



# MAXIGARD™

## Altra•gap™

# ROTATION DETECTORS

A4000: EXPLOSION PROOF ENCLOSURE

A4000B: NEMA 4 ENCLOSURE

A4000C: NEMA 4X FIBERGLASS ENCLOSURE

A4000NF: NEMA 3 PVC ENCLOSURE

*PROVIDES RELAY OUTPUT TO PROTECT AGAINST SHAFT WINDMILLING*

### FUNCTION:

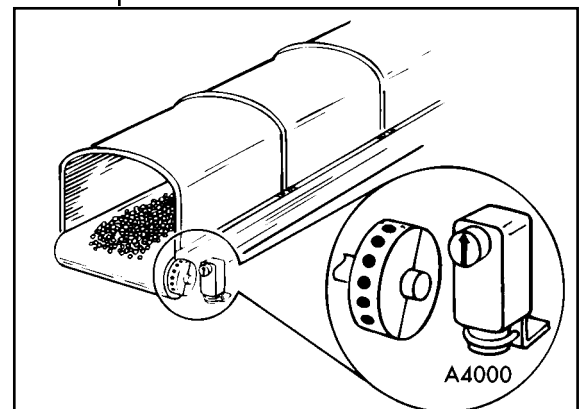
- Detect direction of shaft rotation
- Confirm starting condition
- Detect Shaft windmilling
- Signal other equipment and/or P.C.'s of proper operation
- Control other equipment for sequential starting or stopping

### ADVANTAGES:

- Enclosure for all industrial environments
- 5 amp isolated relays
- LED light for quick set up
- Field adjustable
- Fail safe circuitry
- Complete system, no extras to buy

### APPLICATIONS:

- Exhaust fans
- Belt Conveyors
- Tug boat propellar rotation
- Bucket elevators
- Centrifugal fans
- Bi-directional
- Start protection
- Feedstock signal to programmable controllers



**Typical Application:** The A4000 is used to prevent starting the motor of an incline conveyor if gravity causes the conveyor to roll backwards, protecting the drive package from damage.

### EACH SWITCH INCLUDES AS STANDARD:

Magnetic Disc • Sensor • 10' of Cable • Mounting Bracket • Circuit with (2) 5 amp - SPST Relays and Enclosure

# MAXIGARD™

# A4000

## SPECIFICATIONS:

### POWER REQUIREMENTS:

115 VAC, 50/60 HZ

### POWER CONSUMPTION:

6 VOLT AMPS

### ENVIRONMENTAL:

### TEMPERATURE INFLUENCE:

1% OVER 50°F

### OPERATING TEMPERATURE:

-40°F TO +185°F

### SENSING DISTANCE (GAP):

**SENSOR TO DISC:** .250"

**SENSOR ORIENTATION:** ± 5°

PERPENDICULAR TO DISC OR

OPTIONAL WRAP

### STANDARD ROTATION DETECTION:

CLOCKWISE, FIELD CHANGEABLE

### FUNCTIONAL:

**RELAY:** (2) ISOLATED SPST, N.O./N.C. 5

AMP CONTACTS @ 115 VAC

**CIRCUITRY:** FAILSAFE, COATED P.C.

BOARDS, SOLID STATE, HEAVY DUTY

INDUSTRIAL DESIGN, LED INDICATOR

### OPERATING RANGE:

1 RPM TO 10,000 RPM

**ACCURACY:** ± 1%

**REPEATABILITY:** ± .5%

**SENSING CABLE:** 22 GAUGE, 4 WIRE

SHIELDED, "BELDEN" 8729 OR

EQUAL (MAXIMUM DISTANCE 1,000')

### CONSTRUCTION:

**MAGNET DISC:** ANODIZED ALUMINUM

CERAMIC MAGNETS

**MAGNET WRAP:** (OPTIONAL)

MACHINED ALUMINUM, CERAMIC

MAGNETS, WRAP IS BORED TO FIT

SHAFT DIAMETER

**CIRCUITS:** P.C. CIRCUIT BOARDS,

HEAVY DUTY INDUSTRIAL SOLID

STATE

### ENCLOSURES:

**A4000:** CLASS I, GROUP D, CLASS II

GROUP E, F, G, (THIS IS NOT

WATERPROOF)

**A4000B:** NEMA 4 STEEL ENCLOSURE

**A4000C:** NEMA 4X FIBERGLASS

**A4000NF:** NEMA 3 PVC HOUSING

### SENSOR AND ELECTRICAL

### CONNECTIONS:

**A4000 & A4000NF:** INTEGRAL WITH

CIRCUITRY, SELF CONTAINED,

MAGNET DISC, MOUNTING BRACKET,

ANODIZED ALUMINUM, PIG TAIL

WIRES

**A4000B:** SENSING HEAD, MOUNTING

BRACKET AND MAGNET DISC,

ANODIZED ALUMINUM, TERMINAL

BLOCK CONNECTIONS

**A4000C:** SENSING HEAD, MOUNTING

BRACKET AND MAGNET DISC, PVC

PLASTIC TERMINAL BLOCK

CONNECTIONS

### OPTIONS:

- EXPLOSION-PROOF SENSORS AND ENCLOSURES
- MAGNET WRAPS \*
- 6/12 VDC LOGIC PULSE OUTPUT
- 12/24 VDC OPERATING POWER

### RELATED BULLETINS:

- INSTALLATION AND OPERATING INSTRUCTIONS:
- A4000 & A4000NF: A199
- A4000B & A4000C: A198
- PRICING: AP145-1
- FULL LINE CATALOG: A129

### ORDERING INFORMATION:

- CALL OUT OPTIONS
- SPEED RANGE
- NORMAL SHAFT DIRECTION
- MAGNET DISC OR WRAP

### NOTE:

\* CONSULT FACTORY FOR WRAPS THAT WILL BE TURNING FASTER THAN 3000 RPM



327 Lake Hazeltine Drive  
 Chaska, MN 55318  
 Toll Free: 800-328-0738 U.S. and Canada  
 Fax: 952-368-4129  
<http://www.maxigard.com>  
 E-Mail: [sales@maxigard.com](mailto:sales@maxigard.com)

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