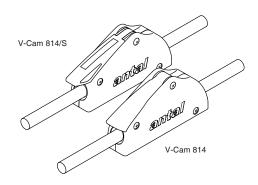


# **Clutches**

V-Cam 814 & V-Cam 814/S



## V-CAM814 CLUTCH

Three models for 8-10 mm., 10-12 mm. and 12-14 mm line ranges; available in single, double, triple and quadruple versions.

The V-CAM814 has a box-structure in UV-resistant resin with stainless steel reinforcements, an aluminium base, a V-Cam and aligning bushing in Aisi 316.

This model is fitted with a large "V" shaped cam that offers high holding strength and a newly designed mechanism that guarantees easy opening even under load. A line can be tailed or winched with the handle closed.

A V-Cam 814 can be completely dismantled for servicing; simple maintenance can be done with the clutch on deck.

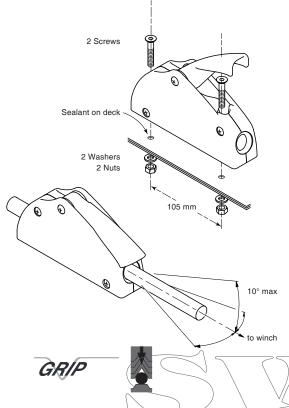
#### **NEW V-CAM 814/S CLUTCH**

V-CAM 814 clutches are also available in "silver series": V-CAM 814/**S** with an ergonomic, polished silver anodized aluminium handle.

All the characteristics remain the same as those of V-Cam 814.

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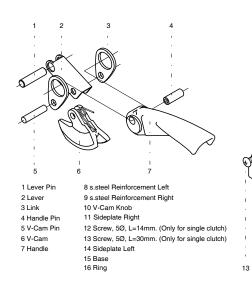
made in italy



Internationally patented Antal V-Grip system: Antal V-Cam 814 and V-Cam 814/S are fitted with the V-Grip system: a "V" shaped cam that improves the holding power, increases the bearing surface on the line and consequently gives higher working loads without cover damages.

#### Installation:

- Each clutch has to be fixed with two AISI316 stainless countersunk flat head screws: 2 x 6 mm screws for 8-10 mm clutches, 2 x 8 mm screws for 10-12 and 12-14 mm clutches.
  Screws, washers and nuts are not included.
- Install the clutch forward of the winch, keeping the line deflection angles as narrow as possible (10° max), as shown in the drawing.
- Mark the screw's position on your deck using the clutches' holes directly, or, alternatively, the full scale template on the back of this guide.
- Lift the handle and place the screws. To ensure a watertight seal, apply sealant around the holes and on the threads of the mounting screws under the clutch base,
- Horizontal mounting: an extra aluminium side-mount base is provided with the clutch. For left and right horizontal mounting. Visit antal it or contact us at antal@antal.it.



Usage

- A line can be tailed with the handle closed. The line stops automatically in the new position.
- You can **release** the line by opening the handle, also under load, without the use of a winch.
- Loss of tension: after pulling the line with the winch, the removal of the line from the winch causes a mechanical shift of the cam. This forward movement of the cam locks the line, but produces a small loss of tension. To reduce the tension loss, open and close the clutch handle just before removing the loaded-up line from the winch.

#### Maintenance:

Refer to the exploded view to identify parts.

- For maintenance, lift the handle and spray fresh water onto all inner moving parts. Wait until they are dry, thus lubricate them with lubricant spray. Take care not to leave lubricant traces onto the line's bearing surface and on the V-Cam teeth, as this may reduce the clutches' grip performance.
- Completely lift the handle and lubricate the two visible Links (n. 3).
- A V-Cam 814 can be dismantled for complete servicing: remove the two mounting screws and take the clutch off the deck
- Remove the Sideplate screws (n. 12, 13) in order to take the Sideplates off.
- Clean the inside from dirt and sea salt which could cause corrosion, lubricate all moving parts, using a light grease, e.g. Teflon based.
- Ensure all internal faces of moving parts are clean and smooth. Replace any worn



• Parts for V-Cam 814 and V-Cam 814/S clutches are available. Refer to the exploded view's numbers to order the parts.

# Rope Choice:

Extensive Safe Working Load tests show that choice of rope is very important for the optimal usage of the clutches. Exceeding Working Loads may damage the line cover, not the clutch.

Tests reveal that the best results are achieved on Dyneema® lines with composite Kevlar/Polyester covers, while traditional pure-Polyester covers over a Dyneema® core prove to have poor resistance. Also "all-Polyester" core/cover versions give excellent results.

## Clutch Choice:

Max load table: V-Cam 814 & V-Cam 814/S

- Line sizes are marked on the clutch's base.
- High loads may damage the line; also, the line's performance depends on the line's age: for a safe ordinary functioning of the system, choose a line and a clutch which work at lower values than those recorded in the table below.

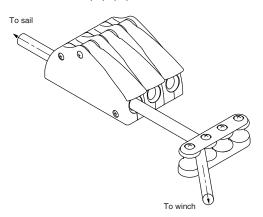
Line Ø	Base for 10 mm line	Base for 12 mm line	Base for 14 mm line	
8 mm	600 kg			
10 mm	850 kg	850 kg		
12 mm		1200 kg	1200 kg	
14 mm			1500 kg	

V-CAM 814/S	V-CAM 814					
MODEL	MODEL	Ø LINE mm	TYPE	WIDTH mm	WEIGHT kg	SCREWS N° x Ø mm
549.111	509.111	- 8 - 10 - 8 - 10	SINGLE	36	0.60	2 x Ø6
549.121	509.121		DOUBLE	65	1.10	4 x Ø6
549.131	509.131		TRIPLE	94	1.60	6 x Ø6
549.141	509.141		QUADRUPLE	123	2.10	8 x Ø6
549.112	509.112	- - 10 - 12 -	SINGLE	36	0.60	2 x Ø8
549.122	509.122		DOUBLE	65	1.10	4 x Ø8
549.132	509.132		TRIPLE	94	1.60	6 x Ø8
549.142	509.142		QUADRUPLE	123	2.10	8 x Ø8
549.113	509.113	- 12 - 14 ·	SINGLE	36	0.60	2 x Ø8
549.123	509.123		DOUBLE	65	1.10	4 x Ø8
549.133	509.133		TRIPLE	94	1.60	6 x Ø8
549.143	509.143		QUADRUPLE	123	2.10	8 x Ø8

Although all antal clutches are fitted with stainless.steel rings and guides at both the entry and the exit side of the line, only very small line deflections are allowed to prevent damage to the clutch.

# Organizers:

Organizers allow for lines to be angled from clutches to a winch which may not be aligned with the clutches. They are in particular useful for batteries of several clutches which are operated by a single winch. Organizers are available with 2, 3, 4, 5, and 6-sheaves.



## Organizers' Description.

- Resin sheave organizer, with double ball bearing and black aluminium cover.
- Available with 2, 3, 4, 5 and 6 sheaves.

# Installation:

- Each sheave's screw is fixed on the deck; screws, washers and nuts are included.
- To ensure a watertight seal, apply sealant around the holes and on the threads of the mounting screws under the organizer's base.

