

REFERENCE GUIDE

LEMO's RECEPTACLE IDENTIFICATION GUIDE ●



INTRODUCTION

This guide describes the basic steps to identify a LEMO receptacle by part number. The guide covers only the most common LEMO connectors. If you know the part number for the plug mate, use the Part # Search feature on the LEMO web site, and select "Find Mate" on the Product Details page. For additional assistance with less common, or more complex models, contact LEMO.

STEPS

1. Read the LEMO model and size markings

E	G	G	.	1	B	.	3	0	5	.	C	L	L
Model						Size/Series							

LEMO receptacles have a model, size and series ID marked on the circumference of the shell. For example: EGG.4B

If you cannot read the markings, use the images below to identify the LEMO connector series. The models depicted here are the most common. Note: the 3rd letter is the Key style. 'G' is most common, but others are available. The catalog lists them in a table for each type.



			
EGG	EGG	ERA	ERA
B Series	K Series	S Series	E Series
- All female contacts - Red dot - Keyed; Key indicator notation	- Red seal under flange - All female contacts - Red dot - Keyed; Key indicator	- Hermaphroditic (half moon) insert - No red dot - No shell key	- Red seal under flange - Hermaphroditic (half-moon) insert

2. Determine the size indicator of the receptacle within the series.

You may need to measure the inside diameter of the receptacle, then use the following chart.

B Series	K Series	S Series	E Series
<u>Code</u> <u>Inner Diameter</u> 00 ~ 5mm, (0.20") 0B ~ 7mm, (0.28") 1B ~ 9mm, (0.35") 2B ~ 12mm, (0.47") 3B ~ 15mm, (0.6") 4B ~ 20mm, (0.8") 5B ~ 30mm, (1.2")	<u>Code</u> <u>Inner Diameter</u> 0K ~ 10mm, (0.4") 1K ~ 12mm, (0.47") 2K ~ 15mm, (0.6") 3K ~ 18mm, (0.7") 4K ~ 24mm, (0.95")	<u>Code</u> <u>Inner Diameter</u> 0S ~ 7mm, (0.28") 1S ~ 9mm, (0.35") 2S ~ 12mm, (0.47") 3S ~ 15mm, (0.6")	<u>Code</u> <u>Inner Diameter</u> 0E ~ 10mm, (0.4") 1E ~ 12mm, (0.47") 2E ~ 15mm, (0.6") 3E ~ 18mm, (0.7")

3. Determine insert/contact type

E	G	G	.	1	B	.	3	0	5	.	C	L	L
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Type

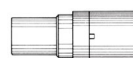
Look into the mating side of the receptacle to determine the insert/contact type.

Single Contact

If there is only one electrical contact, it will be a [low voltage](#) pin, coax, triax, or a [high voltage](#) contact. For more specifics on each of these insert/contact types, see the connector identification guide: [Concentric Contacts](#). For the most common single pin contact, a single 'low voltage' pin, the sixth position of the part number is a '1'. A coax connector is nominally a '2', a high voltage (with its additional anti creep spacer) will be a '4', and a triax has a '6' designation.



Low voltage



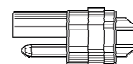
Coax

Multi Contact

If there are multiple contacts, they may be low voltage, coax, triax, high voltage, fiber optic, or a combination thereof. For more specifics on each of these insert/contact types, see the Connector Identification Guide: [Multiple Contacts](#). For the most common multiple contact connector, with low voltage pins, the sixth position of the part number is a "3".



'B' type insert



Hermaphroditic or 'S' type insert

4. Determine insert/contact type configuration

E	G	G	.	1	B	.	3	0	5	.	C	L	L
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Type

To determine the 'type' reference ID for common multipole configurations, count the number of pins and use the 'type' tables in the catalog of the series identified in step 2. For example, the multi-pin multipole insert, with 5 pins is a 'type' **305**.

Reference	Number of contacts	ø A (mm)	Contact type availability				Solder contact		Crimp contact		Rated current (A) ¹⁾
			Solder	Crimp	Printed circuit (straight)	Printed circuit (elbow)	Test voltage (kV rms) ¹⁾ Contact-contact	Test voltage (kV rms) ¹⁾ Contact-shell	Test voltage (kV rms) ¹⁾ Contact-contact	Test voltage (kV rms) ¹⁾ Contact-shell	
1B	302	2	1.3	●	●	●	1.50	1.35	1.70	1.45	15.0 ³⁾
	303	3	1.3	●	●	●	1.30	1.55	1.60	1.85	12.0
	304	4	0.9	●	●	●	1.35	1.45	1.70	1.80	10.0 ²⁾
	305	5	0.9	●	●	●	1.25	1.15	1.30	1.55	9.0 ²⁾

3. Determine shell material

E	G	G	.	1	B	.	3	0	5	.	C	L	L
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Shell Material

For 9th position number, determine the shell material. The most common shell material is brass with matte chrome plating and is indicated with the letter “C”. Anodized aluminum alloy has an L designator and so on. There are many choices available and the code letters are found in [Part Number Identifier](#) web site, or in a table in each catalog.

4. Determine the insert material

E	G	G	.	1	B	.	3	0	5	.	C	L	?
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Insulator Material

The 10th position is the insulator material of the insert. The most common insert material is ‘PEEK’ plastic, a pale beige in color, and is the letter ‘L’ (or sometimes Y). Coax inserts are most often Teflon, which is white, and indicated with the letter “T”. Other insert materials are available and are indicated in a table in the catalogs. Contact LEMO if you are unable to determine the material.

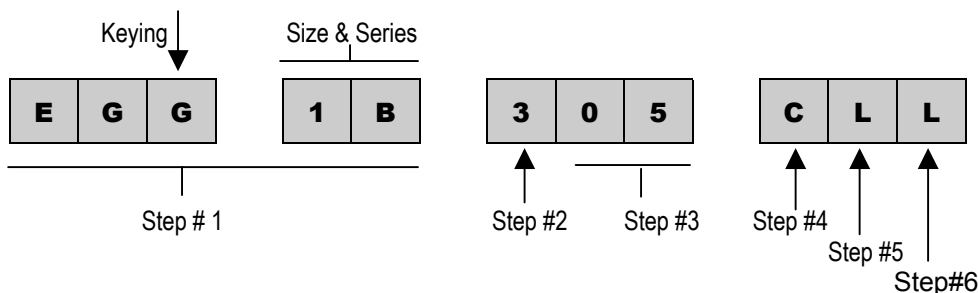
6. Determine termination type

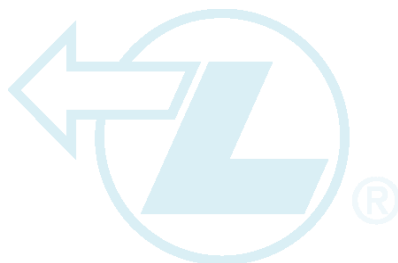
E	G	G	.	1	B	.	3	0	5	.	C	L	L
---	---	---	---	---	---	---	---	---	---	---	---	---	---

Termination Type

If the contacts are terminated, inspect the connection from the wire to the contact pin. Solder, is indicated with the letter “L”. A crimp termination is indicated with the letter “M”. If the contacts are male in a “B” series *receptacle*, this is a reverse sex (male pin in receptacle) connector. For these, the crimp pin is a ‘C’ and the solder pin is indicated with the letter “A” (Note: there are certain *keyways*, such as the J-keyway, reserved for reverse sex connectors, see step 2 above, and check the third position in the part number).

Configure the part number for your LEMO receptacle - Summary





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