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BUOY ORIENTATION SENSOR 4164/4164A

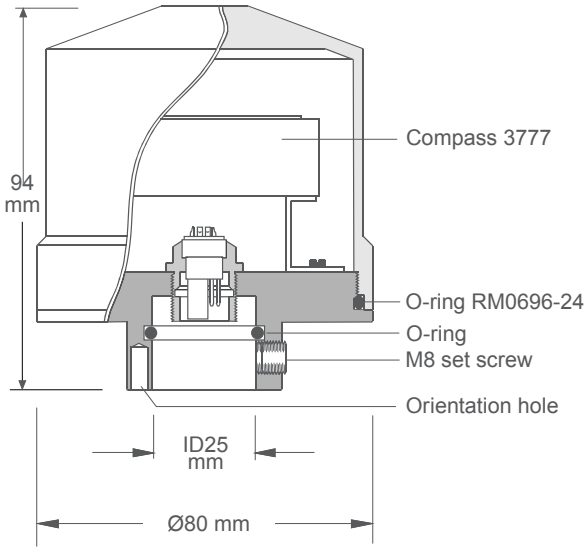
is designed to give a magnetic heading reference for AADI Data Buoys.

This rugged sensor is intended for installation in the Buoy Construction and will then give a magnetic heading reference for wind direction measurements.

The buoy is equipped with either a wind direction sensor or a wind orientation vane that will align the cross arm and the sensor up against the wind.
The sensor consists of an aluminum housing with a Compass 3777 inside and an O-ring seal and a 6-pin watertight receptacle or 10-pin watertight receptacle.

The compass sensor is a solid-state compass with no moving parts. The sensor measures the earth magnetic field and the tilt. The compass direction is calculated based on these measurements.

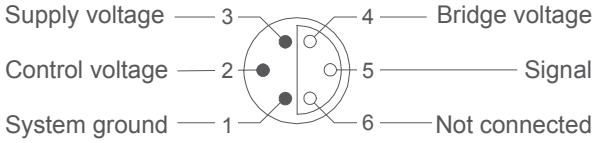
Specifications



Accuracy:	Better than ± 4°
Operating Temp.:	-5°C to 40°C
Signal Output:	
4164:	SR10
4164A:	SR10/RS-232
Electrical Connection:	
4164:	6-pin lemo plug. Directly plug-on to Sensor outlet or by Sensor Cable 2842
4164A:	10-pin lemo plug.
Mounting:	Directly on Data Buoy 4700, Sensor Arm 3415 or Bracket 2808
Material Housing:	Aluminum 6061T6, anodized 10µ
Weight:	450g
Packing:	Cardboard Box

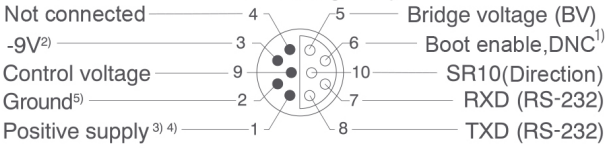
PIN CONFIGURATION 4164

Receptacle, exterior view; pin =●; bushing =○



PIN CONFIGURATION 4164A

Receptacle, exterior view; bushing = ○; pin = ●



[1)] DNC: Do Not Connect
[2)] Supply for SR10 Operation
[3)] Ground for SR10 Operation
[4)] Supply for RS-232 Operation
[5)] Ground for RS-232 Operation

For converting Raw data Sensor Readings to Engineering Units use the equation:
Wind Direction (Deg. M) = $A + BN + CN^2 + DN^3$

Coefficients: A = 0; B = 3.516 E-01; C and D = 0.
(N = is the raw data reading from the Datalogger)

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