

# Decelerometer for Trailers OC3000-S

- ✓ 20b or 200b Pressure Sensors
- ✓ 25t Force Sensor
- ✓ Display of Pressure, Force, Deceleration, Weight
- ✓ Automatic Calculation of Deceleration
- ✓ Automatic Store of Measurements
- ✓ Deceleration Profile at the Display
- ✓ Soft Manager for Windows with Protocol
- ✓ USB Data Output
- ✓ Battery Operation

**Model MC3000-S** is a microprocessor controlled Decelerometer-Datalogger with inputs for Pressure and Force Sensors. It is mainly designed for Trailers in which the Pressure in the air or hydraulics system and the Force at the shaft have to be measured and the overall deceleration calculated.

The pressure gauges 20b or 200b and the force sensor are directly connected and supplied from OC3000-S. The required parameters are set in the menu and stored in internal non-volatile memory. The parameters can be recalled at the display, modified and scaled upon requirement. The measurements and the parameters appear in corresponding windows at the display and can be set in DIN, US or UK units. The Menu is in English or German selectable.


In the Datalogger Mode are the results memorized in the internal 2MB Memory. Each value contains the date and the time added from internal RTC. The measured results are automatically recorded after the pressure reaches preselected values, e.g. 2-4-6-8-10-12-14-16-18-20b for air brakes or 20-40-60-80-100-120-140-160-180-200b for hydraulic brakes. The pressure sensor 20b for air brakes or 200b for hydraulic brakes can be selected.

Nearly unlimited number of measurements can be stored and later recalled at the display. They can also be downloaded to a Windows PC by using the **ABS-setup** which permits bi-directional communication via the USB Terminal. The stored Data can be displayed as tables or graphics. A customized protocol is available at the printer output.

The Parameters are set from the keypads. The pressure in *bar* or *psi* is assigned to the pressure sensor and is automatically calibrated. The force in *daN* or *kg* or other units is defined with scaling constants. Zeroing of the display is possible by using the Tare function.

MC3000-S is designed in accordance with CE and RoHs guidelines 2002/95/EG and supplied from internal rechargeable battery. The sensors are terminated via M12 connectors. Password is used to protect the menu settings from unauthorized operation.



P20	bar	F	daN
18.50		5645	
Weight	kg	Deceleration	%
3 OK	8000	24.23	

Display during Deceleration

# Specifications

Inputs: Pressure: 0-5V, 100kOhm, three terminal connection.  
Force: 1mV/V, 350 Ohm Bridge

Accuracy:  $\pm (0.1\%+1\text{digit})$  from Range.

Display: LCD 128 x 64 Pixels, graphics type with back light.

ADC: 16bit, Linearity  $\pm (1 \text{ LSB} + 1 \text{ Digit})$ .

Tare: The key SET forces the display of the individual signal channels to show zero.

Keypads: 9 keys for all settings.

Memory: 2MB. The measured values are automatically recorded after the pressure reaches values 2-4-6-8-10-12-14-16-18-20b (Sensor 20b) or 20-40-60-80-100-120-140-160-180-200b (Sensor 200b).

Excitation: 24V DC max. 20mA for pressure sensors, 5V for force sensor.

Supply: Battery 6V, 2Ah. Battery charger 100-240VAC. Full charged battery permits 4 hours operation.

Terminals: - Two 8 Pin M12 connectors  
- USB Data Terminal  
- Jack for charger.

## Deceleration Protocol - Customized Printout

ABBREMSPROTOKOLL V1.1 November 2008

Beenden Datei Edit Gerät Drucken Info

### SCHNEEBERGER AG

Dateiname

Abbremsprotokoll Nr.	1256
Kunde	Hans Frey AG, 5421 Baden
Marke	Bucher V44
Fahrgestell	ER123456-11
Garantiegewicht	8000 kg
Stützlast	5000 kg
Tragfähigkeit 1.Achse	2000 kg
Tragfähigkeit 2.Achse	2000kg
Tragfähigkeit 3.Achse	
Erfasst durch	Victor Hugo
Datum	03.11.2008
Bemerkungen	

Bank No. lesen

COM

Format

EU US

IFACE beende

Abbrems-Messwerte 17:24:30 03.11.2008

Bremsdruck (bar)	Bremskraft (daN)	Abbremsung (%)
1.26	95.0	1.19
3.25	137.4	1.72
5.40	618.1	7.73
7.50	1560.5	19.51
9.43	3152.0	39.40
11.59	4430.8	55.38
13.75	4970.4	62.13
15.64	5453.8	68.17
17.80	6009.7	75.12
19.96	6392.1	79.90
16.93	6670.4	83.38
20.46	59.9	0.75

Abbremsung

Abbremsung

Abbremsprotokoll Nr. 1256

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 Marke: Bucher V44  
 Fahrgestell: ER123456-11  
 Garantiegewicht: 8000 kg  
 Stützlast: 5000 kg  
 Tragfähigkeit 1.Achse: 2000 kg  
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 Erfasst durch: Victor Hugo  
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