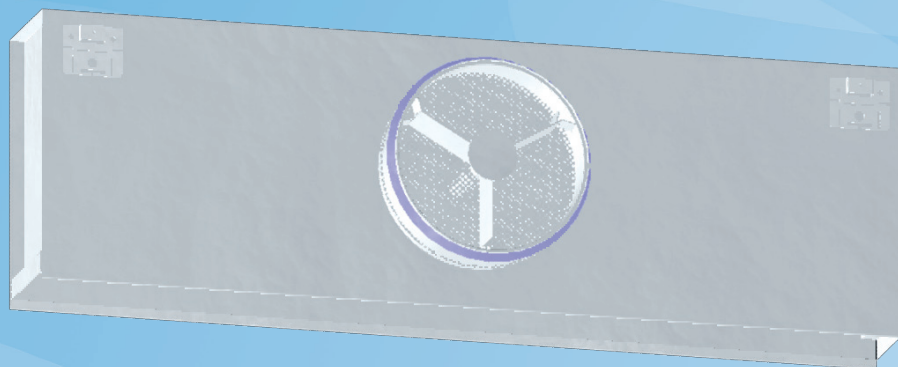


Halton PLD/PLL

Plenum (Linear Slot Diffusers)



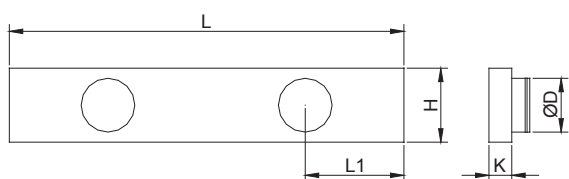
- Plenum for connecting SLL and SLN linear slot diffusers / exhaust units to ductwork
- Ensures proper function of the supply air diffuser
- Access for ductwork cleaning

Product Models & Accessories

- Model with sound attenuation material
- Airflow measurement and adjustment module

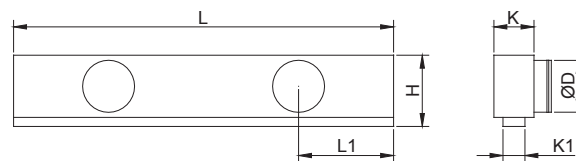
DIMENSIONS

PLD



Slots	H	K	ØD
1	250	47	160
2	275	85	200
3	275	123	200
4	325	161	250

PLL



Slots	H	K	K1	ØD
1	235	117	47	160
2	275	155	85	200
3	275	193	123	200
4	325	231	161	250

Standard dimensions for linear slot diffusers

Diffuser active length (mm)	572	872	1172	1472	1772
L (mm)	570	870	1170	1470	1770
L1 (mm)	286	436	586	368	443
Duct connections (pcs)	1	1	1	2	2

In addition to standard linear slot diffuser sizes, other sizes can be specially ordered.

The maximum length is 2000 mm.

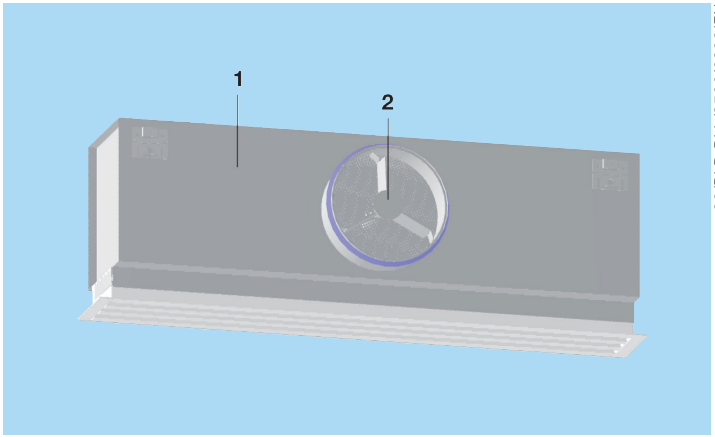
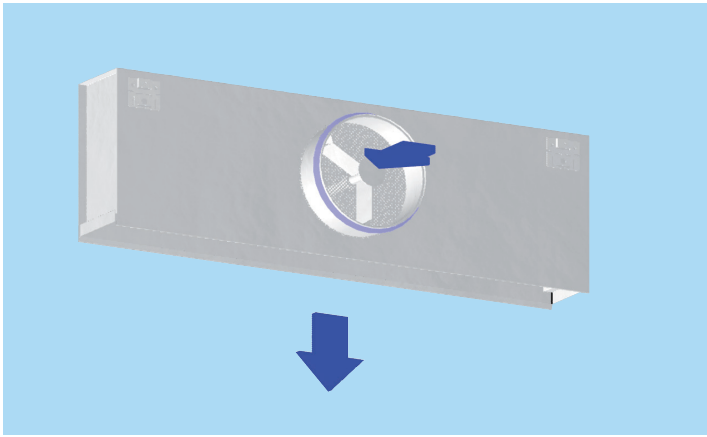
Continuous plenums with modular design are also available for installation lengths greater than 2000 mm.

MATERIAL AND FINISHING

PART	MATERIAL	NOTE
Plenum / spigot	Galvanised steel	
Insulation	Mineral wool	The mineral wool is fixed with nails

ACCESSORIES

ACCESSORY	CODE	DESCRIPTION
Sound attenuation material	IN	Mineral wool in the plenum on 2 sides (IN=2)
Sound attenuation material	IN	Mineral wool in the plenum on 5 sides (IN=5)
Airflow measurement and adjustment unit	OM	For supply installation



Function

The duct pressure and air velocity are reduced inside the plenum box.
 Air is supplied into the space through the diffuser, improving the air distribution quality.
 When the is supplied equipped with a measurement and adjustment unit, the volume flow rate can be balanced.

Installation

CODE	DESCRIPTION
1	Plenum
2	Measurement and adjustment module

The plenum is installed into the suspended ceiling with M8 drop rods (not supplied in the delivery). Connect the plenum to the ductwork with a spigot equipped with an integrated rubber gasket. When equipped with a measurement and adjustment module, the recommended safety distance upstream of the device is at least 3D, in order to ensure a reliable airflow rate measurement. The unit's control spindle must not be excessively bent.

Adjustment

In order to enable airflow adjustment and measurement of airflow rate, it is recommended that you connect the diffuser to the plenum equipped with the MSM module.
 The supply flow rate is determined by using the measurement and adjustment module MSM.
 Detach the linear slot diffuser and pass the tubes and control spindle through the diffuser.
 Replace the diffuser / exhaust unit.
 Measure the differential pressure using a manometer.
 The flow rate is calculated using the formula below.

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 diffuser.

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

Servicing

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

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.

Suggested specifications

The plenum shall be made of galvanised steel.

The plenum shall comprise an airflow measurement and adjustment module.

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

The plenum shall comprise sound attenuation material made of mineral wool.

The plenum reduces duct pressure and air velocity in order to supply air throughout the entire face area of the linear diffuser and improve the air distribution quality.

Product code

PLD/S-L-D-N

PLL/S-L-D-N

S = Number of slots

1, 2, 3, 4

L = Length

400,+1,...,50000

D = Diameter of duct connection

S=1: 160

S=2, S=3: 200

S=4: 250

N = Number of duct connections

1,+1,...,((L-30)/(D+30)+1)

Specifics and accessories

IN = Sound attenuation material

N No attenuation material

2 Sound attenuation material on 2 sides

5 Sound attenuation material on 5 sides

OM = Measurement/adjustment module MSM

N No measurement and adjustment module

Y MSM installed in each duct connection

Code example

PLD/1-400-160-1, IN=N,OM=N