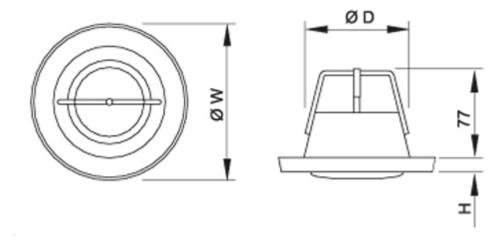# URH – Valve

Overview

- Exhaust air valve
- Wall or ceiling installation
- Adjustable airflow rate
- Ability to measure airflow rate
- Attenuates duct noise
- Installation with or without a separate installation frame

Product models and accessories

- Installation with fixed springs
- Alternative installation frame options

Dimensions and weight

NS	ØW	H	ØD
100	140	13	98
125	165	13	122
160	200	13	158
200	251	13	198

Weight

NS	kg
100	0.3
125	0.4
160	0.6
200	0.8

Material

Part	Material	Note
Collar	Steel	–
Central cone	Steel	–
Gasket	Polyurethane	–
Installation frame	Galvanised steel	Gasket of rubber compound
Protection ring	Steel	–
Finishing	Painted white (RAL 9003)	Special colours available

Accessories

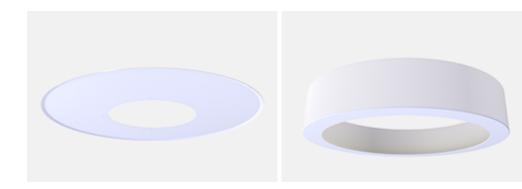| Accessory	Code	Description
Cover plate	CS	For protection of the surfaces from smudging and for directing the air jet in a grid-structured ceiling
Extension part	EP	Extension part for detaching the valve from the surface/ standard height 50 mm
Installation frame	LF	Installation frame without gasket/ 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)
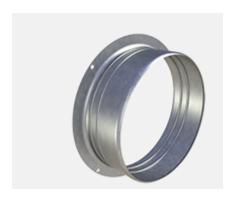

Fig.2. Extensions part (EP)

Fig.3. Installation frame (LF)
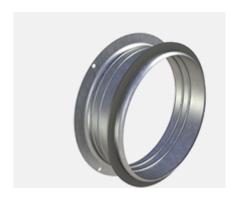

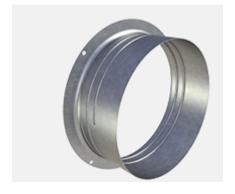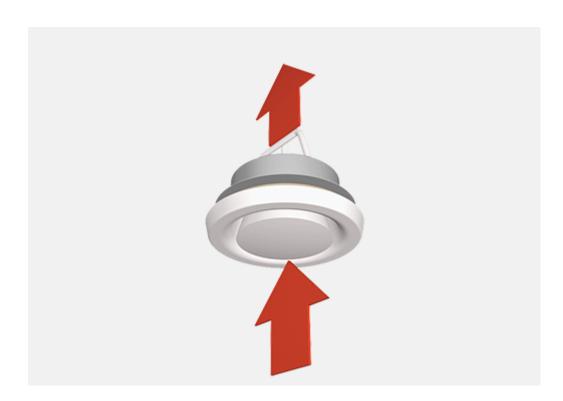**Fig.4.** Installation frame (GF)

Fig.5. Installation frame (DF)

Function

The valve throttles the exhaust airflow and attenuates the duct noise. The pressure drop is dependant on the position of the central cone. The desired exhaust airflow rate is adjusted during
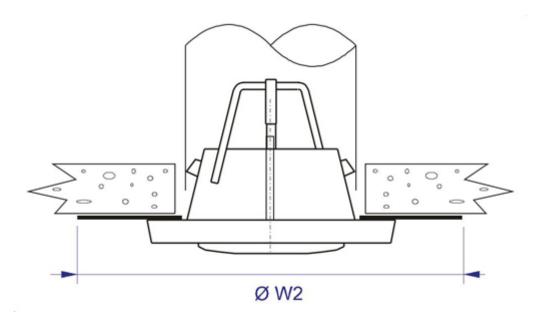
the balancing of the airflows in a ductwork system. After the adjustment the valve is locked at the required adjustment position.

Installation

The URH exhaust valve is mounted with the aid of a separate installation frame LF, GF or DF.
Push the installation frame into the duct and fix it. Push the valve into the installation frame and turn until it is firmly attached.
Alternatively model URH/B can be installed directly into a duct without an installation frame.

Installation with protection ring (CS)

Ø W2

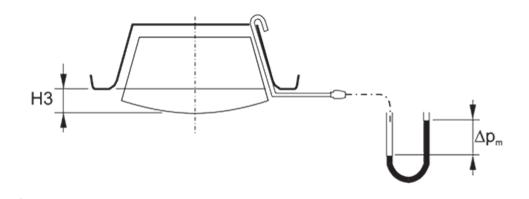| NS	Ø W2
100	290
125	315
160	350
200	400

Adjustment

The URH valve is adjusted by rotating the central cone. Measure the opening (A) position (in mm) of the central cone. Set a probe inside the valve and measure the differential pressure with a manometer. The airflow rate is calculated using the formula below. After the adjustment, lock the central cone with the locking nut.

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

A URH Ø 100	k URH Ø 100	A URH Ø 125	k URH Ø 125	A URH Ø 160	k URH Ø 160	A URH Ø 200	k URH Ø 200
-15	0,43	-15	0,65	-12	1,16	3	1,78
-12	0,63	-12	0,92	-9	1,51	6	2,46
-9	0,83	-9	1,22	-6	1,9	9	3,24
-6	1,02	-6	1,53	-3	2,31	12	3,97
-3	1,22	-3	1,84	0	2,75	15	4,69
0	1,42	0	2,17	3	3,25	20	5,88
3	1,65	3	2,52	6	3,73	25	6,95
6	1,88	6	2,83	9	4,22		
9	2,11	9	3,14	12	4,67		
12	2,33	12	3,46	15	5,12		
		15	3,77	18	5,58		

Servicing

Code description
1. Central cone
2. Locking nut
3. Sleeve

Loosen the valve from the ductwork by turning counter-clockwise. Note the adjusted opening position of the central cone.
Wipe the parts with a damp cloth, instead of immersing in water. Reassemble valve in reverse order after cleaning.

Specification

The exhaust valve shall have an adjustable central cone and sleeve made of painted steel, with a white (RAL 9003) standard colour. The valve shall be fitted with a galvanised steel installation frame. The installation frame shall incorporate a sealing gasket.

Alternative: The valve shall be fixed with springs directly into a duct.

The opening position of the central cone shall be adjusted during balancing in order to achieve required pressure loss and airflow rate. After balancing the central cone shall be locked to the selected adjustment position.

Order Code

URH/S-D; CO-ZT

S = Model
A   Standard
B   With fastening springs

D = Connection size
100, 125, 160, 200

Other options and accessories

CO = Colour
SW   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

Code example

URH/A-100, CO=SW, ZT=N