

Many production processes and processing stages require materials to be bonded firmly for limited periods. The bonds must not leave any traces and must not be allowed to damage the material surfaces when the materials are eventually separated.

The adhesion through controlled static charges provides the ideal solution in these cases: the R130A / R131A / EXR130A charging bar is designed for applying the specific charge quantity. High-resistance materials such as paper, cardboard, plastics etc. are interlocked for brief periods or fastened to conductive surfaces, without the need to use adhesives.

The design of the R130A / R131A / EXR130A charging bar allows its use in perfect harmony with the intended purpose. In combination with the Eltex high voltage generator models this effective charging system ensures productivity and quality improvements in the most varied production areas.

The charging bar EXR130A is available for use in the Ex zone.

## Technical Information



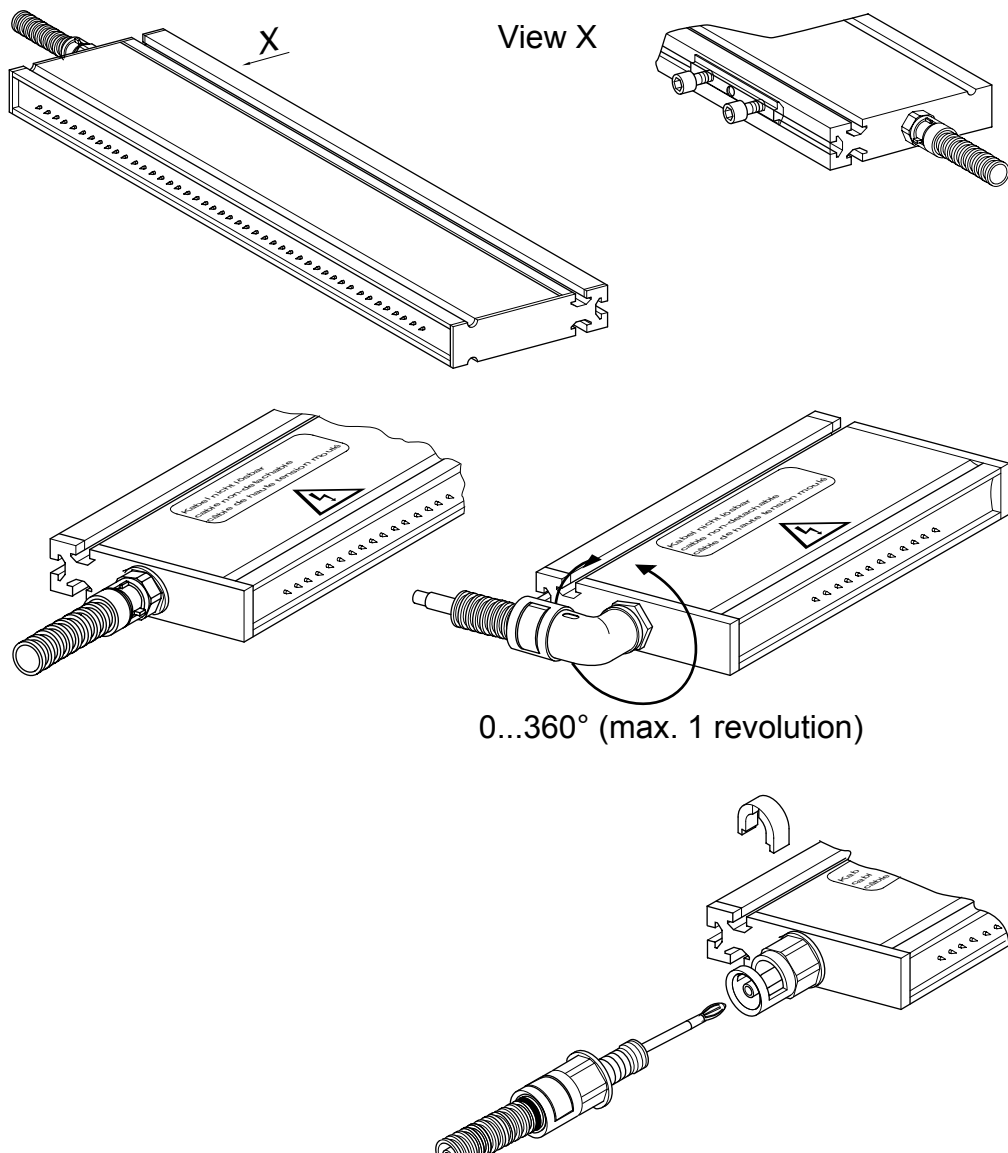
### R130A/R131A Charging Bar EXR130A Charging Bar

TI-e-3020-0404



electrostatic  
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## Overview



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### Electrode R130A / EXR130A

The connection of the high voltage cable can be axial or at a right angle to the electrode.



### Electrode R131A

The connection of the high voltage cable is detachable and only available axial to the electrode.



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## Technical specifications

|                               |  |
|-------------------------------|--|
| Electrode (bar) element       | glass-fibre-reinforced plastic GRP   |
| Encapsulation material        | polyurethane, UL-94 V0   |
| Emission tips                 | special alloy  |
| Installation material         | plastic or metal sliding nuts  |
| Operating ambient temperature | R130A/R131A: 0...+60°C (+32...+140°F)<br>EXR130A: 0...+40°C (+32...+104°F)   |
| Ambient humidity              | max. 60% RH, non-dewing  |
| Dimensions                    | profile: 20 x 80 mm, max. length 3,985 mm, see figure  |
| Weight                        | approx. 2,1 kg/m   |
| Operating voltage             | R130A3/R131A3: max. ±30 kV<br>R130A6: max. ±60 kV<br>EXR130A: max. -30 kV DC/+20 kV DC<br>for voltages higher 60 kV there are special electrode designs available  |
| Operating current             | typically 1 mA per meter of active bar length  |
| High voltage supply           | via Eltex high voltage generators<br>R130A/R131A: series KNH17, KNH18, KNH34 and KNH64<br>EXR130A: series HSG61EX and KNH34 (max. +20 kV DC)<br>EXR130A3K: HVG15-ES or KSH230 (max. -30 kV DC/5 mA)  |
| High voltage connection       | prefabricated high voltage cable in plastic tube with plug for the high voltage generator, length 1...99 m (standard length 5 m)   |
| EX approval (EXR130A)         | BAS97ATEX2218X<br> II2G Ex sm IIA T6 or<br> II3D T100°C provided that the tips of the bar point downwards and that the flash power of the dust is >0.4 mJ.<br>When used with ESA Electrostatic Printing Assist please observe the safety notices in the respective operating instructions. |
| UL approval (EXR130US)        | Class I, Group D; Class II, Group G; Class III; File No. E81984  |

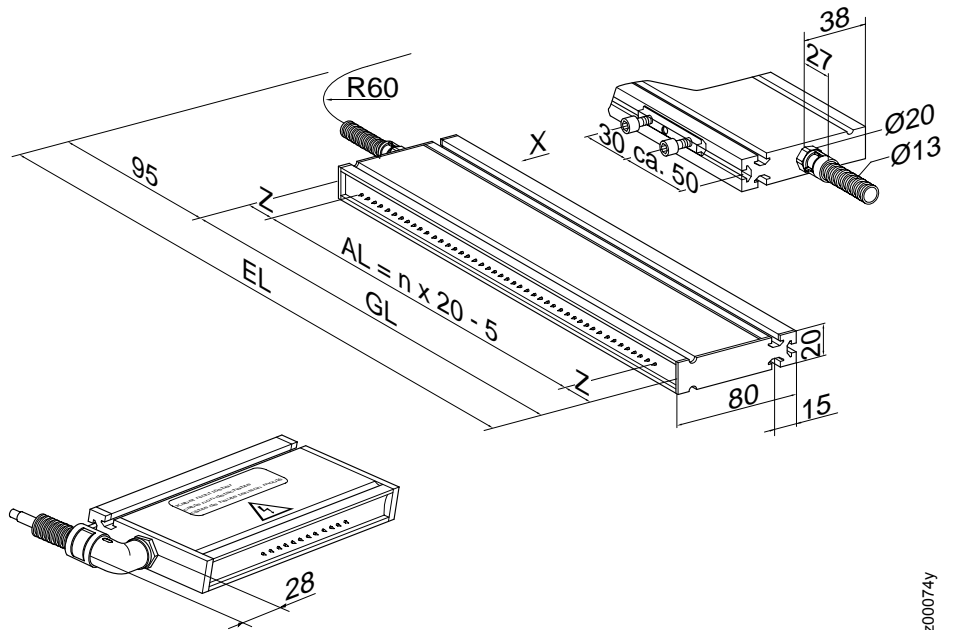


## Dimensions

AL = Active length  
 GL = Total length  
 EL = Installation length

n Whole number,  
 depending on  
 active length

Z 35 mm below 30 kV,  
 60 mm below 60 kV  
 operating voltage



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## Installation

**A Charging bar profile**  
 with 3 flutings

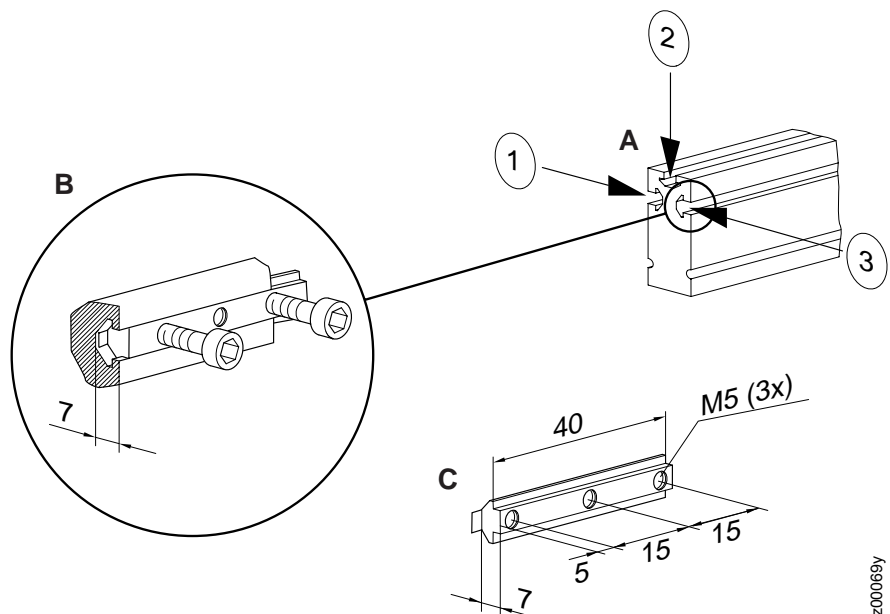
**B Profile section**  
 Max. bolt depth  
 6,5 mm

Torque:  
 4,0 Nm:  
 metallic screw  
 and sliding nut,  
 0,4 Nm:  
 plastic screw  
 and sliding nut

Secure bolts against  
 working loose  
 (e.g. Loctite 243)

**C Sliding nut**

Total length below 1 meter = 2 off  
 Total length below 2 meters = 3 off  
 Total length below 3 meters = 4 off  
 Total length below 4 meters = 5 off



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