

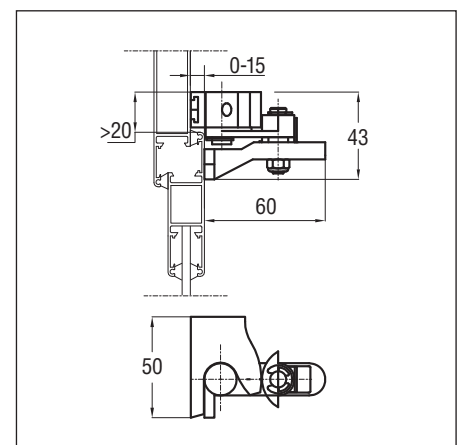
# LOCKING OPENERS

Opening mechanisms for bottom hinged windows

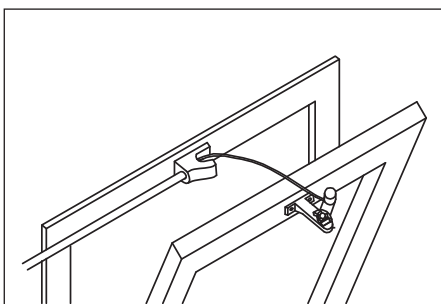


<b>PART No.</b>	WHITE	RAL 9010	30754Y
	BLACK	RAL 9005	37156M
	GREY	RAL 9006	37239Q

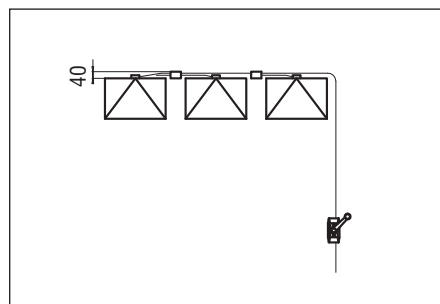
- It can only open bottom hinged windows which not require pushing force for the opening.
- Minimum size; the needed space for the installation is 20 mm from the vent external limit
- Maximum opening stroke: 25 cm; it can be adjusted on the end stroke spring placed in correspondence of the control operator.
- For windows with height inferior to 50 cm it is necessary to reduce the stroke to 1/3 of the window height.
- It is not necessary to work the conduit.
- In systems with more windows it is necessary to use rotary junction boxes to transmit the cable movement from the main line to the auxiliary ones.
- For windows wider than 1,5 m it is necessary to apply two or more thrust points.



Locking opener dimensions

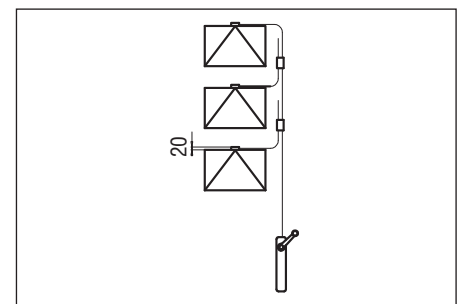


Examples of single installation



Examples of multiple installation

The dimension are measured from the external limits of the vent and show the minimum necessary space



The instructions for a safe installation are included in the section "SECURITY WARNINGS".  
On bottom hinged windows for safety reasons always install side checks.

# BRAVO


Fast assembly kit for single bottom-hinged windows



- BRAVO is a fast assembly kit for single bottom-hinged window whose width does not exceed 1,5 m.
- Minimum space required: 20 mm from the vent upper profile.
- The conduit is supplied in 0.6 m bars, drawn at one end: speed of assembly is ensured thanks to its insertion, with no need of joints.
- One bar of the conduit is already bended (50 mm radius), there is no need of any tool.
- Blister package for display in the shop, easy transport and storage guaranteed.
- Maximum opening: 250 mm; the kit is supplied complete with a pre-cut spent travel tube.
- For vents lower than 500 mm, reduce the stroke to 1/3 of the height by adjusting the end stroke spring, located by the control operator.

NOTE: to open more than one window, loose elements must be ordered (see pages 64-68).



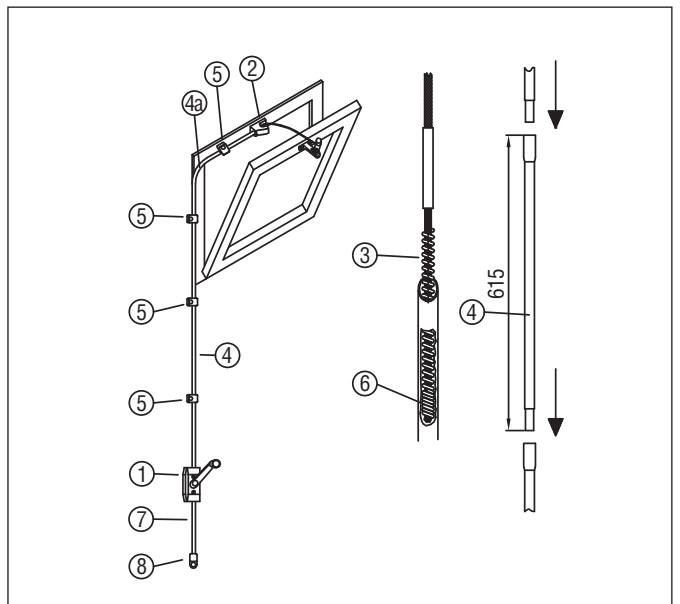
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## PART No.

Conduit length		3,05 m	4,25 m	6,05 m
Color	WHITE	40649K	40650U	40651W
	BLACK	40652Y	40653A	40654C
	GREY	40655E	40656G	40657J

## Items contained in BRAVO

Pos.	Description	Q.ty	Q.ty	Q.ty
1	Flat operator	1	1	1
2	Locking opener	1	1	1
3	Cable	3,5 m	4,7 m	6,5 m
4	Conduit	4	6	9
4A	Bent conduit	1	1	1
5	Saddle	4	6	8
6	Lock spring	1	1	1
7	Spent travel tube	1	1	1
8	End plug	1	1	1



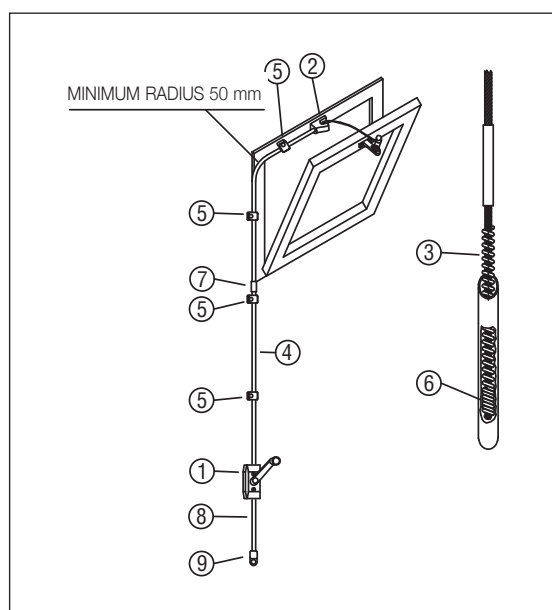
# KIT for single bottom hinged windows with rope



- Suitable for single bottom hinged windows with less than 1,5 m width.
- To have less friction, in order to reduce the effort, a rope has substituted the helical cable which is present just in correspondence of the control operator.
- Quick and easy installation. The conduit preparation tool is not required.
- The small section of the conduit allows an only 50 mm radius bend: it is usually possible to install the conduit on the window frame.
- Maximum opening 250 mm; the kit is provided with already cut spent travel tube.
- The conduit, coated in PVC, is supplied in 3 m pieces.

NOTE: to open more than one window, loose elements must be ordered (see pages 64-68).

**!** The instructions for a safe installation are included in the section "SECURITY WARNINGS".  
On bottom hinged windows for safety reasons always install side checks.



## PART No.

Conduit length		3,00 m	4,50 m	6,00 m
Color	WHITE	40166J	40167K	40168N
	BLACK	40171G	40172H	40173I
	GREY	40194R	40195S	40196T

## Items contained into the KIT

Pos.	Description	Q.ty	Q.ty	Q.ty
1	Flat operator	1	1	
2	Locking opener	1	1	
3	Cable	3 m	4,5 m	6 m
4	Conduit	3 m	4,5 m	6 m
5	Saddle	4	8	8
6	Lock spring	1	1	1
7	Connector	0	1	1
8	Spent travel tube	1	1	1
9	End plug	1	1	1