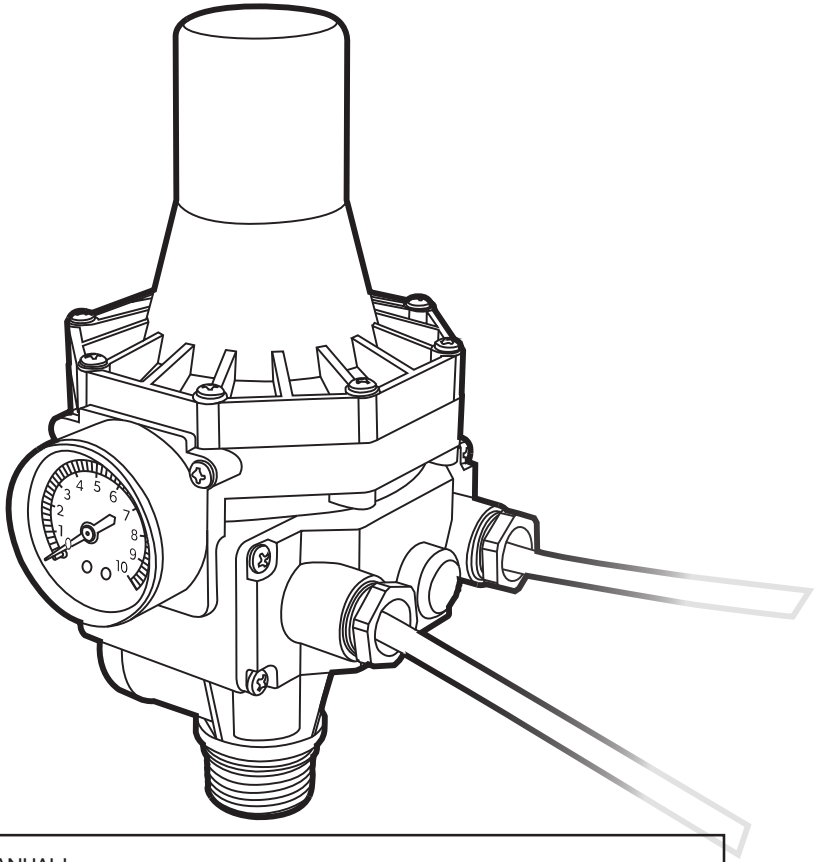
TOLSEN FX FORCE XPRESS

79857
AUTOMATIC PUMP CONTROL

INSTRUCTION MANUAL 10A 1100W



SAVE THIS MANUAL !
You will need this manual for safety instructions, operating procedures and warranty.
Put it and the original sales receipt in a safe dry place for future reference.

SPECIFICATIONS

Input voltage	110-120V
Frequency	60Hz
Max. current	10A
Max. power	1100W
Maximum working pressure	10Bar(145psi)
Starting pressure	1.5Bar(22psi)
Connection	1"male
Protection rating	IP65

INSTRUCTION MANUAL

Safety precautions

This symbol  together with one of the following words "Danger" or "Warning" indicates the risk level deriving from failure to observe the prescribed safety precautions:

 **DANGER risk of electric shock** Warns that failure to observe the precautions invoives a risk of electric shock.

 **DANGER** Warns that failure to observe the precautions involves a risk of damage to persons and/or things.

 **WARNING** Warns that failure to observe the precautions involves the risk of damaging the pump and/or the plant.

1. General information

These instructions are designed to ensure the correct installation and best use of our automatic constant water pressure assemblies.

If you have any doubts, please consult your specialist dealer.

The assemblies are completely silent and are designed to provide an automatic supply of clean water to one or two dwellings.

This is a compact kit comprising a check valve, electronic circuit and reset button. It is designed to maintain constant pressure. It does not permit the pump to operate without water and avoids water hammering. It requires no preloading of air or adjustment. It has a water reserve to prevent the unit from being started by a dripping tap.

If water consumption is more than 1 l/m, the pump will operate continuously.

Our units are constructed with the finest materials and are subjected to the most rigorous hydraulic and electrical controls, painstakingly verified.

By strictly following the instructions for installation and use of the pump, and paying careful attention to the wiring diagrams you shall avoid the possibility of overloading the control circuit or of any other problems associated with misuse, for which we can accept no responsibility.

When the pump reaches maximum pressure the unit automatically switches the pump off.

Unit selection must take into account the fact that the differential must be over 0.7 kg.

2. Installation ⚠

The Controller has a 1xBSP threaded male fitting which can be screwed directly into the pump, and 1xBSP female for connection to discharge pipework.

The assembly should be protected from the risk of flooding and installed in a sheltered place but weliventilated place.

If the pump to which the Controller is fitted is directly connected to the mains supply, it must be remembered

that the incoming pressure must be added to that provided by the pump. Total pressure may never exceed bar.

It can be fitted to any installation that has sufficient feed flow. See installation diagrams.

3. Discharge pipework assembly ⚠

The discharge pipework diameter should be equal to or larger than that of the pump discharge. It should not rest against the pressure unit and should be checked for watertightness.

We recommend the use of a flexible anti-vibration hose on the discharge, as direct connection to rigid pipework could cause damage to the Controller.

No check valve needs to be ibstalled.

4. Electrical connection ⚡

Nominal pump current should be no higher than 10 A and the maximum motor power (P1) should never exceed 1.8 Kw.

Ensure that all the connections between the electronic circuit and the power and motor cables are properly made.

To ensure correct connection see the wiring diagram.

The protection of the system should be based on a differential switch (1fn = 30mA). The supply cable should comply with EEC standards (2) or be of type H07 RN-F as per VDE 0250.

5. Controls prior to start up ⚠

Before first starting the pump ensure:

That the grid voltage and frequency match those featured on the specifica plate.

That the pump shaft turns freely.

That the pump body is completely full of water-fill by unscrewing the corresponding priming plug.

THE PUMP SHOULD NEVER BE OPERATED DRY.

SEE INSTALLATION DIAGRAMS.

6. Start-up

Open all gate valves in the suction and diischarge lines. Switch on the power and the pump will start automatically. While doing so, leave the discharge tap open to bleed any air there may be in the system. Then, close the tap and the assembly will shut down when it reaches maximum pump pressure.

If the pump is not properly primed or these is no water supply, it will shut down after 10 seconds.

Once the water level is recovered and the pump has been properly primed, repeat the start up operation, this time holding in the red reset button for a few seconds.

If the assembly does not operate, does not produce pressure or does not shut down, try to discover the cause of the problem consulting the troubleshooting guide provided below.

7. Maintenance ⚠

Our Controller require no specific maintenance. Notwithstanding, we recommend that they be emptied when temperatures are low and there is a risk of freezing or if the unit is not to be used for a long period of time. If the unit is not to be used for a very long period it should be cleaned and stored in a dry, well-ventilated place.

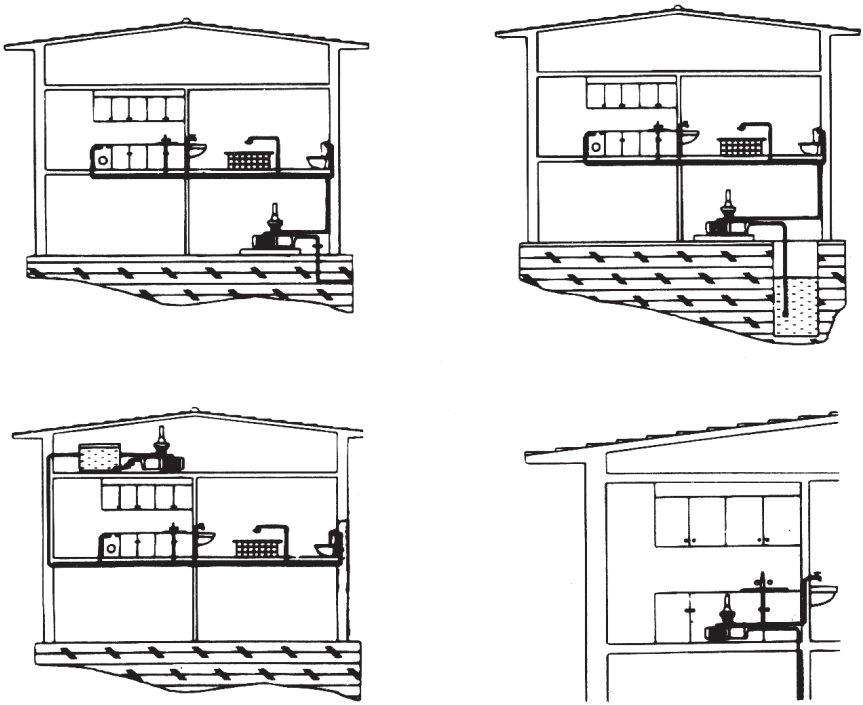


FIG. (1)

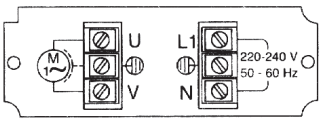
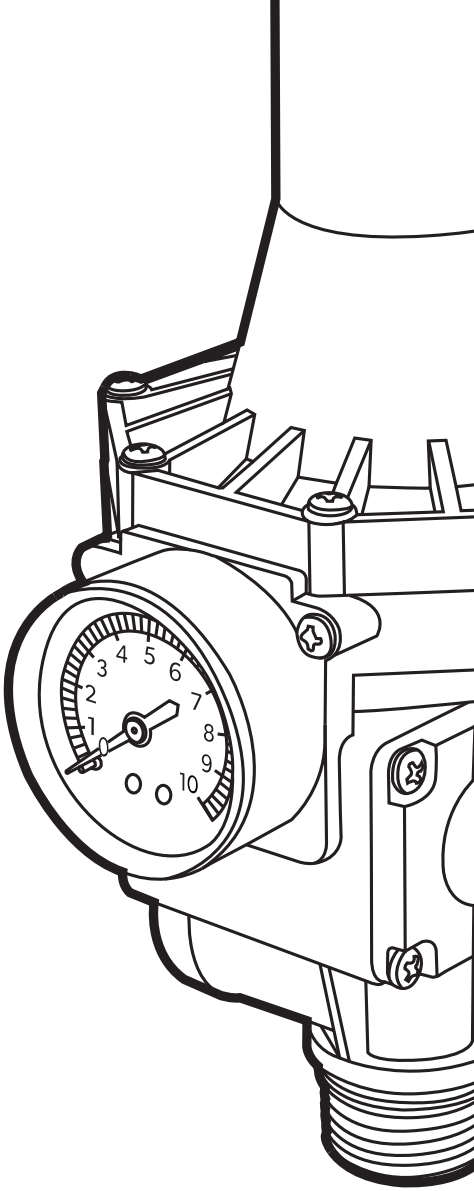


FIG. (2)

POSSIBLE FAULTS,CAUSES AND SOLUTIONS

1. The assembly does not shut down
2. The motor operates but provides no flow
3. The pressure is not sufficient
4. The assembly is constantly stopping and starting
5. The assembly does not start

1	2	3	4	5	CAUSES	SOLUTIONS
	X				Closed gate valve	Open valve
X			X		Tap, or cistern leak	Repair leak
				X	No water	Wait till water level recovered and press red button
				X	Pump blocked	Call service engineer
		X			Total head height	Chk. Geometric ht. Plus loss of head
X	X	X			Air entering suction channel	Carefully seal all joints and connectors
				X	No power	Check fuses
X		X			Leak in discharge pipework	Repair leak
				X	The static head is greater than the assembly start pressure	Chk. Startup setting is correct



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