GENERANT

FINAL LINE REGULATOR
1/4" NPT
Inlet 600 PSI (41.4 bar)

FLR SERIES

DESCRIPTION:

FLR Series pressure regulators provide high flow and quick, positive shut off at the desired set pressure. The regulator design is a non-balanced, spring reference, pressure reducing type regulator. They were designed especially for use as final line regulators for cryogenic liquid cylinders but can be used in many other applications. Solid, non-tied diaphragm provides leak-free and long-lasting performance. Optimized diaphragm and adjustment spring designs provide high flow performance. All FLR Series regulators are supplied factory pre-set and cleaned for oxygen service.



FEATURES:

- **OPTIMIZED FOR HIGH FLOW**: High flow while maintaining outlet pressure near setpoint.
- **QUICK SHUT-OFF**: Regulators transition from the flowing condition to shut in a tight pressure band.
- **SOLID, NON-TIED, DIAPHRAGM**: Solid diaphragm eliminates potential leak path and increases sensitivity.
- **DESIGNED FOR CRYOGENICS**: All materials were selected specifically for use in cryogenic environments.
- **CLEANED FOR OXYGEN SERVICE**: Regulators are cleaned for use in Oxygen service standard.

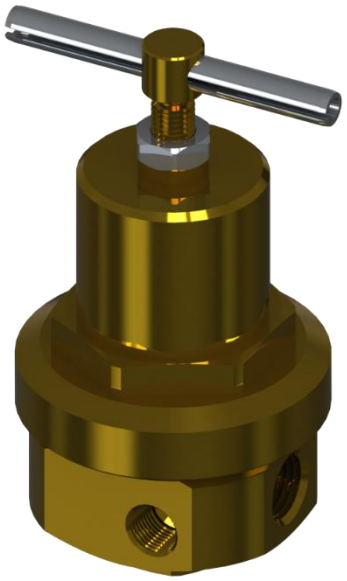
TECHNICAL DATA:

Max Inlet Pressure: 600 PSIG (41.4 bar)

Outlet Pressure Ranges:

Spring	Outlet Pressure Range	PSI/Turn*
A	15 to 65 PSIG (1.0 to 4.5 bar)	15
B	50 to 175 PSIG (3.4 to 12.1 bar)	25
C	150 to 350 PSIG (10.3 to 24.1 bar)	55
D	300 to 525 PSIG (20.7 to 36.2 bar)	70

*PSI/Turn Value is approximate change in setpoint per full turn of the adjustment screw (CW to increase, CCW to decrease), for reference only.



Temperature Range: -320° to 200°F (-196° to 93°C)

Full Open Flow Coefficient: 0.51

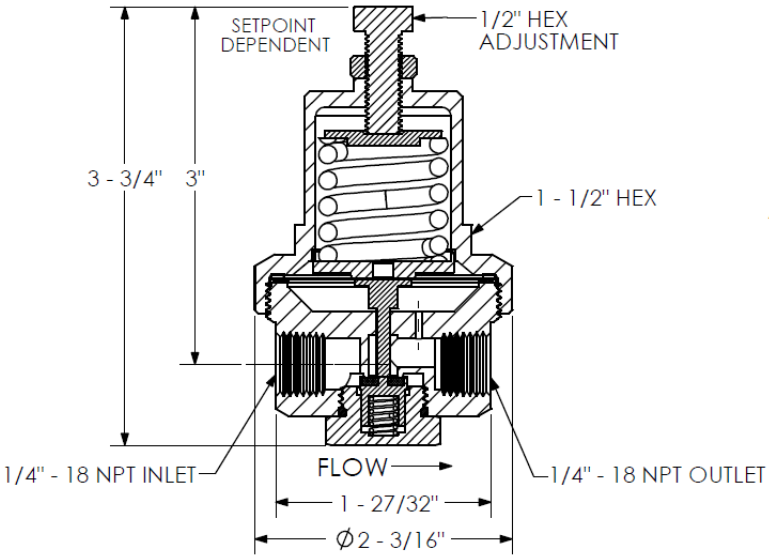
MATERIALS OF CONSTRUCTION:

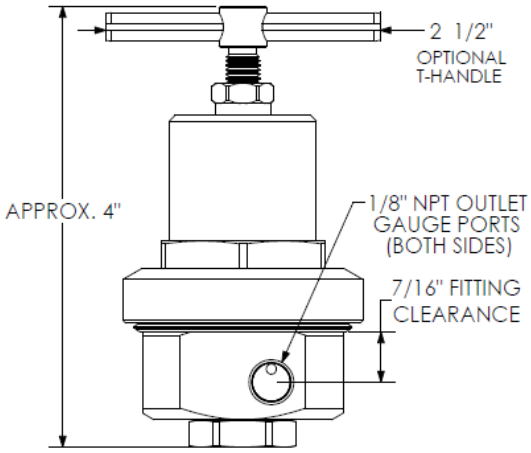
Component	Material
Body, Chamber, Valve Body, Stem, Spring Button, Spring Retainer, Bottom Plug	CDA 360 Brass, ASTM B16
Adjustment Springs	Chrome Silicon, ASTM A401
Adjustment Screw, Locknut, Optional T-Handle	18-8 Stainless Steel
Valve Spring	302 SS, ASTM A313
Diaphragms	Phosphor Bronze
Diaphragm Gasket	Vulcanex ®
Valve Seal	PTFE
Chamber Seal	Gylon ®
Bottom Plug Seal	Silicone

NOTE: Regulators are assembled with Dupont Krytox® lubricant.

FINAL LINE REGULATOR

DIMENSIONAL DATA





1/8" NPT Gauge Ports standard.
T-handle optional.

PERFORMANCE INFORMATION

FLR Series Regulators were designed for high flow rates at low droop levels. Units were extensively tested and qualified for CO2 applications but can be used with a wide variety of medias. Regulators transition from high flow to shut in a tight pressure band.

For flow information in specific applications or pressure conditions, consult factory.

SPRING KITS

Part Number	Spring
CRM-SK-A	A (15 to 65 PSI)
CRM-SK-B	B (50 to 175 PSI)
CRM-SK-C	C (150 to 350 PSI)
CRM-SK-D	D (300 to 525 PSI)

All Replacement Spring Kits come with a Replacement Spring, Chamber Seal, and either Diaphragm Gasket (A, B, and C springs) or Chamber Ring (D Spring).

HOW TO ORDER

FLR-250 - B - 125 T

SERIES

FLR-250 - Final Line Regulator,
1/4" NPT IN AND OUT,
1/8" NPT GAUGE PORTS (2)

OPTIONAL T-HANDLE

T - T-HANDLE
OMIT FOR STANDARD ADJUSTMENT BOLT

SET PRESSURE

Specify set pressure in PSI
OMIT FOR STANDARD SET (BY SPRING, SEE TABLE)

SPRING RANGE

A - 15 to 65 PSI (1.0 to 4.5 bar)
B - 50 to 175 PSI (3.4 to 12.1 bar)
C - 150 to 350 PSI (10.3 to 24.1 bar)
D - 300 to 525 PSI (20.7 to 36.2 bar)

Spring	Std. Set
A	35 PSI
B	125 PSI
C	300 PSI
D	450 PSI

Standard Sets do not come engraved with "Factory Set Pressure."

Repair Kit	Description
CRM-V-RK	Valve Only Repair Kit: Contains bottom plug o'ring, valve, and valve spring.

PROPER COMPONENT SELECTION – When specifying a component, the total system design must be considered to ensure safe and trouble-free performance. Intended component function, materials compatibility, pressure ratings, installation, environment and maintenance are the responsibility of the system designer.

GENERANT
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