

MQ

Self-priming multistage pumps
60 Hz



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Mission

- to successfully develop, produce, and sell high quality pumps and pumping systems worldwide, contributing to a better quality of life and healthier environment



Bjerringbro, Denmark



Fresno, California



Olathe, Kansas



Monterrey, Mexico



Allentown, Pennsylvania



Oakville, Ontario, Canada

- One of the largest pump companies in the world with over 11,000 employees worldwide
- World headquarters in Denmark
- North American headquarters in Kansas City - Manufacturing in Fresno, California
- 60 companies in 40 countries
- More than 10 million pumps produced annually worldwide
- North American companies operating in USA, Canada and Mexico
- Continuous reinvestment in growth and development enables the company to **BE** responsible, **THINK** ahead, and **INNOVATE**

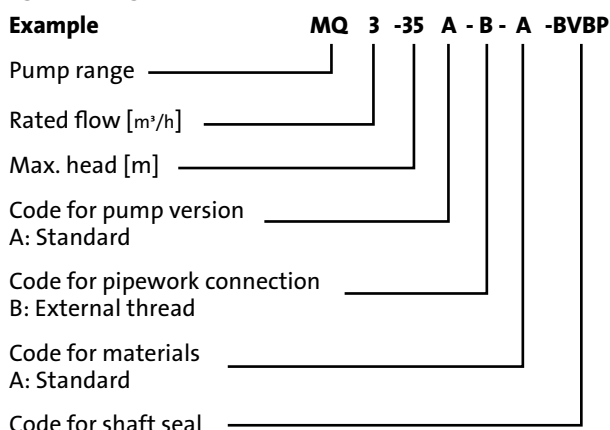
Application

The MQ pump is designed for water supply and pressure boosting ...

- homes
- cabbins, cottages
- on farms as well as
- gardens

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

Type Key



Pumped liquids

Potable water, rain water 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:

- 115 V models: 1 x 110-120 V, 60 Hz
- 230 V models: 1 x 220-240 V, 60 Hz.

Voltage tolerances: -10%/+6%.

Enclosure class: IP54.

Insulation class: B.

Sound pressure level: ≤ 55 dB(A).

Agency approvals: UL, cUL

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 check 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 26 ft (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, excessive temperature, or any overload condition 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 very quiet, which makes it suitable for many applications.

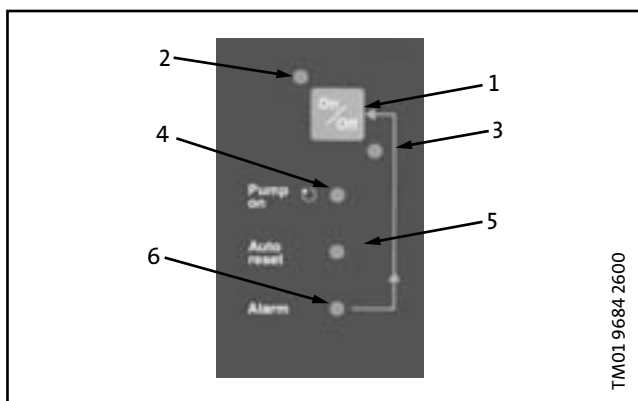
Pressure tank

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



TM01 9684 2600

Pos.	Function	Description
1	ON/OFF button	The Pump is started and stopped by means of the ON/OFF button.
2	Power indicator lights	Indicates that the pump is ready for operation (green).
3		Indicates that the pump is on standby (red).
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.

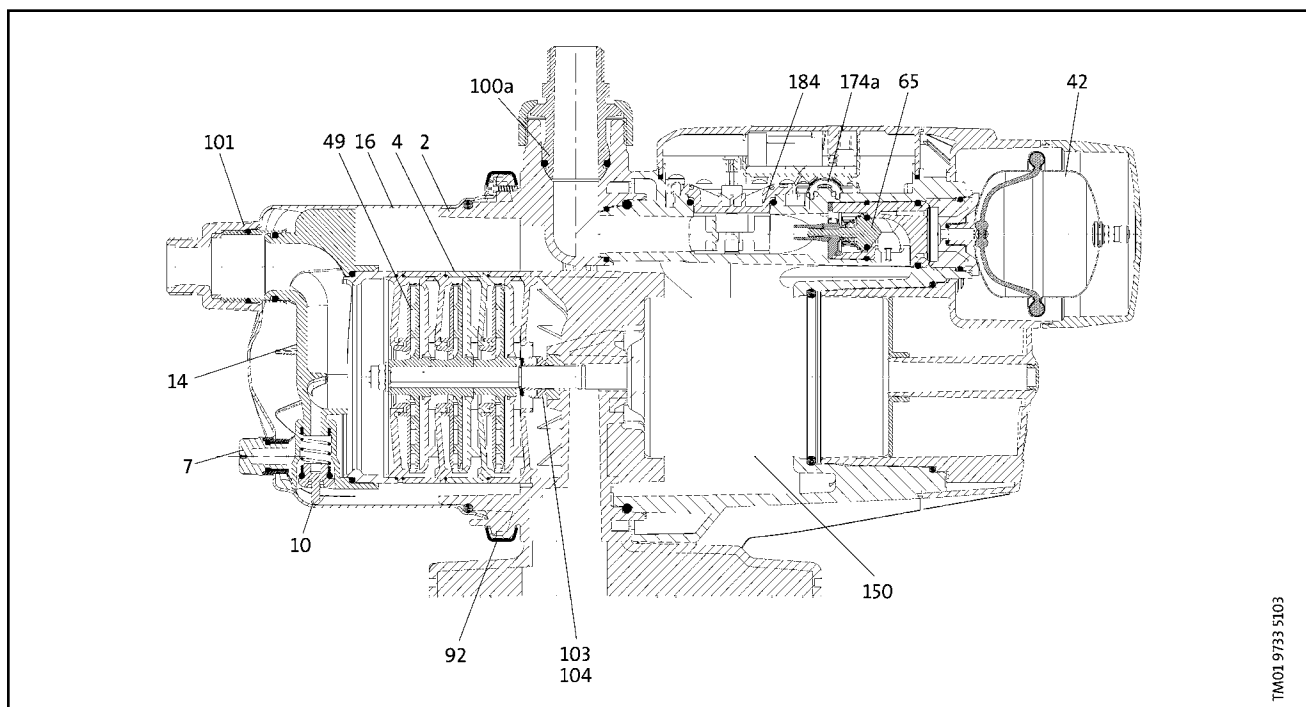
Product range

Region	Pump Type	Voltage	Connection
USA, Canada & Mexico	MQ 3-35	1 x 110 - 120 V	Power Cord w/plug
	MQ 3-45		Power Cord w/plug
	MQ 3-35	1 x 220 - 240 V	Power Cord w/plug
	MQ 3-45		Power Cord w/plug

Material specification

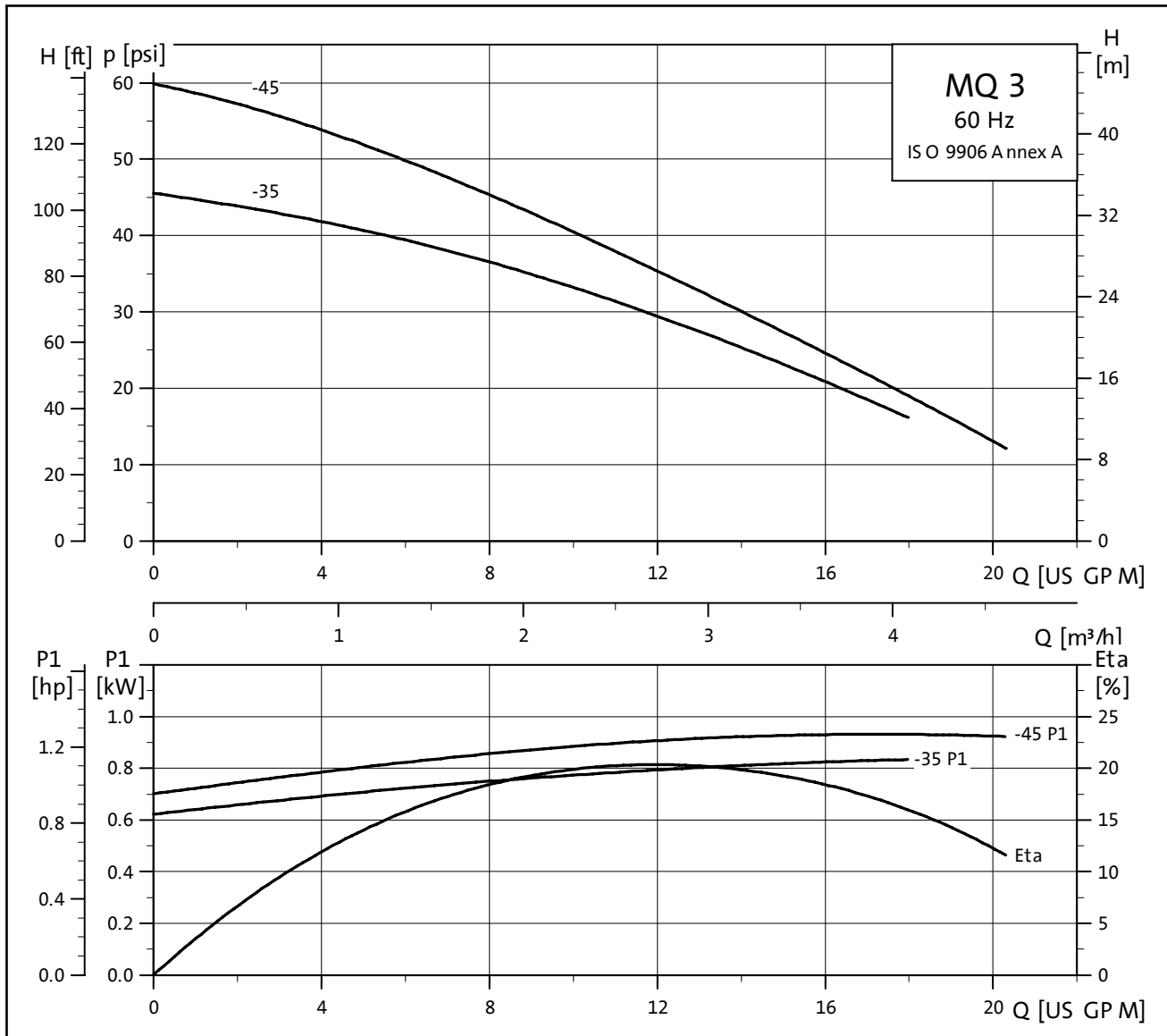
Pos.	Components	Material
2	Motor stool with base plate	POM + 25% glass fiber
4	Chamber	PPO + 20% glass fiber
7	Drain and priming plug	POM + 25% glass fiber
10	Self-priming valve	PP + 30% glass fiber
14	Self-priming part	PPE/PS + 20 % glass fiber
16	Pump sleeve	Stainless steel, DIN W.-Nr. 1.4301, AISI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

POM: Polyoximetylen
 NR-rubber: Natural Rubber
 PPO: Polyphenylene Oxides
 PP: Polypropylene
 PPE/PS: Polyphenylene Oxides (the same as PPO but from different supplier)
 NBR-rubber: Nitrile-Butadiene Rubber



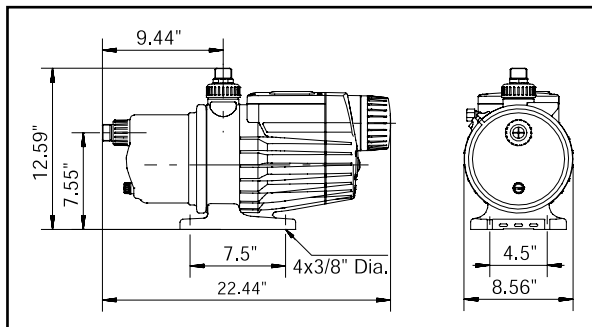
TM01 9733 5103

Flooded suction (0 PSI inlet) performance curves*



*See suction lift performance curves (page 8) for installations with water level below intake.

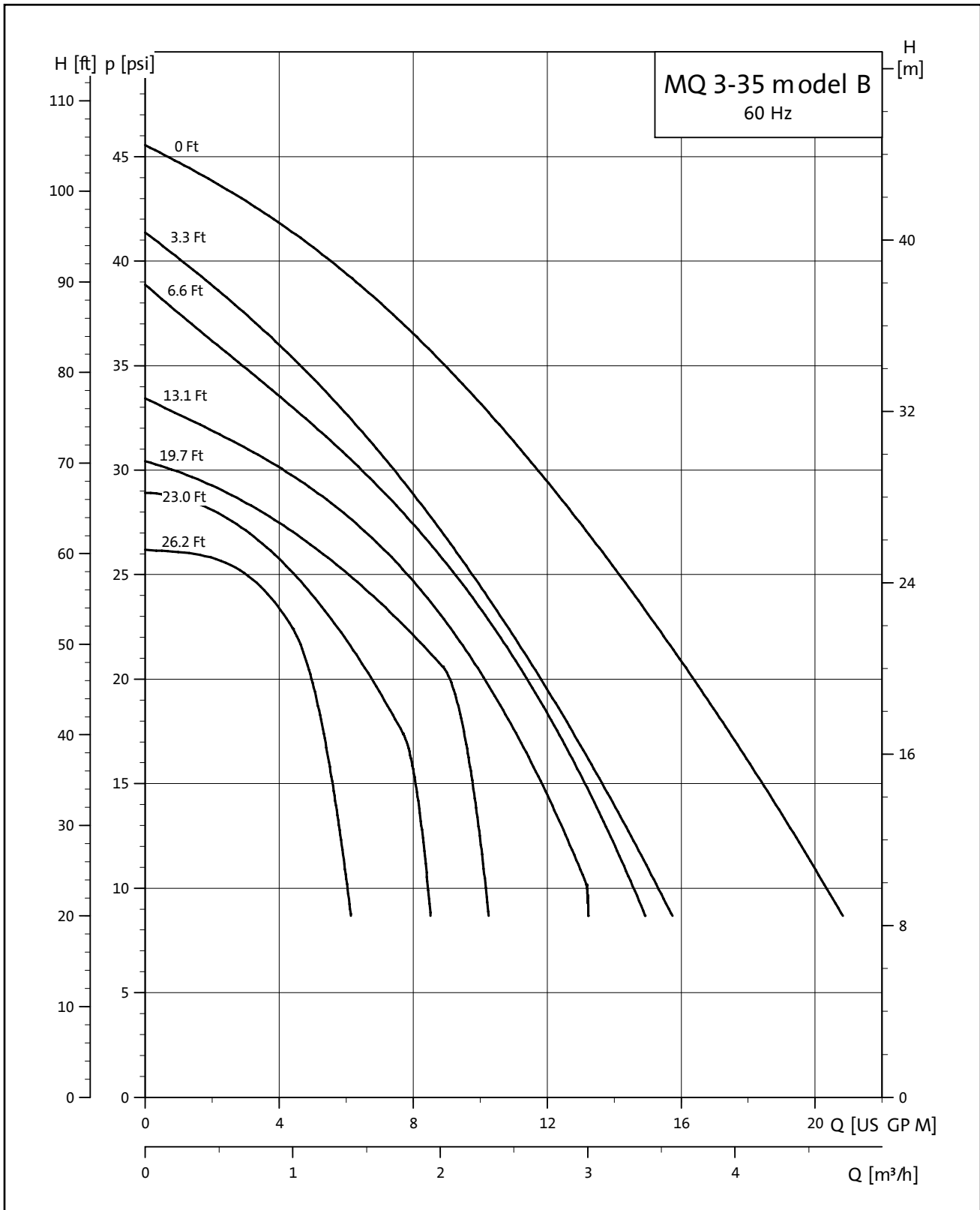
Dimensions



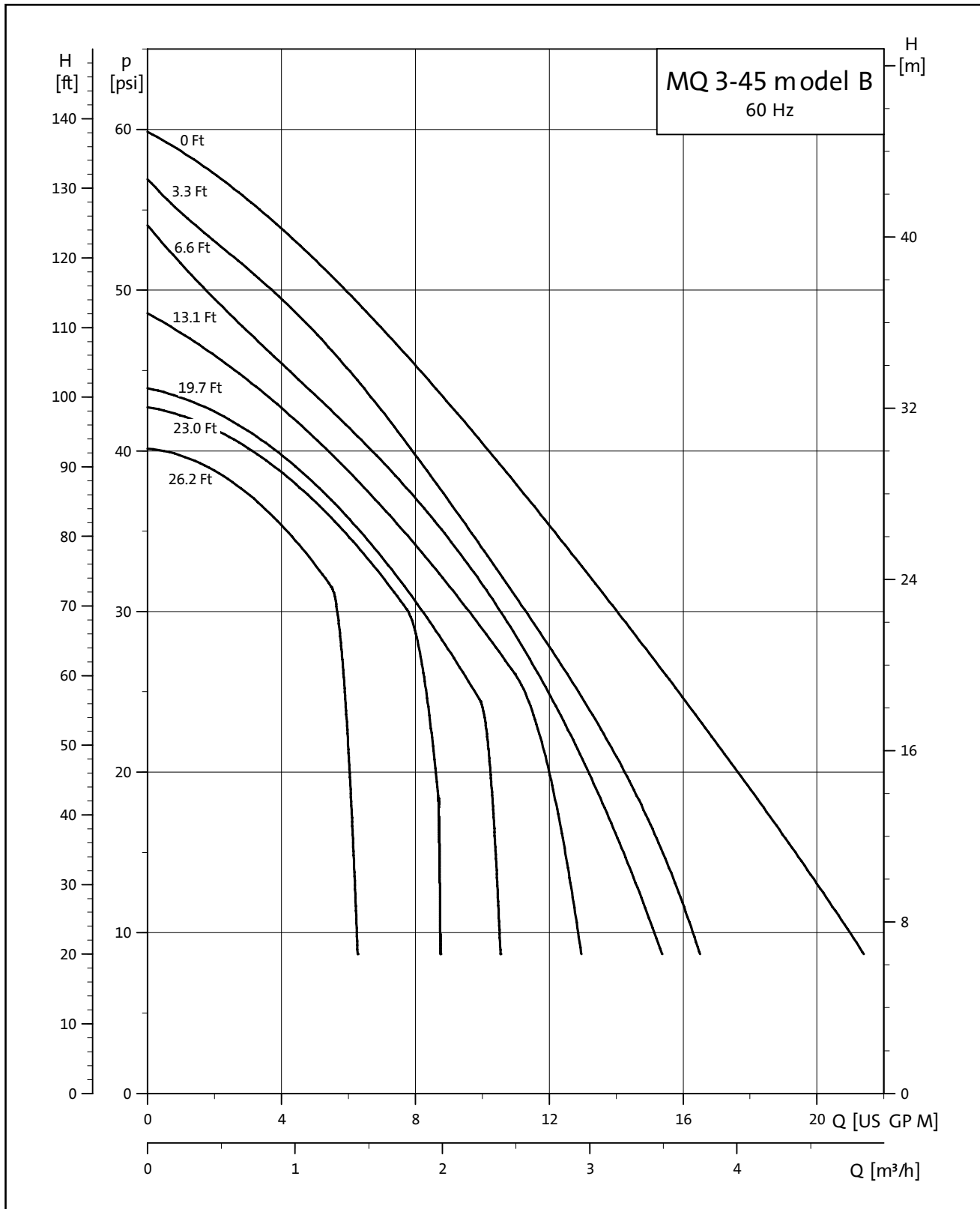
Technical data

Pump type	Voltage	I _n [A]	I _{start} [A]	P ₂		Net weight [pounds]
				[W]	[hp]	
MQ 3-35	1 X 110-120 V	7.2	12.5	580	0.79	29
MQ 3-45	1 X 110-120 V	9.2	12.5	680	0.92	29
MQ 3-35	1 X 220-240 V	3.7	8.6	580	0.79	29
MQ 3-45	1 X 220-240 V	4.5	8.6	680	0.92	29

MQ 3-35 Suction lift performance curves



MQ 3-45 Suction lift performance curves





Company name: _____
 Prepared by: _____
 Phone number: () - _____
 Fax number: () - _____
 Date: _____ Page 1 of: _____
 Quote number: _____

Client Information

Project title: _____	Client name: _____
Reference number: _____	Client number: _____
Client contact: _____	Client phone no: () - _____

Location Information

For: _____	Unit: _____
Site: _____	Service: _____
Address: _____	City: _____ State: _____ Zip Code: _____

Technical Data

Flow (GPM) _____
 Head (Ft) _____
 Motor _____
 Max Fluid Temp _____
 Min Fluid Temp _____
 Max Working Pressure _____
 Min Required Inlet Pressure _____
 Connection Type and Size _____

Motor Information

HP: _____
 Phase: _____
 Voltage: _____
 Enclosure: _____

Pump Information

Model Information from Type Key and Codes: _____	
Quantity Required: _____	Example: MQ 3-35
Minimum required flow: _____	NPSH required at duty point: _____
Product Guide additional information pages	
Materials page number: _____	Performance curve page number: _____
Technical data page number: _____	Motor data page number: _____

Custom-built pump information (optional): _____

Additional Information

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Subject to alterations.

U.S.A.
GRUNDFOS Pumps Corporation
17100 West 118th Terrace
Olathe, Kansas 66061
Phone: (913) 227-3400
Telefax: (913) 227-3500

Canada
GRUNDFOS Canada Inc.
2941 Brighton Road
Oakville, Ontario
L6H 6C9
Phone: (905) 829-9533
Telefax: (905) 829-9512

Mexico
Bombas GRUNDFOS de Mexico S.A. de C.V.
Boulevard TLC No. 15
Parque Industrial Stiva Aeropuerto
C.P. 66600 Apodaca, N.L. Mexico
Phone: 011-52-81-8144 4000
Telefax: 011-52-81-8144 4010

www.grundfos.com

