Storm Choke™ K Safety Valve

TUBING-PRESSURE (AMBIENT) SUBSURFACE-CONTROLLED WIRELINE-RETRIEVABLE SAFETY VALVES

OVERVIEW
Storm Choke™ K safety valves are ambient-type, wireline-retrievable valves with the largest flow area of all direct-controlled safety valves on the market. They are ideally suited for high-volume, low-pressure wells. These valves are normally closed and pre-charged with a set dome pressure.

When the well flowing pressure drops below the predetermined dome-pressure charge, as a result of a rupture in flowline or surface equipment, the dome pressure and main valve spring close the valve, shutting in the well below the earth’s surface. This valve contains a detent mechanism to provide a positive snap-action closure at the valve’s predetermined disaster rate. Its bore is not restricted by a flow bean. The valve is designed to resist pressure surges. A metal-to-metal poppet valve and seat comprise the valve’s primary closure mechanism.

The K valve is ideal for protecting wells with declining bottomhole pressure. This valve closes in situations where a pressure decline would not activate a valve with a flow bean. To reopen the valve, the operator must fully equalize pressure either by applying pressure in the tubing from the surface or by an equalizing prong. The valve will reopen when the tubing pressure acting on the internal piston area overcomes the dome charge.

APPLICATIONS
» Wells with declining bottomhole pressure
» High-volume, low-pressure wells
» Wells with no provisions for surface-controlled valves

FEATURES
» Poppet closure
» Large ports with capacity for high-volume wells
» Designed to resist pressure surges

BENEFITS
» Installed and retrieved under pressure using wireline methods
» Adaptable to any Halliburton lock mandrel
» Designed to locate in any Halliburton landing nipple
» Can be located on large bore intervention packers
### Ambient Safety Valves (Poppet-Type Closure)

<table>
<thead>
<tr>
<th>Nominal Size in. (mm)</th>
<th>Compatible Lock Mandrel</th>
<th>OD in. (mm)</th>
<th>ID in. (mm)</th>
<th>Top Thread (Box)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 1/2 (38.10)</td>
<td>1.500 X®</td>
<td>1.463 (37.16)</td>
<td>0.78 (19.81)</td>
<td>1 1/8-16 UN</td>
</tr>
<tr>
<td>2 (50.80)</td>
<td>1.875 S</td>
<td>1.750 (44.45)</td>
<td>0.650 (16.51)</td>
<td>1 3/16-14 UN</td>
</tr>
<tr>
<td>2 1/2 (63.50)</td>
<td>2.313 X®</td>
<td>2.170 (55.12)</td>
<td>1.250 (31.75)</td>
<td>1 3/16-12 UN</td>
</tr>
<tr>
<td>3 1/2 (88.90)</td>
<td>2.750 X®</td>
<td>2.500 (63.50)</td>
<td>1.620 (41.15)</td>
<td>2 1/4-12 SLB</td>
</tr>
<tr>
<td>4 (101.60)</td>
<td>3.313 X®</td>
<td>3.120 (79.25)</td>
<td>2.120 (53.85)</td>
<td>2 3/4-12 SLB</td>
</tr>
<tr>
<td>4 1/2 (114.30)</td>
<td>3.813 X®</td>
<td>3.500 (88.90)</td>
<td>2.250 to 2.41(57.15 to 61.21)</td>
<td>3 1/16-12 SLB</td>
</tr>
<tr>
<td>5 (127.00)</td>
<td>4.125 X®</td>
<td>3.880 (98.55)</td>
<td>2.41 (61.21)</td>
<td>3 1/4-12.5 SLB</td>
</tr>
<tr>
<td>5 1/2 (139.70)</td>
<td>4.562 X®</td>
<td>4.440 (112.78)</td>
<td>2.880 (73.15)</td>
<td>4-12 SLB</td>
</tr>
<tr>
<td>7 (177.8)</td>
<td>5.750 X®</td>
<td>5.400 (137.16)</td>
<td>3.50 (88.90)</td>
<td>4 15/16-8 SLB</td>
</tr>
</tbody>
</table>

**Ordering Information**

Specify: nipple bore and lock profile, service (standard, %H₂S, %CO₂, amines), pressure and temperature requirements, flowing pressure at closing rate, necessity of API monogramming or other certification requirements.

**Part Number Prefixes:** 22KX, KS: poppet-closure

For more information, contact your local Halliburton representative or visit us on the web at www.halliburton.com

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