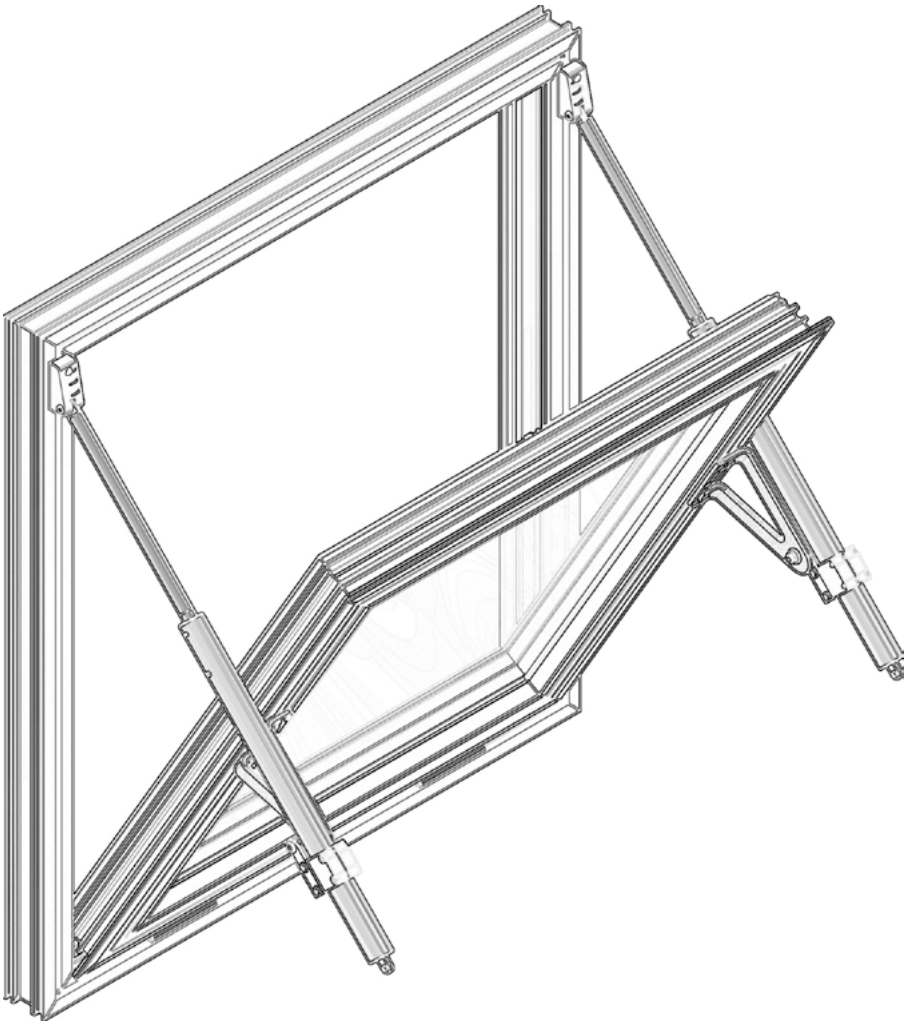
2022

Technical Catalogue



mcr OSO Therm 75

WINDOW SMOKE EXHAUST SYSTEMS

Smoke exhaust, heat removal and roof lighting systems
Technical Catalogue 2022

Graphic design and computer typesetting:
"MERCOR" S.A. - Gravitational Smoke Removal Department Team

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Technical Catalogue

2022

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@mercor.com.pl

The electronic version
of the Technical Catalogue is available
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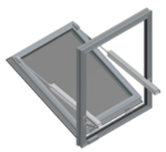
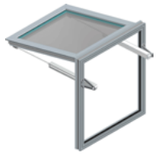
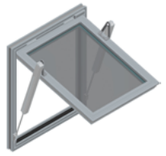
1 | Smoke exhaust windows

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)	» **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 1500 Pa, 1200 Pa or 1000 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 » **SL0** - operational certainty of vents under snow load 0 N/m²			
	Opening angle	10° - 90°			
Control	Electric 24 V - (smoke exhausting and daily ventilation)	•	•	•	•
Control	Electric 48 V - (smoke exhausting and daily ventilation)	•	•	•	•
Control	Electric 230 V - (daily ventilation)	•	•	•	•
Glazing	Triple glass 4/18/4/18/4 Ug=0,5 W/(m²K)	•	•	•	•
Glazing	Triple safety glass 4/18/4/18/33.1 Ug=0,5 W/(m²K)	•	•	•	•
Glazing	Double safety glass 4/16/33.1 Ug= 1,1 W/(m²K)	•	•	•	•
Glazing	Sandwich panel (ALU-PIR-ALU) Ug=0,66 W/(m²K)	•	•	•	•

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 800x800 mm ÷ 2700x1300 mm, in vertical arrangement 800x800 mm ÷ 1600x2200 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 (Ug=0.5W / (m²K)), triple safety glass 4/18/4/18/33.1 (Ug=0.5W / (m²K)), double glass 4/16/33.1 (Ug=1.1W / (m²K)) or sandwich panel (ALU-PIR-ALU) (Ug=0.66W / (m²K))
» windows joined with each other by means of vertical or horizontal connection sets
» leaf opening angle 10° ÷ 90° (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 40 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 15-39; the active aerodynamic area value for these dimensions is calculated by linear interpolation method
» possibility of painting profiles any RAL standard colour; structural or wood imitation colour
» possibility of making bi-colour 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

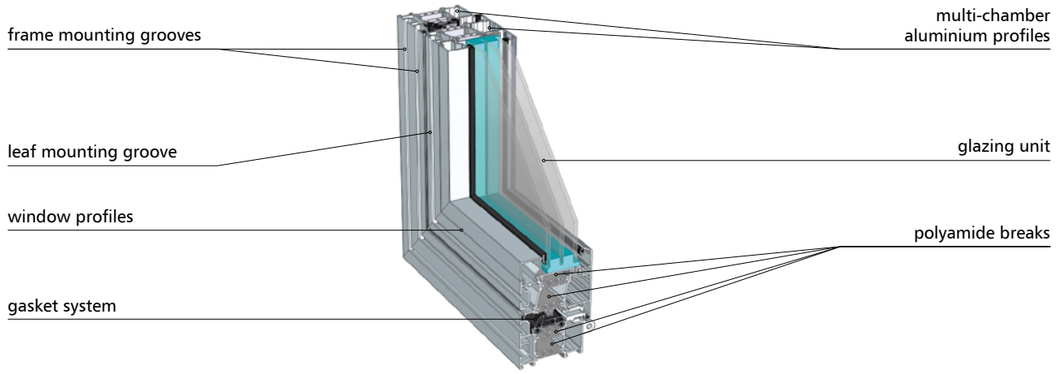


Fig.1 - Cross-section through the profile of an outward-opening smoke exhaust window

1.1.3 | Types of outward-opening smoke exhaust windows

» bottom hung outward-opening windows

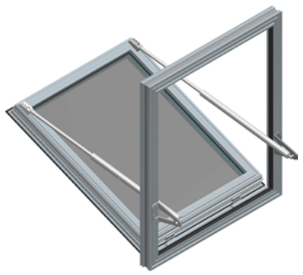


Fig.2 - mcr OSO THERM 75 smoke exhaust window with two S spindle actuators

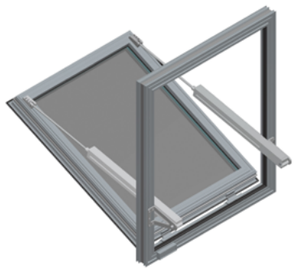


Fig.3 - mcr OSO THERM 75 smoke exhaust window with two G spindle actuators

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

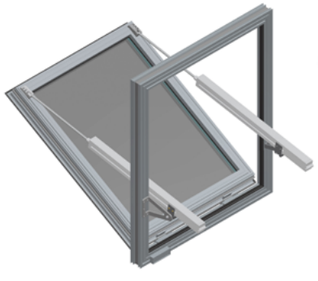


Fig.6 - mcr OSO THERM 75 smoke exhaust window with two G spindle actuators with shifted pivot point

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

» top-hung outward-opening windows

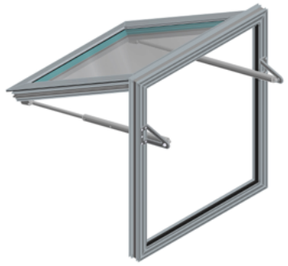


Fig.8 - mcr OSO THERM 75 smoke exhaust window with two S spindle actuators

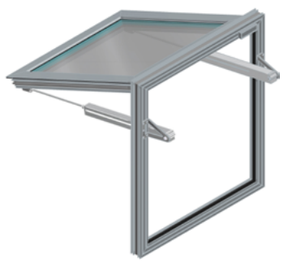


Fig.9 - mcr OSO THERM 75 smoke exhaust window with two G spindle actuators

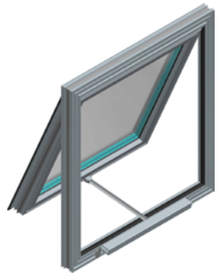


Fig.10 - mcr OSO THERM 75 smoke exhaust window with HCV chain actuator

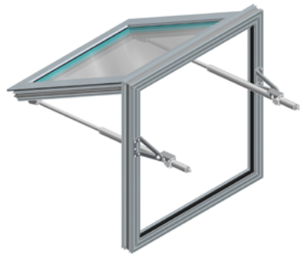


Fig.11 - mcr OSO THERM 75 smoke exhaust window with two S spindle actuators with shifted pivot point

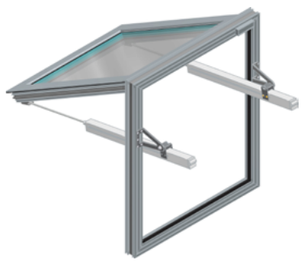


Fig.12 - mcr OSO THERM 75 smoke exhaust window with two G spindle actuators with shifted pivot point

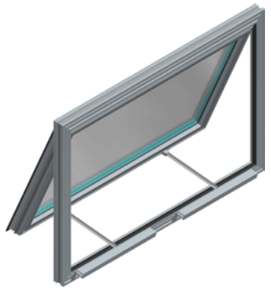


Fig.13 - mcr OSO THERM 75 smoke exhaust window with two HCV chain actuators

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

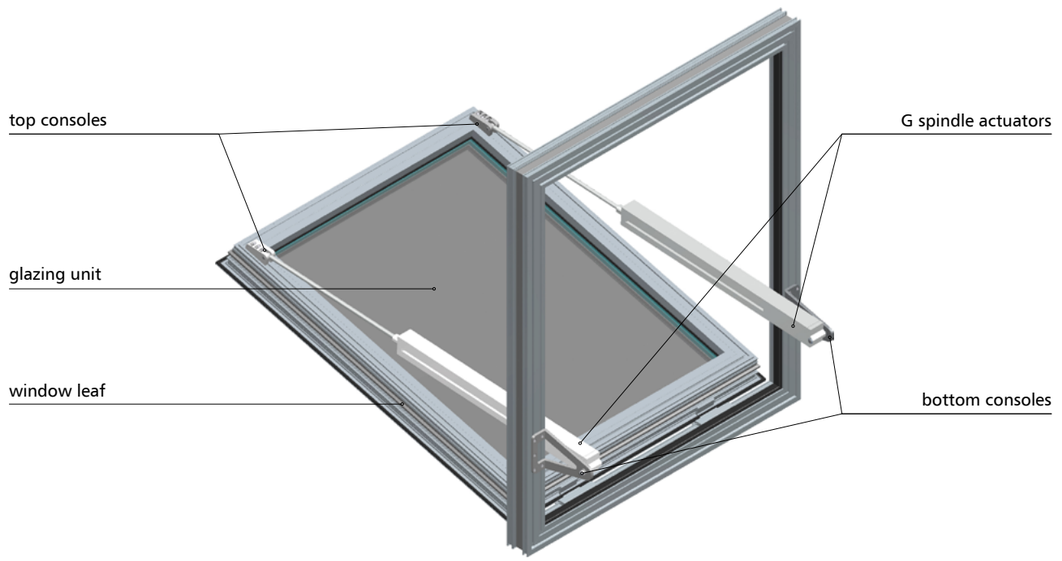


Fig.14 - mcr OSO THERM 75 smoke exhaust window opening outwards by means of two G spindle actuators

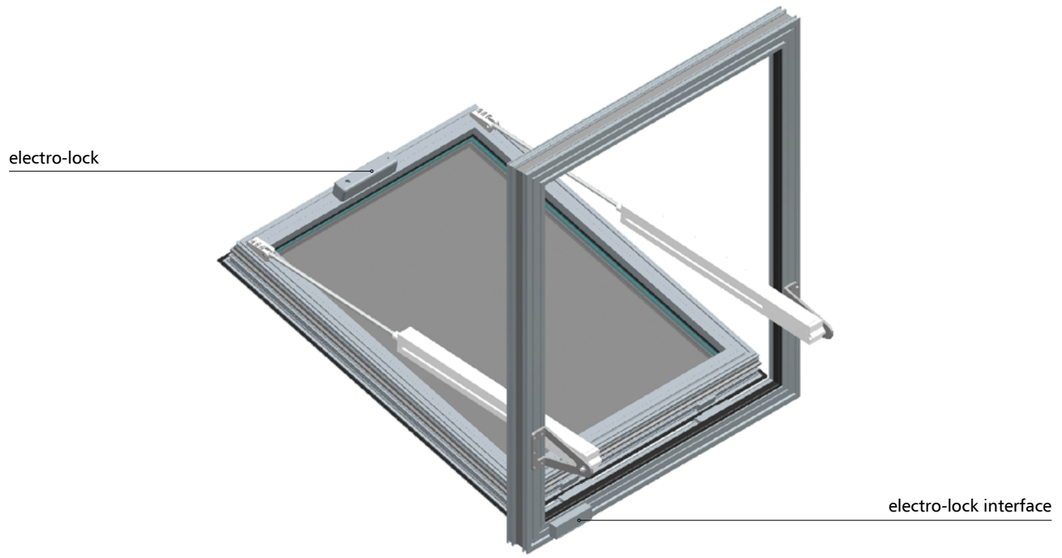


Fig.15 - mcr OSO THERM 75 smoke exhaust window opening outwards by means of two G spindle actuators with electro-lock and interface

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

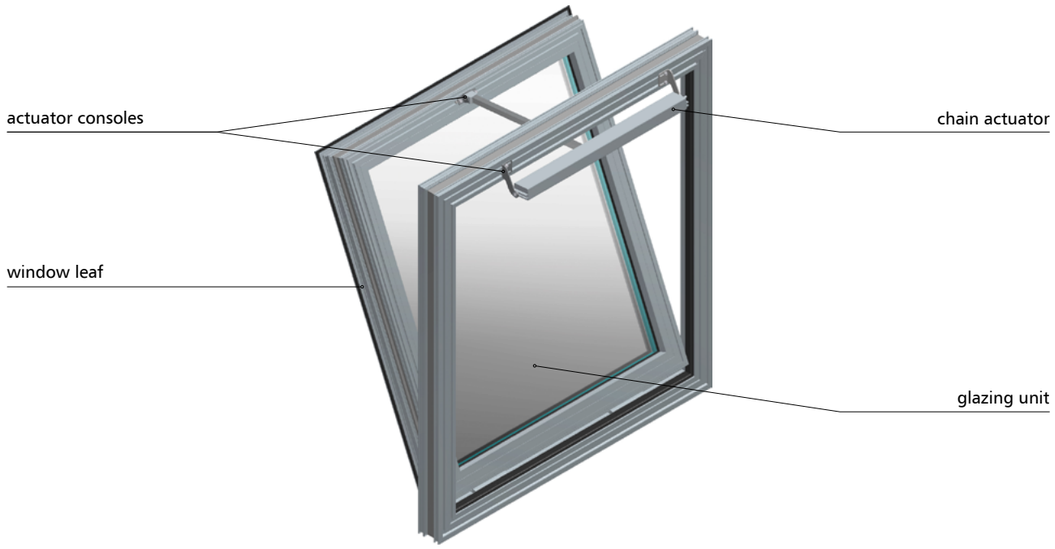


Fig.16 - mcr OSO THERM 75 smoke exhaust window opening outwards by means of single chain actuator

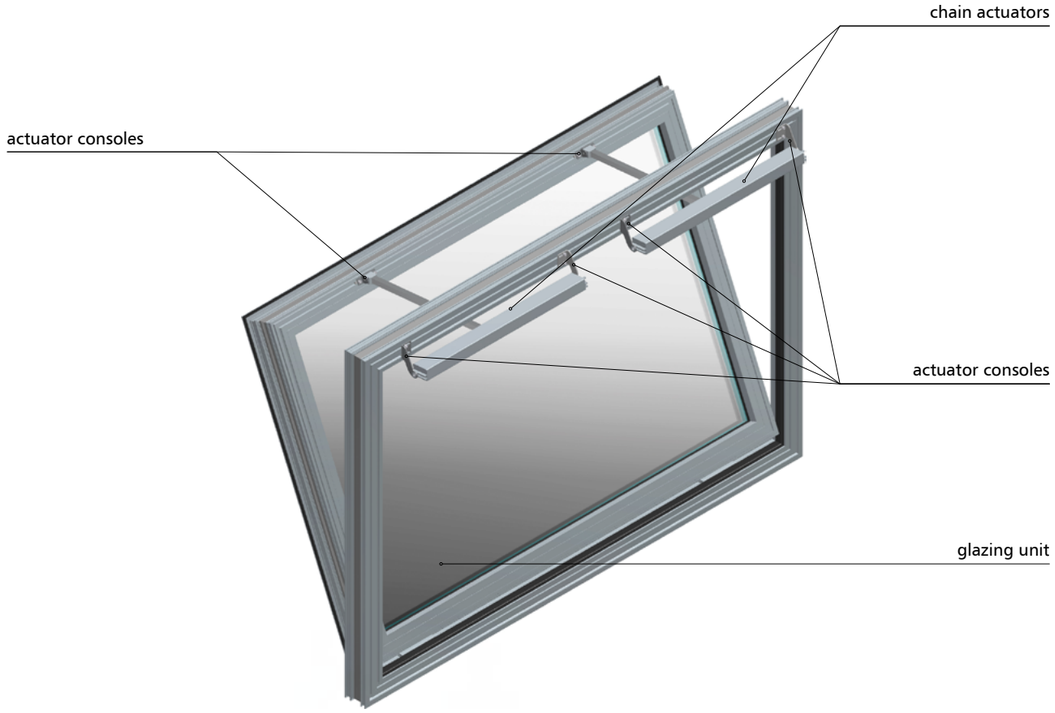


Fig.17 - mcr OSO THERM 75 smoke exhaust window opening outwards by means of two chain actuators

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

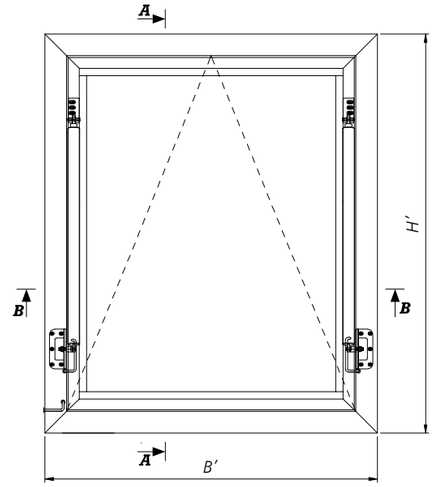


Fig.18 - view from inside of the mcr OSO THERM 75 smoke exhaust window with S spindle actuators in closed position

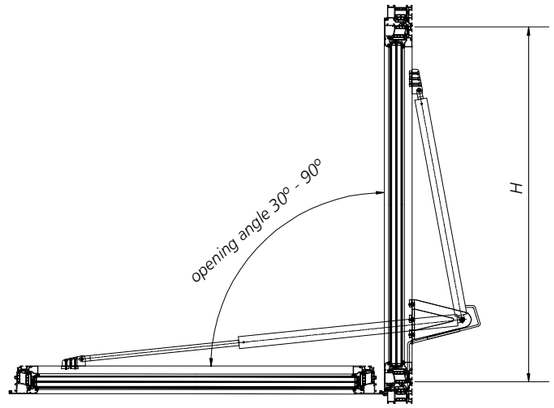


Fig.19 - A-A vertical cross-section through mcr OSO THERM 75 smoke exhaust window in open position

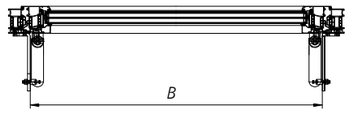


Fig.20 - B-B horizontal cross-section through mcr OSO THERM 75 smoke exhaust window in closed position

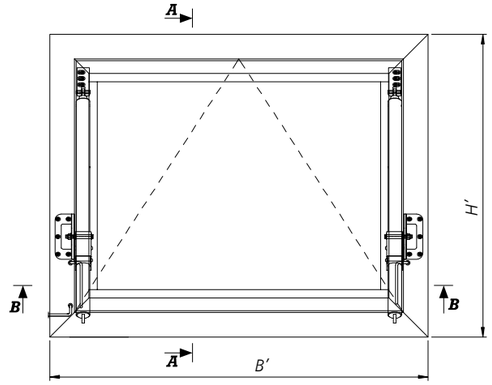


Fig.21 - view from inside of the mcr OSO THERM 75 smoke exhaust window with S spindle actuators with shifted pivot point in closed position

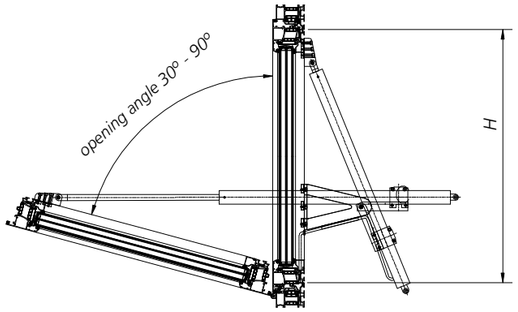


Fig.22 - A-A vertical cross-section through mcr OSO THERM 75 smoke exhaust window with shifted pivot point in open position

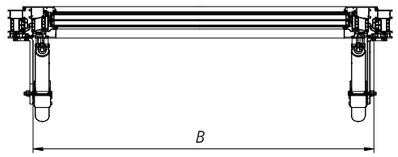


Fig.23 - B-B horizontal cross-section through mcr OSO THERM 75 smoke exhaust window in closed position

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

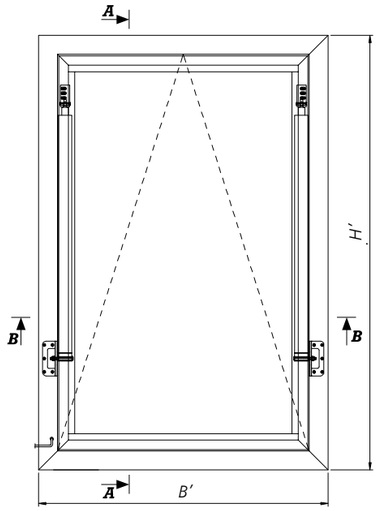


Fig.24 - view from inside of the mcr OSO THERM 75 smoke exhaust window with G spindle actuators in closed position

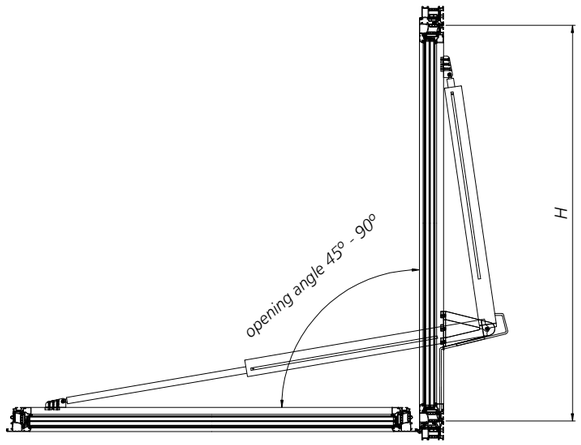


Fig.25 - A-A vertical cross-section through mcr OSO THERM 75 smoke exhaust window in open position

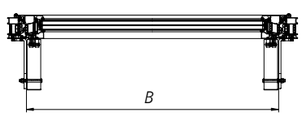


Fig.26 - B-B horizontal cross-section through smoke exhaust window mcr OSO THERM 75 smoke exhaust window in closed position

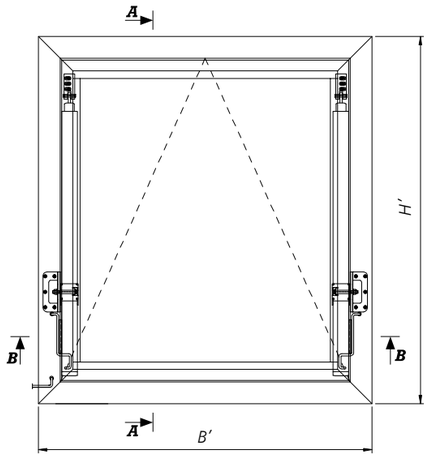


Fig.27 - view from inside of the mcr OSO THERM 75 smoke exhaust window with G spindle actuators with shifted pivot point in closed position

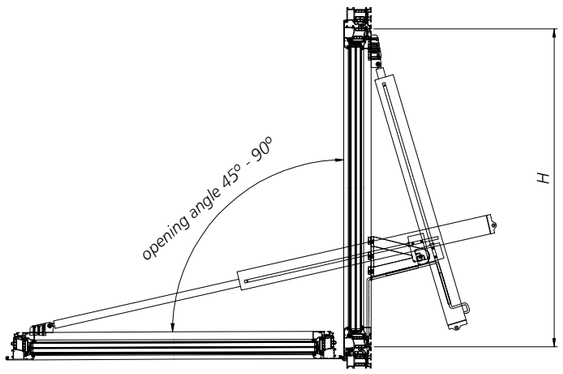


Fig.28 - A-A vertical cross-section through mcr OSO THERM 75 smoke exhaust window with shifted pivot point in open position

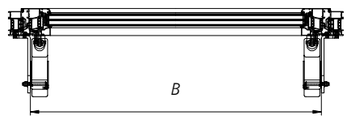


Fig.29 - B-B horizontal cross-section through mcr OSO THERM 75 smoke exhaust window with shifted pivot point in closed position

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

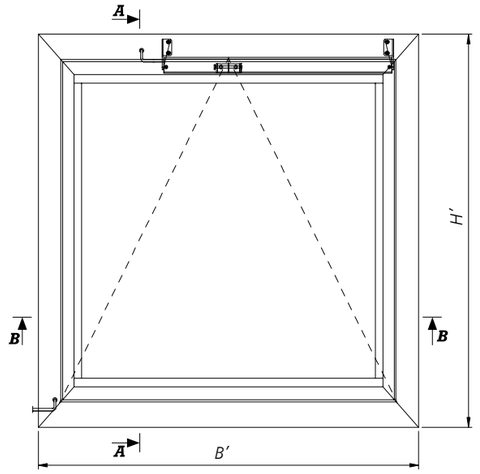


Fig.30 - view from inside of the mcr OSO THERM 75 smoke exhaust window with HCV chain actuator in closed position

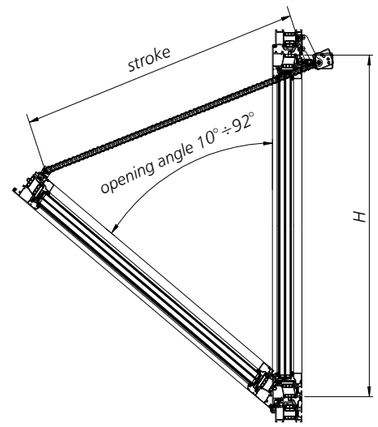


Fig.31 - A-A vertical cross-section through mcr OSO THERM 75 smoke exhaust window in open position

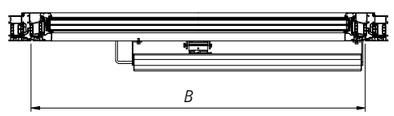


Fig.32 - B-B horizontal cross-section through smoke exhaust window mcr OSO THERM 75 smoke exhaust window in closed position

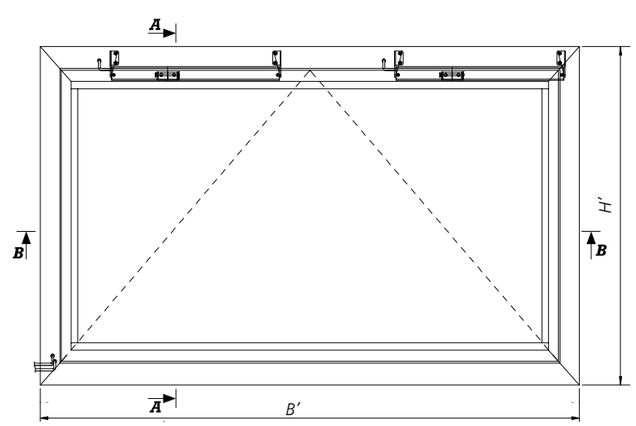


Fig.33 - view from inside of the mcr OSO THERM 75 smoke exhaust window with two HCV chain actuators in closed position

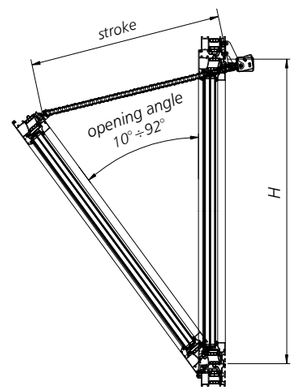


Fig.34 - vertical A-A cross-section through mcr OSO THERM 75 smoke exhaust window in open position

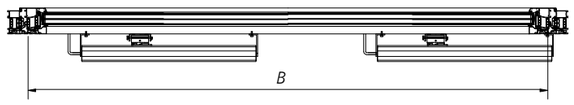


Fig.35 - B-B horizontal cross-section through mcr OSO THERM 75 smoke exhaust window in closed position

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**

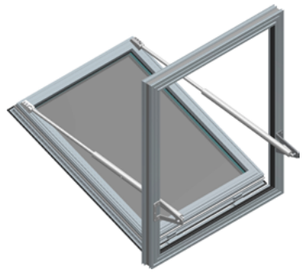


Fig.36 - mcr OSO THERM 75 smoke exhaust window with two S spindle actuators

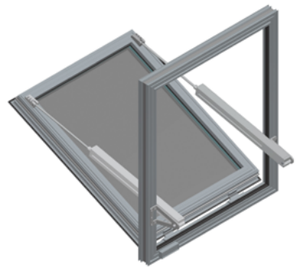


Fig.37 - mcr OSO THERM 75 smoke exhaust window with two G spindle actuators

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

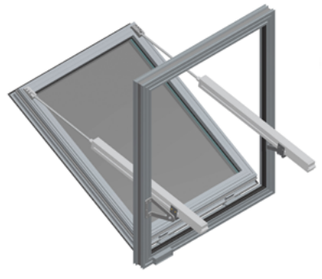


Fig.39 - mcr OSO THERM 75 smoke exhaust window with two G spindle actuators with shifted pivot point

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

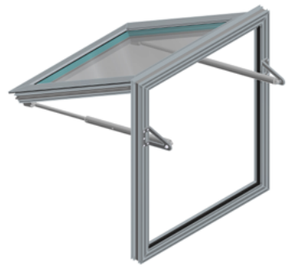


Fig.40 - mcr OSO THERM 75 smoke exhaust window with two S spindle actuators

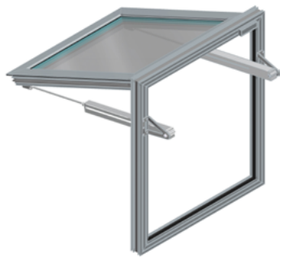


Fig.41 - mcr OSO THERM 75 smoke exhaust window with two G spindle actuators

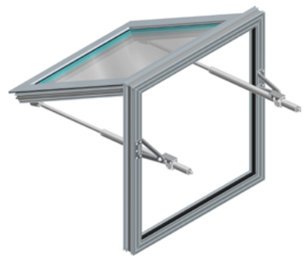


Fig.42 - mcr OSO THERM 75 smoke exhaust window with two S spindle actuators with shifted pivot point

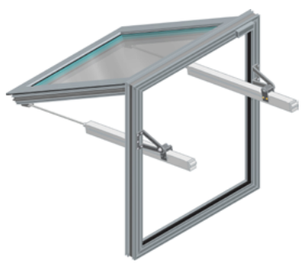


Fig.43 - mcr OSO THERM 75 smoke exhaust window with two G spindle actuators with shifted pivot point

1.1.5.1 | 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**	S08B-300	2x 0,8	**0,30**	S10C-400	2x 1,0	**0,37**	S10C-400	2x 1,0	**0,37**	G26H-600	2x 2,6	**0,56**
800 x 1500		S08B-300	2x 0,8	**0,44**	S10C-350	2x 1,0	**0,34**	S10C-450	2x 1,0	**0,42**	S10C-450	2x 1,0	**0,42**	G26H-600	2x 2,6	**0,60**
800 x 1600		S10C-350	2x 1,0	**0,48**	S10C-450	2x 1,0	**0,56**	S10C-450	2x 1,0	**0,51**	G26H-600	2x 2,6	**0,59**	G26H-600	2x 2,6	**0,65**
800 x 1700		S10C-350	2x 1,0	**0,53**	S10C-450	2x 1,0	**0,61**	S10C-450	2x 1,0	**0,56**	G26H-600	2x 2,6	**0,63**	G26H-600	2x 2,6	**0,69**
800 x 1800		S10C-400	2x 1,0	**0,58**	G26H-600	2x 2,6	**0,66**	S10C-450	2x 1,0	**0,61**	G26H-600	2x 2,6	**0,68**	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-600	2x 2,6	**0,66**	G26H-600	2x 2,6	**0,72**	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-600	2x 2,6	**0,71**	G26H-600	2x 2,6	**0,77**	G26H-750	2x 2,6	**0,78**
800 x 2100		S10C-450	2x 1,0	**0,74**	G26H-600	2x 2,6	**0,81**	G26H-600	2x 2,6	**0,76**	G40H-830	2x 4,0	**0,82**	G40H-830	2x 4,0	**0,82**
800 x 2200		S10C-450	2x 1,0	**0,79**	G26H-600	2x 2,6	**0,87**	G26H-600	2x 2,6	**0,81**	G40H-830	2x 4,0	**0,86**	G40H-830	2x 4,0	**0,87**
900 x 800		S08B-200	2x 0,8	**0,20**	S08B-300	2x 0,8	**0,26**	S08B-300	2x 0,8	**0,22**	G40H-830	2x 4,0	**0,91**	G40H-830	2x 4,0	**0,91**
900 x 900		S08B-200	2x 0,8	**0,23**	S08B-300	2x 0,8	**0,30**	S08B-300	2x 0,8	**0,26**	S10C-400	2x 1,0	**0,32**	S10C-400	2x 1,0	**0,34**
900 x 1000		S08B-200	2x 0,8	**0,27**	S10C-350	2x 1,0	**0,34**	S10C-400	2x 1,0	**0,30**	S10C-400	2x 1,0	**0,37**	S10C-400	2x 1,0	**0,39**
900 x 1100		S08B-200	2x 0,8	**0,31**	S10C-350	2x 1,0	**0,38**	S10C-400	2x 1,0	**0,34**	S10C-450	2x 1,0	**0,41**	S10C-400	2x 1,0	**0,44**
900 x 1200		S08B-300	2x 0,8	**0,35**	S10C-400	2x 1,0	**0,39**	S10C-450	2x 1,0	**0,37**	S10C-450	2x 1,0	**0,45**	S10C-450	2x 1,0	**0,49**
900 x 1300		S10C-350	2x 1,0	**0,40**	S10C-450	2x 1,0	**0,48**	S10C-450	2x 1,0	**0,42**	S10C-450	2x 1,0	**0,50**	S10C-400	2x 1,0	**0,54**
900 x 1400		S08B-300	2x 0,8	**0,45**	S10C-400	2x 1,0	**0,53**	S10C-450	2x 1,0	**0,47**	S10C-450	2x 1,0	**0,52**	S10C-450	2x 1,0	**0,59**
900 x 1500		S08B-300	2x 0,8	**0,49**	S10C-450	2x 1,0	**0,59**	S10C-450	2x 1,0	**0,52**	S10C-450	2x 1,0	**0,57**	S10C-450	2x 1,0	**0,64**
900 x 1600		S10C-350	2x 1,0	**0,55**	S10C-450	2x 1,0	**0,64**	S10C-450	2x 1,0	**0,57**	G26H-550	2x 2,6	**0,62**	G26H-550	2x 2,6	**0,67**
900 x 1700		S10C-350	2x 1,0	**0,60**	S10C-450	2x 1,0	**0,69**	S10C-450	2x 1,0	**0,64**	G26H-600	2x 2,6	**0,67**	G26H-600	2x 2,6	**0,73**
900 x 1800		S10C-400	2x 1,0	**0,65**	G26H-600	2x 2,6	**0,75**	G26H-600	2x 2,6	**0,69**	G26H-600	2x 2,6	**0,73**	G26H-750	2x 2,6	**0,78**
900 x 1900		S10C-400	2x 1,0	**0,71**	G26H-550	2x 2,6	**0,81**	G26H-600	2x 2,6	**0,74**	G26H-600	2x 2,6	**0,78**	G26H-750	2x 2,6	**0,79**
900 x 2000		S10C-450	2x 1,0	**0,77**	G26H-600	2x 2,6	**0,87**	G26H-600	2x 2,6	**0,79**	G26H-600	2x 2,6	**0,83**	G26H-750	2x 2,6	**0,84**
											G26H-750	2x 2,6	**0,88**	G26H-750	2x 2,6	**0,89**
											G40H-830	2x 4,0	**0,94**	G40H-830	2x 4,0	**0,94**

(*) 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.

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]
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**
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**

(*) 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.

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]
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**
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**

(*) 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.

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]
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**
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**

(*) 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.

mcr OSO THERM 75 | Outward-opening smoke exhaust windows
1.1.5.1 | 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]
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**
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**

(*) 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.

WINDOW SIZE	Opening angle **30°**			Opening angle **45°**			Opening angle **60°**			Opening angle **75°**			Opening angle **90°**		
B' x H'	ACTUATOR	POWER CONSUMP-TION **	ACTIVE AERODY-NAMIC AREA [Aa]	ACTUATOR	POWER CONSUMP-TION **	ACTIVE AERODY-NAMIC AREA [Aa]	ACTUATOR	POWER CONSUMP-TION **	ACTIVE AERODY-NAMIC AREA [Aa]	ACTUATOR	POWER CONSUMP-TION **	ACTIVE AERODY-NAMIC AREA [Aa]	ACTUATOR	POWER CONSUMP-TION **	ACTIVE AERODY-NAMIC AREA [Aa]
[mm]	-	[A]	[m²]	-	[A]	[m²]	-	[A]	[m²]	-	[A]	[m²]	-	[A]	[m²]
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**

(*) 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.

mcr OSO THERM 75 | Outward-opening smoke exhaust windows
1.1.5.1 | 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 CONSUMP-TION **	ACTIVE AERODY-NAMIC AREA [Aa]	ACTUATOR	POWER CONSUMP-TION **	ACTIVE AERODY-NAMIC AREA [Aa]	ACTUATOR	POWER CONSUMP-TION **	ACTIVE AERODY-NAMIC AREA [Aa]	ACTUATOR	POWER CONSUMP-TION **	ACTIVE AERODY-NAMIC AREA [Aa]	ACTUATOR	POWER CONSUMP-TION **	ACTIVE AERODY-NAMIC AREA [Aa]
[mm]	-	[A]	[m²]	-	[A]	[m²]	-	[A]	[m²]	-	[A]	[m²]	-	[A]	[m²]
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**
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 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**
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**

(*) 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.

1.1.5.1 | 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 CONSUMP-TION **	**ACTIVE AERODY-NAMIC AREA [Aa]**	ACTUATOR	POWER CONSUMP-TION **	**ACTIVE AERODY-NAMIC AREA [Aa]**	ACTUATOR	POWER CONSUMP-TION **	**ACTIVE AERODY-NAMIC AREA [Aa]**	ACTUATOR	POWER CONSUMP-TION **	**ACTIVE AERODY-NAMIC AREA [Aa]**	ACTUATOR	POWER CONSUMP-TION **	**ACTIVE AERODY-NAMIC AREA [Aa]**
[mm]	-	[A]	**[m²]**	-	[A]	**[m²]**	-	[A]	**[m²]**	-	[A]	**[m²]**	-	[A]	**[m²]**
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**
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**

(*) 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.

mcr OSO THERM 75 | Outward-opening smoke exhaust windows

1.1.5.1 | 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 CONSUMP-TION **	**ACTIVE AERODY-NAMIC AREA [Aa]**	ACTUATOR	POWER CONSUMP-TION **	**ACTIVE AERODY-NAMIC AREA [Aa]**	ACTUATOR	POWER CONSUMP-TION **	**ACTIVE AERODY-NAMIC AREA [Aa]**	ACTUATOR	POWER CONSUMP-TION **	**ACTIVE AERODY-NAMIC AREA [Aa]**	ACTUATOR	POWER CONSUMP-TION **	**ACTIVE AERODY-NAMIC AREA [Aa]**
[mm]	-	[A]	**[m²]**	-	[A]	**[m²]**	-	[A]	**[m²]**	-	[A]	**[m²]**	-	[A]	**[m²]**
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.

1.1.5.2 | 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.45 - mcr OSO THERM 75 smoke exhaust window with two HCV chain actuators

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

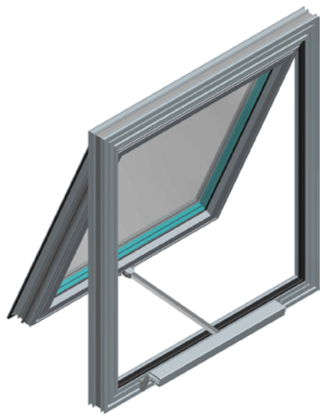


Fig.46 - mcr OSO THERM 75 smoke exhaust window with HCV chain actuator

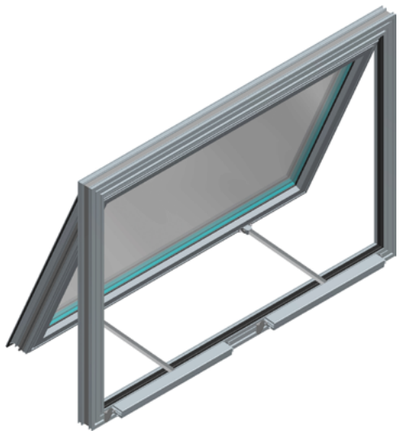


Fig. 47 - mcr OSO THERM 75 smoke exhaust window with two HCV chain actuators

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

WINDOW SIZE B' x H'	ACTUATOR	POWER CONSUMPTION FOR 24 V- / 48 V-***	OPENING ANGLE**	ACTIVE AERODYNAMIC AREA [Aa]
[mm]	-	[A]	[°]	[m²]
800 x 800	HCV500/350	1,4 / 0,7	29	**0,17**
800 x 900	HCV500/350	1,4 / 0,7	25	**0,18**
800 x 1000	HCV500/350	1,4 / 0,7	22	**0,19**
800 x 1100	HCV500/350	1,4 / 0,7	20	**0,21**
800 x 1200	HCV500/350	1,4 / 0,7	18	**0,22**
800 x 1300	HCV500/350	1,4 / 0,7	17	**0,23**
800 x 1400	HCV500/350	1,4 / 0,7	15	**0,25**
800 x 1500	HCV500/350	1,4 / 0,7	14	**0,26**
800 x 1600	HCV500/350	1,4 / 0,7	13	**0,28**
800 x 1700	HCV500/350	1,4 / 0,7	12	**0,29**
800 x 1800	HCV500/350	1,4 / 0,7	12	**0,32**
800 x 1900	HCV500/350	1,4 / 0,7	11	**0,34**
800 x 2000	HCV500/350	1,4 / 0,7	10	**0,36**
800 x 2100	HCV500/350	1,4 / 0,7	10	**0,28**
800 x 2200	HCV500/350	1,4 / 0,7	9	**0,29**
900 x 800	HCV500/600	1,4 / 0,7	51	**0,27**
900 x 800	HCV500/350	1,4 / 0,7	29	**0,19**
900 x 900	HCV500/600	1,4 / 0,7	44	**0,29**
900 x 900	HCV500/350	1,4 / 0,7	25	**0,20**
900 x 1000	HCV500/600	1,4 / 0,7	39	**0,32**
900 x 1000	HCV500/350	1,4 / 0,7	22	**0,22**

WINDOW SIZE B' x H'	ACTUATOR	POWER CONSUMPTION FOR 24 V- / 48 V-***	OPENING ANGLE**	ACTIVE AERODYNAMIC AREA [Aa]
[mm]	-	[A]	[°]	[m²]
900 x 1100	HCV500/600	1,4 / 0,7	35	**0,34**
900 x 1100	HCV500/350	1,4 / 0,7	20	**0,24**
900 x 1200	HCV500/600	1,4 / 0,7	32	**0,36**
900 x 1200	HCV500/350	1,4 / 0,7	18	**0,25**
900 x 1300	HCV500/600	1,4 / 0,7	29	**0,39**
900 x 1300	HCV500/350	1,4 / 0,7	17	**0,26**
900 x 1400	HCV500/600	1,4 / 0,7	27	**0,41**
900 x 1400	HCV500/350	1,4 / 0,7	15	**0,28**
900 x 1500	HCV500/600	1,4 / 0,7	25	**0,44**
900 x 1500	HCV500/350	1,4 / 0,7	14	**0,29**
900 x 1600	HCV500/600	1,4 / 0,7	23	**0,47**
900 x 1600	HCV500/350	1,4 / 0,7	13	**0,31**
900 x 1700	HCV500/600	1,4 / 0,7	22	**0,50**
900 x 1700	HCV500/350	1,4 / 0,7	12	**0,33**
900 x 1800	HCV500/600	1,4 / 0,7	20	**0,53**
900 x 1800	HCV500/350	1,4 / 0,7	12	**0,35**
900 x 1900	HCV500/600	1,4 / 0,7	19	**0,56**
900 x 1900	HCV500/350	1,4 / 0,7	11	**0,38**
900 x 2000	HCV500/600	1,4 / 0,7	18	**0,59**
900 x 2000	HCV500/350	1,4 / 0,7	10	**0,40**
900 x 2100	HCV500/600	1,4 / 0,7	17	**0,62**
900 x 2100	HCV500/350	1,4 / 0,7	10	**0,32**

(*) 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-. HCVA 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.

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

WINDOW SIZE B' x H'	ACTUATOR	POWER CONSUMPTION FOR 24 V- / 48 V-***	OPENING ANGLE**	ACTIVE AERODYNAMIC AREA [Aa]
[mm]	-	[A]	[°]	[m²]
900 x 2200	HCV500/600	1,4 / 0,7	16	**0,64**
900 x 2200	HCV500/350	1,4 / 0,7	9	**0,33**
1000 x 800	HCV500/600	1,4 / 0,7	51	**0,30**
1000 x 800	HCV500/350	1,4 / 0,7	29	**0,21**
1000 x 900	HCV500/600	1,4 / 0,7	44	**0,33**
1000 x 900	HCV500/350	1,4 / 0,7	25	**0,23**
1000 x 1000	HCV500/600	1,4 / 0,7	39	**0,36**
1000 x 1000	HCV500/350	1,4 / 0,7	22	**0,25**
1000 x 1100	HCV500/600	1,4 / 0,7	35	**0,38**
1000 x 1100	HCV500/350	1,4 / 0,7	20	**0,27**
1000 x 1200	HCV500/600	1,4 / 0,7	32	**0,41**
1000 x 1200	HCV500/350	1,4 / 0,7	18	**0,28**
1000 x 1300	HCV500/600	1,4 / 0,7	29	**0,44**
1000 x 1300	HCV500/350	1,4 / 0,7	17	**0,29**
1000 x 1400	HCV500/600	1,4 / 0,7	27	**0,46**
1000 x 1400	HCV500/350	1,4 / 0,7	15	**0,31**
1000 x 1500	HCV500/600	1,4 / 0,7	25	**0,49**
1000 x 1500	HCV500/350	1,4 / 0,7	14	**0,32**
1000 x 1600	HCV500/600	1,4 / 0,7	23	**0,52**

WINDOW SIZE B' x H'	ACTUATOR	POWER CONSUMPTION FOR 24 V- / 48 V-***	OPENING ANGLE**	ACTIVE AERODYNAMIC AREA [Aa]
[mm]	-	[A]	[°]	[m²]
1000 x 1600	HCV500/350	1,4 / 0,7	13	**0,34**
1000 x 1700	HCV500/600	1,4 / 0,7	22	**0,56**
1000 x 1700	HCV500/350	1,4 / 0,7	12	**0,37**
1000 x 1800	HCV500/600	1,4 / 0,7	20	**0,59**
1000 x 1800	HCV500/350	1,4 / 0,7	12	**0,39**
1000 x 1900	HCV500/600	1,4 / 0,7	19	**0,62**
1000 x 1900	HCV500/350	1,4 / 0,7	11	**0,42**
1000 x 2000	HCV500/600	1,4 / 0,7	18	**0,65**
1000 x 2000	HCV500/350	1,4 / 0,7	10	**0,44**
1000 x 2100	HCV500/600	1,4 / 0,7	17	**0,68**
1000 x 2100	HCV500/350	1,4 / 0,7	10	**0,36**
1000 x 2200	HCV500/600	1,4 / 0,7	16	**0,72**
1000 x 2200	HCV500/350	1,4 / 0,7	9	**0,38**
1100 x 800	HCV500/800	1,4 / 0,7	70	**0,39**
1100 x 800	HCV500/600	1,4 / 0,7	51	**0,34**
1100 x 800	HCV500/350	1,4 / 0,7	29	**0,24**
1100 x 900	HCV500/800	1,4 / 0,7	60	**0,43**
1100 x 900	HCV500/600	1,4 / 0,7	44	**0,37**
1100 x 900	HCV500/350	1,4 / 0,7	25	**0,26**
1100 x 1000	HCV500/800	1,4 / 0,7	53	**0,46**

(*) 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-. HCVA 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.

mcr OSO THERM 75 | Outward-opening smoke exhaust windows

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

WINDOW SIZE B' x H'	ACTUATOR	POWER CONSUMPTION FOR 24 V- / 48 V-***	OPENING ANGLE**	ACTIVE AERODYNAM-IC AREA [Aa]
[mm]	-	[A]	[°]	[m²]
1100 x 1000	HCV500/600	1,4 / 0,7	39	**0,40**
1100 x 1000	HCV500/350	1,4 / 0,7	22	**0,27**
1100 x 1100	HCV500/800	1,4 / 0,7	47	**0,49**
1100 x 1100	HCV500/600	1,4 / 0,7	35	**0,42**
1100 x 1100	HCV500/350	1,4 / 0,7	20	**0,29**
1100 x 1200	HCV500/800	1,4 / 0,7	43	**0,53**
1100 x 1200	HCV500/600	1,4 / 0,7	32	**0,45**
1100 x 1200	HCV500/350	1,4 / 0,7	18	**0,31**
1100 x 1300	HCV500/800	1,4 / 0,7	39	**0,56**
1100 x 1300	HCV500/600	1,4 / 0,7	29	**0,48**
1100 x 1300	HCV500/350	1,4 / 0,7	17	**0,32**
1100 x 1400	HCV500/800	1,4 / 0,7	36	**0,60**
1100 x 1400	HCV500/600	1,4 / 0,7	27	**0,51**
1100 x 1400	HCV500/350	1,4 / 0,7	15	**0,34**
1100 x 1500	HCV500/800	1,4 / 0,7	33	**0,64**
1100 x 1500	HCV500/600	1,4 / 0,7	25	**0,54**
1100 x 1500	HCV500/350	1,4 / 0,7	14	**0,35**
1100 x 1600	HCV500/800	1,4 / 0,7	31	**0,68**
1100 x 1600	HCV500/600	1,4 / 0,7	23	**0,58**
1100 x 1600	HCV500/350	1,4 / 0,7	13	**0,38**
1100 x 1700	HCV500/800	1,4 / 0,7	29	**0,72**
1100 x 1700	HCV500/600	1,4 / 0,7	22	**0,61**
1100 x 1700	HCV500/350	1,4 / 0,7	12	**0,40**

WINDOW SIZE B' x H'	ACTUATOR	POWER CONSUMPTION FOR 24 V- / 48 V-***	OPENING ANGLE**	ACTIVE AERODYNAMIC AREA [Aa]
[mm]	-	[A]	[°]	[m²]
1100 x 1800	HCV500/800	1,4 / 0,7	27	**0,76**
1100 x 1800	HCV500/600	1,4 / 0,7	20	**0,65**
1100 x 1800	HCV500/350	1,4 / 0,7	12	**0,42**
1100 x 1900	HCV500/800	1,4 / 0,7	26	**0,80**
1100 x 1900	HCV500/600	1,4 / 0,7	19	**0,68**
1100 x 1900	HCV500/350	1,4 / 0,7	11	**0,45**
1100 x 2000	HCV500/800	1,4 / 0,7	24	**0,84**
1100 x 2000	HCV500/600	1,4 / 0,7	18	**0,71**
1100 x 2000	HCV500/350	1,4 / 0,7	10	**0,48**
1100 x 2100	HCV500/800	1,4 / 0,7	23	**0,89**
1100 x 2100	HCV500/600	1,4 / 0,7	17	**0,75**
1100 x 2100	HCV500/350	1,4 / 0,7	10	**0,40**
1100 x 2200	HCV500/800	1,4 / 0,7	22	**0,95**
1100 x 2200	HCV500/600	1,4 / 0,7	16	**0,79**
1100 x 2200	HCV500/350	1,4 / 0,7	9	**0,42**
1200 x 800	HCV500/800	1,4 / 0,7	70	**0,44**
1200 x 800	HCV500/600	1,4 / 0,7	51	**0,38**
1200 x 800	HCV500/350	1,4 / 0,7	29	**0,26**
1200 x 900	HCV500/800	1,4 / 0,7	60	**0,47**
1200 x 900	HCV500/600	1,4 / 0,7	44	**0,40**
1200 x 900	HCV500/350	1,4 / 0,7	25	**0,28**
1200 x 1000	HCV500/800	1,4 / 0,7	53	**0,51**
1200 x 1000	HCV500/600	1,4 / 0,7	39	**0,44**
1200 x 1000	HCV500/350	1,4 / 0,7	22	**0,30**

(*) 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-. HCVA 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.

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

WINDOW SIZE B' x H'	ACTUATOR	POWER CONSUMPTION FOR 24 V- / 48 V-***	OPENING ANGLE**	ACTIVE AERODYNAMIC AREA [Aa]
[mm]	-	[A]	[°]	[m²]
1200 x 1100	HCV500/800	1,4 / 0,7	47	**0,54**
1200 x 1100	HCV500/600	1,4 / 0,7	35	**0,46**
1200 x 1100	HCV500/350	1,4 / 0,7	20	**0,32**
1200 x 1200	HCV500/800	1,4 / 0,7	43	**0,58**
1200 x 1200	HCV500/600	1,4 / 0,7	32	**0,49**
1200 x 1200	HCV500/350	1,4 / 0,7	18	**0,33**
1200 x 1300	HCV500/800	1,4 / 0,7	39	**0,62**
1200 x 1300	HCV500/600	1,4 / 0,7	29	**0,52**
1200 x 1300	HCV500/350	1,4 / 0,7	17	**0,35**
1200 x 1400	HCV500/800	1,4 / 0,7	36	**0,66**
1200 x 1400	HCV500/600	1,4 / 0,7	27	**0,55**
1200 x 1400	HCV500/350	1,4 / 0,7	15	**0,36**
1200 x 1500	HCV500/800	1,4 / 0,7	33	**0,70**
1200 x 1500	HCV500/600	1,4 / 0,7	25	**0,59**
1200 x 1500	HCV500/350	1,4 / 0,7	14	**0,38**
1200 x 1600	HCV500/800	1,4 / 0,7	31	**0,74**
1200 x 1600	HCV500/600	1,4 / 0,7	23	**0,62**
1200 x 1600	HCV500/350	1,4 / 0,7	13	**0,40**
1200 x 1700	HCV500/800	1,4 / 0,7	29	**0,78**
1200 x 1700	HCV500/600	1,4 / 0,7	22	**0,66**
1200 x 1700	HCV500/350	1,4 / 0,7	12	**0,43**
1200 x 1800	HCV500/800	1,4 / 0,7	27	**0,83**
1200 x 1800	HCV500/600	1,4 / 0,7	20	**0,71**
1200 x 1800	HCV500/350	1,4 / 0,7	12	**0,46**
1200 x 1900	HCV500/800	1,4 / 0,7	26	**0,87**

WINDOW SIZE B' x H'	ACTUATOR	POWER CONSUMPTION FOR 24 V- / 48 V-***	OPENING ANGLE**	ACTIVE AERODYNAMIC AREA [Aa]
[mm]	-	[A]	[°]	[m²]
1200 x 1900	HCV500/600	1,4 / 0,7	19	**0,74**
1200 x 1900	HCV500/350	1,4 / 0,7	11	**0,49**
1200 x 2000	HCV500/800	1,4 / 0,7	24	**0,92**
1200 x 2000	HCV500/600	1,4 / 0,7	18	**0,77**
1200 x 2000	HCV500/350	1,4 / 0,7	10	**0,52**
1200 x 2100	HCV500/800	1,4 / 0,7	23	**0,97**
1200 x 2100	HCV500/600	1,4 / 0,7	17	**0,81**
1200 x 2100	HCV500/350	1,4 / 0,7	10	**0,32**
1200 x 2200	HCV500/800	1,4 / 0,7	22	**1,03**
1200 x 2200	HCV500/600	1,4 / 0,7	16	**0,85**
1200 x 2200	HCV500/350	1,4 / 0,7	9	**0,33**
1300 x 800	HCV500/1000	1,4 / 0,7	92	**0,51**
1300 x 800	HCV500/800	1,4 / 0,7	70	**0,47**
1300 x 800	HCV500/600	1,4 / 0,7	51	**0,41**
1300 x 800	HCV500/350	1,4 / 0,7	29	**0,28**
1300 x 900	HCV500/1000	1,4 / 0,7	78	**0,57**
1300 x 900	HCV500/800	1,4 / 0,7	60	**0,51**
1300 x 900	HCV500/600	1,4 / 0,7	44	**0,44**
1300 x 900	HCV500/350	1,4 / 0,7	25	**0,30**
1300 x 1000	HCV500/1000	1,4 / 0,7	68	**0,62**
1300 x 1000	HCV500/800	1,4 / 0,7	53	**0,55**
1300 x 1000	HCV500/600	1,4 / 0,7	39	**0,48**
1300 x 1000	HCV500/350	1,4 / 0,7	22	**0,32**
1300 x 1100	HCV500/1000	1,4 / 0,7	60	**0,66**
1300 x 1100	HCV500/800	1,4 / 0,7	47	**0,59**
1300 x 1100	HCV500/600	1,4 / 0,7	35	**0,50**
1300 x 1100	HCV500/350	1,4 / 0,7	20	**0,35**
1300 x 1200	HCV500/1000	1,4 / 0,7	54	**0,70**

(*) 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-. HCVA 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.

mcr OSO THERM 75 | Outward-opening smoke exhaust windows

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

WINDOW SIZE B' x H'	ACTUATOR	POWER CONSUMPTION FOR 24 V- / 48 V-***	OPENING ANGLE**	ACTIVE AERODYNAMIC AREA [Aa]
[mm]	-	[A]	[°]	[m²]
1300 x 1200	HCV500/800	1,4 / 0,7	43	**0,63**
1300 x 1200	HCV500/600	1,4 / 0,7	32	**0,53**
1300 x 1200	HCV500/350	1,4 / 0,7	18	**0,36**
1300 x 1300	HCV500/1000	1,4 / 0,7	49	**0,75**
1300 x 1300	HCV500/800	1,4 / 0,7	39	**0,67**
1300 x 1300	HCV500/600	1,4 / 0,7	29	**0,57**
1300 x 1300	HCV500/350	1,4 / 0,7	17	**0,37**
1300 x 1400	HCV500/1000	1,4 / 0,7	45	**0,80**
1300 x 1400	HCV500/800	1,4 / 0,7	36	**0,71**
1300 x 1400	HCV500/600	1,4 / 0,7	27	**0,60**
1300 x 1400	HCV500/350	1,4 / 0,7	15	**0,39**
1300 x 1500	HCV500/1000	1,4 / 0,7	42	**0,84**
1300 x 1500	HCV500/800	1,4 / 0,7	33	**0,75**
1300 x 1500	HCV500/600	1,4 / 0,7	25	**0,63**
1300 x 1500	HCV500/350	1,4 / 0,7	14	**0,41**
1300 x 1600	HCV500/1000	1,4 / 0,7	39	**0,90**
1300 x 1600	HCV500/800	1,4 / 0,7	31	**0,80**
1300 x 1600	HCV500/600	1,4 / 0,7	23	**0,67**
1300 x 1600	HCV500/350	1,4 / 0,7	13	**0,44**
1300 x 1700	HCV500/1000	1,4 / 0,7	36	**0,95**
1300 x 1700	HCV500/800	1,4 / 0,7	29	**0,85**
1300 x 1700	HCV500/600	1,4 / 0,7	22	**0,72**
1300 x 1700	HCV500/350	1,4 / 0,7	12	**0,46**
1300 x 1800	HCV500/1000	1,4 / 0,7	34	**1,00**
1300 x 1800	HCV500/800	1,4 / 0,7	27	**0,89**
1300 x 1800	HCV500/600	1,4 / 0,7	20	**0,76**
1300 x 1800	HCV500/350	1,4 / 0,7	12	**0,49**
1300 x 1900	HCV500/1000	1,4 / 0,7	32	**1,06**
1300 x 1900	HCV500/800	1,4 / 0,7	26	**0,94**
1300 x 1900	HCV500/600	1,4 / 0,7	19	**0,80**

WINDOW SIZE B' x H'	ACTUATOR	POWER CONSUMPTION FOR 24 V- / 48 V-***	OPENING ANGLE**	ACTIVE AERODYNAMIC AREA [Aa]
[mm]	-	[A]	[°]	[m²]
1300 x 1900	HCV500/350	1,4 / 0,7	11	**0,52**
1300 x 2000	HCV500/1000	1,4 / 0,7	31	**1,12**
1300 x 2000	HCV500/800	1,4 / 0,7	24	**1,00**
1300 x 2000	HCV500/600	1,4 / 0,7	18	**0,84**
1300 x 2000	HCV500/350	1,4 / 0,7	10	**0,56**
1300 x 2100	HCV500/1000	1,4 / 0,7	29	**1,18**
1300 x 2100	HCV500/800	1,4 / 0,7	23	**1,05**
1300 x 2100	HCV500/600	1,4 / 0,7	17	**0,87**
1300 x 2100	HCV500/350	1,4 / 0,7	10	**0,35**
1300 x 2200	HCV500/1000	1,4 / 0,7	28	**1,24**
1300 x 2200	HCV500/800	1,4 / 0,7	22	**1,11**
1300 x 2200	HCV500/600	1,4 / 0,7	16	**0,92**
1300 x 2200	HCV500/350	1,4 / 0,7	9	**0,36**
1400 x 800	HCV500/1000	1,4 / 0,7	92	**0,56**
1400 x 800	HCV500/800	1,4 / 0,7	70	**0,52**
1400 x 800	HCV500/600	1,4 / 0,7	51	**0,44**
1400 x 800	HCV500/350	1,4 / 0,7	29	**0,30**
1400 x 900	HCV500/1000	1,4 / 0,7	78	**0,62**
1400 x 900	HCV500/800	1,4 / 0,7	60	**0,56**
1400 x 900	HCV500/600	1,4 / 0,7	44	**0,48**
1400 x 900	HCV500/350	1,4 / 0,7	25	**0,33**
1400 x 1000	HCV500/1000	1,4 / 0,7	68	**0,66**
1400 x 1000	HCV500/800	1,4 / 0,7	53	**0,59**
1400 x 1000	HCV500/600	1,4 / 0,7	39	**0,51**
1400 x 1000	HCV500/350	1,4 / 0,7	22	**0,35**
1400 x 1100	HCV500/1000	1,4 / 0,7	60	**0,71**
1400 x 1100	HCV500/800	1,4 / 0,7	47	**0,64**
1400 x 1100	HCV500/600	1,4 / 0,7	35	**0,54**
1400 x 1100	HCV500/350	1,4 / 0,7	20	**0,37**
1400 x 1200	HCV500/1000	1,4 / 0,7	54	**0,76**
1400 x 1200	HCV500/800	1,4 / 0,7	43	**0,68**
1400 x 1200	HCV500/600	1,4 / 0,7	32	**0,57**
1400 x 1200	HCV500/350	1,4 / 0,7	18	**0,39**

(*) 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-. HCVA 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.

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

WINDOW SIZE B' x H'	ACTUATOR	POWER CONSUMPTION FOR 24 V- / 48 V-***	OPENING ANGLE**	ACTIVE AERODYNAMIC AREA [Aa]
[mm]	-	[A]	[°]	[m²]
1400 x 1300	HCV500/1000	1,4 / 0,7	49	**0,81**
1400 x 1300	HCV500/800	1,4 / 0,7	39	**0,73**
1400 x 1300	HCV500/600	1,4 / 0,7	29	**0,61**
1400 x 1300	HCV500/350	1,4 / 0,7	17	**0,40**
1400 x 1400	HCV500/1000	1,4 / 0,7	45	**0,85**
1400 x 1400	HCV500/800	1,4 / 0,7	36	**0,77**
1400 x 1400	HCV500/600	1,4 / 0,7	27	**0,64**
1400 x 1400	HCV500/350	1,4 / 0,7	15	**0,42**
1400 x 1500	HCV500/1000	1,4 / 0,7	42	**0,91**
1400 x 1500	HCV500/800	1,4 / 0,7	33	**0,81**
1400 x 1500	HCV500/600	1,4 / 0,7	25	**0,68**
1400 x 1500	HCV500/350	1,4 / 0,7	14	**0,44**
1400 x 1600	HCV500/1000	1,4 / 0,7	39	**0,97**
1400 x 1600	HCV500/800	1,4 / 0,7	31	**0,86**
1400 x 1600	HCV500/600	1,4 / 0,7	23	**0,73**
1400 x 1600	HCV500/350	1,4 / 0,7	13	**0,47**
1400 x 1700	HCV500/1000	1,4 / 0,7	36	**1,01**
1400 x 1700	HCV500/800	1,4 / 0,7	29	**0,91**
1400 x 1700	HCV500/600	1,4 / 0,7	22	**0,77**
1400 x 1700	HCV500/350	1,4 / 0,7	12	**0,49**
1400 x 1800	HCV500/1000	1,4 / 0,7	34	**1,07**
1400 x 1800	HCV500/800	1,4 / 0,7	27	**0,96**
1400 x 1800	HCV500/600	1,4 / 0,7	20	**0,82**
1400 x 1800	HCV500/350	1,4 / 0,7	12	**0,52**
1400 x 1900	HCV500/1000	1,4 / 0,7	32	**1,14**
1400 x 1900	HCV500/800	1,4 / 0,7	26	**1,01**
1400 x 1900	HCV500/600	1,4 / 0,7	19	**0,86**
1400 x 1900	HCV500/350	1,4 / 0,7	11	**0,56**
1400 x 2000	HCV500/1000	1,4 / 0,7	31	**1,20**

WINDOW SIZE B' x H'	ACTUATOR	POWER CONSUMPTION FOR 24 V- / 48 V-***	OPENING ANGLE**	ACTIVE AERODYNAMIC AREA [Aa]
[mm]	-	[A]	[°]	[m²]
1400 x 2000	HCV500/800	1,4 / 0,7	24	**1,06**
1400 x 2000	HCV500/600	1,4 / 0,7	18	**0,89**
1400 x 2000	HCV500/350	1,4 / 0,7	10	**0,59**
1400 x 2100	HCV500/1000	1,4 / 0,7	29	**1,27**
1400 x 2100	HCV500/800	1,4 / 0,7	23	**1,12**
1400 x 2100	HCV500/600	1,4 / 0,7	17	**0,93**
1400 x 2100	HCV500/350	1,4 / 0,7	10	**0,38**
1400 x 2200	HCV500/1000	1,4 / 0,7	28	**1,33**
1400 x 2200	HCV500/800	1,4 / 0,7	22	**1,19**
1400 x 2200	HCV500/600	1,4 / 0,7	16	**0,98**
1400 x 2200	HCV500/350	1,4 / 0,7	9	**0,39**
1500 x 800	HCV500/1000	1,4 / 0,7	92	**0,60**
1500 x 800	HCV500/800	1,4 / 0,7	70	**0,56**
1500 x 800	HCV500/600	1,4 / 0,7	51	**0,48**
1500 x 800	HCV500/350	1,4 / 0,7	29	**0,33**
1500 x 900	HCV500/1000	1,4 / 0,7	78	**0,66**
1500 x 900	HCV500/800	1,4 / 0,7	60	**0,60**
1500 x 900	HCV500/600	1,4 / 0,7	44	**0,51**
1500 x 900	HCV500/350	1,4 / 0,7	25	**0,35**
1500 x 1000	HCV500/1000	1,4 / 0,7	68	**0,72**
1500 x 1000	HCV500/800	1,4 / 0,7	53	**0,64**
1500 x 1000	HCV500/600	1,4 / 0,7	39	**0,55**
1500 x 1000	HCV500/350	1,4 / 0,7	22	**0,37**
1500 x 1100	HCV500/1000	1,4 / 0,7	60	**0,77**
1500 x 1100	HCV500/800	1,4 / 0,7	47	**0,69**
1500 x 1100	HCV500/600	1,4 / 0,7	35	**0,58**
1500 x 1100	HCV500/350	1,4 / 0,7	20	**0,40**
1500 x 1200	HCV500/1000	1,4 / 0,7	54	**0,82**
1500 x 1200	HCV500/800	1,4 / 0,7	43	**0,74**
1500 x 1200	HCV500/600	1,4 / 0,7	32	**0,62**
1500 x 1200	HCV500/350	1,4 / 0,7	18	**0,41**
1500 x 1300	HCV500/1000	1,4 / 0,7	49	**0,87**
1500 x 1300	HCV500/800	1,4 / 0,7	39	**0,78**
1500 x 1300	HCV500/600	1,4 / 0,7	29	**0,65**

(*) 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-. HCVA 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.

mcr OSO THERM 75 | Outward-opening smoke exhaust windows

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

WINDOW SIZE B' x H'	ACTUATOR	POWER CONSUMPTION FOR 24 V- / 48 V-***	OPENING ANGLE**	ACTIVE AERODYNAMIC AREA [Aa]
[mm]	-	[A]	[°]	[m²]
1500 x 1300	HCV500/350	1,4 / 0,7	17	**0,43**
1500 x 1400	HCV500/1000	1,4 / 0,7	45	**0,92**
1500 x 1400	HCV500/800	1,4 / 0,7	36	**0,82**
1500 x 1400	HCV500/600	1,4 / 0,7	27	**0,69**
1500 x 1400	HCV500/350	1,4 / 0,7	15	**0,45**
1500 x 1500	HCV500/1000	1,4 / 0,7	42	**0,98**
1500 x 1500	HCV500/800	1,4 / 0,7	33	**0,87**
1500 x 1500	HCV500/600	1,4 / 0,7	25	**0,73**
1500 x 1500	HCV500/350	1,4 / 0,7	14	**0,47**
1500 x 1600	HCV500/1000	1,4 / 0,7	39	**1,03**
1500 x 1600	HCV500/800	1,4 / 0,7	31	**0,92**
1500 x 1600	HCV500/600	1,4 / 0,7	23	**0,77**
1500 x 1600	HCV500/350	1,4 / 0,7	13	**0,49**
1500 x 1700	HCV500/1000	1,4 / 0,7	36	**1,09**
1500 x 1700	HCV500/800	1,4 / 0,7	29	**0,97**
1500 x 1700	HCV500/600	1,4 / 0,7	22	**0,82**
1500 x 1700	HCV500/350	1,4 / 0,7	12	**0,52**
1500 x 1800	HCV500/1000	1,4 / 0,7	34	**1,15**
1500 x 1800	HCV500/800	1,4 / 0,7	27	**1,02**
1500 x 1800	HCV500/600	1,4 / 0,7	20	**0,87**
1500 x 1800	HCV500/350	1,4 / 0,7	12	**0,55**
1500 x 1900	HCV500/1000	1,4 / 0,7	32	**1,21**
1500 x 1900	HCV500/800	1,4 / 0,7	26	**1,08**
1500 x 1900	HCV500/600	1,4 / 0,7	19	**0,91**
1500 x 1900	HCV500/350	1,4 / 0,7	11	**0,59**
1500 x 2000	HCV500/1000	1,4 / 0,7	31	**1,29**
1500 x 2000	HCV500/800	1,4 / 0,7	24	**1,14**
1500 x 2000	HCV500/600	1,4 / 0,7	18	**0,95**
1500 x 2000	HCV500/350	1,4 / 0,7	10	**0,63**
1500 x 2100	HCV500/1000	1,4 / 0,7	29	**1,35**
1500 x 2100	HCV500/800	1,4 / 0,7	23	**1,20**
1500 x 2100	HCV500/600	1,4 / 0,7	17	**0,99**
1500 x 2100	HCV500/350	1,4 / 0,7	10	**0,41**

WINDOW SIZE B' x H'	ACTUATOR	POWER CONSUMPTION FOR 24 V- / 48 V-***	OPENING ANGLE**	ACTIVE AERODYNAMIC AREA [Aa]
[mm]	-	[A]	[°]	[m²]
1500 x 2200	HCV500/1000	1,4 / 0,7	28	**1,42**
1500 x 2200	HCV500/800	1,4 / 0,7	22	**1,27**
1500 x 2200	HCV500/600	1,4 / 0,7	16	**1,04**
1500 x 2200	HCV500/350	1,4 / 0,7	9	**0,43**
1600 x 800	HCV500/1000	1,4 / 0,7	92	**0,64**
1600 x 800	HCV500/800	1,4 / 0,7	70	**0,59**
1600 x 800	HCV500/600	1,4 / 0,7	51	**0,51**
1600 x 800	HCV500/350	1,4 / 0,7	29	**0,35**
1600 x 900	HCV500/1000	1,4 / 0,7	78	**0,71**
1600 x 900	HCV500/800	1,4 / 0,7	60	**0,64**
1600 x 900	HCV500/600	1,4 / 0,7	44	**0,55**
1600 x 900	HCV500/350	1,4 / 0,7	25	**0,37**
1600 x 1000	HCV500/1000	1,4 / 0,7	68	**0,77**
1600 x 1000	HCV500/800	1,4 / 0,7	53	**0,69**
1600 x 1000	HCV500/600	1,4 / 0,7	39	**0,59**
1600 x 1000	HCV500/350	1,4 / 0,7	22	**0,40**
1600 x 1100	HCV500/1000	1,4 / 0,7	60	**0,82**
1600 x 1100	HCV500/800	1,4 / 0,7	47	**0,74**
1600 x 1100	HCV500/600	1,4 / 0,7	35	**0,62**
1600 x 1100	HCV500/350	1,4 / 0,7	20	**0,43**
1600 x 1200	HCV500/1000	1,4 / 0,7	54	**0,87**
1600 x 1200	HCV500/800	1,4 / 0,7	43	**0,78**
1600 x 1200	HCV500/600	1,4 / 0,7	32	**0,65**
1600 x 1200	HCV500/350	1,4 / 0,7	18	**0,44**
1600 x 1300	HCV500/1000	1,4 / 0,7	49	**0,93**
1600 x 1300	HCV500/800	1,4 / 0,7	39	**0,83**
1600 x 1300	HCV500/600	1,4 / 0,7	29	**0,69**
1600 x 1300	HCV500/350	1,4 / 0,7	17	**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-. HCVA 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.

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

WINDOW SIZE B' x H'	ACTUATOR	POWER CONSUMPTION FOR 24 V- / 48 V-***	OPENING ANGLE**	ACTIVE AERODYNAMIC AREA [Aa]
[mm]	-	[A]	[°]	[m²]
1600 x 1400	HCV500/1000	1,4 / 0,7	45	**0,98**
1600 x 1400	HCV500/800	1,4 / 0,7	36	**0,88**
1600 x 1400	HCV500/600	1,4 / 0,7	27	**0,73**
1600 x 1400	HCV500/350	1,4 / 0,7	15	**0,47**
1600 x 1500	HCV500/1000	1,4 / 0,7	42	**1,04**
1600 x 1500	HCV500/800	1,4 / 0,7	33	**0,92**
1600 x 1500	HCV500/600	1,4 / 0,7	25	**0,77**
1600 x 1500	HCV500/350	1,4 / 0,7	14	**0,49**
1600 x 1600	HCV500/1000	1,4 / 0,7	39	**1,10**
1600 x 1600	HCV500/800	1,4 / 0,7	31	**0,98**
1600 x 1600	HCV500/600	1,4 / 0,7	23	**0,82**
1600 x 1600	HCV500/350	1,4 / 0,7	13	**0,52**
1600 x 1700	HCV500/1000	1,4 / 0,7	36	**1,16**
1600 x 1700	HCV500/800	1,4 / 0,7	29	**1,04**
1600 x 1700	HCV500/600	1,4 / 0,7	22	**0,87**
1600 x 1700	HCV500/350	1,4 / 0,7	12	**0,55**
1600 x 1800	HCV500/1000	1,4 / 0,7	34	**1,22**
1600 x 1800	HCV500/800	1,4 / 0,7	27	**1,09**
1600 x 1800	HCV500/600	1,4 / 0,7	20	**0,92**
1600 x 1800	HCV500/350	1,4 / 0,7	12	**0,58**
1600 x 1900	HCV500/1000	1,4 / 0,7	32	**1,29**
1600 x 1900	HCV500/800	1,4 / 0,7	26	**1,14**
1600 x 1900	HCV500/600	1,4 / 0,7	19	**0,97**
1600 x 1900	HCV500/350	1,4 / 0,7	11	**0,62**
1600 x 2000	HCV500/1000	1,4 / 0,7	31	**1,37**
1600 x 2000	HCV500/800	1,4 / 0,7	24	**1,21**
1600 x 2000	HCV500/600	1,4 / 0,7	18	**1,01**
1600 x 2000	HCV500/350	1,4 / 0,7	10	**0,66**
1600 x 2100	HCV500/1000	1,4 / 0,7	29	**1,44**
1600 x 2100	HCV500/800	1,4 / 0,7	23	**1,27**

WINDOW SIZE B' x H'	ACTUATOR	POWER CONSUMPTION FOR 24 V- / 48 V-***	OPENING ANGLE**	ACTIVE AERODYNAMIC AREA [Aa]
[mm]	-	[A]	[°]	[m²]
1600 x 2100	HCV500/600	1,4 / 0,7	17	**1,05**
1600 x 2100	HCV500/350	1,4 / 0,7	10	**0,44**
1600 x 2200	HCV500/1000	1,4 / 0,7	28	**1,51**
1600 x 2200	HCV500/800	1,4 / 0,7	22	**1,34**
1600 x 2200	HCV500/600	1,4 / 0,7	16	**1,10**
1600 x 2200	HCV500/350	1,4 / 0,7	9	**0,46**
1700 x 800	HCV500/1000	1,4 / 0,7	92	**0,69**
1700 x 800	HCV500/800	1,4 / 0,7	70	**0,64**
1700 x 800	HCV500/600	1,4 / 0,7	51	**0,54**
1700 x 800	HCV500/350	1,4 / 0,7	29	**0,37**
1700 x 900	HCV500/1000	1,4 / 0,7	78	**0,76**
1700 x 900	HCV500/800	1,4 / 0,7	60	**0,69**
1700 x 900	HCV500/600	1,4 / 0,7	44	**0,59**
1700 x 900	HCV500/350	1,4 / 0,7	25	**0,40**
1700 x 1000	HCV500/1000	1,4 / 0,7	68	**0,82**
1700 x 1000	HCV500/800	1,4 / 0,7	53	**0,74**
1700 x 1000	HCV500/600	1,4 / 0,7	39	**0,63**
1700 x 1000	HCV500/350	1,4 / 0,7	22	**0,42**
1700 x 1100	HCV500/1000	1,4 / 0,7	60	**0,87**
1700 x 1100	HCV500/800	1,4 / 0,7	47	**0,78**
1700 x 1100	HCV500/600	1,4 / 0,7	35	**0,66**
1700 x 1100	HCV500/350	1,4 / 0,7	20	**0,45**
1700 x 1200	HCV500/1000	1,4 / 0,7	54	**0,93**
1700 x 1200	HCV500/800	1,4 / 0,7	43	**0,83**
1700 x 1200	HCV500/600	1,4 / 0,7	32	**0,70**
1700 x 1200	HCV500/350	1,4 / 0,7	18	**0,46**
1700 x 1300	HCV500/1000	1,4 / 0,7	49	**0,99**
1700 x 1300	HCV500/800	1,4 / 0,7	39	**0,89**
1700 x 1300	HCV500/600	1,4 / 0,7	29	**0,74**
1700 x 1300	HCV500/350	1,4 / 0,7	17	**0,48**

(*) 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-. HCVA 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.

mcr OSO THERM 75 | Outward-opening smoke exhaust windows

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

WINDOW SIZE B' x H'	ACTUATOR	POWER CONSUMPTION FOR 24 V- / 48 V-***	OPENING ANGLE**	ACTIVE AERODYNAMIC AREA [Aa]
[mm]	-	[A]	[°]	[m²]
1700 x 1400	HCV500/1000	1,4 / 0,7	45	**1,04**
1700 x 1400	HCV500/800	1,4 / 0,7	36	**0,93**
1700 x 1400	HCV500/600	1,4 / 0,7	27	**0,77**
1700 x 1400	HCV500/350	1,4 / 0,7	15	**0,50**
1700 x 1500	HCV500/1000	1,4 / 0,7	42	**1,11**
1700 x 1500	HCV500/800	1,4 / 0,7	33	**0,98**
1700 x 1500	HCV500/600	1,4 / 0,7	25	**0,82**
1700 x 1500	HCV500/350	1,4 / 0,7	14	**0,52**
1700 x 1600	HCV500/1000	1,4 / 0,7	39	**1,17**
1700 x 1600	HCV500/800	1,4 / 0,7	31	**1,04**
1700 x 1600	HCV500/600	1,4 / 0,7	23	**0,87**
1700 x 1600	HCV500/350	1,4 / 0,7	13	**0,55**
1700 x 1700	HCV500/1000	1,4 / 0,7	36	**1,23**
1700 x 1700	HCV500/800	1,4 / 0,7	29	**1,09**
1700 x 1700	HCV500/600	1,4 / 0,7	22	**0,92**
1700 x 1700	HCV500/350	1,4 / 0,7	12	**0,58**
1700 x 1800	HCV500/1000	1,4 / 0,7	34	**1,29**
1700 x 1800	HCV500/800	1,4 / 0,7	27	**1,15**
1700 x 1800	HCV500/600	1,4 / 0,7	20	**0,98**
1700 x 1800	HCV500/350	1,4 / 0,7	12	**0,61**
1700 x 1900	HCV500/1000	1,4 / 0,7	32	**1,37**
1700 x 1900	HCV500/800	1,4 / 0,7	26	**1,21**
1700 x 1900	HCV500/600	1,4 / 0,7	19	**1,02**
1700 x 1900	HCV500/350	1,4 / 0,7	11	**0,65**
1700 x 2000	HCV500/1000	1,4 / 0,7	31	**1,45**
1700 x 2000	HCV500/800	1,4 / 0,7	24	**1,28**
1700 x 2000	HCV500/600	1,4 / 0,7	18	**1,06**
1700 x 2000	HCV500/350	1,4 / 0,7	10	**0,69**

WINDOW SIZE B' x H'	ACTUATOR	POWER CONSUMPTION FOR 24 V- / 48 V-***	OPENING ANGLE**	ACTIVE AERODYNAMIC AREA [Aa]
[mm]	-	[A]	[°]	[m²]
1800 x 800	HCV500/1000	1,4 / 0,7	92	**0,73**
1800 x 800	HCV500/800	1,4 / 0,7	70	**0,68**
1800 x 800	HCV500/600	2x 1,4 / 2x 0,7	51	**0,58**
1800 x 800	HCV500/350	2x 1,4 / 2x 0,7	29	**0,40**
1800 x 900	HCV500/1000	1,4 / 0,7	78	**0,82**
1800 x 900	HCV500/800	1,4 / 0,7	60	**0,73**
1800 x 900	HCV500/600	2x 1,4 / 2x 0,7	44	**0,62**
1800 x 900	HCV500/350	2x 1,4 / 2x 0,7	25	**0,42**
1800 x 1000	HCV500/1000	1,4 / 0,7	68	**0,87**
1800 x 1000	HCV500/800	1,4 / 0,7	53	**0,78**
1800 x 1000	HCV500/600	2x 1,4 / 2x 0,7	39	**0,66**
1800 x 1000	HCV500/350	2x 1,4 / 2x 0,7	22	**0,44**
1800 x 1100	HCV500/1000	1,4 / 0,7	60	**0,93**
1800 x 1100	HCV500/800	1,4 / 0,7	47	**0,83**
1800 x 1100	HCV500/600	2x 1,4 / 2x 0,7	35	**0,70**
1800 x 1100	HCV500/350	2x 1,4 / 2x 0,7	20	**0,48**
1800 x 1200	HCV500/1000	1,4 / 0,7	54	**0,99**
1800 x 1200	HCV500/800	1,4 / 0,7	43	**0,89**
1800 x 1200	HCV500/600	2x 1,4 / 2x 0,7	32	**0,74**
1800 x 1200	HCV500/350	2x 1,4 / 2x 0,7	18	**0,49**
1800 x 1300	HCV500/1000	1,4 / 0,7	49	**1,04**
1800 x 1300	HCV500/800	1,4 / 0,7	39	**0,94**
1800 x 1300	HCV500/600	2x 1,4 / 2x 0,7	29	**0,78**
1800 x 1300	HCV500/350	2x 1,4 / 2x 0,7	17	**0,50**
1800 x 1400	HCV500/1000	1,4 / 0,7	45	**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-. HCVA 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.

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

WINDOW SIZE B' x H'	ACTUATOR	POWER CONSUMPTION FOR 24 V- / 48 V-***	OPENING ANGLE**	ACTIVE AERODYNAMIC AREA [Aa]
[mm]	-	[A]	[°]	[m²]
1800 x 1400	HCV500/800	1,4 / 0,7	36	**0,98**
1800 x 1400	HCV500/600	2x 1,4 / 2x 0,7	27	**0,82**
1800 x 1400	HCV500/350	2x 1,4 / 2x 0,7	15	**0,52**
1800 x 1500	HCV500/1000	1,4 / 0,7	42	**1,17**
1800 x 1500	HCV500/800	1,4 / 0,7	33	**1,04**
1800 x 1500	HCV500/600	2x 1,4 / 2x 0,7	25	**0,87**
1800 x 1500	HCV500/350	2x 1,4 / 2x 0,7	14	**0,55**
1800 x 1600	HCV500/1000	1,4 / 0,7	39	**1,24**
1800 x 1600	HCV500/800	1,4 / 0,7	31	**1,09**
1800 x 1600	HCV500/600	2x 1,4 / 2x 0,7	23	**0,91**
1800 x 1600	HCV500/350	2x 1,4 / 2x 0,7	13	**0,57**
1800 x 1700	HCV500/1000	1,4 / 0,7	36	**1,30**
1800 x 1700	HCV500/800	1,4 / 0,7	29	**1,15**
1800 x 1700	HCV500/600	2x 1,4 / 2x 0,7	22	**0,97**
1800 x 1700	HCV500/350	2x 1,4 / 2x 0,7	12	**0,61**
1800 x 1800	HCV500/1000	1,4 / 0,7	34	**1,37**
1800 x 1800	HCV500/800	1,4 / 0,7	27	**1,21**
1800 x 1800	HCV500/600	2x 1,4 / 2x 0,7	20	**1,03**
1800 x 1800	HCV500/350	2x 1,4 / 2x 0,7	12	**0,64**
1800 x 1900	HCV500/1000	1,4 / 0,7	32	**1,45**
1800 x 1900	HCV500/800	1,4 / 0,7	26	**1,28**
1800 x 1900	HCV500/600	2x 1,4 / 2x 0,7	19	**1,07**
1800 x 1900	HCV500/350	2x 1,4 / 2x 0,7	11	**0,68**
1900 x 800	HCV500/1000	1,4 / 0,7	92	**0,78**
1900 x 800	HCV500/800	1,4 / 0,7	70	**0,72**
1900 x 800	HCV500/600	2x 1,4 / 2x 0,7	51	**0,61**
1900 x 800	HCV500/350	2x 1,4 / 2x 0,7	29	**0,42**
1900 x 900	HCV500/1000	1,4 / 0,7	78	**0,86**
1900 x 900	HCV500/800	1,4 / 0,7	60	**0,77**
1900 x 900	HCV500/600	2x 1,4 / 2x 0,7	44	**0,66**
1900 x 900	HCV500/350	2x 1,4 / 2x 0,7	25	**0,44**
1900 x 1000	HCV500/1000	1,4 / 0,7	68	**0,92**
1900 x 1000	HCV500/800	1,4 / 0,7	53	**0,82**
1900 x 1000	HCV500/600	2x 1,4 / 2x 0,7	39	**0,70**
1900 x 1000	HCV500/350	2x 1,4 / 2x 0,7	22	**0,47**
1900 x 1100	HCV500/1000	1,4 / 0,7	60	**0,99**
1900 x 1100	HCV500/800	1,4 / 0,7	47	**0,88**
1900 x 1100	HCV500/600	2x 1,4 / 2x 0,7	35	**0,74**
1900 x 1100	HCV500/350	2x 1,4 / 2x 0,7	20	**0,50**
1900 x 1200	HCV500/1000	1,4 / 0,7	54	**1,04**
1900 x 1200	HCV500/800	1,4 / 0,7	43	**0,93**
1900 x 1200	HCV500/600	2x 1,4 / 2x 0,7	32	**0,78**
1900 x 1200	HCV500/350	2x 1,4 / 2x 0,7	18	**0,51**
1900 x 1300	HCV500/1000	1,4 / 0,7	49	**1,11**
1900 x 1300	HCV500/800	1,4 / 0,7	39	**0,99**
1900 x 1300	HCV500/600	2x 1,4 / 2x 0,7	29	**0,82**
1900 x 1300	HCV500/350	2x 1,4 / 2x 0,7	17	**0,53**
1900 x 1400	HCV500/1000	1,4 / 0,7	45	**1,17**
1900 x 1400	HCV500/800	1,4 / 0,7	36	**1,04**
1900 x 1400	HCV500/600	2x 1,4 / 2x 0,7	27	**0,86**
1900 x 1400	HCV500/350	2x 1,4 / 2x 0,7	15	**0,55**

(*) 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-. HCVA 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.

mcr OSO THERM 75 | Outward-opening smoke exhaust windows

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

WINDOW SIZE B' x H'	ACTUATOR	POWER CONSUMPTION FOR 24 V- / 48 V-***	OPENING ANGLE**	ACTIVE AERODYNAMIC AREA [Aa]
[mm]	-	[A]	[°]	[m²]
1900 x 1500	HCV500/1000	1,4 / 0,7	42	**1,24**
1900 x 1500	HCV500/800	1,4 / 0,7	33	**1,09**
1900 x 1500	HCV500/600	2x 1,4 / 2x 0,7	25	**0,91**
1900 x 1500	HCV500/350	2x 1,4 / 2x 0,7	14	**0,57**
1900 x 1600	HCV500/1000	1,4 / 0,7	39	**1,31**
1900 x 1600	HCV500/800	1,4 / 0,7	31	**1,15**
1900 x 1600	HCV500/600	2x 1,4 / 2x 0,7	23	**0,96**
1900 x 1600	HCV500/350	2x 1,4 / 2x 0,7	13	**0,60**
1900 x 1700	HCV500/1000	1,4 / 0,7	36	**1,37**
1900 x 1700	HCV500/800	1,4 / 0,7	29	**1,22**
1900 x 1700	HCV500/600	2x 1,4 / 2x 0,7	22	**1,02**
1900 x 1700	HCV500/350	2x 1,4 / 2x 0,7	12	**0,63**
1900 x 1800	HCV500/1000	1,4 / 0,7	34	**1,44**
1900 x 1800	HCV500/800	1,4 / 0,7	27	**1,28**
1900 x 1800	HCV500/600	2x 1,4 / 2x 0,7	20	**1,08**
1900 x 1800	HCV500/350	2x 1,4 / 2x 0,7	12	**0,67**
2000 x 800	HCV500/800	2x 1,4 / 2x 0,7	70	**0,75**
2000 x 800	HCV500/600	2x 1,4 / 2x 0,7	51	**0,64**
2000 x 800	HCV500/350	2x 1,4 / 2x 0,7	29	**0,44**
2000 x 900	HCV500/1000	1,4 / 0,7	78	**0,91**
2000 x 900	HCV500/800	2x 1,4 / 2x 0,7	60	**0,81**
2000 x 900	HCV500/600	2x 1,4 / 2x 0,7	44	**0,69**
2000 x 900	HCV500/350	2x 1,4 / 2x 0,7	25	**0,46**
2000 x 1000	HCV500/1000	1,4 / 0,7	68	**0,98**
2000 x 1000	HCV500/800	2x 1,4 / 2x 0,7	53	**0,87**
2000 x 1000	HCV500/600	2x 1,4 / 2x 0,7	39	**0,74**
2000 x 1000	HCV500/350	2x 1,4 / 2x 0,7	22	**0,49**
2000 x 1100	HCV500/1000	1,4 / 0,7	60	**1,04**
2000 x 1100	HCV500/800	2x 1,4 / 2x 0,7	47	**0,92**
2000 x 1100	HCV500/600	2x 1,4 / 2x 0,7	35	**0,77**
2000 x 1100	HCV500/350	2x 1,4 / 2x 0,7	20	**0,53**
2000 x 1200	HCV500/1000	1,4 / 0,7	54	**1,10**
2000 x 1200	HCV500/800	2x 1,4 / 2x 0,7	43	**0,98**
2000 x 1200	HCV500/600	2x 1,4 / 2x 0,7	32	**0,82**
2000 x 1200	HCV500/350	2x 1,4 / 2x 0,7	18	**0,54**
2000 x 1300	HCV500/1000	1,4 / 0,7	49	**1,17**
2000 x 1300	HCV500/800	2x 1,4 / 2x 0,7	39	**1,04**
2000 x 1300	HCV500/600	2x 1,4 / 2x 0,7	29	**0,86**
2000 x 1300	HCV500/350	2x 1,4 / 2x 0,7	17	**0,56**
2000 x 1400	HCV500/1000	1,4 / 0,7	45	**1,23**
2000 x 1400	HCV500/800	2x 1,4 / 2x 0,7	36	**1,09**
2000 x 1400	HCV500/600	2x 1,4 / 2x 0,7	27	**0,90**
2000 x 1400	HCV500/350	2x 1,4 / 2x 0,7	15	**0,57**
2000 x 1500	HCV500/1000	1,4 / 0,7	42	**1,30**
2000 x 1500	HCV500/800	2x 1,4 / 2x 0,7	33	**1,15**
2000 x 1500	HCV500/600	2x 1,4 / 2x 0,7	25	**0,95**
2000 x 1500	HCV500/350	2x 1,4 / 2x 0,7	14	**0,60**
2000 x 1600	HCV500/1000	1,4 / 0,7	39	**1,37**
2000 x 1600	HCV500/800	2x 1,4 / 2x 0,7	31	**1,21**
2000 x 1600	HCV500/600	2x 1,4 / 2x 0,7	23	**1,01**

(*) 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-. HCVA 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.

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

WINDOW SIZE B' x H'	ACTUATOR	POWER CONSUMPTION FOR 24 V- / 48 V-***	OPENING ANGLE**	ACTIVE AERODYNAMIC AREA [Aa]
[mm]	-	[A]	[°]	[m²]
2000 x 1600	HCV500/350	2x 1,4 / 2x 0,7	13	**0,63**
2000 x 1700	HCV500/1000	1,4 / 0,7	36	**1,44**
2000 x 1700	HCV500/800	2x 1,4 / 2x 0,7	29	**1,28**
2000 x 1700	HCV500/600	2x 1,4 / 2x 0,7	22	**1,07**
2000 x 1700	HCV500/350	2x 1,4 / 2x 0,7	12	**0,66**
2100 x 800	HCV500/800	2x 1,4 / 2x 0,7	70	**0,80**
2100 x 800	HCV500/600	2x 1,4 / 2x 0,7	51	**0,68**
2100 x 800	HCV500/350	2x 1,4 / 2x 0,7	29	**0,46**
2100 x 900	HCV500/800	2x 1,4 / 2x 0,7	60	**0,86**
2100 x 900	HCV500/600	2x 1,4 / 2x 0,7	44	**0,73**
2100 x 900	HCV500/350	2x 1,4 / 2x 0,7	25	**0,49**
2100 x 1000	HCV500/1000	1,4 / 0,7	68	**1,02**
2100 x 1000	HCV500/800	2x 1,4 / 2x 0,7	53	**0,91**
2100 x 1000	HCV500/600	2x 1,4 / 2x 0,7	39	**0,78**
2100 x 1000	HCV500/350	2x 1,4 / 2x 0,7	22	**0,52**
2100 x 1100	HCV500/1000	1,4 / 0,7	60	**1,09**
2100 x 1100	HCV500/800	2x 1,4 / 2x 0,7	47	**0,97**
2100 x 1100	HCV500/600	2x 1,4 / 2x 0,7	35	**0,81**
2100 x 1100	HCV500/350	2x 1,4 / 2x 0,7	20	**0,55**
2100 x 1200	HCV500/1000	1,4 / 0,7	54	**1,16**
2100 x 1200	HCV500/800	2x 1,4 / 2x 0,7	43	**1,03**
2100 x 1200	HCV500/600	2x 1,4 / 2x 0,7	32	**0,86**
2100 x 1200	HCV500/350	2x 1,4 / 2x 0,7	18	**0,56**
2100 x 1300	HCV500/1000	1,4 / 0,7	49	**1,22**

WINDOW SIZE B' x H'	ACTUATOR	POWER CONSUMPTION FOR 24 V- / 48 V-***	OPENING ANGLE**	ACTIVE AERODYNAMIC AREA [Aa]
[mm]	-	[A]	[°]	[m²]
2100 x 1300	HCV500/800	2x 1,4 / 2x 0,7	39	**1,09**
2100 x 1300	HCV500/600	2x 1,4 / 2x 0,7	29	**0,90**
2100 x 1300	HCV500/350	2x 1,4 / 2x 0,7	17	**0,58**
2100 x 1400	HCV500/1000	1,4 / 0,7	45	**1,29**
2100 x 1400	HCV500/800	2x 1,4 / 2x 0,7	36	**1,14**
2100 x 1400	HCV500/600	2x 1,4 / 2x 0,7	27	**0,95**
2100 x 1400	HCV500/350	2x 1,4 / 2x 0,7	15	**0,60**
2100 x 1500	HCV500/1000	1,4 / 0,7	42	**1,37**
2100 x 1500	HCV500/800	2x 1,4 / 2x 0,7	33	**1,20**
2100 x 1500	HCV500/600	2x 1,4 / 2x 0,7	25	**1,00**
2100 x 1500	HCV500/350	2x 1,4 / 2x 0,7	14	**0,62**
2100 x 1600	HCV500/1000	1,4 / 0,7	39	**1,44**
2100 x 1600	HCV500/800	2x 1,4 / 2x 0,7	31	**1,27**
2100 x 1600	HCV500/600	2x 1,4 / 2x 0,7	23	**1,06**
2100 x 1600	HCV500/350	2x 1,4 / 2x 0,7	13	**0,65**
2200 x 800	HCV500/1000	2x 1,4 / 2x 0,7	92	**0,91**
2200 x 800	HCV500/800	2x 1,4 / 2x 0,7	70	**0,84**
2200 x 800	HCV500/600	2x 1,4 / 2x 0,7	51	**0,71**
2200 x 800	HCV500/350	2x 1,4 / 2x 0,7	29	**0,48**
2200 x 900	HCV500/1000	2x 1,4 / 2x 0,7	78	**1,00**
2200 x 900	HCV500/800	2x 1,4 / 2x 0,7	60	**0,90**
2200 x 900	HCV500/600	2x 1,4 / 2x 0,7	44	**0,76**
2200 x 900	HCV500/350	2x 1,4 / 2x 0,7	25	**0,51**
2200 x 1000	HCV500/1000	2x 1,4 / 2x 0,7	68	**1,08**
2200 x 1000	HCV500/800	2x 1,4 / 2x 0,7	53	**0,96**
2200 x 1000	HCV500/600	2x 1,4 / 2x 0,7	39	**0,81**
2200 x 1000	HCV500/350	2x 1,4 / 2x 0,7	22	**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-. HCVA 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.

mcr OSO THERM 75 | Outward-opening smoke exhaust windows

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

WINDOW SIZE B' x H'	ACTUATOR	POWER CONSUMPTION FOR 24 V- / 48 V-***	OPENING ANGLE**	ACTIVE AERODYNAMIC AREA [Aa]
[mm]	-	[A]	[°]	[m²]
2200 x 1100	HCV500/1000	2x 1,4 / 2x 0,7	60	**1,15**
2200 x 1100	HCV500/800	2x 1,4 / 2x 0,7	47	**1,02**
2200 x 1100	HCV500/600	2x 1,4 / 2x 0,7	35	**0,85**
2200 x 1100	HCV500/350	2x 1,4 / 2x 0,7	20	**0,58**
2200 x 1200	HCV500/1000	2x 1,4 / 2x 0,7	54	**1,21**
2200 x 1200	HCV500/800	2x 1,4 / 2x 0,7	43	**1,08**
2200 x 1200	HCV500/600	2x 1,4 / 2x 0,7	32	**0,89**
2200 x 1200	HCV500/350	2x 1,4 / 2x 0,7	18	**0,59**
2200 x 1300	HCV500/1000	2x 1,4 / 2x 0,7	49	**1,28**
2200 x 1300	HCV500/800	2x 1,4 / 2x 0,7	39	**1,14**
2200 x 1300	HCV500/600	2x 1,4 / 2x 0,7	29	**0,94**
2200 x 1300	HCV500/350	2x 1,4 / 2x 0,7	17	**0,60**
2200 x 1400	HCV500/1000	2x 1,4 / 2x 0,7	45	**1,36**
2200 x 1400	HCV500/800	2x 1,4 / 2x 0,7	36	**1,20**
2200 x 1400	HCV500/600	2x 1,4 / 2x 0,7	27	**0,99**
2200 x 1400	HCV500/350	2x 1,4 / 2x 0,7	15	**0,63**
2200 x 1500	HCV500/1000	2x 1,4 / 2x 0,7	42	**1,43**
2200 x 1500	HCV500/800	2x 1,4 / 2x 0,7	33	**1,26**
2200 x 1500	HCV500/600	2x 1,4 / 2x 0,7	25	**1,04**
2200 x 1500	HCV500/350	2x 1,4 / 2x 0,7	14	**0,65**
2200 x 1600	HCV500/1000	2x 1,4 / 2x 0,7	39	**1,51**
2200 x 1600	HCV500/800	2x 1,4 / 2x 0,7	31	**1,32**
2200 x 1600	HCV500/600	2x 1,4 / 2x 0,7	23	**1,10**
2200 x 1600	HCV500/350	2x 1,4 / 2x 0,7	13	**0,68**
2300 x 800	HCV500/1000	2x 1,4 / 2x 0,7	92	**0,95**

WINDOW SIZE B' x H'	ACTUATOR	POWER CONSUMPTION FOR 24 V- / 48 V-***	OPENING ANGLE**	ACTIVE AERODYNAMIC AREA [Aa]
[mm]	-	[A]	[°]	[m²]
2300 x 800	HCV500/800	2x 1,4 / 2x 0,7	70	**0,87**
2300 x 800	HCV500/600	2x 1,4 / 2x 0,7	51	**0,74**
2300 x 800	HCV500/350	2x 1,4 / 2x 0,7	29	**0,50**
2300 x 900	HCV500/1000	2x 1,4 / 2x 0,7	78	**1,05**
2300 x 900	HCV500/800	2x 1,4 / 2x 0,7	60	**0,94**
2300 x 900	HCV500/600	2x 1,4 / 2x 0,7	44	**0,80**
2300 x 900	HCV500/350	2x 1,4 / 2x 0,7	25	**0,53**
2300 x 1000	HCV500/1000	2x 1,4 / 2x 0,7	68	**1,13**
2300 x 1000	HCV500/800	2x 1,4 / 2x 0,7	53	**1,00**
2300 x 1000	HCV500/600	2x 1,4 / 2x 0,7	39	**0,85**
2300 x 1000	HCV500/350	2x 1,4 / 2x 0,7	22	**0,57**
2300 x 1100	HCV500/1000	2x 1,4 / 2x 0,7	60	**1,20**
2300 x 1100	HCV500/800	2x 1,4 / 2x 0,7	47	**1,06**
2300 x 1100	HCV500/600	2x 1,4 / 2x 0,7	35	**0,89**
2300 x 1100	HCV500/350	2x 1,4 / 2x 0,7	20	**0,60**
2300 x 1200	HCV500/1000	2x 1,4 / 2x 0,7	54	**1,27**
2300 x 1200	HCV500/800	2x 1,4 / 2x 0,7	43	**1,13**
2300 x 1200	HCV500/600	2x 1,4 / 2x 0,7	32	**0,93**
2300 x 1200	HCV500/350	2x 1,4 / 2x 0,7	18	**0,61**
2300 x 1300	HCV500/1000	2x 1,4 / 2x 0,7	49	**1,34**
2300 x 1300	HCV500/800	2x 1,4 / 2x 0,7	39	**1,20**
2300 x 1300	HCV500/600	2x 1,4 / 2x 0,7	29	**0,98**
2300 x 1300	HCV500/350	2x 1,4 / 2x 0,7	17	**0,63**
2300 x 1400	HCV500/1000	2x 1,4 / 2x 0,7	45	**1,42**
2300 x 1400	HCV500/800	2x 1,4 / 2x 0,7	36	**1,25**
2300 x 1400	HCV500/600	2x 1,4 / 2x 0,7	27	**1,03**
2300 x 1400	HCV500/350	2x 1,4 / 2x 0,7	15	**0,65**

(*) 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-. HCVA 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.

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

WINDOW SIZE B' x H'	ACTUATOR	POWER CONSUMPTION FOR 24 V- / 48 V-***	OPENING ANGLE**	ACTIVE AERODYNAMIC AREA [Aa]
[mm]	-	[A]	[°]	[m²]
2300 x 1500	HCV500/1000	2x 1,4 / 2x 0,7	42	1,49
2300 x 1500	HCV500/800	2x 1,4 / 2x 0,7	33	1,31
2300 x 1500	HCV500/600	2x 1,4 / 2x 0,7	25	1,08
2300 x 1500	HCV500/350	2x 1,4 / 2x 0,7	14	0,67
2400 x 800	HCV500/1000	2x 1,4 / 2x 0,7	92	0,99
2400 x 800	HCV500/800	2x 1,4 / 2x 0,7	70	0,92
2400 x 800	HCV500/600	2x 1,4 / 2x 0,7	51	0,78
2400 x 800	HCV500/350	2x 1,4 / 2x 0,7	29	0,53
2400 x 900	HCV500/1000	2x 1,4 / 2x 0,7	78	1,10
2400 x 900	HCV500/800	2x 1,4 / 2x 0,7	60	0,99
2400 x 900	HCV500/600	2x 1,4 / 2x 0,7	44	0,84
2400 x 900	HCV500/350	2x 1,4 / 2x 0,7	25	0,56
2400 x 1000	HCV500/1000	2x 1,4 / 2x 0,7	68	1,18
2400 x 1000	HCV500/800	2x 1,4 / 2x 0,7	53	1,05
2400 x 1000	HCV500/600	2x 1,4 / 2x 0,7	39	0,89
2400 x 1000	HCV500/350	2x 1,4 / 2x 0,7	22	0,59
2400 x 1100	HCV500/1000	2x 1,4 / 2x 0,7	60	1,25
2400 x 1100	HCV500/800	2x 1,4 / 2x 0,7	47	1,11
2400 x 1100	HCV500/600	2x 1,4 / 2x 0,7	35	0,93
2400 x 1100	HCV500/350	2x 1,4 / 2x 0,7	20	0,62
2400 x 1200	HCV500/1000	2x 1,4 / 2x 0,7	54	1,33
2400 x 1200	HCV500/800	2x 1,4 / 2x 0,7	43	1,18
2400 x 1200	HCV500/600	2x 1,4 / 2x 0,7	32	0,98
2400 x 1200	HCV500/350	2x 1,4 / 2x 0,7	18	0,64
2400 x 1300	HCV500/1000	2x 1,4 / 2x 0,7	49	1,40
2400 x 1300	HCV500/800	2x 1,4 / 2x 0,7	39	1,25
2400 x 1300	HCV500/600	2x 1,4 / 2x 0,7	29	1,03
2400 x 1300	HCV500/350	2x 1,4 / 2x 0,7	17	0,65

WINDOW SIZE B' x H'	ACTUATOR	POWER CONSUMPTION FOR 24 V- / 48 V-***	OPENING ANGLE**	ACTIVE AERODYNAMIC AREA [Aa]
[mm]	-	[A]	[°]	[m²]
2400 x 1400	HCV500/1000	2x 1,4 / 2x 0,7	45	1,48
2400 x 1400	HCV500/800	2x 1,4 / 2x 0,7	36	1,30
2400 x 1400	HCV500/600	2x 1,4 / 2x 0,7	27	1,07
2400 x 1400	HCV500/350	2x 1,4 / 2x 0,7	15	0,67
2500 x 800	HCV500/1000	2x 1,4 / 2x 0,7	92	1,04
2500 x 800	HCV500/800	2x 1,4 / 2x 0,7	70	0,96
2500 x 800	HCV500/600	2x 1,4 / 2x 0,7	51	0,81
2500 x 800	HCV500/350	2x 1,4 / 2x 0,7	29	0,55
2500 x 900	HCV500/1000	2x 1,4 / 2x 0,7	78	1,15
2500 x 900	HCV500/800	2x 1,4 / 2x 0,7	60	1,03
2500 x 900	HCV500/600	2x 1,4 / 2x 0,7	44	0,87
2500 x 900	HCV500/350	2x 1,4 / 2x 0,7	25	0,58
2500 x 1000	HCV500/1000	2x 1,4 / 2x 0,7	68	1,23
2500 x 1000	HCV500/800	2x 1,4 / 2x 0,7	53	1,09
2500 x 1000	HCV500/600	2x 1,4 / 2x 0,7	39	0,93
2500 x 1000	HCV500/350	2x 1,4 / 2x 0,7	22	0,61
2500 x 1100	HCV500/1000	2x 1,4 / 2x 0,7	60	1,31
2500 x 1100	HCV500/800	2x 1,4 / 2x 0,7	47	1,16
2500 x 1100	HCV500/600	2x 1,4 / 2x 0,7	35	0,97
2500 x 1100	HCV500/350	2x 1,4 / 2x 0,7	20	0,65
2500 x 1200	HCV500/1000	2x 1,4 / 2x 0,7	54	1,38
2500 x 1200	HCV500/800	2x 1,4 / 2x 0,7	43	1,23
2500 x 1200	HCV500/600	2x 1,4 / 2x 0,7	32	1,02
2500 x 1200	HCV500/350	2x 1,4 / 2x 0,7	18	0,66
2500 x 1300	HCV500/1000	2x 1,4 / 2x 0,7	49	1,46
2500 x 1300	HCV500/800	2x 1,4 / 2x 0,7	39	1,30
2500 x 1300	HCV500/600	2x 1,4 / 2x 0,7	29	1,06
2500 x 1300	HCV500/350	2x 1,4 / 2x 0,7	17	0,68
2500 x 1400	HCV500/1000	2x 1,4 / 2x 0,7	45	1,54

(*) 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-. HCVA 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.

mcr OSO THERM 75 | Outward-opening smoke exhaust windows

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

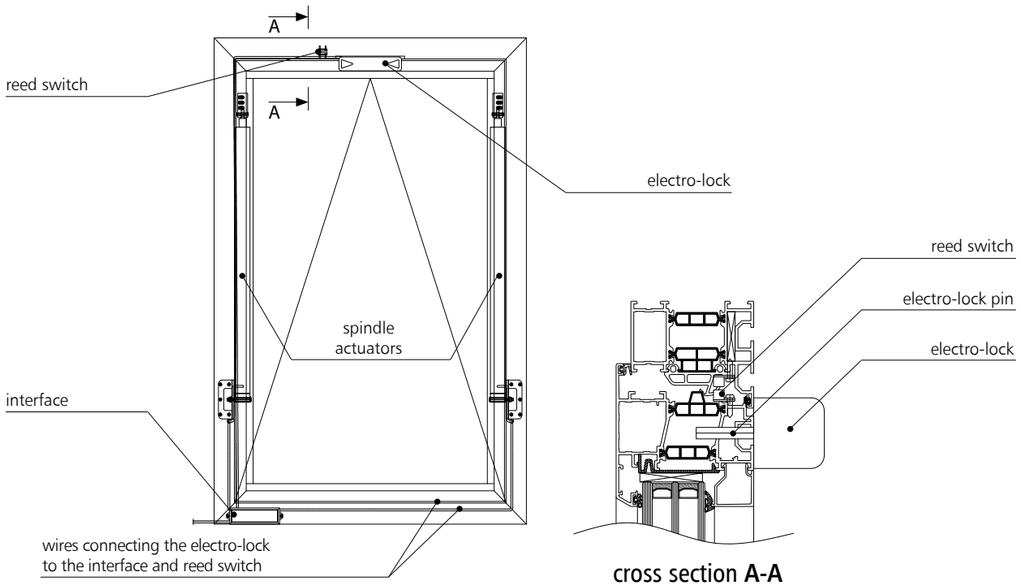
WINDOW SIZE B' x H'	ACTUATOR	POWER CONSUMPTION FOR 24 V- / 48 V-***	OPENING ANGLE**	ACTIVE AERODYNAMIC AREA [Aa]
[mm]	-	[A]	[°]	[m²]
2500 x 1400	HCV500/800	2x 1,4 / 2x 0,7	36	1,35
2500 x 1400	HCV500/600	2x 1,4 / 2x 0,7	27	1,12
2500 x 1400	HCV500/350	2x 1,4 / 2x 0,7	15	0,70
2600 x 800	HCV500/1000	2x 1,4 / 2x 0,7	92	1,08
2600 x 800	HCV500/800	2x 1,4 / 2x 0,7	70	0,99
2600 x 800	HCV500/600	2x 1,4 / 2x 0,7	51	0,84
2600 x 800	HCV500/350	2x 1,4 / 2x 0,7	29	0,57
2600 x 900	HCV500/1000	2x 1,4 / 2x 0,7	78	1,20
2600 x 900	HCV500/800	2x 1,4 / 2x 0,7	60	1,07
2600 x 900	HCV500/600	2x 1,4 / 2x 0,7	44	0,91
2600 x 900	HCV500/350	2x 1,4 / 2x 0,7	25	0,60
2600 x 1000	HCV500/1000	2x 1,4 / 2x 0,7	68	1,28
2600 x 1000	HCV500/800	2x 1,4 / 2x 0,7	53	1,14
2600 x 1000	HCV500/600	2x 1,4 / 2x 0,7	39	0,97
2600 x 1000	HCV500/350	2x 1,4 / 2x 0,7	22	0,64
2600 x 1100	HCV500/1000	2x 1,4 / 2x 0,7	60	1,37
2600 x 1100	HCV500/800	2x 1,4 / 2x 0,7	47	1,21
2600 x 1100	HCV500/600	2x 1,4 / 2x 0,7	35	1,01
2600 x 1100	HCV500/350	2x 1,4 / 2x 0,7	20	0,68
2600 x 1200	HCV500/1000	2x 1,4 / 2x 0,7	54	1,44
2600 x 1200	HCV500/800	2x 1,4 / 2x 0,7	43	1,28
2600 x 1200	HCV500/600	2x 1,4 / 2x 0,7	32	1,05
2600 x 1200	HCV500/350	2x 1,4 / 2x 0,7	18	0,69
2600 x 1300	HCV500/1000	2x 1,4 / 2x 0,7	49	1,52
2600 x 1300	HCV500/800	2x 1,4 / 2x 0,7	39	1,35
2600 x 1300	HCV500/600	2x 1,4 / 2x 0,7	29	1,10
2600 x 1300	HCV500/350	2x 1,4 / 2x 0,7	17	0,70
2700 x 800	HCV500/1000	2x 1,4 / 2x 0,7	92	1,13
2700 x 800	HCV500/800	2x 1,4 / 2x 0,7	70	1,04
2700 x 800	HCV500/600	2x 1,4 / 2x 0,7	51	0,88
2700 x 800	HCV500/350	2x 1,4 / 2x 0,7	29	0,59

WINDOW SIZE B' x H'	ACTUATOR	POWER CONSUMPTION FOR 24 V- / 48 V-***	OPENING ANGLE**	ACTIVE AERODYNAMIC AREA [Aa]
[mm]	-	[A]	[°]	[m²]
2700 x 900	HCV500/1000	2x 1,4 / 2x 0,7	78	1,25
2700 x 900	HCV500/800	2x 1,4 / 2x 0,7	60	1,11
2700 x 900	HCV500/600	2x 1,4 / 2x 0,7	44	0,94
2700 x 900	HCV500/350	2x 1,4 / 2x 0,7	25	0,63
2700 x 1000	HCV500/1000	2x 1,4 / 2x 0,7	68	1,34
2700 x 1000	HCV500/800	2x 1,4 / 2x 0,7	53	1,19
2700 x 1000	HCV500/600	2x 1,4 / 2x 0,7	39	1,00
2700 x 1000	HCV500/350	2x 1,4 / 2x 0,7	22	0,66
2700 x 1100	HCV500/1000	2x 1,4 / 2x 0,7	60	1,42
2700 x 1100	HCV500/800	2x 1,4 / 2x 0,7	47	1,25
2700 x 1100	HCV500/600	2x 1,4 / 2x 0,7	35	1,04
2700 x 1100	HCV500/350	2x 1,4 / 2x 0,7	20	0,70
2700 x 1200	HCV500/1000	2x 1,4 / 2x 0,7	54	1,49
2700 x 1200	HCV500/800	2x 1,4 / 2x 0,7	43	1,33
2700 x 1200	HCV500/600	2x 1,4 / 2x 0,7	32	1,09
2700 x 1200	HCV500/350	2x 1,4 / 2x 0,7	18	0,71
2700 x 1300	HCV500/1000	2x 1,4 / 2x 0,7	49	1,58
2700 x 1300	HCV500/800	2x 1,4 / 2x 0,7	39	1,40
2700 x 1300	HCV500/600	2x 1,4 / 2x 0,7	29	1,15
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.
(**) 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 0.13A 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.

1.1.6 | 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.



B' - window width [mm] \ H' - window height [mm]	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200
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 800x800 mm ÷ 2700x1300 mm, in vertical arrangement 800x800 mm ÷ 1600x2200 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 (Ug=0.5 W / (m^2K)), triple safety glass 4/18/4/18/33.1 (Ug=0.5 W /(m^2K)), double safety glass 4/16/33.1 (Ug= 1.1 W / (m^2K)) or sandwich panel (ALU-PIR-ALU) (Ug=0.66 W/ (m^2K))
» windows joined with each other by means of vertical or horizontal connection sets
» leaf opening angle 10° ÷ 90° (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 71 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 50-71, the value of the active aerodynamic area for these dimensions is calculated by linear interpolation
» possibility of painting profiles in any RAL colour; structural or wood imitation colour
» possibility of making bi-colour 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

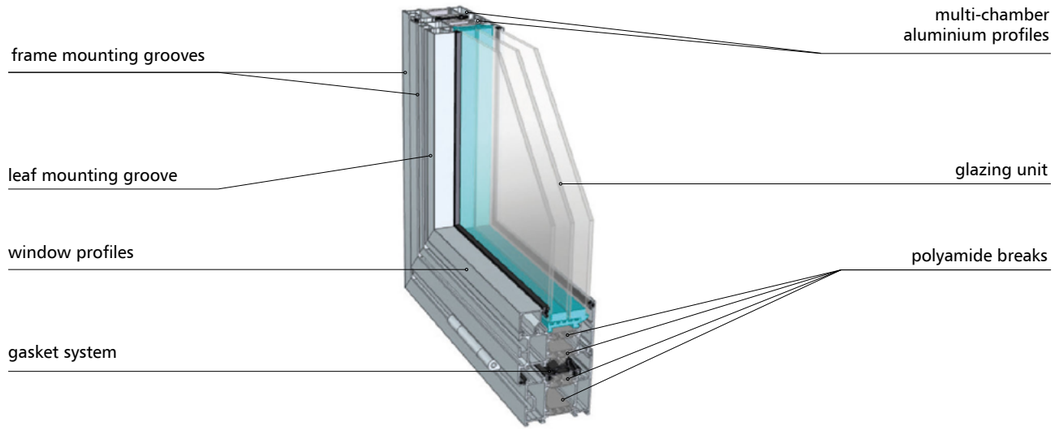


Fig.48 - cross-section through the profile of an inward-opening smoke exhaust window

1.2.3 | Types of inward-opening smoke exhaust windows

» bottom hung inward-opening windows

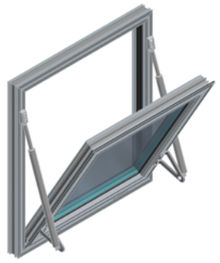


Fig.49 - mcr OSO THERM 75 smoke exhaust window with two S spindle actuators

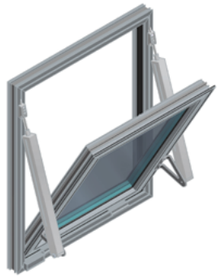


Fig.50 - mcr OSO THERM 75 smoke exhaust window with two G spindle actuators

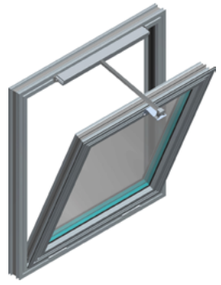


Fig.51 - mcr OSO THERM 75 smoke exhaust window with HCV chain actuator

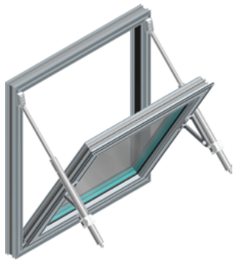


Fig.52 - mcr OSO THERM 75 smoke exhaust window with two S spindle actuators with shifted pivot point

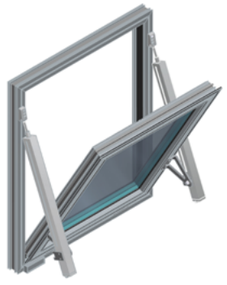


Fig.53 - mcr OSO THERM 75 smoke exhaust window with two G spindle actuators with shifted pivot point

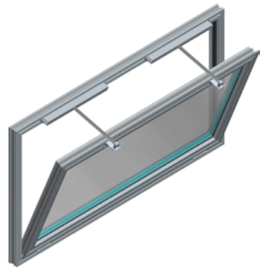


Fig.54 - mcr OSO THERM 75 smoke exhaust window with two HCV chain actuators

» top hung inward-opening windows

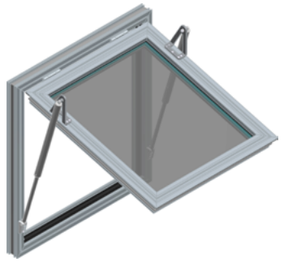


Fig.55 - mcr OSO THERM 75 smoke exhaust window with two S spindle actuators

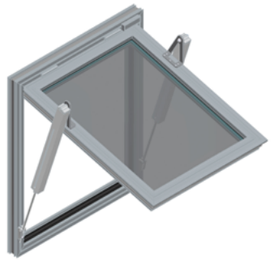


Fig.56 - mcr OSO THERM 75 smoke exhaust window with two G spindle actuators

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

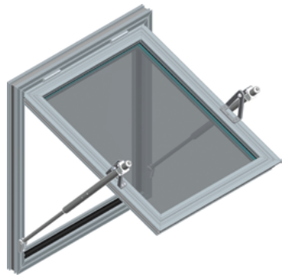


Fig.58 - mcr OSO THERM 75 smoke exhaust window with two S spindle actuators with shifted pivot point

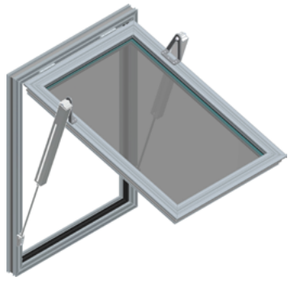


Fig.59 - mcr OSO THERM 75 smoke exhaust window with two G spindle actuators with shifted pivot point

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

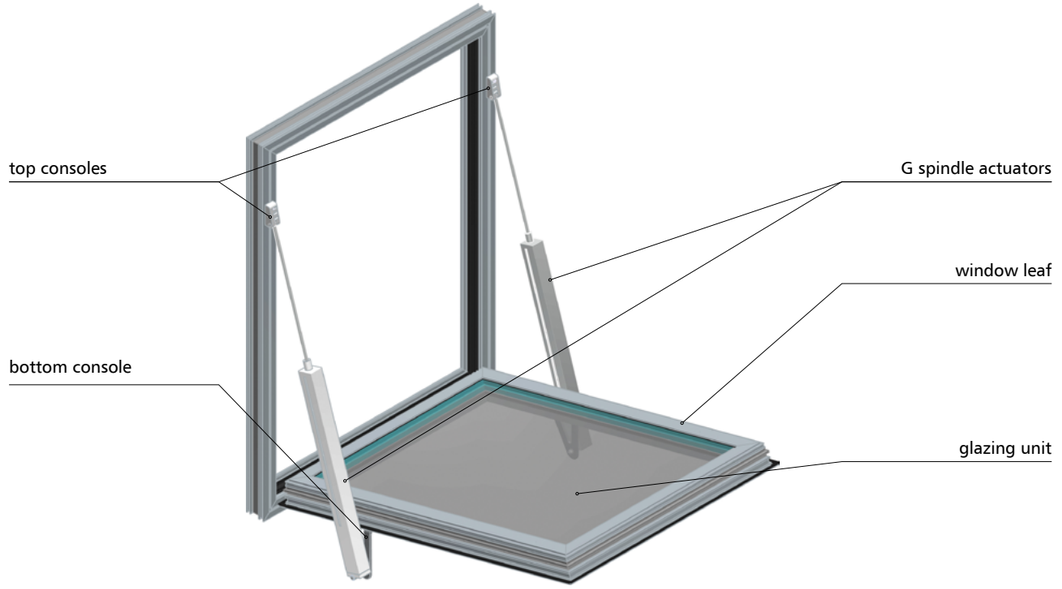


Fig.61 - mcr OSO THERM 75 smoke exhaust window opening inwards by means of two spindle actuators

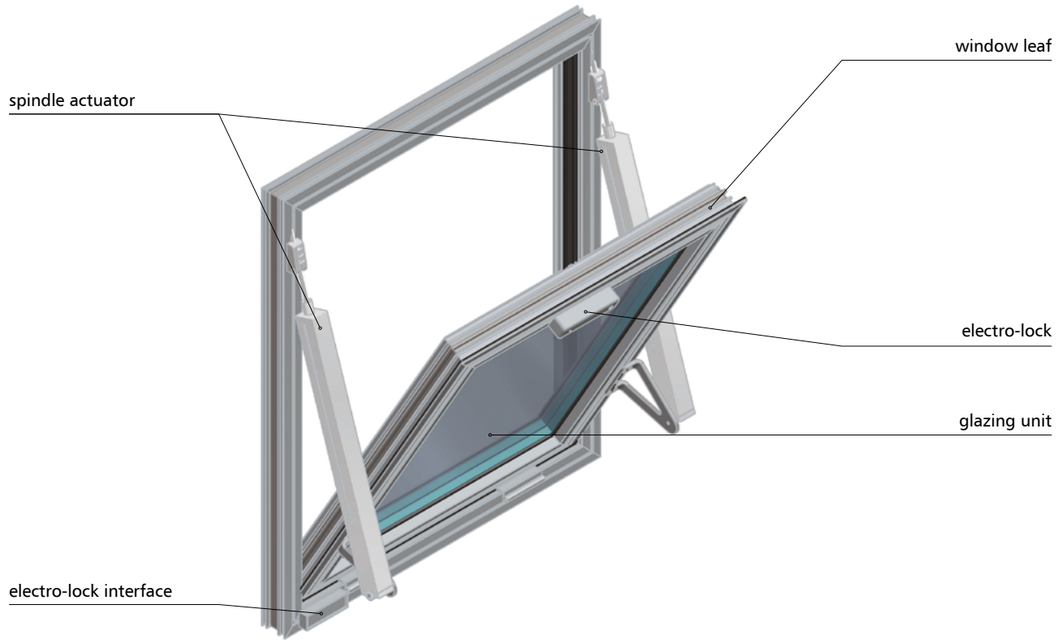


Fig.62 - mcr OSO THERM 75 smoke exhaust window opening inwards by means of two G spindle actuators with electro-lock and interface

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

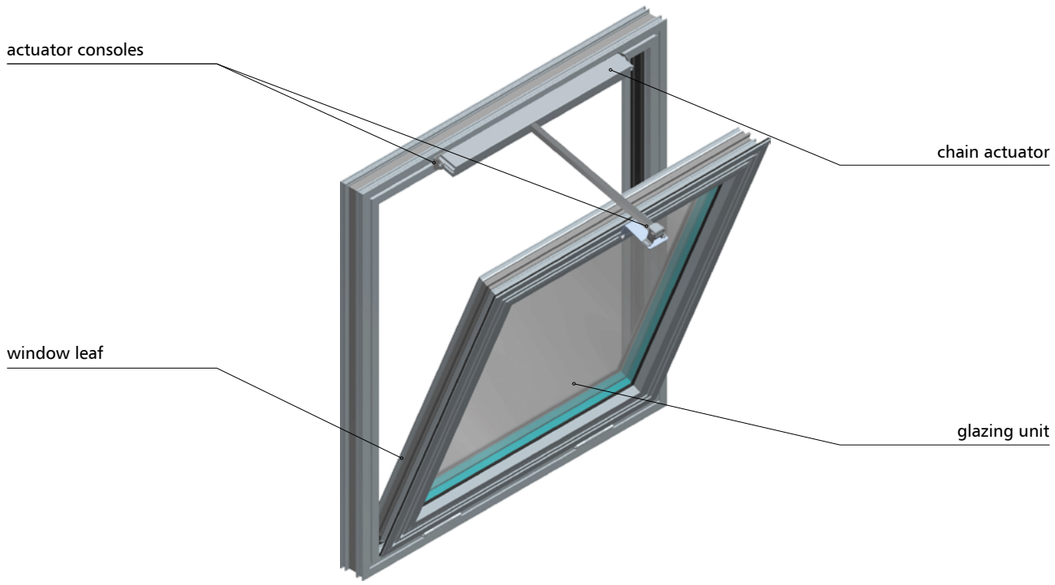


Fig.63 - mcr OSO THERM 75 smoke exhaust window opening inwards by means of single HCV chain actuator

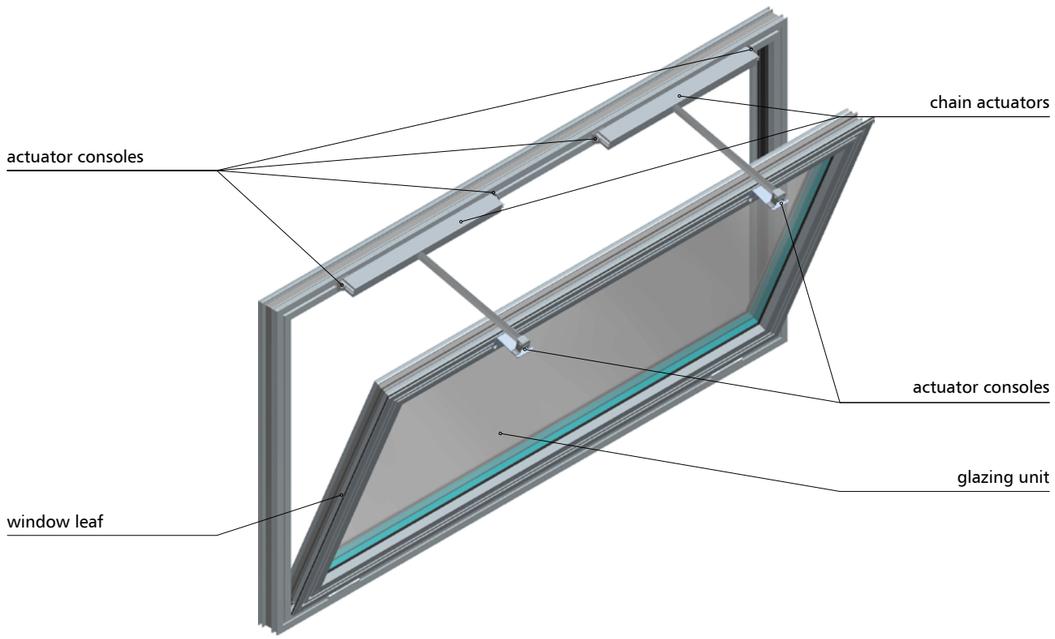


Fig.64 - mcr OSO THERM 75 smoke exhaust window opening inwards by means of double HCV chain actuators

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

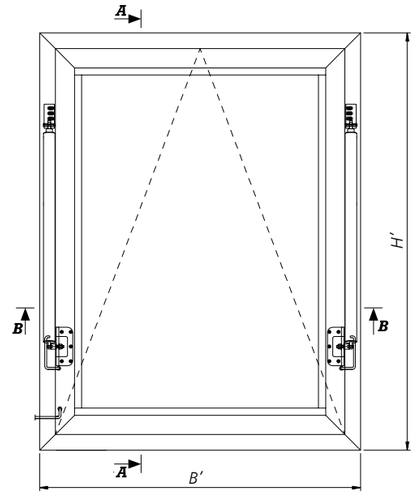


Fig.65 - view from inside of the mcr OSO THERM 75 smoke exhaust window with S spindle actuators in closed position

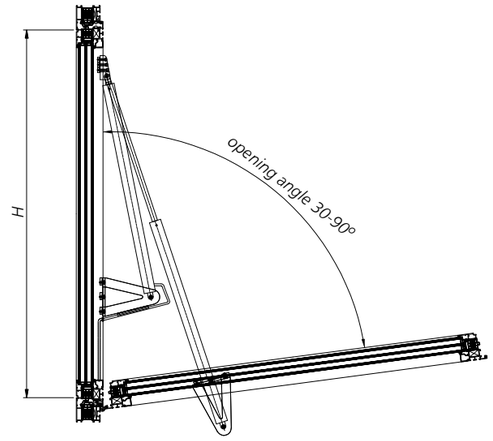


Fig.66 - A-A vertical cross-section through mcr OSO THERM 75 smoke exhaust window in open position

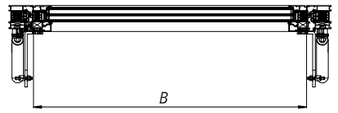


Fig.67 - B-B horizontal cross-section through mcr OSO THERM 75 smoke exhaust window in closed position

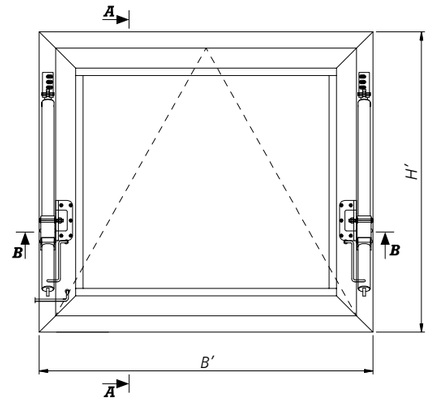


Fig.68 - view from inside of the mcr OSO THERM 75 smoke exhaust window with S spindle actuators with shifted pivot point in closed position

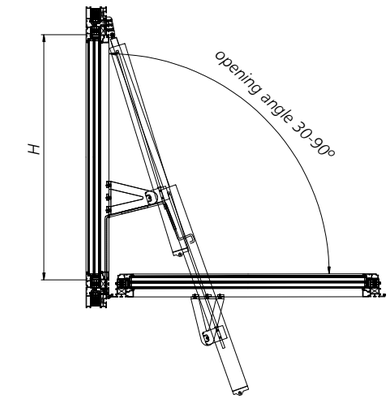


Fig. 69 - A-A vertical cross-section through mcr OSO THERM 75 smoke exhaust window with shifted pivot point in open position

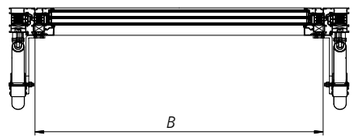


Fig.70 - B-B horizontal cross-section through mcr OSO THERM 75 smoke exhaust window in closed position

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

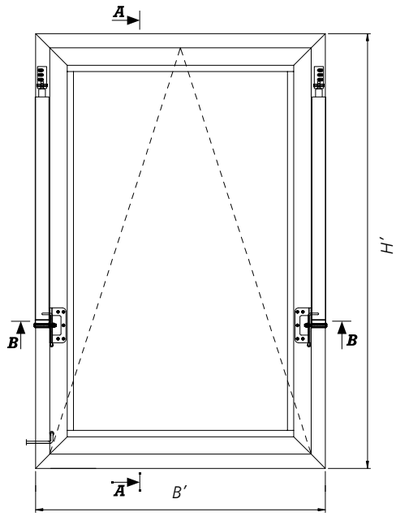


Fig.71 - view from inside of the mcr OSO THERM 75 smoke exhaust window with G spindle actuators in closed position

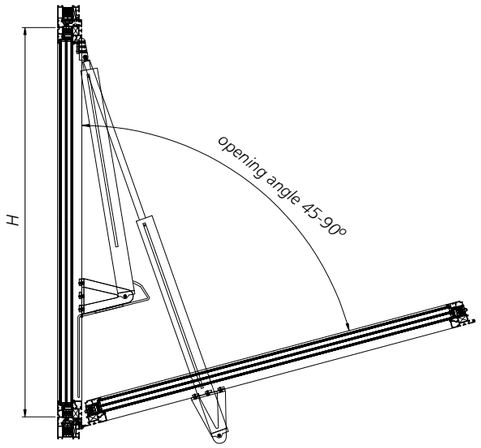


Fig.72 - A-A vertical cross-section through mcr OSO THERM 75 smoke exhaust window in open position

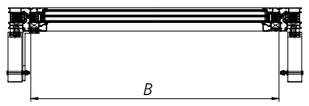


Fig.73 - B-B horizontal cross-section through mcr OSO THERM 75 smoke exhaust window in closed position

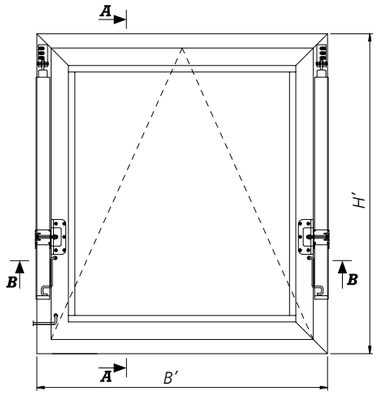


Fig.74 - view from inside of the mcr OSO THERM 75 smoke exhaust window with G spindle actuators with shifted pivot point in closed position

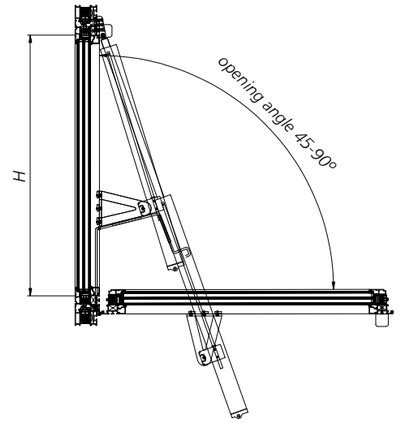


Fig.75 - A-A vertical cross-section through mcr OSO THERM 75 smoke exhaust window with shifted pivot point in open position

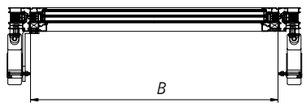


Fig.76 - B-B horizontal cross-section through mcr OSO THERM 75 smoke exhaust window with shifted pivot point in closed position

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

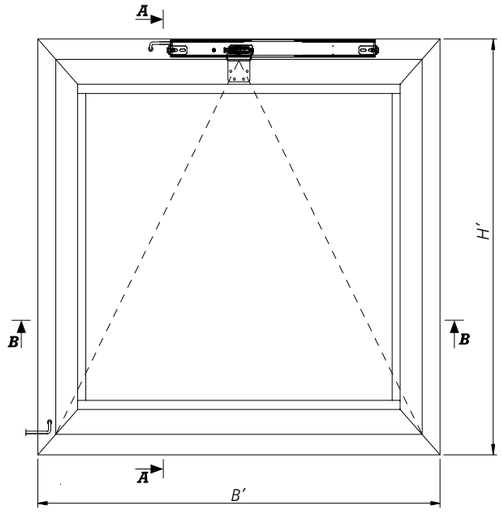


Fig.77 - view from inside of the mcr OSO THERM 75 smoke exhaust window with HCV chain actuator in closed position

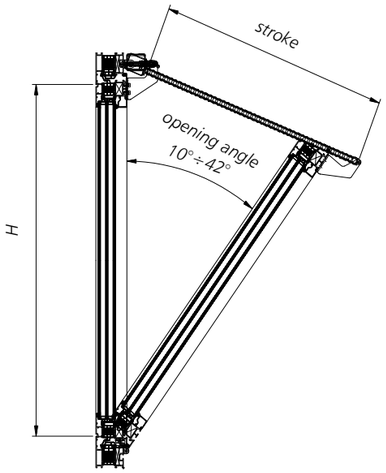


Fig.78 - A-A vertical cross-section through mcr OSO THERM 75 smoke exhaust window in open position

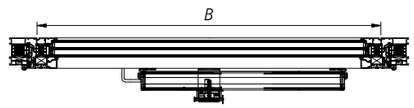


Fig.79 - B-B horizontal cross-section through mcr OSO THERM 75 smoke exhaust window in closed position

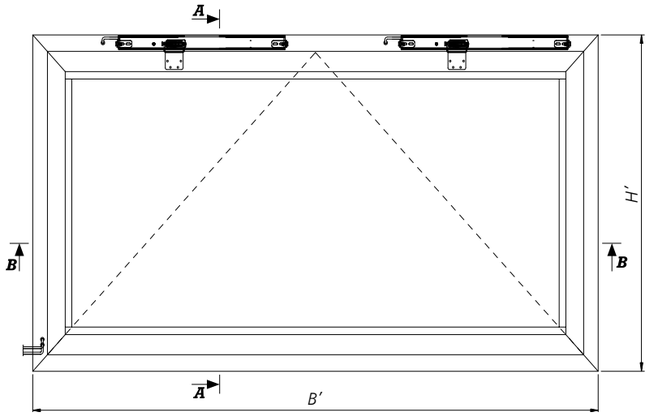


Fig.80 - view from inside of the mcr OSO THERM 75 smoke exhaust window with two HCV chain actuators in closed position

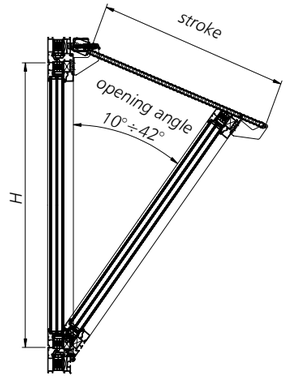


Fig.81 - A-A vertical cross-section through mcr OSO THERM 75 smoke exhaust window in open position

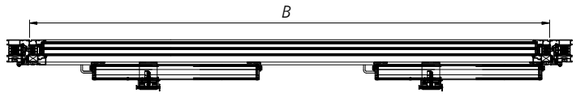


Fig.82 - B-B horizontal cross-section through mcr OSO THERM 75 smoke exhaust window in closed position

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**

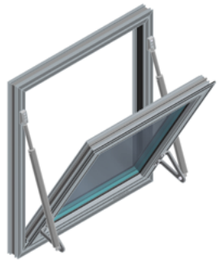


Fig.83 - mcr OSO THERM 75 smoke exhaust window with two S spindle actuators

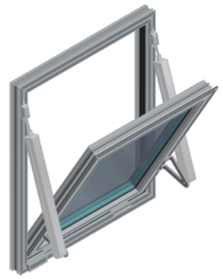


Fig.84 - mcr OSO THERM 75 smoke exhaust window with two G spindle actuators

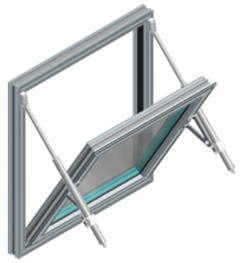


Fig.85 - mcr OSO THERM 75 smoke exhaust window with two S spindle actuators with shifted pivot point

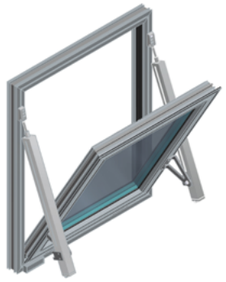


Fig.86 - mcr OSO THERM 75 smoke exhaust window with two G spindle actuators with shifted pivot point

» **top-hung inward-opening windows**

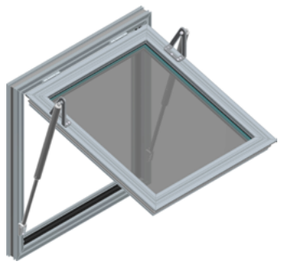


Fig.87 - mcr OSO THERM 75 smoke exhaust window with two S spindle actuators

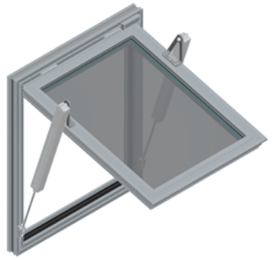


Fig.88 - mcr OSO THERM 75 smoke exhaust window with two G spindle actuators

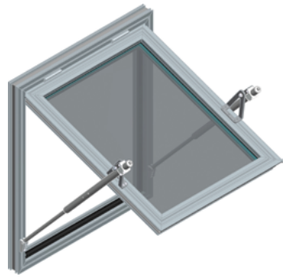


Fig.89 - mcr OSO THERM 75 smoke exhaust window with two G spindle actuators

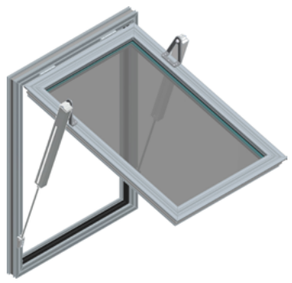


Fig.90 - mcr OSO THERM 75 smoke exhaust window with two G spindle actuators with shifted pivot point

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]	[m²]	-	[A]	[m²]	-	[A]	[m²]	-	[A]	[m²]	-	[A]	[m²]
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**	S08B-200	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-600	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-600	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-600	2x 2,6	**1,02**	G26H-750	2x 2,6	**1,06**	G40H-830	2x 4,0	**1,08**

(*) 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 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]
[mm]	-	[A]	[m²]	-	[A]	[m²]	-	[A]	[m²]
900 x 2100	S10C-450	2x 1,0	**0,85**	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-750	2x 2,6	**1,19**	G40H-830	2x 4,0	**1,23**
1000 x 800	S08B-200	2x 0,8	**0,25**	S10C-400	2x 1,0	**0,39**	S10C-450	2x 1,0	**0,41**
1000 x 900	S08B-200	2x 0,8	**0,29**	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	**0,51**	S10C-450	2x 1,0	**0,54**
1000 x 1100	S08B-200	2x 0,8	**0,38**	S10C-350	2x 1,0	**0,57**	G26H-550	2x 2,6	**0,59**
1000 x 1200	S08B-300	2x 0,8	**0,43**	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-450	2x 1,0	**0,70**	S10C-450	2x 1,0	**0,72**
1000 x 1400	S08B-300	2x 0,8	**0,53**	S10C-450	2x 1,0	**0,76**	G26H-750	2x 2,6	**0,79**
1000 x 1500	S08B-300	2x 0,8	**0,58**	G26H-550	2x 2,6	**0,83**	G26H-750	2x 2,6	**0,86**
1000 x 1600	S10C-350	2x 1,0	**0,64**	G26H-600	2x 2,6	**0,90**	G40H-830	2x 4,0	**0,93**
1000 x 1700	S10C-350	2x 1,0	**0,70**	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-750	2x 2,6	**1,04**	G40H-830	2x 4,0	**1,07**
1000 x 1900	S10C-400	2x 1,0	**0,82**	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-750	2x 2,6	**1,18**	G40H-830	2x 4,0	**1,22**
1000 x 2100	S10C-450	2x 1,0	**0,96**	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-750	2x 2,6	**1,34**	G40H-830	2x 4,0	**1,37**
1100 x 800	S08B-200	2x 0,8	**0,28**	S10C-400	2x 1,0	**0,43**	S10C-450	2x 1,0	**0,46**
1100 x 900	S08B-200	2x 0,8	**0,32**	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	**0,56**	S10C-450	2x 1,0	**0,59**
1100 x 1100	S08B-200	2x 0,8	**0,42**	S10C-350	2x 1,0	**0,63**	G26H-550	2x 2,6	**0,66**
1100 x 1200	S08B-300	2x 0,8	**0,48**	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-450	2x 1,0	**0,78**	G26H-600	2x 2,6	**0,80**
1100 x 1400	S08B-300	2x 0,8	**0,59**	S10C-450	2x 1,0	**0,84**	G26H-750	2x 2,6	**0,88**
1100 x 1500	S08B-300	2x 0,8	**0,65**	G26H-550	2x 2,6	**0,92**	G26H-750	2x 2,6	**0,95**
1100 x 1600	S10C-350	2x 1,0	**0,71**	G26H-600	2x 2,6	**0,99**	G40H-830	2x 4,0	**1,04**
1100 x 1700	S10C-350	2x 1,0	**0,77**	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-750	2x 2,6	**1,15**	G40H-830	2x 4,0	**1,19**

WINDOW SIZE	Opening angle 30°			Opening angle 45°			Opening angle 60°		
B' x H'	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]
900 x 2100	S10C-450	2x 1,0	**0,85**	G26H-600	2x 2,6	**1,00**	G26H-750	2x 2,6	**1,09**
900 x 2200	S10C-450	2x 1,0	**0,91**	G26H-600	2x 2,6	**1,07**	G26H-750	2x 2,6	**1,17**
1000 x 800	S08B-200	2x 0,8	**0,25**	S08B-300	2x 0,8	**0,32**	S08B-300	2x 0,8	**0,37**
1000 x 900	S08B-200	2x 0,8	**0,29**	S08B-300	2x 0,8	**0,37**	S08B-300	2x 0,8	**0,42**
1000 x 1000	S08B-200	2x 0,8	**0,34**	S08B-300	2x 0,8	**0,42**	S10C-400	2x 1,0	**0,48**
1000 x 1100	S08B-200	2x 0,8	**0,38**	S10C-350	2x 1,0	**0,48**	S10C-400	2x 1,0	**0,53**
1000 x 1200	S08B-300	2x 0,8	**0,43**	S08B-300	2x 0,8	**0,53**	S10C-350	2x 1,0	**0,59**
1000 x 1300	S08B-300	2x 0,8	**0,48**	S10C-350	2x 1,0	**0,59**	S10C-400	2x 1,0	**0,65**
1000 x 1400	S08B-300	2x 0,8	**0,53**	S10C-350	2x 1,0	**0,65**	S10C-450	2x 1,0	**0,71**
1000 x 1500	S08B-300	2x 0,8	**0,58**	S10C-400	2x 1,0	**0,71**	S10C-450	2x 1,0	**0,77**
1000 x 1600	S10C-350	2x 1,0	**0,64**	S10C-450	2x 1,0	**0,77**	G26H-550	2x 2,6	**0,84**
1000 x 1700	S10C-350	2x 1,0	**0,70**	S10C-450	2x 1,0	**0,84**	G26H-550	2x 2,6	**0,91**
1000 x 1800	S10C-400	2x 1,0	**0,76**	G26H-550	2x 2,6	**0,91**	G26H-600	2x 2,6	**0,98**
1000 x 1900	S10C-400	2x 1,0	**0,82**	G26H-550	2x 2,6	**0,98**	G26H-600	2x 2,6	**1,06**
1000 x 2000	S10C-450	2x 1,0	**0,88**	G26H-550	2x 2,6	**1,06**	G26H-750	2x 2,6	**1,14**
1000 x 2100	S10C-450	2x 1,0	**0,96**	G26H-600	2x 2,6	**1,13**	G26H-750	2x 2,6	**1,22**
1000 x 2200	S10C-450	2x 1,0	**1,03**	G26H-600	2x 2,6	**1,23**	G26H-750	2x 2,6	**1,30**
1100 x 800	S08B-200	2x 0,8	**0,28**	S08B-300	2x 0,8	**0,36**	S08B-300	2x 0,8	**0,41**
1100 x 900	S08B-200	2x 0,8	**0,32**	S08B-300	2x 0,8	**0,41**	S08B-300	2x 0,8	**0,46**
1100 x 1000	S08B-200	2x 0,8	**0,37**	S08B-300	2x 0,8	**0,46**	S10C-400	2x 1,0	**0,52**
1100 x 1100	S08B-200	2x 0,8	**0,42**	S10C-350	2x 1,0	**0,52**	S10C-400	2x 1,0	**0,59**
1100 x 1200	S08B-300	2x 0,8	**0,48**	S08B-300	2x 0,8	**0,59**	S10C-350	2x 1,0	**0,65**
1100 x 1300	S08B-300	2x 0,8	**0,53**	S10C-350	2x 1,0	**0,65**	S10C-400	2x 1,0	**0,72**
1100 x 1400	S08B-300	2x 0,8	**0,59**	S10C-350	2x 1,0	**0,72**	S10C-450	2x 1,0	**0,79**
1100 x 1500	S08B-300	2x 0,8	**0,65**	S10C-400	2x 1,0	**0,79**	S10C-450	2x 1,0	**0,87**
1100 x 1600	S10C-350	2x 1,0	**0,71**	S10C-450	2x 1,0	**0,87**	G26H-550	2x 2,6	**0,94**
1100 x 1700	S10C-350	2x 1,0	**0,77**	S10C-450	2x 1,0	**0,94**	G26H-550	2x 2,6	**1,01**
1100 x 1800	S10C-400	2x 1,0	**0,84**	S10C-450	2x 1,0	**1,01**	G26H-600	2x 2,6	**1,09**
1200 x 800	S08B-200	2x 0,8	**0,30**	S08B-300	2x 0,8	**0,39**	S08B-300	2x 0,8	**0,44**
1200 x 900	S08B-200	2x 0,8	**0,35**	S08B-300	2x 0,8	**0,44**	S08B-300	2x 0,8	**0,51**
1200 x 1000	S08B-200	2x 0,8	**0,41**	S08B-300	2x 0,8	**0,51**	S10C-400	2x 1,0	**0,58**
1200 x 1100	S08B-200	2x 0,8	**0,46**	S10C-350	2x 1,0	**0,58**	S10C-400	2x 1,0	**0,64**
1200 x 1200	S08B-300	2x 0,8	**0,51**	S08B-300	2x 0,8	**0,64**	S10C-350	2x 1,0	**0,72**
1200 x 1300	S08B-300	2x 0,8	**0,57**	S10C-350	2x 1,0	**0,72**	S10C-400	2x 1,0	**0,79**
1200 x 1400	S08B-300	2x 0,8	**0,63**	S10C-350	2x 1,0	**0,79**	S10C-450	2x 1,0	**0,87**
1200 x 1500	S08B-300	2x 0,8	**0,70**	S10C-400	2x 1,0	**0,87**	S10C-450	2x 1,0	**0,94**
1200 x 1600	S10C-350	2x 1,0	**0,77**	S10C-450	2x 1,0	**0,94**	G26H-550	2x 2,6	**1,01**
1200 x 1700	S10C-350	2x 1,0	**0,84**	S10C-450	2x 1,0	**1,01**	G26H-550	2x 2,6	**1,09**
1200 x 1800	S10C-400	2x 1,0	**0,91**	G26H-550	2x 2,6	**1,09**	G26H-600	2x 2,6	**1,18**
1200 x 1900	S10C-400	2x 1,0	**0,98**	G26H-550	2x 2,6	**1,18**	G26H-600	2x 2,6	**1,26**
1200 x 2000	S10C-450	2x 1,0	**1,06**	G26H-550	2x 2,6	**1,26**	G26H-750	2x 2,6	**1,36**
1200 x 2100	S10C-450	2x 1,0	**1,13**	G26H-600	2x 2,6	**1,36**	G26H-750	2x 2,6	**1,45**
1200 x 2200	S10C-450	2x 1,0	**1,23**	G26H-600	2x 2,6	**1,45**	G26H-750	2x 2,6	**1,55**
1300 x 800	S08B-200	2x 0,8	**0,33**	S08B-300	2x 0,8	**0,41**	S08B-300	2x 0,8	**0,48**
1300 x 900	S08B-200	2x 0,8	**0,39**	S08B-300	2x 0,8	**0,48**	S08B-300	2x 0,8	**0,55**
1300 x 1000	S08B-200	2x 0,8	**0,43**	S08B-300	2x 0,8	**0,56**	S10C-400	2x 1,0	**0,64**
1300 x 1100	S08B-200	2x 0,8	**0,50**	S10C-350	2x 1,0	**0,63**	S10C-400	2x 1,0	**0,71**
1300 x 1200	S08B-300	2x 0,8	**0,56**	S08B-300	2x 0,8	**0,70**	S10C-350	2x 1,0	**0,79**
1300 x 1300	S08B-300	2x 0,8	**0,62**	S10C-350	2x 1,0	**0,77**	S10C-400	2x 1,0	**0,88**
1300 x 1400	S08B-300	2x 0,8	**0,69**	S10C-350	2x 1,0	**0,85**	S10C-450	2x 1,0	**0,95**
1300 x 1500	S08B-300	2x 0,8	**0,76**	S10C-400	2x 1,0	**0,93**	S10C-450	2x 1,0	**1,05**
1300 x 1600	S10C-350	2x 1,0	**0,84**	S10C-450	2x 1,0	**1,01**	G26H-550	2x 2,6	**1,14**

(*) 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.

mcr OSO THERM 75 | Inward-opening smoke exhaust windows

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

(*) 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.

WINDOW SIZE	Opening angle **30°**			Opening angle **45°**			Opening angle **60°**			Opening angle **75°**			Opening angle **90°**		
B' x H'	ACTUATOR	POWER CONSUMP-TION **	ACTIVE AERODY-NAMIC AREA [Aa]	ACTUATOR	POWER CONSUMP-TION **	ACTIVE AERODY-NAMIC AREA [Aa]	ACTUATOR	POWER CONSUMP-TION **	ACTIVE AERODY-NAMIC AREA [Aa]	ACTUATOR	POWER CONSUMP-TION **	ACTIVE AERODY-NAMIC AREA [Aa]	ACTUATOR	POWER CONSUMP-TION **	ACTIVE AERODY-NAMIC AREA [Aa]
[mm]	-	[A]	[m²]	-	[A]	[m²]	-	[A]	[m²]	-	[A]	[m²]	-	[A]	[m²]
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**
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**

(*) 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.

WINDOW SIZE	Opening angle **30°**			Opening angle **45°**			Opening angle **60°**			Opening angle **75°**			Opening angle **90°**		
B' x H'	ACTUATOR	POWER CONSUMP-TION **	ACTIVE AERODY-NAMIC AREA [Aa]	ACTUATOR	POWER CONSUMP-TION **	ACTIVE AERODY-NAMIC AREA [Aa]	ACTUATOR	POWER CONSUMP-TION **	ACTIVE AERODY-NAMIC AREA [Aa]	ACTUATOR	POWER CONSUMP-TION **	ACTIVE AERODY-NAMIC AREA [Aa]	ACTUATOR	POWER CONSUMP-TION **	ACTIVE AERODY-NAMIC AREA [Aa]
[mm]	-	[A]	[m²]	-	[A]	[m²]	-	[A]	[m²]	-	[A]	[m²]	-	[A]	[m²]
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**
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**

(*) 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.

WINDOW SIZE	Opening angle **30°**			Opening angle **45°**			Opening angle **60°**			Opening angle **75°**			Opening angle **90°**		
B' x H'	ACTUATOR	POWER CONSUMP-TION **	ACTIVE AERODY-NAMIC AREA [Aa]	ACTUATOR	POWER CONSUMP-TION **	ACTIVE AERODY-NAMIC AREA [Aa]	ACTUATOR	POWER CONSUMP-TION **	ACTIVE AERODY-NAMIC AREA [Aa]	ACTUATOR	POWER CONSUMP-TION **	ACTIVE AERODY-NAMIC AREA [Aa]	ACTUATOR	POWER CONSUMP-TION **	ACTIVE AERODY-NAMIC AREA [Aa]
[mm]	-	[A]	[m²]	-	[A]	[m²]	-	[A]	[m²]	-	[A]	[m²]	-	[A]	[m²]
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**
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**

(*) 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.

mcr OSO THERM 75 | | Inward-opening smoke exhaust windows
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 CONSUMP-TION **	ACTIVE AERODY-NAMIC AREA [Aa]	ACTUATOR	POWER CONSUMP-TION **	ACTIVE AERODY-NAMIC AREA [Aa]	ACTUATOR	POWER CONSUMP-TION **	ACTIVE AERODY-NAMIC AREA [Aa]	ACTUATOR	POWER CONSUMP-TION **	ACTIVE AERODY-NAMIC AREA [Aa]	ACTUATOR	POWER CONSUMP-TION **	ACTIVE AERODY-NAMIC AREA [Aa]
[mm]	-	[A]	[m²]	-	[A]	[m²]	-	[A]	[m²]	-	[A]	[m²]	-	[A]	[m²]
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.

WINDOW SIZE	Opening angle **30°**			Opening angle **45°**			Opening angle **60°**			Opening angle **75°**			Opening angle **90°**		
B' x H'	ACTUATOR	POWER CONSUMP-TION **	**ACTIVE AERODY-NAMIC AREA [Aa]**	ACTUATOR	POWER CONSUMP-TION **	**ACTIVE AERODY-NAMIC AREA [Aa]**	ACTUATOR	POWER CONSUMP-TION **	**ACTIVE AERODY-NAMIC AREA [Aa]**	ACTUATOR	POWER CONSUMP-TION **	**ACTIVE AERODY-NAMIC AREA [Aa]**	ACTUATOR	POWER CONSUMP-TION **	**ACTIVE AERODY-NAMIC AREA [Aa]**
[mm]	-	[A]	**[m²]**	-	[A]	**[m²]**	-	[A]	**[m²]**	-	[A]	**[m²]**	-	[A]	**[m²]**
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**

(*) 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.

WINDOW SIZE	Opening angle **30°**			Opening angle **45°**			Opening angle **60°**			Opening angle **75°**			Opening angle **90°**		
B' x H'	ACTUATOR	POWER CONSUMP-TION **	**ACTIVE AERODY-NAMIC AREA [Aa]**	ACTUATOR	POWER CONSUMP-TION **	**ACTIVE AERODY-NAMIC AREA [Aa]**	ACTUATOR	POWER CONSUMP-TION **	**ACTIVE AERODY-NAMIC AREA [Aa]**	ACTUATOR	POWER CONSUMP-TION **	**ACTIVE AERODY-NAMIC AREA [Aa]**	ACTUATOR	POWER CONSUMP-TION **	**ACTIVE AERODY-NAMIC AREA [Aa]**
[mm]	-	[A]	**[m²]**	-	[A]	**[m²]**	-	[A]	**[m²]**	-	[A]	**[m²]**	-	[A]	**[m²]**
2600 x 1100	S08B-200	2x 0,8	**0,99**	S10C-350	2x 1,0	**1,27**	S10C-400	2x 1,0	**1,46**	G26G-450	2x 2,6	**1,56**	G26H-550	2x 2,6	**1,63**
2600 x 1200	S08B-300	2x 0,8	**1,12**	S08B-300	2x 0,8	**1,40**	G26G-450	2x 2,6	**1,60**	G26H-550	2x 2,6	**1,71**	G26H-550	2x 2,6	**1,80**
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.

1.2.5.2 | Types of inward-opening smoke exhaust windows with chain actuators

» bottom hung windows

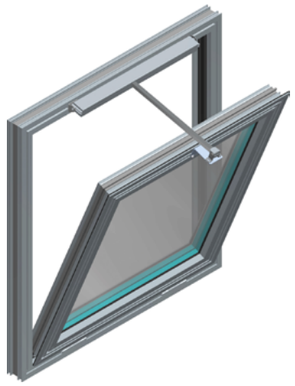


Fig.91 - mcr OSO THERM 75 smoke exhaust window with HCV chain actuator

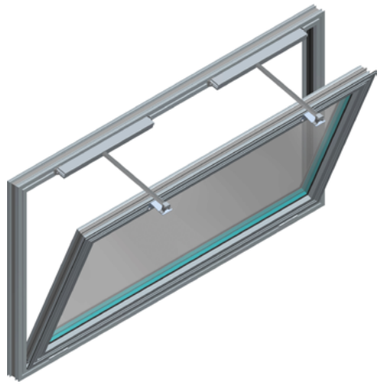


Fig.92 - mcr OSO THERM 75 smoke exhaust window with two HCV chain actuators

» 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

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

WINDOW SIZE B' x H'	ACTUATOR	POWER CONSUMPTION FOR 24 V- / 48 V-***	OPENING ANGLE**	**ACTIVE AERODYNAMIC AREA [Aa]**
[mm]	-	[A]	[°]	**[m²]**
800 x 800	HCV500/350	1,4 / 0,7	27	**0,18**
800 x 900	HCV500/350	1,4 / 0,7	24	**0,19**
800 x 1000	HCV500/350	1,4 / 0,7	21	**0,20**
800 x 1100	HCV500/600	1,4 / 0,7	33	**0,32**
800 x 1100	HCV500/350	1,4 / 0,7	19	**0,21**
800 x 1200	HCV500/600	1,4 / 0,7	30	**0,34**
800 x 1200	HCV500/350	1,4 / 0,7	17	**0,22**
800 x 1300	HCV500/600	1,4 / 0,7	28	**0,36**
800 x 1300	HCV500/350	1,4 / 0,7	16	**0,23**
800 x 1400	HCV500/600	1,4 / 0,7	26	**0,37**
800 x 1400	HCV500/350	1,4 / 0,7	15	**0,25**
800 x 1500	HCV500/600	1,4 / 0,7	24	**0,39**
800 x 1500	HCV500/350	1,4 / 0,7	14	**0,26**
800 x 1600	HCV500/600	1,4 / 0,7	22	**0,42**
800 x 1600	HCV500/350	1,4 / 0,7	13	**0,27**
800 x 1700	HCV500/600	1,4 / 0,7	21	**0,44**
800 x 1700	HCV500/350	1,4 / 0,7	12	**0,29**
800 x 1800	HCV500/600	1,4 / 0,7	20	**0,46**
800 x 1800	HCV500/350	1,4 / 0,7	11	**0,31**
800 x 1900	HCV500/600	1,4 / 0,7	19	**0,48**
800 x 1900	HCV500/350	1,4 / 0,7	11	**0,33**
800 x 2000	HCV500/600	1,4 / 0,7	18	**0,50**
800 x 2000	HCV500/350	1,4 / 0,7	10	**0,34**
800 x 2100	HCV500/600	1,4 / 0,7	17	**0,52**
800 x 2100	HCV500/350	1,4 / 0,7	10	**0,29**
800 x 2200	HCV500/600	1,4 / 0,7	16	**0,55**
800 x 2200	HCV500/350	1,4 / 0,7	9	**0,30**

WINDOW SIZE B' x H'	ACTUATOR	POWER CONSUMPTION FOR 24 V- / 48 V-***	OPENING ANGLE**	**ACTIVE AERODYNAMIC AREA [Aa]**
[mm]	-	[A]	[°]	**[m²]**
900 x 800	HCV500/350	1,4 / 0,7	27	**0,21**
900 x 900	HCV500/350	1,4 / 0,7	24	**0,22**
900 x 1000	HCV500/350	1,4 / 0,7	21	**0,23**
900 x 1100	HCV500/600	1,4 / 0,7	33	**0,37**
900 x 1100	HCV500/350	1,4 / 0,7	19	**0,24**
900 x 1200	HCV500/600	1,4 / 0,7	30	**0,39**
900 x 1200	HCV500/350	1,4 / 0,7	17	**0,25**
900 x 1300	HCV500/600	1,4 / 0,7	28	**0,41**
900 x 1300	HCV500/350	1,4 / 0,7	16	**0,26**
900 x 1400	HCV500/600	1,4 / 0,7	26	**0,43**
900 x 1400	HCV500/350	1,4 / 0,7	15	**0,28**
900 x 1500	HCV500/600	1,4 / 0,7	24	**0,45**
900 x 1500	HCV500/350	1,4 / 0,7	14	**0,29**
900 x 1600	HCV500/600	1,4 / 0,7	22	**0,47**
900 x 1600	HCV500/350	1,4 / 0,7	13	**0,31**
900 x 1700	HCV500/600	1,4 / 0,7	21	**0,49**
900 x 1700	HCV500/350	1,4 / 0,7	12	**0,33**
900 x 1800	HCV500/600	1,4 / 0,7	20	**0,52**
900 x 1800	HCV500/350	1,4 / 0,7	11	**0,35**
900 x 1900	HCV500/600	1,4 / 0,7	19	**0,54**
900 x 1900	HCV500/350	1,4 / 0,7	11	**0,37**

(*) 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-. HCVA 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.

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

WINDOW SIZE B' x H'	ACTUATOR	POWER CONSUMPTION FOR 24 V- / 48 V-***	OPENING ANGLE**	ACTIVE AERODYNAMIC AREA [Aa]
[mm]	-	[A]	[°]	[m²]
900 x 2000	HCV500/600	1,4 / 0,7	18	**0,57**
900 x 2000	HCV500/350	1,4 / 0,7	10	**0,39**
900 x 2100	HCV500/600	1,4 / 0,7	17	**0,60**
900 x 2100	HCV500/350	1,4 / 0,7	10	**0,33**
900 x 2200	HCV500/600	1,4 / 0,7	16	**0,62**
900 x 2200	HCV500/350	1,4 / 0,7	9	**0,35**
1000 x 800	HCV500/350	1,4 / 0,7	27	**0,23**
1000 x 900	HCV500/350	1,4 / 0,7	24	**0,24**
1000 x 1000	HCV500/350	1,4 / 0,7	21	**0,25**
1000 x 1100	HCV500/600	1,4 / 0,7	33	**0,40**
1000 x 1100	HCV500/350	1,4 / 0,7	19	**0,26**
1000 x 1200	HCV500/600	1,4 / 0,7	30	**0,43**
1000 x 1200	HCV500/350	1,4 / 0,7	17	**0,28**
1000 x 1300	HCV500/600	1,4 / 0,7	28	**0,45**
1000 x 1300	HCV500/350	1,4 / 0,7	16	**0,29**
1000 x 1400	HCV500/600	1,4 / 0,7	26	**0,47**
1000 x 1400	HCV500/350	1,4 / 0,7	15	**0,31**

WINDOW SIZE B' x H'	ACTUATOR	POWER CONSUMPTION FOR 24 V- / 48 V-***	OPENING ANGLE**	ACTIVE AERODYNAMIC AREA [Aa]
[mm]	-	[A]	[°]	[m²]
1000 x 1500	HCV500/800	1,4 / 0,7	32	**0,60**
1000 x 1500	HCV500/600	1,4 / 0,7	24	**0,49**
1000 x 1500	HCV500/350	1,4 / 0,7	14	**0,33**
1000 x 1600	HCV500/800	1,4 / 0,7	30	**0,64**
1000 x 1600	HCV500/600	1,4 / 0,7	22	**0,53**
1000 x 1600	HCV500/350	1,4 / 0,7	13	**0,34**
1000 x 1700	HCV500/800	1,4 / 0,7	28	**0,67**
1000 x 1700	HCV500/600	1,4 / 0,7	21	**0,55**
1000 x 1700	HCV500/350	1,4 / 0,7	12	**0,36**
1000 x 1800	HCV500/800	1,4 / 0,7	26	**0,70**
1000 x 1800	HCV500/600	1,4 / 0,7	20	**0,58**
1000 x 1800	HCV500/350	1,4 / 0,7	11	**0,38**
1000 x 1900	HCV500/800	1,4 / 0,7	25	**0,73**
1000 x 1900	HCV500/600	1,4 / 0,7	19	**0,61**
1000 x 1900	HCV500/350	1,4 / 0,7	11	**0,40**
1000 x 2000	HCV500/800	1,4 / 0,7	24	**0,76**
1000 x 2000	HCV500/600	1,4 / 0,7	18	**0,63**
1000 x 2000	HCV500/350	1,4 / 0,7	10	**0,43**
1000 x 2100	HCV500/800	1,4 / 0,7	23	**0,80**
1000 x 2100	HCV500/600	1,4 / 0,7	17	**0,66**
1000 x 2100	HCV500/350	1,4 / 0,7	10	**0,37**
1000 x 2200	HCV500/800	1,4 / 0,7	21	**0,84**

(*) 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-. HCVA 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.

mcr OSO THERM 75 | Inward-opening smoke exhaust windows

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

WINDOW SIZE B' x H'	ACTUATOR	POWER CONSUMPTION FOR 24 V- / 48 V-***	OPENING ANGLE**	ACTIVE AERODYNAMIC AREA [Aa]
[mm]	-	[A]	[°]	[m²]
1000 x 2200	HCV500/600	1,4 / 0,7	16	**0,68**
1000 x 2200	HCV500/350	1,4 / 0,7	9	**0,39**
1100 x 800	HCV500/350	1,4 / 0,7	27	**0,25**
1100 x 900	HCV500/350	1,4 / 0,7	24	**0,26**
1100 x 1000	HCV500/350	1,4 / 0,7	21	**0,28**
1100 x 1100	HCV500/600	1,4 / 0,7	33	**0,44**
1100 x 1100	HCV500/350	1,4 / 0,7	19	**0,29**
1100 x 1200	HCV500/600	1,4 / 0,7	30	**0,48**
1100 x 1200	HCV500/350	1,4 / 0,7	17	**0,31**
1100 x 1300	HCV500/600	1,4 / 0,7	28	**0,50**
1100 x 1300	HCV500/350	1,4 / 0,7	16	**0,32**
1100 x 1400	HCV500/600	1,4 / 0,7	26	**0,52**
1100 x 1400	HCV500/350	1,4 / 0,7	15	**0,34**
1100 x 1500	HCV500/800	1,4 / 0,7	32	**0,67**
1100 x 1500	HCV500/600	1,4 / 0,7	24	**0,55**
1100 x 1500	HCV500/350	1,4 / 0,7	14	**0,35**
1100 x 1600	HCV500/800	1,4 / 0,7	30	**0,71**
1100 x 1600	HCV500/600	1,4 / 0,7	22	**0,57**

WINDOW SIZE B' x H'	ACTUATOR	POWER CONSUMPTION FOR 24 V- / 48 V-***	OPENING ANGLE**	ACTIVE AERODYNAMIC AREA [Aa]
[mm]	-	[A]	[°]	[m²]
1100 x 1600	HCV500/350	1,4 / 0,7	13	**0,37**
1100 x 1700	HCV500/800	1,4 / 0,7	28	**0,74**
1100 x 1700	HCV500/600	1,4 / 0,7	21	**0,60**
1100 x 1700	HCV500/350	1,4 / 0,7	12	**0,40**
1100 x 1800	HCV500/800	1,4 / 0,7	26	**0,77**
1100 x 1800	HCV500/600	1,4 / 0,7	20	**0,63**
1100 x 1800	HCV500/350	1,4 / 0,7	11	**0,42**
1100 x 1900	HCV500/800	1,4 / 0,7	25	**0,80**
1100 x 1900	HCV500/600	1,4 / 0,7	19	**0,66**
1100 x 1900	HCV500/350	1,4 / 0,7	11	**0,45**
1100 x 2000	HCV500/800	1,4 / 0,7	24	**0,84**
1100 x 2000	HCV500/600	1,4 / 0,7	18	**0,69**
1100 x 2000	HCV500/350	1,4 / 0,7	10	**0,48**
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**

(*) 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-. HCVA 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.

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

WINDOW SIZE B' x H'	ACTUATOR	POWER CONSUMPTION FOR 24 V- / 48 V-***	OPENING ANGLE**	ACTIVE AERODYNAMIC AREA [Aa]
[mm]	-	[A]	[°]	[m²]
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**
1200 x 1300	HCV500/350	1,4 / 0,7	16	**0,35**
1200 x 1400	HCV500/600	1,4 / 0,7	26	**0,57**
1200 x 1400	HCV500/350	1,4 / 0,7	15	**0,37**
1200 x 1500	HCV500/800	1,4 / 0,7	32	**0,73**
1200 x 1500	HCV500/600	1,4 / 0,7	24	**0,60**
1200 x 1500	HCV500/350	1,4 / 0,7	14	**0,39**
1200 x 1600	HCV500/800	1,4 / 0,7	30	**0,77**
1200 x 1600	HCV500/600	1,4 / 0,7	22	**0,63**
1200 x 1600	HCV500/350	1,4 / 0,7	13	**0,41**
1200 x 1700	HCV500/800	1,4 / 0,7	28	**0,80**
1200 x 1700	HCV500/600	1,4 / 0,7	21	**0,66**
1200 x 1700	HCV500/350	1,4 / 0,7	12	**0,44**
1200 x 1800	HCV500/1000	1,4 / 0,7	33	**0,95**
1200 x 1800	HCV500/800	1,4 / 0,7	26	**0,83**
1200 x 1800	HCV500/600	1,4 / 0,7	20	**0,69**
1200 x 1800	HCV500/350	1,4 / 0,7	11	**0,45**
1200 x 1900	HCV500/1000	1,4 / 0,7	31	**1,00**
1200 x 1900	HCV500/800	1,4 / 0,7	25	**0,87**
1200 x 1900	HCV500/600	1,4 / 0,7	19	**0,72**
1200 x 1900	HCV500/350	1,4 / 0,7	11	**0,47**
1200 x 2000	HCV500/1000	1,4 / 0,7	30	**1,05**
1200 x 2000	HCV500/800	1,4 / 0,7	24	**0,91**
1200 x 2000	HCV500/600	1,4 / 0,7	18	**0,75**
1200 x 2000	HCV500/350	1,4 / 0,7	10	**0,50**
1200 x 2100	HCV500/1000	1,4 / 0,7	28	**1,09**
1200 x 2100	HCV500/800	1,4 / 0,7	23	**0,95**
1200 x 2100	HCV500/600	1,4 / 0,7	17	**0,78**
1200 x 2100	HCV500/350	1,4 / 0,7	10	**0,33**
1200 x 2200	HCV500/1000	1,4 / 0,7	27	**1,15**
1200 x 2200	HCV500/800	1,4 / 0,7	21	**1,00**
1200 x 2200	HCV500/600	1,4 / 0,7	16	**0,81**
1200 x 2200	HCV500/350	1,4 / 0,7	9	**0,34**
1300 x 800	HCV500/350	1,4 / 0,7	27	**0,30**
1300 x 900	HCV500/350	1,4 / 0,7	24	**0,31**
1300 x 1000	HCV500/350	1,4 / 0,7	21	**0,32**
1300 x 1100	HCV500/600	1,4 / 0,7	33	**0,53**
1300 x 1100	HCV500/350	1,4 / 0,7	19	**0,34**

(*) 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-. HCVA 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.

mcr OSO THERM 75 | Inward-opening smoke exhaust windows

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

WINDOW SIZE B' x H'	ACTUATOR	POWER CONSUMPTION FOR 24 V- / 48 V-***	OPENING ANGLE**	ACTIVE AERODYNAMIC AREA [Aa]
[mm]	-	[A]	[°]	[m²]
1300 x 1200	HCV500/600	1,4 / 0,7	30	**0,56**
1300 x 1200	HCV500/350	1,4 / 0,7	17	**0,36**
1300 x 1300	HCV500/600	1,4 / 0,7	28	**0,59**
1300 x 1300	HCV500/350	1,4 / 0,7	16	**0,38**
1300 x 1400	HCV500/600	1,4 / 0,7	26	**0,61**
1300 x 1400	HCV500/350	1,4 / 0,7	15	**0,40**
1300 x 1500	HCV500/800	1,4 / 0,7	32	**0,79**
1300 x 1500	HCV500/600	1,4 / 0,7	24	**0,64**
1300 x 1500	HCV500/350	1,4 / 0,7	14	**0,42**
1300 x 1600	HCV500/800	1,4 / 0,7	30	**0,84**
1300 x 1600	HCV500/600	1,4 / 0,7	22	**0,67**
1300 x 1600	HCV500/350	1,4 / 0,7	13	**0,43**
1300 x 1700	HCV500/800	1,4 / 0,7	28	**0,87**
1300 x 1700	HCV500/600	1,4 / 0,7	21	**0,71**
1300 x 1700	HCV500/350	1,4 / 0,7	12	**0,46**
1300 x 1800	HCV500/1000	1,4 / 0,7	33	**1,04**
1300 x 1800	HCV500/800	1,4 / 0,7	26	**0,90**
1300 x 1800	HCV500/600	1,4 / 0,7	20	**0,74**
1300 x 1800	HCV500/350	1,4 / 0,7	11	**0,49**
1300 x 1900	HCV500/1000	1,4 / 0,7	31	**1,09**
1300 x 1900	HCV500/800	1,4 / 0,7	25	**0,94**
1300 x 1900	HCV500/600	1,4 / 0,7	19	**0,77**
1300 x 1900	HCV500/350	1,4 / 0,7	11	**0,52**
1300 x 2000	HCV500/1000	1,4 / 0,7	30	**1,15**
1300 x 2000	HCV500/800	1,4 / 0,7	24	**0,98**
1300 x 2000	HCV500/600	1,4 / 0,7	18	**0,80**
1300 x 2000	HCV500/350	1,4 / 0,7	10	**0,55**
1300 x 2100	HCV500/1000	1,4 / 0,7	28	**1,19**
1300 x 2100	HCV500/800	1,4 / 0,7	23	**1,04**
1300 x 2100	HCV500/600	1,4 / 0,7	17	**0,85**
1300 x 2100	HCV500/350	1,4 / 0,7	10	**0,36**
1300 x 2200	HCV500/1000	1,4 / 0,7	27	**1,24**
1300 x 2200	HCV500/800	1,4 / 0,7	21	**1,09**
1300 x 2200	HCV500/600	1,4 / 0,7	16	**0,89**
1300 x 2200	HCV500/350	1,4 / 0,7	9	**0,37**
1400 x 800	HCV500/350	1,4 / 0,7	27	**0,32**
1400 x 900	HCV500/350	1,4 / 0,7	24	**0,33**
1400x 1000	HCV500/350	1,4 / 0,7	21	**0,35**
1400 x 1100	HCV500/600	1,4 / 0,7	33	**0,57**
1400 x 1100	HCV500/350	1,4 / 0,7	19	**0,37**
1400 x 1200	HCV500/600	1,4 / 0,7	30	**0,61**
1400 x 1200	HCV500/350	1,4 / 0,7	17	**0,39**
1400 x 1300	HCV500/600	1,4 / 0,7	28	**0,64**
1400 x 1300	HCV500/350	1,4 / 0,7	16	**0,41**
1400 x 1400	HCV500/600	1,4 / 0,7	26	**0,67**
1400 x 1400	HCV500/350	1,4 / 0,7	15	**0,43**

(*) 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-. HCVA 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.

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

WINDOW SIZE B' x H'	ACTUATOR	POWER CONSUMPTION FOR 24 V- / 48 V-***	OPENING ANGLE**	ACTIVE AERODYNAMIC AREA [Aa]
[mm]	-	[A]	[°]	[m²]
1400 x 1500	HCV500/800	1,4 / 0,7	32	**0,85**
1400 x 1500	HCV500/600	1,4 / 0,7	24	**0,70**
1400 x 1500	HCV500/350	1,4 / 0,7	14	**0,44**
1400 x 1600	HCV500/800	1,4 / 0,7	30	**0,91**
1400 x 1600	HCV500/600	1,4 / 0,7	22	**0,73**
1400 x 1600	HCV500/350	1,4 / 0,7	13	**0,47**
1400 x 1700	HCV500/800	1,4 / 0,7	28	**0,94**
1400 x 1700	HCV500/600	1,4 / 0,7	21	**0,76**
1400 x 1700	HCV500/350	1,4 / 0,7	12	**0,50**
1400 x 1800	HCV500/1000	1,4 / 0,7	33	**1,11**
1400 x 1800	HCV500/800	1,4 / 0,7	26	**0,97**
1400 x 1800	HCV500/600	1,4 / 0,7	20	**0,80**
1400 x 1800	HCV500/350	1,4 / 0,7	11	**0,53**
1400 x 1900	HCV500/1000	1,4 / 0,7	31	**1,16**
1400 x 1900	HCV500/800	1,4 / 0,7	25	**1,01**
1400 x 1900	HCV500/600	1,4 / 0,7	19	**0,83**
1400 x 1900	HCV500/350	1,4 / 0,7	11	**0,56**
1400 x 2000	HCV500/1000	1,4 / 0,7	30	**1,24**
1400 x 2000	HCV500/800	1,4 / 0,7	24	**1,06**
1400 x 2000	HCV500/600	1,4 / 0,7	18	**0,86**
1400 x 2000	HCV500/350	1,4 / 0,7	10	**0,57**
1400 x 2100	HCV500/1000	1,4 / 0,7	28	**1,28**
1400 x 2100	HCV500/800	1,4 / 0,7	23	**1,11**
1400 x 2100	HCV500/600	1,4 / 0,7	17	**0,90**
1400 x 2100	HCV500/350	1,4 / 0,7	10	**0,39**
1400 x 2200	HCV500/1000	1,4 / 0,7	27	**1,33**
1400 x 2200	HCV500/800	1,4 / 0,7	21	**1,15**
1400 x 2200	HCV500/600	1,4 / 0,7	16	**0,93**
1400 x 2200	HCV500/350	1,4 / 0,7	9	**0,41**

WINDOW SIZE B' x H'	ACTUATOR	POWER CONSUMPTION FOR 24 V- / 48 V-***	OPENING ANGLE**	ACTIVE AERODYNAMIC AREA [Aa]
[mm]	-	[A]	[°]	[m²]
1500 x 800	HCV500/350	1,4 / 0,7	27	**0,35**
1500 x 900	HCV500/350	1,4 / 0,7	24	**0,36**
1500 x 1000	HCV500/350	1,4 / 0,7	21	**0,38**
1500 x 1100	HCV500/600	1,4 / 0,7	33	**0,61**
1500 x 1100	HCV500/350	1,4 / 0,7	19	**0,40**
1500 x 1200	HCV500/600	1,4 / 0,7	30	**0,66**
1500 x 1200	HCV500/350	1,4 / 0,7	17	**0,42**
1500 x 1300	HCV500/600	1,4 / 0,7	28	**0,69**
1500 x 1300	HCV500/350	1,4 / 0,7	16	**0,44**
1500 x 1400	HCV500/600	1,4 / 0,7	26	**0,71**
1500 x 1400	HCV500/350	1,4 / 0,7	15	**0,45**
1500 x 1500	HCV500/800	1,4 / 0,7	32	**0,91**
1500 x 1500	HCV500/600	1,4 / 0,7	24	**0,73**
1500 x 1500	HCV500/350	1,4 / 0,7	14	**0,47**
1500 x 1600	HCV500/800	1,4 / 0,7	30	**0,96**
1500 x 1600	HCV500/600	1,4 / 0,7	22	**0,77**
1500 x 1600	HCV500/350	1,4 / 0,7	13	**0,50**
1500 x 1700	HCV500/800	1,4 / 0,7	28	**0,99**
1500 x 1700	HCV500/600	1,4 / 0,7	21	**0,80**
1500 x 1700	HCV500/350	1,4 / 0,7	12	**0,53**
1500 x 1800	HCV500/1000	1,4 / 0,7	33	**1,19**
1500 x 1800	HCV500/800	1,4 / 0,7	26	**1,03**
1500 x 1800	HCV500/600	1,4 / 0,7	20	**0,84**
1500 x 1800	HCV500/350	1,4 / 0,7	11	**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-. HCVA 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.

mcr OSO THERM 75 | Inward-opening smoke exhaust windows

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

WINDOW SIZE B' x H'	ACTUATOR	POWER CONSUMPTION FOR 24 V- / 48 V-***	OPENING ANGLE**	ACTIVE AERODYNAMIC AREA [Aa]
[mm]	-	[A]	[°]	[m²]
1500 x 1900	HCV500/1000	1,4 / 0,7	31	**1,25**
1500 x 1900	HCV500/800	1,4 / 0,7	25	**1,07**
1500 x 1900	HCV500/600	1,4 / 0,7	19	**0,87**
1500 x 1900	HCV500/350	1,4 / 0,7	11	**0,58**
1500 x 2000	HCV500/1000	1,4 / 0,7	30	**1,31**
1500 x 2000	HCV500/800	1,4 / 0,7	24	**1,13**
1500 x 2000	HCV500/600	1,4 / 0,7	18	**0,93**
1500 x 2000	HCV500/350	1,4 / 0,7	10	**0,61**
1500 x 2100	HCV500/1000	1,4 / 0,7	28	**1,36**
1500 x 2100	HCV500/800	1,4 / 0,7	23	**1,18**
1500 x 2100	HCV500/600	1,4 / 0,7	17	**0,97**
1500 x 2100	HCV500/350	1,4 / 0,7	10	**0,42**
1500 x 2200	HCV500/1000	1,4 / 0,7	27	**1,42**
1500 x 2200	HCV500/800	1,4 / 0,7	21	**1,24**
1500 x 2200	HCV500/600	1,4 / 0,7	16	**1,01**
1500 x 2200	HCV500/350	1,4 / 0,7	9	**0,44**
1600 x 800	HCV500/350	1,4 / 0,7	27	**0,36**
1600 x 900	HCV500/350	1,4 / 0,7	24	**0,38**
1600 x 1000	HCV500/350	1,4 / 0,7	21	**0,40**
1600 x 1100	HCV500/600	1,4 / 0,7	33	**0,66**
1600 x 1100	HCV500/350	1,4 / 0,7	19	**0,43**
1600 x 1200	HCV500/600	1,4 / 0,7	30	**0,69**
1600 x 1200	HCV500/350	1,4 / 0,7	17	**0,45**
1600 x 1300	HCV500/600	1,4 / 0,7	28	**0,72**
1600 x 1300	HCV500/350	1,4 / 0,7	16	**0,45**
1600 x 1400	HCV500/600	1,4 / 0,7	26	**0,75**
1600 x 1400	HCV500/350	1,4 / 0,7	15	**0,48**
1600 x 1500	HCV500/800	1,4 / 0,7	32	**0,97**
1600 x 1500	HCV500/600	1,4 / 0,7	24	**0,78**
1600 x 1500	HCV500/350	1,4 / 0,7	14	**0,51**

WINDOW SIZE B' x H'	ACTUATOR	POWER CONSUMPTION FOR 24 V- / 48 V-***	OPENING ANGLE**	ACTIVE AERODYNAMIC AREA [Aa]
[mm]	-	[A]	[°]	[m²]
1600 x 1600	HCV500/800	1,4 / 0,7	30	**1,03**
1600 x 1600	HCV500/600	1,4 / 0,7	22	**0,82**
1600 x 1600	HCV500/350	1,4 / 0,7	13	**0,54**
1600 x 1700	HCV500/800	1,4 / 0,7	28	**1,06**
1600 x 1700	HCV500/600	1,4 / 0,7	21	**0,86**
1600 x 1700	HCV500/350	1,4 / 0,7	12	**0,55**
1600 x 1800	HCV500/1000	1,4 / 0,7	33	**1,27**
1600 x 1800	HCV500/800	1,4 / 0,7	26	**1,10**
1600 x 1800	HCV500/600	1,4 / 0,7	20	**0,90**
1600 x 1800	HCV500/350	1,4 / 0,7	11	**0,58**
1600 x 1900	HCV500/1000	1,4 / 0,7	31	**1,34**
1600 x 1900	HCV500/800	1,4 / 0,7	25	**1,15**
1600 x 1900	HCV500/600	1,4 / 0,7	19	**0,93**
1600 x 1900	HCV500/350	1,4 / 0,7	11	**0,62**
1600 x 2000	HCV500/1000	1,4 / 0,7	30	**1,40**
1600 x 2000	HCV500/800	1,4 / 0,7	24	**1,20**
1600 x 2000	HCV500/600	1,4 / 0,7	18	**0,97**
1600 x 2000	HCV500/350	1,4 / 0,7	10	**0,66**
1600 x 2100	HCV500/1000	1,4 / 0,7	28	**1,45**
1600 x 2100	HCV500/800	1,4 / 0,7	23	**1,25**
1600 x 2100	HCV500/600	1,4 / 0,7	17	**1,02**
1600 x 2100	HCV500/350	1,4 / 0,7	10	**0,45**
1600 x 2200	HCV500/1000	1,4 / 0,7	27	**1,51**
1600 x 2200	HCV500/800	1,4 / 0,7	21	**1,30**
1600 x 2200	HCV500/600	1,4 / 0,7	16	**1,05**
1600 x 2200	HCV500/350	1,4 / 0,7	9	**0,47**
1700 x 800	HCV500/350	2x 1,4 / 2x 0,7	27	**0,39**
1700 x 900	HCV500/350	2x 1,4 / 2x 0,7	24	**0,41**
1700 x 1000	HCV500/350	2x 1,4 / 2x 0,7	21	**0,43**

(*) 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-. HCVA 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.

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

WINDOW SIZE B' x H'	ACTUATOR	POWER CONSUMPTION FOR 24 V- / 48 V-***	OPENING ANGLE**	ACTIVE AERODYNAMIC AREA [Aa]
[mm]	-	[A]	[°]	[m²]
1700 x 1100	HCV500/600	2x 1,4 / 2x 0,7	33	**0,69**
1700 x 1100	HCV500/350	2x 1,4 / 2x 0,7	19	**0,44**
1700 x 1200	HCV500/600	2x 1,4 / 2x 0,7	30	**0,74**
1700 x 1200	HCV500/350	2x 1,4 / 2x 0,7	17	**0,46**
1700 x 1300	HCV500/600	2x 1,4 / 2x 0,7	28	**0,77**
1700 x 1300	HCV500/350	2x 1,4 / 2x 0,7	16	**0,48**
1700 x 1400	HCV500/600	2x 1,4 / 2x 0,7	26	**0,80**
1700 x 1400	HCV500/350	2x 1,4 / 2x 0,7	15	**0,51**
1700 x 1500	HCV500/800	1,4 / 0,7	32	**1,03**
1700 x 1500	HCV500/600	2x 1,4 / 2x 0,7	24	**0,84**
1700 x 1500	HCV500/350	2x 1,4 / 2x 0,7	14	**0,54**
1700 x 1600	HCV500/800	1,4 / 0,7	30	**1,09**
1700 x 1600	HCV500/600	2x 1,4 / 2x 0,7	22	**0,88**
1700 x 1600	HCV500/350	2x 1,4 / 2x 0,7	13	**0,55**
1700 x 1700	HCV500/800	1,4 / 0,7	28	**1,13**
1700 x 1700	HCV500/600	2x 1,4 / 2x 0,7	21	**0,91**
1700 x 1700	HCV500/350	2x 1,4 / 2x 0,7	12	**0,58**
1700 x 1800	HCV500/1000	1,4 / 0,7	33	**1,34**
1700 x 1800	HCV500/800	1,4 / 0,7	26	**1,16**
1700 x 1800	HCV500/600	2x 1,4 / 2x 0,7	20	**0,96**
1700 x 1800	HCV500/350	2x 1,4 / 2x 0,7	11	**0,62**
1700 x 1900	HCV500/1000	1,4 / 0,7	31	**1,40**
1700 x 1900	HCV500/800	1,4 / 0,7	25	**1,21**
1700 x 1900	HCV500/600	2x 1,4 / 2x 0,7	19	**1,00**
1700 x 1900	HCV500/350	2x 1,4 / 2x 0,7	11	**0,66**
1700 x 2000	HCV500/1000	1,4 / 0,7	30	**1,47**
1700 x 2000	HCV500/800	1,4 / 0,7	24	**1,27**
1700 x 2000	HCV500/600	2x 1,4 / 2x 0,7	18	**1,03**
1700 x 2000	HCV500/350	2x 1,4 / 2x 0,7	10	**0,67**
1800 x 800	HCV500/350	2x 1,4 / 2x 0,7	27	**0,41**

WINDOW SIZE B' x H'	ACTUATOR	POWER CONSUMPTION FOR 24 V- / 48 V-***	OPENING ANGLE**	ACTIVE AERODYNAMIC AREA [Aa]
[mm]	-	[A]	[°]	[m²]
1800 x 900	HCV500/350	2x 1,4 / 2x 0,7	24	**0,44**
1800 x 1000	HCV500/350	2x 1,4 / 2x 0,7	21	**0,46**
1800 x 1100	HCV500/600	2x 1,4 / 2x 0,7	33	**0,73**
1800 x 1100	HCV500/350	2x 1,4 / 2x 0,7	19	**0,47**
1800 x 1200	HCV500/600	2x 1,4 / 2x 0,7	30	**0,78**
1800 x 1200	HCV500/350	2x 1,4 / 2x 0,7	17	**0,49**
1800 x 1300	HCV500/600	2x 1,4 / 2x 0,7	28	**0,82**
1800 x 1300	HCV500/350	2x 1,4 / 2x 0,7	16	**0,51**
1800 x 1400	HCV500/600	2x 1,4 / 2x 0,7	26	**0,85**
1800 x 1400	HCV500/350	2x 1,4 / 2x 0,7	15	**0,54**
1800 x 1500	HCV500/800	1,4 / 0,7	32	**1,08**
1800 x 1500	HCV500/600	2x 1,4 / 2x 0,7	24	**0,88**
1800 x 1500	HCV500/350	2x 1,4 / 2x 0,7	14	**0,56**
1800 x 1600	HCV500/800	1,4 / 0,7	30	**1,13**
1800 x 1600	HCV500/600	2x 1,4 / 2x 0,7	22	**0,92**
1800 x 1600	HCV500/350	2x 1,4 / 2x 0,7	13	**0,59**
1800 x 1700	HCV500/800	1,4 / 0,7	28	**1,18**
1800 x 1700	HCV500/600	2x 1,4 / 2x 0,7	21	**0,94**
1800 x 1700	HCV500/350	2x 1,4 / 2x 0,7	12	**0,62**
1800 x 1800	HCV500/1000	1,4 / 0,7	33	**1,41**
1800 x 1800	HCV500/800	1,4 / 0,7	26	**1,22**
1800 x 1800	HCV500/600	2x 1,4 / 2x 0,7	20	**0,99**
1800 x 1800	HCV500/350	2x 1,4 / 2x 0,7	11	**0,66**
1800 x 1900	HCV500/1000	1,4 / 0,7	31	**1,49**

(*) 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-. HCVA 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.

mcr OSO THERM 75 | Inward-opening smoke exhaust windows

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

WINDOW SIZE B' x H'	ACTUATOR	POWER CONSUMPTION FOR 24 V- / 48 V-***	OPENING ANGLE**	ACTIVE AERODYNAMIC AREA [Aa]
[mm]	-	[A]	[°]	[m²]
1800 x 1900	HCV500/800	1,4 / 0,7	25	**1,27**
1800 x 1900	HCV500/600	2x 1,4 / 2x 0,7	19	**1,03**
1800 x 1900	HCV500/350	2x 1,4 / 2x 0,7	11	**0,67**
1900 x 800	HCV500/350	2x 1,4 / 2x 0,7	27	**0,44**
1900 x 900	HCV500/350	2x 1,4 / 2x 0,7	24	**0,46**
1900 x 1000	HCV500/350	2x 1,4 / 2x 0,7	21	**0,47**
1900 x 1100	HCV500/600	2x 1,4 / 2x 0,7	33	**0,78**
1900 x 1100	HCV500/350	2x 1,4 / 2x 0,7	19	**0,49**
1900 x 1200	HCV500/600	2x 1,4 / 2x 0,7	30	**0,83**
1900 x 1200	HCV500/350	2x 1,4 / 2x 0,7	17	**0,52**
1900 x 1300	HCV500/600	2x 1,4 / 2x 0,7	28	**0,86**
1900 x 1300	HCV500/350	2x 1,4 / 2x 0,7	16	**0,54**
1900 x 1400	HCV500/600	2x 1,4 / 2x 0,7	26	**0,89**
1900 x 1400	HCV500/350	2x 1,4 / 2x 0,7	15	**0,56**
1900 x 1500	HCV500/800	1,4 / 0,7	32	**1,14**
1900 x 1500	HCV500/600	2x 1,4 / 2x 0,7	24	**0,91**
1900 x 1500	HCV500/350	2x 1,4 / 2x 0,7	14	**0,58**
1900 x 1600	HCV500/800	1,4 / 0,7	30	**1,20**
1900 x 1600	HCV500/600	2x 1,4 / 2x 0,7	22	**0,96**
1900 x 1600	HCV500/350	2x 1,4 / 2x 0,7	13	**0,61**
1900 x 1700	HCV500/800	1,4 / 0,7	28	**1,25**
1900 x 1700	HCV500/600	2x 1,4 / 2x 0,7	21	**1,00**
1900 x 1700	HCV500/350	2x 1,4 / 2x 0,7	12	**0,65**

WINDOW SIZE B' x H'	ACTUATOR	POWER CONSUMPTION FOR 24 V- / 48 V-***	OPENING ANGLE**	ACTIVE AERODYNAMIC AREA [Aa]
[mm]	-	[A]	[°]	[m²]
1900 x 1800	HCV500/1000	1,4 / 0,7	33	**1,49**
1900 x 1800	HCV500/800	1,4 / 0,7	26	**1,30**
1900 x 1800	HCV500/600	2x 1,4 / 2x 0,7	20	**1,05**
1900 x 1800	HCV500/350	2x 1,4 / 2x 0,7	11	**0,67**
2000 x 800	HCV500/350	2x 1,4 / 2x 0,7	27	**0,46**
2000 x 900	HCV500/350	2x 1,4 / 2x 0,7	24	**0,49**
2000 x 1000	HCV500/350	2x 1,4 / 2x 0,7	21	**0,50**
2000 x 1100	HCV500/600	2x 1,4 / 2x 0,7	33	**0,81**
2000 x 1100	HCV500/350	2x 1,4 / 2x 0,7	19	**0,52**
2000 x 1200	HCV500/600	2x 1,4 / 2x 0,7	30	**0,87**
2000 x 1200	HCV500/350	2x 1,4 / 2x 0,7	17	**0,55**
2000 x 1300	HCV500/600	2x 1,4 / 2x 0,7	28	**0,89**
2000 x 1300	HCV500/350	2x 1,4 / 2x 0,7	16	**0,56**
2000 x 1400	HCV500/600	2x 1,4 / 2x 0,7	26	**0,92**
2000 x 1400	HCV500/350	2x 1,4 / 2x 0,7	15	**0,58**
2000 x 1500	HCV500/800	2x 1,4 / 2x 0,7	32	**1,20**
2000 x 1500	HCV500/600	2x 1,4 / 2x 0,7	24	**0,96**
2000 x 1500	HCV500/350	2x 1,4 / 2x 0,7	14	**0,61**

(*) 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-. HCVA 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.

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

WINDOW SIZE B' x H'	ACTUATOR	POWER CONSUMPTION FOR 24 V- / 48 V-***	OPENING ANGLE**	**ACTIVE AERODYNAMIC AREA [Aa]**
[mm]	-	[A]	[°]	**[m²]**
2000 x 1600	HCV500/800	2x 1,4 / 2x 0,7	30	**1,27**
2000 x 1600	HCV500/600	2x 1,4 / 2x 0,7	22	**1,01**
2000 x 1600	HCV500/350	2x 1,4 / 2x 0,7	13	**0,65**
2000 x 1700	HCV500/800	2x 1,4 / 2x 0,7	28	**1,32**
2000 x 1700	HCV500/600	2x 1,4 / 2x 0,7	21	**1,06**
2000 x 1700	HCV500/350	2x 1,4 / 2x 0,7	12	**0,67**
2100 x 800	HCV500/350	2x 1,4 / 2x 0,7	27	**0,49**
2100 x 900	HCV500/350	2x 1,4 / 2x 0,7	24	**0,50**
2100 x 1000	HCV500/350	2x 1,4 / 2x 0,7	21	**0,52**
2100 x 1100	HCV500/600	2x 1,4 / 2x 0,7	33	**0,86**
2100 x 1100	HCV500/350	2x 1,4 / 2x 0,7	19	**0,55**
2100 x 1200	HCV500/600	2x 1,4 / 2x 0,7	30	**0,92**
2100 x 1200	HCV500/350	2x 1,4 / 2x 0,7	17	**0,58**
2100 x 1300	HCV500/600	2x 1,4 / 2x 0,7	28	**0,93**
2100 x 1300	HCV500/350	2x 1,4 / 2x 0,7	16	**0,58**
2100 x 1400	HCV500/600	2x 1,4 / 2x 0,7	26	**0,97**
2100 x 1400	HCV500/350	2x 1,4 / 2x 0,7	15	**0,61**

WINDOW SIZE B' x H'	ACTUATOR	POWER CONSUMPTION FOR 24 V- / 48 V-***	OPENING ANGLE**	**ACTIVE AERODYNAMIC AREA [Aa]**
[mm]	-	[A]	[°]	**[m²]**
2100 x 1500	HCV500/800	2x 1,4 / 2x 0,7	32	**1,26**
2100 x 1500	HCV500/600	2x 1,4 / 2x 0,7	24	**1,02**
2100 x 1500	HCV500/350	2x 1,4 / 2x 0,7	14	**0,64**
2100 x 1600	HCV500/800	2x 1,4 / 2x 0,7	30	**1,34**
2100 x 1600	HCV500/600	2x 1,4 / 2x 0,7	22	**1,06**
2100 x 1600	HCV500/350	2x 1,4 / 2x 0,7	13	**0,66**
2200 x 800	HCV500/350	2x 1,4 / 2x 0,7	27	**0,51**
2200 x 900	HCV500/350	2x 1,4 / 2x 0,7	24	**0,52**
2200 x 1000	HCV500/350	2x 1,4 / 2x 0,7	21	**0,55**
2200 x 1100	HCV500/600	2x 1,4 / 2x 0,7	33	**0,90**
2200 x 1100	HCV500/350	2x 1,4 / 2x 0,7	19	**0,58**
2200 x 1200	HCV500/600	2x 1,4 / 2x 0,7	30	**0,94**
2200 x 1200	HCV500/350	2x 1,4 / 2x 0,7	17	**0,59**
2200 x 1300	HCV500/600	2x 1,4 / 2x 0,7	28	**0,98**
2200 x 1300	HCV500/350	2x 1,4 / 2x 0,7	16	**0,61**
2200 x 1400	HCV500/600	2x 1,4 / 2x 0,7	26	**1,02**
2200 x 1400	HCV500/350	2x 1,4 / 2x 0,7	15	**0,64**
2200 x 1500	HCV500/800	2x 1,4 / 2x 0,7	32	**1,32**

(*) 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-. HCVA 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.

mcr OSO THERM 75 | Inward-opening smoke exhaust windows

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

WINDOW SIZE B' x H'	ACTUATOR	POWER CONSUMPTION FOR 24 V- / 48 V-***	OPENING ANGLE**	**ACTIVE AERODYNAMIC AREA [Aa]**
[mm]	-	-	[A]	**[m²]**
2200 x 1500	HCV500/600	2x 1,4 / 2x 0,7	24	**1,07**
2200 x 1500	HCV500/350	2x 1,4 / 2x 0,7	14	**0,68**
2200 x 1600	HCV500/800	2x 1,4 / 2x 0,7	30	**1,37**
2200 x 1600	HCV500/600	2x 1,4 / 2x 0,7	22	**1,11**
2200 x 1600	HCV500/350	2x 1,4 / 2x 0,7	13	**0,70**
2300 x 800	HCV500/350	2x 1,4 / 2x 0,7	27	**0,54**
2300 x 900	HCV500/350	2x 1,4 / 2x 0,7	24	**0,55**
2300 x 1000	HCV500/350	2x 1,4 / 2x 0,7	21	**0,58**
2300 x 1100	HCV500/600	2x 1,4 / 2x 0,7	33	**0,94**
2300 x 1100	HCV500/350	2x 1,4 / 2x 0,7	19	**0,60**
2300 x 1200	HCV500/600	2x 1,4 / 2x 0,7	30	**0,99**
2300 x 1200	HCV500/350	2x 1,4 / 2x 0,7	17	**0,61**
2300 x 1200	HCV500/600	2x 1,4 / 2x 0,7	28	**1,03**
2300 x 1200	HCV500/350	2x 1,4 / 2x 0,7	16	**0,64**
2300 x 1400	HCV500/600	2x 1,4 / 2x 0,7	26	**1,07**
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**

WINDOW SIZE B' x H'	ACTUATOR	POWER CONSUMPTION FOR 24 V- / 48 V-***	OPENING ANGLE**	**ACTIVE AERODYNAMIC AREA [Aa]**
[mm]	-	-	[A]	**[m²]**
2300 x 1500	HCV500/350	2x 1,4 / 2x 0,7	14	**0,69**
2400 x 800	HCV500/350	2x 1,4 / 2x 0,7	27	**0,56**
2400 x 900	HCV500/350	2x 1,4 / 2x 0,7	24	**0,57**
2400 x 1000	HCV500/350	2x 1,4 / 2x 0,7	21	**0,60**
2400 x 1100	HCV500/600	2x 1,4 / 2x 0,7	33	**0,97**
2400 x 1100	HCV500/350	2x 1,4 / 2x 0,7	19	**0,61**
2400 x 1200	HCV500/600	2x 1,4 / 2x 0,7	30	**1,03**
2400 x 1200	HCV500/350	2x 1,4 / 2x 0,7	17	**0,64**
2400 x 1300	HCV500/600	2x 1,4 / 2x 0,7	28	**1,08**
2400 x 1300	HCV500/350	2x 1,4 / 2x 0,7	16	**0,67**
2400 x 1400	HCV500/600	2x 1,4 / 2x 0,7	26	**1,10**
2400 x 1400	HCV500/350	2x 1,4 / 2x 0,7	15	**0,70**
2500 x 800	HCV500/350	2x 1,4 / 2x 0,7	27	**0,59**
2500 x 900	HCV500/350	2x 1,4 / 2x 0,7	24	**0,60**
2500 x 1000	HCV500/350	2x 1,4 / 2x 0,7	21	**0,63**

(*) 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-. HCVA 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.

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

WINDOW SIZE B' x H'	ACTUATOR	POWER CONSUMPTION FOR 24 V- / 48 V-***	OPENING ANGLE**	**ACTIVE AERODYNAMIC AREA [Aa]**
[mm]	-	[A]	[°]	**[m²]**
2500 x 1100	HCV500/600	2x 1,4 / 2x 0,7	33	**1,01**
2500 x 1100	HCV500/350	2x 1,4 / 2x 0,7	19	**0,64**
2500 x 1200	HCV500/600	2x 1,4 / 2x 0,7	30	**1,08**
2500 x 1200	HCV500/350	2x 1,4 / 2x 0,7	17	**0,66**
2500 x 1300	HCV500/600	2x 1,4 / 2x 0,7	28	**1,12**
2500 x 1300	HCV500/350	2x 1,4 / 2x 0,7	16	**0,70**
2500 x 1400	HCV500/600	2x 1,4 / 2x 0,7	26	**1,14**
2500 x 1400	HCV500/350	2x 1,4 / 2x 0,7	15	**0,72**
2600 x 800	HCV500/350	2x 1,4 / 2x 0,7	27	**0,61**
2600 x 900	HCV500/350	2x 1,4 / 2x 0,7	24	**0,62**
2600 x 1000	HCV500/350	2x 1,4 / 2x 0,7	21	**0,65**
2600 x 1100	HCV500/600	2x 1,4 / 2x 0,7	33	**1,05**
2600 x 1100	HCV500/350	2x 1,4 / 2x 0,7	19	**0,66**
2600 x 1200	HCV500/600	2x 1,4 / 2x 0,7	30	**1,12**
2600 x 1200	HCV500/350	2x 1,4 / 2x 0,7	17	**0,69**
2600 x 1300	HCV500/600	2x 1,4 / 2x 0,7	28	**1,17**
2600 x 1300	HCV500/350	2x 1,4 / 2x 0,7	16	**0,73**
2700 x 800	HCV500/350	2x 1,4 / 2x 0,7	27	**0,63**

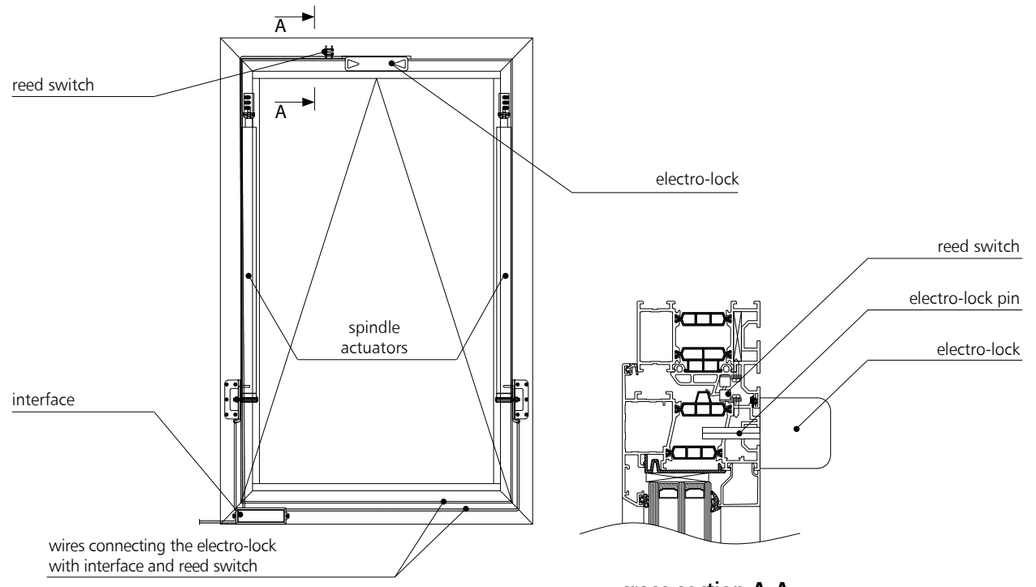
WINDOW SIZE B' x H'	ACTUATOR	POWER CONSUMPTION FOR 24 V- / 48 V-***	OPENING ANGLE**	**ACTIVE AERODYNAMIC AREA [Aa]**
[mm]	-	[A]	[°]	**[m²]**
2700 x 900	HCV500/350	2x 1,4 / 2x 0,7	24	**0,65**
2700 x 1000	HCV500/350	2x 1,4 / 2x 0,7	21	**0,68**
2700 x 1100	HCV500/600	2x 1,4 / 2x 0,7	33	**1,10**
2700 x 1100	HCV500/350	2x 1,4 / 2x 0,7	19	**0,69**
2700 x 1200	HCV500/600	2x 1,4 / 2x 0,7	30	**1,17**
2700 x 1200	HCV500/350	2x 1,4 / 2x 0,7	17	**0,72**
2700 x 1300	HCV500/600	2x 1,4 / 2x 0,7	28	**1,19**
2700 x 1300	HCV500/350	2x 1,4 / 2x 0,7	16	**0,74**

(*) 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-. HCVA 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.

mcr OSO THERM 75 | Inward-opening smoke exhaust windows

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.



cross section **A-A**

B' - window width [mm] \ H' - window height [mm]	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200
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

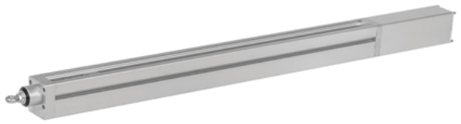


Fig.96 - Spindle actuator type G

» 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

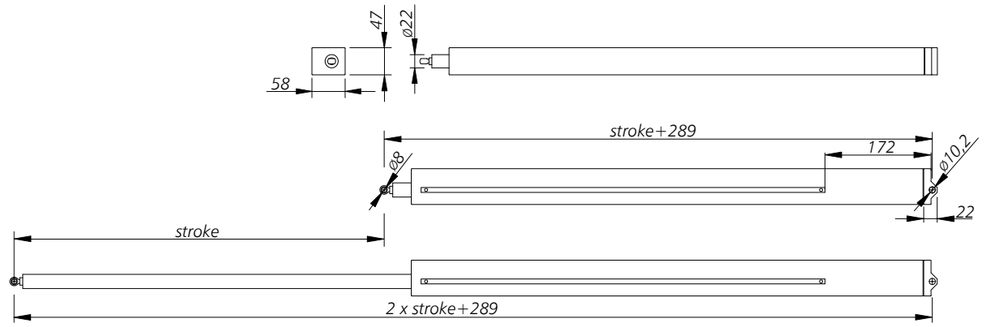


Fig.98 - Dimensions of type G electric spindle actuator [mm]

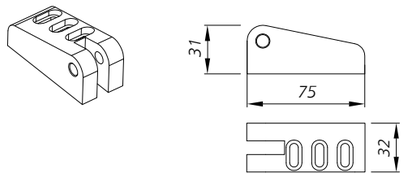


Fig.99 - Top console for mounting type G spindle actuator on the smoke exhaust window, dimensions [mm]

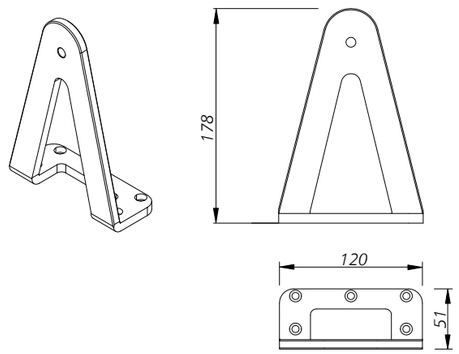


Fig.100 - Bottom bracket for mounting type G spindle actuator on the smoke exhaust window, dimensions [mm]

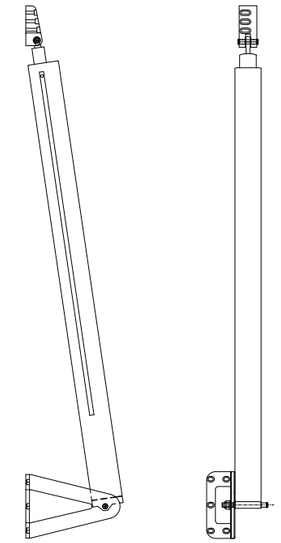


Fig.101 - Type G spindle actuator with upper and lower console mounted

2.1.1 | Type G spindle electric actuator with shifted pivot point

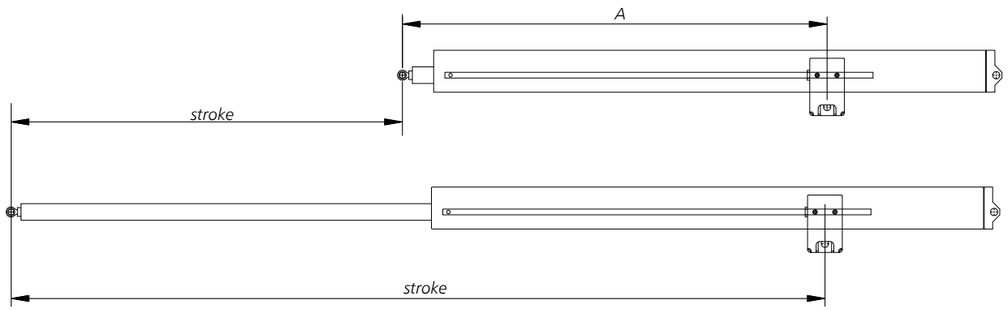


Fig.102 - Dimensions of type G spindle actuator with shifted pivot point

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

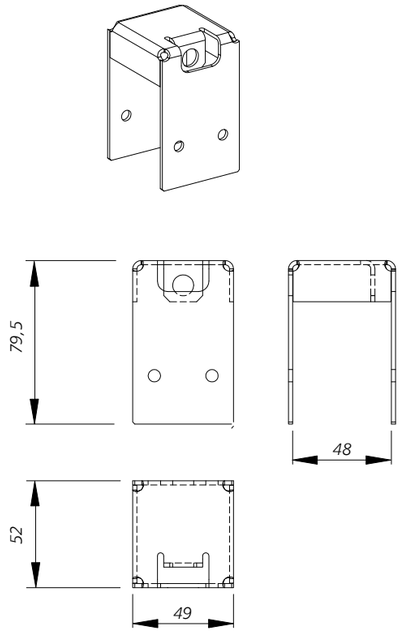


Fig.103 - Sliding console for mounting type G spindle actuator with shifted pivot point on the smoke exhaust window, dimensions [mm]

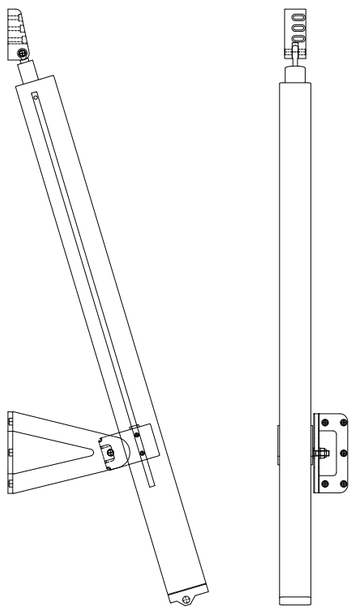


Fig.104 - Type G spindle actuator with upper and lower console mounted with shifted pivot point

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

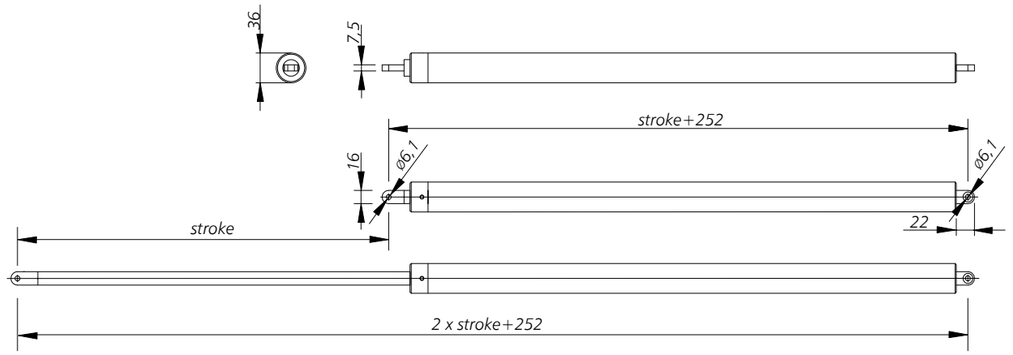


Fig.105 - Dimensions of type S electric spindle actuator [mm]

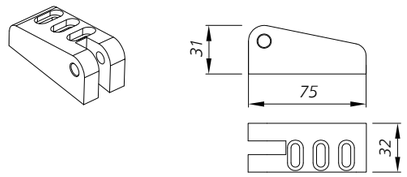


Fig.106 - Top console for mounting type S spindle actuator on the smoke exhaust window, dimensions [mm]

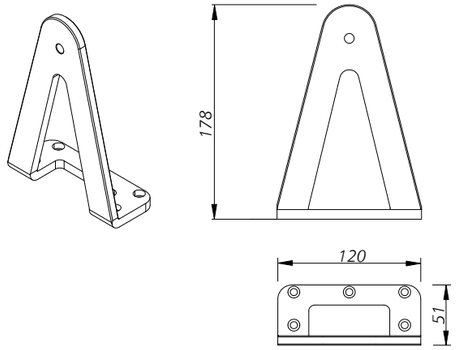


Fig.107 - Bottom bracket for mounting type S spindle actuator on the smoke exhaust window, dimensions [mm]

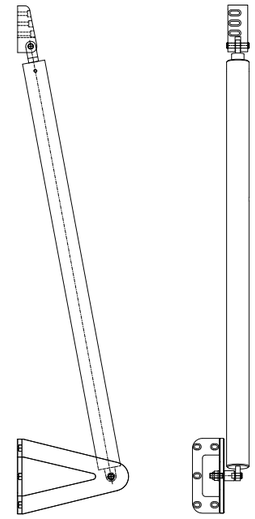


Fig.108 - Type S spindle actuator with upper and lower console mounted

2.1.2 | Type S spindle electric actuator with shifted pivot point

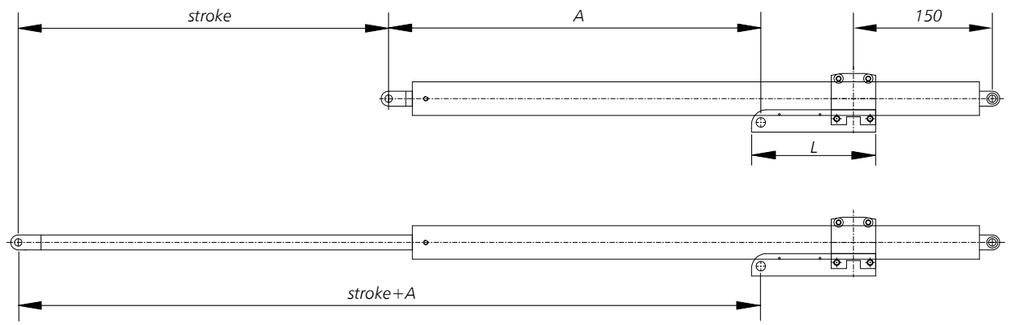


Fig.109 - Dimensions of type S spindle electric actuator with shifted pivot point [mm]

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

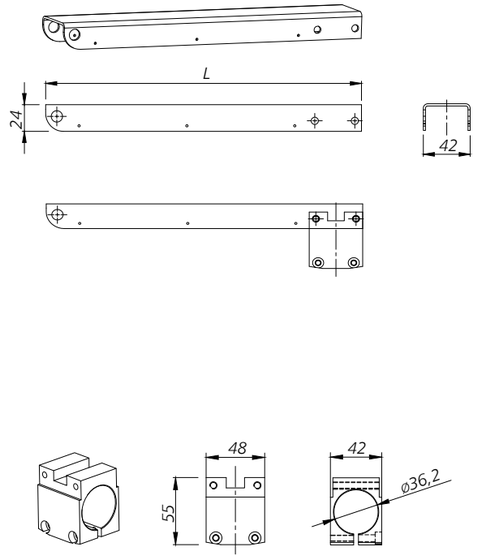


Fig.110 - Sliding console for mounting type S spindle actuator with shifted pivot point on the smoke exhaust window, dimensions [mm]

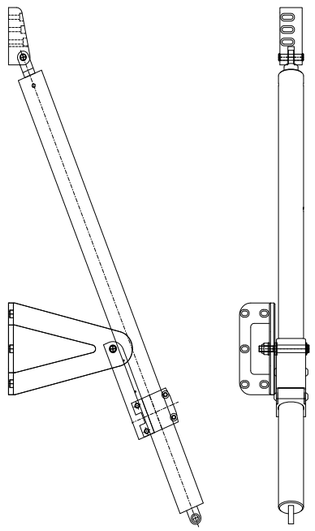


Fig.111 - Type S spindle actuator with upper and lower console mounted with shifted pivot point

mcr OSO THERM 75 | Electric control system for smoke exhaust windows

2. 2 | 24 V- / 48 V- electric chain actuators

2.2.1 | 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 48	1,4 0,7	350	436 x 51 x 40	-25 ÷ +75
HCV 500/600	24 48	1,4 0,7	600	561 x 51 x 40	-25 ÷ +75
HCV 500/800	24 48	1,4 0,7	800	661 x 51 x 40	-25 ÷ +75
HCV 500/1000	24 48	1,4 0,7	1000	766 x 51 x 40	-25 ÷ +75

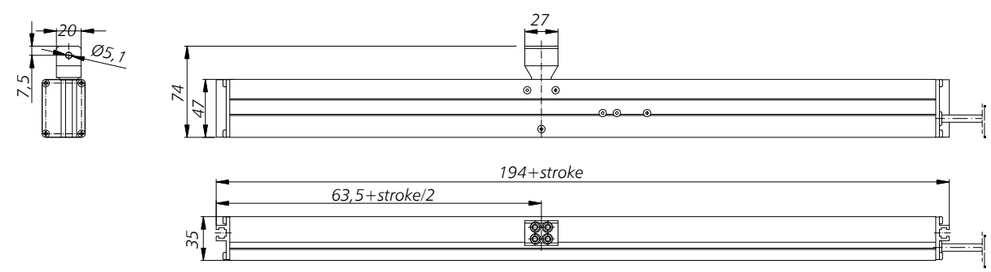


Fig.112 - Dimensions of HCV electric chain actuator [mm]

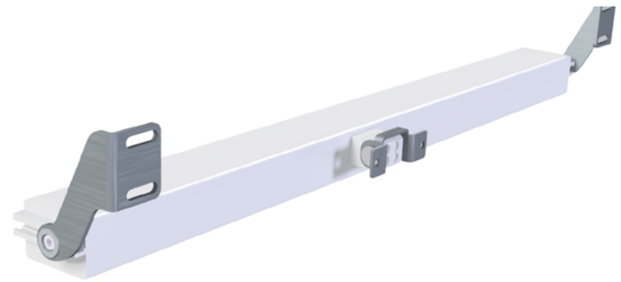


Fig.113 - HCV chain actuator with consoles for outward opening window

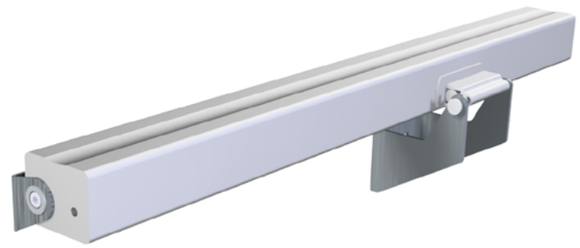


Fig.114 - HCV chain actuator with consoles for inward opening window

2.1.2 | 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

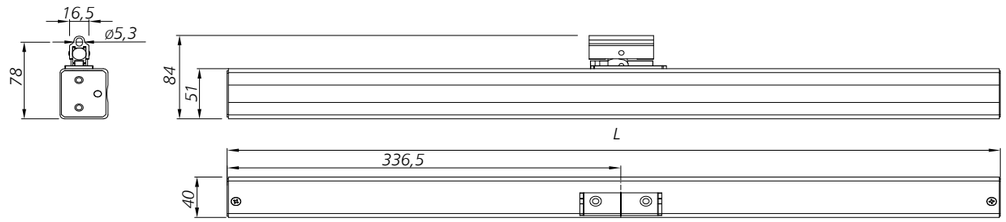


Fig.115 - Dimensions of HCVA electric chain actuator [mm]

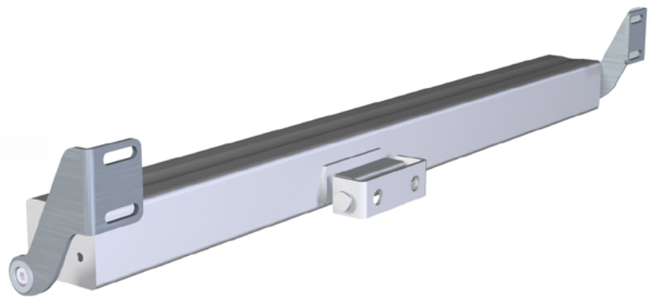
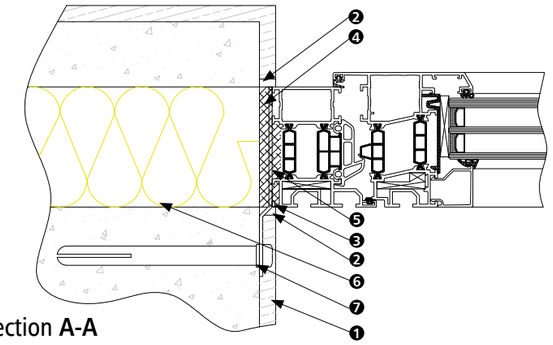


Fig.116 - HCVA chain actuator with consoles for outward opening window

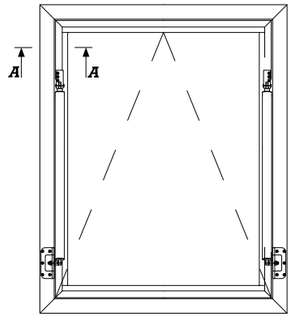
Fig.117 - HCVA chain actuator with consoles for inward opening window

3 | INSTALLATION OF SMOKE EXHAUST WINDOW

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

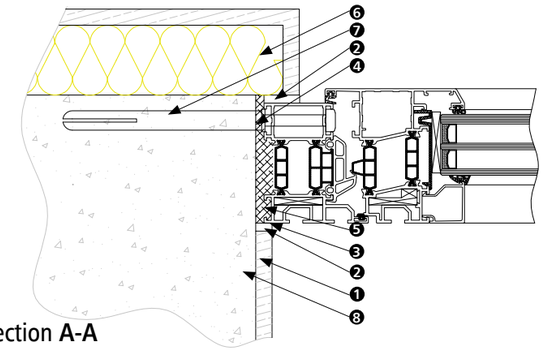


cross section **A-A**

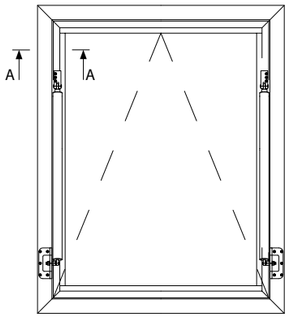


1 - plaster
2 - sealing tape, expandable
3 - corner sealing (neutral silicone)
4 - polyurethane sealing foam
5 - installation gap (10 - 30 mm)
6 - thermal insulation
7 - mounting anchor / dowel

3.2 | Wall-mounted smoke exhaust window with external insulation

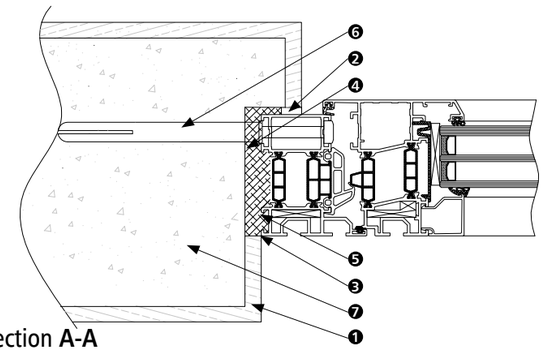


cross section **A-A**

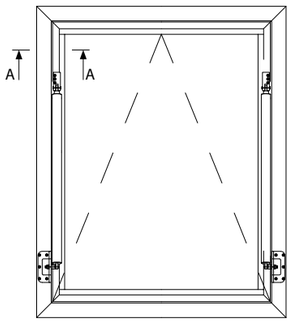


1 - plaster
2 - sealing tape, expandable
3 - corner sealing (neutral silicone)
4 - polyurethane sealing foam
5 - installation gap (10 - 30 mm)
6 - thermal insulation
7 - dowel
8 - bearing wall

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

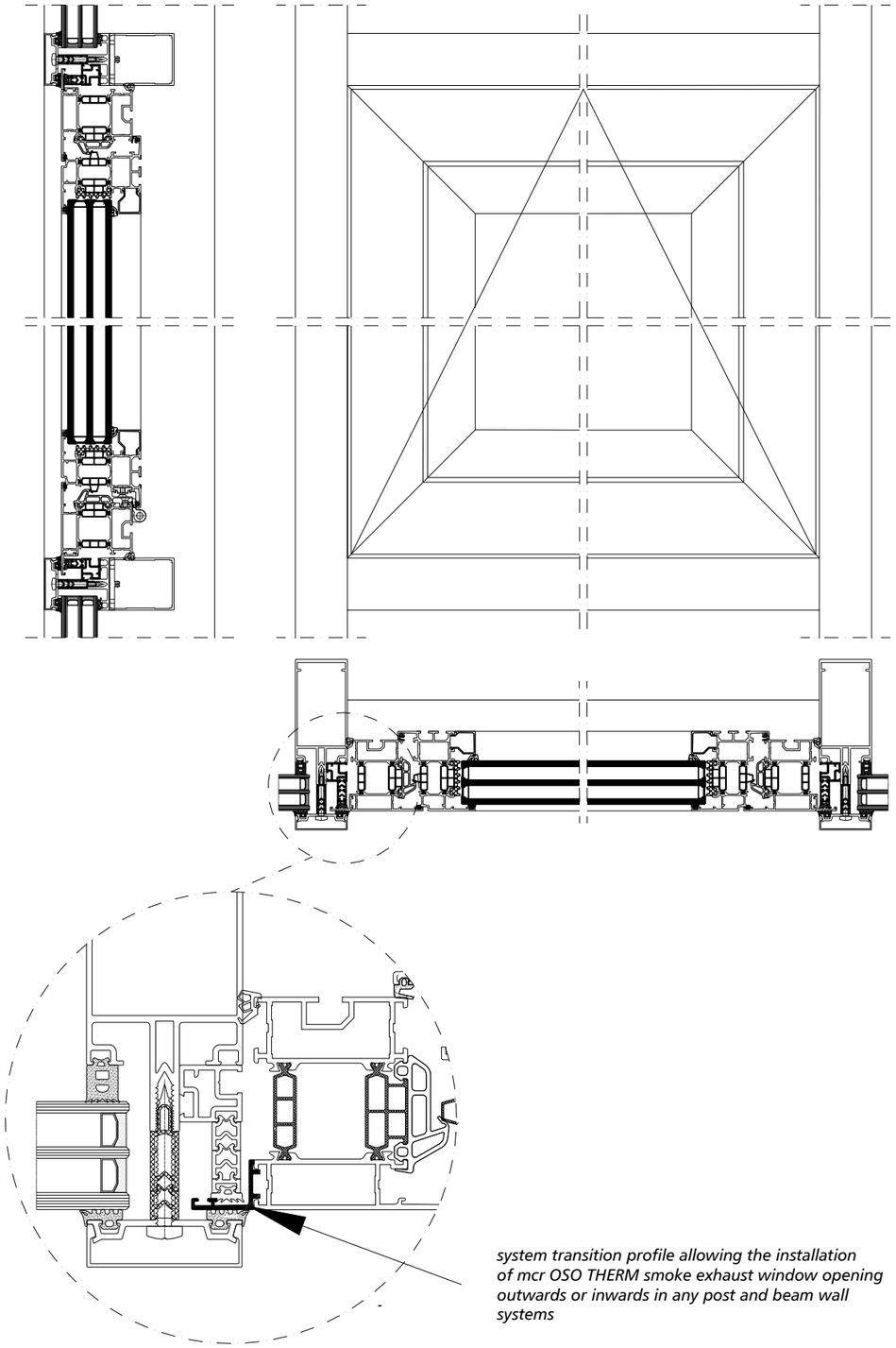


cross section **A-A**



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

mcr OSO THERM 75 |Notes

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