

**AYLESBURY** 

# KAX VALVE

**INSTALLATION GUIDE** 

## **FOR VALVE SIZES (DN):**

3/4"(20)

1"(25)

11/4"(32)

1½"(40)HF

2"(50)SF

#### **IMPORTANT**

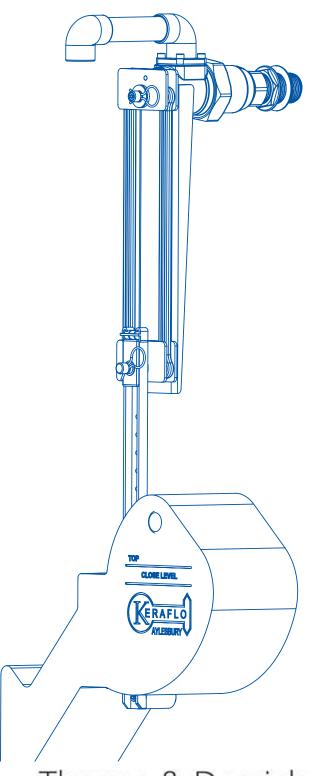
PLEASE KEEP FOR FUTURE REFERENCE.

PLEASE READ THESE INSTRUCTIONS CAREFULLY AND REFER TO ANY DIAGRAMS BEFORE INSTALLATION.

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

For further assistance please ring our Customer Helpline: **0118 921 9920** 





Thorne & Derrick +44 (0) 191 490 1547 www.heatingandprocess.com **KERAFLO** Aylesbury delayed action float valves contain a pair of maintenance free ceramic discs.

There are rare occasions when it may be necessary to partially disassemble the valve, for example, to clear a blockage or to replace some parts.

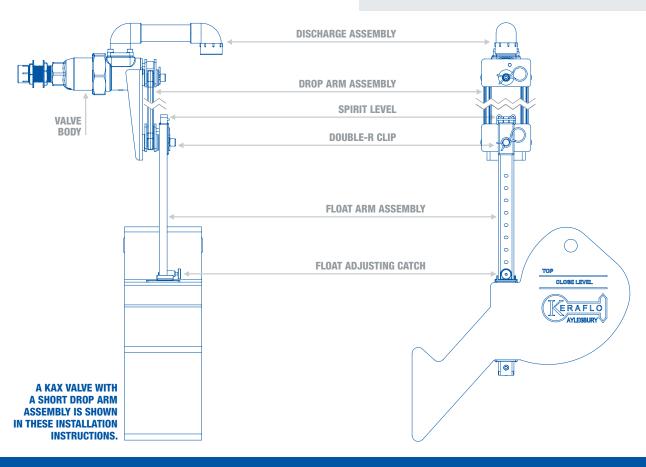
If the problem you are experiencing cannot be solved by using a spares kit contact **KERAFLO** or your supplier.

## **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 2010 AND BS 8558:2011.

TANKS AND PIPES SHOULD BE DISINFECTED USING THE PROCEDURES IN BS EN 806-4:2010 SECTION 6: COMMISSIONING.





Once the valve has been installed and tested, complete and apply the tank label to the tank and send a photograph of the label in place to warranties@keraflo.co.uk in order to receive a full five years' extended warranty for the valve. See warranty sheets for full details.

## PRE-INSTALLATION **CHECKS**

**RAISED VALVE** Use a KAX or KB Type valve for tanks with raised chambers.

CHAMBERS: DO NOT USE A K TYPE VALVE FOR THESE TANKS.

**OPERATING SPACE:** Check for sufficient clearance. The working dimensions are shown on the

attached drawings.

**OVERFLOW/WARNING** 

PIPES:

Check the position of the overflow and warning pipe (where fitted).

See dimension 'R max', drawing on page 7.

**TURBULENT** Exceptionally turbulent waters, such as in cooling towers, should be avoided directly WATER:

beneath the float. Calming measures such as baffle plates, still ponds etc. should be

used in these installations.

**FLANGED TANKS:** The design of the valves, allows sufficient clearance between the float and most internal

> tank flanges and ribs. The valve backnuts may be adjusted to enable fitting to tanks with large flanges; provided a minimum of 20mm exists between the float and tank wall

throughout the arc of the float.

**ROUND TANKS:** Minimum tank diameters required.

VALVE	3/4"	1"	11/4"	1½"HF	2"SF
MIN TANK DIAMETER (M)	1.30M	1.30M	1.30M	2.30M	2.30M

**SLOPING TANK** 

WALL:

The wall to which the Aylesbury KAX Valve is to be attached must be vertical. If the wall around the fixing hole is sloped, tapered washers must be used. These should be

available from the tank supplier.

**PIPEWORK** KERAFLO Aylesbury valves create virtually no tank wall stress. It is therefore not necessary SUPPORT:

to provide additional support to the pipework as long as the Code of Practice for the

Support of Pipework in general is met.

**ISOLATING** An isolating valve must be fitted as near as is reasonably practicable to the

VALVE: KERAFLO valve.

## INSTALLATION **INSTRUCTIONS**

The valve is supplied with the float arm and discharge assemblies detached. To avoid damage it is recommended, where possible. to fit both of these assemblies AFTER installing the valve in the tank.

- Before fitting the valve, flush the supply pipes to clear all debris.
- Remove and retain the double-R clip, washer and bush.
- Remove and discard the red protective cap from the tail.
- Remove and retain one backnut.
- Insert the valve tail through the hole in the tank wall, replace the backnut with the flanged side against the tank wall.
- 6 Connect the supply pipe, after an isolating valve, then hand tighten backnut to hold the valve in place. To prevent the valve turning when tightening the pipe fitting, use either a wrench or a spanner on the valve tail where indicated in diagram 2.

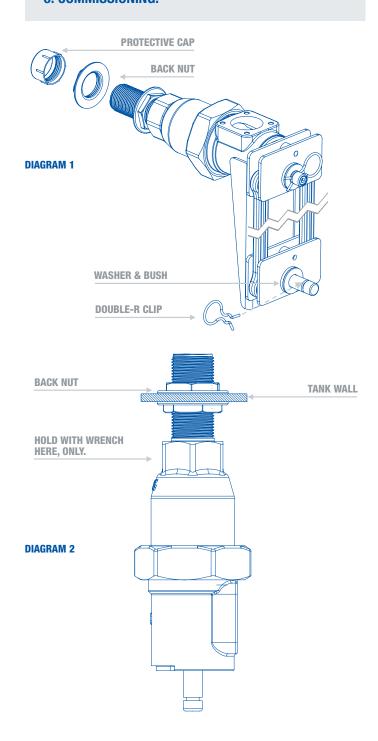
DO NOT USE A WRENCH ON ANY OTHER PART OF THE VALVE.

## **WARNING!**

THE BUILT-IN SPIRIT LEVEL MUST BE USED TO ALIGN THIS VALVE. FAILURE TO FOLLOW THE PROCEDURE LISTED BELOW WILL PREVENT THE **VALVE OPERATING CORRECTLY.** 

**INSTALLATION OF VALVES SHOULD BE IN ACCORDANCE WITH THE WATER SUPPLY (WATER** FITTINGS) REGULATIONS 2010 AND BS 8558:2011.

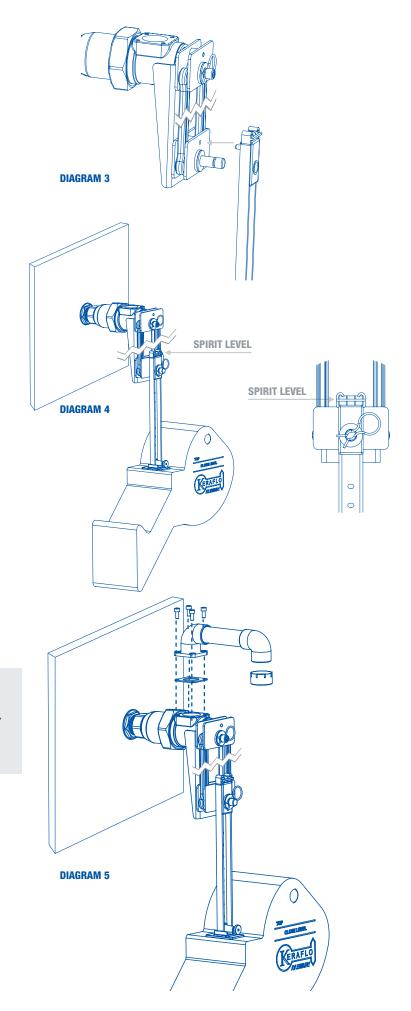
TANKS AND PIPES SHOULD BE DISINFECTED USING THE PROCEDURES IN BS EN 806-4:2010 SECTION 6: COMMISSIONING.



- Fit the float arm assembly ensuring the pin on the float arm locates in the actuator of the drop arm.
- Refit the double-R clip, washer and bush, retained at step 2, to hold the float arm assembly in place.
- Rotate the valve as necessary so the float arm is **VERTICAL** and the valve is in the open position. Use the integrated spirit level, ensuring that the bubble is between the black lines. to check that the valve is aligned horizontally (Diagram 4).
- Tighten backnuts then CHECK **ALIGNMENT AGAIN**, as in step 9.
- 11 Using the 4mm Allen key supplied, fit the discharge assembly referring to Diagram 5 for the direction.
- 12 Remove and discard the protective cap from the discharge assembly, before adjusting closing level, testing and use.

## **ALIGNMENT WARNING!**

THE VALVE MUST BE FITTED WITH THE SPIRIT LEVEL ALIGNED WHEN THE VALVE IS FULLY OPEN. THIS IS CRITICAL TO THE OPERATION OF THE VALVE.



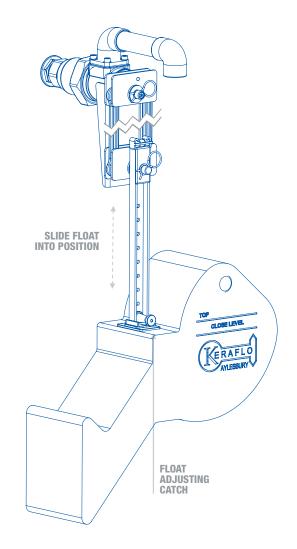
# ADJUSTING CLOSING WATER LEVEL (TWL)

- Pull out the float adjusting catch.
- 2 Slide the float along the arm to the desired position.
- Release the catch and ensure pin locates in desired hole.

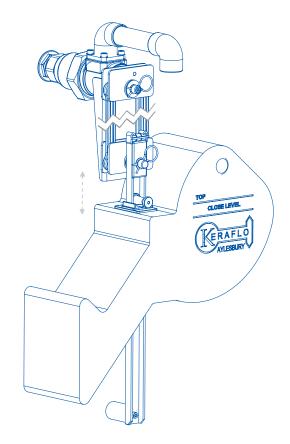
## **TESTING**

Before leaving the installation, manually move the valve to test its operation a number of times, ensuring that it moves freely from the open to the closed position and from the closed to the open position.

Where a valve has not been in operation for one month it is also recommended that the above procedure is carried out.



**DIAGRAM 6** 



# SIZES (DN):

<sup>3</sup>/<sub>4</sub>"(20) 1<sup>1</sup>/<sub>4</sub>"(32) 2"(50)SF

1"(25) 1½"(40)HF

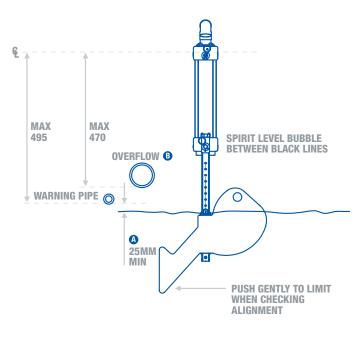
## **WARNING**

THE FLOAT ARM MUST BE FITTED ABSOLUTELY VERTICALLY (IN THE OPEN POSITION) AS INDICATED BY THE SPIRIT LEVEL. (SEE BELOW)

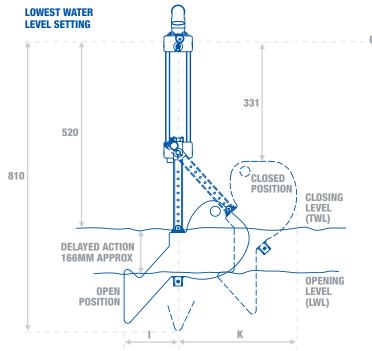
MISALIGNMENT WILL PREVENT THE VALVE FROM CLOSING.

ENSURE OVERFLOWING LEVEL IS NOT LOWER THAN THAT SHOWN BELOW (RMAX); AND HIGHER FOR TURBULENT WATER.

LEVEL DIFFERENTIAL: 125 - 166MM NON-ADJUSTABLE DELAYED ACTION.



## **HIGHEST WATER LEVEL SETTING** Æ 211 359 CLOSED **POSITION CLOSING LEVEL** 0 684 (TWL) **DELAYED ACTION 50MM APPROX OPENING LEVEL** (LWL) **OPEN POSITION** J 152



## **NOTES:**

- SCHD2, SECT 7, G16.5 Water Regs. Gaps should be more if water is turbulent – especially if near valve discharge.
- Typically twice inlet bore. SCHD 2, SECT 7, G16.10 Water Regs. Warning/overflow pipes should be capable of taking any possible flow in the pipe arising from inlet valve failure.

See page 8 for front view.

DN	20	25	32	40HF	50SF
SIZE	3/4"	1"	11/4"	1½"HF	2"SF
1	152	152	152	152	152
J	225	225	225	263	263
K	335	335	335	335	335
L	30°	30°	30°	40°	40°



# **SIZES (DN):**

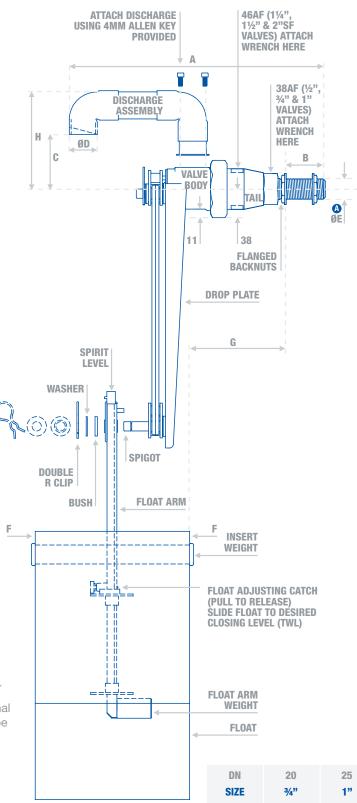
3/4"(20)

1"(25)

11/4"(32)

1½"(40)HF

2"(50)SF



## **BASIC SPECIFICATION:**

Maximum static pressure: 10bar

Maximum flow rate: 3m/s nominal pipe velocity (Flow Rate and Pipe Velocity chart is available at www.keraflo.co.uk)

Temperature range: 1° - 60°C

Level differential: 50 - 100mm non-adjustable delayed action, parallel male BSP (G) connection.

### **NOTES**

Suitable for spigot and fibre washer fittings on ½", ¾" and 1" valves

See page 7 for side view.

DN	20	25	32	40HF	50SF
SIZE	3/4"	1"	11/4"	11/2"HF	2"SF
A	330	330	345	390	395
BMAX	44	44	55	85	90
C	34	34	73	73	73
ØD	19.5	26.9	35.4	35.4	35.4
ØE	26.5	33	42	47.5	60
F	125	125	125	200	200
GMIN	100	100	104	80	85
H	83	83	110	111	111



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