

MQ

Self-priming multistage pumps
60 Hz



Contents

General data

Applications	3
Type key	3
Pumped liquids	3
Operating conditions	3
Technical data	3
Features and benefits	3
Control panel	4
Installation	4
Product range	4

Technical data

Material specification	5
Performance curves	6
Dimensions	6
Technical data	6

Applications

The MQ pump is designed for water supply and pressure boosting

- in private homes
- in summer houses and weekend cottages
- on farms as
- in market gardens and other large gardens.

The pump is suitable for pumping of potable water and rainwater.

Type key

Example	MQ	3	-35	A	-O	-A	- BVBP
Pump range							
Rated flow [m ³ /h]							
Maximum head [m]							
Code for pump version A: Standard							
Code for pipework connection O: External thread							
Code for materials A: Standard							
Code for shaft seal							

Pumped liquids

Potable water, rainwater or other clean, thin, non-aggressive liquids, not containing solid particles or fibres.

Operating conditions

System pressure:	Max. 109 psi (7.5 bar)
Inlet pressure:	Max. 44 psi (3 bar)
Suction lift:	Max. 26 ft (8 m)
Liquid temperature:	32 °F to +95 °F (0 °C to +35 °C)
Ambient temperature:	32 °F to +113 °F (0 °C to +45 °C).

Technical data

Mains voltage:	1 x 110-120 V, 60 Hz 1 x 220-240 V, 60 Hz
Voltage tolerances:	– 10 % / + 6 %
Enclosure class:	IP 54
Insulation class:	B
Sound pressure level:	≤55 dB(A)
Marking:	CE.

Features and benefits

- **Complete system**
The MQ is a complete, all-in-one unit, incorporating pump, motor, diaphragm tank, pressure and flow sensor, controller and non-return valve. The controller ensures that the pump starts automatically when water is consumed and stops automatically when the consumption ceases. In addition, the controller protects the pump in case of faults.
- **Installation**
Due to its compact design, the pump does not take up much space and is easy to install. No space around the pump is required.
- **Simple operation**
The pump features a user-friendly control panel with On/Off button and indicator lights for indication of the operational state of the pump.
- **Self-priming pump**
As it is self-priming, the MQ is able to pump water from a level below the pump. Provided it is filled with water, the pump is able to lift water from a depth of 8 m in less than 5 minutes. This facilitates installation and start-up of the pump and provides more reliable water supply in installations where there is a risk of dry running and leakages in suction hose or pipes.
- **Built-in protective functions**
If exposed to dry running or excessive temperature, for example in case of seizure or overload, the pump will stop automatically, thus preventing a motor burnout.
- **Automatic reset**
The pump features an automatic reset function. In case of dry running or similar alarm, the pump will stop. Restarting will be attempted every 30 minutes for a period of 24 hours. The reset function can be deactivated.
- **Low noise level**
Thanks to its hydraulic design and internal cooling, the pump is extremely low-noise, which makes it suitable for both indoor and outdoor use.
- **Pressure tank**
The built-in pressure tank reduces the number of starts and stops in case of leakages in the pipe system, causing less wear on the pump.
- **Maintenance**
No maintenance of the pump is required.

Control panel

Operation of the MQ pump is effected entirely via the control panel.

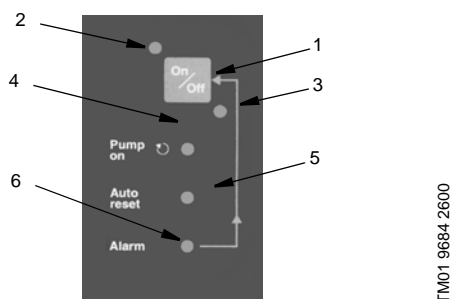


Fig. 1 MQ control panel

Pos.	Function	Description
1	On/Off button	The pump is started and stopped with the On/Off button.
2	Indicator light for mains connection (green)	Indicates that the pump is ready for operation.
3	Indicator light for mains connection (red)	Indicates that the pump is on standby.
4	Pump on (green)	Indicates that the pump is running.
5	Auto reset (green)	Indicates that the auto reset function is active. After an alarm, restarting will be attempted every 30 minutes for a period of 24 hours.
6	Alarm (red)	Indicates that the pump is in alarm state. Manual resetting is possible by pressing the On/Off button.

Product range

Region	Pump type	Voltage	Cable	Product number
North America, Canada and Mexico	MQ 3-35	1 x 110-120 V	None	96515512
	MQ 3-45		None	96515513
	MQ 3-35	1 x 220-240 V	None	96515514
	MQ 3-45		None	96515515
Other 60 Hz markets	MQ 3-35	1 x 110-120 V	2 m	96515516
	MQ 3-45		2 m	96515517
	MQ 3-25	1 x 220-240 V	2 m	96515521
	MQ 3-35		2 m	96515518
	MQ 3-45		2 m	96515519

Material specification

Pos.	Component	Material
2	Motor stool with base plate	POM + 25 % glass fibre
4	Chamber	PPO + 20 % glass fibre
7	Drain and priming plug	POM + 25 % glass fibre
10	Self-priming valve	PP + 30 % glass fibre
14	Self-priming part	PPE/PS + 20 % glass fibre
16	Pump sleeve	Stainless steel, DIN W.-Nr. 1.4301, AISI 304
42	Pressure tank	Butyl (diaphragm)
49	Impeller	PPO + 20 % glass fibre and PTFE
65	Non-return valve	POM + 25 % glass fibre
92	Clamp	Stainless steel, DIN W.-Nr. 1.4301, AISI 304
100a	Discharge port	POM + 25 % glass fibre
101	Suction port	POM + 25 % glass fibre
103	Shaft seal:	Carbon/ceramics/NBR rubber
104	Stationary and rotating parts	
150	Shaft	Stainless steel, DIN W.-Nr. 1.4005, AISI 416
	Motor sleeve	Stainless steel, DIN W.-Nr. 1.4301, AISI 304
174a	Pressure switch	
184	Flow sensor	
	O-rings	NBR rubber

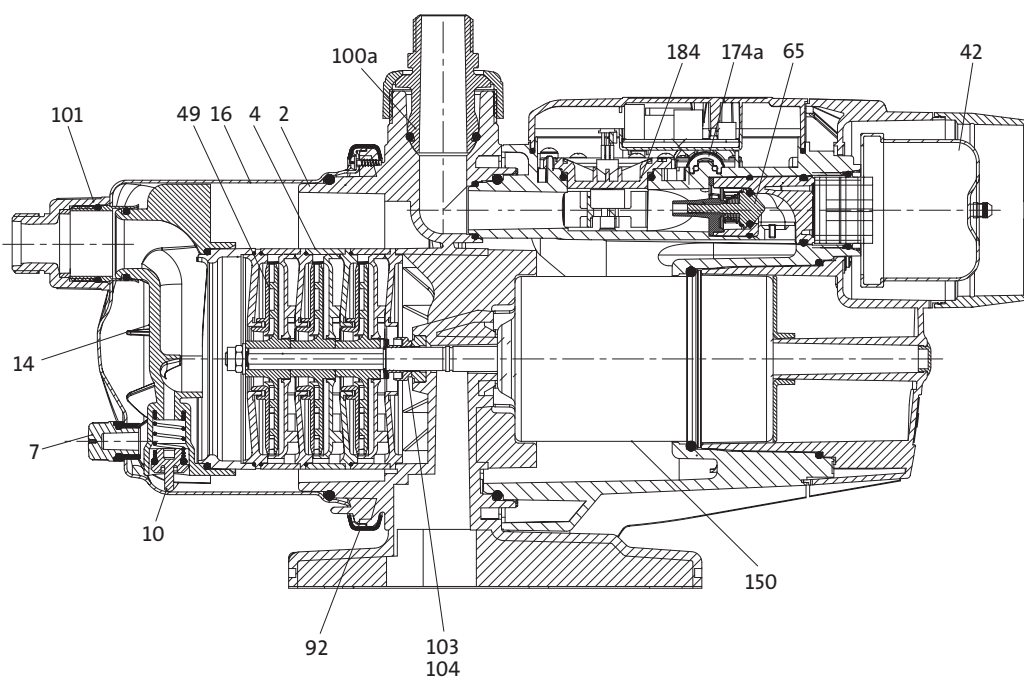
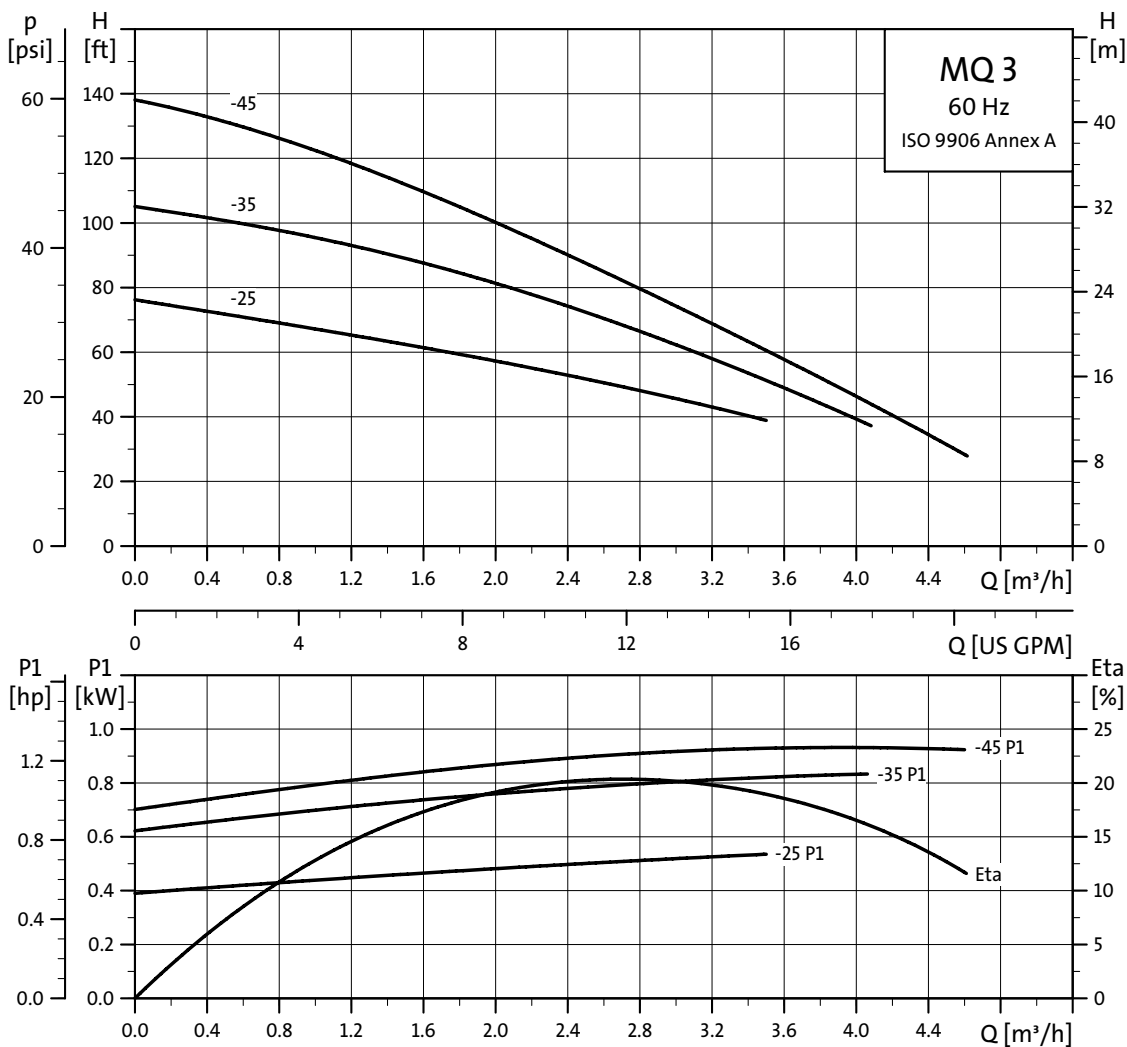


Fig. 2 Sectional drawing of MQ

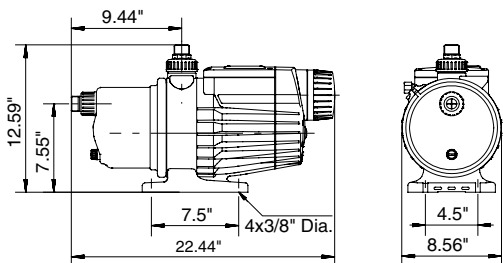
TM01 9733 5006

Performance curves



TM01 9679 4103

Dimensions



TM02 0818 0201

Technical data

Pump type	Voltage	$I_{1/1}$ [A]	I_{start} [A]	P_2		Net weight [kg]
				[W]	[hp]	
MQ 3-35	1 x 110-120 V	7.2	12.5	580	0.79	13.0
MQ 3-45	1 x 110-120 V	9.2	12.5	680	0.92	13.0
MQ 3-25	1 x 220-240 V	2.2	8.6	400	0.55	13.0
MQ 3-35	1 x 220-240 V	3.7	8.6	580	0.79	13.0
MQ 3-45	1 x 220-240 V	4.5	8.6	680	0.92	13.0

V7164095 0607	GB
Repl. V7164095 0104	

Subject to alterations.