



**PLASTIC
CONNECTORS
CONNECTIONS
FOR CRITICAL
PERFORMANCE**

**Single-Patient
Use Connector
Series**



LEMO's REDEL® Single-Patient Use Connector Series

LEMO's REDEL® Single-Patient Use Connector Series are specialized connectors for critical applications in the electro-surgical device market.

The REDEL brand of LEMO connectors is a well established product series in the medical market and LEMO understands the importance of sterilization in minimally invasive electro-surgical procedures. LEMO offers both sterilizable connector / cable solutions and single-patient use connector solutions. The LEMO single-patient use concept is to maintain and embrace the premium materials, quality and reliability of the connector that is reused, and minimize content on the side that is single-patient use, while still retaining critical quality attributes such as highly reliable gold plated contacts for optimal performance.

As with all LEMO products, the REDEL Connector Series has been designed to ensure quality performance in medical applications, yet are economical enough to justify single-use.

REDEL 1P Single-Patient Use Receptacle

The REDEL 1P Receptacle is the most popular and well established version of the single-patient use offering. The product has clearly demonstrated compliance with the ANSI/AAMI HF18:2001 standard for "Electrosurgical Devices." The snap-in design eliminates hardware costs and is easily designed into the base of a surgical handpiece. Optional snap-on backshells are available in either PSU or ABS plastic if cable mounting is preferred. Specific reverse gender keyway configurations are available for the 9, 10 and 14-pin versions. Optional colors and keyways are also available to avoid improper mating. Choice of solder cup or PCB pins are available upon request as well as steam autoclave sterilizable extension cables.

REDEL 1P Single-Patient Use Plug

This plug mates with the 1P Receptacle and has been designed for users that do not prefer to use an extension cable and is a very simple 2-piece design to simplify content and material. The REDEL 1P Plug still utilizes the highly reliable machined gold plated contacts. The standard keyway is "G" but alternate A, B or C keys are available upon request.

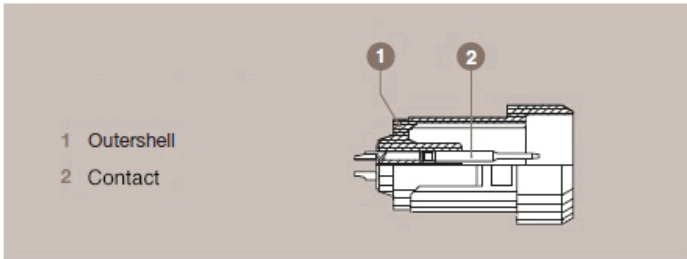
REDEL 2P Single-Patient Use Receptacle

This receptacle product extension is compatible with the standard 2P Plugs. For the electro-surgical catheters that have the need to go beyond the standard 14 pins, this version goes up to 26 and 34-pin configurations. With reverse gender male contacts in the receptacle and female contacts in the mating plug. Available in H and J keyways.

Talk to LEMO about your project!

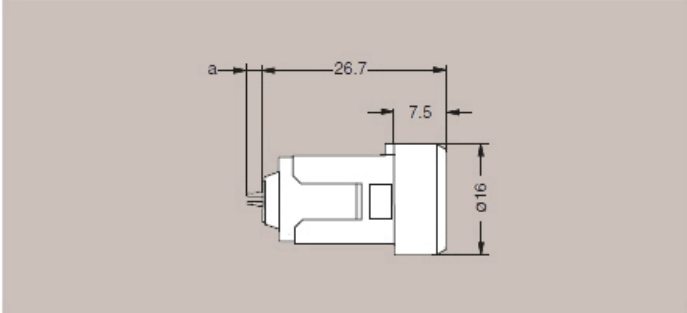
1P Single-Patient Use Receptacle

P Y . M . G .



Characteristics	Value	Standards
Endurance for PY* (latching)	100 Cycles	IEC 60512-5 test 9a
Working temperature range (PSU)	-50 / +150°C	-
Average latching force	6N	IEC 60512-7 test 13a
Average unmating force	7N	IEC 60512-7 test 13a
Average retention force	90N	IEC 60512-7 test 13a

PY● Fixed receptacle, snap on fixing



P Y J . M 1 . 0 G G . A G

Standard Gender:
A, B, G

Reverse Gender:
H, J

Number of Contacts:
See chart below

Insulator*:
G = 4-10 pins
L = 14 pins

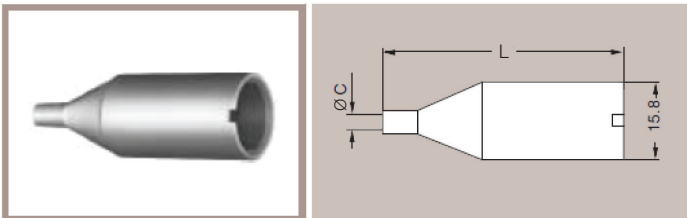
Keys A,B,G:
L = Female
Keys H,J:
A = Male

Color:
A = Blue
B = White
G = Gray
J = Yellow
N = Black
R = Red
V = Green

*Note: Outershell and insulator are moulded out of the same material (PSU), except for 14 pins, which is PEEK. Ø 0.5mm male has Ø 0.44mm buckets.

Number of Contacts	Dim. a (mm)	Contact Ø (mm)	Solder Bucket Ø (mm)	Keyways
4	2.4	0.9	0.8	G
8	4.2	0.7	0.6	H
9	3.9	0.5	0.44	G
10	3.9	0.5	0.44	A, H, J
14	3.9	0.5	0.44	A, G, H, J

PYG.0__ Protective backshell for PY● receptacle



P Y G . 0 2 . 7 Y G . 0 P S U

ØC:
02.5 = 2.5mm*
02.7 = 2.7mm*
03.8 = 3.8mm

Color:
A = Blue
B = White
G = Gray
J = Yellow
N = Black
R = Red
V = Green

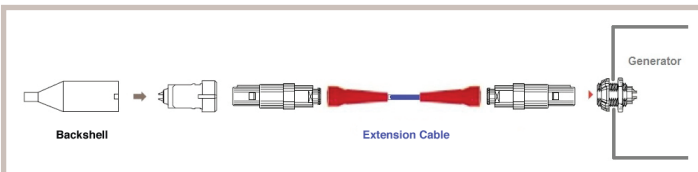
L:
0 = 47 mm
1 = 67.1 mm**

Material:
ABS
PSU

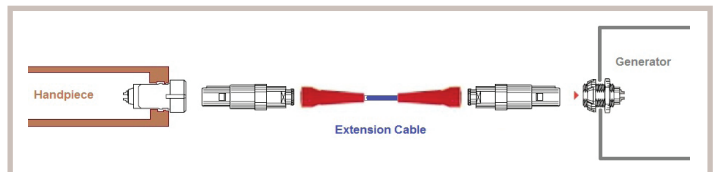
* For 67.1mm length only.

** Extended backshell provides more room for electronics.

Note: All dimensions are in millimeters.



REDEL 1P (Free Receptacle)



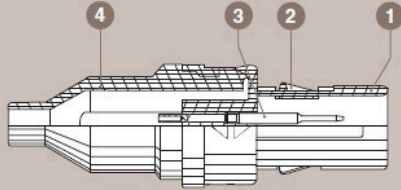
REDEL 1P (Mounted)

1P Single-Patient Use Plug

P J . M A

Fixed receptacle

- 1 Outershell
- 2 Latch sleeve
- 3 Male solder contact
- 4 Backshell



Characteristics	Value	Standards
Endurance for PJ* (latching) - with machined contacts	15 cycles min	IEC 60512-5 test 9a
Working temperature range (ABS)	-30 / +90°C	-
Outershell / insulator material	PSU	-
Backshell material	ABS	-

PJG Straight plug



Figure 1

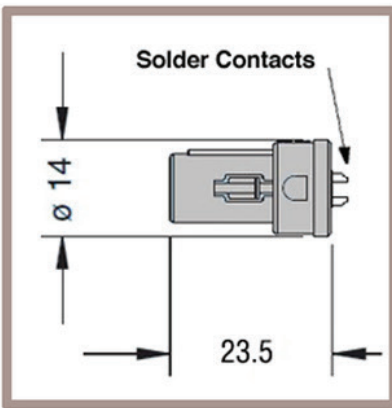


Figure 1 Part

P J G . M 1 . 0 B B . A B

Keying:
A, B, C, G

Number of contacts:
7, 9, 10, 14

Color:
A = Blue
B = White
G = Gray

Optional:
Y = Raised arrows painted
with black ink for
enhanced visibility.

Figure 2

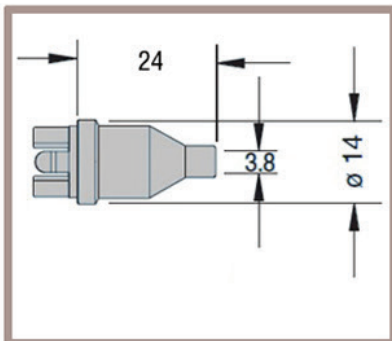


Figure 2 Part

P J G . 1 3 8 . A B

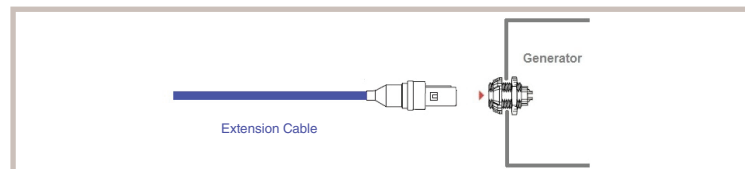
ØC:
138 = 3.8mm

Material:
A = ABS

Color:
B = White
G = Gray

Notes: 7 pin Ø 0.7mm male with Ø 0.8mm solder buckets.
9, 10, and 14 pin Ø 0.5mm male with Ø 0.44mm solder buckets.
Not intended for use with PN• or PY• receptacles.

Note: All dimensions are in millimeters.

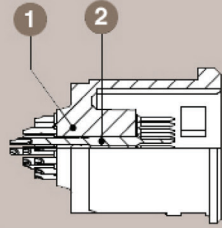


REDEL 1P Single-Patient Use Plug Application Example

2P Single-Patient Use Receptacle

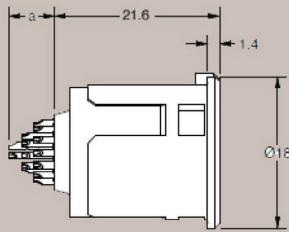
C U . M . . . A

- 1 Outershell
- 2 Male contact



Characteristics	Value	Standards
Endurance for CU (latching) - with machined contacts	100 cycles min	IEC 60512-5 test 9a
Working temperature range (PSU)	-50 / +150°C	-
Outershell / insulator material	PSU	-
Average latching force	5.5	IEC 60512-7 test 13a
Average unmating force	8.5	IEC 60512-7 test 13a
Average retention force	150	IEC 60512-7 test 13a

CU • Fixed receptacle, snap on fixing



C U . M . . . A

Keying:
H, J

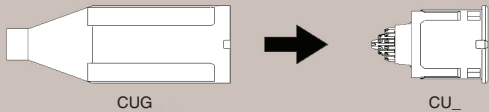
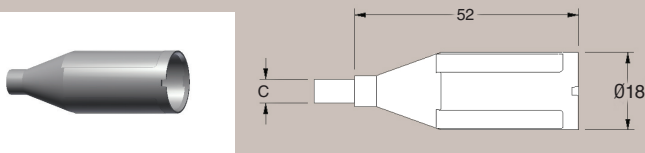
Number of Contacts:
26, 34

Color:
AA = Blue
BB = White
GG = Gray
JJ = Yellow
NN = Black
RR = Red
VV = Green

# of Contacts	a
26	5.5
34	7.0

Note: Contacts are Ø 0.5mm male with Ø 0.44mm solder buckets.

CUG • Protective backshell for CU



C U G . 0 2 5 . A G

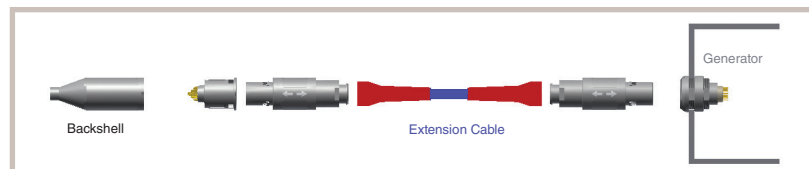
ØC:
025 = 2.5mm
032 = 3.2mm
052 = 5.2mm

Material:
A = ABS

Color:
B = White
G = Gray

Note: ABS working temperature: -30°C + 90°C.

Note: All dimensions are in millimeters.



REDEL 2P Single-Patient Use Receptacle Application Example

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
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TURKEY, UKRAINE

UL Recognition

REDEL connectors are recognized by the Underwriters Laboratories (UL). The approval of the complete system (REDEL connector, cable and your equipment) will be easier because REDEL connectors are recognized.

CE Marking

CE marking  means that the appliance or equipment bearing it complies with the protection requirements of one or several European safety directives.  CE marking applies to complete products or equipment, **but not to electromechanical components, such as connectors.**

RoHS

REDEL connector specifications exceed the requirements of the RoHS directives (2015/863) of the European Parliament and the latest amendments. This directive specifies the restrictions of the use of hazardous substances in electrical and electronic equipment marketed in Europe.

ISO 9001:2015 & ISO 13485:2016

LEMO USA, Inc is registered for design, manufacture, and distribution of self latching push pull electrical and fiber optic connectors and cable assembly.

WARNING (Prop 65 State of California)

This product may contain one or more substances or chemicals known to the state of California to cause cancer.



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