

K091R65 / R67

Electronic bottle scales

For determination of the fill quantity of gas bottles

K091R65 (Standard)

Electronic bottle scales

Digital display with battery compartment (IP54)

K091R67 (Comfort)

Electronic bottle scales

Digital display with internal rechargeable batteries (IP65)

Integrated serial interface for data exchange or monitoring

The electronic bottle scales allow quick and easy determination of the filling capacity of a gas bottle. The large weighing platform and the supporting chain provide additional stability of the gas bottle. The weight is indicated on the illuminated display which switches off automatically if the scales are not used for a certain time. Thanks to the tare function high precision quantification of gas inputs and outputs is possible. The bottle scales can be folded in one step after use -comfortable and space-saving.



- Weighing range: up to 120 kg with tare function
- Digit increment: 10 g
- Accuracy: ± 20 g
- Weight indication reversible from kg to lbs

K091R65 / K091R67

Electronic bottle scales

Technical data K091R65:

Dimensions (if device is ready for operation): L 390 mm, W 450 mm, H 790 mm
Dimensions of weighing platform: L 300 mm, W 310 mm
Dimensions (if device is folded up): L 790 mm, W 450 mm, H 85 mm
Weight: approx. 15.8 kg
Power supply: batteries (4 x 1.5 V AA) / running time in continuous operation up to 72 hours
System of protection: IP54
Operating temperature: -10 bis +40 °C

Technical data K091R67:

Dimensions (if device is ready for operation): L 390 mm, W 450 mm, H 790 mm
Dimensions of weighing platform: L 300 mm, W 310 mm
Dimensions (if device is folded up): L 790 mm, W 450 mm, H 118 mm
Weight: approx. 15.8 kg
Power supply: internal battery (12 V / 2.5 Ah) with battery charger / running time in continuous operation up to 20 hours
System of protection: IP65
Operating temperature: -10 to +40 °C

Standard equipment:

Surface: electrogalvanizing
2 operating manuals in German, English or French

Optional accessories at an extra charge:

Plug 100 - 240 V / 50 - 60 Hz with 2 meter long cable (only K091R65)	05-1820-R026
4 m long cable with M12 plug connectors for serial data exchange (only K091R67)	05-1602-R304
Additional operating manual on CD-ROM	6-0004-R213

Packing:

Packing for K091R65 / K091R67	3-948-R013
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K091R54

Weighing scales

For control of the fill quantity in 600 l gas containers

K091R54

Weighing scales

The weighing scales have been developed specially for large containers used for example in GIS production or in large substations. The weighing range of the device is up to 2,000 kg. The determined weight is indicated on the display immediately.

The integrated serial interface is a special feature allowing data communication with other DILO devices. Thus, not only the weight can be read on the service cart, but the recovery process can also be stopped via the DILO service cart after having reached the provided filling weight. Furthermore, the data can also be transmitted to the laptop or to special monitoring software. There is no easier way of SF₆ monitoring.



- Weighing range: up to 2,000 kg with tare function
- Serial interface
- Digit increment: 0,2 kg
- Accuracy: ± 0,4 kg
- Weight indication reversible from kg to lbs
- Release of the weighing system is not necessary for transportation

Technical data:

Dimensions: L 1.150 mm, W 950 mm, H 775 mm
Net weight: about 107 kg
Operating voltage: 100 - 240 V / 50 - 60 Hz
Power supply unit and internal battery operation up to 20 hours
System of protection: IP65

Standard equipment:

Fixing and steerable rollers
Paint: orange (RAL 2004)
2 operating manuals in German, English or French

Optional accessories at an extra charge:

4 m long cable with M12 plug connectors for serial data exchange	05-1602-R304
Additional operating manual on CD-ROM	6-0004-R213

Packing:

Packing for K091R54	3-1001-R005-C
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Devices for SF₆ gas monitoring

For recording gas quantities from and to the circuit breaker

B152R41

Mass flow measuring system

B152R51

Mass flow measuring system (battery-operated)

Battery operation enables an application independent of the power supply.

With this device, gas monitoring is just that simple. Gas quantities which are filled in and recovered are registered and can be transferred to a computer. The system displays the current mass flow as well as the total mass. It is also equipped with an additional meter which can be reset, add and subtract the gas quantity. Thus, the SF₆ gas monitoring is very easy.



- System can be wall or table mounted
- Coupling groove part DN20
- Measuring accuracy for gases: 0.50 % ± 0.1 kg/h
- PC-Hart modem with PC interface cable (available as option)
- Indication in kg, optionally in lbs

Technical data:

Dimensions: L 400 mm, D 280 mm, H 540 mm
Weight: 26.3 kg
System can be wall or table mounted
Indication in kg, optionally in lbs
Operating temperature: 0 to 50 °C

B152R41 / B152R51

Mass flow measuring system

Standard equipment:

Coupling groove part DN20
Installed in a metal housing
Paint: orange (RAL 2004)
2 operating manuals in German, English or French

Optional equipment (mounted) at an extra charge:

Additional price for electrical special voltage 100 - 127 V / 50 - 60 Hz	6-0005-R119
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Optional accessories at an extra charge:

2 m long rubber hose DN20 with coupling tongue part DN20 on both ends	6-1017-R020
HART modem (USB cable) with visualization software for PC	6-1110-R002
Indication in lbs l lbs/h	6-0005-R130
Aluminium case	3-781-R018
Additional operating manual on CD-ROM	6-0004-R213

Packing:

Packing for measuring device without aluminium case	3-775-R024-C
Packing for measuring device with aluminium case	3-748-R018-C



Visualization software on the PC
(6-1110-R002)



HART modem with
USB interface cable

B152R90 / R91

Mass flow measuring system

B152R90 / B152R90S15

Mass flow meter with automatic filling function

B152R91 / B152R91S15

**Mass flow meter with automatic filling function
and wireless data transmission**

The unique combination of mass flow meter and filling device facilitates the SF₆ gas monitoring considerably. This device does not only enable the registration of the quantities filled in, but allows the automatic filling of a gas compartment at the same time. Thus the operator can select the indication of the gas quantity required or the preset filling value.

After having pressed the start key, the filling quantity required flows from the gas vessel into the gas compartment automatically.



B152R91

- System can be wall or table mounted
- Easy handling via the 5.7" coloured touch screen
- Indication in kg / lbs, bar rel. / bar abs. / kPa / MPa / psi selectable on the operating panel
- Data storing of up to 100 measuring values with names
- Indication on the meter in kg, in 5 g increments, optionally in lbs
- Data transmission via USB or wireless (B152R91 / B152R91S15)

B152R90 / R91

Mass flow measuring system

B152R90 / B152R91

Mass flow meter with automatic filling function

Technical data:

Dimensions: L 400 mm, D 280 mm, H 540 mm
Weight: 29 kg
Operating temperature: 0 to 50 °C
Measuring accuracy for gases: 0.50 % ± 0.1 kg/h
Operating voltage of B152R90 : 230 V / 50 - 60 Hz alternating current
Operating voltage of B152R90S15 : 100 - 127 V / 50 - 60 Hz alternating current
Operating voltage of B152R91 : 230 V / 50 - 60 Hz alternating current
Operating voltage of B152R91S15 : 100 - 127 V / 50 - 60 Hz alternating current

Standard equipment:

DILO coupling DN20
Installed in a metal housing
Paint: orange (RAL 2004)
2 operating manuals in German, English or French

Optional accessories at an extra charge:

SF ₆ gas refilling device (for connection to storage bottle)	3-393-R...
2 m long rubber hose DN20 with coupling tongue part DN20 on both ends	6-1017-R020
Indication on the meter in lbs / lbs/h	6-0005-R130
Aluminium case	3-781-R018
Additional operating manual on CD-ROM	6-0004-R213

Packing:

Packing for measuring device without aluminium case	3-775-R003-C
Packing for measuring device with aluminium case	3-748-R018-C

B195R01 / R02

Weighing unit for "SF₆ Monitoring Manager"

Mobile as cylinder cart

B195R01

Weighing unit for "SF₆ Monitoring Manager" with thermal transfer label printer

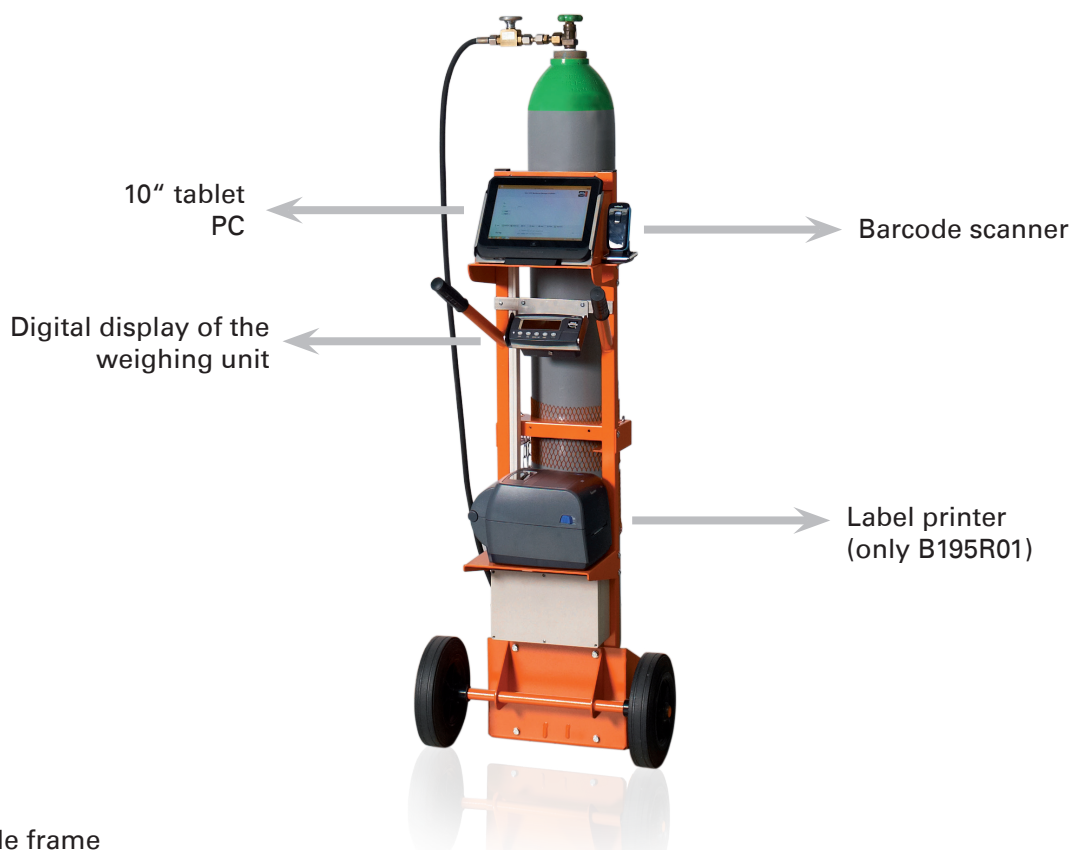
B195R02

Weighing unit for "SF₆ Monitoring Manager" without thermal transfer label printer

This weighing unit is a useful tool for the SF₆ gas bottle management in connection with the „SF₆ Monitoring Manager“, a specially developed database software. The quantity of SF₆ stored in gas bottles is precisely determined by means of electronic scales, incoming and outgoing gas vessels are identified by means of the integrated barcode scanner. The required barcode labels can be printed on site with the label printer (only B195R01).

Gas quantities being filled or withdrawn are registered by the weighing unit and are allocated to the corresponding storage location or customer location via the computer tablet. This unit also enables the registration of the gas quality (e. g. new gas or reuse gas). In filling mode any gas quantities can be withdrawn from the bottle and transferred to other gas vessels. Its difference is immediately registered in the database.

Thus it is possible to survey the gas quantities employed at any time and any location. This considerably simplifies annual reporting in accordance with the CE 1493/2007 directive.



- Stable frame
- Electronic weighing unit: digit increment 10 g, accuracy ± 20 g
- Network independent by Li-Ion battery operation
- 10" tablet computer with database connection
- 2D capable cordless barcode scanner with Bluetooth interface

B195R01 / R02

Weighing unit for “SF₆ Monitoring Manager”

B195R01 / R02

Weighing unit for “SF₆ Monitoring Manager”

Technical data:

Dimensions: L 650 mm, W 570 mm, H 1.320 mm
Dimensions of weighing platform: L 300 mm, W 310 mm
Weight: 45 kg
Operating voltage: 100 - 240 V / 50 - 60 Hz alternating current (for battery charger)

Standard equipment:

10" tablet computer with database connection via WLAN and Ethernet
Only for B195R01: Thermal transfer printer for label width to 100 mm, mounting plate included in the scope of supply
Electronic weighing unit
Battery operation with Li-Ion battery
2D capable cordless barcode scanner with Bluetooth interface
Paint: orange (RAL 2004)
2 operating manuals in German, English or French

Important note:

The device can only be operated in connection with the “SF₆ Monitoring Manager” software.

SF₆ Monitoring Manager:

Web-based data software for SF₆ gas monitoring (cloud solution or installation on internal server)

Initial installation	B195R10
Annual user fee including updates and online support	B195R11

Optional accessories at an extra charge:

Additional operating manual on CD-ROM	6-0004-R213
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Packing:

Packing for B195R01 / B195R02	3-262-R006-C
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