

# SKF SYSTEM 24 - TLSD series

Electro-mechanical single point automatic lubricators













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Electro-mechanical single point automatic lubricators

### SKFTLSD series

The SKFTLSD series is the first choice when a simple and reliable automatic lubricator is required under variable temperatures, or when the application conditions (such as vibration, limited space or hazardous environments) require a remote mounting.

- Filled with SKF Lubricants especially developed for bearing applications
- Maximum discharge pressure of 5 bar over the whole dispensing period
- Transparent reservoir allows visual inspection
- Refill sets include battery pack
- Suitable for both direct and remote installation
- Complete sets are supplied ready to use, including the drive unit, battery pack, filled lubricant canister and matching support plate.

#### Typical applications

- Critical applications where extreme reliability and additional monitoring is required
- Applications in restrictive and hazardous locations
- Applications requiring high volumes of lubricant

SKF DialSet helps to calculate the correct dispense rate.

Multiple accessories are available for TLSD lubricators. More information can be found on pages 14-15.



#### Drive unit - TLSD 1-DS

Top part of TLSD with electric drive and time setting wheel. Supplied with plastic cap and support plate for grease lubrication



#### Refill set e.g. LGWA 2/SD125

Replaceable canister filled with 125 ml or 250 ml of grease or oil. Every refill set is supplied with battery pack.



#### Support plate

TLSD 1-SP is the support plate for grease lubrication.
TLSD 1-SPV is the support plate with integrated non-return valve for oil lubrication.

- A The unit can be programmed to dispense lubricant in 1, 2, 3, 4, 6, 8, 9, 10 and 12 month settings.
- **B** The same drive unit can be used with both cartridge versions by simply adjusting the 125/250 ml switch.
- Traffic light LEDs are visual from all sides because of the presence of dual LEDs on the sides of the lubricator. The meaning of the lights is as follows:
  - Green light: The lubricator is properly functioning.
  - Yellow light: The lubricator is still functioning, but soon some

action will be required. Yellow light serves as a

pre-warning light.

- Red light: The lubricator stopped operating.



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| rease      | Description   | Complete unit 125 | Complete unit 250 | Refill set 125               | Refill set 250               |
|------------|---|-------------------|-------------------|------------------------------|------------------------------|
| LGWA 2     | High load, extreme pressure, wide temperature range | TLSD 125/WA2      | TLSD 250/WA2      | LGWA 2/SD125                 | LGWA 2/SD250                 |
| LGEM 2     | High viscosity bearing grease with solid lubricants | TLSD 125/EM2      | TLSD 250/EM2      | LGEM 2/SD125                 | LGEM 2/SD250                 |
| LGHB 2     | High load, high temperature, high viscosity         | TLSD 125/HB2      | TLSD 250/HB2      | LGHB 2/SD125                 | LGHB 2/SD250                 |
| LGHQ 2     | High performance,<br>high temperature               | TLSD 125/HQ2      | TLSD 250/HQ2      | LGHQ 2/SD125                 | LGHQ 2/SD250                 |
| LGFP 2     | General purpose<br>food grade (NSF H1)              | TLSD 125/FP2      | TLSD 250/FP2      | LGFP 2/SD125                 | LGFP 2/SD250                 |
| LGFQ 2     | High load and wide temperature food grade (NSF H1)  | -                 | -                 | LGFQ 2/SD125                 | LGFQ 2/SD250                 |
| Chain oils |   |                   |                   |                              |                              |
| LHMT 68    | Medium temperature oil                              | TLSD 125/HMT68 1) | TLSD 250/HMT68 1) | LHMT 68/SD125 <sup>2)</sup>  | LHMT 68/SD250 <sup>2)</sup>  |
| LFFM 100   | General purpose food grade (NSF H1)                 | _                 | _                 | LFFM 100/SD125 <sup>2)</sup> | LFFM 100/SD250 <sup>2)</sup> |

 $<sup>^{1)}</sup>$  Includes support plate with non-return valve.  $^{2)}$  Support plate with non return valve (TLSD 1-SPV) can be ordered separately.



| Technical data                                  |  |  |  |
|---|--|--|--|
| Designation                                     | TLSD 125 and TLSD 250  |  |  |
| Grease capacity TLSD 125 TLSD 250               | 125 ml (4.2 US fl. oz)<br>250 ml (8.5 US fl. oz)                   | LED status indicators<br>Green led (each 30 sec)<br>Yellow led (each 30 sec) | OK<br>Pre warning, low battery power   |
| Emptying time                                   | User adjustable: 1, 2, 3, 4, 6, 8, 9, 10 and 12 months             | Yellow led (each 5 sec)<br>Red led (each 5 sec)<br>Red led (each 2 sec)      | Pre warning, high back pressure<br>Warning, stopped on error<br>Warning, empty cartridge |
| Lowest grease purge<br>TLSD 125<br>TLSD 250     | 0,3 ml (0.01 US fl. oz) per day<br>0,7 ml (0.02 US fl. oz) per day | Protection class assembled lubricator  | IP 65  |
| Highest grease purge<br>TLSD 125                | 4,1 ml (0.13 US fl. oz) per day                                    | Battery pack<br>TLSD 1-BAT   | 4,5 V 2,7 Ah/Alkaline manganese  |
| TLSD 250 Ambient temperature range              | 8,3 ml (0.28 US fl. oz) per day                                    | Recommended storage temperature  | 20 °C (70 °F)  |
| TLSD 1-BAT  Maximum operating pressure          | 0 to 50 °C (30 to 120 °F)<br>5 bar (75 psi)                        | Storage life of lubricator   | 3 years <sup>2)</sup> (2 years for LGFP 2 and Oils)                                      |
| Drive mechanism                                 | Electro mechanical   | Total weight (incl. packaging) TLSD 125                                      | 635 g (22.5 oz)  |
| Connection thread                               | G <sup>1</sup> / <sub>4</sub>                                      | TLSD 123   | 800 g (28.2 oz)  |
| Maximum feed line length with:<br>grease<br>oil | Up to 3 meters (10 ft) 1) Up to 5 meters (16 ft)                   |  |  |

<sup>1)</sup> The maximum feed line length is dependent on ambient temperature, grease type and back pressure created by the application.

<sup>2)</sup> Maximum storage life is 3 years from production date, which is printed on the side of the canister. The canister and battery pack may be used at 12 month setting even if activated 3 years from production date.

| Accessories  |   |  |  |  |   |
|--|---|--|--|--|---|
| Designation  | Description   | Designation  | Description  | Designation  | Description   |
| TLSD 1-DS  | Drive unit complete with support plate (TLSD 1-SP)  | LAPM 2<br>LAPN <sup>1</sup> / <sub>8</sub>                               | Y-connection Nipple $G^{1}/_{4} - G^{1}/_{8}$                                      | LAPB 3x7E1   | Brush 30 × 60 mm  |
| TLSD 1-SPV   | Support plate with integrated non-return valve for oil lubrication                                    | LAPN 1/4   | Nipple G <sup>1</sup> / <sub>4</sub> – G <sup>1</sup> / <sub>4</sub>               | LAPB 3x10E1<br>LAPB 5-16E1   | Brush $30 \times 100$ mm<br>Elevator brush, 5–16 mm gap                                       |
| LAPA 45  | Angle connection 45°  | LAPN <sup>1</sup> / <sub>2</sub><br>LAPN <sup>1</sup> / <sub>4</sub> UNF | Nipple $G^{1}/_{4} - G^{1}/_{2}$<br>Nipple $G^{1}/_{4} - 1/_{4}$ UNF               | LAPV <sup>1</sup> / <sub>4</sub><br>LAPV <sup>1</sup> / <sub>8</sub> | Non-return valve G <sup>1</sup> / <sub>4</sub> Non-return valve G <sup>1</sup> / <sub>8</sub> |
| LAPA 90<br>LAPE 35   | Angle connection 90° Extension 35 mm  | LAPN <sup>3</sup> / <sub>8</sub><br>LAPN 6                               | Nipple $G^{1}/_{4} - G^{3}/_{8}$<br>Nipple $G^{1}/_{4} - M6$                       | LAPC 13  | Bracket   |
| LAPE 50<br>LAPF F <sup>1</sup> / <sub>4</sub>                            | Extension 50 mm  Tube connection female G <sup>1</sup> / <sub>4</sub>                                 | LAPN 8<br>LAPN 8x1   | Nipple $6^{1/4}$ – M8<br>Nipple $6^{1/4}$ – M8 × 1                                 | LAPC 63<br>LAPT 1000   | Clamp Flexible tube, 1 000 mm long, 8 × 6 mm  |
| LAPF M <sup>1</sup> / <sub>8</sub><br>LAPF M <sup>1</sup> / <sub>4</sub> | Tube connection male G <sup>1</sup> / <sub>8</sub> Tube connection male G <sup>1</sup> / <sub>4</sub> | LAPN 10<br>LAPN 10x1   | Nipple $6.74 - M3 \times 1$<br>Nipple $6.74 - M10$<br>Nipple $6.74 - M10 \times 1$ | LAPT 5000  | Flexible tube, 5 000 mm long, 8 × 6 mm  |
| LAPF M <sup>1</sup> / <sub>4</sub> SW                                    | Extra strong tube connection male $G^{1}\!/_{4}$  | LAPN 12  | Nipple G <sup>1</sup> / <sub>4</sub> – M12   | LAPT 1000SW  | Extra strong flexible tube,<br>1 000 mm long, 8 × 6 mm  |
| LAPF M <sup>3</sup> / <sub>8</sub><br>LAPG <sup>1</sup> / <sub>4</sub>   | Tube connection male G <sup>3</sup> / <sub>8</sub><br>Grease nipple G <sup>1</sup> / <sub>4</sub>     | LAPN 12x1.5<br>LAPB 3x4E1  | Nipple $6^{1}/_{4}$ – M12 × 1,5<br>Brush 30 × 40 mm                                | LAPT 5000SW  | Extra strong flexible tube,<br>5 000 mm long, 8 × 6 mm  |

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