

INTRINSICALLY SAFE and EXPLOSION PROOF
MAGNETOSTRICTIVE LEVEL PROBE

Wireless Probe
DELPHI RDT

INTRISECALLY SAFE PROBE

DELPHI 485

DELPHI TTL

DELPHI 420

DELPHI 010

DELPHI LPM

EXPLOSION PROOF PROBE

DELPHI 485 EXD



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1 INSTRUCTION

This manual provides with all the necessary information about the installation operations of the DELPHI level probes family.

The family probes should only be installed by trained service engineers.

In the realization of this document, particular attention was paid to make it as complete and accurate as possible. Therefore, ALISONIC S.r.l. reserves the right to make unannounced upgrades aimed at improving the product, including management programs.

ALISONIC S.r.l. is not responsible for damages deriving from information contemplated in the following document.

This manual was written in the compliance with the IEC 82079-1 standard the ATEX DIRECTIVE 2014/34/ EU intended for the use of equipment and protective system used in potentially explosive atmospheres.

MANUFACTURER DATA:

Name	ALISONIC S.r.l.
Address	Via ERCOLANO, 3 20900 MONZA (MB) Italia
Telephone	+39 0362-1547580
Website	www.alisonic.it
e-Mail	assistenza@alisonic.it

The following symbols are adopted within the document:

SYMBOL

DESCRIPTION



IMPORTANT: Danger to people (including death), things or the environment.



ATTENTION: Information and notes concerning important operations and useful considerations.



IMPORTANT: The crossed-out bin symbol indicates that the product, at the end of its life cycle, must be disposed of separately from household waste and must be taken to a collection point for electrical and electronic equipment as required by the European Directive 2012/19 / EU



2 SAFETY INDICATION

The level sensors have been developed, manufactured and tested in accordance with the latest safety standards. Nevertheless, hazard may arise from their use.

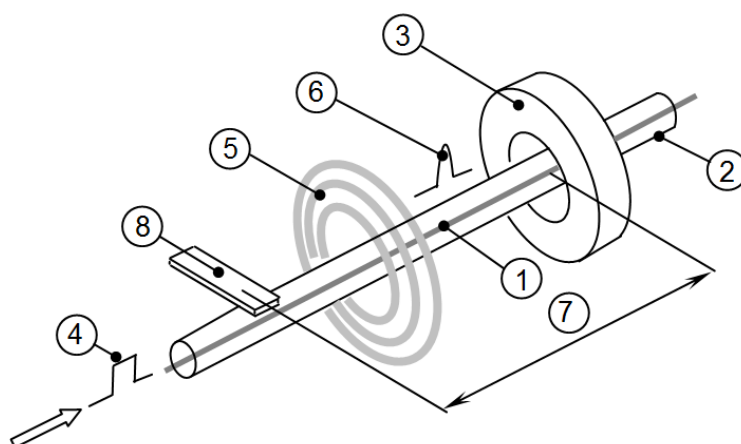
The following safety precautions must be observed in order to reduce the risk of injury, electric shocks, fire or damage to the equipment:

1. Before the installation and use of the equipment please carefully read the instructions given into this manual.
2. The manufacturer is not responsible of any possible operation not mentioned into this manual.
3. Any failure or faulty operation would occur to the equipment, please refer to the authorized personnel for maintenance or directly to the manufacturer.
4. The manufacturer refuses all responsibility for any eventual injury and/or damage to things caused to the non-observance of the safety regulations.
5. The assigned personnel is required to know all the safety regulations relative to the hereby described equipment.
6. Any doubt may occur about the functioning of the equipment please refer to the authorized personnel for maintenance or directly to the manufacturer.
7. Tampering releases, the manufacturer from any responsibility in front of the competent authority.
8. This product is used in fuel tanks and in hazardous areas for risk of explosion and fire. Subterranean leakages of the fuel tanks may cause serious damages to environment and injury.
9. If mixed with air, the flammable vapours may cause explosion. Hazardous areas may be originated therefore by the presence of gas or vapours.
10. · Explosions or fire may cause damages, even lethal.
11. · The magnetostrictive probe can be installed in hazardous areas.
12. The product may be powered only via the permissible auxiliary power supply.
13. **The device must be powered and connected with a INTRINSICALLY SAFE BARRIER, ALISONIC model: ISB-PC or ISB-PR or equivalent intrinsically safety device**



3 DEVICE DESCRIPTION

The sensors consist of a probe head and a probe tube made of stainless steel. The probe tube is fitted in the tank with a screw-in unit for height adjustment. For riser installation, the screw-in unit is not required. A float (4) for



measuring the product filling

level and an additional float

1	magnetostriuctive wire	5	magnetic field
2	external pipe	6	torsional vibration
3	permanent magnet	7	back timing pulse
4	currente pulse	8	pickup sensor

for continuous water detection move on this probe tube. In the case of products having a density greater than 0.9 kg/l, water detection cannot take place and the water float must be removed.

The sensor operates according to the magnetostrictive measuring principle. The probe tube contains a wire made of magnetostrictive material. The sensor electronics transmit pulses through the wire that generate a circular magnetic field. Permanent magnets are used as filling level sensors and are installed in both the product float and the water float. The magnetic fields of the float magnets axially magnetise the wire in this area. Due to the overlapping of the two magnetic fields, a torsion pulse, which runs in both directions through the wire from the float position, is created in the area of the float magnets. One torsion pulse runs directly to the probe head, the other torsion pulse is reflected at the lower end of the probe tube. The time between the current pulse being transmitted and the two torsion pulses arriving at the probe head is measured and the float position calculated. The position of the water float is calculated by measuring a second pulse.



4 ELECTRICAL CHARACTERISTICS

4.1.1 DELPHI RDT

Radiofrequency version connection with self-powered

1. · Power supply through intrinsically safe lithium battery 3.6Vdc, model SAFT LS33600 or EVE ER34615.
2. Battery life up to 3 years.(standard setting)
3. Consumption in transmission mode functioning <70 mA.
4. · Consumption in sleep mode < 200 uA.
5. Frequency transmission 169Mhz
6. ..Transmission power up to 200mW
7. Proprietary serial data protocol
8. The serial number is unique and corresponds to the probe address for the consequent configuration into the electronics control.

4.1.2 DELPHI 485(RS 485 serial port for multipoint connection)

1. · Nominal power supply 12 Vdc (30Vmax) through an intrinsically safe barrier.
2. · Consumption in normal functioning <15 mA @ 12 Vdc
3. · Connection cable supplied by ALISONIC: FR2OR 300V- 4x0.25mm² CEI EN 50363 - ENI 00.181.00
4. · Maximum transmission distance: up to 2 Km based on standard of RS485 interface.
5. T= - 40°C + 80°C
6. Proprietary serial data protocol
7. The serial number is unique and corresponds to the probe address for the consequent configuration into the electronics control
8. **this probe needs intrinsically safe barrier to be connected to the system**

Ui = 30V

Ii = 100mA

Ci = negligible

Li = negligible



4.1.3 DELPHI 485 ExD (RS 485 serial port for multipoint connection)

1. · Nominal power supply 12 Vdc (30Vmax) through an intrinsically safe barrier.
2. · Consumption in normal functioning <15 mA @ 12 Vdc
3. · Connection cable supplied by ALISONIC: FR2OR 300V- 4x0.25mm² CEI EN 50363 - ENI 00.181.00
4. · Maximum transmission distance: up to 2 Km based on standard of RS485 interface.
5. T= - 40°C + 80°C
6. Proprietary serial data protocol
7. The serial number is unique and corresponds to the probe address for the consequent configuration into the electronics control
8. **this probe can be connected directly to the system WITHOUT intrinsically safe barrier**

Ui = 30V

Ii = 100mA

Ci = negligible

Li = negligible

4.1.4 DELPHI LPM (RS 485 serial port for multipoint connection)

1. · Nominal power supply 12 Vdc (30Vmax) through an intrinsically safe barrier.
2. · Consumption in normal functioning <25 mA @ 12 Vdc(25mA LPM)
3. · Connection cable supplied by ALISONIC: FR2OR 300V- 4x0.25mm²
CEI EN 50363 - ENI 00.181.00
4. · Maximum transmission distance: up to 2 Km based on standard of RS485 interface.
5. T= - 40°C + 80°C
6. Proprietary serial data protocol
7. The serial number is unique and corresponds to the probe address for the consequent configuration into the electronics control

Ui = 30V

Ii = 100mA

Ci = negligible

Li = negligible

4.1.5 DELPHI 420

Wired connection version and analogue output of standard 4-20mA current

1. · Power supply 30 Vdc through an intrinsically safe barrier.
2. · Signal 4 to 20 mA over 2 wires only 1 product float



4.1.6 DELPHI 010

Wired connection version and analogue output of standard 0-10Vdc

1. · Power supply 30 Vdc through an intrinsically safe barrier.
2. · Signal 10Vdc over 2 wires only 1 product float.



4.1.7 COMMON CHARACTERISTICS FOR ALL TYPES

1. · Microprocessor based electronic
2. · Support remote diagnostic
3. · Possibility to configure remotely the functional parameters
 - In case of maintenance the internal part of the sensor (wave guide) can be removed without degas the tank, especially useful for LPG applications where the tanks are in pressure.
4. · Tank connection: Not needed if probe is inserted into a riser with internal diameter 2"
 - 2" sliding connection as standard.
 - Other type of optional connections under request (nipped fixed, flanged).
5. · Stainless steel case, IP68.
6. · Probe shaft Stainless Steel AISI 304 / 316
7. · Measurement range: from 500 mm. to 15.000 mm.
8. · Data transmitted:
 - Product level in 0.01 mm
 - Water level in 0.01 mm
 - Medium temperature detected through digital temperature sensor placed along the probe shaft (max 5)
9. · Measurement accuracy: +/- 0,25 mm.
10. · Measurement resolution: +/- 0,01 mm.
11. · Temperature accuracy: +/- 0,2°C (up to 5 temperature sensor option is available)



5 PRODUCT MARKING




5.1.1 DELPHI 485, DELPHI TTL, DELPHI 420, DELPHI 010, DELPHI LPM

 ALISONIC S.r.l. Via Ercolano 3 Monza - Italy	S.N. XXXXXX	Sonda magnetostrittiva <i>Magnetostrictive Probe</i> DELPHI 485	
		YEAR 2018	
		II 1/1G Exia/h IIB T6 Ga/Ga IP68 FISCO field device	
 0035	AR 18 ATEX 023	T=-40 +80°C	
		Ui = 30V Li=Negligible Ii = 100mA Ci=Negligible	

5.1.2 DELPHI 485 ExD

75			
20	 ALISONIC S.r.l. Via Ercolano 3 Monza - Italy	S.N. 123456	sonda magnetostrittiva magnetostrictive probe DELPHI Exd RS485
	 II 1/2G Ex db IIB T6 Ga/Gb IP68	T=-40 +70°C	FISCO FILED DEVICE
	 0035	AR 18 ATEX xxx	YEAR 2018 Vmax = 30Vdc Ii = 10mA

5.1.3 DELPHI RDT

 ALISONIC S.r.l. Via Ercolano 3 Monza - Italy		S.N. XXXXXX	Sonda magnetostrittiva <i>Magnetostrictive Probe</i> DELPHI RDT
 II 1/1G Exia/h IIB T6 Ga/Ga IP68			YEAR 2018
 0035	AR 18 ATEX 023	T=-40 +80°C	Lithium battery inside 3.6Vdc Size D



6 INSTALLATION GUIDE



IMPORTANT: For the installation and maintenance of the sensors, the requirements of the Explosion Protection Regulations, the Industrial Health and Safety Regulations and the Equipment Safety Regulations as well as generally accepted rules of engineering and this manual must be observed.



IMPORTANT: All applicable local safety and accident prevention regulations not included in this manual must also be observed.



ATTENTION: During the assembly, it is important to make sure that the probe tube is not bent. Protect the floats from knocks at all times. No moisture may enter the M12 connector.

Before installation move the supplied floats to the bottom end of the probe tube, otherwise they will slip down suddenly when you erect the sensors and could be damaged when striking the stop cap on bottom



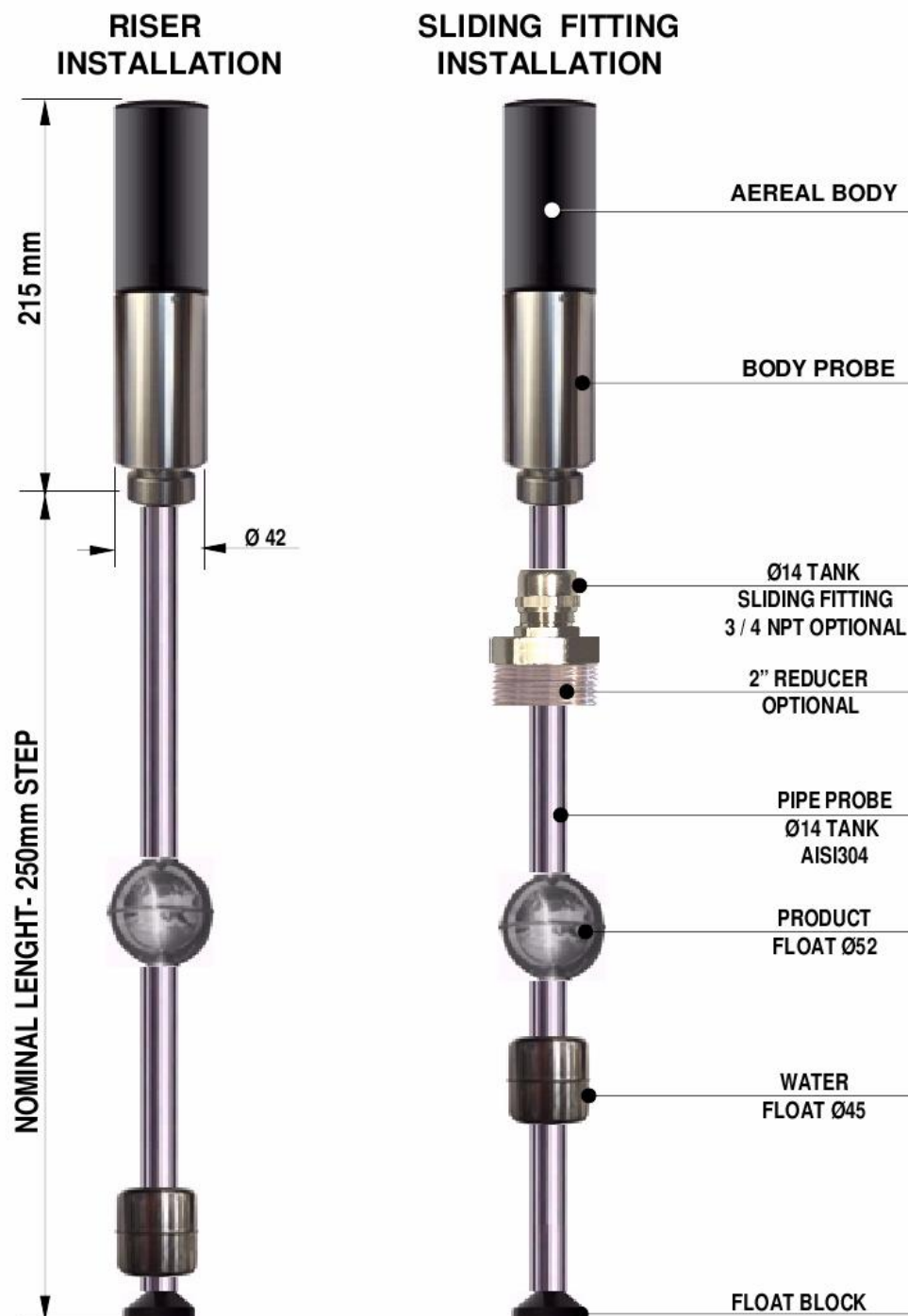
ATTENTION: During the installation, following data of the Delphi sensors, tanks, and products are to be noted for configuring the Sybilla Console:

- Device numbers of the sensors,
- Tank assignments of the sensors,
- Tank assignments of the products,
- Terminal connection of the sensors in wired setting features
- Sensor distances from the central vertical axes of the tanks

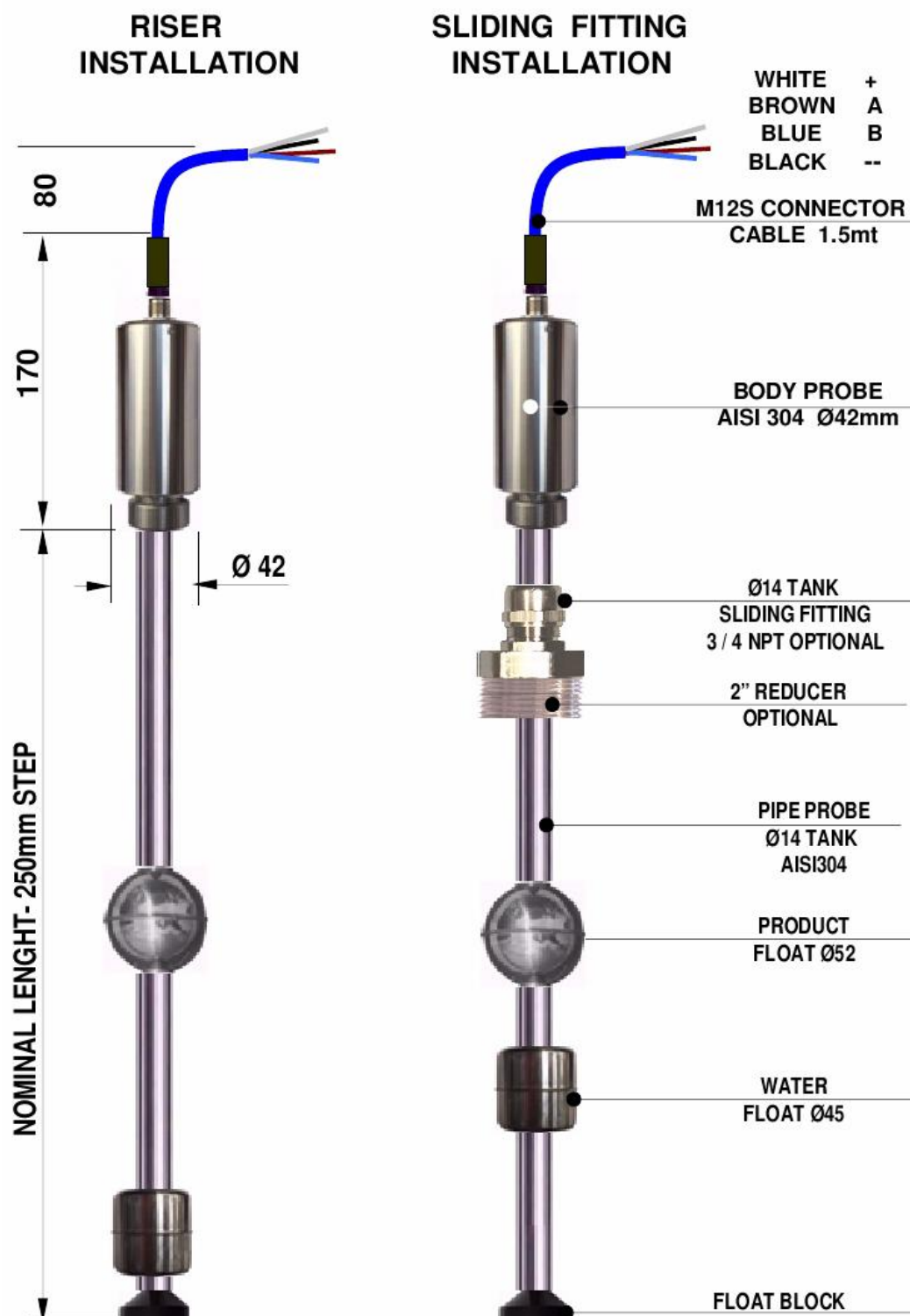


7 PROBE DIMENSIONS

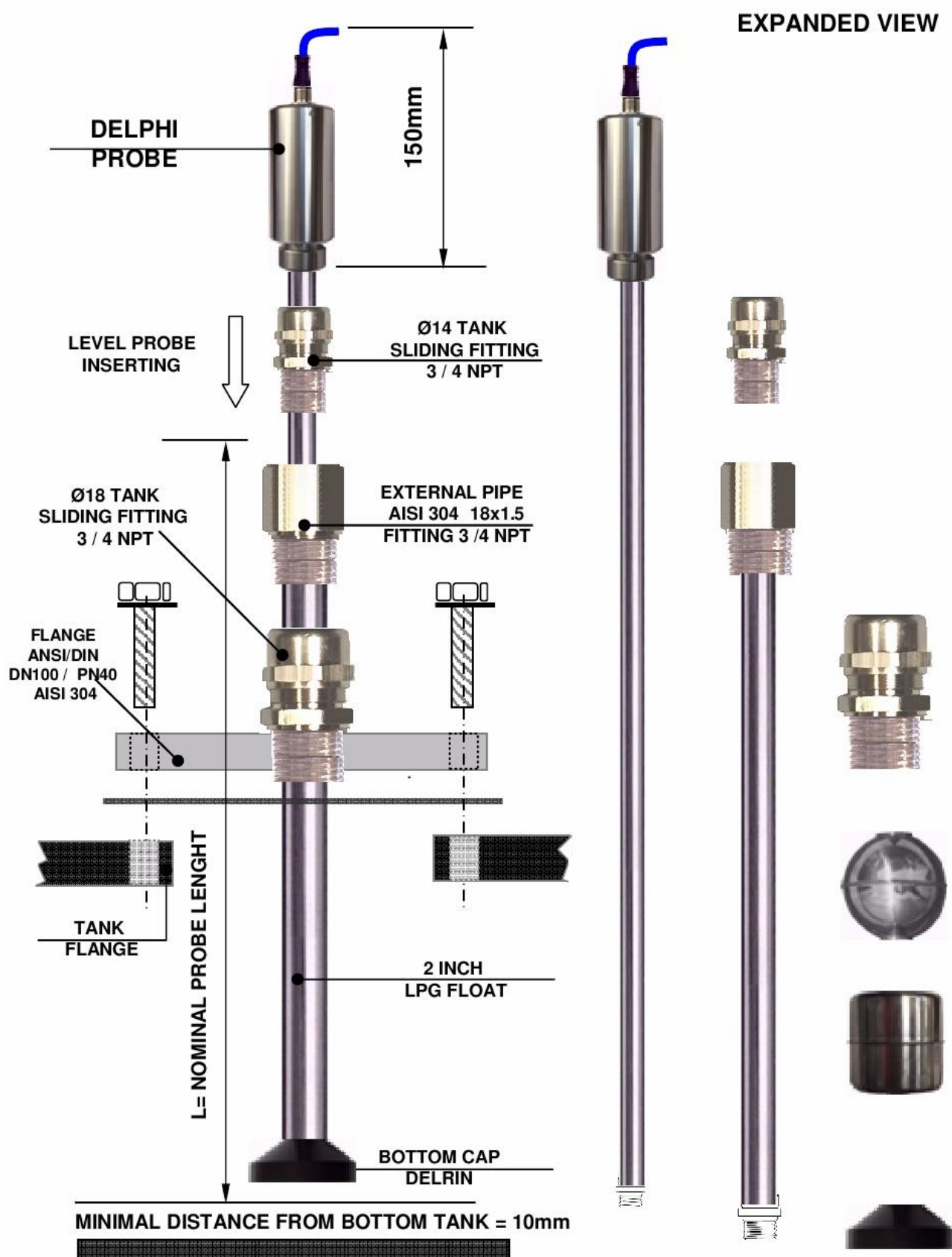
7.1.1 DELPHI RDT (wireless)



7.1.2 DELPHI 485/420/010/TTL (RS485)

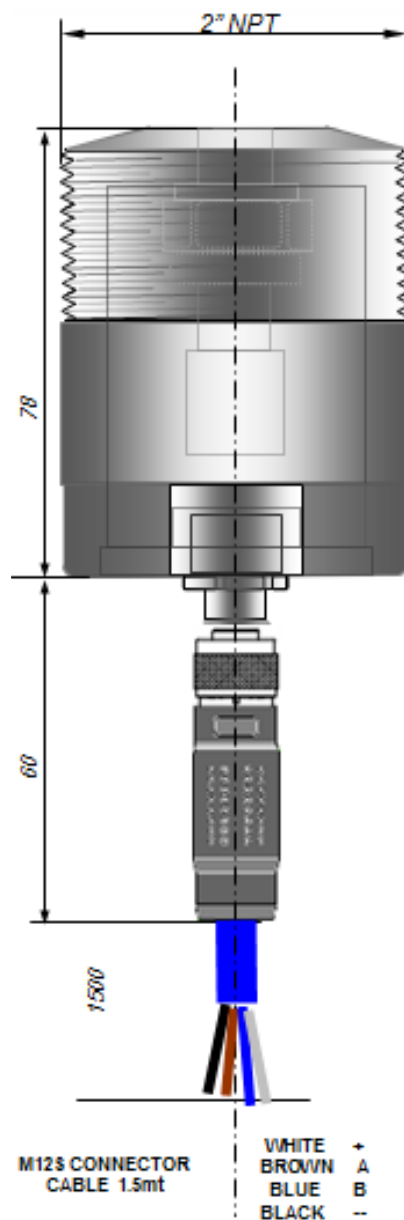


7.1.3 DELPHI 485PP (jacket pipe)



7.1.4 DELPHI LPM

LINE PRESSURE MONITOR



8 ON TANK INSTALLATION

8.1.1 GENERAL RULES

The DELPHI level probe is delivered in cardboard packaging per station or individually or up to a maximum of n.5 probes.

When you receive the device need to checking the integrity of the packaging.

In the removal phase from de original packaging please pay attention not to fold the steel pipe, the probe is an electronic tool!

The DELPHI sensor must be installed vertically inside the tanks as close as possible to the central vertical axis. Afterwards, it will be necessary to configure the respective positions of the sensors.



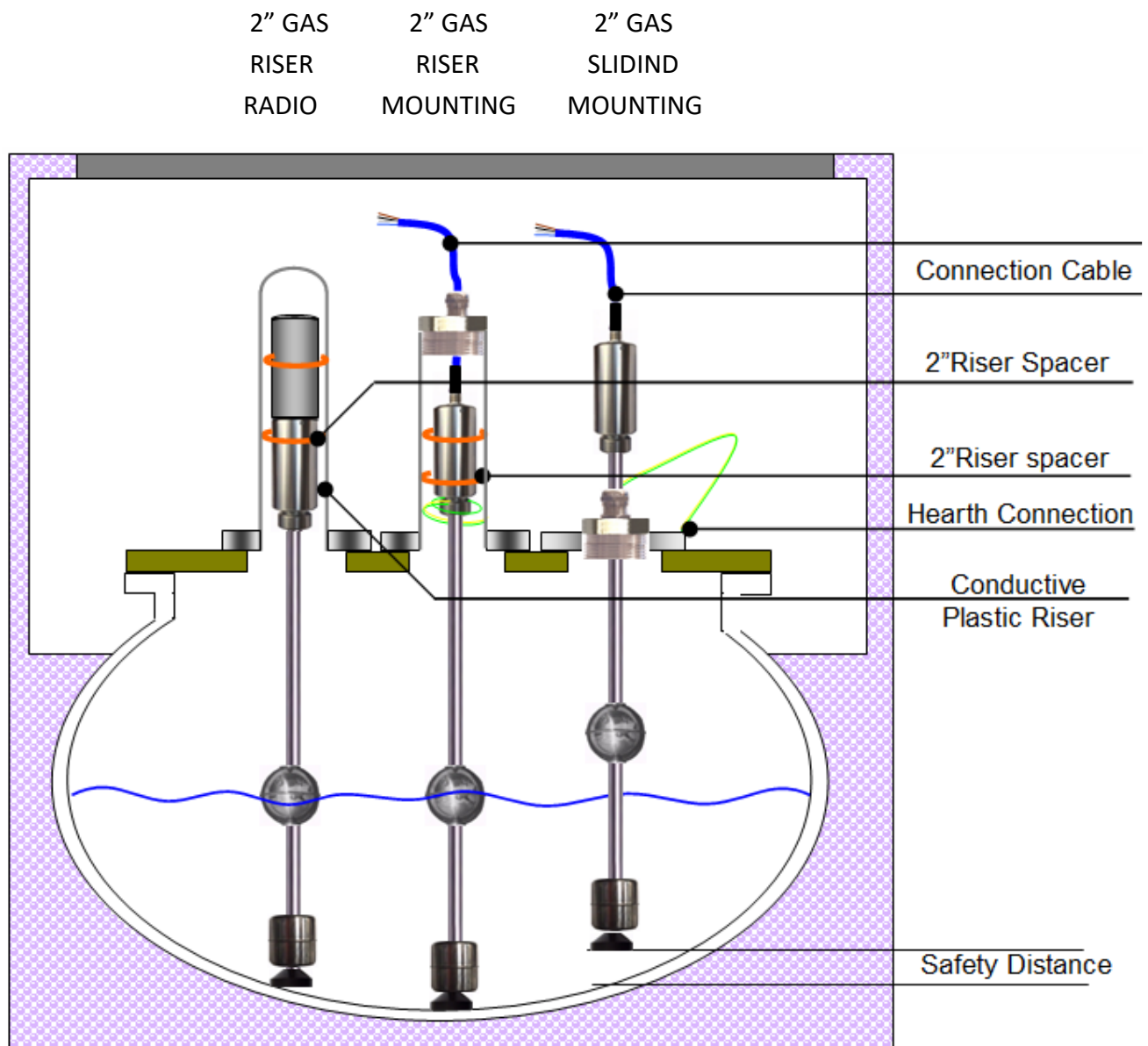
IMPORTANT: in case of hydrocarbon vapour please use anti-sparks tools.

REMEMBER

- 1 The installation must be realized by specialized people
- 2 Respect the safety rules
- 3 Read carefully the instructions provided into this manual
- 4 The manufacturer is not responsible for any damage and or supplementary cost due to the missing respect of the supplied instructions



ON TANK MOUNTING EXAMPLE



8.1.2 SAFETY DISTANCE

To install the probe with a 2-inch GAS sliding fitting press the probe tube gently to the bottom of the tank and then lift it again to lock at an appropriate clearance distance, at least 10 mm for tanks with a diameter up to 2900mm. To fix the probe tube tighten the locking screw.

If it is not considering a clearance distance to the bottom of the tank the probe pipe could be bent, damaging the functional process



8.1.3 INSTALLATION RULES

- 1 The DELPHI level probe can supplied with a 2" male Gas sliding fitting or without a fitting in case of installation inside a safety riser
- 2 The 2" male Gas sliding connector and the floats mounted on it guarantee an easy passage inside 2" pipe connection used like riser. This simplifies the insertion of the probe inside the tank and therefore it is not necessary to disassemble any element.
- 3 The probe pipe inside the tank must not be bent or exposed to impact stresses.
The probe must be mounted keeping the head as high as possible to avoid immersion.
- 4 If a ground connection is required for the dispersion of electrostatic charges, this will be achieved by means of a metal band applied to the sensor pipe and an appropriate conductor connected to the equipotential metallic structure
- 5 The probe is supplied with a 1,5 meters of cable connected to M12 or SM12 connector at the probe head, this cable must be connected to the back bone using a junction box.
- 6 It is recommended to use a junction box IP68 for intrinsically safety connection.
- 7 In a typical RS485 serial connection all the probes are connected in parallel. Normally all the bus connections must be cascading to grant the lower transmission distance. In case of service stations distances are extremely reduced, branches no longer than 50 meters, in this case it is allowed to have a star type wiring.
- 8 The 4-wire connection cable has always red (or black), brown, blue and white colours.
- 9 Connect to the terminal box the cables with same colour: white-white, red-red, etc. At the console the shield from the cables have al to be connected in parallel as a one wire and connected to the earth into the office using a separated ground wire which must not be shared with the motors or power systems earth connections.
- 10 To connection and programming the console please refer to the manual provided together with every device.
- 11 The installation must be done in compliance with CEI 64-8 and EN 60079-14 standards.



8.1.4 *ELECTRIC CONNECTION TO CONSOLE*

After the junction with the probe cable the connection cable between the sensor and the Console must have the following properties:

- Four unshielded wire cable, oil resistant and hydrocarbon resistant.
- Cable conductor section (4 x 0.5mm² up to 100m or 4 x 1mm² up to 200m)
- Cable colour blue or printed blue (for intrinsically safe circuits)
- Maximum external diameter from 6 to 10mm for reliable sealing by the cable gland

The equipotential bonding must be carried out by the installer in accordance with the nationally applicable installation regulations. For the purpose the equipotential connection at the probe pipe can be realized through a metal tie.

8.1.5 *VOLTAGE SURGE PROTECTION*

To protect the level sensor from the voltage surges we recommend that you install a voltage surge protector directly upstream of the probe in the manhole.

Special EN regulations including EN 60079-14 and EN 60079-25 as well as local installation regulations must be observed.



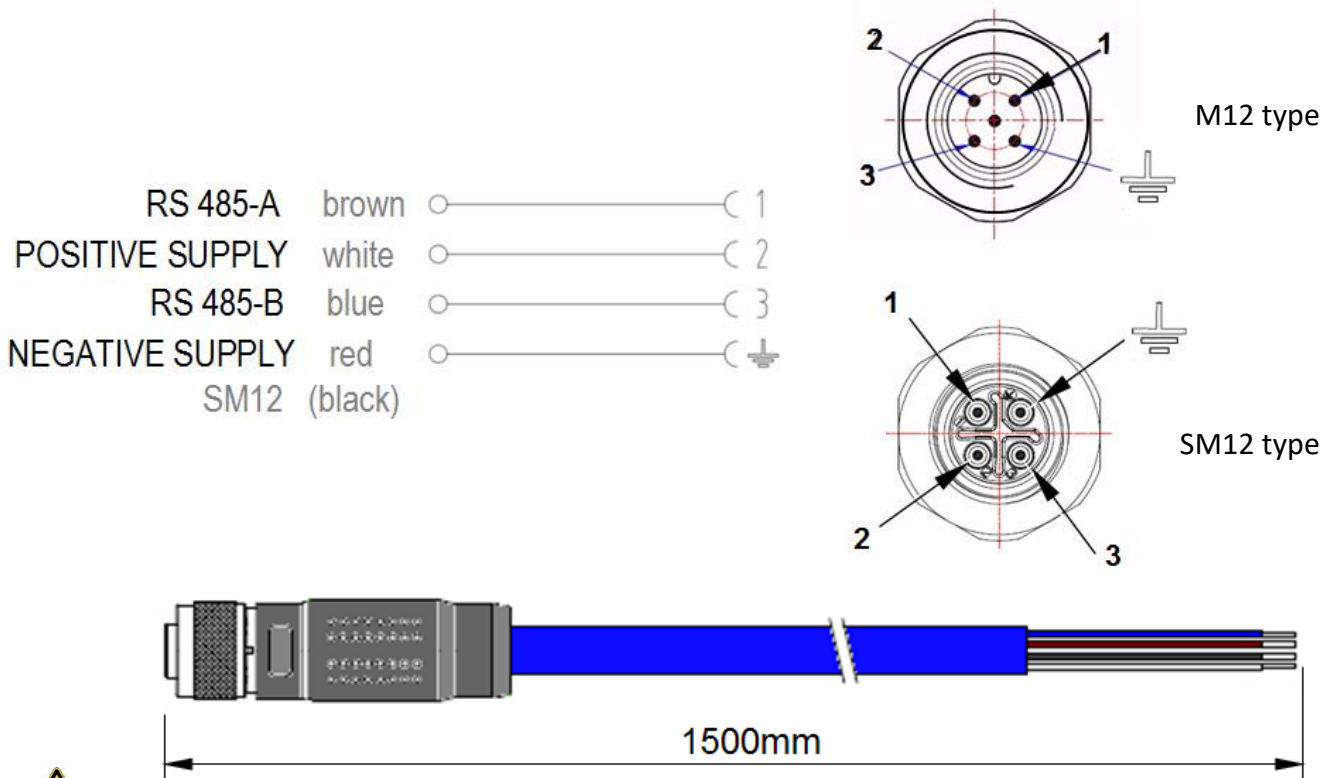
9 WIRED CONNECTIONS

Always ensure that the power has been disconnected before you wire up the Delphi sensors to the Sibylla Console. For wiring, proceed as follows:

- If not already connected, plug the M12/SM12 flying connector supplied by Alisonic to the connector of the probe head.

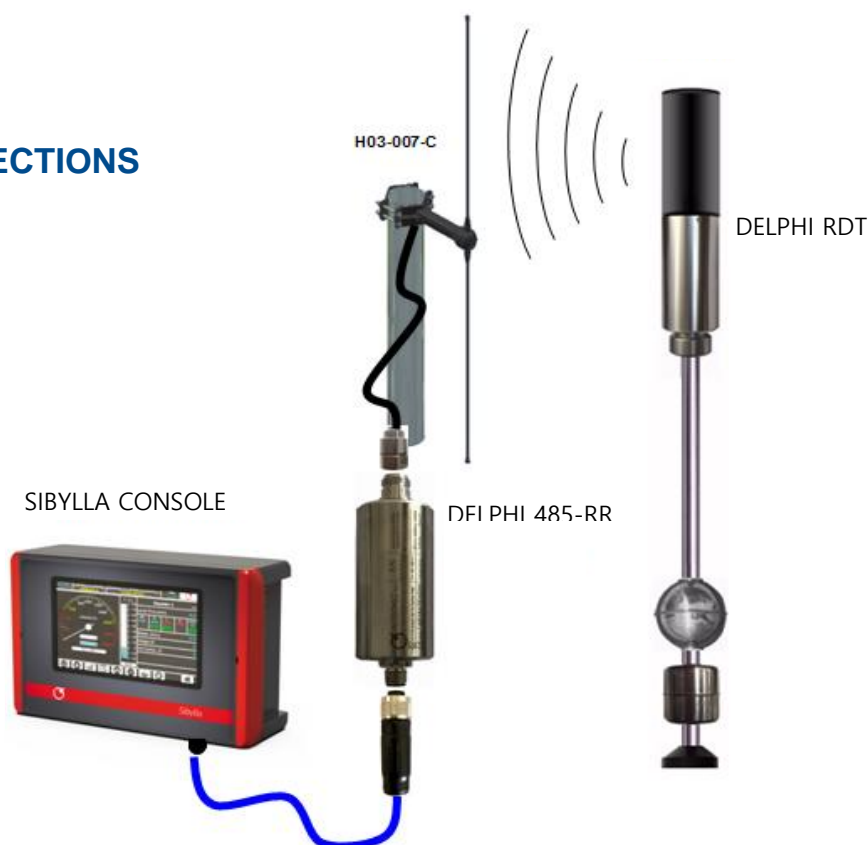
Before to tighten the connector nut look for the correct coupling position as the connectors are provided with a polarization key, do not use excessive tightening torque should be between 100 ... 150 Ncm.

- Connect the probe cable to the connection cable using a junction box with pin assignment as follows:



IMPORTANT: There are two different probe connector M12 type and SM12. The two typology are not compatible make attention at the different wires color.

10 WIRELESS CONNECTIONS



11 WIRELESS SETTING FEATURES AND OPERATIONS

The DELPHI RDT radio probe is managed by the console through the receiver DELPHI 485RR, which is connected to the control unit via an RS485 connection. The receiver is able to manage up to a network of 32 probes

Immediately to its activation by reconnection of the battery the probe transmits the information every 10 seconds for a duration of 10 minutes, after this phase necessary for the installation the probe is always in sleep mode and each minute it wakes up to measure the levels. If the measured measurements of the product or water are different by ± 1 mm from the last measured level, the probe transmits the measurement via radio, otherwise it goes back to sleep mode.

in any case, after 10 minutes of non-transmission, the probe transmits the data even if they are unchanged to avoid system timeout. This must be considered as a cycle time for the receiver. The receiver must activate a non-rx alarm after 1 hour of no transmission.



IMPORTANT: The device is supplied with the battery inserted, if it is necessary to store the probe for more than 3 months it is advisable to remove the battery

The life time battery is between 3 to 5 years after the first turn on and depends directly on the tank usage cycle and settings.



IMPORTANT

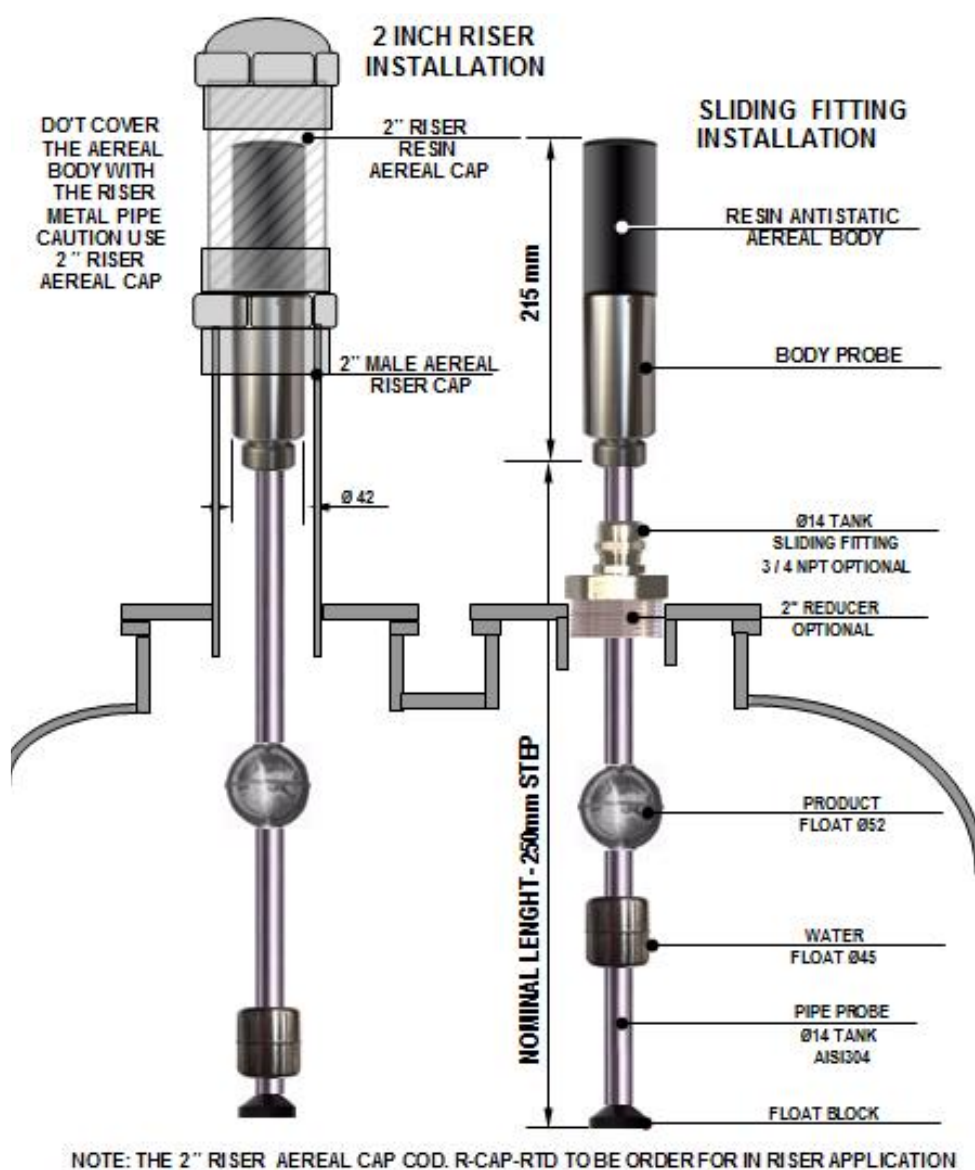
The battery can only be changed in the field by qualified personnel, do not operate in the presence of flammable liquids or explosive atmospheres, following the manual instructions

Only intrinsically safe batteries can be used:

SAFT LS 33600 or equivalent

EVE 3,6 V 19 Ah D dimensione ER34615 farnel 1973584

12 WIRELESS INSTALLATION



13 WIRELESS RECEIVER



Radio Receiver **DELPHI 485-RR**

- Nominal power supply 12 Vdc (30Vmax)
- Consumption in normal functioning <15 mA @ 12 Vdc
- Radio Frequency 169Mhz
- Proprietary serial data protocol
- Sensivity 110dBm
- Connection cable supplied by ALISONIC: FR2OR 300V-4x0.25mm² CEI EN 50363 - ENI 00.181.00
- T= - 40°C + 80°C



14 MAINTENANCE

The sensor and associated floats are maintenance free, if they are operated according to the manufacturer's specifications and not used to other applications.

15 DEVICE RETURN

Before returning any ALISONIC equipment request the (RMA) Return Material Authorization to your account manager of ALISONIC for have the instructions on how to return goods.



16 ATEX CERTIFICATION



your value certified

albarubens



Notified Body n. 2632
Organismo Notificato n. 2632

1

[1]

EU-TYPE EXAMINATION CERTIFICATE

2

CERTIFICATO DI ESAME UE DEL TIPO

[2] **ELECTRICAL EQUIPMENT** Intended for use in Potentially Explosive Atmospheres - Directive 2014/34/EU-ATEX Annex III/Module B
APPARECCHIO ELETTRICO Inteso per l'uso in Atmosfera Potenzialmente Esplosiva - Direttiva 2014/34/EU-ATEX Annex III/Module B

[3] **EU-TYPE EXAMINATION CERTIFICATE n.:**
CERTIFICATO DI ESAME UE DEL TIPO n.:

AR18ATEX023

[4] **ELECTRICAL EQUIPMENT:**
APPARECCHIO ELETTRICO:

Magnetostrictive level gauge - DELPHI xxx
Sonda di livello magnetostrittiva - DELPHI xxx

[5] **MANUFACTURER:**
COSTRUTTORE:

ALISONIC srl

[6] **ADDRESS:**
INDIRIZZO:

via Ercolano, 3
20900 Monza (MB) - ITALY

[7] **This ELECTRICAL EQUIPMENT and any variation is specified in the schedule to this certificate and the documents therein referred to.**
Questo APPARECCHIO ELETTRICO e le varianti sono descritte nell'allegato al presente certificato e nei documenti ivi richiamati.

[8] **Albarubens srl, Notified Body No. 2632, in accordance with Article 17 of the Directive 2014/34/EU-ATEX of the European Parliament and of the Council, dated 26 February 2014, certifies that this ELECTRICAL EQUIPMENT has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres given in Annex II to the Directive.**

The examination and test results are recorded in confidential report MOD 7.4.1 - ID: 2802

Albarubens srl, Organismo Notificato n. 2632, in conformità all'art. 17 della Direttiva 2014/34/UE-ATEX del Parlamento Europeo e del Consiglio, datata 26 Febbraio 2014, certifica che questo APPARECCHIO ELETTRICO è conforme ai Requisiti Essenziali di Sicurezza e Salute per il progetto e la fabbricazione di prodotti destinati ad essere utilizzati in atmosfere potenzialmente esplosive, definiti nell'Allegato II della Direttiva. I risultati dell'esame e dei test sono descritti nel rapporto confidenziale MOD 7.4.1 - ID: 2802

[9] **Compliance with the Essential Health and Safety Requirements has been assured by compliance with the technical standards:**
La conformità ai Requisiti Essenziali di Sicurezza e Salute è assicurata dalla conformità alle norme tecniche:

EN 60079-0:2012/A11:2013 - EN 60079-11:2012 - EN ISO 80079-36:2016

except in respect of those requirements listed at item 18 of the Schedule.
tranne nel caso dei requisiti elencati al punto 18 dell'Allegato.

[10] **If the symbol 'X' is placed after the certificate number, it indicates that the ELECTRICAL EQUIPMENT is subject to the Specific Conditions of Use specified in the next chapter 17.**

Il simbolo 'X', se presente dopo il numero di certificato, indica che questo APPARECCHIO ELETTRICO è soggetto a Condizioni Speciali per l'Uso, specificate nel seguente punto 17.

[11] **This EU-TYPE EXAMINATION CERTIFICATE relates only to the design and construction of the specified ELECTRICAL EQUIPMENT. Further requirements of the Directive apply to the manufacturing process and supply of product. These are not covered by this certificate.**

Questo CERTIFICATO DI ESAME UE DEL TIPO è relativo soltanto al progetto ed alla costruzione di questo APPARECCHIO ELETTRICO. Ulteriori requisiti di questa Direttiva si applicano al processo di fabbricazione e fornitura di questo prodotto. Questi requisiti non sono oggetto del presente certificato.

[12] **The marking of the ELECTRICAL EQUIPMENT shall include the following:**

Questo APPARECCHIO ELETTRICO deve riportare i seguenti contrassegni:



II 1/1G Exia/h IIB T6 Ga/Ga IP68 FISCO FIELD DEVICE

Tamb = -40 +80 °C

Saronno (Italy), 20 Mar 2018

3



PRD N° 257 B

Membro degli Accordi di Mutuo Riconoscimento EA, IAF e ILAC
Signatory of EA, IAF and ILAC Mutual Recognition Agreements



Digital signature

Firmato digitalmente da
Giuseppe Terzaghi
Data: 2018.03.20
16:30:34 +01'00'

ALBARUBENS srl

The legal representative: ing. Giuseppe Terzaghi

Verify the authenticity of this certificate on the website: <https://www.albarubens.it/authentication.php> (Password: MLW18V)

4

page 1/3

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Notified Body n. 2632
Organismo Notificato n. 2632

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[13]

SCHEDULE

ALLEGATO

5

[14] **EU-TYPE EXAMINATION CERTIFICATE n.:**

CERTIFICATO DI ESAME UE DEL TIPO n.:

AR18ATEX023[15] **DESCRIPTION:**

DESCRIZIONE:

INTERFACE VERSIONS:

DELPHI 485 - RS485 serial interface
DELPHI TTL - TTL level serial interface
DELPHI 420 - 4-20mA current loop
DELPHI 010 - 0-10V analog output
DELPHI LPM - pressure gauge
DELPHI RDT - wireless level meter

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CHARACTERISTICS:

CARATTERISTICHE:

Nominal power supply: 9-30V, 15mA

WIRED

Power supply

Ui=30V

Ii=100mA

Ci=negligible (see schematic diagram POW-485, D8: external short circuit of internal capacitor is not possible)

Li=negligible (no series connected inductor)

Auxiliary supply

Ui=4V (OK for lithium battery without barrier)

Ii=600mA (4V from battery / 6.8 ohm of PTC)

Ci=10microF (see C35)

Li= negligible (no series connected inductor)

RS485

U=6.2V (see D1..D4, 5V1/5V6 with 10% of tolerance)

I=120mA (see PTC2/PTC3)

C=negligible

L=negligible

Note: the choice of two different instead three of same value is better, in order to reduce the common mode failures.

4-20mA current-loop (alternative to RS485, same pins)

Ui=30V

Ii=100mA

Ci=negligible

Li=negligible

ROUTINE TESTS:

PROVE DI ROUTINE:

VISUAL INSPECTION OF CONFORMITY TO TECHNICAL FILE

DIELECTRIC STRENGTH TEST (500V)

Ispezione visiva della conformità al fascicolo tecnico

Prova di rigidità dielettrica (500V)

WARNING LABEL:

AVVERTENZE DI TARGA:

Nothing special / Niente di particolare

[16] **This document is based on confidential Atex Assessment Report ref. MOD 7.4.1 - ID: 2802**

Questo documento è basato sul Rapporto di Ispezione confidenziale ref. MOD 7.4.1 - ID: 2802

[17] **Special conditions for safe use depends on correct following of manufacturer's manual. Further modification are not allowed.**

L'efficacia e l'affidabilità di questi apparecchi sono garantite seguendo le istruzioni del manuale d'uso. Non sono ammesse modifiche non autorizzate rispetto al fascicolo tecnico agli atti.

SPECIFIC CONDITIONS FOR SAFE USE: None / Nessuna

CONDIZIONI SPECIALI PER L'UTILIZZO SICURO:





your value certified

albarubens



Notified Body n. 2632
Organismo Notificato n. 2632

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[18] **ESSENTIAL HEALTH AND SAFETY REQUIREMENTS:**

REQUISITI ESSENZIALI DI SICUREZZA E SALUTE:

This Certificate declare compliance with the Essential Health and Safety Requirements (EHSRs) provided by the Directive, because the equipment fully satisfies the standards listed at item [9].

Questo Certificato dichiara la conformità ai Requisiti Essenziali di Sicurezza e Salute (EHSRs) previsti, in quanto l'apparecchio soddisfa le norme elencate al punto [9].

[19] **The descriptive documents quoted hereafter constitute the technical documentation of the product covered by this certificate. These documents are confidential and they are available only to the authorities. Copy of all documents is stored in Albarubens archive.**

I documenti descrittivi elencati di seguito costituiscono la documentazione tecnica del prodotto oggetto di questo certificato. Questi documenti sono confidenziali e sono a disposizione delle sole autorità competenti. Copia degli stessi è conservata presso l'archivio di Albarubens.

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AR18TEST005.pdf

ALISONIC Probe User Manual REV 711b.pdf
AR18TEST054.pdf

[20] **INSPECTOR IN CHARGE OF THE ASSESSMENT:** Ing. Giuseppe Terzaghi

ISPETTORE INCARICATO DELLE VERIFICHE:

FINAL REVIEWER/CERTIFICATE DECISOR:

Dott.ssa Nicoletta De Luca

REVISORE FINALE/DELIBERANTE CERTIFICAZIONE:

End of document, signature on the cover

EXPLANATIONS:

SPIEGAZIONI:

- 1 Albarubens issued this certificate as a Notified Body recognized by the European Commission on the NANDO system.
Albarubens ha emesso questo certificato in quanto Organismo Notificato riconosciuto dalla Commissione Europea sul sistema NANDO.
- 2 This certificate is mandatory for placing these devices on the European Union market.
Questo certificato è obbligatorio per l'immissione di questi apparecchi sul mercato dell'Unione Europea.
- 3 The verification activity at the basis of this certificate was carried out under ISO/IEC/EN17065 accreditation.
L'attività di verifica alla base di questo certificato è stata svolta in regime di accreditamento ISO/IEC/EN17065.
- 4 The authenticity of this certificate is verifiable online, by comparison between the copy in your possession and that downloaded from our secure website.
L'autenticità di questo certificato è verificabile on-line, per confronto tra la copia in vostro possesso e quella scaricata dal nostro sito web protetto.
- 5 The schedule is an integral part of the certificate, which can only be transmitted or reproduced in its entirety.
L'allegato è parte integrante del certificato, che può essere trasmesso o riprodotto solo nella sua interezza.
- 6 Any performance parameter, other than the ones provided by the standards listed in point [9], is descriptive only and not covered by this certificate.
I parametri prestazionali eventualmente riportati, diversi da quelli previsti dalle norme elencate al punto [9], hanno funzione solo descrittiva e non sono coperti da questo certificato.



17 DECLARATION OF CONFORMITY EU

SEE ATTACHED DOCUMENT, COPY NOT COMPLIANCE

		ALISONIC Srl		Via Ercolano 3 20900 Monza (MB) Tel. 0392280809 Fax. 0392280805	
DECLARATION OF CONFORMITY DICHIARAZIONE DI CONFORMITA'				 0035	
Manufacturer / Costruttore		ALISONIC SRL			
Address / Indirizzo		Via ERCOLANO 3 - 20900 MONZA (MB) ITALY			
Customer / Cliente		NOME CLIENTE _____			
Order ref. / Rif. ordine		N.ORDINE CLIENTE		Date / data __/__/__	
<p>In agreement with the indicated above, ALISONIC srl certifies the following materials <i>In accordo con quanto sopra indicato, ALISONIC srl certifica i seguenti materiali</i> This declaration of conformity is issued under the sole responsibility of the manufacturer <i>Questa dichiarazione di conformità è rilasciata sotto la sola responsabilità del produttore.</i></p>					
Product description Descrizione prodotto		Magnetostrictive level probe : Mod. DELPHI <input type="checkbox"/> 485 <input type="checkbox"/> RTD <input type="checkbox"/> TTL <input type="checkbox"/> 420 <input type="checkbox"/> 010 <input type="checkbox"/> LPM			
Serial number / Numero di serie		_____			
Ex Marking / Ex. Marking		 II 1/G Exia/h IIB T6 Ga/Ga IP68 (Tamb = -40 +80°C) FISCO FIELD DEVICE			
Notified Body ALBARUBENS srl (N.2632) Notified Body / Certificato emesso da ALBARUBENS, organismo notificato		AR18ATEX023			
<p>The device object of the present one has been produced and controlled according to Your order and the above description, according to the own technical specifications in accordance with the internal production procedures <i>Il dispositivo oggetto della presente è stato prodotto e controllato secondo il Vs. ordine e la descrizione sopra indicata, secondo le specifiche tecniche proprie in accordo con le procedure interne di produzione</i></p>					
<p>The products are in compliance with the provisions of the following directives and technical standards; <i>I prodotti risultano in conformità con quanto previsto dalle seguenti direttive e norme tecniche:</i> EN 60079-0:2012/A11:2013 - EN 60079-11:2012 - EN ISO 80079-36:2016</p>					
<p style="text-align: right;">Signed for and on behalf of: ALISONIC srl</p>					
Place: Monza / Italy		The legal representative Il legale rappresentate			
Date: _____		_____			



18 REVISION

The following table lists the revisions of the document::

N. revisione	Data	Descrizione	Revisione Firmware
01	March 2018	Emission	1.0.0
02			
03			
04			





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