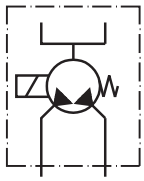
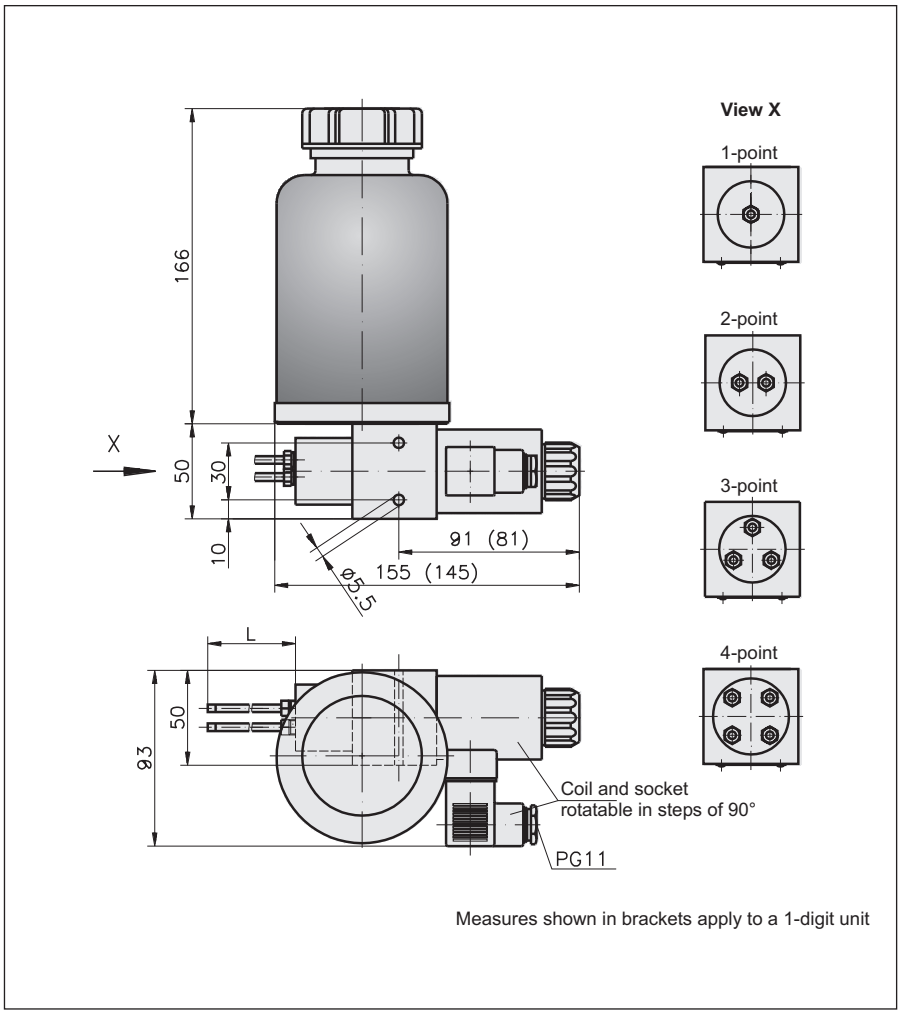
WOERNER
The Experts in Lubrication

Injection unit SAB-C



- Up to four outlets
- Compact construction
- Different driving power



Measures shown in brackets apply to a 1-digit unit

Technical data:

Delivery volume
per stroke and outlet: 15 mm³

Number of strokes max.: approx. 250 min^{-1}
Actuation time min.: approx. 0,1 s
The actuation and off-times depend on the electric magnet, the number of digits, and the medium.

Medium: Oil from 11 to 1900 cP

Ambient temperature: -10 ... +50 °C

Reservoir capacity: 0,7 l

Version without reservoir: Suction connector G1/4

Inserting position: Suction connector above

Nozzle tube length: min. 25 mm
max. 1000 mm
The ø4 nozzle tube can be bent manually, thus enabling the drop to be directed on to the lubrication point.

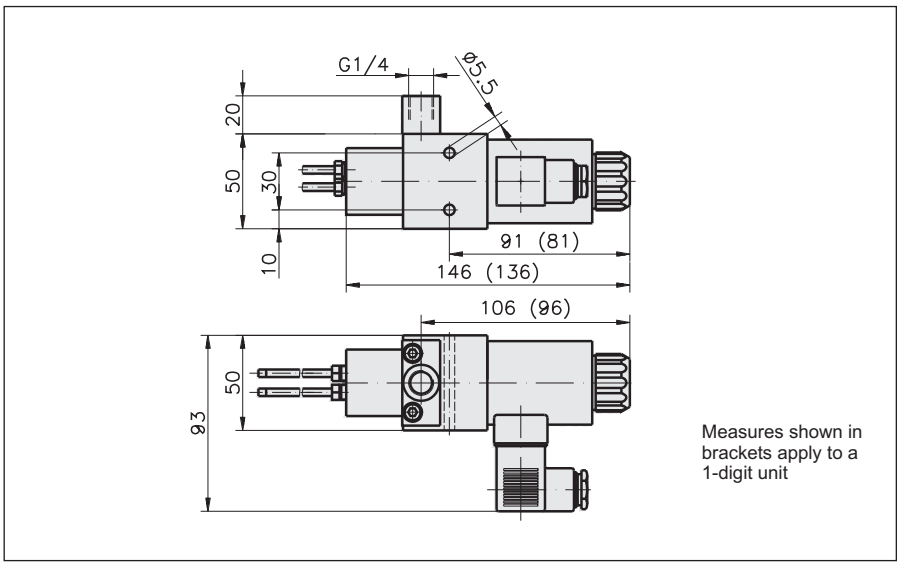
Material:
Pump body: Aluminium
Reservoir: Polyethylene, transparent
Gaskets: Viton

Weight:
SAB-C/../0 1,15 kg
SAB-C/../7 1,40 kg
Level switch 0,10 kg

- Subject to modifications -

EUGEN WOERNER GmbH & Co. KG
Postfach 1661 DE-97866 Wertheim
Am Eichamt 8 DE-97877 Wertheim
Tel. +49 (0) 9342 803-0 info@woerner.de
Fax.+49 (0) 9342 803-202 www.woerner.de

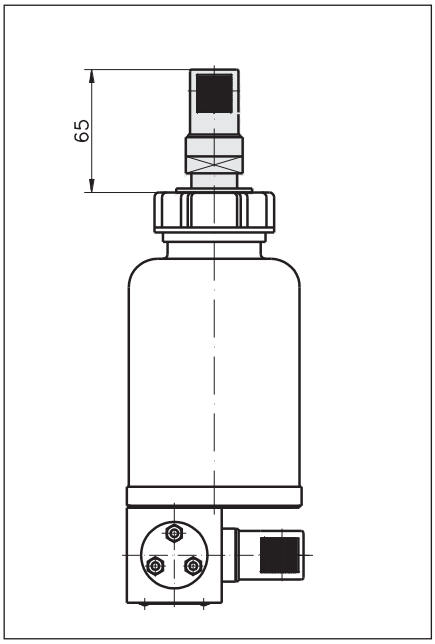
Leaflet-No. **0643.01.07 EN**
Replaces No. 0643.11.06 EN



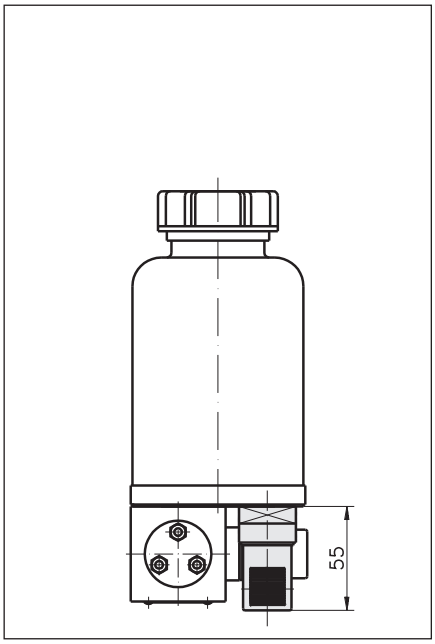
Version without reservoir:

In the version without reservoir, a G1/4 female thread connection piece is mounted.

Level switch in the reservoir lid:



Level switch in the reservoir bottom:



Electrical data:

Level switch with minimal control:

Switching capacity:	10 W 30 VA
Switching current max.:	0,5 A
Switching voltage max.:	230 VUC
Protection type:	IP65
Plug connector:	DIN 43650

Electric magnet:

Insulation class:	F
Voltage:	24 VDC or 230 VAC Special voltage available, upon request!

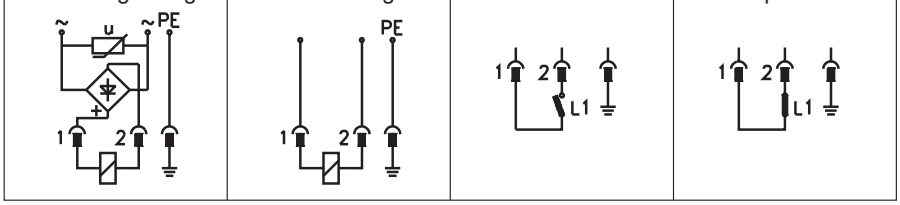
Electric magnet:		A	C
Nominal power:	[W]	30	121
Energized duty rating:	[%]	100	15
Current at:			
24VDC:	[A]	1,27	–
230VAC:	[A]	0,15	0,59

Protection type:	IP65
Plug connector:	DIN 43650

The electric magnet should always be operated by direct voltage. When connecting to an alternating voltage, direct voltage will be generated in the mains socket via the rectifier. Then the direct voltage at the electric magnet will be approximately 10% lower than the alternating voltage at the mains socket.

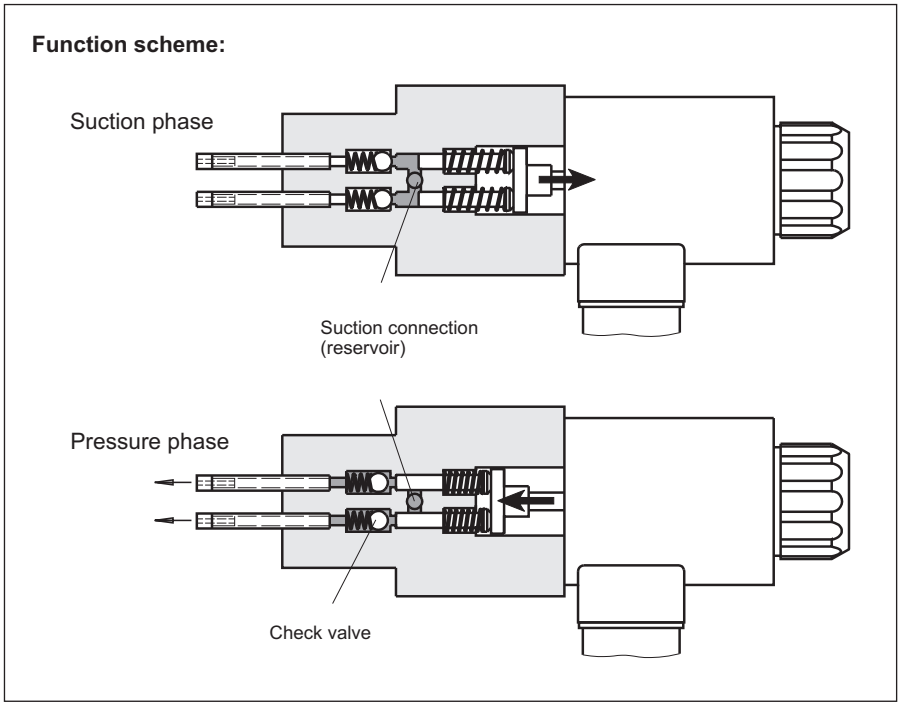
Electrical connection diagrams

Electric magnet		Level switch	
Alternating voltage	Direct voltage	Closer	Opener



EUGEN WOERNER GmbH & Co. KG
Postfach 1661 DE-97866 Wertheim
Am Eichamt 8 DE-97877 Wertheim
Tel. +49 (0) 9342 803-0 info@woerner.de
Fax.+49 (0) 9342 803-202 www.woerner.de

Function scheme:



Operation:

The injection unit consits of a piston pump, an electric magnet, the nozzle tubes and an oil reservoir.

Suction phase:
The piston is put back by means of spring tension. Due to the negative pressure generated, the medium will be sucked out of the reservoir.

Pressure phase:
Upon actuation of the electric magnet, the piston will be accelerated and the lubricant splashed through the nozzle to the lubrication point.

Injection range:
The maximum injection range depends on the medium, the number of outlets, pipe lengths, and the magnetic strength.

De-aerating:
In order to attain a satisfactory injection effect, the injection unit and nozzle pipes must be bled. To do this, the electric magnet is repeatedly operated until the lubricant in the nozzle appears free of air.
This operation can be shortened by ascending the nozzle tubes towards the outlet.

Order-designation:

Injection unit **SAB-C**

Outlets for pipe-AD 4	Outlets Connection thread G1/8	Reservoir [l]	Pipe length [mm]	Level switch	Funtion control	Electric magnet Energized duty rating ED [%]	Connecting voltage
1-point (1)	1-point (1R)	0,7 (7)	(100)	**in the reservoir lid:** Closer (6) / Opener (8)	without (0)	100 (A)	24VDC (G1)
2-point (2)	2-point (2R)		(500)	**in the reservoir bottom:** Closer (6A) / Opener (8A)		100 (A) / 15 (C)	230VAC (W1)
3-point (3)		without (0)	(1000)			Special magnet [1] (*)	(*)
4-point (4)			without (0)	without (0)		without electric magnet [2] (0)	(0)

Order-example:

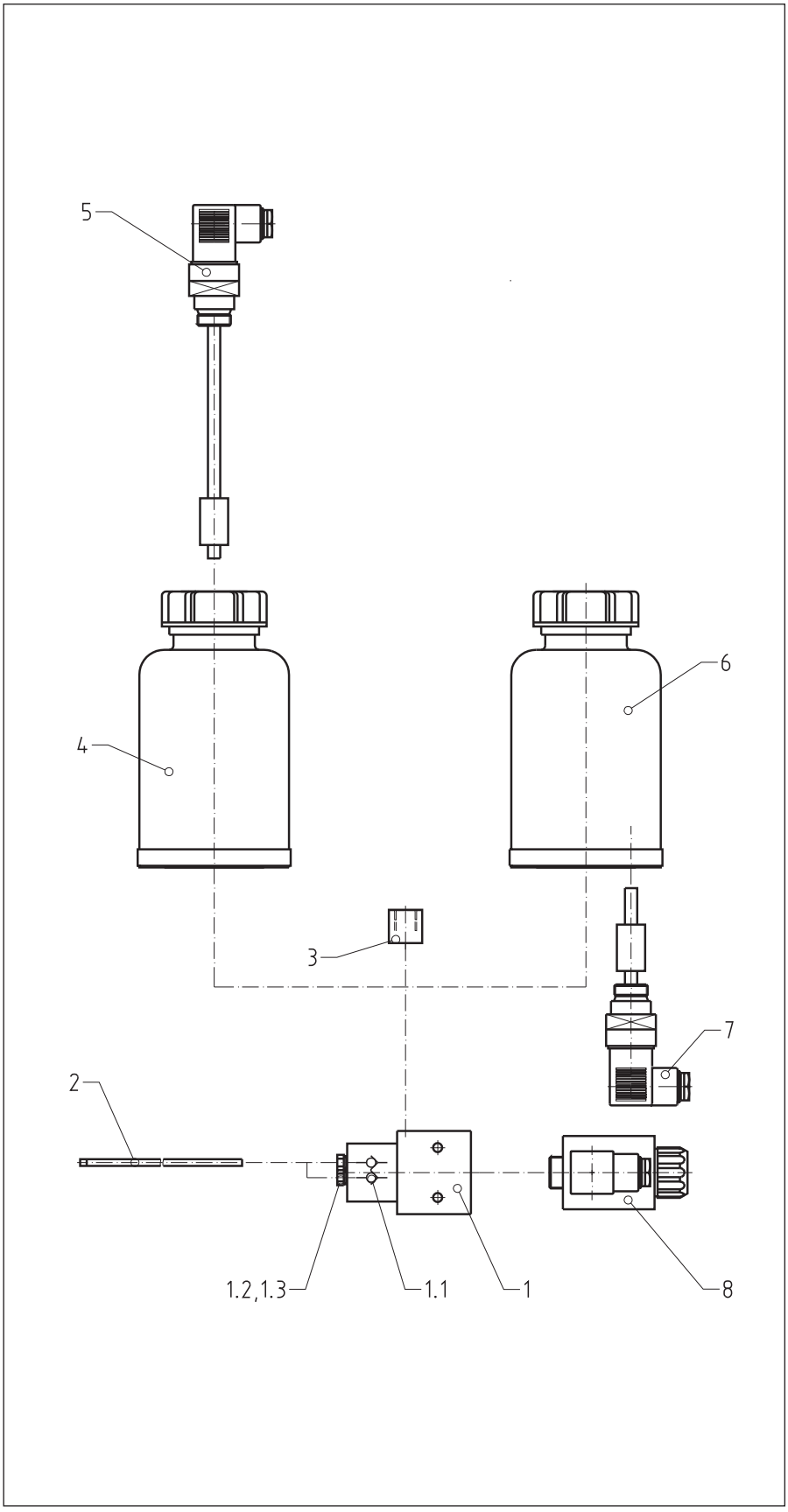
Injection unit SAB-C, two-point, reservoir 0,7l, pipe length 100 mm, level switch (opener) in the reservoir lid, without function control, 100% ED, 24VDC.

Order-designation:

Injection unit
SAB-C / 2 / 7 / 100 / 8 / 0 / A / G1

[1] Magnets with special voltage upon request
[2] Without electric magnet (spare part)

EUGEN WOERNER GmbH & Co. KG
Postfach 1661 DE-97866 Wertheim
Am Eichamt 8 DE-97877 Wertheim
Tel. +49 (0) 9342 803-0 info@woerner.de
Fax.+49 (0) 9342 803-202 www.woerner.de



Spare parts:

Pos.	Designation	Order-no.
	Version for pipe-AD 4:	
1	Pump body, including Pos. 1.1, 1.2, 1.3	
	1 - point: SAB-C / 1 / * / 0 / 0 / 0 / 0 / 0	
	2 - point: SAB-C / 2 / * / 0 / 0 / 0 / 0 / 0	
	3 - point: SAB-C / 3 / * / 0 / 0 / 0 / 0 / 0	
	4 - point: SAB-C / 4 / * / 0 / 0 / 0 / 0 / 0	
1.1	Check valve (1x per outlet)	330.356-64
1.2	Union screw (1x per outlet)	803.871-01
1.3	Double-cone ring (1x per outlet)	953.300-01
2	Nozzle tube 100 mm	330.278-65
	Nozzle tube 500 mm	330.312-65
	Nozzle tube 1000 mm	330.286-65
	Version with thread connection G1/8:	
1	Pump body	
	1 - point "1R": SAB-C / 1R / * / 0 / 0 / 0 / 0 / 0	
	2 - point "2R": SAB-C / 2R / * / 0 / 0 / 0 / 0 / 0	
	Version without reservoir:	
3	Base plate G1/4	330.370-65
	Version without level switch:	
4	Reservoir 0,7 l without lid	330.360-65
	Lid with strainer	165.327-65
	Version level switch in the reservoir lid:	
4	Reservoir 0,7 l without lid	330.360-65
5	Level switch with reservoir lid	
	6 (Closer)	165.328-65
	8 (Opener)	165.329-65
	Version level switch in the reservoir bottom:	
6	Reservoir 0,7 l with lid and strainer	330.377-65
7	Level switch	
	6A (Closer)	477.053-65
	8A (Opener)	468.213-65
8	Electric magnet A/G1 24 VDC 100 % ED	330.392-65
	Electric magnet A/W1 230 VAC 100 % ED	330.394-65
	Electric magnet C/W1 230 VAC 15 % ED	330.396-65
	without picture:	
	Gasket set	330.379-64

- Subject to modifications -

EUGEN WOERNER GmbH & Co. KG
Postfach 1661 DE-97866 Wertheim
Am Eichamt 8 DE-97877 Wertheim
Tel. +49 (0) 9342 803-0 info@woerner.de
Fax.+49 (0) 9342 803-202 www.woerner.de