

Electrically driven lubricator EDL1

Dosage and pressure-booster pump for use in sectional progressive lubrication systems



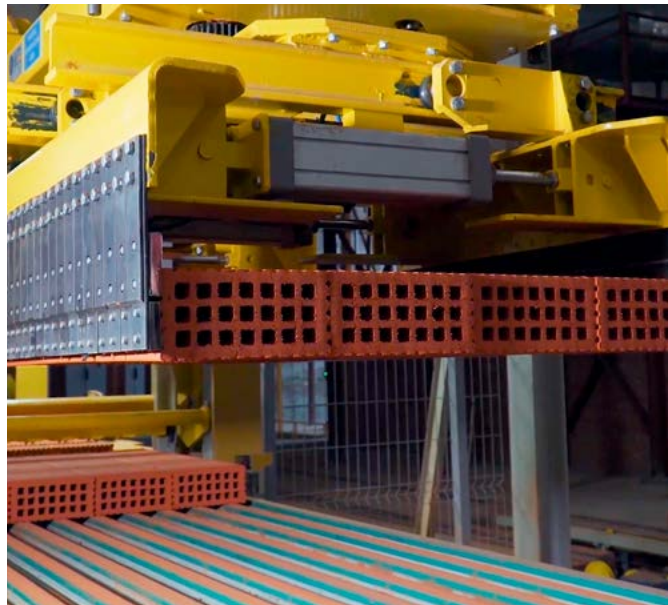
	Grease up to NLGI 2
	up to 280 bar (4 060 psi)
	-25 to 70 °C (-13 to 158 °F)
	max. 1 cm ³ /stroke
	24 V DC
	IP 65



Applications

- Automotive industry
- Cement and mining
- Food and beverage
- Glass industry
- Pharmaceutical industry
- Pulp and paper industry
- Steel industry
- Wayside lubrication in railway applications

Why EDL1?



Full automation – low maintenance

Fully automated lubrication systems, such as sectional EDL lubrication systems, offer significant advantages for production lines in the process industry. These systems operate efficiently even in challenging environments with fluctuating temperatures. The system design based on a central feeding pump ensures a consistent supply of lubricant, allowing to bridge very long distances between the feeding pump and the EDL pump. Reliable SKF automatic lubrication systems allow to make lubrication most professional: The right lubricant, in the right amount, with the right method, at the right time to the right point. But reliable lubrication means also increased uptime and productivity and reduced maintenance cost.



Most flexible sectional systems

Sectional EDL lubrication systems typically comprise a barrel pump, several EDL1 pressure booster pumps, and SSV progressive metering devices. These systems operate efficiently in challenging environments, including outdoor applications with fluctuating temperatures. The central feeding pump supplies lubricant, enabling the EDL pump to function flexibly and autonomously, even in remote locations. Compared to high-cost and complex dual-line lubrication systems, sectional EDL systems offer a more cost-effective and simpler solution, while still providing reliable and efficient lubrication. The sectional approach allows for easy adaptation to specific needs regarding lubricant quantity, number of lubrication points, and lubrication intervals. Additionally, these systems permit straightforward expansion or reduction, so these systems are an ideal solution for various industrial applications.



One feeding all, lubricant drum

Feeding complex automated lubrication systems in process industries from a single centralized lubricant barrel offers numerous advantages. It ensures consistent and precise delivery of lubricants to critical machinery points, reducing friction and wear, and thereby extending equipment lifespan¹. This centralized approach simplifies maintenance, minimizes downtime, and enhances overall operational efficiency². Additionally, it reduces the risk of contamination and spillage, leading to a cleaner and safer working environment. By automating the lubrication process, it also decreases labor costs and improves productivity.

Product information



Description

The EDL1 is an innovative dosage and pressure-booster pump of unmatched simplicity. It is designed to increase input pressures of at least 2 bar (29 psi) up to a max. of 280 bar (4 060 psi). Utilizing progressive metering devices, the EDL1 has been developed for usage in a sectional system as well as in large machines with different lubrication requirements at varying distances. Because lubricant is supplied by means of filling pumps or pressurized cartridges, the device provides flexibility and self-sufficient function, even in remote locations. The EDL1 pump operates effectively in challenging environments, including outdoor applications with fluctuating temperatures. It can also be utilized in many industrial applications that require an affordable sectional lubrication system.

Features and benefits

- High output pressure boost
- Integrated control board for both, impulse- and time-controlled lubrication
- Potential-free contacts for lubrication monitoring
- Ideal solution for expandable lubrication systems with central main lubricant supply
- Optional incl. pressure switch
- Cost-effective solution
- Protection class IP65

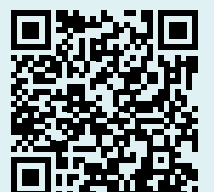
Technical data

Function principle	electronically operated lubricator
Operating temperature	-25 to +70 °C; -13 to +158 °F
Operating pressure	max. 280 bar; 4 015 psi
Inlet pressure	min. 2 bar; max. 280 bar
Lubricant	min. 30 psi; max. 4 015 psi
Outlets	grease: NLGI 1 and 2
Metering quantity	1
full stroke	1 cm ³ /min; 0,06 in ³ /min
half stroke	0,5 cm ³ /min; 0,03 in ³ /min
Operating voltage	24 V DC (± 10%)
Connection main line	GE-LX10 (others on request)
Connection outlet	GE-LX10
Protection class	IP 65
Corrosion protection class	C3
DIN EN ISO 12944-2	
Weight	4 kg; 8.8 lbs
Dimensions	116 × 114 × 350 mm
	4.56 × 4.48 × 13.78 in
Mounting position	any, but not rotating

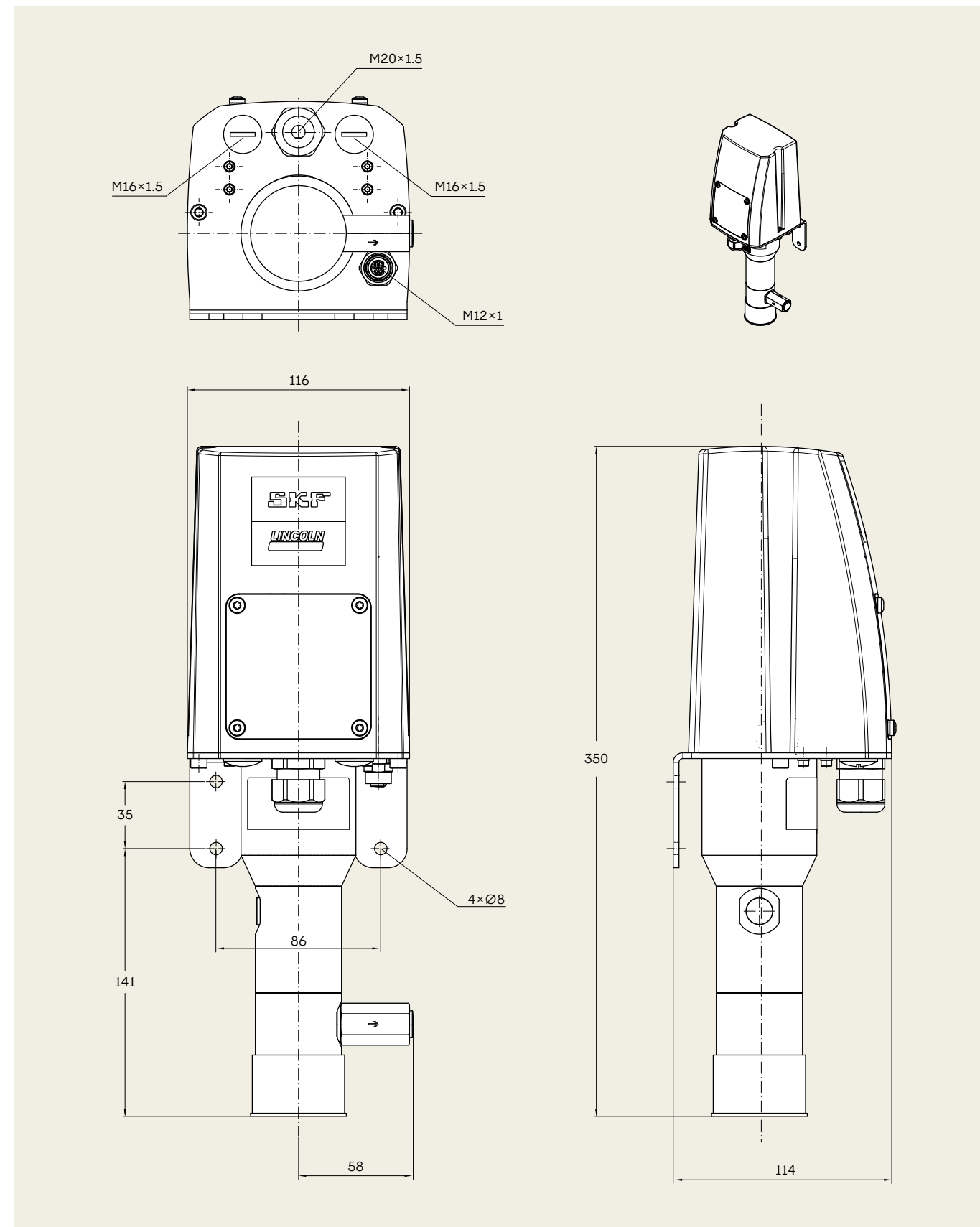
Product video

Below you can find the QR code linking to EDL1 product video.

Find out why EDL1 is an innovation and powerful solution especially for process industries. Have a look!



Installation drawing



Order information

Identification code	E	D	L	1	-	1	-	-	-	-	9	2	4
Pump type	EDL1												
Inlet/outlet positions*	1 = (Standard design) inlet left/ outlet right 2 = Inlet right/ outlet right 3 = Inlet right/ outlet left 4 = Inlet left/ outlet left												
Inlet fitting	0 = without fitting 5 = GE-L Ø10 mm												
Outlet fitting at check valve	0 = without fitting 5 = GE-L Ø10 mm E = GE-L Ø10 mm with cable and pressure switch for max. 300 bar (4 350 psi) M = GE-L Ø10 mm with cable and pressure switch for max. 100 bar (1 450 psi)												
Controller presettings	01 = ON/OFF mode (Start-stop operation settings: volume = 1 cm ³ ; 0.155 in ³ ; full stroke) 11 = Machine contact (automatic mode, operation settings: volume = 1 cm ³ ; 0.155 in ³ ; full stroke) 61 = Sensor (pulse mode, operation settings: open)												
Electric connection	00 = 3x blind plug 01 = 2x blind plug; with 1x M20×1.5 cable screw connection 11 = 1x blind plug; with 1x M16×1.5 and 1x M20×1.5 cable screw connection 31 = 2x M16×1.5 and 1x M20×1.5 cable screw connection												
Power supply	924 = 24 V DC												

* **NOTE:** Positions seen from outside on the front of the pump. All metal parts/pistons based on C3 I/O.

Example: EDL1-155-01-01-924

- EDL1 electrical pressure booster pump
- GE-L Ø10 mm inlet fitting left
- GE-L Ø10 mm outlet fitting right
- Controller preset on ON/OFF mode
- Power supply line and 1x M20 cable screw connection
- 24 V version

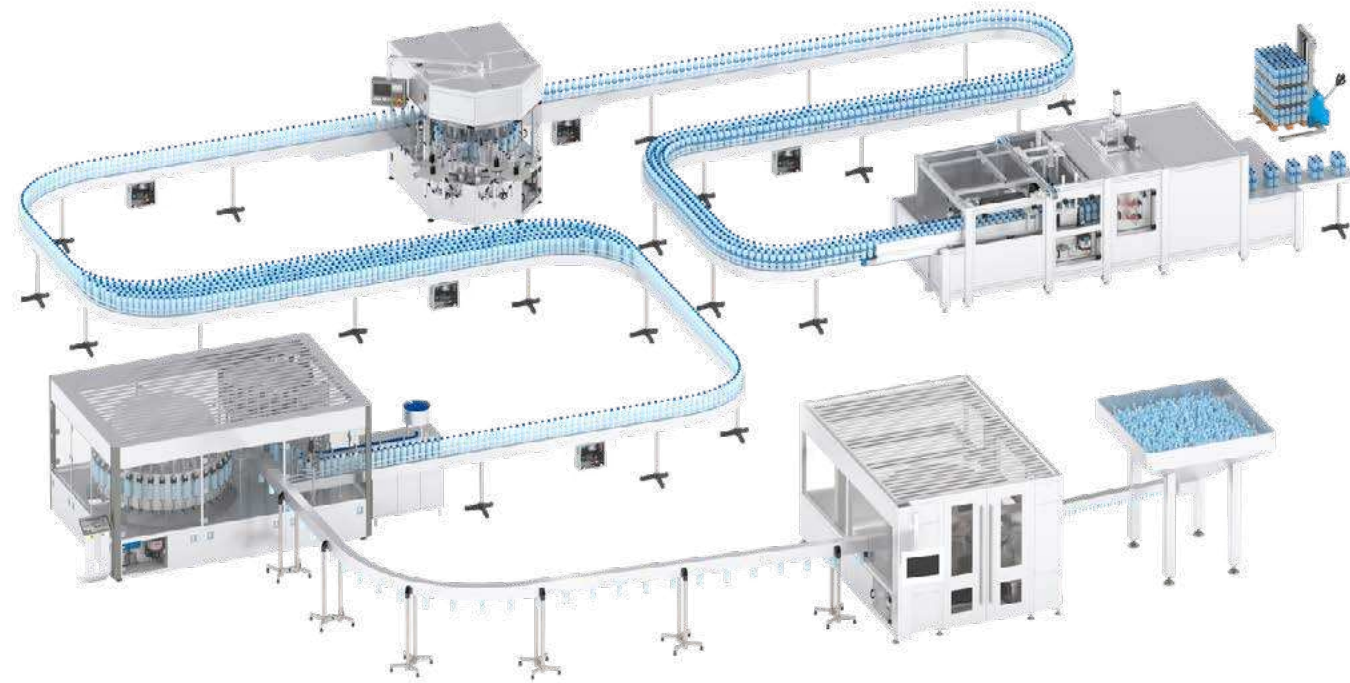


Online configuration

Below you can find the QR code linking to digital product configurator for reliable and efficient product configuration, CAD models and documentation.



Process industry solution



The EDL1 solution

The sectional EDL1 lubrication systems offer significant advantages for process industries like bottling plants. These systems provide automated lubrication, eliminating the need for manual intervention and ensuring consistent and precise lubrication. This automation leads to cost and time savings by reducing labor costs and minimizing downtime associated with manual lubrication. Additionally, the EDL1 system enhances reliability by delivering consistent lubrication even in remote or challenging environments, ensuring optimal performance and longevity of machinery. Overall, the EDL1 system improves efficiency, reduces maintenance costs, and enhances the reliability of lubrication processes.



Referenc case

The QR code is linking to an EDL1 system reference case, made in Germany. Have a look!



Related products



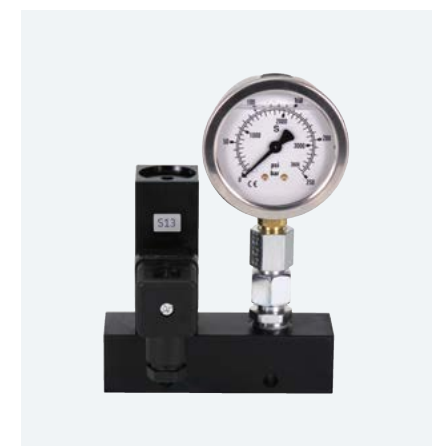
Lubrigun

The performance-proven Lubrigun air-operated pump units are found in industrial facilities worldwide. Ideal for high-pressure applications, these pumps include a powerful displacement air motor with 63,5 mm (2.5 in) stroke. Lubrigun pumps are available for 50 kg (120 lb) and 180 kg (400 lb) drums.



MPB

The MPB pump unit is especially designed for automatic lubrication systems. The unique feature in it compared to traditional air-operated barrel pumps with mechanical air motor valve is its magnetically operated air motor valve. This will reduce the amount of mechanical components in the air motor and also eliminates the need of lubrication in the air motor. The pump is suitable for use with 18, 50 and 180 kg (40, 120 and 400 lb) lubricant barrels.



Pressure switch

In a lubrication system equipped with a pressure booster pump, such as the EDL, the inclusion of a pressure switch is essential for ensuring operational safety and efficiency. The pressure switch serves to prevent overpressure conditions that could potentially damage system components or lead to pump overheating. By limiting the system pressure to a maximum of 270 bar (3 900 psi), the pressure switch safeguards the integrity of the lubrication system, enhances the longevity of the pump, and ensures consistent and reliable performance. This protective measure is crucial for maintaining optimal functionality and preventing costly repairs or downtime.

Related products



SSV

SSV are single block progressive metering devices either made of steel or stainless steel that reliably divide the incoming lubricant in predetermined individual quantities. SSVs can be used with high backpressures, and they are ideally suitable for a wide range of temperatures. The maximum operating pressure is 350 bar. SSV metering devices are available with 6 to 22 outlets. SSV metering devices are also offering several operation monitoring options.



SSVC

SSVC are block-type progressive metering devices with 6 to 22 outlets that reliably divide incoming lubricant into preset individual volumes. The maximum operating pressure is 350 bar. These devices use set screws to separate opposite outlets. By removing these screws and using special outlet fittings, outlets can be internally combined to increase outlet volumes. This unique “cross-porting” concept allows for a maximum number of possible outlet combinations and enables the use of only one outlet side in tight installation spaces.



SEL-CC

The SEL-CC controller cabinets series for EDL1 sectional lubrication systems revolutionizes lubrication management by enabling the control of up to 1 000 lubrication points with a single controller. This high-capacity control system ensures efficient and centralized management of automatic lubrication processes. The SEL-CC series also offers connectivity to standard BUS and Ethernet systems via API, facilitating seamless integration with existing industrial networks and enhancing overall system communication and monitoring. This advanced connectivity and control capability significantly improve operational efficiency and reliability in complex industrial environments.

skf.com | skf.com/EDL1 | skf.com/lubrication

® SKF and LINCOLN are registered trademarks of AB SKF (publ).
LUBE-SHUTTLE is a registered trademark of MATO GmbH & Co KG

© SKF Group 2025. All rights reserved. Please note that this publication may not be copied or distributed, in whole or in part, 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 16144 EN · January 2025

Certain image(s) used under license from Shutterstock.com.

