The problem is either in the fluxgate compass or the autopilots course computer or a poor connection of the fluxgate compass to the course computer. I would test the fluxgate compass, and then make sure my connections are clean tight and correct.

Compass Test:
Multi-meter should be set to:

(a) Resistance scale
(b) 200 ohm scale

The following procedure should then be followed:

1. Disconnect the transducer from the system.

2. Connect one multi-meter lead to the red wire and the other lead to the green wire and a reading as indicated in the test data table should be present.
3. Follow the above procedure for all the color combinations indicated in the test data table.
4. If all readings match those indicated assume the compass transducer is functioning

Compass Test Data:

correctly.

Red to Green - 4 ohms Red to Yellow - 4 ohms Green to Yellow - 8 ohms Screen to Blue - 8 ohms All other combinations - OPEN You are looking for a short or open. A +or - 2 Ohm reading is allowed.

If this check indicates a fault with the compass then you will be best served by replacing the compass. If no problem is indicated then you should send the compass and the course computer to a repair facility for evaluation.