

## **Gases CGA Selection Chart**

## PURE GASES CGA SELECTION CHART FOR FITTINGS

CGA Fittings Required	Pure Gases		
510/300	Acetylene		
590/346/347/702	Air		
240/660/705	Ammonia		
580/680/677	Argon		
350	Arsine*		
320	Carbon Dioxide		
350	Carbon Monoxide		
660	Chlorine		
510	Cyclopropane		
350	Deuterium		
350	Ethane		
350	Ethylene		
510	Ethylene Oxide		
580/680/677	Helium		
350/695/703	Hydrogen		
330	Hydrogen Chloride		
330	Hydrogen Sulfide		
580	Krypton		
350/695/703	Methane		
510	Methyl Chloride		
580/680/677	Neon		
580/680/677	Nitrogen		
326	Nitrous Oxide		
540/577/701	Oxygen*		
350	Phosphine		
510	Propane		
350	Silane*		
668/660	Sulfur Dioxide		
590	Sulfur Hexaflouride		
580/680/677	Xenon		

## MIXED GASES CGA SELECTION CHART FOR FITTINGS

CGA Fittings	Mixed Gases		
Required	Minor Component	in	Major Component
240/660/705	Ammonia		Nitrogen
350	Butane		Nitrogen
296	Carbon Dioxide		Oxygen
580	Carbon Dioxide		Helium or Nitrogen
580	Carbon Dioxide and/or Nitrogen		Helium
590	Carbon Monoxide		Air
330	Chlorine		Nitrogen
350	Diborane		Argon, Helium, Hydrogen, Nitrogen
580	Freon-12		Nitrogen
296	Helium		Oxygen
350	Hexane		Nitrogen
350	Isobutane		Nitrogen
580	Krypton		Argon
590	Methane		Air
580	Moisture		Argon, Helium or Nitrogen
660	Nitric Oxide		Nitrogen
660	Nitrogen Dioxide		Air or Nitrogen
590	Nitrous Oxide		Nitrogen
590	Oxygen		Nitrogen or Helium
350	Propane		Nitrogen or Helium
590	Propane		Air
660	Sulfur Dioxide		Air or Nitrogen
590	Sulfur Hexaflouride		Argon, Helium or Nitrogen
350	Sulfur Hexaflouride		Hydrogen

It is recommended that the user thoroughly familiarize himself with the specific properties of these gases.

The Compressed Gas Association (CGA) has selected and standardized the valve outlet to be used on each gas cylinder. These standards, contained in the document "CGA STANDARD V-1, Compressed Gas Cylinder Valve Outlet Connections", have been adopted to prevent the inadvertent mixing of gases which could be reactive and to avoid other possible misuse hazards.

The above chart may be used for guide purposes only. Consult your gas supplier to determine the actual CGA connection required when ordering a regulator. Since the combined characteristics of a mixture of gases often differ from the properties of the separate components, different CGA connections are often required. The CGA has selected and standardized the valve outlets to be used with mixed gases. These standards are described in CGA publication V-7 - "Standard Method for Determining Cylinder Valve Outlet Connections for Industrial Gas Mixtures".

Mixtures which use the same CGA connection as if the minor component were in its pure gas form have not been included for the sake of brevity. The proper fitting for these mixtures can be determined by looking up the minor component on the chart for pure gases.