

TI-5090 Cable Pinouts - Heidenhain ERN1387 Direct-to-Encoder (14 pin PCB connector)				
Line	Heidenhain Pin	Heidenhain Color	14 Pin TB Pin #	Conductor Color
+5V	1b	BRN/GRN	1	RED
0V	5b	WHT/GRN	2	WHT
A	6b	GRN/BLK	3	GRN
A*	2a	YEL/BLK	4	GRN/BLK
B	3b	BLU/BLK	5	BLU
B*	5a	RED/BLK	6	BLU/BLK
Z	4b	RED	7	ORG
Z*	4a	BLK	8	ORG/BLK
C	7b	GRY	9	RED/BLK
C*	1a	PNK	10	WHT/BLK
D	2b	YEL	11	GRN/WHT
D*	6a	VIO	12	BLU/WHT

Heidenhain 14 pin Pigtail	
M/E P/N:	21982214
Manuf. P/N:	332200-01
Vendor P/N:	HEIDENHAIN
15 Cond., 24 AWG	
M/E P/N:	60090015
Manuf. P/N:	Carol C0746A
Vendor P/N:	W415-1000-ND
Terminal Block - 14pin	
M/E P/N:	21235114
Manuf. P/N:	PCD ELFT 14260

- NOTE:**
- Start with 6' of 15 conductor shielded cable
 - RED/WHT, BLK, and BLK/WHT not used on MEI cable (cut)
 - BLU, WHT, GRN, and BRN not used on Heidenhain pigtail (cut)

Pigtail end of Cable

1. Strip off 3" of cover and remove foil
2. Cut wires at 1/4" intervals in reverse order (i.e. on 10 conductor red would be 1/4" longer than blue and vice versa on connector pigtail).
3. Use ten 3/4" pieces of 1/16" heatshrink to insulate solder connections between 10 conductor and connector pigtail.
4. Route all conductors back along cable and cover with 3" of 3/8" heatshrink as well as heating the pigtail heatshrink.
5. Double the conductor leads back toward the end of the cable, secure with two cable ties and cover with 4" of 1/2" heatshrink.

TB end of cable

1. Strip off 3.25" of cover and remove foil, tin drain.
2. Apply .75" of .25" heat shrink at end of cover
3. Install cable tie at heat shrink, trim tie to 5/16" and install at pin 14 of TB
4. Cut wires to proper length, strip and install in 14 pin TB
5. Tighten all unused terminals
6. Install identifying sticker on TB

