



Wherever there is a danger from foul water backing up into a property through the drainage system the valve will close automatically to prevent flood damage.

Forge valves have now been used to protect many basement flats and low lying properties previously affected by foul and combined sewers unable to cope with abnormal weather conditions.

The valve is manufactured in Britain from polypropylene, which makes it light enough for one man to lift and is simple to install and maintain.



VALVES

FEATURES

The Forge Valve is float operated forcing a closure of the pipe when backflow occurs.

Increased backflow pressure on the flap forces it tighter closed.

The valves are light and can easily be carried into awkward places.

No tools are required to remove the lid and gloved hands can easily remove the wing nuts.

The seal between lid and valve body is designed for life and will not need to be replaced when the valve is opened.

Float and flap assembly lift out with gloved hand once lid is removed. No tools required.

Lid bolts remain attached to valve body when wing nuts are removed.

The valve is made from polypropylene which is extremely durable and resistant to chemicals. This smooth material resists the build up of fat and can easily be cleaned with a hose.

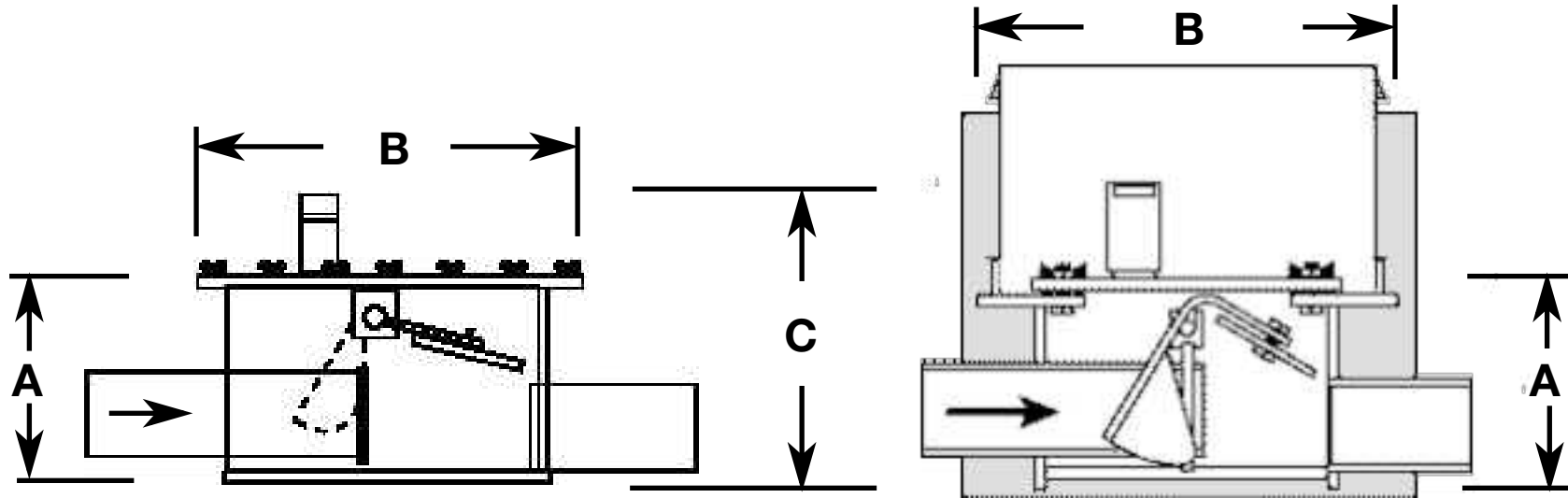
The air release valve ensures a quick reaction to rising water levels.

Available from stock with prompt delivery to suit pipe diameters of 100 mm, 150 mm, 225 mm and 300 mm, other diameters can be manufactured to special order.



VALVES

DIMENSIONS



SEWER VALVE SIDE VIEW

DOMESTIC VALVE SIDE VIEW

DIA	A	B	C	WIDTH	WEIGHT
100mm	265mm	490mm	365mm	420mm	13.0kg
150mm	315mm	540mm	415mm	450mm	14.0kg
225mm	400mm	690mm	500mm	600mm	22.0kg
300mm	460mm	810mm	560mm	710mm	31.0kg
DOMESTIC 100MM	270mm	500mm	370mm	500mm	12.0kg



VALVES

FITTING INSTRUCTIONS

On receipt of your valve please check that it has not been damaged in transit. The flap/spindle assembly should swing freely from the pivot points and this may be checked by touch through the outlet pipe. Attach the air release valve by screwing onto the thread on the lid. The lid is marked with an arrow which should align with the normal flow through the pipe.

It is best to install the valve in a purpose built inspection chamber so that access can be made to it to remove the lid, wash down and inspect. A minimum of 600 mm by 750 mm sized chamber of precast concrete sections or engineering brickwork would allow enough space around a 100 mm or 150 mm dia valve. Larger valves are best suited in concrete rings. A good no-nonsense web site for precast concrete sections is www.hepworthconcrete.co.uk .

The Domestic type valve does not need to be housed in a purpose built chamber. If the depth from ground to invert level is less than 1.0m it will be accessible by fitting UPVC raising sections (available from your builders merchant) of standard 500 mm diameter. These clip to the valve casing and can be surrounded with granular material or lean concrete.

You will need Flexseal or equivalent couplings and possibly bushes to attach the valve to the sewer pipe. As you tighten the coupling it is important that you check that invert of valve and pipe are correctly aligned. We have included a brief list of couplings but for more detailed information visit www.flexseal.co.uk .

We recommend that the valve is checked at least twice a year. All that is needed is a quick clean with a high pressure hose.



VALVES

FITTING SPARE PARTS

Spare parts are available should they be needed but they do need to be fitted by a competent person who has read these instructions.

The existing float/flap assembly can be removed in one unit by lifting out of the pivot cradles. Remove the neoprene rubber from the spigot end of the incoming pipe only if it is damaged by loosening the screw on the retaining band. "Don't fix wot ain't broke", its easier to leave the flap sealing rubber in place if it is undamaged than change it in a cramped manhole. The seal is designed for the life of the valve.

The new pivot rod may need to be cut shorter to prevent it binding against the side walls of the valve. Each valve is hand made so we leave the pivot rod long to accommodate any small differences between valves. Use the old flap assembly as a template, when inserted the flap must seat directly over the rubber seal NOT to one side. This may mean removing a little from each end of the pivot rod. check it will turn freely in the cradles.

If you are replacing the rubber seal, clean pipe end and fit new rubber seal and retaining band but do not fully tighten or push fully onto pipe. Now replace flap assembly and gently close flap pushing rubber seal into place and ensuring a continuous seal between flap and rubber seal. Now tighten retaining band.

All that's left is to secure the float onto the spindle using the two screws provided. Hold the flap closed with one hand and centralise the float with the other. Position it slightly below the top of the side walls to avoid it clashing with the lid. Mark his position and fix.

The self locking bolt attaching the flap should be left loose enough to allow some movement.



VALVES

FLEXSEAL VALVE COUPLINGS

PIPE DIAMETER AND TYPE		COUPLING	BUSH
100mm	Cast Iron, UPVC, Osma, Hunter, etc	SC115 or SC120	
100mm	Stainless	SC115 or SC120	
100mm	Hepworth Supersleve, Naylor	SC120	
4" S.G.W.	S.G.W. Vitrified Clay, Pitched Fibre, Asbestos cement.	SC137	BC08/115
160mm	UPVC, Osma, Hunter, etc	SC175 or SC120	
150mm	Cast Iron, Stainless, Ultrarib	SC175 or SC120	
150mm	Hepworth Supersleve, Naylor Densleve	SC180	BC08/160
150mm	Asbestos Cement, Pitch Fibre	SC200	
6" S.G.W.	Salt Glave Ware	SC200	BC16/160
150mm	Concrete up to 200mm OD	SC200	BC16/160



VALVES

PRESSURE PLATE

The Forge sealed Manhole Pressure Plate has been designed as a low cost measure to:-
prevent nuisance caused by smells
prevent leakage of sewage from manhole covers
improve health and safety with deep manholes.

The sealed pressure plate has been designed for use with 600 mm by 600 mm manhole covers where it may be bolted to the underside of the frame or used as a separate fixture and built into the seating brickwork.

The sealing plate is manufactured from polypropylene which is resistant to corrosion by chemicals and sewer gasses.

The removable plate is held firmly in position to its sub frame with eight stainless steel wing nuts which only need to be hand tightened to ensure an effective seal.

The integral double neoprene seal will prevent effluent or gasses being expelled.

The plate enables the clear display of warning notices regarding manhole depth or “permit to work” situations. Thus highlighting danger at the point of entry and avoiding exposure of workers to unnecessary risk.



VALVES

FITTING PRESSURE PLATE

To fit pressure plate:-

1. Remove the existing 600 mm square manhole cover and frame.
2. Increase the existing bedding depth by 30 mm to allow for the thickness of the pressure plate.
3. Bed pressure plate in bedding mortar then bed manhole frame on top or attach pressure plate to manhole frame with bolts and then place on mortar bed.
4. If preferred the pressure plate can be built into the manhole shaft brickwork.

