



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	
 10966E00 Grounding monitoring device 8146/5075	Device establishes electrostatic grounding of tank container and drums and monitors the connection continuously	8146011010	5,800	
 10997E00 Grounding clamp with cable	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
 04877E00 Grounding clamp with self retracting reel	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



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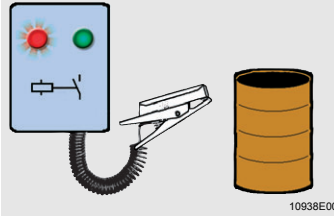
Technical Data

LED indication

Operating principle:

State of grounding process

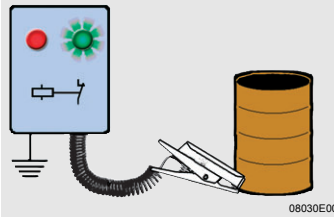
Reaction of grounding monitoring device



Clamp is not connected, grounding equipment not in use

Grounding incorrect

- red light ON
- green light OFF
- contact OPEN



Clamp connected to tank container or drum

Grounding correct

- red light OFF
- green light ON
- contact CLOSED

Material

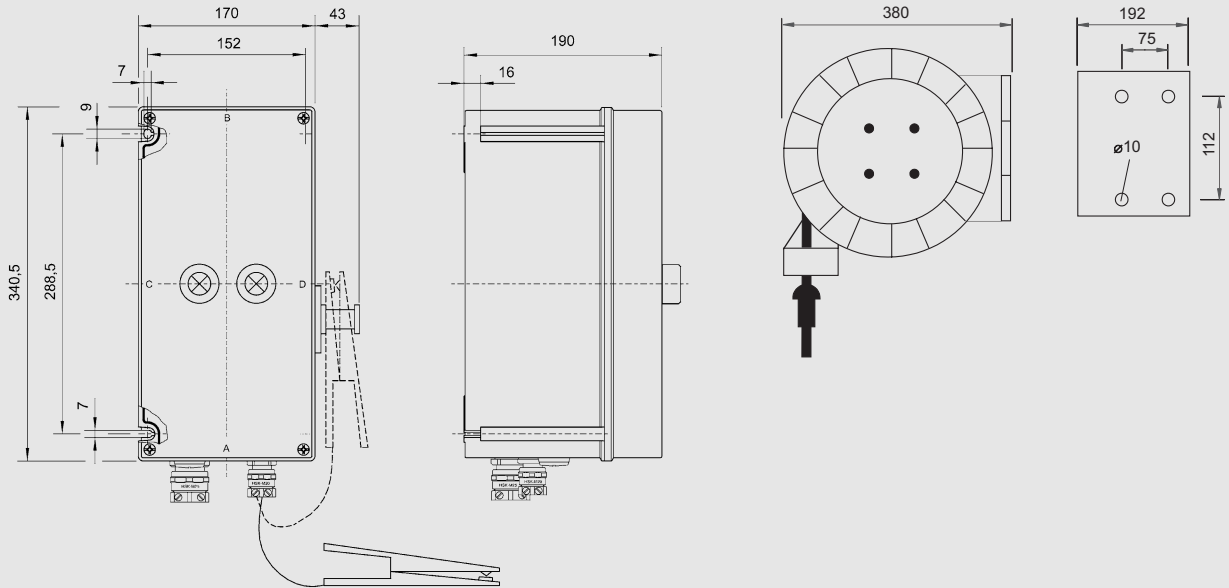
Housing

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.