Multistage Booster Pump

The MQ is a complete, Domestic Booster Pump, incorporating integral controls for on/off control of the pump, diaphragm tank, pressure and flow sensor and non-return valve on pump inlet. 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. Due to its compact design, the pump does not take up much space and is easy to install. The water cooled motor allows the pump to be installed in confined spaces.

The pump features a user-friendly control panel with ON/OFF button and indicator lights for indication of the operational state of the pump.

Features:

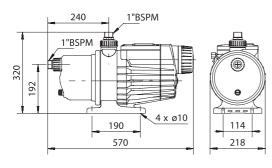
- Compact integrated unit requiring minimum space
- Built-in motor protection
- Automatic re-set
- Low noise levels
- Built-in flow switch reduces stop/start operations



P H Pal [m]	-45					H 5	IQ 3 0 Hz 06 Annex A
	-35		\downarrow				
00 = 32							
24							
16							
8							
0.0	0.4 0.8	1.2 1.6	2.0 2.4	2.8 3.2	2 3.6 4	1.0 4.4	Q [m³/h
0.0 P1	0.2	0.4	0.6	0.8	1.0	1.2	Q [l/s
[kW]- 1.0						-45	P1
0.8				_		-35 P1	
0.6	_					Eta	1

Electrical Data							
Model	Voltage	FLC(A)	SC(A)	Input(W)	Nett Weight Kg		
_	1 x 220-240V	4.0	11.7	550	13.0		
MQ 3-45	1 x 220-240V	4.5	11.7	670	13.0		

Dimensions mm



TM01 9734 2800

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INSTALLATION

Self-cooling, compact and horizontal, the pump is well suited for domestic installations where space is limited.

In addition, the pump discharge is flexible, $\pm 5^{\circ}$, to facilitate connection to existing pipework.

The pump is supplied complete with a 2 m cable.

APPLICATION

The MQ pump is designed for water supply and pressure boosting to outlets no greater than 15m above the pump:

- in private homes,
- in summer houses and weekend cottages,

PUMPED LIQUIDS

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

MAXIMUM OPERATING CONDITIONS

System pressure: Max. 7.5 bar. Inlet pressure: Max. 3 bar. Suction lift: Max. 8 m.

Liquid temperature: 0° C to $+35^{\circ}$ C. Ambient temperature: 0° C to $+45^{\circ}$ C.

TECHNICAL DATA

Mains voltage: $1 \times 220-240 \text{ V}$, 50 Hz. Voltage tolerances: -10%/+6%.

Enclosure class: IP54. Insulation class: B.

Sound pressure level: 55 dB(A).

Marking: CE.

OPERATION

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.

Due to its compact design, the pump does not take up much space and is easy to install.

The pump features a user-friendly control panel with ON/OFF button and indicator lights for indication of the operational state of the pump.

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 burn out.

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.

Thanks to its hydraulic design and internal cooling, the pump is extremely low-noise, which makes it suitable for indoor.

The built-in flow switch reduces the number of starts and stops with small flow demands, causing less wear on the pump. No maintenance of the pump is required.

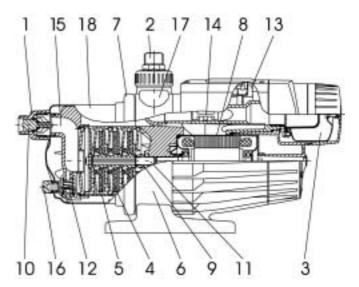
Operation of the MQ pump is effected entirely via the control panel.

CONNECTIONS

1" BSPM flexible connections

MATERIAL SPECIFICATION

Pos.	Component	Material
1	Suction port	POM + 25% glass fibre
2	Discharge port	POM + 25% glass fibre
3	Pressure tank	NR-rubber (diaphragm)
4	Impeller	PPO + 20% glass fibre-PTFE
5	Chamber	PPO + 20% glass fibre
6	Motor stool with ba	ase
	plate	POM + 25% glass fibre
7	Clamp	Stainless steel, DIN WNr. 1.4301, AISI 304
8	Motor with	
	cooling	
	sleeve	Stainless steel, DIN WNr. 1.4301, AISI 304
9	Shaft seal	Carbon/ceramics/NBR rubber
10	Non-return valve	POM + 25% glass fibre
11	Shaft	Stainless steel, DIN WNr. 1.4005,
	AISI 416	
12	Self-priming	
	valve	PP + 30% glass fibre
13	Pressure switch	
14	Flow sensor	
15	Self-priming part	PPE/PS + 20% glass fibre
16	Drain plug	POM + 25% glass fibre
17	Priming plug	POM + 25% glass fibre
18	Pump sleeve	Stainless steel, WNr. 1.4301,
		AISI 304
	O-rings	NBR-rubber





GRUNDFOS