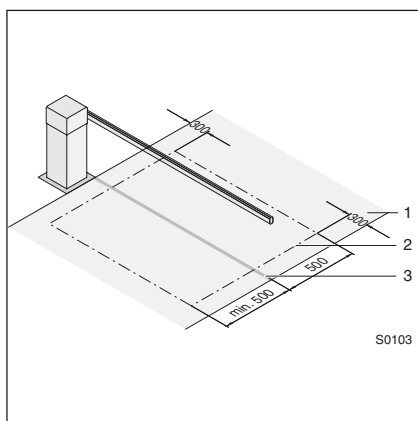


Barrier Accessories MAGSTOP

Loop installation instructions



1 Access lane
2 Induction loop
3 Projection of the barrier boom over the surface of the lane, assuming standard loop installation

General

Barrier installations which close automatically utilise induction loops, to detect approaching vehicles.

The following points should be taken into account when laying induction loops.

1. The loop should be laid symmetrically with respect to the boom. When determining the layout of the loop, it should be remembered that the boom is fixed to the barrier housing at one side.
2. The detection loop should be situated so that there is a distance of at least 500 mm behind, and in front of the boom. In special cases it is possible to deviate from this value by agreement with the factory if a smaller detection area is required.
3. The distance from the barrier housing and the end of the boom should be approx. 300 mm from the induction loop.
4. When concreting in or laying the loop, it should be ensured that the loop cannot move while in operation. Any geometrical changes result in inductance changes, causing interference to the detector.

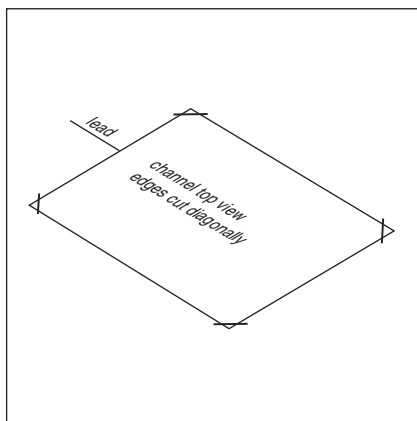
5. Where iron reinforcement is used, it should be ensured that a minimum spacing of 50 mm exists. Iron reinforcement produces fundamental attenuation and reduces the sensitivity of the detector.

6. For checking purposes, a volume resistance < 2 Ohm and an insulation resistance with respect to earth > 1 MOhm must be measured after the loop is laid. Otherwise there is a defect in the loop.

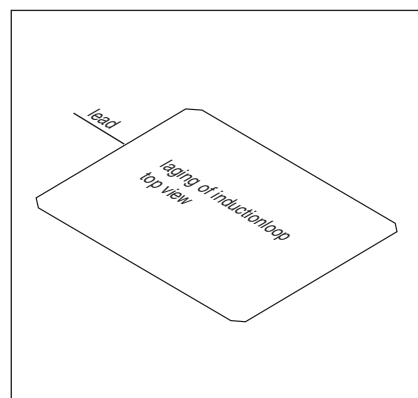
Laying in bitumen/asphalt

For installation in this type of sub-surface, a 30–50 mm deep channel must be cut with a grinding wheel. It must be ensured that the cuts overlap at the corners so that the same depth is achieved at every point.

The loop must then be laid carefully in the channel and pressed down with a piece of wood. Under no circumstances must the insulation be damaged.



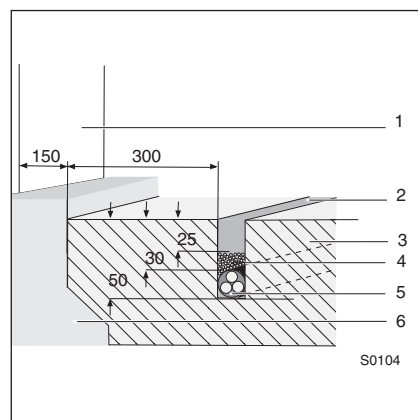
The channel is then sealed with a casting compound. The temperature of the casting compound must not exceed 90 °C during the reaction.



Induction loops are available as ready-made cables with the following dimensions

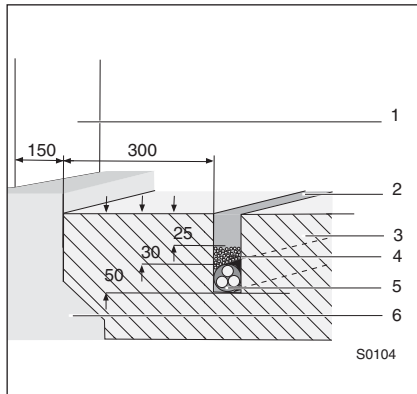
KAS 1	loop periphery	6 m
KAS 2	loop periphery	12 m
KAS 3	loop periphery	21 m
KAS 4	loop periphery	9 m
KAS 5	loop periphery	15 m

In all cases the feed line measures a max. of 15 m. Under no circumstances must it be used in rolled form, but it must be cut to the required length on site.



1 Barrier housing
2 Channel with sealing compound
3 Asphalt covering
4 Glass sand layer
5 Loop cable
6 Concrete foundation

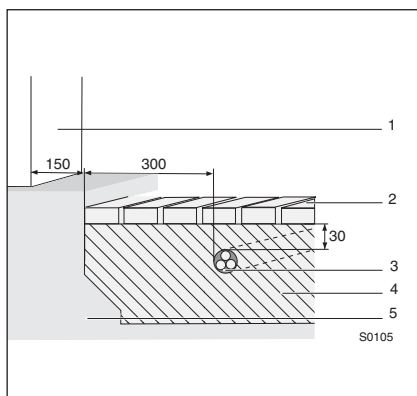
Alternatively, you can make up a loop yourself from 0,75–1,5 mm² single core wire. Ensure that the inductance is between 70 and 500 mH. This can usually be achieved by means of 3 to 5 windings. The feed line must be twisted at least 20 times per meter. The same installation data apply as for the ready-made loops.



- 1 Barrier housing
- 2 Channel with sealing compound
- 3 Asphalt covering
- 4 Glass sand layer
- 5 Loor wire
- 6 Concrete foundation

Laying under composite slabs

In this case the ready-made loop must be used. It must be ensured that the loop is laid in a sand bed and cannot be damaged. A sand layer of about 30 mm must be present between the slabs and the loop.



- 1 Barrier housing
- 2 Paving stones
- 3 Loop cable
- 4 Sand bed
- 5 Concrete foundation