



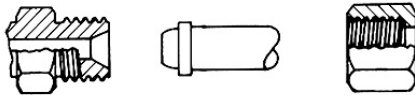
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CGA Fitting Reference

A CGA fitting is the standardized system for the attachment of a compressed gas cylinder to the required regulator or transfer line. Examples of CGA fittings would be CGA-580 for Non-flammable, Non-oxidizing gasses such as Nitrogen, Argon, or Helium. CGA-590 is used for compressed air and CGA-326 is used for Nitrous Oxide. There are approximately a dozen commonly used CGA-fittings, with others used for special purposes.

CONNECTION

CGA 020



USE / DESCRIPTION

Oxygen (A Fitting)

Standard cylinder valve outlet connection for pressures up to 200 psig (1,380 kPa). Cylinder valve outlet thread:
.375-24UNF-2A-RH-EXT

Typically used for CGA V-1 Connection Number 020, 021

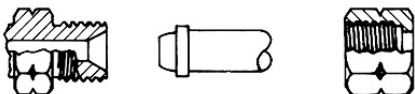
Valve Outlet Dimensions

Minor Diameter = .3228 REF
Pitch Diameter = .3468 - .3430
Major Diameter = .3739 - .3667

Connection Nut Dimensions

Major Diameter = .375 Minimum
Pitch Diameter = .3479 - .3528
Minor Diameter = .330 - .340

CGA 021



Fuel Gases (A Fitting)

Standard cylinder valve outlet connection for pressures up to 200 psig (1,380 kPa):
.375-24UNF-2A-LH-EXT

Typically used for CGA V-1 Connection Number 020, 021

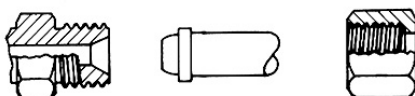
Valve Outlet Dimensions

Minor Diameter = .3228 REF
Pitch Diameter = .3468 - .3430
Major Diameter = .3739 - .3667

Connection Nut Dimensions

Major Diameter = .375 Minimum
Pitch Diameter = .3479 - .3528
Minor Diameter = .330 - .340

CGA 022



Oxygen (B Fitting)

Standard cylinder valve outlet connection for pressures up to 200 psig (1,380 kPa):
.5625-18UNF-2A-RH-EXT

Typically used for CGA V-1 Connection Number 022, 023

Valve Outlet Dimensions

Minor Diameter = .4929 REF
Pitch Diameter = .5250 - .5205

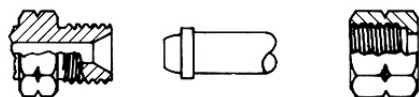
Major Diameter = .5611 - .5524

Connection Nut Dimensions

Major Diameter = .5625 Minimum

Pitch Diameter = .5264 - .5323

Minor Diameter = .502 - .515

CGA 023**Fuel Gases (B Fitting)**

Standard cylinder valve outlet connection for pressures up to 200 psig (1,380 kPa):

.5625-18UNF-2A-LH-EXT**Typically used for CGA V-1 Connection Number 022, 023****Valve Outlet Dimensions**

Minor Diameter = .4929 REF

Pitch Diameter = .5250 - .5205

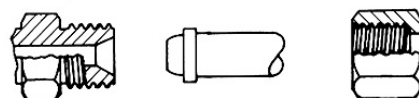
Major Diameter = .5611 - .5524

Connection Nut Dimensions

Major Diameter = .5625 Minimum

Pitch Diameter = .5264 - .5323

Minor Diameter = .502 - .515

CGA 024**Oxygen (C Fitting)**

Standard cylinder valve outlet connection for pressures up to 200 psig (1,380 kPa):

.875-14UNF-2A-RH-EXT**Typically used for CGA V-1 Connection Number 024, 025, 034, 035****Valve Outlet Dimensions**

Minor Diameter = .7858 REF

Pitch Diameter = .8270 - .8216

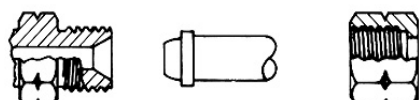
Major Diameter = .8734 - .8631

Connection Nut Dimensions

Major Diameter = .875 Minimum

Pitch Diameter = .8286 - .8356

Minor Diameter = .798 - .814

CGA 025**Fuel Gases (C Fitting)**

Standard cylinder valve outlet connection for pressures up to 200 psig (1,380 kPa):

.875-14UNF-2A-LH-EXT**Typically used for CGA V-1 Connection Number 024, 025, 034, 035****Valve Outlet Dimensions**

Minor Diameter = .7858 REF

Pitch Diameter = .8270 - .8216

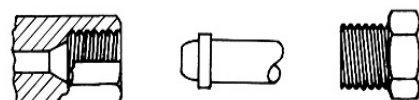
Major Diameter = .8734 - .8631

Connection Nut Dimensions

Major Diameter = .875 Minimum

Pitch Diameter = .8286 - .8356

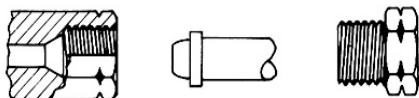
Minor Diameter = .798 - .814

CGA 032**Inert Gases (B Fitting)**

Standard cylinder valve outlet connection for pressures up to 200 psig (1,380 kPa):

.625-18UNF-2B-RH-INT**Typically used for CGA V-1 Connection Number 032, 033**

CGA 033



Industrial Air, Water (B Fitting)

Standard cylinder valve outlet connection for pressures up to 200 psig (1,380 kPa):
.625-18UNF-2B-LH-INT

Typically used for CGA V-1 Connection Number 032, 033

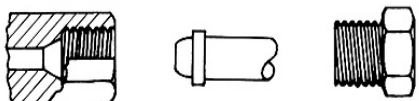
Valve Outlet Dimensions

Minor Diameter = .565 - 578
 Pitch Diameter = .5889 - .5949
 Major Diameter = .625 Minimum

Connection Nut Dimensions

Major Diameter = .6236 - .6149
 Pitch Diameter = .5875 - .5828
 Minor Diameter = .5554 REF

CGA 034



Inert Gases (C Fitting)

Standard cylinder valve outlet connection for pressures up to 200 psig (1,380 kPa):
.875-14UNF-2B-RH-INT

Typically used for CGA V-1 Connection Number 024, 025, 034, 035

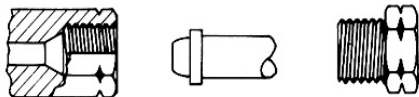
Valve Outlet Dimensions

Minor Diameter = .7858 REF
 Pitch Diameter = .8270 - .8216
 Major Diameter = .8734 - .8631

Connection Nut Dimensions

Major Diameter = .875 Minimum
 Pitch Diameter = .8286 - .8356
 Minor Diameter = .798 - .814

CGA 035



Industrial Air, Water (C Fitting)

Standard cylinder valve outlet connection for pressures up to 200 psig (1,380 kPa):
.875-14UNF-2B-LH-INT

Typically used for CGA V-1 Connection Number 024, 025, 034, 035

Valve Outlet Dimensions

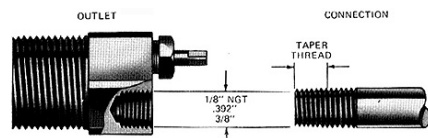
Minor Diameter = .7858 REF
 Pitch Diameter = .8270 - .8216
 Major Diameter = .8734 - .8631

Connection Nut Dimensions

Major Diameter = .875 Minimum
 Pitch Diameter = .8286 - .8356

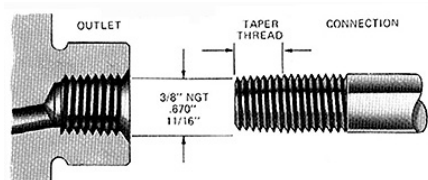
Minor Diameter = .798 - .814

CGA 160



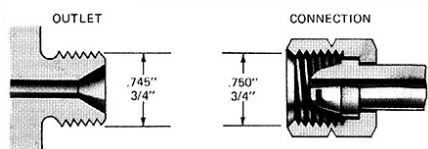
Phosgene

CGA 240



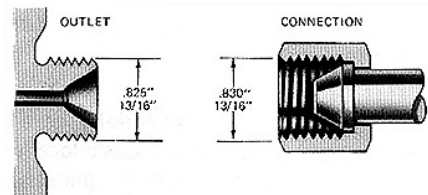
Ammonia

CGA 290



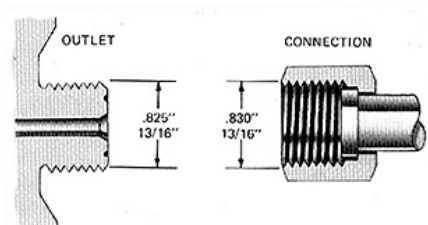
Vinyl Bromide, Vinyl Chloride, Vinyl Methyl Ether

CGA 300



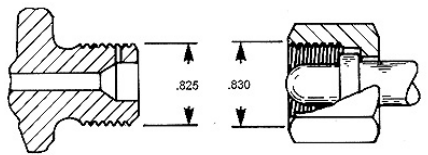
Ethyl Chloride

CGA 320



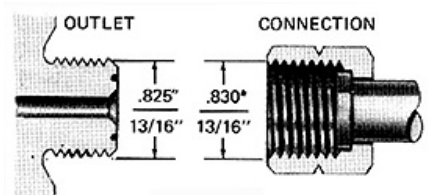
Carbon Dioxide, Methyl Fluoride

CGA 326



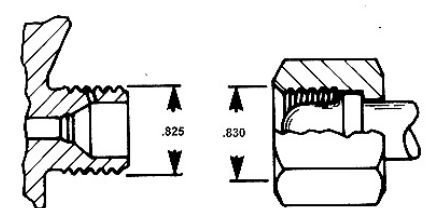
Nitrous Oxide

CGA 330



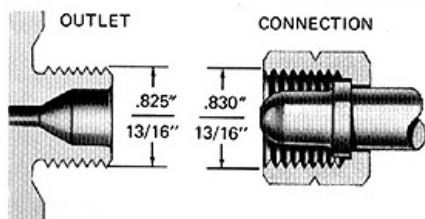
Antimony Pentafluoride, Boron Trifluoride, Carbonyl Sulfide, Deuterium Chloride, Deuterium Sulfide, Hexafluoroacetone, Hydrogen Bromide, Hydrogen Chloride, Hydrogen Iodide, Hydrogen Sulfide, Methyl Bromide, Methyl Mercaptan, Nitrogen Trifluoride, Nitrosyl Chloride, Nitrosyl Fluoride, Nitryl Fluoride, Phenylcarbylamine Chloride, Phosphorous Pentafluoride, Phosphorous Trifluoride, Silicon Tetrafluoride, Sulfur Tetrafluoride, Trifluoroacetyl Chloride, Uranium Hexafluoride

CGA 346



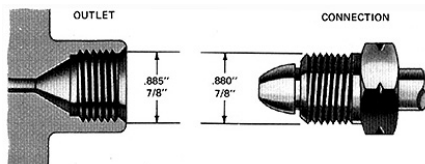
Air

CGA 350



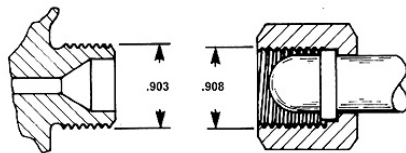
Arsine, Carbon Monoxide, Deuterium, Deuterium Selenide, Diborane, 1,1 Difluoroethylene, Ethane, Ethylene, Germane, Hydrogen, Hydrogen Selenide, Methane, Methyl Fluoride, Methylene Fluoride, Natural Gas, Pentaborane, Phosphine, Silane, Stibine, Tetrafluoroethylene, Vinyl Fluoride

CGA 510



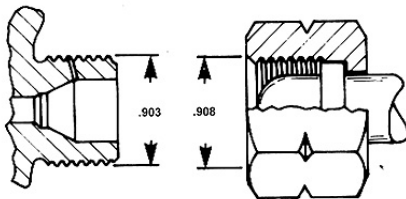
Acetylene, Allene, Bromotrifluoroethylene, 1,3-Butadiene, Butane, 1-Butene, 2-Butene, 1-Chloro-1,1-difluoroethane, Chlorofluoromethane, Chlorotrifluoroethylene, Cyclobutane, Cyclopropane, Diethylzinc, 1,1-Difluoroethane, Dimethyl Ether, 2,2 Dimethylpropane, Ethylacetylene, Ethylene Oxide, Ethyl Ether, Isobutane, Isobutylene, Methane, Methylacetylene, 3-Methyl-1-Butene, Methyl Chloride, Methyl Ethyl Ether, Natural Gas, Propane, Propylene, Silane, Triethylaluminum, 1,1,1 Trifluoroethane Trifluoroethylene, Vinyl Bromide, Vinyl Chloride, Vinyl Methyl Ether

CGA 540



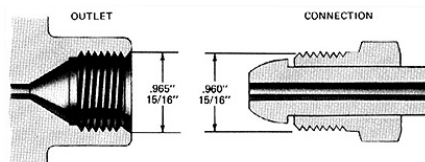
Oxygen

CGA 555



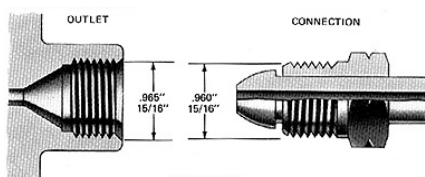
Liquid withdrawal of Butane and Propane

CGA 580



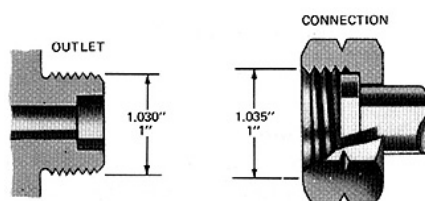
Argon, Helium, Krypton, Neon, Nitrogen, Tetra Fluoro Methane, Xenon

CGA 590



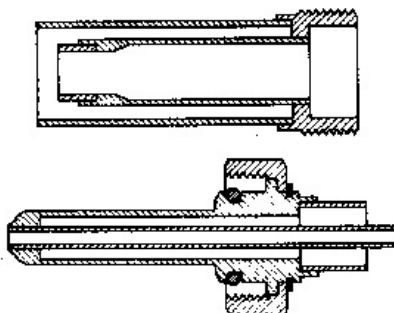
Sulfur Hexafluoride

CGA 670



Bromine Pentafluoride, Bromine Trifluoride, Chlorine Pentafluoride, Chlorine Trifluoride, Deuterium Fluoride, Hydrogen Fluoride, Iodine Pentafluoride, Nitrogen Trifluoride, Perchloryl Fluoride, Tungsten Hexafluoride

CGA 792



Liquid withdrawal of Helium and Neon

