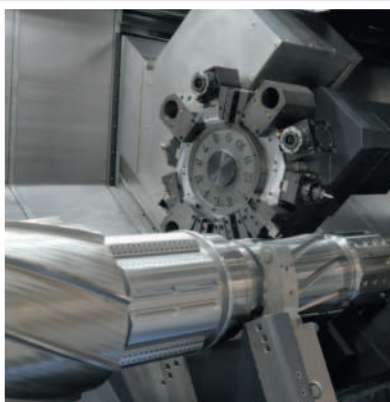


Compact lubrication pump series CLS Basic / CLS Basic Plus

# Easy and intuitive to use

For use in small and medium sized single-line lubrication systems  
in mobile and industrial applications

FOR OIL AND  
FLUID GREASE  
APPLICATIONS



# Easy and intuitive to use

## CLS Basic and Basic Plus

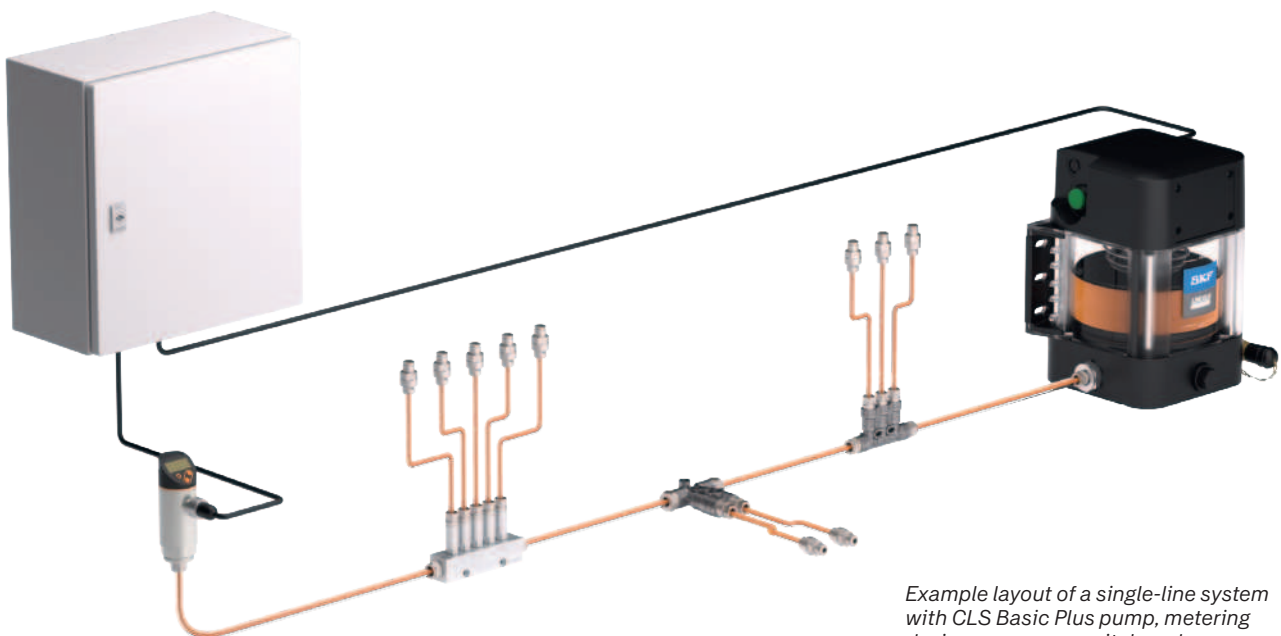
The new pump series CLS works in small and medium-sized single-line lubrication systems for oil and fluid grease. CLS pumps are part of the SKF eLube family which sets a new standard in lubrication performance.

The lightweight, simple and easy-to-use pump stands out with its compact design and reliable functionality in mobile and industrial applications. To fit the specific needs of the applications, several electrical and monitoring features have been tailored.

All CLS models can be ordered with several easy-to-access filling options. An optional follower plate supports a continuous lubricant flow.

The fill level can be visually monitored at each pump model. Basic Plus variants feature integrated empty-level monitoring. Both Basic and Basic Plus variants can be controlled via an external lubrication controller or the machine control system.

An optional manual lubrication button to start an extra lubrication cycle helps to quickly check proper function of the system.



*Example layout of a single-line system with CLS Basic Plus pump, metering devices, pressure switch and a connection to the PLC*

## CLS Basic

**Manual lubrication button**  
To start additional lubrication cycle

**Follower plate**  
To ensure continuous grease flow

**Filling connection**  
with swivelling elbow connection

Visual level monitoring

## CLS Basic Plus

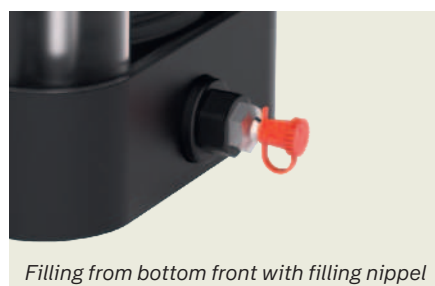
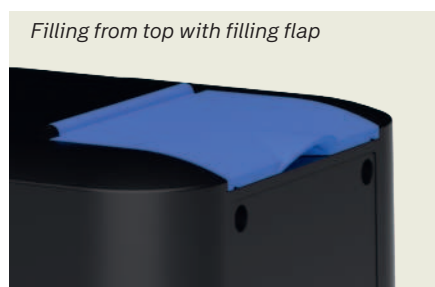
**Integrated empty-level monitoring**  
depending on model

**Electrical connection**  
Bayonet plug for mobile use or square plug for industrial use

Optional filling connection positions

**Standard gear pump**  
Provides up to 100 cm<sup>3</sup> lubricant per minute

## Several filling options make the CLS series very flexible



### CLS Basic / Basic Plus main features

- Lubricant:
  - oils with 20–1500 mm<sup>2</sup>/s
  - fluid greases NLGI 00, 000
- 1-liter reservoir
- Visual level monitoring
- Control via external lubrication controller or machine control system
- Standard gear pump provides up to 100 cm<sup>3</sup> lubricant per minute
- Power supply 24 V DC

### Features depending on model \*:

- Several filling options (from top, from bottom with straight or elbow connections)
- Follower plate
- Additional electrical empty-level monitoring
- Additional manual lubrication button
- Electrical connections:
  - Bayonet plug, 7 pole A-coded (power, signal and manual lubrication)
  - Bayonet plug, 4-pole A-coded (power)
  - Square plug, A-coded (power)
  - M12×1, 4 pole A-coded (signal output)

\* Double check the description per model

# Pre-defined models make ordering easy and improve lead time

The easiest and fastest way to order the new CLS pumps is to choose a pre-defined package. By ordering a pre-defined, standard model, you get a fully equipped pump specifically configured for mobile or industrial use. These packages meet all standard requirements of these applications.



## CLS Basic 24V for mobile use



**Material number**  
**CLS-EFXXX2-0000001**

- 24 V DC
- Compliance E1/ CE

- + Prefilled with fluid grease  
Fuchs Plantogel ECO 00S or 000S
- + Follower plate
- + Filling from bottom right with swivel-  
ling elbow connection\*
- + Bayonet plug, 4 pole A coded<sup>1)</sup>

\* Model with filling from bottom left  
**CLS-EFXXX2-0000002**



## CLS Basic Plus 24V for mobile use



**Material number**  
**CLS-EF1XZ2-0000002**

- 24 V DC
- Compliance E1/ CE

- + For fluid grease
- + Follower plate
- + Filling from bottom right with swivel-  
ling elbow connection \*
- + Empty-level monitoring
- + Bayonet plug, 7 pole A coded<sup>1)2)3)</sup>
- + Additional manual lubrication  
button<sup>4)</sup>, on the left

\* Model with filling from bottom left  
**CLS-EF1XZ2-0000001**



## CLS Basic Plus 24V for industrial use



**Material number**  
**CLS-XF1XX2-0000003**

- 24 V DC
- Compliance CE

- + For fluid grease
- + Follower plate
- + Filling from bottom right with swivel-  
ling elbow connection \*
- + Empty-level monitoring
- + Square plug, A coded<sup>1)</sup>, on the left
- + M12×1, 4 pole A coded<sup>3)</sup>, on the right

\* Model with filling from bottom left  
**CLS-XF1XX2-0000001**



## CLS Basic Plus 24V for industrial use



**Material number**  
**CLS-XU4XX2-0000001**

- 24 V DC
- Compliance CE

- + For oil
- + Filling from top
- + Empty-level monitoring
- + Square plug, A coded <sup>1)</sup>, on the left
- + M12×1, 4 pole A coded <sup>3)</sup>, on the right



## CLS Basic Plus 24V for industrial use



**Material number**  
**CLS-XF1XX2-0000002**

- 24 V DC
- Compliance CE

- + For fluid grease
- + Follower plate
- + Filling from bottom front (closing  
screw)
- + Empty-level monitoring
- + Square plug, A coded <sup>1)</sup>, on the left
- + M12×1, 4 pole A coded <sup>3)</sup>, on the right



## CLS Basic Plus 24V for industrial use



**Material number**  
**CLS-XF1XZ2-0000001**

- 24 V DC
- Compliance CE

- + For fluid grease
- + Follower plate
- + Filling from bottom left with swivelling  
elbow connection \*
- + Empty-level monitoring
- + Square plug, A coded <sup>1)2)</sup>, on the left
- + M12×1, 4 pole A coded <sup>3)</sup>, on the right
- + Additional manual lubrication  
button<sup>4)</sup>, on the left

\* Model with filling from bottom right  
**CLS-XF1XZ2-0000002**

<sup>1)</sup> Power supply  
<sup>2)</sup> Signal input for additional external controlled lubrication cycle  
<sup>3)</sup> Signal output  
<sup>4)</sup> Signal input for manual lubrication via lubrication button

## Technical data for CLS Basic and Basic plus models

Function principle	Electrically operated gear pump	
Lubricants	Lubrication oils with viscosity of 20–1500 mm²/s Fluid greases: NLGI 00 to 000	
Max. working pressure	38 bar	551 psi
Operating temperature	-25 to +65 °C	-13 to +149 °F
Usable reservoir volume	1 l	0.26 gal
Number of pump elements	max. 2	
Lubricant output	50 cm³/min 1)	
IP-protection class 2)	IP 6K9K; IP 66 (IEC 60529); IP 67 (IEC 60529)	
Corrosion class	C3	
Voltages	24 V DC	
Operating current	up to 3 A (max. peak), nominal 0.6 A	
Relative duty cycle	15% ED S3 30 minutes	
Electrical protection class	III	
Outlet connection	G1/4	
Dimensions depending on model and filling connection 3)		
min. H×W×D	212×185×169 mm	8.34×7.28×6.65 in
max. H×W×D	235×205×227 mm	9.25×8.07×8.94 in
Weight (empty)	5 kg	11 lb
Mounting position	Upright	

<sup>1)</sup> At a backpressure of 5 bar and a viscosity of 90 mm<sup>2</sup>/s

<sup>2)</sup> Protection class depending on electrical connection

<sup>3)</sup> See the manual for more details

## Comparison CLS model features

### CLS Basic

### CLS Basic Plus

						
Material number	CLS-EFXXX2-0000001	CLS-EF1XXZ2-0000002	CLS-XF1XX2-0000003	CLS-XU4XX2-0000001	CLS-XF1XX2-0000002	CLS-XF1XZ2-0000001
Application	Mobile	Mobile	Industry	Industry	Industry	Industry
Voltage	24 V DC	24 V DC	24 V DC	24 V DC	24 V DC	24 V DC
Compliance	E1/CE	E1/CE	CE	CE	CE	CE
Corrosion class	C3	C3	C3	C3	C3	C3
Lubricant						
Oil	—	—	—	•	—	—
Fluid grease NLGI 00, 000	•	•	•	—	•	•
Follower plate	•	•	•	—	•	•
Visual level monitoring	•	•	•	•	•	•
Electrical level monitoring						
Empty	—	•	•	•	•	•
Manual lubrication button	—	• 4)	—	—	—	• 4)
Electrical connection right						
M12×1, 4 pole A coded	—	—	• 3)	• 3)	• 3)	• 3)
Bayonet plug						
4 pole A coded	• 1)	—	—	—	—	—
7 pole A coded	—	• 1)2)3)	—	—	—	—
Square plug, A coded	—	—	• 1)2)	• 1)2)	• 1)2)	• 1)2)
Filling from						
Top	—	—	—	•	—	—
Bottom left	—	—	—	—	—	•
Bottom right	•	•	•	—	—	—
Bottom front	—	—	—	—	•	—
Number of outlets	1	1	1	2	2	1

<sup>1)</sup> Power supply

<sup>2)</sup> Signal input for additional external controlled lubrication cycle

<sup>3)</sup> Signal output

<sup>4)</sup> Signal input for manual lubrication via lubrication button

## Spare parts / Additional components <sup>1)</sup>

### Adapters and closure screw <sup>2)</sup>

<b>519-60445-1</b>	Closure screw M22x 1,5
<b>995-001-854</b>	Plug screw M16 x 1.5
<b>995-001-853</b>	Fitting, complete, including seal
<b>995-000-870</b>	Filling connection, straight, plug-in without filter
<b>169-460-406</b>	Filling connection, straight, plug-in with filter (320 µm)
<b>995-997-297</b>	Filling connection, swivelling, with filter (320 µm)
<b>519-33840-1</b>	Adapter with lubrication fitting ST 1/4 acc. to SAE
<b>519-33959-1</b>	Adapter with lubrication fitting A2 AR 1/4
<b>519-33955-1</b>	Adapter with lubrication fitting ST AR 1/4
<b>898-210-050</b>	Protective cap for filler fitting (red)

### Power cables

<b>664-34167-9</b>	Bayonet socket, 4 pole with cable 10 m
<b>664-34428-3</b>	Bayonet socket, 7 pole with cable 10 m
<b>664-36078-7</b>	Square socket with cable 10 m (black)
<b>179-990-600</b>	M12x1 connector, straight (A-coded) with cable 5 m
<b>179-990-601</b>	M12x1 connector, 90° angled (A-coded) with cable 5 m
<b>179-990-371</b>	M12x1 connector, straight (A-coded)
<b>179-990-372</b>	M12x1 connector, 90° angled (A-coded)

### Others

<b>5590-00000015</b>	Mounting bracket kit
<b>5590-00000014</b>	Venting kit
<b>993-000-098</b>	Filter insert, complete

<sup>1)</sup> The spare parts assemblies may be used exclusively for replacement of identical defective parts. Modifications with spare parts on existing products are not allowed. Exceptions to this are the pump elements and the optional filling connection.

<sup>2)</sup> Gasket always included



For accessories and spare parts, please refer to the product catalogue "Single-line automatic lubrication systems"

→**PUB LS/P1 17046 EN**



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