Revolutionizing the Appearance and Performance of Out Swing Windows



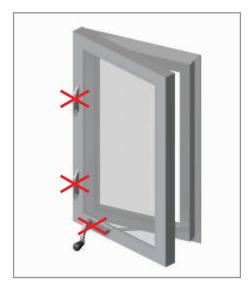


Introduction

Awning and Casement Window Hardware

How it USED to be

Until now, anyone using outswing aluminum windows had only 2 options: Install cam handles and screens with wickets or rotary operators with multiple, separate locks. When limited openings were required, yet another piece of hardware was installed.



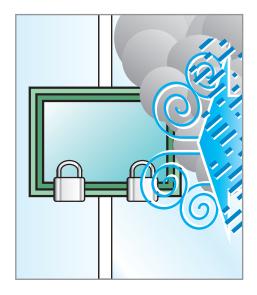


The NEW reality: Less is REALLY more

With Giesse's OS Operator, three functions are combined into one piece of hardware. With only a 180° movement of a single cremone handle, a user can now open and close a window, engage and disengage multiple locking points, and insure security and safety with a limited opening. And since all this functionality begins with a frame-mounted handle, screens are flat -- and wickets are just a memory.







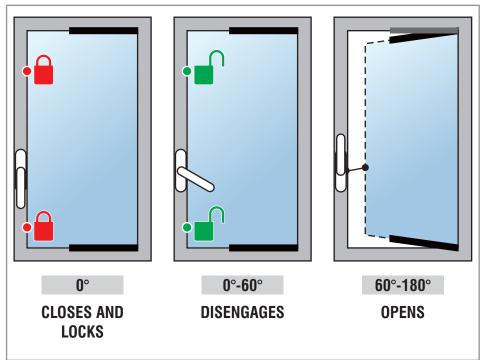




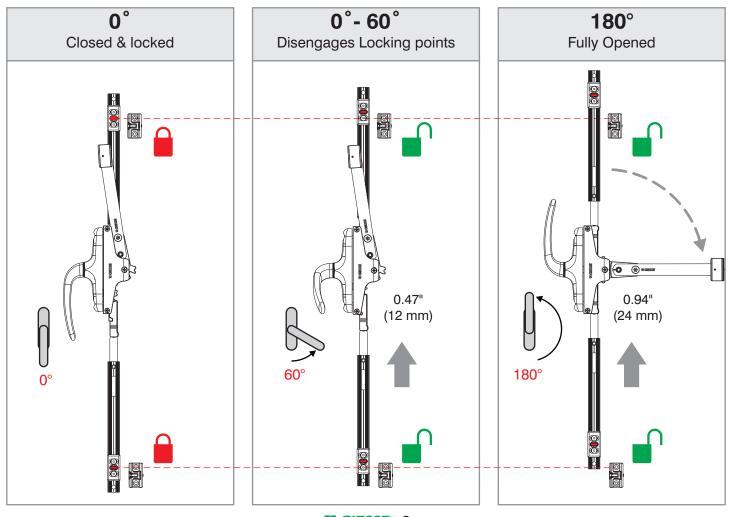
How it all works

GIESSE's innovative design begins with a cremone handle and mechanism that are mounted to the frame. The mechanism includes a movement arm, a gear to transfer movement, and attached locking pawls. Keepers are attached to an integral groove in the vent.

At 0°, the window is closed and the locking points are secured. When the cremone is turned, the locking points release in the first 60° of handle rotation. During the next 120° of movement, the mechanism pushes the sash to the maximum opening based on the arm length. As the cremone rotates back to the closed position, the mechanism brings the vent back to the frame and engages the locking points.

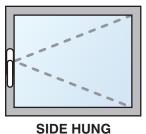


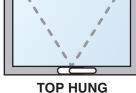
Casement/Side-hung window example



The product

The standard OS Operator is non-handed and can be used for both casement and awning windows. It is 725 mm (28 $^{1}/_{2}$ " inches) long and includes a locking point at each end. For smaller windows, a handed, 466,5 mm (18 $^{3}/_{8}$ " inches) version - with only 1 locking point - is available.

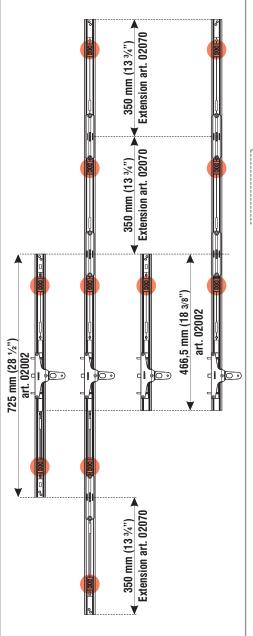


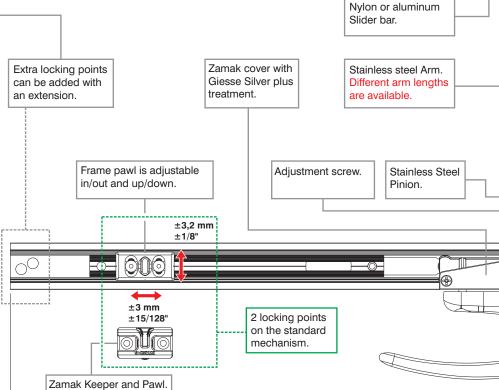


SIDE HUNG TOP HUNG
CASEMENT AWNING

Exstension item 02070

On the basic mechanism, it's possible to fit 2 extensions on the top and bottom with an additional locking point each.





The limit stop has a custodial screw, allowing the vent to be easily opened fully for cleaning purposes.



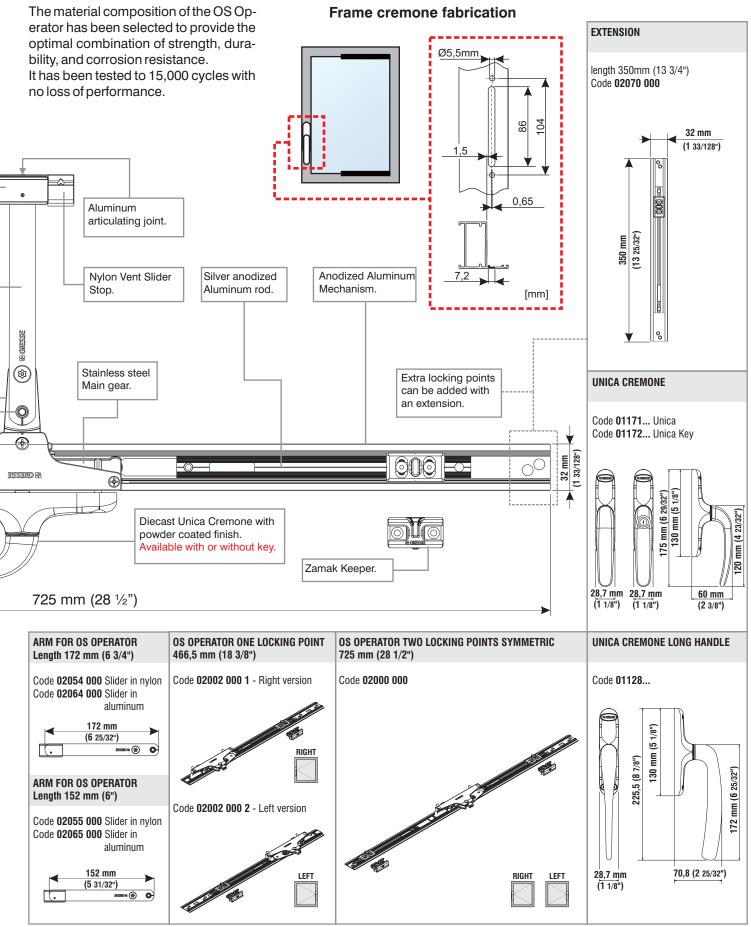
Vent attached to limit stop



Vent disengaged from limit stop

TORX T30

Vent fully opened



Technical details

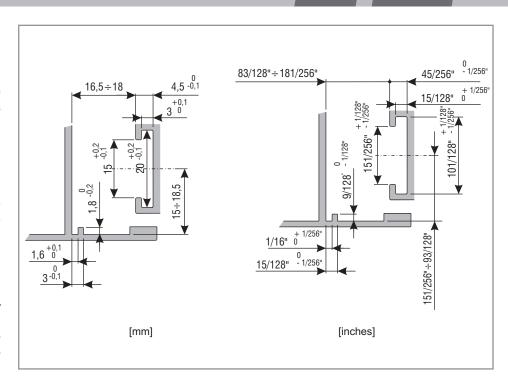
System Design for the OS Operator

The OS Operator has been designed to work with a vent-to-frame clearances that allow for standard four bar hinges. The ideal design utilizes an integral groove on the vent with a flat surface on the frame.

For a detailed review of potential applications, please contact Giesse Engineering for assistance.

Size Limitations

Overall size restrictions for windows utilizing the OS Operator depend upon many factors including the hinges utilized, glass size, windload requirements, and impact requirements.



Max and Min vent size								
		Top Hunç	3			Side Hun	g	
OS Operator mechanism 725	L Max.	1500 mm 59 1/16"	H Max.	2000 mm 78 3/4"	L Max.	900 mm 35 7/16"	H Max.	1600 mm <i>63</i> "
Code 02000 000	L Min.	800 mm 31 1/2"	H Min.	450 mm * 17 22/32"	L Min.	450 mm* 17 23/32"	H Min.	800 mm 31 1/2"
OS Operator mechanism 466,5	L Max.	1500 mm 59 1/16"	H Max.	2000 mm 78 3/4"	L Max.	900 mm 35 7/16"	H Max.	1600 mm <i>63</i> "
Code 02002 000 1 Code 02002 000 2	L Min.	500 mm 19 11/16"	H Min.	450 mm * 17 22/32"	L Min.	450 mm* 17 23/32"	H Min.	500 mm 19 11/16"
* IF THIS DIMENSION IS <= 550 mm (17 23/32") LOOSE RIVET ARMS MUST BE USED								

Test Results

The OS Operator has passed cycle testing at 15,000 cycles for both an awning and casement windows at AAMA's gateway sizes.

In addition, the use of a single cremone handle in the OS Operator substantially improves air and water performance. Traditional systems with rotary operators and multiple locks – penetrate the frame with more and larger openings. Systems designed with the OS Operator can result in reduced air infiltration and higher water performance than these traditional systems.





Component summary

mechanism	Nr.	Description	Code	Mechanism length mm	Mechanism length inches	Locking points	Joint extension	Pieces in each box
Operator me	A1	OS Operator Mechanism - Symmetric - 725	02000 000	725	28 1/2 "	2	Top & bottom, maximum 3 pieces (2+1)	10
0 80	A2	OS Operator Mechanism - RX -466,5	02002 0001	466,5	18 3/8"	1	Top only, maximum	10
A)	А3	OS Operator Mechanism - LH -466,5	02002 0002	466,5	18 3/8"	1	of 2	10
	N×	Description	Codo	Arm length	Arm length	Pieces in each		

Nr.	Description	Code	Arm length mm	Arm length inches	Pieces in each box
B1	Arm for Os Operator - nylon slider -172	02054 000	172	6 3/4"	10
B2	Arm for Os Operator - nylon slider -152	02055 000	152	6"	10
В3	Arm for Os Operator - aluminum -slider -172	02064 000	172	6 3/4"	10
В4	Arm for Os Operator - aluminum -slider -152	02065 000	152	6"	10

Nr.	Description	Code	Cremone handle length mm	Cremone handle length inches	Pieces in each box
C1	Unica Cremone	01171	120	4 23/32"	10
C2	Unica Key Cremone	01172	120	4 23/32"	10
C3	Unica Cremone long handle	01128	172	6 25/32"	10

Extension	Nr.	Description	Code	Extension length mm	Extension length inches	Locking points	Pieces in each box
D) E	D1	Extension - 350	02070 000	350	13 3/4"	1	10

2	Description	Code	Pieces in each box	
	Gasket for Unica cremone	06951 000	100	
	Tool Kit for OS Operator mechanism	02003 000	20	

Note: for codes containing the characters "..." see the General Price List (section entitled "How to order") to identify the code of the chosen finish.

