

Appendix A: Reference Tables



CGA Selection Charts

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, kr-85 |
| 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 hexafluoride |
| 580/680/677 | Xenon |

Mixed Gases CGA Selection Chart for Fittings

| CGA Fittings Required | Mixed Gases | |
|-----------------------|--------------------------------|---|
| | Minor Component | 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 |
| 330 | Chlorine | Nitrogen |
| 350 | Diborane | Argon, helium, Hydrogen, nitrogen |
| 580 | Freon-12 | Nitrogen |
| 296 | Helium | Oxygen |
| 350 | Hexane | Nitrogen |
| 350 | Isobutane | Nitrogen |
| 350 | Krypton-85 | Carbon monoxide, Hydrogen or methane |
| 330 | Krypton-85 | Chlorine |
| 540 | Krypton-85 | Oxygen |
| 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 |
| 660 | Sulfur Dioxide | Air or nitrogen |
| 590 | Sulfur Hexafluoride | Argon, helium or Nitrogen |
| 350 | Sulfur Hexafluoride | Hydrogen |
| 350 | Tritium | Argon, carbon dioxide, Hydrogen, methane, Neon, nitrogen, Krypton, or xenon |

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.

*Exceptions: Flammables in Air or Oxidizers

*Propane in air, methane in air, carbon monoxide in AIR: CGA 590

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 chart above can be used as a reference for the CGA connections.

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.