

CHLORINE

VALVES FOR CHLORINE SERVICE "K" SERIES

General

HABONIM "K" Series Chlorine Service ball valves are ideally suited for use with Chlorine according to guidelines established in the Chlorine Institute Pamphlet 6: "Piping Systems for Dry Chlorine". These valves are specially designed to meet the most demanding requirements for high quality and meticulous material selection for Chlorine applications. All valves designated for Chlorine Service are expertly prepared and cleaned to standards required for the safe operation of Chlorine Service equipment and product purity.

Chlorine

Chlorine is a hazardous, toxic material with a distinctive, pungent odor that comes in a dry state, greenish-yellow liquid state or gaseous state. Chlorine is nonflammable in both gaseous and liquid states however; it can support combustion when combined with other substances.

Chlorine Uses

Chlorine is mainly used in manufacturing chemicals; including solvents, pesticides and herbicides, plastics and fibers, refrigerants and propellants. It is also an ingredient in bleach, deodorizer and disinfectant. In addition, chlorine is widely used in bleaching pulp, paper and textiles; disinfecting drinking water and swimming pool purification; plus in sanitation of industrial and sewage wastes.

Dry Chlorine Systems

Valves for Dry Chlorine Systems are used with Chlorine in dry or liquid state, at temperatures between -101°C (-150°F) and $+149^{\circ}\text{C}$ ($+300^{\circ}\text{F}$). Steel piping is generally recommended for handling dry chlorine, defined as containing no more than 150 PPM of water by weight. Carbon steel is not recommended for service below -29°C (-20°F); it ignites in chlorine near 251°C (483°F). Stainless steels Type 300 series have useful properties for service at low temperatures but can fail due to chloride stress cracking, particularly in presence of moisture at ambient and elevated temperatures.

Monel 400 and Hastelloy C, or Hastelloy C22 are the recommended materials for ball and stem, with TFM or NRG seats. Body and stem seals can be PTFE, CF PTFE or graphite for fire-safe valves.

Valve Component Materials

Mois Ture Level	Material
0 - 20 PPM	Hastelloy C / C22 ball and Monel 400 stem
20 - 50 PPM	Hastelloy C / C22 ball and stem
0 - 50 PPM	Hastelloy C / C22 ball and stem (for end of line service)

Note: For higher moisture levels, Hastelloy C / C22 is the recommended material of construction for all metal parts.

Chlorine Hazards

Chlorine is extremely irritating to the mucous membranes, the eyes and respiratory tract. In the presence of moisture, it is highly corrosive on most common metals. All Habonim Chlorine Service Valves, components and pipe connections are constructed according to strict material specifications recommended for Chlorine applications only.

CHLORINE SERVICE BALL VALVES

End Connections

Service: Dry Chlorine Gas, vacuum to 150 PSIG

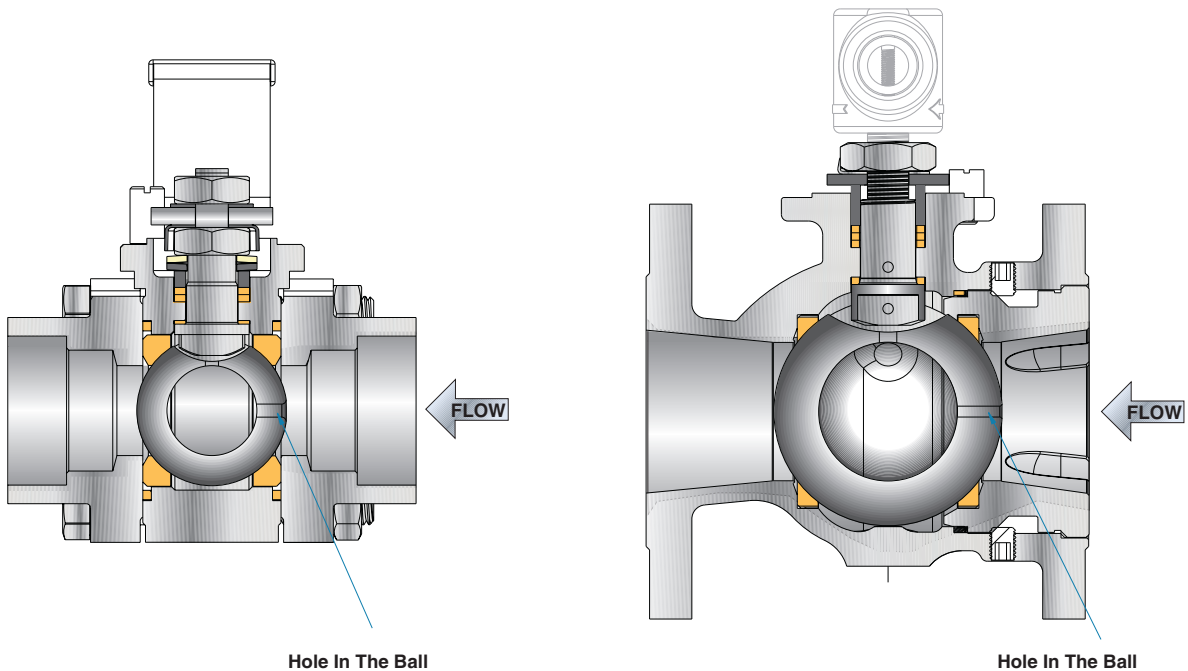
Temperature: -29°C (-20°F) to 149°C (300°F)

Sizes up to 1½"	screwed or socket weld	Class 300
Sizes 2" and above	flanged or butt weld	Class 150

Service: Dry Chlorine Gas or Liquid, vacuum to 300 PSIG

Temperature: -46°C (-50°F) to 149°C (300°F)

Sizes up to 1½"	flanged, screwed or socket weld	Class 300
Sizes 2" and above	flanged or butt weld	Class 300



Hole In The Ball

Hole In The Ball

Valve shown in closed position

In accordance with our policy to strive for continuous improvement of the product, we reserve the right to alter the dimensions, technical data and information included in this catalogue when required.

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