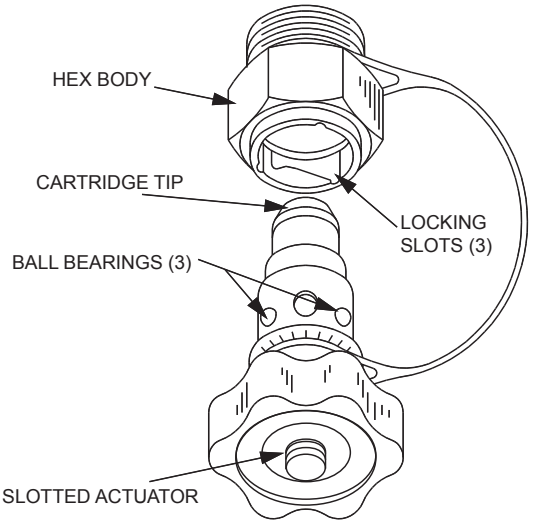
ThermOmegaTech®

INSTALLATION INSTRUCTIONS
GURU® MAGNUM SERIES PLUG

Before installing GURU® Plug, remove nose seal protector from cartridge.

1. Select locations for **GURU® PLUGS**: These should be at the lowest positions possible on the system to be freeze protected and should be accessible for future re-arming.
2. Install the **GURU® PLUG without any pipe dope on the threads** (tightening the hex body to 80 ft-lbs) with its cartridge facing down or at a 45° angle (as shown) for best accessibility. (Make sure lanyard is placed over paint mask and not between paint mask and cartridge tip. Paint mask must be cupped toward cartridge tip.) Do not remove paint mask (cover) on cartridge. **Do not cut lanyard!**
3. **GURU® PLUG** must be installed with a 2.75 in (69.85 mm) minimum operating clearance to allow cartridge to pop out.
4. Cartridge can be removed by pushing in and twisting counter-clockwise (no tools required) and re-installed by pushing in and twisting clockwise.
5. Under freezing conditions, cartridge may be re-installed after reheating.



IMPORTANT: To operate properly in extreme conditions, the GURU® assembly must be dry. If the actuator nose seal or hex body o-ring leaks or drips, replace hex nut and cartridge immediately.

CAUTION: When re-arming GURU® always melt any ice formations from cartridge and inside of hex body prior to installing GURU® PLUG Cartridge to prevent seal damage.

NOTE: Cartridge and inside of hex body must be dry before assembly.

6. Preferred method of testing: **GURU® PLUG** must be removed from cooling system for proper testing. Horizontally place the assembly on a flat surface. Using a can of freeze spray (available through most home-building supply stores or specialty suppliers) intermittently spray the actuator nose to keep a layer of frost on the metal surface. Cartridge should pop within one minute. If not, replace entire unit. Warm the cartridge before reinstalling.

To remove MAGNUM GURU® PLUG CARTRIDGE for service or warming*:
Push cartridge in and twist to the left (counter-clockwise) until it stops. Cartridge will pop out. Remove loop of lanyard cable from **GURU® Cartridge**.

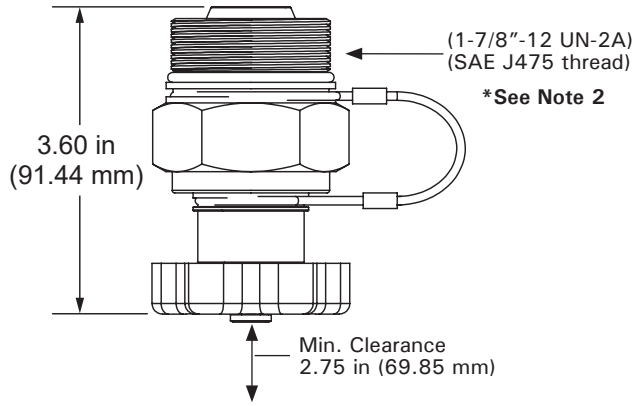
To reinstall MAGNUM GURU® PLUG CARTRIDGE*:
Make sure **GURU® Cartridge** is warmed to 55°F or higher. Replace loop of lanyard in groove of cartridge. Make sure lanyard is placed over paint mask and not between paint mask and cartridge tip. Paint mask must be cupped toward cartridge tip. Push cartridge in and turn to the right until locked. Do not remove paint mask (cover) on cartridge.

Make sure the Hex Nut seat is cleaned before reinserting. You can wipe it with an alcohol wipe or equal (lint-free) wipe.

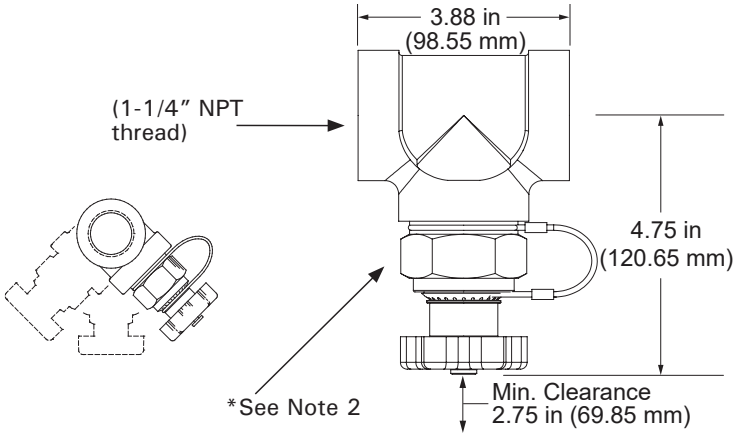


***Prior to filling system with cold water, warm cartridge and place the GURU® Flag and Clip tool (shown above: part number 04-052) in the slotted actuator to prevent cartridge from releasing. This will provide a visual indication that a GURU® cartridge is disabled. Do not use if you do not plan to immediately operate locomotive.**

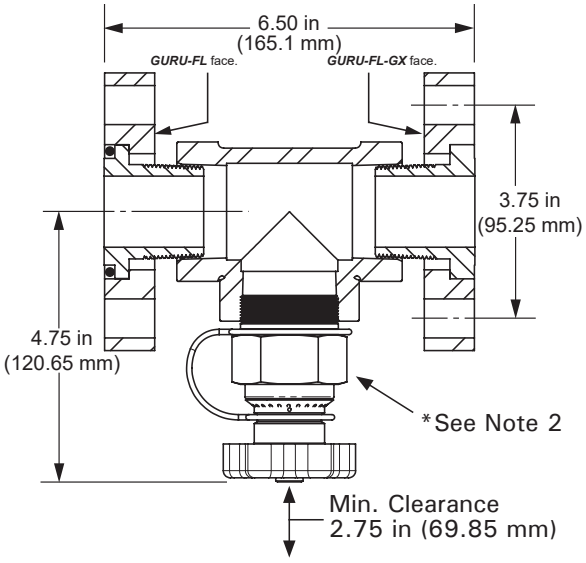
MAGNUM TYPE-S



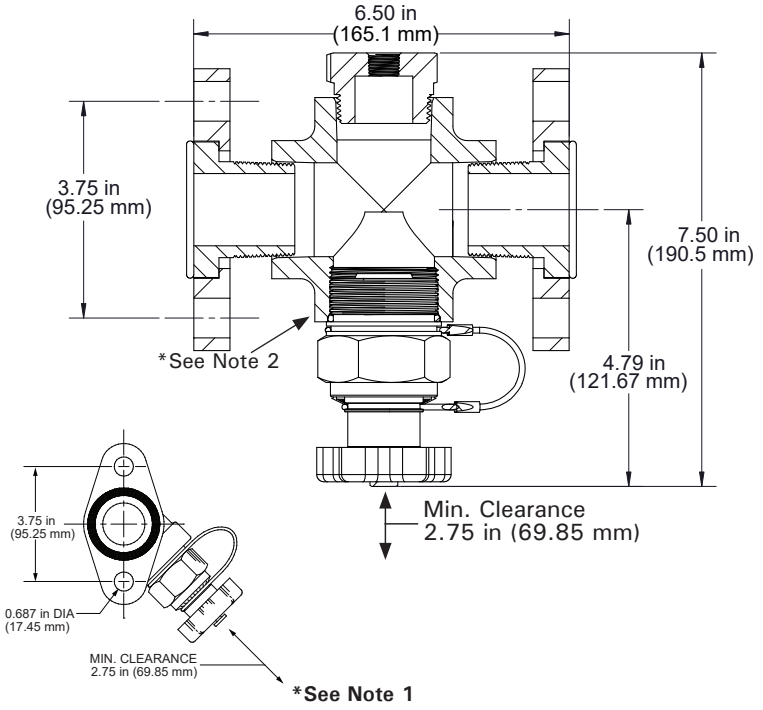
MAGNUM TYPE-T

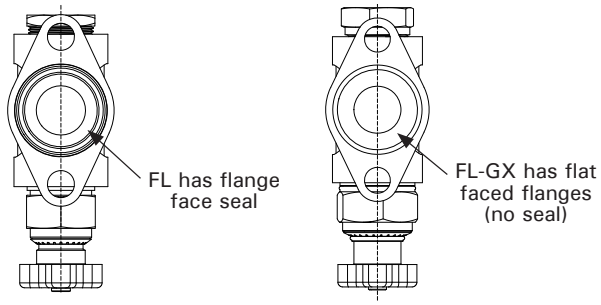


MAGNUM TYPE-FL, FL-GX & FL/FL-GX

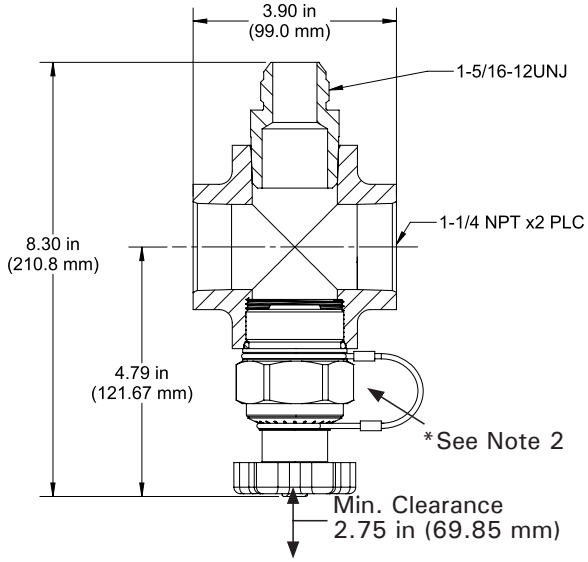


MAGNUM TYPE-CR/FL-GX/P





MAGNUM TYPE-CR/JIC



Note 1: Orient valve so that it faces downward or up to 45˚ as shown
Note 2: Tighten to 80 ft-lbs upon installation

MAINTENANCE

ThermOmegaTech® recommends changing the GURU® Plug every 18-24 months. The characteristic tendency of the GURU® Plug's actuator is to lose a small amount of stroke as it ages beyond one year. This stroke loss causes the release temperature and the manual reset temperature to creep upward. While this is a "safe" tendency for freeze protection, the upward creep can eventually cause nuisance dumping.

The GURU® Plug's colored cap serves as a visual indicator of the year it was built. Five colors rotate, each associated with a year. *View the cap color chart below*. The month and year that the valve was manufactured is also laser marked on the top of each cap.

NOTE: Both the Hex Nut and Valve Cartridge MUST be changed out.

We offer a rebuild program that allows you to return your old Guru Plugs to be refurbished for a discounted price. For more information visit www.thermomegatech.com/guru-rebuild-program/ or contact the factory.

YEARLY COLOR CODES (START: SEPTEMBER 1, END: AUGUST 31)		
2024-2025 SILVER	2025-2026 GREEN	2026-2027 YELLOW
2027-2028 WHITE	2028-2029 RED	2029-2030 SILVER
SERIES REPEATS		

Proper Use: Use ThermOmegaTech® products only as specified to ensure performance, safety, and regulatory compliance.
No Modifications: Do not modify ThermOmegaTech® products, as changes may void warranties and violate regulations (e.g., RoHS, REACH).
Proper Disposal: Dispose of end-of-life products per local hazardous substance regulations; contact ThermOmegaTech® or recycling facilities for guidance.

WARNING: This product can expose you to chemicals, for example lead, nickel, acrylonitrile, which are known to the State of CA to cause cancer, birth defects, or reproductive harm. For more information, go to www.P65Warnings.ca.gov

Warranty information disclosed at www.thermomegatech.com/terms-conditions/

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