

PRODUCT INFORMATION & DATA SHEET

Dual-Stage (cascaded) high stability regulators

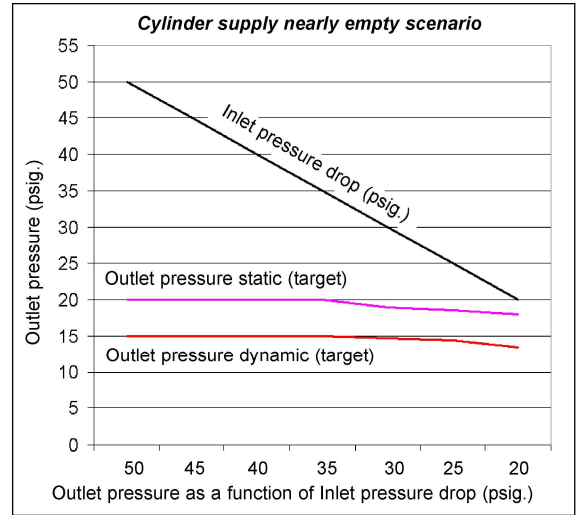
109X series



The new Mountain High 109X series of Dual Stage (cascaded) high stability regulators are ideal for performance-critical applications where pressure stability, repeatability and low drop out regulation of oxygen are important specifications as the supply runs down to nearly empty.

The dual stage regulator allows the useful pressure of a cylinder to be spent down to about 10 psi above the regulating pressure. This will still yield the specified flow rate for the application while maintaining specified pressure and flow requirements.

The graph on the right zooms-in on the details of the output performance of the regulator while the inlet pressure had dropped to the regulation point (unity) ~ 20 psig. of the final stage.



Performance & Operating Specifications

Operating

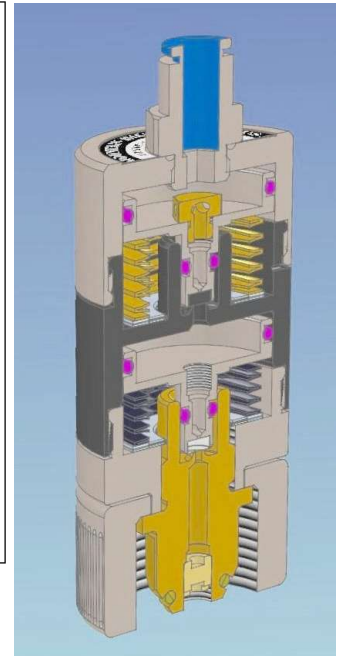
| | | |
|-----------------------|----------------------------------|----------------|
| Inlet pressure range: | 50 ~ 3000 psig. | 3.44 ~ 207 bar |
| Outlet pressure: | 15 ± 1 psig. | 1 ± 0.007 bar |
| typical flow rate: | 10 ± 2 l/min. @ 1 bar | note 1 |
| Max flow rate: | 60 ± 8 l/min. full-flow | note 2 |
| Temperature: | -50 ~ 130 °F | -45 ~ 55 °C |
| Vibration: | ± 25 G. X Y Z (sin @ ~120 Hz.) | note 3 |
| Shock: | ± 12 G. X Y Z (tan @ ~ 0.05 Hz.) | note 3 |

Materials: Using one or more of the following: (Outlet fittings detailed in respective SCDs)

| | |
|--------------------|--|
| Main Body: | UNS C36000 (CDA-360) Brass, UNS A96061 (6061-T6) Aluminum |
| Regulating Seat: | PTFE / (Teflon®), PCTFE / (Kel-F® / Neoflon®), CR / Neoprene |
| Seals & O-rings: | EPDM, Silicone |
| Labels & placards: | PET / Polyester (Mylar®). |

Notes

- 1) MH Test-Set No. XXXX
- 2) MH Test-Set No. XXXX
- 3) Derived from RTCA, DO160-D



Other inlet & outlet fittings are available upon customer specifications.



DIN 477-9N



CGA-540N



SAE-4
(7/16-20)



6/8/20