This data sheet contains information on the number of the maximum possible contacts, the electrical connections, the options and the ordering information of bourdon tube pressure gauges model RSCh 63 with limit switch contact assembly with 1 or 2 electronic or inductive contacts, furthermore dimensional drawings with the position of the electrical connections.

**Data sheet 1610** contains all details of the available models RSCh without limit switch contact assembly. These information as well as the required ordering information are also valid for the version with limit switch contact assembly, as far as not described differently. A case filling is not available.

In **model overview 9.1000** definitions, applications and functions of the particular models of the limit switch contact assemblies are described generally and in detail. It also contains comprehensive information on the selection, switching functions and minimum spans, operating conditions, Ex-protection, options and others.

### Standard Version

**Available limit switch contact assemblies**

<table>
<thead>
<tr>
<th>Indirect (contactless)</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electronic contact</td>
<td>E</td>
</tr>
<tr>
<td>Inductive contact</td>
<td>I</td>
</tr>
</tbody>
</table>

**Number of the maximum possible contacts**

- up to 2 x E
- up to 2 x I

**Case Protection Type** (EN 60 529 / IEC 529)

- IP 54

**Blow-out Device**

Blow-out back; at pressurisation in the case the entire cross section is enabled to the back.

**Nominal Case Size**

- 63 (mm) (2½")

**Window**

Polycarbonate

**Adjusting Mechanism Limit Setting Pointer**

All instruments have an adjustable lock in the window. The limit setting pointer is set to the value at which the switching operation should happen, externally by the removable key.

**Electrical Connection**

- lateral at the right side (bottom) of the case, limit switch contact assembly with 1 contact: 1m connection cable, 2-wire, cable entry with rubber bushing and pull relief
- limit switch contact assembly with 2 contacts: 1m connection cable, 4-wire, screwed cable gland M12x1.5

For identification of an intrinsically safe circuitry limit switch contact assemblies with I-contact are supplied with a blue cable.

### Options

- adjustable lock with non-removable key
- window laminated safety glass without adjustable lock, adjustment after removal of the bayonet ring
- switching distance fixing for 2 contacts upon request
- electronic contacts: PNP switching output as 2-wire connection
- Inductive-contacts: safety version SN or S1N
- more than 1 m connection cable upon request
- plug connector according to DIN EN 175 301-803 construction types A and C, lateral left at 9 o’clock (dimensional drawings upon request) (see also page 2)
- circular plug connector M 12x1 (see also page 2)
- other position of the electrical connections upon request

### Ordering Information

When installing limit switch contact assemblies, the ordering code of the basic model (see data sheet 1610) is extended by

- **code letters:**
  - E electronic contact
  - I inductive contact

- **code number:** for the switching function (clockwise direction of action, that means for pressure gauges at rising pressure)
  - 1 making contact
  - 2 breaking contact
  - 11 1. and 2. making contact
  - 12 1. making contact / 2. breaking contact
  - 21 1. breaking contact / 2. making contact
  - 22 1. and 2. breaking contact

**Examples:**

- RSCh 63-3, 0-10 bar, G ¼ B, I 2
- RSCh 63-3, rFr, 0-25 bar, ¼" NPT, E 21

### Details

For an optimal function of the instruments with limit switch contact assemblies you have to add the following to the ordering information:

- switching pressure(s)
- switching range(s), in which the limit value(s) are adjusted if it is beyond the adjustment ranges that are defined by us
- if an anticlockwise switching direction is requested
Case Configurations, Code Letters, Dimensional Data and Weights, Options

Compared to the basic models there are deviations in the front-to-back sizes, see table. The remaining dimensions can be seen on data sheet 1610.

### Bottom Connection

#### Without mounting device

(no additional code letter)

<table>
<thead>
<tr>
<th>Code letter: r</th>
</tr>
</thead>
<tbody>
<tr>
<td>code letter: r</td>
</tr>
</tbody>
</table>

#### Back flange

code letters: Rh

Case configuration Rh is supplied with 3 loose mounting spacers.

#### Front flange

code letters: Fr

Case configurations “Fr” and rFr” are supplied with loose front flange and 3 mounting brackets that are welded to the case.

### Dimensional Data (mm / inches) and Weights (kg / lb)

<table>
<thead>
<tr>
<th>NCS</th>
<th>b / b1</th>
<th>b2</th>
<th>g±1 / g1±1</th>
<th>r6</th>
<th>approx. weight RSCh</th>
</tr>
</thead>
<tbody>
<tr>
<td>63 limit switch contact assemb. with 1 contact</td>
<td>60/2.36</td>
<td>80/3.15</td>
<td>82/3.23</td>
<td>35/1.38</td>
<td>0.30/0.66</td>
</tr>
<tr>
<td>63 limit switch contact assemb. with 2 contacts</td>
<td>80/3.15</td>
<td>100/3.94</td>
<td>102/4.02</td>
<td>45/1.77</td>
<td>0.30/0.66</td>
</tr>
</tbody>
</table>

### Options

Plug connector DIN EN 17 5301-803

- IP 65, 3-pin and protective contact
- available for max. 1 x E / I
- resp. 2x E for option PNP-switching output as 2-wire connection

These plug connectors are mounted lateral at 9 o’clock

#### Circular plug connector M 12 x 1.5

- IP 67, 4-pin without protective contact
- available for only 2 x E / I
- with 2 m die casted cable upon request

The circular plug connectors have approximately the same position of connection as the cable entries, see above

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1 The information relates on the version with bottom connection and limit switch contact assembly with 2 contacts

Technical changes, replacement of materials and errors excepted.