

# ecoBETA®

## Water Saving Systems

### USP Plug in Valve

## Technical Information Sheet No.6

German efficiency combined with Danish design

Water saving – one of the most important topics nowadays. As we use more and more fresh water, which only amounts to 5% of the worlds water supply, ecoBETA accepted this challenge with a new water saving system to stop this wasting trend and save water also for the next generation.

The **ecoBETA** USP valve is a replacement system for all Flapper flushing systems worldwide. It converts the existing one tank lever single flush system into a tank lever Dual-Flush-System within 5 minutes to save up to 50% of the flushing water.

#### **ecoBETA – the company**

Founded 1999 in Denmark / Europe from the need to reduce water consumption due to increasing water tariffs, **ecoBETA** specializes in the design and manufacturing of retrofit interruptible WC technology.

**ecoBETA**'s award-winning proprietary solutions are capable of reducing WC water usage by up to 50% across all commercially available tank-flushing systems currently installed worldwide.

In addition, **ecoBETA** supplies a wide range of dedicated water saving devices for use in all consumer applications such as faucet aerators, reduced flow shower-heads and more.

Our extensive in-house expertise is also available in an advisory capacity for both large-scale domestic and commercial clients.

**ecoBETA** is represented worldwide.

Most European countries, Australia, Middle East and Far East are the main regions today where **ecoBETA** has a strong presence.

USA, Canada and South America are in the midst of being opened.

#### **Design goal**

**ecoBETA** products are designed to replace a normal single flush valve with a tank lever Dual-Flush-Valve using existing equipment.

#### **Products**

**ecoBETA** manufactures retrofit inserts, retrofit flushing valves and complete flushing valves. Additional water saving devices for shower heads and faucets are part of complete water saving programs in bathrooms.

#### **USx valve family**

**ecoBETA** provides three different water saving valve types for US flushing systems: UST, USAV and USP. Replacing older existing single flush valves or whole flushing systems.

Save water - **ecoBETA** is the answer.



UST  
top controlled  
replacement valve



USAV  
replacement valve



USP  
plugin retrofit valve

**ecoBETA®**  
Water Saving Systems

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## Water Saving Systems

### Functionality

The dual flush is achieved by using the existing single flush hand lever.

**Small Flush** Press lever and let it go

**Full Flush** Press lever and hold it until tank is empty

“Small Flush” implies the amount of water, which is necessary to flush only liquid contents and few toilet paper out of the bowl. The amount of water for a small flush can be adjusted by moving the cup of the USP up- or downward.

“Full Flush” empties the whole cistern and is using the same amount of water as with a flapper valve.

### Installation

USP fits into all flapper valves with an inside diameter range of 49 to 52 mm (1.93 to 2.05 inches).

The Installation of a USP takes less than 5 minutes including adjustment of the small flush water quantity even carried out by a none experienced person. After replacing the Flapper, no further change to the existing system is required.

The water quantity of the small flush is adjustable.

Detailed installation procedure and adjustment is shown in the *ecoBETA* USP animation and in additional installation manuals.

### Service

No particular service is required. The moving parts are designed that only one active moving part is existing to minimize the fail functions and to maximize the quality.

### USP Parts and Material

All USP materials are resistant against normal fresh chlorine water (HIPS, EPDM, stainless steel)

*Material: EPDM*

clip, rod, funnel, valve shaft, cup, bottom piece

*Material: HIPS*

Gasket, disk gasket

*Material: stainless steel*

chain

### USP flow rates

Flushing Flow Rate: 110 l / min (29 gal / min)

Overflow Rate: 27 l / min (7 gal / min)

(Flow rates are average values, depending on volume and level, measured directly at the outlet without a bowl.)

### USP Dimensions

A: 320 mm (12.6")

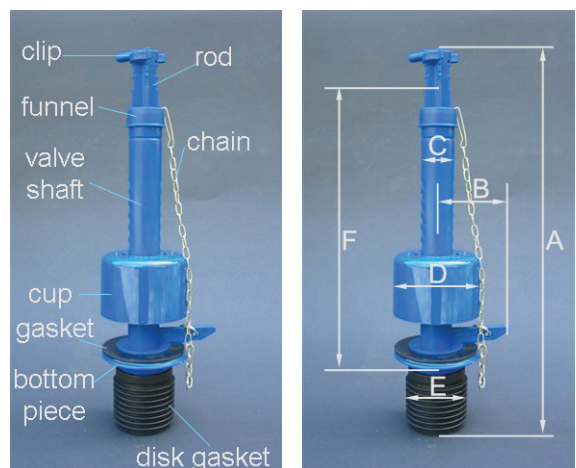
B: 49 mm (1.9")

C: 27 mm (1.1")

D: 74 mm (2.9")

E: 54 mm (2.1") (unmounted)

F: 220 mm (8.7") (max. waterline)



### Markets

DIY, plumbing wholesale, water municipalities, private housing, hospitals, schools, hotels, military, OEM, ...

### Packaging

In bulk, blister, boxes, bags, local packing

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