

## 7700 Pressure Compensated Flowmeter

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### Instructions for Use



ANSI



ISO



ANSI



ISO

**Rx Only**

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## Safety Instructions







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This manual provides you with important information about the 7700 Series Pressure Compensated Flowmeter and should be read carefully to ensure the safe and proper use of this product. READ AND UNDERSTAND ALL THE SAFETY AND OPERATING INSTRUCTIONS CONTAINED IN THIS BOOKLET BEFORE USING THIS PRODUCT. IF YOU DO NOT UNDERSTAND THESE INSTRUCTIONS, OR HAVE ANY QUESTIONS, CONTACT YOUR SUPERVISOR, DEALER OR THE MANUFACTURER BEFORE ATTEMPTING TO USE THE DEVICE.

## Intended Use

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A compensated thorpe tube flowmeter is a device intended for medical purposes that is used to control and measure gas flow rate accurately. The device includes a vertically mounted tube with the outlet of the flowmeter calibrated to a reference pressure.

<b>WARNING</b>	Indicates a potentially hazardous situation, if not avoided, could result in death or serious injury.		
<b>ATTENTION</b>	Indicates a potentially hazardous situation, if not avoided, could result in minor or moderate injury.		
<b>CAUTION</b>	Indicates a potentially hazardous situation, which, if not avoided could result in damage to the device or other property.		
	Caution, consult accompanying documents		Manufacturer's authorized representative in the European Union
	Use no oil 	Read L/min at center of ball	 Serial Number
	Symbol indicates the device complies with the requirements of Directive 93/42/EEC concerning medical devices (on CE marked devices only)		
<b>Rx Only</b>	Caution: Federal (USA) Law restricts this device to sale by or on the order of a licensed healthcare provider.		

## Receiving/Inspection

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Remove product from package and inspect for damage. If product is damaged, DO NOT USE and contact your dealer or equipment provider.

**CAUTION** The tube inside the 0-200 cc/min and 0-1 L/min flowmeter is made of glass and is fragile. Special care should be taken to avoid breaking the glass.

**ATTENTION** It is very important to allow product to remain in original packaging for 24 hours to acclimate to room temperature before use.

**ATTENTION** Store the product in a sealed package to avoid environmental damage. The operating and storage temperature for the Flowmeter should reflect typical environmental conditions of a medical facility environment.

## User Responsibility

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**WARNING** Service of this device should ONLY be performed by properly trained individuals. The Flowmeter must ONLY be used under the direction of a healthcare professional who is trained in its use.

This product performs as explained in this manual, as long as the assembly, use, repair and maintenance are properly followed according to our instructions. Periodic review of this device is recommended. If any damage or defects are present, the product should not be used. This includes parts that may have been altered, contaminated, worn or missing. If any of the above are noted, immediate repair / replacement is required. In compliance with the manufacturers warranty, repair of this device is not to be performed by anyone other than a qualified professional. If this device is subject to improper maintenance, repair, use and/or abuse leading to malfunction of the device, replacement is the sole responsibility of the user.

**WARNING** Due to the possibility of explosion caused by static charge, operation of this device is not to be done if flammable anesthetics are present.

### TO MINIMIZE THE RISK OF EXPLOSION OR FIRE:

- NEVER attempt to attach a Flowmeter directly to a cylinder
- NEVER use grease, oil, organic lubricants or flammable materials on or near the Flowmeter
- NEVER smoke in an area where oxygen is being used
- NEVER use any type of flame or flammable or explosive material near the Flowmeter
- ALWAYS follow CGA and ANSI standards for Flowmeters and Medical Gas Products (E-7) and Oxygen Handling (G-4)

**ATTENTION** Keep the Flowmeter in a clean area when not being used.

**ATTENTION** Ensure that all the connections are tightened and free of leaks prior to use. Use only an oxygen-safe leak detector when testing for leaks.

**WARNING** Each Flowmeter is for use with only one type of gas.

## Specifications\*

Gas	Scale	Increments	Accuracy Averages	Max. Flood/Flush	Transport/Storage Requirements
Oxygen	0-200 cc/min**	25 cc/min (starts at 25 cc/min)	+/- 20 cc/min	500 cc/min	-40°F to 140°F (-40°C to 60°C)
Oxygen	0-1 L/min**	0.1 L/min (starts at 0.1 L/min)	+/- 0.1 L/min	2.5 L/min	-40°F to 140°F (-40°C to 60°C)
Oxygen	0-3.5 L/min**	0.125 L/min (from 0.125-1 L/min) 0.25 L/min (from 1-3.5 L/min)	+/- 0.125 L/min or +/- 10% of reading (whichever is greater)	45 L/min	-40°F to 140°F (-40°C to 60°C)
Gas	Scale	Increments	Accuracy Averages	Min. Flood/Flush	Transport/Storage Requirements
Oxygen	0-8 L/min	0.5 L/min (starts at 0.5 L/min)	+/- 0.5 L/min or +/- 10% of reading (whichever is greater)	50 L/min	-40°F to 140°F (-40°C to 60°C)
Oxygen & Medical Air	0-15 L/min	0.5 L/min (from 1-5 L/min) 1 L/min (from 5-15 L/min)	+/- 0.5 L/min or +/- 10% of reading (whichever is greater)	50 L/min	-40°F to 140°F (-40°C to 60°C)
Oxygen	0-30 L/min	2 L/min (from 4-30 L/min) (starts at 3 L/min)	+/- 0.5 L/min or +/- 10% of reading (whichever is greater)	70 L/min	-40°F to 140°F (-40°C to 60°C)
Oxygen	0-70 L/min	5 L/min (starts at 10 L/min)	+/- 10% of reading	75 L/min	-40°F to 140°F (-40°C to 60°C)

\*Specifications are nominal, subject to change without notice. Flowmeters are calibrated at the pressure indicated on the flow tube, 70°F (21°C), at standard atmospheric pressure. \*\*For use in Neonatal, Pediatric and other low flow applications.

**WARNING** Prior to administering medical air or oxygen, confirm required flow and frequently monitor the flow.

**WARNING** 0-200 cc/min, 0-1 L/min, and 0-3.5 L/min Flowmeters are NOT to be used for resuscitation.

**MRI WARNING** This product may contain magnetic, ferrous material that may affect the result of an MRI. MR conditional options may be available.

## Operating Instructions

1. Turn Flowmeter off by turning knob fully clockwise.
2. Inspect the Flowmeter for damage. If any damage is found, DO NOT use the Flowmeter.

**CAUTION** Over tightening the knob when turning the Flowmeter off will cause damage. The Flowmeter MUST be positioned vertically to ensure maximum accuracy.

**WARNING** The Flow Tube specifies the gas and pressure required. The accuracy will be affected if a different pressure, other than the one specified, is used.

3. Connect the Flowmeter to the supply pressure specified on the Flow Tube.  
NOTE: Supply pressure of 50 psi or 60 psi.

**WARNING** The accuracy may be affected if the temperature of the gas is different than 70°F (21°C) and the supply pressure is different than indicated on the Flow Tube.

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**NOTE:** The accuracy of the flow will not be affected by the attachment of accessories, however, the indicated flow may change.

**WARNING** Connection to the gas source must be done by using only the appropriately indexed fitting.

4. Ensure that the Float Ball is at the very bottom of the Flow Tube when turned off.

**NOTE:** If the Float Ball is not at the bottom of the Flow Tube, the Flowmeter could be leaking. Please contact your dealer or Ohio Medical, LLC.

5. Adjusting the Flow: To DECREASE Flow: Turn the knob clockwise.  
To INCREASE Flow: Turn the knob counter clockwise.

6. To set the flow, align the center of the Float Ball to the indicator line on the Flow Tube.

**WARNING** To avoid injury ALWAYS confirm flow requirement for patient prior to dispensing. Check flow frequently while being administered to patient.

7. If the flow is adjusted beyond the highest calibrated indicator, an undetermined flow will arise.

8. Turn knob completely counter clockwise to achieve maximum Flow/Flush Flow.

**NOTE:** Any flow beyond the highest calibrated line of the Flow Tube with unrestricted flow is Flood/Flush Flow.

## Cleaning Instructions

Use a clean damp cloth with a mild cleaning solution to wipe outside of product. DO NOT gas sterilize with Ethylene Oxide (ETO). DO NOT clean with pungent hydrocarbons.

**CAUTION** DO NOT submerge product in any form of liquid. This will cause damage and void the warranty.

## Troubleshooting

If the Flowmeter does not function properly, contact your dealer or equipment provider.

## Maintenance Prevention

Before and after each use, INSPECT THE FLOWMETER FOR DAMAGE.

**WARNING** When changing connectors on the Flowmeter for service or replacement, NEVER re-attach connectors of a different gas. Doing so may result in patient injury or damage to the equipment

**CAUTION** Disconnect Flowmeter from gas supply BEFORE SERVICING.

**WARNING** Ensure shroud is securely tightened to prevent disconnection under pressure. Turn Clockwise to tighten.



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