



Systematic Lubrication

Intelligent solutions for your systems engineering

SCHAEFFLER

The perfect service package for the lubrication of your equipment



01 Intelligent lubricators

CONCEPT series

A simple and individually adjustable lubricant supply.



Runs like a well-oiled machine.

The intelligent lubricators in the CONCEPT series supply the correct quantity of grease to different lubrication points in your machine at exactly the right time using individually controlled pump bodies. They are available in CONCEPT2 and CONCEPT8 designs.

+ 02 Premium lubricants

ARCANOL grease range

Top-quality greases, developed and tested specifically for rolling bearings.



Nothing but the best grease for your machine.

ARCANOL premium grease is tested in our in-house laboratories and is characterized by its above-average operating life and high performance capability. It is available for a wide range of industries and requirements.

+ 03 Future-oriented know-how

System modules

In “intralogistics” (conveyor belt systems for pallets, roller conveyors, lifting stations, vertical conveyors, rotary tables, etc.), lubrication is carried out via prefabricated pump modules with subdistributors.

Communication via a multifunctional interface.

The individually prefabricated pump modules (configured by the customer) allow for easy scaling of up to several thousand lubrication points. Actuation of and feedback to the higher-level control system is regulated via the multifunctional interface of the CONCEPT devices.



Lubricator

Prefilling of the lubricant pipes with grease/oil

CONCEPT 2
2 pump bodies

Grease
Oil
24 V DC
Battery

CONCEPT 8
2/4 pump bodies

Grease
Oil
24 V DC

Connection variants

Pump body with 1 outlet

Hose of up to 0.3 m with direct plug-type connection

Hose with direct plug-type connection

Pump body with 2 outlets

Hose with direct plug-type connection

Not permissible

Reduction to 1 outlet with a Y connector

Hose with direct plug-type connection

Expansion to 2 outlets with a splitter

Technical consultation required

Hose with direct plug-type connection

Expansion to 3 (max. 4) outlets with a splitter

Technical consultation required

Hose with direct plug-type connection

Expansion to 4 (max. 6) outlets with a progressive distributor

Technical consultation required

Hose with direct plug-type connection

Lubricant pipes

Length of oil lubrication pipe:

$$L_{max} = 100 \text{ m}$$

Length of grease lubrication pipe:

$$L_{max} = \frac{P_{max}}{P_L} \cdot K_S \cdot K_p$$

Pump pressure P_{max}

Correction factor K_S

Correction factor K_p

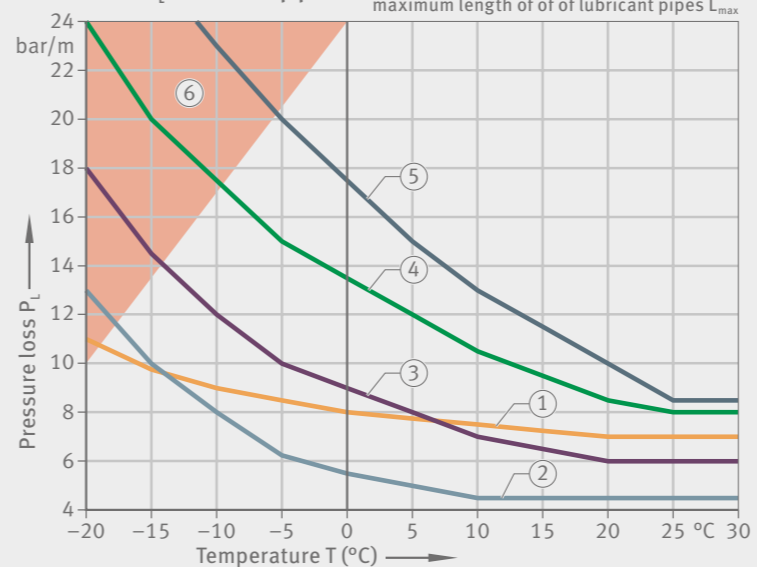
Group of Arcanol greases

Lubricator	P_{max} bar	Inner diameter of lubricant pipes (mm)	K_S	Pause between two pump strokes (h)	K_p
Concept 2 (battery)	30	5	1.00	≥ 3	1.00
Concept 2 (DC 24 V)	50	4	0.65	< 3	0.65
Concept 8 (DC 24 V)	70				

L_{max} = Maximum lubrication pipe length (m)
 P_{max} = Pump pressure of lubricator (bar)
 P_L = Pressure loss in lubricant pipes (bar/m)
 K_S = Correction factor for inner diameter of lubricant pipes
 K_p = Correction factor for pause between two pump strokes

Pressure loss P_L in lubricant pipes

Pressure loss diagram for calculation of maximum length of of of lubricant pipes L_{max}



Group	Grease
①	Arcanol Speed2.6 Arcanol MOTION2 Arcanol FOOD2
②	Arcanol LOAD460 Arcanol TEMP120
③	Arcanol MULTITOP Arcanol MULTI2 Arcanol LOAD150 Arcanol LOAD220 Arcanol LOAD400 Arcanol TEMP110 Arcanol TEMP200
④	Arcanol MULTI3 Arcanol LOAD1000 Arcanol TEMP90 Arcanol CLEAN-M
⑤	Arcanol VIB3
⑥	Technical consultation required

The classification for Arcanol BIO2 has not yet been completed (as of May 2018).

The procedure described here for calculating the maximum length of the lubricant pipes applies only for a simple hose without additional components such as splitter, progressive distributor or angled hose connectors!

Lubrication point

Grease

Linear guidance system

Bearing and labyrinth

Gearing – open
Lubrication supply via a hollow axle; lubricant egress via channels in the polyurethane foam

Oil

Gearing – open
Lubrication supply via a hollow axle; lubricant egress via open-pored polyurethane foam

Chain lubricating pinions
Lubrication supply via a hollow axle; lubricant egress via open-pored polyurethane foam

Chain lubricating rollers (special solutions for roller chains, for example)
Lubrication supply via a hollow axle; lubricant egress via open-pored polyurethane foam

Connector fitting


Pluggable/ threaded

Non-return valve

Can be plugged in on both sides

Pluggable/ threaded

More information

 **Lubrication of rolling bearings**
www.schaeffler.de/en/lubrication

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Issued: 2018, May

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