Series GDR, Gas Delivery Regulator User Instructions

Scope:

These user instructions are applicable for Generant Series GDR Gas Delivery Regulators, sizes 1/4", 3/8", 1/2", 3/4" and 1" (Connection Types NPT, SAE, BSPT and BSPP).

Intended Use:

The intended use of these regulators is to reduce an inlet pressure to a predetermined outlet pressure in a given system. All Series GDR Regulators are supplied from the factory "Cleaned and Packaged for Oxygen Service".

Technical Data:

GDR Series Regulators are 100% factory tested for leakage, droop and flow performance. Every regulator is marked with Manufacturer, Part Number, Date Code, Maximum Inlet Pressure, Set Pressure Range, and Direction of Flow (forged in body).

Model Size	Maximum Inlet Pressure
1/4", 3/8" and 1/2"	580 Psig (40 Bar)
3/4" and 1"	400 Psig (27.6 Bar)

Spring Model Code	Outlet Pressure Range
A (Black)	0 - 55 Psig (0 - 3.8 Bar)
B (Red)	50 - 135 Psig (3.5 - 9.3 Bar)
C (Blue)	125 - 225 Psig (8.6 - 15.5 Bar)
D (Blue)*	225 - 450 Psig (15.5 - 31.0 Bar)

*available for 1/4", 3/8", and 1/2" models only.

⚠ WARNING Generant Series GDR Regulators are supplied "Cleaned for Oxygen Service" from the factory in heat sealed 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. It is recommended that the adjustment screw be turned counter clockwise until no load is present on the spring prior to installing into and pressurizing the system.
2. Ensure that the regulator is piped in the proper direction according to the directional flow arrow forged on the regulator body.
3. 4 Port Regulators are supplied with 1/4" NPT gage ports and include one pipe plug.
4. Once regulator is properly connected and inlet pressure is present, turning adjustment screw clockwise will increase outlet pressure. Regulators are non-relieving. Regulator outlet pressure cannot be decreased with pressure applied and regulator outlet blocked. To decrease outlet pressure, the outlet line must vent excess pressure as screw is turned counter-clockwise.
5. Once desired set pressure is achieved, the regulator can be locked by tightening the lock nut on the adjustment screw.

Generant Regulators are field repairable and springs can be interchanged for A, B, and C range models. Service parts can be ordered from the factory.

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.