

# SERIES KT 10

## SINGLE STAGE HIGH PRESSURE REGULATOR

### HIGH RELIABILITY AND SAFETY BY DESIGN



- ◆ 10,000 psig inlet (690 bar)  
5 to 10,000 psig outlet  
(0.35 to 690 bar)
- ◆ Stainless steel or brass construction
- ◆ Self relieving and non-relieving versions\*
- ◆ Machined from bar stock
- ◆ Field repairable
- ◆ Fine adjustment control
- ◆ Piston sensing element
- ◆ Low flow, 0.06 C<sub>v</sub>  
(HF option, 0.12 C<sub>v</sub>)
- ◆ Pneumatic actuator option for  
pneumatic outlet pressure control
- ◆ 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 for added safety. Non-relieving model does not vent.

\*\*Specific device rating is the lowest of the ratings of body, seat and option selected.

\*\*\*Device delivery pressure cannot exceed its source pressure rating.

\*\*\*\*10,000 psig outlet is only available with standard seat.

#### ENGINEERING DATA

##### Operating Parameters

Source pressure**	
SS body	10,000 psig (690 bar)
Brass body	6,000 psig (414 bar)
Polyimide seat	10,000 psig (690 bar)
PEEK seat	6,000 psig (414 bar)
HF option	6,000 psig (414 bar)
Delivery pressure***	5 to 500 psig (0.34 to 34 bar)
	5 to 800 psig (0.34 to 55 bar)
	10 to 1,500 psig (0.7 to 103 bar)
	15 to 2,500 psig (1 to 172 bar)
	25 to 4,000 psig (1.7 to 276 bar)
	50 to 6,000 psig (3.5 to 414 bar)
	100 to 10,000 psig (7 to 690 bar)****
Design proof pressure	150% of operating pressures
Design burst pressure	300% of operating pressures

##### Other Parameters

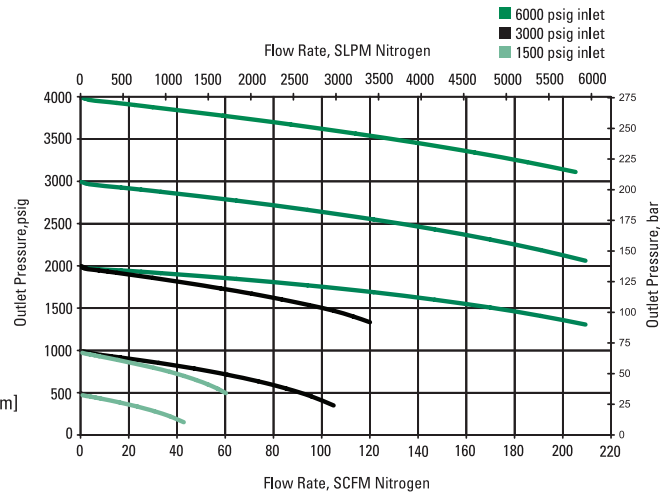
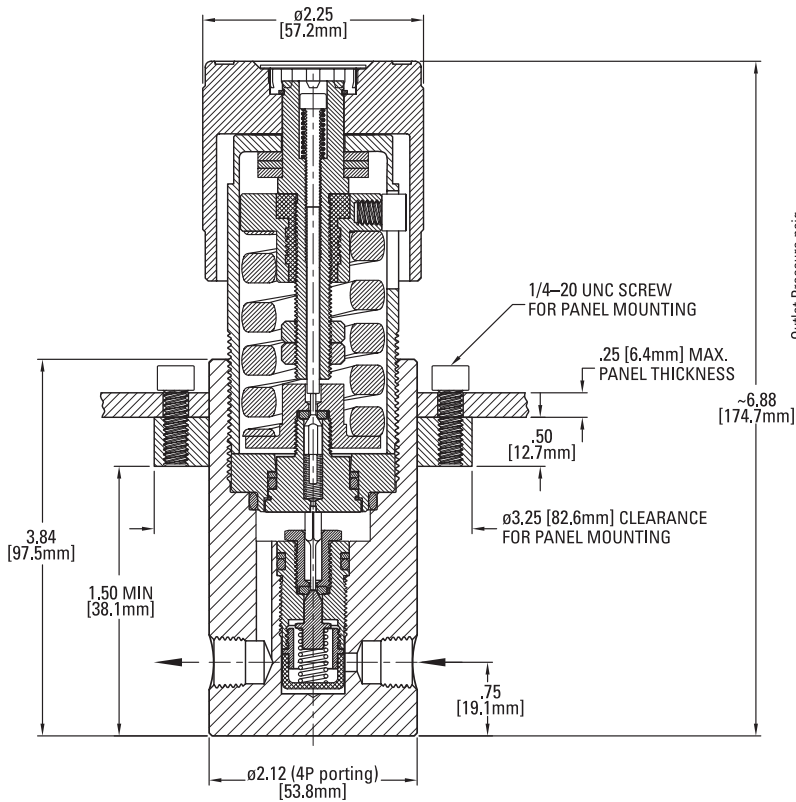
Inlet /outlet ports	1/4" NPT (options available)
Flow coefficient C <sub>v</sub>	0.06 (opt HF 0.12)
Operating temperature	-40° to +160°F (-40° to +71°C)
Leak rate	Bubble tight
Supply pressure effect	Refer to Installation and Operating Instructions
Self relieving* (must be specified)	Standard, non-relieving optional
Shipping weight (approx.)	5 lbs

#### MATERIALS OF CONSTRUCTION

	KT 10S	KT 10C	KT 10B
Body	SS, 316	SS, 300 series	Brass
Inlet filter	SS, 316	SS, 316	Bronze
Piston and trim	SS, 300 series	SS, 300 series	SS, 300 series
Seat, main valve	Polyimide (option available)	Polyimide (option available)	Polyimide (option available)
Seat, vent valve	PCTFE	PCTFE	PCTFE
O-rings	Fluoroelastomer / FKM	Fluoroelastomer / FKM	Fluoroelastomer / FKM
Rings, back up	PTFE	PTFE	PTFE

All specifications subject to change without notice.

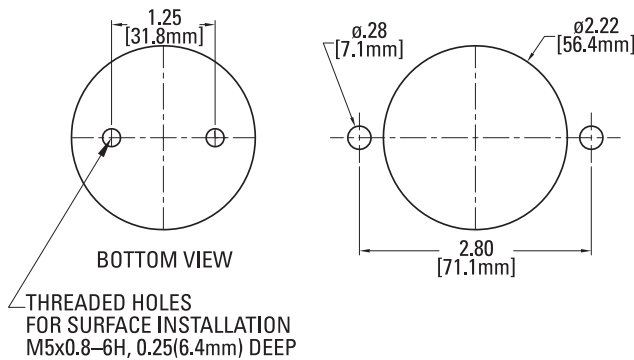
# SERIES KT 10 — QUALITY, RELIABILITY & PERFORMANCE!



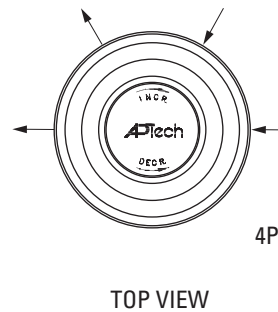
All dimensions in inches.  
Metric dimensions (mm) are for reference only.

Pneumatic Actuator Note: Please refer to installation and operating instructions for dimensional and operating information related to this option.

## Panel Installations



## 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 10 Series	L Pressure Range	1 Self-Relieving Non-Relieving	C Body Material	4P Ports	4 Connection	60 20 Gauge (Source/Delivery)	PK Options
KT 10F = 5-500 psig (0.34 to 34 bar) KT 10H = 5-800 psig (0.34 to 55 bar) KT 10J = 10-1,500 psig (0.7 to 103 bar) KT 10L = 15-2,500 psig (1 to 172 bar) KT 10N = 25-4,000 psig (1.7 to 276 bar) KT 10P = 50-6,000 psig (3.5 to 414 bar) KT 10R = 100-10,000 psig (7 to 690 bar) SS only*				4P = 4 ports	4 = 1/4 inch NPT  MS33649 porting available, consult factory	0 = No gauge 6 = 600 psig/bar 10 = 1,000 psig/bar 20 = 2,000 psig/bar 40 = 4,000 psig/bar 60 = 6,000 psig/bar Q = 10,000 psig/bar	HF = High flow*** PK = PEEK main valve seat*** UE = Polyurethane O-rings BN = Buna-N O-rings EP = Ethylene propylene O-rings P = Panel installation****
1 = Self relieving (venting) 0 = Non-relieving (non-venting) 2 = Pneumatic actuator (non-venting)**		B = Brass (4P porting only) C = Stainless steel (SS), 300 series S = Stainless steel (SS) 316		*KT 10R only available with standard seat. **Pneumatic actuator is only available with H, J, N & R pressure ranges. ***HF is not available with KT 10R or PK seat. ****Panel mount not available with pneumatic actuator option.			

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.