



GOYEN BBD6

BROKEN BAG DETECTOR

WHAT IT DOES

- Continuously monitors for filter media leakage.
- Indicates relative condition of bags.
- Acts as a preventative maintenance tool.

PRODUCT DESCRIPTION

The BBD6 utilises AC Coupled Triboelectric technology. As particles travel through the process they develop a charge. This charge is transferred as the particle passes or impacts the sensing element. The resulting current is amplified, filtered, rectified and further filtered looking only at the AC component, giving a linear representation of the concentration or mass flow rate of the particles in the gas stream.

The reason for measuring the AC component is that, compared to the DC component, the electronics are more sensitive. The AC signal is substantially less affected by

influences such as amplifier noise and process parameters, which includes the build-up of process dust on the sensing rod.

The BBD6 remote sensing head transfers via a digital signal totally filters out any 50 Hz or 60 Hz frequencies related to mains supply. The amplified signal is then sent via data cable to the control unit for further processing and display.

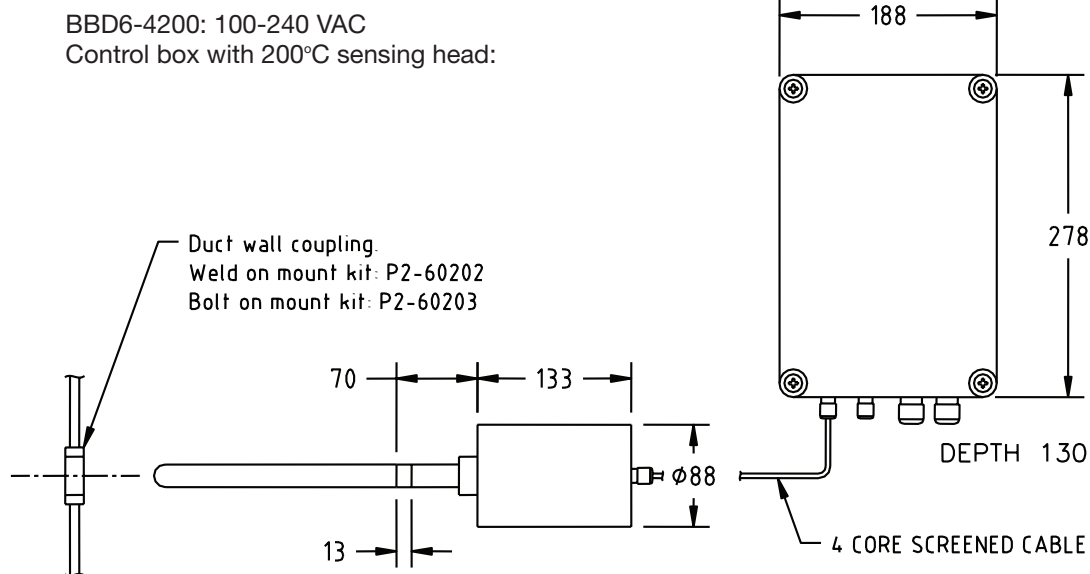
OPERATIONAL RANGE

- Suitable for a wide range of dust collection and stack emissions.
- Applicable for all types of outlet stack geometrical arrangements.
- Insertion temperatures up to 200°C (392°F), higher if required.
- Applicable to most particulate types.
- For duct sizes from 50 mm (2") to outlets over 10 m (33 ft).
- Dust concentrations from 0.01 mg/m³ (4 × 10⁻⁶ gr/ft³).

- Suitable for most stack material e.g. steel, brick etc.
- Optional hazardous area (positively pressurised).

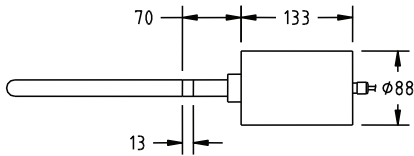
BENEFITS

- Detects most particles regardless of composition.
- Very sensitive due to AC coupled technology.
- Can monitor extremely small particles eg. galvanising fume (~0.1 µm).
- Can be used over a wide range of particulate densities.
- Can assist in dramatically reducing plant down time through filter failures.



BBD6

BROKEN BAG DETECTOR



FEATURES

- Proven AC Triboelectric technology.
- Relay time delay feature.
- Sensitivity adjustment.
- Air purge port to aid in the elimination of bridging.
- Simple Installation.
- Alarm level adjustment.
- Active head to controller mounting up to 100 metres apart.
- ATEX II 3 D&D compliant.

MODES OF OPERATION

The BBD6 indicates instantaneous levels of particulate emissions stream.

The instrument is usually in an uncalibrated indicative mode in which levels are displayed in a relative scale (0–100%). The BBD6 also has 2 relay modes – Normal and Failsafe.

Normal

- The alarm relay is de-energised when the BBD6 is powered up.

Failsafe

- The alarm relay is energised when the BBD6 is powered up
- The alarm relay is de-energised when the BBD6 is in the alarm state
- Is used so that both power failure and high emissions are alarmed.

TECHNICAL SPECIFICATION

FUNCTIONS	
Bar graph:	Visual indication of emission density
Alarm time delay:	0–9 seconds in 1 second steps to prevent false alarms due to pulsing
Sensitivity:	Adjustable sensitivity within the sensing head (High, medium and low available)
OUTPUTS	
Name:	Alarm relay
Specification:	8A Resistive, 1A Inductive
Function:	Emission alarm
CONTROL UNIT	
Enclosure rating:	IP66/Nema 4, ATEX III 3 D&G
Enclosure size:	280 mm x 190 mm x 130 mm (254 mm x 164 mm Mounting)
Enclosure material:	Plastic Composite
Power supply:	100–240 VAC
Bargraph display:	20 step LED
Temperature range:	–20°C to 60°C (–4°F to 140°F)
Active head:	One
SENSING HEAD	
Insertion temperature range:	P2–45200: –20°C to 200°C (–4°F to 392°F)
Connection required on duct:	1" BSPT socket
Electrical Specification between Sensing Head and Control Unit:	4 core screened data cables: Beldon 9534 (or equivalent) max 100 m (330 ft)
ENCLOSURE	
Temperature range:	–20°C to 60°C (–4°F to 140°F)
Enclosure rating:	IP66/NEMA4, ATEX II 3 D&G
Enclosure material:	Aluminium
Sensing element material:	316 Stainless Steel
Sensing element options:	Solid rod, tubular, teflon coated, multiple supports, cable type, different lengths available
AIR PURGE REQUIREMENTS	
Connection:	1/8" gas thread on side of unit
Air Pressure:	400 kPa (60 psi) max
Air Consumption:	1.7–17 m ³ /hr (1–10 cfm) pulsed

AUSTRALIA

New South Wales – Head Office

268–292 Milperra Rd
Milperra NSW 2214
Phone: +61 1800 805 372
Fax: +61 1300 658 799

Queensland

Phone: +61 1800 805 372
Fax: +61 1300 658 799

South Australia

Phone: +61 1800 805 372
Fax: +61 1300 658 799

Victoria

Phone: +61 1800 805 372
Fax: +61 1300 658 799

Western Australia

Phone: +61 1800 805 372
Fax: +61 1300 658 799

Greenspan Technical Services

Coffs Harbour
21 Lawson Cres NSW 2450
Phone: +61 (0) 2 6651 9830
Fax: +61 (0) 2 6651 9831

Greenspan – MCE (RAINMAN)

70 Cleaver Terrace
Belmont, WA, 6104
Phone: +61 (0) 8 9477 1188
Fax: +61 (0) 8 9479 6727

EUROPE

United Kingdom

Unit 3B Beechwood
Chineham Business Park
Basingstoke, Hampshire
RG24 8WA United Kingdom
Phone: +44 1256 817 800
Fax: +44 1256 843 164

Germany

Tyco Umwelttechnik GmbH
Im Petersfeld 6
D-65624 Altendiez
Germany
Phone: +49 6432 1001/1002
Fax: +49 6432 63810

Italy

Mecair s.r.l
Via per Cinisello 97
Milano, Italy
Phone: +39 0362 3751
Fax: +39 0362 3667 279

ASIA

China

Shanghai Representative Office
1209 Greenland Business Centre
1258 Yu Yuan Rd
Shanghai 200050 China
Phone: +86 21 5239 8810
Fax: +86 21 5239 8812

Malaysia

73-M Jalan Mega Mendung
Kompleks Bandar, OUG,
58200 Kuala Lumpur
Malaysia
Phone: +60 3 7987 6839
Fax: +60 3 7987 7839

USA

Corporate Office & Parts Orders

Goyen Valve
1195 Airport Rd
Lakewood, NJ 08701
732-364-7800
Attn: Rob Demeter

CEMS & Process Gas Monitoring

Sales, Technical Support & Proposals
Gary Cacciatore
714-538-7212
gary.cacciatore@pentair.com

National Sales Manager

Jeff Harrington
270-783-9278
jeff.harrington@pentair.com

Northeast US/Eastern Canada

Joe Hanley
New Jersey
Ph: +1 732-674-3903
joe.hanley@pentair.com

Southeastern US

Bob Every
Georgia
Phone: +1 770-258-8533
bob.every@pentair.com

North Midwest

George Moeke
Cincinnati
Phone: +1 513-722-2763
george.moeke@pentair.com

South Midwest

Ken Johnson
Kansas City
Phone: +1 816-333-7333
ken.johnson1@pentair.com

Western North America

Dave Gager
Bayou Vista Texas
david.gager@pentair.com

Mexico/South America

Rosa DeStefano
Lakewood NJ
Phone: +1 732-364-7800
rosa.destefano@pentair.com

