WEIGH INDICATOR

DFWLKI3GD

ATEX3GD VERSION

(FOR UTILIZATION IN EXPLOSION RISK AREAS)

ANNEX

INDEX

1. WARNINGS

- The use of the instrument in hazardous areas require a special attention and special precautions during the use and Maintenance.
- Avoid accumulations of dust.
- ATTENTION! BE CAREFUL OF ELECTROSTATIC CHARGES; ONLY USE WET CLOTHES OR ANTISTATIC PRODUCTS FOR CLEANING
- The instrument complies for the use in zones with specific characteristics: do not install and use the instrument in environments different from the foreseen ones.
- The installation, maintenance and repair of the instrument, must be made by qualified and authorized personnel.
- The maintenance must be made after removing the voltage/power supply of the instrument.
- Only spare parts approved by Dini Argeo must be used.
- Do not paint.
- The ATEX safety of the weighing system is guaranteed **only** if the system is installed, used and taken care of following the instructions given in this manual and in the technical manual (**TECH.MAN.REF.**).
- Avoid accumulations of electrostatic charges; therefore, when using the instrument in a hazardous zone, the appropriate work clothing must be used by the operator or the maintenance person.
- Do not cover the instrument with coverings made by materials which could have electrostatic charge.
- **The safety of the instrument depends on the IP65 protection degree and on the limited breathing case (nR type of protection, see EN60079-15).**
  Do not tamper with or alter with the instrument's seals (cable passings, i, locking screws tightening).
  In the case of installation or maintenance must be respect the IP65 protection degree and the "limited breathing" protection mode by closing all the holes with caps and/or cable glands for inserting cables in the weight indicator case: close well the cap of all the cable glands with the relative appropriate cable section, the cap of all the wires, the locking screws tightening of the indicator and the various instrument connectors (cell, etc.), using the wrenches having the relative measurement (see the "Instructions for installation in hazardous area" section).
- It is forbidden to modify or repair the instrument with components not conforming to the CE declaration; this action compromises the safety of the instrument (**with a subsequent loss of the Ex approval**) and the nullification of the product warranty.
- It is forbidden to connect the instrument to modules not provided for by the CE declaration; this action compromises the safety of the instrument (with a subsequent loss of the Ex approval). Contact Dini Argeo srl for further information.
- It is forbidden to connect the instrument to modules not provided for by the CE declaration; this action compromises the safety of the instrument (**with a subsequent loss of the Ex approval**). Contact Dini Argeo srl for further information.
- **All the cables must be installed and protected in accordance with the standard norms for electrical equipment.**

- **All the peripheral units (for instance printers, converters, etc.), which are not marked ATEX, should be installed only in a zone which is not ATEX classified.**
- Be very careful when using the instrument; any sparks could cause an explosion.
- The DFTL remote control IS NOT ATEX3GD certified therefore it can not be used with the indicator.
- **Avoid direct sunlight.**
- **If the indicator is powered through the BP6ATEX3GD battery, it must not be powered through another voltage because the battery must not be recharged in the hazardous zone.**

Warning:
- Read carefully this document and apply the his technical specifications.
- This manual has been made as carefully and exactly as possible; in any case, your suggestions are always welcome.

2. DESCRIPTION of the SYSTEM

The "DFWLKI3GD", “ATEX3GD" version, electronic weighing terminal is device for hazardous areas having presence of gas, designed and made according to the ATEX 94/9/CE directive, group II category 3GD according to the EN60079-0, EN60079-15, EN61241-0 and EN61241-1 norms with the “limited breathing” protection mode (Ex and nR) for the gas and with the limitation for the maximum superficial temperature of the case (tD and IP) for the dust.

3. MARKINGS

The equipment is marked CE according to the ATEX 94/9/CE directive (attachment X):

	Manufacturer logo: Dini Argeo srl;
Mod.: XXXXXXX	Commercial code of the instrument;
S/N: xxxxx 2011	Serial number and production year;
CE	CE Markings;
II 3G Ex nR IIC T6 X	Specific marking against the explosions in the presence of gas:
II	Group II (surface);
3	Category 3 equipment;
G	Explosive atmospheres caused by gas, fog or vapours;
Ex nR IIC T6 X	Protection mode, gas group, class of temperature;
II 3D Ex tD A22 IP68 T130°C X	Specific marking against the explosions in the presence of dust:
II	Group II (surface);
3	Category 3 equipment;
D	Explosive atmospheres caused by dust;
Ex tD A22 IP68 T130°C X	Protection mode, IP Protection degree of the metallic case (according to EN60529) and maximum superficial temperature of the case.

NOTE: The equipment also has IP65 protection.

Hazardous zones		Category according to the 94/9/CE directive
Gases, hazes or vapours	Zone 0	1G
Gases, hazes or vapours	Zone 1	1 G or 2G
Gases, hazes or vapours	Zone 2	1 G, 2G or 3G
Powders	Zone 20	1D
Powders	Zone 21	1 D or 2D
Powders	Zone 22	1D, 2D or 3D

4. INSTRUCTIONS FOR INSTALLATION IN DANGEROUS AREA

The equipment must be installed and maintained, according to the applicable norms relative to the installations in the danger zone (other than mines) classified for the presence of gas and/or inflammable powders such as ZONE 2 or ZONE 22 (i.e.: EN60079-14, EN60079-17, EN61241-14, EN61241-17, EN1127-1 and with the norms which apply in the zone and in the installation environment).

For the power supply it is necessary use a cable with minimum section is 0,5mm².

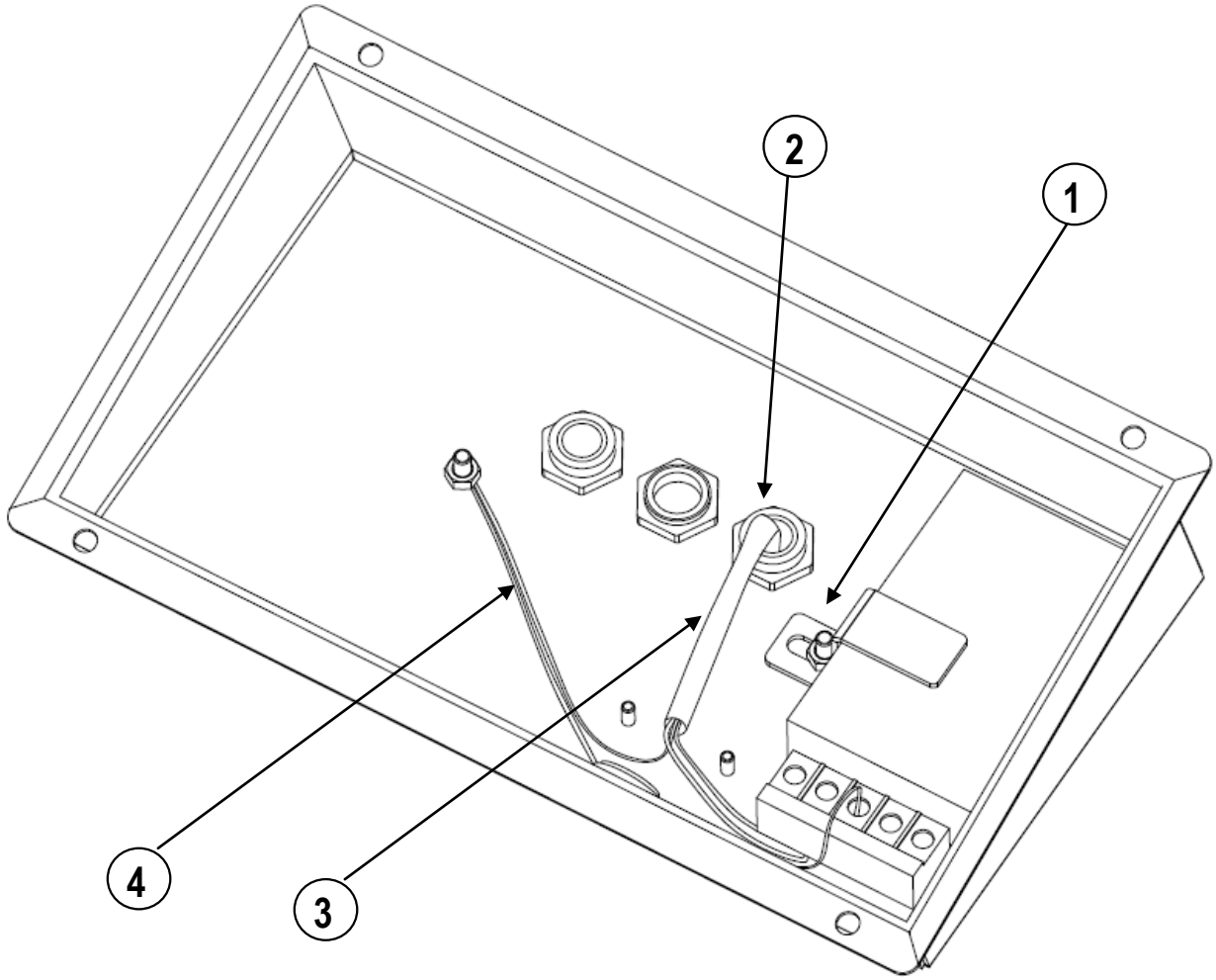
Connect the terminal to the ground using the appropriate anti-rotation and anti-loosening plug of a cable with a minimum section of 4mm².

Minimum and maximum diameter of cable which can be used with relatives cable gland:

Cable gland	min-max cable diameters in mm	Wrench measurement in mm
PG7	3-6	14
PG9	5-8	17

In order to connect the 220 Vac power supply:

- unscrew the indicator's locking screws, and the one of the fixing bracket belonging to the internal power adapter (1);
- unscrew the locking cap of the PG9 cable gland (2);
- put the power supply cable (3) through the PG cable gland and connect it to the internal power adapter as shown in the figure. The wires must be installed on the lower side of the connectors. The yellow-green wire is to be connected to the pin of the container;
- connect with the yellow-green wire (4), the pin and the earth connector of the internal power adapter;



- lock the internal power adapter with the appropriate bracket;
- lock the fairlead cap of the PG cable gland;
- close the indicator making sure that the wires do not get stuck with the front panel's seal and the case;
- tighten the locking screws.

N.B.: Make sure that the metallic box is closed well before using the indicator

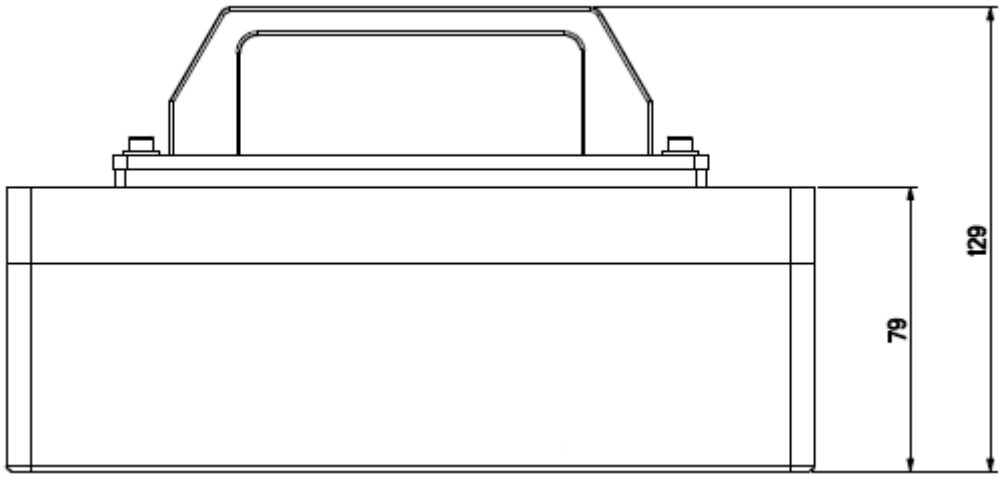
To connect the cable coming from the platform or from the load cell/s:

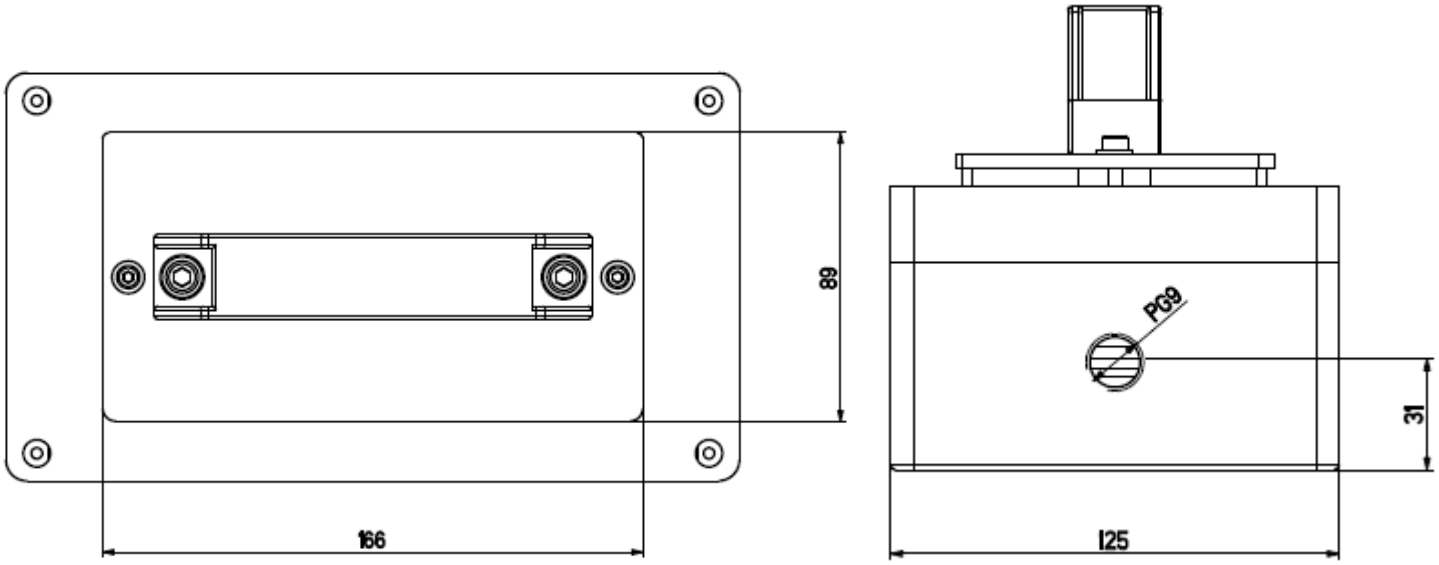
- unscrew the indicator's locking screws;
- unscrew the locking cap of the PG cable gland;
- pass the load cell cable in the cable gland and connect it to the indicator following the instructions shown in section 2 of the technical manual (TECH.MAN.REF.);
- closing well the cap of cable gland;
- close the indicator making sure that the wires do not get stuck with the front panel's seal and the case;
- tighten the locking screws.

N.B.: Make sure that the metallic box is closed well before using the indicator

4.1 BP6ATEX3GD EXTERNAL BATTERY (OPTIONAL)

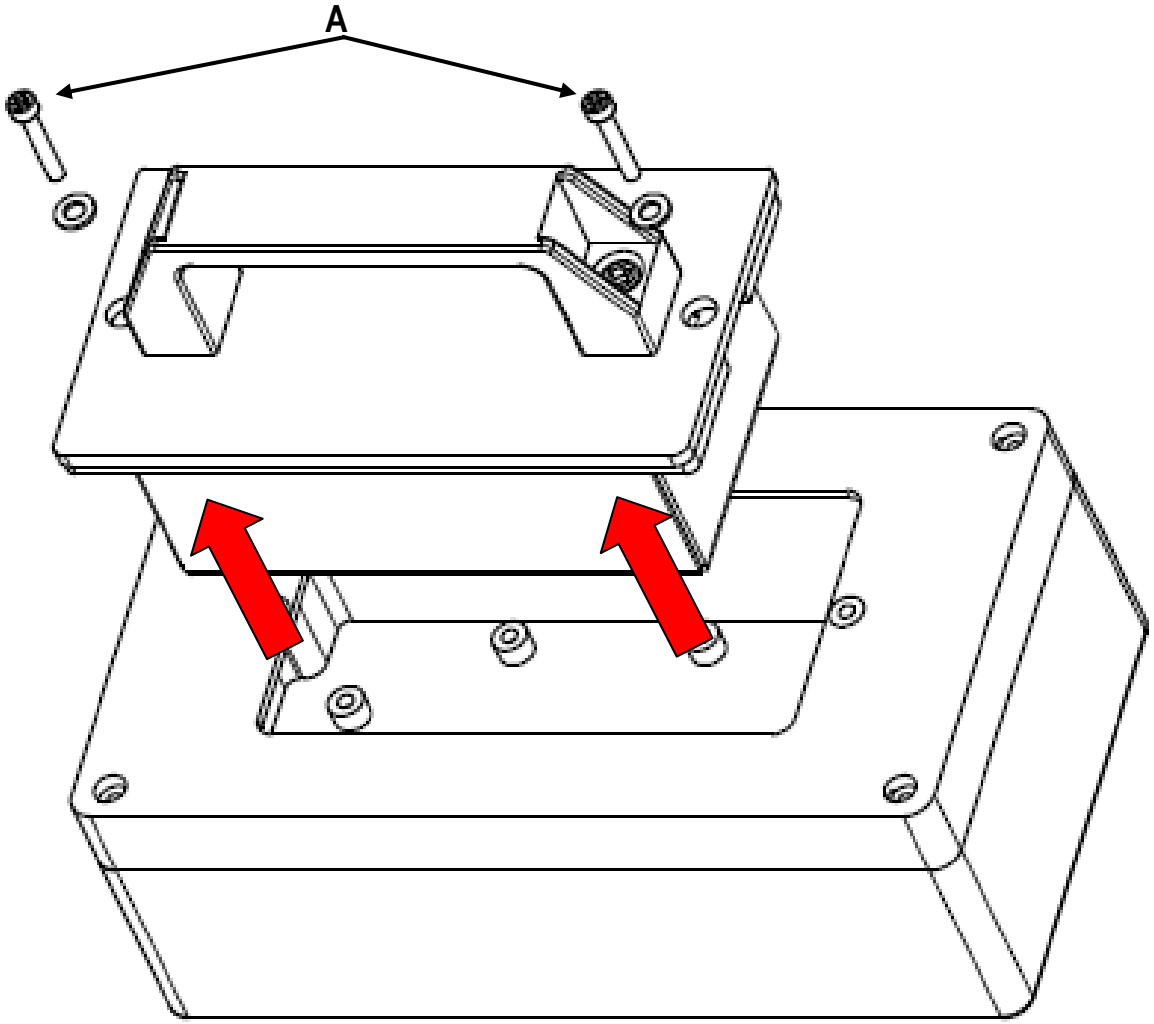
The indicator may be powered trough an external battery (optional), whose external dimensions are shown in figure:





4.1.1 BATTERY REMOVING/CHARGING

- Unscrew the two screws (A) marked in figure:



- Remove the battery pack.
- Unplug the connector from the battery pack.
- Connect the charger to the battery pack by the connector.

⚠ WARNINGS ⚠

- **THE BATTERY MUST BE CONNECTED, DISCONNECTED, AND RECHARGED ONLY IN A SAFE ZONE**
- **WE ADVISED TO COMPLETERLY CHARGE THE BATTERY BEFORE INSTALLING IT IN THE INSTRUMENT.**
- **THE BATTERY CHARGER MUST ALWAYS BE USED IN A SAFE AREA.**
- **THE BATTERY CHARGER MUST ONLY BY POWERED BY THE SUPPLIED MAINS ADAPTER.**
- **AVOID ACCUMULATIONS OF DUST**
- **CLEAN ONLY WITH DAMP CLOTH AND/OR ANTISTATIC PRODUCTS**
- **CHECK THE STATUS OF THE INDICATOR/BATTERY CONNECTOR**
- **CONNECT THE BATTERY TO THE GROUND USING THE APPROPRIATE ANTI-ROTATION AND ANTI-LOOSENING PLUG OF A CABLE WITH A MINIMUM SECTION OF 4 MM².**

ANY RESPONSIBILITY FOR DAMAGES DERIVING BY THE UNOBSERVANCE OF THESE WARNINGS IS DECLINED

DECLARATION OF CE CONFORMITY

We **DINI ARGEO Srl,**
Via della Fisica, 20
41042 Spezzano di Fiorano - MODENA

Declare under our responsability that the following products

- The "DFWLKI3GD" electronic weighing terminal

described in this declaration conform to the following directives:

- **EMC 2004/108/CE Directive**
- **2006/95/EU Directive**
- **ATEX 94/9/CE Directive**
- **2009/23/CE Directive**

The conformity is confirmed by the observance of the following norms:

- EN 60079-0: 2006
- EN 60079-15:2005
- EN 61241-0:2007
- EN 61241-1:2006
- EN 1127-1:2007
- EN 13463-1:2009
- EN 61000-6-2:2005, EN 61000-6-4:2007, EN 61326-1:2006, ,EN 55011:2007
- EN 61010-1:2001
- EN 45501:1992 (°)

(°) *Only with "M" mark.*

Markings:

- **II 3G Ex nR IIC T6 X**
- **II 3D Ex tD A22 IP68 T130°C X**

Spezzano di Fiorano, 30/03/2011

Signature
Marco Bertoni
President