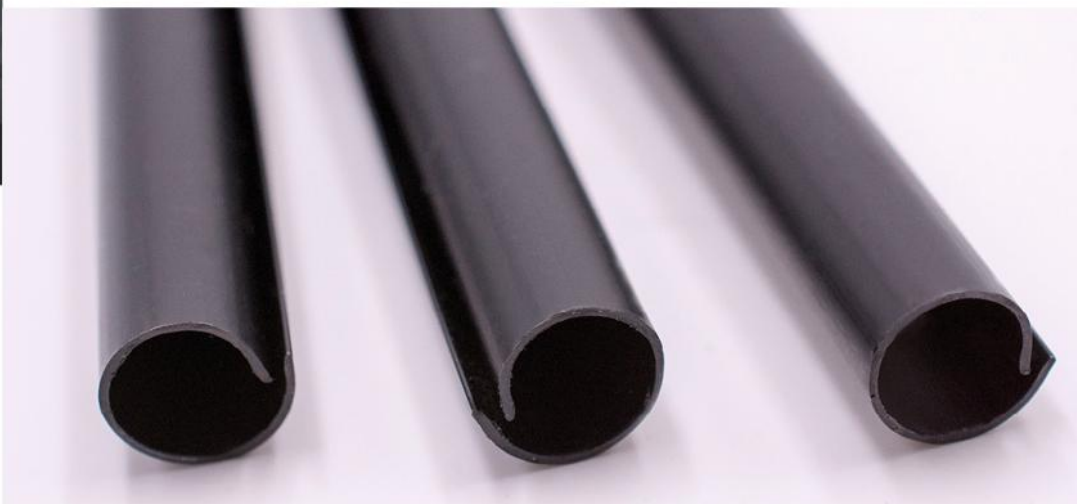




INSTALLATION GUIDE: SCROLL & SCROLL A



INDEX	DATE	LIST OF MODIFICATIONS	DESIGNED	APPROVED
OR	OCT/17/2006	CREATION	GBO	CBA
A	JUL/16/2008	Adding of the tool	MPA	CBA
B	SEP/16/2016	Took out Atmospheric pressure and RH	RPI	BLE
C	FEB/10/22	Update form, storage conditions, installation process	EJO	CBR

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1. Product presentation

1.1. Product description

SCROLL & SCROLL A are self-closing rigid tubes designed for wiring routing and protection of cables.

SCROLL A also provides an open scroll shape for an easy installation.

For further information please refer to the Technical DataSheet, available on Delfingen website:

<https://delfingen.com/medias/DELFINGEN-TDSW-EN-Scroll.pdf>

<https://delfingen.com/medias/DELFINGEN-TDSW-EN-Scroll%20A.pdf>

For further questions, please ask your Delfingen Sales Representative.

1.2. Availability

1.2.1. Color

- Black.

1.2.2. Size

- SCROLL is available in sizes from 6 to 30 mm (or 1/4" to 1 1/2").

SCROLL A is available in sizes from 7 to 30 mm (thickness 0.5 or 0.7mm, depending on the chosen size).

1.3. Marking and identification

No supplier marking

2. Logistic conditions

2.1. Delivery

SCROLL & SCROLL A are delivered in cut lengths from 15 to 2,000 mm (other lengths upon request only).

Delivery option according to the specifications agreed between the customer and Delfingen at program starting stage

2.2. Packaging

SCROLL & SCROLL A are delivered in carton packaging, fully recyclable. Cartons for cut lengths vary in dimensions depending on the length and size of the tubing. (*)

Packaging design according to the specifications agreed between the customer and Delfingen at program starting stage.

() For specific packaging requirements, please ask your Delfingen Sales Representative.*

2.3. **Storage**

DELFINGEN products have to be stored according to the below recommendations from delivery date in an undamaged packaging.

Tubing shall not be exposed during storage to:

- Direct sunlight
- High temperature
- Humidity

We recommend storing the product under 23°C / 50% RH. Under these conditions the tubing can be stored up to two years (2 years).

Storage at higher temperature and up to 50°C and/or under extremely humid environments can promote:

- Leaching out of white substances (oligomers, plasticizers)
- Swelling of the tubing
- Softening of the tubing

Under these conditions the tubing can be stored up to four months (4 months).

DELFINGEN won't be responsible for any damage or performance loss on the product if the storage time is equal or superior to four months (4 months) and/or temperature higher than recommended.

3. Installation and fastening process

Before starting the installation of SCROLL & SCROLL A over the component, ensure you have chosen the size suitable to your application.

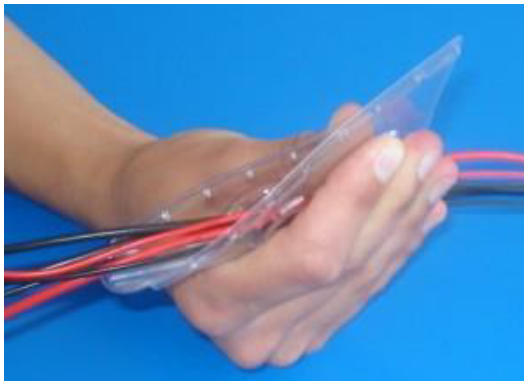
DELFINGEN recommends the usage of DELFINGEN Mounting Tools to install the product. The usage of mounting tools from an alternate supplier is the responsibility of the harness maker.

Choose the adapted mounting tool depending on the tubing diameter:

- MOUNTING TOOL 6-13 for tubing diameters from 6 to 13mm
- MOUNTING TOOL 16-32 for tubing diameters from 16 to 29mm

Installation

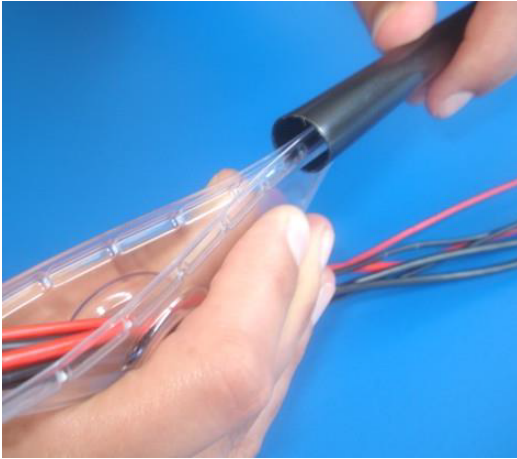
- A. Put the tool around harness wires.



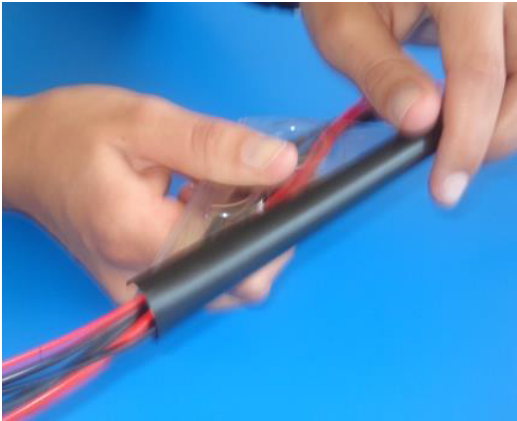
- B. Put the tool into the tube like in the picture.



C. Twist the tube.



D. Make the tool slide into the tube.
Take out the tool of the tube.



E. Check that wires mustn't go out of the tube directly through the slit.

Filling ratio

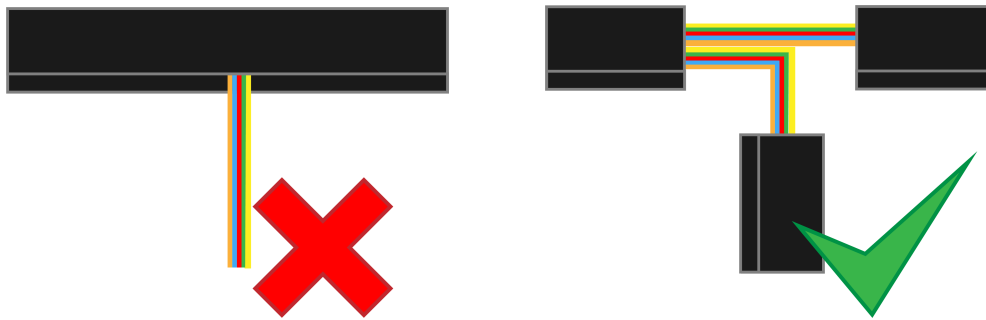
Exterior diameter of the harness wire can not be bigger than the SCROLL or SCROLL A diameter.

Fastening process

SCROLL & SCROLL A have to be held in position after installation by using an adhesive tape, a plastic cable tie, a lacing tape, or a clip to fix at least one end of the product on the component.

Wiring branching

For any branching needed on the wiring harness, SCROLL & SCROLL A have to be cut at each branch before crossing the derivation. Wires shall not pass through the opening to avoid any damages on them. Connection has to be then secured with the use of an adhesive tape.



4. **Other information**

SCROLL & SCROLL A are registered in the IMDS database (International Material Data System)

SCROLL & SCROLL A are conform to the REACH regulation (Registration, Evaluation, Authorisation and restriction of CHemicals)

SCROLL & SCROLL A are conform to the RoHS 3.0 EU Directive 2015/863 (Restriction of the use of certain Hazardous Substances)

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DELFINGEN declines all liability if the product is used for other purposes than those for which it was intended or if the product has not been installed in accordance with the recommendations of use.