

BS Vertriebsbüro GmbH

Silo-Anlagenbau - "Your specialist in silo components"

Pillauer Str. 2 · D-74336 Brackenheim
Fon ++49 (0)7135 12409 · Fax ++49 (0)7135 933599
e-mail: info@bs-vertrieb.de

[Home](#)

[e-mail / Contact](#)

[Impressum](#)

[Allgemeine Geschäftsbedingungen](#)

Others

- [Screening machines](#)
- [Safe, Remote Silo Blockage Removal](#)
- **Grounding Systems**
- [Bush Roller Chains](#)
- Silos
- Sampling
- [Flat Cable Trolleys](#)
- Bearings
Upon Request
- Brushes For Various
Areas Of Application

Grounding Systems



The **ground clamps** are designed for making and - in connection with **Terra-Control** ground system - for monitoring ground connections. The appliances are used in areas where potentially explosive materials and substances are loaded, discharged or refilled. Any developing static charges are safely and effectively eliminated and led to ground. This means that the risk of ignition caused by static discharges is eliminated at source.

Special ground systems operating with two ground clamps are capable of monitoring the correct grounding of conductive Big Bags by measuring the electric resistance between two opposing grounding flags.

Different design variants and sizes of ground clamps are

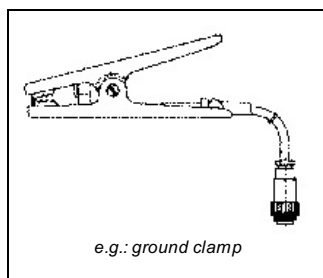
available for active, passive and Big Bag grounding and for use in potentially explosive atmospheres.

The cable rewinders of series **601 KR** ensure that the ground cable is safely reeled back after use, protecting it from damage and dirt.

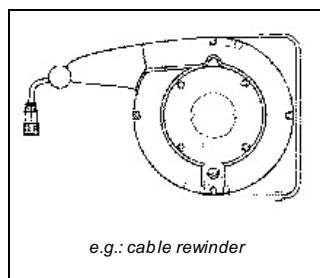
The cable retractor **601 KRA** is made of impact-proof aluminum and is mounted with an assembly bracket. This allows the cable retractor to be turned into the direction of the cable run making unwinding and rewinding easy. The rubber cable outlet prevents moisture and dirt from penetrating the housing. The built-in cable stop mechanism allows the cable to be locked in place and released as required.

The cable retractor **601 KRK / 601 KRB** is encased in a robust and sturdy plastic housing. The cable outlet is fitted with four cable guide rollers for easy cable guidance.

Both cable rewinders are designed for wall mounting and may be used in zones with potentially explosive atmospheres in connection with the **Terra-Control** ground monitoring system.



e.g.: ground clamp



e.g.: cable retractor

Active ground clamps to be used with Terra-Control components:

70AG: Ground clamp, large, length of connecting lead 170 mm with coupling connector or variable without connector

70AK: Ground clamp, small, length of connecting lead 170 mm with coupling connector or variable without connector

Active ground clamps for Big Bags:

70BG: Ground clamp, large, length of connecting lead 170 mm with coupling connector or variable without connector

70HK: Ground clamp, small, length of connecting lead 170 mm with coupling connector or variable without connector (always use two clamps)

Passive ground clamps:

70SG: Ground clamp, large, length of connecting lead 170 mm with coupling connector or variable without connector

70PG: Ground clamp, large, with current limiting resistor, variable length of connecting lead, connection via cable lug 10.5 mm diameter

70FG: Ground clamp, large, variable length of connecting lead, connection via cable lug 8,5 mm diameter

70OK: Ground clamp, small, straight design with anti-kink protection, connection by the user

Cable rewinders:

601 KRA: Cable rewriter in impact-proof aluminum housing IP53; assembly bracket for wall mounting, swivel-type; stop mechanism for ground cable, 2.5 meters connecting cable, 20 meters ground cable, ground clamp connection via coupling connector

601 KRK: Cable rewriter in plastic housing IP53; assembly plate for wall mounting, 2.5 meters connecting cable, 9 meters ground cable, color blue for active grounding ground clamp connection via coupling connector

601 KRB: Cable rewriter in plastic housing IP53; assembly plate for wall mounting, 2.5 meters connecting cable, 9 meters ground cable, color yellow for passive grounding ground clamp connection via coupling connector

Terrabox, Terracard, Terracompact



The controlled grounding principle used in the **Terra-Control** Ground System ensures that static charges developing in potentially explosive atmospheres, e.g. during loading, discharging or refilling are safely avoided. This means that the risk of ignition caused by uncontrolled static discharges is eliminated at source. No impedance grounding and no large conductor diameters, normally needed in electrical machine construction, are required.

Static charges are caused by the contact and separation of material surfaces, e.g. when pumping liquid or powdery materials from one container to another. If no leakage device is available to lead these charges to ground, extremely high charge potentials may develop.

Deflagrations or even explosions caused by sparking can result in substantial damage or personal injury. Objects are considered to be adequately grounded if their ground leakage resistance is not greater than 105...108.

The **Terra-Control** Ground System guarantees a safe and reliable ground connection. Used in combination with the ground clamps and the cable rewinders the system provides the ultimate ground connection.

The **Terra-Control** components monitor the connection to the bonding conductor and the contact across the ground clamps.

This function is controlled by a relay. This relay allows an isolation mechanism to be implemented which, as long as the ground clamp is connected to the container or bin, releases the filling or refilling process, for instance.

If the clamp is removed or slips off, or if the ground connection is interrupted, filling stops automatically.

[→ back to product survey](#)