SINCERT
CERMET
UNI EN ISO 9001-2000

LABORATORIO
N. 44

EUROPEAN
COMMISSION D.G. XII
SPRINT SPECIFIC
PROJECTS SPI 072

Dialogic series terminals



model D 440 IS

SOCIETA' COOPERATIVA
BILANCIAI

Model D 440 IS

General characteristics

Main terminal in stainless steel, provided with separate feeder consisting of a special container, that can be placed in a hazard zone up to a maximum distance of 10 m from the main terminal. The terminal incorporates various operation possibilities, making it suitable for all weighing needs in places with explosion risk, from display of weight to complex management of codes and additional data or use with weighbridges also with "double weighing" and calculation of net weight.
The processed data can be transmitted at a distance thanks to the optional serial outputs, with optical fibre connections, thus enabling printing in a safe zone.



For applications in the automation field there are 4 input and output contacts, for management of load and unload set-points, or other programmable functions, such as: remote button for tare, weigh transmission, reset, etc.
For connections to PLC or other control devices the options for analogue output in 4-20 mA current or serial output in optical fibre can be included.
The terminal is equipped with a polyester 18-key alphanumeric keypad with IP65 protection rating, for selecting functions, weighing operations and entering alphanumeric descriptions.
The D 440 IS can be used as a repeater in hazard zones, by placing a terminal provided with safety barrier in a safe zone.*
Three versions are available: standard version with 230 Vac input and special versions with 115 Vac or 24 Vac input.
In the weighing terminal the electronic components are housed in a compact AISI 304 stainless-steel case with IP65 protection rating for wall, post or table mounting, depending on the version chosen. Equipped with EC approval in conformity with Directive 90/384 EEC and ATEX certificate, it can be connected to any type of analogue load cell.

Model D 440 IS

Technical characteristics of terminal D 440 IS

Weighing terminal with intrinsic safety suitable for use in hazard zones with presence of potentially explosive gases (G) or dusts (D).

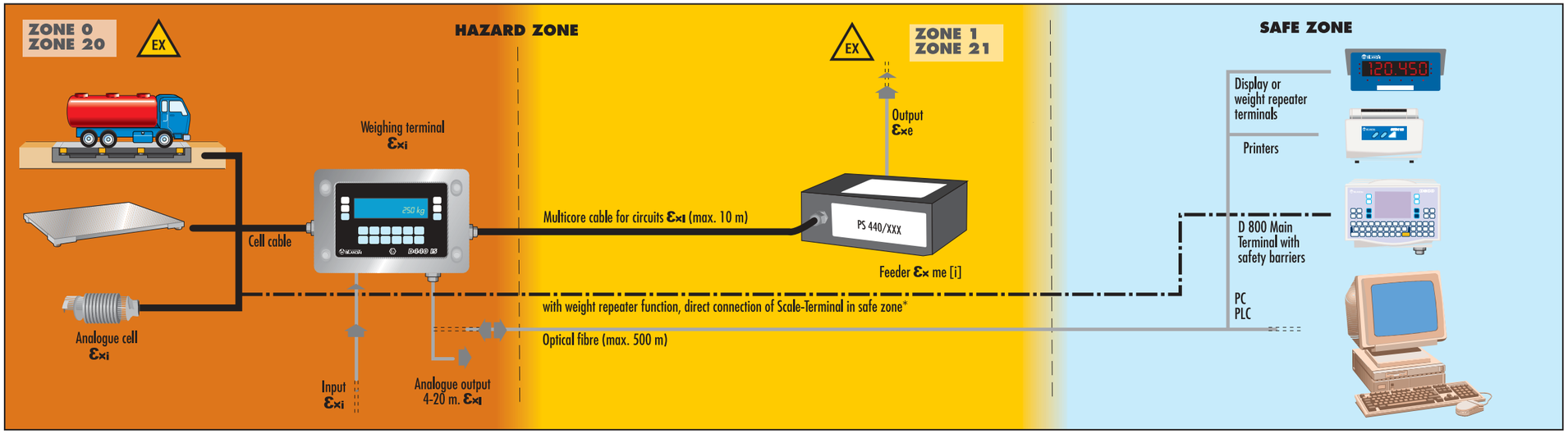
- Protection methods: with intrinsic safety (Exi)
- Operating zones: Zone 0, 1, 2 and Zone 20, 21, 22
- Certificate: CESI 05 ATEX 022
- Marking:
  CESI 05 ATEX 022 II 1GD EEx ia IIC T5 IP65 T=100°C (-20°C ≤ T amb ≤ +55°C)
- Power supply (standard): 230 VAC, 50 / 60 Hz, 20 VA by means of feeder PS440/230 VAC
- Operating temperature (for use in connection with third parties): -10°C / +40°C.

Model D 440 IS

Technical characteristics of feeder PS 440/230 Vac

Weighing terminal with intrinsic safety suitable for use in hazard zones with presence of potentially explosive gases (G) or dusts (D).

- Protection methods: with increased safety (Exe), by means of encapsulation (Exm), with intrinsic safety (Exi)
- Operating zones: Zone 1, Zone 21, Zone 2, Zone 22
- Certificate: CESI 05 ATEX 023
- Marking:
  CESI 05 ATEX 023 II 2 (1)GD EEx e m [ia] IIC T5 IP66 T=100°C (-20°C ≤ T amb ≤ +40°C)
  CESI 05 ATEX 023 II 2 (1)GD EEx e m [ia] IIC T4 IP66 T=135°C (-20°C ≤ T amb ≤ +55°C)



- Operating temperature (in hazard zone): -20°C / +55°C
- Storage temperature: -20°C / +70°C
- Analogue load cell power supply: less than 6 Vdc by means of voltage/current limiter; min. impedance 87 ohm
- Max. cell voltage 23 mV
- 6-wire load cell connection with 'sense'
- Max. external resolution: 4,000 div. OIML (for use in connection with third parties); 10,000 div. (for use not in connection with third parties)
- 8 Hz analogue filter; automatically variable digital filter
- Calibration with the possibility of using a 'linearization' function (max. 5 points)
- 4 optoisolated inputs exi (single common), control for 4 outputs (present on PS440/xxx)
- Clock, permanent calendar
- Backlit graphic display dimensions 135 x 32 mm
- Polyester 18-key alphanumeric keypad
- Protection rating: IP65
- Wall or table mounting terminal fixing kit
- Complies with Directive 94/9/EEC (ATEX)
- Complies with Directive 73/23 EEC (Low Voltage)
- Complies with Directive 89/336/EEC (Electromagnetic Compatibility)
- Electromagnetic immunity in compliance with Standard EN45501
- Immune to irradiated electromagnetic fields of up to 10V/m

- Power supply (standard): 230 VAC, 50 / 60 Hz, 20 VA
- Operating temperature (for use in connection with third parties): -10°C / +40°C
- Operating temperature (in hazard zones): -20°C / +55°C - see marking -
- Storage temperature: -20°C / +70°C
- Protection rating: IP65
- 4 relay outputs (separate "common", command coming from D440IS) Max. 110 Vac 200 mA
- Complies with Directive 94/9/EEC (ATEX)
- Complies with Directive 73/23 EEC (Low Voltage)
- Complies with Directive 89/336/EEC (Electromagnetic Compatibility)
- Electromagnetic immunity in compliance with Standard EN45501
- Immune to irradiated electromagnetic fields of up to 10V/m

Special versions

PS 440 / 115 Vac for 115 Vac network input
- PS 440 / 24 Vac for 24 Vac network input

Model D 440 IS

Functional characteristics (standard version)

- Weight display with variable height digits (16 / 32 mm).
- Language selection for messages (6 languages).
- Weighing system self-diagnostic function.
- Automatic tare' weigh function by means of key, serial channel, or associated Input.
- Predetermined tare' function by means of keypad.
- Reset by means of key, serial channel, or associated Input.
- Weight value transmission and additional data.
- Personalization of more frequently used functions for direct access by means of alphanumeric keypad.
- Sum weighing
- Management of product codes with associated alphanumeric description (max. 20 characters)
- Management of a generic alphanumeric code.
- Management of Multiple Tares.
- Possibility of totalization for a code or preselected function.
- Connection to all printer models supplied by Coop Bilanciai (optical fibre Serial option necessary)
- Weight control function with management of limits associated with product code (max. 500 codes)
- "Manual selection" function with management of up to 15 weight ranges
- "Double weighing" operation

Specific functions are available by request, such the "Extraction function" that provides for loading a container on the scale and after activation of an input (start), the terminal resets the tare and closes an output contact to activate filling of the container until the set value is reached (also possible with 2 speeds).

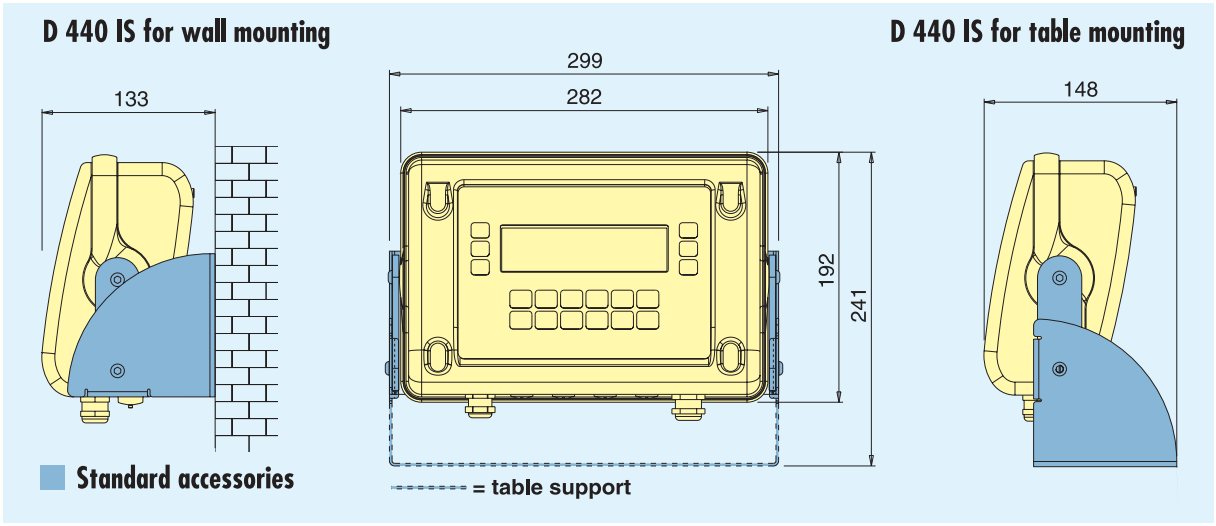


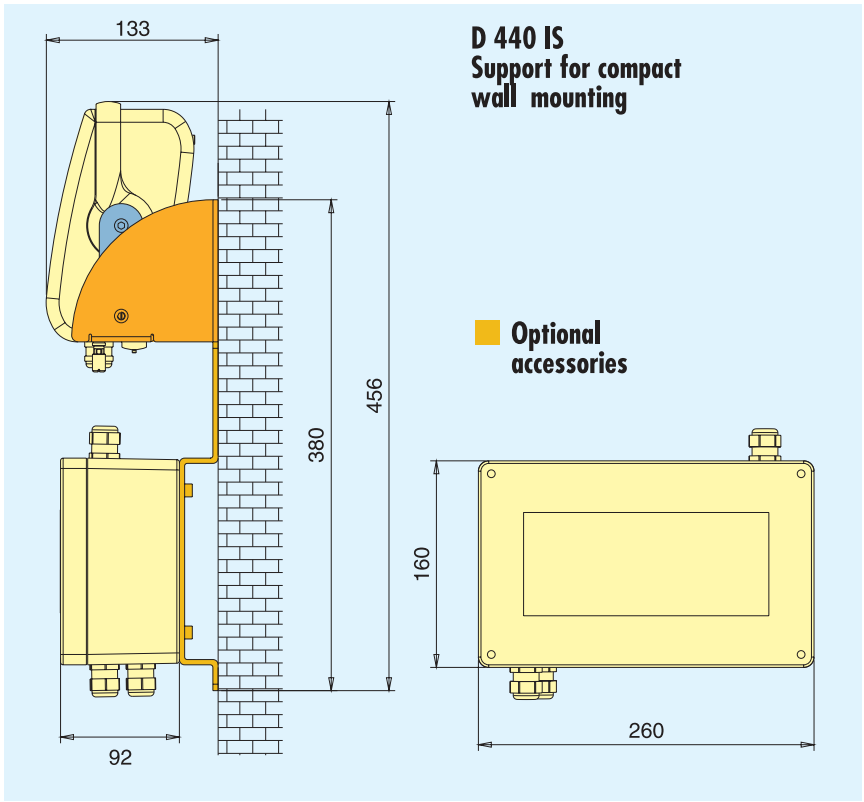
D 440 IS and PS 440 on support for compact wall mounting

Optionals

- MPP permanent weights memory
- Analogue output in current (or else serial output in optical fibre) having the following characteristics: intrinsic safety circuit 4-20mA current internal or external power supply
- Serial output in optical fibre (instead of analogue output) having the following characteristics: 2 bidirectional channels, one of which also suitable for optical ring connection for network of terminals managed by PC; PC interface in safe zone, transmission speed 9600 to 115000 baud (in relation to section attenuation); max. distance with low attenuation fibre: 500 m
- Support for compact wall mounting
- Printer (Bilanciai range) for connection in safe zone via optical fibre

D 440 IS





SOCIETA' COOPERATIVA
BILANCIAI
Weighing instruments and technology

Società Cooperativa Bilanciai Campogalliano
41011 Campogalliano (MO) Italy - Via S. Ferrari, 16
Tel. 059.89.36.11 r.a. - Fax 059.52.70.79
www.coopbilanciai.it - cb@coopbilanciai.it

In line with our aim of continuous product improvement, we reserve the right to make modifications at any time and without prior notice to the products as illustrated in the above photographs.

DOCUMENT CORRELATED WITH CERTIFICATES CESI 05 ATEX 022 AND 023 MODIFICATIONS ARE NOT ALLOWED WITHOUT THE APPROVAL OF THE "PERSON AUTHORIZED"

N 81190063- 0435 netstudio