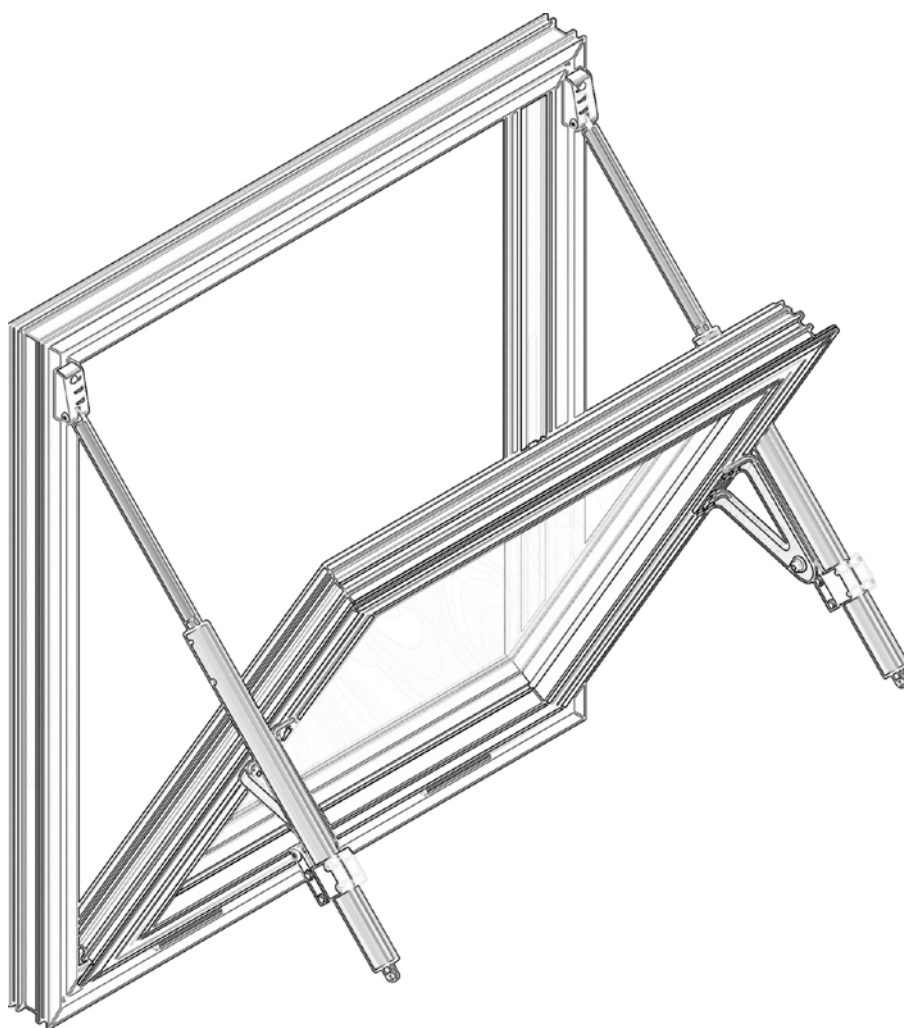


Technical Catalogue



mcr OSO THERM 75

WINDOW SMOKE EXHAUST SYSTEMS



Smoke exhaust, heat removal and roof lighting systems
Technical Catalogue 02/2024

„MERCOR” S.A. with registered office in Gdańsk reserves the right to revise this Technical Catalogue 2024 at any time, without providing a reason. Moreover, any revisions made do not necessitate (at any stage) informing any persons using this Technical Catalogue 2024.

„MERCOR” S.A. also reserves that the contents of this Technical Catalogue 2024 do not constitute a trade offer as defined in art. 66 of Polish Civil Code.

Graphic design and digital typesetting:
„MERCOR” S.A. – Export Department
2024 MERCOR Gdańsk

1. mcr OSO THERM SMOKE EXHAUST WINDOWS	> 6
1.1. OUTWARD-OPENING SMOKE EXHAUST WINDOWS	> 7
1.1.1 Description of standard	> 7
1.1.2 Non-standard options	> 7
1.1.3 Types of outward-opening smoke exhaust windows	> 8
1.1.4 Technical drawings of smoke exhaust windows	> 11
1.1.5 Technical specification	> 14
1.1.6 Technical specification – application of electro-lock in windows with spindle actuators	> 32
1.2. INWARD-OPENING SMOKE EXHAUST WINDOWS	> 33
1.2.1 Description of standard	> 33
1.2.2 Non-standard options	> 33
1.2.3 Types of inward-opening smoke exhaust windows	> 34
1.2.4 Technical drawings of smoke exhaust windows	> 37
1.2.5 Technical specification	> 40
1.2.6 Technical specification – application of electro-lock in windows with spindle actuators	> 55
2. ELECTRIC CONTROL SYSTEM FOR SMOKE EXHAUST WINDOWS	> 56
2.1 24 V- spindle electric actuators	> 56
2.1.1 Type G spindle electric actuators	> 56
2.1.2 Type S spindle electric actuators	> 59
2.2 Type HCV (24 V- / 48 V-) electric chain actuators	> 61
2.3 Type HCVA (230 V~) electric chain actuators	> 62
3. INSTALLATION OF SMOKE EXHAUST WINDOW	> 63

Technical Catalogue

2024

Dear Customers,

We are pleased to present you the Technical Catalogue of smoke exhaust systems for the **mcr OSO THERM 75** Window Smoke Exhaust System. This publication presents the possibilities of this innovative product. The new offering is a combination of our thirty years' experience on the gravitational smoke removal market and specialist knowledge of European experts in the window profile industry.

We believe that the form of presenting our product range will facilitate finding the necessary information about the individual solutions, the included equipment, as well as details on the particular elements of the **mcr OSO THERM 75** system.

Every product shipped from "MERCOR" S.A. factories to the customers is meticulously checked in accordance with the highest quality management standards and undergoes a series of approval tests. We are proud to deliver safety through our business.


Contact us today.
MERCOR S.A. Team - Export Department
export@merc.com.pl

The electronic version
of the Technical Catalogue is
available
at www.mercor.com.pl



1 | Smoke exhaust windows

Smoke exhaust windows are part of the smoke exhausting system designed to remove fumes, fire gases and heat energy outside the building. They may also serve aeration and daily ventilation function, and thanks to their design, patented technical solutions and finishing, they are part of the building's architecture.

Parameters		Outward-opening windows		Inward-opening windows	
		BOTTOM HUNG	TOP-HUNG	BOTTOM HUNG	TOP-HUNG
					
Product classification	Certificate of constancy of performance 1396-CPR-0128 (according to EN 12101- 2)	<ul style="list-style-type: none"> » Re1000 - operational reliability during 1000 cycles of opening and closing to smoke exhaust position, and 10 000 cycles to ventilation position (double function window) » WL1000 / WL1250 / WL1500 - operational certainty of window under wind load equivalent to 1100 Pa, 1200 Pa or 1500 Pa (depending on type, size and accessories), » T(00) - resistance of windows to low temperature 0°C » B300 - resistance of windows to high temperature 300°C » SLO - operational certainty of vents under snow load 0 N/m² 			
	Opening angle	10° – 90°			
Control	Electric 24 V- – (smoke exhausting and daily ventilation)	●	●	●	●
	Electric 48 V- – (smoke exhausting and daily ventilation)	●	●	●	●
	Electric 230 V~ – (daily ventilation)	●	●	●	●
Glazing	Triple glass 4/18/4/18/4 Ug=0.5 W/(m ² K)	●	●	●	●
	Triple safety glass 4/18/4/18/33.1 Ug=0.5 W/(m ² K)	●	●	●	●
	Double safety glass 4/16/33.1 Ug= 1.1 W/(m ² K)	●	●	●	●
	Sandwich panel (ALU-PIR-ALU) Ug=0.66 W/(m ² K)	●	●	●	●

1.1 | Outward-opening smoke exhaust windows

1.1.1 | Description of standard

- » classification according to the Certificate of Constancy of Performance No 1396-CPR-0128 (according to EN 12101-2),
- » outward-opening smoke exhaust windows for installation in facades as individual smoke exhaust and daily ventilation devices or integrated into post and beam facade systems available on the market,
- » size range of outward-opening smoke exhaust windows in horizontal arrangement 800 x 800 mm ÷ 2700 x 1300 mm, in vertical arrangement 800 x 800 mm ÷ 1600 x 2200 mm,
- » smoke exhaust windows made of custom-designed multi-chamber aluminium profiles with polyamide thermal breaks,
- » profile width: frame 75 mm and leaf 84 mm,
- » system of grooves in the profile of the leaf and frame with a covering profile allows to route cables and easily install actuator consoles,
- » leaf glazing: triple glass 4/18/4/18/4 (heat transfer coefficient ($U_g=0.5W / (m^2K)$), triple safety glass 4/18/4/18/33.1 ($U_g=0.5W / (m^2K)$), double glass 4/16/33.1 ($U_g=1.1W / (m^2K)$) or sandwich panel (ALU-PIR-ALU) ($U_g=0.66W / (m^2K)$),
- » windows joined with each other by means of vertical or horizontal connection sets,
- » installation of windows in facade systems,
- » leaf opening angle $10^\circ \div 90^\circ$ (depending on the size of the window and type of control used),
- » exhaust or daily ventilation control: 24 V- / 48 V- power supply (G / S spindle actuators, HCV chain actuators) or 230 V~ (HCVA chain actuators),
- » use of an electro-lock with interface for the selected dimensional range of smoke exhaust windows with spindle actuators (see page 32 for table of dimensions with electro-lock).

1.1.2 | Non-standard options

- » possibility of making intermediate dimensions of smoke exhaust windows between the values given in the table on pages 15-31 the active aerodynamic area value for these dimensions is calculated by linear interpolation method,
- » possibility of painting profiles any RAL standard color; structural or wood imitation color,
- » possibility of making bi-color windows,
- » glazing beads available in rectangular or rounded versions,
- » decorative bars referring to the style of old architecture as well as a modern element of architecture:
 - stuck on - glued to the glazing unit both inside and outside,
 - internal - placed inside the glazing unit,
- » glazing bars - dividing the glass into many smaller formats.

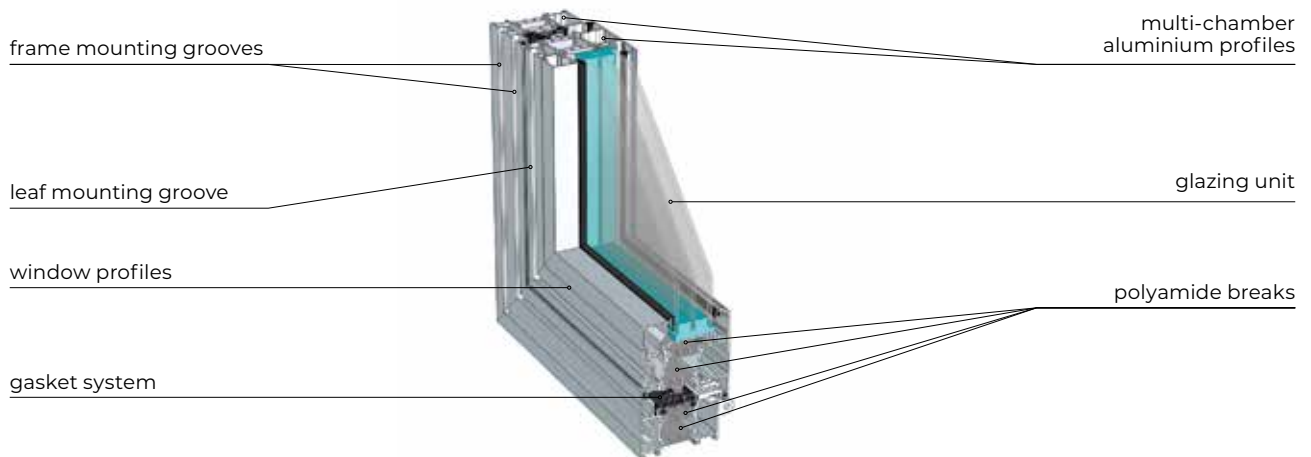


Fig. 1 Cross-section through the profile of an outward-opening smoke exhaust window

1.1.3 | Types of outward-opening smoke exhaust windows

» **bottom hung outward-opening windows**



Fig. 2 mcr OSO THERM 75 smoke exhaust window with two S spindle actuators



Fig. 3 mcr OSO THERM 75 smoke exhaust window with two G spindle actuators



Fig. 4 mcr OSO THERM 75 smoke exhaust window with HCV chain actuator



Fig. 5 mcr OSO THERM 75 smoke exhaust window with two S spindle actuators with shifted pivot point



Fig. 6 mcr OSO THERM 75 smoke exhaust window with two G spindle actuators with shifted pivot point



Fig. 7 mcr OSO THERM 75 smoke exhaust window with two HCV chain actuators

» **top-hung outward-opening windows**



Fig. 8 mcr OSO THERM 75 smoke exhaust window with two S spindle actuators



Fig. 9 mcr OSO THERM 75 smoke exhaust window with two G spindle actuators



Fig. 10 mcr OSO THERM 75 smoke exhaust window with HCV chain actuator



Fig. 11 mcr OSO THERM 75 smoke exhaust window with two S spindle actuators with shifted pivot point



Fig. 12 mcr OSO THERM 75 smoke exhaust window with two G spindle actuators with shifted pivot point



Fig. 13 mcr OSO THERM 75 smoke exhaust window with two HCV chain actuators

1.1.3.1 | Design of outward-opening smoke exhaust window with spindle actuators

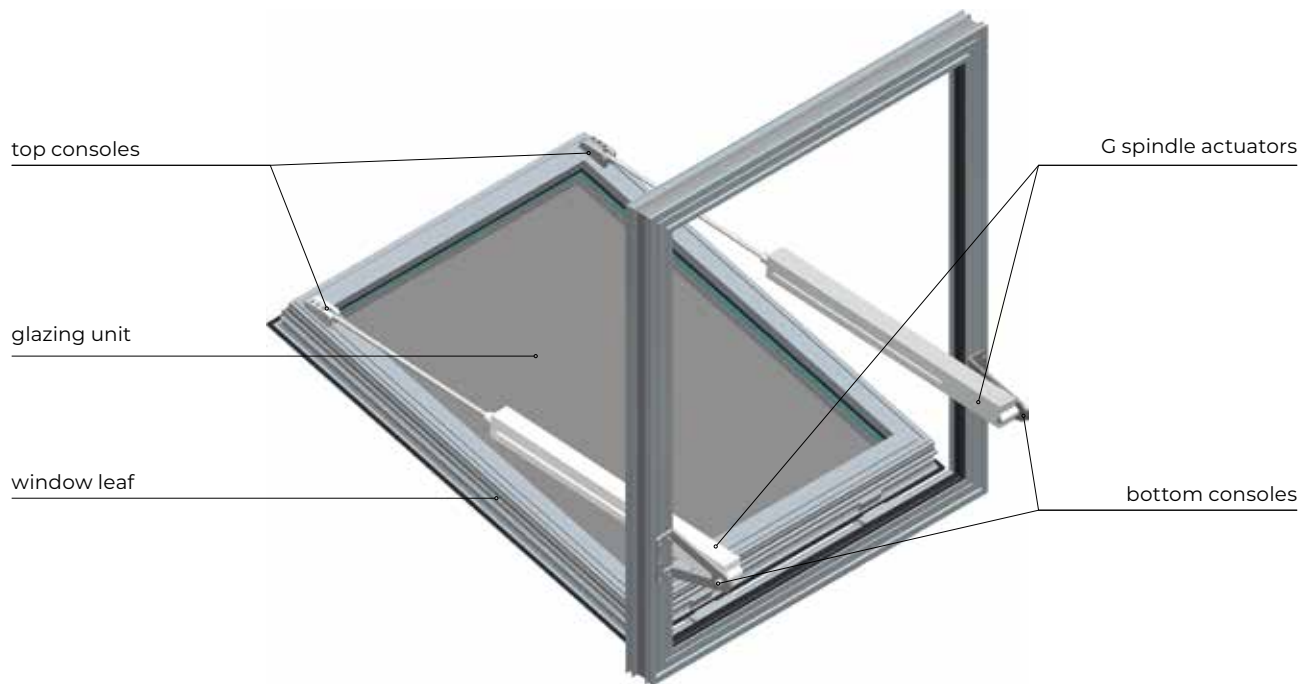


Fig. 14 mcr OSO THERM 75 smoke exhaust window opening outwards by means of two G spindle actuators

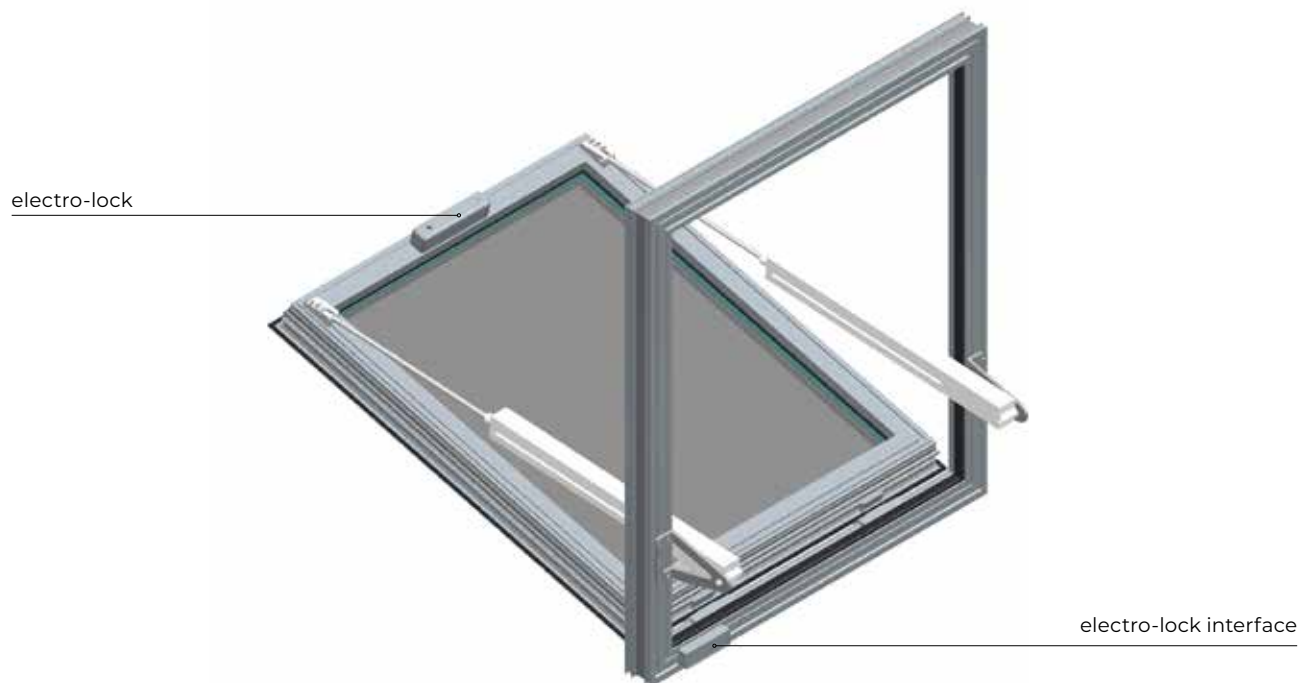


Fig. 15 mcr OSO THERM 75 smoke exhaust window opening outwards by means of two G spindle actuators with electro-lock and interface

1.1.3.2 | Design of outward-opening smoke exhaust window with chain actuators



Fig. 16 mcr OSO THERM 75 smoke exhaust window opening outwards by means of single chain actuator

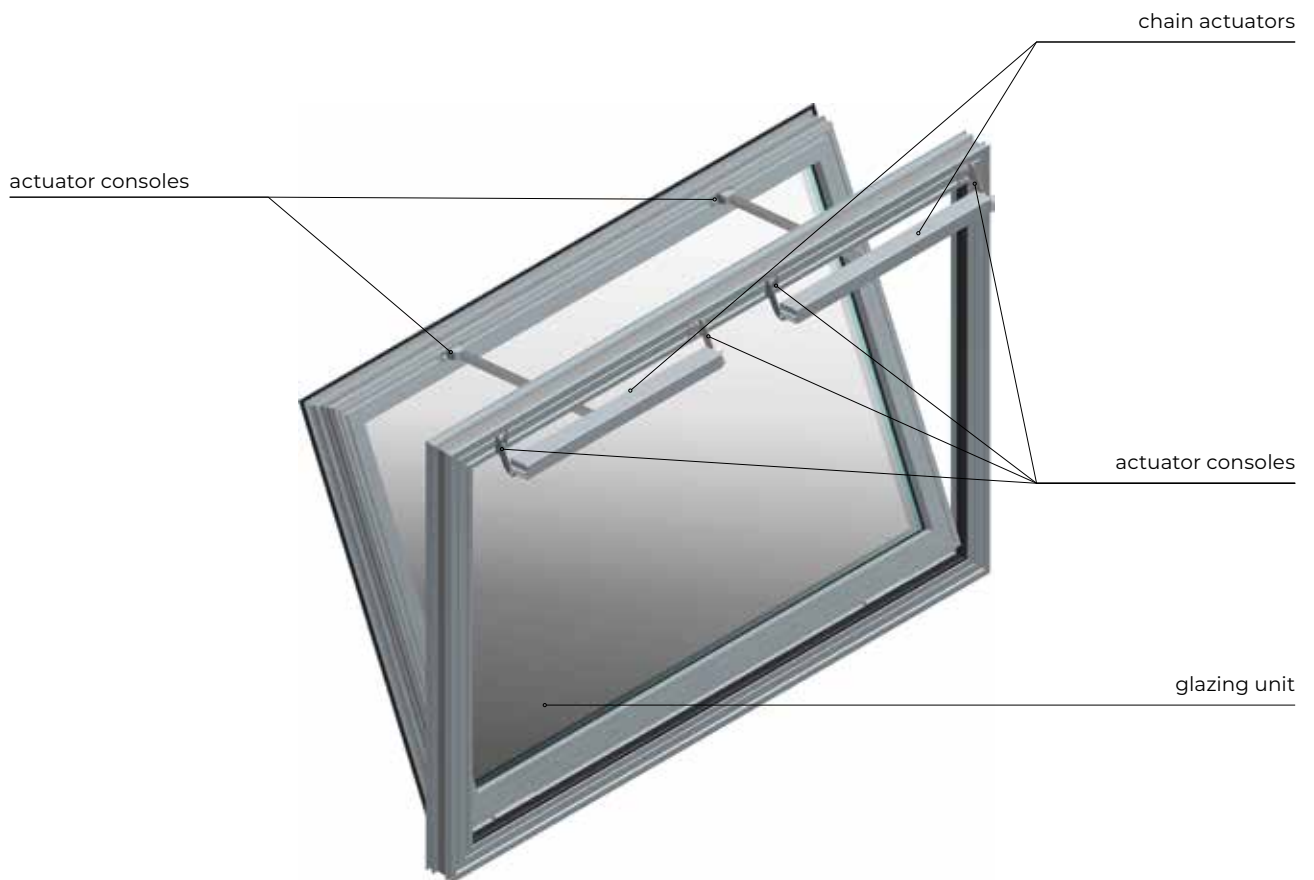


Fig. 17 mcr OSO THERM 75 smoke exhaust window opening outwards by means of two chain actuators

1.1.4 | Technical drawings of outward-opening smoke exhaust windows

1.1.4.1 | Technical drawings of the smoke exhaust window with S spindle actuators

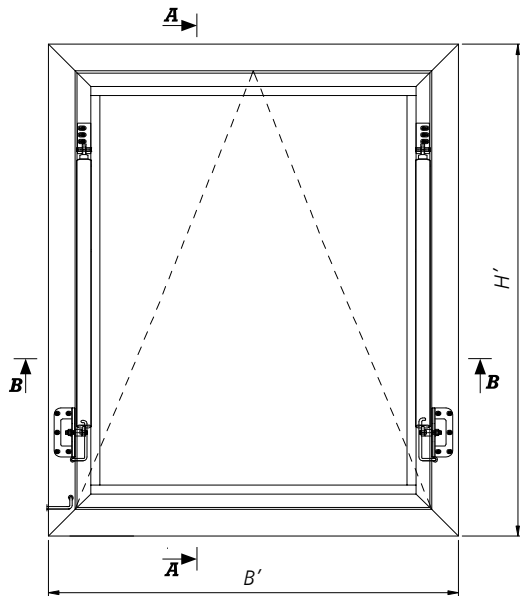


Fig. 18 view from inside of the mcr OSO THERM 75 smoke exhaust window with S spindle actuators in closed position

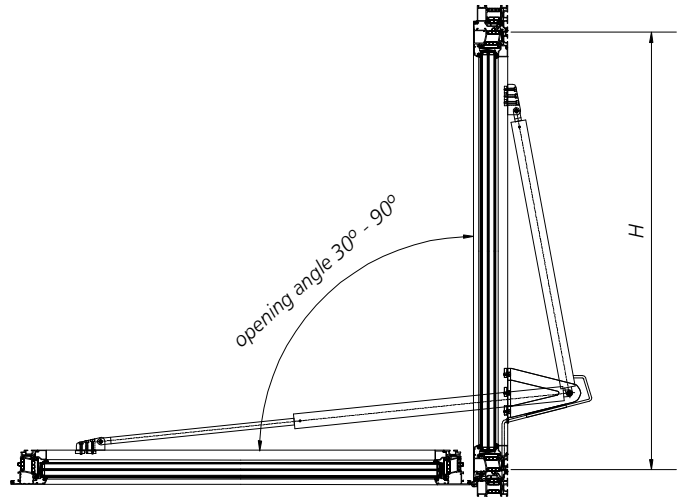


Fig. 19 A-A vertical cross-section through mcr OSO THERM 75 smoke exhaust window in open position

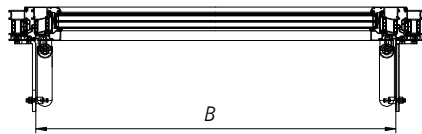


Fig. 20 B-B horizontal cross-section through mcr OSO THERM 75 smoke exhaust window in closed position

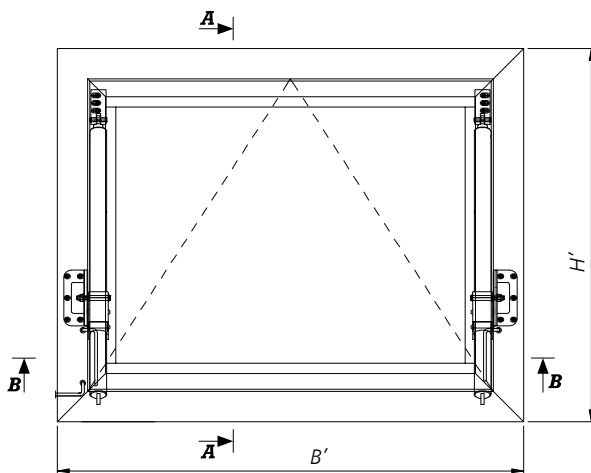


Fig. 21 view from inside of the mcr OSO THERM 75 smoke exhaust window with S spindle actuators with shifted pivot point in closed position

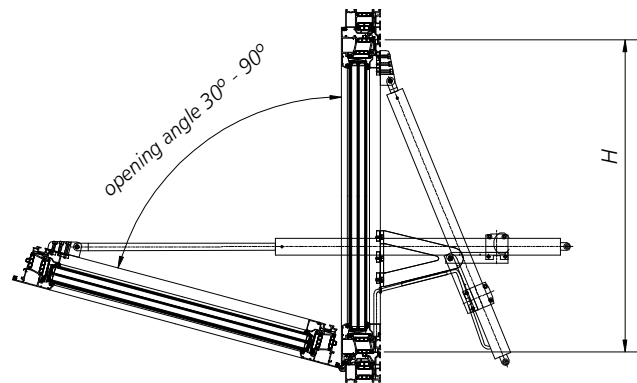


Fig. 22 A-A vertical cross-section through mcr OSO THERM 75 smoke exhaust window with shifted pivot point in open position

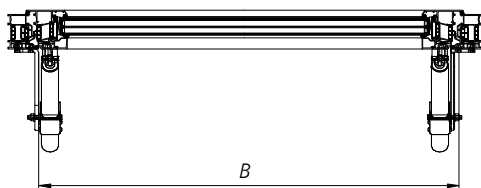


Fig. 23 B-B horizontal cross-section through mcr OSO THERM 75 smoke exhaust window in closed position

B' - external width of the smoke exhaust window
 H' - external height of the smoke exhaust window
 B - internal width of the smoke exhaust window
 H - internal height of the smoke exhaust window

1.1.4.2. | Technical drawings of the smoke exhaust window with G spindle actuators

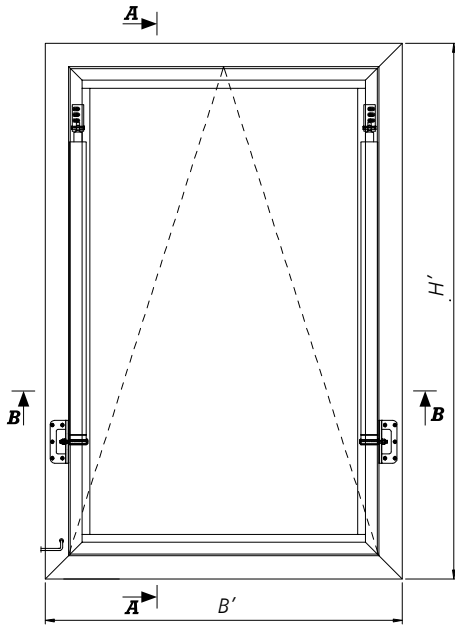


Fig. 24 view from inside of the mcr OSO THERM 75 smoke exhaust window with G spindle actuators in closed position

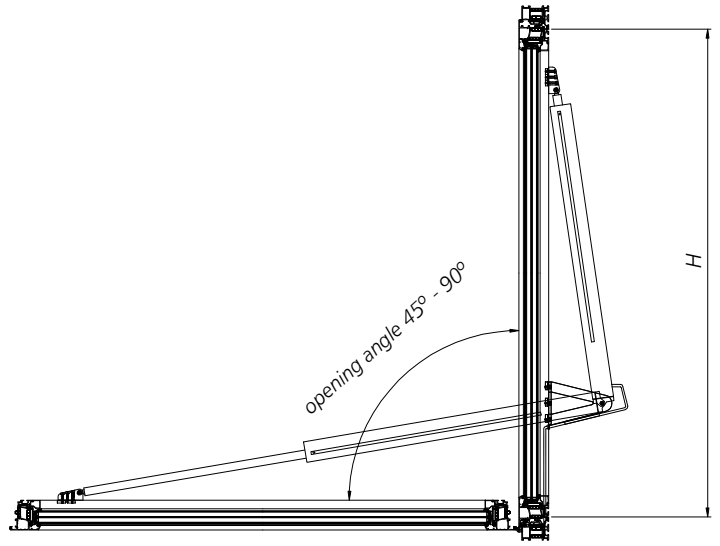


Fig. 25 **A-A** vertical cross-section through mcr OSO THERM 75 smoke exhaust window in open position

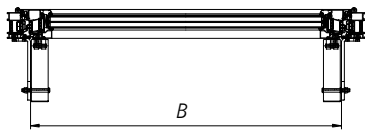


Fig. 26 **B-B** horizontal cross-section through smoke exhaust window mcr OSO THERM 75 smoke exhaust window in closed position

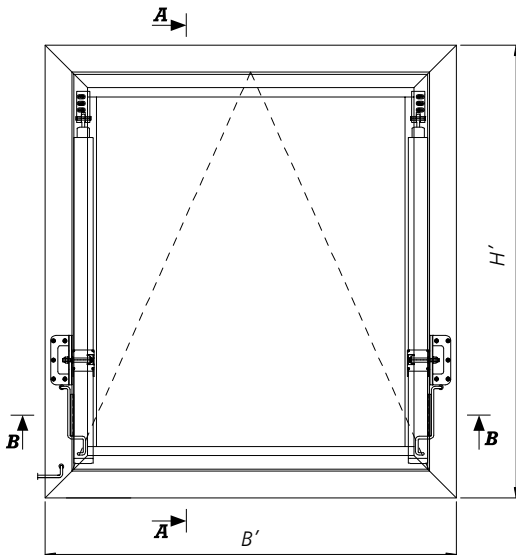


Fig. 27 view from inside of the mcr OSO THERM 75 smoke exhaust window with G spindle actuators with shifted pivot point in closed position

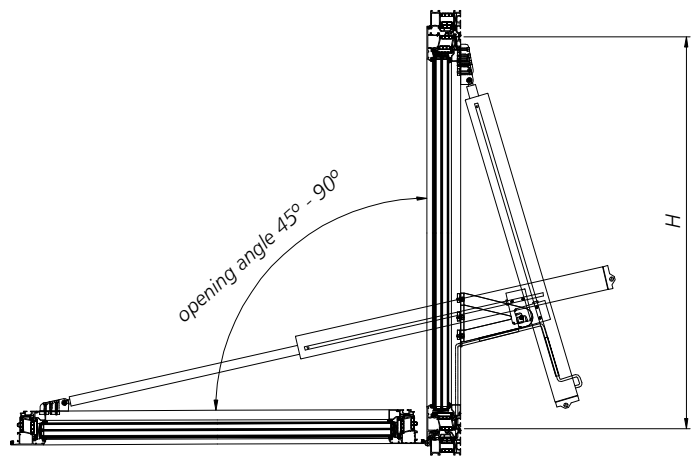


Fig. 28 **A-A** vertical cross-section through mcr OSO THERM 75 smoke exhaust window with shifted pivot point in open position

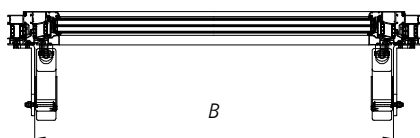


Fig. 29 **B-B** horizontal cross-section through mcr OSO THERM 75 smoke exhaust window with shifted pivot point in closed position

B' - external width of the smoke exhaust window
 H' - external height of the smoke exhaust window
 B - internal width of the smoke exhaust window
 H - internal height of the smoke exhaust window

1.1.4.3. | Technical drawings of the smoke exhaust window with HCV chain actuator

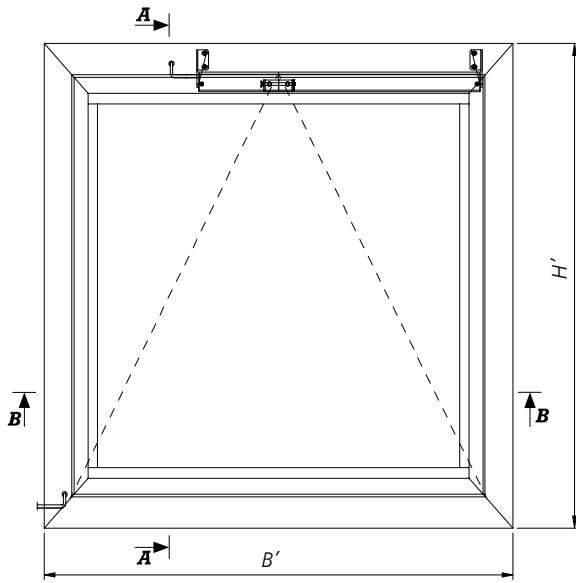


Fig. 30 view from inside of the mcr OSO THERM 75 smoke exhaust window with HCV chain actuator in closed position

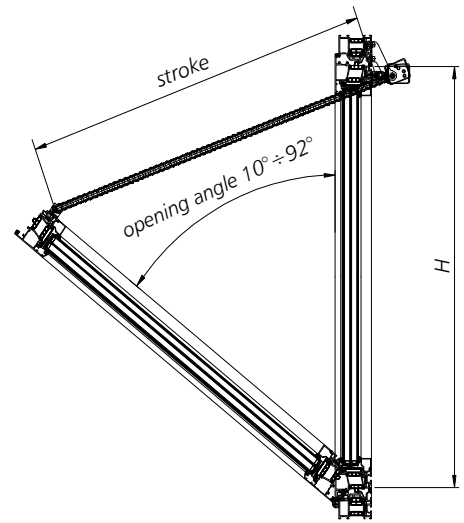


Fig. 31 **A-A** vertical cross-section through mcr OSO THERM 75 smoke exhaust window in open position

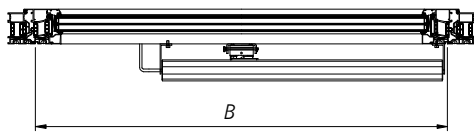


Fig. 32 **B-B** horizontal cross-section through smoke exhaust window mcr OSO THERM 75 smoke exhaust window in closed position

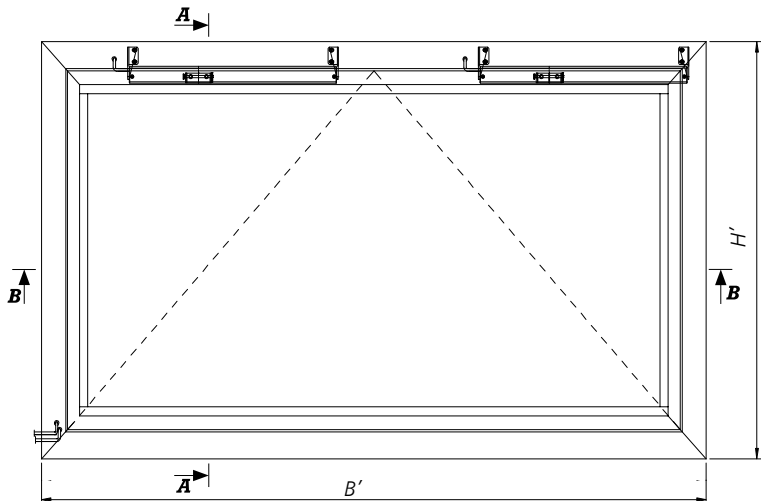


Fig. 33 view from inside of the mcr OSO THERM 75 smoke exhaust window with two HCV chain actuators in closed position

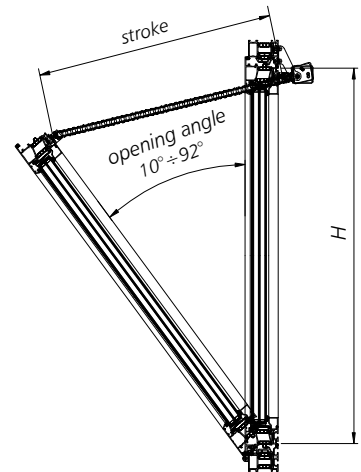


Fig. 34 vertical **A-A** cross-section through mcr OSO THERM 75 smoke exhaust window in open position

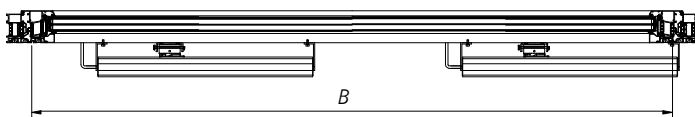


Fig. 35 **B-B** horizontal cross-section through mcr OSO THERM 75 smoke exhaust window in closed position

B' - external width of the smoke exhaust window
 H' - external height of the smoke exhaust window
 B - internal width of the smoke exhaust window
 H - internal height of the smoke exhaust window

1.1.5 | **Technical specification**

1.1.5.1 | **Types of smoke exhaust windows opening outwards by means of spindle actuators**

» **bottom hung outward-opening windows**



Fig. 36 *mcr OSO THERM 75 smoke exhaust window with two S spindle actuators*



Fig. 37 *mcr OSO THERM 75 smoke exhaust window with two G spindle actuators*



Fig. 38 *mcr OSO THERM 75 smoke exhaust window with two S spindle actuators with shifted pivot point*



Fig. 39 *mcr OSO THERM 75 smoke exhaust window with two G spindle actuators with shifted pivot point*

» **top-hung outward-opening windows**



Fig. 40 *mcr OSO THERM 75 smoke exhaust window with two S spindle actuators*



Fig. 41 *mcr OSO THERM 75 smoke exhaust window with two G spindle actuators*



Fig. 42 *mcr OSO THERM 75 smoke exhaust window with two S spindle actuators with shifted pivot point*



Fig. 43 *mcr OSO THERM 75 smoke exhaust window with two G spindle actuators with shifted pivot point*

1.1.5.2| Technical specification – top- and bottom-hung smoke exhaust windows opening outwards with spindle actuators

WINDOW SIZE*	Opening angle 30°			Opening angle 45°			Opening angle 60°			Opening angle 75°			Opening angle 90°		
B' x H'	ACTUATOR	POWER CONSUMPTION **	ACTIVE AERODYNAMIC AREA [Aa]	ACTUATOR	POWER CONSUMPTION **	ACTIVE AERODYNAMIC AREA [Aa]	ACTUATOR	POWER CONSUMPTION **	ACTIVE AERODYNAMIC AREA [Aa]	ACTUATOR	POWER CONSUMPTION **	ACTIVE AERODYNAMIC AREA [Aa]	ACTUATOR	POWER CONSUMPTION **	ACTIVE AERODYNAMIC AREA [Aa]
[mm]	-	[A]	[m²]	-	[A]	[m²]	-	[A]	[m²]	-	[A]	[m²]	-	[A]	[m²]
800 x 800	S08B-200	2x 0.8	0.17	S08B-300	2x 0.8	0.22	S08B-300	2x 0.8	0.26	S10C-400	2x 1.0	0.28	S10C-400	2x 1.0	0.29
800 x 900	S08B-200	2x 0.8	0.21	S08B-300	2x 0.8	0.26	S10C-400	2x 1.0	0.30	S10C-400	2x 1.0	0.32	S10C-400	2x 1.0	0.34
800 x 1000	S08B-200	2x 0.8	0.24	S10C-350	2x 1.0	0.30	S10C-400	2x 1.0	0.34	S10C-450	2x 1.0	0.37	S10C-400	2x 1.0	0.38
800 x 1100	S08B-200	2x 0.8	0.27	S08B-300	2x 0.8	0.34	S10C-350	2x 1.0	0.38	S10C-450	2x 1.0	0.41	S10C-450	2x 1.0	0.43
800 x 1200	S08B-300	2x 0.8	0.31	S10C-350	2x 1.0	0.38	S10C-400	2x 1.0	0.43	S10C-450	2x 1.0	0.45	S10C-450	2x 1.0	0.47
800 x 1300	S10C-350	2x 1.0	0.35	S10C-450	2x 1.0	0.42	S10C-450	2x 1.0	0.47	S10C-450	2x 1.0	0.50	G26H-600	2x 2.6	0.51
800 x 1400	S08B-300	2x 0.8	0.39	S10C-400	2x 1.0	0.47	S10C-450	2x 1.0	0.52	G26H-550	2x 2.6	0.54	G26H-600	2x 2.6	0.56
800 x 1500	S08B-300	2x 0.8	0.44	S10C-450	2x 1.0	0.51	S10C-450	2x 1.0	0.56	G26H-550	2x 2.6	0.59	G26H-600	2x 2.6	0.60
800 x 1600	S10C-350	2x 1.0	0.48	S10C-450	2x 1.0	0.56	G26H-550	2x 2.6	0.61	G26H-600	2x 2.6	0.63	G26H-600	2x 2.6	0.65
800 x 1700	S10C-350	2x 1.0	0.53	S10C-450	2x 1.0	0.61	G26H-550	2x 2.6	0.66	G26H-600	2x 2.6	0.68	G26H-750	2x 2.6	0.69
800 x 1800	S10C-400	2x 1.0	0.58	G26H-600	2x 2.6	0.66	G26H-600	2x 2.6	0.70	G26H-750	2x 2.6	0.72	G26H-750	2x 2.6	0.73
800 x 1900	S10C-400	2x 1.0	0.63	G26H-550	2x 2.6	0.71	G26H-750	2x 2.6	0.75	G26H-750	2x 2.6	0.77	G26H-750	2x 2.6	0.78
800 x 2000	S10C-450	2x 1.0	0.68	G26H-600	2x 2.6	0.76	G26H-750	2x 2.6	0.80	G40H-830	2x 4.0	0.82	G40H-830	2x 4.0	0.82
800 x 2100	S10C-450	2x 1.0	0.74	G26H-600	2x 2.6	0.81	G26H-750	2x 2.6	0.85	G40H-830	2x 4.0	0.86	G40H-830	2x 4.0	0.87
800 x 2200	S10C-450	2x 1.0	0.79	G26H-600	2x 2.6	0.87	G26H-750	2x 2.6	0.91	G40H-830	2x 4.0	0.91	G40H-830	2x 4.0	0.91
900 x 800	S08B-200	2x 0.8	0.20	S08B-300	2x 0.8	0.26	S08B-300	2x 0.8	0.29	S10C-400	2x 1.0	0.32	S10C-400	2x 1.0	0.34
900 x 900	S08B-200	2x 0.8	0.23	S08B-300	2x 0.8	0.30	S10C-400	2x 1.0	0.34	S10C-400	2x 1.0	0.37	S10C-400	2x 1.0	0.39
900 x 1000	S08B-200	2x 0.8	0.27	S10C-350	2x 1.0	0.34	S10C-400	2x 1.0	0.39	S10C-450	2x 1.0	0.42	S10C-400	2x 1.0	0.44
900 x 1100	S08B-200	2x 0.8	0.31	S08B-300	2x 0.8	0.39	S10C-350	2x 1.0	0.44	S10C-450	2x 1.0	0.47	S10C-450	2x 1.0	0.49
900 x 1200	S08B-300	2x 0.8	0.35	S10C-350	2x 1.0	0.44	S10C-400	2x 1.0	0.49	S10C-450	2x 1.0	0.52	G26H-600	2x 2.6	0.54
900 x 1300	S10C-350	2x 1.0	0.40	S10C-450	2x 1.0	0.48	S10C-450	2x 1.0	0.54	S10C-450	2x 1.0	0.57	G26H-600	2x 2.6	0.59
900 x 1400	S08B-300	2x 0.8	0.45	S10C-400	2x 1.0	0.53	S10C-450	2x 1.0	0.59	G26H-550	2x 2.6	0.62	G26H-600	2x 2.6	0.64
900 x 1500	S08B-300	2x 0.8	0.49	S10C-450	2x 1.0	0.59	S10C-450	2x 1.0	0.64	G26H-550	2x 2.6	0.67	G26H-600	2x 2.6	0.69
900 x 1600	S10C-350	2x 1.0	0.55	S10C-450	2x 1.0	0.64	G26H-550	2x 2.6	0.70	G26H-600	2x 2.6	0.73	G26H-600	2x 2.6	0.74
900 x 1700	S10C-350	2x 1.0	0.60	S10C-450	2x 1.0	0.69	G26H-550	2x 2.6	0.75	G26H-600	2x 2.6	0.78	G26H-750	2x 2.6	0.79
900 x 1800	S10C-400	2x 1.0	0.65	G26H-600	2x 2.6	0.75	G26H-600	2x 2.6	0.80	G26H-750	2x 2.6	0.83	G26H-750	2x 2.6	0.84
900 x 1900	S10C-400	2x 1.0	0.71	G26H-550	2x 2.6	0.81	G26H-750	2x 2.6	0.86	G26H-750	2x 2.6	0.88	G26H-750	2x 2.6	0.89
900 x 2000	S10C-450	2x 1.0	0.77	G26H-600	2x 2.6	0.87	G26H-750	2x 2.6	0.92	G40H-830	2x 4.0	0.94	G40H-830	2x 4.0	0.94
900 x 2100	S10C-450	2x 1.0	0.83	G26H-600	2x 2.6	0.93	G26H-750	2x 2.6	0.98	G40H-830	2x 4.0	0.99	G40H-830	2x 4.0	0.99
900 x 2200	S10C-450	2x 1.0	0.90	G26H-600	2x 2.6	0.99	G26H-750	2x 2.6	1.04	G40H-830	2x 4.0	1.04	G40H-830	2x 4.0	1.04
1000 x 800	S08B-200	2x 0.8	0.22	S08B-300	2x 0.8	0.29	S08B-300	2x 0.8	0.33	S10C-400	2x 1.0	0.36	S10C-400	2x 1.0	0.38
1000 x 900	S08B-200	2x 0.8	0.26	S08B-300	2x 0.8	0.34	S10C-400	2x 1.0	0.38	S10C-400	2x 1.0	0.42	S10C-400	2x 1.0	0.44
1000 x 1000	S08B-200	2x 0.8	0.30	S10C-350	2x 1.0	0.39	S10C-400	2x 1.0	0.44	S10C-450	2x 1.0	0.48	G26G-450	2x 2.6	0.50
1000 x 1100	S08B-200	2x 0.8	0.35	S08B-300	2x 0.8	0.44	S10C-350	2x 1.0	0.49	S10C-450	2x 1.0	0.53	G26H-550	2x 2.6	0.55

(*) It is possible to make intermediate dimensions of the smoke exhaust window between the values given in the table. Value of the active aerodynamic area for these dimensions is determined by linear interpolation.

(**) Smoke exhaust windows are equipped with a set of two spindle actuators. Power consumption is given for a set of two actuators.

1.1.5.2| Technical specification – top- and bottom-hung smoke exhaust windows opening outwards with spindle actuators

WINDOW SIZE*	Opening angle 30°			Opening angle 45°			Opening angle 60°			Opening angle 75°			Opening angle 90°		
B' x H'	ACTUATOR	POWER CONSUMPTION **	ACTIVE AERODYNAMIC AREA [Aa]	ACTUATOR	POWER CONSUMPTION **	ACTIVE AERODYNAMIC AREA [Aa]	ACTUATOR	POWER CONSUMPTION **	ACTIVE AERODYNAMIC AREA [Aa]	ACTUATOR	POWER CONSUMPTION **	ACTIVE AERODYNAMIC AREA [Aa]	ACTUATOR	POWER CONSUMPTION **	ACTIVE AERODYNAMIC AREA [Aa]
[mm]	-	[A]	[m ²]	-	[A]	[m ²]	-	[A]	[m ²]	-	[A]	[m ²]	-	[A]	[m ²]
1000 x 1200	S08B-300	2x 0.8	0.40	S10C-350	2x 1.0	0.49	S10C-400	2x 1.0	0.55	S10C-450	2x 1.0	0.59	G26H-600	2x 2.6	0.61
1000 x 1300	S10C-350	2x 1.0	0.45	S10C-450	2x 1.0	0.54	S10C-450	2x 1.0	0.61	S10C-450	2x 1.0	0.65	G26H-600	2x 2.6	0.67
1000 x 1400	S08B-300	2x 0.8	0.50	S10C-400	2x 1.0	0.60	S10C-450	2x 1.0	0.66	G26H-550	2x 2.6	0.70	G26H-600	2x 2.6	0.72
1000 x 1500	S08B-300	2x 0.8	0.55	S10C-450	2x 1.0	0.66	S10C-450	2x 1.0	0.72	G26H-550	2x 2.6	0.76	G26H-600	2x 2.6	0.78
1000 x 1600	S10C-350	2x 1.0	0.61	S10C-450	2x 1.0	0.72	G26H-550	2x 2.6	0.78	G26H-600	2x 2.6	0.82	G26H-600	2x 2.6	0.84
1000 x 1700	S10C-350	2x 1.0	0.67	S10C-450	2x 1.0	0.78	G26H-550	2x 2.6	0.84	G26H-600	2x 2.6	0.88	G26H-750	2x 2.6	0.89
1000 x 1800	S10C-400	2x 1.0	0.73	G26H-600	2x 2.6	0.84	G26H-600	2x 2.6	0.91	G26H-750	2x 2.6	0.94	G26H-750	2x 2.6	0.95
1000 x 1900	S10C-400	2x 1.0	0.79	G26H-550	2x 2.6	0.90	G26H-750	2x 2.6	0.97	G26H-750	2x 2.6	1.00	G26H-750	2x 2.6	1.01
1000 x 2000	S10C-450	2x 1.0	0.86	G26H-600	2x 2.6	0.97	G26H-750	2x 2.6	1.03	G40H-830	2x 4.0	1.06	G40H-830	2x 4.0	1.07
1000 x 2100	S10C-450	2x 1.0	0.93	G26H-600	2x 2.6	1.04	G26H-750	2x 2.6	1.10	G40H-830	2x 4.0	1.12	G40H-830	2x 4.0	1.12
1000 x 2200	S10C-450	2x 1.0	1.00	G26H-600	2x 2.6	1.11	G26H-750	2x 2.6	1.16	G40H-830	2x 4.0	1.18	G40H-830	2x 4.0	1.18
1100 x 800	S08B-200	2x 0.8	0.25	S08B-300	2x 0.8	0.32	S08B-300	2x 0.8	0.37	S10C-400	2x 1.0	0.41	S10C-400	2x 1.0	0.43
1100 x 900	S08B-200	2x 0.8	0.29	S08B-300	2x 0.8	0.37	S10C-400	2x 1.0	0.43	S10C-400	2x 1.0	0.47	S10C-400	2x 1.0	0.49
1100 x 1000	S08B-200	2x 0.8	0.34	S10C-350	2x 1.0	0.43	S10C-400	2x 1.0	0.49	S10C-450	2x 1.0	0.53	G26G-450	2x 2.6	0.55
1100 x 1100	S08B-200	2x 0.8	0.39	S08B-300	2x 0.8	0.48	S10C-350	2x 1.0	0.55	S10C-450	2x 1.0	0.59	G26H-550	2x 2.6	0.62
1100 x 1200	S08B-300	2x 0.8	0.44	S10C-350	2x 1.0	0.54	S10C-400	2x 1.0	0.61	S10C-450	2x 1.0	0.66	G26H-600	2x 2.6	0.68
1100 x 1300	S10C-350	2x 1.0	0.49	S10C-450	2x 1.0	0.60	S10C-450	2x 1.0	0.67	S10C-450	2x 1.0	0.72	G26H-600	2x 2.6	0.74
1100 x 1400	S08B-300	2x 0.8	0.55	S10C-400	2x 1.0	0.66	S10C-450	2x 1.0	0.74	G26H-550	2x 2.6	0.78	G26H-600	2x 2.6	0.81
1100 x 1500	S08B-300	2x 0.8	0.61	S10C-450	2x 1.0	0.73	S10C-450	2x 1.0	0.80	G26H-550	2x 2.6	0.85	G26H-600	2x 2.6	0.87
1100 x 1600	S10C-350	2x 1.0	0.67	S10C-450	2x 1.0	0.79	G26H-550	2x 2.6	0.87	G26H-600	2x 2.6	0.91	G26H-600	2x 2.6	0.93
1100 x 1700	S10C-350	2x 1.0	0.74	S10C-450	2x 1.0	0.86	G26H-550	2x 2.6	0.94	G26H-600	2x 2.6	0.98	G26H-750	2x 2.6	1.00
1100 x 1800	S10C-400	2x 1.0	0.80	G26H-600	2x 2.6	0.93	G26H-600	2x 2.6	1.00	G26H-750	2x 2.6	1.04	G26H-750	2x 2.6	1.06
1100 x 1900	S10C-400	2x 1.0	0.87	G26H-550	2x 2.6	1.00	G26H-750	2x 2.6	1.07	G26H-750	2x 2.6	1.11	G26H-750	2x 2.6	1.12
1100 x 2000	S10C-450	2x 1.0	0.95	G26H-600	2x 2.6	1.07	G26H-750	2x 2.6	1.15	G40H-830	2x 4.0	1.18	G40H-830	2x 4.0	1.19
1100 x 2100	S10C-450	2x 1.0	1.02	G26H-600	2x 2.6	1.15	G26H-750	2x 2.6	1.22	G40H-830	2x 4.0	1.24	G40H-830	2x 4.0	1.25
1100 x 2200	S10C-450	2x 1.0	1.10	G26H-600	2x 2.6	1.23	G26H-750	2x 2.6	1.29	G40H-830	2x 4.0	1.31	G40H-830	2x 4.0	1.32
1200 x 800	S08B-200	2x 0.8	0.27	S08B-300	2x 0.8	0.35	S08B-300	2x 0.8	0.41	S10C-400	2x 1.0	0.45	S10C-400	2x 1.0	0.47
1200 x 900	S08B-200	2x 0.8	0.32	S08B-300	2x 0.8	0.41	S10C-400	2x 1.0	0.47	S10C-400	2x 1.0	0.52	S10C-400	2x 1.0	0.54
1200 x 1000	S08B-200	2x 0.8	0.37	S10C-350	2x 1.0	0.47	S10C-400	2x 1.0	0.54	S10C-450	2x 1.0	0.58	G26G-450	2x 2.6	0.61
1200 x 1100	S08B-200	2x 0.8	0.42	S08B-300	2x 0.8	0.53	S10C-350	2x 1.0	0.60	S10C-450	2x 1.0	0.65	G26H-550	2x 2.6	0.68
1200 x 1200	S08B-300	2x 0.8	0.48	S10C-350	2x 1.0	0.59	S10C-400	2x 1.0	0.67	S10C-450	2x 1.0	0.72	G26H-600	2x 2.6	0.75
1200 x 1300	S10C-350	2x 1.0	0.54	S10C-450	2x 1.0	0.66	S10C-450	2x 1.0	0.74	G26G-450	2x 2.6	0.79	G26H-600	2x 2.6	0.82
1200 x 1400	S08B-300	2x 0.8	0.60	S10C-400	2x 1.0	0.73	S10C-450	2x 1.0	0.81	G26H-550	2x 2.6	0.86	G26H-600	2x 2.6	0.89
1200 x 1500	S08B-300	2x 0.8	0.66	S10C-450	2x 1.0	0.80	S10C-450	2x 1.0	0.88	G26H-550	2x 2.6	0.93	G26H-600	2x 2.6	0.96

(*) It is possible to make intermediate dimensions of the smoke exhaust window between the values given in the table.

Value of the active aerodynamic area for these dimensions is determined by linear interpolation.

(**) Smoke exhaust windows are equipped with a set of two spindle actuators. Power consumption is given for a set of two actuators.

1.1.5.2| Technical specification – top- and bottom-hung smoke exhaust windows opening outwards with spindle actuators

WINDOW SIZE*	Opening angle 30°			Opening angle 45°			Opening angle 60°			Opening angle 75°			Opening angle 90°		
	ACTUATOR	POWER CONSUMPTION **	ACTIVE AERODYNAMIC AREA [Aa]	ACTUATOR	POWER CONSUMPTION **	ACTIVE AERODYNAMIC AREA [Aa]	ACTUATOR	POWER CONSUMPTION **	ACTIVE AERODYNAMIC AREA [Aa]	ACTUATOR	POWER CONSUMPTION **	ACTIVE AERODYNAMIC AREA [Aa]	ACTUATOR	POWER CONSUMPTION **	ACTIVE AERODYNAMIC AREA [Aa]
[mm]	-	[A]	[m ²]	-	[A]	[m ²]	-	[A]	[m ²]	-	[A]	[m ²]	-	[A]	[m ²]
1200 x 1600	S10C-350	2x 1.0	0.73	S10C-450	2x 1.0	0.87	G26H-550	2x 2.6	0.95	G26H-600	2x 2.6	1.00	G26H-600	2x 2.6	1.03
1200 x 1700	S10C-350	2x 1.0	0.80	S10C-450	2x 1.0	0.94	G26H-550	2x 2.6	1.03	G26H-600	2x 2.6	1.08	G26H-750	2x 2.6	1.10
1200 x 1800	S10C-400	2x 1.0	0.88	G26H-600	2x 2.6	1.02	G26H-600	2x 2.6	1.10	G26H-750	2x 2.6	1.15	G26H-750	2x 2.6	1.17
1200 x 1900	S10C-400	2x 1.0	0.95	G26H-550	2x 2.6	1.10	G26H-750	2x 2.6	1.18	G26H-750	2x 2.6	1.22	G26H-750	2x 2.6	1.24
1200 x 2000	S10C-450	2x 1.0	1.03	G26H-600	2x 2.6	1.18	G26H-750	2x 2.6	1.26	G40H-830	2x 4.0	1.29	G40H-830	2x 4.0	1.31
1200 x 2100	S10C-450	2x 1.0	1.12	G26H-600	2x 2.6	1.26	G26H-750	2x 2.6	1.34	G40H-830	2x 4.0	1.37	G40H-830	2x 4.0	1.38
1200 x 2200	S10C-450	2x 1.0	1.20	G26H-600	2x 2.6	1.34	G26H-750	2x 2.6	1.42	G40H-830	2x 4.0	1.44	G40H-830	2x 4.0	1.45
1300 x 800	S08B-200	2x 0.8	0.29	S08B-300	2x 0.8	0.38	S08B-300	2x 0.8	0.44	S10C-400	2x 1.0	0.49	S10C-400	2x 1.0	0.51
1300 x 900	S08B-200	2x 0.8	0.34	S08B-300	2x 0.8	0.45	S10C-400	2x 1.0	0.51	S10C-400	2x 1.0	0.56	G26G-450	2x 2.6	0.59
1300 x 1000	S08B-200	2x 0.8	0.40	S10C-350	2x 1.0	0.51	S10C-400	2x 1.0	0.59	S10C-450	2x 1.0	0.64	G26G-450	2x 2.6	0.67
1300 x 1100	S08B-200	2x 0.8	0.46	S08B-300	2x 0.8	0.58	S10C-350	2x 1.0	0.66	S10C-450	2x 1.0	0.71	G26H-550	2x 2.6	0.74
1300 x 1200	S08B-300	2x 0.8	0.52	S10C-350	2x 1.0	0.65	S10C-400	2x 1.0	0.73	S10C-450	2x 1.0	0.79	G26H-600	2x 2.6	0.82
1300 x 1300	S10C-350	2x 1.0	0.58	S10C-450	2x 1.0	0.72	S10C-450	2x 1.0	0.81	G26G-450	2x 2.6	0.87	G26H-600	2x 2.6	0.90
1300 x 1400	S08B-300	2x 0.8	0.65	S10C-400	2x 1.0	0.79	S10C-450	2x 1.0	0.88	G26H-550	2x 2.6	0.94	G26H-600	2x 2.6	0.97
1300 x 1500	S08B-300	2x 0.8	0.72	S10C-450	2x 1.0	0.87	S10C-450	2x 1.0	0.96	G26H-550	2x 2.6	1.02	G26H-600	2x 2.6	1.05
1300 x 1600	S10C-350	2x 1.0	0.79	S10C-450	2x 1.0	0.94	G26H-550	2x 2.6	1.04	G26H-600	2x 2.6	1.10	G26H-600	2x 2.6	1.13
1300 x 1700	S10C-350	2x 1.0	0.87	S10C-450	2x 1.0	1.02	G26H-550	2x 2.6	1.12	G26H-600	2x 2.6	1.18	G26H-750	2x 2.6	1.20
1300 x 1800	S10C-400	2x 1.0	0.95	G26H-600	2x 2.6	1.11	G26H-600	2x 2.6	1.20	G26H-750	2x 2.6	1.25	G26H-750	2x 2.6	1.28
1300 x 1900	S10C-400	2x 1.0	1.03	G26H-550	2x 2.6	1.19	G26H-750	2x 2.6	1.29	G26H-750	2x 2.6	1.33	G26H-750	2x 2.6	1.36
1300 x 2000	S10C-450	2x 1.0	1.12	G26H-600	2x 2.6	1.28	G26H-750	2x 2.6	1.37	G40H-830	2x 4.0	1.41	G40H-830	2x 4.0	1.43
1300 x 2100	S10C-450	2x 1.0	1.21	G26H-600	2x 2.6	1.37	G26H-750	2x 2.6	1.46	G40H-830	2x 4.0	1.49	G40H-830	2x 4.0	1.51
1300 x 2200	S10C-450	2x 1.0	1.30	G26H-600	2x 2.6	1.46	G26H-750	2x 2.6	1.54	G40H-830	2x 4.0	1.58	G40H-830	2x 4.0	1.59
1400 x 800	S08B-200	2x 0.8	0.32	S08B-300	2x 0.8	0.41	S08B-300	2x 0.8	0.48	S10C-400	2x 1.0	0.53	S10C-400	2x 1.0	0.56
1400 x 900	S08B-200	2x 0.8	0.37	S08B-300	2x 0.8	0.48	S10C-400	2x 1.0	0.56	S10C-400	2x 1.0	0.61	G26G-450	2x 2.6	0.64
1400 x 1000	S08B-200	2x 0.8	0.43	S10C-350	2x 1.0	0.55	S10C-400	2x 1.0	0.63	S10C-450	2x 1.0	0.69	G26G-450	2x 2.6	0.72
1400 x 1100	S08B-200	2x 0.8	0.49	S08B-300	2x 0.8	0.62	S10C-350	2x 1.0	0.71	S10C-450	2x 1.0	0.77	G26H-550	2x 2.6	0.81
1400 x 1200	S08B-300	2x 0.8	0.56	S10C-350	2x 1.0	0.70	S10C-400	2x 1.0	0.79	S10C-450	2x 1.0	0.86	G26H-600	2x 2.6	0.89
1400 x 1300	S10C-350	2x 1.0	0.63	S10C-450	2x 1.0	0.78	S10C-450	2x 1.0	0.87	G26G-450	2x 2.6	0.94	G26H-600	2x 2.6	0.97
1400 x 1400	S08B-300	2x 0.8	0.70	S10C-400	2x 1.0	0.85	S10C-450	2x 1.0	0.96	G26H-550	2x 2.6	1.02	G26H-600	2x 2.6	1.06
1400 x 1500	S08B-300	2x 0.8	0.77	S10C-450	2x 1.0	0.94	S10C-450	2x 1.0	1.04	G26H-550	2x 2.6	1.11	G26H-600	2x 2.6	1.14
1400 x 1600	S10C-350	2x 1.0	0.85	S10C-450	2x 1.0	1.02	G26H-550	2x 2.6	1.12	G26H-600	2x 2.6	1.19	G26H-600	2x 2.6	1.22
1400 x 1700	S10C-350	2x 1.0	0.93	S10C-450	2x 1.0	1.10	G26H-550	2x 2.6	1.21	G26H-600	2x 2.6	1.27	G26H-750	2x 2.6	1.31
1400 x 1800	S10C-400	2x 1.0	1.02	G26H-600	2x 2.6	1.19	G26H-600	2x 2.6	1.30	G26H-750	2x 2.6	1.36	G26H-750	2x 2.6	1.39
1400 x 1900	S10C-400	2x 1.0	1.11	G26H-550	2x 2.6	1.28	G26H-750	2x 2.6	1.39	G26H-750	2x 2.6	1.45	G26H-750	2x 2.6	1.47

(*) It is possible to make intermediate dimensions of the smoke exhaust window between the values given in the table.

Value of the active aerodynamic area for these dimensions is determined by linear interpolation.

(**) Smoke exhaust windows are equipped with a set of two spindle actuators. Power consumption is given for a set of two actuators.

1.1.5.2| Technical specification – top- and bottom-hung smoke exhaust windows opening outwards with spindle actuators

WINDOW SIZE*	Opening angle 30°			Opening angle 45°			Opening angle 60°			Opening angle 75°			Opening angle 90°		
B' x H'	ACTUATOR	POWER CONSUMPTION **	ACTIVE AERODYNAMIC AREA [Aa]	ACTUATOR	POWER CONSUMPTION **	ACTIVE AERODYNAMIC AREA [Aa]	ACTUATOR	POWER CONSUMPTION **	ACTIVE AERODYNAMIC AREA [Aa]	ACTUATOR	POWER CONSUMPTION **	ACTIVE AERODYNAMIC AREA [Aa]	ACTUATOR	POWER CONSUMPTION **	ACTIVE AERODYNAMIC AREA [Aa]
[mm]	-	[A]	[m²]	-	[A]	[m²]	-	[A]	[m²]	-	[A]	[m²]	-	[A]	[m²]
1400 x 2000	S10C-450	2x 1.0	1.20	G26H-600	2x 2.6	1.38	G26H-750	2x 2.6	1.48	G40H-830	2x 4.0	1.53	G40H-830	2x 4.0	1.56
1400 x 2100	S10C-450	2x 1.0	1.29	G26H-600	2x 2.6	1.47	G26H-750	2x 2.6	1.58	G40H-830	2x 4.0	1.62	G40H-830	2x 4.0	1.64
1400 x 2200	S10C-450	2x 1.0	1.39	G26H-600	2x 2.6	1.57	G26H-750	2x 2.6	1.67	G40H-830	2x 4.0	1.71	G40H-830	2x 4.0	1.72
1500 x 800	S08B-200	2x 0.8	0.34	S08B-300	2x 0.8	0.45	S08B-300	2x 0.8	0.52	S10C-400	2x 1.0	0.57	S10C-400	2x 1.0	0.60
1500 x 900	S08B-200	2x 0.8	0.40	S08B-300	2x 0.8	0.52	S10C-400	2x 1.0	0.60	S10C-400	2x 1.0	0.66	G26G-450	2x 2.6	0.69
1500 x 1000	S08B-200	2x 0.8	0.46	S10C-350	2x 1.0	0.59	S10C-400	2x 1.0	0.68	S10C-450	2x 1.0	0.75	G26G-450	2x 2.6	0.78
1500 x 1100	S08B-200	2x 0.8	0.53	S08B-300	2x 0.8	0.67	S10C-350	2x 1.0	0.77	S10C-450	2x 1.0	0.83	G26H-550	2x 2.6	0.87
1500 x 1200	S08B-300	2x 0.8	0.60	S10C-350	2x 1.0	0.75	S10C-400	2x 1.0	0.85	G26G-450	2x 2.6	0.92	G26H-600	2x 2.6	0.96
1500 x 1300	S10C-350	2x 1.0	0.67	S10C-450	2x 1.0	0.83	S10C-450	2x 1.0	0.94	G26G-450	2x 2.6	1.01	G26H-600	2x 2.6	1.05
1500 x 1400	S08B-300	2x 0.8	0.75	S10C-400	2x 1.0	0.92	S10C-450	2x 1.0	1.03	G26H-550	2x 2.6	1.10	G26H-600	2x 2.6	1.14
1500 x 1500	S08B-300	2x 0.8	0.83	S10C-450	2x 1.0	1.00	S10C-450	2x 1.0	1.12	G26H-550	2x 2.6	1.19	G26H-600	2x 2.6	1.23
1500 x 1600	S10C-350	2x 1.0	0.91	S10C-450	2x 1.0	1.09	G26H-550	2x 2.6	1.21	G26H-600	2x 2.6	1.28	G26H-600	2x 2.6	1.32
1500 x 1700	S10C-350	2x 1.0	1.00	S10C-450	2x 1.0	1.18	G26H-550	2x 2.6	1.30	G26H-600	2x 2.6	1.37	G26H-750	2x 2.6	1.41
1500 x 1800	S10C-400	2x 1.0	1.09	G26H-600	2x 2.6	1.28	G26H-600	2x 2.6	1.40	G26H-750	2x 2.6	1.46	G26H-750	2x 2.6	1.50
1500 x 1900	S10C-400	2x 1.0	1.18	G26H-550	2x 2.6	1.38	G26H-750	2x 2.6	1.49	G26H-750	2x 2.6	1.56	G26H-750	2x 2.6	1.59
1500 x 2000	S10C-450	2x 1.0	1.28	G26H-600	2x 2.6	1.48	G26H-750	2x 2.6	1.59	G40H-830	2x 4.0	1.65	G40H-830	2x 4.0	1.68
1500 x 2100	S10C-450	2x 1.0	1.38	G26H-600	2x 2.6	1.58	G26H-750	2x 2.6	1.69	G40H-830	2x 4.0	1.74	G40H-830	2x 4.0	1.77
1500 x 2200	S10C-450	2x 1.0	1.49	G26H-600	2x 2.6	1.68	G26H-750	2x 2.6	1.79	G40H-830	2x 4.0	1.84	G40H-830	2x 4.0	1.86
1600 x 800	S08B-200	2x 0.8	0.36	S08B-300	2x 0.8	0.48	S08B-300	2x 0.8	0.56	S10C-400	2x 1.0	0.61	S10C-400	2x 1.0	0.64
1600 x 900	S08B-200	2x 0.8	0.43	S08B-300	2x 0.8	0.56	S10C-400	2x 1.0	0.64	S10C-400	2x 1.0	0.71	G26G-450	2x 2.6	0.74
1600 x 1000	S08B-200	2x 0.8	0.49	S10C-350	2x 1.0	0.64	S10C-400	2x 1.0	0.73	S10C-450	2x 1.0	0.80	G26G-450	2x 2.6	0.84
1600 x 1100	S08B-200	2x 0.8	0.56	S08B-300	2x 0.8	0.72	S10C-350	2x 1.0	0.82	S10C-450	2x 1.0	0.89	G26H-550	2x 2.6	0.93
1600 x 1200	S08B-300	2x 0.8	0.64	S10C-350	2x 1.0	0.80	S10C-400	2x 1.0	0.91	G26G-450	2x 2.6	0.99	G26H-600	2x 2.6	1.03
1600 x 1300	S10C-350	2x 1.0	0.71	S10C-450	2x 1.0	0.89	S10C-450	2x 1.0	1.01	G26G-450	2x 2.6	1.08	G26H-600	2x 2.6	1.13
1600 x 1400	S08B-300	2x 0.8	0.79	S10C-400	2x 1.0	0.98	S10C-450	2x 1.0	1.10	G26H-550	2x 2.6	1.18	G26H-600	2x 2.6	1.22
1600 x 1500	S08B-300	2x 0.8	0.88	S10C-450	2x 1.0	1.07	G26G-450	2x 2.6	1.20	G26H-550	2x 2.6	1.28	G26H-600	2x 2.6	1.32
1600 x 1600	S10C-350	2x 1.0	0.97	S10C-450	2x 1.0	1.17	G26H-550	2x 2.6	1.29	G26H-600	2x 2.6	1.37	G26H-600	2x 2.6	1.42
1600 x 1700	S10C-350	2x 1.0	1.06	S10C-450	2x 1.0	1.26	G26H-550	2x 2.6	1.39	G26H-600	2x 2.6	1.47	G26H-750	2x 2.6	1.51
1600 x 1800	S10C-400	2x 1.0	1.15	G26H-600	2x 2.6	1.36	G26H-600	2x 2.6	1.50	G26H-750	2x 2.6	1.57	G26H-750	2x 2.6	1.61
1600 x 1900	S10C-400	2x 1.0	1.25	G26H-550	2x 2.6	1.47	G26H-750	2x 2.6	1.60	G26H-750	2x 2.6	1.67	G40H-830	2x 4.0	1.70
1600 x 2000	S10C-450	2x 1.0	1.36	G26H-600	2x 2.6	1.57	G26H-750	2x 2.6	1.70	G40H-830	2x 4.0	1.77	G40H-830	2x 4.0	1.80
1600 x 2100	S10C-450	2x 1.0	1.47	G26H-600	2x 2.6	1.68	G26H-750	2x 2.6	1.81	G40H-830	2x 4.0	1.87	G40H-830	2x 4.0	1.90
1600 x 2200	S10C-450	2x 1.0	1.58	G26H-600	2x 2.6	1.79	G26H-750	2x 2.6	1.92	G40H-830	2x 4.0	1.97	G40H-830	2x 4.0	1.99
1700 x 800	S08B-200	2x 0.8	0.39	S08B-300	2x 0.8	0.51	S08B-300	2x 0.8	0.59	S10C-400	2x 1.0	0.65	G26G-450	2x 2.6	0.69

(*) It is possible to make intermediate dimensions of the smoke exhaust window between the values given in the table. Value of the active aerodynamic area for these dimensions is determined by linear interpolation.

(**) Smoke exhaust windows are equipped with a set of two spindle actuators. Power consumption is given for a set of two actuators.

1.1.5.2| Technical specification – top- and bottom-hung smoke exhaust windows opening outwards with spindle actuators

WINDOW SIZE*	Opening angle 30°			Opening angle 45°			Opening angle 60°			Opening angle 75°			Opening angle 90°		
B' x H'	ACTUATOR	POWER CONSUMPTION **	ACTIVE AERODYNAMIC AREA [Aa]	ACTUATOR	POWER CONSUMPTION **	ACTIVE AERODYNAMIC AREA [Aa]	ACTUATOR	POWER CONSUMPTION **	ACTIVE AERODYNAMIC AREA [Aa]	ACTUATOR	POWER CONSUMPTION **	ACTIVE AERODYNAMIC AREA [Aa]	ACTUATOR	POWER CONSUMPTION **	ACTIVE AERODYNAMIC AREA [Aa]
[mm]	-	[A]	[m ²]	-	[A]	[m ²]	-	[A]	[m ²]	-	[A]	[m ²]	-	[A]	[m ²]
1700 x 900	S08B-200	2x 0.8	0.45	S08B-300	2x 0.8	0.59	S10C-400	2x 1.0	0.69	S10C-400	2x 1.0	0.75	G26G-450	2x 2.6	0.79
1700 x 1000	S08B-200	2x 0.8	0.52	S10C-350	2x 1.0	0.68	S10C-400	2x 1.0	0.78	S10C-450	2x 1.0	0.85	G26G-450	2x 2.6	0.89
1700 x 1100	S08B-200	2x 0.8	0.60	S08B-300	2x 0.8	0.76	S10C-350	2x 1.0	0.88	G26G-450	2x 2.6	0.95	G26H-550	2x 2.6	1.00
1700 x 1200	S08B-300	2x 0.8	0.67	S10C-350	2x 1.0	0.85	S10C-400	2x 1.0	0.97	G26G-450	2x 2.6	1.06	G26H-600	2x 2.6	1.10
1700 x 1300	S10C-350	2x 1.0	0.76	S10C-450	2x 1.0	0.95	S10C-450	2x 1.0	1.07	G26G-450	2x 2.6	1.16	G26H-600	2x 2.6	1.20
1700 x 1400	S08B-300	2x 0.8	0.84	S10C-400	2x 1.0	1.04	S10C-450	2x 1.0	1.17	G26H-550	2x 2.6	1.26	G26H-600	2x 2.6	1.31
1700 x 1500	S08B-300	2x 0.8	0.93	S10C-450	2x 1.0	1.14	G26G-450	2x 2.6	1.27	G26H-550	2x 2.6	1.36	G26H-600	2x 2.6	1.41
1700 x 1600	S10C-350	2x 1.0	1.02	S10C-450	2x 1.0	1.24	G26H-550	2x 2.6	1.38	G26H-600	2x 2.6	1.47	G26H-750	2x 2.6	1.51
1700 x 1700	S10C-350	2x 1.0	1.12	S10C-450	2x 1.0	1.34	G26H-550	2x 2.6	1.48	G26H-600	2x 2.6	1.57	G26H-750	2x 2.6	1.61
1700 x 1800	S10C-400	2x 1.0	1.22	G26H-600	2x 2.6	1.45	G26H-600	2x 2.6	1.59	G26H-750	2x 2.6	1.68	G26H-750	2x 2.6	1.72
1700 x 1900	S10C-400	2x 1.0	1.33	G26H-550	2x 2.6	1.56	G26H-750	2x 2.6	1.70	G26H-750	2x 2.6	1.78	G40H-830	2x 4.0	1.82
1700 x 2000	S10C-450	2x 1.0	1.44	G26H-600	2x 2.6	1.67	G26H-750	2x 2.6	1.81	G40H-830	2x 4.0	1.89	G40H-830	2x 4.0	1.92
1800 x 800	S08B-200	2x 0.8	0.41	S08B-300	2x 0.8	0.54	S08B-300	2x 0.8	0.63	S10C-400	2x 1.0	0.70	G26G-450	2x 2.6	0.73
1800 x 900	S08B-200	2x 0.8	0.48	S08B-300	2x 0.8	0.63	S10C-400	2x 1.0	0.73	S10C-400	2x 1.0	0.80	G26G-450	2x 2.6	0.84
1800 x 1000	S08B-200	2x 0.8	0.55	S10C-350	2x 1.0	0.72	S10C-400	2x 1.0	0.83	S10C-450	2x 1.0	0.91	G26G-450	2x 2.6	0.95
1800 x 1100	S08B-200	2x 0.8	0.63	S08B-300	2x 0.8	0.81	S10C-350	2x 1.0	0.93	G26G-450	2x 2.6	1.01	G26H-550	2x 2.6	1.06
1800 x 1200	S08B-300	2x 0.8	0.71	S10C-350	2x 1.0	0.91	S10C-400	2x 1.0	1.03	G26G-450	2x 2.6	1.12	G26H-600	2x 2.6	1.17
1800 x 1300	S10C-350	2x 1.0	0.80	S10C-450	2x 1.0	1.00	S10C-450	2x 1.0	1.14	G26G-450	2x 2.6	1.23	G26H-600	2x 2.6	1.28
1800 x 1400	S08B-300	2x 0.8	0.89	S10C-400	2x 1.0	1.10	G26G-450	2x 2.6	1.24	G26H-550	2x 2.6	1.34	G26H-600	2x 2.6	1.39
1800 x 1500	S08B-300	2x 0.8	0.98	S10C-450	2x 1.0	1.21	G26G-450	2x 2.6	1.35	G26H-550	2x 2.6	1.45	G26H-601	2x 2.6	1.50
1800 x 1600	S10C-350	2x 1.0	1.08	S10C-450	2x 1.0	1.31	G26H-550	2x 2.6	1.46	G26H-600	2x 2.6	1.56	G26H-750	2x 2.6	1.61
1800 x 1700	S10C-350	2x 1.0	1.18	S10C-450	2x 1.0	1.42	G26H-550	2x 2.6	1.57	G26H-600	2x 2.6	1.67	G26H-750	2x 2.6	1.72
1800 x 1800	S10C-400	2x 1.0	1.29	G26H-600	2x 2.6	1.54	G26H-600	2x 2.6	1.69	G26H-750	2x 2.6	1.78	G40H-830	2x 4.0	1.83
1800 x 1900	S10C-400	2x 1.0	1.40	G26H-550	2x 2.6	1.65	G26H-750	2x 2.6	1.80	G26H-750	2x 2.6	1.89	G40H-830	2x 4.0	1.94
1900 x 800	S08B-200	2x 0.8	0.43	S08B-300	2x 0.8	0.57	S08B-300	2x 0.8	0.67	S10C-400	2x 1.0	0.74	G26G-450	2x 2.6	0.78
1900 x 900	S08B-200	2x 0.8	0.51	S08B-300	2x 0.8	0.66	S10C-400	2x 1.0	0.77	S10C-400	2x 1.0	0.85	G26G-450	2x 2.6	0.89
1900 x 1000	S08B-200	2x 0.8	0.58	S10C-350	2x 1.0	0.76	S10C-400	2x 1.0	0.88	S10C-450	2x 1.0	0.96	G26G-450	2x 2.6	1.01
1900 x 1100	S08B-200	2x 0.8	0.67	S08B-300	2x 0.8	0.86	S10C-350	2x 1.0	0.98	G26G-450	2x 2.6	1.07	G26H-550	2x 2.6	1.12
1900 x 1200	S08B-300	2x 0.8	0.75	S10C-350	2x 1.0	0.96	S10C-400	2x 1.0	1.09	G26G-450	2x 2.6	1.19	G26H-600	2x 2.6	1.24
1900 x 1300	S10C-350	2x 1.0	0.84	S10C-450	2x 1.0	1.06	S10C-450	2x 1.0	1.20	G26G-450	2x 2.6	1.30	G26H-600	2x 2.6	1.36
1900 x 1400	S08B-300	2x 0.8	0.94	S10C-400	2x 1.0	1.17	G26G-450	2x 2.6	1.32	G26H-550	2x 2.6	1.42	G26H-600	2x 2.6	1.47
1900 x 1500	S08B-300	2x 0.8	1.03	S10C-450	2x 1.0	1.27	G26G-450	2x 2.6	1.43	G26H-550	2x 2.6	1.53	G26H-750	2x 2.6	1.59
1900 x 1600	S10C-350	2x 1.0	1.14	S10C-450	2x 1.0	1.39	G26H-550	2x 2.6	1.55	G26H-600	2x 2.6	1.65	G26H-750	2x 2.6	1.70
1900 x 1700	S10C-350	2x 1.0	1.24	S10C-450	2x 1.0	1.50	G26H-550	2x 2.6	1.67	G26H-600	2x 2.6	1.77	G26H-750	2x 2.6	1.82

(*) It is possible to make intermediate dimensions of the smoke exhaust window between the values given in the table. Value of the active aerodynamic area for these dimensions is determined by linear interpolation.

(**) Smoke exhaust windows are equipped with a set of two spindle actuators. Power consumption is given for a set of two actuators.

1.1.5.2| Technical specification – top- and bottom-hung smoke exhaust windows opening outwards with spindle actuators

WINDOW SIZE*	Opening angle 30°			Opening angle 45°			Opening angle 60°			Opening angle 75°			Opening angle 90°		
B' x H'	ACTUATOR	POWER CONSUMPTION **	ACTIVE AERODYNAMIC AREA [Aa]	ACTUATOR	POWER CONSUMPTION **	ACTIVE AERODYNAMIC AREA [Aa]	ACTUATOR	POWER CONSUMPTION **	ACTIVE AERODYNAMIC AREA [Aa]	ACTUATOR	POWER CONSUMPTION **	ACTIVE AERODYNAMIC AREA [Aa]	ACTUATOR	POWER CONSUMPTION **	ACTIVE AERODYNAMIC AREA [Aa]
[mm]	-	[A]	[m²]	-	[A]	[m²]	-	[A]	[m²]	-	[A]	[m²]	-	[A]	[m²]
2000 x 900	S08B-200	2x 0.8	0.53	S08B-300	2x 0.8	0.70	S10C-400	2x 1.0	0.81	S10C-400	2x 1.0	0.90	G26G-450	2x 2.6	0.94
2000 x 1000	S08B-200	2x 0.8	0.61	S10C-350	2x 1.0	0.80	S10C-400	2x 1.0	0.93	G26G-450	2x 2.6	1.02	G26G-450	2x 2.6	1.06
1900 x 1800	S10C-400	2x 1.0	1.36	G26H-600	2x 2.6	1.62	G26H-600	2x 2.6	1.79	G26H-750	2x 2.6	1.88	G40H-830	2x 4.0	1.94
2000 x 800	S08B-200	2x 0.8	0.45	S08B-300	2x 0.8	0.60	S08B-300	2x 0.8	0.70	S10C-400	2x 1.0	0.78	G26G-450	2x 2.6	0.82
2000 x 1100	S08B-200	2x 0.8	0.70	S08B-300	2x 0.8	0.90	S10C-450	2x 1.0	1.04	G26G-450	2x 2.6	1.13	G26H-550	2x 2.6	1.19
2000 x 1200	S08B-300	2x 0.8	0.79	S10C-350	2x 1.0	1.01	S10C-400	2x 1.0	1.15	G26G-450	2x 2.6	1.25	G26H-600	2x 2.6	1.31
2000 x 1300	S10C-350	2x 1.0	0.88	S10C-450	2x 1.0	1.12	S10C-450	2x 1.0	1.27	G26G-450	2x 2.6	1.38	G26H-600	2x 2.6	1.43
2000 x 1400	S08B-300	2x 0.8	0.98	S10C-400	2x 1.0	1.23	G26G-450	2x 2.6	1.39	G26H-550	2x 2.6	1.50	G26H-600	2x 2.6	1.55
2000 x 1500	S08B-300	2x 0.8	1.09	S10C-450	2x 1.0	1.34	G26G-450	2x 2.6	1.51	G26H-550	2x 2.6	1.62	G26H-750	2x 2.6	1.68
2000 x 1600	S10C-350	2x 1.0	1.19	S10C-450	2x 1.0	1.46	G26H-550	2x 2.6	1.63	G26H-600	2x 2.6	1.74	G26H-750	2x 2.6	1.80
2000 x 1700	S10C-350	2x 1.0	1.30	S10C-450	2x 1.0	1.58	G26H-550	2x 2.6	1.75	G26H-600	2x 2.6	1.87	G26H-750	2x 2.6	1.92
2100 x 800	S08B-200	2x 0.8	0.48	S08B-300	2x 0.8	0.64	S08B-300	2x 0.8	0.74	S10C-400	2x 1.0	0.82	G26G-450	2x 2.6	0.86
2100 x 900	S08B-200	2x 0.8	0.56	S08B-300	2x 0.8	0.74	S10C-400	2x 1.0	0.86	S10C-400	2x 1.0	0.94	G26G-450	2x 2.6	0.99
2100 x 1000	S08B-200	2x 0.8	0.65	S10C-350	2x 1.0	0.84	S10C-400	2x 1.0	0.97	G26G-450	2x 2.6	1.07	G26G-450	2x 2.6	1.12
2100 x 1100	S08B-200	2x 0.8	0.73	S08B-300	2x 0.8	0.95	S10C-450	2x 1.0	1.09	G26G-450	2x 2.6	1.19	G26H-550	2x 2.6	1.25
2100 x 1200	S08B-300	2x 0.8	0.83	S10C-350	2x 1.0	1.06	G26G-450	2x 2.6	1.21	G26G-450	2x 2.6	1.32	G26H-600	2x 2.6	1.38
2100 x 1300	S10C-350	2x 1.0	0.93	S10C-450	2x 1.0	1.17	G26G-450	2x 2.6	1.33	G26G-450	2x 2.6	1.45	G26H-600	2x 2.6	1.51
2100 x 1400	S08B-300	2x 0.8	1.03	S10C-400	2x 1.0	1.29	G26G-450	2x 2.6	1.46	G26H-550	2x 2.6	1.58	G26H-750	2x 2.6	1.64
2100 x 1500	S08B-300	2x 0.8	1.14	S10C-450	2x 1.0	1.41	G26G-450	2x 2.6	1.59	G26H-550	2x 2.6	1.70	G26H-750	2x 2.6	1.77
2100 x 1600	S10C-350	2x 1.0	1.25	S10C-450	2x 1.0	1.53	G26H-550	2x 2.6	1.71	G26H-600	2x 2.6	1.83	G26H-750	2x 2.6	1.90
2200 x 800	S08B-200	2x 0.8	0.50	S08B-300	2x 0.8	0.67	S08B-300	2x 0.8	0.78	S10C-400	2x 1.0	0.86	G26G-450	2x 2.6	0.91
2200 x 900	S08B-200	2x 0.8	0.59	S08B-300	2x 0.8	0.77	S10C-400	2x 1.0	0.90	G26G-450	2x 2.6	0.99	G26G-450	2x 2.6	1.04
2200 x 1000	S08B-200	2x 0.8	0.68	S10C-350	2x 1.0	0.88	S10C-400	2x 1.0	1.02	G26G-450	2x 2.6	1.12	G26G-450	2x 2.6	1.18
2200 x 1100	S08B-200	2x 0.8	0.77	S08B-300	2x 0.8	1.00	S10C-450	2x 1.0	1.15	G26G-450	2x 2.6	1.26	G26H-550	2x 2.6	1.31
2200 x 1200	S08B-300	2x 0.8	0.87	S10C-350	2x 1.0	1.11	G26G-450	2x 2.6	1.27	G26G-450	2x 2.6	1.39	G26H-600	2x 2.6	1.45
2200 x 1300	S10C-350	2x 1.0	0.97	S10C-450	2x 1.0	1.23	G26G-450	2x 2.6	1.40	G26G-450	2x 2.6	1.52	G26H-600	2x 2.6	1.59
2200 x 1400	S08B-300	2x 0.8	1.08	S10C-400	2x 1.0	1.35	G26G-450	2x 2.6	1.53	G26H-550	2x 2.6	1.65	G26H-750	2x 2.6	1.72
2200 x 1500	S08B-300	2x 0.8	1.19	S10C-450	2x 1.0	1.48	G26G-450	2x 2.6	1.66	G26H-550	2x 2.6	1.79	G26H-750	2x 2.6	1.86
2200 x 1600	S10C-350	2x 1.0	1.30	S10C-450	2x 1.0	1.60	G26H-550	2x 2.6	1.80	G26H-600	2x 2.6	1.92	G26H-750	2x 2.6	1.99
2300 x 800	S08B-200	2x 0.8	0.52	S08B-300	2x 0.8	0.70	S08B-300	2x 0.8	0.82	S10C-400	2x 1.0	0.90	G26G-450	2x 2.6	0.95
2300 x 900	S08B-200	2x 0.8	0.61	S08B-300	2x 0.8	0.81	S10C-400	2x 1.0	0.94	G26G-450	2x 2.6	1.04	G26G-450	2x 2.6	1.09
2300 x 1000	S08B-200	2x 0.8	0.71	S10C-350	2x 1.0	0.92	S10C-400	2x 1.0	1.07	G26G-450	2x 2.6	1.18	G26G-450	2x 2.6	1.24
2300 x 1100	S08B-200	2x 0.8	0.80	S08B-300	2x 0.8	1.04	S10C-450	2x 1.0	1.20	G26G-450	2x 2.6	1.32	G26H-550	2x 2.6	1.38
2300 x 1200	S08B-300	2x 0.8	0.90	S10C-350	2x 1.0	1.16	G26G-450	2x 2.6	1.33	G26G-450	2x 2.6	1.45	G26H-600	2x 2.6	1.52

(*) It is possible to make intermediate dimensions of the smoke exhaust window between the values given in the table.

Value of the active aerodynamic area for these dimensions is determined by linear interpolation.

(**) Smoke exhaust windows are equipped with a set of two spindle actuators. Power consumption is given for a set of two actuators.

1.1.5.2| Technical specification – top- and bottom-hung smoke exhaust windows opening outwards with spindle actuators

WINDOW SIZE*	Opening angle 30°			Opening angle 45°			Opening angle 60°			Opening angle 75°			Opening angle 90°		
B' x H'	ACTUATOR	POWER CONSUMPTION **	ACTIVE AERODYNAMIC AREA [Aa]	ACTUATOR	POWER CONSUMPTION **	ACTIVE AERODYNAMIC AREA [Aa]	ACTUATOR	POWER CONSUMPTION **	ACTIVE AERODYNAMIC AREA [Aa]	ACTUATOR	POWER CONSUMPTION **	ACTIVE AERODYNAMIC AREA [Aa]	ACTUATOR	POWER CONSUMPTION **	ACTIVE AERODYNAMIC AREA [Aa]
[mm]	-	[A]	[m ²]	-	[A]	[m ²]	-	[A]	[m ²]	-	[A]	[m ²]	-	[A]	[m ²]
2300 x 1300	S10C-350	2x 1.0	1.01	S10C-450	2x 1.0	1.28	G26G-450	2x 2.6	1.47	G26G-450	2x 2.6	1.59	G26H-600	2x 2.6	1.66
2300 x 1400	S08B-300	2x 0.8	1.12	S10C-400	2x 1.0	1.41	G26G-450	2x 2.6	1.60	G26H-550	2x 2.6	1.73	G26H-750	2x 2.6	1.80
2300 x 1500	S08B-300	2x 0.8	1.24	S10C-450	2x 1.0	1.54	G26G-450	2x 2.6	1.74	G26H-550	2x 2.6	1.87	G26H-750	2x 2.6	1.95
2400 x 800	S08B-200	2x 0.8	0.55	S08B-300	2x 0.8	0.73	S08B-300	2x 0.8	0.85	S10C-400	2x 1.0	0.94	G26G-450	2x 2.6	1.00
2400 x 900	S08B-200	2x 0.8	0.64	S08B-300	2x 0.8	0.85	S10C-400	2x 1.0	0.98	G26G-450	2x 2.6	1.09	G26G-450	2x 2.6	1.14
2400 x 1000	S08B-200	2x 0.8	0.74	S10C-350	2x 1.0	0.96	S10C-400	2x 1.0	1.12	G26G-450	2x 2.6	1.23	G26G-450	2x 2.6	1.29
2400 x 1100	S08B-200	2x 0.8	0.84	S08B-300	2x 0.8	1.09	S10C-450	2x 1.0	1.25	G26G-450	2x 2.6	1.38	G26H-550	2x 2.6	1.44
2400 x 1200	S08B-300	2x 0.8	0.94	S10C-350	2x 1.0	1.21	G26G-450	2x 2.6	1.39	G26G-450	2x 2.6	1.52	G26H-600	2x 2.6	1.59
2400 x 1300	S10C-350	2x 1.0	1.05	S10C-450	2x 1.0	1.34	G26G-450	2x 2.6	1.53	G26G-450	2x 2.6	1.67	G26H-600	2x 2.6	1.74
2400 x 1400	S08B-300	2x 0.8	1.17	S10C-400	2x 1.0	1.47	G26G-450	2x 2.6	1.67	G26H-550	2x 2.6	1.81	G26H-750	2x 2.6	1.89
2500 x 800	S08B-200	2x 0.8	0.57	S08B-300	2x 0.8	0.76	S08B-300	2x 0.8	0.89	S10C-400	2x 1.0	0.99	G26G-450	2x 2.6	1.04
2500 x 900	S08B-200	2x 0.8	0.67	S08B-300	2x 0.8	0.88	S10C-400	2x 1.0	1.03	G26G-450	2x 2.6	1.14	G26G-450	2x 2.6	1.19
2500 x 1000	S08B-200	2x 0.8	0.77	S10C-350	2x 1.0	1.01	S10C-400	2x 1.0	1.17	G26G-450	2x 2.6	1.28	G26G-450	2x 2.6	1.35
2500 x 1100	S08B-200	2x 0.8	0.87	S08B-300	2x 0.8	1.13	S10C-450	2x 1.0	1.31	G26G-450	2x 2.6	1.44	G26H-550	2x 2.6	1.50
2500 x 1200	S08B-300	2x 0.8	0.98	S10C-350	2x 1.0	1.26	G26G-450	2x 2.6	1.45	G26G-450	2x 2.6	1.59	G26H-600	2x 2.6	1.66
2500 x 1300	S10C-350	2x 1.0	1.09	S10C-450	2x 1.0	1.40	G26G-450	2x 2.6	1.60	G26G-450	2x 2.6	1.74	G26H-750	2x 2.6	1.82
2500 x 1400	S08B-300	2x 0.8	1.21	S10C-400	2x 1.0	1.53	G26G-450	2x 2.6	1.74	G26H-550	2x 2.6	1.89	G26H-750	2x 2.6	1.97
2600 x 800	S08B-200	2x 0.8	0.59	S08B-300	2x 0.8	0.79	S08B-300	2x 0.8	0.93	S10C-401	2x 1.0	1.03	G26G-450	2x 2.6	1.08
2600 x 900	S08B-200	2x 0.8	0.69	S08B-300	2x 0.8	0.92	S10C-400	2x 1.0	1.07	G26G-450	2x 2.6	1.18	G26G-450	2x 2.6	1.24
2600 x 1000	S08B-200	2x 0.8	0.80	S10C-350	2x 1.0	1.05	S10C-400	2x 1.0	1.21	G26G-450	2x 2.6	1.34	G26G-450	2x 2.6	1.41
2600 x 1100	S08B-200	2x 0.8	0.90	S08B-300	2x 0.8	1.18	S10C-450	2x 1.0	1.36	G26G-450	2x 2.6	1.50	G26H-550	2x 2.6	1.57
2600 x 1200	S08B-300	2x 0.8	1.02	S10C-350	2x 1.0	1.31	G26G-450	2x 2.6	1.51	G26G-450	2x 2.6	1.65	G26H-600	2x 2.6	1.73
2600 x 1300	S10C-350	2x 1.0	1.14	S10C-450	2x 1.0	1.45	G26G-450	2x 2.6	1.66	G26G-450	2x 2.6	1.81	G26H-750	2x 2.6	1.89
2700 x 800	S08B-200	2x 0.8	0.61	S08B-300	2x 0.8	0.82	S08B-300	2x 0.8	0.96	S10C-401	2x 1.0	1.07	G26G-450	2x 2.6	1.13
2700 x 900	S08B-200	2x 0.8	0.72	S08B-300	2x 0.8	0.95	S10C-400	2x 1.0	1.11	G26G-450	2x 2.6	1.23	G26G-450	2x 2.6	1.30
2700 x 1000	S08B-200	2x 0.8	0.83	S10C-350	2x 1.0	1.09	S10C-400	2x 1.0	1.26	G26G-450	2x 2.6	1.39	G26G-450	2x 2.6	1.46
2700 x 1100	S08B-200	2x 0.8	0.94	S08B-300	2x 0.8	1.22	S10C-450	2x 1.0	1.42	G26G-450	2x 2.6	1.56	G26H-550	2x 2.6	1.63
2700 x 1200	S08B-300	2x 0.8	1.05	S10C-350	2x 1.0	1.36	G26G-450	2x 2.6	1.57	G26G-450	2x 2.6	1.72	G26H-600	2x 2.6	1.80
2700 x 1300	S10C-350	2x 1.0	1.18	S10C-450	2x 1.0	1.51	G26G-450	2x 2.6	1.73	G26G-450	2x 2.6	1.88	G26H-750	2x 2.6	1.97

(*) It is possible to make intermediate dimensions of the smoke exhaust window between the values given in the table. Value of the active aerodynamic area for these dimensions is determined by linear interpolation.

(**) Smoke exhaust windows are equipped with a set of two spindle actuators. Power consumption is given for a set of two actuators.

1.1.5.3 | Types of smoke exhaust windows opening outwards by means of chain actuators

» bottom hung outward-opening windows



Fig. 44 mcr OSO THERM 75 smoke exhaust window with HCV chain actuator



Fig. 46 mcr OSO THERM 75 smoke exhaust window with two HCV chain actuators

» top-hung outward-opening windows



Fig. 45 mcr OSO THERM 75 smoke exhaust window with HCV chain actuator



Fig. 47 mcr OSO THERM 75 smoke exhaust window with two HCV chain actuators

1.1.5.4| Technical specification – top- and bottom-hung smoke exhaust windows opening outwards with chain actuators

WINDOW SIZE*	ACTUATOR****	POWER CONSUMPTION FOR 24 V- / 48 V-***	OPENING ANGLE**	ACTIVE AERODYNAMIC AREA [Aa]	WINDOW SIZE*	ACTUATOR****	POWER CONSUMPTION FOR 24 V- / 48 V-***	OPENING ANGLE**	ACTIVE AERODYNAMIC AREA [Aa]
B' x H'					B' x H'				
[mm]	-	[A]	[°]	[m²]	[mm]	-	[A]	[°]	[m²]
800 x 800	HCV500/350	1.4 / 0.7	29	0.17	900 x 2200	HCV500/350	1.4 / 0.7	9	0.33
800 x 900	HCV500/350	1.4 / 0.7	25	0.18	1000 x 800	HCV500/600	1.4 / 0.7	51	0.30
800 x 1000	HCV500/350	1.4 / 0.7	22	0.19	1000 x 800	HCV500/350	1.4 / 0.7	29	0.21
800 x 1100	HCV500/350	1.4 / 0.7	20	0.21	1000 x 900	HCV500/600	1.4 / 0.7	44	0.33
800 x 1200	HCV500/350	1.4 / 0.7	18	0.22	1000 x 900	HCV500/350	1.4 / 0.7	25	0.23
800 x 1300	HCV500/350	1.4 / 0.7	17	0.23	1000 x 1000	HCV500/600	1.4 / 0.7	39	0.36
800 x 1400	HCV500/350	1.4 / 0.7	15	0.25	1000 x 1000	HCV500/350	1.4 / 0.7	22	0.25
800 x 1500	HCV500/350	1.4 / 0.7	14	0.26	1000 x 1100	HCV500/600	1.4 / 0.7	35	0.38
800 x 1600	HCV500/350	1.4 / 0.7	13	0.28	1000 x 1100	HCV500/350	1.4 / 0.7	20	0.27
800 x 1700	HCV500/350	1.4 / 0.7	12	0.29	1000 x 1200	HCV500/600	1.4 / 0.7	32	0.41
800 x 1800	HCV500/350	1.4 / 0.7	12	0.32	1000 x 1200	HCV500/350	1.4 / 0.7	18	0.28
800 x 1900	HCV500/350	1.4 / 0.7	11	0.34	1000 x 1300	HCV500/600	1.4 / 0.7	29	0.44
800 x 2000	HCV500/350	1.4 / 0.7	10	0.36	1000 x 1300	HCV500/350	1.4 / 0.7	17	0.29
800 x 2100	HCV500/350	1.4 / 0.7	10	0.28	1000 x 1400	HCV500/600	1.4 / 0.7	27	0.46
800 x 2200	HCV500/350	1.4 / 0.7	9	0.29	1000 x 1400	HCV500/350	1.4 / 0.7	15	0.31
900 x 800	HCV500/600	1.4 / 0.7	51	0.27	1000 x 1500	HCV500/600	1.4 / 0.7	25	0.49
900 x 800	HCV500/350	1.4 / 0.7	29	0.19	1000 x 1500	HCV500/350	1.4 / 0.7	14	0.32
900 x 900	HCV500/600	1.4 / 0.7	44	0.29	1000 x 1600	HCV500/600	1.4 / 0.7	23	0.52
900 x 900	HCV500/350	1.4 / 0.7	25	0.20	1000 x 1600	HCV500/350	1.4 / 0.7	13	0.34
900 x 1000	HCV500/600	1.4 / 0.7	39	0.32	1000 x 1700	HCV500/600	1.4 / 0.7	22	0.56
900 x 1000	HCV500/350	1.4 / 0.7	22	0.22	1000 x 1700	HCV500/350	1.4 / 0.7	12	0.37
900 x 1100	HCV500/600	1.4 / 0.7	35	0.34	1000 x 1800	HCV500/600	1.4 / 0.7	20	0.59
900 x 1100	HCV500/350	1.4 / 0.7	20	0.24	1000 x 1800	HCV500/350	1.4 / 0.7	12	0.39
900 x 1200	HCV500/600	1.4 / 0.7	32	0.36	1000 x 1900	HCV500/600	1.4 / 0.7	19	0.62
900 x 1200	HCV500/350	1.4 / 0.7	18	0.25	1000 x 1900	HCV500/350	1.4 / 0.7	11	0.42
900 x 1300	HCV500/600	1.4 / 0.7	29	0.39	1000 x 2000	HCV500/600	1.4 / 0.7	18	0.65
900 x 1300	HCV500/350	1.4 / 0.7	17	0.26	1000 x 2000	HCV500/350	1.4 / 0.7	10	0.44
900 x 1400	HCV500/600	1.4 / 0.7	27	0.41	1000 x 2100	HCV500/600	1.4 / 0.7	17	0.68
900 x 1400	HCV500/350	1.4 / 0.7	15	0.28	1000 x 2100	HCV500/350	1.4 / 0.7	10	0.36
900 x 1500	HCV500/600	1.4 / 0.7	25	0.44	1000 x 2200	HCV500/600	1.4 / 0.7	16	0.72
900 x 1500	HCV500/350	1.4 / 0.7	14	0.29	1000 x 2200	HCV500/350	1.4 / 0.7	9	0.38
900 x 1600	HCV500/600	1.4 / 0.7	23	0.47	1100 x 800	HCV500/800	1.4 / 0.7	70	0.39
900 x 1600	HCV500/350	1.4 / 0.7	13	0.31	1100 x 800	HCV500/600	1.4 / 0.7	51	0.34
900 x 1700	HCV500/600	1.4 / 0.7	22	0.50	1100 x 800	HCV500/350	1.4 / 0.7	29	0.24
900 x 1700	HCV500/350	1.4 / 0.7	12	0.33	1100 x 900	HCV500/800	1.4 / 0.7	60	0.43
900 x 1800	HCV500/600	1.4 / 0.7	20	0.53	1100 x 900	HCV500/600	1.4 / 0.7	44	0.37
900 x 1800	HCV500/350	1.4 / 0.7	12	0.35	1100 x 900	HCV500/350	1.4 / 0.7	25	0.26
900 x 1900	HCV500/600	1.4 / 0.7	19	0.56	1100 x 1000	HCV500/800	1.4 / 0.7	53	0.46
900 x 1900	HCV500/350	1.4 / 0.7	11	0.38	1100 x 1000	HCV500/600	1.4 / 0.7	39	0.40
900 x 2000	HCV500/600	1.4 / 0.7	18	0.59	1100 x 1000	HCV500/350	1.4 / 0.7	22	0.27
900 x 2000	HCV500/350	1.4 / 0.7	10	0.40	1100 x 1100	HCV500/800	1.4 / 0.7	47	0.49
900 x 2100	HCV500/600	1.4 / 0.7	17	0.62	1100 x 1100	HCV500/600	1.4 / 0.7	35	0.42
900 x 2100	HCV500/350	1.4 / 0.7	10	0.32	1100 x 1100	HCV500/350	1.4 / 0.7	20	0.29
900 x 2200	HCV500/600	1.4 / 0.7	16	0.64	1100 x 1200	HCV500/800	1.4 / 0.7	43	0.53

(*) Chain actuators HCV500/800 and HCV500/1000 are not available in top hung windows. (***) It is possible to make intermediate dimensions of the smoke exhaust window between the values given in the table. The size of the active aerodynamic area for these dimensions is determined by linear interpolation.
 (***) Power consumption given for the list of actuators used in a given smoke exhaust window.
 (**) Actuators of type HCV 500/xxx may be supplied with 24 V- or 48 V-.
 HCVA 500/xxx actuator with voltage 230 V~ and power consumption 0.13 A may be used as an equivalent of each specified HCV 500/xxx actuator.

1.1.5.4| Technical specification – top- and bottom-hung smoke exhaust windows opening outwards with chain actuators

WINDOW SIZE*	ACTUATOR****	POWER CONSUMPTION FOR 24 V- / 48 V-***	OPENING ANGLE**	ACTIVE AERODYNAMIC AREA [Aa]	WINDOW SIZE*	ACTUATOR****	POWER CONSUMPTION FOR 24 V- / 48 V-***	OPENING ANGLE**	ACTIVE AERODYNAMIC AREA [Aa]
B' x H'					B' x H'				
[mm]	-	[A]	[°]	[m²]	[mm]	-	[A]	[°]	[m²]
1100 x 1200	HCV500/600	1.4 / 0.7	32	0.45	1200 x 1200	HCV500/800	1.4 / 0.7	43	0.58
1100 x 1200	HCV500/350	1.4 / 0.7	18	0.31	1200 x 1200	HCV500/600	1.4 / 0.7	32	0.49
1100 x 1300	HCV500/800	1.4 / 0.7	39	0.56	1200 x 1200	HCV500/350	1.4 / 0.7	18	0.33
1100 x 1300	HCV500/600	1.4 / 0.7	29	0.48	1200 x 1300	HCV500/800	1.4 / 0.7	39	0.62
1100 x 1300	HCV500/350	1.4 / 0.7	17	0.32	1200 x 1300	HCV500/600	1.4 / 0.7	29	0.52
1100 x 1400	HCV500/800	1.4 / 0.7	36	0.60	1200 x 1300	HCV500/350	1.4 / 0.7	17	0.35
1100 x 1400	HCV500/600	1.4 / 0.7	27	0.51	1200 x 1400	HCV500/800	1.4 / 0.7	36	0.66
1100 x 1400	HCV500/350	1.4 / 0.7	15	0.34	1200 x 1400	HCV500/600	1.4 / 0.7	27	0.55
1100 x 1500	HCV500/800	1.4 / 0.7	33	0.64	1200 x 1400	HCV500/350	1.4 / 0.7	15	0.36
1100 x 1500	HCV500/600	1.4 / 0.7	25	0.54	1200 x 1500	HCV500/800	1.4 / 0.7	33	0.70
1100 x 1500	HCV500/350	1.4 / 0.7	14	0.35	1200 x 1500	HCV500/600	1.4 / 0.7	25	0.59
1100 x 1600	HCV500/800	1.4 / 0.7	31	0.68	1200 x 1500	HCV500/350	1.4 / 0.7	14	0.38
1100 x 1600	HCV500/600	1.4 / 0.7	23	0.58	1200 x 1600	HCV500/800	1.4 / 0.7	31	0.74
1100 x 1600	HCV500/350	1.4 / 0.7	13	0.38	1200 x 1600	HCV500/600	1.4 / 0.7	23	0.62
1100 x 1700	HCV500/800	1.4 / 0.7	29	0.72	1200 x 1600	HCV500/350	1.4 / 0.7	13	0.40
1100 x 1700	HCV500/600	1.4 / 0.7	22	0.61	1200 x 1700	HCV500/800	1.4 / 0.7	29	0.78
1100 x 1700	HCV500/350	1.4 / 0.7	12	0.40	1200 x 1700	HCV500/600	1.4 / 0.7	22	0.66
1100 x 1800	HCV500/800	1.4 / 0.7	27	0.76	1200 x 1700	HCV500/350	1.4 / 0.7	12	0.43
1100 x 1800	HCV500/600	1.4 / 0.7	20	0.65	1200 x 1800	HCV500/800	1.4 / 0.7	27	0.83
1100 x 1800	HCV500/350	1.4 / 0.7	12	0.42	1200 x 1800	HCV500/600	1.4 / 0.7	20	0.71
1100 x 1900	HCV500/800	1.4 / 0.7	26	0.80	1200 x 1800	HCV500/350	1.4 / 0.7	12	0.46
1100 x 1900	HCV500/600	1.4 / 0.7	19	0.68	1200 x 1900	HCV500/800	1.4 / 0.7	26	0.87
1100 x 1900	HCV500/350	1.4 / 0.7	11	0.45	1200 x 1900	HCV500/600	1.4 / 0.7	19	0.74
1100 x 2000	HCV500/800	1.4 / 0.7	24	0.84	1200 x 1900	HCV500/350	1.4 / 0.7	11	0.49
1100 x 2000	HCV500/600	1.4 / 0.7	18	0.71	1200 x 2000	HCV500/800	1.4 / 0.7	24	0.92
1100 x 2000	HCV500/350	1.4 / 0.7	10	0.48	1200 x 2000	HCV500/600	1.4 / 0.7	18	0.77
1100 x 2100	HCV500/800	1.4 / 0.7	23	0.89	1200 x 2000	HCV500/350	1.4 / 0.7	10	0.52
1100 x 2100	HCV500/600	1.4 / 0.7	17	0.75	1200 x 2100	HCV500/800	1.4 / 0.7	23	0.97
1100 x 2100	HCV500/350	1.4 / 0.7	10	0.40	1200 x 2100	HCV500/600	1.4 / 0.7	17	0.81
1100 x 2200	HCV500/800	1.4 / 0.7	22	0.95	1200 x 2100	HCV500/350	1.4 / 0.7	10	0.32
1100 x 2200	HCV500/600	1.4 / 0.7	16	0.79	1200 x 2200	HCV500/800	1.4 / 0.7	22	1.03
1100 x 2200	HCV500/350	1.4 / 0.7	9	0.42	1200 x 2200	HCV500/600	1.4 / 0.7	16	0.85
1200 x 800	HCV500/800	1.4 / 0.7	70	0.44	1200 x 2200	HCV500/350	1.4 / 0.7	9	0.33
1200 x 800	HCV500/600	1.4 / 0.7	51	0.38	1300 x 800	HCV500/1000	1.4 / 0.7	92	0.51
1200 x 800	HCV500/350	1.4 / 0.7	29	0.26	1300 x 800	HCV500/800	1.4 / 0.7	70	0.47
1200 x 900	HCV500/800	1.4 / 0.7	60	0.47	1300 x 800	HCV500/600	1.4 / 0.7	51	0.41
1200 x 900	HCV500/600	1.4 / 0.7	44	0.40	1300 x 800	HCV500/350	1.4 / 0.7	29	0.28
1200 x 900	HCV500/350	1.4 / 0.7	25	0.28	1300 x 900	HCV500/1000	1.4 / 0.7	78	0.57
1200 x 1000	HCV500/800	1.4 / 0.7	53	0.51	1300 x 900	HCV500/800	1.4 / 0.7	60	0.51
1200 x 1000	HCV500/600	1.4 / 0.7	39	0.44	1300 x 900	HCV500/600	1.4 / 0.7	44	0.44
1200 x 1000	HCV500/350	1.4 / 0.7	22	0.30	1300 x 900	HCV500/350	1.4 / 0.7	25	0.30
1200 x 1100	HCV500/800	1.4 / 0.7	47	0.54	1300 x 1000	HCV500/1000	1.4 / 0.7	68	0.62
1200 x 1100	HCV500/600	1.4 / 0.7	35	0.46	1300 x 1000	HCV500/800	1.4 / 0.7	53	0.55
1200 x 1100	HCV500/350	1.4 / 0.7	20	0.32	1300 x 1000	HCV500/600	1.4 / 0.7	39	0.48

(*) Chain actuators HCV500/800 and HCV500/1000 are not available in top hung windows. (***) It is possible to make intermediate dimensions of the smoke exhaust window between the values given in the table. The size of the active aerodynamic area for these dimensions is determined by linear interpolation. (****) Power consumption given for the list of actuators used in a given smoke exhaust window.

(**) Actuators of type HCV 500/xxx may be supplied with 24 V- or 48 V-. HCVA 500/xxx actuator with voltage 230 V~ and power consumption 0.13 A may be used as an equivalent of each specified HCV 500/xxx actuator.

1.1.5.4| Technical specification – top- and bottom-hung smoke exhaust windows opening outwards with chain actuators

WINDOW SIZE*	ACTUATOR****	POWER CONSUMPTION FOR 24 V- / 48 V-***	OPENING ANGLE**	ACTIVE AERODYNAMIC AREA [Aa]	WINDOW SIZE*	ACTUATOR****	POWER CONSUMPTION FOR 24 V- / 48 V-***	OPENING ANGLE**	ACTIVE AERODYNAMIC AREA [Aa]
B' x H'					B' x H'				
[mm]	-	[A]	[°]	[m²]	[mm]	-	[A]	[°]	[m²]
1300 x 1000	HCV500/350	1.4 / 0.7	22	0.32	1300 x 2100	HCV500/350	1.4 / 0.7	10	0.35
1300 x 1100	HCV500/1000	1.4 / 0.7	60	0.66	1300 x 2200	HCV500/1000	1.4 / 0.7	28	1.24
1300 x 1100	HCV500/800	1.4 / 0.7	47	0.59	1300 x 2200	HCV500/800	1.4 / 0.7	22	1.11
1300 x 1100	HCV500/600	1.4 / 0.7	35	0.50	1300 x 2200	HCV500/600	1.4 / 0.7	16	0.92
1300 x 1100	HCV500/350	1.4 / 0.7	20	0.35	1300 x 2200	HCV500/350	1.4 / 0.7	9	0.36
1300 x 1200	HCV500/1000	1.4 / 0.7	54	0.70	1400 x 800	HCV500/1000	1.4 / 0.7	92	0.56
1300 x 1200	HCV500/800	1.4 / 0.7	43	0.63	1400 x 800	HCV500/800	1.4 / 0.7	70	0.52
1300 x 1200	HCV500/600	1.4 / 0.7	32	0.53	1400 x 800	HCV500/600	1.4 / 0.7	51	0.44
1300 x 1200	HCV500/350	1.4 / 0.7	18	0.36	1400 x 800	HCV500/350	1.4 / 0.7	29	0.30
1300 x 1300	HCV500/1000	1.4 / 0.7	49	0.75	1400 x 900	HCV500/1000	1.4 / 0.7	78	0.62
1300 x 1300	HCV500/800	1.4 / 0.7	39	0.67	1400 x 900	HCV500/800	1.4 / 0.7	60	0.56
1300 x 1300	HCV500/600	1.4 / 0.7	29	0.57	1400 x 900	HCV500/600	1.4 / 0.7	44	0.48
1300 x 1300	HCV500/350	1.4 / 0.7	17	0.37	1400 x 900	HCV500/350	1.4 / 0.7	25	0.33
1300 x 1400	HCV500/1000	1.4 / 0.7	45	0.80	1400 x 1000	HCV500/1000	1.4 / 0.7	68	0.66
1300 x 1400	HCV500/800	1.4 / 0.7	36	0.71	1400 x 1000	HCV500/800	1.4 / 0.7	53	0.59
1300 x 1400	HCV500/600	1.4 / 0.7	27	0.60	1400 x 1000	HCV500/600	1.4 / 0.7	39	0.51
1300 x 1400	HCV500/350	1.4 / 0.7	15	0.39	1400 x 1000	HCV500/350	1.4 / 0.7	22	0.35
1300 x 1500	HCV500/1000	1.4 / 0.7	42	0.84	1400 x 1100	HCV500/1000	1.4 / 0.7	60	0.71
1300 x 1500	HCV500/800	1.4 / 0.7	33	0.75	1400 x 1100	HCV500/800	1.4 / 0.7	47	0.64
1300 x 1500	HCV500/600	1.4 / 0.7	25	0.63	1400 x 1100	HCV500/600	1.4 / 0.7	35	0.54
1300 x 1500	HCV500/350	1.4 / 0.7	14	0.41	1400 x 1100	HCV500/350	1.4 / 0.7	20	0.37
1300 x 1600	HCV500/1000	1.4 / 0.7	39	0.90	1400 x 1200	HCV500/1000	1.4 / 0.7	54	0.76
1300 x 1600	HCV500/800	1.4 / 0.7	31	0.80	1400 x 1200	HCV500/800	1.4 / 0.7	43	0.68
1300 x 1600	HCV500/600	1.4 / 0.7	23	0.67	1400 x 1200	HCV500/600	1.4 / 0.7	32	0.57
1300 x 1600	HCV500/350	1.4 / 0.7	13	0.44	1400 x 1200	HCV500/350	1.4 / 0.7	18	0.39
1300 x 1700	HCV500/1000	1.4 / 0.7	36	0.95	1400 x 1300	HCV500/1000	1.4 / 0.7	49	0.81
1300 x 1700	HCV500/800	1.4 / 0.7	29	0.85	1400 x 1300	HCV500/800	1.4 / 0.7	39	0.73
1300 x 1700	HCV500/600	1.4 / 0.7	22	0.72	1400 x 1300	HCV500/600	1.4 / 0.7	29	0.61
1300 x 1700	HCV500/350	1.4 / 0.7	12	0.46	1400 x 1300	HCV500/350	1.4 / 0.7	17	0.40
1300 x 1800	HCV500/1000	1.4 / 0.7	34	1.00	1400 x 1400	HCV500/1000	1.4 / 0.7	45	0.85
1300 x 1800	HCV500/800	1.4 / 0.7	27	0.89	1400 x 1400	HCV500/800	1.4 / 0.7	36	0.77
1300 x 1800	HCV500/600	1.4 / 0.7	20	0.76	1400 x 1400	HCV500/600	1.4 / 0.7	27	0.64
1300 x 1800	HCV500/350	1.4 / 0.7	12	0.49	1400 x 1400	HCV500/350	1.4 / 0.7	15	0.42
1300 x 1900	HCV500/1000	1.4 / 0.7	32	1.06	1400 x 1500	HCV500/1000	1.4 / 0.7	42	0.91
1300 x 1900	HCV500/800	1.4 / 0.7	26	0.94	1400 x 1500	HCV500/800	1.4 / 0.7	33	0.81
1300 x 1900	HCV500/600	1.4 / 0.7	19	0.80	1400 x 1500	HCV500/600	1.4 / 0.7	25	0.68
1300 x 1900	HCV500/350	1.4 / 0.7	11	0.52	1400 x 1500	HCV500/350	1.4 / 0.7	14	0.44
1300 x 2000	HCV500/1000	1.4 / 0.7	31	1.12	1400 x 1600	HCV500/1000	1.4 / 0.7	39	0.97
1300 x 2000	HCV500/800	1.4 / 0.7	24	1.00	1400 x 1600	HCV500/800	1.4 / 0.7	31	0.86
1300 x 2000	HCV500/600	1.4 / 0.7	18	0.84	1400 x 1600	HCV500/600	1.4 / 0.7	23	0.73
1300 x 2000	HCV500/350	1.4 / 0.7	10	0.56	1400 x 1600	HCV500/350	1.4 / 0.7	13	0.47
1300 x 2100	HCV500/1000	1.4 / 0.7	29	1.18	1400 x 1700	HCV500/1000	1.4 / 0.7	36	1.01
1300 x 2100	HCV500/800	1.4 / 0.7	23	1.05	1400 x 1700	HCV500/800	1.4 / 0.7	29	0.91
1300 x 2100	HCV500/600	1.4 / 0.7	17	0.87	1400 x 1700	HCV500/600	1.4 / 0.7	22	0.77

(*) Chain actuators HCV500/800 and HCV500/1000 are not available in top hung windows. (***) It is possible to make intermediate dimensions of the smoke exhaust window between the values given in the table. The size of the active aerodynamic area for these dimensions is determined by linear interpolation.
 (***) Power consumption given for the list of actuators used in a given smoke exhaust window.
 (**) Actuators of type HCV 500/xxx may be supplied with 24 V- or 48 V-. HCVA 500/xxx actuator with voltage 230 V~ and power consumption 0.13 A may be used as an equivalent of each specified HCV 500/xxx actuator.

1.1.5.4| Technical specification – top- and bottom-hung smoke exhaust windows opening outwards with chain actuators

WINDOW SIZE*	ACTUATOR****	POWER CONSUMPTION FOR 24 V- / 48 V-***	OPENING ANGLE**	ACTIVE AERODYNAMIC AREA [Aa]	WINDOW SIZE*	ACTUATOR****	POWER CONSUMPTION FOR 24 V- / 48 V-***	OPENING ANGLE**	ACTIVE AERODYNAMIC AREA [Aa]
B' x H'					B' x H'				
[mm]	-	[A]	[°]	[m²]	[mm]	-	[A]	[°]	[m²]
1400 x 1700	HCV500/350	1.4 / 0.7	12	0.49	1500 x 1300	HCV500/350	1.4 / 0.7	17	0.43
1400 x 1800	HCV500/1000	1.4 / 0.7	34	1.07	1500 x 1400	HCV500/1000	1.4 / 0.7	45	0.92
1400 x 1800	HCV500/800	1.4 / 0.7	27	0.96	1500 x 1400	HCV500/800	1.4 / 0.7	36	0.82
1400 x 1800	HCV500/600	1.4 / 0.7	20	0.82	1500 x 1400	HCV500/600	1.4 / 0.7	27	0.69
1400 x 1800	HCV500/350	1.4 / 0.7	12	0.52	1500 x 1400	HCV500/350	1.4 / 0.7	15	0.45
1400 x 1900	HCV500/1000	1.4 / 0.7	32	1.14	1500 x 1500	HCV500/1000	1.4 / 0.7	42	0.98
1400 x 1900	HCV500/800	1.4 / 0.7	26	1.01	1500 x 1500	HCV500/800	1.4 / 0.7	33	0.87
1400 x 1900	HCV500/600	1.4 / 0.7	19	0.86	1500 x 1500	HCV500/600	1.4 / 0.7	25	0.73
1400 x 1900	HCV500/350	1.4 / 0.7	11	0.56	1500 x 1500	HCV500/350	1.4 / 0.7	14	0.47
1400 x 2000	HCV500/1000	1.4 / 0.7	31	1.20	1500 x 1600	HCV500/1000	1.4 / 0.7	39	1.03
1400 x 2000	HCV500/800	1.4 / 0.7	24	1.06	1500 x 1600	HCV500/800	1.4 / 0.7	31	0.92
1400 x 2000	HCV500/600	1.4 / 0.7	18	0.89	1500 x 1600	HCV500/600	1.4 / 0.7	23	0.77
1400 x 2000	HCV500/350	1.4 / 0.7	10	0.59	1500 x 1600	HCV500/350	1.4 / 0.7	13	0.49
1400 x 2100	HCV500/1000	1.4 / 0.7	29	1.27	1500 x 1700	HCV500/1000	1.4 / 0.7	36	1.09
1400 x 2100	HCV500/800	1.4 / 0.7	23	1.12	1500 x 1700	HCV500/800	1.4 / 0.7	29	0.97
1400 x 2100	HCV500/600	1.4 / 0.7	17	0.93	1500 x 1700	HCV500/600	1.4 / 0.7	22	0.82
1400 x 2100	HCV500/350	1.4 / 0.7	10	0.38	1500 x 1700	HCV500/350	1.4 / 0.7	12	0.52
1400 x 2200	HCV500/1000	1.4 / 0.7	28	1.33	1500 x 1800	HCV500/1000	1.4 / 0.7	34	1.15
1400 x 2200	HCV500/800	1.4 / 0.7	22	1.19	1500 x 1800	HCV500/800	1.4 / 0.7	27	1.02
1400 x 2200	HCV500/600	1.4 / 0.7	16	0.98	1500 x 1800	HCV500/600	1.4 / 0.7	20	0.87
1400 x 2200	HCV500/350	1.4 / 0.7	9	0.39	1500 x 1800	HCV500/350	1.4 / 0.7	12	0.55
1500 x 800	HCV500/1000	1.4 / 0.7	92	0.60	1500 x 1900	HCV500/1000	1.4 / 0.7	32	1.21
1500 x 800	HCV500/800	1.4 / 0.7	70	0.56	1500 x 1900	HCV500/800	1.4 / 0.7	26	1.08
1500 x 800	HCV500/600	1.4 / 0.7	51	0.48	1500 x 1900	HCV500/600	1.4 / 0.7	19	0.91
1500 x 800	HCV500/350	1.4 / 0.7	29	0.33	1500 x 1900	HCV500/350	1.4 / 0.7	11	0.59
1500 x 900	HCV500/1000	1.4 / 0.7	78	0.66	1500 x 2000	HCV500/1000	1.4 / 0.7	31	1.29
1500 x 900	HCV500/800	1.4 / 0.7	60	0.60	1500 x 2000	HCV500/800	1.4 / 0.7	24	1.14
1500 x 900	HCV500/600	1.4 / 0.7	44	0.51	1500 x 2000	HCV500/600	1.4 / 0.7	18	0.95
1500 x 900	HCV500/350	1.4 / 0.7	25	0.35	1500 x 2000	HCV500/350	1.4 / 0.7	10	0.63
1500 x 1000	HCV500/1000	1.4 / 0.7	68	0.72	1500 x 2100	HCV500/1000	1.4 / 0.7	29	1.35
1500 x 1000	HCV500/800	1.4 / 0.7	53	0.64	1500 x 2100	HCV500/800	1.4 / 0.7	23	1.20
1500 x 1000	HCV500/600	1.4 / 0.7	39	0.55	1500 x 2100	HCV500/600	1.4 / 0.7	17	0.99
1500 x 1000	HCV500/350	1.4 / 0.7	22	0.37	1500 x 2100	HCV500/350	1.4 / 0.7	10	0.41
1500 x 1100	HCV500/1000	1.4 / 0.7	60	0.77	1500 x 2200	HCV500/1000	1.4 / 0.7	28	1.42
1500 x 1100	HCV500/800	1.4 / 0.7	47	0.69	1500 x 2200	HCV500/800	1.4 / 0.7	22	1.27
1500 x 1100	HCV500/600	1.4 / 0.7	35	0.58	1500 x 2200	HCV500/600	1.4 / 0.7	16	1.04
1500 x 1100	HCV500/350	1.4 / 0.7	20	0.40	1500 x 2200	HCV500/350	1.4 / 0.7	9	0.43
1500 x 1200	HCV500/1000	1.4 / 0.7	54	0.82	1600 x 800	HCV500/1000	1.4 / 0.7	92	0.64
1500 x 1200	HCV500/800	1.4 / 0.7	43	0.74	1600 x 800	HCV500/800	1.4 / 0.7	70	0.59
1500 x 1200	HCV500/600	1.4 / 0.7	32	0.62	1600 x 800	HCV500/600	1.4 / 0.7	51	0.51
1500 x 1200	HCV500/350	1.4 / 0.7	18	0.41	1600 x 800	HCV500/350	1.4 / 0.7	29	0.35
1500 x 1300	HCV500/1000	1.4 / 0.7	49	0.87	1600 x 900	HCV500/1000	1.4 / 0.7	78	0.71
1500 x 1300	HCV500/800	1.4 / 0.7	39	0.78	1600 x 900	HCV500/800	1.4 / 0.7	60	0.64
1500 x 1300	HCV500/600	1.4 / 0.7	29	0.65	1600 x 900	HCV500/600	1.4 / 0.7	44	0.55

(*) Chain actuators HCV500/800 and HCV500/1000 are not available in top hung windows. (***) It is possible to make intermediate dimensions of the smoke exhaust window between the values given in the table. The size of the active aerodynamic area for these dimensions is determined by linear interpolation. (****) Power consumption given for the list of actuators used in a given smoke exhaust window.

(**) Actuators of type HCV 500/xxx may be supplied with 24 V- or 48 V-. HCVA 500/xxx actuator with voltage 230 V~ and power consumption 0.13 A may be used as an equivalent of each specified HCV 500/xxx actuator.

1.1.5.4| Technical specification – top- and bottom-hung smoke exhaust windows opening outwards with chain actuators

WINDOW SIZE*	ACTUATOR****	POWER CONSUMPTION FOR 24 V- / 48 V-***	OPENING ANGLE**	ACTIVE AERODYNAMIC AREA [Aa]	WINDOW SIZE*	ACTUATOR****	POWER CONSUMPTION FOR 24 V- / 48 V-***	OPENING ANGLE**	ACTIVE AERODYNAMIC AREA [Aa]
B' x H'					B' x H'				
[mm]	-	[A]	[°]	[m²]	[mm]	-	[A]	[°]	[m²]
1600 x 900	HCV500/350	1.4 / 0.7	25	0.37	1600 x 2000	HCV500/350	1.4 / 0.7	10	0.66
1600 x 1000	HCV500/1000	1.4 / 0.7	68	0.77	1600 x 2100	HCV500/1000	1.4 / 0.7	29	1.44
1600 x 1000	HCV500/800	1.4 / 0.7	53	0.69	1600 x 2100	HCV500/800	1.4 / 0.7	23	1.27
1600 x 1000	HCV500/600	1.4 / 0.7	39	0.59	1600 x 2100	HCV500/600	1.4 / 0.7	17	1.05
1600 x 1000	HCV500/350	1.4 / 0.7	22	0.40	1600 x 2100	HCV500/350	1.4 / 0.7	10	0.44
1600 x 1100	HCV500/1000	1.4 / 0.7	60	0.82	1600 x 2200	HCV500/1000	1.4 / 0.7	28	1.51
1600 x 1100	HCV500/800	1.4 / 0.7	47	0.74	1600 x 2200	HCV500/800	1.4 / 0.7	22	1.34
1600 x 1100	HCV500/600	1.4 / 0.7	35	0.62	1600 x 2200	HCV500/600	1.4 / 0.7	16	1.10
1600 x 1100	HCV500/350	1.4 / 0.7	20	0.43	1600 x 2200	HCV500/350	1.4 / 0.7	9	0.46
1600 x 1200	HCV500/1000	1.4 / 0.7	54	0.87	1700 x 800	HCV500/1000	1.4 / 0.7	92	0.69
1600 x 1200	HCV500/800	1.4 / 0.7	43	0.78	1700 x 800	HCV500/800	1.4 / 0.7	70	0.64
1600 x 1200	HCV500/600	1.4 / 0.7	32	0.65	1700 x 800	HCV500/600	1.4 / 0.7	51	0.54
1600 x 1200	HCV500/350	1.4 / 0.7	18	0.44	1700 x 800	HCV500/350	1.4 / 0.7	29	0.37
1600 x 1300	HCV500/1000	1.4 / 0.7	49	0.93	1700 x 900	HCV500/1000	1.4 / 0.7	78	0.76
1600 x 1300	HCV500/800	1.4 / 0.7	39	0.83	1700 x 900	HCV500/800	1.4 / 0.7	60	0.69
1600 x 1300	HCV500/600	1.4 / 0.7	29	0.69	1700 x 900	HCV500/600	1.4 / 0.7	44	0.59
1600 x 1300	HCV500/350	1.4 / 0.7	17	0.45	1700 x 900	HCV500/350	1.4 / 0.7	25	0.40
1600 x 1400	HCV500/1000	1.4 / 0.7	45	0.98	1700 x 1000	HCV500/1000	1.4 / 0.7	68	0.82
1600 x 1400	HCV500/800	1.4 / 0.7	36	0.88	1700 x 1000	HCV500/800	1.4 / 0.7	53	0.74
1600 x 1400	HCV500/600	1.4 / 0.7	27	0.73	1700 x 1000	HCV500/600	1.4 / 0.7	39	0.63
1600 x 1400	HCV500/350	1.4 / 0.7	15	0.47	1700 x 1000	HCV500/350	1.4 / 0.7	22	0.42
1600 x 1500	HCV500/1000	1.4 / 0.7	42	1.04	1700 x 1100	HCV500/1000	1.4 / 0.7	60	0.87
1600 x 1500	HCV500/800	1.4 / 0.7	33	0.92	1700 x 1100	HCV500/800	1.4 / 0.7	47	0.78
1600 x 1500	HCV500/600	1.4 / 0.7	25	0.77	1700 x 1100	HCV500/600	1.4 / 0.7	35	0.66
1600 x 1500	HCV500/350	1.4 / 0.7	14	0.49	1700 x 1100	HCV500/350	1.4 / 0.7	20	0.45
1600 x 1600	HCV500/1000	1.4 / 0.7	39	1.10	1700 x 1200	HCV500/1000	1.4 / 0.7	54	0.93
1600 x 1600	HCV500/800	1.4 / 0.7	31	0.98	1700 x 1200	HCV500/800	1.4 / 0.7	43	0.83
1600 x 1600	HCV500/600	1.4 / 0.7	23	0.82	1700 x 1200	HCV500/600	1.4 / 0.7	32	0.70
1600 x 1600	HCV500/350	1.4 / 0.7	13	0.52	1700 x 1200	HCV500/350	1.4 / 0.7	18	0.46
1600 x 1700	HCV500/1000	1.4 / 0.7	36	1.16	1700 x 1300	HCV500/1000	1.4 / 0.7	49	0.99
1600 x 1700	HCV500/800	1.4 / 0.7	29	1.04	1700 x 1300	HCV500/800	1.4 / 0.7	39	0.89
1600 x 1700	HCV500/600	1.4 / 0.7	22	0.87	1700 x 1300	HCV500/600	1.4 / 0.7	29	0.74
1600 x 1700	HCV500/350	1.4 / 0.7	12	0.55	1700 x 1300	HCV500/350	1.4 / 0.7	17	0.48
1600 x 1800	HCV500/1000	1.4 / 0.7	34	1.22	1700 x 1400	HCV500/1000	1.4 / 0.7	45	1.04
1600 x 1800	HCV500/800	1.4 / 0.7	27	1.09	1700 x 1400	HCV500/800	1.4 / 0.7	36	0.93
1600 x 1800	HCV500/600	1.4 / 0.7	20	0.92	1700 x 1400	HCV500/600	1.4 / 0.7	27	0.77
1600 x 1800	HCV500/350	1.4 / 0.7	12	0.58	1700 x 1400	HCV500/350	1.4 / 0.7	15	0.50
1600 x 1900	HCV500/1000	1.4 / 0.7	32	1.29	1700 x 1500	HCV500/1000	1.4 / 0.7	42	1.11
1600 x 1900	HCV500/800	1.4 / 0.7	26	1.14	1700 x 1500	HCV500/800	1.4 / 0.7	33	0.98
1600 x 1900	HCV500/600	1.4 / 0.7	19	0.97	1700 x 1500	HCV500/600	1.4 / 0.7	25	0.82
1600 x 1900	HCV500/350	1.4 / 0.7	11	0.62	1700 x 1500	HCV500/350	1.4 / 0.7	14	0.52
1600 x 2000	HCV500/1000	1.4 / 0.7	31	1.37	1700 x 1600	HCV500/1000	1.4 / 0.7	39	1.17
1600 x 2000	HCV500/800	1.4 / 0.7	24	1.21	1700 x 1600	HCV500/800	1.4 / 0.7	31	1.04
1600 x 2000	HCV500/600	1.4 / 0.7	18	1.01	1700 x 1600	HCV500/600	1.4 / 0.7	23	0.87

(*) Chain actuators HCV500/800 and HCV500/1000 are not available in top hung windows. (***) It is possible to make intermediate dimensions of the smoke exhaust window between the values given in the table. The size of the active aerodynamic area for these dimensions is determined by linear interpolation.
 (***) Power consumption given for the list of actuators used in a given smoke exhaust window.
 (***) Actuator of type HCV 500/xxx may be supplied with 24 V- or 48 V-.
 HCVA 500/xxx actuator with voltage 230 V~ and power consumption 0.13 A may be used as an equivalent of each specified HCV 500/xxx actuator.

1.1.5.4| Technical specification – top- and bottom-hung smoke exhaust windows opening outwards with chain actuators

WINDOW SIZE*	ACTUATOR****	POWER CONSUMPTION FOR 24 V- / 48 V-***	OPENING ANGLE**	ACTIVE AERODYNAMIC AREA [Aa]	WINDOW SIZE*	ACTUATOR****	POWER CONSUMPTION FOR 24 V- / 48 V-***	OPENING ANGLE**	ACTIVE AERODYNAMIC AREA [Aa]
B' x H'					B' x H'				
[mm]	-	[A]	[°]	[m²]	[mm]	-	[A]	[°]	[m²]
1700 x 1600	HCV500/350	1.4 / 0.7	13	0.55	1800 x 1400	HCV500/350	2x 1.4 / 2x 0.7	15	0.52
1700 x 1700	HCV500/1000	1.4 / 0.7	36	1.23	1800 x 1500	HCV500/1000	1.4 / 0.7	42	1.17
1700 x 1700	HCV500/800	1.4 / 0.7	29	1.09	1800 x 1500	HCV500/800	1.4 / 0.7	33	1.04
1700 x 1700	HCV500/600	1.4 / 0.7	22	0.92	1800 x 1500	HCV500/600	2x 1.4 / 2x 0.7	25	0.87
1700 x 1700	HCV500/350	1.4 / 0.7	12	0.58	1800 x 1500	HCV500/350	2x 1.4 / 2x 0.7	14	0.55
1700 x 1800	HCV500/1000	1.4 / 0.7	34	1.29	1800 x 1600	HCV500/1000	1.4 / 0.7	39	1.24
1700 x 1800	HCV500/800	1.4 / 0.7	27	1.15	1800 x 1600	HCV500/800	1.4 / 0.7	31	1.09
1700 x 1800	HCV500/600	1.4 / 0.7	20	0.98	1800 x 1600	HCV500/600	2x 1.4 / 2x 0.7	23	0.91
1700 x 1800	HCV500/350	1.4 / 0.7	12	0.61	1800 x 1600	HCV500/350	2x 1.4 / 2x 0.7	13	0.57
1700 x 1900	HCV500/1000	1.4 / 0.7	32	1.37	1800 x 1700	HCV500/1000	1.4 / 0.7	36	1.30
1700 x 1900	HCV500/800	1.4 / 0.7	26	1.21	1800 x 1700	HCV500/800	1.4 / 0.7	29	1.15
1700 x 1900	HCV500/600	1.4 / 0.7	19	1.02	1800 x 1700	HCV500/600	2x 1.4 / 2x 0.7	22	0.97
1700 x 1900	HCV500/350	1.4 / 0.7	11	0.65	1800 x 1700	HCV500/350	2x 1.4 / 2x 0.7	12	0.61
1700 x 2000	HCV500/1000	1.4 / 0.7	31	1.45	1800 x 1800	HCV500/1000	1.4 / 0.7	34	1.37
1700 x 2000	HCV500/800	1.4 / 0.7	24	1.28	1800 x 1800	HCV500/800	1.4 / 0.7	27	1.21
1700 x 2000	HCV500/600	1.4 / 0.7	18	1.06	1800 x 1800	HCV500/600	2x 1.4 / 2x 0.7	20	1.03
1700 x 2000	HCV500/350	1.4 / 0.7	10	0.69	1800 x 1800	HCV500/350	2x 1.4 / 2x 0.7	12	0.64
1800 x 800	HCV500/1000	1.4 / 0.7	92	0.73	1800 x 1900	HCV500/1000	1.4 / 0.7	32	1.45
1800 x 800	HCV500/800	1.4 / 0.7	70	0.68	1800 x 1900	HCV500/800	1.4 / 0.7	26	1.28
1800 x 800	HCV500/600	2x 1.4 / 2x 0.7	51	0.58	1800 x 1900	HCV500/600	2x 1.4 / 2x 0.7	19	1.07
1800 x 800	HCV500/350	2x 1.4 / 2x 0.7	29	0.40	1800 x 1900	HCV500/350	2x 1.4 / 2x 0.7	11	0.68
1800 x 900	HCV500/1000	1.4 / 0.7	78	0.82	1900 x 800	HCV500/1000	1.4 / 0.7	92	0.78
1800 x 900	HCV500/800	1.4 / 0.7	60	0.73	1900 x 800	HCV500/800	1.4 / 0.7	70	0.72
1800 x 900	HCV500/600	2x 1.4 / 2x 0.7	44	0.62	1900 x 800	HCV500/600	2x 1.4 / 2x 0.7	51	0.61
1800 x 900	HCV500/350	2x 1.4 / 2x 0.7	25	0.42	1900 x 800	HCV500/350	2x 1.4 / 2x 0.7	29	0.42
1800 x 1000	HCV500/1000	1.4 / 0.7	68	0.87	1900 x 900	HCV500/1000	1.4 / 0.7	78	0.86
1800 x 1000	HCV500/800	1.4 / 0.7	53	0.78	1900 x 900	HCV500/800	1.4 / 0.7	60	0.77
1800 x 1000	HCV500/600	2x 1.4 / 2x 0.7	39	0.66	1900 x 900	HCV500/600	2x 1.4 / 2x 0.7	44	0.66
1800 x 1000	HCV500/350	2x 1.4 / 2x 0.7	22	0.44	1900 x 900	HCV500/350	2x 1.4 / 2x 0.7	25	0.44
1800 x 1100	HCV500/1000	1.4 / 0.7	60	0.93	1900 x 1000	HCV500/1000	1.4 / 0.7	68	0.92
1800 x 1100	HCV500/800	1.4 / 0.7	47	0.83	1900 x 1000	HCV500/800	1.4 / 0.7	53	0.82
1800 x 1100	HCV500/600	2x 1.4 / 2x 0.7	35	0.70	1900 x 1000	HCV500/600	2x 1.4 / 2x 0.7	39	0.70
1800 x 1100	HCV500/350	2x 1.4 / 2x 0.7	20	0.48	1900 x 1000	HCV500/350	2x 1.4 / 2x 0.7	22	0.47
1800 x 1200	HCV500/1000	1.4 / 0.7	54	0.99	1900 x 1100	HCV500/1000	1.4 / 0.7	60	0.99
1800 x 1200	HCV500/800	1.4 / 0.7	43	0.89	1900 x 1100	HCV500/800	1.4 / 0.7	47	0.88
1800 x 1200	HCV500/600	2x 1.4 / 2x 0.7	32	0.74	1900 x 1100	HCV500/600	2x 1.4 / 2x 0.7	35	0.74
1800 x 1200	HCV500/350	2x 1.4 / 2x 0.7	18	0.49	1900 x 1100	HCV500/350	2x 1.4 / 2x 0.7	20	0.50
1800 x 1300	HCV500/1000	1.4 / 0.7	49	1.04	1900 x 1200	HCV500/1000	1.4 / 0.7	54	1.04
1800 x 1300	HCV500/800	1.4 / 0.7	39	0.94	1900 x 1200	HCV500/800	1.4 / 0.7	43	0.93
1800 x 1300	HCV500/600	2x 1.4 / 2x 0.7	29	0.78	1900 x 1200	HCV500/600	2x 1.4 / 2x 0.7	32	0.78
1800 x 1300	HCV500/350	2x 1.4 / 2x 0.7	17	0.50	1900 x 1200	HCV500/350	2x 1.4 / 2x 0.7	18	0.51
1800 x 1400	HCV500/1000	1.4 / 0.7	45	1.11	1900 x 1300	HCV500/1000	1.4 / 0.7	49	1.11
1800 x 1400	HCV500/800	1.4 / 0.7	36	0.98	1900 x 1300	HCV500/800	1.4 / 0.7	39	0.99
1800 x 1400	HCV500/600	2x 1.4 / 2x 0.7	27	0.82	1900 x 1300	HCV500/600	2x 1.4 / 2x 0.7	29	0.82

(*) Chain actuators HCV500/800 and HCV500/1000 are not available in top hung windows. (***) It is possible to make intermediate dimensions of the smoke exhaust window between the values given in the table. The size of the active aerodynamic area for these dimensions is determined by linear interpolation. (****) Power consumption given for the list of actuators used in a given smoke exhaust window.

(**) Actuators of type HCV 500/xxx may be supplied with 24 V- or 48 V-. HCVA 500/xxx actuator with voltage 230 V~ and power consumption 0.13 A may be used as an equivalent of each specified HCV 500/xxx actuator.

1.1.5.4| Technical specification – top- and bottom-hung smoke exhaust windows opening outwards with chain actuators

WINDOW SIZE*	ACTUATOR****	POWER CONSUMPTION FOR 24 V- / 48 V-***	OPENING ANGLE**	ACTIVE AERODYNAMIC AREA [Aa]	WINDOW SIZE*	ACTUATOR****	POWER CONSUMPTION FOR 24 V- / 48 V-***	OPENING ANGLE**	ACTIVE AERODYNAMIC AREA [Aa]
B' x H'				[m²]	B' x H'				[m²]
[mm]	-	[A]	[°]	[m²]	[mm]	-	[A]	[°]	[m²]
1900 x 1300	HCV500/350	2x 1.4 / 2x 0.7	17	0.53	2000 x 1400	HCV500/1000	1.4 / 0.7	45	1.23
1900 x 1400	HCV500/1000	1.4 / 0.7	45	1.17	2000 x 1400	HCV500/800	2x 1.4 / 2x 0.7	36	1.09
1900 x 1400	HCV500/800	1.4 / 0.7	36	1.04	2000 x 1400	HCV500/600	2x 1.4 / 2x 0.7	27	0.90
1900 x 1400	HCV500/600	2x 1.4 / 2x 0.7	27	0.86	2000 x 1400	HCV500/350	2x 1.4 / 2x 0.7	15	0.57
1900 x 1400	HCV500/350	2x 1.4 / 2x 0.7	15	0.55	2000 x 1500	HCV500/1000	1.4 / 0.7	42	1.30
1900 x 1500	HCV500/1000	1.4 / 0.7	42	1.24	2000 x 1500	HCV500/800	2x 1.4 / 2x 0.7	33	1.15
1900 x 1500	HCV500/800	1.4 / 0.7	33	1.09	2000 x 1500	HCV500/600	2x 1.4 / 2x 0.7	25	0.95
1900 x 1500	HCV500/600	2x 1.4 / 2x 0.7	25	0.91	2000 x 1500	HCV500/350	2x 1.4 / 2x 0.7	14	0.60
1900 x 1500	HCV500/350	2x 1.4 / 2x 0.7	14	0.57	2000 x 1600	HCV500/1000	1.4 / 0.7	39	1.37
1900 x 1600	HCV500/1000	1.4 / 0.7	39	1.31	2000 x 1600	HCV500/800	2x 1.4 / 2x 0.7	31	1.21
1900 x 1600	HCV500/800	1.4 / 0.7	31	1.15	2000 x 1600	HCV500/600	2x 1.4 / 2x 0.7	23	1.01
1900 x 1600	HCV500/600	2x 1.4 / 2x 0.7	23	0.96	2000 x 1600	HCV500/350	2x 1.4 / 2x 0.7	13	0.63
1900 x 1600	HCV500/350	2x 1.4 / 2x 0.7	13	0.60	2000 x 1700	HCV500/1000	1.4 / 0.7	36	1.44
1900 x 1700	HCV500/1000	1.4 / 0.7	36	1.37	2000 x 1700	HCV500/800	2x 1.4 / 2x 0.7	29	1.28
1900 x 1700	HCV500/800	1.4 / 0.7	29	1.22	2000 x 1700	HCV500/600	2x 1.4 / 2x 0.7	22	1.07
1900 x 1700	HCV500/600	2x 1.4 / 2x 0.7	22	1.02	2000 x 1700	HCV500/350	2x 1.4 / 2x 0.7	12	0.66
1900 x 1700	HCV500/350	2x 1.4 / 2x 0.7	12	0.63	2100 x 800	HCV500/800	2x 1.4 / 2x 0.7	70	0.80
1900 x 1800	HCV500/1000	1.4 / 0.7	34	1.44	2100 x 800	HCV500/600	2x 1.4 / 2x 0.7	51	0.68
1900 x 1800	HCV500/800	1.4 / 0.7	27	1.28	2100 x 800	HCV500/350	2x 1.4 / 2x 0.7	29	0.46
1900 x 1800	HCV500/600	2x 1.4 / 2x 0.7	20	1.08	2100 x 900	HCV500/800	2x 1.4 / 2x 0.7	60	0.86
1900 x 1800	HCV500/350	2x 1.4 / 2x 0.7	12	0.67	2100 x 900	HCV500/600	2x 1.4 / 2x 0.7	44	0.73
2000 x 800	HCV500/800	2x 1.4 / 2x 0.7	70	0.75	2100 x 900	HCV500/350	2x 1.4 / 2x 0.7	25	0.49
2000 x 800	HCV500/600	2x 1.4 / 2x 0.7	51	0.64	2100 x 1000	HCV500/1000	1.4 / 0.7	68	1.02
2000 x 800	HCV500/350	2x 1.4 / 2x 0.7	29	0.44	2100 x 1000	HCV500/800	2x 1.4 / 2x 0.7	53	0.91
2000 x 900	HCV500/1000	1.4 / 0.7	78	0.91	2100 x 1000	HCV500/600	2x 1.4 / 2x 0.7	39	0.78
2000 x 900	HCV500/800	2x 1.4 / 2x 0.7	60	0.81	2100 x 1000	HCV500/350	2x 1.4 / 2x 0.7	22	0.52
2000 x 900	HCV500/600	2x 1.4 / 2x 0.7	44	0.69	2100 x 1100	HCV500/1000	1.4 / 0.7	60	1.09
2000 x 900	HCV500/350	2x 1.4 / 2x 0.7	25	0.46	2100 x 1100	HCV500/800	2x 1.4 / 2x 0.7	47	0.97
2000 x 1000	HCV500/1000	1.4 / 0.7	68	0.98	2100 x 1100	HCV500/600	2x 1.4 / 2x 0.7	35	0.81
2000 x 1000	HCV500/800	2x 1.4 / 2x 0.7	53	0.87	2100 x 1100	HCV500/350	2x 1.4 / 2x 0.7	20	0.55
2000 x 1000	HCV500/600	2x 1.4 / 2x 0.7	39	0.74	2100 x 1200	HCV500/1000	1.4 / 0.7	54	1.16
2000 x 1000	HCV500/350	2x 1.4 / 2x 0.7	22	0.49	2100 x 1200	HCV500/800	2x 1.4 / 2x 0.7	43	1.03
2000 x 1100	HCV500/1000	1.4 / 0.7	60	1.04	2100 x 1200	HCV500/600	2x 1.4 / 2x 0.7	32	0.86
2000 x 1100	HCV500/800	2x 1.4 / 2x 0.7	47	0.92	2100 x 1200	HCV500/350	2x 1.4 / 2x 0.7	18	0.56
2000 x 1100	HCV500/600	2x 1.4 / 2x 0.7	35	0.77	2100 x 1300	HCV500/1000	1.4 / 0.7	49	1.22
2000 x 1100	HCV500/350	2x 1.4 / 2x 0.7	20	0.53	2100 x 1300	HCV500/800	2x 1.4 / 2x 0.7	39	1.09
2000 x 1200	HCV500/1000	1.4 / 0.7	54	1.10	2100 x 1300	HCV500/600	2x 1.4 / 2x 0.7	29	0.90
2000 x 1200	HCV500/800	2x 1.4 / 2x 0.7	43	0.98	2100 x 1300	HCV500/350	2x 1.4 / 2x 0.7	17	0.58
2000 x 1200	HCV500/600	2x 1.4 / 2x 0.7	32	0.82	2100 x 1400	HCV500/1000	1.4 / 0.7	45	1.29
2000 x 1200	HCV500/350	2x 1.4 / 2x 0.7	18	0.54	2100 x 1400	HCV500/800	2x 1.4 / 2x 0.7	36	1.14
2000 x 1300	HCV500/1000	1.4 / 0.7	49	1.17	2100 x 1400	HCV500/600	2x 1.4 / 2x 0.7	27	0.95
2000 x 1300	HCV500/800	2x 1.4 / 2x 0.7	39	1.04	2100 x 1400	HCV500/350	2x 1.4 / 2x 0.7	15	0.60
2000 x 1300	HCV500/600	2x 1.4 / 2x 0.7	29	0.86	2100 x 1500	HCV500/1000	1.4 / 0.7	42	1.37
2000 x 1300	HCV500/350	2x 1.4 / 2x 0.7	17	0.56	2100 x 1500	HCV500/800	2x 1.4 / 2x 0.7	33	1.20

(*) Chain actuators HCV500/800 and HCV500/1000 are not available in top hung windows. (***) It is possible to make intermediate dimensions of the smoke exhaust window between the values given in the table. The size of the active aerodynamic area for these dimensions is determined by linear interpolation.
 (***) Power consumption given for the list of actuators used in a given smoke exhaust window.
 (**) Actuators of type HCV 500/xxx may be supplied with 24 V- or 48 V-.
 HCVA 500/xxx actuator with voltage 230 V~ and power consumption 0.13 A may be used as an equivalent of each specified HCV 500/xxx actuator.

1.1.5.4| Technical specification – top- and bottom-hung smoke exhaust windows opening outwards with chain actuators

WINDOW SIZE*	ACTUATOR****	POWER CONSUMPTION FOR 24 V- / 48 V-***	OPENING ANGLE**	ACTIVE AERODYNAMIC AREA [Aa]	WINDOW SIZE*	ACTUATOR****	POWER CONSUMPTION FOR 24 V- / 48 V-***	OPENING ANGLE**	ACTIVE AERODYNAMIC AREA [Aa]
B' x H'					B' x H'				
[mm]	-	[A]	[°]	[m²]	[mm]	-	[A]	[°]	[m²]
2100 x 1500	HCV500/600	2x 1.4 / 2x 0.7	25	1.00	2300 x 800	HCV500/600	2x 1.4 / 2x 0.7	51	0.74
2100 x 1500	HCV500/350	2x 1.4 / 2x 0.7	14	0.62	2300 x 800	HCV500/350	2x 1.4 / 2x 0.7	29	0.50
2100 x 1600	HCV500/1000	1.4 / 0.7	39	1.44	2300 x 900	HCV500/1000	2x 1.4 / 2x 0.7	78	1.05
2100 x 1600	HCV500/800	2x 1.4 / 2x 0.7	31	1.27	2300 x 900	HCV500/800	2x 1.4 / 2x 0.7	60	0.94
2100 x 1600	HCV500/600	2x 1.4 / 2x 0.7	23	1.06	2300 x 900	HCV500/600	2x 1.4 / 2x 0.7	44	0.80
2100 x 1600	HCV500/350	2x 1.4 / 2x 0.7	13	0.65	2300 x 900	HCV500/350	2x 1.4 / 2x 0.7	25	0.53
2200 x 800	HCV500/1000	2x 1.4 / 2x 0.7	92	0.91	2300 x 1000	HCV500/1000	2x 1.4 / 2x 0.7	68	1.13
2200 x 800	HCV500/800	2x 1.4 / 2x 0.7	70	0.84	2300 x 1000	HCV500/800	2x 1.4 / 2x 0.7	53	1.00
2200 x 800	HCV500/600	2x 1.4 / 2x 0.7	51	0.71	2300 x 1000	HCV500/600	2x 1.4 / 2x 0.7	39	0.85
2200 x 800	HCV500/350	2x 1.4 / 2x 0.7	29	0.48	2300 x 1000	HCV500/350	2x 1.4 / 2x 0.7	22	0.57
2200 x 900	HCV500/1000	2x 1.4 / 2x 0.7	78	1.00	2300 x 1100	HCV500/1000	2x 1.4 / 2x 0.7	60	1.20
2200 x 900	HCV500/800	2x 1.4 / 2x 0.7	60	0.90	2300 x 1100	HCV500/800	2x 1.4 / 2x 0.7	47	1.06
2200 x 900	HCV500/600	2x 1.4 / 2x 0.7	44	0.76	2300 x 1100	HCV500/600	2x 1.4 / 2x 0.7	35	0.89
2200 x 900	HCV500/350	2x 1.4 / 2x 0.7	25	0.51	2300 x 1100	HCV500/350	2x 1.4 / 2x 0.7	20	0.60
2200 x 1000	HCV500/1000	2x 1.4 / 2x 0.7	68	1.08	2300 x 1200	HCV500/1000	2x 1.4 / 2x 0.7	54	1.27
2200 x 1000	HCV500/800	2x 1.4 / 2x 0.7	53	0.96	2300 x 1200	HCV500/800	2x 1.4 / 2x 0.7	43	1.13
2200 x 1000	HCV500/600	2x 1.4 / 2x 0.7	39	0.81	2300 x 1200	HCV500/600	2x 1.4 / 2x 0.7	32	0.93
2200 x 1000	HCV500/350	2x 1.4 / 2x 0.7	22	0.54	2300 x 1200	HCV500/350	2x 1.4 / 2x 0.7	18	0.61
2200 x 1100	HCV500/1000	2x 1.4 / 2x 0.7	60	1.15	2300 x 1300	HCV500/1000	2x 1.4 / 2x 0.7	49	1.34
2200 x 1100	HCV500/800	2x 1.4 / 2x 0.7	47	1.02	2300 x 1300	HCV500/800	2x 1.4 / 2x 0.7	39	1.20
2200 x 1100	HCV500/600	2x 1.4 / 2x 0.7	35	0.85	2300 x 1300	HCV500/600	2x 1.4 / 2x 0.7	29	0.98
2200 x 1100	HCV500/350	2x 1.4 / 2x 0.7	20	0.58	2300 x 1300	HCV500/350	2x 1.4 / 2x 0.7	17	0.63
2200 x 1200	HCV500/1000	2x 1.4 / 2x 0.7	54	1.21	2300 x 1400	HCV500/1000	2x 1.4 / 2x 0.7	45	1.42
2200 x 1200	HCV500/800	2x 1.4 / 2x 0.7	43	1.08	2300 x 1400	HCV500/800	2x 1.4 / 2x 0.7	36	1.25
2200 x 1200	HCV500/600	2x 1.4 / 2x 0.7	32	0.89	2300 x 1400	HCV500/600	2x 1.4 / 2x 0.7	27	1.03
2200 x 1200	HCV500/350	2x 1.4 / 2x 0.7	18	0.59	2300 x 1400	HCV500/350	2x 1.4 / 2x 0.7	15	0.65
2200 x 1300	HCV500/1000	2x 1.4 / 2x 0.7	49	1.28	2300 x 1500	HCV500/1000	2x 1.4 / 2x 0.7	42	1.49
2200 x 1300	HCV500/800	2x 1.4 / 2x 0.7	39	1.14	2300 x 1500	HCV500/800	2x 1.4 / 2x 0.7	33	1.31
2200 x 1300	HCV500/600	2x 1.4 / 2x 0.7	29	0.94	2300 x 1500	HCV500/600	2x 1.4 / 2x 0.7	25	1.08
2200 x 1300	HCV500/350	2x 1.4 / 2x 0.7	17	0.60	2300 x 1500	HCV500/350	2x 1.4 / 2x 0.7	14	0.67
2200 x 1400	HCV500/1000	2x 1.4 / 2x 0.7	45	1.36	2400 x 800	HCV500/1000	2x 1.4 / 2x 0.7	92	0.99
2200 x 1400	HCV500/800	2x 1.4 / 2x 0.7	36	1.20	2400 x 800	HCV500/800	2x 1.4 / 2x 0.7	70	0.92
2200 x 1400	HCV500/600	2x 1.4 / 2x 0.7	27	0.99	2400 x 800	HCV500/600	2x 1.4 / 2x 0.7	51	0.78
2200 x 1400	HCV500/350	2x 1.4 / 2x 0.7	15	0.63	2400 x 800	HCV500/350	2x 1.4 / 2x 0.7	29	0.53
2200 x 1500	HCV500/1000	2x 1.4 / 2x 0.7	42	1.43	2400 x 900	HCV500/1000	2x 1.4 / 2x 0.7	78	1.10
2200 x 1500	HCV500/800	2x 1.4 / 2x 0.7	33	1.26	2400 x 900	HCV500/800	2x 1.4 / 2x 0.7	60	0.99
2200 x 1500	HCV500/600	2x 1.4 / 2x 0.7	25	1.04	2400 x 900	HCV500/600	2x 1.4 / 2x 0.7	44	0.84
2200 x 1500	HCV500/350	2x 1.4 / 2x 0.7	14	0.65	2400 x 900	HCV500/350	2x 1.4 / 2x 0.7	25	0.56
2200 x 1600	HCV500/1000	2x 1.4 / 2x 0.7	39	1.51	2400 x 1000	HCV500/1000	2x 1.4 / 2x 0.7	68	1.18
2200 x 1600	HCV500/800	2x 1.4 / 2x 0.7	31	1.32	2400 x 1000	HCV500/800	2x 1.4 / 2x 0.7	53	1.05
2200 x 1600	HCV500/600	2x 1.4 / 2x 0.7	23	1.10	2400 x 1000	HCV500/600	2x 1.4 / 2x 0.7	39	0.89
2200 x 1600	HCV500/350	2x 1.4 / 2x 0.7	13	0.68	2400 x 1000	HCV500/350	2x 1.4 / 2x 0.7	22	0.59
2300 x 800	HCV500/1000	2x 1.4 / 2x 0.7	92	0.95	2400 x 1100	HCV500/1000	2x 1.4 / 2x 0.7	60	1.25
2300 x 800	HCV500/800	2x 1.4 / 2x 0.7	70	0.87	2400 x 1100	HCV500/800	2x 1.4 / 2x 0.7	47	1.11

(*) Chain actuators HCV500/800 and HCV500/1000 are not available in top hung windows. (***) It is possible to make intermediate dimensions of the smoke exhaust window between the values given in the table. The size of the active aerodynamic area for these dimensions is determined by linear interpolation. (****) Power consumption given for the list of actuators used in a given smoke exhaust window.

(**) Actuators of type HCV 500/xxx may be supplied with 24 V- or 48 V-. HCVA 500/xxx actuator with voltage 230 V~ and power consumption 0.13 A may be used as an equivalent of each specified HCV 500/xxx actuator.

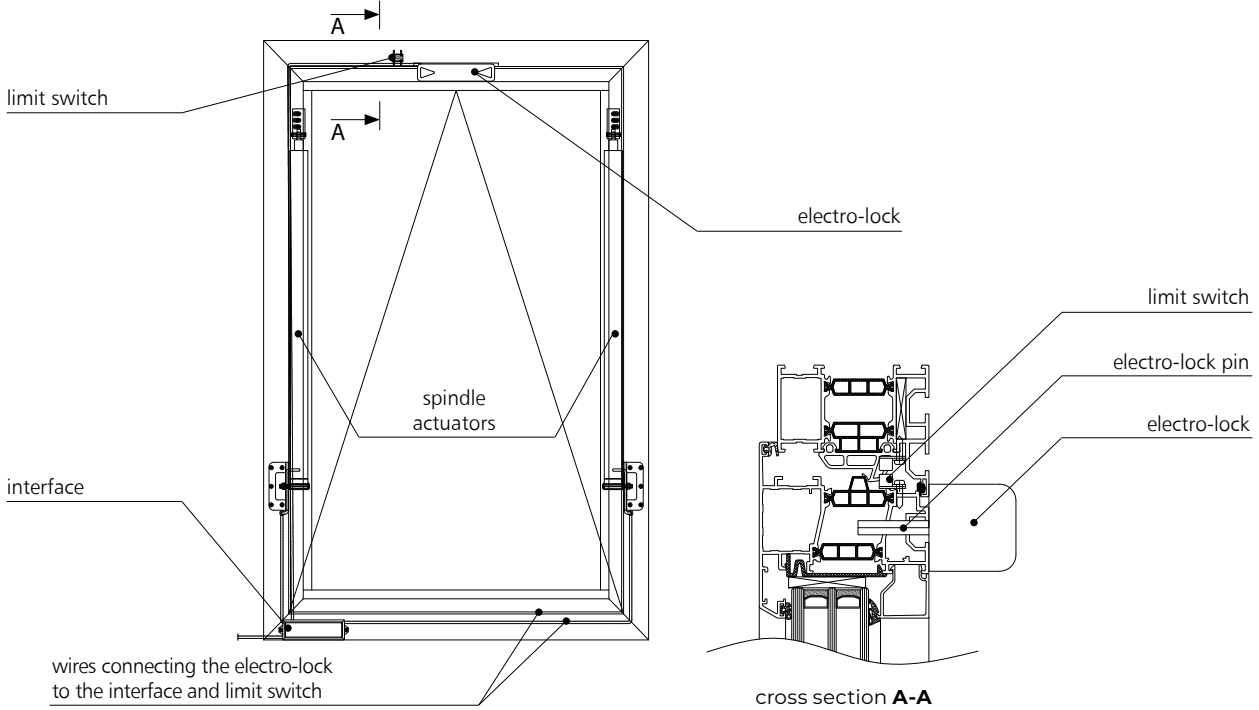
1.1.5.4| Technical specification – top- and bottom-hung smoke exhaust windows opening outwards with chain actuators

WINDOW SIZE*	ACTUATOR****	POWER CONSUMPTION FOR 24 V- / 48 V-***	OPENING ANGLE**	ACTIVE AERODYNAMIC AREA [Aa]	WINDOW SIZE*	ACTUATOR****	POWER CONSUMPTION FOR 24 V- / 48 V-***	OPENING ANGLE**	ACTIVE AERODYNAMIC AREA [Aa]
B' x H'					B' x H'				
[mm]	-	[A]	[°]	[m²]	[mm]	-	[A]	[°]	[m²]
2400 x 1100	HCV500/600	2x 1.4 / 2x 0.7	35	0.93	2600 x 800	HCV500/350	2x 1.4 / 2x 0.7	29	0.57
2400 x 1100	HCV500/350	2x 1.4 / 2x 0.7	20	0.62	2600 x 900	HCV500/1000	2x 1.4 / 2x 0.7	78	1.20
2400 x 1200	HCV500/1000	2x 1.4 / 2x 0.7	54	1.33	2600 x 900	HCV500/800	2x 1.4 / 2x 0.7	60	1.07
2400 x 1200	HCV500/800	2x 1.4 / 2x 0.7	43	1.18	2600 x 900	HCV500/600	2x 1.4 / 2x 0.7	44	0.91
2400 x 1200	HCV500/600	2x 1.4 / 2x 0.7	32	0.98	2600 x 900	HCV500/350	2x 1.4 / 2x 0.7	25	0.60
2400 x 1200	HCV500/350	2x 1.4 / 2x 0.7	18	0.64	2600 x 1000	HCV500/1000	2x 1.4 / 2x 0.7	68	1.28
2400 x 1300	HCV500/1000	2x 1.4 / 2x 0.7	49	1.40	2600 x 1000	HCV500/800	2x 1.4 / 2x 0.7	53	1.14
2400 x 1300	HCV500/800	2x 1.4 / 2x 0.7	39	1.25	2600 x 1000	HCV500/600	2x 1.4 / 2x 0.7	39	0.97
2400 x 1300	HCV500/600	2x 1.4 / 2x 0.7	29	1.03	2600 x 1000	HCV500/350	2x 1.4 / 2x 0.7	22	0.64
2400 x 1300	HCV500/350	2x 1.4 / 2x 0.7	17	0.65	2600 x 1100	HCV500/1000	2x 1.4 / 2x 0.7	60	1.37
2400 x 1400	HCV500/1000	2x 1.4 / 2x 0.7	45	1.48	2600 x 1100	HCV500/800	2x 1.4 / 2x 0.7	47	1.21
2400 x 1400	HCV500/800	2x 1.4 / 2x 0.7	36	1.30	2600 x 1100	HCV500/600	2x 1.4 / 2x 0.7	35	1.01
2400 x 1400	HCV500/600	2x 1.4 / 2x 0.7	27	1.07	2600 x 1100	HCV500/350	2x 1.4 / 2x 0.7	20	0.68
2400 x 1400	HCV500/350	2x 1.4 / 2x 0.7	15	0.67	2600 x 1200	HCV500/1000	2x 1.4 / 2x 0.7	54	1.44
2500 x 800	HCV500/1000	2x 1.4 / 2x 0.7	92	1.04	2600 x 1200	HCV500/800	2x 1.4 / 2x 0.7	43	1.28
2500 x 800	HCV500/800	2x 1.4 / 2x 0.7	70	0.96	2600 x 1200	HCV500/600	2x 1.4 / 2x 0.7	32	1.05
2500 x 800	HCV500/600	2x 1.4 / 2x 0.7	51	0.81	2600 x 1200	HCV500/350	2x 1.4 / 2x 0.7	18	0.69
2500 x 800	HCV500/350	2x 1.4 / 2x 0.7	29	0.55	2600 x 1300	HCV500/1000	2x 1.4 / 2x 0.7	49	1.52
2500 x 900	HCV500/1000	2x 1.4 / 2x 0.7	78	1.15	2600 x 1300	HCV500/800	2x 1.4 / 2x 0.7	39	1.35
2500 x 900	HCV500/800	2x 1.4 / 2x 0.7	60	1.03	2600 x 1300	HCV500/600	2x 1.4 / 2x 0.7	29	1.10
2500 x 900	HCV500/600	2x 1.4 / 2x 0.7	44	0.87	2600 x 1300	HCV500/350	2x 1.4 / 2x 0.7	17	0.70
2500 x 900	HCV500/350	2x 1.4 / 2x 0.7	25	0.58	2700 x 800	HCV500/1000	2x 1.4 / 2x 0.7	92	1.13
2500 x 1000	HCV500/1000	2x 1.4 / 2x 0.7	68	1.23	2700 x 800	HCV500/800	2x 1.4 / 2x 0.7	70	1.04
2500 x 1000	HCV500/800	2x 1.4 / 2x 0.7	53	1.09	2700 x 800	HCV500/600	2x 1.4 / 2x 0.7	51	0.88
2500 x 1000	HCV500/600	2x 1.4 / 2x 0.7	39	0.93	2700 x 800	HCV500/350	2x 1.4 / 2x 0.7	29	0.59
2500 x 1000	HCV500/350	2x 1.4 / 2x 0.7	22	0.61	2700 x 900	HCV500/1000	2x 1.4 / 2x 0.7	78	1.25
2500 x 1100	HCV500/1000	2x 1.4 / 2x 0.7	60	1.31	2700 x 900	HCV500/800	2x 1.4 / 2x 0.7	60	1.11
2500 x 1100	HCV500/800	2x 1.4 / 2x 0.7	47	1.16	2700 x 900	HCV500/600	2x 1.4 / 2x 0.7	44	0.94
2500 x 1100	HCV500/600	2x 1.4 / 2x 0.7	35	0.97	2700 x 900	HCV500/350	2x 1.4 / 2x 0.7	25	0.63
2500 x 1100	HCV500/350	2x 1.4 / 2x 0.7	20	0.65	2700 x 1000	HCV500/1000	2x 1.4 / 2x 0.7	68	1.34
2500 x 1200	HCV500/1000	2x 1.4 / 2x 0.7	54	1.38	2700 x 1000	HCV500/800	2x 1.4 / 2x 0.7	53	1.19
2500 x 1200	HCV500/800	2x 1.4 / 2x 0.7	43	1.23	2700 x 1000	HCV500/600	2x 1.4 / 2x 0.7	39	1.00
2500 x 1200	HCV500/600	2x 1.4 / 2x 0.7	32	1.02	2700 x 1000	HCV500/350	2x 1.4 / 2x 0.7	22	0.66
2500 x 1200	HCV500/350	2x 1.4 / 2x 0.7	18	0.66	2700 x 1100	HCV500/1000	2x 1.4 / 2x 0.7	60	1.42
2500 x 1300	HCV500/1000	2x 1.4 / 2x 0.7	49	1.46	2700 x 1100	HCV500/800	2x 1.4 / 2x 0.7	47	1.25
2500 x 1300	HCV500/800	2x 1.4 / 2x 0.7	39	1.30	2700 x 1100	HCV500/600	2x 1.4 / 2x 0.7	35	1.04
2500 x 1300	HCV500/600	2x 1.4 / 2x 0.7	29	1.06	2700 x 1100	HCV500/350	2x 1.4 / 2x 0.7	20	0.70
2500 x 1300	HCV500/350	2x 1.4 / 2x 0.7	17	0.68	2700 x 1200	HCV500/1000	2x 1.4 / 2x 0.7	54	1.49
2500 x 1400	HCV500/1000	2x 1.4 / 2x 0.7	45	1.54	2700 x 1200	HCV500/800	2x 1.4 / 2x 0.7	43	1.33
2500 x 1400	HCV500/800	2x 1.4 / 2x 0.7	36	1.35	2700 x 1200	HCV500/600	2x 1.4 / 2x 0.7	32	1.09
2500 x 1400	HCV500/600	2x 1.4 / 2x 0.7	27	1.12	2700 x 1200	HCV500/350	2x 1.4 / 2x 0.7	18	0.71
2500 x 1400	HCV500/350	2x 1.4 / 2x 0.7	15	0.70	2700 x 1300	HCV500/1000	2x 1.4 / 2x 0.7	49	1.58
2600 x 800	HCV500/1000	2x 1.4 / 2x 0.7	92	1.08	2700 x 1300	HCV500/800	2x 1.4 / 2x 0.7	39	1.40
2600 x 800	HCV500/800	2x 1.4 / 2x 0.7	70	0.99	2700 x 1300	HCV500/600	2x 1.4 / 2x 0.7	29	1.15
2600 x 800	HCV500/600	2x 1.4 / 2x 0.7	51	0.84	2700 x 1300	HCV500/350	2x 1.4 / 2x 0.7	17	0.73

(*) Chain actuators HCV500/800 and HCV500/1000 are not available in top hung windows. (***) It is possible to make intermediate dimensions of the smoke exhaust window between the values given in the table. The size of the active aerodynamic area for these dimensions is determined by linear interpolation.
 (***) Power consumption given for the list of actuators used in a given smoke exhaust window.
 (**) Actuators of type HCV 500/xxx may be supplied with 24 V- or 48 V-. HCVA 500/xxx actuator with voltage 230 V~ and power consumption 0.13 A may be used as an equivalent of each specified HCV 500/xxx actuator.

1.1.6 | Technical specification - application of electro-lock in windows with spindle actuators

The automatic electro-lock for smoke exhausting windows as well as daily ventilation windows provide protection and safety. It is mounted in place of the handle and after receiving 24 V- voltage its pin rotates and moves the peripheral hardware. This guarantees resistance of the leaf against wind load and suitable, tamper-proof leaf-to-frame connection. The electro-lock works with the: interface, reed switch and the actuators. Standard peripheral hardware is used for installation. Electro-lock specification: 24 V-; 1.0 A; 10 Nm. Power consumption of electro-lock does not sum up with power consumption of actuators.



		H' - window height [mm]														
		800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200
B' - window width [mm]	800	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	900	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	1000	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	1100	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	1200	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	1300	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	1400	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	1500	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	1600	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	1700	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	1800	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	1900	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	2000	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	2100	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	2200	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	2300	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	2400	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
2500	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
2600	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
2700	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	

* dimensional range of electro-lock windows
 ■ dimensional range of windows without electro-lock
 ■ area beyond availability

1.2 | Inward-opening smoke exhaust windows

1.2.1 | Description of standard

- » classification according to the Certificate of Constancy of Performance No 1396-CPR-0128 (according to EN 12101-2),
- » inward-opening smoke exhaust windows intended for installation in the facade as individual smoke exhaust and daily ventilation devices or integrated into post and beam facade systems available on the market,
- » dimensional range of inward-opening smoke exhaust windows in horizontal arrangement 800 x 800 mm ÷ 2700 x 1300 mm, in vertical arrangement 800 x 800 mm ÷ 1600 x 2200 mm,
- » smoke exhaust windows made of individually designed multi-chamber aluminium profiles with polyamide thermal breaks,
- » profile width: frame 75 mm and leaf 84 mm,
- » groove system in the leaf and frame profile with covering profile allows to route cables and install actuator consoles easily,
- » leaf glazing: triple glass 4/18/4/18/4 (heat transfer coefficient ($U_g=0.5 \text{ W / (m}^2\text{K)}$)), triple safety glass 4/18/4/18/33.1 ($U_g=0.5 \text{ W / (m}^2\text{K)}$), double safety glass 4/16/33.1 ($U_g=1.1 \text{ W / (m}^2\text{K)}$) or sandwich panel (ALU-PIR-ALU) ($U_g=0.66 \text{ W / (m}^2\text{K)}$),
- » windows joined with each other by means of vertical or horizontal connection sets,
- » leaf opening angle $10^\circ \div 90^\circ$ (depending on the size of the window and type of control used),
- » exhaust or daily ventilation control: 24 V- / 48 V- power supply (G / S spindle actuators, HCV chain actuators) or 230 V~ (HCVA chain actuators),
- » use of an electro-lock with interface for the selected dimensional range of smoke exhaust windows with spindle actuators (see page 56) for table of dimensions with electro lock).

1.2.2 | Non-standard options

- » possibility of making intermediate dimensions of smoke exhaust windows between the values given in the table on pages 41-54, the value of the active aerodynamic area for these dimensions is calculated by linear interpolation,
- » possibility of painting profiles in any RAL color; structural or wood imitation color,
- » possibility of making bi-color windows,
- » glazing beads available in rectangular or rounded versions,
- » decorative bars referring to the style of old architecture as well as a modern element of architecture:
 - stuck on - glued to the glazing unit both inside and outside,
 - internal - placed inside the glazing unit,
- » glazing bars - dividing the glass into many smaller formats.

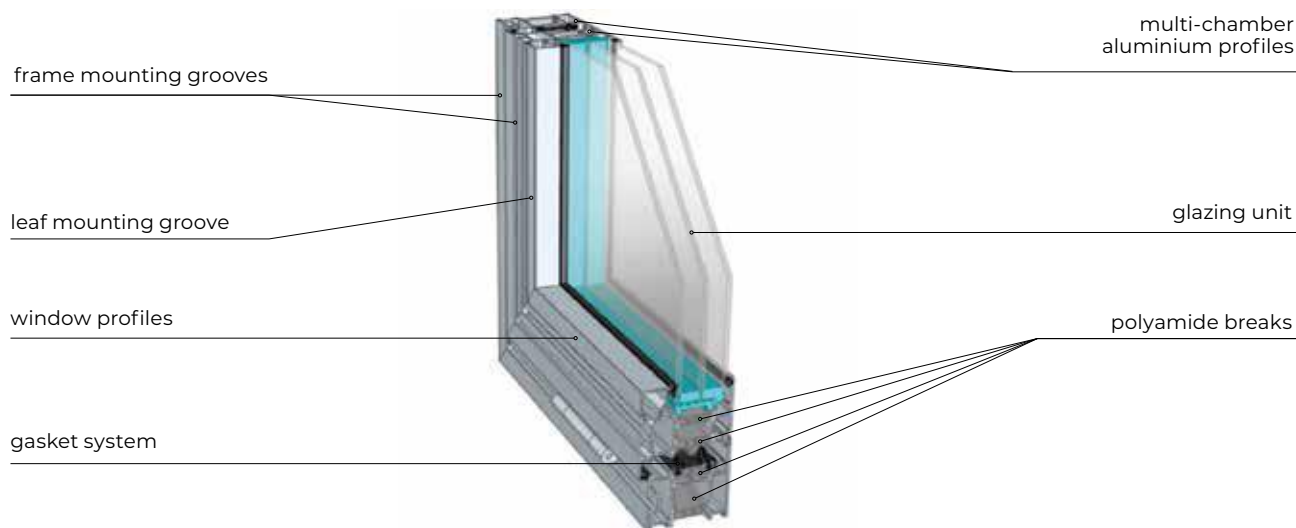


Fig. 48 cross-section through the profile of an inward-opening smoke exhaust window

1.2.3 | Types of inward-opening smoke exhaust windows

» **bottom hung inward-opening windows**



Fig. 49 *mcr OSO THERM 75 smoke exhaust window with two S spindle actuators*



Fig. 50 *mcr OSO THERM 75 smoke exhaust window with two G spindle actuators*



Fig. 51 *mcr OSO THERM 75 smoke exhaust window with HCV chain actuator*



Fig. 52 *mcr OSO THERM 75 smoke exhaust window with two S spindle actuators with shifted pivot point*



Fig. 53 *mcr OSO THERM 75 smoke exhaust window with two G spindle actuators with shifted pivot point*



Fig. 54 *mcr OSO THERM 75 smoke exhaust window with two HCV chain actuators*

» **top hung inward-opening windows**



Fig. 55 *mcr OSO THERM 75 smoke exhaust window with two S spindle actuators*



Fig. 56 *mcr OSO THERM 75 smoke exhaust window with two G spindle actuators*



Fig. 57 *mcr OSO THERM 75 smoke exhaust window with HCV chain actuator*



Fig. 58 *mcr OSO THERM 75 smoke exhaust window with two S spindle actuators with shifted pivot point*



Fig. 59 *mcr OSO THERM 75 smoke exhaust window with two G spindle actuators with shifted pivot point*



Fig. 60 *mcr OSO THERM 75 smoke exhaust window with two HCV chain actuators*

1.2.3.1 | Design of inward opening smoke exhaust window with spindle actuators

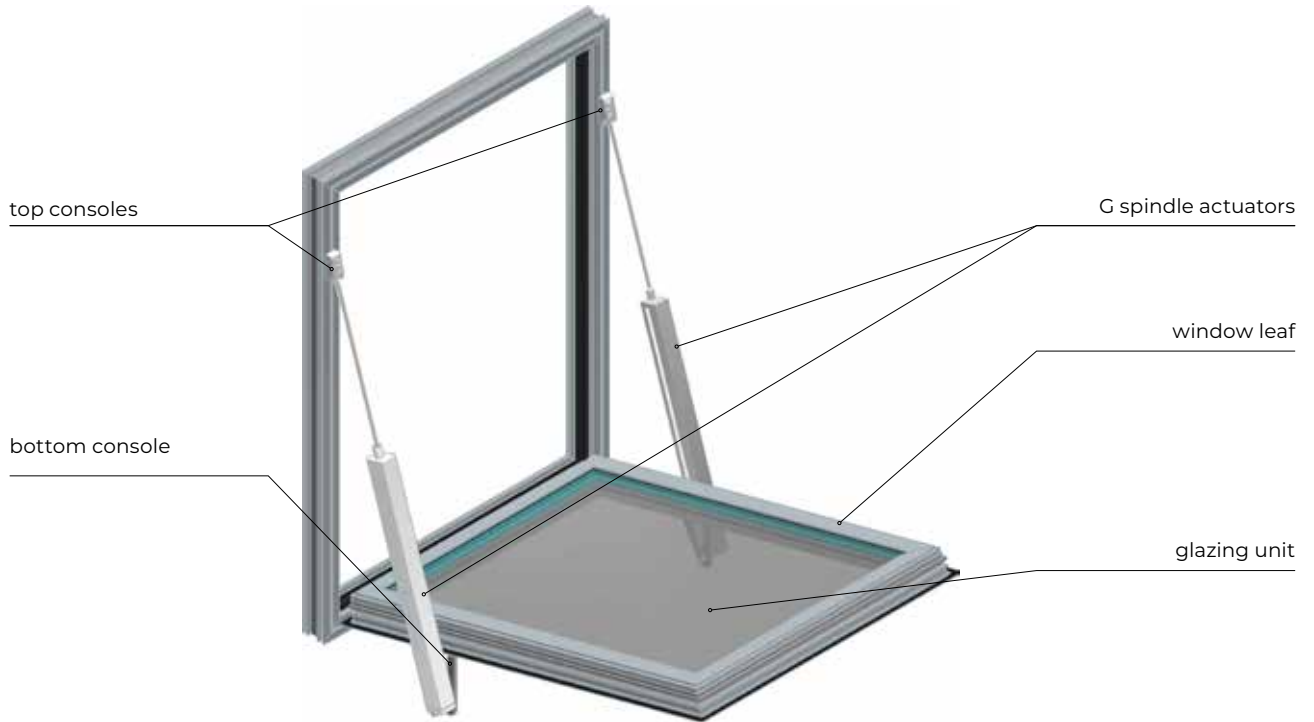


Fig. 61 mcr OSO THERM 75 smoke exhaust window opening inwards by means of two spindle actuators

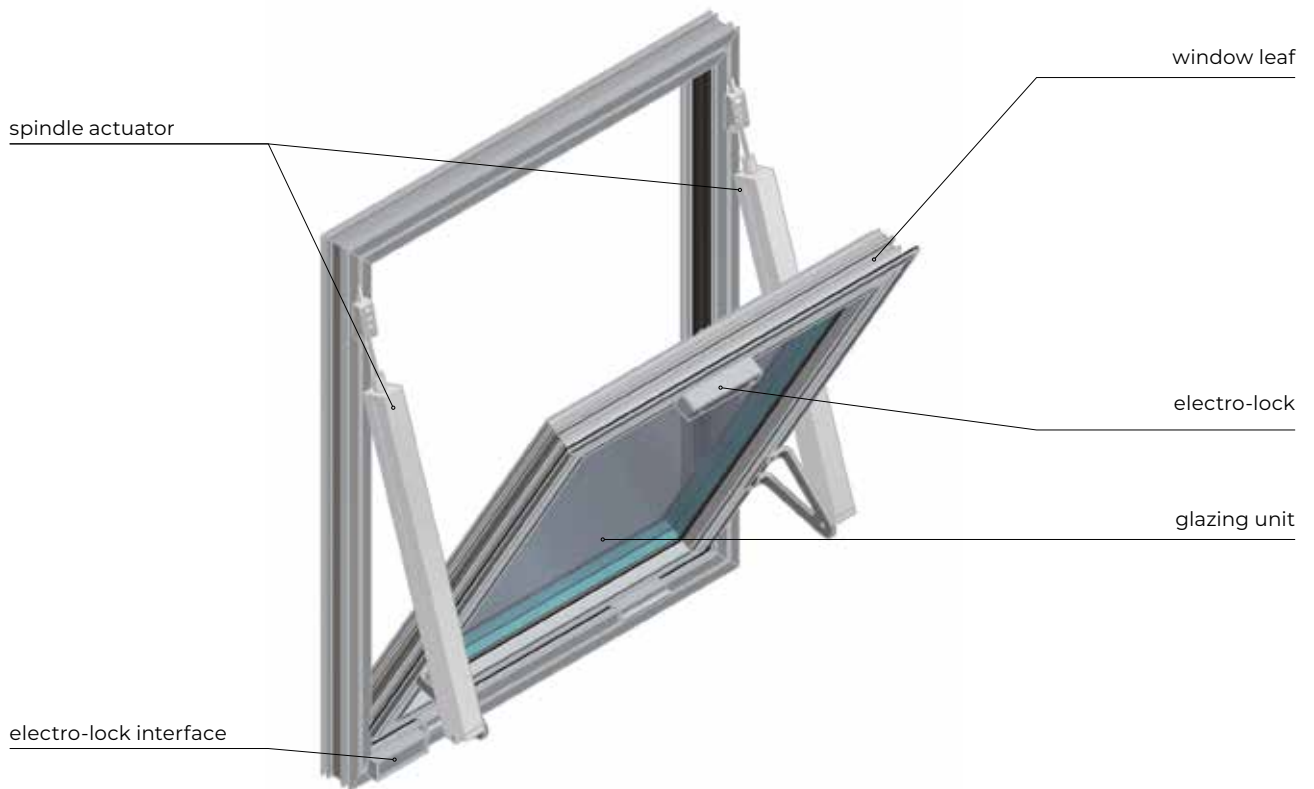


Fig. 62 mcr OSO THERM 75 smoke exhaust window opening inwards by means of two G spindle actuators with electro-lock and interface

1.2.3.2 | Design of smoke exhaust window opening inwards by means of chain actuators

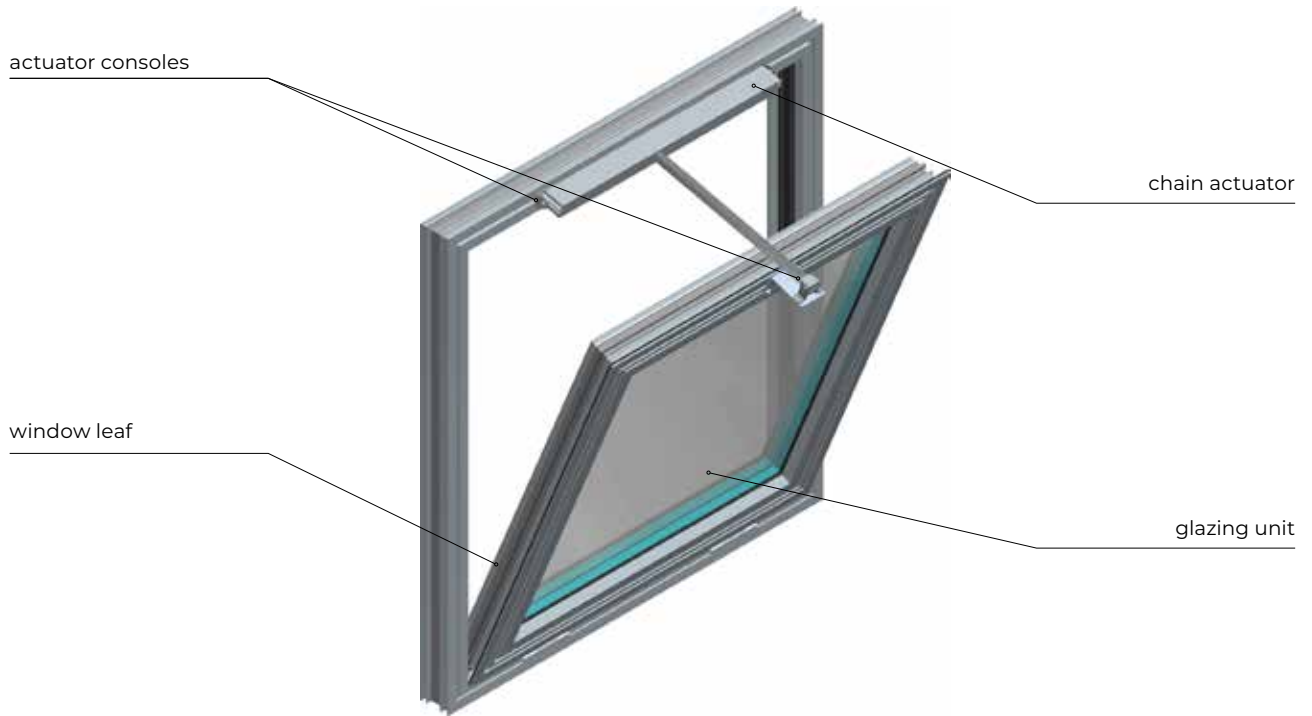


Fig. 63 mcr OSO THERM 75 smoke exhaust window opening inwards by means of single HCV chain actuator

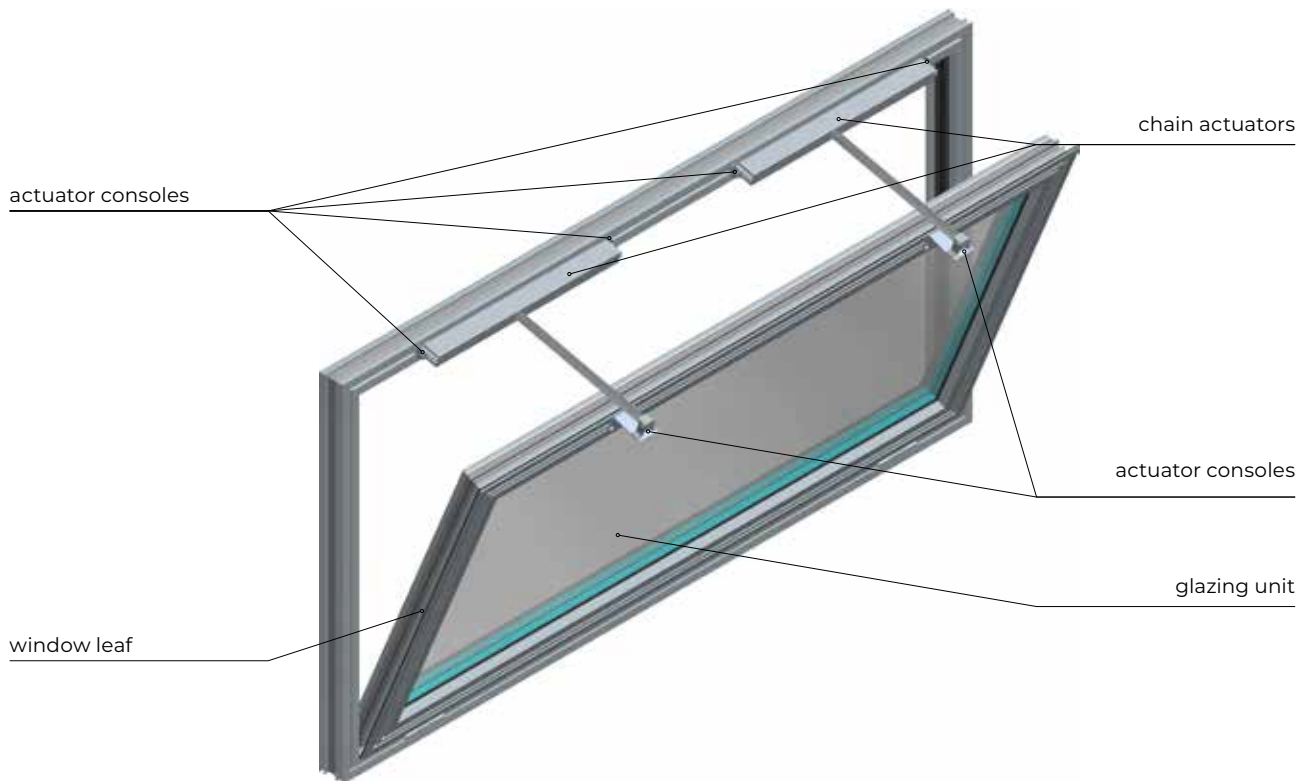


Fig. 64 mcr OSO THERM 75 smoke exhaust window opening inwards by means of double HCV chain actuators

1.2.4 | Technical drawings of inward opening smoke exhaust windows

1.2.4.1 | Technical drawings of the smoke exhaust window with S spindle actuators

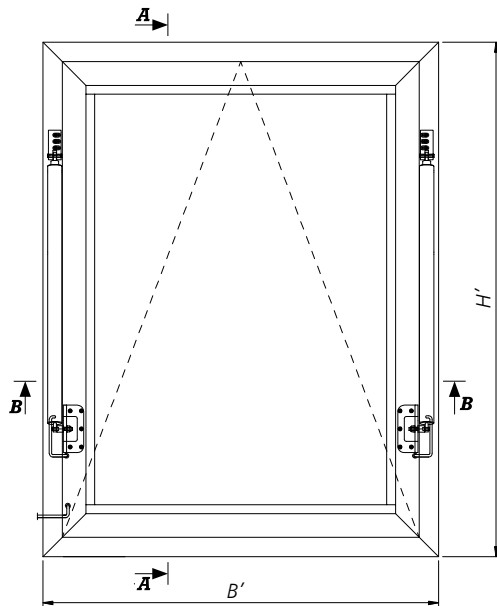


Fig. 65 view from inside of the mcr OSO THERM 75 smoke exhaust window with S spindle actuators in closed position

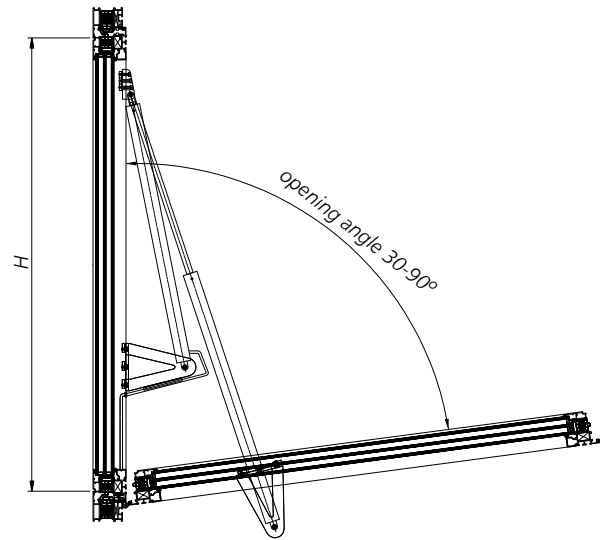


Fig. 66 **A-A** vertical cross-section through mcr OSO THERM 75 smoke exhaust window in open position

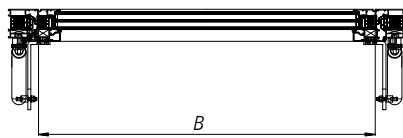


Fig. 67 **B-B** horizontal cross-section through mcr OSO THERM 75 smoke exhaust window in closed position

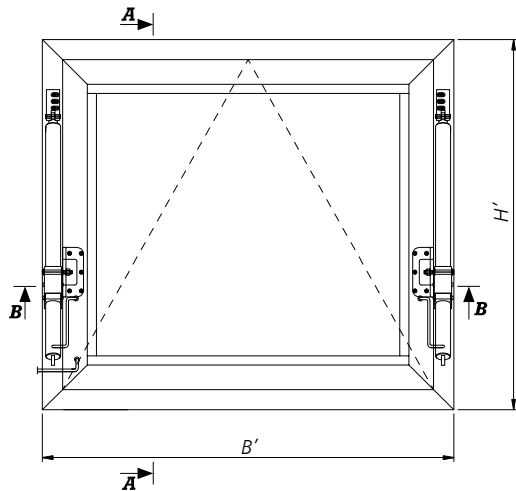


Fig. 68 view from inside of the mcr OSO THERM 75 smoke exhaust window with S spindle actuators with shifted pivot point in closed position

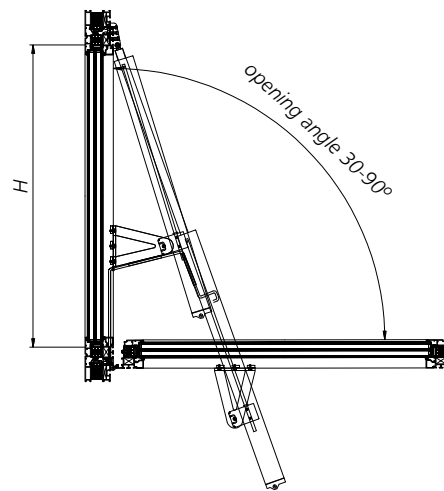


Fig. 69 **A-A** vertical cross-section through mcr OSO THERM 75 smoke exhaust window with shifted pivot point in open position

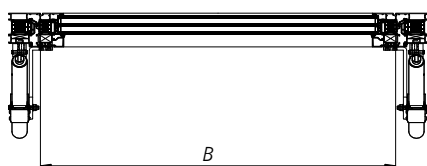


Fig. 70 **B-B** horizontal cross-section through mcr OSO THERM 75 smoke exhaust window in closed position

B' - external width of the smoke exhaust window
 H' - external height of the smoke exhaust window
 B - internal width of the smoke exhaust window
 H - internal height of the smoke exhaust window

1.2.4.2 | Technical drawings of the smoke exhaust window with G spindle actuators

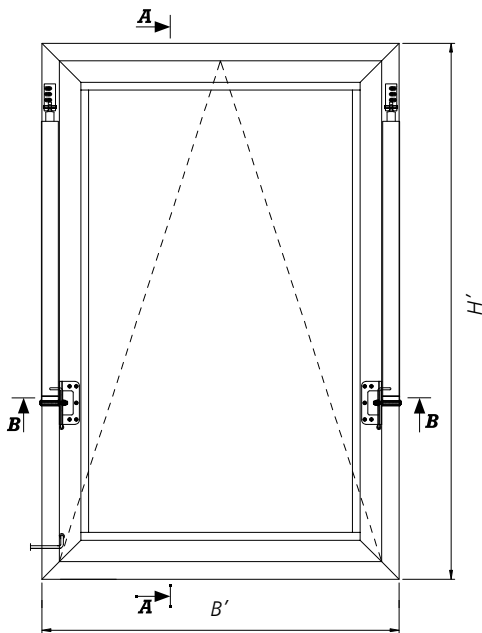


Fig. 71 view from inside of the mcr OSO THERM 75 smoke exhaust window with G spindle actuators in closed position

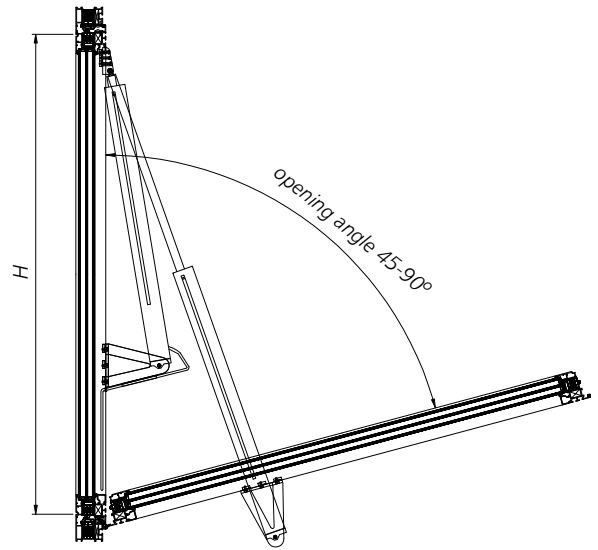


Fig. 72 **A-A** vertical cross-section through mcr OSO THERM 75 smoke exhaust window in open position

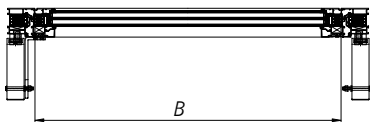


Fig. 73 **B-B** horizontal cross-section through mcr OSO THERM 75 smoke exhaust window in closed position

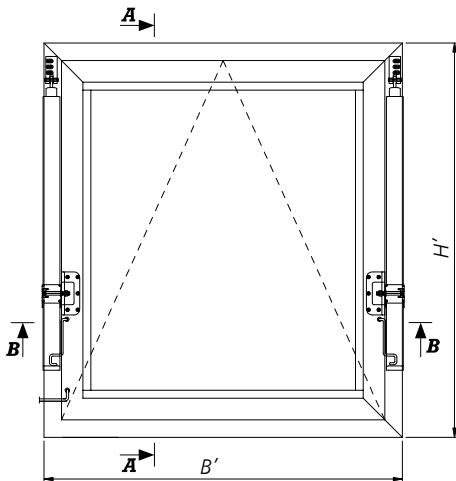


Fig. 74 view from inside of the mcr OSO THERM 75 smoke exhaust window with G spindle actuators with shifted pivot point in closed position

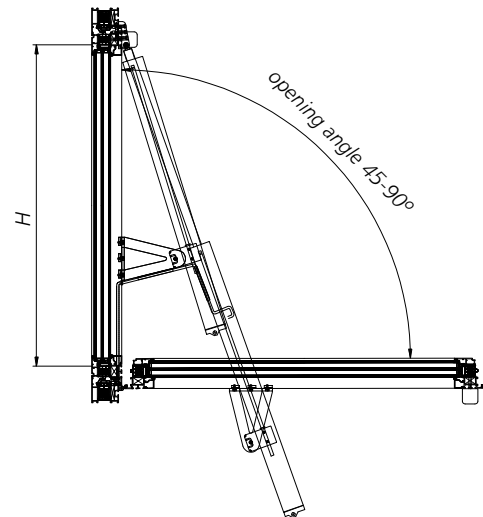


Fig. 75 **A-A** vertical cross-section through mcr OSO THERM 75 smoke exhaust window with shifted pivot point in open position

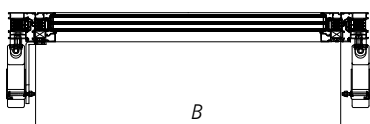


Fig. 76 **B-B** horizontal cross-section through mcr OSO THERM 75 smoke exhaust window with shifted pivot point in closed position

B' - external width of the smoke exhaust window
 H' - external height of the smoke exhaust window
 B - internal width of the smoke exhaust window
 H - internal height of the smoke exhaust window

1.2.4.3 | Technical drawings of the smoke exhaust window with HCV chain actuator

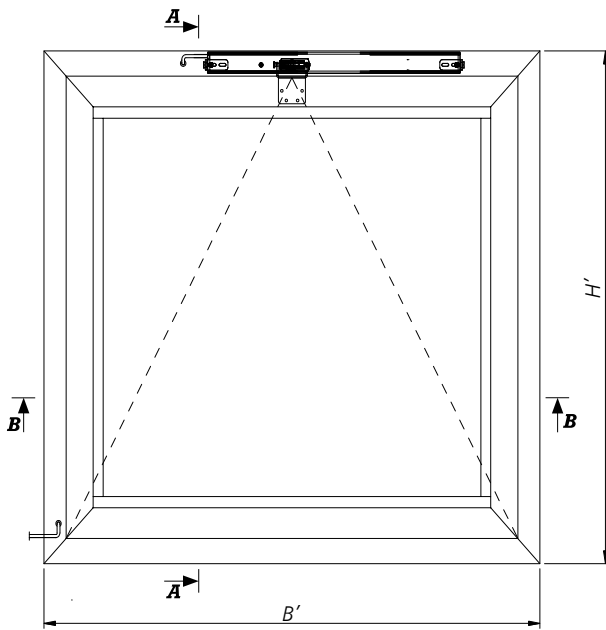


Fig. 77 view from inside of the mcr OSO THERM 75 smoke exhaust window with HCV chain actuator in closed position

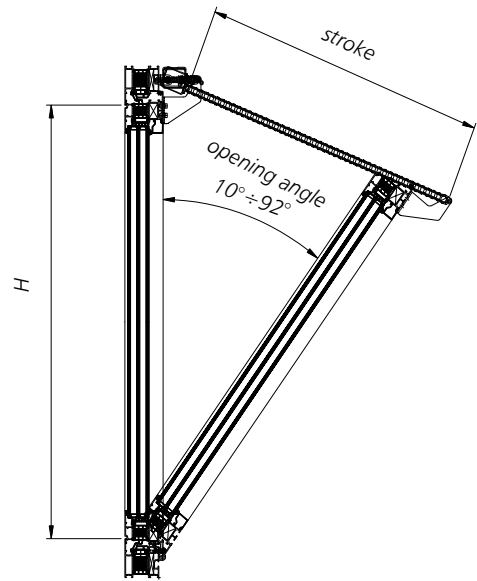


Fig. 78 **A-A** vertical cross-section through mcr OSO THERM 75 smoke exhaust window in open position

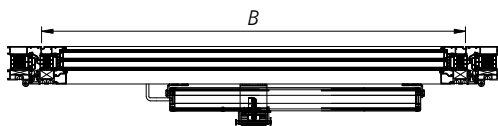


Fig. 79 **B-B** horizontal cross-section through mcr OSO THERM 75 smoke exhaust window in closed position

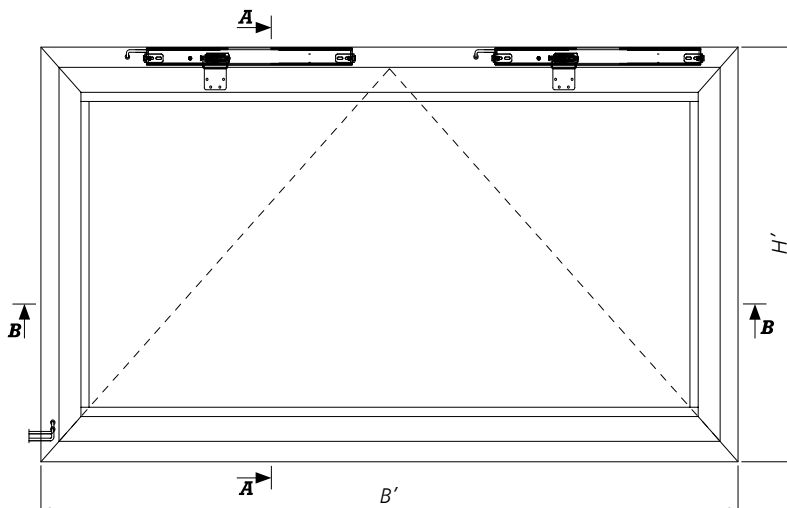


Fig. 80 view from inside of the mcr OSO THERM 75 smoke exhaust window with two HCV chain actuators in closed position

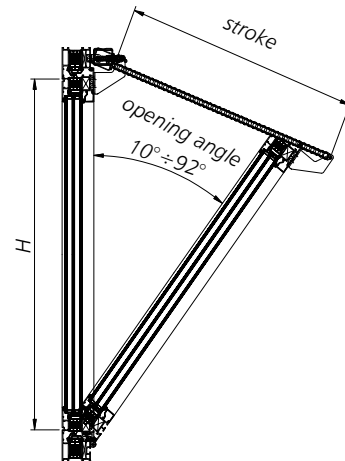


Fig. 81 **A-A** vertical cross-section through mcr OSO THERM 75 smoke exhaust window in open position

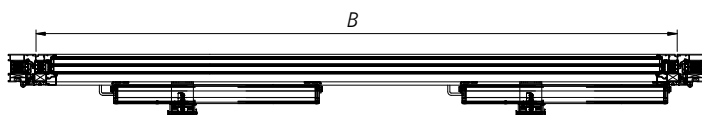


Fig. 82 **B-B** horizontal cross-section through mcr OSO THERM 75 smoke exhaust window in closed position

B' - external width of the smoke exhaust window
 H' - external height of the smoke exhaust window
 B - internal width of the smoke exhaust window
 H - internal height of the smoke exhaust window

1.2.5 | **Technical specification**

1.2.5.1 | **Types of smoke exhaust windows opening inwards by means of spindle actuators**

» **bottom hung inward-opening windows**



Fig. 83 *mcr OSO THERM 75 smoke exhaust window with two S spindle actuators*



Fig. 84 *mcr OSO THERM 75 smoke exhaust window with two G spindle actuators*



Fig. 85 *mcr OSO THERM 75 smoke exhaust window with two S spindle actuators with shifted pivot point*



Fig. 86 *mcr OSO THERM 75 smoke exhaust window with two S spindle actuators with shifted pivot point*

» **top-hung inward-opening windows**



Fig. 87 *mcr OSO THERM 75 smoke exhaust window with two S spindle actuators*



Fig. 88 *mcr OSO THERM 75 smoke exhaust window with two G spindle actuators*



Fig. 89 *mcr OSO THERM 75 smoke exhaust window with two G spindle actuators*



Fig. 90 *mcr OSO THERM 75 smoke exhaust window with two G spindle actuators with shifted pivot point*

1.2.5.2| Technical specification – types of smoke exhaust windows opening inwards by means of spindle actuators

WINDOW SIZE*	Opening angle 30°			Opening angle 45°			Opening angle 60°			Opening angle 75°			Opening angle 90°		
B' x H'	ACTUATOR	POWER CONSUMPTION **	ACTIVE AERODYNAMIC AREA [Aa]	ACTUATOR	POWER CONSUMPTION **	ACTIVE AERODYNAMIC AREA [Aa]	ACTUATOR	POWER CONSUMPTION **	ACTIVE AERODYNAMIC AREA [Aa]	ACTUATOR	POWER CONSUMPTION **	ACTIVE AERODYNAMIC AREA [Aa]	ACTUATOR	POWER CONSUMPTION **	ACTIVE AERODYNAMIC AREA [Aa]
[mm]	-	[A]	[m ²]	-	[A]	[m ²]	-	[A]	[m ²]	-	[A]	[m ²]	-	[A]	[m ²]
800 x 800	S08B-200	2x 0.8	0.20	S08B-300	2x 0.8	0.25	S08B-300	2x 0.8	0.29	S10C-400	2x 1.0	0.30	S10C-450	2x 1.0	0.32
800 x 900	S08B-200	2x 0.8	0.23	S08B-300	2x 0.8	0.29	S08B-300	2x 0.8	0.33	S10C-400	2x 1.0	0.35	S10C-450	2x 1.0	0.37
800 x 1000	S08B-200	2x 0.8	0.27	S08B-300	2x 0.8	0.33	S10C-400	2x 1.0	0.38	S08B-300	2x 0.8	0.40	S10C-450	2x 1.0	0.42
800 x 1100	S08B-200	2x 0.8	0.30	S10C-350	2x 1.0	0.38	S10C-400	2x 1.0	0.43	S10C-350	2x 1.0	0.45	G26H-550	2x 2.6	0.47
800 x 1200	S08B-300	2x 0.8	0.34	S08B-300	2x 0.8	0.42	S10C-350	2x 1.0	0.47	S10C-400	2x 1.0	0.50	G26H-550	2x 2.6	0.52
800 x 1300	S08B-300	2x 0.8	0.38	S10C-350	2x 1.0	0.46	S10C-400	2x 1.0	0.52	S10C-450	2x 1.0	0.54	S10C-450	2x 1.0	0.57
800 x 1400	S08B-300	2x 0.8	0.42	S10C-350	2x 1.0	0.51	S10C-450	2x 1.0	0.57	S10C-450	2x 1.0	0.60	G26H-750	2x 2.6	0.61
800 x 1500	S08B-300	2x 0.8	0.46	S10C-400	2x 1.0	0.56	S10C-450	2x 1.0	0.62	G26H-550	2x 2.6	0.65	G26H-750	2x 2.6	0.67
800 x 1600	S10C-350	2x 1.0	0.50	S10C-450	2x 1.0	0.61	G26H-550	2x 2.6	0.67	G26H-600	2x 2.6	0.70	G40H-830	2x 4.0	0.72
800 x 1700	S10C-350	2x 1.0	0.55	S10C-450	2x 1.0	0.66	G26H-550	2x 2.6	0.73	G26H-600	2x 2.6	0.76	G40H-830	2x 4.0	0.78
800 x 1800	S10C-400	2x 1.0	0.60	G26H-550	2x 2.6	0.71	G26H-600	2x 2.6	0.78	G26H-750	2x 2.6	0.81	G40H-830	2x 4.0	0.84
800 x 1900	S10C-400	2x 1.0	0.66	G26H-550	2x 2.6	0.78	G26H-600	2x 2.6	0.84	G26H-750	2x 2.6	0.87	G40H-830	2x 4.0	0.89
800 x 2000	S10C-450	2x 1.0	0.71	G26H-550	2x 2.6	0.83	G26H-750	2x 2.6	0.89	G26H-750	2x 2.6	0.92	G40H-830	2x 4.0	0.96
800 x 2100	S10C-450	2x 1.0	0.76	G26H-600	2x 2.6	0.89	G26H-750	2x 2.6	0.95	G26H-750	2x 2.6	0.99	G40H-830	2x 4.0	1.01
800 x 2200	S10C-450	2x 1.0	0.81	G26H-600	2x 2.6	0.94	G26H-750	2x 2.6	1.02	G26H-750	2x 2.6	1.05	G40H-830	2x 4.0	1.07
900 x 800	S08B-200	2x 0.8	0.23	S08B-300	2x 0.8	0.28	S08B-300	2x 0.8	0.32	S10C-400	2x 1.0	0.35	S10C-450	2x 1.0	0.36
900 x 900	S08B-200	2x 0.8	0.26	S08B-300	2x 0.8	0.33	S08B-300	2x 0.8	0.38	S10C-400	2x 1.0	0.40	S10C-450	2x 1.0	0.42
900 x 1000	S08B-200	2x 0.8	0.31	S08B-300	2x 0.8	0.38	S10C-400	2x 1.0	0.43	S08B-300	2x 0.8	0.45	S10C-450	2x 1.0	0.48
900 x 1100	S08B-200	2x 0.8	0.35	S10C-350	2x 1.0	0.43	S10C-400	2x 1.0	0.48	S10C-350	2x 1.0	0.51	G26H-550	2x 2.6	0.53
900 x 1200	S08B-300	2x 0.8	0.39	S08B-300	2x 0.8	0.47	S10C-350	2x 1.0	0.53	S10C-400	2x 1.0	0.56	G26H-550	2x 2.6	0.58
900 x 1300	S08B-300	2x 0.8	0.43	S10C-350	2x 1.0	0.53	S10C-400	2x 1.0	0.59	S10C-450	2x 1.0	0.62	S10C-450	2x 1.0	0.64
900 x 1400	S08B-300	2x 0.8	0.48	S10C-350	2x 1.0	0.58	S10C-450	2x 1.0	0.64	S10C-450	2x 1.0	0.68	G26H-750	2x 2.6	0.70
900 x 1500	S08B-300	2x 0.8	0.53	S10C-400	2x 1.0	0.64	S10C-450	2x 1.0	0.70	G26H-550	2x 2.6	0.74	G26H-750	2x 2.6	0.77
900 x 1600	S10C-350	2x 1.0	0.58	S10C-450	2x 1.0	0.70	G26H-550	2x 2.6	0.77	G26H-600	2x 2.6	0.80	G40H-830	2x 4.0	0.83
900 x 1700	S10C-350	2x 1.0	0.63	S10C-450	2x 1.0	0.75	G26H-550	2x 2.6	0.83	G26H-600	2x 2.6	0.86	G40H-830	2x 4.0	0.89
900 x 1800	S10C-400	2x 1.0	0.68	G26H-550	2x 2.6	0.81	G26H-600	2x 2.6	0.88	G26H-750	2x 2.6	0.92	G40H-830	2x 4.0	0.95
900 x 1900	S10C-400	2x 1.0	0.74	G26H-550	2x 2.6	0.87	G26H-600	2x 2.6	0.95	G26H-750	2x 2.6	0.99	G40H-830	2x 4.0	1.02
900 x 2000	S10C-450	2x 1.0	0.80	G26H-550	2x 2.6	0.94	G26H-750	2x 2.6	1.02	G26H-750	2x 2.6	1.06	G40H-830	2x 4.0	1.08
900 x 2100	S10C-450	2x 1.0	0.85	G26H-600	2x 2.6	1.00	G26H-750	2x 2.6	1.09	G26H-750	2x 2.6	1.13	G40H-830	2x 4.0	1.15
900 x 2200	S10C-450	2x 1.0	0.91	G26H-600	2x 2.6	1.07	G26H-750	2x 2.6	1.16	G26H-750	2x 2.6	1.19	G40H-830	2x 4.0	1.23
1000 x 800	S08B-200	2x 0.8	0.25	S08B-300	2x 0.8	0.32	S08B-300	2x 0.8	0.37	S10C-400	2x 1.0	0.39	S10C-450	2x 1.0	0.41
1000 x 900	S08B-200	2x 0.8	0.29	S08B-300	2x 0.8	0.37	S08B-300	2x 0.8	0.43	S10C-400	2x 1.0	0.45	S10C-450	2x 1.0	0.47
1000 x 1000	S08B-200	2x 0.8	0.34	S08B-300	2x 0.8	0.42	S10C-400	2x 1.0	0.48	S08B-300	2x 0.8	0.51	S10C-450	2x 1.0	0.54
1000 x 1100	S08B-200	2x 0.8	0.38	S10C-350	2x 1.0	0.48	S10C-400	2x 1.0	0.54	S10C-350	2x 1.0	0.57	G26H-550	2x 2.6	0.59

(*) It is possible to make intermediate dimensions of the smoke exhaust window between the values given in the table. Value of the active aerodynamic area for these dimensions is determined by linear interpolation.

(**) Smoke exhaust windows are equipped with a set of two spindle actuators. Power consumption is given for a set of two actuators.

1.2.5.2| Technical specification – types of smoke exhaust windows opening inwards by means of spindle actuators

WINDOW SIZE*	Opening angle 30°			Opening angle 45°			Opening angle 60°			Opening angle 75°			Opening angle 90°		
B' x H'	ACTUATOR	POWER CONSUMPTION **	ACTIVE AERODYNAMIC AREA [Aa]	ACTUATOR	POWER CONSUMPTION **	ACTIVE AERODYNAMIC AREA [Aa]	ACTUATOR	POWER CONSUMPTION **	ACTIVE AERODYNAMIC AREA [Aa]	ACTUATOR	POWER CONSUMPTION **	ACTIVE AERODYNAMIC AREA [Aa]	ACTUATOR	POWER CONSUMPTION **	ACTIVE AERODYNAMIC AREA [Aa]
[mm]	-	[A]	[m²]	-	[A]	[m²]	-	[A]	[m²]	-	[A]	[m²]	-	[A]	[m²]
1000 x 1200	S08B-300	2x 0.8	0.43	S08B-300	2x 0.8	0.53	S10C-350	2x 1.0	0.60	S10C-400	2x 1.0	0.63	G26H-550	2x 2.6	0.66
1000 x 1300	S08B-300	2x 0.8	0.48	S10C-350	2x 1.0	0.59	S10C-400	2x 1.0	0.66	S10C-450	2x 1.0	0.70	S10C-450	2x 1.0	0.72
1000 x 1400	S08B-300	2x 0.8	0.53	S10C-350	2x 1.0	0.65	S10C-450	2x 1.0	0.72	S10C-450	2x 1.0	0.76	G26H-750	2x 2.6	0.79
1000 x 1500	S08B-300	2x 0.8	0.58	S10C-400	2x 1.0	0.71	S10C-450	2x 1.0	0.79	G26H-550	2x 2.6	0.83	G26H-750	2x 2.6	0.86
1000 x 1600	S10C-350	2x 1.0	0.64	S10C-450	2x 1.0	0.77	G26H-550	2x 2.6	0.86	G26H-600	2x 2.6	0.90	G40H-830	2x 4.0	0.93
1000 x 1700	S10C-350	2x 1.0	0.70	S10C-450	2x 1.0	0.84	G26H-550	2x 2.6	0.92	G26H-600	2x 2.6	0.97	G40H-830	2x 4.0	0.99
1000 x 1800	S10C-400	2x 1.0	0.76	G26H-550	2x 2.6	0.91	G26H-600	2x 2.6	1.00	G26H-750	2x 2.6	1.04	G40H-830	2x 4.0	1.07
1000 x 1900	S10C-400	2x 1.0	0.82	G26H-550	2x 2.6	0.98	G26H-600	2x 2.6	1.07	G26H-750	2x 2.6	1.11	G40H-830	2x 4.0	1.14
1000 x 2000	S10C-450	2x 1.0	0.88	G26H-550	2x 2.6	1.05	G26H-750	2x 2.6	1.15	G26H-750	2x 2.6	1.18	G40H-830	2x 4.0	1.22
1000 x 2100	S10C-450	2x 1.0	0.96	G26H-600	2x 2.6	1.13	G26H-750	2x 2.6	1.21	G26H-750	2x 2.6	1.25	G40H-830	2x 4.0	1.30
1000 x 2200	S10C-450	2x 1.0	1.03	G26H-600	2x 2.6	1.20	G26H-750	2x 2.6	1.29	G26H-750	2x 2.6	1.34	G40H-830	2x 4.0	1.37
1100 x 800	S08B-200	2x 0.8	0.28	S08B-300	2x 0.8	0.36	S08B-300	2x 0.8	0.41	S10C-400	2x 1.0	0.43	S10C-450	2x 1.0	0.46
1100 x 900	S08B-200	2x 0.8	0.32	S08B-300	2x 0.8	0.41	S08B-300	2x 0.8	0.47	S10C-400	2x 1.0	0.50	S10C-450	2x 1.0	0.52
1100 x 1000	S08B-200	2x 0.8	0.37	S08B-300	2x 0.8	0.46	S10C-400	2x 1.0	0.53	S08B-300	2x 0.8	0.56	S10C-450	2x 1.0	0.59
1100 x 1100	S08B-200	2x 0.8	0.42	S10C-350	2x 1.0	0.52	S10C-400	2x 1.0	0.60	S10C-350	2x 1.0	0.63	G26H-550	2x 2.6	0.66
1100 x 1200	S08B-300	2x 0.8	0.48	S08B-300	2x 0.8	0.59	S10C-350	2x 1.0	0.66	S10C-400	2x 1.0	0.70	G26H-550	2x 2.6	0.73
1100 x 1300	S08B-300	2x 0.8	0.53	S10C-350	2x 1.0	0.65	S10C-400	2x 1.0	0.73	S10C-450	2x 1.0	0.78	G26H-600	2x 2.6	0.80
1100 x 1400	S08B-300	2x 0.8	0.59	S10C-350	2x 1.0	0.72	S10C-450	2x 1.0	0.81	S10C-450	2x 1.0	0.84	G26H-750	2x 2.6	0.88
1100 x 1500	S08B-300	2x 0.8	0.65	S10C-400	2x 1.0	0.79	S10C-450	2x 1.0	0.88	G26H-550	2x 2.6	0.92	G26H-750	2x 2.6	0.95
1100 x 1600	S10C-350	2x 1.0	0.71	S10C-450	2x 1.0	0.86	G26H-550	2x 2.6	0.95	G26H-600	2x 2.6	0.99	G40H-830	2x 4.0	1.04
1100 x 1700	S10C-350	2x 1.0	0.77	S10C-450	2x 1.0	0.93	G26H-550	2x 2.6	1.03	G26H-600	2x 2.6	1.07	G40H-830	2x 4.0	1.11
1100 x 1800	S10C-400	2x 1.0	0.84	G26H-550	2x 2.6	1.00	G26H-600	2x 2.6	1.11	G26H-750	2x 2.6	1.15	G40H-830	2x 4.0	1.19
1100 x 1900	S10C-400	2x 1.0	0.91	G26H-550	2x 2.6	1.08	G26H-600	2x 2.6	1.17	G26H-750	2x 2.6	1.23	G40H-830	2x 4.0	1.26
1100 x 2000	S10C-450	2x 1.0	0.98	G26H-550	2x 2.6	1.16	G26H-750	2x 2.6	1.26	G26H-750	2x 2.6	1.31	G40H-830	2x 4.0	1.35
1100 x 2100	S10C-450	2x 1.0	1.05	G26H-600	2x 2.6	1.24	G26H-750	2x 2.6	1.35	G26H-750	2x 2.6	1.40	G40H-830	2x 4.0	1.43
1100 x 2200	S10C-450	2x 1.0	1.12	G26H-600	2x 2.6	1.32	G26H-750	2x 2.6	1.44	G26H-750	2x 2.6	1.48	G40H-830	2x 4.0	1.52
1200 x 800	S08B-200	2x 0.8	0.30	S08B-300	2x 0.8	0.39	S08B-300	2x 0.8	0.45	S10C-400	2x 1.0	0.48	S10C-450	2x 1.0	0.50
1200 x 900	S08B-200	2x 0.8	0.35	S08B-300	2x 0.8	0.44	S08B-300	2x 0.8	0.51	S10C-400	2x 1.0	0.54	S10C-450	2x 1.0	0.57
1200 x 1000	S08B-200	2x 0.8	0.41	S08B-300	2x 0.8	0.51	S10C-400	2x 1.0	0.58	S08B-300	2x 0.8	0.62	S10C-450	2x 1.0	0.64
1200 x 1100	S08B-200	2x 0.8	0.46	S10C-350	2x 1.0	0.58	S10C-400	2x 1.0	0.66	S10C-350	2x 1.0	0.69	G26H-550	2x 2.6	0.72
1200 x 1200	S08B-300	2x 0.8	0.51	S08B-300	2x 0.8	0.64	S10C-350	2x 1.0	0.73	S10C-400	2x 1.0	0.77	G26H-550	2x 2.6	0.80
1200 x 1300	S08B-300	2x 0.8	0.57	S10C-350	2x 1.0	0.72	S10C-400	2x 1.0	0.81	S10C-450	2x 1.0	0.85	G26H-600	2x 2.6	0.88
1200 x 1400	S08B-300	2x 0.8	0.63	S10C-350	2x 1.0	0.79	S10C-450	2x 1.0	0.89	G26G-450	2x 2.6	0.93	G26H-750	2x 2.6	0.96
1200 x 1500	S08B-300	2x 0.8	0.70	S10C-400	2x 1.0	0.87	S10C-450	2x 1.0	0.96	G26H-550	2x 2.6	1.01	G26H-750	2x 2.6	1.05

(*) It is possible to make intermediate dimensions of the smoke exhaust window between the values given in the table. Value of the active aerodynamic area for these dimensions is determined by linear interpolation.

(**) Smoke exhaust windows are equipped with a set of two spindle actuators. Power consumption is given for a set of two actuators.

1.2.5.2| Technical specification – types of smoke exhaust windows opening inwards by means of spindle actuators

WINDOW SIZE*	Opening angle 30°			Opening angle 45°			Opening angle 60°			Opening angle 75°			Opening angle 90°		
	ACTUATOR	POWER CONSUMPTION **	ACTIVE AERODYNAMIC AREA [Aa]	ACTUATOR	POWER CONSUMPTION **	ACTIVE AERODYNAMIC AREA [Aa]	ACTUATOR	POWER CONSUMPTION **	ACTIVE AERODYNAMIC AREA [Aa]	ACTUATOR	POWER CONSUMPTION **	ACTIVE AERODYNAMIC AREA [Aa]	ACTUATOR	POWER CONSUMPTION **	ACTIVE AERODYNAMIC AREA [Aa]
[mm]	-	[A]	[m²]	-	[A]	[m²]	-	[A]	[m²]	-	[A]	[m²]	-	[A]	[m²]
1200 x 1600	S10C-350	2x 1.0	0.77	S10C-450	2x 1.0	0.94	G26H-550	2x 2.6	1.04	G26H-600	2x 2.6	1.09	G40H-830	2x 4.0	1.12
1200 x 1700	S10C-350	2x 1.0	0.84	S10C-450	2x 1.0	1.01	G26H-550	2x 2.6	1.13	G26H-600	2x 2.6	1.17	G40H-830	2x 4.0	1.22
1200 x 1800	S10C-400	2x 1.0	0.91	G26H-550	2x 2.6	1.09	G26H-600	2x 2.6	1.20	G26H-750	2x 2.6	1.26	G40H-830	2x 4.0	1.30
1200 x 1900	S10C-400	2x 1.0	0.98	G26H-550	2x 2.6	1.18	G26H-600	2x 2.6	1.29	G26H-750	2x 2.6	1.35	G40H-830	2x 4.0	1.39
1200 x 2000	S10C-450	2x 1.0	1.06	G26H-550	2x 2.6	1.26	G26H-750	2x 2.6	1.39	G26H-750	2x 2.6	1.44	G40H-830	2x 4.0	1.49
1200 x 2100	S10C-450	2x 1.0	1.13	G26H-600	2x 2.6	1.36	G26H-750	2x 2.6	1.48	G26H-750	2x 2.6	1.53	G40H-830	2x 4.0	1.57
1200 x 2200	S10C-450	2x 1.0	1.23	G26H-600	2x 2.6	1.45	G26H-750	2x 2.6	1.55	G26H-750	2x 2.6	1.61	G40H-830	2x 4.0	1.66
1300 x 800	S08B-200	2x 0.8	0.33	S08B-300	2x 0.8	0.41	S08B-300	2x 0.8	0.48	S10C-400	2x 1.0	0.52	S10C-450	2x 1.0	0.54
1300 x 900	S08B-200	2x 0.8	0.39	S08B-300	2x 0.8	0.48	S08B-300	2x 0.8	0.55	S10C-400	2x 1.0	0.59	S10C-450	2x 1.0	0.62
1300 x 1000	S08B-200	2x 0.8	0.43	S08B-300	2x 0.8	0.56	S10C-400	2x 1.0	0.64	S08B-300	2x 0.8	0.68	S10C-450	2x 1.0	0.70
1300 x 1100	S08B-200	2x 0.8	0.50	S10C-350	2x 1.0	0.63	S10C-400	2x 1.0	0.71	S10C-350	2x 1.0	0.76	G26H-550	2x 2.6	0.79
1300 x 1200	S08B-300	2x 0.8	0.56	S08B-300	2x 0.8	0.70	S10C-350	2x 1.0	0.79	S10C-400	2x 1.0	0.85	G26H-550	2x 2.6	0.87
1300 x 1300	S08B-300	2x 0.8	0.62	S10C-350	2x 1.0	0.77	S10C-400	2x 1.0	0.88	S10C-450	2x 1.0	0.92	G26H-600	2x 2.6	0.97
1300 x 1400	S08B-300	2x 0.8	0.69	S10C-350	2x 1.0	0.85	S10C-450	2x 1.0	0.95	G26G-450	2x 2.6	1.02	G26H-750	2x 2.6	1.05
1300 x 1500	S08B-300	2x 0.8	0.76	S10C-400	2x 1.0	0.93	S10C-450	2x 1.0	1.05	G26H-550	2x 2.6	1.10	G26H-750	2x 2.6	1.15
1300 x 1600	S10C-350	2x 1.0	0.84	S10C-450	2x 1.0	1.01	G26H-550	2x 2.6	1.14	G26H-600	2x 2.6	1.19	G40H-830	2x 4.0	1.23
1300 x 1700	S10C-350	2x 1.0	0.91	S10C-450	2x 1.0	1.10	G26H-550	2x 2.6	1.22	G26H-600	2x 2.6	1.28	G40H-830	2x 4.0	1.33
1300 x 1800	S10C-400	2x 1.0	0.99	G26H-550	2x 2.6	1.19	G26H-600	2x 2.6	1.31	G26H-750	2x 2.6	1.37	G40H-830	2x 4.0	1.41
1300 x 1900	S10C-400	2x 1.0	1.07	G26H-550	2x 2.6	1.28	G26H-600	2x 2.6	1.41	G26H-750	2x 2.6	1.47	G40H-830	2x 4.0	1.52
1300 x 2000	S10C-450	2x 1.0	1.15	G26H-550	2x 2.6	1.37	G26H-750	2x 2.6	1.51	G26H-750	2x 2.6	1.56	G40H-830	2x 4.0	1.60
1300 x 2100	S10C-450	2x 1.0	1.23	G26H-600	2x 2.6	1.46	G26H-750	2x 2.6	1.59	G26H-750	2x 2.6	1.65	G40H-830	2x 4.0	1.71
1300 x 2200	S10C-450	2x 1.0	1.32	G26H-600	2x 2.6	1.56	G26H-750	2x 2.6	1.69	G26H-750	2x 2.6	1.76	G40H-830	2x 4.0	1.79
1400 x 800	S08B-200	2x 0.8	0.36	S08B-300	2x 0.8	0.45	S08B-300	2x 0.8	0.53	S10C-400	2x 1.0	0.56	S10C-450	2x 1.0	0.58
1400 x 900	S08B-200	2x 0.8	0.41	S08B-300	2x 0.8	0.53	S08B-300	2x 0.8	0.60	S10C-400	2x 1.0	0.64	S10C-450	2x 1.0	0.67
1400 x 1000	S08B-200	2x 0.8	0.47	S08B-300	2x 0.8	0.60	S10C-400	2x 1.0	0.69	G26G-450	2x 2.6	0.73	S10C-450	2x 1.0	0.76
1400 x 1100	S08B-200	2x 0.8	0.54	S10C-350	2x 1.0	0.67	S10C-400	2x 1.0	0.77	G26G-450	2x 2.6	0.82	G26H-550	2x 2.6	0.86
1400 x 1200	S08B-300	2x 0.8	0.61	S08B-300	2x 0.8	0.75	S10C-350	2x 1.0	0.86	G26H-550	2x 2.6	0.91	G26H-550	2x 2.6	0.94
1400 x 1300	S08B-300	2x 0.8	0.68	S10C-350	2x 1.0	0.84	S10C-400	2x 1.0	0.94	G26H-550	2x 2.6	1.00	G26H-600	2x 2.6	1.05
1400 x 1400	S08B-300	2x 0.8	0.75	S10C-350	2x 1.0	0.92	S10C-450	2x 1.0	1.04	G26G-450	2x 2.6	1.10	G26H-750	2x 2.6	1.14
1400 x 1500	S08B-300	2x 0.8	0.83	S10C-400	2x 1.0	1.01	S10C-450	2x 1.0	1.13	G26H-550	2x 2.6	1.19	G26H-750	2x 2.6	1.22
1400 x 1600	S10C-350	2x 1.0	0.91	S10C-450	2x 1.0	1.10	G26H-550	2x 2.6	1.22	G26H-600	2x 2.6	1.29	G40H-830	2x 4.0	1.33
1400 x 1700	S10C-350	2x 1.0	0.99	S10C-450	2x 1.0	1.19	G26H-550	2x 2.6	1.32	G26H-600	2x 2.6	1.38	G40H-830	2x 4.0	1.42
1400 x 1800	S10C-400	2x 1.0	1.05	G26H-550	2x 2.6	1.28	G26H-600	2x 2.6	1.42	G26H-750	2x 2.6	1.49	G40H-830	2x 4.0	1.53
1400 x 1900	S10C-400	2x 1.0	1.14	G26H-550	2x 2.6	1.38	G26H-600	2x 2.6	1.53	G26H-750	2x 2.6	1.59	G40H-830	2x 4.0	1.65

(*) It is possible to make intermediate dimensions of the smoke exhaust window between the values given in the table. Value of the active aerodynamic area for these dimensions is determined by linear interpolation.

(**) Smoke exhaust windows are equipped with a set of two spindle actuators. Power consumption is given for a set of two actuators.

1.2.5.2| Technical specification – types of smoke exhaust windows opening inwards by means of spindle actuators

WINDOW SIZE*	Opening angle 30°			Opening angle 45°			Opening angle 60°			Opening angle 75°			Opening angle 90°		
B' x H'	ACTUATOR	POWER CONSUMPTION **	ACTIVE AERODYNAMIC AREA [Aa]	ACTUATOR	POWER CONSUMPTION **	ACTIVE AERODYNAMIC AREA [Aa]	ACTUATOR	POWER CONSUMPTION **	ACTIVE AERODYNAMIC AREA [Aa]	ACTUATOR	POWER CONSUMPTION **	ACTIVE AERODYNAMIC AREA [Aa]	ACTUATOR	POWER CONSUMPTION **	ACTIVE AERODYNAMIC AREA [Aa]
[mm]	-	[A]	[m²]	-	[A]	[m²]	-	[A]	[m²]	-	[A]	[m²]	-	[A]	[m²]
1400 x 2000	S10C-450	2x 1.0	1.24	G26H-550	2x 2.6	1.48	G26H-750	2x 2.6	1.61	G26H-750	2x 2.6	1.68	G40H-830	2x 4.0	1.73
1400 x 2100	S10C-450	2x 1.0	1.34	G26H-600	2x 2.6	1.58	G26H-750	2x 2.6	1.72	G26H-750	2x 2.6	1.79	G40H-830	2x 4.0	1.85
1400 x 2200	S10C-450	2x 1.0	1.43	G26H-600	2x 2.6	1.69	G26H-750	2x 2.6	1.84	G26H-750	2x 2.6	1.90	G40H-830	2x 4.0	1.94
1500 x 800	S08B-200	2x 0.8	0.38	S08B-300	2x 0.8	0.48	S08B-300	2x 0.8	0.57	S10C-400	2x 1.0	0.60	S10C-450	2x 1.0	0.62
1500 x 900	S08B-200	2x 0.8	0.44	S08B-300	2x 0.8	0.57	S08B-300	2x 0.8	0.65	S10C-400	2x 1.0	0.69	S10C-450	2x 1.0	0.73
1500 x 1000	S08B-200	2x 0.8	0.51	S08B-300	2x 0.8	0.64	S10C-400	2x 1.0	0.74	G26G-450	2x 2.6	0.79	G26H-550	2x 2.6	0.82
1500 x 1100	S08B-200	2x 0.8	0.58	S10C-350	2x 1.0	0.72	S10C-400	2x 1.0	0.83	G26G-450	2x 2.6	0.88	G26H-550	2x 2.6	0.92
1500 x 1200	S08B-300	2x 0.8	0.65	S08B-300	2x 0.8	0.81	S10C-350	2x 1.0	0.93	G26H-550	2x 2.6	0.97	G26H-550	2x 2.6	1.02
1500 x 1300	S08B-300	2x 0.8	0.73	S10C-350	2x 1.0	0.90	S10C-400	2x 1.0	1.01	G26H-550	2x 2.6	1.08	G26H-600	2x 2.6	1.11
1500 x 1400	S08B-300	2x 0.8	0.79	S10C-350	2x 1.0	0.99	S10C-450	2x 1.0	1.12	G26G-450	2x 2.6	1.17	G26H-750	2x 2.6	1.22
1500 x 1500	S08B-300	2x 0.8	0.87	S10C-400	2x 1.0	1.09	S10C-450	2x 1.0	1.22	G26H-550	2x 2.6	1.28	G26H-750	2x 2.6	1.32
1500 x 1600	S10C-350	2x 1.0	0.96	S10C-450	2x 1.0	1.18	G26H-550	2x 2.6	1.31	G26H-600	2x 2.6	1.38	G40H-830	2x 4.0	1.44
1500 x 1700	S10C-350	2x 1.0	1.04	S10C-450	2x 1.0	1.27	G26H-550	2x 2.6	1.42	G26H-600	2x 2.6	1.49	G40H-830	2x 4.0	1.53
1500 x 1800	S10C-400	2x 1.0	1.13	G26H-550	2x 2.6	1.37	G26H-600	2x 2.6	1.53	G26H-750	2x 2.6	1.59	G40H-830	2x 4.0	1.65
1500 x 1900	S10C-400	2x 1.0	1.22	G26H-550	2x 2.6	1.47	G26H-600	2x 2.6	1.62	G26H-750	2x 2.6	1.69	G40H-830	2x 4.0	1.74
1500 x 2000	S10C-450	2x 1.0	1.32	G26H-550	2x 2.6	1.58	G26H-750	2x 2.6	1.74	G26H-750	2x 2.6	1.80	G40H-830	2x 4.0	1.87
1500 x 2100	S10C-450	2x 1.0	1.41	G26H-600	2x 2.6	1.69	G26H-750	2x 2.6	1.86	G26H-750	2x 2.6	1.93	G40H-830	2x 4.0	1.97
1500 x 2200	S10C-450	2x 1.0	1.51	G26H-600	2x 2.6	1.79	G26H-750	2x 2.6	1.95	G26H-750	2x 2.6	2.04	G40H-830	2x 4.0	2.10
1500 x 1500	S08B-300	2x 0.8	0.87	S10C-400	2x 1.0	1.09	S10C-450	2x 1.0	1.22	G26H-550	2x 2.6	1.28	G26H-750	2x 2.6	1.32
1500 x 1600	S10C-350	2x 1.0	0.96	S10C-450	2x 1.0	1.18	G26H-550	2x 2.6	1.31	G26H-600	2x 2.6	1.38	G40H-830	2x 4.0	1.44
1500 x 1700	S10C-350	2x 1.0	1.04	S10C-450	2x 1.0	1.27	G26H-550	2x 2.6	1.42	G26H-600	2x 2.6	1.49	G40H-830	2x 4.0	1.53
1500 x 1800	S10C-400	2x 1.0	1.13	G26H-550	2x 2.6	1.37	G26H-600	2x 2.6	1.53	G26H-750	2x 2.6	1.59	G40H-830	2x 4.0	1.65
1500 x 1900	S10C-400	2x 1.0	1.22	G26H-550	2x 2.6	1.47	G26H-600	2x 2.6	1.62	G26H-750	2x 2.6	1.69	G40H-830	2x 4.0	1.74
1500 x 2000	S10C-450	2x 1.0	1.32	G26H-550	2x 2.6	1.58	G26H-750	2x 2.6	1.74	G26H-750	2x 2.6	1.80	G40H-830	2x 4.0	1.87
1500 x 2100	S10C-450	2x 1.0	1.41	G26H-600	2x 2.6	1.69	G26H-750	2x 2.6	1.86	G26H-750	2x 2.6	1.93	G40H-830	2x 4.0	1.97
1500 x 2200	S10C-450	2x 1.0	1.51	G26H-600	2x 2.6	1.79	G26H-750	2x 2.6	1.95	G26H-750	2x 2.6	2.04	G40H-830	2x 4.0	2.10
1600 x 800	S08B-200	2x 0.8	0.40	S08B-300	2x 0.8	0.52	S08B-300	2x 0.8	0.60	S10C-400	2x 1.0	0.64	S10C-450	2x 1.0	0.67
1600 x 900	S08B-200	2x 0.8	0.47	S08B-300	2x 0.8	0.61	S08B-300	2x 0.8	0.70	S10C-400	2x 1.0	0.74	S10C-450	2x 1.0	0.78
1600 x 1000	S08B-200	2x 0.8	0.55	S08B-300	2x 0.8	0.68	S10C-400	2x 1.0	0.78	G26G-450	2x 2.6	0.84	G26H-550	2x 2.6	0.88
1600 x 1100	S08B-200	2x 0.8	0.62	S10C-350	2x 1.0	0.78	S10C-400	2x 1.0	0.89	G26G-450	2x 2.6	0.95	G26H-550	2x 2.6	0.98
1600 x 1200	S08B-300	2x 0.8	0.68	S08B-300	2x 0.8	0.87	S10C-350	2x 1.0	0.99	G26H-550	2x 2.6	1.04	G26H-550	2x 2.6	1.09
1600 x 1300	S08B-300	2x 0.8	0.77	S10C-350	2x 1.0	0.96	S10C-400	2x 1.0	1.09	G26H-550	2x 2.6	1.16	G26H-600	2x 2.6	1.19
1600 x 1400	S08B-300	2x 0.8	0.85	S10C-350	2x 1.0	1.05	S10C-450	2x 1.0	1.20	G26G-450	2x 2.6	1.25	G26H-750	2x 2.6	1.31
1600 x 1500	S08B-300	2x 0.8	0.94	S10C-400	2x 1.0	1.15	S10C-450	2x 1.0	1.29	G26H-550	2x 2.6	1.37	G26H-750	2x 2.6	1.41

(*) It is possible to make intermediate dimensions of the smoke exhaust window between the values given in the table. Value of the active aerodynamic area for these dimensions is determined by linear interpolation.

(**) Smoke exhaust windows are equipped with a set of two spindle actuators. Power consumption is given for a set of two actuators.

1.2.5.2| Technical specification – types of smoke exhaust windows opening inwards by means of spindle actuators

WINDOW SIZE*	Opening angle 30°			Opening angle 45°			Opening angle 60°			Opening angle 75°			Opening angle 90°		
B' x H'	ACTUATOR	POWER CONSUMPTION **	ACTIVE AERODYNAMIC AREA [Aa]	ACTUATOR	POWER CONSUMPTION **	ACTIVE AERODYNAMIC AREA [Aa]	ACTUATOR	POWER CONSUMPTION **	ACTIVE AERODYNAMIC AREA [Aa]	ACTUATOR	POWER CONSUMPTION **	ACTIVE AERODYNAMIC AREA [Aa]	ACTUATOR	POWER CONSUMPTION **	ACTIVE AERODYNAMIC AREA [Aa]
[mm]	-	[A]	[m ²]	-	[A]	[m ²]	-	[A]	[m ²]	-	[A]	[m ²]	-	[A]	[m ²]
1600 x 1600	S10C-350	2x 1.0	1.03	S10C-450	2x 1.0	1.25	G26H-550	2x 2.6	1.40	G26H-600	2x 2.6	1.47	G40H-830	2x 4.0	1.54
1600 x 1700	S10C-350	2x 1.0	1.12	S10C-450	2x 1.0	1.36	G26H-550	2x 2.6	1.52	G26H-600	2x 2.6	1.59	G40H-830	2x 4.0	1.64
1600 x 1800	S10C-400	2x 1.0	1.21	G26H-550	2x 2.6	1.46	G26H-600	2x 2.6	1.61	G26H-750	2x 2.6	1.69	G40H-830	2x 4.0	1.76
1600 x 1900	S10C-400	2x 1.0	1.31	G26H-550	2x 2.6	1.58	G26H-600	2x 2.6	1.74	G26H-750	2x 2.6	1.82	G40H-830	2x 4.0	1.87
1600 x 2000	S10C-450	2x 1.0	1.41	G26H-550	2x 2.6	1.68	G26H-750	2x 2.6	1.86	G26H-750	2x 2.6	1.93	G40H-830	2x 4.0	2.00
1600 x 2100	S10C-450	2x 1.0	1.51	G26H-600	2x 2.6	1.80	G26H-750	2x 2.6	1.96	G26H-750	2x 2.6	2.05	G40H-830	2x 4.0	2.11
1600 x 2200	S10C-450	2x 1.0	1.62	G26H-600	2x 2.6	1.92	G26H-750	2x 2.6	2.09	G26H-750	2x 2.6	2.17	G40H-830	2x 4.0	2.25
1700 x 800	S08B-200	2x 0.8	0.43	S08B-300	2x 0.8	0.56	S08B-300	2x 0.8	0.64	S10C-400	2x 1.0	0.69	S10C-450	2x 1.0	0.72
1700 x 900	S08B-200	2x 0.8	0.50	S08B-300	2x 0.8	0.65	S08B-300	2x 0.8	0.74	S10C-400	2x 1.0	0.79	S10C-450	2x 1.0	0.83
1700 x 1000	S08B-200	2x 0.8	0.58	S08B-300	2x 0.8	0.73	S10C-400	2x 1.0	0.84	G26G-450	2x 2.6	0.89	G26H-550	2x 2.6	0.94
1700 x 1100	S08B-200	2x 0.8	0.65	S10C-350	2x 1.0	0.83	S10C-400	2x 1.0	0.95	G26G-450	2x 2.6	1.01	G26H-550	2x 2.6	1.04
1700 x 1200	S08B-300	2x 0.8	0.73	S08B-300	2x 0.8	0.92	S10C-350	2x 1.0	1.04	G26H-550	2x 2.6	1.11	G26H-550	2x 2.6	1.17
1700 x 1300	S08B-300	2x 0.8	0.82	S10C-350	2x 1.0	1.02	S10C-400	2x 1.0	1.16	G26H-550	2x 2.6	1.24	G26H-600	2x 2.6	1.27
1700 x 1400	S08B-300	2x 0.8	0.91	S10C-350	2x 1.0	1.12	S10C-450	2x 1.0	1.28	G26G-450	2x 2.6	1.34	G26H-750	2x 2.6	1.40
1700 x 1500	S08B-300	2x 0.8	1.00	S10C-400	2x 1.0	1.22	G26G-450	2x 2.6	1.38	G26H-550	2x 2.6	1.47	G26H-750	2x 2.6	1.51
1700 x 1600	S10C-350	2x 1.0	1.09	S10C-450	2x 1.0	1.33	G26H-550	2x 2.6	1.50	G26H-600	2x 2.6	1.57	G40H-830	2x 4.0	1.62
1700 x 1700	S10C-350	2x 1.0	1.19	S10C-450	2x 1.0	1.44	G26H-550	2x 2.6	1.59	G26H-600	2x 2.6	1.70	G40H-830	2x 4.0	1.75
1700 x 1800	S10C-400	2x 1.0	1.26	G26H-550	2x 2.6	1.56	G26H-600	2x 2.6	1.72	G26H-750	2x 2.6	1.80	G40H-830	2x 4.0	1.86
1700 x 1900	S10C-400	2x 1.0	1.37	G26H-550	2x 2.6	1.67	G26H-600	2x 2.6	1.85	G26H-750	2x 2.6	1.94	G40H-830	2x 4.0	2.00
1700 x 2000	S10C-450	2x 1.0	1.47	G26H-550	2x 2.6	1.78	G26H-750	2x 2.6	1.96	G26H-750	2x 2.6	2.05	G40H-830	2x 4.0	2.11
1800 x 800	S08B-200	2x 0.8	0.46	S08B-300	2x 0.8	0.59	S08B-300	2x 0.8	0.68	S10C-400	2x 1.0	0.73	S10C-450	2x 1.0	0.76
1800 x 900	S08B-200	2x 0.8	0.54	S08B-300	2x 0.8	0.68	S08B-300	2x 0.8	0.79	S10C-400	2x 1.0	0.84	S10C-450	2x 1.0	0.88
1800 x 1000	S08B-200	2x 0.8	0.62	S08B-300	2x 0.8	0.78	S10C-400	2x 1.0	0.89	G26G-450	2x 2.6	0.95	G26H-550	2x 2.6	1.00
1800 x 1100	S08B-200	2x 0.8	0.69	S10C-350	2x 1.0	0.88	S10C-400	2x 1.0	1.01	G26G-450	2x 2.6	1.07	G26H-550	2x 2.6	1.11
1800 x 1200	S08B-300	2x 0.8	0.78	S08B-300	2x 0.8	0.97	S10C-350	2x 1.0	1.11	G26H-550	2x 2.6	1.18	G26H-550	2x 2.6	1.24
1800 x 1300	S08B-300	2x 0.8	0.87	S10C-350	2x 1.0	1.08	S10C-400	2x 1.0	1.23	G26H-550	2x 2.6	1.30	G26H-600	2x 2.6	1.35
1800 x 1400	S08B-300	2x 0.8	0.96	S10C-350	2x 1.0	1.18	S10C-450	2x 1.0	1.34	G26G-450	2x 2.6	1.42	G26H-750	2x 2.6	1.47
1800 x 1500	S08B-300	2x 0.8	1.04	S10C-400	2x 1.0	1.30	G26G-450	2x 2.6	1.46	G26H-550	2x 2.6	1.53	G26H-750	2x 2.6	1.60
1800 x 1600	S10C-350	2x 1.0	1.13	S10C-450	2x 1.0	1.41	G26H-550	2x 2.6	1.59	G26H-600	2x 2.6	1.66	G40H-830	2x 4.0	1.71
1800 x 1700	S10C-350	2x 1.0	1.24	S10C-450	2x 1.0	1.52	G26H-550	2x 2.6	1.69	G26H-600	2x 2.6	1.79	G40H-830	2x 4.0	1.86
1800 x 1800	S10C-400	2x 1.0	1.34	G26H-550	2x 2.6	1.63	G26H-600	2x 2.6	1.83	G26H-750	2x 2.6	1.92	G40H-830	2x 4.0	1.97
1800 x 1900	S10C-400	2x 1.0	1.45	G26H-550	2x 2.6	1.76	G26H-600	2x 2.6	1.94	G26H-750	2x 2.6	2.05	G40H-830	2x 4.0	2.12
1900 x 800	S08B-200	2x 0.8	0.48	S08B-300	2x 0.8	0.63	S08B-300	2x 0.8	0.72	S10C-400	2x 1.0	0.78	S10C-450	2x 1.0	0.81
1900 x 900	S08B-200	2x 0.8	0.57	S08B-300	2x 0.8	0.72	S08B-300	2x 0.8	0.84	S10C-400	2x 1.0	0.89	G26H-550	2x 2.6	0.92

(*) It is possible to make intermediate dimensions of the smoke exhaust window between the values given in the table. Value of the active aerodynamic area for these dimensions is determined by linear interpolation.

(**) Smoke exhaust windows are equipped with a set of two spindle actuators. Power consumption is given for a set of two actuators.

1.2.5.2| Technical specification – types of smoke exhaust windows opening inwards by means of spindle actuators

WINDOW SIZE*	Opening angle 30°			Opening angle 45°			Opening angle 60°			Opening angle 75°			Opening angle 90°		
	ACTUATOR	POWER CONSUMPTION **	ACTIVE AERODYNAMIC AREA [Aa]	ACTUATOR	POWER CONSUMPTION **	ACTIVE AERODYNAMIC AREA [Aa]	ACTUATOR	POWER CONSUMPTION **	ACTIVE AERODYNAMIC AREA [Aa]	ACTUATOR	POWER CONSUMPTION **	ACTIVE AERODYNAMIC AREA [Aa]	ACTUATOR	POWER CONSUMPTION **	ACTIVE AERODYNAMIC AREA [Aa]
[mm]	-	[A]	[m²]	-	[A]	[m²]	-	[A]	[m²]	-	[A]	[m²]	-	[A]	[m²]
1900 x 1000	S08B-200	2x 0.8	0.64	S08B-300	2x 0.8	0.82	S10C-400	2x 1.0	0.94	G26G-450	2x 2.6	1.01	G26H-550	2x 2.6	1.06
1900 x 1100	S08B-200	2x 0.8	0.73	S10C-350	2x 1.0	0.93	S10C-400	2x 1.0	1.07	G26G-450	2x 2.6	1.13	G26H-550	2x 2.6	1.17
1900 x 1200	S08B-300	2x 0.8	0.82	S08B-300	2x 0.8	1.03	S10C-350	2x 1.0	1.18	G26H-550	2x 2.6	1.25	G26H-550	2x 2.6	1.31
1900 x 1300	S08B-300	2x 0.8	0.92	S10C-350	2x 1.0	1.14	S10C-400	2x 1.0	1.31	G26H-550	2x 2.6	1.37	G26H-600	2x 2.6	1.43
1900 x 1400	S08B-300	2x 0.8	1.00	S10C-350	2x 1.0	1.25	S10C-450	2x 1.0	1.42	G26G-450	2x 2.6	1.51	G26H-750	2x 2.6	1.55
1900 x 1500	S08B-300	2x 0.8	1.10	S10C-400	2x 1.0	1.37	G26G-450	2x 2.6	1.54	G26H-550	2x 2.6	1.62	G26H-750	2x 2.6	1.69
1900 x 1600	S10C-350	2x 1.0	1.20	S10C-450	2x 1.0	1.48	G26H-550	2x 2.6	1.66	G26H-600	2x 2.6	1.76	G40H-830	2x 4.0	1.82
1900 x 1700	S10C-350	2x 1.0	1.31	S10C-450	2x 1.0	1.60	G26H-550	2x 2.6	1.80	G26H-600	2x 2.6	1.88	G40H-830	2x 4.0	1.97
1900 x 1800	S10C-400	2x 1.0	1.42	G26H-550	2x 2.6	1.73	G26H-600	2x 2.6	1.94	G26H-750	2x 2.6	2.03	G40H-830	2x 4.0	2.09
2000 x 800	S08B-200	2x 0.8	0.51	S08B-300	2x 0.8	0.66	S08B-300	2x 0.8	0.76	S10C-400	2x 1.0	0.82	S10C-450	2x 1.0	0.85
2000 x 900	S08B-200	2x 0.8	0.60	S08B-300	2x 0.8	0.76	S08B-300	2x 0.8	0.89	S10C-400	2x 1.0	0.94	G26H-550	2x 2.6	0.98
2000 x 1000	S08B-200	2x 0.8	0.68	S08B-300	2x 0.8	0.87	S10C-400	2x 1.0	1.00	G26G-450	2x 2.6	1.06	G26H-550	2x 2.6	1.12
2000 x 1100	S08B-200	2x 0.8	0.77	S10C-350	2x 1.0	0.97	S10C-400	2x 1.0	1.11	G26G-450	2x 2.6	1.19	G26H-550	2x 2.6	1.24
2000 x 1200	S08B-300	2x 0.8	0.87	S08B-300	2x 0.8	1.09	G26G-450	2x 2.6	1.24	G26H-550	2x 2.6	1.32	G26H-550	2x 2.6	1.37
2000 x 1300	S08B-300	2x 0.8	0.95	S10C-350	2x 1.0	1.21	G26G-450	2x 2.6	1.38	G26H-550	2x 2.6	1.45	G26H-600	2x 2.6	1.51
2000 x 1400	S08B-300	2x 0.8	1.05	S10C-350	2x 1.0	1.32	G26G-450	2x 2.6	1.49	G26G-450	2x 2.6	1.59	G26H-750	2x 2.6	1.63
2000 x 1500	S08B-300	2x 0.8	1.16	S10C-400	2x 1.0	1.43	G26G-450	2x 2.6	1.63	G26H-550	2x 2.6	1.71	G26H-750	2x 2.6	1.79
2000 x 1600	S10C-350	2x 1.0	1.27	S10C-450	2x 1.0	1.55	G26H-550	2x 2.6	1.75	G26H-600	2x 2.6	1.86	G40H-830	2x 4.0	1.92
2000 x 1700	S10C-350	2x 1.0	1.38	S10C-450	2x 1.0	1.69	G26H-550	2x 2.6	1.90	G26H-600	2x 2.6	1.99	G40H-830	2x 4.0	2.08
2100 x 800	S08B-200	2x 0.8	0.54	S08B-300	2x 0.8	0.70	S08B-300	2x 0.8	0.80	S10C-400	2x 1.0	0.86	S10C-450	2x 1.0	0.90
2100 x 900	S08B-200	2x 0.8	0.63	S08B-300	2x 0.8	0.80	S08B-300	2x 0.8	0.92	S10C-400	2x 1.0	0.99	G26H-550	2x 2.6	1.03
2100 x 1000	S08B-200	2x 0.8	0.71	S08B-300	2x 0.8	0.92	S10C-400	2x 1.0	1.05	G26G-450	2x 2.6	1.12	G26H-550	2x 2.6	1.17
2100 x 1100	S08B-200	2x 0.8	0.81	S10C-350	2x 1.0	1.02	S10C-400	2x 1.0	1.17	G26G-450	2x 2.6	1.25	G26H-550	2x 2.6	1.31
2100 x 1200	S08B-300	2x 0.8	0.92	S08B-300	2x 0.8	1.14	G26G-450	2x 2.6	1.31	G26H-550	2x 2.6	1.40	G26H-550	2x 2.6	1.44
2100 x 1300	S08B-300	2x 0.8	1.00	S10C-350	2x 1.0	1.26	G26G-450	2x 2.6	1.42	G26H-550	2x 2.6	1.52	G26H-600	2x 2.6	1.59
2100 x 1400	S08B-300	2x 0.8	1.11	S10C-350	2x 1.0	1.37	G26G-450	2x 2.6	1.57	G26G-450	2x 2.6	1.66	G26H-750	2x 2.6	1.72
2100 x 1500	S08B-300	2x 0.8	1.22	S10C-400	2x 1.0	1.51	G26G-450	2x 2.6	1.69	G26H-550	2x 2.6	1.80	G26H-750	2x 2.6	1.88
2100 x 1600	S10C-350	2x 1.0	1.34	S10C-450	2x 1.0	1.63	G26H-550	2x 2.6	1.84	G26H-600	2x 2.6	1.93	G40H-830	2x 4.0	2.02
2200 x 800	S08B-200	2x 0.8	0.57	S08B-300	2x 0.8	0.73	S08B-300	2x 0.8	0.84	S10C-400	2x 1.0	0.90	S10C-450	2x 1.0	0.94
2200 x 900	S08B-200	2x 0.8	0.65	S08B-300	2x 0.8	0.84	S08B-300	2x 0.8	0.96	S10C-400	2x 1.0	1.04	G26H-550	2x 2.6	1.08
2200 x 1000	S08B-200	2x 0.8	0.75	S08B-300	2x 0.8	0.96	S10C-400	2x 1.0	1.10	G26G-450	2x 2.6	1.18	G26H-550	2x 2.6	1.23
2200 x 1100	S08B-200	2x 0.8	0.85	S10C-350	2x 1.0	1.07	S10C-400	2x 1.0	1.23	G26G-450	2x 2.6	1.31	G26H-550	2x 2.6	1.37
2200 x 1200	S08B-300	2x 0.8	0.93	S08B-300	2x 0.8	1.20	G26G-450	2x 2.6	1.37	G26H-550	2x 2.6	1.45	G26H-550	2x 2.6	1.50
2200 x 1300	S08B-300	2x 0.8	1.05	S10C-350	2x 1.0	1.32	G26G-450	2x 2.6	1.49	G26H-550	2x 2.6	1.59	G26H-600	2x 2.6	1.67

(*) It is possible to make intermediate dimensions of the smoke exhaust window between the values given in the table. Value of the active aerodynamic area for these dimensions is determined by linear interpolation.

(**) Smoke exhaust windows are equipped with a set of two spindle actuators. Power consumption is given for a set of two actuators.

1.2.5.2| Technical specification – types of smoke exhaust windows opening inwards by means of spindle actuators

WINDOW SIZE*	Opening angle 30°			Opening angle 45°			Opening angle 60°			Opening angle 75°			Opening angle 90°		
B' x H'	ACTUATOR	POWER CONSUMPTION **	ACTIVE AERODYNAMIC AREA [Aa]	ACTUATOR	POWER CONSUMPTION **	ACTIVE AERODYNAMIC AREA [Aa]	ACTUATOR	POWER CONSUMPTION **	ACTIVE AERODYNAMIC AREA [Aa]	ACTUATOR	POWER CONSUMPTION **	ACTIVE AERODYNAMIC AREA [Aa]	ACTUATOR	POWER CONSUMPTION **	ACTIVE AERODYNAMIC AREA [Aa]
[mm]	-	[A]	[m ²]	-	[A]	[m ²]	-	[A]	[m ²]	-	[A]	[m ²]	-	[A]	[m ²]
2200 x 1400	S08B-300	2x 0.8	1.16	S10C-350	2x 1.0	1.44	G26G-450	2x 2.6	1.65	G26G-450	2x 2.6	1.74	G26H-750	2x 2.6	1.81
2200 x 1500	S08B-300	2x 0.8	1.28	S10C-400	2x 1.0	1.57	G26G-450	2x 2.6	1.78	G26H-550	2x 2.6	1.89	G26H-750	2x 2.6	1.95
2200 x 1600	S10C-350	2x 1.0	1.37	S10C-450	2x 1.0	1.72	G26H-550	2x 2.6	1.93	G26H-600	2x 2.6	2.03	G40H-830	2x 4.0	2.12
2300 x 800	S08B-200	2x 0.8	0.59	S08B-300	2x 0.8	0.76	S08B-300	2x 0.8	0.88	S10C-400	2x 1.0	0.94	S10C-450	2x 1.0	0.99
2300 x 900	S08B-200	2x 0.8	0.68	S08B-300	2x 0.8	0.88	S08B-300	2x 0.8	1.01	S10C-400	2x 1.0	1.09	G26H-550	2x 2.6	1.13
2300 x 1000	S08B-200	2x 0.8	0.78	S08B-300	2x 0.8	1.00	S10C-400	2x 1.0	1.16	G26G-450	2x 2.6	1.23	G26H-550	2x 2.6	1.29
2300 x 1100	S08B-200	2x 0.8	0.89	S10C-350	2x 1.0	1.12	S10C-400	2x 1.0	1.28	G26G-450	2x 2.6	1.37	G26H-550	2x 2.6	1.43
2300 x 1200	S08B-300	2x 0.8	0.98	S08B-300	2x 0.8	1.25	G26G-450	2x 2.6	1.43	G26H-550	2x 2.6	1.52	G26H-550	2x 2.6	1.58
2300 x 1300	S08B-300	2x 0.8	1.10	S10C-350	2x 1.0	1.37	G26G-450	2x 2.6	1.57	G26H-550	2x 2.6	1.67	G26H-600	2x 2.6	1.75
2300 x 1400	S08B-300	2x 0.8	1.22	S10C-350	2x 1.0	1.51	G26G-450	2x 2.6	1.73	G26G-450	2x 2.6	1.81	G26H-750	2x 2.6	1.90
2300 x 1500	S08B-300	2x 0.8	1.31	S10C-400	2x 1.0	1.65	G26G-450	2x 2.6	1.86	G26H-550	2x 2.6	1.98	G26H-750	2x 2.6	2.04
2400 x 800	S08B-200	2x 0.8	0.62	S08B-300	2x 0.8	0.80	S08B-300	2x 0.8	0.92	S10C-400	2x 1.0	0.99	G26H-550	2x 2.6	1.03
2400 x 900	S08B-200	2x 0.8	0.71	S08B-300	2x 0.8	0.92	S08B-300	2x 0.8	1.06	G26G-450	2x 2.6	1.14	G26H-550	2x 2.6	1.18
2400 x 1000	S08B-200	2x 0.8	0.82	S08B-300	2x 0.8	1.03	S10C-400	2x 1.0	1.20	G26G-450	2x 2.6	1.29	G26H-550	2x 2.6	1.35
2400 x 1100	S08B-200	2x 0.8	0.91	S10C-350	2x 1.0	1.17	S10C-400	2x 1.0	1.34	G26G-450	2x 2.6	1.43	G26H-550	2x 2.6	1.50
2400 x 1200	S08B-300	2x 0.8	1.03	S08B-300	2x 0.8	1.30	G26G-450	2x 2.6	1.50	G26H-550	2x 2.6	1.59	G26H-550	2x 2.6	1.65
2400 x 1300	S08B-300	2x 0.8	1.15	S10C-350	2x 1.0	1.43	G26G-450	2x 2.6	1.64	G26H-550	2x 2.6	1.75	G26H-600	2x 2.6	1.83
2400 x 1400	S08B-300	2x 0.8	1.24	S10C-350	2x 1.0	1.58	G26G-450	2x 2.6	1.81	G26G-450	2x 2.6	1.89	G26H-750	2x 2.6	1.98
2500 x 800	S08B-200	2x 0.8	0.65	S08B-300	2x 0.8	0.83	S08B-300	2x 0.8	0.96	S10C-400	2x 1.0	1.03	G26H-550	2x 2.6	1.08
2500 x 900	S08B-200	2x 0.8	0.74	S08B-300	2x 0.8	0.95	S08B-300	2x 0.8	1.10	G26G-450	2x 2.6	1.18	G26H-550	2x 2.6	1.23
2500 x 1000	S08B-200	2x 0.8	0.85	S08B-300	2x 0.8	1.08	S10C-400	2x 1.0	1.26	G26G-450	2x 2.6	1.33	G26H-550	2x 2.6	1.38
2500 x 1100	S08B-200	2x 0.8	0.95	S10C-350	2x 1.0	1.22	S10C-400	2x 1.0	1.40	G26G-450	2x 2.6	1.49	G26H-550	2x 2.6	1.56
2500 x 1200	S08B-300	2x 0.8	1.07	S08B-300	2x 0.8	1.34	G26G-450	2x 2.6	1.54	G26H-550	2x 2.6	1.66	G26H-550	2x 2.6	1.72
2500 x 1300	S08B-300	2x 0.8	1.20	S10C-350	2x 1.0	1.50	G26G-450	2x 2.6	1.71	G26H-550	2x 2.6	1.82	G26H-600	2x 2.6	1.88
2500 x 1400	S08B-300	2x 0.8	1.30	S10C-350	2x 1.0	1.64	G26G-450	2x 2.6	1.85	G26G-450	2x 2.6	1.98	G26H-750	2x 2.6	2.07
2600 x 800	S08B-200	2x 0.8	0.67	S08B-300	2x 0.8	0.85	S08B-300	2x 0.8	1.00	S10C-400	2x 1.0	1.07	G26H-550	2x 2.6	1.12
2600 x 900	S08B-200	2x 0.8	0.77	S08B-300	2x 0.8	0.99	S08B-300	2x 0.8	1.14	G26G-450	2x 2.6	1.23	G26H-550	2x 2.6	1.28
2600 x 1000	S08B-200	2x 0.8	0.89	S08B-300	2x 0.8	1.12	S10C-400	2x 1.0	1.31	G26G-450	2x 2.6	1.39	G26H-550	2x 2.6	1.44
2600 x 1300	S08B-300	2x 0.8	1.25	S10C-350	2x 1.0	1.56	G26G-450	2x 2.6	1.78	G26H-550	2x 2.6	1.90	G26H-600	2x 2.6	1.96
2700 x 800	S08B-200	2x 0.8	0.70	S08B-300	2x 0.8	0.89	S08B-300	2x 0.8	1.04	S10C-400	2x 1.0	1.11	G26H-550	2x 2.6	1.16
2700 x 900	S08B-200	2x 0.8	0.80	S08B-300	2x 0.8	1.04	S08B-300	2x 0.8	1.19	G26G-450	2x 2.6	1.28	G26H-550	2x 2.6	1.33
2700 x 1000	S08B-200	2x 0.8	0.92	S08B-300	2x 0.8	1.17	S10C-400	2x 1.0	1.36	G26G-450	2x 2.6	1.44	G26H-550	2x 2.6	1.50
2700 x 1100	S08B-200	2x 0.8	1.03	S10C-350	2x 1.0	1.32	S10C-400	2x 1.0	1.52	G26G-450	2x 2.6	1.62	G26H-550	2x 2.6	1.70
2700 x 1200	S08B-300	2x 0.8	1.16	S08B-300	2x 0.8	1.46	G26G-450	2x 2.6	1.67	G26H-550	2x 2.6	1.78	G26H-550	2x 2.6	1.87
2700 x 1300	S08B-300	2x 0.8	1.27	S10C-350	2x 1.0	1.62	G26G-450	2x 2.6	1.85	G26H-550	2x 2.6	1.96	G26H-600	2x 2.6	2.04

(*) It is possible to make intermediate dimensions of the smoke exhaust window between the values given in the table. Value of the active aerodynamic area for these dimensions is determined by linear interpolation.

(**) Smoke exhaust windows are equipped with a set of two spindle actuators. Power consumption is given for a set of two actuators.

» **bottom hung windows**



Fig. 91 mcr OSO THERM 75 smoke exhaust window with HCV chain actuator



Fig. 92 mcr OSO THERM 75 smoke exhaust window with two HCV chain actuators

» **top-hung windows**



Fig. 93 mcr OSO THERM 75 smoke exhaust window with HCV chain actuator



Fig. 94 mcr OSO THERM 75 smoke exhaust window with two HCV chain actuators

1.2.5.4| Technical specification - top- and bottom-hung smoke exhaust windows opening inwards with chain actuators

WINDOW SIZE*	ACTUATOR****	POWER CONSUMPTION FOR 24 V- / 48 V-***	OPENING ANGLE**	ACTIVE AERODYNAMIC AREA [Aa]	WINDOW SIZE*	ACTUATOR****	POWER CONSUMPTION FOR 24 V- / 48 V-***	OPENING ANGLE**	ACTIVE AERODYNAMIC AREA [Aa]
B' x H'					B' x H'				
[mm]	-	[A]	[°]	[m²]	[mm]	-	[A]	[°]	[m²]
800 x 800	HCV500/350	1.4 / 0.7	27	0.18	900 x 1800	HCV500/600	1.4 / 0.7	20	0.52
800 x 900	HCV500/350	1.4 / 0.7	24	0.19	900 x 1800	HCV500/350	1.4 / 0.7	11	0.35
800 x 1000	HCV500/350	1.4 / 0.7	21	0.20	900 x 1900	HCV500/600	1.4 / 0.7	19	0.54
800 x 1100	HCV500/600	1.4 / 0.7	33	0.32	900 x 1900	HCV500/350	1.4 / 0.7	11	0.37
800 x 1100	HCV500/350	1.4 / 0.7	19	0.21	900 x 2000	HCV500/600	1.4 / 0.7	18	0.57
800 x 1200	HCV500/600	1.4 / 0.7	30	0.34	900 x 2000	HCV500/350	1.4 / 0.7	10	0.39
800 x 1200	HCV500/350	1.4 / 0.7	17	0.22	900 x 2100	HCV500/600	1.4 / 0.7	17	0.60
800 x 1300	HCV500/600	1.4 / 0.7	28	0.36	900 x 2100	HCV500/350	1.4 / 0.7	10	0.33
800 x 1300	HCV500/350	1.4 / 0.7	16	0.23	900 x 2200	HCV500/600	1.4 / 0.7	16	0.62
800 x 1400	HCV500/600	1.4 / 0.7	26	0.37	900 x 2200	HCV500/350	1.4 / 0.7	9	0.35
800 x 1400	HCV500/350	1.4 / 0.7	15	0.25	1000 x 800	HCV500/350	1.4 / 0.7	27	0.23
800 x 1500	HCV500/600	1.4 / 0.7	24	0.39	1000 x 900	HCV500/350	1.4 / 0.7	24	0.24
800 x 1500	HCV500/350	1.4 / 0.7	14	0.26	1000 x 1000	HCV500/350	1.4 / 0.7	21	0.25
800 x 1600	HCV500/600	1.4 / 0.7	22	0.42	1000 x 1100	HCV500/600	1.4 / 0.7	33	0.40
800 x 1600	HCV500/350	1.4 / 0.7	13	0.27	1000 x 1100	HCV500/350	1.4 / 0.7	19	0.26
800 x 1700	HCV500/600	1.4 / 0.7	21	0.44	1000 x 1200	HCV500/600	1.4 / 0.7	30	0.43
800 x 1700	HCV500/350	1.4 / 0.7	12	0.29	1000 x 1200	HCV500/350	1.4 / 0.7	17	0.28
800 x 1800	HCV500/600	1.4 / 0.7	20	0.46	1000 x 1300	HCV500/600	1.4 / 0.7	28	0.45
800 x 1800	HCV500/350	1.4 / 0.7	11	0.31	1000 x 1300	HCV500/350	1.4 / 0.7	16	0.29
800 x 1900	HCV500/600	1.4 / 0.7	19	0.48	1000 x 1400	HCV500/600	1.4 / 0.7	26	0.47
800 x 1900	HCV500/350	1.4 / 0.7	11	0.33	1000 x 1400	HCV500/350	1.4 / 0.7	15	0.31
800 x 2000	HCV500/600	1.4 / 0.7	18	0.50	1000 x 1500	HCV500/800	1.4 / 0.7	32	0.60
800 x 2000	HCV500/350	1.4 / 0.7	10	0.34	1000 x 1500	HCV500/600	1.4 / 0.7	24	0.49
800 x 2100	HCV500/600	1.4 / 0.7	17	0.52	1000 x 1500	HCV500/350	1.4 / 0.7	14	0.33
800 x 2100	HCV500/350	1.4 / 0.7	10	0.29	1000 x 1600	HCV500/800	1.4 / 0.7	30	0.64
800 x 2200	HCV500/600	1.4 / 0.7	16	0.55	1000 x 1600	HCV500/600	1.4 / 0.7	22	0.53
800 x 2200	HCV500/350	1.4 / 0.7	9	0.30	1000 x 1600	HCV500/350	1.4 / 0.7	13	0.34
900 x 800	HCV500/350	1.4 / 0.7	27	0.21	1000 x 1700	HCV500/800	1.4 / 0.7	28	0.67
900 x 900	HCV500/350	1.4 / 0.7	24	0.22	1000 x 1700	HCV500/600	1.4 / 0.7	21	0.55
900 x 1000	HCV500/350	1.4 / 0.7	21	0.23	1000 x 1700	HCV500/350	1.4 / 0.7	12	0.36
900 x 1100	HCV500/600	1.4 / 0.7	33	0.37	1000 x 1800	HCV500/800	1.4 / 0.7	26	0.70
900 x 1100	HCV500/350	1.4 / 0.7	19	0.24	1000 x 1800	HCV500/600	1.4 / 0.7	20	0.58
900 x 1200	HCV500/600	1.4 / 0.7	30	0.39	1000 x 1800	HCV500/350	1.4 / 0.7	11	0.38
900 x 1200	HCV500/350	1.4 / 0.7	17	0.25	1000 x 1900	HCV500/800	1.4 / 0.7	25	0.73
900 x 1300	HCV500/600	1.4 / 0.7	28	0.41	1000 x 1900	HCV500/600	1.4 / 0.7	19	0.61
900 x 1300	HCV500/350	1.4 / 0.7	16	0.26	1000 x 1900	HCV500/350	1.4 / 0.7	11	0.40
900 x 1400	HCV500/600	1.4 / 0.7	26	0.43	1000 x 2000	HCV500/800	1.4 / 0.7	24	0.76
900 x 1400	HCV500/350	1.4 / 0.7	15	0.28	1000 x 2000	HCV500/600	1.4 / 0.7	18	0.63
900 x 1500	HCV500/600	1.4 / 0.7	24	0.45	1000 x 2000	HCV500/350	1.4 / 0.7	10	0.43
900 x 1500	HCV500/350	1.4 / 0.7	14	0.29	1000 x 2100	HCV500/800	1.4 / 0.7	23	0.80
900 x 1600	HCV500/600	1.4 / 0.7	22	0.47	1000 x 2100	HCV500/600	1.4 / 0.7	17	0.66
900 x 1600	HCV500/350	1.4 / 0.7	13	0.31	1000 x 2100	HCV500/350	1.4 / 0.7	10	0.37
900 x 1700	HCV500/600	1.4 / 0.7	21	0.49	1000 x 2200	HCV500/800	1.4 / 0.7	21	0.84
900 x 1700	HCV500/350	1.4 / 0.7	12	0.33	1000 x 2200	HCV500/600	1.4 / 0.7	16	0.68

(*) Chain actuators HCV500/800 and HCV500/1000 are not available in top hung windows.

(**) Actuators of type HCV 500/xxx may be supplied with 24 V- or 48 V-. HCV500/xxx actuator with voltage 230 V~ and power consumption 0.13A may be used as an equivalent of each specified HCV 500/xxx actuator.

(***) It is possible to make intermediate dimensions of the smoke exhaust window between the values given in the table. The size of the active aerodynamic area for these dimensions is determined by linear interpolation.

(****) Power consumption given for the list of actuators used in a given smoke exhaust window.

1.2.5.4| Technical specification - top- and bottom-hung smoke exhaust windows opening inwards with chain actuators

WINDOW SIZE*	ACTUATOR****	POWER CONSUMPTION FOR 24 V- / 48 V-***	OPENING ANGLE**	ACTIVE AERODYNAMIC AREA [Aa]	WINDOW SIZE*	ACTUATOR****	POWER CONSUMPTION FOR 24 V- / 48 V-***	OPENING ANGLE**	ACTIVE AERODYNAMIC AREA [Aa]
B' x H'					B' x H'				
[mm]	-	[A]	[°]	[m²]	[mm]	-	[A]	[°]	[m²]
1000 x 2200	HCV500/350	1.4 / 0.7	9	0.39	1200 x 1300	HCV500/350	1.4 / 0.7	16	0.35
1100 x 800	HCV500/350	1.4 / 0.7	27	0.25	1200 x 1400	HCV500/600	1.4 / 0.7	26	0.57
1100 x 900	HCV500/350	1.4 / 0.7	24	0.26	1200 x 1400	HCV500/350	1.4 / 0.7	15	0.37
1100 x 1000	HCV500/350	1.4 / 0.7	21	0.28	1200 x 1500	HCV500/800	1.4 / 0.7	32	0.73
1100 x 1100	HCV500/600	1.4 / 0.7	33	0.44	1200 x 1500	HCV500/600	1.4 / 0.7	24	0.60
1100 x 1100	HCV500/350	1.4 / 0.7	19	0.29	1200 x 1500	HCV500/350	1.4 / 0.7	14	0.39
1100 x 1200	HCV500/600	1.4 / 0.7	30	0.48	1200 x 1600	HCV500/800	1.4 / 0.7	30	0.77
1100 x 1200	HCV500/350	1.4 / 0.7	17	0.31	1200 x 1600	HCV500/600	1.4 / 0.7	22	0.63
1100 x 1300	HCV500/600	1.4 / 0.7	28	0.50	1200 x 1600	HCV500/350	1.4 / 0.7	13	0.41
1100 x 1300	HCV500/350	1.4 / 0.7	16	0.32	1200 x 1700	HCV500/800	1.4 / 0.7	28	0.80
1100 x 1400	HCV500/600	1.4 / 0.7	26	0.52	1200 x 1700	HCV500/600	1.4 / 0.7	21	0.66
1100 x 1400	HCV500/350	1.4 / 0.7	15	0.34	1200 x 1700	HCV500/350	1.4 / 0.7	12	0.44
1100 x 1500	HCV500/800	1.4 / 0.7	32	0.67	1200 x 1800	HCV500/1000	1.4 / 0.7	33	0.95
1100 x 1500	HCV500/600	1.4 / 0.7	24	0.55	1200 x 1800	HCV500/800	1.4 / 0.7	26	0.83
1100 x 1500	HCV500/350	1.4 / 0.7	14	0.35	1200 x 1800	HCV500/600	1.4 / 0.7	20	0.69
1100 x 1600	HCV500/800	1.4 / 0.7	30	0.71	1200 x 1800	HCV500/350	1.4 / 0.7	11	0.45
1100 x 1600	HCV500/600	1.4 / 0.7	22	0.57	1200 x 1900	HCV500/1000	1.4 / 0.7	31	1.00
1100 x 1600	HCV500/350	1.4 / 0.7	13	0.37	1200 x 1900	HCV500/800	1.4 / 0.7	25	0.87
1100 x 1700	HCV500/800	1.4 / 0.7	28	0.74	1200 x 1900	HCV500/600	1.4 / 0.7	19	0.72
1100 x 1700	HCV500/600	1.4 / 0.7	21	0.60	1200 x 1900	HCV500/350	1.4 / 0.7	11	0.47
1100 x 1700	HCV500/350	1.4 / 0.7	12	0.40	1200 x 2000	HCV500/1000	1.4 / 0.7	30	1.05
1100 x 1800	HCV500/800	1.4 / 0.7	26	0.77	1200 x 2000	HCV500/800	1.4 / 0.7	24	0.91
1100 x 1800	HCV500/600	1.4 / 0.7	20	0.63	1200 x 2000	HCV500/600	1.4 / 0.7	18	0.75
1100 x 1800	HCV500/350	1.4 / 0.7	11	0.42	1200 x 2000	HCV500/350	1.4 / 0.7	10	0.50
1100 x 1900	HCV500/800	1.4 / 0.7	25	0.80	1200 x 2100	HCV500/1000	1.4 / 0.7	28	1.09
1100 x 1900	HCV500/600	1.4 / 0.7	19	0.66	1200 x 2100	HCV500/800	1.4 / 0.7	23	0.95
1100 x 1900	HCV500/350	1.4 / 0.7	11	0.45	1200 x 2100	HCV500/600	1.4 / 0.7	17	0.78
1100 x 2000	HCV500/800	1.4 / 0.7	24	0.84	1200 x 2100	HCV500/350	1.4 / 0.7	10	0.33
1100 x 2000	HCV500/600	1.4 / 0.7	18	0.69	1200 x 2200	HCV500/1000	1.4 / 0.7	27	1.15
1100 x 2000	HCV500/350	1.4 / 0.7	10	0.48	1200 x 2200	HCV500/800	1.4 / 0.7	21	1.00
1100 x 2100	HCV500/800	1.4 / 0.7	23	0.89					
1100 x 2100	HCV500/600	1.4 / 0.7	17	0.73					
1100 x 2100	HCV500/350	1.4 / 0.7	10	0.42					
1100 x 2200	HCV500/800	1.4 / 0.7	21	0.93					
1100 x 2200	HCV500/600	1.4 / 0.7	16	0.75					
1100 x 2200	HCV500/350	1.4 / 0.7	9	0.44					
1200 x 800	HCV500/350	1.4 / 0.7	27	0.28					
1200 x 900	HCV500/350	1.4 / 0.7	24	0.29					
1200 x 1000	HCV500/350	1.4 / 0.7	21	0.30					
1200 x 1100	HCV500/600	1.4 / 0.7	33	0.49					
1200 x 1100	HCV500/350	1.4 / 0.7	19	0.32					
1200 x 1200	HCV500/600	1.4 / 0.7	30	0.51					
1200 x 1200	HCV500/350	1.4 / 0.7	17	0.33					
1200 x 1300	HCV500/600	1.4 / 0.7	28	0.54					

(*) Chain actuators HCV500/800 and HCV500/1000 are not available in top hung windows.

(**) Actuators of type HCV 500/xxx may be supplied with 24 V- or 48 V-. HCV4 500/xxx actuator with voltage 230 V~ and power consumption 0.13A may be used as an equivalent of each specified HCV 500/xxx actuator.

(***) It is possible to make intermediate dimensions of the smoke exhaust window between the values given in the table. The size of the active aerodynamic area for these dimensions is determined by linear interpolation.

(****) Power consumption given for the list of actuators used in a given smoke exhaust window.

1.2.5.4| Technical specification - top- and bottom-hung smoke exhaust windows opening inwards with chain actuators

WINDOW SIZE*	ACTUATOR****	POWER CONSUMPTION FOR 24 V- / 48 V-***	OPENING ANGLE**	ACTIVE AERODYNAMIC AREA [Aa]	WINDOW SIZE*	ACTUATOR****	POWER CONSUMPTION FOR 24 V- / 48 V-***	OPENING ANGLE**	ACTIVE AERODYNAMIC AREA [Aa]
B' x H'					B' x H'				
[mm]	-	[A]	[°]	[m²]	[mm]	-	[A]	[°]	[m²]
1200 x 2200	HCV500/600	1.4 / 0.7	16	0.81	1400x 1000	HCV500/350	1.4 / 0.7	21	0.35
1200 x 2200	HCV500/350	1.4 / 0.7	9	0.34	1400 x 1100	HCV500/600	1.4 / 0.7	33	0.57
1300 x 800	HCV500/350	1.4 / 0.7	27	0.30	1400 x 1100	HCV500/350	1.4 / 0.7	19	0.37
1300 x 900	HCV500/350	1.4 / 0.7	24	0.31	1400 x 1200	HCV500/600	1.4 / 0.7	30	0.61
1300 x 1000	HCV500/350	1.4 / 0.7	21	0.32	1400 x 1200	HCV500/350	1.4 / 0.7	17	0.39
1300 x 1100	HCV500/600	1.4 / 0.7	33	0.53	1400 x 1300	HCV500/600	1.4 / 0.7	28	0.64
1300 x 1100	HCV500/350	1.4 / 0.7	19	0.34	1400 x 1300	HCV500/350	1.4 / 0.7	16	0.41
1300 x 1200	HCV500/600	1.4 / 0.7	30	0.56	1400 x 1400	HCV500/600	1.4 / 0.7	26	0.67
1300 x 1200	HCV500/350	1.4 / 0.7	17	0.36	1400 x 1400	HCV500/350	1.4 / 0.7	15	0.43
1300 x 1300	HCV500/600	1.4 / 0.7	28	0.59	1400 x 1500	HCV500/800	1.4 / 0.7	32	0.85
1300 x 1300	HCV500/350	1.4 / 0.7	16	0.38	1400 x 1500	HCV500/600	1.4 / 0.7	24	0.70
1300 x 1400	HCV500/600	1.4 / 0.7	26	0.61	1400 x 1500	HCV500/350	1.4 / 0.7	14	0.44
1300 x 1400	HCV500/350	1.4 / 0.7	15	0.40	1400 x 1600	HCV500/800	1.4 / 0.7	30	0.91
1300 x 1500	HCV500/800	1.4 / 0.7	32	0.79	1400 x 1600	HCV500/600	1.4 / 0.7	22	0.73
1300 x 1500	HCV500/600	1.4 / 0.7	24	0.64	1400 x 1600	HCV500/350	1.4 / 0.7	13	0.47
1300 x 1500	HCV500/350	1.4 / 0.7	14	0.42	1400 x 1700	HCV500/800	1.4 / 0.7	28	0.94
1300 x 1600	HCV500/800	1.4 / 0.7	30	0.84	1400 x 1700	HCV500/600	1.4 / 0.7	21	0.76
1300 x 1600	HCV500/600	1.4 / 0.7	22	0.67	1400 x 1700	HCV500/350	1.4 / 0.7	12	0.50
1300 x 1600	HCV500/350	1.4 / 0.7	13	0.43	1400 x 1800	HCV500/1000	1.4 / 0.7	33	1.11
1300 x 1700	HCV500/800	1.4 / 0.7	28	0.87	1400 x 1800	HCV500/800	1.4 / 0.7	26	0.97
1300 x 1700	HCV500/600	1.4 / 0.7	21	0.71	1400 x 1800	HCV500/600	1.4 / 0.7	20	0.80
1300 x 1700	HCV500/350	1.4 / 0.7	12	0.46	1400 x 1800	HCV500/350	1.4 / 0.7	11	0.53
1300 x 1800	HCV500/1000	1.4 / 0.7	33	1.04	1400 x 1900	HCV500/1000	1.4 / 0.7	31	1.16
1300 x 1800	HCV500/800	1.4 / 0.7	26	0.90	1400 x 1900	HCV500/800	1.4 / 0.7	25	1.01
1300 x 1800	HCV500/600	1.4 / 0.7	20	0.74	1400 x 1900	HCV500/600	1.4 / 0.7	19	0.83
1300 x 1800	HCV500/350	1.4 / 0.7	11	0.49	1400 x 1900	HCV500/350	1.4 / 0.7	11	0.56
1300 x 1900	HCV500/1000	1.4 / 0.7	31	1.09	1400 x 2000	HCV500/1000	1.4 / 0.7	30	1.24
1300 x 1900	HCV500/800	1.4 / 0.7	25	0.94	1400 x 2000	HCV500/800	1.4 / 0.7	24	1.06
1300 x 1900	HCV500/600	1.4 / 0.7	19	0.77	1400 x 2000	HCV500/600	1.4 / 0.7	18	0.86
1300 x 1900	HCV500/350	1.4 / 0.7	11	0.52	1400 x 2000	HCV500/350	1.4 / 0.7	10	0.57
1300 x 2000	HCV500/1000	1.4 / 0.7	30	1.15	1400 x 2100	HCV500/1000	1.4 / 0.7	28	1.28
1300 x 2000	HCV500/800	1.4 / 0.7	24	0.98	1400 x 2100	HCV500/800	1.4 / 0.7	23	1.11
1300 x 2000	HCV500/600	1.4 / 0.7	18	0.80	1400 x 2100	HCV500/600	1.4 / 0.7	17	0.90
1300 x 2000	HCV500/350	1.4 / 0.7	10	0.55	1400 x 2100	HCV500/350	1.4 / 0.7	10	0.39
1300 x 2100	HCV500/1000	1.4 / 0.7	28	1.19	1400 x 2200	HCV500/1000	1.4 / 0.7	27	1.33
1300 x 2100	HCV500/800	1.4 / 0.7	23	1.04	1400 x 2200	HCV500/800	1.4 / 0.7	21	1.15
1300 x 2100	HCV500/600	1.4 / 0.7	17	0.85	1400 x 2200	HCV500/600	1.4 / 0.7	16	0.93
1300 x 2100	HCV500/350	1.4 / 0.7	10	0.36	1400 x 2200	HCV500/350	1.4 / 0.7	9	0.41
1300 x 2200	HCV500/1000	1.4 / 0.7	27	1.24	1500 x 1200	HCV500/600	1.4 / 0.7	30	0.66
1300 x 2200	HCV500/800	1.4 / 0.7	21	1.09	1500 x 1200	HCV500/350	1.4 / 0.7	17	0.42
1300 x 2200	HCV500/600	1.4 / 0.7	16	0.89	1500 x 1300	HCV500/600	1.4 / 0.7	28	0.69
1300 x 2200	HCV500/350	1.4 / 0.7	9	0.37	1500 x 1300	HCV500/350	1.4 / 0.7	16	0.44
1400 x 800	HCV500/350	1.4 / 0.7	27	0.32	1500 x 1400	HCV500/600	1.4 / 0.7	26	0.71
1400 x 900	HCV500/350	1.4 / 0.7	24	0.33	1500 x 1400	HCV500/350	1.4 / 0.7	15	0.45

(*) Chain actuators HCV500/800 and HCV500/1000 are not available in top hung windows.

(**) Actuators of type HCV 500/xxx may be supplied with 24 V- or 48 V-. HCV4 500/xxx actuator with voltage 230 V~ and power consumption 0.13A may be used as an equivalent of each specified HCV 500/xxx actuator.

(***) It is possible to make intermediate dimensions of the smoke exhaust window between the values given in the table. The size of the active aerodynamic area for these dimensions is determined by linear interpolation.

(****) Power consumption given for the list of actuators used in a given smoke exhaust window.

1.2.5.4| Technical specification - top- and bottom-hung smoke exhaust windows opening inwards with chain actuators

WINDOW SIZE*	ACTUATOR****	POWER CONSUMPTION FOR 24 V- / 48 V-***	OPENING ANGLE**	ACTIVE AERODYNAMIC AREA [Aa]	WINDOW SIZE*	ACTUATOR****	POWER CONSUMPTION FOR 24 V- / 48 V-***	OPENING ANGLE**	ACTIVE AERODYNAMIC AREA [Aa]
B' x H'					B' x H'				
[mm]	-	[A]	[°]	[m²]	[mm]	-	[A]	[°]	[m²]
1500 x 1500	HCV500/800	1,4 / 0,7	32	0,91	1600 x 1600	HCV500/600	1,4 / 0,7	22	0,82
1500 x 1500	HCV500/600	1,4 / 0,7	24	0,73	1600 x 1600	HCV500/350	1,4 / 0,7	13	0,54
1500 x 1500	HCV500/350	1,4 / 0,7	14	0,47	1600 x 1700	HCV500/800	1,4 / 0,7	28	1,06
1500 x 1600	HCV500/800	1,4 / 0,7	30	0,96	1600 x 1700	HCV500/600	1,4 / 0,7	21	0,86
1500 x 1600	HCV500/600	1,4 / 0,7	22	0,77	1600 x 1700	HCV500/350	1,4 / 0,7	12	0,55
1500 x 1600	HCV500/350	1,4 / 0,7	13	0,50	1600 x 1800	HCV500/1000	1,4 / 0,7	33	1,27
1500 x 1700	HCV500/800	1,4 / 0,7	28	0,99	1600 x 1800	HCV500/800	1,4 / 0,7	26	1,10
1500 x 1700	HCV500/600	1,4 / 0,7	21	0,80	1600 x 1800	HCV500/600	1,4 / 0,7	20	0,90
1500 x 1700	HCV500/350	1,4 / 0,7	12	0,53	1600 x 1800	HCV500/350	1,4 / 0,7	11	0,58
1500 x 1800	HCV500/1000	1,4 / 0,7	33	1,19	1600 x 1900	HCV500/1000	1,4 / 0,7	31	1,34
1500 x 1800	HCV500/800	1,4 / 0,7	26	1,03	1600 x 1900	HCV500/800	1,4 / 0,7	25	1,15
1500 x 1800	HCV500/600	1,4 / 0,7	20	0,84	1600 x 1900	HCV500/600	1,4 / 0,7	19	0,93
1500 x 1800	HCV500/350	1,4 / 0,7	11	0,54	1600 x 1900	HCV500/350	1,4 / 0,7	11	0,62
1500 x 1900	HCV500/1000	1,4 / 0,7	31	1,25	1600 x 2000	HCV500/1000	1,4 / 0,7	30	1,40
1500 x 1900	HCV500/800	1,4 / 0,7	25	1,07	1600 x 2000	HCV500/800	1,4 / 0,7	24	1,20
1500 x 1900	HCV500/600	1,4 / 0,7	19	0,87	1600 x 2000	HCV500/600	1,4 / 0,7	18	0,97
1500 x 1900	HCV500/350	1,4 / 0,7	11	0,58	1600 x 2000	HCV500/350	1,4 / 0,7	10	0,66
1500 x 2000	HCV500/1000	1,4 / 0,7	30	1,31	1600 x 2100	HCV500/1000	1,4 / 0,7	28	1,45
1500 x 2000	HCV500/800	1,4 / 0,7	24	1,13	1600 x 2100	HCV500/800	1,4 / 0,7	23	1,25
1500 x 2000	HCV500/600	1,4 / 0,7	18	0,93	1600 x 2100	HCV500/600	1,4 / 0,7	17	1,02
1500 x 2000	HCV500/350	1,4 / 0,7	10	0,61	1600 x 2100	HCV500/350	1,4 / 0,7	10	0,45
1500 x 2100	HCV500/1000	1,4 / 0,7	28	1,36	1600 x 2200	HCV500/1000	1,4 / 0,7	27	1,51
1500 x 2100	HCV500/800	1,4 / 0,7	23	1,18	1600 x 2200	HCV500/800	1,4 / 0,7	21	1,30
1500 x 2100	HCV500/600	1,4 / 0,7	17	0,97	1600 x 2200	HCV500/600	1,4 / 0,7	16	1,05
1500 x 2100	HCV500/350	1,4 / 0,7	10	0,42	1600 x 2200	HCV500/350	1,4 / 0,7	9	0,47
1500 x 2200	HCV500/1000	1,4 / 0,7	27	1,42	1700 x 800	HCV500/350	2x 1,4 / 2x 0,7	27	0,39
1500 x 2200	HCV500/800	1,4 / 0,7	21	1,24	1700 x 900	HCV500/350	2x 1,4 / 2x 0,7	24	0,41
1500 x 2200	HCV500/600	1,4 / 0,7	16	1,01	1700 x 1000	HCV500/350	2x 1,4 / 2x 0,7	21	0,43
1500 x 2200	HCV500/350	1,4 / 0,7	9	0,44	1700 x 1100	HCV500/600	2x 1,4 / 2x 0,7	33	0,69
1600 x 800	HCV500/350	1,4 / 0,7	27	0,36	1700 x 1100	HCV500/350	2x 1,4 / 2x 0,7	19	0,44
1600 x 900	HCV500/350	1,4 / 0,7	24	0,38	1700 x 1200	HCV500/600	2x 1,4 / 2x 0,7	30	0,74
1600 x 1000	HCV500/350	1,4 / 0,7	21	0,40	1700 x 1200	HCV500/350	2x 1,4 / 2x 0,7	17	0,46
1600 x 1100	HCV500/600	1,4 / 0,7	33	0,66	1700 x 1300	HCV500/600	2x 1,4 / 2x 0,7	28	0,77
1600 x 1100	HCV500/350	1,4 / 0,7	19	0,43	1700 x 1300	HCV500/350	2x 1,4 / 2x 0,7	16	0,48
1600 x 1200	HCV500/600	1,4 / 0,7	30	0,69	1700 x 1400	HCV500/600	2x 1,4 / 2x 0,7	26	0,80
1600 x 1200	HCV500/350	1,4 / 0,7	17	0,45	1700 x 1400	HCV500/350	2x 1,4 / 2x 0,7	15	0,51
1600 x 1300	HCV500/600	1,4 / 0,7	28	0,72	1700 x 1500	HCV500/800	1,4 / 0,7	32	1,03
1600 x 1300	HCV500/350	1,4 / 0,7	16	0,45	1700 x 1500	HCV500/600	2x 1,4 / 2x 0,7	24	0,84
1600 x 1400	HCV500/600	1,4 / 0,7	26	0,75	1700 x 1500	HCV500/350	2x 1,4 / 2x 0,7	14	0,54
1600 x 1400	HCV500/350	1,4 / 0,7	15	0,48	1700 x 1600	HCV500/800	1,4 / 0,7	30	1,09
1600 x 1500	HCV500/800	1,4 / 0,7	32	0,97	1700 x 1600	HCV500/600	2x 1,4 / 2x 0,7	22	0,88
1600 x 1500	HCV500/600	1,4 / 0,7	24	0,78	1700 x 1600	HCV500/350	2x 1,4 / 2x 0,7	13	0,55
1600 x 1500	HCV500/350	1,4 / 0,7	14	0,51	1700 x 1700	HCV500/800	1,4 / 0,7	28	1,13
1600 x 1600	HCV500/800	1,4 / 0,7	30	1,03	1700 x 1700	HCV500/600	2x 1,4 / 2x 0,7	21	0,91

(*) Chain actuators HCV500/800 and HCV500/1000 are not available in top hung windows.

(**) Actuators of type HCV 500/xxx may be supplied with 24 V- or 48 V-. HCV4 500/xxx actuator with voltage 230 V~ and power consumption 0.13A may be used as an equivalent of each specified HCV 500/xxx actuator.

(***) It is possible to make intermediate dimensions of the smoke exhaust window between the values given in the table. The size of the active aerodynamic area for these dimensions is determined by linear interpolation.

(****) Power consumption given for the list of actuators used in a given smoke exhaust window.

1.2.5.4| Technical specification - top- and bottom-hung smoke exhaust windows opening inwards with chain actuators

WINDOW SIZE*	ACTUATOR****	POWER CONSUMPTION FOR 24 V- / 48 V-***	OPENING ANGLE**	ACTIVE AERODYNAMIC AREA [Aa]	WINDOW SIZE*	ACTUATOR****	POWER CONSUMPTION FOR 24 V- / 48 V-***	OPENING ANGLE**	ACTIVE AERODYNAMIC AREA [Aa]
B' x H'					B' x H'				
[mm]	-	[A]	[°]	[m²]	[mm]	-	[A]	[°]	[m²]
1700 x 1700	HCV500/350	2x 1.4 / 2x 0.7	12	0.58	1900 x 1100	HCV500/600	2x 1.4 / 2x 0.7	33	0.78
1700 x 1800	HCV500/1000	1.4 / 0.7	33	1.34	1900 x 1100	HCV500/350	2x 1.4 / 2x 0.7	19	0.49
1700 x 1800	HCV500/800	1.4 / 0.7	26	1.16	1900 x 1200	HCV500/600	2x 1.4 / 2x 0.7	30	0.83
1700 x 1800	HCV500/600	2x 1.4 / 2x 0.7	20	0.96	1900 x 1200	HCV500/350	2x 1.4 / 2x 0.7	17	0.52
1700 x 1800	HCV500/350	2x 1.4 / 2x 0.7	11	0.62	1900 x 1300	HCV500/600	2x 1.4 / 2x 0.7	28	0.86
1700 x 1900	HCV500/1000	1.4 / 0.7	31	1.40	1900 x 1300	HCV500/350	2x 1.4 / 2x 0.7	16	0.54
1700 x 1900	HCV500/800	1.4 / 0.7	25	1.21	1900 x 1400	HCV500/600	2x 1.4 / 2x 0.7	26	0.89
1700 x 1900	HCV500/600	2x 1.4 / 2x 0.7	19	1.00	1900 x 1400	HCV500/350	2x 1.4 / 2x 0.7	15	0.56
1700 x 1900	HCV500/350	2x 1.4 / 2x 0.7	11	0.66	1900 x 1500	HCV500/800	1.4 / 0.7	32	1.14
1700 x 2000	HCV500/1000	1.4 / 0.7	30	1.47	1900 x 1500	HCV500/600	2x 1.4 / 2x 0.7	24	0.91
1700 x 2000	HCV500/800	1.4 / 0.7	24	1.27	1900 x 1500	HCV500/350	2x 1.4 / 2x 0.7	14	0.58
1700 x 2000	HCV500/600	2x 1.4 / 2x 0.7	18	1.03	1900 x 1600	HCV500/800	1.4 / 0.7	30	1.20
1700 x 2000	HCV500/350	2x 1.4 / 2x 0.7	10	0.67	1900 x 1600	HCV500/600	2x 1.4 / 2x 0.7	22	0.96
1800 x 800	HCV500/350	2x 1.4 / 2x 0.7	27	0.41	1900 x 1600	HCV500/350	2x 1.4 / 2x 0.7	13	0.61
1800 x 900	HCV500/350	2x 1.4 / 2x 0.7	24	0.44	1900 x 1700	HCV500/800	1.4 / 0.7	28	1.25
1800 x 1000	HCV500/350	2x 1.4 / 2x 0.7	21	0.46	1900 x 1700	HCV500/600	2x 1.4 / 2x 0.7	21	1.00
1800 x 1100	HCV500/600	2x 1.4 / 2x 0.7	33	0.73	1900 x 1700	HCV500/350	2x 1.4 / 2x 0.7	12	0.65
1800 x 1100	HCV500/350	2x 1.4 / 2x 0.7	19	0.47	1900 x 1800	HCV500/1000	1.4 / 0.7	33	1.49
1800 x 1200	HCV500/600	2x 1.4 / 2x 0.7	30	0.78	1900 x 1800	HCV500/800	1.4 / 0.7	26	1.30
1800 x 1200	HCV500/350	2x 1.4 / 2x 0.7	17	0.49	1900 x 1800	HCV500/600	2x 1.4 / 2x 0.7	20	1.05
1800 x 1300	HCV500/600	2x 1.4 / 2x 0.7	28	0.82	1900 x 1800	HCV500/350	2x 1.4 / 2x 0.7	11	0.67
1800 x 1300	HCV500/350	2x 1.4 / 2x 0.7	16	0.51	2000 x 800	HCV500/350	2x 1.4 / 2x 0.7	27	0.46
1800 x 1400	HCV500/600	2x 1.4 / 2x 0.7	26	0.85	2000 x 900	HCV500/350	2x 1.4 / 2x 0.7	24	0.49
1800 x 1400	HCV500/350	2x 1.4 / 2x 0.7	15	0.54	2000 x 1000	HCV500/350	2x 1.4 / 2x 0.7	21	0.50
1800 x 1500	HCV500/800	1.4 / 0.7	32	1.08	2000 x 1100	HCV500/600	2x 1.4 / 2x 0.7	33	0.81
1800 x 1500	HCV500/600	2x 1.4 / 2x 0.7	24	0.88	2000 x 1100	HCV500/350	2x 1.4 / 2x 0.7	19	0.52
1800 x 1500	HCV500/350	2x 1.4 / 2x 0.7	14	0.56	2000 x 1200	HCV500/600	2x 1.4 / 2x 0.7	30	0.87
1800 x 1600	HCV500/800	1.4 / 0.7	30	1.13	2000 x 1200	HCV500/350	2x 1.4 / 2x 0.7	17	0.55
1800 x 1600	HCV500/600	2x 1.4 / 2x 0.7	22	0.92	2000 x 1300	HCV500/600	2x 1.4 / 2x 0.7	28	0.89
1800 x 1600	HCV500/350	2x 1.4 / 2x 0.7	13	0.59	2000 x 1300	HCV500/350	2x 1.4 / 2x 0.7	16	0.56
1800 x 1700	HCV500/800	1.4 / 0.7	28	1.18	2000 x 1400	HCV500/600	2x 1.4 / 2x 0.7	26	0.92
1800 x 1700	HCV500/600	2x 1.4 / 2x 0.7	21	0.94	2000 x 1400	HCV500/350	2x 1.4 / 2x 0.7	15	0.58
1800 x 1700	HCV500/350	2x 1.4 / 2x 0.7	12	0.62	2000 x 1500	HCV500/800	2x 1.4 / 2x 0.7	32	1.20
1800 x 1800	HCV500/1000	1.4 / 0.7	33	1.41	2000 x 1500	HCV500/600	2x 1.4 / 2x 0.7	24	0.96
1800 x 1800	HCV500/800	1.4 / 0.7	26	1.22	2000 x 1500	HCV500/350	2x 1.4 / 2x 0.7	14	0.61
1800 x 1800	HCV500/600	2x 1.4 / 2x 0.7	20	0.99	2000 x 1600	HCV500/800	2x 1.4 / 2x 0.7	30	1.27
1800 x 1800	HCV500/350	2x 1.4 / 2x 0.7	11	0.66	2000 x 1600	HCV500/600	2x 1.4 / 2x 0.7	22	1.01
1800 x 1900	HCV500/1000	1.4 / 0.7	31	1.49	2000 x 1600	HCV500/350	2x 1.4 / 2x 0.7	13	0.65
1800 x 1900	HCV500/800	1.4 / 0.7	25	1.27	2000 x 1700	HCV500/800	2x 1.4 / 2x 0.7	28	1.32
1800 x 1900	HCV500/600	2x 1.4 / 2x 0.7	19	1.03	2000 x 1700	HCV500/600	2x 1.4 / 2x 0.7	21	1.06
1800 x 1900	HCV500/350	2x 1.4 / 2x 0.7	11	0.67	2000 x 1700	HCV500/350	2x 1.4 / 2x 0.7	12	0.67
1900 x 800	HCV500/350	2x 1.4 / 2x 0.7	27	0.44	2100 x 800	HCV500/350	2x 1.4 / 2x 0.7	27	0.49
1900 x 900	HCV500/350	2x 1.4 / 2x 0.7	24	0.46	2100 x 900	HCV500/350	2x 1.4 / 2x 0.7	24	0.50
1900 x 1000	HCV500/350	2x 1.4 / 2x 0.7	21	0.47	2100 x 1000	HCV500/350	2x 1.4 / 2x 0.7	21	0.52

(*) Chain actuators HCV500/800 and HCV500/1000 are not available in top hung windows.

(**) Actuators of type HCV 500/xxx may be supplied with 24 V- or 48 V-. HCV4 500/xxx actuator with voltage 230 V~ and power consumption 0.13A may be used as an equivalent of each specified HCV 500/xxx actuator.

(***) It is possible to make intermediate dimensions of the smoke exhaust window between the values given in the table. The size of the active aerodynamic area for these dimensions is determined by linear interpolation.

(****) Power consumption given for the list of actuators used in a given smoke exhaust window.

1.2.5.4| Technical specification - top- and bottom-hung smoke exhaust windows opening inwards with chain actuators

WINDOW SIZE*	ACTUATOR****	POWER CONSUMPTION FOR 24 V- / 48 V-***	OPENING ANGLE**	ACTIVE AERODYNAMIC AREA [Aa]	WINDOW SIZE*	ACTUATOR****	POWER CONSUMPTION FOR 24 V- / 48 V-***	OPENING ANGLE**	ACTIVE AERODYNAMIC AREA [Aa]
B' x H'					B' x H'				
[mm]	-	[A]	[°]	[m²]	[mm]	-	[A]	[°]	[m²]
2100 x 1100	HCV500/600	2x 1.4 / 2x 0.7	33	0.86	2300 x 1500	HCV500/350	2x 1.4 / 2x 0.7	14	0.69
2100 x 1100	HCV500/350	2x 1.4 / 2x 0.7	19	0.55	2400 x 800	HCV500/350	2x 1.4 / 2x 0.7	27	0.56
2100 x 1200	HCV500/600	2x 1.4 / 2x 0.7	30	0.92	2400 x 900	HCV500/350	2x 1.4 / 2x 0.7	24	0.57
2100 x 1200	HCV500/350	2x 1.4 / 2x 0.7	17	0.58	2400 x 1000	HCV500/350	2x 1.4 / 2x 0.7	21	0.60
2100 x 1300	HCV500/600	2x 1.4 / 2x 0.7	28	0.93	2400 x 1100	HCV500/600	2x 1.4 / 2x 0.7	33	0.97
2100 x 1300	HCV500/350	2x 1.4 / 2x 0.7	16	0.58	2400 x 1100	HCV500/350	2x 1.4 / 2x 0.7	19	0.61
2100 x 1400	HCV500/600	2x 1.4 / 2x 0.7	26	0.97	2400 x 1200	HCV500/600	2x 1.4 / 2x 0.7	30	1.03
2100 x 1400	HCV500/350	2x 1.4 / 2x 0.7	15	0.61	2400 x 1200	HCV500/350	2x 1.4 / 2x 0.7	17	0.64
2100 x 1500	HCV500/800	2x 1.4 / 2x 0.7	32	1.26	2400 x 1300	HCV500/600	2x 1.4 / 2x 0.7	28	1.08
2100 x 1500	HCV500/600	2x 1.4 / 2x 0.7	24	1.02	2400 x 1300	HCV500/350	2x 1.4 / 2x 0.7	16	0.67
2100 x 1500	HCV500/350	2x 1.4 / 2x 0.7	14	0.64	2400 x 1400	HCV500/600	2x 1.4 / 2x 0.7	26	1.10
2100 x 1600	HCV500/800	2x 1.4 / 2x 0.7	30	1.34	2400 x 1400	HCV500/350	2x 1.4 / 2x 0.7	15	0.70
2100 x 1600	HCV500/600	2x 1.4 / 2x 0.7	22	1.06	2500 x 800	HCV500/350	2x 1.4 / 2x 0.7	27	0.59
2100 x 1600	HCV500/350	2x 1.4 / 2x 0.7	13	0.66	2500 x 900	HCV500/350	2x 1.4 / 2x 0.7	24	0.60
2200 x 800	HCV500/350	2x 1.4 / 2x 0.7	27	0.51	2500 x 1000	HCV500/350	2x 1.4 / 2x 0.7	21	0.63
2200 x 900	HCV500/350	2x 1.4 / 2x 0.7	24	0.52	2500 x 1100	HCV500/600	2x 1.4 / 2x 0.7	33	1.01
2200 x 1000	HCV500/350	2x 1.4 / 2x 0.7	21	0.55	2500 x 1100	HCV500/350	2x 1.4 / 2x 0.7	19	0.64
2200 x 1100	HCV500/600	2x 1.4 / 2x 0.7	33	0.90	2500 x 1200	HCV500/600	2x 1.4 / 2x 0.7	30	1.08
2200 x 1100	HCV500/350	2x 1.4 / 2x 0.7	19	0.58	2500 x 1200	HCV500/350	2x 1.4 / 2x 0.7	17	0.66
2200 x 1200	HCV500/600	2x 1.4 / 2x 0.7	30	0.94	2500 x 1300	HCV500/600	2x 1.4 / 2x 0.7	28	1.12
2200 x 1200	HCV500/350	2x 1.4 / 2x 0.7	17	0.59	2500 x 1300	HCV500/350	2x 1.4 / 2x 0.7	16	0.70
2200 x 1300	HCV500/600	2x 1.4 / 2x 0.7	28	0.98	2500 x 1400	HCV500/600	2x 1.4 / 2x 0.7	26	1.14
2200 x 1300	HCV500/350	2x 1.4 / 2x 0.7	16	0.61	2500 x 1400	HCV500/350	2x 1.4 / 2x 0.7	15	0.72
2200 x 1400	HCV500/600	2x 1.4 / 2x 0.7	26	1.02	2600 x 800	HCV500/350	2x 1.4 / 2x 0.7	27	0.61
2200 x 1400	HCV500/350	2x 1.4 / 2x 0.7	15	0.64	2600 x 900	HCV500/350	2x 1.4 / 2x 0.7	24	0.62
2200 x 1500	HCV500/800	2x 1.4 / 2x 0.7	32	1.32	2600 x 1000	HCV500/350	2x 1.4 / 2x 0.7	21	0.65
2200 x 1500	HCV500/600	2x 1.4 / 2x 0.7	24	1.07	2600 x 1100	HCV500/600	2x 1.4 / 2x 0.7	33	1.05
2200 x 1500	HCV500/350	2x 1.4 / 2x 0.7	14	0.68	2600 x 1100	HCV500/350	2x 1.4 / 2x 0.7	19	0.66
2200 x 1600	HCV500/800	2x 1.4 / 2x 0.7	30	1.37	2600 x 1200	HCV500/600	2x 1.4 / 2x 0.7	30	1.12
2200 x 1600	HCV500/600	2x 1.4 / 2x 0.7	22	1.11	2600 x 1200	HCV500/350	2x 1.4 / 2x 0.7	17	0.69
2200 x 1600	HCV500/350	2x 1.4 / 2x 0.7	13	0.70	2600 x 1300	HCV500/600	2x 1.4 / 2x 0.7	28	1.17
2300 x 800	HCV500/350	2x 1.4 / 2x 0.7	27	0.54	2600 x 1300	HCV500/350	2x 1.4 / 2x 0.7	16	0.73
2300 x 900	HCV500/350	2x 1.4 / 2x 0.7	24	0.55	2700 x 800	HCV500/350	2x 1.4 / 2x 0.7	27	0.63
2300 x 1000	HCV500/350	2x 1.4 / 2x 0.7	21	0.58	2700 x 900	HCV500/350	2x 1.4 / 2x 0.7	24	0.65
2300 x 1100	HCV500/600	2x 1.4 / 2x 0.7	33	0.94	2700 x 1000	HCV500/350	2x 1.4 / 2x 0.7	21	0.68
2300 x 1100	HCV500/350	2x 1.4 / 2x 0.7	19	0.60	2700 x 1100	HCV500/600	2x 1.4 / 2x 0.7	33	1.10
2300 x 1200	HCV500/600	2x 1.4 / 2x 0.7	30	0.99	2700 x 1100	HCV500/350	2x 1.4 / 2x 0.7	19	0.69
2300 x 1200	HCV500/350	2x 1.4 / 2x 0.7	17	0.61	2700 x 1200	HCV500/600	2x 1.4 / 2x 0.7	30	1.17
2300 x 1200	HCV500/600	2x 1.4 / 2x 0.7	28	1.03	2700 x 1200	HCV500/350	2x 1.4 / 2x 0.7	17	0.72
2300 x 1200	HCV500/350	2x 1.4 / 2x 0.7	16	0.64	2700 x 1300	HCV500/600	2x 1.4 / 2x 0.7	28	1.19
2300 x 1400	HCV500/600	2x 1.4 / 2x 0.7	26	1.07	2700 x 1300	HCV500/350	2x 1.4 / 2x 0.7	16	0.74
2300 x 1400	HCV500/350	2x 1.4 / 2x 0.7	15	0.67					
2300 x 1500	HCV500/800	2x 1.4 / 2x 0.7	32	1.36					
2300 x 1500	HCV500/600	2x 1.4 / 2x 0.7	24	1.11					

(*) Chain actuators HCV500/800 and HCV500/1000 are not available in top hung windows.

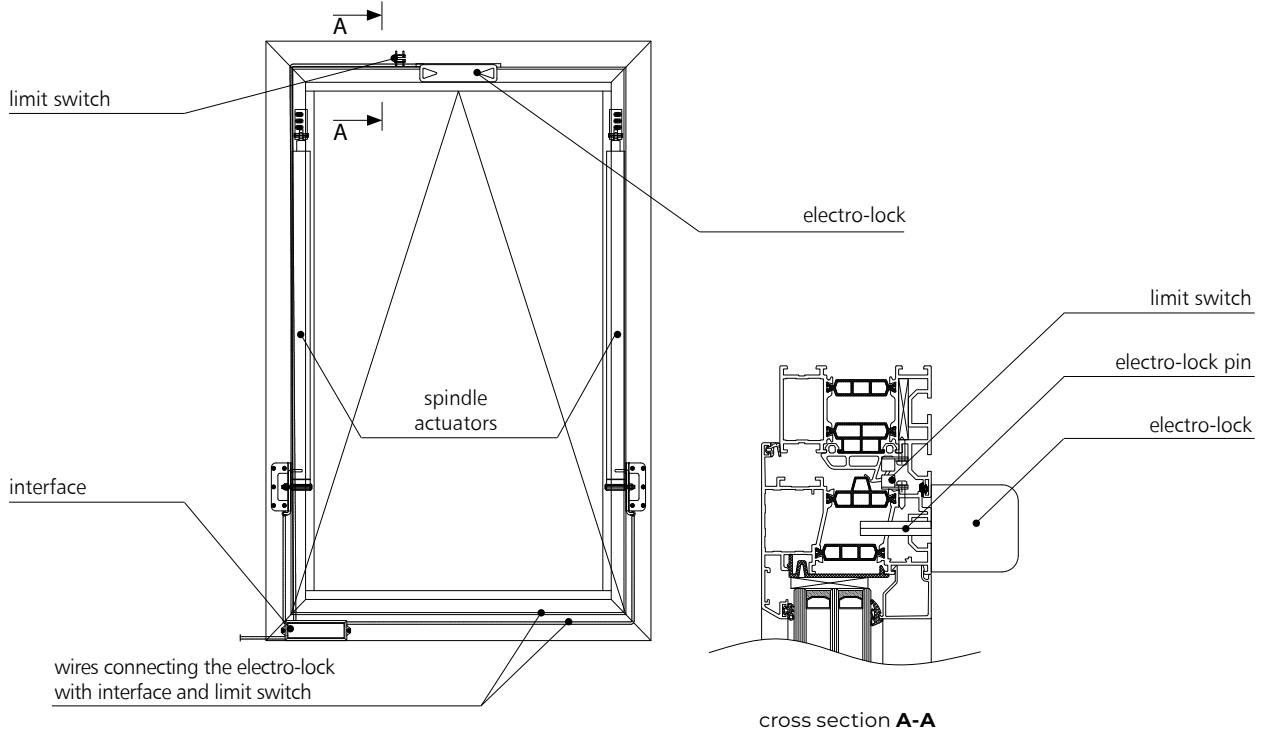
(**) Actuators of type HCV 500/xxx may be supplied with 24 V- or 48 V-. HCV4 500/xxx actuator with voltage 230 V~ and power consumption 0.13A may be used as an equivalent of each specified HCV 500/xxx actuator.

(***) It is possible to make intermediate dimensions of the smoke exhaust window between the values given in the table. The size of the active aerodynamic area for these dimensions is determined by linear interpolation.

(****) Power consumption given for the list of actuators used in a given smoke exhaust window.

1.2.6 | Technical specification - application of electro-lock in windows with spindle actuators

The automatic electro-lock for smoke and heat exhaust windows provide protection and safety. It is mounted in place of the handle, where after receiving 24 V- voltage it rotates and moves the peripheral hardware. This guarantees resistance of the leaf against wind load and suitable, tamper-proof leaf-to-frame connection. The electro-lock works with the: interface, reed switch and the actuators. Standard peripheral hardware is used for installation. Electro-lock specification: 24 V-; 1.0 A; 10 Nm. Power consumption of electro-lock does not sum up with power consumption of actuators.



		H' - window height [mm]														
		800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200
B' - window width [mm]	800	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	900	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	1000	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	1100	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	1200	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	1300	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	1400	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	1500	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	1600	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	1700	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	1800	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	1900	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	2000	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	2100	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	2200	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	2300	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	2400	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
2500	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
2600	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
2700	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	

- * dimensional range of electro-lock windows
- dimensional range of windows without electro-lock
- area beyond availability

2 | Smoke exhaust window control system

Electrically controlled natural smoke exhausting systems are usually designed in staircases of low and medium-rise buildings and in other escape routes, such as office aisles, or passages and atria in shopping malls.

Smoke exhaust windows can be triggered manually, e.g. by pressing the emergency pushbutton, automatically through smoke detectors or remotely through the smoke detection system. In such case, the system starts to operate in the initial phase of the fire, improving the evacuation conditions for the users of the facility, and with more extensive control systems it is also possible to change the smoke exhaust scenario as the fire conditions change.

A frequent addition to the smoke exhaust window control system are switches for manual activation of daily ventilation. The daily ventilation system may be equipped with a weather monitoring unit with a wind-rain sensor. In case of adverse weather conditions wind and rain sensor automatically closes the windows opened for daily ventilation.

» electric spindle actuators



Fig. 95 Spindle actuator type S



Fig. 96 Spindle actuator type G

» electric chain actuators



Fig. 97 Chain actuator type HCV, HCVA

2.1 | 24 V- spindle electric actuators

24 V- electric spindle motors are used to open smoke exhaust windows as well as for daily ventilation. They are powered by 24 V-. The actuator casing is made of anodized aluminium. They are equipped as standard with an anti-interference capacitor, overload switch and limit switches. Protection grade IP40 for type G actuators, operating mode S2 (according to DIN EN 0530), available options IP42, IP54 and IP42 for type S actuators.

2.1.1 | Type G spindle electric actuators

ACTUATOR TYPE	SUPPLY VOLTAGE	NOMINAL POWER CONSUMPTION	ACTUATOR STROKE	DIMENSIONS (LxBxH)	MAXIMUM OPERATING TEMPERATURE
	[V]	[A]	[mm]	[mm]	[°C]
G26G/H-550	24	2.6	550	839 x 58 x 47	-25 ÷ +60
G26G/H-600	24	2.6	600	889 x 58 x 47	-25 ÷ +60
G26G/H-750	24	2.6	750	1039 x 58 x 47	-25 ÷ +60
G40H-830	24	4.0	830	1119 x 58 x 47	-25 ÷ +60

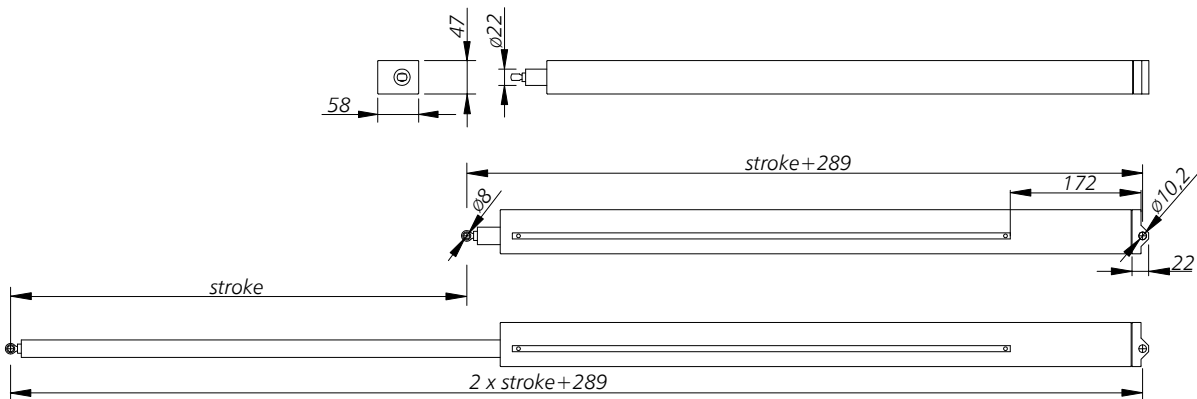


Fig. 98 Dimensions of type G electric spindle actuator [mm]

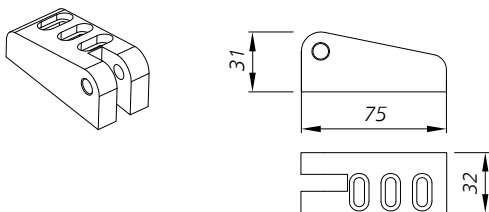


Fig. 99 Top console for mounting type G spindle actuator on the smoke exhaust window, dimensions [mm]

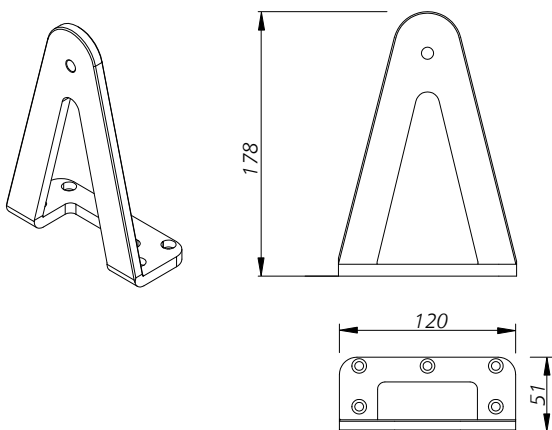


Fig. 100 Bottom bracket for mounting type G spindle actuator on the smoke exhaust window, dimensions [mm]

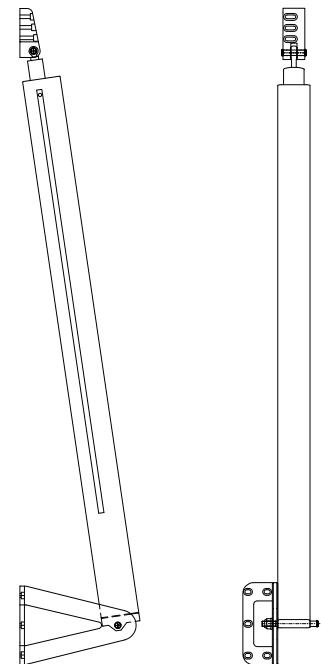
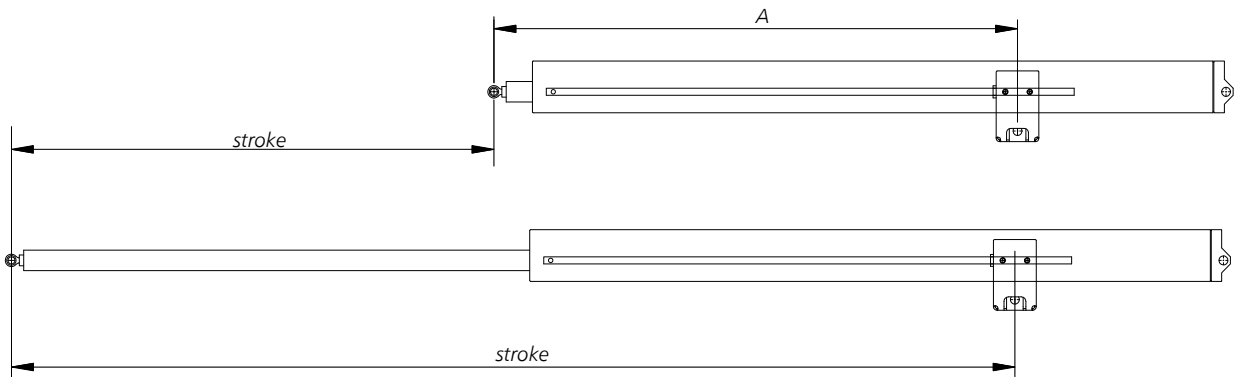


Fig. 101 Type G spindle actuator with upper and lower console mounted

2.1.1 | Type G spindle electric actuator with shifted pivot point



A - dimension depends on opening angle and height of the window

Fig. 102 Dimensions of type G spindle actuator with shifted pivot point

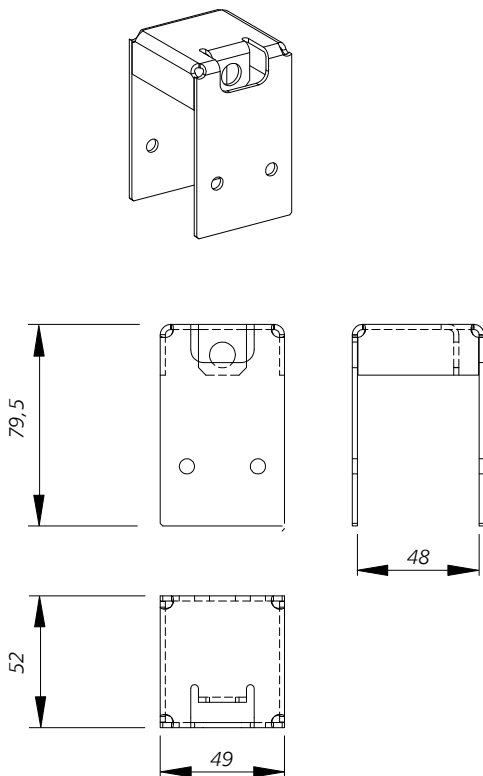


Fig. 103 Sliding console for mounting type G spindle actuator with shifted pivot point on the smoke exhaust window, dimensions [mm]

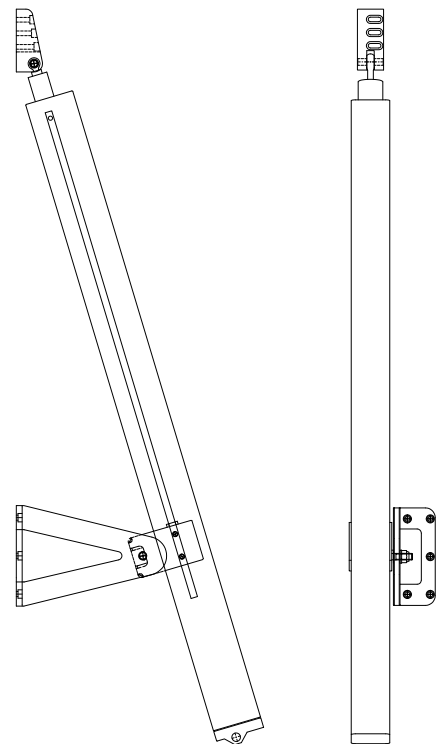


Fig. 104 Type G spindle actuator with upper and lower console mounted with shifted pivot point

2.1.2 | Type S spindle electric actuators

ACTUATOR TYPE	SUPPLY VOLTAGE	NOMINAL POWER CONSUMPTION	ACTUATOR STROKE	DIMENSIONS (LxBxH)	MAXIMUM OPERATING TEMPERATURE
	[V]	[A]	[mm]	[mm]	[°C]
S08B-200	24	0.8	200	452 x 36	-25 ÷ +60
S08B-300	24	0.8	300	552 x 36	-25 ÷ +60
S10C-350	24	1.0	350	602 x 36	-25 ÷ +60
S10C-400	24	1.0	400	652 x 36	-25 ÷ +60
S10C-450	24	1.0	450	702 x 36	-25 ÷ +60

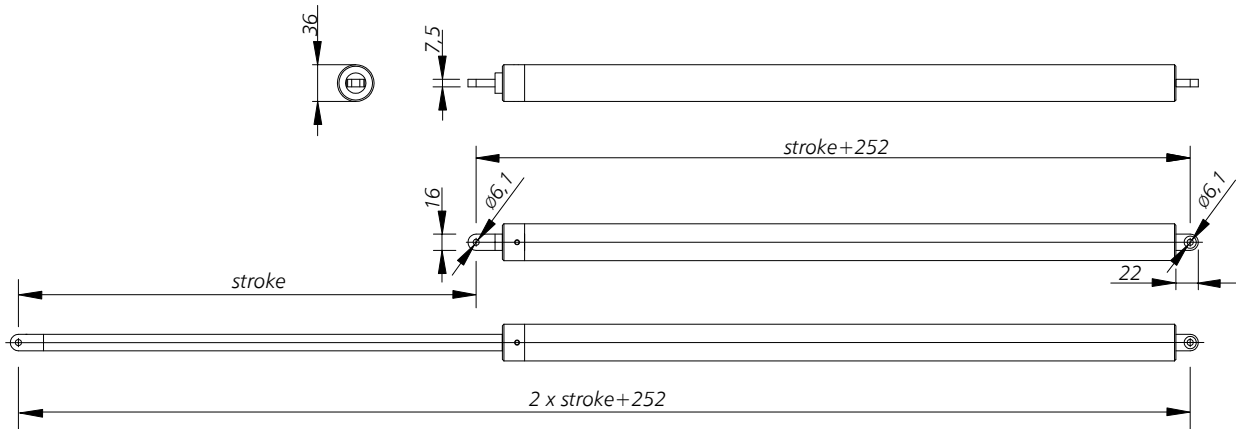


Fig. 105 Dimensions of type S electric spindle actuator [mm]

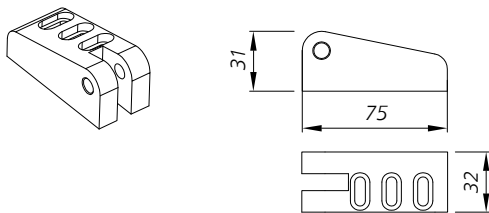


Fig. 106 Top console for mounting type S spindle actuator on the smoke exhaust window, dimensions [mm]

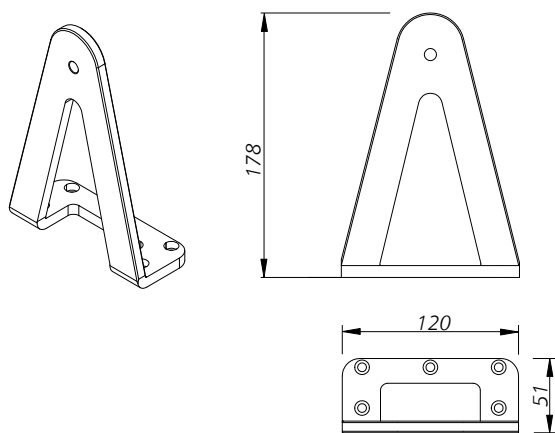


Fig. 107 Bottom bracket for mounting type S spindle actuator on the smoke exhaust window, dimensions [mm]

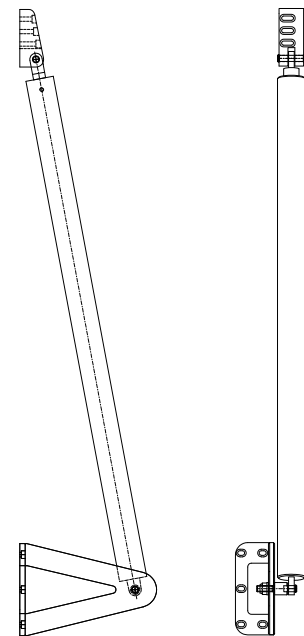


Fig. 108 Type S spindle actuator with upper and lower console mounted

2.1.2 | Type S spindle electric actuator with shifted pivot point

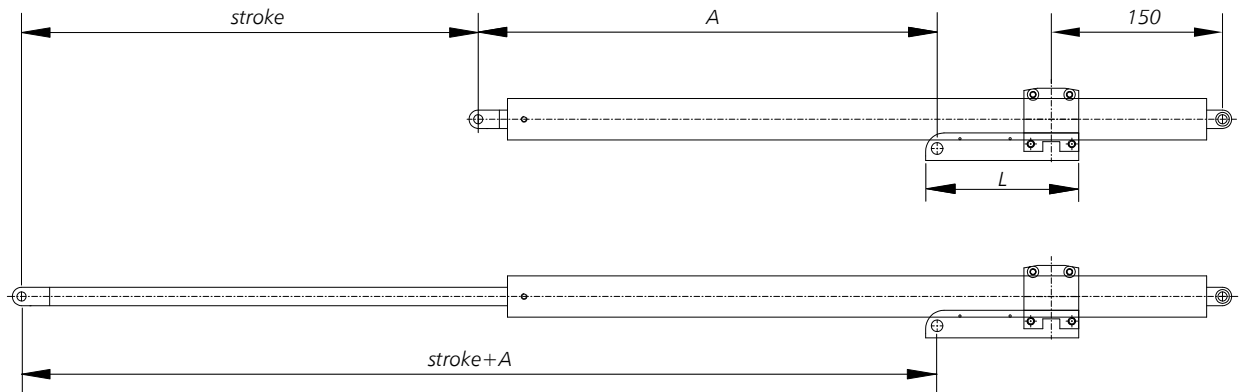


Fig. 109 Dimensions of type S spindle electric actuator with shifted pivot point [mm]

A, L - dimensions depends on opening angle and window height

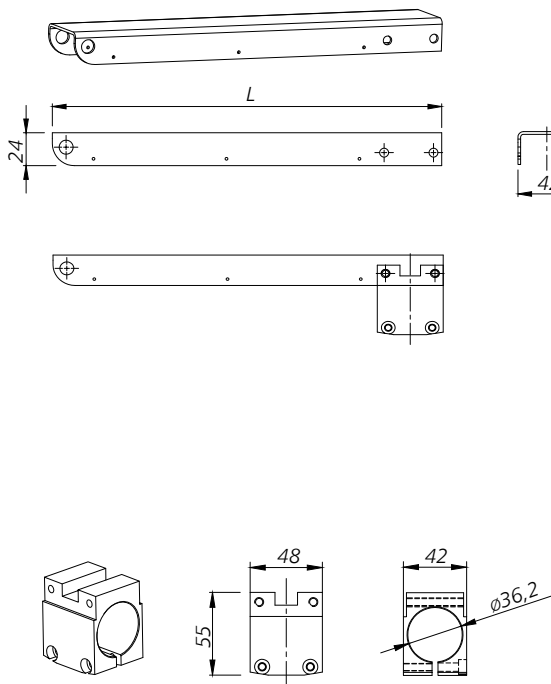


Fig. 110 Sliding console for mounting type S spindle actuator with shifted pivot point on the smoke exhaust window, dimensions [mm]

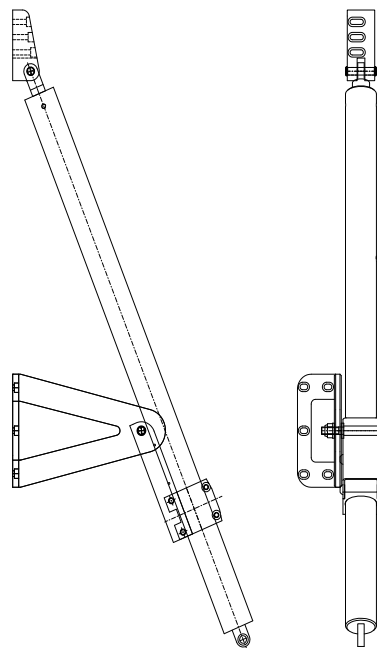


Fig. 111 Type S spindle actuator with upper and lower console mounted with shifted pivot point

2.2. | HCV electric chain actuator (24 V- / 48 V-)

Electric chain drive in a stylish, anodised aluminium casing. The push/pull force of the actuators is 500 N / 500 N. Maximum holding force 2000 N. Full load speed up to 10 mm/sec; speed at nominal load up to 17 mm/sec (depending on chain length). Two different speeds can be set: for daily ventilation and for the smoke exhausting function. Electronically controlled cut-off in end position and emergency stop on overload. Heat-resistant 2.5 m long silicone connection cable. IP32 protection grade.

ACTUATOR TYPE	SUPPLY VOLTAGE	NOMINAL POWER CONSUMPTION	ACTUATOR STROKE	DIMENSIONS (LxBxH)	MAXIMUM OPERATING TEMPERATURE
	[V]	[A]	[mm]	[mm]	[°C]
HCV 500/350	24	1.4	350	436 x 51 x 40	-25 ÷ +75
	48	0.7			
HCV 500/600	24	1.4	600	561 x 51 x 40	-25 ÷ +75
	48	0.7			
HCV 500/800	24	1.4	800	661 x 51 x 40	-25 ÷ +75
	48	0.7			
HCV 500/1000	24	1.4	1000	766 x 51 x 40	-25 ÷ +75
	48	0.7			

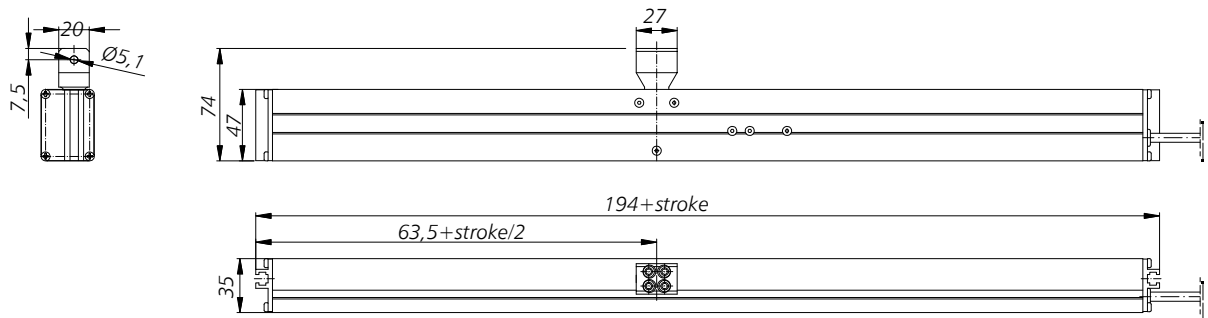


Fig. 112 Dimensions of HCV electric chain actuator [mm]



Fig. 113 HCV chain actuator with consoles for outward opening window



Fig. 114 HCV chain actuator with consoles for inward opening window

2.3 | HCVA electric chain actuators (230 V~)

Electric chain drive in a stylish, anodised aluminium casing. The push/pull force of the actuators is 500 N / 500 N. Maximum holding force 2000 N. Full load speed up to 10 mm/s (depending on chain length). Electronically controlled cut-off in end position and emergency stop on overload. Heat-resistant 2.5 m long silicone connection cable. IP32 protection grade.

ACTUATOR TYPE	SUPPLY VOLTAGE	NOMINAL POWER	ACTUATOR STROKE	DIMENSIONS (LxBxH)	MAXIMUM OPERATING TEMPERATURE
	[V]		[mm]	[mm]	[°C]
HCVA 500/350	230	30	350	586 x 51 x 40	-5 ÷ +55
HCVA 500/600	230	30	600	711 x 51 x 40	-5 ÷ +55
HCVA 500/800	230	30	800	811 x 51 x 40	-5 ÷ +55
HCVA 500/1000	230	30	1000	916 x 51 x 40	-5 ÷ +55

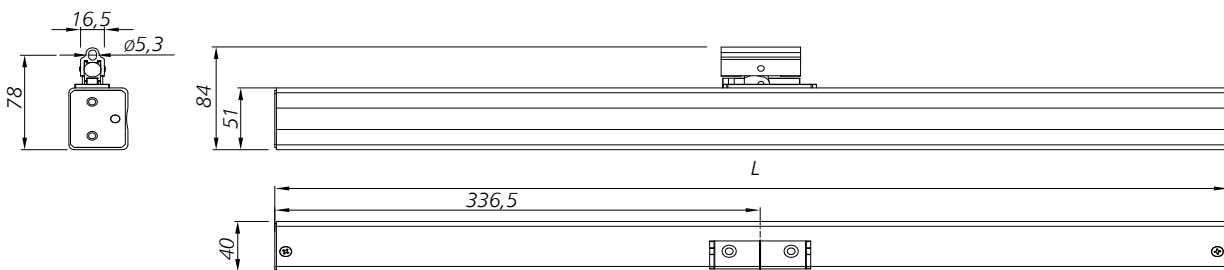


Fig. 115 Dimensions of HCVA electric chain actuator [mm]



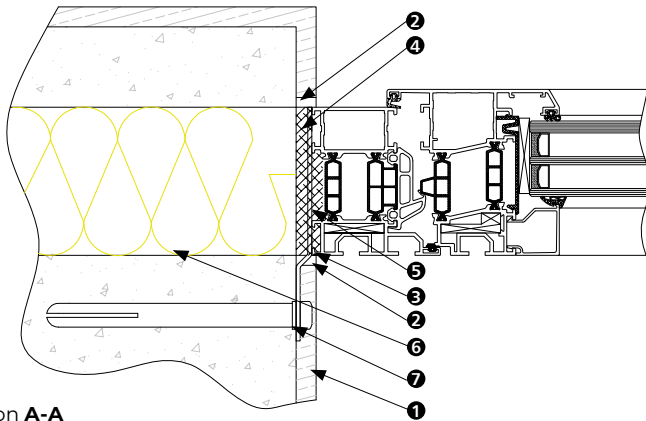
Fig. 116 HCVA chain actuator with consoles for outward opening window



Fig. 117 HCVA chain actuator with consoles for inward opening window

3 | Installation of smoke exhaust window

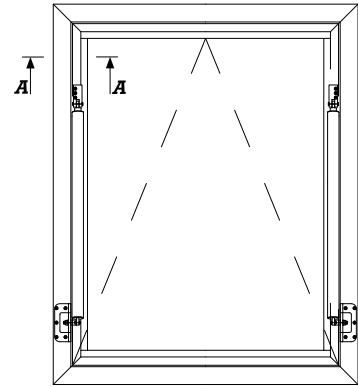
3.1 | Smoke exhaust window mounted in a three-layer wall



cross section **A-A**

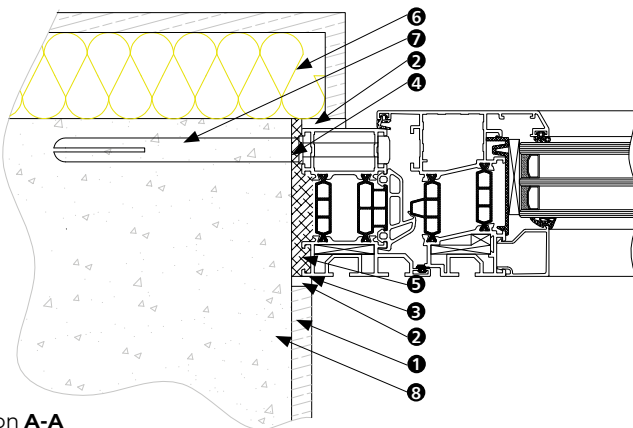
- 1 - plaster
- 2 - sealing tape, expandable
- 3 - corner sealing (neutral silicone)

- 4 - polyurethane sealing foam
- 5 - installation gap (10 - 30 mm)
- 6 - thermal insulation



7 - mounting anchor / dowel

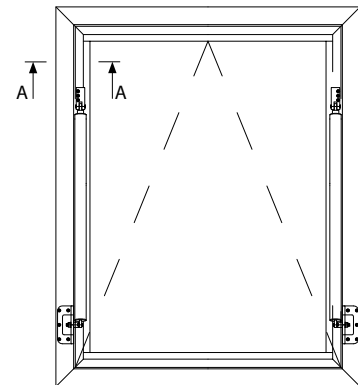
3.2 | Wall-mounted smoke exhaust window with external insulation



cross section **A-A**

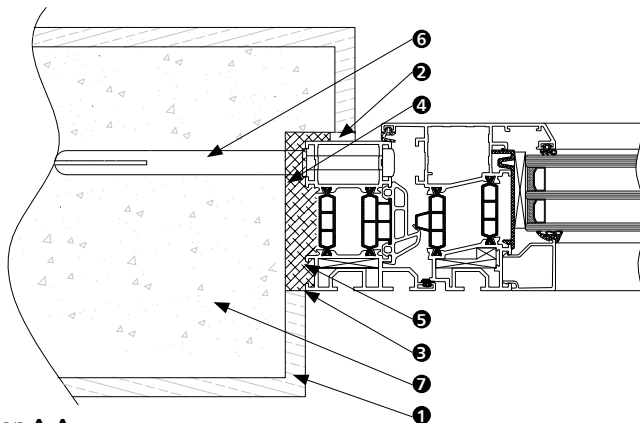
- 1 - plaster
- 2 - sealing tape, expandable
- 3 - corner sealing (neutral silicone)

- 4 - polyurethane sealing foam
- 5 - installation gap (10 - 30 mm)
- 6 - thermal insulation



7 - dowel
8 - bearing wall

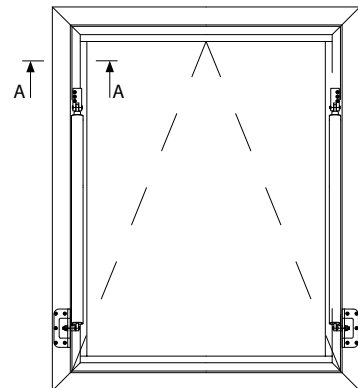
3.3 | Smoke exhaust window mounted in the wall with external reveal



cross section **A-A**

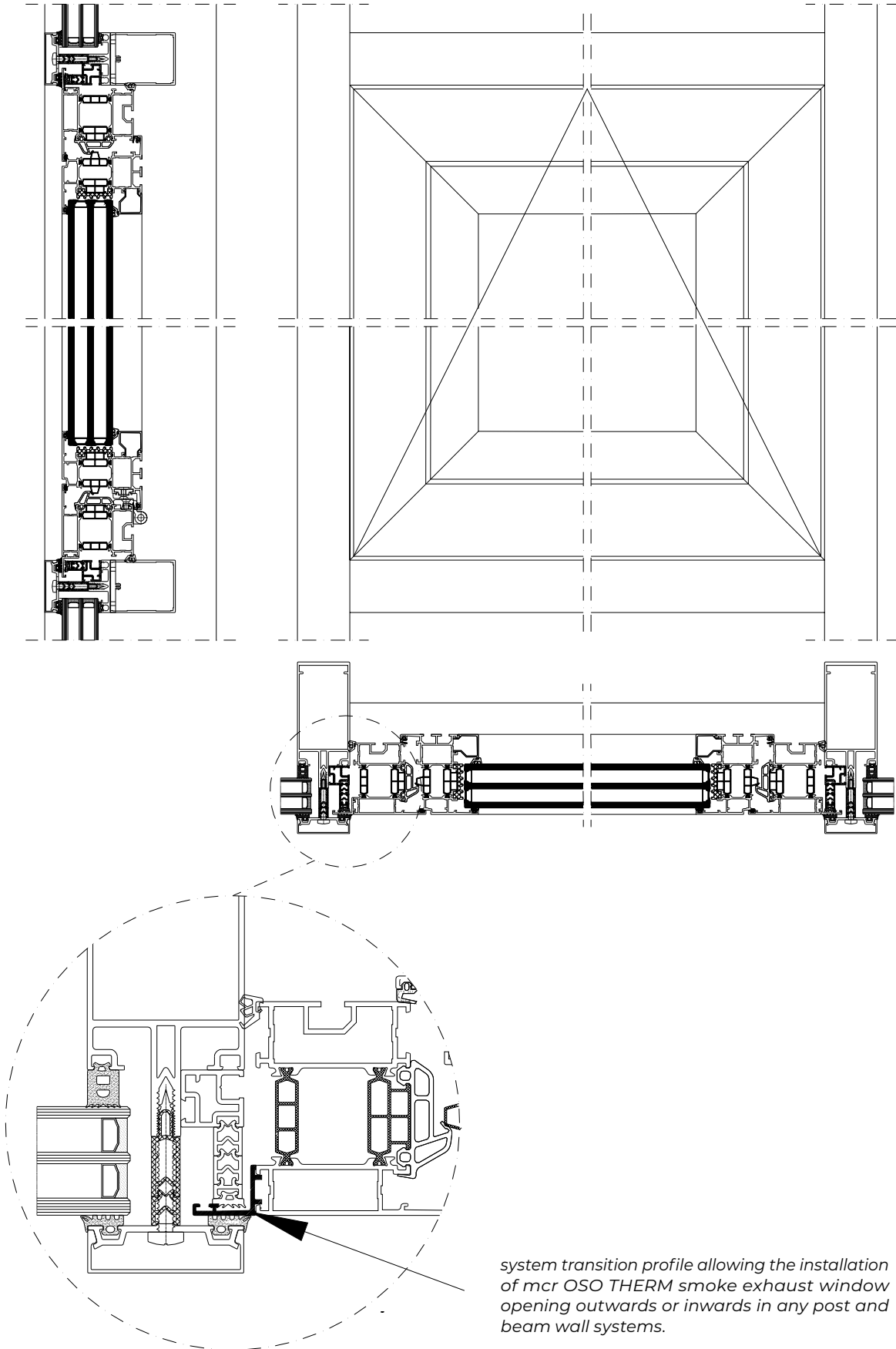
- 1 - plaster
- 2 - sealing tape, expandable
- 3 - corner sealing (neutral silicone)

- 4 - polyurethane sealing foam
- 5 - installation gap (10 - 30 mm)
- 6 - dowel

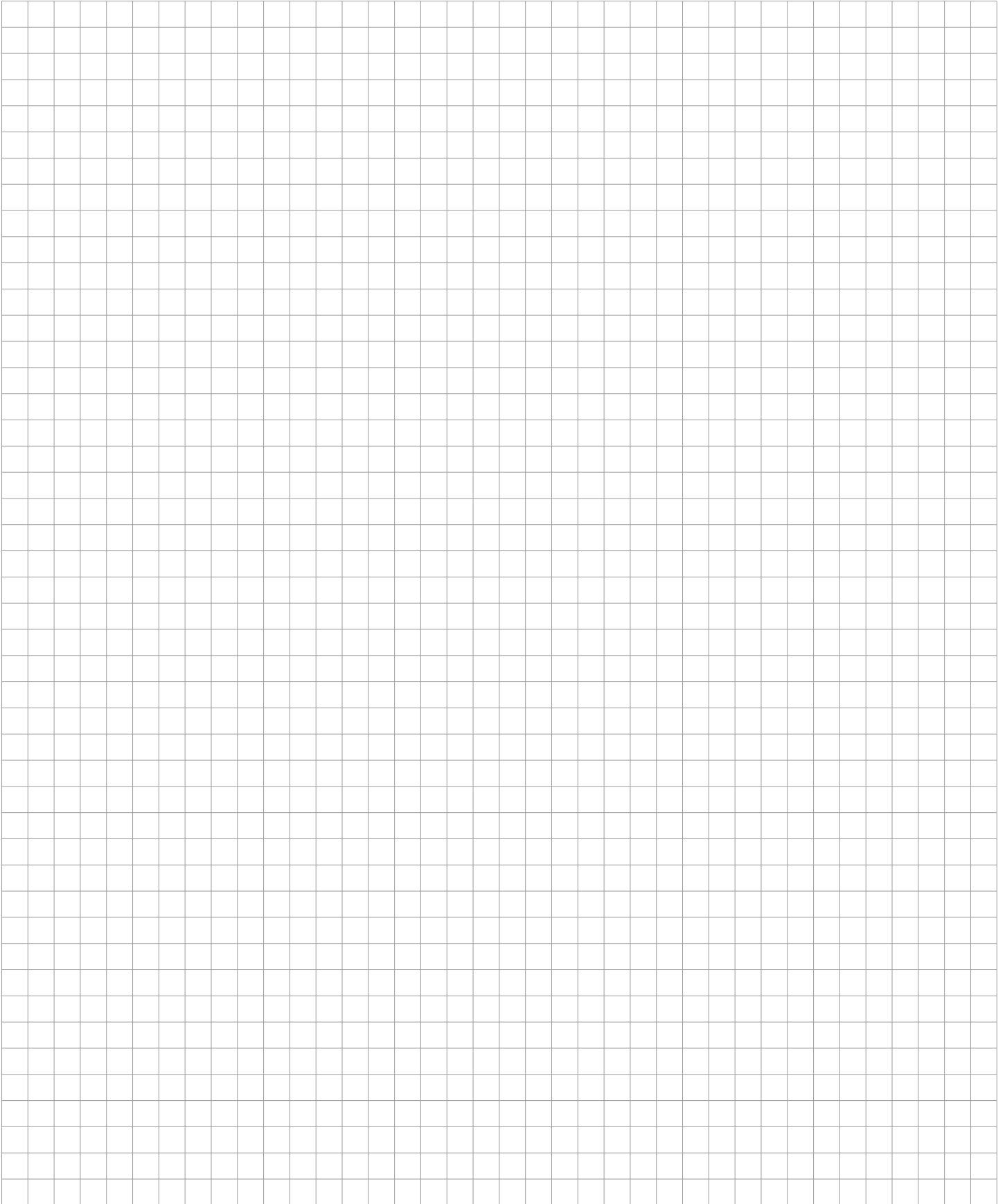


7 - bearing wall

3.4 | Connection of inward- or outward-opening smoke exhaust window with facade



system transition profile allowing the installation of mcr OSO THERM smoke exhaust window opening outwards or inwards in any post and beam wall systems.





„MERCOR” S.A.
ul. Grzegorza z Sanoka 2
80-408 Gdańsk, Poland
tel. + 48 58 341 42 45
export@mercortecresa.com.pl

> MERCOR UKRAINE SP. Z O.O.

Ukraine

www.mercor.com.ua

📍 Scheptyckich 26

📍 79-016 Lviv

☎ +380 32 240 34 47

☎ +380 32 240 34 07

✉ info@mercortecresa.com.ua

> MERCOR FIRE PROTECTION SYSTEMS S.C. S.R.L.

Romania

www.mercor.ro

📍 Drum Centura Chitila - Mogosoaia, no 3, floor 4

📍 Oras Chitila, Ilfov RO-077045

☎ +40 371 324 182

☎ +40 372 877 070

✉ romania@mercortecresa.com.pl

> MERCOR TECRESA

Spain

Parque Tecnológico Legatec.

www.mercortecresa.com

📍 C/ Margarita Salas nº 6

📍 28919 Leganés (Madrid)

☎ +34 91 428 22 60

☎ +34 91 428 22 62

✉ info@mercortecresa.com

> MERCOR SLOVAKIA S.R.O.

Slovakia

www.mercor-slovakia.sk

📍 Galvaniho 7/D

📍 821 04 Bratislava

☎ +421 2 2062 0040

☎ +421 2 2062 0049

✉ mercor@mercortecresa.com.sk

> MERCOR CZECH REPUBLIC S.R.O.

Czech Republic

www.mercor-czech.cz

📍 Letní 1122/1

📍 721 00 Ostrava-Svinov

☎ +420 597 317 665

✉ mercor@mercortecresa.cz

> MERCOR - DUNAMENTI TŰZVÉDELEM ZRT.

Hungary

www.dunamenti.hu

📍 Nemeskéri Kiss Miklós utca 39

📍 2131 Göd

☎ +36 30 919-0542

✉ godcenter@dunamenti.hu

> MERCOR FIRE PROTECTION UK LTD

England

www.mercor-uk.co.uk

📍 Unit P(10), Heywood Distribution Park,

📍 Pilsworth Road, Heywood, OL10 2TT

☎ +44 (0) 0161 3598309

✉ enquiries@mercortecresa.co.uk



European Union
European Regional
Development Fund

