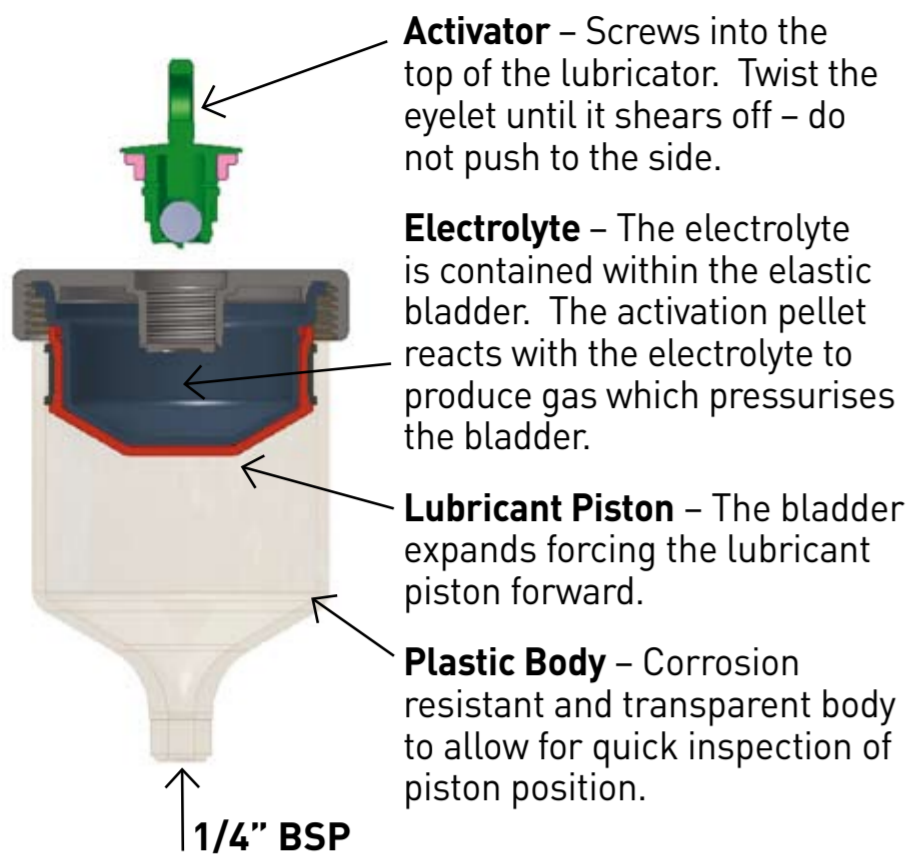


perma Futura – Quick Reference Chart



Operating Principle



Activator – Screws into the top of the lubricator. Twist the eyelet until it shears off – do not push to the side.

Electrolyte – The electrolyte is contained within the elastic bladder. The activation pellet reacts with the electrolyte to produce gas which pressurises the bladder.

Lubricant Piston – The bladder expands forcing the lubricant piston forward.

Plastic Body – Corrosion resistant and transparent body to allow for quick inspection of piston position.



Dispensing Rates

Different rates are achieved by selecting colour coded activators. There are 4 types: 1 (yellow), 3 (green), 6 (red) and 12 (grey).

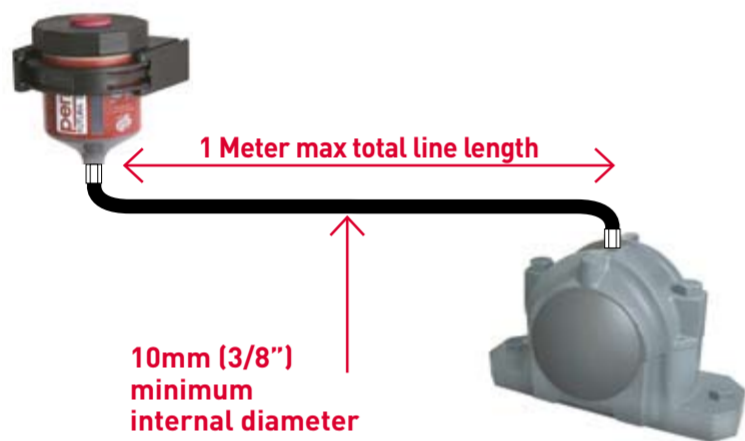
A Type 1 activator will dispense the lubricator contents over a 1 month period when the average ambient temperature is 20°C, Type 3 = 3 months and so on.

* Dispensing rates are based on an average ambient temperature of 20°C. Higher average temperatures lead to faster dispensing and lower temperatures to slower dispensing¹.

	Activator Color	Time Period	Dispensing Rate, cc per day
	Yellow	1 month	3.3 cc per day*
	Green	3 months	1.1 cc per day*
	Red	6 months	0.6 cc per day*
	Grey	12 months	0.3 cc per day*

Remote Installations

Direct mount where safe to do so as this provides maximum pressure to the bearing. For remote mounting use lines which are no more than 1 meter long with an internal diameter of at least 10mm. Smaller diameter lines increase resistance to grease flow.



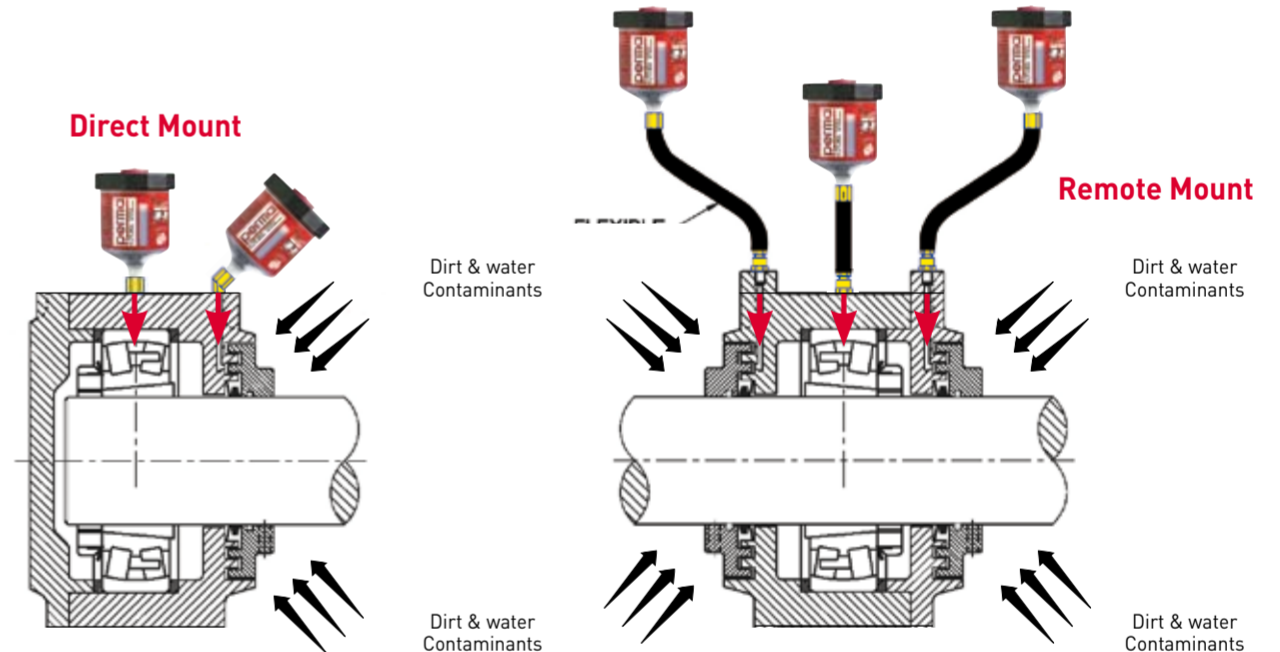
Remote installed perma Futura

Always prime grease lines and pre-grease bearings. Minimise small diameter restrictions and ensure that the bearing will receive grease freely.

Contamination Prevention – for high contamination sites

Different bearing configurations have different greasing requirements². The example here demonstrates the importance of preventing the ingress of solid contaminants and water.

For sites where contamination levels are high it is common to apply grease directly to taconite and labyrinth seals, in addition to the bearing. This provides a positive purge of grease to prevent the entry of contaminants.



Mounting System Examples



MB01 bracket with BC30 beam clamp and 708V purge kit



MB02 bracket with BC30 beam clamps and 708V purge kits



CH01 bracket with 708V manual purge kit

Installation & Servicing Tips

1. Always ensure that newly installed bearings are pre-packed prior to fitting lubricator.
2. Pre-grease bearings using a grease gun to ensure that the point can receive grease freely. Clean all fittings to prevent contamination.
3. Select the activator type to suit the application.
4. Decide whether to direct or remote mount depending on access and safety implications. Do not exceed the recommended line dimensions.
5. Activate the lubricator by screwing the activator until the eyelet shears off – twist only, do not push to the side to break eyelet.
6. Write the date of installation on the lubricator and record the date of installation in the site maintenance scheduling system.
7. Screw the lubricator into the grease port by hand – tools are not necessary.
8. Once installed the lubricator should be periodically inspected to check that accidental damage has not occurred.
9. Replace lubricator on the planned date.
10. When replacing empty lubricators manually purge the bearing to ensure that lubrication conditions have not changed.

Trouble Shooting

Correct installation is essential for correct lubricator operation.

Observation	Solution
Grease dispensing too quickly	Average ambient temperature too high for activator type – <ul style="list-style-type: none"> • Select slower activator type. <u>OR</u> • Remote mount away from heat source. <u>OR</u> • Change to STAR Vario for temp independent dispensing.
Grease dispensing too slowly	Average ambient temperature too low for activator type – <ul style="list-style-type: none"> • Select faster activator type. <u>OR</u> • Change to STAR Vario for temperature independent dispensing. Resistance to grease flow too high – <ul style="list-style-type: none"> • Manually purge point to ensure that grease can be freely received by bearing. <u>THEN</u> • Reduce grease line length <u>AND/OR</u> increase line diameter. <u>OR</u> • Eliminate restrictions caused by small diameter fittings. <u>OR</u> • Select faster activator type. <u>OR</u> • Select grease with better pumpability.
Grease 'spurts' from lubricator when removed from service	Resistance to grease flow too high – <ul style="list-style-type: none"> • Manually purge point to ensure that grease can be freely received by bearing <u>THEN</u> • Reduce grease line length <u>AND/OR</u> increase line diameter. <u>OR</u> • Eliminate restrictions caused by small diameter fittings. • Change to STAR Vario for higher pressure output.

Notes–

1. Application backpressure and other factors can also affect dispensing rates.
2. Rarely is there a categorically correct answer when it comes to the grease lubrication of bearings. Greasing decisions should take into account the recommendations of original equipment manufacturers, site based maintenance experience and good maintenance practices in general. Information here is based on perma's general opinion only.

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