



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

## RF Connectors Technical Data Sheet

**PE44646A**

### Configuration

- FAKRA Jack 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 PE44646A FAKRA jack 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 jack connector operates up to a maximum frequency of 4 GHz and offers good VSWR of 1.3:1.

Our FAKRA jack connector PE44646A 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) |         |         | 1,000   | Vrms  |
| Inner Conductor DC Resistance        |         |         | 6       | mOhms |
| Outer Conductor DC Resistance        |         |         | 2.5     | mOhms |
| Insulation Resistance                | 1,000   |         |         | MOhms |

### Mechanical Specifications

|             |                    |
|-------------|--------------------|
| <b>Size</b> |                    |
| Length      | 0.038 in [0.97 mm] |
| Width/Dia.  | 0.37 in [9.40 mm]  |
| Height      | 0.54 in [13.72 mm] |
| Weight      | 0.008 lbs [3.63 g] |

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [FAKRA Jack Connector Crimp/Solder Attachment for RG174, RG316, RG188, .100 inch, PE-B100, PE-C100, LMR-100, Black Color PE44646A](#)



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## RF Connectors Technical Data Sheet

**PE44646A**

### 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:

FAKRA Jack Connector Crimp/Solder Attachment for RG174, RG316, RG188, .100 inch, PE-B100, PE-C100, LMR-100, Black 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.

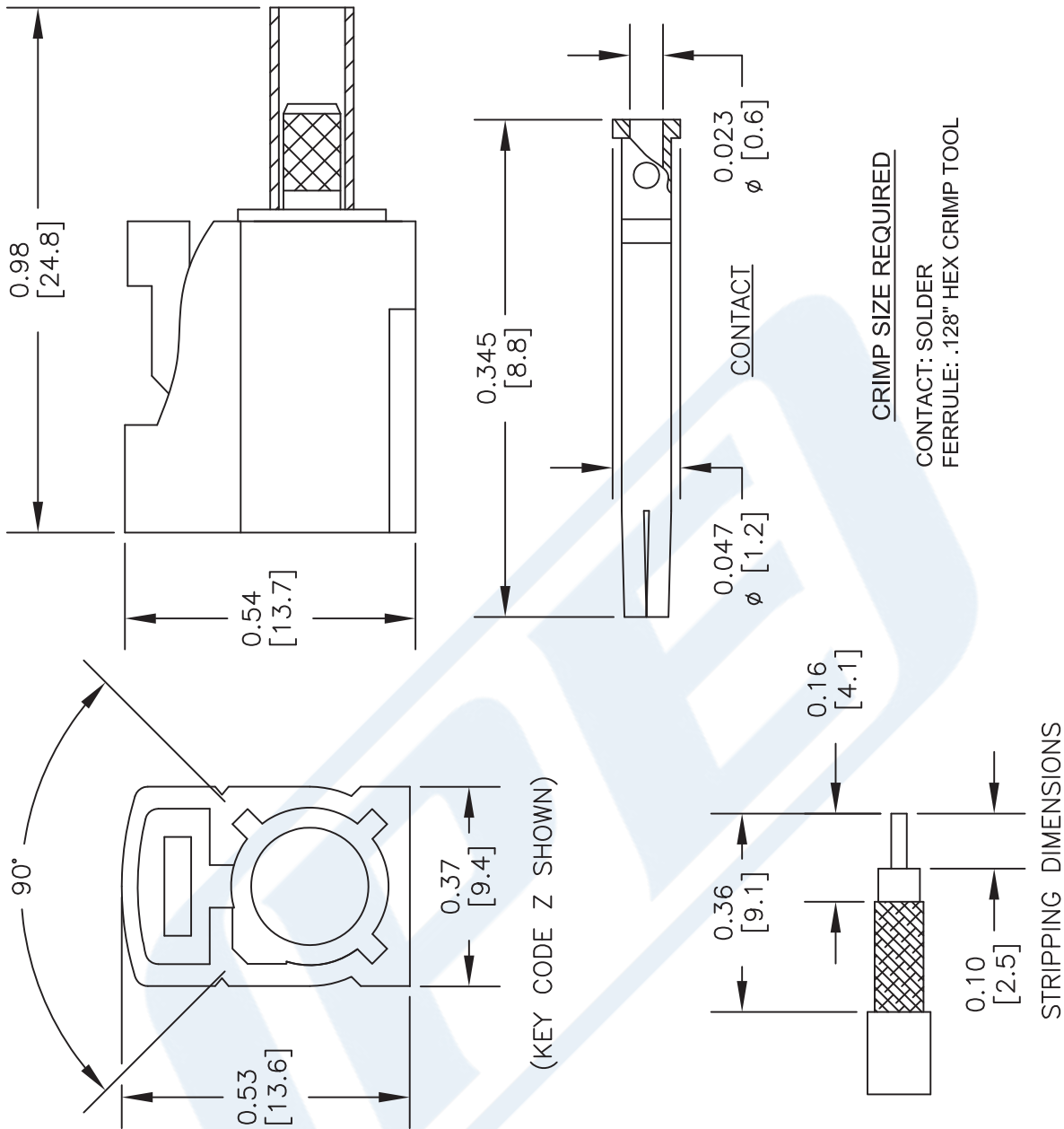
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URL: <https://www.pasternack.com/fakra-jack-standard-pe-c100-rg174-rg316-connector-pe44646a-p.aspx>

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# PE44646A CAD Drawing

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3. DIMENSIONS ARE IN INCHES [mm].

DWG TITLE  
**PE44646/Y**

CAGE CODE 53919

2233

## Part Configurator

1. Replace Y with code.

| 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                           |

**PE PASTERNAK**  
THE ENGINEER'S RF SOURCE  
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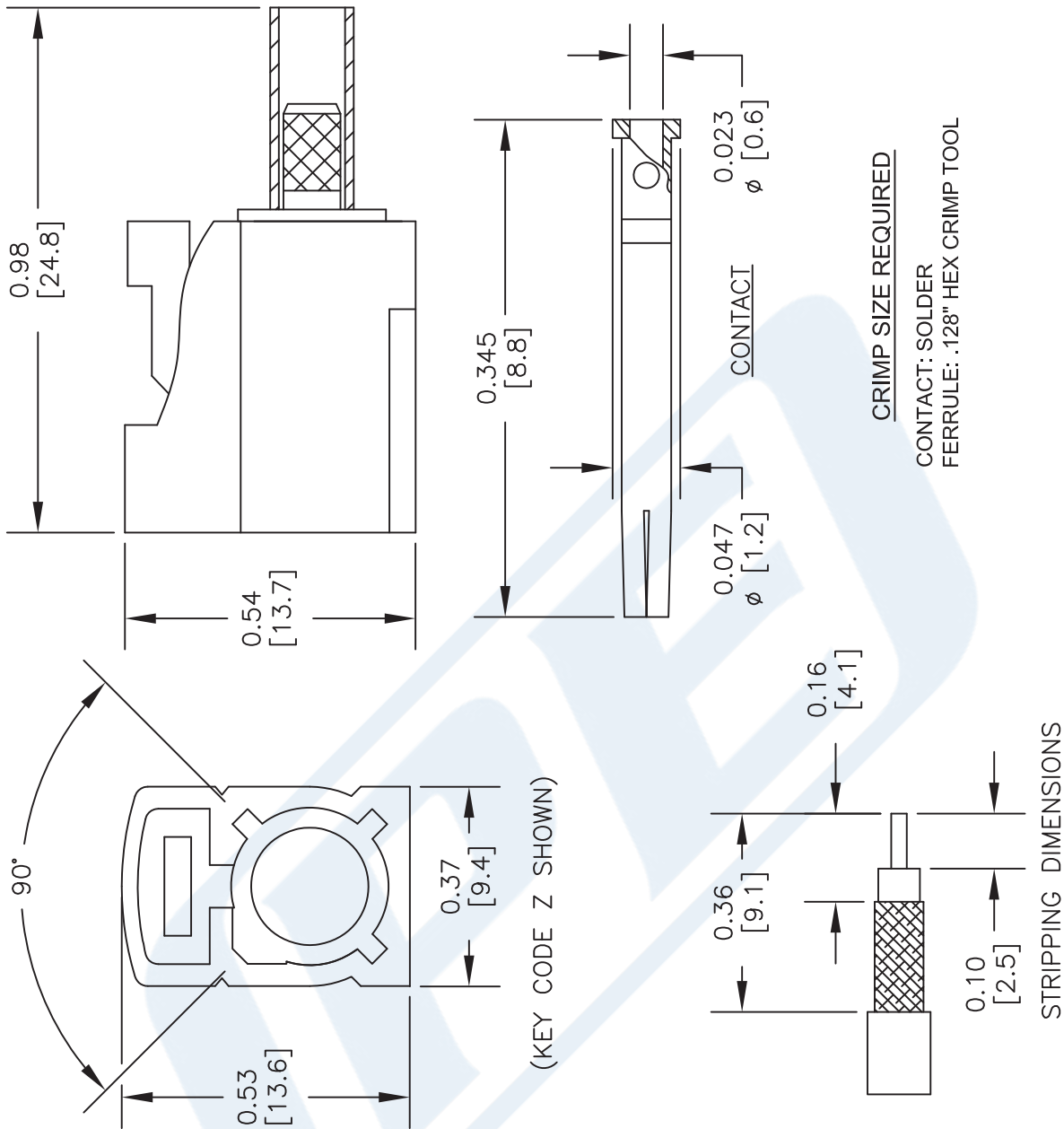
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## Low Loss Flexible LMR-100-FR Outdoor Rated Coax Cable Double Shielded with Black FRPE Jacket Fire Rated

### RF Cables Technical Data Sheet



**LMR-100A-FR**

#### Times Microwave Systems Coax Cable Specification Configuration

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

#### Features

- CMR Riser Rated Coax
- Non-Halogen, Low Smoke FRPE Jacket
- Max Operating Frequency of 5.8 GHz
- Phase Velocity 66% VoP
- Max Operating Temperature +85°C
- Min Install Bend Radius of 0.25 inches

#### Applications

- In-Building Riser Runs
- Short Antenna Installs
- RF Test Systems
- General Purpose RF Interconnect
- Laboratory Applications

#### Description

LMR-100-FR Fire Rated 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-FR coax cable is manufactured in a flexible design and has a 50 Ohm impedance. This low loss and CMR riser rated 50 Ohm coax cable LMR-100-FR is constructed with a 0.110 inch diameter and Black FRPE jacket.

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

LMR-100-FR cable is part of more than one million RF, microwave parts in stock at Pasternack. This Times Microwave low loss flexible LMR-100-FR 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: [Low Loss Flexible LMR-100-FR Outdoor Rated Coax Cable Double Shielded with Black FRPE Jacket Fire Rated LMR-100A-FR](#)



## Low Loss Flexible LMR-100-FR Outdoor Rated Coax Cable

### Double Shielded with Black FRPE Jacket Fire Rated

## RF Cables

### Technical Data Sheet


**LMR-100A-FR**

|                               |               |              |
|-------------------------------|---------------|--------------|
| 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                          | 0.0092 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, 1 Strand     | 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: [Low Loss Flexible LMR-100-FR Outdoor Rated Coax Cable Double Shielded with Black FRPE Jacket Fire Rated LMR-100A-FR](#)





## Low Loss Flexible LMR-100-FR Outdoor Rated Coax Cable Double Shielded with Black FRPE Jacket Fire Rated

### RF Cables Technical Data Sheet



**LMR-100A-FR**

|                |               |                   |
|----------------|---------------|-------------------|
| Conductor Type | Solid         |                   |
| Dielectric     | PE            | 0.06 in [1.52 mm] |
| First Shield   | Aluminum Tape | [ ]               |
| Second Shield  | Tinned Copper | [ ]               |
| Jacket         | FRPE, 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:

Low Loss Flexible LMR-100-FR Outdoor Rated Coax Cable Double Shielded with Black FRPE Jacket Fire Rated 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.

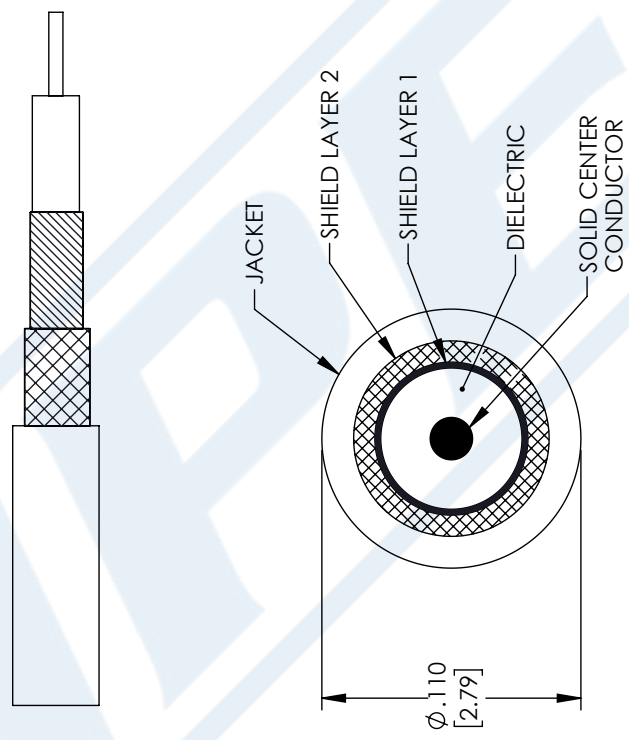
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URL: <https://www.pasternack.com/low-loss-flexible-lmr100fr-frpe-jacket-aluminum-tape-over-tinned-copper-outer-conductor-double-shielded-lmr-100a-fr-p.aspx>

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**TIMES** MICROWAVE SYSTEMS **LMR-100A-FR CAD Drawing**  
 Low Loss Flexible LMR-100-FR Outdoor Rated Coax Cable  
 Double Shielded with Black FRPE Jacket Fire Rated

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



|                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                   |                                                                                                                                                                      |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>PE PASTERNAK</b><br>an INFINITI® brand<br>Pasternack Enterprises, Inc.<br>P.O. Box 16759, Irvine, CA 92623.<br>Phone: 1.949.261.1920   1.866.727.8376<br>Fax: 1.949.261.7451<br>Website: www.pasternack.com<br>E-mail: sales@pasternack.com                                                                                                                                                                                                                          |                                                                                   | THIRD-ANGLE PROJECTION<br><br>THE INFORMATION AND DESIGN IN THIS DOCUMENT IS THE PROPERTY OF PASTERNAK CORPORATION ALL RIGHTS RESERVED.<br>SHEET 1 OF 1<br>SCALE N/A |
| UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [ ] ARE MILLIMETERS<br>TOLERANCES:<br>.X = ±.2 [5.08]<br>.XX = ±.02 [51]<br>.XXX = ±.005 [13]<br>ANGLES ± 1°<br>CABLE LENGTH (L) TOLERANCES:<br>L ≤ 12 [305] = +1 [25] / -0<br>12 [305] < L ≤ 60 [1524] = +2 [51] / -0<br>60 [1524] < L ≤ 120 [3048] = +4 [102] / -0<br>120 [3048] < L ≤ 300 [7620] = +6 [152] / -0<br>300 [7620] < L = +5% / -0<br>ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY. | SIZE A<br>CAGE CODE 53919<br>DRAWN BY MVEERAPPAN<br>ITEM NO. LMR-100A-FR<br>REV A |                                                                                                                                                                      |

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