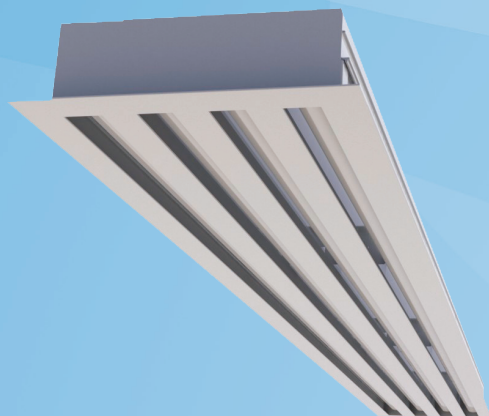


Halton SLL

Linear Slot Diffuser



- Horizontal or vertical plane jet air supply, suitable also for exhaust
- Ceiling or wall installation, suitable also for continuous “wall to wall” installations
- Adjustable throw pattern, flexibility of orientation with different configurations
- Detachable diffuser allows cleaning of the terminal unit and ductwork

Accessories

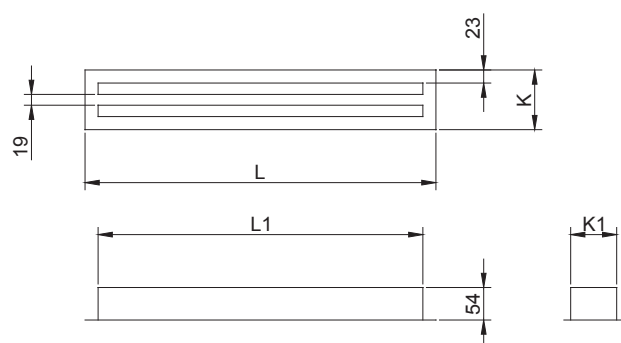
- Plenum with a circular duct connection(s) D160...250mm with rubber gasket
- Plenum options with measurement and adjustment functions
- Sound insulation for plenum

MATERIAL AND FINISHING

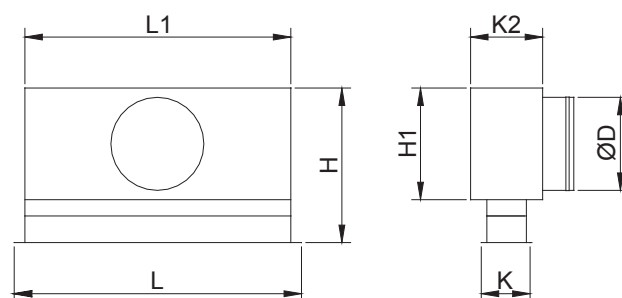
PART	MATERIAL	FINISHING	NOTE
Outer frame	Aluminium	Mill finished Anodised Polyester-painted / White RAL 9010 / 50% gloss	Special colours available 100 % Epoxy painted as option
End caps / T profiles	Aluminium	Mill finished Anodised Polyester-painted / White RAL 9010 / 50% gloss	Special colours available 100 % Epoxy painted as option
Inner vanes	Aluminium	Mill finished Anodised Polyester-painted / White RAL 9010 / 50% gloss	Special colours available 100 % Epoxy painted as option
Flow deflection vanes (for supply application)	Aluminium	Mill finished	Special colours available 100 % Epoxy painted as option
Plenum	Galvanised steel		

DIMENSIONS

SLL



SLL + PLL



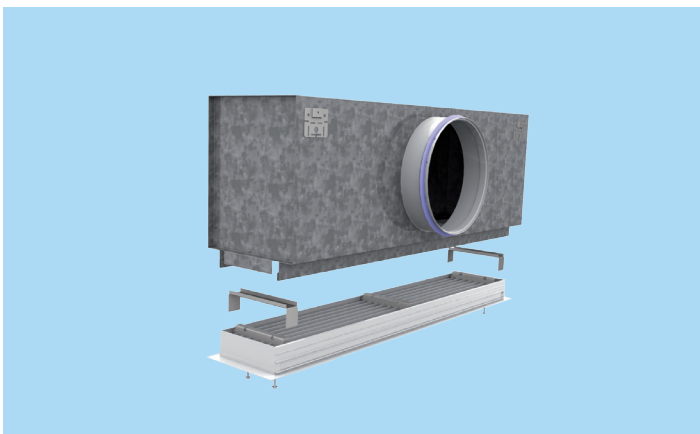
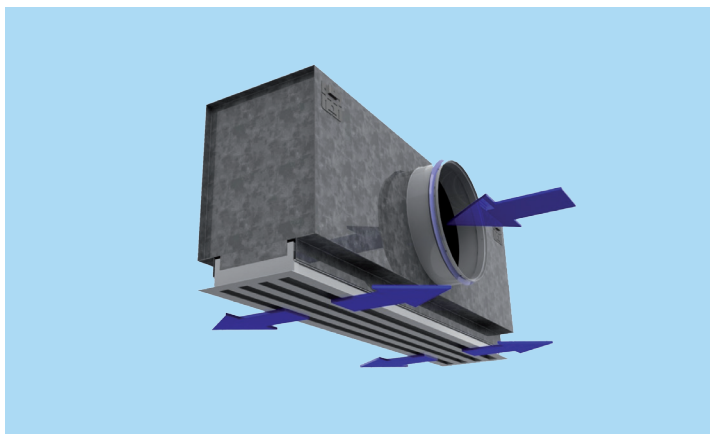
Standard dimensions of the SPL unit with standard end caps are presented in the table below.

Active length	Slots	L	L1	H	H1	K	K1	K2	ØD
572	1	618	570	255..275	200	67	47	117	1x160
872	1	918	870	255..275	200	67	47	117	1x160
1172	1	1218	1170	255..275	200	67	47	117	1x160
1472	1	1518	1470	255..275	200	67	47	117	2x160
1772	1	1818	1770	255..275	200	67	47	117	2x160
572	2	618	570	295..315	240	105	85	155	1x200
872	2	918	870	295..315	240	105	85	155	1x200
1172	2	1218	1170	295..315	240	105	85	155	1x200
1472	2	1518	1470	295..315	240	105	85	155	2x200
1772	2	1818	1770	295..315	240	105	85	155	2x200
572	3	618	570	295..315	240	143	123	193	1x200
872	3	918	870	295..315	240	143	123	193	1x200
1172	3	1218	1170	295..315	240	143	123	193	1x200
1472	3	1518	1470	295..315	240	143	123	193	2x200
1772	3	1818	1770	295..315	240	143	123	193	2x200
572	4	618	570	345..365	290	181	161	231	1x250
872	4	918	870	345..365	290	181	161	231	1x250
1172	4	1218	1170	345..365	290	181	161	231	1x250
1472	4	1518	1470	345..365	290	181	161	231	2x250
1772	4	1818	1770	345..365	290	181	161	231	2x250

ACCESSORIES

ACCESSORY	CODE	DESCRIPTION
Plenum	PLL	Plenum for duct connection (with or without attenuation material)
Plenum	PLD	Plenum for duct connection (with or without attenuation material)
Airflow measurement and adjustment module	MSM	For supply installation
Airflow measurement and adjustment module	MEM	For exhaust installation
End caps	E1	For modular ceiling, Width = 5 mm (2 pcs)
Sound attenuation	IN	Mineral wool
Installation brackets	ST	For installation of exhaust model (SLM/E) into the exhaust ceiling plenum

Special end caps are available for modular ceilings.



Function

Supply air is supplied through the linear slots of the diffuser horizontally along the ceiling surface or vertically into the occupied zone.

For wall installation, the plane jet air is supplied horizontally or directed to the ceiling surface, which increases the throw length.

For an exhaust application, the diffuser is supplied without flow control vanes.

Installation

The SLL linear slot diffuser is connected directly to the PLL or PLD plenum.

The plenum is installed into the suspended ceiling with M8 drop rods (not included in the delivery) and connected to the ductwork.

Remove the T-profiles of the SLL by pulling them gently, in order to access the transversal bars located behind the profiles.

Fit the installation brackets into the grooves of the plenum and secure with the screws supplied with the unit.

Put screws into the holes of the transversal bars. Screw on until the diffuser is flush to the ceiling. Replace the T-profiles.

The unit can be installed in a suspended ceiling by using the optional end caps; either E1 with 5 mm flange.

The unit can be used for exhaust air by connecting the unit (model SLL/E) to the exhaust ceiling plenum using ST installation brackets.

The unit can be used for exhaust air by connecting the unit (model SLL/E) to the exhaust ceiling plenum using ST installation brackets .

Adjustment

The air pattern can be changed through 180° by adjusting the flow deflection vanes using a screwdriver. Each deflection vane section can be individually adjusted without removing the T-profiles in order to provide flexibility in supply air pattern orientation.

Diffusers are delivered unadjusted with the flow deflection vanes in the open position.

In order to enable airflow adjustment and measurement of airflow rate, it is recommended that the diffuser be connected to the PLL or PLD balancing plenum equipped with the MSM module in supply and MEM in exhaust.

The supply flow rate is determined by using the measurement and adjustment module MSM.

Detach the linear diffuser and pass the tubes and control spindle through the linear diffuser.

Replace the diffuser.

Measure the differential pressure using a manometer.

The airflow rate is calculated using the formula below.

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

Adjust the airflow rate by rotating the control spindle until the desired setting is achieved.

Lock the damper position with a screw.

Replace the tubes and spindle into the plenum and replace the linear diffuser.

K-factor for installations with different safety distances (D= duct diameter)

PLL/PLD	>6XD	min 3XD
160	19	22
200	49	32
250	51	51

Servicing

Remove the T-profiles.

Remove the linear diffuser by unscrewing the screws of the transversal bars.

Clean the parts by wiping with a damp cloth.

Push the linear diffuser back into place by screwing the transversal bars to the installation brackets.

Option: with balancing plenum PLD + MSM/MEM or PLL + MSM/MEM

Remove the measurement and adjustment module by gently pulling the shaft (not the control spindle or measurement tubes!).

Wipe the parts with a damp cloth, instead of immersing in water.

Reassemble the measurement and adjustment module by pushing the shaft back into place until the module meets the stopper.

Push the linear diffuser back into place by screwing the transversal bars to the installation brackets.

Suggested specifications

The linear slot diffuser shall have an extruded aluminium outer frame, flow deflection vanes and T-profiles, and be anodised or polyester-painted to white (RAL 9010) colour.

Each air pattern adjustment section shall comprise two flow deflection vanes.

The diffuser shall be connected to the ductwork using a plenum with mineral wool as sound attenuation material.

The removable linear slot diffuser shall be mounted into the plenum with invisible screws.

The plenum shall comprise an airflow measurement and adjustment module.

The linear diffuser shall be removable in order to provide access to the measurement and adjustment module in the plenum.

Flow deflection vanes and T-profiles shall be easily removable for access to the plenum.

The supply air pattern shall be directable by adjusting the flow deflection vanes without any change in the appearance of the diffuser.

Product code

SLL/S-N-L

S = Model

S	Supply
E	Exhaust

N = Number of slots

1, 2, 3, 4

L = Length

400,+1,...50000

Specifics and accessories

SE = End caps (Y/N)

Y	Yes
N	No

ST = Type of end caps

NA	Not assigned
N1	Standard 23 mm
E1	Type E1

FI = Finishing

AN	Anodised
PN	Painted
MF	Mill finished

CO = Colour

W	White
X	Special colour
N	No painting

Code example

SLL/S-1-400, SE=Y,ST=N1,FI=AN,CO=N

Sub products

PLL	Plenum (Linear slot diffusers)
PLD	Plenum (Diffusers)