

# Technical Data

## Preliminary Remark

The units of measurement used in the technical data are based on the international (SI) units system.

### In this chapter you will find

- general Machine Data.
- information about Additional Specifications for your machine.

### Please note:

The values indicated (e.g., dimensions, weights) apply to standard machine designs.

Specific machine data can be found in other sections of your technical documents, e.g., in the spare parts or electrical component documents.

**Machine Data**

<b>Machine designation</b>	SENSOMETIC
<b>Machine design</b>	System for pressureless filling, VP-GL.
<b>Permissible machine application</b>	For filling of products for which it has been designed by the manufacturer. For filling in containers for which it has been designed by the manufacturer.
<b>Manufacturer</b>	KRONES AG Böhmerwaldstr. 5 D-93068 Neutraubling For further information, please refer to the address directory in the chapter titled "ADDITIONAL INFORMATION"!
<b>Serial number</b>	Corresponds to the order (com.) number. (Please refer to the identification plate.)
<b>Year of construction</b>	Please refer to the identification plate
<b>Position of identification plates</b>	1x visible from the outside, under the machine table. 1x on the control cabinet.

<b>Machine type</b>	<p>Depending on the required output, sizes ranging from type 121 to type 136, type 221 to type 236, type 321 to type 336.</p> <p>Example:</p> <p style="text-align: center;">K-121-001</p> <table border="1" style="margin-left: auto; margin-right: auto;"><tr><td style="border: none;">Order (com.)</td><td style="border: none;"> </td><td style="border: none;"> </td><td style="border: none;">Manufacturer's number</td></tr><tr><td style="border: none;">Machine type</td><td style="border: none;"> </td><td style="border: none;"> </td><td style="border: none;"></td></tr></table>	Order (com.)			Manufacturer's number	Machine type			
Order (com.)			Manufacturer's number						
Machine type									
<b>Machine model</b>	<p>Please refer to the group list included in the spare parts documents.</p>								

## Explanation of the model designation - example:

VP - GL 40 / 10 KK - 94 LM

Valve  
Pneumatic

Gravity Long tube

No. of filling valves

No. of sealing heads

Type of closer, if integrated

- KK = crowner
- NK = corker
- SV = roll-on sealer
- SOV = special closer
- PST = closer for plastic stoppers

Machine pitch in mm



If the pitch of the filler and closer is different,  
two values will be indicated in the following order, e.g., 94/113.

Machine's direction of rotation


- LM = right-to-left design = container discharge at left
- RM = left-to-right design = container discharge at right

Reference point: At front side of machine = side where container infeed/discharge is located.

<b>Machine specifications</b>	
Mechanical specifications, output rates, machine construction, dimensions and weights	are contained in the gearing layout drawing, foundation layout drawing, spare parts documents, data sheet, and in the installation layout drawing.
Electrical specifications, power requirements (type, quality, quantity)	are contained in the documents of the electrical components, (wiring diagram, electrical component list, electrical specifications, software plan, power and operating supply layout drawing, etc.)
Product supply	via product pipe
Feed/discharge of containers	by conveyors or infeed starwheel
<b>Noise emission value</b>	The noise emission value in the working environment does not exceed 83 dB (A) at a nominal machine speed of up to 30,000 bph. 85 dB (A) at a nominal machine speed of up to 60,000 bph. These values were measured according to DIN 45 635, section 28.

<p><b>Permissible products</b></p>	<p>Only those products are to be filled for which the machine has been designed and constructed.</p> <p> The filling of products containing ozone must be specifically authorised as per order confirmation, as specially-suited materials are then required.</p>
<p><b>The machine is equipped for handling the container types according to the group list.</b></p>	<p>Please refer to the group list and container-specific group list(s) included in the spare parts documents.</p>
<p><b>Permissible gases/protective gases in the product bowl</b></p>	<p>Carbon dioxide (CO<sub>2</sub>) Nitrogen (N<sub>2</sub>) Sterile air Saturated steam</p>
<p><b>Permissible lubricants</b></p>	<p>Please refer to the chapter titled "Lubrication Instructions".</p>
<p><b>Permissible cleaning agents and disinfectants</b></p>	<p>Please refer to the chapter titled "Cleaning/Disinfection"</p> <p> The use of products and cleaning media containing ozone must be specifically authorised as per order confirmation, as specially-suited materials are then required.</p>


<b>Supply connections</b>	<ul style="list-style-type: none"><li>● Electricity</li><li>● gas (CO<sub>2</sub>, N<sub>2</sub>, sterile air),</li><li>● operating air,</li><li>● water,</li><li>● steam*,</li><li>● product feed pipe,</li><li>● CIP return pipe.</li></ul> <p>Connected loads, nominal widths, and pressures are indicated in the installation layout drawing, data sheet or, if provided, in the power and operating supply layout drawing.</p>
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<p><b>Waste produced during machine operation</b></p>	<p><b>During filling,</b></p> <ul style="list-style-type: none"><li>● gas (e.g., CO<sub>2</sub>, N<sub>2</sub>, sterile air),</li><li>● container fragments/waste,</li><li>● residual product.</li></ul> <p><b>During CIP,</b></p> <ul style="list-style-type: none"><li>● waste water,</li><li>● steam*,</li><li>● cleaning and disinfection solutions.</li></ul> <p><b>During maintenance,</b></p> <ul style="list-style-type: none"><li>● old (spare) parts,</li><li>● lubricants and their containers,</li><li>● cleaning agents and solvents,</li><li>● batteries,</li><li>● plastic materials,</li><li>● etc.</li></ul> <p> Care must be taken to ensure that waste is disposed of by professionals. Please also refer to KRONES' SAFETY INSTRUCTIONS.</p>
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\* Unless otherwise specifically agreed within the framework of the order confirmation, suction devices for steam must be installed by the customer with the assistance of an authorised air-conditioning system firm.




## Temperatures, Fill Levels, Pressures

Permissible operating temperatures	Temperature [°C]	
	min.	max.
 <ul style="list-style-type: none"> <li>● For further information, please refer to the chart titled "Recommended Cleaning Agents And Disinfectants" in the chapter titled "Maintenance".</li> <li>● The adjacent values are standard values. The guaranteed performance values for filling directly relate to the filling temperatures as per order confirmation. They are generally measured in the filled container.</li> </ul>	Operating air*	+ 50
	<b>Filling</b>	
	Product	+ 95
	<b>CIP / SIP**</b>	
	Cleaning/disinfection solution	+ 80
	Water	+ 95
	Steam	+ 110

\* For further information on the compressed-air quality, please refer to the instructions on "PNEUDRI High Efficiency Compressed Air Dryers" in the chapter titled "Additional Manuals".

\*\* CIP = Cleaning In Place      Meaning: Internal cleaning/disinfection of the machine, without having to disassemble it or having to make substantial changes as regards the mode of operation.

SIP = Steaming In Place      To do so, a cleaning agent/disinfectant flows through the machine.

Permissible fill levels		Fill level [mm]	
		min.	max.
	Product bowl	Depends on the product.	
	Oil container for lift cylinders  Do not check the oil level until the lift cylinders have been lowered!	_____	30 (Please also refer to the marks corresponding to this level on the oil container.)
	Main drive, gear	Fill level corresponds to the level of the sight glass.	

<p><b>Permissible operating supply pressure levels</b></p> <p>These values are valid only in compliance with the German regulations for the prevention of accidents (UVV).</p>		Pressure [gauge pressure in bar]	
		min.	max.
	Operating air	6	10
	<b>Filling</b>		
	Gas (e.g., CO <sub>2</sub> , N <sub>2</sub> , sterile air)		
	For flushing the product bowl with gas.	1	_____
	For filling with minimal pressure.	3	_____
	Water	3	5
	Product	Refer to the order confirmation.	
	<b>CIP / SIP</b>		
Cleaning/disinfection solution	2	3	
Steam	_____	0.5	

Permissible operating pressure levels	Pressure [gauge pressure in bar]	
	min.	max.
<b>Operating air</b>		
Lift cylinders	3	
5/2 directional valves, pneumatic motors	5	7
Automatic flap valves (= pipe system valves)	6	7
Dehumidifier	Same as operating supply pressure level for operating air.	
Ring distributor (filling valves)	6	7
Product control valve (Camflex)	1.4	
Pressure for pneumatic clutches (only with BLOC arrangements)	3	

Permissible operating pressure levels	Pressure [gauge pressure in bar]	
	min.	max.
<b>Additional pressures</b>		
Gas (e.g. CO <sub>2</sub> , N <sub>2</sub> , sterile air)		
For flushing the product bowl with gas.	Same as respective operating supply pressure level. (There should always be a moderate flow through the product bowl.)	
For flushing the filling valves.	Same as respective operating supply pressure level.	
Product bowl pressure	Ambient air pressure 5	
Water	Same as respective operating supply pressure level.	
Product	Same as respective operating supply pressure level.	