



# CEMBRE

HYDRAULIC CABLE  
CUTTING SAFETY HEADS

TC050Y-KV TC065Y-SC-KV  
TC085Y-KV TC096Y-KV TC120Y-KV

CE  
UK  
CA



ENGLISH

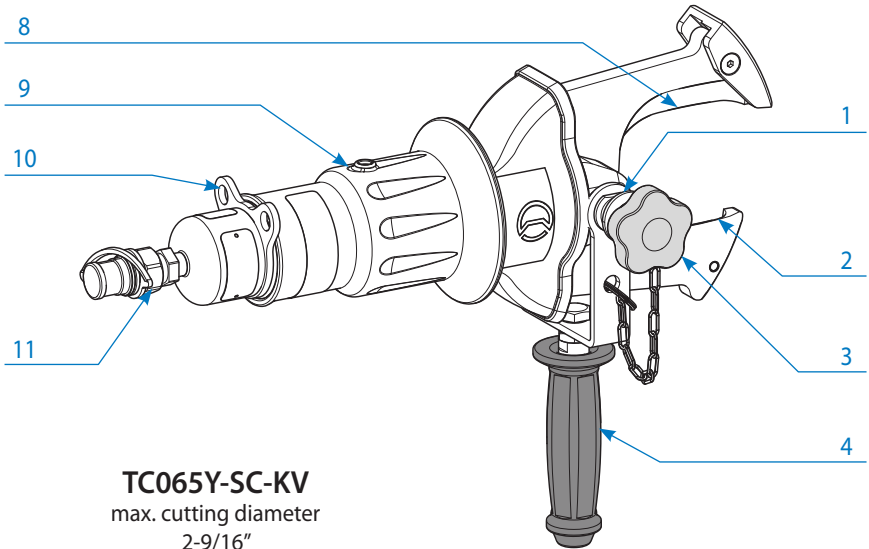
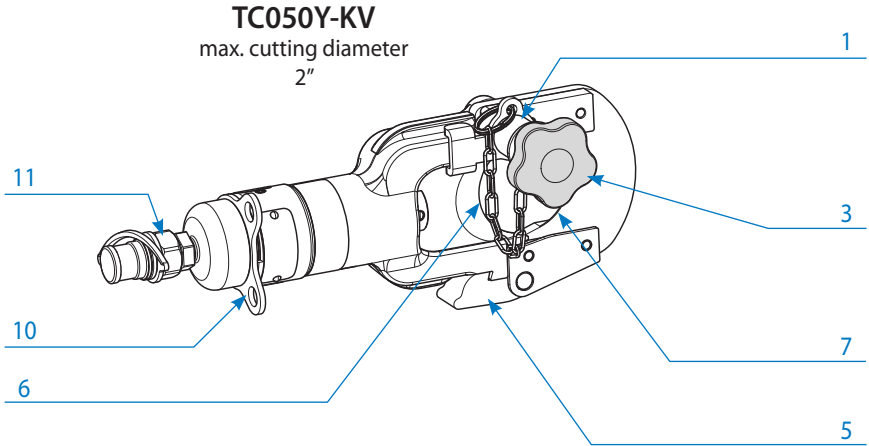
OPERATION AND MAINTENANCE MANUAL  
(Translation of the original instructions)

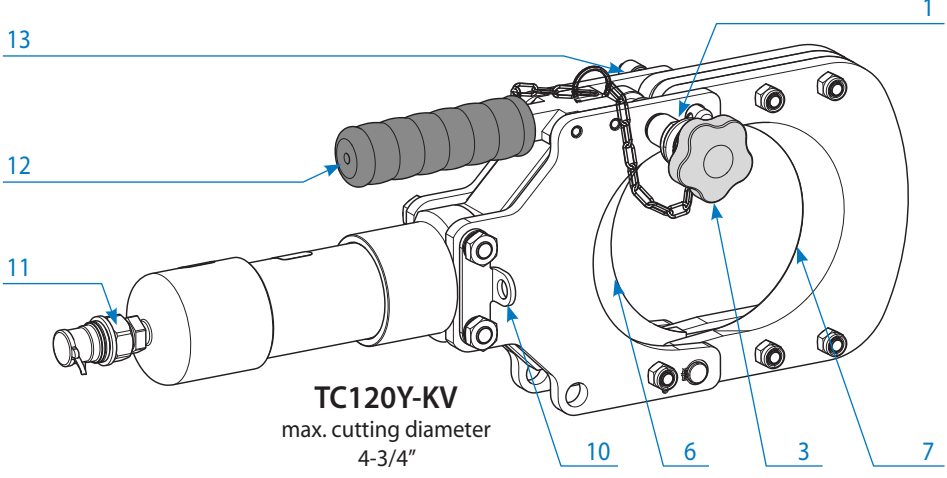
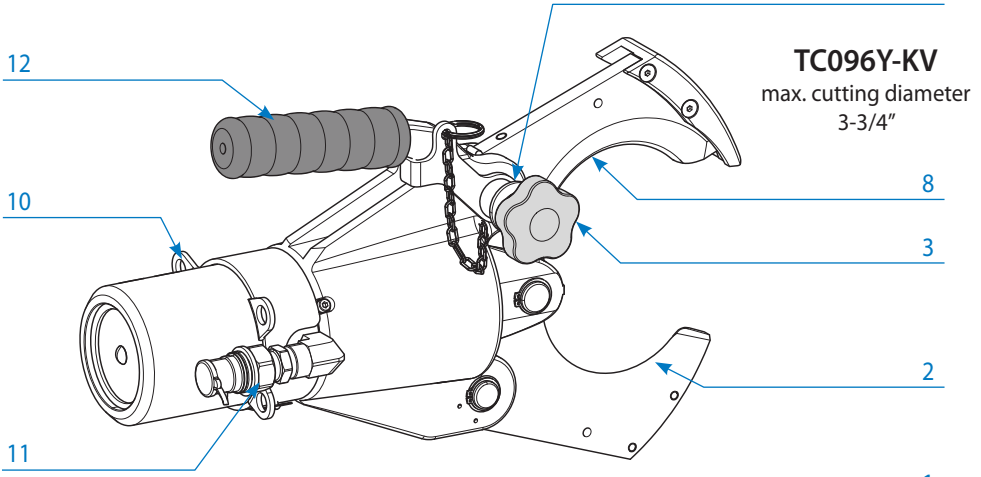
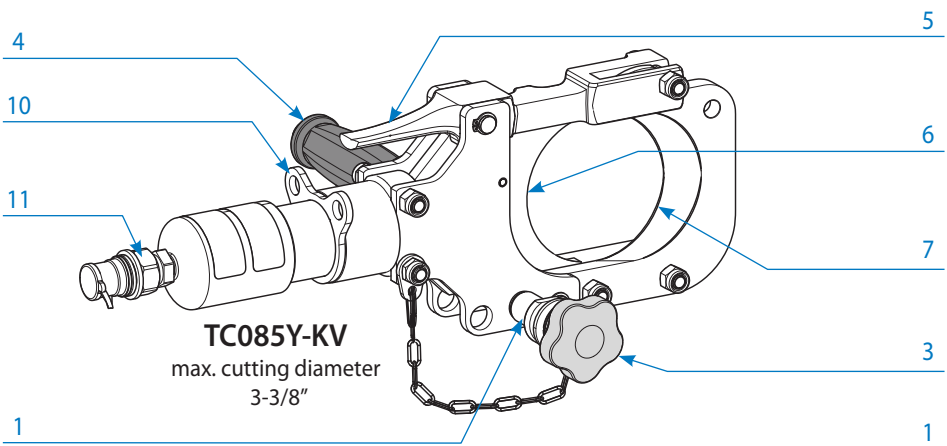
17M219U - 6261435

# 1. DESCRIPTION OF THE MAIN COMPONENTS






- 1 - GROUNDING SOCKET
- 2 - RIGHT BLADE
- 3 - GROUNDING KNOB
- 4 - HANDLE (to be fitted)
- 5 - HEAD LATCH
- 6 - LOWER BLADE

- 7 - UPPER BLADE
- 8 - LEFT BLADE
- 9 - GRIP
- 10 - HANGING POINTS FOR SUPPORT STRAP
- 11 - MALE INSULATED QUICK COUPLER
- 12 - HANDLE
- 13 - HEAD FIXING PIN





## WARNING SYMBOLS

	Before using these safety heads, carefully read the instructions in this manual.
	Keep hands clear of cutting blades.
	Do not cut Steel. Do not attempt to cut Steel ropes or Steel reinforced cables (ACSR), the heads are designed for cutting Copper or Aluminum cable.
 	Always wear safety glasses and gloves when operating these safety heads.

	Cutting operations must be strictly in accordance with the safety and working procedures established by the responsible power utility.
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## 2. GENERAL CHARACTERISTICS

Type	TC050Y-KV	TC065Y-SC-KV	TC085Y-KV	TC096Y-KV	TC120Y-KV
Max. cutting cable diameter	2" (50 mm)	2-9/16" (65 mm)	3-3/8" (85 mm)	3-3/4" (95 mm)	4-3/4" (120 mm)
Max. operating pressure	10,000 psi (700 bar)				
Oil necessary, displacement	2.4 cu. in. (39 cm <sup>3</sup> )	5.2 cu. in. (86 cm <sup>3</sup> )	5.5 cu. in. (90 cm <sup>3</sup> )	7.6 cu. in. (124 cm <sup>3</sup> )	11.1 cu. in. (182 cm <sup>3</sup> )
Weight	7.5 lbs (3.4 kg)	12.3 lbs (5.6 kg)	12.1 lbs (5.5 kg)	18.5 lbs (8.4 kg)	21.3 lbs (9.7 kg)
Dimensions	Ref. to page 10				

- **Application range:** cable cutting safety heads can only be used to cut Copper and Aluminum cables where the absence of voltage cannot be guaranteed.

*Hydraulic cable cutting safety heads must be used only with insulated flexible hoses and hydraulic pumps containing insulating oil.*



*Insulating oil is a special hydraulic oil with properties which insulate the pump from the cutting head.*

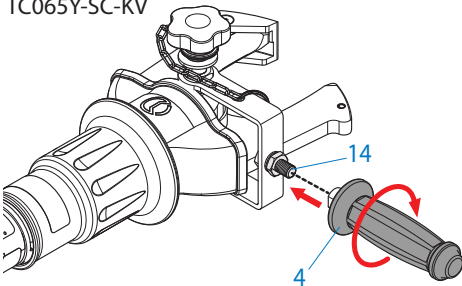
## 3. INSTRUCTIONS FOR USE

Cable cutting units (head and pump) must be used as described herein and always observing working procedures established by the responsible power utility.

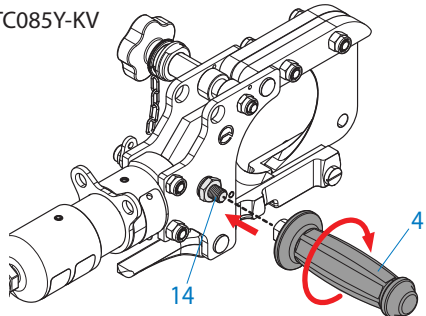
### 3.1) Preparation

- ▶ Only remove the cutting head from its case at the work place.
- ▶ *TC065Y-SC-KV and TC085Y-KV:* mount the support handle (4) on the head by screwing it onto the threaded pin (14); at the end of the work, remove the handle before storing the head in its case.

TC065Y-SC-KV




TC085Y-KV

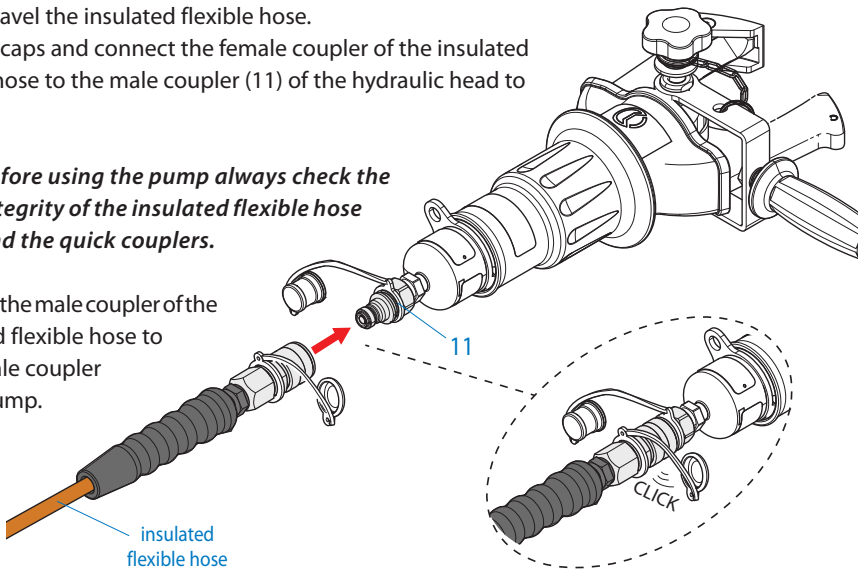


### 3.2) Connecting the insulated flexible hose (Ref. to Fig. 4)

- ▶ Fully unravel the insulated flexible hose.
- ▶ Remove caps and connect the female coupler of the insulated flexible hose to the male coupler (11) of the hydraulic head to be used.

 **Before using the pump always check the integrity of the insulated flexible hose and the quick couplers.**

- ▶ Connect the male coupler of the insulated flexible hose to the female coupler of the pump.

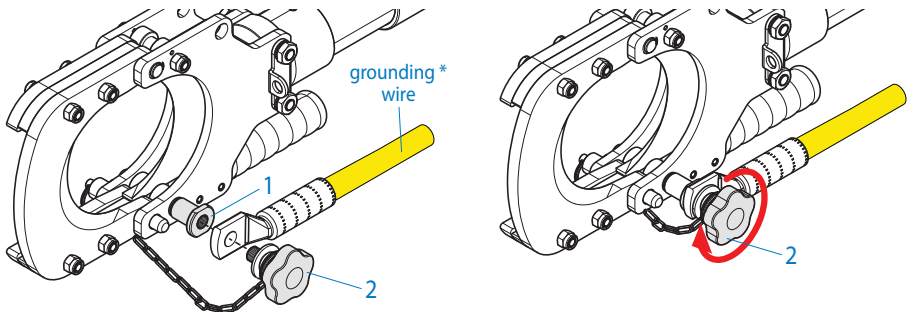


### 3.3) Grounding the cutting head

Safety cutting heads are provided with a grounding socket (1). To ground the cutting head, proceed as follows:

#### • Using a grounding wire with lug termination

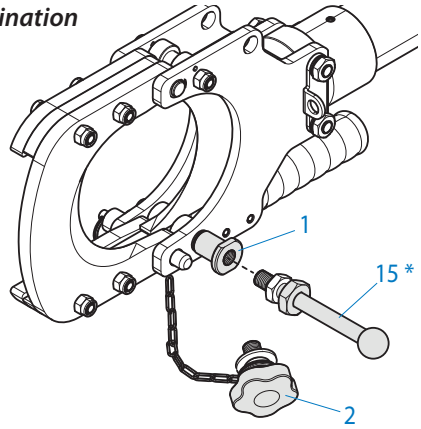
- ▶ Unscrew knob (2) from the grounding socket (1) of the head.
- ▶ Connect the terminal of the grounding wire to the socket (1) using the knob (2), **fasten the knob tightly**.
- ▶ Fully unwind the grounding wire and connect it to a grounding system using the clamp.



\* purchase separately

• **Using a grounding wire with ball & socket termination**

- ▶ Unscrew knob (2) from the grounding socket (1).
- ▶ Screw the grounding pin (15) tightly into the socket (1) (1/2"-13 UNC thread).
- ▶ Fully unwind the grounding wire and connect it by the clamps to the grounding wire pin (15) and to the grounding system using the clamps.



\* purchase separately

**3.4) Positioning the cutting head**

The cutting head must be manually positioned around the cable to be cut based on the diameter of the cable (Ref. to § 1).

- ▶ **TC065Y-SC-KV and TC096Y-KV:** insert the cable between the blades, at the desired cutting point.
- ▶ **TC050Y-KV and TC085Y-KV:** release latch (5) to open the blades. Insert the cable, close the head and fully secure the latch (5).

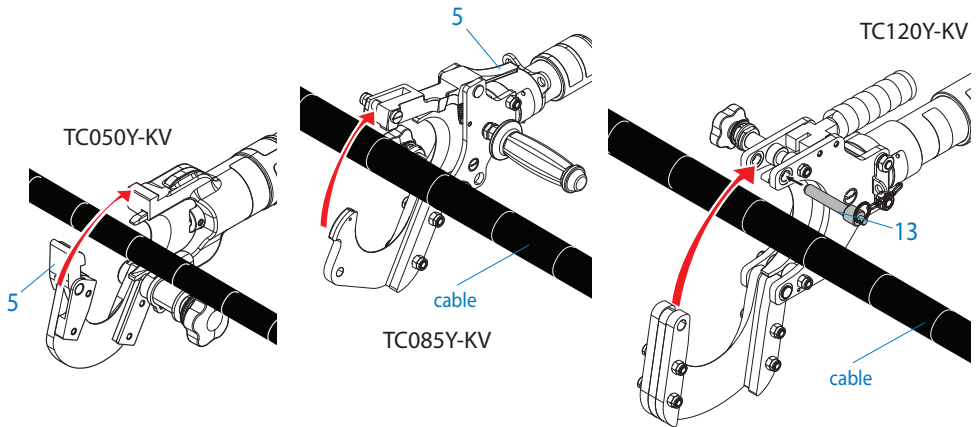
**Ensure that the head is fully secured: partial closure may damage the head.**

- ▶ **TC120Y-KV:** Extract the locking pin (13) to open the blades. Insert the cable, close the head and fully secure the locking pin (13).

**Ensure that the head is fully secured: partial closure may damage the head.**



**Make sure the blades are exactly positioned on the desired cutting point.**



Once the blades of the cutting head are around the cable to be cut, stabilise the head in position (e.g. by pressing the cutting head against the ground); when used in the “man-hole” we recommend the usage of **SS-TCY support strap** (Ref. to § 6) in order to support the head in the horizontal stable position.

### 3.5) Cutting



*Cutting operations strictly follow the safety and working procedures established by the responsible power utility.*

- ▶ Fully unravel the insulated flexible hose to provide a safe working distance.
- ▶ Operate the pump to advance the blades and progressively cut the cable.
- ▶ At the end of the operation open the blades using the oil release control of the pump.
- ▶ Access the cutting area and remove the cutting head from the cable using the support grip provided.

### 3.6) Unintentional cutting of live cable



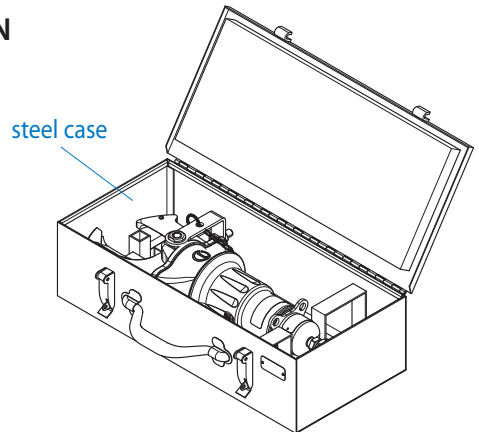
*Following a short circuit, contact the electricity power utility immediately for information. To access the cutting area and remove the cutting head, strictly follow the safety and working procedures established by the responsible power utility.*

## 4. STORAGE AND TRANSPORTATION

Each CEMBRE cable cutting safety head is precisely constructed and supplied in a robust steel case (canvas bag for TC050Y-KV) for protection of individual components from damage and for transportation to the work place.

Only remove a cable cutting head- from its case at the work place.

TC065Y-SC-KV and TC085Y-KV: remove the handle (4) before storing the head in its case.



## 5. CARE AND MAINTENANCE

The CEMBRE cable cutting safety heads are designed for on site use and thanks to its construction characteristics it is a technical and robust operating device.

To guarantee the reliability the CEMBRE cutting heads it is recommended to:

- ▶ After every use, remove dirt from the cutting head, cylinder, blades and seals using a brush dipped in a liquid detergent. Dry the area carefully.
- ▶ Carefully clean the quick couplers and their protective caps each time the unit is used.
- ▶ Periodically, lubricate blade pivots with some drops of oil.
- ▶ Always store and transport the cutting head in its case.

### 5.1) Replacement of the automatic coupler

To replace the automatic coupler proceed as follows:

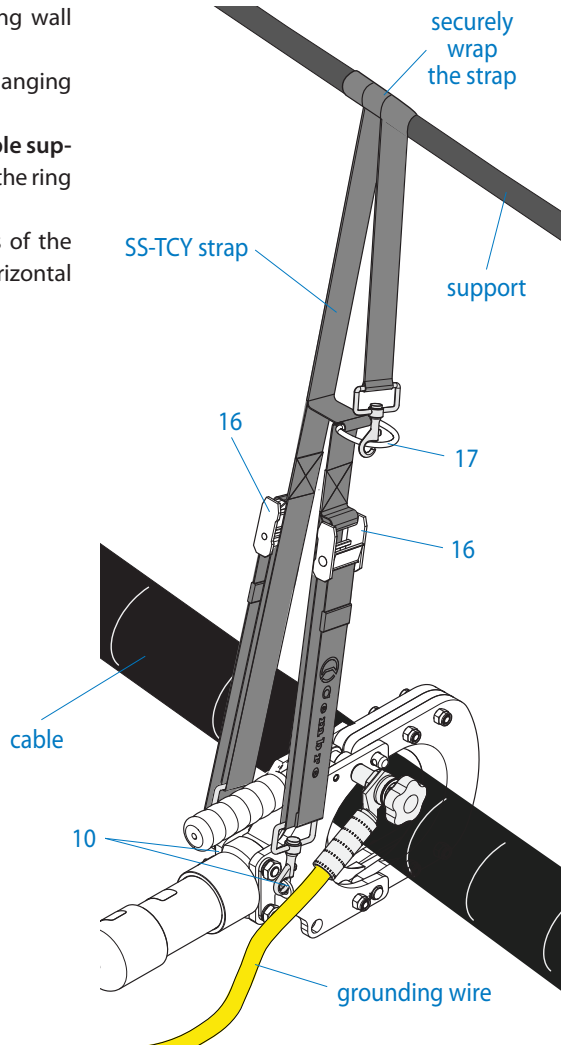
- ▶ Remove the old coupler and carefully clean the thread of the head to remove the old sealant.
- ▶ Apply Teflon tape to the thread, fit the new automatic coupler (type I38-M) and tighten to **30 Nm** (22 lbf ft).



## 6. TSS-TCY SUPPORT STRAP (purchase separately)

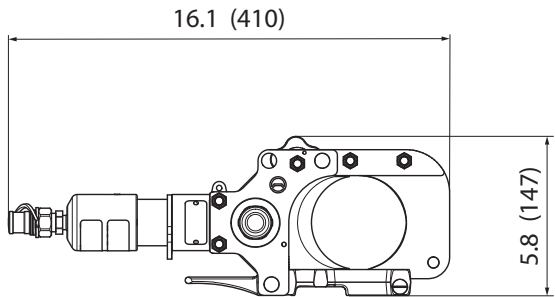
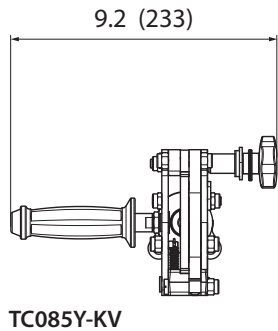
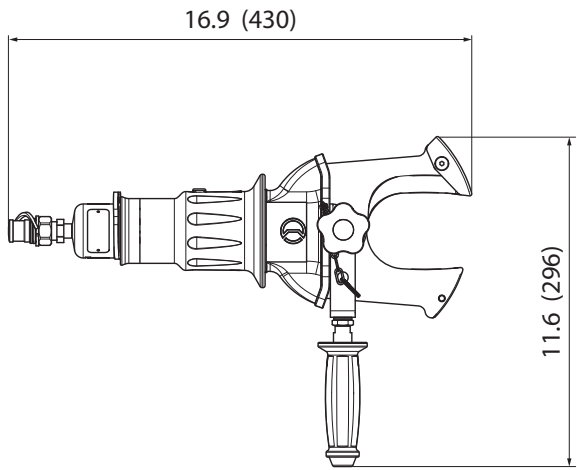
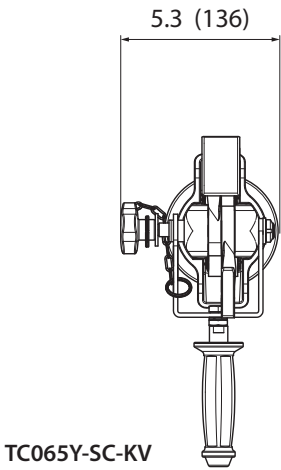
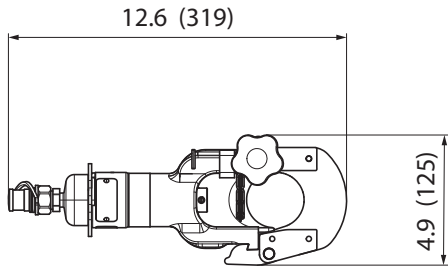
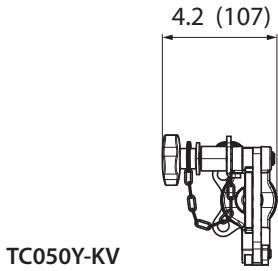
The support strap allows the head to hang securely from a suitable support e.g when cutting wall mounted cable inside “man-holes”.

- ▶ Connect the strap end hooks to the hanging points (10) of the head.
- ▶ **Securely wrap the strap around a stable support** above the head and latch it using the ring (17).
- ▶ Set the length of the strap by means of the buckle (16) so to support the head in horizontal position.



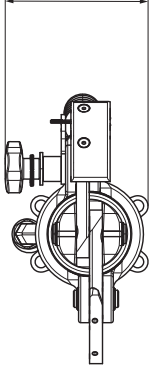
## 7. RETURN TO CEMBRE FOR OVERHAUL

In the case of a breakdown contact our Area Agent who will advise you on the problem and give you the necessary instructions on how to dispatch the tool to our nearest Service Centre; if possible, include a copy of the original CEMBRE Test Certificate supplied with the tool or fill in and include the form available in the “ASSISTANCE” section of the CEMBRE website.

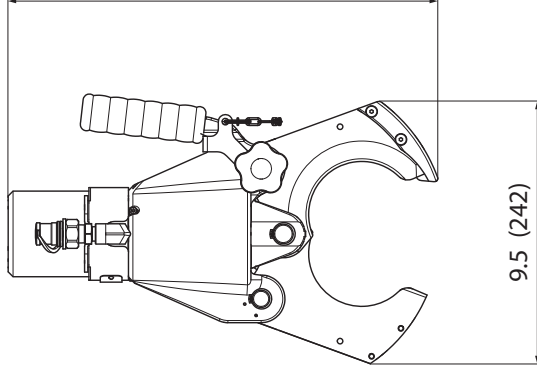


inch (mm)

5.3 (134)



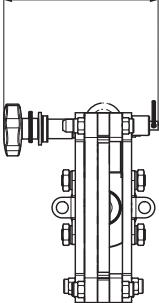
14.6 (397)



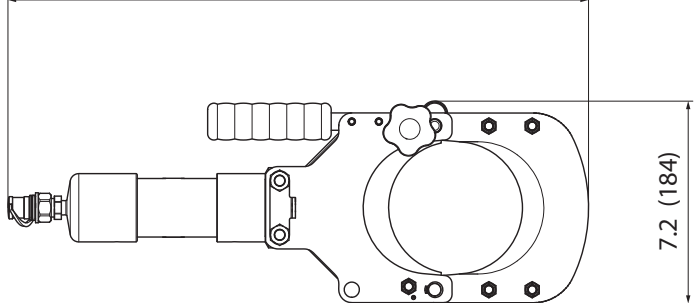
TC096Y-KV

9.5 (242)

5.5 (139)



21.1 (536)



TC120Y-KV

7.2 (184)

inch (mm)



**DECLARATION OF CONFORMITY -  
DECLARATION DE CONFORMITE - KONFORMITÄTSERLÄRUNG -  
DECLARACIÓN DE CONFORMIDAD - DICHIARAZIONE DI CONFORMITÀ**

We/ Nous/ Wir/ Nos Noi: **CEMBRE S.p.A. Via Serenissima, 9 – 25135 Brescia (Italy)**

Declare under our sole responsibility that the product - *Déclarons sous notre seule responsabilité que le produit*  
- Erklären in alleiniger Verantwortung dass das Produkt - *Declaramos bajo nuestra responsabilidad que el producto*  
- Dichiariamo sotto nostra unica responsabilità che il prodotto:

**TC050Y-KV TC065Y-SC-KV TC085Y-KV TC096Y-KV TC120Y-KV**

To which this declaration relates is in conformity with the following standard(s) or other normative document(s) -  
*Auquel cette déclaration se réfère est conforme à la (aux) norme(s) ou autre(s) document(s) normatif(s) -*  
Auf dass sich diese Erklärung bezieht, mit der/den folgenden Norm(en) oder dem/den normativen Dokument(en)  
*über einstimmt - Al que se refere esta declaración, cumple la(s) norma(s) u otro(s) documento(s) normativo(s) -*  
Al quale si riferisce questa dichiarazione è conforme alla(e) norma(e) o altro(i) documento(i) normativo(i):

**EN ISO 12100**

Following the provisions of EU directive(s) - *Conformément aux dispositions de(s) directive(s) EU -*  
Gemäß den Bestimmungen der EU Richtlinien - *De acuerdo con las disposiciones de la(s) directiva(s) EU*  
Conformemente alle disposizioni della(e) direttiva(e) EU:

**2006/42/EC**

Person authorised to compile the technical file - *Personne autorisée à constituer le dossier technique -*  
Person die bevollmächtigt ist, die technischen Unterlagen zusammenzustellen -  
*Persona facultada para elaborar el expediente técnico -* Persona autorizzata a costituire il file tecnico:

**Gianluca Cama via Serenissima, 9 – 25135 Brescia (Italy)**

Brescia **26-10-2022**



Felice Albertazzi  
CHIEF SALES & MARKETING OFFICER  
Cembre S.p.A.



**DECLARATION OF CONFORMITY**

We: **CEMBRE S.p.A. Via Serenissima, 9 – 25135 Brescia (Italy)**

Declare under our sole responsibility that the product:

**TC050Y-KV TC065Y-SC-KV TC085Y-KV TC096Y-KV TC120Y-KV**

To which this declaration relates is in conformity with the following standard(s) or other normative document(s):

**EN ISO 12100**

Following the provisions of the UK Legislation(s):

**S.I. 2008/1597**

Brescia **26-10-2022**



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