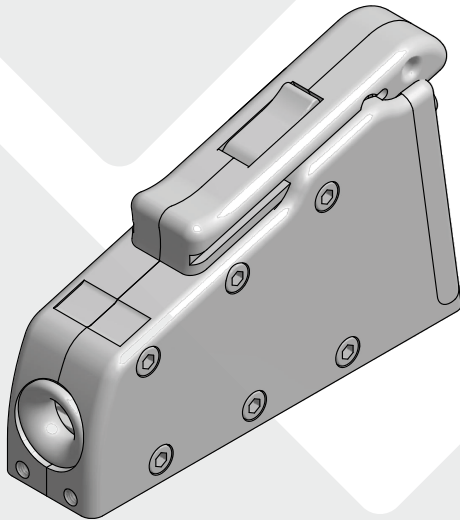


# *antal*

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## DV JAMMERS DOUBLE V-GRIP

## USER'S GUIDE



## DV JAMMER

The DV Jammer is a line holding device suitable for the extremely high loads of the high-tech Dyneema® lines as well as exceptional holding power on polyester ropes. Four models, for lines ranging from 8 to 14 mm diameter, are available. This covers a wide range of boats up to around 100 ft in length.

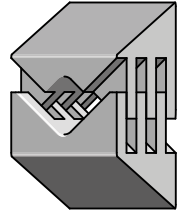
### DV - DOUBLE V-GRIP

The DV-grip is a locking system based on two opposing V shaped wedges, the result is a 4 sides grip which provides additional benefits over traditional 2-sided grip line stoppers:

- Less line wear
- Higher holding power
- Smaller sizes and lower weight



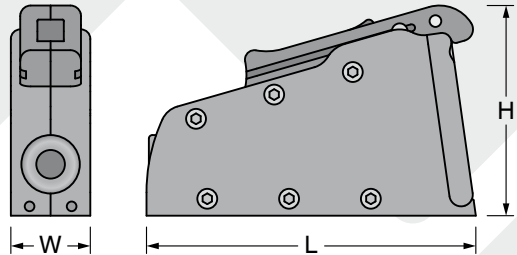
DOUBLE  
V-GRIP



DV is a patent pending product by Antal srl, Padova, Italy.

### DV JAMMERS: RANGE OF AVAILABLE MODELS

Four models, for 8, 10, 12 and 14 mm lines, are offered.



#### DV JAMMERS

MODEL	FOR LINE Ø mm	W mm	L mm	H mm	WEIGHT gr	FASTENERS* n° x Ø mm	MAX LOAD Kg
505.081	8	34	126	86	600	4 x Ø6	1500
505.101	10	34	141	90	680	4 x Ø8	2000
505.121	12	42	169	108	1180	4 x Ø10	3000
505.141	14	42	185	113	1300	4 x Ø10	4000

\*Mounting hardware, four threaded studs, washers and nuts are included.  
(AISI 316 material)

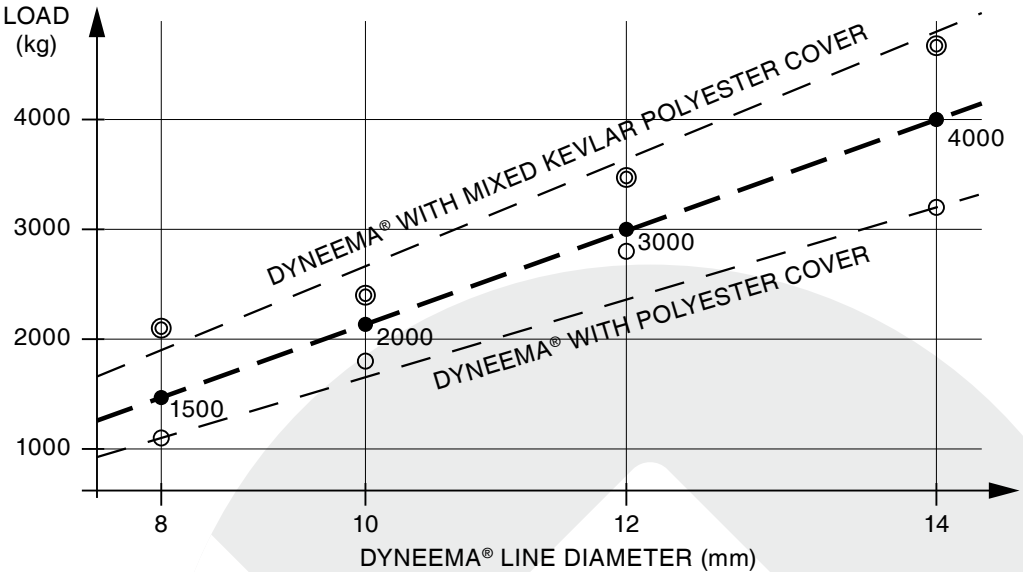
## TEST RESULTS AND MAX LOAD

Test values were obtained on Dyneema® lines with different covers:

- Dyneema® with polyester cover
- Dyneema® with mixed Kevlar-polyester cover

Results shown in the lower graph correspond to the failure of the cover and the resulting core slippage.

Dyneema® line with a Kevlar-Polyester cover provides much better test results than the Dyneema® line with a Polyester cover which performed poorly, with results even below the simple polyester line (polyester cover and core).



Based on the test results Antal recommends the following maximum loads:

- 505.081 for 8 mm line - 1500 kg
- 505.101 for 10 mm line - 2000 kg
- 505.121 for 12 mm line - 3000 kg
- 505.141 for 14 mm line - 4000 kg

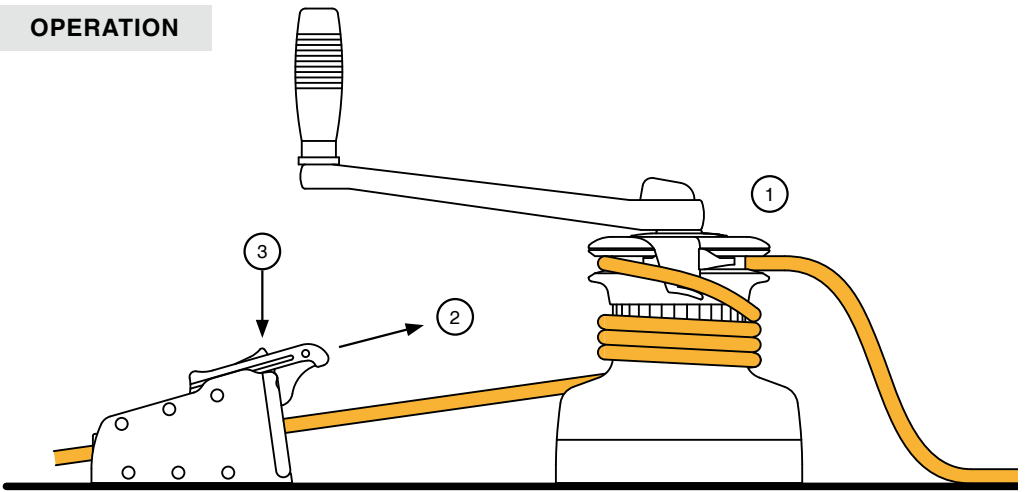
Appropriate safety margins must be considered for the max loads.

The suggested maximum load limit is the limit of a line, not of the jammer.

Above values for max loads are not valid for Dyneema® lines with a polyester cover or for polyester lines with a lower breaking load value than the recommended maximum load value.

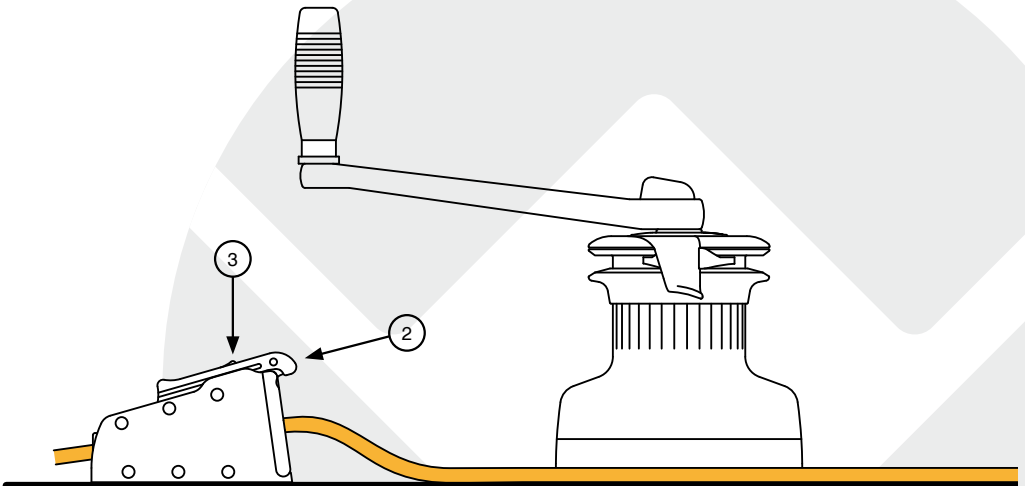
Tests with polyester lines (polyester core and cover) show that the limits is the breaking load of the line itself, with values close to our max loads.

## OPERATION



### RELEASE: Easing the line

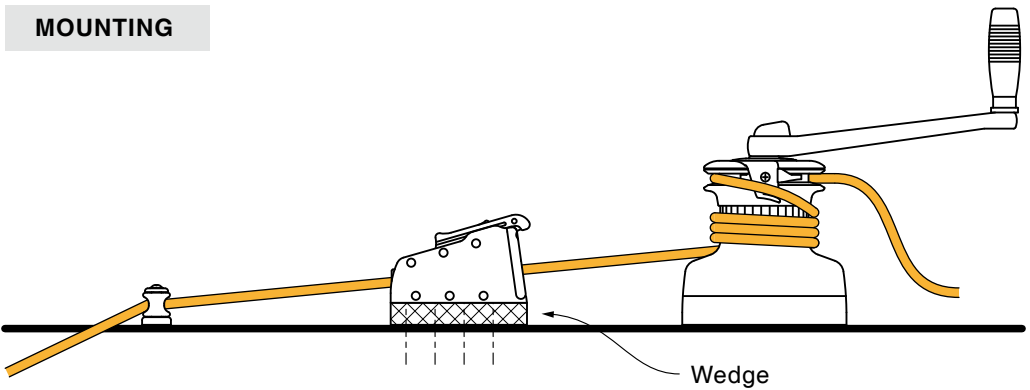
- Tension the line with a winch (1) until the jammer is open
- Pull the upper slider (2) until the ratchet (3) locks in the fully open position
- The line is now free to pass through the open jammer unobstructed



### LOCK: Locking the line

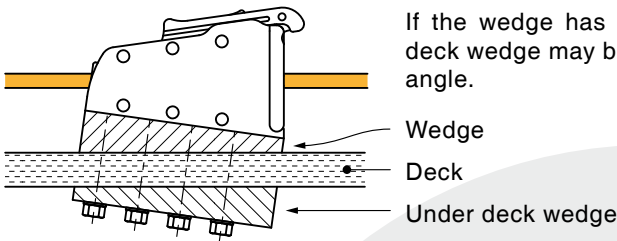
- With the tensioned line on the winch push down on the ratchet (3) to disengage the upper slider
- Push the upper slider (2) as far forward as possible to minimize the locking settling
- Remove the line from the winch

## MOUNTING



### POSITIONING

To avoid deflections of the line in relation to a winch, it may be necessary to correctly position the jammer on a wedge.



If the wedge has a significant angle then an under-deck wedge may be necessary to counter the on-deck angle.

### FASTENING BY STUDS

The jammer is mounted from under deck with 4 threaded studs, washers and nuts, AISI316 hardware is included.

### STUDS LENGTH

For the 8 mm stud consider the deck thickness + 22 mm, for the 10 mm stud consider the deck thickness + 28 mm.

### THREAD LOCKER

Use Loctite® strong (270) or medium (243) to lock the studs in the jammer base, use Loctite® medium (243) or weak (222) on the studs and the nuts under-deck.

### HOLES THROUGH THE DECK

For each jammer it is necessary to drill 4 holes, use the templates on pages 8 and 9 to drill the holes in the correct location.

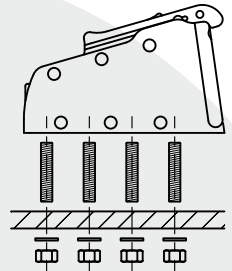
### CAUTION !

Before drilling the holes ensure that the mounting surface is structurally sound to accept the high load of a DV jammer !

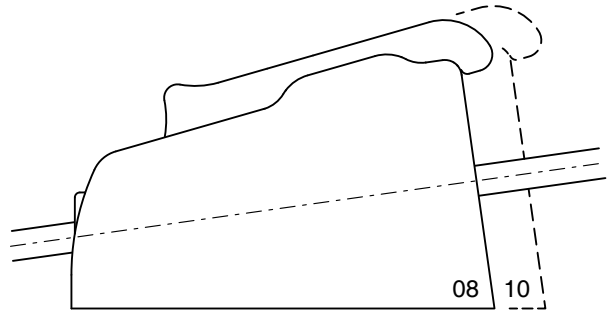
Cored mounting surfaces may have to be re-reinforced with an epoxy filler, a backing plate of appropriate size and thickness may also be necessary !

### SEALANT

Put a flexible and waterproof sealant around the holes on deck and under the base of the jammer to prevent water ingress.

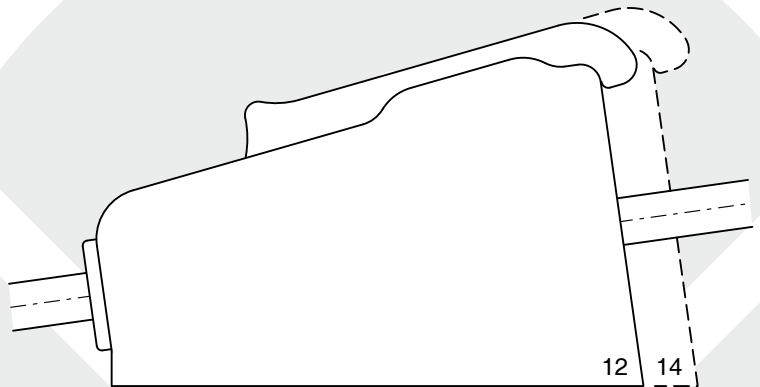


## TEMPLATES



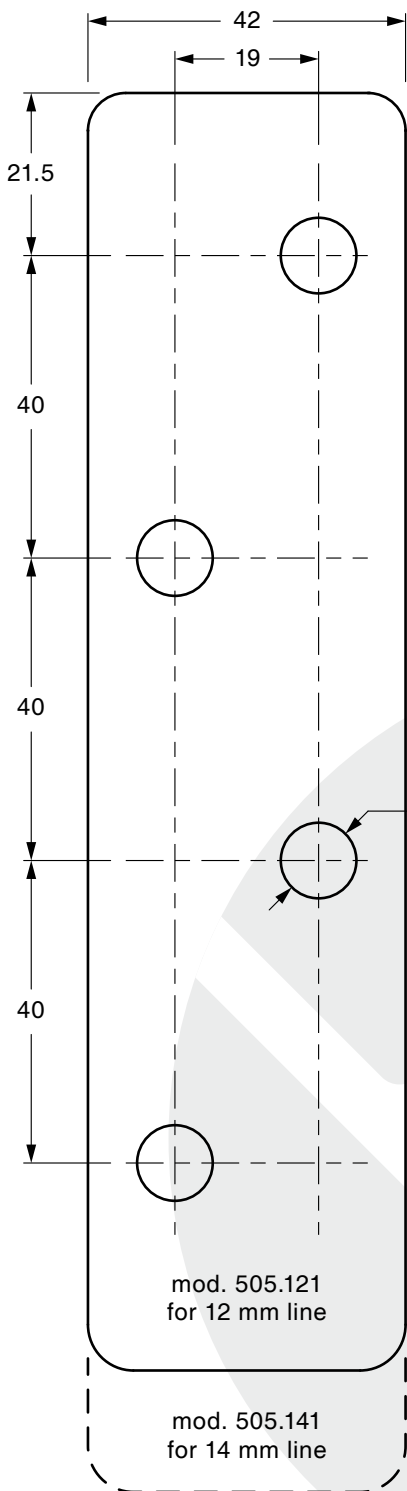
### TEMPLATES for lines 8 and 10 mm

The bases of mod. 505.081 and 505.101 have the same width and the same hole spacing but different overall lengths. The line entry level is the same for models 505.081 and 505.101, they share the same mounting pattern.

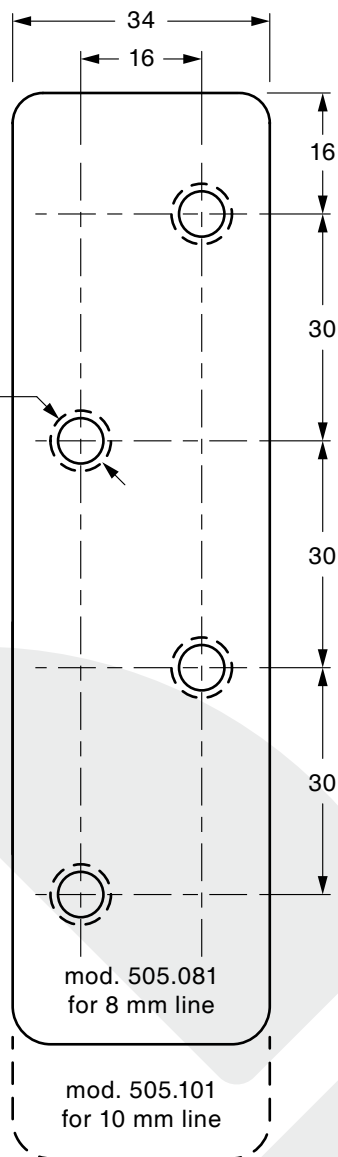


### TEMPLATES for lines 12 and 14 mm

The bases of mod. 505.121 and 505.141 also have the same width and the same hole spacing but different overall lengths. The line entry level is the same for models 505.121 and 505.141, they share the same mounting pattern.



n° 4 x Ø6 / Ø8 \*



winch



\* { mod. 505.081 = n° 4 x Ø6  
mod. 505.101 = n° 4 x Ø8

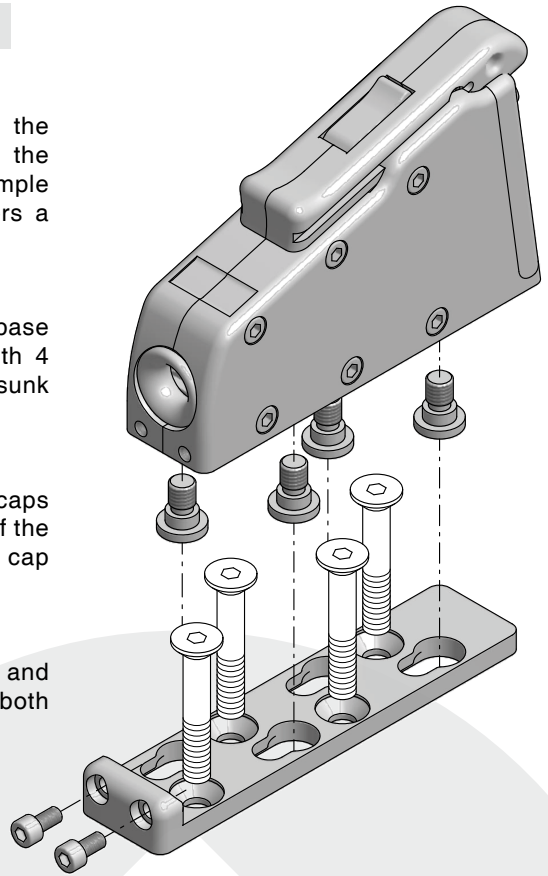
## FASTENING FROM THE DECK SIDE

When it is not possible to access the mounting studs/nuts/washers from the bottom side of the jammer, for example when mounting on a mast, Antal offers a special mounting set including:

- **LOWER BASE:** this is an aluminium base that can be mounted from above with 4 screws (not included, use countersunk screws UNI 5933 - DIN 7991).

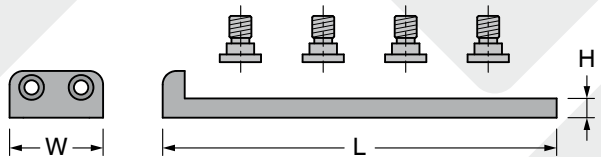
- **4 THREADED CAPS :** stainless steel caps that will be screwed into the 4 holes of the jammer base. Use Loctite 243 on the cap threads.

One lower base fits both models for 8 and 10 mm lines, another lower base fits both models for 12 and 14 mm lines.



## MOUNTING BASE

Fastening from above  
into threaded holes



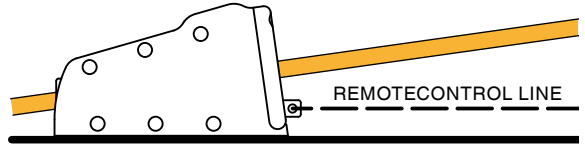
LOWER BASE mod.	W mm	L mm	H mm	WEIGHT gr	FASTENERS n° x Ø mm	FOR DV JAMMER mod.
505.084	34	134	7	70	4 x Ø6	505.081 / 505.082
505.104	34	149	7	80	4 x Ø8	505.101 / 505.102
505.124	42	178	9	129	4 x Ø10	505.121 / 505.122
505.144	42	194	9	145	4 x Ø10	505.141 / 505.142



## DV JAMMERS: REMOTE CONTROL

A “remote control” version is also available: this model does not have the upper manual control slider, the lower slider is controlled with a control line.

REMOTE CONTROL DV JAMMER	
MODEL	FOR LINE Ø mm
505.082	8
505.102	10
505.122	12
505.142	14

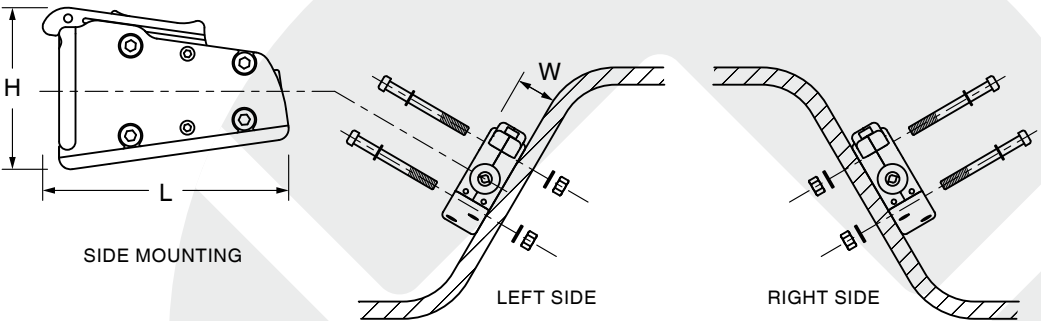


Weights, sizes and max loads are described on the table on page 6.

## DV JAMMER: SIDE-MOUNTING VERSION

DV Jammers are also available for side-mounting; the same model can be mounted on either left or right side.

Studs, washers and nuts of AISI 316 material are included.



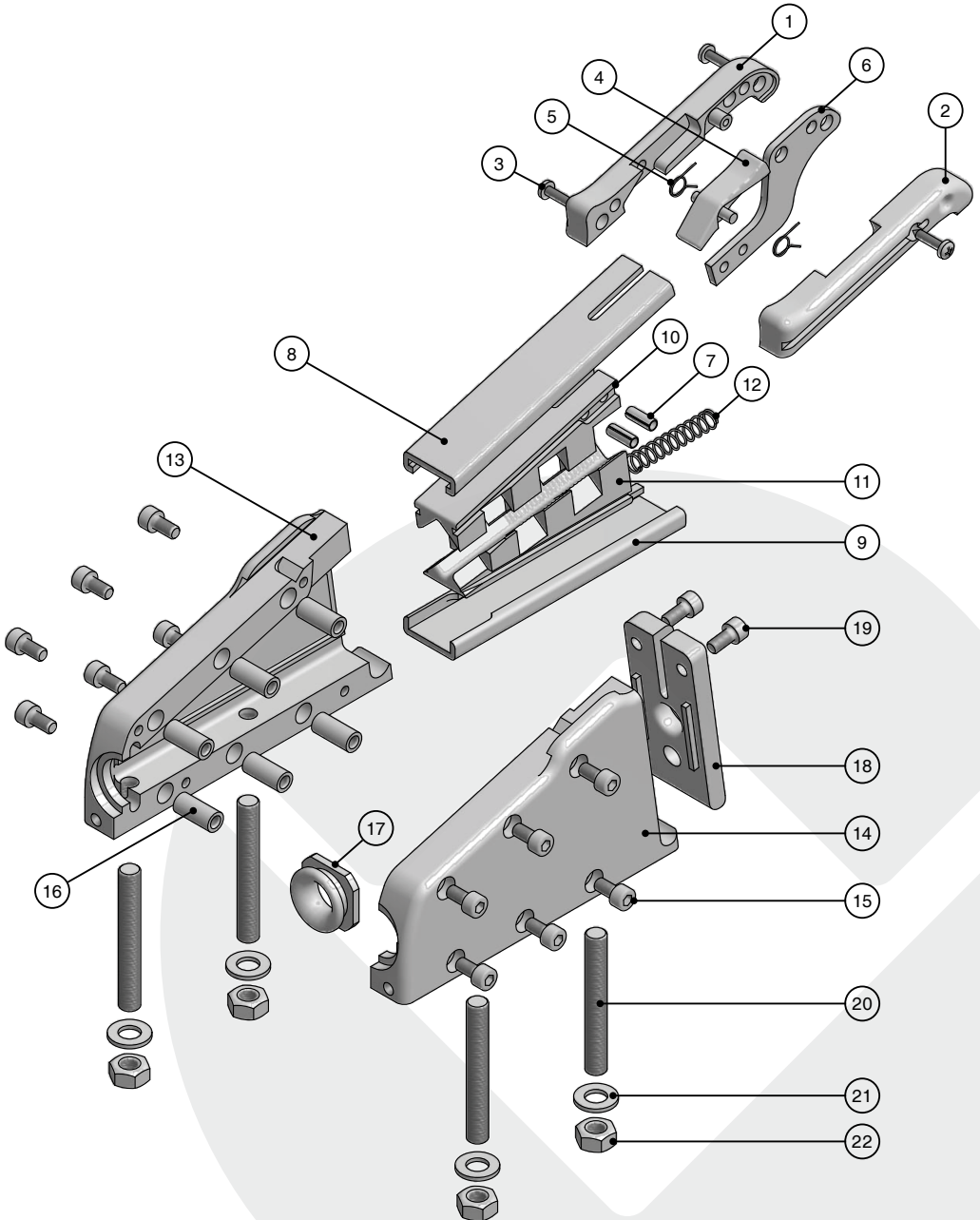
### SIDE MOUNTING DV JAMMERS

MODEL	FOR LINE Ø mm	W mm	L mm	H mm	WEIGHT gr	FASTENERS* n° x Ø mm	MAX LOAD Kg
505.083	8	34	135	95	630	4 x Ø6	1500
505.103	10	34	150	99	720	5 x Ø6	2000
505.123	12	42	179	118	1220	4 x Ø8	3000
505.143	14	42	195	122	1345	5 x Ø8	4000

\*Studs (AISI 316), washers and nuts are included.

## EXPLODED VIEW

Line size: each model is suitable for a single line diameter that is printed on the rear cover (#18).



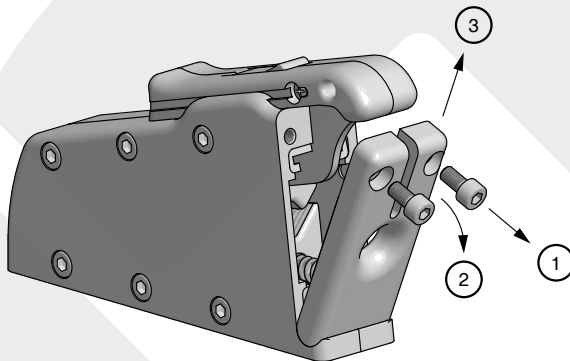
## PARTS LIST

N°	Description	Q.ty	N°	Description	Q.ty
01	R-Slider.....	1	12	Wedge spring.....	1
02	L-Slider.....	1	13	Right cover.....	1
03	Slider screw.....	3	14	Left cover.....	1
04	Ratchet.....	1	15	Cover screw.....	12
05	Ratchet spring.....	1-2	16	Cover threaded pipe.....	6
06	Slider blade.....	1	17	Front ring.....	1
07	Blade pin.....	2	18	Rear cover.....	1
08	Upper track.....	1	19	Rear cover screw.....	2
09	Lower track.....	1	20	Stud.....	4
10	Upper V wedge.....	1	21	Washer.....	4
11	Lower V wedge.....	1	22	Nut.....	4

## MAINTENANCE

Antal Jammers do not need any lubrication, but spraying with fresh water will prolong the life of the jammer and ensure a reliable operation.

For a deep cleaning of the inside of the jammer it can be opened-up; just remove the two screws from the rear cover and a complete disassembling will be possible.



Use silicone or Teflon® grease or any other specific product to reduce the contact between aluminium and stainless steel parts (screws) and to avoid aluminium corrosion.

### CAUTION !

Avoid any kind of lubrication on the V-shaped area of the two wedges.

Parts to service a DV jammer are available, for part numbers refer to the exploded view.



***antal***

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**ANTAL srl** - Via del Progresso 10 - 35127 Padova - Italy  
Tel. 049 8702655 - 8701265 - Fax 049 760906  
**[www.antal.it](http://www.antal.it)** - [antal@antal.it](mailto:antal@antal.it)