

# Technical Data Sheet

## Installation Tools

### Installation of Ear Clamps and Low Profile Clamps

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Control Unit

with Trigger unit EL  
(EL = electronic version)or with Trigger unit ELT  
ergonomic handling  
(ELT = electronic version with  
extended trigger)

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Highly efficient, verified installation

Process reliability, electronic monitoring of all specified parameters – 100% documentation

Prevention of multiple closures by means of clamp detection in the pincer head

Up to 99 parameter data sets (APN) programmable

Optimal usability with the aid of function keys and large display

Force or stroke-priority action, either with or without initial holding feature and verification function

Complete integration into automated systems (USB-, extended mixed signal- and RS232 port)

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## Electronically Controlled Pneumatic Pincer Oetiker ELK 02

The control unit is selected by language. The pincer unit is determined by the type of Oetiker clamp to be installed, the required closing force and the available air pressure. The pincer and control unit together form a complete unit. To obtain the optimum closing force, please refer to the technical information for the product being installed, and take into account the availability of special pincer heads.

Oetiker will be pleased to help you find the correct choice for your application. Data log acquisition from an Oetiker ELK 02 available in the integrated "Measurement"-mask, when connected to a PC.

Standard hose/cable length of the Trigger Unit is 3 m. Alternative hose/cable lengths, also as angled versions, on request.

The ELK 02 control unit and the software can be operated in different languages. The technical description is included on a CD.

### Selection example

For a closing force of ca. 3000 N using an HO 3000 EL, the available inlet pressure must be at least 6 bar. The closing force itself must be set to the required data by changing parameters in the ELK 02 control unit. This can be done using a PC and a sequence programmed into the ELK 02 or by an external control signal. A closing force tester, for example Test Equipment CAL 01, is used to determine and set the correct closing force.

## Technical data ELK 02 control unit

|                        |                     |
|------------------------|---------------------|
| Power supply:          | 85–265 V / 47–63 Hz |
| Power requirement:     | 30 Va (Fuse 10 A)   |
| Compressed air supply: | 4–10 bar            |
| External dimensions:   | 200 x 230 x 70 mm   |
| Weight:                | 3.7 kg              |

## Delivery scope ELK 02 control unit

|                                                              |
|--------------------------------------------------------------|
| Control unit item no. 13600289                               |
| PC Software ELK 02                                           |
| CD with operating instructions                               |
| Compressed air connection set (incl. filter/water separator) |
| Connection cable for all interfaces                          |
| Mains cable with country-specific plug                       |

## Selection of control unit

| Plug type       | Schuko plug<br>(plug type F,<br>3-pole) | CH<br>(plug type J,<br>3-pole) | UK<br>(plug type G,<br>3-pole) | USA<br>(plug type B,<br>3-pole) | South Amer-<br>ica (plug<br>3-pole) | AUS<br>(plug type I,<br>3-pole) | Japan<br>(plug type B,<br>3-pole) |
|-----------------|-----------------------------------------|--------------------------------|--------------------------------|---------------------------------|-------------------------------------|---------------------------------|-----------------------------------|
| Norm conformity | CEE 7/4                                 | SEV 1011                       | BS 1363                        | NEMA 5-15                       | NBR 14136                           | AS 3112                         | NEMA 5-15                         |
| Item No.        | 13600295                                | 13600296                       | 13600297                       | 13600298                        | 13600299                            | 13600300                        | 13600301                          |

For control unit ELK 02, order pincer and pincer head in accordance with the requirements of the Oetiker clamp type to be assembled: see following pages.

## Selection of complete pincer systems

The complete pincer system consists of pincer head and pincer.

- 1) First select the pincer head in accordance with the requirement.
- 2) Then select the pincer type (EL or ELT) in the corresponding columns below. The item numbers for the complete pincer include the pincer and the desired pincer head.

## Pincer heads

|                     |          |          |          |          |          |          |          |          |
|---------------------|----------|----------|----------|----------|----------|----------|----------|----------|
| Jaw width (mm)      | 5.5      | 7.5      | 7.5      | 10.2     | 10.2     | 10.5     | 10.5     | 14.5     |
| Open gap (mm)       | 8.6      | 11.6     | 13.2     | 13.2     | 16.2     | 13.7     | 16.6     | 16.6     |
| For ear width* (mm) | <= 7     | 8        | 10       | 10       | 13       | 10       | 13       | 13       |
| Item No.            | 13900156 | 13900152 | 13900148 | 13900119 | 13900140 | 13900112 | 13900097 | 13900544 |

\* measured inside

## Type of pincer Standard trigger unit EL

EL  
without  
pincer head

|                       |          |          |                 |                 |          |                 |          |          |
|-----------------------|----------|----------|-----------------|-----------------|----------|-----------------|----------|----------|
| HO 2000 EL            |          |          |                 |                 |          |                 |          |          |
| Pincer complete       | 13900187 | 13900188 | <b>13900189</b> | <b>13900191</b> | -        | -               | -        | 13900231 |
| Replacement-jaw kit   | 13900166 | 13900167 | 13900168        | 13900163        | -        | -               | -        |          |
| HO 3000 EL            |          |          |                 |                 |          |                 |          |          |
| Pincer complete       | -        | 13900192 | <b>13900193</b> | <b>13900195</b> | 13900196 | -               | -        | 13900232 |
| Replacement-jaw kit   | -        | 13900167 | 13900168        | 13900163        | 13900170 | -               | -        |          |
| HO 4000 EL            |          |          |                 |                 |          |                 |          |          |
| Pincer complete       | -        | -        | -               | 13900199        | 13900200 | -               | -        | 13900233 |
| Replacement-jaw kit   | -        | -        | -               | 13900163        | 13900170 | -               | -        |          |
| HO 5000 EL            |          |          |                 |                 |          |                 |          |          |
| Pincer complete       | -        | -        | -               | -               | -        | <b>13900201</b> | 13900202 | 13900234 |
| Replacement-jaw kit   | -        | -        | -               | -               | -        | 13900164        | 13900165 |          |
| HO 7000 EL            |          |          |                 |                 |          |                 |          |          |
| Pincer complete       | -        | -        | -               | -               | -        | <b>13900203</b> | 13900204 | 13900547 |
| Replacement-jaw kit   | -        | -        | -               | -               | -        | 13900164        | 13900165 | 13900545 |
| Calibration adapter** | 13600016 | -        | -               | -               | -        | -               | -        | -        |
|                       |          |          |                 |                 |          |                 |          | 13600016 |

## Type of pincer Standard Trigger unit ELT with extended trigger

ELT  
without  
pincer head

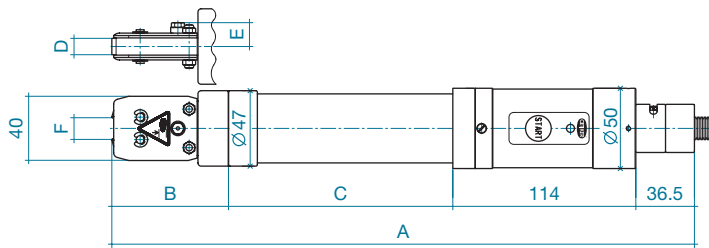
|                       |          |          |                 |                 |          |                 |          |                 |
|-----------------------|----------|----------|-----------------|-----------------|----------|-----------------|----------|-----------------|
| HO 2000 ELT           |          |          |                 |                 |          |                 |          |                 |
| Pincer complete       | 13900529 | 13900530 | <b>13900496</b> | <b>13900532</b> | -        | -               | -        | <b>13900333</b> |
| Replacement-jaw kit   | 13900166 | 13900167 | 13900168        | 13900163        | -        | -               | -        |                 |
| HO 3000 ELT           |          |          |                 |                 |          |                 |          |                 |
| Pincer complete       | -        | 13900533 | <b>13900534</b> | <b>13900373</b> | 13900536 | -               | -        | <b>13900335</b> |
| Replacement-jaw kit   | -        | 13900167 | 13900168        | 13900163        | 13900170 | -               | -        |                 |
| HO 4000 ELT           |          |          |                 |                 |          |                 |          |                 |
| Pincer complete       | -        | -        | -               | 13900539        | 13900540 | -               | -        | <b>13900337</b> |
| Replacement-jaw kit   | -        | -        | -               | 13900163        | 13900170 | -               | -        |                 |
| HO 5000 ELT           |          |          |                 |                 |          |                 |          |                 |
| Pincer complete       | -        | -        | -               | -               | -        | <b>13900525</b> | 13900526 | <b>13900339</b> |
| Replacement-jaw kit   | -        | -        | -               | -               | -        | 13900164        | 13900165 |                 |
| HO 7000 ELT           |          |          |                 |                 |          |                 |          |                 |
| Pincer complete       | -        | -        | -               | -               | -        | <b>13900382</b> | 13900541 | 13900723        |
| Replacement-jaw kit   | -        | -        | -               | -               | -        | 13900164        | 13900165 | 13900545        |
| Calibration adapter** | 13600016 | -        | -               | -               | -        | -               | -        | -               |
|                       |          |          |                 |                 |          |                 |          | 13600016        |

\*\* already included in CAL 01

Item numbers in **bold type** are included in the recommended basic equipment. Replacement jaw kit = left and right pincer jaws complete with all necessary parts. The jaw width must be at least 0.5 mm wider than the band used for the clamps to be installed. The opening gap should be wide enough for the largest ear.

## Technical data

## HO 2000 EL/HO 3000 EL/HO 4000 EL



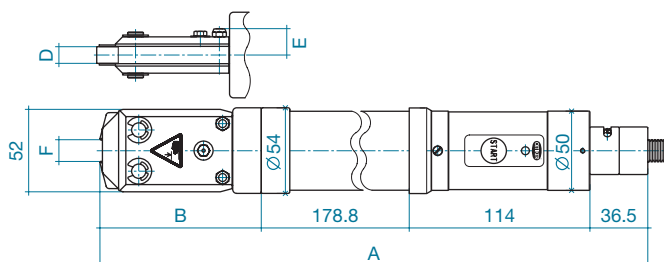
## Pincer heads

|                     |          |          |          |          |          |          |
|---------------------|----------|----------|----------|----------|----------|----------|
| Jaw width (mm)      | 5.5      | 7.5      | 7.5      | 10.2     | 10.2     | 10.2     |
| For ear width* (mm) | <= 7     | 8        | 10       | 8        | 10       | 13       |
| Item No.            | 13900156 | 13900152 | 13900148 | 13900144 | 13900119 | 13900140 |

## Type of pincer

|            |        |       |       |       |       |       |       |
|------------|--------|-------|-------|-------|-------|-------|-------|
| HO 2000 EL | A (mm) | 325.0 | 324.0 | 324.0 | 324.0 | 324.0 | -     |
|            | B (mm) | 74.0  | 73.0  | 73.0  | 73.0  | 73.0  | -     |
|            | C (mm) | 101.0 | 101.0 | 101.0 | 101.0 | 101.0 | -     |
|            | D (mm) | 5.5   | 7.5   | 7.5   | 10.2  | 10.2  | -     |
|            | E (mm) | 12.3  | 13.3  | 13.3  | 14.9  | 14.9  | -     |
|            | F (mm) | 8.6   | 11.6  | 13.2  | 11.6  | 13.2  | -     |
| HO 3000 EL | A (mm) | -     | 363.0 | 363.0 | 363.0 | 363.0 | 368.0 |
|            | B (mm) | -     | 73.0  | 73.0  | 73.0  | 73.0  | 78.0  |
|            | C (mm) | -     | 140.0 | 140.0 | 140.0 | 140.0 | 140.0 |
|            | D (mm) | -     | 7.5   | 7.5   | 10.2  | 10.2  | 10.2  |
|            | E (mm) | -     | 13.3  | 13.3  | 14.9  | 14.9  | 14.9  |
|            | F (mm) | -     | 11.6  | 13.2  | 11.6  | 13.2  | 16.2  |
| HO 4000 EL | A (mm) | -     | -     | 402.0 | 402.0 | 402.0 | 407.0 |
|            | B (mm) | -     | -     | 73.0  | 73.0  | 73.0  | 78.0  |
|            | C (mm) | -     | -     | 179.0 | 179.0 | 179.0 | 179.0 |
|            | D (mm) | -     | -     | 7.5   | 10.2  | 10.2  | 10.2  |
|            | E (mm) | -     | -     | 13.3  | 14.9  | 14.9  | 14.9  |
|            | F (mm) | -     | -     | 13.2  | 11.6  | 13.2  | 16.2  |

## HO 5000 EL



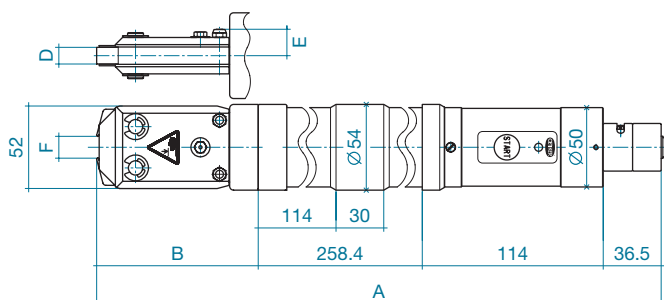
## Pincer heads

|                     |          |          |          |
|---------------------|----------|----------|----------|
| Jaw width D (mm)    | 10.5     | 10.5     | 14.5     |
| For ear width* (mm) | 10       | 13       | 13       |
| Item No.            | 13900112 | 13900097 | 13900544 |

## Type of pincer

|            |        |       |       |       |
|------------|--------|-------|-------|-------|
| HO 5000 EL | A (mm) | 420.0 | 425.0 | 425.0 |
|            | B (mm) | 102.0 | 107.0 | 107.0 |
|            | E (mm) | 16.6  | 16.6  | 18.6  |
|            | F (mm) | 13.7  | 16.6  | 16.6  |

## HO 7000 EL



## Pincer heads

|                     |          |          |          |
|---------------------|----------|----------|----------|
| Jaw width D (mm)    | 10.5     | 10.5     | 14.5     |
| For ear width* (mm) | 10       | 13       | 13       |
| Item No.            | 13900112 | 13900097 | 13900544 |

## Type of pincer

|            |        |       |       |       |
|------------|--------|-------|-------|-------|
| HO 7000 EL | A (mm) | 511.0 | 516.0 | 516.0 |
|            | B (mm) | 102.0 | 107.0 | 107.0 |
|            | E (mm) | 16.6  | 16.6  | 18.6  |
|            | F (mm) | 13.7  | 16.6  | 16.6  |

\* measured inside



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Installation tool with high process reliability

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Efficient, uniform assembly

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High-quality, complete pincer system for uniform clamp closures

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Full range of pincer heads, for compatibility to all standard clamps

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Adaptation of special head designs possible

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## Pneumatic Pincers Oetiker ME

This high-quality, complete pincer system ensures the uniform installation of Oetiker clamps. The selection of the correct pincer body and head is dependent on the type of Oetiker clamp, the required closing force, and the air supply pressure that is available.

To obtain the optimum closing force, please refer to the technical information for the product being installed, and take into account the availability of special pincer heads.

### Selection example

For a closing force of ca. 3000 N using an HO 3000 ME, the available inlet pressure must be at least 6 bar. The closing force must be set to the data given. To change the closing force, the inlet pressure must be adjusted. A closing force tester, for example Test Equipment CAL 01, is used to determine and set the correct closing force.

Delivery scope pneumatic pincer Oetiker ME

Oetiker ME with pincer head

Compressed air connection set (incl. filter/water separator)

Operating instruction

## Selection of complete pincer systems

The complete pincer system consists of pincer head and pincer.

- 1) First select the pincer head in accordance with the requirement.
- 2) Then select the pincer type in the corresponding columns below. The item numbers for the complete pincer include the pincer and the desired pincer head.

### Pincer heads

|                     |          |          |          |          |          |          |          |          |
|---------------------|----------|----------|----------|----------|----------|----------|----------|----------|
| Jaw width (mm)      | 5.5      | 7.5      | 7.5      | 10.2     | 10.2     | 10.5     | 10.5     | 14.5     |
| Open gap (mm)       | 8.6      | 11.6     | 13.2     | 13.2     | 16.2     | 13.7     | 16.6     | 16.6     |
| For ear width* (mm) | </= 7    | 8        | 10       | 10       | 13       | 10       | 13       | 13       |
| Item No.            | 13900158 | 13900154 | 13900150 | 13900138 | 13900142 | 13900113 | 13900114 | 13900543 |

### Type of pincer

ME  
without  
pincer head

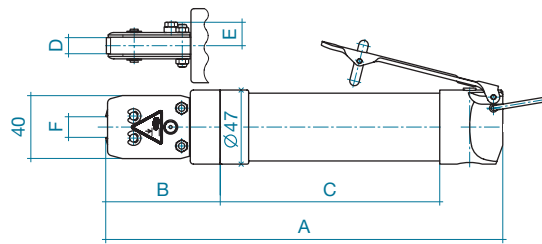
|                     |          |          |          |          |          |          |          |          |          |
|---------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| HO 2000 ME          |          |          |          |          |          |          |          |          |          |
| Pincer complete     | 13900173 | 13900174 | 13900176 | 13900182 | -        | -        | -        | -        | 13900226 |
| Replacement-jaw kit | 13900166 | 13900167 | 13900168 | 13900163 | -        | -        | -        | -        |          |
| HO 3000 ME          |          |          |          |          |          |          |          |          |          |
| Pincer complete     | -        | 13900175 | 13900177 | 13900183 | 13900185 | -        | -        | -        | 13900227 |
| Replacement-jaw kit | -        | 13900167 | 13900168 | 13900163 | 13900170 | -        | -        | -        |          |
| HO 4000 ME          |          |          |          |          |          |          |          |          |          |
| Pincer complete     | -        | -        | -        | 13900184 | 13900186 | -        | -        | -        | 13900228 |
| Replacement-jaw kit | -        | -        | -        | 13900163 | 13900170 | -        | -        | -        |          |
| HO 5000 ME          |          |          |          |          |          |          |          |          |          |
| Pincer complete     | -        | -        | -        | -        | -        | 13900161 | 13900162 | -        | 13900229 |
| Replacement-jaw kit | -        | -        | -        | -        | -        | 13900164 | 13900165 | -        |          |
| HO 7000 ME          |          |          |          |          |          |          |          |          |          |
| Pincer complete     | -        | -        | -        | -        | -        | 13900171 | 13900172 | 13900546 | 13900230 |
| Replacement-jaw kit | -        | -        | -        | -        | -        | 13900164 | 13900165 | 13900545 |          |

\* measured inside

Item numbers in **bold type** are included in the recommended basic equipment. Replacement jaw kit = left and right pincer jaws complete with all necessary parts. The jaw width must be at least 0.5 mm wider than the band used for the clamps to be installed. The opening gap should be wide enough for the largest ear.

## Technical data

HO 2000 ME/HO 3000 ME/HO 4000 ME



## Pincer heads

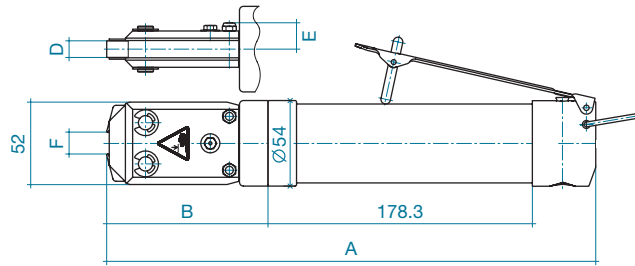
|                     |          |          |          |          |          |
|---------------------|----------|----------|----------|----------|----------|
| Jaw width D (mm)    | 5.5      | 7.5      | 7.5      | 10.2     | 10.2     |
| For ear width* (mm) | </= 7    | 8        | 10       | 10       | 13       |
| Item No.            | 13900158 | 13900154 | 13900150 | 13900138 | 13900142 |

## Type of pincer

|            |        |       |       |       |       |       |
|------------|--------|-------|-------|-------|-------|-------|
| HO 2000 ME | A (mm) | 214.0 | 213.0 | 213.0 | 213.0 | -     |
|            | B (mm) | 74.0  | 73.0  | 73.0  | 73.0  | -     |
|            | C (mm) | 101.0 | 101.0 | 101.0 | 101.0 | -     |
|            | D (mm) | 5.5   | 7.5   | 7.5   | 10.2  | -     |
|            | E (mm) | 12.3  | 13.3  | 13.3  | 14.9  | -     |
|            | F (mm) | 8.6   | 11.6  | 13.2  | 13.2  | -     |
| HO 3000 ME | A (mm) | -     | 252.0 | 252.0 | 252.0 | 257.0 |
|            | B (mm) | -     | 73.0  | 73.0  | 73.0  | 78.0  |
|            | C (mm) | -     | 140.0 | 140.0 | 140.0 | 140.0 |
|            | D (mm) | -     | 7.5   | 7.5   | 10.2  | 10.2  |
|            | E (mm) | -     | 13.3  | 13.3  | 14.9  | 14.9  |
|            | F (mm) | -     | 11.6  | 13.2  | 13.2  | 16.2  |
| HO 4000 ME | A (mm) | -     | -     | 291.0 | 291.0 | 296.0 |
|            | B (mm) | -     | -     | 73.0  | 73.0  | 78.0  |
|            | C (mm) | -     | -     | 179.0 | 179.0 | 179.0 |
|            | D (mm) | -     | -     | 7.5   | 10.2  | 10.2  |
|            | E (mm) | -     | -     | 13.3  | 14.9  | 14.9  |
|            | F (mm) | -     | -     | 13.2  | 13.2  | 16.2  |



## HO 5000 ME



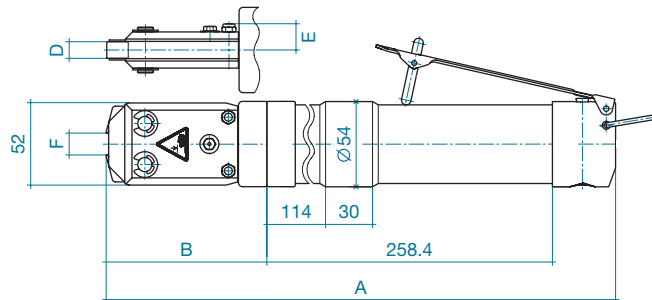
## Pincer heads

|                     |          |          |          |
|---------------------|----------|----------|----------|
| Jaw width D (mm)    | 10.5     | 10.5     | 14.5     |
| For ear width* (mm) | 10       | 13       | 13       |
| Item No.            | 13900113 | 13900114 | 13900543 |

## Type of pincer

|            |        |       |       |       |
|------------|--------|-------|-------|-------|
| HO 5000 ME | A (mm) | 309.0 | 314.0 | 314.0 |
|            | B (mm) | 102.0 | 107.0 | 107.0 |
|            | E (mm) | 16.6  | 16.6  | 18.6  |
|            | F (mm) | 13.7  | 16.6  | 16.6  |

## HO 7000 ME



## Pincer heads

|                     |          |          |          |
|---------------------|----------|----------|----------|
| Jaw width D (mm)    | 10.5     | 10.5     | 14.5     |
| For ear width* (mm) | 10       | 13       | 13       |
| Item No.            | 13900113 | 13900114 | 13900543 |

## Type of pincer

|            |        |       |       |       |
|------------|--------|-------|-------|-------|
| HO 7000 ME | A (mm) | 400.0 | 405.0 | 405.0 |
|            | B (mm) | 102.0 | 107.0 | 107.0 |
|            | E (mm) | 16.6  | 16.6  | 18.6  |
|            | F (mm) | 13.7  | 16.6  | 16.6  |

\* measured inside

Compressed air connection: internal thread G 1/4

# Special Pincer Heads for Oetiker ME/EL

## – Installation of Oetiker Ear Clamps <sup>1/2</sup>

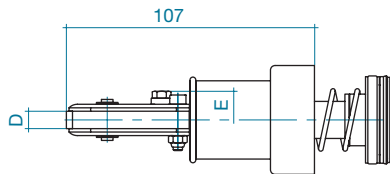
### Pincer head with extended holders

Different extensions allow to reach areas where access is restricted.  
Compatible with pincer types HO 2000 to HO 4000.

### Selection of pincer heads

The jaw width must be at least 0.5 mm wider than the band used for the clamps to be installed. The opening gap should be wide enough for the largest ear.

#### Extension 34.5 mm



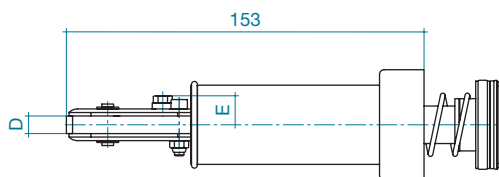
#### Pincer heads

|                     |      |      |      |
|---------------------|------|------|------|
| Jaw width D (mm)    | 5.5  | 7.5  | 10.2 |
| Open gap (mm)       | 8.6  | 13.2 | 13.2 |
| Height E (mm)       | 11.0 | 12.0 | 14.0 |
| For ear width* (mm) | <=7  | 10   | 10   |

#### Type of pincer

|       |                       |          |          |          |
|-------|-----------------------|----------|----------|----------|
| HO ME | Pincer head complete  | 13900272 | 13900274 | 13900276 |
|       | Replacement-jaw kit   | 13900166 | 13900168 | 13900163 |
| HO EL | Pincer head complete  | 13900271 | 13900273 | 13900275 |
|       | Replacement-jaw kit   | 13900166 | 13900168 | 13900163 |
|       | Calibration adaptor** | 13600016 | 13600016 | 13600016 |

#### Extension 80 mm



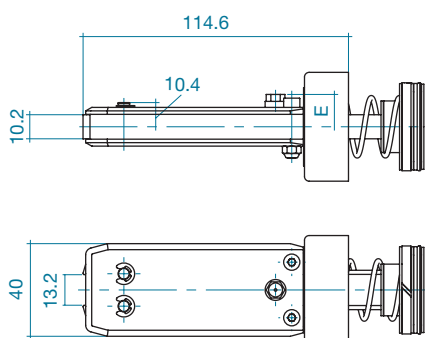
#### Pincer heads

|                     |      |      |      |
|---------------------|------|------|------|
| Jaw width D (mm)    | 5.5  | 7.5  | 10.2 |
| Open gap (mm)       | 8.6  | 13.2 | 13.2 |
| Height E (mm)       | 11.0 | 12.0 | 14.0 |
| For ear width* (mm) | <=7  | 10   | 10   |

#### Type of pincer

|       |                       |          |          |          |
|-------|-----------------------|----------|----------|----------|
| HO ME | Pincer head complete  | 13900278 | 13900280 | 13900282 |
|       | Replacement-jaw kit   | 13900166 | 13900168 | 13900163 |
| HO EL | Pincer head complete  | 13900277 | 13900279 | 13900281 |
|       | Replacement-jaw kit   | 13900166 | 13900168 | 13900163 |
|       | Calibration adaptor** | 13600016 | 13600016 | 13600016 |

#### Extension 42 mm, narrow



#### Pincer heads

|                     |      |
|---------------------|------|
| Jaw width (mm)      | 10.2 |
| Open gap (mm)       | 13.2 |
| Height E (mm)       | 14.0 |
| For ear width* (mm) | 10   |

#### Type of pincer

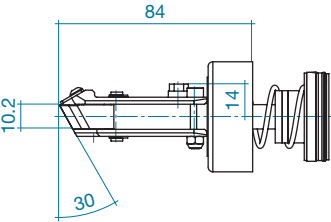
|       |                      |          |
|-------|----------------------|----------|
| HO ME | Pincer head complete | 13900801 |
|       | Replacement-jaw kit  | 13900163 |
| HO EL | Pincer head complete | 13900802 |
|       | Replacement-jaw kit  | 13900163 |

\* Measured inside

\*\* already included in CAL 01

Pincer heads with angled jaws  
Specially for installing ear clamps where access is restricted.  
Suitable for ear clamps with 7 and 9 mm band widths. Compatible  
with pincer types HO 2000 to HO 4000.

Jaws angled at 30°



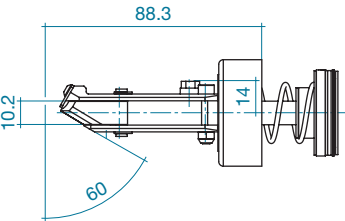
Pincer heads 30°

|                     |      |
|---------------------|------|
| Jaw width (mm)      | 10.2 |
| Open gap (mm)       | 13.2 |
| For ear width* (mm) | 10   |

Type of pincer

|       |                      |          |
|-------|----------------------|----------|
| HO ME | Pincer head complete | 13900706 |
| HO EL | Pincer head complete | 13900707 |
|       | Replacement-jaw kit  | 13900708 |
|       | Calibration set      | 13900871 |

Jaws angled at 60°



Pincer heads 60°

|                     |      |
|---------------------|------|
| Jaw width (mm)      | 10.2 |
| Open gap (mm)       | 13.2 |
| For ear width* (mm) | 10   |

Type of pincer

|       |                      |          |
|-------|----------------------|----------|
| HO ME | Pincer head complete | 13900694 |
| HO EL | Pincer head complete | 13900697 |
|       | Replacement-jaw kit  | 13900695 |
|       | Calibration set      | 13900872 |

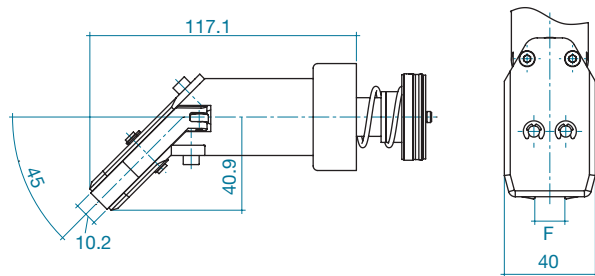
\* Measured inside

# Special Pincer Heads for Oetiker ME/EL

## – Installation of Oetiker Ear Clamps <sup>2/2</sup>

Jaws angled at 45°

Compatible with pincer types HO 2000 to HO 4000.



Pincer heads 45°

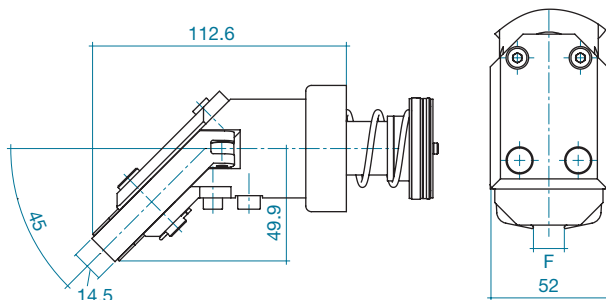
|                     |      |      |
|---------------------|------|------|
| Jaw width (mm)      | 10.2 | 10.2 |
| Open gap F (mm)     | 13.2 | 16.2 |
| For ear width* (mm) | 10   | 13   |

Type of pincer

|       |                      |          |          |
|-------|----------------------|----------|----------|
| HO ME | Pincer head complete | 13901271 | 13900775 |
|       | Replacement-jaw kit  | 13900777 | 13900777 |
| HO EL | Pincer head complete |          | 13900776 |
|       | Replacement-jaw kit  |          | 13900777 |

Jaws angled at 45°

Compatible with pincer types HO 5000 and HO 7000.



Pincer heads 45°

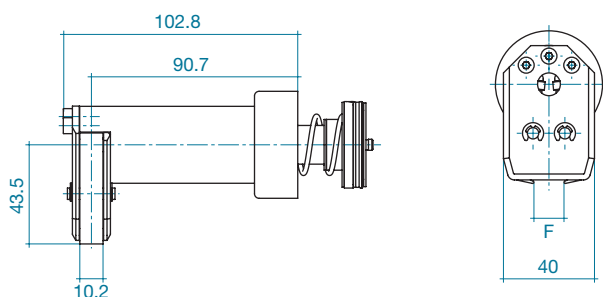
|                     |      |      |
|---------------------|------|------|
| Jaw width (mm)      | 14.5 | 14.5 |
| Open gap F (mm)     | 13.7 | 16.6 |
| For ear width* (mm) | 10   | 13   |

Type of pincer

|       |                      |          |          |
|-------|----------------------|----------|----------|
| HO ME | Pincer head complete | 13900784 | 13900782 |
|       | Replacement-jaw kit  | 13900785 | 13900785 |
| HO EL | Pincer head complete |          | 13900783 |
|       | Replacement-jaw kit  |          | 13900785 |

Jaws angled at 90°

Compatible with pincer types HO 2000 to HO 4000.



Pincer heads 90°

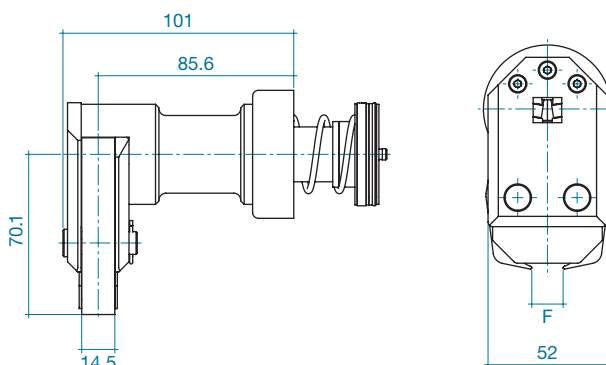
|                     |      |      |
|---------------------|------|------|
| Jaw width (mm)      | 10.2 | 10.2 |
| Open gap F (mm)     | 13.2 | 16.2 |
| For ear width* (mm) | 10   | 13   |

Type of pincer

|       |                      |          |          |
|-------|----------------------|----------|----------|
| HO ME | Pincer head complete | 13900781 | 13900778 |
|       | Replacement-jaw kit  | 13900780 | 13900780 |
| HO EL | Pincer head complete |          | 13900779 |
|       | Replacement-jaw kit  |          | 13900780 |

Jaws angled at 90°

Compatible with pincer types HO 5000 to HO 7000.



Pincer heads 90°

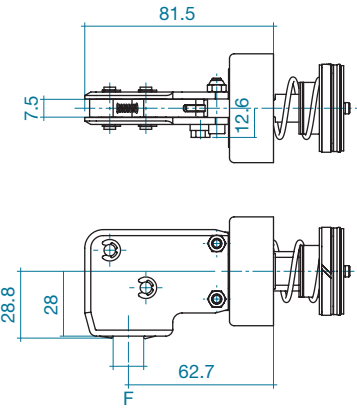
|                     |      |      |
|---------------------|------|------|
| Jaw width (mm)      | 14.5 | 14.5 |
| Open gap F (mm)     | 13.7 | 16.6 |
| For ear width* (mm) | 10   | 13   |

Type of pincer

|       |                      |          |          |
|-------|----------------------|----------|----------|
| HO ME | Pincer head complete | 13900788 | 13900786 |
|       | Replacement-jaw kit  | 13900789 | 13900789 |
| HO EL | Pincer head complete |          | 13900787 |
|       | Replacement-jaw kit  |          | 13900789 |

\* Measured inside

90° lengthwise  
Compatible with pincer types HO 2000 to HO 4000.



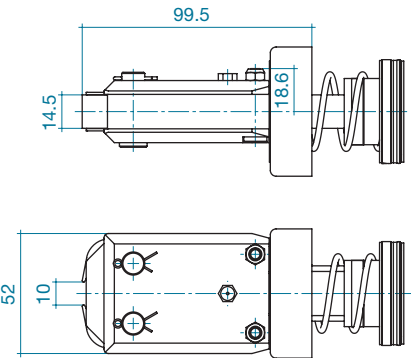
Pincer heads 90° lengthwise

|                     |      |      |
|---------------------|------|------|
| Jaw width (mm)      | 7.5  | 7.5  |
| Open gap F (mm)     | 13.2 | 16.2 |
| For ear width* (mm) | 10   | 13   |

Type of pincer

|                            |          |          |
|----------------------------|----------|----------|
| HO ME Pincer head complete | 13901280 | 13901282 |
| HO EL Pincer head complete | 13901281 | 13901283 |
| Replacement-jaw kit        | 13901284 | 13901284 |

Pincer Head for 1-Ear Clamp with stud  
Pincer head for installation of 1-Ear Clamp with stud, band width 14 mm. Compatible with pincer types HO 5000 and HO 7000.



Pincer heads

|                     |       |
|---------------------|-------|
| Jaw width (mm)      | 14.5  |
| Open gap (mm)       | 10.0  |
| For ear width* (mm) | ≤ 5.5 |

Type of pincer

|                            |          |
|----------------------------|----------|
| HO ME Pincer head complete | 13900773 |
| HO EL Pincer head complete | 13900772 |
| Replacement-jaw kit        | 13900771 |
| Calibration set            | 13600146 |

\* Measured inside

# Special Pincer Heads for Oetiker ME/EL

## – Installation of Oetiker Stepless® Low Profile Clamps

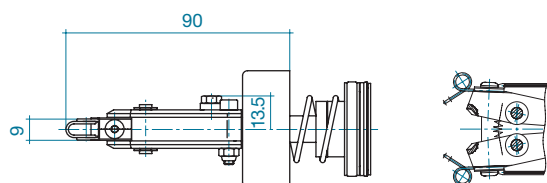
All Oetiker Stepless® Low Profile Clamps have unique head requirements and are specific to the product group designation and type.

When using Oetiker ME pneumatic pincers, it is essential to use a throttle valve for adjusting the closing speed.

Oetiker recommends the use of appropriate calibration equipment and techniques to ensure that the closing force is achieved. When used in conjunction with the HO EL body assembly, the force and closed gap can be controlled and monitored.

Pincer heads for installing reusable Stepless® Low Profile Clamps – Product Group 168 (RWV)

The hold-down springs fitted to both jaws make closure easier and improve handling. Compatible with pincer types HO 2000 to HO 4000.



Pincer heads

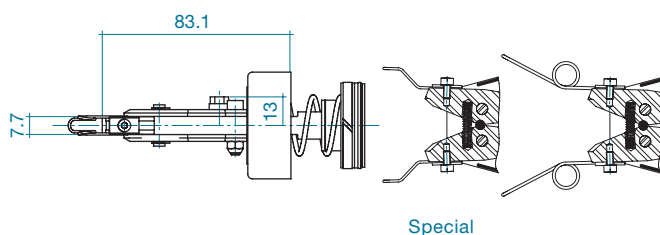
| Jaw width (mm) | 9.0 |
|----------------|-----|
|----------------|-----|

Pincer types

|       |                                       |          |
|-------|---------------------------------------|----------|
| HO ME | Pincer head complete                  | 13900257 |
|       | Replacement-jaw kit                   | 13900295 |
|       | Spring accessory                      | 13900302 |
|       | Calibration adaptor                   | 13900862 |
|       | Throttle valve with plug DN6          | 13900636 |
|       | Throttle valve with adaptor for NPT 1 | 13900637 |
| HO EL | Pincer head complete                  | 13900634 |
|       | Replacement-jaw kit                   | 13900295 |
|       | Spring accessory                      | 13900302 |
|       | Calibration adaptor                   | 13900862 |

Pincer heads for installing Stepless® Low Profile Clamps – Product Group 168

The optional hold-down springs improve handling, especially for production-line applications. Can be used for standard clamps from 40 mm (or approx. 19.5 mm for special types). Can be used for clamps 7, 9 mm and 10 mm wide. Compatible with pincer types HO 3000 and HO 4000.



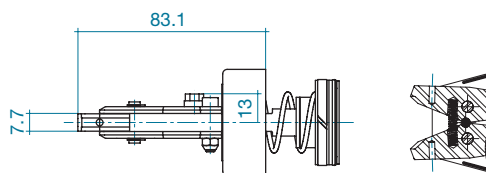
| Pincer heads   | Standard | Special* |
|----------------|----------|----------|
| Jaw width (mm) | 7.7      | 7.7      |

Pincer types

|       |                                       |          |          |
|-------|---------------------------------------|----------|----------|
| HO ME | Pincer head complete                  | 13900664 | 13900666 |
|       | Replacement-jaw kit                   | 13900673 | 13900673 |
|       | Spring accessory                      | 13900675 | 13900676 |
|       | Calibration adaptor                   | 13900862 | 13900862 |
|       | Throttle valve with plug DN6          | 13900636 | 13900636 |
|       | Throttle valve with adaptor for NPT 1 | 13900637 | 13900637 |
| HO EL | Pincer head complete                  | 13900663 | 13900665 |
|       | Replacement-jaw kit                   | 13900673 | 13900673 |
|       | Spring accessory                      | 13900675 | 13900676 |
|       | Calibration adaptor                   | 13900862 | 13900862 |

\* Low-profile clamp with single closure hook – only for 7 mm band width. Especially suitable for small low-profile clamps

Pincer heads for installing Stepless® Low Profile Clamps with tolerance compensation – Product Group 168  
Compatible with pincer types HO 3000 and HO 4000.

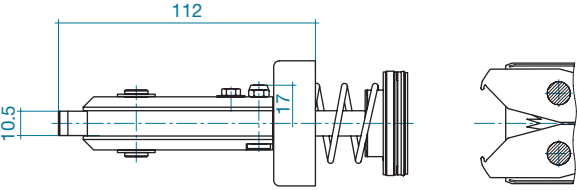


| Pincer heads   | RT 8 |
|----------------|------|
| Jaw width (mm) | 7.7  |

Pincer types

|       |                      |          |
|-------|----------------------|----------|
| HO ME | Pincer head complete | 13900670 |
|       | Replacement-jaw kit  | 13900673 |
|       | Calibration adaptor  | 13900862 |
| HO EL | Pincer head complete | 13900669 |
|       | Replacement-jaw kit  | 13900673 |
|       | Calibration adaptor  | 13900862 |

Pincer head for installing Stepless® Low Profile Clamp 192 – Product Group 192  
Compatible with pincer types HO 5000 EL and HO 7000 EL.

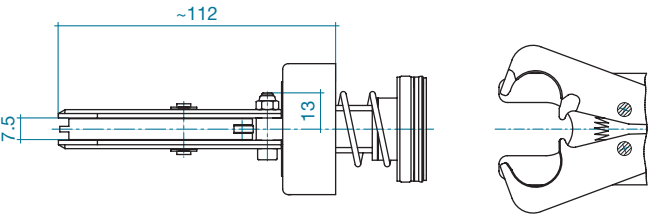


Stepless® Low Profile Clamp 192  
with tolerance compensation element

|                |           |
|----------------|-----------|
| Pincer heads   | 1/3 waves |
| Jaw width (mm) | 10.5      |

|                            |          |
|----------------------------|----------|
| Pincer types               |          |
| HO EL Pincer head complete | 13900555 |
| Replacement-jaw kit        | 13900556 |
| Calibration adaptor EL     | 13900495 |

Pincer head for installing Clamps ER – Product Group 194  
Compatible with pincer types HO 2000–4000.



|                |     |
|----------------|-----|
| Pincer heads   |     |
| Jaw width (mm) | 7.5 |

|              |            |
|--------------|------------|
| Pincer types |            |
| HO ME/EL     | On request |



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Efficient, uniform and repeatable assembly  
Cordless installation tool for Ear Clamps  
Lightweight, ergonomic design for easy handling  
LED-display to indicate battery capacity and service interval

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## Cordless Clamp Pincer Oetiker CP 01 & 02 & 03

The Cordless Clamp Pincers CP 01, CP 02 and CP 03 are available as alternatives to the Pneumatic Pincers Oetiker ME. These devices offer good accuracy and ergonomic handling for fast, uniform assembly of Oetiker ear clamp types. The advantage of these closing tools is the cordless design and hence unrestricted, free motion during clamp assembly.

The hydraulic accumulator unit incorporates an automatic retraction function which returns the jaws to their open position when the selected maximum closing force is reached. The unit is also equipped with a special brake which stops jaw closure when the trigger is released.

The pincer head can be smoothly rotated 360° around the longitudinal axis in order to gain better access to tight corners and other hard-to-reach areas.

### Delivery scope Oetiker CP 01 & 02 & 03

- Cordless Clamp Pincer complete with pincer head and accumulator
- Special screwdriver (to adjust closing force)
- Operating Instructions (multi-lingual document)
- Charger (compatible with local electrical supply voltage/ plug configuration)
- Carrying case

### Optional accessories and spare parts

- Accumulator for CP 01/CP 02/CP 03 Item No.: 14000972
- Screwdriver Item No.: 14000973



| Technical Data*      | CP 01            | CP 02            | CP 03            |
|----------------------|------------------|------------------|------------------|
| Closing force range: | 1000 N–4200 N**  | 4200 N–8500 N**  | 4500 N–9000 N*   |
| External dimensions: | 410 x 56 x 80 mm | 445 x 56 x 80 mm | 445 x 56 x 80 mm |
| Weight:              | 2050 g (4.5 lbs) | 2250 g (5.0 lbs) | 2300 g (5.0 lbs) |
| Closing time:        | 2 seconds        | 2 seconds        | 2 seconds        |

\* Approx. data

\*\* Closing force, depending on pincer head, can be determined via:

- CAL 01, only with Software Generation V2.2 or higher
- SKM 01 or SKM 02

## Selection of complete pincer systems

The complete pincer system consists of pincer head and pincer.

- 1) First select the pincer head in accordance with the requirement.
- 2) Then select the pincer type in the corresponding columns below. The item numbers for the pincer include the pincer and the desired pincer head.

| Pincer heads        | CP 01    | CP 01    | CP 01    | CP 02    | CP 02    | CP 03    |
|---------------------|----------|----------|----------|----------|----------|----------|
| Jaw width (mm)      | 7.5      | 10.2     | 10.2     | 10.5     | 10.5     | 14.5     |
| Open gap (mm)       | 13.2     | 13.2     | 16.2     | 13.7     | 16.6     | 16.6     |
| For ear width* (mm) | 10       | 10       | 13       | 10       | 13       | 13       |
| Item No.            | 13900683 | 13900659 | 13900725 | 13900662 | 13900660 | 13900711 |

Selection of pincer type according to language/country (main plug)

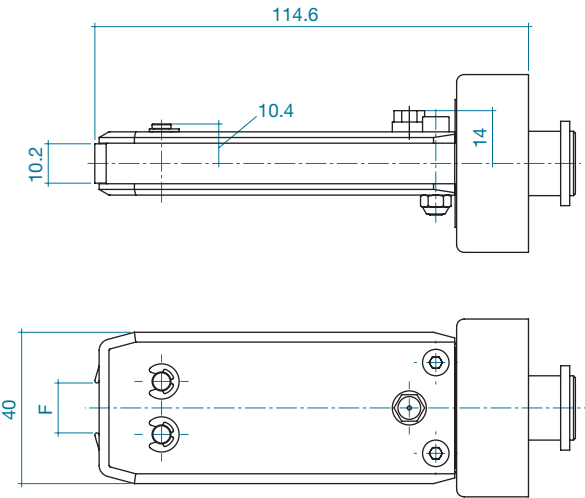
CP set without  
pincer head

|                     |   |          |   |          |          |          |          |
|---------------------|---|----------|---|----------|----------|----------|----------|
| CP 01 (AUS)         | - | 13900651 | - | -        | -        | -        | 13900698 |
| Replacement-jaw kit |   | 13900163 |   |          |          |          |          |
| CP 01 (EU)          | - | 13900650 | - | -        | -        | -        | 13900699 |
| Replacement-jaw kit |   | 13900163 |   |          |          |          |          |
| CP 01 (UK)          | - | 13900653 | - | -        | -        | -        | 13900700 |
| Replacement-jaw kit |   | 13900163 |   |          |          |          |          |
| CP 01 (US)          | - | 13900652 | - | -        | -        | -        | 13900701 |
| Replacement-jaw kit |   | 13900163 |   |          |          |          |          |
| CP 02 (AUS)         | - | -        | - | 13900655 | -        | -        | 13900702 |
| Replacement-jaw kit |   |          |   | 13900164 |          |          |          |
| CP 02 (EU)          | - | -        | - | 13900654 | -        | -        | 13900703 |
| Replacement-jaw kit |   |          |   | 13900164 |          |          |          |
| CP 02 (UK)          | - | -        | - | 13900657 | -        | -        | 13900704 |
| Replacement-jaw kit |   |          |   | 13900164 |          |          |          |
| CP 02 (US)          | - | -        | - | 13900656 | -        | -        | 13900705 |
| Replacement-jaw kit |   |          |   | 13900164 |          |          |          |
| CP 03 (AUS)         | - | -        | - | -        | -        | 13900713 | 13900717 |
| Replacement-jaw kit |   |          |   |          |          | 13900545 |          |
| CP 03 (EU)          | - | -        | - | -        | -        | 13900712 | 13900716 |
| Replacement-jaw kit |   |          |   |          |          | 13900545 |          |
| CP 03 (UK)          | - | -        | - | -        | -        | 13900715 | 13900719 |
| Replacement-jaw kit |   |          |   |          |          | 13900545 |          |
| CP 03 (US)          | - | -        | - | -        | -        | 13900714 | 13900718 |
| Replacement-jaw kit |   |          |   |          | 13900545 |          |          |

\* Measured inside

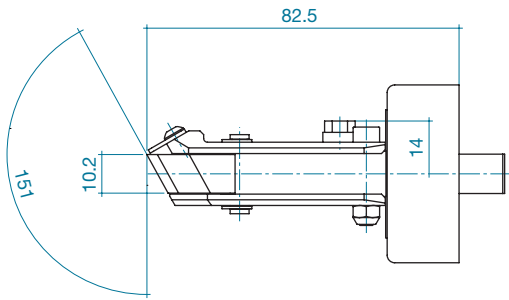
# Special Pincer Heads for CP 01

Pincer heads long, narrow



|                     |          |
|---------------------|----------|
| Pincer heads        |          |
| Jaw width (mm)      | 10.2     |
| Open gap F (mm)     | 13.2     |
| For ear width* (mm) | 10       |
| Item No.            | 13900800 |
| Replacement-jaw kit | 13900163 |

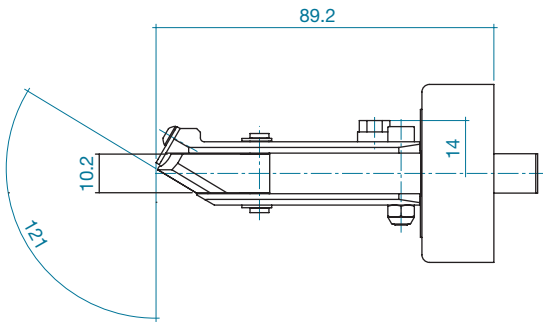
Pincer heads 30°



Pincer heads

|                     |          |
|---------------------|----------|
| Jaw width (mm)      | 10.2     |
| Open gap F (mm)     | 13.2     |
| For ear width* (mm) | 10       |
| Item No.            | 13900724 |
| Replacement-jaw kit | 13900708 |
| Calibration adaptor | 13900722 |

Pincer heads 60°



Pincer heads

|                     |          |
|---------------------|----------|
| Jaw width (mm)      | 10.2     |
| Open gap F (mm)     | 13.2     |
| For ear width* (mm) | 10       |
| Item No.            | 13900690 |
| Replacement-jaw kit | 13900695 |
| Calibration adaptor | 13900696 |

\* Measured inside

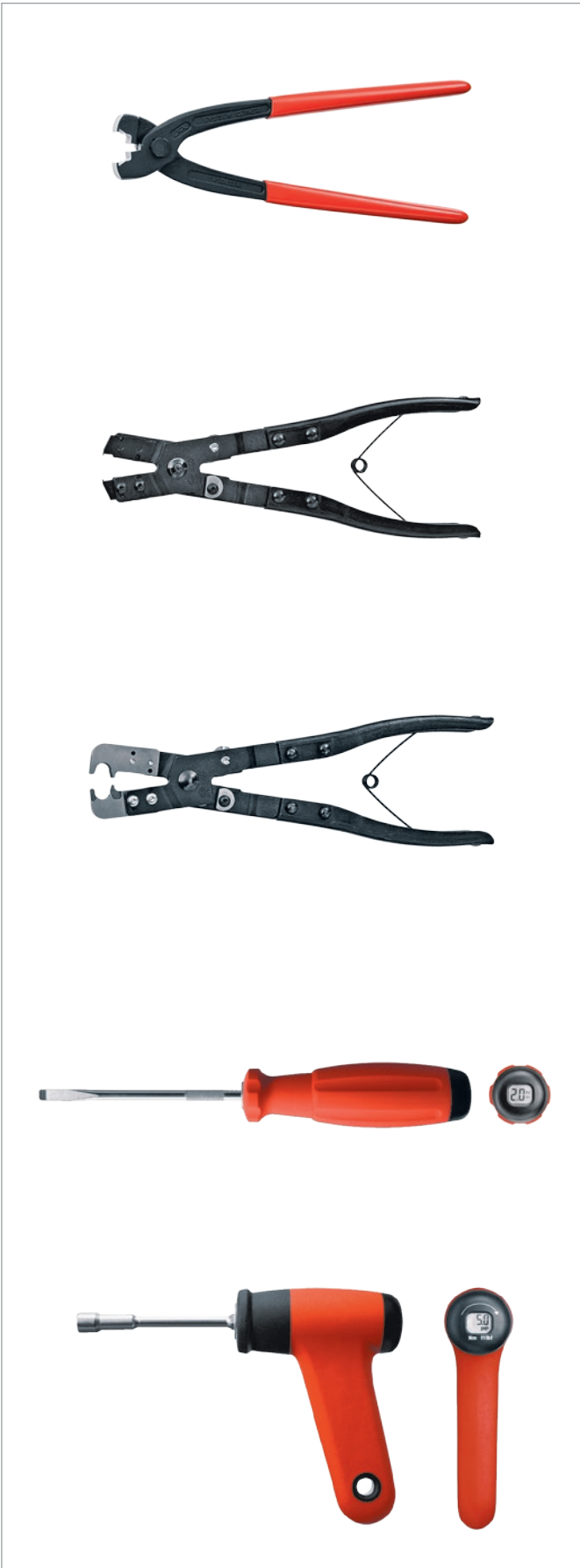
# Manual closing tools



| Tool type                                                                                                    | Item No.   |
|--------------------------------------------------------------------------------------------------------------|------------|
| For Ear Clamps                                                                                               |            |
| Standard pincers with straight jaws                                                                          | 14100082   |
| For Ear Clamps                                                                                               |            |
| Pincers with side jaws for limited space                                                                     | 14100083   |
| For Ear Clamps                                                                                               |            |
| Pincers with narrow jaws for limited space                                                                   | 14100037   |
| For Ear Clamps                                                                                               |            |
| Manual pincer with force monitoring with straight jaws Oetiker HMK 01                                        | On request |
| Manual pincer with force monitoring with side jaws Oetiker HMK S01 for limited space (image not shown)       | On request |
| For correct installation and uniform closure. A vibration signal indicates when the preset force is reached. |            |
| For Ear Clamps – Heavy Duty                                                                                  |            |
| Pincer system, consists of                                                                                   |            |
| Clamping tool                                                                                                | 14100097   |
| Torque wrench                                                                                                | 14100098   |
| For PG 167 PEX (ASTM <sup>1</sup> F 877/2098)                                                                |            |
| 2-Handle Ratchet Pincer                                                                                      | 14100069   |
| 3-Handle Ratchet Pincer                                                                                      | 14100280   |
| Single handed installation (image not shown)                                                                 |            |

Light design for ease of handling. When using Ratchet Pincers, these only open when the clamp is completely closed. The specifications of ASTM Standard F2098 must be met.

<sup>1</sup> ASTM = American Society for Testing and Materials



| Tool type                                     | Item No.   |
|-----------------------------------------------|------------|
| For Stepless Low Profile Clamps 192           |            |
| Clamp pincers with special jaw form           | 14100134   |
| For Stepless Low Profile Clamps               |            |
| Pincers with return spring                    |            |
| 5 mm wide                                     | 14100031   |
| 7/10 mm wide                                  | 14100030   |
| With tolerance compensation                   | 14100109   |
| For Clamps ER                                 |            |
| Pincers with return spring                    | On request |
| For Screw Clamps/Worm Drive Clamps            |            |
| Torque wrench with digital display 1.0–5.0 Nm | 14100304   |
| Socket set bit for slotted-head screws        | 14100306   |
| Torque wrench with digital display 3.2–16 Nm  | 14100307   |
| Socket set bit for hexagon-head screws (SW 7) | 14100308   |

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