

gREX™ Meter Installation Instructions

General

This leaflet contains general installation instructions for 2-wire and 3-wire applications of the gREX meter. All meters are factory-calibrated and tested before shipment. For proper installation, accuracy, and maximum life of the meter, use the following installation instructions. For more information about the operation of the meter, see the *gREX Meter Technical Manual* (TM42-2420) and the *gREX Meter Technical Manual for use in Canada* (TM42-2425).

⚠ DANGER

Dangerous voltage with high current capabilities are present. Use authorised utility procedures to install and service metering equipment. Equipment damage, personal injury, or death can result if safety precautions are not followed.

Preliminary inspection

All meters are calibrated and tested before shipment. For proper installation, accuracy, and maximum life of the meters, use the following installation procedures.

⚠ WARNING

Use authorised utility procedures to install and service metering equipment. Dangerous voltages are present. Equipment damage, personal injury, or death can result if safety precautions are not followed.

Before installing and applying power to the gREX meter, Elster recommends a brief inspection of the meter. Check for any of the following items:

- missing or broken parts
- missing or broken wires
- bent or cracked components
- evidence of overheating

Also, check the nameplate to make certain the meter is appropriate for the service.

Physical damage to the outside of the gREX meter may indicate a risk of electronic damage to the inside of the meter. Do not connect power to a meter that is suspected of having internal damage. Contact your Elster representative if you suspect your meter may be damaged.

Placing the meter into service

See "Wiring diagrams" on page 3 for illustrations of connection wiring diagrams.

⚠ CAUTION

Make certain to install the correct meter for the service type, maximum current, and capacity required. Installing mismatched meters can damage equipment. Always verify that the maximum meter voltage and current ratings are equal to or greater than the maximum service voltage and current.

If a gREX meter is installed in a meter shop and a collector is powered at the same time, the gREX meter may have registered to the collector. Before removing the gREX meter from the shop, the meter should be unregistered from the collector (see the technical manual for specific instructions).

Elster

Raleigh, North Carolina USA
+1 800 338 5251 (Technical Support in the US)
+1 905 634 4895 (Canada Main)
support@us.elster.com
www.elsterelectricity.com



To install the gREX meter safely and effectively, follow this procedure:

1. Decide whether to use the upper or lower meter hanger location. Using the lower meter hanger location will hide the top supporting screw.
2. Using an M5 screw for the top supporting position, hang the meter on it. Make certain that the meter is level. The meter will operate correctly in any position, but failing to mount the meter in a proper vertical position will place the other mounting holes at the wrong place on the mounting panel.
3. Decide whether to use the side supporting screw location or the bottom supporting screw location. Select the screw location that is better suited for the mounting plate.
4. Use an M5 screw to secure the meter enclosure at either the side screw location or bottom screw location.

NOTICE

Elster does not recommend the use of the gREX meter in aluminum wiring applications.

5. Ensure the voltage is either disconnected from a power source or that utility safety practices for handling live circuits are strictly followed.
6. Wire the meter using colour-coded wire according to locally applicable specifications.
7. After wiring the meter and making any relay connections, assemble the terminal cover and apply power.

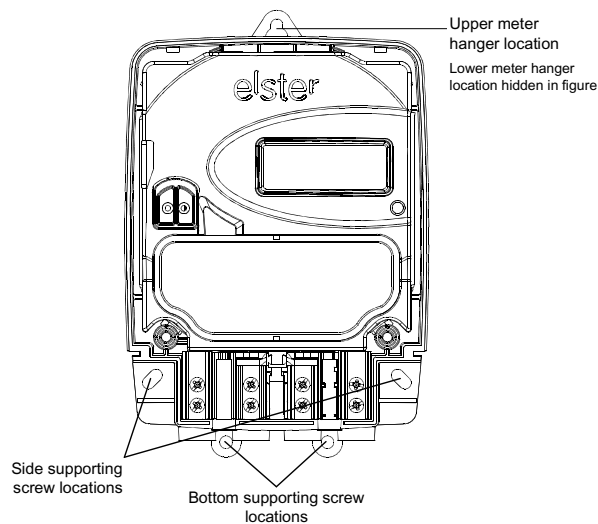


Figure 1. gREX meter mounting screw locations

Initial setup

After installing and powering the gREX meter, verify the following:

- If there is a load, the pulse indicator on the LCD is flashing; and the real energy arrows indicate the correct energy flow direction.
- Required meter seals are in place.
- Any information (such as location of the meter) has been recorded.

If the meter is not working properly after it has been installed, then check for improper installation or wiring. If the installation and wiring are correct, then check these other areas:

- the meter installation matches the meter nameplate
- the correct type of gREX meter is installed in the existing service
- no evidence of mechanical or electrical damage to either the meter or the installation location
- the service voltage falls within the operating range as indicated on the nameplate
- the seals are not broken

Notes: A broken seal may be an indication of tampering with the gREX meter installation.

Removing the meter from service

Use caution when removing the gREX meter from service.

⚠ WARNING

Use authorised utility procedures to remove metering equipment. Dangerous voltages are present. Equipment damage, personal injury, or death can result if safety precautions are not followed.

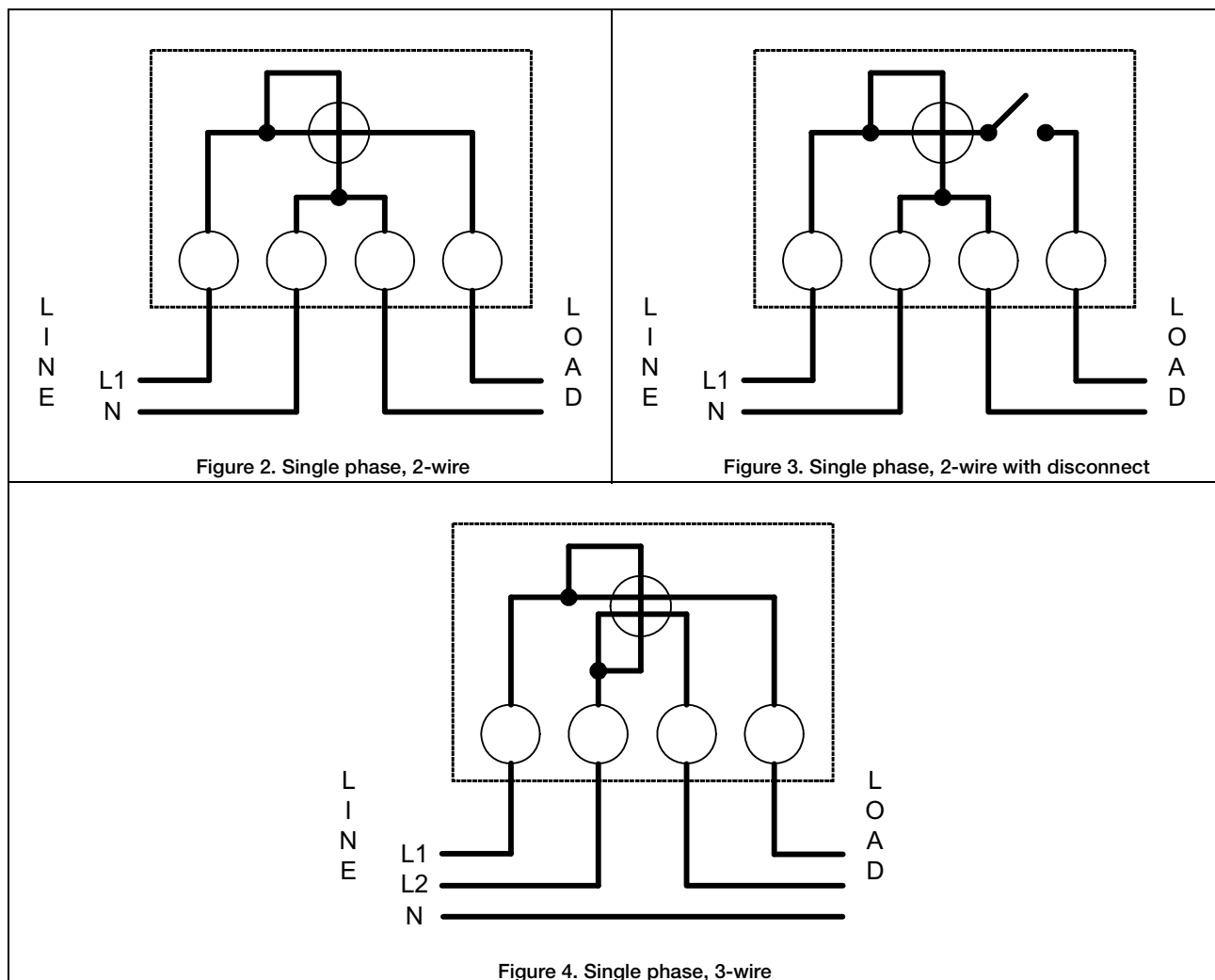
When the meter is removed from the field, the meter registration status should be cleared before installing the meter in a new location (see the technical manual for more information).

If it becomes necessary to remove a gREX meter from service, use the following procedure:

1. Before disconnecting the meter, make certain that the existing meter data has been read and recorded from the display.
2. Remove the terminal cover screw and remove the terminal cover.
3. Disconnect the wiring.
4. Remove the side or bottom supporting screws, as applicable.
5. Lift the meter off the meter hanger screw.

Wiring diagrams

The gREX meter is available for direct connected service. Refer to the wiring diagram on the nameplate for each meter for specific terminal assignments. All connections are equipped with combination-head screws that accept either a slotted or Phillips screwdriver.



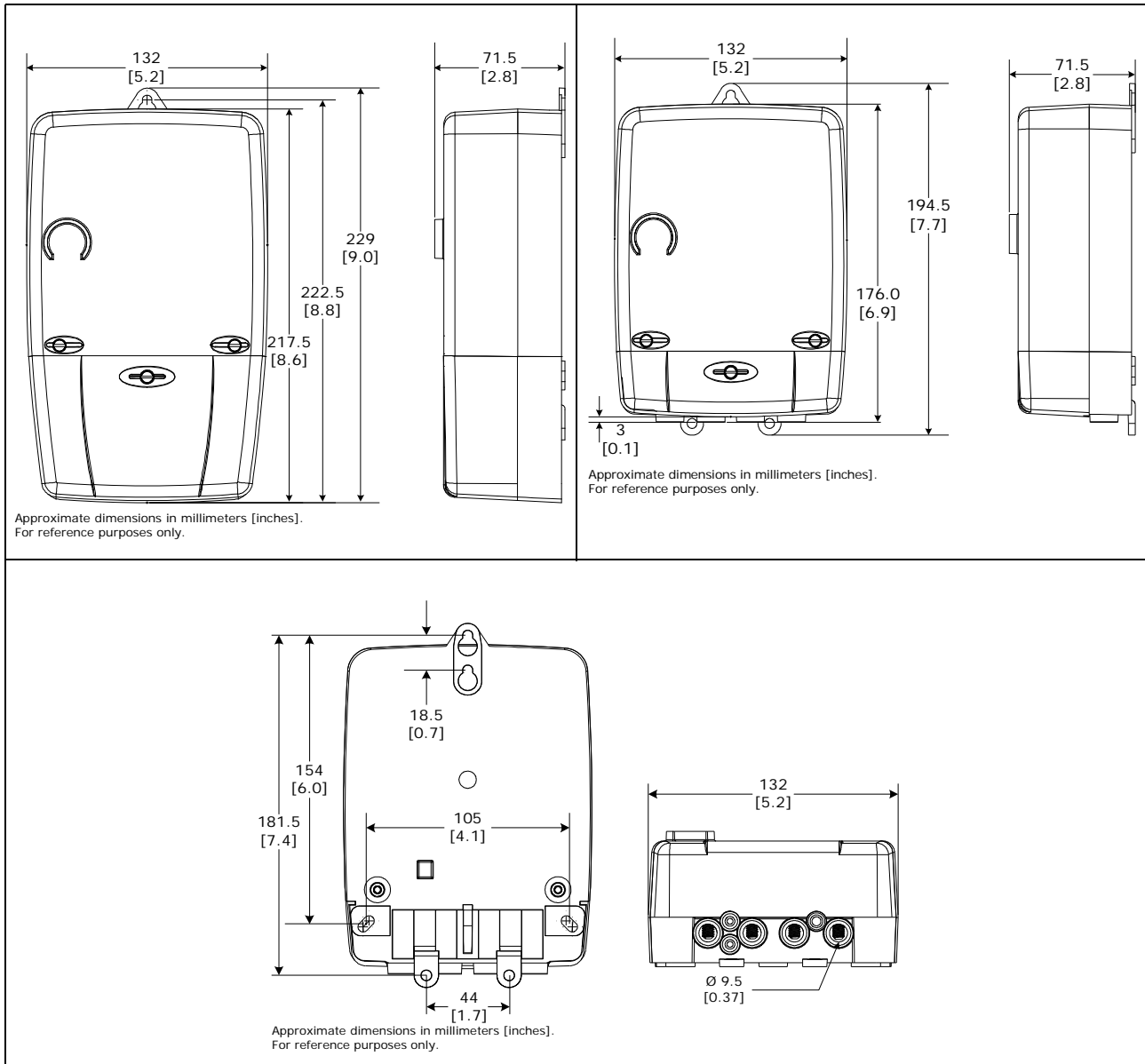


Figure 5. gREX meter dimensions

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