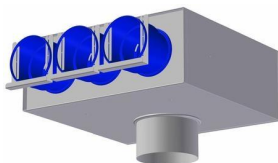


**AFV-R-10 RECTANGULAR  
DIFFUSER**



**AURAFLEX-PLENUM BOX,  
3 INLETS ROOF DESIGN**

## AURAFLEX

- Diffusers in steel
- Customer adapted diffuser pattern
- Available in all colours
- Plenum box with damper and measuring outlet for commissioning
- Plenum box adapted both spiro and flexible ducts
- Distribution box designed for low pressure loss and good sound attenuation

## APPLICATION



### AURAFLEX - DIFFUSER

AFV is designed for comfort ventilation of all types of homes where balanced ventilation are installed, for example by new construction or rehabilitation of apartment buildings. Circular and rectangular diffusers are adapted standard wall thickness of steel joists and single plasterboard on both sides. Circular supply diffuser for ceiling installation are also available. All AuraFlex-diffusers can be used both as inlet and extract diffusers. Plenum box damper is cleanable, so any purification using as a extract diffuser can be performed easily.

#### Design

AFV consisting of a front frame and rear plate with connections for inlet duct. Diffuser front attaches without tools and is easily removable for cleaning etc. The frame has separate slots for adjustment wire and measuring tube. Ceiling diffusers are produced as a slit diffuser, the steel rear plate is manufactured from galvanized steel with mounted EPDM rubber gasket.

### AURAFLEX - PLENUM BOX

AFK plenum box is recommended to provide better sound attenuation, and adjustment and measurement unit. AFK is a rectangular plenum box with sound absorber and damper which provides access to the connecting duct. The damper can be locked in the desired position. AFK-TK is used with DSO where there is no need for damper and measuring outlet.

#### Design

AFK plenum box is available in three versions; straight, angle and Roof design. The plenum box is insulated with a sound absorber in two sides. The plenum box can be provided with one outlet, and one, two or three inlets for AuraFlex duct. The plenum box has wire operated damper, and measuring outlet for commissioning. The plenum box is also provided for spiro-assembly, but then only with one inlet and one outlet. AFK-TK is isolated in the sides and bottom, without adjustment possibilities as this is done on the DSO diffuser.

## AURAFLEX - DISTRIBUTION BOX

AF-FB is a distribution box which distributes AuraFlex-ducts until the respective rooms of the apartment. The outlet pipe not in use, is blocked with plastic lids.

### Design

Distribution boxes are designed for low pressure loss and great sound absorption. AF-FB is delivered as standard with Ø160 connection. Other dimensions on request.

## DESCRIPTION



## AURAFLEX - DIFFUSERS

### Materials and surfaces

Diffuser Front and frame are made of steel, and rear plate consists of galvanized steel. The rear plate is fitted with EPDM rubber gasket. AFV is delivered painted standard white; RAL 9003 - gloss 30. Other colours are available on request. Ceiling diffusers are made of steel, rear plate is manufactured from galvanized steel with mounted EPDM rubber gasket. The diffuser front is fixed with magnets.

## AURAFLEX - PLENUM BOX

### Materials and surfaces

AFK is made of galvanized sheet steel, with sound absorber of polyester. On AFK for AuraFlex-duct outlet is made of galvanized sheet steel and inlet made of plastic. AFK for spiro-assembly having outlets and inlets made of galvanized sheet steel.

## AURAFLEX - DISTRIBUTION BOX

### Materials and surfaces

AF-FB is made of galvanized sheet steel, inlet is fitted with EPDM rubber gasket. The attached outlets are made of plastic.

## AURAFLEX - DUCT

### Materials and surfaces

AuraFlex-ducts are made of PE, outlet spigots and lid is made of plastic. Gaskets are made of EPDM rubber, duct lock is made of galvanized steel.

Documented abilities for the AuraFlex-duct:

- Certified according to EN 10204
- Tested in accordance with DIN EN ISO 846 Hygiene and micro bacterial features
- Tested in accordance with DIN 4102 Fire, class B2
- Documented antistatic properties, surface resistance  $<10^{12}\Omega$

## INSTALLATION



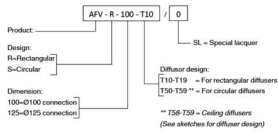
## AURAFLEX - DIFFUSERS

The diffuser is mounted on the wall by first position the backplate with the wire fixing down towards the floor and screw it to the wall. Then place the diffuser front on the backplate with magnets, with slots for measuring tube and regulation wire up towards the ceiling.

## AURAFLEX - DUCTS

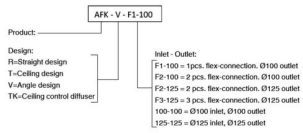
The AuraFlex-duct is mounted by first remove the duct lock and the plastic lids. Then insert a gasket on the duct. The duct is then pushed into the outlet spigot and locked with the duct Lock.

## TECHNICAL INFORMATION



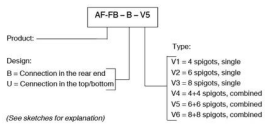
**Example:**  
 AFV - R - 100 - T10 / 0

**Explanation:**  
 AuraFlex-diffuser, rectangular with Ø100 connection, type T10 painted standard white RAL 9003 - gloss 30.



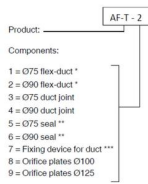
**Example:**  
 AFK - V - F1-100

**Explanation:**  
 AuraFlex-plenum box, angle design with 1 pcs. flex connection and Ø100 outlet.



**Example:**  
 AF-FB - B - V5

**Explanation:**  
 AuraFlex - distribution box, with connection in the rear end, with 6+6 spigots, combined supply air and extract air.



\* supplied on rolls a 50m  
 \*\* number of seals reconciled with the number of spigots on the AuraFlex-plenum box and AuraFlex-distribution box.  
 \*\*\* Fixing device for Ø75 and Ø90 flexible duct. Are supplied in packages of 50 pieces.

**Example:**  
 AF-T - 2

**Explanation:**  
 AuraFlex-duct Ø90 roll a 50 m.

Table for AuraFlex diffusers			
Diffuser nr.	Design	L-factor	T-factor
T10	Rectangular	6,6	1
T11	Rectangular	6,1	1
T12	Rectangular	6,0	1
T13	Rectangular	3,7	4
T18	Rectangular	5,8	2
T19	Rectangular	2,9	5
T50	Circular	5,3	2
T51	Circular	4,2	3
T53	Circular	3,5	4
T54	Circular	3,0	5
T55	Circular	2,5	5
T58	Circular	5,6	1
T59	Circular	5,6	1

**Explanation:**

T-factor indicates the pressure drop line that applies to diffuser type in open position in the diagram for generated noise.

L-factor indicates throw length factor for diffuser type interpolated to the intermediate line.

Table 3, Opening grade diffuser

L=2,9		L=4,9		L=6,6	
small opening grade (diffuser netto opening grade)			large opening grade		
T=5	T=4	T=3	T=2	T=1	