



10865E00

Grounding Systems Grounding Monitoring Device Series 8146/5075




- Monitored electrostatic grounding of tank container and drums during the loading and unloading of flammable liquids
- For use in Zone 1 and Zone 2
- Robust design
- Easy installation and operation
- Potential free contact for signalisation to the control system and control of alarm devices

STAHL

The grounding monitoring device, **Series 8146/5075**, ensures that tank container and drums are electrostatically grounded correctly during the loading or unloading of flammable liquids. The device provides a conductive connection to the ground and monitors in parallel the quality of the electrostatic grounding. The electrostatic charge of the tank is kept on a safe level. An occasional discharge in conjunction with a spark is prevented and therefore the explosion protection ensured. The following recommendations demand the electrostatic grounding of tank container and drums during the loading or unloading procedure and endorse that interlocks should be provided to prevent loading when the grounding cable is not connected.

- Cenelec CLC/TR 50404 Code of practice for the avoidance of hazards due to static electricity
- National Fire Protection Association NFPA77 Recommended practice of static electricity 2000 edition

Zones 1 & 2

| Selection Table | | | |
|---|---|---|-----------------------|
| Version | Description | Ordering code | Weight kg |
|  <p>10966E00 Grounding monitoring device 8146/5075</p> | Device establishes electrostatic grounding of tank container and drums and monitors the connection continuously | 8146011010 | 5,800 |
|  <p>10997E00 Grounding clamp with cable</p> | Robust ergonomic grounding clamp, stainless steel, for indoor and outdoor applications - II 1 GD T6 | with 10 m straight cable | 3116320 1,600 |
| | | with 5 m spiral cable | 3116340 1,300 |
| | | with 10 m spiral cable | 3116350 1,600 |
|  <p>04877E00 Grounding clamp with self retracting reel</p> | Robust grounding clamp, stainless steel - II 2 GD T6 | Self retracting reel with 15 m Hytel isolated cable | 3116400 16,000 |

| Technical Data | |
|--|--|
| Certificates | PTB 01 ATEX 1024 (II 2 G) |
| Explosion protection | ⊕ II 2 G EEx ed [ia] IIC T6 |
| Installation | in Zone 1, Zone 2 |
| Ambient temperature | - 20 °C ... + 55 °C |
| Storage temperature | - 20 °C ... + 40 °C |
| Degree of protection | IP 65 |
| Power supply | |
| Rated voltage | 120 ... 250 V AC |
| Rated current | 50 mA |
| Power consumption | 3 VA |
| Cable entries | |
| Grounding clamp | M 20 x 1,5; trumpet threaded cable nut |
| Power supply | M 25 x 1,5; for cable diameter 7 ... 17 mm |
| Contact | M 25 x 1,5; for cable diameter 7 ... 17 mm |
| | Note: Other cable glands on request |
| Output potential free normally open (Ex e) | |
| Minimum load | 12 V / 100 µA |
| Maximum load DC | 250 V / 2 A |
| Maximum load AC | 250 V / 4 A |



Grounding Systems Grounding Monitoring Device Series 8146/5075

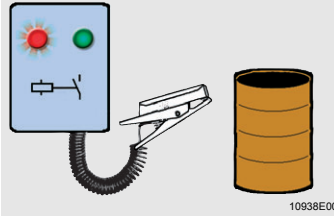
Technical Data

LED indication

Operating principle:

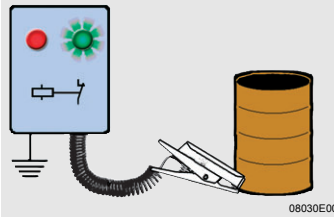
State of grounding process

Reaction of grounding monitoring device



Clamp is not connected, grounding equipment not in use

- red light ON
- green light OFF
- contact OPEN



Clamp connected to tank container or drum

- red light OFF
- green light ON
- contact CLOSED

Material

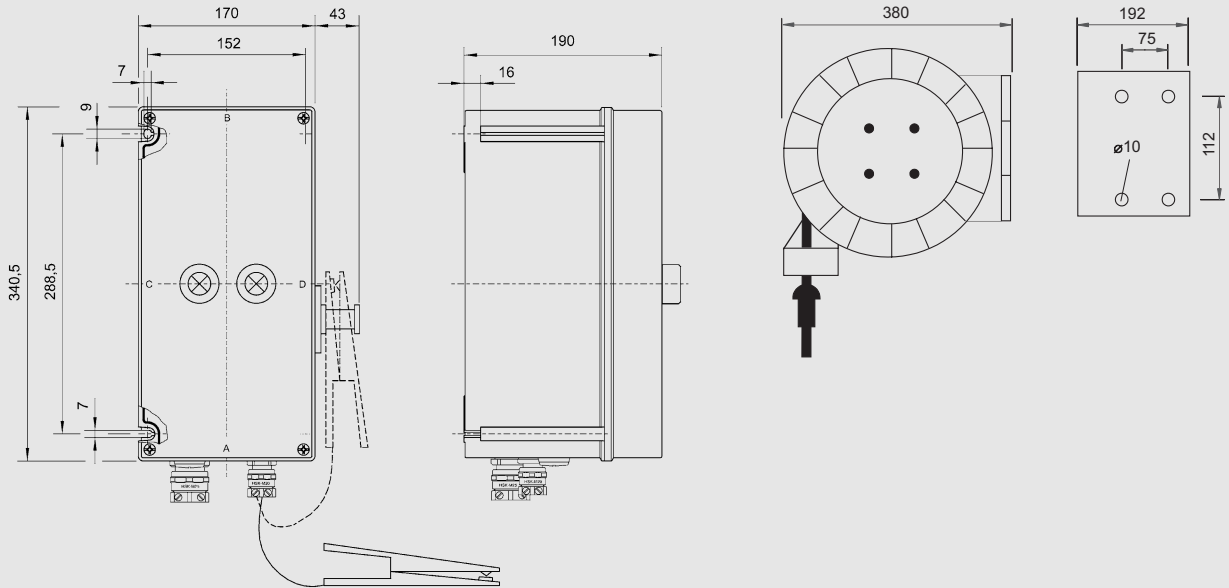
Housing

Polyester resin, flame resistant, self-extinguishing

Clamp

pressed galvanised steel, contact point in copper

Dimension drawings (all dimensions in mm) – subject to alterations



Grounding monitoring device 8146/5075

Cable reel with self retracting reel

We reserve the right to make alterations to the technical data, weights, dimensions, designs and products available without notice. The illustrations cannot be considered binding.