

MAGNA1

Circulator pumps
50 Hz



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1. Product description

The Grundfos MAGNA1 circulator pumps are designed for circulating liquids in the following systems:

- heating systems
- air-conditioning and cooling systems

The pump range can also be used for the following systems:

- ground source heat pump systems
- solar-heating systems.

Duty range

Data	MAGNA1 (N) Single-head pumps	MAGNA1 D Twin-head pumps
Maximum flow rate, Q	71 m ³ /h	110 m ³ /h
Maximum head, H	18 metres	
Maximum system pressure	1.6 MPa (16 bar)	
Liquid temperature	-10 °C to +110 °C	



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Fig. 1 Single-head MAGNA1 pumps

Characteristic features

- Proportional-pressure control.
- Constant-pressure control.
- Constant-curve/constant-speed duty.
- No external motor protection required.
- Insulating shells supplied with single-head pumps for heating systems.
- Wide temperature range where the liquid temperature and the ambient temperature are independent of each other.

Benefits

- Simple installation.
- Low energy consumption. All MAGNA1 pumps comply with the EuP 2013 and 2015 requirements.
- Eight light fields for indication of pump setting.
- Low noise level.
- No maintenance and long life.
- The complete range is available for a maximum system pressure of 16 bar (PN 16).

Main applications

Heating systems

- Main pump
- mixing loops
- heating surfaces
- air-conditioning surfaces.

The MAGNA1 circulator pumps are designed for circulating liquids in heating systems with variable flows where it is desirable to optimise the setting of the pump duty point, thus reducing energy costs. To ensure correct operation, it is important that the sizing range of the system falls within the duty range of the pump.

Type key

Code	Example	MAGNA1	D	80	-120	(F)	360
	Type range MAGNA1						
D	Twin-head pump						
	Nominal diameter (DN) of suction and discharge ports [mm]						
	Maximum head [dm]						
	Pipe connection Threaded F Flange						
	Port-to-port length [mm]						

Performance range, MAGNA1

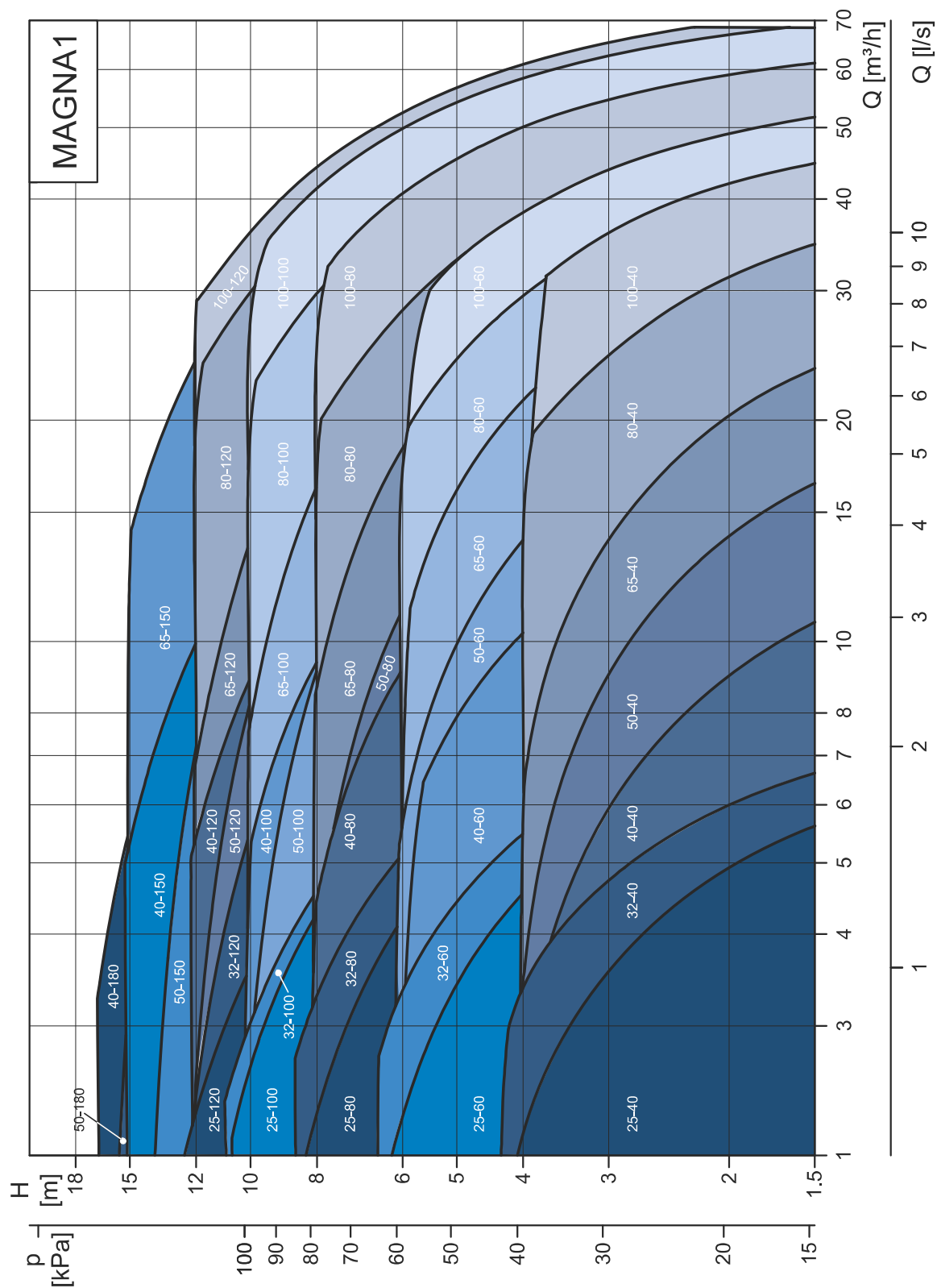


Fig. 2 Performance range, MAGNA1

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Performance range, MAGNA1 D single-head operation

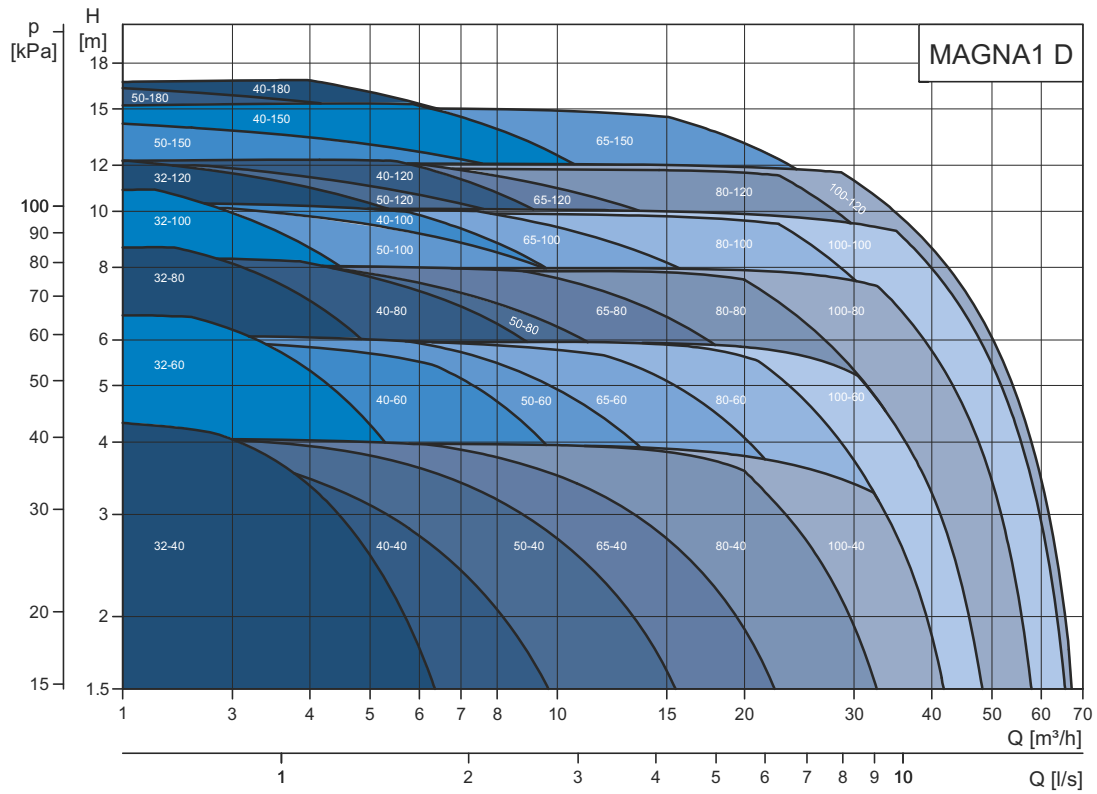


Fig. 3 Performance range, MAGNA1 D single-head operation

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Performance range, MAGNA1 D twin-head operation

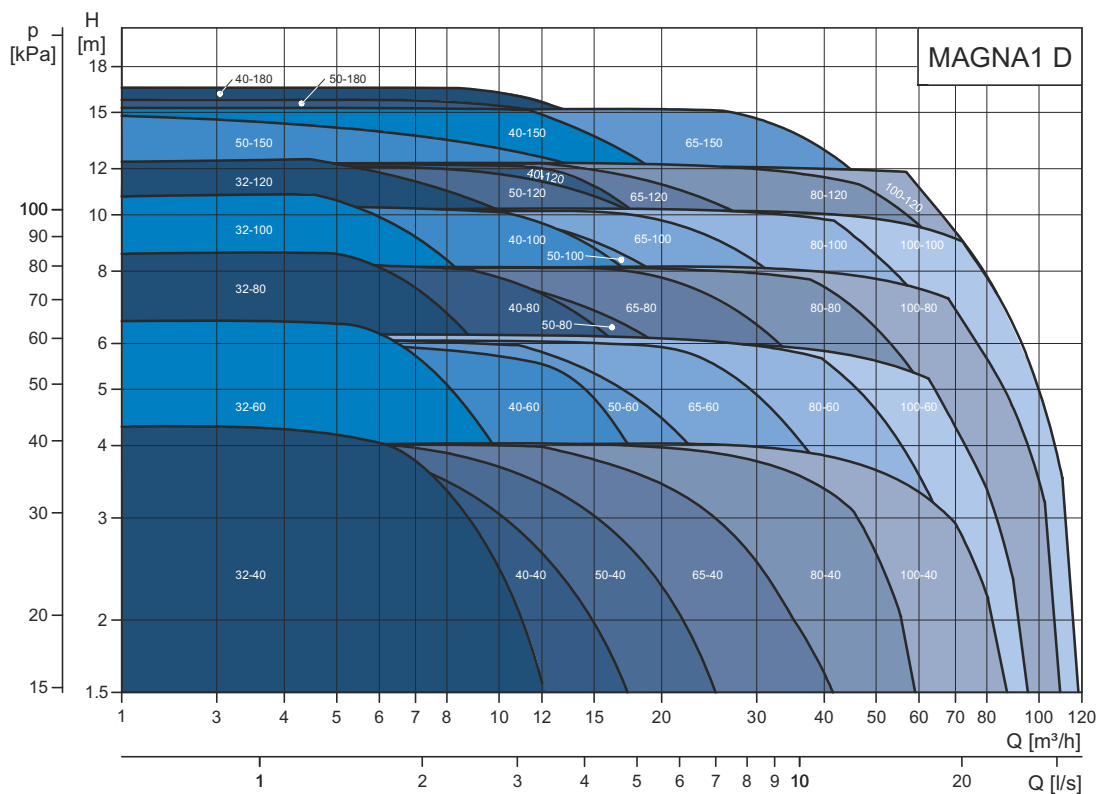


Fig. 4 Performance range, MAGNA1 D twin-head operation

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2. Product range

Single-head pumps

Pump type	Port-to-port length [mm]	Threaded pipe connection		Data sheet Page
		Cast iron		
		PN 6/10	PN 16	
MAGNA1 25-40	180	•	•	31
MAGNA1 25-60	180	•	•	33
MAGNA1 25-80	180	•	•	35
MAGNA1 25-100	180	•	•	37
MAGNA1 25-120	180	•	•	39
MAGNA1 32-40	180	•	•	40
MAGNA1 32-60	180	•	•	44
MAGNA1 32-80	180	•	•	48
MAGNA1 32-100	180	•	•	52

Pump type	Port-to-port length [mm]	Flange connection				Data sheet Page
		Cast iron				
		PN 6	PN 10	PN 6/10	PN 16	
MAGNA1 32-40 F	220			•	•	54
MAGNA1 32-60 F	220			•	•	58
MAGNA1 32-80 F	220			•	•	62
MAGNA1 32-100 F	220			•	•	66
MAGNA1 32-120 F	220			•	•	68
MAGNA1 40-40 F	220			•	•	70
MAGNA1 40-60 F	220			•	•	72
MAGNA1 40-80 F	220			•	•	74
MAGNA1 40-100 F	220			•	•	76
MAGNA1 40-120 F	250			•	•	78
MAGNA1 40-150 F	250			•	•	80
MAGNA1 40-180 F	250			•	•	82
MAGNA1 50-40 F	240			•	•	84
MAGNA1 50-60 F	240			•	•	86
MAGNA1 50-80 F	240			•	•	88
MAGNA1 50-100 F	280			•	•	90
MAGNA1 50-120 F	280			•	•	92
MAGNA1 50-150 F	280			•	•	94
MAGNA1 50-180 F	280			•	•	96
MAGNA1 65-40 F	340			•	•	98
MAGNA1 65-60 F	340			•	•	100
MAGNA1 65-80 F	340			•	•	102
MAGNA1 65-100 F	340			•	•	104
MAGNA1 65-120 F	340			•	•	106
MAGNA1 65-150 F	340			•	•	108
MAGNA1 80-40 F	360	•	•		•	110
MAGNA1 80-60 F	360	•	•		•	112
MAGNA1 80-80 F	360	•	•		•	114
MAGNA1 80-100 F	360	•	•		•	116
MAGNA1 80-120 F	360	•	•		•	118
MAGNA1 100-40 F	450	•	•		•	120
MAGNA1 100-60 F	450	•	•		•	122
MAGNA1 100-80 F	450	•	•		•	124
MAGNA1 100-100 F	450	•	•		•	126
MAGNA1 100-120 F	450	•	•		•	128

Note: The product numbers of the various pump variants can be found on page [130](#).

Twin-head pumps

Pump type	Port-to-port length [mm]	Threaded pipe connection		Data sheet Page
		Cast iron		
		PN 6/10	PN 16	
MAGNA1 D 32-40	180	•	•	42
MAGNA1 D 32-60	180	•	•	46
MAGNA1 D 32-80	180	•	•	50
MAGNA1 D 32-100	180	•	•	53

Pump type	Port-to-port length [mm]	Flange connection				Data sheet Page
		Cast iron				
		PN 6	PN 10	PN 6/10	PN 16	
MAGNA1 D 32-40 F	220			•	•	56
MAGNA1 D 32-60 F	220			•	•	60
MAGNA1 D 32-80 F	220			•	•	64
MAGNA1 D 32-100 F	220			•	•	67
MAGNA1 D 32-120 F	220			•	•	69
MAGNA1 D 40-40 F	220			•	•	71
MAGNA1 D 40-60 F	220			•	•	73
MAGNA1 D 40-80 F	220			•	•	75
MAGNA1 D 40-100 F	220			•	•	77
MAGNA1 D 40-120 F	250			•	•	79
MAGNA1 D 40-150 F	250			•	•	81
MAGNA1 D 40-180 F	250			•	•	83
MAGNA1 D 50-40 F	240			•	•	85
MAGNA1 D 50-60 F	240			•	•	87
MAGNA1 D 50-80 F	240			•	•	89
MAGNA1 D 50-100 F	280			•	•	91
MAGNA1 D 50-120 F	280			•	•	93
MAGNA1 D 50-150 F	280			•	•	95
MAGNA1 D 50-180 F	280			•	•	97
MAGNA1 D 65-40 F	340			•	•	99
MAGNA1 D 65-60 F	340			•	•	101
MAGNA1 D 65-80 F	340			•	•	103
MAGNA1 D 65-100 F	340			•	•	105
MAGNA1 D 65-120 F	340			•	•	107
MAGNA1 D 65-150 F	340			•	•	109
MAGNA1 D 80-40 F	360	•	•		•	111
MAGNA1 D 80-60 F	360	•	•		•	113
MAGNA1 D 80-80 F	360	•	•		•	115
MAGNA1 D 80-100 F	360	•	•		•	117
MAGNA1 D 80-120 F	360	•	•		•	119
MAGNA1 D 100-40 F	450	•	•		•	121
MAGNA1 D 100-60 F	450	•	•		•	123
MAGNA1 D 100-80 F	450	•	•		•	125
MAGNA1 D 100-100 F	450	•	•		•	127
MAGNA1 D 100-120 F	450	•	•		•	129

Note: The product numbers of the various pump variants can be found on page [130](#).

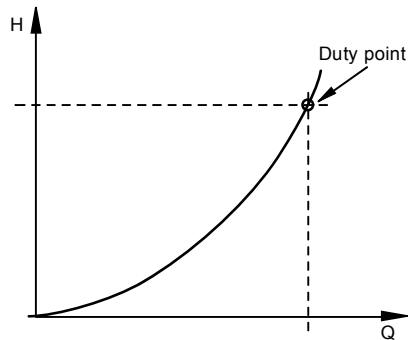
Pump selection

Pump size

The selection of pump size should be based on the following:

- required maximum flow
- maximum pressure loss in the system.

Refer to the system characteristics to determine the duty point. See fig. 5.



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Fig. 5 System characteristic

Operating conditions

It should be checked whether the operating conditions are fulfilled, i.e.

- liquid quality and temperature
- ambient conditions
- minimum inlet pressure
- maximum operating pressure.

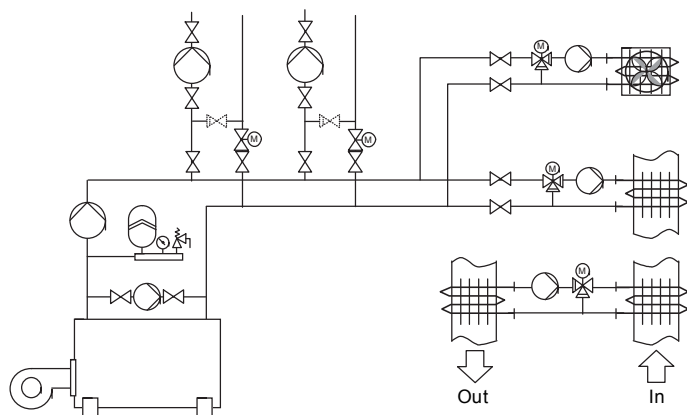
Control modes

- Proportional-pressure control in systems with considerable pressure losses in relation to large flow variations.
- Constant-pressure control in systems with insignificant pressure losses in relation to large flow variations.
- In constant-curve/constant-speed operation, the pump will run at a constant speed, independent of the actual flow demand in the system.

3. Functions

System applications

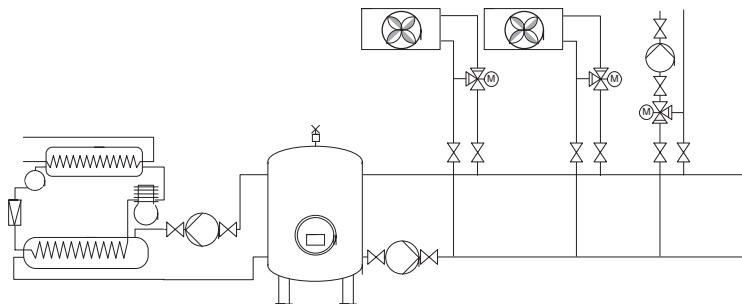
Heating systems



- One- and two-pipe heating systems
- Main pumps
- Zone pumps
- Mixing loops
- Boiler shunt pumps
- Pumps for heating surfaces
- Calorifiers
- Underfloor-heating systems
- Solar-heating systems
- Ground source heat pump systems
- Heat recovery systems.

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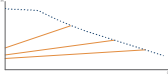
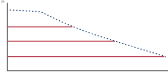
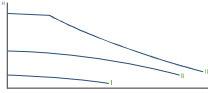
Air-conditioning and cooling systems



- Two-pipe air-conditioning systems
- Main pumps
- Zone pumps
- Pumps for refrigeration units
- Heat pump systems
- Ground source heat pump systems
- Heat recovery systems
- Air-conditioning surfaces.

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Selection of control mode

System application	Select this control mode
<p>In systems with relatively large pressure losses in the distribution pipes and in air-conditioning and cooling systems.</p> <ul style="list-style-type: none"> • Two-pipe heating systems with thermostatic valves and <ul style="list-style-type: none"> – very long distribution pipes – strongly throttled pipe balancing valves – differential-pressure regulators – large pressure losses in those parts of the system through which the total quantity of water flows (for example boiler, heat exchanger and distribution pipe up to the first branching). • Primary circuit pumps in systems with large pressure losses in the primary circuit. • Air-conditioning systems with <ul style="list-style-type: none"> – heat exchangers (fan coils) – cooling ceilings – cooling surfaces. 	<p>Proportional pressure</p> 
<p>In systems with relatively small pressure losses in the distribution pipes.</p> <ul style="list-style-type: none"> • Two-pipe heating systems with thermostatic valves and <ul style="list-style-type: none"> – dimensioned for natural circulation – small pressure losses in those parts of the system through which the total quantity of water flows (for example boiler, heat exchanger and distribution pipe up to the first branching) or – modified to a high differential temperature between flow pipe and return pipe (for example district heating). • Underfloor heating systems with thermostatic valves. • One-pipe heating systems with thermostatic valves or pipe balancing valves. • Primary circuit pumps in systems with small pressure losses in the primary circuit. 	<p>Constant pressure</p> 
<p>The pump can also be set to operate according to the max. or min. curve, like an uncontrolled pump:</p> <ul style="list-style-type: none"> • The max. curve mode can be used in periods in which a maximum flow is required. This operating mode is for instance suitable for hot-water priority. • The min. curve mode can be used in periods in which a minimum flow is required. This operating mode is for instance suitable for manual night setback. 	<p>Constant curve</p> 

Control modes

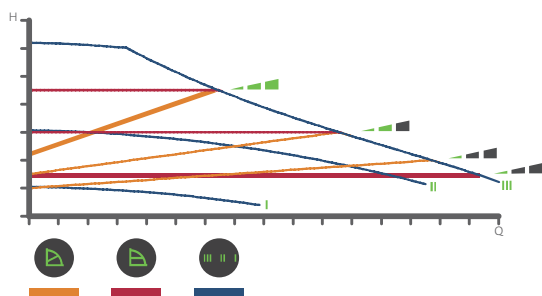


Fig. 6 Selection of pump setting for system type

Factory setting: Intermediate proportional-pressure curve, referred to as PP2.

Proportional-pressure curve (PP1, PP2 or PP3)

Proportional-pressure control adjusts the pump performance to the actual heat demand in the system, but the pump performance follows the selected performance curve, PP1, PP2 or PP3. See fig. 7 where PP2 has been selected.

See [Selection of control mode](#), page 11, for further information.

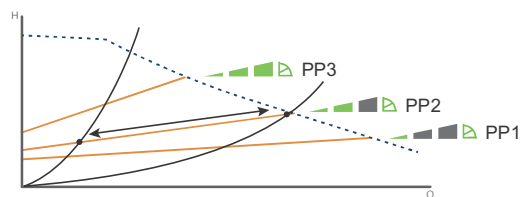


Fig. 7 Three proportional-pressure curves/settings

The selection of the right proportional-pressure setting depends on the characteristics of the heating system in question and the actual heat demand.

Constant-pressure curve (CP1, CP2 or CP3)

Constant-pressure control adjusts the pump performance to the actual heat demand in the system, but the pump performance follows the selected performance curve, CP1, CP2 or CP3. See fig. 8 where CP1 has been selected.

See [Selection of control mode](#), page 11, for further information.

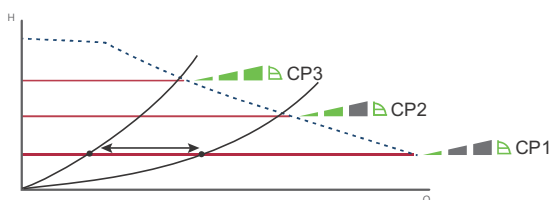


Fig. 8 Three constant-pressure curves/settings

The selection of the right constant-pressure setting depends on the characteristics of the heating system in question and the actual heat demand.

Constant curve/constant speed (I, II or III)

In constant-curve/constant-speed operation, the pump will run at a constant speed, independent of the actual flow demand in the system. The pump performance follows the selected performance curve, I, II or III. See fig. 9 where II has been selected.

See [Selection of control mode](#), page 11, for further information.

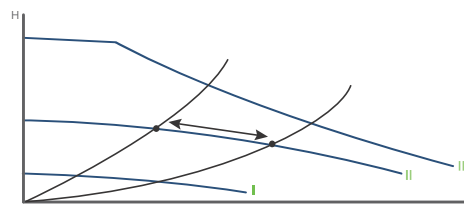
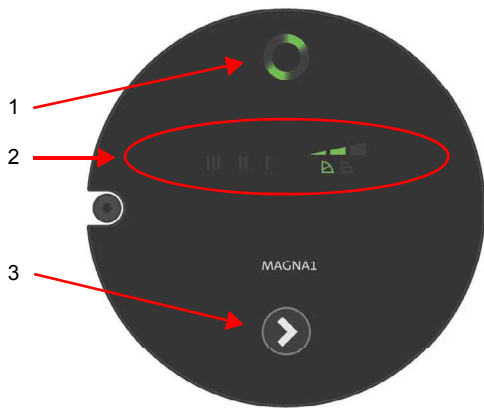


Fig. 9 Three constant curve/constant speed settings

The selection of the right constant-curve/constant-speed setting depends on the characteristics of the heating system in question.

Control panel



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Fig. 10 Control panel at first start-up

The control panel on the pump comprises the following:

Pos.	Description
1	Grundfos Eye operating status. See section Grundfos Eye .
2	Eight light fields indicating the pump setting. See section Light fields indicating the pump setting .
3	Push-button for selection of pump setting.

Grundfos Eye

The Grundfos Eye is on when the power supply has been switched on. See fig. 10, pos. 1.

The Grundfos Eye is an indicator light providing information about the actual pump status.

The indicator light will flash in different sequences and provide information about the following:

- power on/off
- pump alarms.

Light fields indicating the pump setting

The pump has nine optional performance settings which can be selected with the push-button.

See fig. 10, pos. 3.

The pump setting is indicated by eight light fields in the display. See fig. 10, pos. 2.

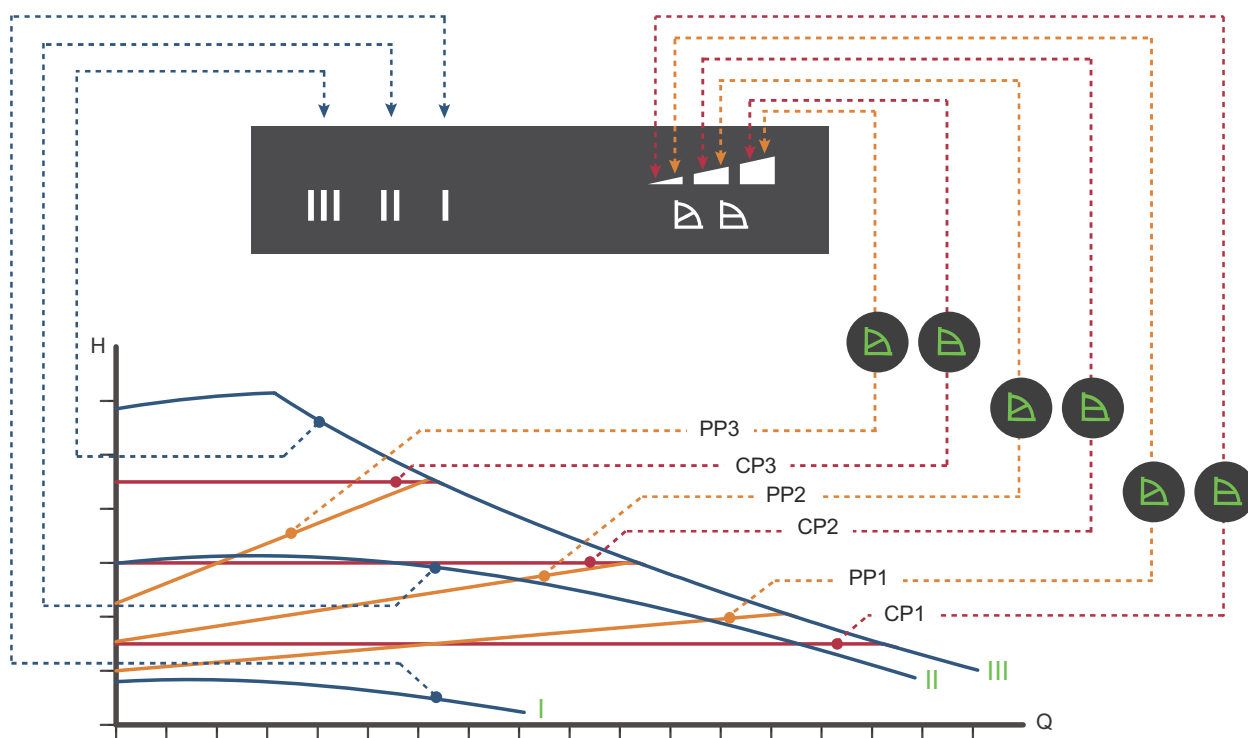


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Fig. 11 Factory setting, PP2

Button presses	Active light fields	Description
0		Intermediate proportional-pressure curve, referred to as PP2
1		Highest proportional-pressure curve, referred to as PP3
2		Lowest constant-pressure curve, referred to as CP1
3		Intermediate constant-pressure curve, referred to as CP2
4		Highest constant-pressure curve, referred to as CP3
5		Constant curve/constant speed III
6		Constant curve/constant speed II
7		Constant curve/constant speed I
8		Lowest proportional-pressure curve, referred to as PP1

Overview of settings



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Fig. 12 Pump setting in relation to pump performance

Setting	Pump curve	Function
PP1	Lowest proportional-pressure curve	The duty point of the pump will move up or down on the lowest proportional-pressure curve, depending on the heat demand. See fig. 12. The head (pressure) is reduced at falling heat demand and increased at rising heat demand.
PP2	Intermediate proportional-pressure curve	The duty point of the pump will move up or down on the intermediate proportional-pressure curve, depending on the heat demand. See fig. 12. The head (pressure) is reduced at falling heat demand and increased at rising heat demand.
PP3	Highest proportional-pressure curve	The duty point of the pump will move up or down on the highest proportional-pressure curve, depending on the heat demand. See fig. 12. The head (pressure) is reduced at falling heat demand and increased at rising heat demand.
CP1	Lowest constant-pressure curve	The duty point of the pump will move out or in on the lowest constant-pressure curve, depending on the heat demand in the system. See fig. 12. The head (pressure) is kept constant, irrespective of the heat demand.
CP2	Intermediate constant-pressure curve	The duty point of the pump will move out or in on the intermediate constant-pressure curve, depending on the heat demand in the system. See fig. 12. The head (pressure) is kept constant, irrespective of the heat demand.
CP3	Highest constant-pressure curve	The duty point of the pump will move out or in on the highest constant-pressure curve, depending on the heat demand in the system. See fig. 12. The head (pressure) is kept constant, irrespective of the heat demand.
III	Speed III	The pump runs on a constant curve which means that it runs at a constant speed. In speed III, the pump is set to run on the max. curve under all operating conditions. See fig. 12. Quick venting of the pump can be obtained by setting the pump to speed III for a short period.
II	Speed II	The pump runs on a constant curve which means that it runs at a constant speed. In speed II, the pump is set to run on the intermediate curve under all operating conditions. See fig. 12.
I	Speed I	The pump runs on a constant curve which means that it runs at a constant speed. In speed I, the pump is set to run on the min. curve under all operating conditions. See fig. 12.

4. Operating conditions

General recommendations

Water in heating systems	Water quality according to local standards such as the German standard VDI 2035
Water containing glycol	Maximum viscosity = 15 mm ² /s (~ 50 % glycol at +2 °C)

Liquid temperature

-10 to +110 °C.

Ambient conditions

Ambient temperature during operation	0 to +40 °C
Ambient temperature during storage and transport	-30 to +55 °C
Relative air humidity	Max. 95 %

Maximum operating pressure

PN 6: 6 bar / 0.6 MPa

PN 10: 10 bar / 1.0 MPa

PN 16: 16 bar / 1.6 MPa.

Minimum inlet pressure

The following relative minimum inlet pressure must be available at the pump inlet during operation to avoid cavitation noise and damage to the pump bearings.

Note: The values in the table below apply to single-head pumps and twin-head pumps in single-head operation.

Single-head pumps DN	Liquid temperature		
	75 °C	95 °C	110 °C
	Inlet pressure [bar] / [MPa]		
25-40/60/80/100/120	0.10 / 0.01	0.35 / 0.035	1.0 / 0.10
32-40/60/80/100	0.10 / 0.01	0.35 / 0.035	1.0 / 0.10
32-120	0.90 / 0.09	1.30 / 0.13	1.9 / 0.19
40-40/60	0.10 / 0.01	0.35 / 0.035	1.0 / 0.10
40-80/100	0.10 / 0.01	0.50 / 0.05	1.0 / 0.10
40-120/150/180	0.10 / 0.01	0.50 / 0.05	1.0 / 0.10
50-40/60/80	0.10 / 0.01	0.40 / 0.04	1.0 / 0.10
50-100	0.10 / 0.01	0.50 / 0.05	1.0 / 0.10
50-120	0.10 / 0.01	0.50 / 0.05	1.0 / 0.10
50-150/180	0.70 / 0.07	1.20 / 0.12	1.7 / 0.17
65-40/60/80/100	0.70 / 0.07	1.20 / 0.12	1.7 / 0.17
65-120	0.70 / 0.07	1.20 / 0.12	1.7 / 0.17
65-150	0.70 / 0.07	1.20 / 0.12	1.7 / 0.17
80-40/60/80/100/120	0.50 / 0.05	1.00 / 0.10	1.5 / 0.15
100-40/60/80/100/120	0.70 / 0.07	1.20 / 0.12	1.7 / 0.17

In the case of twin-head operation, the required relative inlet pressure must be increased by 0.1 bar / 0.01 MPa compared to the stated values for single-head pumps or twin-head pumps in single-head operation.

Note: The actual inlet pressure plus pump pressure against a closed valve must be lower than the maximum permissible system pressure.

The relative minimum inlet pressures apply to pumps installed up to 300 metres above sea level. For altitudes above 300 metres, the required relative inlet pressure must be increased by 0.01 bar / 0.001 MPa per 100 metres altitude. The MAGNA1 pump is only approved for an altitude of 2000 metres above sea level.

Pumped liquids

The pump is suitable for thin, clean, non-aggressive and non-explosive liquids, not containing solid particles or fibres that may attack the pump mechanically or chemically.

In heating systems, the water should meet the requirements of accepted standards on water quality in heating systems, for example the German standard VDI 2035.

Do not use the pump for flammable liquids, such as diesel oil and petrol.

Do not use the pump for aggressive liquids, such as acids and seawater.

If the pump is not used during periods of frost, necessary steps must be taken to prevent frost bursts.

Additives with a density and/or kinematic viscosity higher than those/that of water will reduce the hydraulic performance.

Do not use additives that in any way can/will disturb the functionality of the pump.

Whether a pump is suitable for a particular liquid depends on a number of factors of which the most important are lime content, pH value, temperature, content of solvents and oils.

The pump can be used for pumping water/glycol mixtures up to 50 %. See section [General recommendations](#).

The pumping of glycol mixtures will reduce the hydraulic performance.

Electrical data

Pump type	MAGNA1 (D)
Enclosure class	IPX4D (EN 60529).
Insulation class	F.
Supply voltage	1 x 230 V \pm 10 % 50/60 Hz, PE.
Leakage current	$I_{\text{leakage}} < 3.5 \text{ mA}$. The leakage current is measured in accordance with EN 60335-1.
EMC	EN 55014-1:2006, EN 55014-2:1998, EN 61800-3-3:2008 and EN 61000-3-2:2006.

Sound pressure level

Pump type	MAGNA1 (D)
Sound pressure level	$\leq 43 \text{ dB(A)}$

5. Construction

The MAGNA1 is of the canned-rotor type, i.e. pump and motor form an integral unit without shaft seal and with only two gaskets for sealing. The bearings are lubricated by the pumped liquid.

The pump is characterised by the following:

- controller integrated in the control box
- control panel on the control box
- twin-head versions
- no external motor protection required
- insulating shells supplied with single-head pumps for heating systems.

Motor and electronic controller

The MAGNA1 incorporates a 4-pole synchronous, permanent-magnet motor (PM motor). This motor type is characterised by higher efficiency than a conventional asynchronous squirrel-cage motor. The pump speed is controlled by an integrated frequency converter.

Pump connections

Threaded pipe connections according to ISO 228-1.
Flange dimensions according to EN 1092-2.

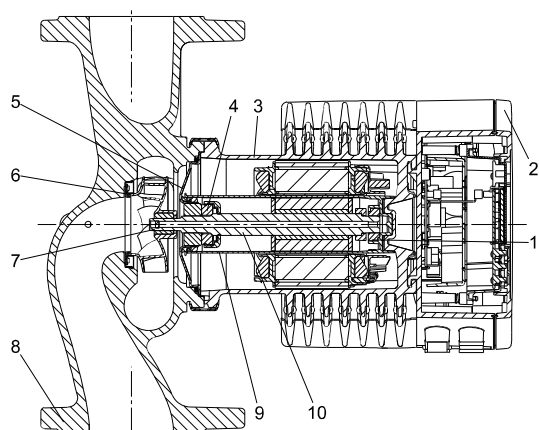
Surface treatment

The pump housing and pump head are electrocoated to improve the corrosion resistance.

Electrocoating includes:

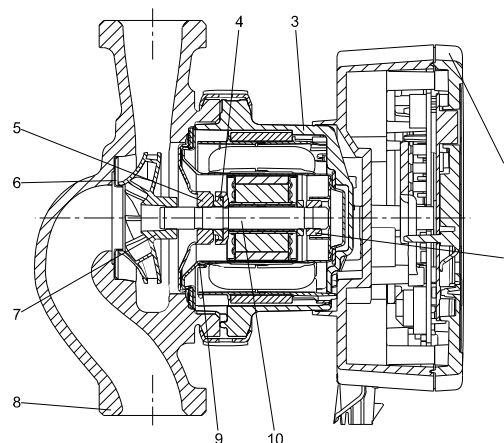
- alkaline cleaning
- pretreatment with zinc phosphate coating
- cathodic electrocoating (epoxy)
- curing of paint film at 200 to 250 °C.

Sectional drawings



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Fig. 13 Flanged version with PPS-composite rotor can



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Fig. 14 Threaded version with stainless-steel rotor can

Material specification

See figs 13 and 14.

Pos.	Component	Material	EN
1	Outer bearing ring	Aluminium oxide	
2	Control box	Polycarbonate	
3	Stator housing	Aluminium	
	O-rings/gaskets	EPDM	
4	Thrust bearing	Aluminium oxide/carbon	
5	Bearing plate	Stainless steel	EN 1.4301
6	Neck ring	Stainless steel	EN 1.4301
7	Impeller	PES	
8	Pump housing	Cast iron	EN 1561 EN-GJL-250
9	Rotor can	PPS or stainless steel	
10	Shaft	Stainless steel	EN 1.4404

Rotor can materials

MAGNA1 25-40/60/80/100 (PN 6/10) and MAGNA1 32-40/60/80 (PN 6/10) have stainless-steel rotor can.

All other versions have PPS-composite rotor can. See below table.

Pump type	Maximum system pressure		
	PN 6 / 0.6 MPa	PN 10 / 1.0 MPa	PN 16 / 1.6 MPa
MAGNA1 25-40/60/80/100	Stainless-steel rotor can		
MAGNA1 25-120	PPS-composite rotor can		
MAGNA1 32-40/60/80	Stainless-steel rotor can		
MAGNA1 32-100/120	PPS-composite rotor can		
MAGNA1 40-40/60/80/100/120/150/180	PPS-composite rotor can		
MAGNA1 50-40/60/80/100/120/150/180	PPS-composite rotor can		
MAGNA1 65-40/60/80/100/120/150	PPS-composite rotor can		
MAGNA1 80-40/60/80/100/120	PPS-composite rotor can		
MAGNA1 100-40/60/80/100/120	PPS-composite rotor can		

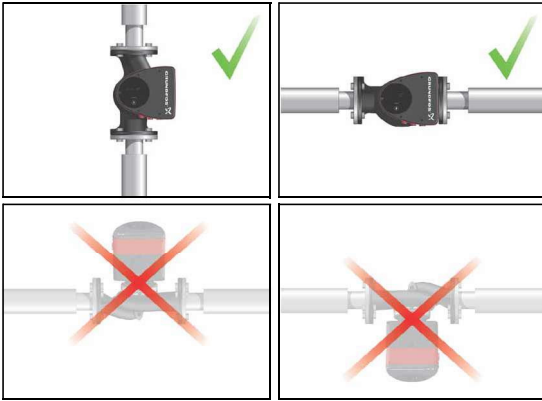
6. Installation

Mechanical installation

The MAGNA1 is designed for indoor installation.

The pump must be installed with horizontal motor shaft.

The pump may be installed in horizontal as well as vertical pipes.



TM05 5518 3812

Fig. 15 Installation positions

Arrows on the pump housing indicate the liquid flow direction through the pump.

The control box must be in horizontal position with the Grundfos logo in vertical position. See fig. 15.

This is described in the installation and operating instructions.



<http://GRUNDFOS.COM/MAGNA1-MANUAL>

The pump must be installed in such a way that it is not stressed by the pipework.

The pump may be suspended direct in the pipes, provided that the pipework can support the pump.

Twin-head pumps are prepared for installation on a mounting bracket or base plate.

To ensure adequate cooling of motor and electronics, the following must be observed:

- Position the pump in such a way that sufficient cooling is ensured.
- The ambient temperature must not exceed +40 °C.

Insulating shells

The insulating shells supplied with single-head MAGNA1 pumps are for heating systems and should be fitted as part of the installation.

Insulating shells for pumps for air-conditioning and cooling systems are available as an accessory. See section *Insulating kits for air-conditioning and cooling systems*, page 21.

Note: Insulating shells are not available for twin-head pumps.

Electrical installation

The electrical connection and protection should be carried out in accordance with local regulations.

- The pump must be connected to an external mains switch.
- The pump must always be correctly earthed.
- The pump requires no external motor protection.
- The pump incorporates thermal protection against slow overloading and blocking.
- When switched on via the power supply, the pump will start pumping after approx. 5 seconds.

Note: The number of starts and stops via the power supply must not exceed four times per hour.

The pump mains connection must be made as shown in fig. 16 or 17, page 20.

Cables



- All cables used must be connected in accordance with local regulations.

Additional protection

If the pump is connected to an electric installation where an earth leakage circuit breaker (ELCB) is used as an additional protection, this circuit breaker must trip when earth fault currents with DC content (pulsating DC) occur.

The earth leakage circuit breaker must be marked with the first or both of the symbols shown below:



Symbol	Description
	High-sensitivity ELCB, type A, according to IEC 60775
	High-sensitivity ELCB, type B, according to IEC 60775

Connection diagrams

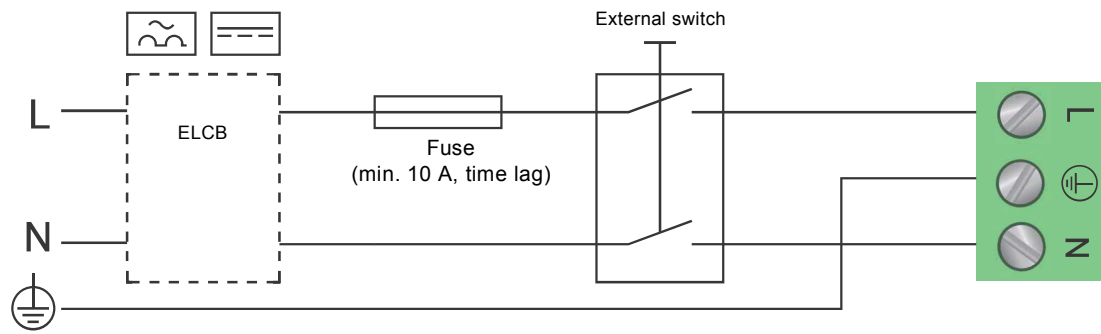


Fig. 16 Example of terminal connection, 1 x 230 V ± 10 %, 50/60 Hz, PE

TM03 2397 3712

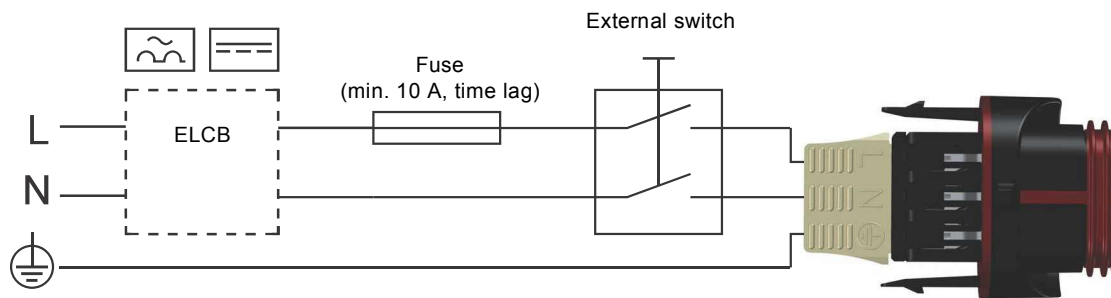


Fig. 17 Example of ALPHA plug connection, 1 x 230 V ± 10 %, 50/60 Hz, PE

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7. Accessories

Insulating kits for air-conditioning and cooling systems

Single-head pumps for air-conditioning and cooling systems can be fitted with insulating shells. A kit consists of two shells made of polyurethane (PUR) and a self-adhesive seal to ensure tight assembly.



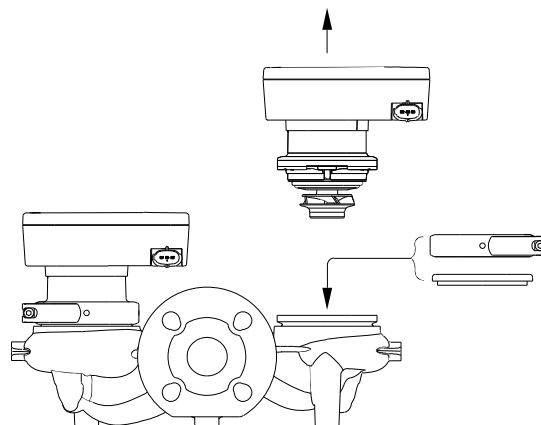
TM05 5529 3812

Fig. 18 Fitting the insulating shells to a MAGNA1 pump

Pump type	Product number
MAGNA1 25-40/60/80/100/120	98354534
MAGNA1 32-40/60/80/100/120	98354535
MAGNA1 32-40/60/80/100 F	98354536
MAGNA1 32-120 F	98063287
MAGNA1 40-40/60	98354537
MAGNA1 40-80/100 F	98063288
MAGNA1 40-120/150/180 F	98145675
MAGNA1 50-40/60/80 F	98063289
MAGNA1 50-100/120/150/180 F	98145676
MAGNA1 65-40/60/80/100/120/150 F	96913593
MAGNA1 80-40/60/80/100/120 F	98134265
MAGNA1 100-40/60/80/100/120 F	96913589

Blanking flanges

A blanking flange is used to blank off the opening when one of the pumps of a twin-head pump is removed for service to enable uninterrupted operation of the other pump.



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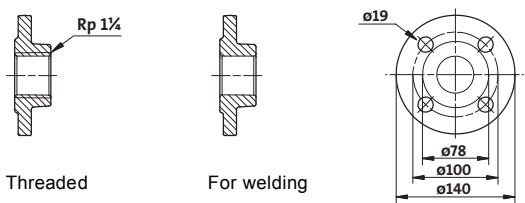
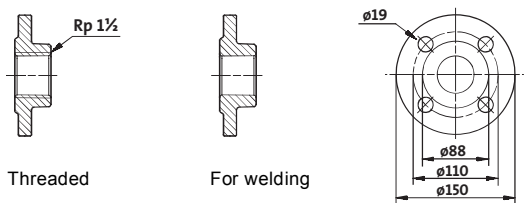
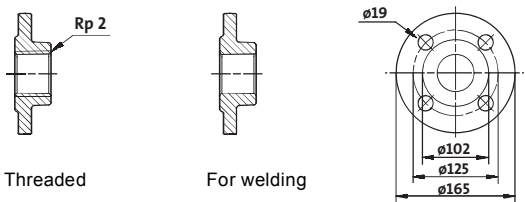
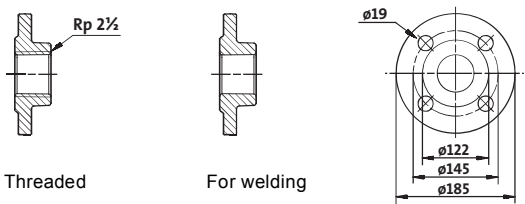
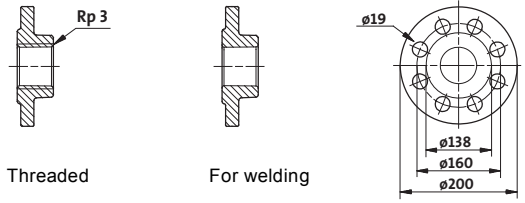
Fig. 19 Position of blanking flange

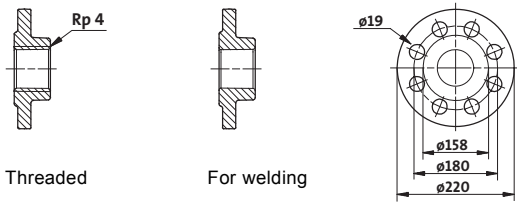
Pump type	Product number
MAGNA1 25-40/60/80/100/120	
MAGNA1 32-40/60/80/100 (F)	98159373
MAGNA1 40-40/60 F	
MAGNA1 32-120 F	
MAGNA1 40-/80/100/120/150/180 F	
MAGNA1 50-40/60/80/100/120/150/180 F	98159372
MAGNA1 65-40/60/80/100/120/150 F	
MAGNA1 80-40/60/80/100/120 F	
MAGNA1 100-40/60/80/100/120 F	

Counter flanges

Cast-iron pumps

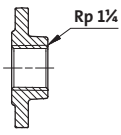
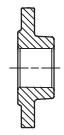
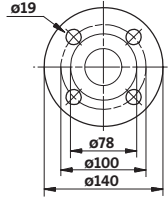
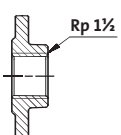
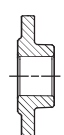
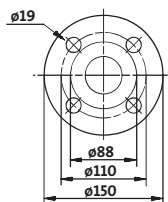
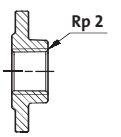
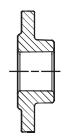
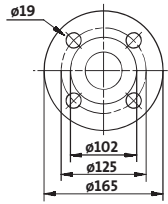
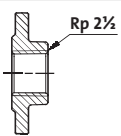
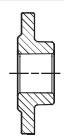
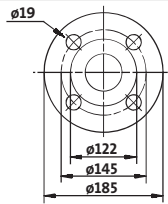
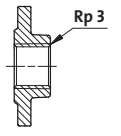
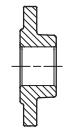
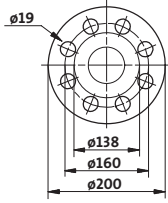
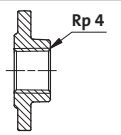
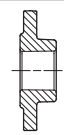
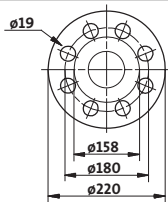
A counter-flange kit consists of two stainless-steel flanges, two gaskets of asbestos-free material IT 200 and the required number of bolts and nuts.

Counter flange	Pump type	Description	Rated pressure (EN 1092-2)	Pipework connection	Product number
 <p>Threaded</p> <p>For welding</p>	MAGNA1 DN 32	Threaded	10 bar	Rp 1 1/4	539703
		For welding	10 bar	32 mm, nominal	539704
		Threaded	16 bar	Rp 1 1/4	539703
		For welding	16 bar	32 mm, nominal	539704
 <p>Threaded</p> <p>For welding</p>	MAGNA1 DN 40	Threaded	10 bar	Rp 1 1/2	539701
		For welding	10 bar	40 mm, nominal	539702
		Threaded	16 bar	Rp 1 1/2	539701
		For welding	16 bar	40 mm, nominal	539702
 <p>Threaded</p> <p>For welding</p>	MAGNA1 DN 50	Threaded	10 bar	Rp 2	549801
		For welding	10 bar	50 mm, nominal	549802
		Threaded	16 bar	Rp 2	549801
		For welding	16 bar	50 mm, nominal	549802
 <p>Threaded</p> <p>For welding</p>	MAGNA1 DN 65	Threaded	10 bar	Rp 2 1/2	559801
		For welding	10 bar	65 mm, nominal	559802
		Threaded	16 bar	Rp 2 1/2	559801
		For welding	16 bar	65 mm, nominal	559802
 <p>Threaded</p> <p>For welding</p>	MAGNA1 DN 80	Threaded	6 bar	Rp 3	569902
		For welding	6 bar	80 mm, nominal	569901
		Threaded	10 bar	Rp 3	569802
		For welding	10 bar	80 mm, nominal	569801
		Threaded	16 bar	Rp 3	569802
		For welding	16 bar	80 mm, nominal	569801

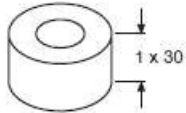
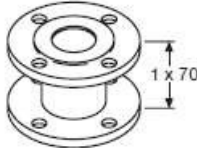


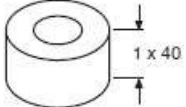
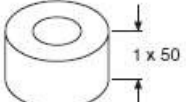
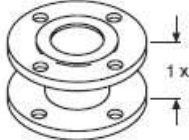
Counter flange		Pump type	Description	Rated pressure (EN 1092-2)	Pipework connection	Product number	
 <p>Threaded</p> <p>For welding</p> <p>TM03 0483 5204</p>		MAGNA1 DN 100	Threaded	6 bar	Rp 4	579901	
			For welding	6 bar	100 mm, nominal	579902	
				Threaded	10 bar	Rp 4	579801
				For welding	10 bar	100 mm, nominal	579802
				Threaded	16 bar	Rp 4	579801
				For welding	16 bar	100 mm, nominal	579802

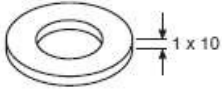

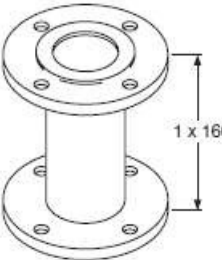
Stainless-steel pumps

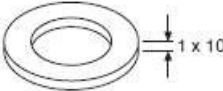
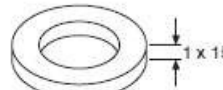




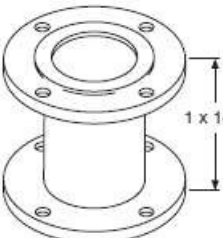
A counter-flange kit consists of two bronze flanges, two gaskets of asbestos-free material IT 200 and the required number of bolts and nuts.

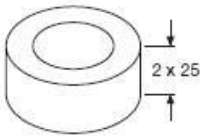
Counter flange			Pump type	Description	Rated pressure (EN 1092-2)	Pipework connection	Product number
			MAGNA1 DN 32	Threaded	10 bar	Rp 1 1/4	96427029
Threaded	For welding	For welding		10 bar	32 mm, nominal	96427030	
				Threaded	16 bar	Rp 1 1/4	96427029
				For welding	16 bar	32 mm, nominal	96427030
			TM03 0478 5204				
			MAGNA1 DN 40	Threaded	10 bar	Rp 1 1/2	539711
Threaded	For welding	For welding		10 bar	40 mm, nominal	539712	
				Threaded	16 bar	Rp 1 1/2	539711
				For welding	16 bar	40 mm, nominal	539712
			TM03 0479 5204				
			MAGNA1 DN 50	Threaded	10 bar	Rp 2	549811
Threaded	For welding	For welding		10 bar	50 mm, nominal	549812	
			TM03 0480 5204				
			MAGNA1 DN 65	Threaded	10 bar	Rp 2 1/2	559811
Threaded	For welding	For welding		10 bar	65 mm, nominal	559812	
			TM03 0481 5204				
			MAGNA1 DN 80	Threaded	6 bar	Rp 3	96405735
Threaded	For welding	For welding		6 bar	80 mm, nominal	569911	
				Threaded	10 bar	Rp 3	569812
			TM03 0482 5204	For welding	10 bar	80 mm, nominal	569811
			TM03 0485 5204				
			MAGNA1 DN 100	Threaded	6 bar	Rp 4	96405737
Threaded	For welding	For welding		10 bar	Rp 4	96405738	

Adapter for various port-to-port lengths

DN	Type	Height [mm]	Diameter [mm]		Pitch circle diameter [mm]		Adapter	Product number		
			PN 6	PN 10	PN 6	PN 10		PN 6	PN 10	
40	A40-30	1 x 30	-	-	-	-		TM05 4372 2212	96281076	96608515
	A40-70	1 x 70	-	-	100	110		TM05 4373 2212	539921	539721
50	A50-10	1 x 10	90	102	-	125		TM05 4374 2212	549921	549821
	A50-20	1 x 20	90	102	-	-		TM05 4375 2212	549922	549822
	A50-40	1 x 40	-	-	-	-		TM05 4376 2212	96281077	96608516
	A50-50	1 x 50	90	102	-	-		TM05 4377 2212	549923	549823
	A50-60	1 x 60	-	-	110	125		TM05 4378 2212	549924	549824

DN	Type	Height [mm]	Diameter [mm]		Pitch circle diameter [mm]		Adapter	Product number		
			PN 6	PN 10	PN 6	PN 10		PN 6	PN 10	
	A65-10	1 x 10	110	122	-	-		TM05 4379 2212	559921	559821
65	A65-25	1 x 25	110	122	-	-		TM05 4380 2212	559922	559822
	A65-160	1 x 160	-	-	130	145		TM05 4381 2212	559923	559823

DN	Type	Height [mm]	Diameter [mm]		Pitch circle diameter [mm]		Adapter	Product number		
			PN 6	PN 10	PN 6	PN 10		PN 6	PN 10	
80	A80-10	1 x 10	127	138	150	160		TM05 4382 2212	569921	569821
	A80-15	1 x 15	127	138	-	-		TM05 4383 2212	569922	569822
	A80-20	1 x 20	127	138	-	-		TM05 4384 2212	569923	569823
	A80-25	1 x 25	127	138	-	-		TM05 4385 2212	569924	569824
	A80-40	1 x 40	127	138	-	-		TM05 4386 2212	569925	569825
	A80-50	1 x 50	127	138	-	-		TM05 4387 2212	569926	569826
	A80-140	1 x 140	-	-	150	160		TM05 4388 2212	569927	569827

DN	Type	Height [mm]	Diameter [mm]		Pitch circle diameter [mm]		Adapter	Product number	
			PN 6	PN 10	PN 6	PN 10		PN 6	PN 10
100	A100-50	2 x 25	-	-	-	-		96545610	96545610

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8. Guide to performance curves

Each pump setting has its own performance curve (Q/H curve). A power curve (P1 curve) belongs to each Q/H curve. The power curve shows the pump power consumption (P1) in Watt at a given Q/H curve.

The P1 value corresponds to the value that can be read from the pump display. See fig. 20.

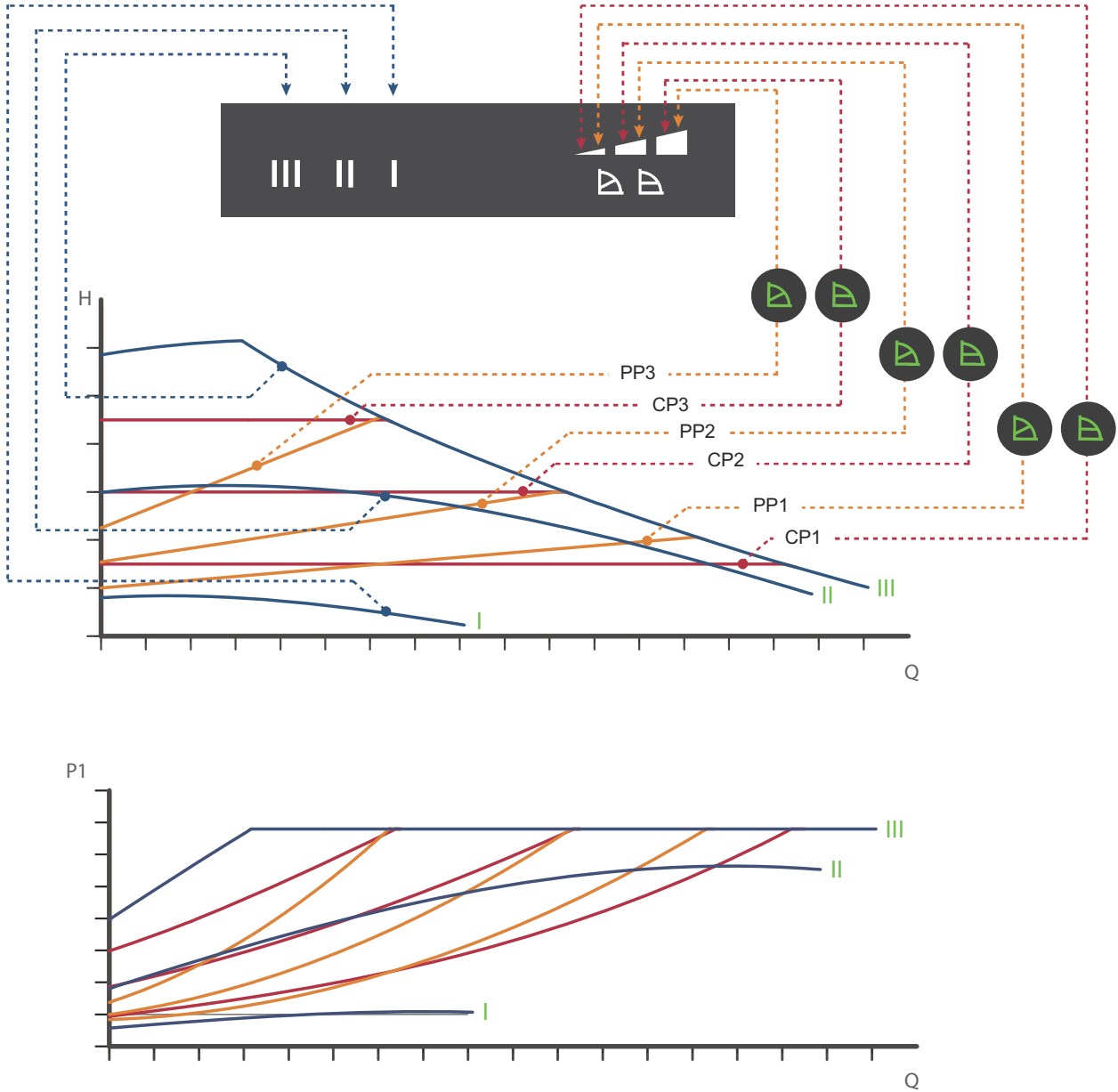


Fig. 20 Performance curves in relation to pump setting

Setting	Pump curve
PP1	Lowest proportional-pressure curve
PP2	Intermediate proportional-pressure curve
PP3	Highest proportional-pressure curve
CP1	Lowest constant-pressure curve
CP2	Intermediate constant-pressure curve
CP3	Highest constant-pressure curve
III	Constant-curve duty, fixed speed III
II	Constant-curve duty, fixed speed II
I	Constant-curve duty, fixed speed I

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9. Curve conditions

Performance curves

The guidelines below apply to the performance curves on pages 48 to 105:

- Test liquid: airless water.
- The curves apply to a density of $\rho = 998.2 \text{ kg/m}^3$ and a liquid temperature of $+20 \text{ }^\circ\text{C}$.
- All curves show average values and should not be used as guarantee curves. If a specific minimum performance is required, individual measurements must be made.
- The curves apply to a kinematic viscosity of $\nu = 1.004 \text{ mm}^2/\text{s}$ (1.004 cSt).
- Reference supply voltage: 1 x 230 V, 50 Hz.
- Curves obtained according to EN 16297.

Symbols used on the following pages



Fig. 21 Energy efficiency index (EEI)

The MAGNA1 is energy-optimised and complies with the EuP Directive (Commission Regulation (EC) No 641/2009) which will be effective as from 1 January 2013.

For MAGNA1 pumps, the energy efficiency index (EEI) is ≤ 0.23 .

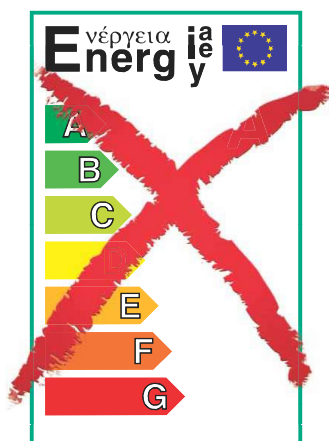


Fig. 22 Old energy label

From 1 January 2013, the old A to G energy label will be replaced by the new energy efficiency index (EEI). Only the best of today's A-labelled circulator pumps will meet the new requirements.

Figure 23 shows the energy consumption index for a typical circulator pump compared to the various EEI limits.

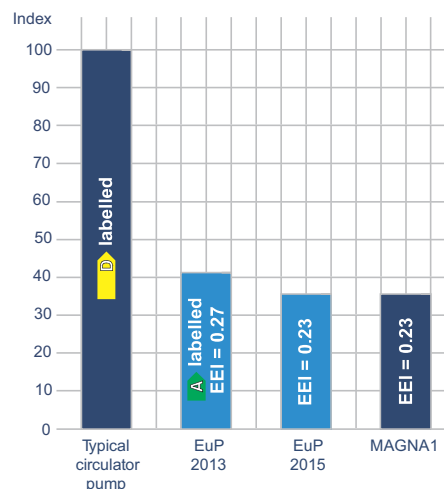


Fig. 23 Energy consumption index

With an energy efficiency index (EEI) equal to the EuP 2015, you can achieve significant energy savings compared to a typical circulator pump and thus a remarkably fast return on investment. This means, of course, that the MAGNA1 meets the standards of the EuP legislation.

For more information about the new energy directive, please visit:

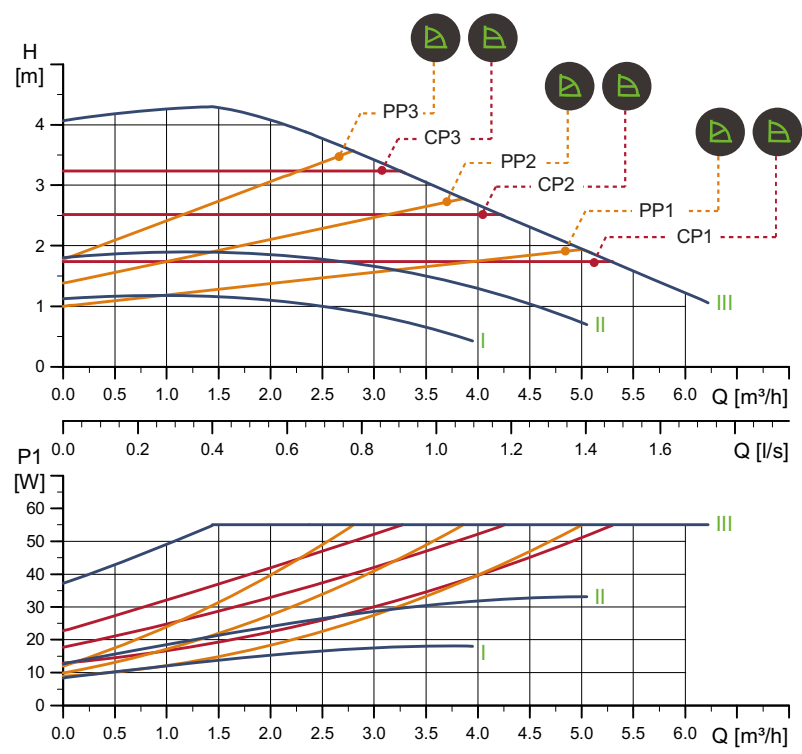


<http://energy.grundfos.com>

10. Performance curves and technical data

MAGNA1 25-40

1 x 230 V, 50/60 Hz

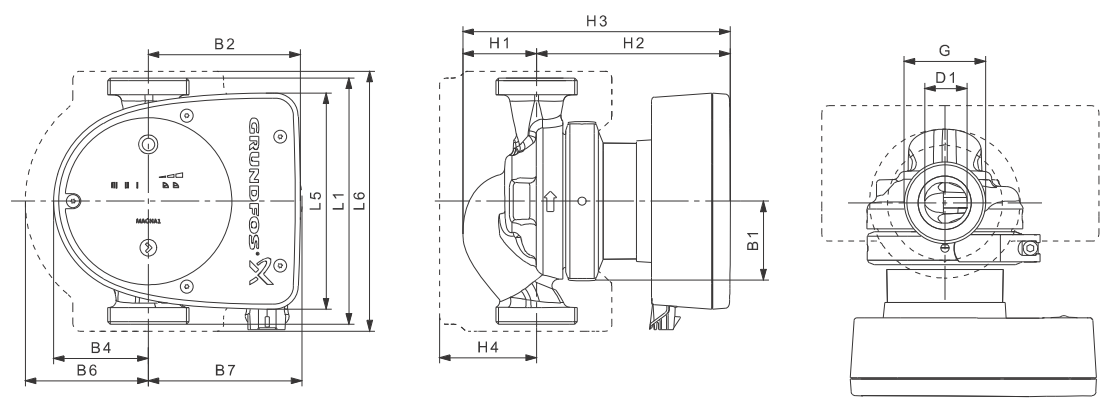


Speed	P1 [W]	I _{1/1} [A]
Min.	9	0.09
Max.	56	0.45

The pump incorporates overload protection.

Connections: See [Counter flanges](#), page 22.
 System pressure: Max. 1.0 MPa (10 bar). Also available as max. 1.6 MPa (16 bar).
 Liquid temperature: -10 to +110 °C (TF 110).
 Specific EEI: 0.22.

Net weight [kg]	Gross weight [kg]	Ship. vol. [m³]
4.4	5.4	0.012



Pump type	Dimensions [mm]													(inch)	
	L1	L5	L6	B1	B2	B4	B6	B7	H1	H2	H3	H4	D1	G	
MAGNA1 25-40	180	158	190	58	111	69	90	113	54	142	196	71	25	1 1/2	

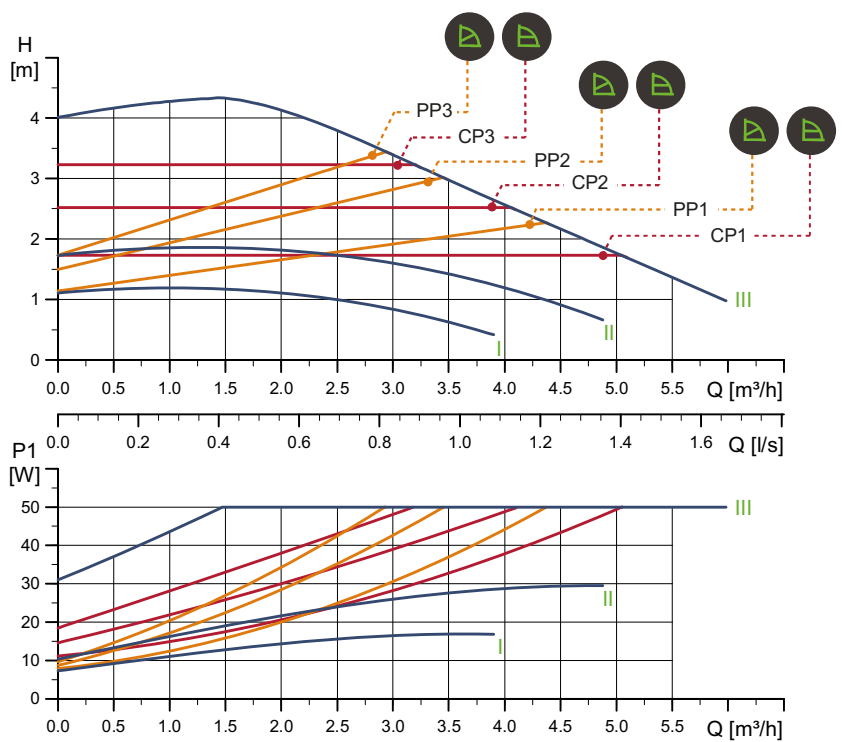
For product numbers, see page 130.

TM05 6316 4711

TM05 5142 3312

MAGNA1 25-40

1 x 230 V, 50/60 Hz

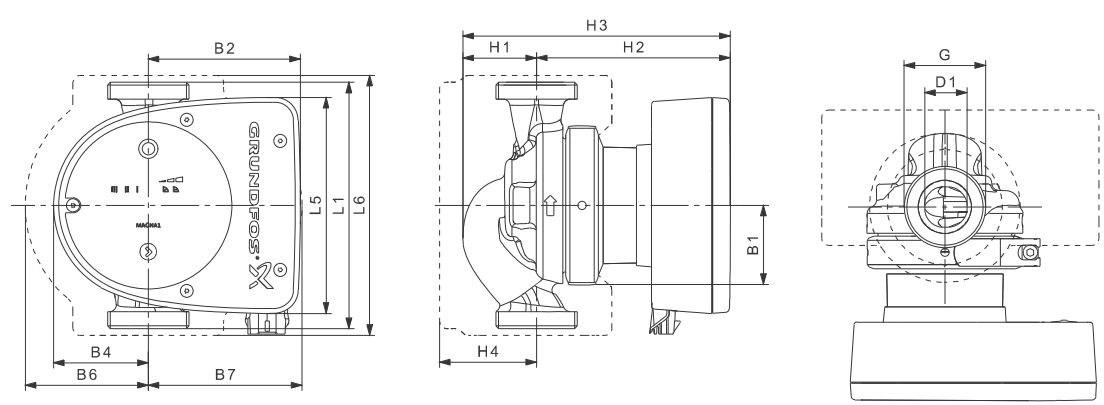


Speed	P1 [W]	I _{1/1} [A]
Min.	8	0.08
Max.	51	0.41

The pump incorporates overload protection.

Net weight [kg]	Gross weight [kg]	Ship. vol. [m ³]
4.4	5.4	0.012

Connections: See [Counter flanges](#), page 22.
 System pressure: Max. 1.6 MPa (16 bar). Also available as max. 1.0 MPa (10 bar).
 Liquid temperature: -10 to +110 °C (TF 110).
 Specific EEI: 0.21.



Pump type	Dimensions [mm]													(inch)	
	L1	L5	L6	B1	B2	B4	B6	B7	H1	H2	H3	H4	D1	G	
MAGNA1 25-40	180	158	190	58	111	69	90	113	54	142	196	71	25	1 1/2	

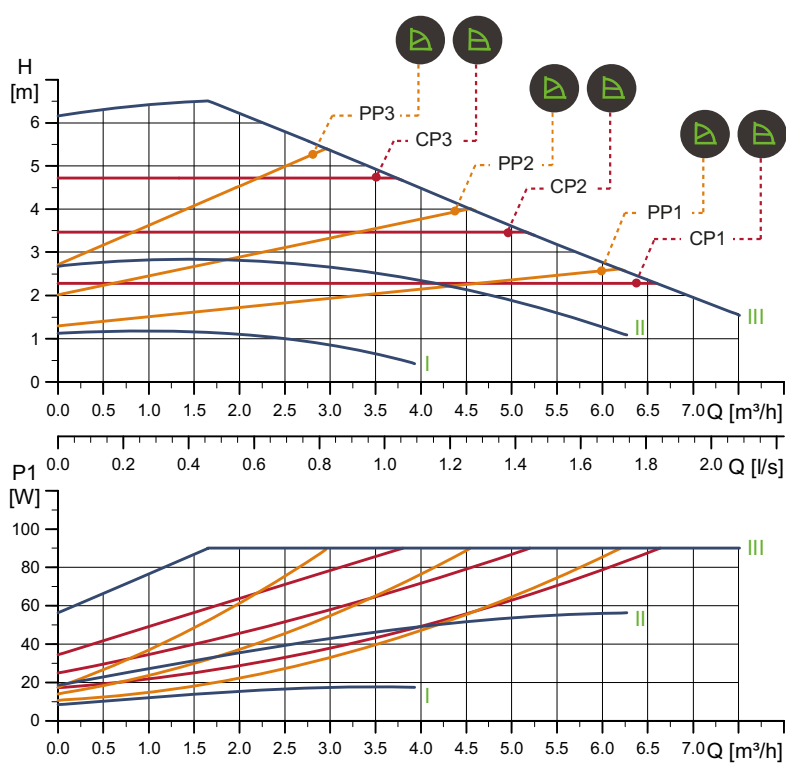
For product numbers, see page 130.

TM05 6317 4711

TM05 5142 3312

MAGNA1 25-60

1 x 230 V, 50/60 Hz

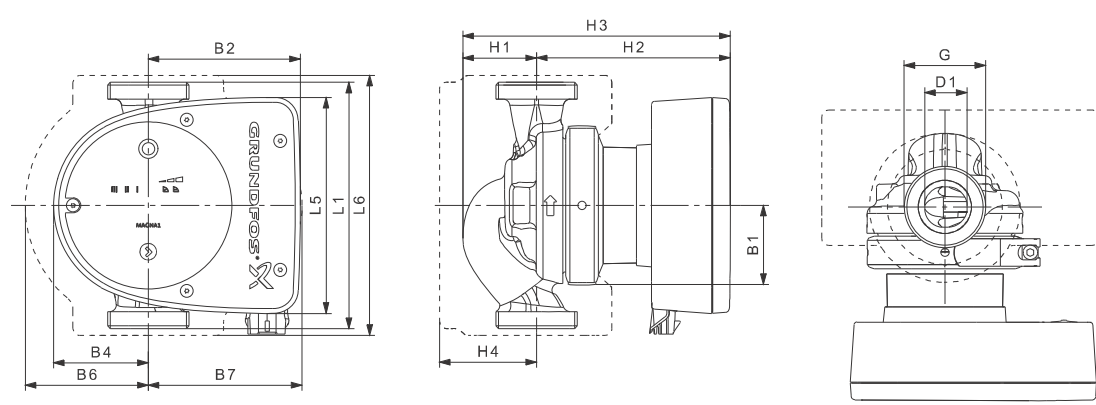


Speed	P1 [W]	I _{1/1} [A]
Min.	9	0.09
Max.	92	0.74

The pump incorporates overload protection.

Net weight [kg]	Gross weight [kg]	Ship. vol. [m ³]
4.4	5.4	0.012

Connections: See [Counter flanges](#), page 22.
 System pressure: Max. 1.0 MPa (10 bar). Also available as max. 1.6 MPa (16 bar).
 Liquid temperature: -10 to +110 °C (TF 110).
 Specific EEI: 0.22.



Pump type	Dimensions [mm]													(inch)	
	L1	L5	L6	B1	B2	B4	B6	B7	H1	H2	H3	H4	D1	G	
MAGNA1 25-60	180	158	190	58	111	69	90	113	54	142	196	71	25	1 1/2	

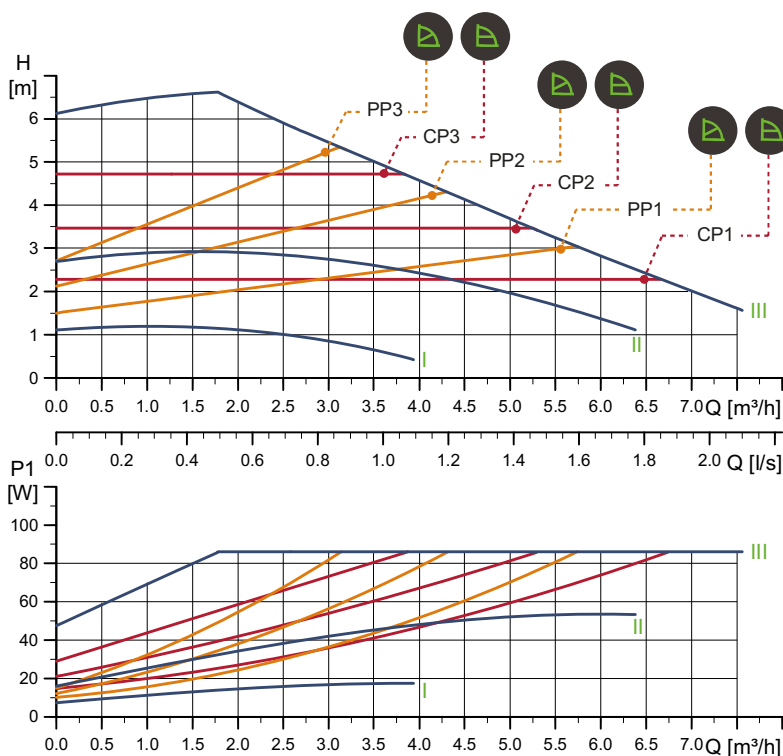
For product numbers, see page 130.

TM05 6318 4712

TM05 5142 3312

MAGNA1 25-60

1 x 230 V, 50/60 Hz

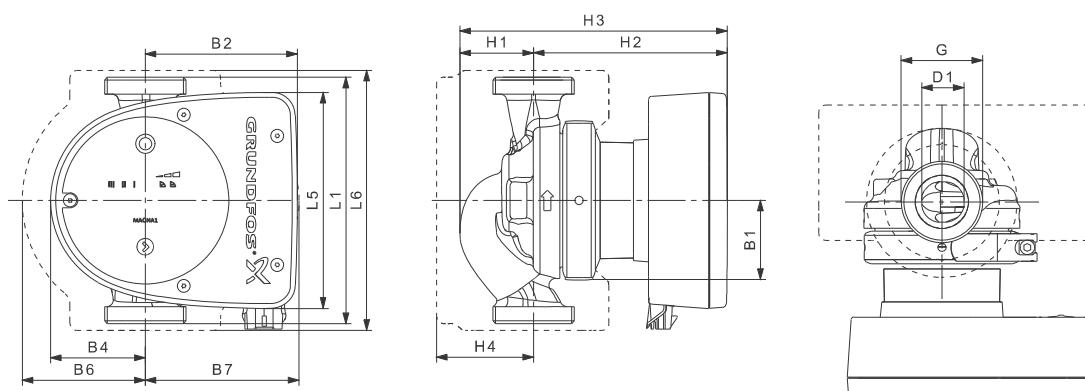


Speed	P1 [W]	I _{1/1} [A]
Min.	8	0.08
Max.	87	0.7

The pump incorporates overload protection.

Net weight [kg]	Gross weight [kg]	Ship. vol. [m ³]
4.4	5.4	0.012

Connections: See [Counter flanges](#), page 22.
 System pressure: Max. 1.6 MPa (16 bar).
 Also available as max. 1.0 MPa (10 bar).
 Liquid temperature: -10 to +110 °C (TF 110).
 Specific EEI: 0.21.



Pump type	Dimensions [mm]													(inch)	
	L1	L5	L6	B1	B2	B4	B6	B7	H1	H2	H3	H4	D1	G	
MAGNA1 25-60	180	158	190	58	111	69	90	113	54	142	196	71	25	1 1/2	

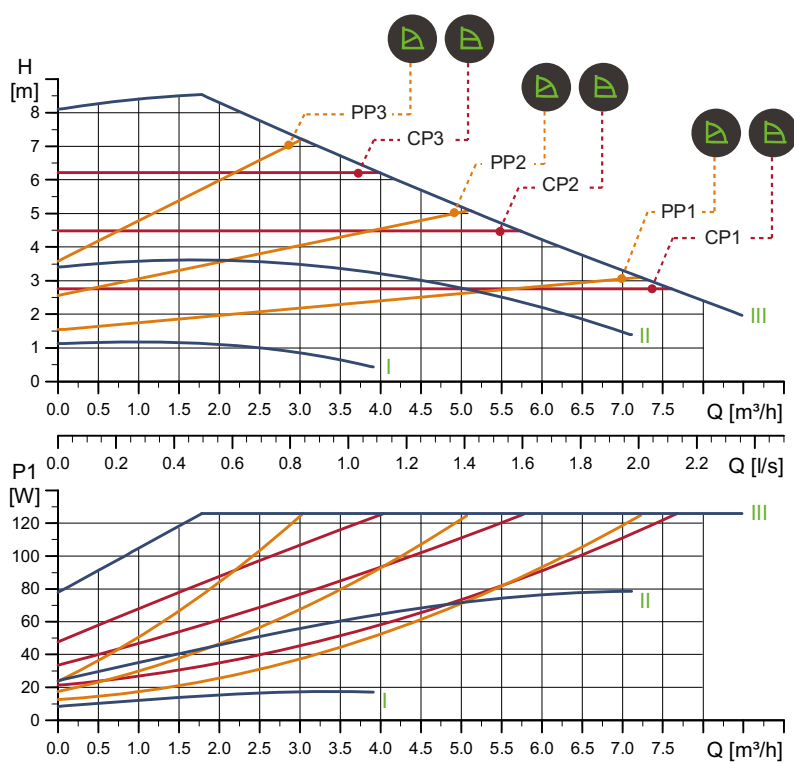
For product numbers, see page 130.

TM05 6319 4712

TM05 5142 3312

MAGNA1 25-80

1 x 230 V, 50/60 Hz

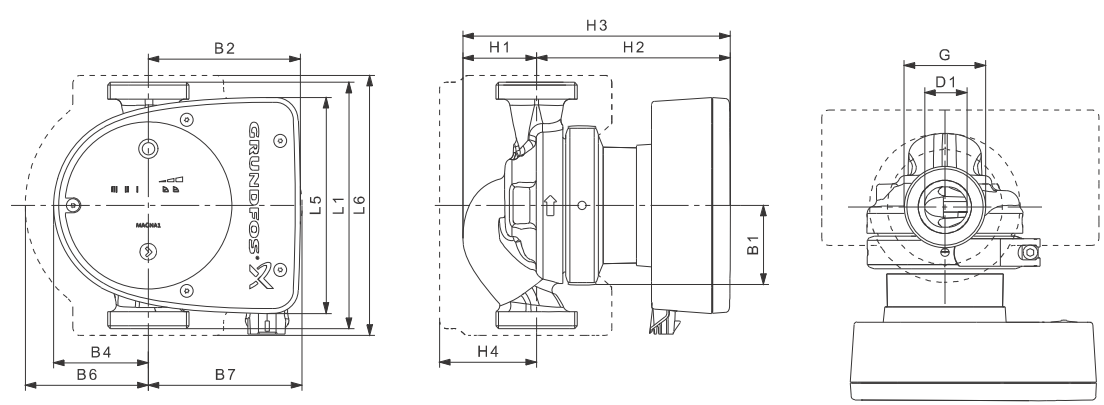


Speed	P1 [W]	I _{1/1} [A]
Min.	9	0.09
Max.	128	1.03

The pump incorporates overload protection.

Net weight [kg]	Gross weight [kg]	Ship. vol. [m ³]
4.4	5.4	0.012

Connections: See [Counter flanges](#), page 22.
 System pressure: Max. 1.0 MPa (10 bar). Also available as max. 1.6 MPa (16 bar).
 Liquid temperature: -10 to +110 °C (TF 110).
 Specific EEI: 0.22.



Pump type	Dimensions [mm]													(inch)	
	L1	L5	L6	B1	B2	B4	B6	B7	H1	H2	H3	H4	D1	G	
MAGNA1 25-80	180	158	190	58	111	69	90	113	54	142	196	71	25	1 1/2	

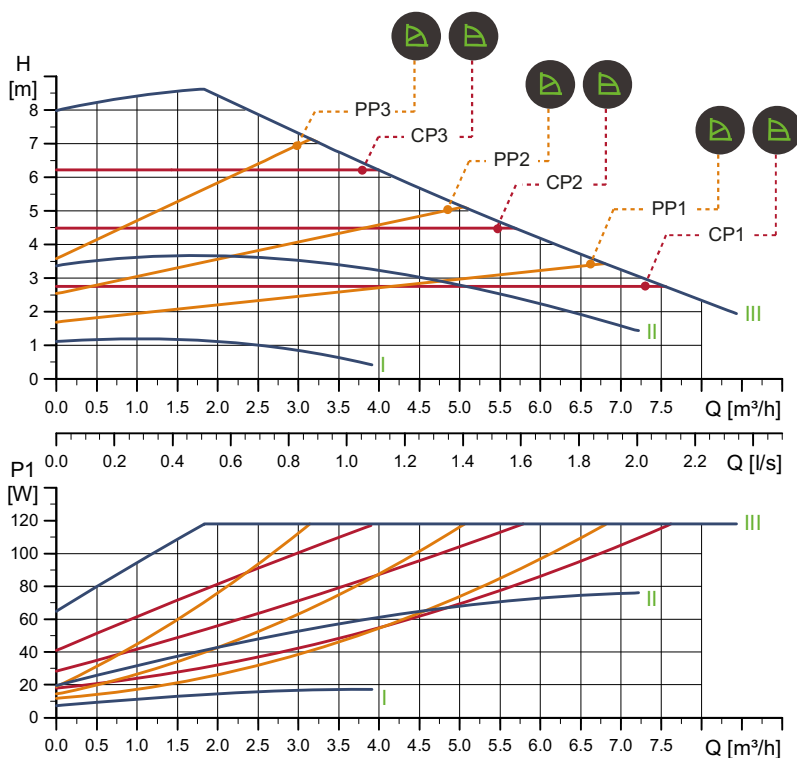
For product numbers, see page 130.

TM05 6320 4712

TM05 5142 3312

MAGNA1 25-80

1 x 230 V, 50/60 Hz

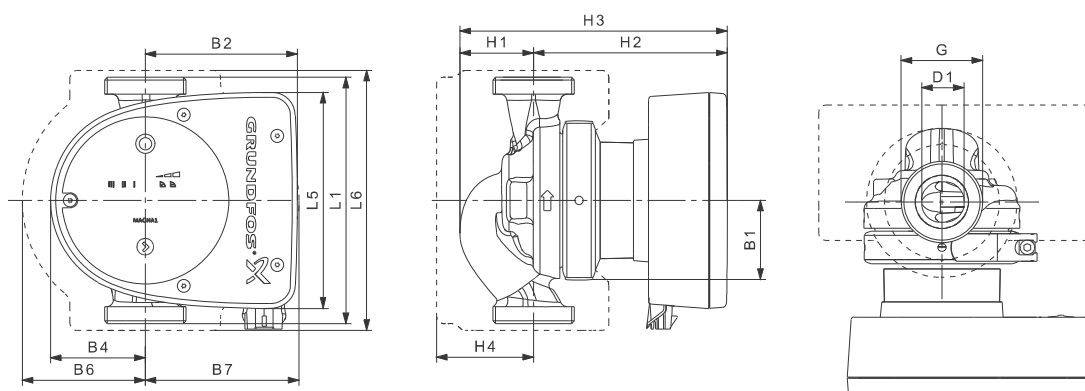


Speed	P1 [W]	I _{1/1} [A]
Min.	8	0.08
Max.	119	0.96

The pump incorporates overload protection.

Net weight [kg]	Gross weight [kg]	Ship. vol. [m ³]
4.4	5.4	0.012

Connections: See [Counter flanges](#), page 22.
 System pressure: Max. 1.6 MPa (16 bar). Also available as max. 1.0 MPa (10 bar).
 Liquid temperature: -10 to +110 °C (TF 110).
 Specific EEI: 0.21.



Pump type	Dimensions [mm]													(inch)	
	L1	L5	L6	B1	B2	B4	B6	B7	H1	H2	H3	H4	D1	G	
MAGNA1 25-80	180	158	190	58	111	69	90	113	54	142	196	71	25	1 1/2	

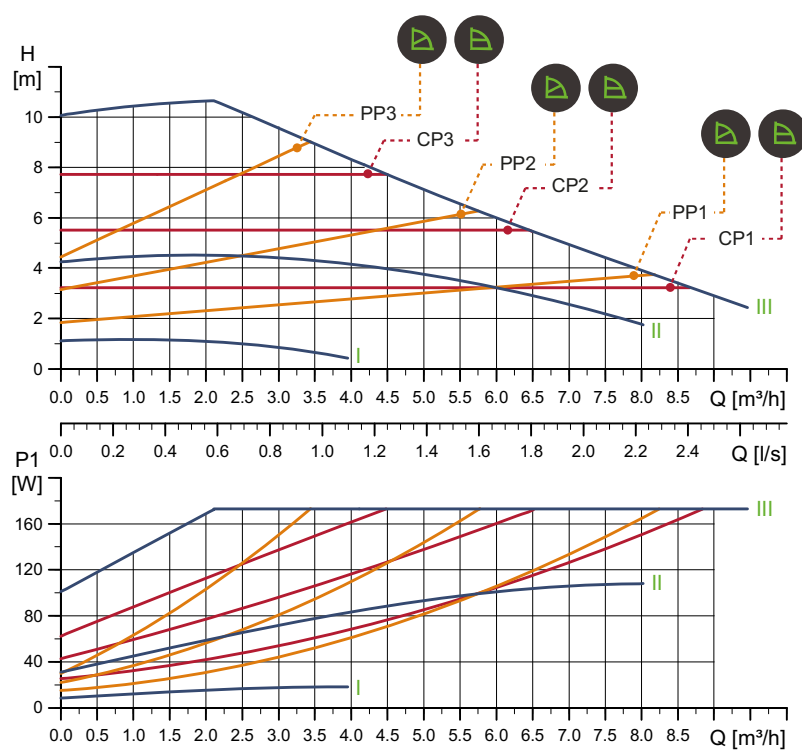
For product numbers, see page 130.

TM05 6321 4712

TM05 5142 3312

MAGNA1 25-100

1 x 230 V, 50/60 Hz

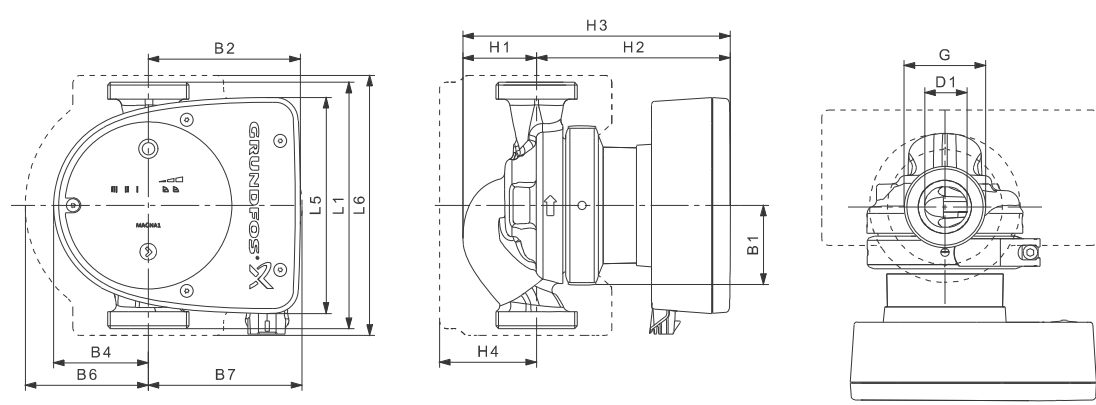


Speed	P1 [W]	I _{1/1} [A]
Min.	9	0.09
Max.	176	1.42

The pump incorporates overload protection.

Net weight [kg]	Gross weight [kg]	Ship. vol. [m ³]
4.4	5.4	0.012

Connections: See [Counter flanges](#), page 22.
 System pressure: Max. 1.0 MPa (10 bar). Also available as max. 1.6 MPa (16 bar).
 Liquid temperature: -10 to +110 °C (TF 110).
 Specific EEI: 0.22.



Pump type	Dimensions [mm]													(inch)	
	L1	L5	L6	B1	B2	B4	B6	B7	H1	H2	H3	H4	D1	G	
MAGNA1 25-100	180	158	190	58	111	69	90	113	54	142	196	71	25	1 1/2	

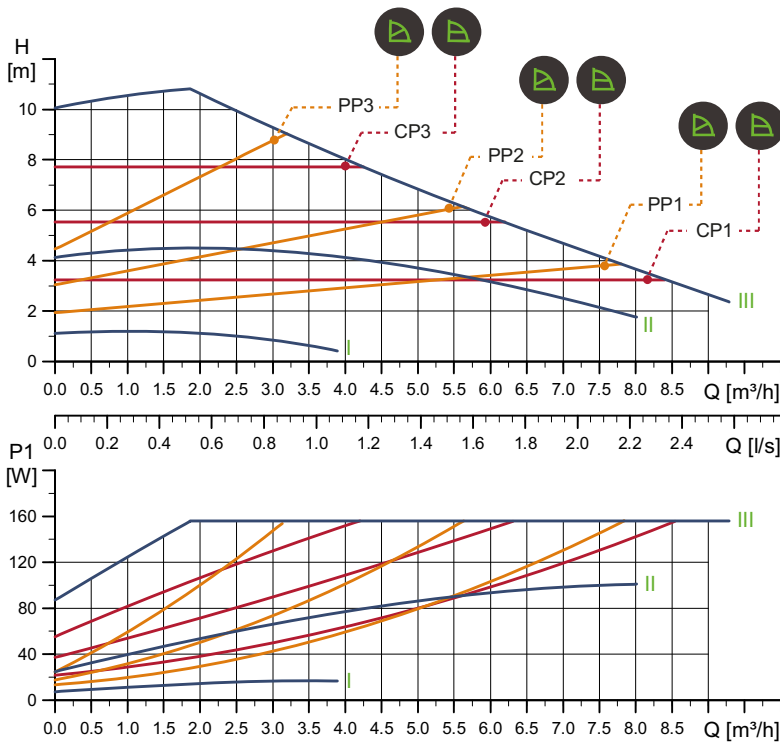
For product numbers, see page 130.

TM05 6322 4712

TM05 5142 3312

MAGNA1 25-100

1 x 230 V, 50/60 Hz



Speed	P1 [W]	I _{1/1} [A]
Min.	8	0.08
Max.	158	1.28

The pump incorporates overload protection.

Net weight [kg]	Gross weight [kg]	Ship. vol. [m ³]
4.4	5.4	0.012

Connections:

System pressure:

Liquid temperature:

Specific EEI:

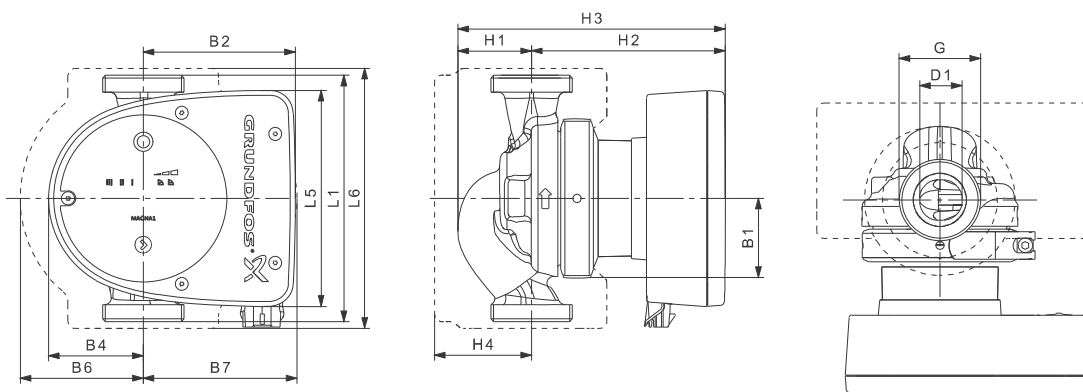
See [Counter flanges](#), page 22.

Max. 1.6 MPa (16 bar).

Also available as max. 1.0 MPa (10 bar).

-10 to +110 °C (TF 110).

0.21.



Pump type	Dimensions [mm]													(inch)	
	L1	L5	L6	B1	B2	B4	B6	B7	H1	H2	H3	H4	D1	G	
MAGNA1 25-100	180	158	190	58	111	69	90	113	54	142	196	71	25	1 1/2	

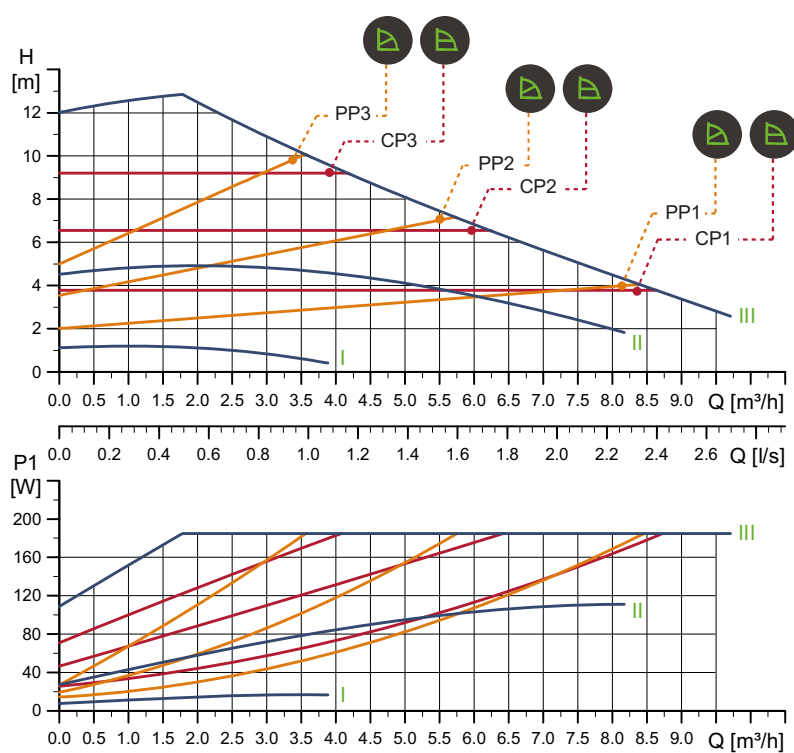
For product numbers, see page 130.

TM05 6323 4712

TM05 5142 3312

MAGNA1 25-120

1 x 230 V, 50/60 Hz

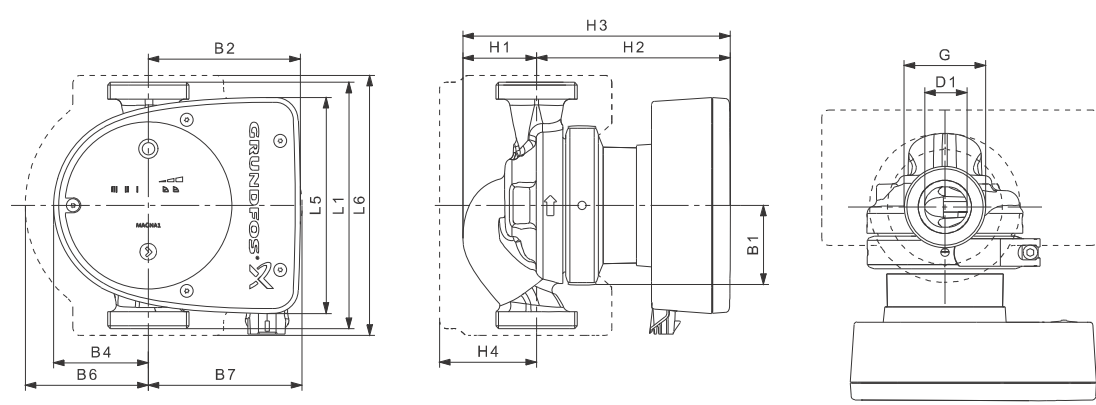


Speed	P1 [W]	I _{1/1} [A]
Min.	8	0.08
Max.	188	1.51

The pump incorporates overload protection.

Net weight [kg]	Gross weight [kg]	Ship. vol. [m ³]
4.4	5.4	0.012

Connections: See [Counter flanges](#), page 22.
 System pressure: Max. 1.0 MPa (10 bar). Also available as max. 1.6 MPa (16 bar).
 Liquid temperature: -10 to +110 °C (TF 110).
 Specific EEI: 0.21.



Pump type	Dimensions [mm]													(inch)	
	L1	L5	L6	B1	B2	B4	B6	B7	H1	H2	H3	H4	D1	G	
MAGNA1 25-120	180	158	190	58	111	69	90	113	54	142	196	71	25	1 1/2	

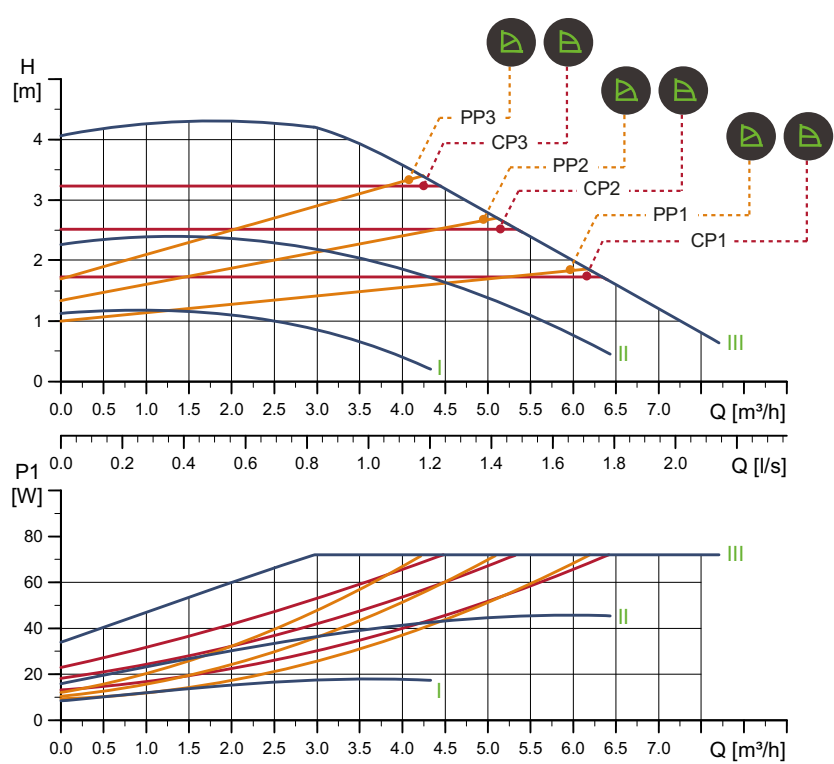
For product numbers, see page 130.

TM05 6324 4712

TM05 5142 3312

MAGNA1 32-40

1 x 230 V, 50/60 Hz

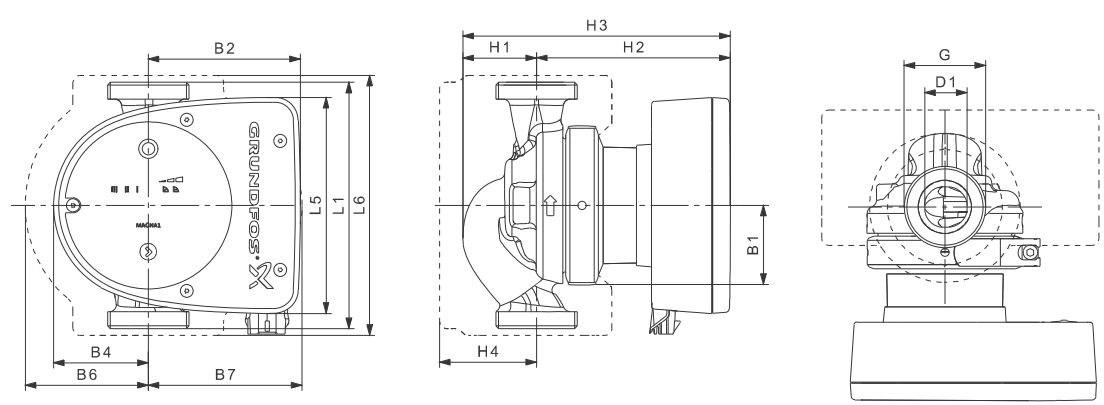


Speed	P1 [W]	I _{1/1} [A]
Min.	9	0.09
Max.	73	0.59

The pump incorporates overload protection.

Net weight [kg]	Gross weight [kg]	Ship. vol. [m ³]
4.4	5.4	0.012

Connections: See [Counter flanges](#), page 22.
 System pressure: Max. 1.0 MPa (10 bar). Also available as max. 1.6 MPa (16 bar).
 Liquid temperature: -10 to +110 °C (TF 110).
 Specific EEI: 0.22.



Pump type	Dimensions [mm]													(inch)	
	L1	L5	L6	B1	B2	B4	B6	B7	H1	H2	H3	H4	D1	G	
MAGNA1 32-40	180	158	190	58	111	69	90	113	54	142	196	71	32	2	

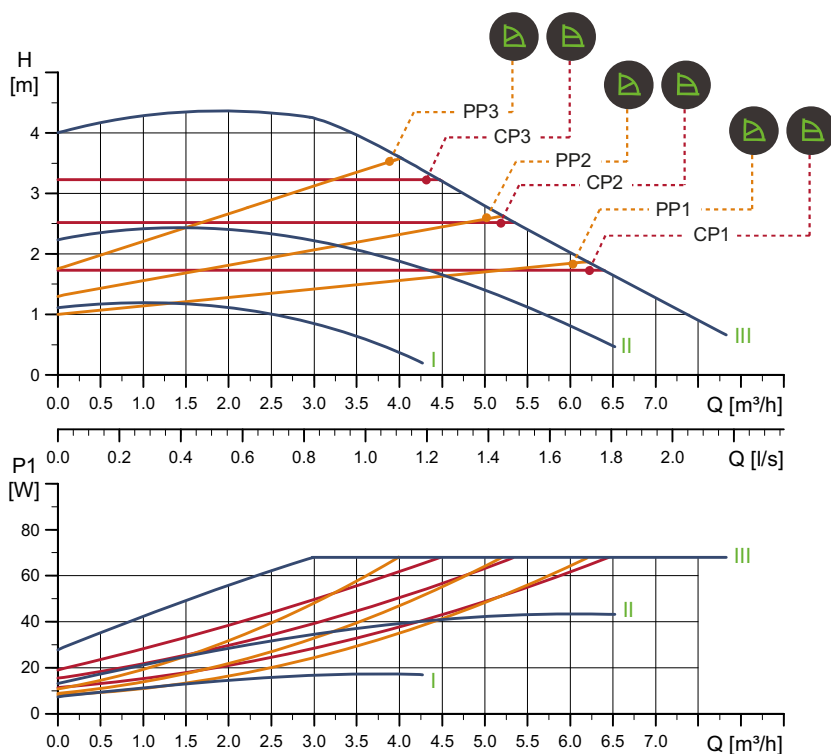
For product numbers, see page 130.

TM05 6325 4712

TM05 5142 3312

MAGNA1 32-40

1 x 230 V, 50/60 Hz



Speed	P1 [W]	I _{1/1} [A]
Min.	8	0.08
Max.	69	0.56

The pump incorporates overload protection.

Net weight [kg]	Gross weight [kg]	Ship. vol. [m³]
4.4	5.4	0.012

Connections:

System pressure:

Liquid temperature:

Specific EEI:

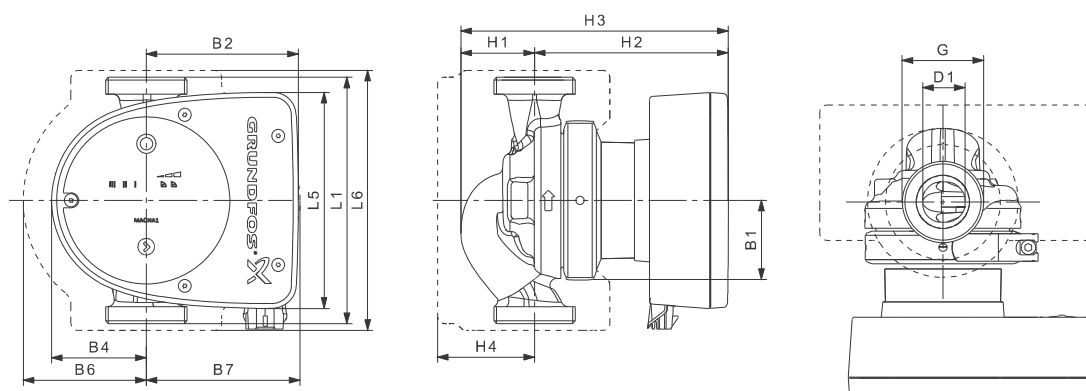
See [Counter flanges](#), page 22.

Max. 1.6 MPa (16 bar).
Also available as max. 1.0 MPa (10 bar).

-10 to +110 °C (TF 110).

0.21.

TM05 6326 4712



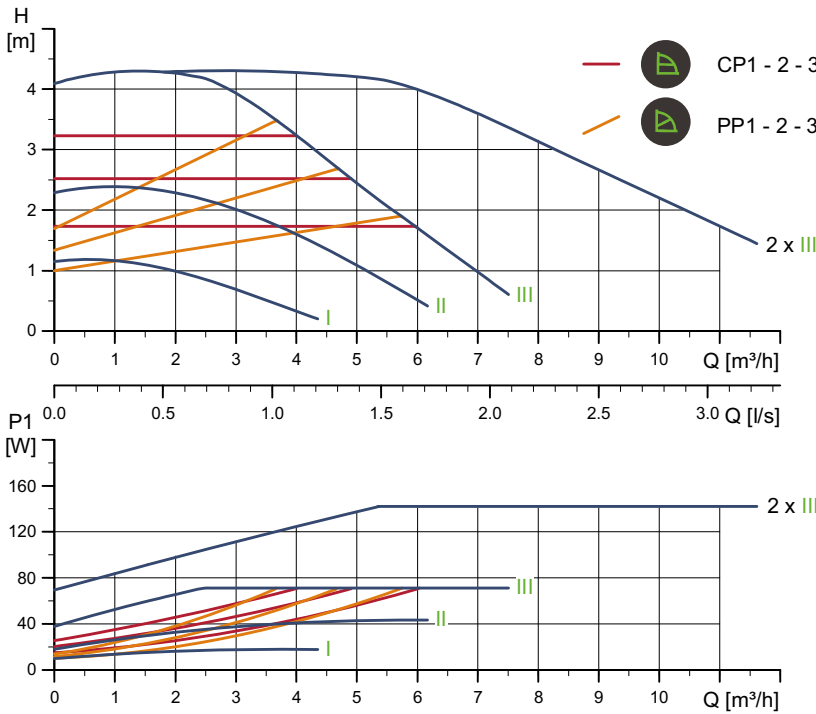
TM05 5142 3312

Pump type	Dimensions [mm]													(inch)	
	L1	L5	L6	B1	B2	B4	B6	B7	H1	H2	H3	H4	D1	G	
MAGNA1 32-40	180	158	190	58	111	69	90	113	54	142	196	71	32	2	

For product numbers, see page 130.

MAGNA1 D 32-40

1 x 230 V, 50/60 Hz



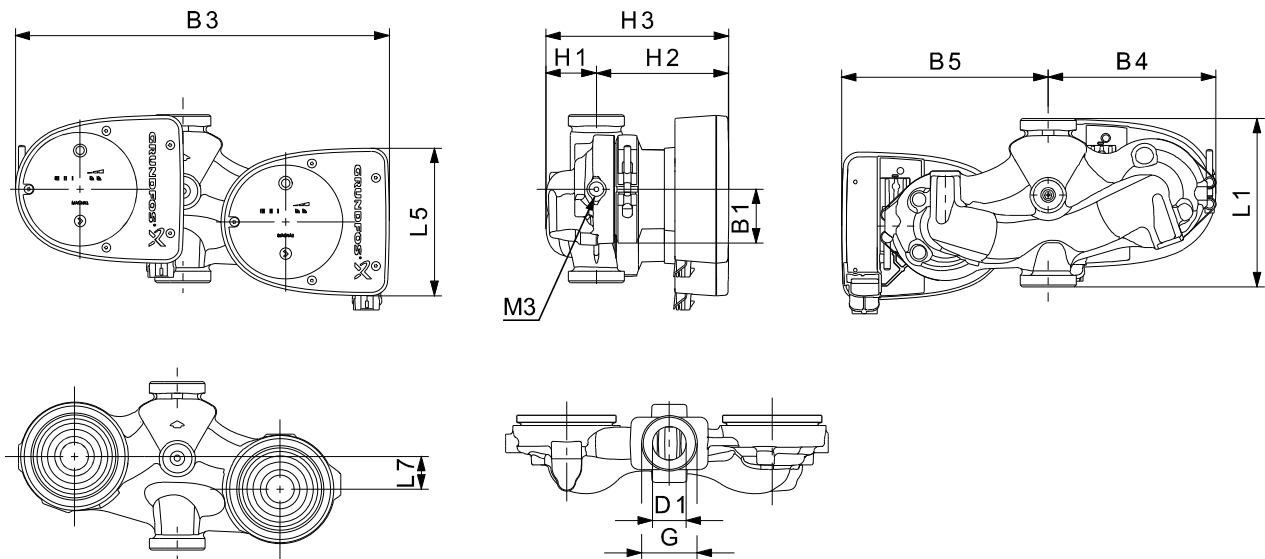
Speed	P1 [W]	I _{1/1} [A]
Min.	9	0.09
Max.	73	0.59

The pump incorporates overload protection.

Net weight [kg]	Gross weight [kg]	Ship. vol. [m ³]
12.4	13.4	0.045

Connections: See [Counter flanges](#), page 22.
 System pressure: Max. 1.0 MPa (10 bar). Also available as max. 1.6 MPa (16 bar).
 Liquid temperature: -10 to +110 °C (TF 110).
 Specific EEI: 0.23.

TM05 6363 4712



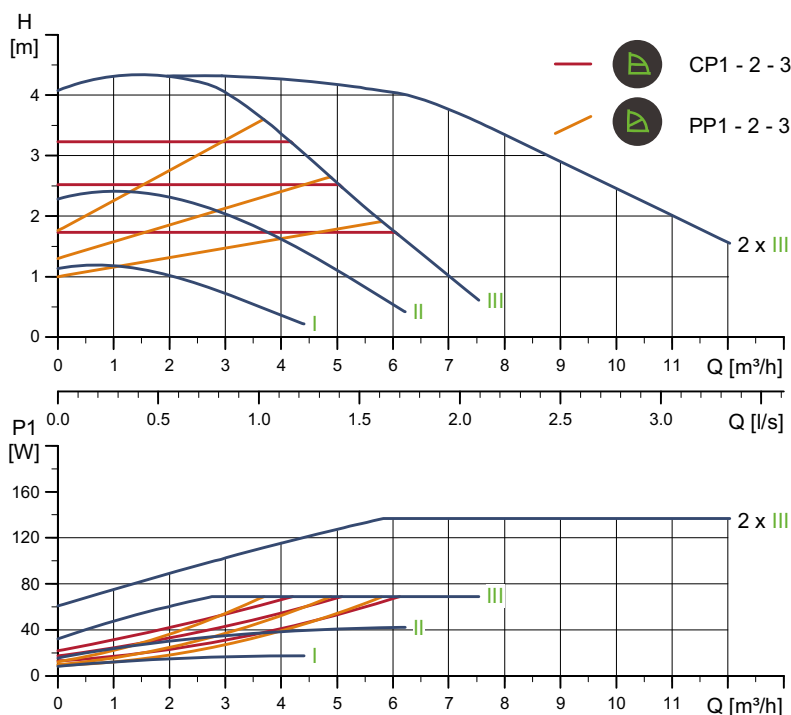
TM05 5201 3412

Pump type	Dimensions [mm]											(inch)	
	L1	L5	L7	B1	B3	B4	B5	H1	H2	H3	D1	G	M3
MAGNA1 D 32-40	180	158	35	58	400	179	221	54	142	196	32	2	1/4

For product numbers, see page 130.

MAGNA1 D 32-40

1 x 230 V, 50/60 Hz



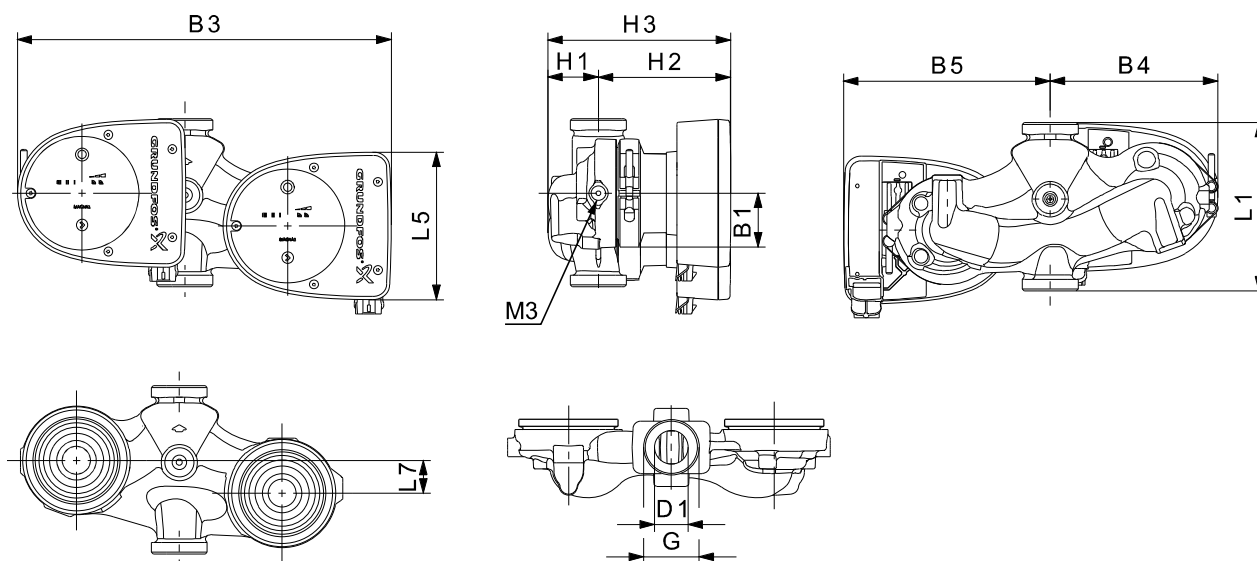
Speed	P1 [W]	I _{1/1} [A]
Min.	8	0.08
Max.	69	0.56

The pump incorporates overload protection.

Net weight [kg]	Gross weight [kg]	Ship. vol. [m ³]
12.4	13.4	0.045

Connections: See [Counter flanges](#), page 22.
 System pressure: Max. 1.6 MPa (16 bar). Also available as max. 1.0 MPa (10 bar).
 Liquid temperature: -10 to +110 °C (TF 110).
 Specific EEI: 0.22.

TM05 6364 4712



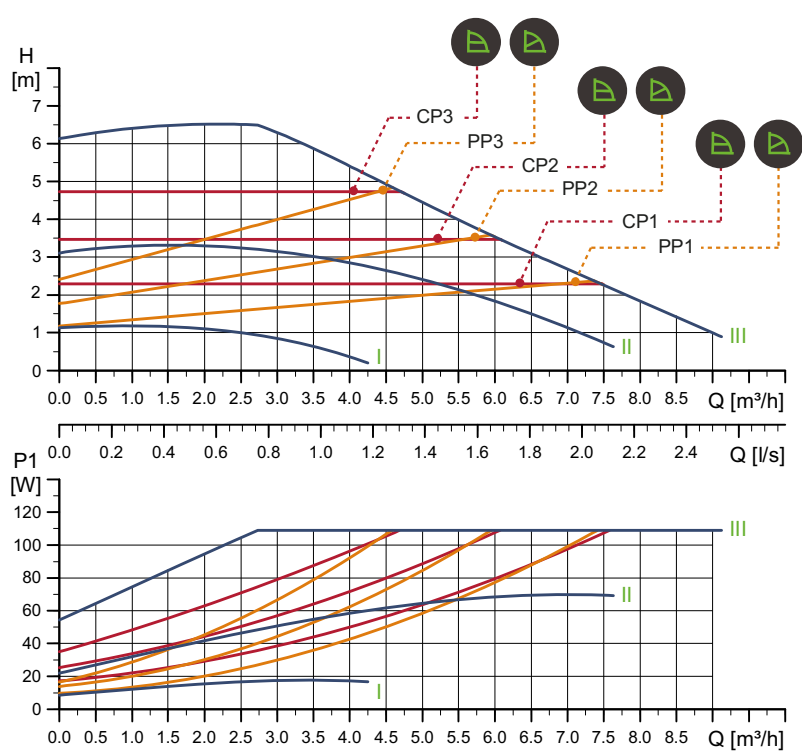
TM05 5201 3412

Pump type	Dimensions [mm]											(inch)		
	L1	L5	L7	B1	B3	B4	B5	H1	H2	H3	D1	G	M3	
MAGNA1 D 32-40	180	158	35	58	400	179	221	54	142	196	32	2	1/4	

For product numbers, see page 130.

MAGNA1 32-60

1 x 230 V, 50/60 Hz



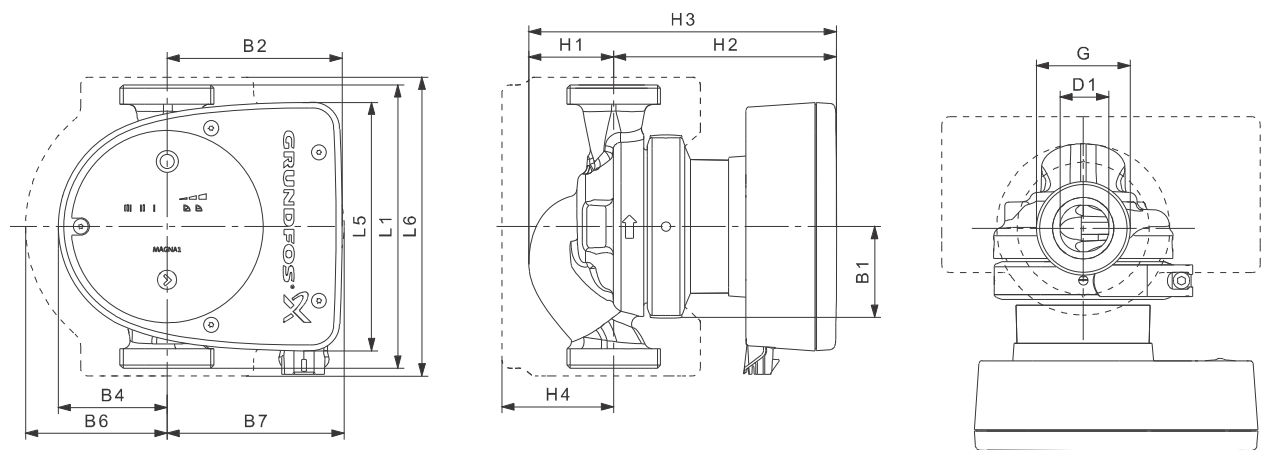
Speed	P1 [W]	I _{1/1} [A]
Min.	9	0.09
Max.	111	0.9

The pump incorporates overload protection.

Net weight [kg]	Gross weight [kg]	Ship. vol. [m ³]
4.4	5.4	0.012

Connections: See [Counter flanges](#), page 22.
 System pressure: Max. 1.0 MPa (10 bar). Also available as max. 1.6 MPa (16 bar).
 Liquid temperature: -10 to +110 °C (TF 110).
 Specific EEI: 0.22.

TM05 6327 4712



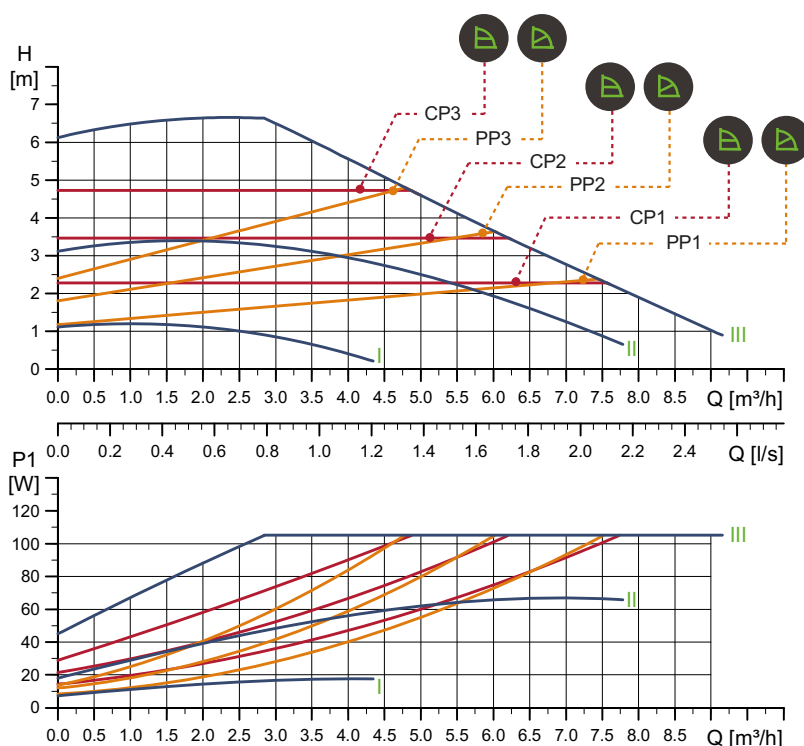
TM05 5142 3312

Pump type	Dimensions [mm]													(inch)	
	L1	L5	L6	B1	B2	B4	B6	B7	H1	H2	H3	H4	D1	G	
MAGNA1 32-60	180	158	190	58	111	69	90	113	54	142	196	71	32	2	

For product numbers, see page 130.

MAGNA1 32-60

1 x 230 V, 50/60 Hz



TM05 6328 4712

Speed	P1 [W]	I _{1/1} [A]
Min.	8	0.08
Max.	106	0.86

The pump incorporates overload protection.

Net weight [kg]	Gross weight [kg]	Ship. vol. [m ³]
4.4	5.4	0.012

Connections:

System pressure:

Liquid temperature:

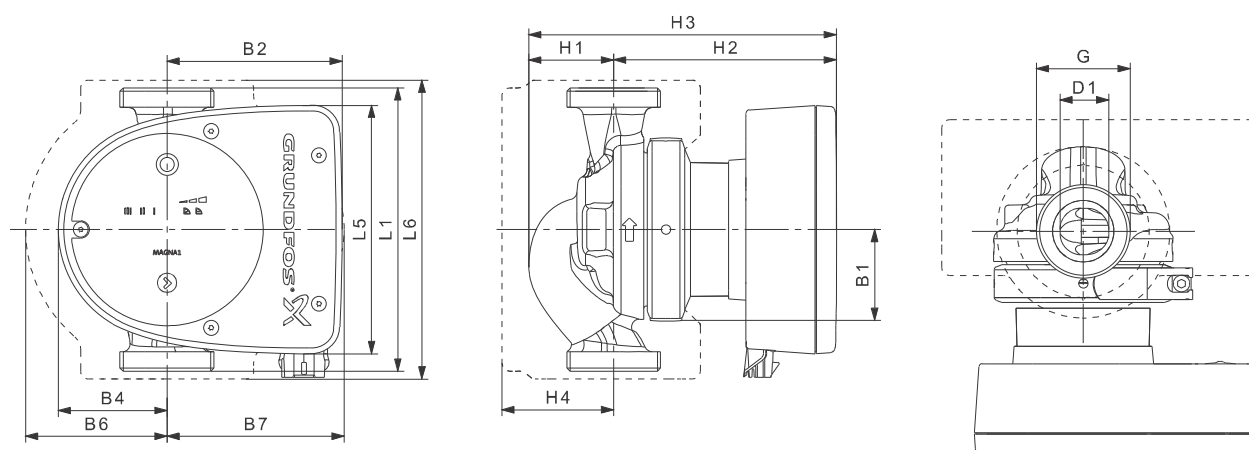
Specific EEI:

See [Counter flanges](#), page 22.

Max. 1.6 MPa (16 bar).
Also available as max. 1.0 MPa (10 bar).

-10 to +110 °C (TF 110).

0.21.



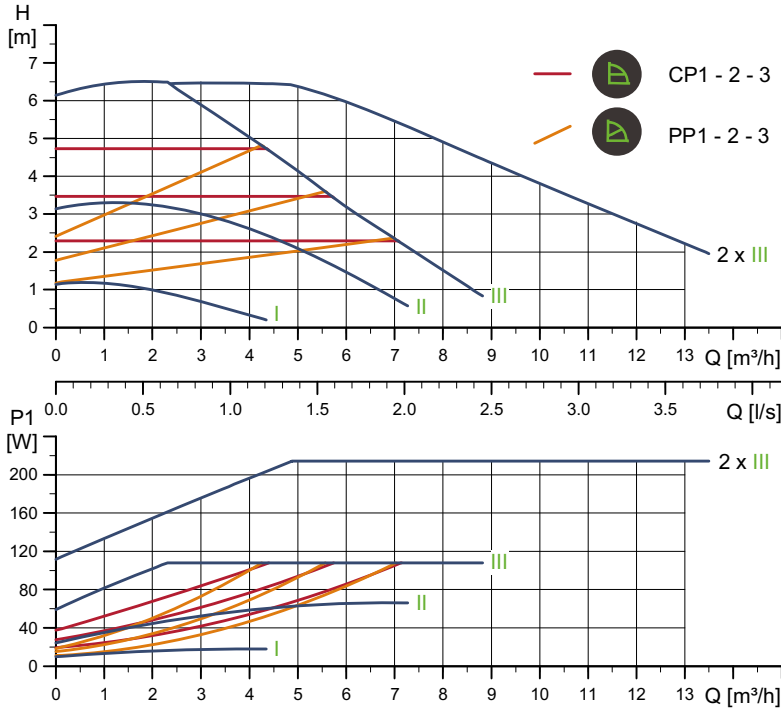
TM05 5142 3312

Pump type	Dimensions [mm]													(inch)	
	L1	L5	L6	B1	B2	B4	B6	B7	H1	H2	H3	H4	D1	G	
MAGNA1 32-60	180	158	190	58	111	69	90	113	54	142	196	71	32	2	

For product numbers, see page 130.

MAGNA1 D 32-60

1 x 230 V, 50/60 Hz



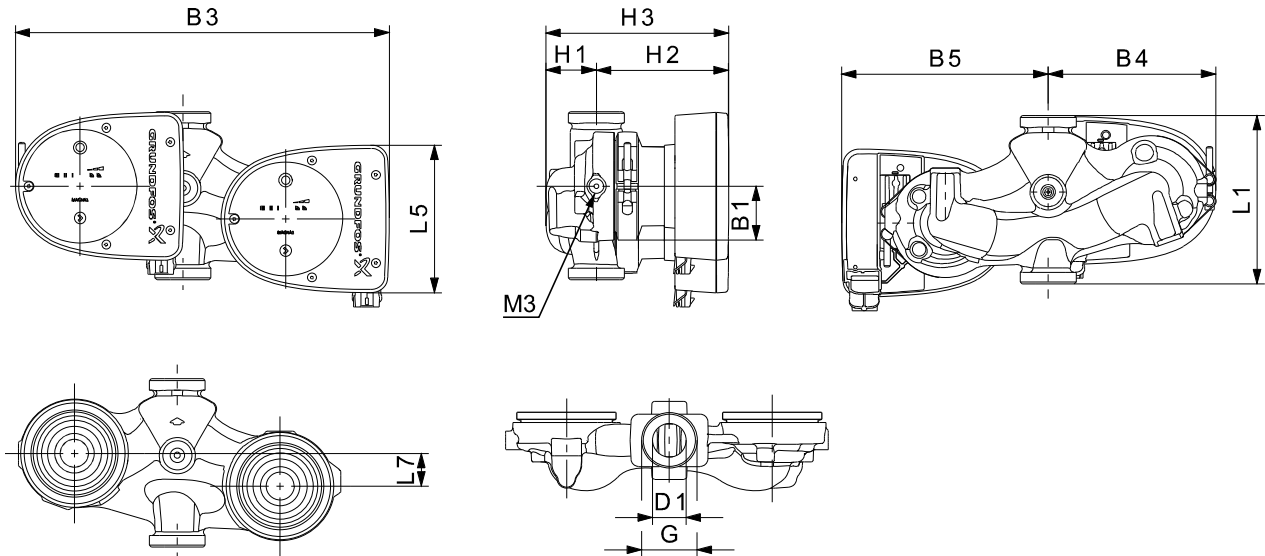
Speed	P1 [W]	I _{1/1} [A]
Min.	9	0.09
Max.	111	0.9

The pump incorporates overload protection.

Net weight [kg]	Gross weight [kg]	Ship. vol. [m ³]
12.4	13.4	0.045

Connections: See [Counter flanges](#), page 22.
 System pressure: Max. 1.0 MPa (10 bar). Also available as max. 1.6 MPa (16 bar).
 Liquid temperature: -10 to +110 °C (TF 110).
 Specific EEI: 0.23.

TM05 6365 4712



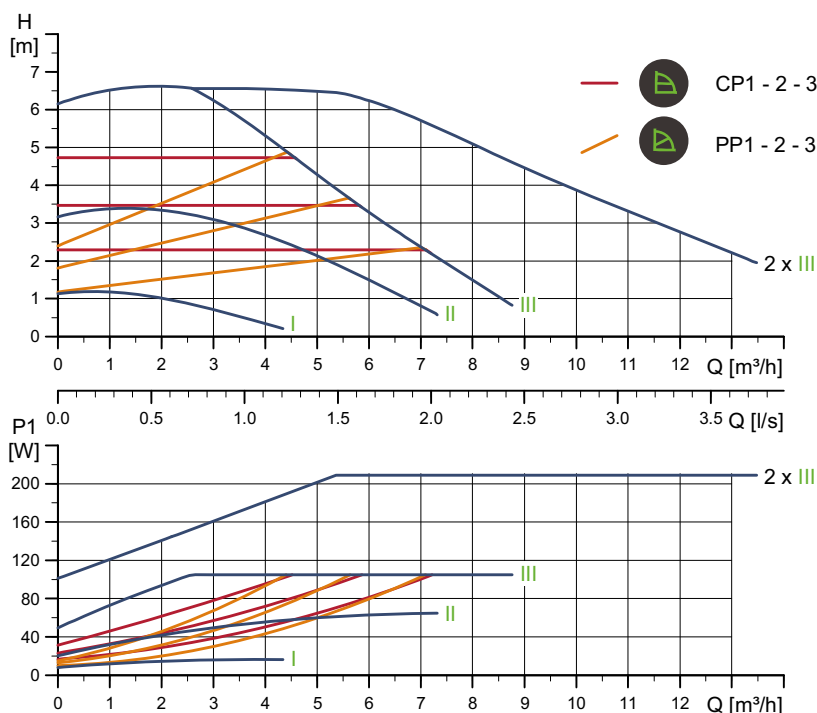
TM05 5201 3412

Pump type	Dimensions [mm]											(inch)	
	L1	L5	L7	B1	B3	B4	B5	H1	H2	H3	D1	G	M3
MAGNA1 D 32-60	180	158	35	58	400	179	221	54	142	196	32	2	1/4

For product numbers, see page 130.

MAGNA1 D 32-60

1 x 230 V, 50/60 Hz



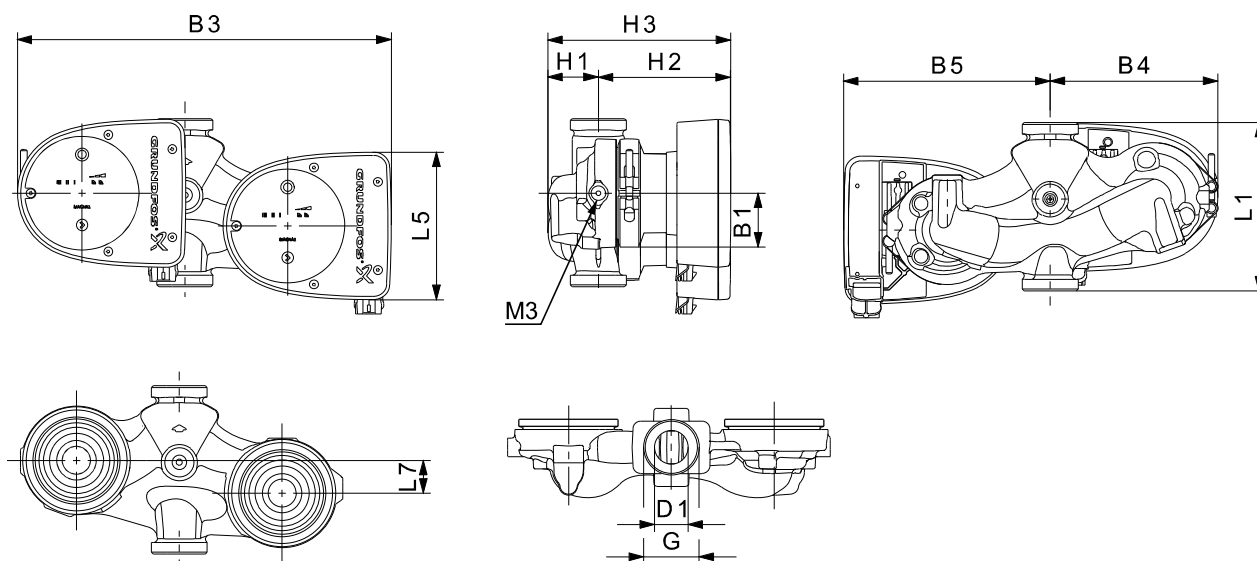
Speed	P1 [W]	I _{1/1} [A]
Min.	8	0.08
Max.	106	0.86

The pump incorporates overload protection.

Net weight [kg]	Gross weight [kg]	Ship. vol. [m ³]
12.4	13.4	0.045

Connections: See [Counter flanges](#), page 22.
 System pressure: Max. 1.6 MPa (16 bar). Also available as max. 1.0 MPa (10 bar).
 Liquid temperature: -10 to +110 °C (TF 110).
 Specific EEI: 0.22.

TM05 6366 4712



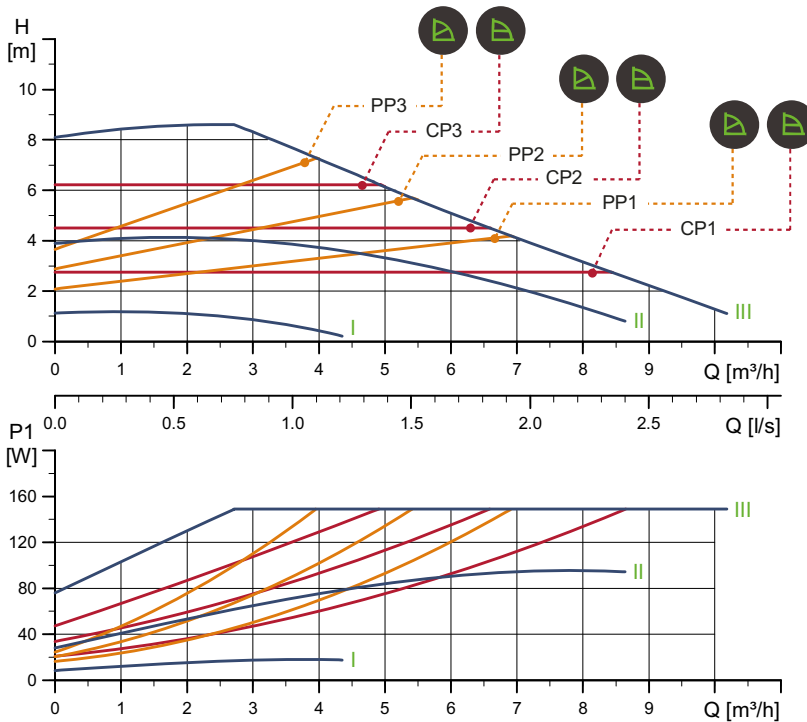
TM05 5201 3412

Pump type	Dimensions [mm]											(inch)		
	L1	L5	L7	B1	B3	B4	B5	H1	H2	H3	D1	G	M3	
MAGNA1 D 32-60	180	158	35	58	400	179	221	54	142	196	32	2	1/4	

For product numbers, see page 130.

MAGNA1 32-80

1 x 230 V, 50/60 Hz



Speed	P1 [W]	I _{1/1} [A]
Min.	9	0.09
Max.	151	1.22

The pump incorporates overload protection.

Net weight [kg]	Gross weight [kg]	Ship. vol. [m ³]
4.4	5.4	0.012

Connections:

System pressure:

Liquid temperature:

Specific EEI:

See [Counter flanges](#), page 22.

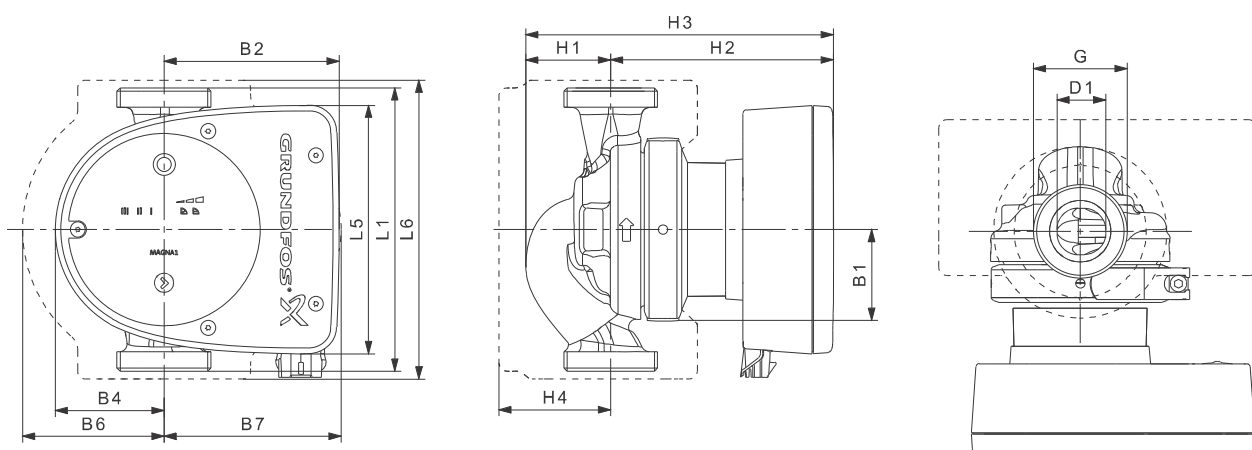
Max. 1.0 MPa (10 bar).

Also available as max. 1.6 MPa (16 bar).

-10 to +110 °C (TF 110).

0.22.

TM05 6329 4712



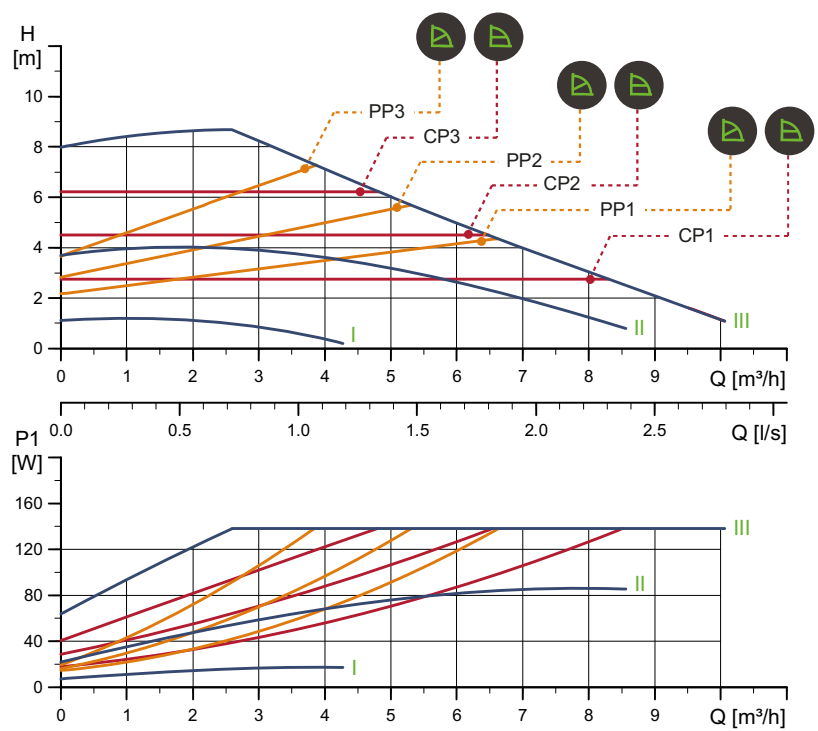
TM05 5142 3312

Pump type	Dimensions [mm]													(inch)	
	L1	L5	L6	B1	B2	B4	B6	B7	H1	H2	H3	H4	D1	G	
MAGNA1 32-80	180	158	190	58	111	69	90	113	54	142	196	71	32	2	

For product numbers, see page 130.

MAGNA1 32-80

1 x 230 V, 50/60 Hz



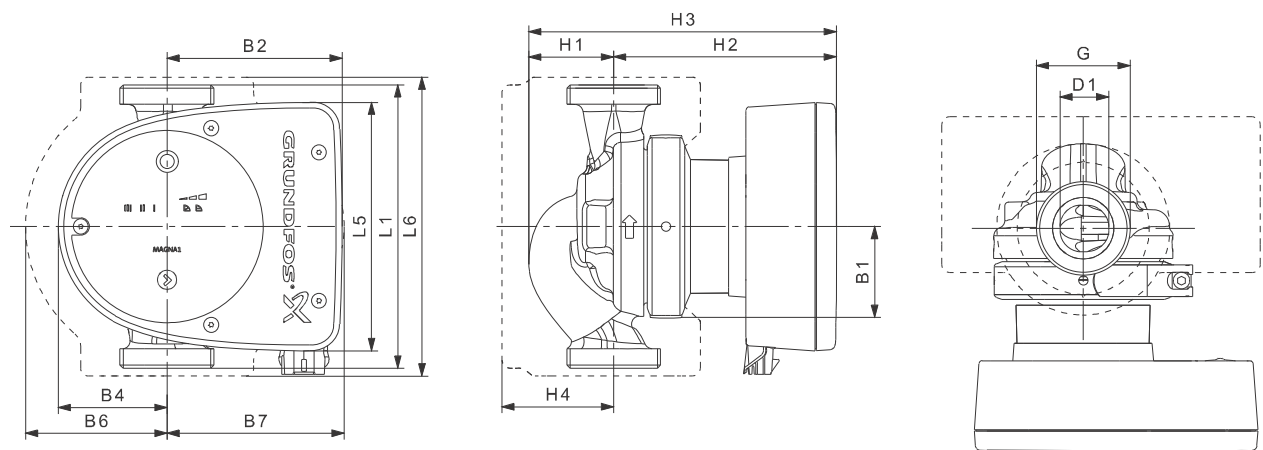
Speed	P1 [W]	I _{1/1} [A]
Min.	8	0.08
Max.	140	1.13

The pump incorporates overload protection.

Net weight [kg]	Gross weight [kg]	Ship. vol. [m ³]
4.4	5.4	0.012

Connections: See [Counter flanges](#), page 22.
 System pressure: Max. 1.6 MPa (16 bar). Also available as max. 1.0 MPa (10 bar).
 Liquid temperature: -10 to +110 °C (TF 110).
 Specific EEI: 0.21.

TM05 6330 4712



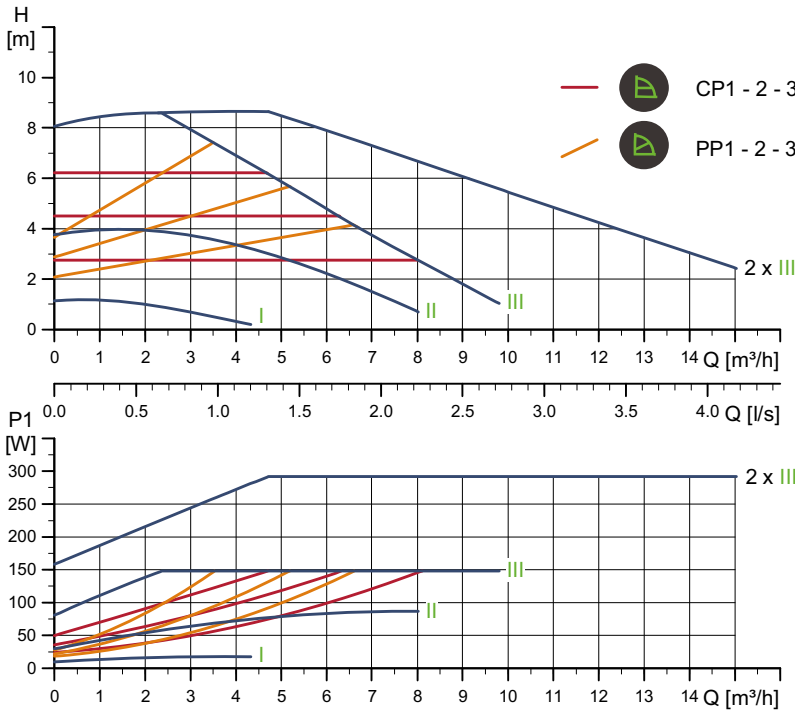
TM05 5142 3312

Pump type	Dimensions [mm]													(inch)	
	L1	L5	L6	B1	B2	B4	B6	B7	H1	H2	H3	H4	D1	G	
MAGNA1 32-80	180	158	190	58	111	69	90	113	54	142	196	71	32	2	

For product numbers, see page 130.

MAGNA1 D 32-80

1 x 230 V, 50/60 Hz



Speed	P1 [W]	I _{1/I} [A]
Min.	9	0.09
Max.	151	1.22

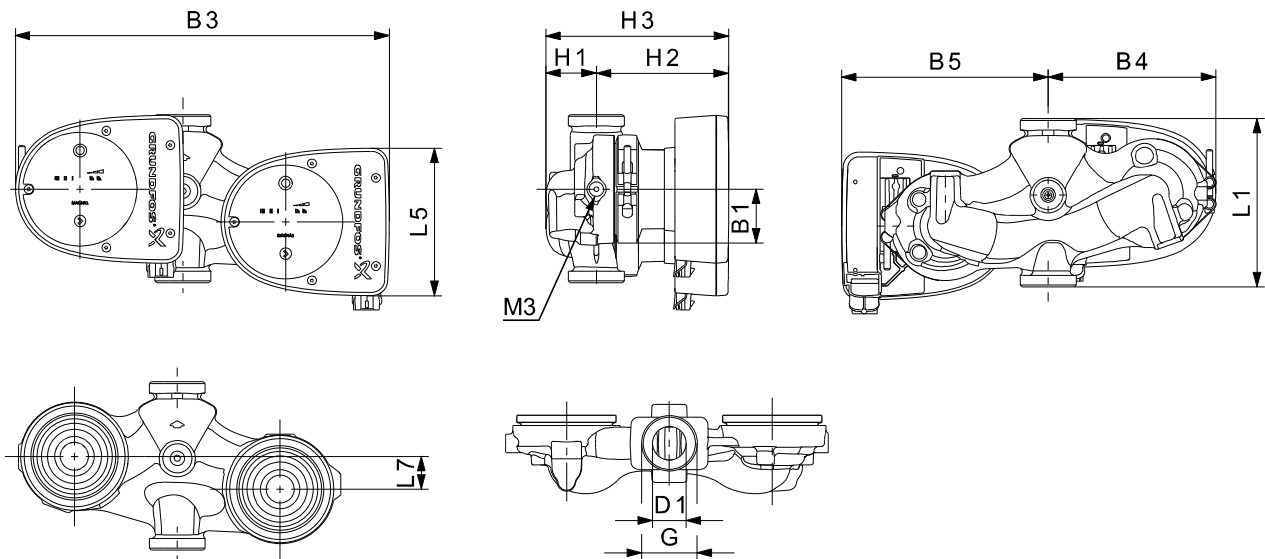
The pump incorporates overload protection.

Net weight [kg]	Gross weight [kg]	Ship. vol. [m ³]
12.4	13.4	0.045

Connections:
System pressure:
Liquid temperature:
Also available with:
Specific EEI:

See [Counter flanges](#), page 22.
Max. 1.0 MPa (10 bar).
Also available as max. 1.6 MPa (16 bar).
-10 to +110 °C (TF 110).
Stainless-steel pump housing, type N.
0.23.

TM05 6367 4712



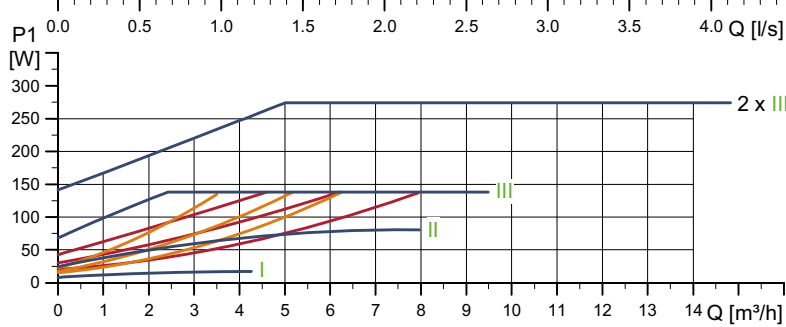
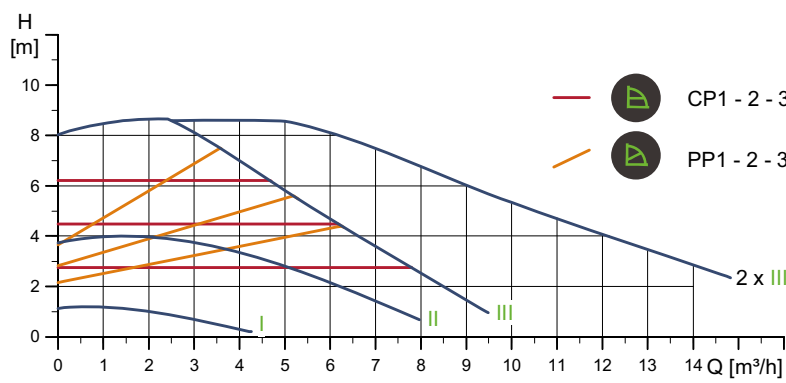
Pump type	Dimensions [mm]											(inch)		
	L1	L5	L7	B1	B3	B4	B5	H1	H2	H3	D1	G	M3	
MAGNA1 D 32-80	180	158	35	58	400	179	221	54	142	196	32	2	1/4	

For product numbers, see page 130.

TM05 5201 3412

MAGNA1 D 32-80

1 x 230 V, 50/60 Hz



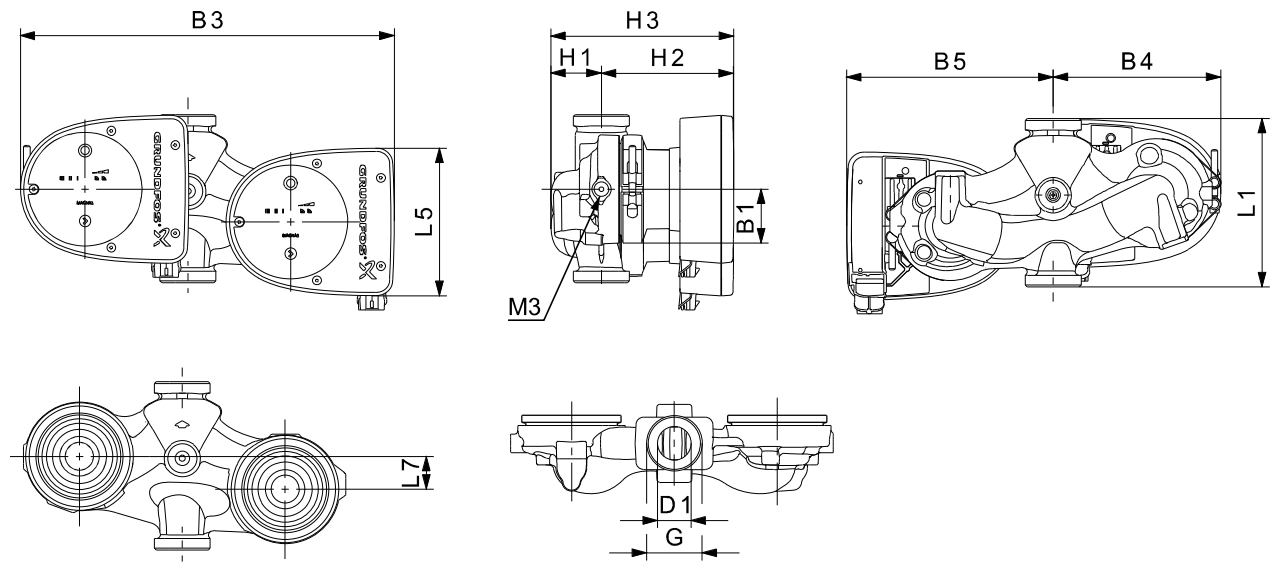
Speed	P1 [W]	I _{1/1} [A]
Min.	8	0.08
Max.	140	1.13

The pump incorporates overload protection.

Net weight [kg]	Gross weight [kg]	Ship. vol. [m ³]
12.4	13.4	0.045

Connections: See [Counter flanges](#), page 22.
 System pressure: Max. 1.6 MPa (16 bar). Also available as max. 1.0 MPa (10 bar).
 Liquid temperature: -10 to +110 °C (TF 110).
 Also available with: Stainless-steel pump housing, type N.
 Specific EEI: 0.22.

TM05 6368 4712



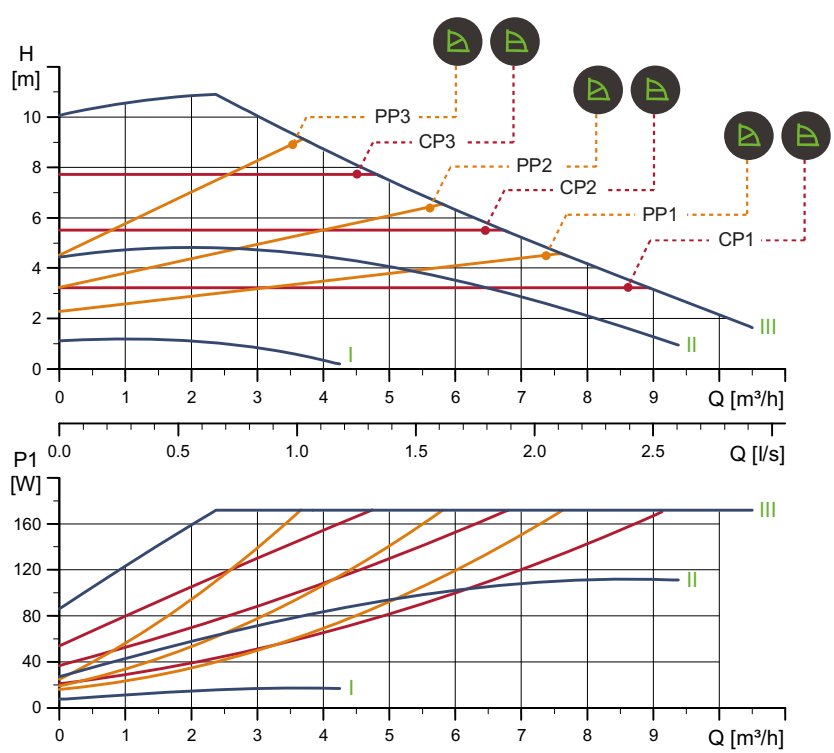
TM05 5201 3412

Pump type	Dimensions [mm]											(inch)		
	L1	L5	L7	B1	B3	B4	B5	H1	H2	H3	D1	G	M3	
MAGNA1 D 32-80	180	158	35	58	400	179	221	54	142	196	32	2	1/4	

For product numbers, see page 130.

MAGNA1 32-100

1 x 230 V, 50/60 Hz



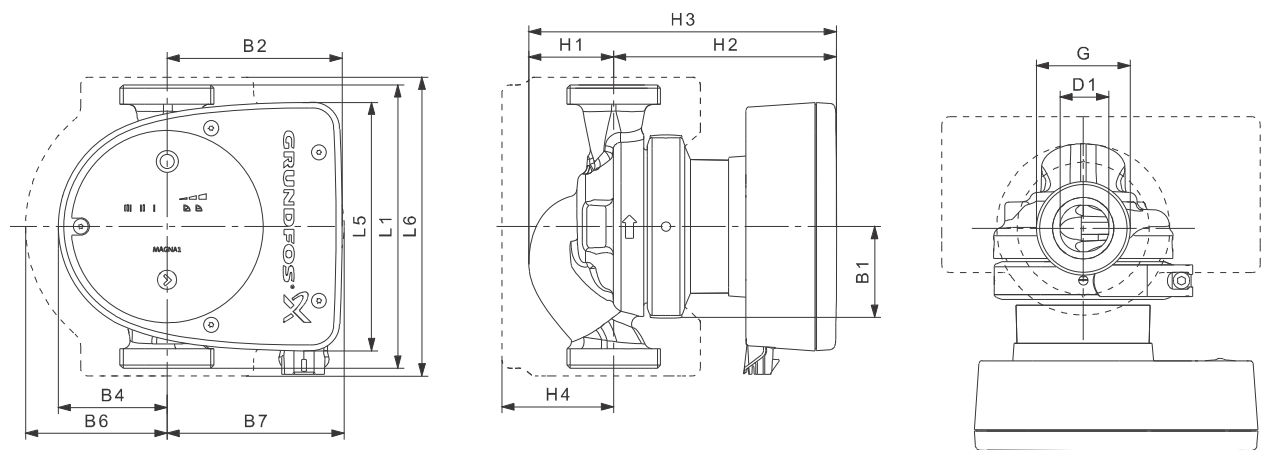
Speed	P1 [W]	I _{1/1} [A]
Min.	8	0.08
Max.	175	1.41

The pump incorporates overload protection.

Net weight [kg]	Gross weight [kg]	Ship. vol. [m ³]
4.4	5.4	0.012

Connections: See [Counter flanges](#), page 22.
 System pressure: Max. 1.0 MPa (10 bar). Also available as max. 1.6 MPa (16 bar).
 Liquid temperature: -10 to +110 °C (TF 110).
 Specific EEI: 0.21.

TM05 6331 4712



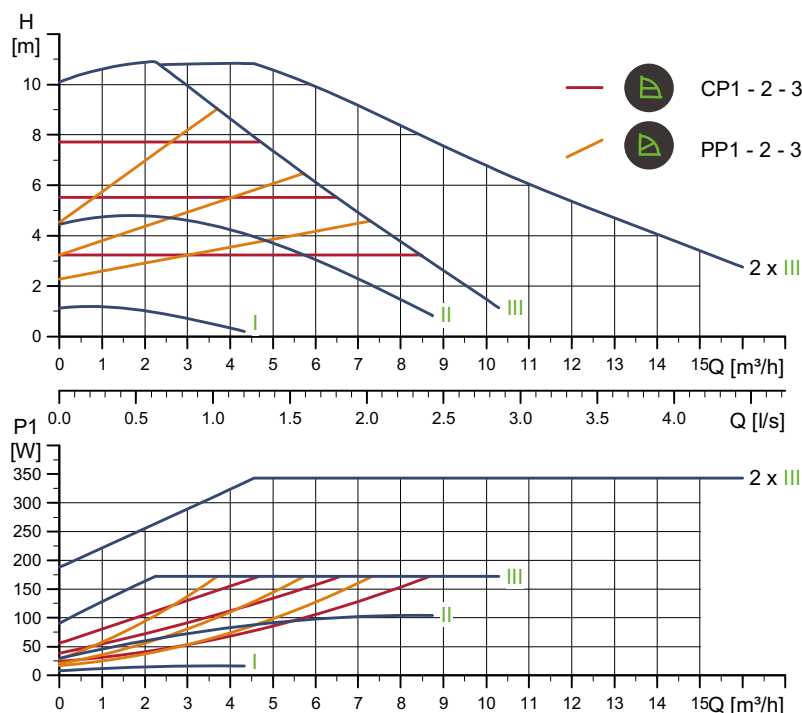
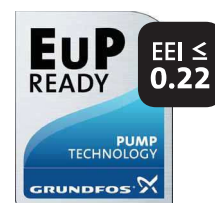
TM05 5142 3312

Pump type	Dimensions [mm]													(inch)	
	L1	L5	L6	B1	B2	B4	B6	B7	H1	H2	H3	H4	D1	G	
MAGNA1 32-100	180	158	190	58	111	69	90	113	54	142	196	71	32	2	

For product numbers, see page 130.

MAGNA1 D 32-100

1 x 230 V, 50/60 Hz



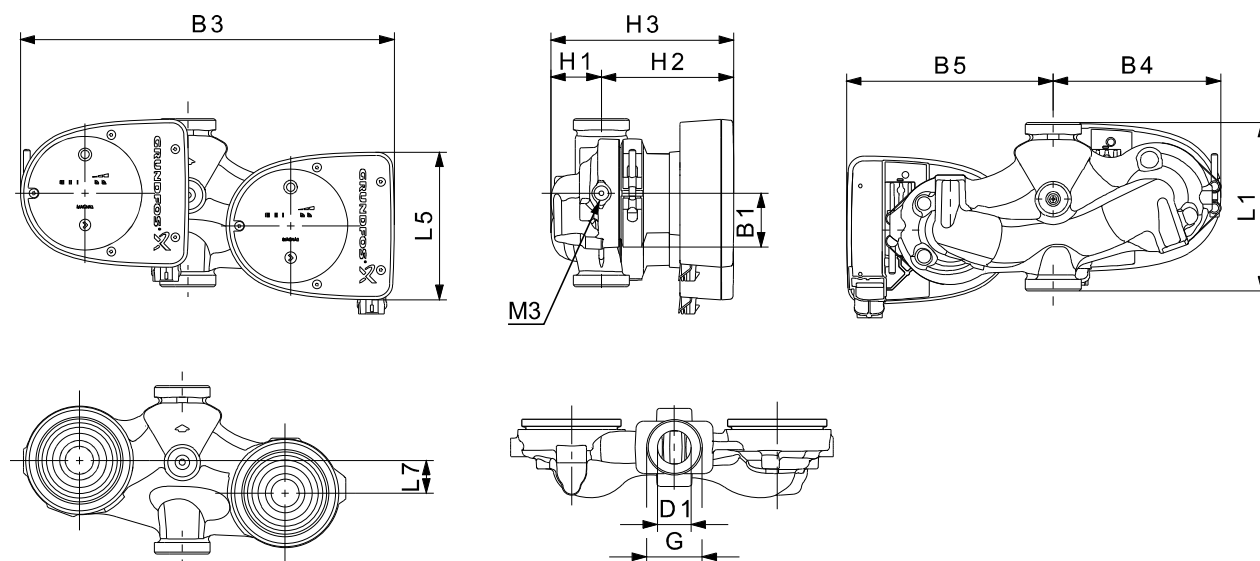
Speed	P1 [W]	I _{1/1} [A]
Min.	8	0.08
Max.	175	1.41

The pump incorporates overload protection.

Net weight [kg]	Gross weight [kg]	Ship. vol. [m ³]
12.4	13.4	0.045

Connections: See [Counter flanges](#), page 22.
 System pressure: Max. 1.0 MPa (10 bar). Also available as max. 1.6 MPa (16 bar).
 Liquid temperature: -10 to +110 °C (TF 110).
 Specific EEI: 0.22.

TM05 6369 4712



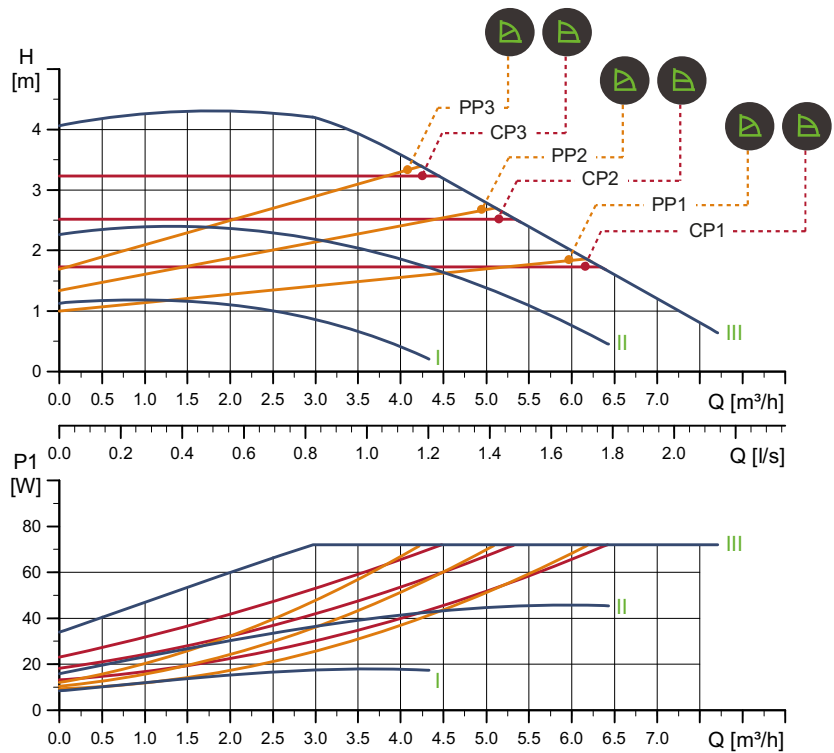
TM05 5201 3412

Pump type	Dimensions [mm]											(inch)		
	L1	L5	L7	B1	B3	B4	B5	H1	H2	H3	D1	G	M3	
MAGNA1 D 32-100	180	158	35	58	400	179	221	54	142	196	32	2	1/4	

For product numbers, see page 130.

MAGNA1 32-40 F

1 x 230 V, 50/60 Hz

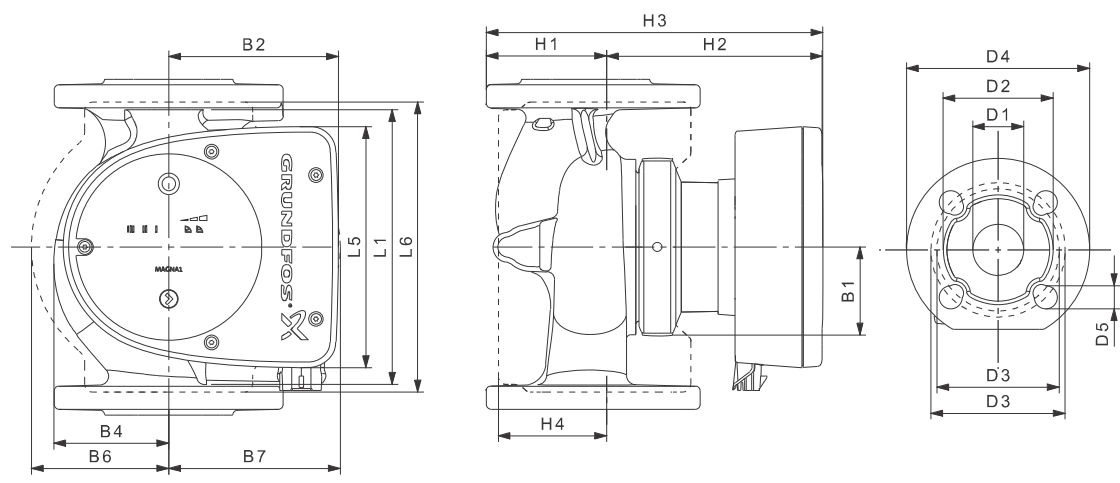


Speed	P1 [W]	I _{1/1} [A]
Min.	9	0.09
Max.	73	0.59

The pump incorporates overload protection.

Net weight [kg]	Gross weight [kg]	Ship. vol. [m ³]
7.4	8.4	0.016

Connections: See [Counter flanges](#), page 22.
 System pressure: Max. 1.0 MPa (10 bar). Also available as max. 1.6 MPa (16 bar).
 Liquid temperature: -10 to +110 °C (TF 110).
 Specific EEI: 0.22.



Pump type	Dimensions [mm]																
	L1	L5	L6	B1	B2	B4	B6	B7	H1	H2	H3	H4	D1	D2	D3	D4	D5
MAGNA1 32-40 F	220	158	220	58	111	69	100	110	65	142	207	82	32	76	90/100	140	14/19

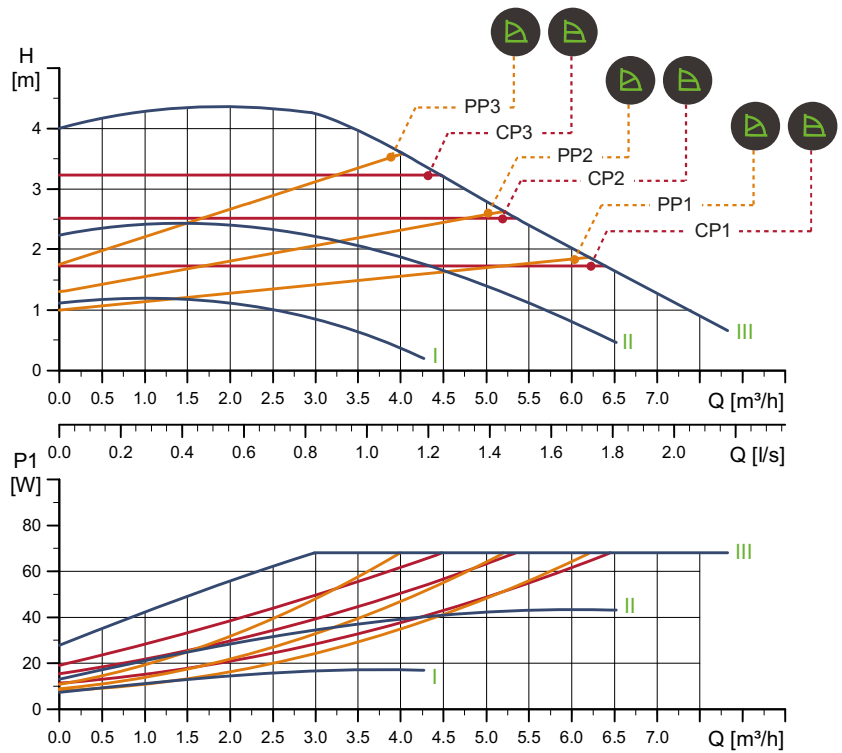
For product numbers, see page 130.

TM05 6325 4712

TM05 5200 3412

MAGNA1 32-40 F

1 x 230 V, 50/60 Hz

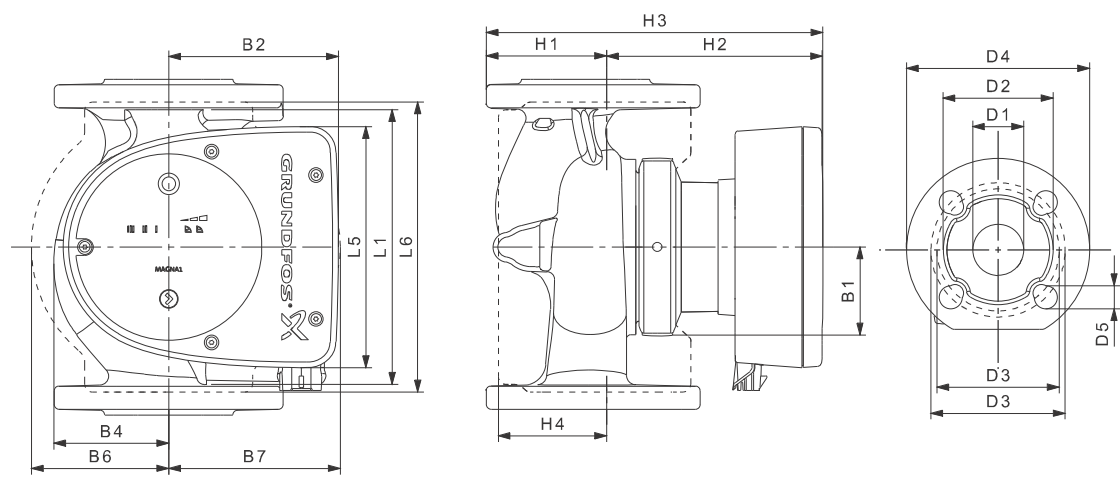


Speed	P1 [W]	I _{1/1} [A]
Min.	8	0.08
Max.	69	0.56

The pump incorporates overload protection.

Net weight [kg]	Gross weight [kg]	Ship. vol. [m ³]
7.4	8.4	0.016

Connections: See [Counter flanges](#), page 22.
 System pressure: Max. 1.6 MPa (16 bar). Also available as max. 1.0 MPa (10 bar).
 Liquid temperature: -10 to +110 °C (TF 110).
 Specific EEI: 0.21.



Pump type	Dimensions [mm]																
	L1	L5	L6	B1	B2	B4	B6	B7	H1	H2	H3	H4	D1	D2	D3	D4	D5
MAGNA1 32-40 F	220	158	220	58	111	69	100	110	65	142	207	82	32	76	90/100	140	14/19

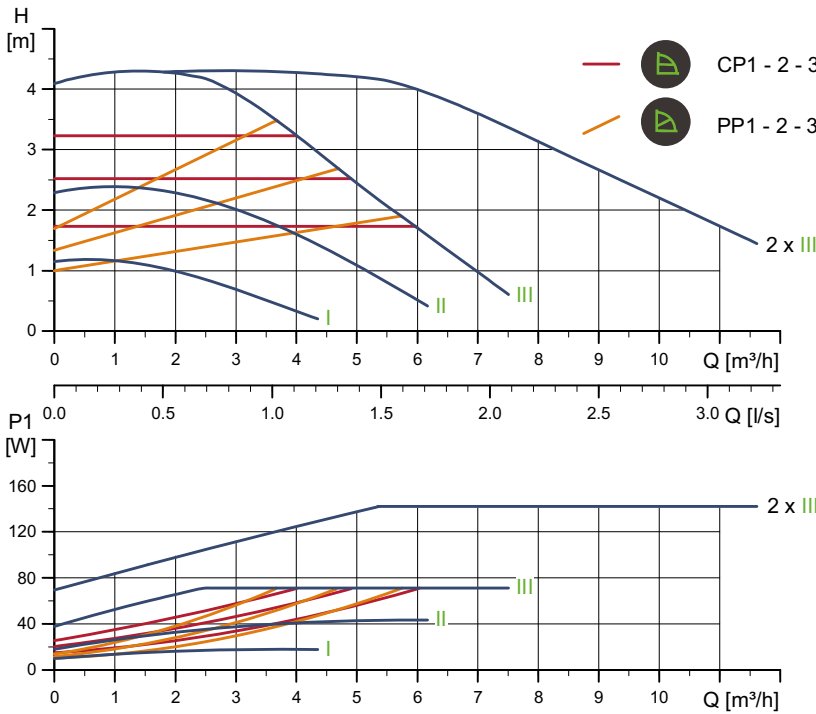
For product numbers, see page 130.

TM05 6326 4712

TM05 5200 3412

MAGNA1 D 32-40 F

1 x 230 V, 50/60 Hz

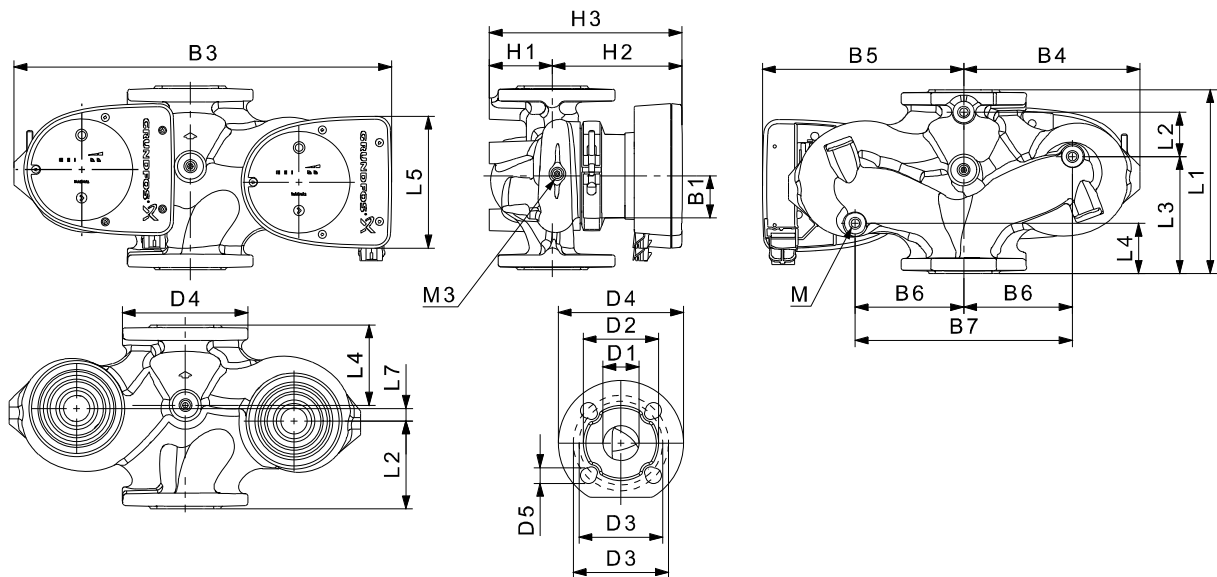


Speed	P1 [W]	I _{1/1} [A]
Min.	9	0.09
Max.	73	0.59

The pump incorporates overload protection.

Net weight [kg]	Gross weight [kg]	Ship. vol. [m ³]
14.7	15.7	0.045

Connections: See [Counter flanges](#), page 22.
 System pressure: Max. 1.0 MPa (10 bar). Also available as max. 1.6 MPa (16 bar).
 Liquid temperature: -10 to +110 °C (TF 110).
 Specific EEI: 0.23.



Pump type	Dimensions [mm]																	Rp				
	L1	L2	L3	L4	L5	L7	B1	B3	B4	B5	B6	B7	H1	H2	H3	D1	D2	D3	D4	D5	M	M3
MAGNA1 D 32-40 F	220	73	120	85	158	35	58	400	179	221	130	260	69	142	211	32	76	90/100	140	14/19	12	1/4

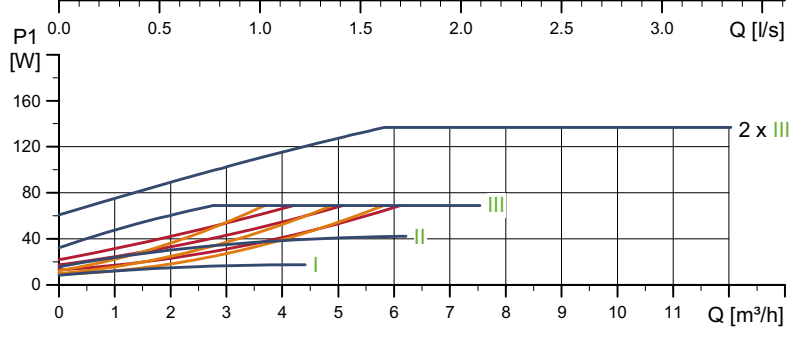
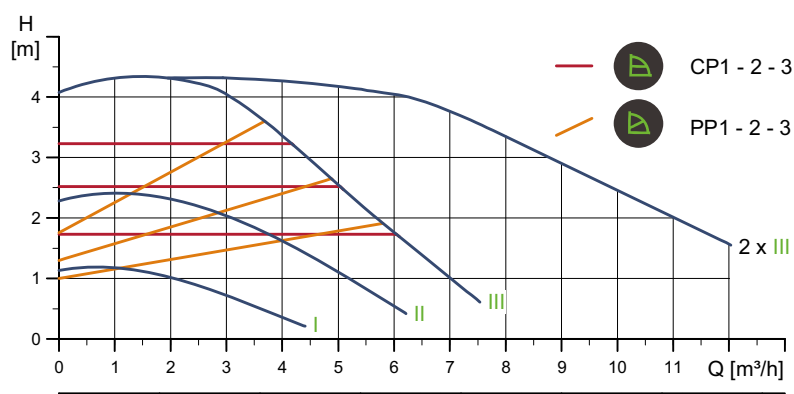
For product numbers, see page 130.

TM05 6363 4712

TM05 4960 3012

MAGNA1 D 32-40 F

1 x 230 V, 50/60 Hz

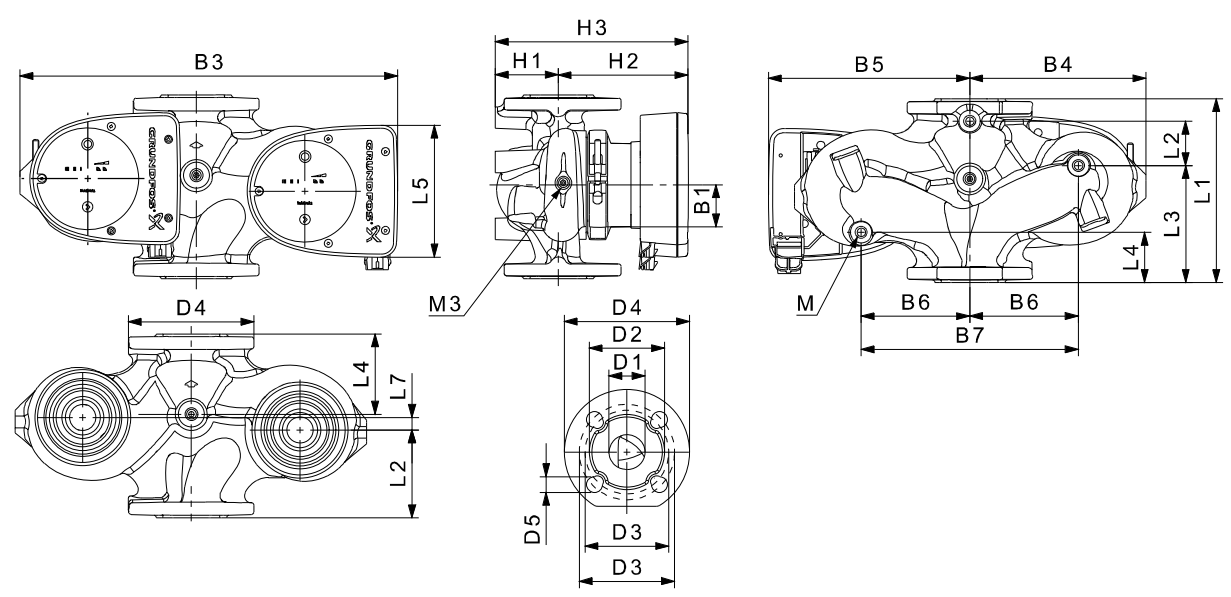


Speed	P1 [W]	I _{1/1} [A]
Min.	8	0.08
Max.	69	0.56

The pump incorporates overload protection.

Connections: See [Counter flanges](#), page 22.
 System pressure: Max. 1.6 MPa (16 bar). Also available as max. 1.0 MPa (10 bar).
 Liquid temperature: -10 to +110 °C (TF 110).
 Specific EEI: 0.22.

Net weight [kg]	Gross weight [kg]	Ship. vol. [m ³]
14.7	15.7	0.045



Pump type	Dimensions [mm]																			Rp		
	L1	L2	L3	L4	L5	L7	B1	B3	B4	B5	B6	B7	H1	H2	H3	D1	D2	D3	D4		D5	M
MAGNA1 D 32-40 F	220	73	120	85	158	35	58	400	179	221	130	260	69	142	211	32	76	90/100	140	14/19	12	1/4

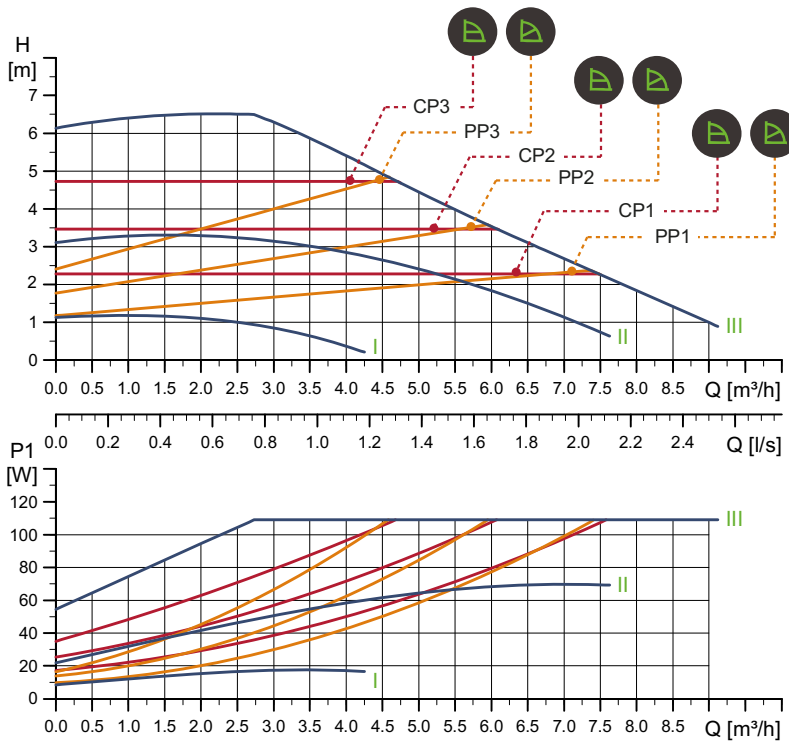
For product numbers, see page 130.

TM05 6364 4712

TM05 4960 3012

MAGNA1 32-60 F

1 x 230 V, 50/60 Hz

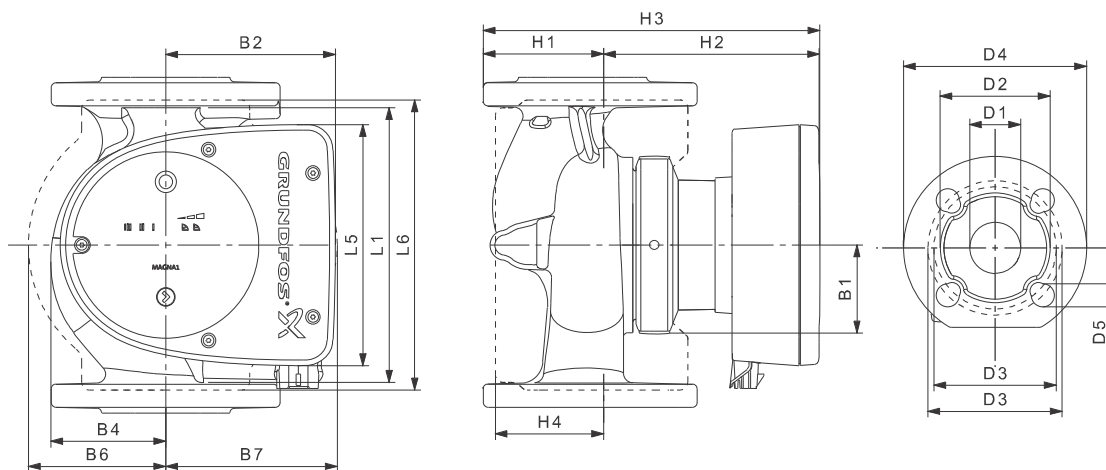


Speed	P1 [W]	I _{1/1} [A]
Min.	9	0.09
Max.	111	0.90

The pump incorporates overload protection.

Net weight [kg]	Gross weight [kg]	Ship. vol. [m ³]
7.4	8.4	0.016

Connections: See [Counter flanges](#), page 22.
 System pressure: Max. 1.0 MPa (10 bar). Also available as max. 1.6 MPa (16 bar).
 Liquid temperature: -10 to +110 °C (TF 110).
 Specific EEI: 0.22.



Pump type	Dimensions [mm]																
	L1	L5	L6	B1	B2	B4	B6	B7	H1	H2	H3	H4	D1	D2	D3	D4	D5
MAGNA1 32-60 F	220	158	220	58	111	69	100	110	65	142	207	82	32	76	90/100	140	14/19

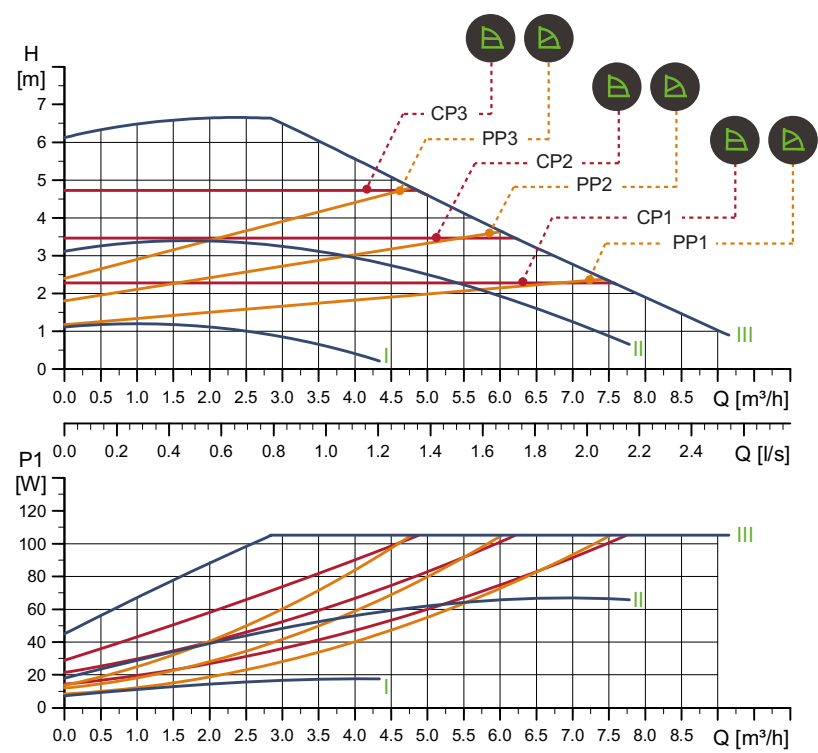
For product numbers, see page 130.

TM05 6327 4712

TM05 5200 3412

MAGNA1 32-60 F

1 x 230 V, 50/60 Hz

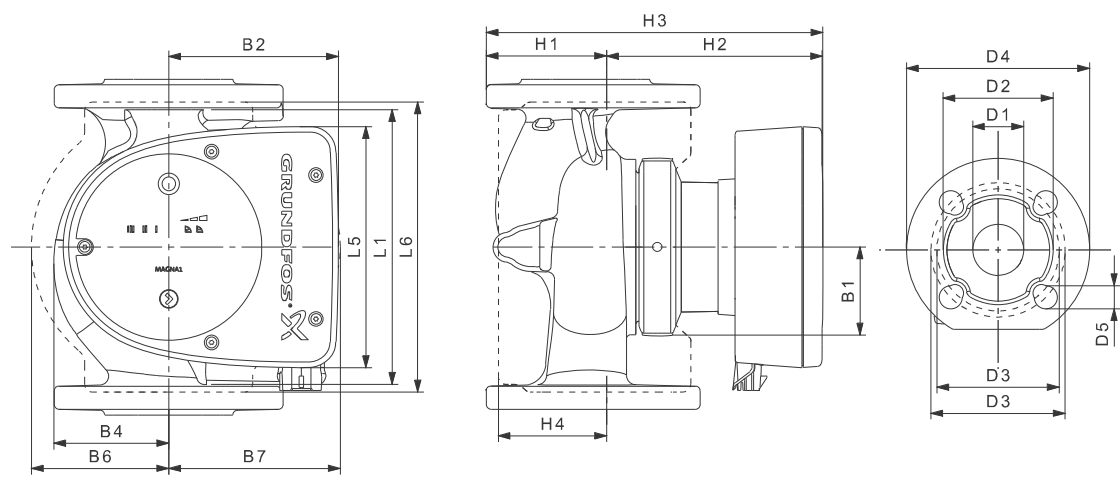


Speed	P1 [W]	I _{1/1} [A]
Min.	8	0.08
Max.	106	0.86

The pump incorporates overload protection.

Net weight [kg]	Gross weight [kg]	Ship. vol. [m ³]
7.4	8.4	0.016

Connections: See [Counter flanges](#), page 22.
 System pressure: Max. 1.6 MPa (16 bar). Also available as max. 1.0 MPa (10 bar).
 Liquid temperature: -10 to +110 °C (TF 110).
 Specific EEI: 0.21.



Pump type	Dimensions [mm]																
	L1	L5	L6	B1	B2	B4	B6	B7	H1	H2	H3	H4	D1	D2	D3	D4	D5
MAGNA1 32-60 F	220	158	220	58	111	69	100	110	65	142	207	82	32	76	90/100	140	14/19

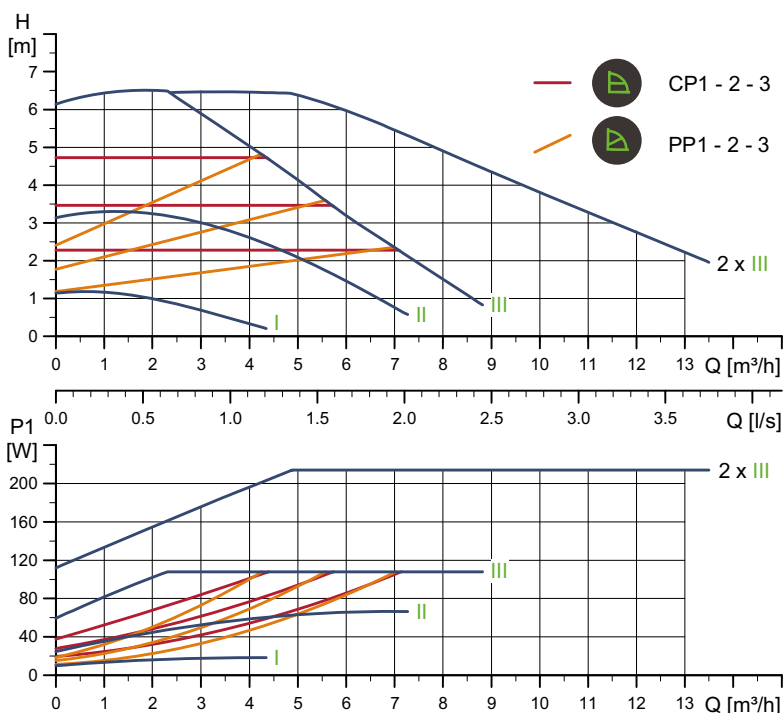
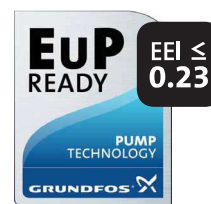
For product numbers, see page 130.

TM05 6328 4712

TM05 5200 3412

MAGNA1 D 32-60 F

1 x 230 V, 50/60 Hz



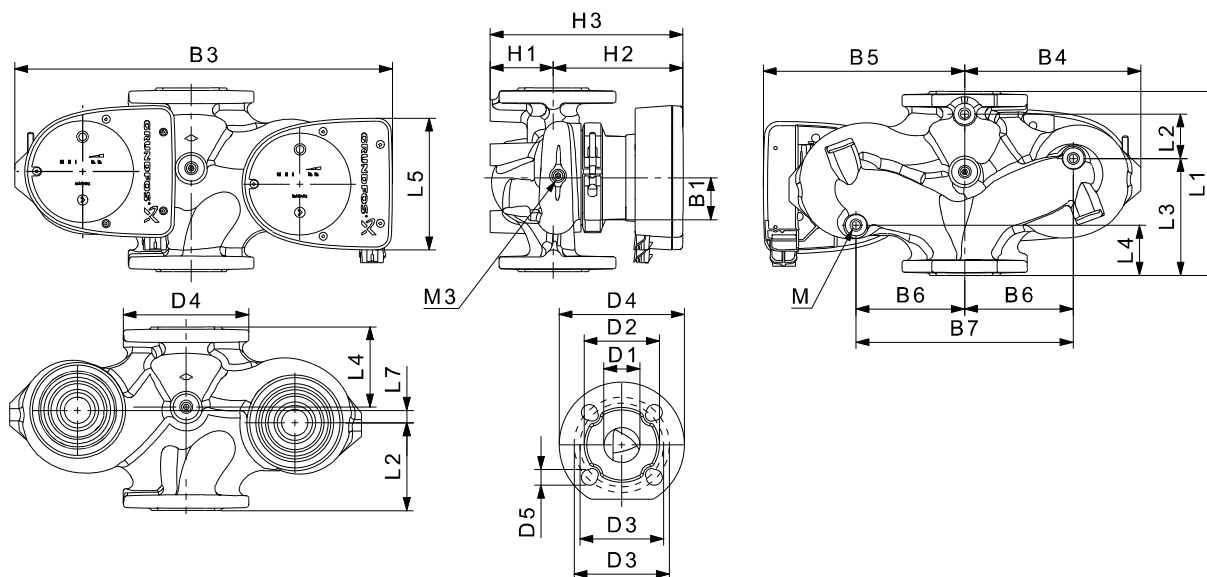
TM05 6365 4712

Speed	P1 [W]	I _{1/1} [A]
Min.	9	0.09
Max.	111	0.90

Connections: See [Counter flanges](#), page 22.
 System pressure: Max. 1.0 MPa (10 bar). Also available as max. 1.6 MPa (16 bar).
 Liquid temperature: -10 to +110 °C (TF 110).
 Specific EEI: 0.23.

The pump incorporates overload protection.

Net weight [kg]	Gross weight [kg]	Ship. vol. [m³]
14.7	15.7	0.045



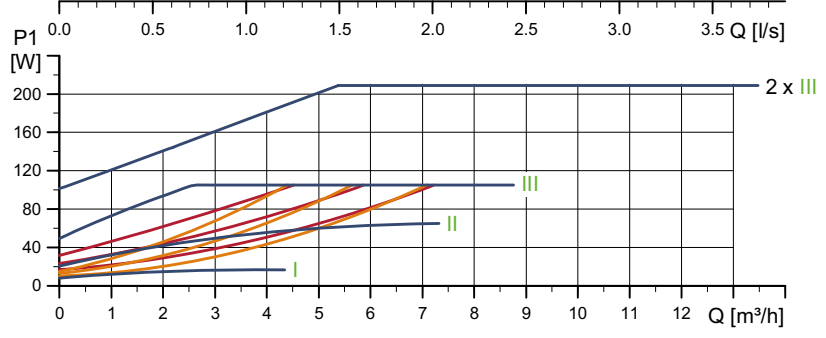
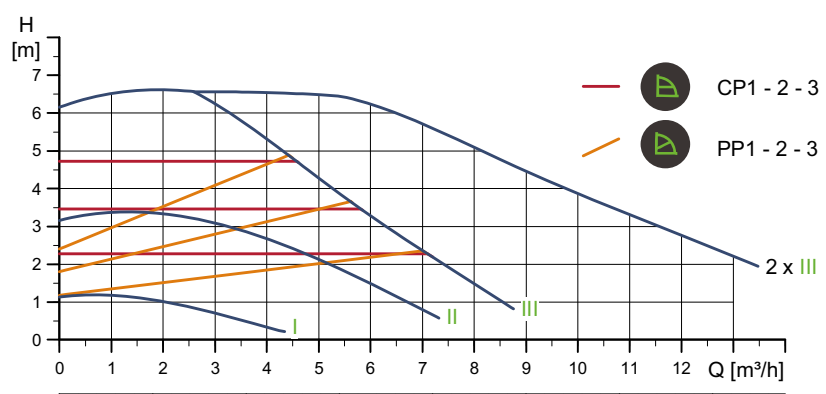
TM05 4960 3012

Pump type	Dimensions [mm]																			Rp		
	L1	L2	L3	L4	L5	L7	B1	B3	B4	B5	B6	B7	H1	H2	H3	D1	D2	D3	D4	D5	M	M3
MAGNA1 D 32-60 F	220	73	120	85	158	35	58	400	179	221	130	260	69	142	211	32	76	90/100	140	14/19	12	1/4

For product numbers, see page 130.

MAGNA1 D 32-60 F

1 x 230 V, 50/60 Hz

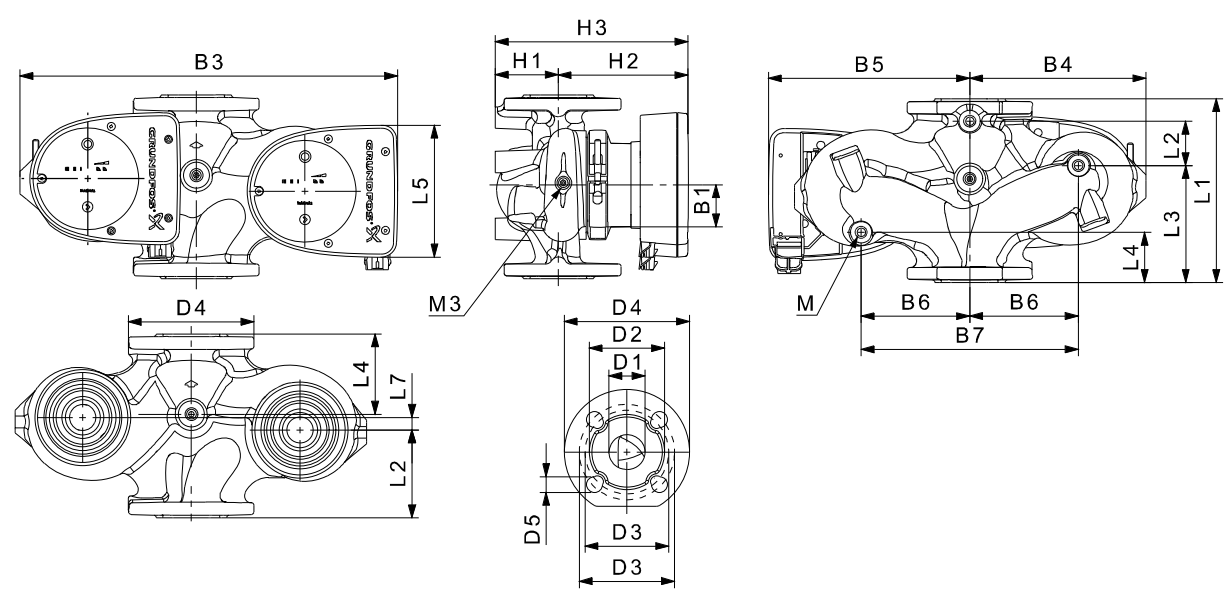


Speed	P1 [W]	I _{1/1} [A]
Min.	8	0.08
Max.	106	0.86

The pump incorporates overload protection.

Connections: See [Counter flanges](#), page 22.
 System pressure: Max. 1.6 MPa (16 bar). Also available as max. 1.0 MPa (10 bar).
 Liquid temperature: -10 to +110 °C (TF 110).
 Specific EEI: 0.22.

Net weight [kg]	Gross weight [kg]	Ship. vol. [m³]
14.7	15.7	0.045



Pump type	Dimensions [mm]																	Rp				
	L1	L2	L3	L4	L5	L7	B1	B3	B4	B5	B6	B7	H1	H2	H3	D1	D2		D3	D4	D5	M
MAGNA1 D 32-60 F	220	73	120	85	158	35	58	400	179	221	130	260	69	142	211	32	76	90/100	140	14/19	12	1/4

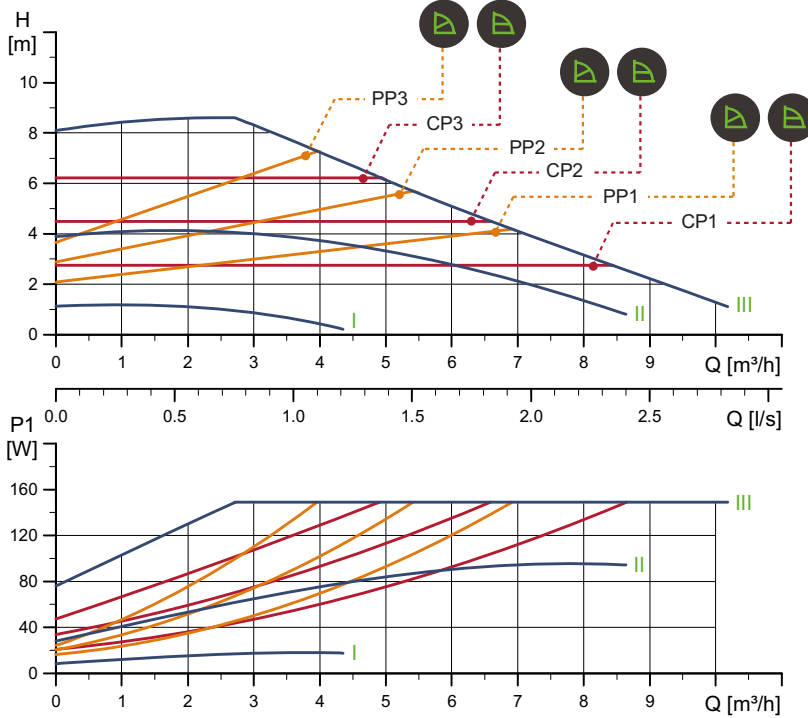
For product numbers, see page 130.

TM05 6366 4712

TM05 4960 3012

MAGNA1 32-80 F

1 x 230 V, 50/60 Hz

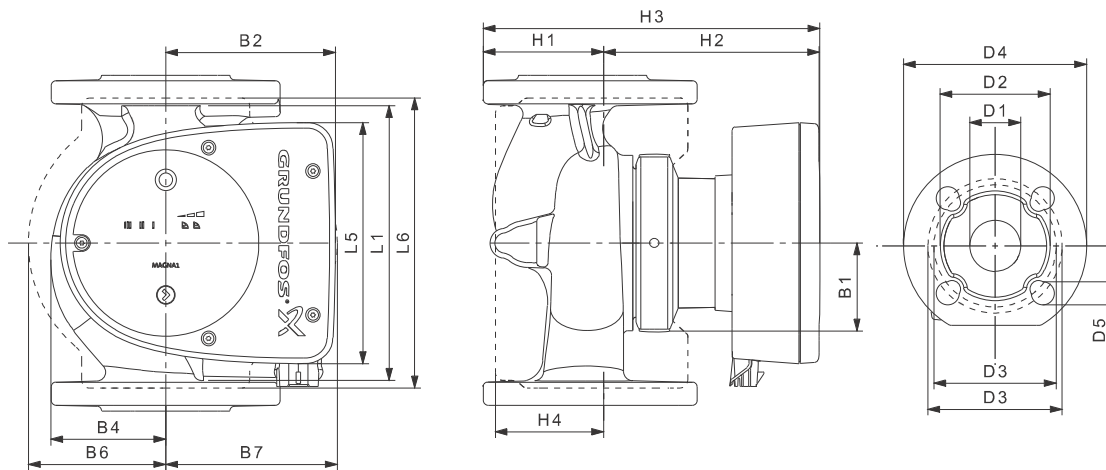


Speed	P1 [W]	I _{1/1} [A]
Min.	9	0.09
Max.	151	1.22

The pump incorporates overload protection.

Net weight [kg]	Gross weight [kg]	Ship. vol. [m ³]
7.4	8.4	0.016

Connections: See [Counter flanges](#), page 22.
 System pressure: Max. 1.0 MPa (10 bar). Also available as max. 1.6 MPa (16 bar).
 Liquid temperature: -10 to +110 °C (TF 110).
 Specific EEI: 0.22.



Pump type	Dimensions [mm]																
	L1	L5	L6	B1	B2	B4	B6	B7	H1	H2	H3	H4	D1	D2	D3	D4	D5
MAGNA1 32-80 F	220	158	220	58	111	69	100	110	65	142	207	82	32	76	90/100	140	14/19

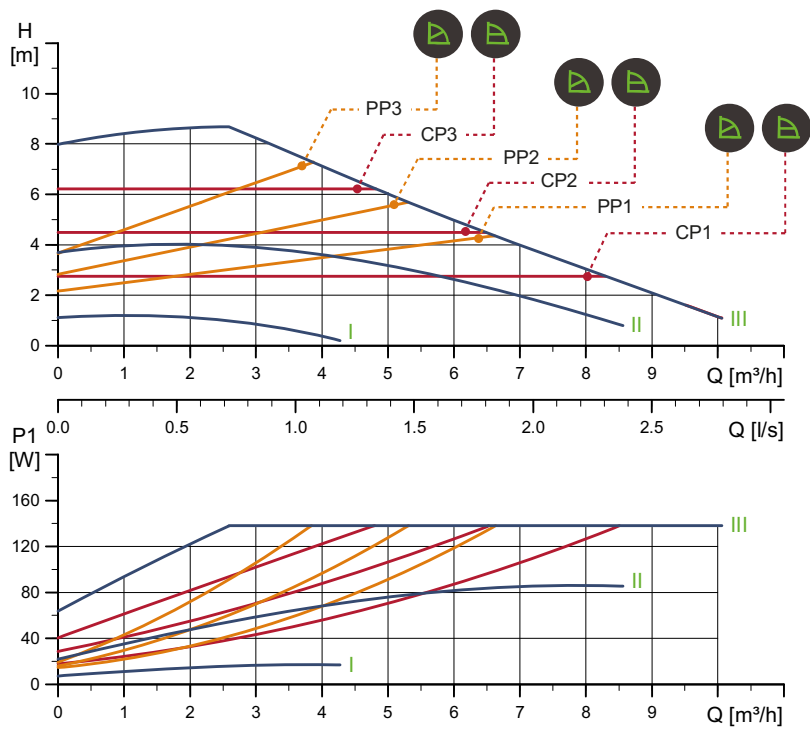
For product numbers, see page 130.

TM05 6329 4712

TM05 5200 3412

MAGNA1 32-80 F

1 x 230 V, 50/60 Hz

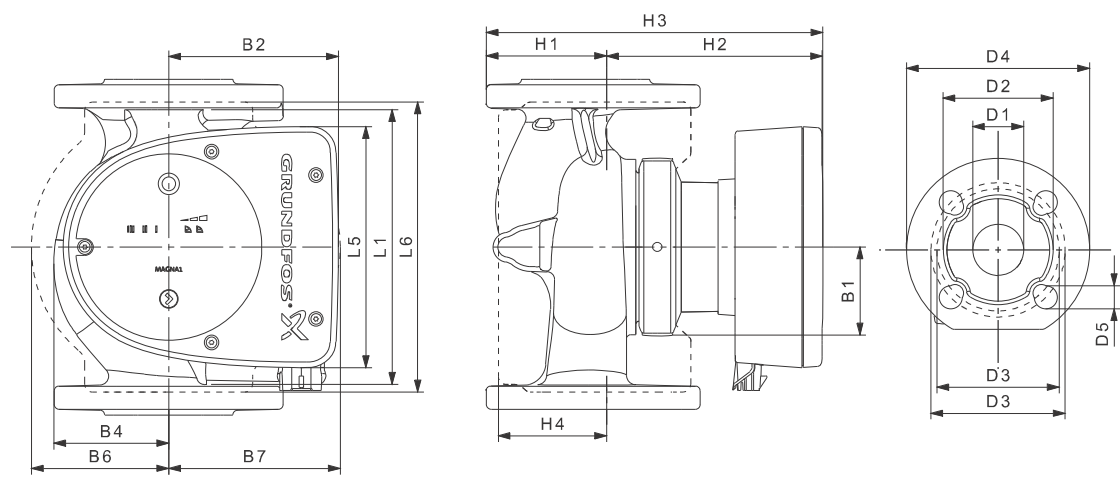


Speed	P1 [W]	I _{1/1} [A]
Min.	8	0.08
Max.	140	1.13

The pump incorporates overload protection.

Net weight [kg]	Gross weight [kg]	Ship. vol. [m ³]
7.4	8.4	0.016

Connections: See [Counter flanges](#), page 22.
 System pressure: Max. 1.6 MPa (16 bar). Also available as max. 1.0 MPa (10 bar).
 Liquid temperature: -10 to +110 °C (TF 110).
 Specific EEI: 0.21.



Pump type	Dimensions [mm]																
	L1	L5	L6	B1	B2	B4	B6	B7	H1	H2	H3	H4	D1	D2	D3	D4	D5
MAGNA1 32-80 F	220	158	220	58	111	69	100	110	65	142	207	82	32	76	90/100	140	14/19

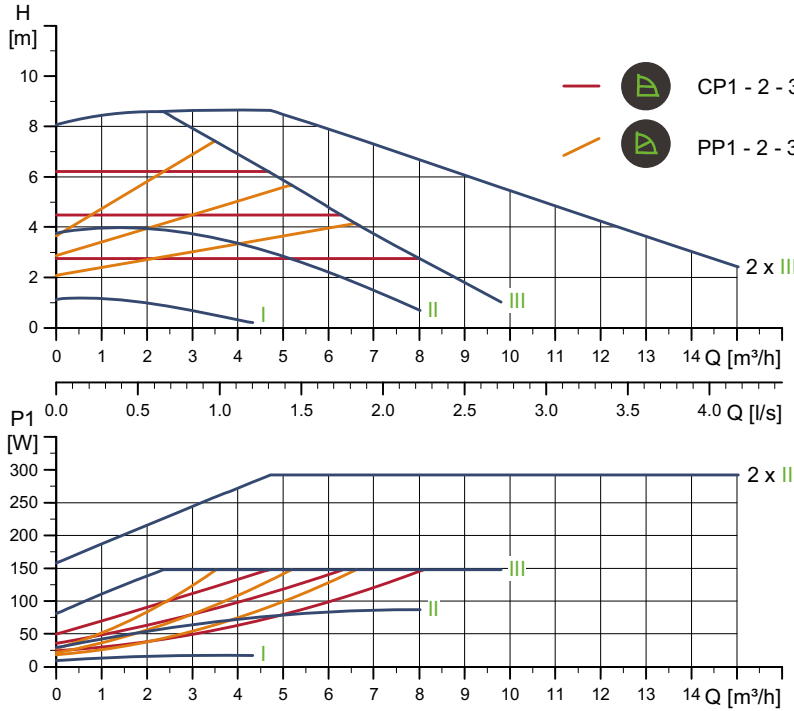
For product numbers, see page 130.

TM05 6330 4712

TM05 5200 3412

MAGNA1 D 32-80 F

1 x 230 V, 50/60 Hz

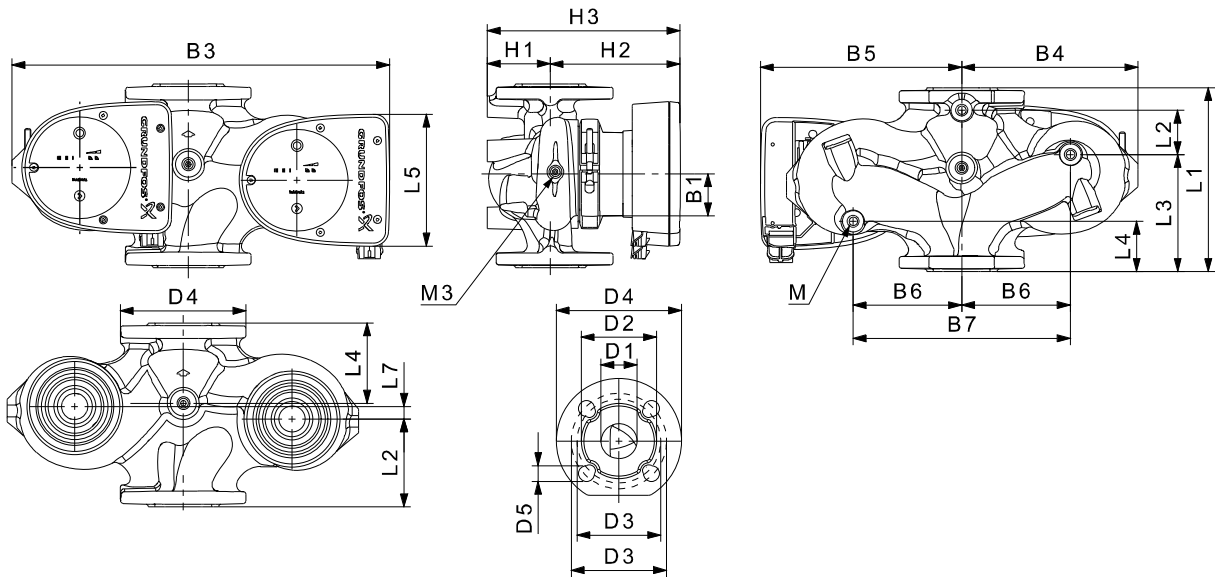


Speed	P1 [W]	I _{1/1} [A]
Min.	9	0.09
Max.	151	1.22

The pump incorporates overload protection.

Net weight [kg]	Gross weight [kg]	Ship. vol. [m ³]
14.7	15.7	0.045

Connections: See [Counter flanges](#), page 22.
 System pressure: Max. 1.0 MPa (10 bar). Also available as max. 1.6 MPa (16 bar).
 Liquid temperature: -10 to +110 °C (TF 110).
 Specific EEI: 0.23.



Pump type	Dimensions [mm]																		Rp			
	L1	L2	L3	L4	L5	L7	B1	B3	B4	B5	B6	B7	H1	H2	H3	D1	D2	D3	D4	D5	M	M3
MAGNA1 D 32-80 F	220	73	120	85	158	35	58	400	179	221	130	260	69	142	211	32	76	90/100	140	14/19	12	1/4

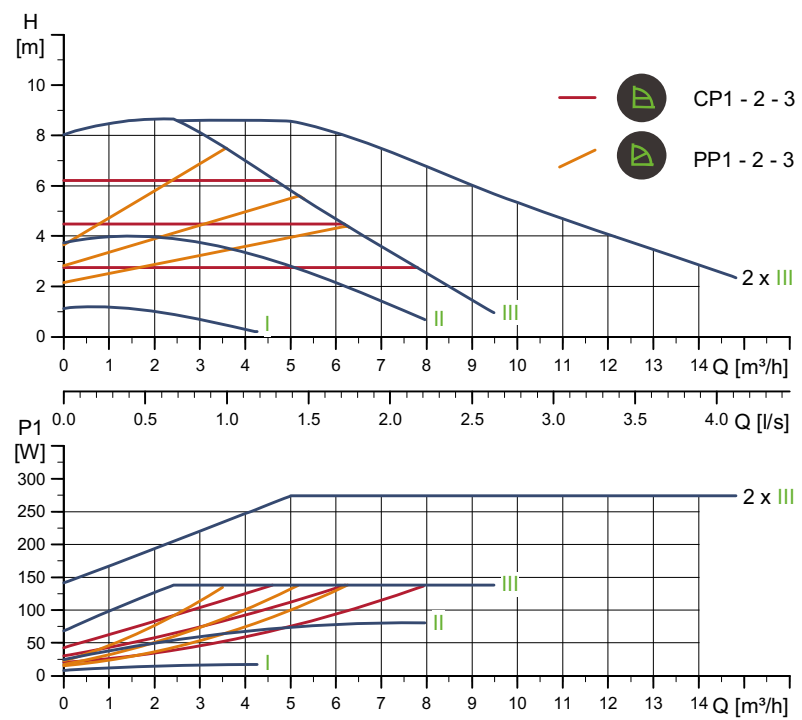
For product numbers, see page 130.

TM05 6367 4712

TM05 4960 3012

MAGNA1 D 32-80 F

1 x 230 V, 50/60 Hz

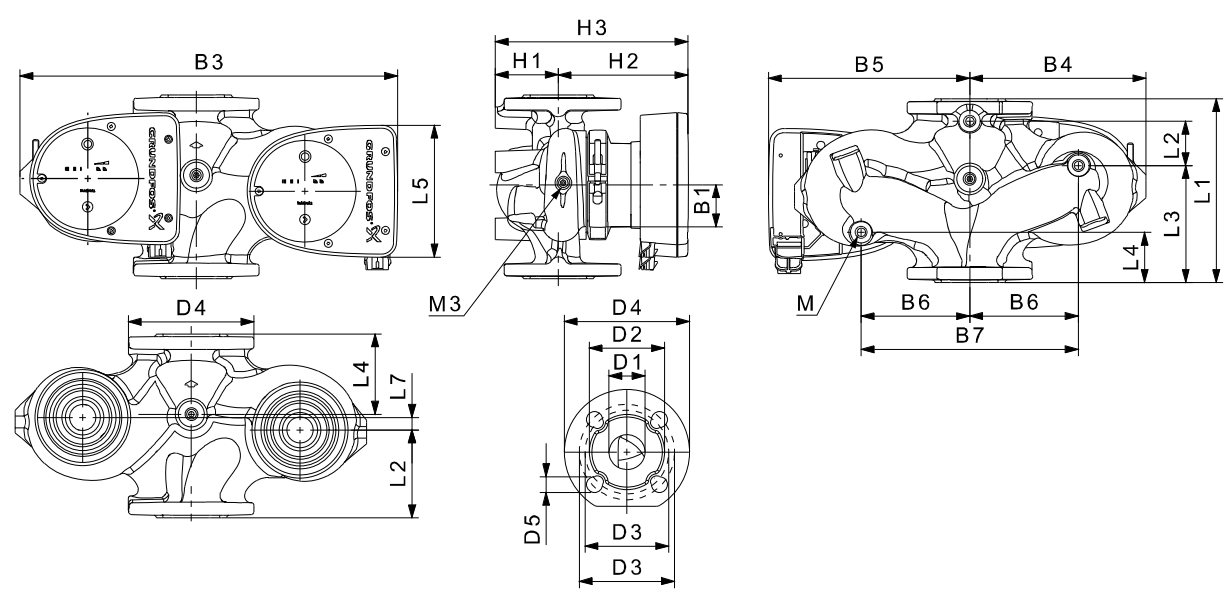


Speed	P1 [W]	I _{1/1} [A]
Min.	8	0.08
Max.	140	1.13

The pump incorporates overload protection.

Net weight [kg]	Gross weight [kg]	Ship. vol. [m ³]
14.7	15.7	0.045

Connections: See [Counter flanges](#), page 22.
 System pressure: Max. 1.6 MPa (16 bar). Also available as max. 1.0 MPa (10 bar).
 Liquid temperature: -10 to +110 °C (TF 110).
 Specific EEI: 0.22.



Pump type	Dimensions [mm]																		Rp			
	L1	L2	L3	L4	L5	L7	B1	B3	B4	B5	B6	B7	H1	H2	H3	D1	D2	D3		D4	D5	M
MAGNA1 D 32-80 F	220	73	120	85	158	35	58	400	179	221	130	260	69	142	211	32	76	90/100	140	14/19	12	1/4

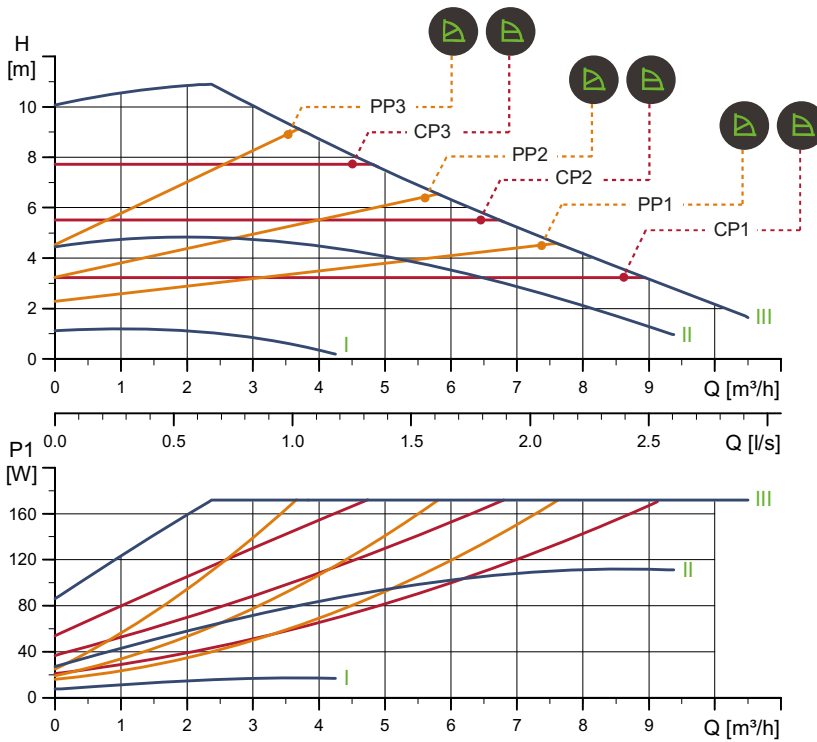
For product numbers, see page 130.

TM05 6368 4712

TM05 4960 3012

MAGNA1 32-100 F

1 x 230 V, 50/60 Hz

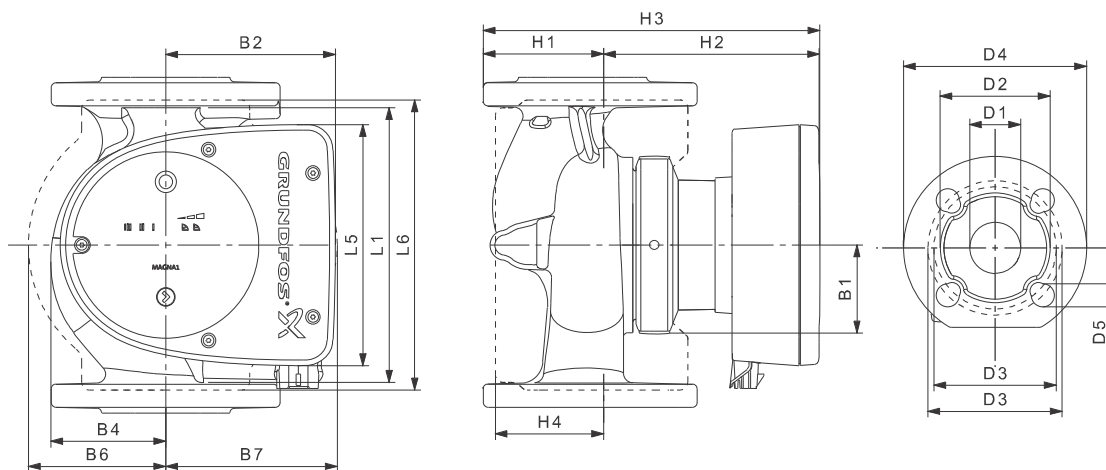


Speed	P1 [W]	I _{1/1} [A]
Min.	8	0.08
Max.	175	1.41

The pump incorporates overload protection.

Net weight [kg]	Gross weight [kg]	Ship. vol. [m ³]
7.4	8.4	0.016

Connections: See [Counter flanges](#), page 22.
 System pressure: Max. 1.0 MPa (10 bar). Also available as max. 1.6 MPa (16 bar).
 Liquid temperature: -10 to +110 °C (TF 110).
 Specific EEI: 0.21.



Pump type	Dimensions [mm]																
	L1	L5	L6	B1	B2	B4	B6	B7	H1	H2	H3	H4	D1	D2	D3	D4	D5
MAGNA1 32-100 F	220	158	220	58	111	69	100	110	65	142	207	82	32	76	90/100	140	14/19

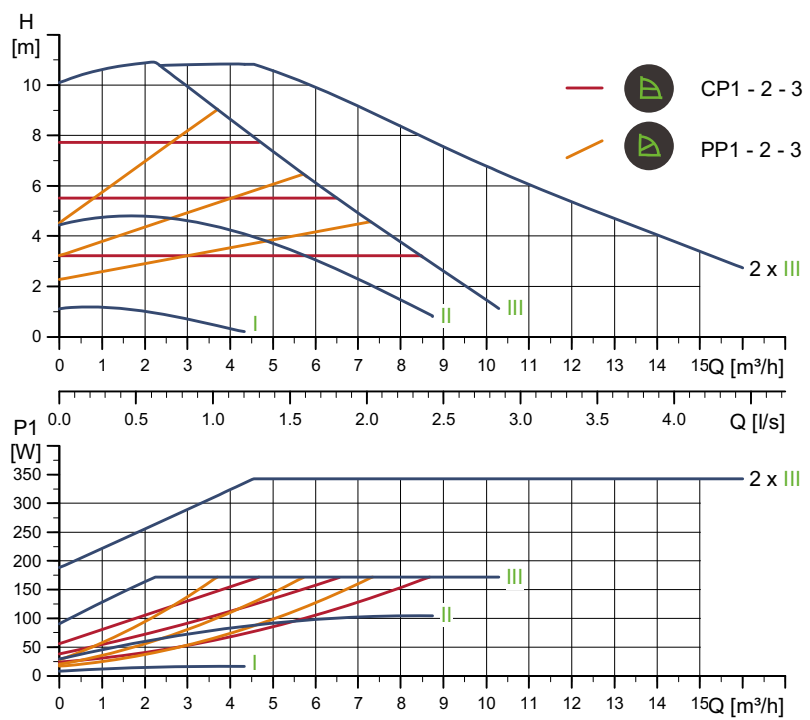
For product numbers, see page 130.

TM05 6331 4712

TM05 5200 3412

MAGNA1 D 32-100 F

1 x 230 V, 50/60 Hz

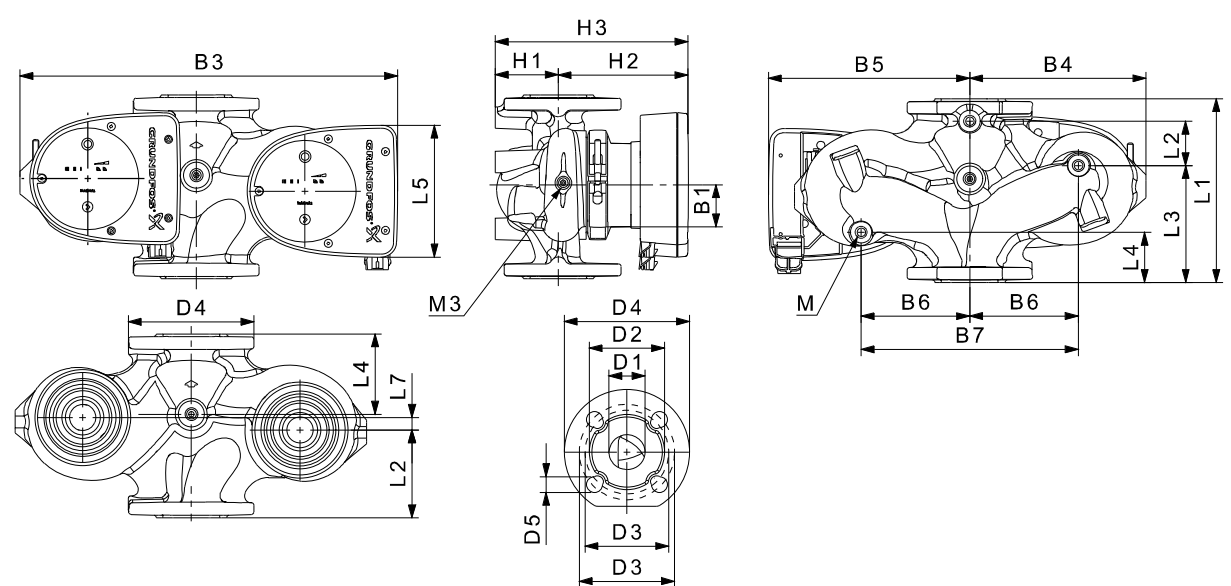


Speed	P1 [W]	I _{1/1} [A]
Min.	8	0.08
Max.	175	1.41

The pump incorporates overload protection.

Net weight [kg]	Gross weight [kg]	Ship. vol. [m ³]
14.7	15.7	0.045

Connections: See [Counter flanges](#), page 22.
 System pressure: Max. 1.0 MPa (10 bar). Also available as max. 1.6 MPa (16 bar).
 Liquid temperature: -10 to +110 °C (TF 110).
 Specific EEI: 0.22.



Pump type	Dimensions [mm]																	Rp				
	L1	L2	L3	L4	L5	L7	B1	B3	B4	B5	B6	B7	H1	H2	H3	D1	D2		D3	D4	D5	M
MAGNA1 D 32-100 F	220	73	120	85	158	35	58	400	179	221	130	260	69	142	211	32	76	90/100	140	14/19	12	1/4

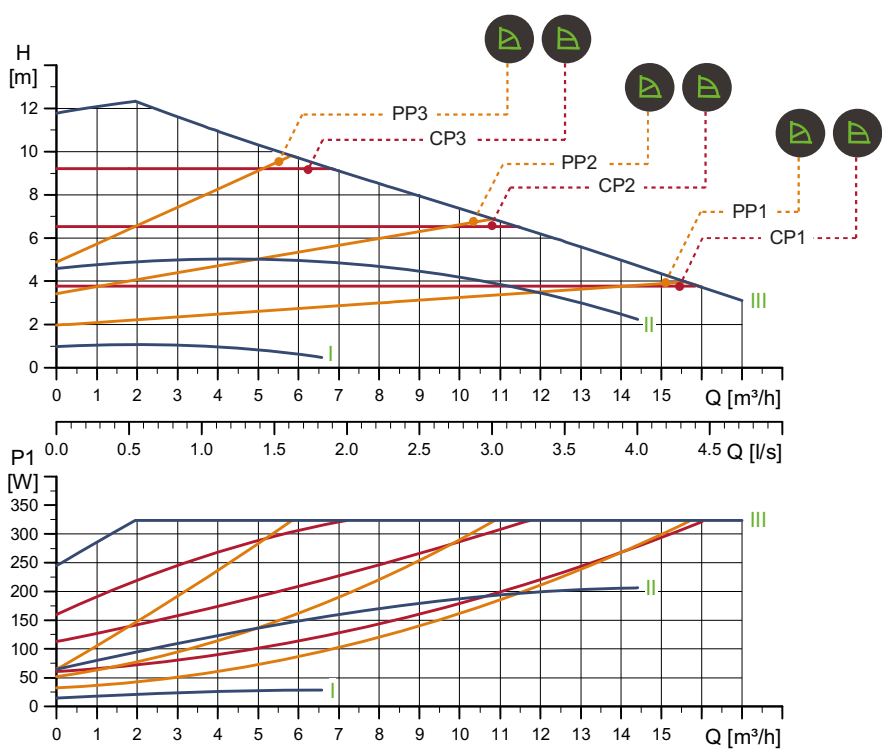
For product numbers, see page 130.

TM05 6369 4712

TM05 4960 3012

MAGNA1 32-120 F

1 x 230 V, 50/60 Hz

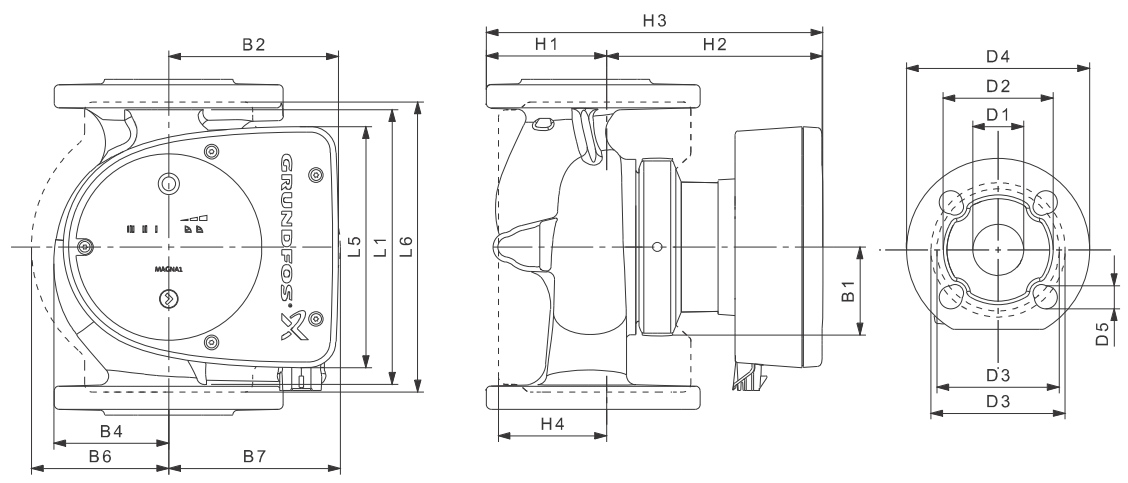


Speed	P1 [W]	I _{1/I} [A]
Min.	15	0.17
Max.	329	1.48

The pump incorporates overload protection.

Net weight [kg]	Gross weight [kg]	Ship. vol. [m ³]
15.4	17.1	0.040

Connections: See [Counter flanges](#), page 22.
 System pressure: Max. 1.0 MPa (10 bar). Also available as max. 1.6 MPa (16 bar).
 Liquid temperature: -10 to +110 °C (TF 110).
 Specific EEI: 0.21.



Pump type	Dimensions [mm]																
	L1	L5	L6	B1	B2	B4	B6	B7	H1	H2	H3	H4	D1	D2	D3	D4	D5
MAGNA1 32-120 F	220	204	216	84	164	73	106	116	65	301	366	86	32	76	90/100	140	14/19

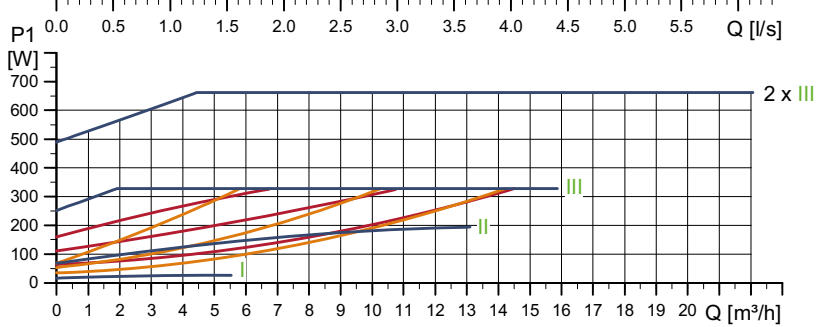
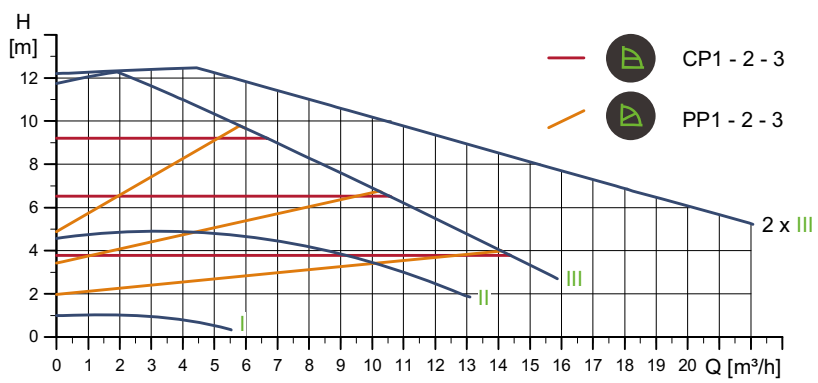
For product numbers, see page 130.

TM05 6387 4712

TM05 5200 3412

MAGNA1 D 32-120 F

1 x 230 V, 50/60 Hz

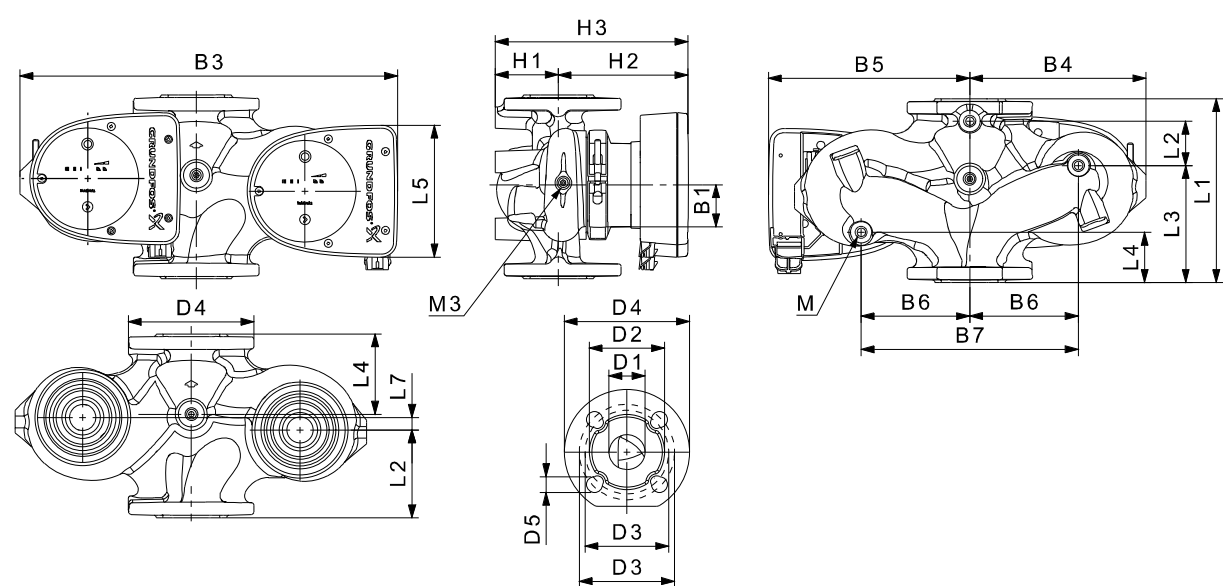


Speed	P1 [W]	I _{1/1} [A]
Min.	16.3	0.18
Max.	335	1.50

The pump incorporates overload protection.

Connections: See [Counter flanges](#), page 22.
 System pressure: Max. 1.0 MPa (10 bar). Also available as max. 1.6 MPa (16 bar).
 Liquid temperature: -10 to +110 °C (TF 110).
 Specific EEI: 0.22.

Net weight [kg]	Gross weight [kg]	Ship. vol. [m³]
29.8	33.7	0.087



Pump type	Dimensions [mm]																				Rp	
	L1	L2	L3	L4	L5	L7	B1	B3	B4	B5	B6	B7	H1	H2	H3	D1	D2	D3	D4	D5		M
MAGNA1 D 32-120 F	220	97	90	50	204	50	84	502	210	294	130	260	68	300	368	32	76	90/100	140	14/19	12	1/4

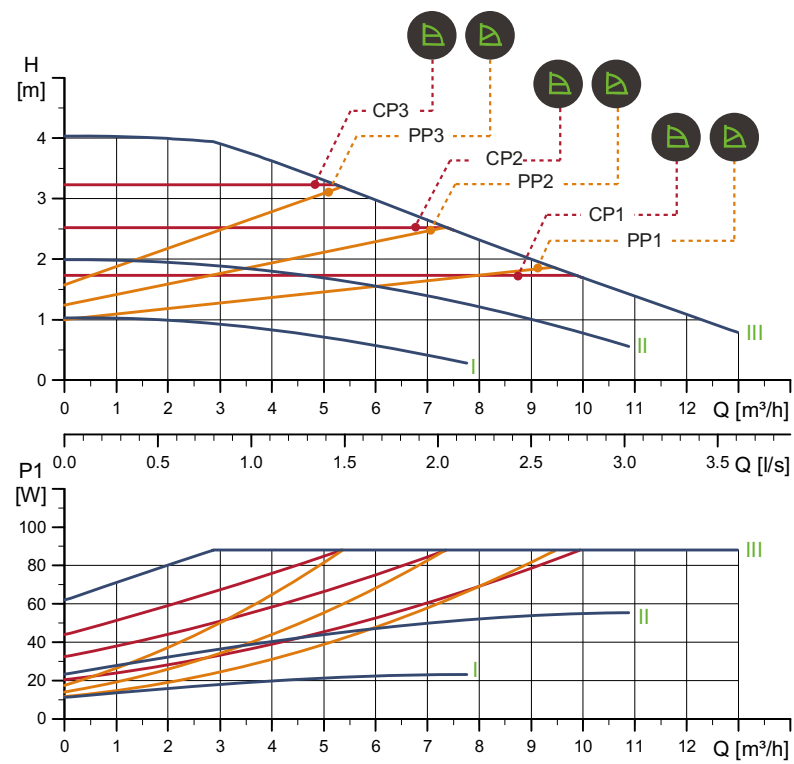
For product numbers, see page 130.

TM05 6334 4712

TM05 4960 3012

MAGNA1 40-40 F

1 x 230 V, 50/60 Hz

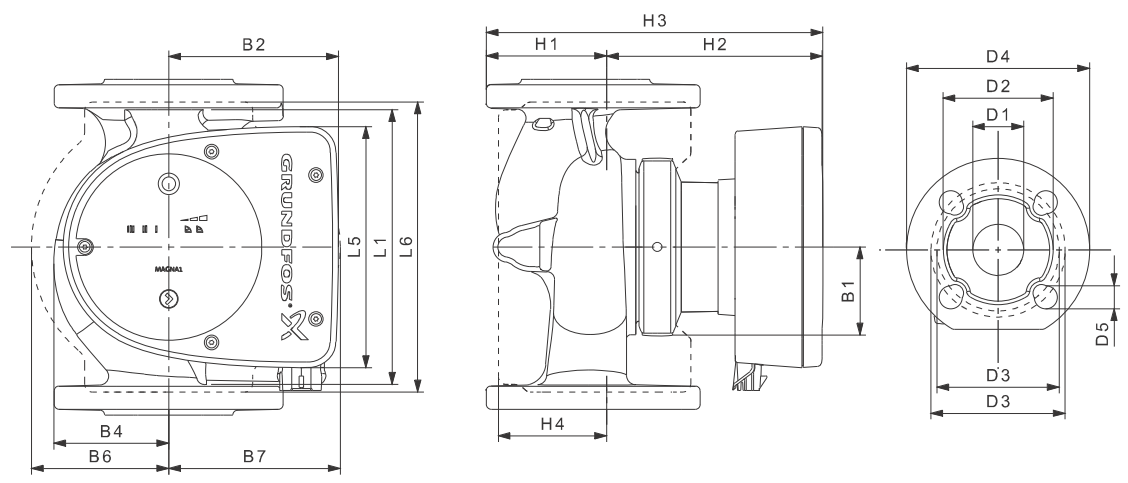


Speed	P1 [W]	I _{1/1} [A]
Min.	12	0.11
Max.	90	0.72

The pump incorporates overload protection.

Net weight [kg]	Gross weight [kg]	Ship. vol. [m ³]
9.5	10.5	0.016

Connections: See [Counter flanges](#), page 22.
 System pressure: Max. 1.0 MPa (10 bar). Also available as max. 1.6 MPa (16 bar).
 Liquid temperature: -10 to +110 °C (TF 110).
 Specific EEI: 0.21.



Pump type	Dimensions [mm]																
	L1	L5	L6	B1	B2	B4	B6	B7	H1	H2	H3	H4	D1	D2	D3	D4	D5
MAGNA1 40-40 F	220	158	220	58	111	69	105	105	65	156	221	83	40	84	100/110	150	14/19

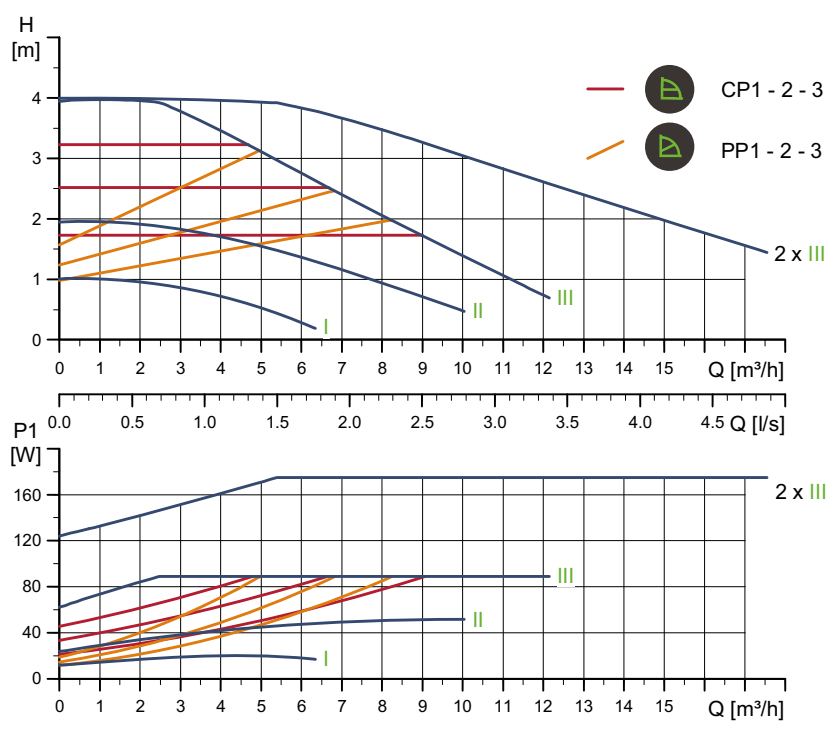
For product numbers, see page 130.

TM05 6332 4712

TM05 5200 3412

MAGNA1 D 40-40 F

1 x 230 V, 50/60 Hz

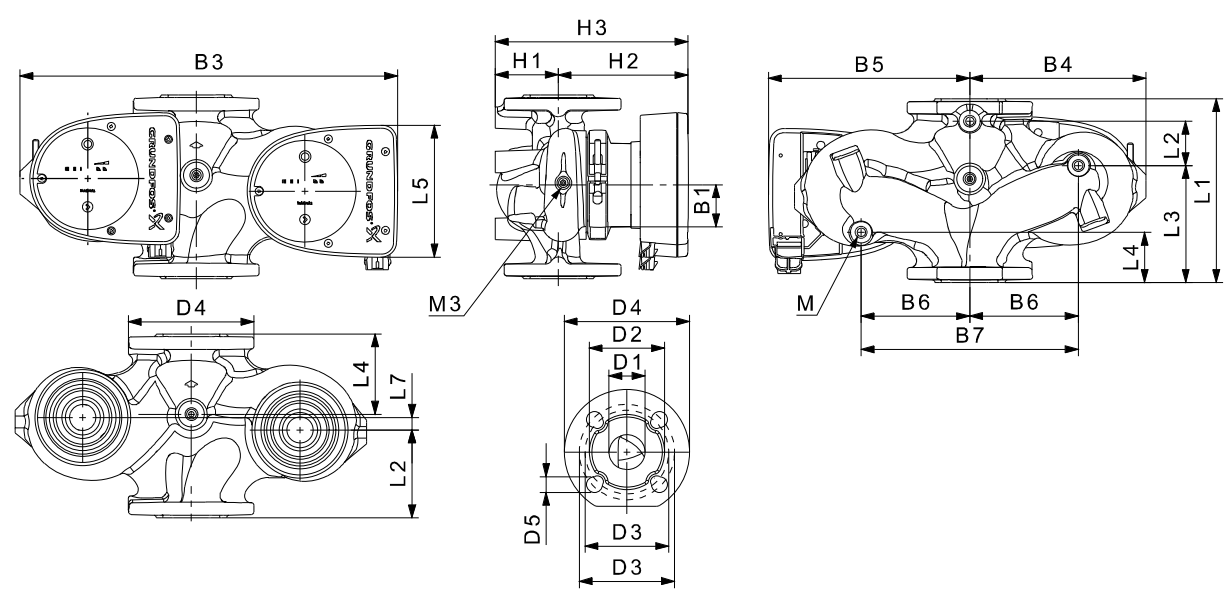


Speed	P1 [W]	I _{1/1} [A]
Min.	12	0.11
Max.	90	0.72

The pump incorporates overload protection.

Connections: See [Counter flanges](#), page 22.
 System pressure: Max. 1.0 MPa (10 bar). Also available as max. 1.6 MPa (16 bar).
 Liquid temperature: -10 to +110 °C (TF 110).
 Specific EEI: 0.22.

Net weight [kg]	Gross weight [kg]	Ship. vol. [m ³]
19.0	20.0	0.045



Pump type	Dimensions [mm]																				Rp	
	L1	L2	L3	L4	L5	L7	B1	B3	B4	B5	B6	B7	H1	H2	H3	D1	D2	D3	D4	D5		M
MAGNA1 D 40-40 F	220	53	140	60	158	15	58	452	211	241	130	260	76	156	232	40	84	100/110	150	14/19	12	1/4

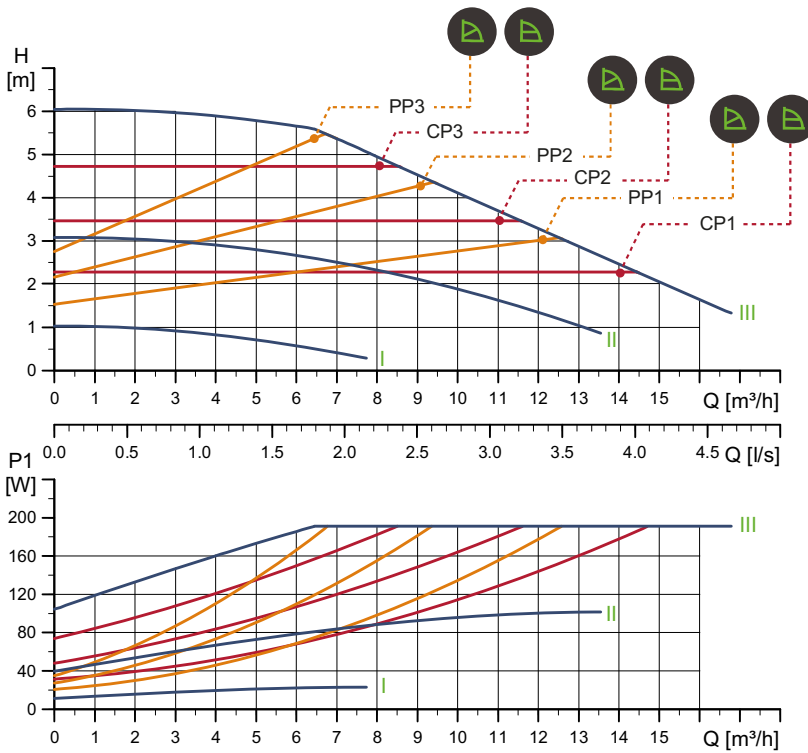
For product numbers, see page 130.

TM05 6370 4712

TM05 4960 3012

MAGNA1 40-60 F

1 x 230 V, 50/60 Hz



Speed	P1 [W]	I _{1/1} [A]
Min.	12	0.11
Max.	194	1.56

The pump incorporates overload protection.

Net weight [kg]	Gross weight [kg]	Ship. vol. [m ³]
9.5	10.5	0.016

Connections:

System pressure:

Liquid temperature:

Specific EEI:

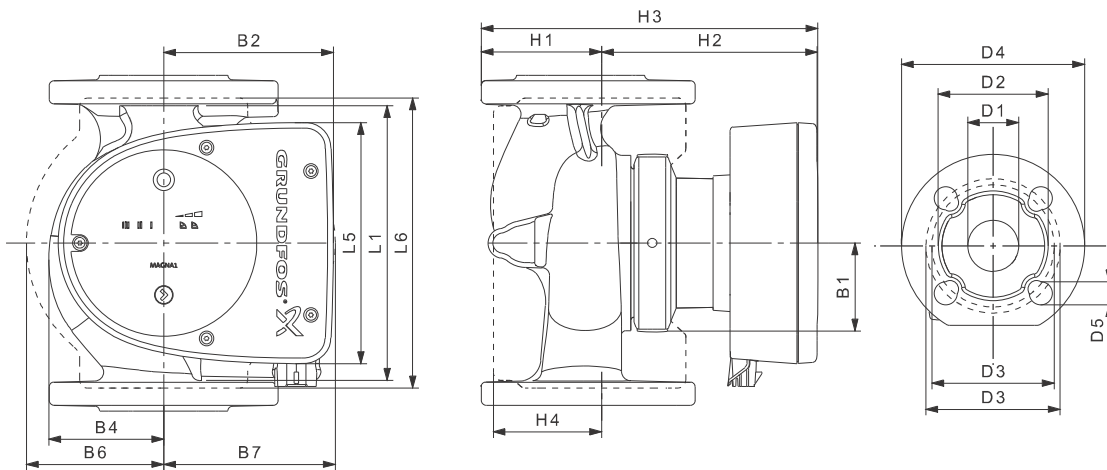
See [Counter flanges](#), page 22.

Max. 1.0 MPa (10 bar).

Also available as max. 1.6 MPa (16 bar).

-10 to +110 °C (TF 110).

0.21.



Pump type	Dimensions [mm]																
	L1	L5	L6	B1	B2	B4	B6	B7	H1	H2	H3	H4	D1	D2	D3	D4	D5
MAGNA1 40-60 F	220	158	220	58	111	69	105	105	65	156	221	83	40	84	100/110	150	14/19

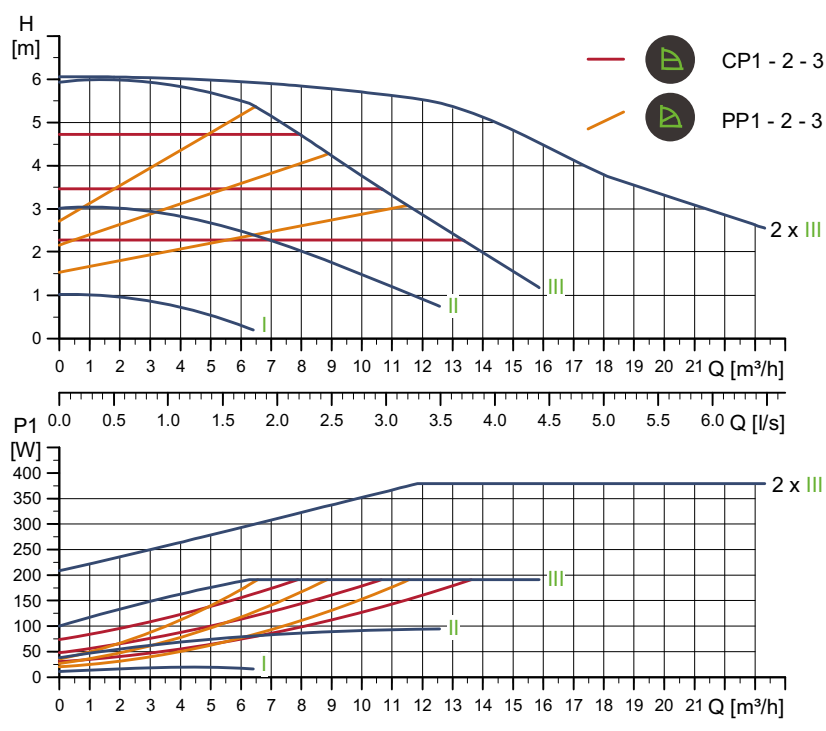
For product numbers, see page 130.

TM05 6370 4712

TM05 5200 3412

MAGNA1 D 40-60 F

1 x 230 V, 50/60 Hz

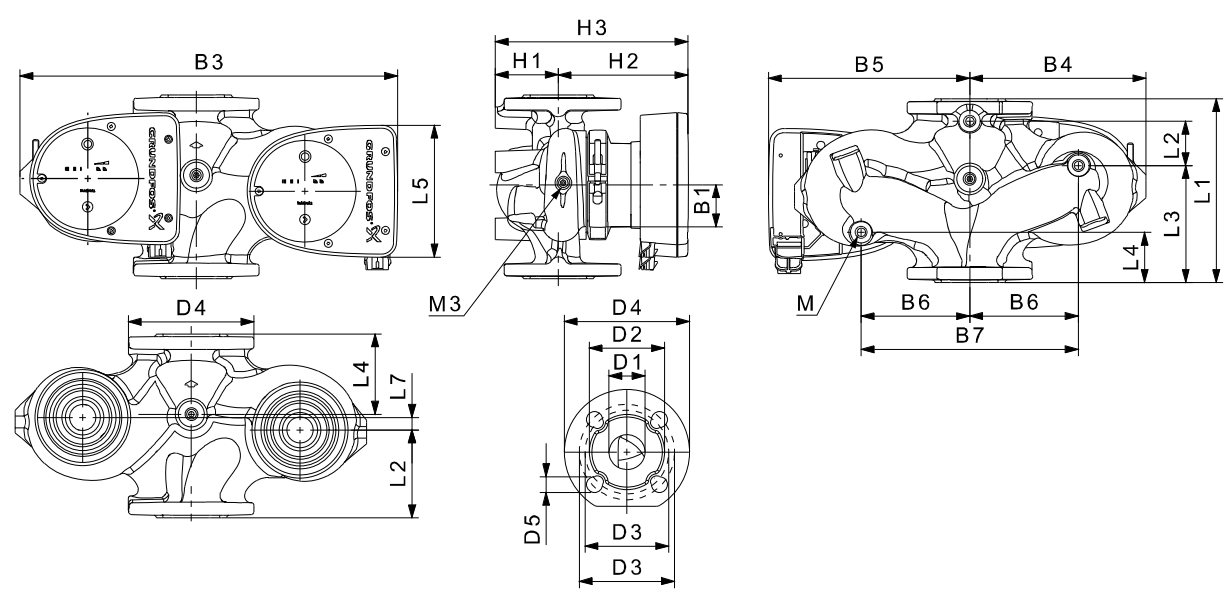


Speed	P1 [W]	I _{1/1} [A]
Min.	12	0.11
Max.	194	1.56

The pump incorporates overload protection.

Connections: See [Counter flanges](#), page 22.
 System pressure: Max. 1.0 MPa (10 bar). Also available as max. 1.6 MPa (16 bar).
 Liquid temperature: -10 to +110 °C (TF 110).
 Specific EEI: 0.22.

Net weight [kg]	Gross weight [kg]	Ship. vol. [m³]
19.0	20.0	0.045



Pump type	Dimensions [mm]																				Rp	
	L1	L2	L3	L4	L5	L7	B1	B3	B4	B5	B6	B7	H1	H2	H3	D1	D2	D3	D4	D5		M
MAGNA1 D 40-60 F	220	53	140	60	158	15	58	452	211	241	130	260	76	156	232	40	84	100/110	150	14/19	12	1/4

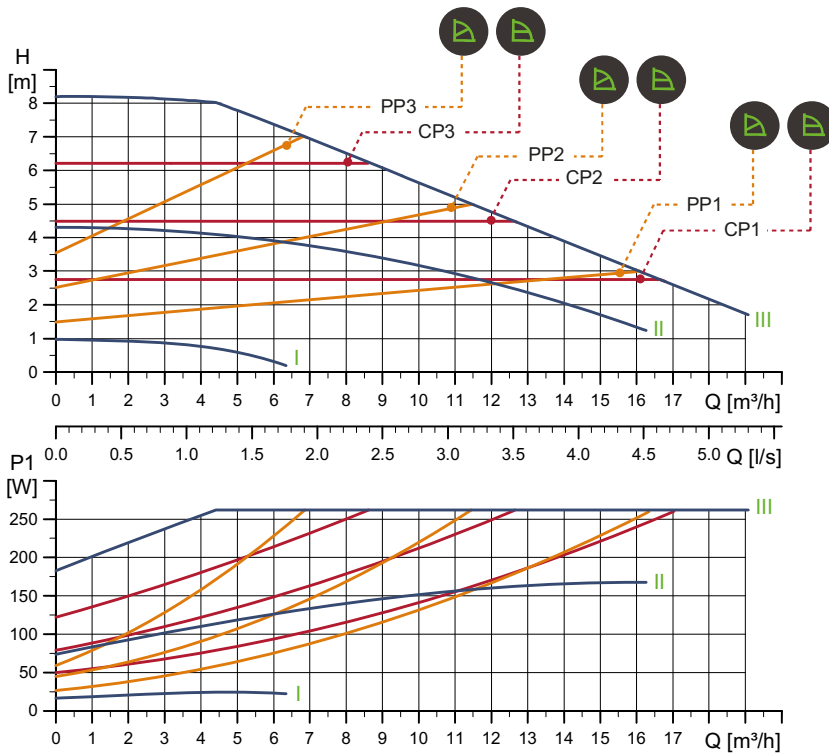
For product numbers, see page 130.

TM05 6371 4712

TM05 4960 3012

MAGNA1 40-80 F

1 x 230 V, 50/60 Hz

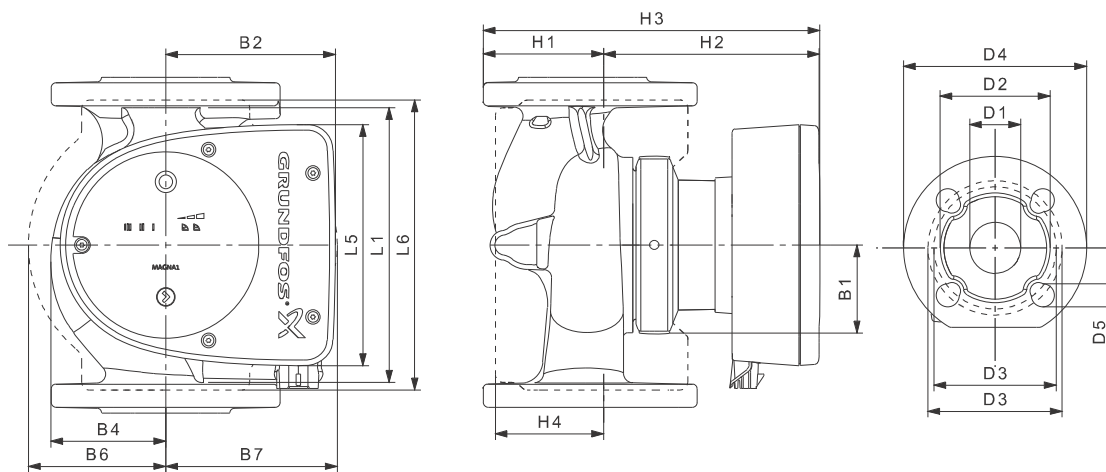


Speed	P1 [W]	I _{1/1} [A]
Min.	17	0.19
Max.	267	1.18

The pump incorporates overload protection.

Net weight [kg]	Gross weight [kg]	Ship. vol. [m ³]
16.5	18.2	0.040

Connections: See [Counter flanges](#), page 22.
 System pressure: Max. 1.0 MPa (10 bar). Also available as max. 1.6 MPa (16 bar).
 Liquid temperature: -10 to +110 °C (TF 110).
 Specific EEI: 0.23.



Pump type	Dimensions [mm]																
	L1	L5	L6	B1	B2	B4	B6	B7	H1	H2	H3	H4	D1	D2	D3	D4	D5
MAGNA1 40-80 F	220	204	220	84	164	73	106	128	65	304	369	83	40	84	100/110	150	14/19

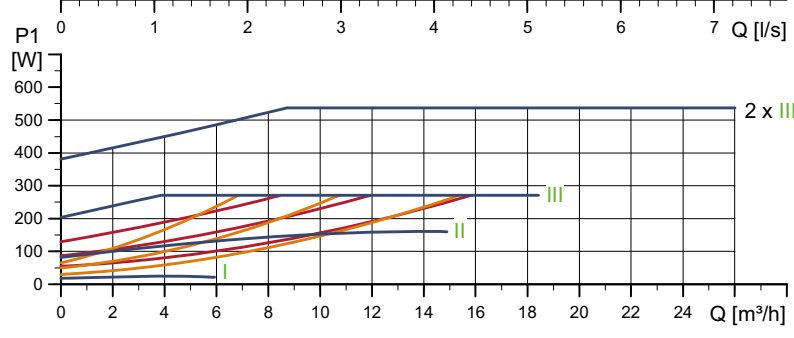
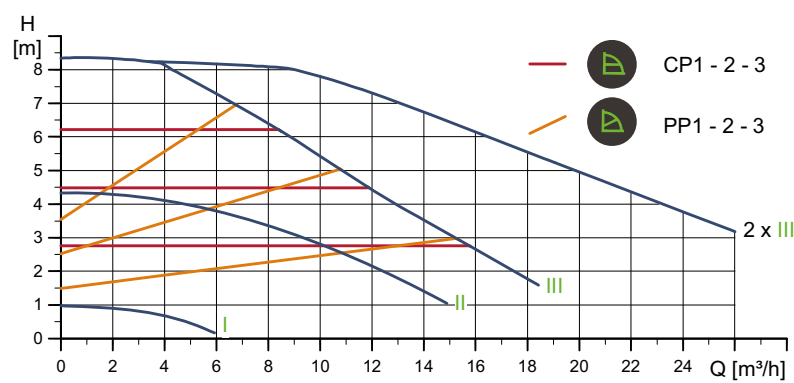
For product numbers, see page 130.

TM05 6288 4712

TM05 5200 3412

MAGNA1 D 40-80 F

1 x 230 V, 50/60 Hz

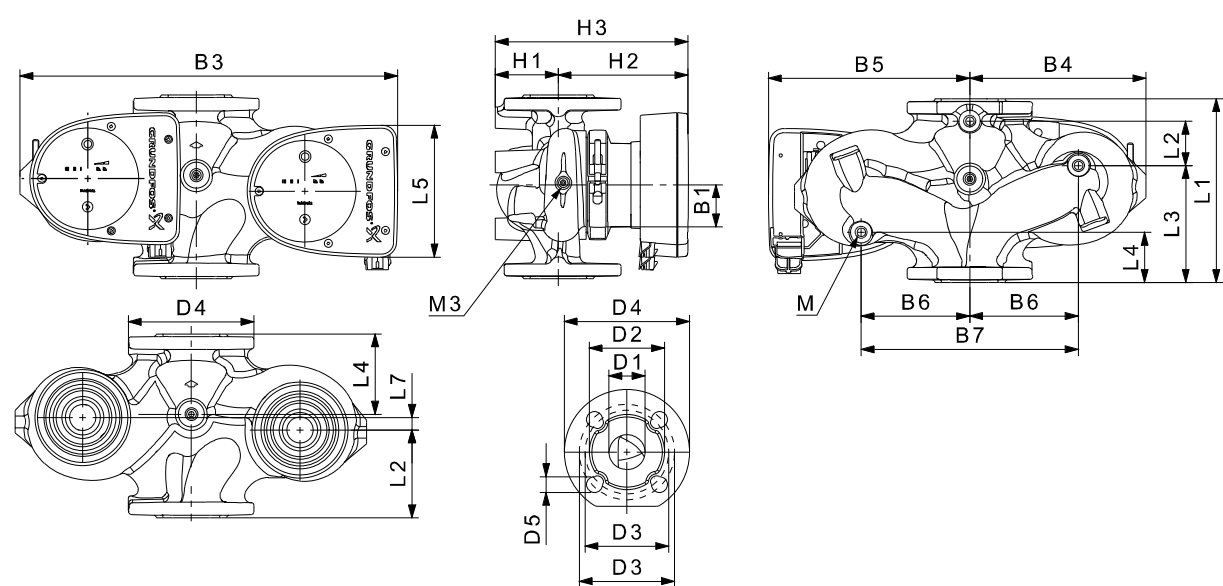


Speed	P1 [W]	I _{1/1} [A]
Min.	18.4	0.20
Max.	276	1.25

The pump incorporates overload protection.

Connections: See [Counter flanges](#), page 22.
 System pressure: Max. 1.0 MPa (10 bar). Also available as max. 1.6 MPa (16 bar).
 Liquid temperature: -10 to +110 °C (TF 110).
 Specific EEI: 0.23.

Net weight [kg]	Gross weight [kg]	Ship. vol. [m³]
32.3	36.2	0.087



Pump type	Dimensions [mm]																				Rp	
	L1	L2	L3	L4	L5	L7	B1	B3	B4	B5	B6	B7	H1	H2	H3	D1	D2	D3	D4	D5		M
MAGNA1 D 40-80 F	220	53	140	60	204	15	84	502	210	294	130	260	76	303	379	40	84	100/110	150	14/19	12	1/4

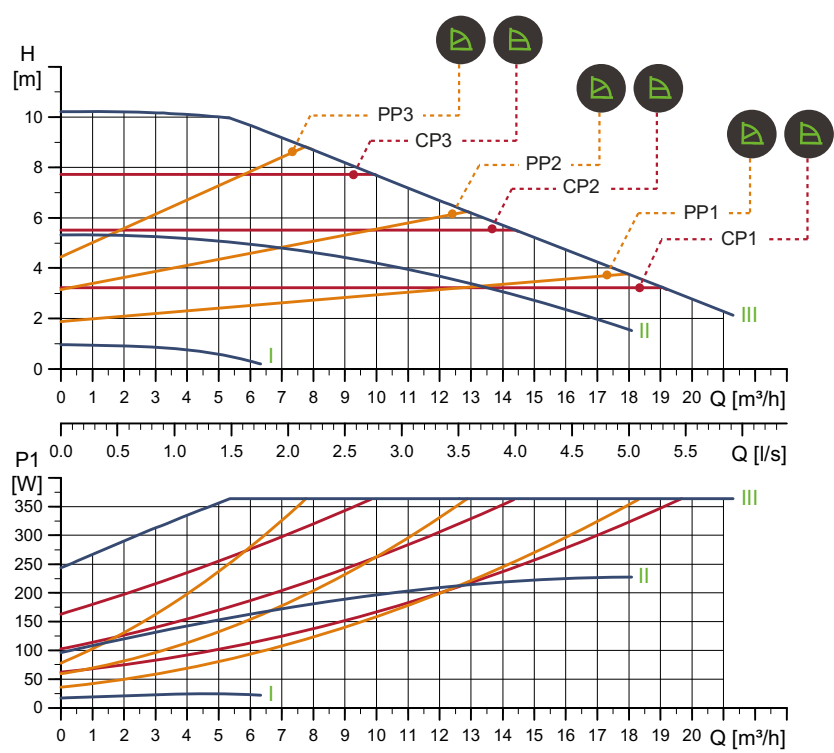
For product numbers, see page 130.

TM05 3733 1912

TM05 4960 3012

MAGNA1 40-100 F

1 x 230 V, 50/60 Hz

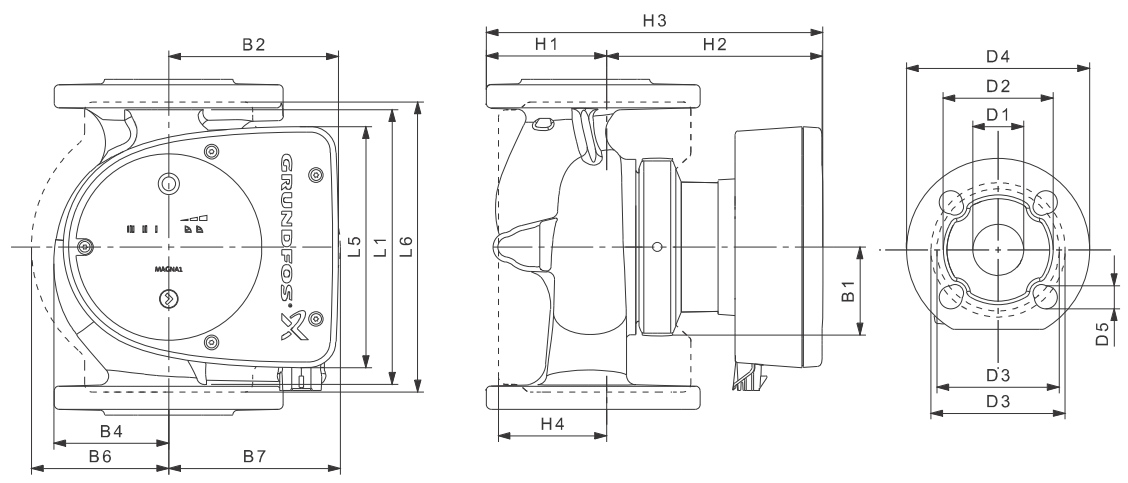


Speed	P1 [W]	I _{1/1} [A]
Min.	17	0.19
Max.	370	1.65

The pump incorporates overload protection.

Net weight [kg]	Gross weight [kg]	Ship. vol. [m ³]
16.5	18.2	0.040

Connections: See [Counter flanges](#), page 22.
 System pressure: Max. 1.0 MPa (10 bar). Also available as max. 1.6 MPa (16 bar).
 Liquid temperature: -10 to +110 °C (TF 110).
 Specific EEI: 0.23.



Pump type	Dimensions [mm]																
	L1	L5	L6	B1	B2	B4	B6	B7	H1	H2	H3	H4	D1	D2	D3	D4	D5
MAGNA1 40-100 F	220	204	220	84	164	73	106	128	65	304	369	83	40	84	100/110	150	14/19

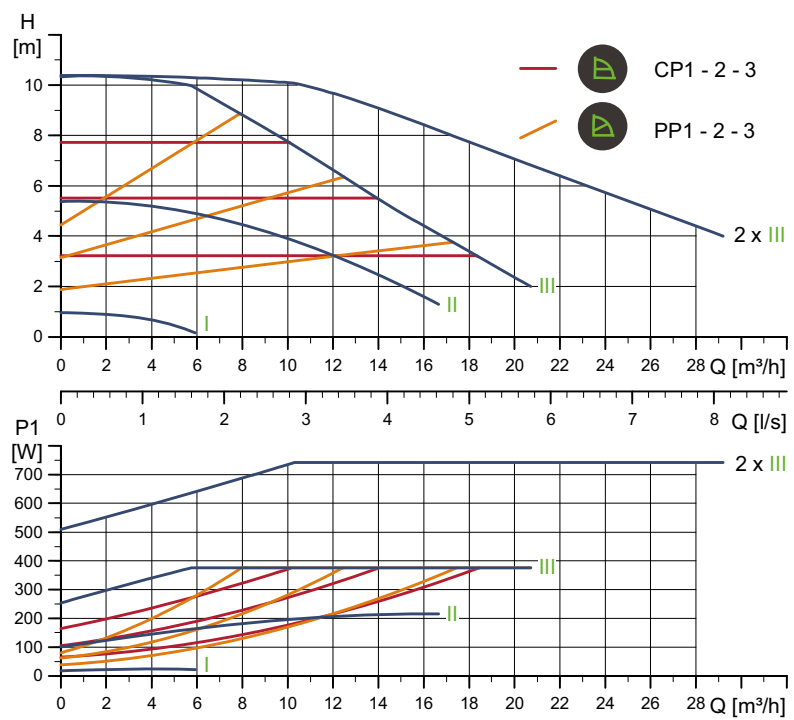
For product numbers, see page 130.

TM05 6289 4712

TM05 5200 3412

MAGNA1 D 40-100 F

1 x 230 V, 50/60 Hz

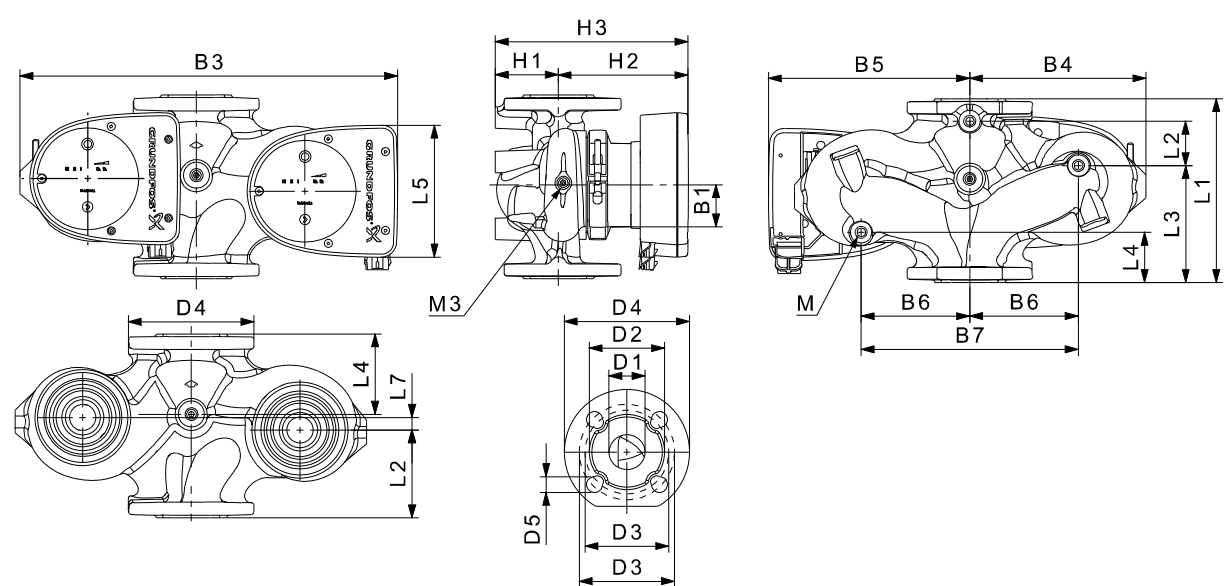


Speed	P1 [W]	I _{1/1} [A]
Min.	18.1	0.20
Max.	383	1.70

The pump incorporates overload protection.

Net weight [kg]	Gross weight [kg]	Ship. vol. [m ³]
32.3	36.2	0.087

Connections: See [Counter flanges](#), page 22.
 System pressure: Max. 1.0 MPa (10 bar). Also available as max. 1.6 MPa (16 bar).
 Liquid temperature: -10 to +110 °C (TF 110).
 Specific EEI: 0.23.



Pump type	Dimensions [mm]																				Rp	
	L1	L2	L3	L4	L5	L7	B1	B3	B4	B5	B6	B7	H1	H2	H3	D1	D2	D3	D4	D5		M
MAGNA1 D 40-100 F	220	53	140	60	204	15	84	502	210	294	130	260	76	303	379	40	84	100/110	150	14/19	12	1/4

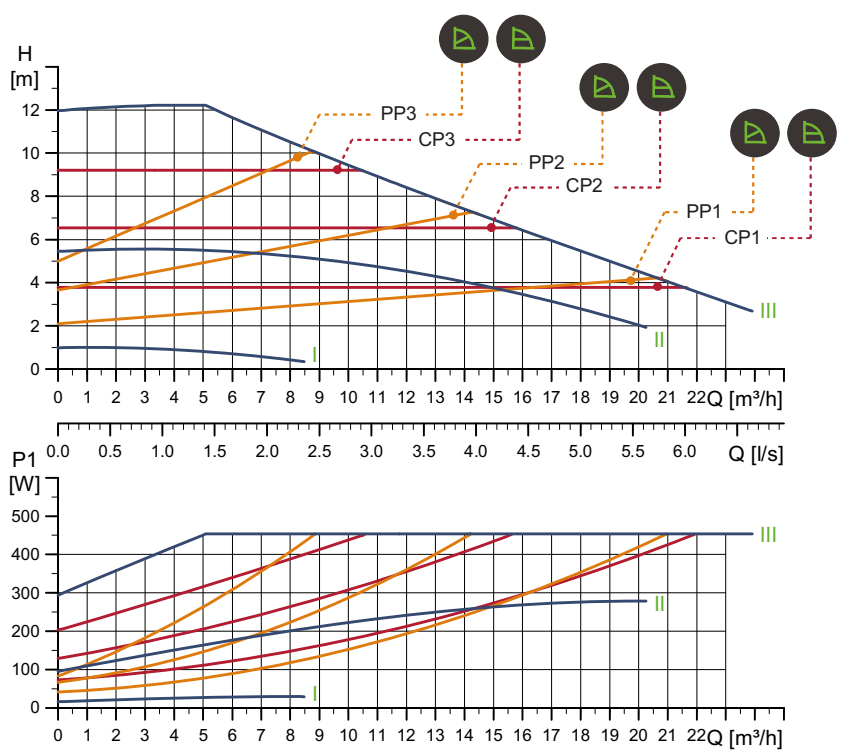
For product numbers, see page 130.

TM05 6336 4712

TM05 4960 3012

MAGNA1 40-120 F

1 x 230 V, 50/60 Hz

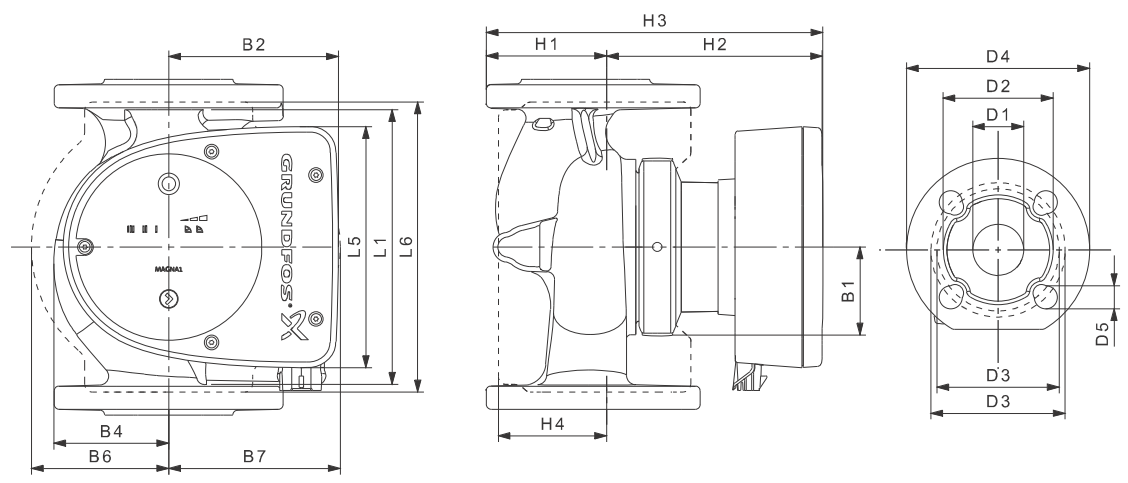


Speed	P1 [W]	I _{1/1} [A]
Min.	15	0.18
Max.	463	2.05

The pump incorporates overload protection.

Net weight [kg]	Gross weight [kg]	Ship. vol. [m ³]
16.2	17.7	0.040

Connections: See [Counter flanges](#), page 22.
 System pressure: Max. 1.0 MPa (10 bar). Also available as max. 1.6 MPa (16 bar).
 Liquid temperature: -10 to +110 °C (TF 110).
 Specific EEI: 0.21.



Pump type	Dimensions [mm]																
	L1	L5	L6	B1	B2	B4	B6	B7	H1	H2	H3	H4	D1	D2	D3	D4	D5
MAGNA1 40-120 F	250	204	220	84	164	73	106	128	65	304	369	83	40	84	100/110	150	14/19

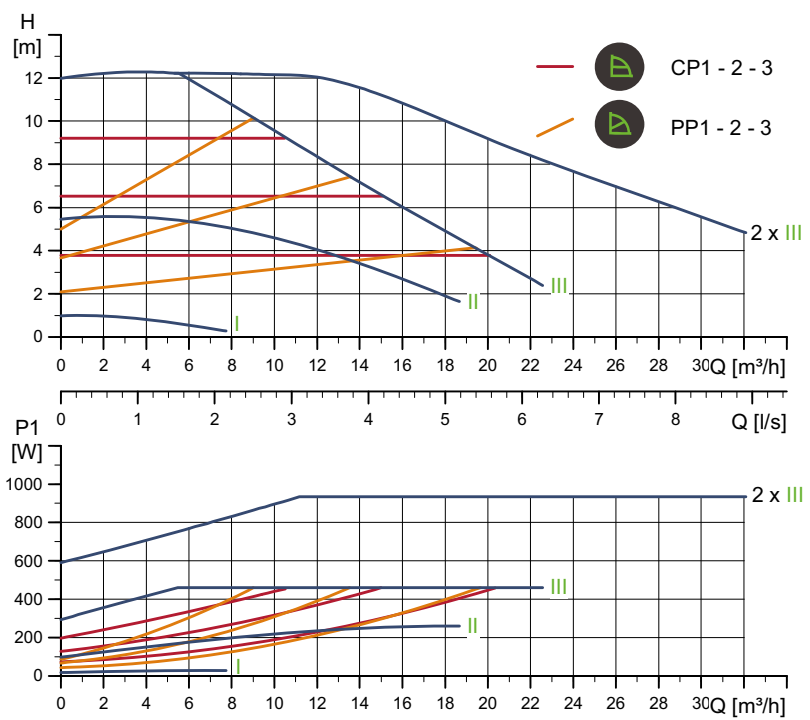
For product numbers, see page 130.

TM05 6290 4712

TM05 5200 3412

MAGNA1 D 40-120 F

1 x 230 V, 50/60 Hz

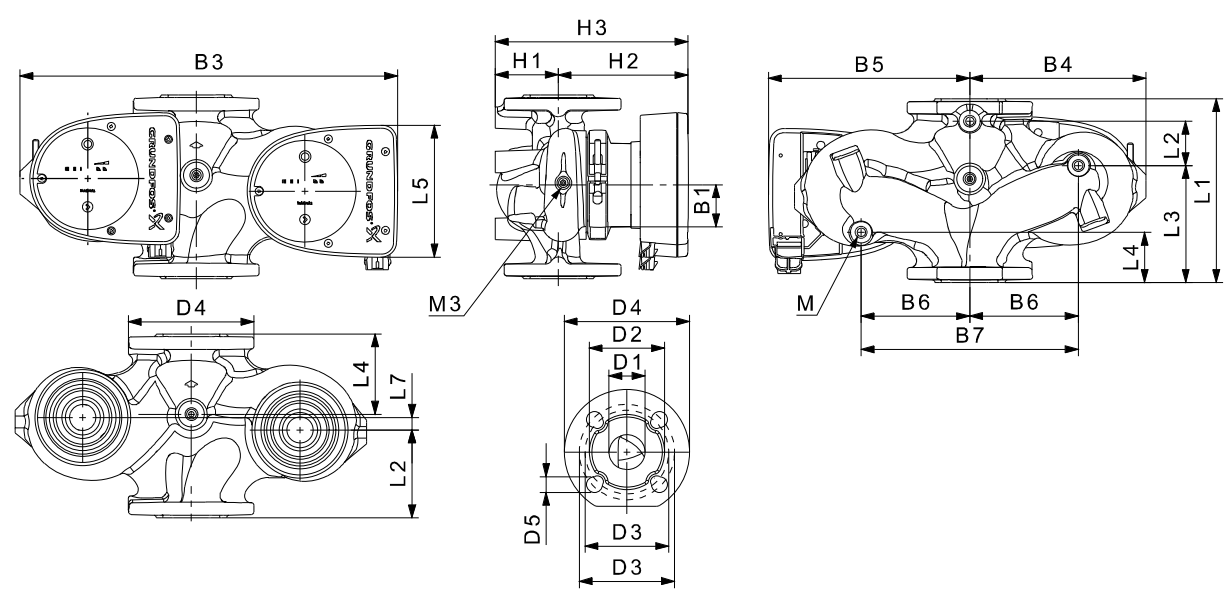


Speed	P1 [W]	I _{1/1} [A]
Min.	17	0.19
Max.	476	2.10

The pump incorporates overload protection.

Connections: See [Counter flanges](#), page 22.
 System pressure: Max. 1.0 MPa (10 bar). Also available as max. 1.6 MPa (16 bar).
 Liquid temperature: -10 to +110 °C (TF 110).
 Specific EEI: 0.22.

Net weight [kg]	Gross weight [kg]	Ship. vol. [m ³]
31.4	35.3	0.087



Pump type	Dimensions [mm]																				Rp	
	L1	L2	L3	L4	L5	L7	B1	B3	B4	B5	B6	B7	H1	H2	H3	D1	D2	D3	D4	D5		M
MAGNA1 D 40-120 F	250	58	155	75	204	0	84	512	220	294	130	260	69	303	372	40	84	100/110	150	14/19	12	1/4

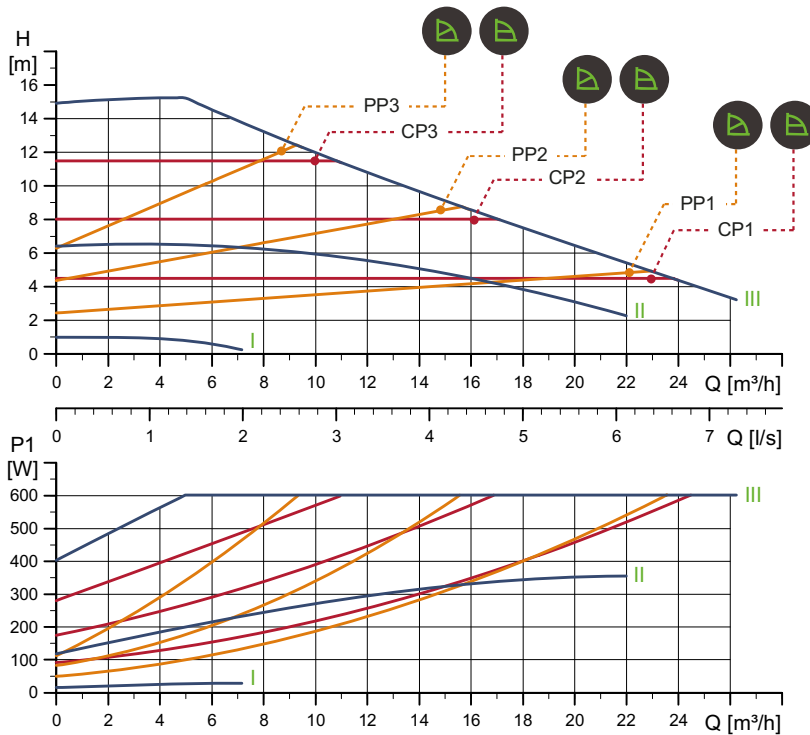
For product numbers, see page 130.

TM05 6337 4712

TM05 4960 3012

MAGNA1 40-150 F

1 x 230 V, 50/60 Hz



Speed	P1 [W]	I _{1/1} [A]
Min.	16	0.18
Max.	615	2.71

The pump incorporates overload protection.

Net weight [kg]	Gross weight [kg]	Ship. vol. [m ³]
16.2	17.7	0.040

Connections:

System pressure:

Liquid temperature:

Specific EEI:

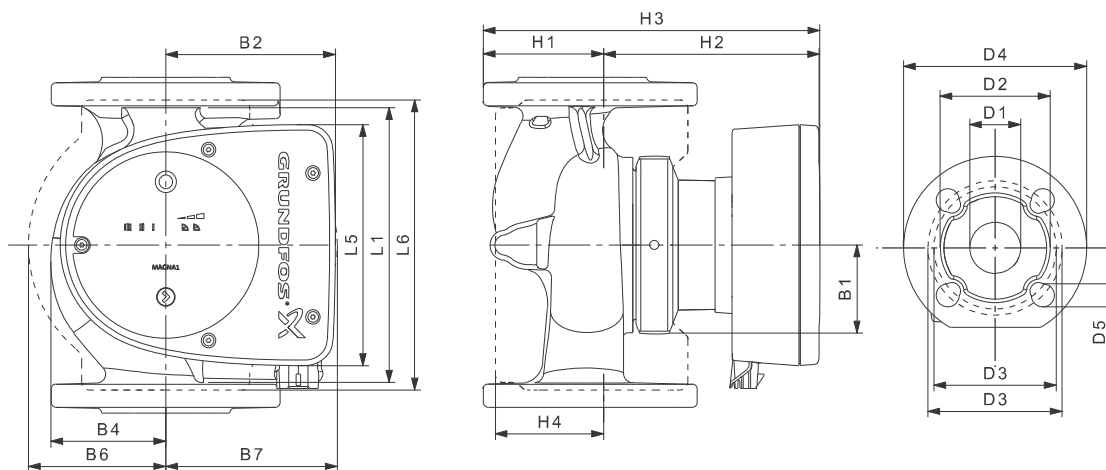
See [Counter flanges](#), page 22.

Max. 1.0 MPa (10 bar).

Also available as max. 1.6 MPa (16 bar).

-10 to +110 °C (TF 110).

0.21.



Pump type	Dimensions [mm]																
	L1	L5	L6	B1	B2	B4	B6	B7	H1	H2	H3	H4	D1	D2	D3	D4	D5
MAGNA1 40-150 F	250	204	220	84	164	73	106	128	65	304	369	83	40	84	100/110	150	14/19

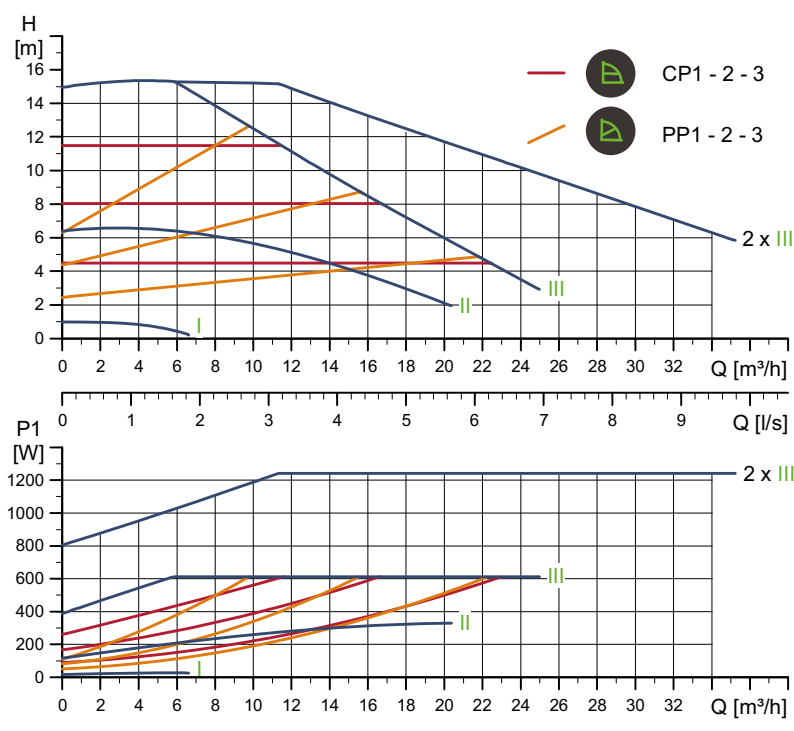
For product numbers, see page 130.

TM05 6291 4712

TM05 5200 3412

MAGNA1 D 40-150 F

1 x 230 V, 50/60 Hz

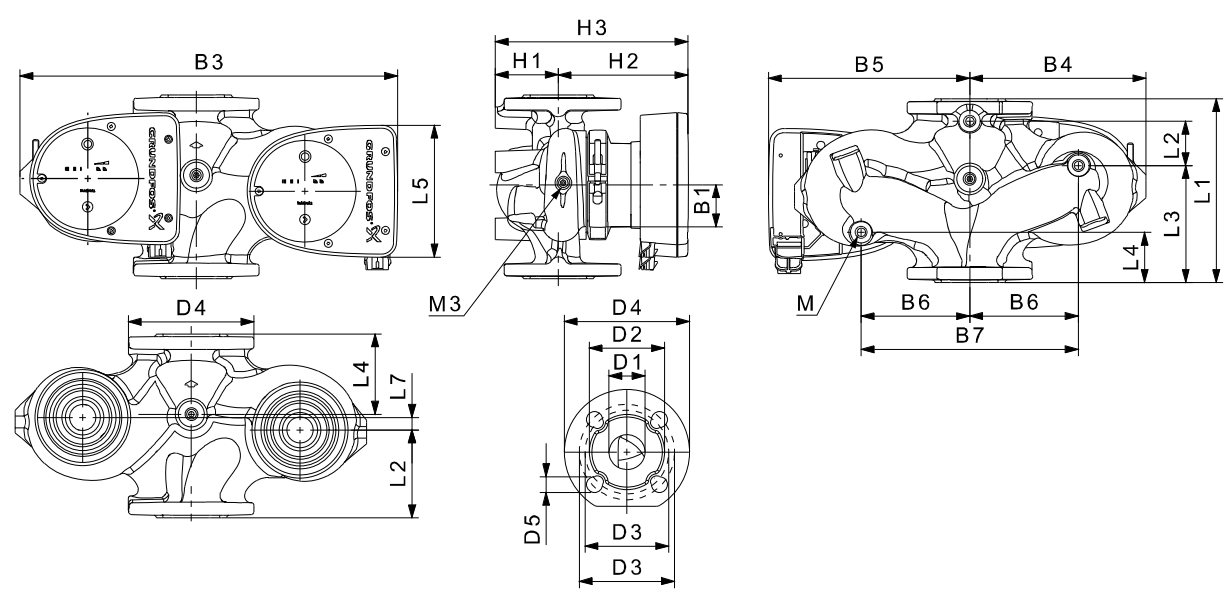


Speed	P1 [W]	I _{1/1} [A]
Min.	16.9	0.18
Max.	630	2.77

The pump incorporates overload protection.

Net weight [kg]	Gross weight [kg]	Ship. vol. [m ³]
31.4	35.3	0.087

Connections: See [Counter flanges](#), page 22.
 System pressure: Max. 1.0 MPa (10 bar). Also available as max. 1.6 MPa (16 bar).
 Liquid temperature: -10 to +110 °C (TF 110).
 Specific EEI: 0.21.



Pump type	Dimensions [mm]																			Rp		
	L1	L2	L3	L4	L5	L7	B1	B3	B4	B5	B6	B7	H1	H2	H3	D1	D2	D3	D4		D5	M
MAGNA1 D 40-150 F	250	58	155	75	204	0	84	512	220	294	130	260	69	303	372	40	84	100/110	150	14/19	12	1/4

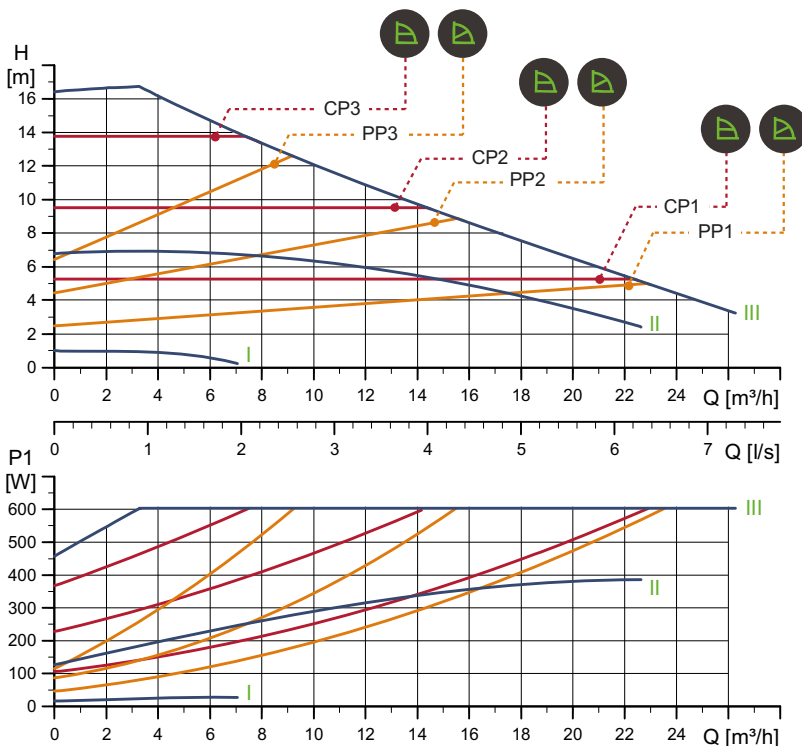
For product numbers, see page 130.

TM05 6338 4712

TM05 4960 3012

MAGNA1 40-180 F

1 x 230 V, 50/60 Hz

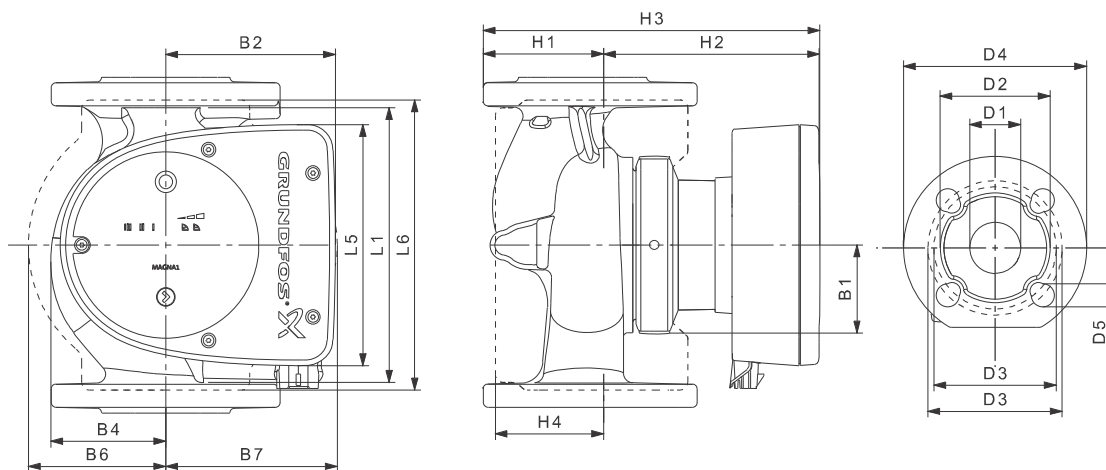


Speed	P1 [W]	I _{1/1} [A]
Min.	16	0.22
Max.	615	2.71

The pump incorporates overload protection.

Net weight [kg]	Gross weight [kg]	Ship. vol. [m ³]
16.2	17.7	0.040

Connections: See [Counter flanges](#), page 22.
 System pressure: Max. 1.0 MPa (10 bar). Also available as max. 1.6 MPa (16 bar).
 Liquid temperature: -10 to +110 °C (TF 110).
 Specific EEI: 0.20.



Pump type	Dimensions [mm]																
	L1	L5	L6	B1	B2	B4	B6	B7	H1	H2	H3	H4	D1	D2	D3	D4	D5
MAGNA1 40-180 F	250	204	220	84	164	73	106	128	65	304	369	83	40	84	100/110	150	14/19

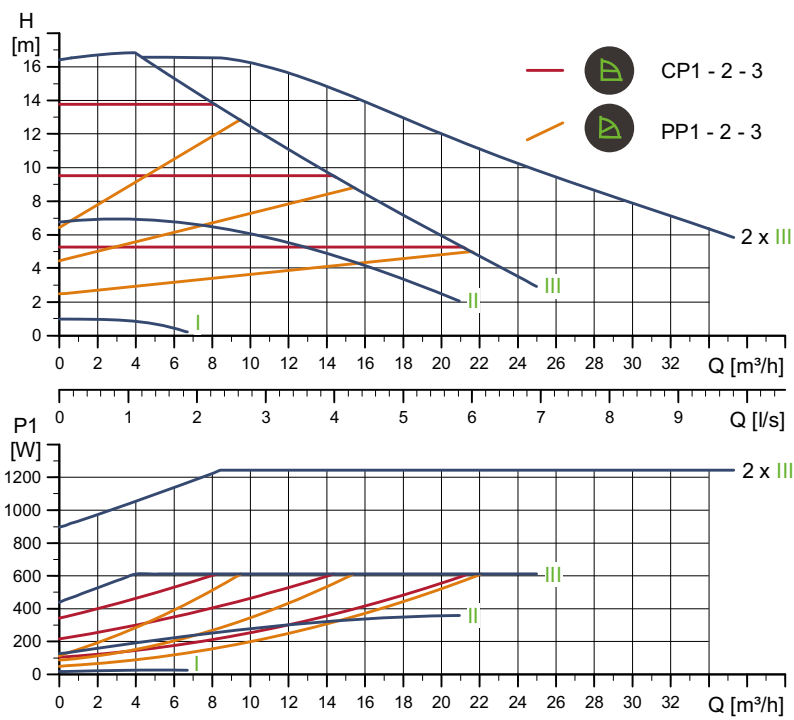
For product numbers, see page 130.

TM05 6292 4712

TM05 5200 3412

MAGNA1 D 40-180 F

1 x 230 V, 50/60 Hz

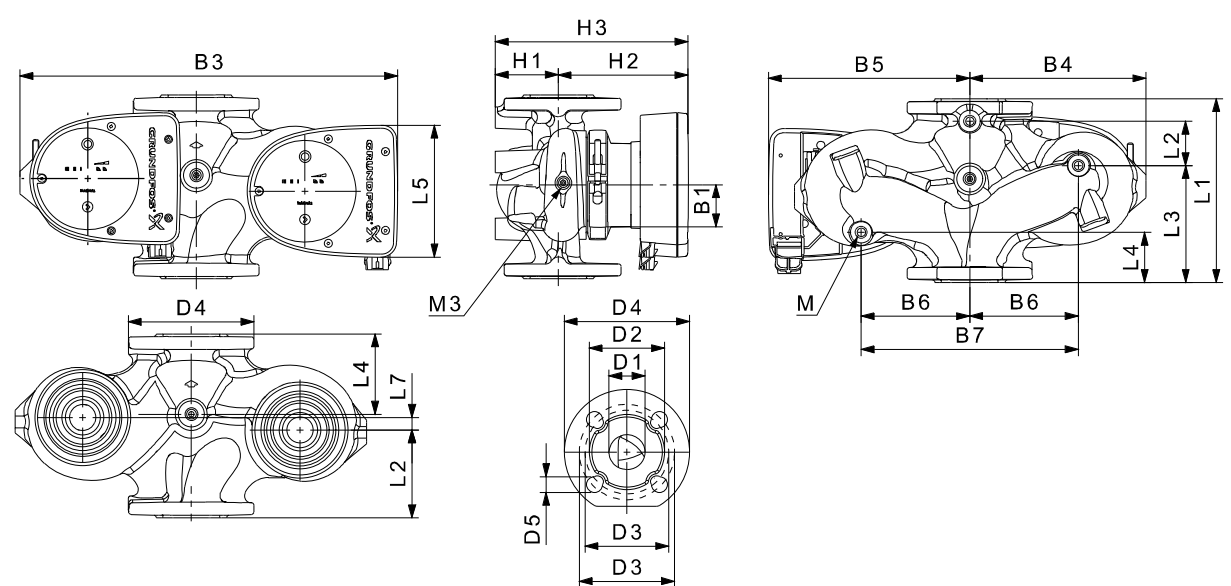


Speed	P1 [W]	I _{1/1} [A]
Min.	15.4	0.19
Max.	629	2.75

The pump incorporates overload protection.

Net weight [kg]	Gross weight [kg]	Ship. vol. [m ³]
31.4	35.3	0.087

Connections: See [Counter flanges](#), page 22.
 System pressure: Max. 1.0 MPa (10 bar). Also available as max. 1.6 MPa (16 bar).
 Liquid temperature: -10 to +110 °C (TF 110).
 Specific EEI: 0.21.



Pump type	Dimensions [mm]																				Rp	
	L1	L2	L3	L4	L5	L7	B1	B3	B4	B5	B6	B7	H1	H2	H3	D1	D2	D3	D4	D5		M
MAGNA1 D 40-180 F	250	58	155	75	204	0	84	512	220	294	130	260	69	303	372	40	84	100/110	150	14/19	12	1/4

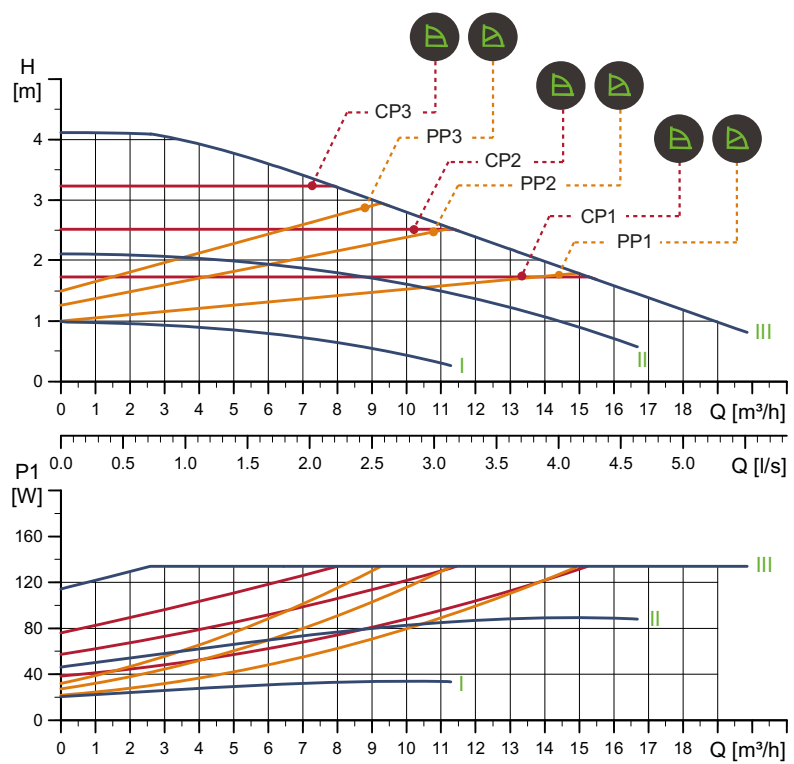
For product numbers, see page 130.

TM05 6339 4712

TM05 4960 3012

MAGNA1 50-40 F

1 x 230 V, 50/60 Hz

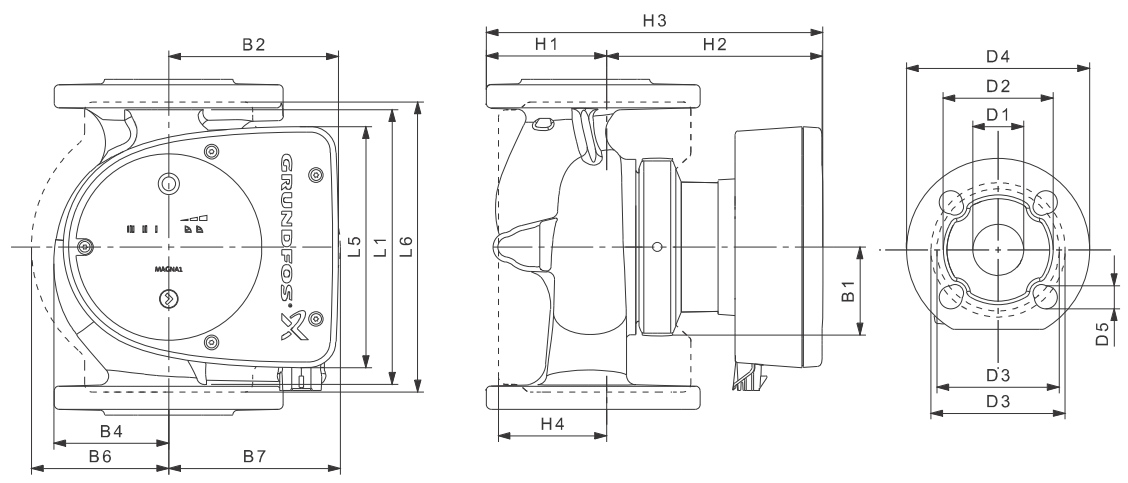


Speed	P1 [W]	I _{1/1} [A]
Min.	20.9	0.22
Max.	137	0.65

The pump incorporates overload protection.

Net weight [kg]	Gross weight [kg]	Ship. vol. [m ³]
17.7	19.8	0.046

Connections: See [Counter flanges](#), page 22.
 System pressure: Max. 1.0 MPa (10 bar). Also available as max. 1.6 MPa (16 bar).
 Liquid temperature: -10 to +110 °C (TF 110).
 Specific EEI: 0.23.



Pump type	Dimensions [mm]																
	L1	L5	L6	B1	B2	B4	B6	B7	H1	H2	H3	H4	D1	D2	D3	D4	D5
MAGNA1 50-40 F	240	204	240	84	164	73	127	127	71	304	375	97	50	102	110/125	165	14/19

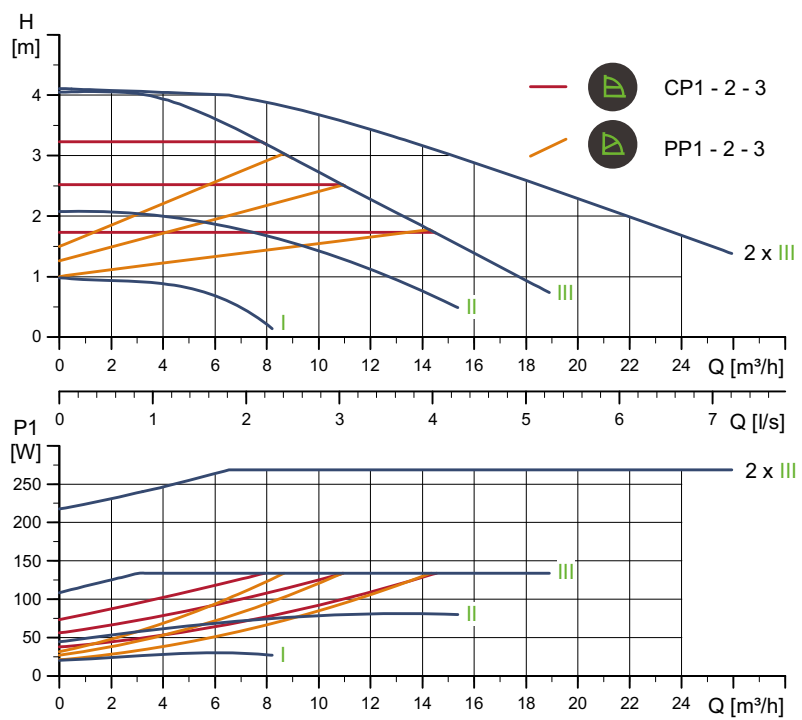
For product numbers, see page 130.

TM05 6293 4712

TM05 5200 3412

MAGNA1 D 50-40 F

1 x 230 V, 50/60 Hz

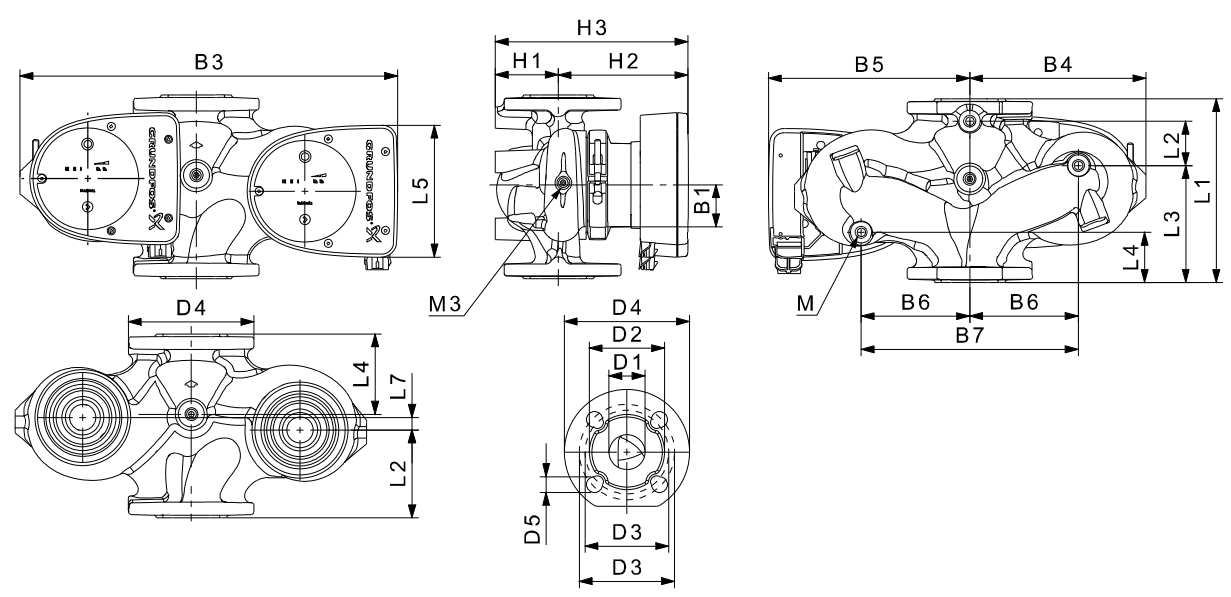


Speed	P1 [W]	I _{1/1} [A]
Min.	21.1	0.22
Max.	137	0.65

The pump incorporates overload protection.

Net weight [kg]	Gross weight [kg]	Ship. vol. [m ³]
34.3	42.0	0.132

Connections: See [Counter flanges](#), page 22.
 System pressure: Max. 1.0 MPa (10 bar). Also available as max. 1.6 MPa (16 bar).
 Liquid temperature: -10 to +110 °C (TF 110).
 Specific EEI: 0.23.



Pump type	Dimensions [mm]																				Rp	
	L1	L2	L3	L4	L5	L7	B1	B3	B4	B5	B6	B7	H1	H2	H3	D1	D2	D3	D4	D5		M
MAGNA1 D 50-40 F	240	48	160	45	204	45	84	515	221	294	130	260	75	304	379	50	102	110/125	165	14/19	12	1/4

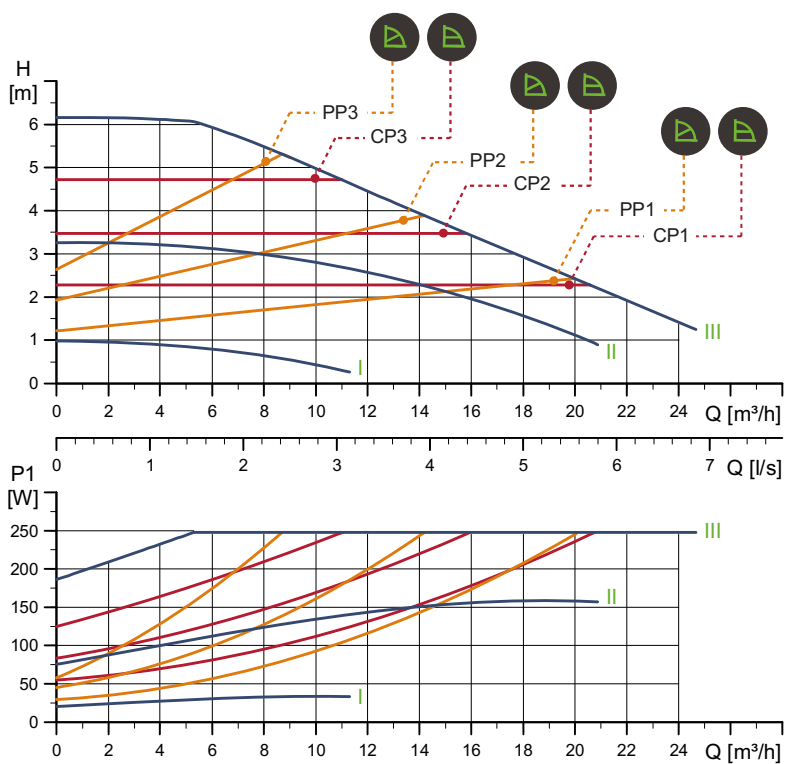
For product numbers, see page 130.

TM05 6340 4712

TM05 4960 3012

MAGNA1 50-60 F

1 x 230 V, 50/60 Hz

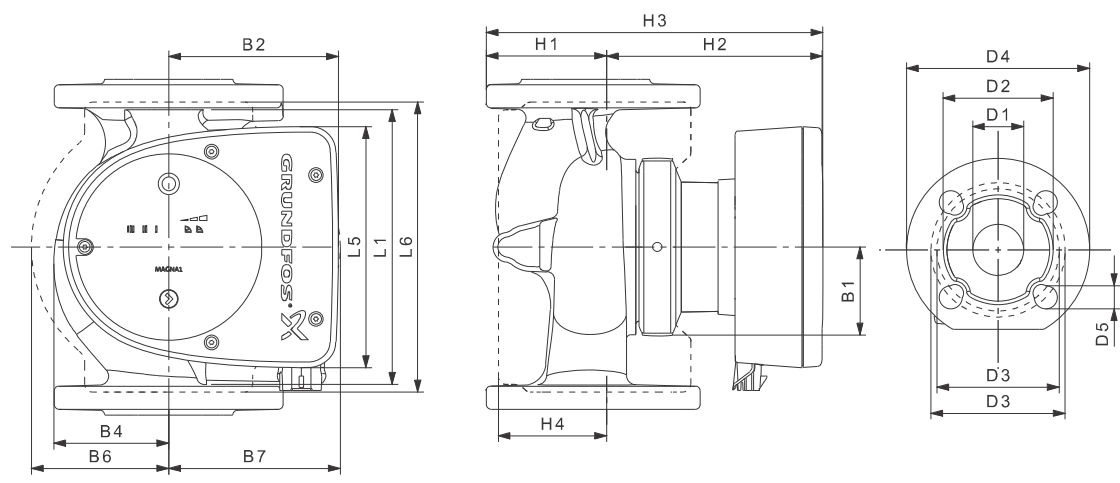


Speed	P1 [W]	I _{1/1} [A]
Min.	20.9	0.22
Max.	252	1.15

The pump incorporates overload protection.

Net weight [kg]	Gross weight [kg]	Ship. vol. [m ³]
17.7	19.8	0.046

Connections: See [Counter flanges](#), page 22.
 System pressure: Max. 1.0 MPa (10 bar). Also available as max. 1.6 MPa (16 bar).
 Liquid temperature: -10 to +110 °C (TF 110).
 Specific EEI: 0.22.



Pump type	Dimensions [mm]																
	L1	L5	L6	B1	B2	B4	B6	B7	H1	H2	H3	H4	D1	D2	D3	D4	D5
MAGNA1 50-60 F	240	204	240	84	164	73	127	127	71	304	375	97	50	102	110/125	165	14/19

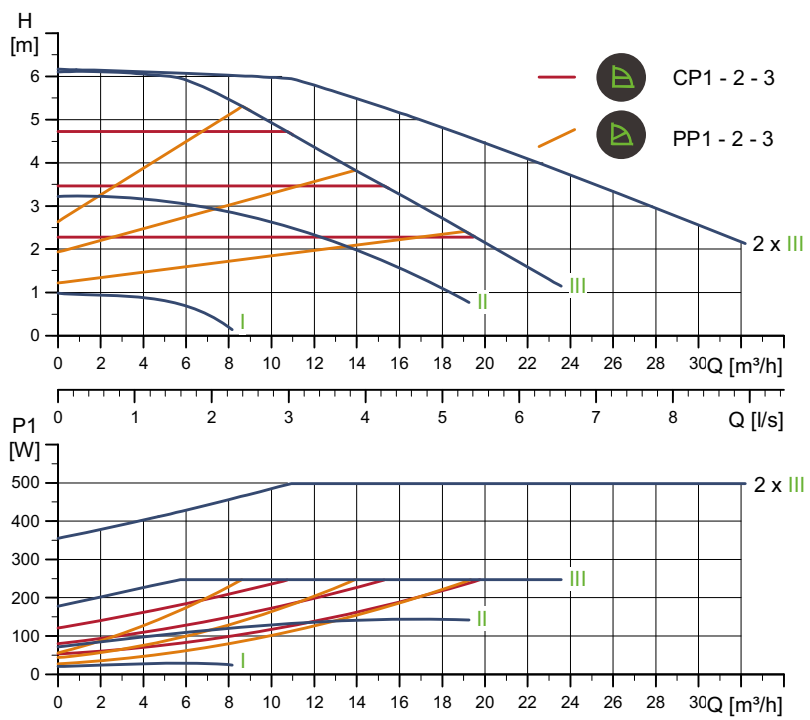
For product numbers, see page 130.

TM05 6294 4712

TM05 5200 3412

MAGNA1 D 50-60 F

1 x 230 V, 50/60 Hz

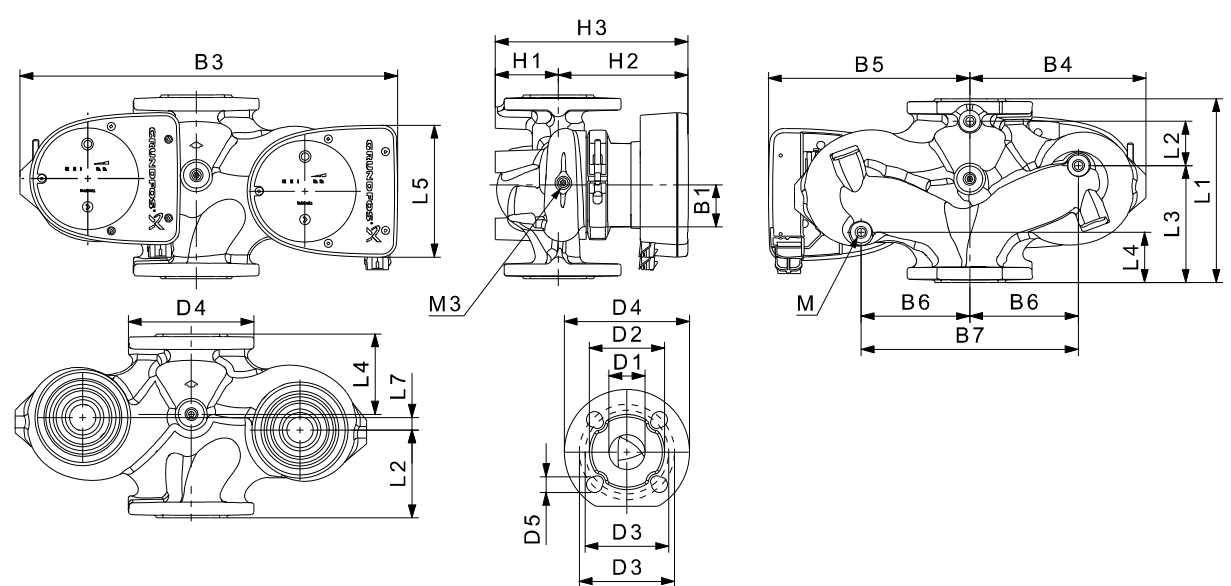


Speed	P1 [W]	I _{1/1} [A]
Min.	20.9	0.22
Max.	253	1.15

The pump incorporates overload protection.

Net weight [kg]	Gross weight [kg]	Ship. vol. [m ³]
34.3	42.0	0.132

Connections: See [Counter flanges](#), page 22.
 System pressure: Max. 1.0 MPa (10 bar). Also available as max. 1.6 MPa (16 bar).
 Liquid temperature: -10 to +110 °C (TF 110).
 Specific EEI: 0.23.



Pump type	Dimensions [mm]																				Rp	
	L1	L2	L3	L4	L5	L7	B1	B3	B4	B5	B6	B7	H1	H2	H3	D1	D2	D3	D4	D5		M
MAGNA1 D 50-60 F	240	48	160	45	204	45	84	515	221	294	130	260	75	304	379	50	102	110/125	165	14/19	12	1/4

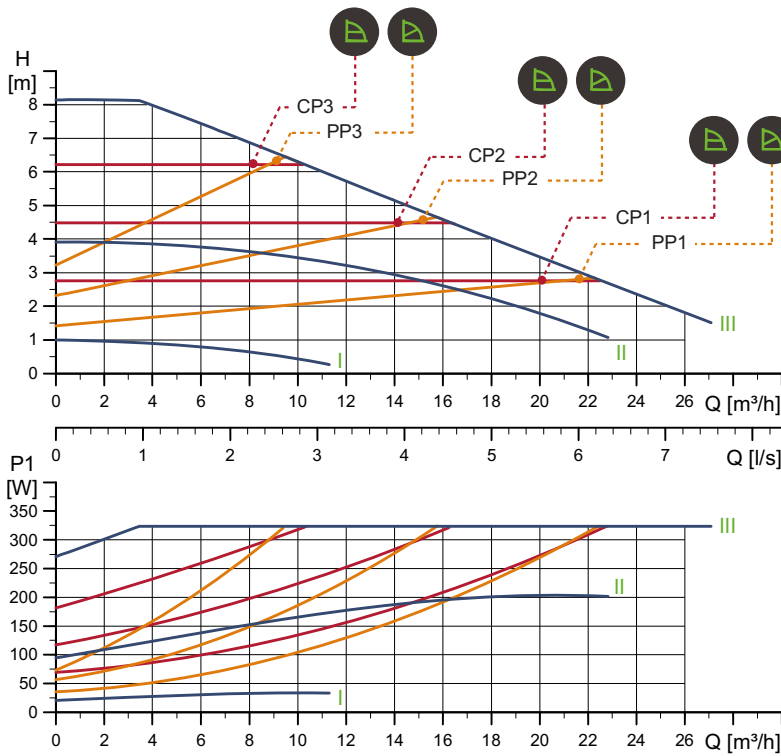
For product numbers, see page 130.

TM05 6341 4712

TM05 4960 3012

MAGNA1 50-80 F

1 x 230 V, 50/60 Hz

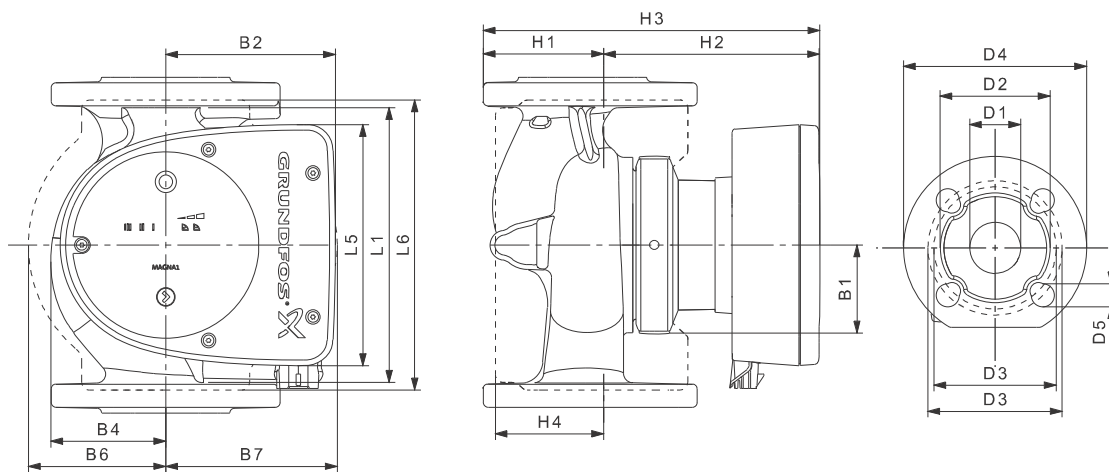


Speed	P1 [W]	I _{1/1} [A]
Min.	20.9	0.22
Max.	331	1.48

The pump incorporates overload protection.

Net weight [kg]	Gross weight [kg]	Ship. vol. [m ³]
17.7	19.8	0.046

Connections: See [Counter flanges](#), page 22.
 System pressure: Max. 1.0 MPa (10 bar). Also available as max. 1.6 MPa (16 bar).
 Liquid temperature: -10 to +110 °C (TF 110).
 Specific EEI: 0.21.



Pump type	Dimensions [mm]																
	L1	L5	L6	B1	B2	B4	B6	B7	H1	H2	H3	H4	D1	D2	D3	D4	D5
MAGNA1 50-80 F	240	204	240	84	164	73	127	127	71	304	374	97	50	102	110/125	165	14/19

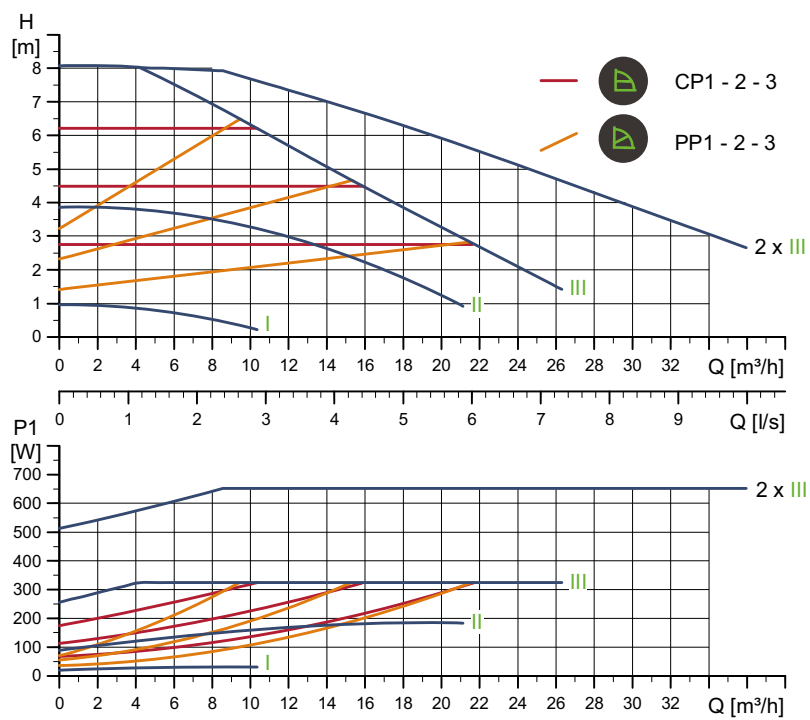
For product numbers, see page 130.

TM05 6295 4712

TM05 5200 3412

MAGNA1 D 50-80 F

1 x 230 V, 50/60 Hz

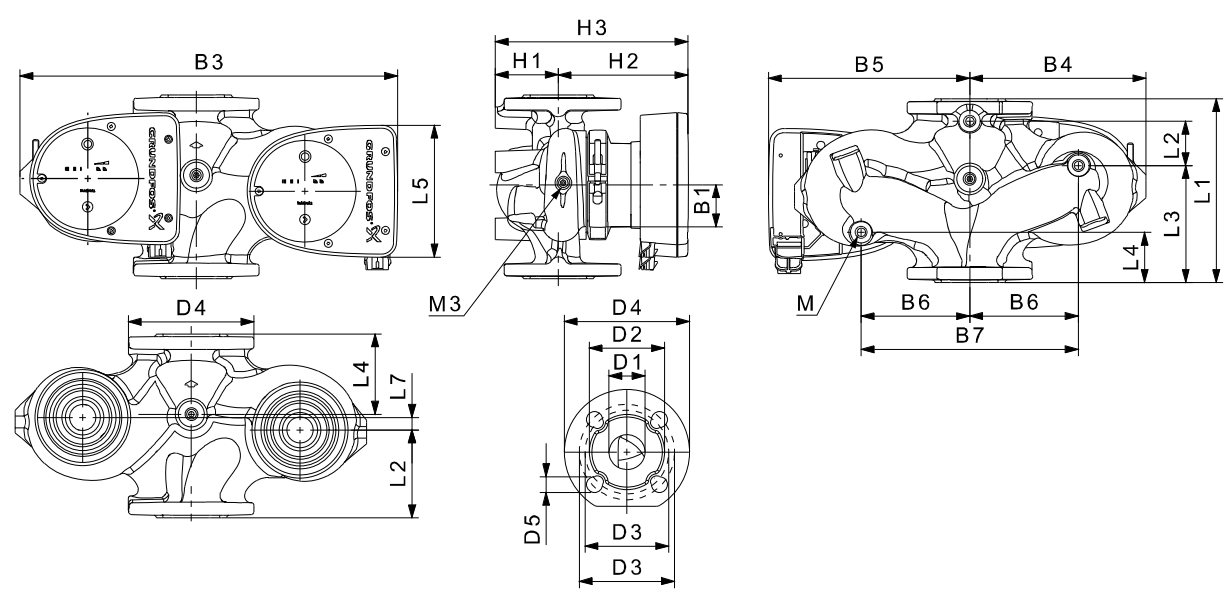


Speed	P1 [W]	I _{1/1} [A]
Min.	20.6	0.22
Max.	331	1.48

The pump incorporates overload protection.

Connections: See [Counter flanges](#), page 22.
 System pressure: Max. 1.0 MPa (10 bar). Also available as max. 1.6 MPa (16 bar).
 Liquid temperature: -10 to +110 °C (TF 110).
 Specific EEI: 0.22.

Net weight [kg]	Gross weight [kg]	Ship. vol. [m³]
34.3	42.0	0.132



Pump type	Dimensions [mm]																				Rp	
	L1	L2	L3	L4	L5	L7	B1	B3	B4	B5	B6	B7	H1	H2	H3	D1	D2	D3	D4	D5		M
MAGNA1 D 50-80 F	240	48	160	45	204	45	84	515	221	294	130	260	75	304	379	50	102	110/125	165	14/19	12	1/4

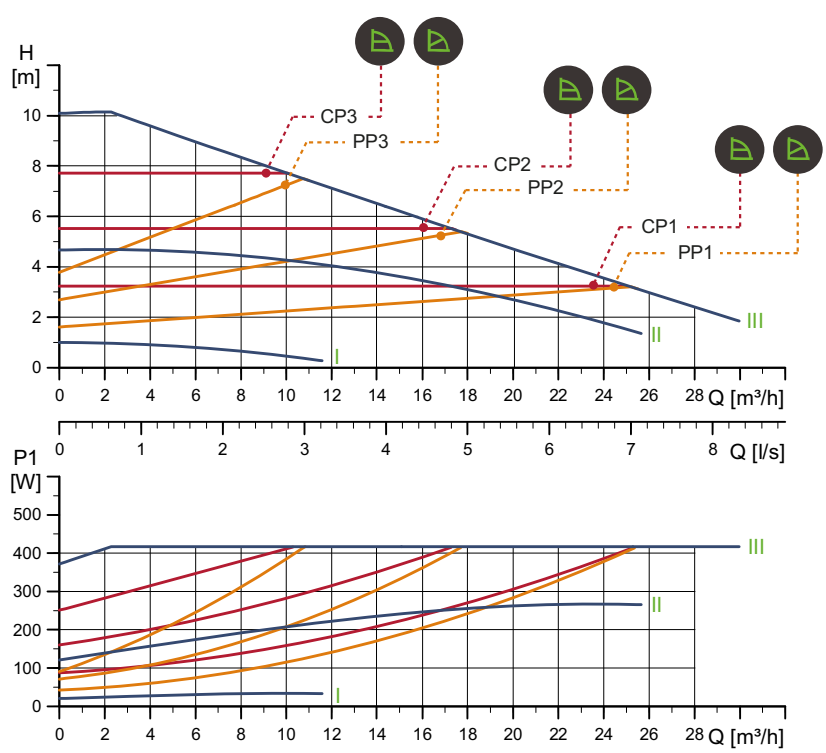
For product numbers, see page 130.

TM05 6342 4712

TM05 4960 3012

MAGNA1 50-100 F

1 x 230 V, 50/60 Hz

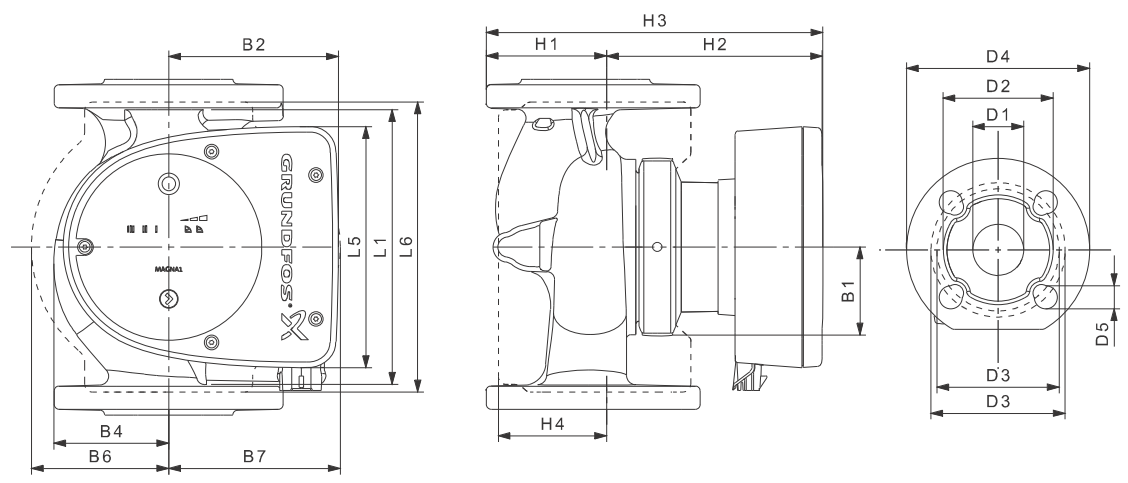


Speed	P1 [W]	I _{1/1} [A]
Min.	20.9	0.22
Max.	425	1.90

The pump incorporates overload protection.

Net weight [kg]	Gross weight [kg]	Ship. vol. [m ³]
18.2	20.4	0.046

Connections: See [Counter flanges](#), page 22.
 System pressure: Max. 1.0 MPa (10 bar). Also available as max. 1.6 MPa (16 bar).
 Liquid temperature: -10 to +110 °C (TF 110).
 Specific EEI: 0.21.



Pump type	Dimensions [mm]																
	L1	L5	L6	B1	B2	B4	B6	B7	H1	H2	H3	H4	D1	D2	D3	D4	D5
MAGNA1 50-100 F	280	204	240	84	164	73	127	127	72	304	376	97	50	102	110/125	165	14/19

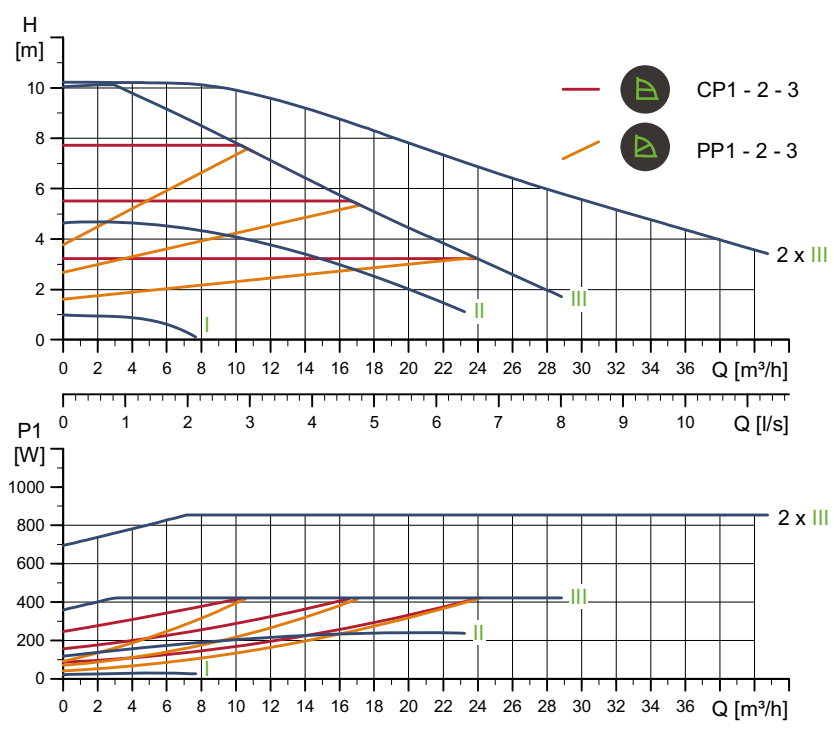
For product numbers, see page 130.

TM05 6296 4712

TM05 5200 3412

MAGNA1 D 50-100 F

1 x 230 V, 50/60 Hz

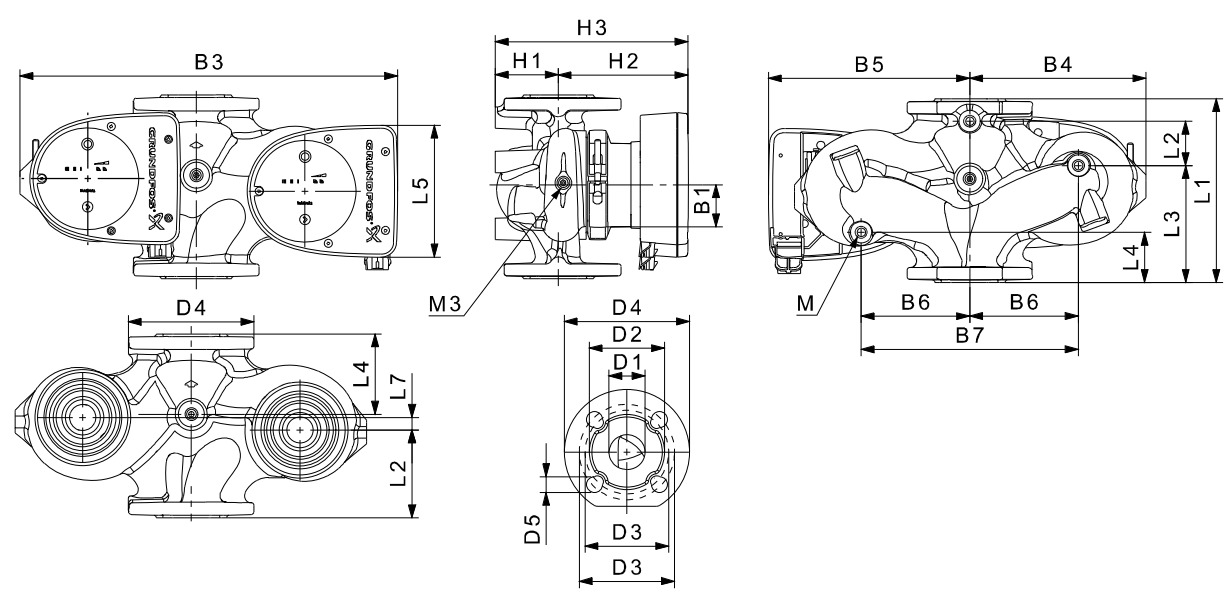


Speed	P1 [W]	I _{1/1} [A]
Min.	21	0.22
Max.	433	1.93

The pump incorporates overload protection.

Net weight [kg]	Gross weight [kg]	Ship. vol. [m ³]
34.3	42.0	0.132

Connections: See [Counter flanges](#), page 22.
 System pressure: Max. 1.0 MPa (10 bar). Also available as max. 1.6 MPa (16 bar).
 Liquid temperature: -10 to +110 °C (TF 110).
 Specific EEI: 0.22.



Pump type	Dimensions [mm]																				Rp	
	L1	L2	L3	L4	L5	L7	B1	B3	B4	B5	B6	B7	H1	H2	H3	D1	D2	D3	D4	D5		M
MAGNA1 D 50-100 F	280	175	75	75	204	0	84	517	223	294	130	260	75	304	379	50	102	110/125	165	14/19	12	1/4

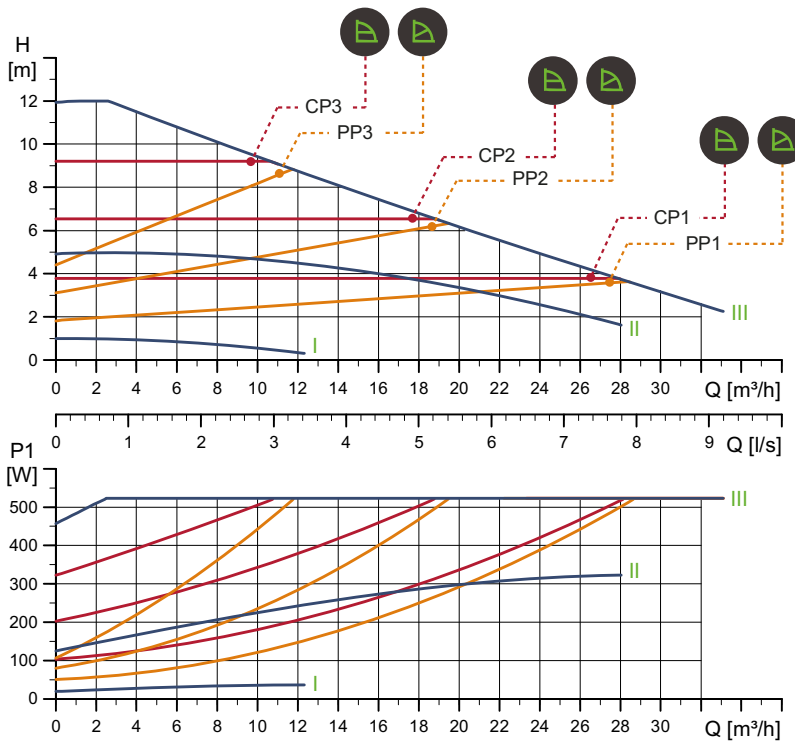
For product numbers, see page 130.

TM05 6343 4712

TM05 4960 3012

MAGNA1 50-120 F

1 x 230 V, 50/60 Hz

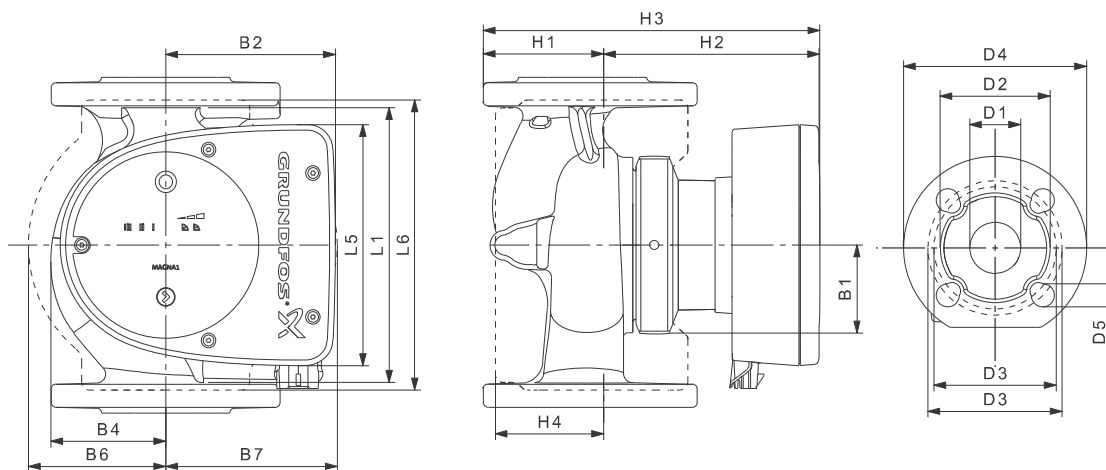


Speed	P1 [W]	I _{1/1} [A]
Min.	20.2	0.22
Max.	533	2.37

The pump incorporates overload protection.

Net weight [kg]	Gross weight [kg]	Ship. vol. [m ³]
18.2	20.4	0.046

Connections: See [Counter flanges](#), page 22.
 System pressure: Max. 1.0 MPa (10 bar). Also available as max. 1.6 MPa (16 bar).
 Liquid temperature: -10 to +110 °C (TF 110).
 Specific EEI: 0.21.



Pump type	Dimensions [mm]																
	L1	L5	L6	B1	B2	B4	B6	B7	H1	H2	H3	H4	D1	D2	D3	D4	D5
MAGNA1 50-120 F	280	204	240	84	164	73	127	127	72	304	376	97	50	102	110/125	165	14/19

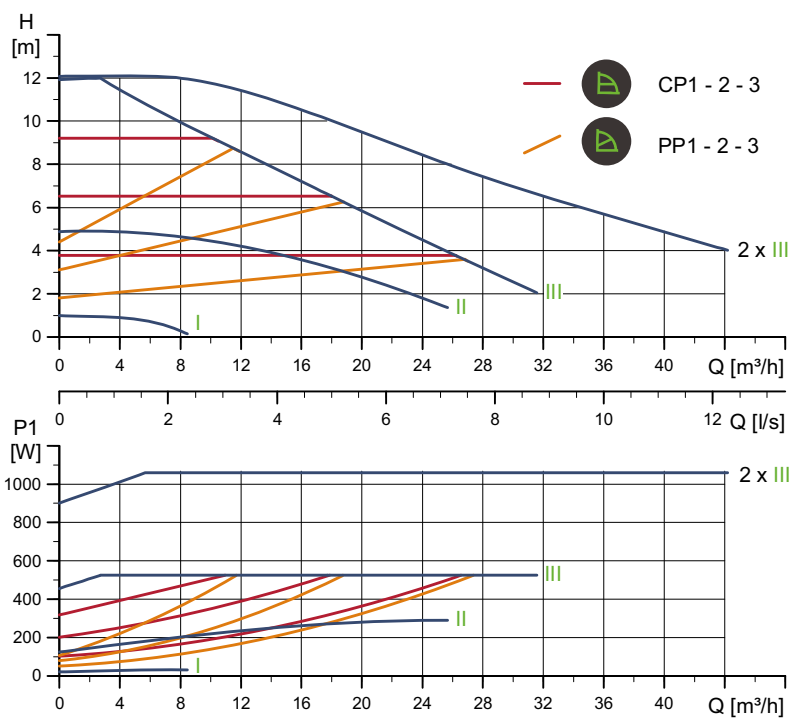
For product numbers, see page 130.

TM05 6297 4712

TM05 5200 3412

MAGNA1 D 50-120 F

1 x 230 V, 50/60 Hz

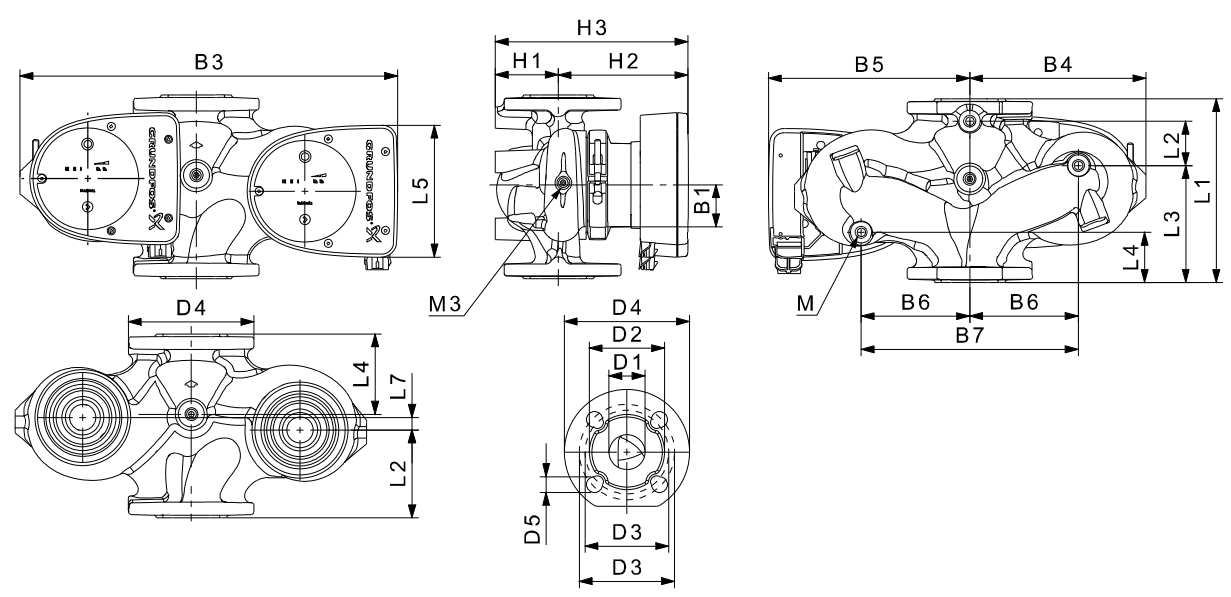


Speed	P1 [W]	I _{1/1} [A]
Min.	20.7	0.22
Max.	534	2.37

The pump incorporates overload protection.

Connections: See [Counter flanges](#), page 22.
 System pressure: Max. 1.0 MPa (10 bar). Also available as max. 1.6 MPa (16 bar).
 Liquid temperature: -10 to +110 °C (TF 110).
 Specific EEI: 0.22.

Net weight [kg]	Gross weight [kg]	Ship. vol. [m ³]
34.3	42.0	0.132



Pump type	Dimensions [mm]																				Rp	
	L1	L2	L3	L4	L5	L7	B1	B3	B4	B5	B6	B7	H1	H2	H3	D1	D2	D3	D4	D5		M
MAGNA1 D 50-120 F	280	175	75	75	204	0	84	517	223	294	130	260	75	304	379	50	102	110/125	165	14/19	12	1/4

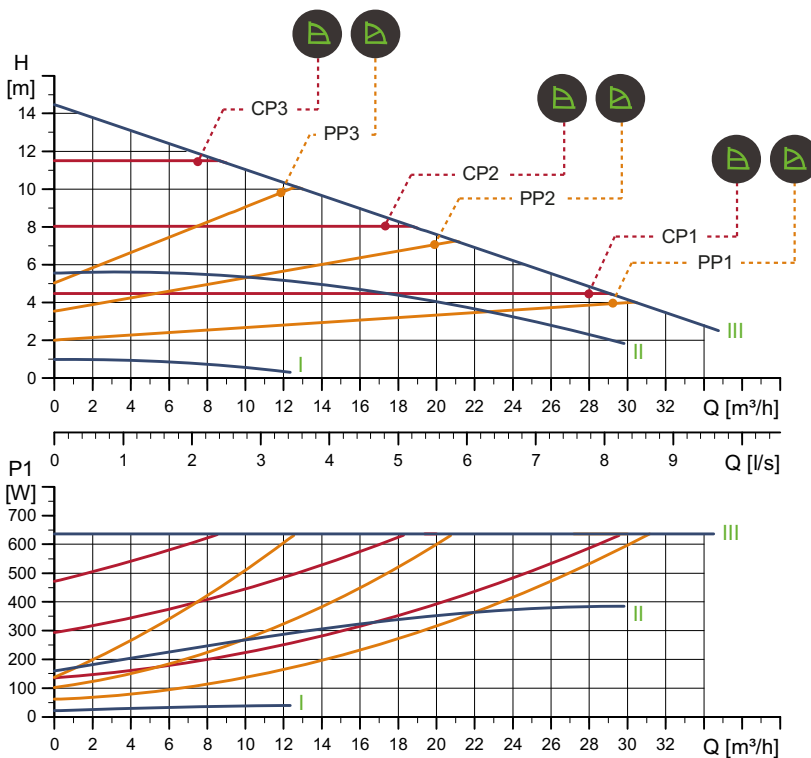
For product numbers, see page 130.

TM05 6344 4712

TM05 4960 3012

MAGNA1 50-150 F

1 x 230 V, 50/60 Hz



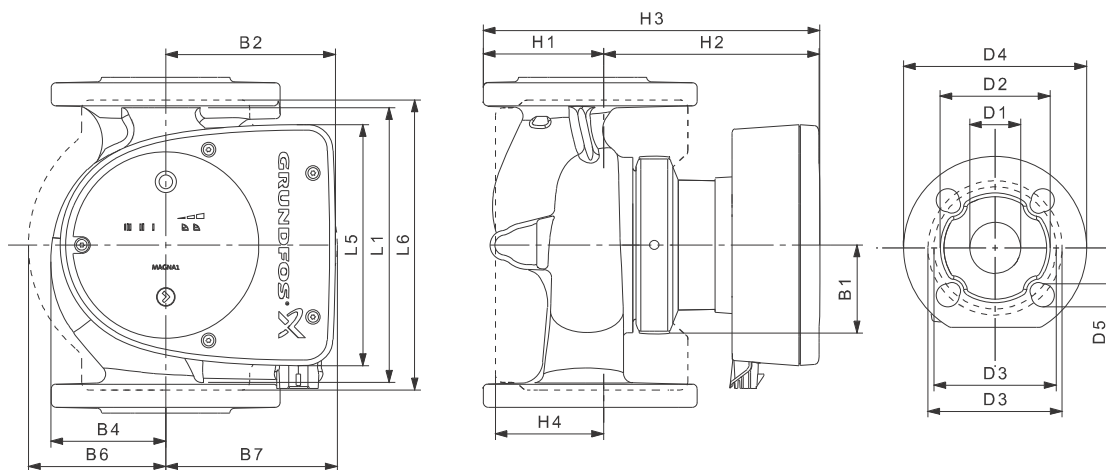
TM05 6298 4712

Speed	P1 [W]	I _{1/1} [A]
Min.	22.2	0.24
Max.	649	2.87

The pump incorporates overload protection.

Net weight [kg]	Gross weight [kg]	Ship. vol. [m ³]
19.1	21.3	0.046

Connections: See [Counter flanges](#), page 22.
 System pressure: Max. 1.0 MPa (10 bar). Also available as max. 1.6 MPa (16 bar).
 Liquid temperature: -10 to +110 °C (TF 110).
 Specific EEI: 0.20.



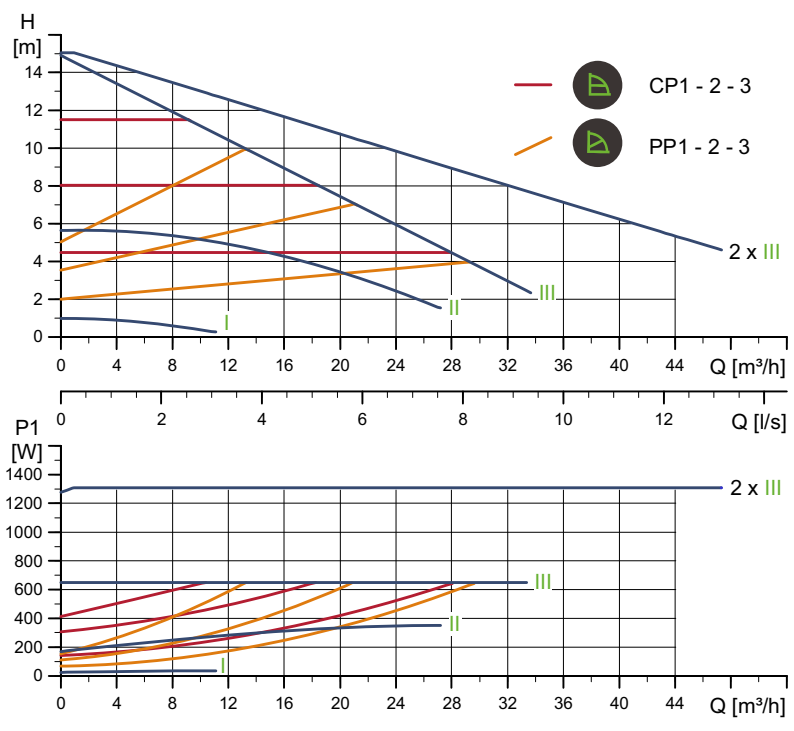
TM05 5200 3412

Pump type	Dimensions [mm]																
	L1	L5	L6	B1	B2	B4	B6	B7	H1	H2	H3	H4	D1	D2	D3	D4	D5
MAGNA1 50-150 F	280	204	240	84	164	73	127	127	72	304	376	97	50	102	110/125	165	14/19

For product numbers, see page 130.

MAGNA1 D 50-150 F

1 x 230 V, 50/60 Hz

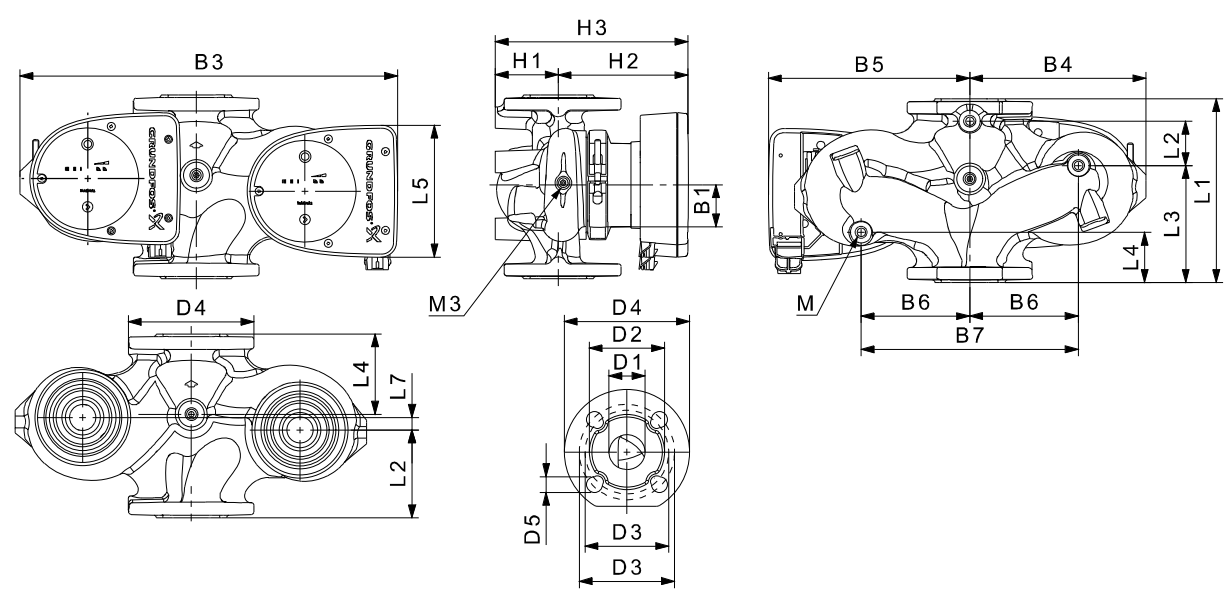


Speed	P1 [W]	I _{1/1} [A]
Min.	23.8	0.26
Max.	653	2.88

The pump incorporates overload protection.

Net weight [kg]	Gross weight [kg]	Ship. vol. [m³]
36.1	43.7	0.132

Connections: See [Counter flanges](#), page 22.
 System pressure: Max. 1.0 MPa (10 bar). Also available as max. 1.6 MPa (16 bar).
 Liquid temperature: -10 to +110 °C (TF 110).
 Specific EEI: 0.21.



Pump type	Dimensions [mm]																				Rp	
	L1	L2	L3	L4	L5	L7	B1	B3	B4	B5	B6	B7	H1	H2	H3	D1	D2	D3	D4	D5		M
MAGNA1 D 50-150 F	280	175	75	75	204	0	84	517	223	294	130	260	75	304	379	50	102	110/125	165	14/19	12	1/4

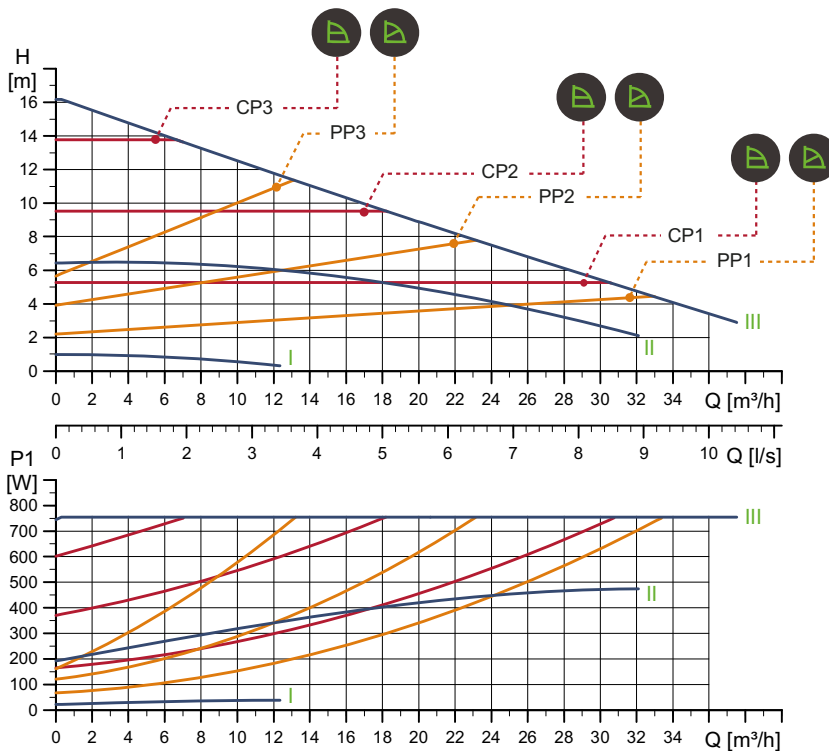
For product numbers, see page 130.

TM05 6345 4712

TM05 4960 3012

MAGNA1 50-180 F

1 x 230 V, 50/60 Hz

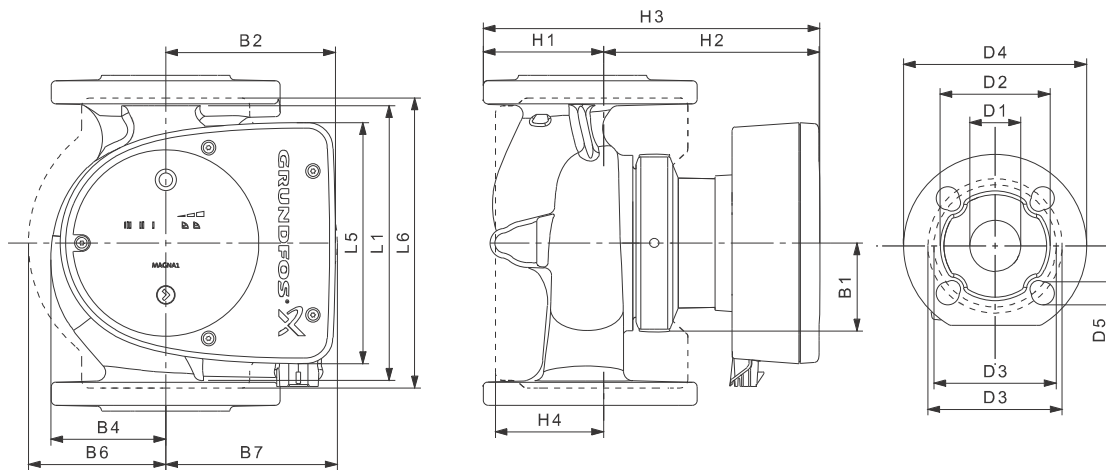


Speed	P1 [W]	I _{1/1} [A]
Min.	22.1	0.24
Max.	769	3.40

The pump incorporates overload protection.

Net weight [kg]	Gross weight [kg]	Ship. vol. [m ³]
19.1	21.3	0.046

Connections: See [Counter flanges](#), page 22.
 System pressure: Max. 1.0 MPa (10 bar). Also available as max. 1.6 MPa (16 bar).
 Liquid temperature: -10 to +110 °C (TF 110).
 Specific EEI: 0.20.



Pump type	Dimensions [mm]																
	L1	L5	L6	B1	B2	B4	B6	B7	H1	H2	H3	H4	D1	D2	D3	D4	D5
MAGNA1 50-180 F	280	204	240	84	164	73	127	127	72	304	376	97	50	102	110/125	165	14/19

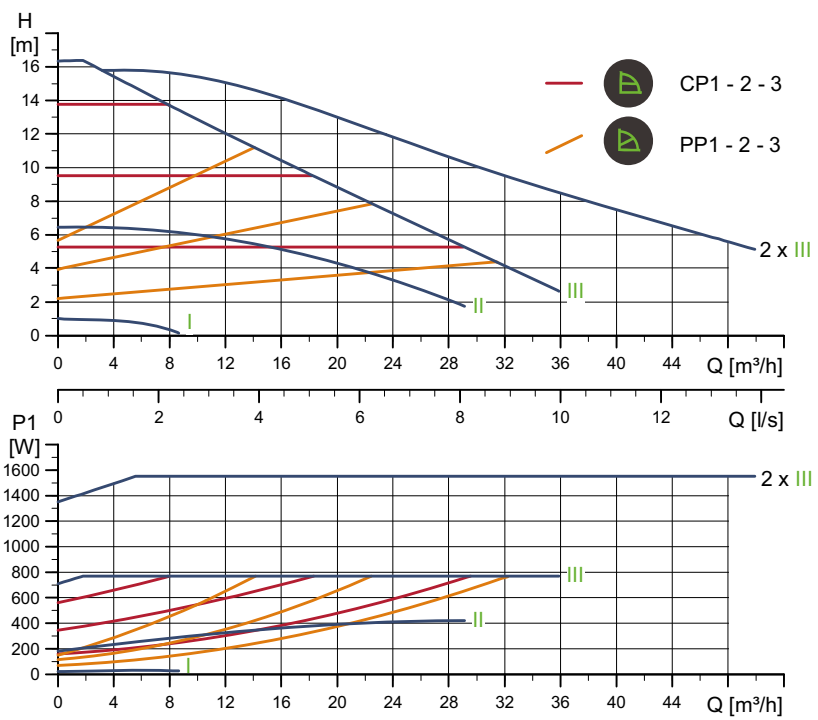
For product numbers, see page 130.

TM05 6299 4712

TM05 5200 3412

MAGNA1 D 50-180 F

1 x 230 V, 50/60 Hz



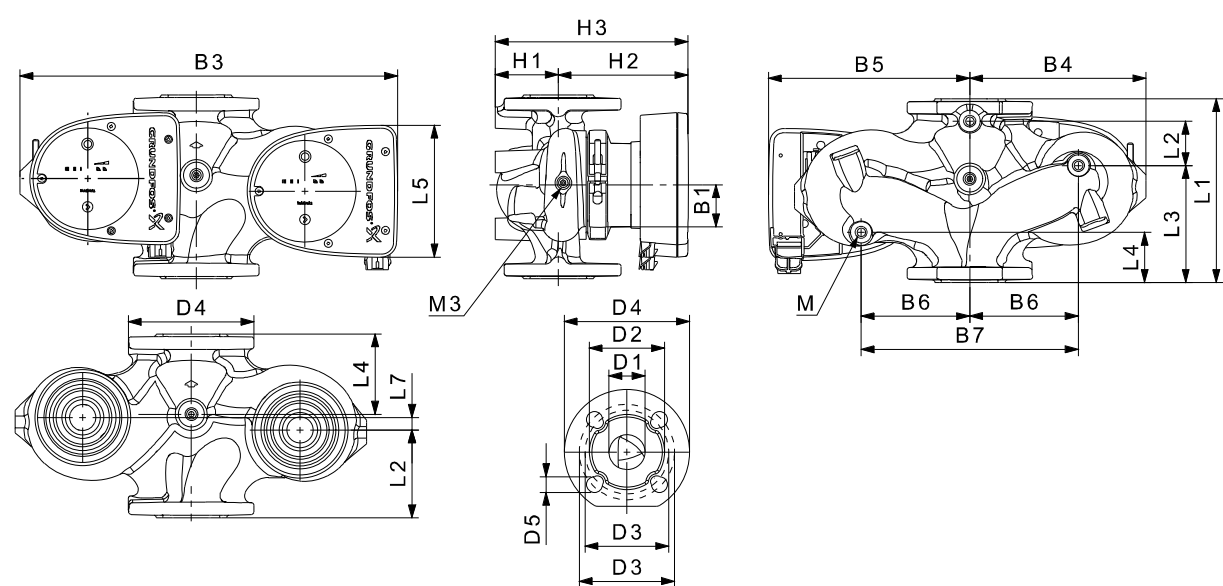
Speed	P1 [W]	I _{1/1} [A]
Min.	22.4	0.23
Max.	785	3.46

The pump incorporates overload protection.

Net weight [kg]	Gross weight [kg]	Ship. vol. [m³]
36.1	43.7	0.132

Connections: See [Counter flanges](#), page 22.
 System pressure: Max. 1.0 MPa (10 bar). Also available as max. 1.6 MPa (16 bar).
 Liquid temperature: -10 to +110 °C (TF 110).
 Specific EEI: 0.22.

TM05 6346 4712



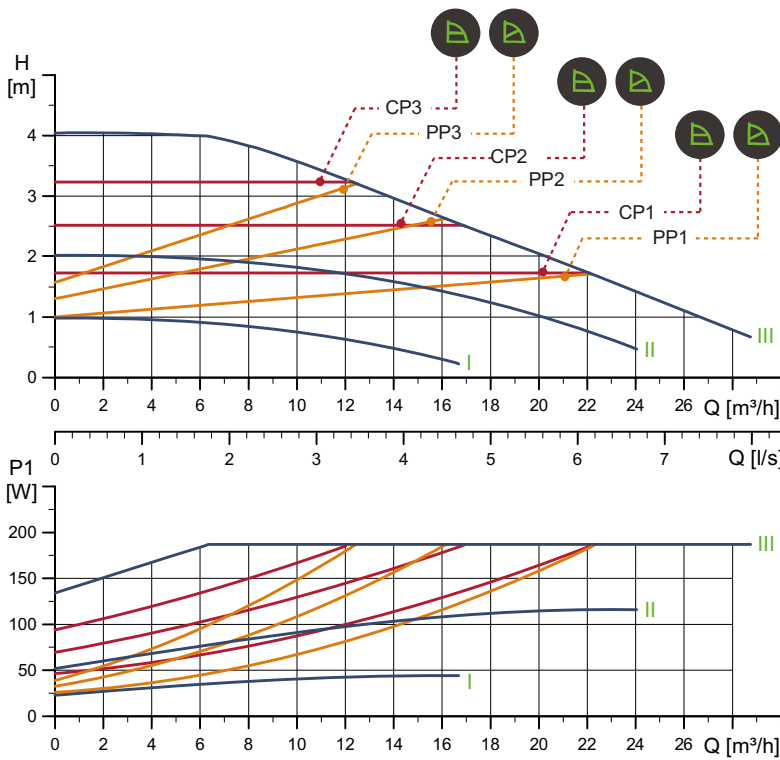
TM05 4960 3012

Pump type	Dimensions [mm]																				Rp	
	L1	L2	L3	L4	L5	L7	B1	B3	B4	B5	B6	B7	H1	H2	H3	D1	D2	D3	D4	D5		M
MAGNA1 D 50-180 F	280	175	75	75	204	0	84	517	223	294	130	260	75	304	379	50	102	110/125	165	14/19	12	1/4

For product numbers, see page 130.

MAGNA1 65-40 F

1 x 230 V, 50/60 Hz

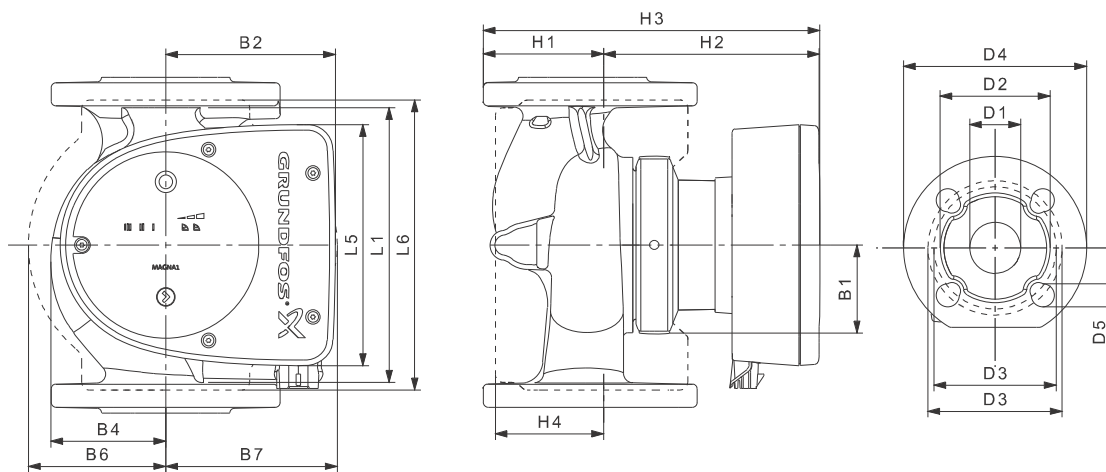


Speed	P1 [W]	I _{1/1} [A]
Min.	23.2	0.24
Max.	190	0.90

The pump incorporates overload protection.

Net weight [kg]	Gross weight [kg]	Ship. vol. [m ³]
20.7	23.0	0.057

Connections: See [Counter flanges](#), page 22.
 System pressure: Max. 1.0 MPa (10 bar). Also available as max. 1.6 MPa (16 bar).
 Liquid temperature: -10 to +110 °C (TF 110).
 Specific EEI: 0.21.



Pump type	Dimensions [mm]																
	L1	L5	L6	B1	B2	B4	B6	B7	H1	H2	H3	H4	D1	D2	D3	D4	D5
MAGNA1 65-40 F	340	204	296	84	164	73	133	133	74	312	386	94	65	119	130/145	185	14/19

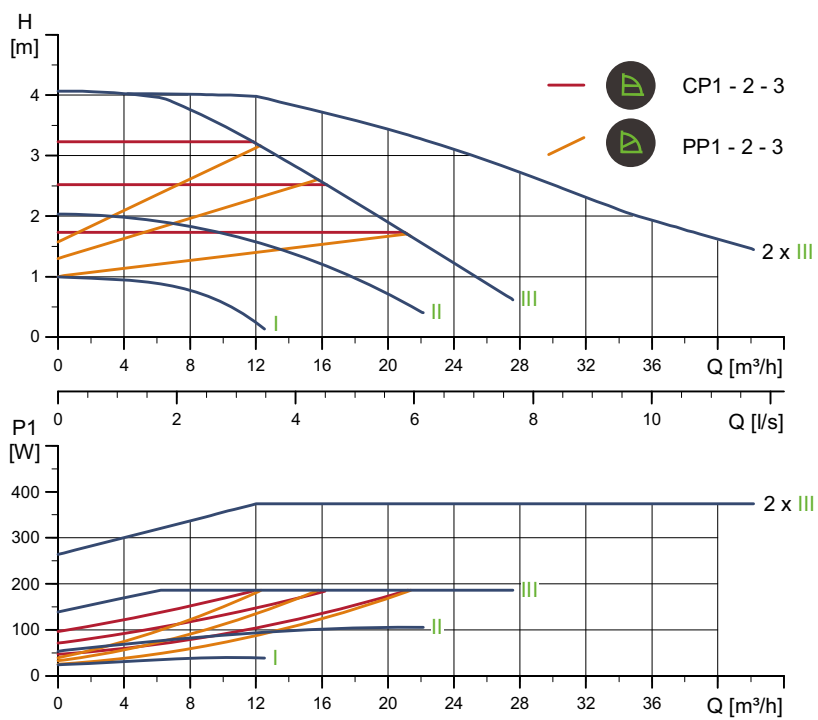
For product numbers, see page 130.

TM05 6300 4712

TM05 5200 3412

MAGNA1 D 65-40 F

1 x 230 V, 50/60 Hz

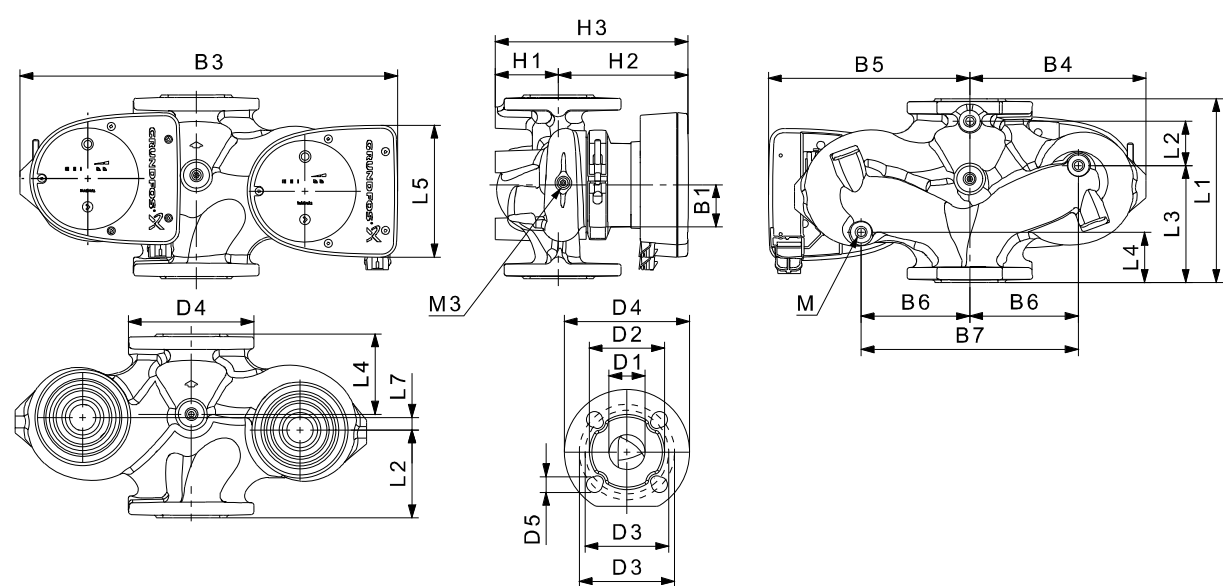


Speed	P1 [W]	I _{1/1} [A]
Min.	23.9	0.26
Max.	189	0.89

The pump incorporates overload protection.

Connections: See [Counter flanges](#), page 22.
 System pressure: Max. 1.0 MPa (10 bar). Also available as max. 1.6 MPa (16 bar).
 Liquid temperature: -10 to +110 °C (TF 110).
 Specific EEI: 0.23.

Net weight [kg]	Gross weight [kg]	Ship. vol. [m³]
38.5	46.0	0.132



Pump type	Dimensions [mm]																				Rp	
	L1	L2	L3	L4	L5	L7	B1	B3	B4	B5	B6	B7	H1	H2	H3	D1	D2	D3	D4	D5		M
MAGNA1 D 65-40 F	340	218	92	92	204	0	84	522	228	294	130	260	77	312	389	65	119	130/145	185	14/19	12	1/4

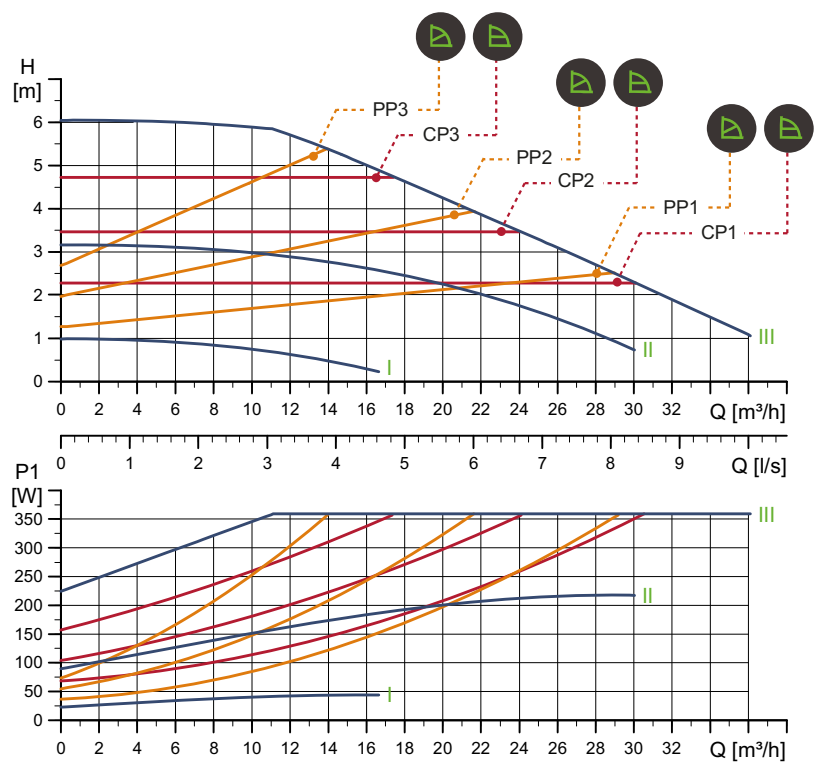
For product numbers, see page 130.

TM05 6347 4712

TM05 4960 3012

MAGNA1 65-60 F

1 x 230 V, 50/60 Hz

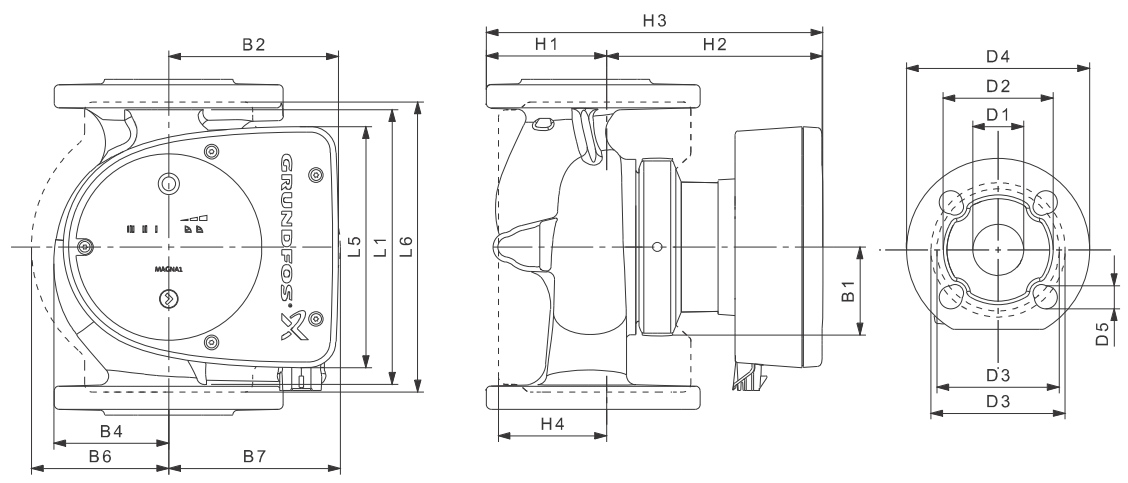


Speed	P1 [W]	I _{1/1} [A]
Min.	23.2	0.24
Max.	365	1.64

The pump incorporates overload protection.

Net weight [kg]	Gross weight [kg]	Ship. vol. [m ³]
20.7	23.0	0.057

Connections: See [Counter flanges](#), page 22.
 System pressure: Max. 1.0 MPa (10 bar). Also available as max. 1.6 MPa (16 bar).
 Liquid temperature: -10 to +110 °C (TF 110).
 Specific EEI: 0.20



Pump type	Dimensions [mm]																
	L1	L5	L6	B1	B2	B4	B6	B7	H1	H2	H3	H4	D1	D2	D3	D4	D5
MAGNA1 65-60 F	340	204	296	84	164	73	133	133	74	312	386	94	65	119	130/145	185	14/19

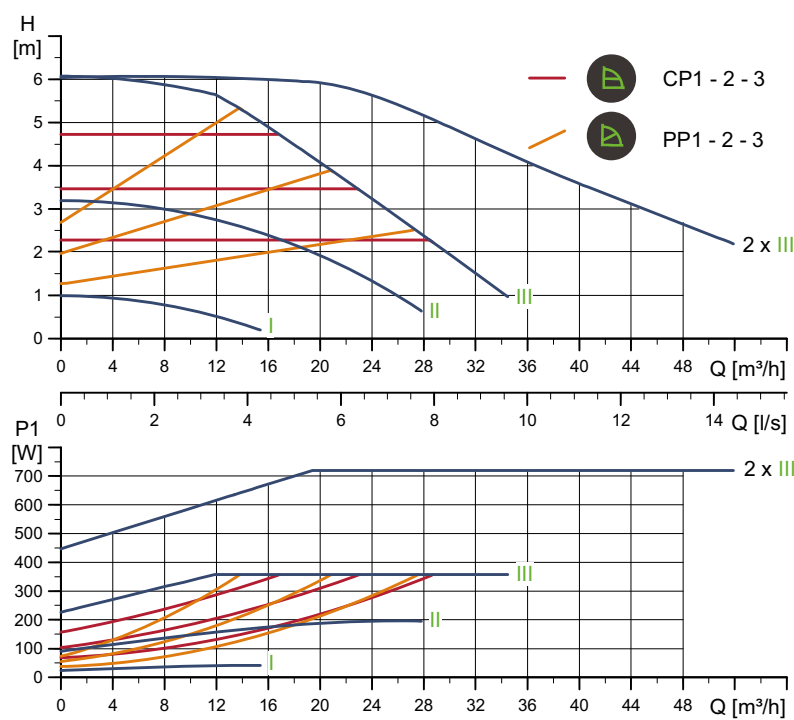
For product numbers, see page 130.

TM05 6301 4712

TM05 5200 3412

MAGNA1 D 65-60 F

1 x 230 V, 50/60 Hz

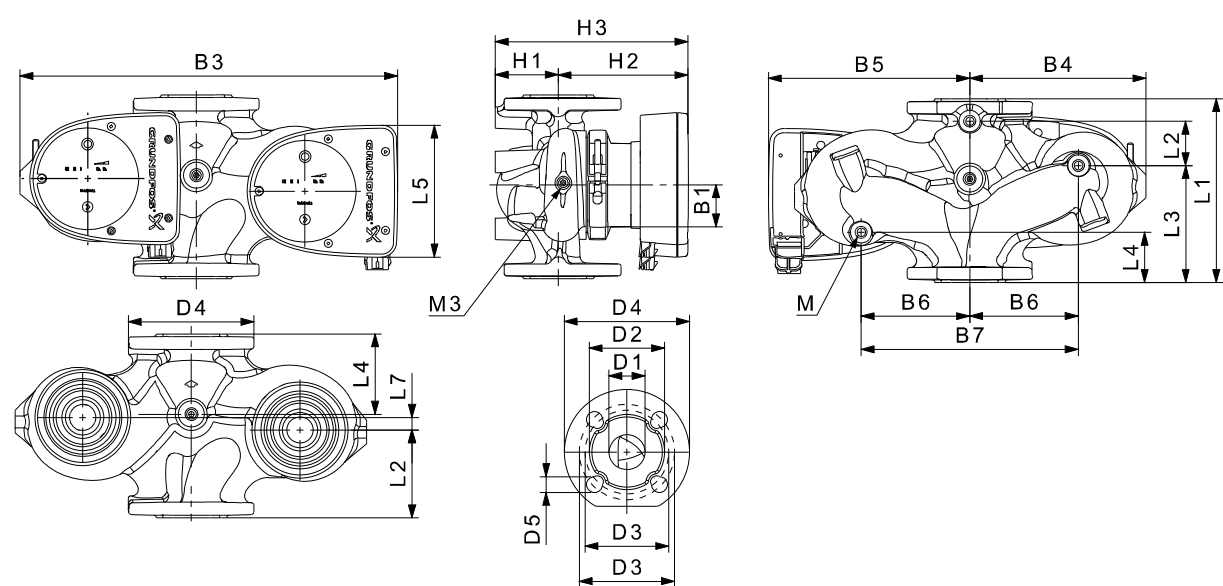


Speed	P1 [W]	I _{1/1} [A]
Min.	21	0.24
Max.	364	1.63

The pump incorporates overload protection.

Net weight [kg]	Gross weight [kg]	Ship. vol. [m ³]
38.5	46.0	0.132

Connections: See [Counter flanges](#), page 22.
 System pressure: Max. 1.0 MPa (10 bar). Also available as max. 1.6 MPa (16 bar).
 Liquid temperature: -10 to +110 °C (TF 110).
 Specific EEI: 0.22.



Pump type	Dimensions [mm]																		Rp			
	L1	L2	L3	L4	L5	L7	B1	B3	B4	B5	B6	B7	H1	H2	H3	D1	D2	D3		D4	D5	M
MAGNA1 D 65-60 F	340	218	92	92	204	0	84	522	228	294	130	260	77	312	389	65	119	130/145	185	14/19	12	1/4

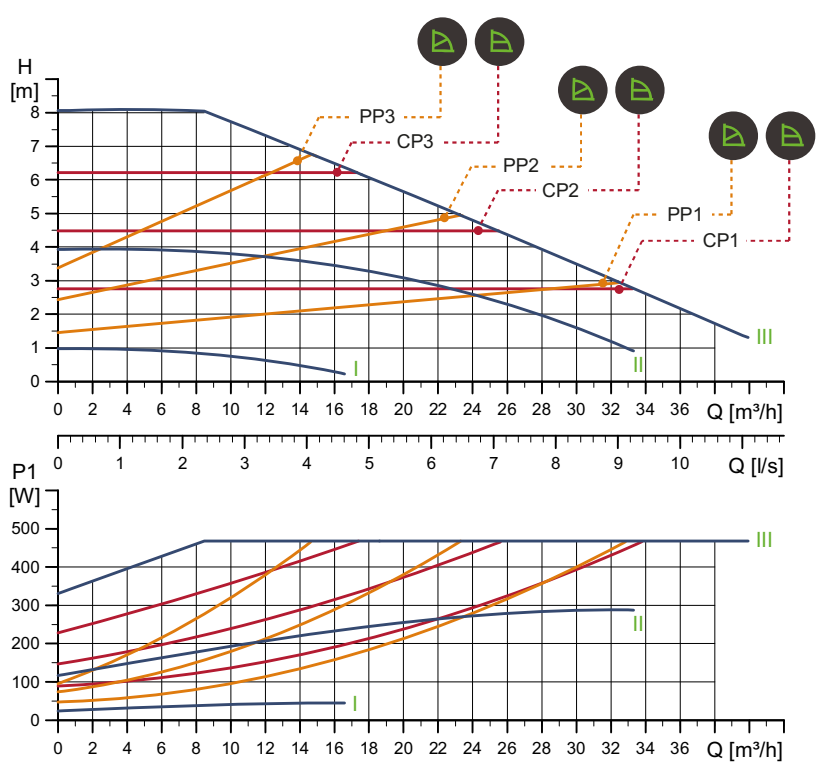
For product numbers, see page 130.

TM05 6348 4712

TM05 4960 3012

MAGNA1 65-80 F

1 x 230 V, 50/60 Hz

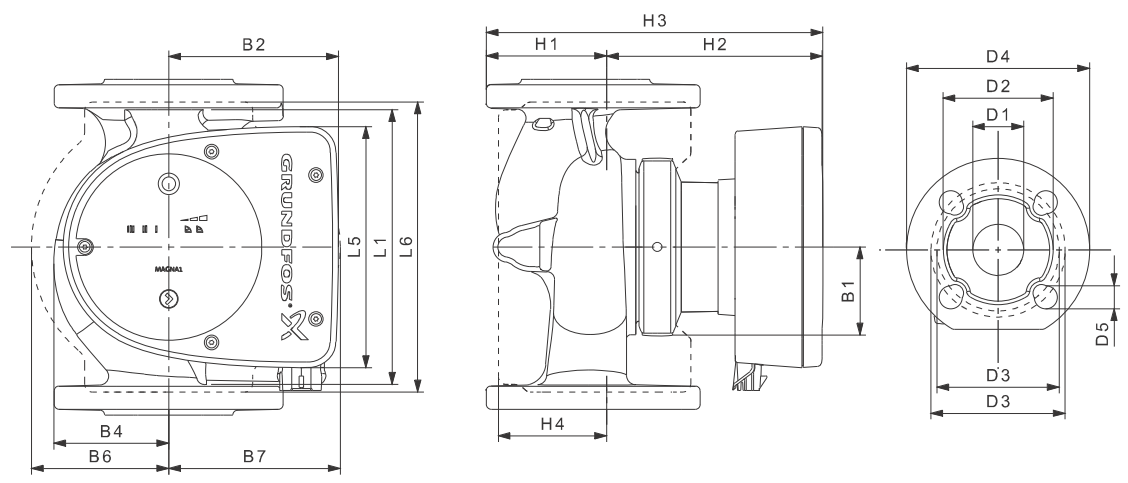


Speed	P1 [W]	I _{1/1} [A]
Min.	24.2	0.26
Max.	476	2.11

The pump incorporates overload protection.

Net weight [kg]	Gross weight [kg]	Ship. vol. [m ³]
21.6	23.8	0.057

Connections: See [Counter flanges](#), page 22.
 System pressure: Max. 1.0 MPa (10 bar). Also available as max. 1.6 MPa (16 bar).
 Liquid temperature: -10 to +110 °C (TF 110).
 Specific EEI: 0.20.



Pump type	Dimensions [mm]																
	L1	L5	L6	B1	B2	B4	B6	B7	H1	H2	H3	H4	D1	D2	D3	D4	D5
MAGNA1 65-80 F	340	204	296	84	164	73	133	133	74	312	386	94	65	119	130/145	185	14/19

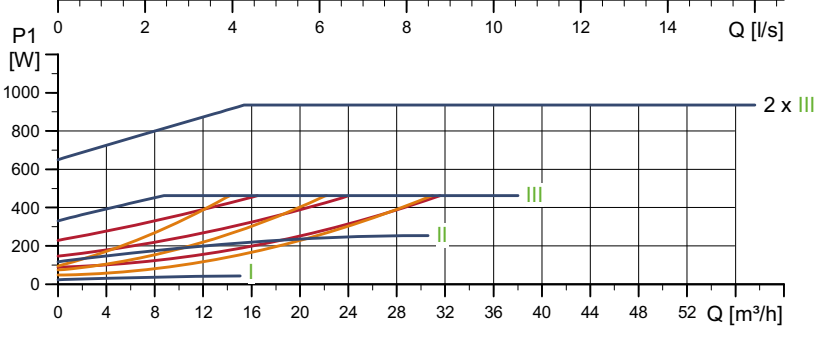
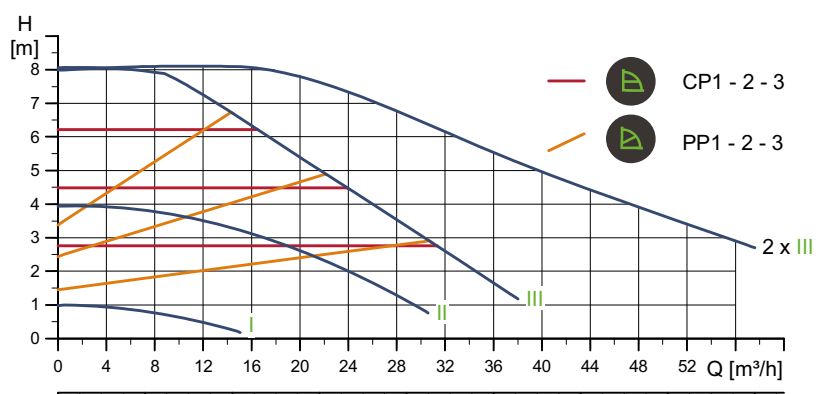
For product numbers, see page 130.

TM05 6302 4712

TM05 5200 3412

MAGNA1 D 65-80 F

1 x 230 V, 50/60 Hz

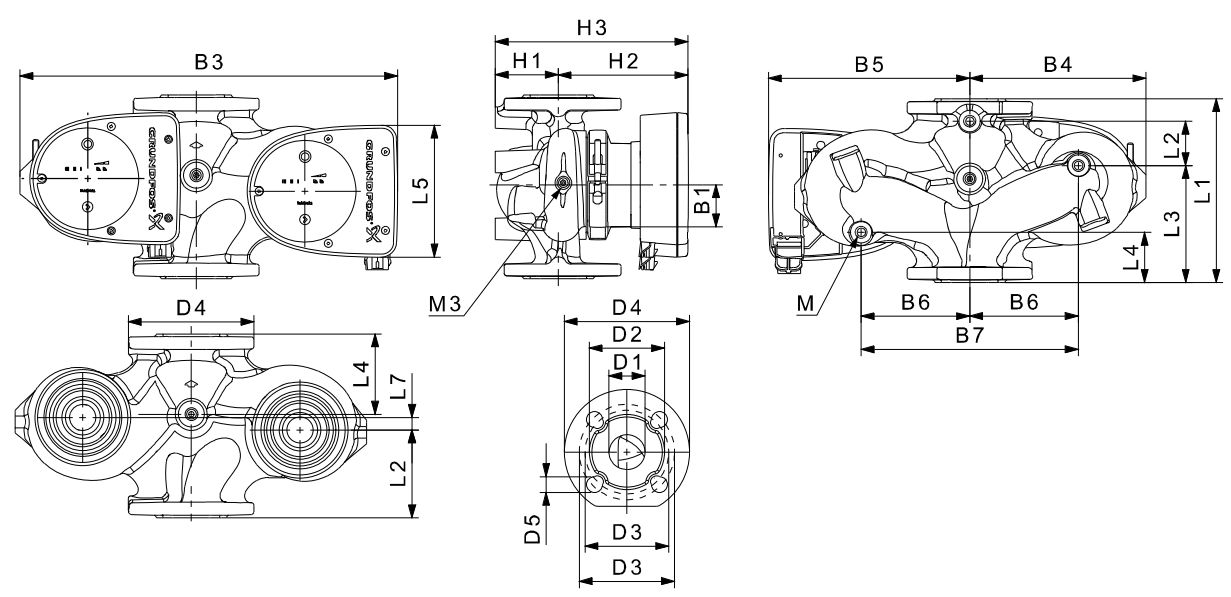


Speed	P1 [W]	I _{1/1} [A]
Min.	24.2	0.26
Max.	472	2.11

The pump incorporates overload protection.

Connections: See [Counter flanges](#), page 22.
 System pressure: Max. 1.0 MPa (10 bar). Also available as max. 1.6 MPa (16 bar).
 Liquid temperature: -10 to +110 °C (TF 110).
 Specific EEI: 0.21.

Net weight [kg]	Gross weight [kg]	Ship. vol. [m³]
40.3	47.8	0.132



Pump type	Dimensions [mm]																				Rp	
	L1	L2	L3	L4	L5	L7	B1	B3	B4	B5	B6	B7	H1	H2	H3	D1	D2	D3	D4	D5		M
MAGNA1 D 65-80 F	340	218	92	92	204	0	84	522	228	294	130	260	77	312	389	65	119	130/145	185	14/19	12	1/4

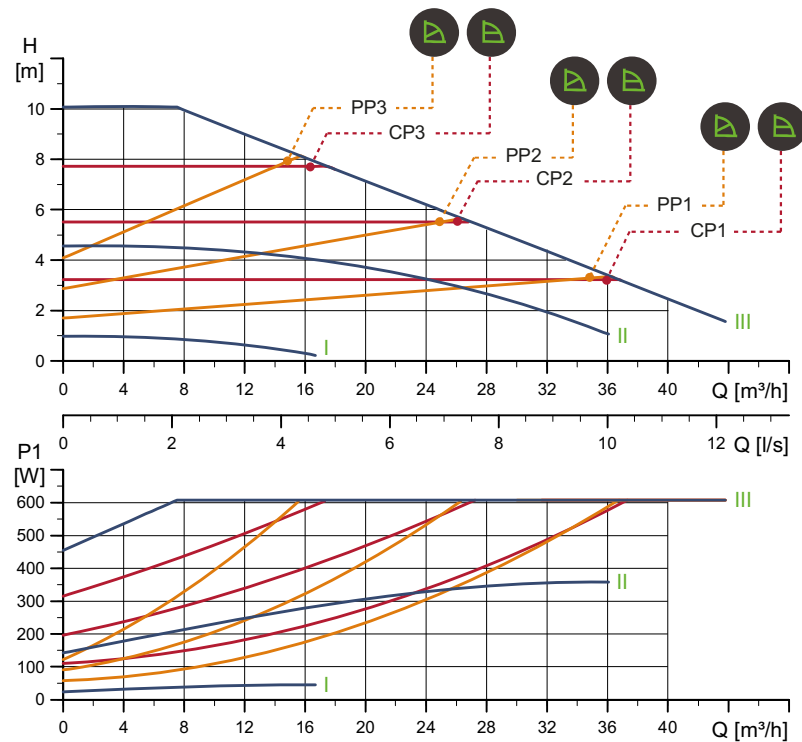
For product numbers, see page 130.

TM05 6349 4712

TM05 4960 3012

MAGNA1 65-100 F

1 x 230 V, 50/60 Hz

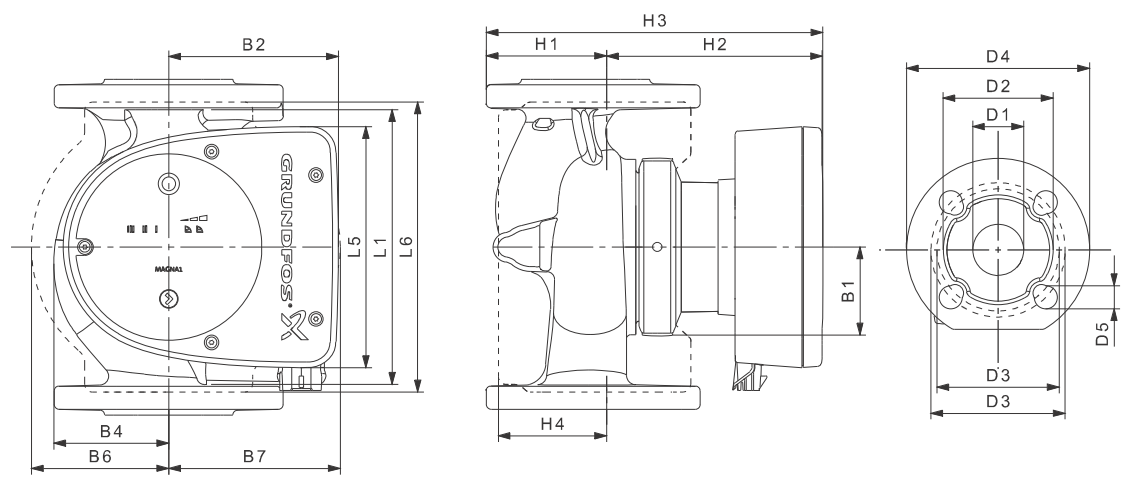


Speed	P1 [W]	I _{1/1} [A]
Min.	24.7	0.26
Max.	619	2.73

The pump incorporates overload protection.

Net weight [kg]	Gross weight [kg]	Ship. vol. [m ³]
21.6	23.8	0.057

Connections: See [Counter flanges](#), page 22.
 System pressure: Max. 1.0 MPa (10 bar). Also available as max. 1.6 MPa (16 bar).
 Liquid temperature: -10 to +110 °C (TF 110).
 Specific EEI: 0.20.



Pump type	Dimensions [mm]																
	L1	L5	L6	B1	B2	B4	B6	B7	H1	H2	H3	H4	D1	D2	D3	D4	D5
MAGNA1 65-100 F	340	204	296	84	164	73	133	133	74	312	386	94	65	119	130/145	185	14/19

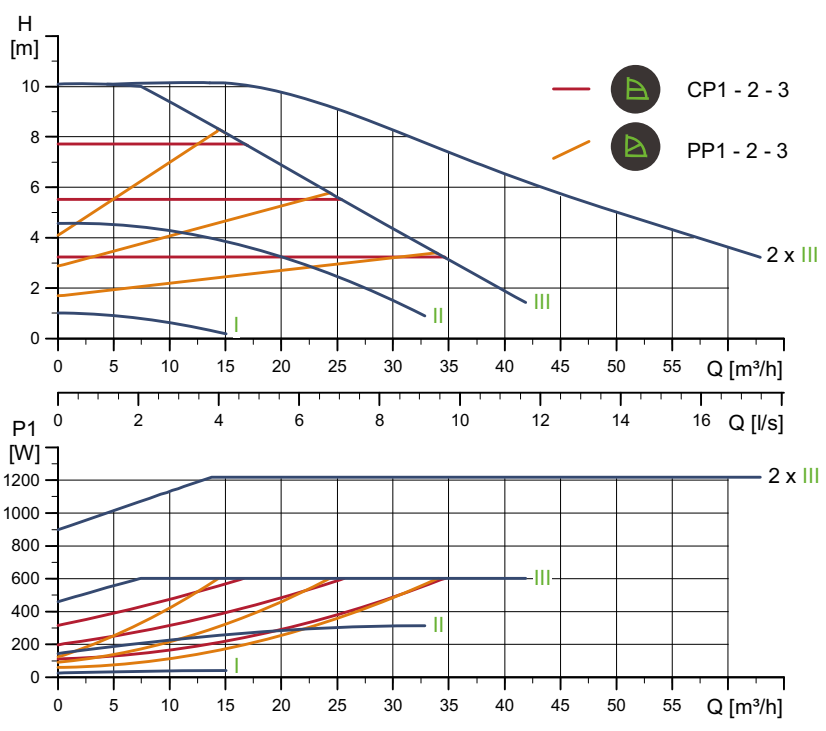
For product numbers, see page 130.

TM05 6303 4712

TM05 5200 3412

MAGNA1 D 65-100 F

1 x 230 V, 50/60 Hz

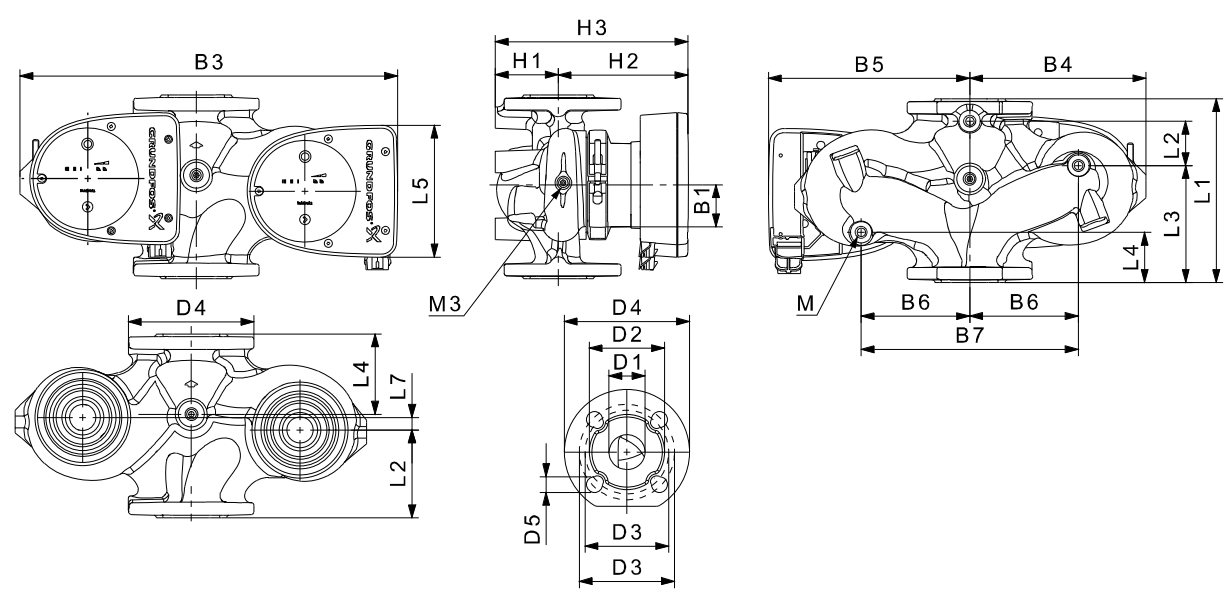


Speed	P1 [W]	I _{1/1} [A]
Min.	24.1	0.26
Max.	614	2.71

The pump incorporates overload protection.

Net weight [kg]	Gross weight [kg]	Ship. vol. [m ³]
40.3	47.8	0.132

Connections: See [Counter flanges](#), page 22.
 System pressure: Max. 1.0 MPa (10 bar). Also available as max. 1.6 MPa (16 bar).
 Liquid temperature: -10 to +110 °C (TF 110).
 Specific EEI: 0.21.



Pump type	Dimensions [mm]																				Rp	
	L1	L2	L3	L4	L5	L7	B1	B3	B4	B5	B6	B7	H1	H2	H3	D1	D2	D3	D4	D5		M
MAGNA1 D 65-100 F	340	218	92	92	204	0	84	522	228	294	130	260	77	312	389	65	119	130/145	185	14/19	12	1/4

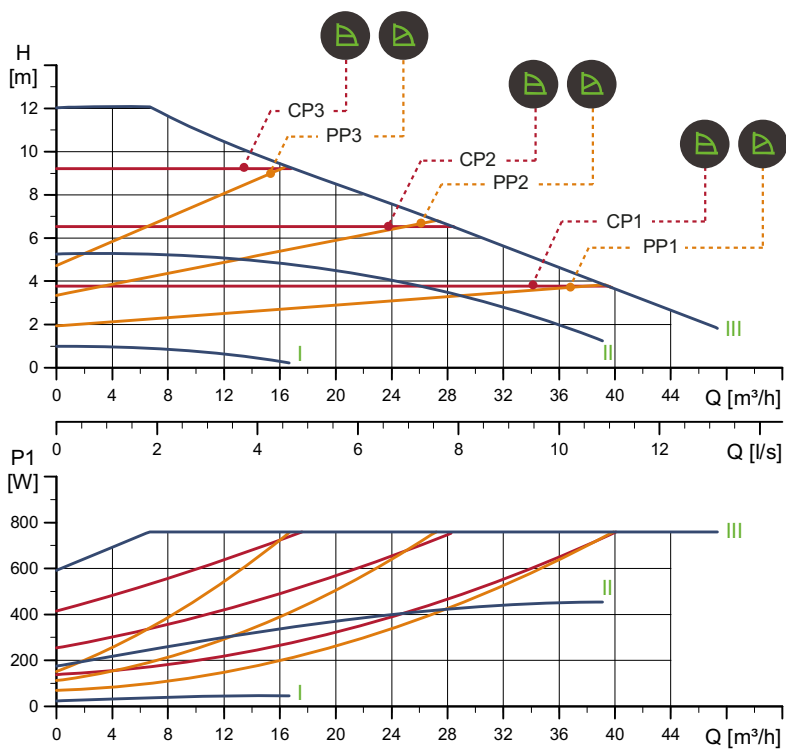
For product numbers, see page 130.

TM05 6350 4712

TM05 4960 3012

MAGNA1 65-120 F

1 x 230 V, 50/60 Hz

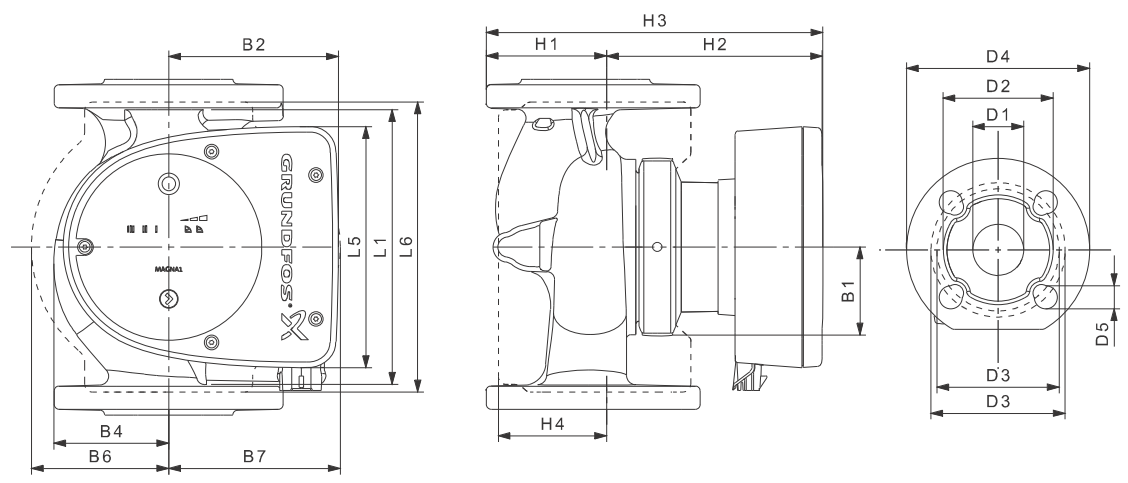


Speed	P1 [W]	I _{1/1} [A]
Min.	24.38	0.26
Max.	774	3.42

The pump incorporates overload protection.

Net weight [kg]	Gross weight [kg]	Ship. vol. [m ³]
21.6	23.8	0.057

Connections: See [Counter flanges](#), page 22.
 System pressure: Max. 1.0 MPa (10 bar). Also available as max. 1.6 MPa (16 bar).
 Liquid temperature: -10 to +110 °C (TF 110).
 Specific EEI: 0.18.



Pump type	Dimensions [mm]																
	L1	L5	L6	B1	B2	B4	B6	B7	H1	H2	H3	H4	D1	D2	D3	D4	D5
MAGNA1 65-120 F	340	204	296	84	164	73	133	133	74	312	386	94	65	119	130/145	185	14/19

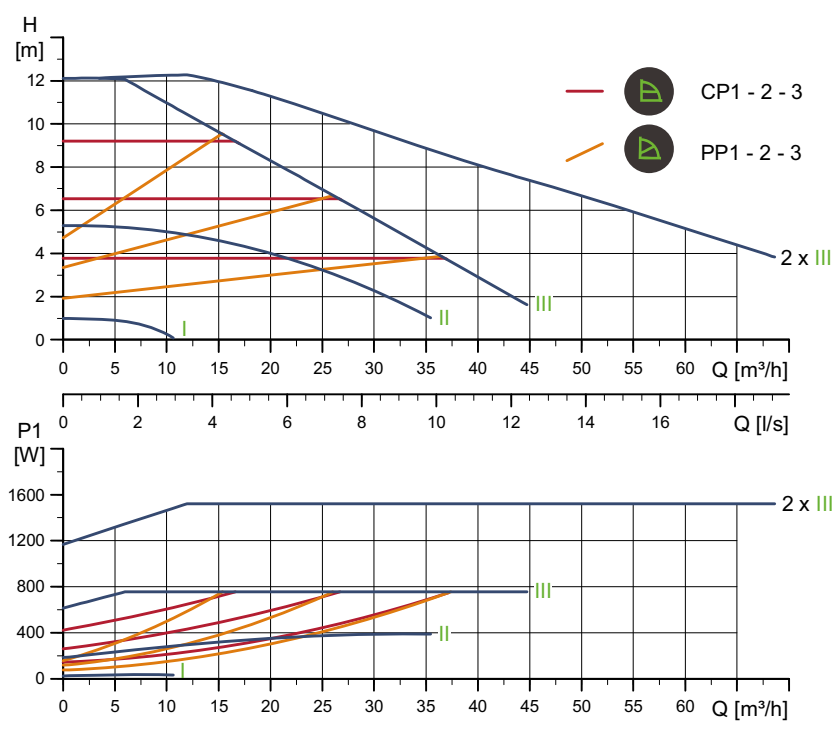
For product numbers, see page 130.

TM05 6304 4712

TM05 5200 3412

MAGNA1 D 65-120 F

1 x 230 V, 50/60 Hz



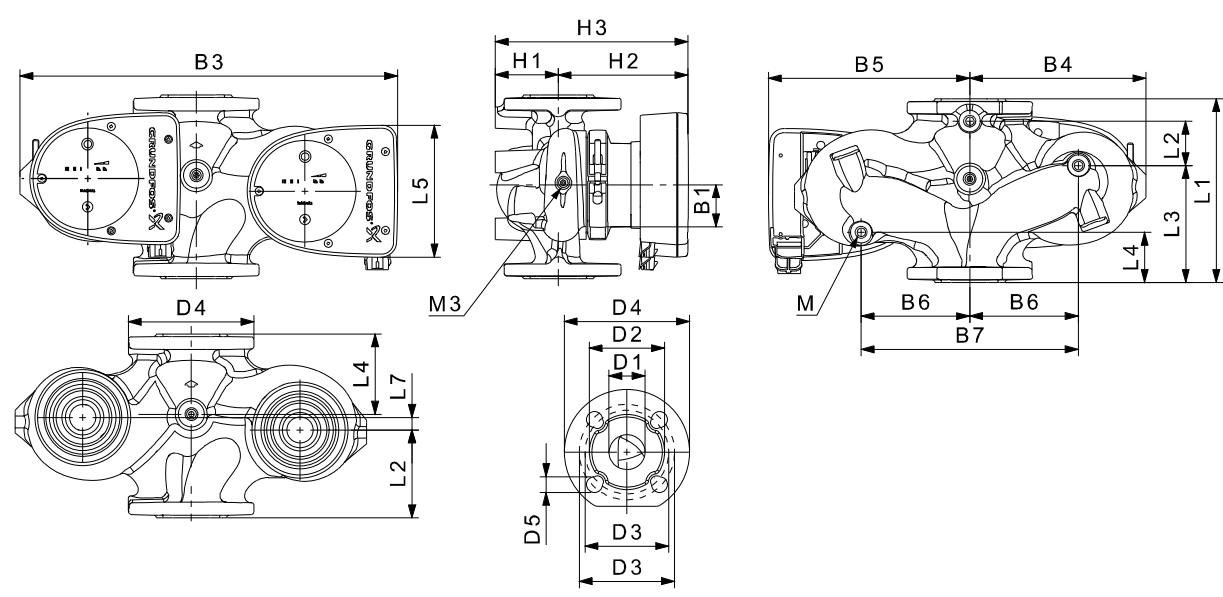
Speed	P1 [W]	I _{1/1} [A]
Min.	24.9	0.27
Max.	769	3.39

The pump incorporates overload protection.

Net weight [kg]	Gross weight [kg]	Ship. vol. [m ³]
40.3	47.8	0.132

Connections: See [Counter flanges](#), page 22.
 System pressure: Max. 1.0 MPa (10 bar). Also available as max. 1.6 MPa (16 bar).
 Liquid temperature: -10 to +110 °C (TF 110).
 Specific EEI: 0.21.

TM05 6351 4712



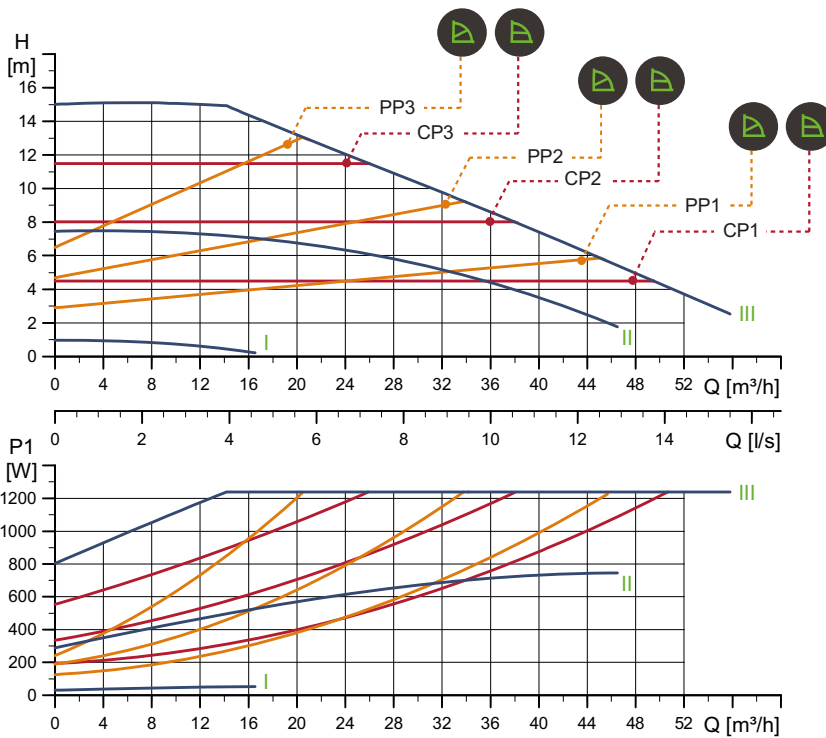
TM05 4960 3012

Pump type	Dimensions [mm]																				Rp	
	L1	L2	L3	L4	L5	L7	B1	B3	B4	B5	B6	B7	H1	H2	H3	D1	D2	D3	D4	D5		M
MAGNA1 D 65-120 F	340	218	92	92	204	0	84	522	228	294	130	260	77	312	389	65	119	130/145	185	14/19	12	1/4

For product numbers, see page 130.

MAGNA1 65-150 F

1 x 230 V, 50/60 Hz



Speed	P1 [W]	I _{1/1} [A]
Min.	30.7	0.31
Max.	1263	5.53

The pump incorporates overload protection.

Net weight [kg]	Gross weight [kg]	Ship. vol. [m ³]
24.3	26.6	0.057

Connections:

See [Counter flanges](#), page 22.

System pressure:

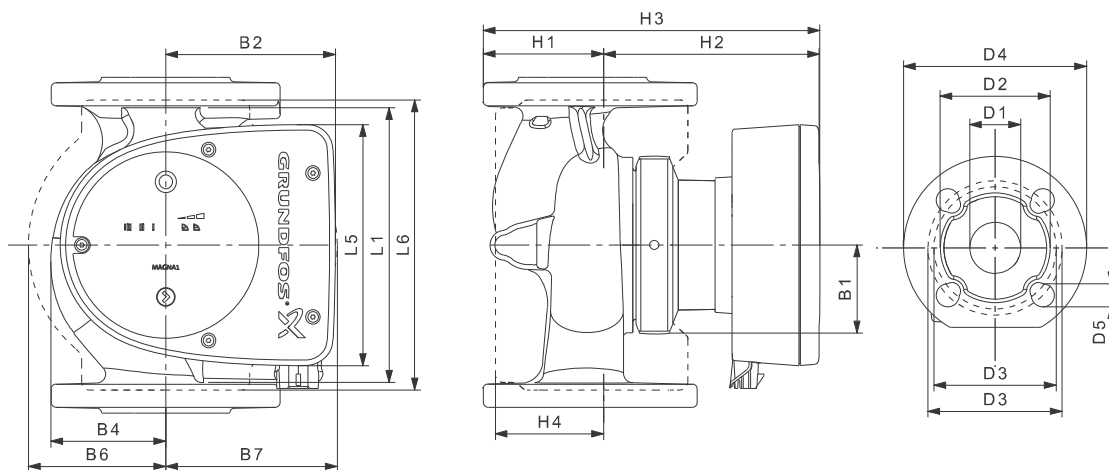
Max. 1.0 MPa (10 bar).
Also available as max. 1.6 MPa (16 bar).

Liquid temperature:

-10 to +110 °C (TF 110).

Specific EEI:

0.18.



Pump type	Dimensions [mm]																
	L1	L5	L6	B1	B2	B4	B6	B7	H1	H2	H3	H4	D1	D2	D3	D4	D5
MAGNA1 65-150 F	340	204	296	84	164	73	133	133	74	312	386	94	65	119	130/145	185	14/19

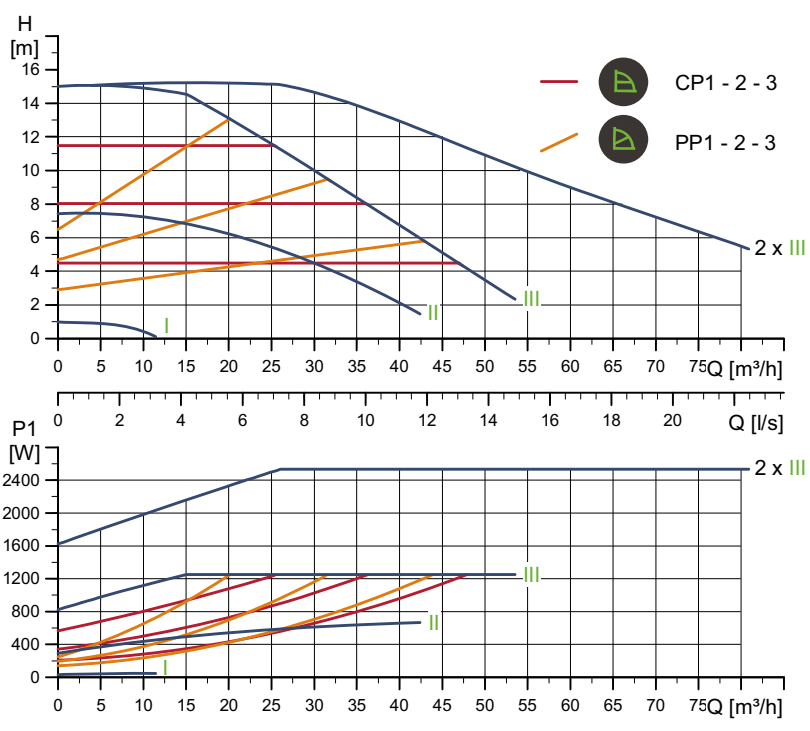
For product numbers, see page 130.

TM05 6305 4712

TM05 5200 3412

MAGNA1 D 65-150 F

1 x 230 V, 50/60 Hz

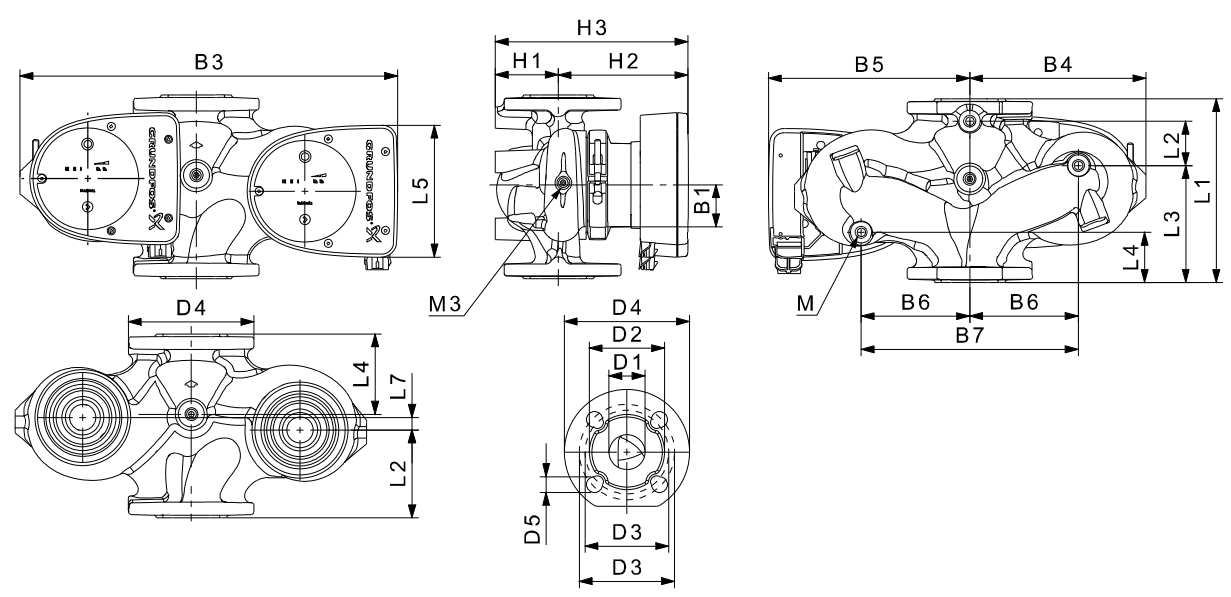


Speed	P1 [W]	I _{1/1} [A]
Min.	32.3	0.33
Max.	1275	5.62

The pump incorporates overload protection.

Net weight [kg]	Gross weight [kg]	Ship. vol. [m ³]
45.7	53.2	0.132

Connections: See [Counter flanges](#), page 22.
 System pressure: Max. 1.0 MPa (10 bar). Also available as max. 1.6 MPa (16 bar).
 Liquid temperature: -10 to +110 °C (TF 110).
 Specific EEI: 0.21.



Pump type	Dimensions [mm]																				Rp	
	L1	L2	L3	L4	L5	L7	B1	B3	B4	B5	B6	B7	H1	H2	H3	D1	D2	D3	D4	D5		M
MAGNA1 D 65-150 F	340	218	92	92	204	0	84	522	228	294	130	260	77	312	389	65	119	130/145	185	14/19	12	1/4

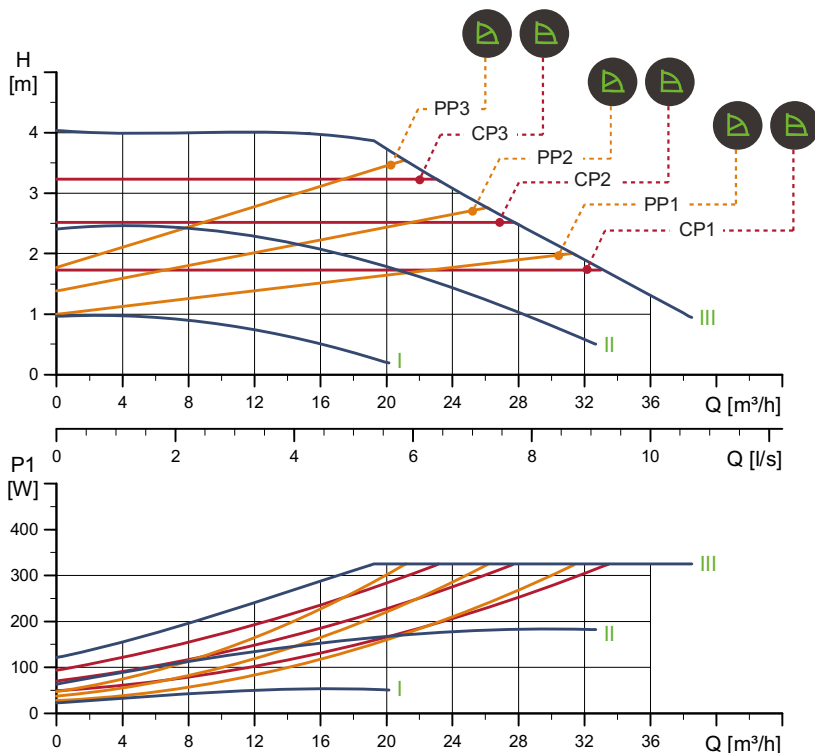
For product numbers, see page 130.

TM05 6352 4712

TM05 4960 3012

MAGNA1 80-40 F

1 x 230 V, 50/60 Hz

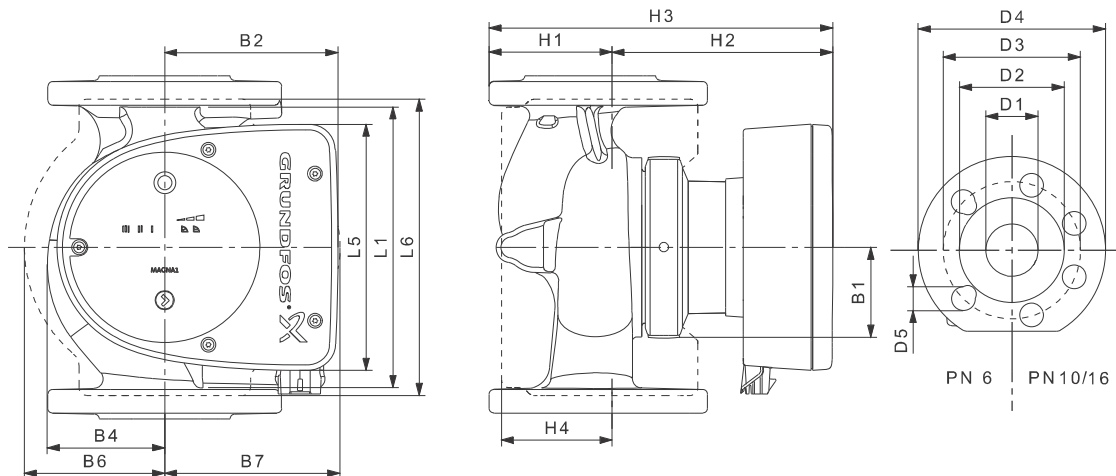


Speed	P1 [W]	I _{1/1} [A]
Min.	24	0.26
Max.	331	1.49

The pump incorporates overload protection.

Net weight [kg]	Gross weight [kg]	Ship. vol. [m ³]
26.8	29.1	0.072

Connections: See [Counter flanges](#), page 22.
 System pressure: Max. 1.0 MPa (10 bar). Also available as max. 1.6 MPa (16 bar).
 Liquid temperature: -10 to +110 °C (TF 110).
 Specific EEI: 0.22.



Pump type	Dimensions [mm]																
	L1	L5	L6	B1	B2	B4	B6	B7	H1	H2	H3	H4	D1	D2	D3	D4	D5
MAGNA1 80-40 F	360	204	310	84	164	73	163	163	96	318	413	115	80	128	150/160	200	19

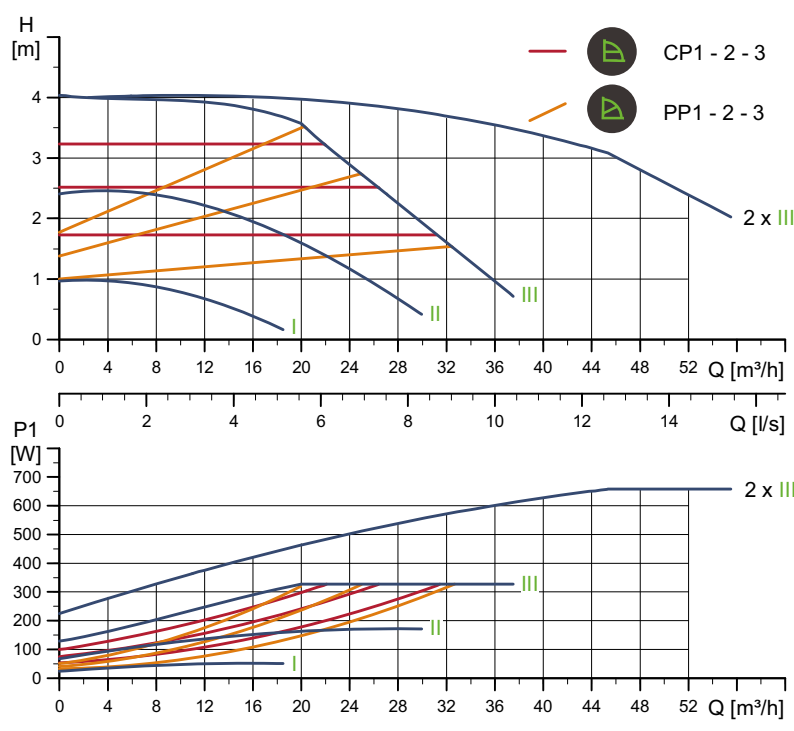
For product numbers, see page 130.

TM05 6306 4712

TM05 5276 3512

MAGNA1 D 80-40 F

1 x 230 V, 50/60 Hz

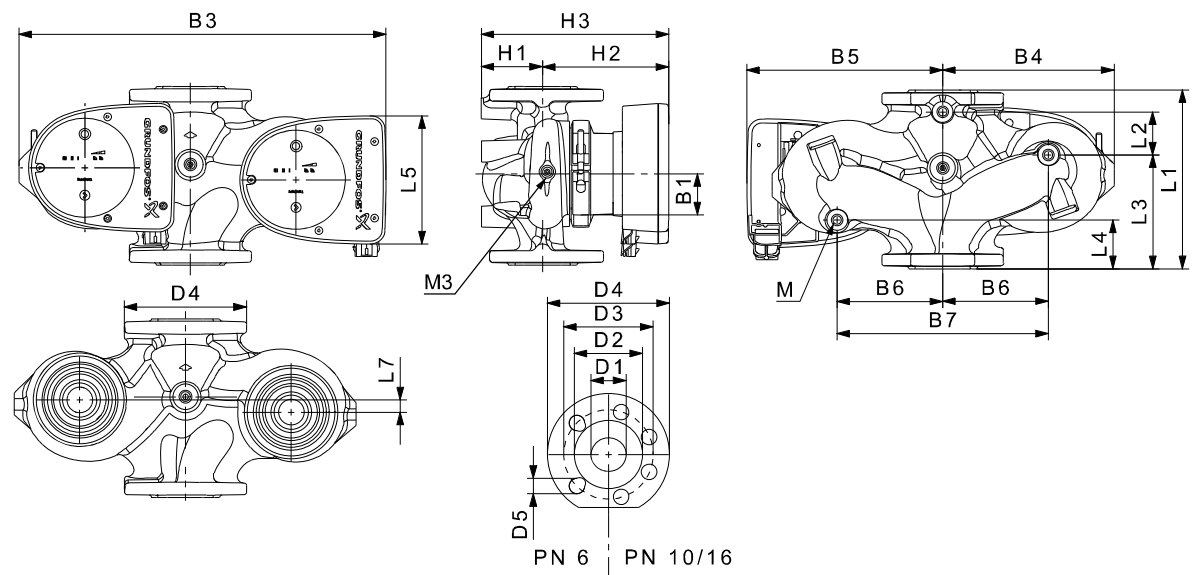


Speed	P1 [W]	I _{1/1} [A]
Min.	25.3	0.27
Max.	333	1.49

The pump incorporates overload protection.

Connections: See [Counter flanges](#), page 22.
 System pressure: Max. 1.0 MPa (10 bar). Also available as max. 1.6 MPa (16 bar).
 Liquid temperature: -10 to +110 °C (TF 110).
 Specific EEI: 0.21.

Net weight [kg]	Gross weight [kg]	Ship. vol. [m ³]
45.9	55.7	0.208



Pump type	Dimensions [mm]																	Rp				
	L1	L2	L3	L4	L5	L7	B1	B3	B4	B5	B6	B7	H1	H2	H3	D1	D2	D3	D4	D5	M	M3
MAGNA1 D 80-40 F	360	218	102	102	204	0	84	538	244	294	130	260	97	318	415	80	128	150/160	200	19	12	1/4

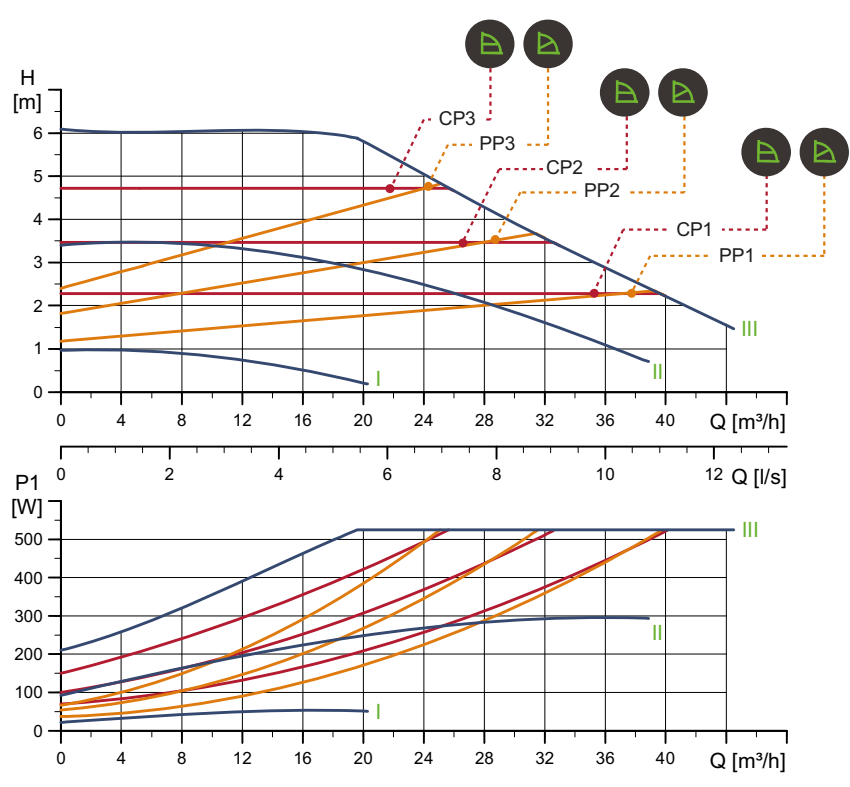
For product numbers, see page 130.

TM05 6353 4712

TM05 5275 3512

MAGNA1 80-60 F

1 x 230 V, 50/60 Hz

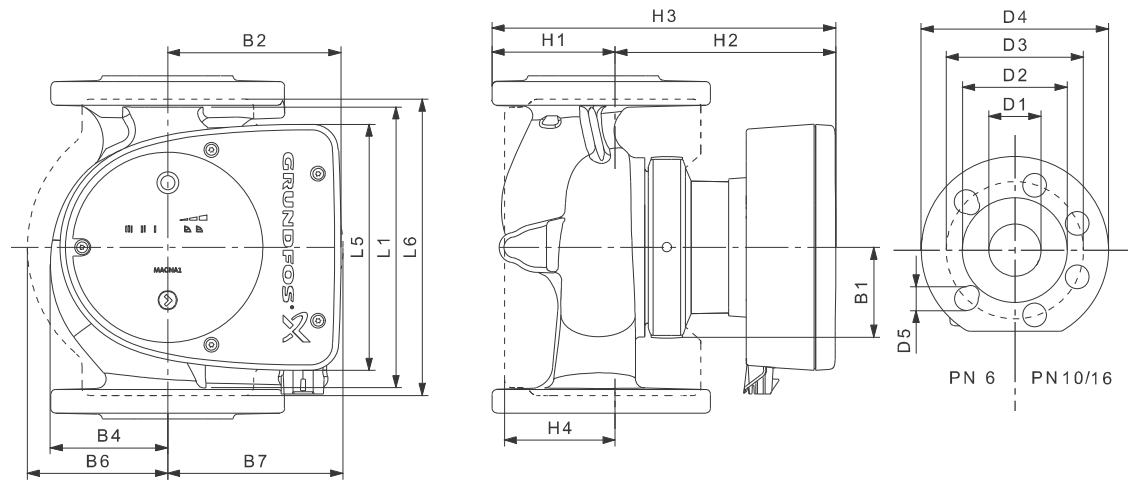


Speed	P1 [W]	I _{1/1} [A]
Min.	23.6	0.24
Max.	536	2.37

The pump incorporates overload protection.

Connections: See [Counter flanges](#), page 22.
 System pressure: Max. 1.0 MPa (10 bar). Also available as max. 1.6 MPa (16 bar).
 Liquid temperature: -10 to +110 °C (TF 110).
 Specific EEI: 0.20.

Net weight [kg]	Gross weight [kg]	Ship. vol. [m ³]
26.8	29.1	0.072



Pump type	Dimensions [mm]																
	L1	L5	L6	B1	B2	B4	B6	B7	H1	H2	H3	H4	D1	D2	D3	D4	D5
MAGNA1 80-60 F	360	204	310	84	164	73	163	163	96	318	413	115	80	128	150/160	200	19

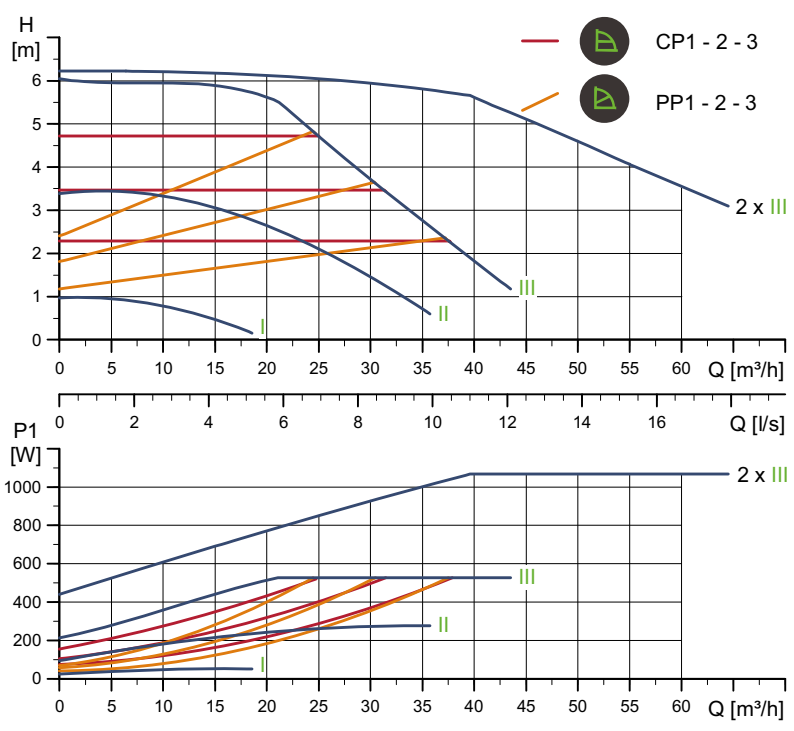
For product numbers, see page 130.

TM05 6307 4712

TM05 5276 3512

MAGNA1 D 80-60 F

1 x 230 V, 50/60 Hz

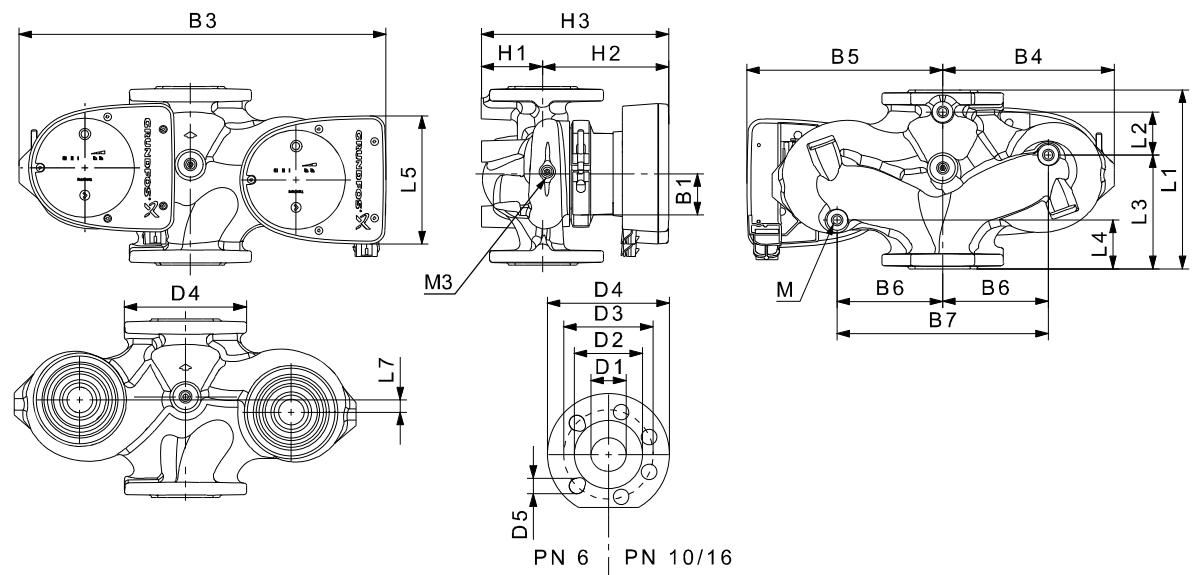


Speed	P1 [W]	I _{1/1} [A]
Min.	24.7	0.27
Max.	537	2.38

The pump incorporates overload protection.

Net weight [kg]	Gross weight [kg]	Ship. vol. [m ³]
45.9	55.7	0.208

Connections: See [Counter flanges](#), page 22.
 System pressure: Max. 1.0 MPa (10 bar). Also available as max. 1.6 MPa (16 bar).
 Liquid temperature: -10 to +110 °C (TF 110).
 Specific EEI: 0.20.



Pump type	Dimensions [mm]																	Rp				
	L1	L2	L3	L4	L5	L7	B1	B3	B4	B5	B6	B7	H1	H2	H3	D1	D2	D3	D4	D5	M	M3
MAGNA1 D 80-60 F	360	218	102	102	204	0	84	538	244	294	130	260	97	318	415	80	128	150/160	200	19	12	1/4

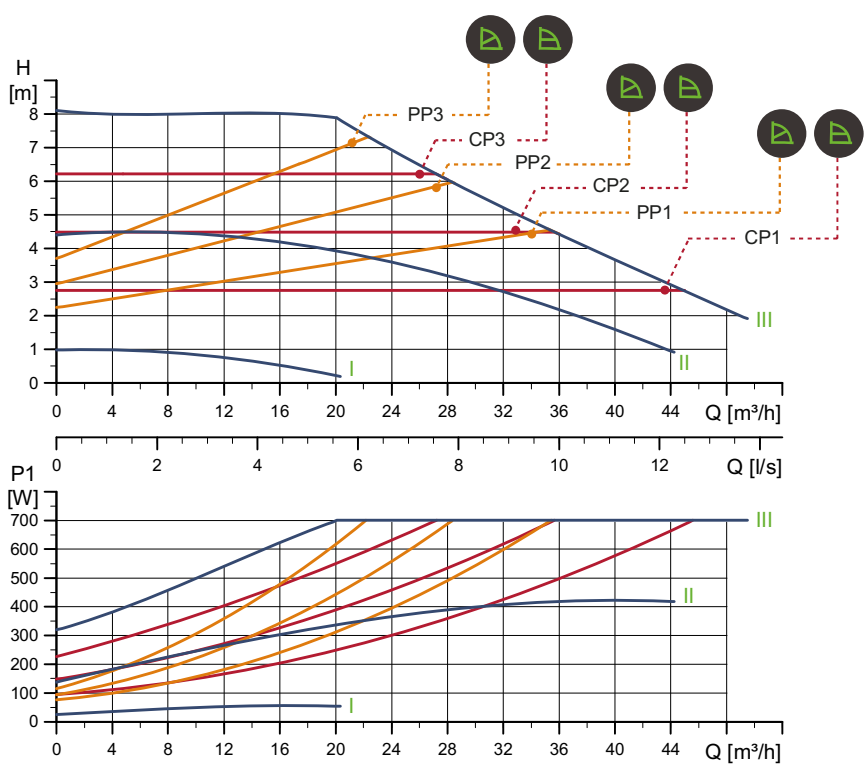
For product numbers, see page 130.

TM05 6354 4712

TM05 5275 3512

MAGNA1 80-80 F

1 x 230 V, 50/60 Hz

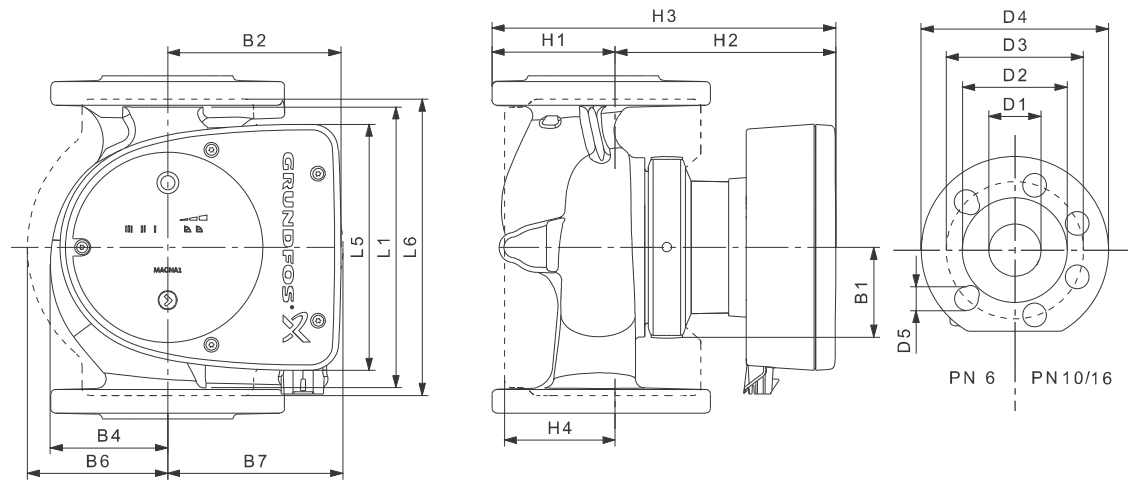


Speed	P1 [W]	I _{1/1} [A]
Min.	26.3	0.28
Max.	715	3.14

The pump incorporates overload protection.

Net weight [kg]	Gross weight [kg]	Ship. vol. [m ³]
29.6	32.0	0.072

Connections: See [Counter flanges](#), page 22.
 System pressure: Max. 1.0 MPa (10 bar). Also available as max. 1.6 MPa (16 bar).
 Liquid temperature: -10 to +110 °C (TF 110).
 Specific EEI: 0.20.



Pump type	Dimensions [mm]																
	L1	L5	L6	B1	B2	B4	B6	B7	H1	H2	H3	H4	D1	D2	D3	D4	D5
MAGNA1 80-80 F	360	204	310	84	164	73	163	163	96	318	413	115	80	128	150/160	200	19

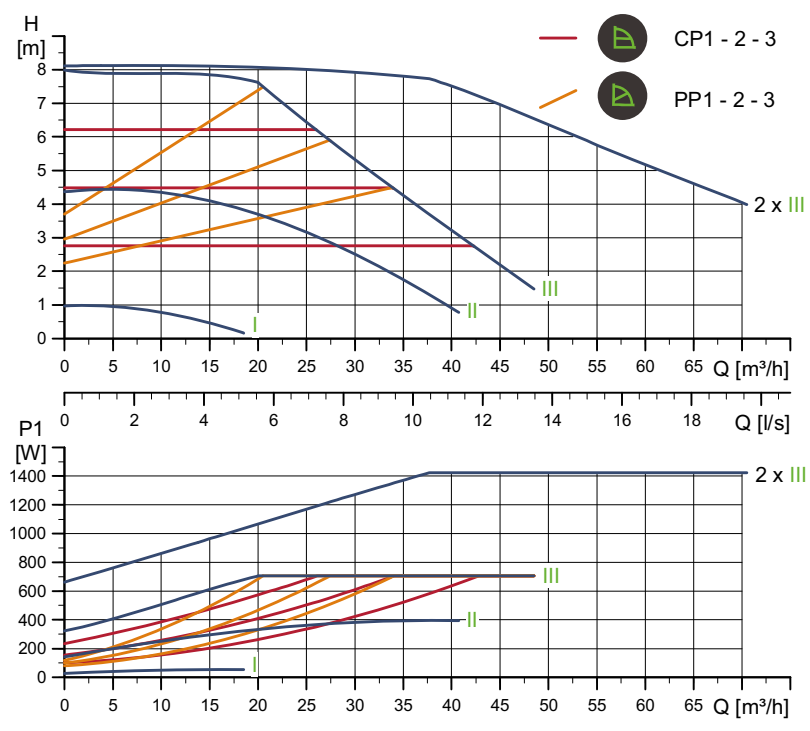
For product numbers, see page 130.

TM05 6308 4712

TM05 5276 3512

MAGNA1 D 80-80 F

1 x 230 V, 50/60 Hz

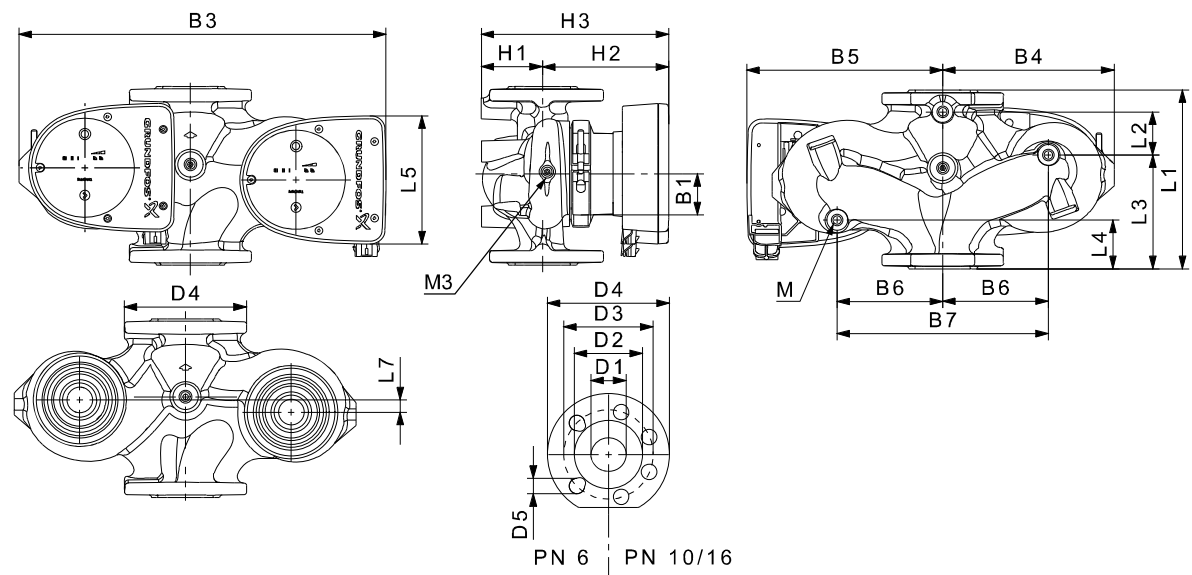


Speed	P1 [W]	I _{1/1} [A]
Min.	27.3	0.27
Max.	718	3.15

The pump incorporates overload protection.

Net weight [kg]	Gross weight [kg]	Ship. vol. [m ³]
51.6	61.3	0.208

Connections: See [Counter flanges](#), page 22.
 System pressure: Max. 1.0 MPa (10 bar). Also available as max. 1.6 MPa (16 bar).
 Liquid temperature: -10 to +110 °C (TF 110).
 Specific EEI: 0.21.



Pump type	Dimensions [mm]																	Rp				
	L1	L2	L3	L4	L5	L7	B1	B3	B4	B5	B6	B7	H1	H2	H3	D1	D2	D3	D4	D5	M	M3
MAGNA1 D 80-80 F	360	218	102	102	204	0	84	538	244	294	130	260	97	318	415	80	128	150/160	200	19	12	1/4

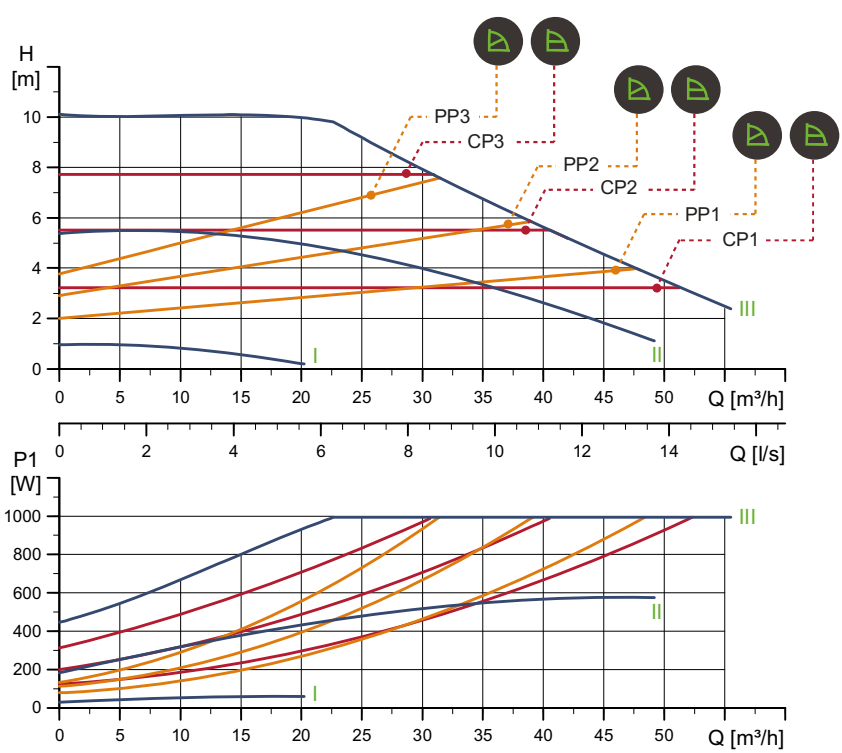
For product numbers, see page 130.

TM05 6355 4712

TM05 5275 3512

MAGNA1 80-100 F

1 x 230 V, 50/60 Hz

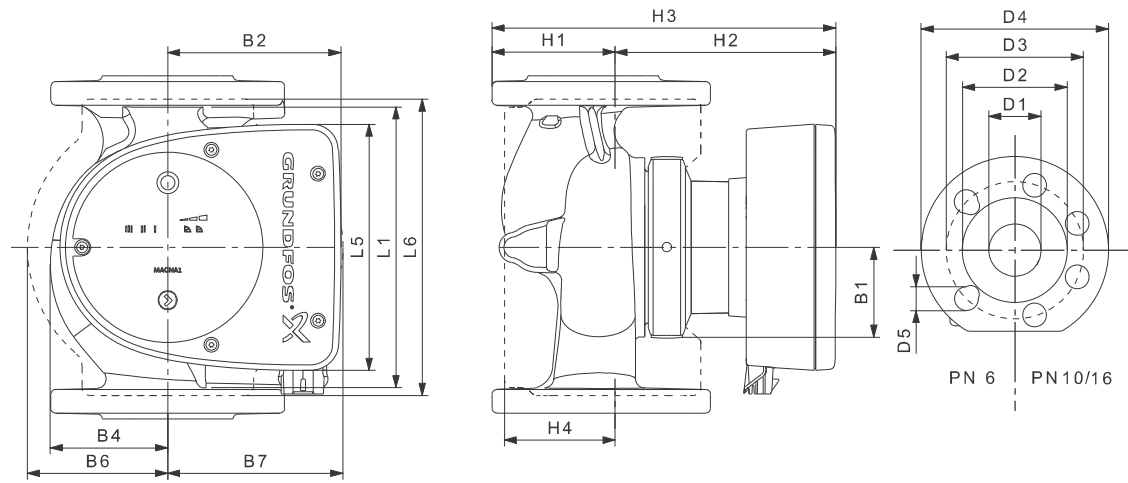


Speed	P1 [W]	I _{1/1} [A]
Min.	30.7	0.31
Max.	1014	4.45

The pump incorporates overload protection.

Net weight [kg]	Gross weight [kg]	Ship. vol. [m ³]
30.2	32.6	0.072

Connections: See [Counter flanges](#), page 22.
 System pressure: Max. 1.0 MPa (10 bar). Also available as max. 1.6 MPa (16 bar).
 Liquid temperature: -10 to +110 °C (TF 110).
 Specific EEI: 0.19.



Pump type	Dimensions [mm]																
	L1	L5	L6	B1	B2	B4	B6	B7	H1	H2	H3	H4	D1	D2	D3	D4	D5
MAGNA1 80-100 F	360	204	310	84	164	73	163	163	96	318	413	115	80	128	150/160	200	19

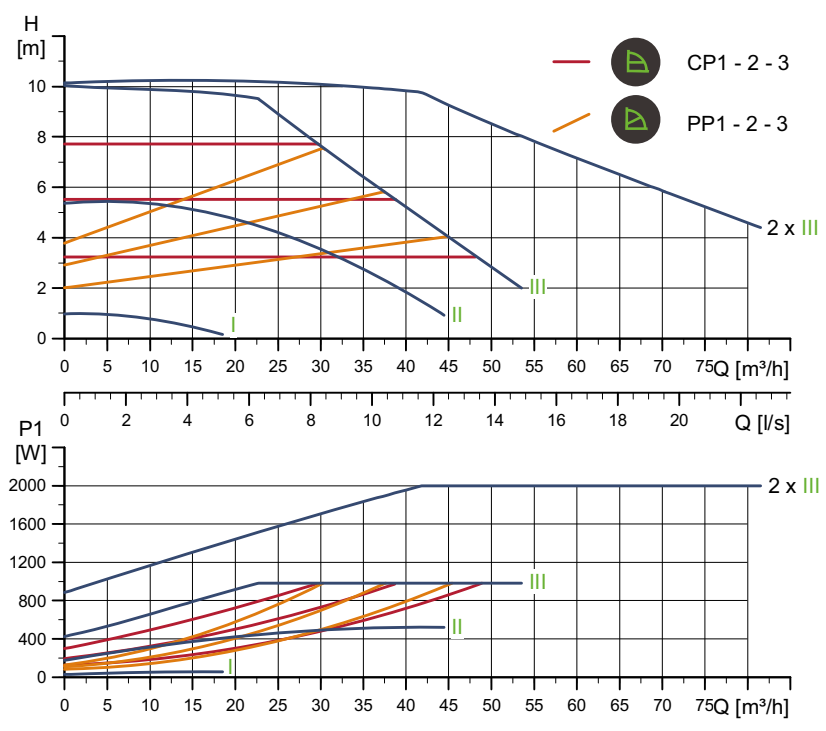
For product numbers, see page 130.

TM05 6309 4712

TM05 5276 3512

MAGNA1 D 80-100 F

1 x 230 V, 50/60 Hz

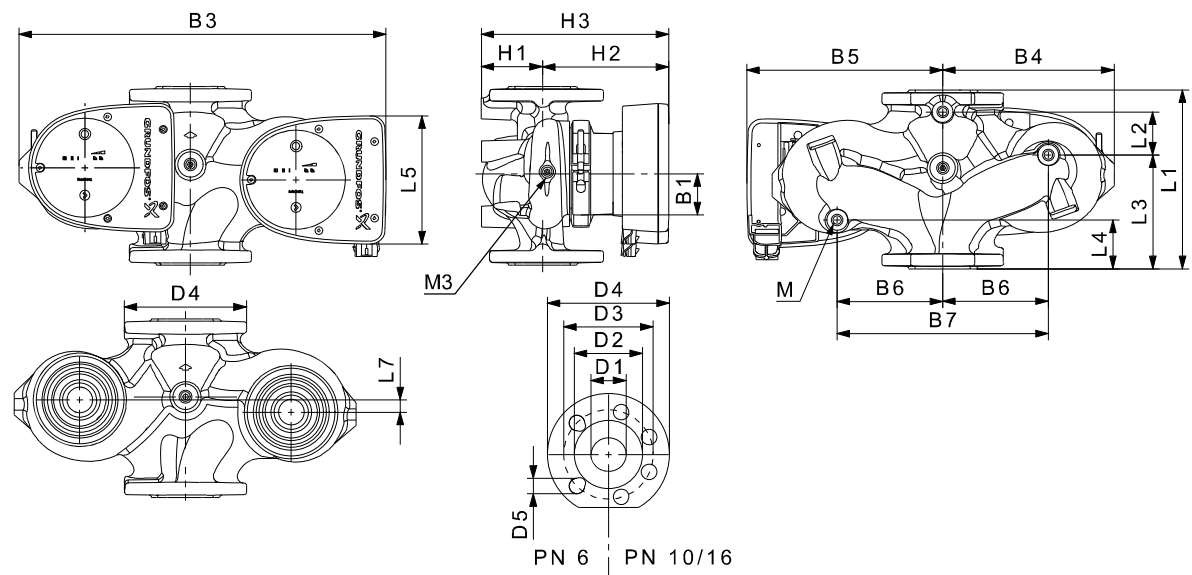


Speed	P1 [W]	I _{1/1} [A]
Min.	31	0.32
Max.	1002	4.41

The pump incorporates overload protection.

Net weight [kg]	Gross weight [kg]	Ship. vol. [m ³]
52.7	62.5	0.208

Connections: See [Counter flanges](#), page 22.
 System pressure: Max. 1.0 MPa (10 bar). Also available as max. 1.6 MPa (16 bar).
 Liquid temperature: -10 to +110 °C (TF 110).
 Specific EEI: 0.21.



Pump type	Dimensions [mm]																	Rp				
	L1	L2	L3	L4	L5	L7	B1	B3	B4	B5	B6	B7	H1	H2	H3	D1	D2		D3	D4	D5	M
MAGNA1 D 80-100 F	360	218	102	102	204	0	84	538	244	294	130	260	97	318	415	80	128	150/160	200	19	12	1/4

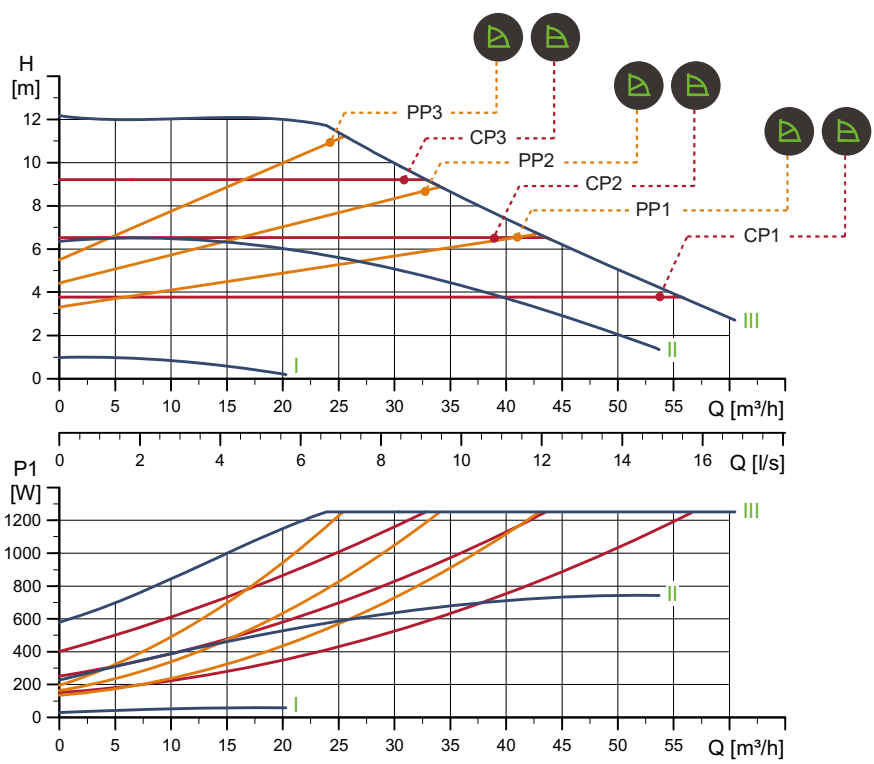
For product numbers, see page 130.

TM05 6356 4712

TM05 5275 3512

MAGNA1 80-120 F

1 x 230 V, 50/60 Hz

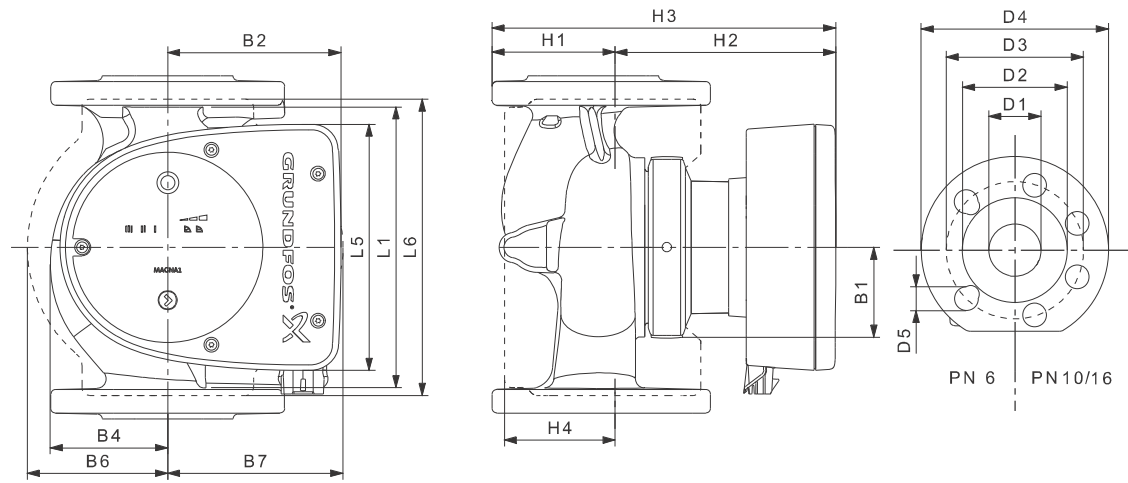


Speed	P1 [W]	I _{1/1} [A]
Min.	30.5	0.31
Max.	1277	5.59

The pump incorporates overload protection.

Net weight [kg]	Gross weight [kg]	Ship. vol. [m ³]
30.2	32.6	0.072

Connections: See [Counter flanges](#), page 22.
 System pressure: Max. 1.0 MPa (10 bar). Also available as max. 1.6 MPa (16 bar).
 Liquid temperature: -10 to +110 °C (TF 110).
 Specific EEI: 0.19.



Pump type	Dimensions [mm]																
	L1	L5	L6	B1	B2	B4	B6	B7	H1	H2	H3	H4	D1	D2	D3	D4	D5
MAGNA1 80-120 F	360	204	310	84	164	73	163	163	96	318	413	115	80	128	150/160	200	19

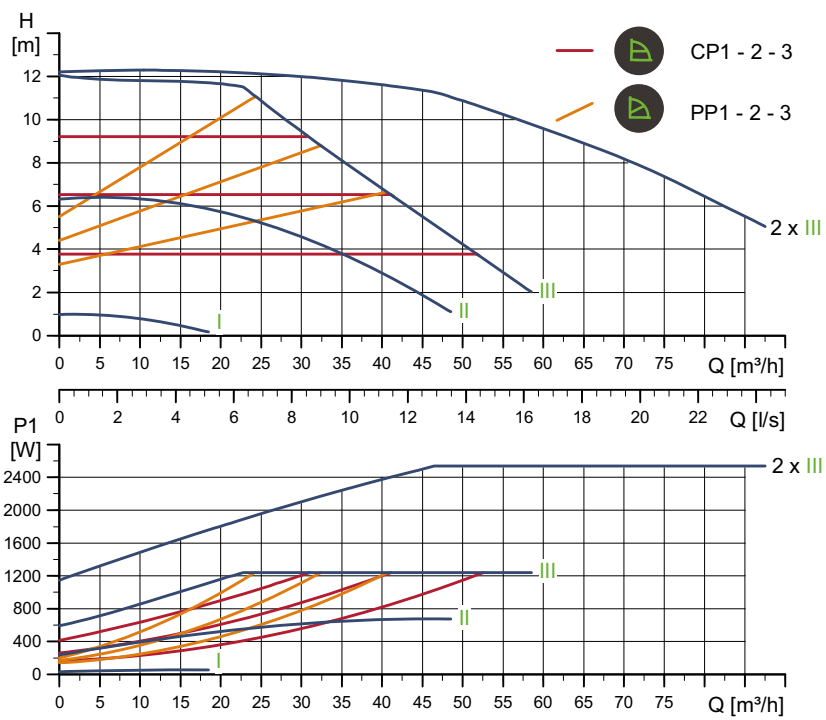
For product numbers, see page 130.

TM05 6310 4712

TM05 5276 3512

MAGNA1 D 80-120 F

1 x 230 V, 50/60 Hz

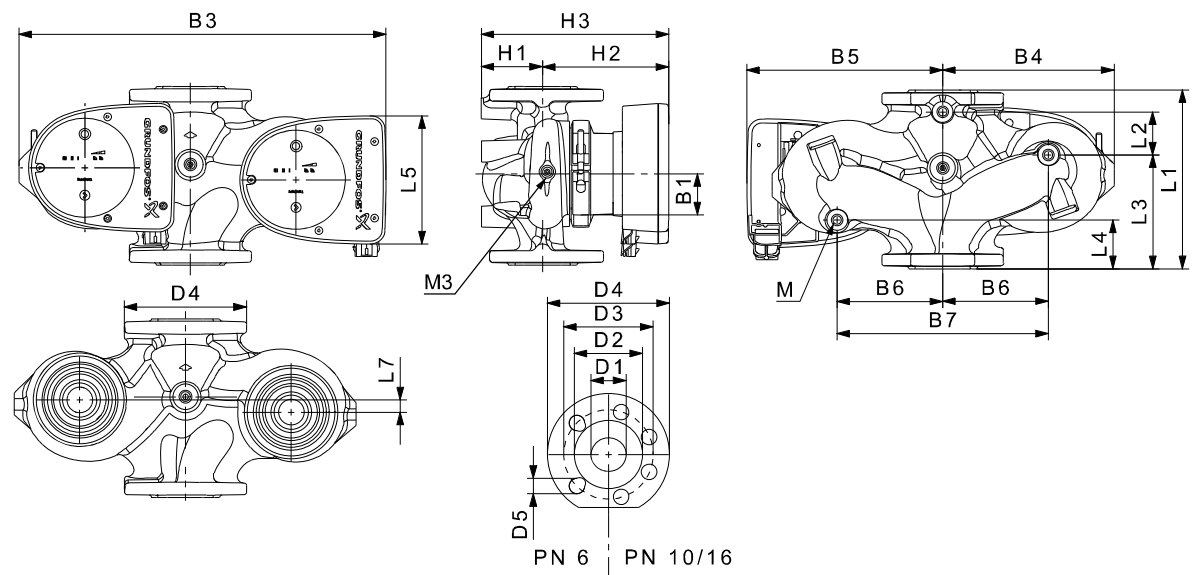


Speed	P1 [W]	I _{1/1} [A]
Min.	32.2	0.33
Max.	1265	5.54

The pump incorporates overload protection.

Net weight [kg]	Gross weight [kg]	Ship. vol. [m ³]
52.7	62.5	0.208

Connections: See [Counter flanges](#), page 22.
 System pressure: Max. 1.0 MPa (10 bar). Also available as max. 1.6 MPa (16 bar).
 Liquid temperature: -10 to +110 °C (TF 110).
 Specific EEI: 0.21.



Pump type	Dimensions [mm]																	Rp				
	L1	L2	L3	L4	L5	L7	B1	B3	B4	B5	B6	B7	H1	H2	H3	D1	D2	D3	D4	D5	M	M3
MAGNA1 D 80-120 F	360	218	102	102	204	0	84	538	244	294	130	260	97	318	415	80	128	150/160	200	19	12	1/4

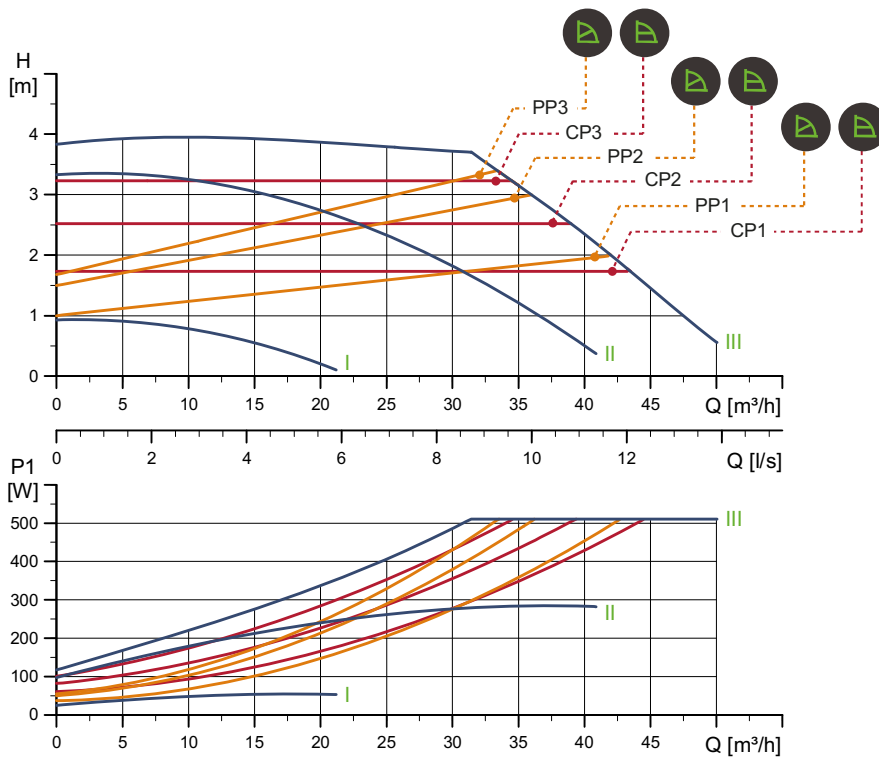
For product numbers, see page 130.

TM05 6357 4712

TM05 5275 3512

MAGNA1 100-40 F

1 x 230 V, 50/60 Hz

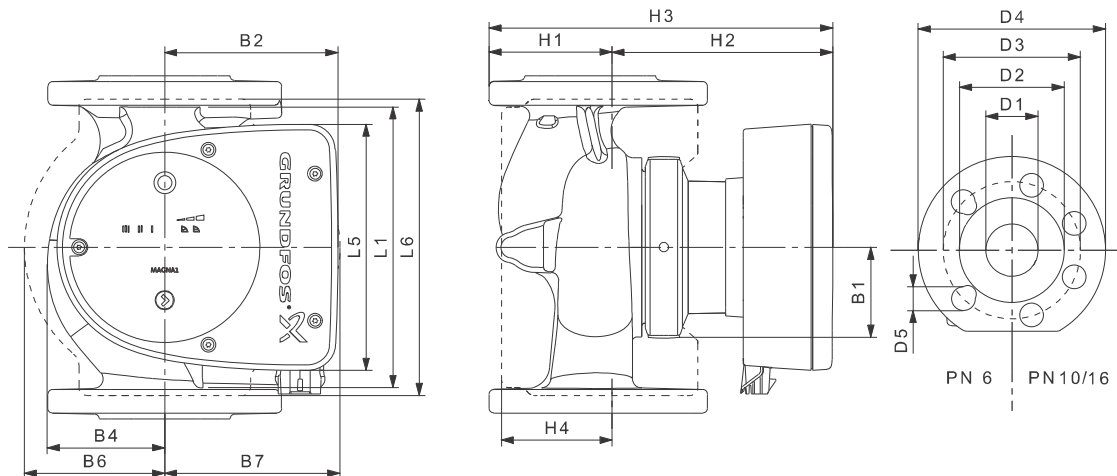


Speed	P1 [W]	I _{1/1} [A]
Min.	26	0.27
Max.	521	2.32

The pump incorporates overload protection.

Net weight [kg]	Gross weight [kg]	Ship. vol. [m³]
34.2	36.4	0.099

Connections: See [Counter flanges](#), page 22.
 System pressure: Max. 1.0 MPa (10 bar). Also available as max. 1.6 MPa (16 bar).
 Liquid temperature: -10 to +110 °C (TF 110).
 Specific EEI: 0.19.



Pump type	Dimensions [mm]																
	L1	L5	L6	B1	B2	B4	B6	B7	H1	H2	H3	H4	D1	D2	D3	D4	D5
MAGNA1 100-40 F	450	204	396	84	164	73	178	178	103	330	433	120	100	160	170	220	19

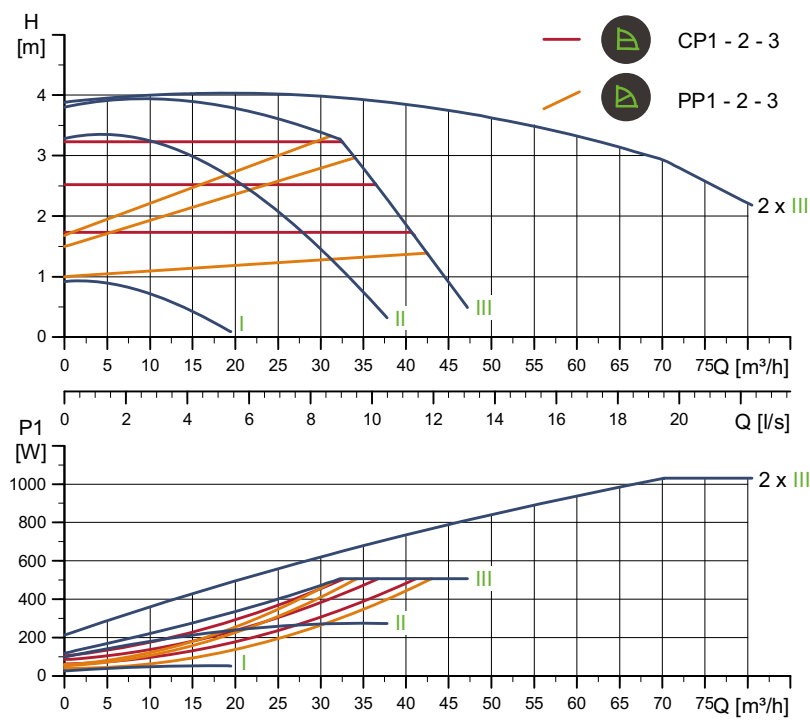
For product numbers, see page 130.

TM05 6311 4712

TM05 5276 3512

MAGNA1 D 100-40 F

1 x 230 V, 50/60 Hz

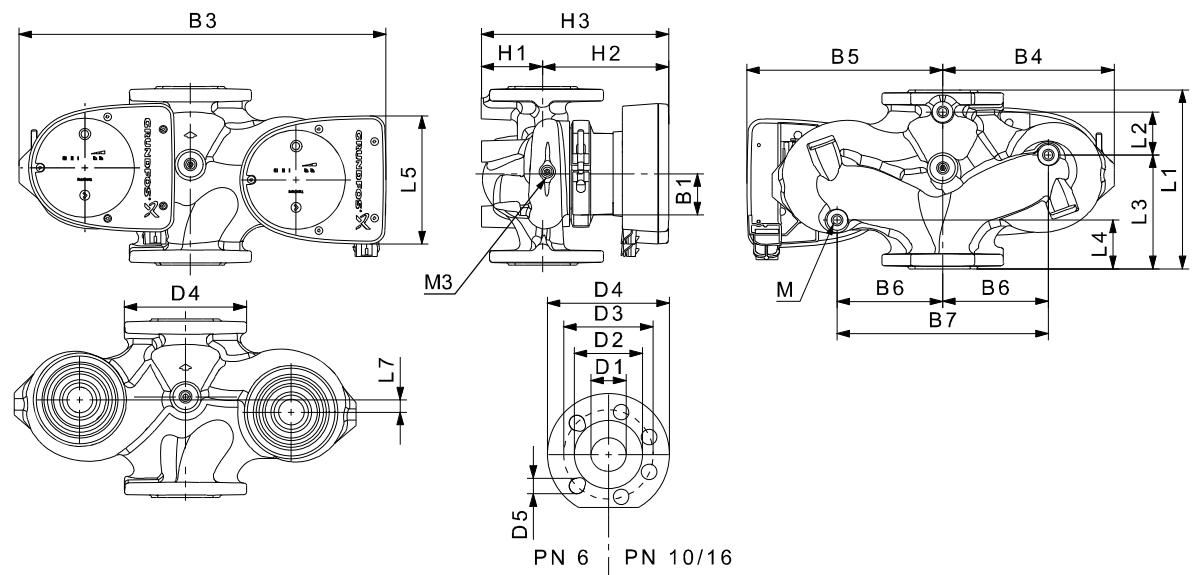


Speed	P1 [W]	I _{1/1} [A]
Min.	26	0.27
Max.	518	2.3

The pump incorporates overload protection.

Net weight [kg]	Gross weight [kg]	Ship. vol. [m ³]
62.1	72.0	0.208

Connections: See [Counter flanges](#), page 22.
 System pressure: Max. 1.0 MPa (10 bar). Also available as max. 1.6 MPa (16 bar).
 Liquid temperature: -10 to +110 °C (TF 110).
 Specific EEI: 0.19.



Pump type	Dimensions [mm]																	Rp				
	L1	L2	L3	L4	L5	L7	B1	B3	B4	B5	B6	B7	H1	H2	H3	D1	D2	D3	D4	D5	M	M3
MAGNA1 D 100-40 F	450	243	147	147	204	0	84	551	252	299	135	270	103	330	434	100	160	170	220	19	12	1/4

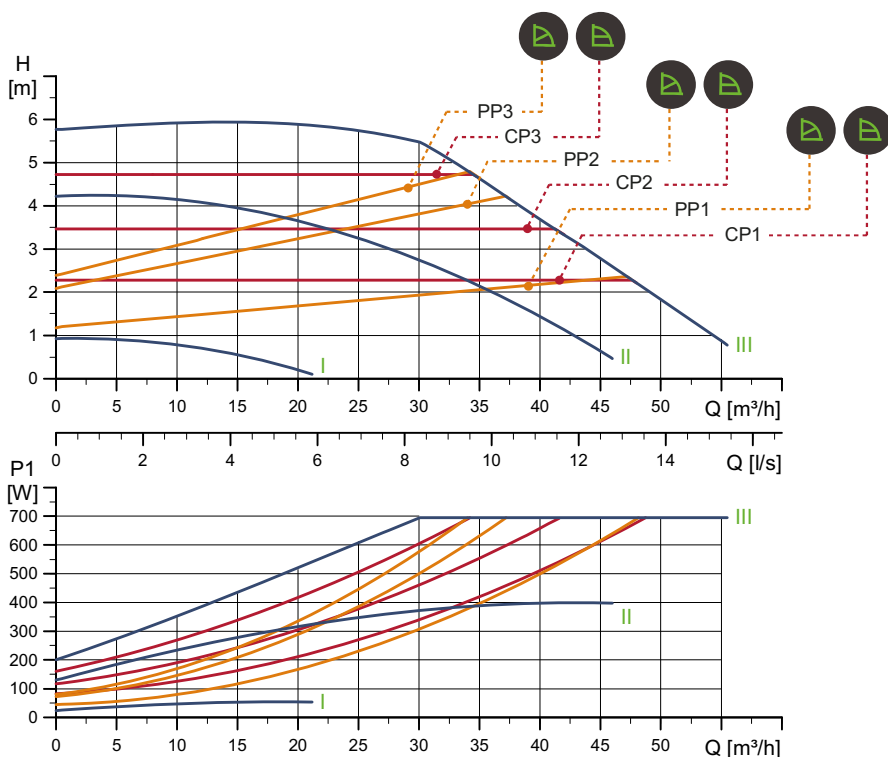
For product numbers, see page 130.

TM05 6358 4712

TM05 5275 3512

MAGNA1 100-60 F

1 x 230 V, 50/60 Hz

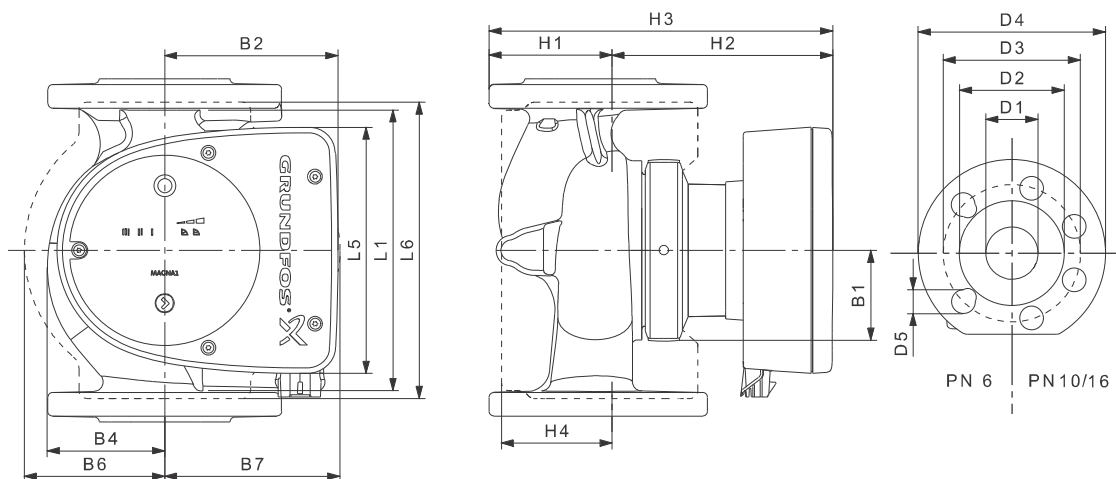


Speed	P1 [W]	I _{1/1} [A]
Min.	25.6	0.27
Max.	708	3.13

The pump incorporates overload protection.

Net weight [kg]	Gross weight [kg]	Ship. vol. [m ³]
34.2	36.4	0.099

Connections: See [Counter flanges](#), page 22.
 System pressure: Max. 1.0 MPa (10 bar). Also available as max. 1.6 MPa (16 bar).
 Liquid temperature: -10 to +110 °C (TF 110).
 Specific EEI: 0.19.



Pump type	Dimensions [mm]																
	L1	L5	L6	B1	B2	B4	B6	B7	H1	H2	H3	H4	D1	D2	D3	D4	D5
MAGNA1 100-60 F	450	204	396	84	164	73	178	178	103	330	433	120	100	160	170	220	19

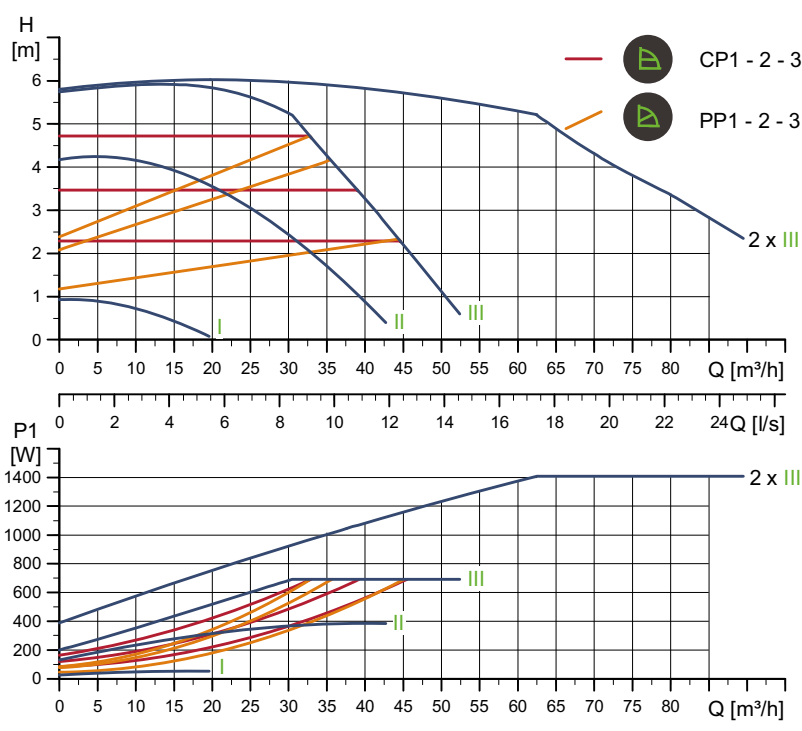
For product numbers, see page 130.

TM05 6312 4712

TM05 5276 3512

MAGNA1 D 100-60 F

1 x 230 V, 50/60 Hz

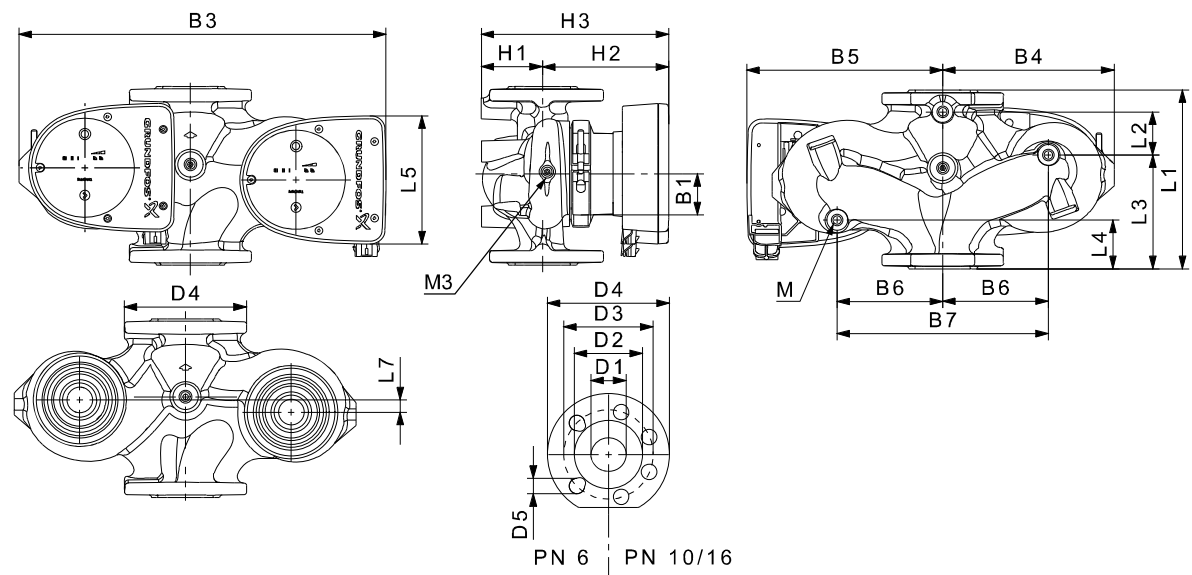


Speed	P1 [W]	I _{1/1} [A]
Min.	26.1	0.28
Max.	705	3.11

The pump incorporates overload protection.

Net weight [kg]	Gross weight [kg]	Ship. vol. [m ³]
62.1	72.0	0.208

Connections: See [Counter flanges](#), page 22.
 System pressure: Max. 1.0 MPa (10 bar). Also available as max. 1.6 MPa (16 bar).
 Liquid temperature: -10 to +110 °C (TF 110).
 Specific EEI: 0.22.



Pump type	Dimensions [mm]																	Rp				
	L1	L2	L3	L4	L5	L7	B1	B3	B4	B5	B6	B7	H1	H2	H3	D1	D2		D3	D4	D5	M
MAGNA1 D 100-60 F	450	243	147	147	204	0	84	551	252	299	135	270	103	330	434	100	160	170	220	19	12	1/4

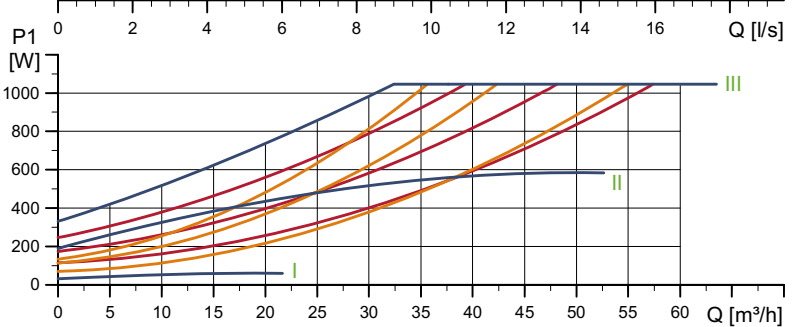
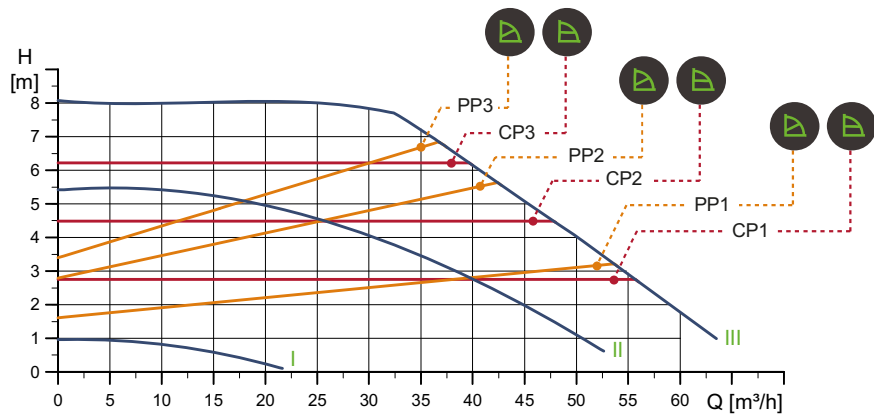
For product numbers, see page 130.

TM05 6359 4712

TM05 5275 3512

MAGNA1 100-80 F

1 x 230 V, 50/60 Hz

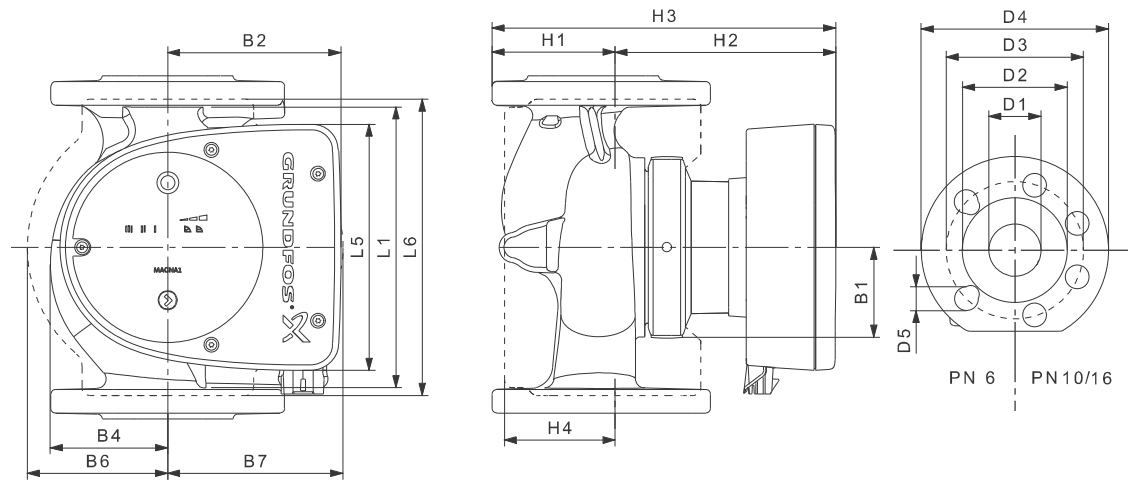


Speed	P1 [W]	I _{1/1} [A]
Min.	31.4	0.32
Max.	1067	4.71

The pump incorporates overload protection.

Net weight [kg]	Gross weight [kg]	Ship. vol. [m ³]
34.8	37.0	0.099

Connections: See [Counter flanges](#), page 22.
 System pressure: Max. 1.0 MPa (10 bar). Also available as max. 1.6 MPa (16 bar).
 Liquid temperature: -10 to +110 °C (TF 110).
 Specific EEI: 0.19.



Pump type	Dimensions [mm]																
	L1	L5	L6	B1	B2	B4	B6	B7	H1	H2	H3	H4	D1	D2	D3	D4	D5
MAGNA1 100-80 F	450	204	396	84	164	73	178	178	103	330	433	120	100	160	170	220	19

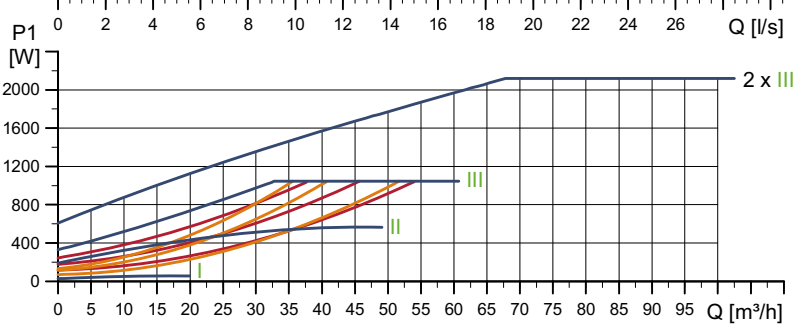
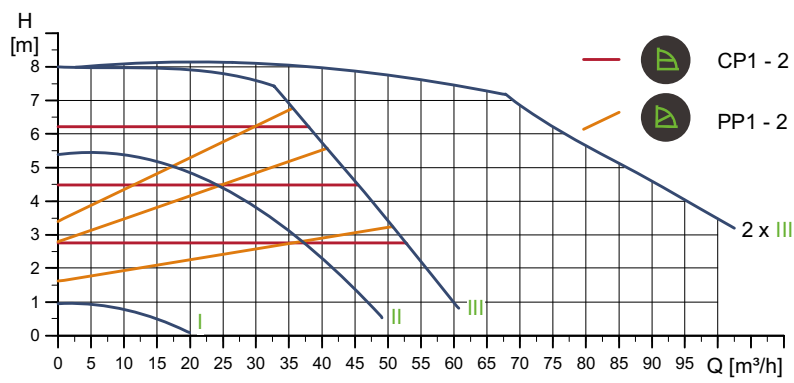
For product numbers, see page 130.

TM05 6313 4712

TM05 5276 3512

MAGNA1 D 100-80 F

1 x 230 V, 50/60 Hz

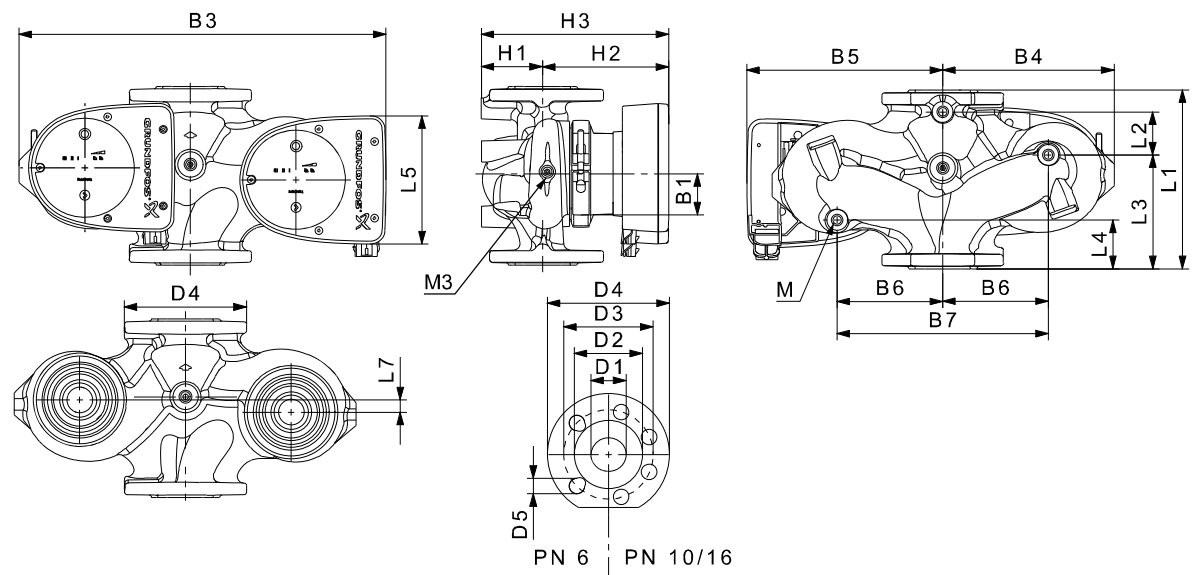


Speed	P1 [W]	I _{1/1} [A]
Min.	31.3	0.32
Max.	1066	4.70

The pump incorporates overload protection.

Connections: See [Counter flanges](#), page 22.
 System pressure: Max. 1.0 MPa (10 bar). Also available as max. 1.6 MPa (16 bar).
 Liquid temperature: -10 to +110 °C (TF 110).
 Specific EEI: 0.22.

Net weight [kg]	Gross weight [kg]	Ship. vol. [m ³]
62.3	72.2	0.208



Pump type	Dimensions [mm]																	Rp				
	L1	L2	L3	L4	L5	L7	B1	B3	B4	B5	B6	B7	H1	H2	H3	D1	D2		D3	D4	D5	M
MAGNA1 D 100-80 F	450	243	147	147	204	0	84	551	252	299	135	270	103	330	434	100	160	170	220	19	12	1/4

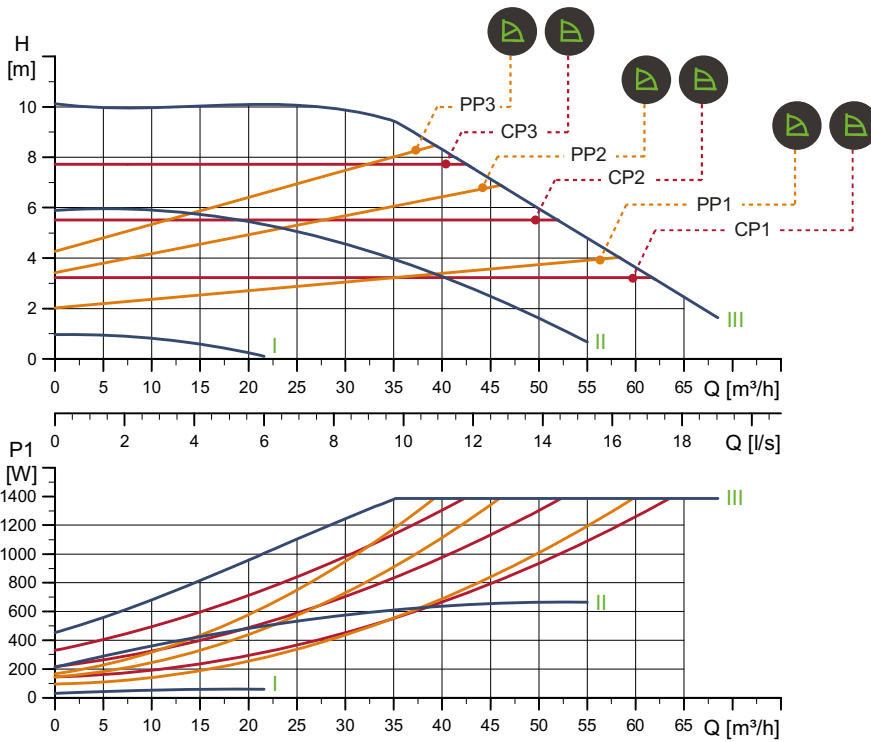
For product numbers, see page 130.

TM05 6360 4712

TM05 5275 3512

MAGNA1 100-100 F

1 x 230 V, 50/60 Hz

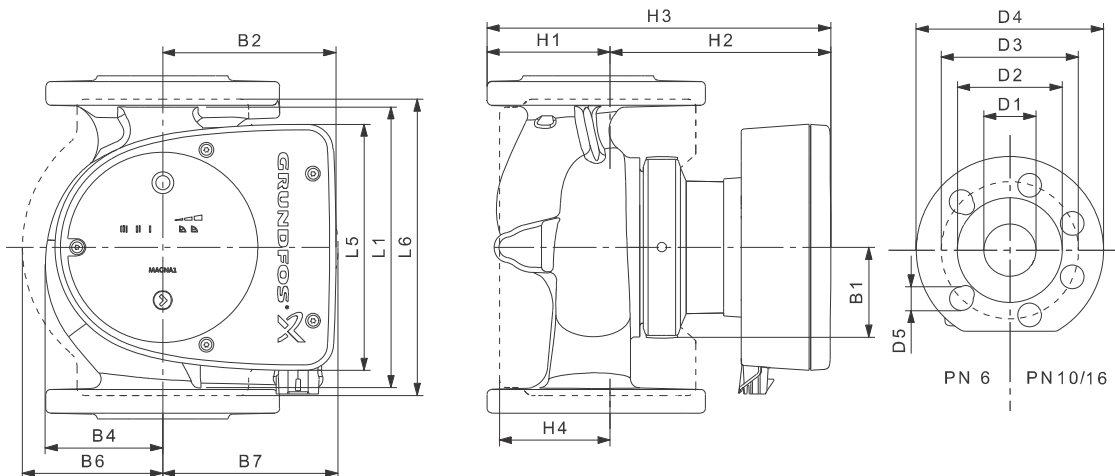


Speed	P1 [W]	I _{1/1} [A]
Min.	31.3	0.32
Max.	1413	6.23

The pump incorporates overload protection.

Net weight [kg]	Gross weight [kg]	Ship. vol. [m ³]
34.8	37.0	0.099

Connections: See [Counter flanges](#), page 22.
 System pressure: Max. 1.0 MPa (10 bar). Also available as max. 1.6 MPa (16 bar).
 Liquid temperature: -10 to +110 °C (TF 110).
 Specific EEI: 0.19.



Pump type	Dimensions [mm]																
	L1	L5	L6	B1	B2	B4	B6	B7	H1	H2	H3	H4	D1	D2	D3	D4	D5
MAGNA1 100-100 F	450	204	396	84	164	73	178	178	103	330	433	120	100	160	170	220	19

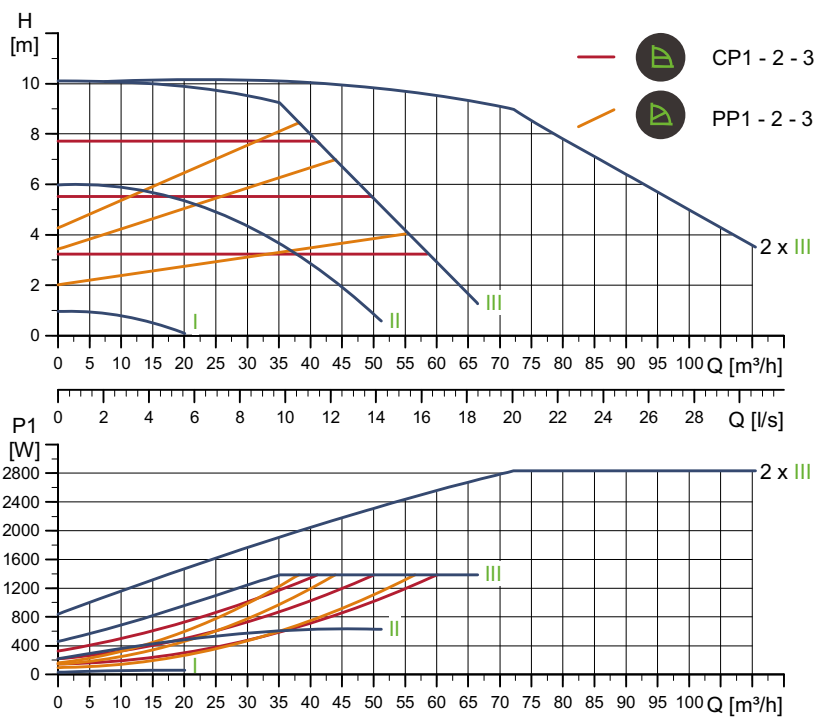
For product numbers, see page 130.

TM05 6314 4712

TM05 5276 3512

MAGNA1 D 100-100 F

1 x 230 V, 50/60 Hz

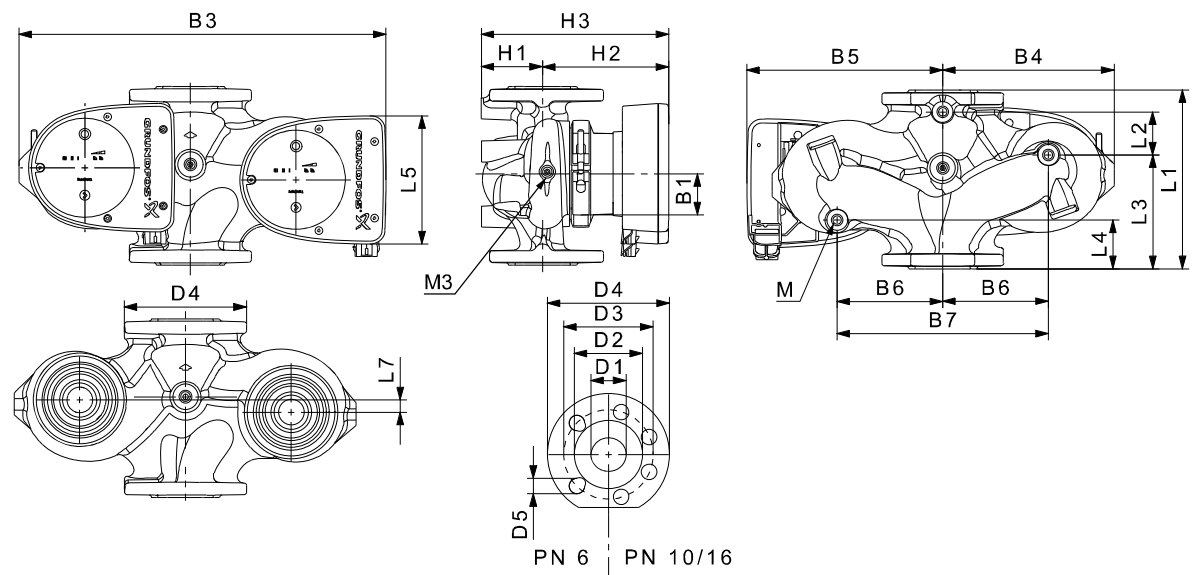


Speed	P1 [W]	I _{1/1} [A]
Min.	31.1	0.32
Max.	1413	6.23

The pump incorporates overload protection.

Net weight [kg]	Gross weight [kg]	Ship. vol. [m ³]
62.3	72.2	0.208

Connections: See [Counter flanges](#), page 22.
 System pressure: Max. 1.0 MPa (10 bar). Also available as max. 1.6 MPa (16 bar).
 Liquid temperature: -10 to +110 °C (TF 110).
 Specific EEI: 0.19.



Pump type	Dimensions [mm]																	Rp				
	L1	L2	L3	L4	L5	L7	B1	B3	B4	B5	B6	B7	H1	H2	H3	D1	D2		D3	D4	D5	M
MAGNA1 D 100-100 F	450	243	147	147	204	0	84	551	252	299	135	270	103	330	434	100	160	170	220	19	12	1/4

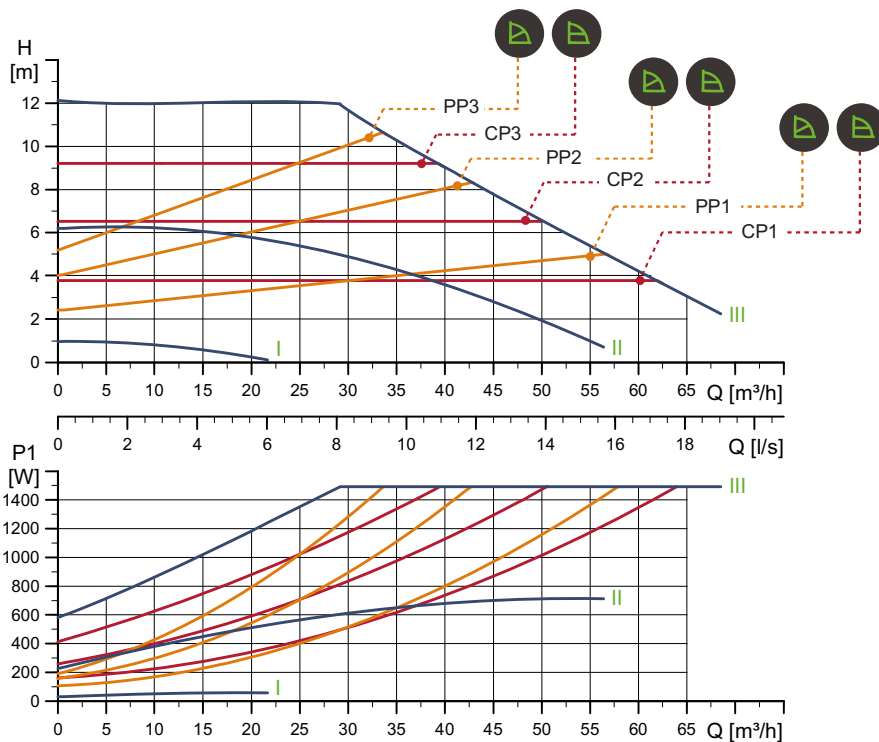
For product numbers, see page 130.

TM05 6361 4712

TM05 5275 3512

MAGNA1 100-120 F

1 x 230 V, 50/60 Hz

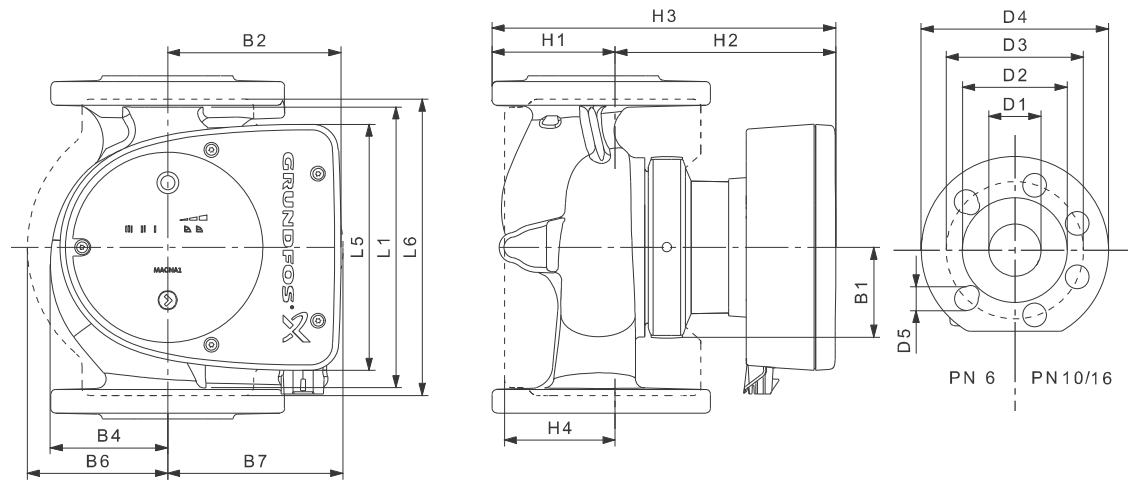


Speed	P1 [W]	I _{1/1} [A]
Min.	31.1	0.32
Max.	1523	6.73

The pump incorporates overload protection.

Net weight [kg]	Gross weight [kg]	Ship. vol. [m ³]
34.8	37.0	0.099

Connections: See [Counter flanges](#), page 22.
 System pressure: Max. 1.0 MPa (10 bar). Also available as max. 1.6 MPa (16 bar).
 Liquid temperature: -10 to +110 °C (TF 110).
 Specific EEI: 0.21.



Pump type	Dimensions [mm]																
	L1	L5	L6	B1	B2	B4	B6	B7	H1	H2	H3	H4	D1	D2	D3	D4	D5
MAGNA1 100-120 F	450	204	396	84	164	73	178	178	103	330	433	120	100	160	170	220	19

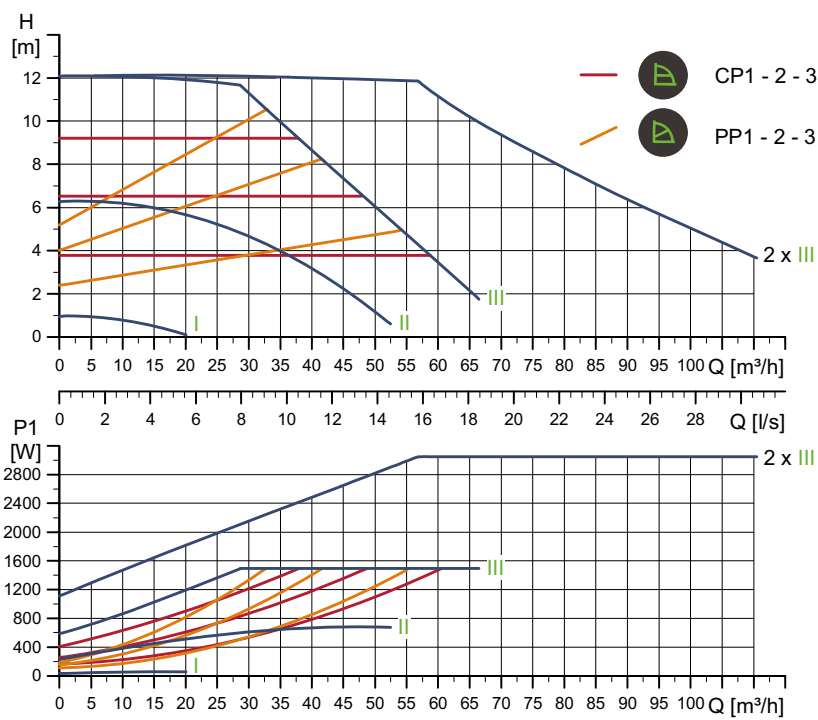
For product numbers, see page 130.

TM05 6315 4712

TM05 5276 3512

MAGNA1 D 100-120 F

1 x 230 V, 50/60 Hz

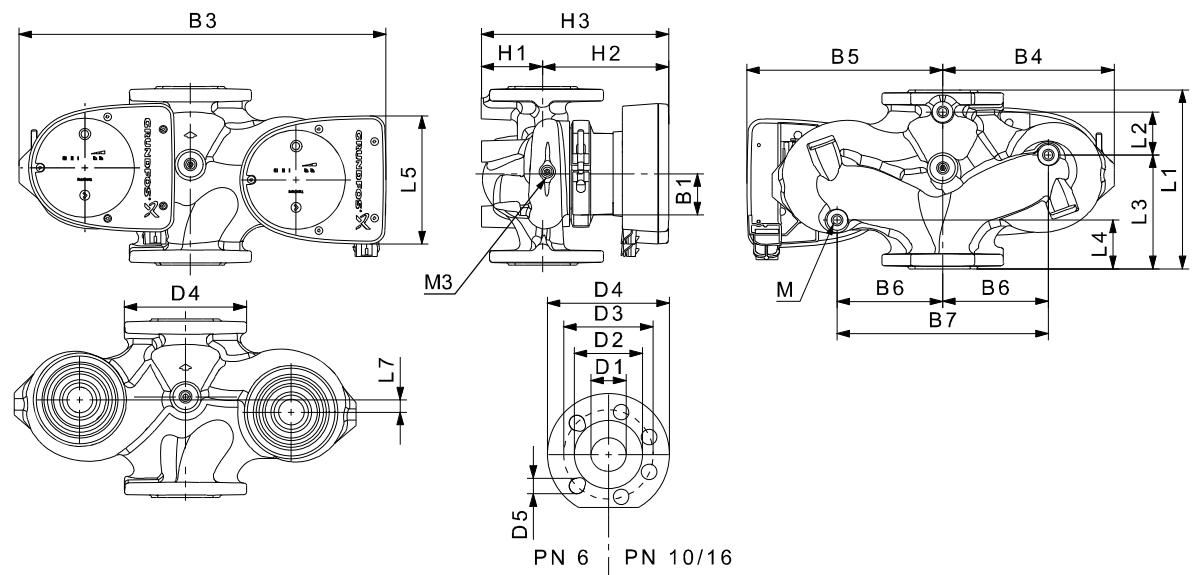


Speed	P1 [W]	I _{1/1} [A]
Min.	31.2	0.32
Max.	1521	6.71

The pump incorporates overload protection.

Net weight [kg]	Gross weight [kg]	Ship. vol. [m ³]
62.3	72.7	0.208

Connections: See [Counter flanges](#), page 22.
 System pressure: Max. 1.0 MPa (10 bar). Also available as max. 1.6 MPa (16 bar).
 Liquid temperature: -10 to +110 °C (TF 110).
 Specific EEI: 0.22.



Pump type	Dimensions [mm]																Rp					
	L1	L2	L3	L4	L5	L7	B1	B3	B4	B5	B6	B7	H1	H2	H3	D1		D2	D3	D4	D5	M
MAGNA1 D 100-120 F	450	243	147	147	204	0	84	551	252	299	135	270	103	330	434	100	160	170	220	19	12	1/4

For product numbers, see page 130.

TM05 6362 4712

TM05 5275 3512

11. Product numbers

MAGNA1 for the international market

Single-head pumps

Pump type	Port-to-port length [mm]	Threaded pipe connection		Data sheet Page
		Cast iron		
		PN 6/10	PN 16	
MAGNA1 25-40	180	97924153	97924147	31
MAGNA1 25-60	180	97924154	97924148	33
MAGNA1 25-80	180	97924144	97924149	35
MAGNA1 25-100	180	97924145	97924150	37
MAGNA1 25-120	180	97924146	97924161	39
MAGNA1 32-40	180	97924162	97924168	40
MAGNA1 32-60	180	97924163	97924169	44
MAGNA1 32-80	180	97924164	97924170	48
MAGNA1 32-100	180	97924165	97924171	52

Pump type	Port-to-port length [mm]	Flange connection				Data sheet Page
		Cast iron				
		PN 6	PN 10	PN 6/10	PN 16	
MAGNA1 32-40 F	220			98333824	98333822	54
MAGNA1 32-60 F	220			98333844	98333842	58
MAGNA1 32-80 F	220			98333864	98333862	62
MAGNA1 32-100 F	220			97924166	97924172	66
MAGNA1 32-120 F	220			97924167	97924173	68
MAGNA1 40-40 F	220			97924174	97924181	70
MAGNA1 40-60 F	220			97924175	97924182	72
MAGNA1 40-80 F	220			97924176	97924183	74
MAGNA1 40-100 F	220			97924177	97924184	76
MAGNA1 40-120 F	250			97924178	97924185	78
MAGNA1 40-150 F	250			97924179	97924186	80
MAGNA1 40-180 F	250			97924180	97924187	82
MAGNA1 50-40 F	240			97924188	97924195	84
MAGNA1 50-60 F	240			97924189	97924196	86
MAGNA1 50-80 F	240			97924190	97924197	88
MAGNA1 50-100 F	280			97924191	97924198	90
MAGNA1 50-120 F	280			97924192	97924199	92
MAGNA1 50-150 F	280			97924193	97924200	94
MAGNA1 50-180 F	280			97924194	97924201	96
MAGNA1 65-40 F	340			97924202	97924208	98
MAGNA1 65-60 F	340			97924203	97924209	100
MAGNA1 65-80 F	340			97924204	97924210	102
MAGNA1 65-100 F	340			97924205	97924211	104
MAGNA1 65-120 F	340			97924206	97924212	106
MAGNA1 65-150 F	340			97924207	97924213	108
MAGNA1 80-40 F	360	97924214	97924224		97924234	110
MAGNA1 80-60 F	360	97924215	97924225		97924235	112
MAGNA1 80-80 F	360	97924216	97924226		97924236	114
MAGNA1 80-100 F	360	97924217	97924227		97924237	116
MAGNA1 80-120 F	360	97924218	97924228		97924238	118
MAGNA1 100-40 F	450	97924219	97924229		97924239	120
MAGNA1 100-60 F	450	97924220	97924230		97924240	122
MAGNA1 100-80 F	450	97924221	97924231		97924241	124
MAGNA1 100-100 F	450	97924222	97924232		97924242	126
MAGNA1 100-120 F	450	97924223	97924233		98335134	128

Twin-head pumps

Pump type	Port-to-port length [mm]	Threaded pipe connection		Data sheet Page
		Cast iron		
		PN 6/10	PN 16	
MAGNA1 D 32-40	180	97924367	97924373	42
MAGNA1 D 32-60	180	97924368	97924374	46
MAGNA1 D 32-80	180	97924369	97924375	50
MAGNA1 D 32-100	180	97924370	97924376	53

Pump type	Port-to-port length [mm]	Flange connection				Data sheet Page
		Cast iron				
		PN 6	PN 10	PN 6/10	PN 16	
MAGNA1 D 32-40 F	220			98333830	98333828	56
MAGNA1 D 32-60 F	220			98333850	98333848	60
MAGNA1 D 32-80 F	220			98333870	98333868	64
MAGNA1 D 32-100 F	220			97924371	97924377	67
MAGNA1 D 32-120 F	220			97924372	97924378	69
MAGNA1 D 40-40 F	220			97924379	97924386	71
MAGNA1 D 40-60 F	220			97924380	97924387	73
MAGNA1 D 40-80 F	220			97924381	97924388	75
MAGNA1 D 40-100 F	220			97924382	97924389	77
MAGNA1 D 40-120 F	250			97924383	97924390	79
MAGNA1 D 40-150 F	250			97924384	97924391	81
MAGNA1 D 40-180 F	250			97924385	97924392	83
MAGNA1 D 50-40 F	240			97924393	97924400	85
MAGNA1 D 50-60 F	240			97924394	97924401	87
MAGNA1 D 50-80 F	240			97924395	97924402	89
MAGNA1 D 50-100 F	280			97924396	97924403	91
MAGNA1 D 50-120 F	280			97924397	97924404	93
MAGNA1 D 50-150 F	280			97924398	97924405	95
MAGNA1 D 50-180 F	280			97924399	97924406	97
MAGNA1 D 65-40 F	340			97924407	97924413	99
MAGNA1 D 65-60 F	340			97924408	97924414	101
MAGNA1 D 65-80 F	340			97924409	97924415	103
MAGNA1 D 65-100 F	340			97924410	97924416	105
MAGNA1 D 65-120 F	340			97924411	97924417	107
MAGNA1 D 65-150 F	340			97924412	97924418	109
MAGNA1 D 80-40 F	360	97924419	97924429		97924439	111
MAGNA1 D 80-60 F	360	97924420	97924430		97924440	113
MAGNA1 D 80-80 F	360	97924421	97924431		97924441	115
MAGNA1 D 80-100 F	360	97924422	97924432		97924442	117
MAGNA1 D 80-120 F	360	97924423	97924433		97924443	119
MAGNA1 D 100-40 F	450	97924424	97924434		97924444	121
MAGNA1 D 100-60 F	450	97924425	97924435		97924445	123
MAGNA1 D 100-80 F	450	97924426	97924436		97924446	125
MAGNA1 D 100-100 F	450	97924427	97924437		97924447	127
MAGNA1 D 100-120 F	450	97924428	97924438		97924448	129

MAGNA1 for the German market

Single-head pumps

Pump type	Port-to-port length [mm]	Threaded pipe connection		Data sheet Page
		Cast iron		
		PN 6/10	PN 16	
MAGNA1 25-40	180	97924531	97924536	31
MAGNA1 25-60	180	97924532	97924537	33
MAGNA1 25-80	180	97924533	97924538	35
MAGNA1 25-100	180	97924534	97924539	37
MAGNA1 25-120	180	97924535	97924540	39
MAGNA1 32-40	180	97924541	97924547	40
MAGNA1 32-60	180	97924542	97924548	44
MAGNA1 32-80	180	97924543	97924549	48
MAGNA1 32-100	180	97924544	97924550	52

Pump type	Port-to-port length [mm]	Flange connection				Data sheet Page
		Cast iron				
		PN 6	PN 10	PN 6/10	PN 16	
MAGNA1 32-40 F	220			98333825	98333823	54
MAGNA1 32-60 F	220			98333845	98333843	58
MAGNA1 32-80 F	220			98333865	98333863	62
MAGNA1 32-100 F	220			97924545	97924551	66
MAGNA1 32-120 F	220			97924546	97924552	68
MAGNA1 40-40 F	220			97924553	97924560	70
MAGNA1 40-60 F	220			97924554	97924561	72
MAGNA1 40-80 F	220			97924555	97924562	74
MAGNA1 40-100 F	220			97924556	97924563	76
MAGNA1 40-120 F	250			97924557	97924564	78
MAGNA1 40-150 F	250			97924558	97924565	80
MAGNA1 40-180 F	250			97924559	97924566	82
MAGNA1 50-40 F	240			97924567	97924574	84
MAGNA1 50-60 F	240			97924568	97924575	86
MAGNA1 50-80 F	240			97924569	97924576	88
MAGNA1 50-100 F	280			97924570	97924577	90
MAGNA1 50-120 F	280			97924571	97924578	92
MAGNA1 50-150 F	280			97924572	97924579	94
MAGNA1 50-180 F	280			97924573	97924580	96
MAGNA1 65-40 F	340			97924581	97924587	98
MAGNA1 65-60 F	340			97924582	97924588	100
MAGNA1 65-80 F	340			97924583	97924589	102
MAGNA1 65-100 F	340			97924584	97924590	104
MAGNA1 65-120 F	340			97924585	97924591	106
MAGNA1 65-150 F	340			97924586	97924592	108
MAGNA1 80-40 F	360	97924593	97924603		97924613	110
MAGNA1 80-60 F	360	97924594	97924604		97924614	112
MAGNA1 80-80 F	360	97924595	97924605		97924615	114
MAGNA1 80-100 F	360	97924596	97924606		97924616	116
MAGNA1 80-120 F	360	97924597	97924607		97924617	118
MAGNA1 100-40 F	450	97924598	97924608		97924618	120
MAGNA1 100-60 F	450	97924599	97924609		97924619	122
MAGNA1 100-80 F	450	97924600	97924610		97924620	124
MAGNA1 100-100 F	450	97924601	97924611		97924621	126
MAGNA1 100-120 F	450	97924602	97924612		97924622	128

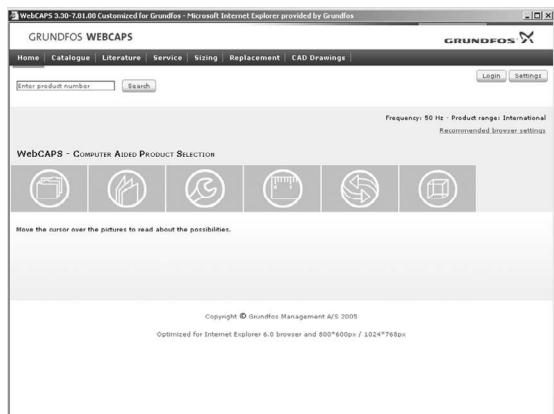
Twin-head pumps

Pump type	Port-to-port length [mm]	Threaded pipe connection		Data sheet Page
		Cast iron		
		PN 6/10	PN 16	
MAGNA1 D 32-40	180	97924747	97924753	42
MAGNA1 D 32-60	180	97924748	97924754	46
MAGNA1 D 32-80	180	97924749	97924755	50
MAGNA1 D 32-100	180	97924750	97924756	53

Pump type	Port-to-port length [mm]	Flange connection				Data sheet Page
		Cast iron				
		PN 6	PN 10	PN 6/10	PN 16	
MAGNA1 D 32-40 F	220			98333831	98333829	56
MAGNA1 D 32-60 F	220			98333851	98333849	60
MAGNA1 D 32-80 F	220			98333871	98333869	64
MAGNA1 D 32-100 F	220			97924751	97924757	67
MAGNA1 D 32-120 F	220			97924752	97924758	69
MAGNA1 D 40-40 F	220			97924759	97924766	71
MAGNA1 D 40-60 F	220			97924760	97924767	73
MAGNA1 D 40-80 F	220			97924761	97924768	75
MAGNA1 D 40-100 F	220			97924762	97924769	77
MAGNA1 D 40-120 F	250			97924763	97924770	79
MAGNA1 D 40-150 F	250			97924764	97924771	81
MAGNA1 D 40-180 F	250			97924765	97924772	83
MAGNA1 D 50-40 F	240			97924773	97924780	85
MAGNA1 D 50-60 F	240			97924774	97924781	87
MAGNA1 D 50-80 F	240			97924775	97924782	89
MAGNA1 D 50-100 F	280			97924776	97924783	91
MAGNA1 D 50-120 F	280			97924777	97924784	93
MAGNA1 D 50-150 F	280			97924778	97924785	95
MAGNA1 D 50-180 F	280			97924779	97924786	97
MAGNA1 D 65-40 F	340			97924787	97924793	99
MAGNA1 D 65-60 F	340			97924788	97924794	101
MAGNA1 D 65-80 F	340			97924789	97924795	103
MAGNA1 D 65-100 F	340			97924790	97924796	105
MAGNA1 D 65-120 F	340			97924791	97924797	107
MAGNA1 D 65-150 F	340			97924792	97924798	109
MAGNA1 D 80-40 F	360	97924799	97924809		97924819	111
MAGNA1 D 80-60 F	360	97924800	97924810		97924820	113
MAGNA1 D 80-80 F	360	97924801	97924811		97924821	115
MAGNA1 D 80-100 F	360	97924802	97924812		97924822	117
MAGNA1 D 80-120 F	360	97924803	97924813		97924823	119
MAGNA1 D 100-40 F	450	97924804	97924814		97924824	121
MAGNA1 D 100-60 F	450	97924805	97924815		97924825	123
MAGNA1 D 100-80 F	450	97924806	97924816		97924826	125
MAGNA1 D 100-100 F	450	97924807	97924817		97924827	127
MAGNA1 D 100-120 F	450	97924808	97924818		97924828	129

12. Further product documentation

WebCAPS

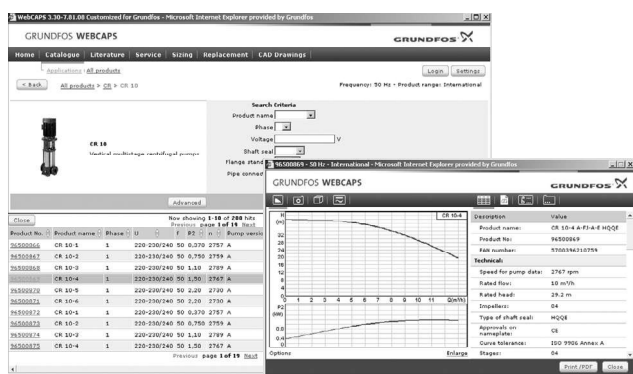


WebCAPS is a **Web-based Computer Aided Product Selection** program available on www.grundfos.com.

WebCAPS contains detailed information on more than 220,000 Grundfos products in more than 30 languages.

Information in WebCAPS is divided into six sections:

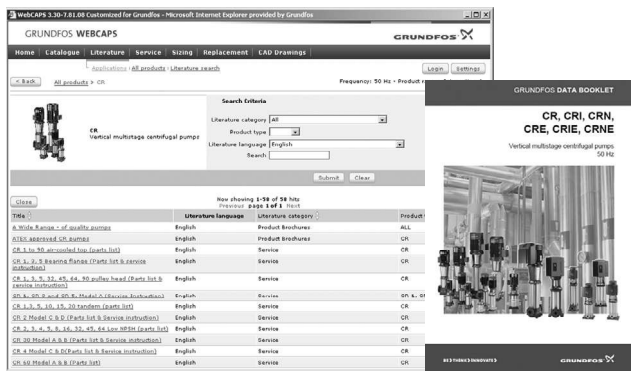
- Catalogue
- Literature
- Service
- Sizing
- Replacement
- CAD drawings.



Catalogue

Based on fields of application and pump types, this section contains the following:

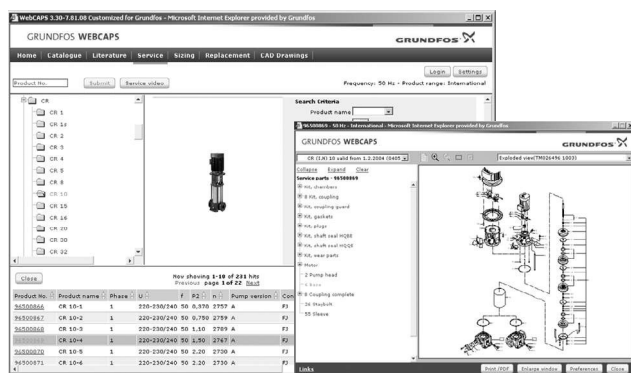
- technical data
- curves (QH, Eta, P1, P2, etc.) which can be adapted to the density and viscosity of the pumped liquid and show the number of pumps in operation
- product photos
- dimensional drawings
- wiring diagrams
- quotation texts, etc.



Literature

This section contains all the latest documents of a given pump, such as

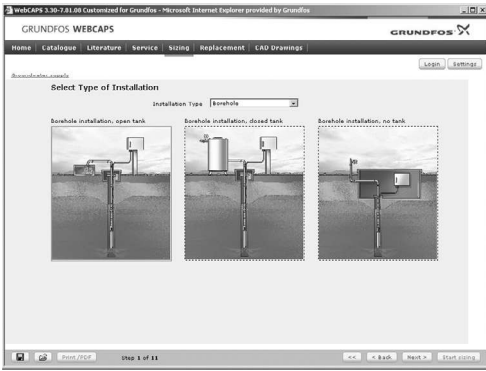
- data booklets
- installation and operating instructions
- service documentation, such as Service kit catalogue and Service kit instructions
- quick guides
- product brochures.




Service

This section contains an easy-to-use interactive service catalogue. Here you can find and identify service parts of both existing and discontinued Grundfos pumps.

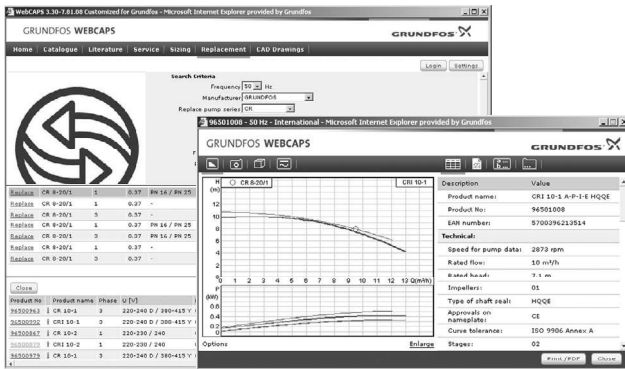
Furthermore, the section contains service videos showing you how to replace service parts.




Sizing 

This section is based on different fields of application and installation examples and gives easy step-by-step instructions in how to size a product:

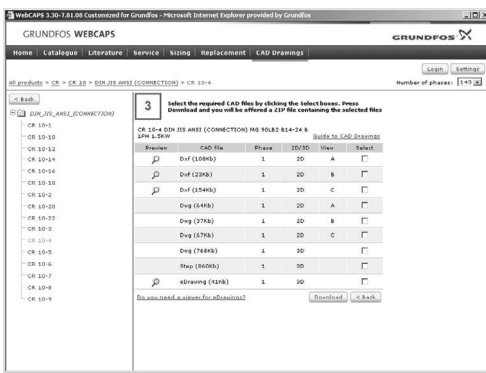
- Select the most suitable and efficient pump for your installation.
- Carry out advanced calculations based on energy, consumption, payback periods, load profiles, life cycle costs, etc.
- Analyse your selected pump via the built-in life cycle cost tool.
- Determine the flow velocity in wastewater applications, etc.



Replacement 

In this section you find a guide to selecting and comparing replacement data of an installed pump in order to replace the pump with a more efficient Grundfos pump. The section contains replacement data of a wide range of pumps produced by other manufacturers than Grundfos.

Based on an easy step-by-step guide, you can compare Grundfos pumps with the one you have installed on your site. When you have specified the installed pump, the guide will suggest a number of Grundfos pumps which can improve both comfort and efficiency.



CAD drawings 

In this section, it is possible to download 2-dimensional (2D) and 3-dimensional (3D) CAD drawings of most Grundfos pumps.

These formats are available in WebCAPS:

- 2-dimensional drawings:
- .dxf, wireframe drawings
 - .dwg, wireframe drawings.
- 3-dimensional drawings:
- .dwg, wireframe drawings (without surfaces)
 - .stp, solid drawings (with surfaces)
 - .eprt, E-drawings.



WinCAPS



Fig. 24 WinCAPS DVD

WinCAPS is a **Windows-based Computer Aided Product Selection** program containing detailed information on more than 220,000 Grundfos products in more than 30 languages.

The program contains the same features and functions as WebCAPS, but is an ideal solution if no internet connection is available.

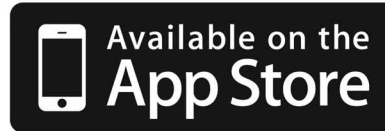
WinCAPS is available on DVD and updated once a year.

GO CAPS

Mobile solution for professionals on the GO!



CAPS functionality on the mobile workplace.



Subject to alterations.

98091807 1212

ECM: 1104638

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