

# Park-release emergency valve (PREV) 971 002

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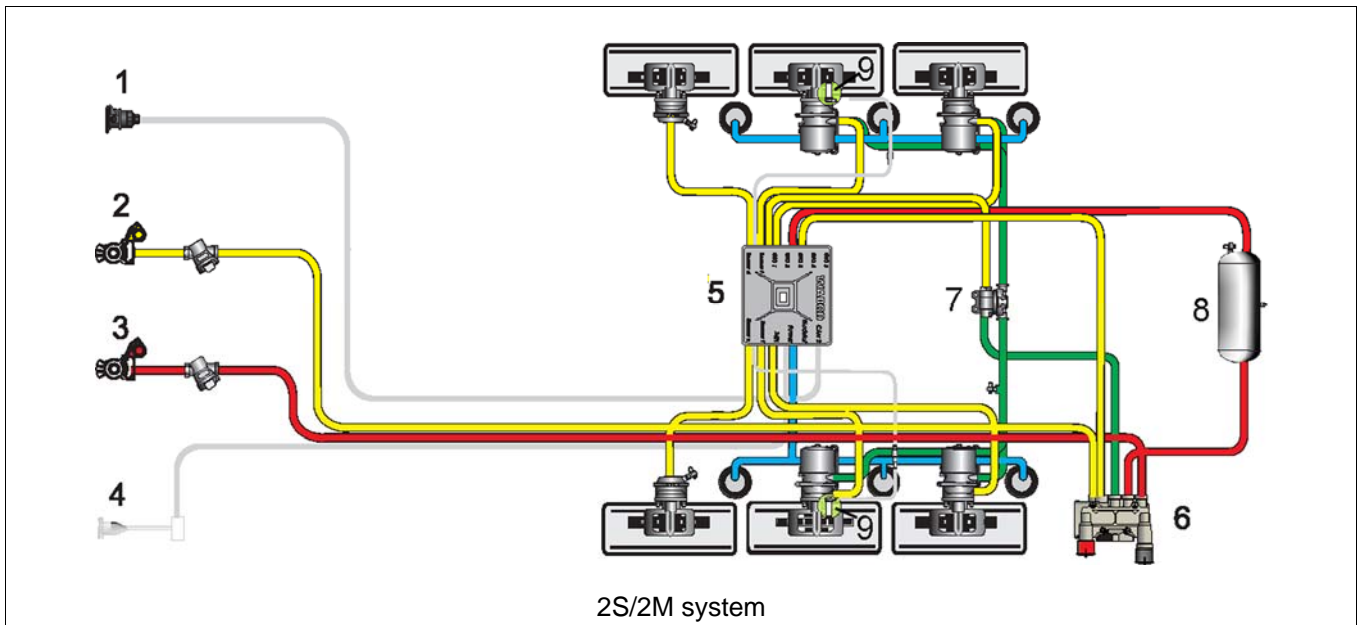
### Application

Vehicle with Trailer EBS version D and E

### Purpose

The park release emergency valve replaces the trailer emergency valve and the twin release valve, used till now in the trailer braking systems of the EBS D generation. This valve simplifies the trailer braking system by the elimination of one device and realises the functions typically for the trailer braking valve, as rupture function or pressure restraint when the (semi-)trailer has been unhitched.

### Installation diagram – Trailer EBS E



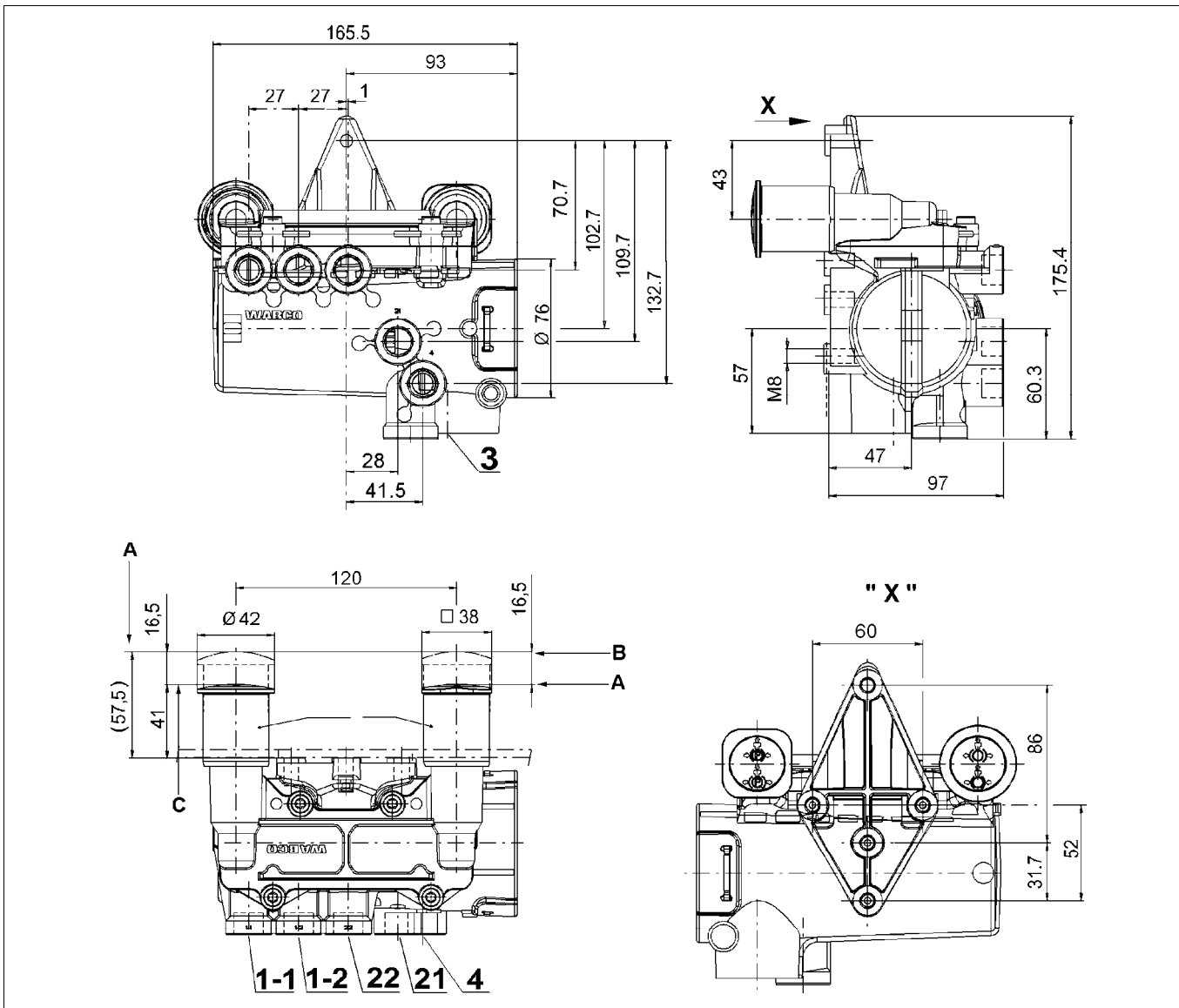
2S/2M system

### Legend

1 Voltage supply via ISO 7638	2 Control line	3 Supply line
4 Stop light supply via ISO 1185 (optional)	5 Trailer EBS E Modulator	6 Park-release emergency valve (PREV)
7 Overload protection valve	8 Tank	9 Sensors

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## Installation dimensions



### Legend

**A** Driving position

**B** Parking position

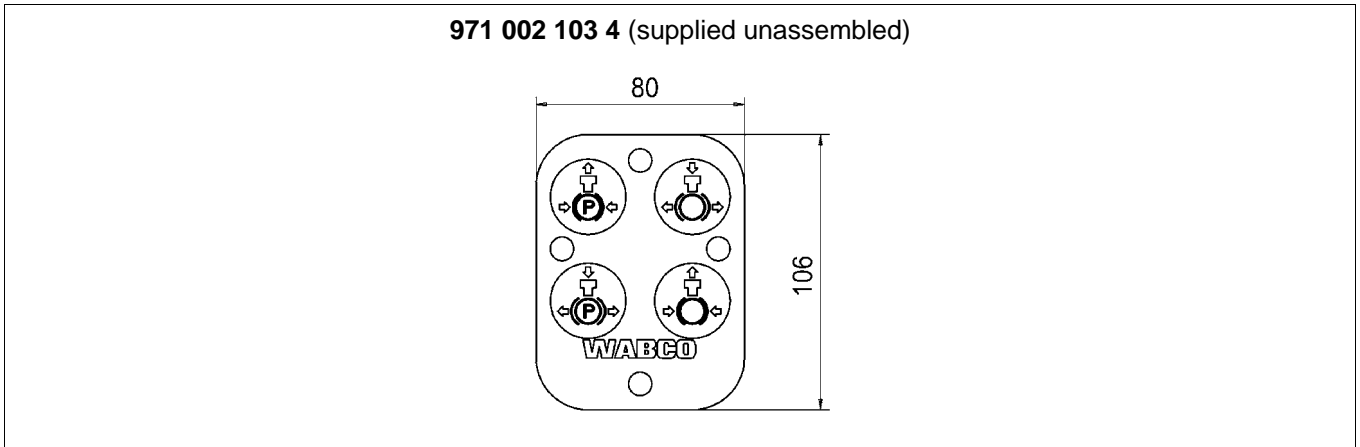
**C** Release position

### Technical data

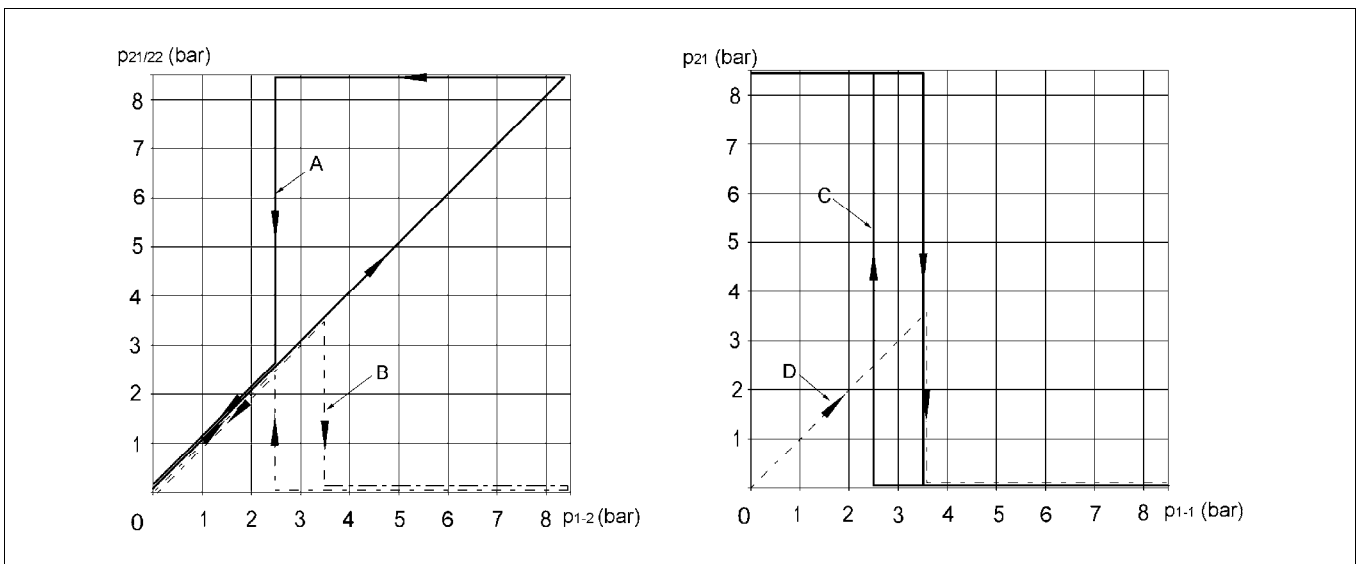
Order number	971 002 900 0	971 002 902 0	971 002 910 0	971 002 911 0	971 002 912 0	971 002 913 0
Operating pressure	p <sub>1-1</sub> 8.5 bar					
Max. permissible operating pressure (brief)	p <sub>1-1</sub> 10 bar					
installation restrictions	Maximum deviation of the device from the vertical ± 15°					
Operating temperature range	-40 °C to +65 °C					
Weight	1.6 kg		1.8 kg		1.9 kg	1.8 kg
Quickfit connections	No			Yes		

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## Plate with parking and driving symbols



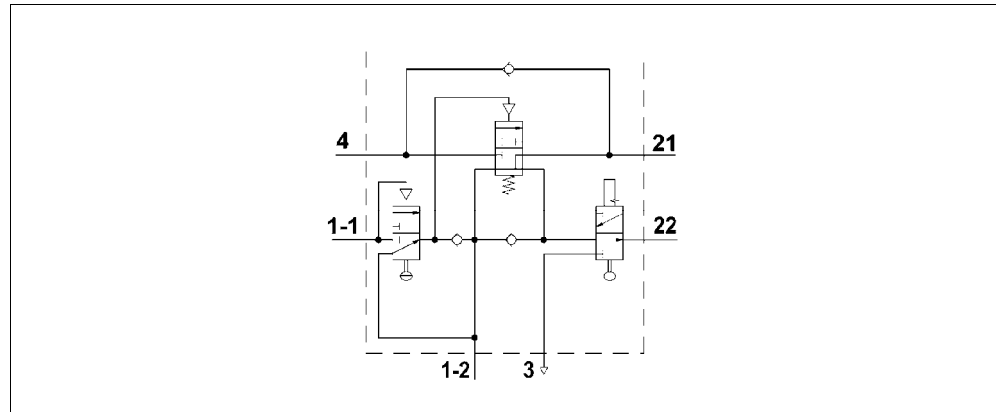
## Pressure diagrams



### Legend

$p_{1-1}$	Input pressure	<b>A</b>	Spring brake cylinder 22	<b>B</b>	Modulator 21
$p_{1-2}$	Connection	<b>C</b>	Automatic braking	<b>D</b>	Initial fill
$p_{21}$ ; $p_{21/22}$	Output pressure				

### Operation



The compressed air, coming from the coupling head “supply” of the motor vehicle, goes through port 1-1 of the PREV to port 1-2 and onward to the supply reservoir of the trailer. Via port 22 the compressed air goes to the subsequent 2-way quick release valve and pressures the spring type chambers of the tristop® cylinders.

When using the brake system of the motor vehicle the compressed air goes via the coupling head “service” and port 4 through the PREV and port 21 to the EBS-trailer modulator.

The black actuation button (release button of the service brake system) enables the brake system to be released manually following automatic braking when the vehicle is parked up without any compressed air supply. However, there must be sufficient reservoir pressure in the tank to permit this.

The red actuation button (actuation of the parking brake system) enables the parking brake to be applied or released by venting the spring-type brake actuators.

When the trailer is unhitched (supply line evacuated), it is braked automatically by the service brakes and, at the same time, the non-return valve integrated in the park-release emergency valve is bypassed in the spring-type brake actuator circuit. If the reservoir pressure in the parked trailer drops, the spring-type brake actuators automatically take over providing the braking effort and prevent the vehicle from rolling away.

All control functions are active in case of a supply line break.