

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_v
(HF option, 0.12 C_v)
- ◆ Pneumatic actuator option for
pneumatic outlet pressure control
- ◆ Installation and operating instructions
available at www.aptech-online.com

*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.

‡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.

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

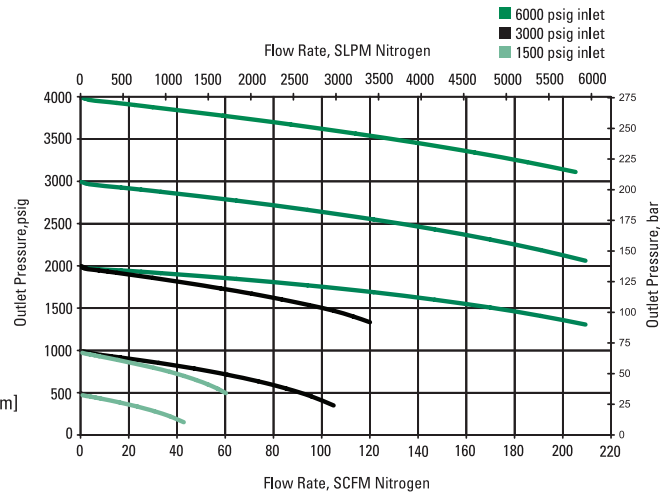
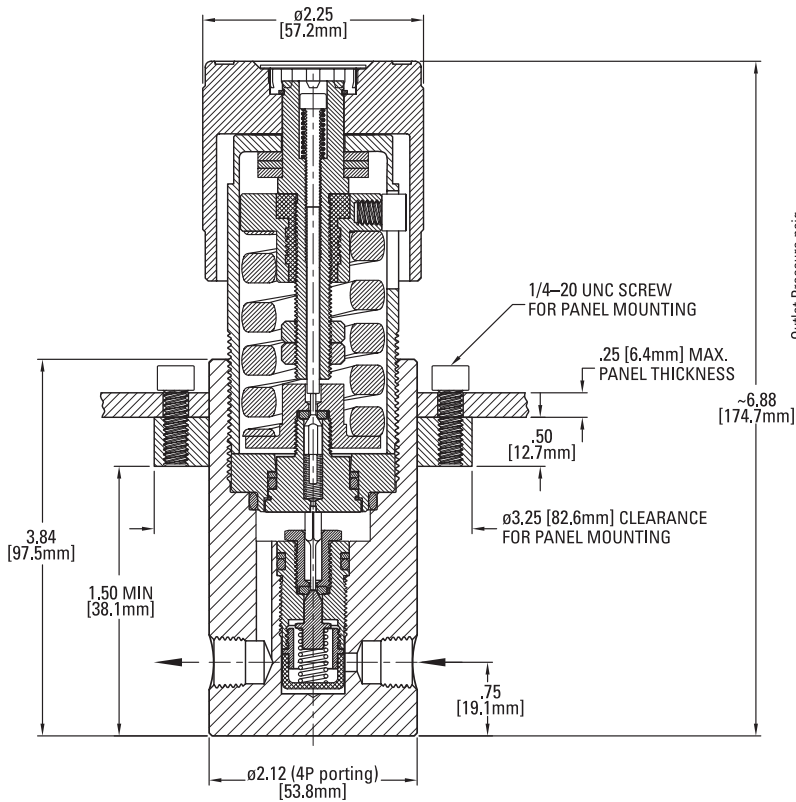
Inlet /outlet ports	1/4" NPT (options available)
Flow coefficient Cv [‡]	0.06 (opt HF 0.12)
Operating temperature	-40° to +160°F (-40° to +71°C)
Leak rate	Bubble tight
Supply pressure effect	Refer to Installation and Operating Instructions
Self relieving* (must be specified)	Standard, non-relieving optional
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.

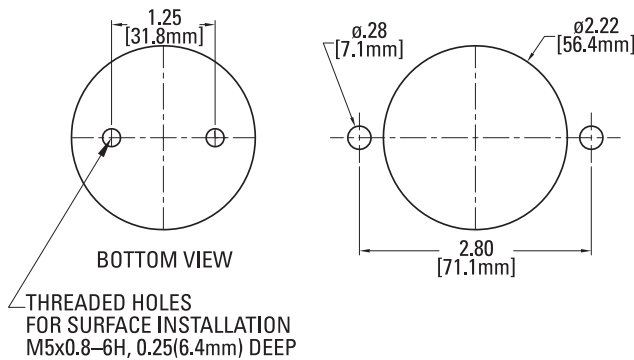
SERIES KT 10 — QUALITY, RELIABILITY & PERFORMANCE!



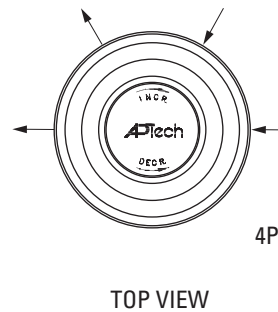
All dimensions in inches.
Metric dimensions (mm) are for reference only.

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)				4P = 4 ports	4 = 1/4 inch NPT	0 = No gauge	HF = High flow***
KT 10H = 5-800 psig (0.34 to 55 bar)						6 = 600 psig/bar	PK = PEEK main valve seat****
KT 10J = 10-1,500 psig (0.7 to 103 bar)					MS33649	10 = 1,000 psig/bar	UE = Polyurethane O-rings
KT 10L = 15-2,500 psig (1 to 172 bar)					porting available, consult factory	20 = 2,000 psig/bar	BN = Buna-N O-rings
KT 10N = 25-4,000 psig (1.7 to 276 bar)						40 = 4,000 psig/bar	EP = Ethylene propylene O-rings
KT 10P = 50-6,000 psig (3.5 to 414 bar)						60 = 6,000 psig/bar	P = Panel installation****
KT 10R = 100-10,000 psig (7 to 690 bar) SS only*						Q = 10,000 psig/bar	
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.