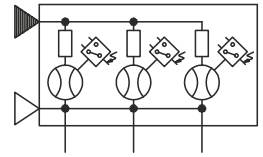




Illustration shows example

**OL-single-line distributor VOE-D**

with delivery monitoring



**Use:**

In OL<sup>®</sup>-lubrication systems that are based on the one-line system.

- Smallest oil volume per time unit as continuous oil flow
- High functional safety because of visual and electrical delivery checking
- Selectable dosing volume per lubrication point each (10...230 mm<sup>3</sup> per cycle) by simply exchanging the dosing elements
- Air throughput per lubrication point individually adjustable
- Compact design

**Technical data:**

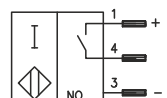
Operating pressure air:	max. 10 bar min. 2 bar
Operating pressure oil:	max. 45 bar
Outlet pressure:	min. +20 bar
Relief pressure oil:	<1,2 bar
Cycle times	
min. activation time:	Pressure build-up time* +1 s
min. relief time:	Pressure relief time* +10 s
Medium:	Mineral oil
Grade of filtration:	≤3 µm
Operating viscosity	
Dosing element 1:	≤250 mm <sup>2</sup> /s
Dosing element 2 ... 7:	≤3000 mm <sup>2</sup> /s
Temperature range:	0 ... 70 °C
Material:	Aluminium / steel
Visual range:	PMMA
Sealing material:	FPM
Weight	
VOE-D01/2:	0,8 kg
VOE-D01/4:	1,4 kg
VOE-D01/6:	2,0 kg
VOE-D01/8:	2,6 kg

\* depending on pump and system

**Inductive proximity switch:**

Operating voltage:	10 ... 30 VDC
Switching hysteresis:	≤15%
Switching current:	130 mA
Protection class:	DIN EN 60529 IP67
Connection type:	Male M12x1, 4-pin (for matching connecting cable see accessories)

**Connection diagram:**

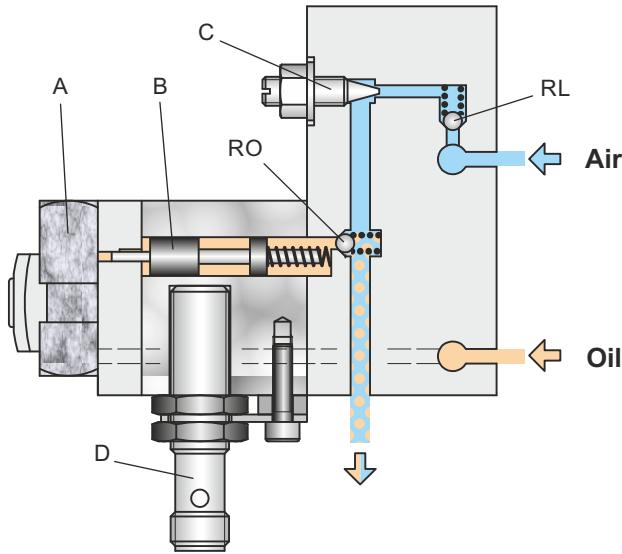


- Subject to modifications -

Pos.

- 1 Air metering screw
- 2 Oil-proportioning element
- 3 Proximity switch
- 4 Outlet G 1/8
- 5 Vent screw
- 6 Oil connector G 1/8
- 7 Air connector G 1/8

Outlet number	2	4	6	8
Measure "A"	62	106	150	194
Measure "B"	without	55	55	55



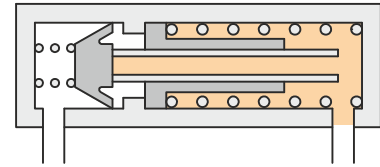
**Mode of operation:**

The oil volume as allocated by dosing element **A** (DEB) causes pin **B** to shift. This pin attenuates proximity switch **D**. After completion of oil delivery, pin **B** is moved back into its home position by means of the spring. The oil is delivered into the oil-air mixing channel via an oil check valve **RO**. The transport air coming from the air check valve **RL** moves the oil as a steady lubricant coating to the friction point. Every point an air throttle screw **C** is allocated to. This screw enables the required compressed air throughput to be adjusted.

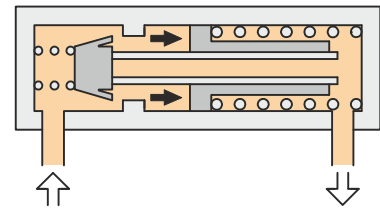
**Operational safety:**

In case of any modification (e. g. change of dosing elements, alteration of throttle settings, etc.), functionality needs to be checked: In the lubrication point lines connected, the flow of circular streaks towards the lubrication should be visible. During assembly of the proximity switch please take care that the active surface (front side) touches the base area of the drill hole.

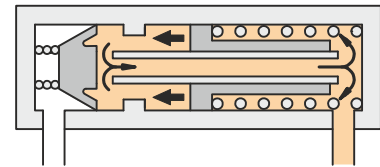
**Functional scheme dosing element DEB:**



Idle position, no oil delivery.



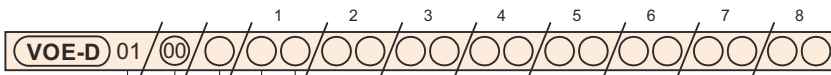
Lubricant delivery and pressure build-up. Proportioned lubricant volume is allocated to.



Pressure relief in oil inlet. Lubricant in dosing element is rearranged.

- Subject to modifications -

**Order designation:**



Outlets number	Dosing volume per point mm <sup>3</sup>		Electrical delivery monitoring
②	10 ①	110 ⑤	with proximity switch Ⓝ
④	20 ②	170 ⑥	
⑥	22 ③	230 ⑦	without proximity switch Ⓛ
⑧	34 ④	without ⑧ (Blind element)	
	57 ④		

**Order example:**

OL-single-line distributor with 4 outlets, dosing volume 57, 110, 230, 170 mm<sup>3</sup> and proximity switch at point 1, 2, 4.

**Order designation:**

**VOE-D01 / 00 / 4 / 4N / 5N / 7L / 6N**

**Accessories:**

Connecting cable 5 m / 0° for proximity switch (order separately, please)

Order no.

**913.404-46**

Technical documents also valid for this product:

E0878 EN Spare parts VOE-D

OL-single-line distributor VOE-D

EUGEN WOERNER GmbH & Co. KG  
Hafenstrasse 2 DE-97877 Wertheim  
Tel. +49 9342 803-0 info@woerner.de  
Fax +49 9342 803-202 www.woerner.de

Data sheet P0878 EN



### Important information about this data sheet

Reproduction, also in extracts, only permitted with the approval of the firm of EUGEN WOERNER GmbH & Co. KG.

All the information in this data sheet has been examined for correctness with great care. Nevertheless, WOERNER cannot assume any liability for losses or damage resulting directly or indirectly from the application of the information contained in this data sheet.

All products from WOERNER may only be used as intended and corresponding to the information in this data sheet.

For products supplied with operating instructions, the additional directives and information contained in them are to be complied with.

Materials deviating from those mentioned in this data sheet and the technical documents which further apply may only be poured into and processed in the appliances and systems manufactured and supplied by WOERNER by following agreement with and written approval by WOERNER.

The safety and danger information stated in the safety data sheets of the substances used must be taken into account at all costs.

Transportation of gases, liquefied gases, gases under pressure, vapours and liquids, the vapour pressure of which is more than 0,5 bar above normal atmospheric pressure (1013 mbar) at the maximum admissible temperature, of easy inflammable or explosive media as well as transportation of foodstuffs is forbidden.

### Information on EU Directive 2011/65/EU (RoHS)

In its controls and switching devices, WOERNER only uses materials which fulfil the criteria of EU Directive 2011/65/EU. To the extent that hexavalent chromium has been used as corrosion protection in the parts which we produce ourselves, it has already been replaced by other environmentally tolerable protective measures.

The mechanical devices supplied by WOERNER are not affected by EU Directive 2011/65/EU.

But as WOERNER is conscious of its responsibility towards the environment, we shall also use materials fulfilling the requirements of the Directive for devices not covered by EU Directive 2011/65/EU as soon as they are generally available and their use is technically possible.