



# Hose reel carts

## User manual

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### On these operating instructions



If the text follows a mark (as shown on the left), this means that an important instruction follows.



If the text follows a mark (as shown on the left), this means that an important warning follows relating to danger to the user or damage to the apparatus. The user is always responsible for its own personal protection.

#### 1. Cleaning the suspension cable

Make sure to clean the stainless steel suspension cable well before use. Immerse it in a pan filled with water and add some dishwasher detergent (or Deconex art. no.:200529) and cook it right through for 30 minutes. Then cook it well with clean water; it is ready for use now.

#### 2. Hose reel cart

Open the box containing the parts of the hose reel cart. Read the instructions for assembly of the hose reel cart well. It is not necessary to assemble the tube connections. The optional Gardena connection and brass elbow are only required in the case the cart will be used as a regular hose reel.

The material includes a grey container with 2 white clamps on it. Click the container onto one of the vertical bars of the hose reel cart (see photo). Use the container to store the pump.

Some leather straps are included in the material. Attach a strap to one of the spokes of the reel. The remaining straps will be used to attach the hose to the hose reel.



Large hose reel cart (122719)



Large hose reel cart (122719) with mounted tube, cables and pump.

### 3. Assembly of the pump, flange, suspension cable and tube connection

Remove the tube connection from its wrapping. Unwrap the pump and use the correct spanner to mount the tube connection (E) to the pump housing (the use of Teflon tape is allowed but not necessarily required).



**Caution! Make sure to mount the flange (G) of the suspension cable between the tube connection and the pump housing (the flange item no is 122712). See figure.**

When pumping in monitoring wells at a diameter wider than or equal to 75 mm (or in open water) use the cooling jacket. Slide it over the pump. Then mount the flange and tube connection.

Remove the stainless steel cable (F) from the wrapping and thread the tail end through the holes in the flange mounted on the pump. Use the cable clamps (H) to secure the loop.

### 4. Working surface

Find a clean working surface minimally at the length of the tube and cable; for instance a lawn or a parking lot. You may also bundle the cables and tubes while hanging them from a (sufficiently deep) monitoring well.

#### 4.1 Necessary tools:

- Spanners to tighten the tube in the tube connection.
- Sturdy gloves.
- Key/spanner to tighten the cable clamp of the suspension cable.
- Pair of wire-cutters.
- Folding ruler.

#### 4.2 Mounting the tube to the pump

Unwrap the tube. Lay the pump on the floor (or on a workbench). Slide at least one tube clamp over the tube. Link the tube to the connection. Tighten the clamp.

#### 4.3 Unreeling the tube and cables

**Caution:** Do not unreel the hose reel by hand, it is advisable to trail them over a bar and unreel them while walking (this will prevent the tubes and cables from becoming entangled or taut). Place the pump at a distance of 30, 60, or 90 metres from the hose reel cart; depending on the length of the cable or tube, and unreel the tube towards the hose reel cart. Repeat for the cable.

Finally unreel the power cable towards the hose reel.

#### 4.4 Bundling tubes and cables

You may now bundle the cables and tube. Start at the pump end, working towards the nozzle of the tube. Attach the first strap at a distance of one meter from the pump. Make sure the power cable is **not taut**; it may never be **strained**. Attach a strap every metre until 3 metres before the tube's nozzle.

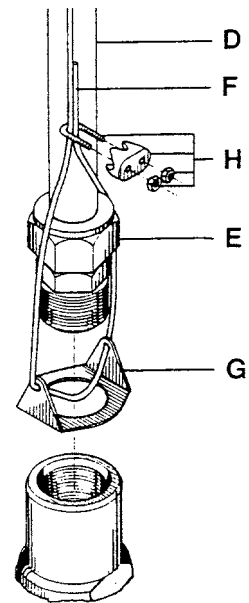
#### 4.5 Attaching the tube to the hose reel

The smaller hose reel cart (item no: 122718):

Slide the tube through one of the slits in the core of the hose reel and then outwards through the opening in the black plastic pivot.

In the larger hose reel cart (item no 122719) there is an opening in the hose reel axel, insert the tube into the opening and pull it out at the other end.

Two metres will suffice to position the tube above drums, buckets or sample bottles. Secure the tube with the leather straps. If you use a tube with a diameter over 19 mm the tube cannot be fed through the pivot. In that case you may thread the tube through the spokes of the reel. Another option is to connect the tube to the pivot rather than feeding the tube through it.



#### 4.6 Attaching the suspension cable to the hose reel

Thread the stainless steel cable through the reel and pull it taught at an equal length with the tube. Use a cable clamp to secure the tail end.

#### 4.7 Attaching the power cable to the reel

Use a strap to temporarily attach the tail end of the power cable during reeling of the tube/suspension cable/power cable-bundle.

You may now reel in the bundle. Use sturdy gloves. Place the pump in the container on the hose reel cart. Use a leather strap to secure the reel to the frame to prevent it from unreeling. The pump is ready now for storage, transportation or use.

### 5. Maintenance, operation, cleaning

Lowering the cable/tube - bundle in the monitoring well may cause damage to the Teflon tube or cable. Also, the bundle straps may get caught. This may be avoided following this procedure: Cut off the bottom end (the narrow end) from a supply funnel. Cut the funnel lengthwise. Lower the pump 50 cm into the monitoring well. Place the funnel around the cable/tube-bundle and slide into the monitoring well. Lowering the pump will now be easy. Remove the funnel before hoisting up.

For maintenance and operation of the pump we refer to the pump's instructions for use.

Use a warm detergent solution in a wide bucket to fully immerse the pump and its inside for cleaning. Also immerse the nozzle in the bucket. Use the pump to circulate the liquid in the bucket. Repeat the circulation using clean water. Then remove the remaining water from the pump by taking out the watertight seal in the bottom of the motor housing. This will help to preserve the quality of the ball bearings. You may need a high-pressure sprayer or -steam to clean the tube's exterior!

### 6. Use of a polyethylene tube

In the case you prefer to use a polyethylene tube rather than a Teflon one, particularly when sampling volatile liquids, you will have to change it after each sampling activity. As polyethylene has a high level of ab- and ad sorption the tube will easily tend to become dirty. In that case it is best to bundle only the power- and motor cable. Reel them on the hose reel. Before lowering the pump attach a tube to the pump and lower it un-bundled. Upon conclusion of the pumping activity hoist the pump and the tube simultaneously, laying the tube aside for later destruction. This activity requires two persons.

#### Caution



**Make sure the water level will not drop below the suction opening. The pump might overheat or get damaged.**



**Make sure to avoid pumping silt and sand particles; the (detachable) impeller (122711) tends to wear off differently. A tube fitted with a ball valve (122017 with 121302 or 122020 with 121304) will be useful in removing deposit from a monitoring well without damaging the pump.**



**An insulation guard (991301) protects you and your equipment from electrical shocks or other calamities. In the Netherlands the use of the insulation guard for large-capacity generators (as is the case with this pump) is compulsory.**

**The insulation guard is highly sensitive and may get activated even before the user will notice any defect of the cable, converter or generator. Hence, first check the entire electrical circuit before sending back the insulation guard for repair! If necessary the pump's power cable can be replaced using a set of cable assembly parts (12274313). For more information see the pump's instructions for use.**

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