**IB-R**  
Ventilation grille**Contents**

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## GENERAL CONDITIONS

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### General description and instructions

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These additional operating instructions must be observed prior to mounting and commissioning the device.

These additional operating instructions contain basic information regarding its use in areas subject to explosion hazards to be observed during assembly, operation and maintenance.

Prior to mounting and commissioning and during maintenance work, the present additional operating instructions must be read by the installer and the responsible skilled personnel/system operator.

Non-observance of the proper assembly and safety instructions will result in the loss of any claims for damages!

### Designated use

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The ventilation grilles are used in ventilation systems. The ventilation grilles have been designed for use in ventilation systems in areas subject to explosion hazards according to the ATEX marking "Device group II, Zones 1, 2 and 21, 22".

These devices are not suitable for use in unreleased Ex zones.

The operating safety of the delivered devices is only guaranteed when used in accordance with their designated use. The ventilation grilles shall only be used in media that do not fall below the temperature of -20 ° and do not exceed +72 °C.

### Mounting information

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Mounting and commissioning must be carried out by skilled personnel only and in accordance with the recognised technical rules and the safety and accident prevention regulations. In order to avoid the risk of static charges, the ventilation grille must be connected to the on-site equipotential bonding on the grounding connection provided for this purpose.

The operator must make sure that no metallic parts can fall into the ventilation duct.

### Maintenance

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Only a device subjected to proper maintenance and kept in perfect condition can guarantee safe and reliable operation.

When defective parts are replaced with spare parts, only SCHAKO KG original spare parts may be used. The SCHAKO KG cannot be held liable for any damage caused by using spare parts that are not original and will not give any warranty.

### Hazard caused by non-observance of the safety instructions

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Non-observance of the safety instructions can result both in putting persons and the environment and operating units at risk.

Likewise, non-observance of the safety instructions will result in the loss of any claims for damages.

## ATEX DESCRIPTION

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**The ventilation grilles have the following ATEX marking:**

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These ventilation grilles meet the regulations of the ATEX directives and can be used in ventilation systems in areas subject to explosion hazards.

Classification by zone must be established by the system operator or planner in compliance with current standards.

**Note:**

In explosion-protected zones, only devices that have an ATEX approval for this use may be used. It rests with the operator to ensure that the products are only used in zones specified by the product marking.

### Special conditions

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The permissible media temperature range is -20 °C to +72 °C. It must be ensured that all metal components are properly and permanently connected to the ground potential.

To avoid propagating brush discharge on diffusers with RAL coating, it must be ensured that the air in the ventilation system is not heavily contaminated with non-conductive particles.

### Type of ignition protection

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The type of ignition protection of the ventilation grilles is guaranteed by their safe design.

### Quality assurance

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The SCHAKO production facilities are certified according to the QM procedure EN ISO 9001.

## FUNCTION AND USE

Supply and return air grille especially suitable for duct connection with **horizontal or vertical, pivoting, individually adjustable air deflection blades** on the front side. With hit-and-miss damper for air volume regulation

## MODELS

|                |  |
|----------------|--|
| IB-R-...       | for duct installation  |
| IB-R-01-...    | horizontal, pivoting air deflection blades on the front side.  |
| IB-R-08-...    | same as IB-R-01-..., additionally with hit-and-miss damper.  |
| IB-R-8c-...    | same as IB-R-01-..., additionally with vertical, pivoting air deflection blades and hit-and-miss damper.   |
| IB-R-10-...    | vertical, pivoting air deflection blades on the front side.  |
| IB-R-15-...    | same as IB-R-10-..., additionally with hit-and-miss damper.  |
| IB-R-16-...    | same as IB-R-10-..., additionally with horizontal, pivoting air deflection blades and hit-and-miss damper. |
| IB-R-...-N-... | single design  |

### Air throw pattern:

|              |   |
|--------------|---|
| ...-L000-... | blade position straight (standard)                                      |
| ...-L044-... | blade position 44° diverging  |
| ...-L084-... | blade position 84° diverging  |
| ...-L110-... | blade position 110° diverging<br>(only for IB-R-10 / IB-R-15 / IB-R-16) |
| ...-L140-... | blade position 140° diverging<br>(only for IB-R-10 / IB-R-15 / IB-R-16) |
| ...-LGEG-... | blade position opposite to one another                                  |

## MOUNTING

- Screw mounting (-SM, standard)
  - screws must be provided on site.
- Concealed mounting (-VM) (-VM) and clamp mounting (-KB)
  - not possible!

## PROCESSING

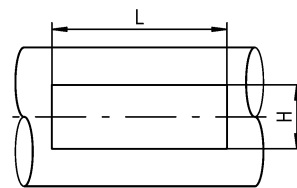
### Frame and blades

- Galvanised sheet steel (-SV-0000).
- Sheet steel (-SB):
  - painted to the colour RAL 9010 (white) (-9010).
  - painted to DD coating version.

### Hit-and-miss damper

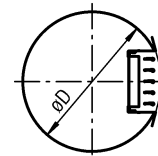
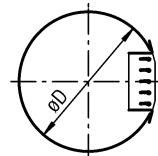
- Electrolytically galvanised sheet steel (only IB-R-08-... and IB-R-15-...).

## INSTALLATION SITUATION



IB-R-01 / 10-...

IB-R-08 / 8c / 15 / 16-...



The curved flange and the three height dimensions, apart from providing high stability and torsional rigidity, allow optimum adaptation of the ventilation grille type Ib-R to sheet metal and spiral ducts. The selection of the grille height depends on the duct measures shown in the table. The grille frames only make optimum contact when the ideal duct diameter is used.

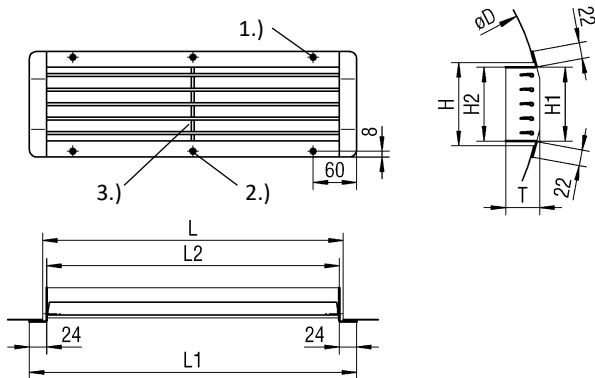
### Duct diameter

| IB-R<br>H | ØD   |       |                      |
|-----------|------|-------|----------------------|
|           | Min. | Ideal | Max.<br>number<br>of |
| 65        | 140  | 250   | 400                  |
| 115       | 300  | 500   | 800                  |
| 215       | 600  | 750   | 1250                 |

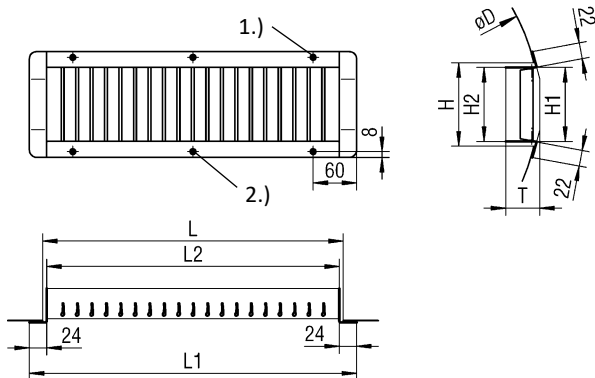
**DIMENSIONS**

**Without hit-and-miss damper**

**IB-R-01-...**



**IB-R-10-...**



**Available sizes IB-R-01 / IB-R-10**

| L    | L1   | L2   | H   | H1  | H2  | T  |
|------|------|------|-----|-----|-----|----|
| 315  | 352  | 306  | 65  | 52  | 54  | 42 |
| 415  | 452  | 406  | 115 | 102 | 104 | 47 |
| 515  | 552  | 506  | 215 | 202 | 204 | 56 |
| 615  | 652  | 606  |     |     |     |    |
| 815  | 852  | 806  |     |     |     |    |
| 1015 | 1052 | 1006 |     |     |     |    |
| 1215 | 1252 | 1206 |     |     |     |    |

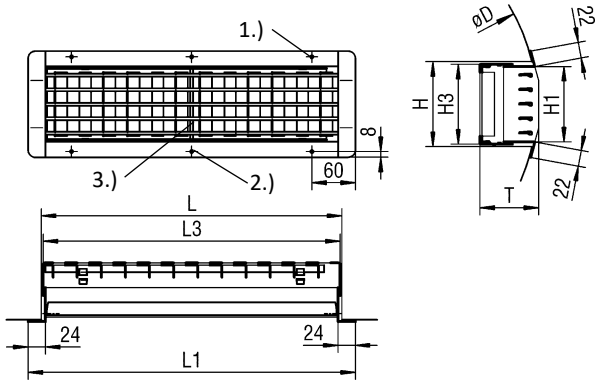
All combined lengths and heights available!

Other sizes available on request.

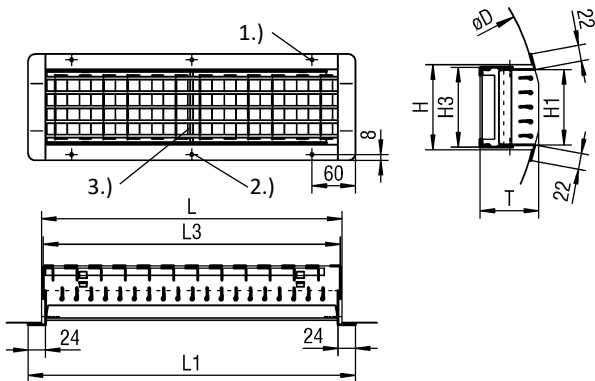
- 1.) Indentation for slotted shallow-raised countersunk-head tapping screw DIN ISO 7051 pitch 3.9 (on site).
- 2.) From L ≥ 515
- 3.) Intermediate rail from L ≥ 815

**With hit-and-miss damper**

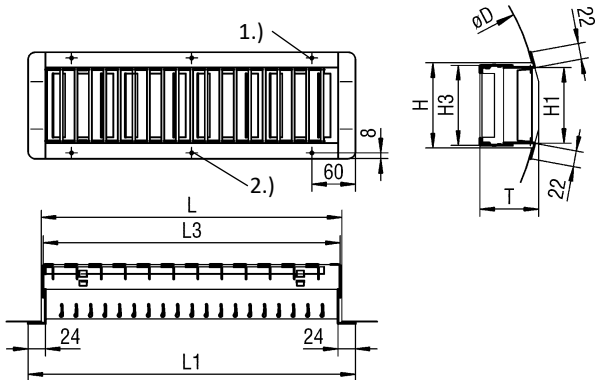
**IB-R-08-...**



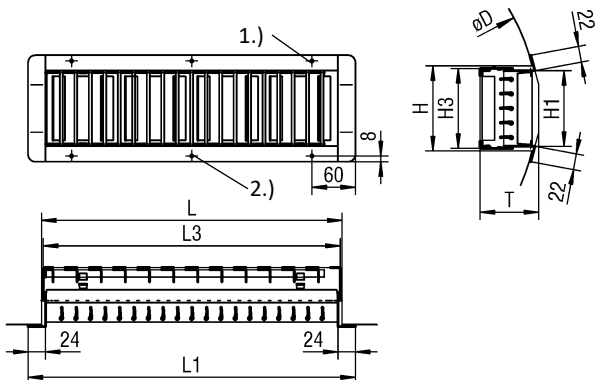
**IB-R-8c-...**



**IB-R-15-...**



**IB-R-16-...**



**Available sizes IB-R-08 / IB-R-8c / IB-R-15 / IB-R-16**

| L    | L1   | L3   | H   | H1  | H3  | T  |
|------|------|------|-----|-----|-----|----|
| 315  | 352  | 310  | 65  | 58  | 60  | 85 |
| 415  | 452  | 410  | 115 | 108 | 110 | 91 |
| 515  | 552  | 510  | 215 | 208 | 210 | 95 |
| 615  | 652  | 610  |     |     |     |    |
| 815  | 852  | 810  |     |     |     |    |
| 1015 | 1052 | 1010 |     |     |     |    |
| 1215 | 1252 | 1210 |     |     |     |    |

All combined lengths and heights available!

Other sizes available on request.

- 1.) Indentation for slotted shallow-raised countersunk-head tapping screw DIN ISO 7051 pitch 3.9 (on site).
- 2.) From L ≥ 515
- 3.) Intermediate rail from L ≥ 815

TYPE PLATE



# Lüftungsgitter IB-R

Baugröße .....

Baujahr .....

Auftragsnummer .....

Positionsnummer .....

Seriennummer .....



II 2G Ex h IIC T6 Gb  
II 2D Ex h IIIC T80°C Db





EPS 21 ATEX 2 065 X

**CERTIFICATE OF CONFORMITY**



**Konformitätsbescheinigung**

- (1)
- (2) Geräte und Schutzsysteme zur bestimmungsgemäßen Verwendung in explosionsgefährdeten Bereichen – **Richtlinie 2014/34/EU**
- (3) Bescheinigungsnummer  
**EPS 21 ATEX 2 065 X** **Revision 0**
- (4) Gerät: Lüftungsgitter IB-Q und IB-R
- (5) Hersteller: Schako KG
- (6) Anschrift: Steigstraße 25-27  
78600 Kolbingen  
Deutschlang
- (7) Die Bauart dieses Gerätes sowie die verschiedenen zulässigen Ausführungen sind in der Anlage zu dieser Konformitätsbescheinigung festgelegt.
- (8) Bureau Veritas Consumer Products Services Germany GmbH bescheinigt aufgrund einer freiwilligen Prüfung auf Basis der Richtlinie 2014/34/EU des Europäischen Parlaments und des Rates vom 26. Februar 2014 die Erfüllung der grundlegenden Sicherheits- und Gesundheitsanforderungen für die Konzeption und den Bau von Geräten und Schutzsystemen zur bestimmungsgemäßen Verwendung in explosionsgefährdeten Bereichen gemäß Anhang II der Richtlinie. Die Ergebnisse der Prüfung sind in der vertraulichen Dokumentation unter der Referenznummer 21TH0259 festgelegt.
- (9) Die grundlegenden Sicherheits- und Gesundheitsanforderungen werden erfüllt durch Übereinstimmung mit:  
**EN IEC 60079-0:2018      EN ISO 80079-36:2016      EN ISO 80079-37:2016**
- (10) Falls das Zeichen „X“ hinter der Bescheinigungsnummer steht, wird auf besondere Bedingungen für die sichere Anwendung des Gerätes in der Anlage zu dieser Bescheinigung hingewiesen.
- (11) Diese Konformitätsbescheinigung bezieht sich nur auf Konzeption und Prüfung des festgelegten Gerätes gemäß Richtlinie 2014/34/EU. Weitere Anforderungen dieser Richtlinie gelten für die Herstellung und das Inverkehrbringen dieses Gerätes. Diese Anforderungen werden nicht durch diese Bescheinigung abgedeckt.
- (12) Die Kennzeichnung des Gerätes muss die folgenden Angaben enthalten:

 II 2G Ex h IIC T6 Gb  
 II 2D Ex h IIC T80°C Db



Hamburg, 20.05.2021

Seite 1 von 2

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(13)

**Anlage**(14) **Konformitätsbescheinigung EPS 21 ATEX 2 065 X**

Revision 0

(15) Beschreibung des Gerätes:

Die verschiedenen Lüftungsgitter mit Anschlussbox dienen zur Luftstrahlführung in Räumen. Die Auslässe bestehen aus verzinktem Stahlblech oder Stahlblech mit einer antistatischen Lackierung RAL 9010 oder DD-Lack.

(16) Referenznummer: 21TH0259(17) Besondere Bedingungen:

Der erlaubte Medientemperaturbereich ist -20°C bis +72°C.

Es muss sichergestellt werden, dass alle metallischen Teile ordnungsgemäß und dauerhaft mit dem Erdpotential verbunden sind.

Zur Vermeidung von Gleitstielbüschelentladungen muss bei den Auslässen mit RAL Lack sichergestellt werden, dass die Luft im Lüftungssystem keine starke Belastung an nichtleitfähigen Partikeln aufweist.

(18) Grundlegende Sicherheits- und Gesundheitsanforderungen:

Durch Übereinstimmung mit Normen abgedeckt.

Zertifizierungsstelle Explosionsschutz

Hamburg, 20.05.2021



H. Schaffner

Seite 2 von 2

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