



HTAS MOTION ALIGNMENT SENSOR

DESCRIPTION

The **H**igh **T**emperature **A**lignment **S**ensor detects moving ferrous material and is designed for use with bucket elevators and conveyors to detect the buckets, for measurement of speed and alignment. It can also detect ferrous bolts, which are used to attach non-ferrous buckets. The sensor is used in conjunction with a PLC or with a Watchdog or A400 Elite control unit. 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.

SPECIFICATION

Model No	HTAS
Voltage	12-24vdc \pm 10%
Supply current	60-130ma
Outputs, current sinking max	100ma (NPN with pull up)
Detection range (1" bolt head)	25mm-100mm
Detection rate	200-2000 PPMin
Protection	IP66
Hazardous area classification	Zone 22 (CAT 3D)
Temperature rating	150°C continuous 180°C maximum
Cable	3 core 4m long



CONTROL

Sensitivity adjustment is achieved with the internal potentiometer and the voltage on terminal 7. To use the internal potentiometer, connect terminal 7 to the terminal 10 (+ve, 12-24v). Turn the potentiometer clockwise to increase sensitivity.

To use the external control voltage (A400 etc) connect terminal 7 to the control voltage from the A400 and turn the potentiometer on the HTAS control box fully anti-clockwise. Reduce the control voltage to increase sensitivity.

In both arrangements, reduce the sensitivity if the pulsed output (LED) becomes unstable.

LED INDICATOR

The green LED shows the state of the pulsed output and flashes once for each bucket (bolt) detected. The LED should be off when no buckets (bolts) are detected, if not, reduce the sensitivity.

BRAIME ELEVATOR COMPONENTS LIMITED

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4B COMPONENTS LTD

729 SABRINA DRIVE ♦ EAST PEORIA, IL 61611-3578 ♦ USA

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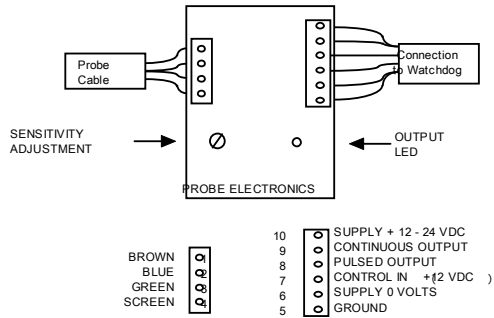
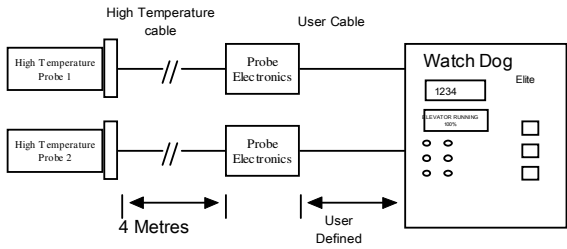
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WHEAT ELECTRONICS LIMITED

UNIT4 ♦ HOOKSTONE CHASE ♦ HARROGATE HG2 7HS ♦ ENGLAND

Web: <http://www.wheatelectronics.co.uk> Email: mail@wheatelectronics.co.uk

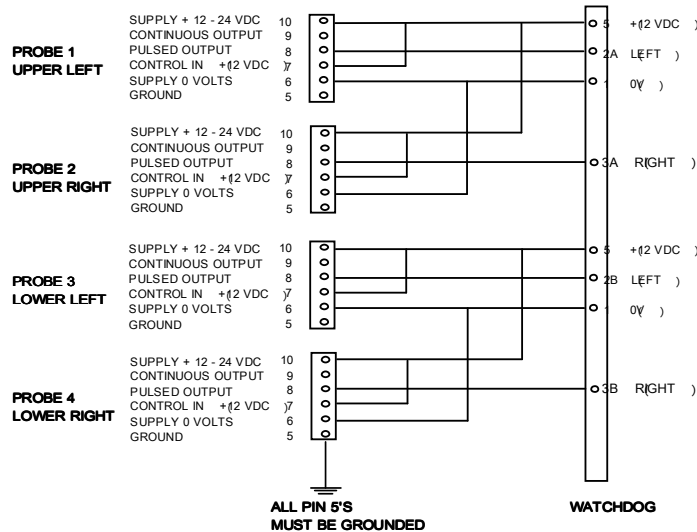
Tel. +44 (0)1423 887311 ♦ Fax. +44 (0)1423 885726



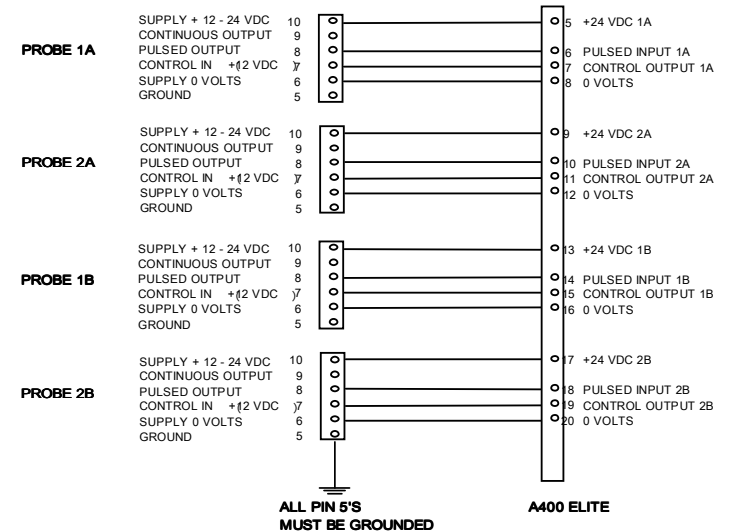
THE PULSED OUTPUT CAN BE CONNECTED TO EITHER A WATCHDOG PROBE INPUT OR AN A400 ELEVATOR MONITOR PROBE INPUT.

THE CONTINUOUS OUTPUT CAN BE USED TO SIGNAL A PLC THAT THE PROBE IS DETECTING. THE SIGNAL IS HIGH WHEN NOT DETECTING AND LOW WHEN DETECTING

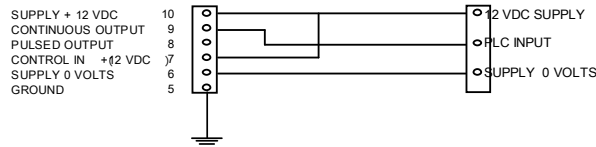
HIGH TEMPERATURE MOTION ALIGNMENT PROBE CONNECTION DIAGRAM



TYPICAL WATCHDOG CONNECTIONS



TYPICAL A400 ELITE CONNECTIONS



TYPICAL PLC CONNECTIONS