

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



LINCOLN
®

Easy and intuitive to use

CLS Basic and Basic Plus

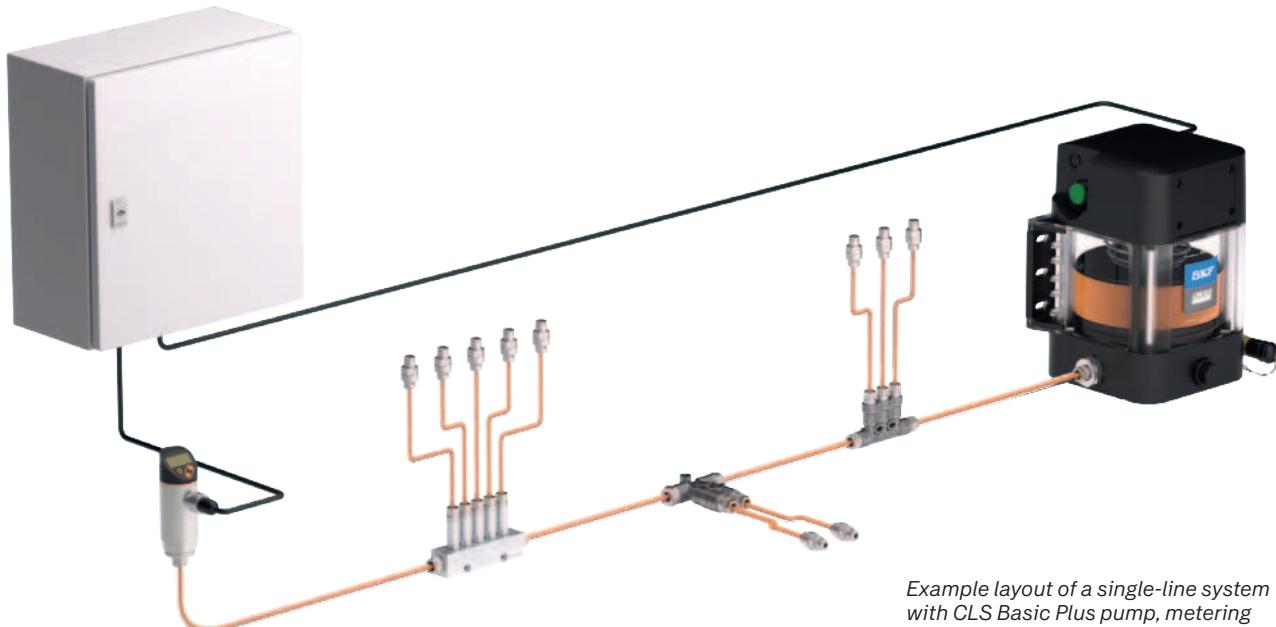
The new pump series CLS works in small and medium-sized single-line lubrication systems for oil and fluid grease. CLS pumps are part of the SKF eLube family which sets a new standard in lubrication performance.

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

Optional filling connection positions

CLS Basic Plus

Integrated empty-level monitoring
depending on model

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

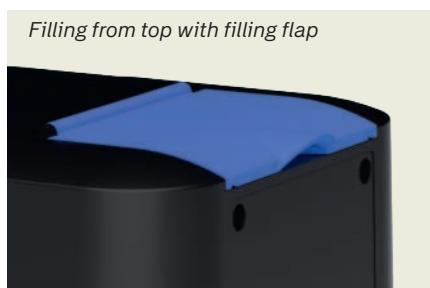
Standard gear pump
Provides up to 100 cm³ lubricant per minute



Several filling options make the CLS series very flexible



Filling from bottom left with swivelling elbow connection



Filling from top with filling flap



Filling from bottom front with plug-in connection



Filling from bottom front with filling nippel



Closing screw if front connection is not used

CLS Basic / Basic Plus main features

- Lubricant:
 - oils with 20–1500 mm²/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 cm³ 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 VDC
- Compliance E1/ CE

+ Prefilled with fluid grease Fuchs Plantogel ECO 00S or 000S

+ Follower plate

+ Filling from bottom right with swiveling elbow connection*

+ Bayonet plug, 4 pole A coded¹⁾

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

 **CLS Basic Plus**
24V for mobile use



Material number
CLS-EF1XZ2-0000002

- 24 VDC
- Compliance E1/ CE

+ For fluid grease

+ Follower plate

+ Filling from bottom right with swiveling elbow connection *

+ Empty-level monitoring

+ Bayonet plug, 7 pole A coded¹⁾²⁾³⁾

+ Additional manual lubrication button⁴⁾, 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 VDC
- Compliance CE

+ For fluid grease

+ Follower plate

+ Filling from bottom right with swiveling elbow connection *

+ Empty-level monitoring

+ Square plug, A coded¹⁾, on the left

+ M12×1, 4 pole A coded³⁾, 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 VDC
- Compliance CE

+ For oil

+ Filling from top

+ Empty-level monitoring

+ Square plug, A coded¹⁾, on the left

+ M12×1, 4 pole A coded³⁾, on the right

 **CLS Basic Plus**
24V for industrial use



Material number
CLS-XF1XX2-0000002

- 24 VDC
- Compliance CE

+ For fluid grease

+ Follower plate

+ Filling from bottom front (closing screw)

+ Empty-level monitoring

+ Square plug, A coded¹⁾, on the left

+ M12×1, 4 pole A coded³⁾, on the right

 **CLS Basic Plus**
24V for industrial use



Material number
CLS-XF1XZ2-0000001

- 24 VDC
- Compliance CE

+ For fluid grease

+ Follower plate

+ Filling from bottom left with swivelling elbow connection *

+ Empty-level monitoring

+ Square plug, A coded¹⁾²⁾, on the left

+ M12×1, 4 pole A coded³⁾, on the right

+ Additional manual lubrication button⁴⁾, on the left

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

¹⁾ Power supply

²⁾ Signal input for additional external controlled lubrication cycle

³⁾ Signal output

⁴⁾ 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 mm ² /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 cm ³ /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	

¹⁾ At a backpressure of 5 bar and a viscosity of 90 mm²/s

²⁾ Protection class depending on electrical connection

³⁾ See the manual for more details

Comparison CLS model features	CLS Basic		CLS Basic Plus			
						
Material number	CLS-EFXXX2-0000001	CLS-EF1XZ2-0000002	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						
Emptyy	–	•	•	•	•	•
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

¹⁾ Power supply

²⁾ Signal input for additional external controlled lubrication cycle

³⁾ Signal output

⁴⁾ Signal input for manual lubrication via lubrication button

Spare parts / Additional components ¹⁾

Adapters and closure screw ²⁾

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

Power cables

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

Others

5590-000000015	Mounting bracket kit
5590-000000014	Venting kit
993-000-098	Filter insert, complete

¹⁾ 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.

²⁾ Gasket always included



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

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