

WDA4

High Power Extended Range Magnetic Proximity Sensor

APPLICATION

Non-contacting extended range magnetic proximity sensor, not affected by dust or material build up, used to detect moving ferrous material up to 75mm away from the sensor.

METHOD OF OPERATION

The WDA sensor is designed for use with bucket elevators to detect the buckets in order to measure speed and alignment. It can also detect screw conveyor flights, and ferrous bolts when attached to non-ferrous buckets. A more specialized use of the WDA sensor is for broken/slack chain detection.

The sensor is used in conjunction with a PLC or with 4B's Watchdog™ Elite or A400 Elite control units. Two output signals are provided: one signal is a pulse output, representing each bucket detected: the second signal is a continuous output when moving buckets are detected. The continuous output can be wired normally energized or normally de-energized (please see manual).

FEATURES

- ▶ Adjustable Sensing Range 25mm to 75 mm
- ▶ LED Indication
- ▶ Mounting Bracket Included
- ▶ ½" NTP Conduit Entry
- ▶ Stainless Steel Construction
- ▶ High Temperature Version Available
- ▶ IP66 Protection

PART NUMBERS/ACCESSORIES

- ▶ WDA4V342AI WDA4 Standard Sensor, with earth stud
- ▶ HTAS1V34 WDA High Temperature Sensor – NOT APPROVED
- ▶ WDAMB Sensor Mount (Included with Sensor)
- ▶ AS62 Abrasion Shield

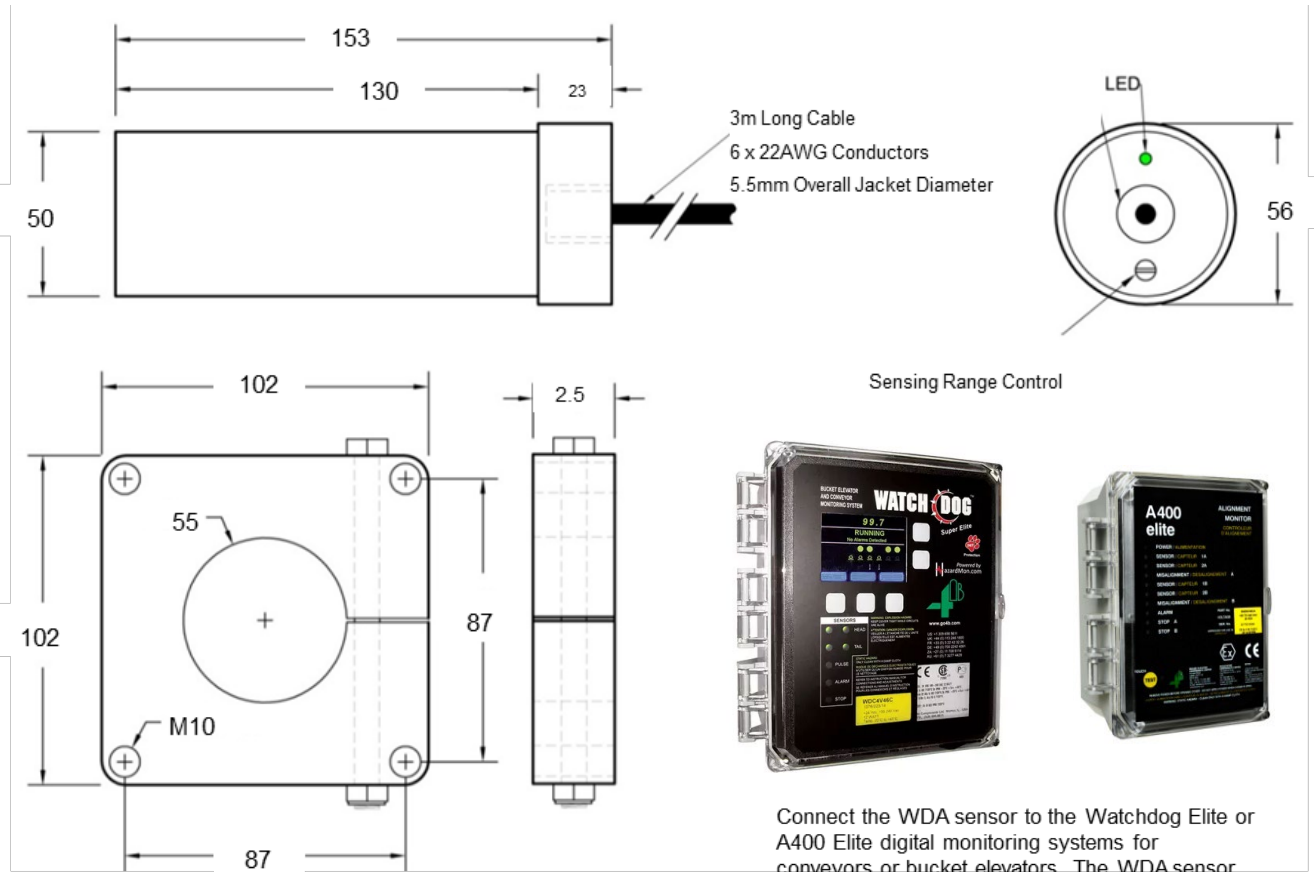
4B COMPATIBLE MONITORING SYSTEMS

- ▶ WDC4VxxCAI Watchdog Elite Monitoring System
- ▶ A4004V46CAI A400 Elite Monitoring System



WDA4 Sensor

DIMENSIONS



Connect the WDA sensor to the Watchdog Elite or A400 Elite digital monitoring systems for conveyors or bucket elevators. The WDA sensor can also be connected directly to a motor starter circuit or PLC.

TECHNICAL SPECIFICATIONS

Operating Voltage Range	12 to 24 VDC + 10%
Supply Current	40 mA
LED Indicator	<ul style="list-style-type: none"> Green (Flashing) – Target Detected Green (Off) – No Target Detected
Pulses Output (MAX)	Solid State Relay, 25 mA sink or source @ 240 VAC/DC (MAX), non-inductive
Continuous Output (MAX)	Solid State Relay, 25 mA sink or source @ 240 VAC/DC (MAX), non-inductive
Detection Range	Adjustable 25 to 75mm
Detection Rate	20 – 2,000 PPM (Pulses Per Minute)
Cable	3m 6 core
Operating Temperature	-20 °C to +50 °C
Conduit Entry	½" NPT
Ingress Protection	IP66
Approvals	ATEX, IECEx Zone 20