



Read-Rite® Polymer Lids

RF-FRIENDLY FOR AMR & AMI SYSTEMS **100+ DIFFERENT SIZES AND STYLES**

Set your AMI up for success: ensure your RF signals transmit clearly and unobstructed between meter endpoints and data collectors. Replacing your old cast iron or concrete lid with a more RF-friendly material is a practical and cost-effective approach to maximize your AMR or AMI investment.



Nicor Read-Rite® replacement lids are made of a no-break polyolefin, a virtually RF-transparent material. Every available AMR and AMI endpoint available can be mounted underneath or through Read-Rite® lids with Nicor's patented endpoint mounting solutions.

Read-Rite® replacement lids are H20 load rated, meet ADA slip resistance requirements and resist color fading with UV inhibitors.

See back side for more specification details.



**WE WORK WITH ALL NATIONAL AND
LOCAL WATERWORKS DISTRIBUTORS.
JUST ASK FOR 'NICOR' BY NAME.**

**Basic and specialized colors
available:**



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Woman-Owned and Proudly Made in the USA

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Read-Rite® Polymer Lid Details

VIRGIN POLYMER MATERIAL H2O LOAD RATED

MANUFACTURING METHOD

- **Made with 100% virgin No-Break polymer for consistency in material and quality; virgin material enables UV inhibitors to be added, supports RF-transparency.**
- **Made using injection molding method for uniform construction integrity.**

PERSONNEL AND PUBLIC SAFETY

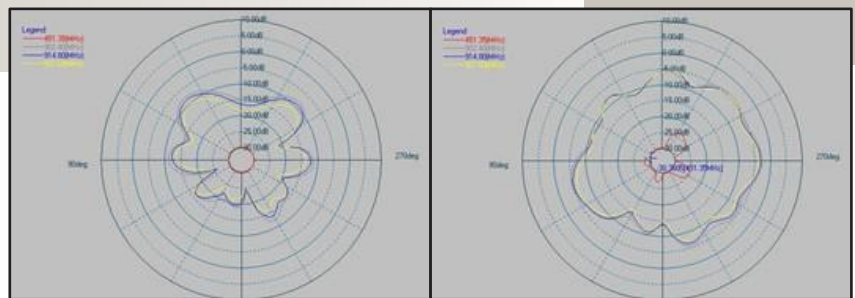
- **Meets ADA slip resistant requirements: coefficient of static friction @ 0.73 (dry) and not less than 0.50 (wet).**
- **Integrates radio endpoint to be flush with top of lid for no-trip hazard and pedestrian safety.**
- **Uses lightweight material to improve safety of utility workers during installation.**

PRODUCT LONGEVITY AND INTEGRITY

- **Resists ultraviolet degradation; passes accelerated weathering tests in accordance with ASTM G154-06 Xenon Arc Accelerated Aging test.**
- **H2O load rated, third-party tested in accordance with AASHTO testing.**
- **Maintains physical properties and is resistant to thermal expansion/contraction and deformation in an operating range of -40° to 190° Fahrenheit.**
- **Impervious to water absorption as determined by test standard ASTM D 570-98 Water Absorption - 24 Hour Method.**



RADIO PROPAGATION RESULTS FROM METER PIT: LEFT: OTHER COMPOSITE MATERIAL RIGHT: NICOR'S POLYMER MATERIAL





READ-RITE® POLYMER LIDS

RF-FRIENDLY FOR AMR & AMI SYSTEMS
H-20 LOAD RATED

RECTANGLE LID MEASUREMENTS

SIZE	LENGTH	WIDTH	THICKNESS	WEIGHT* [LBS]	QTY/PALLET	LBS/PALLET
B3	14-1/2"	8-3/4"	1-1/8"	2.9	300	870
B9C	15-1/4"	9-7/8"	1-5/8"	6.8	220	1496
B9B	15-1/4"	9-7/8"	1-5/8"	6.8	220	1496
B9X	15-1/4"	10-1/8"	1-5/8"	6.3	220	1386
B90	15-1/4"	10-1/4"	1-5/8"	6.2	220	1364
B12	18"	11-1/8"	1-3/4"	8.7	120	1044
B16	20-5/8"	10-1/2"	2"	12.45	110	1369.5
B24	19-5/8"	18-1/8"	2"	19	100	1900
B30	23-1/8"	13-3/4"	2"	17.8	100	1780
B33	19-1/2"	10-3/4"	2"	17.8	170	3026
B36	30-1/2"	17-9/16"	2"	32.5	40	1300
B65	26-1/4"	15"	2"	20.3	60	1218
MBDual	16-9/16"	14-9/16"	1-1/2"	10.3	150	1545
MAG 1	16-5/8"	9"	1-1/2"	5.2	200	1040
MAG 2	21-13/16"	13-15/16"	1-1/2"	11.2	125	1400
MAG 3	25-7/8"	15-3/16"	1-3/4"	18.8	60	1128
MAG 4	30-1/8"	19-3/4"	1-1/2"	31.3	60	1878
Fogtite #1	20-1/4"	14-1/4"	2-1/2"	17.9	100	1790

*all weights and quantities are estimates

BASIC AND SPECIALIZED
COLORS AVAILABLE:



NICORINC.NET

WOMAN-OWNED AND PROUDLY MADE IN THE USA





READ-RITE® POLYMER LIDS

OVAL LID MEASUREMENTS

RF-FRIENDLY FOR AMR & AMI SYSTEMS
H-20 LOAD RATED

SIZE	WIDTH	THICKNESS	LENGTH	LOCK STYLE(S)	WEIGHT* (LBS)	QTY/PALLET	LBS/PALLET
6X9	6-5/16"	7/16"	9-3/4"	Spring-Lock	1.05	400	420
6X13	6-3/8"	3/8"	13-7/8"	Spring-Lock	1.35	300	405
7X13	7-1/8"	1-1/4"	13-5/8"	Spring-Lock	2.3	300	690
7X14	7-1/8"	1-1/4"	13-5/8"	Spring-Lock	2.3	300	690
9X17	9-3/8"	1/2"	17-1/2"	Spring-Lock	4.73	250	1183
10X13	10-1/8"	7/16"	13-3/4"	Spring-Lock	2.6	250	650
10X14	10"	1/2"	12"	Ford Double Gulf	2.2	220	484
10X16	9-3/4"	1-1/4"	16"	Spring-Lock	3.2	200	640
10X18	9-5/8"	1/2"	18"	Spring-Lock	4.12	200	824
10X19	9-5/8"	3/8"	19-1/4"	Ford MBX Spring-Lock	4.2	200	840
12X18	12"	1/2"	17-3/4"	Spring Lock	5.2	175	910

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READ-RITE® POLYMER LIDS

RF-FRIENDLY FOR AMR & AMI SYSTEMS
H-20 LOAD RATED

ROUND LID MEASUREMENTS

SIZE	TOP DIAMETER	SKIRT DIA.	TOP THICKNESS	LOCK STYLE(S)	WEIGHT* (LBS)	QTY/PALLET	LBS/PALLET
FCS Insert B&T	5-1/4"	5-1/8"	1-3/8"	Drop-in	1	500	500
7.25 Valve Box Lid	7-3/8"	5-1/2"	1-15/16"	Cam Lock or Hinge Lock	1.3	250	325
10.0	10"	6-3/8"	1"	No Lock	2	220	440
Yakima	10"	8-7/8"	5/8"	Latch Lock	2.1	220	462
10.25"	10-1/4"	8-3/4"	1/4"	Worm Gear	1.1	220	242
10.375"	10-3/8"	9"	1/2" or 3/8"	Spring Lock	1.82	220	400.4
G5	11"	8-3/4"	5/8"	Cam Lock	2.88	220	633.6
11.25"	11-1/4"	9-3/4"	3/8"	Spring Lock	2.5	220	550
11.375"	11-3/8"	10-1/8"	3/8" or 1/2"	Cam Lock or Worm Gear	2.5	220	550
11.5 Crescent	11-1/2"	10-3/8"	1/4"	Worm Gear	2.47	220	543.4
11.75" Clark	11-7/8"	10-3/4"	1/2"	Worm Gear	2.7	220	594
12.0 Type A	12"	10-3/4"	3/4"	Worm Gear	2.42	200	484
12.25 Type A	12-1/4"	10-3/4"	11/16"	Worm Gear	2.82	200	564
12.25 Type X	12-1/4"	11-1/4"	11/16"	Spring Lock or Worm Gear	2.75	200	550
12.25 Type CX	12-1/4"	11-1/4" or 10 3/4"	1/2"	Worm Gear	3.12	200	624

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READ-RITE® POLYMER LIDS

ROUND LID MEASUREMENTS

RF-FRIENDLY FOR AMR & AMI SYSTEMS
H-20 LOAD RATED

SIZE	TOP DIAMETER	SKIRT DIA.	TOP THICKNESS	LOCK STYLE(S)	WEIGHT* (LBS)	QTY/PALLET	LBS/PALLET
12.25 Type O/X	12-1/4"	11-1/4"	11/16"	Worm Gear	3.12	200	624
12.5 Type OMSB	12-1/4"	10-1/2"	1/2"	Worm Gear	2.97	200	594
12.5 Type C	12-1/2"	11-1/4" or 10-3/4"	1/2"	Spring-Lock or Worm Gear	3.12	200	624
12.25 Type LC	12-1/2"	11-1/4"	1/2"	Worm Gear	2.11	200	422
12.25 Type LC/X	12-1/2"	11-1/4"	11/16"	Worm Gear	3.12	200	624
13.0" Denver Castings	13"	11-3/4"	3/4"	Spring-Lock or Worm Gear	2.80	200	560
13.25 COMCO	13-1/4"	11-5/8"	3/8"	Worm Gear	3.05	200	610
14.5"	14-1/2"	13-1/16"	5/8"	Worm Gear	4.55	175	796.25
15"	15-1/4"	14-1/2"	1/2"	Latch Lock	5.12	150	768
16"	16-3/8"	14-5/8"	1/2"	Worm Gear	5.38	175	941.5
18.0	18"	16-5/16"	1"	Latch Lock	7.66	125	957.5
18.75"	18-11/16"	17-7/8"	1/2"	Latch Lock	6.85	125	856.3
20.0	19-5/8"	18"	1/2"	Latch Lock	11.0	96	1056
21.25"	21-1/8"	19-3/4"	3/4"	Worm Gear	12.5	96	1200

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BASIC AND SPECIALIZED
COLORS AVAILABLE:



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AMR/AMI ENDPOINT BRACKETS

COMPATIBLE WITH ALL AMR/AMI SYSTEMS
NO TOOLS REQUIRED

WHY USE ENDPOINT BRACKETS?

Most of us know from our daily experiences with cell phones that higher and less obstructed areas help us achieve better signal. Now that water meters are equipped with similar technology, getting a clear radio signal out of the meter box is key to a fully functioning AMR/AMI system.

Utilities can set their AMR/AMI systems up for success at the time of installation by utilizing Nicor Endpoint Brackets. Used in conjunction with Nicor Read-Rite® polymer lids, a communication endpoint can be installed in several ways: 1) threaded, 2) through the lid, or 3) with Endpoint Brackets.

Nicor Endpoint Brackets enable the endpoint to attach to the underside of the lid. This elevates the endpoint to support optimal radio propagation. Brackets can also help keep the endpoint free of dirt and moisture when compared to having the endpoint sitting in the pit.

UNDER A NICOR READ-RITE® LID

IS A

WORLD

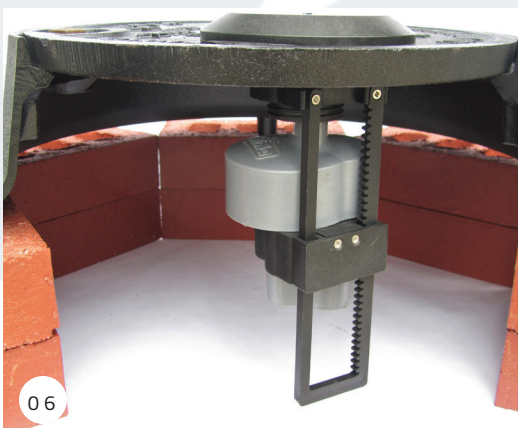
OF POTENTIAL TO MOUNT EVERY AVAILABLE

AMR & AMI

ENDPOINT UNDER OR THROUGH THE LID.



AMR/AMI ENDPOINT SOLUTIONS



AMR/AMI ENDPOINT BRACKETS

01 U-BRACKET WITH SCREW FOR ALL AMI SYSTEMS **02 SENSUS** ENDPOINT INSTALLED WITH SNAP-IN U-BRACKET **03 HONEYWELL** ENDPOINT INSTALLED THRU NICOR LID WITH RECESS **04 OFF-SET** SNAP-IN BRACKET FOR ITRON RIVA, 100W & 60W ERTS **05 ACLARA** ADJUSTABLE BRACKET **06 ADJUSTABLE** SLIDING BRACKET FOR MUELLER MINET & HOTROD **07 BADGER** ENDPOINT MOUNTED WITH U-BRACKET



HYDROCONN® CONNECTORS AMR SERIES III & IV



DE FACTO INDUSTRY STANDARD FOR WATERPROOF IN-LINE CONNECTORS

Nicor Inc. Hydroconn® AMR cables are specifically designed to vastly improve cable/connectors reliability in rugged field applications, such as harsh meter pits or underwater applications. Nicor's Hydroconn® connectors are time-tested and proven to maintain a watertight seal up to 30 meters underwater.

Utilities can easily detach Nicor connectors in order to troubleshoot meter endpoints or swap out a meter.

SPECIFICATIONS FOR SERIES III AND IV

Connector Material	Flexible Hydraplas®
Contacts	Machined 22 AWG copper alloy
Contact Plating	5μ inches gold per Mil-G-45204 over Ni
Insulator	Glass filled thermoplastic
Current Rating	7.5 amps
Voltage Rating	300 V AC/rms 50Hz
Insulation Resistance	5000 MΩ at 500 vdc
Temperature Rating	-20° to +80°C Low temp cable flexibility
Cable Jacket	Hydraplas®
Pressure Rating	Submersible to 30 meters

➤ ROBOTIC
MANUFACTURING

➤ INTERNAL/EXTERNAL
TOTALLY BONDED
CONNECTOR

➤ POST-MOLDED STRAIN
RELIEF FROM CABLE TO
CONNECTOR



Patented AMR Series III



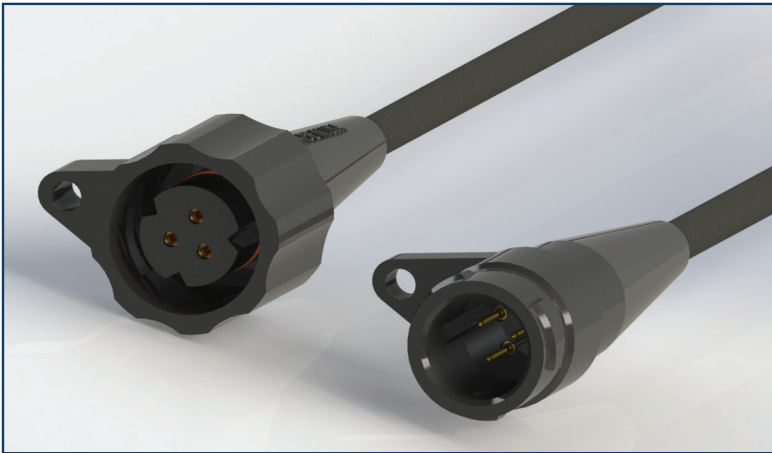
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HYDROCONN® CONNECTORS AMR SERIES IV

MOST POPULAR BRAND OF IN-LINE
CONNECTORS BY QTYS SHIPPED NATIONWIDE

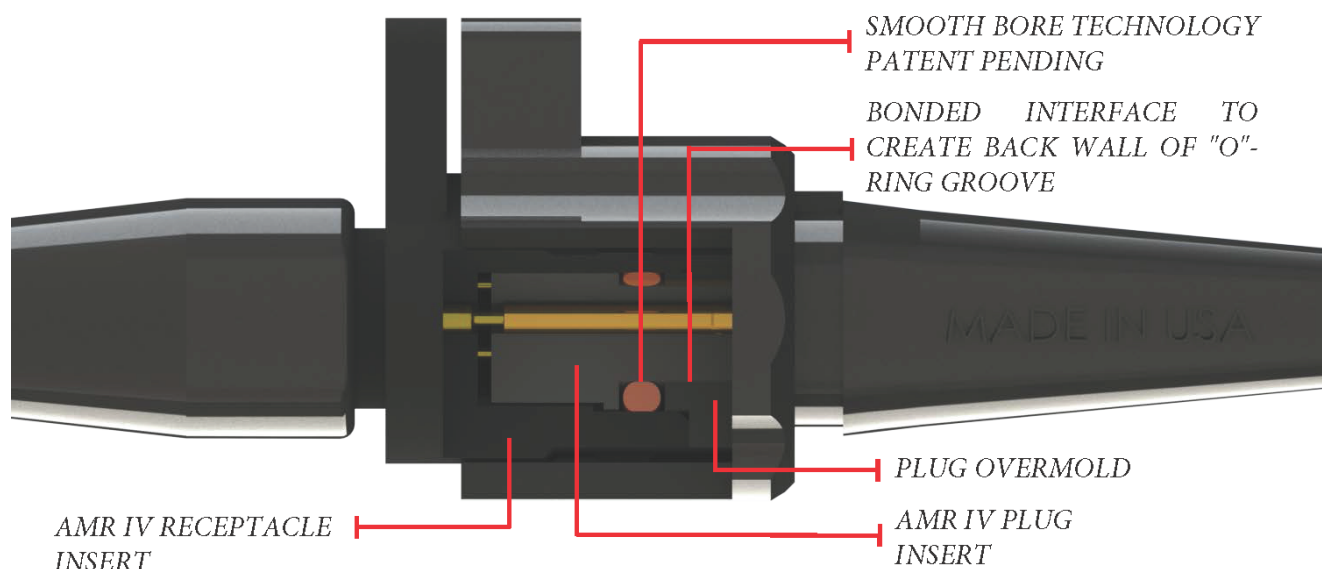


Nicor Inc. Hydroconn® AMR Series IV cables are designed to withstand the tough meter pit environments;

Series IV connectors are watertight and pass rigorous waterproof and pressure testing. They are available as either molded in place or potted terminations for sealing.

Nicor's Hydroconn® Series IV connector has a serviceable O-ring in plug with no parting line in the groove, such as harsh meter pits or underwater applications. Series IV is intermateable with the Itron In-Line Connector.

AMR IV CONNECTION CUT-AWAY



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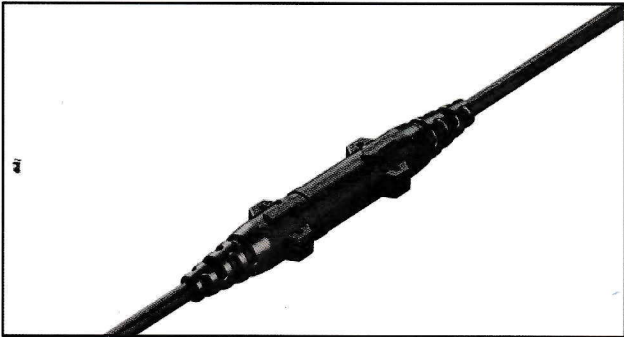
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Nicor Hydroconn AMR III Series Connectors Tamper Latch Installation Instructions

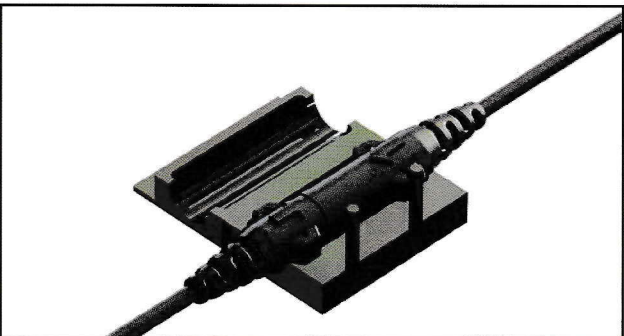
- 1) Align connectors with arrows facing up and facing each other as shown.



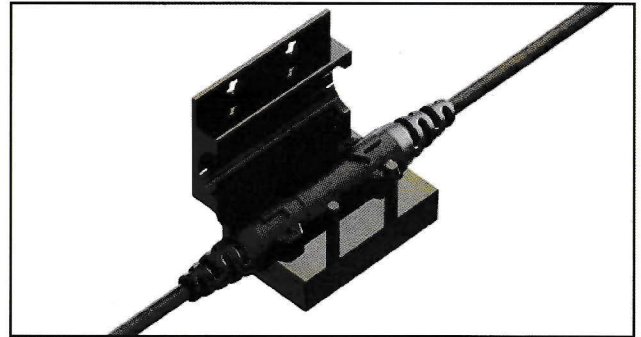
- 2) Keeping arrows aligned; press firmly together until fully mated. Do not twist when mating.



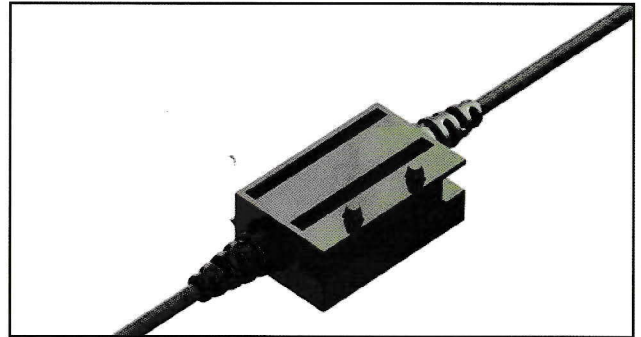
- 3) With arrows facing up, place mated connectors into tamper latch as shown.



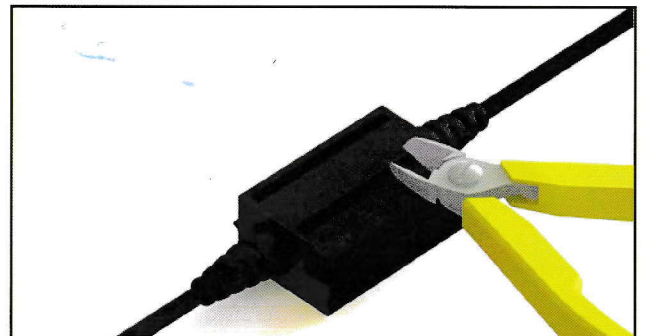
- 4) While holding connector and latch, fold upper half forward and over to close.



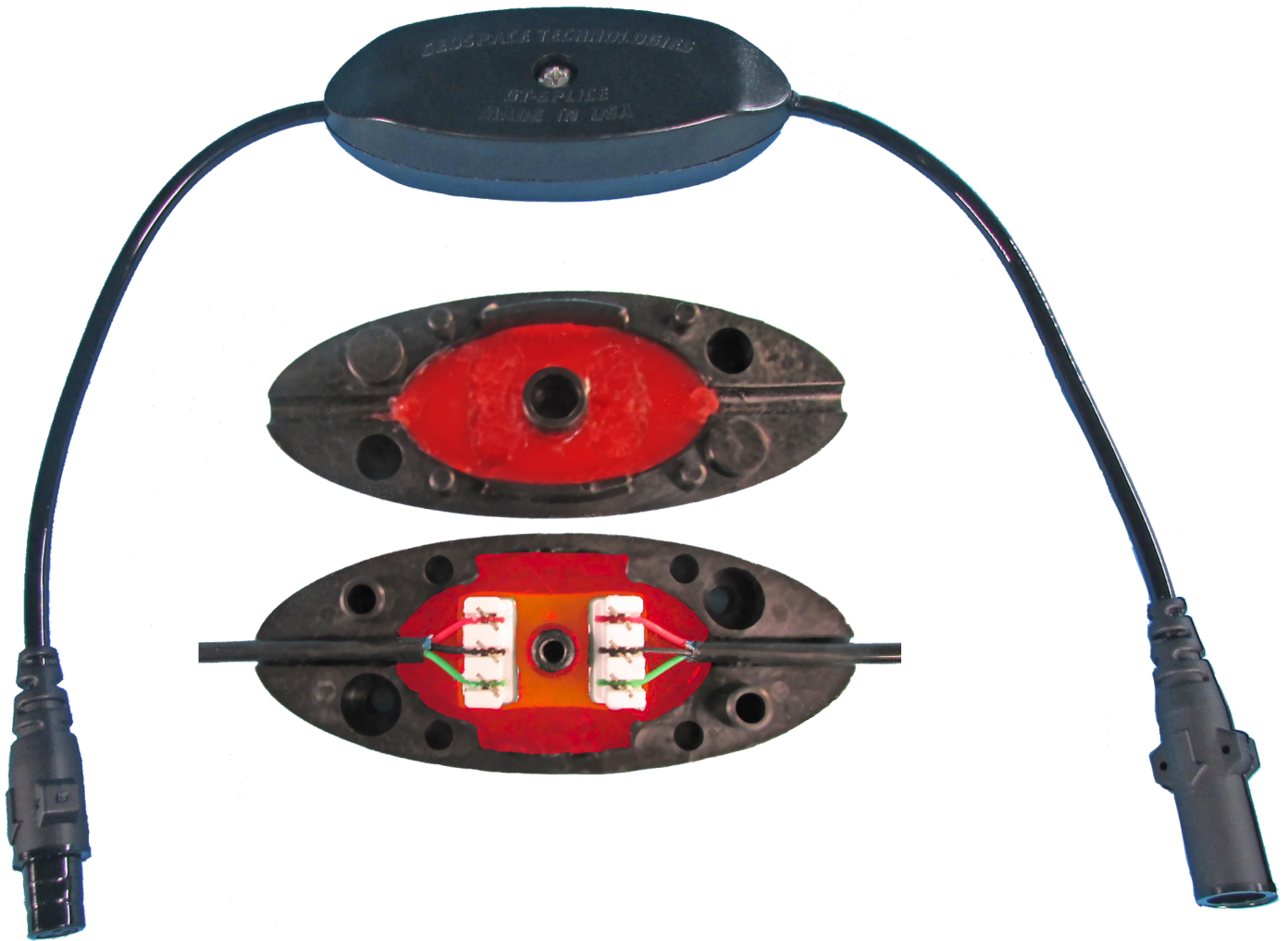
- 5) Press upper half down firmly to secure tamper latch, a 'snap' should be heard.



- 6) Remove tamper latch using cutters to cut post heads, do not pry open or reuse tamper latch.



GT FIELD SPLICE



Simple Mess-Free Waterproof GT Splice

- Field installable in less than 1 minute
- 100% watertight gel seal
- Wax free, no stripping wires or pouring liquid epoxy
- Standard European Punch-Down Block, 22-24 AWG Wires
- Properly set and cut wires when using impact punch-down tool
- Made in USA

GT FIELD SPLICE

**Connect Your Water Meters to Your Radio-read
Meter Network with a Waterproof Seal.**



SPLICE KIT BODY

Upper and Lower Shells	RoHS-compliant Polypropylene
Proprietary Waterproof Gel	Pre-installed, Self-healing
Operating Temperature	-40°F to +158°F

PUNCH-DOWN BLOCK

Compliance	Compliance: Type approved against TEC, CT Block spec. GR/CTN-03/03 March 04
Plastics	Plastics: PBT, Resistant against aggressive chemicals (PVC Softener)
Plastics Flammability Class	Plastics Flammability Class: UL 94 V0
Contact	Contact: Special Brass, Silver Plated
Wire Gauge	AWG 22 TO AWG 24 Stranded or Solid
1 Wire Per Contact	0.63 to 0.83 mm
2 Wire Per Contact	0.40 to 0.63 mm
Insulation Diameter of Connectable Wires	0.7 to 1.6 mm
Contact Resistance	< 2.5m ohms
Insulation Resistance	>50 Meg ohms
Dielectric Strength	2 KV rms
Impulse Current	5kA(8/20micro sec)
Current Carrying Capacity	2 A

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