

Please see attached
 Test Procedures
 RayClic proper insertion
 Blank Test Report

XL IO

<https://cdn.chemelex.com/Product%20Documents/Installation%20Manuals/RAYCHEM-IM-H580-33-XLTraceEdgePFP-EN.pdf>

RayClic PC install video

<https://www.youtube.com/watch?v=gKUq8VqPLaw>

General heat trace install video (Not XLTrace, different components)

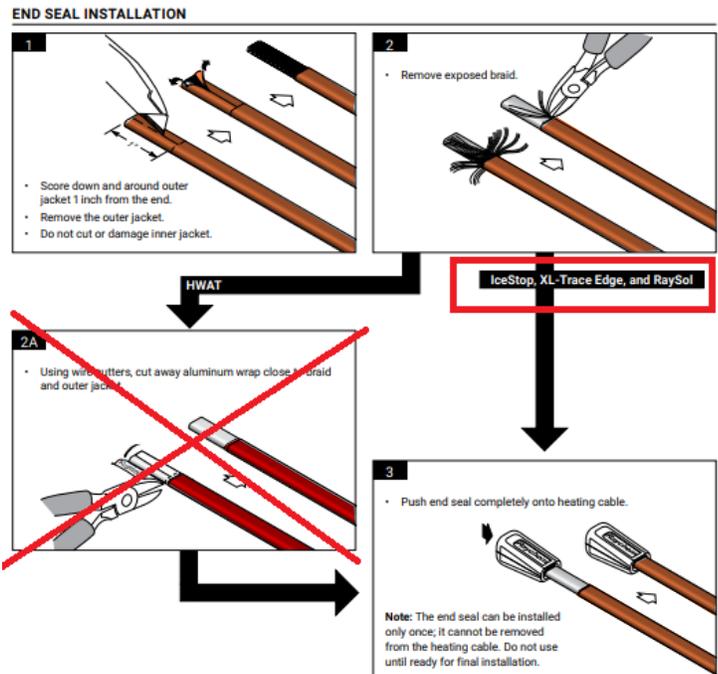
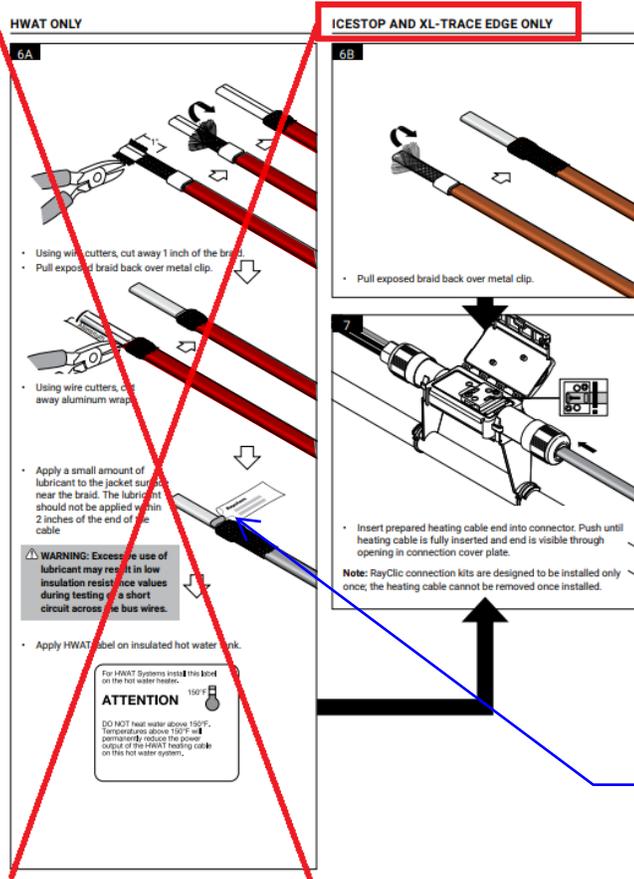
<https://www.youtube.com/watch?v=AFaVGKu3FWY>

RayClic PC installation instructions

<https://cdn.chemelex.com/Product%20Documents/Installation%20Manuals/RAYCHEM-IM-H550-92-RayClicConnectionSystem-EN.pdf>

For XLTrace (orange or black cable)
 Do NOT follow the HWAT step 6a
 YOU WANT 6B

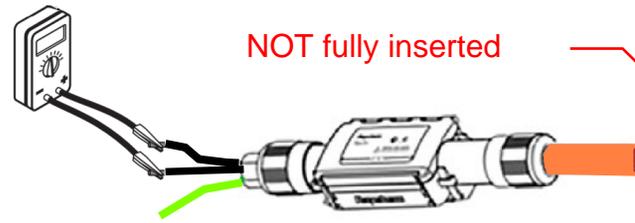
For the end seal you want to go
 straight from step 2 to 3



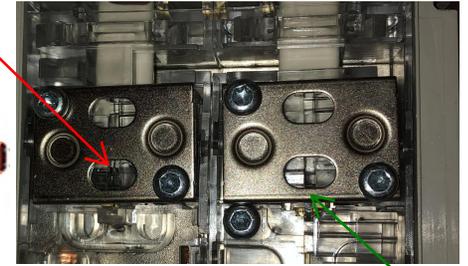
Do NOT use lube provided!

"CORE" resistance

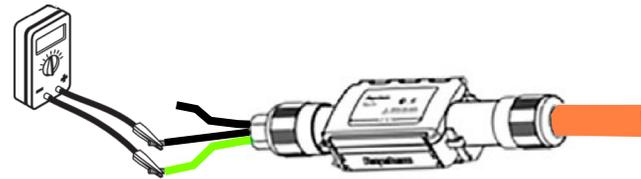
"CORE" resistance is read from Black to Black. This is reading across the heating core and should show 4-150 ohms depending on length and temperature. A longer cable should have a lower core resistance. If the reading is above 300 ohms be sure that the cable is fully inserted into the RayClic. Check the Rayclic screws for tightness. If below 3 ohms check for a bus wire to bus wire short or exceeded maximum circuit length.



NOT fully inserted



You should see white inner jacket all the way into both windows



Capacitance Reading

The capacitance reading can be used to estimate length. The capacitance is read from the bus wire (black) to braid (green). The reading (in nano farads) times the factor (see chart to the right) will give a rough estimate of the heating cable connected length. Note that if the is a bad IR reading the indicated length will be **WRONG** and the you will see a cable length as long as only one bus wire is connected. This should be used as an estimate only.

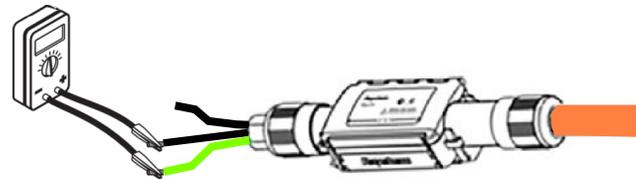
CAPACITANCE FACTORS

Heating cable	Capacitance factor	
	ft/nF	(m/nF)
3XLE	6.7	(2.1)
5XLE and 8XLE	5.0	(1.6)
12XLE	5.8	(1.8)

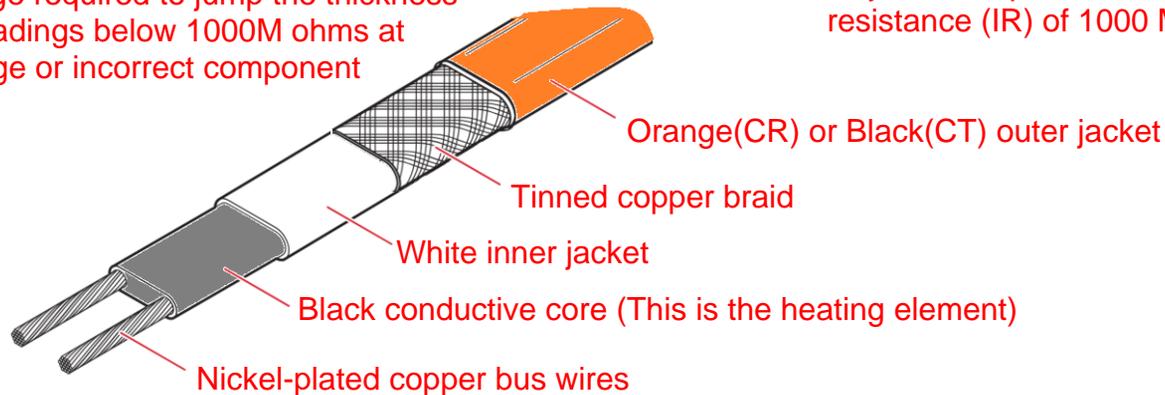
Estimated length = Capacitance reading (in nf) x Capacitance Factor

Insulation Resistance Testing (Meggering)

Insulation resistance testing is the electrical version of pressure testing a pipe. The resistance of the primary jacket is measured from the bus wire (black) to braid (green) at a high voltage to be sure there is no damage. Raychem requires this to be done up to 2500VDC because that is the voltage required to jump the thickness of the primary jacket. Readings below 1000M ohms at 2500VDC indicate damage or incorrect component installation.

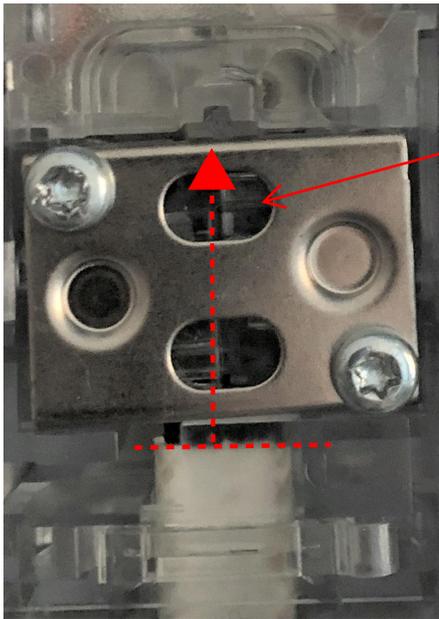


Raychem requires a minimum insulation resistance (IR) of 1000 Mega ohms at 2500VDC

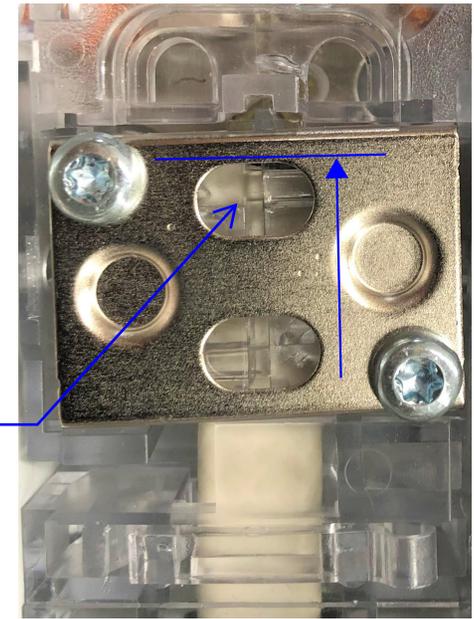
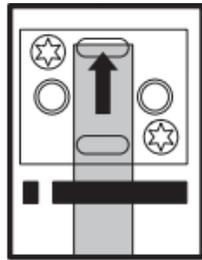


Commercial Services LLC

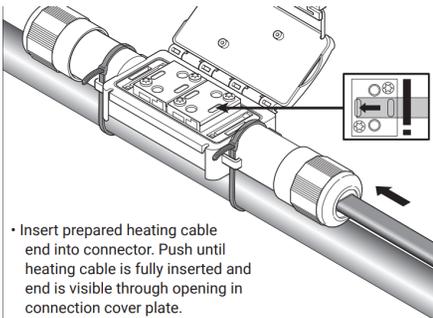
TITLE: RAYCHEM XLE IO Testing Diagrams		
SCALE: NONE	DATE: 11/3/22	REV: A



The heating cable inner jacket should be visible in both windows



Heating cable inner jacket visible in top window



• Insert prepared heating cable end into connector. Push until heating cable is fully inserted and end is visible through opening in connection cover plate.

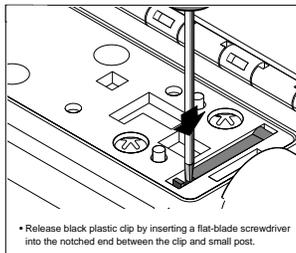
Find the powered RayClic instructions here:

<https://cdn.chemelx.com/Product%20Documents/Installation%20Manuals/RAYCHEM-IM-H55092-RayClicConnectionSystem-EN.pdf>

Rayclic Power IO video

<https://www.youtube.com/watch?v=gKUq8VqPLaw>

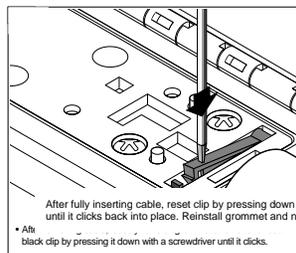
IT IS POSSIBLE TO REMOVE THE HEATING CABLE FROM THE RAYCLIC. YOU CAN DAMAGE THE RAYCLIC IN DOING THIS. BE SURE TO CHECK THE CORE RESISTANCE AFTER REINSERTING THE HEATING CABLE TO CONFIRM GOOD CONNECTION



• Release black plastic clip by inserting a flat-blade screwdriver into the notched end between the clip and small post.



• Pry up the clip until it pops free.



After fully inserting cable, reset clip by pressing down until it clicks back into place. Reinstall grommet and nut.
• At black clip by pressing it down with a screwdriver until it clicks.

See video at <https://cdcommercialservices.com/>



TITLE: Proper RayClic Cable Insertion

SCALE: NONE DATE: 2/28/23 REV: A

Megger Brand MIT2500
This tester does all of the readings
listed on previous pages.



NOTE:
When testing long circuits you may have to
connect one lead AFTER you start testing.
If not you may get a "HI CAP" error from
the device.

Grainger offers the MIT2500 here:
https://www.grainger.com/product/54JH70?gucid=N:N:PS:Paid:G:GL:CSM-2295:Y8ZQJW:20500801:APZ_1&gad_source=1&gad_campaignid=21375667808&gclid=CjwKCAjwmnCBhA4EiwAtVjzmoYelLtLicyPtALTv_UszrZgBLIpSQvt6LKpWQcbzskbdjrR7ilvbxoC8foQAvD_BwE&gclidsrc=aw.ds

TITLE: Megger MIT2500

SCALE NONE	DATE 6/24/25	REV A
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