

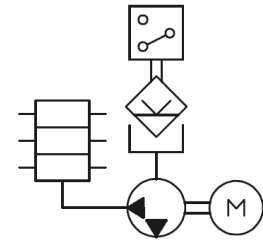
Technical Data Sheet

DLS-Pump 2071





**Pump unit:
DLS-Pump 2071**



Use:

Pump unit in central lubrication systems

- **for conveying fluid grease or grease**
- **1 pump outlet**
- **electrical control and monitoring**
- **with stirring without conveying function**

Technical specifications:

Delivery pressure permitted: max. 70 bar
number of Pump elements: 1

Delivery volume per stroke and element:

with pump element 04: 0,04 cm³

Temperature range: -20 ... +60 °C

At low temperatures, the penetration of the grease must be taken into account.

Installation position: perpendicular

Material:

Housing:	aluminum
pump element:	stole
container:	St / Polyamide transparent
seals:	NBR

Medium: oil and grease up
NLGI class 2

(Conditions of use of container and
Pay attention to fill level monitoring!)

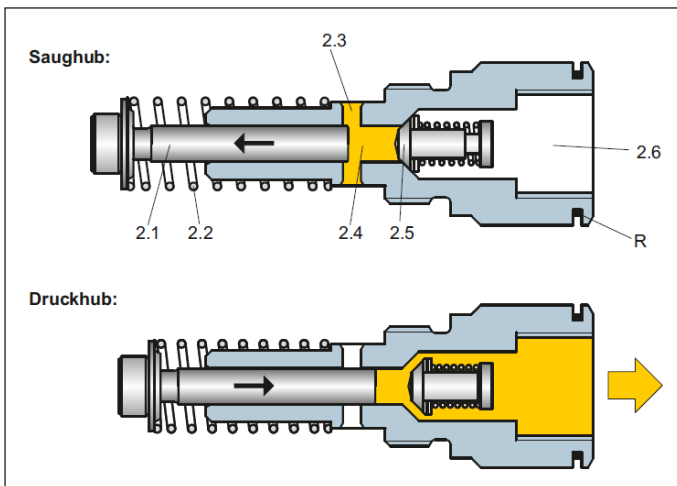
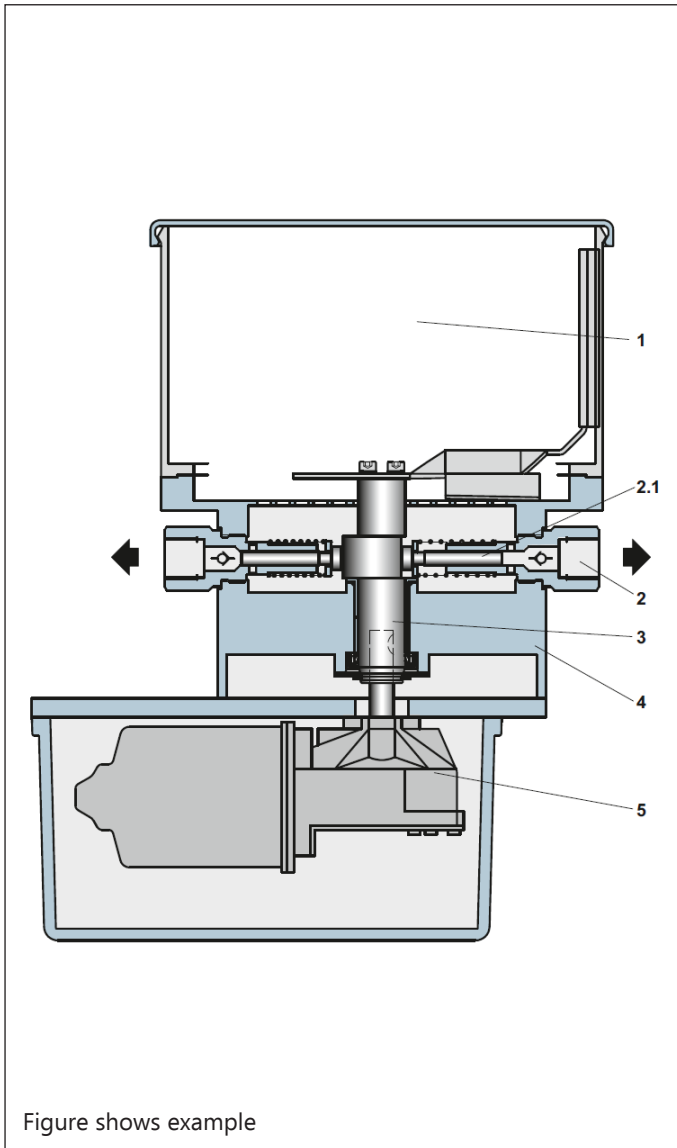
Drive (without control):

Connection voltage:	24 VDC
Electricity:	max. 2,5 A
Speed (depending on load):	ca. 30 min-1
Degree of protection:	DIN EN 60529 IP55 higher IP on request

Due to the design, the DC geared motor should only be used in pulse mode.

Power pack for control:

Electricity:	min. 3,0 A
Tension:	24 VDC ±10% DC



Description:

Drive:

The pump unit DLS-Pump 2071 is through driven by a geared motor **5** which is flanged to the pump housing **4** from below.

Funding function:

When the eccentric shaft **3** rotates, the delivery piston **2.1** of each pump element performs one suction and pressure stroke per revolution and delivers lubricant from the container **1** to the lubricating points. Depending on the application (lubricant, need for lubricant, etc.), the pump unit can be equipped with different pump elements, containers and monitoring elements.

Stir without conveying function:

In some operating modes, additional stirring of the lubricant is required to improve the quality of the lubricant and the delivery behavior.

This is done in the pump unit DLS-Pump 2071 by a specially designed eccentric drive allows.

If the eccentric shaft **3** rotates in one direction of rotation, the pump elements work while the agitator supplies them with the lubricant.

As soon as the eccentric shaft **3** rotates in the other direction, the lubricant is stirred without the pump elements delivering.

With the built-in control, working and idle times for conveying with stirring and stirring without conveying can be programmed independently of one another.

Pump elements:

During the suction stroke, the delivery piston **2.1** is moved against the eccentric shaft **3** by the compression spring **2.2**. The lubricant in the container **1** is sucked through the suction hole **2.3** into the dosing chamber **2.4**.

During the pressure stroke, the delivery piston **2.1** is displaced by the eccentric shaft **3**.

The suction hole **2.3** is closed and the quantity of lubricant in the dosing chamber **2.4** is conveyed via the check valve **2.5** to the outlet **2.6**.

Identification of the pump elements:

Size:	delivery volume:	License plate R :
04	0,04 cm ³	white ring

Operating Notes:

The pump units may only be filled with clean grease from the original containers operate. When commissioning is during the first filling the pump up to Fill the agitator blades with gear oil. This ensures good ventilation.

The lubrication point lines must be cleaned and have free passage. They should only be connected to the lubricating points when the lubricant emerges free of air. All connections the pressure line must be checked for leaks.

In order to protect the pump set and the connected lines from overloading, safety elements, e.g. B. pressure relief valves are installed.

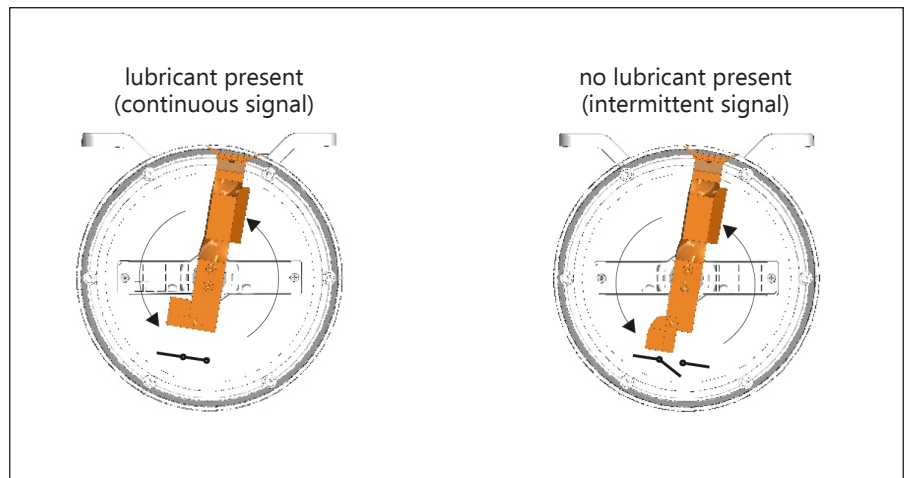
Level control:

Level control „C“:
min. level monitoring for liquid grease NLGI grade 000 to grease NLGI grade 2

The contact is switched when the container is empty and the pump drive shaft is rotating. The blank signal is intermittent. The switching mechanism can, for. B. when filling the container. That's why it has to be with external control signal when the pump is switched on can be evaluated with a delay (approx. 5 s).

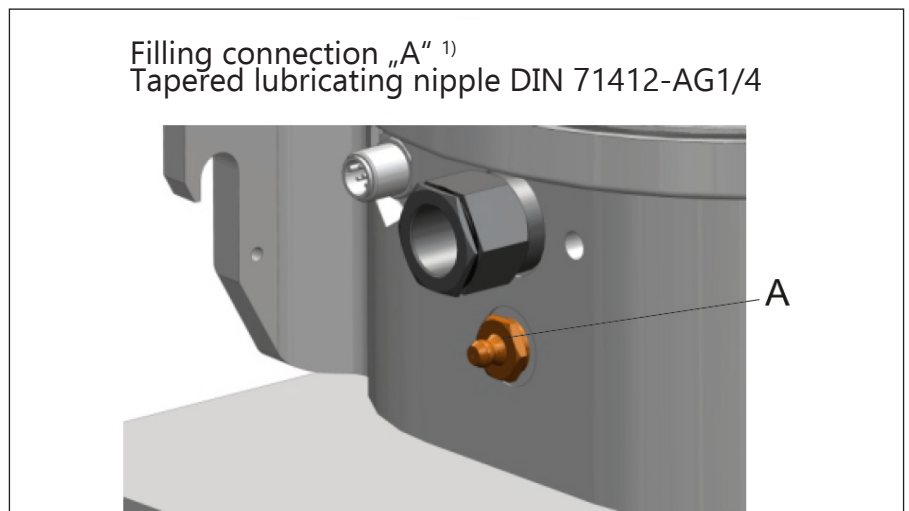
Version without control:

With „stirring without conveying“ the signal evaluation is to be suppressed.



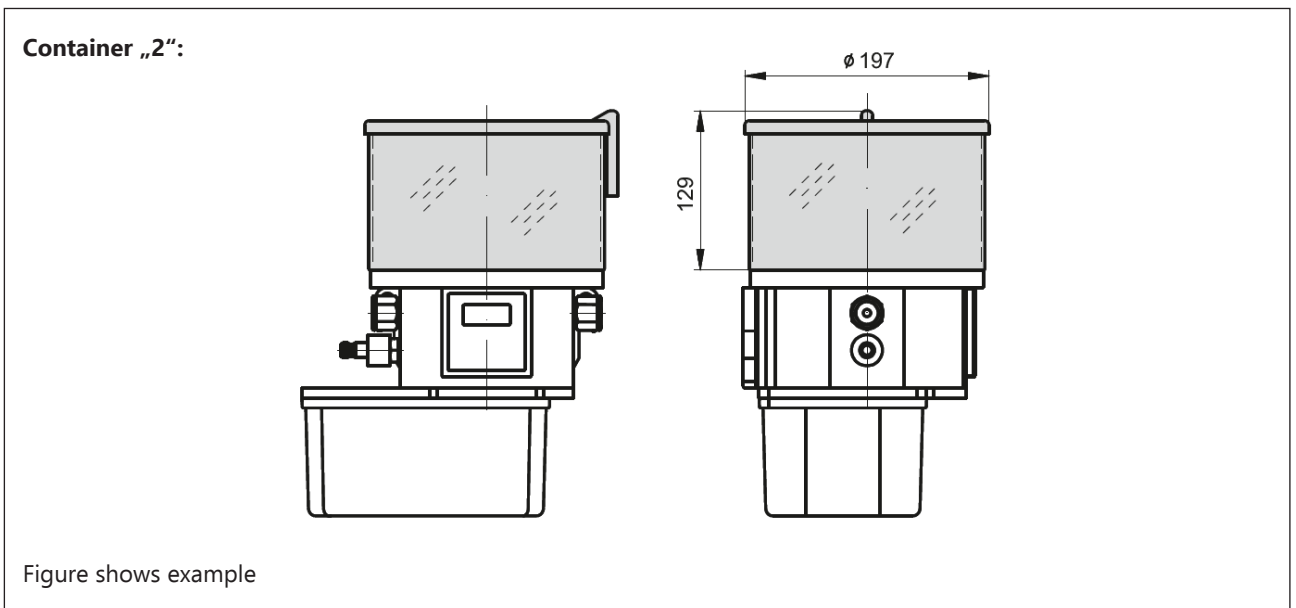
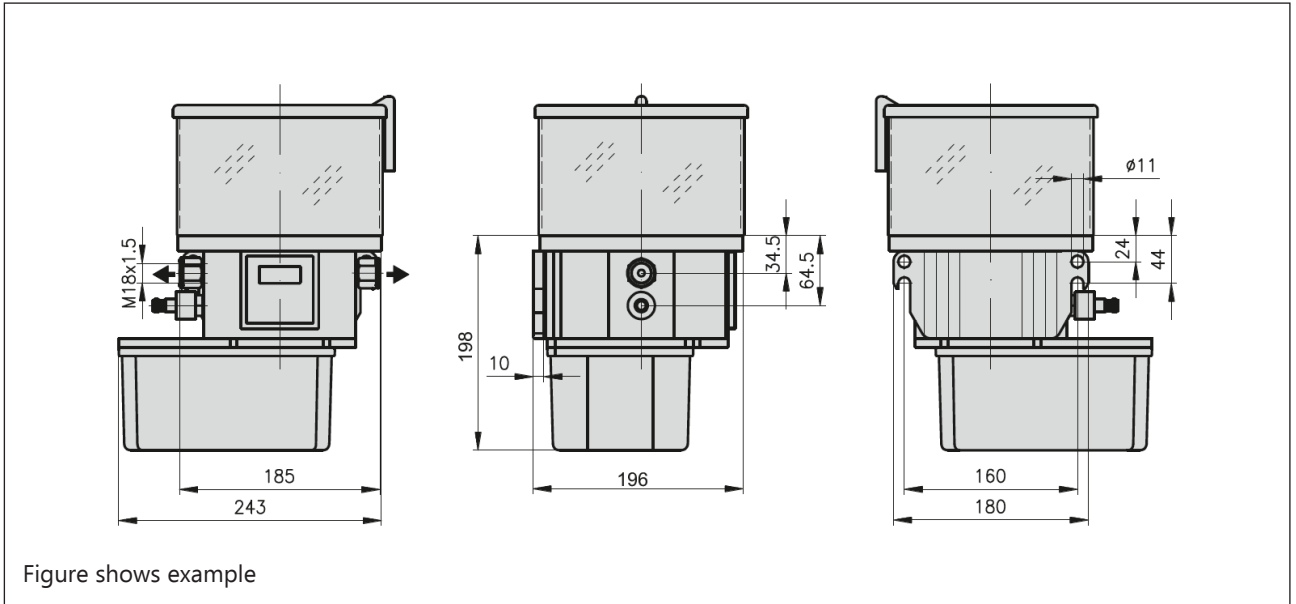
Filling connection:

The filling connection is located below the left pump element.

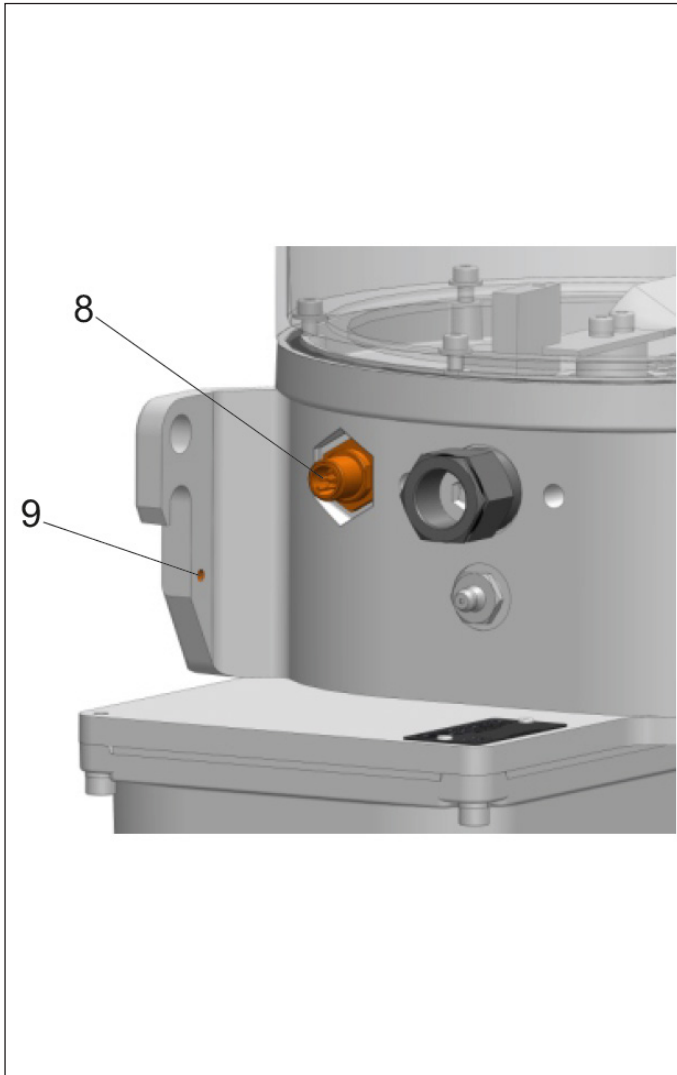


Technical specifications:

Temperature range:	0 ... +60 °C
switching voltage:	max. 30 VDC
switching current:	max. 0,25 A
switching capacity:	max. 3,0 W
switching function:	Opener
For inductive and capacitive loads protective circuits are to be provided. (diode, RC element, varistor)	



	Content in L	Weight in kg	Material	
			Container	Lid
Container „2“	2	max. 6,1	polyamide transparent	polypropylene



equipotential bonding 9:

threaded hole: M4

Connection cable for electrical connection:

Operating voltage: 10 ... 30 VDC
 cable cross-section: 5x0,34 mm²
 Degree of protection: DIN EN 60529 IP67
 connection type: Rifle M12x1, 5-polig, 0°

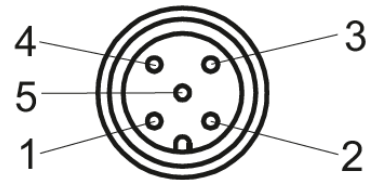
Power pack for version with controller (optional):

Power adapter: 100-240 VAC / 50-60 Hz

Electrical connection 8:

Version with control:

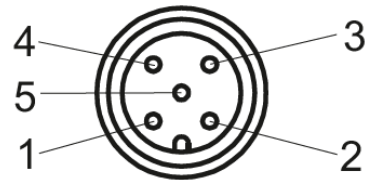
connection type: plug M12x1, 5-pin



1. +24Vdc
2. +24 VDC (external release, external impulses)
3. 0V
4. output: alarm (24 VDC = no alarm)
5. Output: Lubrication (24 VDC = active)

Version without control:

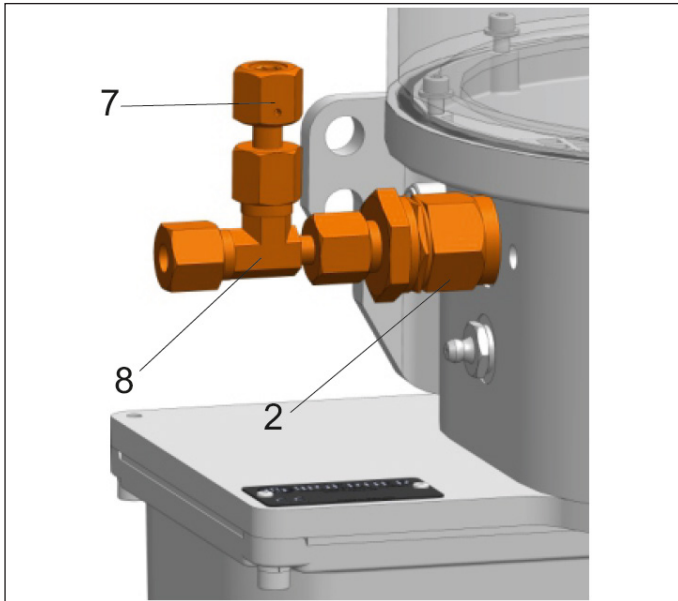
connection type: plug M12x1, 5-pin



1. +24 VDC (conveying function 1)
2. +24 VDC (stirring function1)
3. 0V
4. signal line (level)
- 5.

1) Explanation:

Funding function: 24 VDC on Pin 1
 stirring function: 24 VDC on Pin 1 & 2
 drive (without control)
 Connection voltage: 24 VDC
 Electricity: max. 2,5 A
 Speed (depending on load): ca. 30 min⁻¹
 Degree of protection: DIN EN 60529
 IP55
 higher IP on request



Accessories:

Pressure relief valve on the pump element:
A pressure relief valve **7** on the pump element is used to limit the operating pressure **2** connected.

The operating pressure of the DLS pump 2071 is limited to 70 bar at the factory. Changing the setting will void the warranty. There is also a risk of connected elements such as hoses and valves being damaged or people being injured.

Screw connection set **8** for hose $\varnothing 6$.

Important information about this data sheet

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All products from DLS Schmiersysteme GmbH may only be used as intended, in accordance with the information in this data sheet. For products that are supplied with operating instructions, the additional provisions and information contained in these must be observed.

Substances that deviate from the substances mentioned in this data sheet and the applicable technical documents may only be used and processed in the devices and systems manufactured and supplied by us after consultation with DLS Schmiersysteme GmbH and after written approval by DLS Schmiersysteme GmbH. The safety and hazard information listed in the safety data sheets for the materials used must be observed.

The pumping of gases, liquefied gases, gases dissolved under pressure, vapors and liquids whose vapor pressure at the permissible maximum temperature is more than 0.5 bar above normal atmospheric pressure (1013 mbar), of highly flammable or explosive media and the pumping of Food is prohibited.

Note on EU Directive 2011/65/EU (RoHS)

DLS Schmiersysteme GmbH only uses materials in its controls and switching devices that meet the criteria of EU Directive 2011/65/EU. Insofar as chromium VI was used as corrosion protection in our in-house production parts, this has already been replaced by other environmentally friendly protective measures.

The mechanical devices supplied by DLS Schmiersysteme GmbH do not fall under the EU Directive 2011/65/EU.

However, since DLS Schmiersysteme GmbH is aware of its responsibility towards the environment, we will also use materials for the devices that do not fall under the EU Directive 2011/65/EU that meet the requirements of the directive as soon as they are generally available and the use is technical is possible.