7-16 DIN Male Positive Stop™ for 1/2 in AL4RPV-50, LDF4-50A, HL4RPV-50 cable

Product Classification

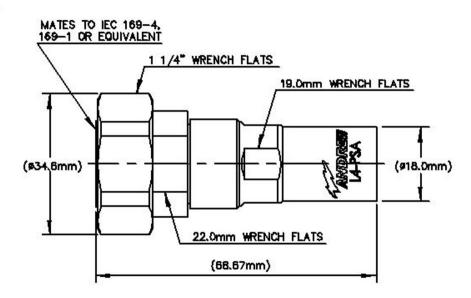
| Product Type | Wireless and radiating connector |
|---------------------------------|--|
| Product Brand | HELIAX® Positive Stop™ |
| Product Series | LDF4-50A |
| Ordering Note | CommScope® standard product (Global) |
| General Specifications | |
| Body Style | Straight |
| Cable Family | AL4-50 |
| Harmonized System (HS) Code | 854420 (Coaxial cable and other coaxial electric conductors) |
| Inner Contact Attachment Method | Captivated |
| Inner Contact Plating | Silver |
| Interface | 7-16 DIN Male |
| Mounting Angle | Straight |
| Outer Contact Attachment Method | Ring-flare |
| Outer Contact Plating | Trimetal |
| Dimensions | |
| Length | 68.58 mm 2.7 in |
| Diameter | 34.54 mm 1.36 in |
| Nominal Size | 1/2 in |

Outline Drawing

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Electrical Specifications

| 3rd Order IMD at Frequency | -120 dBm @ 910 MHz |
|--------------------------------------|----------------------|
| 3rd Order IMD Test Method | Two +43 dBm carriers |
| Insertion Loss Coefficient, typical | 0.05 |
| Average Power at Frequency | 1.1 kW @ 900 MHz |
| Cable Impedance | 50 ohm |
| Connector Impedance | 50 ohm |
| dc Test Voltage | 4000 V |
| Inner Contact Resistance, maximum | 0.8 m0hm |
| Insulation Resistance, minimum | 5000 MOhm |
| Operating Frequency Band | 0 – 8800 MHz |
| Outer Contact Resistance, maximum | 1.5 m0hm |
| Peak Power, maximum | 40 kW |
| RF Operating Voltage, maximum (vrms) | 1415 V |
| Shielding Effectiveness | -110 dB |

VSWR/Return Loss

| Frequency Band | VSWR | Return Loss (dB) |
|----------------|-------|------------------|
| 45–1000 MHz | 1.023 | 38.89 |

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| 1010-2200 MHz | 1.029 | 36.9 |
|---------------|-------|-------|
| 2200-3000 MHz | 1.046 | 32.96 |
| 3010-4000 MHz | 1.074 | 28.95 |
| 4010-6000 MHz | 1.106 | 25.96 |
| 6010-8000 MHz | 1.152 | 23.02 |

Mechanical Specifications

| Attachment Durability | 25 cycles |
|-------------------------------------|---|
| Connector Retention Tensile Force | 889.64 N 200 lbf |
| Connector Retention Torque | 5.42 N-m 47.998 in lb |
| Coupling Nut Proof Torque | 25 N-m 221.269 in lb |
| Coupling Nut Retention Force | 1000 N 224.81 lbf |
| Coupling Nut Retention Force Method | MIL-C-39012C-3.25, 4.6.22 |
| Insertion Force | 200.17 N 45 lbf |
| Insertion Force Method | IEC 61169-1:15.2.4 |
| Interface Durability | 500 cycles |
| Interface Durability Method | IEC 61169-4:9.5 |
| Mechanical Shock Test Method | MIL-STD-202, Method 213, Test Condition I |

Environmental Specifications

| Operating Temperature | -55 °C to +85 °C (-67 °F to +185 °F) |
|---------------------------------|---|
| Storage Temperature | -55 °C to +85 °C (-67 °F to +185 °F) |
| Corrosion Test Method | MIL-STD-1344A, Method 1001.1, Test Condition A |
| Immersion Depth | 1 m |
| Immersion Test Mating | Unmated |
| Immersion Test Method | IEC 60529:2001, IP68 |
| Moisture Resistance Test Method | MIL-STD-202F, Method 106F |
| Thermal Shock Test Method | MIL-STD-202F, Method 107G, Test Condition A-1, Low Temperature -55 $^\circ\mathrm{C}$ |
| Vibration Test Method | IEC 60068-2-6 |
| Water Jetting Test Mating | Unmated |
| Water Jetting Test Method | IEC 60529:2001, IP66 |
| | |

Packaging and Weights

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COMMSCOPE°

Weight, net

120.09 g | 0.265 lb

Regulatory Compliance/Certifications

Agency

Classification

CHINA-ROHS

ISO 9001:2015



Above maximum concentration value Designed, manufactured and/or distributed under this quality management system Compliant/Exempted

* Footnotes

Insertion Loss Coefficient, typical 0.05⁷ freq (GHz) (not applicable for elliptical waveguide)

Immersion Depth

Immersion at specified depth for 24 hours

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