

# perma STAR VARIO

Temperature independent, precise lubrication



## Electro-mechanical, variable time settings, temperature independent

perma STAR VARIO consists of a reusable electro-mechanical drive unit and a single-use lubricant cartridge. Because the lubricator is mechanically driven the dispensing rate is independent of ambient temperature and back pressure\*. Inspections of the STAR VARIO are made easy via the transparent lubricant cartridge and the alert system which utilises different flashing sequences of red and green LED's to communicate the status of the lubricator to maintenance personnel.

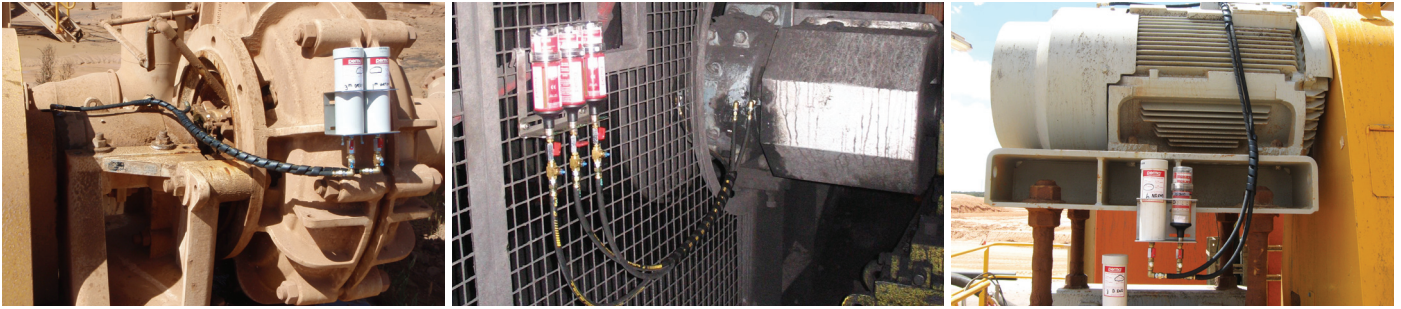
The label of the lubricant cartridge includes allocated spaces for recording the date of installation and the date of next service. The label also confirms the % of grease remaining. These features support responsible lubricator management.

**perma**<sup>®</sup>

# Application



perma STAR VARIO is a single-point, automatic lubricator which is suited to a broad range of bearing and chain applications. perma STAR VARIO is ideal for applications which demand precise grease delivery or for operating environments which include significant temperature fluctuations. The remote mounting options for the perma STAR VARIO provides practical options for lubricators to be installed in safe and easy to access locations.



Single Point Lubrication Systems

## Characteristics

- Precise lubricant delivery which is independent of temperature and back pressure\*
- Transparent housing to facilitate inspection of the lubricant piston position
- LED alert system to provide feedback to users confirming operational status
- Reusable Drive Unit
- Immediate pressure generation
- Broadest range of options for safe, robust and easy to implement remote mounting
- Lubricates a single point with greases up to NLGI 2 or oils
- Lubricant canisters are filled under controlled conditions in order maintain lubricant cleanliness and are not refillable

## Benefits

### Facilitates precise lubrication programs across a broad range of equipment, particularly where remote mounting is required

- Provides accurate lubricant delivery with immediate pressure build-up to help ensure that lubricant starvation or over lubrication do not occur.
- Whilst requiring an initial investment in Drive Units and Mounting Systems, provides long term cost benefits compared to gas type lubricators.

### Extends Equipment Service Life

- Lubricates equipment while it is running to provide optimal lubricant exchange
- Delivers intermittent injections of fresh grease to labyrinth and taconite seals to prevent the ingress of contaminants

### Safer lubrication option compared to manual greasing

- Reduces manual work load by automating an otherwise laborious manual process
- Continues to lubricate without the need for shutdown and isolation
- Provides extensive options for safe remote mounting, up to 3 meters from the lubrication point

\* Total back pressure must be less than the pressure delivery capability of the lubricator

## Technical data

Housing  
Transparent plastic

Drive – reusable  
Electromechanical

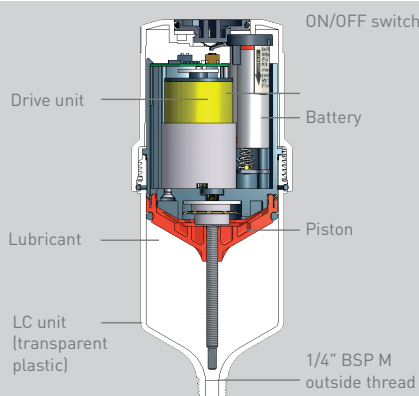
Power supply  
STAR battery pack

Discharge period  
1, 3, 6 or 12 months

Lubricant volume  
60 cm<sup>3</sup>, 120 cm<sup>3</sup> or 250 cm<sup>3</sup>

Operating temperature  
-10 °C to +50 °C

Remote installations  
3 meter of 3/8" ID line (grease)



LED Flashing Sequence	Alert System Message
Flash every 15 sec	Normal operation
Flash every 8 sec	Blockage
Flash every 3 sec	Lubricator empty

### Discharge amounts in cm<sup>3</sup> per day:

TIME	Time setting	Dwell time h:min	S60	M120	L250
			60 cm <sup>3</sup>	120 cm <sup>3</sup>	250 cm <sup>3</sup>
			VOL	VOL	VOL
	1 month	1:30	2.0 cm <sup>3</sup>	4.0 cm <sup>3</sup>	8.3 cm <sup>3</sup>
	3 months	4:37	0.67 cm <sup>3</sup>	1.3 cm <sup>3</sup>	2.8 cm <sup>3</sup>
	6 months	9:17	0.33 cm <sup>3</sup>	0.67 cm <sup>3</sup>	1.4 cm <sup>3</sup>
	12 months	18:36	0.17 cm <sup>3</sup>	0.33 cm <sup>3</sup>	0.7 cm <sup>3</sup>

Switch position indicated by white square