

EFF

Extract Valve

Data Sheet

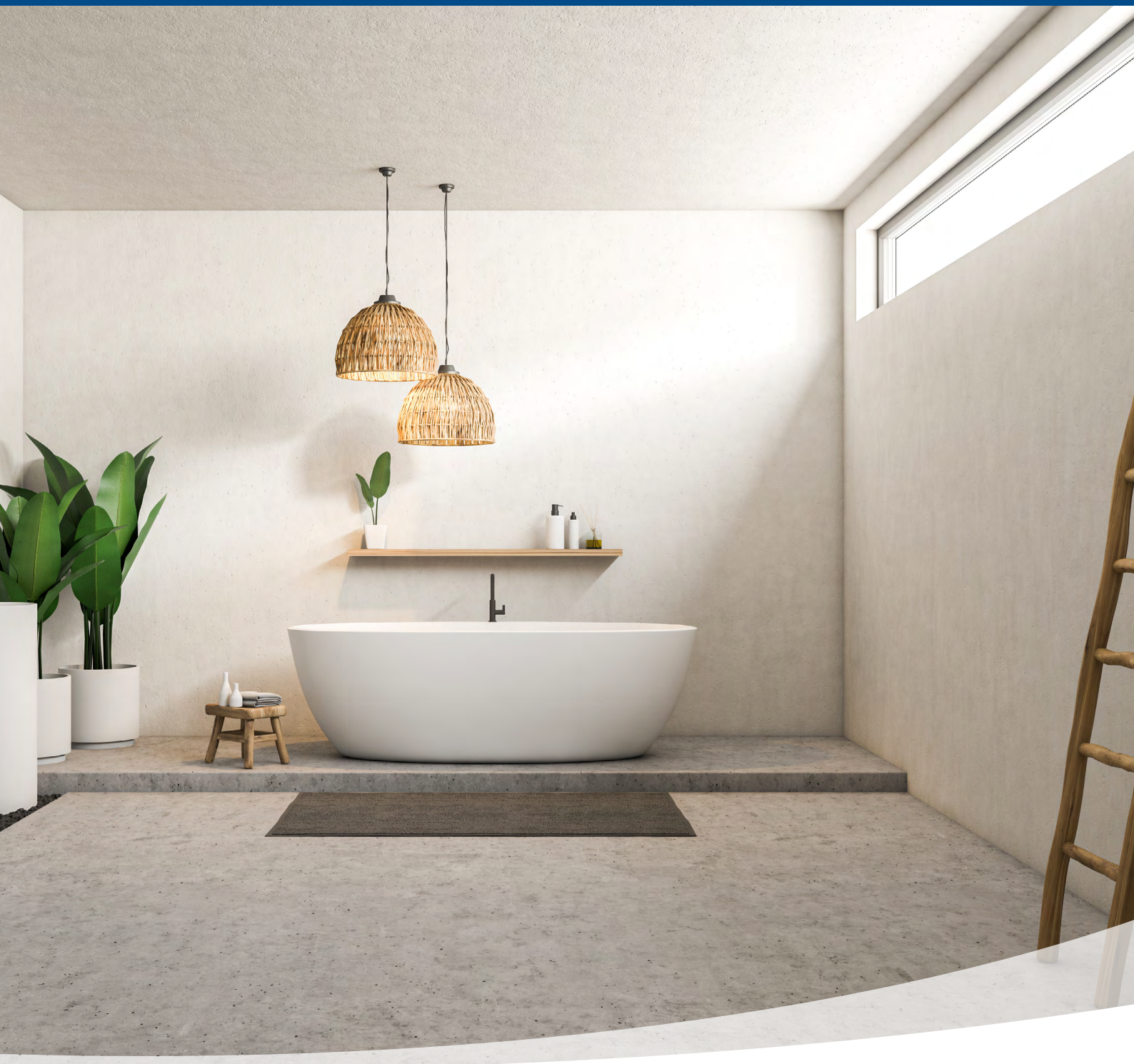


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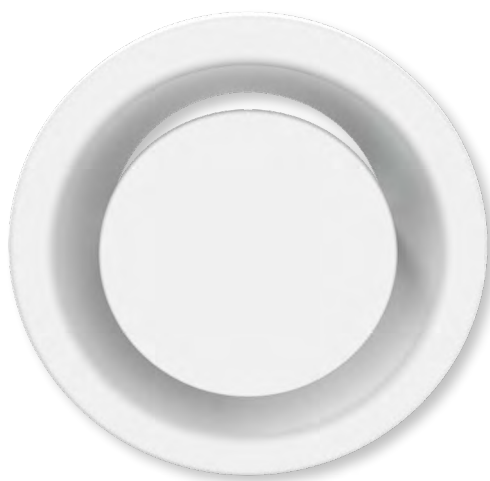
Supplement 8

Related Products. 8



Good to know

Current information on all products is available at [🔗 design.systemair.com](https://design.systemair.com)



Description

EFF is a circular extract diffuser for ceiling installation. It has adjustable vent capacity.

Highlights

- Non-disturbant aesthetic form
- Easy installation
- Vast adjustability range

Accessories

Detailed information about accessories for EFF is available on page [5](#).

- RFU and RFP: Mounting Frames

Design

EFF is made from galvanized steel sheet with powder colour coating. The product consists of the fixed part with fixing springs equipped duct connection and the valve seat and the movable valve front cone. The front cone is held by the central thread bolt and can be moved by rotating. So the gap between the cone and the seat can be adjusted to set the required air flow volume.

Product Parts

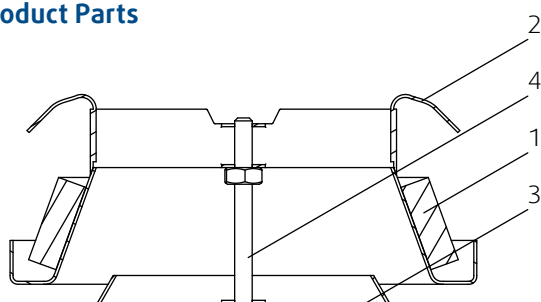


Fig. 1: Components of EFF

Legend

1	Valve seat (fixed part)
2	Fixing spring for duct or mounting frame
3	Front valve cone (movable)
4	Thread bolt

Dimensions

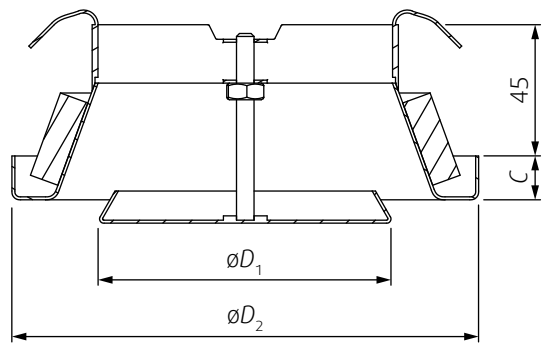


Fig. 2: Dimensions of EFF

Tab. 1: Dimensions of EFF

	øD ₁	øD ₂	C	m
	(mm)			(kg)
EFF-63	63	90	15	0,10
EFF-80	80	106		0,17
EFF-100	100	135		0,20
EFF-125	125	160		0,29
EFF-150	150	191		0,35
EFF-160	160	195	18	0,39
EFF-200	200	238		0,57

Ordering Code

EFF- -		
		63
		80
		100
		125
		150
		160
Size	øDN (mm)	200
	Signal white	RAL9003
	White	RAL9010
	Traffic white	RAL9016
Colour	Other RAL colour	RALXXXX

NOTE: The standard RAL colours have gloss 30%.

Example of the Ordering Code

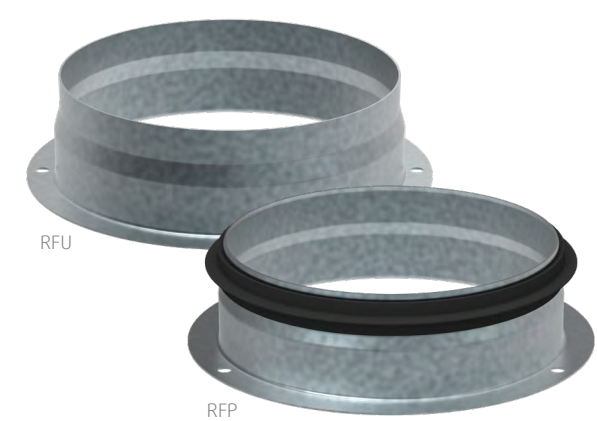
EFF-125-RAL9003

Extract valve with nominal size 125 mm, with signal white coating RAL 9003.

Accessories

RFU & RFP

Mounting Frames



Tab. 2: Dimensions of RFU and RFP

$\varnothing DN$	$\varnothing A$	$\varnothing D$	Installation opening diameter
(mm)			
80	100	71	78
100	120	97	103
125	146	122	128
150	170	143	149
160	180	157	163
200	220	197	203

Description

RFU, RFP are mounting frames for the valve EFF. They enable connection of the duct types that cannot be connected directly to the valve, like e.g. flexible ducts. Also the frames help fixing the valves to the rigid construction parts like e.g. suspended ceiling.

Design

The RFU, RFP are made from galvanized steel. The RFP is fitted with a rubber gasket.

Dimensions

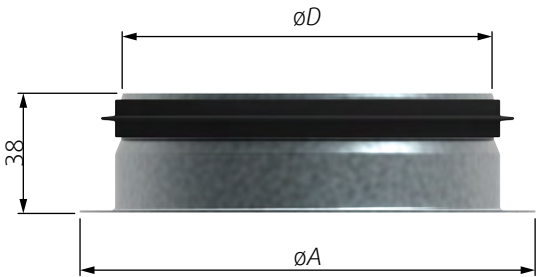


Fig. 3: Dimensions of RFU and RFP

Ordering Codes

		RFU(RFP)-	
		80	
		100	
		125	
		150	
		160	
Size	$\varnothing DN$ (mm)	200	

Example of the Ordering Code

RFP-125

Mounting frame with rubber gasket, size 125 mm.

Quick Selection

	Air flow volume at different sound power levels L_{WA}					
	25 dB		30 dB		35 dB	
Type	m³/h	l/s	m³/h	l/s	m³/h	l/s
EFF-63	20	6	27	8	34	9
EFF-80	23	6	31	9	38	11
EFF-100	52	14	73	20	90	25
EFF-125	82	23	110	31	132	37
EFF-150	108	30	144	40	170	47
EFF-160	121	34	162	45	191	53
EFF-200	152	42	198	55	232	64

NOTE: The working points were measured with 10 mm vent gap adjustment.

Technical Parameters

Legend

p_s	Pa	Pressure drop
q_v	m³/h l/s	Air flow volume
L_{WA}	dB(A)	A-weighted total radiated sound power level
ΔT	K	Temperature difference Supply air - Room air

$L_{0,2}$	m	Air throw length with terminal velocity 0,2 m/s
L_x	m	Air throw length calculated for specific terminal velocity
x	m/s	Terminal velocity in range of 0,1 m/s ... 1 m/s

Calculation of Air Throw for Different Terminal Velocities

$L_x = L_{0,2} \cdot 0,2/x$

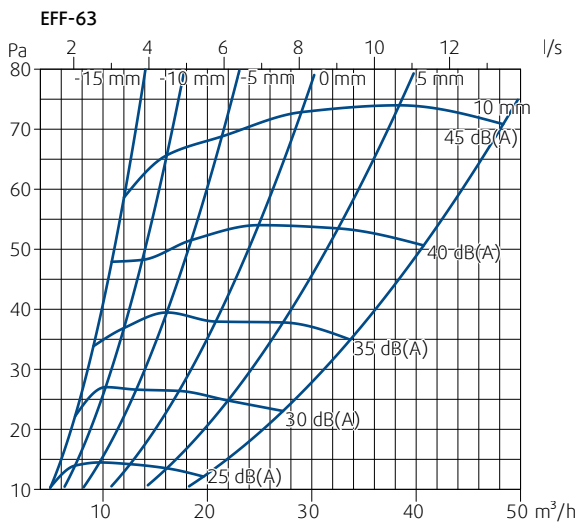


Diagram 1: Pressure drop & A-weighted total radiated sound power level depending on air flow volume

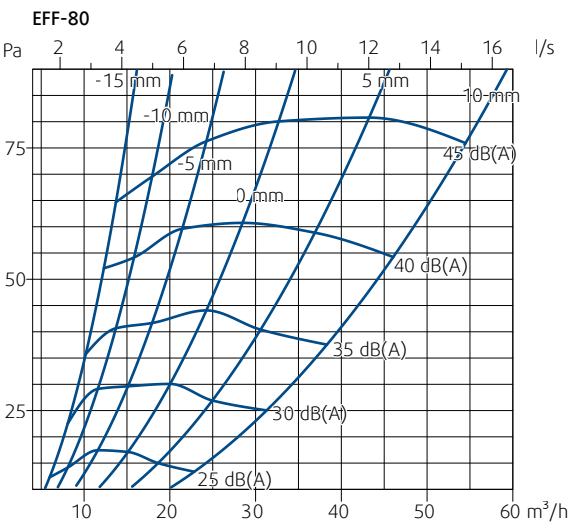


Diagram 2: Pressure drop & A-weighted total radiated sound power level depending on air flow volume

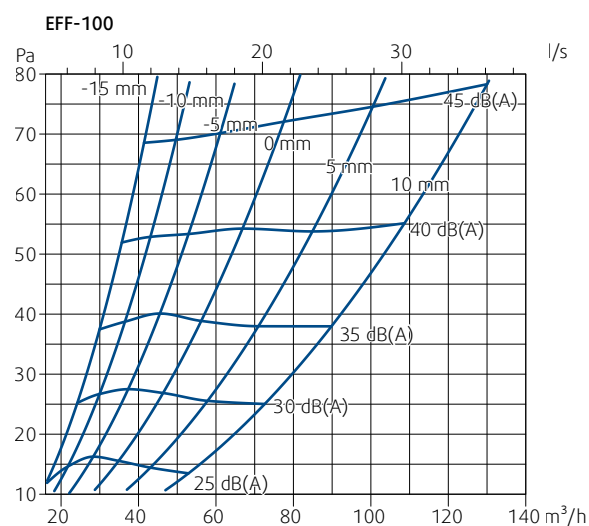


Diagram 3: Pressure drop & A-weighted total radiated sound power level depending on air flow volume

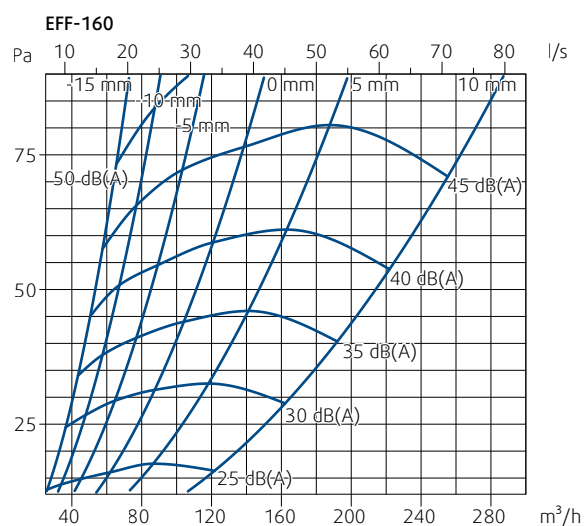


Diagram 6: Pressure drop & A-weighted total radiated sound power level depending on air flow volume

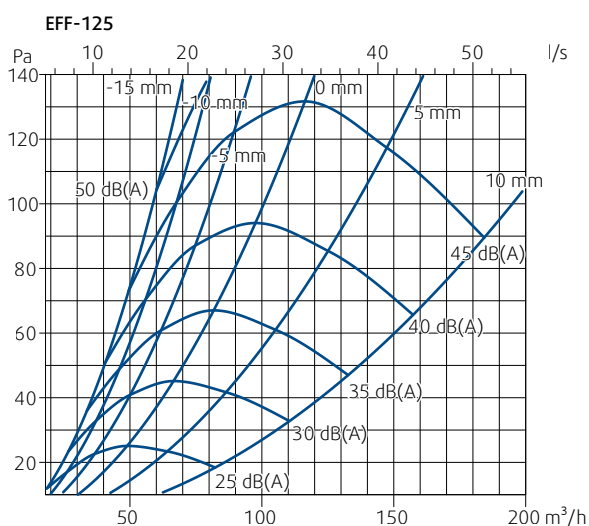


Diagram 4: Pressure drop & A-weighted total radiated sound power level depending on air flow volume

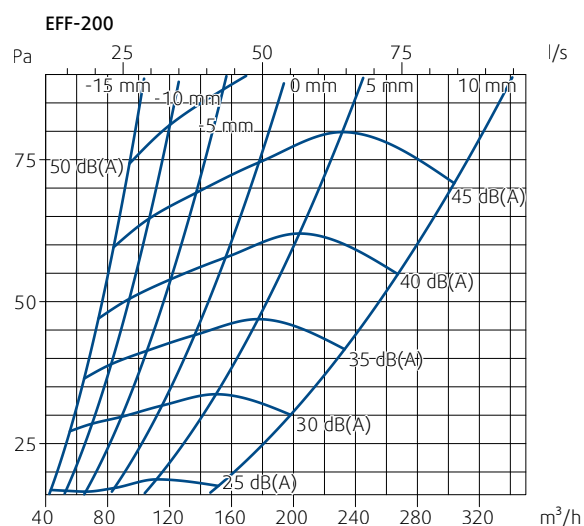


Diagram 7: Pressure drop & A-weighted total radiated sound power level depending on air flow volume

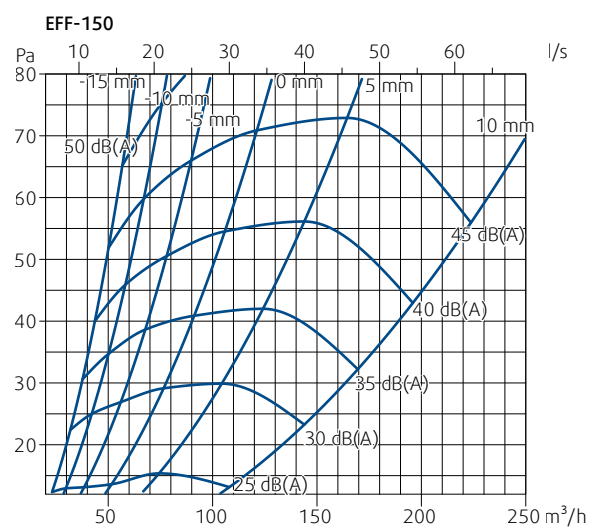


Diagram 5: Pressure drop & A-weighted total radiated sound power level depending on air flow volume

Installation, Maintenance & Operation

Information about installation, maintenance and operation is available in the ["UserManual_EFF"](#) document or follow the instructions on [Systemair DESIGN](#).

Dry indoor conditions with an operation temperature range of -20°C to +70°C.

Transport & Storage

Dry indoor conditions with a temperature range of -40°C to +50°C.

Supplement

Any deviations from the technical specifications contained herein and the terms should be discussed with the manufacturer. We reserve the right to make any changes to the product without prior notice, provided that these changes do not affect the quality of the product and the required parameters.

Current information on all products is available on [Systemair DESIGN](#).

Related Products

TFF

Supply Valve

Product information is available within the ["DataSheet_TFF"](#) technical documentation and on [Systemair DESIGN](#).

