

Piston distributors for OIL

General aspects

Suitable for use in single line central lubrication systems to inject lubricant from an intermittent drive system pump.

The pump builds pressure up on the main line and feeds the distributors that inject a given quantity of lubricant to the lubrication points.

The lubricant flow rates for the various points are determined through the doser nipple. The total demand for lubricant (cm³/hour) can also be regulated through the frequency of lubrication.

They operate reliably within a wide range of viscosities and independent of the rate of pressure rise from the pump.

Two assembly types are provided:

- Single dispensers for manifold assembly (fig.1)
- Distributor blocks with 2-3-5 outlets (fig.2)

Operation

Initial position (Fig.3)

The piston unit is in resting position.

The lubricant is on the side of the spring piston and the non-return unit blocks the way from the inlet hole inwards.

Dosage (Fig.4)

The pump builds pressure up and moves the piston expelling the lubricant through the outlet hole.

The non-return valve allows lubricant to flow to the lower piston chamber and blocks the way to the inner hole of the shaft guide.

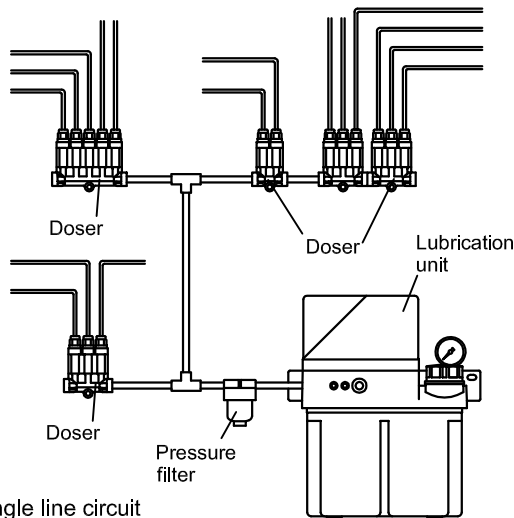
The amount of dosed lubricant depends on the length of the outlet nipple (it limits the stroke of the piston).

End of cycle (Fig.5)

The pump stops turning and the spring moves the piston back to its initial position.

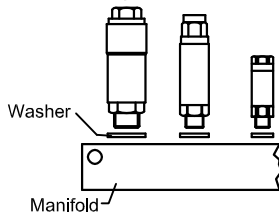
The pressure moves the non-return valve by:

- Opening the inner hole of the shaft guide and joining the piston's lower chamber with the upper chamber.
- Blocking the inward access from the inlet.

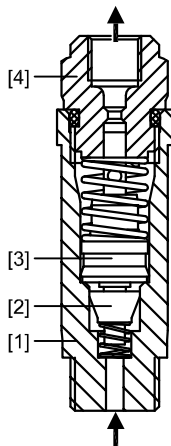
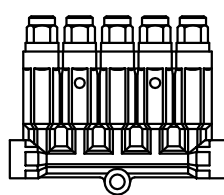


Single line circuit

(Fig.1)
 Dosers for manifold assembly

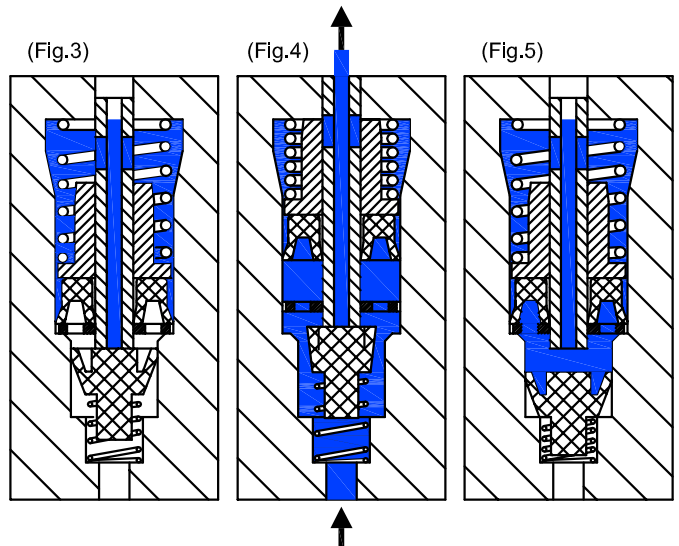


(Fig.2)
 Distributor block



Construction

- [1] Body
- [2] Non-return valve
- [3] Piston
- [4] Doser nipple

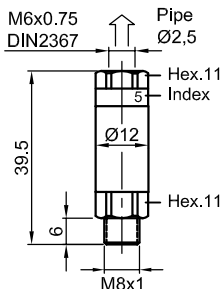


Piston distributors for OIL

Mod. **DE01/A** 170.110.000



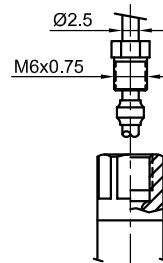
Material:
-Steel body
-Brass doser fitting



DE (X) / A - 0 / (X)

Outlet pipe connection Ø2,5	Flow
(01) M6x0,75 DIN2637 for fitting + sleeve	(1) 0,01 cm3 (2) 0,03 cm3 (3) 0,06 cm3 (4) 0,10 cm3 (5) 0,16 cm3

Connection through
M6x0,75 DIN2637
for fitting + sleeve

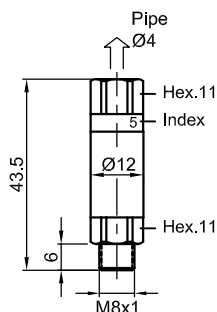


Mod. **DE01/B** 170.120.000

Mod. **DE06/B** 171.120.000



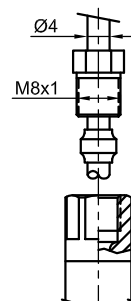
Material:
-Steel body
-Brass doser fitting



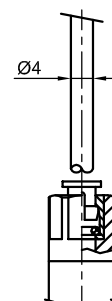
DE (X) / B - 0 / (X)

Outlet pipe connection Ø4	Flow
(01) M8x1 DIN2637 for fitting + sleeve	(1) 0,01 cm3 (2) 0,03 cm3 (3) 0,06 cm3 (4) 0,10 cm3 (5) 0,16 cm3
(06) Quick fitting	

Connection through
M8x1 DIN2637 for
fitting + sleeve



Connection through
quick fitting



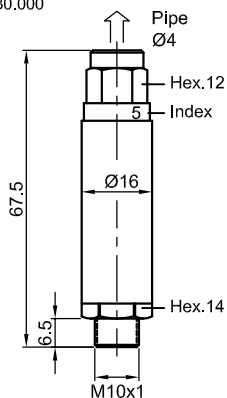
See connection details in page 06

Mod. **DE01/C** 170.130.000

Mod. **DE06/C** 171.130.000



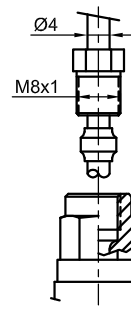
Material:
-Aluminium body
-Brass doser fitting



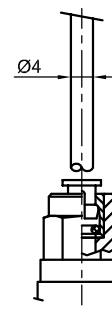
DE (X) / C - 0 / (X)

Outlet pipe connection Ø4	Flow
(01) M8x1 DIN2637 for fitting + sleeve	(4) 0,1 cm3 (5) 0,2 cm3 (6) 0,4 cm3 (7) 0,6 cm3
(06) Quick fitting	

Connection through
M8x1 DIN2637 for
fitting + sleeve



Connection through
quick fitting



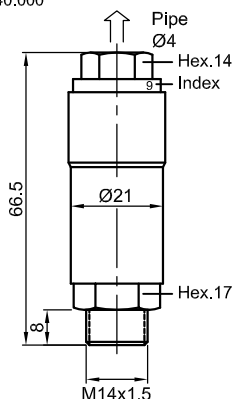
See connection details in page 06

Mod. **DE01/D** 170.140.000

Mod. **DE06/D** 171.140.000



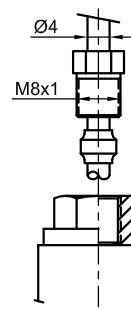
Material:
-Aluminium body
-Brass doser fitting



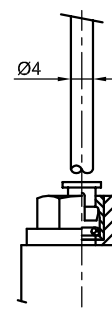
DE (X) / D - 0 / (X)

Outlet pipe connection Ø4	Flow
(01) M8x1 DIN2637 for fitting + sleeve	(5) 0,2 cm3 (6) 0,4 cm3 (7) 0,6 cm3 (8) 1,0 cm3 (9) 1,5 cm3
(06) Quick fitting	

Connection through
M8x1 DIN2637 for
fitting + sleeve



Connection through
quick fitting



See connection details in page 06

Manifolds for dosers

RF01/B
502.200.000
DIN 2367

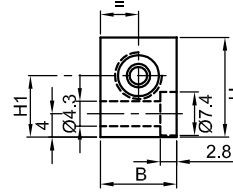
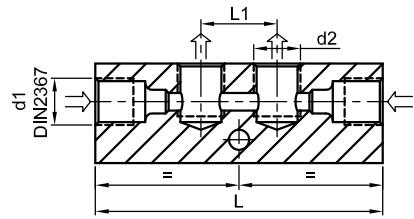


Fig. 1

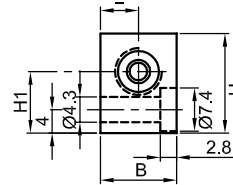
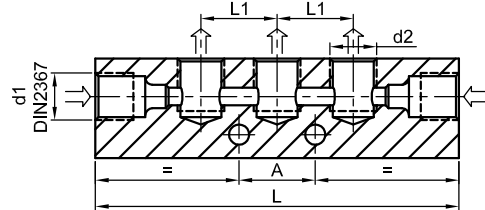


Fig. 2

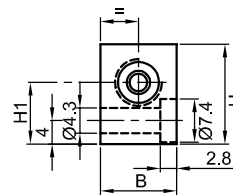
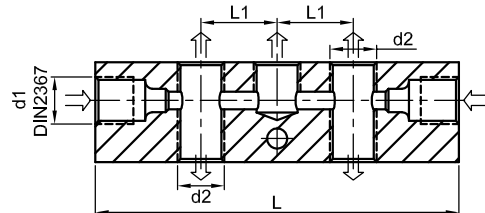


Fig. 3

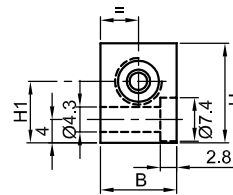
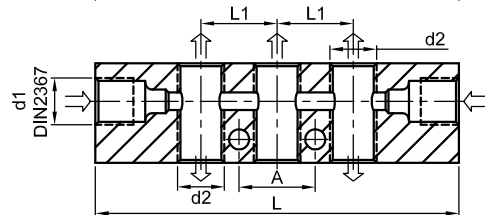
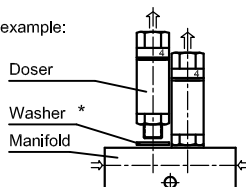


Fig. 4

Fig.	d1 DIN2367	d2	N° of outlets	Reference	L	A	H	B	H1	L1	Material
1	M8x1 pipe Ø4	M8x1	2	RF01/B-1-402	49	—	17	13	10.5	13	Aluminium
			3	RF01/B-1-403	62	—					
	M10x1 pipe Ø6	M8x1	2	RF01/B-1-602	52	—	17	13	10.5	13	Aluminium
			3	RF01/B-2-602	56	—					
			4	RF01/B-1-603	65	—	20	16	11	17	Steel
			5	RF01/B-2-603	73	—					
			6	RF01/B-1-604	78	—	17	13	10.5	13	Aluminium
	7	RF01/B-1-605	91	—							
	M14x1,5 pipe Ø8	M8x1	2	RF01/B-1-802	61	—	20	18	11	13	Aluminium
			3	RF01/B-1-803	74	—					
4			RF01/B-1-804	87	—						
M10x1 pipe Ø6	M10x1	2	RF01/B-1-662	58	—	20	18	11	17	Aluminium	
		3	RF01/B-1-663	75	—						
		5	RF01/B-1-665	109	—						
2	M10x1 pipe Ø6	M8x1	8	RF01/B-1-608	130	52	17	13	10.5	13	Aluminium
			10	RF01/B-1-610	156	78					
	M14x1,5 pipe Ø8	M8x1	6	RF01/B-1-806	113	39	20	18	11	13	Aluminium
			8	RF01/B-1-808	139	65					
3	M8x1 pipe Ø4	M8x1	5	RF02/B-1-405	62	—	17	13	10.5	13	Aluminium
	M10x1 pipe Ø6	M8x1	5	RF02/B-1-605	65	—					
			5	RF02/B-2-605	73	—					
4	M14x1,5 pipe Ø8	M8x1	5	RF02/B-1-805	74	—	20	18	11	13	Aluminium
	M10x1 pipe Ø6	M10x1	6	RF02/B-1-666	75	17					

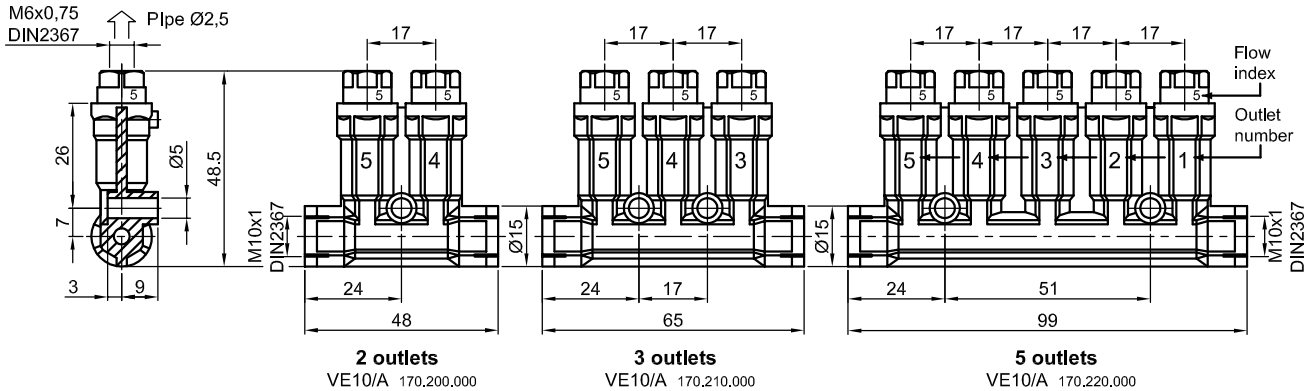
Application example:



* Aluminium washer Ø8 Ref. 956.600.002
Ø10 Ref. 956.600.003
* Copper washer Ø8 Ref. 956.601.002
Ø10 Ref. 956.601.003



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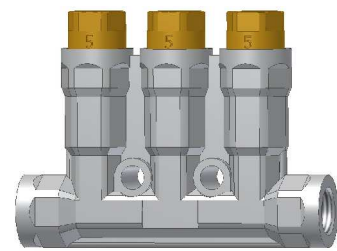
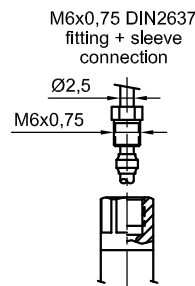


VE (X) / A - 0 / (X) - (X) (X) (X) (X) (X)

Outlet pipe connection Ø2,5	No. outlets	Outl. 5	Outl. 4	Outl. 3	Outl. 2	Outl. 1
(10) M6x0,75 DIN2637 for fitting + sleeve	(2)	(X)	(X)			
	(3)	(X)	(X)	(X)		
	(5)	(X)	(X)	(X)	(X)	(X)

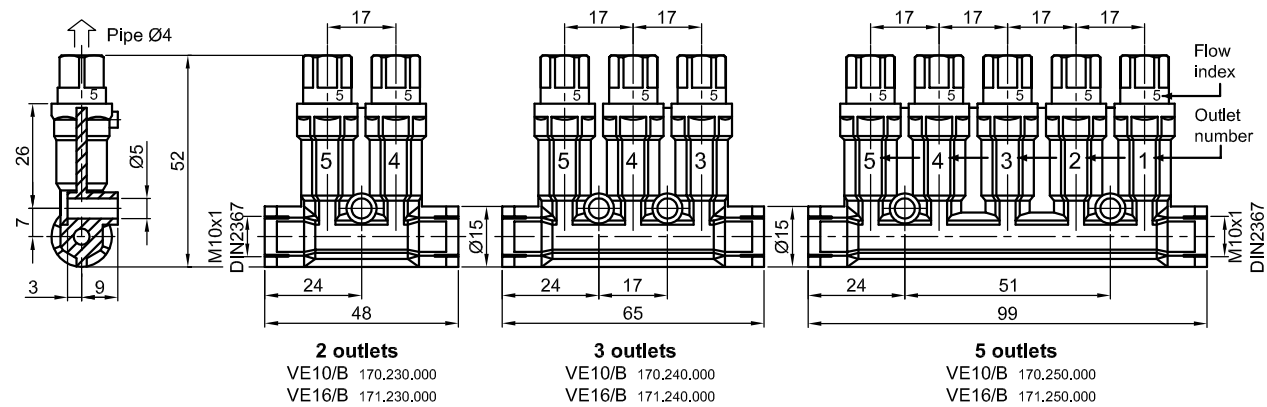
Index / Flow

(0)	0
(1)	0,01 cm3
(2)	0,03 cm3
(3)	0,06 cm3
(4)	0,10 cm3
(5)	0,16 cm3



Material:
-Zamak body
-Brass doser fitting

Order example:
3 outlets distributor with the following flows left to right: 0,10 - 0,06 - 0,10cm3
Reference: VE10/A-0/3-434
To modify the flow change the corresponding outlet nipple.
See codes in page 06. Index 1 (0,01cm3) cannot be modified.

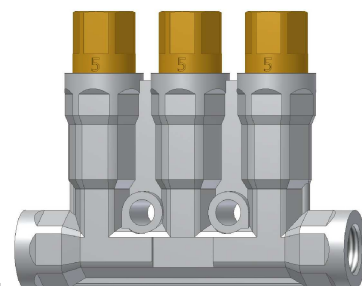
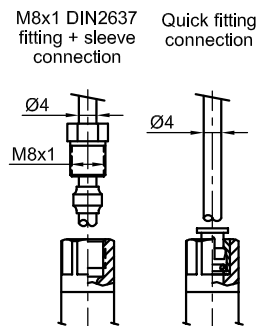


VE (X) / B - 0 / (X) - (X) (X) (X) (X) (X)

Outlet pipe connection Ø4	No. outlets	Outl. 5	Outl. 4	Outl. 3	Outl. 2	Outl. 1
(10) M8x1 DIN2637 for fitting + sleeve	(2)	(X)	(X)			
	(3)	(X)	(X)	(X)		
(16) Quick fitting	(5)	(X)	(X)	(X)	(X)	(X)

Index / Flow

(0)	0
(1)	0,01 cm3
(2)	0,03 cm3
(3)	0,06 cm3
(4)	0,10 cm3
(5)	0,16 cm3

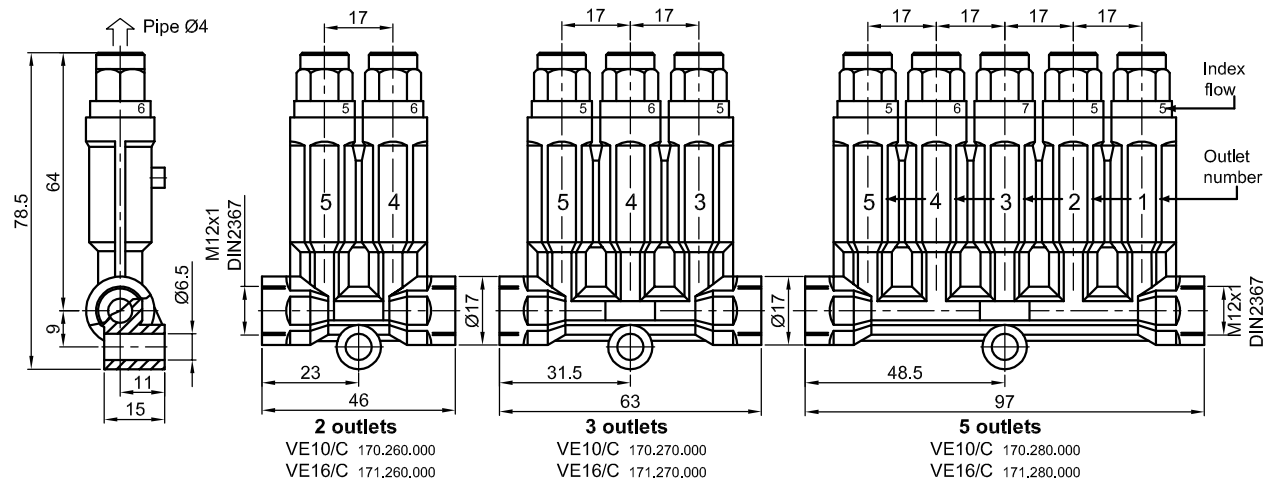


Material:
-Zamak body.
-Brass doser fitting.

Order example:
3 outlets distributor with the following flows left to right: 0,10 - 0,06 - 0,10cm3
Reference: VE10/B-0/3-434
To modify the flow change the corresponding outlet nipple.
See codes in page 06. Index 1 (0,01cm3) cannot be modified.

See connection details in page 06

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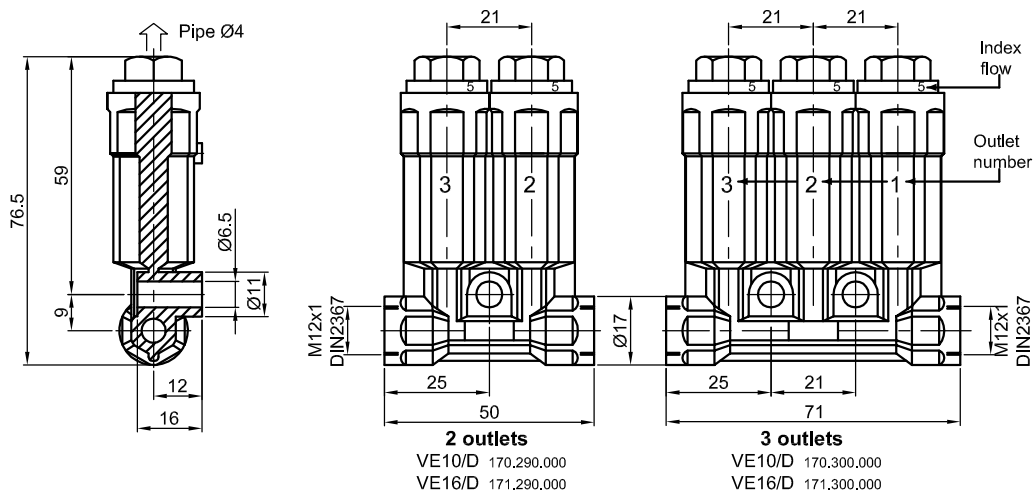
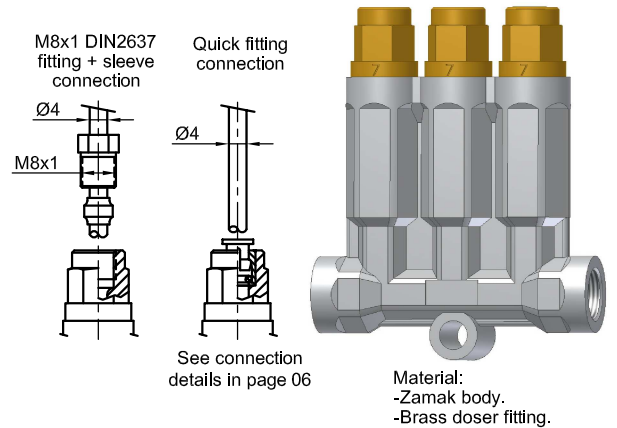


VE (X) /C-0/(X) - (X) (X) (X) (X) (X)

Outlet pipe connection Ø4	No. Outlets	Outl. 5	Outl. 4	Outl. 3	Outl. 2	Outl. 1
10 M8x1 DIN2637 for fitting + sleeve	2	X	X			
	3	X	X	X		
16 Quick fitting	5	X	X	X	X	X

Index / Flow
0 0
4 0,1 cm ³
5 0,2 cm ³
6 0,4 cm ³
7 0,6 cm ³

Order example:
3 no outlet doser with the following flows left to right: 0,6-0,4-0,6cm³
Reference: VE10/C-0/3-767
To modify the flow change the corresponding outlet fitting.
See codes in page 06

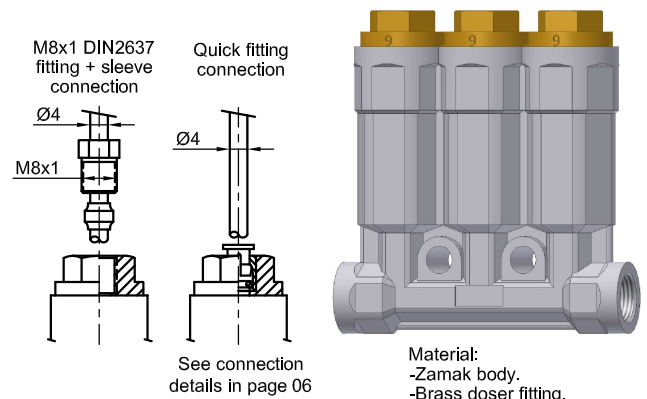


VE (X) /D-0/(X) - (X) (X) (X)

Outlet pipe connection Ø4	No. Outlets	Outl. 3	Outl. 2	Outl. 1
10 M8x1 DIN2637 for fitting + sleeve	2	X	X	
16 Quick fitting	3	X	X	X

Index / Flow
0 0
5 0,2 cm ³
6 0,4 cm ³
7 0,6 cm ³
8 1,0 cm ³
9 1,5 cm ³

Order example:
3 no outlet doser with the following flows left to right: 0,6-1,0-0,6cm³
Reference: VE10/D-0/3-787
To modify the flow change the corresponding outlet fitting.
See codes in page 06



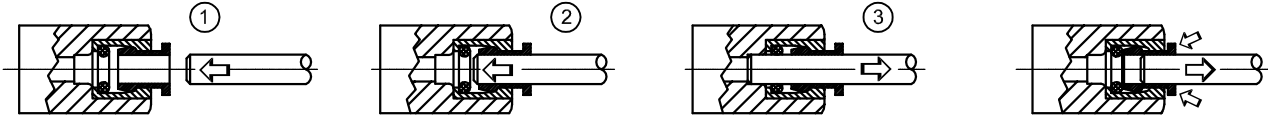
-Indications on the connection with quick fittings-

Cut the Ø4 pipe and insert it into the fitting.
For rigid or metal pipes chamfer the outer diameter of the pipe to avoid possible damage to the O-ring inside the fitting.

Fully insert the pipe until it reaches the stop at the bottom of the housing.

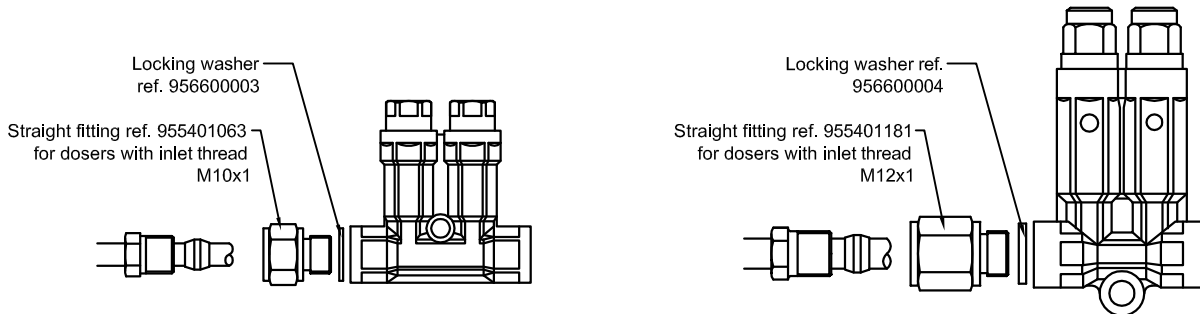
To ensure the connection is correctly fitted pull the pipe outwards: it must stay tied up and without moving.

To disconnect press down the plastic tab towards the fitting pulling the pipe at the same time.



-Indications on the main line connection-

To achieve the correct fitting of the nipples with the doser inlet of the main line connections it is recommended to tie in an inlet fitting to avoid direct assembly of the nipple on the aluminium body of the doser.



Technical characteristics

Lubricant Synthetic and mineral oils
Working pressure 10 ÷ 45 bar
Pressure relief <1,5 bar
Working temperature 0°C ÷ +70°C
Gasket material..... FPM
Viscosity 32 ÷ 2000 mm²/sec

Spare parts doser nipple

Index	Flow	DE01/A VE10/A	DE01/B VE10/B	DE06/B VE16/B	DE01/C VE10/C	DE06/C VE16/C	DE01/D VE10/D	DE06/D VE16/D
0	0 cm ³	170.000.000	171.000.000	171.000.000	172.000.000	172.000.000	173.000.000	173.000.000
2	0,03 cm ³	170.015.003	171.015.003	171.415.003				
3	0,06 cm ³	170.020.006	171.020.006	171.420.006				
4	0,10 cm ³	170.025.010	171.025.010	171.425.010	172.010.010	172.410.010		
5	0,16 cm ³	170.030.016	171.030.016	171.430.016				
5	0,20 cm ³				172.015.020	172.415.020	173.010.020	173.410.020
6	0,40 cm ³				172.020.040	172.420.040	173.015.040	173.415.040
7	0,60 cm ³				172.025.060	172.425.060	173.020.060	173.420.060
8	1,0 cm ³						173.025.100	173.425.100
9	1,50 cm ³						173.030.150	173.430.150