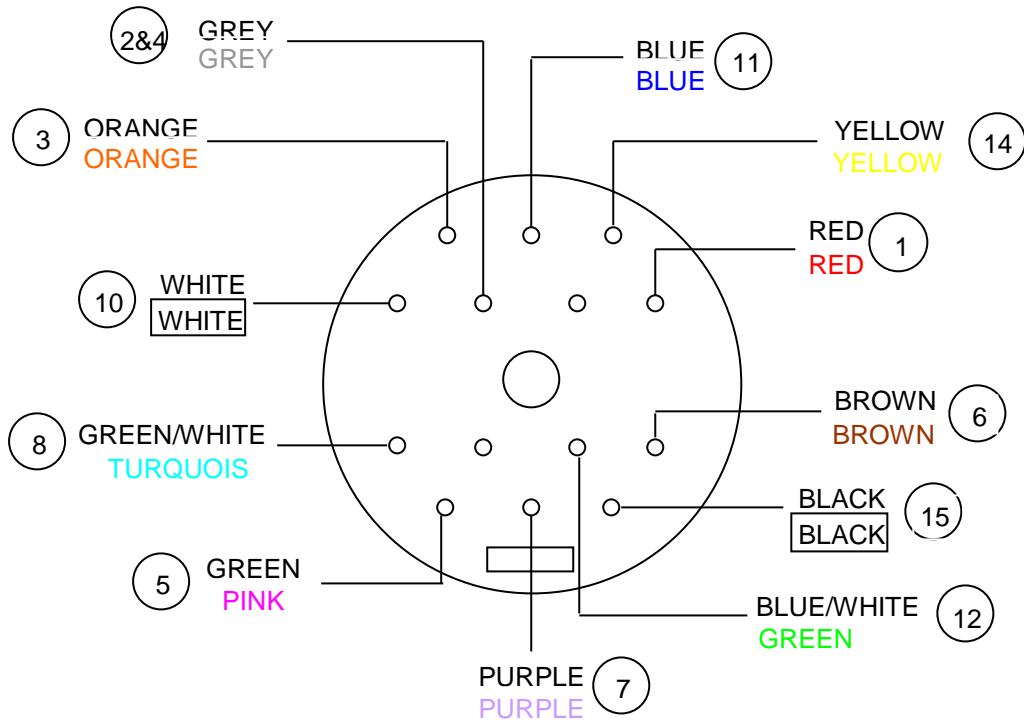
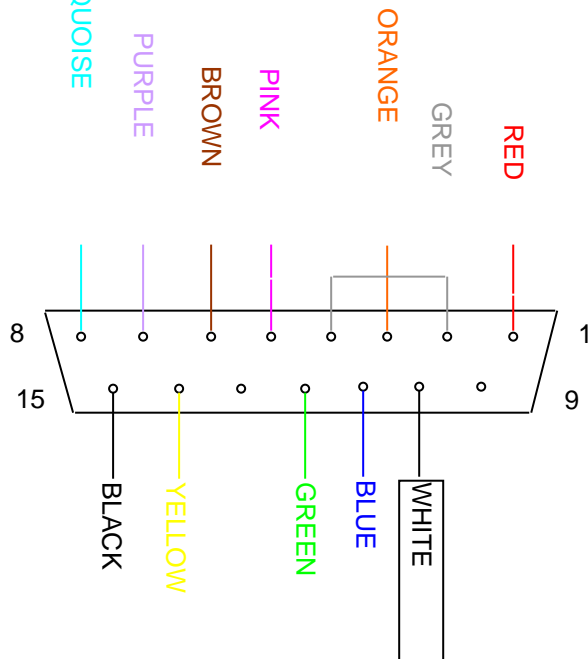


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**BLACK TEXT = RENISHAW 90 DEG PLUG, COLOURED TEXT =**

TURQUOISE



**15 WAY 2 ROW MALE PLUG**

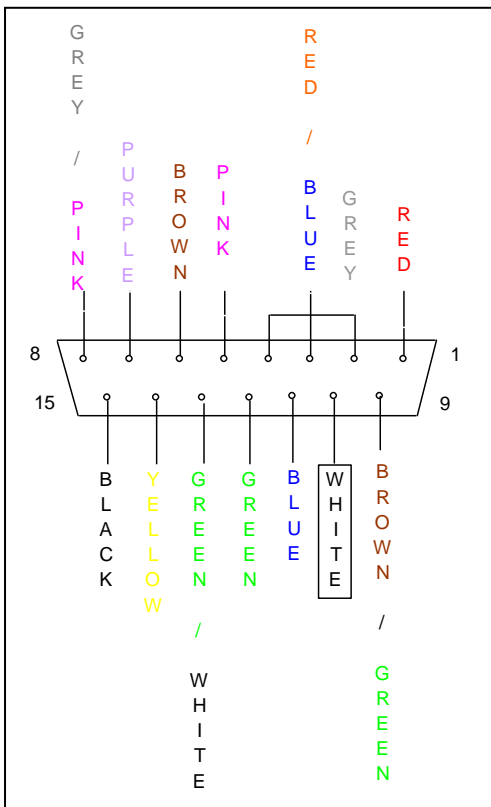
- 1. GROUND SENSE  
2&4. 0v
- 3. A AXIS FEEDBACK
- 5. MOTOR PROBE
- 6. DC REFERENCE 12v
- 7. B AXIS MOTOR/PROBE
- 8. LED & DATUM
- 10. LOCKING MOTOR 8v DC
- 11. A AXIS MOTOR 12v DC NOMINAL
- 12. A AXIS MOTOR 12v DC
- 14. B AXIS FEEDBACK
- 15. B AXIS MOTOR PROBE

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### PH10T Probe cable pin outs

Change of probe cable supplier, PH10T cabling change.

14 core grey cable igus CHAINFLEX - CF240.01.14

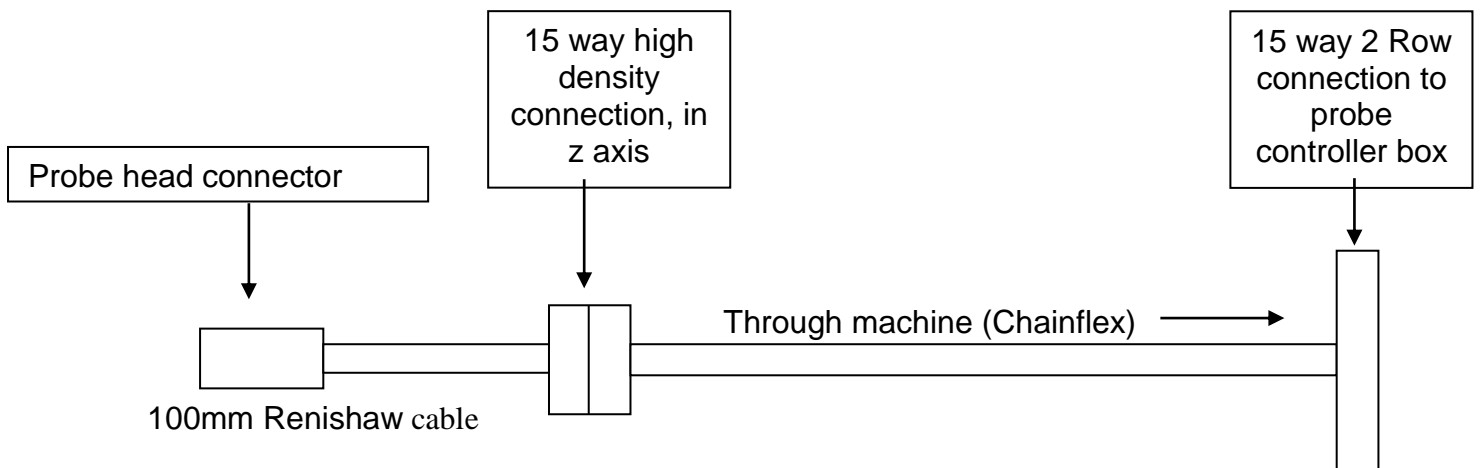


Probe connector –  
Controller end will be a 15 way 2 ROW D-type

Within the z axis quill is an additional connection, which converts the Renishaw probe connection to the CHAINFLEX cable, this uses the same pin outs but uses High Density 15 way plug and socket which are 3 ROW.

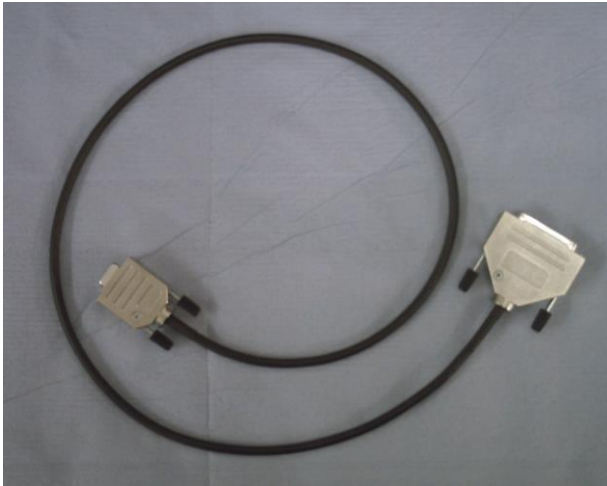
Renishaw to 15 way connection details

Pin	Colour
1	Red
2	Grey
3	Orange
4	Normally linked to 2 – linked at controller end.
5	Pink
6	Brown
7	Purple
8	Turquoise
9	Not used
10	White
11	Blue
12	Green
13	Not used
14	Yellow
15	Black



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**RS232 Communications cable (indexing)**



25 Way D-type (socket)	9 Way D-type (socket)
Pin 1 (Braid)	Shell (Braid)
Pin 2	Pin 2
Pin 3	Pin 3
Pin 4	Pin 8
Pin 5 looped to pin 20	
Pin 7	Pin 5

**PICSB cable (probe signal)**



9 Way D-type (plug)	9 Way D-type (socket)
Pin 3 LED C	Pin 3
Pin 4 LED A (link to pin 8)	Pin 4
Pin 5 Probe	Pin 5
Pin 9 Probe return	Pin 9
Shell	Shell
C – Cathode	
A - Anode	

**DIP Switch settings**

**PHC10-2**

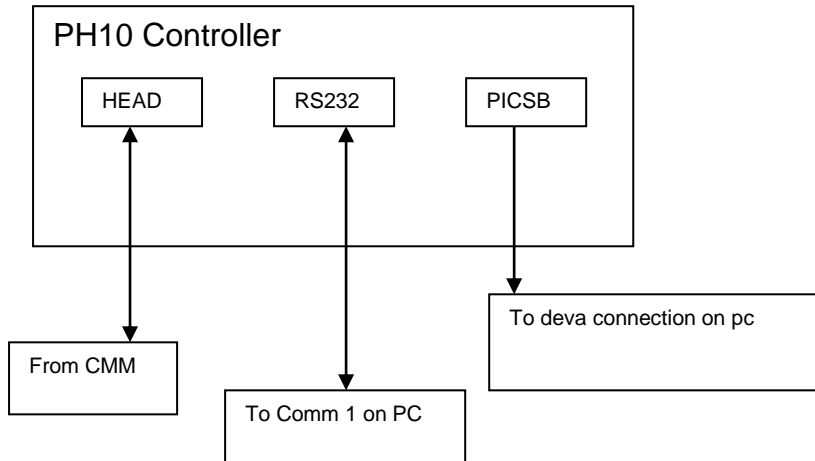
Switches 1, 3, 15 and 16 up, remaining switches down.

**PHC10-3**

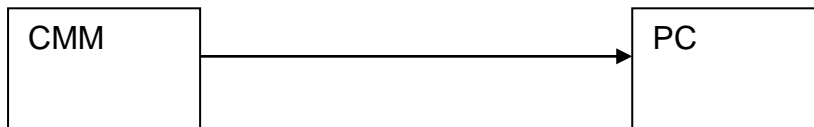
Switches 1, 3, 12, and 13 up

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**Connection schematic PH10T**



**Connection schematic RTP20 , MH20i, TP8, MIP, PH1, TP2, PH6**



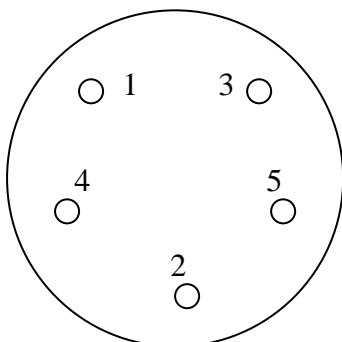
**Probe Wiring**

Deva 001card

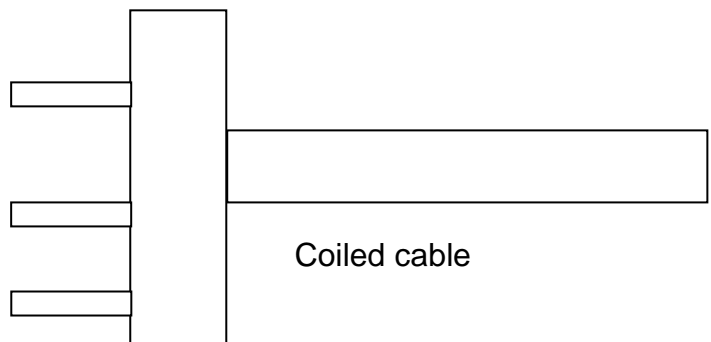
- Pin 1 LED Cat
- Pin 3 LED Anode
- Pin 4 Probe
- Pin 5 Probe

Deva 004 card

- Pin 3 LED Cat (Red)
- Pin 4 LED Anode – link to pin 8 (Yellow)
- Pin 5 Probe (Pink)
- Pin 9 Probe return (White)



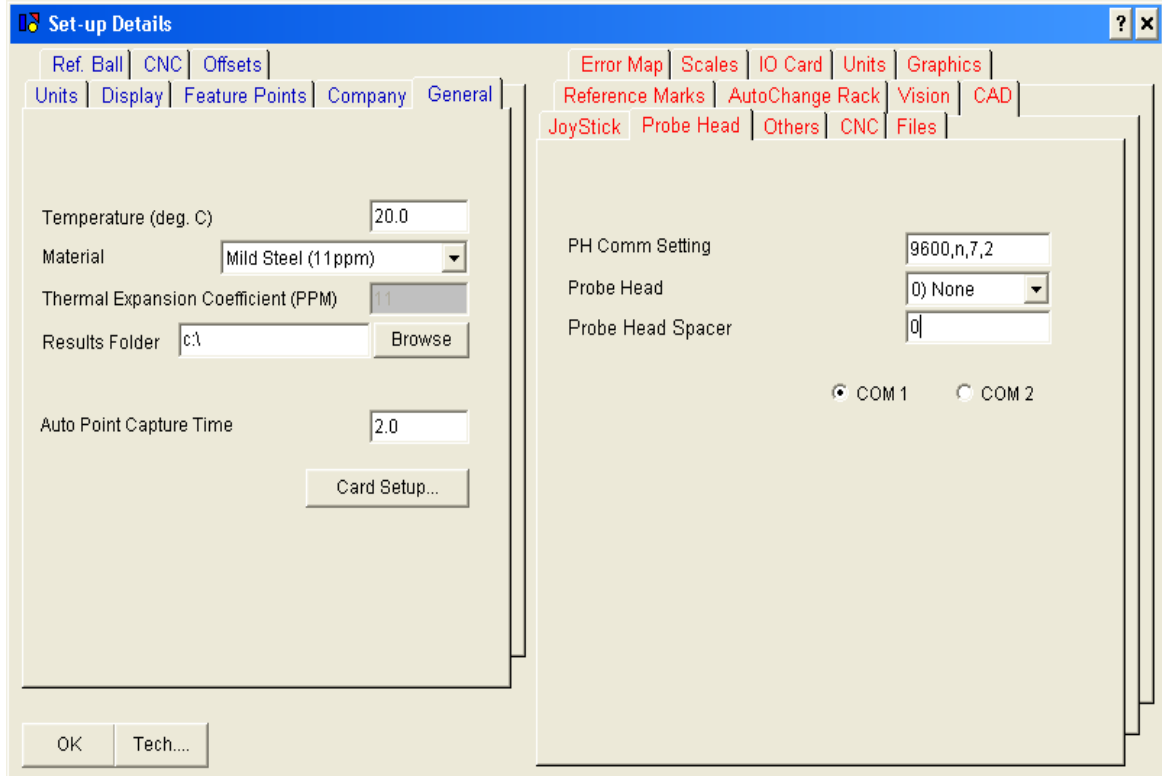
End view of cable



Coiled cable

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## Aberlink settings



### PH Comm setting

No requirement to change from the default, this determines the communication protocol, for PH10 probe indexing.

### Probe head

Use the drop down menu to select your probe type. Restart software to effect the change.

### Probe Head Spacer

If there is a spacer between the end of the quill and the top of the probe head, enter this thickness here in mm. Important to ensure correct z offset is used within the probe offset, and relative error map position.

### COM 1      COM 2

Option to choose which com port to use, generally pc's now only have one com port, which is com port 1.

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## Differences between PHC10-2 and PHC10-3

The table below is a summary of the differences between PHC10-3 and PHC10-2 configuration switch settings that allows you to correctly configure your PHC10-3 when replacing a PHC10-2.

PHC10-2 switch	PHC10-3 switch equivalent	Function	Up	Down
Communications				
1	1#	Baud rate		
2	2#	Baud rate		
3	3#	Baud rate		
4 (not used)				
5 (not used)				
6	4*#	Stop bit	2 stop bits	1 stop bit
7	5*#	CTS protocol	CTS on	CTS off
8	6*#	LF protocol	LF on	LF off
9	9#	Command set	Extended	Basic
10	10	Probe reset time	2 (extended)	1 (standard)
Interface				
11	7	PPOFF	PPOFF - active during head index	PPOFF - inactive during head index
12	8	HCU1 probe, DAMP and probe reset buttons	Enabled	Disabled
13 (not used)				
14 (not used)				
15+16	12	Output configuration	PICS	DIN
17+18	11	Interface connection	PICS or 7 pin DIN operation	5 pin DIN operation only
	13	Probe wire isolation	Machine cable	Multiwire