



Series GEM Regulator User Instructions

Scope:

These User Instructions are applicable for Generant Series GEM Regulators.

Intended Use:

The intended use for Series GEM regulators is a combination pressure build - economizer regulator for cryogenic liquid cylinders.

Technical Data:

Series GEM Regulators are 100% factory tested for leakage and factory pre-set. Every regulator is marked with Manufacturer, Part Number, Factory Set Pressure, Pressure Range, Date Code, and Maximum Inlet Pressure. Ports are also labeled (IN, OUT, and ECON). Customer may specify a set pressure in the range listed below or regulators will be factory pre-set to a default set pressure in the range.

Maximum Inlet Pressure: 600 PSIG (42 Bar)

Outlet Pressure Ranges:

“B” Spring: 50 – 200 PSIG

“C” Spring: 150 – 350 PSIG

“D” Spring: 300 – 500 PSIG

⚠ WARNING

Generant Series GEM Regulators are supplied “Cleaned for Oxygen Service” standard in heat sealed in poly bags. Once removed from the bag, integrity of this cleaning has been compromised. Proper handling should be used to ensure the integrity and cleanliness of the system.

Operating Instructions:

1. Ensure that the regulator is installed according to the port engraving on the regulator body and the labeled connections on the liquid cylinder.
2. For bench setting instructions, please refer to Generant document EN-FR-160. IMPORTANT: When setting regulators off the cylinders, outlet and economizer ports must be connection to avoid internal damage to the regulator.
3. To adjust regulator, refer to the table below to adjust to desired pressure build setpoint from Factory Pre-Set pressure. Turn regulator adjusting screw (7/16” hex) clockwise to increase pressure and counter-clockwise to decrease pressure.

*NOTE: Values in the table are for reference only.

Actual pressure adjustments will vary slightly.

4. Once desired adjustment is made, the regulator can be locked by tightening the lock nut on the adjustment screw.

SPRING	RANGE (PSIG)	PSI/TURN (APPROX)
B	50 - 200	28
C	150 - 350	36
D	300 - 500	56

Safe Component Selection

When selecting a component, the total system design must be considered to ensure safe, trouble free performance. Component function, materials compatibility, adequate ratings, proper installation, operation, cleanliness and maintenance are the responsibility of the system designer and user.