

GIESSE **OS OPERATOR**

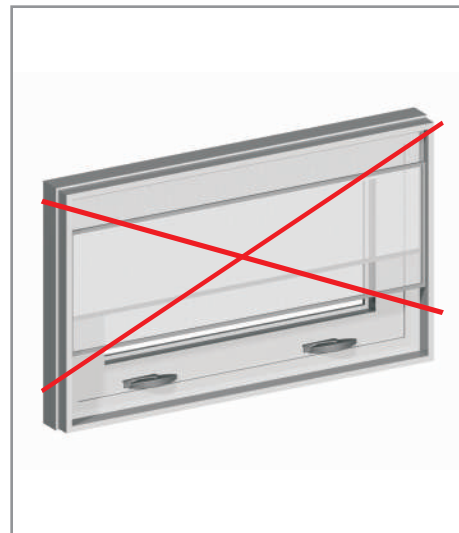
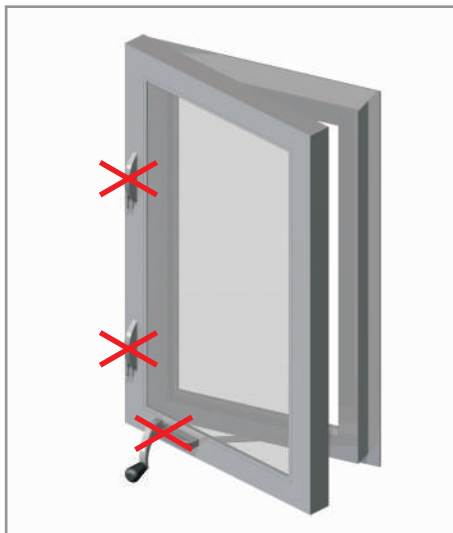
Revolutionizing the Appearance and
Performance of Out Swing Windows



Awning and Casement Window Hardware

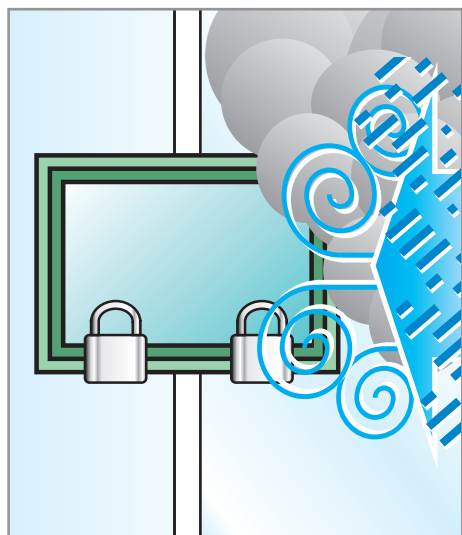
How it USED to be

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.

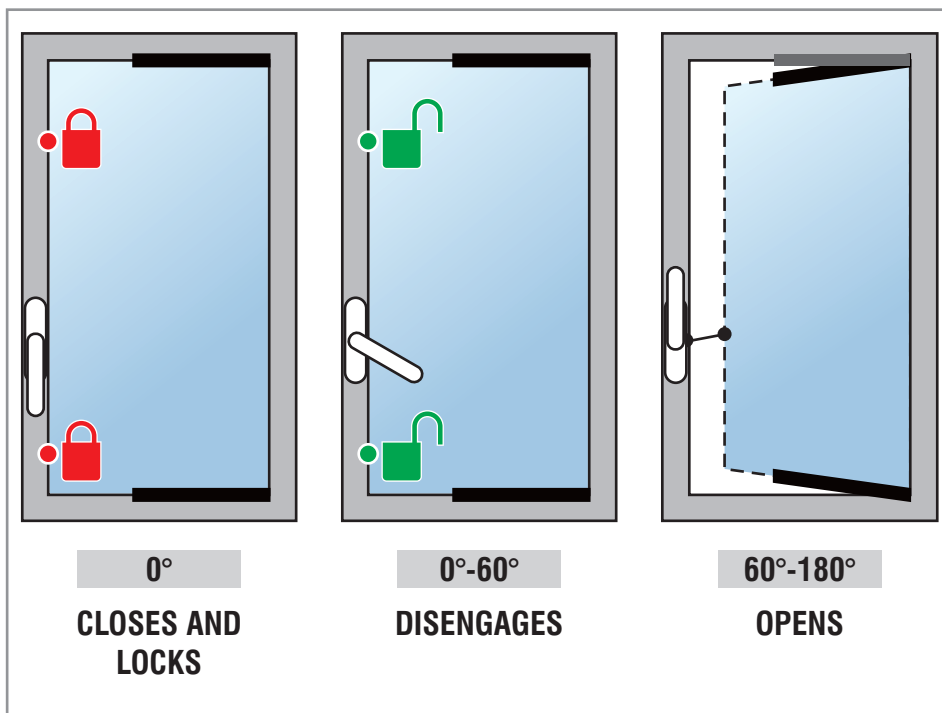


GIESSE OS OPERATOR

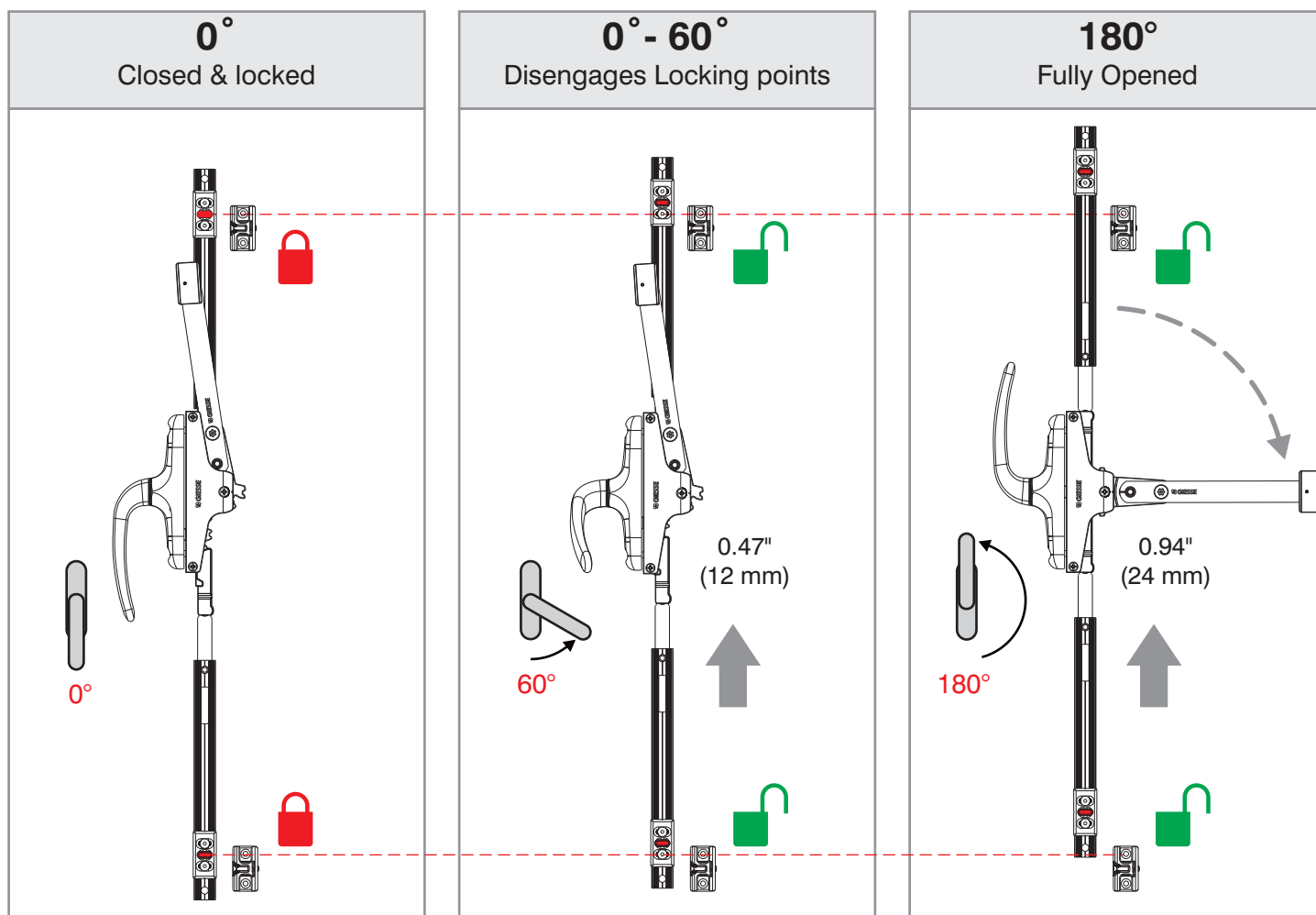
How it all works

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.



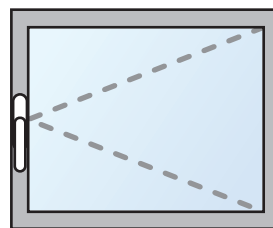
Casement/Side-hung window example



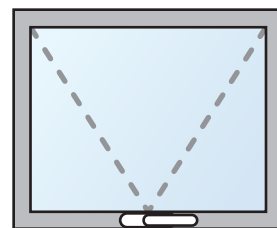
GIESSE OS OPERATOR

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.



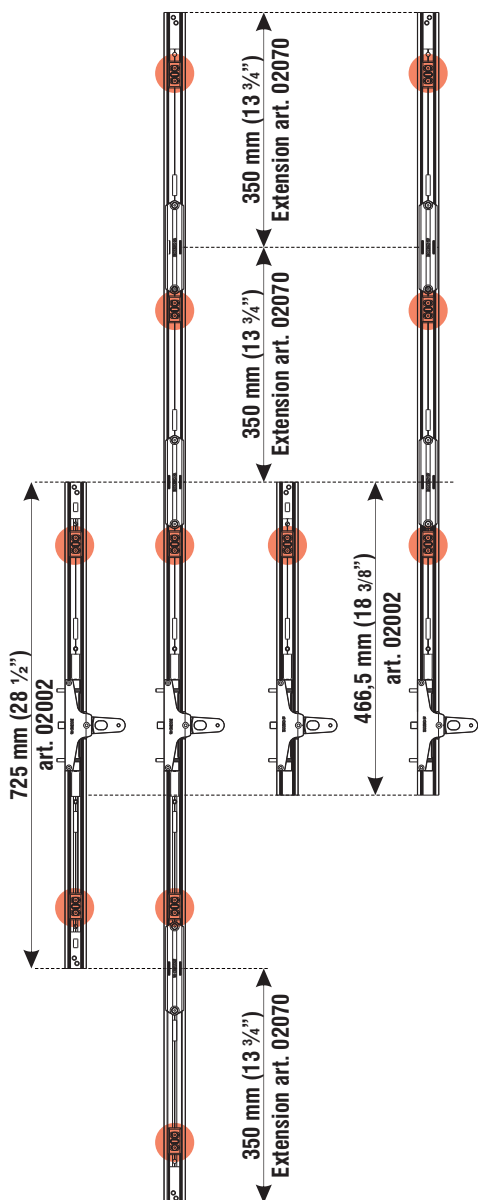
**SIDE HUNG
CASEMENT**



**TOP HUNG
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.



Extra locking points can be added with an extension.

Zamak cover with Giesse Silver plus treatment.

Nylon or aluminum Slider bar.

Stainless steel Arm. Different arm lengths are available.

Frame pawl is adjustable in/out and up/down.

Adjustment screw.

Stainless Steel Pinion.

$\pm 3,2$ mm
 $\pm 1/8$ "

± 3 mm
 $\pm 15/128$ "

2 locking points on the standard mechanism.

Zamak Keeper and Pawl.

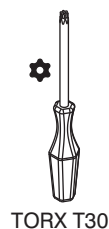
The limit stop has a custodial screw, allowing the vent to be easily opened fully for cleaning purposes.



Vent attached to limit stop



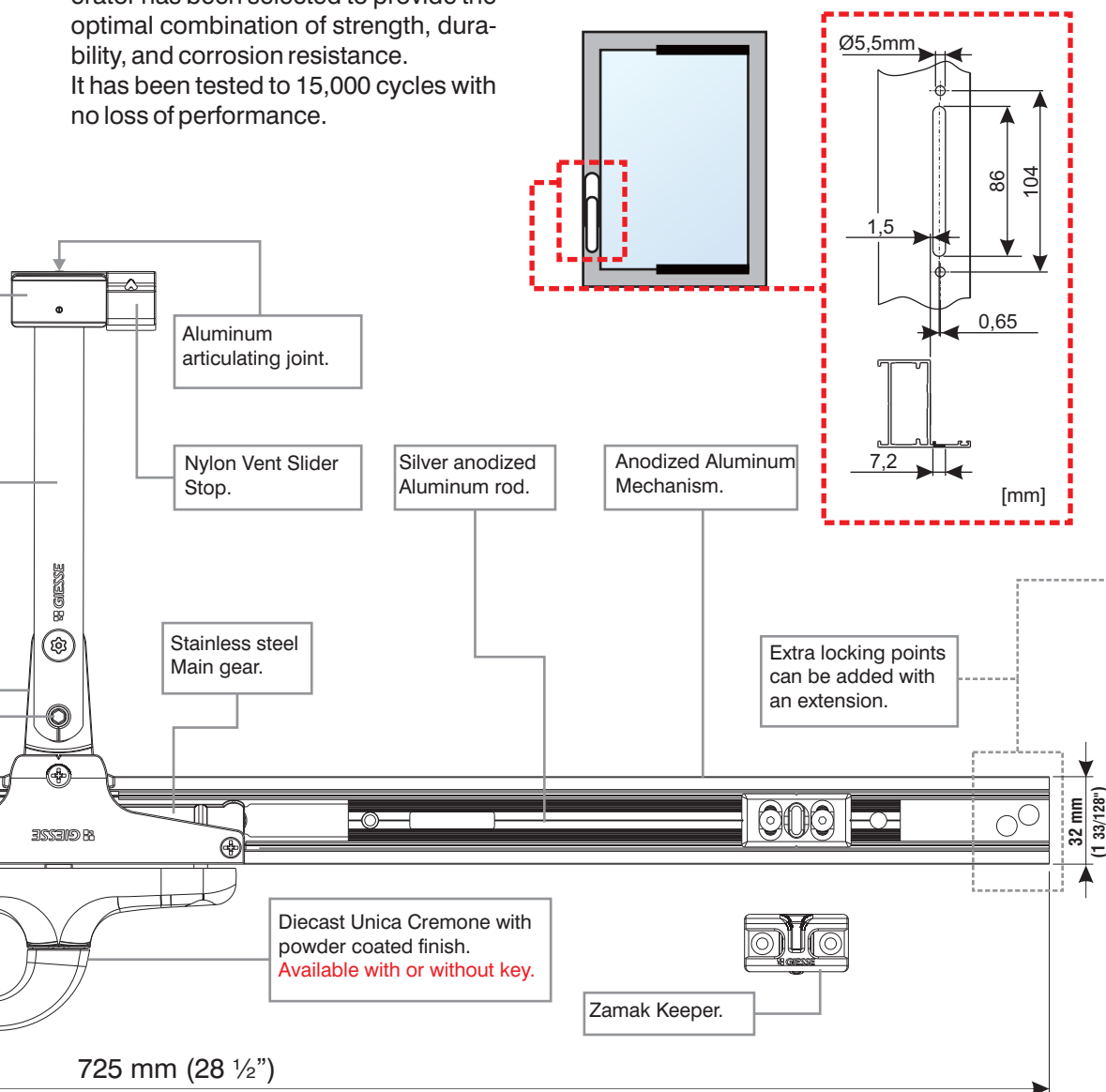
Vent disengaged from limit stop
Vent fully opened



TORX T30

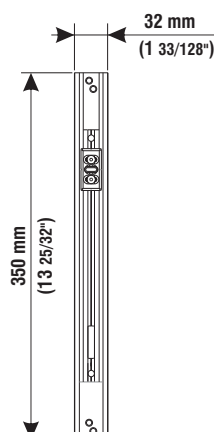
The material composition of the OS Operator has been selected to provide the optimal combination of strength, durability, and corrosion resistance. It has been tested to 15,000 cycles with no loss of performance.

Frame cremone fabrication



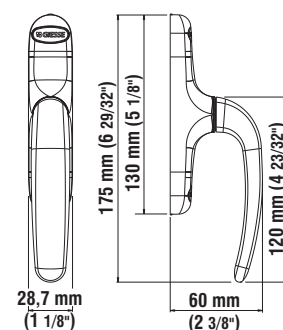
EXTENSION

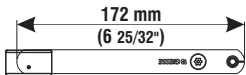
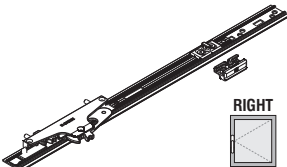
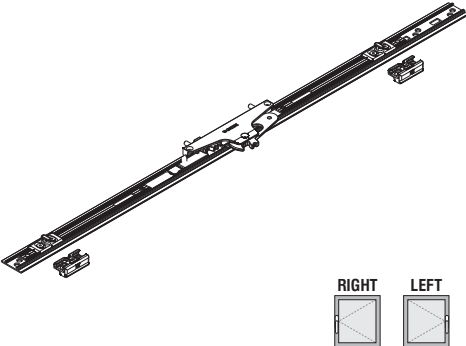
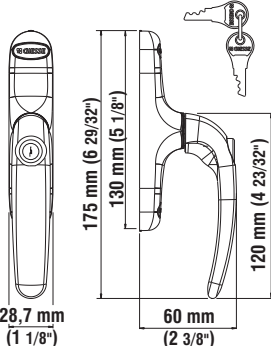
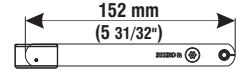
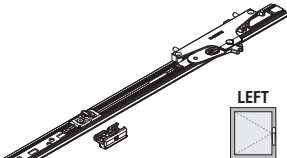
length 350 mm (13 3/4")
Code 02070 000



UNICA CREMONE

Code 01171...



ARM FOR OS OPERATOR Length 172 mm (6 3/4")	OS OPERATOR ONE LOCKING POINT 466,5 mm (18 3/8")	OS OPERATOR TWO LOCKING POINTS SYMMETRIC 725 mm (28 1/2")	UNICA KEY CREMONE
Code 02054 000 Slider in nylon Code 02064 000 Slider in aluminum 	Code 02002 000 1 - Right version 	Code 02000 000 	Code 01172... 
ARM FOR OS OPERATOR Length 152 mm (6") Code 02055 000 Slider in nylon Code 02065 000 Slider in aluminum 	Code 02002 000 2 - Left version 		

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

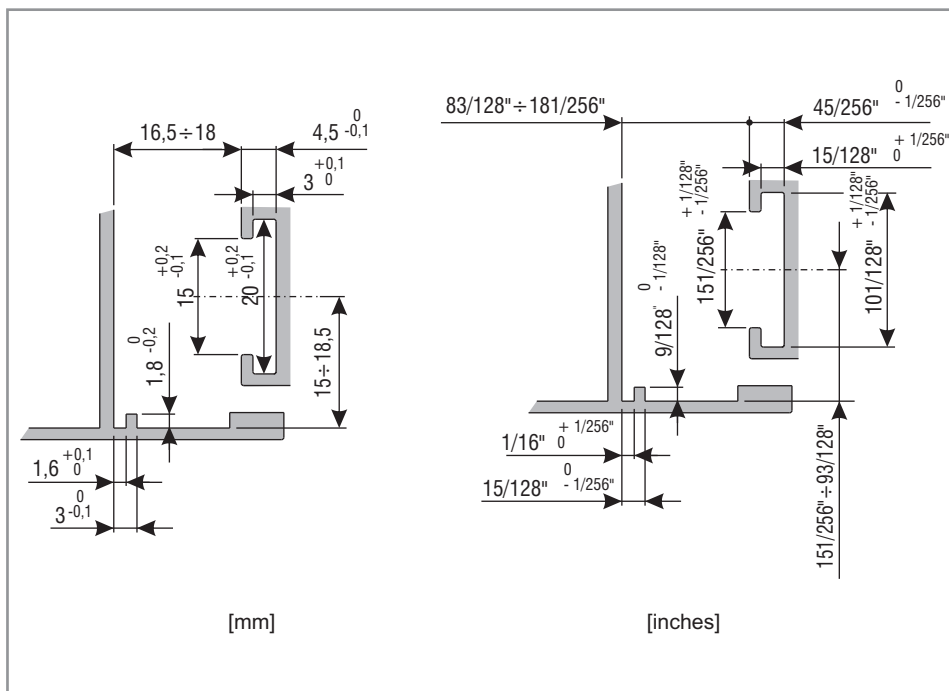
System Design for the OS Operator

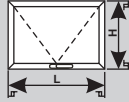
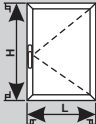
The OS Operator has been designed to work with a vent-to-frame clearances that allow for standard four bar hinges. The ideal design utilizes an integral groove on the vent with a flat surface on the frame.

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.

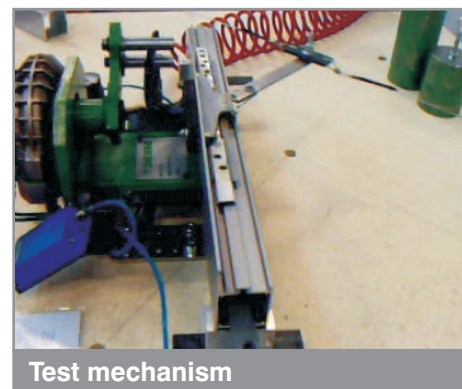


Max and Min vent size								
Top Hung 				Side Hung 				
OS Operator mechanism 725 Code 02000 000	L Max.	1500 mm	H Max.	2000 mm	L Max.	900 mm	H Max.	1600 mm
		59 1/16"		78 3/4"		35 7/16"		63"
OS Operator mechanism 466,5 Code 02002 000 1 Code 02002 000 2	L Min.	800 mm	H Min.	450 mm *	L Min.	450 mm*	H Min.	800 mm
		31 1/2"		17 22/32"		17 23/32"		31 1/2"
	L Max.	1500 mm	H Max.	2000 mm	L Max.	900 mm	H Max.	1600 mm
		59 1/16"		78 3/4"		35 7/16"		63"
	L Min.	500 mm	H Min.	450 mm *	L Min.	450 mm*	H Min.	500 mm
		19 11/16"		17 22/32"		17 23/32"		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.

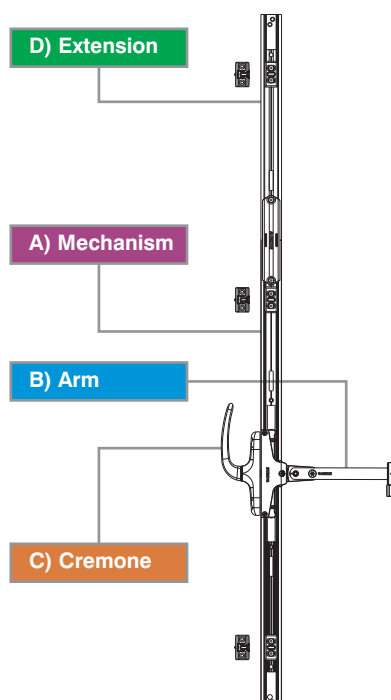
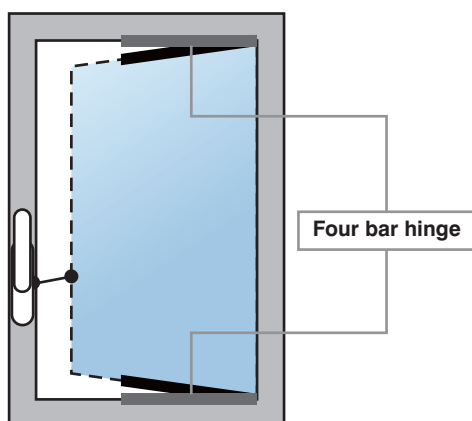


GIESSE OS OPERATOR

Component summary

A) OS Operator mechanism	Nr.	Description	Code	Mechanism lenght mm	Mechanism lenght inches	Locking points	Joint extension	Pieces in each box
	A1	OS Operator Mechanism - Symmetric - 725	02000 000	725	28 1/2 "	2	Top & bottom, maximum 3 pieces (2+1)	10
	A2	OS Operator Mechanism - RX -466,5	02002 0001	466,5	18 3/8"	1	Top only, maximum of 2	10
	A3	OS Operator Mechanism - LH -466,5	02002 0002	466,5	18 3/8"	1		10
B) Arms for OS Operator	Nr.	Description	Code	Arm lenght mm	Arm lenght 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		
	B3	Arm for Os Operator - aluminum -slider -172	02064 000	172	6 3/4"	10		
	B4	Arm for Os Operator - aluminum -slider -152	02065 000	152	6"	10		
C) Cremone for OS Operator	Nr.	Description	Code	Cremone handle lenght mm	Cremone handle lenght inches	Pieces in each box		
	C1	Unica Cremone	01171 ...	120	4 23/32"	10		
	C2	Unica Key Cremone	01172 ...	120	5 23/32"	10		
D) Extension	Nr.	Description	Code	Extension lenght mm	Extension lenght inches	Locking points	Pieces in each box	
	D1	Extension - 350	02070 000	350	13 3/4"	1	10	
Other items	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.



GIESSE NORTH AMERICA

www.gs-na.com

423 279 9900

gsna@giessegroup.com



U0304000/01-2011