

RSKE / RSKM

Multi-purpose fire safety smoke dampers

Use

- The dampers are intended for integration into smoke control systems of buildings and structures of various purpose and designed for extraction of combustion products from the spaces of floor corridors, hallways, air locks etc.
- The dampers can be used as smoke dampers in emergency smoke extraction ventilation systems in the event of a fire to support evacuation of people from the building at the initial phase of the fire occurring in any of the building spaces.
- The RSKE/RSKM multi-purpose fire safety smoke dampers are rated to resist fire for 180 minutes (E 180) at the temperature of 600 °C.



Fire resistance rating:
600 °C within 180 min.



Normally closed single louvre fire safety dampers RSKE



Normally closed multiple-louvre fire safety dampers RSKM

Design

- The damper casing is made of galvanised steel 1.5 mm thick.
- The dampers are available in the wall-mounted or duct-mounted variant which have either one or two attachment flanges.

Control and modifications

- The units are available in two control options (with an electric magnet and with an electric actuator in different configurations):

THE DAMPER WITH AN ELECTRIC MAGNET (220 OR 24 V)

- The damper opens via a spring when the electric magnet is energized. When the damper reaches the end position, a limit switch opens the circuit disconnecting the electric magnet from the power mains. The electric magnet must not remain energized for more than 2 seconds. The damper is reset to the safety (closed) position manually by means of a handle. The damper equipped with an electric magnet has a special button for testing the unit performance.

THE DAMPER WITH A 230 OR 24 V ELECTRIC ACTUATOR AND A RETURN SPRING

- The flaps are automatically set to the normal (closed) position when applying voltage to the electric actuator. On a fire alarm signal the electric actuator is de-energized causing its return spring to set the damper to an open position. The electric actuator is equipped with a contact group to signal its end positions. The damper can also be controlled manually and fixed in any position. The unit can be unlocked either manually using a hex wrench or automatically upon power-up.

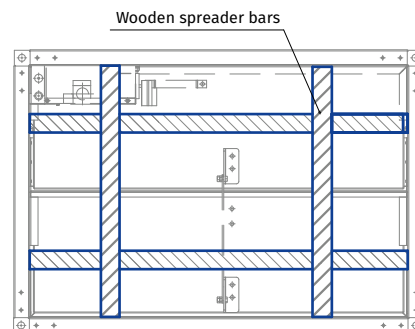
THE DAMPER WITH A 230 OR 24 V ELECTRIC ACTUATOR AND TWO-WIRE CONTROL

- The damper flap is set from the "Open" to the "Closed" position by an external command sending the voltage phase from one actuator contact to the other. The electric actuator is equipped with a contact group to signal its end positions. The damper can be controlled manually by means of a hex key.

Note: The RSKM dampers with a height of 300 and 350 mm have one louvre. The main difference between the RSKM and the RSKE dampers with a similar height of 300 and 350 mm is that the method of fastening the flap, which ensures a smaller overhang of the flap beyond the RSKM damper.

Mounting

- The dampers are not intended for installation in air ducts and ducts of spaces with fire and explosion hazard categories A and in local exhaust systems designed for extraction of flammable and explosive mixtures as well as in systems containing environments more aggressive to plain carbon steels than air or those containing sticky and fibrous materials.
- Fire safety dampers are only intended for installation in systems subjected to regular cleaning to prevent formation of flammable deposits.
- The damper must be installed into the building envelope structure in accordance with the applicable standards and regulations. The seal fire resistance must be at least equal to that of the building envelope. When preparing for installation the damper casing should be fitted with wooden spreader bars to prevent deformation, torsional twisting or geometry perturbation of the casing which may result in louvre jamming and, eventually, loss of the damper functionality.



- Upon completion of the damper brickwork envelope in the smoke shaft, fire division wall or flooring and complete cure (setting) of the sealing, remove the wooden spreader bars and check the louvre for free and frictionless opening.
- Ground the damper, connect the electromagnet or electric actuator (depending on the modification) to the automatic fire-fighting system and test the damper actuation.

Designation key

RSKE/RSKM 30 x 30 / 1 PVP24 / O

Damper series:

RSKE: single-louvre
RSKM: multi-louvre

Damper flow area width [cm]:

30; 35; 40; 45; 50; 55; 60; 65; 70; 75; 80; 85; 90; 95; 100; 105; 110; 115; 120; 125; 130; 135; 140

Damper flow area height [cm]:

30; 35; 40; 45; 50; 55; 60; 65; 70; 75; 80; 85; 90; 95; 100; 105; 110; 115; 120; 125; 130; 135; 140

Number of flanges:

1: one
2: two

Actuator type:

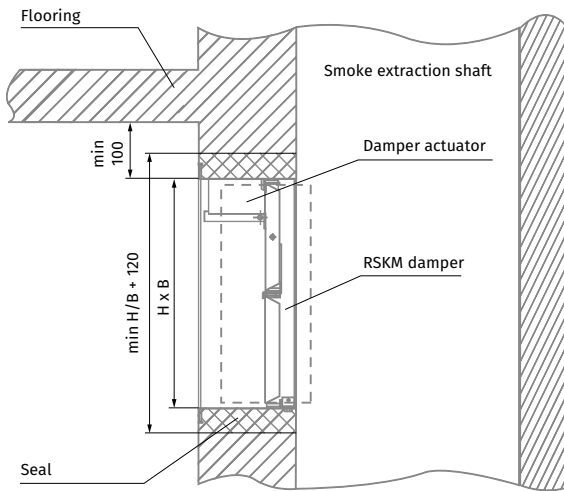
EM220/24: 220/24 V electric magnet
PN24: 24 V NENU TEC open/close electric actuator
PN230: 230 V NENU TEC open/close electric actuator
PNP24: 24 V NENU TEC electric actuator with a return spring
PNP230: 230 V NENU TEC electric actuator with a return spring
PV24: 24 V BELIMO open/close electric actuator
PV230: 230 V BELIMO open/close electric actuator
PVP24: 24 V BELIMO electric actuator with a return spring
PVP230: 230 V BELIMO electric actuator with a return spring
PS24: 24 V SIEMENS open/close electric actuator
PS230: 230 V SIEMENS open/close electric actuator
PSP24: 24 V SIEMENS electric actuator with a return spring
PSP230: 230 V SIEMENS actuator with a return spring

Actuator location:

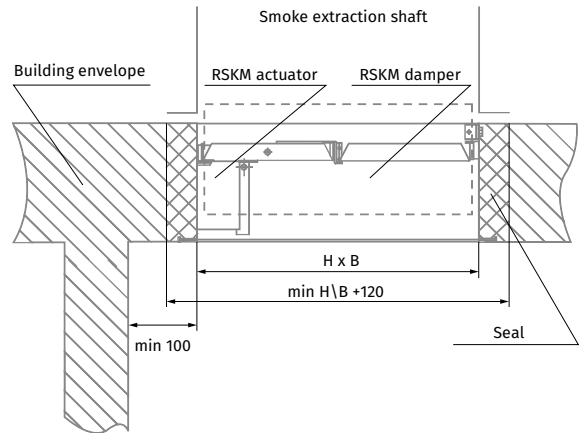
O: outside (except for EM220/24 electric magnet)
I: inside

Installation recommendation for the RSKM damper with an internally connected actuator

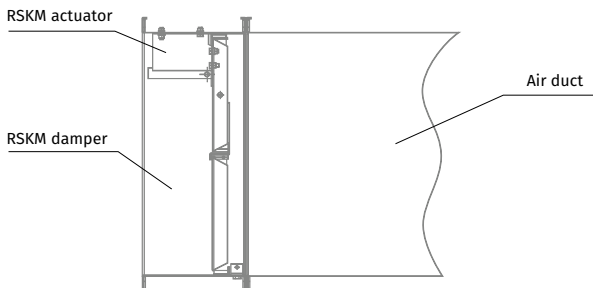
IN VERTICAL BUILDING STRUCTURES



IN HORIZONTAL BUILDING STRUCTURES

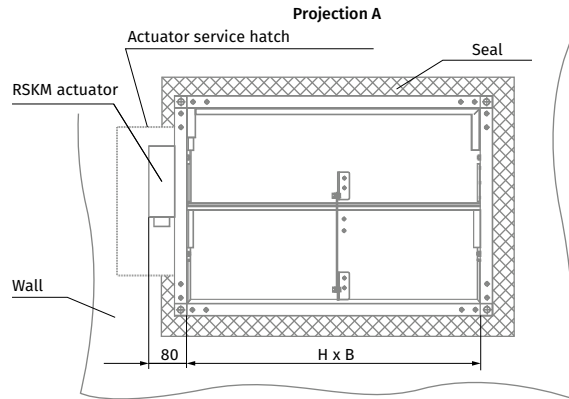
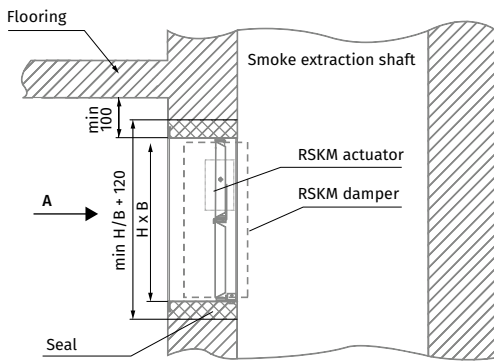


DUCT MODIFICATION WITH AN AIR DUCT

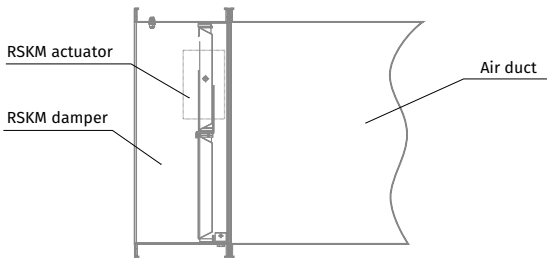


Installation recommendation for the RSKM damper with an externally located actuator

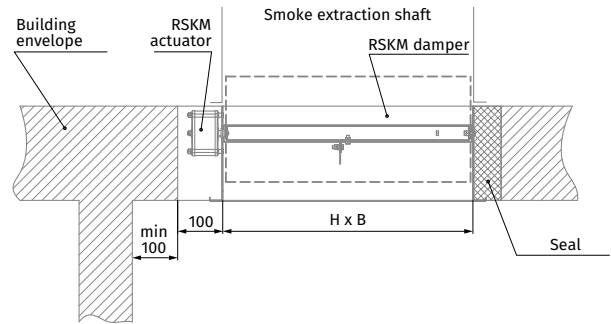
IN VERTICAL BUILDING STRUCTURES



DUCT MODIFICATION WITH AN AIR DUCT

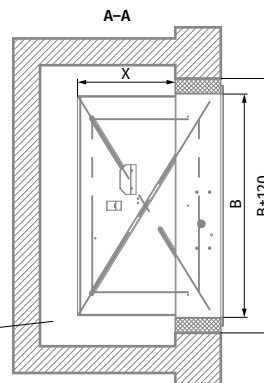
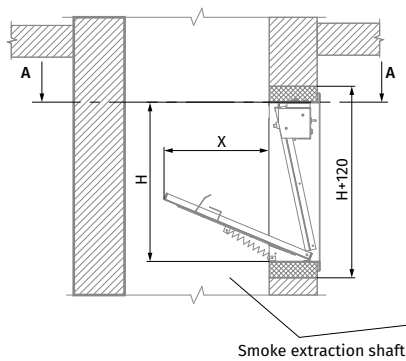


IN HORIZONTAL BUILDING STRUCTURES

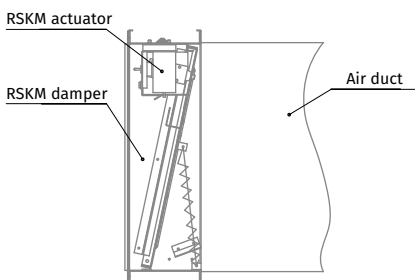


Installation recommendation for the RSKE damper with an internally connected actuator

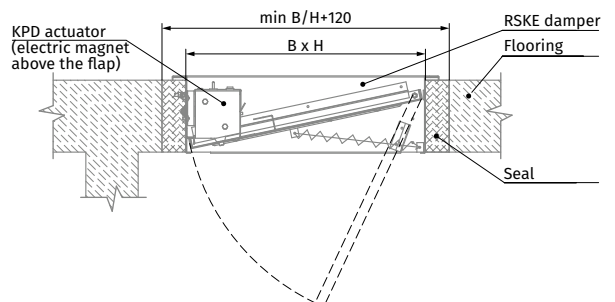
IN VERTICAL BUILDING STRUCTURES



DUCT MODIFICATION WITH AN AIR DUCT



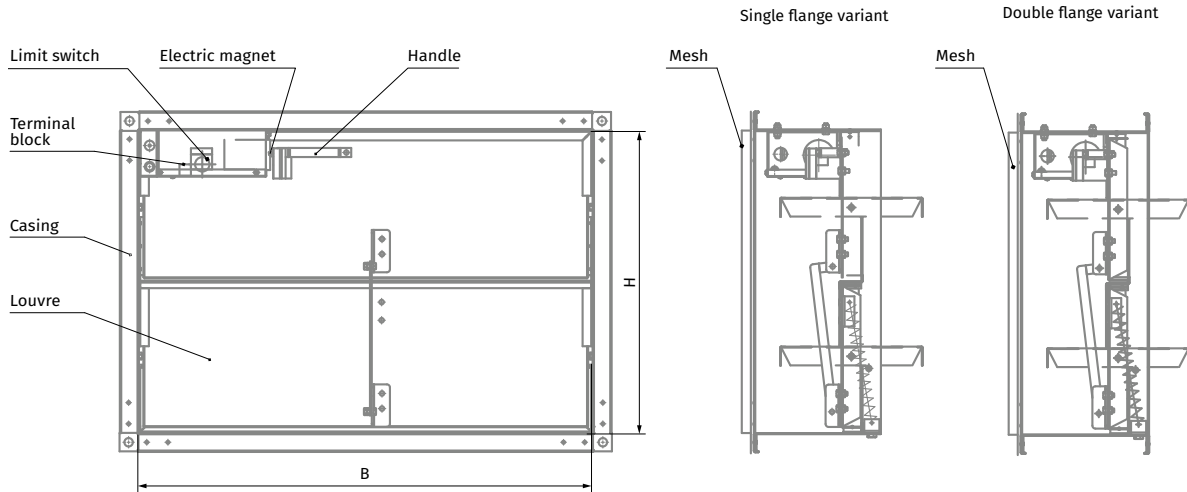
IN HORIZONTAL BUILDING STRUCTURES



Possible RSKM damper variants

THE RSKM DAMPER WITH AN INTERNALLY INSTALLED ELECTROMAGNET (220/24 V), SINGLE OR DOUBLE FLANGE

- o The single flange variant is intended for wall or ceiling mounting irrespective of the dimensional orientation. Upon the test or emergency damper actuation, the louvres can only be manually reset to the initial position.
- o The double flange variant is intended for duct installation irrespective of the dimensional orientation. Upon the test or emergency damper actuation the louvres can only be manually reset to the initial position.



FLOW AREA OF THE RSKM SMOKE EXHAUST DAMPER WITH AN ELECTROMAGNET [M²]

| B/H [mm] | 300 | 350 | 400 | 450 | 500 | 550 | 600 | 650 | 700 | 750 | 800 | 850 | 900 | 950 | 1000 | 1050 | 1100 | 1150 | 1200 | 1250 | 1300 | 1350 | 1400 | |
|----------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|--|
| 300 | 0.06 | | | | | | | | | | | | | | | | | | | | | | | |
| 350 | 0.08 | 0.1 | | | | | | | | | | | | | | | | | | | | | | |
| 400 | 0.09 | 0.11 | 0.12 | | | | | | | | | | | | | | | | | | | | | |
| 450 | 0.1 | 0.13 | 0.14 | 0.16 | | | | | | | | | | | | | | | | | | | | |
| 500 | 0.12 | 0.14 | 0.15 | 0.18 | 0.2 | | | | | | | | | | | | | | | | | | | |
| 550 | 0.13 | 0.16 | 0.17 | 0.2 | 0.23 | 0.25 | | | | | | | | | | | | | | | | | | |
| 600 | 0.15 | 0.18 | 0.19 | 0.22 | 0.25 | 0.28 | 0.31 | | | | | | | | | | | | | | | | | |
| 650 | 0.16 | 0.19 | 0.2 | 0.24 | 0.27 | 0.3 | 0.33 | 0.37 | | | | | | | | | | | | | | | | |
| 700 | 0.17 | 0.21 | 0.22 | 0.26 | 0.29 | 0.33 | 0.36 | 0.4 | 0.43 | | | | | | | | | | | | | | | |
| 750 | 0.19 | 0.22 | 0.24 | 0.28 | 0.31 | 0.35 | 0.39 | 0.43 | 0.46 | 0.48 | | | | | | | | | | | | | | |
| 800 | 0.2 | 0.24 | 0.26 | 0.3 | 0.34 | 0.38 | 0.42 | 0.46 | 0.5 | 0.51 | 0.55 | | | | | | | | | | | | | |
| 850 | 0.21 | 0.26 | 0.27 | 0.31 | 0.36 | 0.4 | 0.44 | 0.48 | 0.53 | 0.54 | 0.59 | 0.63 | | | | | | | | | | | | |
| 900 | 0.23 | 0.27 | 0.29 | 0.33 | 0.38 | 0.42 | 0.47 | 0.51 | 0.56 | 0.58 | 0.62 | 0.67 | 0.71 | | | | | | | | | | | |
| 950 | 0.24 | 0.29 | 0.31 | 0.35 | 0.4 | 0.45 | 0.5 | 0.54 | 0.59 | 0.61 | 0.66 | 0.71 | 0.75 | 0.8 | | | | | | | | | | |
| 1000 | 0.25 | 0.3 | 0.32 | 0.37 | 0.42 | 0.47 | 0.52 | 0.57 | 0.62 | 0.64 | 0.69 | 0.74 | 0.79 | 0.84 | 0.89 | | | | | | | | | |
| 1050 | 0.26 | 0.32 | 0.34 | 0.39 | 0.44 | 0.5 | 0.55 | 0.6 | 0.65 | 0.67 | 0.73 | 0.78 | 0.83 | 0.88 | 0.93 | 0.99 | | | | | | | | |
| 1100 | 0.27 | 0.33 | 0.35 | 0.41 | 0.46 | 0.52 | 0.57 | 0.63 | 0.68 | 0.7 | 0.76 | 0.82 | 0.87 | 0.92 | 0.97 | 1.04 | 1.11 | | | | | | | |
| 1150 | 0.28 | 0.35 | 0.37 | 0.43 | 0.48 | 0.55 | 0.6 | 0.66 | 0.71 | 0.73 | 0.8 | 0.86 | 0.91 | 0.96 | 1.01 | 1.1 | 1.17 | 1.25 | | | | | | |
| 1200 | 0.29 | 0.36 | 0.38 | 0.45 | 0.5 | 0.57 | 0.62 | 0.69 | 0.74 | 0.76 | 0.83 | 0.9 | 0.95 | 1 | 1.05 | 1.16 | 1.23 | 1.32 | 1.4 | | | | | |
| 1250 | 0.3 | 0.38 | 0.4 | 0.47 | 0.52 | 0.6 | 0.65 | 0.72 | 0.77 | 0.79 | 0.87 | 0.94 | 0.99 | 1.04 | 1.09 | 1.22 | 1.29 | 1.39 | 1.47 | 1.55 | | | | |
| 1300 | 0.31 | 0.39 | 0.41 | 0.49 | 0.54 | 0.62 | 0.67 | 0.75 | 0.8 | 0.82 | 0.9 | 0.98 | 1.03 | 1.08 | 1.13 | 1.28 | 1.35 | 1.46 | 1.54 | 1.63 | 1.71 | | | |
| 1350 | 0.32 | 0.41 | 0.43 | 0.51 | 0.56 | 0.65 | 0.7 | 0.78 | 0.83 | 0.85 | 0.94 | 1.02 | 1.07 | 1.12 | 1.17 | 1.34 | 1.41 | 1.53 | 1.61 | 1.71 | 1.79 | 1.88 | | |
| 1400 | 0.33 | 0.42 | 0.44 | 0.53 | 0.58 | 0.67 | 0.72 | 0.81 | 0.86 | 0.88 | 0.97 | 1.06 | 1.11 | 1.16 | 1.21 | 1.4 | 1.47 | 1.6 | 1.68 | 1.79 | 1.87 | 1.97 | 2.06 | |

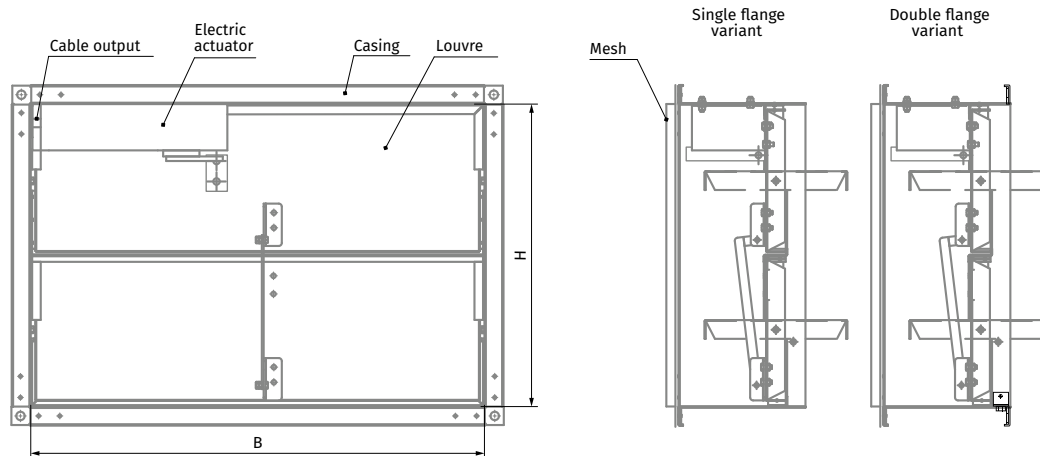
Note: Select the damper of the required cross-section BxH according to the completed table cells. Since the damper can be installed in any spatial position, a change of the height and width (B and H values) orientation may enable selection of a damper with a cross-section beyond the completed cell range.

For example, a 700x500 mm damper can be ordered as 500x700 mm.

**THE RSKM DAMPER WITH AN ELECTRIC ACTUATOR (230 OR 24 V)
INSTALLED INSIDE THE DAMPER, SINGLE OR DOUBLE FLANGE**

- The single flange variant is intended for wall or ceiling mounting irrespective of the dimensional orientation.
- The double flange variant is intended for duct installation irrespective of the dimensional orientation. The louvres of dampers equipped with a

two-position electric actuator are set to the "open" or "closed" position by an external actuating signal. After a test or emergency actuation the louvres of dampers equipped with an electric actuator with a return spring can return to the initial position automatically upon feeding the supply voltage.



FLOW AREA OF THE RSKM SMOKE EXHAUST DAMPER WITH AN ELECTRIC ACTUATOR INSTALLED INSIDE THE DAMPER [m²]

| B/H [mm] | 300 | 350 | 400 | 450 | 500 | 550 | 600 | 650 | 700 | 750 | 800 | 850 | 900 | 950 | 1000 | 1050 | 1100 | 1150 | 1200 | 1250 | 1300 | 1350 | 1400 | |
|----------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|--|
| 300 | 0.06 | | | | | | | | | | | | | | | | | | | | | | | |
| 350 | 0.08 | 0.1 | | | | | | | | | | | | | | | | | | | | | | |
| 400 | 0.09 | 0.11 | 0.12 | | | | | | | | | | | | | | | | | | | | | |
| 450 | 0.1 | 0.13 | 0.14 | 0.16 | | | | | | | | | | | | | | | | | | | | |
| 500 | 0.12 | 0.14 | 0.15 | 0.18 | 0.2 | | | | | | | | | | | | | | | | | | | |
| 550 | 0.13 | 0.16 | 0.17 | 0.2 | 0.23 | 0.25 | | | | | | | | | | | | | | | | | | |
| 600 | 0.15 | 0.18 | 0.19 | 0.22 | 0.25 | 0.28 | 0.31 | | | | | | | | | | | | | | | | | |
| 650 | 0.16 | 0.19 | 0.2 | 0.24 | 0.27 | 0.3 | 0.33 | 0.37 | | | | | | | | | | | | | | | | |
| 700 | 0.17 | 0.21 | 0.22 | 0.26 | 0.29 | 0.33 | 0.36 | 0.4 | 0.43 | | | | | | | | | | | | | | | |
| 750 | 0.19 | 0.22 | 0.24 | 0.28 | 0.31 | 0.35 | 0.39 | 0.43 | 0.46 | 0.48 | | | | | | | | | | | | | | |
| 800 | 0.2 | 0.24 | 0.26 | 0.3 | 0.34 | 0.38 | 0.42 | 0.46 | 0.5 | 0.51 | 0.55 | | | | | | | | | | | | | |
| 850 | 0.21 | 0.26 | 0.27 | 0.31 | 0.36 | 0.4 | 0.44 | 0.48 | 0.53 | 0.54 | 0.59 | 0.63 | | | | | | | | | | | | |
| 900 | 0.23 | 0.27 | 0.29 | 0.33 | 0.38 | 0.42 | 0.47 | 0.51 | 0.56 | 0.58 | 0.62 | 0.67 | 0.71 | | | | | | | | | | | |
| 950 | 0.24 | 0.29 | 0.31 | 0.35 | 0.4 | 0.45 | 0.5 | 0.54 | 0.59 | 0.61 | 0.66 | 0.71 | 0.75 | 0.8 | | | | | | | | | | |
| 1000 | 0.25 | 0.3 | 0.32 | 0.37 | 0.42 | 0.47 | 0.52 | 0.57 | 0.62 | 0.64 | 0.69 | 0.74 | 0.79 | 0.84 | 0.89 | | | | | | | | | |
| 1050 | 0.26 | 0.32 | 0.34 | 0.39 | 0.44 | 0.5 | 0.55 | 0.6 | 0.65 | 0.67 | 0.73 | 0.78 | 0.83 | 0.88 | 0.93 | 0.99 | | | | | | | | |
| 1100 | 0.27 | 0.33 | 0.35 | 0.41 | 0.46 | 0.52 | 0.57 | 0.63 | 0.68 | 0.7 | 0.76 | 0.82 | 0.87 | 0.92 | 0.97 | 1.04 | 1.11 | | | | | | | |
| 1150 | 0.28 | 0.35 | 0.37 | 0.43 | 0.48 | 0.55 | 0.6 | 0.66 | 0.71 | 0.73 | 0.8 | 0.86 | 0.91 | 0.96 | 1.01 | 1.1 | 1.17 | 1.25 | | | | | | |
| 1200 | 0.29 | 0.36 | 0.38 | 0.45 | 0.5 | 0.57 | 0.62 | 0.69 | 0.74 | 0.76 | 0.83 | 0.9 | 0.95 | 1 | 1.05 | 1.16 | 1.23 | 1.32 | 1.4 | | | | | |
| 1250 | 0.3 | 0.38 | 0.4 | 0.47 | 0.52 | 0.6 | 0.65 | 0.72 | 0.77 | 0.79 | 0.87 | 0.94 | 0.99 | 1.04 | 1.09 | 1.22 | 1.29 | 1.39 | 1.47 | 1.55 | | | | |
| 1300 | 0.31 | 0.39 | 0.41 | 0.49 | 0.54 | 0.62 | 0.67 | 0.75 | 0.8 | 0.82 | 0.9 | 0.98 | 1.03 | 1.08 | 1.13 | 1.28 | 1.35 | 1.46 | 1.54 | 1.63 | 1.71 | | | |
| 1350 | 0.32 | 0.41 | 0.43 | 0.51 | 0.56 | 0.65 | 0.7 | 0.78 | 0.83 | 0.85 | 0.94 | 1.02 | 1.07 | 1.12 | 1.17 | 1.34 | 1.41 | 1.53 | 1.61 | 1.71 | 1.79 | 1.88 | | |
| 1400 | 0.33 | 0.42 | 0.44 | 0.53 | 0.58 | 0.67 | 0.72 | 0.81 | 0.86 | 0.88 | 0.97 | 1.06 | 1.11 | 1.16 | 1.21 | 1.4 | 1.47 | 1.6 | 1.68 | 1.79 | 1.87 | 1.97 | 2.06 | |

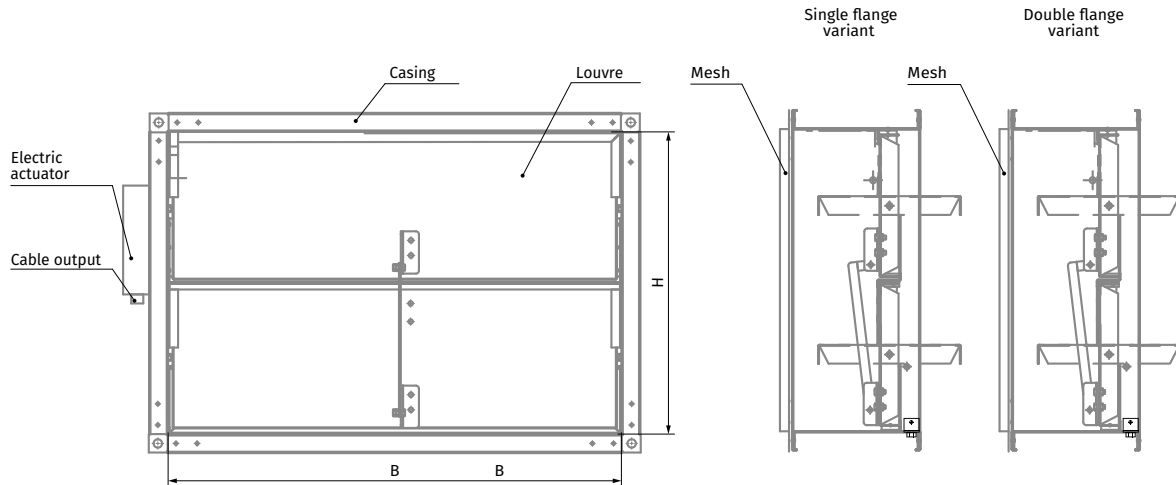
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For example, a 700x500 mm damper can be ordered as 500x700 mm.

THE RSKM DAMPER WITH AN ELECTRIC ACTUATOR (230 OR 24 V) INSTALLED OUTSIDE THE DAMPER, SINGLE OR DOUBLE FLANGE

- o The single flange variant is intended for wall or ceiling mounting irrespective of the dimensional orientation.
- o The double flange variant is intended for duct installation irrespective of the dimensional orientation. The louvres of dampers equipped with a

two-position electric actuator are set to the "open" or "closed" position by an external actuating signal. After a test or emergency actuation the louvres of dampers equipped with an electric actuator with a return spring can return to the initial position automatically upon feeding the supply voltage.



FLOW AREA OF THE RSKM SMOKE EXHAUST DAMPER WITH AN ELECTRIC ACTUATOR INSTALLED INSIDE THE DAMPER [M²]

| B/H [mm] | 300 | 350 | 400 | 450 | 500 | 550 | 600 | 650 | 700 | 750 | 800 | 850 | 900 | 950 | 1000 | 1050 | 1100 | 1150 | 1200 | 1250 | 1300 | 1350 | 1400 | |
|----------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|--|
| 300 | 0.07 | | | | | | | | | | | | | | | | | | | | | | | |
| 350 | 0.09 | 0.11 | | | | | | | | | | | | | | | | | | | | | | |
| 400 | 0.1 | 0.12 | 0.13 | | | | | | | | | | | | | | | | | | | | | |
| 450 | 0.11 | 0.14 | 0.15 | 0.17 | | | | | | | | | | | | | | | | | | | | |
| 500 | 0.13 | 0.15 | 0.16 | 0.19 | 0.21 | | | | | | | | | | | | | | | | | | | |
| 550 | 0.14 | 0.17 | 0.18 | 0.21 | 0.24 | 0.26 | | | | | | | | | | | | | | | | | | |
| 600 | 0.16 | 0.18 | 0.2 | 0.23 | 0.26 | 0.29 | 0.32 | | | | | | | | | | | | | | | | | |
| 650 | 0.17 | 0.2 | 0.21 | 0.25 | 0.28 | 0.31 | 0.34 | 0.38 | | | | | | | | | | | | | | | | |
| 700 | 0.18 | 0.22 | 0.23 | 0.27 | 0.3 | 0.34 | 0.37 | 0.41 | 0.44 | | | | | | | | | | | | | | | |
| 750 | 0.2 | 0.23 | 0.25 | 0.29 | 0.32 | 0.36 | 0.4 | 0.44 | 0.47 | 0.49 | | | | | | | | | | | | | | |
| 800 | 0.21 | 0.25 | 0.27 | 0.31 | 0.35 | 0.39 | 0.43 | 0.47 | 0.51 | 0.52 | 0.56 | | | | | | | | | | | | | |
| 850 | 0.22 | 0.27 | 0.28 | 0.32 | 0.37 | 0.41 | 0.45 | 0.49 | 0.54 | 0.55 | 0.6 | 0.64 | | | | | | | | | | | | |
| 900 | 0.24 | 0.28 | 0.3 | 0.34 | 0.39 | 0.43 | 0.48 | 0.52 | 0.57 | 0.59 | 0.63 | 0.68 | 0.72 | | | | | | | | | | | |
| 950 | 0.25 | 0.3 | 0.32 | 0.36 | 0.41 | 0.46 | 0.51 | 0.55 | 0.6 | 0.62 | 0.67 | 0.72 | 0.76 | 0.81 | | | | | | | | | | |
| 1000 | 0.26 | 0.31 | 0.33 | 0.38 | 0.43 | 0.48 | 0.53 | 0.58 | 0.63 | 0.65 | 0.7 | 0.75 | 0.8 | 0.85 | 0.9 | | | | | | | | | |
| 1050 | 0.27 | 0.33 | 0.35 | 0.4 | 0.45 | 0.51 | 0.56 | 0.61 | 0.66 | 0.68 | 0.74 | 0.79 | 0.84 | 0.89 | 0.94 | 1 | | | | | | | | |
| 1100 | 0.28 | 0.34 | 0.36 | 0.42 | 0.47 | 0.53 | 0.58 | 0.64 | 0.69 | 0.71 | 0.77 | 0.83 | 0.88 | 0.93 | 0.98 | 1.05 | 1.12 | | | | | | | |
| 1150 | 0.29 | 0.36 | 0.38 | 0.44 | 0.49 | 0.56 | 0.61 | 0.67 | 0.72 | 0.74 | 0.81 | 0.87 | 0.92 | 0.97 | 1.02 | 1.11 | 1.18 | 1.26 | | | | | | |
| 1200 | 0.3 | 0.37 | 0.39 | 0.46 | 0.51 | 0.58 | 0.63 | 0.7 | 0.75 | 0.77 | 0.84 | 0.91 | 0.96 | 1.01 | 1.06 | 1.17 | 1.24 | 1.33 | 1.41 | | | | | |
| 1250 | 0.31 | 0.39 | 0.41 | 0.48 | 0.53 | 0.61 | 0.66 | 0.73 | 0.78 | 0.8 | 0.88 | 0.95 | 1 | 1.05 | 1.1 | 1.23 | 1.3 | 1.4 | 1.48 | 1.56 | | | | |
| 1300 | 0.32 | 0.4 | 0.42 | 0.5 | 0.55 | 0.63 | 0.68 | 0.76 | 0.81 | 0.83 | 0.91 | 0.99 | 1.04 | 1.09 | 1.14 | 1.29 | 1.36 | 1.47 | 1.55 | 1.64 | 1.72 | | | |
| 1350 | 0.33 | 0.42 | 0.44 | 0.52 | 0.57 | 0.66 | 0.71 | 0.79 | 0.84 | 0.86 | 0.95 | 1.03 | 1.08 | 1.13 | 1.18 | 1.35 | 1.42 | 1.54 | 1.62 | 1.72 | 1.8 | 1.89 | | |
| 1400 | 0.34 | 0.43 | 0.45 | 0.54 | 0.59 | 0.68 | 0.73 | 0.82 | 0.87 | 0.89 | 0.98 | 1.07 | 1.12 | 1.17 | 1.22 | 1.41 | 1.48 | 1.61 | 1.69 | 1.8 | 1.88 | 1.98 | 2.07 | |

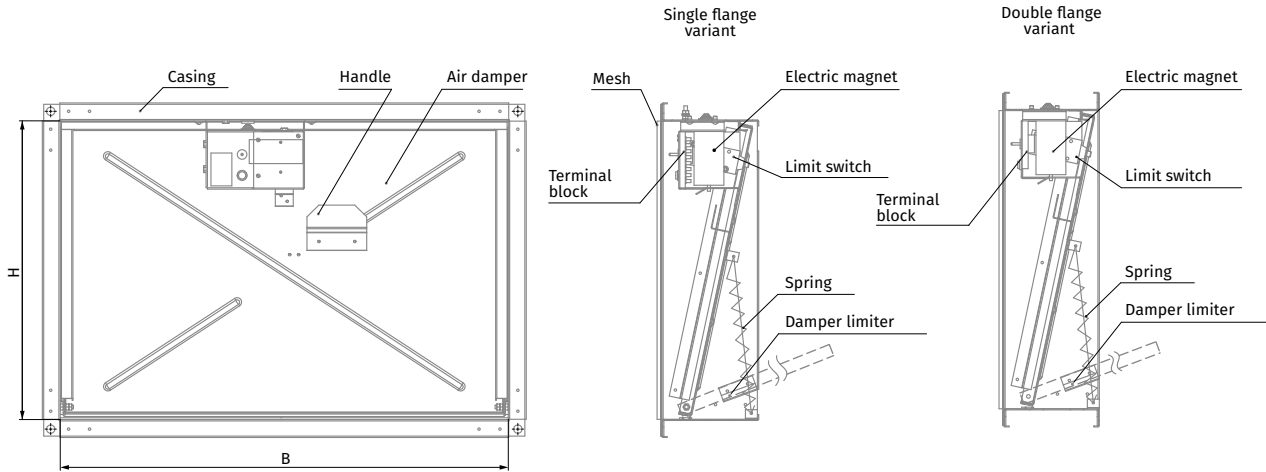
Note: Select the damper of the required cross-section BxH according to the completed table cells. Since the damper can be installed in any spatial position, a change of the height and width (B and H values) orientation may enable selection of a damper with a cross-section beyond the completed cell range.

For example, a 700x500 mm damper can be ordered as 500x700 mm.

Possible RSKE damper variants

THE RSKE DAMPER WITH AN INTERNALLY INSTALLED ELECTROMAGNET (220/24 V), SINGLE OR DOUBLE FLANGE

- The single flange variant is intended for wall or ceiling installation. The damper must be installed according to the installation guidelines for the RSKE damper with an internal actuator (see page 14). Upon the test or emergency damper actuation, the louvres can only be manually reset to initial position.
- The double flange variant is intended for duct installation. Upon the test or emergency damper actuation the louvres can only be manually reset to the initial position.



FLOW AREA OF THE RSKE SMOKE EXHAUST DAMPER WITH AN ELECTROMAGNET [m²]

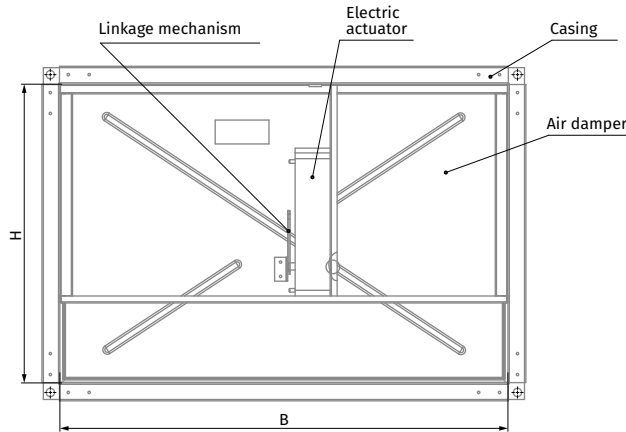
| B/H [mm] | 300 | 350 | 400 | 450 | 500 | 550 | 600 | 650 | 700 | 750 | 800 | 850 | 900 | 950 | 1000 | 1050 | 1100 | 1150 | 1200 | 1250 | 1300 | 1350 | 1400 | |
|----------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|--|
| 300 | 0.06 | | | | | | | | | | | | | | | | | | | | | | | |
| 350 | 0.08 | 0.1 | | | | | | | | | | | | | | | | | | | | | | |
| 400 | 0.09 | 0.11 | 0.12 | | | | | | | | | | | | | | | | | | | | | |
| 450 | 0.1 | 0.13 | 0.14 | 0.16 | | | | | | | | | | | | | | | | | | | | |
| 500 | 0.12 | 0.14 | 0.15 | 0.18 | 0.2 | | | | | | | | | | | | | | | | | | | |
| 550 | 0.13 | 0.16 | 0.17 | 0.2 | 0.23 | 0.25 | | | | | | | | | | | | | | | | | | |
| 600 | 0.15 | 0.18 | 0.19 | 0.22 | 0.25 | 0.28 | 0.31 | | | | | | | | | | | | | | | | | |
| 650 | 0.16 | 0.19 | 0.2 | 0.24 | 0.27 | 0.3 | 0.33 | 0.37 | | | | | | | | | | | | | | | | |
| 700 | 0.17 | 0.21 | 0.22 | 0.26 | 0.29 | 0.33 | 0.36 | 0.4 | 0.43 | | | | | | | | | | | | | | | |
| 750 | 0.19 | 0.22 | 0.24 | 0.28 | 0.31 | 0.35 | 0.39 | 0.43 | 0.46 | 0.48 | | | | | | | | | | | | | | |
| 800 | 0.2 | 0.24 | 0.26 | 0.3 | 0.34 | 0.38 | 0.42 | 0.46 | 0.5 | 0.51 | 0.55 | | | | | | | | | | | | | |
| 850 | 0.21 | 0.26 | 0.27 | 0.31 | 0.36 | 0.4 | 0.44 | 0.48 | 0.53 | 0.54 | 0.59 | 0.63 | | | | | | | | | | | | |
| 900 | 0.23 | 0.27 | 0.29 | 0.33 | 0.38 | 0.42 | 0.47 | 0.51 | 0.56 | 0.58 | 0.62 | 0.67 | 0.71 | | | | | | | | | | | |
| 950 | 0.24 | 0.29 | 0.31 | 0.35 | 0.4 | 0.45 | 0.5 | 0.54 | 0.59 | 0.61 | 0.66 | 0.71 | 0.75 | 0.8 | | | | | | | | | | |
| 1000 | 0.25 | 0.3 | 0.32 | 0.37 | 0.42 | 0.47 | 0.52 | 0.57 | 0.62 | 0.64 | 0.69 | 0.74 | 0.79 | 0.84 | 0.89 | | | | | | | | | |
| 1050 | 0.26 | 0.32 | 0.34 | 0.39 | 0.44 | 0.5 | 0.55 | 0.6 | 0.65 | 0.67 | 0.73 | 0.78 | 0.83 | 0.88 | 0.93 | 0.99 | | | | | | | | |
| 1100 | 0.27 | 0.33 | 0.35 | 0.41 | 0.46 | 0.52 | 0.57 | 0.63 | 0.68 | 0.7 | 0.76 | 0.82 | 0.87 | 0.92 | 0.97 | 1.04 | 1.11 | | | | | | | |
| 1150 | 0.28 | 0.35 | 0.37 | 0.43 | 0.48 | 0.55 | 0.6 | 0.66 | 0.71 | 0.73 | 0.8 | 0.86 | 0.91 | 0.96 | 1.01 | 1.1 | 1.17 | 1.25 | | | | | | |
| 1200 | 0.29 | 0.36 | 0.38 | 0.45 | 0.5 | 0.57 | 0.62 | 0.69 | 0.74 | 0.76 | 0.83 | 0.9 | 0.95 | 1 | 1.05 | 1.16 | 1.23 | 1.32 | 1.4 | | | | | |
| 1250 | 0.3 | 0.38 | 0.4 | 0.47 | 0.52 | 0.6 | 0.65 | 0.72 | 0.77 | 0.79 | 0.87 | 0.94 | 0.99 | 1.04 | 1.09 | 1.22 | 1.29 | 1.39 | 1.47 | 1.55 | | | | |
| 1300 | 0.31 | 0.39 | 0.41 | 0.49 | 0.54 | 0.62 | 0.67 | 0.75 | 0.8 | 0.82 | 0.9 | 0.98 | 1.03 | 1.08 | 1.13 | 1.28 | 1.35 | 1.46 | 1.54 | 1.63 | 1.71 | | | |
| 1350 | 0.32 | 0.41 | 0.43 | 0.51 | 0.56 | 0.65 | 0.7 | 0.78 | 0.83 | 0.85 | 0.94 | 1.02 | 1.07 | 1.12 | 1.17 | 1.34 | 1.41 | 1.53 | 1.61 | 1.71 | 1.79 | 1.88 | | |
| 1400 | 0.33 | 0.42 | 0.44 | 0.53 | 0.58 | 0.67 | 0.72 | 0.81 | 0.86 | 0.88 | 0.97 | 1.06 | 1.11 | 1.16 | 1.21 | 1.4 | 1.47 | 1.6 | 1.68 | 1.79 | 1.87 | 1.97 | 2.06 | |

Note: Select the damper of the required cross-section BxH according to the completed table cells.

THE RSKE DAMPER WITH AN ELECTRIC ACTUATOR (230 OR 24 V) INSTALLED INSIDE THE DAMPER, SINGLE OR DOUBLE FLANGE

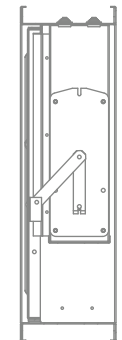
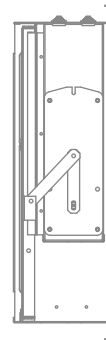
- o The single flange variant is intended for wall or ceiling mounting irrespective of the dimensional orientation.
- o The double flange variant is intended for duct installation irrespective of the dimensional orientation. The louvres of dampers equipped with a

two-position electric actuator are set to the "open" or "closed" position by an external actuating signal. After a test or emergency actuation the louvres of dampers equipped with an electric actuator with a return spring can return to the initial position automatically upon feeding the supply voltage.



Single flange variant

Double flange variant



FLOW AREA OF THE RSKE SMOKE EXHAUST DAMPER WITH AN ELECTRIC ACTUATOR INSTALLED INSIDE THE DAMPER [m²]

| B/H [mm] | 300 | 350 | 400 | 450 | 500 | 550 | 600 | 650 | 700 | 750 | 800 | 850 | 900 | 950 | 1000 | 1050 | 1100 | 1150 | 1200 | 1250 | 1300 | 1350 | 1400 | |
|----------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|--|
| 300 | 0.06 | | | | | | | | | | | | | | | | | | | | | | | |
| 350 | 0.08 | 0.1 | | | | | | | | | | | | | | | | | | | | | | |
| 400 | 0.09 | 0.11 | 0.12 | | | | | | | | | | | | | | | | | | | | | |
| 450 | 0.1 | 0.13 | 0.14 | 0.16 | | | | | | | | | | | | | | | | | | | | |
| 500 | 0.12 | 0.14 | 0.15 | 0.18 | 0.2 | | | | | | | | | | | | | | | | | | | |
| 550 | 0.13 | 0.16 | 0.17 | 0.2 | 0.23 | 0.25 | | | | | | | | | | | | | | | | | | |
| 600 | 0.15 | 0.18 | 0.19 | 0.22 | 0.25 | 0.28 | 0.31 | | | | | | | | | | | | | | | | | |
| 650 | 0.16 | 0.19 | 0.2 | 0.24 | 0.27 | 0.3 | 0.33 | 0.37 | | | | | | | | | | | | | | | | |
| 700 | 0.17 | 0.21 | 0.22 | 0.26 | 0.29 | 0.33 | 0.36 | 0.4 | 0.43 | | | | | | | | | | | | | | | |
| 750 | 0.19 | 0.22 | 0.24 | 0.28 | 0.31 | 0.35 | 0.39 | 0.43 | 0.46 | 0.48 | | | | | | | | | | | | | | |
| 800 | 0.2 | 0.24 | 0.26 | 0.3 | 0.34 | 0.38 | 0.42 | 0.46 | 0.5 | 0.51 | 0.55 | | | | | | | | | | | | | |
| 850 | 0.21 | 0.26 | 0.27 | 0.31 | 0.36 | 0.4 | 0.44 | 0.48 | 0.53 | 0.54 | 0.59 | 0.63 | | | | | | | | | | | | |
| 900 | 0.23 | 0.27 | 0.29 | 0.33 | 0.38 | 0.42 | 0.47 | 0.51 | 0.56 | 0.58 | 0.62 | 0.67 | 0.71 | | | | | | | | | | | |
| 950 | 0.24 | 0.29 | 0.31 | 0.35 | 0.4 | 0.45 | 0.5 | 0.54 | 0.59 | 0.61 | 0.66 | 0.71 | 0.75 | 0.8 | | | | | | | | | | |
| 1000 | 0.25 | 0.3 | 0.32 | 0.37 | 0.42 | 0.47 | 0.52 | 0.57 | 0.62 | 0.64 | 0.69 | 0.74 | 0.79 | 0.84 | 0.89 | | | | | | | | | |
| 1050 | 0.26 | 0.32 | 0.34 | 0.39 | 0.44 | 0.5 | 0.55 | 0.6 | 0.65 | 0.67 | 0.73 | 0.78 | 0.83 | 0.88 | 0.93 | 0.99 | | | | | | | | |
| 1100 | 0.27 | 0.33 | 0.35 | 0.41 | 0.46 | 0.52 | 0.57 | 0.63 | 0.68 | 0.7 | 0.76 | 0.82 | 0.87 | 0.92 | 0.97 | 1.04 | 1.11 | | | | | | | |
| 1150 | 0.28 | 0.35 | 0.37 | 0.43 | 0.48 | 0.55 | 0.6 | 0.66 | 0.71 | 0.73 | 0.8 | 0.86 | 0.91 | 0.96 | 1.01 | 1.1 | 1.17 | 1.25 | | | | | | |
| 1200 | 0.29 | 0.36 | 0.38 | 0.45 | 0.5 | 0.57 | 0.62 | 0.69 | 0.74 | 0.76 | 0.83 | 0.9 | 0.95 | 1 | 1.05 | 1.16 | 1.23 | 1.32 | 1.4 | | | | | |
| 1250 | 0.3 | 0.38 | 0.4 | 0.47 | 0.52 | 0.6 | 0.65 | 0.72 | 0.77 | 0.79 | 0.87 | 0.94 | 0.99 | 1.04 | 1.09 | 1.22 | 1.29 | 1.39 | 1.47 | 1.55 | | | | |
| 1300 | 0.31 | 0.39 | 0.41 | 0.49 | 0.54 | 0.62 | 0.67 | 0.75 | 0.8 | 0.82 | 0.9 | 0.98 | 1.03 | 1.08 | 1.13 | 1.28 | 1.35 | 1.46 | 1.54 | 1.63 | 1.71 | | | |
| 1350 | 0.32 | 0.41 | 0.43 | 0.51 | 0.56 | 0.65 | 0.7 | 0.78 | 0.83 | 0.85 | 0.94 | 1.02 | 1.07 | 1.12 | 1.17 | 1.34 | 1.41 | 1.53 | 1.61 | 1.71 | 1.79 | 1.88 | | |
| 1400 | 0.33 | 0.42 | 0.44 | 0.53 | 0.58 | 0.67 | 0.72 | 0.81 | 0.86 | 0.88 | 0.97 | 1.06 | 1.11 | 1.16 | 1.21 | 1.4 | 1.47 | 1.6 | 1.68 | 1.79 | 1.87 | 1.97 | 2.06 | |

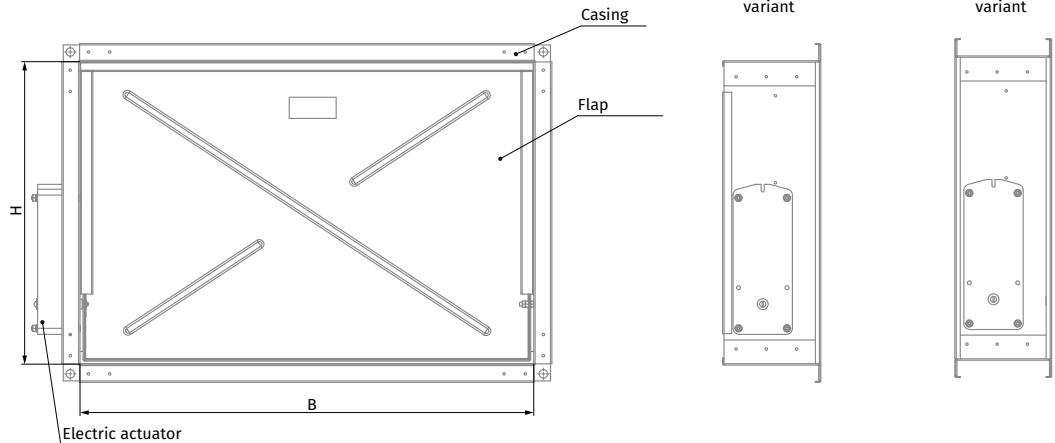
Note: Select the damper of the required cross-section BxH according to the completed table cells. Since the damper can be installed in any spatial position, a change of the height and width (B and H values) orientation may enable selection of a damper with a cross-section beyond the completed cell range.

For example, a 700x500 mm damper can be ordered as 500x700 mm.

THE RSKE DAMPER WITH AN ELECTRIC ACTUATOR (230 OR 24 V) INSTALLED OUTSIDE THE DAMPER, SINGLE OR DOUBLE FLANGE:

- The single flange variant is intended for wall or ceiling mounting irrespective of the dimensional orientation.
- The double flange variant is intended for duct installation irrespective of the dimensional orientation. The louvres of dampers equipped with a two-position electric actuator are set to the "open" or "closed" position

tion by an external actuating signal. After a test or emergency actuation the louvres of dampers equipped with an electric actuator with a return spring can return to the initial position automatically upon feeding the supply voltage.



FLOW AREA OF THE RSKE SMOKE EXHAUST DAMPER WITH AN ELECTRIC ACTUATOR INSTALLED OUTSIDE THE DAMPER [m²]

| B/H [mm] | 300 | 350 | 400 | 450 | 500 | 550 | 600 | 650 | 700 | 750 | 800 | 850 | 900 | 950 | 1000 | 1050 | 1100 | 1150 | 1200 | 1250 | 1300 | 1350 | 1400 | |
|----------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|--|
| 300 | 0,07 | | | | | | | | | | | | | | | | | | | | | | | |
| 350 | 0,09 | 0,11 | | | | | | | | | | | | | | | | | | | | | | |
| 400 | 0,1 | 0,12 | 0,13 | | | | | | | | | | | | | | | | | | | | | |
| 450 | 0,11 | 0,14 | 0,15 | 0,17 | | | | | | | | | | | | | | | | | | | | |
| 500 | 0,13 | 0,15 | 0,16 | 0,19 | 0,21 | | | | | | | | | | | | | | | | | | | |
| 550 | 0,14 | 0,17 | 0,18 | 0,21 | 0,24 | 0,26 | | | | | | | | | | | | | | | | | | |
| 600 | 0,16 | 0,18 | 0,2 | 0,23 | 0,26 | 0,29 | 0,32 | | | | | | | | | | | | | | | | | |
| 650 | 0,17 | 0,2 | 0,21 | 0,25 | 0,28 | 0,31 | 0,34 | 0,38 | | | | | | | | | | | | | | | | |
| 700 | 0,18 | 0,22 | 0,23 | 0,27 | 0,3 | 0,34 | 0,37 | 0,41 | 0,44 | | | | | | | | | | | | | | | |
| 750 | 0,2 | 0,23 | 0,25 | 0,29 | 0,32 | 0,36 | 0,4 | 0,44 | 0,47 | 0,49 | | | | | | | | | | | | | | |
| 800 | 0,21 | 0,25 | 0,27 | 0,31 | 0,35 | 0,39 | 0,43 | 0,47 | 0,51 | 0,52 | 0,56 | | | | | | | | | | | | | |
| 850 | 0,22 | 0,27 | 0,28 | 0,32 | 0,37 | 0,41 | 0,45 | 0,49 | 0,54 | 0,55 | 0,6 | 0,64 | | | | | | | | | | | | |
| 900 | 0,24 | 0,28 | 0,3 | 0,34 | 0,39 | 0,43 | 0,48 | 0,52 | 0,57 | 0,59 | 0,63 | 0,68 | 0,72 | | | | | | | | | | | |
| 950 | 0,25 | 0,3 | 0,32 | 0,36 | 0,41 | 0,46 | 0,51 | 0,55 | 0,6 | 0,62 | 0,67 | 0,72 | 0,76 | 0,81 | | | | | | | | | | |
| 1000 | 0,26 | 0,31 | 0,33 | 0,38 | 0,43 | 0,48 | 0,53 | 0,58 | 0,63 | 0,65 | 0,7 | 0,75 | 0,8 | 0,85 | 0,9 | | | | | | | | | |
| 1050 | 0,27 | 0,33 | 0,35 | 0,4 | 0,45 | 0,51 | 0,56 | 0,61 | 0,66 | 0,68 | 0,74 | 0,79 | 0,84 | 0,89 | 0,94 | 1 | | | | | | | | |
| 1100 | 0,28 | 0,34 | 0,36 | 0,42 | 0,47 | 0,53 | 0,58 | 0,64 | 0,69 | 0,71 | 0,77 | 0,83 | 0,88 | 0,93 | 0,98 | 1,05 | 1,12 | | | | | | | |
| 1150 | 0,29 | 0,36 | 0,38 | 0,44 | 0,49 | 0,56 | 0,61 | 0,67 | 0,72 | 0,74 | 0,81 | 0,87 | 0,92 | 0,97 | 1,02 | 1,11 | 1,18 | 1,26 | | | | | | |
| 1200 | 0,3 | 0,37 | 0,39 | 0,46 | 0,51 | 0,58 | 0,63 | 0,7 | 0,75 | 0,77 | 0,84 | 0,91 | 0,96 | 1,01 | 1,06 | 1,17 | 1,24 | 1,33 | 1,41 | | | | | |
| 1250 | 0,31 | 0,39 | 0,41 | 0,48 | 0,53 | 0,61 | 0,66 | 0,73 | 0,78 | 0,8 | 0,88 | 0,95 | 1 | 1,05 | 1,1 | 1,23 | 1,3 | 1,4 | 1,48 | 1,56 | | | | |
| 1300 | 0,32 | 0,4 | 0,42 | 0,5 | 0,55 | 0,63 | 0,68 | 0,76 | 0,81 | 0,83 | 0,91 | 0,99 | 1,04 | 1,09 | 1,14 | 1,29 | 1,36 | 1,47 | 1,55 | 1,64 | 1,72 | | | |
| 1350 | 0,33 | 0,42 | 0,44 | 0,52 | 0,57 | 0,66 | 0,71 | 0,79 | 0,84 | 0,86 | 0,95 | 1,03 | 1,08 | 1,13 | 1,18 | 1,35 | 1,42 | 1,54 | 1,62 | 1,72 | 1,8 | 1,89 | | |
| 1400 | 0,34 | 0,43 | 0,45 | 0,54 | 0,59 | 0,68 | 0,73 | 0,82 | 0,87 | 0,89 | 0,98 | 1,07 | 1,12 | 1,17 | 1,22 | 1,41 | 1,48 | 1,61 | 1,69 | 1,8 | 1,88 | 1,98 | 2,07 | |

Note: Select the damper of the required cross-section BxH according to the completed table cells. Since the damper can be installed in any spatial position, a change of the height and width (B and H values) orientation may enable selection of a damper with a cross-section beyond the completed cell range.

For example, a 700x500 mm damper can be ordered as 500x700 mm.

Technical data

ELECTROMAGNET

| Parameters | Parameter value |
|--|-----------------|
| Rated voltage [V] | 220/24 |
| Rated current at the ambient temperature of 25±10 °C [A] | 0.6/5.5 |
| Armature stroke [mm] | 10±1 |
| Armature release time [seconds] | 2 |
| Tractive force [N] | 45 |
| Maximum active power consumption at 220 V [W] | 600 |
| Maximum total power consumption at 220 V [W] | 1200 |
| Maximum total power consumption at 24 V [W] | 60 |

BELIMO ELECTRIC ACTUATORS WITH A RETURN SPRING

| Parameters | Basic models | | Models with increased torque | |
|--|--|--------------|--|--------------|
| Rated voltage [V] | AC/DC 24 | AC 230 | AC/DC 24 | AC 230 |
| Rated voltage range [V] | AC 19.2...28.8 DC 21.6...28.8 | AC 198...264 | AC 19.2...28.8 DC 21.6...28.8 | AC 198...264 |
| Rated voltage frequency AC [Hz] | 50/60 | | 50/60 | |
| Power consumption in rest position [W] | 1.4 | 2.0 | 2 | 3 |
| Power consumption in operation [W] | 4.0 | 4.5 | 7 | 8.5 |
| Maximum design capacity [VA] | 6 | 9.0 | 10 | 11 |
| Motor torque [Nm] | 9 | | 18 | |
| Spring torque [Nm] | 7 | | 12 | |
| Protection class | III | II | III | II |
| Ingress protection rating | IP54 | IP54 | IP54 | IP54 |
| Auxiliary switches | 2 pcs., single-pole, reversible, 1 mA...3(0.5)A, AC 250 V | | 2 pcs., single-pole, reversible, 1 mA...6(3)A, AC 250 V | |
| Electric motor connection cable | | | 1 m, 2 x 0.75 mm ² (halogen-free) | |
| Auxiliary switch connection cable | | | 1 m, 6 x 0.75 mm ² (halogen-free) | |
| Running time spring | 20 seconds at -10...+55 °C < 60 seconds at -30...-10 °C | | 16 seconds at +20 °C | |
| Running time motor | < 60 s/90° | | < 120 s/90° | |
| Service life | | | Min. 60 000 emergency positions | |
| Technical maintenance | | | Not required | |

BELIMO TWO-POSITION ELECTRIC ACTUATORS

| Parameters | Basic models | | Models with increased torque | |
|--|----------------------------------|--------------|---|--------------|
| Rated voltage [V] | AC/DC 24 | AC 230 | AC/DC 24 | AC 230 |
| Rated voltage range [V] | AC 19.2...28.8 DC 21.6...28.8 | AC 198...264 | AC 19.2...28.8 DC 21.6...28.8 | AC 198...264 |
| Rated voltage frequency AC [Hz] | 50/60 | | 50/60 | |
| Power consumption in rest position [W] | <0.5 | <1 | 0.5 | 0.5 |
| Power consumption in operation [W] | 7,5 | 5 | 12 | 8 |
| Maximum design capacity [VA] | 9 | 12 | 18 | 15 |
| Motor torque [Nm] | 15 | | 40 | |
| Spring torque [Nm] | 20 | | 50 | |
| Protection class | III | II | III | II |
| Ingress protection rating | IP54 | IP54 | IP54 | IP54 |
| Auxiliary switches | | | 2 pcs., single-pole, reversible, 1 mA...3(0.5)A, AC 250 B | |
| Electric motor connection cable | | | 1 m, 3 x 0.75 mm ² (halogen-free) | |
| Auxiliary switch connection cable | | | 1 m, 6 x 0.75 mm ² (halogen-free) | |
| Running time | < 30 s/90° | | < 60 s/90° | |
| Service life | | | Min. 10 000 emergency positions | |
| Technical maintenance | | | Not required | |

NENU TEC ELECTRIC ACTUATORS WITH A RETURN SPRING

| Parameters | Basic models | | Models with increased torque | |
|--|--|--------------|--|--------------|
| Rated voltage [V] | AC/DC 24 | AC 230 | AC/DC 24 | AC 230 |
| Rated voltage range [V] | AC/DC 21.8...26.4 | AC 209...253 | AC/DC 21.8...26.4 | AC 209...253 |
| Rated voltage frequency AC [Hz] | 50/60 | | 50/60 | |
| Power consumption in rest position [W] | 2.5 | | 2 | |
| Power consumption in operation [W] | 7 | | 10 | |
| Maximum design capacity [VA] | 10 | | 10 | |
| Motor torque [Nm] | 5 | | 8 | |
| Spring torque [Nm] | 5 | | 8 | |
| Protection class | III | II | III | II |
| Ingress protection rating | IP54 | | | |
| Auxiliary switches | 2 pcs., single-pole, reversible, 3 (1.5) A, AC 250 V | | | |
| Electric motor connection cable | 1 m, 2 x 0.75 mm ² (halogen-free) | | | |
| Auxiliary switch connection cable | 1 m, 6 x 0.75 mm ² (halogen-free) | | | |
| Running time | 50...70 seconds (return spring < 20 c seconds) | | 75...90 c seconds (return spring < 25 seconds) | |
| Service life | 60 000 emergency positions | | 60 000 emergency positions | |

NENU TEC TWO-POSITION ELECTRIC ACTUATORS

| Parameters | Basic models | | Models with increased torque | |
|--|--|--------------|------------------------------|--------------|
| Rated voltage [V] | AC/DC 24 | AC 230 | AC/DC 24 | AC 230 |
| Rated voltage range [V] | AC/DC 21.8...26.4 | AC 209...253 | AC/DC 21.8...26.4 | AC 209...253 |
| Rated voltage frequency AC [Hz] | 50/60 | 50/60 | 50/60 | 50/60 |
| Power consumption in rest position [W] | 3.5 | 3.5 | 3.5 | 3.5 |
| Power consumption in operation [W] | 8.2 | 5.2 | 8.2 | 5.2 |
| Maximum design capacity [VA] | 10 | 10 | 10 | 10 |
| Motor torque [Nm] | 15 | 15 | 15 | 15 |
| Spring torque [Nm] | 15 | 15 | 15 | 15 |
| Protection class | III | II | III | II |
| Ingress protection rating | IP54 | | | |
| Auxiliary switches | 2 pcs., single-pole, reversible, 3 (1.5) A, AC 250 V | | | |
| Electric motor connection cable | 1 m, 3 x 0.75 mm ² (halogen-free) | | | |
| Auxiliary switch connection cable | 1 m, 6 x 0.75 mm ² (halogen-free) | | | |
| Running time | < 30 seconds | | < 30 c seconds | |
| Service life | 60 000 emergency positions | | 60 000 emergency positions | |

SIEMENS ELECTRIC ACTUATORS WITH A RETURN SPRING

| Parameters | Basic models | | Models with increased torque | |
|--|---|----------|------------------------------|----------|
| Rated voltage [V] | AC 24 / DC 24...48 | AC 230 | AC 24 / DC 24...48 | AC 230 |
| Rated voltage range [V] | AC/DC ±20 % | AC ±15 % | AC/DC ±20 % | AC ±15 % |
| Rated voltage frequency AC [Hz] | 50/60 | | 50/60 | |
| Power consumption in rest position [W] | 2 | 3.5 | 3 | 4 |
| Power consumption in operation [W] | 3.5 | 4.5 | 5 | 6 |
| Maximum design capacity [VA] | 5 | 7 | 7 | 8 |
| Motor torque [Nm] | 9 | | 18 | |
| Spring torque [Nm] | 7 | | 18 | |
| Protection class | III | II | III | II |
| Ingress protection rating | IP54 | IP54 | IP54 | IP54 |
| Auxiliary switches | 2 pcs., single-pole, reversible, 6(2)A, AC 24...250 V | | | |
| Electric motor connection cable | 0.9 m, 2 x 0.75 mm ² (halogen-free) | | | |
| Auxiliary switch connection cable | 0.9 m, 6 x 0.75 mm ² (halogen-free) | | | |
| Running time spring | 15 seconds < 60 seconds at -30...-10 °C | | | |
| Running time motor | 90 s/90° | | 90 s/90° | |
| Service life | 10 000 emergency positions | | | |
| Technical maintenance | Not required | | | |

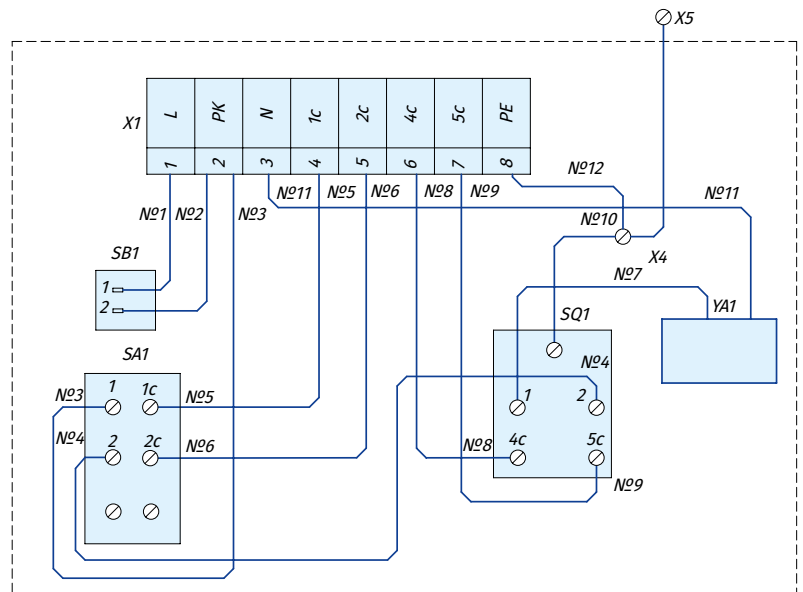
Note: The table "Main technical specifications of Siemens two-position electric actuators" is in development. This information is available upon request.

Electrical connection diagrams of RSKE/RSKM dampers

RSKE/RSKM DAMPER EQUIPPED WITH AN ELECTROMAGNET

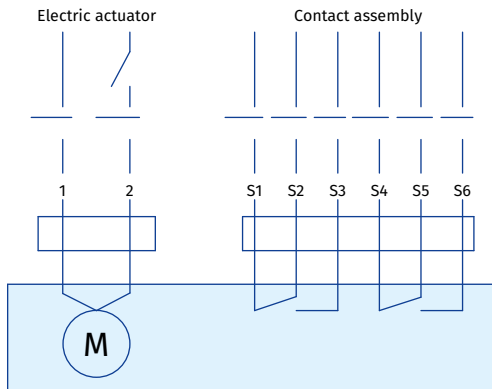
- SQ1:** end switch
- YA1:** electromagnet
- SB1:** damper louvre opening button
- PK:** contact of automatic fire suppression block
- SA1:** power supply circuit disconnection switch of electromagnetic latch
- X1:** terminal block

- 1:** supply voltage phase
- 2:** contact of automatic fire suppression block
- 3:** supply voltage neutral
- 4, 5:** command circuit control
- 6, 7:** louvre position control
- 8:** grounding bus



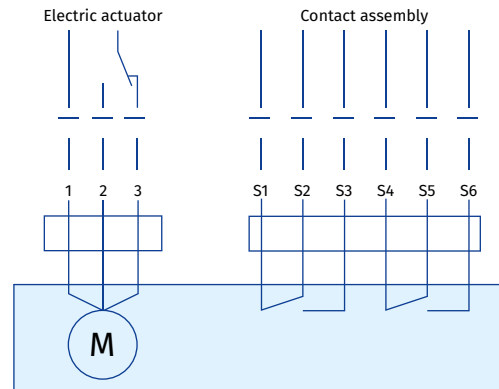
RSKE/RSKM DAMPER EQUIPPED WITH AN ELECTRIC ACTUATOR

Electric actuator with a return spring



- 1:** "Neutral" contact of supply voltage
- 2:** "Line" contact of supply voltage – closing the damper louvres
- S1...S6:** fixed microswitch contacts for signalling end positions

Two-position electric actuator



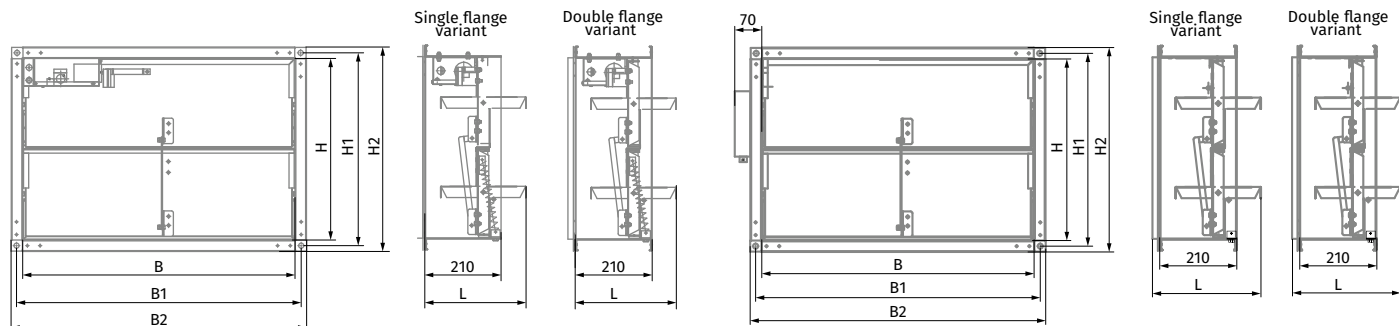
- 1:** "Neutral" contact of supply voltage
- 2, 3:** "Line" contact of supply voltage damper louvre closing or opening
- S1...S6:** fixed microswitch contacts for signalling end positions

Overall and connecting dimensions of RSKM multi-louvre dampers

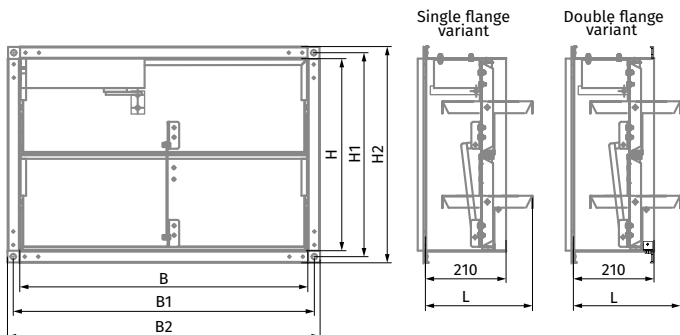
| Standard damper size [cm] | Minimum flow area [m ²] | Dimensions [mm] | | | | | | | Weight [kg] | Number of louvres, pcs. |
|---------------------------|-------------------------------------|-----------------|------|------|------|------|------|-----|-------------|-------------------------|
| | | H | H1 | H2 | B | B1 | B2 | L | | |
| 300x300 | 0.06 | 300 | 320 | 340 | 300 | 320 | 340 | 310 | 6.5 | 1 |
| 350x350 | 0.10 | 350 | 370 | 390 | 350 | 370 | 390 | 345 | 7.8 | |
| 400x400 | 0.12 | 400 | 420 | 440 | 400 | 420 | 440 | 260 | 9.5 | |
| 450x450 | 0.16 | 450 | 470 | 490 | 450 | 470 | 490 | 275 | 11.3 | 2 |
| 500x500 | 0.20 | 500 | 520 | 540 | 500 | 520 | 540 | 285 | 12.1 | |
| 550x550 | 0.25 | 550 | 580 | 610 | 550 | 580 | 610 | 300 | 14.2 | 3 |
| 600x600 | 0.31 | 600 | 630 | 660 | 600 | 630 | 660 | 260 | 17 | |
| 650x650 | 0.37 | 650 | 680 | 710 | 650 | 680 | 710 | 270 | 19 | |
| 700x700 | 0.43 | 700 | 730 | 760 | 700 | 730 | 760 | 275 | 20.3 | 4 |
| 750x750 | 0.48 | 750 | 780 | 810 | 750 | 780 | 810 | 285 | 22.1 | |
| 800x800 | 0.55 | 800 | 830 | 860 | 800 | 830 | 860 | 260 | 24.8 | 5 |
| 850x850 | 0.63 | 850 | 880 | 910 | 850 | 880 | 910 | 270 | 26.8 | |
| 900x900 | 0.71 | 900 | 930 | 960 | 900 | 930 | 960 | 275 | 28.8 | |
| 950x950 | 0.80 | 950 | 980 | 1010 | 950 | 980 | 1010 | 280 | 30.8 | 4 |
| 1000x1000 | 0.90 | 1000 | 1030 | 1060 | 1000 | 1030 | 1060 | 285 | 32.8 | |
| 1050x1050 | 0.99 | 1050 | 1080 | 1110 | 1050 | 1080 | 1110 | 295 | 34.8 | 5 |
| 1100x1100 | 1.11 | 1100 | 1130 | 1160 | 1100 | 1130 | 1160 | 305 | 36.8 | |
| 1150x1150 | 1.25 | 1150 | 1180 | 1210 | 1150 | 1180 | 1210 | 320 | 38.8 | |
| 1200x1200 | 1.40 | 1200 | 1230 | 1260 | 1200 | 1230 | 1260 | 335 | 40.8 | 5 |
| 1250x1250 | 1.55 | 1250 | 1280 | 1310 | 1250 | 1280 | 1310 | 350 | 42.8 | |
| 1300x1300 | 1.71 | 1300 | 1330 | 1360 | 1300 | 1330 | 1360 | 260 | 46.0 | 5 |
| 1350x1350 | 1.88 | 1350 | 1380 | 1410 | 1350 | 1380 | 1410 | 270 | 49.0 | |
| 1400x1400 | 2.06 | 1400 | 1430 | 1460 | 1400 | 1430 | 1460 | 280 | 52.0 | |

Note: Product weight may vary slightly depending on the number of flanges and actuator type.

- The **RSKM** damper with an internally installed electromagnet (220/24 V), single or double flange.
- The **RSKM** damper with an electric actuator (230 or 24 V) installed outside the damper, single or double flange.



- The **RSKM** damper with an electric actuator (230 or 24 V) installed inside the damper, single or double flange.

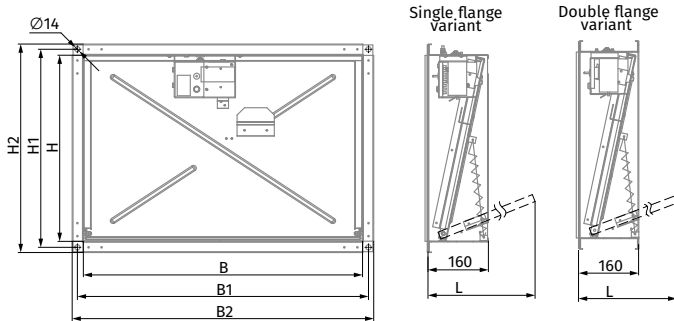


Overall and connecting dimensions of the RSKE single-louvre damper

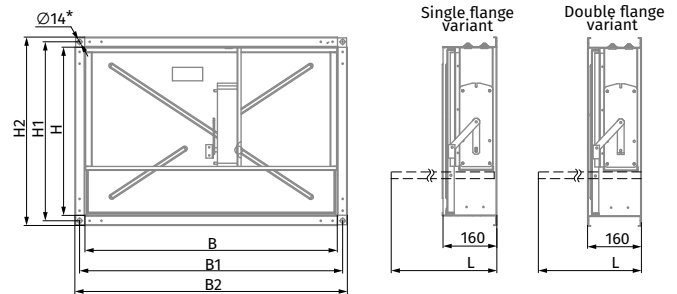
| Standard damper size [cm] | Minimum flow area [m ²] | Dimensions [mm] | | | | | | | Weight [kg] | Number of louvres, pcs. |
|---------------------------|-------------------------------------|-----------------|------|------|------|------|------|------|-------------|-------------------------|
| | | H | H1 | H2 | B | B1 | B2 | L | | |
| 300x300 | 0.06 | 300 | 330 | 360 | 300 | 330 | 360 | 350 | 6.3 | 1 |
| 350x350 | 0.10 | 350 | 380 | 410 | 350 | 380 | 410 | 390 | 7.3 | |
| 400x400 | 0.12 | 400 | 430 | 460 | 400 | 430 | 460 | 410 | 8.2 | |
| 450x450 | 0.16 | 450 | 480 | 510 | 450 | 480 | 510 | 460 | 9.5 | |
| 500x500 | 0.20 | 500 | 530 | 560 | 500 | 530 | 560 | 500 | 10.6 | |
| 550x550 | 0.25 | 550 | 580 | 610 | 550 | 580 | 610 | 550 | 11.9 | |
| 600x600 | 0.31 | 600 | 630 | 660 | 600 | 630 | 660 | 600 | 13.2 | |
| 650x650 | 0.37 | 650 | 680 | 710 | 650 | 680 | 710 | 640 | 14.5 | |
| 700x700 | 0.43 | 700 | 730 | 760 | 700 | 730 | 760 | 690 | 16.0 | |
| 750x750 | 0.48 | 750 | 780 | 810 | 750 | 780 | 810 | 740 | 17.4 | |
| 800x800 | 0.55 | 800 | 830 | 860 | 800 | 830 | 860 | 790 | 19.0 | |
| 850x850 | 0.63 | 850 | 880 | 910 | 850 | 880 | 910 | 840 | 20.6 | |
| 900x900 | 0.71 | 900 | 930 | 960 | 900 | 930 | 960 | 890 | 21.4 | |
| 950x950 | 0.80 | 950 | 980 | 1010 | 950 | 980 | 1010 | 930 | 23.9 | |
| 1000x1000 | 0.90 | 1000 | 1030 | 1060 | 1000 | 1030 | 1060 | 980 | 25.6 | |
| 1050x1050 | 0.99 | 1050 | 1080 | 1110 | 1050 | 1080 | 1110 | 1000 | 28.0 | |
| 1100x1100 | 1.11 | 1100 | 1130 | 1160 | 1100 | 1130 | 1160 | 1030 | 30.5 | |
| 1150x1150 | 1.25 | 1150 | 1180 | 1210 | 1150 | 1180 | 1210 | 1060 | 33.0 | 2 |
| 1200x1200 | 1.40 | 1200 | 1230 | 1260 | 1200 | 1230 | 1260 | 1090 | 35.5 | |
| 1250x1250 | 1.55 | 1250 | 1280 | 1310 | 1250 | 1280 | 1310 | 1120 | 38.0 | |
| 1300x1300 | 1.71 | 1300 | 1330 | 1360 | 1300 | 1330 | 1360 | 1150 | 42.0 | |
| 1350x1350 | 1.88 | 1350 | 1380 | 1410 | 1350 | 1380 | 1410 | 1180 | 45.0 | 4 |
| 1400x1400 | 2.06 | 1400 | 1430 | 1460 | 1400 | 1430 | 1460 | 1210 | 48.0 | |

Note: Product weight may vary slightly depending on the number of flanges and actuator type.

- The **RSKE** damper with an internally installed electromagnet (220/24 V), single or double flange.



- The **RSKE** damper with an electric actuator (230 or 24 V) installed inside the damper, single or double flange.



- The **RSKE** damper with an electric actuator (230 or 24 V) installed outside the damper, single or double flange.

