

The Smart Discharging System is used mainly in cases where disruptive static charges need to be eliminated over medium distances.

The advantages of the Smart Discharging System SDS:

- integrated high voltage generation
- high output voltage for medium discharge range
- a long life emission tip realized with an optimized high-performance material of the emission tip
- shockless - no danger of electrical shock to personnel
- robust, compact design
- profile easy to clean
- easy installation
- function and malfunction monitoring of the system with fault signal output
- crosslinking of the bar in CANopen® networks

## Technical Information



F01045y

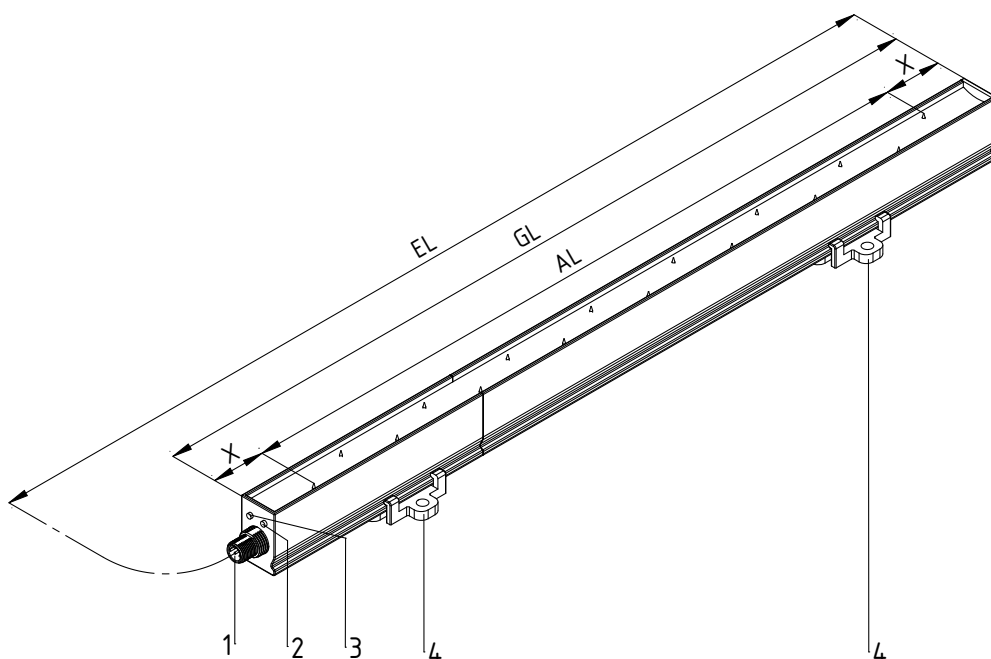
## Smart Discharging System Discharging Bar SDS

for 24 V DC

TI-en-2080-1708



## Dimensions and assembly instructions



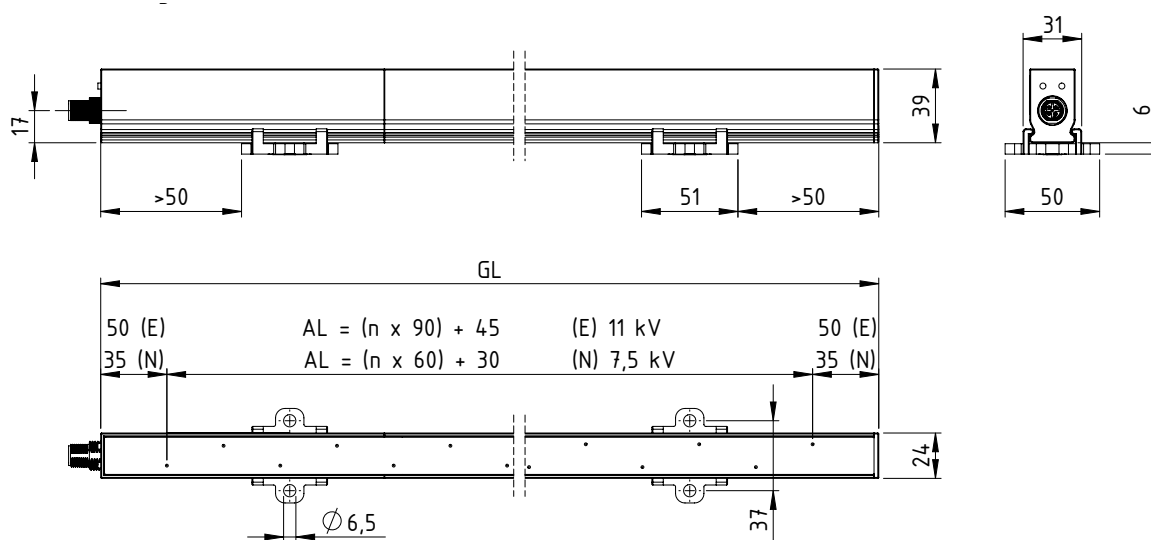
- 1 Connector M12
- 2 Operating display Status-LED
- 3 Operating display CANopen®-Status-LED
- 4 Holder

EL = Installation Length

AL = Active Length

GL = Total Length

X = Distance first resp. last tip (depending on the operating space)



Z-114897y\_1

Z-114897y\_2

## Variants

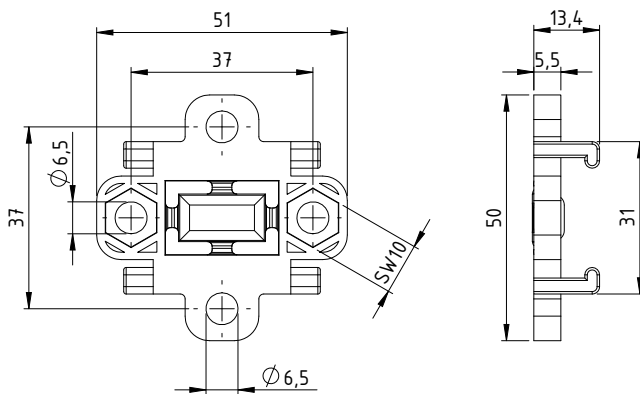
The use of the SDS/N and SDS/E discharging bars depends on the material to be discharged, the process speed, the distance to the material and the required residual charge.

Please contact a member of the Eltex sales team to determine the variant required for your application.

The discharging bar SDS is available in 4 different variants. Different configurations with regard to operating range and/or interface are available:

- Operating range
  - SDS/N Close range:  
Active length: 330 mm - 3,990 mm  
grid spacing 60 mm
  - SDS/E Enlarged range:  
Active length: 315 mm - 3,905 mm  
grid spacing 90 mm
- Interface
  - SDS/\_S bar with fault signal output
  - SDS/\_C bar with CANopen®

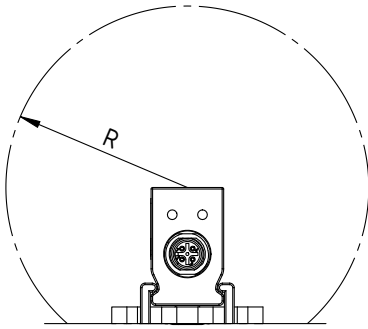
## Mounting the discharging bar SDS



Z-114897Y\_3

The profile of the bar features a through-going sideways groove in which the bar holders are positioned at regular distances. The bar is fixed in place simply by tightening two bolts each for every holder.

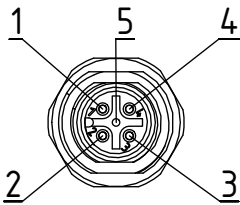
## Locating the discharging bar SDS



Z-114897y\_4

The discharging bar SDS must be positioned such that the distance between the emission tips and the object to be discharged is smaller than the distance to the grounded machine components, in simpler terms, this corresponds to a circle with a radius R around the emission tips.

## Plug connection



### Variant fault signal output

PIN	Function
1	fault signal output
2	24 V DC supply voltage
3	0 V
4	0 V
5	shield

### Variant CANopen®

PIN	Function
1	shield
2	24 V DC supply voltage
3	0 V
4	CAN High
5	CAN Low

## Technical data discharging bar SDS

Supply voltage	24 V DC $\pm 10\%$
Input Current	max. 0.5 A
Power Input	max. 12 W
Output voltage	SDS/N: $\pm 7$ kV; SDS/E: $\pm 11$ kV
Working distance	SDS/N: min. 100 mm; SDS/E: min. 150 mm
Ambient operating temperature	+5...+50°C (+41...+122°F)
Storage temperature	-20...+80°C (-4...+176°F)
Ambient humidity	max. 80% r.F., non-dewing
Short-circuit / tip	SDS/N: max. 0.075 mA; SDS/E: max. 0.120 mA
Fault signal output	24 V DC $\pm 10\%$ , max. 50 mA, overload protection
Circular connector	M12x1 A-coded; connector 5-pins
Protection class	IP 66 according EN 60529
Mounting material	holder bar SDS - included in delivery
Dimensions	39 mm x 24 mm x total length



Eltex-Elektrostatik-Gesellschaft mbH  
 Blauenstraße 67-69, D-79576 Weil am Rhein  
 Fon +49 (0) 76 21/ 79 05 - 230  
 Fax +49 (0) 76 21/ 79 05 - 310  
 eMail info@eltex.com  
 Internet www.eltex.com