

# Halton ULA – Supply and exhaust air valve



## Overview

- Suitable as supply or exhaust air valve.
- Wall or ceiling installation.
- Adjustable airflow rate.
- Ability to measure airflow rate.
- Attenuates duct noise.
- Flow pattern can be directed to one direction.
- Installation without an installation frame directly into ductwork or with a separate installation frame.

## Product models and accessories

- Model with installation frame.
- Protection ring for protecting the surfaces from smudging.
- Extension part for detaching the valve from surfaces.

# Quick selection

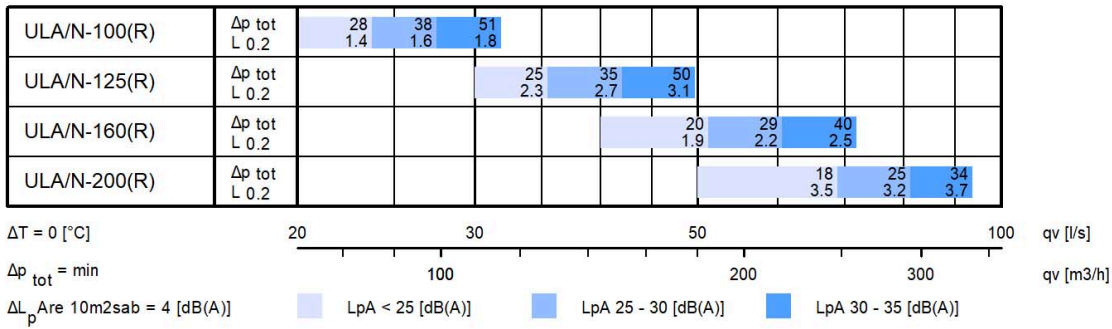


Fig.1. Halton

## ULA, radial jet

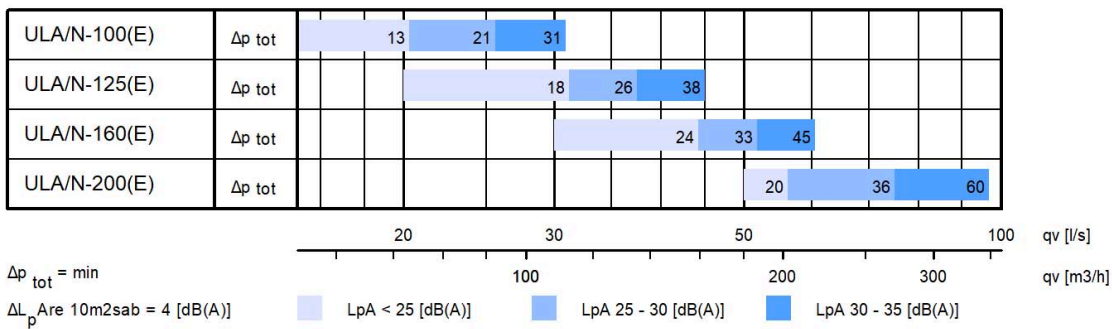
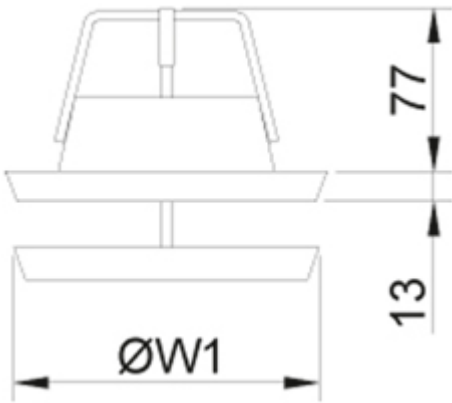


Fig.2. Halton ULA, exhaust

# Dimensions and weight



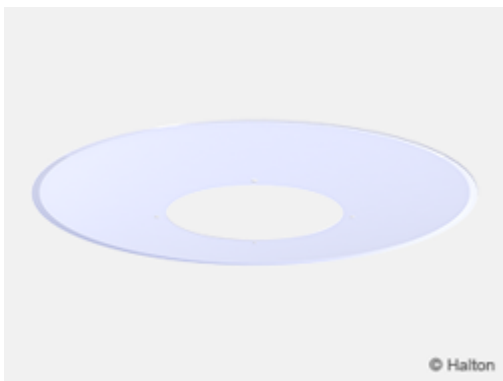
NS [mm]	$\varnothing W$ [mm]	$\varnothing W1$ [mm]	Weight [kg]
100	140	133	0.4
125	165	155	0.5
160	200	189	0.6
200	251	240	0.9

# Material

Part	Material	Note
Collar	Steel	–
Front panel	Steel	–
Attenuation panel	Polyethylene	–
Sector plate	Polyethylene	–
Gasket	Polyurethane	–
Finishing	Painted, white (RAL 9003 /30%)	Special colour available

# Accessories

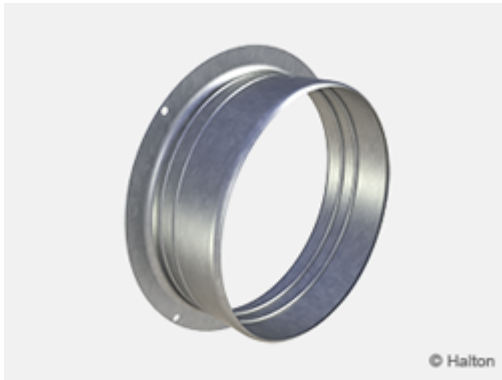
Accessory	Code	Description
Cover plate	CS	For protection of the surfaces from smudging and for directing the air jet in a grid-structured ceiling
Extension part	EP	Extension part for detaching the valve from the surface/ standard height 50 mm
Installation frame	LF	Installation frame without gasket/ height 50 mm
Installation frame	GF	Installation frame with gasket/ height 50 mm
Installation frame	DF	Installation frame with duct dimensions can be installed directly to duct parts such as bending or T-branch etc



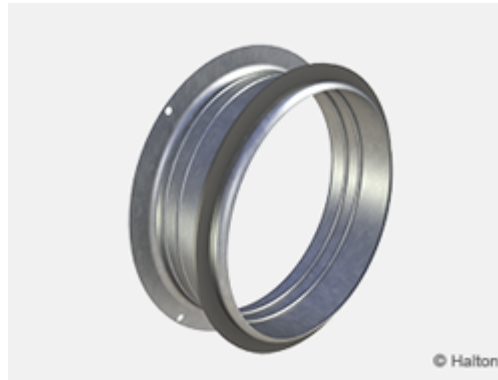
**Fig.1.** Cover plate (CS)



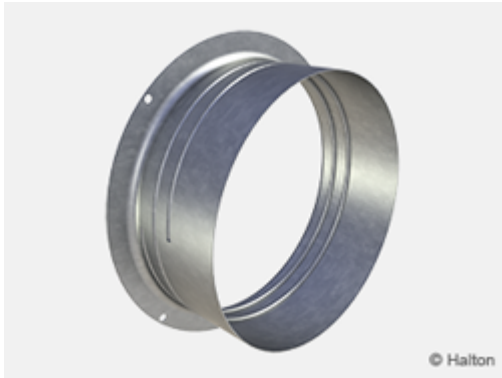
**Fig.2.** Extensions part (EP)



**Fig.3.** Installation frame (LF)

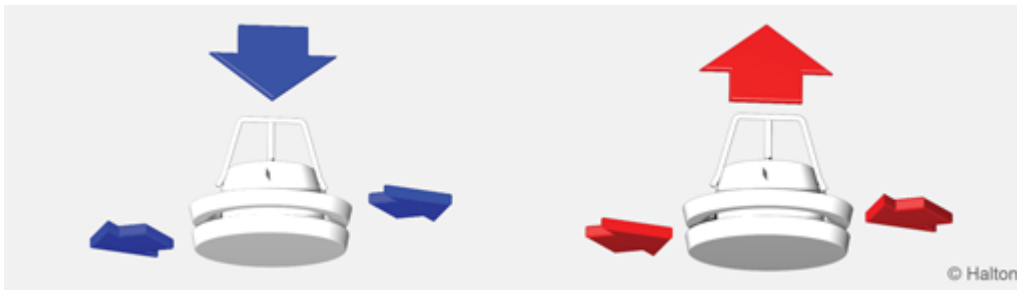


**Fig.4.** Installation frame (GF)



**Fig.5.** Installation frame (DF)

## Function



**Supply**

**Exhaust**

In supply air application in the desired flow pattern is directed using an internal sector plate.

Pressure loss and airflow rate are dependent on both the flow pattern adjustment and position of the front panel.

The valve attenuates duct noise.

The desired pressure loss and airflow rate can be adjusted in an exhaust air application, by removing the sector plate and adjusting the front panel position.

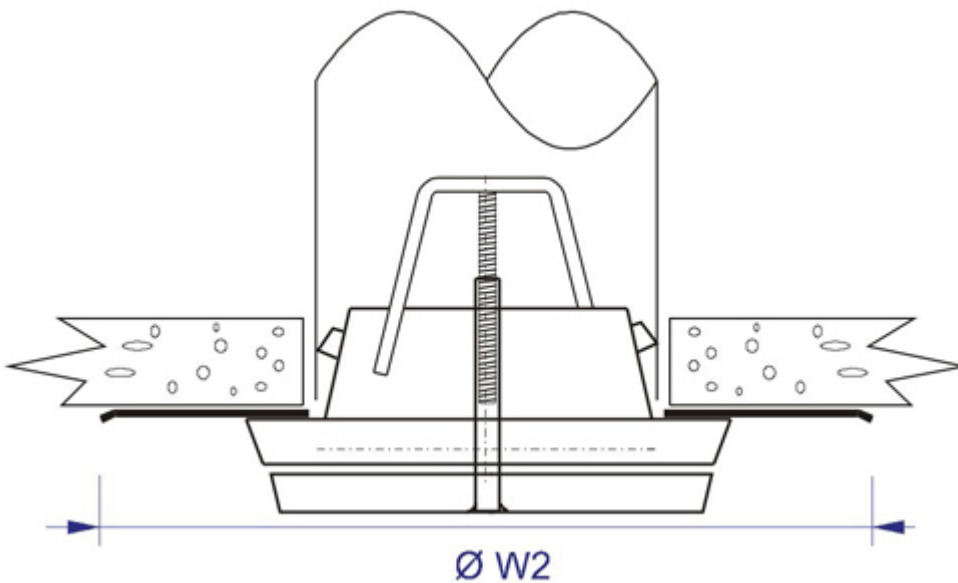
# Installation

The collar of Halton ULA is installed either directly into the end of a duct with fixing springs or alternatively with the aid of a separate installation frame (LF, GF or DF).

The supply air valve can be installed in contact with the ceiling or wall surface, with or without a protection ring (CS), or with an extension part (EP).

## Protection ring (CS)

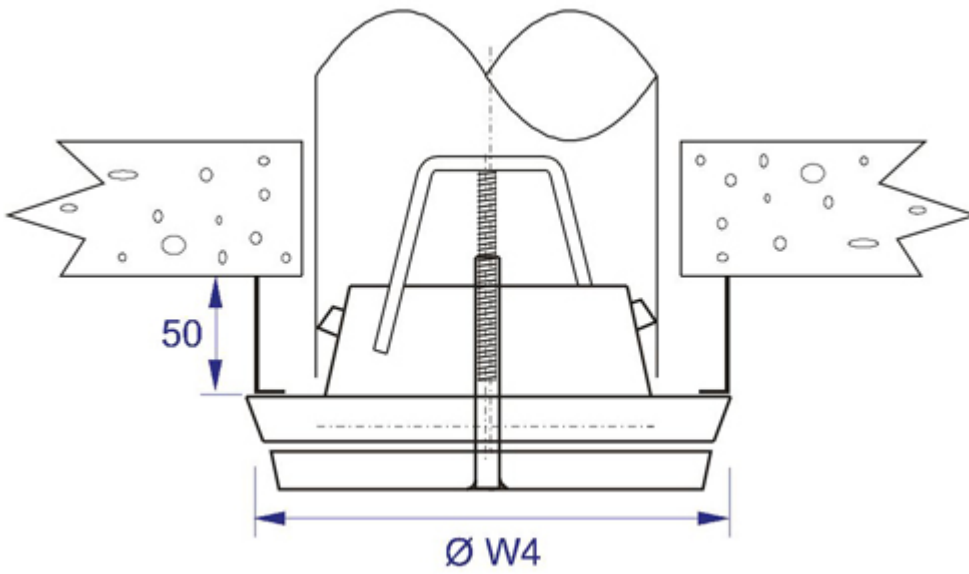
The CS protection ring protects the surface from smudging and can also be used for directing the air jet in an open grid-structured ceiling installation.



NS	Ø W2
100	290
125	315
160	350
200	400

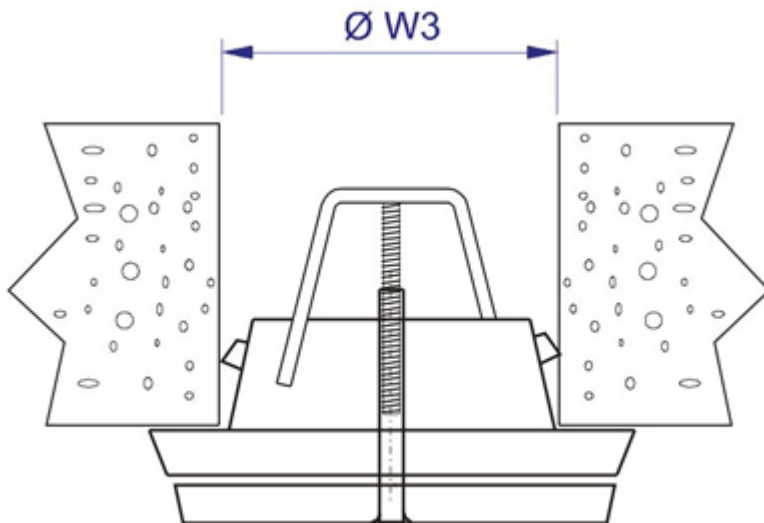
## Extension part (EP)

The EP extension part allows the valve to be suspended from the ceiling surface, allowing the supply air jet to be directed clear of a nearby obstacle.



NS [mm]	Ø W4 [mm]
100	150
125	175
160	210
200	260

## Installation hole in hollow core slabs

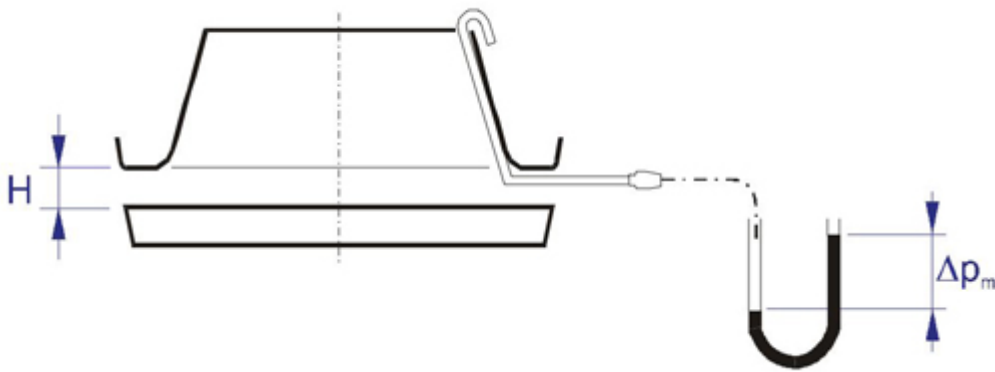


NS [mm]	Ø W3 [mm]
100	96-101
125	121-126
160	155-161
200	195-201

## Adjustment

In the supply application the sector plate is positioned prior to airflow direction. In an exhaust application the sector plate is not used, yet the spring shall be conserved.

The Halton ULA valve is adjusted by rotating the front panel. Measure the opening (A) position (in mm) of the front panel.



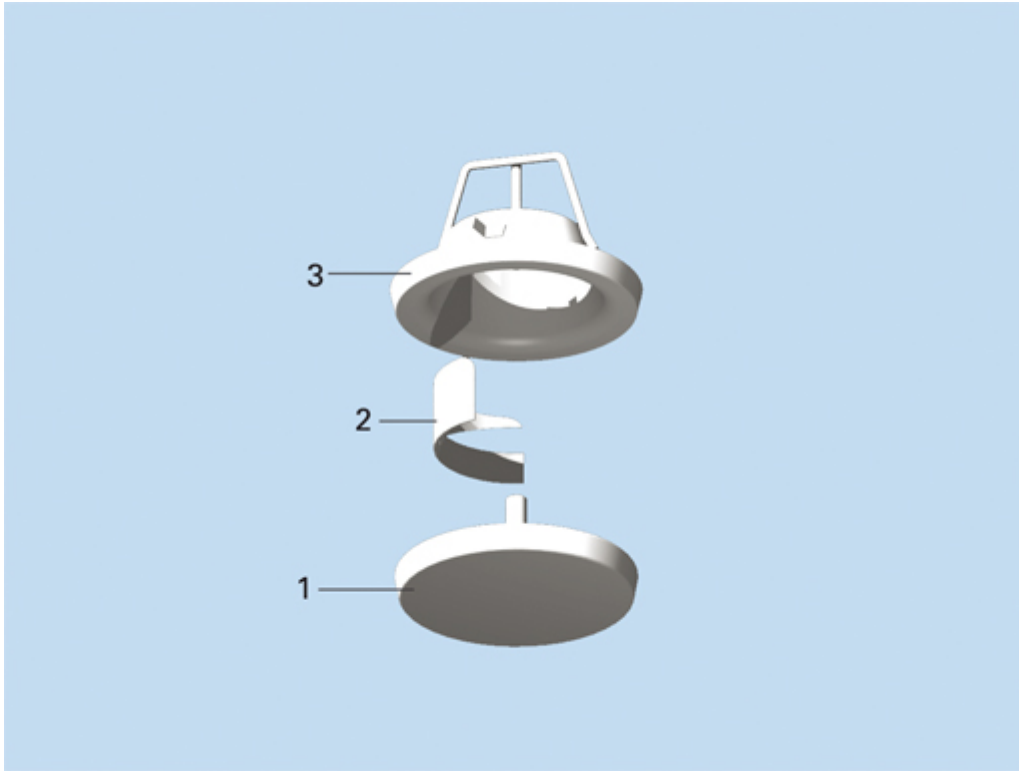
Set a probe inside the valve and measure the differential pressure with a manometer. The airflow rate is calculated using the formula below.

After adjustment, lock the front panel with the locking nut.

$$q_v = k * \sqrt{\Delta p_m}$$



# Servicing



## Key

1. Front panel
2. Sector plate
3. Collar

Loosen the valve from duckwork and unscrew the front panel (1) from the collar (3) for cleaning. Remove the sector plate (2) by pulling gently to detach the spring. Clean the components with a damp cloth, instead of immersing in water. Reassemble in reverse order after cleaning.

## Specification

The supply and exhaust valve shall have a detachable front panel and collar made of painted steel, with a white (RAL 9003) standard colour.

The collar shall have fixing springs and comprise a sealing gasket to be fixed directly to the duct. The front panel shall have a sound attenuation panel to reduce duct noise.

When used for supply, the desired flow pattern shall be adjusted by rotating the front panel and using the internal sector plate (180° or 360°).

# Order code

## ULA/S-D; CO-ZT

### S = Model

- N Standard with fastening springs
- A For installation with a separate frame

### D = Duct connection size [mm]

100, 125, 160, 200

## Other options and accessories

### CO = Colour

- SW Signal white (RAL 9003)
- X Special colour (RAL xxxx)

### ZT = Tailored product

- N No
- Y Yes (ETO)

## Sub products

- CS Cover plate (ULA)
- EP Extension part
- DF Installation frame for duct parts
- GF Installation frame with gasket
- LF Installation frame without gasket

## Order code example

ULA/N-100, CO=SW, ZT=N