KENCO CHEMICAL INJECTORS

INDUSTRIES SERVED: Natural Gas Transmission and Distribution • Oil and Gas Production and Refining • Petrochemical • Water Treatment • Fluid Processing • Pulp & Paper Processing

Patent No. 7,137,569

KENCO CHEMICAL INJECTORS

APPLICATION

Kenco chemical injectors are designed to inject and properly atomize corrosive chemicals into the turbulent stream of a process system pipeline. The Kenco chemical injector will minimize the possibility of corrosive chemical build-up on the walls of the pipeline.

FEATURES

- Patented aspirator tip design on injector disperses chemical evenly into process stream and away from pipe walls
- Check valve in injector eliminates backflow
- Injector is ideal for high pressure applications up to 6000 psig
- Injector has been designed so that it can be mounted in any orientation
- Standard insertion lengths available from 1-1/2” to 24” long. Custom sizes also available.
- Injector available in 316 Stainless Steel, Hastelloy C-276, and CPVC
- Ball-check material in 316 Stainless Steel injectors is 316 Stainless Steel and ball-check material in CPVC and Hastelloy injectors is ceramic.
- Ball-check retainer material in 316 Stainless Steel and CPVC injectors is Inconel. Ball-check retainer material in Hastelloy injectors is Hastelloy.
- Standard Injector chemical feed port is 1/2” NPT and process connection is 1/2” or 3/4” NPT. Flanged process connections also available, consult factory for options.

MINI-INJECTOR

- “Mini” injector assembly atomizes chemical in smaller pipelines and/or lower flowrates
- Available in 316 Stainless Steel only
- Standard Injector chemical feed port and process connection is 1/8” or 1/4” NPT

MODELS KINJ & KINJM

Temperature & Pressure Ratings

<table>
<thead>
<tr>
<th>INJECTOR MATERIAL</th>
<th>MAXIMUM WORKING PRESSURE</th>
<th>MAXIMUM OPERATING TEMPERATURE</th>
</tr>
</thead>
<tbody>
<tr>
<td>316 SS</td>
<td>6000 psig</td>
<td>800°F</td>
</tr>
<tr>
<td>Hast C–276</td>
<td>6000 psig</td>
<td>800°F</td>
</tr>
<tr>
<td>CPVC</td>
<td>340psig @ 73°F; 150 psig @ 150°F</td>
<td>200°F</td>
</tr>
</tbody>
</table>

KENCO RETRACTABLE INJECTORS

APPLICATION

Kenco retractable injectors allow for injector insertion or removal without interrupting the main process in the pipeline.

FEATURES

- Patented aspirator tip design on injector disperses chemical evenly into process stream and away from pipe walls
- Ball valve assembly isolates pipeline from injector assembly when injection is not required
- Compression seal holds the assembly from back pressure
- Safety line prevents the injector assembly from being completely withdrawn and protects against blowout
- Standard ball valve assemblies available in 316 Stainless Steel, Alloy 20, CPVC and Brass. Standard Injector Nozzle assemblies available in 316 Stainless Steel, Hastelloy C-276 and CPVC.
- Ball-check material in 316 Stainless Steel injectors is 316 Stainless Steel and ball-check material in CPVC and Hastelloy injectors is ceramic.
- Ball-check retainer material in 316 Stainless Steel and CPVC injectors is Inconel. Ball-check retainer material in Hastelloy injectors is Hastelloy. Optional check valve and/or body bleed valve available.
- Standard Retractable Injector chemical feed port is 1/2” NPT. Process connection is 3/4” NPT. Flanged process connections also available, consult factory for options.

MODELS KRINJ

Temperature & Pressure Ratings

<table>
<thead>
<tr>
<th>VALVE MATERIAL</th>
<th>MAXIMUM WORKING PRESSURE</th>
<th>MAXIMUM OPERATING TEMPERATURE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brass</td>
<td>150 psig</td>
<td>up to 350°F</td>
</tr>
<tr>
<td>316 SS</td>
<td>150 psig</td>
<td>up to 400°F</td>
</tr>
<tr>
<td>Alloy 20</td>
<td>150 psig</td>
<td>up to 400°F</td>
</tr>
<tr>
<td>CPVC</td>
<td>150psig @ 73°F; 100 psig @ 150°F</td>
<td>200°F</td>
</tr>
</tbody>
</table>

*Order Length equals measurement range plus housing clearance, but does not include inactive zones.

KENCO Chemical Injectors have a unique design engineered to minimize the possibility of corrosive chemical build-up on the walls of the pipeline.

This photograph of a KENCO injector illustrates the misting created by the unique design.
**KINJ RETRACTABLE INJECTOR**

**TYPICAL USE**

Retractable injector may be installed in any orientation around the circumference of the pipe.

**PROPER ORIENTATION OF ASPIRATOR TIP**

**WITH RESPECT TO FLOW DIRECTION FOR MAXIMUM ATOIZATION**

**RETRACTABLE INJECTOR SHOWN INSTALLED AT PROPER INSERTION DEPTH WITH OPTIMAL TIP ORIENTATION**

---

**ORDERING GUIDE**

**REQUESTED BY:**

**COMPANY:**

**ADDRESS:**

**CITY:**

**STATE:**

**ZIP:**

**PHONE:**

**FAX:**

**EMAIL:**

---

**KINJ**

**Injector Style**

**KINJ = Standard Injector**

**Process Connections**

50 = 1/2" NPT
75 = 3/4" NPT

*Flanged units available, consult factory for options*

**Material of Construction**

**S6 = 316 Stainless Steel**

**HC = Hastelloy C-276 w/ceramic ball**

**CP = CPVC w/ceramic ball**

**Insertion Length (inches)**

L1.875 = 1-7/8 for 1" to 3" pipeline
L(_)= custom length up to 6"; indicate desired length in box above

---

**KINJM**

**Injector Style**

**KINJM = Miniature Injector**

**Inlet/Process Connections**

125 = 1/8" NPT
250 = 1/4" NPT

*Flanged units available, consult factory for options*

**Material of Construction**

**S6 = 316 Stainless Steel**

**Insertion Length (inches)**

L1.875 = 1-7/8" for 1" to 3" pipeline
L(_)= custom length up to 6"; indicate desired length in box above

---

**KNIRJ**

**Injector Style**

**KNIRJ = Retractable Injector**

**Process Connections**

75 = 3/4" NPT

*Flanged units available, consult factory for options*

**Material of Construction (Valve)**

**S6 = 316 Stainless Steel**

**A20 = Alloy 20**

**CP = CPVC**

**B = Brass**

**Check Valve**

CVB = Check Valve with Body Bleed
CVN = Check Valve without Body Bleed

**Compression Seal Material**

**B = Buna-N**

**V = Fluorocarbon**

**A = Aflas**

**E = Ethylene Propylene**

**K = Kalrez**

**Insertion Length (inches)**

L1.875 = 1-7/8" for 1" to 3" pipeline
L(_)= custom length up to 6"; indicate desired length in box above

---

Kenco Sales Offices:

**Headquarters**

10001 E, 34th St.
Tulsa, OK 74146
phone 918.863.4406
fax 918.863.4480
www.kenco-eng.com
email: info@kenco-eng.com

**Baton Rouge Office**

11616 Industriellex, Suite 7
Baton Rouge, LA 70809
phone 225.755.1912
fax 225.755.1913
www.kenco-eng.com
e: kenco-la@kenco-eng.com

81578 (11-13-18)