LOAD CAPACITY TABLE
Hinges for doors up to 20 Kg - door mass class 1

The loading capacity of the hinges is a data that cannot be determined in an absolute manner, since not all the elements that constitute doors and windows can always be determined in advance.
The main variables are:
1) dimensions of the shutter;
2) weight of the shutter;
3) number of hinges;
4) position of the hinges;
5) type and quality of the frame material. For example: the presence of knots in wood may jeopardize the grip of the hinge or in the case of PVC frames the presence and the shape of the internal metal reinforcement may affect the loading capacity of the hinges;
6) accuracy, precision and experience in the assembly. For example: installing the male more than 6 mm away from the frame or a thread not completely screwed, can compromise the proper functioning of the hinges;
7) position and frequency of use of the window/door.

The following table has been defined taking into consideration:
1) the information provided by the European Norm UNI EN 1935:2002.
2) the tests performed on the hinges.
In particular, norm 1935:2002 suggests to load a hinge with 1/3 of the declared weight in the CE certificate or declaration of performance, thus recommends the use of three hinges per shutter, praxis OTLAV agrees with, since it makes the door/window more stable.
The regulations 1935:2002 also determines that in the case of doors or windows of remarkable width, it is necessary to apply a "coefficient of increase of the shutter mass", which determines the decrease of the loading capacity of the hinges.

The hinges are divided in 8 classes* of weight:
Class 0: doors up to 10 Kg
Class 1: doors up to 20 Kg
Class 2: doors up to 40 Kg
Class 3: doors up to 60 Kg
Class 4: doors up to 80 Kg
Class 5: doors up to 100 Kg
Class 6: doors up to 120 Kg
Class 7: doors up to 160 Kg

NB: with doors of 13 kg and hinges in class 1, it is possible to use a hinge less than reported in this table.

Hinges for doors up to 20 Kg - door mass class 1

Door height mm.	600	800	900	1000	1050	1100	1150	1200	1250	1300
2400	4	4	4	5	5	5	5	5	3	3
2300	3	3	4	4	5	5	5	3	3	3
2200	3	3	3	4	4	4	3	3	3	3
2100	3	3	3	3	4	3	3	3	3	3
2000	3	3	3	3	3	3	3	3	3	3
1900	3	3	3	3	3	3	3	3	3	3
1800	3	3	3	3	3	3	3	3	3	3
1200	3	3	3	3	3	3	3	Ctd	Ctd	Ctd
800	3	3	3	3	Ctd	Ctd	Ctd	Ctd	Ctd	Ctd

Door width mm.

X	Suggested number of hinges
3	Switch to a hinge of one higher class, use 3 hinges, to choose the hinge see list on page 3.
Ctd	Non-standard door sizes, please contact the technical department

* The class refers to the third cell of the CE certificate or declaration of performance.

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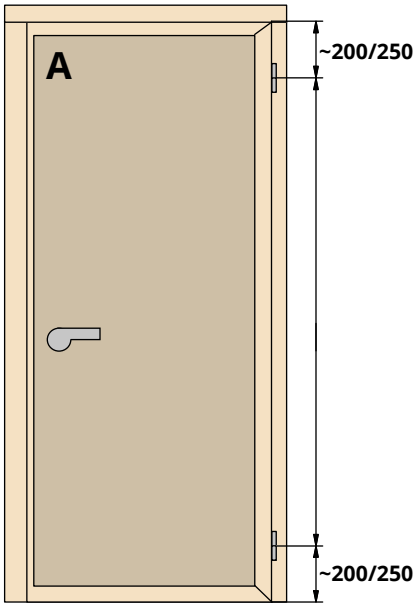
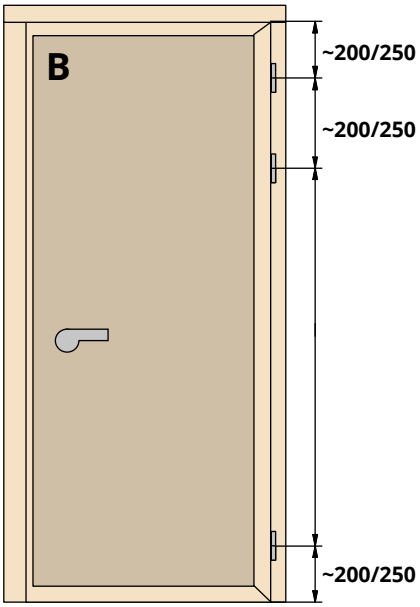
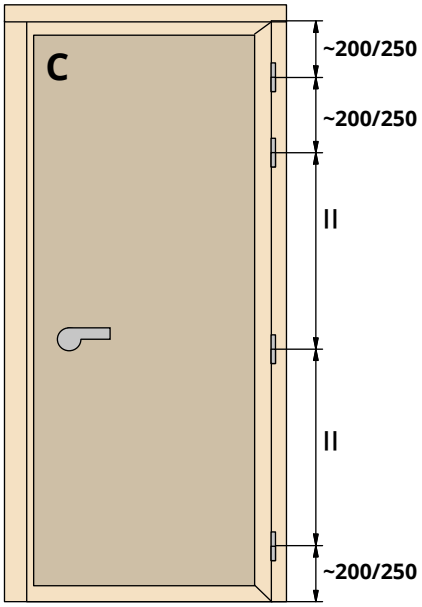
Positioning of the hinges



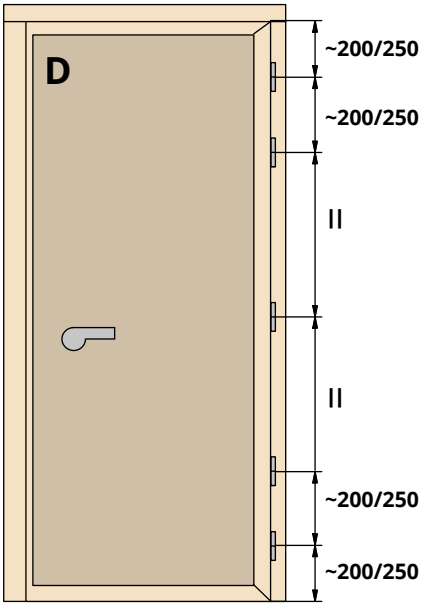
2 hinges



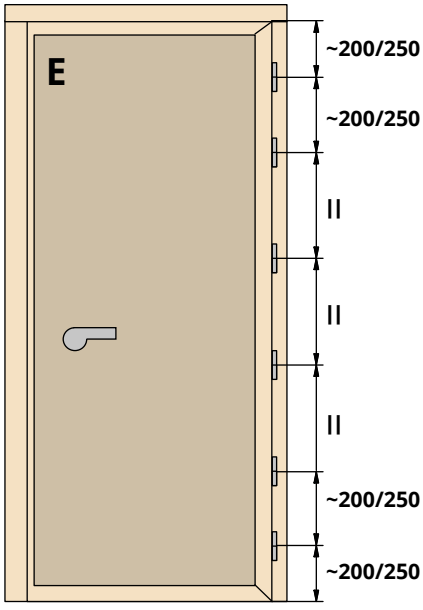
3 hinges



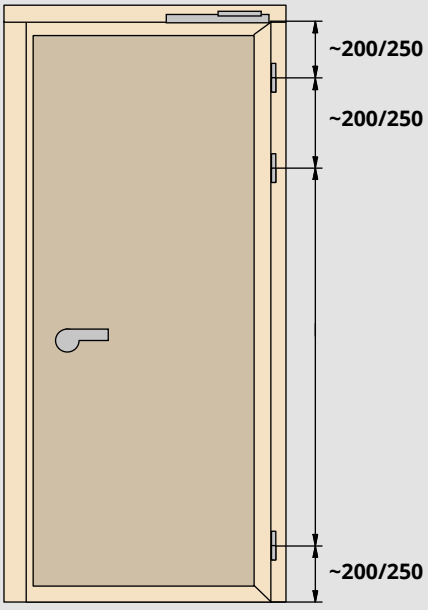
4 hinges



5 hinges



6 hinges



Door-closer

Referring to the load capacity table, add a hinge, respecting the diagrams reported hereby.

The product is guaranteed only if used according to the instructions given by the manufacturer.

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Codes table

Table of OTLAV hinges codes divided by class of weight.

Hinge classes								
0 - 10 kg	1 - 20 kg	2 - 40 kg	3 - 60 kg	4 - 80 kg	5 - 100 kg	6 - 120 Kg	7- 160 kg	200 kg
530Ø9	060Ø13	030Ø13	030Ø14	320Ø20	495Ø16 Exacta	494Ø20	495Ø18 URSUS	475Ø18
530Ø11	210Ø13	050Ø13	030Ø16	483Ø16	482Ø16	495Ø20		
535Ø9	300Ø13	055Ø13	031Ø16	486Ø16		495Ø16 Ursus		
535Ø11	300Ø14	057Ø13	045Ø18	495Ø13				
600Ø9	300Ø16	060Ø14	055Ø14	495Ø14				
605Ø9	NT 021	070Ø13	055Ø16	495Ø14				
605Ø11	P09Ø13	075Ø13	057Ø14	750Ø18				
610Ø9		085Ø13	057Ø16					
610Ø11		095Ø14	058Ø14					
		100Ø13,5	085Ø14					
		101Ø13,5	100Ø15					
		102Ø15	101Ø15					
		103Ø15	103Ø15					
		190Ø13	104Ø15					
		190Ø14	180Ø16					
		409Ø14	190Ø14					
		P05Ø13	190Ø16					
		P38Ø13	221Ø15					
		P39Ø13	320Ø15					
		P50Ø15	320Ø16					
		P88Ø13	320Ø18					
			335Ø15					
			340Ø15					
			341Ø15					
			343Ø15					
			355Ø13					
			355Ø14					
			355Ø16					
			484Ø16					
			485Ø14					
			486Ø14					
			491Ø14					
			CE 022Ø15					
			CE 047Ø15					
			CE 048Ø15					
			CE 335Ø150					
			FP 096Ø8					
			TE012Ø15					

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