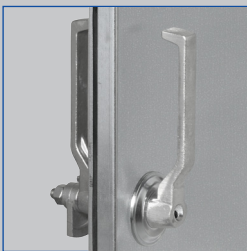


# Doors

## Type BS



Double lever locking device (interior lever, double leaf door)



Removable front locking lever (of double lever locking device)



Cylinder rim lock



Inspection window



### Inspection access doors for filter chambers, air handling units or other enclosures with machinery or equipment

Rectangular single leaf inspection access doors that are robust and ensure only minimal leakage even in case of large differential pressures

- Minimum width of 300 mm, minimum height of 300 mm
- Maximum width of 800 mm, maximum height of 800 mm
- Maximum pressure loading of 1000 Pa, in closing direction, up to nominal size 600 × 600 mm 2000 Pa
- Air leakage rate of approx. 0.6 l/s or 2 m<sup>3</sup>/h at 1000 Pa, up to nominal size 600 × 600 mm approx. 1.1 l/s or 4 m<sup>3</sup>/h at 2000 Pa
- Double skin door leaf made of galvanised sheet steel and with mineral wool infill
- Door frame made of angle sections
- Double lever locking device, can be operated from both sides
- APT rubber seal, temperature resistant up to 90 °C
- Available in standard sizes and many intermediate sizes

Optional equipment and accessories

- Cylinder rim lock, mortice lock, inspection window and removable exterior locking lever
- Powder-coated for outdoor installation

Type		Page
BS	General information	BS – 2
	Function	BS – 3
	Technical data	BS – 4
	Specification text	BS – 5
	Order code	BS – 6
	Dimensions and weight	BS – 7
	Product details	BS – 8
	Installation details	BS – 9

## Application

### Application

- Low-leakage inspection access doors of Type BS are used as separating elements for air handling units, filter chambers, or enclosures for machinery or electrical equipment
- Robust construction with very low air leakage rate even in case of large differential pressures
- Powder-coated construction with increased corrosion resistance
- Maximum pressure on the opening side is 1000 Pa, up to nominal size 600 × 600 mm 2000 Pa

- spaces (air not in motion) and 25 W/(m<sup>2</sup>K) for outside (air in motion)
- Optional door frame without fixing tabs (-21) but with flange holes

### Nominal sizes

- B: 500, 600 mm (intermediate sizes: 300 – 800 mm, in increments of 1 mm)
- H: 500, 600 mm (intermediate sizes: 300 – 800 mm, in increments of 1 mm)
- Any combination of B × H

### Special characteristics

- U-value: 1.02 W/(m<sup>2</sup>K) at 8 W/(m<sup>2</sup>K) for internal

## Description

### Variants

- R: Right hinge
- L: Left hinge
- 11: Angle section frame with welded fixing tabs
- 21: Angle section frame without fixing tabs

### Parts and characteristics

- Door with perimeter seal
- Double lever locking device
- Absorption material
- Hinges
- Frame

### Attachments

- Locks, inspection window, front locking lever: for the improvement and extension of the range of applications

### Construction features

- Double skin door leaf; skin thickness of 1 mm and 1.25 mm (opening side), respectively
- Stiffeners at the level of the double lever locking devices
- Double lever locking device, can be operated from both sides
- Seal is temperature resistant up to 90 °C
- Maximum pressure loading of 1000 Pa (in closing direction), up to nominal size 600 × 600 mm 2000 Pa; air leakage rate of approx. 0.6 l/s or 2 m<sup>3</sup>/h at 1000 Pa, up to nominal size 600 × 600 mm approx. 1.1 l/s or 4 m<sup>3</sup>/h at 2000 Pa

### Materials and surfaces

- Door leaf and stiffeners made of galvanised sheet steel
- Absorption material is mineral wool
- Door frame made of galvanised steel 50 × 50 × 4 mm
- Double lever locking device made of aluminium diecast
- APT rubber seal
- P1: Powder-coated, RAL CLASSIC colour
- PS: Powder-coated, NCS or DB colour

### Mineral wool

- To DIN 4102, fire rating class A2, non-combustible
- RAL quality mark RAL-GZ 388
- Biosoluble according to TRGS 905 and EU directive 97/69/EG
- Inert to fungal and bacterial growth

### Maintenance

- Maintenance-free as construction and materials are not subject to wear
- Contamination should be removed as it may lead to corrosion and to increased closed door air leakage

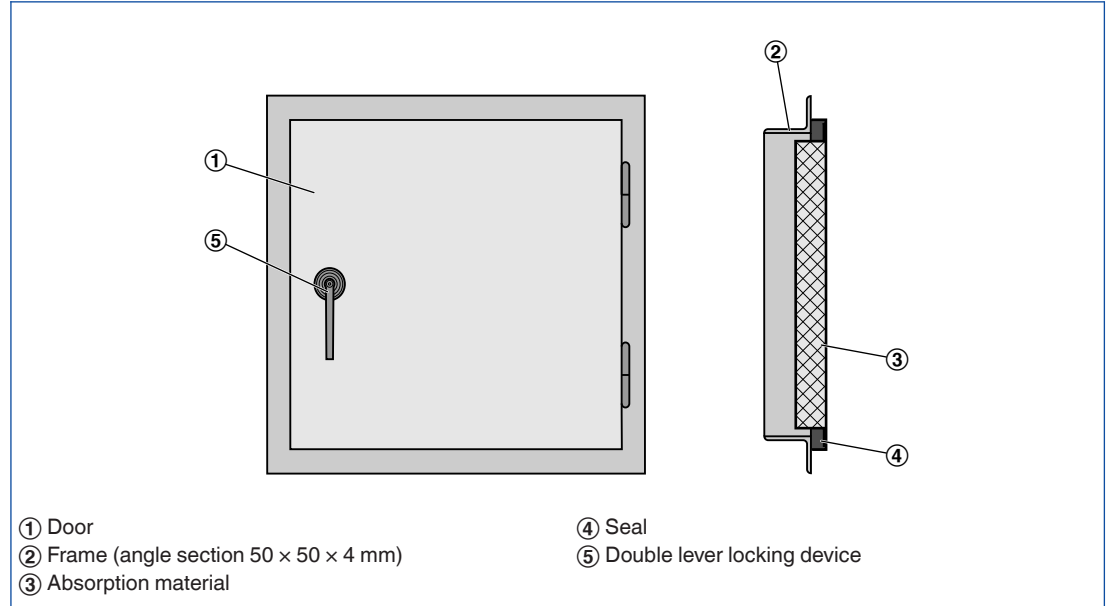
**Functional description**

Low-leakage inspection access doors are low-leakage separating elements for rooms or other enclosures.

When the door is being closed, i.e. when the

double locking levers are being turned, the perimeter seal is fully pressed against the frame. As a consequence, the air leakage rate is extremely low even in case of high differential pressures.

**Schematic illustration of BS**



Nominal sizes	300 × 300 – 800 × 800 mm
Maximum pressure on the opening side	1000 Pa, up to nominal size 600 × 600 mm 2000 Pa
Weighted sound reduction index	43 – 46 dB

**Weighted sound reduction index**

Centre frequency $f_m$ [Hz]	Centre frequency $f_m$ [Hz]			
125	250	500	1000	2000
$R_w$	$R_w$			
dB	dB			
26	38	44	46	46

This specification text describes the general properties of the product. Texts for variants can be generated with our Easy Product Finder design programme.

Low-leakage inspection access doors as separating elements for air handling units, filter chambers, or enclosures for machinery or electrical equipment.

Ready-to-install component that consists of a door leaf with double lever locking device, absorption material, seal and hinges, and a frame. Air leakage rate on the opening side is approx. 0.6 l/s or 2 m<sup>3</sup>/h at 2000 Pa.

#### Special characteristics

- U-value: 1.02 W/(m<sup>2</sup>K) at 8 W/(m<sup>2</sup>K) for internal spaces (air not in motion) and 25 W/(m<sup>2</sup>K) for outside (air in motion)
- Optional door frame without fixing tabs (-21) but with flange holes

#### Materials and surfaces

- Door leaf and stiffeners made of galvanised sheet steel
- Absorption material is mineral wool
- Door frame made of galvanised steel 50 × 50 ×

4 mm

- Double lever locking device made of aluminium diecast
- APT rubber seal
- P1: Powder-coated, RAL CLASSIC colour
- PS: Powder-coated, NCS or DB colour

Mineral wool

- To DIN 4102, fire rating class A2, non-combustible
- RAL quality mark RAL-GZ 388
- Biosoluble according to TRGS 905 and EU directive 97/69/EG
- Inert to fungal and bacterial growth

#### Technical data

- Nominal sizes: 300 × 300 – 800 × 800 mm
- Maximum pressure on the opening side is 1000 Pa, up to nominal size 600 × 600 mm 2000 Pa
- Weighted sound reduction index: 43 – 46 dB

BS

<b>BS – R / 500×500 / Z03 / P1 – RAL ...</b>				
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>

**1** Type

**BS** Low-leakage inspection access door

**2** Construction

**R** Right side

**L** Left side

**3** Nominal size [mm]

B × H

**4** Attachments

No entry: none

**Z01 – Z03**

**Z05**

**5** Surface

No entry: standard construction

**P1** Powder-coated, RAL CLASSIC colour

**PS** Powder-coated, DB colour

Gloss level

RAL 9010 50 %

RAL 9006 30 %

All other RAL colours 70 %

**Order example: BS–L/500×650/Z03**

**Variant**

Left hinge

**Nominal size**

500 × 650 mm

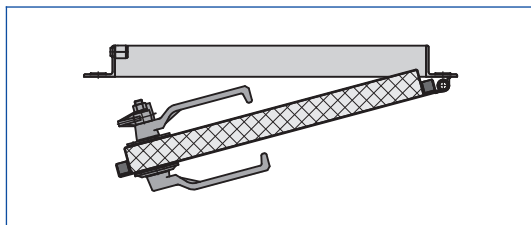
**Attachments**

With inspection window

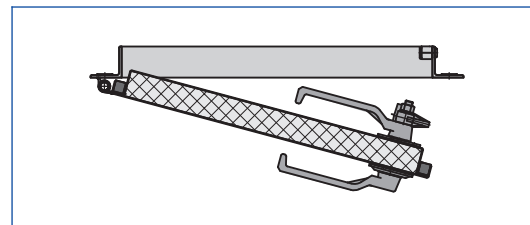
**Surface**

Standard construction

**Right hinge**



**Left hinge**



BS

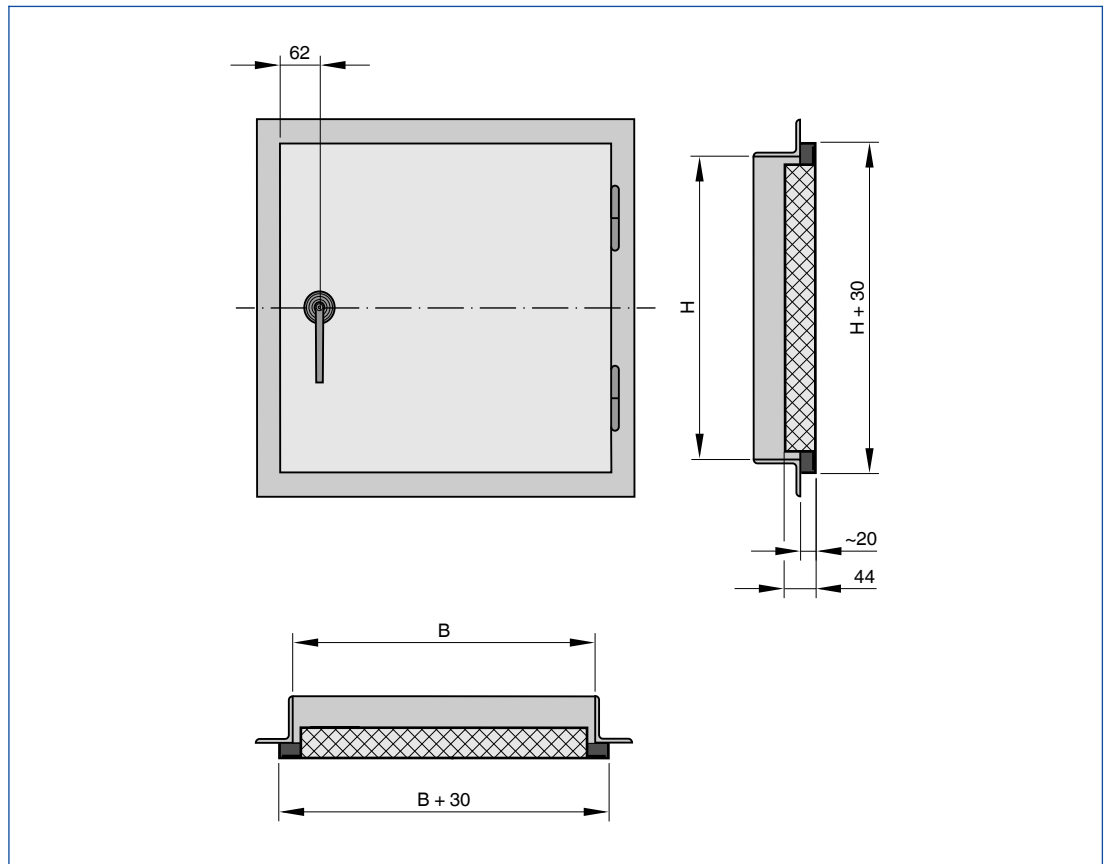
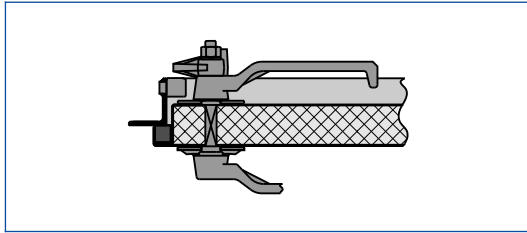


Illustration shows right hinge

BS, weights

H	B [mm]			
	400	500	600	800
mm	kg			
400	12	15	18	24
500	13	16	19	25
600	13	17	20	26
800	14	18	21	27

Double lever locking device on angle section  
door frame





**Installation and commissioning**

- Align the frame precisely before mortaring it in
- When the door is closed, the perimeter seal must be in full contact with the frame

**Wall installation**

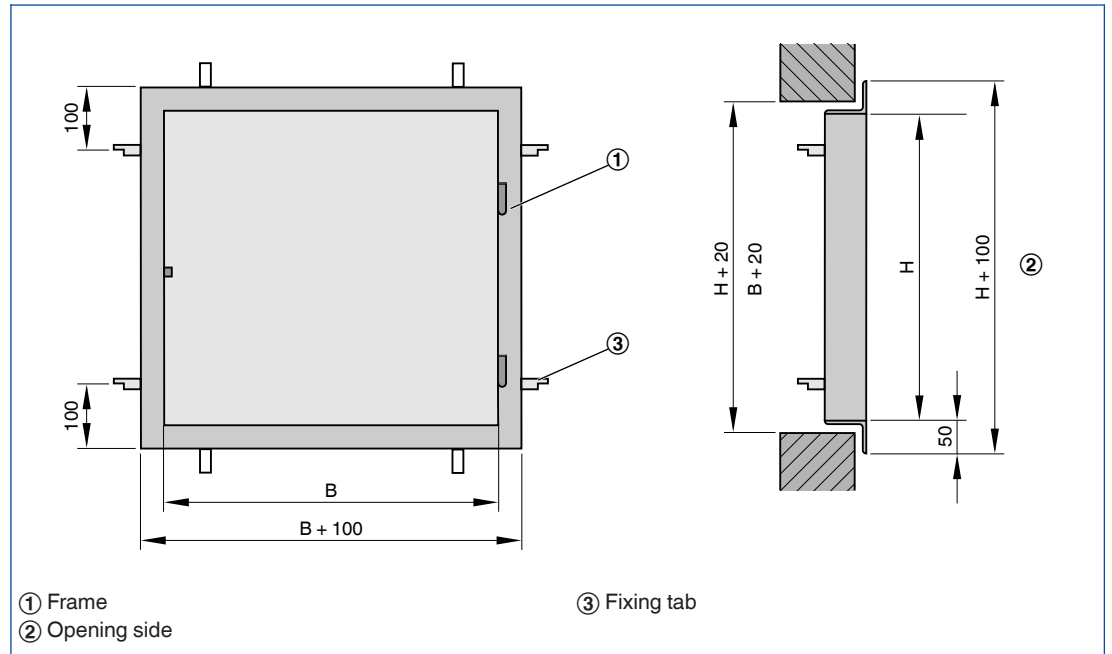


Illustration shows right hinge

**No. of fixing tabs on each side**

Sizes	n
mm	Qty
300 – 499	1
500 – 800	2

Installation into an enclosure

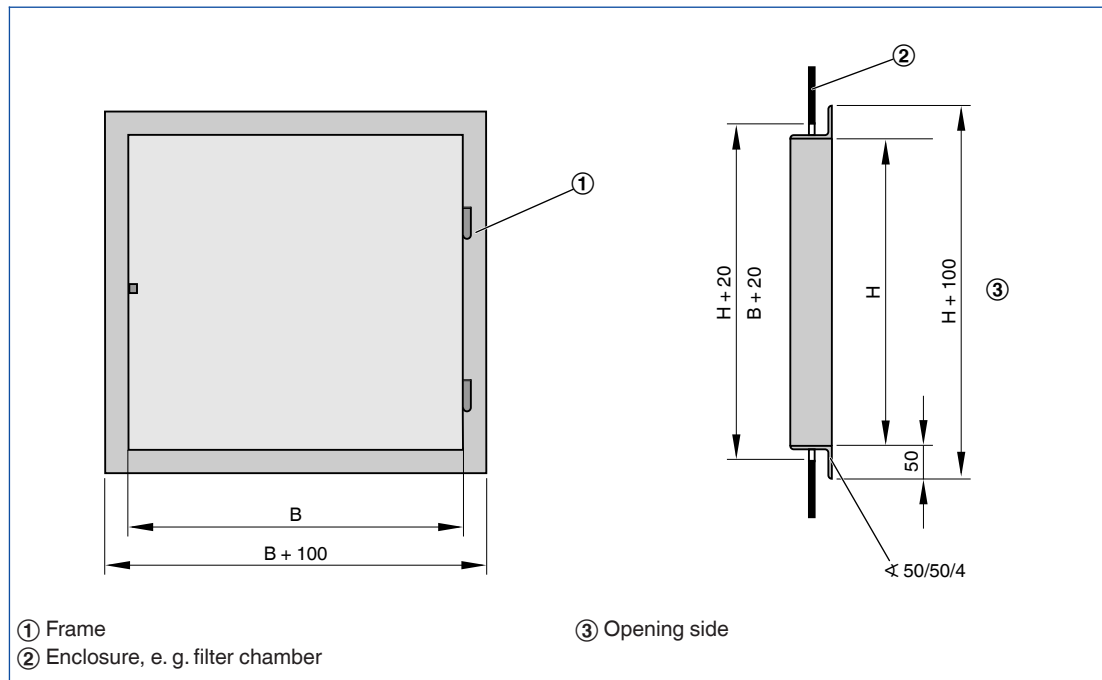


Illustration shows right hinge