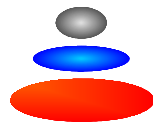


# **FLOWST8N CASE STUDY** **THE FIRST IN SUCTION LIFT**



**GRIFEN** sprinkler solutions

## **DOMESTIC & RESIDENTIAL** **PUMP FLOW STATION FOR** **BS9251**

**FLOWST8N** can be installed under suction lift conditions freeing up building space and saving additional structural building elements. This is an overview of the first system installed and commissioned under suction lift.

A dedicated external pump room has been constructed which is protected from the snow and frost with a frost stat and heater. The photo shows the pump system installed above to the tank, the tank cover and inspection hatch can be seen in the foreground. The builders have provided a service opening under the lockable cover to make serving much simpler.

The commissioning did have a few teething problems; a check valve was installed in the delivery line, this has been drilled (temporarily) to allow system pressure to act on the switches. This will be removed from the line and is not necessary.

The foot valve/ non return in the tank passed for a moment while some sediment was stuck under the seat. A five second pump run disturbed the sediment and seated the valve.

### **MAJOR BENEFITS of suction lift**

- Install in a wider range of locations
- Cost saving in building construction
- Space saving in building construction
- No flood risk from the tank

After filling the system the pressure switch adjustment sequence was run and a manually started auto weekly test was carried out.

An annual test was also performed so the unit will warn of a service in 12 months.

A Technical data sheet is available along with CAD files for the various configurations. A video clip is also available of the misting system protecting the pump and controls from fire in a cupboard. This external pump room is also protected by the mist system.

Tech data and pump curves on the reverse.



Top; 3 storey flats with sprinkler protection in Cannock Centre from left to right;  
Tony Panter - Staffordshire Survey Services, Gary Noble GRIFEN sprinkler solutions, Wayne Astbury-Astbury Electrical.  
Below; Healthy system display  
Tank low level switch monitored by **FLOWST8N** (LL on the display), an alarm contact is also sent to the remote panel.  
Valve sets within the building



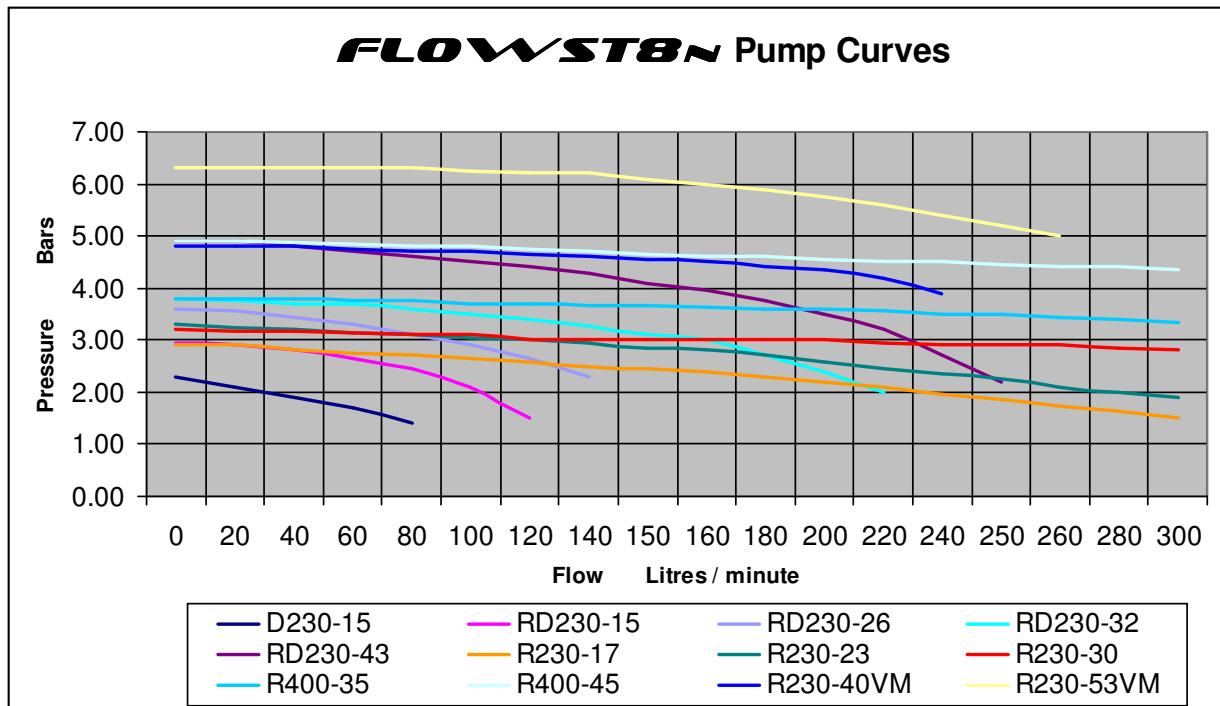
### **CUSTOMER COMMENTS**

Tony "very simple to install and delighted to have the suction lift option giving flexibility, it worked a treat, we will definitely be using it again". Tony will also be performing quarterly testing on top of the auto weekly flow test. Wayne "great to have combined alarms which make the remote panel simpler and more cost effective" Tony "it would be nice to have the display higher up" - we will be offering this as an option.

Thanks also to Neil Pinchen of Chase Engineers.

## Technical Specifications

Model	Flow at duty point	P max	VAC	kW	inlet	outlet
D230-17	60l/min@ 1.7 bar	2.3 bar	230	0.37	1"	1"
RD230-15	60l/min@ 2.65 or 120l/min @1.5 bar	2.9 bar	230	0.75	1"	1"
RD230-26	120l/min@ 2.65 bar	3.3 bar	230	1.1	1.25"	1"
RD230-32	120l/min @ 3.8 bar	3.2 bar	230	1.5	1.5"	1"
RD230-43	120l/min@ 4.3 bar	4.9 bar	230	2.2	1.5"	1"
R230-17	240l/min@ 1.7 bar	3.1 bar	230	1.1	1.5"	1.5"
R230-23	240l/min@ 2.35 bar	3.3 bar	230	1.5	1.5"	1.5"
R230-30	240l/min @ 2.95 bar	3.1 bar	230	2.2	2"	2"
R230-40VM	240l/min@ 4.0 bar	4.5 bar	230	3	2	2"
R230-53VM	240l/min@ 5.3 bar	6.2 bar	230	4	2	2"
R400-35	240l/min@ 3.5 bar	3.8 bar	400	3.0	2"	2"
R400-45	240l/min@ 4.5 bar	4.9 bar	400	4.0	2"	2"



This graph combines all our products on one selection chart, pump curves are available for individual units.

### Understanding the product codes

D = 60l/min, RD = 120l/min, R = 240l/min

230 / 400 = voltage

Number = head in metres @ duty point

e.g. R400-35 = 240 litres / min at 3.5 bars 400VAC motor

Suffix VM = vertical multistage pump

Other pump duties are available, if you can provide the duty we can assist in the product selection.

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