

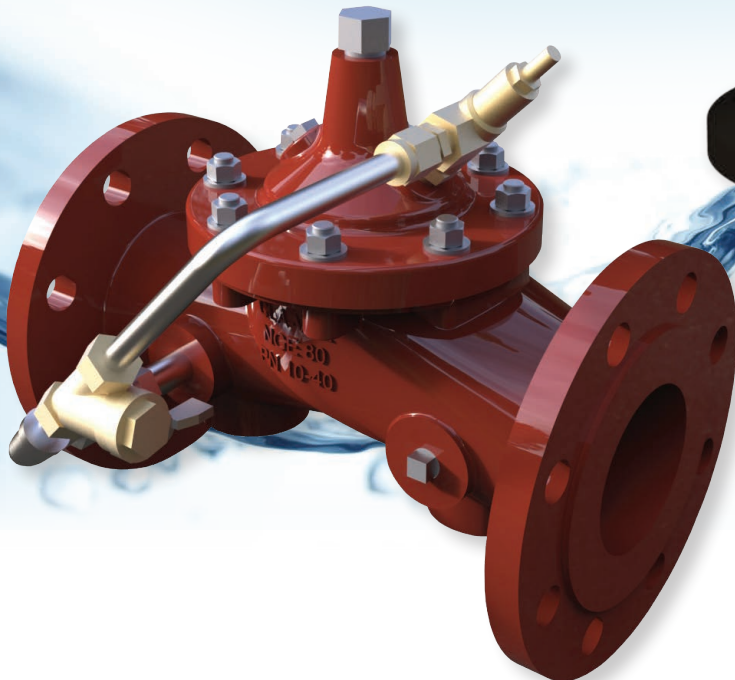


# Fire Sprinkler Tank Valves



LPS 2083 : Issue 01  
Cert/LPCB ref. 1642

First ever fire  
valve to receive  
**LPCB**  
accreditation



## FB Type Fire Sprinkler Tank Valves

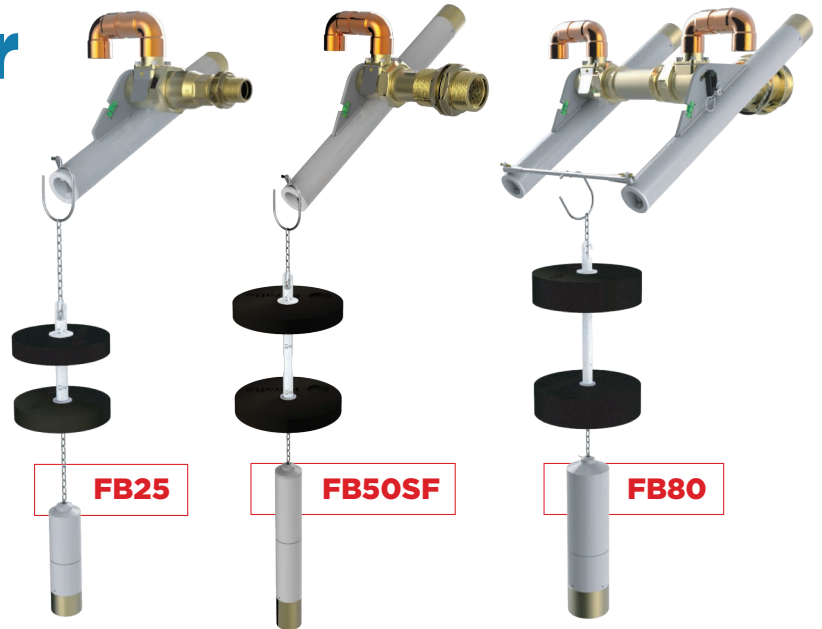
Mechanical float valves certified to LPS 2083, suitable for tanks with or without raised valve chambers.

Available in 1", 2" (single head) and 3" (twin head) sizes.

# Fire Sprinkler Tank Valves



LPS 2083 : Issue 01  
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These **Fire Sprinkler Tank Valves** were the first on the market to comply with the LPCB's Loss Prevention Standard LPS 2083.

This significant endorsement highlights the exceptional standards and build quality of Keraflo's products, setting a new benchmark for the performance of fire safety in commercial buildings. The integration of LPS 2083 into the LPS 1276 standard is a critical step forward for fire safety.

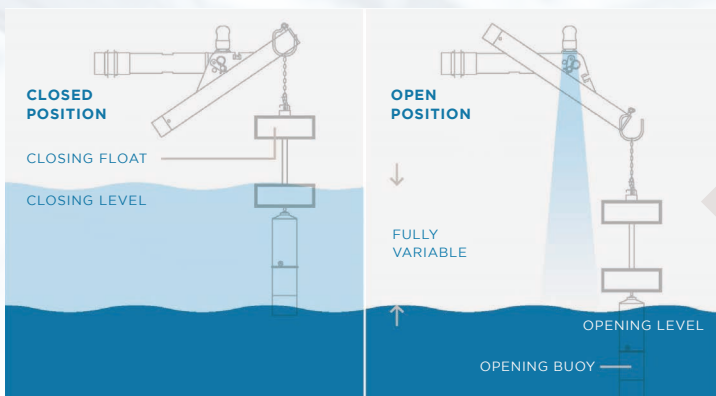
This standard clearly outlines the requirements for the design, installation and maintenance of fire protection systems, ensuring that all components work together seamlessly to provide optimal protection.

## How it works

When water is used from the tank and the water levels falls, the Keraflo FB Type valve will not open immediately, unlike an equilibrium valve. There is instead a delay, the FB Type valve does not open until the water level has fallen to the user-selected level.

When this water level is reached the FB Type Valve moves from a 'fully closed' position into

a 'fully open' position, allowing water to flow into the tank at its maximum flow rate. When the water level has returned to its original fill level, the valve immediately closes from the 'fully open' position, preventing the 'trickling' associated with equilibrium valves.



FB Type valves have opening and closing operating adjustments.

FB Type valves are also ideal for tanks without a lid or raised valve chamber and where the vertical drop from the valve to the water level may be considerable.

## Key Benefits

- Standards Compliance**  
 Fully BRE tested and certified to LPS 2083.
- Installation Flexibility**  
 Suitable for installation directly into a tank or raised valve chamber with an extensive range of opening and closing levels – ideal for larger tanks.
- Easy Adjustment**  
 Supplied with an adjustable chain allowing the closing level to be set below any combination of weir slot, overflow and/or warning device.
- Maximised Tank Capacity**  
 Minimal space required between valve and water level, maximises tank capacity.
- Positive Float-Activated Action**  
 Either fully open or fully closed - no trickle.
- Backsiphonage Protection**  
 'Up and Over discharge' to BS1212 Part 2 – to facilitate Water Regulations.
- New Installations and Retrofit**  
 Can be seamlessly integrated into new installations or retrofitted into existing systems.
- Robust Design**  
 The heart of the valve incorporates pressure compensating, non-wearing, ceramic disc assembly, housed in a DZR brass body for extended durability.
- Proven Float Design**  
 Made from polyethylene closed cell foam which is CFC-free, and chemically and biologically inert.
- Quiet Operation**  
 Quieter in operation than conventional valves, due to the elimination of water hammer, valve bounce, 'hiss' and dribble.
- Reduced Tank Wall Stress**  
 The valve's lightweight design reduces stress on the tank wall fixing point, with no need for additional supporting structures.
- Compatible**  
 Designed for use with a wide range of fire protection systems.
- 10 Year Warranty**  
 10 times the industry standard.

## Flow rate for nominal valve size at stated flow pressure

VALVE MODEL	FB25		FB50SF		FB80		KEY
Size (inches) Size (mm)	1" 25mm	v28	2" 50mm	v54	3" 80mm	v76.1	
BAR	l/s	m/s	l/s	m/s	l/s	m/s	
0.5	0.18	0.33	0.67	0.32	1.34	0.31	
0.10	0.25	0.47	0.95	0.45	1.90	0.45	
0.25	0.40	0.74	1.50	0.72	3.00	0.70	
0.50	0.56	1.04	2.12	1.02	4.25	1.00	
1.00	0.79	1.47	3.00	1.44	6.00	1.41	
1.50	0.97	1.60	3.68	1.76	7.35	1.72	
2.00	1.12	2.08	4.25	2.03	8.49	1.99	
3.00	1.38	2.55	5.20	2.49	10.40	2.44	
4.00	1.59	2.95	6.00	2.87	12.01	2.82	
5.00	1.78	3.29	6.71	3.21	13.43	3.15	
<b>Kv m<sup>3</sup>/hr</b>	<b>2.86</b>		<b>10.81</b>		<b>21.62</b>		

**V** Velocity of water flowing in corresponding copper pipe (mm) at stated flow rate

**SF** Standard flow

Velocity < 2m/s

Velocity > 2m/s < 3m/s

Velocity > 3m/s

**CONVERSION FACTORS** Litres per second to cubic metres per hour x 3.6 • Litres per second to cubic metres per minute x 0.06  
 Litres per second to gallons per hour x 791.9 • Litres per second to gallons per minute x 13.2

**PRESSURE** Bar to pounds per square inch x 14.5 • Bar to Pascal x 100,000 • Bar to metres x 10.2

## Technical Specification

Keraflo FB Type equilibrium float valve with DZR brass body has been BRE tested and certified to LPS 2083. The up and over discharge conforms to BS.1212 Part 2. The valve features a non-wearing maintenance-free ceramic disc seal for water pressure up to 5 bar. For fire sprinkler cold water cisterns with or without raised chamber.

PRODUCT CODES		
Fire Sprinkler Tank Valves	Size	Product Code
FB Type mechanical float valve, Single Head	1" (25mm)	FB25
FB Type mechanical float valve, Single Head, Standard Flow	2" (50mm)	FB50SF
FB Type mechanical float valve, Twin Head	3" (80mm)	FB80

## Quality & Warranty Information

Keraflo products are manufactured under Quality Management Systems certified to ISO.9001:2015.

FB Type Fire Sprinkler Tank Valves have a 1 Year Warranty from date of manufacture as standard, which can be extended to a 10 Year Warranty from date of installation at no extra cost, subject to registration and installation and maintenance as described in FB installation guide.



See FB installation guide for details



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