

B44-LC for load cells



Large format meter with 4 digits and 100mm digit height, for reading up to 50 meters, for load cell signals at industrial applications. Versatile and configurable instrument, provides excitation voltage, 'tare' and 'auto-tare' functions, configurable acquisition speed and noise rejection to 50 and 60Hz. Front keypad for easy access to the configuration menu and connection for remote keypad. Two universal power supply options for AC and DC. Optional relay outputs, transistor, SSR control, analog retransmission and communications for Modbus RTU and RS-485 ASCII protocols. Sturdy metallic housing with full IP65 protection, for panel, wall or hanging mount.

Technical specifications

Reading

Digits	4
Reading	9999 / -1999
Decimal point	configurable
Led color	red or green
Digit height	100mm
Type of digit	7 segment
Angle of vision	120°

Load cells

Type of cells	1 mV/V, 2 mV/V, 3 mV/V and others
Excitation voltage	5Vdc or 10Vdc, configurable (max. 140mA)
Vexc. protection	against shortcircuit
Maximum voltage at terminals	30Vdc
Number of cells*	1 to 8 load cells (powered 5Vdc) 1 to 4 load cells (powered 10Vdc)

**(values calculated for standard 350 Ohms load cells. For cells with different impedance, the number is limited by the 140mA available current)*

Measure

Signal ranges (FS)	5 mV, 10 mV, 15 mV, 20 mV, 30 mV, 100 mV (internal)
Accuracy at 25 °	0.05 % FS
Thermal stability	100 ppm / °
Input impedance	20 MOhms
Acquisitions / second*	15, 50 or 60 acquisition / second (configurable)
<i>*(and refresh for alarms, analog outputs and bus)</i>	
Signal terminals	plug-in screw terminals (pitch 3.81 mm) cable gland output PG9 (max. 8 mm diameter) max. 0.50 mm ²
Wire section	

Outputs and configuration

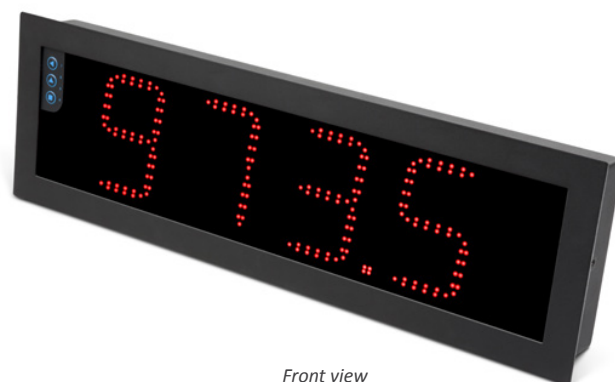
Output and control options	relays, analog output, serial communications, ...
Configuration	3 button front keypad (connection for remote keypad)

Power

Power 'H'	85 to 265 Vac and 120 to 370 Vdc (isolated 2500 Vac)
Power 'L'	11 to 36 Vdc (isolated 1500 Vdc)
Consumption	<3.0 W (meter only) <5.0 W (meter with options)
Power terminals	plug-in screw terminals (pitch 5.08 mm) cable gland output PG9 (max. 8 mm diameter) max. 2.5 mm ² (max. AWG14)
Wire section	

Mechanical

Housing	metallic (textured black painted iron)
Front filter	methacrylate
IP protection	full IP65 housing
Weight	<2500 grams
Mounting	panel, wall, hanging
Front size (panel cut-out)	542 x 166 mm (524 x 148 mm)
Deep	80 mm (including terminals)
Operating temp. (storage)	0 to 50 °C (-20 to 70 °C)
Packing box	paperboard, 38 x 15 x 10 cm



Front view

Order reference

Format	Model	Power	Color	Option 1	Option 2	Option 3	Custom
B44	- LC	- H	- R	-	-	-	-
		-H (85-265 Vac and 120-370Vdc) -L (11-36 Vdc)	-R (red led) -G (green led)	- R1 (1 relay output) - AO (analog output) - RTU (Modbus RTU) - S4 (RS-485) - S2 (RS-232) - T1 (1 transistor output) - SSR (1 SSR control output) - 0 (empty)			

* Option 3 available with formats B26 and B46



Rear view

45
YEARS

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Q
ISO 9001

Certified Quality

CE
EN-61010-1

Security

CE
EN-61326-1

Electromagnetic C.

5
YEARS

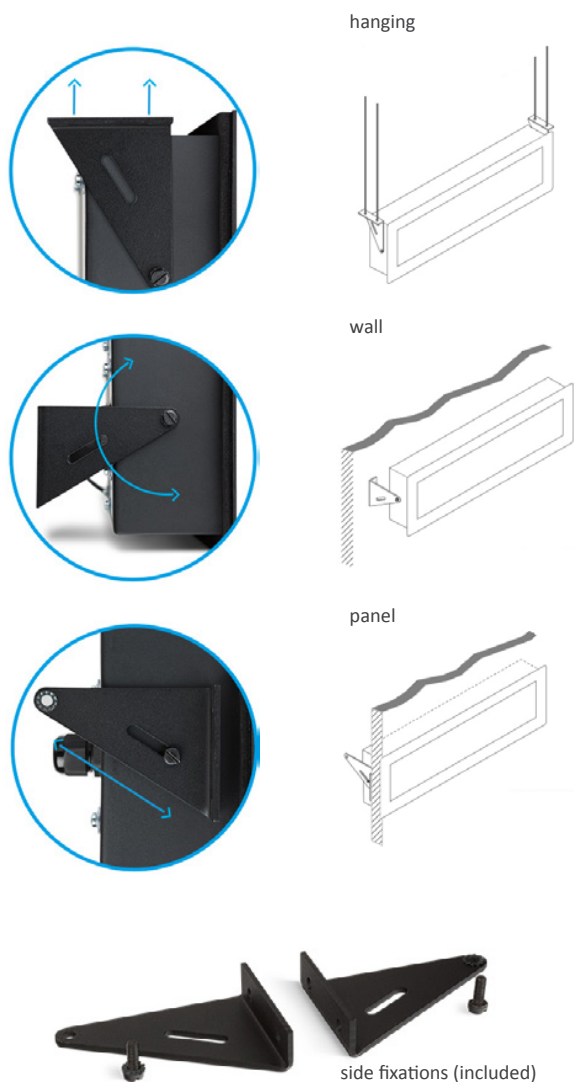
Extended Warranty

Output and control options

Format	Model	Power	Color	Option 1	Option 2	Option 3	Custom
B44	LC	H	R				

	Function	Installable options	Isolation
R1	1 relay output	2	yes
T1	1 transistor output	2	yes
SSR	1 control for SSR relay	2	yes
AO	1 analog output	2	yes
RTU	1 Modbus RTU port	2	yes
S4	1 RS-485 port	2	yes
S2	1 RS-232 port	2	yes
Option 3 available with formats B26 and B46			

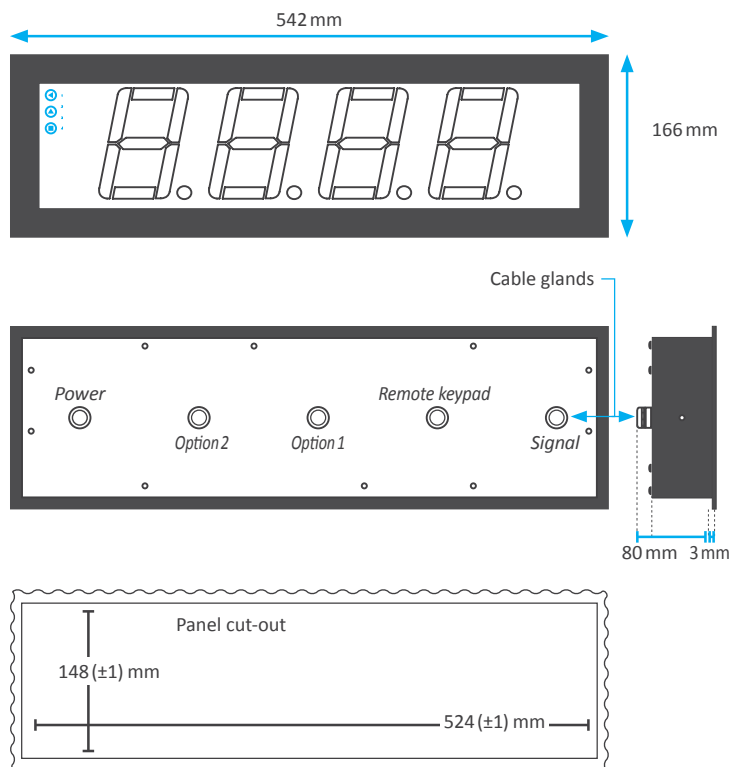
Mounting options



Functions included

- 'Fast access' menu fast access to parameters from front key 'UP' (■) (alarm setpoint, ...)
- 'Tare' function configurable from different access points
- 'Auto-tare' function automatic tare
- Scale factor scale the reading values and offset
- 'Stock of units' count number of items based on weight
- Modes modes with noise rejection to 50 and 60 Hz
- Alarms with one or two setpoints, independent activation and deactivation delays, hysteresis, optional manual deactivation of the relay
- Stability alarms activation triggered by stability of the signal
- Display filters recursive filter, 'steps', fixed digits, ...
- Rear control activate functions from rear terminal
- Front key 'LE' (◀) activate functions from front key
- 'On power-up' function activate functions at power-up
- Memory maximum and minimum
- Password blocks access to configuration menu.
- Troubleshooting functions values for input signal, excitation voltage and excitation current provided to the cell
- Brightness 5 levels of brightness intensity.

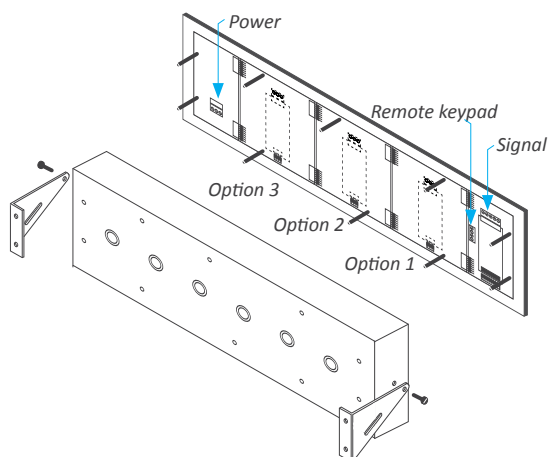
Dimensions



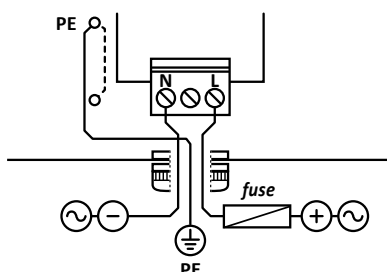
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Connections

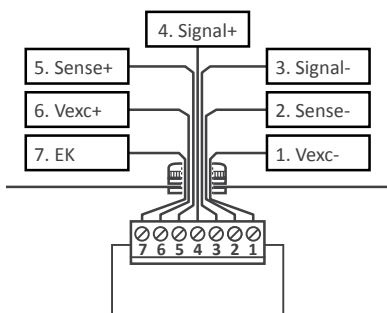
Internal structure for a B26 instrument



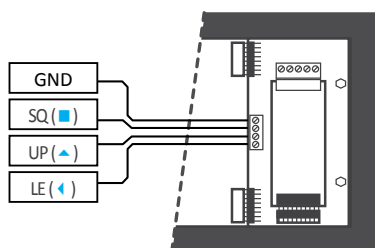
Power connections



Signal connections

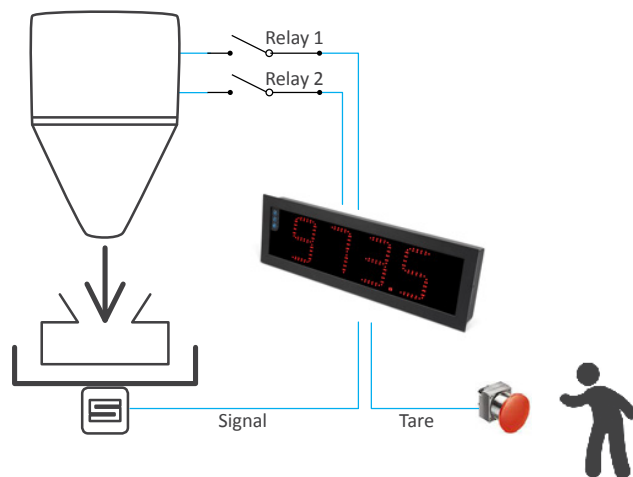


Connections for remote keypad



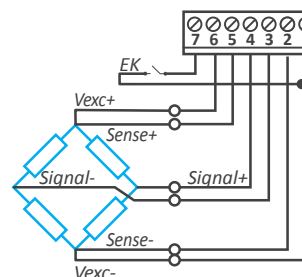
Example of application with control

Bucket filling with material from a silo. Measure and reading of the weight at the bucket, with automatic control for slow filling with relay 1 and final closing of the silo opening with relay 2.

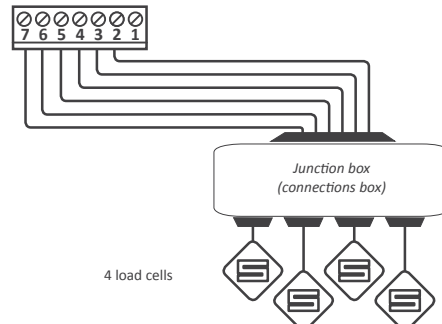


Examples for other connections

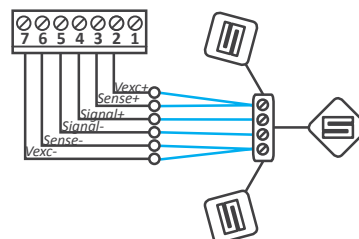
Connections with 1 load cell



Connections with 'junction box'



Direct connections with 3 load cells



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Other options

Red color



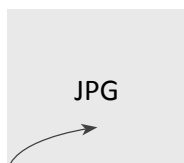
Red leds

Green color



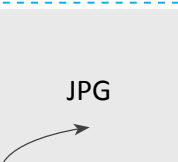
Green leds

White color



White leds

Cable output



Preinstalled cable, 2 meters

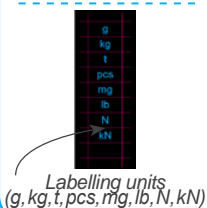
Accessories

RKB



Remote keypad

Units-8



Labelling units (g, kg, t, pcs, mg, lb, N, kN)

Other meters for load cells

Series B

4 and 6 digits

digit height 60 and 100 mm
color red, green
reading 25 and 50 meters
formats B24, B26, B44, B46



Series M

4, 5 and 6 digits

digit height 14 mm
color red, green
reading 5 meters
size 96 x 48 mm

DIGITAL PANEL METER
SERIES M
Full Signal Ranges Available



Series K

Further view

digit height 20 mm
color red
reading 8 meters
size 96 x 48 mm

DIGITAL PANEL METERS
SERIES K
20 mm Digit Size



Series S

Compact size

digit height 14 mm
color red, green
reading 5 meters
size 72 x 36 mm

DIGITAL PANEL METERS
SERIES S
Compact Size 72x36 mm



Other signals



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