

1. Description

1.1 What is Alarm-BI-TENSIT

Alarm-BI-Tensit is the BGT brand name for a tempered glass with a conducting loop, which is burnt into the glass surface for use with Class C intruder alarm systems. The conductor loop takes on the function of the alarm sensor. There is a choice of two types of alarm sensor.

1.2 Function

If there is any damage to the installed pane it bursts completely into the crumb structure which is typical for tempered glass. This interrupts the alarm loop with its current flow in several places which in turn triggers an alarm.

1.3 Arrangement

To protect it from mechanical damage the conductor loop is subjected to an additional transport overprinting process. According to the VdS guidelines the conductor loop should be arranged at the top right or top left. In exceptional cases it may be arranged at the bottom right or bottom left.

The alarm loop must not be installed on the attack side but only on the intermediate gap or film side.

1.4 Electrical connection

A flexible four-core flat cable wire is used for the electrical connection. A 150 mm long line is bonded to the alarm loop for strain relief purposes. The two outer poles are soldered to the leads of the conductor loop and the two centre poles are short-circuited. The length of the line is 300 mm. Due to the strain relief line of 150 mm there is thus a free length of about 150 mm available. The cable ends in flat-pin terminal.

The extension is made with a flat-pin plug connection. Cable lengths are 1500 mm and 5000 mm. The extension cable is supplied ex factory with a flat-pin socket and a free end. When connecting up the alarm system it is essential to make the short-circuit between the two middle poles in the cable. The plug connector must be protected by a suitable shrink-on-tube.

1.5 Position of solder points

Alarm-Bi-Tensit, type VSG + ISO

1.6 Approval bases

- Process guidelines VdS 2344 (03/94)
- General requirements and test methods VdS 2227 (01/94)
- Guidelines on environmental behaviour VdS 2210 (05/92)
- DIN VDE 0833 Part 1 (01/89) and Part 3 (09/92)
- Requirements of alarm glazing VdS 2270 (09/92)

2. Technical Data

2.1 Product Types

Approvals for Alarm-BI-Tensit are available for combinations of laminated safety glass and insulation glass.

a.) Alarm-Bi-Tensit as

- Bi-Tensit
- Bi-Color (not printed over the full surface)
- Bi-FireStop
- Sun protection glass *
- Thermal insulating glass *

b.) Opposite panes off:

- Bi-Glas
- Bi-Combiset
- Bi-Hestral
- Bi-Tensit
- Bi-Color
- Bi-FireStop
- Sun protection glass
- Thermal insulating glass

*In these cases the printing of the alarm loop must be on the uncoated side.

2.2 Resistance of alarm loop

The connected resistance of Alarm-BI-Tensit does not depend on the glass surface. The loop-resistance is $5 \pm 2 \Omega$.

The max. current load must not exceed 0,5 A.

2.3 Dimensions

Min. pane size: 300 x 300 mm

Max. pane size: 1500 x 2600 mm

(Greater dimensions upon request)