



ADVANCED PRESSURE TECHNOLOGY

SERIES KT 9

SINGLE STAGE HIGH PRESSURE REGULATOR

HIGH RELIABILITY UNDER PRESSURE



- ◆ 6,000 psig inlet (414 bar) inlet to 2,500 psig (172 bar) outlet
- ◆ Stainless steel
- ◆ Self relieving and non-relieving*
- ◆ Piston sensing element
- ◆ High flow (HF) option
- ◆ Field repairable
- ◆ Welded face seal connection option**
- ◆ Installation and operating instructions available at www.aptech-online.com in the Tech Briefs section

*Self relieving model vents pressure above set point to atmosphere automatically for ease of pressure adjustment and safety. Non-relieving model does not vent.

**This series is not assembled in a Class 100 cleanroom nor is it helium leak tested, though it is welded construction.

***HF option requires VS seat.

MATERIALS OF CONSTRUCTION

MATERIAL OPTION

Body	KT 9 S
Inlet screen, filter, washer	SS, 316L
Poppet, spring, nozzle, piston, cylinder	SS 316
Seat, main valve	SS 316
Seat, vent valve	PCTFE (Polyimide required for HF and optional for standard)
O-rings	PCTFE
Back up ring	FKM/FPM Fluoroelastomer
	PTFE

All specifications subject to change without notice.

ENGINEERING DATA

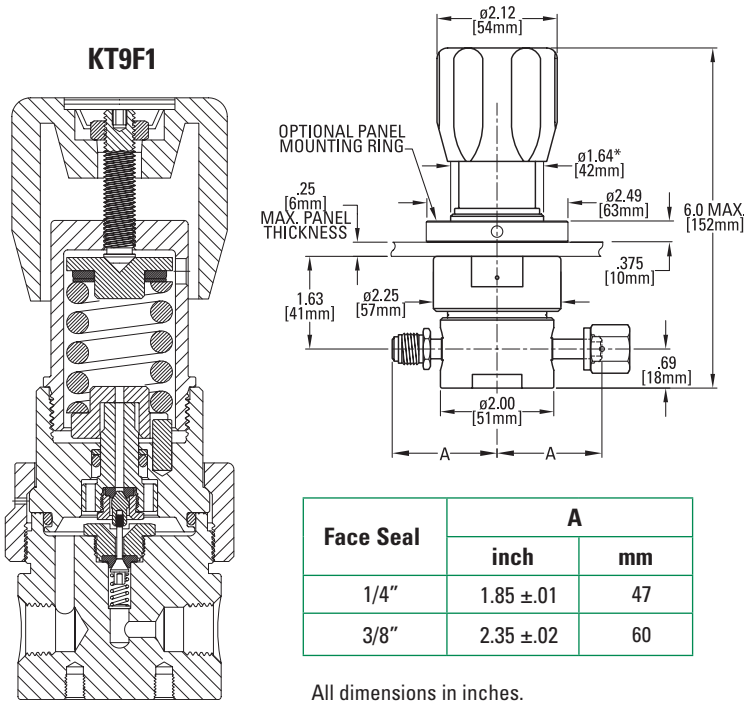
Operating Parameters

Source pressure	
KT 9	6,000 psig (414 bar)
KT 9 W	4,500 psig (310 bar)
Delivery pressure	10 to 200 psig (0.7 to 13.8 bar)
	25 to 500 psig (1.7 to 34.4 bar)
	100 to 2,500 psig (7 to 172 bar)
Design proof pressure	150% of maximum rating
Design burst pressure	300% of maximum rating

Other Parameters

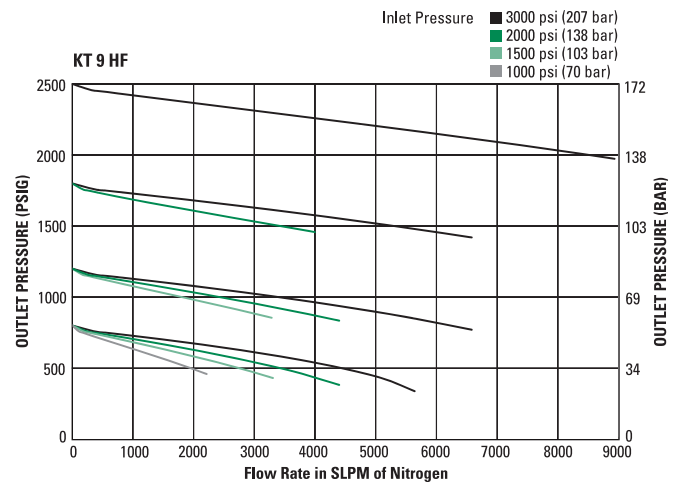
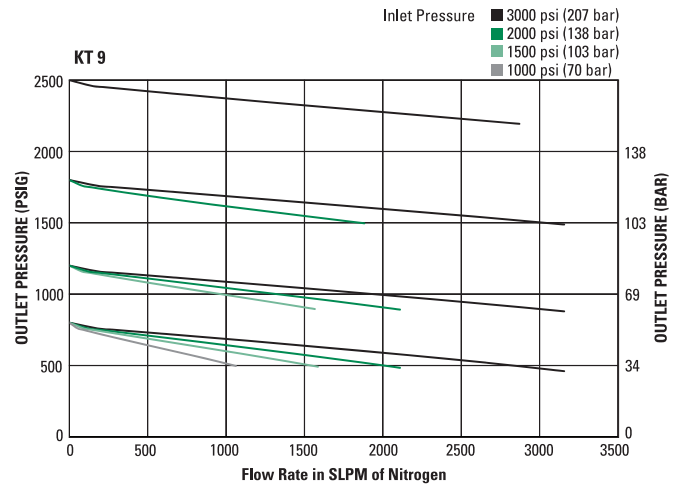
Inlet/outlet ports	1/4" NPT and 1/4" face seal
Flow coefficient Cv	0.09 (opt HF 0.15)***
Operating temperature	0 to +140F (-18 to +60C)
Leak rate	Bubble tight
Supply pressure effect	Refer to Installation and Operating Instructions
Self relieving*	Standard, non-relieving optional (must be specified)
Shipping weight (approx.)	4 lb

SERIES KT 9 — QUALITY, RELIABILITY & PERFORMANCE!

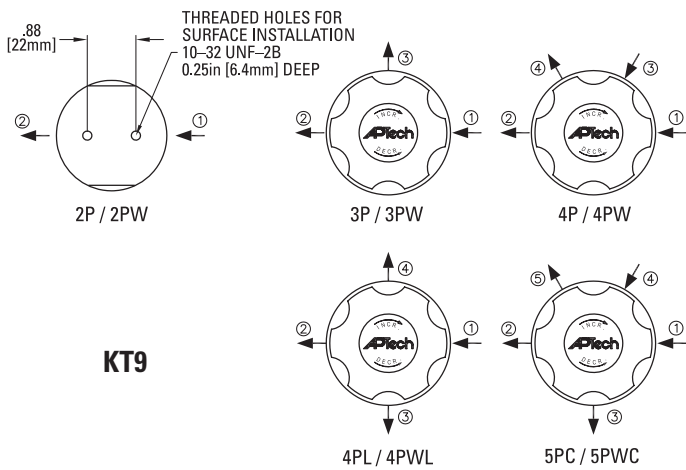


Face Seal	A	
	inch	mm
1/4"	1.85 ±.01	47
3/8"	2.35 ±.02	60

All dimensions in inches.
Metric dimensions [mm] are for reference only.
*1-3/4" Recommended panel hole diameter.



Porting



CAUTION: Product selection is the sole responsibility of the user, regardless of any recommendations or suggestions made by the factory. The user shall make selections based upon their own analysis and testing with regard to function, material compatibility and product ratings. Proper installation, operation and maintenance are also required to assure safe, trouble free performance.

ORDERING INFORMATION

KT 9 Series	F Pressure Range	1 Relieving Non-Relieving	S Material	3P Ports	W Optional	FV4 FV4 Connection (Inlet/Outlet)	60 20 Gauge Source Delivery	HF Options
KT 9D = 5-200 psig (0.35 to 14 bar) KT 9F = 25-500 psig (1.7 to 34 bar) KT 9L = 100-2,500 psig (7 to 172 bar)				2P = 2 ports 3P = 3 ports 4P = 4 ports 4PL = 4 ports 5PC = 5 ports	W = Welded	4* = 1/4 inch NPT MV4** = 1/4 inch face seal male FV4** = 1/4 inch face seal female	0 = No gauge 2 = 200 psig/bar 4 = 400 psig/bar 6 = 600 psig/bar 10 = 1,000 psig/bar 40 = 4,000 psig/bar 60 = 6,000 psig/bar	VS = Polyimide seat HF = High flow*** P = Panel installation
1 = Self relieving (venting) 0 = Non-relieving (non-venting)						*NPT port only listed once. **MV4 and FV4 only available with W option and both ports must be noted.	Gauge ports are 1/4 inch female NPT or MV4 if welded.	***HF option requires VS seat. HF option not recommended for H ₂ service.
S = Stainless Steel 316L								

AP Tech has product options and variations which are not documented in data sheets. If you have a model number that is not defined by the ordering information, please consult the factory or your local representative.