

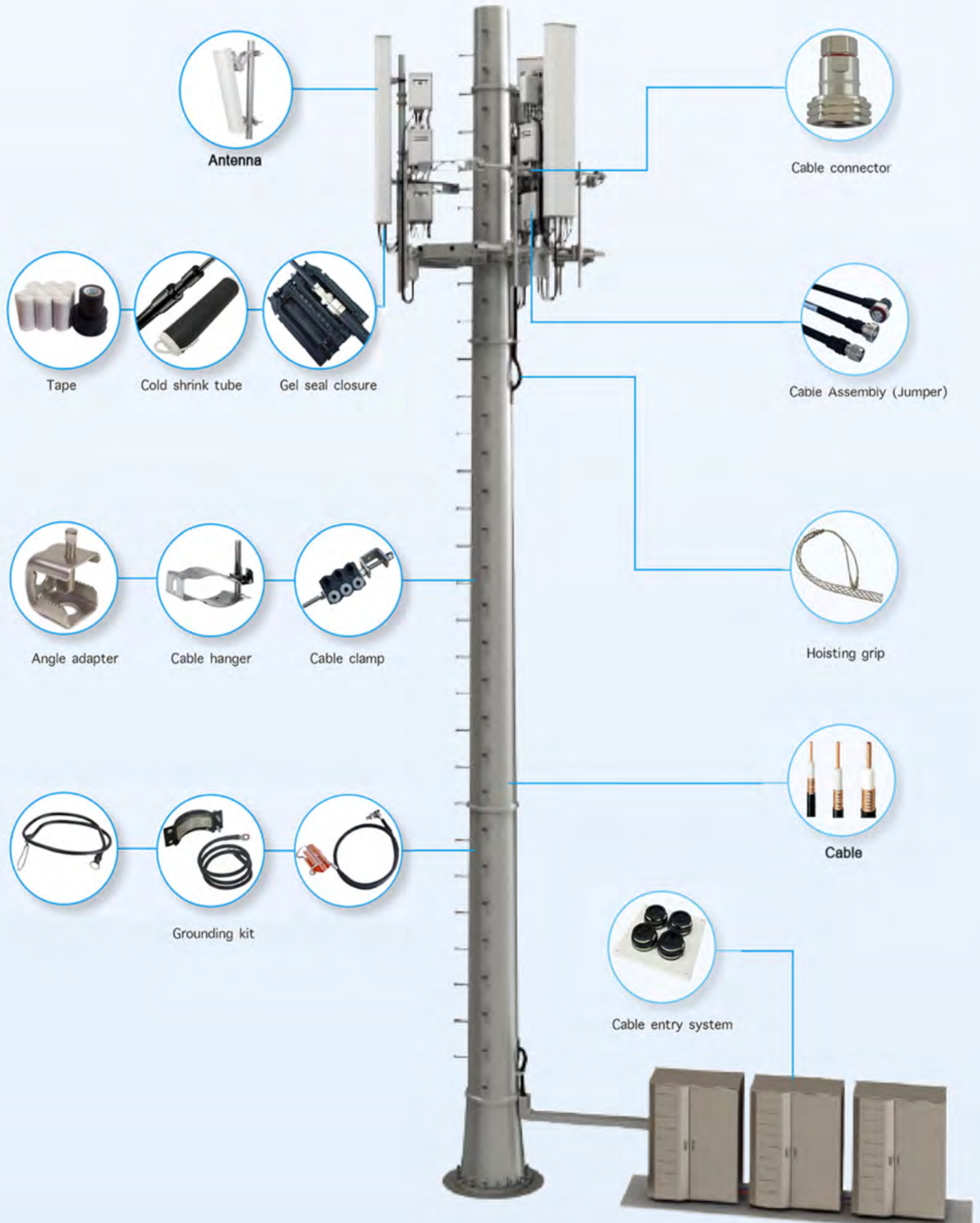
Main Product:



- Weather Proofing Kit
- RF Connector
- Connector Adapter and Dust Cap
- Jumper Cable
- Cable Grounding Kit
- Hoisting Grip
- Cable Clamp and Hanger
- Cable Entry System
- Passive Component
- Antenna

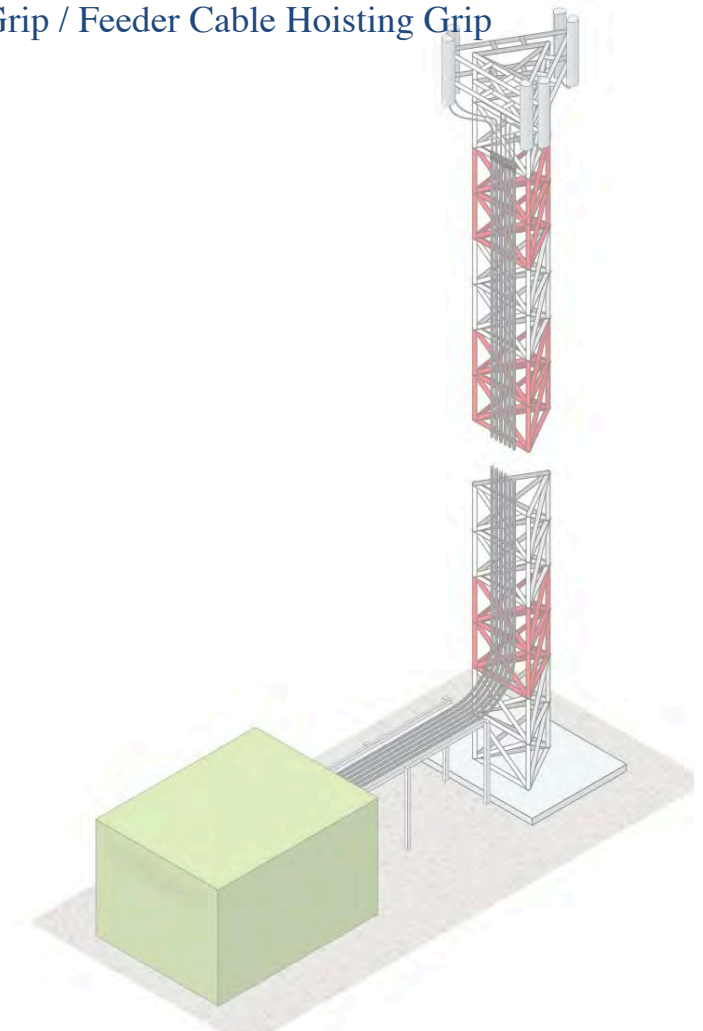
Application Guide

----Cell Tower



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weather proofing kit --sealing your world



TITLE

gel seal closure



TITLE

cold shrink tube



TITLE

weather proof tape

Gel Seal Closure

Gel seal closure, is a new kind of weatherproofing kit. This closure contains an innovative gel material and provides an efficient block against moisture & salt mist.

Gel seal closures have passed strict tests from labs and achieve good feedback from long-term practical application. The easy of installation and reusable feature makes them a cost-effective solution.



Full sizes of gel seal closures:

| Item No. | Product Description. |
|--------------|---|
| GSC-12ANT | Gel seal closure for 1/2" jumper cable to antenna. |
| GSC-12ANT-S | Gel seal closure for 1/2" jumper cable to antenna, short version. |
| GSC-4310-12 | Gel seal closure for 1/2" jumper cable to 4.3-10 connector. |
| GSC-4195-12 | Gel seal closure for 1/2" jumper cable to 4.1-9.5 MINI DIN connector. |
| GSC-78ANT | Gel seal closure for 7/8" cable to antenna |
| GSC-7812 | Gel seal closure for 1/2" jumper cable to 7/8" feeder. |
| GSC-11412 | Gel seal closure for 1/2" jumper cable to 1-1/4" feeder. |
| GSC-15812 | Gel seal closure for 1/2" jumper cable to 1-5/8" feeder. |
| GSC-12GROUND | Gel seal closure for 1/2" grounding kit |
| GSC-78GROUND | Gel seal closure for 7/8" grounding kit |
| GSC-12SRRU | Gel seal closure for 1/2" super flexible to RRU N connector |
| GSC-38N | Gel seal closure for 3/8" cable to N connector. |

Cold Shrink Tube

Cold shrink tubing is a fast and easy way to weatherproof a connection. Simply position the pre-expanded tubing over the connection that you are protecting and pull the support tube. The tubing compresses to form a weatherproof seal.



Size For Telecom:

| Item No. | Diameter before shrink | Length (after full-shrink) | Material | Application |
|--------------|------------------------|-------------------------------|----------|--|
| CST-A12-S | 45mm | 200mm | silicone | 1/2" to antenna, 1/2" to 1/2" |
| CST-A12 | 53mm | 203mm | EPDM | |
| CST-124310-S | 40 | 152 | silicone | 1/2" to 4.3-10 or MINI DIN connector |
| CST-124310 | 45 | 152 | EPDM | |
| CST-RRU-S | 30 | 152 | silicone | 1/2" to RRU |
| CST-1278 | 53mm | 254mm | EPDM | 1/2" to 7/8", 5/8" to 7/8" |
| CST-1278-S | 53mm | 254mm | silicone | |
| CST-78ANT | 53mm | 203mm | EPDM | 7/8" to antenna |
| CST-78ANT-S | 53mm | 203mm | silicone | |
| CST-12158 | 70mm | 330mm | EPDM | 1/2" to 1-1/4" or 1-5/8" 5/8" to 1-1/4" or 1-5/8" |
| CST-12214 | 80mm | 381mm | EPDM | 1/2" to 2-1/4", 5/8" to 2-1/4" |

Other size can be customized according your requirement.

Weatherproofing

Other Size of EPDM Cold Shrink Tube:

| Item No. | Inner Dia Of Tube mm | Length after shrink mm | Min Cable Diameter mm | Max Cable Diameter mm |
|-----------|-------------------------|---------------------------|--------------------------|--------------------------|
| PCS20-6 | 20 | 152 | 7.8 | 14.3 |
| PCS25-8 | 25 | 203 | 10.1 | 20.9 |
| PCS25-11 | 25 | 280 | 10.1 | 20.9 |
| PCS32-10 | 32 | 254 | 13.0 | 25.4 |
| PCS32-11 | 32 | 280 | 13.0 | 25.4 |
| PCS35-9 | 35 | 230 | 13.9 | 30.1 |
| PCS35-11 | 35 | 280 | 13.9 | 30.1 |
| PCS40-6 | 40 | 152 | 17.5 | 35.1 |
| PCS40-8 | 40 | 203 | 17.5 | 35.1 |
| PCS40-10 | 40 | 254 | 17.5 | 35.1 |
| PCS40-12 | 40 | 305 | 17.5 | 35.1 |
| PCS40-16 | 40 | 406 | 17.5 | 35.1 |
| PCS40-18 | 40 | 457 | 17.5 | 35.1 |
| PCS53-6 | 53 | 152 | 25.0 | 46.0 |
| PCS53-7 | 53 | 178 | 25.0 | 46.0 |
| PCS53-8 | 53 | 203 | 25.0 | 46.0 |
| PCS53-10 | 53 | 254 | 25.0 | 46.0 |
| PCS53-12 | 53 | 305 | 25.0 | 46.0 |
| PCS53-18 | 53 | 457 | 25.0 | 46.0 |
| PCS70-6 | 70 | 152 | 32.2 | 63.0 |
| PCS70-9 | 70 | 230 | 32.2 | 63.0 |
| PCS70-12 | 70 | 305 | 32.2 | 63.0 |
| PCS70-15 | 70 | 355 | 32.2 | 63.0 |
| PCS70-18 | 70 | 457 | 32.2 | 63.0 |
| PCS104-9 | 104 | 229 | 42.6 | 93.7 |
| PCS104-20 | 104 | 508 | 42.6 | 93.7 |
| PCS120-9 | 120 | 229 | 46.0 | 114.3 |
| PCS120-24 | 120 | 610 | 46.0 | 114.3 |

Other size can be customized according your requirement.

Other Size of Silicon Cold Shrink Tube:

| Item No. | Inner Dia Of Tube mm | Length after shrink mm | Min Cable Diameter mm | Max Cable Diameter mm |
|------------|-------------------------|---------------------------|--------------------------|--------------------------|
| SPCS25-2.5 | 25 | 63.5 | 7.3 | 21.0 |
| SPCS25-7 | 25 | 178 | 7.3 | 21.0 |
| SPCS25-8 | 25 | 203 | 7.3 | 21.0 |
| SPCS28-5 | 28 | 125 | 6.0 | 25.0 |
| SPCS28-5.9 | 28 | 150 | 6.0 | 25.0 |
| SPCS35-5.5 | 35 | 140 | 10.5 | 30.0 |
| SPCS35-7 | 35 | 178 | 10.5 | 30.0 |
| SPCS35-9 | 35 | 229 | 10.5 | 30.0 |
| SPCS35-10 | 35 | 254 | 10.5 | 30.0 |
| SPCS35-12 | 35 | 305 | 10.5 | 30.0 |
| SPCS40-5.5 | 40 | 140 | 11.9 | 34.0 |
| SPCS40-8 | 40 | 203 | 11.9 | 34.0 |
| SPCS40-9 | 40 | 230 | 11.9 | 34.0 |
| SPCS40-10 | 40 | 254 | 11.9 | 34.0 |
| SPCS40-12 | 40 | 305 | 11.9 | 34.0 |
| SPCS45-6 | 45 | 152 | 13.5 | 39.0 |
| SPCS45-8 | 45 | 203 | 13.5 | 39.0 |
| SPCS45-10 | 45 | 254 | 13.5 | 39.0 |
| SPCS45-12 | 45 | 305 | 13.5 | 39 |
| SPCS53-6 | 53 | 152 | 18.2 | 45 |
| SPCS53-10 | 53 | 254 | 18.2 | 45 |
| SPCS53-12 | 53 | 305 | 18.2 | 45 |
| SPCS53-18 | 53 | 457 | 18.2 | 45 |
| SPCS70-5 | 70 | 125 | 22.4 | 63 |
| SPCS70-6 | 70 | 152 | 22.4 | 63 |
| SPCS70-10 | 70 | 254 | 22.4 | 63 |
| SPCS70-14 | 70 | 355 | 22.4 | 63 |
| SPCS70-18 | 70 | 457 | 22.4 | 63 |
| SPCS70-20 | 70 | 508 | 22.4 | 63 |

Other size can be customized according your requirement.

Cold shrink breakouts

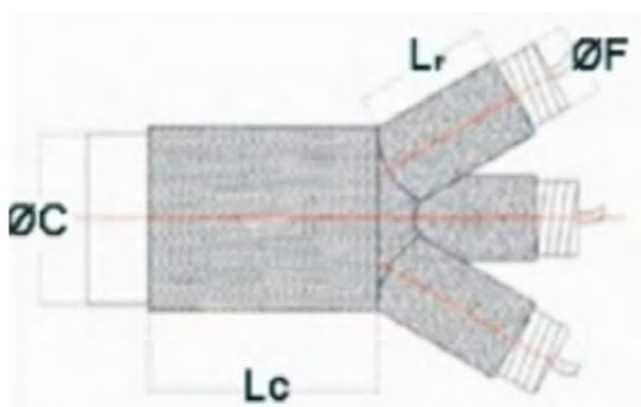
The Cold Shrink Silicone Rubber 3,4,5,6/C (3,4,5,6 conductor) Cable Breakout are a series of open-ended molded silicone rubber sealing assemblies that are factory expanded and mounted on removable inner supporting plastic cores. They are supplied for field installation in a pre-stretched condition. The supporting cores are removed after the seal has been positioned for installation around the breakout area of a 3,4,5,6/C (3,4,5,6 conductor) cable. Core removal allows the silicone rubber to shrink down to a predetermined diameter, creating an environmental enclosure for individual cable phase legs and overall cable jacket.



Features:

1. Material: silicone rubber
2. Good insulation property
3. Nice resistance to tracking and UV radiation
4. Hydrophobic and dielectric property
5. Nice design of electrical and physical features
6. Cold, heat and corona resistance
7. Used in polluted and wet environment
8. High elastomer, no sharp splash when unforeseen destroying
9. Used in polluted and wet environment
10. Easy to check and install: Take out the inner parts when installing, no need any fire and special tool

Cold Shrink Breakouts selection table



Weatherproofing

| Item No. | Cores No. | ΦC (As Supplied / After Recovery) | Cable Application Ranger | ΦF(As Supplied / After Recovery) | Cable Application Ranger | LF | LC |
|----------|-----------|-----------------------------------|--------------------------|----------------------------------|--------------------------|----|-----|
| | | mm | mm | mm | mm | mm | mm |
| SCSB 3-1 | 3 cores | 65/22 (±2) | 24-55 | 25/9 (±2) | 10-19 | 45 | 130 |
| SCSB 3-2 | | 56/18 (±2) | 20-48 | 20/8 (±2) | 9-14 | 45 | 130 |
| SCSB 3-3 | | 79/37 (±2) | 38-67 | 31/15 (±2) | 16-26 | 45 | 130 |
| SCSB 3-4 | | 87/43 (±2) | 45-78 | 34/16 (±2) | 18-29 | 45 | 135 |
| SCSB 3-5 | | 103/50 (±2) | 52-94 | 39/19 (±2) | 22-34 | 45 | 150 |
| SCSB 3-6 | | 119/59 (±2) | 61-110 | 46/23 (±2) | 25-41 | 45 | 165 |
| SCSB 3-7 | | 139/72 (±2) | 74-130 | 58/28 (±2) | 30-54 | 55 | 180 |
| SCSB 3-8 | | 146/72 (±2) | 74-140 | 65/28 (±2) | 30-59 | 55 | 180 |
| SCSB 3-9 | | 165/72 (±2) | 74-155 | 69/28 (±2) | 30-64 | 55 | 180 |
| SCSB 4-1 | 4 cores | 65/20 (±2) | 22-55 | 20/7 (±2) | 8-14 | 35 | 126 |
| SCSB 4-2 | | 80/29 (±2) | 30-70 | 25/9 (±2) | 10-19 | 40 | 137 |
| SCSB 4-3 | | 88/41 (±2) | 42-78 | 32/11 (±2) | 12-26 | 40 | 145 |
| SCSB 4-4 | | 119/46 (±2) | 47-110 | 46/16 (±2) | 17-41 | 40 | 145 |
| SCSB 5-1 | 5 cores | 79/27 (±2) | 28-70 | 20/7 (±2) | 8-14 | 40 | 123 |
| SCSB 5-2 | | 87/37 (±2) | 38-78 | 25/9 (±2) | 10-19 | 40 | 134 |
| SCSB 5-3 | | 109/48 (±2) | 49-100 | 35/12 (±2) | 13-29 | 45 | 138 |
| SCSB 5-4 | | 120/47 (±2) | 49-110 | 40/11 (±2) | 13-36 | 45 | 138 |
| SCSB 6-1 | 6 cores | 102/35 (±2) | 37-94 | 32/10 (±2) | 12-26 | 60 | 135 |

Cold Shrink End Caps

Description:

Cold Shrink End Caps SE Series are close-ended, tubular rubber sleeves that are factory expanded and loaded onto a removable core.

When positioned over the end of a cable, or other cylindrical object, the core is removed to provide a reliable environmental seal.

Four different end caps are available to accommodate a wide range of sizes.



Applications

Could Shrink End Caps protect cables, pipes and other cylindrical objects from exposure to moisture, contamination, corrosion, ozone, ultra-violet radiation, physical contact and other environmental hazards.

Features

- 1.Simple and fast installation, no tools required
2. Accommodates size ranges from 0.46” -3.32”.
3. Sealing tight, high rebound even after prolonged years of aging and exposure
4. No mastic or tape required.
- 5.No torches or heat required.
6. Good abrasion resistance.
7. Seals tight, retains resiliency for years.
8. Resists fungus.
9. Resists acids and alkalis.
10. Resists ozone
11. Provide sealing protection over multi-core cable ends
- 12.Used to seal cables during installation or storage, protecting cable ends against water and dust

Cold Shrink End Caps selection table

| Item No. | Diameter | Use Range/In. | Use Range/mm |
|----------|----------|---------------|--------------|
| CSEC-1 | Ø25 | 0.46 - 0.82 | 11.6-20.9 |
| CSEC-2 | Ø35 | 0.63 - 1.18 | 15.9-30.1 |
| CSEC-3 | Ø55 | 1.02 - 1.94 | 26-49.2 |
| CSEC-4 | Ø95 | 1.79 - 3.32 | 45.5-84.3 |

Weather Proofing Tape----Universal Weather Proof Kit

Universal weatherproofing kit for connectors and splices, include butyl rubber tape and PVC tape. It provides a multi-layer, long-term environmental seal over multiple connections.



| | |
|---------------------|--|
| Application: | Coax protection |
| Mount to : | Cables and connectors |
| Design: | Tape kit for multi-layer wrap |
| Feature: | Multi-connection protection |
| Material: | Butyl and Vinyl |
| Includes: | Six rolls of 2-1/2 in butyl rubber tape Two rolls of 3/4 in PVC tape. One roll of 2 in PVC tape. |

| Part No. | Include |
|--------------------|---|
| WK-WT-221213-1.5 | 6 rolls butyl rubber tape (600mm x 63.5mm x 1.5mm) , 2 rolls of 3/4" PVC tape (20.12m x 19.05mm x 0.19mm), 1 roll of 2" PVC tape (6.1m x 50.8mm x0.19mm), |
| WK-WT-221213-3.175 | 6 rolls butyl rubber tape (600mm x 63.5mm x 3.175mm) , 2 rolls of 3/4" PVC tape (20.12m x 19.05mm x 0.19mm), 1 roll of 2" PVC tape (6.1m x 50.8mm x0.19mm), |
| WK-WT-221213-3.5 | 6 rolls butyl rubber tape (600mm x 63.5mm x 3.5mm) , 2 rolls of 3/4" PVC tape (20.12m x 19.05mm x 0.19mm), 1 roll of 2" PVC tape (6.1m x 50.8mm x0.19mm), |
| WK-WT-221213-4 | 6 rolls butyl rubber tape (600mm x 63.5mm x 4.0mm) , 2 rolls of 3/4" PVC tape (20.12m x 19.05mm x 0.19mm), 1 roll of 2" PVC tape (6.1m x 50.8mm x0.19mm), |

Other size can be customized according your requirement.

Weather Proofing Tape----Electrical PVC Tape (3/4")

Colorful PVC Backing Insulating Electrical tape provides excellent resistant to abrasion, moisture, alkalis, acids and corrosion. It provides an additional moisture seal for cable connectors. It also prevents loosening of connections from vibration or other external stresses which would eventually allow moisture penetration. The sealed connector is suitable for typical exposed and buried cable applications.



Weatherproofing

Specification Table:

| Part No. | Color: | Size |
|--------------------|--------|-----------------|
| WT-PVCT-1920.18-BK | Black | 19mm*20m*0.18mm |
| WT-PVCT-1910.18-BK | Black | 19mm*10m*0.18mm |
| WT-PVCT-1920.18-BE | Blue | 19mm*20m*0.18mm |
| WT-PVCT-1910.18-BE | Blue | 19mm*10m*0.18mm |
| WT-PVCT-1920.18-BN | Brown | 19mm*20m*0.18mm |
| WT-PVCT-1910.18-BN | Brown | 19mm*10m*0.18mm |
| WT-PVCT-1920.18-GN | Green | 19mm*20m*0.18mm |
| WT-PVCT-1910.18-GN | Green | 19mm*10m*0.18mm |
| WT-PVCT-1920.18-OE | Orange | 19mm*20m*0.18mm |
| WT-PVCT-1910.18-OE | Orange | 19mm*10m*0.18mm |
| WT-PVCT-1920.18-PE | Purple | 19mm*20m*0.18mm |
| WT-PVCT-1910.18-PE | Purple | 19mm*10m*0.18mm |
| WT-PVCT-1920.18-RD | Red | 19mm*20m*0.18mm |
| WT-PVCT-1910.18-RD | Red | 19mm*10m*0.18mm |
| WT-PVCT-1920.18-WE | White | 19mm*20m*0.18mm |
| WT-PVCT-1910.18-WE | White | 19mm*10m*0.18mm |
| WT-PVCT-1920.18-YW | Yellow | 19mm*20m*0.18mm |
| WT-PVCT-1910.18-YW | Yellow | 19mm*10m*0.18mm |

Other size can be customized according your requirement.

Weather Proofing Tape----Electrical PVC Tape (2")

Colorful PVC Backing Insulating Electrical tape provides excellent resistant to abrasion, moisture, alkalis, acids and corrosion. It provides an additional moisture seal for cable connectors. It also prevents loosening of connections from vibration or other external stresses which would eventually allow moisture penetration. The sealed connector is suitable for typical exposed and buried cable applications.



| Part No. | Color: | Size |
|--------------------|--------|-----------------|
| WT-PVCT-506.18-BK | Black | 50mm*6m*0.18mm |
| WT-PVCT-5010.18-BK | Black | 50mm*10m*0.18mm |
| WT-PVCT-506.18-BE | Blue | 50mm*6m*0.18mm |
| WT-PVCT-5010.18-BE | Blue | 50mm*10m*0.18mm |
| WT-PVCT-506.18-BN | Brown | 50mm*6m*0.18mm |
| WT-PVCT-5010.18-BN | Brown | 50mm*10m*0.18mm |
| WT-PVCT-506.18-GN | Green | 50mm*6m*0.18mm |
| WT-PVCT-5010.18-GN | Green | 50mm*10m*0.18mm |
| WT-PVCT-506.18-OE | Orange | 50mm*6m*0.18mm |
| WT-PVCT-5010.18-OE | Orange | 50mm*10m*0.18mm |
| WT-PVCT-506.18-PE | Purple | 50mm*6m*0.18mm |
| WT-PVCT-5010.18-PE | Purple | 50mm*10m*0.18mm |
| WT-PVCT-506.18-RD | Red | 50mm*6m*0.18mm |
| WT-PVCT-5010.18-RD | Red | 50mm*10m*0.18mm |
| WT-PVCT-506.18-WE | White | 50mm*6m*0.18mm |
| WT-PVCT-5010.18-WE | White | 50mm*10m*0.18mm |
| WT-PVCT-506.18-YW | Yellow | 50mm*6m*0.18mm |
| WT-PVCT-5010.18-YW | Yellow | 50mm*10m*0.18mm |

Other size can be customized according your requirement.

Weather Proofing Tape----Butyl Rubber Tape (Mastic)

Butyl Mastic Tape is a high tack, self-fusing butyl rubber mastic ideal for making water and humidity resistant seal, it provides additional moisture seal for cable connections. Butyl Mastic Tape is a high tack sealant with excellent adhesion to cable jackets and other insulating materials. It maintains its tack and flexibility to temperatures as low as 0°F (-18°C), ensuring a high quality seal over a wide range of temperatures.



Weatherproofing

Specification Table:

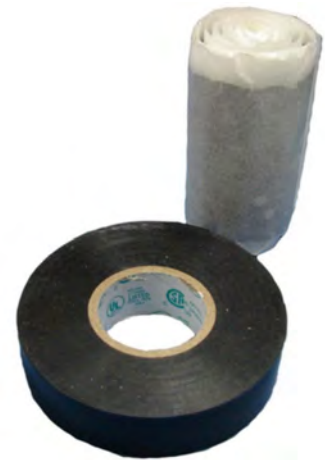
| Part No. | Color: | Size |
|----------------------|--------|-------------------------|
| WT-RT-MT63-0.6-3.175 | Black | 63.5mm x 600mm x3.175mm |
| WT-RT-MT63-0.6-1.5 | Black | 63.5mm x 600mm x1.5mm |

Other size can be customized according your requirement.

Weather Proofing Tape----Universal Weather Proof Kit

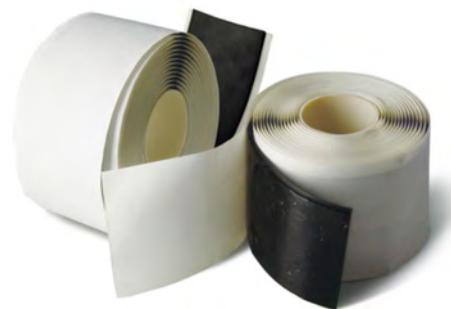
Universal weatherproofing kit for connectors and splices, include butyl rubber tape and PVC tape. It provides a multi-layer, long-term environmental seal over multiple connections.

| | |
|--------------|--|
| Application: | Coax protection |
| Mount to : | Cables and connectors |
| Design: | Tape kit for multilayer wrap |
| Feature: | Multi-connection protection |
| Material: | Butyl and Vinyl |
| Includes: | 1 rolls of 2-1/2 in butyl rubber tape 1 rolls of 3/4 in PVC tape. |



Weather Proofing Tape----Rubber Mastic Tape

Rubber mastic tape is a conformable self-fusing rubber electrical insulating and sealing tape. It consists of an ethylene propylene rubber (EPR) backing coated with an aggressive, temperature-stable mastic adhesive. It is designed for electrical insulating and moisture sealing applications. It offers excellent resistance to moisture and ultraviolet exposure and is intended for both indoor and weather exposed outdoor applications.

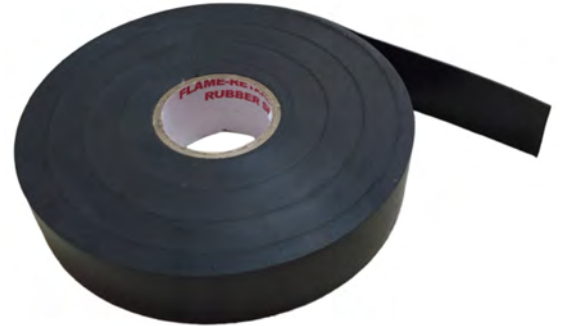


| Part No. | Color: | Size |
|----------------------|--------|-------------------|
| WT-RT-2228-50-3-1.65 | Black | 50mm x 3m x1.65mm |
| WT-RT-2228-38-3-1.65 | Black | 38mm x 3m x1.65mm |

Other size can be customized according your requirement.

Weather Proofing Tape----Linerless Rubber Splicing Tape

No lining insulation, flame retardant self-adhesive tape, the substrate is ethylene propylene rubber, excellent flame retardant properties. It is applied to the normal temperature of 90°C , and the temperature is 130°C. Short circuit temperature 250. It can be used for the insulation, flame retardant and heat dissipation of the cable terminal and the joint, which has excellent electrical performance and can be applied to 70KV .



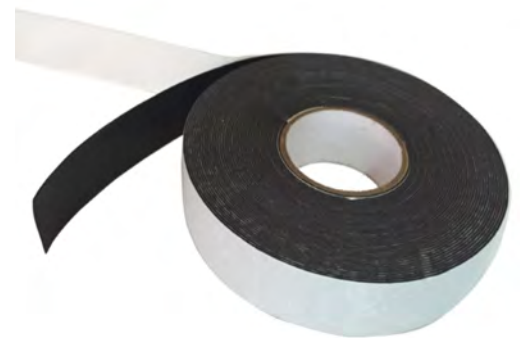
| Part No. | Color: | Size |
|---------------------------|--------|-----------------------|
| WT-SBLL-130C-19-9.14-0.75 | Black | 19mm x 9.14m x 0.75mm |
| WT-SBLL-130C-25-9.14-0.75 | Black | 25mm x 9.14m x 0.75mm |
| WT-SBLL-130C-38-9.14-0.75 | Black | 38mm x 9.14m x 0.75mm |

Other size can be customized according your requirement.

Weather Proofing Tape---- Self-fusing Rubber Splicing Tape

Rubber Splicing Tape is a highly conformable, self-fusing EPR (Ethylene Propylene Rubber) based, high voltage splicing tape. It is a shelf-stable tape with excellent electrical properties. It can be used as an insulation for low-voltage application as well as an insulation for splices up to 69,000 volts.

- Can be used to splice and terminate cables
- Based on Ethylene Propylene Rubber (EPR)
- Self-fusing tape
- Excellent electrical properties
- A special liner which will not stick to the tape upon unwind




Weatherproofing

Specification Table:

| Part No. | Part No. |
|-------------------|-------------------|
| WT-SB23-19-5-0.76 | 19mm x 5M x0.76mm |
| WT-SB23-25-5-0.76 | 25mm x 5M x0.76mm |
| WT-SB23-36-5-0.76 | 36mm x 5M x0.76mm |
| WT-SB23-50-5-0.76 | 50mm x 5M x0.76mm |
| WT-SB23-19-9-0.76 | 19mm x 9M x0.76mm |
| WT-SB23-25-9-0.76 | 25mm x 9M x0.76mm |
| WT-SB23-36-9-0.76 | 36mm x 9M x0.76mm |
| WT-SB23-50-9-0.76 | 50mm x 9M x0.76mm |
| WT-SB23-19-5-0.5 | 19mm x 5M x0.5mm |
| WT-SB23-25-5-0.5 | 25mm x 5M x0.5mm |
| WT-SB23-36-5-0.5 | 36mm x 5M x0.5mm |
| WT-SB23-50-5-0.5 | 50mm x 5M x0.5mm |
| WT-SB23-19-9-0.5 | 19mm x 9M x0.5mm |
| WT-SB23-25-9-0.5 | 25mm x 9M x0.5mm |
| WT-SB23-36-9-0.5 | 36mm x 9M x0.5mm |

Other size can be customized according your requirement.

Weather Proofing Tape----Universal Weather Proof Kit

| Part No. | Include | |
|------------|---|--|
| WK-WT-6C6P | <p>Six rolls of insulation and sealing rubber mastic compound tape (3m*50.8mm*1.65mm)</p> <p>Six rolls of 3/4 in PVC tape (20.12m*19.05mm*0.18mm)</p> |  |



1

Cable Connector

2

Conector Adapter

3

Connector Dust Cap

4

Lightning Arrester

Cable Connector / Adapter Dust Cap / Lightning Arrester

DIN 7/16 RF Coaxial Connectors

7/16 (DIN, L29) connector with reliable structure and its performance is extremely stable, is specially designed for outdoor base stations in mobile communication (GSM, CDMA, 3G, 4G) systems, featuring high power, low loss, high operating voltage and perfect waterproof performance and applicable to various environments.

It is easy to install and provides reliable connection.



DIN connector for 1/2" super flexible cable


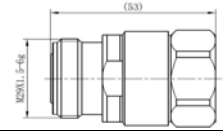

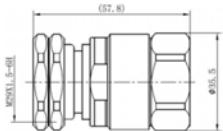
| Part No. | Description | Picture | Drawing |
|----------|--|---------|---------|
| DF-12S | DIN female connector for 1/2" super flexible cable | | |
| DM-12S | DIN male connector for 1/2" super flexible cable | | |
| DM-W-12S | DIN male angle connector for 1/2" super flexible cable | | |

DIN connector for 1/2" cable:




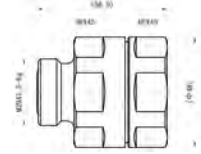
| Part No. | Description | Picture | Drawing |
|----------|---|---------|---------|
| DF-12 | DIN female connector for 1/2" cable | | |
| DM-12 | DIN male connector for 1/2" cable | | |
| DM-W-12 | DIN male angle connector for 1/2" cable | | |

Cable Connector / Adapter Dust Cap / Lightning Arrester


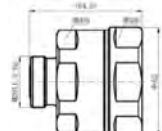

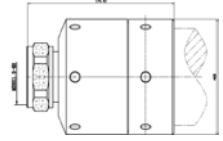
DIN connector for 7/8" cable:

| Part No. | Description | Picture | Drawing |
|----------|-------------------------------------|--|---|
| DF-78 | DIN female connector for 7/8" cable |  |  |
| DM-78 | DIN male connector for 7/8" cable |  |  |

DIN connector for 1-1/4" cable:

| Part No. | Description | Picture | Drawing |
|----------|---------------------------------------|--|---|
| DF-114 | DIN female connector for 1-1/4" cable |  |  |
| DM-114 | DIN male connector for 1-1/4" cable |  |  |

DIN connector for 1-5/8" cable:

| Part No. | Description | Picture | Drawing |
|----------|---------------------------------------|--|---|
| DF-158 | DIN female connector for 1-5/8" cable |  |  |
| DM-158 | DIN male connector for 1-5/8" cable |  |  |

Other size can be customized according your requirement.

Cable Connector / Adapter Dust Cap / Lightning Arrester

N RF Coaxial Connectors

N connector is type of threaded medium and high-power connector, featuring superb vibration resistance, high reliability, and excellent mechanical and electrical performance. It is widely applied to radio equipment, indoor coverage system and outdoor base stations for mobile communication in a vibrating and adverse environment.



N connector for 1/2" super flexible cable:


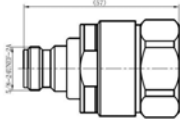

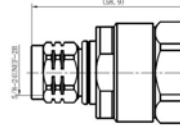
| Part No. | Description | Picture | Drawing |
|----------|--|---------|---------|
| NF-12S | N female connector for 1/2" super flexible cable | | |
| NM-12S | N male connector for 1/2" super flexible cable | | |
| NM-W-12S | N male angle connector for 1/2" super flexible cable | | |

N connector for 1/2" super flexible cable:


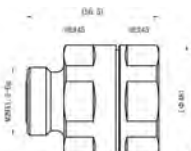

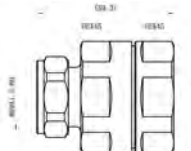
| Part No. | Description | Picture | Drawing |
|----------|---------------------------------------|---------|---------|
| NF-12 | N female connector for 1/2" cable | | |
| NM-12 | N male connector for 1/2" cable | | |
| NM-W-12 | N male angle connector for 1/2" cable | | |

Cable Connector / Adapter Dust Cap / Lightning Arrester


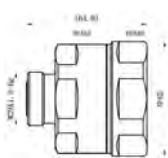

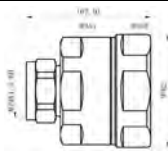
N connector for 7/8" cable:

| Part No. | Description | Picture | Drawing |
|----------|-----------------------------------|--|---|
| NF-78 | N female connector for 7/8" cable |  |  |
| NM-78 | N male connector for 7/8" cable |  |  |

N connector for 1-1/4" cable:

| Part No. | Description | Picture | Drawing |
|----------|-------------------------------------|--|---|
| NF-114 | N female connector for 1-1/4" cable |  |  |
| NM-114 | N male connector for 1-1/4" cable |  |  |

N connector for 1-5/8" cable:

| Part No. | Description | Picture | Drawing |
|----------|-------------------------------------|--|---|
| NF-158 | N female connector for 1-5/8" cable |  |  |
| NM-158 | N male connector for 1-5/8" cable |  |  |

Other size can be customized according your requirement.

Cable Connector / Adapter Dust Cap / Lightning Arrester

4.3-10 RF Coaxial Connectors

The 4.3-10 connector system is designed to meet the rising performance needs of mobile network equipment e.g. to connect the RRU to the antenna. Features of the 4.3-10 Connectors are compact connector sizes, best electrical performance, low PIM and coupling torque as well as the easy installation. Three different coupling mechanisms of the plug connectors screw, quick-lock/push-pull and hand-screw types are mateable with all jack connectors.



4.3-10 connectors:

| Part No. | Description | Picture | Drawing |
|----------------|--|---------|---------|
| 4312M-12 | 4.3-10 male connector for 1/2" cable | | |
| 4310F-RG141-FG | 4.3-10 male flange connector for RG141 cable | | |
| 4310M-78 | 4.3-10 male connector for 7/8" cable | | |

Other size can be customized according your requirement.

Other Connector Item No.

CONNECTOR - DIN / M - 78 - CP

| Category | Connector Type | Male / Female | Cable Size | Install Type |
|----------|----------------|---------------|------------|--------------|
|----------|----------------|---------------|------------|--------------|


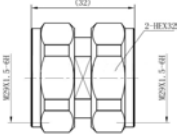

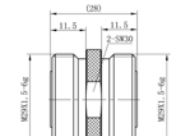
| | | | | |
|-----------|---|--|--|--|
| Connector | DIN= L29 DIN 7/16 N= N type 4310=4.3-10 4195=4.1-9.5 other type | M=Male F=Female MRA=Male Right Angle FRA=Female Right | 12=1/2" 12S=1/2" superflexible 78=7/8" 114=1-1/4" 158=1-5/8" other size cable | CL=clamp type CR=crimp type FL=flange type SD=solder type |
|-----------|---|--|--|--|

RF Connectors Adapter


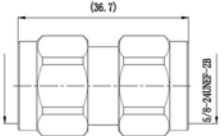

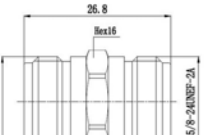
Adapters provide convenient transitions between popular series coaxial connectors. Provides a minimum length consistent with good electrical performance. The small size, low VSWR, and broad frequency coverage permits a wide range of applications. The major application is the test system and operating systems. Material is nickel plated brass, and gold plated brass. The material and plating is to be consistent with the basic connector series. All dielectrics are TFE fluorocarbon. The center contacts are made of beryllium copper, gold plated.



DIN Connector Adapter:


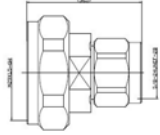

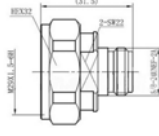

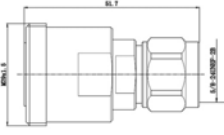

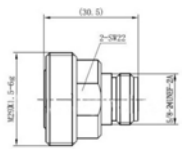
| Part No. | Description | Picture | Drawing |
|-----------|--------------------------|--|---|
| DINM-DINM | DIN male to DIN male |  |  |
| DINF-DINF | DIN female to DIN female |  |  |

N Connector Adapter:


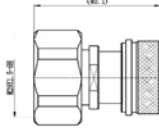

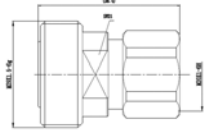

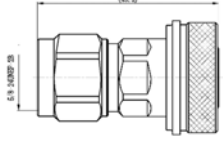

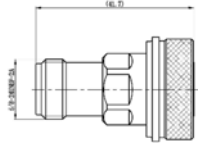
| Part No. | Description | Picture | Drawing |
|----------|----------------------|--|---|
| NM-NM | N male to N male |  |  |
| NF-NF | N female to N female |  |  |

Cable Connector / Adapter Dust Cap / Lightning Arrester


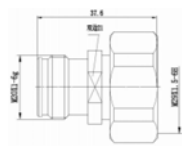

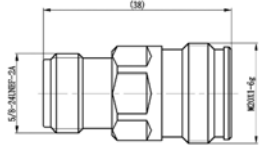
DIN to N Connector Adapter:

| Part No. | Description | Picture | Drawing |
|----------|------------------------|---|--|
| DINM-NM | DIN male to N male |  |  |
| DINM-NF | DIN male to N female |  |  |
| DINF-NM | DIN female to N male |  |  |
| DINF-NF | DIN female to N female |  |  |

4.3-10 Connector Adapter:

| Part No. | Description | Picture | Drawing |
|------------|---------------------------|--|---|
| 4310M-DINM | 4.3-10 male to DIN male |  |  |
| 4310M-DINF | 4.3-10 male to DIN female |  |  |
| 4310M-NM | 4.3-10 male to N male |  |  |
| 4310M-NF | 4.3-10 male to N female |  |  |

Cable Connector / Adapter Dust Cap / Lightning Arrester

| Part No. | Description | Picture | Drawing |
|------------|---------------------------|--|---|
| 4310F-DINM | 4.3-10 female to DIN male |  |  |
| 4310F-NF | 4.3-10 female to N female |  |  |

Any other straight in-line adapter and angle adapter is also available.

Connectors Dust Cap

Dust cap is the perfect solution for protecting your equipment's coaxial connector from dust and water when they are not in use. The chain has a convenient eyelet for a chassis retaining screw. The high quality nickel finish looks great and will provide long service life. We provide many types of dust cap for common coaxial connectors, for example SMA, BNC, TNC, N, 7/16 DIN type connector, and the dust cap can with or without chain. It's easy to install, and while a cable is not plugged in, it's great practice to protect connectors with protective cap to increase the efficiency of device.



Material: Brass with Nick-plated or rubber
O-ring: Silicone rubber

DIN Connector Adapter:

| Part No. | Description |
|------------------|---|
| DCAP-DF-W.C | Dust cap for DIN female connector, with chain |
| DCAP-DF-W/O.C | Dust cap for DIN female connector, without chain |
| DCAP-DF-W/O.C-RT | Dust cap for DIN female connector, without chain, Rubber type |
| DCAP-DM-W.C | Dust cap for DIN male connector, with chain |
| DCAP-DM-W/O.C | Dust cap for DIN male connector, without chain |



N Connector Adapter:

| Part No. | Description |
|---------------|--|
| DCAP-NF-W.C | Dust cap for N female connector, with chain |
| DCAP-NF-W/O.C | Dust cap for N female connector, without chain |

Cable Connector / Adapter Dust Cap / Lightning Arrester

Other Connector Adapter:

| Part No. | Description |
|-----------|---|
| DCAP-SMAF | Dust Cap use for SMA female connector with chain/ without chain |
| DCAP-TNCF | Dust Cap use for TNC female connector with chain/ without chain |
| DCAP-BNCF | Dust Cap use for BNC female connector with chain/ without chain |

Lightning Arrester

Surge arrestors provide excellent lightning protection and outstanding RF performance. All designs have low return loss, low insertion loss and low intermodulation. ERS offers $1/4\lambda$ wavelength type and gas discharge tube.

Features / Benefits


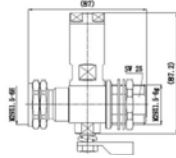

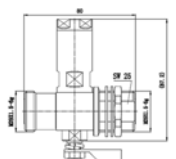
- Outstanding RF Performance
- Complete Weatherproof
- Available with Type N or DIN Interface


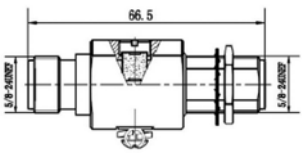

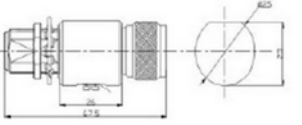

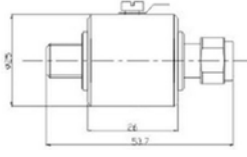


$1/4\lambda$ wavelength:

| Part No. | Description | Picture | Drawing |
|-----------------------|---|---------|---------|
| LA-14W-DMDF-0825 | DIN male to DIN female | | |
| LA-14WGDT-DFDF-0727-B | DIN female to DIN female, $1/4$ wave + gas (bulkhead) | | |
| LA-14W-NFNM-2460 | N male to N female | | |
| LA-14W-NFNM-0825 | 4.3-10 female to N female | | |

Cable Connector / Adapter Dust Cap / Lightning Arrester

| Part No. | Description | Picture | Drawing |
|--------------------|--|--|---|
| LA-14W-DMDF-0727 | DIN male to DIN female |  |  |
| LA-14W-DFDF-0727-B | DIN female to DIN female, 1/4 wave + gas (bulkhead) |  |  |

| Part No. | Description | Picture | Drawing |
|------------------|-------------------------|--|---|
| LA-GDT-NFNF-3G | N female to N female |  |  |
| LA-GDT-NMNF-3G | N female to N male, 1/4 |  |  |
| LA-GDT-FMFF-500M | F male to F female |  |  |

Grounding Kit



Clip-on grounding kit

Description:

Clip-on ground kits are an advanced type for coaxial cable grounding, providing an easy installation as well as dependable protection of coaxial cable system. The designed clip design and pre-formed strap allow the clip-on ground kits to be easily slipped over the coaxial cable's outer conductor. The latch was optimized to provide a secure fix maximizing performance by ensuring proper contact surface area and pressure.

Material:

Contact: high quality copper strap;

Grounding clamp: per-formed copper strap;

Grounding / earthing cable: 16mm² or 13mm² BV or BVR copper wire

Copper lugs: 16-8, 13-8 tin plated copper lugs to connect to grounding bar

Installation accessories: stainless steel 304.



| Description | Item No. | Specification. |
|------------------------|--------------|---|
| Click-on grounding kit | GROUND-CO14 | Click-on grounding kit for 1/4" coaxial cable |
| | GROUND-CO38 | Click-on grounding kit for 3/8" coaxial cable |
| | GROUND-CO12 | Click-on grounding kit for 1/2" coaxial cable |
| | GROUND-CO78 | Click-on grounding kit for 7/8" coaxial cable |
| | GROUND-CO114 | Click-on grounding kit for 1-1/4" coaxial cable |
| | GROUND-CO158 | Click-on grounding kit for 1-5/8" coaxial cable |

Framework grounding kit

Description:

Framework grounding kit is compact design for outdoor coaxial cables (corrugated or braid) grounding. With Tinned copper strip & butyl seal, framework grounding kit offers quick installation, good waterproofing.

Material:

- Inner contact: Tin plated copper braid strap.
- Grounding clamp: 304 stainless steel + EPDM rubber plated
- Seal strip: each side has seal strip to ensure water proofing.
- Grounding / earthing cable: 16mm² or 13mm² BV or BVR copper wire
- Copper lugs: 16-8, 13-8 tin plated copper lugs
- Installation accessories: Inner hex bolts for soon installation.



Grounding

| Description | Item No. | Specification. |
|-------------------------|--------------|--|
| Framework grounding kit | GROUND-FW14 | Framework grounding kit for 1/4" coaxial cable |
| | GROUND-FW38 | Framework grounding kit for 3/8" coaxial cable |
| | GROUND-FW12 | Framework grounding kit for 1/2" coaxial cable |
| | GROUND-FW78 | Framework grounding kit for 7/8" coaxial cable |
| | GROUND-FW114 | Framework grounding kit for 1-1/4" coaxial cable |
| | GROUND-FW158 | Framework grounding kit for 1-5/8" coaxial cable |

242948 Standard grounding kit for 1/4 in and 3/8 cable

Standard Grounding Kit for 1/4 in and 3/8 in corrugated and braided coaxial cable and elliptical waveguide 240 and 380

Grounding strap material: copper or Tin-plated copper

Include: Grounding kit, Hardware, lug, 1 roll PVC tape, 1 roll butyl rubber tape, cable, cable ties

Lug type: one hole type

Weatherproof Method: Butyl and electric tape



| Item No. | Specification. |
|---------------|---|
| GROUND-242948 | Standard Grounding Kit for 1/4 in and 3/8 in corrugated & braided coaxial cable |

GK-SUNV Universal Grounding Kit

GK-SUNV Universal Grounding Kit for 1/4 in through 5/8 in corrugated coaxial cable

Grounding strap material: Tin-plated copper

Include: Grounding kit, Hardware, lug, 1 roll PVC tape, 1 roll butyl rubber tape, cable,

Lug type: one hole type

Weatherproof Method: Butyl and electric tape



| Item No. | Specification. |
|----------------|--|
| GROUND-GK-SUNV | Universal Grounding Kit for 1/4 in through 5/8 in corrugated coaxial cable |

Grounding

Bolt-on Grounding Kit

Bolt on Grounding Kit for for 3/8 in corrugated and braided coaxial cable .

Grounding strap material: Tin-plated copper

Include: Grounding kit, Hardware, lug, 1 roll PVC tape, 1 roll butyl rubber tape, cable,

Lug type: one hole type

Weatherproof Method: Butyl and electric tape



| Item No. | Specification. |
|-----------|--|
| GROUND-BO | Standard Grounding Kit for 3/8 in corrugated & braided coaxial cable |

Copper Strap type Grounding Kits

Copper strap type grounding kit is a original designed grounding kit. With preformed copper strap and copper lugs, installation of this type grounding kit is soon and simple. The universal grounding kit is an innovative grounding design allowing a single grounding kit to accommodate any size of coaxial cable from 1/2" to 3" .



| Item No. | Specification. |
|-----------|--|
| GROUND-CS | Copper strap type grounding kit for 1/2" to 3" coaxial cable |

Indoor Feeder Cable Grounding Kit

Indoor type grounding is used for indoor 7/8" coaxial cable grounding composed with C copper terminal, stainless steel clamp, colored grounding cable.



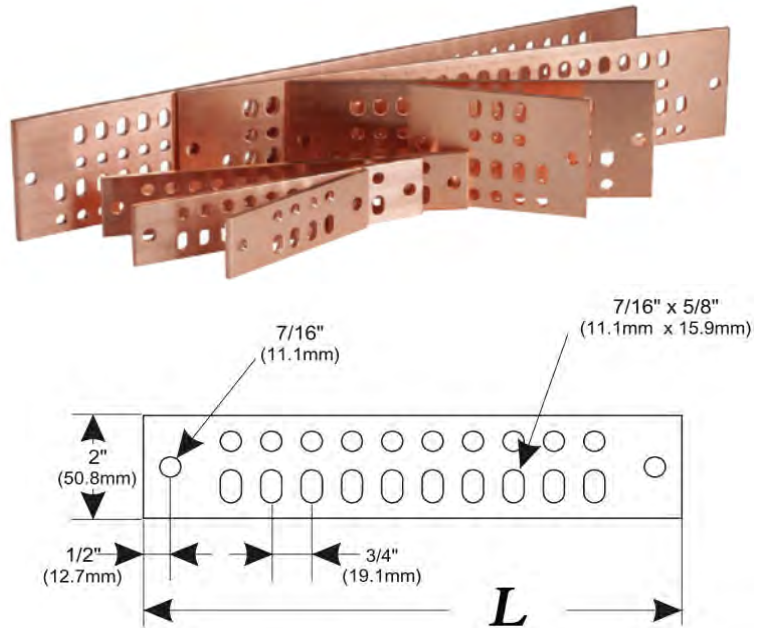
| Item No. | Specification. |
|-------------|---|
| GROUND-ID78 | Indoor grounding kit for 7/8" coaxial cable |

Grounding

Copper Ground Buss Bars

General Specifications

- Solid 1/4" thick copper buss bars
- Universal hole pattern accepts 2 hole lugs with 3/4" and/or 1" spacing
- Custom patterns and hole sizes available
- Application: grounding
- Mounts to: wall or tower
- Material: copper

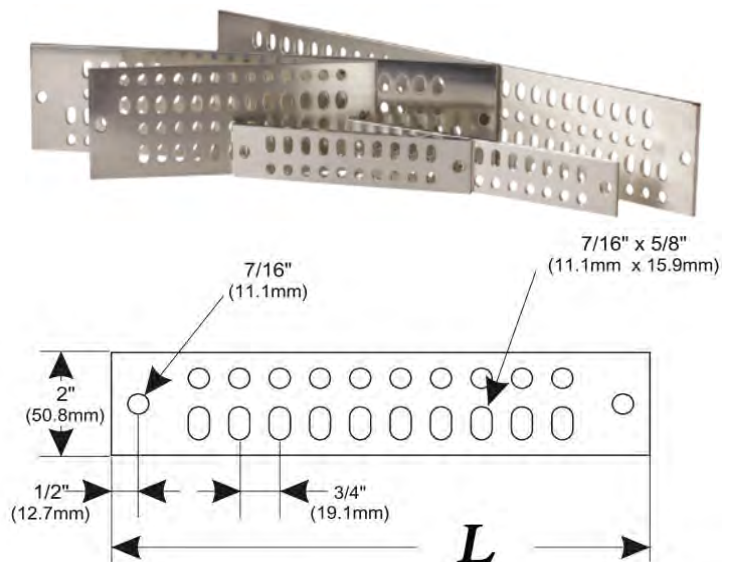


| Part No. | Description | Size |
|-------------|-----------------|----------|
| GBU-C-1426 | copper buss bar | 2" x 6" |
| GBU-C-14210 | copper buss bar | 2" x 10" |
| GBU-C-14212 | copper buss bar | 2" x 12" |
| GBU-C-14214 | copper buss bar | 2" x 14" |
| GBU-C-14412 | copper buss bar | 4" x 12" |
| GBU-C-14414 | copper buss bar | 4" x 14" |
| GBU-C-14420 | copper buss bar | 4" x 20" |
| GBU-C-14424 | copper buss bar | 4" x 24" |

Tinned Copper Ground Buss Bars

General Specifications

- Solid 1/4" thick copper buss bars
- Universal hole pattern accepts 2 hole lugs with 3/4" and/or 1" spacing
- Custom patterns and hole sizes available
- Application: grounding
- Mounts to: wall or tower
- Material: tinned copper



Grounding

| Part No. | Description | Size |
|--------------|------------------------|----------|
| GBU-CT-1426 | Tinned copper buss bar | 2" x 6" |
| GBU-CT-14210 | Tinned copper buss bar | 2" x 10" |
| GBU-CT-14212 | Tinned copper buss bar | 2" x 12" |
| GBU-CT-14214 | Tinned copper buss bar | 2" x 14" |
| GBU-CT-14412 | Tinned copper buss bar | 4" x 12" |
| GBU-CT-14414 | Tinned copper buss bar | 4" x 14" |
| GBU-CT-14420 | Tinned copper buss bar | 4" x 20" |
| GBU-CT-14424 | Tinned copper buss bar | 4" x 24" |

2" x 10"

| Part No. | Description | Drawing |
|--------------|--|---------|
| GBU-C-14210 | Ground Buss Bar, 1/4" x 2" x 10" (6.4 mm x 50.8 mm x 254.0 mm), hardware not included | |
| GBU-CT-14210 | Tinned Ground Buss Bar, 1/4" x 2" x 10" (6.4 mm x 50.8 mm x 254.0 mm), hardware not included | |

2" x 14"

| Part No. | Description | Drawing |
|--------------|--|---------|
| GBU-C-14214 | Ground Buss Bar, 1/4" x 2" x 14" (6.4 mm x 50.8 mm x 355.6 mm), hardware not included | |
| GBU-CT-14214 | Tinned Ground Buss Bar, 1/4" x 2" x 14" (6.4 mm x 50.8 mm x 355.6 mm), hardware not included | |

Grounding

4" x 12"

| Part No. | Description | Drawing |
|--------------|---|---------|
| GBU-C-14412 | Ground Buss Bar, 1/4" x 4" x 12" (6.3 mm x 101.6 mm x 304.8 mm), hardware not included | |
| GBU-CT-14412 | Tinned Ground Buss Bar, 1/4" x 4" x 12" (6.3 mm x 101.6 mm x 304.8 mm), hardware not included | |

4" x 20"

| Part No. | Description | Drawing |
|--------------|---|---------|
| GBU-C-14420 | Ground Buss Bar, 1/4" x 4" x 20" (6.3 mm x 101.6 mm x 508.0 mm), hardware not included | |
| GBU-CT-14420 | Tinned Ground Buss Bar, 1/4" x 4" x 20" (6.3 mm x 101.6 mm x 508.0 mm), hardware not included | |

Other Size Ground Buss Bars

General Specifications

- Design: universal slotted or standard hole
- Custom patterns and hole sizes available
- Application: grounding
- Mounts to: wall or tower
- Material: copper or tinned copper
- Order separately: hardware kit

Grounding

2" x 12"

| Part No. | Description | Material |
|---------------|--|----------|
| GB-C-14212-1 | Ground Buss Bar, 1/4" x 2" x 12" (6.4 mm x 50.8 mm x 304.8 mm), hardware not included | |
| GB-CT-14212-2 | Tinned Ground Buss Bar, 1/4" x 2" x 12" (6.4 mm x 50.8 mm x 304.8 mm), hardware not included | |

2-1/2" x 12-1/2"

| Part No. | Description | Drawing |
|-------------------|--|---------|
| GB-C-142.512.5-3 | Ground Buss Bar, 1/4" x 2.5" x 12.5" (6.4 mm x 63.5 mm x 317.5 mm), hardware not included | |
| GB-CT-142.512.5-4 | Tinned Ground Buss Bar, 1/4" x 2.5" x 12.5" (6.4 mm x 63.5 mm x 317.5 mm), hardware not included | |

2-1/2" x 19-1/2"

| Part No. | Description | Drawing |
|-------------------|--|---------|
| GB-C-142.519.5-5 | Ground Buss Bar, 1/4" x 2.5" x 19.5" (6.4 mm x 63.5 mm x 495.3 mm), hardware not included | |
| GB-CT-142.519.5-6 | Tinned Ground Buss Bar, 1/4" x 2.5" x 19.5" (6.4 mm x 63.5 mm x 495.3 mm), hardware not included | |

Grounding

4" x 14"

| Part No. | Description | Drawing |
|---------------|---|---------|
| GB-C-14414-7 | Ground Buss Bar, 1/4" x 4" x 14" (6.3 mm x 101.6 mm x 355.6 mm), hardware not included | |
| GB-CT-14414-8 | Tinned Ground Buss Bar, 1/4" x 4" x 14" (6.3 mm x 101.6 mm x 355.6 mm), hardware not included | |

4" x 24"

| Part No. | Description | Drawing |
|----------------|---|---------|
| GB-C-14424-9 | Ground Buss Bar, 1/4" x 4" x 24" (6.3 mm x 101.6 mm x 609.6 mm), hardware not included | |
| GB-CT-14424-10 | Tinned Ground Buss Bar, 1/4" x 4" x 24" (6.3 mm x 101.6 mm x 609.6 mm), hardware not included | |

Universal Buss Bar Hardware Kit

| Part No. | Description | Drawing |
|----------|---|---|
| BBHK-IS | Universal Buss Bar Hardware Kit—Insulated Shelter | <p>Insulated Shelter</p> <p>Non-Insulated Shelter</p> <p>Insulated Tower</p> <p>Non-Insulated Tower</p> |
| BBHK-NIS | Universal Buss Bar Hardware Kit—Non-Insulated Shelter | |
| BBHK-IT | Universal Buss Bar Hardware Kit—Insulated Tower | |
| BBHK-NIT | Universal Buss Bar Hardware Kit—Non-Insulated Tower | |

NOTE: Buss Bar Kit includes all components necessary to attach buss bars in any of the four configurations shown above

Grounding

Cable Lug (Barrel Lug)

Cable lugs (tubular, crimp type) are made of high conductive copper tube with tin-plated. These products are suitable for the connection of copper conductors cable with equipment. They are fully annealed to ensure qualities of electrical and mechanical strength. These are widely used in Electricity Boards and Electrical Industries.



One Hole Lugs- No Inspection Window

| Part No. | Gauge | Stud Size | Picture |
|----------|-----------------|-----------|---------|
| CL-8-14 | #8 | 1/4" | |
| CL-6-14 | #6 | 1/4" | |
| CL-6-38 | #6 | 3/8" | |
| CL-2S-38 | 2 Solid, #3, #4 | 3/8" | |
| CL-2-14 | #2 | 1/4" | |
| CL-2-516 | #2 | 5/16" | |
| CL-2-38 | #2 | 3/8" | |

Two Hole Lugs-No Inspection Window


| Part No. | Gauge | Stud Size | Picture |
|-----------|-----------------|-----------|---------|
| CL-82-14 | #8 | 1/4" | |
| CL-62-14 | #6 | 1/4" | |
| CL-62-38 | #6 | 3/8" | |
| CL-2S2-38 | 2 Solid, #3, #4 | 3/8" | |
| CL-2S2-14 | 2 Solid, #3, #4 | 1/4" | |
| CL-22-14 | #2 | 1/4" | |
| CL-22-516 | #2 | 1/4" | |
| CL-22-38 | #2 | 3/8" | |

Universal Two Hole Lugs-No Inspection Window


| Part No. | Gauge | Stud Size | Picture |
|------------|-----------------|-----------|---------|
| CL-62-38U | #6 | 3/8" | |
| CL-2S2-38U | 2 Solid, #3, #4 | 3/8" | |
| CL-22-38U | #2 | 3/8" | |

Grounding


One Hole Lugs- With Inspection Window

| Part No. | Gauge | Stud Size | Picture |
|-------------|-----------------|-----------|---|
| CL-IH-8-14 | #8 | 1/4" |  |
| CL-IH-6-14 | #6 | 1/4" | |
| CL-IH-6-38 | #6 | 3/8" | |
| CL-IH-2S-38 | 2 Solid, #3, #4 | 3/8" | |
| CL-IH-2-14 | #2 | 1/4" | |
| CL-IH-2-38 | #2 | 3/8" | |

Two Hole Lugs-With Inspection Window

| Part No. | Gauge | Stud Size | Picture |
|--------------|-----------------|-----------|--|
| CL-IH-82-14 | #8 | 1/4" |  |
| CL-IH-62-14 | #6 | 1/4" | |
| CL-IH-62-38 | #6 | 3/8" | |
| CL-IH-2S2-38 | 2 Solid, #3, #4 | 3/8" | |
| CL-IH-2S2-14 | 2 Solid, #3, #4 | 1/4" | |
| CL-IH-22-14 | #2 | 1/4" | |
| CL-IH-22-516 | #2 | 1/4" | |
| CL-IH-22-38 | #2 | 3/8" | |

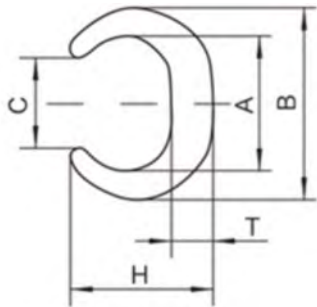
Universal Two Hole Lugs-With Inspection Window

| Part No. | Gauge | Stud Size | Picture |
|---------------|-----------------|-----------|---|
| CL-IH-62-38U | #6 | 3/8" |  |
| CL-IH-2S2-38U | 2 Solid, #3, #4 | 3/8" | |
| CL-IH-22-38U | #2 | 3/8" | |

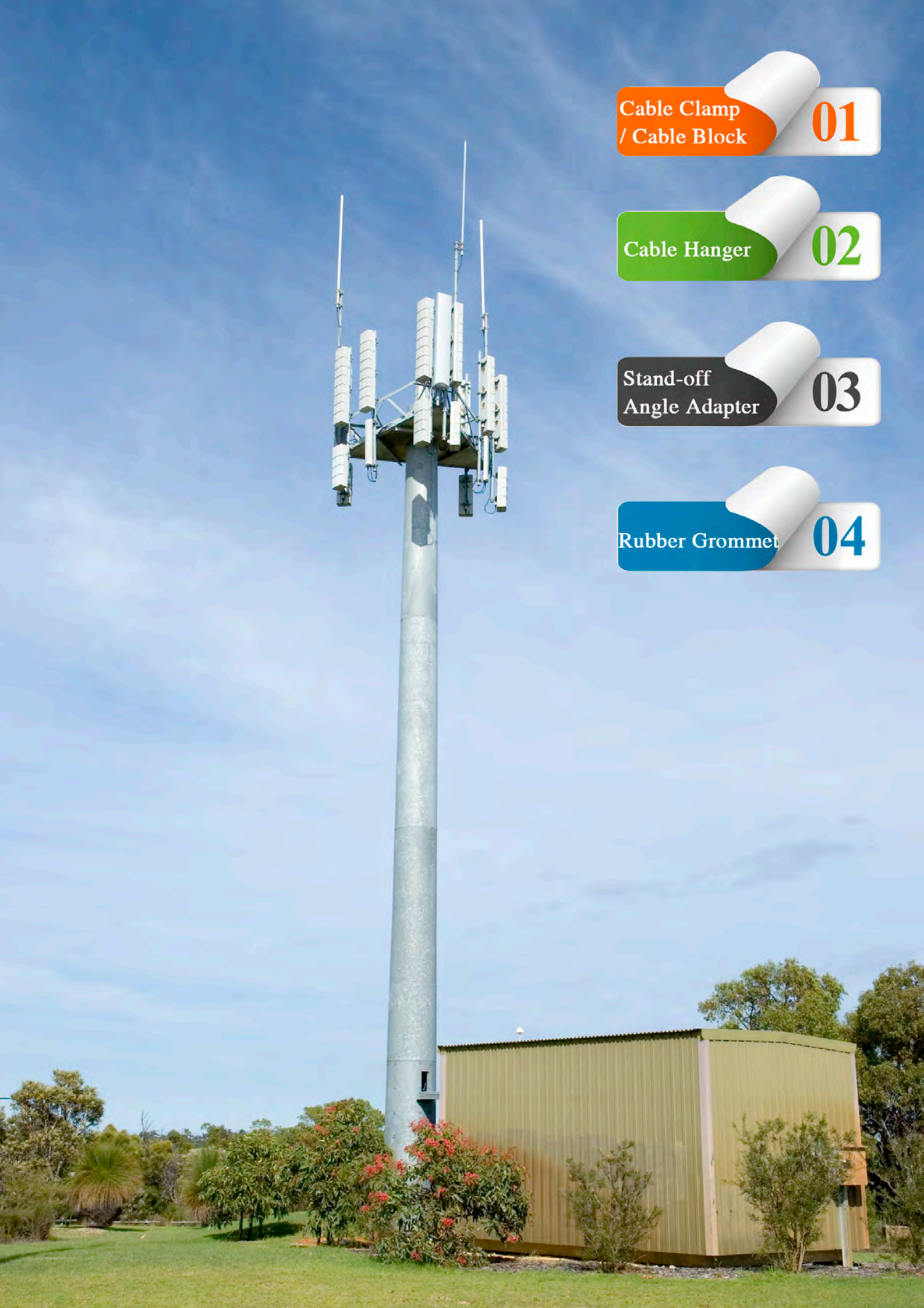
Grounding

Copper C Taps (C Clamp)

Copper C clamp is made of high quality copper, and It is suitable for the connection of copper or aluminum splicing wire, made of "C" shaped. Copper C clamp is widely used in earthing project with its Strong corrosion resistance, Good conductivity, and long use life.



| Item No. | Suitable Section of Conductor(mm ²) | Dimensions(mm) | | | | | |
|----------|---|----------------|------|------|----|-----|------|
| | | B | A | H | L | T | C |
| CCT-10 | 7.5~11 | 9.5 | 6.3 | 6.2 | 12 | 1.6 | 4 |
| CCT-16 | 11.5~16 | 11.8 | 7.8 | 7.8 | 13 | 2 | 5 |
| CCT-20 | 14~20 | 12.8 | 8.6 | 9.7 | 13 | 2.9 | 5.4 |
| CCT-26 | 21~26 | 14.7 | 10.2 | 10 | 16 | 3.2 | 6.5 |
| CCT-44 | 27~44 | 19 | 13.4 | 14.4 | 20 | 4 | 8.5 |
| CCT-60 | 45~60 | 21 | 15.4 | 15.4 | 22 | 4 | 9.7 |
| CCT-76 | 61~76 | 24.4 | 17.3 | 17.6 | 22 | 5 | 10.8 |
| CCT-98 | 77~98 | 27.8 | 20.8 | 18.8 | 25 | 5 | 12.8 |
| CCT-122 | 99~122 | 29.8 | 22.1 | 21.2 | 26 | 5.5 | 13.5 |
| CCT-154 | 123~154 | 34 | 25.7 | 24.2 | 28 | 6 | 17 |
| CCT-190 | 155~190 | 37 | 28.5 | 25.4 | 35 | 6 | 17.4 |
| CCT-240 | 191~240 | 40 | 30.2 | 28.5 | 40 | 7 | 19 |
| CCT-288 | 241~288 | 44.5 | 34.7 | 31.1 | 45 | 7 | 22.3 |
| CCT-365 | 289~365 | 47.5 | 37.7 | 34 | 50 | 7 | 24.8 |
| CCT-450 | 366~450 | 57 | 42.5 | 41 | 60 | 10 | 28 |
| CCT-560 | 451~560 | 62 | 46 | 44 | 65 | 11 | 31 |
| CCT-700 | 561~700 | 73 | 52 | 48.5 | 70 | 12 | 34 |



Cable Clamp
/ Cable Block

01

Cable Hanger

02

Stand-off
Angle Adapter

03

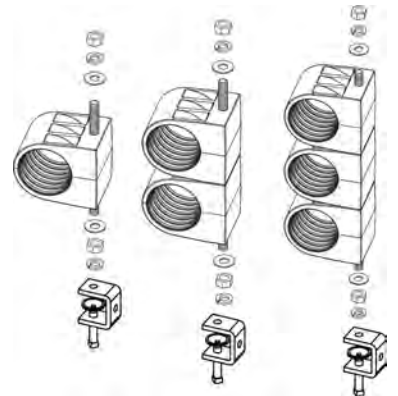
Rubber Grommet

04

Cable Clamp / Cable Hanger Angle Adapter / Rubber Grommet

Feeder Cable Clamp—Single Hole Through Type

The feeder cable clamp is designed specifically for wireless application. These stackable space saving clamps provide versatility in all applications reducing material and installation costs. Feeder cable clamp are manufactured from a durable weather resistant glass polypropylene which exceeds the recommended temperature parameters for coaxial cable i.e.(-40° to 185° F). Thermal, chemical and UV resistance ensure long term integrity in extreme environments, hardware is available in 304 or 201 stainless steel.




- Material: Stainless steel 304
- Design: Single-hole type
- Include: Angle adapter, mounting hardwares, plastic clamp
- Mount to: Angle members

| Item No. | Description. |
|------------------|--|
| CH-CC-S38S-1 | For 3/8" super flexible coaxial cable, 1 run |
| CH-CC -S38S-2 | For 3/8" super flexible coaxial cable, 2 run |
| CH-CC -S38S-3 | For 3/8" super flexible coaxial cable, 3 run |
| CH-CC -S38-1 | For 3/8" coaxial cable, 1 run |
| CH-CC -S38-2 | For 3/8" coaxial cable, 2 run |
| CH-CC -S38-3 | For 3/8" coaxial cable, 3 run |
| CH-CC -S12S-1 | For 1/2" super flexible coaxial cable, 1 run |
| CH-CC -S12S-2 | For 1/2" super flexible coaxial cable, 2 run |
| CH-CC -S12S-3 | For 1/2" super flexible coaxial cable, 3 run |
| CH-CC -S12MM-1 | For cable with OD: 12mm-13mm, 1run |
| CH-CC -S12MM-2 | For cable with OD: 12mm-13mm, 2run |
| CH-CC -S12MM-3 | For cable with OD: 12mm-13mm, 3run |
| CH-CC -S12-1 | For 1/2" coaxial cable, 1 run |
| CH-CC -S12-2 | For 1/2" coaxial cable, 2 run |
| CLAMP-S12-3 | For 1/2" coaxial cable, 3 run |
| CH-CC -S14.5MM-1 | For cable with OD: 14.5mm-15.5mm, 1run |
| CH-CC -S14.5MM-2 | For cable with OD: 14.5mm-15.5mm, 2run |
| CH-CC -S14.5MM-3 | For cable with OD: 14.5mm-15.5mm, 3run |
| CH-CC -S78-1 | For 7/8" coaxial cable, 1 run |
| CH-CC -S78-2 | For 7/8" coaxial cable, 2 run |
| CH-CC -S78-3 | For 7/8" coaxial cable, 3 run |
| CH-CC -S114-1 | For 1-1/4" coaxial cable, 1 run |
| CH-CC -S114-2 | For 1-1/4" coaxial cable, 2 run |
| CH-CC -S114-3 | For 1-1/4" coaxial cable, 3 run |
| CH-CC -S158-1 | For 1-5/8" coaxial cable, 1 run |
| CH-CC -S158-2 | For 1-5/8" coaxial cable, 2 run |
| CH-CC -S158-3 | For 1-5/8" coaxial cable, 3 run |

* Please contact us for more other size.

Cable Clamp / Cable Hanger Angle Adapter / Rubber Grommet


Feeder Cable Clamp—Single Hole Through-Click Type

| Item No. | Description. | Picture |
|-----------------|---|---|
| CH-CC-CK-S12-1 | For 1/2" coaxial cable, 1 run, click type |  |
| CH-CC-CK-S12-2 | For 1/2" coaxial cable, 2 run, click type | |
| CH-CC-CK-S12-3 | For 1/2" coaxial cable, 3 run, click type | |
| CH-CC-CK-S78-1 | For 7/8" coaxial cable, 1 run, click type | |
| CH-CC-CK-S78-2 | For 7/8" coaxial cable, 2 run, click type | |
| CH-CC-CK-S78-3 | For 7/8" coaxial cable, 3 run, click type | |
| CH-CC-CK-S114-1 | For 1-1/4" coaxial cable, 1 run, click type | |
| CH-CC-CK-S114-2 | For 1-1/4" coaxial cable, 2 run, click type | |
| CH-CC-CK-S114-3 | For 1-1/4" coaxial cable, 3 run, click type | |
| CH-CC-CK-S158-1 | For 1-5/8" coaxial cable, 1 run, click type | |
| CH-CC-CK-S158-2 | For 1-5/8" coaxial cable, 2 run, click type | |
| CH-CC-CK-S158-3 | For 1-5/8" coaxial cable, 3 run, click type | |

- Please contact us for more other size.

Feeder Cable Clamp—Double Hole Through-Click Type

- Material: Stainless steel 304
- Design: Single-hole type
- Include: Angle adapter, mounting hardwares, plastic clamp
- Mount to: Angle members
- Feature: Durability, easy installation, weather-resistant.

| Item No. | Description. | Picture |
|-----------------|---|---|
| CH-CC-CK-D12-2 | For 1/2" coaxial cable, 2 run, click type |  |
| CH-CC-CK-D12-4 | For 1/2" coaxial cable, 4 run, click type | |
| CH-CC-CK-D12-6 | For 1/2" coaxial cable, 6 run, click type | |
| CH-CC-CK-D78-2 | For 7/8" coaxial cable, 2 run, click type | |
| CH-CC-CK-D78-4 | For 7/8" coaxial cable, 4 run, click type | |
| CH-CC-CK-D78-6 | For 7/8" coaxial cable, 6 run, click type | |
| CH-CC-CK-D114-2 | For 1-1/4" coaxial cable, 2 run, click type | |
| CH-CC-CK-D114-4 | For 1-1/4" coaxial cable, 4 run, click type | |
| CH-CC-CK-D114-6 | For 1-1/4" coaxial cable, 6 run, click type | |
| CH-CC-CK-D158-2 | For 1-5/8" coaxial cable, 2 run, click type | |
| CH-CC-CK-D158-4 | For 1-5/8" coaxial cable, 4 run, click type | |
| CH-CC-CK-D158-6 | For 1-5/8" coaxial cable, 6 run, click type | |

- * Please contact us for more other size.


Cable Clamp / Cable Hanger Angle Adapter / Rubber Grommet

Feeder Cable Clamp—Double Hole Through Type

| Item No. | Description. | Picture |
|----------------|--|--|
| CH-CC-D38-2 | For 3/8" coaxial cable, 2 run |  |
| CH-CC-D38-4 | For 3/8" coaxial cable, 4 run | |
| CH-CC-D38-6 | For 3/8" coaxial cable, 6 run | |
| CH-CC-D12S-2 | For 1/2" super flexible coaxial cable, 2 run | |
| CH-CC-D12S-4 | For 1/2" super flexible coaxial cable, 4 run | |
| CH-CC-D12S-6 | For 1/2" super flexible coaxial cable, 6 run | |
| CH-CC-13*14DH1 | For 14mm-14.5mm cable, 2run | |
| CH-CC-13*14DH2 | For 14mm-14.5mm cable, 4run | |
| CH-CC-13*14DH3 | For 14mm-14.5mm cable, 6run | |
| CH-CC-D12-2 | For 1/2" coaxial cable, 2 run | |
| CH-CC-D12-4 | For 1/2" coaxial cable, 4 run | |
| CH-CC-D12-6 | For 1/2" coaxial cable, 6 run | |
| CH-CC-D78-2 | For 7/8" coaxial cable, 2 run | |
| CH-CC-D78-4 | For 7/8" coaxial cable, 4 run | |
| CH-CC-D78-6 | For 7/8" coaxial cable, 6 run | |
| CH-CC-D114-2 | For 1-1/4" coaxial cable, 2 run | |
| CH-CC-D114-4 | For 1-1/4" coaxial cable, 4 run | |
| CH-CC-D114-6 | For 1-1/4" coaxial cable, 6 run | |
| CH-CC-D158-2 | For 1-5/8" coaxial cable, 2 run | |
| CH-CC-D158-4 | For 1-5/8" coaxial cable, 4 run | |
| CH-CC-D158-6 | For 1-5/8" coaxial cable, 6 run | |

* Please contact us for more other size.



Feeder Cable Clamp—Double Hole Through- Asymmetric Type

| Item No. | Description. | Picture |
|------------------|---|---|
| CH-CC-7A13*14DH1 | For 7.0-7.5mm*1 run and 14-14.5mm*1 run |  |
| CH-CC-7A13*14DH2 | For 7.0-7.5mm*2 run and 14-14.5mm*2 run | |
| CH-CC-7A13*14DH3 | For 7.0-7.5mm*3 run and 14-14.5mm*3 run | |

* Please contact us for more other size.

Cable Clamp / Cable Hanger Angle Adapter / Rubber Grommet

Feeder Cable Clamp—Triple Hole Through Type

| Item No. | Description. | Picture |
|---------------------------------|---|--|
| CH-CC-6.5A15.5*16.5TH21-2R | For 6 run 6.5-7.5mm +d 3 run11-17.5mm cable |  |
| CH-CC-4*6A6.4*7A15.5*17TH111-3R | For 3 run 4-5mm+3 run 6.5-7.5mm+ 3 run18-18mm |  |

* Please contact us for more other size.

Cable Clamp / Cable Hanger Angle Adapter / Rubber Grommet

Combined clamp

The clamp can be combined freely by all size of single hole, double or triple hole clamp, also can add rubber grommet into the clamp hole for suit for wide range of cable size.

Below is some of our regular Combined clamp

| Item No. | Description. | Picture |
|--------------------------|--|---|
| CH-CC-13*14DH3-R7R9.5*13 | Small hole for 7-7.5mm cable, big hole for 9.5-11.5 mm cable |  |
| CH-CC-13*14DH3-R5R9.5*13 | Small hole for 5-5.5mm cable, big hole for 9.5-11.5 mm cable |  |
| CH-CC-7A13*14DH3-R9.5*13 | Small hole for 7-8mm cable, big hole for 9.5-11.5mm cable |  |
| CH-CC-12.2SH2-R0711 | For 7-9mm cable |  |
| CH-CC-13*14DH3-R7 | Small hole for 7-7.5mm cable, big hole for 14-14.5 cable |  |

Cable Clamp / Cable Hanger Angle Adapter / Rubber Grommet

| Item No. | Description. | Picture |
|---------------------------|-------------------------------|---|
| CH-CC-7813*14DH11-R20.5R7 | For 7-8mm & 20.5-23mm cable |  |
| CH-CC-7813*14DH22-R20.5R7 | For 7-8mm & 20.5-23mm cable |  |
| CH-CC-78DH2-R20.5 | For 20.5-23mm cable |  |
| CH-CC-13*14DH2-R5 | For 5-5.5mm & 14-14.5mm cable |  |
| CH-CC-13*14DH2-R7 | For 7-7.5mm & 14-14.5mm cable |  |
| CH-CC-78DH1-R10R20.5 | For 10-11mm and 20-22mm cable |  |
| CH-CC-1213*14DH11-R7 | For 7-8mm & 1/2" cable |  |

Cable Clamp / Cable Hanger Angle Adapter / Rubber Grommet

| Item No. | Description. | Picture |
|----------------------|--------------------------|---|
| CH-CC-12DH1-R12 | For 12-13mm cable |  |
| CH-CC-12DH1-R8 | For 8-9mm cable |  |
| CH-CC-12DH2-R9.5 | For 9.5-10mm cable |  |
| CH-CC-12SH2-12R8 | For 8-9mm cable |  |
| CH-CC-13*1478DH11-R5 | For 5-5.5mm & 7/8" cable |  |
| CH-CC-13*14DH2-R7 | For 7-7.5mm cable |  |
| CH-CC-3812DH11 | For 1/2" and 3/8" cable |  |


Cable Clamp / Cable Hanger Angle Adapter / Rubber Grommet

| Item No. | Description. | Picture |
|---------------------------|---------------------------------|---|
| CH-CC-38DH3-R6.5 | For 6.5-7mm cable |  |
| CH-CC-4*8A10.5*11DH3-R4*8 | For 10.5-11.5mm and 4-6mm cable |  |
| CH-CC-7812DH11-R10R8 | For 8mm and 10mm cable |  |
| CH-CC-13*14DH-R9.5*13R4*8 | For 9.5-11.5mm and 4-6mm cable |  |
| CH-CC-78DH1-R10 | For 10mm cable |  |
| CH-CC-7813*14DH22-R20R5 | For 5-5.5mm & 20-22mm cable |  |


*For more other size, please contact us freely.

Cable Clamp / Cable Hanger Angle Adapter / Rubber Grommet


Cable Clamp -- rubber ring-angle adapter type

| Item No. | Size | Description | Picture |
|----------|-------------------------------|--------------------------------------|---|
| CC-RRAA | 1/2", 7/8", 1-1/4", 1-5/8" | For 1/2", 7/8", 1-1/4", 1-5/8" cable |  |


Cable Clamp -- support blocks with stand off and hose clamp

| Item No. | Size | Description | Picture |
|-----------|-------------------------------|--------------------------------------|---|
| CC-SOHCSB | 1/2", 7/8", 1-1/4", 1-5/8" | For 1/2", 7/8", 1-1/4", 1-5/8" cable |  |


Cable Clamp -- Wall install type

| Item No. | Size | Description | Picture |
|----------|-------------------------------|--------------------------------------|--|
| CC-WT-1 | 1/2", 7/8", 1-1/4", 1-5/8" | For 1/2", 7/8", 1-1/4", 1-5/8" cable |  |


Cable Clamp -- Wall install type

| Item No. | Size | Description | Picture |
|----------|-------------------------------|--------------------------------------|---|
| CC-WT-2 | 1/2", 7/8", 1-1/4", 1-5/8" | For 1/2", 7/8", 1-1/4", 1-5/8" cable |  |

Cable Clamp -- support blocks with clamp head and hose clamp

| Item No. | Size | Description | Picture |
|-----------|-------------------------------|--------------------------------------|---|
| CC-CHHCSB | 1/2", 7/8", 1-1/4", 1-5/8" | For 1/2", 7/8", 1-1/4", 1-5/8" cable |  |

Cable Clamp -- rubber ring-hose clamp type

| Item No. | Size | Description | Picture |
|----------|-------------------------------|--------------------------------------|---|
| CC-RRHC | 1/2", 7/8", 1-1/4", 1-5/8" | For 1/2", 7/8", 1-1/4", 1-5/8" cable |  |

Cable Clamp / Cable Hanger Angle Adapter / Rubber Grommet

Coax Cable Support Blocks

Introduction:

The Coax Support Block is a block hanger system designed specifically for wireless applications. Stackable space saving units provide versatility in all applications reducing material and installation costs by requiring only one M8 or 3/8" or 10mm threaded rod to secure up to six runs of coax. Coax Support Blocks are manufactured from a durable weather resistant Long Glass Polypropylene which exceeds the recommended temperature parameters for coaxial cable i.e. (-40° to 185° F). Thermal, chemical, and UV resistance ensure long term integrity in extreme environments including mountain tops, deserts, coastal, and industrial type applications.

Specifications:

Size: 1/4", 3/8", 1/2", 5/8", 7/8", 1-1/4", 1-5/8", or use with grommet rubber for different size cable freely.

Type: One hole type, double hole type, self-locking type and leaky cable type



Product Information:

| | |
|--------------------------|--|
| App: | Cable support |
| Support blocks type: | Double hole type |
| Size: | 7/8" |
| Available size: | 3/8", 1/2", 5/8", 7/8", 1-1/4", 1-5/8" ect., or use with grommet rubber for different size cable freely. |
| Compatible Max diameter: | 27mm |
| Compatible Min diameter: | 26mm |
| Mounts from: | M8 or M10 threaded rod |
| Material: | Fiber glass reinforced PP |
| Incl.: | Blocks only |
| Packing : | Plastic bag + carton |

Cable Clamp / Cable Hanger Angle Adapter / Rubber Grommet

| Part No. | Description | Part No. | Description |
|--------------|------------------------------------|--------------|-------------------------------------|
| CH-CB-38-SH | Single hole type, for 3/8" Cable | CH-CB-38-SL | Self-locking type, for 3/8" Cable |
| CH-CB-12S-SH | Single hole type, for 1/2S" Cable | CH-CB-12S-SL | Self-locking type, for 1/2S" Cable |
| CH-CB-12-SH | Single hole type, for 1/2" Cable | CH-CB-12-SL | Self-locking type, for 1/2" Cable |
| CH-CB-78-SH | Single hole type, for 7/8" Cable | CH-CB-78-SL | Self-locking type, for 7/8" Cable |
| CH-CB-114-SH | Single hole type, for 1-1/4" Cable | CH-CB-114-SL | Self-locking type, for 1-1/4" Cable |
| CH-CB-158-SH | Single hole type, for 1-5/8" Cable | CH-CB-158-SL | Self-locking type, for 1-5/8" Cable |
| CH-CB-214-SH | Single hole type, for 2-1/4" Cable | CH-CB-214-SL | Self-locking type, for 2-1/4" Cable |
| CH-CB-38-DH | Double hole type, for 3/8" Cable | CH-CB-38-LC | Leaky cable type, for 3/8" Cable |
| CH-CB-12S-DH | Double hole type, for 1/2S" Cable | CH-CB-12S-LC | Leaky cable type, for 1/2S" Cable |
| CH-CB-12-DH | Double hole type, for 1/2" Cable | CH-CB-12-LC | Leaky cable type, for 1/2" Cable |
| CH-CB-78-DH | Double hole type, for 7/8" Cable | CH-CB-78-LC | Leaky cable type, for 7/8" Cable |
| CH-CB-114-DH | Double hole type, for 1-1/4" Cable | CH-CB-114-LC | Leaky cable type, for 1-1/4" Cable |
| CH-CB-158-DH | Double hole type, for 1-5/8" Cable | CH-CB-158-LC | Leaky cable type, for 1-5/8" Cable |
| CH-CB-214-DH | Double hole type, for 2-1/4" Cable | CH-CB-214-LC | Leaky cable type, for 2-1/4" Cable |

Cable Clamp / Cable Hanger Angle Adapter / Rubber Grommet

Leaking Cable or Radiating Cable Hanger



Description:

Radiating cable hanger is main use for fasten radiating cable, mainly used for fix cable to walls or steel wire, and can be used in the environments of tunnels, wall and underground pipeline. It consist of self-locking clamp or hanger, round base (stand off), and screw part.

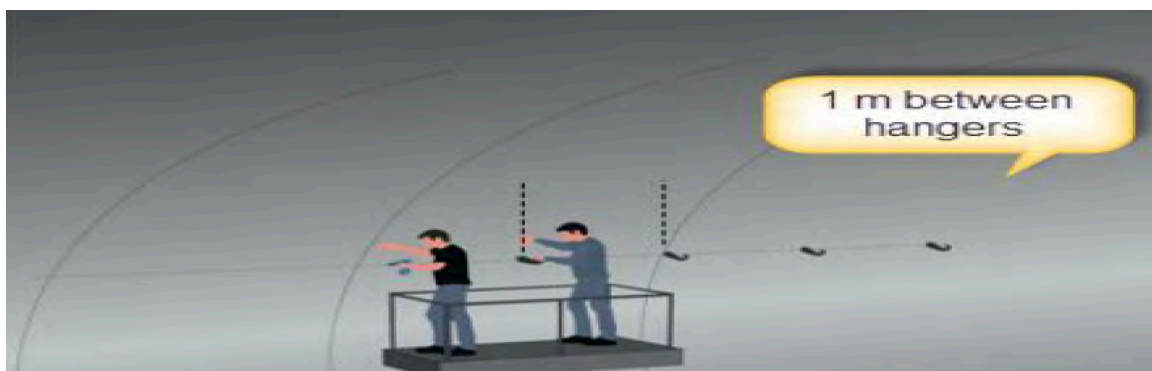
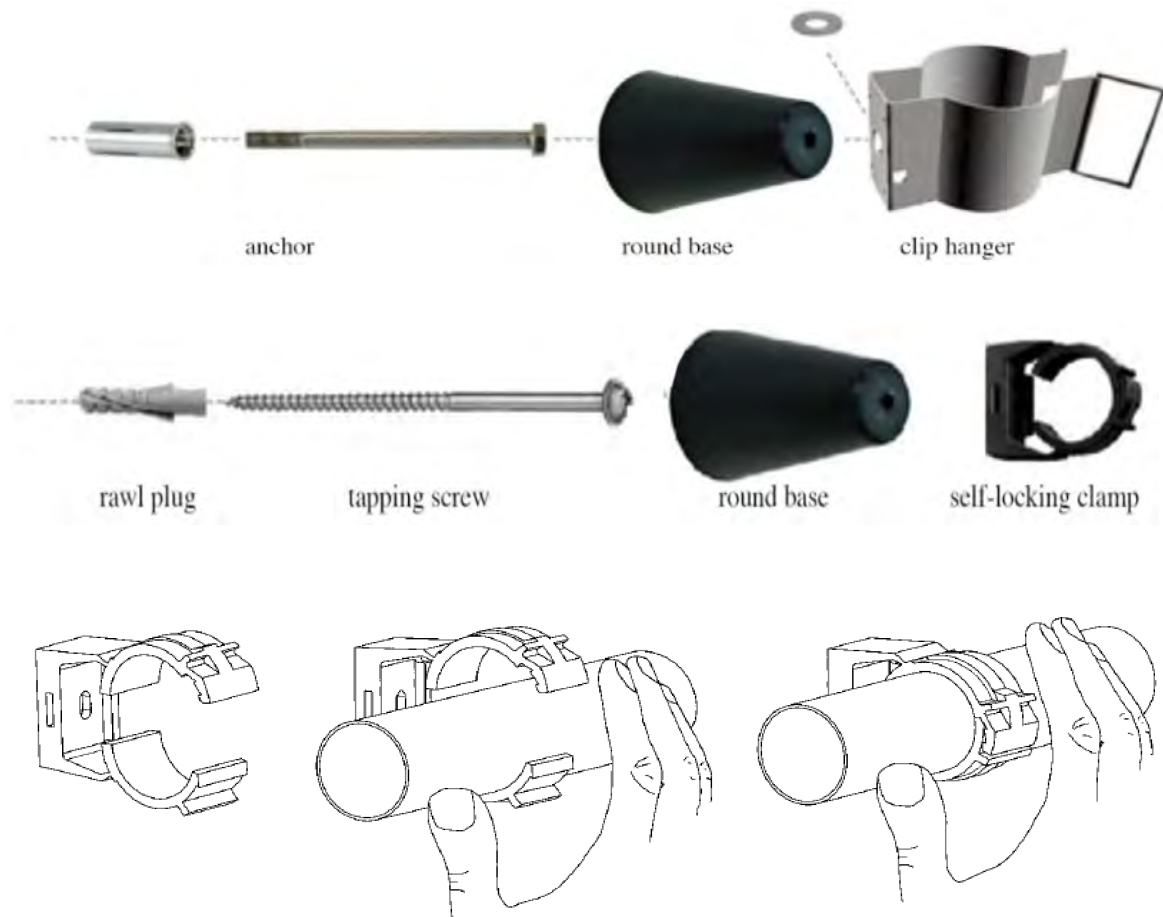


| Item No. | Component & Material | Size | Picture |
|-------------------|---|-------------------------------|---|
| CC-RCH-SCPSA | self-locking clamp: nylon round base(cone standoff): pp metal anchor: carbon steel | 1/2", 7/8", 1-1/4", 1-5/8" |  |
| CC-RCH-SCPSA-MT | self-locking clamp: nylon round base(cone standoff): pp metal anchor: carbon steel metal tight clamp: stainless steel | 1/2", 7/8", 1-1/4", 1-5/8" |  |
| CC-RCH-SCPSTS | self-locking clamp: nylon round base(cone standoff): pp tapping screw: stainless steel rawl plug: nylon | 1/2", 7/8", 1-1/4", 1-5/8" |  |
| CC-RCH-CHPSA | matel clip hanger: stainless steel round base(cone standoff): pp metal anchor: carbon steel | 1/2", 7/8", 1-1/4", 1-5/8" |  |
| CC-RCH-BHPSA | matel butterfly hanger: stainless steel round base(cone standoff): pp metal anchor: carbon steel | 1/2", 7/8", 1-1/4", 1-5/8" |  |
| CC-RCH-BHMSA | matel butterfly hanger: stainless steel round base(cone standoff): pp matel anchor: carbon steel metal standoff: stainless steel | 1/2", 7/8", 1-1/4", 1-5/8" |  |
| CC-RCH-CCPSA | nylon click-on clamp: nylon pyramid or cone standoff: pp metal anchor: carbon steel/galvanized steel | 1-1/4", 1-5/8" |  |
| CC-RCH-DCCMSA | double click-on clamp: nylon metal standoff: stainless steel metal anchor: stainless steel | 1-1/4", 1-5/8" |  |
| CC-RCHOT-SCMH1-MT | self-locking clamp: nylon hook: carbon steel metal tight clamp: carbon steel application: for outer tunnel | 1/2", 7/8", 1-1/4", 1-5/8" |  |

Cable Clamp / Cable Hanger Angle Adapter / Rubber Grommet

| | | | |
|-----------------|---|----------------|---|
| CC-RCH-CCHPSA | combination clip hanger: nylon + carbon steel pyramid or cone standoff: pp metal anchor: stainless steel/galvanized steel | 1-1/4", 1-5/8" |  |
| CC-RCHOT-DCCMH2 | double click-on clamp: nylon hook: : stainless steel application: for outer tunnel | 1-1/4", 1-5/8" |  |

Installation Instruction:



Cable Clamp / Cable Hanger Angle Adapter / Rubber Grommet

Metal Cable Hanger--Standard Butterfly Hangers

Description:

Features: Stainless Steel Standard Hangers provide a reliable solution for supporting single runs of coaxial cable in wireless systems. Cable grippers bite into the coax jacketing to provide additional support.

Recommended spacing is one hanger for every 3 feet of cable. Use with braided, corrugated, or smooth wall cables. Allows cable attachment by using 3/8" hardware (not included). Will not loosen over time.

Hex head bolt is also slotted for use with a screw driver. Fits corrugated and smooth wall cables.

Construction: Constructed from high grade 304 stainless steel for maximum corrosion protection. Part is tumbled and cleaned to remove burrs and oil.

Design Criteria: Can be used outdoors or indoors.



| Item No. | Description |
|------------|--|
| CH-SBH-12 | Butterfly Hangers for 1/2" Coaxial Cable |
| CH-SBH-78 | Butterfly Hangers for 7/8" Coaxial Cable |
| CH-SBH-114 | Butterfly Hangers for 1-1/4" Coaxial Cable |
| CH-SBH-158 | Butterfly Hangers for 1-5/8" Coaxial Cable |

Metal Cable Hanger--- Clip-on Hanger

Features:

- Allows cable attachment using 3/8" hardware.
- Slotted to allow attachment with hose clamps or 1/2" banding.
- Locking bale for easy installation, no nuts or bolts.
- Fits corrugated or smooth-wall cables.
- Material: 304 stainless steel for maximum corrosion protection.



| Item No. | Description |
|------------|--|
| CH-COH-12 | Clip-on hangers for 1/2" Coaxial Cable |
| CH-COH-78 | Clip-on hangers for 7/8" Coaxial Cable |
| CH-COH-114 | Clip-on hangers for 1-1/4" Coaxial Cable |
| CH-COH-158 | Clip-on hangers for 1-5/8" Coaxial Cable |

Cable Clamp / Cable Hanger Angle Adapter / Rubber Grommet

Snap-In Angle Adapters (AA-SI)

Angle Adapters for Snap-In

Angle Adapters are used to attach a variety of cable hangers to angled tower members without drilling any holes into the tower leg. Snap-In Angle Universal Adapter is comprised of stainless steel and has two 3/4" holes for use with snap-in hangers, wider opening allows more versatility in mounting.



Universal Angle Adapters (AA-U)

Two 3/4" mounting holes for snap-in hangers. With serrated teeth to grip surfaces. adapter insert included, these insert convert the 3/4 holes to threaded 3/8" holes. Tensioning bolts, fillister screws with lock washer and inserts included. Wider opening allows more versatility in mounting. Constructed from high grade 304 stainless steel.



Angle Adapters, 3/8" threaded (AA-38)

304 Stainless Steel construction, serrated teeth grab onto and hold steel surfaces. Hardware includes 3/8" bolt and fillister screw with lock washer. Wider opening allows more versatility in mounting.



C Shape Clamp Head For Feeder Clamp (AA-CCH)

Clamp head is made from stainless steel, it will be used together with rod and plastic clamp to fix coaxial feeder cables to base towers, with M8 threaded hole.

Material: 304 stainless steel



Insert Kits for Angle Adapters (AA-IK)

Used to convert 3/4" snap-in holes to threaded 3/8" holes for use with clip and butterfly hangers or threaded rod.



Feature:

1. Four use with the universal angle adapter series
2. Heavy-Duty 304 stainless steel construction
3. Convert 3/4" snap-in holes to threaded 3/8" holes



Cable Clamp / Cable Hanger Angle Adapter / Rubber Grommet

Hardware Kit for Angle Adapter

| Part No. | Description | Picture |
|-----------|--|---|
| AA-HK-SBW | Include bolt and washer, Bolt size: 3/8"hole, length: 3/4" Material: 304 stainless steel |  |
| AA-HK-LB | Bolt size: square head, 3/8"hole, length: 1-3/4" Material: 304 stainless steel |  |

Stand Off Adapters

Product Description:

Stand-Off Adapters enable hangers to be mounted to larger members. Removing a loose threaded insert quickly converts this Stand- Off to accept Snap-In Hangers. Includes all necessary slotted hex head bolts, hex nuts and lock washers. Stand-Offs are slotted to accept round member adapters or banding straps for mounting on any size round tower member. These Stand-Off Adapters are manufactured from stainless steel to resist corrosion.

Installation:

1. Fasten hanger to stand-off with the nut, bolt and lock washer.
2. Mount the stand-off to the round tower member with the adjustable round member adapter or other adapter.

Stand Off Adapters with 3/8" Tapped Hole

Application: Coaxial cable

- Support Size: 3/8" or 10 mm tapped hole
- Heavy duty 304 Stainless Steel construction
- Accepts hose clamps and banding
- Design: Adapts hangers to round members
- Feature: Provides 2" stand-off
- Material: Stainless steel



| Part No. | Description |
|--------------|---|
| AA-SOA-38 | 3/8" hole stand-off |
| AA-SOA-38-HK | 3/8" hole stand-off, include hardware kit |

Cable Clamp / Cable Hanger Angle Adapter / Rubber Grommet

Stand Off with 3/4" Hole For Snap-Ins

- Application: Coaxial cable
- Support Size: 3/4" hole for Snap-Ins
- Heavy duty 304 Stainless Steel construction
- Accepts hose clamps and banding
- Design: Adapts hangers to round members
- Feature: Provides 2" stand-off
- Material: Stainless steel



| Part No. | Description |
|----------------|--|
| AA-SOA-34 | 3/4" hole stand-off |
| AA-SOA-38-HKIA | 3/8" hole stand-off, include insert adapter and hardware kit |

Three-Run Standoffs

- Application: Coaxial cable
- Support Size: 3/4" hole for Snap-Ins
- Heavy duty 304 Stainless Steel construction
- Accepts hose clamps and banding
- Design: Adapts hangers to round members
- Feature: Provides 2" stand-off
- Material: Stainless steel



| Part No. | Description |
|----------------|--|
| AA-SOA-TR | Three-run stand-off |
| AA-SOA-TR-HKIA | Three-run stand-off, include insert adapter and hardware kit |

Clamp heads

General Specifications

- Durable 304 Stainless Steel construction
- Accepts 1/2" banding or hose clamps
- 3/8" hole for common hardware mounting



| Part No. | Description |
|----------|-----------------------------|
| AA-CH | Stainless Steel Clamp Heads |

Cable Clamp / Cable Hanger Angle Adapter / Rubber Grommet

Rubber Grommet / Barrel Cushion

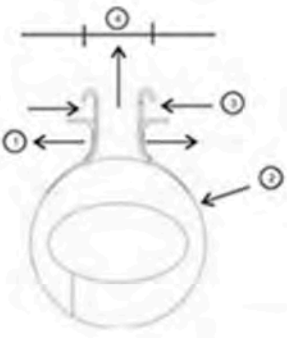
These EPDM grommets are designed to manage the RF coax cable, elliptical waveguide, power cable, hybrid cable and fiber cable...etc. They are usually used for wireless cellular sites. The grommet fit with snap-in hanger or coax block hanger for easy installation. They allow multiple runs with single attachment point. They are manufactured from UV resistant EPDM rubber which is durable in extreme conditions.

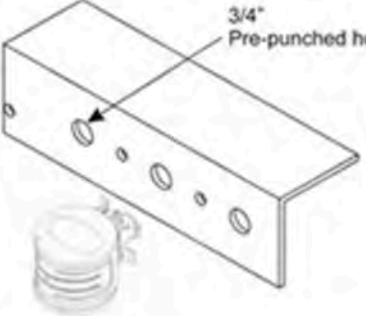
Selectable Material: EPDM rubber, natural rubber.

TYPICAL APPLICATIONS

INSERTION DIRECTIONS

- ① Spread Hanger Open
- ② Insert Cushion
- ③ Squeeze hanger
- ④ Insert into hole

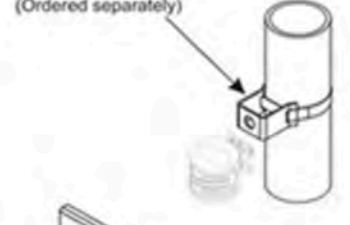




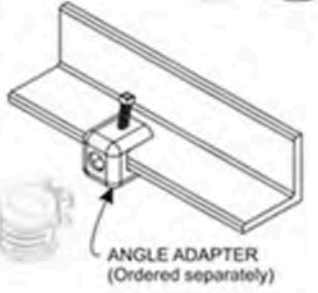
3/4"
Pre-punched hole

NOTE: Thickness of pre-punched member: .120" - .135" (3.0mm -)

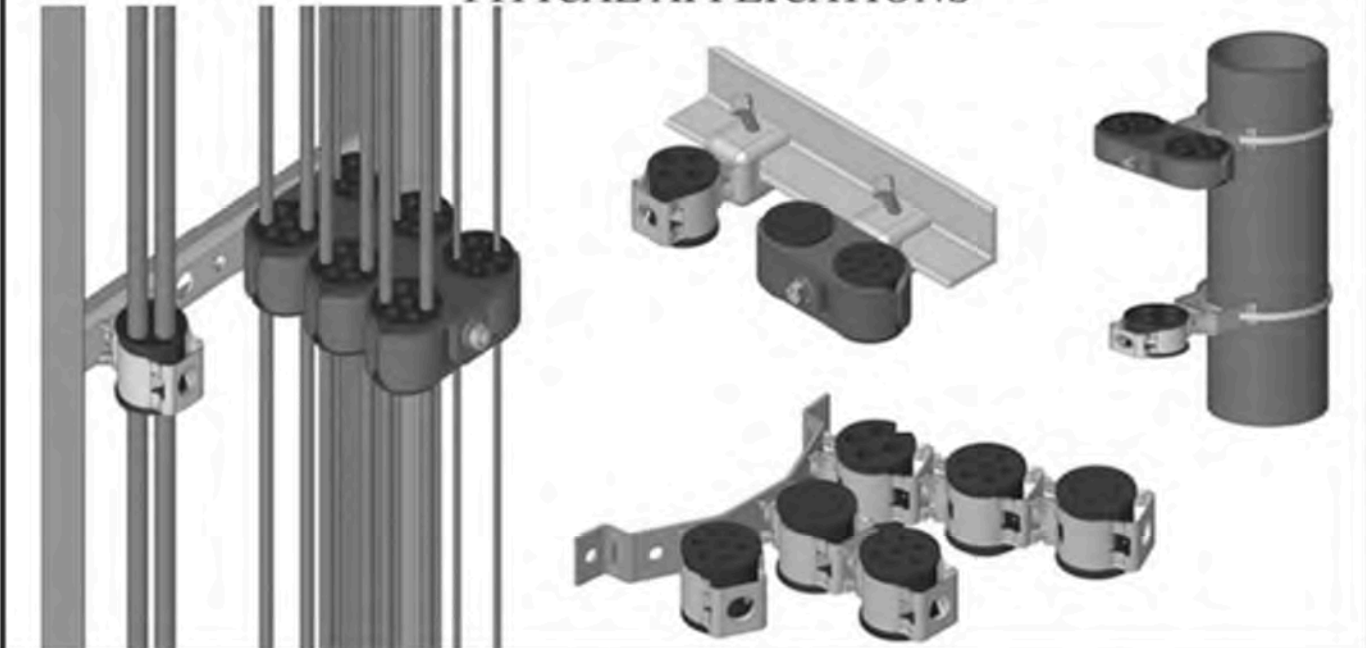
STAND-OFF ADAPTER
(Ordered separately)



ANGLE ADAPTER
(Ordered separately)



TYPICAL APPLICATIONS



Cable Clamp / Cable Hanger Angle Adapter / Rubber Grommet



single hole type



multi hole type

Rubber Grommet / Barrel Cushion---Single Hole

| Item No. | Match with hanger | Holes | Suggested cable sizes |
|----------------|-------------------|--------|------------------------------------|
| CH-RG12S-5mm | 1/2"S | 5mm | 5-6mm fiber |
| CH-RG12-5mm | 1/2" | 5mm | 5-6mm fiber |
| CH-RG38-6.5mm | 3/8" | 6.5mm | 6.5-7mm cable |
| CH-RG12S-6.5mm | 1/2"S | 6.5mm | 6.5-7mm cable |
| CH-RG12-6.5mm | 1/2" (15.8mm) | 6.5mm | 6.5-7mm cable |
| CH-RG12-7mm | 1/2" (15.8mm) | 7mm | LMR240, 1/4", 7-8mm cable |
| CH-RG12-8.3mm | 1/2" (15.8mm) | 8.3mm | 8-10mm cable |
| CH-RG12-9.5mm | 1/2" (15.8mm) | 9.5mm | 9.5-10.5mm cable |
| CH-RG12-10mm | 1/2" (15.8mm) | 10mm | LMR400, 3/8", RG11U, 10-12mm cable |
| CH-RG78-7 | 7/8" | 7mm | LMR240, 1/4", 7-8mm cable |
| CH-RG78-10 | 7/8" | 10mm | LMR400, 3/8", RG11U, 10-11mm cable |
| CH-RG78-14 | 7/8" | 14mm | 14-15mm cable |
| CH-RG78-20 | 7/8" | 20mm | 20-21mm cable |
| CH-RG78-20 | 7/8" | 20mm | 20-22mm cable |
| CH-RG78-20.5 | 7/8" | 20.5mm | 20.5-22.5mm cable |
| CH-RG114-10 | 1-1/4" | 10mm | 10-11mm cable |
| CH-RG114-15 | 1-1/4" | 15mm | 15-16mm cable |
| CH-RG114-19 | 1-1/4" | 19mm | 19-21mm power cable |
| CH-RG114-19.5 | 1-1/4" | 19.5mm | 19.5-21mm cable |
| CH-RG114-20 | 1-1/4" | 20mm | 20-21mm cable |
| CH-RG114-22 | 1-1/4" | 22mm | 22-23mm cable |
| CH-RG114-33 | 1-1/4" | 33mm | 33-35mm cable |
| CH-RG114-23 | 1-1/4" | 23mm | 23-25mm cable |
| CH-RG114-27 | 1-1/4" | 27mm | 7/8", 27-29mm power cable |
| CH-RG158-33 | 1-5/8" | 33mm | 33-35mm cable |
| CH-RG12S-4*6mm | 1/2"S | 4*6mm | 4-5.5mm cable |
| CH-RG12S-5*8mm | 1/2"S | 5*8mm | 5-7mm cable |

* Please contact us for more other size.

Cable Clamp / Cable Hanger Angle Adapter / Rubber Grommet

Rubber Grommet / Barrel Cushion---Multi Hole

| Item No. | Match with hanger | Holes | Suggested cable sizes |
|-----------------|-------------------|------------------|--|
| CH-RG114-386 | 1-1/4" | 10mm(6) | (7) LMR400, 3/8" flex, RG11U |
| CH-RG158-1410 | 1-5/8" | 6mm(10) | (10) 1/4" Super flex & LMR240 |
| CH-RG158-386 | 1-5/8" | 10mm(6) | (7) LMR400, 3/8" flex, RG11U |
| CH-RG158-387 | 1-5/8" | 10mm(7) | (7) LMR400, 3/8" flex, RG11U |
| CH-RG158-124 | 1-5/8" | 16mm(4) | (4) 1/2" coax |
| CH-RG158-582 | 1-5/8" | 21mm(2) | (2) LMR900, 5/8" coax |
| CH-RG158-144122 | 1-5/8" | 6mm(4), 16mm(2) | (4) LMR240, 1/4"S (2) 1/2" coax |
| CH-RG158-384122 | 1-5/8" | 10mm(4), 16mm(2) | (4) LMR400, 3/8" flex, RG11U (2) 1/2" coax |
| CH-RG158-144384 | 1-5/8" | 6mm(4), 10mm(4) | (4) LMR240, 1/4"S (4) LMR400, 3/8" flex, RG11U |
| CH-RG214-144582 | 2-1/4" | 6mm(4), 21mm(2) | (4) 1/4"S, LMR240 (2) LMR900, 5/8" coax |
| CH-RG214-384582 | 2-1/4" | 10mm(4), 21mm(2) | (4) LMR400, 3/8" flex, RG11U (2) LMR900, 5/8" coax |

* Please contact us for more other size.

Cable Entry and Sealing Solution



Cable Entry



Cable Entry Panel 4" (102mm)

Aluminum feed-thru entry panels enable multiple coax runs to enter buildings and shelters. These panels support the coax at the entry point and prevent moisture from entering the building. Each panel features 4 (102mm) openings to accept boot assemblies. Each boot assembly must be fitted with a cushion to hold the coax in place. Feed-thru entry panels are offered with a broad selection of hole patterns and plate sizes to match your exact application. These entries can be used in both interior and exterior wall. Each feed-thru entry panel includes a set of wall attachment hardware. Boots and cushions, or boot assembly kits must be purchased separately to accommodate specific coax requirements.



Characteristics

| | |
|---------------------------------------|-----------------------------------|
| Application: Entry port solutions | Feature: Easy to install solution |
| Design: Entry plates with round ports | Mounts to: Walls |
| Includes: Port, mounting hardware | Material: Aluminum |

| Part No. | Description | Part No. | Description |
|------------|----------------------------|------------|-----------------------------|
| CES-CEP-11 | Entry Panel, 1 Port, 1 x 1 | CES-CEP-25 | Entry Panel, 10 Port, 2 x 5 |
| CES-CEP-12 | Entry Panel, 2 Port, 1 x 2 | CES-CEP-26 | Entry Panel, 12 Port, 2 x 6 |
| CES-CEP-13 | Entry Panel, 3 Port, 1 x 3 | CES-CEP-33 | Entry Panel, 9 Port, 3 x 3 |
| CES-CEP-14 | Entry Panel, 4 Port, 1 x 4 | CES-CEP-34 | Entry Panel, 12 Port, 3 x 4 |
| CES-CEP-22 | Entry Panel, 4 Port, 2 x 2 | CES-CEP-36 | Entry Panel, 18 Port, 3 x 6 |
| CES-CEP-23 | Entry Panel, 6 Port, 2 x 3 | CES-CEP-44 | Entry Panel, 16 Port, 4 x 4 |
| CES-CEP-24 | Entry Panel, 8 Port, 2 x 4 | CES-CEP-46 | Entry Panel, 24 Port, 4 x 6 |

Note: Other sizes can be customized according to your request.

Cable Entry

Cable Entry Boot Assembly Kit 4" (102mm)

Each Assembly cable entry boot include:

1. A outer boot. (EPDM Rubber or natural rubber)
2. A selectable inner cushion insert. (EPDM Rubber or natural rubber)
3. Two hose clamp. (Stainless steel)

The 4" cable entry boot, is made of EPDM rubber or natural rubber. The material is unaffected by ozone, sunlight, aging, or temperature extremes. It is to be installed to the 4" entry panel, and allow the various coaxial cable go into the shelter through them. One piece design for easy installation and superior water sealing properties.



| Name | Matching cable | Item No. | Specification |
|-----------------------------|---------------------------|---------------|---------------|
| Selectable Boot and Cushion | 1/2" super flexible cable | CES-BAK-12S-1 | 1/2"S x 1 |
| | | CES-BAK-12S-2 | 1/2"S x 2 |
| | | CES-BAK-12S-3 | 1/2"S x 3 |
| | | CES-BAK-12S-4 | 1/2"S x 4 |
| | | CES-BAK-12S-5 | 1/2"S x 5 |
| | | CES-BAK-12S-6 | 1/2"S x 6 |
| | | CES-BAK-12S-7 | 1/2"S x 7 |
| | | CES-BAK-12S-8 | 1/2"S x 8 |
| | | CES-BAK-12S-9 | 1/2"S x 9 |
| | 1/2" cable | CES-BAK-12-2 | 1/2" x 1 |
| | | CES-BAK-12-2 | 1/2" x 2 |
| | | CES-BAK-12-3 | 1/2" x 3 |
| | | CES-BAK-12-4 | 1/2" x 4 |
| | | CES-BAK-12-5 | 1/2" x 5 |
| | | CES-BAK-12-6 | 1/2" x 6 |
| | | CES-BAK-12-7 | 1/2" x 7 |
| | | CES-BAK-12-8 | 1/2" x 8 |
| | 7/8" cable | CES-BAK-78-1 | 7/8" x 1 |
| | | CES-BAK-78-2 | 7/8" x 2 |
| | | CES-BAK-78-3 | 7/8" x 3 |
| | | CES-BAK-78-4 | 7/8" x 4 |
| | 1-1/4" cable | CES-BAK-114-1 | 1-1/4" x 1 |
| | 1-5/8" cable | CES-BAK-158-1 | 1-5/8" x 1 |
| | 2-1/4" cable | CES-BAK-214-1 | 2-1/4" x 1 |

Note: Other sizes can be customized according to your request.

Cable Entry

Dust Cap (End Cap) For 4" Cable Entry Panel

Introduction:

Cable entry plate dust cap is made from rubber, will use match with cable entry panel with 4" (102mm) hole, it can against dust and water enter from the plate hole.



| | | |
|----------------|----------------------------|--|
| Item NO.: | CES-DC-4 | |
| Item Name: | Cable Entry Plate Dust Cap | |
| Product Class: | Plate Cap | |
| Cap Material: | Black Rubber | |
| Color: | Black | |
| UV Resistance: | ≥1000 hours | |
| Cap Size: | Round, for 4" entry plate | |
| Cap Packing: | Plastic Bag and carton | |

Cable Entry Cushion Plugs

Introduction:

The cushion plugs is made from rubber, the material is unaffected by ozone, sunlight, aging, or temperature extremes. It is to be installed to the cable cushion insert when the hole of cushion have not cable through.



| | | |
|--------------|--------------------------------|--|
| Application: | Entry port solutions | |
| Size: | 1/2"S to 2-1/4" coaxial cable | |
| Design: | Plugs for unused cushion holes | |
| Feature: | Allows for future expansion | |
| Mounts to | Cushion inserts | |
| Material: | EPDM rubber or natural rubber | |
| Includes: | Plugs only | |

Cable Entry

Full sizes of cushion plugs:

| Name | Matching Cable | Item No. | Specification |
|--------------------------|---------------------------------|------------|---------------|
| Selectable Cushion Plugs | 1/2" super flexible cable holes | CES-CP-12S | 1/2"S |
| | 1/2" cable holes | CES-CP-12 | 1/2" |
| | 7/8" cable holes | CES-CP-78 | 7/8" |
| | 1-1/4" cable holes | CES-CP-114 | 1-1/4" |
| | 1-5/8" cable holes | CES-CP-158 | 1-5/8" |
| | 2-1/4" cable holes | CES-CP-214 | 2-1/4" |

Feed-Thru Boot Assemblies

Application: Entry port solutions

Size: 4" (101.6 mm)

Design: Compression boot for aluminum entry panels

Feature: One-piece design simplifies installation

Mounts to: Entry panels

Material: EPDM rubber or natural rubber

Includes: Boot, two hose clamps

Order Separately: Cushion inserts, entry panel



| Name | Description | Item No. |
|---------------------------|---|-----------|
| Feed-Thru Boot Assemblies | 4" (101.6 mm) Feed-thru Boot Assembly, cushion not included | CES-FTB-4 |

Cushion Inserts

Application: Entry Port Solutions

Size: Versions for coaxial cable

Design: Compression fit round cushion

Feature: Dependable seal

Mounts to: Feed-thru boot assembly

Material: EPDM rubber or natural rubber

Includes: Cushion Insert only

Order Separately: Feed-thru Boot assembly, Entry Panel



Cable Entry

| Name | Matching cable | Item No. | Specification |
|---------------------------|---------------------------|----------------|---------------|
| Selectable Cushion Insert | 1/2" super flexible cable | CES-CI-12S-1 | 1/2"S x 1 |
| | | CES- CI -12S-2 | 1/2"S x 2 |
| | | CES- CI -12S-3 | 1/2"S x 3 |
| | | CES- CI -12S-4 | 1/2"S x 4 |
| | | CES- CI -12S-5 | 1/2"S x 5 |
| | | CES- CI -12S-6 | 1/2"S x 6 |
| | | CES- CI -12S-7 | 1/2"S x 7 |
| | | CES- CI -12S-8 | 1/2"S x 8 |
| | | CES- CI -12S-9 | 1/2"S x 9 |
| | 1/2" cable | CES- CI -12-2 | 1/2" x 1 |
| | | CES- CI -12-2 | 1/2" x 2 |
| | | CES- CI -12-3 | 1/2" x 3 |
| | | CES- CI -12-4 | 1/2" x 4 |
| | | CES- CI -12-5 | 1/2" x 5 |
| | | CES- CI -12-6 | 1/2" x 6 |
| | | CES- CI -12-7 | 1/2" x 7 |
| | | CES- CI -12-8 | 1/2" x 8 |
| | 7/8" cable | CES- CI -78-1 | 7/8" x 1 |
| | | CES- CI -78-2 | 7/8" x 2 |
| | | CES- CI -78-3 | 7/8" x 3 |
| | | CES- CI -78-4 | 7/8" x 4 |
| | 1-1/4" cable | CES- CI -114-1 | 1-1/4" x 1 |
| | 1-5/8" cable | CES- CI -158-1 | 1-5/8" x 1 |
| | 2-1/4" cable | CES- CI -214-1 | 2-1/4" x 1 |

Cushion Hanger Assemblies

Application: Coaxial cable support

Size: Versions for coaxial cable and elliptical waveguide cable

Design: Multi-run cushion hanger

Feature: Handles coaxial or waveguide

Material: EPDM rubber or natural rubber

Includes: Cushion, hose clamp, and clamp head, kit of 10

Order Separately: 3/8" or 10 mm mounting hardware kits



Cable Entry

| Name | Matching cable | Item No. | Specification |
|---------------------------|---------------------------|---------------|---------------|
| Cushion Hanger Assemblies | 1/2" super flexible cable | CES-CHA-12S-1 | 1/2"S x 1 |
| | | CES-CHA-12S-2 | 1/2"S x 2 |
| | | CES-CHA-12S-3 | 1/2"S x 3 |
| | | CES-CHA-12S-4 | 1/2"S x 4 |
| | | CES-CHA-12S-5 | 1/2"S x 5 |
| | | CES-CHA-12S-6 | 1/2"S x 6 |
| | | CES-CHA-12S-7 | 1/2"S x 7 |
| | | CES-CHA-12S-8 | 1/2"S x 8 |
| | | CES-CHA-12S-9 | 1/2"S x 9 |
| | 1/2" cable | CES-CHA-12-2 | 1/2" x 1 |
| | | CES-CHA-12-2 | 1/2" x 2 |
| | | CES-CHA-12-3 | 1/2" x 3 |
| | | CES-CHA-12-4 | 1/2" x 4 |
| | | CES-CHA-12-5 | 1/2" x 5 |
| | | CES-CHA-12-6 | 1/2" x 6 |
| | | CES-CHA-12-7 | 1/2" x 7 |
| | | CES-CHA-12-8 | 1/2" x 8 |
| | 7/8" cable | CES-CHA-78-1 | 7/8" x 1 |
| | | CES-CHA-78-2 | 7/8" x 2 |
| | | CES-CHA-78-3 | 7/8" x 3 |
| | | CES-CHA-78-4 | 7/8" x 4 |
| | 1-1/4" cable | CES-CHA-114-1 | 1-1/4" x 1 |
| | 1-5/8" cable | CES-CHA-158-1 | 1-5/8" x 1 |
| | 2-1/4" cable | CES-CHA-214-1 | 2-1/4" x 1 |

Cable Entry

Cable Entry Panel ---Nut Type

Aluminum feed-thru entry panels enable multiple coax runs to enter buildings and shelters. These panels support the coax at the entry point and prevent moisture from entering the building. Each panel features 78mm openings to accept boot assemblies. Boot assembly kit are offered with a broad selection of hole patterns and plate sizes to match your exact application. These entries can be used in both interior and exterior wall.



| Part No. | Description | Part No. | Description |
|---------------|----------------------------|---------------|-----------------------------|
| CES-CEP-NT-11 | Entry Panel, 1 Port, 1 x 1 | CES-CEP-NT-24 | Entry Panel, 8 Port, 2 x 4 |
| CES-CEP-NT-12 | Entry Panel, 2 Port, 1 x 2 | CES-CEP-NT-25 | Entry Panel, 10 Port, 2 x 5 |
| CES-CEP-NT-13 | Entry Panel, 3 Port, 1 x 3 | CES-CEP-NT-26 | Entry Panel, 12 Port, 2 x 6 |
| CES-CEP-NT-14 | Entry Panel, 4 Port, 1 x 4 | CES-CEP-NT-33 | Entry Panel, 9 Port, 3 x 3 |
| CES-CEP-NT-22 | Entry Panel, 4 Port, 2 x 2 | CES-CEP-NT-34 | Entry Panel, 12 Port, 3 x 4 |
| CES-CEP-NT-23 | Entry Panel, 6 Port, 2 x 3 | CES-CEP-NT-36 | Entry Panel, 18 Port, 3 x 6 |
| CES-CEP-NT-7 | Entry Panel, 7 Port, | CES-CEP-NT-44 | Entry Panel, 16 Port, 4 x 4 |

Cable Entry Boot Assembly Kit--- Nut Type

Each Assembly cable entry boot include:

1. A selectable cushion boot. (EPDM Rubber or natural rubber)
2. A metal plate. (Galvanized steel)

The boot is made of EPDM rubber or natural rubber. The material is unaffected by ozone, sunlight, aging, or temperature extremes. It is to be installed to the entry panel, and allow the various coaxial cable go into the shelter through them. One piece design for easy installation and superior water sealing properties.



Introduction:

| | |
|--------------|-------------------------------|
| Application: | Entry port solutions |
| Size: | Versions for coaxial cable |
| Design: | Fit for nut type panels |
| Feature: | Dependable seal |
| Mounts to: | Nut type panels |
| Material: | EPDM rubber, Galvanized steel |
| Includes: | Cushion boot and metal plate |

Cable Entry

| Name | Matching cable | Item No. | Specification |
|------------------------------|---------------------------|--------------|---------------|
| Selectable Boot Assembly Kit | 1/2" super flexible cable | BAK-NT-12S-1 | 1/2"S x 1 |
| | | BAK-NT-12S-2 | 1/2"S x 2 |
| | | BAK-NT-12S-3 | 1/2"S x 3 |
| | | BAK-NT-12S-4 | 1/2"S x 4 |
| | | BAK-NT-12S-5 | 1/2"S x 5 |
| | | BAK-NT-12S-6 | 1/2"S x 6 |
| | | BAK-NT-12S-7 | 1/2"S x 7 |
| | | BAK-NT-12S-8 | 1/2"S x 8 |
| | 1/2" cable | BAK-NT-12-1 | 1/2" x 1 |
| | | BAK-NT-12-2 | 1/2" x 2 |
| | | BAK-NT-12-3 | 1/2" x 3 |
| | | BAK-NT-12-4 | 1/2" x 4 |
| | | BAK-NT-12-5 | 1/2" x 5 |
| | | BAK-NT-12-6 | 1/2" x 6 |
| | | BAK-NT-12-7 | 1/2" x 7 |
| | 7/8" cable | BAK-NT-78-1 | 7/8" x 1 |
| | | BAK-NT-78-2 | 7/8" x 2 |
| | | BAK-NT-78-3 | 7/8" x 3 |
| | 1-1/4" cable | BAK-NT-114-1 | 1-1/4" x 1 |
| | 1-5/8" cable | BAK-NT-158-1 | 1-5/8" x 1 |
| | 2-1/4" cable | BAK-NT-214-1 | 2-1/4" x 1 |

Passive Component

 Dummy Load

 Attenuator

 Power Splitter

 Hybrid Coupler

 Directional Coupler

 Combiner

 Duplexer



Passive Component

Dummy Load / Terminations

Description:

Dummy load is a means of termination microwave transmission line without much reflection. It is performed by microwave power absorption. Dummy load is used to provide launch for the signal from the end of the cable. Our coaxial dummy loads frequency are up to 3GHz(0-3000MHz) /6GHz /18GHz. The power capacity can be up to 300W. The convection-cooled Dry fixed Dummy loads (Terminations) are offered with impedance values of 50 Ohm. The max VSWR for our typical RF terminators is 1.2:1, 1.15:1 or 1.1:1 is also available.



1w-5w Low Power Dummy Load / Terminations

| Part No. | Frequency | Connector Type | Power | Picture |
|-----------------|-----------|----------------|-------|---|
| PC-DL-3-5-DM | 3GHz | DIN male | 5W |  |
| PC-DL-3-5-NM | 3GHz | N male | 5W |  |
| PC-DL-3-5-NF | 3GHz | N female | 5W |  |
| PC-DL-18-2-SMAM | 18GHz | SMA male | 2W |  |
| PC-DL-18-5-SMAM | 18GHz | SMA male | 5W |  |

* Note: Other Designs are Available on Request

Passive Component

10w-60w Medium Power Dummy Load / Terminations

| Part No. | Frequency | Connector Type | Power | Picture |
|---------------|-----------|----------------|-------|---|
| PC-DL-3-50-DM | 3GHz | DIN male | 50W |  |
| PC-DL-3-50-NM | 3GHz | N male | 50W |  |
| PC-DL-3-50-NF | 3GHz | N female | 50W |  |
| PC-DL-3-60-DM | 3GHz | DIN male | 60W |  |
| PC-DL-3-10-NM | 3GHz | N male | 10W |  |
| PC-DL-3-10-DM | 3GHz | DIN male | 10W |  |

* Note: Other Designs are Available on Request

Passive Component

75w-300w High Power Dummy Load / Terminations

| Part No. | Frequence | Connector Type | Power | Picture |
|------------------|-----------|----------------|-------|---|
| PC-DL-3-100-DM | 3GHz | DIN male | 100W |  |
| PC-DL-3-100-DF | 3GHz | DIN female | 100W |  |
| PC-DL-3-100-NM | 3GHz | N male | 100W |  |
| PC-DL-8-100-NM | 8GHz | N male | 100W |  |
| PC-DL-3-250-NF | 3GHz | N female | 250W |  |
| PC-DL-3-300-SMAM | 3GHz | SMA male | 300W |  |

* Note: Other Designs are Available on Request.

Passive Component

Coaxial Attenuator

RF attenuators, 50ohm attenuator are RF site Passive components widely used as In-Building Solutions components. Our RF coax attenuator is manufactured to precise RF / microwave industry specifications.

Fixed RF attenuators are rated to 1W, 2W, 5W, 10W, 15W, 20W, 25W, 30W, 50W, 100W, 200W/Watts at the stated attenuation value of (3-60dB) 3 dB, 5dB, 6dB, 10dB, 15dB, 20dB, 25dB, 30dB...60dB.

Typical Frequency of this coax attenuator can be 0-3000MHz/3GHz, 6GHz, 18GHz. Typical max VSWR is under 1.2:1, can be 1.15:1 even be 1.1:1.

Variable Attenuators include Rotary Attenuators and Step Attenuators.

When to purchase attenuators, it is important to consider primary parameters below:

1. RF attenuator Attenuation: it depends on the ratio between the output and the input signal levels for the RF attenuators are used, for example: a 3dB attenuators can reduce the signal power to 1/2; a 6dB attenuators 1/4; 10db attenuators can reduce to 1/10; 20dB attenuators to 1/100...
2. RF Fixed attenuator Power: RF attenuators include 1W, 2W, 5W, 10W, 15W, 20W, 25W, 30W, 50W, 100W, 200W
3. RF Coaxial attenuator Frequency Range: The level of attenuation of a fixed attenuator varies with frequency, which may be caused by the frequency dependence on the resistors or other components used in the attenuator. The frequency range (or frequency bandwidth) that RF fixed coax attenuator covers: 3GHz, 4GHz, 6GHz, 8GHz, 18GHz
4. RF attenuator Accuracy: when the equipment is under the test, there will be a tolerance on the nominal level of attenuation.



Passive Component

Fixed Coaxial Attenuator

| Part No. | Frequence | Attenuation | Connector Type | Power | Picture |
|--------------------|-----------|-------------|------------------------|-------|---|
| PC-RFCA-3-100W-N | 3GHz | 0-60dB | N male to N female | 100W |  |
| PC-RFCA-3-10W-N | 3GHz | 0-60dB | N male to N female | 10W |  |
| PC-RFCA-3-2W-N | 3GHz | 0-60dB | N male to N female | 2W |  |
| PC-RFCA-3-100W-DIN | 3GHz | 0-60dB | DIN male to DIN female | 100W |  |
| PC-RFCA-18-2W-SMA | 18GHz | 0-12dB | SMA male to SMA female | 2W |  |
| PC-RFCA-3-2W-SMA | 3GHz | 0-30dB | SMA male to SMA female | 2W |  |
| PC-RFCA-3-5W-SMA | 3GHz | 0-40dB | SMA male to SMA female | 5W |  |
| PC-RFCA-3-5W-SMA | 3GHz | 0-30dB | SMA male to SMA female | 5W |  |

* Note: Other Designs are Available on Request.

Passive Component

Variable Coaxial Attenuators

| Part No. | Freq. | Attenuation | Type | Connector | Power | Picture |
|-------------------------------|--------|------------------------|-----------------------------------|-----------|-------|---|
| PC-RFCA-RK-6G-90/10-2W-SMA | 6GHz | 0-90dB / 10dB step | rotary knob | SMA | 2W |  |
| PC-RFCA-RK-6G-10/1-2W-SMA | 6GHz | 0-10dB / 1dB step | rotary knob | SMA | 2W |  |
| PC-RFCA-RK-2.5G-11/0.1-2W-SMA | 2.5GHz | 0-11dB / 0.1dB step | rotary knob / series connection | SMA | 2W |  |
| PC-RFCA-RK-3G-11/0.1-2W-SMA | 3GHz | | rotary knob / series connection | SMA | 2W | |
| PC-RFCA-RK-4.3G-11/0.1-2W-SMA | 4.3GHz | | rotary knob / series connection | SMA | 2W | |
| PC-RFCA-RK-6G-11/0.1-2W-SMA | 6GHz | | rotary knob / series connection | SMA | 2W | |
| PC-RFCA-RK-2.5G-50/1-2W-SMA | 2.5GHz | 0-50dB / 1dB step | rotary knob / series connection | SMA | 2W |  |
| PC-RFCA-RK-2.5G-70/1-2W-SMA | 2.5GHz | 0-70dB / 1dB step | rotary knob / series connection | SMA | 2W | |
| PC-RFCA-RK-3G-70/1-2W-SMA | 3GHz | | rotary knob / series connection | SMA | 2W | |
| PC-RFCA-RK-4.3G-70/1-2W-SMA | 4.3GHz | | rotary knob / series connection | SMA | 2W | |
| PC-RFCA-RK-6G-70/1-2W-SMA | 6GHz | | rotary knob / series connection | SMA | 2W | |
| PC-RFCA-RK-2.5G-100/1-2W-SMA | 2.5GHz | 0-100dB / 1dB step | rotary knob / series connection | SMA | 2W |  |
| PC-RFCA-RK-3G-100/1-2W-SMA | 3GHz | | rotary knob / series connection | SMA | 2W | |
| PC-RFCA-RKPC-6G-70/1-2W-SMA | 6GHz | 0-70dB | rotary knob / parallel connection | SMA | 2W |  |
| PC-RFCA-PB-2.5G-90/1-10W-N | 2.5GHz | 0-90dB / 1dB step | push button | N | 10W |  |
| PC-RFCA-PB-2.5G-60/1-10W-N | 2.5GHz | 0-60dB / 1dB step | push button | N | 10W | |
| PC-RFCA-PB-2.5G-30/1-10W-N | 2.5GHz | 0-30dB / 1dB step | push button | N | 10W | |
| PC-RFCA-PB-2.5G-90/1-2W-SMA | 2.5GHz | 0-90dB / 1dB step | push button | SMA | 2W |  |
| PC-RFCA-PB-2.5G-60/1-2W-SMA | 2.5GHz | 0-60dB / 1dB step | push button | SMA | 2W | |
| PC-RFCA-PB-2.5G-30/1-2W-SMA | 2.5GHz | 0-30dB / 1dB step | push button | SMA | 2W | |

Passive Component

RF power splitter/dividers

RF power splitter/dividers (also known as RF power tappers or coaxial splitters) are RF site components/passive devices that couple a defined amount of power in a transmission line to a port, the signal allowed to be used in another circuit. 50 Ohm power dividers have many RF applications including providing a signal for test and measurement, combining feeds to and from an antenna, splitting transmitted and received signals on phone lines and many others.



power splitter/divider include two series:

1. High power splitter/divider Series, also named: Cavity type power dividers; reactive dividers; Air-line dielectric type power dividers.
2. Low power splitters/dividers Series, also named Micro-strip type resistive divider, Wilkinson Splitters


RF power dividers can be ordered with N, DIN, SMA gender connector types. 50 Ohm power dividers / coaxial splitters can be purchased in 2 Way, 3 Way, 4 Way, 6 Way, 8 Way or 12 Way port designs, frequency range is up to 350-2700MHz, 800-2500MHz, 698-2700MHz, 694-3800MHz, 800-3500MHz, 4000-8000MHz...

Key Features of Coax splitter components:

- Low PIM (< -153dBc; @ 2x +43dBm)
- Broad Frequency Range 350-430MHz, 698-2700 MHz, 694-3800MHz....
- Low Insertion Loss
- Any RF connector combination (BNC, SMA, N, TNC, 7/16DIN, F, reverse polarity and more)
- High Isolation
- Low VSWR
- Operating Temperature: -20 ~ +70 C


Passive Component

Cavity type power dividers---Round Type 800-2500MHz

| Part No. | Frequence | Way | Connector | PIM | Application | Picture |
|------------------------|-------------|----------|-----------|------|-----------------------|--|
| PC-CPS-R-0825-120-DF-2 | 800-2500MHz | 2 way | DIN | -120 | In door or outdoor |  |
| PC-CPS-R-0825-153-DF-2 | | | Female | -153 | | |
| PC-CPS-R-0825-120-NF-2 | | | N Female | -120 | | |
| PC-CPS-R-0825-153-NF-2 | | | -153 | | | |
| PC-CPS-R-0825-120-DF-3 | | 3 way | DIN | -120 | | |
| PC-CPS-R-0825-153-DF-3 | | | Female | -153 | | |
| PC-CPS-R-0825-120-NF-3 | | | N Female | -120 | | |
| PC-CPS-R-0825-153-NF-3 | | | -153 | | | |
| PC-CPS-R-0825-120-DF-4 | | 4 way | DIN | -120 | | |
| PC-CPS-R-0825-153-DF-4 | | | Female | -153 | | |
| PC-CPS-R-0825-120-NF-4 | | | N Female | -120 | | |
| PC-CPS-R-0825-153-NF-4 | | | -153 | | | |
| PC-CPS-R-0825-120-DF-6 | | 6 way | DIN | -120 | | |
| PC-CPS-R-0825-153-DF-6 | | | Female | -153 | | |
| PC-CPS-R-0825-120-NF-6 | | | N Female | -120 | | |
| PC-CPS-R-0825-153-NF-6 | | | | -153 | | |


* Note: Other Designs are Available on Request.

Cavity type power dividers---Round Type 698-2700MHz

| Part No. | Frequence | Way | Connector | PIM | Application | Picture |
|------------------------|-------------|----------|-----------|------|----------------------|---|
| PC-CPS-R-0727-120-DF-2 | 698-2700MHz | 2 way | DIN | -120 | indoor or outdoor |  |
| PC-CPS-R-0727-153-DF-2 | | | Female | -153 | | |
| PC-CPS-R-0727-120-NF-2 | | | N Female | -120 | | |
| PC-CPS-R-0727-153-NF-2 | | | -153 | | | |
| PC-CPS-R-0727-120-DF-3 | | 3 way | DIN | -120 | | |
| PC-CPS-R-0727-153-DF-3 | | | Female | -153 | | |
| PC-CPS-R-0727-120-NF-3 | | | N Female | -120 | | |
| PC-CPS-R-0727-153-NF-3 | | | -153 | | | |
| PC-CPS-R-0727-120-DF-4 | | 4 way | DIN | -120 | | |
| PC-CPS-R-0727-153-DF-4 | | | Female | -153 | | |
| PC-CPS-R-0727-120-NF-4 | | | N Female | -120 | | |
| PC-CPS-R-0727-153-NF-4 | | | -153 | | | |
| PC-CPS-R-0727-120-DF-6 | | 6 way | DIN | -120 | | |
| PC-CPS-R-0727-153-DF-6 | | | Female | -153 | | |
| PC-CPS-R-0727-120-NF-6 | | | N Female | -120 | | |
| PC-CPS-R-0727-153-NF-6 | | | | -153 | | |


Passive Component

Cavity type power dividers---Round Type 350-2700MHz

| Part No. | Frequence | Way | Connector | PIM | Application | Picture |
|-------------------------|-------------|----------|-----------|------|----------------------|---|
| PC-CPS-R-03527-120-DF-2 | 350-2700MHz | 2 way | DIN | -120 | indoor or outdoor |  |
| PC-CPS-R-03527-153-DF-2 | | | Female | -153 | | |
| PC-CPS-R-03527-120-NF-2 | | | N Female | -120 | | |
| PC-CPS-R-03527-153-NF-2 | | | N Female | -153 | | |
| PC-CPS-R-03527-120-DF-3 | | 3 way | DIN | -120 | | |
| PC-CPS-R-03527-153-DF-3 | | | Female | -153 | | |
| PC-CPS-R-03527-120-NF-3 | | | N Female | -120 | | |
| PC-CPS-R-03527-153-NF-3 | | | N Female | -153 | | |
| PC-CPS-R-03527-120-DF-4 | | 4 way | DIN | -120 | | |
| PC-CPS-R-03527-153-DF-4 | | | Female | -153 | | |
| PC-CPS-R-03527-120-NF-4 | | | N Female | -120 | | |
| PC-CPS-R-03527-153-NF-4 | | | N Female | -153 | | |
| PC-CPS-R-03527-120-DF-6 | | 6 way | DIN | -120 | | |
| PC-CPS-R-03527-153-DF-6 | | | Female | -153 | | |
| PC-CPS-R-03527-120-NF-6 | | | N Female | -120 | | |
| PC-CPS-R-03527-153-NF-6 | | | N Female | -153 | | |


* Note: Other Designs are Available on Request.

Cavity type power dividers---Round Type 1700-2500MHz

| Part No. | Frequence | Way | Connector | PIM | Application | Picture |
|------------------------|--------------|----------|-----------|------|----------------------|---|
| PC-CPS-R-1725-120-DF-2 | 1700-2500MHz | 2 way | DIN | -120 | indoor or outdoor |  |
| PC-CPS-R-1725-153-DF-2 | | | Female | -153 | | |
| PC-CPS-R-1725-120-NF-2 | | | N Female | -120 | | |
| PC-CPS-R-1725-153-NF-2 | | | N Female | -153 | | |
| PC-CPS-R-1725-120-DF-3 | | 3 way | DIN | -120 | | |
| PC-CPS-R-1725-153-DF-3 | | | Female | -153 | | |
| PC-CPS-R-1725-120-NF-3 | | | N Female | -120 | | |
| PC-CPS-R-1725-153-NF-3 | | | N Female | -153 | | |
| PC-CPS-R-1725-120-DF-4 | | 4 way | DIN | -120 | | |
| PC-CPS-R-1725-153-DF-4 | | | Female | -153 | | |
| PC-CPS-R-1725-120-NF-4 | | | N Female | -120 | | |
| PC-CPS-R-1725-153-NF-4 | | | N Female | -153 | | |
| PC-CPS-R-1725-120-DF-6 | | 6 way | DIN | -120 | | |
| PC-CPS-R-1725-153-DF-6 | | | Female | -153 | | |
| PC-CPS-R-1725-120-NF-6 | | | N Female | -120 | | |
| PC-CPS-R-1725-153-NF-6 | | | N Female | -153 | | |


Passive Component

Cavity type power dividers---Round Type 4G-8GMHz

| Part No. | Frequence | Way | Connector | PIM | Application | Picture |
|------------------------|-----------|-------|------------|------|--------------------|---|
| PC-CPS-R-4080-120-DF-2 | 4G-8GHz | 2 way | DIN Female | -120 | In door or outdoor |  |
| PC-CPS-R-4080-153-DF-2 | | | | -153 | | |
| PC-CPS-R-4080-120-NF-2 | | | N Female | -120 | | |
| PC-CPS-R-4080-153-NF-2 | | | | -153 | | |
| PC-CPS-R-4080-120-DF-3 | | 3 way | DIN Female | -120 | | |
| PC-CPS-R-4080-153-DF-3 | | | | -153 | | |
| PC-CPS-R-4080-120-NF-3 | | | N Female | -120 | | |
| PC-CPS-R-4080-153-NF-3 | | | | -153 | | |
| PC-CPS-R-4080-120-DF-4 | | 4 way | DIN Female | -120 | | |
| PC-CPS-R-4080-153-DF-4 | | | | -153 | | |
| PC-CPS-R-4080-120-NF-4 | | | N Female | -120 | | |
| PC-CPS-R-4080-153-NF-4 | | | | -153 | | |
| PC-CPS-R-4080-120-DF-6 | | 6 way | DIN Female | -120 | | |
| PC-CPS-R-4080-153-DF-6 | | | | -153 | | |
| PC-CPS-R-4080-120-NF-6 | | | N Female | -120 | | |
| PC-CPS-R-4080-153-NF-6 | | | | -153 | | |


* Note: Other Designs are Available on Request.

Cavity type power dividers---Square Type 800-2500MHz

| Part No. | Frequence | Way | Connector | PIM | Application | Picture |
|------------------------|-------------|-------|------------|------|--------------------|---|
| PC-CPS-S-0825-120-DF-2 | 800-2500MHz | 2 way | DIN Female | -120 | In door or outdoor |  |
| PC-CPS-S-0825-153-DF-2 | | | | -153 | | |
| PC-CPS-S-0825-120-NF-2 | | | N Female | -120 | | |
| PC-CPS-S-0825-153-NF-2 | | | | -153 | | |
| PC-CPS-S-0825-120-DF-3 | | 3 way | DIN Female | -120 | | |
| PC-CPS-S-0825-153-DF-3 | | | | -153 | | |
| PC-CPS-S-0825-120-NF-3 | | | N Female | -120 | | |
| PC-CPS-S-0825-153-NF-3 | | | | -153 | | |
| PC-CPS-S-0825-120-DF-4 | | 4 way | DIN Female | -120 | | |
| PC-CPS-S-0825-153-DF-4 | | | | -153 | | |
| PC-CPS-S-0825-120-NF-4 | | | N Female | -120 | | |
| PC-CPS-S-0825-153-NF-4 | | | | -153 | | |
| PC-CPS-S-0825-120-DF-6 | | 6 way | DIN Female | -120 | | |
| PC-CPS-S-0825-153-DF-6 | | | | -153 | | |
| PC-CPS-S-0825-120-NF-6 | | | N Female | -120 | | |
| PC-CPS-S-0825-153-NF-6 | | | | -153 | | |


Passive Component

Cavity type power dividers---Square Type 698-2700MHz

| Part No. | Frequence | Way | Connector | PIM | Application | Picture |
|------------------------|-------------|----------|-----------|------|----------------------|---|
| PC-CPS-S-0727-120-DF-2 | 698-2700MHz | 2 way | DIN | -120 | indoor or outdoor |  |
| PC-CPS-S-0727-153-DF-2 | | | Female | -153 | | |
| PC-CPS-S-0727-120-NF-2 | | | N Female | -120 | | |
| PC-CPS-S-0727-153-NF-2 | | | N Female | -153 | | |
| PC-CPS-S-0727-120-DF-3 | | 3 way | DIN | -120 | | |
| PC-CPS-S-0727-153-DF-3 | | | Female | -153 | | |
| PC-CPS-S-0727-120-NF-3 | | | N Female | -120 | | |
| PC-CPS-S-0727-153-NF-3 | | | N Female | -153 | | |
| PC-CPS-S-0727-120-DF-4 | | 4 way | DIN | -120 | | |
| PC-CPS-S-0727-153-DF-4 | | | Female | -153 | | |
| PC-CPS-S-0727-120-NF-4 | | | N Female | -120 | | |
| PC-CPS-S-0727-153-NF-4 | | | N Female | -153 | | |
| PC-CPS-S-0727-120-DF-6 | | 6 way | DIN | -120 | | |
| PC-CPS-S-0727-153-DF-6 | | | Female | -153 | | |
| PC-CPS-S-0727-120-NF-6 | | | N Female | -120 | | |
| PC-CPS-S-0727-153-NF-6 | | | N Female | -153 | | |


* Note: Other Designs are Available on Request.

Cavity type power dividers---Square Type 350-2700MHz

| Part No. | Frequence | Way | Connector | PIM | Application | Picture |
|-------------------------|-------------|----------|-----------|------|----------------------|---|
| PC-CPS-S-03527-120-DF-2 | 350-2700MHz | 2 way | DIN | -120 | indoor or outdoor |  |
| PC-CPS-S-03527-153-DF-2 | | | Female | -153 | | |
| PC-CPS-S-03527-120-NF-2 | | | N Female | -120 | | |
| PC-CPS-S-03527-153-NF-2 | | | N Female | -153 | | |
| PC-CPS-S-03527-120-DF-3 | | 3 way | DIN | -120 | | |
| PC-CPS-S-03527-153-DF-3 | | | Female | -153 | | |
| PC-CPS-S-03527-120-NF-3 | | | N Female | -120 | | |
| PC-CPS-S-03527-153-NF-3 | | | N Female | -153 | | |
| PC-CP-S-03527-120-DF-4 | | 4 way | DIN | -120 | | |
| PC-CPS-S-03527-153-DF-4 | | | Female | -153 | | |
| PC-CPS-S-03527-120-NF-4 | | | N Female | -120 | | |
| PC-CPS-S-03527-153-NF-4 | | | N Female | -153 | | |
| PC-CPS-S-03527-120-DF-6 | | 6 way | DIN | -120 | | |
| PC-CPS-S-03527-153-DF-6 | | | Female | -153 | | |
| PC-CPS-S-03527-120-NF-6 | | | N Female | -120 | | |
| PC-CPS-S-03527-153-NF-6 | | | N Female | -153 | | |


Passive Component

Cavity type power dividers---Square Type 1700-2500MHz

| Part No. | Frequence | Way | Connector | PIM | Application | Picture |
|------------------------|--------------|-------|-----------|------|-------------------|---|
| PC-CPS-S-1725-120-DF-2 | 1700-2500MHz | 2 way | DIN | -120 | indoor or outdoor |  |
| PC-CPS-S-1725-153-DF-2 | | | Female | -153 | | |
| PC-CPS-S-1725-120-NF-2 | | | N Female | -120 | | |
| PC-CPS-R-1725-153-NF-2 | | | N Female | -153 | | |
| PC-CPS-S-1725-120-DF-3 | | 3 way | DIN | -120 | | |
| PC-CPS-S-1725-153-DF-3 | | | Female | -153 | | |
| PC-CPS-S-1725-120-NF-3 | | | N Female | -120 | | |
| PC-CPS-S-1725-153-NF-3 | | | N Female | -153 | | |
| PC-CPS-S-1725-120-DF-4 | | 4 way | DIN | -120 | | |
| PC-CPS-S-1725-153-DF-4 | | | Female | -153 | | |
| PC-CPS-S-1725-120-NF-4 | | | N Female | -120 | | |
| PC-CPS-S-1725-153-NF-4 | | | N Female | -153 | | |
| PC-CPS-S-1725-120-DF-6 | | 6 way | DIN | -120 | | |
| PC-CPS-S-1725-153-DF-6 | | | Female | -153 | | |
| PC-CPS-S-1725-120-NF-6 | | | N Female | -120 | | |
| PC-CPS-S-1725-153-NF-6 | | | N Female | -153 | | |

* Note: Other Designs are Available on Request.

Cavity type power dividers---Square Type 4G-8GMHz

| Part No. | Frequence | Way | Connector | PIM | Application | Picture |
|------------------------|-----------|-------|------------|------|--------------------|---|
| PC-CPS-S-4080-120-DF-2 | 4G-8GHz | 2 way | DIN Female | -120 | In door or outdoor |  |
| PC-CPS-S-4080-153-DF-2 | | | Female | -153 | | |
| PC-CPS-S-4080-120-NF-2 | | | N Female | -120 | | |
| PC-CPS-S-4080-153-NF-2 | | | N Female | -153 | | |
| PC-CPS-S-4080-120-DF-3 | | 3 way | DIN Female | -120 | | |
| PC-CPS-S-4080-153-DF-3 | | | Female | -153 | | |
| PC-CPS-S-4080-120-NF-3 | | | N Female | -120 | | |
| PC-CPS-S-4080-153-NF-3 | | | N Female | -153 | | |
| PC-CPS-S-4080-120-DF-4 | | 4 way | DIN Female | -120 | | |
| PC-CPS-S-4080-153-DF-4 | | | Female | -153 | | |
| PC-CPS-S-4080-120-NF-4 | | | N Female | -120 | | |
| PC-CPS-S-4080-153-NF-4 | | | N Female | -153 | | |
| PC-CPS-S-4080-120-DF-6 | | 6 way | DIN Female | -120 | | |
| PC-CPS-S-4080-153-DF-6 | | | Female | -153 | | |
| PC-CPS-S-4080-120-NF-6 | | | N Female | -120 | | |
| PC-CPS-S-4080-153-NF-6 | | | N Female | -153 | | |

Passive Component

Micro-Strip Power Splitter (Low Power Divider/ splitter)

Micro-strip power splitter also named resistive power Divider/splitter, Micro-Strip splitter, Wilkinson Divider.

Resistive Power dividers can be used to split a single signal. Due to a resistive 50 ohm Power divider/splitter has identical insertion loss from any port to any other port, it acts much like a node in a mesh network. Because of their symmetric design, the isolation of a resistive divider/ splitter is equal to its insertion loss. Example: A 2-way resistive power divider/ splitter has 6dB of insertion from any port to any other port. All paths have 6dB of insertion loss. A RF resistive power divider/combiner has much higher insertion loss than reactive power divider/combiner. Example: 2-way resistive = 6dB, 2-way reactive = 3dB. Some configurations such as 2 way, 3 way, 4 way, 6 way, 8 way are available as resistive power dividers than as reactive power dividers.



Micro-Strip Power Splitter 800-2500MHz

| Part No. | Frequency | Way | Connector | Power | Application |
|-------------------|-------------|-------|-----------|-------|--------------------|
| PC-MSPS-0825-NF-2 | 800-2500MHz | 2 way | N Female | 50W | In door or outdoor |
| PC-MSPS-0825-NF-3 | | 3 way | N Female | 50W | |
| PC-MSPS-0825-NF-4 | | 4 way | N Female | 50W | |
| PC-MSPS-0825-NF-6 | | 6 way | N Female | 50W | |

* Note: Other Designs are Available on Request.

Micro-Strip Power Splitter 700-2700MHz

| Part No. | Frequency | Way | Connector | Power | Application |
|-------------------|-------------|-------|-----------|-------|--------------------|
| PC-MSPS-0727-NF-2 | 700-2700MHz | 2 way | N Female | 50W | In door or outdoor |
| PC-MSPS-0727-NF-3 | | 3 way | N Female | 50W | |
| PC-MSPS-0727-NF-4 | | 4 way | N Female | 50W | |
| PC-MSPS-0727-NF-6 | | 6 way | N Female | 50W | |

* Note: Other Designs are Available on Request.

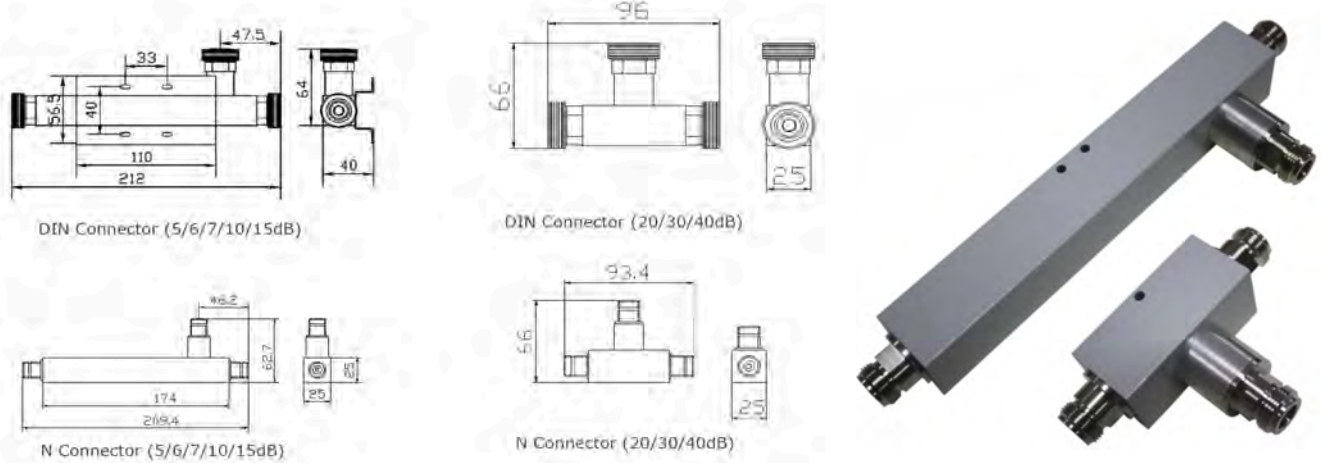
Micro-Strip Power Splitter 400-430MHz

| Part No. | Frequency | Way | Connector | Power | Application |
|--------------------|------------|-------|-----------|-------|--------------------|
| PC-MSPS-04043-NF-2 | 400-430MHz | 2 way | N Female | 50W | In door or outdoor |
| PC-MSPS-04043-NF-3 | | 3 way | N Female | 50W | |
| PC-MSPS-04043-NF-4 | | 4 way | N Female | 50W | |
| PC-MSPS-04043-NF-6 | | 6 way | N Female | 50W | |

* Note: Other Designs are Available on Request.

Passive Component

RF Power Tapper 694-2700MHz



| | | | | | | | | |
|---------------------|--------------------------------------|----------------|----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Part No. | PC-PT-0727-5-N | PC-PT-0727-6-N | PC-PT-0727-7-N | PC-PT-0727-10-N | PC-PT-0727-15-N | PC-PT-0727-20-N | PC-PT-0727-30-N | PC-PT-0727-40-N |
| | PC-PT-0727-5-D | PC-PT-0727-6-D | PC-PT-0727-7-D | PC-PT-0727-10-D | PC-PT-0727-15-D | PC-PT-0727-20-D | PC-PT-0727-30-D | PC-PT-0727-40-D |
| Coupling (dB) | 5±1dB | 6±1dB | 7±1dB | 10±1.2dB | 15±1.3dB | 20±1.3dB | 30±1.5dB | 40±2dB |
| Insertion Loss (dB) | 1.85dB | 1.55dB | 1.3dB | 0.7dB | 0.4dB | 0.3dB | 0.3dB | 0.2dB |
| VSWR | ≤1.35:1 | | | | | | | |
| Frequency (MHz) | 694-2700 | | | | | | | |
| Return Loss(dB) | ≤-16dB | | | | | | | |
| Power (W) | 200W max | | | | | | | |
| Impedance(ohm) | 50 | | | | | | | |
| Connector | N female or DIN female | | | | | | | |
| Temperature | -40°C~+80°C | | | | | | | |
| Relative humidity | 0-95% | | | | | | | |
| Color | Black-plated or Silvery-White Plated | | | | | | | |

Passive Component

RF Hybrid Coupler/ RF Hybrid Combiner

An RF Hybrid Coupler (also named Hybrid Combiner) is a special configuration of a more generalized “RF Directional Coupler.” The characteristic of the hybrid coupler is to divide the input power equally amongst the two output ports (assuming they are terminated properly).

Application: RF Hybrid Couplers are used in many circuit and system applications, such as Test & Measurement, RF amplifiers, transmitters and receivers.

The typical hybrid coupler is 3dB Hybrid Coupler, also known as 90 degree hybrid coupler also called Quadrature Hybrid Couplers. This requires the termination of one output port in 50 ohms, and results in a 3dB loss in each signal. In situations where two similar feeds are required—for example in-building applications—both outputs may be used, eliminating the need for a termination and the 3 dB loss. Coupled ports are 90° out of phase and the isolated port helps protect against mismatched loads on the coupled ports. They are connectorized units. RF hybrid couplers offer low insertion loss, low VSWR and high power capability in a small package which are often required. These products are available in narrow and broadband bandwidths making them ideal for applications including, power amplifier, mixers, power dividers / combiners, modulators, antenna feeds, attenuators, switches and phase shifters. Performance grades range from low-cost commercial to rugged military. Those Hybrid combiner can be customized and meet or exceed critical performance and/or packaging specifications



Important Specific parameters when selecting the right RF Hybrid Coupler for your application include:

- Connector Type, N-Jack(F) or 7/16 DIN-Jack(F), or other customized type
- Power (W), maximum input level;
- Frequency Range (GHz) of Operation; Typical frequency band of hybrid coupler is 698-2700 MHz, 800-2500 MHz, 350-520MHz or customized...
- Isolation (dB);
- Insertion Loss (dB);
- VSWR (max ratio);
- Customized and OEM is available.


Hybrid Coupler Series:

1. 3dB hybrid coupler, also known as 90 degree hybrid coupler, or 3dB hybrid combiners
2. 4x4 Port Hybrid Matrices (4 in, 4 out), which is used in RPT(Repeater) application, and IBS(In-Building Solutions) application.





Passive Component




3dB Hybrid Coupler---800-2500MHz

| Part No. | Frequence | PIM3 | Connector | Power | Application | Picture |
|--------------------|-------------|------|-----------------|-------|-----------------------|---|
| PC-HC-3dB-0825-3DF | 800-2500MHz | -140 | 3 DIN Female | 500W | In door or outdoor |  |

3dB Hybrid Coupler---700-2700MHz


| Part No. | Frequence | PIM3 | Connector | Power | Application | Picture |
|----------------------|-------------|------|-----------------|-------|-----------------------|---|
| PC-HC-3dB-0727-4DF | 700-2700MHz | -140 | 4 DIN Female | 500W | In door or outdoor |  |
| PC-HCHS-3dB-0727-3NF | 700-2700MHz | -140 | 3 N Female | 200W | In door or outdoor |  |

3dB Hybrid Coupler---800-2700MHz

| Part No. | Frequence | PIM3 | Connector | Power | Application | Picture |
|----------------------|-------------|------|-----------------|-------|-----------------------|---|
| PC-HC-3dB-0827-4NF | 800-2700MHz | -140 | 4 N Female | 200W | In door or outdoor |  |
| PC-HCHS-3dB-0827-3NF | 800-2700MHz | -140 | 3 N Female | 200W | In door or outdoor |  |
| PC-HC-3dB-0827-3DINF | 800-2700MHz | -140 | 3 DIN Female | 500W | In door or outdoor |  |



Passive Component

3dB Hybrid Coupler---350-520MHz

| Part No. | Frequence | Connector | Power | Application | Picture |
|------------------------|------------|-----------------|-------|-----------------------|---|
| PC-HC-3dB-035052-4SMAF | 350-520MHz | 4 SMA Female | 200W | In door or outdoor |  |


* Note: Other Designs are Available on Request.

Hybrid Matrices 4X4, 700-2700MHz

| Part No. | Frequence | Connector | Power | Application | Picture |
|--------------------|-------------|-------------------|-------|-----------------------|---|
| PC-HC-HM-0727-44NF | 698-2700MHz | 4X4 N Female | 100W | In door or outdoor |  |
| PC-HC-HM-0727-44DF | 698-2700MHz | 4X4 DIN Female | 200W | In door or outdoor |  |

* Note: Other Designs are Available on Request.

Hybrid Matrices 4X4, 800-2500MHz

| Part No. | Frequence | Connector | Power | Application | Picture |
|---------------------|-------------|--------------|-------|-----------------------|---|
| PC-HC-HM-08252-44NF | 800-2500MHz | 4X4 N Female | 100W | In door or outdoor |  |

* Note: Other Designs are Available on Request.

Passive Component

RF combiner

RF combiner also known as RF power combiner, used for combining several incoming signals together and transmit one output signal.

RF combiners include two types:

1. Same-band Combiner: combine multiple base stations of the same frequency band and/or technology onto a single feeder.

Enables antenna and feeder sharing for two base stations in the same frequency band as a BTS Combiner (Same Frequency). That is to say, it is used for combining multiple base stations to common band.

Features and benefits:

- Two Operators can share feeders, TMAs and antennas
- Reduce CAPEX by minimizing hardware components on an installation
- Improved installation quality by minimizing cable connections and hardware

Whether you are an operator or contractor, save operational expenditure where costly tower leasing fees are charged.

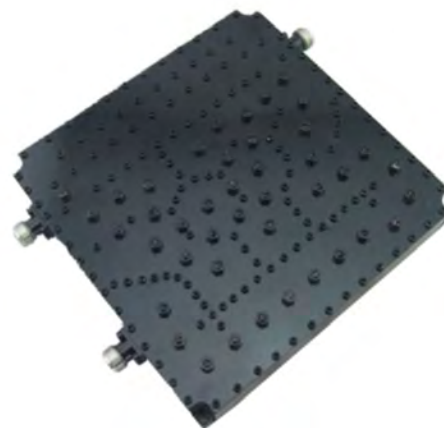
Same-Band Combiners are designed and produced to be of high quality standards to ensure reliable operation in harsh tower environments. And Same-Band Combiners are also of cost-effective to meet the commercial need.

2. Multi-Band Combiners: combiners combine different dual frequency bands onto the same feeder systems.

Multi-Band Combiners will save CAPEX by minimizing hardware components during installation. Multi-Band Combiners are designed for cost-effective antenna sharing for outdoor and indoor applications. Provides a wide range of Multi-Band Combiner products for 2G, 3G, 4G and LTE systems. The Multi-Band Combiners can be customized to combine specific frequency spectrums without incurring high insertion loss allowing operators to integrate their frequencies into a common antenna system with greater ease and efficiency.




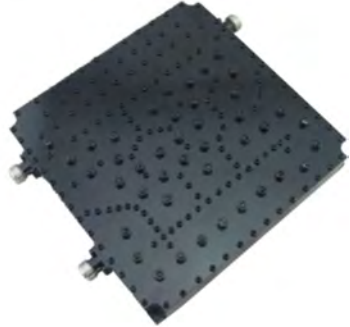
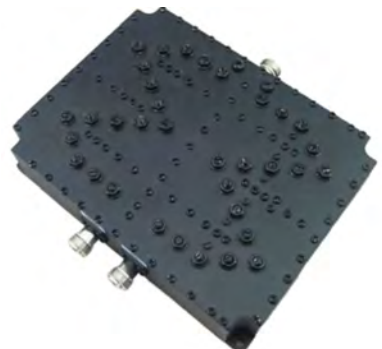
Multi-Band Combiners Series include: Dual Band Combiners, Triplexes Band Combiners, Four Band Combiners. OEM is available!

We can do combiner all Bands for TETRA, LTE, GSM, CDMA, DCS, PCS, UMTS, Wi-Max, etc.



Passive Component

Dual band combiner

| Part No. | CH1 | CH2 | Power | Connector | PIM3 | Picture |
|---------------------------------|---|------------------------|-------|-----------|------|---|
| PC-CB2-CDMA 2000/PHS-NF | CDMA2000 (800-960MHz) | PHS (1710-2170MHz) | 200W | N-F | -120 |  |
| PC-CB2-CDMA 2000/PHS-NF-1 | CDMA2000 (800-960MHz) | PHS (1710-2170MHz) | 200W | N-F | -120 |  |
| PC-CB2-CDMA 2000&PHS/WLAN-NF | CDMA2000&PHS (800-960&1710-2170MHz) | WLAN (2400-2500MHz) | 200W | N-F | -120 |  |
| PC-CB2-GSM&DCS&TD N-NF | GSM&DCS&TD (885-954&1710-2025&2300-2380 MHz) | WLAN (2400-2500MHz) | 200W | N-F | -120 |  |
| PC-CB2-GSM&DCS/3G-NF | GSM&DCS (885-960&1710-1880MHz) | 3G (1920-2170MHz) | 200W | N-F | -120 |  |

* Note: Other Designs are Available on Request.

Passive Component

Three band combiner

| Part No. | CH1 | CH2 | CH3 | Power | Connector | PIM3 | Picture |
|--------------------------------------|--------------------------------------|---------------------------|-----------------------------|-------|-----------|------|--|
| PC-CB3-GSM& CDMA/DCS/W CDMA-NF | GSM&CDMA (885-960&800-96 0MHz) | DCS (1710-1880M Hz) | WCDMA (2010-2025M Hz) | 200W | N-F | -120 |  |
| PC-CB3-DCS/3 G/WLAN-NF | DCS (1710-1880MHz) | 3G (1920-2170M Hz) | WLAN (2400-2500M Hz) | 200W | N-F | -120 |  |

* Note: Other Designs are Available on Request.

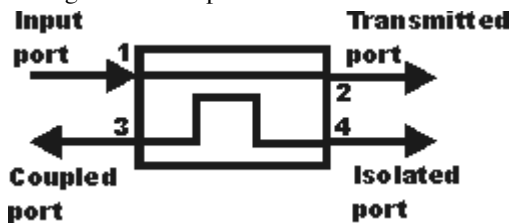
Passive Component

RF Directional Coupler

An RF Directional Coupler is a four-port passive devices which accepts an input RF signal and divides it into 2 output signals. Engineers use it to couple a specific proportion of the power travelling in one transmission line out through another connection or port. RF Directional Couplers are used for sampling a signal, sometimes both the incident and reflected waves.



RF directional couplers are passive devices that couple part of the transmission power in a transmission line. Our RF directional couplers provide the bandwidth, high directivity and higher power that engineers need for their most demanding application designs. RF coaxial directional couplers often use two transmission lines set close together so that energy passing through one is coupled to the other.

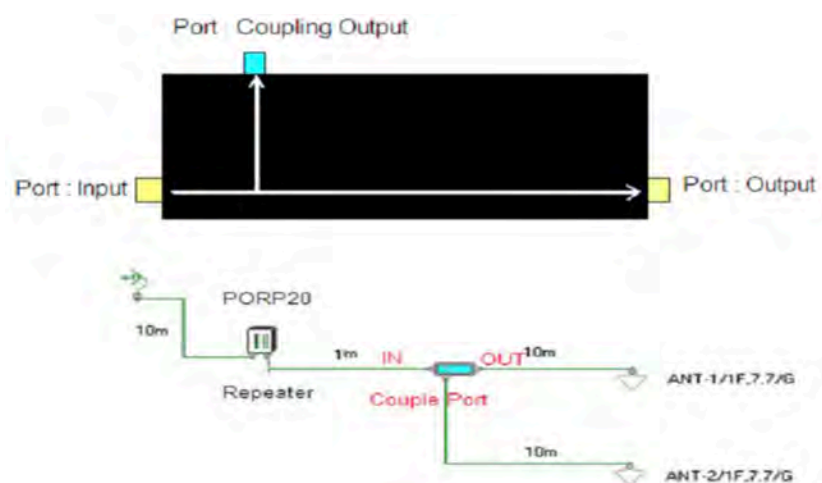


We carries coaxial-connectorized RF Directional Couplers, Our unique Air Dielectric designs directional coupler allow us to achieve better coupling flatness, low VSWR and low main line loss in small sizes. Depending upon the power, the cavity type can meet the high power application as high power directional couplers up to 300 watts. these connectorized directional couplers are available with SMA, N, 7/16 DIN connectors. Other connectors available upon request. Coaxial-Connectorized directional couplers are designed to be screw-down mounted to a heat sink. Availability in a wide range of coupling values makes this series useful in optimizing the power distribution required in passive in-building distributed antenna systems (DAS). The extremely wide frequency range allows use with multiband antennas and wireless base stations and leaky cable systems. With minimal solder joints and a low loss air dielectric, the dissipative loss has been minimized and reliability enhanced.

Features & Benefits

- Ultra wide-band, multi-section design
- Minimal RF Insertion Loss
- Rugged, high Reliability
- Low Passive Intermodulation (PIM3)
- Cavity type, can meet High power range.
- OEM or ODM is available.

Contact us for more information to RF Directional Coupler.



Passive Component

RF Directional Coupler with DIN Connector



| | | | | | | |
|-----------------|--|------------------------|-------------------|-----------------------|-------------------|-------------------|
| Item No. | PC-DC-0825-5/6-D | PC-DC-0825-7/8-D | PC-DC-0825-10-D | PC-DC-0825-13/15-D | PC-DC-0825-20-D | PC-DC-0825-30-D |
| | PC-DC-0827-5/6-D | PC-DC-0827-7/8-D | PC-DC-0827-10-D | PC-DC-0827-13/15-D | PC-DC-0827-20-D | PC-DC-0827-30-D |
| | PC-DC-0725-5/6-D | PC-DC-0725-7/8-D | PC-DC-0725-10-D | PC-DC-0725-13/15-D | PC-DC-0725-20-D | PC-DC-0725-30-D |
| | PC-DC-0727-5/6-D | PC-DC-0727-7/8-D | PC-DC-0727-10-D | PC-DC-0727-13/15-D | PC-DC-0727-20-D | PC-DC-0727-30-D |
| | PC-DC-0738-5/6-D | PC-DC-0738-7/8-D | PC-DC-0738-10-D | PC-DC-0738-13/15-D | PC-DC-0738-20-D | PC-DC-0738-30-D |
| | PC-DC-013018-5/6-D | PC-DC-013018-7/8-D | PC-DC-013018-10-D | PC-DC-013018-13/15-D | PC-DC-013018-20-D | PC-DC-013018-30-D |
| Frequency (MHz) | 800-2500, 800-2700, 698-2500, 698-2700, 700-3800, 130-180 | | | | | |
| Insertion Loss | $\leq 2.0 / \leq 1.75$ | $\leq 1.45 / \leq 1.3$ | ≤ 0.8 | $\leq 0.8 / \leq 0.5$ | ≤ 0.4 | ≤ 0.4 |
| Coupling | 5/6 | 7/8 | 10 | 13/15 | 20 | 30 |
| Accuracy | $\pm 0.8 / \pm 0.8$ | $\pm 0.8 / \pm 0.8$ | ± 1.0 | $\pm 1.0 / \pm 1.0$ | ± 1.2 | ± 1.5 |
| Isolation | $\geq 25 / \geq 26$ | $\geq 27 / \geq 28$ | ≥ 28 | $\geq 31 / \geq 32$ | ≥ 35 | ≥ 45 |
| VSWR | ≤ 1.3 | | | | | |
| PIM | $\leq -120\text{dBc}@2*43\text{dBm}$, $\leq -140\text{dBc}@2*43\text{dBm}$, $\leq -150\text{dBc}@2*43\text{dBm}$, | | | | | |
| Power | 500W | | | | | |
| Impedance | 50 ohm | | | | | |
| Connector | DIN (7/16) | | | | | |
| Color | Black-plated | | | | | |
| Temperature | -20~+70 | | | | | |
| Application | In door or outdoor (IP60 or IP65) | | | | | |
| Humidity | 5%-95% | | | | | |
| Weight | about 0.9kg | | | | | |

* Note: Other Designs are Available on Request.

Passive Component

RF Directional Coupler with N Connector



| | | | | | | |
|-----------------|--|------------------------|-------------------|-----------------------|--------------------|-------------------|
| Item No. | PC-DC-0825-5/6-N | PC-DC-0825-7/8-N | PC-DC-0825-10-N | PC-DC-0825-13/15-N | PC-DC-0825-20-N | PC-DC-0825-30-N |
| | PC-DC-0827-5/6-N | PC-DC-0827-7/8-N | PC-DC-0827-10-N | PC-DC-0827-13/15-N | PC-DC-0827-20-N | PC-DC-0827-30-N |
| | PC-DC-0725-5/6-N | PC-DC-0725-7/8-N | PC-DC-0725-10-N | PC-DC-0725-13/15-N | PC-DC-0725-20-N | PC-DC-0725-30-N |
| | PC-DC-0727-5/6-N | PC-DC-0727-7/8-N | PC-DC-0727-10-N | PC-DC-0727-13/15-N | PC-DC-0727-20-N | PC-DC-0727-30-N |
| | PC-DC-0738-5/6-N | PC-DC-0738-7/8-N | PC-DC-0738-10-N | PC-DC-0738-13/15-N | PC-DC-0738-20-N | PC-DC-0738-30-N |
| | PC-DC-013018-5/6-N | PC-DC-013018-7/8-N | PC-DC-013018-10-N | PC-DC-013018-13/15-N | PC-DC-013018-20-ND | PC-DC-013018-30-N |
| Frequency (MHz) | 800-2500, 800-2700, 698-2500, 698-2700, 700-3800, 130-180 | | | | | |
| Insertion Loss | $\leq 2.0 / \leq 1.75$ | $\leq 1.45 / \leq 1.3$ | ≤ 0.8 | $\leq 0.8 / \leq 0.5$ | ≤ 0.4 | ≤ 0.4 |
| Coupling | 5/6 | 7/8 | 10 | 13/15 | 20 | 30 |
| Accuracy | $\pm 0.8 / \pm 0.8$ | $\pm 0.8 / \pm 0.8$ | ± 1.0 | $\pm 1.0 / \pm 1.0$ | ± 1.2 | ± 1.5 |
| Isolation | $\geq 25 / \geq 26$ | $\geq 27 / \geq 28$ | ≥ 28 | $\geq 31 / \geq 32$ | ≥ 35 | ≥ 45 |
| VSWR | ≤ 1.25 | | | | | |
| PIM | $\leq -120\text{dBc}@2*43\text{dBm}$, $\leq -140\text{dBc}@2*43\text{dBm}$, $\leq -150\text{dBc}@2*43\text{dBm}$, | | | | | |
| Power | 300W | | | | | |
| Impedance | 50 ohm | | | | | |
| Connector | N connector | | | | | |
| Color | Black-plated | | | | | |
| Temperature | -20~+70 | | | | | |
| Application | In door or outdoor (IP60 or IP65) | | | | | |
| Humidity | 5%-95% | | | | | |
| Weight | about 0.23kg | | | | | |

* Note: Other Designs are Available on Request.


Passive Component

RF Duplexers


A Duplexer (or sometimes also called diplexer) is a 3 ports device most commonly used to allow a transmitter and receiver to operate on different frequencies, to share a common antenna while operating simultaneously. The filters that make up the duplexer isolate the transmitter from the receiver by doing two important functions--Function1, to filter out any transmitter noise sidebands that are being generated on the receive frequency, function1 is the most important. Function2, to protect the receiver from transmitter carrier overload. The amount of isolation necessary is dependent upon the TX (Transport) to RX (Recieve) frequency spacing. As the frequencies get closer, a higher value of isolation is required.

A duplexer is an electronic device that allows bi-directional (duplex) communication over a single path. In radar and radio communications systems, it isolates the receiver from the transmitter while permitting them to share a common antenna. Most radio repeater systems include a duplexer. Duplexers can be based on frequency (often a waveguide filter), polarization (such as an orthomode transducer), or timing (as is typical in radar).

Duplexer RX:632-656MHz, TX:680-698MHz


| Frequence: | RX | TX | Picture |
|------------------|--------------------------------------|--------------------------------------|---|
| | 632-656MHz | 680-698MHz | |
| Insertion loss: | $\leq 1.2\text{dB}$ | $\leq 1.2\text{dB}$ |  |
| Ripple: | $\leq 0.2\text{dB}$ | $\leq 0.2\text{dB}$ | |
| Return Loss: | $\geq 17\text{dB}$ | $\geq 17\text{dB}$ | |
| Rejection: | $\geq 60\text{dB}@680-698\text{MHz}$ | $\geq 60\text{dB}@632-656\text{MHz}$ | |
| Impedance: | 50 ohm | | |
| Insulation (dB): | ≥ 20 | | |
| Color: | black | | |
| RF Connector: | N-female | | |

Duplexer for GSM900


| Frequence: | RX | TX | Picture |
|------------------|---------------------|---------------------|---|
| | 880-915MHz | 925-960MHz | |
| Insertion loss: | $\leq 1.8\text{dB}$ | $\leq 1.8\text{dB}$ |  |
| Return Loss: | $\geq 18\text{dB}$ | $\geq 18\text{dB}$ | |
| Impedance: | 50 ohm | | |
| Insulation (dB): | ≥ 20 | | |
| Color: | black | | |
| RF Connector: | SMA-female | | |

Passive Component


Duplexer for CDMA2000

| Frequency: | RX | TX | Picture |
|------------------|---------------|---------------|---|
| | 1920-1940MHz | 2110-2130MHz | |
| Insertion loss: | ≤1.6dB | ≤1.6dB |  |
| Ripple: | ≤0.8dB | ≤0.8dB | |
| Rejection: | 1915MHz ≥18dB | 2105MHz ≥18dB | |
| | 1945MHz ≥18dB | 2135MHz ≥10dB | |
| | 1910MHz ≥30dB | 2100MHz ≥30dB | |
| | 1950MHz ≥30dB | 2140MHz ≥30dB | |
| VSWR | ≤1.25 | | |
| Impedance: | 50 ohm | | |
| Insulation (dB): | ≥90 | | |
| Color: | black | | |
| RF Connector: | SMA-female | | |

Duplexer for GSM1800

| Frequency: | RX | TX | Picture |
|------------------|---------------------------------|--------------|---|
| | 1710~1785MHz | 1805~1880MHz | |
| Insertion loss: | ≤1.5dB | ≤1.5dB |  |
| VSWR | ≤1.3 | | |
| Impedance: | 50 ohm | | |
| Insulation (dB): | ≥70 | | |
| Color: | black | | |
| RF Connector: | ANT: N-female RX/TX: SMA-female | | |

Duplexer for WCDMA

| Frequency: | RX | TX | Picture |
|-------------------|------------------------------------|------------------------------------|---|
| | 1940-1955MHz | 2130-2145MHz | |
| In-band flatness: | 0.7 (1940.4-1954.6/ 2130.4-2144.6) | 0.7 (1940.4-1954.6/ 2130.4-2144.6) |  |
| Insertion loss: | <1.7(1940.4-1954.6) | <1.0(2130.4-2144.6) | |
| Rejection: | FO±2.5MHz --- ≥8dBc | ≥10dBc | |
| | FO±10MHz --- ≥15dBc | ≥10dBc | |
| | FO±20MHz --- ≥60dBc | ≥35dBc | |
| VSWR | ≤1.3 | | |
| Power: | ≥250W | | |
| Insulation (dB): | ≥90 | | |
| Color: | black | | |
| RF Connector: | N-female | | |

* Note: Other Designs are Available on Request.

Antenna



Antenna

Antenna

RF antennas include two categories: directional antennas and omni-directional antennas.

Directional antennas include in-ceiling dome RF antennas, Yagi antennas, Log-periodic antenna/LPDA, passive GPS and active GPS antennas, fixed and panel antenna.

Donor antenna: it is a outdoor antenna which provides the capacity from the BTS for the mobile users.

Service Antenna: Omni/directional In-building Antenna is placed at the end of the distributed network and connected to the distributed network, to coverage the area where mobile user exists.



Indoor Omni Antenna

Indoor Omni Antenna is placed at the end of the signal distributed network and connected to the distributed network, to coverage the area where mobile user exists in building.

Application:

- ◆ CDMA / GSM / 3G / 2.4GHz WLAN / LTE
- ◆ Wireless public hotspot coverage
- ◆ Wireless communication & Data transmission.
- ◆ Indoor signal coverage
- ◆ TDD/FDD-LTE



Antenna

| Electrical Data | |
|-----------------------|-------------------------|
| Frequency Range | 698-960/1710-2700 MHz |
| Bandwidth | 262/990 MHz |
| VSWR | $\leq 2.0/\leq 1.5$ |
| Gain | 2.5/5dBi |
| Input Impedance | 50 Ω |
| Horizontal Beam width | 360° |
| Vertical Beam width | 91° |
| Polarization | Vertical |
| Max.Power | 50W |
| Connector Type | N-F or Customer specify |
| Lightning Protection | DC Ground |
| Mechanical Data | |
| Weight | 250g |
| Dimension | Ø165×100mm |



| Electrical Specifications | | | |
|---------------------------|-----------------|--------------|--------------|
| Frequency Range | 698-960MHz | 1710-1880MHz | 1880-2700MHz |
| Polarization | V | V | H+V |
| VSWR | ≤ 1.5 | | |
| Gain | 2dBi | 3dBi | |
| Input Impedance | 50 Ω | | |
| Vertical Beamwidth | 100-120° | 30-65° | |
| Horizontal BeamWidth | 360° | | |
| Input Impedance | 50 Ω | | |
| Max. Power | 50W | | |
| Lightning Protection | DC Ground | | |
| Mechanical Specifications | | | |
| Connector Type | N-Female | | |
| Dimensions | Ø200×130MM | | |
| Radome Color | White | | |
| Weight | 0.7kg | | |
| Reflector Material | Copper | | |
| Radome Material | UV-PVC | | |
| Operating Temperature | -40°C to +60 °C | | |
| Wind Speed, Maximum | 36.9 m/s | | |



Antenna

| Electrical Specifications | | | |
|---------------------------|----------------------------|------------|--------------|
| Frequency Range | 698-806MHz | 806-960MHz | 1710-2700MHz |
| Polarization | Vertical | | |
| VSWR | ≤2.0 | ≤1.5 | ≤1.5 |
| Gain | 4dBi | | |
| Input Impedance | 50Ω | | |
| 3dB BeamWidth | 360° | | |
| Horizontal BeamWidth | 60° | | |
| Input Impedance | 50Ω | | |
| Max. Power | 50W | | |
| Lightning Protection | DC Ground | | |
| Mechanical Specifications | | | |
| Connector Type | N-Female | | |
| Dimensions | Ø60×250 mm (Ø 2.36×63.5in) | | |
| Mount Type | Mast Mount | | |
| Weight | 1.0kg | | |
| Reflector Material | Copper | | |
| Radome Material | UV-PVC | | |
| Radome Color | White | | |
| Wind Speed, Maximum | 216.0 km/h | | |
| Operating Temperature | -40°C to +60 °C | | |
| Mounting Pole | Ø38-Ø52mm | | |



Antenna

| Electrical Specifications | | |
|---------------------------|-----------------|--------------|
| Frequency Range | 698-960MHz | 1710-2170MHz |
| Polarization | V+H | |
| VSWR | ≤2 | ≤1.8 |
| Gain | 3dBi | 4.5dBi |
| Input Impedance | 50Ω | |
| Vertical Angle | 70°/40° | |
| Horizontal BeamWidth | 360° | |
| Input Impedance | 50Ω | |
| Max. Power | 50W | |
| Lightning Protection | Direct Ground | |
| Mechanical Specifications | | |
| Connector Type | N-Female | |
| Dimensions | Ø210×37mm | |
| Radome Color | White | |
| Weight | 0.45kg | |
| Reflector Material | Aluminum | |
| Radome Material | ABS | |
| Operating Temperature | -40°C to +60 °C | |



Indoor Panel Antenna

Panel Antenna is an antenna type that radiates in only a specific direction. It uses wave guide technology to focus incoming and outgoing radio signals into a focused, effective signal by concentrating their energy. A panel antenna is similar to a sector antenna, which is a directional antenna used in telecommunications for cell phone connectivity and wireless Internet. It also is called "patch antennas."

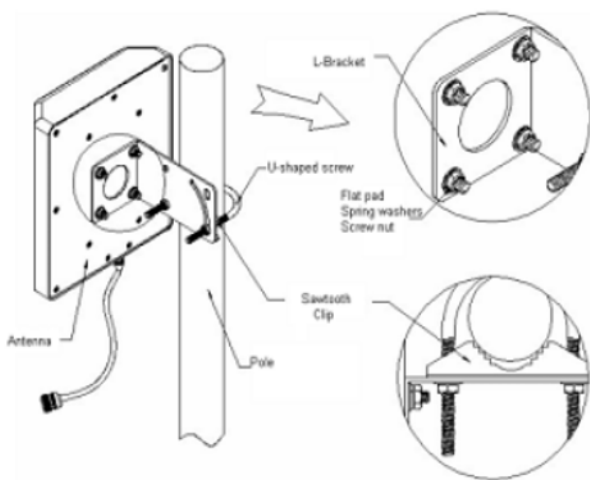
Feature:

- ◆ Indoor coverage, such as hotels, office buildings, etc.
- ◆ compact structure, beautiful appearance
- ◆ Wireless communication & Data transmission.
- ◆ Indoor signal coverage
- ◆ Easy to install and operate

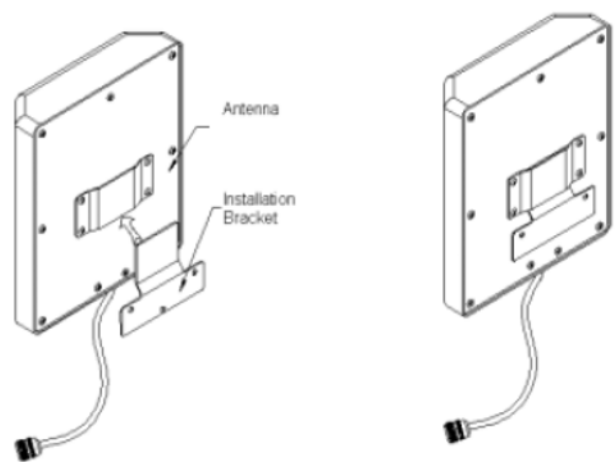


Antenna

| Electrical Specifications | | | | |
|------------------------------|----------------------------|---------|-----------|-----------|
| Frequency Range | 698-806 | 806-960 | 1710-2500 | 2500-2700 |
| | MHz | MHz | MHz | MHz |
| Polarization | Vertical | | | |
| VSWR | ≤1.8 | ≤1.5 | ≤1.5 | ≤1.5 |
| Gain | 7/8 dBi | | | |
| Input Impedance | 50Ω | | | |
| Half-power Beamwidth | Hor:65° Ver:55° | | | |
| F/B Ratio | ≥15dB | | | |
| PIM, 3rd Order C(2×33dBm 2W) | < -135dBc | | | |
| Max.Power | 50W | | | |
| Lightning Protection | DC Ground | | | |
| Mechanical Specifications | | | | |
| Connector | N-female (Copper) | | | |
| Connector Position | With 30cm low loss pigtail | | | |
| Dimensions | 210×180×43mm | | | |
| Antenna weight | 0.5kgs | | | |
| Packing size | 53x32x41cm(20pcs) | | | |
| Reflector material | Aluminum | | | |
| Radome material | ABS | | | |
| Radome color | White | | | |
| Operating temperature | -40°C to +70°C | | | |



Pole mounted



Wall mounted

Antenna

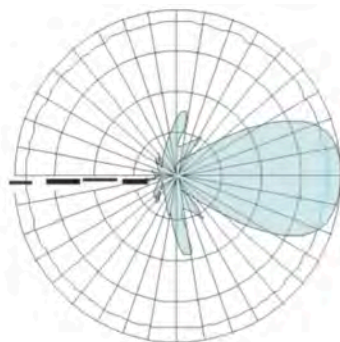
Log Period Antenna

Log periodic antenna is a broadband, multi-element, directional, narrow-beam antenna that has impedance and radiation characteristics that are regularly repetitive as a logarithmic function of the excitation frequency. The individual components are often dipoles, as in a log-periodic dipole array.

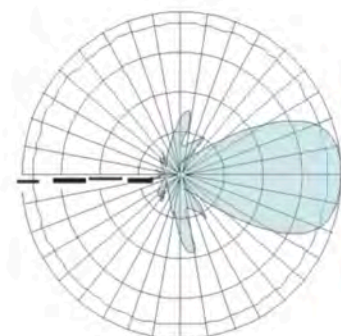


| Electrical Specifications | |
|---------------------------|----------------------|
| Frequency Range | 698-960/1710-2700MHz |
| Gain | 11±0.5dBi |
| Horizontal Beamwidth | 65±5° |
| Vertical Beamwidth | 35±3° |
| F/B ratio | ≥20dB |
| VSWR | ≤1.5 |
| Impedance | 50 Ω |
| Polarization | Vertical |
| Max. Power | 100W |
| Connector | SMA-J or customized |
| Lightning Protection | DC-Ground |
| Mechanical Specifications | |
| Dimension | 440*200*40mm |
| Weight | 0.8kg |
| Rated Wind Velocity | 36.9 m/s |
| Reflector material | Copper/Aluminum |
| Operational Humidity | < 95% |
| Radome Color | white |
| Radome material | ABS |
| Operating temperature | ~40~55°C |

Radiation Patterns:



H-Plane



V-Plane

Antenna

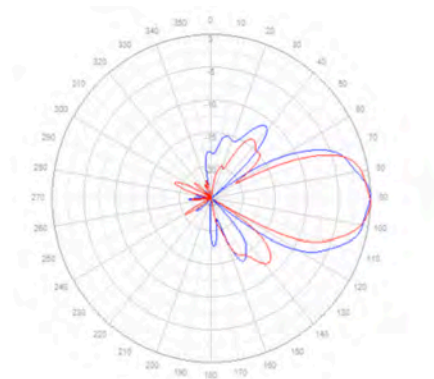
Directional Outdoor Panel Antenna

Panel antenna is directional antenna, panel antenna is a kind of mobile communications antenna, it is mainly used for outdoor coverage. Tabular antenna is widely used and extremely important base station antenna in GSM and CDMA. The advantage of this antenna is: high gain and good sector pattern, petals small, vertical direction Angle is easy to control, reliable sealing performance and long service life.

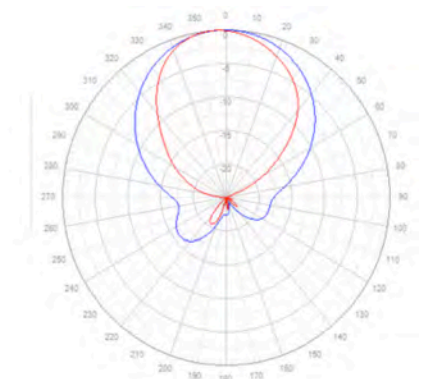


| Electrical Specifications | |
|---------------------------|----------------------|
| Frequency Range | 698-960/1710-2700MHz |
| Gain | 10±1dBi |
| Horizontal Beamwidth | 60±8° |
| Vertical Beamwidth | 30±2° |
| F/B ratio | ≥20dB |
| VSWR | ≤1.8 |
| Impedance | 50 Ω |
| Polarization | Vertical |
| Max. Power | 100W |
| Connector | 7-16 DIN Female |
| PIM, 3rd Order, 2 x 2 W | 140dBc |
| Mechanical Specifications | |
| Dimension | 620*280*115mm |
| Weight | about 4.7kg |
| Reflector material | Cu/Al |
| Operational Humidity | < 100% |
| Radome Color | white |
| Radome material | PVC UV resistant |
| Operating temperature | -40~60° |

Radiation Patterns:



H-Plane



V-Plane

Antenna

Grid parabolic antenna

| ELECTRICAL | |
|---------------------|------------------------|
| Frequency Range | 1920-2170-MHz |
| Bandwidth | 250-MHz |
| Gain | 17-dBi |
| F/B Ratio | ≥ 18 -dB |
| VSWR | ≤ 1.5 |
| Polarization | Vertical or Horizontal |
| Max power | 100 -W |
| Nominal Impedance | 50 - Ω |
| MECHANICAL | |
| Connector | N female or customized |
| Antenna Dimension | 0.4x0.6-M |
| Weight | 2.5-Kg |
| Material | Aluminum Alloy |
| Rated Wind Velocity | 60-m/s |



| ELECTRICAL | |
|---------------------|------------------------|
| Frequency Range | 824-896-MHz |
| Bandwidth | 72-MHz |
| Gain | 20-dBi |
| Beamwidth | H:13° E:13° |
| F/B Ratio | ≥ 30 -dB |
| VSWR | ≤ 1.5 |
| Polarization | Vertical |
| Max power | 100 -W |
| Nominal Impedance | 50 - Ω |
| MECHANICAL | |
| Connector | N female or customized |
| Antenna Dimension | 1.5-M |
| Weight | 25-Kg |
| Rated Wind Velocity | 60-m/s |
| Mast Diameter | 50 to 75-mm |



Support Grip / Pulling Grip



Pulling Grips



Support Grips

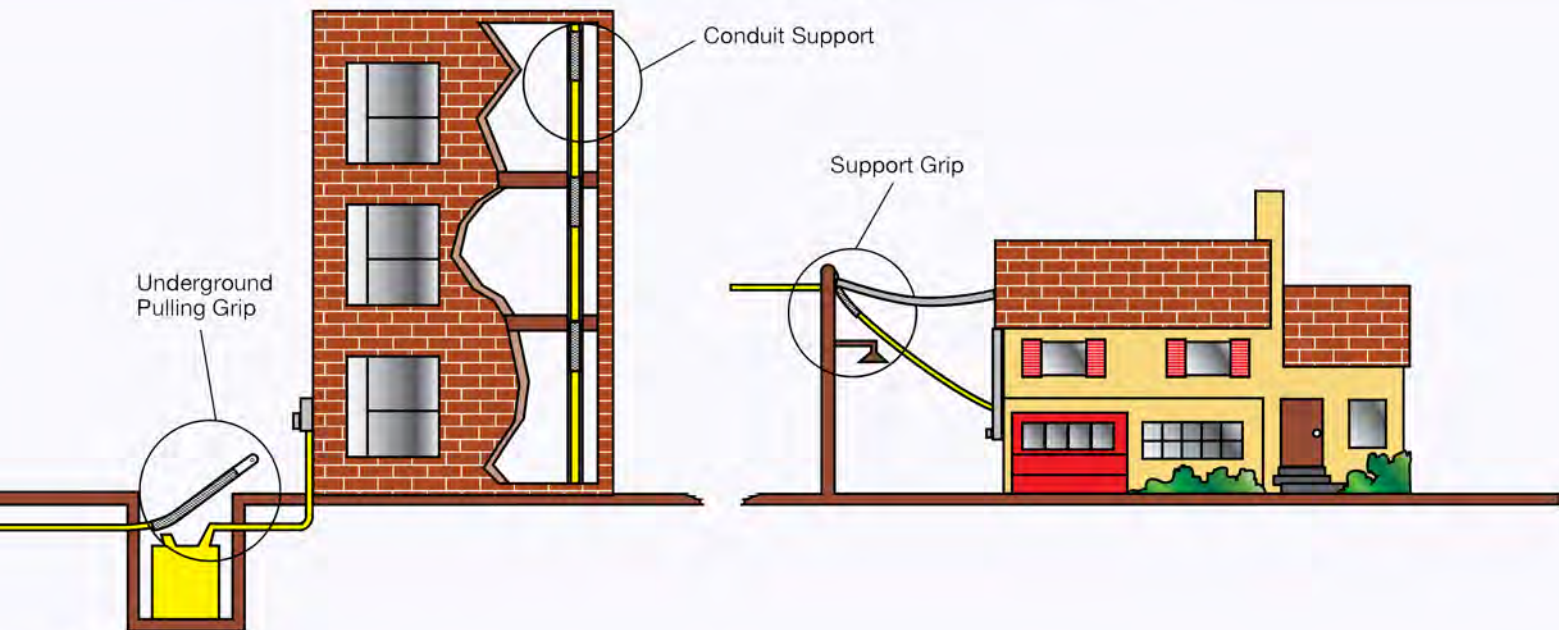
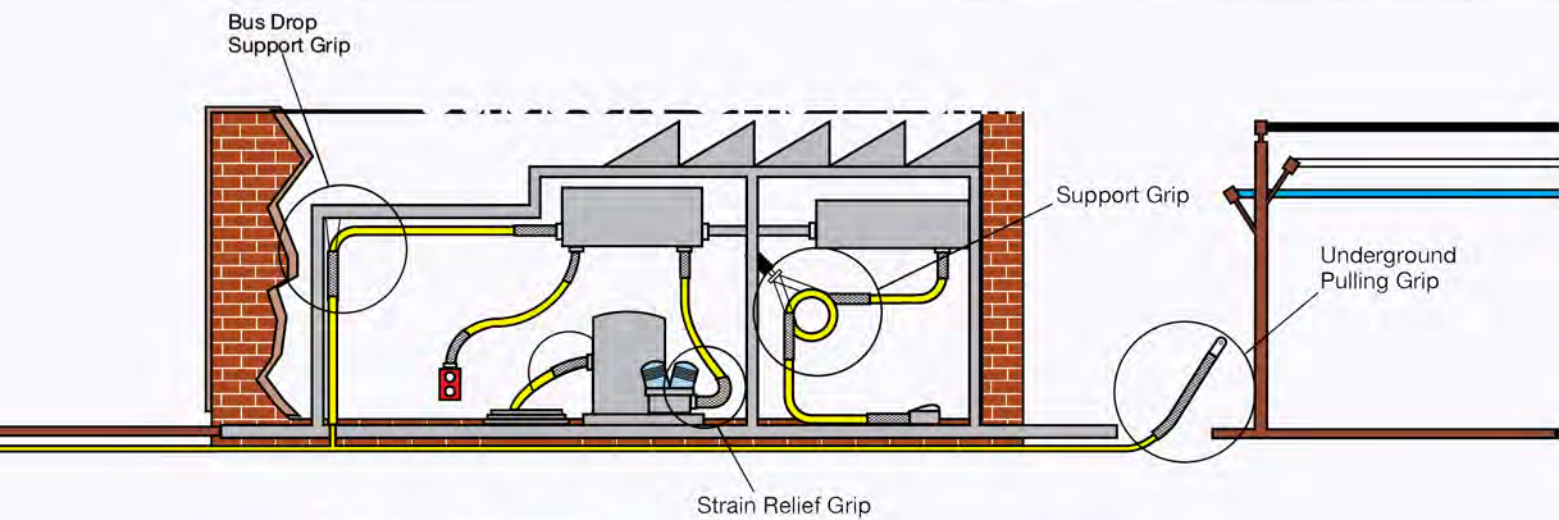
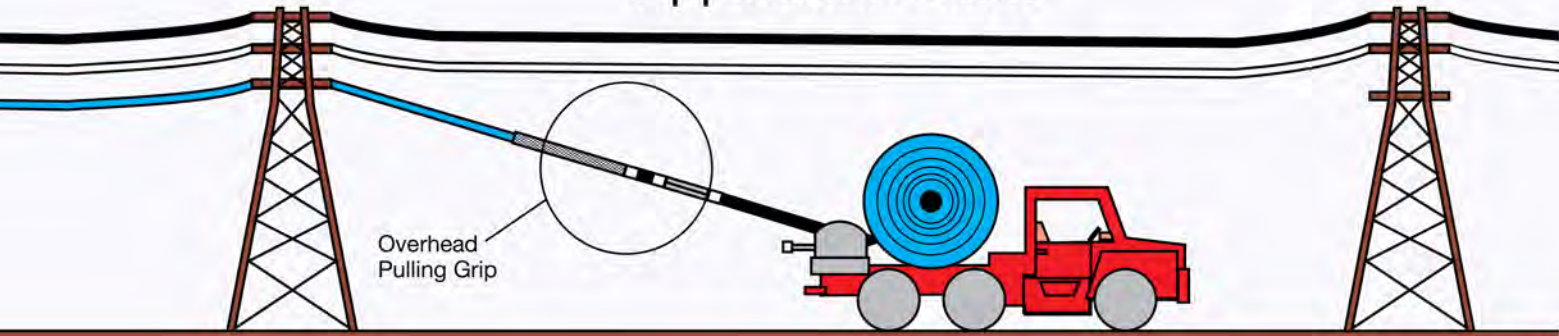


Strain Relief Grips



Support Grip / Pulling Grip

Application Guide



Pulling Grips

Pulling Grips are reusable tools for pulling insulated conductors or bare wires, cable, nylon and wire rope, fiber optic cable etc. Both flexible eye and rotating eye attachments are available.

Strain-Relief Grips

Strain-Relief Grips are used to connect cable or flexible conduit to electrical enclosures and equipment. This prevents pullout and bending due to tension at the inner conductors at the point of termination.

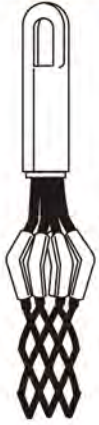
Support Grips

Support Grips distribute the weight of the vertical or sloping runs of electrical and fiber optic cable, over the entire length of the grip so that the cable is not subject to damage. These grips are also available in stainless steel for additional corrosion-resistance.

Support Grip / Pulling Grip

Selection Guide for Grip Applications

Pulling Grips



Heavy-Duty Rotating Eye

For underground wiring and overhead heavy-duty pulling of service lines and new construction cable.



Heavy-Duty Flexible Eye

For overhead transmission and distribution line stringing.



Slack Grips

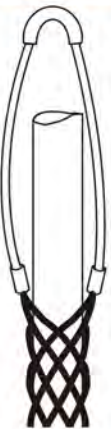
For removing underground cable and pulling slack in existing cable and new installations and when end of cable is not available.



Light-Duty Flexible Eye

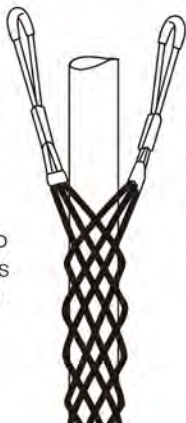
For light industrial pulling of electrical cable and for underground and industrial plant wiring and re-wiring.

Support Grips



Single Eye

For single hook attachment of permanent indoor/outdoor cable. Available on heavy-duty, standard duty, and service drop grips. See pages V-28, V-32, and V-34.



Double Eye

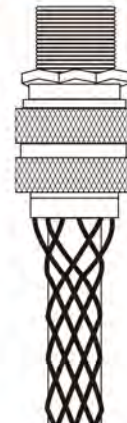
For double hook attachment of permanent indoor/outdoor cable. Available on heavy-duty and standard duty grips. See pages V-29 and V-33.



Single Offset Eye

For offset hook attachment of permanent indoor/outdoor cable. Available on standard duty and light-duty support grips. See page V-30.

Strain Relief Grips



Strain Relief Grips

Indoor or outdoor use where subject to moisture, splash, or washdown. Examples are enclosures, crane hoist and pendant drop stations, hand tools, pumps, and processing equipment. Available in straight, 90°, or 45° configurations.

Feeder Cable Hoisting Grip



Pre-laced

Pre-laced hoisting grips feature a closed-mesh design which simplifies installation over traditional split, lace-up style grips. The unique design allows the pre-laced hoisting grip to slip over an unterminated end of coax.



Lace-up

Lace-up hoisting grips provide an effective means for hoisting coax and elliptical waveguide into position and can be utilized to provide additional support once in place.

Fiber Optic Cable Support Grip & Pulling Grip



Fiber Optic Cable Grip

Fiber optic cable grip was used for the installation of fibre optic cables for either overhead or underground applications.

Support Grip / Pulling Grip

Non-Conductive Nylon Pulling Grips

Non-Conductive Pulling Grips were developed for use by utilities for pulling overhead distribution lines in close proximity to energized lines and hardware, made of a high strength nylon, are available for pulling single cable or cable bundles.


Benefits

- Extra flexibility for easy installation.
- Non-metallic mesh provides for safe pulls over “hot” areas.
- Grips are corrosion resistant.

Nylon Pulling Grips—single eye, single weave, nylon, close mesh

| Part No. | Cable Dia/Grip Length(mm) | Tensile Strength | Picture |
|-------------------|------------------------------|------------------|--|
| NCPG-SESW-PA-225 | 2 x 25mm ² / 600 | 15kN |  |
| NCPG-SESW-PA-235 | 2 x 35mm ² / 600 | 15kN | |
| NCPG-SESW-PA-250 | 2 x 50mm ² / 600 | 15kN | |
| NCPG-SESW-PA-295 | 2 x 95mm ² / 600 | 15kN | |
| NCPG-SESW-PA-335 | 3 x 35mm ² / 600 | 15kN | |
| NCPG-SESW-PA-395 | 3 x 95mm ² / 600 | 25kN | |
| NCPG-SESW-PA-425 | 4 x 25mm ² / 600 | 15kN | |
| NCPG-SESW-PA-435 | 4 x 35mm ² / 600 | 15kN | |
| NCPG-SESW-PA-450 | 4 x 50mm ² / 600 | 15kN | |
| NCPG-SESW-PA-470 | 4 x 70mm ² / 800 | 17kN | |
| NCPG-SESW-PA-495 | 4 x 95mm ² / 800 | 25kN | |
| NCPG-SESW-PA-4150 | 4 x 150mm ² / 800 | 25kN | |

Nylon Pulling Grips—offset eye, single weave, nylon, close mesh

| Part No. | Cable Dia/Grip Length(mm) | Tensile Strength | Picture |
|-------------------|------------------------------|------------------|---|
| NCPG-OESW-PA-225 | 2 x 25mm ² / 600 | 15kN |  |
| NCPG-OESW-PA-235 | 2 x 35mm ² / 600 | 15kN | |
| NCPG-OESW-PA-250 | 2 x 50mm ² / 600 | 15kN | |
| NCPG-OESW-PA-295 | 2 x 95mm ² / 600 | 15kN | |
| NCPG-OESW-PA-335 | 3 x 35mm ² / 600 | 15kN | |
| NCPG-OESW-PA-395 | 3 x 95mm ² / 600 | 25kN | |
| NCPG-OESW-PA-425 | 4 x 25mm ² / 600 | 15kN | |
| NCPG-OESW-PA-435 | 4 x 35mm ² / 600 | 15kN | |
| NCPG-OESW-PA-450 | 4 x 50mm ² / 600 | 15kN | |
| NCPG-OESW-PA-470 | 4 x 70mm ² / 800 | 17kN | |
| NCPG-OESW-PA-495 | 4 x 95mm ² / 800 | 25kN | |
| NCPG-OESW-PA-4150 | 4 x 150mm ² / 800 | 25kN | |

Support Grip / Pulling Grip

Hoisting Grip for Coaxial Cable And Elliptical Waveguide



Lace-up hoisting grip

Lace-up hoisting grips provide an effective means for hoisting coax and elliptical waveguide into position and can be utilized to provide additional support once in place. The lace-up design allows the hoisting grip to be attached even when the run has been connectorized and facilitates easy positioning at 200 (61m) increments on long coax runs.



Pre-laced hoisting grip

Pre-laced hoisting grips feature a closed-mesh design which simplifies installation over traditional split, lace-up style grips. The unique design allows the pre-laced hoisting grip to slip over an unterminated end of coax. The grip securely tightens when pulled, providing an effective means to hoist coax into position and to provide additional support for the coax once in place.

| Characteristic | Lace-up hoisting grip | Pre-laced hoisting grip |
|----------------|-----------------------------------|-------------------------------------|
| Application | coax | coax support |
| Size. | 3/8" to 2-1/4" | 1/2" to 2-1/4" |
| Feature. | Lace up at any point on coax | Pre-laced to simplify installation |
| Design. | Open mesh with single eye support | Closed mesh with single eye support |
| Material. | Stainless steel or Tinned bronze | Stainless steel or Tinned bronze |
| Include. | Mesh Grip, lacing wire | Mesh Grip, support clamp |

| Design | Product code | Description |
|-----------|------------------|---|
| Lace-up | HG12-L | Lace-up hoisting grip for 1/2" coax or LMR600 coax |
| | HG58-L | Lace-up hoisting grip for 5/8" coax or LMR900 coax |
| | HG78-L | Lace-up hoisting grip for 7/8" coax or LMR1200 coax |
| | HG114-L | Lace-up hoisting grip for 1-1/4" coax or LMR1700 coax |
| | HG158-L | Lace-up hoisting grip for 1-5/8" coax or LMR1700 coax |
| | HG214-L | Lace-up hoisting grip for 2-1/4" coax or LMR1700 coax |
| Pre-laced | HG38-P / HG38S-P | Pre-laced hoisting grip for 3/8" flexible and super flexible coax |
| | HG12-P / HG12S-P | Pre-laced hoisting grip for 1/2" flexible and super flexible coax |
| | HG58-P | Pre-laced hoisting grip for 5/8" coax |
| | HG78-P | Pre-laced hoisting grip for 7/8" coax |
| | HG114-P | Pre-laced hoisting grip for 1-1/4" coax |
| | HG158-P | Pre-laced hoisting grip for 1-5/8" coax |
| | HG214-P | Pre-laced hoisting grip for 2-1/4" coax |

Other Accessory



Accessory

Round Member Adapters

| Name: | Round Member Adapters |  | | |
|--------------|-----------------------|--|------------------|--------------------|
| Material: | 304 Stainless Steel | | | |
| Size: | As Below | | | |
| Application: | Cable Support | | | |
| Item No. | Diameter Range | Width W (mm) | Thickness T (mm) | Weight (kg/100pcs) |
| RMA-1 | 14-27 | 12 | 0.6 | 1 |
| RMA-2 | 18-32 | 12 | 0.6 | 1.3 |
| RMA-3 | 21-44 | 12 | 0.6 | 1.61 |
| RMA-4 | 27-51 | 12 | 0.6 | 1.7 |
| RMA-5 | 33-57 | 12 | 0.6 | 1.8 |
| RMA-6 | 40-63 | 12 | 0.6 | 1.9 |
| RMA-7 | 46-70 | 12 | 0.6 | 2 |
| RMA-8 | 52-76 | 12 | 0.6 | 2.2 |
| RMA-9 | 59-82 | 12 | 0.6 | 2.36 |
| RMA-10 | 65-89 | 12 | 0.6 | 2.5 |
| RMA-11 | 72-95 | 12 | 0.6 | 2.6 |
| RMA-12 | 78-101 | 12 | 0.6 | 2.7 |
| RMA-13 | 84-108 | 12 | 0.6 | 2.75 |
| RMA-14 | 91-114 | 12 | 0.6 | 2.8 |
| RMA-15 | 105-127 | 12 | 0.6 | 3 |
| RMA-16 | 118-140 | 12 | 0.6 | 3.4 |
| RMA-17 | 130-152 | 12 | 0.6 | 3.5 |
| RMA-18 | 141-165 | 12 | 0.6 | 3.7 |
| RMA-19 | 155-178 | 12 | 0.6 | 4 |
| RMA-20 | 175-197 | 12 | 0.6 | 4.3 |
| RMA-21 | 194-216 | 12 | 0.6 | 4.4 |
| RMA-22 | 213-235 | 12 | 0.6 | 4.9 |
| RMA-23 | 232-254 | 12 | 0.6 | 5.3 |
| RMA-24 | 251-273 | 12 | 0.6 | 5.6 |
| RMA-25 | 270-292 | 12 | 0.6 | 6 |
| RMA-26 | 289-311 | 12 | 0.6 | 6.2 |

* Note: Other Size are Available on Request.

Accessory

Stainless Steel Single Ear Stepless Hose Clamp

| | | |
|--------------|--------------------------------|--|
| Name: | Single Ear Stepless Hose Clamp | |
| Material: | 304 Stainless Steel | |
| Size: | As Below | |
| Application: | Cable Support | |
| Part No. | SESHC-SS-* | |

| Model (d) | Adjusting diameter Range | Model (d) | Adjusting diameter Range | Model (d) | Adjusting diameter Range |
|-----------|--------------------------|-----------|--------------------------|-----------|--------------------------|
| 11.9 | 9.4-11.9 | 33.1 | 29.9-33.1 | 77.0 | 73.8-77.0 |
| 12.3 | 9.8-12.3 | 34.6 | 31.4-34.6 | 78.5 | 75.3-78.5 |
| 12.8 | 10.3-12.8 | 36.1 | 32.9-36.1 | 80.0 | 76.8-80.0 |
| 13.3 | 10.8-13.3 | 37.6 | 34.4-37.6 | 81.5 | 78.3-81.5 |
| 13.8 | 11.3-13.8 | 38.1 | 34.9-38.1 | 83.0 | 79.8-83.0 |
| 14.0 | 11.5-14.0 | 39.6 | 36.4-39.6 | 84.5 | 81.3-84.5 |
| 14.5 | 12.0-14.5 | 41.0 | 37.8-41.0 | 86.0 | 82.8-86.0 |
| 14.8 | 12.3-14.8 | 42.5 | 39.3-42.5 | 87.5 | 84.3-87.5 |
| 15.3 | 12.8-15.3 | 44.0 | 40.8-44.0 | 89.0 | 85.8-89.0 |
| 15.7 | 13.2-15.7 | 45.5 | 42.3-45.5 | 90.5 | 87.3-90.5 |
| 16.2 | 13.7-16.2 | 47.0 | 43.8-47.0 | 92.0 | 88.8-92.0 |
| 16.6 | 14.1-16.6 | 48.5 | 45.3-48.5 | 93.5 | 90.3-93.5 |
| 16.8 | 14.3-16.8 | 50.0 | 46.8-50.0 | 95.0 | 91.8-95.0 |
| 17.0 | 14.5-17.0 | 51.5 | 48.3-51.5 | 96.5 | 93.3-96.5 |
| 17.5 | 15.0-17.5 | 53.0 | 49.8-53.0 | 98.0 | 94.8-98.0 |
| 17.8 | 14.6-17.8 | 54.5 | 51.3-54.5 | 99.5 | 96.3-99.5 |
| 18.0 | 14.8-18.0 | 56.0 | 52.8-56.0 | 101.0 | 87.8-101.0 |
| 18.5 | 15.3-18.5 | 57.5 | 54.3-57.5 | 102.5 | 99.3-102.5 |
| 19.2 | 16.0-19.2 | 59.0 | 56.8-59.0 | 104.0 | 100.8-104.0 |
| 19.8 | 16.8-19.8 | 60.5 | 57.3-60.5 | 105.5 | 102.3-105.5 |

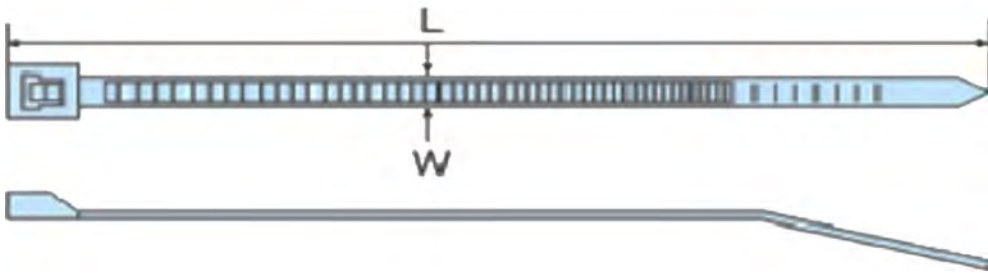
* Note: other size are available on request.

Accessory

Nylon Cable Ties/Zip Ties

It is made of UL certified nylon 66 material and featuring 94V-2 fire-resistant grade, heat-resisting, acid & erosion control, insulate well, and not apt to age.

Color: White, UV black, and other colors available



| Item No. | Length | Width | Max Diameter. | Min Strength |
|-------------------|--------|-------|---------------|--------------|
| | mm | mm | mm | kg(lbs) |
| ZD100W (White) | 100 | 2.5 | 22 | 8(18) |
| ZD100B (UV Black) | 100 | 2.5 | 22 | 8(18) |
| ZD150W (White) | 150 | 2.5 | 35 | 8(18) |
| ZD150B (UV Black) | 150 | 2.5 | 35 | 8(18) |
| ZD200W (White) | 200 | 2.5 | 53 | 8(18) |
| ZD200B (UV Black) | 200 | 2.5 | 53 | 8(18) |
| ZD300W (White) | 300 | 3.6 | 76 | 18(40) |
| ZD300B (UV Black) | 300 | 3.6 | 76 | 18(40) |
| ZD400W (White) | 400 | 4.8 | 105 | 22(50) |
| ZD400B (UV Black) | 400 | 4.8 | 105 | 22(50) |
| ZD500W (White) | 500 | 4.8 | 145 | 22(50) |
| ZD500B (UV Black) | 500 | 4.8 | 145 | 22(50) |
| ZD650W (White) | 650 | 8.8 | 178 | 78(172) |
| ZD650B (UV Black) | 650 | 8.8 | 178 | 78(172) |

Others available by requested.

Accessory

Stainless Steel Cable Tie--Ball Look Type

Characteristic:

Vj g{ "j cxg'cp'wpls wg'dcm'hqenlpi 'o gej cpluo "vj cv'cmqy "gcukl 'cpf 's wlemf
 kpuvngf "cpf 'pqv'wvf qpg0J ki j "vgpukg'wtgpi vj . "pqp/i co o cdkkv{ 0'
 Y qtnlpi "go r gtcwmg</82¢372
 J ki j "tgukcpeg'vq'cegve'cekf . "cmcrk'cekf . "uwr j wle'cekf . "ceqttqf g00ve0"
 Cm'hgpi vj "ctg'cxckrdng0"
 Uckpgruu'uvgnv{ r g526. "538"



| Type | Specification (mm) | Max bundied (mm) | Thickness (mm) | Packing (pcs/bag) |
|----------|--------------------|------------------|----------------|-------------------|
| CT-SS-BL | 4.6*100 | 23 | 0.25 | 100 |
| CT-SS-BL | 4.6*150 | 38 | 0.25 | 100 |
| CT-SS-BL | 4.6*200 | 52 | 0.25 | 100 |
| CT-SS-BL | 4.6*250 | 63 | 0.25 | 100 |
| CT-SS-BL | 4.6*300 | 82 | 0.25 | 100 |
| CT-SS-BL | 4.6*350 | 95 | 0.25 | 100 |
| CT-SS-BL | 4.6*400 | 116 | 0.25 | 100 |
| CT-SS-BL | 4.6*500 | 125 | 0.25 | 100 |
| CT-SS-BL | 4.6*600 | 154 | 0.25 | 100 |
| CT-SS-BL | 8*150 | 38 | 0.25 | 100 |
| CT-SS-BL | 8*200 | 52 | 0.25 | 100 |
| CT-SS-BL | 8*250 | 63 | 0.25 | 100 |
| CT-SS-BL | 8*300 | 82 | 0.25 | 100 |
| CT-SS-BL | 8*350 | 95 | 0.25 | 100 |
| CT-SS-BL | 8*400 | 114 | 0.25 | 100 |
| CT-SS-BL | 8*500 | 125 | 0.25 | 100 |
| CT-SS-BL | 8*600 | 154 | 0.25 | 100 |
| CT-SS-BL | 12*250 | 64 | 0.3 | 100 |
| CT-SS-BL | 12*300 | 82 | 0.3 | 100 |
| CT-SS-BL | 12*400 | 110 | 0.3 | 100 |
| CT-SS-BL | 12*500 | 140 | 0.3 | 100 |
| CT-SS-BL | 12*600 | 154 | 0.3 | 100 |

* Note: other size are available on request.

Stainless Steel Epoxy Coated Cable Tie--Ball Lock

Characteristic:

They have an unique ball locking with plastic jetting mechanism that allow easily and quickly installed and not undone.

High tensile strength; Non-flammability.

Working temperature: -40°C~85°C.

High resistance to acetic acid, alkali acid, sulphuric acid, acorrode ...etc.

All lenght are available,

Stainless steel 304/316



| Type | Specification (mm) | Max bundied (mm) | Thickness (mm) | Packing (pcs/bag) |
|-------------|--------------------|------------------|----------------|-------------------|
| CT-SS-BL-CT | 4.6*100 | 23 | 0.35 | 100 |
| CT-SS-BL-CT | 4.6*150 | 38 | 0.35 | 100 |
| CT-SS-BL-CT | 4.6*200 | 52 | 0.35 | 100 |
| CT-SS-BL-CT | 4.6*250 | 63 | 0.35 | 100 |
| CT-SS-BL-CT | 4.6*300 | 82 | 0.35 | 100 |
| CT-SS-BL-CT | 4.6*350 | 95 | 0.35 | 100 |
| CT-SS-BL-CT | 4.6*400 | 116 | 0.35 | 100 |
| CT-SS-BL-CT | 4.6*500 | 125 | 0.35 | 100 |
| CT-SS-BL-CT | 4.6*600 | 154 | 0.35 | 100 |
| CT-SS-BL-CT | 8*150 | 38 | 0.35 | 100 |
| CT-SS-BL-CT | 8*200 | 52 | 0.35 | 100 |
| CT-SS-BL-CT | 8*250 | 63 | 0.35 | 100 |
| CT-SS-BL-CT | 8*300 | 82 | 0.35 | 100 |
| CT-SS-BL-CT | 8*350 | 95 | 0.35 | 100 |
| CT-SS-BL-CT | 8*400 | 114 | 0.35 | 100 |
| CT-SS-BL-CT | 8*500 | 125 | 0.35 | 100 |
| CT-SS-BL-CT | 8*600 | 154 | 0.35 | 100 |
| CT-SS-BL-CT | 12*250 | 64 | 0.35 | 100 |
| CT-SS-BL-CT | 12*300 | 82 | 0.35 | 100 |
| CT-SS-BL-CT | 12*400 | 110 | 0.35 | 100 |
| CT-SS-BL-CT | 12*500 | 140 | 0.35 | 100 |
| CT-SS-BL-CT | 12*600 | 154 | 0.35 | 100 |

* Note: other size are available on request.

Accessory

Stainless Steel Cable Tie -- LType



Stainless Steel Cable Tie

Material: Stainless steel 304,316.

All length and color are available;

Characteristic: easily and quickly installed and not undone, High tensile strength;

Non-flammability High resistance to acetic acid, alkali acid, sulphuric, corrode...etc.

Operating temperature: -40°C~85°C



Stainless Steel Epoxy Coated Cable Tie

| Type | | Specification (W X L) mm | Max bundied (mm) | Packing (pcs/bag) |
|-----------------|-----------------------------|-----------------------------|------------------|-------------------|
| Stainless Steel | Stainless Steel With Coated | | | |
| CT-SS-L | CT-SS-L-CT | 8x150 | 31 | 100 |
| CT-SS-L | CT-SS-L-CT | 8x200 | 47 | 100 |
| CT-SS-L | CT-SS-L-CT | 8x250 | 64 | 100 |
| CT-SS-L | CT-SS-L-CT | 8x300 | 79 | 100 |
| CT-SS-L | CT-SS-L-CT | 8x400 | 110 | 100 |
| CT-SS-L | CT-SS-L-CT | 8x500 | 140 | 100 |
| CT-SS-L | CT-SS-L-CT | 12x150 | 31 | 100 |
| CT-SS-L | CT-SS-L-CT | 12x200 | 47 | 100 |
| CT-SS-L | CT-SS-L-CT | 12x250 | 64 | 100 |
| CT-SS-L | CT-SS-L-CT | 12x300 | 79 | 100 |
| CT-SS-L | CT-SS-L-CT | 12x350 | 95 | 100 |
| CT-SS-L | CT-SS-L-CT | 12x400 | 110 | 100 |
| CT-SS-L | CT-SS-L-CT | 12x450 | 125 | 100 |
| CT-SS-L | CT-SS-L-CT | 12x500 | 140 | 100 |
| CT-SS-L | CT-SS-L-CT | 16x300 | 78 | 100 |
| CT-SS-L | CT-SS-L-CT | 16x400 | 110 | 100 |
| CT-SS-L | CT-SS-L-CT | 16x500 | 140 | 100 |
| CT-SS-L | CT-SS-L-CT | 16x600 | 175 | 100 |
| CT-SS-L | CT-SS-L-CT | 16x800 | 235 | 100 |
| CT-SS-L | CT-SS-L-CT | 16x1000 | 300 | 100 |

*Please contact us for more other size

Accessory

Stainless Steel Banding (Naked / PVC Covered / Epoxy Coated)—(CT-SSB)

Material: Stainless steel 304, 316; Naked, PVC Covered, Epoxy Coated;

All length and color are available, special product can made according to customers's sample.

Features: high acid resistance, corrosion resistance and tensile strength; non-flammable; easy and convenient use.

Operating temperature: -40°C~85°C

Part No.: CT-SSB

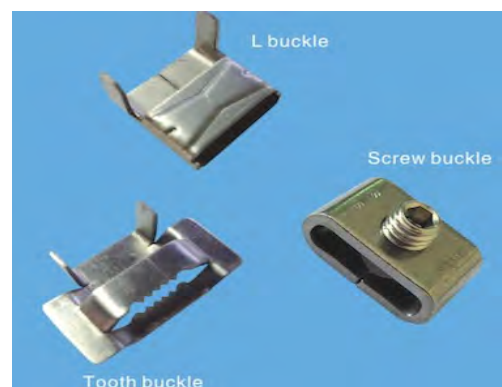


| Size | Length/Roll | Breaking Tensile Strength | | Width | Thickness | Weight Per Tote |
|------|-------------|---------------------------|------|-------|-----------|-----------------|
| | | lbs | mm | mm | mm | kgs |
| 1/4" | 100ft | 475 | 6.4 | 0.51 | 0.77 | |
| 3/8" | 100ft | 1040 | 9.6 | 0.63 | 1.45 | |
| 1/2" | 100ft | 1710 | 12.7 | 0.76 | 2.31 | |
| 5/8" | 100ft | 1940 | 15.9 | 0.76 | 2.9 | |
| 3/4" | 100ft | 2290 | 19.1 | 0.76 | 3.5 | |

Tooth Buckle, L Buckle, Screw Buckle (CT-SS-BK)

Stainless steel buckles are manufactured from high quality 201, 304, 316, stainless steel, to match the stainless steel strip. Buckles are generally used for heavy duty banding or strapping.

The core feature of the stainless steel buckle is it's strength. This feature is due to the single stainless steel pressing design which allows for construction without joins or seams. The buckles are available in matching 1/4", 3/8", 1/2", 5/8", and 3/4" widths and with the exception for the 5/8" buckles, accommodates the double-wrap application to solve heavier duty clamping requirements.



| Size | Std. Box | Match Banding Size | | Thickness | Weight Per Box |
|------|----------|--------------------|------|-----------|----------------|
| | | inch | mm | mm | kgs |
| 1/4" | 100 | 1/4" | 6.4 | 1 | 0.14 |
| 3/8" | 100 | 3/8" | 9.6 | 1 | 0.37 |
| 1/2" | 100 | 1/2" | 12.7 | 1 | 1.09 |
| 5/8" | 100 | 5/8" | 15.9 | 1.2 | 1.22 |
| 3/4" | 100 | 3/4" | 19.1 | 1.2 | 1.77 |

Stainless Steel Cable Tie or Banding Installation Tools



CT-SS-IT-1

Suitable for stainless steel cable ties of width 2.4mm to 9.0mm.

Feature: fast fastening wires and cables and automatically cut off the left part, simple to operate.

Material: Metal

Length: 205mm

Weight: 0.595kg



CT-SS-IT-2

Suitable for stainless steel cable ties of width 2.4mm to 9.0mm.

Feature: fast fastening wires and cables and automatically cut off the left part, simple to operate.

Material: Metal

Length: 205mm

Weight: 0.595kg



CT-SS-IT-3

Suitable for stainless steel cable ties of width 8mm to 16mm.

Feature: easy cut off and remove the left ties, long life time.

Material: metal



CT-SS-IT-4

Suitable for stainless steel cable ties of width 10mm to 25mm.

Feature: easy cut off and remove the left ties, long life time.

Material: metal

Accessory

Attachment Hardware

Material: 304 stainless steel

Size: 3/8" or M6 or M8 or M10



| Part No. | Product | Description |
|--------------|--------------|---------------|
| AH-HB-38114 | Hex Bolt | 3/8" x 1-1/4" |
| AH-FW-38 | Flat Washer | 3/8" |
| AH-LW-38 | Lock Washer | 3/8" |
| AH-HN-38 | Hex Nut | 3/8" |
| AH-HS-38 | Hardware set | 3/8" |
| AH-SB-38134 | Square Bolt | 3/8" x 1-3/4" |
| AH-HB-M6114 | Hex Bolt | M6 x 1-1/4" |
| AH-FW-M6 | Flat Washer | M6 |
| AH-LW-M6 | Lock Washer | M6 |
| AH-HN-M6 | Hex Nut | M6 |
| AH-HS-M6 | Hardware set | M6 |
| AH-HB-M8114 | Hex Bolt | M8 x 1-1/4" |
| AH-FW-M8 | Flat Washer | M8 |
| AH-LW-M8 | Lock Washer | M8 |
| AH-HN-M8 | Hex Nut | M8 |
| AH-HS-M8 | Hardware set | M8 |
| AH-SB-M8134 | Square Bolt | M8 x 1-3/4" |
| AH-HB-M10114 | Hex Bolt | M10 x 1-1/4" |
| AH-FW-M10 | Flat Washer | M10 |
| AH-LW-M10 | Lock Washer | M10 |
| AH-HN-M10 | Hex Nut | M10 |
| AH-HS-M10 | Hardware set | M10 |
| AH-SB-M10134 | Square Bolt | M10 x 1-3/4" |

Accessory

Hanger Hardware Kit

Application: Coaxial cable support

Size: 3/8" or M8 or M10

Design: Hardware kit for hanger attachment to member

Material: Stainless steel

Includes: Bolts, nuts, lock washers, kit of 10



| Part No. | Description |
|-------------|---|
| HHK-3834 | Hanger hardware kit, 3/8" x 3/4", slotted hex head bolts, lock washers and hex nuts. |
| HHK-381 | Hanger hardware kit, 3/8" x 1", slotted hex head bolts, lock washers and hex nuts. |
| HHK-M819 | Hanger hardware kit, M8 x 19mm, slotted hex head bolts, lock washers and hex nuts. |
| HHK-M825.4 | Hanger hardware kit, M8 x 25.4mm, slotted hex head bolts, lock washers and hex nuts. |
| HHK-M1019 | Hanger hardware kit, M10 x 19mm, slotted hex head bolts, lock washers and hex nuts. |
| HHK-M1025.4 | Hanger hardware kit, M10 x 25.4mm, slotted hex head bolts, lock washers and hex nuts. |

Mounting Hardware Kits for Coax Support Blocks

Application: Coaxial cable support

Size: 3/8" or M8 or M10

Design: 1, 2, and 3-stack threaded rod kits

Feature: Stacks coaxial cable blocks

Material: Galvanized steel

Includes: Threaded rod and hardware, kit of 10



| Part No. | Description |
|----------|---|
| SBHK-38 | 3/8" Hardware Kits, include 1 threaded rod (length can be customized) and 2 nuts, 2 flat washer, 2 lock washer. |
| SBHK-M8 | M8 Hardware Kits, include 1 threaded rod (length can be customized) and 2 nuts, 2 flat washer, 2 lock washer. |
| SBHK-M10 | M10 Hardware Kits, include 1 threaded rod (length can be customized) and 2 nuts, 2 flat washer, 2 lock washer. |

Accessory

Single Wall Heat Shrink Tube

Single wall heat shrinkable tubing is used in the electronics, automotive, military&aerospace sectors in a variety of applications including:

- Mechanical Protection
- Abrasion Protection
- Moisture Protection
- Cable Insulation
- Strain Relief
- Marking & Bundling of electronic components

Features

- Flexible, Flame retardant
- Shrink Ratio: 2:1 or 3:1 for selectable
- Low smoke generation if burning
- Continuous operating temperature:-55°C to 125 °C
- Start shrink temperature:≥84°C
- Finish shrink temperature:≥120°C



Single Wall Heat Shrink Tube (Shrink Ratio: 2:1)----HST-SW-2X-H

Physical

| Property | Test Method | Typical Performance |
|-----------------------------------|-----------------------|------------------------------|
| Tensile Strength | ASTM D2671 | ≥10.4Mpa |
| Tensile Strength after Heat aging | UL 224 158°C X168hrs | ≥7.3Mpa |
| Elongation after Heat aging | UL 224 158°C X 168hrs | ≥100% |
| Heat shock | UL 224 250°C X 4HRS | NO dripping NO cracking |

Electrical

| Property | Test Method | Typical Performance |
|---------------------|-------------|----------------------------|
| Dielectric Strength | IEC 243 | ≥15kv/mm |
| Volume Resistivity | IEC 93 | ≥1 x 10 ¹⁴ Ω.cm |

Chemical

| Property | Test Method | Typical Performance |
|----------------------|-----------------------|---------------------|
| Corrosion Action | UL 224 158°C X 168hrs | PASS |
| Copper Compatibility | UL 224 158°C X 168hrs | PASS |

Accessory

Dimension:

| SIZE | AS SUPPLIED | AFTER RECOVERY | | STANDARD PACKAGE |
|------|------------------------|-------------------------------|----------------------------|----------------------|
| | | INTERNAL DIAMETER MAX(mm) | WALL THICKNESS NOM (mm) | |
| mm | INTERNAL DIAMETER (mm) | | | SPOOL LENGTH M/spool |
| Φ0.8 | 1.1±0.2 | ≤0.5 | 0.33±0.1 | 200 |
| Φ1.0 | 1.5±0.2 | ≤0.65 | 0.36±0.1 | 200 |
| Φ1.5 | 2.0±0.2 | ≤0.85 | 0.36±0.1 | 200 |
| Φ2.0 | 2.5±0.2 | ≤1 | 0.45±0.1 | 200 |
| Φ2.5 | 3.0±0.2 | ≤1.3 | 0.45±0.1 | 200 |
| Φ3.0 | 3.5±0.2 | ≤1.5 | 0.45±0.1 | 200 |
| Φ3.5 | 4.0±0.2 | ≤1.8 | 0.45±0.1 | 200 |
| Φ4.0 | 4.5±0.2 | ≤2 | 0.45±0.1 | 200 |
| Φ4.5 | 5.0±0.2 | ≤2.3 | 0.45±0.1 | 200 |
| Φ5.0 | 5.5±0.2 | ≤2.5 | 0.56±0.1 | 100 |
| Φ5.5 | 6.0±0.2 | ≤2.75 | 0.56±0.1 | 100 |
| Φ6.0 | 6.5±0.2 | ≤3 | 0.56±0.1 | 100 |
| Φ7.0 | 7.5±0.3 | ≤3.5 | 0.56±0.1 | 100 |
| Φ8.0 | 8.5±0.3 | ≤4 | 0.56±0.1 | 100 |
| Φ9.0 | 9.5±0.3 | ≤4.5 | 0.56±0.1 | 100 |
| Φ10 | 10.5±0.3 | ≤5 | 0.56±0.1 | 100 |
| Φ11 | 11.5±0.3 | ≤5.5 | 0.56±0.1 | 100 |
| Φ12 | 12.5±0.3 | ≤6 | 0.56±0.1 | 100 |
| Φ13 | 13.5±0.3 | ≤6.5 | 0.7±0.1 | 100 |
| Φ14 | 14.5±0.3 | ≤7 | 0.7±0.1 | 100 |
| Φ15 | 15.5±0.4 | ≤7.5 | 0.7±0.1 | 100 |
| Φ16 | 16.5±0.4 | ≤8 | 0.7±0.1 | 100 |
| Φ17 | 17.5±0.4 | ≤8.5 | 0.7±0.1 | 100 |
| Φ18 | 19.0±0.5 | ≤9 | 0.7±0.1 | 100 |
| Φ20 | 22.0±0.5 | ≤10 | 0.8±0.15 | 100 |
| Φ22 | 24.0±0.5 | ≤11 | 0.8±0.15 | 100 |
| Φ25 | 26.0±0.5 | ≤12.5 | 0.9±0.15 | 50 |
| Φ28 | 29.0±0.5 | ≤14 | 0.9±0.15 | 50 |
| Φ30 | 31.5±1.0 | ≤15 | 1.0±0.15 | 50 |
| Φ35 | 36.5±1.0 | ≤17.5 | 1.0±0.15 | 50 |
| Φ40 | 41.5±1.0 | ≤20 | 1.0±0.15 | 50 |
| Φ50 | ≥50 | ≤25 | 1.1±0.15 | 25 |
| Φ60 | ≥60 | ≤30 | 1.2±0.15 | 25 |
| Φ70 | ≥70 | ≤35 | 1.3±0.15 | 25 |
| Φ80 | ≥80 | ≤40 | 1.3±0.20 | 25 |
| Φ90 | ≥90 | ≤45 | 1.3±0.20 | 25 |

Accessory

| SIZE | AS SUPPLIED | AFTER RECOVERY | | STANDARD PACKAGE |
|------|------------------------|-------------------------------|----------------------------|----------------------|
| | | INTERNAL DIAMETER MAX(mm) | WALL THICKNESS NOM (mm) | |
| mm | INTERNAL DIAMETER (mm) | | | SPOOL LENGTH M/spool |
| Φ100 | ≥100 | ≤50 | 1.3±0.20 | 25 |
| Φ120 | ≥120 | ≤60 | 1.3±0.20 | 25 |
| Φ150 | ≥150 | ≤75 | 1.3±0.20 | 25 |
| Φ180 | ≥180 | ≤90 | 1.3±0.20 | 25 |
| Φ210 | ≥210 | ≤105 | 1.3±0.30 | 25 |
| Φ230 | ≥230 | ≤115 | 1.3±0.30 | 25 |
| Φ250 | ≥250 | ≤125 | 1.3±0.30 | 25 |
| Φ300 | ≥300 | ≤150 | 1.3±0.30 | 25 |

Single Wall Heat Shrink Tube (Shrink Ratio: 3:1)----HST-SW-3X-H

Dimension:

| SIZE | AS SUPPLIED | AFTER RECOVERY | | STANDARD PACKAGE |
|-------|---------------------------|-------------------------------|----------------------------|-------------------------|
| | | INTERNAL DIAMETER MAX (mm) | WALL THICKNESS NOM (mm) | |
| mm | INTERNAL DIAMETER (mm) | | | SPOOL LENGTH M/spool |
| 1.5 | 1.5 | 0.50 | 0.45 | 200 |
| 3.0 | 3.0 | 1.00 | 0.55 | 200 |
| 4.5 | 4.5 | 1.00 | 0.6 | 100 |
| 6.0 | 6.0 | 2.00 | 0.65 | 100 |
| 9.0 | 9.0 | 3.00 | 0.75 | 50 |
| 12.0 | 12.0 | 4.00 | 0.75 | 50 |
| 15.0 | 15.0 | 5.00 | 0.8 | 50 |
| 18.0 | 18.0 | 6.00 | 0.85 | 50 |
| 24.0 | 24.0 | 8.00 | 1 | 25 |
| 30.0 | 30.0 | 10.00 | 1.15 | 1.22 |
| 39.0 | 39.0 | 13.00 | 1.5 | 1.22 |
| 50.0 | 50.0 | 16.00 | 2.5 | 1 |
| 60.0 | 60.0 | 20.00 | 2.6 | 1 |
| 70.0 | 70.0 | 23.00 | 2.6 | 1 |
| 80.0 | 80.0 | 26.00 | 2.6 | 1 |
| 90.0 | 90.0 | 30.00 | 2.6 | 1 |
| 100.0 | 100.0 | 33.00 | 2.6 | 1 |

Dual Wall (Adhesive-Lined) Heat Shrink Tube

Adhesive lined heat shrink tubing with environmental sealing capability for a wide variety of electrical applications, including automotive and marine, wire harness, wire splices, breakouts, and connector-to-cable transitions.

Dual Wall Heat Shrink Tube (Shrink Ratio: 2:1)----HST-DW-2X -H

Features:

- 2:1 shrink ratio
- Longitudinal shrink ratio: $\leq 8\%$
- Out jacket flame retardant
- Super sealing against water, moisture or other contaminants
- Continuous operating temperature: -45°C to 125°C



Technical Data

| Property | Test Method | Standard |
|------------------------------|-----------------------|-------------------------|
| Tensile Strength(Mpa) | ASTM D2671 | ≥ 10.4 |
| Elongation | ASTM D2671 | ≥ 300 |
| Tensile Strength after aging | UL 224 158°C X 168hrs | ≥ 7.3 |
| Elongation after aging(%) | UL 224 158°C X 168hrs | ≥ 200 |
| Dielectric Strength | IEC243 | ≥ 15 |
| Volume Resistivity | ASTM D876 | $\geq 1 \times 10^{14}$ |

Hot Melt Adhesive

Property

| Property | Test Method | Standard |
|-------------------------|-------------|----------------------|
| Water Absorption | ASTM D570 | $\leq 0.2\%$ |
| Softening Point | ASTM E8 | 95°C |
| Strength of peering(PE) | ASTM D1000 | 120N/25MM |
| Strength of peering(AL) | ASTM D1000 | 80N/25MM |

Accessory

Dimensions:

| SIZE (mm) | AS SUPPLIED | AFTER RECOVERY | | | STANDARD PACKAGE |
|--------------|---------------------------|---------------------------|------------------------------|----------------------------|------------------------|
| | INTERNAL DIAMETER (mm) | INTERNAL DIAMETER (mm) | TOTAL WALL THICKNESS (mm) | ADHESIVE THICKNESS (mm) | SPOOL LENGTH (M/spool) |
| 1.6 | 1.6 | 0.8 | 0.60±0.15 | 0.30±0.1 | 200 |
| 2.4 | 2.4 | 1.2 | 0.70±0.15 | 0.35±0.1 | 200 |
| 3.2 | 3.2 | 1.6 | 0.70±0.15 | 0.35±0.1 | 200 |
| 4.8 | 4.8 | 2.4 | 0.80±0.15 | 0.40±0.1 | 100 |
| 6.4 | 6.4 | 3.2 | 0.80±0.15 | 0.40±0.1 | 100 |
| 7.9 | 7.9 | 3.9 | 0.90±0.15 | 0.45±0.1 | 100 |
| 9.5 | 9.5 | 4.8 | 0.90±0.15 | 0.45±0.1 | 1.22 |
| 12.7 | 12.7 | 6.4 | 0.95±0.20 | 0.45±0.1 | 1.22 |
| 15.9 | 15.9 | 7.9 | 0.95±0.20 | 0.45±0.1 | 1.22 |
| 19.1 | 19.1 | 9.5 | 1.0±0.20 | 0.45±0.1 | 1.22 |
| 25.4 | 25.4 | 12.7 | 1.1±0.20 | 0.50±0.1 | 1.22 |
| 31.8 | 31.8 | 15 | 1.15±0.20 | 0.50±0.1 | 1.22 |
| 38.1 | 38.1 | 19 | 1.25±0.20 | 0.50±0.1 | 1.22 |
| 44.5 | 44.5 | 22 | 1.35±0.20 | 0.55±0.1 | 1.22 |
| 50.8 | 50.8 | 25.4 | 1.5±0.25 | 0.60±0.1 | 1.22 |

Dual Wall Heat Shrink Tube (Shrink Ratio: 3:1)---HST-DW-3X -H

Features:

- 3:1 shrink ratio
- Longitudinal shrink ratio: ≤8%
- Outer jacket flame retardant
- Super sealing against water, moisture or other contaminants
- Continuous operating temperature: -45°C to 125 °C
- Shrink temperature: 120°C



Technical Data

| Property | Test Method | Standard |
|-----------------------------------|-----------------------|---------------------|
| Tensile Strength(Mpa) | ASTM D2671 | ≥10.4 |
| Elongation | ASTM D2671 | ≥300 |
| Tensile Strength after aging(Mpa) | UL 224 158°C X 168hrs | ≥7.3 |
| Elongation after aging(%) | UL 224 158°C X 168hrs | ≥200 |
| Dielectric Strength(kv/mm) | IEC243 | ≥15 |
| Volume Resistivity(Ω.cm) | ASTM D876 | ≥1x10 ¹⁴ |

Accessory

Hot Melt Adhesive Property

| Property | Test Method | Standard |
|-------------------------|-------------|-----------|
| Water Absorption | ASTM D570 | ≤0.2% |
| Softening Point | ASTM E8 | 95°C |
| Strength of pearing(PE) | ASTM D1000 | 120N/25MM |
| Strength of pearing(AL) | ASTM D1000 | 80N/25MM |

Dimensions:

| SIZE | AS SUPPLIED | AFTER RECOVERY | | | STANDARD PACKAGE |
|------|---------------------------|-------------------------|------------------------------|----------------------------|------------------------|
| (mm) | INTERNAL DIAMETER (mm) | INTERNAL DIAMETER mm | TOTAL WALL THICKNESS (mm) | ADHESIVE THICKNESS (mm) | SPOOL LENGTH (M/spool) |
| 3.2 | 3.2 | 1.00 | 0.90±0.15 | 0.35±0.1 | 200 |
| 4.8 | 4.8 | 1.60 | 1.00±0.15 | 0.40±0.1 | 100 |
| 6.4 | 6.4 | 2.20 | 1.25±0.15 | 0.45±0.12 | 100 |
| 7.9 | 7.9 | 2.70 | 1.30±0.15 | 0.50±0.12 | 100 |
| 9.5 | 9.5 | 3.20 | 1.40±0.15 | 0.50±0.12 | 50 |
| 12.7 | 12.7 | 4.20 | 1.70±0.15 | 0.50±0.12 | 36.6 |
| 15 | 15 | 5.20 | 1.80±0.15 | 0.55±0.15 | 30.5 |
| 19.1 | 19.1 | 6.30 | 1.95±0.15 | 0.55±0.15 | 30.5 |
| 25.4 | 25.4 | 8.50 | 2.05±0.20 | 0.55±0.15 | 30.5 |
| 30 | 30 | 10.20 | 2.20±0.20 | 0.60±0.15 | 24.4 |
| 39 | 39 | 13.50 | 2.50±0.20 | 0.60±0.15 | 18.3 |
| 50 | 50 | 17.00 | 2.80±0.25 | 0.70±0.15 | 12.2 |
| 64 | 64 | 21.00 | 3.00±0.25 | 0.70±0.15 | 6.1 |
| 76 | 76 | 25.00 | 3.00±0.30 | 1.00±0.20 | 1.22 |
| 90 | 90 | 30.00 | 3.00±0.30 | 1.00±0.20 | 1.22 |
| 100 | 100 | 34.00 | 3.00±0.30 | 1.00±0.20 | 1.22 |
| 125 | 125 | 42.00 | 3.00±0.30 | 1.00±0.20 | 1.22 |

Dual Wall Heat Shrink Tube (Shrink Ratio: 4:1)---HST-DW-4X -H

Features:

- 4:1 shrink ratio
- Longitudinal shrink ratio: ≤8%
- Outer jacket flame retardant
- Super sealing against water, moisture or other contaminants
- Continuous operating temperature:-45°C to 125 °C
- Shrink temperature:120°C



Accessory

Technical Data

| Property | Test Method | Standard |
|-----------------------------------|-----------------------|---------------------|
| Tensile Strength(Mpa) | ASTM D2671 | ≥10.4 |
| Elongation | ASTM D2671 | ≥300 |
| Tensile Strength after aging(Mpa) | UL 224 158°C X 168hrs | ≥7.3 |
| Elongation after aging(%) | UL 224 158°C X 168hrs | ≥200 |
| Dielectric Strength(kv/mm) | IEC243 | ≥15 |
| Volume Resistivity(Ω.cm) | ASTM D876 | ≥1x10 ¹⁴ |

Hot Melt Adhesive

Property

| Property | Test Method | Standard |
|-------------------------|-------------|-----------|
| Water Absorption | ASTM D570 | ≤0.2% |
| Softening Point | ASTM E8 | 95°C |
| Strength of pearing(PE) | ASTM D1000 | 120N/25MM |
| Strength of pearing(AL) | ASTM D1000 | 80N/25MM |

Dimensions:

| SIZE (mm) | AS SUPPLIED (mm) | AFTER RECOVERY | | | STANDARD PACKAGE |
|--------------|---------------------|---------------------------|------------------------------|----------------------------|---------------------------|
| | | INTERNAL DIAMETER (mm) | TOTAL WALL THICKNESS (mm) | ADHESIVE THICKNESS (mm) | SPOOL LENGTH (M/spool) |
| 4.0 | 4.0 | 1.00 | 1.1±0.15 | 0.4±0.15 | 200 |
| 6.0 | 6.0 | 1.50 | 1.5±0.15 | 0.5±0.15 | 100 |
| 8.0 | 8.0 | 2.00 | 1.7±0.15 | 0.5±0.15 | 50 |
| 12.0 | 12.0 | 3.00 | 2.0±0.15 | 0.6±0.15 | 1.22m/pc |
| 16.0 | 16.0 | 4.00 | 2.3±0.25 | 0.6±0.15 | 1.22m/pc |
| 20.0 | 20.0 | 5.00 | 2.6±0.25 | 0.6±0.15 | 1.22m/pc |
| 24.0 | 24.0 | 6.00 | 3.0±0.3 | 0.7±0.15 | 1.22m/pc |
| 32.0 | 32.0 | 8.00 | 3.0±0.3 | 0.7±0.15 | 1.22m/pc |
| 52.0 | 52.0 | 13.00 | 3.3±0.3 | 0.7±0.15 | 1.22m/pc |

Non-slip Textured heat shrink tube (HST-NST)

Specifications & applications:

- Unique surface designed by environmental friendly PE material for durable abrasion.
- Economical and install friendly, it's well suited for the DIY market.
- Applications such as: Tennis rackets, badminton rackets, fishing rods, baseball bats, billiard cue, hockey sticks, industrial hand tools, athletic equipment and various handles.
- Increased friction and safety on smooth surfaces minimizes slipping.
- Standard colors : black 、 red、 yellow、 green and blue



Technical features:

- Minimum shrinkage temperature: $\geq 60^{\circ}\text{C}$
- Full recovery temperature: $\geq 100^{\circ}\text{C}$
- Operating temperature: -55°C to 110°C
- Shrinkage ratio: 2:1
- Tensile strength: $\geq 10.4\text{MPa}$



Standard sizes and lengths:

| Size mm | Dimension Before shrink mm | | Dimension After shrink mm | | Length M/pc |
|------------|-------------------------------|-----------------|------------------------------|-----------------|-------------|
| | Internal Diameter | Thickness | Internal Diameter | Thickness | |
| $\phi 15$ | ≥ 15 | 0.45 ± 0.15 | ≤ 8.0 | 0.85 ± 0.20 | 1 |
| $\phi 20$ | ≥ 20 | 0.50 ± 0.15 | ≤ 11.0 | 0.90 ± 0.20 | 1 |
| $\phi 22$ | ≥ 22 | 0.50 ± 0.15 | ≤ 12.5 | 0.90 ± 0.20 | 1 |
| $\phi 25$ | ≥ 25 | 0.50 ± 0.15 | ≤ 14.5 | 1.00 ± 0.20 | 1 |
| $\phi 28$ | ≥ 28 | 0.50 ± 0.15 | ≤ 15.5 | 1.00 ± 0.20 | 1 |
| $\phi 30$ | ≥ 30 | 0.60 ± 0.15 | ≤ 17.5 | 1.20 ± 0.20 | 1 |
| $\phi 35$ | ≥ 35 | 0.60 ± 0.15 | ≤ 20.0 | 1.20 ± 0.20 | 1 |
| $\phi 40$ | ≥ 40 | 0.60 ± 0.15 | ≤ 23.0 | 1.20 ± 0.20 | 1 |
| $\phi 45$ | ≥ 45 | 0.65 ± 0.15 | 25 | 1.25 ± 0.20 | 1 |
| $\phi 50$ | ≥ 50 | 0.65 ± 0.15 | ≤ 28.0 | 1.25 ± 0.20 | 1 |