Appliance- and Carton Clamps

T413G · T414
KAUP Appliance- and Carton Clamps T413G · T414 are used world-wide for palletless transportation of white goods (fridges, washing machines etc.) and brown goods (electronic entertainment centres). For transportation of only one unit or up to 16 units: KAUP always has a suitable Appliance / Carton Clamp!

And KAUP has once again improved this product group. Newly designed pressure frame and pressure plates, fixed pipe lines instead of flexible hoses, optional possibilities for setting camber and toe-in are only some of the features of the new KAUP Appliance- and Carton Clamps T413G · T414. And as an absolute novelty: load-dependent clamping force control ‘Smart Load Control’.

Configure your very own individual Appliance- / Carton Clamp!
Innovations of T414B-1

01 Pressure plates
New aluminum pressure plates with vulcanized abrasion-resistant grooved profile rubber - 180° rotation

02 Adjustment
Toe-in & camber no longer pre-defined but individually adjustable (as option)

03 Clamp arms
New, optimized arm support and new torsion resistant pressure frame.

04 Profile
Low service, glide-optimized synthetic sliding profiles for energy-saving long operating times

05 Wear & tear
Exchangeable, high strength wear and tear pads in different heights on the lower side of the arms.

06 Hydraulic
Optimized hydraulic system for significantly higher opening and closing speeds
KAUP revolutionizes material handling with Appliance- / Carton Clamps T413G · T414 and has designed, especially for these, an intelligent and autonomous system. The so called 'Smart Load Control' (SLC) system regulates, as the only one on the market, the clamping force on Large Surface Clamps exclusively load dependent and not load pattern dependent.

'Smart Load Control' is therefore based on the weight applied when flexibly defining the clamping force and not on the dimensions of the load. The aim of the system is to ensure that only as much clamping force as really necessary acts on the load – completely without intervention of the forklift truck driver. Thus SLC always guarantees damage-free handling of goods. Even better: 'Smart Load Control' functions without intervention in the forklift hydraulic system. It only requires a power supply 'Plug and Play'.
Smart Load Control

Advantages

01  Autonomic

'Smart Load Control' is an autonomic system – combinable with other KAUP clamps. These attachments are: 'SLC ready'.

02  Monitoring

Monitoring, Recording and Portable control of the transported loading pattern and clamping pattern (optional).

03  Conform

SLC functions without intervention in the forklift hydraulics - the CE-Compliance in acc. with EU-Machinery Directive is legally guaranteed.

Function

01  Clamping

Clamping arms move together and begin to clamp the load with a minimum pressure.

02  Pressure

The lifting movement generates an automatic pressure adjustment until the load is lifted freely.

03  Handling

Lifting, clamping and transportation of the load with optimal clamping pressure – never more than absolutely necessary.
Different variants for various applications

Every Appliance- and Carton Clamp T413G · T414 can be equipped and upgraded for individual use: from a basic device with fixed set pressure to the all-in version with autonomous load-dependent clamp force control - „Smart Load Control“ – as well as adjustable toe-in & camber.

01

Basic: Clamp with single pressure setting

The clamping force is pre-defined according to the application and adjusted. The attachment always operates with the same pre-set clamping pressure, which is based on the heaviest load to be transported. However, there is a risk of load damage when transporting lighter and more sensitive goods.

Features:
- Manometer gauge for monitoring the operating pressure
- Adjustable pressure relief valve
- Fixed setting to pre-defined pressure
- Optional with hand wheel to change the pressure

02

Comfort: Clamp with manual pressure selection

More protection against load damage is provided by manual pressure switching. The clamping pressure can be selected mechanically from three or four pressure levels defined specifically for the application. The attachment always operates at the selected clamping pressure and does not prevent incorrect operation by the forklift truck driver.

Features:
- Pressure gauge for monitoring the operating pressure
- Adjustable pressure relief valve for 3 or 4 selectable pressure stages
- Operation by manual / electrical control as option
- Optional with optical display for selected pressure range
**Upgrade: Clamp with automatic pressure selection**

The required pressures are pre-defined, selected and assigned to various load patterns. The system independently identifies differing load patterns and automatically sets the required clamping pressure. This system prevents incorrect operation by the forklift truck driver, but is based on the dimensions and not the weight of the load.

**Features:**
- Light barrier
- Reflecting light switch
- Programmable Logic Control (PLC)

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**All-in: Clamp with 'Smart Load Control' (SLC)**

The required pressures are always adjusted autonomously depending on the load. SLC rules out incorrect operation by the forklift driver and reduces damage to a previously unimaginable minimum.

**Features:**
- Patented autonomic working SLC unit
- Aluminum pressure plates with vulcanized grooved profile rubber (RPG)
- Display for monitoring and reporting as option
- Module for wireless data communication as option
- Sensors for recording further parameters as option
Contact pad coatings
Every Appliance- and Carton Clamp T413G · T414 can be fitted for each individual operation with the optimal contact pad coating.

Gripping nap strap coating
the yellow coating is very soft, leaves no marks on the load and distinguishes itself through excellent friction. The black coating has low wear and tear qualities.

Secutex lining
is made of Polyurethane cast around a metal grid. It is screwed onto the contact pads and can be exchanged easily if necessary. It distinguishes itself through excellent friction and durability.

Grooved profile rubber (RPG)
The vulcanized grooved profile rubber on the aluminum pressure plates is characterized by high abrasion resistance. Due to the very good adhesion and adaptation to the load surface a lower clamping pressure is required. Grooved profile rubber is only available on screw-on aluminum pressure plates.