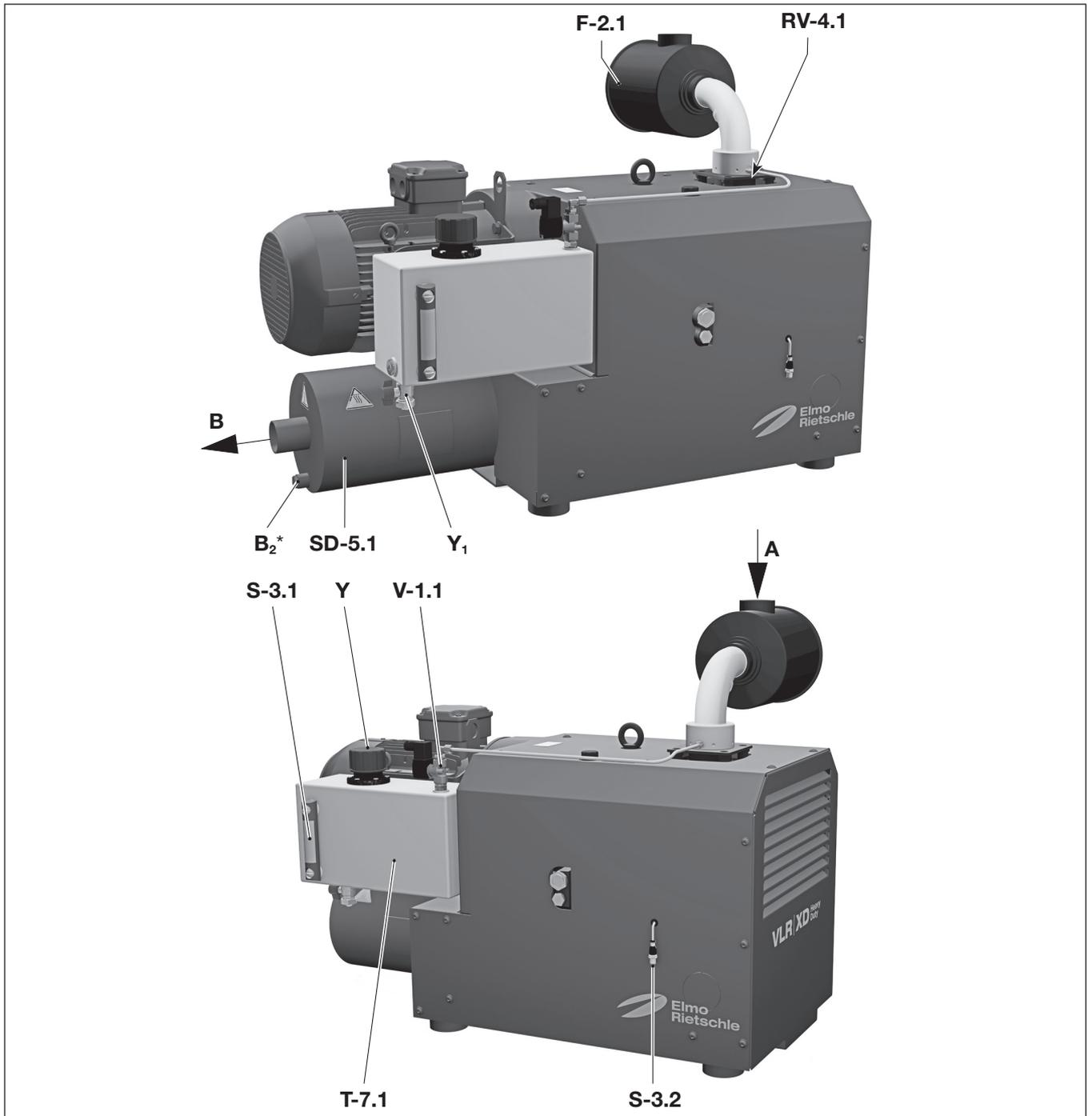
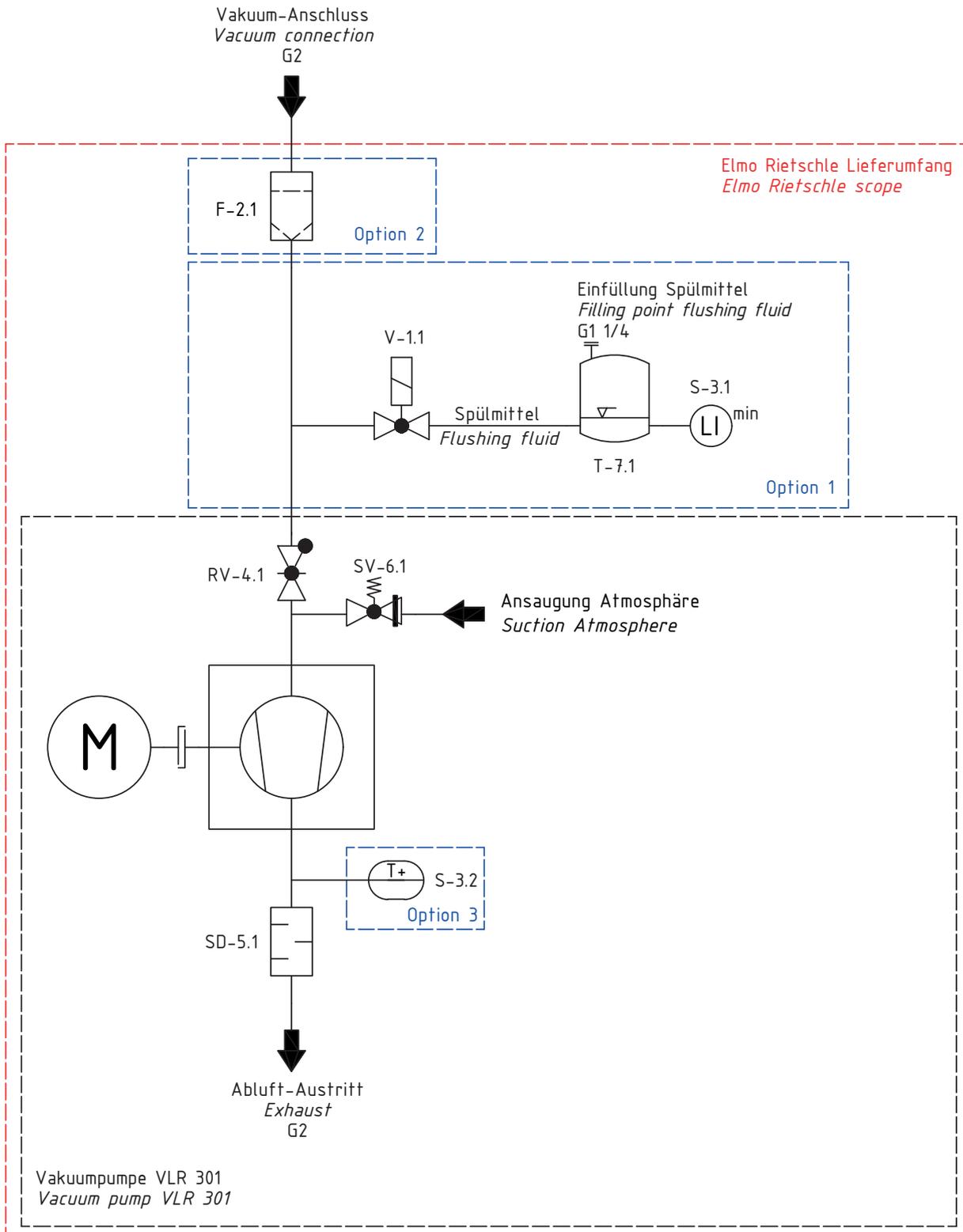


**Claw-vacuum pump C-VLR 301 (40)**

- |                       |                             |               |   |
|-----------------------|-----------------------------|---------------|---|
| <b>A</b>              | Vacuum connection           | <b>S-3.1</b>  | Fill level monitor - rinsing agent                |
| <b>B</b>              | Exhaust air connection      | <b>S-3.2</b>  | Temperature sensor - pressure port (M12 x 1)      |
| <b>B<sub>2</sub>*</b> | Condensate drain            | <b>RV-4.1</b> | Non-return valve                                  |
| <b>Y</b>              | Filling point rinsing agent | <b>SD-5.1</b> | Silencer pump (B <sub>1</sub> *)                  |
| <b>Y<sub>1</sub></b>  | Rinsing agent-discharge     | <b>SV-6.1</b> | Vacuum relief valve (under the hood; not visible) |
| <b>V-1.1</b>          | Rinsing valve               | <b>T-7.1</b>  | Rinsing agent container                           |
| <b>F-2.1</b>          | Intake filter               |               |   |

\* Designation in operating instructions

## P+I scheme C-VLR 301 (40)



## Technical data C-VLR 301 (40)

C-VLR 301 (40)	
Weight	kg*
Length	1093 mm*
Width	616 mm*
Height	832 mm*
Vacuum connection	Without filter G 2 / with filter G 2
Filling point rinsing agent	G 1 1/4 (Vent screw)

\* Dimensions and weight vary depending on the accessories attached and the installation position of the accessories

## Installation and commissioning



The claw vacuum pump C-VLR 301 (40) with XD accessories attached must be connected by a qualified specialist.

Observe the applicable accident prevention regulations during installation and operation.



Please read the operating instructions BA 885 first and observe Chapter "Installation, commissioning and maintenance."

Observe the safety instructions described in chapter "Safety instructions for installation, commissioning and maintenance" during all work.

### Rinsing agent unit

The rinsing agent unit includes all components required for the rinsing of the claw vacuum pump C-VLR 301 (40).

Rinsing is done by a suitable rinsing agent that is determined by the customer and has to be filled into the attached rinsing agent tank (T-7.1). During the rinsing process, a controlled rinsing valve (V-1.1) gets the rinsing agent from the rinsing agent tank (T-7.1). An optical filling level indicator (S-3.1) is attached to the rinsing agent tank for monitoring its filling level. Check the filling level regularly and if necessary refill rinsing agent.



**Caution: The pump is only allowed to be rinsed at 50 Hz or 60 Hz because too much moisture accumulates in the pump at low frequencies and the pump can be damaged.**

When selecting a suitable rinsing agent, consider the material compatibility of the individual components.

### Description of the rinsing process

**Recommendation:** First, the claw vacuum pump C-VLR301 (40) should only be rinsed in the post run.

The control of the rinsing process should be integrated in the customer's control system.

1. The claw vacuum pump C-VLR301 (40) runs for **5 minutes** in post-run mode via a vacuum relief valve (SV-6.1) with the suction valve closed (not shown in the P+I scheme).  
**Note:** During the whole rinsing process, the suction valve remains closed.
2. After 5 minutes, the rinsing valve (V-1.1) opens for **30 seconds** (1st rinsing passage).
3. Then, close the rinsing valve (V-1.1) for **3 minutes** (rinsing pause).
4. After that, open the rinsing valve (V-1.1) again for another **30 seconds** (2nd rinsing passage).
5. For removing the residual moisture in the claw vacuum pump, the pump should be operated for another **10 minutes** after the 2nd rinsing passage - as described in item 1.



The above described rinsing process is only recommended. Optimize the rinsing process referring its duration and frequency depending on the experiences made and determine and specify it on site. For this purpose we recommend testing the rinsing result under production conditions especially within the starting phase.



**Danger of death from touching live parts!**

Before starting any maintenance work, disconnect the machine by pressing the main switch or unplugging it and ensure that it cannot be turned on again.

## Material compatibility of components

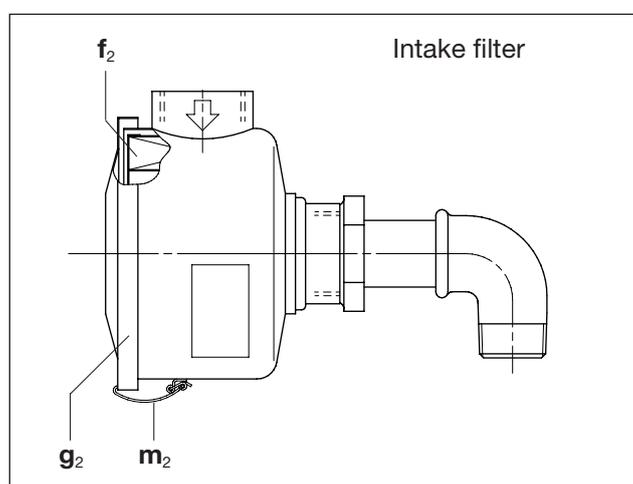
List of materials of the individual components and their resistivity

Resistivity against		PA 6	PP	PA-T	FPM	NBR
Oil, grease		+	+	+	+	+
Solvent:	Tri	+	o	+	+	o
	Per	+	o	+	+	o
Acids:	weak	o	+	-	+	o
	strong	-	+	-	+	o
Leaches:	weak	+	+	+	+	+
	strong	o	+	+	+	+
Petrol		+	+	+	+	+
Alcohol		+	+	-	+	+
Hot water		o	+	-	+	+
UV light and weather-resistance		o	o	o	+	-

+ resistant, o conditionally resistant, - not resistant

## Maintenance and cleaning

### Air filtering



**Note: Insufficient maintenance of the air filter reduces the performance of the machine and damages can result on the machine.**

Clean the filter cartridge ( $f_2$ ) of the suction filter every month or more often, depending on pollution, by blowing off from the inside to the outside. In spite of cleaning the filter its separation efficiency will continue to deteriorate. Therefore the filter should be replaced every six months. The filter cartridge ( $f_2$ ) can be removed after releasing the brackets ( $m_2$ ) on the filter cover ( $g_2$ ).

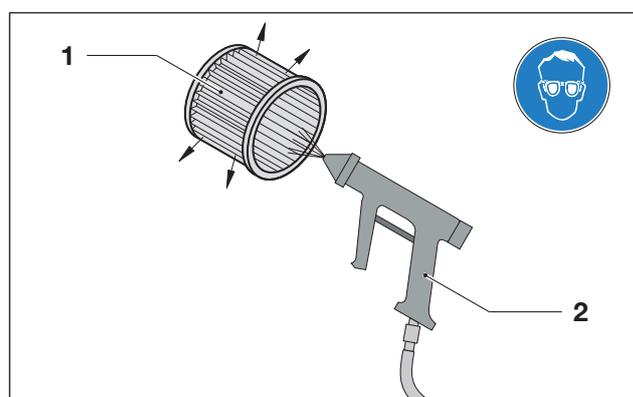
**Note: Do not damage the filter cartridges when cleaning them.**



**Danger of injury when dealing with compressed air!**

When blowing through with compressed air, solid particles may be carried along or powder dust swirling around may cause injury to the eyes.

Therefore, always wear goggles and a dust mask when cleaning with compressed air.



Blow off the filter cartridge (1) using compressed air (2).

For further maintenance works refer to the operating instructions **BA 885**

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Edition: 1.0 · 19.7.2017 · M 34-EN