



SMA Female Bulkhead Mount Connector Crimp/Solder Attachment for RG174, RG316, RG188, 0.100 inch, PE-B100, PE-C100, LMR-100, .235 inch D Hole

RF Connectors Technical Data Sheet

PE44643

Configuration

- SMA Female Connector
- 50 Ohms
- Straight Body Geometry
- RG174, RG316, RG188, 0.100 inch, PE-B100, PE-C100, LMR-100 Interface Type
- Crimp/Solder Attachment
- Bulkhead

Features

- Max. Operating Frequency 12.4 GHz
- Gold Plated Beryllium Copper Contact

Applications

- General Purpose Test
- Rack and Panel Mount Applications
- Custom Cable Assemblies

Description

Pasternack's PE44643 SMA female bulkhead connector with crimp/solder attachment for RG174, RG316, RG188, 0.100 inch, PE-B100, PE-C100 and LMR-100 (.235 inch D hole) is part of our full line of RF components available for same-day shipping. Our SMA female connector operates up to a maximum frequency of 12.4 GHz. This SMA bulkhead connector allows designers to create external connections on their product enclosures, and can be used in a variety of other rack mount and panel mount applications.

Our SMA female bulkhead connector PE44643 datasheet specifications and drawing with dimensions are shown below in this PDF. Pasternack's broad catalog of RF, microwave and millimeter wave connectors allows designers to configure and customize their signal connections however they like. Whether the need is to provide an I/O for a board design, or simply create a custom cable assembly configuration, Pasternack has the right connector for the job. Pasternack can also expertly build your custom cable assemblies for you and ship same-day.

Electrical Specifications

| Description | Minimum | Typical | Maximum | Units |
|-----------------|---------|---------|---------|-------|
| Frequency Range | DC | | 12.4 | GHz |

Mechanical Specifications

| | |
|-------------|---------------------|
| Size | |
| Length | 0.875 in [22.23 mm] |
| Width/Dia. | 0.433 in [11.00 mm] |
| Weight | 0.012 lbs [5.44 g] |

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMA Female Bulkhead Mount Connector Crimp/Solder Attachment for RG174, RG316, RG188, 0.100 inch, PE-B100, PE-C100, LMR-100, .235 inch D Hole PE44643](#)



SMA Female Bulkhead Mount Connector Crimp/Solder Attachment for RG174, RG316, RG188, 0.100 inch, PE-B100, PE-C100, LMR-100, .235 inch D Hole

RF Connectors Technical Data Sheet

PE44643

Material Specifications

| Description | Material | Plating |
|-----------------|------------------|---------|
| Contact | Beryllium Copper | Gold |
| Insulation | PTFE | |
| Outer Conductor | Brass | Gold |
| Body | Brass | Gold |

Environmental Specifications

Temperature

Operating Range -65 to +165 deg C

Compliance Certifications (see [product page](#) for current document)

Plotted and Other Data

Notes:

SMA Female Bulkhead Mount Connector Crimp/Solder Attachment for RG174, RG316, RG188, 0.100 inch, PE-B100, PE-C100, LMR-100, .235 inch D Hole from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% availability and are part of the broadest selection in the industry.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMA Female Bulkhead Mount Connector Crimp/Solder Attachment for RG174, RG316, RG188, 0.100 inch, PE-B100, PE-C100, LMR-100, .235 inch D Hole PE44643](#)

URL: <https://www.pasternack.com/sma-female-bulkhead-with-o-ring-crimp-attachment-for-rg174-rg188-rg316-pe44643-p.aspx>

The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. Pasternack reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Pasternack does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Pasternack does not assume any liability arising out of the use of any part or documentation.

PE44643 CAD Drawing

SMA Female Bulkhead Mount Connector Crimp/Solder Attachment for RG174, RG316, RG188, 0.100 inch, PE-B100, PE-C100, LMR-100, .235 inch D Hole



NOTES:
 1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL.
 2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME.
 3. DIMENSIONS ARE IN INCHES [mm].
 4. FITS MIL-C-17 AND EQUIVALENT CABLES.

DWG TITLE
PE44643

PE PASTERNAK
 THE ENGINEERS' RF SOURCE
 Pasternack Enterprises, Inc.
 P.O. Box 16759 | Irvine | CA | 92623
 Phone: (949) 261-1920 | Fax: (949) 261-7451
 Website: www.pasternack.com | E-Mail: sales@pasternack.com

| | | | | |
|----------------|-----------------|-----------|--------|------|
| FSCM NO. 53919 | CAD FILE 032916 | SCALE N/A | SIZE A | 2233 |
|----------------|-----------------|-----------|--------|------|



FAKRA Plug Connector Crimp/Solder Attachment for RG174, RG316, RG188, .100 inch, PE-B100, PE-C100, LMR-100, Water Blue Color

RF Connectors Technical Data Sheet

PE45404Z

Configuration

- FAKRA Plug Connector
- 50 Ohms
- Straight Body Geometry
- RG174, RG316, RG188, .100 inch, PE-B100, PE-C100, LMR-100 Interface Type
- Crimp/Solder Attachment

Features

- Max. Operating Frequency 4 GHz
- Good VSWR of 1.3:1
- Gold Plated Phosphor Bronze Contact

Applications

- General Purpose Test
- Custom Cable Assemblies

Description

Pasternack's PE45404Z FAKRA plug connector with crimp/solder attachment for RG174, RG316, RG188, .100 inch, PE-B100, PE-C100 and LMR-100 is part of our full line of RF components available for same-day shipping. Our FAKRA plug connector operates up to a maximum frequency of 4 GHz and offers good VSWR of 1.3:1.

Our FAKRA plug connector PE45404Z datasheet specifications and drawing with dimensions are shown below in this PDF. Pasternack's broad catalog of RF, microwave and millimeter wave connectors allows designers to configure and customize their signal connections however they like. Whether the need is to provide an I/O for a board design, or simply create a custom cable assembly configuration, Pasternack has the right connector for the job. Pasternack can also expertly build your custom cable assemblies for you and ship same-day.

Electrical Specifications

| Description | Minimum | Typical | Maximum | Units |
|--------------------------------------|---------|---------|---------|-------|
| Frequency Range | DC | | 4 | GHz |
| VSWR | | | 1.3:1 | |
| Operating Voltage (AC) | | | 335 | Vrms |
| Dielectric Withstanding Voltage (AC) | | | 800 | Vrms |
| Inner Conductor DC Resistance | | | 6 | mOhms |
| Outer Conductor DC Resistance | | | 2.5 | mOhms |
| Insulation Resistance | 1,000 | | | MOhms |

Mechanical Specifications

| Size | |
|------------|--------------------|
| Length | 0.035 in [0.89 mm] |
| Width/Dia. | 0.37 in [9.40 mm] |
| Height | 0.433 in [11 mm] |

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [FAKRA Plug Connector Crimp/Solder Attachment for RG174, RG316, RG188, .100 inch, PE-B100, PE-C100, LMR-100, Water Blue Color PE45404Z](#)



FAKRA Plug Connector Crimp/Solder Attachment
for RG174, RG316, RG188, .100 inch, PE-B100,
PE-C100, LMR-100, Water Blue Color

RF Connectors Technical Data Sheet

PE45404Z

Material Specifications

| Description | Material | Plating |
|-----------------|-----------------|---------|
| Contact | Phosphor Bronze | Gold |
| Insulation | PTFE | |
| Outer Conductor | Brass | Nickel |
| Body | Plastic | |

Environmental Specifications

Temperature

Operating Range

-40 to +85 deg C

Compliance Certifications (see [product page](#) for current document)

Plotted and Other Data

Notes:

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [FAKRA Plug Connector Crimp/Solder Attachment for RG174, RG316, RG188, .100 inch, PE-B100, PE-C100, LMR-100, Water Blue Color PE45404Z](#)



FAKRA Plug Connector Crimp/Solder Attachment
for RG174, RG316, RG188, .100 inch, PE-B100,
PE-C100, LMR-100, Water Blue Color

RF Connectors Technical Data Sheet

PE45404Z

Assembly Instruction



ASSEMBLY PROCEDURES

1. STRIP CABLE TO THE DIMENSIONS SHOWN, DO NOT NICK CENTER CONDUCTOR OR BRAID.
2. PUSH CENTER CONDUCTOR FULLY INTO CONTACT AND SOLDER, REMOVE ANY EXCESS SOLDER.
3. FLARE BRAID AND INSERT CONTACT INTO THE BODY UNTIL IT SEATS.
4. SLIDE FERRULE OVER BRAID AND CRIMP WITH CRIMP TOOL.

CRIMP SIZE REQUIRED

- CONTACT: SOLDER.
- FERRULE: .128 HEX CRIMP TOOL.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [FAKRA Plug Connector Crimp/Solder Attachment for RG174, RG316, RG188, .100 inch, PE-B100, PE-C100, LMR-100, Water Blue Color PE45404Z](#)



FAKRA Plug Connector Crimp/Solder Attachment
for RG174, RG316, RG188, .100 inch, PE-B100,
PE-C100, LMR-100, Water Blue Color

RF Connectors Technical Data Sheet

PE45404Z

FAKRA Plug Connector Crimp/Solder Attachment for RG174, RG316, RG188, .100 inch, PE-B100, PE-C100, LMR-100, Water Blue Color from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

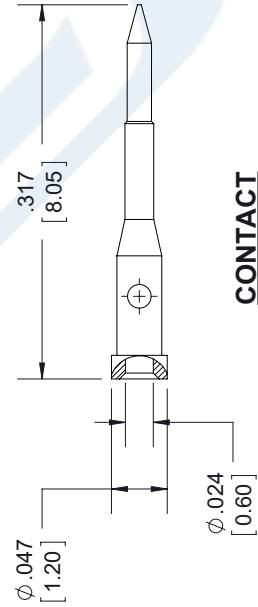
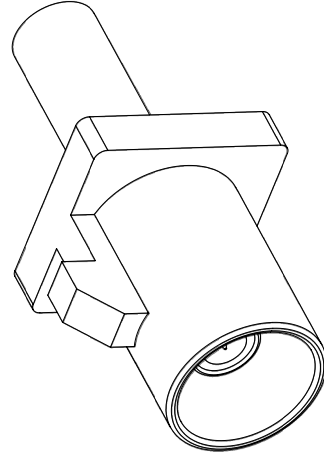
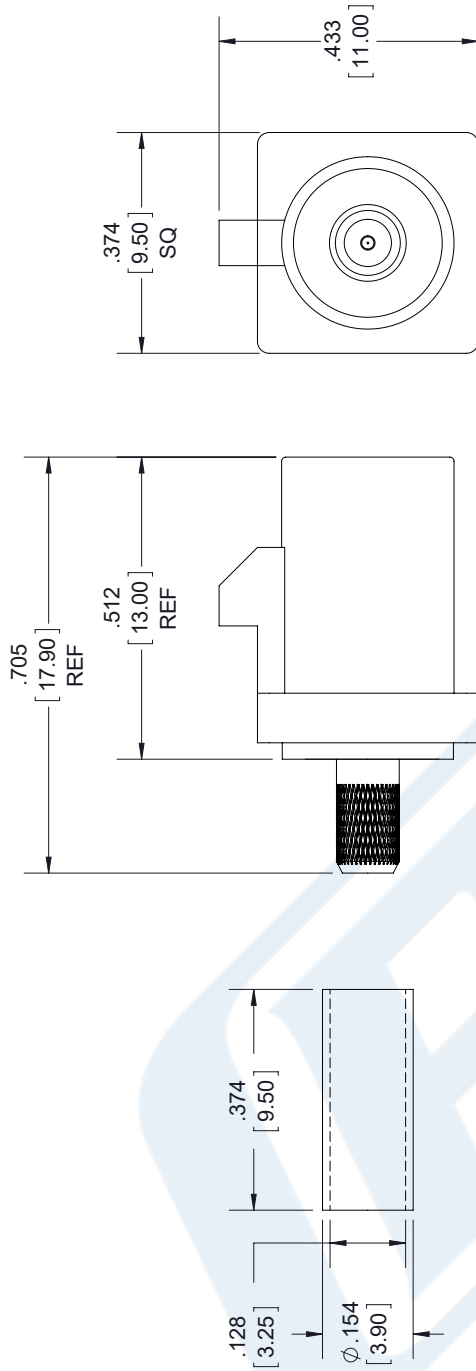
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [FAKRA Plug Connector Crimp/Solder Attachment for RG174, RG316, RG188, .100 inch, PE-B100, PE-C100, LMR-100, Water Blue Color PE45404Z](https://www.pasternack.com/fakra-plug-rg174-rg316-rg188-.100-inch-pe-b100-pe-c100-lmr-100-water-blue-color-pe45404z-p.aspx)

URL: <https://www.pasternack.com/fakra-plug-rg174-rg316-.100-pe-b100-pe-c100-connector-pe45404z-p.aspx>

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PE45404Z CAD Drawing

FAKRA Plug Connector Crimp/Solder Attachment for RG174, RG316, RG188, .100 inch, PE-B100, PE-C100, LMR-100, Water Blue Color



FAKRA CONFIGURATION

| CODING | JACK | COLOR | APPLICATION |
|--------|------|------------|--|
| A | | BLACK | RADIO WITH PHANTOM SUPPLY |
| B | | WHITE | RADIO WITHOUT PHANTOM SUPPLY |
| C | | BLUE | GPS: TELEMATICS OR NAVIGATION |
| D | | BORDEAUX | GSM: CELLULAR PHONE |
| H | | VIOLET | GPS: TELEMATICS AND NAVIGATION |
| I | | BEIGE | BLUETOOTH |
| K | | CURRY | RADIO WITH IF OUTPUT (ANTENNA DIVERSITY) |
| Z | | WATER BLUE | NEUTRAL CODING |

STANDARD TOLERANCES

.X ±0.2
.XX ±0.01
.XXX ±0.005

*STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES



Pasternack Enterprises, Inc.
P.O. Box 16759 | Irvine | CA | 92623

Phone: (949) 261-1920 | Fax: (949) 261-7451
Website: www.pasternack.com | E-Mail: sales@pasternack.com

DWG TITLE

PE45404Z

CAGE CODE 53919

CAD FILE 082917

SCALE N/A

SIZE A

9999

NOTES:
1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL.
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LMR-100-UF Ultra Flex version of the 100 series Low Loss Coax

RF Cables Technical Data Sheet



LMR-100A-UF

Times Microwave Systems Coax Cable Specification

Configuration

- Low Loss, Outdoor Flexible Cable
- 2 Shield(s)

Features

- Ultra Flexible Coax with Stranded Center Conductor
- Max Operating Frequency of 5.8 GHz
- Phase Velocity 66% VoP
- Max Operating Temperature +85°C
- TPE Jacket
- Min Install Bend Radius of 0.25 inches

Applications

- RF Test Systems
- Antenna Installs
- Laboratory Applications
- General Purpose RF Interconnect
- Jumper Assemblies

Description

LMR-100-UF Ultra Flex version of the 100 series Low Loss Coax from Times Microwave is part of the large product offering by Pasternack of radio frequency coaxial cable types specifically stocked to be ready for same-day shipment. Pasternack LMR-100-UF coax cable is manufactured in an ultra flexible design and has a 50 Ohm impedance. This low loss and ultra flexible 50 Ohm coax cable LMR-100-UF is constructed with a 0.110 inch diameter and Black TPE jacket.

LMR-100-UF flexible 50 Ohm coax cable with TPE jacket is rated for a 5.8 GHz maximum operating frequency. This 50 Ohm 0.110 inch diameter and low loss ultra flexible coax cable is built with an aluminum double shield count and RF shielding of 90 dB. Times Microwave LMR-100-UF TPE coax is constructed with PE dielectric and a maximum operating temperature of 85 degrees C. Pasternack's offering of LMR-100-UF coax cable provides specs for this wire on its RF coax cable LMR-100-UF datasheet.

LMR-100-UF cable is part of more than one million RF, microwave parts in stock at Pasternack. This Times Microwave low loss ultra flexible LMR-100-UF coax cable is ready to buy and can be shipped worldwide. Pasternack also maintains a wide selection of other radio frequency coaxial cable types that ship same-day from our warehouse as with the rest of our other RF/microwave components.

* LMR™ is a trademark of Times Microwave Systems.

Electrical Specifications

| Description | Minimum | Typical | Maximum | Units |
|--------------------------------------|---------|-------------|---------|--------------|
| Frequency Range | DC | | 5.8 | GHz |
| Impedance | | 50 | | Ohms |
| Velocity of Propagation | | 66 | | % |
| Time Delay | | 1.54 [5.05] | | ns/ft [ns/m] |
| Shielding Effectiveness | 90 | | | dB |
| Dielectric Withstanding Voltage (DC) | | | 500 | Vdc |

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [LMR-100-UF Ultra Flex version of the 100 series Low Loss Coax LMR-100A-UF](#)



LMR-100-UF Ultra Flex version of the 100 series Low Loss Coax

RF Cables Technical Data Sheet



LMR-100A-UF

| | | |
|-------------------------------|---------------|--------------|
| Jacket Spark | 2,000 | Vrms |
| Inner Conductor DC Resistance | 81 | Ohms/1000ft |
| Outer Conductor DC Resistance | 9.5 | Ohms/1000ft |
| Nominal Capacitance | 30.8 [101.05] | pF/ft [pF/m] |
| Nominal Inductance | 0.077 [0.25] | uH/ft [uH/m] |
| Input Power (Peak) | 600 | Watts |

Performance by Frequency Band

| Description | F1 | F2 | F3 | F4 | F5 | Units |
|-----------------------|-------|------|-------|-------|------|----------|
| Frequency | 50 | 150 | 220 | 450 | 900 | MHz |
| Attenuation, Typ | 5.1 | 8.9 | 10.9 | 15.8 | 22.8 | dB/100ft |
| | 16.73 | 29.2 | 35.76 | 51.84 | 74.8 | dB/100m |
| Input Power (CW), Max | 180 | 100 | 83 | 57 | 39 | Watts |

| Description | F6 | F7 | F8 | F9 | F10 | Units |
|-----------------------|-------|--------|--------|--------|-------|----------|
| Frequency | 1.5 | 1.8 | 2 | 2.5 | 5.8 | GHz |
| Attenuation, Typ | 30.1 | 33.2 | 35.2 | 39.8 | 64.1 | dB/100ft |
| | 98.75 | 108.92 | 115.49 | 130.58 | 210.3 | dB/100m |
| Input Power (CW), Max | 29 | 27 | 25 | 22 | 13 | Watts |

Mechanical Specifications

| | |
|---------------------------------|--------------------------|
| Diameter | 0.11 in [2.79 mm] |
| Weight | 0.008 lbs/ft [0.01 kg/m] |
| Min. Bend Radius (Installation) | 0.25 in [6.35 mm] |
| Min. Bend Radius (Repeated) | 1 in [25.4 mm] |
| Bending Moment | 0.1 lbs-ft [0.14 N-m] |
| Tensile Strength | 15 lbs [6.8 kg] |
| Flat Plate Crush | 10 lbs/in [0.18 kg/mm] |

Construction Specifications

| Description | Material and Plating | Diameter |
|-----------------|----------------------|--------------------|
| Inner Conductor | Copper | 0.018 in [0.46 mm] |

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [LMR-100-UF Ultra Flex version of the 100 series Low Loss Coax LMR-100A-UF](#)



LMR-100-UF Ultra Flex version of the 100 series Low Loss Coax

RF Cables Technical Data Sheet



LMR-100A-UF

| | | |
|----------------|---------------|--------------------|
| Conductor Type | Stranded | |
| Dielectric | PE | 0.06 in [1.52 mm] |
| First Shield | Aluminum Tape | 0.068 in [1.73 mm] |
| Second Shield | Tinned Copper | 0.083 in [2.11 mm] |
| Jacket | TPE, Black | 0.11 in [2.79 mm] |

Environmental Specifications

Temperature

| | |
|--------------------|------------------|
| Operating Range | -40 to +85 deg C |
| Installation Range | -40 to +85 deg C |
| Storage Range | -70 to +85 deg C |

Compliance Certifications (see [product page](#) for current document)

Plotted and Other Data

Notes:

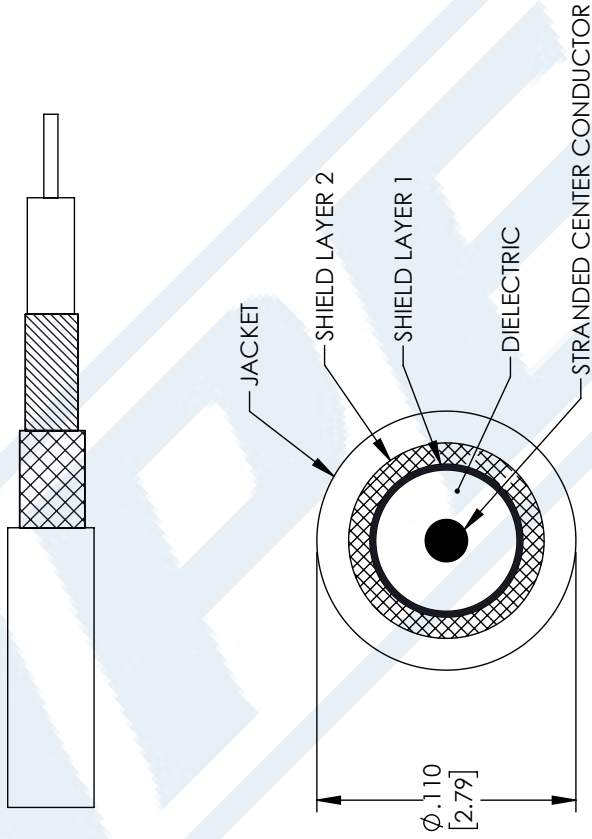
LMR-100-UF Ultra Flex version of the 100 series Low Loss Coax from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [LMR-100-UF Ultra Flex version of the 100 series Low Loss Coax LMR-100A-UF](#)

URL: <https://www.pasternack.com/low-loss-flexible-lmr-100a-uf-tpe-jacket-aluminum-tape-over-tinned-copper-outer-conductor-double-shielded-lmr-100a-uf-p.aspx>

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| REVISIONS | | |
|-----------|-----------------|------------|
| REV. | DESCRIPTION | DATE |
| A | INITIAL RELEASE | 06-04-2021 |
| | | APPROVED |
| | | SELLIS |



UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [] ARE MILLIMETERS

TOLERANCES:

.X = ±.2 [.508] FRACTIONS ± 1/32
 .XX = ±.02 [.51] ANGLES ± 1°
 .XXX = ±.005 [.13]

CABLE LENGTH (L), TOLERANCES:

L ≤ 12 [305] = +1 [25] / -0
 12 [305] < L ≤ 60 [1524] = +2 [51] / -0
 60 [1524] < L ≤ 120 [3048] = +4 [102] / -0
 120 [3048] < L ≤ 300 [7620] = +6 [152] / -0
 300 [7620] < L = +5% / -0

ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.

PE PASTERNAK
 an INFINITI brand

Pasternack Enterprises, Inc.
 P. O. Box 16759, Irvine, CA 92623.
 Phone: 1.949.261.1920 | 1.866.727.8376
 Fax: 1.949.261.7451
 Website: www.pasternack.com
 E-mail: sales@pasternack.com

ITEM NO. LMR-100A-UF

SIZE A CAGE CODE 53919 DRAWN BY MVEERAPPAN

THIRD-ANGLE PROJECTION

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SHEET 1 OF 1

SCALE N/A

REV A