



- HBG 800-DP handwheel.
- HBG 800-DP access point.
- 433 Mhz radio frequency antenna.
- 868 Mhz radio frequency antenna.
- Charging station.
- Connecting adaptor HBG 800-DP FS.
- Mounting set + adhesive symbols for front sheet.
- Support for the charging station - Code: 14500067.
- Configured Anybus X-gateway (PROFIBUS-EtherCAT) - Code: 13410060.
- (SNR-10-223-D) DC Filter - Code: 19400007.
- Toroidal core (KEMET ESD-SR-250) - Code: 10403028.
- HBG 800-DP FS connection cable (5 m) - Code: 11312169.
- PROFIBUS connection cable (1.5 m) - Code: 52100075.
- Sheet with electrical diagram, the content of the KIT HBG 800-DP FS and checks to be carried out after the system has been mounted - Code: 52100076.



The following items shown in the electrical diagram are not included in the KIT HBG 800-DP FS: CNC, Safety PLC, Power supply 1, Power supply 2, Grounding plate 1 and Grounding plate 2.

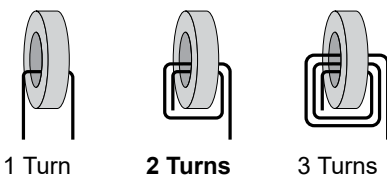
2 Checking the installation:

After making the installation, check:

CEM.

- That you have correctly connected the HBG 800-DP Access Point cable shield to the Grounding Plate 1.
- That you have correctly connected the Ethercat cable shield to Grounding Plate 2 on the Anybus X-gateway side.
- That the 24 V used to power the Anybus X-gateway and the HBG 800-DP FS connection adapter is obtained from the DC Filter output.
- That the 24 V used to power the CNC comes directly from the power supply before the DC Filter.
- That you use a different power supply than the one used to power the CNC and the DC filter for the handwheel safety buttons.
- That you have connected the ground cable to the ground screw on the DC Filter.
- That you have connected the Profibus connection cable with the line terminator switched ON on the side of the HBG 800-DP FS connection adapter.
- That you have connected the Profibus connection cable with the line terminator switched OFF on the side of the Anybus X-gateway.
- That cables 7, 8, 9, and 11 of connector X2 of the HBG 800-DP FS connection adapter have the Toroidal core (KEMET ESD-SR-250) with **two turns**, as indicated in the installation manual and in the image below.

How to count the turns of the Toroidal core:



IMPORTANT INFORMATION:

To connect the HBG 800-DP FS connection adapter to the Anybus X-gateway, the S1 switch must be set to **OFF, OFF, OFF, OFF (address 2)**. It should be noted that **the maximum counting speed of the handwheel is 2 revolutions per second**. If the handwheel is moved at a speed higher than this, it will not work properly.



NOTE: For more information, download the (KIT HBG 800-DP FS) wireless handwheel manual.



3 Electrical diagram.

