SERIES AK 1000T
SINGLE STAGE PRESSURE REGULATOR
COST EFFECTIVE HIGH PERFORMANCE

- Vacuum to 3,500 psig (241 bar) inlet, 150 psig (10 bar) outlet
- Flow capacity*
  0 to 100 slpm (0 to 3.5 scfm)
- Stainless Steel construction
- Ni-Cr-Mo alloy internals, ‘SHP’ option, for added corrosion resistance
- High leak integrity
- Body machined from bar stock
- Optional accessories
- Fine adjustment control
- Cleaned for O2 service
- Diffusion resistant Stainless Steel diaphragm
- Knob LOTO option
  (refer to AP KL data sheet)
- Installation and operating instructions
  available at www.aptech-online.com
  in the Tech Briefs section

** ENGINEERING DATA **

** Operating Parameters **
- Source pressure: vacuum to 3,500 psig (241 bar)
  (AK 1001T, 300 psig [21 bar] max)
- Delivery pressure:
  AK 1001T 0.5 to 10 psig (0.035 to 0.7 bar)
  AK 1002T 1 to 30 psig (0.07 to 2 bar)
  AK 1006T 1 to 60 psig (0.07 to 4 bar)
  AK 1010T 2 to 100 psig (0.14 to 7 bar)
  AK 1015T 5 to 150 psig (0.3 to 10 bar)
- Proof pressure: 150% of operating pressures
- Burst pressure: 300% of operating pressures

** Other Parameters **
- Inlet/outlet ports: 1/4” NPT; 1/4” BSPT;
  1/4” & 3/8” compression
- Flow coefficient, Cv: 0.15
- Internal volume: 0.3 in³ (4.8 cm³)
- Operating temperature: -40º to +160ºF (-40º to +71ºC)**
- Leak rate: 1 x 10⁻⁹ scs
- Supply pressure effect: 1 psig per 100 psig
  source pressure change

** MATERIALS OF CONSTRUCTION **

<table>
<thead>
<tr>
<th>Body</th>
<th>AK 1000TS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poppet and diaphragm</td>
<td>SS 316L</td>
</tr>
<tr>
<td>Seat</td>
<td>SS 316</td>
</tr>
<tr>
<td>Bonnet</td>
<td>SS 303</td>
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</tbody>
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<table>
<thead>
<tr>
<th>AK 1000TSHP</th>
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</thead>
<tbody>
<tr>
<td>SS 316L</td>
</tr>
<tr>
<td>Ni-Cr-Mo alloy / UNS N06022</td>
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<tr>
<td>PCTFE</td>
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<tr>
<td>SS 303</td>
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</tbody>
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*Flow rating based upon N2 @ 100 psig inlet, varying gas type and, or inlet/outlet pressures may effect rating.
**VS option 14º to 194ºF (-10º to +90ºC).
All specifications subject to change without notice.
ORDERING INFORMATION

AK 1002T
Series

AK 1001T = 0.5-10 psig (.03 to .7 bar)
AK 1002T = 1-30 psig (.07 to 2 bar)
AK 1006T = 1-60 psig (.07 to 4 bar)
AK 1010T = 2-100 psig (.14 to 7 bar)
AK 1015T = 5-150 psig (.3 to 10 bar)

S = Stainless steel (SS)
SHP = SS with Ni-Cr-Mo alloy diaphragm and poppet

4PL = 4 Ports
5PC = 5 Ports

Port Configuration

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<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>1/4 inch NPT</td>
<td>4T</td>
<td>1/4 inch compression</td>
</tr>
<tr>
<td>4BR</td>
<td>1/4 inch BSPT</td>
<td>6T</td>
<td>3/8 inch compression</td>
</tr>
</tbody>
</table>

NOTE: Designators required for all ports, but "0" not required if there isn’t a port. *Gauges are only available 1/4 inch NPT, BSPT not available.

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.

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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