

# 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<sub>v</sub>  
Higher flow, HF option, 2.0 C<sub>v</sub>
- ◆ 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](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.

### MATERIALS OF CONSTRUCTION

#### MATERIAL OPTION

Body  
Seat, valve  
O-rings  
Back up rings  
Other parts  
Poppet spring

#### C

SS, 300 series  
PCTFE  
Fluoroelastomer / FKM  
PTFE  
SS; 300 series, or PH 15-7 Mo  
302 SS (HF option 17-7 PH)

#### B

Brass  
PCTFE  
Fluoroelastomer / FKM  
PTFE  
SS; 300 series, or PH 15-7 Mo  
302 SS (HF option 17-7 PH)

### 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 maximum rating

Design burst pressure

400% of maximum rating

#### Other Parameters

Inlet/outlet ports

1/2" and 3/4" NPT (options available)

Flow coefficient C<sub>v</sub>

0.8 (opt HF 2.0)

C<sub>v</sub> vent valve

0.06 (self relieving option only)

Operating temperature

-40 to +160F (-40 to +71C)

Leak rate

Bubble tight

Supply pressure effect

Refer to installation and

Operating Instructions

Self relieving\*\*

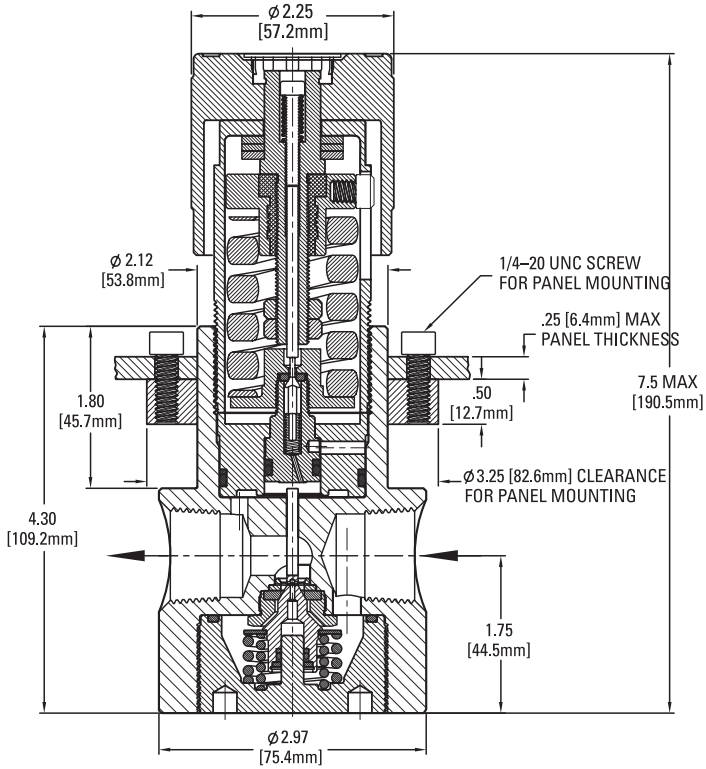
Standard, non-relieving optional  
(must be specified)

Shipping weight (approx.) 8 lb (3.6 kg)

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

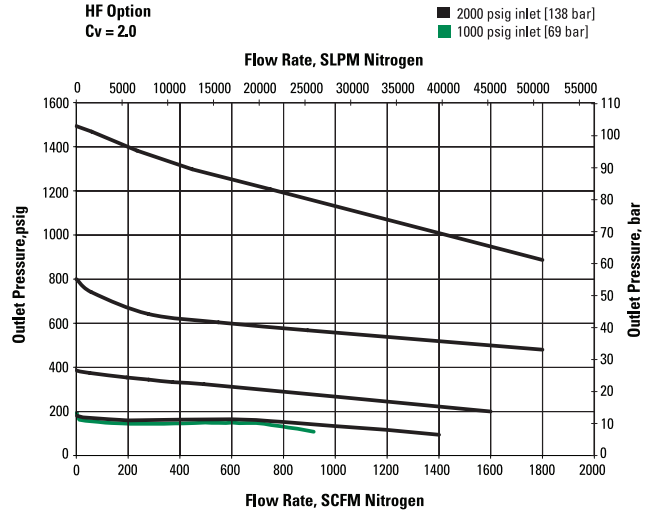
All specifications subject to change without notice.

# SERIES KT 12 — QUALITY, RELIABILITY & PERFORMANCE!

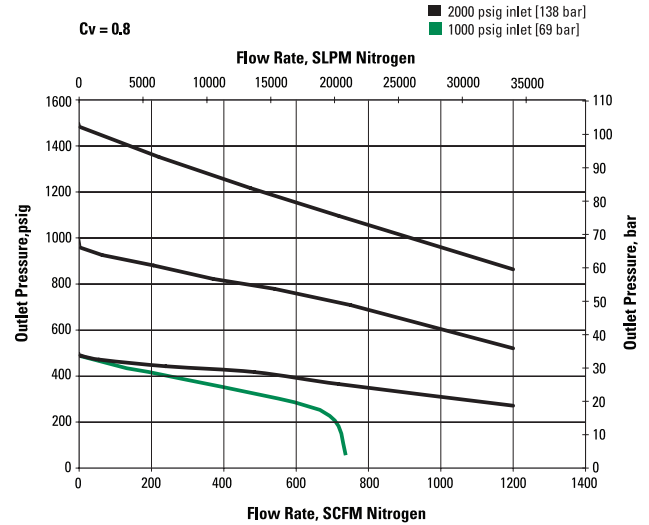


**CAUTION:** Product selection is the sole responsibility of the user, regardless of any recommendations or suggestions made by the factory. The user shall make selections based upon their own analysis and testing with regard to function, material compatibility and product ratings. Proper installation,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

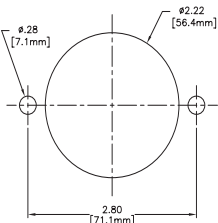
HF Option  
Cv = 2.0



Cv = 0.8

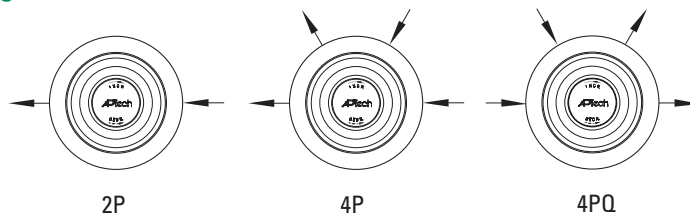


## Panel Installations



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 Delivery	P Options
KT 12B = 5-120 psig (0.35 to 8.3 bar)				2P = 2 ports	8 = 1/2 inch NPT	0 = No gauge	HF = High flow
KT 12E = 5-300 psig (0.35 to 21 bar)				4P = 4 ports	12 = 3/4 inch NPT	4 = 400 psig/bar	P = Panel installation**
KT 12G = 5-600 psig (0.35 to 41 bar)				4PQ = 4 ports		6 = 600 psig/bar	Note: HF option not recommended for H <sub>2</sub> service.
KT 12I = 10-1,000 psig (0.7 to 69 bar)						10 = 1,000 psig/bar	
KT 12J = 15-1,500 psig (1.0 to 103 bar)						20 = 2,000 psig/bar	
KT 12L = 25-2,500 psig (1.7 to 172 bar)						40 = 4,000 psig/bar	
						60 = 6,000 psig/bar	
						Gauge ports are 1/4 inch female NPT.	

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

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

\*\*Panel mount not available with pneumatic actuator option.