

BP9 and BR9 Series

pH and REDOX Indicator controllers



Features

- IP66 Surface mounting enclosure
- Simple installation and low cost of ownership
- Optional isolated 4-20 mA output
- Single or dual adjustable set points
- Flow switch input disables relay operation

Aimed primarily at simple pH and Redox control applications the instruments retain only the most important functions. This has two benefits; it reduces the purchase price and simplifies the installation and operation of the instrument, without compromising quality or reliability.

The controllers are housed in a IP66 surface mounted enclosure with a liquid crystal display making them suitable for mounting outdoors. The controllers are easy to set up using PCB mounted DIP switches and potentiometers mounted on the front panel assembly.

The basic model offers a single control/alarm point, which can be set to operate anywhere in the measurement range and a digital display.

The more advanced model offers two set points plus an isolated 4-20 mA current output, with both versions available for pH or redox measurements.

The BP9 and BP93 pH controllers have manual temperature compensation while the BP94 and BP95 pH controllers have automatic temperature compensation when used with a pH electrode fitted with a PT1000 temperature compensation element.

The BP9 and BR9 series of pH and Redox controllers are ideal for many applications including neutralisation, cooling tower water treatments, plating shop metal finishing tanks, swimming pool water treatments and fume scrubbing.

Specification

Range of measurement and control

BP9, BP93, BP94, BP95

0–14.00 pH

BR9, BR93

±1000 mV

Display

Backlit 3.5 digit LCD

Accuracy of measurement

0.5% of full scale ±1 digit

Temperature compensation

BP9, BP93

Manual 0–100°C

BP94, BP95

Automatic compensation when used with a pH electrode with a built in PT1000 temperature element.

Calibration

Accessible from the front of the instrument.

BP9

By buffer (offset) and slope adjustment.

BR9

Offset adjustment only.

Input Cable

A good quality low noise coaxial cable.

LTH type LN10 or equivalent.

Maximum length 30 metres.

Alarm control set points

BP9, BP94, BR9

Single set point with associated changeover relay contacts rated at 5A 250vAC.

User selectable high or low operation.

BP93, BP95, BR93

Two set points with associated changeover relay contacts rated at 5A 250vAC.

User selectable high or low operation.

Hysteresis (dead band)

1% of full scale

Alarm control lamps

Red high intensity LEDs denoting the state of each relay.

Flow switch input:

Open contact input disables relay operation.

Output Signal

BP93, BP95 and BR93 only.

Fully isolated 0/4–20 mA current output into a maximum load of 300 ohms.

Ambient temperature

0–50°C for full specification

Power supply

100–120v or 200–250v AC 50/60 Hz.

Power consumption

Less than 5VA

Housing

Surface mounted ABS

Protection

IP 66

Weight

Less than 800 grams

Dimensions

156 x 176 x 60mm

Order Codes

Type No	Part No	Description
BP9	2066	PH indicator/controller with single relay output.
BP93	2067	PH indicator/controller with 4–20mA current output and 2 relays.
BP94	2078	PH indicator/controller with single relay output, automatic temperature compensation.
BP95	2079	PH indicator/controller with 4–20mA current output and 2 relays, automatic temperature compensation.
BR9	2527	Redox indicator/controller, with single relay output.
BR93	2528	Redox indicator/controller with 4–20mA current output and 2 relays.



These products comply with current European Directives

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