USB501-6
Universal base for surface mounting

The base USB501-6 can be used for dry and humid rooms.
It has no loop contact.

Fig. 1 base USB 501-6

Description

The universal base USB 501-6 is designed so that it can be used for surface mounting.

The base is provided with break-out points for entry of the installation cables. A 6-pin terminal block is present in the interior of the USB 501-6.

The detector is fixed in the USB 501-6 by means of a bayonet connection.

For the formation of cross-connection points, it is possible, if required, to provide a further 4-pin terminal block in the snap holder provided for this purpose.

The base USB 501-6 is suitable for the following SecuriStar fire detectors
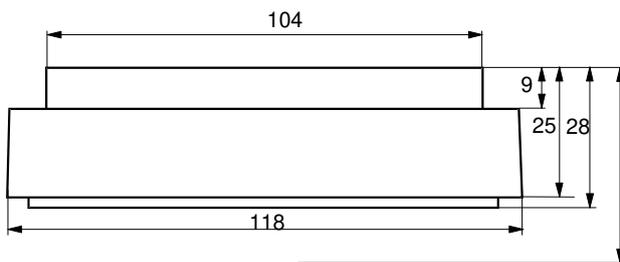- SSD521, UTD521, SCD563, TCD563,
- SSD531, UTD531, STD531, SCD573, TCD573, MCD573
- MCD573X, CCD573X

Planning

☞ Country-specific guidelines for planning and installation of automatic fire alarm systems apply to the project planning.
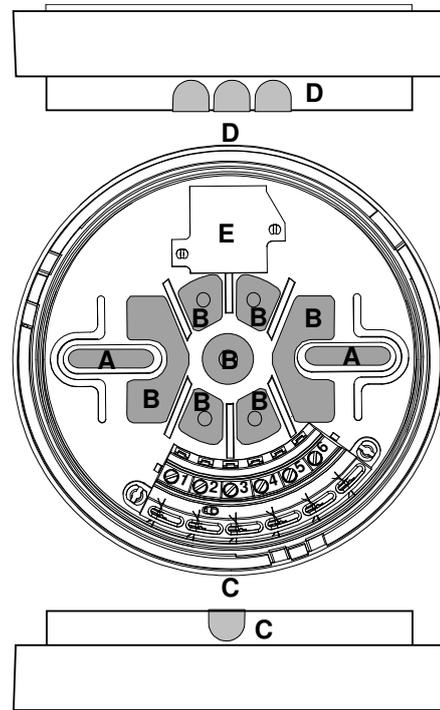
Dimensional drawing

Height with detector 563,573,573X: 69mm
Height with detector 521,531: 78mm

Fig. 2 dimensional drawing USB501-6

Terminal assignment

Terminal	Signal	SecuriPro	SecuriFire
1	GND	U / Y	C1/C2
2	DATA A	T	L1
3	DATA B	X	L2
4	GND alarm output		
5	Plus alarm output		
6	Terminal point (shielding)	shield	shield

Mounting / Installation

A= Fixing　　　　　　　**C+D**= Entry at inner circumference
B= Hole in bottom　　　　**E**= Fixing for additional terminals

Fig. 3 Position of the break-out points

The base USB 501-6 must be permanently mounted by means of two screws to withstand movement due to pressure, tension and torsion. For this purpose, the two break-out points A (slots) in the bottom of the base should be broken through.

⚠ The base must be fixed on a smooth, clean surface. To avoid deformations of the base, the fixing surface on concrete ceilings must not be uneven.

Depending on the method of cable entry, it may be necessary to pull the installation cable through the openings B in the bottom of the base before screwing down the base.

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Data sheet

Since the alarm indicator lamp on the SecuriStar fire detector series is not arranged centrally, the exact mounting direction of the base is important (LED orientation towards room or sector entrance required). When several detectors are mounted in large rooms or corridors, however, it is preferable to mount all bases in the same direction (e.g. by positioning the fixing holes of all bases parallel to the wall).

Cable entry may be either from the back through the bottom of the base (opening **B**) or from the side, on the inner circumference, (opening **C** or **D**), Fig. 3,4 and 5.

Flush-mounted installation through dropped ceiling

Hole B

Ceiling

Surface-mounted installation
Entry C or D
Hole B

Fig. 4 Methods of cable entry

Concrete ceiling

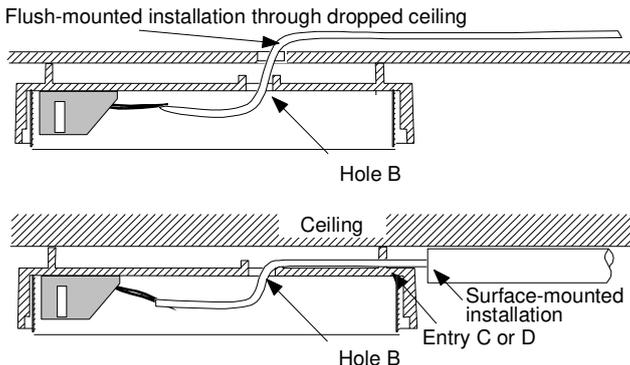Flush-mounted installation from flush-mounted socket
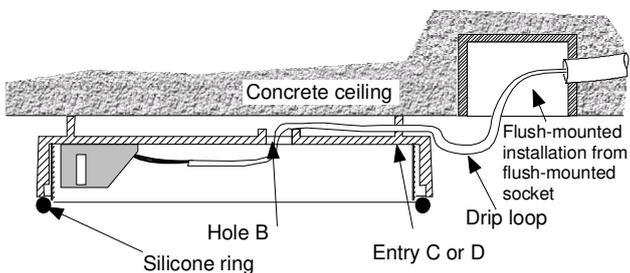Drip loop

Hole B
Entry C or D
Silicone ring

Fig. 5 Cable entry in damp rooms

Cable types with the following specifications should be used for the electrical installation:

Cable type	R (Ω/km)	C (nF/km)	max. (m)
Pair or quad with or without shield minimum **0.6 Ø**	63 - 66	<70	1000
Pair or quad with or without shield minimum **0.8 Ø**	35 - 38	40 - 98	1500

The voltage drop must be calculated.
Screening of the installation is not normally necessary.

! In applications where EMC interference is present or may occur periodically due to work processes, a screened installation should be provided.

Technical data

Mounting method	surface mounted
Application	dry and humid rooms [1]
Protection category	IP 44 [1]
Testing by VdS	according to EN 54 Part 5 and 7
Ambient temperature range (continuous)	-25 ... +70 °C
Ambient humidity (briefly, without condensation) at 40°C	95 % rel/F
Ambient humidity (continuous, without condensation) at 40°C	70 % rel/F
Terminals	pluggable cable terminals, 2,5 mm²
Dimensions	⌀ 118 / height 28 mm
Housing colour	white similar RAL 9003
Housing material	PC-ABS, TPE
Weight	ca. 83 g

[1] see section „Mounting / Installation".

Article numbers and spare parts

Brief description	Article number
Universal base USB 501-6	5000547-0006
Universal base USB 501-6 MC	988.971588 5000547-0091
Option reserve terminal block for cross-connections	2510802
Option silicone ring	
Option detector numbering plate DNP 521/531	3110320

Further base versions, see relevant data sheets
USB 501-1 for surface mounting
USB 501-2 for flush mounting in dropped ceilings
USB 501-3 IP 54
USB 501-4 for flush mounting in concrete