

# RDI metering unit

SKF DosaLub product family

Metering unit for grease up to NLGI grade 2, from 0,01 to 0,03 cm<sup>3</sup> per stroke



The RDI metering units have been designed for lubricant deposit, injection and filling of industrial mounting and assembly lines. .

They can feed very small quantities of lubricant (0,01 to 0,03 cm<sup>3</sup>) into products as different as:

- Components of car dashboards (control lever, button)
- Locking systems of electric household appliances
- Lock barrels
- Ski binding
- Etc.
- Very precise metered quantities
- Volumetric metering independent of any change in temperature or lubricant viscosity
- Very good repeatability over time
- Easily adjustable (interchangeable metering rings)
- Robust design for long service
- Possible to have several outlets on the same unit
- Independent metered quantity for each outlet
- The unit can be fed in lubricant from varied sources (drum pump, network)

Advantages



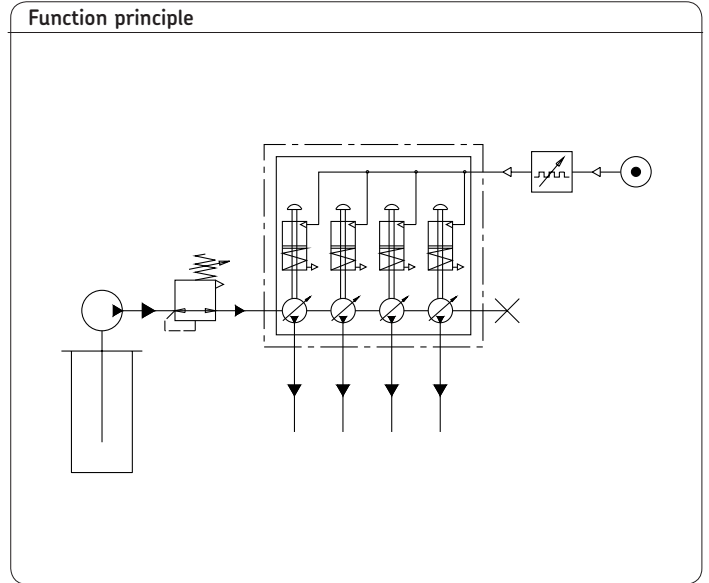
## RDI metering unit

The RDI metering unit is made of pneumatic micropumps which are mounted on a common ground plate.

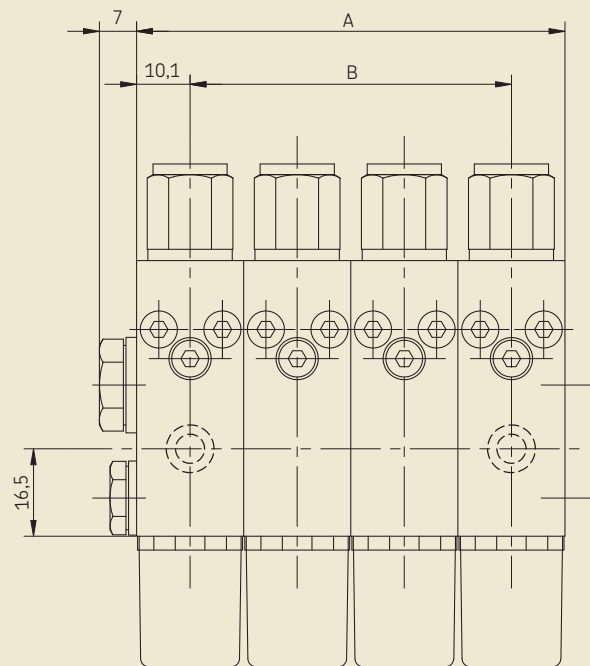
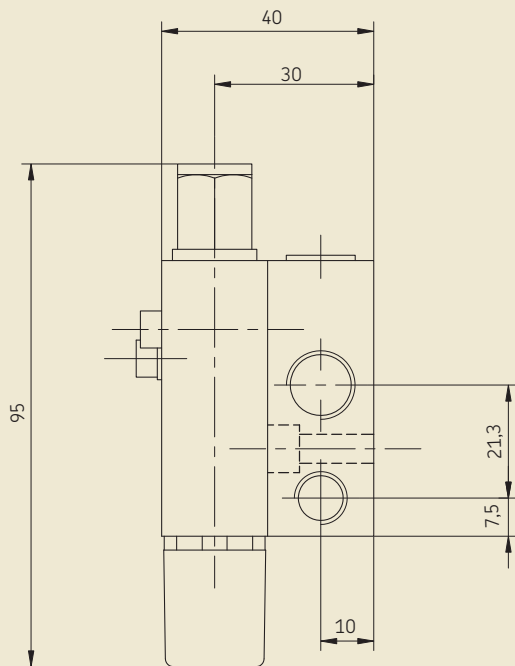
The piston stroke determines the quantity of lubricant which is delivered at every cycle. This quantity is independent of any change in temperature and lubricant viscosity. The piston stroke can be adjusted with a set of metering rings which is delivered with the metering unit. There is one set for every micropump with four different metering rings: 0,01 , 0,015 , and 0,02 cm<sup>3</sup> per stroke.

A pneumatic solenoid valve or a pneumatic timer is controlling the working frequency of the micropumps. The maximum micropump working frequency is one stroke every two seconds.

Lubricant (grease) is fed under pressure to the metering unit from a pneumatic pump directly mounted on a lubricant reservoir (drum, bucket, cartridge) or from a network under pressure. The maximum lubricant inlet pressure is 2 bars.



## RDI metering unit



Order No.	Outlet(s)	A	B
RDI.G.01.001	1	20,2	-
RDI.G.02.001	2	40,4	20,2
RDI.G.03.001	3	60,6	40,4
RDI.G.04.001	4	80,8	60,6
RDI.G.05.001	5	101	80,8

See important product usage information on the back cover.  
See operating instruction 951-130-411.

## RDI metering unit

### RDI metering units\*

Order No.	Outlet(s)
RDI.G.01.001	1
RDI.G.02.001	2
RDI.G.03.001	3
RDI.G.04.001	4
RDI.G.05.001	5

\*) The RDI metering unit are systematically delivered with set(s) of metering rings.

### Accessories

**Pneumatic solenoid valve with ground plate** (mounting on rail according to EN50022)

Order No. .... AC-4680-E+\_\_\_\*

\*) Note: the voltage key has to be added to the order No.  
924 for 24 V DC, 429 for 115 V AC, 428 for 230 V AC

**Pneumatic timer with ground plate** (mounting on rail according to EN50022)

Order No. .... SY.9243.E

### Notice!

Excessive tube length and/or small tube diameters can lead to pressure losses when using grease (not oil), subsequently disrupting the lubricant delivery. Please take this into account when planning an installation. For the best results, use metal tubing or tubing with minimal distortions. The distance between the micropump and lubrication point should be as short as possible.  
Lubricants must be free of entrained air.

### Technical data

#### RDI metering units

Air inlet pressure . . . . .	5 to 8 bars
Lubricant inlet pressure max. . . . .	2 bars
Working frequency . . . . .	1 stroke/2 seconds
Operating temperature . . . . .	15 to 40 °C
Delivery rate (outlet) . . . . .	0,01 to 0,03 cm <sup>3</sup>
Lubricants . . . . .	grease up to NLGI grade 2
Materials	
Body . . . . .	brass
Piston . . . . .	stainless steel
Seal . . . . .	fluorocarbon (FPM)
Ground plate . . . . .	aluminum

### Technical data accessories

#### Pneumatic solenoid valve 3/2

Type . . . . .	NC
Inlet pressure P . . . . .	4 < P < 8 bars
Service life . . . . .	1,5 × 10 <sup>7</sup> operating cycles
Voltage / power . . . . .	24 V DC, 1W 115 V AC, 2,5 VA 230 V AC, 2,5 VA

#### Pneumatic timer (SY.9243.E)

Frequency . . . . .	3 Hz
Flow rate at 6 bars . . . . .	170 NI/min
Operating pressure . . . . .	2 to 8 bars
Service life . . . . .	10 <sup>7</sup> operating cycles

**Order No.: 1-4201-EN**

Subject to change without notice! (04/2009)

**Important product usage information**

All products from SKF may be used only for their intended purpose as described in this brochure and in any instructions. If operating instructions are supplied with the products, they must be read and followed.

Not all lubricants are suitable for use in centralized lubrication systems.

SKF does offer an inspection service to test customer supplied lubricant to determine if it can be used in a centralized system. SKF lubrication systems or their components are not approved for use with gases, liquefied gases, pressurized gases in solution and fluids with a vapor pressure exceeding normal atmospheric pressure (1013 mbars) by more than 0,5 bar at their maximum permissible temperature.

Hazardous materials of any kind, especially the materials classified as hazardous by European Community Directive EC 67/548/EEC, Article 2, Par. 2, may only be used to fill SKF centralized lubrication systems and components and delivered and/or distributed with the same after consulting with and receiving written approval from SKF.

**Further brochures**

1-9201-EN Transport of Lubricants in Centralized Lubrication Systems

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