

# Carton and Appliance Clamps



## Experience the new way to handle your white goods!

The Bolzoni Auramo carton clamps are extensively used for the handling of “white goods”, in both factories and warehouses, such as washing machines, refrigerators, microwave ovens, televisions and for the handling of other types of materials packed in cartons.

Thanks to the palletless handling, the carton clamp allows the optimization of warehouse storage space and reduction of the costs for packaging materials.



LS-V Model

**Visibility, productivity, safety with the new Carton Clamp:**

### LS-V

The new LS-V model Bolzoni Auramo carton and appliance clamps incorporate new technical features able to guarantee safe and efficient handling together with easy installation and longer lifetime:

- Very rigid frame structure with single piece double “T” profile. Wide visibility window thanks to new chassis design, granting safe and easy handling operations.
- Large surface aluminium pads to reduce the total weight of the clamp and to maximize the residual capacity of the lift truck.
- Special high-friction vulcanized rubber lining increases positive grip allowing safe and damage-free handling.
- 4-ways reversible pads.
- Thin arm profiles and new design elbow supports allow easy knifing between loads.
- Pad supports with robust design and varying height for an optimized distribution of the clamping force.
- New fixing system of the sliding pads to relieve stress.
- New self-aligning cylinder fixing to avoid breakage.
- Integral sideshift.
- Flow divider.
- All standard models are suitable for pallet handling application with optional 7” high wear plates at the bottom of each pads.



## Innovative solution to damage free handling with correct clamping force: the Easy-Move intelligent carton and appliance clamp model.

In the white goods industry the handling problems caused by the use of incorrect clamping force can create serious risks of products damaging: insufficient pressure results in the product being dropped, while too much pressure can crush or damage the package and its content. Bolzoni integrates the standard technical features of the KS-C model carton clamp with the most advanced technology in hydraulics, electronics and laser sensors for clamping force controlling to provide the most advanced solution for Logistic Managers in Home Appliances manufacturers Inbound warehouses and 3PLs.

Easy-MOVE 4.0 is a **FULLY WIFI CONNECTED** and automatic electronic clamping pressure control system for damage free handling in white goods logistic, based on the association of the detected load between the arms with the correct cylinders pressure to properly grip the units without any exceeding force. Different to all competitors **Easy-MOVE 4.0** also provides an **advanced light signal driving assistance** technology enabling also the most unexperienced truck drivers to handle all sorts of washing machines, refrigerators, ovens, dishwashers and general consumer products without any damage.

The laser sensors and the electronic micro-control allow the system to **detect the load and input the correct clamping pressure** through

a proportional pressure relief valve. The Central Processing Unit (CPU) of the clamp **can easily be controlled from remote** through the Bolzoni dedicated portal and the accuracy of the input in bars is granted by the pressure sensor measuring the hydraulic at the end of the CPU input.

With its own credentials the Logistic Manager and/or the truck provider can adjust the handling load parameters, recalibrate the sensors if necessary, associate the opening ranges to the required pressure levels and have a real time monitoring of the clamp performances and productivity.  
3PLs can easily print their **online report** showing perfect correspondence between product handling and manufacturers' force guidelines.

The remote monitoring function includes also a **remote diagnosis** dashboard that allows Bolzoni Group service organization to immediately intervene on the clamp set up and have a detailed view of the clamp's parameters.

It is also possible to recalibrate the pressure levels in case of introduction of new loading schemes and finally to switch to single pressure manual mode.

### Recap of the system USPs:

FULLY AUTOMATIC SYSTEM

TOTAL LOAD DAMAGE PREVENTION

INDEPENDENT FROM TRUCK DRIVERS LACK OF EXPERIENCE

THE ONLY FULLY WIFI CONNECTED CLAMP

TOTAL CLAMP / PRESSURE / FORCE REMOTE CONTROL

LOWER TCO THANKS TO TOTAL PROTECTION OF ELECTRONIC COMPONENTS

HIGH PRESSURE ACCURACY DUE TO PRESSURE SENSOR AND CLOSED LOOP

DIAGNOSIS / REPORTING / DOWNLOADABLE FILES



① Laser sensors to detect the load and the opening range of the arms.



② Laser sensor to detect the presence of the load in height.



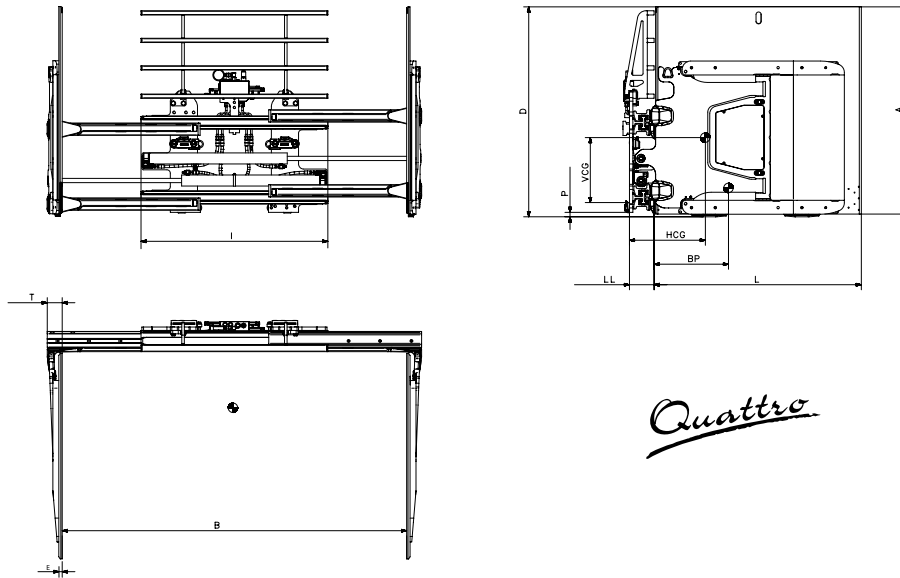
③ Lamp for fast feedback on clamp functioning.



④ Gateway to share data on web interface.

**Range:** 2,000 - 4,400 Lbs.

- Very rigid frame structure with single piece double T-profile.
- Wide visibility window for safe and easy handling operations.
- Large surface aluminium pads.
- Single oscillating pad.
- Special high-friction vulcanized rubber lining for increased positive grip allowing safe and damage-free handling.
- 4-ways reversible pads.
- Thin arm profile and new elbow support design allow easy kniving between loads.
- All standard models are suitable for pallet handling application.



Model	Capacity Lbs.	Load Center		Opening Range		Arm Dimensions			Frame Width	Minimum Carriage Width	Height	Weight Lbs.	Horizontal Center of Gravity	Vertical Center of Gravity	Effective Thickness	Ground Clearance	Mounting Class
	Q	BP	B min	B max	A	L	E	I	FL	D	W	HCG	VCG	LL	P		
LS 12 V1A	2,600	15"	24.8"	78.3"	48.0"	30.0"	2.2"	40.2"	27.2"	48.3"	1,235	12.4"	17.8"	5.8"	1.2"	II	
LS 12 V1A	2,600	15"	22.0"	79.9"	48.0"	30.0"	2.2"	45.7"	27.2"	48.3"	1,257	12.4"	17.8"	5.8"	1.2"	II	
LS 12 V3A	2,600	20"	24.0"	77.6"	48.0"	40.0"	2.2"	40.2"	27.2"	48.3"	1,323	13.1"	15.0"	5.8"	1.2"	II	
LS 09 V4A	2,500	21"	23.6"	77.2"	48.0"	42.0"	2.2"	40.2"	27.2"	48.3"	1,341	16.9"	14.9"	5.5"	1.2"	II	
LS 09 V5A	2,500	23"	23.2"	76.8"	48.0"	46.0"	2.2"	40.2"	27.2"	48.3"	1,471	18.0"	15.0"	5.5"	1.2"	II	
LS 09 V6A	2,500	24"	23.2"	76.8"	48.0"	48.0"	2.2"	40.2"	27.2"	48.3"	1,544	19.4"	15.0"	5.5"	1.2"	II	
LS 09 V7A	2,000	26"	22.8"	76.4"	48.0"	52.0"	2.2"	40.2"	27.2"	48.3"	1,610	20.9"	15.0"	5.5"	1.2"	II	
LS 16 V3A	3,500	20"	22.8"	79.1"	48.0"	40.0"	2.2"	42.5"	27.2"	48.3"	1,367	13.1"	15.0"	5.8"	1.2"	II/III	
LS 16 V4A	3,500	21"	22.4"	78.7"	48.0"	42.0"	2.2"	42.5"	27.2"	48.3"	1,455	13.9"	15.0"	5.8"	1.2"	II/III	
LS 16 V5A	3,500	23"	22.0"	78.3"	48.0"	46.0"	2.2"	42.5"	27.2"	48.3"	1,521	18.2"	15.0"	5.8"	1.2"	II/III	
LS 16 V6A	3,500	24"	22.0"	78.3"	48.0"	48.0"	2.2"	42.5"	27.2"	48.3"	1,577	19.0"	15.0"	5.8"	1.2"	II/III	
LS 14 V7A	3,100	26"	21.7"	78.0"	48.0"	52.0"	2.2"	42.5"	27.2"	48.3"	1,599	20.8"	15.0"	5.8"	1.2"	II/III	
LS 14 V8A	3,100	27"	21.2"	77.6"	48.0"	54.0"	2.2"	42.5"	27.2"	48.3"	1,643	21.4"	15.0"	5.8"	1.2"	II/III	
LS 16 VJA	3,500	20"	22.8"	79.1"	54.0"	40.0"	2.2"	42.5"	27.2"	54.3"	1,433	16.5"	17.8"	5.8"	1.2"	II/III	
LS 16 VXA	3,500	24"	22.0"	78.3"	54.0"	48.0"	2.2"	42.5"	27.2"	54.3"	1,610	18.4"	17.8"	5.8"	1.2"	II/III	
LS 14 VVA	3,100	26"	21.7"	78.0"	54.0"	52.0"	2.2"	42.5"	27.2"	54.3"	1,654	19.4"	17.8"	5.8"	1.2"	II/III	
LS 20 V6A	4,400	26"	19.3"	78.4"	48.0"	48.0"	2.2"	50.3"	27.2"	48.3"	2,139	17.7"	17.8"	6.4"	1.2"	III	

### Notes:

- Two hydraulic functions.
- E= arm thickness, including rubber.
- T= arm thickness at the arm base, including rubber, 3.9" for all models.
- Block valve with 2 pressure relief valve, factory pre-setting.
- Internal sideshift.
- Pressure gauge.
- Flow divider for equal arms movement.
- Load backrest.
- Quick disconnect lower hooks.
- Weld-on arms.
- Aluminium pads with single oscillation.

### Options:

- Special opening ranges.
- Other arm dimensions.
- Removable side load stabilizers.
- Class III mounting.
- Four position pressure relief valve.
- Double oscillating arm pad.
- Rigid arms, without oscillation.
- Razorback pads.
- Replaceable 7" high wear plates at the bottom of each pads (these pads are only 2 ways reversible)
- Non-sideshifting - no charge

