1. Product overview

Pump	Description	Technical data	Page
JP 5 and JP 6 pumps and boosters			
JP 5, JP 6			
	Self-priming pump for water supply and transfer in applications such as: • single- and two-family houses • gardens.	Maximum suction lift: 7 m Maximum head: 57 m Maximum flow rate: 5 m Pump body: stainless steel	9
JP 5 PM, JP 6 PM			
	JP 5 or JP 6 pump with a Pressure Manager **Features** • Anticycling • dry-running protection • automatic start/stop.	Maximum suction lift: 7 m Maximum head: 57 m Maximum flow rate: 5 m Pump body: stainless steel	11
JP 5 PT, JP 6 PT			
	JP 5 or JP 6 pump with a pressure tank and pressure switch **Features** • Automatic start/stop • constant water supply.	Maximum suction lift: 7 m Maximum head: 57 m Maximum flow rate: 5 m Pump body: stainless steel Tank: 18, 24, 60 l, horizontal	12
JPA pumps and boosters			
JPA			
	Self-priming pump for water supply and transfer in applications such as: • single- and two-family houses • gardens • small-scale agriculture • industrial greenhouses.	Maximum suction lift: 8 m Maximum head: 62 m Maximum flow rate: 12 m Pump body: cast iron	13
JPA PM			
	JPA pump with a PM pressure manager **Features** • Anticycling • dry-running protection • automatic start/stop.	Maximum suction lift: 8 m Maximum head: 54 m Maximum flow rate: 4 m Pump body: cast iron	15
JPA PT			
	JPA pump with a pressure tank and pressure switch. The pressure tank is available in a horizontal or vertical version. **Features** • Automatic start/stop • constant water supply.	Maximum suction lift: 8 m Maximum head: 54 m Maximum flow rate: 4 m Pump body: cast iron Tank: 18 l vertical, 20 l horizontal	16

2. Product description

Introduction

Grundfos offers jet pumps for a wide range of domestic applications such as water supply to single- and two-family houses, gardens and small-scale agriculture. The jet pumps ensure a constant supply of water to your home and garden. Grundfos offers four different product types which include a jet pump:

- separate jet pumps
- booster solutions which include a jet pump and a Pressure Manager
- booster solutions which include a jet pump, a pressure switch and a pressure tank
- booster solutions which include a jet pump, a pressure switch, a pressure tank and an external ejector nozzle for deep-well applications.

Jet pumps

The jet pumps are self-priming centrifugal pumps designed for long and trouble-free operation. A jet pump has an excellent suction capacity and is self-priming thanks to the built-in ejector.

The pump is small, handy and easy to move around, which makes it suitable for various applications.

TM01 4595 3502 - TM05 5205 3412
Gr1045 - TM06 5410 4515

Fig. 1 JP 5, JP 6, JPC, JPA

Boosters

The boosters are compact systems for domestic water supply. The boosters consist of a Grundfos jet pump and a pressure control unit. The pressure control unit gives more comfort to the user, as it allows the pump to start and stop automatically according to demand.

The boosters are divided into two main groups, i.e. jet pumps with Pressure Manager and jet pumps with a pressure tank.

Booster with Pressure Manager

The Pressure Manager comes in two versions:

- a basic version, PM 1
- an advanced version, PM 2.

They both have the following features:

- anticycling
- automatic start/stop
- dry-running protection
- integrated non-return valve.

TM05 5989 4312 - TM05 8007 1813

Fig. 2 JP 5/6 PM, JPA PM, JPC PM

Booster with pressure tank

The booster consists of a pressure switch, a pressure gauge and a diaphragm tank.

The pressure switch automatically starts the pump according to demand. The diaphragm tank ensures a constant water pressure in the water supply and thereby limits the number of starts in case of low water consumption or leakage loss. Furthermore, the diaphragm tank increases system comfort by compensating for pressure drops when a tap is opened, and finally it reduces problems with water hammer in the pipework.

TM05 5987 4312 -
TM05 8225 2113 -
TM06 5409 4515

Fig. 3 JP 5/6 PT, JPC PT, JPA PT, JPD PT

Pumped liquids

Jet pumps and boosters are suitable for pumping clean, thin, non-aggressive and non-explosive liquids without solid particles or fibres. Examples of liquids:

- potable water
- rainwater.

If the pumps are used for pumping unclean liquids, such as pool water, they must subsequently be flushed with clean water. The pumps must not be used for transfer of diesel oil or other oil-containing liquids. Sand and other impurities in the water cause wear to the pump.