

The **BA404B** manual set point station enables the current flowing in a 4/20mA loop to be adjusted from the process area. The instrument is loop powered, and has been certified intrinsically safe allowing installation within a hazardous area.

Main application of the set point station is the adjustment of plant parameters from within the process area. Controller set points, actuator positions, speed controllers, or any parameter represented by a 4/20mA signal may be accurately adjusted from within a hazardous area. Local indication of the loop current in engineering units can be provided by connecting any BEKA intrinsically safe loop powered indicator in series with the BA404B.

The intrinsic safety of the BA404B allows it to be installed within a hazardous area without the need for purged, pressurised or flameproof enclosures. The set point station is BASEEFA certified to the CENELEC standards, and may be used with most common 4/20mA Zener barriers and galvanic isolators. Application guide AG404 lists the type of barriers and galvanic isolators which may be used and provides additional applicational information.

A robust field mounting enclosure is suitable for use in most process areas without additional protection. The enclosure is an epoxy painted aluminium die-casting, sealed with a neoprene gasket to form an IP65 hoseproof assembly which may be surface mounted, or clamped to a pipe using the optional pipe mounting kit. The large ten-turn metal control knob is ungraduated and fitted with a heavy duty locking mechanism and end-stops. Both the control and locking knobs are deeply knurled allowing easy adjustment by an operator wearing gloves. To simplify installation and maintenance the BA404B can be removed from the enclosure without disconnecting the field wiring. Function and units of adjustment may be engraved on an optional stainless steel plate mounted above the control knob.

Reliability is ensured by an ISO9001 approved quality control system supported by a three year guarantee. Set point stations are protected from reverse connection and overrange input current, and incorporate radio frequency filtering to comply with the European EMC Directive.

Compatible field mounting indicators are listed in the product specification.

BA404B

2-wire 4/20mA manual set point stations

Intrinsically safe for use in all hazardous areas

- *Loop powered*
- *Intrinsically safe*
- *Robust IP65 field mounting*
- *3 Year guarantee*



BEKA

associates

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SPECIFICATION

Output

Current	Typ 3.5 to 21mA
Resistance	Greater than 1MΩ

Power Supply

Voltage	10 to 30V dc
Ripple	1V pk to pk 50Hz

Intrinsic safety

Europe BASEEFA	
Standard	EN 50 020 : 1977
Code	EEx ia IIC T4
Cert No	
Apparatus	BAS Ex85B2007
System	BAS Ex852008
Output parameters	
Ceq	10nF
Leq	2μH
Location	Zone 0, 1 or 2
Installation	The BA404B may be connected to any certified intrinsically safe circuit whose output parameters do not exceed:
Uo	30V
Wo	1W

Environmental

Operating temp	-20 to +60°C
Humidity	To 95% at 40°C
Enclosure	
BA404B	IP65
EMC	In accordance with EU Directive 89/336/EEC, full report available.
Immunity	Less than 6% of span error for 10V/m field strength between 27MHz & 1 GHz.
Emissions	Electromagnetically benign

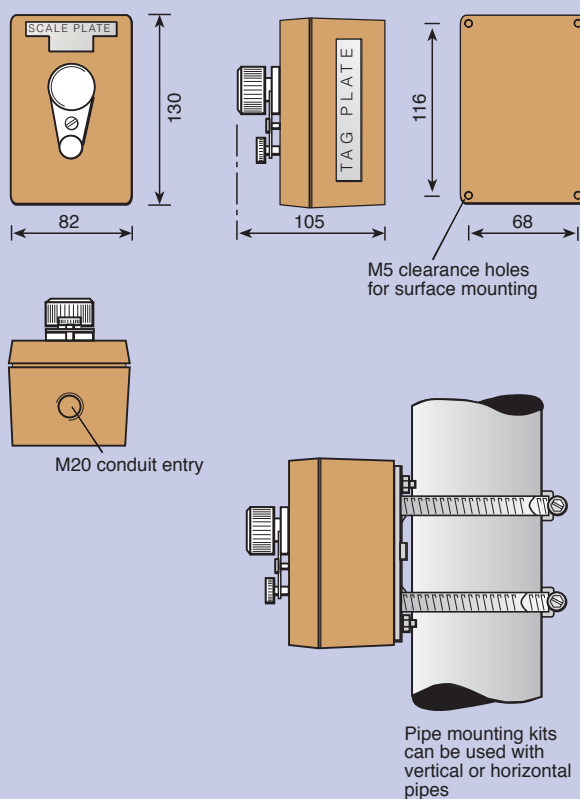
Mechanical

Terminals	Screw clamp for 0.5 to 2.5mm ² cables
Weight	1kg

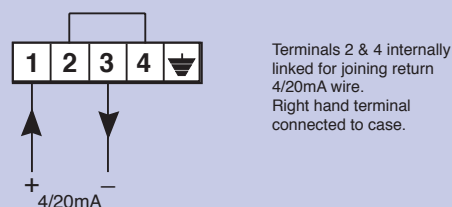
Accessories

Scale plate	Stainless steel plate engraved with units of adjustment.
Tag plate	Stainless steel plate engraved with tagging information.
Pipe mounting kit	BA399 mounts BA404B onto any vertical or horizontal pipe

DIMENSIONS (mm)



TERMINAL CONNECTIONS



HOW TO ORDER

Model number	Please specify BA404B
Accessories	Please specify if required
Scale plate	Legend required
Tag plate	Legend required
Pipe mounting kit	BA399