

# GELBAU - SENSING STRIPS

3100.0110I  
Safety Edge Profile 32.5mm STD

- No mechanical components
- Easy installation
- IP67 (factory fitted)



## Product description

The sensing strips consist of two layers of rubber, one with conductive and one normal insulating rubber. A copper wire embedded in two separated layers of conductive rubber together with a resistor at the end of the sensing strip, forms a closed circuit. If the separated layers are pressed together there is a short-circuit, the control unit react and its outputs release. In the same set hammer the control unit reacts to an open-circuit in the cable or in the sensing strip's copper conductor. Several sensing strips can be easily connected in series. Up to 100 m of sensing strip can be connected to one control unit.

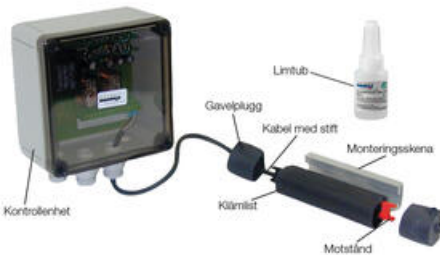
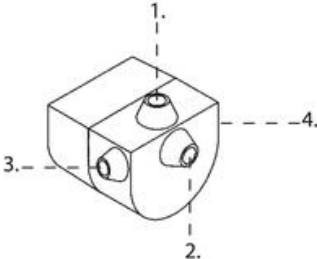
## Technical data

|                               |                                                                                     |
|-------------------------------|-------------------------------------------------------------------------------------|
| Ingress protection class      | IP67 (factory fitted)                                                               |
| Ambient temperature           | -20 °C to +80 °C                                                                    |
| Cable connection              | 2, 5 or 15 m cable with pin connector                                               |
| Max. cable length             | 50 m                                                                                |
| Max. number of sensing strips | No limit (up to 100 m)                                                              |
| Material                      | EPDM or NBR (nitrile)                                                               |
| Contact voltage (operation)   | Approx. 5 V from the control unit                                                   |
| Contact current (operation)   | 0.6 mA                                                                              |
| Min. activation force         | 10 N                                                                                |
| Installation                  | Use our mounting rail                                                               |
| Safety category               | 3 in accordance with EN954-1 with control unit                                      |
| Standard                      | EN1760-2                                                                            |
| Conforming to                 | MD, EMC, LVD                                                                        |
| Approvals                     |  |

| Chemical properties |            |           |
|---------------------|------------|-----------|
| Liquid              | Resistant: |           |
|                     | EPDM       | Nitrile   |
| Water               | Excellent  | Excellent |

|                 |           |      |
|-----------------|-----------|------|
| Acids (diluted) | Poor      | Good |
| Solvents        | Poor      | Good |
| Oils            | Poor      | Good |
| Petrol          | Poor      | Good |
| Ozone           | Excellent | Poor |

## Connection

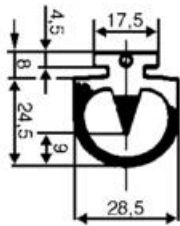
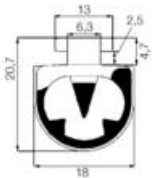
|                                                                                    |                      |
|------------------------------------------------------------------------------------|----------------------|
| <b>A complete system consists of the following:</b>                                | <b>Cable outputs</b> |
|   |                      |
|  |                      |

Indicate the cable output number when ordering factory fitted strips.

## Order number

**Sensing strips** (dimensions in mm)

| Order no.  | Description                | Material |
|------------|----------------------------|----------|
| 3100.0118  | Sensing strip 21 mm, black | EPDM     |
| 3100.0118W | Sensing strip 21 mm, white | EPDM     |
| 3100.0118N | Sensing strip 21 mm, black | Nitrile  |

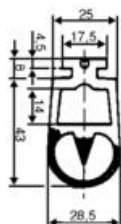


| Order no.    | Description                   | Material |
|--------------|-------------------------------|----------|
| 3100.0110I   | Sensing strip 32.5 mm, black  | EPDM     |
| 3100.0110RED | Sensing strip 32.5 mm, red    | EPDM     |
| 3100.0110Y   | Sensing strip 32.5 mm, yellow | EPDM     |

3100.0110N

Sensing strip 32.5 mm, black

Nitrile

**Order no.****Description****Material**

3100.1610

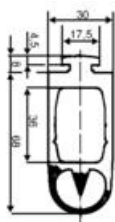
Sensing strip 51 mm, black

EPDM

3100.1610N

Sensing strip 51 mm, black

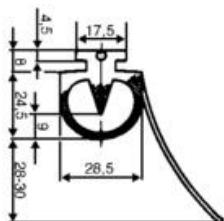
Nitrile

**Order no.****Description****Material**

3100.0310

Sensing strip 76 mm, black

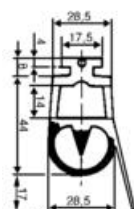
EPDM

**Order no.****Description****Material**

3100.0510

Sensing strip 32.5 mm with seal

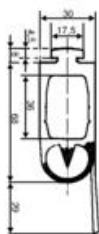
EPDM

**Order no.****Description****Material**

3100.0804

Sensing strip 51 mm with seal

EPDM



| Order no. | Description                   | Material |
|-----------|-------------------------------|----------|
| 3100.0210 | Sensing strip 76 mm with seal | EPDM     |

#### Installation components

#### For sensing strip 3100.0118

##### 1. Sensing strip



| Order no.  | Description                | Material |
|------------|----------------------------|----------|
| 3100.0118  | Sensing strip 21 mm, black | EPDM     |
| 3100.0118W | Sensing strip 21 mm, white | EPDM     |
| 3100.0118N | Sensing strip 21 mm, black | Nitrile  |

##### 2. End cap



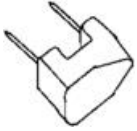
| Order no.  | Description               | Material |
|------------|---------------------------|----------|
| 3050.1318  | End cap (130/18)          | EPDM     |
| 3050.1318W | End cap (130/18), white   | EPDM     |
| 3050.1318N | End cap (130/18), nitrile | Nitrile  |

##### 3. Cable with pin



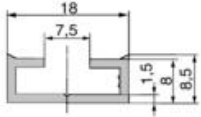
| Order no. | Description                    |
|-----------|--------------------------------|
| 3020.1183 | Connection cable (118/03), 3 m |
| 3020.1185 | Connection cable (118/05), 5 m |

#### 4. Resistor with pin



| Order no. | Description              |
|-----------|--------------------------|
| 3031.1186 | Resistor (118), 8.2 kOhm |

#### 5.



| Order no. | Description                                               |
|-----------|-----------------------------------------------------------|
| 3045.1219 | Mounting rail (112/A7) Only available in 2000, 4000 mm... |

#### Installation components

For sensing strips 3100.0110 and 3100.0510

##### 1. Sensing strip



| Order no.    | Description                   | Material |
|--------------|-------------------------------|----------|
| 3100.0110I   | Sensing strip 32.5 mm, black  | EPDM     |
| 3100.0110RED | Sensing strip 32.5 mm, red    | EPDM     |
| 3100.0110Y   | Sensing strip 32.5 mm, yellow | EPDM     |
| 3100.0110N   | Sensing strip 32.5 mm, black  | Nitrile  |

##### 2. End cap



| Order no.    | Description               | Material |
|--------------|---------------------------|----------|
| 3050.1302    | End cap (130/2)           | EPDM     |
| 3050.1302RED | End cap (130/2), red      | EPDM     |
| 3050.1302Y   | End cap (130/2), yellow   | EPDM     |
| 3050.1302N   | End cap (130/2N), nitrile | Nitrile  |

##### 3. Cable with pin



| Order no.  | Description                     |
|------------|---------------------------------|
| 3020.1300B | Connection cable, 0.35 m        |
| 3020.1301B | Connection cable (130/01), 1m   |
| 3020.1302B | Connection cable (130/02), 2 m  |
| 3020.1305B | Connection cable (130/05), 5 m  |
| 3020.1307B | Connection cable (130/07), 15 m |

#### 4. Resistor with pin



| Order no.  | Description           |
|------------|-----------------------|
| 3031.1306B | Resistor 8.2 kΩ (red) |

#### 5. Corner connector



| Order no.  | Description                               | Material |
|------------|-------------------------------------------|----------|
| 3050.0071  | Corner connector 90°, horizontal          | EPDM     |
| 3050.0071N | Corner connector 90°, horizontal, nitrile | Nitrile  |

Other angles/colours on request

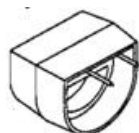
#### 6. Corner connector



| Order no.  | Description                             | Material |
|------------|-----------------------------------------|----------|
| 3050.0072  | Corner connector 90°, vertical          | EPDM     |
| 3050.0072N | Corner connector 90°, vertical, nitrile | Nitrile  |

Other colours on request

#### 7. Connector



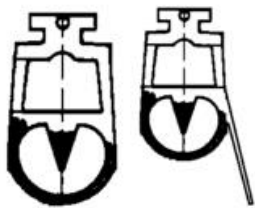
| Order no. | Description                                     |
|-----------|-------------------------------------------------|
| 3050.0061 | Straight connector for sensing strip 3100.0110I |

\*Some order numbers have the additional designation "N" which means they are made of oil-resistant nitrile. Without this additional designation the material is EPDM.

Installation components

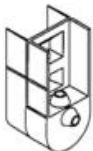
For sensing strips 3100.1610 and 3100.0804

1. Sensing strip



| Order no.  | Description                   | Material |
|------------|-------------------------------|----------|
| 3100.1610  | Sensing strip 51 mm, black    | EPDM     |
| 3100.1610N | Sensing strip 51 mm, black    | Nitrile  |
| 3100.0804  | Sensing strip 51 mm with seal | EPDM     |

2. End cap



| Order no.  | Description               | Material |
|------------|---------------------------|----------|
| 3050.1303  | End cap (130/3)           | EPDM     |
| 3050.1303N | End cap (130/3N), nitrile | Nitrile  |

3. Cable with pin



| Order no.  | Description                     |
|------------|---------------------------------|
| 3020.1300B | Connection cable, 0.35 m        |
| 3020.1302B | Connection cable (130/02), 2 m  |
| 3020.1305B | Connection cable (130/05), 5 m  |
| 3020.1307B | Connection cable (130/07), 15 m |

4. Resistor with pin



| Order no.  | Description           |
|------------|-----------------------|
| 3031.1306B | Resistor 8.2 kΩ (red) |

## 5. Corner connector



| Order no. | Description                |
|-----------|----------------------------|
| 3050.0074 | Corner connector (h=51 mm) |

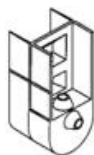
For sensing strips 3100.0310 and 3100.0210

## 6. Sensing strip



| Order no. | Description                   |
|-----------|-------------------------------|
| 3100.0310 | Sensing strip 76 mm, black    |
| 3100.0210 | Sensing strip 76 mm with seal |

## 7. End cap



| Order no.  | Description               | Material |
|------------|---------------------------|----------|
| 3050.1303  | End cap (130/3)           | EPDM     |
| 3050.1303N | End cap (130/3N), nitrile | Nitrile  |

## 8. Cable with pin



| Order no.  | Description                     |
|------------|---------------------------------|
| 3020.1300B | Connection cable, 0.35 m        |
| 3020.1302B | Connection cable (130/02), 2 m  |
| 3020.1305B | Connection cable (130/05), 5 m  |
| 3020.1307B | Connection cable (130/07), 15 m |

## 9. Resistor with pin



| Order no.  | Description           |
|------------|-----------------------|
| 3031.1306B | Resistor 8.2 kΩ (red) |

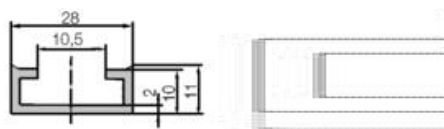
## 10. Corner connector



| Order no. | Description                | Material |
|-----------|----------------------------|----------|
| 3050.0073 | Corner connector (h=76 mm) | EPDM     |

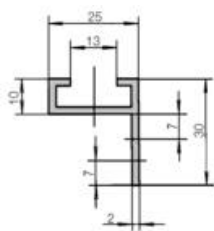
## Mounting rail

### 11. Installation rail



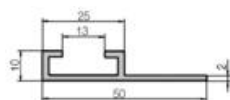
| Order no. | Description                                                 |
|-----------|-------------------------------------------------------------|
| 3045.1213 | Mounting rail (112/A1) Only available in 2000, 4000 mm etc. |
| 3045.1212 | Mounting rail (112/A) Only available in 2000, 4000 mm etc.  |

### 12. Installation rail



| Order no. | Description                                                 |
|-----------|-------------------------------------------------------------|
| 3045.1214 | Mounting rail (112/A2) Only available in 2000, 4000 mm etc. |

### 13. Installation rail



| Order no. | Description                                                 |
|-----------|-------------------------------------------------------------|
| 3045.1215 | Mounting rail (112/A3) Only available in 2000, 4000 mm etc. |

\*Some order numbers have the additional designation "N" which means they are made of oil-resistant nitrile. Without this additional designation the material is EPDM

## Specifications

|                 |              |
|-----------------|--------------|
| Approvals       | CE, TÜV NORD |
| Conforming To   | EMC, LVD, MD |
| Contact Current | 0.6          |

|                               |       |
|-------------------------------|-------|
| Contact Voltage               | 5     |
| Height                        | 32    |
| IP Class                      | IP67  |
| Material                      | EPDM  |
| Number Of Terminal Strips Max | 10    |
| Temperature ambient from      | -10   |
| Temperature ambient to        | 50    |
| Terminal Strip Length Max     | 100 m |

