

UHP TDR3 Pressure Regulators

High Pressure Tied Diaphragm



GTC Features

- Compact Body with High Flow Capacity
- High Pressure Rated - 3300 psig Max Inlet
- Tied Diaphragm Positive Shut-off Feature
- Multiple Outlet Pressure Ranges

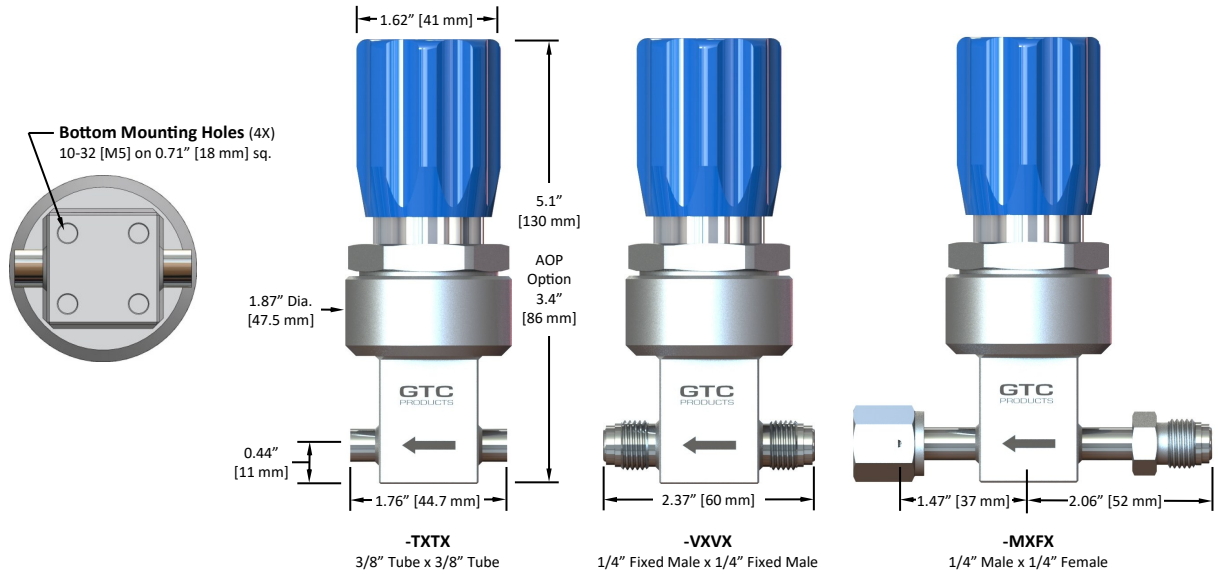
Technical Data

Specification	R203	R206	R210	R215 and AOP
Outlet Pressure Range	2 to 30 psig (.1 to 2 bar) VAC Option: Vac to 30 psig (-0.5 to 2 bar)	2 to 60 psig (.1 to 4 bar) VAC Option: Vac to 60 psig (-0.5 to 4 bar)	2 to 100 psig (.1 to 7 bar)	2 to 150 psig (.1 to 10 bar)
Maximum Inlet Pressure	3300 psig (230 bar)			
Proof / Burst Pressure	150% / 300% of operating pressures			
Flow Coefficient	0.30 Cv comparative performance*			
Operating Temperature	-20° to 160° F (option: Vespel™ -20° to 300° F)			
Helium Leak Rate - Inboard	1 x 10 ⁻⁹ scc/s He			
Supply Pressure Effect	1.1 psig outlet pressure increase per 100 psig inlet pressure decrease			
Wetted Surface Roughness	10 Ra Max			
Wetted Surface Body Mat'l	Electropolished 316L VAR Stainless Steel			
Wetted Surface Other Mat'l	Diaphragm: Elgiloy™, Seat: PCTFE (optional Vespel™), Poppet: (optional Hastelloy™ C-22), Poppet Spring: SS 17-7 PH			

* Flow Capacity is comparable to other manufacturers Cv of .30
Actual calculated Cv is .08. Refer to flow charts to compare.



Dimensions



Ordering Information R210-TDR3-2A-VXX-VS

Outlet Pressure Range

- R203 - 2 to 30 psig (VAC option: Vac to 30 psig)
- R206 - 2 to 60 psig (VAC option: Vac to 60 psig)
- R210 - 2 to 100 psig
- R215 - 2 to 150 psig
- AOP - 2 to 150 psig (pneumatically operated)

Body Series

TDR3 - High Pressure Series

Porting

- 2A - 2 Port inline
- 3D - 3 Port (2 port inline with 1 outlet gauge port)
- 4M - 4 Port (2 port inline with 2 gauge ports)
- 4W - 4 Port - Left (2 port inline with 2 gauge ports)

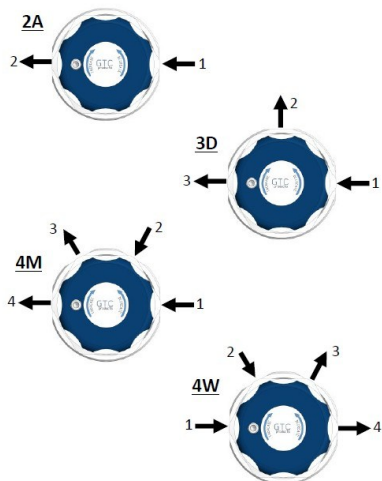
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Ports

Options

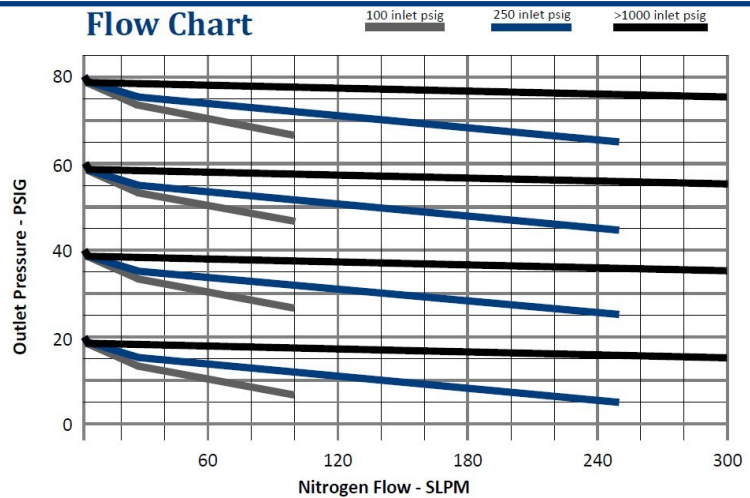
- VS - Vespel™ Seat
- VAC - Vacuum Operation

TDR3 Connections

- X - (No port)
- T - 3/8" Tube Stub
- F - 1/4" Female Face Seal, Hi-Flo
- M - 1/4" Male Face Seal, Hi-Flo
- V - 1/4" Fixed Male Face Seal
- I - 1/4" Internal "Gasket-less" Face Seal
- 4 - 1/4" Tube Stub



Flow Chart



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