RTM 3

OXYGEN-THERAPY

FLOWMETERS WITH
FLOATING BALL

TECHNOLOGIE
MEDICALE

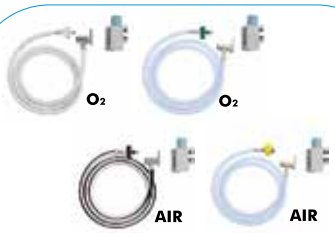
ENGLISH VERSION • 08/2020

RAIL MOUNTING SYSTEMS

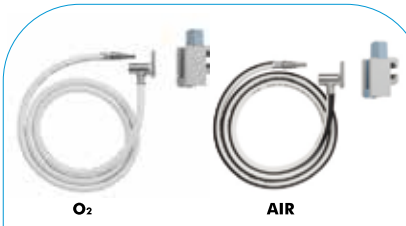
AFNOR TM CHOC
rail mounting systems

BS rail mounting systems

DIN rail mounting systems

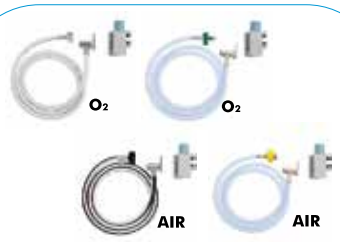


US OHMEDA rail mounting systems



NORDIC rail mounting systems

UNI rail mounting systems



DISS rail mounting systems

Others standards available upon request.

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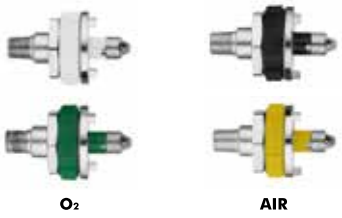
DIRECT PROBES

AFNOR TM CHOC direct probes

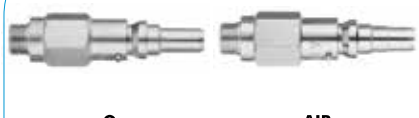
BS direct probes

CZECH direct probes

DIN direct probes



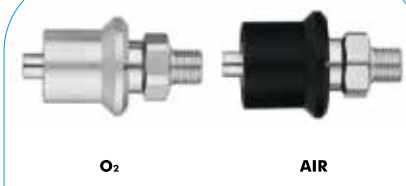
US OHMEDA direct probes



NORDIC direct probes

DISS direct probes

UNI direct probes



CARBUROS direct probes

Others standards available upon request.

RTM 3

The RTM3 flowmeter with floating ball is used to adjust and measure the flow of a gas that is to be delivered to patients through the respiratory tract. The RTM3 should be connected to a source of pressured gas on the wall either using a direct probe or a rail mounting system. It must be fitted at its outlet either with a humidifier/nebulizer or with an outlet tubing nipple.

Main technical features:

Medical device of glass IIa.

In compliance with the EN ISO 15002.

Inlet pressure : 4.5 bar $^{+}/_{-}$ 0.5 bar (O_2)
4.5 bar $^{+}/_{-}$ 0.5 bar (Air)

- **Flowmeter with compensated pressure** ensuring perfect flowrate stability and accuracy. The scale working pressure is the same as the pressure of the network so that the scale is not affected by any counter-pressure.
- **New type of "cartridge" knob**, extremely reliable, easy-to-clean and ensuring an optimized adjustment. Perfect tighness of the knob thanks to its polyamide seat.

  The knob was tested under pressurized working conditions during more than 10,000 cycles (which corresponds to 5 openings / closings every day during more than 5 years) without showing any leakage after closing. ***This allows us to guarantee the closing of the knob during 5 years without any leakage***.
- **Monoblock scale cover made of polyamide** for a higher sturdiness and a greater safety. The inopportune unscrewing of the monoblock scale cover is not possible. Patients have no acces to te scale.
- **Expanded scale** providing higher reading accuracy for low flowrates (only for 05 l/min and 15 l/min RTM3 flowmeters).
- **Filter at the scale inlet** protecting the device against any gas network impurities and thus ensuring the protection of both the patient and the flowmeter.
- Body made of nickel-plated brass, very strong.
- Flowmeter MRI compatible.
- Normative information (gas name, CE marking, signs related to the use of the devise) are mentionned on a self-adhesive ring for a better reading and immediate identification of a TM device. The identification ring is protected against tarnishing and wear & tear thanks to the monoblock cover.
- **A unit serial number is engraved on the body of each flowmeter** ensuring its identification and traceability.

Many versions available:

Available gases & flowrates:

- OXYGEN & MEDICAL AIR: **1.5l/min, 5l/min, 15l/min, 30l/min**
- CO_2: **12l/min**
- CARBOGEN: **15l/min**
- Inlets: 12x100F - 1/4G M - 1/8NPT F - 3/8"BSP F.
- Outlets: 12x125 M - 9/16" M - 1/2"BSF - 1/4G M.
- Available configurations: Single, Twin and DUO.
- Available connections to the wall outlet: Direct probe or Rail mounting system.
- Standards: AFNOR (French Standard) - BS (British Standard) DIN (German Standard) - OHMEDA DIAMOND (American standard) - NORDIC (Scandinavian Standard) - UNI (Italian Standard) - DISS (American Standard) - Korean standard - Japonese standard - SANS/SABS (South Africa standard).
- Weight (without direct probe): 275 g.
- Dimensions (without direct probe):
  Height 145 mm x width 35 mm x depth 70 mm.

Use, cleaning and maintenance:

The RTM3 flowmeter must be connected vertically. Then just open the knob and adjust the position of the floating ball according to the required flowrate (reading in the middle of the ball).

Clean the outisde of the device with water and soap. Rinse and dry. If using disinfecting products please check their compatibility with plastics. Do not lay under water.

Device to be serviced every annual inspection according to intensive use, if any.

Accessories:

- Tubing nipple (1 part) or tubing nipple (2 parts) ❶
- Switch or Flow-Switch ❷
- Humidifier: CCO model (250 ml) or TMS model (500ml) ❸

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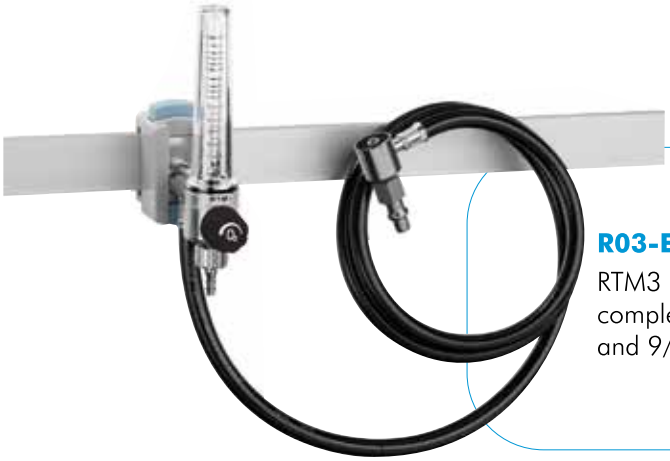
R01-E

RTM3 O_2 15 l/min mounted with BS direct probe and 9/16" outlet tubing nipple

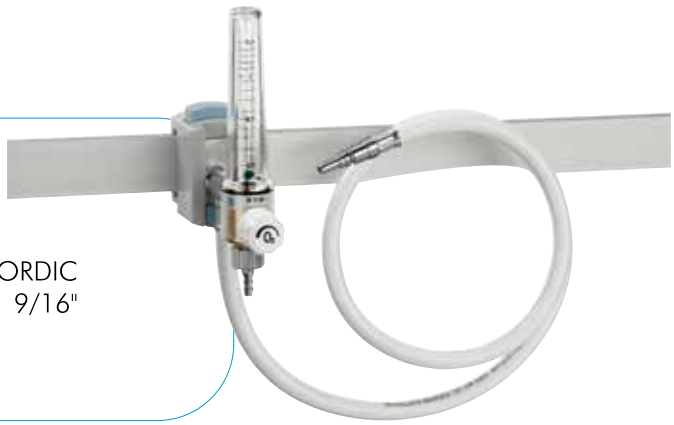
R02-E

RTM3 O_2 05 l/min mounted with DIN direct probe and 250 ml CCO humidifier



R03-E

RTM3 O_2 15 l/min mounted with DIN complete rail mounting system (neutral) and 9/16" outlet tubing nipple



R04-E

RTM3 O_2 1.5 l/min mounted with NORDIC complete rail mounting system and 9/16" outlet tubing nipple

R05-E

RTM3 O_2 15 l/min mounted with UNI direct probe and 500 ml TMS humidifier

R06-E

Twin RTM3 O_2 15-30 l/min mounted with AFNOR TM CHOC direct probe and 12x125 outlet tubing nipples

R07-E

RTM3 AIR 05 l/min mounted with BS direct probe and 1/2" BS outlet tubing nipple

R08-E

RTM3 O_2 70 l/min mounted with DISS direct probe and 9/16" outlet tubing nipple

R09-E

RTM3 O_2 70 l/min mounted with clamping vice NIST and 9/16" outlet tubing nipple

RTM3 DUO FLOWMETER

Patented model

Double outlet integrated in the body of the flowmeter:

- One horizontal outlet tubing nipple;
- One vertical central threaded outlet to connect a humidifier (outlet thread 12x125 M and 9/16" M available).

Thanks to this DUO system there is no need to screw and unscrew the outlet tubing nipple or the humidifier.

The saving of time is really appreciated compared to a standard flowmeter and the risk of losing the nipple is avoided.

The user can choose between 3 positions and can switch from one position to another without removing the nipple or the humidifier.

- 1st **position:** the gas flow is delivered through the nipple.
- 2nd **position:** the gas flow is cut off. Parking position.
- 3rd **position:** the gas flow goes through the vertical central outlet to which you can connect either a CCO humidifier (250 ml) or a TMS humidifier (500 ml) or any other model (single-use humidifier, nebulizer).

Also available with a complete rail mounting system.

R10-E

RTM3 DUO O_2 15 l/min with AFNOR TM CHOC direct probe

To convert the standard RTM3 flowmeters into DUO flowmeters the solution is :

TM FLOW-SWITCH OR SWITCH

- **Flow-Switch: model with ring** (R10)
- **Switch: model with knob** (R11)

Both Flow-Switch and Switch can be screwed onto any standard flowmeter. They enable you to deliver a gas flow either through the outlet tubing nipple or through a humidifier.

Available with 12x125 or 9/16" threaded inlet and outlet.

11-E

R12-E

AFNOR French Standard — RTM3 FLOWMETERS WITH FLOATING BALL

OXYGEN (O_2) / MEDICAL AIR	Flowrates l/min	Single 1.5	Single 05	Single 15	Single 30	Twin 15-15	DUO 15
Inlet thread: 12 x 100 F	Outlet thread: 12x125M	17579	14801	14803	14805	14811	14815
		X	14696	14683	14685	14691	14693
	Outlet thread: 9/16" M	17587	14851	14855	14859	14866	14873
		X	14709	14713	14717	14724	-
Inlet thread: 1/4G M	Outlet thread: 12x125M	17610	14800	14802	14804	14810	14814
		X	14680	14682	14684	14690	-
	Outlet thread: 9/16" M	17591	14849	14853	14857	14865	14871
		X	14707	14711	14715	14723	-
Mounted with AFNOR TM CHOC direct probe	Outlet thread: 12x125M	17581	14030	14038	14046	14071	14078
		X	13883	13891	13899	13924	13928
	With nipple*: 12 x 125	17583	14032	14040	14048	14073	X
		X	13885	13893	13901	13926	X
	Outlet thread: 9/16" M	17588	14130	14134	14138	14150	14155
		X	13968	13972	13976	13988	-
	With nipple*: 9/16" M	17589	14131	14135	14139	14151	X
		X	13969	13973	13977	13989	X
Mounted with AFNOR TM CHOC complete rail mounting system (polycarbonate clamp)	Outlet thread: 12x125M	17612	14026	14034	14042	14068	-
		X	13879	13887	13895	13921	-
	With nipple*: 12 x 125	17614	14028	14036	14044	14070	X
		X	13881	13889	13897	13923	X
	Outlet thread: 9/16" M	17592	14128	14132	14136	14148	-
		X	13966	13970	13974	13986	-
	With nipple*: 9/16" M	17593	14129	14133	14137	14149	X
		X	13967	13971	13975	13987	X

BS British Standard — RTM3 FLOWMETERS WITH FLOATING BALL

OXYGEN (O_2) / MEDICAL AIR	Flowrates l/min	Single 1.5	Single 05	Single 15	Single 30	Twin 15-15	DUO 15
Inlet thread: 1/4G M	Outlet thread: 9/16" M	17591	14849	14853	14857	14865	14871
		X	14707	14711	14715	14723	-
	Outlet thread: 1/2" BS F	17574	14752	14754	14756	14760	X
		X	14659	14661	14663	14667	X
Mounted with BS direct probe	Outlet thread: 9/16" M	17594	14398	14404	14410	14424	14430
		X	14278	14284	14290	14304	-
	With nipple*: 9/16" M	17595	14399	14405	14411	14425	X
		X	14279	14285	14291	14305	X
Mounted with BS complete rail mounting system (polycarbonate clamp)	Outlet thread: 9/16" M	17596	14400	14406	14412	14426	14431
		X	14280	14286	14292	14306	-
	With nipple*: 9/16" M	17597	14401	14407	14413	14427	X
		X	14281	14287	14293	14307	X

* Outlet tubing nipple in 2 parts, metal
- Available upon request only.
X Not available.
Please contact us for other flowmeter configurations.

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