Carton and Appliance Clamps

BOLZONI AURAMO

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 alluminium 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 AURAMO integrates standard technical features of the carton clamp with the most advanced technology in hydraulics, electronics and laser sensors for clamping force controlling.
The new intelligent system is an electronic control of the clamping force, driven by the number and dimensions of the unit loads which have to be handled. 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 micro-control can be managed by a BOLZONI AURAMO configuration tablet. Through an easy procedure (touchscreen based) the operator can adjust the handling load parameters, recalibrate the sensors if necessary, associate the opening ranges to the required pressure levels. 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.
BOLZONI AURAMO Easy-move system is providing outstanding **benefits**
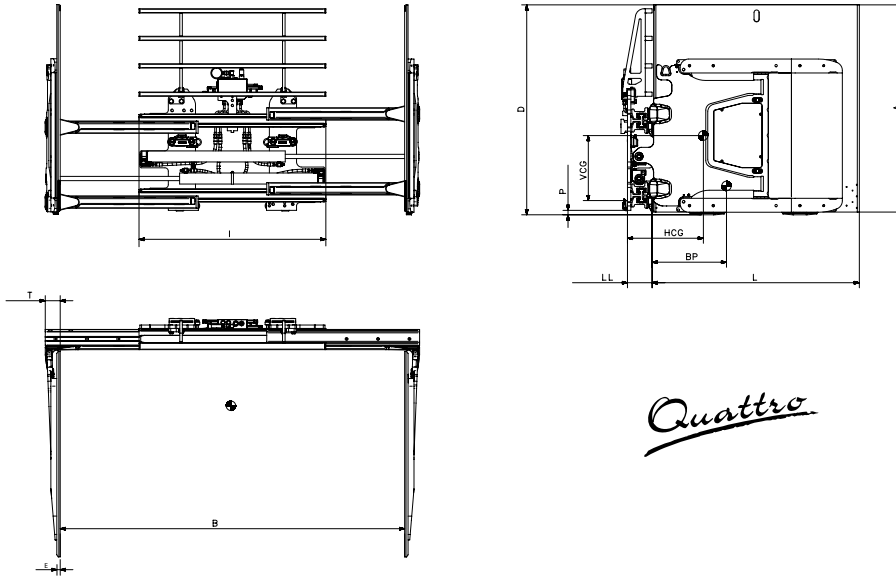
to all the operators of the logistic chain in white goods (end users, 3PLs, forklift truck providers):

- Completely **automatic system** with no responsibility left to truck drivers for wrong pressure choice; the truck drivers are not even allowed to interfere with clamp parameters that are factory set and – only if necessary – modified by forklift trucks provider and/or end user's logistics experts;
- The clamp can be used as a conventional clamp with n**o need of further training for truck drivers** or additional truck driving operations;
- **User friendly set up** interface thanks to easy software graphics and possibility to use Bolzoni set up tablet: it is easy to load new configuration schemes;
- **Very low TCO** (total cost of ownership) due to complete clamp and laser sensors protection: the sensors are located behind the load encapsulated in the chassis design and they are never touched or hit by the load
- Very **easy electrical connection** to truck ports thanks to spiral cable included in the package;
- In case of any type of clamp emergency the software allows easy switch to manual mode avoiding all possible stops in handling procedures.

Set up Tablet
Controls the parameters of the pressure configuration based on opening ranges.

④ **Opening laser sensor**
Detect the opening of the clamp and position of the arm

① **Laser detector**
Laser sensor for upper row to detect presence of boxes in the upper part of the pads.

② **Proportional valve**
Commands the hydraulic pressure in the clamping cylinders.

③ **Depth load engagement sensors**
Detect type and configuration of the load in depth/height and the distance from the clamp body.

Quattro

Range: 2,000 - 3,500 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 knifing 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	x L x	E	I	FL	D	W	HCG	VCG	LL	P	
LS 12 V1A	2,600	15"	22.0''	79.9''	48.0"	30.0"	2.2"	44.1"	27.2"	48.3"	1,257	12.4"	17.8"	5.8"	1.2"	II
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 V3A	2,600	20"	23.2''	76.8''	48.0"	40.0"	2.2"	40.2"	27.2"	48.3"	1,323	13.1"	15.0"	5.8"	1.2"	II
LS 10 V4A	2,500	21"	22.4''	76.8''	48.0"	42.0"	2.2"	40.2"	27.2"	48.3"	1,341	16.9"	14.9"	5.5"	1.2"	II
LS 10 V5A	2,500	23"	22.4''	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"	22.4''	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"	22.0''	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"	22.0''	78.3''	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"	22.0''	78.3''	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"	21.7''	78.0''	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"	22.0''	78.3''	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 VYA	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"	18.5''	77.6''	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

CERTIFIED ISO 9001 MANUFACTURER

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