

Mini piston pump unit

# SKF Compact Greaser (ETP)

For fluid grease and grease NLGI grade 0 to 2



- The economical solution for the lubrication of linear guides, robots, rolling bearings and high-speed spindle bearings
- Ideal, economical alternative when no centralized lubrication system is available
- Three possible dosages: 10, 15 and 20 mm<sup>3</sup>
- As many as five lube points are automatically supplied with lubricant
- Dependable protection against deficient lubrication
- Low maintenance and operating costs
- Available with optional fill level monitoring



# SKF Compact Greaser – ETP

## Effective protection against deficient lubrication

### Exact metering of lubricant quantities resulting in an economic and ecological payoff.

A Compact Greaser is the ideal alternative when it comes to the lubrication of linear guides, robots and rolling bearings on machinery and equipment for which a centralized lubrication system would have been too expensive, thus making it necessary to fall back on solutions with high operating costs.

Compared with simple lubricating equipment or manual lubrication, as is often the case in practice, the Compact Greaser assures effective and lasting protection against deficient lubrication.

The Compact Greaser automatically supplies up to five lube points with lubricant, thus assuring in many cases dependable operation of guides and/or bearings for their entire life cycle.

The quiet Compact Greaser also has a lot to offer from a financial and ecological point of view. Low maintenance and operating costs on the one hand combined with a frugal use of resources on the other thanks to variable lube cycles and exact metering of the lubricant quantities required.

In many cases the Compact Greaser is also used in grease lubrication systems. Thanks to its low metering volumes it is also used with appropriate grease for the lubrication of spindle bearings.

### Simple installation and connection to the machine's control system

Thanks to its small dimensions and low weight – the easy-to-handle Compact Greaser weighs only 410 grams with a full cartridge – the Compact Greaser is easy to install, even in cramped and complicated conditions.

Its maximum power consumption amounts to 24 W, so the Compact Greaser – like a solenoid valve – can be operated directly by the SPC, namely without a separate power pack or additional circuit breaker. This is where it reveals its superiority over simple lubricators that are **not** connected to the machine's control system and thus go on lubricating even during operating breaks. That leads to higher lubrication costs, unnecessary stress on the environment and damage to bearing seals.

The Compact Greaser is designed for NLGI grade 0 to 2 grease and permits metering rates of 10, 15 or 20 mm<sup>3</sup> per stroke. The number of outlet ports and the metering rates are flexible and can be specified when an order is placed, thus making it possible to find a customized lubrication solution. A bayonet lock makes it easy to replace the lubricator's grease cartridge.

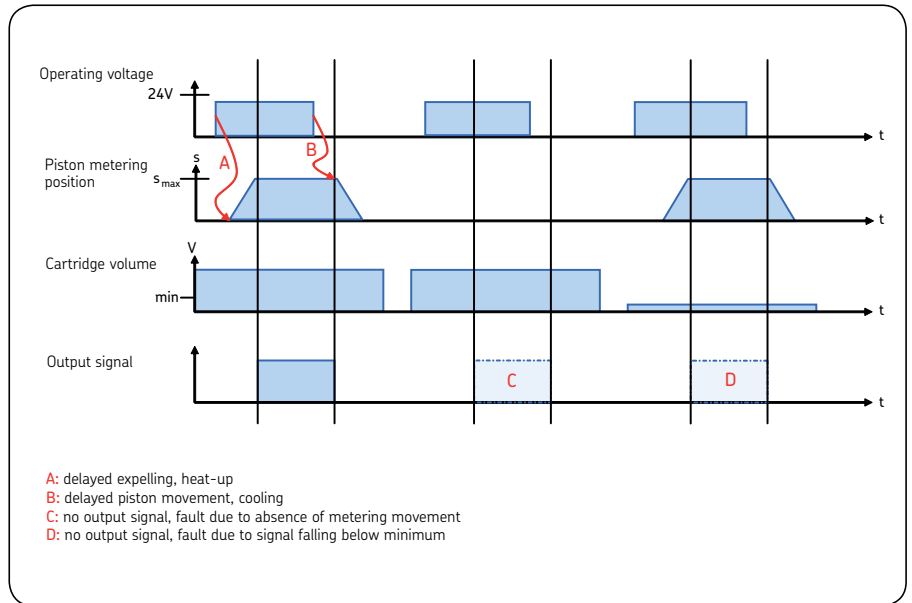
### CAUTION

The important information on product usage located on the back cover applies to all systems described in this brochure.

# SKF Compact Greaser – ETP

## Technical data

The Compact Greaser is available with a monitoring system which monitors whether the metering pulse and fill level fall below minimum. The dynamics are shown in the figure to the right.



### Technical data

Metering volume/outlet <sup>1)</sup> .....	15 mm <sup>3</sup> /stroke = B (standard) 10 mm <sup>3</sup> /stroke = C 20 mm <sup>3</sup> /stroke = A
Number of outlets .....	2, 3, 4 or 5
Max. back pressure .....	25 bar
Weight with full cartridge .....	360 g (without monitoring) 410 g (with monitoring)
Operating voltage .....	24 V DC $\pm 10\%$ (+924)
Contact time .....	7 min
Min. interval time .....	30 min
Power input .....	24 W
Max. starting current .....	1 A
Operating temperature .....	+15 to 40 °C

Type of enclosure acc. EN 60529 .....	IP55 with mounted socket
Lubricant .....	Grease, NLGI grades 0 to 2 (NLGI grade 3 on request)

### Electrical connection

#### Without monitoring

Electrical connection .....	DIN EN 175301-803-A
-----------------------------	---------------------

#### With monitoring

Electrical connection .....	M12x1
-----------------------------	-------

### Level- and stroke indication

Max. switching current .....	0,5 A
Max. breaking capacity .....	10 VA

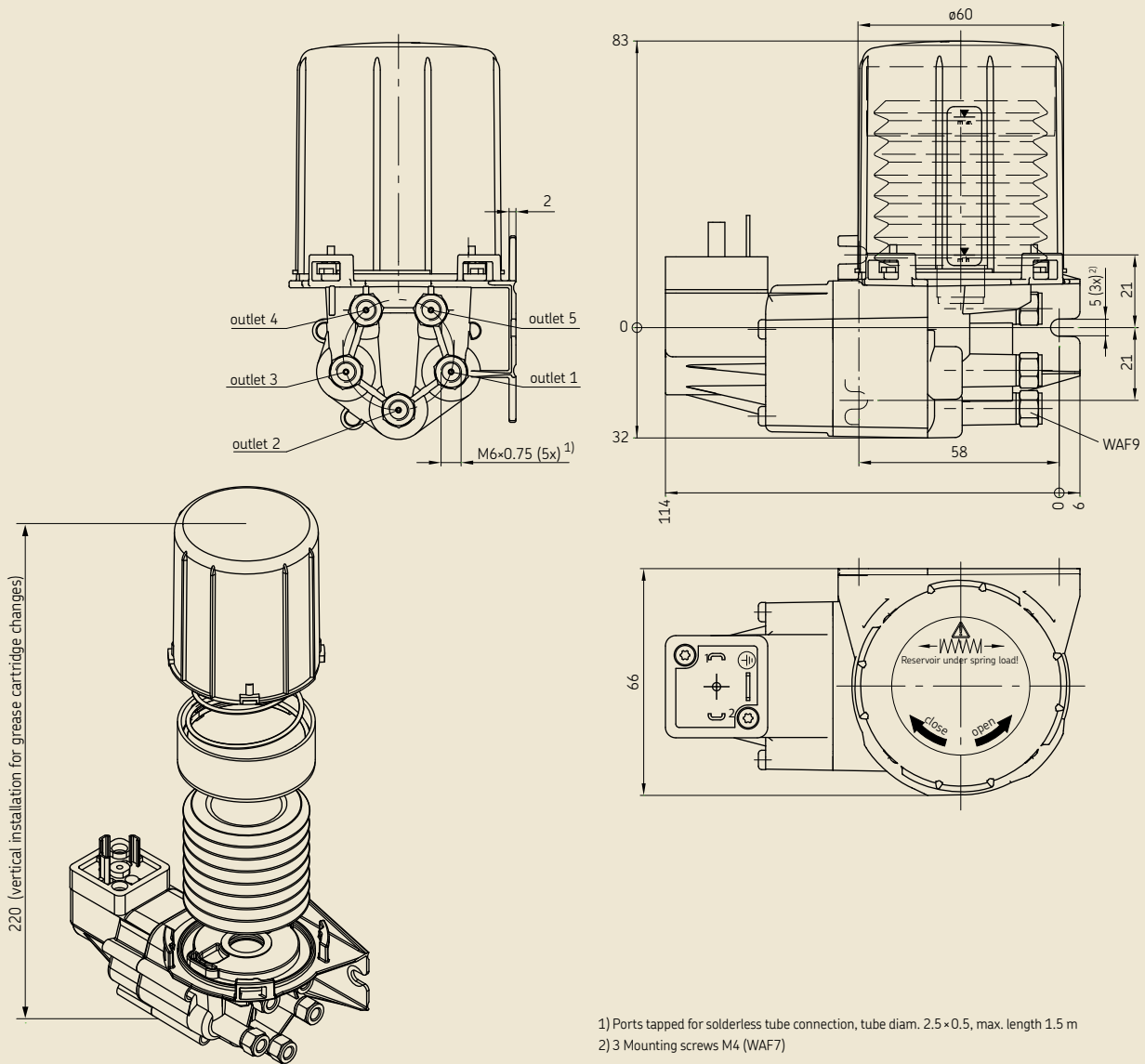
<sup>1)</sup> Please note!

During the assembly and approval test of grease filled cartridge the compact greaser has been vented. But considering the physical feature of grease, air particles are unavoidable in the microstructure of grease and can affect the accuracy of grease metering. The metering volume also depends on the grease type applied, its viscosity and ambient temperature. The given metering volumes are the average values based on the SKF standard grease by measuring over 10 strokes. A deviation of the metering volume is possible in individual case. For certain applications the customer-specified grease must be tested before ordering.

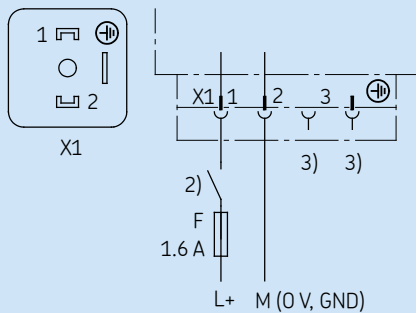
# SKF Compact Greaser – ETP

## Dimensions

ETP5 without level indication



**Pay attention to correct polarity!  
No function if polarity is reversed!**

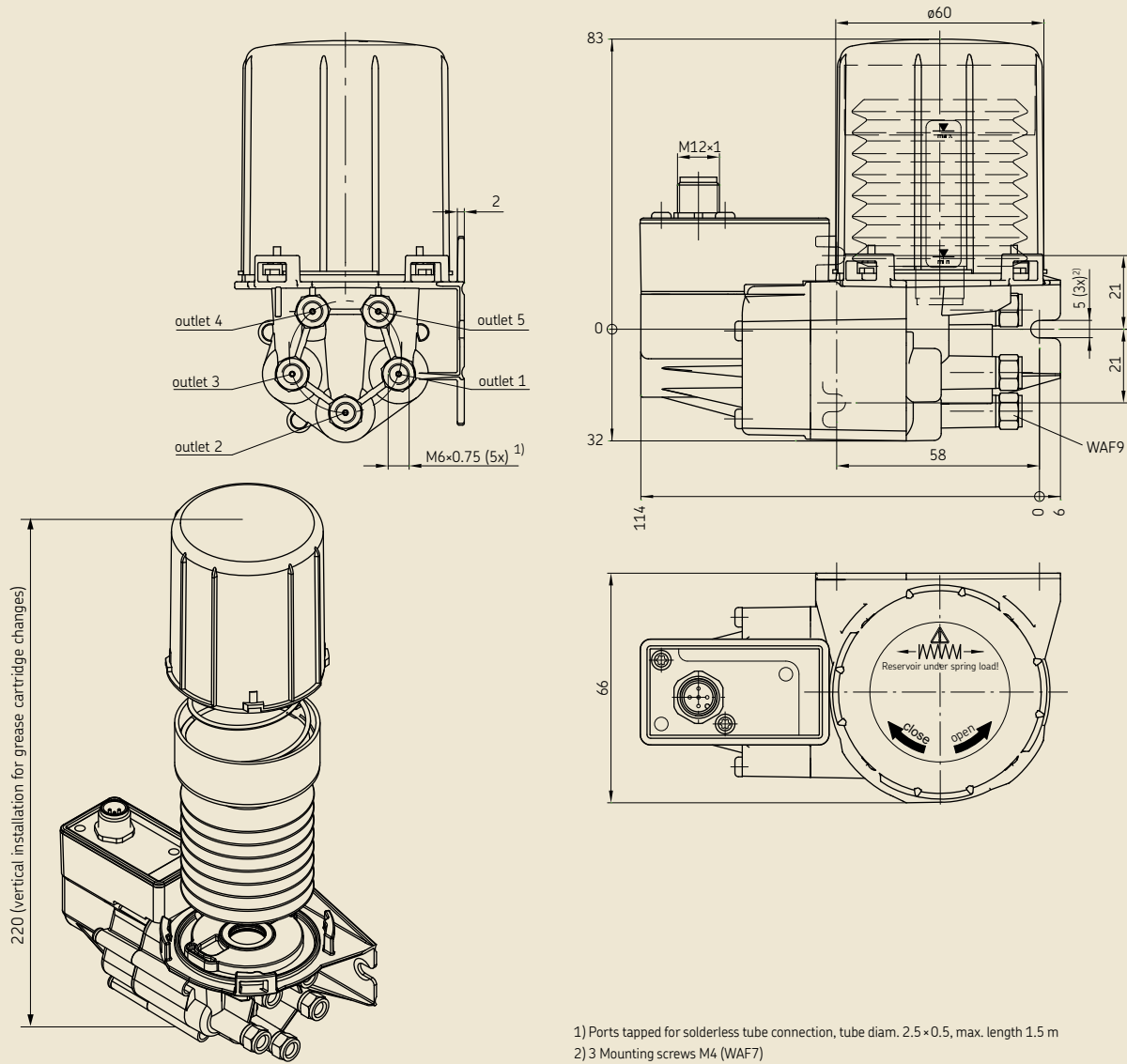


- Legend**
- L+ + Potential supply voltage (machine's main switch ON)
  - M – Potential supply voltage (0V, GND)
  - X1 Plug connector supply voltage to DIN EN 175301-803-A
  - F Fuse
  - 2) External control unit; relay contact "pump ON"
  - 3) PIN not used

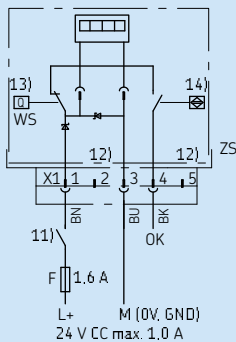
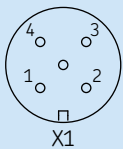
# SKF Compact Greaser – ETP

## Dimensions

ETP5 with level indication



1) Ports tapped for solderless tube connection, tube diam. 2.5 × 0.5, max. length 1.5 m  
2) 3 Mounting screws M4 (WAF7)



**Pay attention to correct polarity!  
No function if polarity is reversed!**

### Legend

- L+ + Potential supply voltage (machine's main switch ON)
- M – Potential supply voltage (0V, GND)
- X1 Plug connector supply voltage M12×1
- F Fuse
- 11) External control unit; relay contact "pump ON"
- 12) PIN not used
- 13) Contact scheme: filled reservoir (maximum)
- 14) Contact scheme: not actuated (rest position)


# SKF Compact Greaser – ETP

## Configurator

**Order key**      **E T P**      -      **1 2 3 4 5**      -      **+**      **9 2 4**


**Products series**  
**ETP** = Electro-thermic Pumpe

**Number of outlets**  
**2** = 2 outlets (1/3)  
**3** = 3 outlets (1/3/4)  
**4** = 4 outlets (1/2/3/4)  
**5** = 5 outlets (1/2/3/4/5)



**Level- and stroke indication**  
**WZ** = Indication for level- and stroke  
**no entry** = without monitoring

**Metering volume**  
**A** = 20 mm<sup>3</sup>/stroke  
**B** = 15 mm<sup>3</sup>/stroke  
**C** = 10 mm<sup>3</sup>/stroke  
**X** = closed



**Filling**  
**B** = SKF LGMT 2 (rolling bearing grease)  
**C** = SKF LGGB 2 (biodegradable grease)  
**D** = SKF LGFP 2 (food-compatible bearing grease)  
**Z** = Grease on customer request (Minimum order 20 pieces) The desired lubricant has to be provided by customer.<sup>1) 2)</sup>

**Voltage key**  
**924** = 24 V DC

<sup>1)</sup> → see below

<sup>2)</sup> Equation for ordering **Compact Greaser ETPxxx-xxxxx-Z with lubricant according to customer specification**:  $1 + (\text{number of Compact Greasers ordered})/2$ , e.g., an order for 50 pieces of Compact Greasers requires 26 pieces of 400 g cartridges:  $1 + (50/2) = 26$  pieces.

### Order example: ETP4WZ-BBCBX-B+924

- Product series ETP
- 4 outlets
- Indication for level- and stroke

- Outlet 1 = 15 mm<sup>3</sup>/stroke
- Outlet 2 = 15 mm<sup>3</sup>/stroke
- Outlet 3 = 10 mm<sup>3</sup>/stroke
- Outlet 4 = 15 mm<sup>3</sup>/stroke

- Outlet 5 = closed
- filling with LGMT 2 rolling bearing grease
- 24 V DC operating voltage

## Accessories

### Grease cartridge



**Order key**      **F K 0 0 8**      -     

**Product series**  
**FK008** = Grease cartridge 80 cm<sup>3</sup>

**Lubricant**  
**B** = SKF LGMT 2 (rolling bearing grease)  
**C** = SKF LGGB 2 (biodegradable grease)  
**D** = SKF LGFP 2 (food-compatible bearing grease)  
**Z** = Grease on customer request (Minimum order 20 pieces)  
 The desired lubricant has to be provided by customer.<sup>1) 3)</sup>

### Order example

#### FK008-B

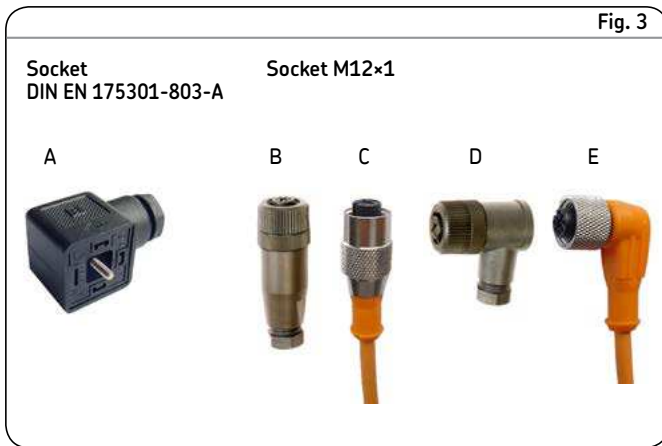
- Grease cartridge, 80 cm<sup>3</sup>
- filling with LGMT 2 rolling bearing grease

<sup>1)</sup> The requested lubricant must be supplied in 400 g standard cartridges (DIN 1284). For venting and the testing procedure, the number of supplied 400 g cartridges must be calculated using the equation for ordering the Compact Greaser or the grease cartridge. The safety data sheet must be enclosed with the lubricant shipment. The order number and the marking "Lubricant for ETP filling" must be indicated on the outer packaging so that it can be allocated.

<sup>3)</sup> Equation for ordering **grease cartridge FK008-Z with lubricant according to customer specification**:  $1 + (\text{number of grease cartridges ordered})/4$ , e.g., an order for 50 pieces of grease cartridges requires 14 pieces of 400 g cartridges:  $1 + (50/4) = 14$  pieces.

# Accessories

## Electric plug-and-socket connectors

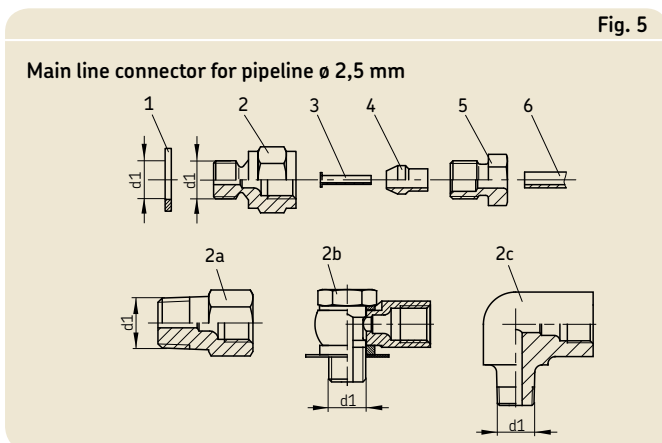
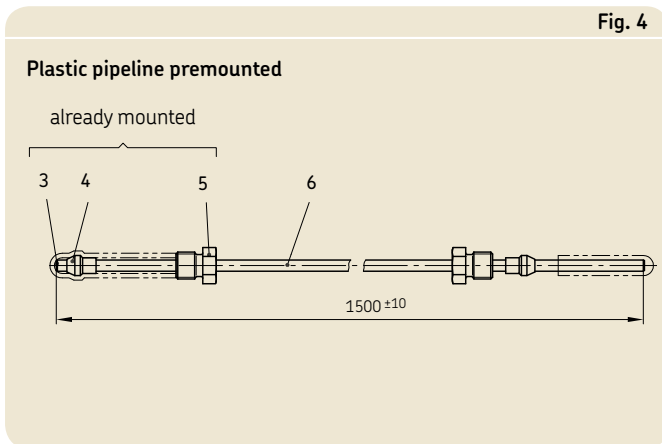


### Electric plug-and-socket connectors

Fig.	Description	Order No.
A	Socket, diameter of cable 6–10 mm	179-990-033
A	Socket, diameter of cable 4,5–7 mm	179-990-147
B	Socket M12x1 straight	179-990-371
C	Socket M12x1 straight, with integrally extruded line (5 m, 3x0.25 mm <sup>2</sup> )	179-990-381
D	Socket M12x1 angled	179-990-372
E	Socket M12x1 angled, with integrally extruded line (5 m, 3x0.25 mm <sup>2</sup> )	179-990-382

See also brochure 1-1730-EN

## Pipelines and main line connectors



### Pipelines and main line connectors

Pos.	Description	ø d1	Order No.
<b>Plastic pipeline premounted, filled with grease (Fig. 4):</b>			
Rolling bearing grease SKF LGMT2			995-001-197-B
Biodegradable grease SKF LGGB2			995-001-197-C
Food-compatible bearing grease SKF LGFP2			995-001-197-D
1	Washer	M6 M8	DIN7603-A6x10-CU DIN7603-A8x11,5-CU
2	Connector	M6 M6x0,75 M8x1	402-004 402-003 402-006
2a	Conical connector	M6x0,75 M8x1 M10x1	402-003K 402-006K 402-008K
2b	Banjo fitting, not lockable	M6 M6x0,75 M8x1	502-161 502-101 502-102
2c	Banjo fitting	M6	502-206K
3	Reinforcing socket		402-603
4	Tapered sleeve		402-611
5	Socket union		402-612
6	Plastic pipeline		WVN715-R02.5x0.5

See also brochure 1-0103-EN

**Note**  
While mounting the lubrication line, fitting must be fixed by an adequate tool to avoid distortion of the SKF Compact Greaser.

**!** **Important information on product usage**

SKF and Lincoln lubrication systems or their components are not approved for use with gases, liquefied gases, pressurized gases in solution and fluids with a vapor pressure exceeding normal atmospheric pressure (1 013 mbar) by more than 0,5 bar at their maximum permissible temperature.

**Further brochures**

1-0103-EN *Fittings and Accessories*  
1-1730-EN *Electric Plug-and-Socket Connectors*  
1-9201-EN *Transport of Lubricants in Centralized Lubrication Systems*

**SKF Lubrication Systems Germany GmbH**

Berlin Plant  
Motzener Strasse 35/37 · 12277 Berlin  
PF 970444 · 12704 Berlin · Germany

Tel. +49 (0)30 72002-0  
Fax +49 (0)30 72002-111

**This brochure was presented to you by:**

© SKF is a registered trademark of the SKF Group.

© SKF Group 2015

The contents of this publication are the copyright of the publisher and may not be reproduced (even extracts) unless prior written permission is granted. Every care has been taken to ensure the accuracy of the information contained in this publication but no liability can be accepted for any loss or damage whether direct, indirect or consequential arising out of the use of the information contained herein.

PUB LS/P2 11146 EN · November 2015 · 1-0988-EN

