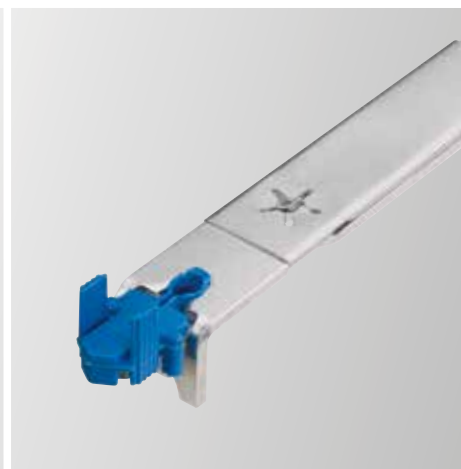


TECHNOLOGY IN MOTION



**MACO**  
**ESPAGS**  
ESPAGNOLETTES



Catalogue 2016



Part number



Packing unit



Number of required night-vent striker plates



Number of required shootbolt striker plates



Number of required combi striker plates



Sash rebate width (SRW) and sash rebate height (SRH)



Overall component length



Overall component width



Cam height

**Note:** If not otherwise specified, all dimensions are stated in millimetres and packing units in items per box.



Dear MACO customer,

You are holding our new order catalogue in your hands. Our main aim was to present our product range in a simple and easy-to-understand manner in order to provide you with a practical working document. In addition to this catalogue, our package leaflet and assembly instructions will help you to process and install our products correctly. These are available to download from [extranet.maco.eu](http://extranet.maco.eu) or [www.maco.eu](http://www.maco.eu).

Our products help to ensure that windows, doors and large-scale elements offer optimum function and security. As a premium manufacturer, that carries out its business according to the highest standards, the optimum quality and functionality of our hardware is our top priority. While we guarantee the best possible product characteristics for our hardware components, the responsibility for professional installation and correct fixing lies in your hands.

We want to support you, as a dealer or fabricator, with your responsibility for the safety of your products. Our binding assembly instructions and package leaflets provide information about the general use and processing of our hardware. To ensure the best fabrication and attachment of the hardware components – to suit the relevant installation situation, such as strength and profile design of the timber, arrangement of chambers and reinforcement in PVC profiles, etc. , you can have elements tested and evaluated at our certified test centre: an air permeability and driving rain test as well as a pull-out test will help you to meet CE marking requirements. This means that you can rest assured that you are meeting all the standards and directives applicable to you.

You can find information about how to properly store our hardware components in our operation and maintenance instructions or the VHBH guideline of the Quality Assurance Association: Locks and Hardware ([www.fvsb.de](http://www.fvsb.de)).

**Important for dealers:** *MACO supplies its products with the corresponding number of package leaflets. As a dealer, you are responsible for enclosing the correct number of package leaflets with the products sold by you. Also, please ensure that you make your customers aware of the relevant binding instructions and legal aspects of the document.*

We also provide you with operation and maintenance instructions for end users for you to pass on to your customers. These can also be downloaded from the MACO website ([www.maco.eu](http://www.maco.eu)).

We are offering an option in our extranet ([extranet.maco.eu](http://extranet.maco.eu)) with our online catalogue, which, in addition to highly up-to-date information, also offers the advantage of extensive additional technical information for all components. You can obtain access details from your contact partner in field sales.

All of our printed documentation is continuously revised and expanded. Please make sure that you are working with our most current documentation. All of our documentation is available for download at [extranet.maco.eu](http://extranet.maco.eu) or [www.maco.eu](http://www.maco.eu). We hope that the catalogue will prove to be a valuable tool for your daily work. We wish you every success and hope to see you online soon.

**We confirm receipt and approvingly acknowledge its contents.**

Stamp:

\_\_\_\_\_ *Please print your name in capital letters*

Date: \_\_\_\_\_ Signature: \_\_\_\_\_

MACO sales manager: \_\_\_\_\_

MACO  
ESPAGS





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MACO  
ESPAGS





## **1      Technical and general information**

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## 1 Technical and general information

### 1.1 How to use the catalogue

If not otherwise specified, all dimensions are stated in millimetres and packing units in items per box.

Drawings and diagrams are not to scale.

The content of this document is constantly being updated, so regular calibration is necessary. The current ver-

sion is downloadable from the Extranet ([extranet.maco.eu](http://extranet.maco.eu)) or from our website ([www.macouk.net](http://www.macouk.net)).

Please send comments or suggestions about our instructions by email to [feedback@maco.eu](mailto:feedback@maco.eu).





### 1.2 Certificates and guarantees

MACO ensures high quality, not only with ongoing continuous internal testing, but also through external auditing by renowned, independent institutes. Copies of all our independent test certificates, covering our quality, safety and environmental management systems, as well as our

product guarantees are available to download from our website [www.macouk.net](http://www.macouk.net), customers can access them directly from our customer extranet portal ([extranet.maco.eu](http://extranet.maco.eu)). In addition our safety descriptions relating to dangerous substances (REACH Declaration) are available, covering all MACO products.



## 1.3 Product Liability

### “ESPAGS“ Window Espagnolettes

In accordance with the manufacturer's liability for his products, which is defined in the “Product Liability Law” (§ 1 PHG), the following information is binding and should be considered for the entire “Espags” espagnolette product range. Non compliance shall relieve the manufacturer of all liability.

#### 1. PRODUCT INFORMATION AND CONVENTIONAL USE

In terms of this definition, the espagnolette product range includes (window sash and frame) fittings for timber, PVC-u and aluminium and their corresponding material combinations.

##### 1.1 Inline and Offset espagnolettes

When closing and locking the window one or more adjustable mushroom bolts engage into striker plates. The espagnolette is activated by turning the handle through 90°.

##### 1.2 Shootbolt espagnolettes

When closing and locking the window a combination of adjustable mushroom bolts and end shootbolts engage into striker plates. The espagnolette is activated by turning the handle through 90°.

##### 1.3 R.A.I.L. espagnolettes

When closing and locking the window one or more pairs of adjustable mushroom bolts engage together into striker plates. The espagnolette is activated by turning the handle through 90°.

#### 2. PRODUCT INSTALLATION

MACO espagnolettes should only be fitted by specialists. The MACO espagnolette must be able to be fitted easily into the recesses made in the window sash. Any components forced into the recess can impair the functionality of the espagnolette fitting.

The espagnolette must be screwed onto the window using appropriate tools that have a torque function.

The striker plates (mushroom, shootbolt and combination (combi)) must be fitted in such a way that they allow the espagnolette locking points to enter unhindered. Any component forced into a striker plate can impair the functionality of the espagnolette locking system.

To ensure the correct function of the mushroom striker plates they contain notches on the face that correspond to the centre of the mushroom bolt, which designate the optimal position of the striker plate. Shootbolt striker plates should be inserted into a mushroom strike and together they are located into the corners of the frame. When using combination (combi) striker plates these are simply located into the corners of the frame.

The striker plates must be screwed onto the frame using appropriate screws for the correct application with tools that have a torque function.

#### 3. PRODUCT MAINTENANCE

In order to ensure perfect functionality of MACO window espagnolettes

- the necessary information and instructions are to be transferred to the appropriate persons;
- the applicable standards are to be observed;
- MACO espagnolettes must be used according to their defined function;
- the manufacturer's regulations concerning the configuration of the fittings are to be observed;
- maintenance and care instructions are to be followed;
- faults may only be repaired by specialist personnel.

#### 4. PRODUCT PERFORMANCE

Unless the product performances and explicitly specified in our catalogues and brochures, the requirements of the individual locking system must be agreed with us.

The information concerning product performance solely refers to the combination of MACO original parts.

The efficiency of locking systems depends on, among other things, frequency of use, method of operation, environmental influences, maintenance and care.



## 1.4 General Terms and Conditions

Our general terms and conditions are available for download from our website ([www.macouk.net](http://www.macouk.net)) or from our extranet ([extra-net.maco.eu](http://extra-net.maco.eu)).

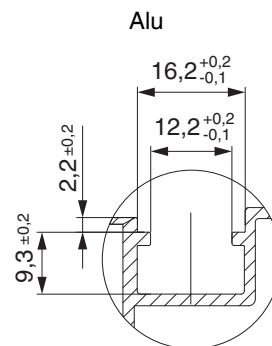
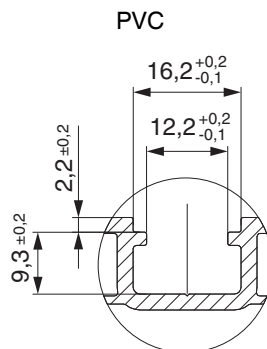
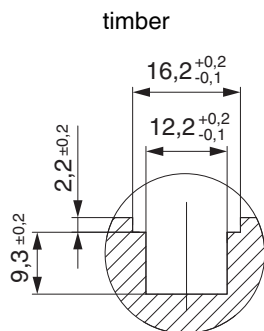


## 1.5 Profile specifications

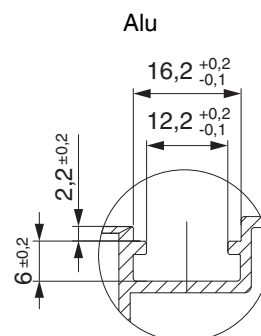
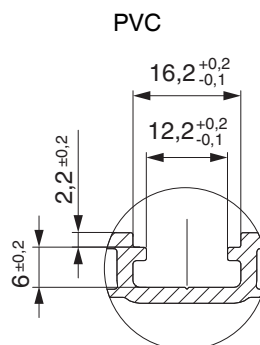
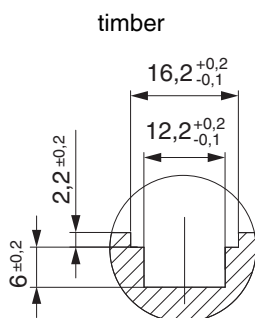
### 1.5.1 Eurogroove

For installation of turn-only and turn&tilt hardware the Eurogroove must be designed according to the following specifications:

#### Eurogroove



#### Shallow Eurogroove





## 2 M-SPAG

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2.1	M-SPAG Overview sizes & range	14
2.2	Backset 20 mm	15
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## 2 M-SPAG

### 2.1 M-SPAG Overview sizes & range

① Size 4 · 1200–1500 mm



② Size 3 · 900–1200 mm



③ Size 2 · 700–900 mm



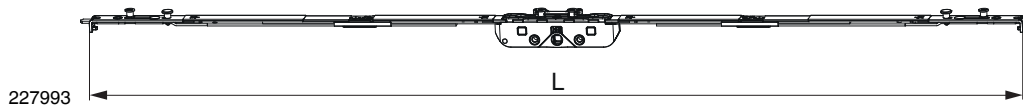
④ Size 1 · 600–700 mm



⑤ Size 0 · 500–600 mm

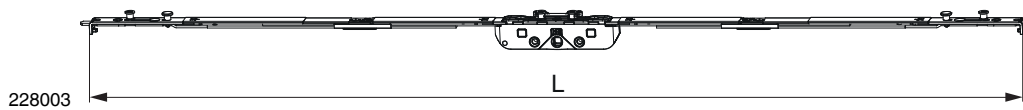


**2.2 Backset 20 mm**



**2.2.1 Mushroom height 7.7 mm, telescopic**

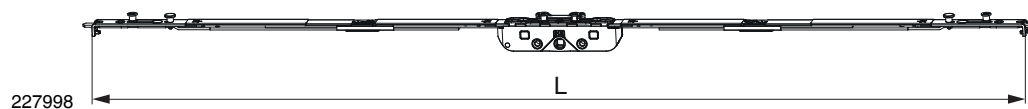
	L					No	No Tricoat
- silver	size 0	500	500 - 600	1	2	10	<b>227990</b>
	size 1	600	600 - 700	1	2	10	<b>227991</b>
	size 2	700	700 - 900	1	2	10	<b>227992</b>
	size 3	900	900 - 1.200	1	2	10	<b>227993</b>
	size 4	1.200	1.200 - 1.500	1	2	10	<b>227994</b>







**2.2.2 Mushroom height 9.0 mm, telescopic**

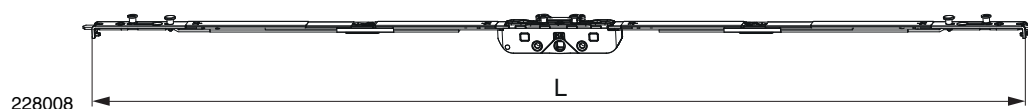
	L					No	No Tricoat
- silver	size 0	500	500 - 600	1	2	10	<b>228000</b>
	size 1	600	600 - 700	1	2	10	<b>228001</b>
	size 2	700	700 - 900	1	2	10	<b>228002</b>
	size 3	900	900 - 1.200	1	2	10	<b>228003</b>
	size 4	1.200	1.200 - 1.500	1	2	10	<b>228004</b>

## 2.3 Backset 22 mm







### 2.3.1 Mushroom height 7.7 mm, telescopic

	L					No	No Tricoat
- silver	size 0	500	500 - 600	1	2	10	<b>227995</b>
	size 1	600	600 - 700	1	2	10	<b>227996</b>
	size 2	700	700 - 900	1	2	10	<b>227997</b>
	size 3	900	900 - 1.200	1	2	10	<b>227998</b>
	size 4	1.200	1.200 - 1.500	1	2	10	<b>227999</b>



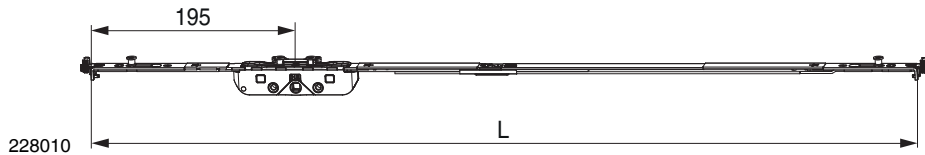
### 2.3.2 Mushroom height 9.0 mm, telescopic

	L					No	No Tricoat
- silver	size 0	500	500 - 600	1	2	10	<b>228005</b>
	size 1	600	600 - 700	1	2	10	<b>228006</b>
	size 2	700	700 - 900	1	2	10	<b>228007</b>
	size 3	900	900 - 1.200	1	2	10	<b>228008</b>
	size 4	1.200	1.200 - 1.500	1	2	10	<b>228009</b>



## 2.4 M-Spag Reach

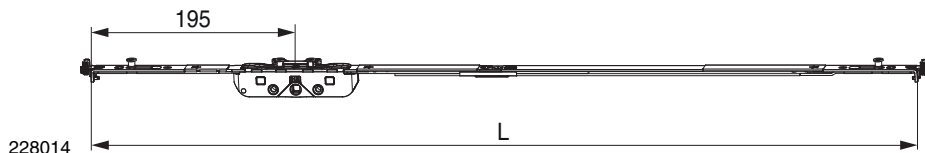
### 2.4.1 Backset 20 mm



228010

#### 2.4.1.1 Mushroom Height 7.7 mm

		L					No	No Tricoat
- silver	size 1	650	650 - 800	1	2	10	<b>228010</b>	
	size 2	800	800 - 950	1	2	10	<b>228011</b>	

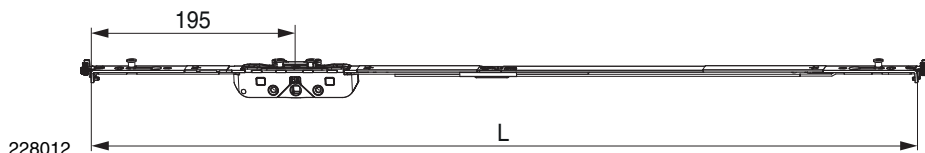


228014

#### 2.4.1.2 Mushroom Height 9.0 mm

		L					No	No Tricoat
- silver	size 1	650	650 - 800	1	2	10	<b>228014</b>	
	size 2	800	800 - 950	1	2	10	<b>228015</b>	

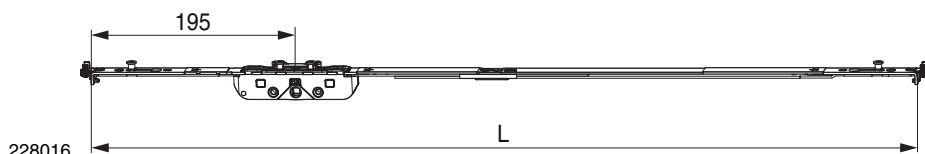
### 2.4.2 Backset 22 mm



228012

#### 2.4.2.1 Mushroom Height 7.7 mm

		L					No	No Tricoat
- silver	size 1	650	650 - 800	1	2	10	<b>228012</b>	
	size 2	800	800 - 950	1	2	10	<b>228013</b>	

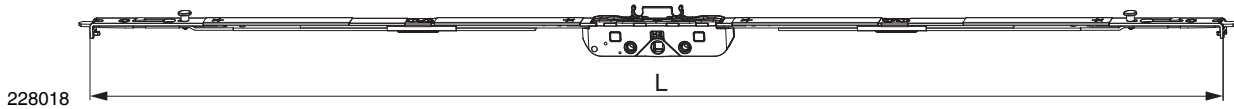





228016

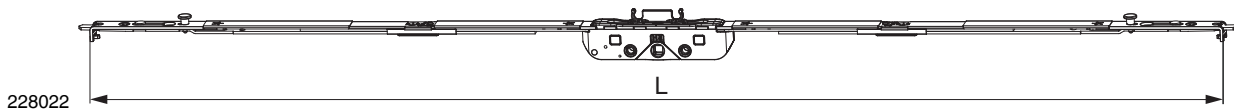
#### 2.4.2.2 Mushroom Height 9.0 mm




		L					No	No Tricoat
- silver	size 1	650	650 - 800	1	2	10	<b>228016</b>	
	size 2	800	800 - 950	1	2	10	<b>228017</b>	

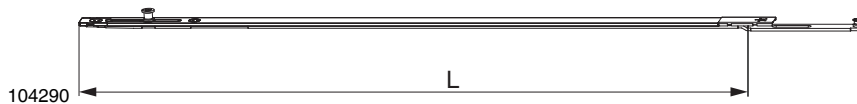
## 2.5 M-SPAG accessories





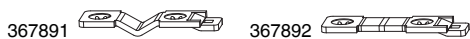
2.5.1 French casement M-SPAG, backset 20 mm		L				No	No Tricoat	
- silver	600-700	size 1	600	600 - 700	2	10	<b>228018</b>	
	700-900	size 2	700	700 - 900	2	10	<b>228019</b>	
	900-1200	size 3	900	900 - 1.200	2	10	<b>228020</b>	
	1200-1500	size 4	1.200	1.200 - 1.500	2	10	<b>228021</b>	




2.5.2 French casement M-SPAG, backset 22 mm		L				No	No Tricoat	
- silver	600-700	size 1	600	600 - 700	2	10	<b>228022</b>	
	700-900	size 2	700	700 - 900	2	10	<b>228023</b>	
	900-1200	size 3	900	900 - 1.200	2	10	<b>228024</b>	
	1200-1500	size 4	1.200	1.200 - 1.500	2	10	<b>228025</b>	

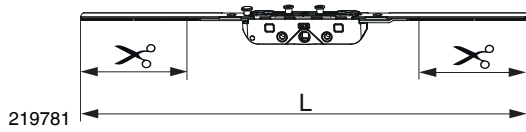


2.5.3 M-SPAG extensions		L			No	No Tricoat
- silver	250	MH7.7	20	<b>104288</b>		
		MH9.0	20	<b>104289</b>		
	500	MH7.7	20	<b>104290</b>		
		MH9.0	20	<b>104291</b>		



2.5.4 M-SPAG stabilizing plate			No	No Tricoat
- silver	PVC	200	<b>367891</b>	
	timber	200	<b>367892</b>	

**2.6 M-Spag Size 0 croppable**



219781

**2.6.1 Backset 20 mm**



- silver

428

142

320 - 600

1

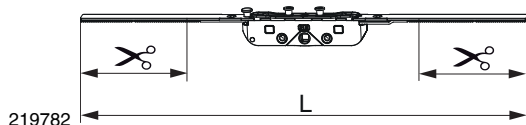
MH7.7  
MH9.0

10

10

**219781**

**219783**



219782

**2.6.2 Backset 22 mm**



- silver

428

142

320 - 600

1

MH7.7  
MH9.0

10

10

**219782**

**219784**



219785

**2.6.3 Extension size 0**



- silver

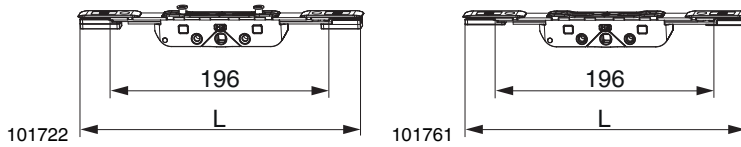
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

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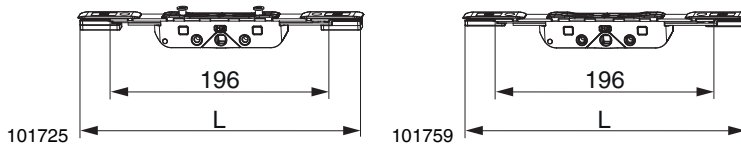
20




**219785**

## 2.7 M-Spag croppable

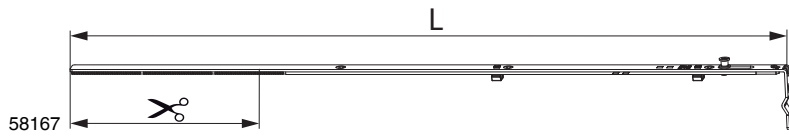







2.7.1 Backset 20 mm		L				No	No Tricoat
- silver	shallow Eurogroove	251	1	MH7.7	10	101721	102703
	Eurogroove	251	1	MH7.7	10	101722	102704
	shallow Eurogroove	251	1	MH9.0	10	101726	102707
	Eurogroove	251	1	MH9.0	10	101728	102708
	shallow Eurogroove	251	0		10	101762	102712
	Eurogroove	251	0		10	101761	105121

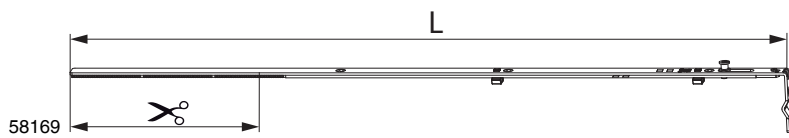







2.7.2 Backset 22 mm		L				No	No Tricoat
- silver	shallow Eurogroove	251	1	MH7.7	10	101723	102705
	Eurogroove	251	1	MH7.7	10	101725	102706
	shallow Eurogroove	251	1	MH9.0	10	101729	102709
	Eurogroove	251	1	MH9.0	10	101730	102710
	shallow Eurogroove	251	0		10	101760	102711
	Eurogroove	251	0		10	101759	105120

## 2.8 Shootbolt extensions, croppable



2.8.1 Mushroom height 7.7 mm		L						No	No Tricoat
- silver	size 0	132	40	320 - 400	0	1	40	58177	214125
	size 1	356	232	401 - 800	1	1	40	58160	209717
	size 2	492	168	801 - 1.100	1	1	40	58166	216094
	size 3	642	168	1.101 - 1.400	1	1	40	58167	216095



2.8.2 Mushroom height 9.0 mm		L						No	No Tricoat
- silver	size 0	132	40	320 - 400	0	1	40	58177	214125
	size 1	356	232	401 - 800	1	1	40	58161	213444
	size 2	492	168	801 - 1.100	1	1	40	58168	216096
	size 3	642	168	1.101 - 1.400	1	1	40	58169	216097

MACO  
ESPAGS



M-SPAG



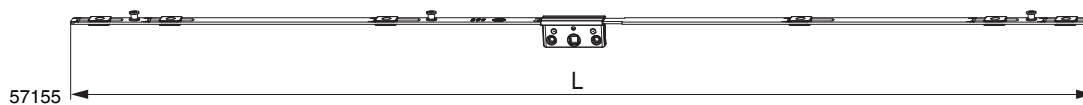
### 3      OFFSET

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3.1	Espagnolettes, backset 20 mm	24
3.2	Espagnolettes, backset 25 mm	25

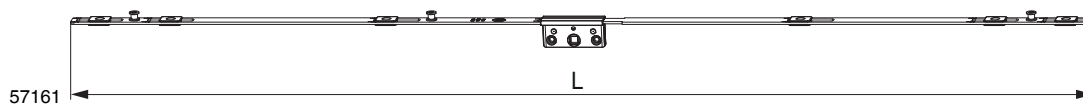
### 3 OFFSET

#### 3.1 Espagnolettes, backset 20 mm






##### 3.1.1 Mushroom height 7.7 mm

	L				No	No Tricoat	
- silver	size 0	291	310 - 510	2	20	<b>57151</b>	
	size 1	381	400 - 600	2	20	<b>57152</b>	
	size 2	581	601 - 800	2	20	<b>57153</b>	
	size 3	781	801 - 1.000	2	20	<b>57154</b>	
	size 4	981	1.001 - 1.200	3	20	<b>57155</b>	
	size 5	1.181	1.201 - 1.400	3	20	<b>57156</b>	

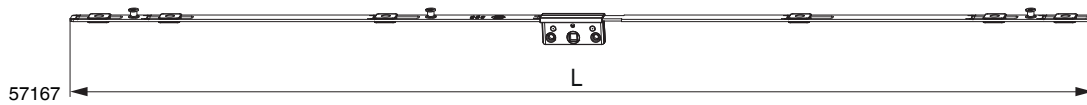


##### 3.1.2 Mushroom height 9.0 mm




	L				No	No Tricoat	
- silver	size 0	291	310 - 510	2	20	<b>57157</b>	
	size 1	381	400 - 600	2	20	<b>57158</b>	
	size 2	581	601 - 800	2	20	<b>57159</b>	
	size 3	781	801 - 1.000	2	20	<b>57160</b>	
	size 4	981	1.001 - 1.200	3	20	<b>57161</b>	
	size 5	1.181	1.201 - 1.400	3	20	<b>57162</b>	

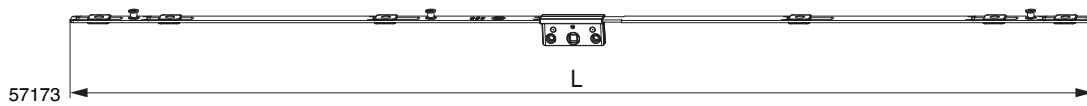


### 3.2 Espagnolettes, backset 25 mm






#### 3.2.1 Mushroom height 7.7 mm

		L				No	No Tricoat
- silver	size 0	291	310 - 510	2	20	57163	
	size 1	381	400 - 600	2	20	57164	
	size 2	581	601 - 800	2	20	57165	
	size 3	781	801 - 1.000	2	20	57166	
	size 4	981	1.001 - 1.200	3	20	57167	
	size 5	1.181	1.201 - 1.400	3	20	57168	



#### 3.2.2 Mushroom height 9.0 mm

		L				No	No Tricoat
- silver	size 0	291	310 - 510	2	20	57169	
	size 1	381	400 - 600	2	20	57170	
	size 2	581	601 - 800	2	20	57171	
	size 3	781	801 - 1.000	2	20	57172	
	size 4	981	1.001 - 1.200	3	20	57173	
	size 5	1.181	1.201 - 1.400	3	20	57174	

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OFFSET



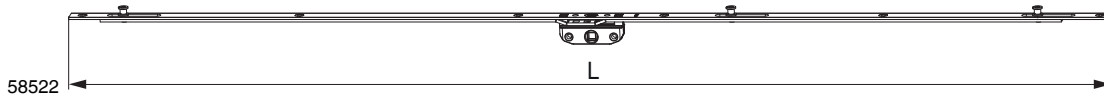
## 4      **INLINE**




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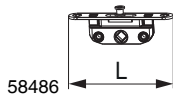
4.1	<b>Espagnolettes, backset 20 mm</b>	<b>28</b>
4.2	<b>Espagnolettes, backset 22 mm</b>	<b>29</b>

## 4 INLINE

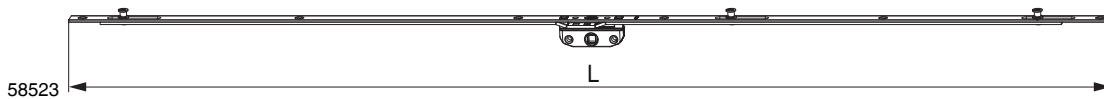
### 4.1 Espagnolettes, backset 20 mm






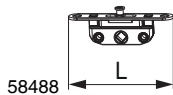
4.1.1 Mushroom height 7.7 mm	L				No	No Tricoat
- silver						
size 0	260	260 - 400	2	20	<b>58493</b>	
size 1	400	401 - 600	2	20	<b>58501</b>	
size 2	600	601 - 800	2	20	<b>58508</b>	
size 3	800	801 - 1.000	2	20	<b>58515</b>	
size 4	1.000	1.001 - 1.200	3	20	<b>58522</b>	
size 5	1.200	1.201 - 1.400	3	10	<b>58528</b>	



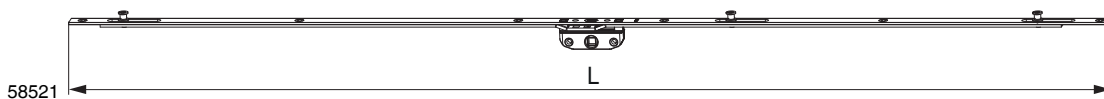
4.1.2 Single cam, mushroom height 7.7 mm	L			No	No Tricoat
- silver	100	1	20	<b>58486</b>	






4.1.3 Mushroom height 9.0 mm	L				No	No Tricoat
- silver						
size 0	260	260 - 400	2	20	<b>58494</b>	
size 1	400	401 - 600	2	20	<b>58502</b>	
size 2	600	601 - 800	2	20	<b>58509</b>	
size 3	800	801 - 1.000	2	20	<b>58516</b>	
size 4	1.000	1.001 - 1.200	3	20	<b>58523</b>	
size 5	1.200	1.201 - 1.400	3	10	<b>58529</b>	

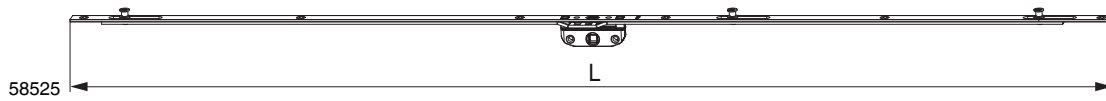


4.1.4 Single cam, mushroom height 9.0 mm	L			No	No Tricoat
- silver	100	1	20	<b>58488</b>	



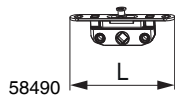
4.1.5 Mushroom height 10.5 mm	L				No	No Tricoat
- silver						
size 1	400	400 - 600	2	20	<b>58500</b>	
size 2	600	601 - 800	2	20	<b>58507</b>	
size 3	800	801 - 1.000	2	20	<b>58514</b>	
size 4	1.000	1.001 - 1.200	3	20	<b>58521</b>	

## 4.2 Espagnolettes, backset 22 mm



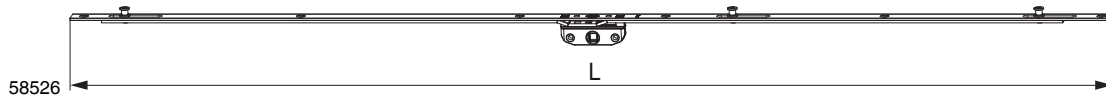
### 4.2.1 Mushroom height 7.7 mm

		L				No	No Tricoat
- silver	size 0	260	260 - 400	2	20	<b>58496</b>	
	size 1	400	401 - 600	2	20	<b>58504</b>	
	size 2	600	601 - 800	2	20	<b>58511</b>	
	size 3	800	801 - 1.000	2	20	<b>58518</b>	
	size 4	1.000	1.001 - 1.200	3	20	<b>58525</b>	
	size 5	1.200	1.201 - 1.400	3	10	<b>58530</b>	



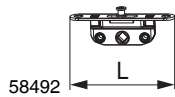
### 4.2.2 Single cam, mushroom height 7.7 mm

		L			No	No Tricoat
- silver		100	1	20	<b>58490</b>	



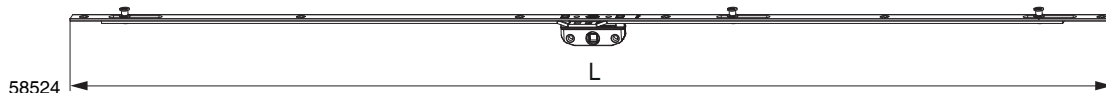
### 4.2.3 Mushroom height 9.0 mm

		L				No	No Tricoat
- silver	size 0	260	260 - 400	2	20	<b>58497</b>	
	size 1	400	401 - 600	2	20	<b>58505</b>	
	size 2	600	601 - 800	2	20	<b>58512</b>	
	size 3	800	801 - 1.000	2	20	<b>58519</b>	
	size 4	1.000	1.001 - 1.200	3	20	<b>58526</b>	
	size 5	1.200	1.201 - 1.400	3	10	<b>58531</b>	



### 4.2.4 Single cam, mushroom height 9.0 mm

		L			No	No Tricoat
- silver		100	1	20	<b>58492</b>	



### 4.2.5 Mushroom height 10.5 mm

		L				No	No Tricoat
- silver	size 1	400	400 - 600	2	20	<b>58503</b>	
	size 2	600	601 - 800	2	20	<b>58510</b>	
	size 3	800	801 - 1.000	2	20	<b>58517</b>	
	size 4	1.000	1.001 - 1.200	3	20	<b>58524</b>	

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INLINE



**5 MK I**

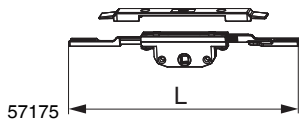
---

<b>5.1</b>	<b>Reverse action shootbolt espagnolettes</b>	<b>32</b>
<b>5.2</b>	<b>Shootbolt extensions for PVC</b>	<b>34</b>
<b>5.3</b>	<b>Shootbolt extensions for timber</b>	<b>35</b>
<b>5.4</b>	<b>Shootbolt extensions for French casement windows</b>	<b>36</b>
<b>5.5</b>	<b>Mushroom extensions</b>	<b>37</b>

## 5 MK I

### 5.1 Reverse action shootbolt espagnolettes

#### 5.1.1 Drive gear with cover holders and cover



##### 5.1.1.1 Backset 20 mm

- silver

L



No

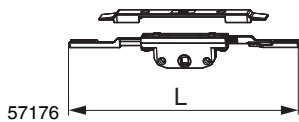
No  
Tricoat

220

40

57175

214116



##### 5.1.1.2 Backset 22 mm

- silver

L



No

No  
Tricoat

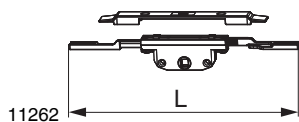
220

40

57176

214117

#### 5.1.2 Drive gear with cover



##### 5.1.2.1 Backset 20 mm

- silver

L



No

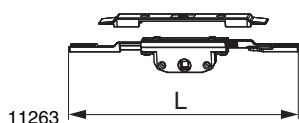
No  
Tricoat

220

40

11262

102699



##### 5.1.2.2 Backset 22 mm

- silver

L



No

No  
Tricoat

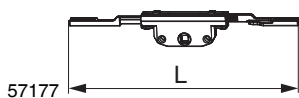
220

40

11263

101536

#### 5.1.3 Drive gear without cover



##### 5.1.3.1 Backset 20 mm

- silver



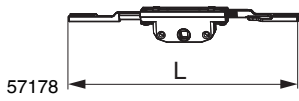
No

No  
Tricoat

40

57177





5.1.3.2 Backset 22 mm

- silver



40

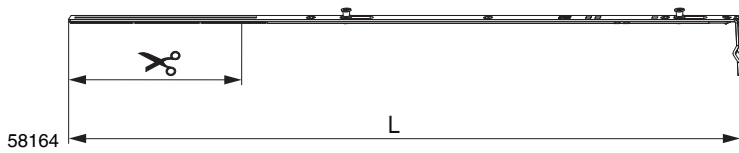







57178

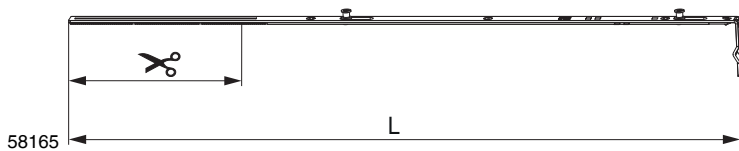







Tricoat

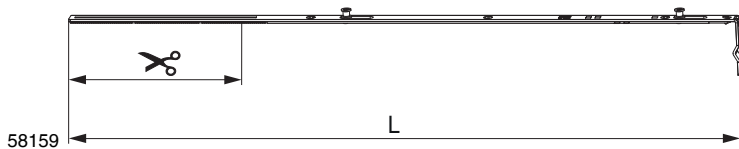
## 5.2 Shootbolt extensions for PVC








5.2.1 Mushroom height 7.7 mm		L						No	No Tricoat
- silver	size 0	132	40	320 - 400	0	1	40	58177	214125
	size 1	356	232	401 - 800	1	1	40	58160	209717
	size 2	492	168	801 - 1.100	2	1	40	58162	209019
	size 3	642	168	1.101 - 1.400	2	1	40	58164	209070

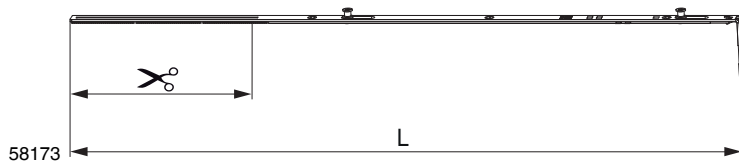







5.2.2 Mushroom height 9.0 mm		L						No	No Tricoat
- silver	size 0	132	40	320 - 400	0	1	40	58177	214125
	size 1	356	232	401 - 800	1	1	40	58161	213444
	size 2	492	168	801 - 1.100	2	1	40	58163	213457
	size 3	642	168	1.101 - 1.400	2	1	40	58165	213458

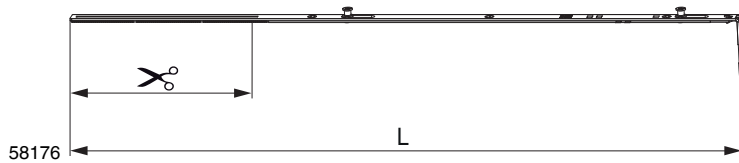







5.2.3 Mushroom height 10.5 mm		L						No	No Tricoat
- silver	size 0	132	40	320 - 400	0	1	40	58177	214125
	size 1	356	232	401 - 800	1	1	30	58157	214119
	size 2	492	168	801 - 1.100	2	1	30	58158	214120
	size 3	642	168	1.101 - 1.400	2	1	40	58159	214121

### 5.3 Shootbolt extensions for timber

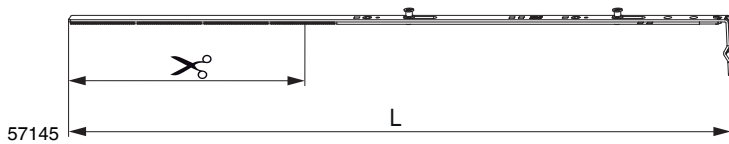


5.3.1 Mushroom height 7.7 mm		L						No	No Tricoat
- silver	size 0	132	40	320 - 400	0	1	40	<b>58170</b>	<b>213184</b>
	size 1	356	232	401 - 800	1	1	40	<b>58171</b>	<b>206590</b>
	size 2	492	168	801 - 1.100	2	1	40	<b>58172</b>	<b>206615</b>
	size 3	642	168	1.101 - 1.400	2	1	40	<b>58173</b>	<b>206591</b>

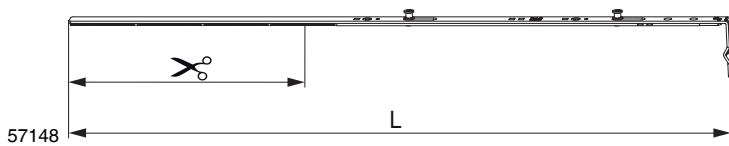


5.3.2 Mushroom height 9.0 mm		L						No	No Tricoat
- silver	size 0	132	40	320 - 400	0	1	40	<b>58170</b>	<b>213184</b>
	size 1	356	232	401 - 800	1	1	40	<b>58174</b>	<b>214122</b>
	size 2	492	168	801 - 1.100	2	1	40	<b>58175</b>	<b>214123</b>
	size 3	642	168	1.101 - 1.400	2	1	40	<b>58176</b>	<b>214124</b>

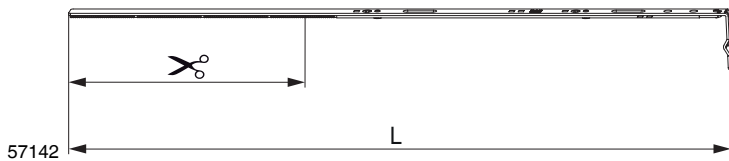
## 5.4 Shootbolt extensions for French casement windows



5.4.1 Master sash extensions, mushroom height 7.7 mm		L						No	No Tricoat
- silver	size 1	433	232	600 - 1.000	1	1	40	57143	213187
	size 2	633	232	1.001 - 1.400	2	2	40	57145	213188



5.4.2 Master sash extensions, mushroom height 9.0 mm		L						No	No Tricoat
- silver	size 1	433	232	600 - 1.000	1	1	40	57146	215299
	size 2	633	232	1.001 - 1.400	2	2	40	57148	222616





5.4.3 Slave sash extensions		L					No	No Tricoat
- silver	size 1	433	232	600 - 1.000	1	40	57141	213185
	size 2	633	232	1.001 - 1.400	1	40	57142	213186

## 5.5 Mushroom extensions





### 5.5.1 Mushroom height 7.7 mm

	L			No	No Tricoat
- silver	250	1	20	<b>11804</b>	<b>101537</b>
	600	1	20	<b>102858</b>	



### 5.5.2 Mushroom height 9.0 mm

	L			No	No Tricoat
- silver	250	1	20	<b>101530</b>	<b>102743</b>
	600	1	20	<b>102859</b>	

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MK I



## 6 MACH II

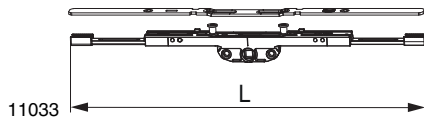
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6.1	Reverse action shootbolt espagnolettes _____	40
6.2	Shootbolt extensions, non croppable _____	42
6.3	Shootbolt extensions, croppable _____	43
6.4	Shootbolt extensions for French casement windows _____	44
6.5	Shootbolt extensions for top hung windows _____	45
6.6	Shootbolt centre locks for top hung windows _____	46

## 6 MACH II

### 6.1 Reverse action shootbolt espagnolettes

#### 6.1.1 Non croppable, backset 20 mm



##### 6.1.1.1 Mushroom height 7.7 mm

L



No

No  
Tricoat

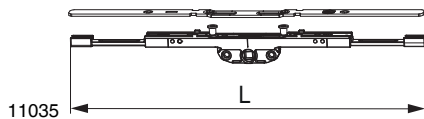
- silver

340

1

20

11033



##### 6.1.1.2 Mushroom height 9.0 mm

L



No

No  
Tricoat

- silver

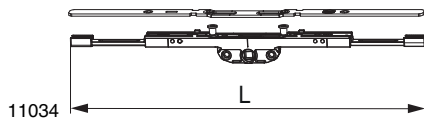
340

1

20

11035

#### 6.1.2 Non croppable, backset 22 mm



##### 6.1.2.1 Mushroom height 7.7 mm

L



No

No  
Tricoat

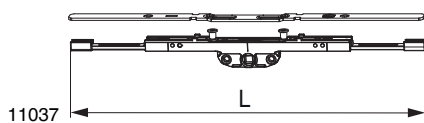
- silver

340

1

20

11034



##### 6.1.2.2 Mushroom height 9.0 mm

L



No

No  
Tricoat

- silver

340

1

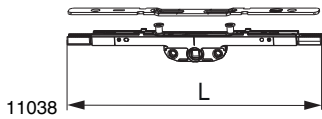
20

11037



224790

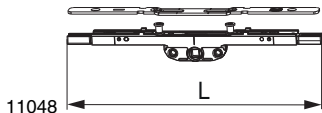


**6.1.3 Croppable, backset 20 mm**





**6.1.3.1 Mushroom height 7.7 mm**

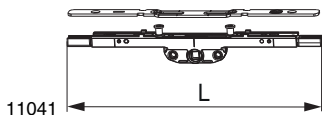
- silver	L			No	No Tricoat
	244	1	20	11038	





**6.1.3.2 Mushroom height 9.0 mm**

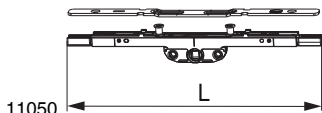
- silver	L			No	No Tricoat
	244	1	20	11048	

**6.1.4 Croppable, backset 22 mm**



**6.1.4.1 Mushroom height 7.7 mm**

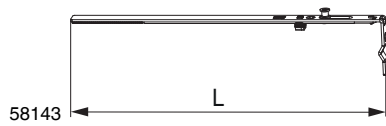
- silver	L			No	No Tricoat
	244	1	20	11041	







**6.1.4.2 Mushroom height 9.0 mm**

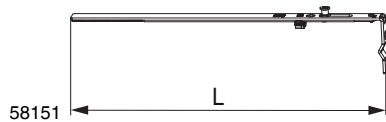
- silver	L			No	No Tricoat
	244	1	20	11050	104019

## 6.2 Shootbolt extensions, non croppable







### 6.2.1 Mushroom height 7.7 mm

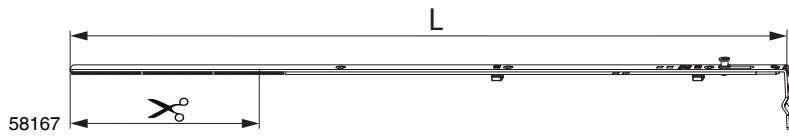
		L					No	No Tricoat
- silver	size 1	150	500 - 600	0	1	40	<b>58140</b>	<b>226572</b>
	size 2	200	601 - 700	1	1	40	<b>58141</b>	<b>226573</b>
	size 3	250	701 - 800	1	1	40	<b>58142</b>	<b>226574</b>
	size 4	300	801 - 900	1	1	40	<b>58143</b>	<b>226575</b>
	size 5	350	900 - 1.000	1	1	40	<b>58144</b>	<b>226576</b>
	size 6	400	1.001 - 1.100	1	1	40	<b>58145</b>	<b>226577</b>
	size 7	450	1.100 - 1.200	1	1	40	<b>58146</b>	<b>226578</b>
	size 8	500	1.201 - 1.300	1	1	40	<b>58147</b>	<b>226579</b>
	size 9	550	1.301 - 1.400	1	1	40	<b>58148</b>	<b>226586</b>








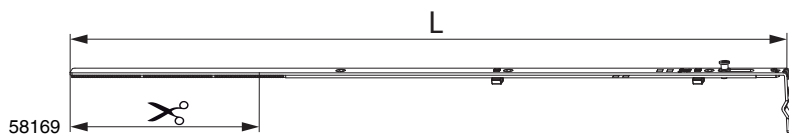
### 6.2.2 Mushroom height 9.0 mm






		L					No	No Tricoat
- silver	size 1	150	500 - 600	0	1	40	<b>58140</b>	<b>226572</b>
	size 2	200	600 - 700	1	1	40	<b>58149</b>	
	size 3	250	701 - 800	1	1	40	<b>58150</b>	
	size 4	300	801 - 900	1	1	40	<b>58151</b>	<b>224791</b>
	size 5	350	901 - 1.000	1	1	40	<b>58152</b>	
	size 6	400	1.001 - 1.100	1	1	40	<b>58153</b>	
	size 7	450	1.101 - 1.200	1	1	40	<b>58154</b>	
	size 8	500	1.201 - 1.300	1	1	40	<b>58155</b>	
	size 9	550	1.301 - 1.400	1	1	40	<b>58156</b>	

### 6.3 Shootbolt extensions, croppable

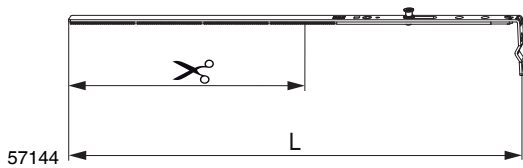


6.3.1 Mushroom height 7.7 mm		L						No	No Tricoat
- silver	size 0	132	40	320 - 400	0	1	40	58177	214125
	size 1	356	232	401 - 800	1	1	40	58160	209717
	size 2	492	168	801 - 1.100	1	1	40	58166	216094
	size 3	642	168	1.101 - 1.400	1	1	40	58167	216095

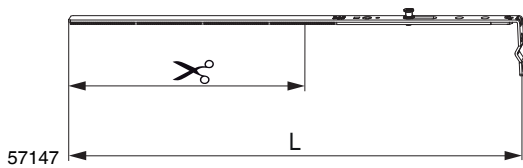


6.3.2 Mushroom height 9.0 mm		L						No	No Tricoat
- silver	size 0	132	40	320 - 400	0	1	40	58177	214125
	size 1	356	232	401 - 800	1	1	40	58161	213444
	size 2	492	168	801 - 1.100	1	1	40	58168	216096
	size 3	642	168	1.101 - 1.400	1	1	40	58169	216097

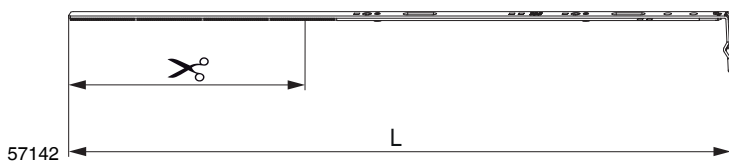
## 6.4 Shootbolt extensions for French casement windows



6.4.1 Master sash extensions, mushroom height 7.7 mm		L						No	No Tricoat
- silver	size 1	433	232	600 - 1.000	1	1	40	57143	213187
	size 2	633	232	1.001 - 1.400	1	1	40	57144	222614

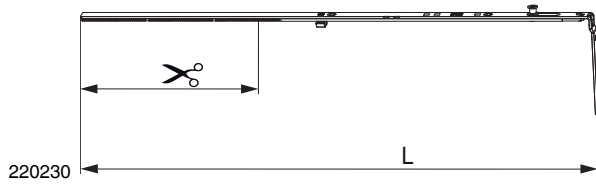


6.4.2 Master sash extensions, mushroom height 9.0 mm		L						No	No Tricoat
- silver	size 1	433	232	600 - 1.000	1	1	40	57146	215299
	size 2	633	232	1.001 - 1.400	1	1	40	57147	222615

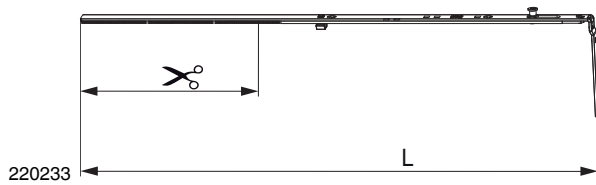


6.4.3 Slave sash extensions		L					No	No Tricoat
- silver	size 1	433	232	600 - 1.000	1	40	57141	213185
	size 2	633	232	1.001 - 1.400	1	40	57142	213186

**6.5 Shootbolt extensions for top hung windows**

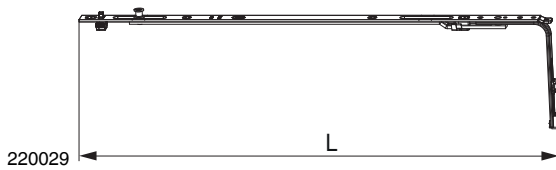


<b>6.5.1 Mushroom height 7.7 mm</b>		<b>L</b>						<b>No</b>	<b>No</b> Tricoat
- silver	size 1	320	232	500 - 800	1	1	40	<b>220229</b>	<b>211689</b>
	size 2	492	232	801 - 1.100	1	1	30	<b>220230</b>	<b>211690</b>






<b>6.5.2 Mushroom height 9.0 mm</b>		<b>L</b>						<b>No</b>	<b>No</b> Tricoat
- silver	size 1	320	232	500 - 800	1	1	40	<b>220232</b>	<b>222622</b>
	size 2	492	232	801 - 1.100	1	1	30	<b>220233</b>	<b>222623</b>

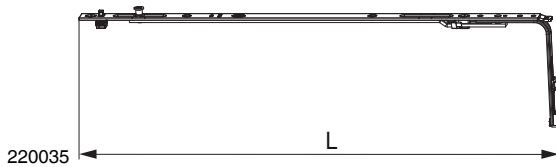
## 6.6 Shootbolt centre locks for top hung windows



### 6.6.1 Mushroom height 7.7 mm




- silver

	L				No	No Tricoat
size 000	352	600 - 750	1	20	<b>205961</b>	<b>211691</b>
size 00	452	750 - 1.050	1	20	<b>220029</b>	<b>211692</b>
size 0	580	1.051 - 1.300	1	20	<b>220030</b>	<b>211693</b>
size 1	680	1.250 - 1.500	1	20	<b>220031</b>	



### 6.6.2 Mushroom height 9.0 mm

- silver

	L				No	No Tricoat
size 000	352	600 - 750	1	20	<b>209719</b>	
size 00	452	750 - 1.050	1	20	<b>220035</b>	<b>222619</b>
size 0	580	1.051 - 1.300	1	20	<b>220036</b>	<b>222620</b>
size 1	680	1.250 - 1.500	1	20	<b>220037</b>	<b>222621</b>



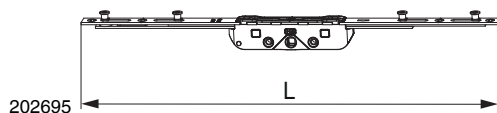
**7 R.A.I.L.**




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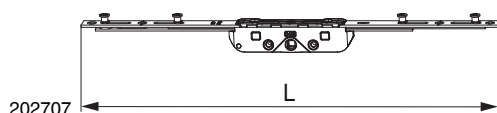
<b>7.1</b>	<b>Espagnolettes, backset 20 mm</b>	<b>48</b>
<b>7.2</b>	<b>Espagnolettes, backset 22 mm</b>	<b>49</b>
<b>7.3</b>	<b>R.A.I.L. REACH</b>	<b>50</b>




## 7 R.A.I.L.

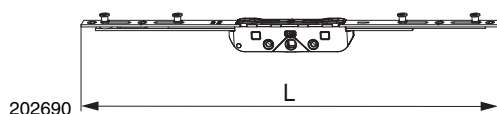
### 7.1 Espagnolettes, backset 20 mm






7.1.1 Mushroom height 7.7 mm	L				No	No Tricoat
- silver						
size 1	200	200 - 400	1	10	202693	208159
size 2	400	401 - 600	2	10	202694	208160
size 3	600	601 - 800	2	10	202695	208161
size 4	800	801 - 1.000	3	10	202696	208162
size 4A	900	901 - 1.100	3	10	208805	208823
size 5	1.000	1.001 - 1.200	3	10	202697	208163
size 5A	1.100	1.100 - 1.300	3	10	208806	208824
size 6	1.200	1.201 - 1.400	3	10	202698	208164



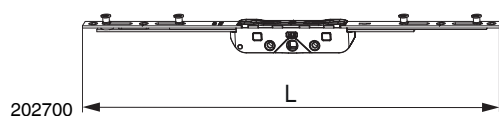
7.1.2 Mushroom height 9.0 mm	L				No	No Tricoat
- silver						
size 1	200	200 - 400	1	10	202705	208165
size 2	400	401 - 600	2	10	202706	208166
size 3	600	601 - 800	2	10	202707	208167
size 4	800	801 - 1.000	3	10	202708	208168
size 4A	900	901 - 1.100	3	10	208809	208827
size 5	1.000	1.001 - 1.200	3	10	202709	208169
size 5A	1.100	1.101 - 1.300	3	10	208810	208828
size 6	1.200	1.201 - 1.400	3	10	202710	208170



7.1.3 Mushroom height 10.5 mm	L				No	No Tricoat
- silver						
size 1	200	200 - 400	1	10	202691	208171
size 2	400	401 - 600	2	10	202690	208172
size 3	600	601 - 800	2	10	202689	208173
size 4	800	801 - 1.000	3	10	202688	208174
size 4A	900	901 - 1.100	3	10	208813	208831
size 5	1.000	1.001 - 1.200	3	10	202687	208175
size 5A	1.100	1.101 - 1.300	3	10	208814	208832
size 6	1.200	1.201 - 1.400	3	10	202686	208176






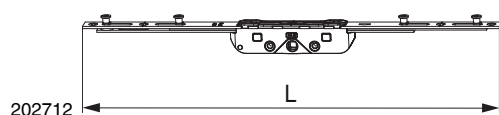
## 7.2 Espagnolettes, backset 22 mm



### 7.2.1 Mushroom height 7.7 mm




- silver

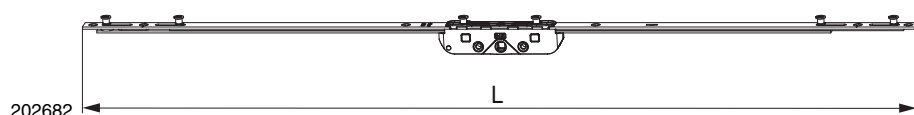
	L				No	No Tricoat
size 1	200	200 - 400	1	10	202699	208177
size 2	400	401 - 600	2	10	202700	208178
size 3	600	601 - 800	2	10	202701	208179
size 4	800	801 - 1.000	3	10	202702	208180
size 4A	900	901 - 1.100	3	10	208807	208825
size 5	1.000	1.001 - 1.200	3	10	202703	208181
size 5A	1.100	1.101 - 1.300	3	10	208808	208826
size 6	1.200	1.201 - 1.400	3	10	202704	208182



### 7.2.2 Mushroom height 9.0 mm




- silver

	L				No	No Tricoat
size 1	200	200 - 400	1	10	202711	208183
size 2	400	401 - 600	2	10	202712	208184
size 3	600	601 - 800	2	10	202713	208185
size 4	800	801 - 1.000	3	10	202714	208186
size 4A	900	901 - 1.100	3	10	208811	208829
size 5	1.000	1.001 - 1.200	3	10	202715	208187
size 5A	1.100	1.101 - 1.300	3	10	208812	208830
size 6	1.200	1.201 - 1.400	3	10	202716	208188



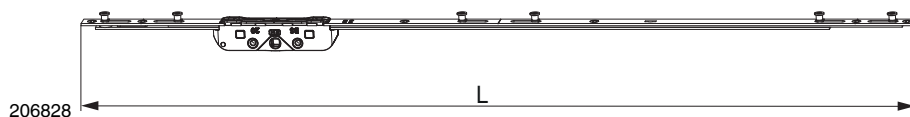
### 7.2.3 Mushroom height 10.5 mm

- silver




	L				No	No Tricoat
size 1	200	200 - 400	1	10	202685	208189
size 2	400	401 - 600	2	10	202684	208190
size 3	600	601 - 800	2	10	202683	208191
size 4	800	801 - 1.000	3	10	202682	208192
size 4A	900	901 - 1.100	3	10	208815	208833
size 5	1.000	1.001 - 1.200	3	10	202681	208193
size 5A	1.100	1.101 - 1.300	3	10	208816	208834
size 6	1.200	1.201 - 1.400	3	10	202679	208194

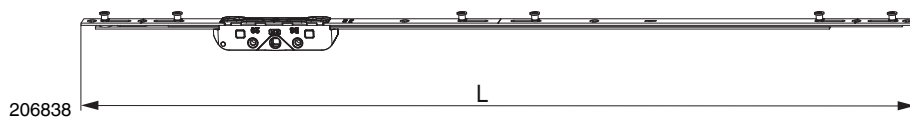
## 7.3 R.A.I.L. REACH

### 7.3.1 Handle height 185 mm, backset 20 mm






#### 7.3.1.1 Mushroom height 7.7 mm

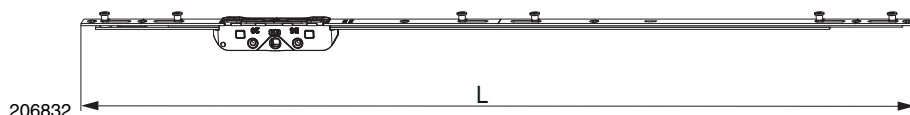
		L				No	No Tricoat
- silver	size 3	600	600 - 800	2	10	206827	208228
	size 4	800	801 - 1.000	3	10	206828	208229
	size 4A	900	901 - 1.100	3	10	208856	208868
	size 5	1.000	1.001 - 1.200	3	10	206829	208230
	size 5A	1.100	1.101 - 1.300	3	10	208857	208869
	size 6	1.200	1.201 - 1.400	3	10	206830	208231






#### 7.3.1.2 Mushroom height 9.0 mm

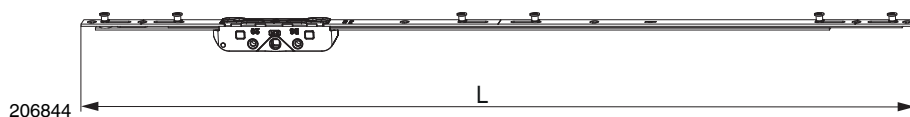
		L				No	No Tricoat
- silver	size 3	600	600 - 800	2	10	206837	208232
	size 4	800	801 - 1.000	3	10	206838	208233
	size 4A	900	901 - 1.100	3	10	208860	208872
	size 5	1.000	1.001 - 1.200	3	10	206839	208234
	size 5A	1.100	1.101 - 1.300	3	10	208861	208873
	size 6	1.200	1.201 - 1.400	3	10	206840	208235

### 7.3.2 Handle height 185 mm, backset 22 mm






#### 7.3.2.1 Mushroom height 7.7 mm

		L				No	No Tricoat
- silver	size 3	600	600 - 800	2	10	206831	208236
	size 4	800	801 - 1.000	3	10	206832	208237
	size 4A	900	901 - 1.100	3	10	208858	208870
	size 5	1.000	1.001 - 1.200	3	10	206835	208238
	size 5A	1.100	1.101 - 1.300	3	10	208859	208871
	size 6	1.200	1.201 - 1.400	3	10	206836	208239



#### 7.3.2.2 Mushroom height 9.0 mm

		L				No	No Tricoat
- silver	size 3	600	600 - 800	2	10	206842	208240
	size 4	800	801 - 1.000	3	10	206844	208242
	size 4A	900	901 - 1.100	3	10	208862	208874
	size 5	1.000	1.001 - 1.200	3	10	206845	208243
	size 5A	1.100	1.101 - 1.300	3	10	208863	208875
	size 6	1.200	1.201 - 1.400	3	10	206846	208244



## 8 Friction hinges

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8.1	Top and side hung handed stay _____	52
8.2	Side hung extreme stay _____	54
8.3	Handed restrictor stay _____	56
8.4	Fire escape/easy clean friction stay _____	58
8.5	Fire escape/easy clean extreme friction stay _____	60



## 8 Friction hinges

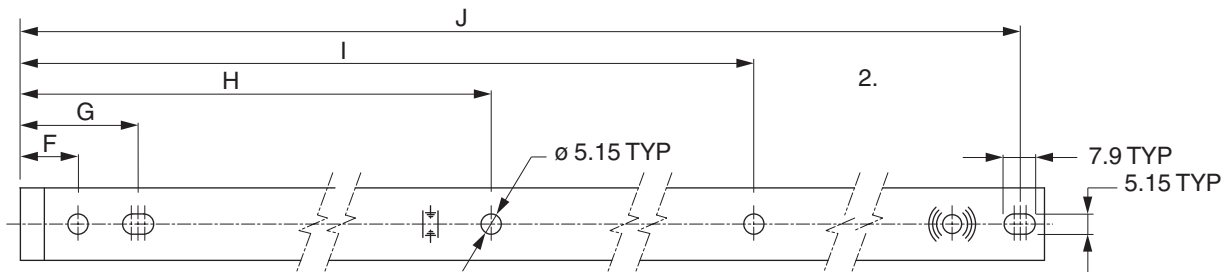
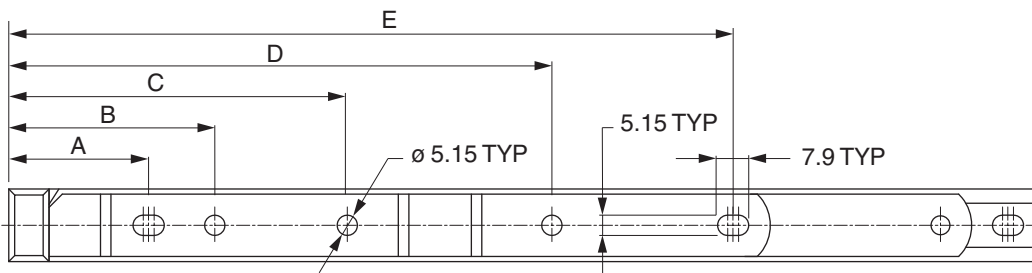
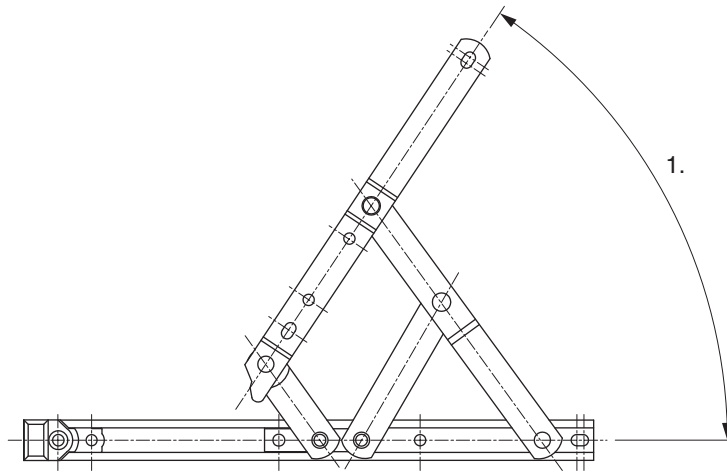
### 8.1 Top and side hung handed stay

Improved security and weather performance through use of nylon reduced friction end cap.

Designed to offer a smooth closure and higher performance for window applications of all sizes.

- Available in 8, 10, 12, 16, 20 and 24 inch top hung and 8, 12 and 16 inch side hung
- Manufactured using high grade austenitic and ferritic stainless steel
- Tested to 30,000 cycles

Part Number austen	Part Number ferritic	Size inches	Size mm	Application	Sash Width mm	Sash Height mm	Sash Weight approx. KG	Stack Height mm	Opening angle degrees	Pack Qty
472048	472000	8	210	top hung	1200	300	10	13/14	62	50 pairs
472048	472000	8	210	side hung	400	1200	18	13/14	62	50 pairs
472049	472001	10	260	top hung	1200	450	16	13/14	90	50 pairs
472050	472002	12	304	top hung	1200	600	21	13/14	86	25 pairs
472050	472002	12	304	side hung	600	1200	24	13/14	86	25 pairs
472051	472003	16	406	top hung	1200	750	22	13/14	83	25 pairs
472051	472003	16	406	side hung	700	1300	26	13/14	83	25 pairs
472052	472004	20	511	top hung	1200	900	24	13/14	42	25 pairs
472053	472005	24	616.4	top hung	1200	1500	50	13/14	38	25 pairs
472072	472024	8	210	top hung	1200	300	10	16/17	62	50 pairs
472072	472024	8	210	side hung	400	1200	18	16/17	62	50 pairs
472073	472025	10	260	top hung	1200	450	16	16/17	90	50 pairs
472074	472026	12	304	top hung	1200	600	21	16/17	86	25 pairs
472074	472026	12	304	side hung	600	1200	24	16/17	86	25 pairs
472075	472027	16	406	top hung	1200	750	22	16/17	83	25 pairs
472075	472027	16	406	side hung	700	1300	26	16/17	83	25 pairs
472076	472028	20	511	top hung	1200	900	24	16/17	42	25 pairs
472077	472029	24	616.4	top hung	1200	1500	50	16/17	38	25 pairs



1. See table
2. Underside of channel fixing holes

Application	Size inches	A	B	C	D	E	F	G	H	I	J
top/side hung	8	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
top hung	10	36.2	53.0	-	-	150.8	15.5	30.5	159.5	-	203.9
top hung	10	36.2	52.5	-	69.7	202.7	15.5	30.5	-	209.5	253.8
top/side hung	12	36.0	58.2	-	202.7	-	15.5	30.3	-	199.7	305.2
top/side hung	16	36.2	138.9	-	271.9	-	15.5	30.5	-	308.7	406.8
top hung	20	36.2	53.0	-	217.2	311.2	15.5	30.5	217.8	-	508.7
top hung	24	36.2	53.0	98.4	268.0	362.0	15.5	30.5	217.5	405.3	609.5

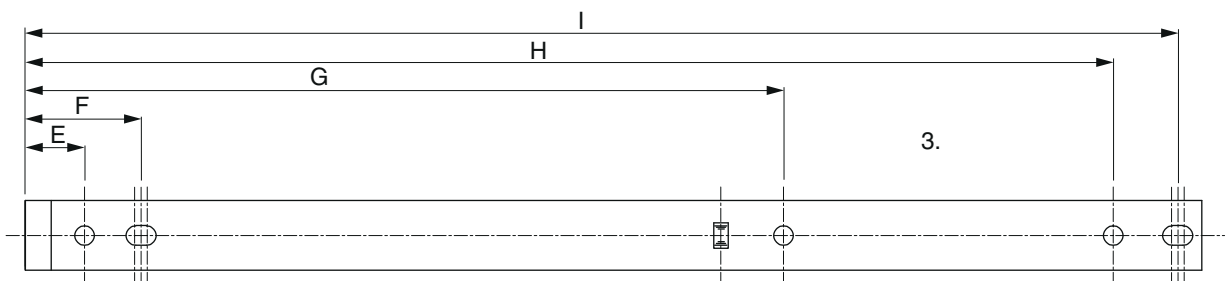
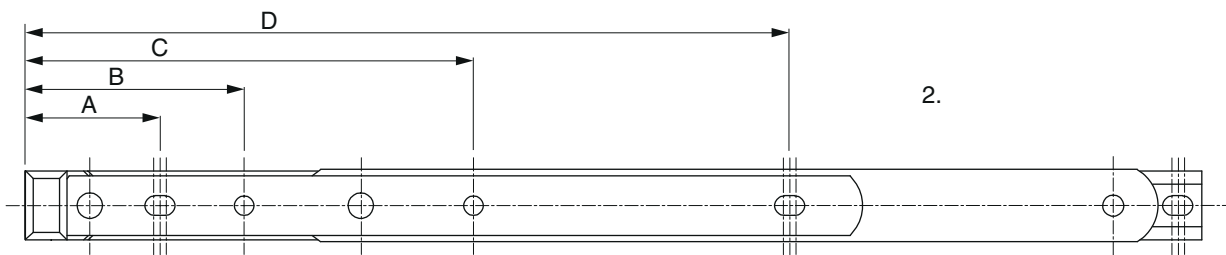
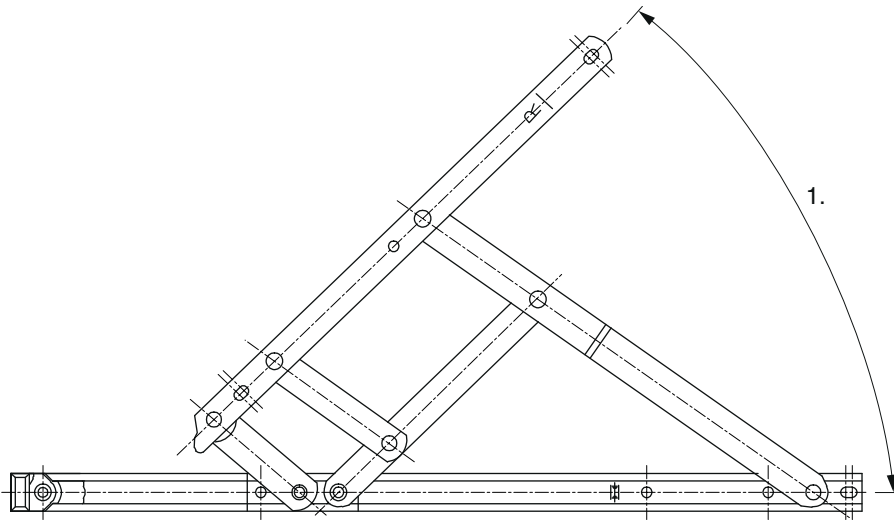


## 8.2 Side hung extreme stay

For extreme durability and strength.

- Maximum vent width of 950 mm and a maximum weight of 35 kg
- Available in 13 mm and 17 mm stack heights
- Tested to 50,000 cycles for durability
- Overlap slide for enhanced smooth operation
- 2 reinforced austenitic heavy duty links for added strength
- Easy clean complies with BS 8213
- Conforms to BS 6375 Part 2 1987 and BBA Assessment report 2161A

Part Number austen	Part Number ferritic	Size inches	Size mm	Sash Width mm	Sash Weight approx. KG	Stack Height mm	Opening angle degrees	Pack Qty
472056	472008	12	311	750	30	13/14	87	50 pairs
472057	472009	16	406	950	35	13/14	84	25 pairs
472080	472032	12	311	750	30	16/17	87	50 pairs
472081	472033	16	406	950	35	16/17	84	25 pairs



1. See table
2. Top view of fourth arm vent fixing holes
3. Underside of channel fixing holes

Application	Size inches	A	B	C	D	E	F	G	H	I
side hung	12	mm 36.0	mm 58.2	mm -	mm 202.7	mm 15.5	mm 30.3	mm 199.7	mm -	mm 305.2
side hung	16	mm 35.2	mm -	mm 138.0	mm 270.8	mm 15.5	mm 30.9	mm 308.5	mm 369.0	mm 406.0



### 8.3 Handed restrictor stay

Simple built in child resistant catch, limiting the opening. Quick one handed operation for an adult to open the window fully.

- Child resistant catch limits the opening to 100 mm maximum when activated
- Tested to BS 6375 Part 2 1987 to withstand a force of 600N when opened to its restricted position
- Single side hung or as a pair for top hung

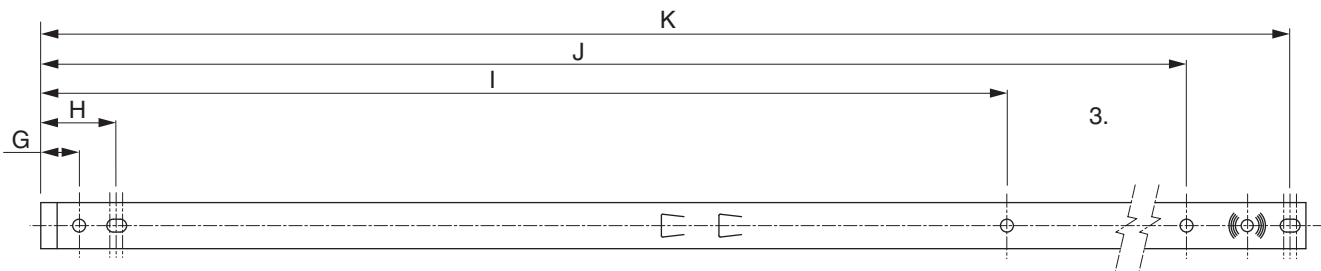
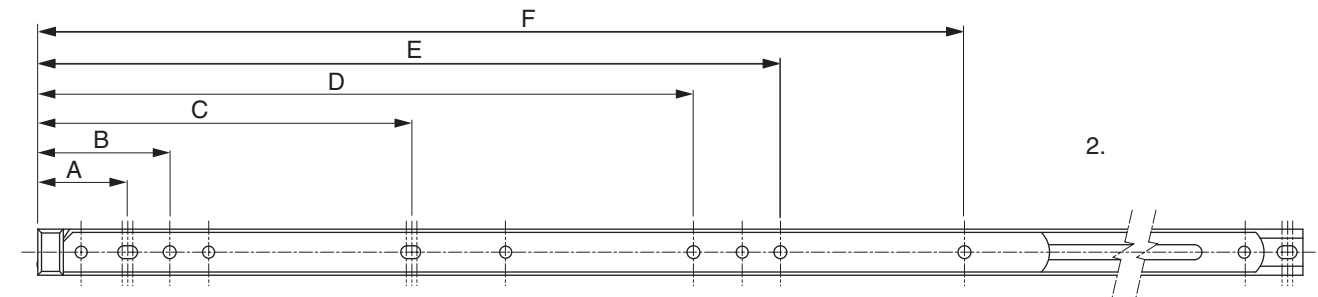
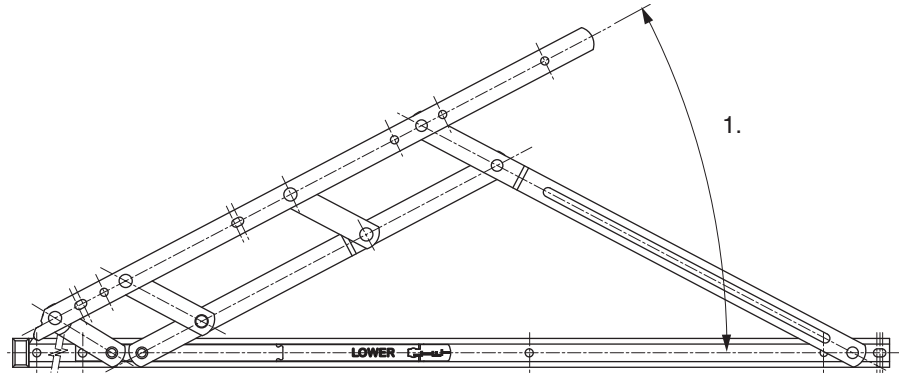
- Built in quick release levers allow windows to be fully opened for easy cleaning conforming to BS 8213 Part 1 1991
- Widely used by local authorities, housing specifiers and fabricators
- Suitable for kite marked BS 7415 windows
- Manufactured using high grade austenitic and ferritic stainless steel

Rh Part Number austen	Lh Part Number austen	Rh Part Number ferritic	Lh Part Number ferritic	Size inches	Size mm	Sash Width mm	Sash Height mm	Sash Weight KG	Stack Height mm	Restricted Angle	Opening angle	Pack Qty
472062	472063	472014	472015	12	311	1200	600	20	13/14	11	59	50 single
472064	472065	472016	472017	16	406	1200	750	24	13/14	10	48	50 single
472066	472067	472018	472019	20	508	1200	900	24	13/14	8.5	45	50 single
472068	472069	472020	472021	24	609	1200	1200	32	13/14	7.6	45	50 single
472070	472070	472022	472022	12	311	650	1250	20	13/14	11	59	25 pairs
472071	472071	472023	472023	16	406	700	1300	24	13/14	10	48	25 pairs
472086	472087	472038	472039	12	311	1200	600	20	16/17	11	59	50 single
472088	472089	472040	472041	16	406	1200	750	24	16/17	10	48	50 single
472090	472091	472042	472043	20	508	1200	900	24	16/17	8.5	45	50 single
472092	472093	472044	472045	24	609	1200	1200	32	16/17	7.6	45	50 single
472094	472094	472046	472046	12	311	650	1250	20	16/17	11	59	25 pairs
472095	472095	472047	472047	16	406	700	1300	24	16/17	10	48	25 pairs



To release the restricted mechanism, pull the window towards you slightly, gently lift the restrictor catches and push the window open.

Pull the window fully closed to activate the automatic reset facility.



1. See table
2. Top view of fourth arm vent fixing holes
3. Underside of channel fixing holes

Application	Size inches	A	B	C	D	E	F	G	H	I	J	K
top/side hung	12	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
top/side hung	16	32.6	-	114.8	-	212.7	279.3	15.5	30.5	-	269.3	305.7
top/side hung	16	36.2	53.0	165.3	-	314.3	380.9	15.5	30.5	-	370.7	407.0
top hung	20	36.2	53.0	217.2	-	-	311.1	15.5	30.5	391.7	472.5	508.4
top hung	24	36.2	53.0	149.5	262.8	297.6	371.0	15.5	30.8	391.1	574.5	610.4



## 8.4 Fire escape/easy clean friction stay

For clear egress and an easy clean solution.

- Full opening to 90 degrees providing clear egress of 500 mm on a 600 mm wide vent
- Easy to operate thumb catches allow the vent to slide to the easy clean mode giving between 100 mm and 250 mm clear

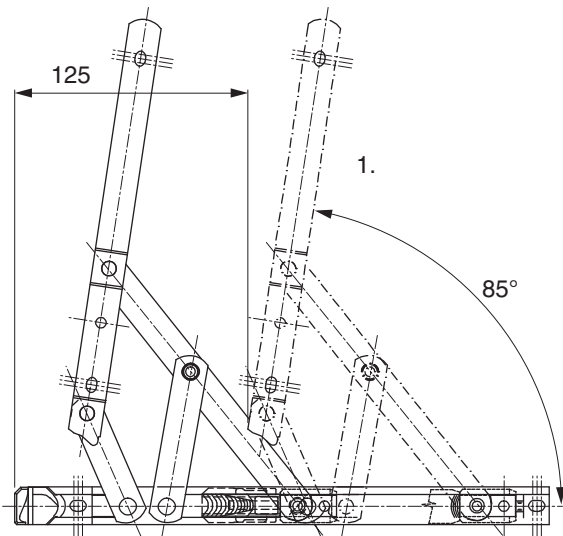
opening

- **Note: Please observe BS 8213 Part 1: 1991 Code of practice for safety in use and during cleaning of windows.**

Part Number austen	Part Number ferritic	Size inches	Size mm	Sash Width mm	Sash Height mm	Sash Weight approx. KG	Stack Height mm	Opening angle degrees	Pack Qty
472058	472010	12	311	600	1200	18	13/14	85	50 pairs
472059	472011	16	413	600	1200	21	13/14	89	25 pairs
472082	472034	12	311	600	1200	18	16/17	85	50 pairs
472083	472035	16	413	600	1200	21	16/17	89	25 pairs

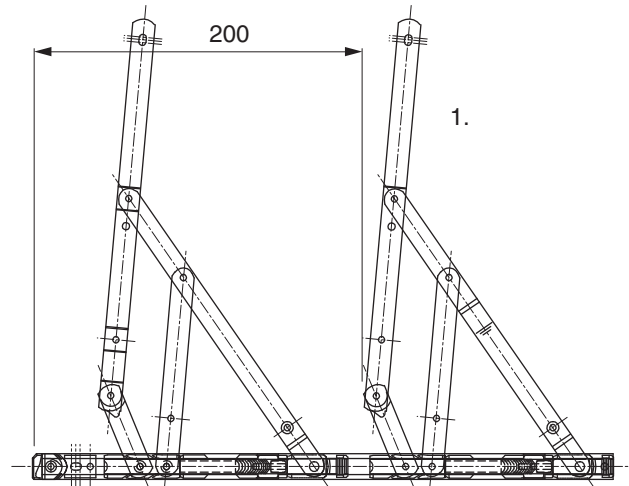
(21 with riser)

125 Easy-Clean

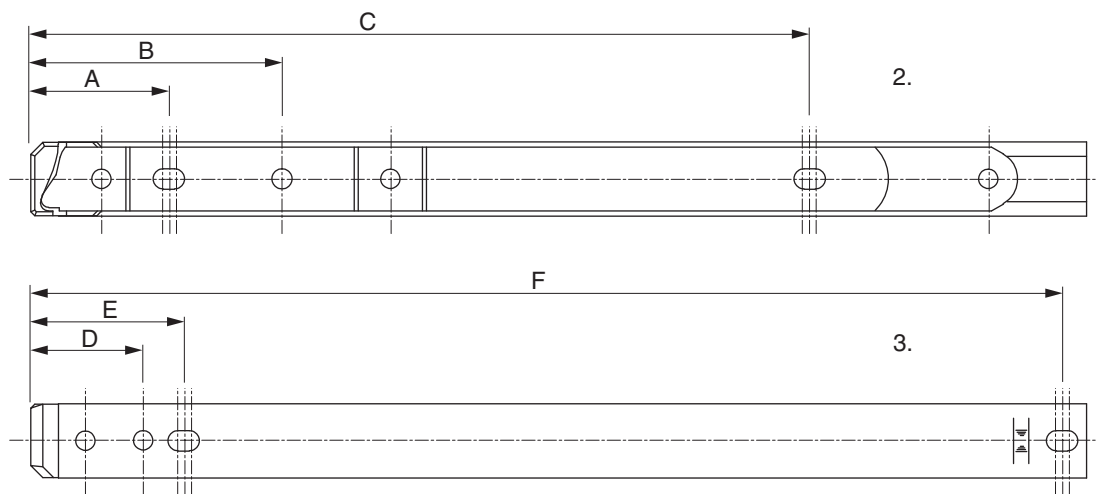


12" Side Hung Easy Clean

200 Easy-Clean



16" Side Hung Easy Clean



1. Packer used to obtain heights of 16/17 mm
2. Top view of fourth arm vent fixing holes
3. Underside of channel fixing holes

Application	Size inches	A	B	C	D	E	F	G
side hung	12	mm	mm	mm	mm	mm	mm	mm
side hung	12	34.2	61.8	208.3	31.4	41.4	305.7	-
side hung	16	34.4	138.4	271.4	270.8	31.3	41.3	407.2



## 8.5 Fire escape/easy clean extreme friction stay

For clear egress and an easy clean solution.

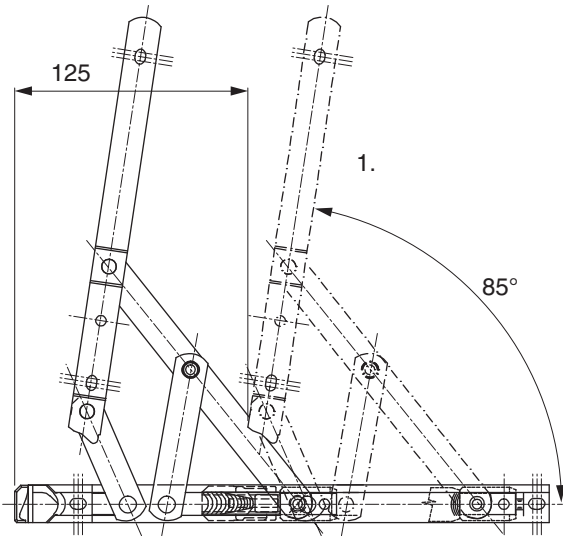
- Initial opening similar to standard friction stay
- Full opening to 90 degrees providing clear egress in excess of 500 mm on a 600 mm wide vent
- Easy to operate thumb catches allow the vent to slide to the easy clean position giving between 100 and 250 mm clear

opening

- To reset simply close the window and then re-open to go back to the egress position and close
- **Note: Please observe BS 8213 Part 1: 1991 Code of practice for safety in use and during cleaning of windows.**

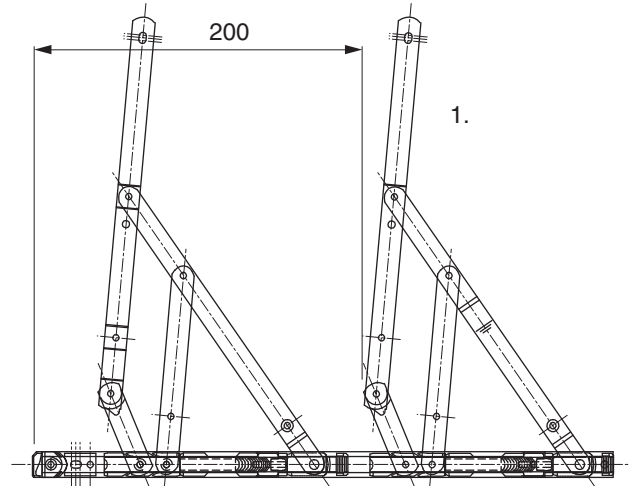
Part Number austen	Part Number ferritic	Size inches	Size mm	Sash Width mm	Sash Weight approx. KG	Stack Height mm	Opening angle degrees	Pack Qty
472060	472012	12	311	700	30	13/14	85	50 pairs
472061	472013	16	406	800	30	13/14	89	25 pairs
472084	472036	12	311	700	30	16/17	85	50 pairs
472085	472037	16	406	800	30	16/17	89	25 pairs

125 Easy-Clean

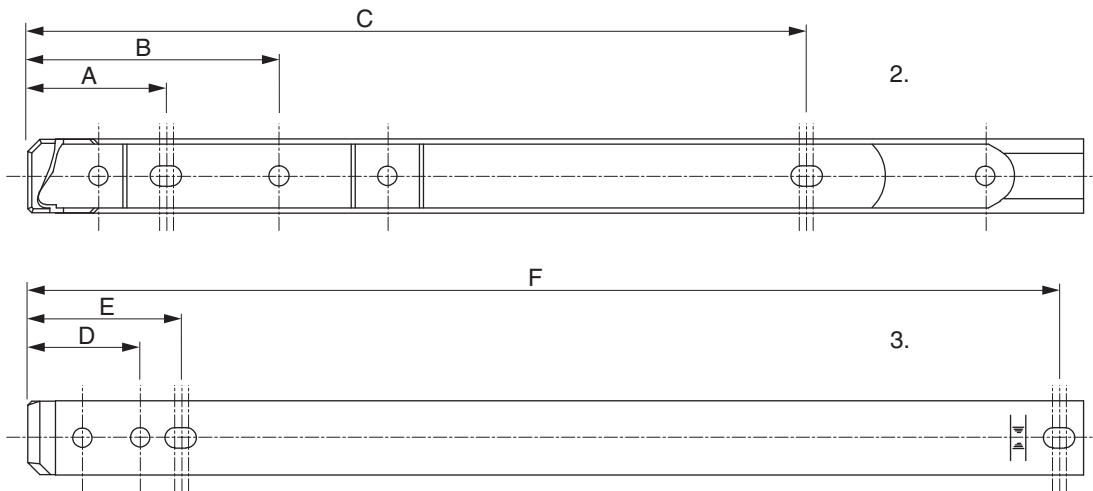


12" Side Hung Easy Clean

200 Easy-Clean



16" Side Hung Easy Clean



1. Packer used to obtain heights of 16/17 mm
2. Top view of fourth arm vent fixing holes
3. Underside of channel fixing holes

Application	Size inches	A	B	C	D	E	F	G
side hung	12	mm	mm	mm	mm	mm	mm	mm
side hung	12	34.2	61.8	208.3	31.4	41.4	305.7	-
side hung	16	34.4	138.4	271.4	270.8	31.3	41.3	407.2

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Friction hinges



## 9 Striker plates

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9.1	Product information	64
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## 9 Striker plates

### 9.1 Product information

To order the correct striker type please refer to the latest profile datasheet.



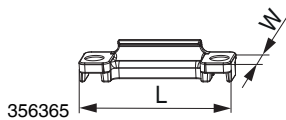


## 10 Hinge protectors


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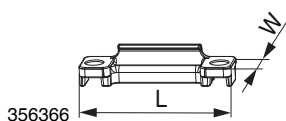
10.1	Stack height 13 mm	66
10.2	Stack height 17 mm	66
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## 10 Hinge protectors




### 10.1 Stack height 13 mm

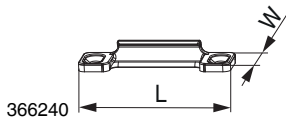
			L	W		N <sup>o</sup>	N <sup>o</sup> Tricoat
- silver	for PVC	Egress Frame	68	18,5	200	<b>352928</b>	<b>359143</b>
		Standard Frame	68	17	200	<b>94100</b>	<b>359141</b>
		Universal Sash	68	18,5	200	<b>356365</b>	<b>359145</b>




### 10.2 Stack height 17 mm

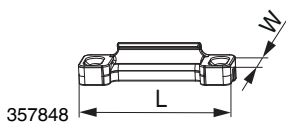
			L	W		N <sup>o</sup>	N <sup>o</sup> Tricoat
- silver	for PVC	Egress Frame	68	18,5	200	<b>353309</b>	<b>359144</b>
		Standard Frame	68	17	200	<b>94200</b>	<b>359142</b>
		Universal Sash	68	18,5	200	<b>356366</b>	<b>359146</b>

### 10.3 Profile specific




#### 10.3.1 Profile specific for sash

				L	W		No	No Tricoat
- silver	for PVC	Spectus Elite 70	LH/RH	68	18,5	200	<b>366240</b>	
		Veka 70 + 70FS		68	18,5	200	<b>367260</b>	
	for timber		LH/RH	68	18,5	200	<b>362625</b>	<b>363526</b>



#### 10.3.2 Profile specific for frame

				L	W		No	No Tricoat
- silver	for PVC	Eurocell Eurologic 70	LH/RH	68	18,5	200	<b>357848</b>	
		Spectus Elite 70	LH/RH	68	18,5	200	<b>366241</b>	
		Synseal Synergy	LH/RH	68	18,5	200	<b>362187</b>	
		Veka 70 + 70FS	LH/RH	68	18,5	200	<b>367261</b>	

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Hinge protectors




## 11 Restrictors

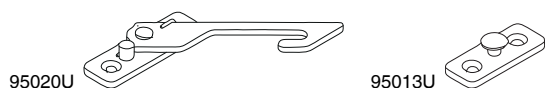
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11.1	Auto latch restrictors — ferritic _____	70
11.2	Auto latch restrictors — austenitic _____	70
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11.4	MULTI VENT opening restrictors _____	70
11.5	MULTI VENT packers for housings _____	71

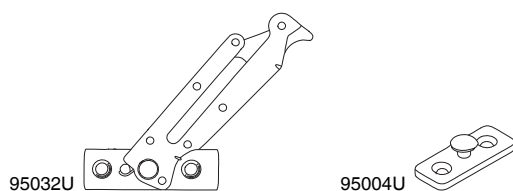
## 11 Restrictors




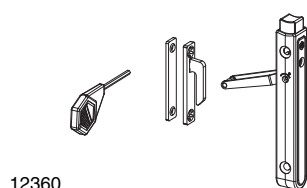
11.1 Auto latch restrictors — ferritic		No	No Tricoat
Stainless Steel Restrictor ferritic LH	50	95022U	
Stainless Steel Restrictor ferritic RH	50	95023U	
Striker Post Stainless Steel ferritic Post Height 2.5mm	50	95009U	
Striker Post Stainless Steel ferritic Post Height 9.5mm	50	95004U	
Striker Post Stainless Steel ferritic Post Height 10.5mm	50	95007U	
Striker Post Stainless Steel ferritic Post Height 11.5mm	50	95005U	
Striker Post Stainless Steel ferritic Post Height 14.5mm	50	95006U	
Striker Post Stainless Steel ferritic Post Height 16.5mm	50	95008U	




11.2 Auto latch restrictors — austenitic		No	No Tricoat
Stainless Steel Restrictor austenitic LH	50	95020U	
Stainless Steel Restrictor austenitic RH	50	95021U	
Striker Post Stainless Steel austenitic Post Height 9.5mm	50	95013U	
Striker Post Stainless Steel austenitic Post Height 10.5mm	50	95012U	
Striker Post Stainless Steel austenitic Post Height 11.5mm	50	95014U	
Striker Post Stainless Steel austenitic Post Height 13.5mm	50	95015U	
Striker Post Stainless Steel austenitic Post Height 14.5mm	50	95016U	



11.3 Laminated restrictors		No	No Tricoat
Laminated Stainless Steel Restrictor ferritic LH	50	95032U	
Laminated Stainless Steel Restrictor ferritic RH	50	95033U	
Striker Post Stainless Steel ferritic Post Height 2.5mm	50	95009U	
Striker Post Stainless Steel ferritic Post Height 9.5mm	50	95004U	
Striker Post Stainless Steel ferritic Post Height 10.5mm	50	95007U	
Striker Post Stainless Steel ferritic Post Height 11.5mm	50	95005U	
Striker Post Stainless Steel ferritic Post Height 14.5mm	50	95006U	
Striker Post Stainless Steel ferritic Post Height 16.5mm	50	95008U	



11.4 MULTI VENT opening restrictors		No	No Tricoat
RAL 8019 grey brown	20	12361	
traffic white RAL 9016	20	12360	



**11.5 MULTI VENT packers for housings**



**Nº**

**Nº**  
Tricoat

white

5°

100

**42509**




15°

100

**42514**




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104290	20	18	208173	10	48	213187	40	36,44
104291	20	18	208174	10	48	213188	40	36
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