

# RA-F12A-WS

Feeder 1/2" RF Cable



## Product overview

1/2" Super Flexible Feeder Cable is a type of RF coaxial cable which is used to transfer RF signals from one point to another which allows for precise bending and handling when needed in tight spaces. Typically, 1/2 super flexible cables are used as jumper cables to connect to an antenna of transmission equipment.

## Construction

|                 |                |                                |
|-----------------|----------------|--------------------------------|
| Inner Conductor | Material       | CCA                            |
|                 | Diameter       | 3.60 mm ± 0.05 mm              |
| Insulation      | Material       | FPE                            |
|                 | Diameter       | 9.20 mm ± 0.15 mm              |
| Outer Conductor | Material       | Helical Corrugated Copper Tube |
|                 | Braid Coverage | 12.20 mm ± 0.15 mm             |
| Jacket          | Material       | LLDPE or Fire- Retardant PE    |
|                 | Diameter       | 13.60 mm ± 0.20 mm             |

## Mechanical Characteristics

|                         |               |              |
|-------------------------|---------------|--------------|
| Bending Radius          | Single Bend   | 17 mm        |
|                         | Repeated Bend | 55 mm        |
| Tensile Strength        |               | 750 N        |
| Cable Weight            |               | 150 KG/KM    |
| Recommended temperature | Storage       | -70 to +85°C |
|                         | Installation  | -40 to +60°C |
|                         | Operating     | -55 to +85°C |

## Test Data

|                               |                                 |
|-------------------------------|---------------------------------|
| Inner Conductor DC Resistance | 2.89 Ω/KM                       |
| Outer Conductor DC Resistance | 5.68 Ω/KM                       |
| Characteristic Impedance      | 50 Ω ± 1.5 Ω                    |
| Capacitance                   | 82 p F/m                        |
| Velocity                      | 84 %                            |
| Dielectric Strength           | 3.0 KV                          |
| Insulation Resistance         | > 1 x 10 <sup>4</sup> Ω/KM      |
| Peak Power Rating             | 16 KV                           |
| Peak Voltage                  | 1400 V                          |
| Cut-Off Frequency             | 13 GHZ                          |
| Low Temperature Bending       | Not cracked                     |
| Thermal Shock                 | Not cracked                     |
| Operating Temperature         | - 20°C to +60°C (-4°F to 140°F) |
| Storage Temperature           | - 10°C to +40°C (14°F to 104°F) |

## Technical Test [ @68°F(20°C) ]

| Frequency(MHZ) | Attenuation(dB/100m) | Average Power(KV) |
|----------------|----------------------|-------------------|
| 200            | 4.91                 | 2.00              |
| 450            | 7.59                 | 1.38              |
| 800            | 10.40                | 1.01              |
| 900            | 11.20                | 0.95              |
| 1000           | 11.80                | 0.89              |
| 1500           | 14.90                | 0.70              |
| 1800           | 16.60                | 0.63              |
| 2000           | 17.60                | 0.59              |
| 2200           | 18.27                | 0.56              |
| 2500           | 19.20                | 0.52              |
| 3000           | 22.40                | 0.46              |

Note:

For flame-retardant jack cables, the recommended temperature is:

Storage: - 30 C to+80 C, installation: - 25 C to+60 C, operating temperature: - 30 C to+80 C