

# BURE

## Circular ceiling high capacity diffuser with dual adjustable vents for high installations



### Function

BURE is suited for comfort high capacity ventilation of big halls and industrial buildings. Suitable for heating and cooling using the adjustable construction. Installation height is between 4 and 12m.

The air stream pattern (horizontal or vertical) can be adjusted manually (BURE-HC...) or by an autonomous thermal (BURE-TC...) or an electric actuator (BURE-M2 for 2-point/AC 230V actuator and BURE-MC for continuous AC24V actuator with DC 0...10V control signal). The BURE consists of an inlet spigot and an inner and outer cage with openings for supply air in the peripheral surface and the underside. Dependent of the operation method the openings in the peripheral surface (cooling, horizontal air stream) or the underside (heating, vertical air stream) are opened.

The control mechanism in HC and MC version adjusts the flow pattern in any selected position on the adjustment scale (at the connection side of the product) between position 1 (fully horizontal) and 5 (fully vertical). The TC and M2 version controls in a section of the range that can be shifted on the adjustment scale towards the horizontal flow pattern (in direction of pos. 1) or towards the vertical flow pattern (direction of pos. 5).

### Ordering codes

Nominal size	DN supply connection (mm)		BURE -	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			250			
			315			
			400			
			500			
			630			
Type of control	Electric actuator AC 230V, 2-point control	M2				
	Electric actuator AC 24V, DC 0-10V continuous control	MC				
	Thermal actuator, continuous control	TC				
	Manual control	HC				
Surface treatment <sup>1)</sup>	RAL9010 white, gloss 30%	RAL9010				
	Other colours RAL...	RALXXXX				

### Ordering code example:

BURE - 400 - MC

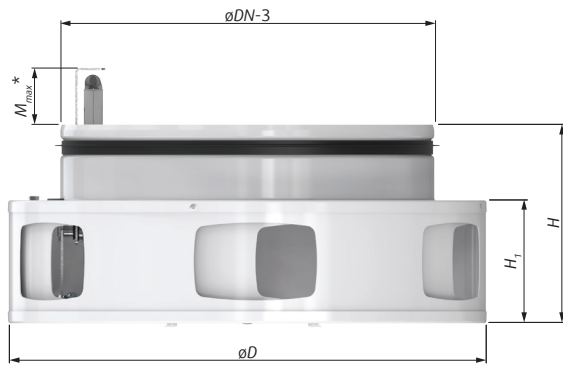
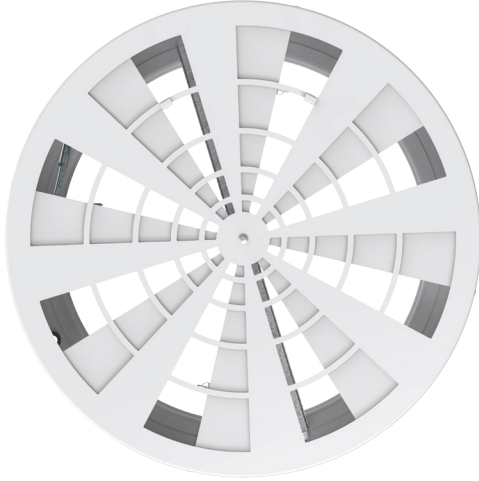
High capacity diffuser BURE, supply connection nominal size 400mm, with AC 24V electric drive for DC 0...10V continuous control. White colour coating RAL9010 gloss 30%.

#### NOTE:

1. If the ordering code does not contain surface treatment, so RAL9010, gloss 30% will be delivered as standard.

## Design

The BURE is made of powder coated steel (RAL 9010) and is available in the duct connection sizes 250, 315, 400, 500 and 630 mm. At underside the double segment blinds allow the free area of more than 50%.



\* (BURE-MC or BURE-M2 with an electric actuator)

Fig. 1: BURE dimensions

## Dimensions

DN	ØD	H	H <sub>1</sub>	M <sub>max</sub> *	BURE... -HC	BURE... -TC	BURE... -MC/-M2
(mm)					(kg)		
250	315	160	99	50	2,6	3	3,1
315	400	182	119	48	3,8	4,3	4,3
400	500	204	144	-	5,7	6,6	7,2
500	600	223	163		7,9	8,9	9,5
630	800	271	211		12,8	14,2	14,5

Tab. 1: BURE table of dimensions and weight

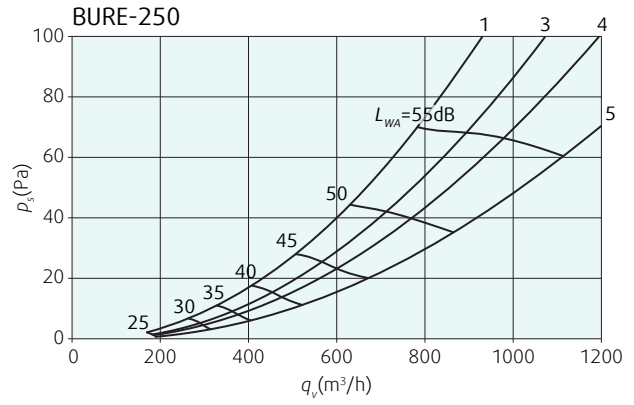


Diagram 1a: Pressure drop and sound power level

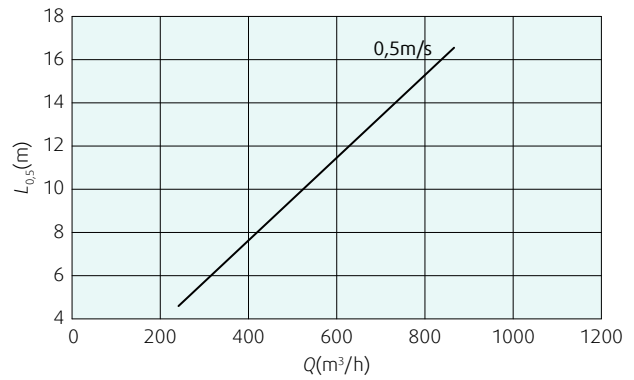


Diagram 1b: Isothermal vertical throw length with adjustment mechanism in position 5. Measured for terminal velocity 0,5m/s.

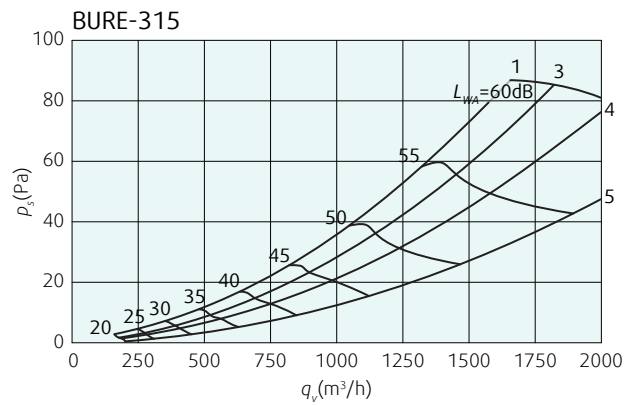


Diagram 2a: Pressure drop and sound power level

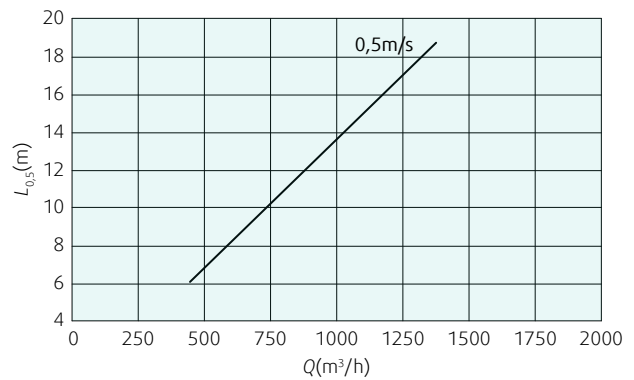


Diagram 2b: Isothermal vertical throw length with adjustment mechanism in position 5. Measured for terminal velocity 0,5m/s.

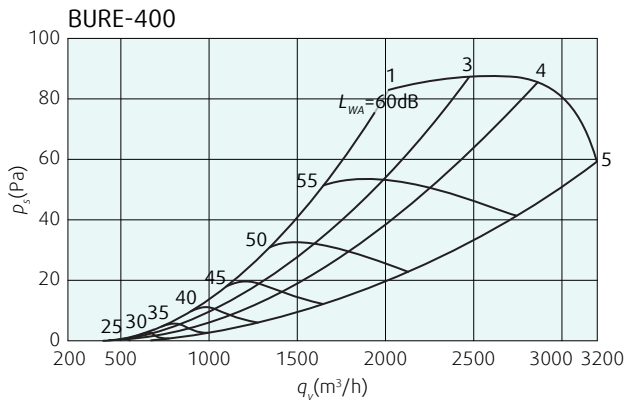


Diagram 3a: Pressure drop and sound power level

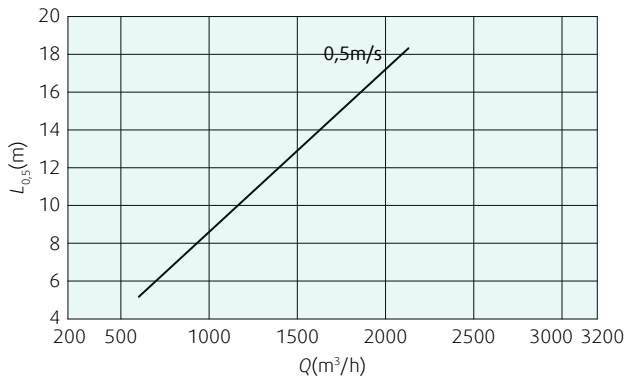


Diagram 3b: Isothermal vertical throw length with adjustment mechanism in position 5. Measured for terminal velocity 0,5m/s.

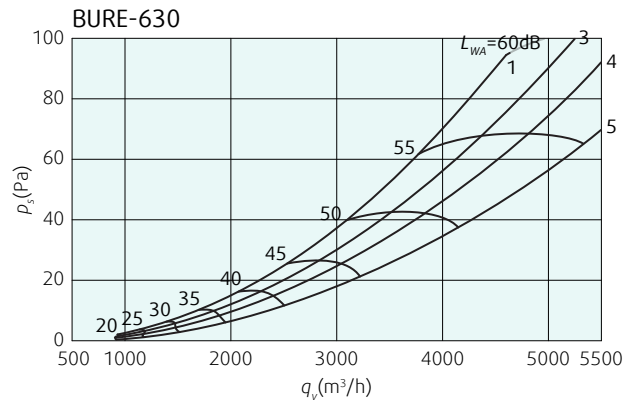


Diagram 5a: Pressure drop and sound power level

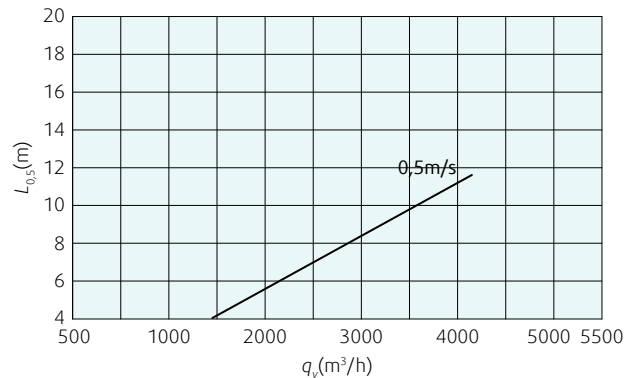


Diagram 5b: Isothermal vertical throw length with adjustment mechanism in position 5. Measured for terminal velocity 0,5m/s

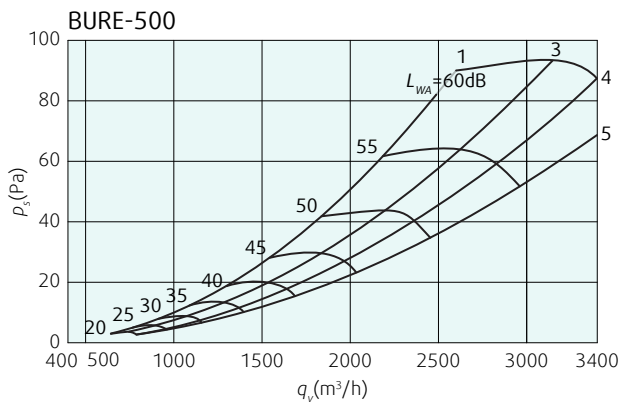


Diagram 4a: Pressure drop and sound power level

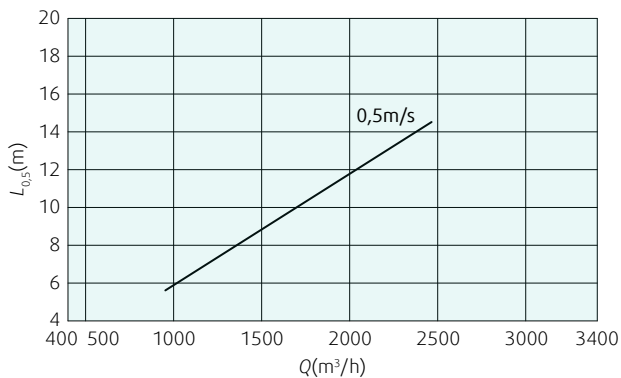


Diagram 4b: Isothermal vertical throw length with adjustment mechanism in position 5. Measured for terminal velocity 0,5m/s.

**Legend**

<b>1, 2, 3, 4</b>	flow direction adjustment mechanism
<b>Position 1</b>	vertical flow direction of the diffuser fully closed = only horizontal flow
<b>Position 5</b>	vertical flow direction of the diffuser fully open = only vertical flow

<b>ΔT - Heating</b>	5 K	10 K	15 K	20 K	25 K
<b>K<sub>T</sub> - Correction factor</b>	· 0,57	· 0,40	· 0,33	· 0,28	· 0,25
<b>Throw (m) = L<sub>0,5</sub> · K<sub>T</sub></b>					

Tab. 2: Throw length correction for non-isothermal vertical flow

**Mounting**

The BURE is mounted directly in a spiro duct by a rubber gasket tight connection.