

HYPERGRIP® CONNECTOR SERIES

TECHNICAL NOTE | TERMINATION TIME STUDY



SUPERIOR EFFICIENCY

It was determined, using an independent cable assembly vendor, that the assembly process for the HG series circular medical connectors is a more efficient process than the most used industry standard method. The results of that time study showed a 25% time reduction allowing for greater output in less time and cost.

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RELATIVE TIME TO TERMINATE CONNECTORS

CONTACT TERMINATION TYPES:

Comparison of two widely available connector contact termations

1.Terminate Then Insert (Crimp & Poke)



HyperGrip Series

2. Solder Cup Contacts



Common Medical Connectors

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STEPS TO TERMINATE CONTACTS

Type 1

- Crimp wire into contact
- Insert contact into insulator with insertion tool

Type 2

- Cut heat-shrink tubing and slide over wire
- Pre-tin wire
- ▶ Solder wire into contact (avoiding solder bridging to adjacent contacts)
- Apply heat to heat-shrink tubing over the solder joint

This termination time study was done at an independenct cable assembly vendor on 19 postion connectors with the two different types of terminations:

- Hypertac HG3E10GG1904FRAH (Type 1)
- Lemo/Redel CLB.M19.GLLG (Type 2)

AVERAGE TIME OF TERMINATION:

Type 1

- ▶ 16.4 mins per connector
- 0.86 mins (52 secs) per contact

Type 2

- 22.4 mins per connector
- ▶ 1.18 mins (71 secs) per contact





Therefore, there is an approximate 25% reduction in assembly time using the crimp and poke method vs. soldering into a nest of solder-cup tails. In the example above, if the labor rate was \$10 per hour, the cost to terminate Type 1 would cost \$2.73 per connector vs. \$3.73 per connector (a savings of \$1 per connector – and overhead based on labor rates would also increase these savings). Savings per connector would vary depending on labor rates.

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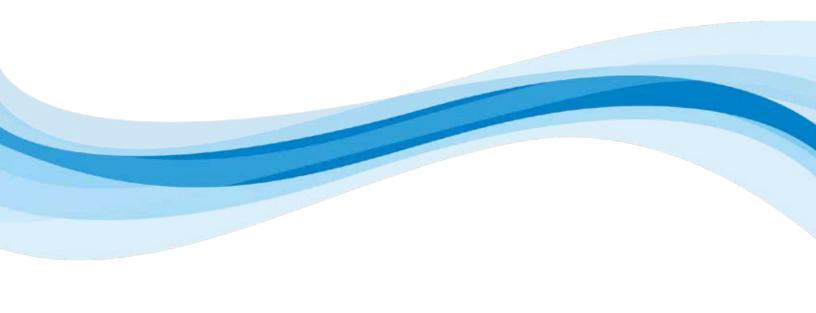
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