



SAPPHIRE AUTOLUBE

Long life multi-purpose grease in an automatic lubricator.
Designed for the effective lubrication and protection of all types of ball, roller and plain bearings. Particularly where improved pumpability is required

FEATURES

- Ø Contains high performance Sapphire 1 bearing grease
- Ø Temperature range -30°C to 150°C
- Ø Outstanding EP performance ($>800\text{kg}$ weld load)
- Ø Revolutionary multi-complex soap technology
- Ø Greatly extended lubrication intervals
 - Ø typically 3 times longer than conventional soap thickened greases
- Ø Good corrosion resistance
- Ø Blue in colour for high visibility
- Ø Good pumpability

DIRECTIONS FOR USE

- Ø Prime the mounting point with Sapphire 1 before installing.
- Ø Select the dispensing time required and turn the Autolube on
- Ø Screw unit onto a $\frac{1}{4}$ " BSP female mounting point.

Technical and Safety Data Sheets are available from:

Fax Back Facility : +44 (0)113 232 2770
Web Site : www.rocol.com
Customer Service : +44 (0)113 232 2700

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1

ROCOL Lubricants

ROCOL House, Swillington, Leeds LS26 8BS, England.

Tel: +44 (0)113 232 2600 Fax: +44 (0)113 232 2760

www.rocol.com

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The information in this publication is based on our experience and reports from customers.
There are many factors outside our control or knowledge which affect the use and performance of our products, for which reason it is given without responsibility.

TECHNICAL DATA



SAPPHIRE AUTOLUBE

TECHNICAL DATA (typical values)

| | |
|--|--|
| Mounting thread size on Autolube | 1/4" BSP male |
| Maximum pressure build up | 5 bar |
| <u>GREASE DETAILS</u> | |
| Appearance | Smooth, blue grease |
| NLGI No. (IP 50)(ASTM D217) | NLGI No. 1 |
| Base type | Severely refined mineral oil |
| Thickener | Multi-complex soap technology |
| Temperature range | -30 ⁰ C to 150 ⁰ C |
| Base fluid viscosity at 40 ⁰ C | 180 cSt |
| Base fluid viscosity at 100 ⁰ C | 17 cSt |
| Shell 4 ball (IP 239)(ASTM D2596) | |
| Weld load | >800 kg |
| Mean hertz load | 120 kg |
| Timken 'OK' Load (IP 326)(ASTM D2509) | 60lb |
| Copper Corrosion test (IP 112)(ASTM D130) | 1a |
| Corrosion test - Emcor (IP 220) | 0:0 |
| Storage | Storage temperature should be controlled to between 1 and 40 °C. |
| Pack sizes | 120 ml |

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2

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1. SET DISPENSING PERIOD BY SELECTING A FACTOR:

| SEVERITY OF OPERATING CONDITIONS <i>i.e.... Dust, water, loading, vibration etc...</i> | FACTOR |
|---|--------|
| MEDIUM | 10 |
| HEAVY | 15 |
| VERY HEAVY | 20 |

Add factor to the bore of the bearing (in millimetres) i.e. 15 + 25mm bore = 40

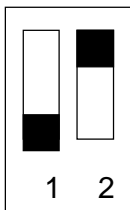
Then read the lubrication interval from the chart below:

| SUM OF BEARING BORE IN mm PLUS OPERATING CONDITION FACTOR | LUBRICATION INTERVAL |
|---|----------------------|
| < 50 | 36 months |
| 50 – 70 | 18 months |
| 70 – 100 | 9 months |
| 100 – 135 | 3 month |
| > 135 | Consult ROCOL |

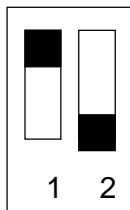
OTHER CONSIDERATIONS:

| SAPPHIRE settings (months) | 3 | 9 | 18 | 36 |
|--------------------------------|------|------|------|------|
| ml/day dispensed | 1.33 | 0.44 | 0.22 | 0.11 |
| Approx. hours between ml shots | 10 | 30 | 60 | 120 |

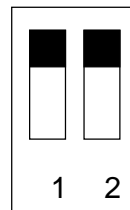
SET SWITCHES TO THE SELECTED FREQUENCY:



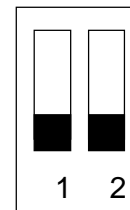
1 month



3 months



6 months



12 months

Issue 12604a: Jan-04

3

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2. Switch on. Priming cycle begins, dispensing 2.5ml of grease.
3. Immediately screw into a ¼ BSP female connection.
4. Check led's in unit for correct operation as outlined below:

| LED COLOUR | STATUS | TIMING | OPERATION |
|-------------|----------|------------------|--------------------|
| GREEN | FLASHING | Every 15 seconds | FUNCTIONING |
| RED | FLASHING | Every 8 seconds | MALFUNCTION |
| GREEN & RED | FLASHING | Every 3 seconds | CARTRIDGE EMPTY |
| GREEN & RED | ON | Continuous | DISPENSING |

SPECIFICATIONS

- Sapphire Autolubes are supplied preset to empty a cartridge in 18 months
- The Autolube is an electromechanical, reusable, automatic lubricator
- The Sapphire Autolube is filled with Sapphire 1 bearing grease
- Autolube fitting – ¼ BSP male
- Remote mount with 6mm bore nylon tubing up to 3 mtrs away (1.5 mtrs if pumping uphill)
- Dispensing – 2.5 ml initially for 25 seconds then 0.56 ml each cycle
- Capacity – 120 ml per cartridge
- Non-refillable cartridge. Thread is destroyed when empty
- Autolube temperature range – 0°C to 50°C – Constant discharge pressure
- *During malfunctions* - Back pressure builds to 5 bar by activating 5 times, then the Autolube switches off automatically until the pressure is relieved.
- The Autolube is manufactured to IP65 (Not for submerged applications)
- The ROCOL Autolube is not classified as intrinsically safe
- The unit can be switched off
- Drive unit can be reused – Replacement cartridges are supplied with new batteries

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4

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