

red-y compact 2 series

BATTERY POWERED DIGITAL MASS FLOW METERS FOR GASES



Independent digital convenience: Thermal Mass Flow Meters for Gases

The red-y compact 2 series mass flow meters are characterized by powerful technology, intelligent functions and innovative design.

This latest generation offers a new level of ease of use: compact design with battery power and backlit touch display for great flexibility.

Digital comfort:

Touch Technologie

The touch display offers intuitive navigation. The many variables that make the unit flexible are easily accessible. Automatic display alignment thanks to position sensor.

Independent Operation

The flow meters are powered with standard AA battery and Micro-USB power supply.
Optional 24 Vdc power supply available.

Modular Extensions

The instruments can be extended and retrofitted with different modules: battery module, power module and alarm module.

High Accuracy & Dynamics

The devices offer high accuracy & a wide dynamic range:

Accuracy up to $\pm 1\%$ of full scale

Turndown ratio up to 1 : 100

(depending on application/measuring range)

Totalizer

In addition to the actual flow, the total consumption is displayed. Ideal for gas consumption measurements.

1 Device – Multiple Gases

One measuring device can be used for up to 3 different gases or gas mixtures.

Password Protection

To avoid unauthorised change of settings, the menu of the new red-y compact can be locked with a password.

3-Year Warranty*

High-quality components ensure long and trouble-free operation.

*does not apply to calibration, battery, options and accessories



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| Instrument versions «red-y compact 2 series | | | | | | | | Power Supply | | |
|---|---------------|--|--------------------------------------|-----------|--------------------|--------------|-----------------|-----------------------------------|---------------|---------------|
| ● Standard ○ Option | | | | | | | | | | |
| Version | Touch Display | Auto display alignment (position sensor) | Choose between multiple home screens | Totalizer | Multigas (up to 3) | Manual valve | Alarm functions | Mirco-USB power supply (DIN62684) | Battery power | 24 Vdc supply |
| compact meter GCM | ● | ● | ● | ● | ○ | | | ● | ● | ○ |
| compact regulator GCR | ● | ● | ● | ● | ○ | ● | | ● | ● | ○ |
| compact switch GCS | ● | ● | ● | ● | ○ | | ● | ● | | ● |
| compact all-in GCA | ● | ● | ● | ● | ○ | ● | ● | ● | | ● |

The new red-y compact 2 series – Even more stunning features:

● Wide Choice of Flow Units:

Choose between a large number of **standardized** and **normalized flow units** of the **Imperial, US customary** and **SI** measuring systems (with user adjustable reference conditions).

The units are selectable from the integrated menu both for the actual flow and the totalized flow.

● Extended Alarm Functions:

The red-y compact 2 series provides 3 configurable alarms. The following triggers are available:

Low alarm, high alarm, window alarm and **totalizer alarm**

The alarms can be configured with different parameters: **Normally open, normally closed, hysteresis, auto/manual/remote reset, delay and alarm duration**

● Device Information & Notifications

Display of complete device information including all configuration settings. Alerts and notifications show up on the home screen.

● Upgrade Device Features

New device features will be available and can be updated through the built-in USB interface. Stay informed on latest releases at www.htk-hamburg.com

VA-Meters vs. Massflow Meters



Many applications require a **higher accuracy** together with **pressure and temperature compensation** which cannot be realized with conventional variable area flow meters.




VA-meters are extremely sensitive to pressure and temperature changes. 1 bar change in pressure can generate an error of 50% in your measurement.

Our mass flow meters generate repeatability! The **electronic alarm module offers many options** over a single VA-meter alarm.

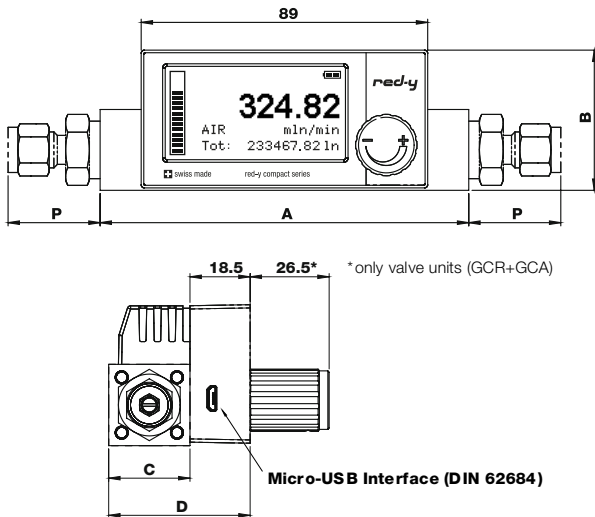


Technical data

red-y compact 2 series

| Technical data (Continuation) | | | |
|------------------------------------|---|--|---|
| Performance data (Continuation) | Pressure sensitivity | < 0.2% / bar of reading (typical N ₂) | |
| | Temperature sensitivity | < 0.025% FS measuring range type / °C | |
| | Warm-up time | < 1 sec. for full accuracy | |
| Integration | Display | Touch display (128x64 px) with automatic position adjustment (position sensor) Backlighting only with external power supply (Micro-USB or 24 Vdc) | |
| | Process connection | G $\frac{1}{4}$ " (BSPP* female) up to 60 l _n /min, G $\frac{1}{2}$ " (BSPP* female) up to 450 l _n /min *British Standard Pipe Parallel | |
| | Inlet section | None required | |
| | Mounting orientation | Any position (consult manufacturer above 5 bar or vertical mounting) / Display rotates 180° | |
| | Connection cable | For external power supply or alarm module: 2 m with fly leads | |
| | Safety | Test pressure | 16 bar a |
| | Leak rate | < 1 x 10 ⁻⁶ mbar l/s He | |
| | Environmental protection | IP-50 | |
| | EMC | EN 61326-1 | |
| Options |  |  |  |
| | Panel Mounting Kit | Vacuum Fittings | Various Inlet and Outlet Fittings |

Dimensions <red-y compact 2 series>



| Typ / Body | Length (mm) | | | |
|-----------------------|-------------|----|----|----|
| | A | B | C | D |
| GCM G $\frac{1}{4}$ " | | | | |
| GCR G $\frac{1}{4}$ " | 114 | 44 | 25 | 44 |
| GCS G $\frac{1}{4}$ " | | | | |
| GCA G $\frac{1}{4}$ " | | | | |
| GCM G $\frac{1}{2}$ " | 160 | 54 | 35 | 54 |
| GCS G $\frac{1}{2}$ " | | | | |
| GCR G $\frac{1}{2}$ " | 207 | 54 | 35 | 54 |
| GCA G $\frac{1}{2}$ " | | | | |

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Type code 

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| Type code «red-y compact 2 series» | | | | | | | | | | |
|---|---|---|---|---|---|---|--|---|-----|-----|
| Instrument type | red-y compact 2 series (Gas) | G | C | | | | | | | |
| Function | Meter | | | M | | | | | | |
| | Regulator – With manual valve | | | R | | | | | | |
| | Switch – With alarm | | | S | | | | | | |
| | All-In – With manual valve & alarm | | | A | | | | | | |
| Full scale of measuring range (Air) defined by manufacturer | Customer-specific (Divider A, up to 600 mln/min) | | | | A | X | | | | |
| | Customer-specific (Divider B, up to 6000 mln/min) | | | | B | X | | | | |
| | Customer-specific (Divider C, up to 60 lln/min) | | | | C | X | | | | |
| | Customer-specific (Divider D, up to 450 lln/min) | | | | D | X | | | | |
| Instrument version | Eco (±2.0% of FS / > 200 lln/min ±3.0% of FS, 1 : 50) | | | | | | | E | | |
| | Special (±1.0% of FS, 1 : 100 / up to 50 lln/min Air) | | | | | | | S | | |
| | Customer-specific / OEM | | | | | | | K | | |
| Materials (Body, seals) | Aluminium, FKM | | | | | | | A | | |
| | Aluminium, EPDM | | | | | | | B | | |
| | Stainless steel, FKM | | | | | | | S | | |
| | Stainless steel, EPDM | | | | | | | T | | |
| | Customer-specific / OEM | | | | | | | K | | |
| Supply (Micro-USB always available) | Battery supply | | | | | | | | B | |
| | External supply 24 Vdc, 2 m | | | | | | | | F | |
| | Customer-specific / OEM | | | | | | | | K | |
| Material valve (regulator, all-in) | Nickel-plated brass | | | | | | | | A | |
| | Stainless steel | | | | | | | | S | |
| | Customer-specific / OEM | | | | | | | | K | |
| | No valve | | | | | | | | N | |
| Manual valve defined by manufacturer | NS 1.0 | | | | | | | | | 1 0 |
| | NS 1.5 | | | | | | | | | 1 5 |
| | NS 2.0 | | | | | | | | | 2 0 |
| | NS 2.5 | | | | | | | | | 2 5 |
| | NS 3.0 | | | | | | | | | 3 0 |
| | NS 3.5 | | | | | | | | | 3 5 |
| | NS 4.0 | | | | | | | | | 4 0 |
| | NS 6.0 | | | | | | | | | 6 5 |
| | Valve not defined | | | | | | | | | 8 8 |
| | Valve mounted | | | | | | | | | 9 5 |
| | Customer-specific / OEM | | | | | | | | | 9 9 |
| No valve | | | | | | | | | 0 0 | |
| Type code | | G | C | | - | | | | - | |

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