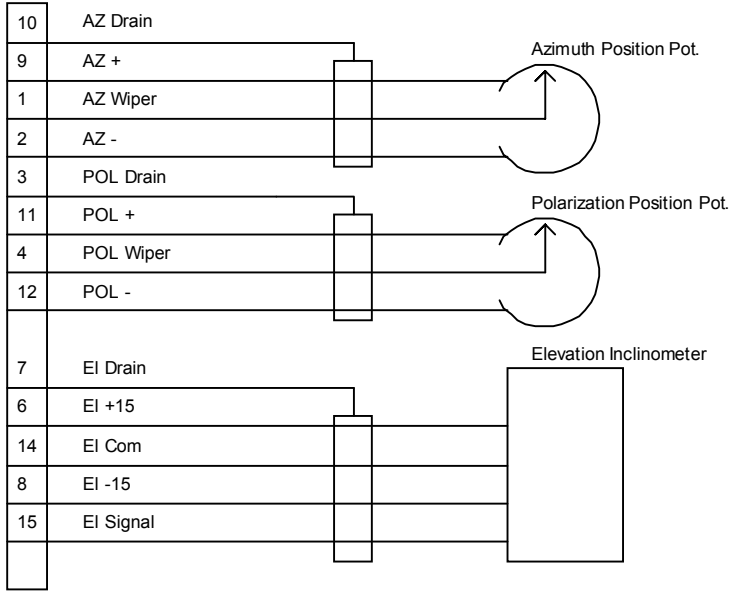


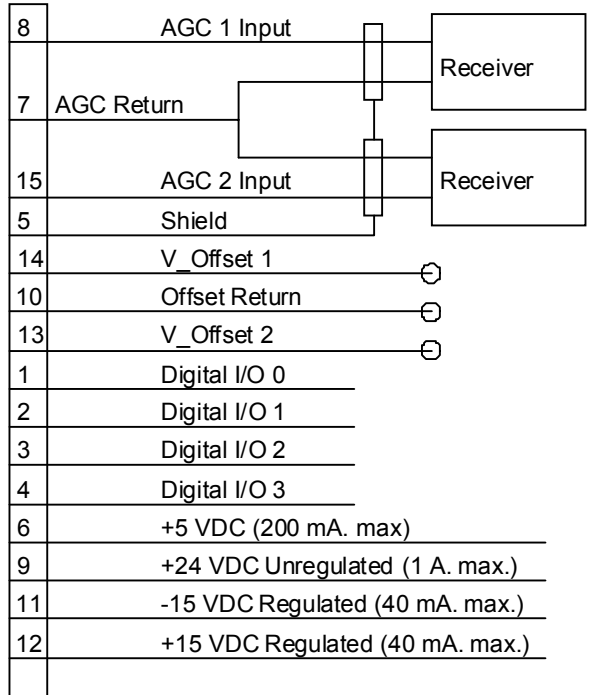
P1 - Position Sensors

DB15 male



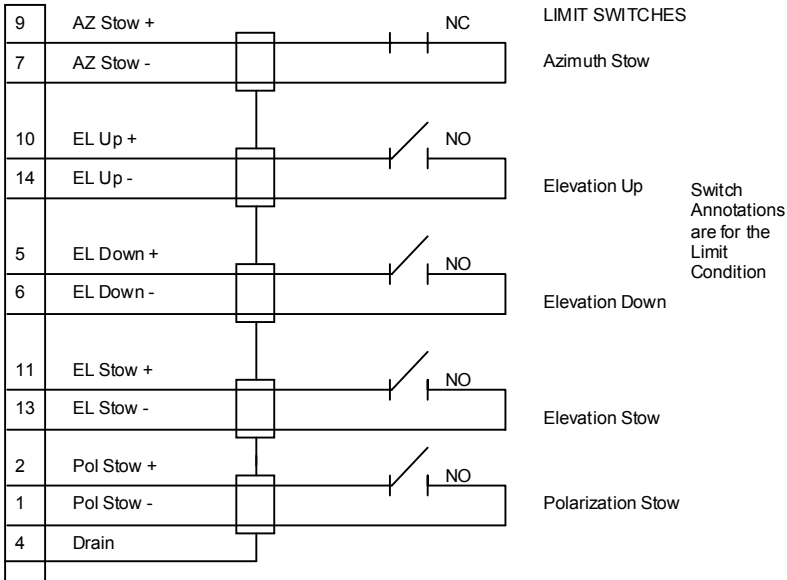
P2 - Analog Signal Strength

DB15 male



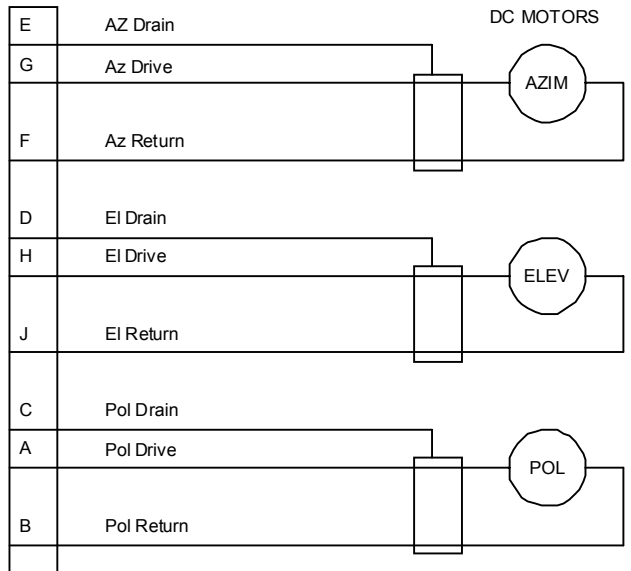
P3 - Limit Switches

DB15 male



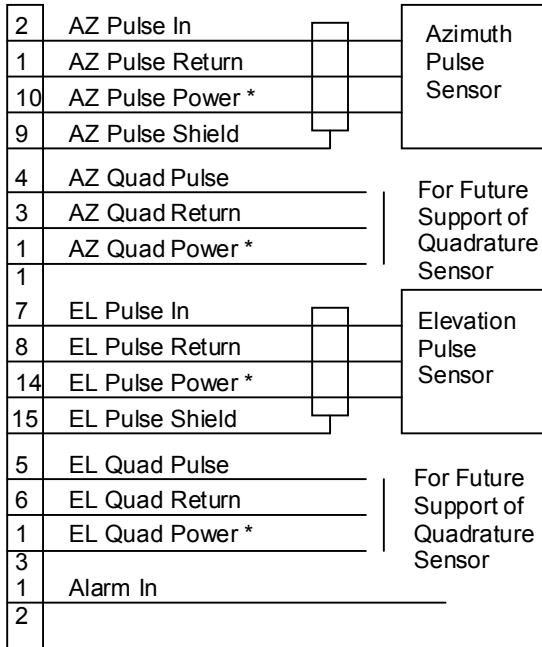
P7 - Az/EI/Pol Motors

Amphenol 22-20P



P4 - Pulse Sensor

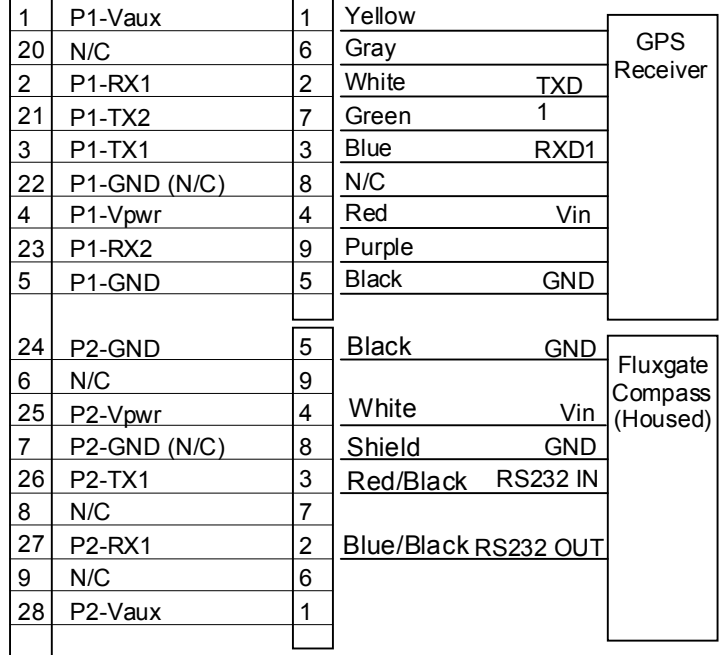
DB15 female



P9 - GPS & Flux Gate Compass

DB37 male

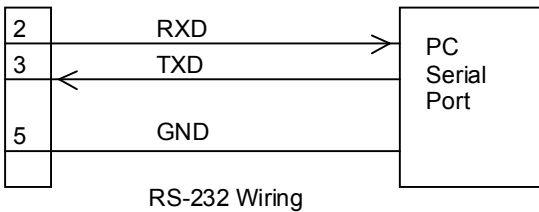
DB9 male



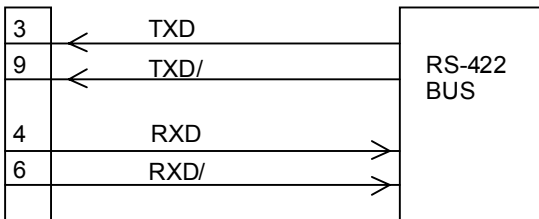
DB9 male

P5 - RS232/RS422 I/O

DB9 male



DB9 male

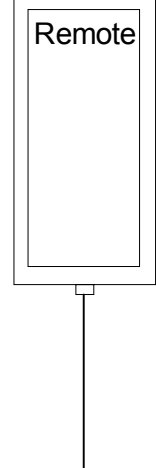


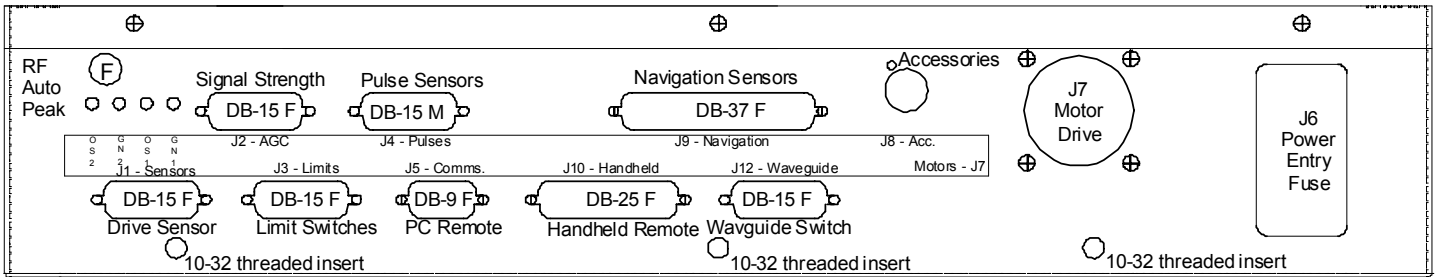
P10 - Hand Held Remote Control

DB25 male



(Optional)



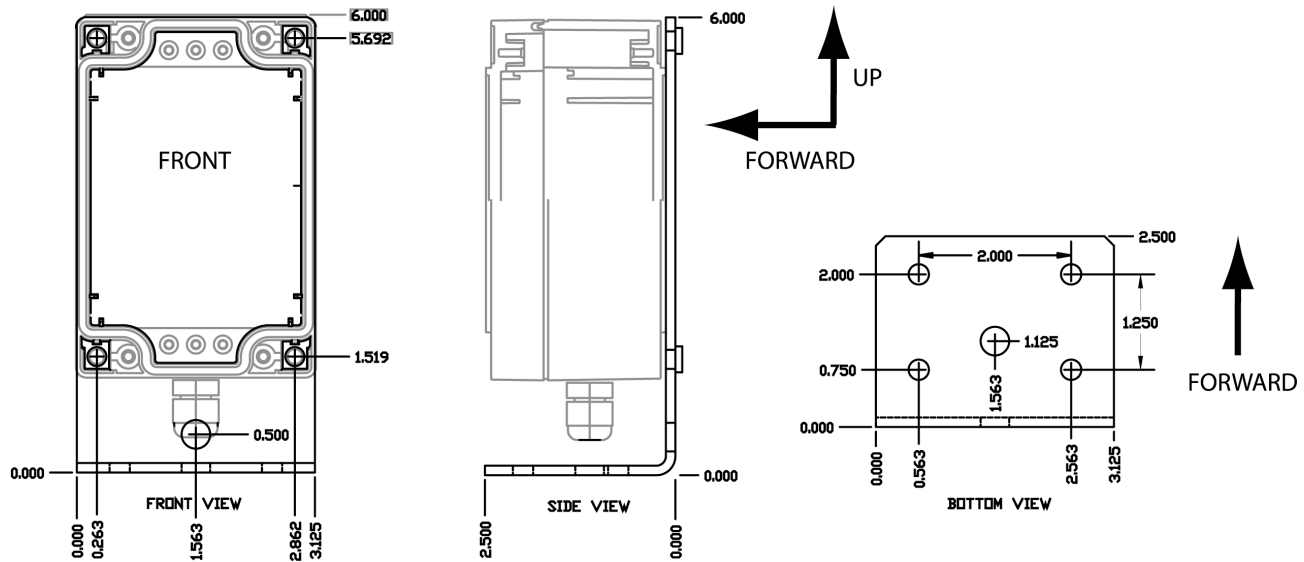


RC3000 FLUXGATE COMPASS

Research Concepts, Inc.
Fax: (913) 422-0211

5420 Martindale, Shawnee, KS 66218-9680
e-mail: support@researchconcepts.com

Phone: (913) 422-0210
www.researchconcepts.com



The Fluxgate Compass box may be either bracket mounted or flush mounted. Without the bracket it may be attached to a flat surface by four 10-32 screws from inside the box through the four corner holes shown in the FRONT view diagram above. An optional FA-MITGBAR-1032 kit may be used to mount the box blind through an accessible surface. The kit provides four standoffs that are attached to the lid of the box providing 10-32 threads to mate with external 10-32 screws. When using the bracket mount it may be mounted with four 1/4 inch bolts using the holes shown in the bottom view of the bracket in the above diagram. The cable may be routed through either hole in the bracket. The circuit board may also be removed from the housing or an unboxed model is available on order for a custom installations.

- This sensor will operate through tilt (pitch & roll) ranges of $\pm 16^\circ$.
- White cable 40ft. standard length, 1/4 inch diameter, terminated with a D9 male connector. Other lengths available on request.
- A 1/4 inch opening is required for the cable to pass through a panel.
- Environmental Specifications
 - Operating Temperature: -40°C to $+ 65^\circ\text{C}$
 - Storage Temperature: -57°C to $+ 71^\circ\text{C}$

AccuStar Electronic Clinometer

Lucas Control Systems

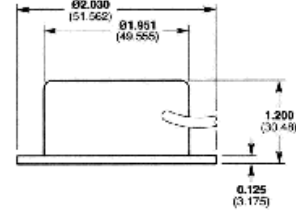
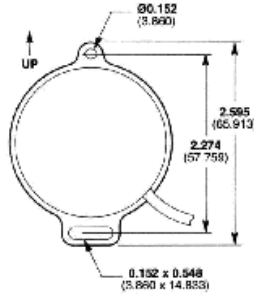
1000 Lucas Way
Hampton, VA 23666
Phone: (757) 766-1500
Fax: (757) 766-4458

Internet: www.schaevitz.com

What you need to know to order.

Model Number	Description
0211 1002-000	Analog Vertical Flange
0211 1102-000	Horizontal Flange

Dimensions in (mm)

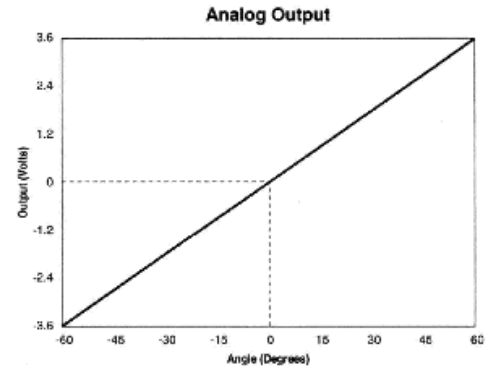


Analog Output

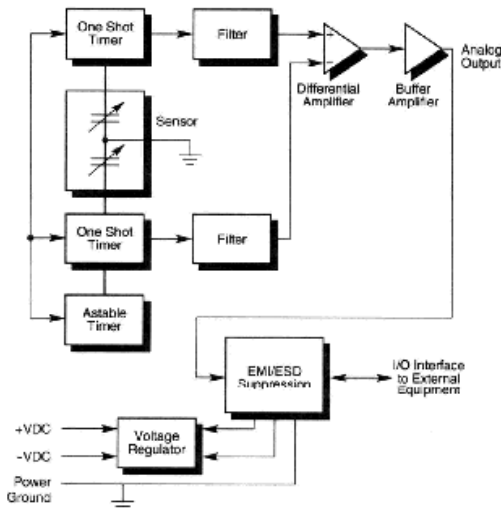
Features

- ✓ Internally regulated
- ✓ Bipolar input/output

The Analog clinometer is a signal conditioned sensor which has been designed for dc voltage, bipolar operation. The clinometer requires a bipolar supply of ± 8 to ± 15 VDC and delivers an output of ± 3.6 VDC. This device is internally regulated for various applications. The output scale is fixed at a nominal 60mV per degree not dependent on the supply voltage. The Analog clinometer has full EMI and ESD suppression circuitry on every line.



Analog I/O Block Diagram



Analog Electrical Specifications

Voltage	
Voltage Supply	
Nominal	± 12 VDC
Range (regulated)	± 8 to ± 15 VDC
Current	5 mA/supply
Scale Factor	60 mV/degree $\pm 10\%$
Load Resistance (min.)	10 kOhms
Level Output (0°)	0 VDC
Electrical Connections	
Wire Source	
Black	Power ground
Red	+8 to +15 VDC
Gray	-8 to -15 VDC
Blue	Signal output (reference to power ground)

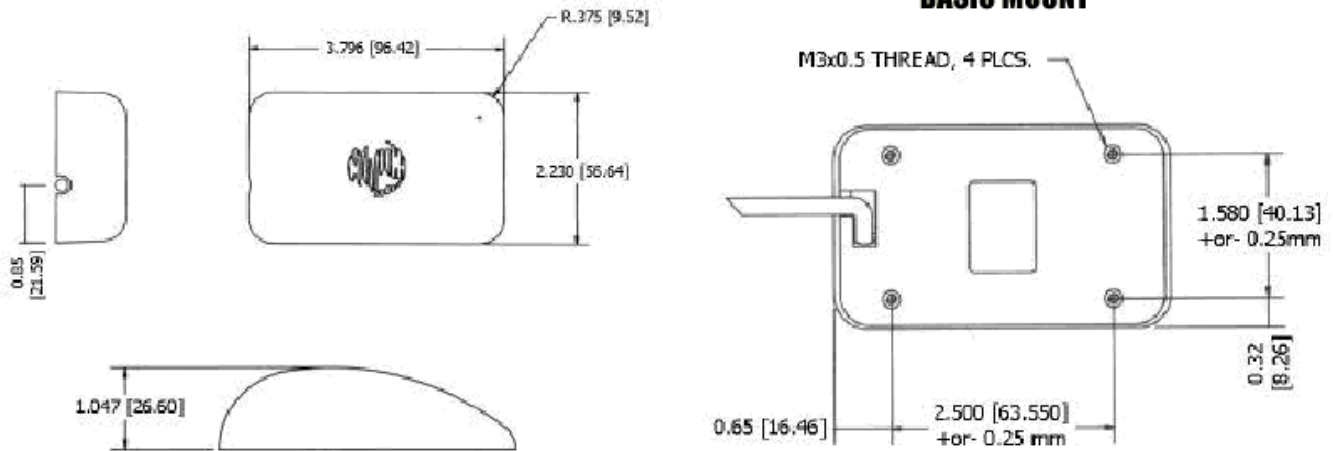
RC3000 GPS RECEIVER MOUNTING

Research Concepts, Inc.
 Fax: (913) 422-0211

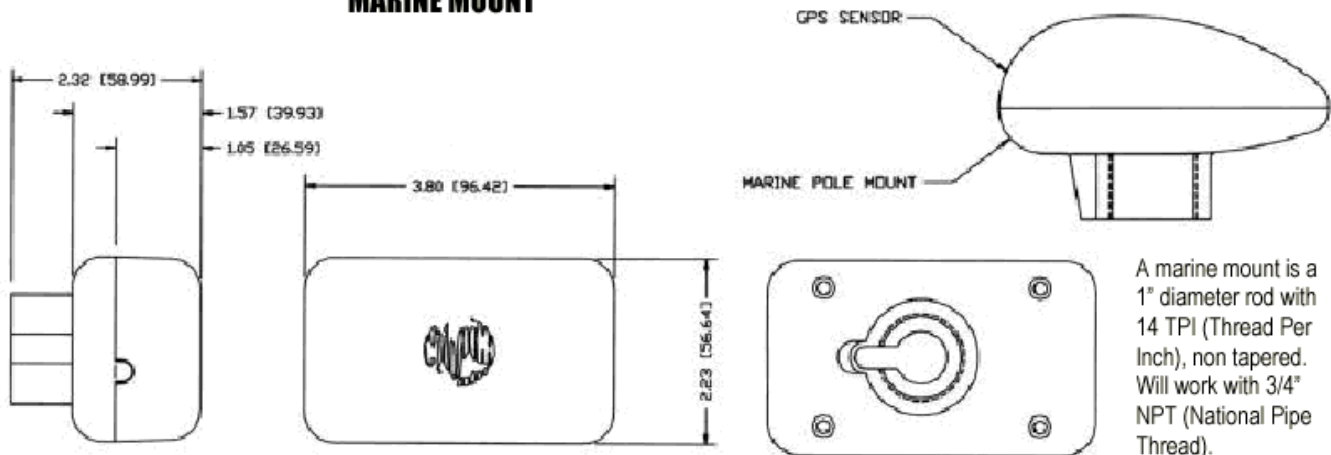
5420 Martindale, Shawnee, KS 66218-9680
 e-mail:support@researchconcepts.com

Phone: (913) 422-0210
 www.researchconcepts.com

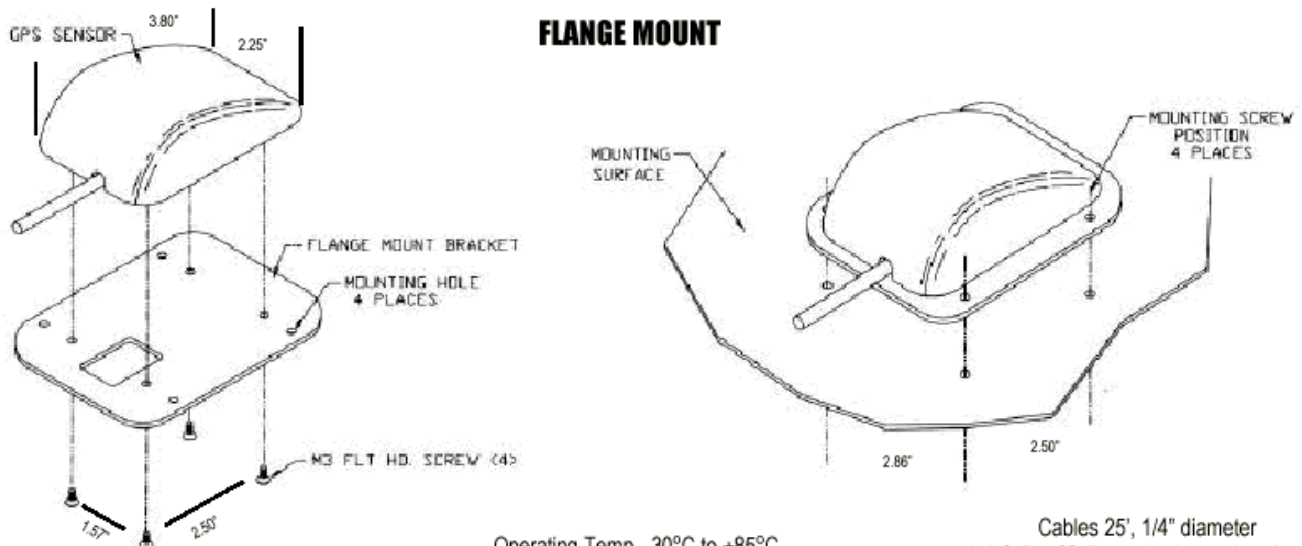
BASIC MOUNT



MARINE MOUNT

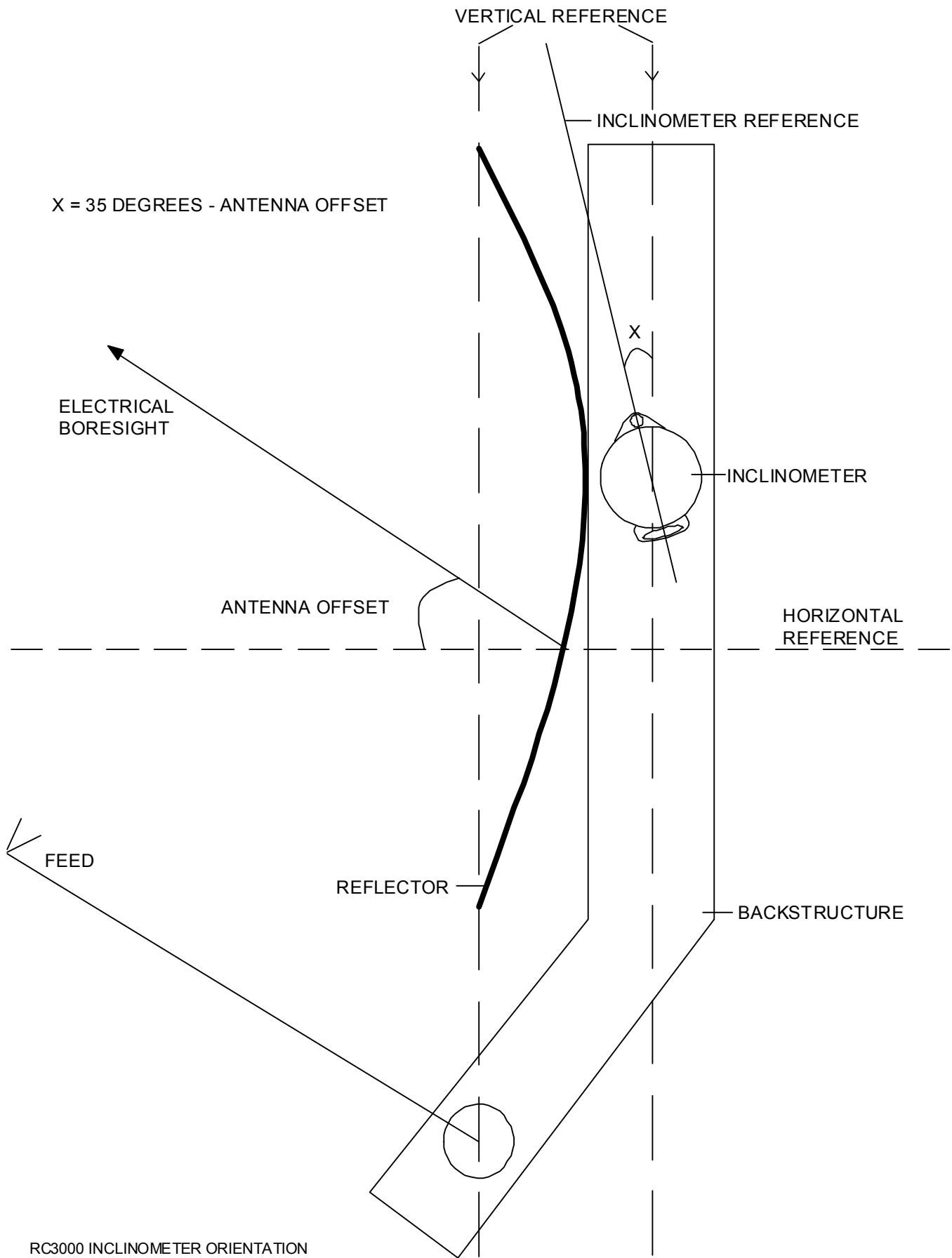


FLANGE MOUNT



Operating Temp. -30°C to +85°C
 Storage Temp. -40°C to +90°C

Cables 25', 1/4" diameter
 A 1.25" x .625" opening is required for the connector to pass through a panel.

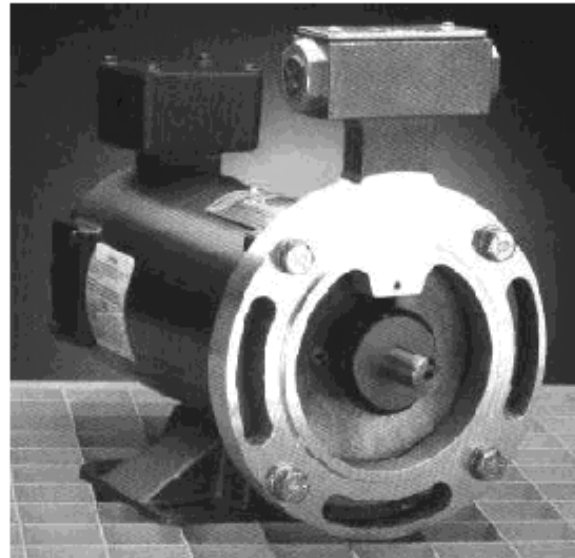


RC3000 INCLINOMETER ORIENTATION

DIGITAL TACHOMETER SENSOR KITS

POWER/MATION

W238 N1690 Rockwood Drive
 Waukesha, WI 53188
 Phone: (414) 523-0600
 800-242-2060
 Fax: (414) 523-0611



SPECIFICATIONS

INPUT: 5-16 VDC

OUTPUT: NPN, 20ma

TEMPERATURE: Minus 40°F to plus 225°F

OUTPUT CONNECTION: Three Wire

PULSES PER REVOLUTION (ppr): 1 *

WAVE FORM: Square Wave

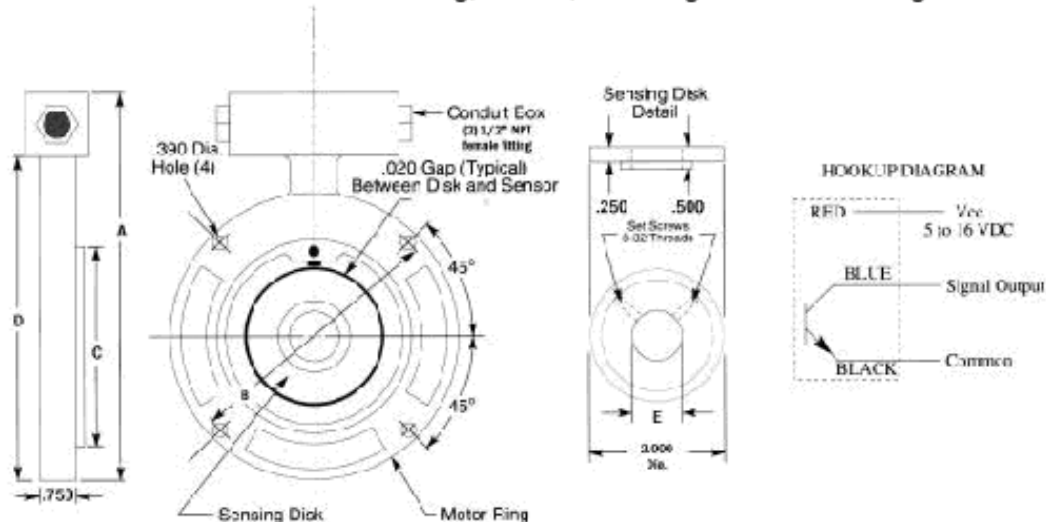
ENVIRONMENT: Impervious to dust, oil & water

* 2, 15 & 60 ppr models are available

ORDERING CHART

MOTOR FRAME SIZE	KIT MODEL NUMBER	DIMENSIONS				
		A	B	C	D	E
56C	DTK-056 M1	9.375	5.875	4.500	7.875	5/8"
143TC, 145TC, 182C & 184C	DTK-184 M1	9.375	5.875	4.500	7.875	7/8"
182TC, 184TC, 213C, 215C & 254C	DTK-215 M1	12.312	7.250	8.500	10.000	1-1/8"
213TC, 215TC, 254UC & 256UC	DTK-254 M1	12.312	7.250	8.500	10.000	1-3/8"
254TC & 256TC	DTK-256 M1	12.312	7.250	8.500	10.000	1-5/8"

NOTE: Kits consist of motor face ring, sensor, mounting bolts and sensing wheel.



NOTE: To interface sensor to controller, use a shielded triple (18-22 AWG) with bare drain wire, such as Belden 8772.

RESEARCH CONCEPTS, INC.

5420 Martindale, Shawnee, KS 66218-9680
www.researchconcepts.com

Phone: (913) 422-0210

The RC3000 is housed in a standard 2 RU enclosure 17 inches long and 17 inches wide. Handles extend approximately 1.5" in front and connectors with the mating connectors will extend approximately 3.5" in the rear.

Four #10-32 threaded inserts are positioned to the rear on each side for chassis support. These holes lie in a 2.5" x 6.0" rectangle.

