

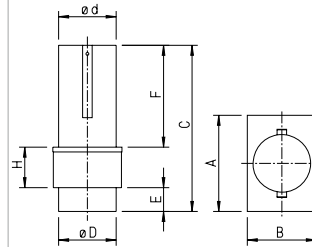
ELS-D



Approval Z-41.3-368
No maintenance conditions

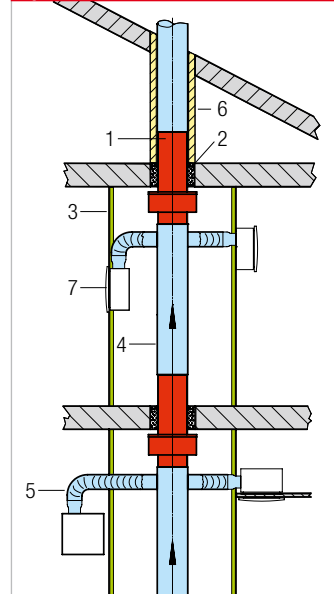


Dimensions ELS-D



Dim. in mm

System with mono tube fans



In accordance with building regulations, ventilation which vertically cross more than two full floors must be protected against fire and smoke. Traditionally, this requirement has been met by placing the ventilation duct in a fire-proof shaft. This involved: High investment costs, large space requirements, longer construction period and, above all, the cost of two shafts (distinction between mixed-use installation shaft and ventilation shaft).

■ The use of ELS-D ceiling seal has many advantages, such as e.g.:

- Placement of the ventilation duct in mixed-use installation shaft with simple, 12.5 mm thick plasterboard cladding.
- ELS-D have no maintenance requirements. Additional fire dampers with possible maintenance requirements are not necessary.
- Certified mono tube ventilation units without fire protection cladding or fire dampers may be connected via Aluflex pipes.
- Disc valves or volume flow-regulating extract air elements made of plastic can be used for central systems. These cold smoke shutters (type KAK) should be added to prevent the spread of cold smoke.

- The connection of extract air from domestic kitchens is permitted.
- The structural and functional advantages of plasterboard installations or elements can be fully realised.
- An approximate reduction of the space requirement to the ND of the main pipeline is possible through axial rotation during installation (either wide or narrow side forward or diagonal).
- The passage cross-section of the ventilation duct is fully maintained and there is no additional pressure loss. Cleaning and inspection are not affected.

General technical approval from the DIBt with no. Z-41.3-368.
Fire resistance class: K 90-18017 (three-floor test).

■ Description

Casing made of galvanised steel sheet with integrated connectors at top and bottom. The upper connector also serves as a ceiling outlet.

■ Two-stage function

- The dampers initially close the air flow opening at approx. 90 °C and prevent the introduction of high temperatures on other floors.
- The integrated foam actuator packages completely seal the

ventilation duct above the damper at approx. 180 °C.

■ Installation

ELS-D can be installed in the underside of the ceiling or in installation elements in just a few simple steps. The installation position is vertical. The ceiling seal is fixed by the two mounting brackets which are held in grouting and screed. The ceiling outlet is already integrated in ELS-D. The main pipeline can be simply slipped over and inserted on the other side like a fitting thanks to the standard connectors.

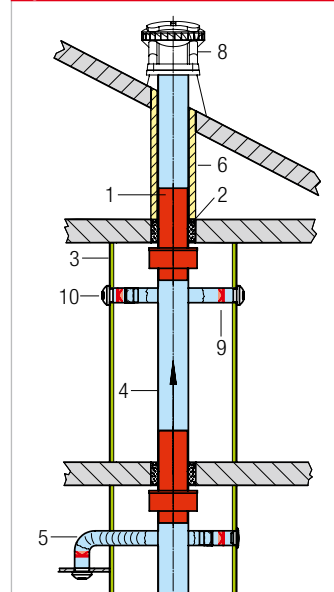
■ Accessories

Cold smoke shutter

Prevents the possible backflow of cold air etc. in central ventilation systems to other fire sections when the fan is at a standstill. (not required for systems with individual ventilation units.)

- KAK 100** Ref. no. 04097
ND 100 mm
- KAK 125** Ref. no. 04098
ND 125 mm

System with central fan



Legend

- 1 Ceiling seal ELS-D
- 2 Ceiling grouting
- 3 Installation shaft cladding e.g. 12.5 mm plasterboard
- 4 Main duct (spiral duct)
- 5 Connection duct (Aluflex)
- 6 Insulation against condensation
- 7 ELS ind. vent. units flush or surface without fire protection requirements
- 8 Central fan, e.g. Type DV EC (see page 80 ff.)
- 9 Cold smoke shutter KAK
- 10 Extract air element AE or disc valve (KTVA or MTVA)

■ Reference

Other sizes and product details regarding the use of cold smoke shutters KAK.

See page 597

Order data

Type	Ref. no.	Dimensions in mm								Weight approx. kg
		A	B	C	Ø d	Ø D	E	F	H	
ELS-D 100	00270	183	123	385	99	102	50	250	85	2.5
ELS-D 125	00185	208	148	394	124	127	50	250	94	3.4
ELS-D 140	00186	233	163	403	139	142	50	250	103	4.0
ELS-D 160	00187	258	183	413	159	162	50	250	113	5.0
ELS-D 180	00188	283	203	424	179	182	50	250	124	6.0
ELS-D 200	00271	308	223	434	199	202	50	250	134	7.2