

Title:	Compatibility Cable wiring information for Hydronix Cable 0090/0090A
Document reference (DRC):	EN0039 Rev1.0
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Products affected:	HP02, HM05, HPSE, ORB1
Summary:	Connection information for converting a 0090/0090A cable to a Compatibility Cable.

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## 1) Summary

The new 4m Sensor Cable (part no 0090A) has been designed to take the place of the existing standard (0071) and compatibility (0069) cables. The 0090A cable has a Military Spec. connector at one end that connects to the Hydronix Sensor, and the other end is left as bare wires. The old Hydronix Compatibility Cable (0069) had a Military Spec. connector and a larger Bulgin connector.

Hydronix can supply Bulgin connectors to customers who still need a compatibility cable. The Hydronix part number for the Bulgin Set is #0029.

Note that this document also applies for customers who have the 0090 Sensor Cable.

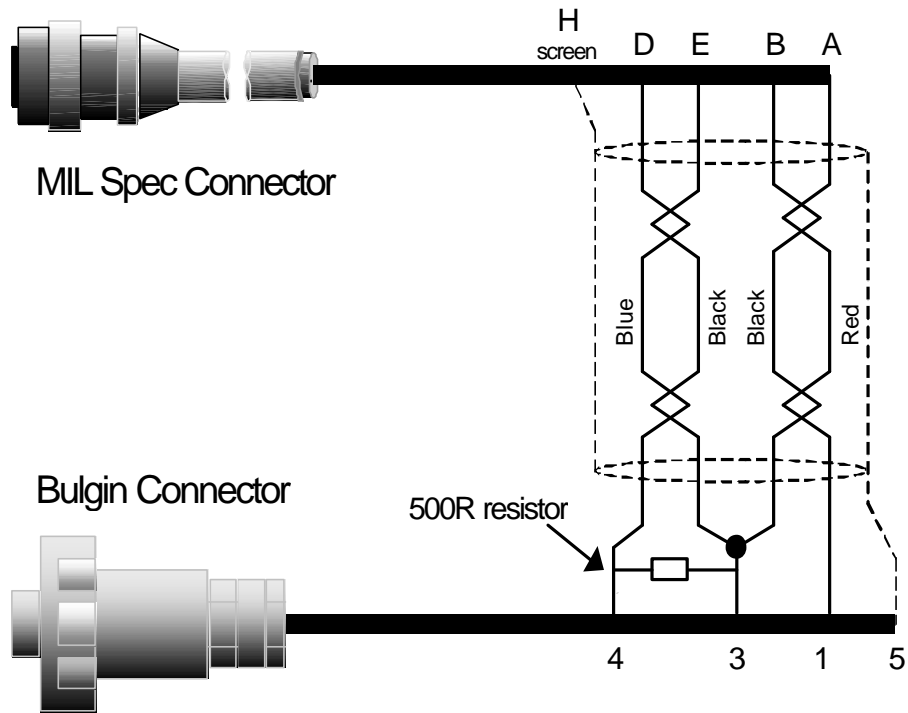
## 2) Connection information

Using a sensor in compatibility mode requires the use of the 500W resistor supplied with the cable. Once the sensor is set to compatibility mode, this will produce the correctly characterised 0 – 10 V signal to allow the Hydro-Control IV or Hydro-View to operate.

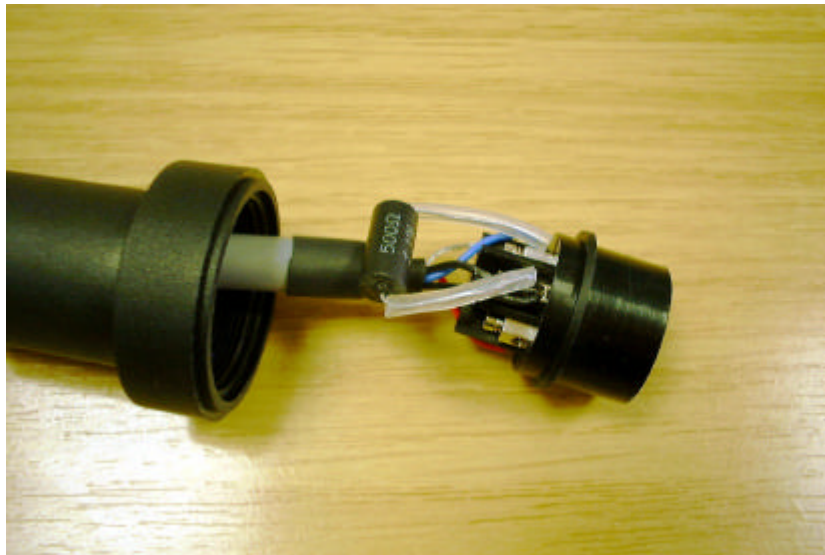
Twisted Pair Number	Bulgin pins	MIL spec pins	Sensor & Probe connections	Cable colour
1	1	A	+15-30V DC	Red
1	3	B	0V	Black
2	--	C	1 <sup>st</sup> Digital input	Yellow
2	--	--	-	Black (Cut back)
3	4	D	1 <sup>st</sup> Analogue Positive (+)	Blue
3	3	E	1 <sup>st</sup> Analogue Return (-)	Black
4	--	F	RS485 A	White
4	--	G	RS485 B	Black
5	--	J	2 <sup>nd</sup> Digital input	Green
5	-	--	-	Black (Cut back)
6	--	D	2 <sup>nd</sup> Analogue Positive (+)	Brown
6	--	K	2 <sup>nd</sup> Analogue Return (-)	Black
	5	H	Screen	Screen

**Connect the 500W resistor to pins 3 and 4 on the Bulgin Connector.**

### 3) Wiring Diagram



There is sufficient room in the Bulgin Connector housing for the 500Ω resistor, which can be screwed directly to the pins. Some clear sleeving should be used to insulate the legs of the resistor.



For ease of fitting:

Cut resistor leads to approx 25mm (1")

Cut the 4 wire lengths to approximately 35mm (1 3/8")