



Object and surface monitoring, door and bolt contacts
DBM / DGM / DSM
AM 115 / TK / RK

Technical product brochure

Breakthrough detector for surface monitoring

The DBM/DGM/DSM breakthrough detectors are used for VdS-compliant monitoring of doors, buildings and containers for climb-through, reach-through and reachthrough with small tools.

The breakthrough detectors consist of a backing layer (non-woven fabric or plastic mesh) with meander-shaped, sewed-on double-stranded wires. The very first attempt at forceful entry causes definite damage or bypassing of the wires. This changes their resistance value, and the electronic monitoring triggers an alarm.

Benefits - point by point

- Triggering of alarm at the very first attempt at forceful entry
- Reacts to breakthrough attempts of all types
- · Easy integration in intruder detection systems
- · Closed-circuit current principle

Certificate of suitability

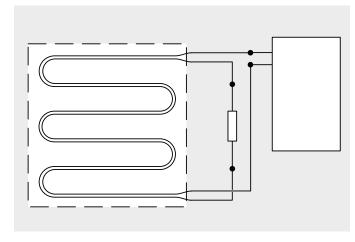
The breakthrough detectors for surface monitoring are approved by VdS for use in intruder detection systems up to Class C under no. G 190084.

Technical data

Z wiring

Voltage: max. 48 VAC/VDC Power input: max. 500 mA

Contact definition



More information available at dormakaba.com under Products – Security technology.

Specification text

Order no.

DBM

Breakthrough detector VdS Class C, no. G 190084 for surface monitoring for drill-through and VdS-compliant monitoring for reach-through with small tools. Consists of a non-woven fabric with meander-shaped, sewed-on double-stranded wires.

Wire distance: A = 15 mm Resistance value:

18 Ohm/m²

•	DBM 815	B = 800 mm	19742 815
•	DBM 515	B = 500 mm	19742 515
•	DBM 315	B = 300 mm	19742 315
•	DBM 215	B = 200 mm	19742 215

DGM

Breakthrough detector VdS Class C, no. G 190084 for VdS-compliant surface monitoring for reach-through. Consists of a non-woven fabric with meander-shaped, sewed-on double-stranded wires

Wire distance: A = 40 mm Resistance value:

 $7 \, Ohm/m^2$

•	DGM 840	B = 800 mm	19742 840
•	DGM 540	B = 500 mm	19742 540
•	DGM 440	B = 400 mm	19742 440
	DGM 340	B = 300 mm	19742 340

DSM

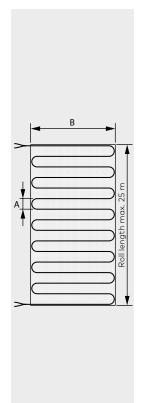
Breakthrough detector VdS Class C, no. G 190084 for surface monitoring for climb-through. Consists of a plastic mesh with meander-shaped, sewed-on double-stranded wires.

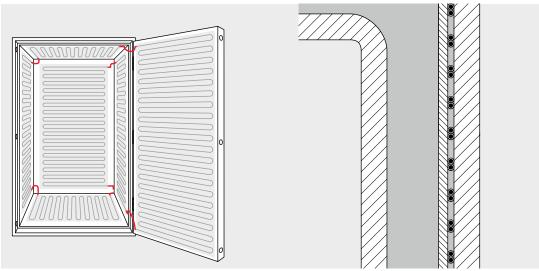
Wire distance:

A = 100 mm Resistance value: 3 Ohm/m²

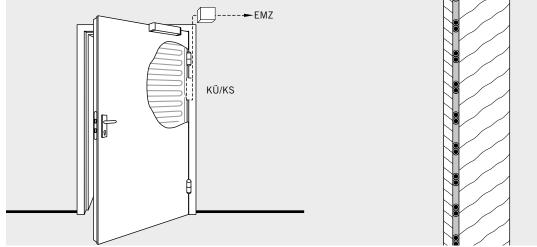
DSM 1000 B = 1000 mm
 DSM 500 B = 500 mm
 19741500

Examples of DBM system on safe

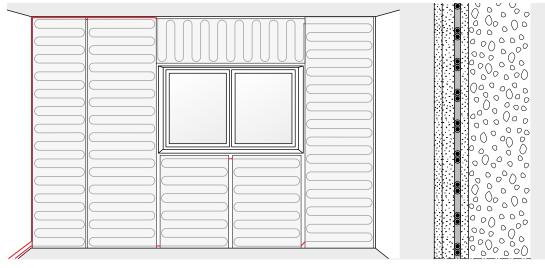




Examples of DGM system on door



Examples of DSM system on wall



Break-off detector

The break-off detector AM 115 is used for monitoring valuables boxes, safes, weapon cabinets, vending machines, showcases, art objects, window grilles, etc. against unauthorised removal.

It consists of a spacer ring, a PCB designed as a predetermined breaking point, a cover cap monitored for tampering and a 4-metre connection cable, and can be used in combination with M 10-M 16 screws.

Benefits - point by point

- Easy integration in intruder detection systems
- · Monitored for tampering
- · Closed-circuit current principle

Certificate of suitability

The break-off detector AM 115 is approved by VdS for use in intruder detection systems up to Class C under no. G 194 032.

Technical data

Dimensions: $35 \times 25 \times 45 \text{ mm}$

Switching capacity: max. 30 V DC, 100 mA Tamper switch: max. 30 V DC, 100 mA (opener) Release force of the PCB if installed as per instructions:

approx. 5,000 N

Z wiring

Specification text

AM 115

Break-off detector VdS Class C, no. G 194032 for monitoring valuables boxes, safes, weapon cabinets, vending machines, showcases, art objects, window grilles, etc. against unauthorised removal. Consists of a spacer ring, a PCB designed as a predetermined breaking point, a cover cap monitored for tampering and a 4-metre connection cable.

Can be used in combination with M 10-M 16 screws.

Dimensions: 35 x 25 x 45 mm Switching capacity: max. 30 V DC,

100 mA

Tamper switch:

max. 30 V DC, 100 mA (opener)

19730115

Order no.

SLD heavy-duty dowel

For fastening the component (valuables box) using external thread. Monitoring of removal/breaking-off in connection with break-off detector AM 115.

SLD 31 M10/100 19733100
 SLD 41 M12/100 19734100
 SLD 51 M16/100 19735100

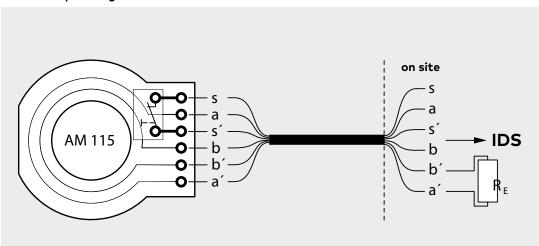
Packaging unit = 2 pcs

Dowel

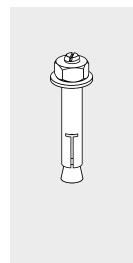
Туре	Max. fastening height tfix (mm)	Drill bit Ø (mm)	Minimum borehole depth h1 (mm)	Dowel length L (mm)
SLD 31	100	15	90	195
SLD 41	100	18	105	214
SLD 51	100	24	125	238

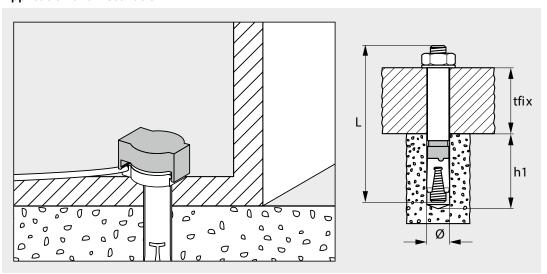
Connector pin assignment





Application and installation





Door and bolt contacts

Door contacts TK 1xx and TK 2xx are used for monitoring the opening of doors, e.g. in connection with motor locks or escape route security systems.

The RK bolt contact switch is a particularly smooth version specially tailored to SVP locks. The RK is used for monitoring the insurance-compliant locking of doors.

Benefits - point by point

- Reed door contacts for flush-mounted installation in wooden doors or for screw installation in wooden and metal doors
 - Delivery including connection cable
 - VdS recognitions enable the integration of TK and RK in intruder detection systems

Certificate of suitability

- TK 103/TK 110: VdS recognition in accordance with Class B, no. G 191518
- TK 203/TK 210: VdS recognition in accordance with Class B, no. G 191523
- RK: VdS recognition in accordance with Class C, no. G 193082

Specification text

dormakaba door contact TK 1xx

Door contact conforming to VDS Class B, No. G 191518, NO-NC contact for monitoring of door opening.

Dimensions Ø x D: approx. 6 x 30 mm Connection cable: 2.3 m flexible Switching capacity: max. 10 W

TK 103, brown 49931103 TK 110, white 49931210

Order no.

dormakaba door contact TK 2xx

Door contact conforming to VDS Class B, no. G 191523, NO-NC contact for monitoring of door opening. Dimensions W x H x D:

approx. 55 x 10 x 10 mm Connection cable: 2.3 m flexible

Switching capacity: max. 10 W

TK 203, brown 49931203 49931210 TK 210, white

dormakaba RK bolt contact switch

Bolt contact switch conforming to VDS Class C,

No. G 193 082, potential-free changeover contact for monitoring the locking of doors. Specially tailored to SVP locks.

Class of protection: IP 68

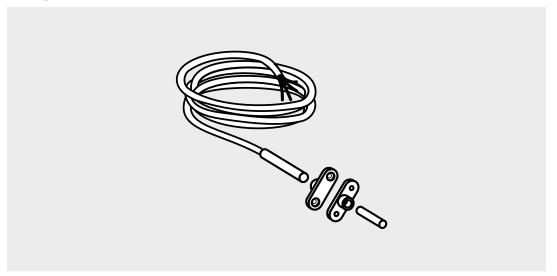
Connection cable: 4 m LIYY 3 x 0.14 mm²

Switching capacity: 30 V DC, 200 mA 15198000

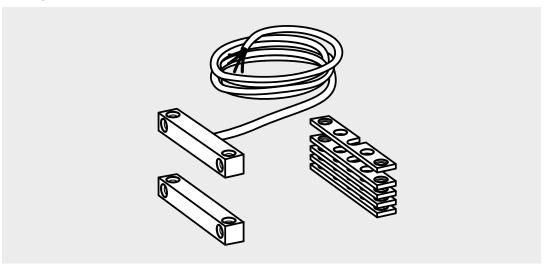
Technical data

Туре	Dimensions	Connection cable	Contact	Maximum load current
TK 103 TK 110	Ø x D approx. 6 x 30 mm	2.3 m flexible cable	NO-NC contact	max. 10 W
TK 203 TK 210	W x H x D approx. 55 x 10 x 10 mm	2.3 m flexible cable	NO-NC contact	max. 10 W
RK	Suitable for all strike plates "-RK"	4 m LIYY 3 x 0.14 mm	Potential-free changeo- ver contact	max. 30 V DC, 200 mA

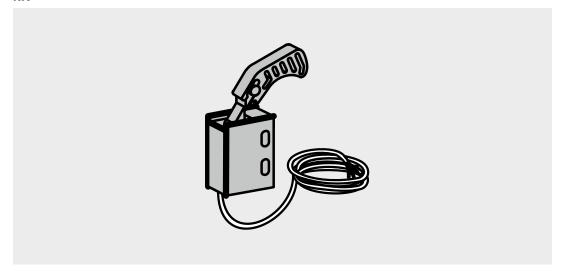
TK 103/TK 110



TK 203/TK 210



RK





Door Hardware



Electronic Access & Data



Mechanical Key Systems



Lodging Systems



Entrance Systems



Interior Glass Systems



Safe Locks



Service

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