Functional test of Reed/resistor sensor chains

- 1. Disconnect any resistance-to-current converter, whether panel mounted, such as MF24-... or head-mounted, such as XT-42- SI.
- 2. Connect an ohmmeter to any two of the wire combinations and check the resistance value output in accordance with the table and float movement below.

Black - Brown (R1)	Blue - Brown (R2)	Black - Blue (Ri)
Resistance value increases proportionally to the height of the float. Zero, when float at the bottom of the measuring range, full resistance, when float at max. position	Resistance value decreases proportionally to the height of the float. Full resistance when float at bottom, zero, when float at max position	Total resistance value (Ri), +/- 1 % - regardless of float position (but float or magnet must be present within the active of the measuring chain

Notes:

- R1 and R2 should read 'infinity' on meter when no float/magnet present.
- The "total" value may jump up or down by the value of 1 or 2 resistors (this is normal)
- Leaving float/magnet at any one given position within the active range, take both R1 and R2 measurements without moving the float and these two values added together should equal Ri (it may vary by the value of 1 or 2 individual resistors however)
- The active measuring range may vary from the insertion length of the unit. Many units also have a customer pre-specified measuring range with possible dead bands at the top and bottom end. These are classed as the L1 position for 100 % and L2 position for 0 %.
- On R1 and R2 the resistance increase / decrease should be linear and increments should be in line with the individual resistance value of each chip contact.

Please note down all measured resistance values and feed back to us for evaluation.

Measurements on measuring chains

Please carry out the following measurements on each chain for evaluation:

Magnet position	Resistance		
	Black - Brown (R1)	Blue - Brown (R2)	Black - Blue (Ri)
Without magnet			
0 %			
25 %			
50 %			
75 %			
100 %			

