



Den Braven

# Suction Cup with metal Handle

Ergonomically designed single cup vacuum pump with maximum capacity of 57 kg

## PRODUCT DESCRIPTION

Zwaluw Suction Cup is an ergonomically designed 200 mm single cup vacuum pump that provides a comfortable hold during lifting. Zwaluw Suction Cup provides a quick release from the surface due to the combination of the rubber pad and relief valve. The pump's plunger has a red indicator line to show the vacuum level when the lifter is in use. When the lifter is properly attached to the load's surface, the red line will be hidden inside the pump. Should the red line become visible during a lift, set down the load and re-pump until red line is again hidden.

## KEY BENEFITS

- One hand operation
- Cup diameter of 200 mm
- Lifting capacity of maximum 57 kg
- Comfortable grip
- Convenient vacuum indicator and release
- Superior lifting capacity performance
- Prevent injuries and increase productivity
- Built from durable heavy duty handle made of metal
- Long-term durability and outstanding reliability
- Supplied with protective carrying case
- Safe for most surfaces

## APPLICATIONS

Zwaluw Suction Cup can be used to handle awkward loads at the building site and in a manufacturing environment for lifting and handling glass windows, counter tops, appliances, patio doors, vending machines, windshields, side lites, sheet metal, auto body panels, cladding insulated metal panels, etc.

Zwaluw Suction Cup use vacuum to lift and carry loads:

- A manual pump removes air from between the rubber pad and the contact surface.
- The red line on the pump's plunger serves as a vacuum indicator.
- A check valve allows the user to repump the cup without removing it from the contact surface.
- And a release mechanism allows the cup to disengage completely.

Maximum Load Capacity includes a 3:1 safety factor and requires the following:

- Attachment on clean, smooth, non-porous flat surfaces.
- A minimum vacuum level of -59 kPa
- And a friction coefficient of 1.

This rating is based on tests of new hand cups attached to the upper, horizontal surface of static objects in ideal conditions. Many factors can reduce the capacity, including: lifting a load when the cup is attached to a vertical or inclined surface; or lifting a load that applies leverage to the cup

## DIRECTION FOR USE

Use the cup on clean, relatively smooth, non-porous surfaces, at temperatures from -10°C to 40°C. Moisture or contaminants can reduce the slip resistance of the cup. The red-line indicator may not perform reliably at elevations above 1500 meters.

To Attach Zwaluw Suction Cup at the load:

- Position Zwaluw Suction Cup on the contact surface so the red line will be visible if it should appear while lifting the load. CAUTION: Test the cup for staining or deformation of load surfaces with light colors or soft coatings.
- Pump the plunger until the Den Braven® QEA111G attaches completely. When the red line is hidden, vacuum is sufficient for lifting.
- Check the plunger frequently to make sure the cup remains

securely attached. If the red line appears while lifting, set down the load immediately and pump the plunger until the red line is hidden again.

To Release Zwaluw Suction Cup from the load:

- Set the load on a secure support.
- Press the valve release lever until the cup disengages completely. CAUTION: Remove the cup when not in use!

## LIMITATIONS

Do not use on dirty, rough, porous and wet surfaces

## SURFACE PREPARATIONS AND FINISHING

Examine and test the cup regularly to make sure it does not exhibit the following faults:

- cuts or damage to sealing edges of rubber pad.
- cracks or dents in handle or pump.
- reappearance of red line soon after attaching cup.
- sluggishness or dramatic changes in pump action.
- excessive glaze or stiffness of rubber pad.
- air filter missing from cup face.
- Correct any faults before using the cup.

## CLEANING

Remove the air filter from the cup face. Use Zwaluw Wipes to clean the cup. CAUTION: To prevent liquid from contaminating the pump, hold the cup face-down or cover the suction hole in the filter recess. Wipe all residue from the cup face. Allow the cup to dry and reinstall the air filter.

## HEALTH & SAFETY

Product Safety Data Sheet must be read and understood before use. These are available on request and via our websites

## WARRANTY & GUARANTEE

Bostik warrants that its product complies, within its shelf life, to its specification.

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