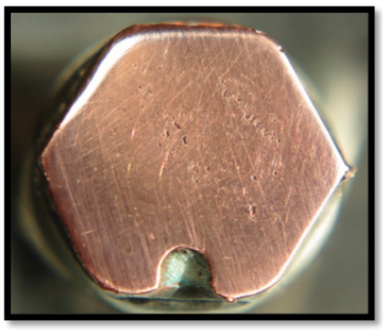
Crimp Test Specification Sheet | Cablecraft 50mm² HD Range

Crimp Section Photo



Copper tube I/D 9.5mm
Copper tube O/D 12.1mm
Test cable 50mm² (396/0.4mm) Tri-rated to BS 6231
Crimp tool - Cablecraft Pt Nº CHT 185
Crimp die - Cablecraft Pt Nº BDS-50-35-150 35/50 hexagon size 10.13mm A/F
Ensure indentor is aligned on underside and crimp near entry point, then crimp again near inspection point
Dimension from bottom of indentation to opposite flat 8.2mm
Initial volt drop across joint with 40A dc test current 0.00037v
Initial resistance across joint = 9.2 μΩ
Initial resistance of twice the length of the compression barrel = 12μΩ (volt drop test pass)
Minimum pull force required to meet electrical installation standard BS EN 60352-2-2006 = 3000 Newtons
Minimum pull force required to meet London Underground Engineering Rail Standard E 6487 A2 = 5800 Newtons
Pull force achieved = 6400 Newtons (pass on both standards)

Comments: Some voids visible on crimp section photo, but overall pass.

Applicable terminal part numbers:

CCT50-5HD	CCT50-6HD	CCT50-8HD
CCT50-10HD	CCT50-12HD	CCT50-14HD
CCT50-16HD		

Test equipment used:
Solartron 7071 computing voltmeter
Farnell AP 20-80 regulated power supply

Test cable suppliers:
General Cable
Clynder Cables
Draka Cables

NB: BS 4579 Pt 1 states, "For all cable sites above 10mm² the value of resistance of any joint shall not exceed the resistance of a length of conductor equal to twice the length of the compression barrel".

Orrconnect

Independent testing carried out by Orrconnect Limited
September 2014

CABLECRAFT™ creative wiring solutions

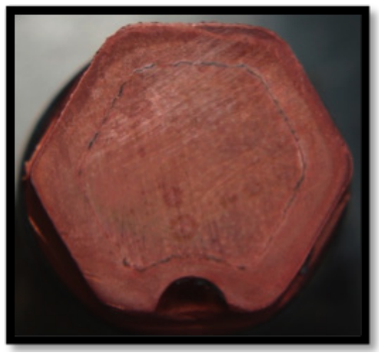
betaduct BIRCH VALLEY CTT

Cablecraft House, Circle Business Centre, Blackburn Road, Houghton-Regis, Bedfordshire, LU5 5DD.
Phone: 01582 606033 • Fax: 01582 606063 • Email: sales@cablecraft.co.uk • Web: www.cablecraft.co.uk
VAT NO. GB 639 920 900 • CO. REG. NO. 2478297

Link-up Registered
nqa. ISO 9001 Registered UKAS 015
INVESTORS IN PEOPLE

Crimp Test Specification Sheet | Cablecraft 70mm² HD Range

Crimp Section Photo



Copper tube I/D 11.5mm
Copper tube O/D 15mm
Test cable 70mm² (360/0.5mm) Tri-rated cable to BS 6231
Crimp tool - Cablecraft Pt Nº CHT 185
Crimp die - Cablecraft Pt Nº CHT 185HD 70-25 (BDS 70-25), hexagon size 12.6mm A/F, 10.8mm to indentor
Initial volt drop across joint with 60A dc test current 0.000328v typical
Initial resistance across joint = 5.4 μΩ typical
Initial cable resistance of twice the length of the compression barrel = 12.2 μΩ (volt drop test pass)
Minimum pull force required to meet electrical installation standard BS EN 60352-2-2006 = 4200 Newtons
Minimum pull force required to meet London Underground Engineering Rail Standard E 6487 A2 = 6700 Newtons
Pull force achieved = 8580 Newtons typical (pass on both standards)

Comments: The volume of wall thickness was generous relative to the terminal cross sectional area and the hexagon size was well matched to the volume of material to be crimped also resulting in minimal compression flash. These terminals require a double crimp. For second crimp, allow a space of 2mm, thus creating a collar effect. Indentors to be positioned on the under side of the terminal.

Applicable terminal part numbers:

CCT70-5HD	CCT70-6HD	CCT70-8HD
CCT70-10HD	CCT70-12HD	CCT70-16HD

Test equipment used:
Solartron 7071 computing voltmeter
Farnell AP 20-80 regulated power supply

Mecmesin Twin Beam Tensometer 0-25 KN

Test cable suppliers:
Eland Cables Limited

NB: BS 4579 Pt 1 states, "For all cable sizes above 10mm² the value of resistance of any joint shall not exceed the resistance of a length of conductor equal to twice the length of the compression barrel".

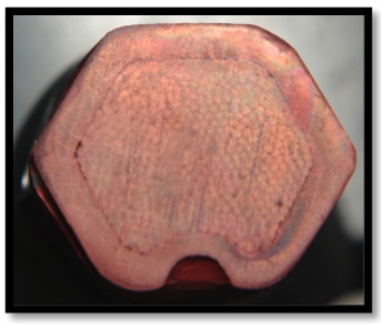
Orrconnect

Independent testing carried out by Orrconnect Limited
September 2014

Cablecraft House, Circle Business Centre, Blackburn Road, Houghton-Regis, Bedfordshire, LU5 5DD.
Phone: 01582 606033 • Fax: 01582 606063 • Email: sales@cablecraft.co.uk • Web: www.cablecraft.co.uk
VAT NO. GB 639 920 900 • CO. REG. NO. 2478297

Crimp Test Specification Sheet | Cablecraft 95mm² HD Range

Crimp Section Photo



Copper tube I/D 13.5mm
Copper tube O/D 17mm
Test cable 95mm² (475/0.5mm) Tri-rated cable to BS 6231
Crimp tool - Cablecraft Pt Nº CHT 185
Crimp die - Cablecraft Pt Nº CHT 185HD 95-16 (BDS 95-16), hexagon size 13.4mm A/F, 11.45mm to indentor
Initial volt drop across joint with 60A dc test current 0.000308v typical
Initial resistance across joint = 5.1 µΩ typical
Initial cable resistance of twice the length of the compression barrel = 9.9 µΩ (volt drop test pass)
Minimum pull force required to meet electrical installation standard BS EN 60352-2-2006 = 5700 Newtons
Minimum pull force required to meet London Underground Engineering Rail Standard E 6487 A2 = 8800 Newtons
Pull force achieved = 9310 Newtons typical (pass on both standards)

Comments: The volume of wall thickness was generous relative to the terminal cross sectional area and the hexagon size was well matched to the volume of material to be crimped also resulting in minimal compression flash. These terminals require a double crimp. For second crimp, allow a space of 2mm, thus creating a collar effect. Indentors to be positioned on the under side of the terminal.

Applicable terminal part numbers:

CCT95-6HD	CCT95-8HD	CCT95-10HD
CCT95-12HD	CCT95-14HD	CCT95-16HD

Test equipment used:
Solartron 7071 computing voltmeter
Farnell AP 20-80 regulated power supply

Mecmesin Twin Beam Tensometer 0-25 KN

Test cable suppliers:
Eland Cables Limited

NB: BS 4579 Pt 1 states, "For all cable sizes above 10mm² the value of resistance of any joint shall not exceed the resistance of a length of conductor equal to twice the length of the compression barrel".

Orrconnect

Independent testing carried out by Orrconnect Limited
September 2014

CRIMP TEST SPECIFICATION SHEET | CABLECRAFT 95MM² HD RANGE

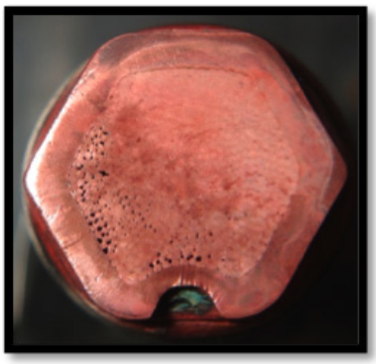
CABLECRAFT™ creative wiring solutions

Cablecraft House, Circle Business Centre, Blackburn Road, Houghton-Regis, Bedfordshire, LU5 5DD.
Phone: 01582 606033 • Fax: 01582 606063 • Email: sales@cablecraft.co.uk • Web: www.cablecraft.co.uk
VAT NO. GB 639 920 900 • CO. REG. NO. 2478297

Link-up Registered
nqa. ISO 9001 Registered
UKAS
INVESTORS IN PEOPLE

Crimp Test Specification Sheet | Cablecraft 120mm² HD Range

Crimp Section Photo



Copper tube I/D 15mm
Copper tube O/D 19mm
Test cable 120mm² (608/0.5mm) Tri-rated cable to BS 6231
Crimp tool - Cablecraft Pt Nº CHT 185
Crimp die - Cablecraft Pt Nº CHT 185HD 120-10 (BDS 120-10), hexagon size 15.7mm A/F, 13.9mm to indentor
Initial volt drop across joint with 60A dc test current 0.000266v typical
Initial resistance across joint = 4.4 μΩ typical
Initial cable resistance of twice the length of the compression barrel = 8.3 μΩ (volt drop test pass)
Minimum pull force required to meet electrical installation standard BS EN 60352-2-2006 = 7200 Newtons
Minimum pull force required to meet London Underground Engineering Rail Standard E 6487 A2 = 9700 Newtons
Pull force achieved = 13200 Newtons typical (pass on both standards)

Comments: The volume of wall thickness was generous relative to the terminal cross sectional area and the hexagon size was well matched to the volume of material to be crimped also resulting in minimal compression flash. These terminals require a double crimp. For second crimp, allow a space of 2mm, thus creating a collar effect.

Applicable terminal part numbers:

CCT120-8HD	CCT120-10HD	CCT120-12HD
CCT120-14HD	CCT120-16HD	CCT120-20HD

Test equipment used:
Solartron 7071 computing voltmeter
Farnell AP 20-80 regulated power supply

Mecmesin Twin Beam Tensometer 0-25 KN

Test cable suppliers:
Eland Cables Limited

NB: BS 4579 Pt 1 states, "For all cable sizes above 10mm² the value of resistance of any joint shall not exceed the resistance of a length of conductor equal to twice the length of the compression barrel".

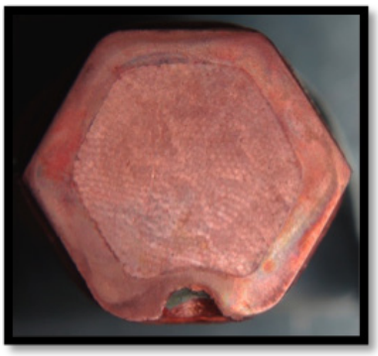
Orrconnect

Independent testing carried out by Orrconnect Limited
September 2014

Cablecraft House, Circle Business Centre, Blackburn Road, Houghton-Regis, Bedfordshire, LU5 5DD.
Phone: 01582 606033 • Fax: 01582 606063 • Email: sales@cablecraft.co.uk • Web: www.cablecraft.co.uk
VAT NO. GB 639 920 900 • CO. REG. NO. 2478297

Crimp Test Specification Sheet | Cablecraft 150mm² HD Range

Crimp Section Photo



Copper tube I/D 16.5mm
Copper tube O/D 21mm
Test cable 150mm² (756/0.5mm) Tri-rated cable to BS 6231
Crimp tool - Cablecraft Pt Nº CHT 185
Crimp die - Cablecraft Pt Nº CHT 185HD 150 (BDS 150), hexagon size 17.3mm A/F, 15.5mm to indentor
Initial volt drop across joint with 75A dc test current 0.000289v typical
Initial resistance across joint = 3.8 μΩ typical
Initial cable resistance of twice the length of the compression barrel = 8.1 μΩ (volt drop test pass)
Minimum pull force required to meet electrical installation standard BS EN 60352-2-2006 = 9000 Newtons
Minimum pull force required to meet London Underground Engineering Rail Standard E 6487 A2 = 12000 Newtons
Pull force achieved = 12990 Newtons typical (pass on both standards)

Comments: The volume of wall thickness was generous relative to the terminal cross sectional area and the hexagon size was well matched to the volume of material to be crimped also resulting in minimal compression flash. These terminals require a double crimp. For second crimp, allow a space of 2mm, thus creating a collar effect. Indentors to be positioned on the under side of the terminal.

Applicable terminal part numbers:

CCT150-8HD	CCT150-10HD	CCT150-12HD
CCT150-14HD	CCT150-16HD	CCT150-20HD

Test equipment used:
Solartron 7071 computing voltmeter
Farnell AP 20-80 regulated power supply

Mecmesin Twin Beam Tensometer 0-25 KN

Test cable suppliers:
Eland Cables Limited

NB: BS 4579 Pt 1 states, "For all cable sizes above 10mm² the value of resistance of any joint shall not exceed the resistance of a length of conductor equal to twice the length of the compression barrel".

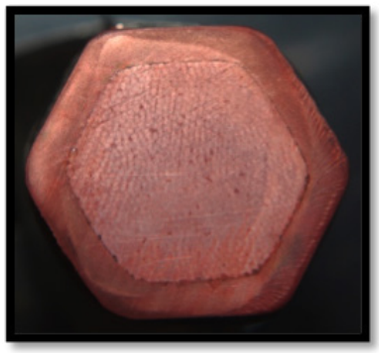
Orrconnect

Independent testing carried out by Orrconnect Limited
September 2014

Cablecraft House, Circle Business Centre, Blackburn Road, Houghton-Regis, Bedfordshire, LU5 5DD.
Phone: 01582 606033 • Fax: 01582 606063 • Email: sales@cablecraft.co.uk • Web: www.cablecraft.co.uk
VAT NO. GB 639 920 900 • CO. REG. NO. 2478297

Crimp Test Specification Sheet | Cablecraft 185mm² HD Range

Crimp Section Photo



Copper tube I/D 18.5mm
Copper tube O/D 23mm
Test cable 185mm² (925/0.5mm) Tri-rated cable to BS 6231
Crimp tool - Cablecraft Pt Nº CHT 400
Crimp die - Cablecraft Pt Nº CHT400D-185, hexagon size 18.4mm A/F
Initial volt drop across joint with 75A dc test current 0.000248v typical
Initial resistance across joint = 3.3 µΩ typical
Initial cable resistance of twice the length of the compression barrel = 7.3 µΩ (volt drop test pass)
Minimum pull force required to meet electrical installation standard BS EN 60352-2-2006 = 11100 Newtons
Minimum pull force required to meet London Underground Engineering Rail Standard E 6487 A2 = 14800 Newtons
Pull force achieved = 23275 Newtons typical (pass on both standards)

Comments: The volume of wall thickness was generous relative to the terminal cross sectional area and the hexagon size was well matched to the volume of material to be crimped also resulting in minimal compression flash. These terminals require a double crimp. For second crimp, allow a space of 2mm, thus creating a collar effect. Indentors to be positioned on the under side of the terminal.

Applicable terminal part numbers:

CCT185-12HD CCT185-14HD CCT185-16HD CCT185-20HD

Test equipment used:
Solartron 7071 computing voltmeter
Farnell AP 20-80 regulated power supply

Mecmesin Twin Beam Tensometer 0-25 KN

Test cable suppliers: Eland Cables Limited

NB: BS 4579 Pt 1 states, "For all cable sizes above 10mm² the value of resistance of any joint shall not exceed the resistance of a length of conductor equal to twice the length of the compression barrel".

Orrconnect

Independent testing carried out by Orrconnect Limited
September 2014

CRIMP TEST SPECIFICATION SHEET | CABLECRAFT 185MM² HD RANGE

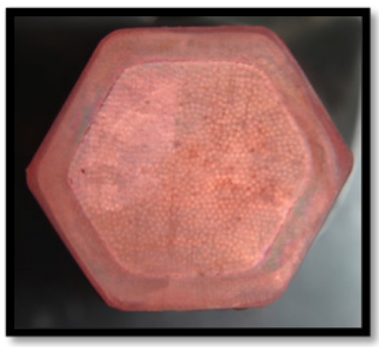
CABLECRAFT™ creative wiring solutions

Cablecraft House, Circle Business Centre, Blackburn Road, Houghton-Regis, Bedfordshire, LU5 5DD.
Phone: 01582 606033 • Fax: 01582 606063 • Email: sales@cablecraft.co.uk • Web: www.cablecraft.co.uk
VAT NO. GB 639 920 900 • CO. REG. NO. 2478297

Link-up Registered
ISO 9001 Registered
INVESTORS IN PEOPLE

Crimp Test Specification Sheet | Cablecraft 240mm² HD Range

Crimp Section Photo



Copper tube I/D 21mm
Copper tube O/D 26mm
Test cable 240mm² (1221/0.5mm) Tri-rated cable to BS 6231
Crimp tool - Cablecraft Pt Nº CHT 400
Crimp die - Cablecraft Pt Nº CHT400D-240, hexagon size 21.2mm A/F
Initial volt drop across joint with 75A dc test current 0.000172v typical
Initial resistance across joint = 2.2 μΩ typical
Initial cable resistance of twice the length of the compression barrel = 5.8μΩ (volt drop test pass)
Minimum pull force required to meet electrical installation standard BS EN 60352-2-2006 = 14400 Newtons
Minimum pull force required to meet London Underground Engineering Rail Standard E 6487 A2 = 19200 Newtons
Pull force achieved = 24700 Newtons typical (pass on both standards)

Comments: The volume of wall thickness was generous relative to the terminal cross sectional area and the hexagon size was well matched to the volume of material to be crimped also resulting in minimal compression flash. These terminals require a double crimp. For second crimp, allow a space of 2mm, thus creating a collar effect. Indentors to be positioned on the under side of the terminal.

Applicable terminal part numbers:

CCT240-10HD	CCT240-12HD	CCT240-14HD
CCT240-16HD	CCT240-20HD	

Test equipment used:
Solartron 7071 computing voltmeter
Farnell AP 20-80 regulated power supply

Mecmesin Twin Beam Tensometer 0-25 KN

Test cable suppliers: Eland Cables Limited

NB: BS 4579 Pt 1 states, "For all cable sizes above 10mm² the value of resistance of any joint shall not exceed the resistance of a length of conductor equal to twice the length of the compression barrel".

Orrconnect

Independent testing carried out by Orrconnect Limited
September 2014

CABLECRAFT™ creative wiring solutions

Cablecraft House, Circle Business Centre, Blackburn Road, Houghton-Regis, Bedfordshire, LU5 5DD.
Phone: 01582 606033 • Fax: 01582 606063 • Email: sales@cablecraft.co.uk • Web: www.cablecraft.co.uk
VAT NO. GB 639 920 900 • CO. REG. NO. 2478297

Link-up Registered
nqa. ISO 9001 Registered UKAS
INVESTORS IN PEOPLE

Crimp Test Specification Sheet | Cablecraft 300mm² HD Range

Crimp Section Photo

Copper tube I/D 23mm
Copper tube O/D 28mm
Test cable 300mm² (1525/0.5mm) Flexible mains cable to BS 6195, type 4C
Crimp tool - Cablecraft Pt Nº CHT 400
Crimp die - Cablecraft Pt Nº CHT400D-300, hexagon size 22mm A/F
Initial volt drop across joint with 75A dc test current 0.000145v typical
Initial resistance across joint = 1.9 μΩ typical
Initial cable resistance of twice the length of the compression barrel = 4.8μΩ (volt drop test pass)
Minimum pull force required to meet electrical installation standard BS EN 60352-2-2006 = 18000 Newtons
Minimum pull force required to meet London Underground Engineering Rail Standard E 6487 A2 = 24000 Newtons
Pull force achieved = >25000 Newton (pass on both standards)

Comments: The volume of wall thickness was generous relative to the terminal cross sectional area and the hexagon size was well matched to the volume of material to be crimped also resulting in minimal compression flash. These terminals require a double crimp. For second crimp, allow a space of 2mm, thus creating a collar effect. Indentors to be positioned on the under side of the terminal.

Applicable terminal part numbers:

CCT300-10HD	CCT300-12HD	CCT300-14HD
CCT300-16HD	CCT300-20HD	

Test equipment used:
Solartron 7071 computing voltmeter
Farnell AP 20-80 regulated power supply

Mecmesin Twin Beam Tensometer 0-25 KN

Test cable suppliers: Eland Cables Limited

NB: BS 4579 Pt 1 states, "For all cable sizes above 10mm² the value of resistance of any joint shall not exceed the resistance of a length of conductor equal to twice the length of the compression barrel".

Orrconnect

Independent testing carried out by Orrconnect Limited
September 2014

Cablecraft House, Circle Business Centre, Blackburn Road, Houghton-Regis, Bedfordshire, LU5 5DD.
Phone: 01582 606033 • Fax: 01582 606063 • Email: sales@cablecraft.co.uk • Web: www.cablecraft.co.uk
VAT NO. GB 639 920 900 • CO. REG. NO. 2478297