

Single Line Lubrication Systems

Single line distributor

Technical description

The single line distributor GVO-1 supplies lubricant under pump pressure via the lines directly to the lube points. Each outlet supplies one lube point.

The metering of lubricant can be adjusted for each distributor or at each metering valve for each lube point steplessly variable. The single line distributor GVO-1 have an indicator pin for the visual function control.

Technical data

Operating pressure: max. 70 bar
min. 50 bar

Relief pressure: < 15 bar

Temperature range: -25 °C to +175 °C

Lubricant: oils, 68 - 1000 mm²/s
fluid grease, NLGI 000, 00

Metering volume:
0,016 to 0,050 cm³ / stroke and outlet

Metering setting: by means of set screw
min. to max. metering volume =
approx. 1,5 revolution

Material:
zinc nickel-coating acc. to DIN 50979

No. of outlets or metering valves of a single line distributor:
min. 1
max. 15

Weight: see table

Table with weights:

No. of outlets or metering valves	Weight (kg)
1 (w/o distributor strip)	0,090
1	0,153
2	0,287
3	0,421
4	0,554
5	0,688
6	0,822
7	0,955
8	1,089
10	1,356
12	1,624
15	2,025



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Functional description

When lubricant is delivered through the inlet drilling (1) into the distributor or the metering valve, it presses the supply piston (2) upwards against the resilience. Hence lubricant that is already in the outlet chamber (3) is supplied to the outlet (4). At the end of the supply piston movement new lubricant flows into the metering chamber (5). The metering piston (6) is pressed to the right against resilience and the metering chamber (5) is filled. The indication pin (7) is shown and displays that the metering chamber (5) is filled with lubricant.

Due to the following pressure relief in the inlet drilling (8) the delivery piston (9) is pressed downwards by the spring. Now lubricant is pressed out of the metering chamber into the outlet chamber (11) by resilience of the metering piston (10). This is displayed by the non-visible indicator pin.

After the pressure relief the metering piston is ready for the next lubrication cycle.

By moving the set screw (13) the metering volume can be adjusted after loosening the counter nut (14).

Setting of metering volume

The set screw (13) limits the way to the metering piston and hence controls the metering volume. Turning it clockwise reduces the volume, turning it counter-clockwise increases the volume.

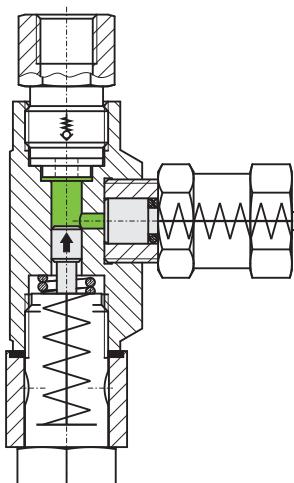
Loosen the counter nut (14) to adjust the requested volume via the set screw. Observe that the adjusting way from min. to the max. volume is approx. 1,5 revolutions of the screw. Afterwards tighten the nut (14) again.

The metering volume can be reduced to approx. 30 % of the max. metering volume without affecting the function of the valves.

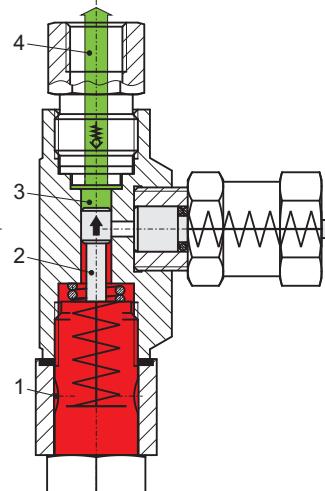
The metering valves are adjusted to full up- and down stroke when being delivered. Do the setting after the start-up and after a ventilation of the pressure connection.

- = pressure channels
- = following metering stroke
- = already delivered

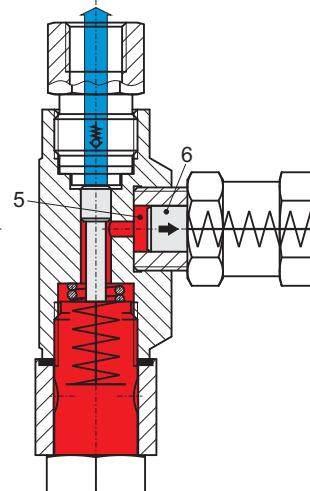
Break time



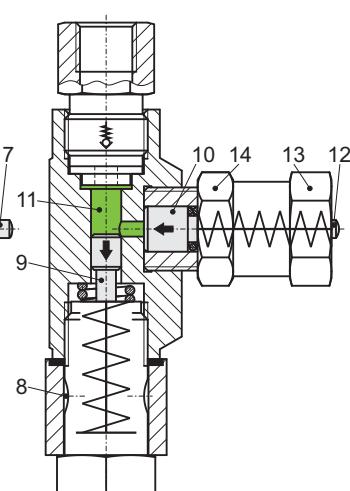
Supply time



Relief time



Refill time



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Single line distributor

GVO-1

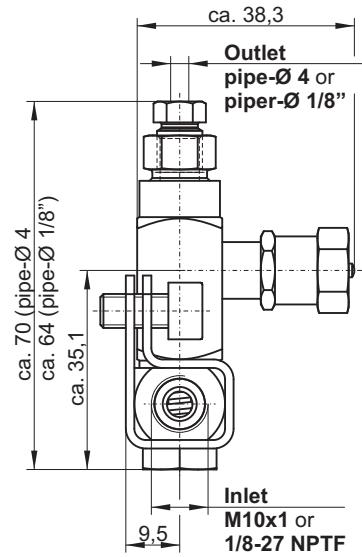
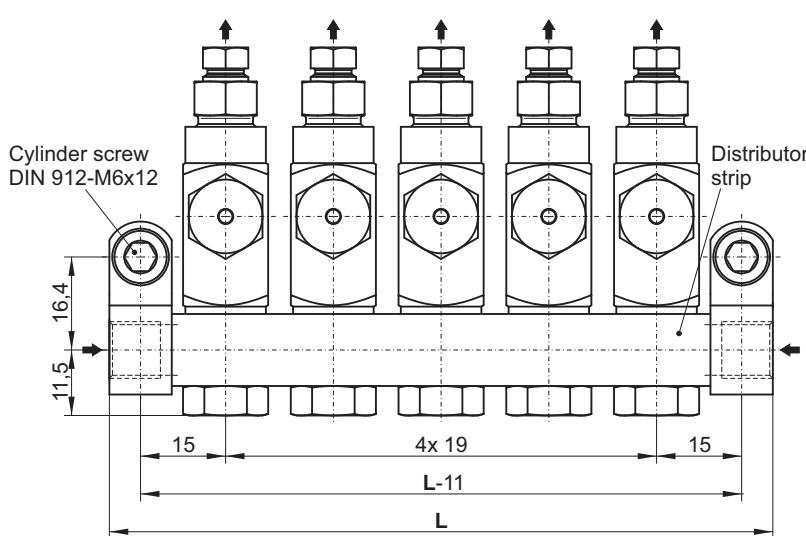
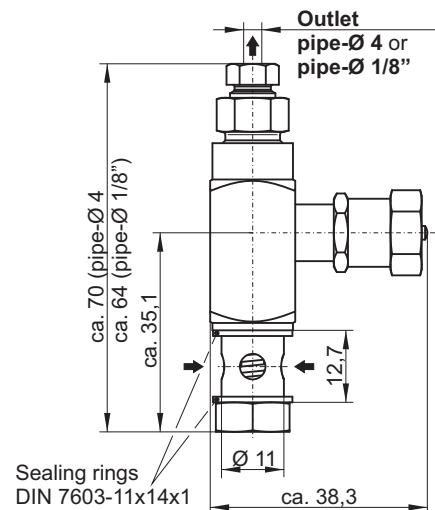


Table of dimensions:

Number of outlets, resp. metering valves	Dim. "L" (mm)
1	41
2	60
3	79
4	98
5	117
6	136
7	155
8	174
10	212
12	250
15	307

Metering valve without distributor strip

Outlet pipe-Ø 4, order-no.: 41260010001
Outlet pipe-Ø 1/8", order-no. 41260010002



Order key for type-no. 4126

Type-no.	4126	4126 001 12 1 1 000
Code-no.	4126	
Single line distributor	GVO-1	
Code-no.	001	
No. of outlets	1 2 3 4 5 6 7 8 10 12 15	
Code-no.	01 02 03 04 05 06 07 08 10 12 15	
Inlet thread	M10x1 1/8-27 NPTF	
Code-no.	1 2	
Outlet thread	M8x1, pipe-Ø 4 5/16-24, pipe-Ø 1/8"	
Code-no.	1 2	
Special model	standard	
Code-no.	000	