM2F 2MXHM 803	1,1+1,1	1,5+1,5	430	1,6±2,8	1,2±2,4	G 21/2	G 2	840	162	208	866	428				61	100	300
BS2F 2MXH 804	BSM2F 2MXHM 804	1,5+1,5	2+2	400	2,8±4,0	2,4±3,6	G 21/2	G 2	840	162	208	896	458				66	200	300
BS2F 2MXH 805/A		1,8+1,8	2,5+2,5	400	3,5±5,0	3,0±4,5	G 21/2	G 2	840	162	208	926	488				68	200	500
BS2F 2MXH 1603/A		1,8+1,8	2,5+2,5	760	1,5±3,0	1,2±2,7	G 3	G 21/2	985	250	295	945	490	905			87	300	500
BS2F 2MXH 1604/A		3+3	4+4	740	2,8±4,0	2,4±3,6	G 3	G 21/2	985	265	295	1045	530				114	500	750
BS2F 2MXH 1605/A		3,7+3,7	5+5	740	3,8±5,3	3,4±4,9	G 3	G 21/2	985	265	295	1085	565	1040	625	600	122	500	1000
BS2F 2MXH 1606/A		4+4	5,5+5,5	700	4,5±6,5	4,0±6,0	G 3	G 21/2	985	265	295	1120	605				124	750	1500

\* Maximum pumps flow at minimum set pressure of 2<sup>nd</sup> pressure switch.

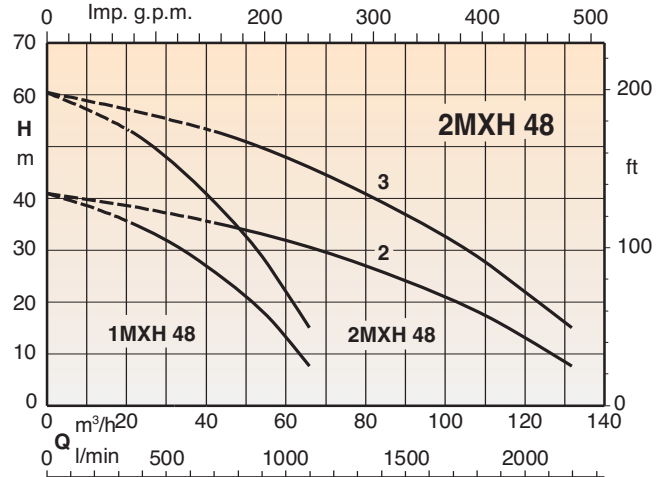
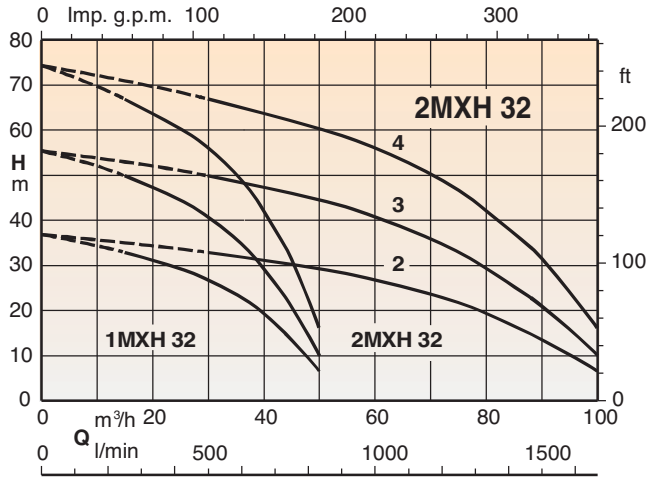
### BS1V1F BSM1V1F

Mains: 400V 3~ Motor: 400V 3~	Mains: 230V 1~ Motor: 230V 3~ and 230V 1~	Motor		Manifolds		mm							Weight kg	Vessel Membrane litre				
		kW	HP	DN1	DN2	H	h1	h2	L1	L2	m1	B2		B	Mem. litre	Vessel litre		
BS1V1F 2MXH 203E	BSM1V1F 2MXH 203E	0,45+0,45	0,6+0,6	G 2	G 11/2	1100	162	202	773	335						42	24x2	
BS1V1F 2MXH 204/A	BSM1V1F 2MXH 204/A	0,55+0,55	0,75+0,75	G 2	G 11/2	1100	162	202	796	358						47	24x2	
BS1V1F 2MXH 205/A	BSM1V1F 2MXH 205/A	0,75+0,75	1+1	G 2	G 11/2	1100	162	202	820	382						50	24x2	
BS1V1F 2MXH 206/B	BSM1V1F 2MXH 206/B	1,1+1,1	1,5+1,5	G 2	G 11/2	1100	162	202	845	406						54	24x2	
BS1V1F 2MXH 403/A	BSM1V1F 2MXH 403/A	0,55+0,55	0,75+0,75	G 2	G 11/2	1100	162	202	773	335						46	24x2	
BS1V1F 2MXH 404/A	BSM1V1F 2MXH 404/A	0,75+0,75	1+1	G 2	G 11/2	1100	162	202	796	358						49	24x2	
BS1V1F 2MXH 405/B	BSM1V1F 2MXH 405/B	1,1+1,1	1,5+1,5	G 2	G 11/2	1100	162	202	820	382	235	625	600			53	24x2	
BS1V1F 2MXH 406	BSM1V1F 2MXH 406	1,5+1,5	2+2	G 2	G 11/2	1100	162	202	845	406						57	24x2	
BS1V1F 2MXH 803	BSM1V1F 2MXH 803	1,1+1,1	1,5+1,5	G 21/2	G 2	1100	162	208	866	428						61	24x2	
BS1V1F 2MXH 804	BSM1V1F 2MXH 804	1,5+1,5	2+2	G 21/2	G 2	1100	162	208	896	458						66	24x2	
BS1V1F 2MXH 805/A		1,8+1,8	2,5+2,5	G 21/2	G 2	1100	162	208	926	488						68	24x2	
BS1V1F 2MXH 1603/A		1,8+1,8	2,5+2,5	G 3	G 21/2	1275	250	295	1050	490	905					107	24x2	
BS1V1F 2MXH 1604/A		3+3	4+4	G 3	G 21/2	1275	265	295	1055	530						134	24x2	
BS1V1F 2MXH 1605/A		3,7+3,7	5+5	G 3	G 21/2	1510	265	295	1130	565	1040	625	600			150	24x2	
BS1V1F 2MXH 1606/A		4+4	5,5+5,5	G 3	G 21/2	1510	265	295	1175	605						152	24x2	

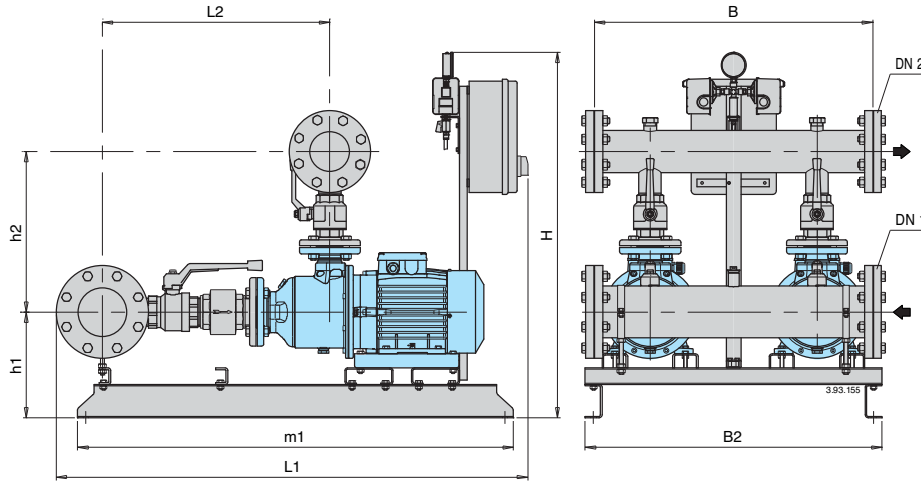
### BS2V BSM2V

Mains: 400V 3~ Motor: 400V 3~	Mains: 230V 1~ Motor: 230V 3~ and 230V 1~	Motor		Manifolds		mm							Weight kg	Vessel Membrane litre				
		kW	HP	DN1	DN2	H	h1	h2	L1	L2	m1	B2		B	Mem. litre	Vessel litre		
BS2V 2MXH 203E	BSM2V 2MXH 203E	0,45+0,45	0,6+0,6	G 2	G 11/2	1100	162	202	773	335						42	24x2	
BS2V 2MXH 204/A	BSM2V 2MXH 204/A	0,55+0,55	0,75+0,75	G 2	G 11/2	1100	162	202	796	358						47	24x2	
BS2V 2MXH 205/A	BSM2V 2MXH 205/A	0,75+0,75	1+1	G 2	G 11/2	1100	162	202	820	382						50	24x2	
BS2V 2MXH 206/B	BSM2V 2MXH 206/B	1,1+1,1	1,5+1,5	G 2	G 11/2	1100	162	202	845	406						54	24x2	
BS2V 2MXH 403/A	BSM2V 2MXH 403/A	0,55+0,55	0,75+0,75	G 2	G 11/2	1100	162	202	773	335						46	24x2	
BS2V 2MXH 404/A	BSM2V 2MXH 404/A	0,75+0,75	1+1	G 2	G 11/2	1100	162	202	796	358						49	24x2	
BS2V 2MXH 405/B	BSM2V 2MXH 405/B	1,1+1,1	1,5+1,5	G 2	G 11/2	1100	162	202	820	382	235	625	600			53	24x2	
BS2V 2MXH 406	BSM2V 2MXH 406	1,5+1,5	2+2	G 2	G 11/2	1100	162	202	845	406						57	24x2	
BS2V 2MXH 803	BSM2V 2MXH 803	1,1+1,1	1,5+1,5	G 21/2	G 2	1100	162	208	866	428						61	24x2	
BS2V 2MXH 804	BSM2V 2MXH 804	1,5+1,5	2+2	G 21/2	G 2	1100	162	208	896	458						66	24x2	
BS2V 2MXH 805/A		1,8+1,8	2,5+2,5	G 21/2	G 2	1100	162	208	926	488						68	24x2	
BS2V 2MXH 1603/A		1,8+1,8	2,5+2,5	G 3	G 21/2	1275	250	295	1050	490	905					107	24x2	
BS2V 2MXH 1604/A		3+3	4+4	G 3	G 21/2	1275	265	295	1055	530						134	24x2	
BS2V 2MXH 1605/A		3,7+3,7	5+5	G 3	G 21/2	1510	265	295	1130	565	1040	625	600			150	24x2	
BS2V 2MXH 1606/A		4+4	5,5+5,5	G 3	G 21/2	1510	265	295	1175	605						152	24x2	

### Coverage chart



## Characteristic, dimensions and weights



### BS2F

Mains: 400V 3~ Motor: 400V 3~	Motor		Q max* l/min	Taratura pressostati		Collettori		mm							Weight kg	Vessel		
	kW	HP		bar	bar	DN1	DN2	H	h1	h2	L1	L2	m1	B2		B	Mem. litre	vessel litre
BS2F 2MXH 3202/A	4+4	5,5+5,5	1530	1,5÷3,0	1,2÷2,7	125	100	985	285	435	1260	565	1175			186	750	1500
BS2F 2MXH 3203/A	5,5+5,5	7,5+7,5	1420	3,0÷4,5	2,5÷4,0	125	100	985	285	435	1270	615	1175			215	1000	2000
BS2F 2MXH 3204/A	7,5+7,5	10+10	1360	4,0÷6,0	3,5÷5,5	125	100	1510	285	435	1320	660	1175	800	750	260	1500	3000
BS2F 2MXH 4802/A	5,5+5,5	7,5+7,5	2100	1,5÷3,0	1,2÷2,7	150	125	985	285	465	1245	665	1175			240	1000	2000
BS2F 2MXH 4803/A	7,5+7,5	10+10	1900	3,0÷4,5	2,5÷4,0	150	125	1510	285	465	1420	725	1220			286	1500	3000

\* Maximum pumps flow at minimum set pressure of 2<sup>nd</sup> pressure switch.

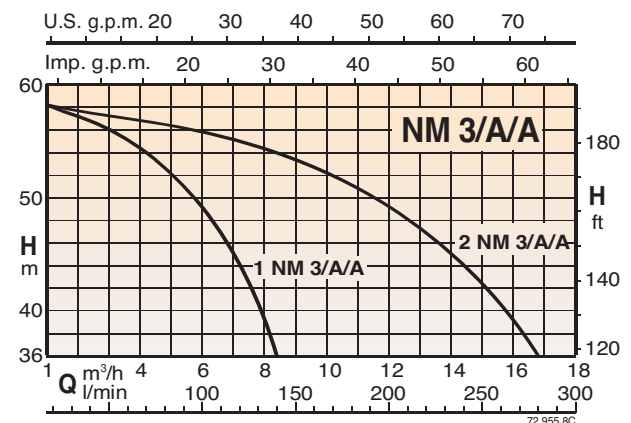
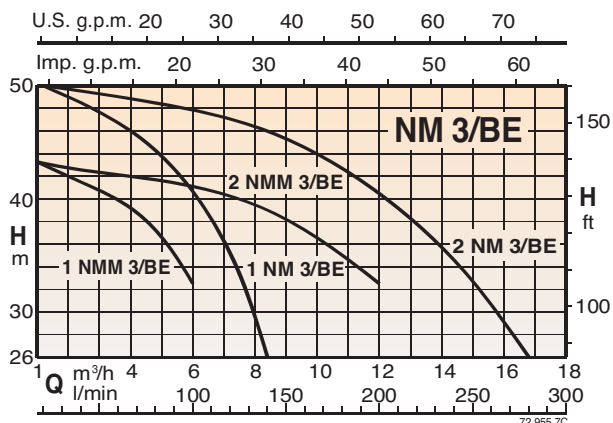
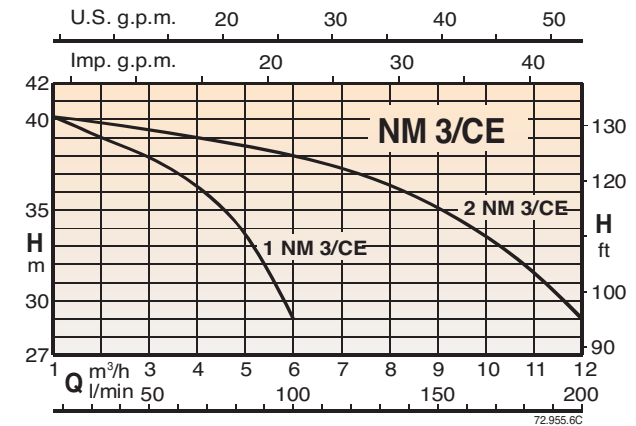
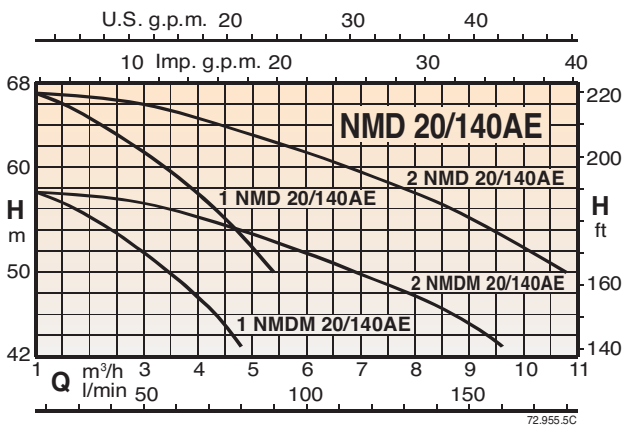
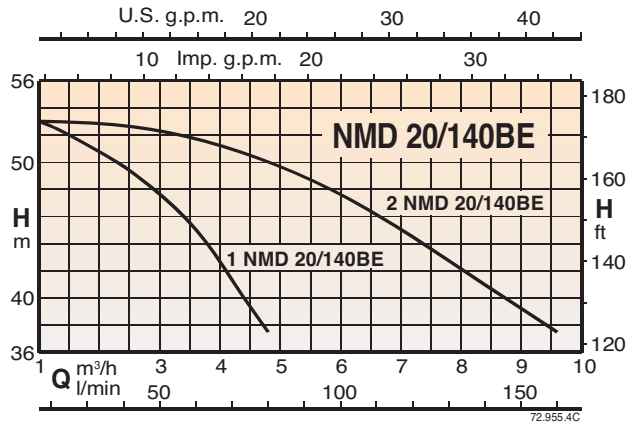
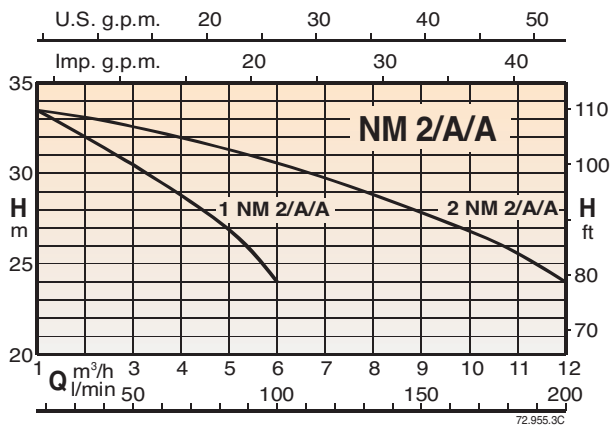
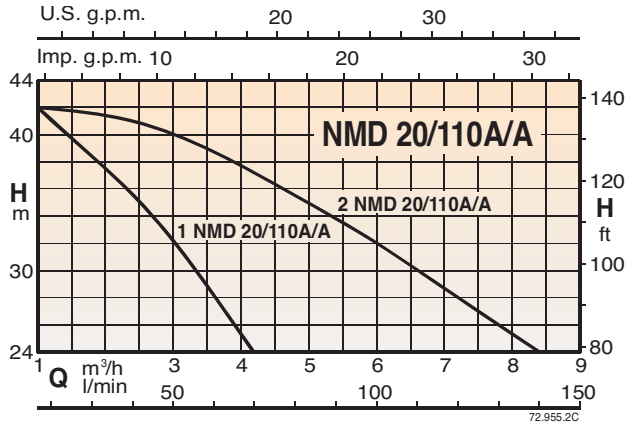
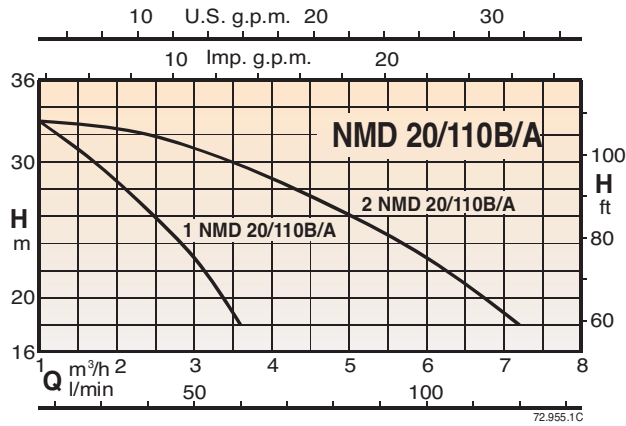
### BS1V1F

Mains: 400V 3~ Motor: 400V 3~	Motor		Collettori		mm							Weight kg	Vessel Membrane litre		
	kW	HP	DN1	DN2	H	h1	h2	L1	L2	m1	B2		B	Mem. litre	vessel litre
BS1V1F 2MXH 3202/A	4+4	5,5+5,5	125	100	1510	285	435	1265	565	1175			214	24x2	
BS1V1F 2MXH 3203/A	5,5+5,5	7,5+7,5	125	100	1510	285	435	1270	615	1175			243	24x2	
BS1V1F 2MXH 3204/A	7,5+7,5	10+10	125	100	1510	285	435	1320	660	1175	800	750	260	24x2	
BS1V1F 2MXH 4802/A	5,5+5,5	7,5+7,5	150	125	1510	285	465	1380	665	1175			268	24x2	
BS1V1F 2MXH 4803/A	7,5+7,5	10+10	150	125	1510	285	465	1420	725	1220			286	24x2	

### BS2V

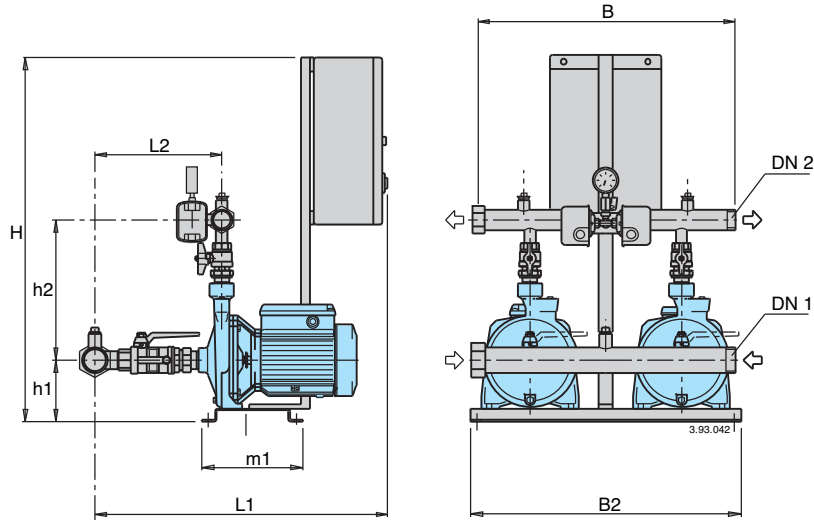
Mains: 400V 3~ Motor: 400V 3~	Motor		Collettori		mm							Weight kg	Vessel Membrane litre		
	kW	HP	DN1	DN2	H	h1	h2	L1	L2	m1	B2		B	Mem. litre	vessel litre
BS2V 2MXH 3202/A	4+4	5,5+5,5	125	100	1510	285	435	1265	565	1175			214	24x2	
BS2V 2MXH 3203/A	5,5+5,5	7,5+7,5	125	100	1510	285	435	1270	615	1175			243	24x2	
BS2V 2MXH 3204/A	7,5+7,5	10+10	125	100	1510	285	435	1320	660	1175	800	750	260	24x2	
BS2V 2MXH 4802/A	5,5+5,5	7,5+7,5	150	125	1510	285	465	1380	665	1175			268	24x2	
BS2V 2MXH 4803/A	7,5+7,5	10+10	150	125	1510	285	465	1420	725	1220			286	24x2	

### Coverage chart





### Characteristic, dimensions and weights



### BS2F BSM2F

Mains: 400V 3~ Motor: 400V 3~	Mains: 230V 1~ Motor: 230V 1~	Motor		Q max+ l/min	Pres. switch setting		Manifolds		mm								Weight kg	Vessel Mem. litre	Vessel litre
		kW	HP		bar	bar	DN1	DN2	H	h1	h2	L1	L2	m1	B2	B			
BS2F 2NMD 20/110B/A	BSM2F 2NMDM 20/110B/A	0,45+0,45	0,6+0,6	120	2,0÷3,0	1,7÷2,7	G2	G 1 1/2	840	129	277	670	315				51	24x2	100
BS2F 2NMD 20/110A/A	BSM2F 2NMDM 20/110A/A	0,75+0,75	1+1	130	2,8÷4,0	2,4÷3,6	G2	G 1 1/2	840	129	277	670	315				55	60	100
BS2F 2NM 2/A/A	BSM2F 2NMM 2/A/A	0,75+0,75	1+1	200	2,0÷3,0	1,7÷2,7	G2	G 1 1/2	840	129	295	620	262				54	80	200
BS2F 2NMD 20/140BE	BSM2F 2NMDM 20/140BE	1,1+1,1	1,5+1,5	160	3,4÷4,9	3,2÷4,7	G2	G 1 1/2	840	146	295	670	320				72	80	200
	BSM2F 2NMDM 20/140AE	1,5+1,5	2+2	160	4,0÷5,3	3,7÷5,0	G2	G 1 1/2	840	146	295	670	320	235	625	600	75	100	200
BS2F 2NMD 20/140AE		1,5+1,5	2+2	180	5,0÷6,3	4,7÷6,0	G2	G 1 1/2	840	146	295	670	320				77	100	200
BS2F 2NM 3/CE	BSM2F 2NMM 3/CE	1,1+1,1	1,5+1,5	200	2,5÷3,5	2,2÷3,2	G2	G 1 1/2	840	146	325	650	267				71	100	200
	BSM2F 2NMM 3/BE	1,5+1,5	2+2	200	3,0÷4,0	2,7÷3,7	G2	G 1 1/2	840	146	325	650	267				75	100	300
BS2F 2NM 3/BE		1,5+1,5	2+2	270	3,2÷4,5	2,9÷4,2	G2	G 1 1/2	840	146	325	650	267				76	100	300
BS2F 2NM 3/A/A		2,2+2,2	3+3	280	4,0÷5,3	3,7÷5,0	G2	G 1 1/2	840	146	325	650	267				78	200	300

\* Maximum pumps flow at minimum set pressure of 2<sup>nd</sup> pressure switch.

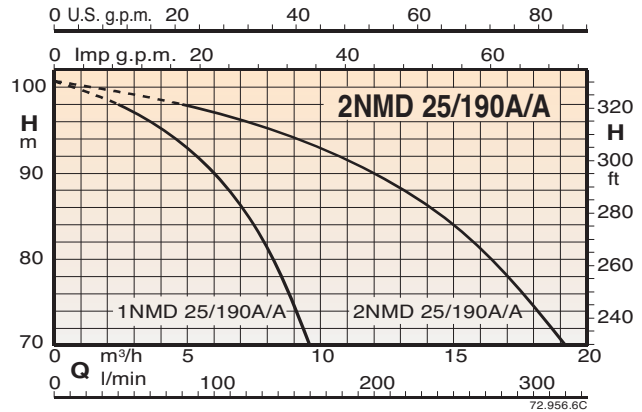
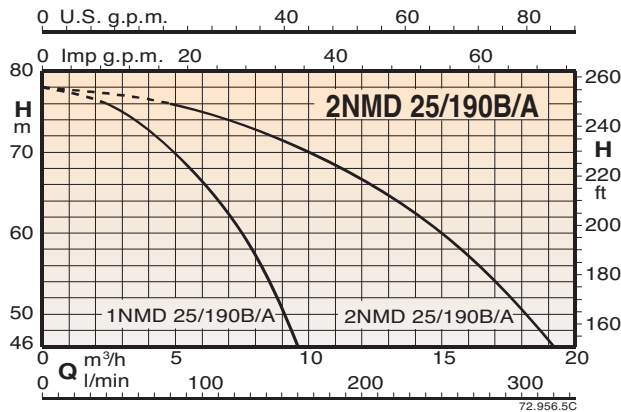
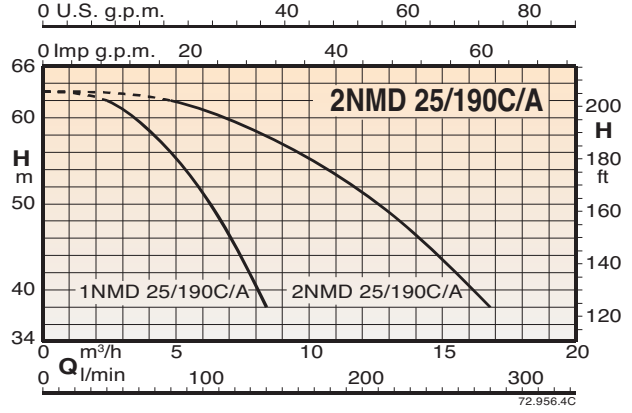
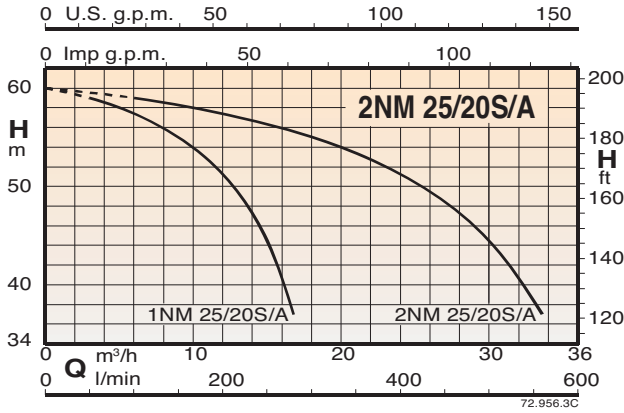
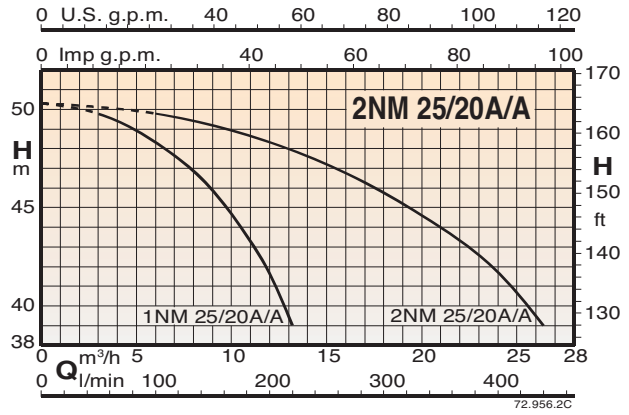
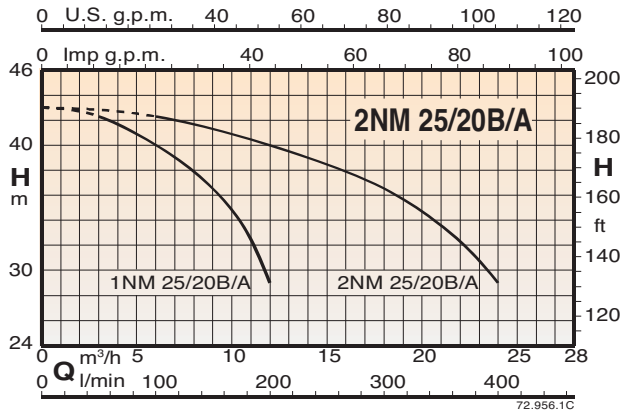
### BS1V1F BSM1V1F

Mains: 400V 3~ Motor: 400V 3~	Mains: 230V 1~ Motor: 230V 3~ and 230V 1~	Motor		Manifolds		mm								Weight kg	Vessel Membrane litre		
		kW	HP	DN1	DN2	H	h1	h2	L1	L2	m1	B2	B				
BS1V1F 2NMD 20/110B/A	BSM1V1F 2NMDM 20/110B/A	0,45+0,45	0,6+0,6	G2	G 1 1/2	840	129	277	670	315						51	24x2
BS1V1F 2NMD 20/110A/A	BSM1V1F 2NMDM 20/110A/A	0,75+0,75	1+1	G2	G 1 1/2	840	129	277	670	315						55	24x2
BS1V1F 2NM 2/A/A	BSM1V1F 2NMM 2/A/A	0,75+0,75	1+1	G2	G 1 1/2	840	129	295	620	262						54	24x2
BS1V1F 2NMD 20/140BE	BSM1V1F 2NMDM 20/140BE	1,1+1,1	1,5+1,5	G2	G 1 1/2	840	146	295	670	320						72	24x2
	BSM1V1F 2NMDM 20/140AE	1,5+1,5	2+2	G2	G 1 1/2	840	146	295	670	320	235	625	600			75	24x2
BS1V1F 2NMD 20/140AE		1,5+1,5	2+2	G2	G 1 1/2	840	146	295	670	320						77	24x2
BS1V1F 2NM 3/CE	BSM1V1F 2NMM 3/CE	1,1+1,1	1,5+1,5	G2	G 1 1/2	840	146	325	650	267						71	24x2
	BSM1V1F 2NMM 3/BE	1,5+1,5	2+2	G2	G 1 1/2	840	146	325	650	267						75	24x2
BS1V1F 2NM 3/BE		1,5+1,5	2+2	G2	G 1 1/2	840	146	325	650	267						76	24x2
BS1V1F 2NM 3/A/A		2,2+2,2	3+3	G2	G 1 1/2	840	146	325	650	267						78	24x2

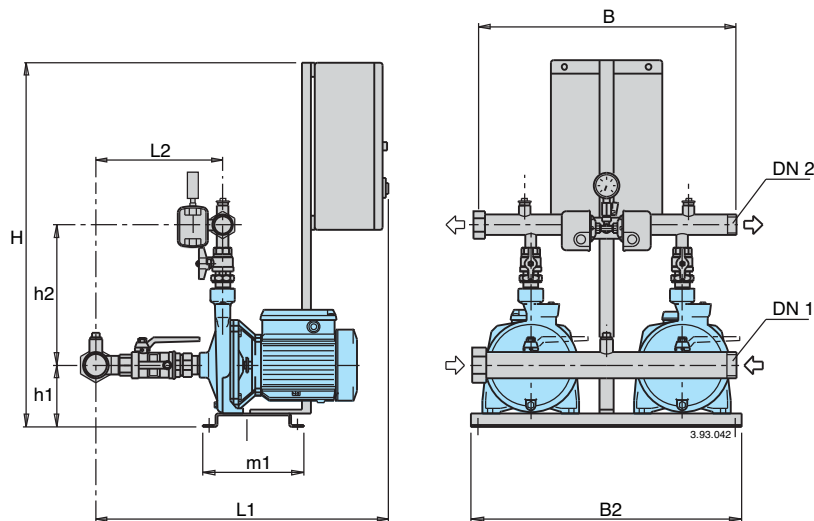
### BS2V BSM2V

Mains: 400V 3~ Motor: 400V 3~	Mains: 230V 1~ Motor: 230V 3~	Motor		Manifolds		mm								Weight kg	Vessel Membrane litre		
		kW	HP	DN1	DN2	H	h1	h2	L1	L2	m1	B2	B				
BS2V 2NMD 20/110B/A	BSM2V 2NMDM 20/110B/A	0,45+0,45	0,6+0,6	G2	G 1 1/2	840	129	277	670	315						51	24x2
BS2V 2NMD 20/110A/A	BSM2V 2NMDM 20/110A/A	0,75+0,75	1+1	G2	G 1 1/2	840	129	277	670	315						55	24x2
BS2V 2NM 2/A/A	BSM2V 2NMM 2/A/A	0,75+0,75	1+1	G2	G 1 1/2	840	129	295	620	262						54	24x2
BS2V 2NMD 20/140BE	BSM2V 2NMDM 20/140BE	1,1+1,1	1,5+1,5	G2	G 1 1/2	840	146	295	670	320						72	24x2
	BSM2V 2NMDM 20/140AE	1,5+1,5	2+2	G2	G 1 1/2	840	146	295	670	320	235	625	600			75	24x2
BS2V 2NMD 20/140AE		1,5+1,5	2+2	G2	G 1 1/2	840	146	295	670	320						77	24x2
BS2V 2NM 3/CE	BSM2V 2NMM 3/CE	1,1+1,1	1,5+1,5	G2	G 1 1/2	840	146	325	650	267						71	24x2
	BSM2V 2NMM 3/BE	1,5+1,5	2+2	G2	G 1 1/2	840	146	325	650	267						75	24x2
BS2V 2NM 3/BE		1,5+1,5	2+2	G2	G 1 1/2	840	146	325	650	267						76	24x2
BS2V 2NM 3/A/A		2,2+2,2	3+3	G2	G 1 1/2	840	146	325	650	267						78	24x2

## Coverage chart



## Characteristic, dimensions and weights



### BS2F

Mains: 400V 3~ Motor: 400V 3~	Motor		Q max+ l/min	Pres. switch setting		Manifolds		mm							Weight kg	Vessel		
	kW	HP		bar	bar	DN1	DN2	H	h1	h2	L1	L2	m1	B2		B	Mem. litre	Vessel litre
BS2F 2NM 25/20B/A	2,2+2,2	3+3	400	3,0÷4,0	2,7÷3,7	G 2 1/2	G 2	840	160	330	725	373				87	300	500
BS2F 2NM 25/20A/A	3+3	4+4	440	3,8÷4,8	3,5÷4,5	G 2 1/2	G 2	840	160	330	725	373				106	500	800
BS2F 2NM 25/20S/A	4+4	5,5+5,5	560	4,0÷5,5	3,5÷5,0	G 2 1/2	G 2	840	160	330	725	373				114	500	800
BS2F 2NMD 25/190C/A	2,2+2,2	3+3	280	4,3÷5,8	3,8÷5,3	G 2 1/2	G 2	840	175	330	760	407	235	625	600	108	200	300
BS2F 2NMD 25/190B/A	3+3	4+4	300	5,0÷7,0	4,5÷6,5	G 2 1/2	G 2	840	175	330	760	407				123	200	300
BS2F 2NMD 25/190A/A	4+4	5,5+5,5	320	7,5÷9,0	7,0÷8,5	G 2 1/2	G 2	840	175	330	760	407				132	300	500

+ Maximum pumps flow at minimum set pressure of 2<sup>nd</sup> pressure switch.

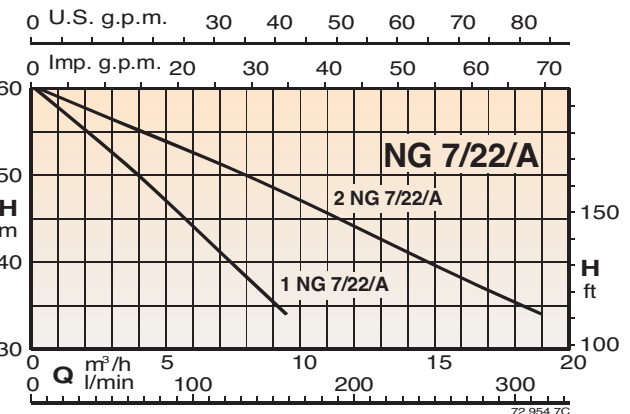
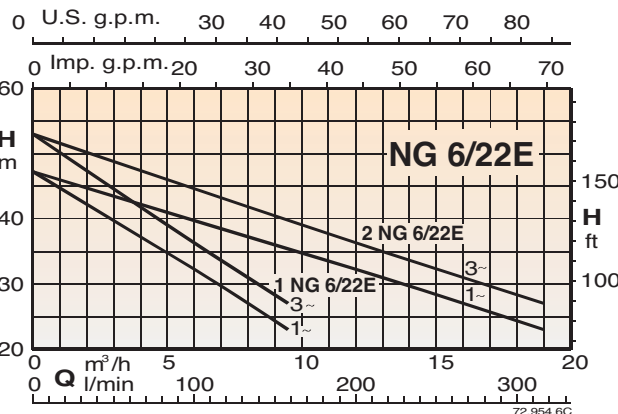
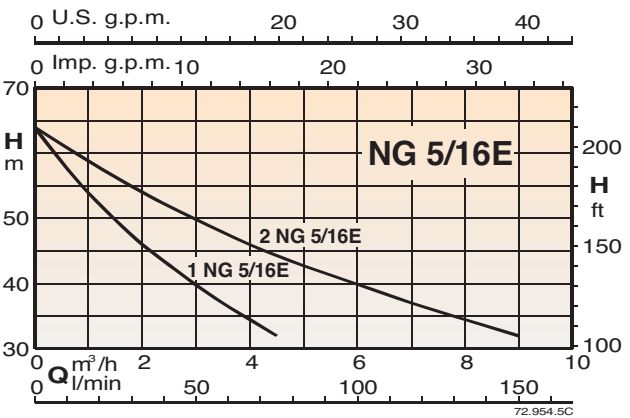
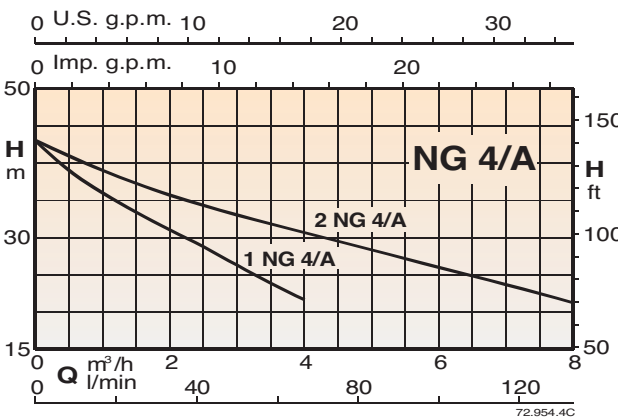
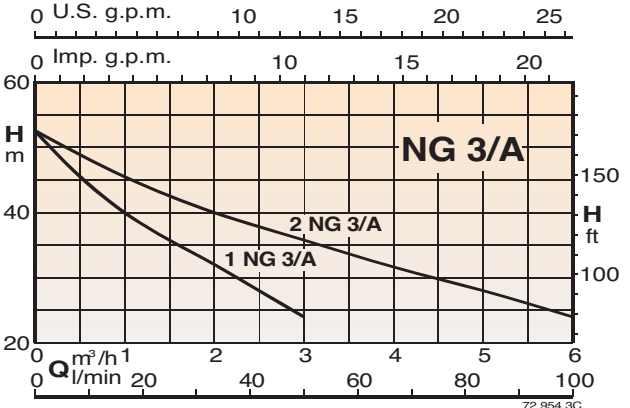
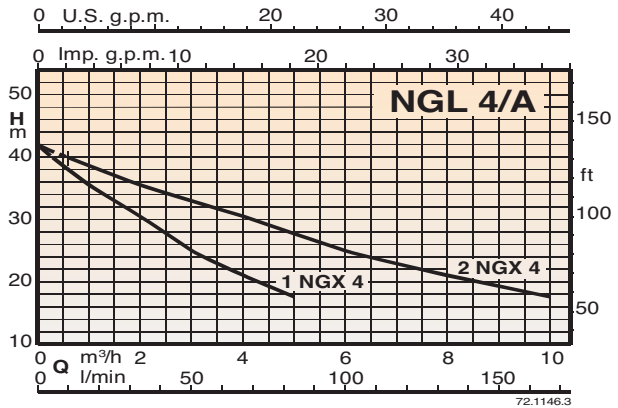
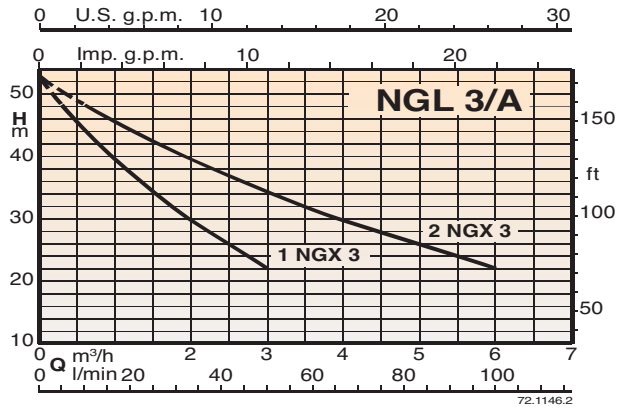
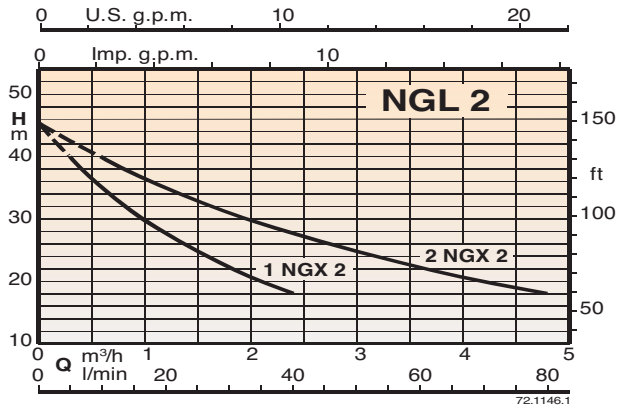
### BS1V1F

Mains: 400V 3~ Motor: 400V 3~	Motor		Q max+ l/min	Pres. switch setting		Manifolds		mm							Weight kg	Vessel		
	kW	HP		bar	bar	DN1	DN2	H	h1	h2	L1	L2	m1	B2		B	Mem. litre	Vessel litre
BS1V1F 2NM 25/20B/A	2,2+2,2	3+3	400	3,0÷4,0	2,7÷3,7	G 2 1/2	G 2	840	160	330	725	373				87	24x2	
BS1V1F 2NM 25/20A/A	3+3	4+4	440	3,8÷4,8	3,5÷4,5	G 2 1/2	G 2	840	160	330	725	373				106	24x2	
BS1V1F 2NM 25/20S/A	4+4	5,5+5,5	560	4,0÷5,5	3,5÷5,0	G 2 1/2	G 2	840	160	330	725	373				114	24x2	
BS1V1F 2NMD 25/190C/A	2,2+2,2	3+3	280	4,3÷5,8	3,8÷5,3	G 2 1/2	G 2	840	175	330	760	407	235	625	600	108	24x2	
BS1V1F 2NMD 25/190B/A	3+3	4+4	300	5,0÷7,0	4,5÷6,5	G 2 1/2	G 2	840	175	330	760	407				123	24x2	
BS1V1F 2NMD 25/190A/A	4+4	5,5+5,5	320	7,5÷9,0	7,0÷8,5	G 2 1/2	G 2	840	175	330	760	407				132	24x2	

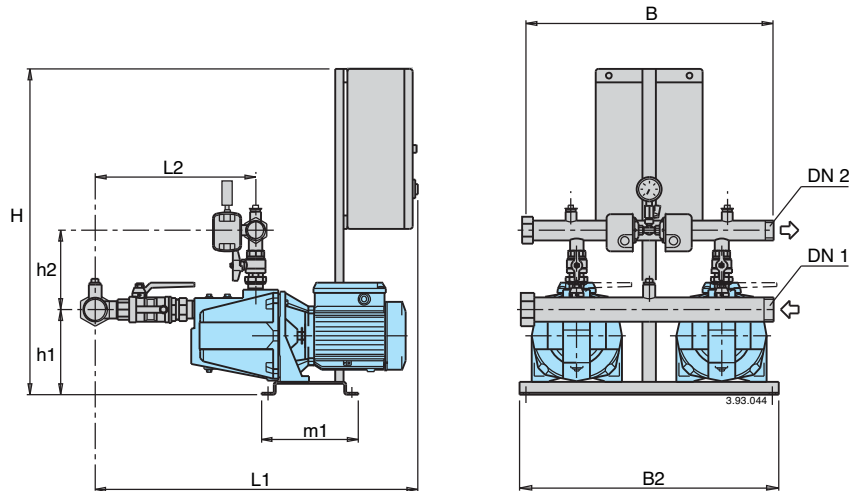
### BS2V

Mains: 400V 3~ Motor: 400V 3~	Motor		Q max+ l/min	Pres. switch setting		Manifolds		mm							Weight kg	Vessel		
	kW	HP		bar	bar	DN1	DN2	H	h1	h2	L1	L2	m1	B2		B	Mem. litre	Vessel litre
BS2F 2NM 25/20B/A	2,2+2,2	3+3	400	3,0÷4,0	2,7÷3,7	G 2 1/2	G 2	840	160	330	725	373				87	24x2	
BS2F 2NM 25/20A/A	3+3	4+4	440	3,8÷4,8	3,5÷4,5	G 2 1/2	G 2	840	160	330	725	373				106	24x2	
BS2F 2NM 25/20S/A	4+4	5,5+5,5	560	4,0÷5,5	3,5÷5,0	G 2 1/2	G 2	840	160	330	725	373				114	24x2	
BS2F 2NMD 25/190C/A	2,2+2,2	3+3	280	4,3÷5,8	3,8÷5,3	G 2 1/2	G 2	840	175	330	760	407	235	625	600	108	24x2	
BS2F 2NMD 25/190B/A	3+3	4+4	300	5,0÷7,0	4,5÷6,5	G 2 1/2	G 2	840	175	330	760	407				123	24x2	
BS2F 2NMD 25/190A/A	4+4	5,5+5,5	320	7,5÷9,0	7,0÷8,5	G 2 1/2	G 2	840	175	330	760	407				132	24x2	

## Coverage chart



### Characteristic, dimensions and weights



### BS2F      BSM2F

Mains: 400V 3~ Motor: 400V 3~	Mains: 230V 1~ Motor: 230V 1~	Motor		Q max* l/min	Pres. switch setting		Manifolds		mm								Weight kg	Vessel	
		kW	HP		bar	bar	DN1	DN2	H	h1	h2	L1	L2	m1	B2	B		Mem. litre	Vessel litre
BS2F 2NGL 2	BSM2F 2NGLM 2	0,45+0,45	0,6+0,6	70	2,4÷3,6	2,0÷3,2	G 2	G 1 1/2	840	151	206	793	355				42	24x2	100
BS2F 2NGL 3/A	BSM2F 2NGLM 3/A	0,55+0,55	0,75+0,75	90	2,8÷4,0	2,4÷3,6	G 2	G 1 1/2	840	151	206	793	355	235	625	600	46	24x2	100
BS2F 2NGL 4/A	BSM2F 2NGLM 4/A	0,75+0,75	1+1	160	2,2÷3,4	1,8÷3,0	G 2	G 1 1/2	840	151	206	793	355				49	24x2	100

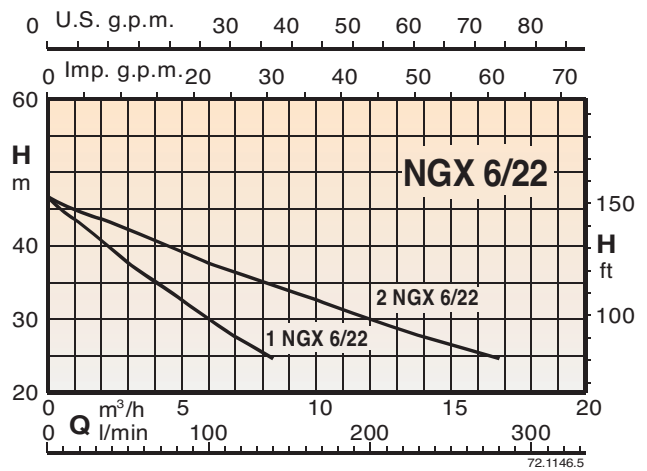
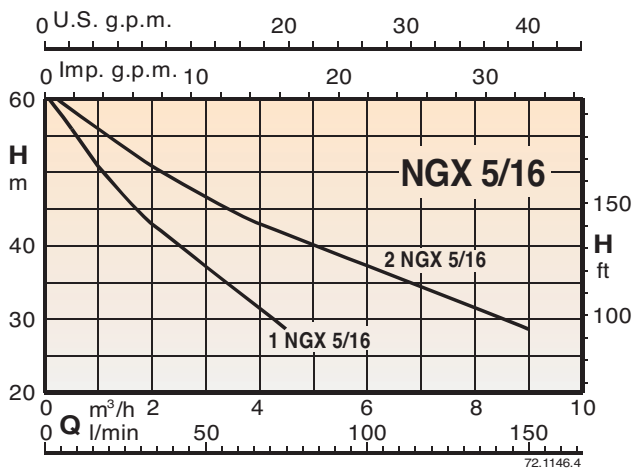
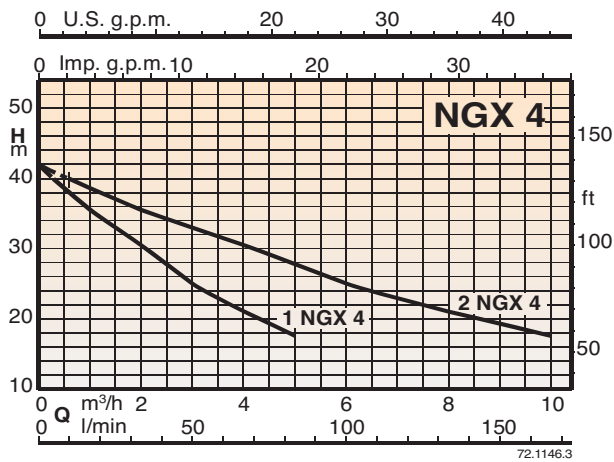
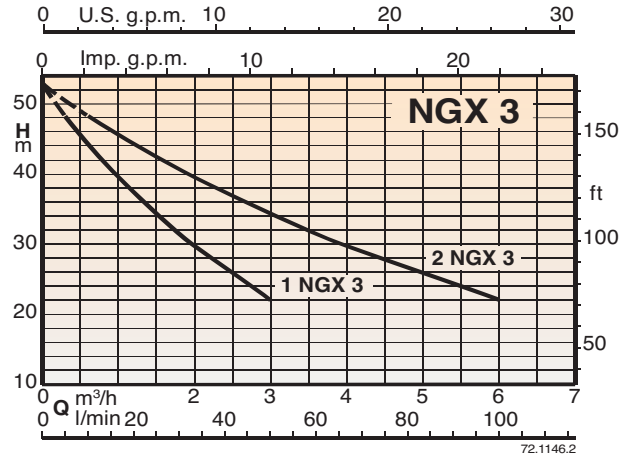
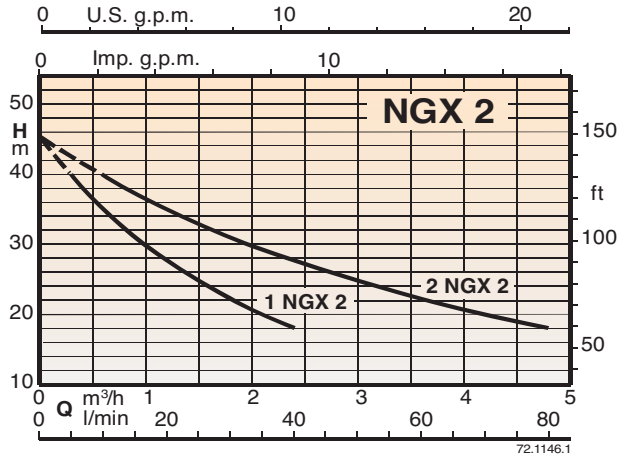
\* Maximum pumps flow at minimum set pressure of 2<sup>nd</sup> pressure switch.

### BS2F      BSM2F

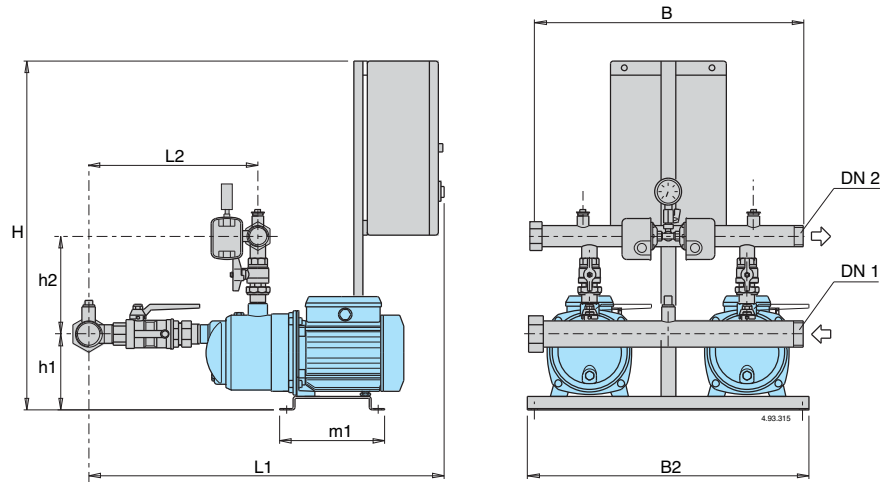
Mains: 400V 3~ Motor: 400V 3~	Mains: 230V 1~ Motor: 230V 1~	Motor		Q max* l/min	Pres. switch setting		Manifolds		mm								Weight kg	Vessel	
		kW	HP		bar	bar	DN1	DN2	H	h1	h2	L1	L2	m1	B2	B		Mem. litre	Vessel litre
BS2F 2NG 3/A	BSM2F 2NGM 3/A	0,55+0,55	0,75+0,75	95	3,0÷4,2	2,5÷3,7	G2	G 1 1/2	840	184	188	775	345				61	24x2	100
BS2F 2NG 4/A	BSM2F 2NGM 4/A	0,75+0,75	1+1	130	2,4÷3,6	2,0÷3,2	G2	G 1 1/2	840	184	188	775	345				62	24x2	100
BS2F 2NG 5-16E	BSM2F 2NGM 5-16E	1,1+1,1	1,5+1,5	140	3,8÷5,3	3,4÷4,9	G 2 1/2	G 1 1/2	840	200	202	935	470	235	625	600	86	24x2	100
BS2F 2NG 6-22E		1,5+1,5	2+2	290	3,0÷4,2	2,5÷3,7	G 2 1/2	G 1 1/2	840	200	202	935	470				89	100	200
BS2F 2NG 7-22/A		2,2+2,2	3+3	300	3,8÷5,3	3,4÷4,9	G 2 1/2	G 1 1/2	840	200	202	935	470				90	100	200
									840	200	202	935	470				92	200	300

\* Maximum pumps flow at minimum set pressure of 2<sup>nd</sup> pressure switch.

Coverage chart



**Characteristic, dimensions and weights**



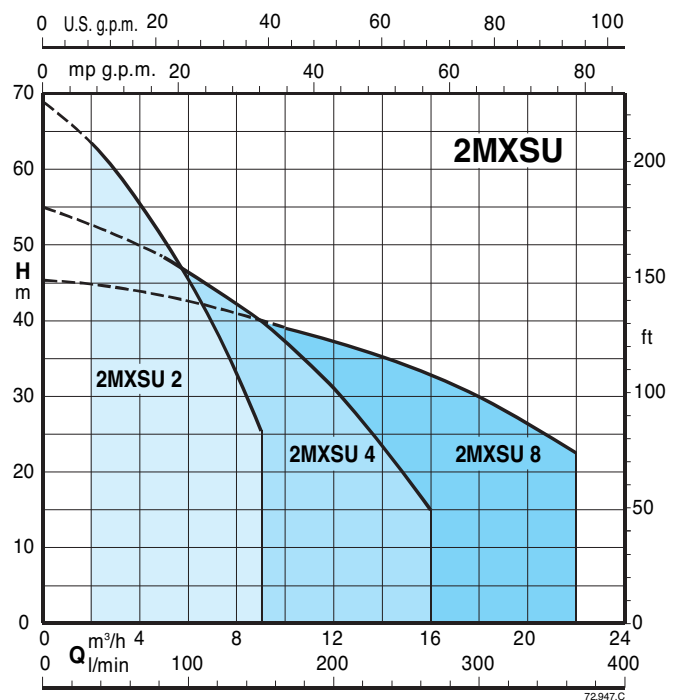
**BS2F      BSM2F**

Mains: 400V 3~ Motor: 400V 3~	Mains: 230V 1~ Motor: 230V 1~	Motor		Q max* l/min	Pres. switch setting		Manifolds		mm							Weight kg	Vessel		
		kW	HP		bar	bar	DN1	DN2	H	h1	h2	L1	L2	m1	B2		B	Mem. litre	Vessel litre
<b>BS2F 2NGX 2</b>	<b>BSM2F 2NGXM 2</b>	0,45+0,45	0,6+0,6	70	2,4÷3,6	2,0÷3,2	G 2	G 1 1/2	840	151	206	793	355				42	24x2	100
<b>BS2F 2NGX 3/A</b>	<b>BSM2F 2NGXM 3/A</b>	0,55+0,55	0,75+0,75	90	2,8÷4,0	2,4÷3,6	G 2	G 1 1/2	840	151	206	793	355				46	24x2	100
<b>BS2F 2NGX 4/A</b>	<b>BSM2F 2NGXM 4/A</b>	0,75+0,75	1+1	160	2,2÷3,4	1,8÷3,0	G 2	G 1 1/2	840	151	206	793	355	235	625	600	49	24x2	100
<b>BS2F 2NGX 5-16</b>	<b>BSM2F 2NGXM 5-16</b>	1,1+1,1	1,5+1,5	140	3,4÷4,9	3,0÷4,5	G 2	G 1 1/2	840	187	212	836	380				61	24x2	100
<b>BS2F 2NGX 6-22</b>	<b>BSM2F 2NGXM 6-22</b>	1,5+1,5	2+2	280	3,0÷4,2	2,5÷3,7	G 2	G 1 1/2	840	187	212	836	380				65	100	200

\* Maximum pumps flow at minimum set pressure of 2<sup>nd</sup> pressure switch.



Coverage chart



## Construction

Automatic pressure boosting plant consisting of two vertical multi-stage pumps complete with ball, non return valve on the suction side and ball valves on the discharge side.

Suction and delivery manifolds are in AISI 304 stainless steel.

Connections are located on the delivery manifold for the installation of two 20 litres cylindrical vessels.

### Electrical control boards:

- with microprocessor for fixed speed pump units (see page 422).
- with frequency converter for variable speed pump units (see page 423).

The unit includes one pressure gauge and two adjustable differential pressure switches or pressure transducer (for sets with frequency converter).

## Operation

### BS 2F Fixed speed pump

Depending on the reduction of the pressure in the system, the pressure switches determine the starting up of the pumps in sequence and the microprocessor alternates the starts.

### BS1V1F Pumps at variable speed with one frequency converter

According to the water consumption, one or more pumps start, one at variable speed and the others at fixed speed, to grant the water quantity required at the set pressure.

### BS2V Pumps at variable speed with two frequency converter

Depending on water consumption, one or more pumps are activated, all at variable speed, in order to guarantee the quantity of water required at the set pressure.

## Applications

To supply water in civil and industrial buildings.

As pressure boosting pump to increase water pressure when needed (follow local rules).

## Motors

2-pole induction motors, 50 Hz,  $n = 2900$  rpm

- Three-phase 230V - 400V  $\pm 10\%$ , suitable for operation with frequency converter.

- Single-phase 230V  $\pm 10\%$ .

Insulation class F.

Protection IP 68.

Constructed in accordance with: IEC 60034.

Other voltages and frequencies on request.

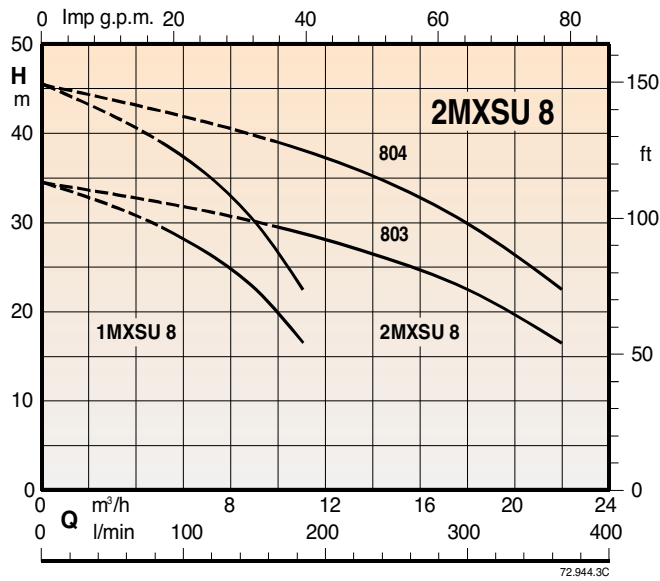
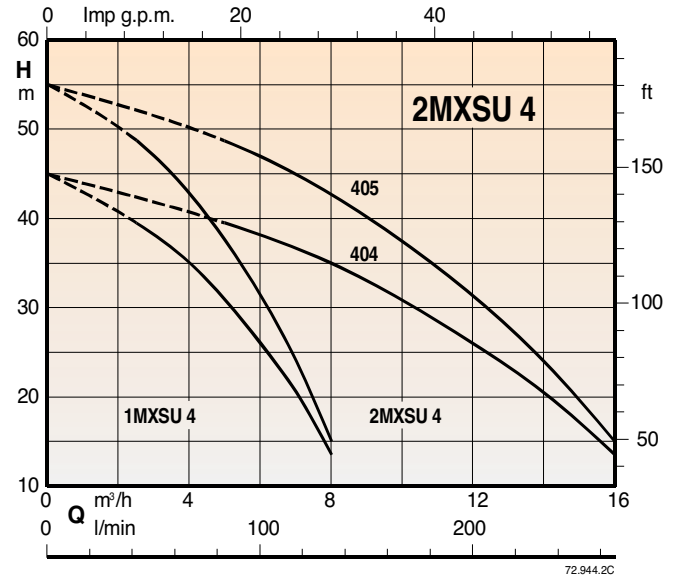
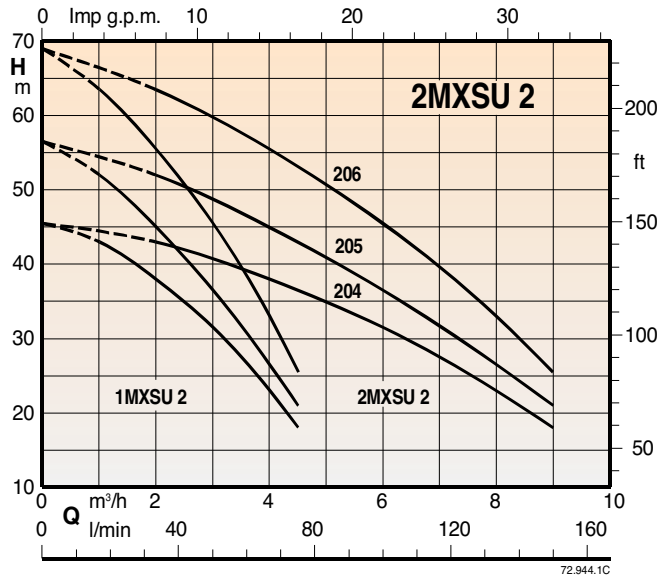
## Vessels

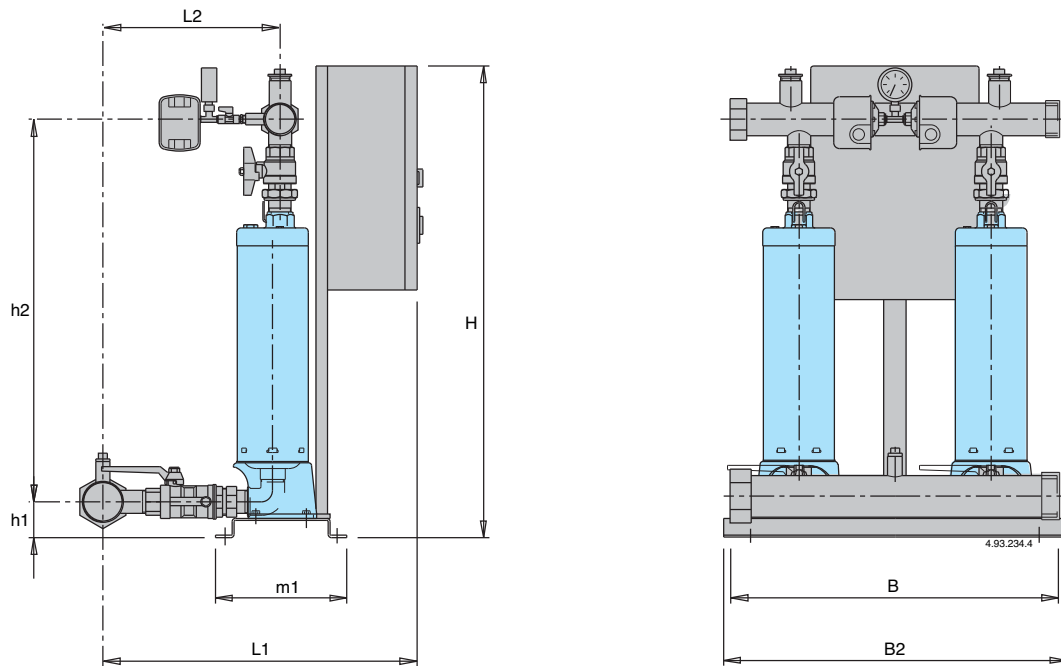
When installing the unit, connect in the delivery section to a diaphragm or galvanised tank.

The recommended sized are shown in the following page.



## Coverage chart





### Dimensions and weights

TYPE		DN1	DN2	mm								kg
				H	h1	h2	L1	L2	m1	B	B2	
BS.. 2MXSU 204/A	BSM.. 2MXSU 204/A					657						50 - 50
BS.. 2MXSU 205/A	BSM.. 2MXSU 205/A	G 2	G 2	840	66	681	630	300	234	600	625	52 - 52
BS.. 2MXSU 206/A	BSM.. 2MXSU 206/A					705						54 - 55
BS.. 2MXSU 404/A	BSM.. 2MXSU 404/A					657						52 - 53
BS.. 2MXSU 405/A	BSM.. 2MXSU 405/A	G 2	G 2	840	66	681	630	300	234	600	625	53 - 54
BS.. 2MXSU 803/A	BSM.. 2MXSU 803/A					681						52 - 53
BS.. 2MXSU 804/A	BSM.. 2MXSU 804/A	G 2	G 2	840	66	681	630	300	234	600	625	57

### Performance

#### BS2F BSM2F

Mains: 400V 3~ Motor: 400V 3~	Mains: 230V 1~ Motor: 230V 1~	Motor		Pres. switch	Pres. switch	Average capacity		Maximum capacity		Membrane V.	Vessel
		kW	HP	bar	bar	Q l/min	H m	Q l/min	H m	litre	litre
BS2F 2MXSU 204/A	BSM2F 2MXSU 204/A	0,55+0,55	0,75+0,75	2,3+3,8	1,8+3,3	98	32	145	20	40	100
BS2F 2MXSU 205/A	BSM2F 2MXSU 205/A	0,75+0,75	1+1	3,0+4,5	2,5+4,0	83	41	122	30	40	100
BS2F 2MXSU 206/A	BSM2F 2MXSU 206/A	0,9+0,9	1,2+1,2	3,8+5,8	3,5+5,5	83	51	117	40	50	100
BS2F 2MXSU 404/A	BSM2F 2MXSU 404/A	0,9+0,9	1,2+1,2	2,1+3,6	1,7+3,2	172	30	240	18	60	100
BS2F 2MXSU 405/A	BSM2F 2MXSU 405/A	1,1+1,1	1,5+1,5	3,0+4,5	2,5+4,0	172	37	230	25	80	300
BS2F 2MXSU 803/A	BSM2F 2MXSU 803/A	1,1+1,1	1,5+1,5	2,0+2,7	1,6+2,3	260	25	365	17	100	300
BS2F 2MXSU 804/A	BSM2F 2MXSU 804/A	1,5+1,5	2+2	3,4+3,6	2,0+3,2	245	34	350	25	200	300

#### BS1V1F BSM1V1F

Mains: 400V 3~ Motor: 400V 3~	Mains: 230V 1~ (1)	Motor		Vessel Membrane litre
		kW	HP	
BS1V1F 2MXSU 204/A	BS1V1F 2MXSU 204/A	0,55 x2	0,75 x2	24x2
BS1V1F 2MXSU 205/A	BS1V1F 2MXSU 205/A	0,75 x2	1 x2	24x2
BS1V1F 2MXSU 206/A	BS1V1F 2MXSU 206/A	0,9 x2	1,2 x2	24x2
BS1V1F 2MXSU 404/A	BS1V1F 2MXSU 404/A	0,9 x2	1,2 x2	24x2
BS1V1F 2MXSU 405/A	BS1V1F 2MXSU 405/A	1,1 x2	1,5 x2	24x2
BS1V1F 2MXSU 803/A	BS1V1F 2MXSU 803/A	1,1 x2	1,5 x2	24x2
BS1V1F 2MXSU 804/A	BS1V1F 2MXSU 804/A	1,5 x2	2 x2	24x2

(1) SYSTEMS WITH:  
1 variable speed pump three-phase motor  
1 fixed speed pump single-phase motor  
Power supply to control panel  
230 V single-phase

#### BS2V BSM2V

Mains: 400V 3~ Motor: 400V 3~	Mains: 230V 1~ (1)	Motor		Vessel Membrane litre
		kW	HP	
BS2V 2MXSU 204/A	BSM2V 2MXSU 204/A	0,55 x2	0,75 x2	24x2
BS2V 2MXSU 205/A	BSM2V 2MXSU 205/A	0,75 x2	1 x2	24x2
BS2V 2MXSU 206/A	BSM2V 2MXSU 206/A	0,9 x2	1,2 x2	24x2
BS2V 2MXSU 404/A	BSM2V 2MXSU 404/A	0,9 x2	1,2 x2	24x2
BS2V 2MXSU 405/A	BSM2V 2MXSU 405/A	1,1 x2	1,5 x2	24x2
BS2V 2MXSU 803/A	BSM2V 2MXSU 803/A	1,1 x2	1,5 x2	24x2
BS2V 2MXSU 804/A	BSM2V 2MXSU 804/A	1,5 x2	2 x2	24x2

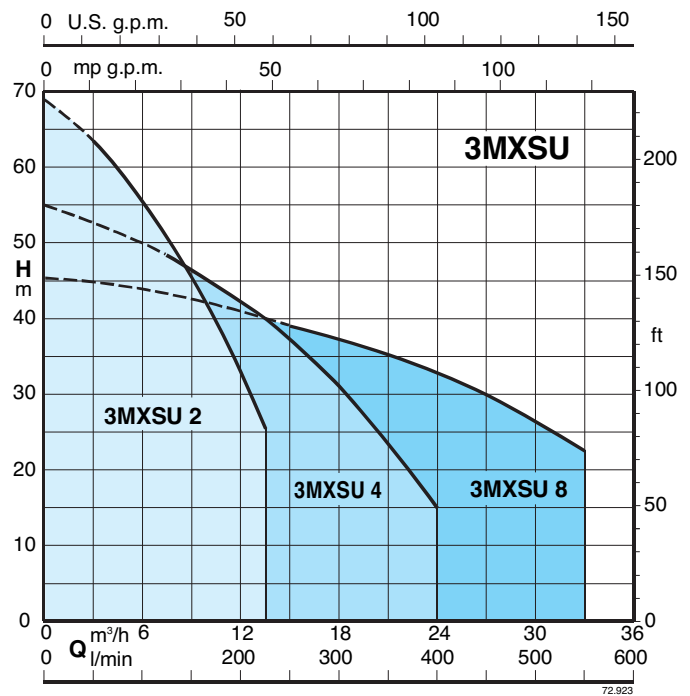
(1) Three-phase motor 230 V.  
Power supply to control panel:  
- 230 V three-phase  
- 230 V single-phase  
Frequency converter output is always 230 V three-phase.

# 3 MXSU

Pressure boosting sets with three Vertical Multi-Stage Pumps  
Fixed speed pump or **Variable speed pump (frequency converter)**



Coverage chart



## Construction

Automatic pressure boosting plant consisting of three vertical multi-stage pumps complete with ball, non return valve on the suction side and ball valves on the discharge side.

Suction and delivery manifolds are in AISI 304 stainless steel.

Connections are located on the delivery manifold for the installation of two 20 litres cylindrical vessels.

### Electrical control boards:

- with microprocessor for fixed speed pump units (see page 422).
- with frequency converter for variable speed pump units (see page 423).

The unit includes one pressure gauge and three adjustable differential pressure switches or pressure transducer (for sets with frequency converter).

## Operation

### BS 3F Fixed speed pump

Depending on the reduction of the pressure in the system, the pressure switches determine the starting up of the pumps in sequence and the microprocessor alternates the starts.

### BS1V2F Pumps at variable speed with one frequency converter

According to the water consumption, one or more pumps start, one at variable speed and the others at fixed speed, to grant the water quantity required at the set pressure.

### BS3V Pumps at variable speed with three frequency converter

Depending on water consumption, one or more pumps are activated, all at variable speed, in order to guarantee the quantity of water required at the set pressure.

## Applications

To supply water in civil and industrial buildings.

As pressure boosting pump to increase water pressure when needed (follow local rules).

## Motors

2-pole induction motors, 50 Hz, n = 2900 rpm

- Three-phase 230V - 400V ± 10%, suitable for operation with frequency converter.

- Single-phase 230V ± 10% (on request).

Insulation class F.

Protection IP 68.

Constructed in accordance with: IEC 60034.

Other voltages and frequencies on request.

## Vessels

When installing the unit, connect in the delivery section to a diaphragm or galvanised tank.

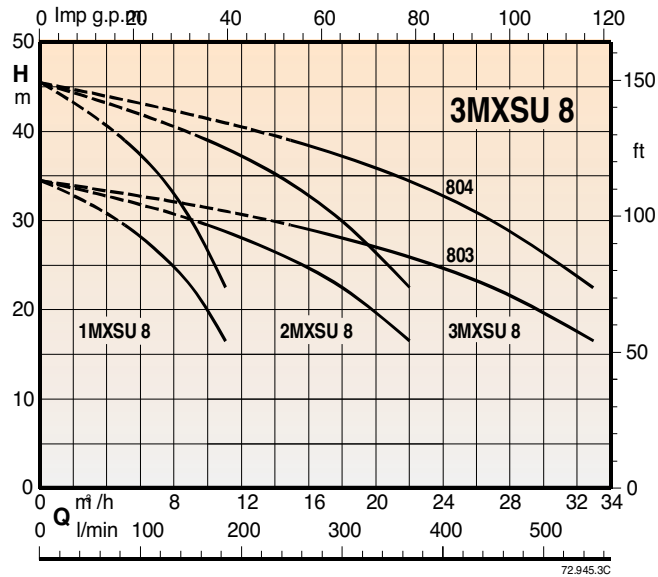
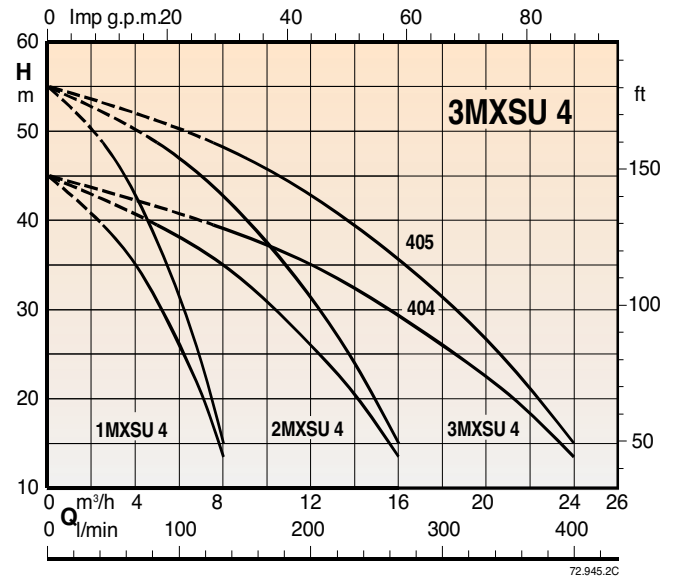
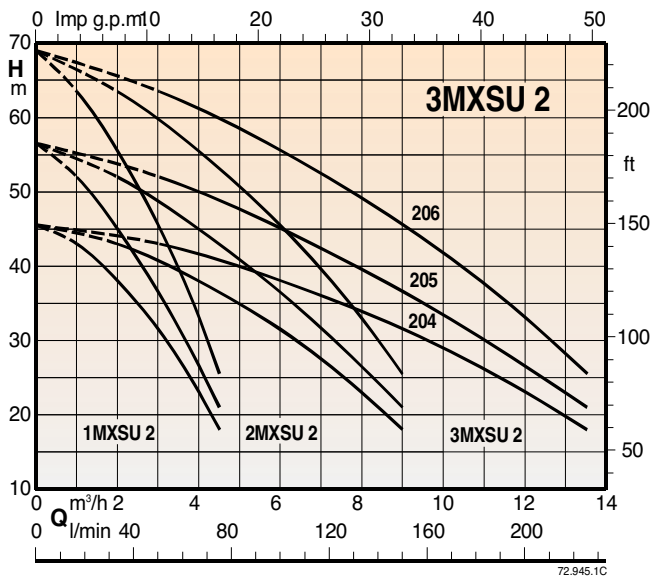
The recommended sized are shown in the following page.

# 3 MXSU

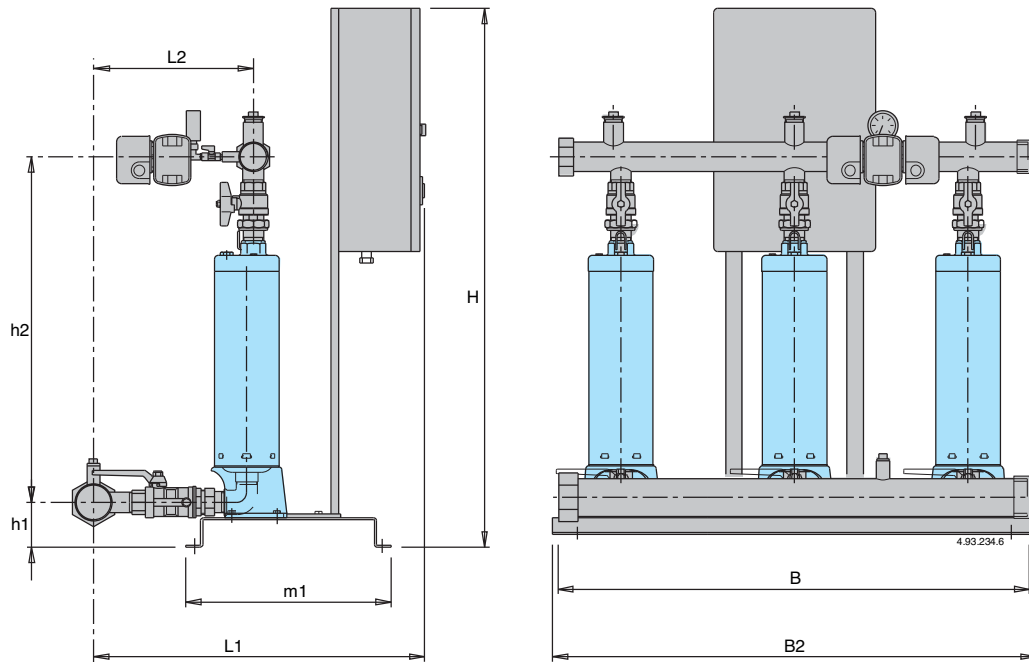
Pressure boosting sets with three Vertical Multi-Stage Pumps  
 Fixed speed pump or Variable speed pump (frequency converter)



## Coverage chart



## Dimensions and weights



TYPE	DN1	DN2	mm								kg	
			H	h1	h2	L1	L2	m1	B	B2		
BS.. 3MXSU 204/A					657							85
BS.. 3MXSU 205/A	G 2 1/2	G 2	1060	91	681	680	300	306	950	1000		88
BS.. 3MXSU 206/A					705							91
BS.. 3MXSU 404/A	G 2 1/2	G 2	1060	91	657	680	300	306	950	1000		88
BS.. 3MXSU 405/A					681							89
BS.. 3MXSU 803/A	G 2 1/2	G 2	1060	91	690	680	305	306	950	1000		88
BS.. 3MXSU 804/A					690							96

## Performance

### BS3F

Mains: 400V 3~ Motor: 400V 3~	Motor		Pres. switch bar	Pres. switch bar	Pres. switch bar	Average capacity		Maximum capacity		Membrane V. litre	Vessel litre
	kW	HP				Q l/min	H m	Q l/min	H m		
BS3F 3MXSU 204/A	0,5+0,5+0,5	0,75+0,75+0,75	3,0±4,0	2,5±3,5	2,0±3,0	146	32	215	20	40	100
BS3F 3MXSU 205/A	0,75+0,75+0,75	1+1+1	3,7±4,7	3,3±4,3	2,9±3,9	125	41	180	30	40	100
BS3F 3MXSU 206/A	0,9+0,9+0,9	1,2+1,2+1,2	4,3±5,8	3,8±5,3	3,3±4,8	132	50	190	35	40	100
BS3F 3MXSU 404/A	0,9+0,9+0,9	1,2+1,2+1,2	2,5±4,0	2,0±3,5	1,5±3,0	268	29	390	15	60	100
BS3F 3MXSU 405/A	1,1+1,1+1,1	1,5+1,5+1,5	3,0±4,5	2,6±4,1	2,2±3,7	268	36	355	23	80	200
BS3F 3MXSU 803/A	1,1+1,1+1,1	1,5+1,5+1,5	2,0±2,7	1,7±2,4	1,4±2,1	400	25	550	15	100	200
BS3F 3MXSU 804/A	1,5+1,5+1,5	2+2+2	2,8±3,6	2,5±3,3	2,2±3,0	375	35	550	22	200	300

### BS1V2F

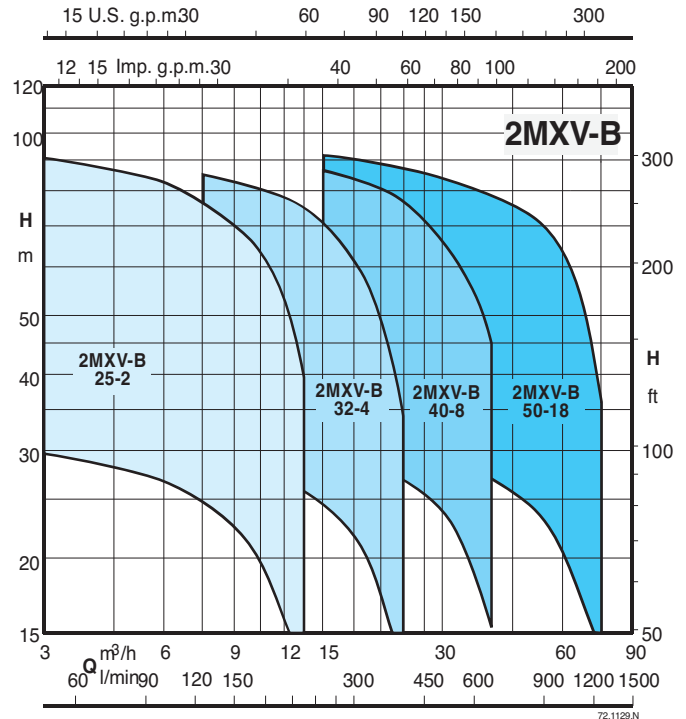
Mains: 400V 3~ Motor: 400V 3~	Motor		Vessel Membrane litre
	kW	HP	
BS1V2F 3MXSU 204/A	0,55 x3	0,75 x3	24x3
BS1V2F 3MXSU 205/A	0,75 x3	1 x3	24x3
BS1V2F 3MXSU 206/A	0,9 x3	1,2 x3	24x3
BS1V2F 3MXSU 404/A	0,9 x3	1,2 x3	24x3
BS1V2F 3MXSU 405/A	1,1 x3	1,5 x3	24x3
BS1V2F 3MXSU 803/A	1,1 x3	1,5 x3	24x3
BS1V2F 3MXSU 804/A	1,5 x3	2 x3	24x3

### BS3V

Mains: 400V 3~ Motor: 400V 3~	Motor		Vessel Membrane litre
	kW	HP	
BS3V 3MXSU 204/A	0,55 x3	0,75 x3	24x3
BS3V 3MXSU 205/A	0,75 x3	1 x3	24x3
BS3V 3MXSU 206/A	0,9 x3	1,2 x3	24x3
BS3V 3MXSU 404/A	0,9 x3	1,2 x3	24x3
BS3V 3MXSU 405/A	1,1 x3	1,5 x3	24x3
BS3V 3MXSU 803/A	1,1 x3	1,5 x3	24x3
BS3V 3MXSU 804/A	1,5 x3	2 x3	24x3



Coverage chart



## Construction

Automatic pressure boosting plant consisting of two vertical multi-stage close coupled pumps complete with ball, non return valve on the suction side and ball valves on the discharge side.

Suction and delivery manifolds are in AISI 304.

Connections are located on the delivery manifold for the installation of two 20 litres cylindrical vessels (for 2MXV-B 25-32-40).

Connections are located on the delivery manifold for the installation of one 20 litres cylindrical vessel (for 2MXV-B 50).

### Electrical control boards:

- with microprocessor for fixed speed pump units (see page 422).
- with frequency converter for variable speed pump units (see page 423).

The unit includes one pressure gauge and two adjustable differential pressure switches or pressure transducer (for sets with frequency converter).

## Operation

### BS 2F Fixed speed pump

Depending on the reduction of the pressure in the system, the pressure switches determine the starting up of the pumps in sequence and the microprocessor alternates the starts.

### BS1V1F Pumps at variable speed with one frequency converter

According to the water consumption, one or more pumps start, one at variable speed and the others at fixed speed, to grant the water quantity required at the set pressure.

### BS2V Pumps at variable speed with two frequency converter

Depending on water consumption, one or more pumps are activated, all at variable speed, in order to guarantee the quantity of water required at the set pressure.

## Applications

To supply water in civil and industrial buildings.

As pressure boosting pump to increase water pressure when needed (follow local rules).

## Motors

2-pole induction motors, 50 Hz, n = 2900 rpm

- Three-phase 230/400V  $\pm 10\%$ , suitable for operation with frequency converter.
- Single-phase 230V  $\pm 10\%$  (up to 2,2 kW).

Insulation class F.

Protection IP 54.

Constructed in accordance with: IEC 60034.

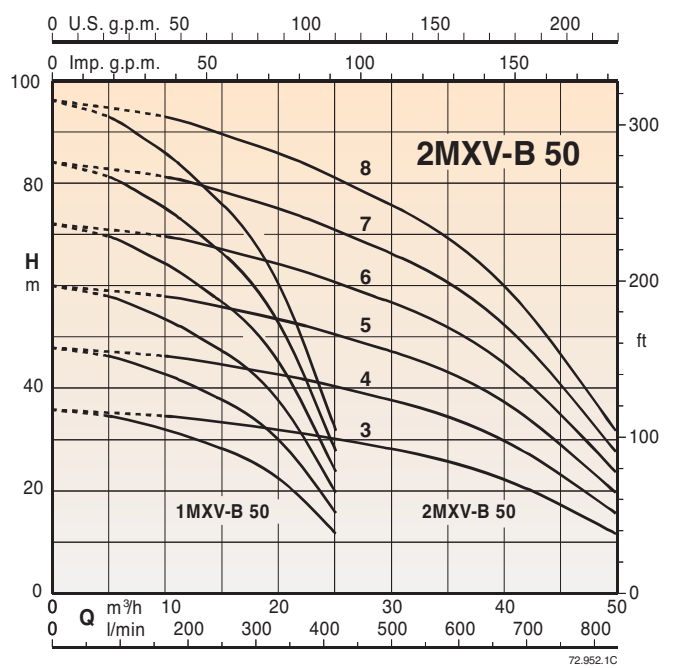
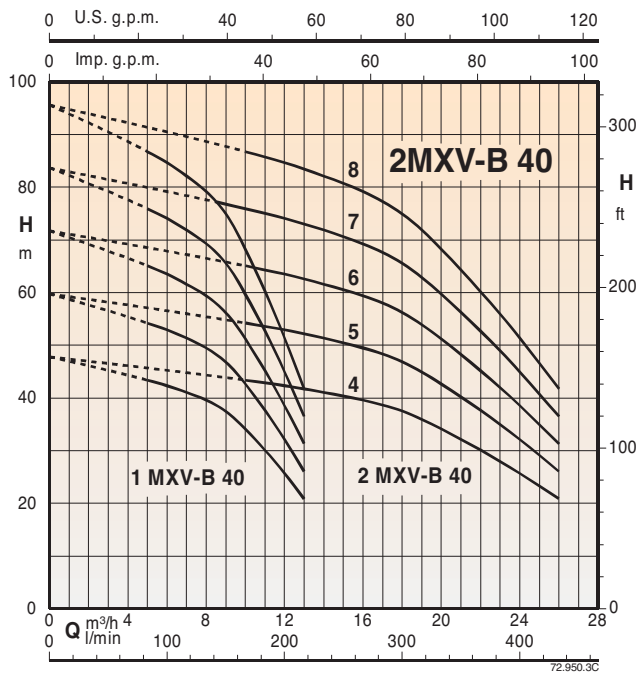
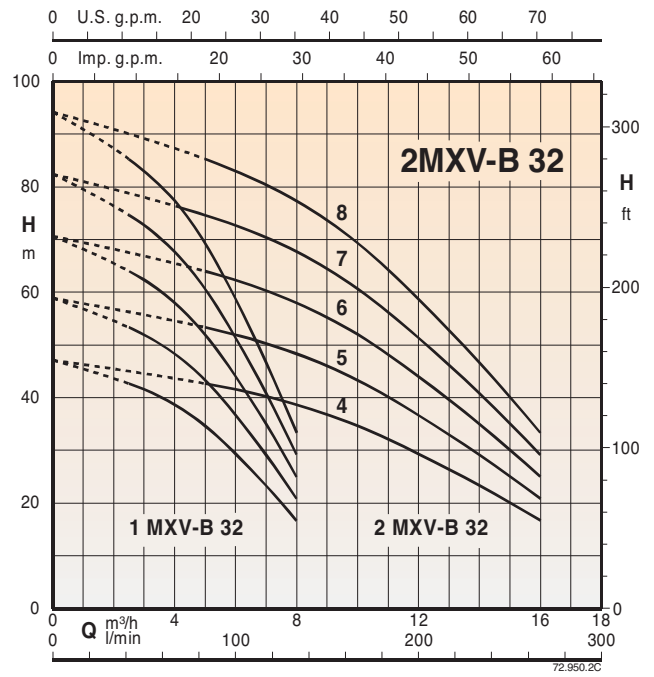
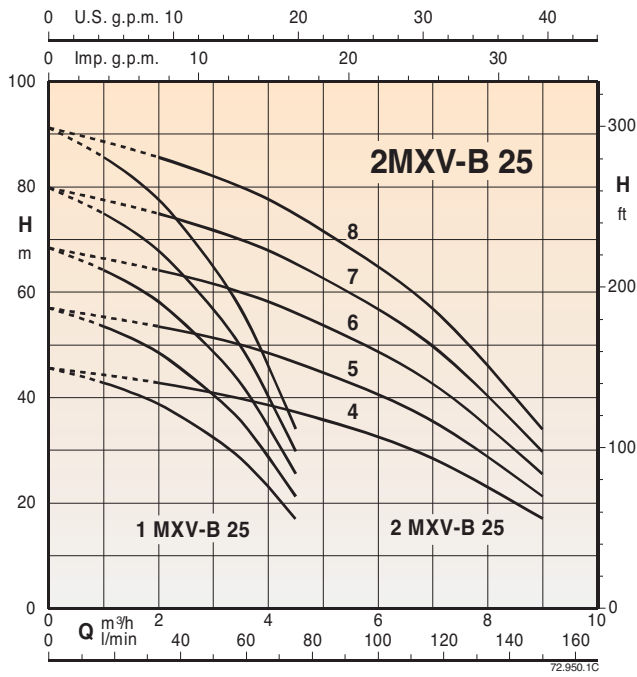
Other voltages and frequencies on request.

## Vessels

When installing the unit, connect in the delivery section to a diaphragm or galvanised tank.

The recommended sized are shown in the following page.

## Coverage chart



## Performance

### BS2F

### BSM2F

Mains: 400V 3~ Motor: 400V 3~	Mains: 230V 1~ Motor: 230V 1~	Motor		Pres. switch bar	Pres. switch bar	Average capacity		Maximum capacity		Membrane V. litre	Vessel litre
		kW	HP			Q l/min	H m	Q l/min	H m		
BS2F 2MXV-B 25-204	BSM2F 2MXV-BM 25-204	0,75+0,75	1+1	2,5+4,0	2,2+3,7	106	31	135	22	40	100
BS2F 2MXV-B 25-205	BSM2F 2MXV-BM 25-205	0,75+0,75	1+1	3,5+5,0	3,0+4,5	103	40	133	30	50	300
BS2F 2MXV-B 25-206	BSM2F 2MXV-BM 25-206	1,1+1,1	1,5+1,5	4,0+6,0	3,5+5,5	95	50	125	40	50	300
BS2F 2MXV-B 25-207	BSM2F 2MXV-BM 25-207	1,1+1,1	1,5+1,5	5,0+7,0	4,5+6,5	92	60	115	50	60	300
BS2F 2MXV-B 25-208	BSM2F 2MXV-BM 25-208	1,5+1,5	2+2	6,0+8,0	5,5+7,5	86	70	110	60	80	500
BS2F 2MXV-B 32-404	BSM2F 2MXV-BM 32-404	1,1+1,1	1,5+1,5	2,3+3,8	1,8+3,3	190	31	245	22	100	200
BS2F 2MXV-B 32-405	BSM2F 2MXV-BM 32-405	1,1+1,1	1,5+1,5	3,4+4,9	3,0+4,5	186	40	235	30	100	300
BS2F 2MXV-B 32-406	BSM2F 2MXV-BM 32-406	1,5+1,5	2+2	4,0+6,0	3,5+5,5	180	50	215	40	100	300
BS2F 2MXV-B 32-407	BSM2F 2MXV-BM 32-407	1,5+1,5	2+2	5,0+7,0	4,5+6,5	170	60	210	50	200	300
BS2F 2MXV-B 32-408/A		2,2+2,2	3+3	6,0+8,0	5,5+7,5	165	70	195	60	200	500
BS2F 2MXV-B 40-804	BSM2F 2MXV-BM 40-804	1,5+1,5	2+2	2,5+4,0	2,2+3,7	356	31	420	22	200	300
BS2F 2MXV-B 40-805/A		2,2+2,2	3+3	3,5+5,0	3,0+4,5	350	40	410	30	300	500
BS2F 2MXV-B 40-806/A		2,2+2,2	3+3	4,0+6,0	3,5+5,5	340	50	390	40	300	500
BS2F 2MXV-B 40-807/A		3+3	4+4	5,0+7,0	4,5+6,5	330	60	380	50	300	500
BS2F 2MXV-B 40-808/A		3+3	4+4	6,0+8,0	5,5+7,5	325	70	365	60	300	500
BS2F 2MXV-B 50-1803/A		2,2+2,2	3+3	1,5+3,0	1,2+2,7	660	22	780	15	500	800
BS2F 2MXV-B 50-1804/A		3+3	4+4	2,5+4,0	2,2+3,7	650	31	750	22	500	800
BS2F 2MXV-B 50-1805/A		3,7+3,7	5+5	3,5+5,0	3,0+4,5	640	40	750	30	500	800
BS2F 2MXV-B 50-1806/A		4+4	5,5+5,5	4,0+6,0	3,5+5,5	610	50	720	40	500	1000
BS2F 2MXV-B 50-1807/A		5,5+5,5	7,5+7,5	5,0+7,0	4,5+6,5	590	60	700	50	500	1000
BS2F 2MXV-B 50-1808/A		5,5+5,5	7,5+7,5	6,0+8,0	5,5+7,5	560	70	670	60	500	1000

### BS1V1F

### BSM1V1F

Mains: 400V 3~ Motor: 400V 3~	Mains: 230V 1~ (1)	Motor		Vessel Membrane litre
		kW	HP	
BS1V1F 2MXV-B 25-204	BSM1V1F 2MXV-B 25-204	0,75 x2	1 x2	24x2
BS1V1F 2MXV-B 25-205	BSM1V1F 2MXV-B 25-205	0,75 x2	1 x2	24x2
BS1V1F 2MXV-B 25-206	BSM1V1F 2MXV-B 25-206	1,1 x2	1,5 x2	24x2
BS1V1F 2MXV-B 25-207	BSM1V1F 2MXV-B 25-207	1,1 x2	1,5 x2	24x2
BS1V1F 2MXV-B 25-208	BSM1V1F 2MXV-B 25-208	1,5 x2	2 x2	24x2
BS1V1F 2MXV-B 32-404	BSM1V1F 2MXV-B 32-404	1,1 x2	1,5 x2	24x2
BS1V1F 2MXV-B 32-405	BSM1V1F 2MXV-B 32-405	1,1 x2	1,5 x2	24x2
BS1V1F 2MXV-B 32-406	BSM1V1F 2MXV-B 32-406	1,5 x2	2 x2	24x2
BS1V1F 2MXV-B 32-407	BSM1V1F 2MXV-B 32-407	1,5 x2	2 x2	24x2
BS1V1F 2MXV-B 32-408/A		2,2 x2	3 x2	24x2
BS1V1F 2MXV-B 40-804	BSM1V1F 2MXV-B 40-804	1,5 x2	2 x2	24x2
BS1V1F 2MXV-B 40-805/A		2,2 x2	3 x2	24x2
BS1V1F 2MXV-B 40-806/A		2,2 x2	3 x2	24x2
BS1V1F 2MXV-B 40-807/A		3 x2	4 x2	24x2
BS1V1F 2MXV-B 40-808/A		3 x2	4 x2	24x2
BS1V1F 2MXV-B 50-1803/A		2,2 x2	3 x2	24x1
BS1V1F 2MXV-B 50-1804/A		3 x2	4 x2	24x1
BS1V1F 2MXV-B 50-1805/A		3,7 x2	5 x2	24x1
BS1V1F 2MXV-B 50-1806/A		4 x2	5,5 x2	24x1
BS1V1F 2MXV-B 50-1807/A		5,5 x2	7,5 x2	24x1
BS1V1F 2MXV-B 50-1808/A		5,5 x2	7,5 x2	24x1

- (1) SYSTEMS WITH:  
1 variable speed pump three-phase motor  
1 fixed speed pump single-phase motor  
Power supply to control panel 230 V single-phase

### BS2V

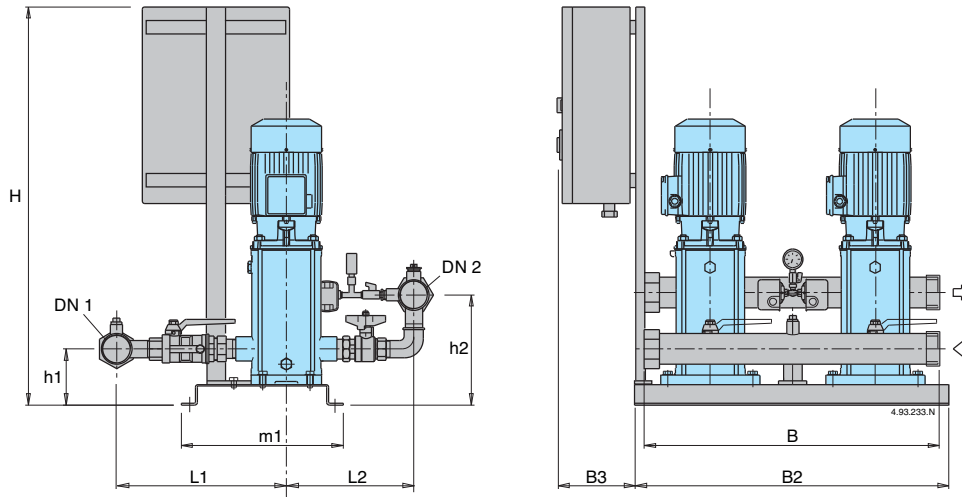
### BSM2V

Mains: 400V 3~ Motor: 400V 3~	Mains: 230V 1~ (1)	Motor		Vessel Membrane litre
		kW	HP	
BS2V 2MXV-B 25-204	BSM2V 2MXV-B 25-204	0,75 x2	1 x2	24x2
BS2V 2MXV-B 25-205	BSM2V 2MXV-B 25-205	0,75 x2	1 x2	24x2
BS2V 2MXV-B 25-206	BSM2V 2MXV-B 25-206	1,1 x2	1,5 x2	24x2
BS2V 2MXV-B 25-207	BSM2V 2MXV-B 25-207	1,1 x2	1,5 x2	24x2
BS2V 2MXV-B 25-208	BSM2V 2MXV-B 25-208	1,5 x2	2 x2	24x2
BS2V 2MXV-B 32-404	BSM2V 2MXV-B 32-404	1,1 x2	1,5 x2	24x2
BS2V 2MXV-B 32-405	BSM2V 2MXV-B 32-405	1,1 x2	1,5 x2	24x2
BS2V 2MXV-B 32-406	BSM2V 2MXV-B 32-406	1,5 x2	2 x2	24x2
BS2V 2MXV-B 32-407	BSM2V 2MXV-B 32-407	1,5 x2	2 x2	24x2
BS2V 2MXV-B 32-408/A		2,2 x2	3 x2	24x2
BS2V 2MXV-B 40-804	BSM2V 2MXV-B 40-804	1,5 x2	2 x2	24x2
BS2V 2MXV-B 40-805/A		2,2 x2	3 x2	24x2
BS2V 2MXV-B 40-806/A		2,2 x2	3 x2	24x2
BS2V 2MXV-B 40-807/A		3 x2	4 x2	24x2
BS2V 2MXV-B 40-808/A		3 x2	4 x2	24x2
BS2V 2MXV-B 50-1803/A		2,2 x2	3 x2	24x1
BS2V 2MXV-B 50-1804/A		3 x2	4 x2	24x1
BS2V 2MXV-B 50-1805/A		3,7 x2	5 x2	24x1
BS2V 2MXV-B 50-1806/A		4 x2	5,5 x2	24x1
BS2V 2MXV-B 50-1807/A		5,5 x2	7,5 x2	24x1
BS2V 2MXV-B 50-1808/A		5,5 x2	7,5 x2	24x1

- (1) Three-phase motor 230 V.  
Power supply to control panel: - 230 V three-phase  
- 230 V single-phase  
Frequency converter output is always 230 V three-phase.



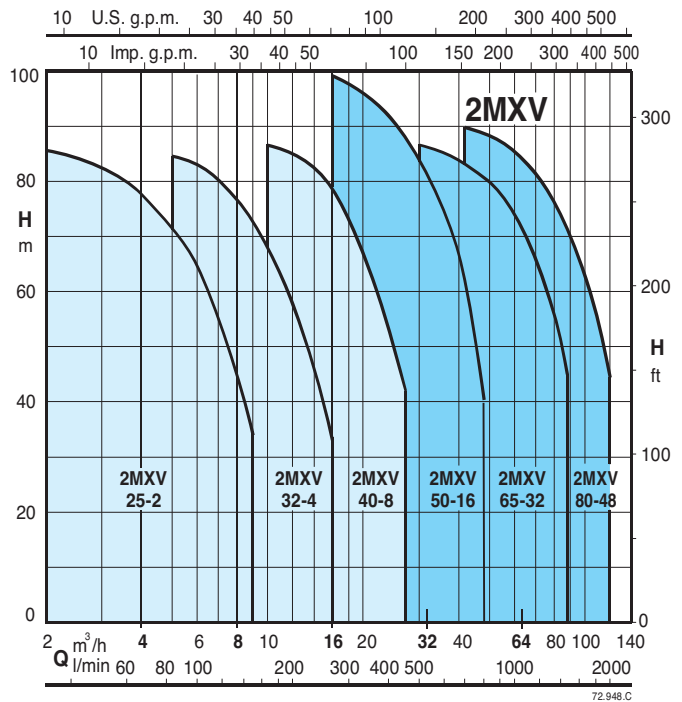
## Dimensions and weights



TYPE		DN1	DN2	mm									kg
				H	h1	h2	L1	L2	m1	B	B2	B3	
BS.. 2MXV-B 25-204	BSM.. 2MXV-BM 25-204												105
BS.. 2MXV-B 25-205	BSM.. 2MXV-BM 25-205												107
BS.. 2MXV-B 25-206	BSM.. 2MXV-BM 25-206	G 1 1/2	G 1 1/2	860	119	218	331	254	365	600	625	160	109
BS.. 2MXV-B 25-207	BSM.. 2MXV-BM 25-207												111
BS.. 2MXV-B 25-208	BSM.. 2MXV-BM 25-208												118
BS.. 2MXV-B 32-404	BSM.. 2MXV-BM 32-404												108
BS.. 2MXV-B 32-405	BSM.. 2MXV-BM 32-405												111
BS.. 2MXV-B 32-406	BSM.. 2MXV-BM 32-406	G 2	G 2	860	119	225	360	270	365	600	625	160	115
BS.. 2MXV-B 32-407	BSM.. 2MXV-BM 32-407												118
BS.. 2MXV-B 32-408/A													121
BS.. 2MXV-B 40-804	BSM.. 2MXV-BM 40-804												116
BS.. 2MXV-B 40-805/A													119
BS.. 2MXV-B 40-806/A		G 2 1/2	G 2 1/2	860	124	245	445	350	365	600	625	160	121
BS.. 2MXV-B 40-807/A													143
BS.. 2MXV-B 40-808/A													145
BS.. 2MXV-B 50-1803/A													208
BS.. 2MXV-B 50-1804/A													228
BS.. 2MXV-B 50-1805/A													238
BS.. 2MXV-B 50-1806/A		G 3	G 3	906	215	215	495	405	550	700	950	160	240
BS.. 2MXV-B 50-1807/A													262
BS.. 2MXV-B 50-1808/A													264



Coverage chart



## Construction

Automatic pressure boosting plant consisting of two vertical multi-stage pumps complete with ball, non return valve on the suction side and ball valves on the discharge side.

Suction and delivery manifolds are in AISI 304.

Connections are located on the delivery manifold for the installation of two 20 litres cylindrical vessels (for 2MXV 25-32-40).

Connections are located on the delivery manifold for the installation of one 20 litres cylindrical vessel (for 2MXV 50-65-80).

### Electrical control boards:

- with microprocessor for fixed speed pump units (see page 422). Motor starting is D.O.L. up to 5,5 kW and Y/Δ for power rating 7,5 up to 15 kW.
- with frequency converter for variable speed pump units (see page 423).

The unit includes one pressure gauge and two adjustable differential pressure switches or pressure transducer (for sets with frequency converter).

## Operation

### BS 2F Fixed speed pump

Depending on the reduction of the pressure in the system, the pressure switches determine the starting up of the pumps in sequence and the microprocessor alternates the starts.

### BS1V1F Pumps at variable speed with one frequency converter

According to the water consumption, one or more pumps start, one at variable speed and the others at fixed speed, to grant the water quantity required at the set pressure.

### BS2V Pumps at variable speed with two frequency converter

Depending on water consumption, one or more pumps are activated, all at variable speed, in order to guarantee the quantity of water required at the set pressure.

## Applications

To supply water in civil and industrial buildings.

As pressure boosting pump to increase water pressure when needed (follow local rules).

## Motors

2-pole induction motors, 50 Hz, n = 2900 rpm

- Three-phase 230/400V ± 10% up to 3 kW, suitable for operation with frequency converter;
- 400/690V ± 10% from 4 to 15 kW, suitable for operation with frequency converter.

- Single-phase 230V ± 10% (up to 2,2 kW).

Insulation class F.

Protection IP 55.

Constructed in accordance with: IEC 60034.

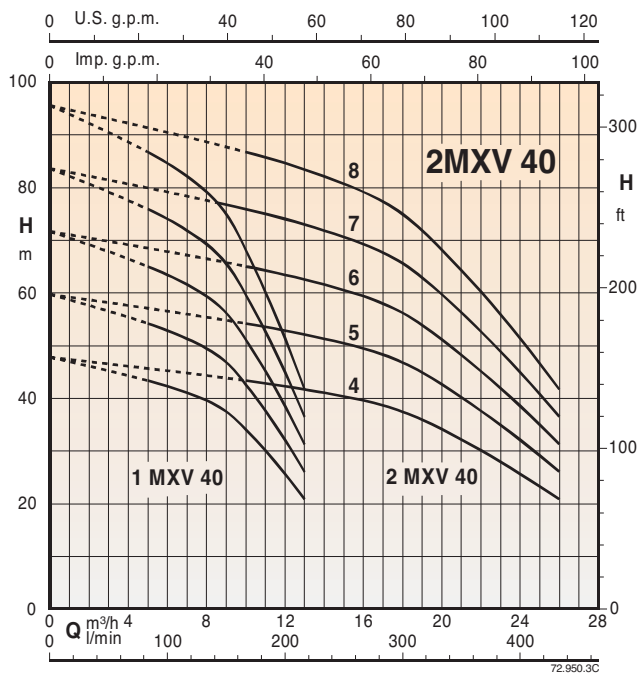
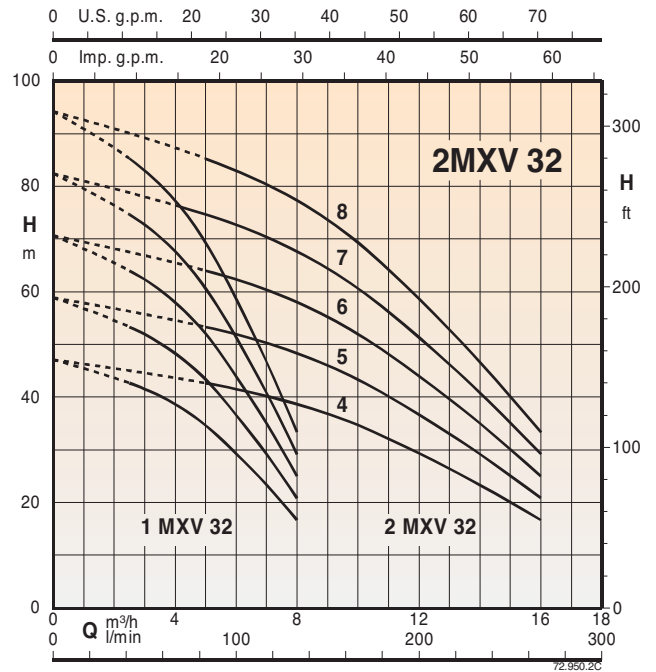
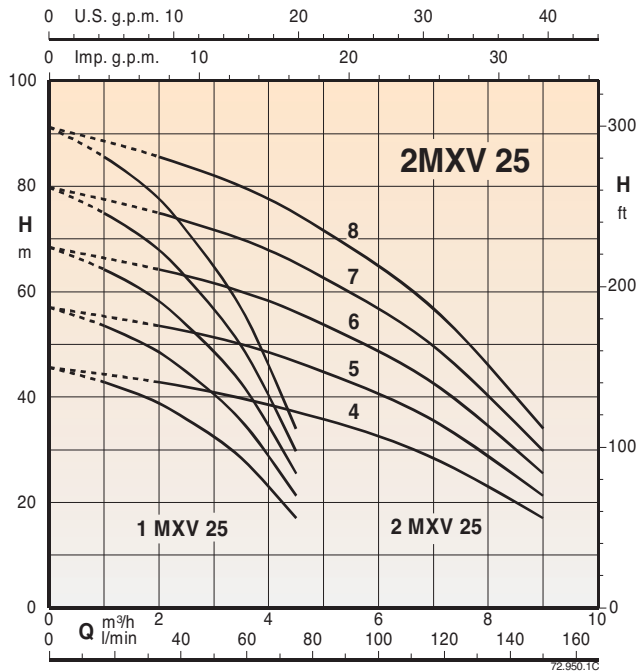
Other voltages and frequencies on request.

## Vessels

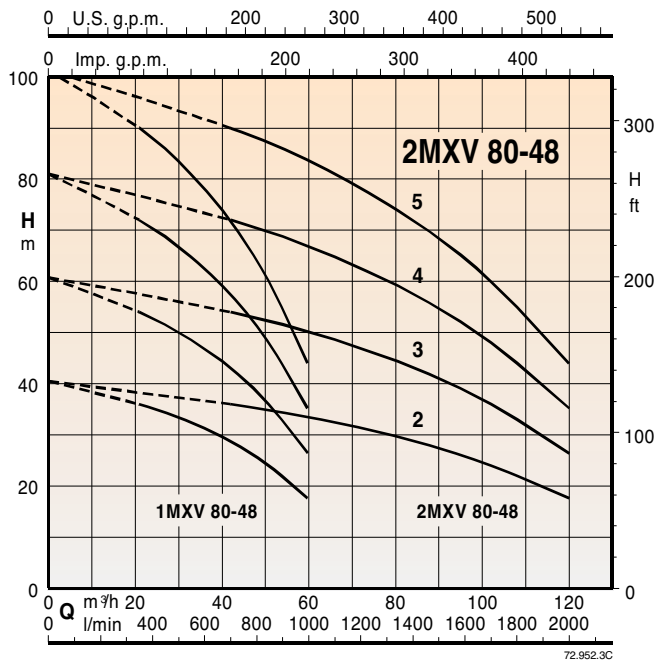
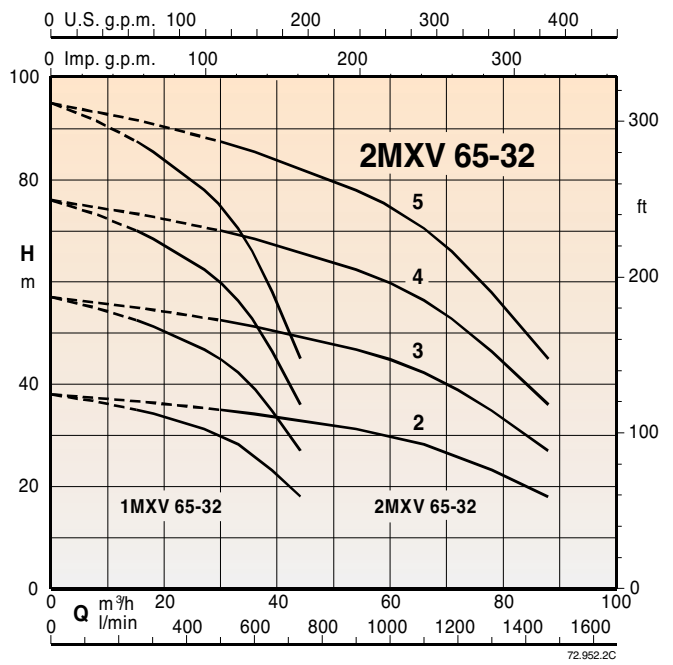
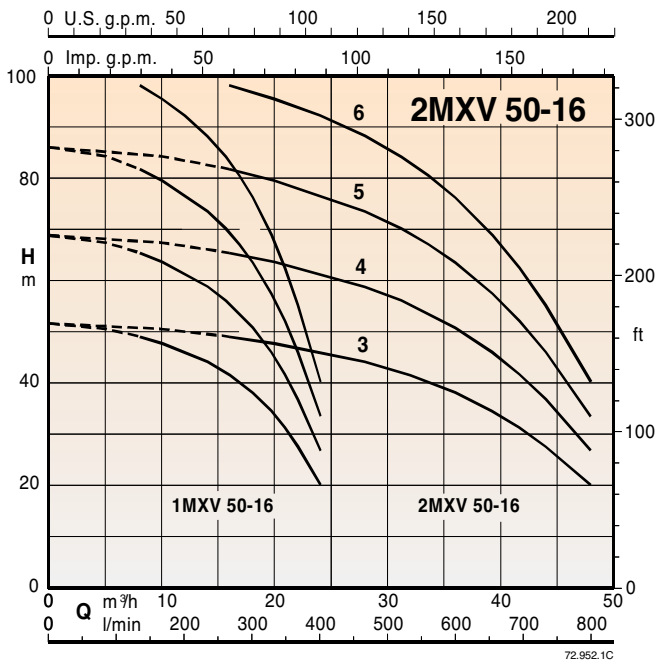
When installing the unit, connect in the delivery section to a diaphragm or galvanised tank.

The recommended sized are shown in the following page.

## Coverage chart



### Coverage chart



## Performance

### BS2F BSM2F

Mains: 400V 3~ Motor: 400V 3~	Mains: 230V 1~ Motor: 230V 1~	Motor		Pres. switch	Pres. switch	Average capacity		Maximum capacity		Membrane V.	Vessel
		kW	HP	bar	bar	Q l/min	H m	Q l/min	H m	litre	litre
BS2F 2MXV 25-204	BSM2F 2MXV 25-204M	0,75+0,75	1+1	2,5±4,0	2,2±3,7	106	31	135	22	40	100
BS2F 2MXV 25-205	BSM2F 2MXV 25-205M	0,75+0,75	1+1	3,5±5,0	3,0±4,5	103	40	133	30	50	300
BS2F 2MXV 25-206	BSM2F 2MXV 25-206M	1,1+1,1	1,5+1,5	4,0±6,0	3,5±5,5	95	50	125	40	50	300
BS2F 2MXV 25-207	BSM2F 2MXV 25-207M	1,1+1,1	1,5+1,5	5,0±7,0	4,5±6,5	92	60	115	50	60	300
BS2F 2MXV 25-208	BSM2F 2MXV 25-208M	1,5+1,5	2+2	6,0±8,0	5,5±7,5	86	70	110	60	80	500
BS2F 2MXV 32-404	BSM2F 2MXV 32-404M	1,1+1,1	1,5+1,5	2,3±3,8	1,8±3,3	190	31	245	22	100	200
BS2F 2MXV 32-405	BSM2F 2MXV 32-405M	1,1+1,1	1,5+1,5	3,4±4,9	3,0±4,5	186	40	235	30	100	300
BS2F 2MXV 32-406	BSM2F 2MXV 32-406M	1,5+1,5	2+2	4,0±6,0	3,5±5,5	180	50	215	40	100	300
BS2F 2MXV 32-407	BSM2F 2MXV 32-407M	1,5+1,5	2+2	5,0±7,0	4,5±6,5	170	60	210	50	200	300
BS2F 2MXV 32-408		2,2±2,2	3+3	6,0±8,0	5,5±7,5	165	70	195	60	200	500
BS2F 2MXV 40-804	BSM2F 2MXV 40-804M	1,5+1,5	2+2	2,5±4,0	2,2±3,7	356	31	420	22	200	300
BS2F 2MXV 40-805		2,2±2,2	3+3	3,5±5,0	3,0±4,5	350	40	410	30	300	500
BS2F 2MXV 40-806		2,2±2,2	3+3	4,0±6,0	3,5±5,5	340	50	390	40	300	500
BS2F 2MXV 40-807		3+3	4+4	5,0±7,0	4,5±6,5	330	60	380	50	300	500
BS2F 2MXV 40-808		3+3	4+4	6,0±8,0	5,5±7,5	325	70	365	60	300	500
BS2F 2MXV 50-1603		3+3	4+4	3,0±4,5	2,5±4,0	600	39	750	25	500	800
BS2F 2MXV 50-1604		4+4	5,5+5,5	4,0±6,0	3,5±5,5	565	51	710	40	500	1000
BS2F 2MXV 50-1605		5,5+5,5	7,5+7,5	5,5±7,5	5,0±7,0	555	70	680	55	-	1000
BS2F 2MXV 50-1606		5,5+5,5	7,5+7,5	6,5±9,0	6,0±8,5	540	83	640	70	-	1500
BS2F 2MXV 65-3202		4+4	5,5+5,5	2,0±3,0	1,7±2,7	1080	28	1460	18	-	1500
BS2F 2MXV 65-3203		5,5+5,5	7,5+7,5	3,3±4,8	2,8±4,3	1050	43	1400	30	-	1500
BS2F 2MXV 65-3204		7,5+7,5	10+10	4,5±6,5	4,0±6,0	1050	58	1300	45	-	2000
BS2F 2MXV 65-3205		11+11	15+15	6,0±8,0	5,5±7,5	1030	73	1270	60	-	3000
BS2F 2MXV 80-4802		5,5+5,5	7,5+7,5	2,0±3,2	1,6±2,8	1350	30	2000	18	-	2000
BS2F 2MXV 80-4803		7,5+7,5	10+10	3,5±5,0	3,0±4,5	1400	43	1900	30	-	3000
BS2F 2MXV 80-4804		11+11	15+15	4,5±6,5	4,0±6,0	1400	58	1800	45	-	4000
BS2F 2MXV 80-4805		15+15	20+20	6,0±8,0	5,5±7,5	1400	72	1700	60	-	5000

### BS1V1F BSM1V1F

Mains: 400V 3~ Motor: 400V 3~	Mains: 230V 1~ (1)	Motor		Vessel Membrane litri
		kW	HP	
BS1V1F 2MXV 25-204	BSM1V1F 2MXV 25-204	0,75 x2	1 x2	24x2
BS1V1F 2MXV 25-205	BSM1V1F 2MXV 25-205	0,75 x2	1 x2	24x2
BS1V1F 2MXV 25-206	BSM1V1F 2MXV 25-206	1,1 x2	1,5 x2	24x2
BS1V1F 2MXV 25-207	BSM1V1F 2MXV 25-207	1,1 x2	1,5 x2	24x2
BS1V1F 2MXV 25-208	BSM1V1F 2MXV 25-208	1,5 x2	2 x2	24x2
BS1V1F 2MXV 32-404	BSM1V1F 2MXV 32-404	1,1 x2	1,5 x2	24x2
BS1V1F 2MXV 32-405	BSM1V1F 2MXV 32-405	1,1 x2	1,5 x2	24x2
BS1V1F 2MXV 32-406	BSM1V1F 2MXV 32-406	1,5 x2	2 x2	24x2
BS1V1F 2MXV 32-407	BSM1V1F 2MXV 32-407	1,5 x2	2 x2	24x2
BS1V1F 2MXV 32-408		2,2 x2	3 x2	24x2
BS1V1F 2MXV 40-804	BSM1V1F 2MXV 40-804	1,5 x2	2 x2	24x2
BS1V1F 2MXV 40-805		2,2 x2	3 x2	24x2
BS1V1F 2MXV 40-806		2,2 x2	3 x2	24x2
BS1V1F 2MXV 40-807		3 x2	4 x2	24x2
BS1V1F 2MXV 40-808		3 x2	4 x2	24x2
BS1V1F 2MXV 50-1603		3 x2	4 x2	24x1
BS1V1F 2MXV 50-1604		4 x2	5,5 x2	24x1
BS1V1F 2MXV 50-1605		5,5 x2	7,5 x2	24x1
BS1V1F 2MXV 50-1606		5,5 x2	7,5 x2	24x1
BS1V1F 2MXV 65-3202		4 x2	5,5 x2	24x1
BS1V1F 2MXV 65-3203		5,5 x2	7,5 x2	24x1
BS1V1F 2MXV 65-3204		7,5 x2	10 x2	24x1
BS1V1F 2MXV 65-3205		11 x2	15 x2	24x1
BS1V1F 2MXV 80-4802		5,5 x2	7,5 x2	24x1
BS1V1F 2MXV 80-4803		7,5 x2	10 x2	24x1
BS1V1F 2MXV 80-4804		11 x2	15 x2	24x1
BS1V1F 2MXV 80-4805		15 x2	20 x2	24x1

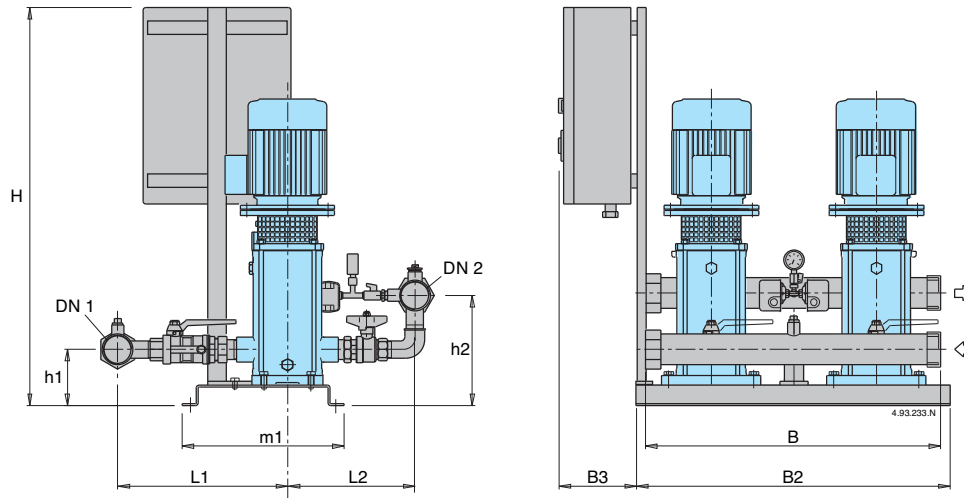
(1) SYSTEMS WITH:  
1 variable speed pump three-phase motor  
1 fixed speed pump single-phase motor  
Power supply to control panel  
230 V single-phase

### BS2V BSM2V

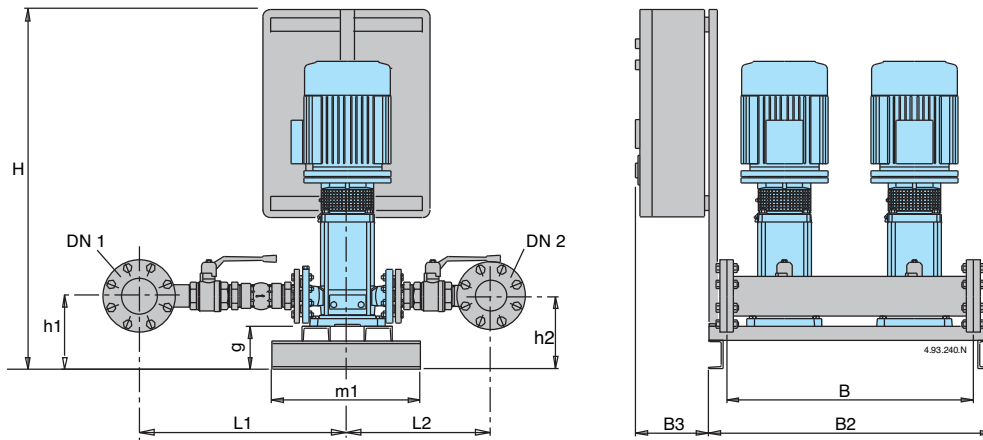
Mains: 400V 3~ Motor: 400V 3~	Mains: 230V 1~ (1)	Motor		Vessel Membrane litri
		kW	HP	
BS2V 2MXV 25-204	BSM2V 2MXV 25-204	0,75 x2	1 x2	24x2
BS2V 2MXV 25-205	BSM2V 2MXV 25-205	0,75 x2	1 x2	24x2
BS2V 2MXV 25-206	BSM2V 2MXV 25-206	1,1 x2	1,5 x2	24x2
BS2V 2MXV 25-207	BSM2V 2MXV 25-207	1,1 x2	1,5 x2	24x2
BS2V 2MXV 25-208	BSM2V 2MXV 25-208	1,5 x2	2 x2	24x2
BS2V 2MXV 32-404	BSM2V 2MXV 32-404	1,1 x2	1,5 x2	24x2
BS2V 2MXV 32-405	BSM2V 2MXV 32-405	1,1 x2	1,5 x2	24x2
BS2V 2MXV 32-406	BSM2V 2MXV 32-406	1,5 x2	2 x2	24x2
BS2V 2MXV 32-407	BSM2V 2MXV 32-407	1,5 x2	2 x2	24x2
BS2V 2MXV 32-408		2,2 x2	3 x2	24x2
BS2V 2MXV 40-804	BSM2V 2MXV 40-804	1,5 x2	2 x2	24x2
BS2V 2MXV 40-805		2,2 x2	3 x2	24x2
BS2V 2MXV 40-806		2,2 x2	3 x2	24x2
BS2V 2MXV 40-807		3 x2	4 x2	24x2
BS2V 2MXV 40-808		3 x2	4 x2	24x2
BS2V 2MXV 50-1603		3 x2	4 x2	24x1
BS2V 2MXV 50-1604		4 x2	5,5 x2	24x1
BS2V 2MXV 50-1605		5,5 x2	7,5 x2	24x1
BS2V 2MXV 50-1606		5,5 x2	7,5 x2	24x1
BS2V 2MXV 65-3202		4 x2	5,5 x2	24x1
BS2V 2MXV 65-3203		5,5 x2	7,5 x2	24x1
BS2V 2MXV 65-3204		7,5 x2	10 x2	24x1
BS2V 2MXV 65-3205		11 x2	15 x2	24x1
BS2V 2MXV 80-4802		5,5 x2	7,5 x2	24x1
BS2V 2MXV 80-4803		7,5 x2	10 x2	24x1
BS2V 2MXV 80-4804		11 x2	15 x2	24x1
BS2V 2MXV 80-4805		15 x2	20 x2	24x1

(1) Three-phase motor 230 V.  
Power supply to control panel:  
- 230 V three-phase  
- 230 V single-phase  
Frequency converter output is always 230 V three-phase.

### Dimensions and weights



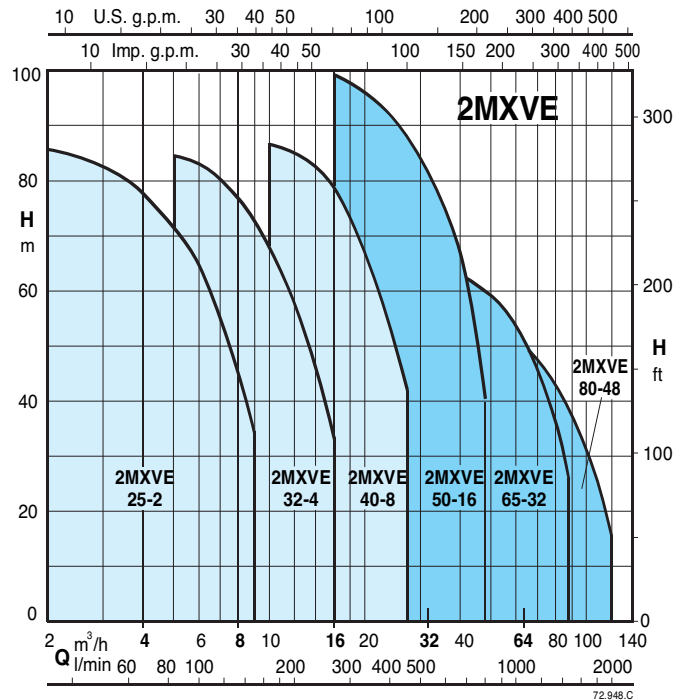
TYPE		DN1	DN2	mm									kg
				H	h1	h2	L1	L2	m1	B	B2	B3	
BS.. 2MXV 25-204	BS.. 2MXV 25-204M												110
BS.. 2MXV 25-205	BS.. 2MXV 25-205M												112
BS.. 2MXV 25-206	BS.. 2MXV 25-206M	G 1 1/2	G 1 1/2	860	119	218	331	254	365	600	625	160	114
BS.. 2MXV 25-207	BS.. 2MXV 25-207M												116
BS.. 2MXV 25-208	BS.. 2MXV 25-208M												126
BS.. 2MXV 32-404	BS.. 2MXV 32-404M												113
BS.. 2MXV 32-405	BS.. 2MXV 32-405M												115
BS.. 2MXV 32-406	BS.. 2MXV 32-406M	G 2	G 2	860	119	225	360	270	365	600	625	160	125
BS.. 2MXV 32-407	BS.. 2MXV 32-407M												127
BS.. 2MXV 32-408													137
BS.. 2MXV 40-804	BS.. 2MXV 40-804M												126
BS.. 2MXV 40-805													136
BS.. 2MXV 40-806		G 2 1/2	G 2 1/2	860	124	245	445	350	365	600	625	160	138
BS.. 2MXV 40-807													164
BS.. 2MXV 40-808													166



TYPE		DN1	DN2	mm									kg	
				H	h1	h2	L1	L2	B	B2	B3	m1	g	
BS.. 2MXV 50-1603											160			282
BS.. 2MXV 50-1604											160			298
BS.. 2MXV 50-1605		G 3	G 3	935	215	215	590	415	700	950	200	550	125	336
BS.. 2MXV 50-1606											200			340
BS.. 2MXV 65-3202											160			358
BS.. 2MXV 65-3203											200			396
BS.. 2MXV 65-3204		100	100	1335	230	230	660	475	750	950	250	550	125	420
BS.. 2MXV 65-3205											250			480
BS.. 2MXV 80-4802											200			408
BS.. 2MXV 80-4803											250			432
BS.. 2MXV 80-4804		125	125	1335	230	230	725	495	750	950	250	550	125	490
BS.. 2MXV 80-4805											250			520



Coverage chart



## Construction

Automatic pressure boosting plant consisting of two vertical multi-stage pumps complete with ball, non return valve on the suction side and ball valves on the discharge side.

Suction and delivery manifolds are in AISI 304.

Connections are located on the delivery manifold for the installation of two 20 litres cylindrical vessels (for 2MXVE 25-32-40).

Connections are located on the delivery manifold for the installation of one 20 litres cylindrical vessel (for 2MXVE 50-65-80).

The unit includes a pressure transducer.

## Operation

### BS1V1F Pumps at variable speed with one frequency converter

According to the water consumption, one or more pumps start, one at variable speed and the others at fixed speed, to grant the water quantity required at the set pressure.

### BS2V Pumps at variable speed with two frequency converter

Depending on water consumption, one or more pumps are activated, all at variable speed, in order to guarantee the quantity of water required at the set pressure.

## Applications

To supply water in civil and industrial buildings.

As pressure boosting pump to increase water pressure when needed (follow local rules).

## Motors

2-pole induction motors, 50 Hz, n = 2900 rpm

- Three-phase 400/690V ± 10%.

Insulation class F.

Protection IP 55.

Constructed in accordance with: IEC 60034.

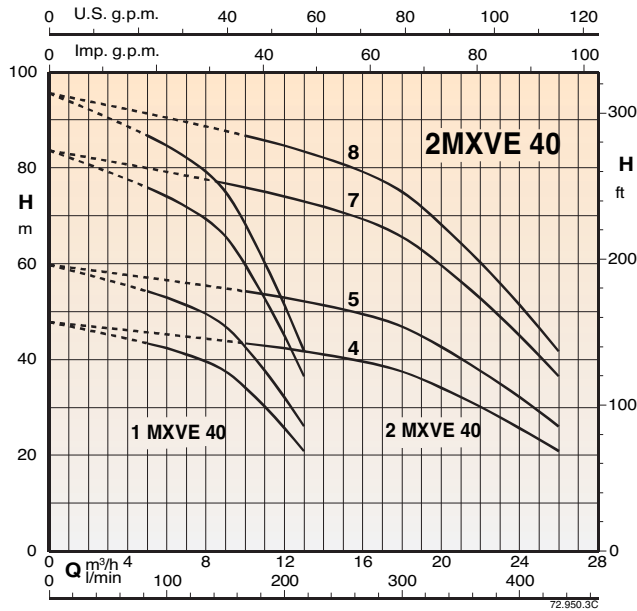
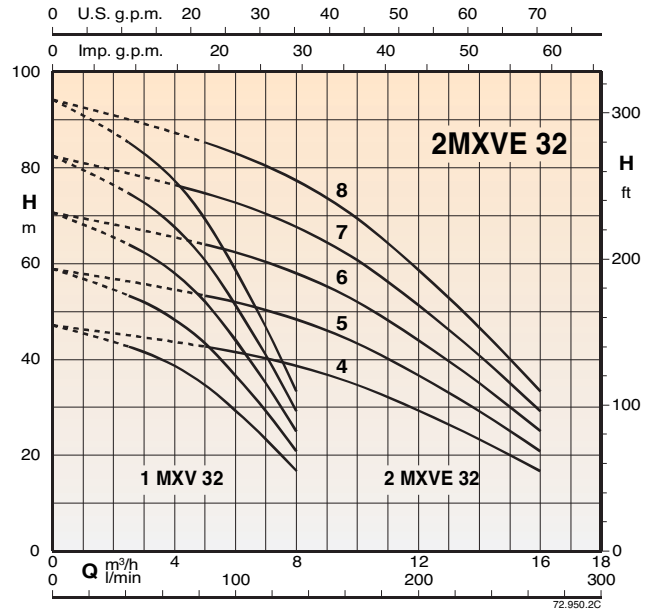
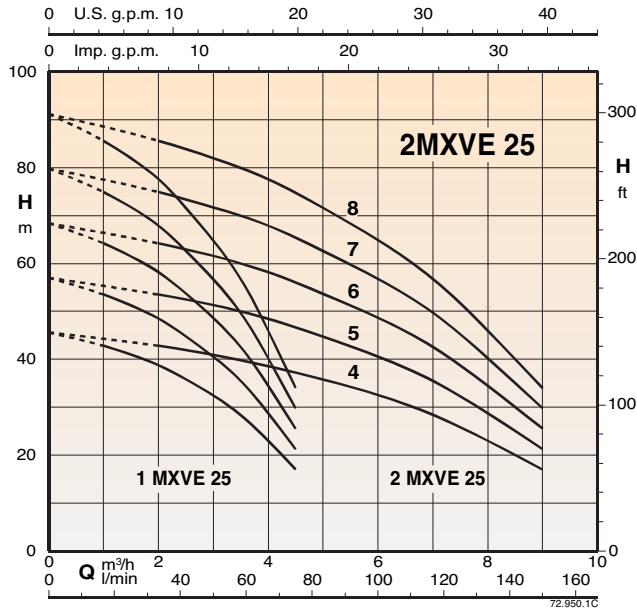
Other voltages and frequencies on request.

## Vessels

When installing the unit, connect in the delivery section to a diaphragm.

The recommended sized are shown in the following page.

## Coverage chart



## Performance

### BS1V1F

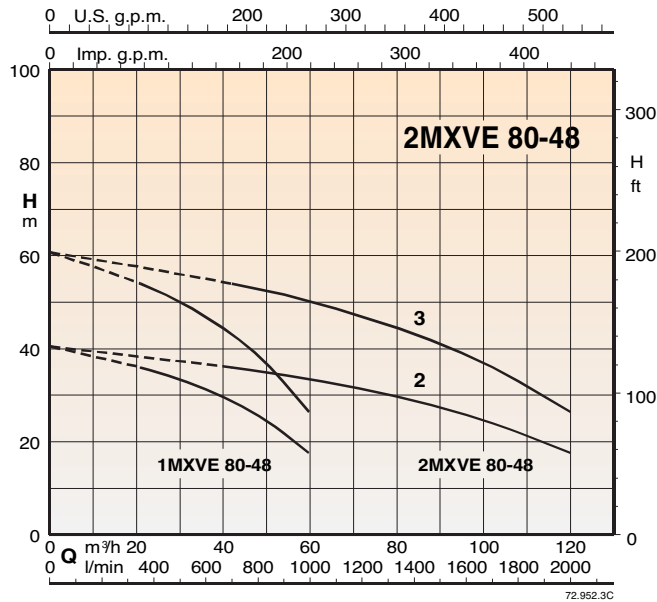
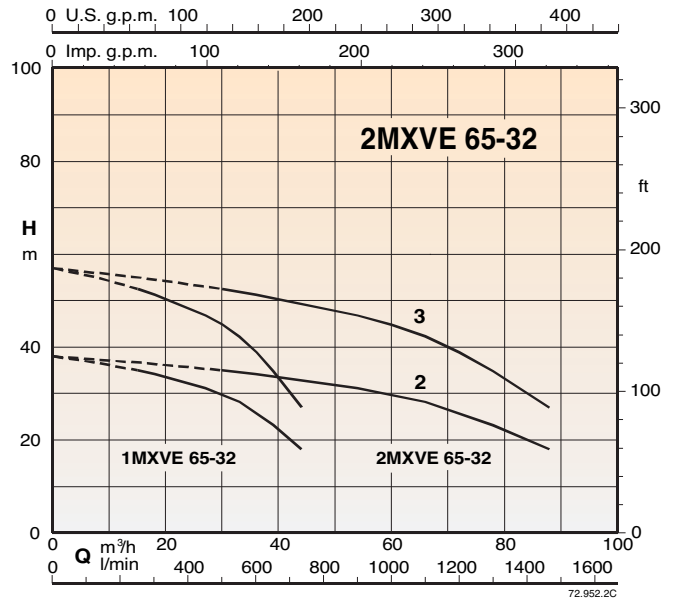
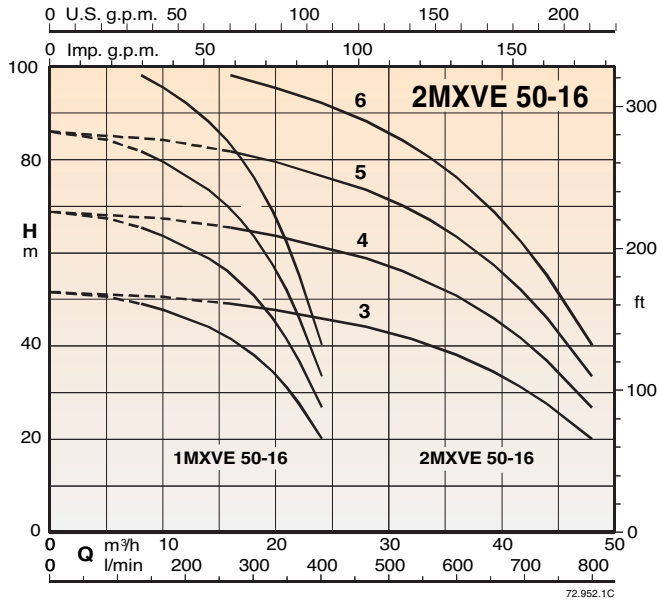
Mains: 400V 3~ Motor: 400V 3~	Motor		Vessel Membrane litre
	kW	HP	
BS1V1F 1MXVE 25-204+1MXV 25-204	0,75+0,75	1+1	24x2
BS1V1F 1MXVE 25-205+1MXV 25-205	1,1+0,75	1,5+1	24x2
BS1V1F 1MXVE 25-206+1MXV 25-206	1,1+1,1	1,5+1,5	24x2
BS1V1F 1MXVE 25-207+1MXV 25-207	1,5+1,1	2+1,5	24x2
BS1V1F 1MXVE 25-208+1MXV 25-208	1,5+1,5	2+2	24x2
BS1V1F 1MXVE 32-404+1MXV 32-404	1,1+1,1	1,5+1,5	24x2
BS1V1F 1MXVE 32-405+1MXV 32-405	1,5+1,1	2+1,5	24x2
BS1V1F 1MXVE 32-406+1MXV 32-406	1,5+1,5	2+2	24x2
BS1V1F 1MXVE 32-407+1MXV 32-407	2,2+1,5	3+2	24x2
BS1V1F 1MXVE 32-408+1MXV 32-408	2,2+2,2	3+3	24x2
BS1V1F 1MXVE 40-804+1MXV 40-804	2,2+1,5	3+2	24x2
BS1V1F 1MXVE 40-805+1MXV 40-805	2,2+2,2	3+3	24x2
BS1V1F 1MXVE 40-807+1MXV 40-807	3+3	4+4	24x2
BS1V1F 1MXVE 40-808+1MXV 40-808	4+3	5,5+4	24x2

### BS2V

Mains: 400V 3~ Motor: 400V 3~	Motor		Vessel Membrane litre
	kW	HP	
BS2V 2MXVE 25-204	0,75 x2	1 x2	24x2
BS2V 2MXVE 25-205	1,1 x2	1,5 x2	24x2
BS2V 2MXVE 25-206	1,1 x2	1,5 x2	24x2
BS2V 2MXVE 25-207	1,5 x2	2 x2	24x2
BS2V 2MXVE 25-208	1,5 x2	2 x2	24x2
BS2V 2MXVE 32-404	1,1 x2	1,5 x2	24x2
BS2V 2MXVE 32-405	1,5 x2	2 x2	24x2
BS2V 2MXVE 32-406	1,5 x2	2 x2	24x2
BS2V 2MXVE 32-407	2,2 x2	3 x2	24x2
BS2V 2MXVE 32-408	2,2 x2	3 x2	24x2
BS2V 2MXVE 40-804	2,2 x2	3 x2	24x2
BS2V 2MXVE 40-805	2,2 x2	3 x2	24x2
BS2V 2MXVE 40-807	3 x2	4 x2	24x2
BS2V 2MXVE 40-808	4 x2	5,5 x2	24x2



## Coverage chart



## Performance

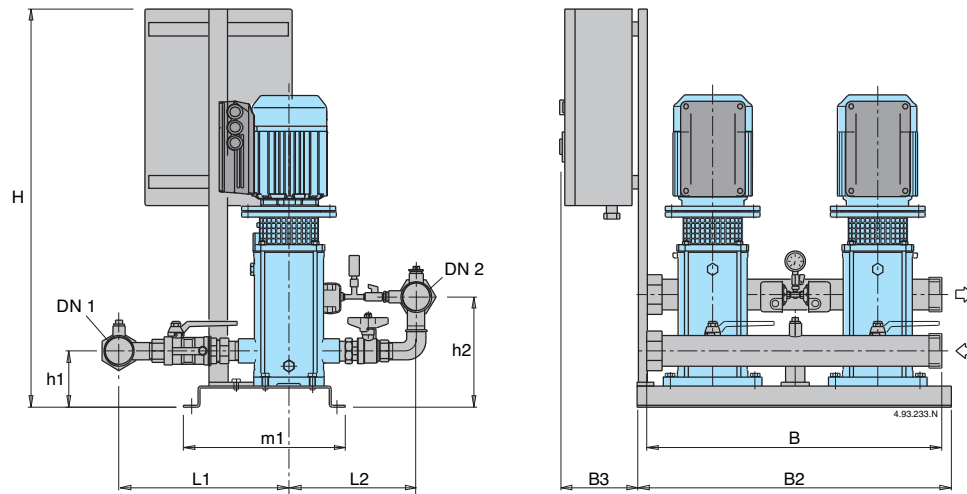
### BS1V1F

Mains: 400V 3~ Motor: 400V 3~	Motor		Vessel Membrane litre
	kW	HP	
BS1V1F 1MXVE 50-1603+1MXV 50-1603	4+3	5,5+4	24x1
BS1V1F 1MXVE 50-1604+1MXV 50-1604	5,5+4	7,5+5,5	24x1
BS1V1F 1MXVE 50-1605+1MXV 50-1605	5,5+5,5	7,5+7,5	24x1
BS1V1F 1MXVE 50-1606+1MXV 50-1606	7,5+5,5	7,5+7,5	24x1
BS1V1F 1MXVE 65-3202+1MXV 65-3202	4+4	5,5+5,5	24x1
BS1V1F 1MXVE 65-3203+1MXV 65-3203	7,5+5,5	10+7,5	24x1
BS1V1F 1MXVE 80-4802+1MXV 80-4802	5,5+5,5	7,5+7,5	24x1
BS1V1F 1MXVE 80-4803+1MXV 80-4803	7,5+7,5	10+10	24x1

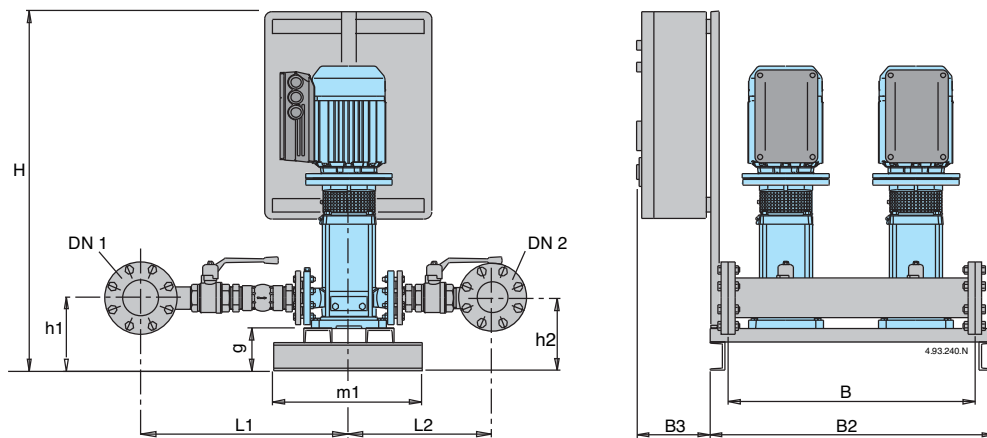
### BS2V

Mains: 400V 3~ Motor: 400V 3~	Motor		Vessel Membrane litre
	kW	HP	
BS2V 2MXVE 50-1603	4 x2	5,5 x2	24x1
BS2V 2MXVE 50-1604	5,5 x2	7,5 x2	24x1
BS2V 2MXVE 50-1605	5,5 x2	7,5 x2	24x1
BS2V 2MXVE 50-1606	7,5 x2	10 x2	24x1
BS2V 2MXVE 65-3202	4 x2	5,5 x2	24x1
BS2V 2MXVE 65-3203	7,5 x2	10 x2	24x1
BS2V 2MXVE 80-4802	5,5 x2	7,5 x2	24x1
BS2V 2MXVE 80-4803	7,5 x2	10 x2	24x1

## Dimensions and weights



TYPE	DN1	DN2	mm									kg	
			H	h1	h2	L1	L2	m1	B	B2	B3		
BS.. 2MXVE 25-204													110
BS.. 2MXVE 25-205													112
BS.. 2MXVE 25-206	G 1 1/2	G 1 1/2	860	119	218	331	254	365	600	625	160		114
BS.. 2MXVE 25-207													116
BS.. 2MXVE 25-208													126
BS.. 2MXVE 32-404													113
BS.. 2MXVE 32-405													115
BS.. 2MXVE 32-406	G 2	G 2	860	119	225	360	270	365	600	625	160		125
BS.. 2MXVE 32-407													127
BS.. 2MXVE 32-408													137
BS.. 2MXVE 40-804													126
BS.. 2MXVE 40-805													136
BS.. 2MXVE 40-807	G 2 1/2	G 2 1/2	860	124	245	445	350	365	600	625	160		164
BS.. 2MXVE 40-808													166



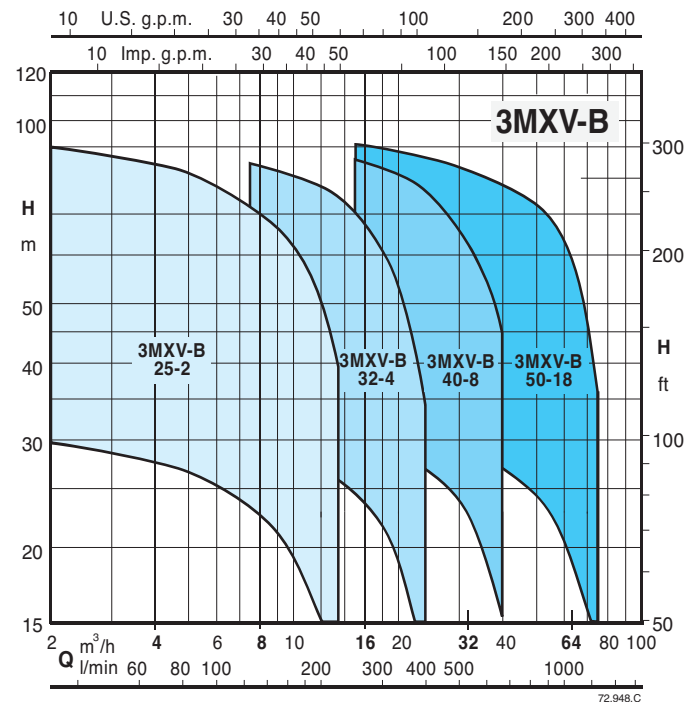
TYPE	DN1	DN2	mm										kg	
			H	h1	h2	L1	L2	B	B2	B3	m1	g		
BS.. 2MXVE 50-1603														282
BS.. 2MXVE 50-1604														298
BS.. 2MXVE 50-1605	G 3	G 3	935	215	215	590	415	700	950	200	550	125		336
BS.. 2MXVE 50-1606										200				340
BS.. 2MXVE 65-3202	100	100	1335	230	230	660	475	750	950	160	550	125		358
BS.. 2MXVE 65-3203										200				396
BS.. 2MXVE 80-4802	125	125	1335	230	230	725	495	750	950	200	550	125		408
BS.. 2MXVE 80-4803										250				432

# 3 MXV-B

Pressure boosting sets with three Vertical Multi-Stage Pumps  
Fixed speed pump or **Variable speed pump (frequency converter)**



Coverage chart



## Construction

Automatic pressure boosting plant consisting of three vertical multi-stage close coupled pumps complete with ball, non return valve on the suction side and ball valves on the discharge side.

Suction and delivery manifolds are in AISI 304.

Connections are located on the delivery manifold for the installation of three 20 litres cylindrical vessels (for 3MXV-B 25-32-40).

Connections are located on the delivery manifold for the installation of two 20 litres cylindrical vessels (for 3MXV-B 50).

### Electrical control boards:

- with microprocessor for fixed speed pump units (see page 422).
- with frequency converter for variable speed pump units (see page 423).

The unit includes one pressure gauge and three adjustable differential pressure switches or pressure transducer (for sets with frequency converter).

## Operation

### BS 3F Fixed speed pump

Depending on the reduction of the pressure in the system, the pressure switches determine the starting up of the pumps in sequence and the microprocessor alternates the starts.

### BS1V2F Pumps at variable speed with one frequency converter

According to the water consumption, one or more pumps start, one at variable speed and the others at fixed speed, to grant the water quantity required at the set pressure.

### BS3V Pumps at variable speed with three frequency converter

Depending on water consumption, one or more pumps are activated, all at variable speed, in order to guarantee the quantity of water required at the set pressure.

## Applications

To supply water in civil and industrial buildings.

As pressure boosting pump to increase water pressure when needed (follow local rules).

## Motors

2-pole induction motors, 50 Hz, n = 2900 rpm, suitable for operation with frequency converter.

- Three-phase 230/400V ± 10%.

Insulation class F.

Protection IP 54.

Constructed in accordance with: IEC 60034.

Other voltages and frequencies on request.

## Vessels

When installing the unit, connect in the delivery section to a diaphragm or galvanised tank.

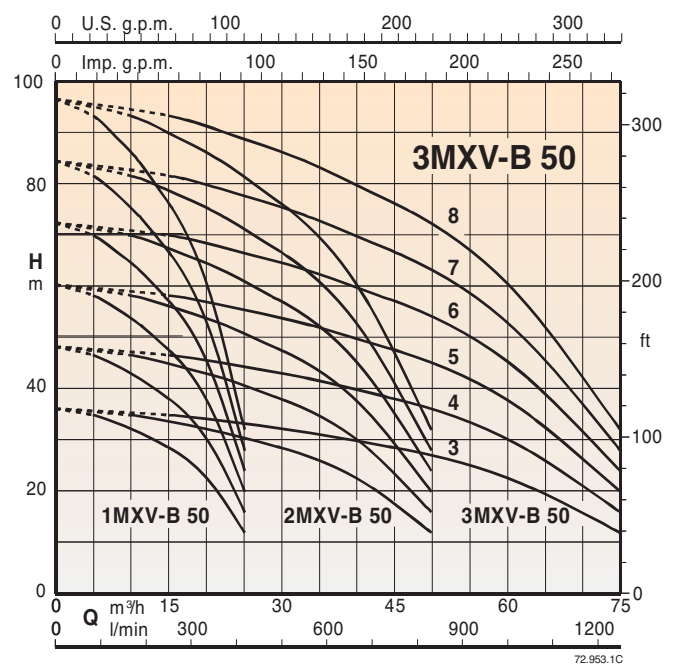
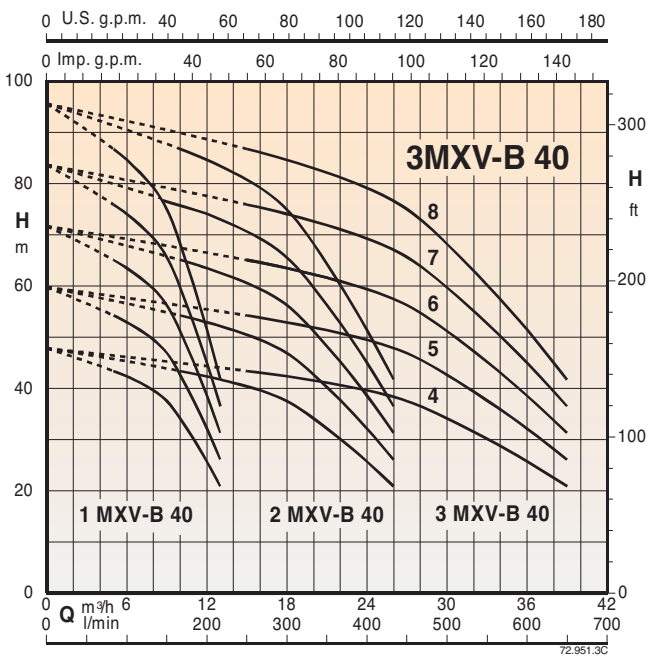
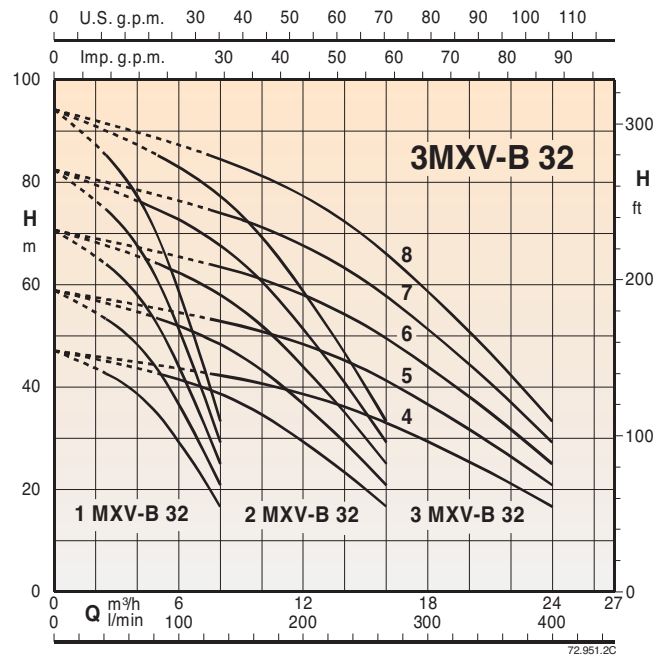
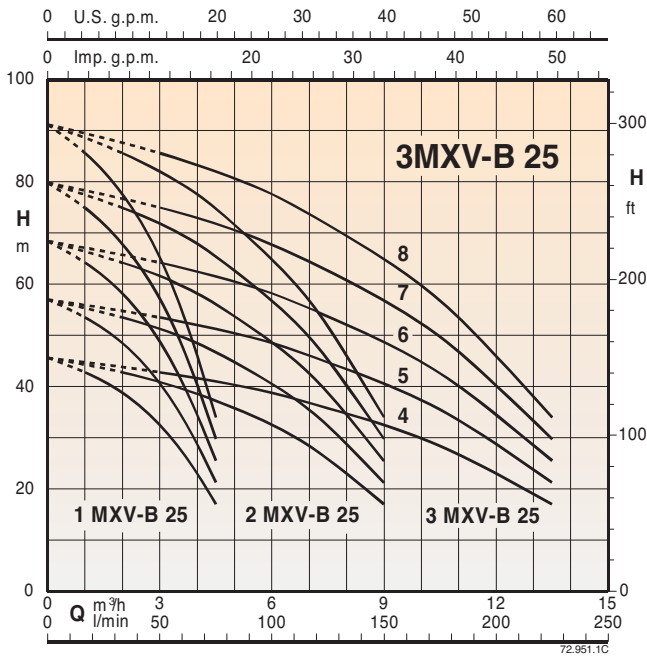
The recommended sized are shown in the following page.

# 3 MXV-B

Pressure boosting sets with three Vertical Multi-Stage Pumps  
 Fixed speed pump or Variable speed pump (frequency converter)



## Coverage chart



## Performance

### BS3F

Mains: 400V 3~ Motor: 400V 3~	Motor		Pres. switch bar	Pres. switch bar	Pres. switch bar	Average capacity		Maximum capacity		Membrane V. litre	Vessel litre
	kW	HP				Q l/min	H m	Q l/min	H m		
BS3F 3MXV-B 25-204	0,75+0,75+0,75	1+1+1	2,5±4,0	2,2±3,7	1,9±3,4	165	30	220	19	40	100
BS3F 3MXV-B 25-205	0,75+0,75+0,75	1+1+1	3,5±5,0	3,2±4,7	2,9±4,4	155	40	200	29	50	300
BS3F 3MXV-B 25-206	1,1+1,1+1,1	1,5+1,5+1,5	4,5±6,0	4,2±5,7	3,9±5,4	145	50	190	39	50	300
BS3F 3MXV-B 25-207	1,1+1,1+1,1	1,5+1,5+1,5	5,5±7,0	5,2±6,7	4,9±6,4	142	60	175	49	60	300
BS3F 3MXV-B 25-208	1,5+1,5+1,5	2+2+2	6,5±8,0	6,2±7,7	5,9±7,4	132	70	170	59	80	500
BS3F 3MXV-B 32-404	1,1+1,1+1,1	1,5+1,5+1,5	2,3±3,8	2,0±3,5	1,7±3,2	303	30	395	19	100	200
BS3F 3MXV-B 32-405	1,1+1,1+1,1	1,5+1,5+1,5	3,4±4,9	3,1±4,6	2,8±4,3	280	40	350	29	100	300
BS3F 3MXV-B 32-406	1,5+1,5+1,5	2+2+2	4,4±5,9	4,1±5,6	3,8±5,3	270	50	330	39	100	300
BS3F 3MXV-B 32-407	1,5+1,5+1,5	2+2+2	5,5±7,0	5,2±6,7	4,9±6,4	260	60	310	49	200	300
BS3F 3MXV-B 32-408/A	2,2+2,2+2,2	3+3+3	6,5±8,0	6,2±7,7	5,9±7,4	245	70	300	59	200	500
BS3F 3MXV-B 40-804	1,5+1,5+1,5	2+2+2	2,5±4,0	2,2±3,7	1,9±3,4	550	30	650	19	200	300
BS3F 3MXV-B 40-805/A	2,2+2,2+2,2	3+3+3	3,5±5,0	3,2±4,7	2,9±4,4	525	40	620	29	300	500
BS3F 3MXV-B 40-806/A	2,2+2,2+2,2	3+3+3	4,5±6,0	4,2±5,7	3,9±5,4	510	50	600	39	300	500
BS2F 3MXV-B 40-807/A	3+3+3	4+4+4	5,5±7,0	5,2±6,7	4,9±6,4	500	60	580	49	300	500
BS2F 3MXV-B 40-808/A	3+3+3	4+4+4	6,5±8,0	6,2±7,7	5,9±7,4	490	70	560	59	300	500
BS2F 3MXV-B 50-1803/A	2,2+2,2+2,2	3+3+3	1,8±3,0	1,5±2,7	1,2±2,4	1160	21	1250	12	500	800
BS2F 3MXV-B 50-1804/A	3+3+3	4+4+4	2,5±4,0	2,2±3,7	1,9±3,4	1000	30	1200	19	500	800
BS2F 3MXV-B 50-1805/A	3,7+3,7+3,7	5+5+5	3,5±5,0	3,2±4,7	2,9±4,4	950	40	1130	29	500	800
BS2F 3MXV-B 50-1806/A	4+4+4	5,5+5,5+5,5	4,5±6,0	4,2±5,7	3,9±5,4	920	50	1100	39	500	1000
BS2F 3MXV-B 50-1807/A	5,5+5,5+5,5	7,5+7,5+7,5	5,5±7,0	5,2±6,7	4,9±6,4	880	60	1050	49	500	1000
BS2F 3MXV-B 50-1808/A	5,5+5,5+5,5	7,5+7,5+7,5	6,5±8,0	6,2±7,7	5,9±7,4	790	70	1030	59	500	1000

### BS1V2F

Mains: 400V 3~ Motor: 400V 3~	Motor		Vessel Membrane litre
	kW	HP	
BS1V2F 3MXV-B 25-204	0,75 x3	1 x3	24x3
BS1V2F 3MXV-B 25-205	0,75 x3	1 x3	24x3
BS1V2F 3MXV-B 25-206	1,1 x3	1,5 x3	24x3
BS1V2F 3MXV-B 25-207	1,1 x3	1,5 x3	24x3
BS1V2F 3MXV-B 25-208	1,5 x3	2 x3	24x3
BS1V2F 3MXV-B 32-404	1,1 x3	1,5 x3	24x3
BS1V2F 3MXV-B 32-405	1,1 x3	1,5 x3	24x3
BS1V2F 3MXV-B 32-406	1,5 x3	2 x3	24x3
BS1V2F 3MXV-B 32-407	1,5 x3	2 x3	24x3
BS1V2F 3MXV-B 32-408/A	2,2 x3	3 x3	24x3
BS1V2F 3MXV-B 40-804	1,5 x3	2 x3	24x3
BS1V2F 3MXV-B 40-805/A	2,2 x3	3 x3	24x3
BS1V2F 3MXV-B 40-806/A	2,2 x3	3 x3	24x3
BS1V2F 3MXV-B 40-807/A	3 x3	4 x3	24x3
BS1V2F 3MXV-B 40-808/A	3 x3	4 x3	24x3
BS1V2F 3MXV-B 50-1803/A	2,2 x3	3 x3	24x2
BS1V2F 3MXV-B 50-1804/A	3 x3	4 x3	24x2
BS1V2F 3MXV-B 50-1805/A	3,7 x3	5 x3	24x2
BS1V2F 3MXV-B 50-1806/A	4 x3	5,5 x3	24x2
BS1V2F 3MXV-B 50-1807/A	5,5 x3	7,5 x3	24x2
BS1V2F 3MXV-B 50-1808/A	5,5 x3	7,5 x3	24x2

### BS3V

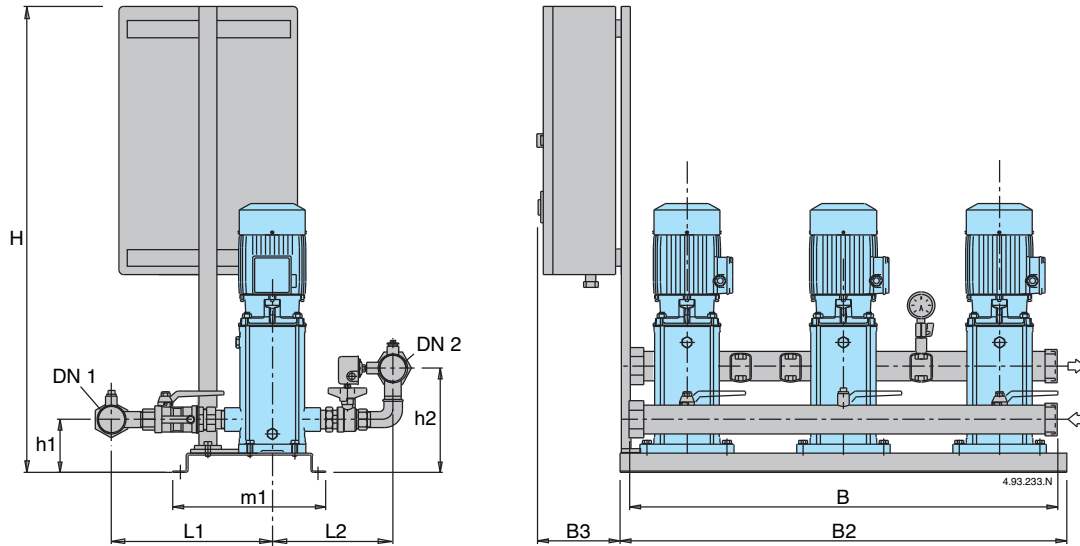
Mains: 400V 3~ Motor: 400V 3~	Motor		Vessel Membrane litre
	kW	HP	
BS3V 3MXV-B 25-204	0,75 x3	1 x3	24x3
BS3V 3MXV-B 25-205	0,75 x3	1 x3	24x3
BS3V 3MXV-B 25-206	1,1 x3	1,5 x3	24x3
BS3V 3MXV-B 25-207	1,1 x3	1,5 x3	24x3
BS3V 3MXV-B 25-208	1,5 x3	2 x3	24x3
BS3V 3MXV-B 32-404	1,1 x3	1,5 x3	24x3
BS3V 3MXV-B 32-405	1,1 x3	1,5 x3	24x3
BS3V 3MXV-B 32-406	1,5 x3	2 x3	24x3
BS3V 3MXV-B 32-407	1,5 x3	2 x3	24x3
BS3V 3MXV-B 32-408/A	2,2 x3	3 x3	24x3
BS3V 3MXV-B 40-804	1,5 x3	2 x3	24x3
BS3V 3MXV-B 40-805/A	2,2 x3	3 x3	24x3
BS3V 3MXV-B 40-806/A	2,2 x3	3 x3	24x3
BS3V 3MXV-B 40-807/A	3 x3	4 x3	24x3
BS3V 3MXV-B 40-808/A	3 x3	4 x3	24x3
BS3V 3MXV-B 50-1803/A	2,2 x3	3 x3	24x2
BS3V 3MXV-B 50-1804/A	3 x3	4 x3	24x2
BS3V 3MXV-B 50-1805/A	3,7 x3	5 x3	24x2
BS3V 3MXV-B 50-1806/A	4 x3	5,5 x3	24x2
BS3V 3MXV-B 50-1807/A	5,5 x3	7,5 x3	24x2
BS3V 3MXV-B 50-1808/A	5,5 x3	7,5 x3	24x2

# 3 MXV-B

Pressure boosting sets with three Vertical Multi-Stage Pumps  
 Fixed speed pump or **Variable speed pump (frequency converter)**



## Dimensions and weights



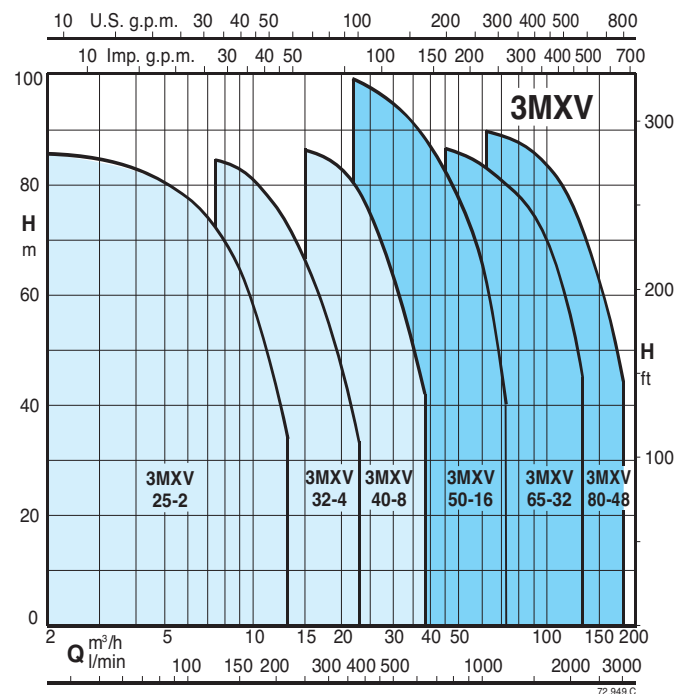
TYPE	DN1	DN2	mm									kg	
			H	h1	h2	L1	L2	B	B2	B3	m1		
BS.. 3MXV-B 25-204													103
BS.. 3MXV-B 25-205													105
BS.. 3MXV-B 25-206	G 2	G 2	1060	134	233	337	254	950	1000	200	406		107
BS.. 3MXV-B 25-207													118
BS.. 3MXV-B 25-208													120
BS.. 3MXV-B 32-404													104
BS.. 3MXV-B 32-405													108
BS.. 3MXV-B 32-406	G 2 1/2	G 2 1/2	1060	134	240	368	270	950	1000	200	406		113
BS.. 3MXV-B 32-407													118
BS.. 3MXV-B 32-408/A													122
BS.. 3MXV-B 40-804													111
BS.. 3MXV-B 40-805/A													117
BS.. 3MXV-B 40-806/A	G 3	G 3	1060	139	260	452	350	950	1000	200	406		123
BS.. 3MXV-B 40-807/A													156
BS.. 3MXV-B 40-808/A													159
BS.. 3MXV-B 50-1803/A													251
BS.. 3MXV-B 50-1804/A													281
BS.. 3MXV-B 50-1805/A	100	100	1090	215	215	507	418	1200	1400	200	550		296
BS.. 3MXV-B 50-1806/A													299
BS.. 3MXV-B 50-1807/A													332
BS.. 3MXV-B 50-1808/A													335

# 3 MXV

Pressure boosting sets with three Vertical Multi-Stage Pumps  
Fixed speed pump or **Variable speed pump (frequency converter)**



Coverage chart



## Construction

Automatic pressure boosting plant consisting of three vertical multi-stage pumps complete with ball, non return valve on the suction side and ball valves on the discharge side.

Suction and delivery manifolds are in AISI 304.

Connections are located on the delivery manifold for the installation of three 20 litres cylindrical vessels (for 3MXV 25-32-40).

Connections are located on the delivery manifold for the installation of two 20 litres cylindrical vessels (for 3MXV 50-65-80).

### Electrical control boards:

- with microprocessor for fixed speed pump units (see page 422). Motor starting is D.O.L. up to 5,5 kW and Y/Δ for power rating 7,5 up to 15 kW.
- with frequency converter for variable speed pump units (see page 423).

The unit includes one pressure gauge and three adjustable differential pressure switches or pressure transducer (for sets with frequency converter).

## Operation

### BS 3F Fixed speed pump

Depending on the reduction of the pressure in the system, the pressure switches determine the starting up of the pumps in sequence and the microprocessor alternates the starts.

### BS1V2F Pumps at variable speed with one frequency converter

According to the water consumption, one or more pumps start, one at variable speed and the others at fixed speed, to grant the water quantity required at the set pressure.

### BS3V Pumps at variable speed with three frequency converter

Depending on water consumption, one or more pumps are activated, all at variable speed, in order to guarantee the quantity of water required at the set pressure.

## Applications

To supply water in civil and industrial buildings.

As pressure boosting pump to increase water pressure when needed (follow local rules).

## Motors

2-pole induction motors, 50 Hz, n = 2900 rpm, suitable for operation with frequency converter.

- Three-phase 230/400V ± 10% up to 3 kW;
- 400/690V ± 10% from 4 to 15 kW.

Insulation class F.

Protection IP 55.

Constructed in accordance with: IEC 60034.

Other voltages and frequencies on request.

## Vessels

When installing the unit, connect in the delivery section to a diaphragm or galvanised tank.

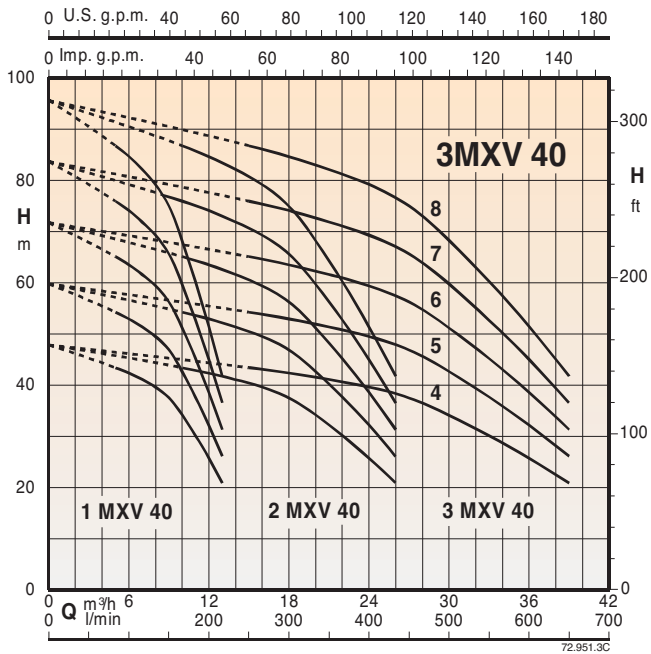
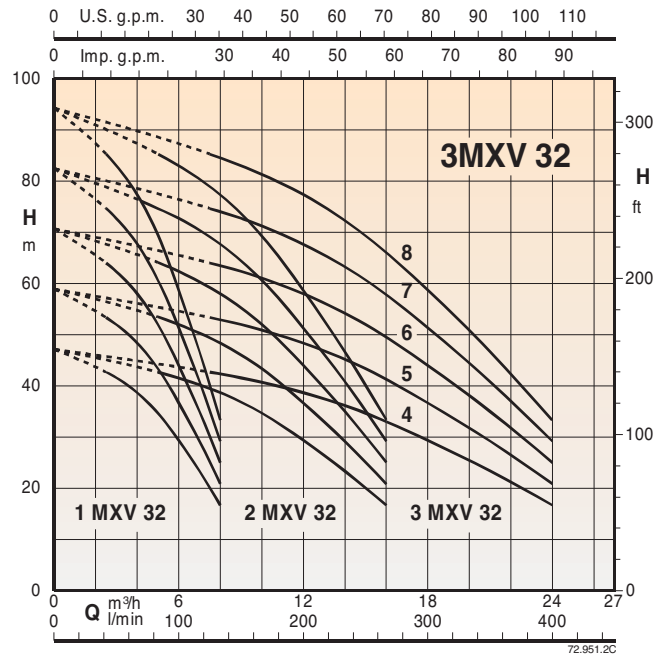
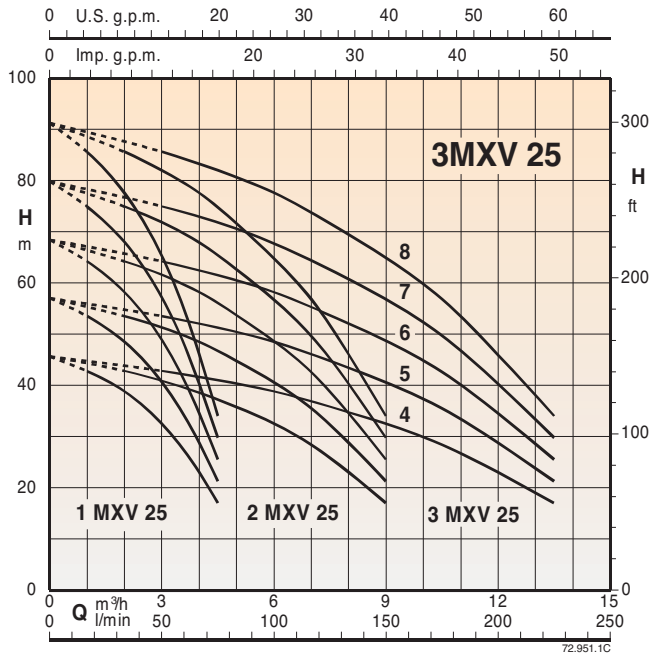
The recommended sized are shown in the following page.

# 3 MXV

Pressure boosting sets with three Vertical Multi-Stage Pumps  
 Fixed speed pump or Variable speed pump (frequency converter)

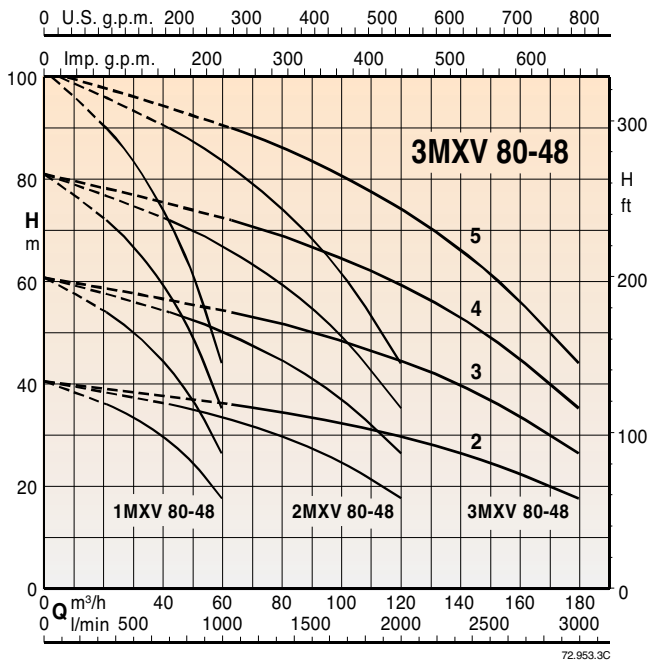
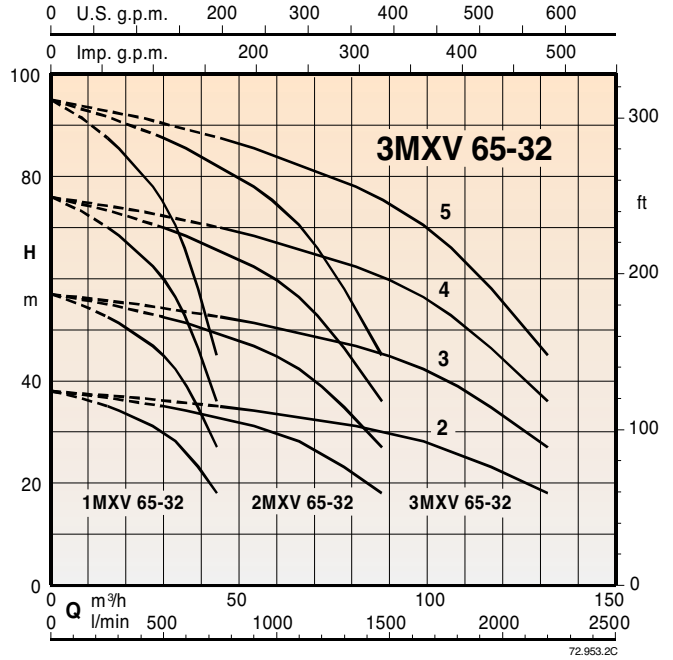
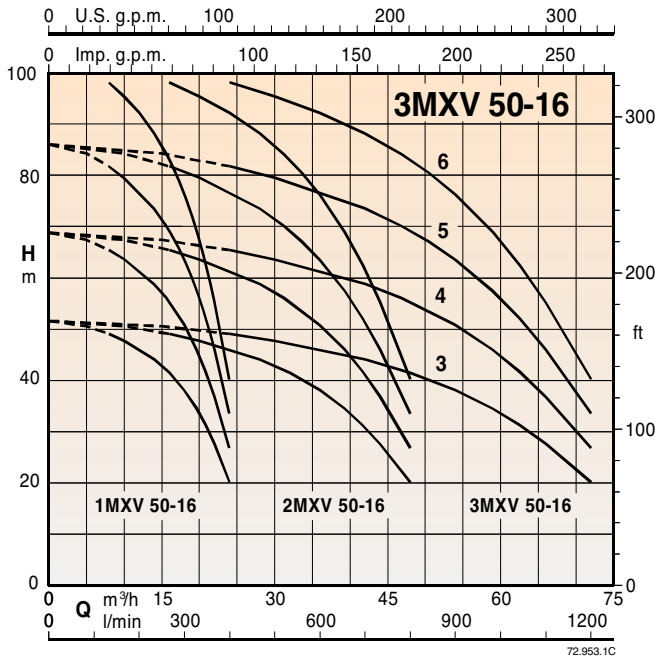


## Coverage chart





## Coverage chart



## Performance

### BS3F

Mains: 400V 3~ Motor: 400V 3~	Motor		Pres. switch	Pres. switch	Pres. switch	Average capacity		Maximum capacity		Membrane V.	Vessel
	kW	HP	bar	bar	bar	Q l/min	H m	Q l/min	H m	litre	litre
BS3F 3MXV 25-204	0,75+0,75+0,75	1+1+1	2,5+4,0	2,2+3,7	1,9+3,4	165	30	220	19	40	100
BS3F 3MXV 25-205	0,75+0,75+0,75	1+1+1	3,5+5,0	3,2+4,7	2,9+4,4	155	40	200	29	50	300
BS3F 3MXV 25-206	1,1+1,1+1,1	1,5+1,5+1,5	4,5+6,0	4,2+5,7	3,9+5,4	145	50	190	39	50	300
BS3F 3MXV 25-207	1,1+1,1+1,1	1,5+1,5+1,5	5,5+7,0	5,2+6,7	4,9+6,4	142	60	175	49	60	300
BS3F 3MXV 25-208	1,5+1,5+1,5	2+2+2	6,5+8,0	6,2+7,7	5,9+7,4	132	70	170	59	80	500
BS3F 3MXV 32-404	1,1+1,1+1,1	1,5+1,5+1,5	2,3+3,8	2,0+3,5	1,7+3,2	303	30	395	19	100	200
BS3F 3MXV 32-405	1,1+1,1+1,1	1,5+1,5+1,5	3,4+4,9	3,1+4,6	2,8+4,3	280	40	350	29	100	300
BS3F 3MXV 32-406	1,5+1,5+1,5	2+2+2	4,5+6,0	4,2+5,7	3,9+5,4	270	50	330	39	100	300
BS3F 3MXV 32-407	1,5+1,5+1,5	2+2+2	5,5+7,0	5,2+6,7	4,9+6,4	260	60	310	49	200	300
BS3F 3MXV 32-408	2,2+2,2+2,2	3+3+3	6,5+8,0	6,2+7,7	5,9+7,4	245	70	300	59	200	500
BS3F 3MXV 40-804	1,5+1,5+1,5	2+2+2	2,5+4,0	2,2+3,7	1,9+3,4	550	30	650	19	200	300
BS3F 3MXV 40-805	2,2+2,2+2,2	3+3+3	3,5+5,0	3,2+4,7	2,9+4,4	525	40	620	29	300	500
BS3F 3MXV 40-806	2,2+2,2+2,2	3+3+3	4,5+6,0	4,2+5,7	3,9+5,4	510	50	600	39	300	500
BS3F 3MXV 40-807	3+3+3	4+4+4	5,5+7,0	5,2+6,7	4,9+6,4	500	60	580	49	300	500
BS3F 3MXV 40-808	3+3+3	4+4+4	6,5+8,0	6,2+7,7	5,9+7,4	490	70	560	59	300	500
BS3F 3MXV 50-1603	3+3+3	4+4+4	3,0+4,5	2,5+4,0	2,0+3,5	920	38	1200	20	300	500
BS3F 3MXV 50-1604	4+4+4	5,5+5,5+5,5	4,5+6,0	4,0+5,5	3,5+5,0	885	51	1120	35	500	800
BS3F 3MXV 50-1605	5,5+5,5+5,5	7,5+7,5+7,5	6,0+7,5	5,5+7,0	5,0+6,5	875	67	1060	50	500	1000
BS3F 3MXV 50-1606	5,5+5,5+5,5	7,5+7,5+7,5	7,5+9,0	7,0+8,5	6,5+8,0	860	82	1030	65	-	1000
BS3F 3MXV 65-3202	4+4+4	5,5+5,5+5,5	2,2+3,4	1,9+3,1	1,6+2,8	1620	28	2200	16	-	1500
BS3F 3MXV 65-3203	5,5+5,5+5,5	7,5+7,5+7,5	3,8+5,0	3,3+4,5	2,8+4,0	1580	42	2150	28	-	1500
BS3F 3MXV 65-3204	7,5+7,5+7,5	10+10+10	5,0+6,5	4,5+6,0	4,0+5,5	1620	57	2100	40	-	2000
BS3F 3MXV 65-3205	11+11+11	15+15+15	6,5+8,0	6,0+7,5	5,5+7,0	1620	73	2000	55	-	3000
BS3F 3MXV 80-4802	5,5+5,5+5,5	7,5+7,5+7,5	2,2+3,5	1,9+3,2	1,6+2,9	2000	30	3000	17	-	2000
BS3F 3MXV 80-4803	7,5+7,5+7,5	10+10+10	3,8+5,0	3,3+4,5	2,8+4,0	2075	44	2900	28	-	3000
BS3F 3MXV 80-4804	11+11+11	15+15+15	5,0+6,5	4,5+6,0	4,0+5,5	2072	58	2850	40	-	4000
BS3F 3MXV 80-4805	15+15+15	20+20+20	6,5+8,0	6,0+7,5	5,5+7,0	2075	73	2700	55	-	5000

### BS1V2F

Mains: 400V 3~ Motor: 400V 3~	Motor		Vessel Membrane litre
	kW	HP	
BS1V2F 3MXV 25-204	0,75 x3	1 x3	24x3
BS1V2F 3MXV 25-205	0,75 x3	1 x3	24x3
BS1V2F 3MXV 25-206	1,1 x3	1,5 x3	24x3
BS1V2F 3MXV 25-207	1,1 x3	1,5 x3	24x3
BS1V2F 3MXV 25-208	1,5 x3	2 x3	24x3
BS1V2F 3MXV 32-404	1,1 x3	1,5 x3	24x3
BS1V2F 3MXV 32-405	1,1 x3	1,5 x3	24x3
BS1V2F 3MXV 32-406	1,5 x3	2 x3	24x3
BS1V2F 3MXV 32-407	1,5 x3	2 x3	24x3
BS1V2F 3MXV 32-408	2,2 x3	3 x3	24x3
BS1V2F 3MXV 40-804	1,5 x3	2 x3	24x3
BS1V2F 3MXV 40-805	2,2 x3	3 x3	24x3
BS1V2F 3MXV 40-806	2,2 x3	3 x3	24x3
BS1V2F 3MXV 40-807	3 x3	4 x3	24x3
BS1V2F 3MXV 40-808	3 x3	4 x3	24x3
BS1V2F 3MXV 50-1603	3 x3	4 x3	24x2
BS1V2F 3MXV 50-1604	4 x3	5,5 x3	24x2
BS1V2F 3MXV 50-1605	5,5 x3	7,5 x3	24x2
BS1V2F 3MXV 50-1606	5,5 x3	7,5 x3	24x2
BS1V2F 3MXV 65-3202	4 x3	5,5 x3	24x2
BS1V2F 3MXV 65-3203	5,5 x3	7,5 x3	24x2
BS1V2F 3MXV 65-3204	7,5 x3	10 x3	24x2
BS1V2F 3MXV 65-3205	11 x3	15 x3	24x2
BS1V2F 3MXV 80-4802	5,5 x3	7,5 x3	24x2
BS1V2F 3MXV 80-4803	7,5 x3	10 x3	24x2
BS1V2F 3MXV 80-4804	11 x3	15 x3	24x2
BS1V2F 3MXV 80-4805	15 x3	20 x3	24x2

### BS3V

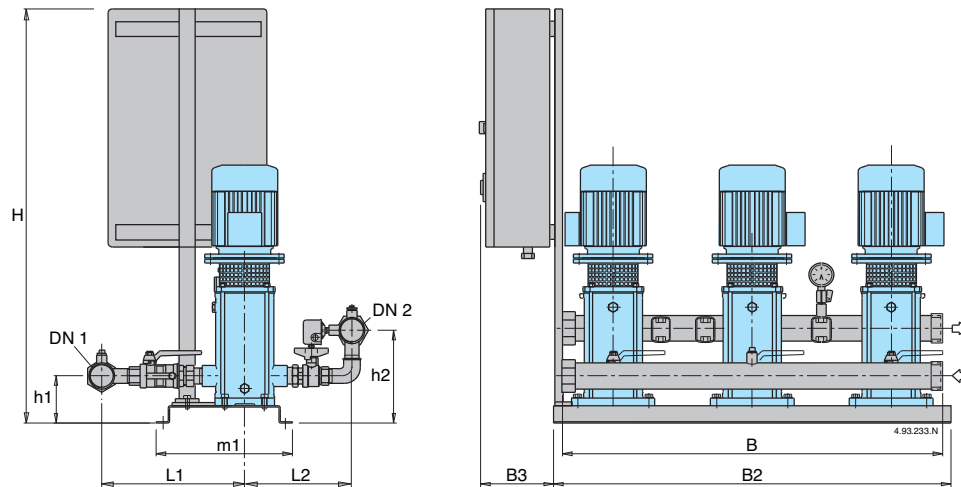
Mains: 400V 3~ Motor: 400V 3~	Motor		Vessel Membrane litre
	kW	HP	
BS3V 3MXV 25-204	0,75 x3	1 x3	24x3
BS3V 3MXV 25-205	0,75 x3	1 x3	24x3
BS3V 3MXV 25-206	1,1 x3	1,5 x3	24x3
BS3V 3MXV 25-207	1,1 x3	1,5 x3	24x3
BS3V 3MXV 25-208	1,5 x3	2 x3	24x3
BS3V 3MXV 32-404	1,1 x3	1,5 x3	24x3
BS3V 3MXV 32-405	1,1 x3	1,5 x3	24x3
BS3V 3MXV 32-406	1,5 x3	2 x3	24x3
BS3V 3MXV 32-407	1,5 x3	2 x3	24x3
BS3V 3MXV 32-408	2,2 x3	3 x3	24x3
BS3V 3MXV 40-804	1,5 x3	2 x3	24x3
BS3V 3MXV 40-805	2,2 x3	3 x3	24x3
BS3V 3MXV 40-806	2,2 x3	3 x3	24x3
BS3V 3MXV 40-807	3 x3	4 x3	24x3
BS3V 3MXV 40-808	3 x3	4 x3	24x3
BS3V 3MXV 50-1603	3 x3	4 x3	24x2
BS3V 3MXV 50-1604	4 x3	5,5 x3	24x2
BS3V 3MXV 50-1605	5,5 x3	7,5 x3	24x2
BS3V 3MXV 50-1606	5,5 x3	7,5 x3	24x2
BS3V 3MXV 65-3202	4 x3	5,5 x3	24x2
BS3V 3MXV 65-3203	5,5 x3	7,5 x3	24x2
BS3V 3MXV 65-3204	7,5 x3	10 x3	24x2
BS3V 3MXV 65-3205	11 x3	15 x3	24x2
BS3V 3MXV 80-4802	5,5 x3	7,5 x3	24x2
BS3V 3MXV 80-4803	7,5 x3	10 x3	24x2
BS3V 3MXV 80-4804	11 x3	15 x3	24x2
BS3V 3MXV 80-4805	15 x3	20 x3	24x2

# 3 MXV

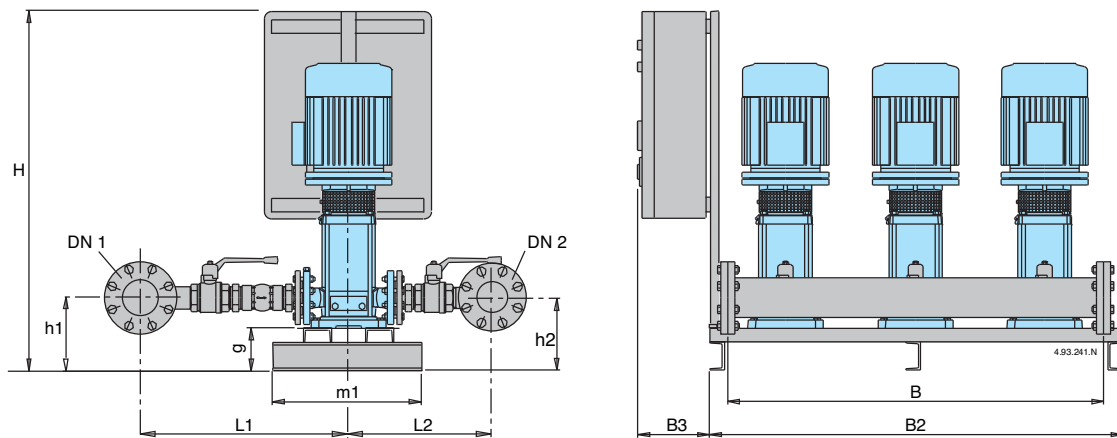
Pressure boosting sets with three Vertical Multi-Stage Pumps  
 Fixed speed pump or **Variable speed pump (frequency converter)**



## Dimensions and weights



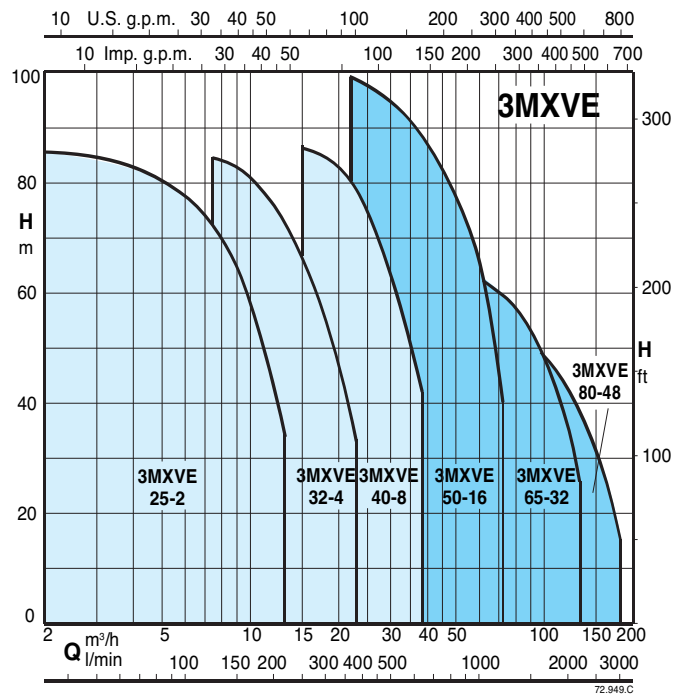
TYPE	DN1	DN2	mm								kg	
			H	h1	h2	L1	L2	B	B2	B3		m1
BS.. 3MXV 25-204	G 2	G 2	1060	134	233	337	254	950	1000	200	406	110
BS.. 3MXV 25-205												112
BS.. 3MXV 25-206												114
BS.. 3MXV 25-207												116
BS.. 3MXV 25-208												126
BS.. 3MXV 32-404	G 2 1/2	G 2 1/2	1060	134	240	368	270	950	1000	200	406	113
BS.. 3MXV 32-405												115
BS.. 3MXV 32-406												125
BS.. 3MXV 32-407												127
BS.. 3MXV 32-408												137
BS.. 3MXV 40-804	G 3	G 3	1060	139	260	452	350	950	1000	200	406	126
BS.. 3MXV 40-805												136
BS.. 3MXV 40-806												138
BS.. 3MXV 40-807												164
BS.. 3MXV 40-808												166



TYPE	DN1	DN2	mm									kg	
			H	h1	h2	L1	L2	B	B2	B3	m1		g
BS.. 3MXV 50-1603	100	100	1135	215	215	600	425	1150	1500	200	550	125	362
BS.. 3MXV 50-1604										200			385
BS.. 3MXV 50-1605										250			448
BS.. 3MXV 50-1606										250			454
BS.. 3MXV 65-3202	125	125	1135	230	230	672	487	1200	1500	200	550	125	448
BS.. 3MXV 65-3203			1135							510			
BS.. 3MXV 65-3204			1535							546			
BS.. 3MXV 65-3205			1535							634			
BS.. 3MXV 65-3205			1535							634			
BS.. 3MXV 80-4802	150	150	1135	230	230	738	508	1200	1500	250	550	125	518
BS.. 3MXV 80-4803			1535							560			
BS.. 3MXV 80-4804			1535							645			
BS.. 3MXV 80-4805			1535							695			



Coverage chart



## Construction

Automatic pressure boosting plant consisting of three vertical multi-stage pumps complete with ball, non return valve on the suction side and ball valves on the discharge side.

Suction and delivery manifolds are in AISI 304.

Connections are located on the delivery manifold for the installation of three 20 litres cylindrical vessels (for 3MXVE 25-32-40).

Connections are located on the delivery manifold for the installation of two 20 litres cylindrical vessels (for 3MXVE 50-65-80).

The unit includes a pressure transducer.

## Operation

### BS1V2F Pumps at variable speed with one frequency converter

According to the water consumption, one or more pumps start, one at variable speed and the others at fixed speed, to grant the water quantity required at the set pressure.

### BS3V Pumps at variable speed with three frequency converter

Depending on water consumption, one or more pumps are activated, all at variable speed, in order to guarantee the quantity of water required at the set pressure.

## Applications

To supply water in civil and industrial buildings.

As pressure boosting pump to increase water pressure when needed (follow local rules).

## Motors

2-pole induction motors, 50 Hz, n = 2900 rpm, suitable for operation with frequency converter.

- Three-phase 230/400V ± 10% 400/690V.

Insulation class F.

Protection IP 55.

Constructed in accordance with: IEC 60034.

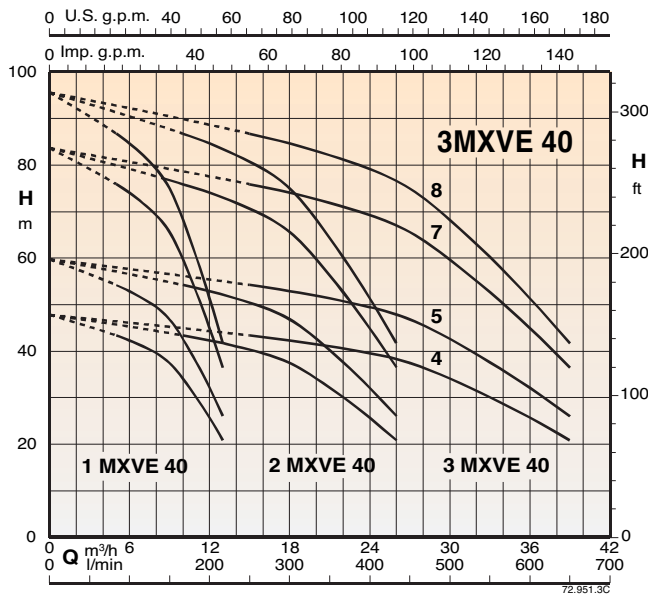
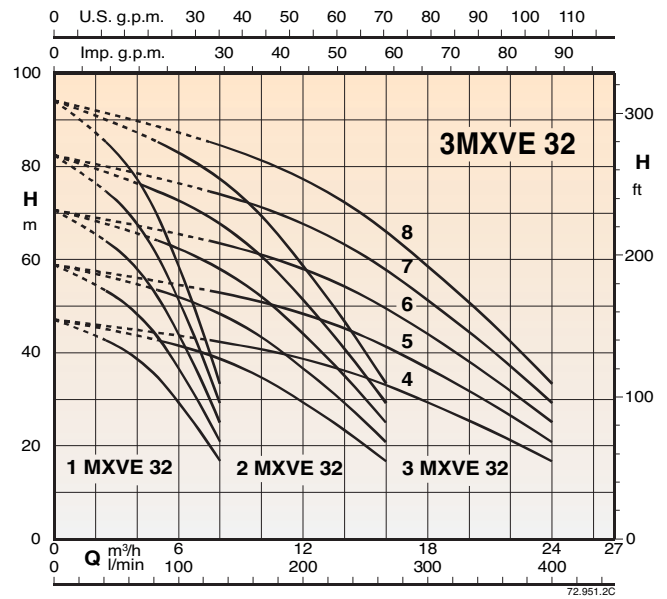
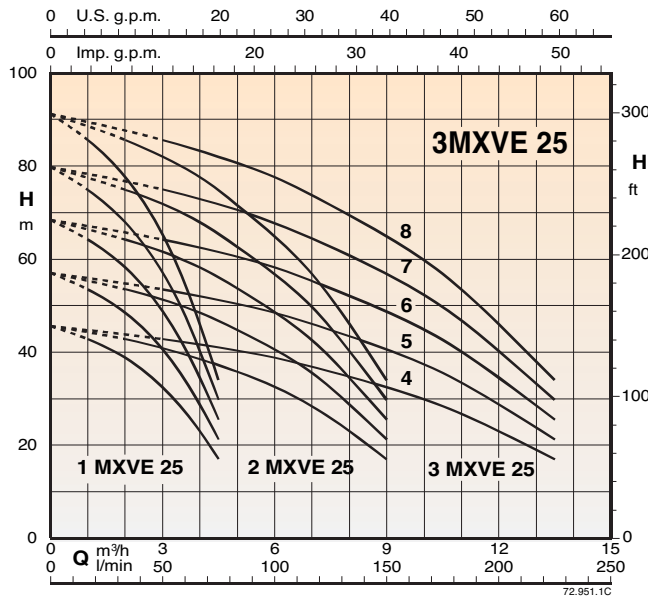
Other voltages and frequencies on request.

## Vessels

When installing the unit, connect in the delivery section to a diaphragm or galvanised tank.

The recommended sized are shown in the following page.

## Coverage chart



## Performance

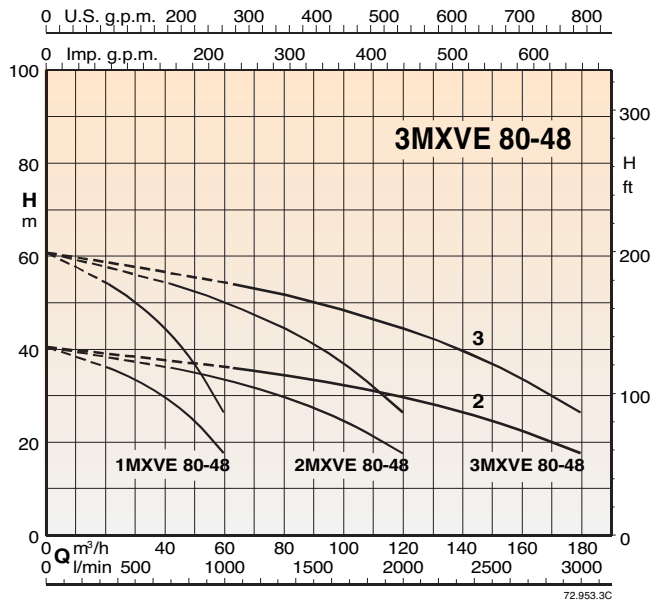
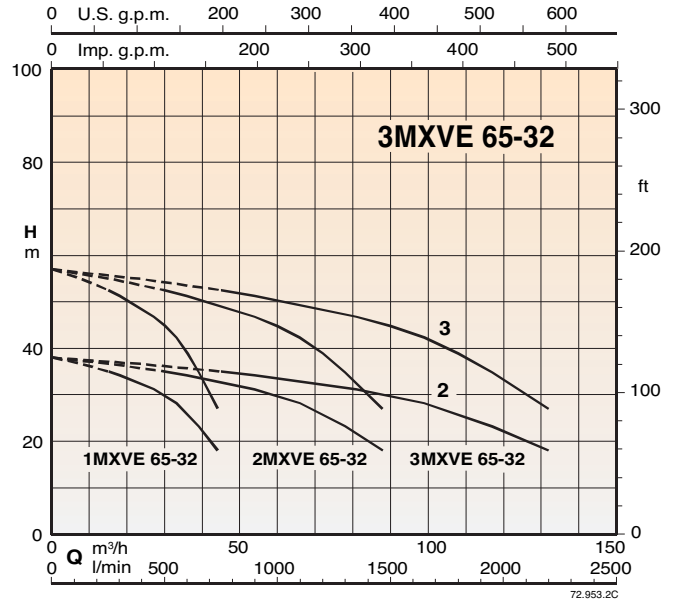
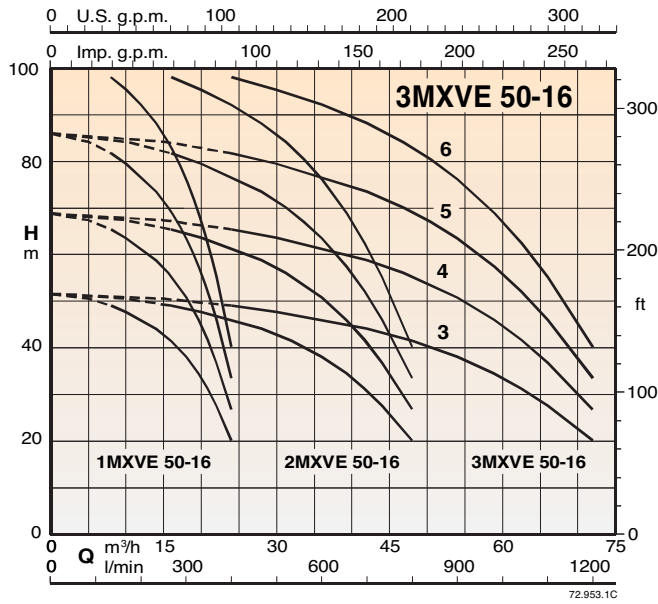
### BS1V2F

Mains: 400V 3~ Motor: 400V 3~	Motor		Vessel Membrane litre
	kW	HP	
BS1V2F 1MXVE 25-204+2MXV 25-204	0,75+0,75x2	1+1x2	24x3
BS1V2F 1MXVE 25-205+2MXV 25-205	1,1+0,75x2	1,5+1x2	24x3
BS1V2F 1MXVE 25-206+2MXV 25-206	1,1+1,1x2	1,5+1,5x2	24x3
BS1V2F 1MXVE 25-207+2MXV 25-207	1,5+1,1x2	2+1,5x2	24x3
BS1V2F 1MXVE 25-208+2MXV 25-208	1,5+1,5x2	2+2x2	24x3
BS1V2F 1MXVE 32-404+2MXV 32-404	1,1+1,1x2	1,5+1,5x2	24x3
BS1V2F 1MXVE 32-405+2MXV 32-405	1,5+1,1x2	2+1,5x2	24x3
BS1V2F 1MXVE 32-406+2MXV 32-406	1,5+1,5x2	2+2x2	24x3
BS1V2F 1MXVE 32-407+2MXV 32-407	2,2+1,5x2	3+2x2	24x3
BS1V2F 1MXVE 32-408+2MXV 32-408	2,2+2,2x2	3+3x2	24x3
BS1V2F 1MXVE 40-804+2MXV 40-804	2,2+1,5x2	3+2x2	24x3
BS1V2F 1MXVE 40-805+2MXV 40-805	2,2+2,2x2	3+3x2	24x3
BS1V2F 1MXVE 40-807+2MXV 40-807	3+3x2	4+4x2	24x3
BS1V2F 1MXVE 40-808+2MXV 40-808	4+3x2	5,5+4x2	24x3

### BS3V

Mains: 400V 3~ Motor: 400V 3~	Motor		Vessel Membrane litre
	kW	HP	
BS3V 3MXVE 25-204	0,75 x3	1 x3	24x3
BS3V 3MXVE 25-205	1,1 x3	1,5 x3	24x3
BS3V 3MXVE 25-206	1,1 x3	1,5 x3	24x3
BS3V 3MXVE 25-207	1,5 x3	2 x3	24x3
BS3V 3MXVE 25-208	1,5 x3	2 x3	24x3
BS3V 3MXVE 32-404	1,1 x3	1,5 x3	24x3
BS3V 3MXVE 32-405	1,5 x3	2 x3	24x3
BS3V 3MXVE 32-406	1,5 x3	2 x3	24x3
BS3V 3MXVE 32-407	2,2 x3	3 x3	24x3
BS3V 3MXVE 32-408	2,2 x3	3 x3	24x3
BS3V 3MXVE 40-804	2,2 x3	3 x3	24x3
BS3V 3MXVE 40-805	2,2 x3	3 x3	24x3
BS3V 3MXVE 40-807	3 x3	4 x3	24x3
BS3V 3MXVE 40-808	4 x3	5,5 x3	24x3

## Coverage chart



## Performance

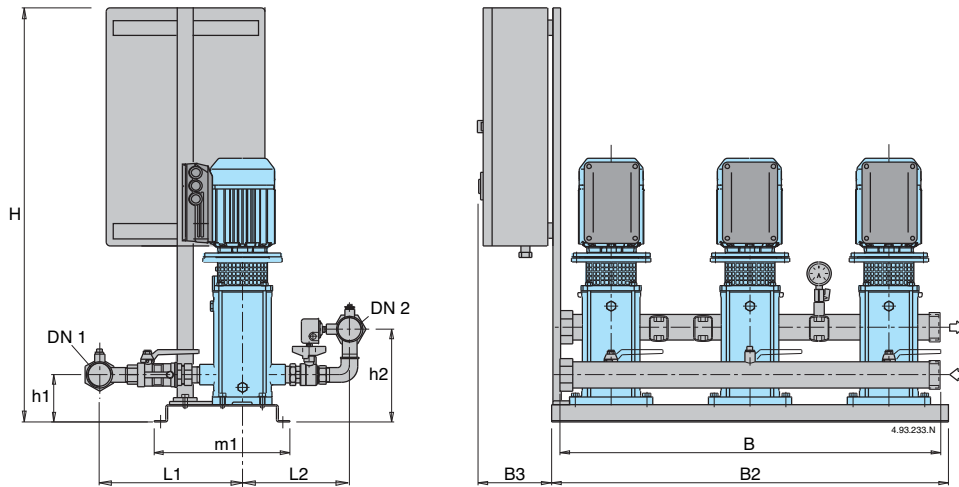
### BS1V2F

Mains: 400V 3~ Motor: 400V 3~	Motor		Vessel Membrane litre
	kW	HP	
BS1V2F 1MXVE 50-1603+2MXV 50-1603	4+3x2	5,5+4x2	24x2
BS1V2F 1MXVE 50-1604+2MXV 50-1604	5,5+4x2	7,5+5,5x2	24x2
BS1V2F 1MXVE 50-1605+2MXV 50-1605	5,5+5,5x2	7,5+7,5x2	24x2
BS1V2F 1MXVE 50-1606+2MXV 50-1606	7,5+5,5x2	7,5+7,5x2	24x2
BS1V2F 1MXVE 65-3202+2MXV 65-3202	4+4x2	5,5+5,5x2	24x2
BS1V2F 1MXVE 65-3203+2MXV 65-3203	7,5+5,5x2	10+7,5x2	24x2
BS1V2F 1MXVE 80-4802+2MXV 80-4802	5,5+5,5x2	7,5+7,5x2	24x2
BS1V2F 1MXVE 80-4803+2MXV 80-4803	7,5+7,5x2	10+10x2	24x2

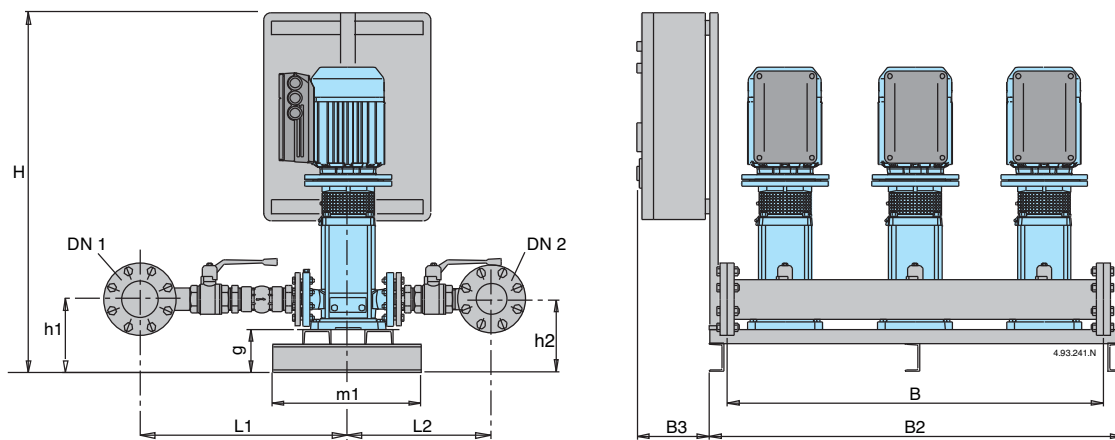
### BS3V

Mains: 400V 3~ Motor: 400V 3~	Motor		Vessel Membrane litre
	kW	HP	
BS3V 3MXVE 50-1603	4 x3	5,5 x3	24x2
BS3V 3MXVE 50-1604	5,5 x3	7,5 x3	24x2
BS3V 3MXVE 50-1605	5,5 x3	7,5 x3	24x2
BS3V 3MXVE 50-1606	7,5 x3	10 x3	24x2
BS3V 3MXVE 65-3202	4 x3	5,5 x3	24x2
BS3V 3MXVE 65-3203	7,5 x3	10 x3	24x2
BS3V 3MXVE 80-4802	5,5 x3	7,5 x3	24x2
BS3V 3MXVE 80-4803	7,5 x3	10 x3	24x2

## Dimensions and weights



TYPE	DN1	DN2	mm									kg
			H	h1	h2	L1	L2	B	B2	B3	m1	
BS.. 3MXVE 25-204	G 2	G 2	1060	134	233	337	254	950	1000	200	406	110
BS.. 3MXVE 25-205												112
BS.. 3MXVE 25-206												114
BS.. 3MXVE 25-207												116
BS.. 3MXVE 25-208												126
BS.. 3MXVE 32-404	G 2 1/2	G 2 1/2	1060	134	240	368	270	950	1000	200	406	113
BS.. 3MXVE 32-405												115
BS.. 3MXVE 32-406												125
BS.. 3MXVE 32-407												127
BS.. 3MXVE 32-408												137
BS.. 3MXVE 40-804	G 3	G 3	1060	139	260	452	350	950	1000	200	406	126
BS.. 3MXVE 40-805												136
BS.. 3MXVE 40-807												164
BS.. 3MXVE 40-808												166



TYPE	DN1	DN2	mm										kg
			H	h1	h2	L1	L2	B	B2	B3	m1	g	
BS.. 3MXVE 50-1603	100	100	1135	215	215	600	425	1150	1500	200	550	125	362
BS.. 3MXVE 50-1604										200			385
BS.. 3MXVE 50-1605										250			448
BS.. 3MXVE 50-1606	125	125	1135	230	230	672	487	1200	1500	250	550	125	454
BS.. 3MXVE 65-3202										200			448
BS.. 3MXVE 65-3203										250			510
BS.. 3MXVE 80-4802	150	150	1135	230	230	738	508	1200	1500	250	550	125	518
BS.. 3MXVE 80-4803										1535			560



## Construction

Automatic pressure boosting plant consisting of two centrifugal pumps complete with ball, non return valve on the suction side and ball valves on the discharge side.

Suction and delivery manifolds are in steel.

### Electrical control boards:

- with microprocessor for fixed speed pump units (see page 422). Motor starting is D.O.L. up to 5,5 kW and Y/Δ for power rating 7,5 up to 55 kW.
- with frequency converter for variable speed pump units (see page 423).

The unit includes one pressure gauge and two adjustable differential pressure switches or pressure transducer (for sets with frequency converter).

## Operation

### BS 2F Fixed speed pump

Depending on the reduction of the pressure in the system, the pressure switches determine the starting up of the pumps in sequence and the microprocessor alternates the starts.

### BS1V1F Pumps at variable speed with one frequency converter

According to the water consumption, one or more pumps start, one at variable speed and the others at fixed speed, to grant the water quantity required at the set pressure.

### BS2V Pumps at variable speed with two frequency converter

Depending on water consumption, one or more pumps are activated, all at variable speed, in order to guarantee the quantity of water required at the set pressure.

## Applications

To supply water in civil and industrial buildings.

As pressure boosting pump to increase water pressure when needed (follow local rules).

## Motors

2-pole induction motors, 50 Hz, n = 2900 rpm, suitable for operation with frequency converter.

- Three-phase 230/400V ± 10% up to 3 kW;
- 400/690V ± 10% from 4 to 55 kW.

Insulation class F.

Protection IP 54.

Constructed in accordance with: IEC 60034.

Other voltages and frequencies on request.

## Vessels

When installing the unit, connect in the delivery section to a diaphragm or galvanised tank.

The recommended sized are shown in the following page.

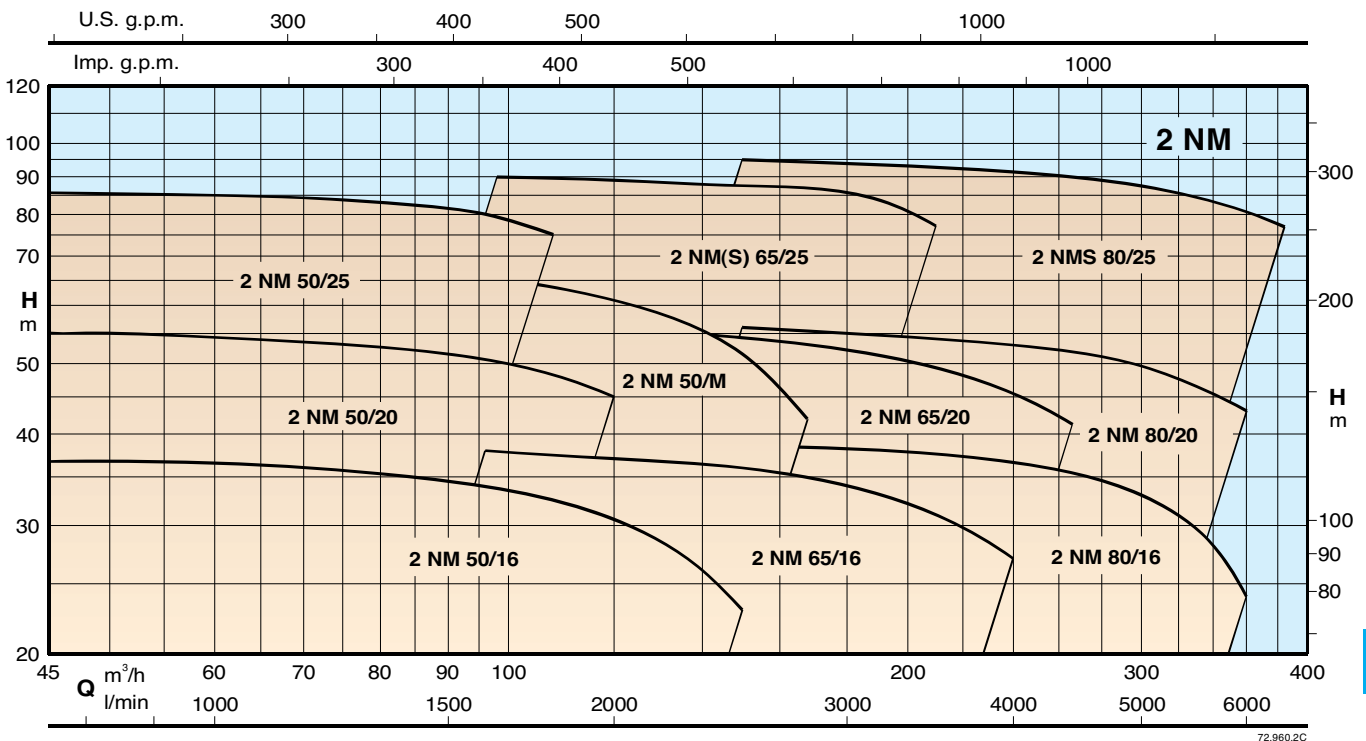
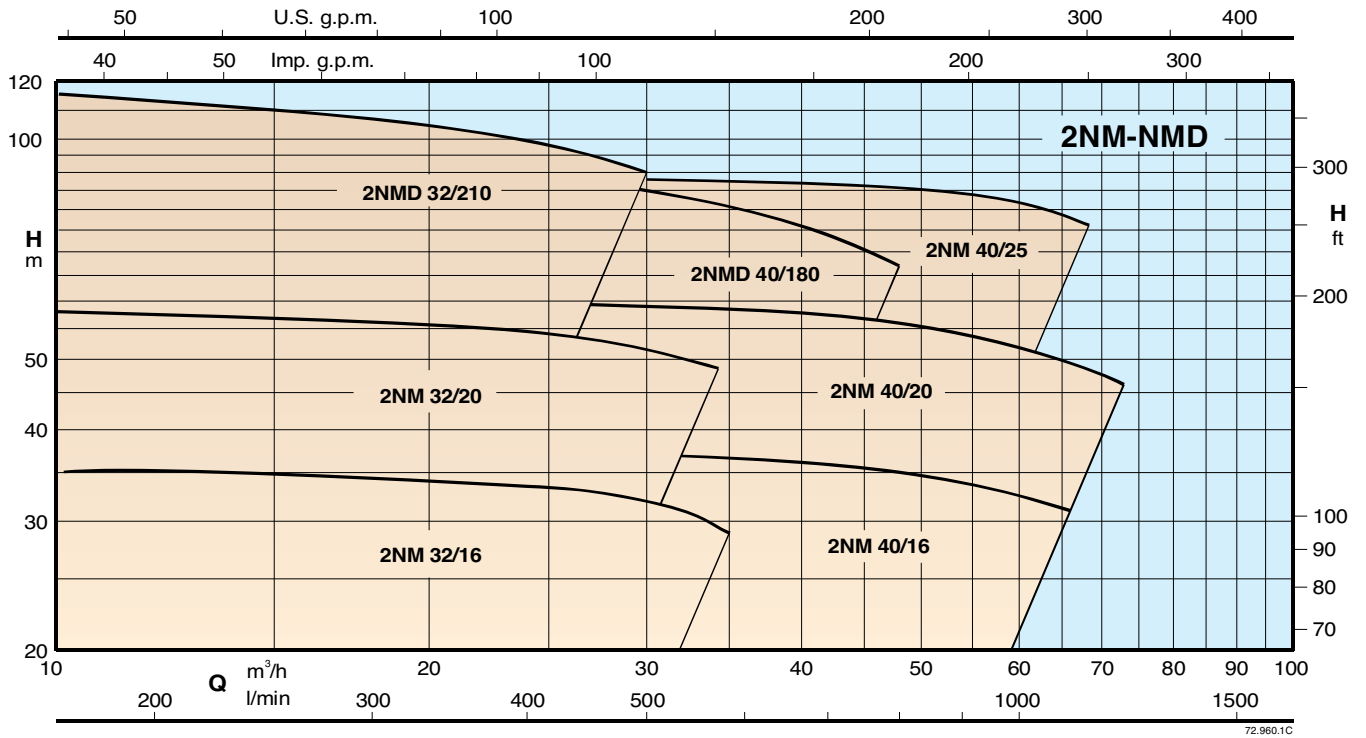


# 2 NM, NMD

Pressure boosting sets with two Centrifugal Pumps  
 Fixed speed pump or Variable speed pump (frequency converter)



## Coverage chart



## Performance

### BS2F

Mains: 400V 3~ Motor: 400V 3~	Motor		Q max* l/min	Total head m	Pres. switch		S.Membrana litre	Vessel litre
	kW	HP			bar	bar		
BS2F 2NM 32/16BE	1,5+1,5	2+2	560	29,5	2,2÷2,8	2,0÷2,6	500	1000
BS2F 2NM 32/16A/A	2,2+2,2	3+3	560	35,5	2,7÷3,4	2,5÷3,2	500	1000
BS2F 2NM 32/20C/A	3+3	4+4	560	45	3,2÷4,2	3,0÷4,0	500	750
BS2F 2NM 32/20A/A	4+4	5,5+5,5	560	57,5	4,5÷5,5	4,0÷5,0	---	2000
BS2F 2NMD 32/210D/A	4+4	5,5+5,5	440	71	5,0÷7,0	4,5÷6,5	500	1000
BS2F 2NMD 32/210C/A	5,5+5,5	7,5+7,5	500	84	6,0÷8,0	5,5÷7,5	500	1000
BS2F 2NMD 32/210B/A	7,5+7,5	10+10	500	104	8,0÷10	7,5÷9,5	---	1500
BS2F 2NMD 32/210A/A	9,2+9,2	12,5+12,5	500	114	9,5÷11	9,0÷10,5	---	1500
BS2F 2NMD 40/180D/A	4+4	5,5+5,5	800	60	4,0÷5,5	3,5÷5,0	500	1000
BS2F 2NMD 40/180C/A	5,5+5,5	7,5+7,5	800	69	5,0÷6,5	4,5÷6,0	500	1000
BS2F 2NMD 40/180B/A	7,5+7,5	10+10	800	87	6,7÷8,2	6,2÷7,7	---	1500
BS2F 2NMD 40/180A/A	9,2+9,2	12,5+12,5	800	94	7,5÷9,0	7,0÷8,5	---	2000
BS2F 2NM 40/16B/B	3+3	4+4	1400	29	1,5÷2,5	1,2÷2,2	---	2000
BS2F 2NM 40/16A/B	4+4	5,5+5,5	1600	37	2,4÷3,4	2,0÷3,0	---	3000
BS2F 2NM 40/20B/A	5,5+5,5	7,5+7,5	1260	50	3,7÷4,7	3,3÷4,3	---	3000
BS2F 2NM 40/20A/A	7,5+7,5	10+10	1400	57,5	4,4÷5,4	3,9÷4,9	---	3000
BS2F 2NM 40/25B/B	11+11	15+15	1400	69,5	5,6÷6,6	5,1÷6,1	---	5000
BS2F 2NM 40/25A/B	15+15	20+20	1400	90	7,7÷8,7	7,3÷8,3	---	5000
BS2F 2NM 50/16B/B	5,5+5,5	7,5+7,5	2700	31	1,7÷2,7	1,2÷2,2	---	3000
BS2F 2NM 50/16A/B	7,5+7,5	10+10	2700	38,5	2,5÷3,5	2,0÷3,0	---	4000
BS2F 2NM 50/20B/B	9,2+9,2	12,5+12,5	2600	48	3,5÷4,5	3,0÷4,0	---	5000
BS2F 2NM 50/20A/B	11+11	15+15	2600	55	4,2÷5,2	3,7÷4,7	---	5000
BS2F 2NM 50/25C/B	11+11	15+15	2300	55	4,1÷5,1	3,6÷4,6	---	5000
BS2F 2NM 50/25B/B	15+15	20+20	2300	69	5,6÷6,6	5,1÷6,1	---	5000
BS2F 2NM 50/25A/B	18,5+18,5	25+25	2300	80,5	6,6÷7,6	6,1÷7,1	---	5000
BS2F 2NM 50M/E/A	11+11	15+15	2500	48	3,5÷4,5	3,0÷4,0	---	5000
BS2F 2NM 50M/D/A	15+15	20+20	2800	57	4,0÷5,2	3,5÷4,7	---	5000
BS2F 2NM 50M/C/A	18,5+18,5	25+25	2800	68	5,0÷6,5	4,5÷6,0	---	5000
BS2F 2NM 65/16B/A	11+11	15+15	4000	33,5	2,0÷3,0	1,7÷2,7	---	5000
BS2F 2NM 65/16A/A	15+15	20+20	4000	38	2,5÷3,5	2,2÷3,2	---	5000
BS2F 2NM 65/20C/A	15+15	20+20	4400	44	3,0÷4,0	2,5÷3,5	---	5000
BS2F 2NM 65/20B/A	18,5+18,5	25+25	4400	50	3,6÷4,6	3,2÷4,2	---	5000
BS2F 2NM 65/200A/A	22+22	30+30	4400	56,5	4,2÷5,2	3,8÷4,8	---	5000
BS2F 2NM 65/250C/A	22+22	30+30	3600	64	5,0÷6,0	4,6÷5,6	---	5000
BS2F 2NM 65/250B/A	30+30	40+40	3600	79,5	6,6÷7,6	6,2÷7,2	---	5000
BS2F 2NMS 65/250A	37+37	50+50	3600	90	7,7÷8,7	7,3÷8,3	---	5000
BS2F 2NM 80/16B/A	15+15	20+20	6000	34	2,5÷3,5	2,0÷3,0	---	5000
BS2F 2NM 80/16A/A	18,5+18,5	25+25	6000	38,5	2,0÷3,0	1,7÷2,7	---	5000
BS2F 2NM 80/200B/A	22+22	30+30	6000	46,5	3,3÷4,3	3,0÷4,0	---	5000
BS2F 2NM 80/200A/A	30+30	40+40	6000	56	4,3÷5,3	4,0÷5,0	---	5000
BS2F 2NM 80/250E/A	22+22	30+30	6000	51	3,8÷4,8	3,2÷4,2	---	5000
BS2F 2NM 80/250D/A	30+30	40+40	6400	65	4,5÷6,0	4,0÷5,5	---	5000
BS2F 2NMS 80/250C	37+37	50+50	6400	73,5	5,5÷7,0	5,0÷6,5	---	5000
BS2F 2NMS 80/250B	45+45	60+60	6400	84	6,5÷8,0	6,0÷7,5	---	5000
BS2F 2NMS 80/250A	55+55	75+75	6400	95	8,0÷9,0	7,5÷8,5	---	5000

\* Maximum pumps flow at minimum set pressure of 2<sup>nd</sup> pressure switch.

## Performance

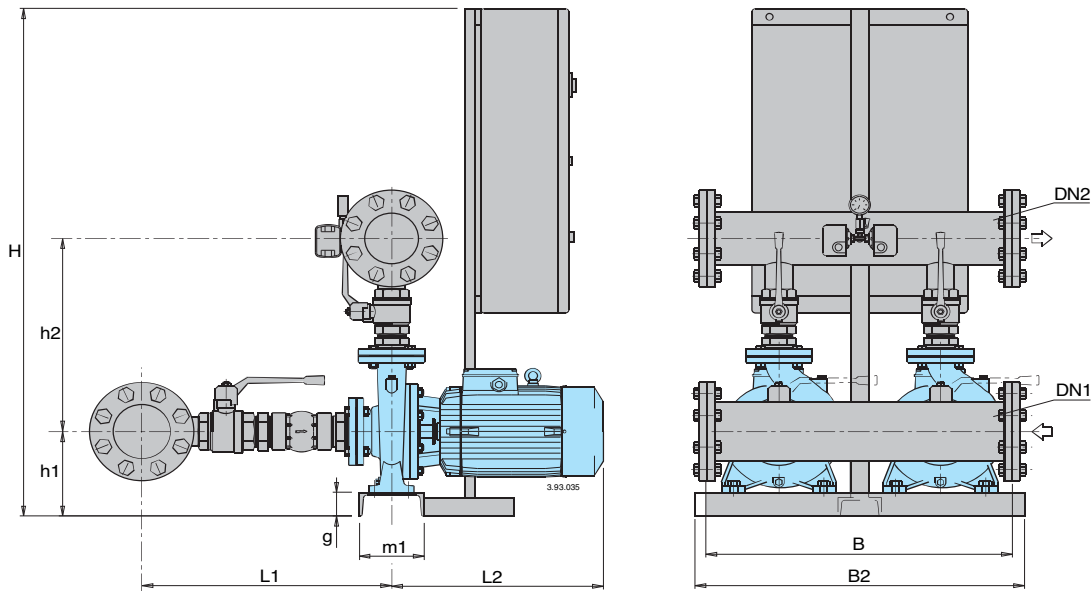
### BS1V1F

Mains: 400V 3~ Motor: 400V 3~	Motor		Vessel Membrane litre
	kW	HP	
BS1V1F 2NM 32/16BE	1,5 x2	2 x2	24
BS1V1F 2NM 32/16A/A	2,2 x2	3 x2	24
BS1V1F 2NM 32/20C/A	3 x2	4 x2	24
BS1V1F 2NM 32/20A/A	4 x2	5,5 x2	24
BS1V1F 2NMD 32/210D/A	4 x2	5,5 x2	24
BS1V1F 2NMD 32/210C/A	5,5 x2	7,5 x2	24
BS1V1F 2NMD 32/210B/A	7,5 x2	10 x2	24
BS1V1F 2NMD 32/210A/A	9,2 x2	12,5 x2	24
BS1V1F 2NMD 40/180D/A	4 x2	5,5 x2	24
BS1V1F 2NMD 40/180C/A	5,5 x2	7,5 x2	24
BS1V1F 2NMD 40/180B/A	7,5 x2	10 x2	24
BS1V1F 2NMD 40/180A/A	9,2 x2	12,5 x2	24
BS1V1F 2NM 40/16B/B	3 x2	4 x2	24
BS1V1F 2NM 40/16A/B	4 x2	5,5 x2	24
BS1V1F 2NM 40/20B/A	5,5 x2	7,5 x2	24
BS1V1F 2NM 40/20A/A	7,5 x2	10 x2	24
BS1V1F 2NM 40/25B/B	11 x2	15 x2	24
BS1V1F 2NM 40/25A/B	15 x2	20 x2	24
BS1V1F 2NM 50/16B/B	5,5 x2	7,5 x2	24
BS1V1F 2NM 50/16A/B	7,5 x2	10 x2	24
BS1V1F 2NM 50/20B/B	9,2 x2	12,5 x2	24
BS1V1F 2NM 50/20A/B	11 x2	15 x2	24
BS1V1F 2NM 50/25C/B	11 x2	15 x2	24
BS1V1F 2NM 50/25B/B	15 x2	20 x2	24
BS1V1F 2NM 50/25A/B	18,5 x2	25 x2	24
BS1V1F 2NM 50M/E/A	11 x2	15 x2	24
BS1V1F 2NM 50M/D/A	15 x2	20 x2	24
BS1V1F 2NM 50M/C/A	18,5 x2	25 x2	24
BS1V1F 2NM 65/16B/A	11 x2	15 x2	24
BS1V1F 2NM 65/16A/A	15 x2	20 x2	24
BS1V1F 2NM 65/20C/A	15 x2	20 x2	24
BS1V1F 2NM 65/20B/A	18,5 x2	25 x2	24
BS1V1F 2NM 65/200A/A	22 x2	30 x2	24
BS1V1F 2NM 65/250C/A	22 x2	30 x2	24
BS1V1F 2NM 65/250B/A	30 x2	40 x2	24
BS1V1F 2NMS 65/250A	37 x2	50 x2	24
BS1V1F 2NM 80/16B/A	15 x2	20 x2	24
BS1V1F 2NM 80/16A/A	18,5 x2	25 x2	24
BS1V1F 2NM 80/200B/A	22 x2	30 x2	24
BS1V1F 2NM 80/200A/A	30 x2	40 x2	24
BS1V1F 2NM 80/250E/A	22 x2	30 x2	24
BS1V1F 2NM 80/250D/A	30 x2	40 x2	24
BS1V1F 2NMS 80/250C	37 x2	50 x2	24
BS1V1F 2NMS 80/250B	45 x2	60 x2	24
BS1V1F 2NMS 80/250A	55 x2	75 x2	24

### BS2V

Mains: 400V 3~ Motor: 400V 3~	Motor		Vessel Membrane litre
	kW	HP	
BS2V 2NM 32/16BE	1,5 x2	2 x2	24
BS2V 2NM 32/16A/A	2,2 x2	3 x2	24
BS2V 2NM 32/20C/A	3 x2	4 x2	24
BS2V 2NM 32/20A/A	4 x2	5,5 x2	24
BS2V 2NMD 32/210D/A	4 x2	5,5 x2	24
BS2V 2NMD 32/210C/A	5,5 x2	7,5 x2	24
BS2V 2NMD 32/210B/A	7,5 x2	10 x2	24
BS2V 2NMD 32/210A/A	9,2 x2	12,5 x2	24
BS2V 2NMD 40/180D/A	4 x2	5,5 x2	24
BS2V 2NMD 40/180C/A	5,5 x2	7,5 x2	24
BS2V 2NMD 40/180B/A	7,5 x2	10 x2	24
BS2V 2NMD 40/180A/A	9,2 x2	12,5 x2	24
BS2V 2NM 40/16B/B	3 x2	4 x2	24
BS2V 2NM 40/16A/B	4 x2	5,5 x2	24
BS2V 2NM 40/20B/A	5,5 x2	7,5 x2	24
BS2V 2NM 40/20A/A	7,5 x2	10 x2	24
BS2V 2NM 40/25B/B	11 x2	15 x2	24
BS2V 2NM 40/25A/B	15 x2	20 x2	24
BS2V 2NM 50/16B/B	5,5 x2	7,5 x2	24
BS2V 2NM 50/16A/B	7,5 x2	10 x2	24
BS2V 2NM 50/20B/B	9,2 x2	12,5 x2	24
BS2V 2NM 50/20A/B	11 x2	15 x2	24
BS2V 2NM 50/25C/B	11 x2	15 x2	24
BS2V 2NM 50/25B/B	15 x2	20 x2	24
BS2V 2NM 50/25A/B	18,5 x2	25 x2	24
BS2V 2NM 50M/E/A	11 x2	15 x2	24
BS2V 2NM 50M/D/A	15 x2	20 x2	24
BS2V 2NM 50M/C/A	18,5 x2	25 x2	24
BS2V 2NM 65/16B/A	11 x2	15 x2	24
BS2V 2NM 65/16A/A	15 x2	20 x2	24
BS2V 2NM 65/20C/A	15 x2	20 x2	24
BS2V 2NM 65/20B/A	18,5 x2	25 x2	24
BS2V 2NM 65/200A/A	22 x2	30 x2	24
BS2V 2NM 65/250C/A	22 x2	30 x2	24
BS2V 2NM 65/250B/A	30 x2	40 x2	24
BS2V 2NMS 65/250A	37 x2	50 x2	24
BS2V 2NM 80/16B/A	15 x2	20 x2	24
BS2V 2NM 80/16A/A	18,5 x2	25 x2	24
BS2V 2NM 80/200B/A	22 x2	30 x2	24
BS2V 2NM 80/200A/A	30 x2	40 x2	24
BS2V 2NM 80/250E/A	22 x2	30 x2	24
BS2V 2NM 80/250D/A	30 x2	40 x2	24
BS2V 2NMS 80/250C	37 x2	50 x2	24
BS2V 2NMS 80/250B	45 x2	60 x2	24
BS2V 2NMS 80/250A	55 x2	75 x2	24

## Dimensions



TYPE	DN1	DN2	mm									
			H	h1	h2	L2	L1	B	B2	m1	g	
BS.. 2NM 32/16BE	G 3	G 2 1/2	835	165	345	330	490	600	625	235	5	
BS.. 2NM 32/16A/A												
BS.. 2NM 32/20C/A	G 3	G 2 1/2	835	195	365	390	490	600	625	235	5	
BS.. 2NM 32/20A/A												
BS.. 2NMD 32/210D/A	G 3	G 2 1/2	865	155	380	415	480	700	800	400	5	
BS.. 2NMD 32/210C/A				182		440						
BS.. 2NMD 32/210B/A				182		440						
BS.. 2NMD 32/210A/A				217		515						
BS.. 2NMD 40/180D/A	G 3	G 2 1/2	865	155	460	410	500	700	800	400	5	
BS.. 2NMD 40/180C/A				182		435						
BS.. 2NMD 40/180B/A				182		435						
BS.. 2NMD 40/180A/A				217		510						
BS.. 2NM 40/16B/B	100	80	855	187	380	395	570	820	800	400	5	
BS.. 2NM 40/16A/B												
BS.. 2NM 40/20B/A	100	80	1055	215	400	425	590	820	800	400	5	
BS.. 2NM 40/20A/A												
BS.. 2NM 40/25B/B	100	80	1360	240	440	540	590	820	900	140	60	
BS.. 2NM 40/25A/B				615								
BS.. 2NM 50/16B/B	125	100	1055	215	435	425	600	820	900	120	55	
BS.. 2NM 50/16A/B				1355								
BS.. 2NM 50/20B/B	125	100	1355	215	455	540	600	820	900	120	55	
BS.. 2NM 50/20A/B				455								
BS.. 2NM 50/25C/B	125	100	1360	240	480	545	600	820	900	140	60	
BS.. 2NM 50/25B/B						620						
BS.. 2NM 50/25A/B						620						
BS.. 2NM 50M/E/A						600						
BS.. 2NM 50M/D/A	150	125	1385	217	495	650	825	920	900	240	85	
BS.. 2NM 50M/C/A						675						
BS.. 2NM 65/16B/A	200	150	1360	220	525	540	720	920	900	140	60	
BS.. 2NM 65/16A/A						615						
BS.. 2NM 65/20C/A	200	150	1360	240	550	615	720	920	900	140	60	
BS.. 2NM 65/20B/A						615				140	60	
BS.. 2NM 65/200A/A						720				300	100	
BS.. 2NM 65/250C/A	200	150	1600	260	575	720	720	1100	1200	300	100	
BS.. 2NM 65/250B/A						720				300	100	
BS.. 2NMS 65/250A						907				400	110	
BS.. 2NM 80/16B/A	250	200	1360	240	615	620	700	1050	1100	140	60	
BS.. 2NM 80/16A/A						1560						
BS.. 2NM 80/200B/A	250	200	1600	260	640	720	700	1050	1100	300	100	
BS.. 2NM 80/200A/A												
BS.. 2NM 80/250E/A	250	200	1600	260	670	720	700	1200	1300	300	100	
BS.. 2NM 80/250D/A						720				300	100	
BS.. 2NMS 80/250C						932				400	110	
BS.. 2NMS 80/250B						1005				400	110	
BS.. 2NMS 80/250A						1073				400	110	

\* Cabinet version