



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\*\*
- ◆ Knob LOTO option (refer to AP KL data sheet)
- ◆ Installation and operating instructions available at [www.aptech-online.com](http://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.

‡A pressure regulator Cv is a nominal value which indicates the point of choked flow. Please refer to a flow curve or a recommendation guide for usable flow range.

#### MATERIALS OF CONSTRUCTION

##### MATERIAL OPTION

Body  
Inlet screen, filter, washer  
Poppet, spring, nozzle, piston, cylinder  
Seat, main valve  
Seat, vent valve  
O-rings  
Back up ring

##### KT 9 S

SS, 316L  
SS 316  
SS 316  
PCTFE (Polyimide required for HF and optional for standard)  
PCTFE  
FKM/FPM Fluoroelastomer  
PTFE



#### ENGINEERING DATA

##### Operating Parameters

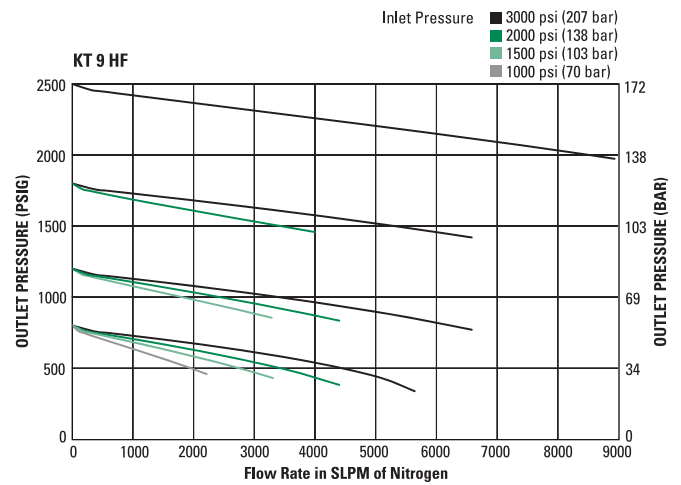
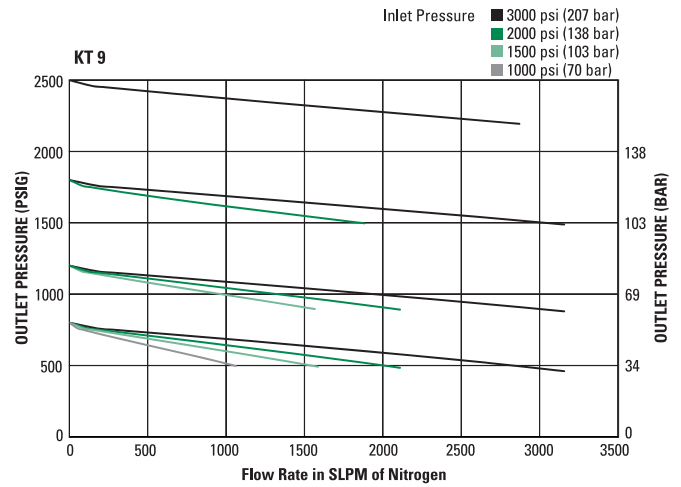
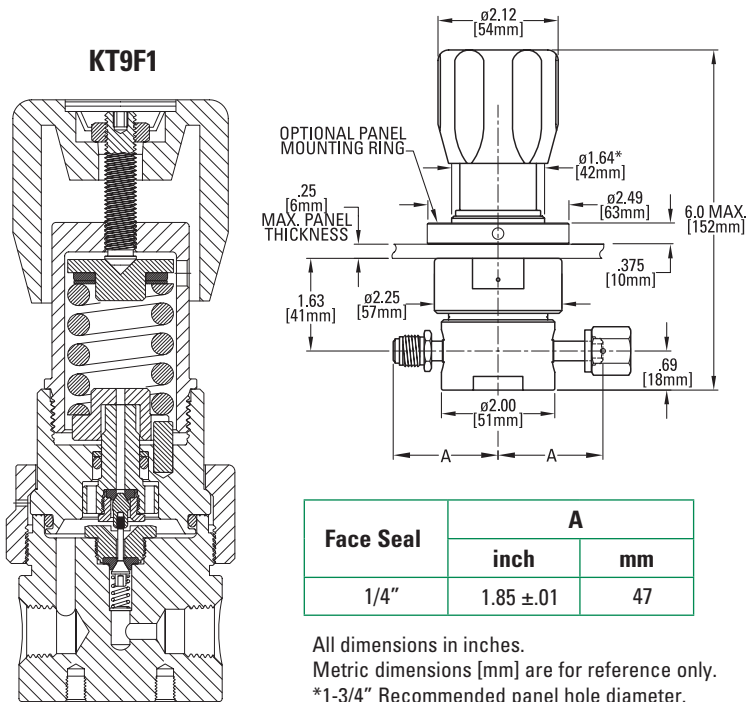
Source pressure	
KT 9	6,000 psig (414 bar)
KT 9 W	4,500 psig (310 bar)
Delivery pressure	10 to 200 psig (0.7 to 13.8 bar) 25 to 500 psig (1.7 to 34.4 bar) 100 to 2,500 psig (7 to 172 bar)
Design proof pressure	150% of operating pressures
Design burst pressure	300% of operating pressures

##### Other Parameters

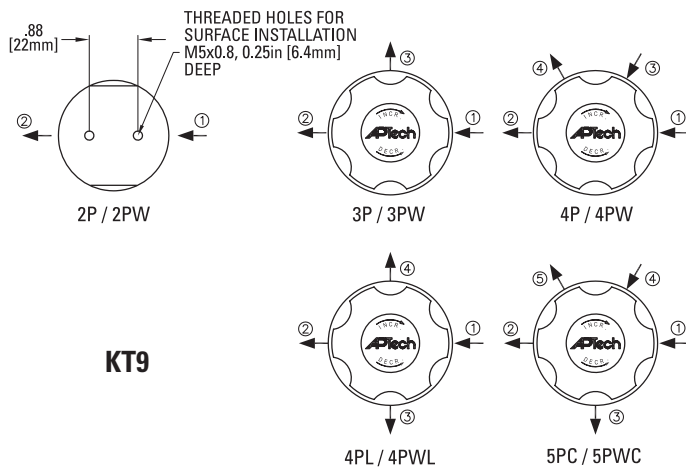
Inlet/outlet ports	1/4" NPT and 1/4" face seal
Flow coefficient Cv‡	0.09 (opt HF 0.15)***
Operating temperature	0° to +140°F (-18° to +60°C)
Leak rate	Bubble tight
Supply pressure effect	Refer to Installation and Operating Instructions
Self relieving*	Standard, non-relieving optional (must be specified)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

All specifications subject to change without notice.

# SERIES KT 9 — QUALITY, RELIABILITY & PERFORMANCE!



## Porting



**KT9**

**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

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KT 9 Series	F Pressure Range	1 Relieving Non-Relieving	S Material	3P Ports	W Optional	FV4 Connection (Inlet/Outlet)	FV4	50 Gauge	20 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  *NPT port only listed once. **MV4 and FV4 only available with W option and both ports must be noted.		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 50 = 5,000 psig/bar 60 = 6,000 psig/bar†		VS = Polyimide seat HF = High flow*** P = Panel installation KL = Knob LOTO (refer to AP KL data sheet)  ***HF option requires VS seat. HF option not recommended for H <sub>2</sub> service.	
1 = Self relieving (venting) 0 = Non-relieving (non-venting)											
S = Stainless Steel 316L										Gauge ports are 1/4 inch female NPT or MV4 if welded. †60 gauge option not available KT9W.	

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.

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