

SERIES KT 12

SINGLE STAGE, HIGH FLOW, HIGH PRESSURE REGULATOR



- ◆ 6,000 psig inlet (414 bar)
5 to 2,500 psig outlet (0.35 to 172 bar)
- ◆ Stainless steel or brass construction
- ◆ Self relieving and non-relieving versions**
- ◆ Machined from bar stock
- ◆ Field repairable
- ◆ Fine adjustment control
- ◆ Piston sensing element
- ◆ High flow, 0.8 C_v
Higher flow, HF option, 2.0 C_v
- ◆ High flow with high delivery pressure
- ◆ Balanced poppet design
- ◆ Pneumatic actuator option for pneumatic outlet pressure control
- ◆ Installation and operating instructions available at www.aptech-online.com in the Tech Briefs section

ENGINEERING DATA

Operating Parameters

Source pressure*	
SS body	6,000 psig (414 bar)
Brass body	5,000 psig (345 bar)
Delivery pressure	5 to 120 psig (0.35 to 8.3 bar)*
	5 to 300 psig (0.35 to 21 bar)
	5 to 600 psig (0.35 to 41 bar)
	10 to 1,000 psig (0.7 to 69 bar)
	15 to 1,500 psig (1.0 to 103 bar)
	25 to 2,500 psig (1.7 to 172 bar)
Design proof pressure	150% of operating pressures
Design burst pressure	300% of operating pressures

Other Parameters

Inlet /outlet ports	1/2" and 3/4" NPT (options available)
Flow coefficient C _v ***	0.8 (opt HF 2.0)
C _v vent valve	0.06 (self relieving option only)
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**	Standard, non-relieving optional (must be specified)
Shipping weight (approx.)	8 lb (3.6 kg)

MATERIALS OF CONSTRUCTION

MATERIAL OPTION

Body	C SS, 300 series	B Brass
Seat, valve	PCTFE	PCTFE
O-rings	Fluoroelastomer / FKM	Fluoroelastomer / FKM
Back up rings	PTFE	PTFE
Other parts	SS; 300 series, or PH 15-7 Mo	SS; 300 series, or PH 15-7 Mo
Poppet spring	302 SS (HF option 17-7 PH)	302 SS (HF option 17-7 PH)

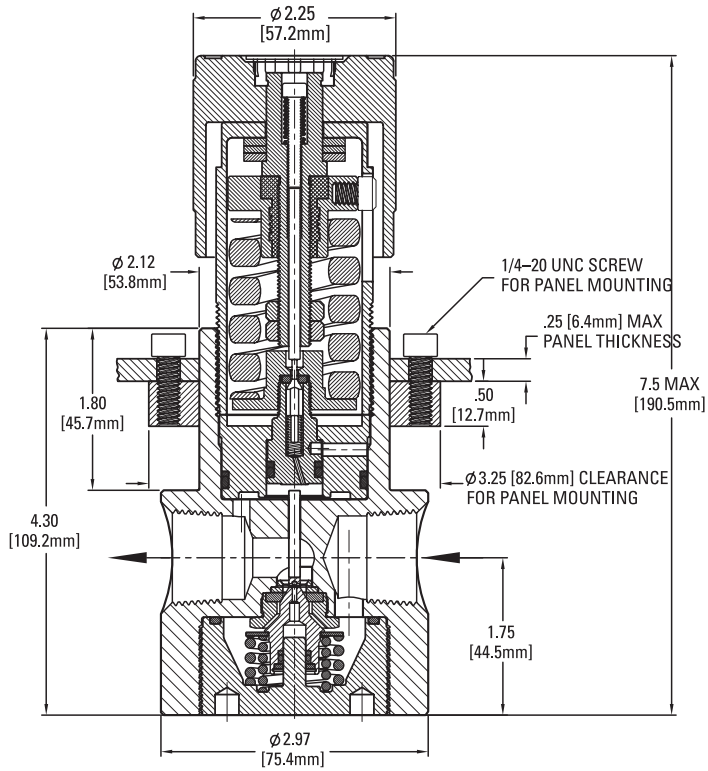
*Source pressure for 120 psig max. delivery pressure option limited to 3500 psig (241 bar) max.

**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.

***A pressure regulator C_v 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.

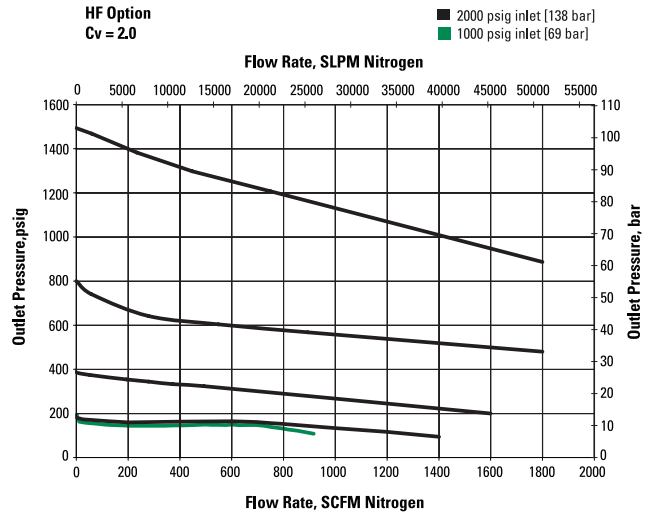
All specifications subject to change without notice.

SERIES KT 12 — QUALITY, RELIABILITY & PERFORMANCE!

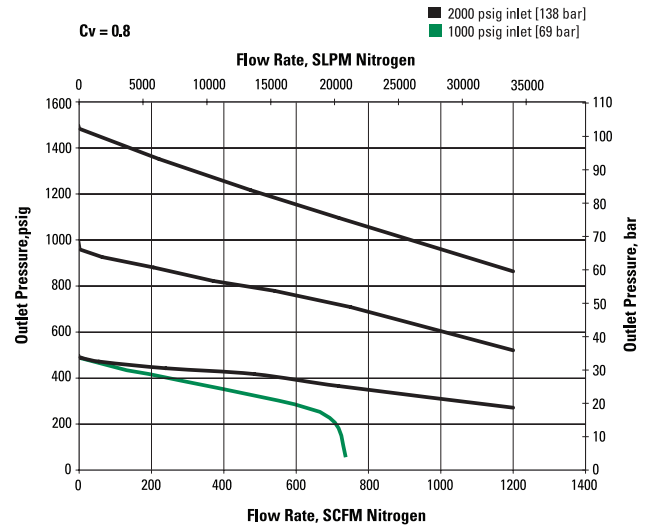


CAUTION: Product selection is the sole responsibility of the user, regardless of any recommendations or suggestions made by the factory. The user shall make selections based upon their own analysis and testing with regard to function, material compatibility and product ratings. Proper installation, operation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

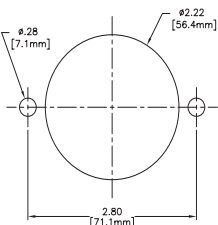
HF Option
Cv = 2.0



Cv = 0.8

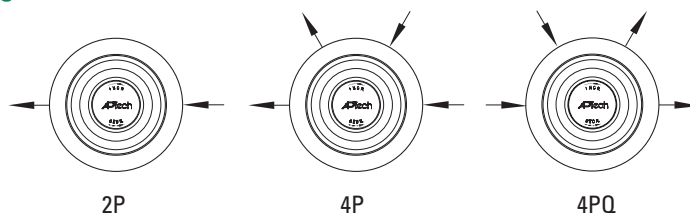


Panel Installations



Panel mount cut out dimension

Porting



ORDERING INFORMATION

KT 12 Series	J Pressure Range	1 Relieving Non-Relieving	C Material	4P Ports	8 Connection (Inlet/Outlet)	60 20 Gauge Source Delivery	P Options
KT 12B = 5-120 psig (0.35 to 8.3 bar) KT 12E = 5-300 psig (0.35 to 21 bar) KT 12G = 5-600 psig (0.35 to 41 bar) KT 12I = 10-1,000 psig (0.7 to 69 bar) KT 12J = 15-1,500 psig (1.0 to 103 bar) KT 12L = 25-2,500 psig (1.7 to 172 bar)				2P = 2 ports 4P = 4 ports 4PQ = 4 ports	8 = 1/2 inch NPT 12 = 3/4 inch NPT	0 = No gauge 4 = 400 psig/bar 6 = 600 psig/bar 10 = 1,000 psig/bar 20 = 2,000 psig/bar 40 = 4,000 psig/bar 60 = 6,000 psig/bar Gauge ports are 1/4 inch female NPT.	HF = High flow P = Panel installation** Note: HF option not recommended for H ₂ service.
		1 = Self relieving (venting) 0 = Non-relieving (non-venting) 2 = Pneumatic actuator (non-venting)*			Pneumatic Actuator Note: Please refer to installation and operating instructions for dimensional and operating information related to this option.		
		B = Brass C = Stainless steel (SS), 300 series					

*Pneumatic actuator is only available with G, J and L pressure ratings.

**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.