

# ***FLOTEC INC***

Web Site: <http://www.floteco2.com>

7625 West New York Street 317-273-6960 Fax 317-273-6979  
 Indianapolis, Indiana 46214-4911 e-mail: [flotec@floteco2.com](mailto:flotec@floteco2.com)

Order desk: 800-401-1723  
 Order desk Fax 800-515-9254

The FLOTEC Nitrous oxide Flowmeter is designed to provide a constant flow of Nitrous oxide at different inlet pressure. In addition, the FLOTEC Flowmeter can simultaneously deliver a measured flow through the twelve-position selector. FLOTEC Flowmeters have a metal inlet filter and rotor filter body and are available in a complete range of Nitrous oxide Chemetron, Ohio, Female Swivel DISS or 1/8" Female pipe inlet connections and DISS fitting valve outlet connections. FLOTEC products contain no latex or latex byproducts.

**SPECIFICATIONS:**

Operating Range: 17, 20, 24, 30, 50, 58, 70 PSI

Flow Capacity: Minimum: 30 MLM; Maximum: 40 LPM  
 thru the 12 position selector

Temperature Range: -20 to 150F

Inlet Configuration: Chemetron, Ohio, Female Swivel  
 DISS or 1/8" Female pipe

Outlet Configuration: Hose Barb  
 DISS-1040-A fitting

**REPLACEMENT PARTS:**

Inlet and outlet Connections

- 316L S.S. Sintered Filter disk
- 20 micron Sintered Stainless Steel Rotor filter body w/ lased shim-cup

Rotor Assembly

O-ring the 1 1/16-20 FM Body THD

**INSTALLATION: Nitrous oxide Flowmeter Sub- Assembly:**

Carefully remove red cap from inlet and outlet port by twisting out. **Do not pull cap straight out.**

Check to insure filter disk is installed. Do not allow Teflon tape to cover first thread of filling. Use no more than two turns of tape.

**INSTALLATION: FMW or Solid Cover:** Be sure is properly positioned Flowmeter Sub-Assembly and Cover before torque.

**INSTALLATION: Pipe Connector:** Use only Teflon tape on the threads as a sealant.

**WARNING:** Some Medical gases can be dangerous. Large quantities of some medical gases can push the Nitrous oxide out of a room which can cause a person to faint and/or asphyxiate. Consult CGA standard # G-8.1 for other cautions.

**PREVENTIVE MAINTENANCE:** All Flowmeters should be tested and cleaned periodically to insure proper performance. The frequency of testing should be established according to usage, but it should be performed at least once per year to evaluate for damage, contamination, wear and performance.

**LEAK TEST:** Attach the Flowmeter to outlet Nitrous oxide gas system, plug all flowmeter outlets, turn the flow selector to "OFF" and slowly open outlet medical air gas system valve. Apply a compatible leak test solution to all outlets, fittings, and Flowmeter body to check for bubbles. Tighten fittings as required to eliminate all external leaks. **DO NOT** over tighten threaded connections. Replace o-ring if required. Close outlet system valve.

## WARNING:

Disassembly, assembly, and testing of Flowmeters should be performed only by trained personnel. The work area must be free of hydrocarbon contaminants and residues because of the danger of spontaneous combustion when residues are exposed to gaseous medical air.

## SAFETY WARNINGS:

1. The use of FLOTEC Nitrous oxide flowmeters for gases other than compressed outlet Nitrous oxide of up to 70 psi is expressly prohibited by FLOTEC and the user must assume all liabilities.
2. Use no oil or grease.
3. Never administer oxidizing gases when smoking or when near an open flame.
4. Never use medical gases from a cylinder without reducing the pressure through a suitable regulator intended for that gas.
5. **Ensure that the threaded fitting on flowmeters are properly mated for the gas intended.**  
Never attempt to force an incompatible connection.
6. Never permit compressed Nitrous oxide to enter a flowmeter suddenly. Always open the valve slowly.
7. Fully open the valve when a flowmeter is attached and in use.
8. Never leave a Nitrous oxide gas system valve open with flowmeter attached when flowmeter is not in use.
9. Before a flowmeter is removed, fully close the Nitrous oxide gas system valve and release all residual gas pressure from within the flowmeter.
10. Never interchange flowmeters, hoses, or other equipment with similar equipment intended for use with other gases. Flowmeters and related fittings should never be handled with oily or greasy hands or gloves. Never hold hand over the outlet(s) to test for the presence of pressure.
11. Never use Nitrous oxide as a pressure medium to purge obstructed pipelines or equipment, to operate pneumatic tools, or to build up pressure in any tanks.
12. Do not stand in front of a flowmeter outlet when opening the Nitrous oxide gas system valve in case foreign particles are present which could cause a hazardous malfunction of the flowmeter.
13. Oxygen therapy may be critical treatment. The use of the flowmeter should be made in strict accordance with the prescription and instructions of a physician.
14. Secure cylinders to wall, stand, or cart in accordance with local fire codes.
15. Downstream equipment used in conjunction with the flowmeter should be equipped with suitable safety valves to prevent overpressurization and damage.
16. Nitrous oxide must never be allowed to contact oil, grease or other petroleum-based substances. Therefore, do not use oil or grease on Medical air flowmeters, cylinders, valves or other related equipment. Do not use or store Nitrous oxide equipment near excessive heat (>125 F or 51.5 C) or open flame.
17. CAUTION: Do not use organic-based threaded sealants on any portion of the regulator. Use only Teflon threaded-sealing tape or Medical air service compound.
18. Never leave pressurized Nitrous oxide within a flowmeter. Always purge residual gases when not in use.

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## Declaration of Conformity

### Product identification

Product name : Regulators & Flow meters, Regulators with Flow meter.  
Brand : Flotec  
Cat. Number : RXXXX-XXXXX, FXXX-XXXXX, MXXXX-XXXXX, DXXXX-XXXXX  
Batch/Serial Nr. : Numbered Sequentially

### Manufacturer

Name : Flotec  
Address : 7625 West New York Street  
Indianapolis, IN 46214-4911  
Country : USA  
Representative : Brian Davidson  
Tel : +1 317-273-6960  
Fax : +1 317-273-6979

### Authorized Representative in Europe

Name : Emergo Europe  
Address : Molenstraat 15  
2513 BH  
The Hague  
Country : The Netherlands  
Tel : (31) (0) 70 345-8570  
Fax : (31) (0) 70 346-7299

### Notified Body

Name : UL International (UK) Ltd  
Address : Wonersh House, The Guildway  
Old Portsmouth Road  
Country : UK- Guildford, Surrey, GU13 1LR  
I.D. Number : CE 0843

### Means of conformity

Flotec Inc. declares that the product listed has been classified as Class IIb - Annex IX, Rule 11 and is in conformity with the essential requirements and provisions of Council Directive: 93/42/EEC

### Signature

Place and date : Flotec Inc 09-11-14

Signature :



Name : Brian Davidson  
[Name and Signature of authorized person within organization]

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## Symbols

### Symbols

PSI  
KG/CM<sup>2</sup>  
BAR  
MPA  
HP  
LPM  
SN



### Definition

POUNDS PER SQUARE INCH  
KILOGRAMS PER SQUARE CENTIMETER  
KILOGRAMS PER SQUARE CENTIMETER  
MEGA PASCAL  
HIGH PRESSURE PORT  
LITERS PER MINUTE  
SERIAL NUMBER

USE NO OIL



- CONSULT INSTRUCTIONS FOR USE

EC REP -

AUTHORISED REPRESENTATIVE IN THE EUROPEAN COMMUNITY