



# perma STAR VARIO BLUETOOTH EX

Precise, reliable, bluetooth compatible, ex-proof certification

#### Versatile lubrication system with Bluetooth functionality for use in potentially explosive areas

perma STAR VARIO BLUETOOTH EX is used for single-point lubrication of roller and sliding bearings, sliding guides, open gears, gear racks, spindles, shaft seals and chains in potentially explosive areas. Thanks to precise lubricant metering, perma STAR VARIO BLUETOOTH EX is ideal for lubrication of electric motors with specified lubricant quantities. The lubrication system can be configured, controlled and maintained conveniently from a distance via perma CONNECT. perma STAR VARIO BLUETOOTH EX can be used in potentially explosive areas with gases (up to Zone 0 / Div 1) and dusts (up to Zone 20 / Div 1). Thanks to the intrinsically safe Battery pack STAR VARIO EX, both battery pack and STAR LC can be replaced directly on site.

More about our perma products can be found on our website www.permausa.com







II 1G Ex ia IIB T4 Ga II 1D Ex ia IIIC T<sub>200</sub>135°C Da IECEx CML 21.0169X I M1 Ex ia I Ma

CML 23ATEX2479X



Class I/II/III Div 1 Groups C,D,E,F,G, T4 - T135°C Intrinsically safe / Sécurité intrinsèque Class I/II/III Zone 0/20 AEx/Ex ia IIB T4 Ga AEx/Ex ia IIIC T135°C Da -40°C to +60°C









## **PRODUCT CHARACTERISTICS & CUSTOMER BENEFITS**



# EX-PROOF CERTIFICATION CLASS I, II, III, DIV 1 & POKA-YOKE SAFEGUARD

Automatic lubricant supply of lubrication points in potentially explosive areas

Replacement of battery pack and STAR LC directly on site

Safeguard mechanism ensures the use of the correct battery pack



#### **BLUETOOTH FUNCTIONALITY**

Simple operation via perma CONNECT

Realtime configuration, control and maintenance from a distance

Increased workplace safety



#### PRESSURE BUILD-UP OF 109 OSI ALLOWS REMOTE MOUNTING UP TO 5 M

Mounting outside of dangerous areas

Higher equipment availability

Universal application

## **TECHNICAL DATA**

#### Drive - reusable

Electromechanical drive with Battery pack STAR VARIO EX (Lithium)

## Discharge period

1, 2, 3 ... 12 months | 1, 2, 3 ... 52 weeks STAR LC 500: max. 6 months

## Lubricant volume

60, 120, 250, 500 cc | 2.03, 4.06, 8.45, 16.91 fl oz

## Operating temperature

-40 °C\* to +60 °C | -40 °F\* to +140 °F

## Pressure build-up

7.5 bar | 109 psi

## Protection class

Min. IP 54

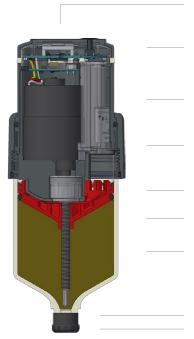
#### Standard & special lubricants

Greases up to NLGI 2 | Oils

#### **Dimensions**

LC 60: Ø 75 x 155 mm | LC 120: Ø 75 x 178 mm LC 250: Ø 75 x 228 mm | LC 500: Ø 75 x 324 mm

\*Only use with suitable low temperature lubricants!



LCD display with push button

STAR VARIO BLUETOOTH EX Drive (PA GF)

Battery pack STAR VARIO EX



Gearmotor

Piston

STAR LC (Copolyester)

Lubricant

Oil-filled units (PA) have an integrated oil retaining valve (red plug) Outside thread R1/4