

# 1276 Fire Sprinkler Tank Valve

# FP

**Installation Guide** 

For valve sizes (DN):

FP80 - 3" (80mm)

FP100 - 4" (100mm)

FP150 - 6" (150mm)

Other sizes available on request.

### **MPORTANT**

#### Please keep for future reference.

Please read these instructions carefully and refer to any diagrams before installation.

These instructions contain important information which will help you install your **KERAFLO** float valve correctly and ensure safe use and maintenance.

For further assistance please ring our customer helpline: **0118 921 9920**.



LPS 2083 : Issue 01 Cert/LPCB ref. 1642 (FB25 Pilot Valve only)





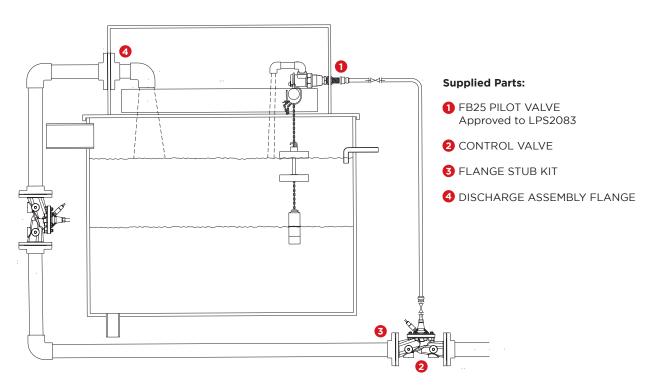
**KERAFLO** float valves contain a pair of maintenance free ceramic discs.

## **⚠ IMPORTANT**

Please read these instructions carefully and refer to any diagrams before installation.

Installation of valves should be in accordance with the Water Supply (Water Fittings)
Regulations 1999 and BS 8558:2015.

Tanks and pipes should be disinfected using the procedures in BS EN 806-4:2010 Section 6: Commissioning.



FP Type Valves offer a flexible solution to the installation of large Float Operated Valves in sprinkler tank systems.

#### **Principle of Operation**

The FP Float Valve maintains the water level in a storage tank to the desired level. The pilot for the Control Valve is an FB Type Float Valve which enables a wide range of opening and closing levels to be set. **Refer to P-FBSFINSTALL for FB Type Float Valve Installation Guide.** 

**Opening -** When the water level in the tank drops to the desired level, the FB Pilot Valve opens, relieving the pressure in the Pilot Line causing the Control Valve to open.

**Closing -** When the water level rises to the desired closing level, the FB Pilot Valve closes, causing the Control Valve to close smoothly.



Control Valve Location - There are four options for the mounting of the Control Valve -

- 1. Outside the tank at floor level.
- 2. Outside the tank above the tank water level.
- 3. Inside the tank above the tank water level.
- 4. Vertically in the rising main 150mm (6 inch) only. Note: This option does not require a strainer.

For new installations, options 1 or 4 are recommended since they facilitate installation, maintenance and avoid tank wall stress.

**Strainers** - It is recommended that a coarse particle strainer is installed upstream of the control valve to prevent debris entering it unless the control valve is positioned as in option 4.

**FB Pilot Valve Location -** The FB Pilot Valve (which is approved/manufactured to LPS2083) must be inside the tank above the water level. Refer to the FB Installation Instructions P-FBSFINSTALL. To reduce the effects of turbulence, it is recommended that the FB Valve is mounted away from the main discharge, e.g. on the opposing wall of a raised valve chamber.

**Stilling Wells & Baffles -** Generally a stilling well around the FB Pilot Float is not necessary. However, if the Float is unavoidably close to the discharge, calming measures around the Float may be required. This could consist of a large plastic tube - at least 150mm internal diameter.

**Discharge Position -** If an air gap is required for back flow protection, the discharge must be above the water level. If an air gap is not required, the discharge could be connected towards the bottom of the tank.

**Servicing Valves -** A servicing valve (not supplied) must be fitted upstream of the Control Valve and between the Control Valve and the FB Pilot Float Valve.



#### **FB Pilot Valve Installation**

1. Refer to the Installation Instructions supplied with the FB Type Valve.

#### **Control Valve Installation**

- 1. Where the Valve is to be fitted to a newly installed system, flush through the supply pipes before connecting the
- 2. Connect the Control Valve Inlet to the supply flange using an appropriate gasket and bolts. Note the arrow on the side of the Valve indicating the direction of flow.
- 3. Connect the Filling Pipe (not supplied) from the Control Valve outlet to the tank

#### **Connection of Pilot Line**

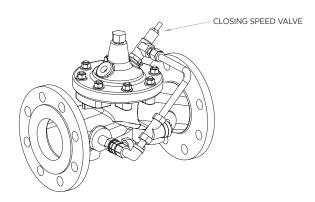
- 1. Please note this is subjected to the upstream supply pressure.
- 2. Connect the Pilot Line to the FB Pilot Valve (1" BSP male tail). Ensure a Servicing Valve (not supplied) is fitted close to the FB Pilot Valve.
- 3. Continue the Pilot Line from the Servicing Valve to the top cover of the Control Valve (3/8" BSP female).

#### **Commissioning & Testing**

- 1. Set the Opening and Closing Levels of the FB Pilot to the desired levels see FB Installation Instructions P-FBSFINSTALL.
- 2. Gently open the main Servicing Valve.
- 3. Set the Closing Speed Valve see Closing Speed Valve.

#### Closing Speed (CS) Valve

The CS Valve avoids excessive pressures (Water Hammer) developing in the supply pipe as the Control Valve Closes. The CS Valve is the slotted screw with lock nut found on the top cover of the Control Valve. The CS Valve should be set to provide a delay of 2 - 6 seconds between the FB Pilot Valve closing and the Control Valve closing. Turning the CS Valve clockwise will increase the delay and vice versa. If a "bang" is heard when the Control Valve closes, reduce the speed of closure by turning the CS Valve clockwise.



#### Flow & Pressure Regulation

If the flow rate is too great or the supply pressure drops too much when the Control Valve is open, restrict the flow by means of a suitable Valve.

#### Servicing & Maintenance

If there is debris contained in the water, the Y strainer in the Pilot System on the Control Valve may eventually start to block (symptom - Control Valve Closing time will increase). To clean - isolate supply by closing the Isolating Valve to the Pilot Line, and the Spherical Valve between the Control Valve and the Y Strainer.

Ensure the KB Pilot valve is activated at a minimum of once every 12 months. This is a requirement of the extended product warranty. Refer to the FB Installation Instructions P-FBSFINSTALL for details.



FP1 Rev3





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