Calliope Pumps

PRODUCT CATALOG 2026

Smart Water Pump Systems &
PM VFD Technology



ISO9001 | CE Certified | SGS Approved

www.calliopepump.com

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HISTORY | SINCE 1958

1958
The first motor workshop



1968
Hand-assembling motors



1978
Assembling on the ground



1989



1994
Cooperation with a German company



2001
MinDong Electric Group established



2019
First intelligent pump developed — SPS-90



2023
Full range launched — SPS / SCS



2024
SCS / ICP100 / P800-3 launched



2025
PB320EA / Z800 launched



SINCE 1958

ABOUT US

Fujian Calliope Pumps Co., Ltd.

An independent smart pump company under Mindong Group. We design and manufacture household permanent magnet variable frequency (PM VFD) water pumps for homes, villas, apartments and farms.

Energy Saving ≥60%

PM VFD technology saves 60% or more energy versus a conventional fixed-speed pump at the same duty point.

Ultra-Silent ≤40 dB

Water-cooled motor and VFD speed control for quiet operation.

CE Certified

All single-phase models CE certified. Quality controlled from motor to finished pump.

Smart Control

Constant pressure, self-priming, dry-run protection, fault alarm and self-check.

Mindong Group — founded 1958, responsible for R&D and product design.

In-house motor R&D and production — OEM / ODM & private label available.

Full range — 18 models: SPS-90 · SPS90-3 · ICP100A · ICP100F · ICP106F · ICP102-50

Stainless multistage: SCS90P-3 · SCS100P-3 · PYPZ-E · PYS-E · SG95 · PB320EA

New & DC 24 V: Z400 · P800-3 · P800/1500 · MT24-25 · ISC-200 · ISC2-200



1958	50,000 m²	200+	20+
Founded	Factory	Staff	Engineers

INTELLIGENT | EFFICIENT | PROFESSIONAL | CUSTOMIZABLE

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R&D & QUALITY

PM VFD Technology · Test Laboratory · 100% Inspection



Test Laboratory



Smart Manufacturing



Quality Control

IQC
Incoming material inspection

IPQC
In-process quality control

FQC
Final product inspection

100% Pressure Test
Ensure stable performance

MOTOR TECHNOLOGY

PERMANENT MAGNET vs ASYNCHRONOUS MOTOR

The motor inside every Calliope pump — and why it matters

CALLIOPE PM VFD MOTOR

≤40

Relative energy use at the same duty point

- Permanent magnet rotor — no rotor copper loss
- VFD stepless speed control — 5 power stages
- Constant pressure, settable 10–30 m
- Soft start — low inrush current
- Dry-run & overload protection, fault alarm, self-check

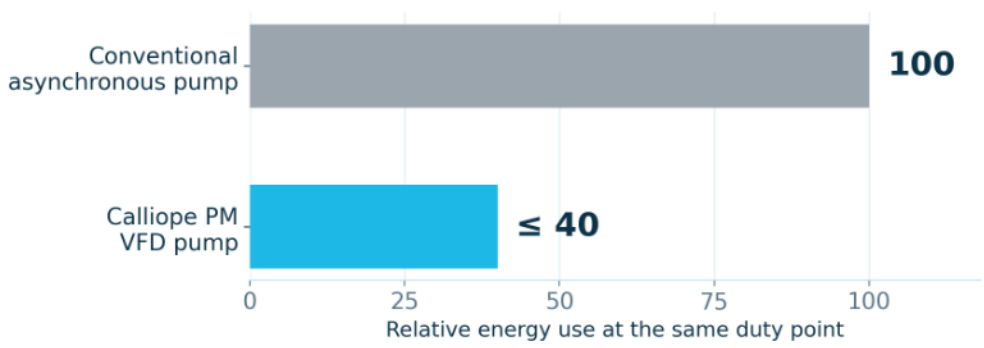
CONVENTIONAL ASYNCHRONOUS MOTOR

100

Relative energy use — baseline

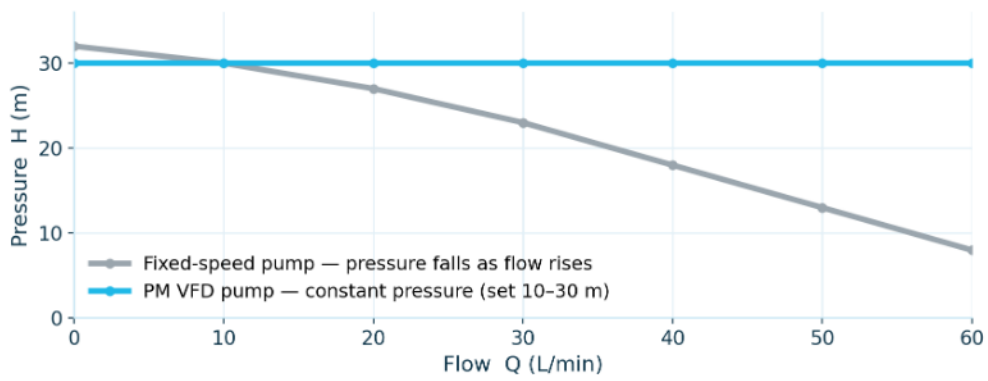
- Induction rotor — rotor copper loss
- Fixed speed — full speed even at low demand
- Pressure rises and falls with flow
- Direct start — high inrush, typically 5–7× rated
- No built-in protection — needs external controls

ENERGY USE



At the same flow and head duty point under constant-pressure conditions.

PRESSURE vs FLOW



Typical curve shapes — the PM pump holds the set pressure; the fixed-speed pump does not.

Same pump, same duty point — the PM VFD motor uses 60% or less energy.

Comparison basis: same flow and head duty point under constant-pressure conditions, versus a conventional fixed-speed pump of the same power. Based on our factory test data, available on request.

≥60%
Energy saving vs fixed-speed

10–30 m
Constant pressure, settable

≤40 dB
Quiet operation — SPS-90

SELECTION GUIDE

Calliope Pumps Selection Guide

How to choose the right Calliope smart booster pump. Calliope pumps use permanent magnet motors with integrated variable-frequency control. The pump adjusts its speed to the water actually in use, so pressure stays steady and the motor does not run at full load all the time. Use the four steps below to match a model to your customer's site. If you send us the details at the end, our engineers will confirm the choice.

01 /

Step 1. Define the duty point

Two numbers decide the pump: the pressure needed at the highest or farthest outlet, and the peak flow when several outlets run at once. Required head = height from the water source to the highest outlet + pipe friction loss + pressure wanted at the tap (2 bar ≈ 20 m). Peak flow = the outlets likely to run together (shower, washing machine, kitchen, garden). Choose a model whose curve covers this point with some margin. Do not size for the extreme case, because the pump regulates itself at partial load.

02 /

Step 2. Check the water source

Mains or rooftop tank: most booster models suit this. Tank, cistern or well below the pump: choose a self-priming model such as ICP100F or ICP106F. Maximum suction lift is 7–9 m depending on the model. Water quality: clean, non-corrosive water, pH 6.5–8.5, no solid particles above 0.2 mm. Liquid temperature up to 70°C on most models (PYPZ-E and PYS-E: 55°C).

03 /

Step 3. Check the power supply

Most models accept a wide input range (170–260 V, 50–60 Hz), which suits areas with unstable voltage. For 110/115/127 V or three-phase supply, tell us your local standard. Voltage and phase customization is available on selected models.



04 /

Step 4. Choose the control and power stage

Constant pressure (ICP100F, ICP106F): pressure can be set between 10 and 30 m. Best for villas and multi-point use. Five adjustable power stages (SPS-90, SPS90-3, SCS90P-3, SCS100P-3, ICP100A, ICP102-50): one model covers several head and flow ranges, so distributors can stock fewer SKUs. Smart protection against dry running and overload, with fault alarm and self-check.

Application	Recommended models	Key data
Apartment, small house, quiet operation	SPS-90	17–32 m, up to 60 L/min, noise ≤40 dB
Villa, duplex, higher head	SPS90-3, SCS90P-3	up to 45 m, 70–75 L/min
Tank or well supply with constant pressure	ICP100F, ICP106F	38–42 m, 86 L/min, self-priming
Stainless steel, higher head	SCS100P-3, PYPZ-E, PYS-E	30–75 m, 55–165 L/min
Large house, school, small building	ICP100A	up to 38 m, up to 102 L/min
Large flow: irrigation, hotel, light industry	ICP102-50	500 L/min, up to 28 m
RV, solar water, water heater boost	MT24-25, ISC-200, ISC2-200	DC24V, 200 W, 25 m, 25 L/min, IP65

05 /

Regional notes for importers

Americas: 60 Hz grid and 110–127 V supply are common. Confirm voltage before ordering.
Southeast Asia: rooftop tanks and unstable mains pressure. The wide voltage range and constant-pressure models fit well.
Middle East: underground tanks and high ambient temperature. Choose self-priming models and check the 0–40°C ambient limit at the install site.
Eastern Europe: old pipe networks and well water. Check water quality and the 10 bar maximum working pressure.

06 /

Operating advice

Keep the duty point inside the pump's working range. Running far outside it overloads the motor. Leave at least 30 cm of free space around the pump for ventilation (ICP100F and ICP106F). Install a check valve on the suction line for tank or well systems. Every pump is water-cooled, with a ceramic shaft and bearings, so there is no fan noise.

07 /

Certificates and documents

Certificates available on request. Please tell us your target market so we can send the matching documents.

08 /

Get a model recommendation

Send us these seven items and we will reply with a model and a quotation:

1. Country and local voltage / frequency
2. Water source (mains, rooftop tank, underground tank, well)
3. Number of floors and outlets
4. Required pressure and peak flow
5. Installation environment (indoor, outdoor, ambient temperature)
6. Order type (stock model, private label, OEM/ODM) and estimated quantity
7. Certificates required for your market (available on request)

A · Single-phase single-stage	SPS-90 · ICP100A · ICP100F · ICP106F · ICP102-50
B · Stainless multistage	SPS90-3 · SCS90P-3 · SCS100P-3 · PYPZ-E · PYS-E
C · DC 24 V	MT24-25 · ISC-200 · ISC2-200
New	SG95 · PB320EA · Z400 · P800-3 · P800/1500

SPS SERIES

SPS-90

Intelligent Inverter Booster Pump



INTRODUCTION

- Small size but higher efficiency and bigger flow, with super-quiet operation.
- Friendly Human-Machine interface. Fully automatic operation by our developed micro controller.
- Intelligent diagnose and alarm for abnormal situations, with failure protections and automatic voltage adjustment.
- Permanent magnet and frequency conversion technology, up to 60% energy saving. Customized outputs, 5 stages adjustable for actual demands.
- Adopt ceramic shaft and bearing build food grade safety.

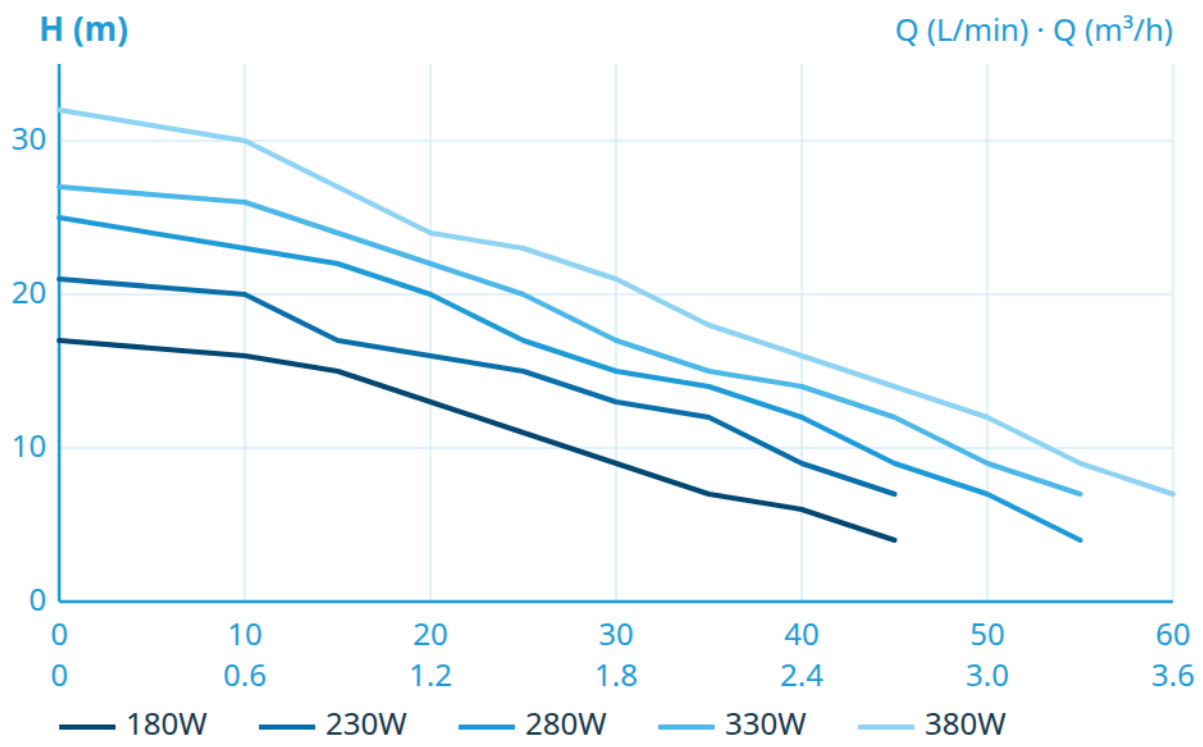
CHARACTERS

- Stable performance: between 170–270 V, 50–60 Hz, the pump performance can be stabilized within 5%.
- Smaller size, lighter weight, higher efficiency, bigger flow.
- Easy operation: pump can automatically run and stop. Only 2 buttons, friendly Human-Machine interface.
- Intelligent diagnosis: the pump will alarm, self-check, and predict failure in abnormal situations.
- Water cooling for driving motor and controller, no fan cooling can reduce the noise and increase the motor efficiency.
- Pump casting parts have electrophoresis treatment, ceramic shaft and bearings.
- Super silence: running noise level ≤ 40 dB.

TECHNICAL DATA

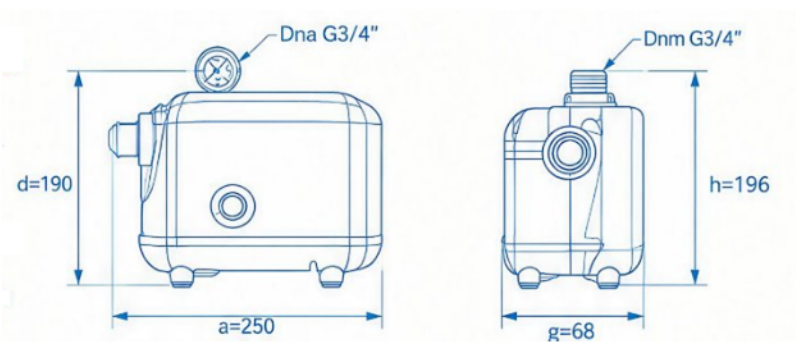
Type	Power kW	Power HP	Current A	Qmax L/min	Hmax m	Speed r/min	Suct. max m
180W	0.18	0.25	1.45	47	17	5000	7
230W	0.23	0.30	1.8	51	21	5000	7
280W	0.28	0.38	2.0	55	25	5000	7
330W	0.33	0.45	2.4	58	27	5000	7
380W	0.38	0.5	2.7	60	32	5000	7

Q-H CURVE



OVERALL AND MOUNTING DIMENSION

Model	Dna	Dnm	a	d	g	h	G.W. (kg)
SPS90	3/4"	3/4"	250	190	68	196	5.4



Super Silence
Noise level ≤40 dB

Human-Machine Interface
2 buttons, easy operation

Frequency Conversion
Energy saving ≥60%

Fully Automatic
Closed-loop control & protections

Wide Frequency · Voltage
50–60 Hz, 170–270 V

Customized Outputs
5 stages adjustable

SPS SERIES

SPS90-3

Permanent Magnet Variable Frequency Booster Pump



FEATURES

- Stable performance: wide voltage 170–260 V, wide frequency 50–60 Hz.
- Smaller size, lighter weight, higher efficiency, lower noise and stronger function.
- Simple operation: pump can run and stop automatically according to the user's requirements, with only 2 buttons.
- Smart fault diagnosis: pump will alarm, self-check and fault prediction under abnormal conditions.
- Water-cooled motor and controller, no fan cooling, which can reduce noise and improve motor efficiency.
- Stainless steel precision casting pump body, ceramic shaft and ceramic bearing ensure water-using safety.

Note: Adjust five different power stages according to the actual situation.

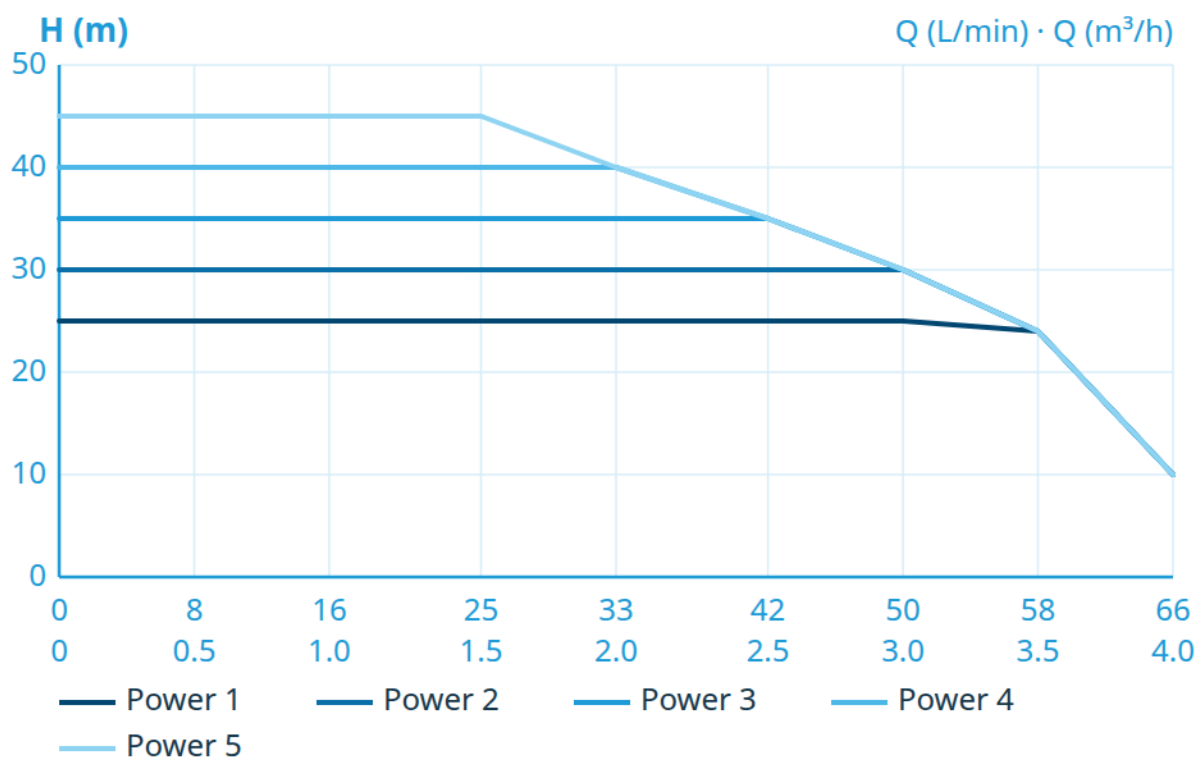
WORKING CONDITIONS

- Thin, clean, non-solidifying, non-flammable and non-explosive liquid.
- No solid particles and fibers (less than 0.2 mm in diameter).
- Liquid temperature: 5–70°C, PH: 6.5–8.5.
- Ambient temperature: 0–40°C, relative humidity: max. 85% (RH).
- The inlet minimum flow is 3 L/min, max. working pressure: 10 bar.

TECHNICAL DATA

Power	Min kW	Max kW	Current A	Qmax L/min	Hmax m	Suct. max m
Power 1	0.27	0.8	5.5	70	25	7
Power 2	0.33	0.8	5.5	70	30	7
Power 3	0.41	0.8	5.5	70	35	7
Power 4	0.49	0.8	5.5	70	40	7
Power 5	0.58	0.8	5.5	70	45	7

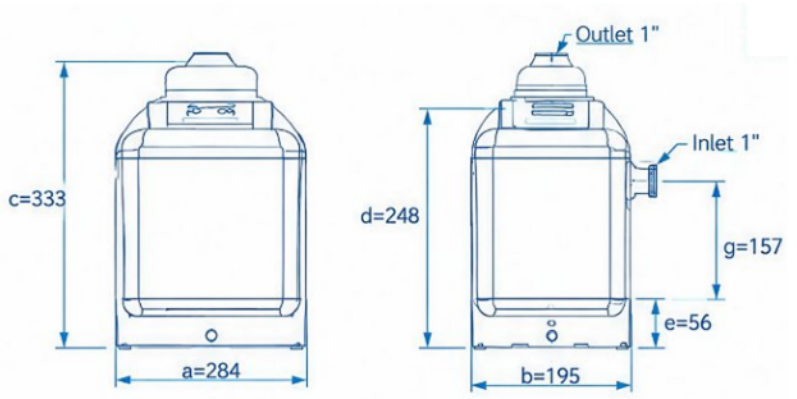
Q-H CURVE



INSTALL DIMENSION

Model	Inlet	Outlet	a	b	c	d	e	f	g	Kg
SPS90-3	1"	1"	284	195	333	248	56	18	157	9.5

Package: carton with plywood tray. Carton dimension: 32.5 × 33.5 × 37 cm.



Frequency Conversion
Energy saving ≥60%

Wide Frequency
Frequency range: 50–60 Hz

Man-machine Interface
Multiple options to meet your needs

Automatic
Smart control panel, operate and protect automatically

Wide Voltage
Adjust voltage automatically: 170–260 V

Ultra-quiet
Noise standard ≤55 dB

SG SERIES

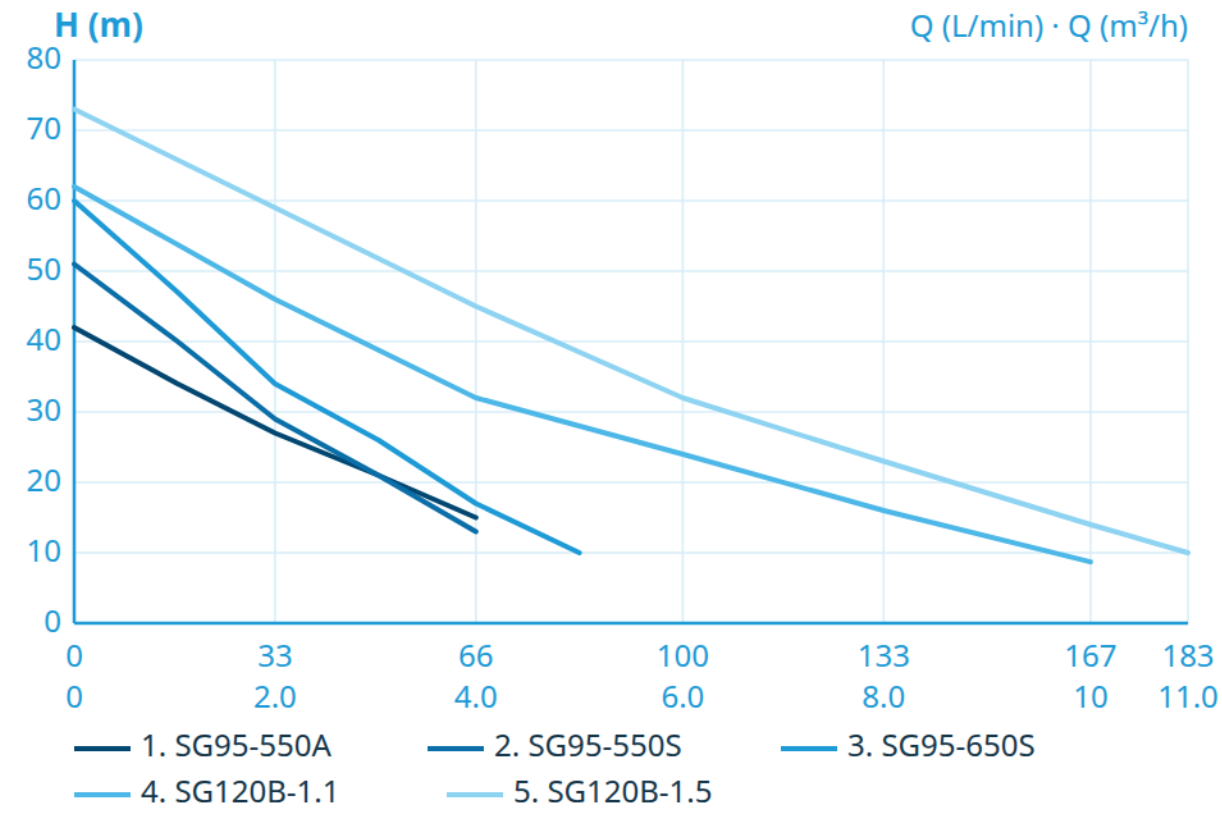
SG95 Permanent Magnet Centrifugal Pipe Pump



Technical Data — Single-phase motor

Model	Power kW	Power HP	Current A	Qmax L/min	Hmax m
SG95-550A	0.55	0.75	3.9	86	42
SG95-550S	0.55	0.75	3.9	75	51
SG95-650S	0.65	0.87	4.5	80	60
SG120B-1.1	1.1	1.5	7.5	164	62
SG120B-1.5	1.5	2	10	178	73

Q-H CURVE



FEATURES

- Stable performance: wide voltage 170–260 V, wide frequency 50–60 Hz.
- Smaller, lighter, more efficient, quieter and more powerful.
- Easy operation: automatic start/stop, only 2 buttons.
- Intelligent diagnosis: alarms, self-checks and predicts faults under abnormal conditions.
- Water-cooled motor and controller, no fan: lower noise, higher efficiency.
- Ceramic shaft and ceramic bearing ensure water-using safety.
- Maximum outlet pressure: inlet pressure + 3.8 bar.

Frequency Conversion
Energy saving ≥60%

Wide Frequency
Frequency range: 50–60 Hz

Man-machine Interface
Multiple options to meet your needs

Automatic
Smart control panel, operate and protect automatically

Wide Voltage
Adjust voltage automatically: 170–260 V

Ultra-quiet
Noise standard ≤40 dB

WORKING CONDITIONS

- Ambient temperature: 0–40°C.
- Liquid temperature: 5–70°C.
- Max. working pressure: 10 bar.

OVERALL DIMENSION (mm)

Model	Inlet	Outlet	a	b	c	d
SG95-550A	1"	1"	95	273	62	81
SG95-550S	1"	1"	95	249	62	81
SG95-650S	1"	1"	95	268	62	81
SG120B-1.1	1.25"	1.25"	123	351	62	88.5
SG120B-1.5	1.25"	1.25"	95	273	62	81

Model	Package A	Package B	Package H	Package Kg
SG95-550A	350	115	115	5.8
SG95-550S	326	115	115	—
SG95-650S	350	115	115	—
SG120B-1.1	—	—	—	—
SG120B-1.5	—	—	—	—

PB SERIES

PB320EA

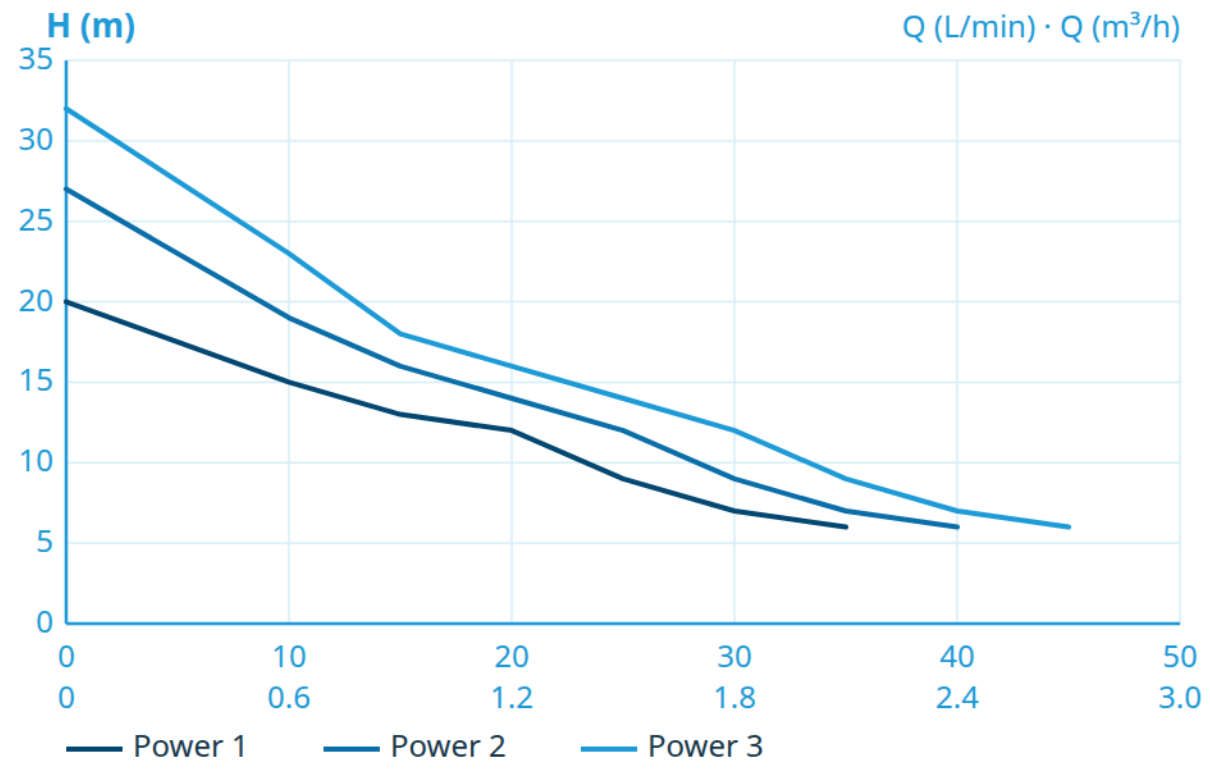
Permanent Magnet Booster Pump



TYPE	Power kW	Power HP	Current A	Qmax L/min	Hmax m	Suctmax m
Power 1	0.09	0.12	0.44	38	20	6
Power 2	0.12	0.16	0.57	43	27	6
Power 3	0.14	0.18	0.66	46	32	6

Note: Three adjustable settings (Power 1–3) to suit different water pressure requirements.

Q-H CURVE



FEATURES

- Ultra-wide voltage range: 160–265 V, 50–60 Hz.
- Ultra-low noise, as low as 35 dB (water lubrication required).
- Corrosion-resistant treatment of castings.
- Two working modes, automatic and manual, freely switchable.
- Three adjustable power settings to suit different water-pressure requirements.
- Intelligent start/stop prevents frequent cycling and failure to stop.
- Fully protective casing, suitable for outdoor installation.
- Safe low-voltage DC supply for the permanent magnet motor.
- Saves over 42% electricity versus traditional electric pumps.

Frequency Conversion
Energy saving ≥42%

Wide Frequency
Frequency range: 50–60 Hz

Man-machine Interface
Multiple options to meet your needs

Automatic
Smart control panel, operate and protect automatically

Wide Voltage
Adjust voltage automatically: 160–265 V

Ultra-quiet
Noise standard ≤40 dB

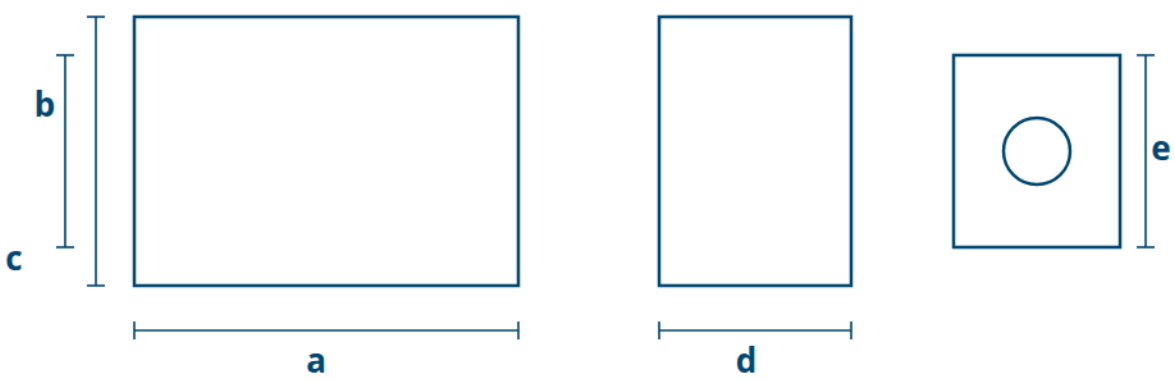
APPLICATIONS

- Home water supply and garden irrigation
- Long-distance water supply and equipment matching
- Supports outdoor unprotected installation
- Clean water or non-corrosive liquids without solid particles

OPERATING LIMITS

- Maximum ambient temperature: +40°C
- Maximum liquid temperature: +50°C
- Insulation class: Class B
- Protection rating: IP44
- Working mode: S1
- Input voltage: Single-phase AC 160–265 V / 50–60 Hz

OVERALL AND MOUNTING DIMENSION



Model	Inlet	Outlet	a	b	c	d	e	Kg
PB320EA	3/4"	3/4"	123	180	150	103	103	3

Package: Carton with Plywood Tray · Carton Dimension: 29.5 × 21 × 20.8 cm

SCS SERIES

SCS90P-3

Permanent Magnet Variable Frequency Multistage Stainless Steel Pump



FEATURES

- Stable performance: wide voltage 170–260 V, wide frequency 50–60 Hz.
- Smaller size, lighter weight, higher efficiency, lower noise and stronger function.
- Simple operation: pump can run and stop automatically according to the user's requirements, with only 2 buttons.
- Smart fault diagnosis: pump will alarm, self-check and fault prediction under abnormal conditions.
- Water-cooled motor and controller, no fan cooling, which can reduce noise and improve motor efficiency.
- Stainless steel precision casting pump body, ceramic shaft and ceramic bearing ensure water-using safety.
- The maximum outlet pressure can be inlet pressure plus 3.8 bar.

Note: Adjust five different power stages according to the actual situation.

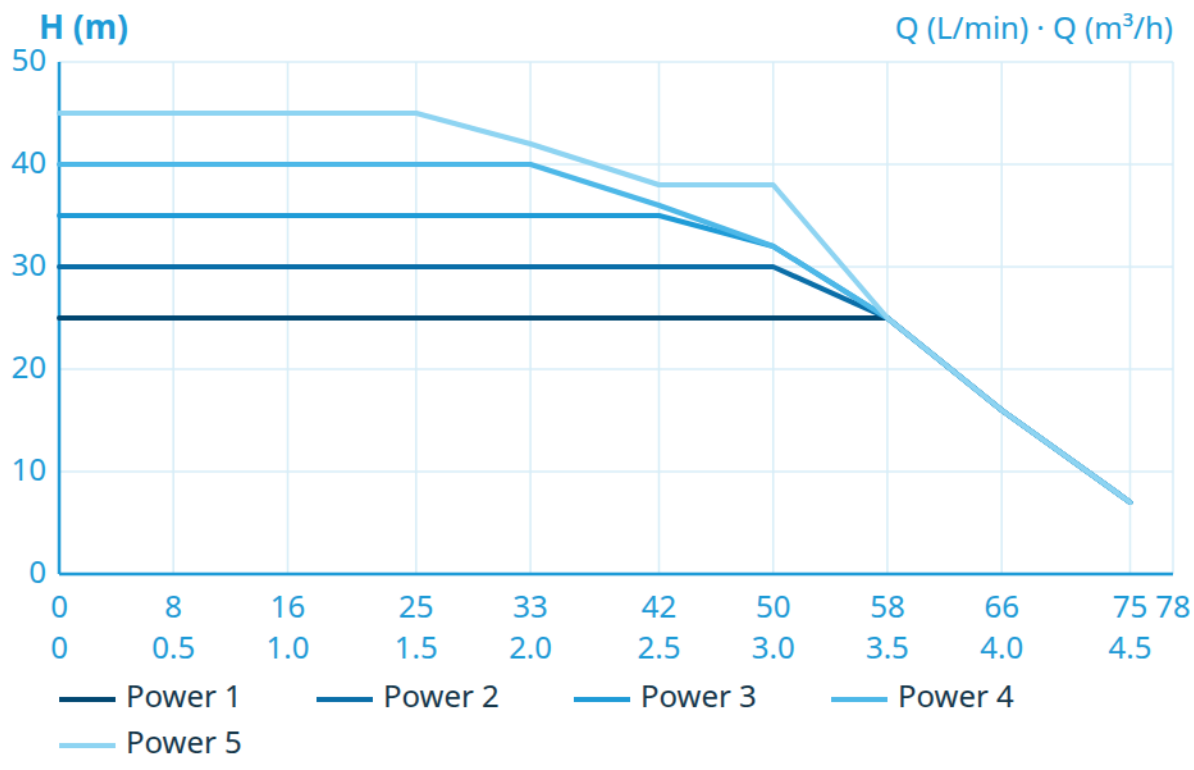
WORKING CONDITIONS

- Thin, clean, non-solidifying, non-flammable and non-explosive liquid.
- No solid particles and fibers (less than 0.2 mm in diameter).
- Max. working pressure: 10 bar.
- Liquid temperature: 5–70°C, PH: 6.5–8.5.
- Ambient temperature: 0–40°C, relative humidity: max. 85% (RH).

TECHNICAL DATA

Power	Min kW	Max kW	Current A	Qmax L/min	Hmax m	Suct. max m
Power 1	0.24	0.75	5.1	75	25	7
Power 2	0.30	0.75	5.1	75	30	7
Power 3	0.38	0.75	5.1	75	35	7
Power 4	0.43	0.75	5.1	75	40	7
Power 5	0.47	0.75	5.1	75	45	7

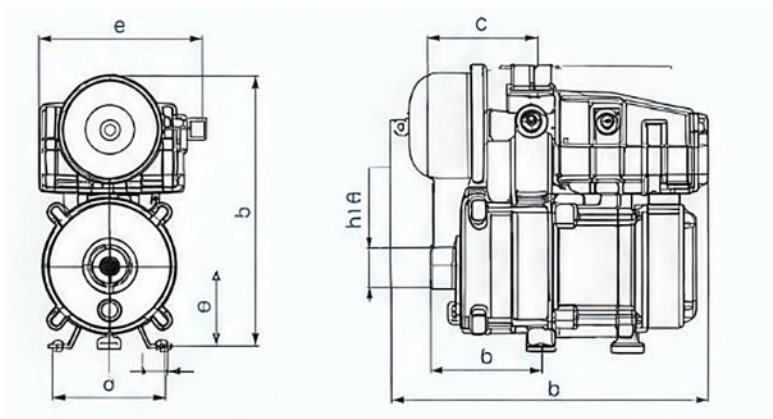
Q-H CURVE



INSTALL DIMENSION

Model	Inlet	Outlet	a	b	c	d	e	f	g	h	Kg
SCS90P-3	G 1"	G 1"	222	90	82	155	95	7	72	236	6.4

Package: carton with plywood tray. Carton dimension: 27 × 19.5 × 28 cm.



Frequency Conversion
Energy saving ≥60%

Wide Frequency
Frequency range: 50–60 Hz

Man-machine Interface
Multiple options to meet your needs

Automatic
Smart control panel, operate and protect automatically

Wide Voltage
Adjust voltage automatically: 170–260 V

100% Stainless Steel
Pump body / impeller / shaft

SCS SERIES

SCS100P-3

Permanent Magnet Variable Frequency Multistage Stainless Steel Pump



TYPE	Power kW	Power HP	Current A	Qmax L/min	Hmax m	Suct. max m
Power 1	0.55	0.75	3.8	115	46	7
Power 2	0.75	1.0	5.1	125	58	7
Power 3	0.90	1.2	6.1	135	65	7
Power 4	1.1	1.5	7.2	145	75	7
Power 5	1.5	2.0	9.4	165	75	7

Note: Five adjustable settings (Power 1–5) to suit different water pressure requirements.

FEATURES

- Stable performance: wide voltage 170–260 V, wide frequency 50–60 Hz.
- Smaller, lighter, more efficient, quieter and more powerful.
- Easy operation: automatic start/stop, only 2 buttons.
- Intelligent diagnosis: alarms, self-checks and predicts faults under abnormal conditions.
- Water-cooled motor and controller, no fan: lower noise, higher efficiency.
- Stainless steel precision-cast pump body with ceramic shaft and bearings for safe drinking water.
- Maximum outlet pressure: inlet pressure + 3.8 bar.

Frequency Conversion
Energy saving ≥60%

Wide Frequency
Frequency range: 50–60 Hz

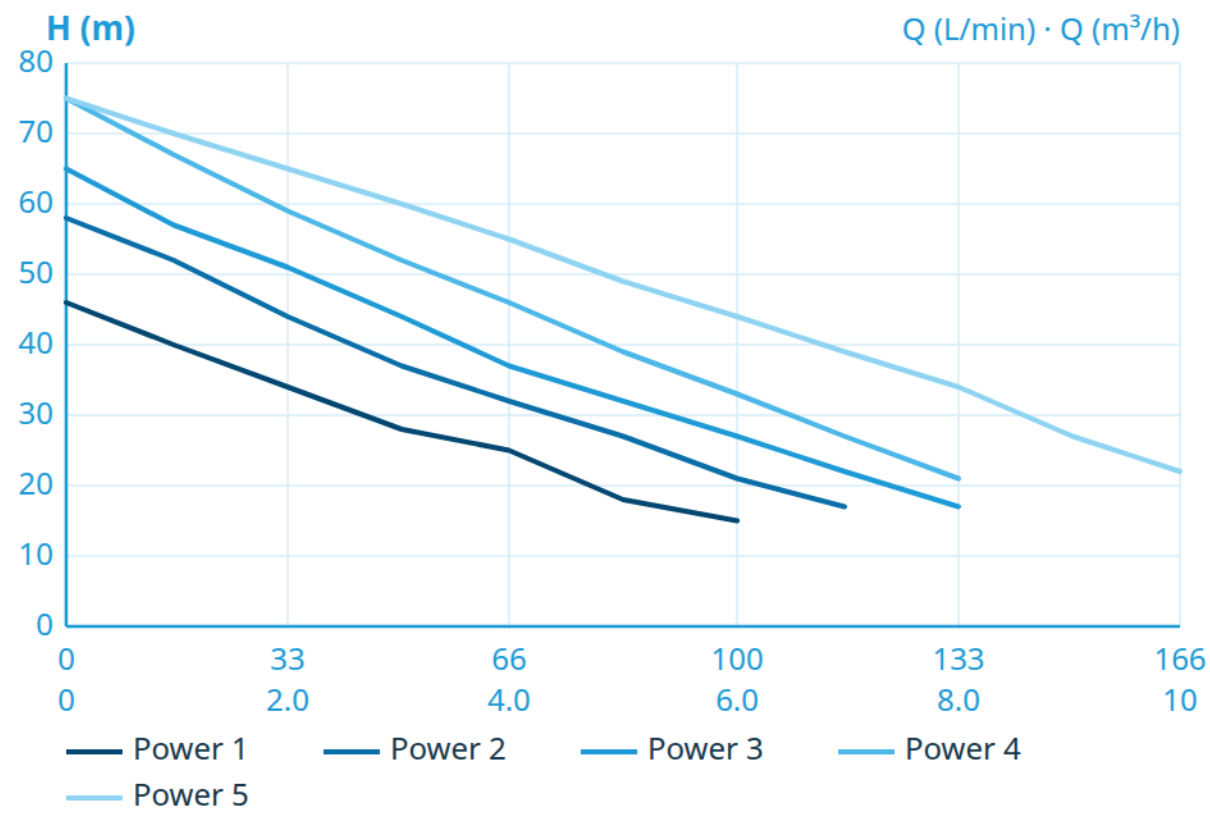
Man-machine Interface
Multiple options to meet your needs

Automatic
Smart control panel, operate and protect automatically

Wide Voltage
Adjust voltage automatically: 170–260 V

100% Stainless Steel
Stainless steel pump body / impeller / shaft

Q-H CURVE



WORKING CONDITIONS

- Clean, thin, non-solidifying, non-flammable and non-explosive liquid.
- No solid particles or fibres (under 0.2 mm in diameter).
- Max. working pressure: 10 bar.
- Liquid temperature: 5–70°C, pH: 6.5–8.5.
- Ambient temperature: 0–40°C, relative humidity: max. 85% (RH).

OVERALL AND MOUNTING DIMENSION

Model	Inlet	Outlet	a	b	c	d	e	f	g	h	Kg
SCS100P-3	G 1.25"	G 1.25"	256	102	102	146	120	8	82	240	—

Package: Carton with Plywood Tray · Carton Dimension: 27 × 19.5 × 28 cm

75 m
Max head

165 L/min
Max flow

5 stages
Adjustable power

170–260 V
Wide voltage

ICP SERIES

ICP100F

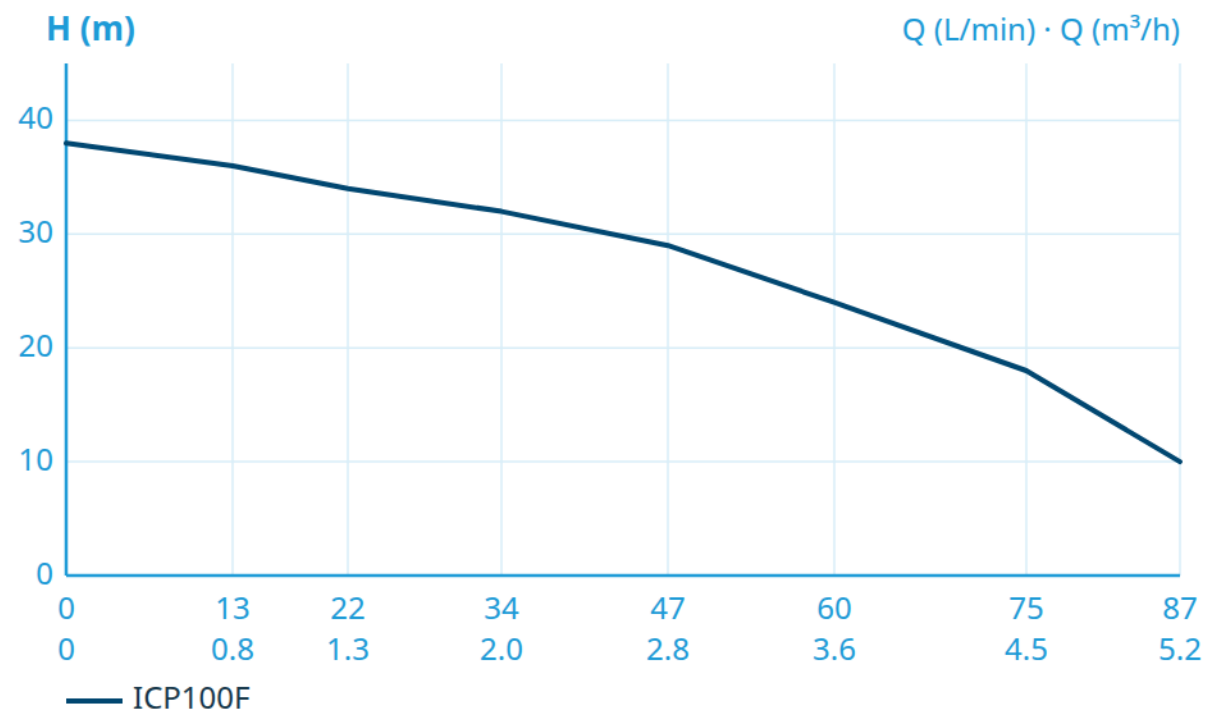
Permanent Magnet Variable Frequency Smart Booster Pump



TECHNICAL DATA

Model	Power kW	Power HP	Current A	Qmax L/min	Hmax m	Suct. max m
ICP100F	0.75	1.0	3.8	86	38	8

Q-H DATA



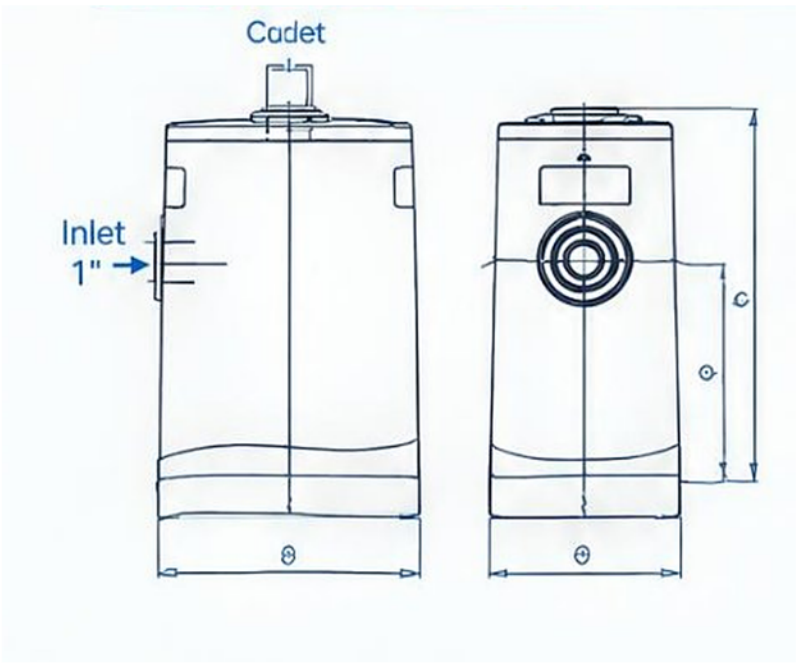
FEATURES

- Quick self-priming.
- Stable performance: between 170–260 V, 50–60 Hz, the performance is stable within 1%.
- Small size, light weight and high efficiency.
- Easy to operate: pump can run and stop automatically according to the user's requirements, simple man-machine interface with 3 buttons.
- Smart fault diagnosis: pump will alarm, self-check and fault prediction under abnormal conditions.
- Motor is water cooling (not air cooling), which reduces noise and improves motor efficiency.
- Stainless steel shaft.

INSTALL DIMENSION

Model	Inlet	Outlet	a	d	g	h	Kg
ICP100F	1"	1"	230	144	166	278	8.0

Minimum space is 30 cm. Package: carton with plywood tray. Carton dimension: 29.7 × 17.9 × 30.8 cm.



WORKING CONDITIONS

- Thin, clean, non-solidifying, non-flammable and non-explosive liquid.
- No solid particles and fibers (less than 0.2 mm in diameter).
- Liquid temperature: 5–70°C, PH: 6.5–8.5.
- Ambient temperature: 0–40°C, relative humidity: max. 85% (RH).
- Max. working pressure: 10 bar.

Constant pressure can be set from 10 to 30 m.

Frequency Conversion
Energy saving ≥60%

Constant Pressure
Stable water supply pressure

Man-machine Interface
Optional operating modes

Automatic
Smart control panel, operate and protect automatically

Wide Voltage
Adjust voltage range 175–260 V automatically

Wide Frequency
Frequency range: 50–60 Hz

ICP SERIES

ICP106F

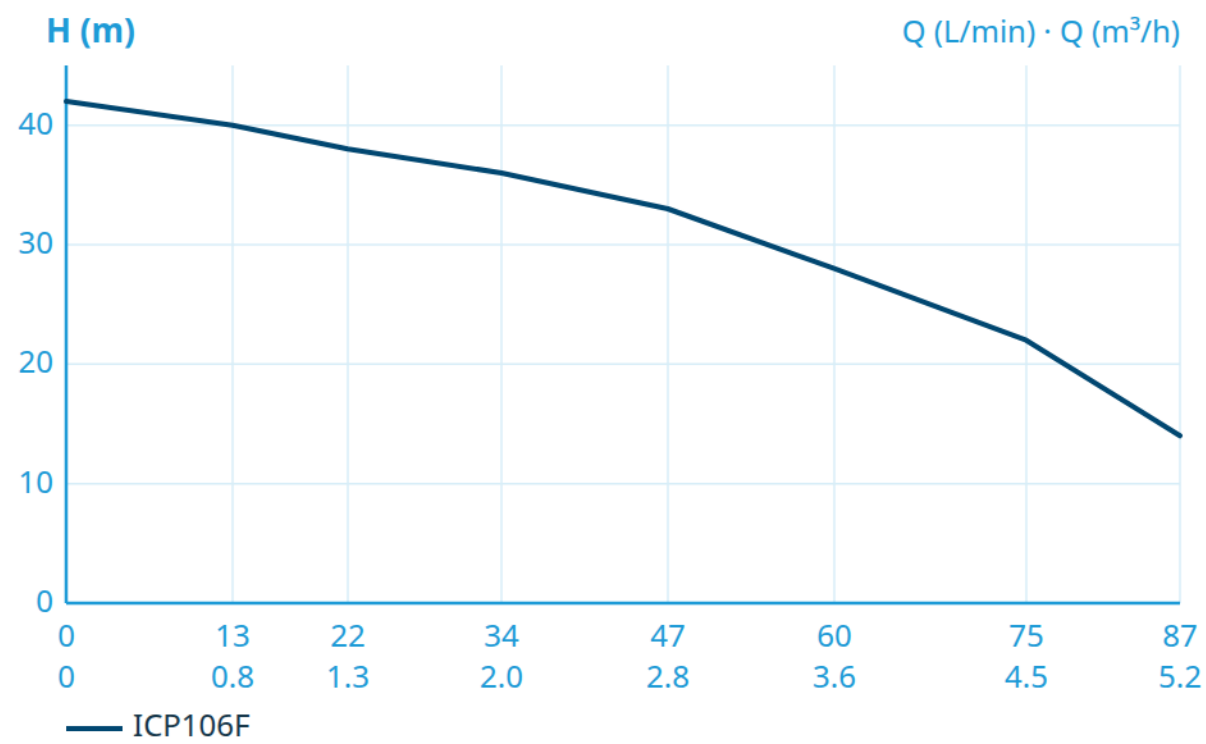
Permanent Magnet Variable Frequency Smart Booster Pump



TECHNICAL DATA

Model	Power kW	Power HP	Current A	Qmax L/min	Hmax m	Suct. max m
ICP106F	0.75	1.0	3.8	86	42	9

Q-H DATA



FEATURES

- Quick self-priming.
- Stable performance: between 170–260 V, 50–60 Hz, the performance is stable within 1%.
- Small size, light weight and high efficiency.
- Easy to operate: pump can run and stop automatically according to the user's requirements, simple man-machine interface with 3 buttons.
- Smart fault diagnosis: pump will alarm, self-check and fault prediction under abnormal conditions.
- Motor is water cooling (not air cooling), which reduces noise and improves motor efficiency.
- Stainless steel shaft.

WORKING CONDITIONS

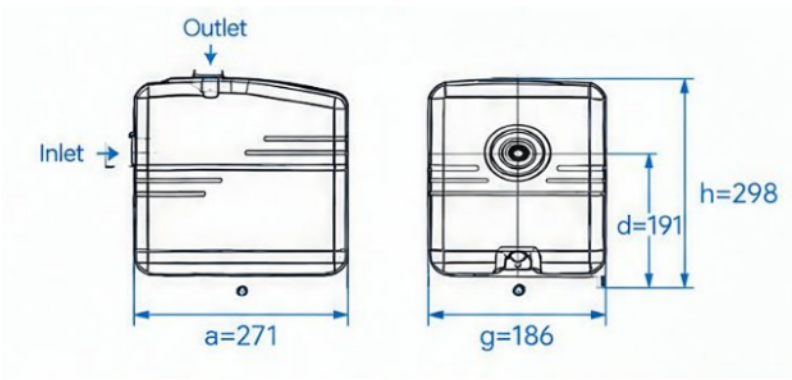
- Thin, clean, non-solidifying, non-flammable and non-explosive liquid.
- No solid particles and fibers (less than 0.2 mm in diameter).
- Liquid temperature: 5–70°C, PH: 6.5–8.5.
- Ambient temperature: 0–40°C, relative humidity: max. 85% (RH).
- Max. working pressure: 10 bar.

Constant pressure can be set from 10 to 30 m.

INSTALL DIMENSION

Model	Inlet	Outlet	a	d	g	h	Kg
ICP106F	1"	1"	271	191	186	298	9.8

Minimum space is 30 cm. Package: carton with plywood tray. Carton dimension: 32.5 × 23.5 × 34.5 cm.



Frequency Conversion
Energy saving ≥60%

Constant Pressure
Stable water supply pressure

Man-machine Interface
Optional operating modes

Automatic
Smart control panel, operate and protect automatically

Wide Voltage
Adjust voltage range 175–260 V automatically

Wide Frequency
Frequency range: 50–60 Hz

PYPZ SERIES

PYPZ-E

Permanent Magnet Variable Frequency Booster Pump



APPLICATION FIELD

It can be used for a variety of household water supplies, such as villas, duplex apartments, large bungalows, etc., to pressurize household tap water, extract well water, or be used to pressurize under roof water tanks.

CHARACTERISTICS

- House pressurization
- Water tower pressurization
- Hot water pressurization
- Intake water from well
- Pressurized tap water

APPLICATION CONDITIONS

Item	Value
Maximum liquid temperature	4–55°C
Maximum ambient temperature	4–50°C
PH value	6.5–8.5
Insulation grade	F
Protection class	IPX4
Media properties	Clean water and other low viscosity non-aggressive

HEADLINE

Energy efficient
Stable operation

Noiseless operation
For comfortable life

Compact design
Easy to install

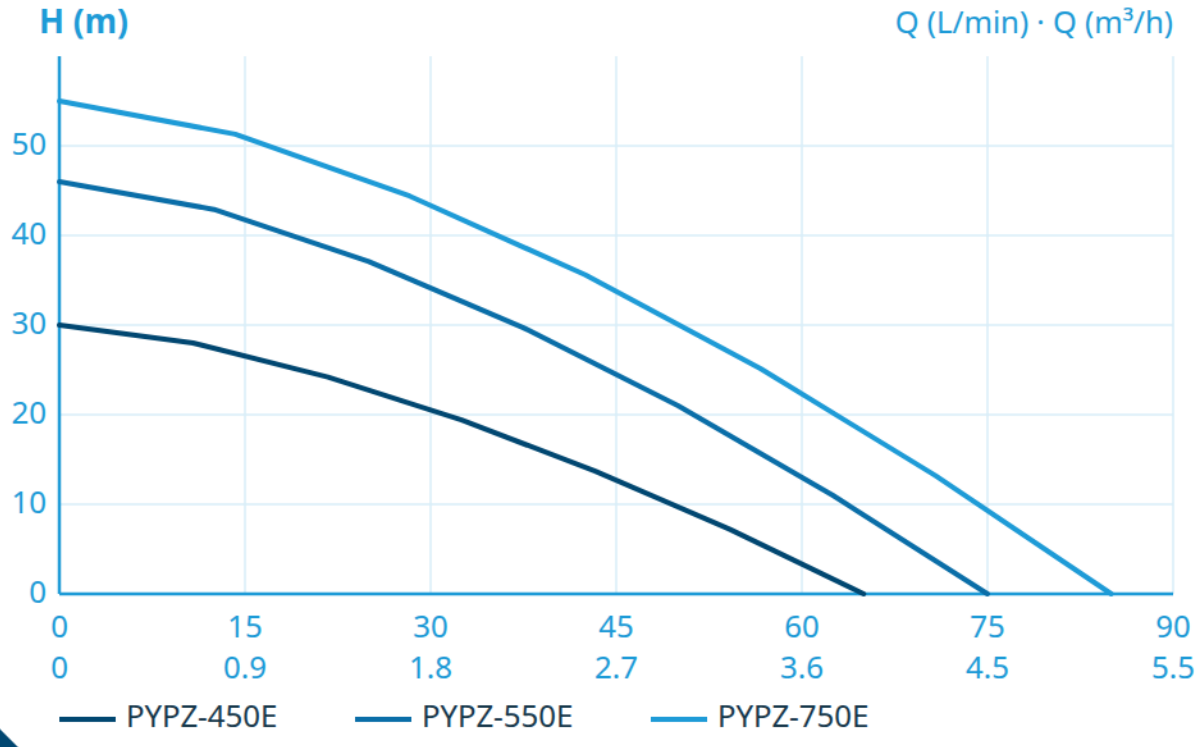
Permanent magnet
Frequency conversion, intelligent control

Phase (single or three) and voltage (110/115/127/220/230/240 V) are customized as per user's request.

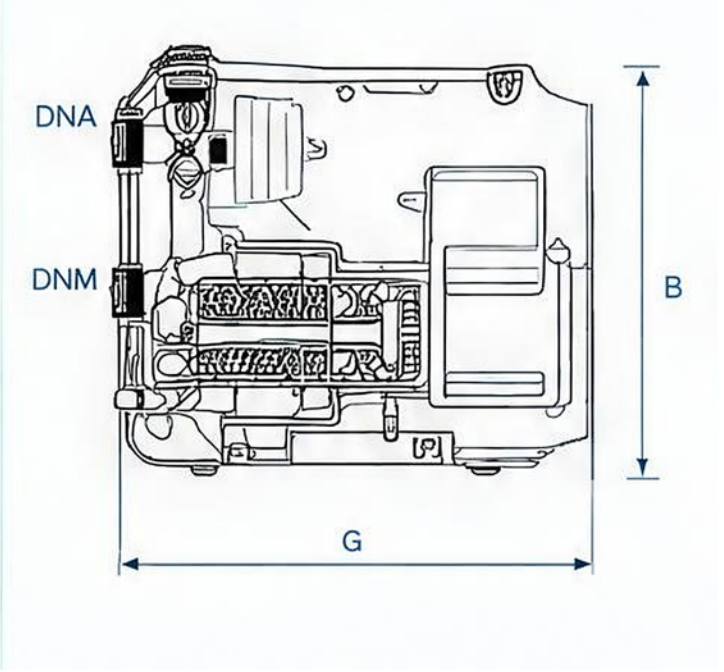
TECHNICAL DATA

Model	Output Power kW	Output Power HP	Hmax (m)	Qmax (L/min)	S.Head (m)	Speed (r/min)	DNA	DNM	a	b	c	Packing L	Packing W	Packing H	G.W. kg
PYPZ-450E	0.45	0.6	30	65	8	4800	25	25	342	298	197	350	200	205	6.0
PYPZ-550E	0.55	0.75	46	75	8	5200	25	25	342	298	197	350	200	205	6.1
PYPZ-750E	0.75	1.0	55	85	8	5600	25	25	342	298	197	350	200	205	6.5

PERFORMANCE CURVE



INSTALLATION



Suction 8 (m). Dimensions and packing size are in mm.

PYS SERIES

PYS-E Permanent Magnet Variable Frequency Booster Pump



APPLICATION CONDITIONS

Item	Value
Maximum liquid temperature	4–55°C
Maximum ambient temperature	0–80°C
PH value	6.5–8.5
Insulation grade	F
Protection class	IPX4
Media properties	Clean water and other low viscosity non-aggressive

APPLICATION FIELD

It can be used for a variety of household water supplies, such as villas, duplex apartments, large bungalows, etc., to pressurize household tap water, or be used to pressurize under roof water tanks.

CHARACTERISTICS

- House pressurization
- Water tower pressurization
- Hot water pressurization
- Pressurized tap water

HEADLINE

Energy efficient
Stable operation

Noiseless operation
For comfortable life

Compact design
Easy to install

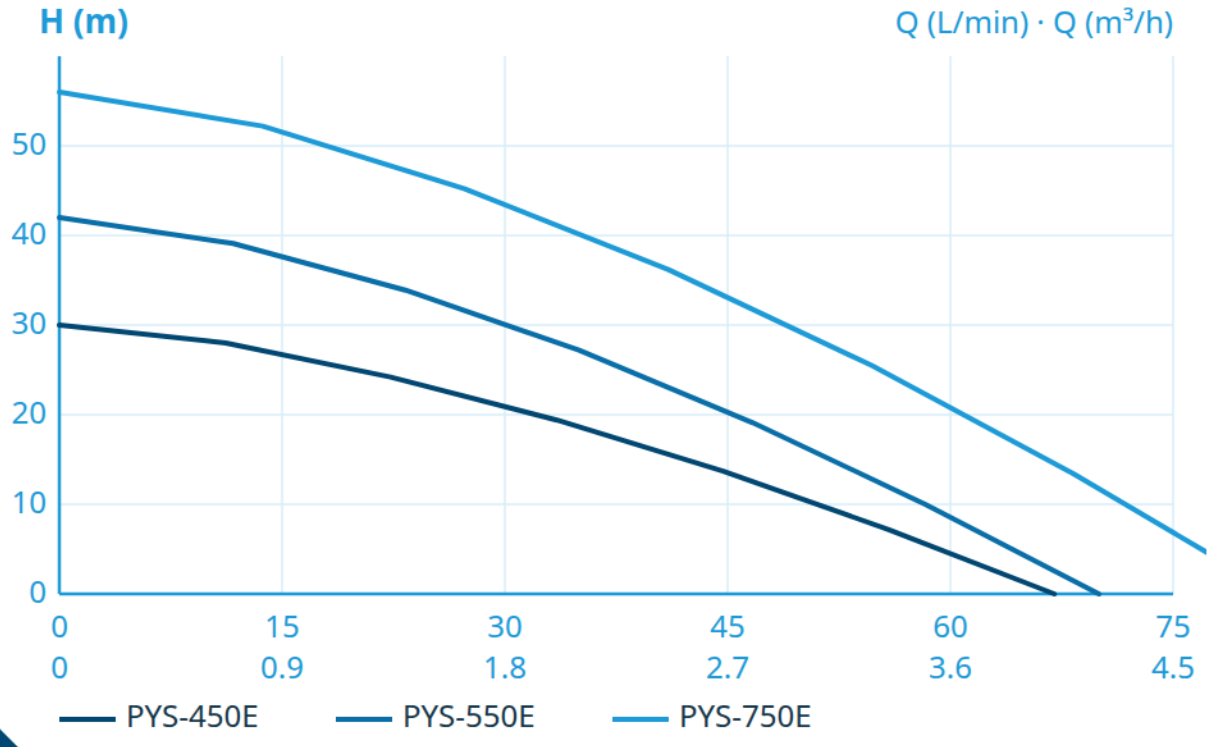
Permanent magnet
Frequency conversion, intelligent control

Phase (single or three) and voltage (110/115/127/220/230/240 V) are customized as per user's request.

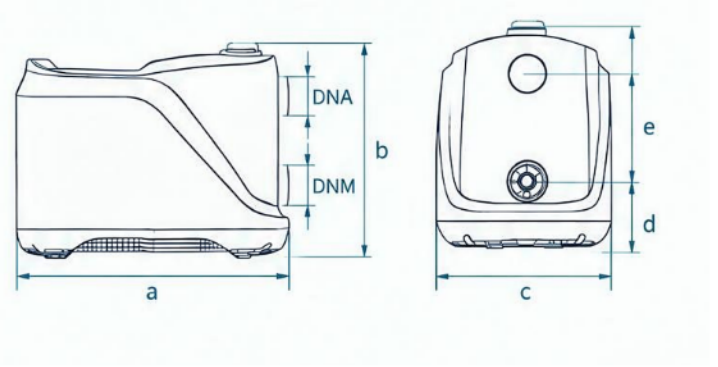
TECHNICAL DATA

Model	Output Power kW	Output Power HP	Hmax (m)	Qmax (L/min)	Multiple impellers	Speed (r/min)	DNA	DNM	a	b	c	d	e	Packing L	Packing W	Packing H	G.W. kg
PYS-450E	0.45	0.6	30	67	3	4800	25	25	291	227	196	70.5	102.5	293	198	229	5.6
PYS-550E	0.55	0.7	42	70	4	4800	25	25	291	227	196	70.5	102.5	293	198	229	5.7
PYS-750E	0.75	1.0	56	82	4	5600	25	25	291	227	196	70.5	102.5	293	198	229	6.1

PERFORMANCE CURVE



INSTALLATION



Dimensions and packing size are in mm.

ICP SERIES

ICP100A

Intelligent Centrifugal Pump



FEATURES

- Stable performance: wide voltage 170–260 V, wide frequency 50–60 Hz.
- Smaller size, lighter weight and higher efficiency.
- Simple operation: pump can run and stop automatically according to the user's requirements, with only 2 buttons.
- Smart fault diagnosis: pump will alarm, self-check and fault prediction under abnormal conditions.
- Pump equips with a permanent magnet motor, which can reduce noise and improve motor efficiency.
- High efficiency: energy and power saving.

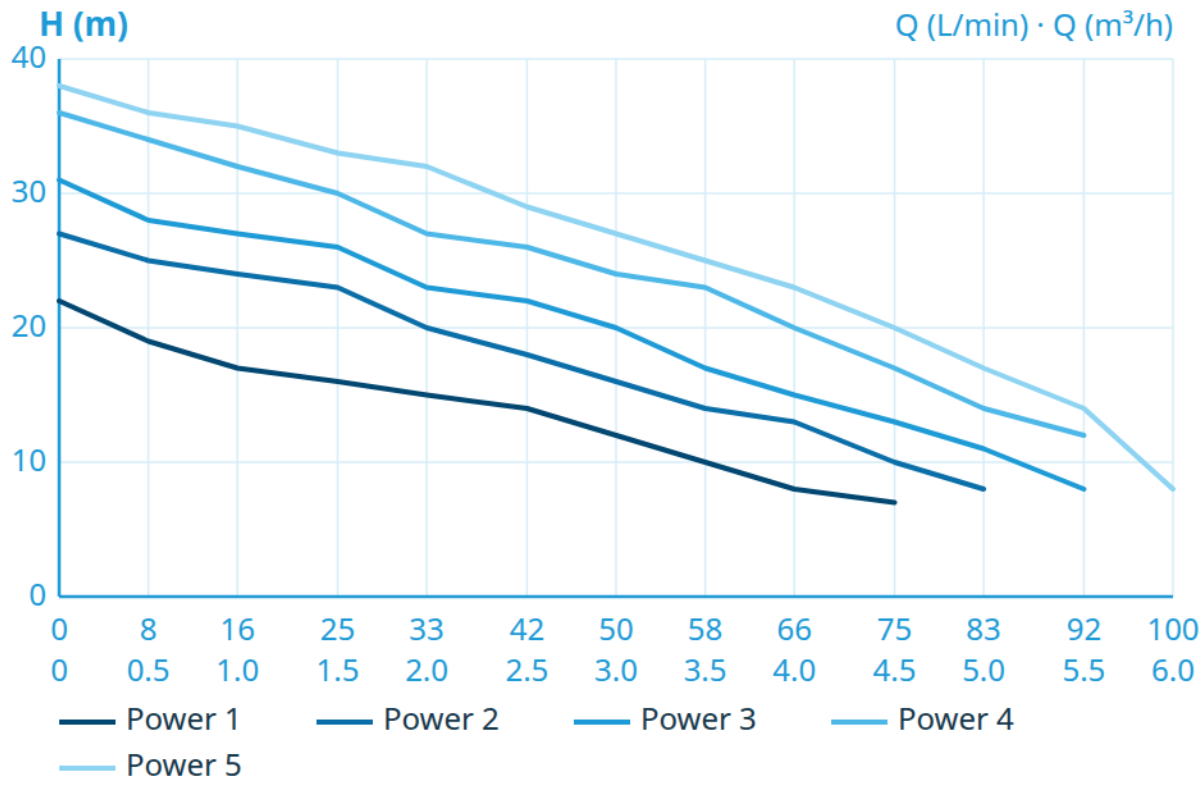
WORKING CONDITIONS

- Thin, clean, non-solidifying, non-flammable and non-explosive liquid.
- No solid particles and fibers (less than 0.2 mm in diameter).
- Max. working pressure: 10 bar.
- Liquid temperature: 5–70°C, PH: 6.5–8.5.
- Ambient temperature: 0–40°C, relative humidity: max. 85% (RH).

TECHNICAL DATA

Power	Power kW	Power HP	Current A	Qmax L/min	Hmax m	Suct. max m
Power 1	0.3	0.4	2.2	75	22	7
Power 2	0.4	0.55	2.8	83	27	7
Power 3	0.5	0.66	3.5	92	31	7
Power 4	0.6	0.8	4.2	95	36	7
Power 5	0.75	1.0	5.2	102	38	7

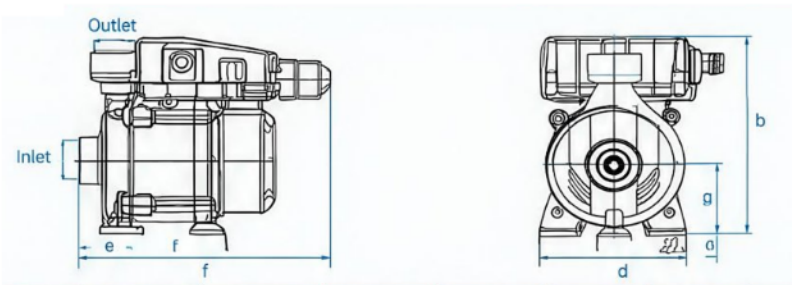
Q-H CURVE



INSTALL DIMENSION

Model	Inlet	Outlet	a	b	d	e	f	g	h	Kg
ICP100A	1"	1"	175	27	156	93	7	71	194	4.5

Package: carton with plywood tray. Carton dimension: 21 × 17 × 22 cm.



Frequency Conversion
Energy saving ≥60%

Wide Frequency
Frequency range: 50–60 Hz

Small Size
50% smaller than traditional pumps

Big Power
High output

Wide Voltage
Adjust voltage automatically: 170–260 V

ICP SERIES

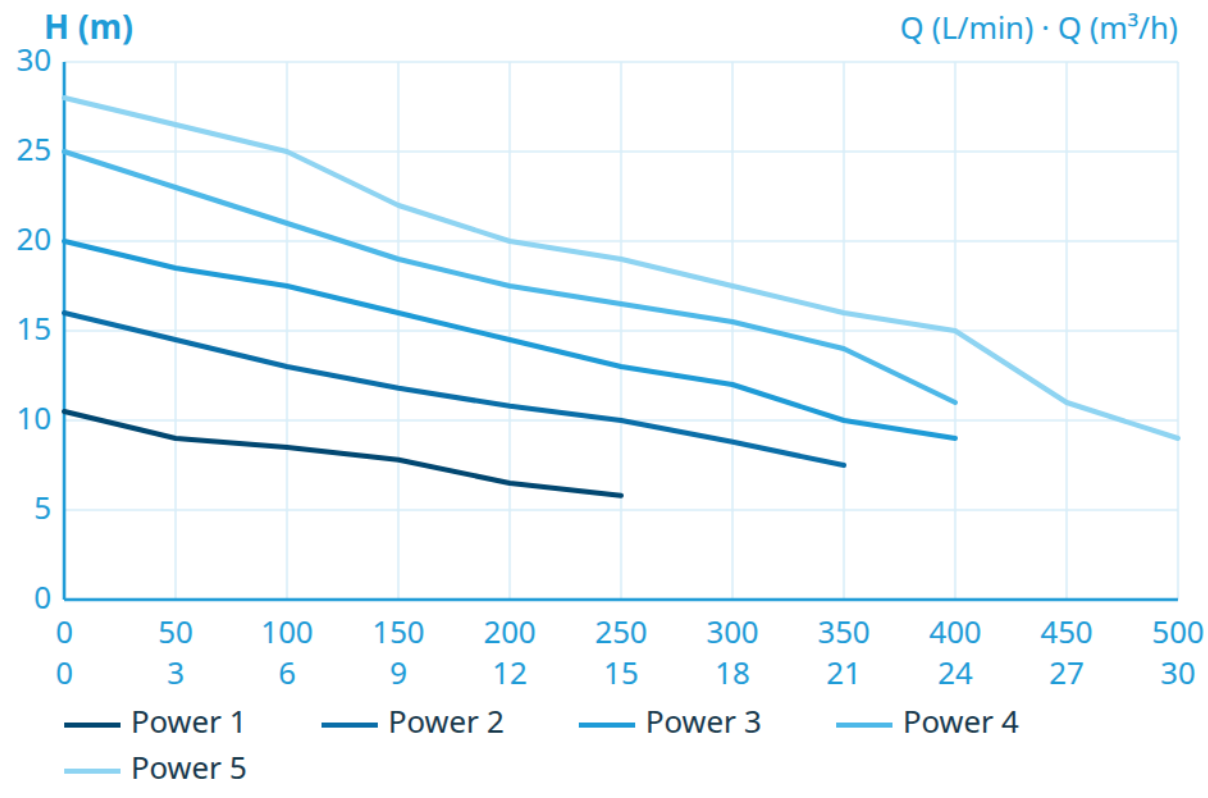
ICP102-50 Intelligent Centrifugal Pump



TECHNICAL DATA

Power	Power kW	Power HP	Current A	Qmax L/min	Hmax m
Power 1	0.35	0.48	2.5	280	10.5
Power 2	0.65	0.85	4.5	350	16
Power 3	0.98	1.3	6.6	400	20
Power 4	1.28	1.7	8.5	440	25
Power 5	1.5	2.0	10.5	500	28

Q-H CURVE



Q axis: Q (L/min) · Q (m³/h).

FEATURES

- Stable performance: wide voltage 170–260 V, wide frequency 50–60 Hz.
- Smaller size, lighter weight, higher efficiency and larger flow.
- Simple operation: pump can run and stop automatically according to the user's requirements, with only 2 buttons.
- Smart fault diagnosis: pump will alarm, self-check and fault prediction under abnormal conditions.
- Pump equips with a permanent magnet motor, which can reduce noise and improve motor efficiency.
- High efficiency: energy and power saving.
- Large flow: suitable for industrial facilities, agricultural irrigation, hotel, etc.

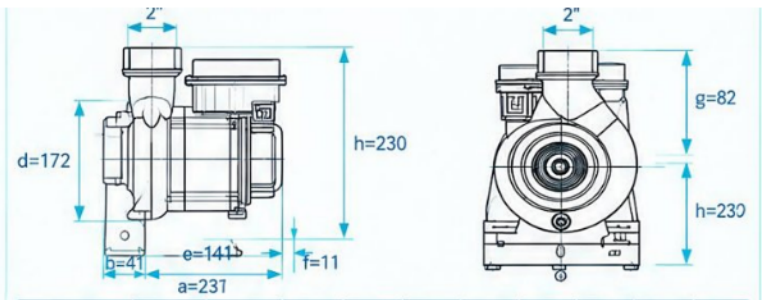
WORKING CONDITIONS

- Thin, clean, non-solidifying, non-flammable and non-explosive liquid.
- No solid particles and fibers (less than 0.2 mm in diameter).
- Max. working pressure: 10 bar.
- Liquid temperature: 5–70°C, PH: 6.5–8.5.
- Ambient temperature: 0–40°C, relative humidity: max. 85% (RH).

INSTALL DIMENSION

Model	Inlet	Outlet	a	b	d	e	f	g	h	Kg
ICP102-50	2"	2"	237	41	172	141	11	82	230	13

Package: carton with plywood tray. Carton dimension: 26 × 21.5 × 26 cm.



Frequency Conversion
Energy saving ≥60%

Wide Frequency
Frequency range: 50–60 Hz

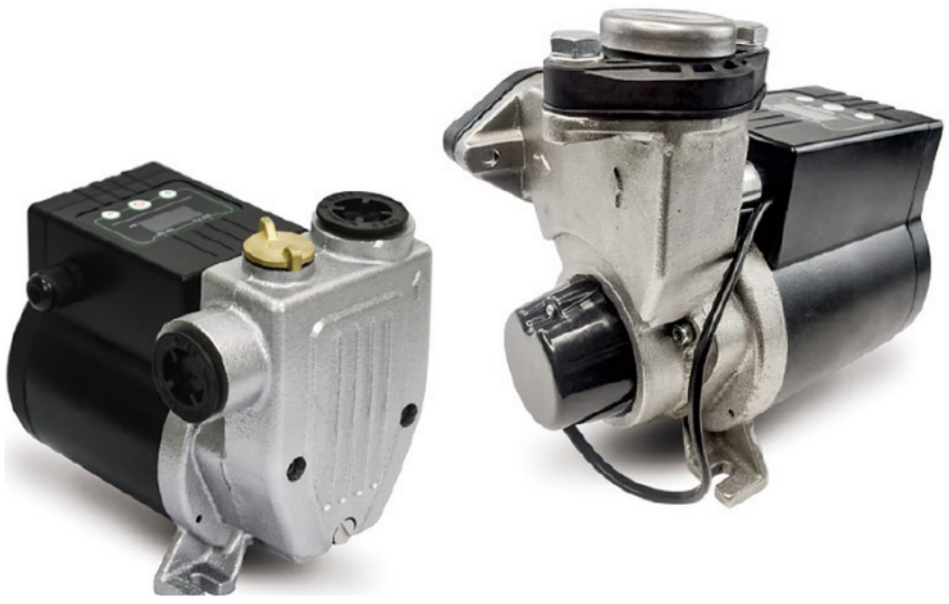
Small Size
50% smaller than traditional pumps

Big Power
High output

Wide Voltage
Adjust voltage automatically: 170–260 V

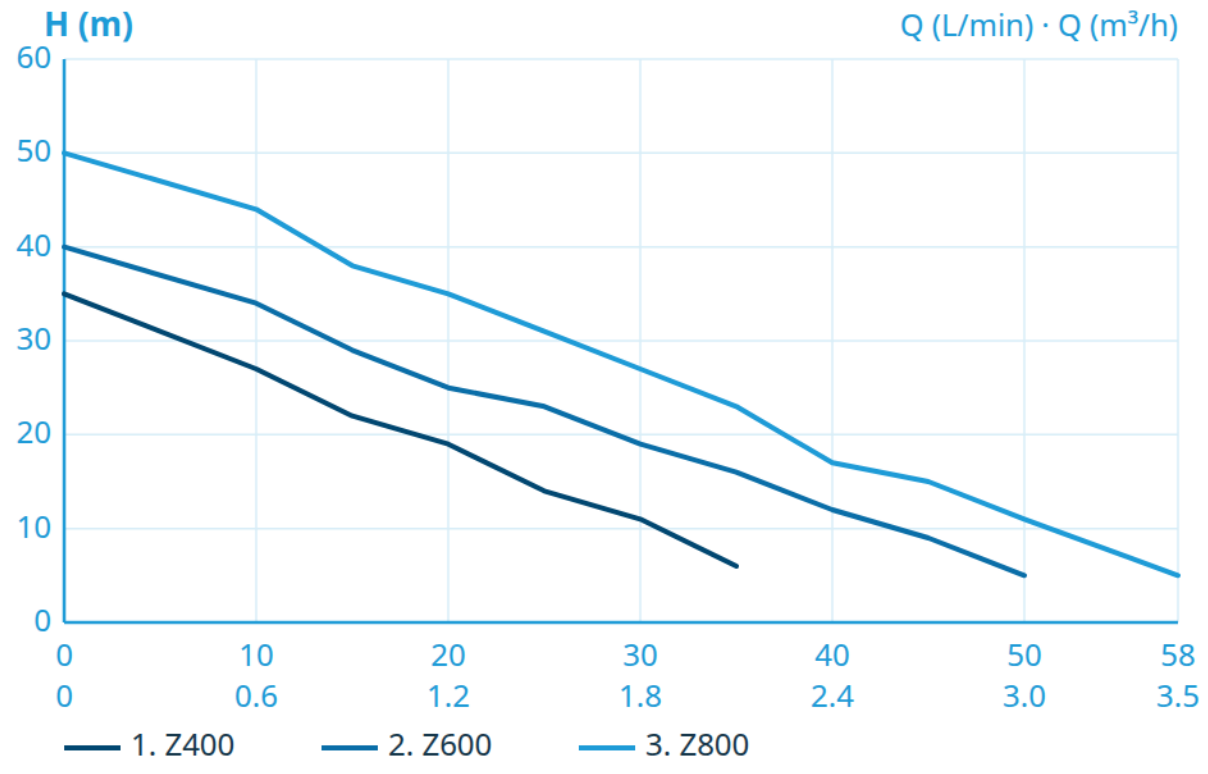
Z SERIES

Z400 Permanent Magnet Variable Frequency Booster Pump



Model	Power kW	Power HP	Current A	Qmax L/min	Hmax m	Suct. max m
Z400	0.4	0.55	2.7	38	35	9
Z600	0.55	0.75	4	50	40	9
Z800	0.75	1	5	58	50	9

Q-H CURVE



FEATURES

- Stable performance: wide voltage 170–260 V, wide frequency 50–60 Hz.
- Smaller, lighter, more efficient, quieter and more powerful.
- Easy operation: automatic start/stop, only 2 buttons.
- Intelligent diagnosis: alarms, self-checks and predicts faults under abnormal conditions.
- Water-cooled motor and controller, no fan: lower noise, higher efficiency.
- Stainless steel precision-cast pump body with ceramic shaft and bearings for safe drinking water.
- Maximum outlet pressure: inlet pressure + 3.8 bar.

Frequency Conversion
Energy saving ≥60%

Wide Frequency
Frequency range: 50–60 Hz

Man-machine Interface
Multiple options to meet your needs

Automatic
Smart control panel, operate and protect automatically

Wide Voltage
Adjust voltage automatically: 170–260 V

Quiet
Noise standard ≤55 dB

WORKING CONDITIONS

- Clean, thin, non-solidifying, non-flammable and non-explosive liquid.
- No solid particles or fibres (under 0.2 mm in diameter).
- Liquid temperature: 5–70°C, pH: 6.5–8.5.
- Ambient temperature: 0–40°C, relative humidity: max. 85% (RH).
- Max. working pressure: 10 bar.
- Minimum inlet flow: 3 L/min.

OVERALL AND MOUNTING DIMENSION

Model	Inlet	Outlet	a	b	c	d	e	f	g	h	Kg
Z400	1"	1"	175	50	131	99	63	7	88	179	5.3
Z600	1"	1"	175	50	131	99	63	7	88	179	5.3
Z800	1"	1"	184	47	180	119	71	7	93	214	5.3

Package: Carton with Plywood Tray · Carton Dimension: 21.5 × 16.3 × 21 cm

50 m
Max head — Z800

58 L/min
Max flow — Z800

9 m
Max suction

170–260 V
Wide voltage

P800 SERIES

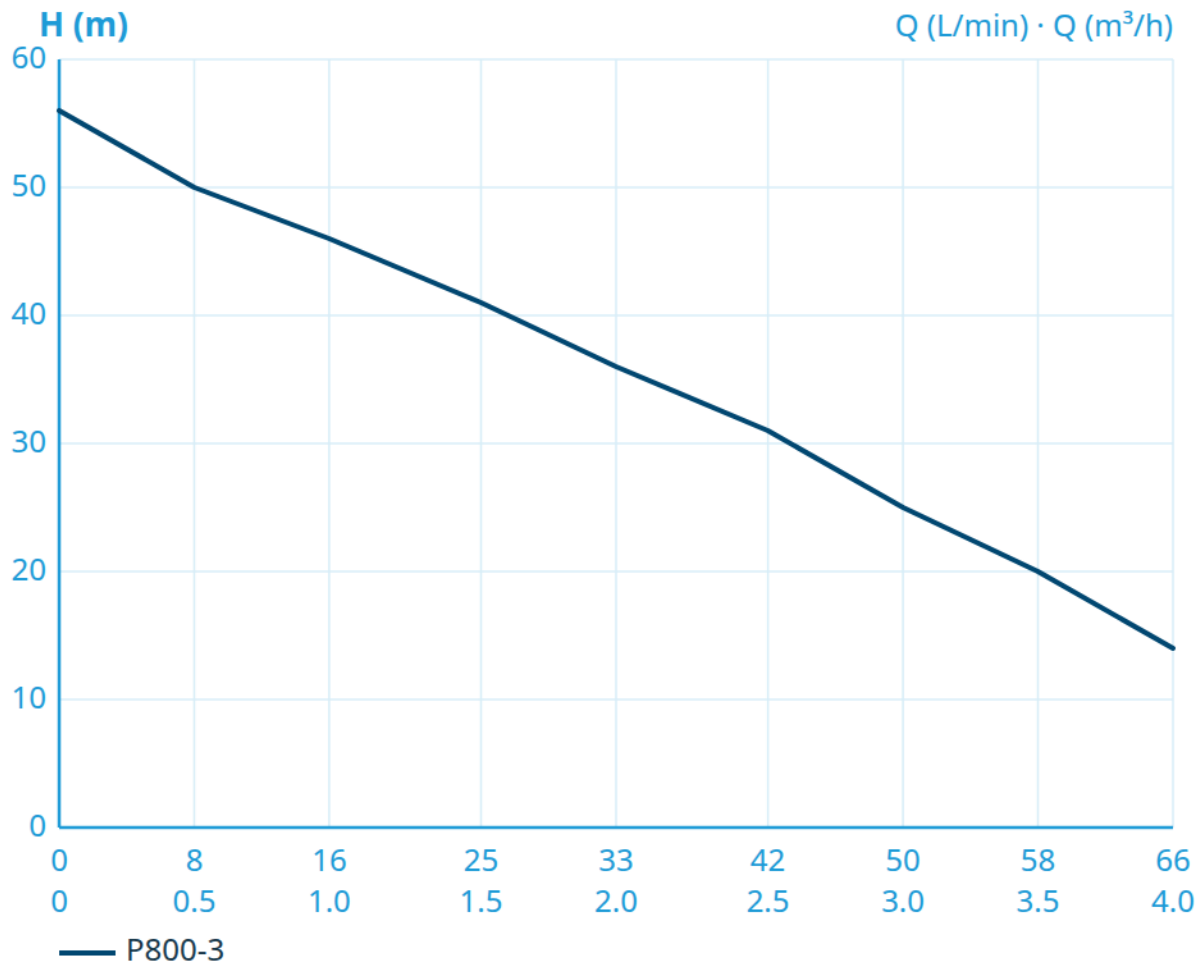
P800-3

Permanent Magnet Variable Frequency Multistage Stainless Steel Pump



Model	Power kW	Power HP	Current A	Qmax L/min	Hmax m	Suct. max m
P800-3	0.75	1.0	5.2	72	56	7

Q-H CURVE



FEATURES

- Stable performance: wide voltage 170–260 V, wide frequency 50–60 Hz.
- Smaller, lighter, more efficient, quieter and more powerful.
- Easy operation: automatic start/stop, only 2 buttons.
- Intelligent diagnosis: alarms, self-checks and predicts faults under abnormal conditions.
- Water-cooled motor and controller, no fan: lower noise, higher efficiency.
- Stainless steel precision-cast pump body with ceramic shaft and bearings for safe drinking water.

Frequency Conversion
Energy saving ≥60%

Wide Frequency
Frequency range: 50–60 Hz

Man-machine Interface
Multiple options to meet your needs

Automatic
Smart control panel, operate and protect automatically

Wide Voltage
Adjust voltage automatically: 170–260 V

Ultra-quiet
Noise standard ≤55 dB

OVERALL AND MOUNTING DIMENSION

Model	Inlet	Outlet	a	b	c	d	e	f	g	h
P800-3	1"	1"	290	102	85	156	129.5	9	88	260

56 m
Max head

72 L/min
Max flow

0.75 kW
Power

170–260 V
Wide voltage

P SERIES

P800/1500 Permanent Magnet Motor



P Series universal permanent magnet motors are designed to combine with different water pumps for different purposes. Customers can use them as standard pump motors, fitted to different pump wet ends to build a new electric pump — centrifugal, peripheral, jet or deep-well pumps. With a wide operating range, high delivery, large capacity, compact size, light weight, low maintenance and easy operation, P Series motors offer a new high-technology choice for water pumps.

MOTOR FEATURES

- Variable-speed motor: five shifts set on the panel to suit different pump duties.
- Standard shaft and locating spigot for easy fitting to pump wet ends.
- Bearing-free construction with internal water cooling: only 38 dB.
- Smart control system: easy to operate, with full protection against most faults.
- Up to 30% energy saving versus traditional water pumps.

Variable Speed
Five shifts on the panel

Bearing-free
Internal water cooling

Ultra-quiet
Noise level only 38 dB

Energy Saving
Up to 30% versus traditional pumps

Wide Voltage
Voltage range: 175–260 V

Smart Control
Full protection against most faults

TECHNICAL DATA

Type	Power (W)	Current (A)	Voltage (V)	Input (Hz)	RPM range (r/min)	Shaft D (mm)	Locating D (mm)	Size (mm)	Weight (kg)
P800	750	4.2	175–260	50–60	2500–4600	15	110	D165×250	5.6
P1500	1500	8.3	175–260	50–60	2500–4200	20	130	D165×250	7.2

INSTALLATION SIZE (mm)

Frame	A	B	C	D	E	F	G	H	I	J
P800	168	18	5.8	15	24.5	146	115	74.5	135	102
P1500	—	—	—	—	—	—	—	—	—	—

P1500 mounting dimensions are not given in the source data.

OPERATING — CONSTANT PRESSURE MODE

1. Press the power button to start the motor and enter Constant Pressure Operating Mode, the default mode. The motor starts on Shift 3, at a constant pressure of 0.22 MPa (pressure settings vary by pump type).
2. Press the shift button to cycle through the shifts.
3. Five shifts are available, from lower to higher constant pressure.

Shift 5	Shift 4	Shift 3	Shift 2	Shift 1
		Default · 0.22 MPa		

1500 W Max power — P1500

38 dB Noise level

175–260 V Wide voltage

5 shifts Constant-pressure shifts

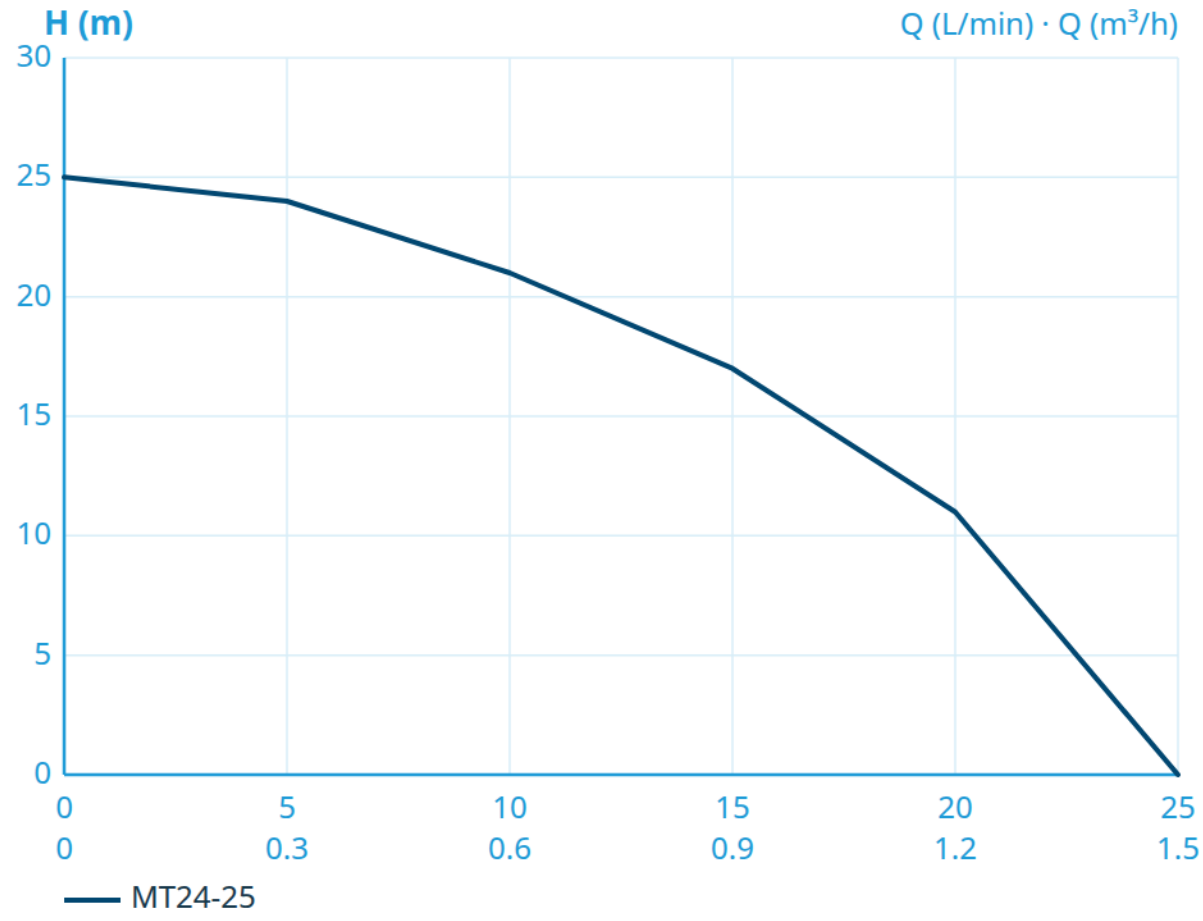
DC SERIES

MT24-25

Intelligent DC Booster Pump



PERFORMANCE CURVE



FEATURES

- **Permanent Magnet Motor**
- **Ultra Quiet Operation**
- **Automatic Start & Stop**
- **Energy Saving**
- **IP65 Protection**
- **Compact Design**

APPLICATIONS

Household Booster Systems · Water Heaters · Apartments · Villas · RV Water Systems · Solar Water Supply Systems

SPECIFICATION

Item	Specification
Control	1 Button
Temperature	0–65°C
Connection	15 mm
Insulation Class	Class H
Protection	IP65
Color	White / Black
Power	200 W
Voltage	DC 24 V
Max Head	25 m
Max Flow Rate	25 L/min
Pump Body	Reinforced Nylon
Weight	1 kg
Size	5.5 × 8 × 13 cm
Warranty	1 Year

DC 24 V
Safe low voltage

200 W
Permanent magnet motor

25 m
Max head

25 L/min
Max flow

Supplied with an adapter for AC 110/220 V mains input.

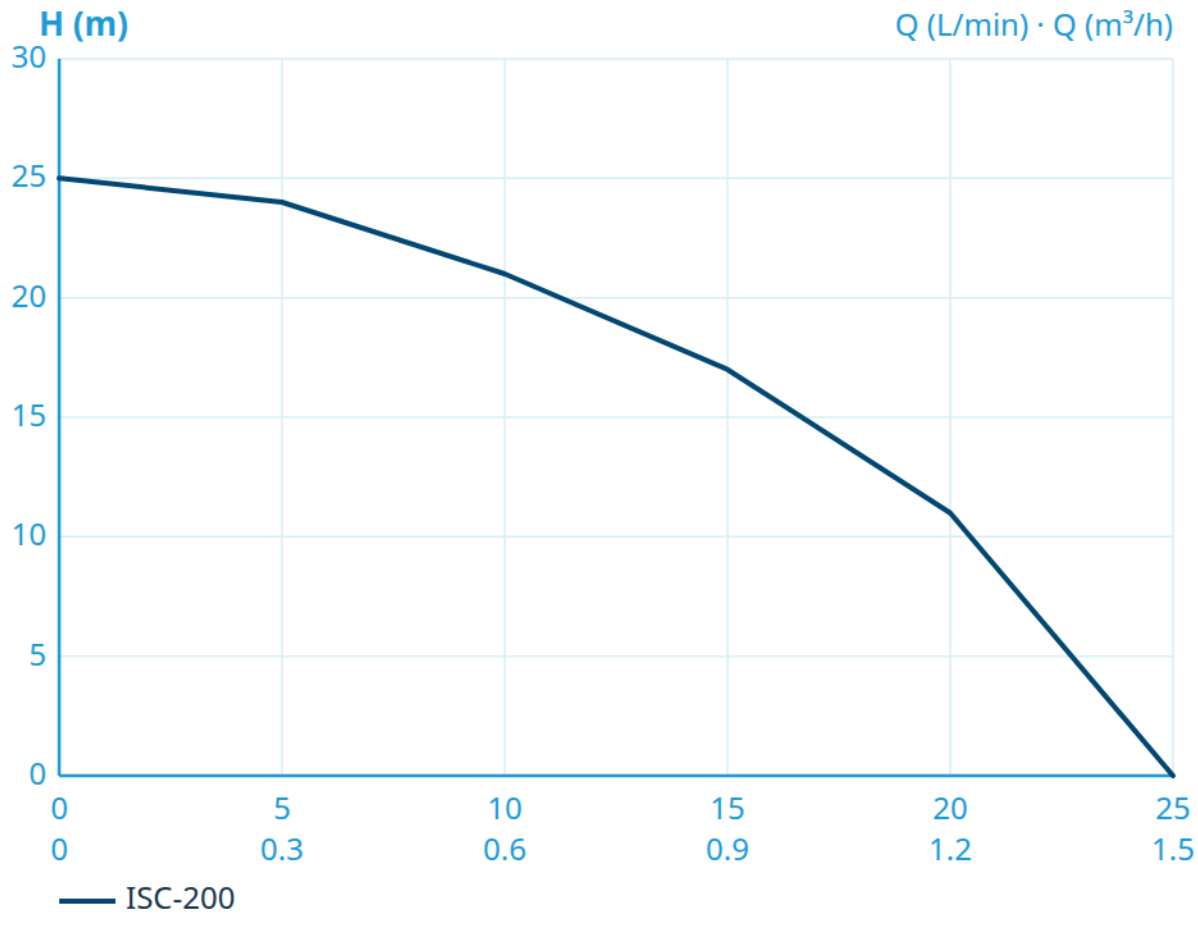
DC SERIES

ISC-200

Intelligent Constant Pressure Booster Pump



PERFORMANCE CURVE



FEATURES

Permanent Magnet Motor

Ultra Quiet Operation

Automatic Start & Stop

Energy Saving

IP65 Protection

Compact Design

APPLICATIONS

Household Booster Systems · Water Heaters · Apartments · Villas · RV Water Systems · Solar Water Supply Systems

SPECIFICATION

Item	Specification
Control	1 Button
Temperature	0–65°C
Connection	15 mm
Insulation Class	Class H
Protection	IP65
Color	White / Black
Power	200 W
Voltage	DC 24 V
Max Head	25 m
Max Flow Rate	25 L/min
Pump Body	Reinforced Nylon
Weight	1 kg
Size	5.5 × 8 × 13 cm
Warranty	1 Year

DC 24 V
Safe low voltage

200 W
Permanent magnet motor

25 m
Max head

25 L/min
Max flow

Supplied with an adapter for AC 110/220 V mains input.

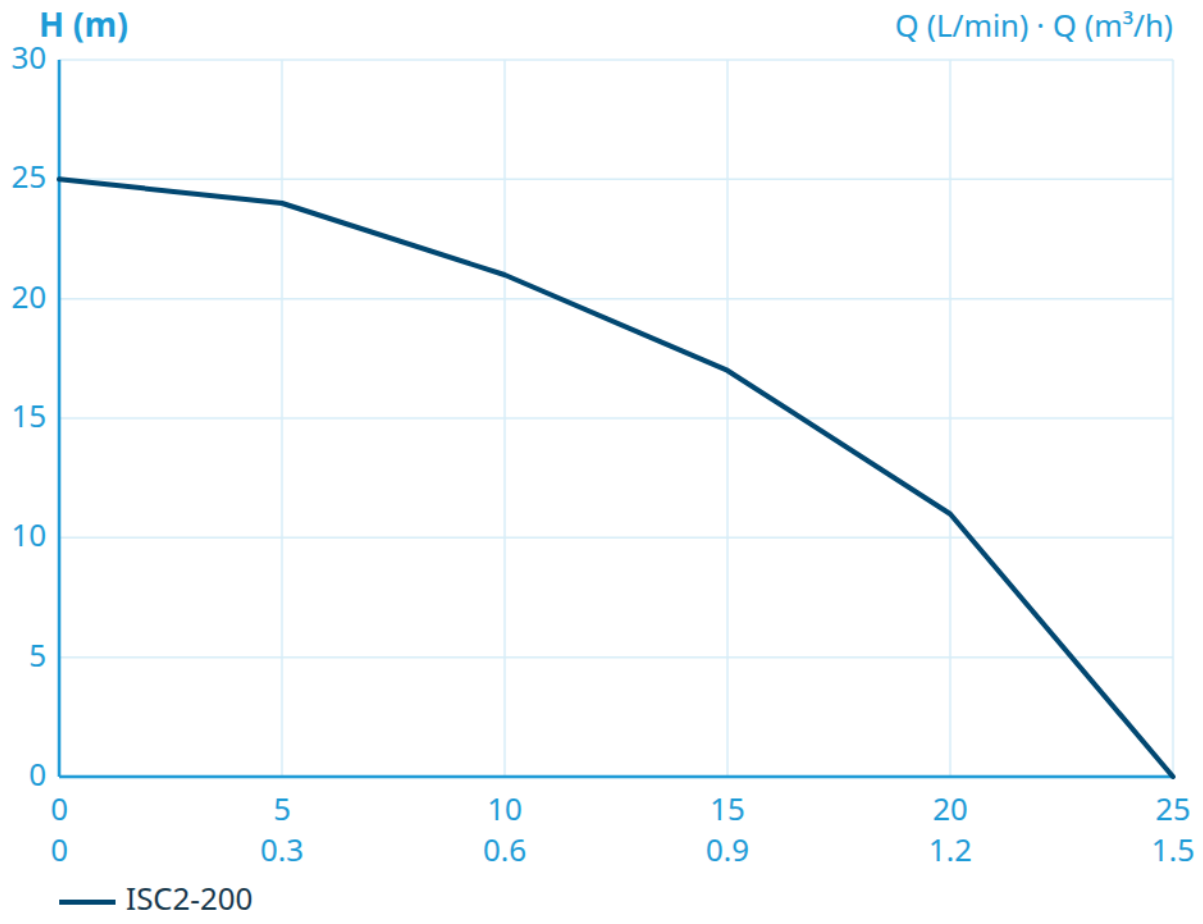
DC SERIES

ISC2-200

Second Generation Smart Booster Pump



PERFORMANCE CURVE



FEATURES

- **Permanent Magnet Motor**
- **Ultra Quiet Operation**
- **Automatic Start & Stop**
- **Energy Saving**
- **IP65 Protection**
- **Compact Design**

APPLICATIONS

Household Booster Systems · Water Heaters · Apartments · Villas · RV Water Systems · Solar Water Supply Systems

SPECIFICATION

Item	Specification
Control	2 Buttons
Temperature	0–65°C
Connection	15 mm
Insulation Class	Class H
Protection	IP65
Color	White / Black
Power	200 W
Voltage	DC 24 V
Max Head	25 m
Max Flow Rate	25 L/min
Pump Body	Reinforced Nylon
Weight	1 kg
Size	5.5 × 8 × 13 cm
Warranty	1 Year

DC 24 V
Safe low voltage

200 W
Permanent magnet motor

25 m
Max head

25 L/min
Max flow

Supplied with an adapter for AC 110/220 V mains input.

Calliope Pumps

PRODUCT CATALOG
2026

Smart Water Pump Systems & PM VFD Technology

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