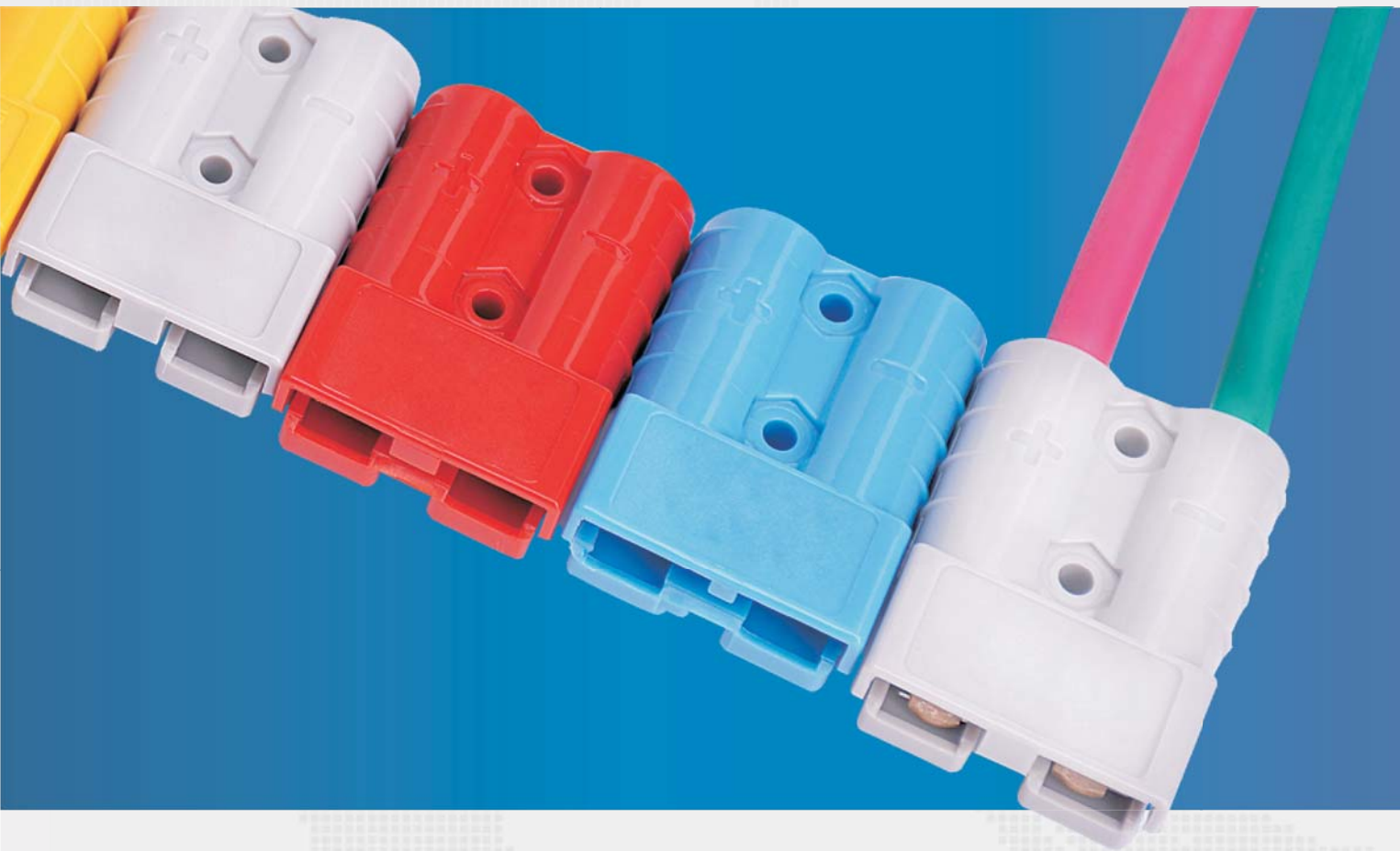


KLS
electronic

NINGBO KLS ELECTRONIC CO.,LTD.



INSULATED TERMINALS

WWW.KLSELE.COM

Email:sales@cnkls.com

Tel:0086-574-86828566

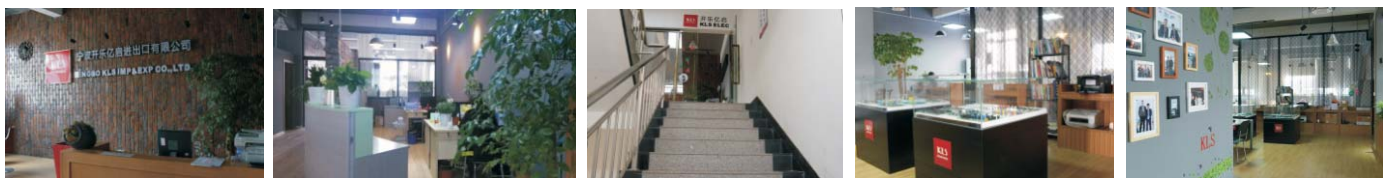


NINGBO KLS ELECTRONIC CO.LTD

was founded in 2002.

KLS has been granted ISO9001 management system certifications.

KLS has supplier assessment reports No.: 4488700_T For BUREAU VERITAS.
KLS has developed into a comprehensive group of electronic components, it has more than 10 wholly-owned and holding subsidiaries, With sales volume of over 20 million USD, KLS consecutively ranks among Top 10 Ningbo China Enterprises



INSULATED TERMINALS



application





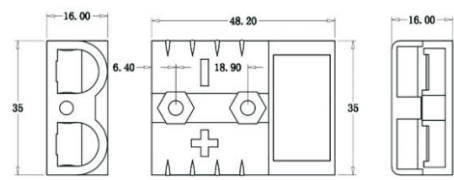
INSULATED TERMINALS

SB50 SERIES / HOUSING 2-POLE 50A



Material And Surface Performance:

1. Material of terminal: Black copper
2. Process of production: precision punching
3. Fully ag-plating on surface, it's ag-plating thickness is 1 μ m
4. Shrapnel: stainless steel
5. Process of production: precision punching
6. Housing: material pc
7. Process of production: plastic injection



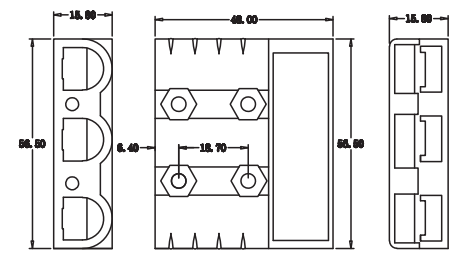
| Part Number | Housing Color | Part Number | Housing Color |
|------------------|---------------|-----------------|---------------|
| L-KLS1-XT27-H-Y | Yellow | L-KLS1-XT27-H-L | Blue |
| L-KLS1-XT27-H-OR | Orange | L-KLS1-XT27-H-G | Green |
| L-KLS1-XT27-H-R | Red | L-KLS1-XT27-H-B | Black |
| L-KLS1-XT27-H-GY | Gray | | |

SB50 SERIES / HOUSING 3-POLE 50A



Material And Surface Performance:

1. Material of terminal: Gray copper
2. Process of production: precision punching
3. Fully ag-plating on surface, it's ag-plating thickness is 1 μ m
4. Shrapnel: stainless steel
5. Process of production: precision punching
6. Housing: material pc
7. Process of production: plastic injection



| Part Number | Housing Color | Part Number | Housing Color |
|-------------------|---------------|-------------------|---------------|
| L-KLS1-XT27D-H-Y | Yellow | L-KLS1-XT27D-H-GY | Gray |
| L-KLS1-XT27D-H-OR | Orange | L-KLS1-XT27D-H-L | Blue |
| L-KLS1-XT27D-H-R | Red | L-KLS1-XT27D-H-G | Green |
| L-KLS1-XT27D-H-B | Black | | |

INSULATED TERMINALS

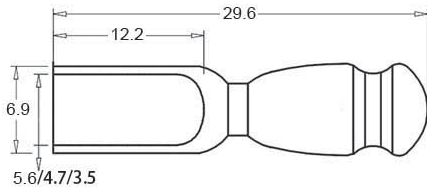


SB50 SERIES / CONTACT 50A



Technical Parameters:

1. Rated current(Amperes):50A
2. Rated voltage(Volts):600V
3. Insulation Resistance:5000MΩ
4. Contact Resistance(mΩ): 0.055 ± 0.005
5. Voltage Proof:2200V(DC)



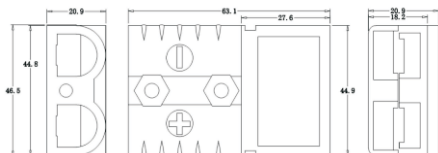
| Part Number | -A-(mm) | -B-(mm) | -C-(mm) | -D-(mm) | Wire size | Current |
|----------------|---------|---------|---------|---------|-----------|---------|
| L-KLS1-XT27-T1 | 29.6 | 6.9 | 5.6 | 12.2 | 6AWG | 50A |
| L-KLS1-XT27-T | 29.6 | 6.9 | 4.7 | 12.2 | 8AWG | 50A |
| L-KLS1-XT27-T2 | 29.6 | 6.9 | 3.5 | 12.2 | 10-12AWG | 50A |

SB120 SERIES / HOUSING 2-POLE 120A



Material And Surface Performance:

1. Material of terminal:Blue copper
2. Process of production:precision punching
3. Fully ag-plating on surface,it's ag-plating thickness is $1 \mu m$
4. Shrapnel : stainless steel
5. Process of production: precision punching
6. Housing : material pc
7. Process of production: plastic injection



| Part Number | Housing Color | Part Number | Housing Color |
|------------------|---------------|-------------------|---------------|
| L-KLS1-XT120-H-R | Red | L-KLS1-XT120-H-GY | Gray |
| L-KLS1-XT120-H-L | Blue | L-KLS1-XT120-H-Y | Yellow |



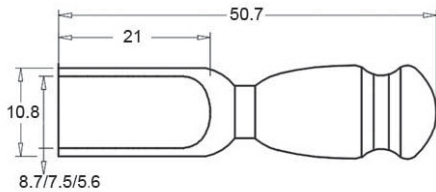
INSULATED TERMINALS

SB120 SERIES / CONTACT 120A



Technical Parameters:

1. Rated current(Amperes):120A
2. Rated voltage(Volts):600V
3. Insulation Resistance:5000MΩ
4. Contact Resistance(mΩ):<140
5. Voltage Proof:2200V(DC)



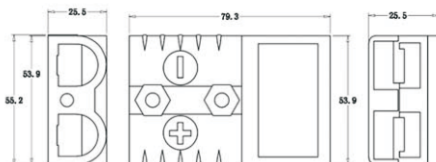
| Part Number | -A-(mm) | -B-(mm) | -C-(mm) | -D-(mm) | Wire size | Current |
|-----------------|---------|---------|---------|---------|-----------|---------|
| L-KLS1-XT120-T | 50.7 | 10.8 | 8.7 | 21 | 2AWG | 120 A |
| L-KLS1-XT120-T1 | 50.7 | 10.8 | 7.5 | 21 | 4AWG | 120A |
| L-KLS1-XT120-T2 | 50.7 | 10.8 | 5.6 | 21 | 6AWG | 120A |

SB175 SERIES / HOUSING 2-POLE 175A



Material And Surface Performance:

1. Material of terminal:Red copper
2. Process of production:precision punching
3. Fully ag-plating on surface,it's ag-plating thickness is 1 μ m
4. Shrapnel: stainless steel
5. Process of production :precision punching
6. Housing: material pc
7. Process of production: plastic injection



| Part Number | Housing Color | Part Number | Housing Color |
|-------------------|---------------|-------------------|---------------|
| L-KLS1-XT175-H-Y | Yellow | L-KLS1-XT175-H-R | Red |
| L-KLS1-XT175-H-OR | Orange | L-KLS1-XT175-H-GY | Gray |
| L-KLS1-XT175-H-L | Blue | | |

INSULATED TERMINALS

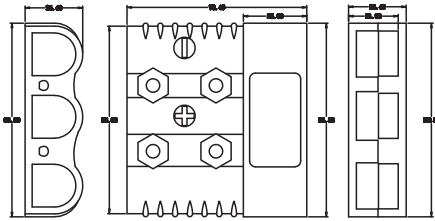


SB175 SERIES / HOUSING3-POLE 175A



Material And Surface Performance:

1. Material of terminal: Red copper
2. Process of production: precision punching
3. Fully ag-plating on surface, it's ag-plating thickness is $1 \mu\text{m}$
4. Shrapnel: stainless steel
5. Process of production: precision punching
6. Housing: material pc
7. Process of production: plastic injection



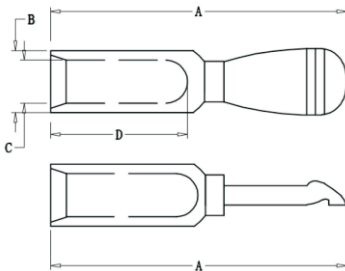
| Part Number | Housing Color | Part Number | Housing Color |
|--------------------|---------------|--------------------|---------------|
| L-KLS1-XT175D-H-Y | Yellow | L-KLS1-XT175D-H-R | Red |
| L-KLS1-XT175D-H-OR | Orange | L-KLS1-XT175D-H-GY | Gray |
| L-KLS1-XT175D-H-L | Blue | | |

SB175 SERIES / CONTACT 180A



Technical Parameters:

1. Rated current(Ampere): 180A
2. Rated voltage(Volts): 600V
3. Insulation Resistance: 5000M Ω
4. Contact Resistance(m Ω): <95
5. Voltage Proof: 2200V(DC)



| Part Number | -A-(mm) | -B-(mm) | -C-(mm) | -D-(mm) | Wire size | Current |
|-----------------|---------|---------|---------|---------|-----------|---------|
| L-KLS1-XT175-T | 54.5 | 10.8 | 8.4 | 25 | 2AWG | 150A |
| L-KLS1-XT175-T1 | 54.5 | 10.8 | 7.5 | 25 | 4AWG | 120A |
| L-KLS1-XT175-T2 | 54.5 | 10.8 | 5.6 | 25 | 6-8AWG | 100A |



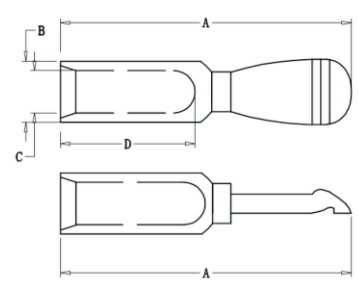
INSULATED TERMINALS

SB175 SERIES / CONTACT 180A



Technical Parameters:

1. Rated current(Amperes): 180A
2. Rated voltage(Volts): 600V
3. Insulation Resistance: 5000MΩ
4. Contact Resistance(mΩ): <95
5. Voltage Proof: 2200V(DC)



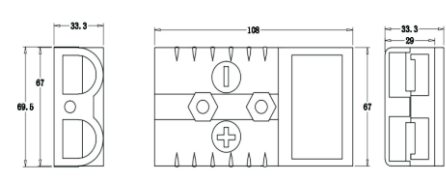
| Part Number | -A-(mm) | -B-(mm) | -C-(mm) | -D-(mm) | Wire size | Current |
|------------------|---------|---------|---------|---------|-----------|---------|
| L-KLS1-XT175-TA | 57.8 | 12.8 | 11.2 | 21 | 1/0AWG | 175A |
| L-KLS1-XT175-T1A | 57.8 | 12.8 | 8.9 | 21 | 2AWG | 150A |
| L-KLS1-XT175-T2A | 57.8 | 12.8 | 7.6 | 21 | 4AWG | 120A |

SB350 SERIES / HOUSING 2-POLE



Material And Surface Performance:

1. Material of terminal: Gray copper
2. Process of production: precision punching
3. Fully ag-plating on surface, it's ag-plating thickness is 1 μ m
4. Shrapnel: stainless steel
5. Process of production: precision punching
6. Housing: material pc
7. Process of production: plastic injection



| Part Number | Housing Color | Part Number | Housing Color |
|------------------|---------------|-------------------|---------------|
| L-KLS1-XT350-H-Y | Yellow | L-KLS1-XT350-H-OR | Orange |
| L-KLS1-XT350-H-R | Red | L-KLS1-XT350-H-GY | Gray |
| L-KLS1-XT350-H-L | Blue | L-KLS1-XT350-H-R | Green |
| L-KLS1-XT350-H-B | Black | | |

INSULATED TERMINALS

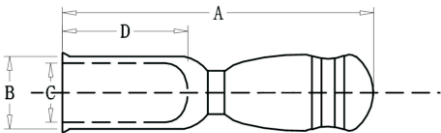


SB350 SERIES / CONTACT



Technical Parameters:

1. Rated current(Amperes):350A
2. Rated voltage(Volts):600V
3. Insulation Resistance:5000MΩ
4. Contact Resistance(mΩ):<40
5. Voltage Proof:2200V(DC)



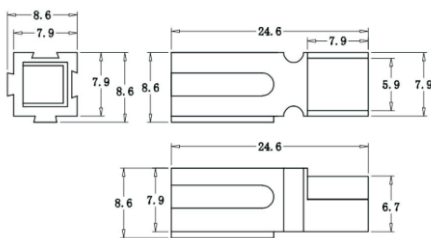
| Part Number | -A-(mm) | -B-(mm) | -C-(mm) | -D-(mm) | Wire size | Current |
|----------------|---------|---------|---------|---------|-----------|---------|
| L-KLS1-XT350-T | 81.7 | 15.8 | 12.6 | 37 | 2/0 AWG | 3500A |

PP15-45 SERIES / HOUSING1-POLE 15/30A



Material And Surface Performance:

1. Material of terminal:Red copper
2. Process of production:precision punching
3. Fully ag-plating on surface,it's ag-plating thickness is 1 μ m
4. Shrapnel: stainless steel
5. Process of production: precision punching
6. Housing: material pc
7. Process of production: plastic injection



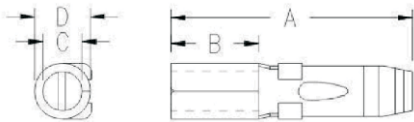
| Part Number | Housing Color | Part Number | Housing Color |
|------------------|---------------|------------------|---------------|
| L-KLS1-XD45-H-R | Red | L-KLS1-XD45-H-G | Green |
| L-KLS1-XD45H-B | Black | L-KLS1-XD45-H-W | White |
| L-KLS1-XD45-H-L | Blue | L-KLS1-XD45-H-Y | Yellow |
| L-KLS1-XD45-H-OR | Orange | L-KLS1-XD45-H-GY | Gray |
| L-KLS1-XD45-H-BR | Brown | L-KLS1-XD45-H-PI | Pink |
| L-KLS1-XD45-H-PU | Purple | | |

PP15-45 SERIES / CONTACT 15A



Technical Parameters:

1. Rated current(Amperes):45A
2. Rated voltage(Volts):600V
3. Insulation Resistance:1000MΩ
4. Contact Resistance(mΩ):<500
5. Flammability:UL94 V-0



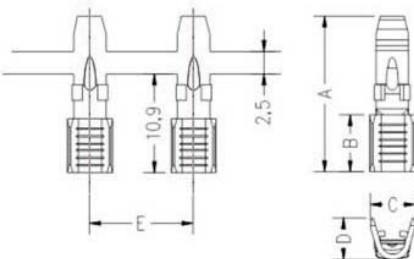
| Part Number | -A-(mm) | -B-(mm) | -C-(mm) | -D-(mm) | Wire | Plating |
|---------------|---------|---------|---------|---------|----------|---------|
| L-KLS1-XD45-T | 16.2 | 7.7 | 2.8 | 4.0 | 12/16AWG | Ag |

PP15-45 SERIES / CONTACT 15A



Technical Parameters:

1. Rated current(Amperes):45A
2. Rated voltage(Volts):600V
3. Insulation Resistance:1000MΩ
4. Contact Resistance(mΩ):<500
5. Flammability:UL94 V-0



| Part Number | -A-(mm) | -B-(mm) | -C-(mm) | -D-(mm) | -E-(mm) | Wire | Plating |
|-----------------|---------|---------|---------|---------|---------|----------|---------|
| L-KLS1-XD45-T2A | 17.3 | 6.3 | 5.6 | 5.0 | 11.5 | 10/14AWG | Tin |
| L-KLS1-XD45-T1A | 17.3 | 6.3 | 5.0 | 4.6 | 11.5 | 12/16AWG | Tin |

INSULATED TERMINALS

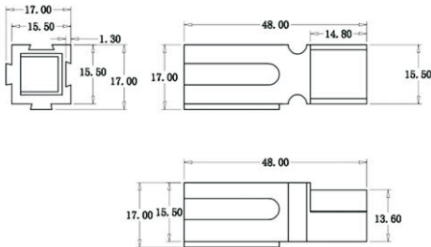


PP75 SERIES / HOUSING1-POLE 75A



Material And Surface Performance:

1. Material of terminal: Gray copper
2. Process of production: precision punching
3. Fully ag-plating on surface, it's ag-plating thickness is 1 μ m
4. Shrapnel: stainless steel
5. Process of production: precision punching
6. Housing: material pc
7. Process of production: plastic injection



| Part Number | Housing Color | Part Number | Housing Color |
|------------------|---------------|------------------|---------------|
| L-KLS1-XD75-H-L | Blue | L-KLS1-XD75-H-B | Black |
| L-KLS1-XD75-H-W | White | L-KLS1-XD75-H-G | Green |
| L-KLS1-XD75-H-R | Red | L-KLS1-XD75-H-Y | Yellow |
| L-KLS1-XD75-H-OR | Orange | L-KLS1-XD75-H-GY | Gray |

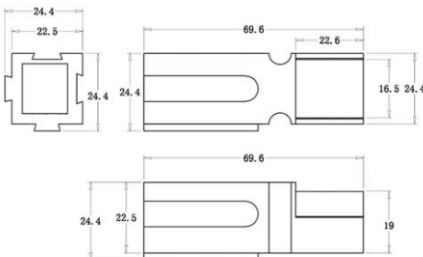
Matching Terminals: [L-KLS1-XT27-T/T1/T2](#)

PP120 SERIES / HOUSING1-POLE 120A



Material And Surface Performance:

1. Material of terminal: Black copper
2. Process of production: precision punching
3. Fully ag-plating on surface, it's ag-plating thickness is 1 μ m
4. Shrapnel: stainless steel
5. Process of production: precision punching
6. Housing: material pc
7. Process of production: plastic injection



| Part Number | Housing Color | Part Number | Housing Color |
|------------------|---------------|-------------------|---------------|
| L-KLS1-XD120-H-L | Blue | L-KLS1-XD120-H-B | Black |
| L-KLS1-XD120-H-W | White | L-KLS1-XD120-H-R | Red |
| L-KLS1-XD120-H-G | Green | L-KLS1-XD120-H-GY | Gray |

Matching Terminals: [L-KLS1-XT120-T/T1/T2](#)



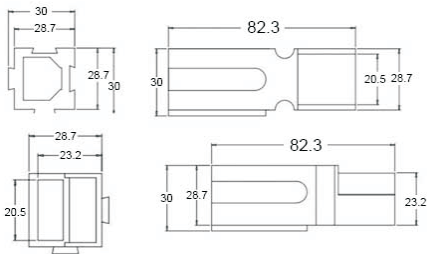
INSULATED TERMINALS

PP180 SERIES / HOUSING1-POLE 180A



Material And Surface Performance:

1. Material of terminal: Blue copper
2. Process of production: precision punching
3. Fully ag-plating on surface, it's ag-plating thickness is $1 \mu m$
4. Shrapnel: stainless steel
5. Process of production: precision punching
6. Housing: material pc
7. Process of production: plastic injection



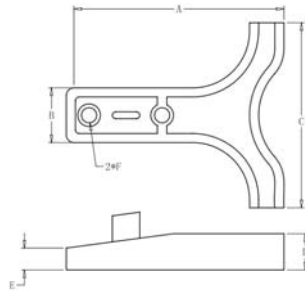
| Part Number | Housing Color | Part Number | Housing Color |
|------------------|---------------|------------------|---------------|
| L-KLS1-XD180-H-L | Blue | L-KLS1-XD180-H-B | Black |
| L-KLS1-XD180-H-W | White | L-KLS1-XD180-H-R | Red |
| L-KLS1-XD180-H-G | Green | | |

Matching Terminals: L-KLS1-XT175-TA/T1A/T2A

INSULATED TERMINALS

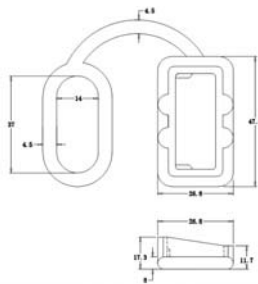


SB50 SERIES / CONNECTOR HANDLE, 50 AMP POLE



| Part Number | -A-(mm) | -B-(mm) | -C-(mm) | -D-(mm) | -E-(mm) | -F-(mm) |
|-------------------|---------|---------|---------|---------|---------|---------|
| L-KLS1-XT27-HL-GY | 9.6 | 49 | 3.5 | 19.0 | 14.5 | 55.5 |
| L-KLS1-XT27-HL-R | 5.5 | 14.5 | 49 | 9.6 | 5.8 | 4.0 |

SB50 SERIES / DUST CAP, SOFT PLASTIC 50 AMP POLE

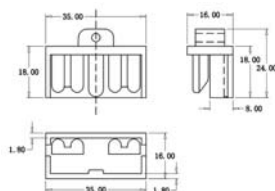


Part Number

L-KLS1-XT27-DC-B

L-KLS1-XT27-DC-R

SB50 SERIES / DUST CAP, HARD PLASTIC 50 AMP POLE



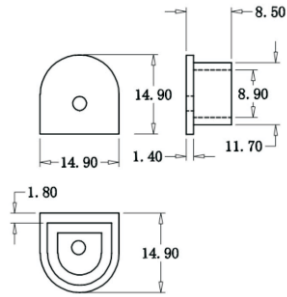
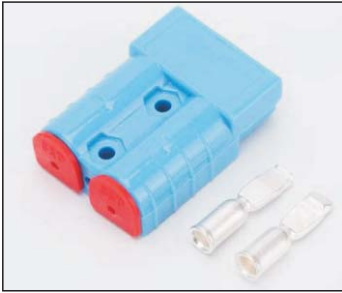
Part Number

L-KLS1-XT27-DC2-B



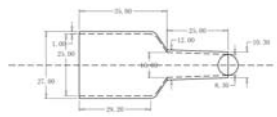
INSULATED TERMINALS

SB50 SERIES / SOLID LINE PLUG, 50 AMP POLE



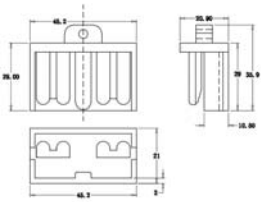
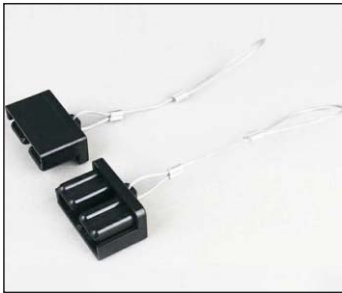
| Part Number |
|-------------------|
| L-KLS1-XT27-SLP-R |
| L-KLS1-XT27-SLP-B |

SB50 SERIES / DUST JACLCET, 50 AMP POLE



| Part Number |
|------------------|
| L-KLS1-XT27-DJ-R |
| L-KLS1-XT27-DJ-B |

SB120 SERIES / DUST CAP, HARD PLASTIC 120 AMP POLE

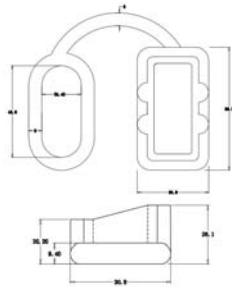
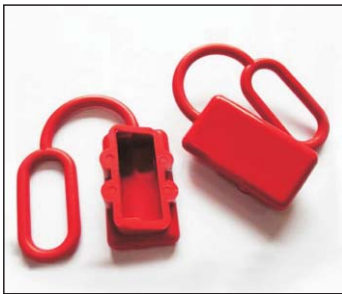


| Part Number |
|--------------------|
| L-KLS1-XT120-DC2-B |

INSULATED TERMINALS



SB120 SERIES / DUST CAP, SOFT PLASTIC 120 AMP POLE

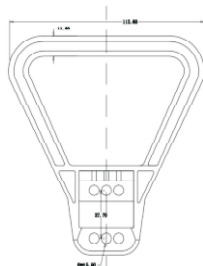


Part Number

L-KLS1-XT120-DC-B

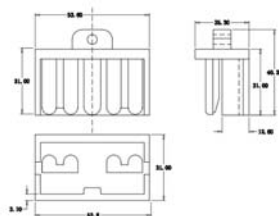
L-KLS1-XT120-DC-R

SB175 SERIES / CONNECTOR HANDLE, 175 AMP POLE



| Part Number | -A-(mm) | -B-(mm) | -C-(mm) | -D-(mm) | -E-(mm) | -F-(mm) | -G-(mm) |
|--------------------|---------|---------|---------|---------|---------|---------|---------|
| L-KLS1-XT175-HL-GY | 41 | 113 | 6.6 | 6.0 | 125.5 | 28.7 | 76.0 |
| L-KLS1-XT175-HL-R | 41 | 113 | 6.6 | 6.0 | 125.5 | 28.7 | 76.0 |

SB175 SERIES / DUST CAP, HARD PLASTIC 175 AMP POLE



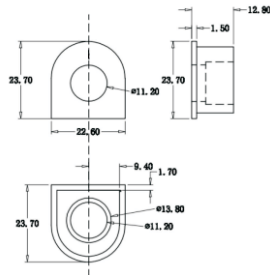
Part Number

L-KLS1-XT175-DC-B



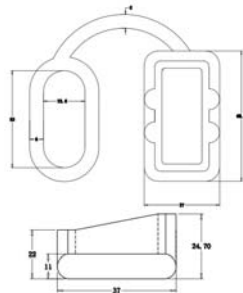
INSULATED TERMINALS

SB175 SERIES / SOLID LINE PLUG, 175 AMP POLE



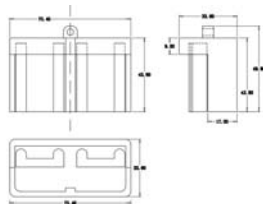
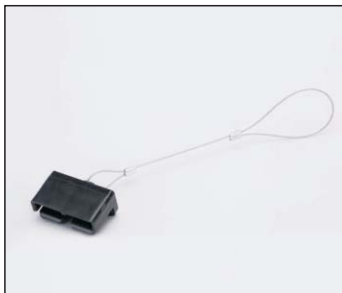
| Part Number | Threadhole |
|--------------------|------------|
| L-KLS1-XT175-SLP-R | 11.2 |

SB175 SERIES / DUST CAP, SOFT PLASTIC 175 AMP POLE



| Part Number |
|--------------------|
| L-KLS1-XT175-DC1-B |
| L-KLS1-XT175-DC1-R |

SB350 SERIES / DUST CAP, HARD PLASTIC, 350 AMP POLE



| Part Number |
|-------------------|
| L-KLS1-XT350-DC-B |

INSULATED TERMINALS



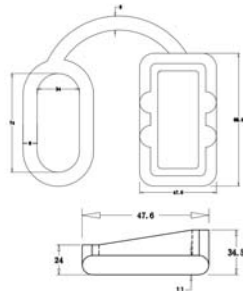
SB350 SERIES / SOLID LINE PLUG, 350 AMP POLE



Part Number

L-KLS1-XT350-SLP-R

SB350 SERIES / DUST CAP, SOFT PLASTIC, 350 AMP POLE

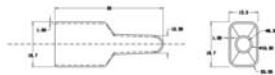


Part Number

L-KLS1-XT350-DC1-B

L-KLS1-XT350-DC1-R

PP15-45 SERIES / DUST JACKET, 45 AMP 2POLE



Part Number

L-KLS1-XD45-DJ-B

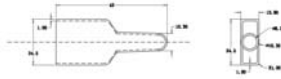
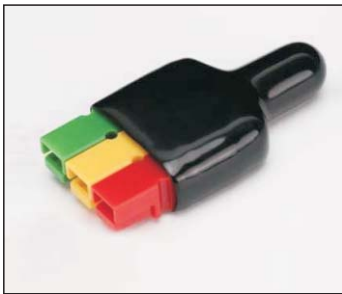
Pole

2Pole
jacket



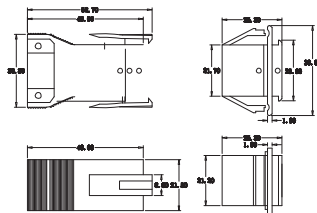
INSULATED TERMINALS

PP15-45 SERIES / DUST JACKET, 45 AMP 3POLE



| Part Number | Pole |
|-------------------|--------------|
| L-KLS1-XD45-DJ1-B | 3Pole jacket |

PP15-45 SERIES / SHORT HOUSING 4-POLE



| Part Number | Housing Color | Description |
|---------------------|---------------|----------------------|
| L-KLS1-XD45-SH-4P-B | Black | Short housing 4-pole |
| L-KLS1-XD45-LH-4P-B | Black | Long housing 4-pole |
| L-KLS1-XD45-SH-6P-B | Black | Short housing 6-pole |
| L-KLS1-XD45-LH-6P-B | Black | Long housing 6-pole |
| L-KLS1-XD45-SH-8P-B | Black | Short housing 8-pole |
| L-KLS1-XD45-LH-8P-B | Black | Long housing 8-pole |

Product Specification

Number: L-KLS1-XT28
Name: 2(Power)+4(Signal) Connector
Specification: _____
Customer: EXJ278
Date: 2019-07-04

Customer Signature:



WWW.KLSELE.COM

NINGBO KLS ELECTRONIC CO; LTD

Tel : 0086-574-86828566

Fax : 0086-574-86824882

ADD : NO. 8-1, RONGXIA RD. XIAPU SHANQIAN
INDUSTRIAL ZONE BEILUN NINGBO ZHEJIANG.

| Compile | Check | Review | Approval |
|---------|--------|--------|----------|
| Jenny | Jack.C | | |

| | | | |
|-------------|------------------------------|---------|------------|
| Part name | | Date | 2019-07-04 |
| Part number | L-KLS1-XT28 | Edition | V1 |
| Department | 2(Power)+4(Signal) Connector | Page | 2 / 5 |

L-KLS1-XT28 Connector Datasheet

■ Part no.

L-KLS1-XT28

■ Name

2(Power)+4(Signal) Connector

■ Electrical Characteristics

A、 Rated Voltage 600V (AC/DC)

B、 Rated Current Power 75A (6#); Signal 8A (14#)

C、 Contact Resistance Power \leq 0.5m Ω (8#) ; Signal \leq 5m Ω (20#)

D、 Insulation Resistance \geq 5000M Ω

■ Mechanical Characteristics

A、 Average insertion force 70N

B、 Mechanical life 5000 times

■ Material and surface plating

A、 Metal material:Copper alloy, Surface treatment:Terminal silver plated,
Female pin silver plated (Crown spring gold plated)

■ Male pin gold plated

B、 Plastic material:PC (UL94 V-0), injection molding

■ Work Environment

A、 Temperature -20 $^{\circ}$ C \sim +75 $^{\circ}$ C

B、 Humidity 90% \sim 95% (40 $^{\circ}$ C \pm 2 $^{\circ}$ C)

■ Suitable Wire Gauge

A、 Power terminal 12-6AWG

B、 Signal terminal 24-14AWG

■ Terminal Retention Force

A、 Power Terminal 250N Min.

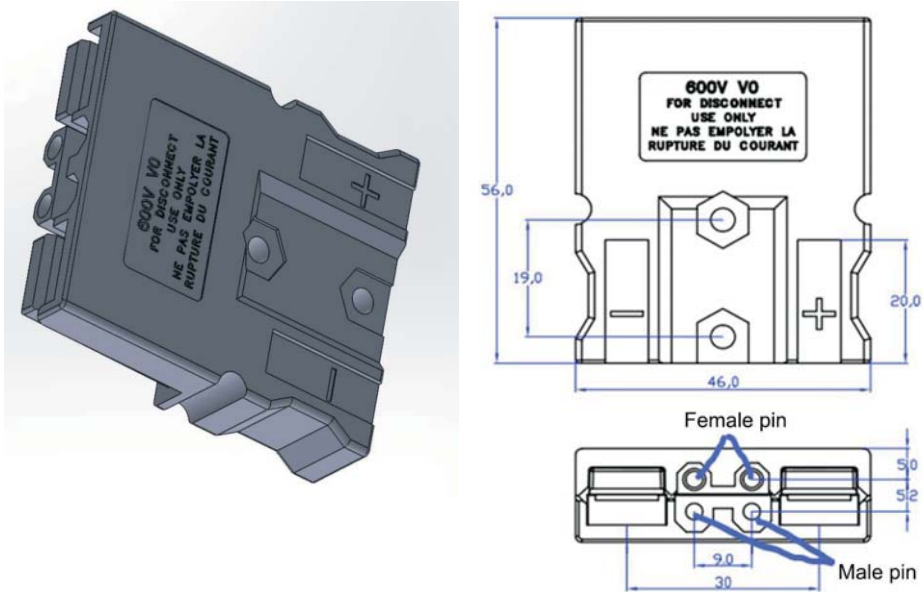
B、 Signal Terminal 22N Min.

| | | | |
|-------------|------------------------------|---------|------------|
| Part name | | Date | 2019-07-04 |
| Part number | L-KLS1-XT28 | Edition | V1 |
| Department | 2(Power)+4(Signal) Connector | Page | 3 / 5 |

■ **Maximum Overall Dimension**

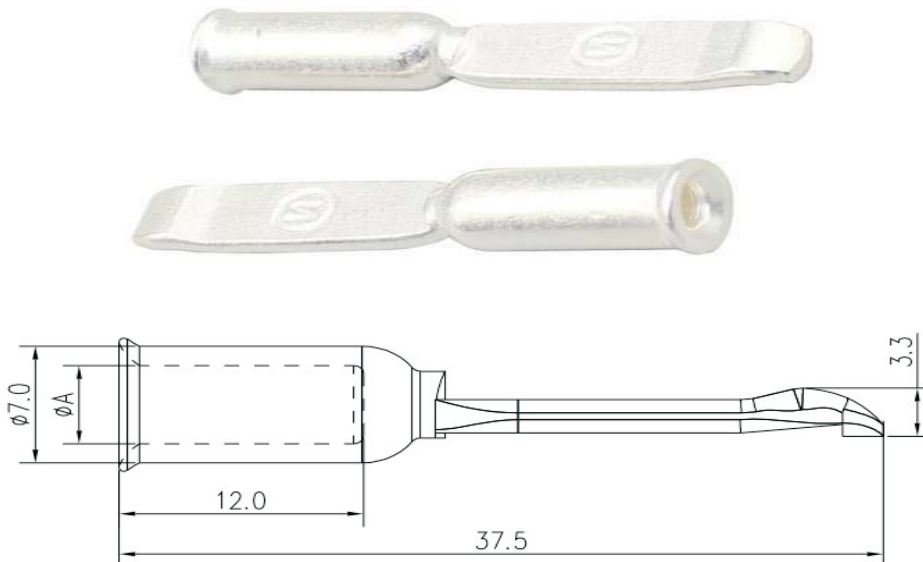
L × W × H = 56mm × 46mm × 15.3mm

Outside Drawing



Terminal, Male and Femal Pin Illustration

Terminal (Crimping)

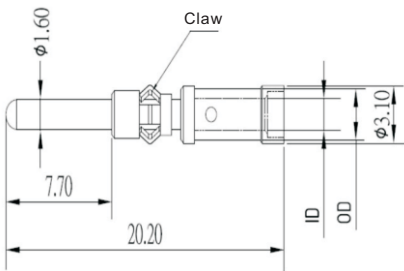


| P/N | L-KLS1-XT28-T1 | L-KLS1-XT28-T2 | L-KLS1-XT28-T3 |
|--------------------|----------------|----------------|----------------|
| DIMENSION ϕ A | ϕ 5.6 | ϕ 4.7 | ϕ 3.5 |
| WIRE RANGE | 6AWG | 8AWG | 10&12AWG |

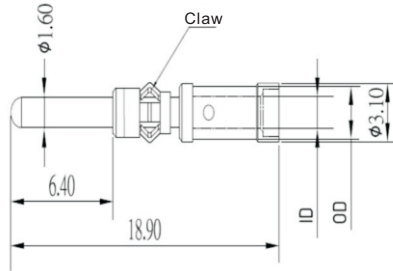
| | | | |
|-------------|------------------------------|---------|------------|
| Part name | | Date | 2019-07-04 |
| Part number | L-KLS1-XT28 | Edition | V1 |
| Department | 2(Power)+4(Signal) Connector | Page | 4 / 5 |

Male Pin (Crimping)

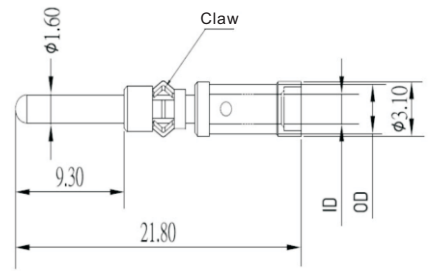
Standard Male PIN



Short (S type) Male PIN



Long (L type) Male PIN

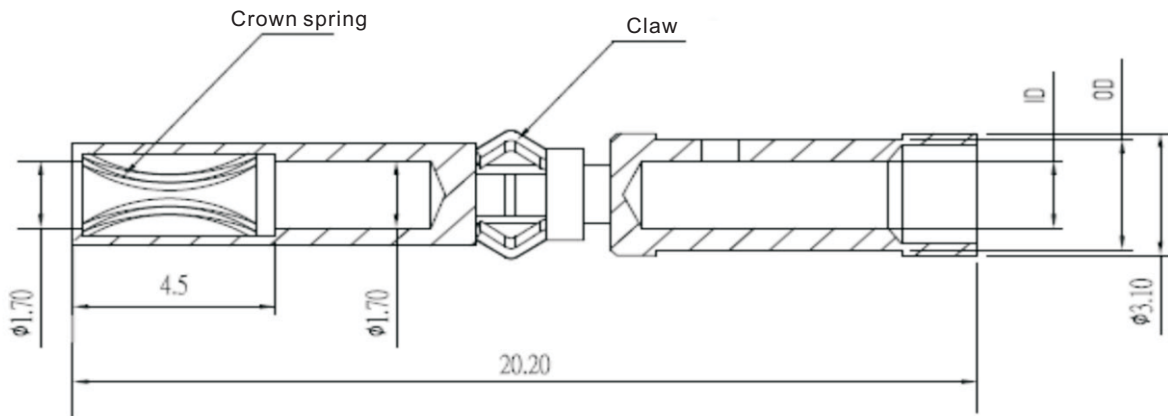


| P/N | Wire Gauge | OD | ID |
|-------------------|------------|-------|--------|
| L-KLS1-XT28-MST01 | #24/20 | ∅ 2.1 | ∅ 1.10 |
| L-KLS1-XT28-MST02 | #20/16 | ∅ 2.8 | ∅ 1.70 |
| L-KLS1-XT28-MST03 | #16/14 | ∅ 3.0 | ∅ 2.10 |



Female Pin (Crimping)

Female Pin



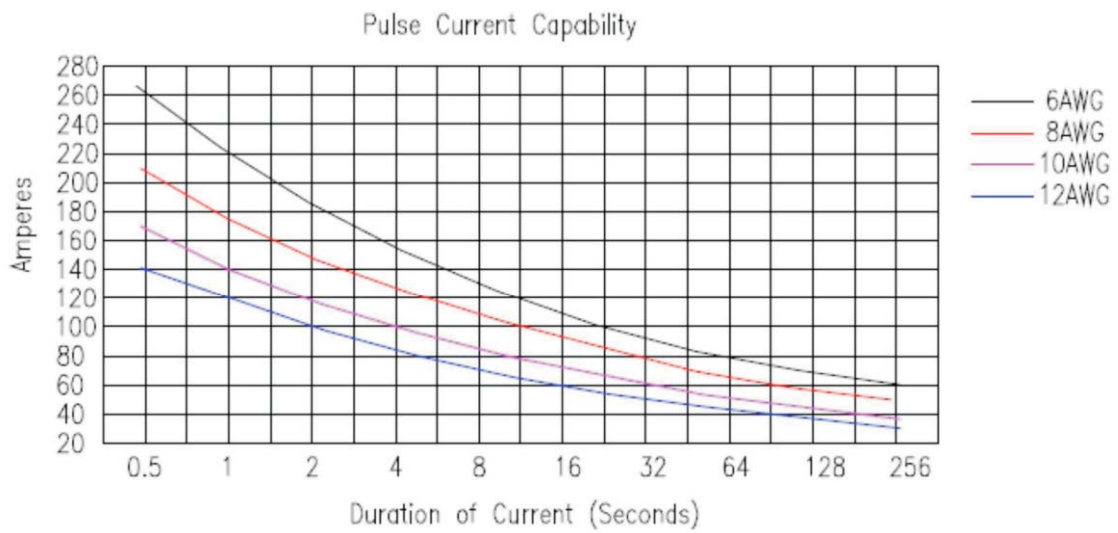
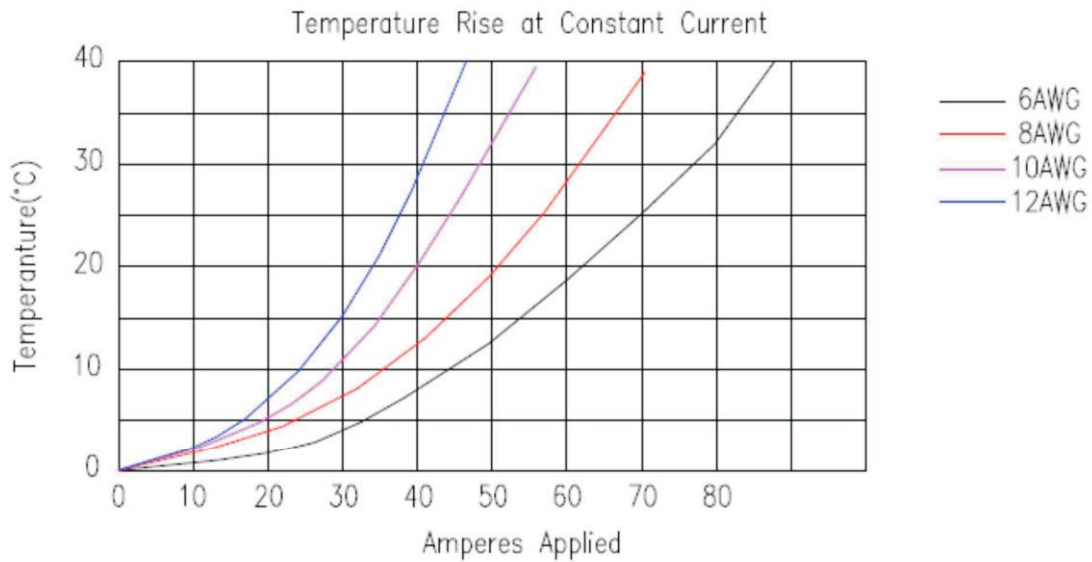
| P/N | Wire Gauge | OD | ID |
|-------------------|------------|-------|--------|
| L-KLS1-XT28-FST01 | #24/20 | ∅ 2.1 | ∅ 1.10 |
| L-KLS1-XT28-FST02 | #20/16 | ∅ 2.8 | ∅ 1.70 |
| L-KLS1-XT28-FST03 | #16/14 | ∅ 3.0 | ∅ 2.10 |



| | | | |
|-------------|------------------------------|---------|------------|
| Part name | | Date | 2019-07-04 |
| Part number | L-KLS1-XT28 | Edition | V1 |
| Department | 2(Power)+4(Signal) Connector | Page | 5 / 5 |

■ **Temperature Rise**

Temperature rise curve



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Dust plug



50A



120A



175A



350A

Solar power wire



Cigar lighter wire

Electric vehicle



Power wire

Scrubber wire



Electric wheelchair wire



Electric wire