

Specifications, Ordering Information and Installation Instructions for MR398-JBPC Series Fiber Optic Junction Boxes

DOC: 98-0398-02

MICRONOR INC. 900 Calle Plano, Unit K Camarillo, CA 93012 USA T (805) 389-6600 F (805) 389-6605 sales@micronor.com www.micronor.com

For Support in Europe:

MICRONOR AG Pumpwerkstrasse 32 CH-8105 Regensdorf Switzerland T +41-44-843-4020 F +41-44-843-4039 sales@micronor.ch www.micronor.com

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File Name

98-0398-02_D_MR398-JB_Manual_Released 07-Dec-2015

Revision List

Α	Initial Release	Feb 2013
В	Added Reference Drawings	March 2014
С	Added new Camarillo address and tel/fax	Oct 2015
D	Update style and product images	Dec 2015

1. Description

The MICRONOR MR398 series fiber optic junction boxes are designed to join two fiber optic cables and environmentally protect the connection. The junction boxes are designed to seal the incoming cables while accommodating varying diameter of fiber cables that might be used in the field. The sealing is accomplished by building up the cable jacket to the desired 12.4mm of the cable glands employed. The through hole of the cable gland is sufficient to sleeve LC-Duplex or ST connectors through.

2. Ordering Information

Connector #1	Connector #2	Micronor Part Number
Duplex-LC	Duplex-LC	MR398-JBPC-CC
Duplex-LC	ODVA LC-Duplex	MR398-JBPC-CD
ODVA LC-Duplex	ODVA LC-Duplex	MR398-JBPC-DD

NOTE: For special housing requirements, please contact Micronor sales.

3. Specifications

Size		
MR398-JBPC-DD, MR398-JBPC-CD,	4.53 x 3.54 x 2.17 in. 115.06 x 89.92 x 55.12 mm	
MR398-JBPC-CC	6.73 x 4.76 x 2.17 in. 170.94 x 120.90 x 55.12 mm	
Weight		
MR398-JBPC-DD, MR398-JBPC-CD,	0.4lbs, 0.2kg	
MR398-JBPC-CC	0.7lbs, 0.35kg	
Housing	Impact-resistant UV Stabilized	UL508-4X Listed
	Polycarbonate,	UL94-HB Flame Rating
	Silicon Gasket	
	Grey	
Temperature Range	-40°C to +120°C	Or as limited by fiber optic cable and connector used.
Ingress Protection	IP65 per IEC 529	With connectors attached and
	NEMA 1, 2, 4, 4x, 12 and 13	properly installed.

4. MR398-JBPC-CC (Duplex-LC to Duplex-LC)



Fiber Cable Input – Fiber Cable Output

QTY 1: Enclosure with cable glands mounted

QTY 1: MR320C, LC-Duplex Adapter

QTY 2: MR398-SLKT-36 Seals for 3mm and 6mm cable jacket

QTY 2: MR398-SLKT-08 Seal for 8mm cable jacket

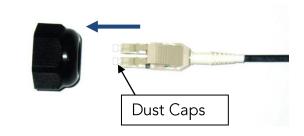
QTY 2: MR398-SLKT-10 Seal for 10mm cable jacket

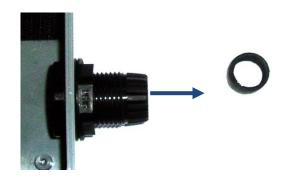
QTY 4: No. 8 x 5/8 Philips mounting screws

STEPS

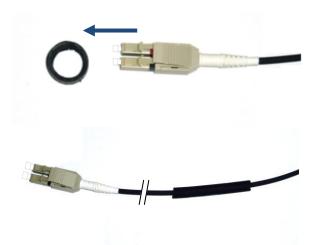
<u>Note:</u> The following are instructions for MR398-SLKT-36.

- 4.1. Remove nut from cable gland mount
- 4.2.Feed LC connector through nut KEEP DUST CAPS ON CONNECTORS UNTIL FINAL INSTALLATION
- **4.3.**Remove rubber grommet from cable gland mount





4.4.Feed LC connector through grommet



4.5. Place 3mm sleeve onto fiber cable.

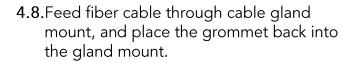
4.6.Place 6mm sleeve on top of 3mm sleeve.

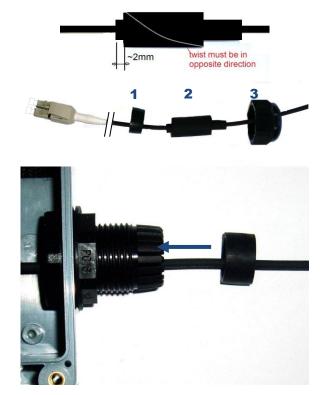


4.7.For highest strain relief place sleeves as shown.

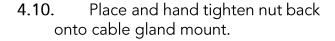
Assembly Order:

- 1. Grommet
- 2. Norprene® Sleeve(s)
- 3. Gland Nut

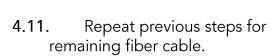




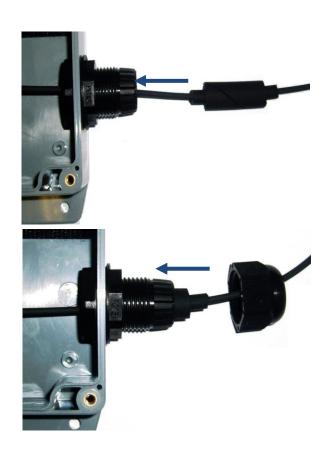
4.9.Feed through both 3mm and 6mm sleeves into grommet and cable gland mount.

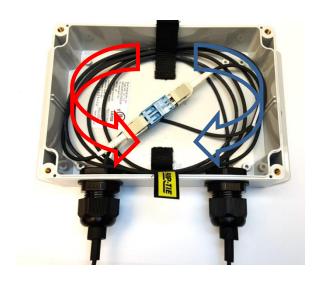


Note: Do not over torque nut, may damage cable gland.



- 4.12. Loosely coil excess fiber from each gland in opposite directions from each other, CCW & CW. Secure coil with provided Nylon Hook straps. For optimum signal strength, avoid sharp bends and asymmetrical coils.
- 4.13. Remove Dust Caps and connector with MR320C adapter. Allow connection to lie diagonally.
- **4.14.** Retain remaining sleeve sizes for future use with varying cable diameters.
- **4.15.** Place cover onto junction box and seal using the four captive screws.





5. MR398-JBPC-CD (Duplex-LC to ODVA LC-Duplex)



Fiber Cable Input – LC-Duplex Output

QTY 1: Enclosure with cable glands mounted

QTY 1: MR398-SLKT-36 Seals for 3mm and 6mm cable jacket

QTY 1: MR398-SLKT-08 Seal for 8mm cable jacket

QTY 1: MR398-SLKT-10 Seal for 10mm cable jacket

QTY 4: No. 8 x 5/8 Philips mounting screws

STEPS

- 5.1.Refer to <u>Steps 4.1-4.9</u> for fiber cable input.
- **5.2.**Loosely coil excess fiber cable and secure coil with provided Nylon Hook straps.
- 5.3. Connect LC connector into ODVA connector housing as shown. For optimum signal strength, avoid sharp bends and asymmetrical coils.



5.4.Place cover onto junction box and seal using the four captive screws.

5.5.Insert ODVA LC-Duplex connector, twist clockwise and lock bayonet into place.



5.6.Connect open dust cap to free hanging junction box dust cap to prevent dust entering while in operation.



6. MR398-JBPC-DD (ODVA LC-Duplex to ODVA LC-Duplex)



STEPS

- **6.1**.Insert ODVA LC-Duplex connector, twist clockwise and lock into place.
- **6.2**.Repeat Step 6.1 for remaining ODVA fiber cable.
- **6.3.**Connect open dust cap to free hanging junction box dust cap to prevent dust entering while in operation.

LC-Duplex Input – LC-Duplex Output

QTY 1: Enclosure with 2 LC-Duplex receptacles mounted and connected internally with a 62.5/125µm MM fiber

QTY 4: No. 8 x 5/8 Philips mounting screws





7. Mounting Information

7.1. MR398-JBPC-CC Housing

Recommended Mounting Orientation: MR398-JBC-CC



- Orient Junction box as shown, with fiber cables hanging freely downward.
- Provide at least 4 inches of clearance for fiber cable glands.

7.2. MR398-JBPC-CD Housing

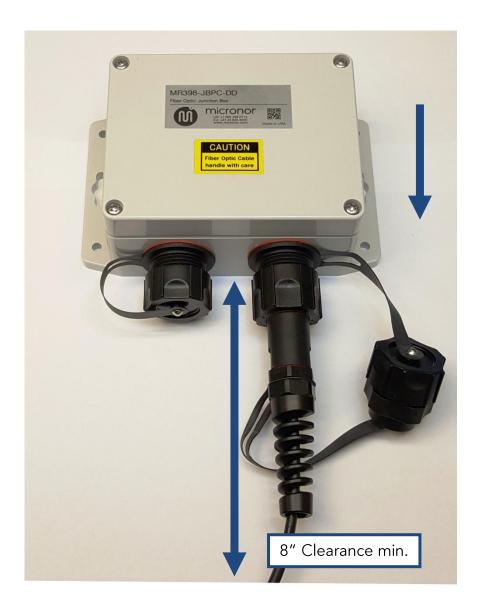
Recommended Mounting Orientation: MR398-JBPC-CD/DD



- Orient junction box as shown, with fiber cables hanging freely downward.
- Provide at least 8 inches of clearance for fiber cable connectors.

7.3. MR398-JBPC-DD Housing

Recommended Mounting Orientation: MR398-JBPC-DD



- Orient junction box as shown, with fiber cables hanging freely downward.
- Provide at least 8 inches of clearance for fiber cable connectors.