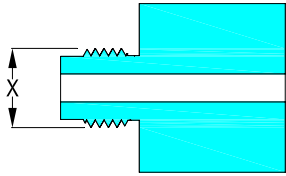


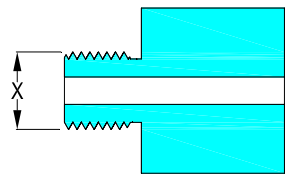
# Compressed Gas Association CGA V-1 Cylinder Valve Connections

Following is a summary of the North American Compressed Gas Association CGA V-1 cylinder valve outlet fittings. The thread specifications are technically accurate, but the dimension 'X' is only show as a reference dimension (thread I.D. or O.D.) that could be measured by someone with a cylinder in order to help determine what an unknown valve connection is. Connections with flat end sealing face require a soft sealing washer as part of the connection. Connections with angled sealing faces are intended to seal metal-to-metal, although an optional o-ring seal is possible on some connections. Teflon tape should not be used on the valve connection threads. (I.D. = inside diameter, O.D. = outside diameter)



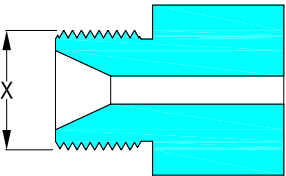
## CGA 170

0.5625" UNF RH External, 18 T.P.I.  
Face end sealing face, thread O.D. 14.2mm  
Gases: non-corrosive gases in small cylinders



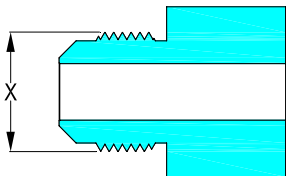
## CGA 180

0.625" UNF RH External, 18 T.P.I.  
Face end sealing face, thread O.D. 15.8mm  
Gases: all gas in small cylinders



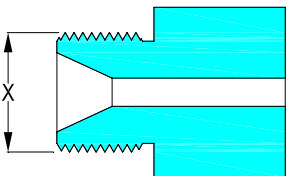
## CGA 290

0.745" NGO LH External, 14 T.P.I.  
Internal angled sealing face, thread O.D. 18.8mm  
Gases: vinyl bromide, vinyl chloride, vinyl methyl ether



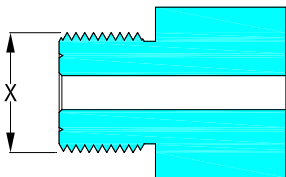
## CGA 295

0.750" UNS RH External, 14 T.P.I.  
External angled sealing face, thread O.D. 19.0mm  
Gases: certain oxidizing mixtures



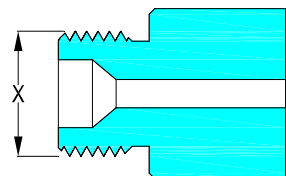
## CGA 300

0.825" NGO RH External, 14 T.P.I.  
Internal angled sealing face, thread O.D. 20.8mm  
Gases: acetylene, ethyl chloride



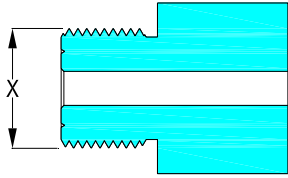
## CGA 320

0.825" NGO RH External, 14 T.P.I.  
Flat end sealing face, thread O.D. 20.8mm  
Gases: carbon dioxide



## CGA 326

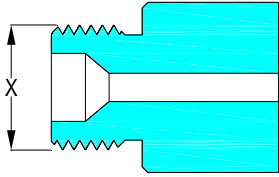
0.825" NGO RH External, 14 T.P.I.  
Internal angled sealing face, thread O.D. 20.8mm, centre hole 10.9mm x 6mm deep  
Gases: nitrous oxide

**CGA 330**

0.825" NGO LH External, 14 T.P.I.

Flat end sealing face, thread O.D. 20.8mm

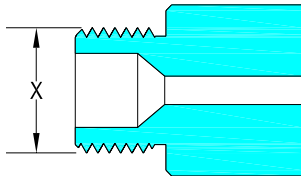
Gases: carbonyl sulphide, hydrogen chloride, hydrogen sulphide, methyl bromide

**CGA 346**

0.825" NGO RH External, 14 T.P.I.

Internal angled sealing face, thread O.D. 20.8mm, centre hole 12.8mm x 8.8 deep

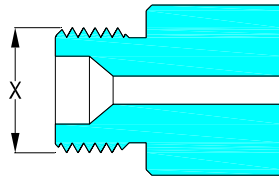
Gases: air

**CGA 347**

0.825" NGO RH External, 14 T.P.I.

Internal angled sealing face, thread O.D. 20.8mm, centre hole 12.8mm x 11.5 deep

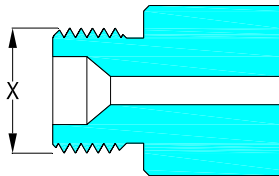
Gases: air (up to 5500 PSI)

**CGA 350**

0.825" NGO LH External, 14 T.P.I.

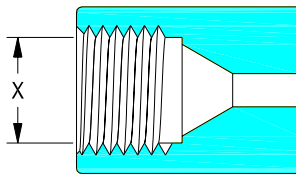
Internal angled sealing face, thread O.D. 20.8mm, centre hole 12.8mm x 7.9mm deep

Gases: carbon monoxide, ethane, ethylene, hydrogen, methane, phosphine, silane

**CGA 410**

0.850" NGO LH External, 14 T.P.I.

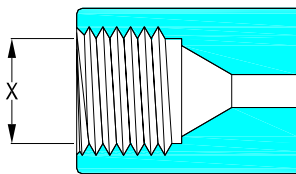
Internal angled sealing face, thread O.D. 21.4mm, centre hole 12.8mm x 7.9mm deep

**CGA 500**

0.885" NGO RH Internal, 14 T.P.I.

Internal angled sealing face, thread I.D. 21.0 mm

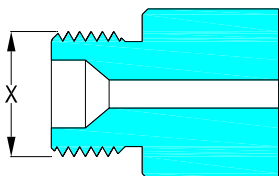
Gases: special medical gas mixtures

**CGA 510**

0.885" NGO LH Internal, 14 T.P.I.

Internal angled sealing face, thread I.D. 21.0mm

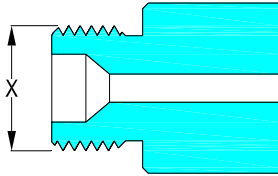
Gases: acetylene, butane, ethylene oxide, propane, silane

**CGA 540**

0.903" NGO RH External, 14 T.P.I.

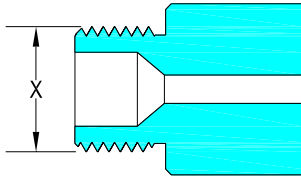
Internal angled sealing face, thread O.D. 22.8mm, centre hole 15.1mm x 5.6mm deep

Gases: oxygen



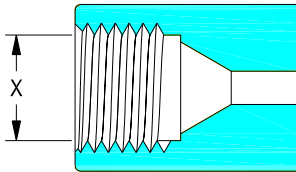
**CGA 555**

0.903" NGO LH External, 14 T.P.I.  
Internal angled sealing face, thread O.D. 22.8mm, centre hole 15.1mm x 5.6mm deep  
Gases: butane, propane (liquid withdrawal only)



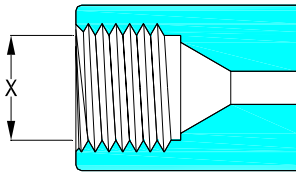
**CGA 577**

0.960" NGO RH External, 14 T.P.I.  
Internal angled sealing face, thread O.D. 24.3mm, centre hole 16.8mm x 9.7mm deep  
Gases: oxygen (up to 4000 PSI)



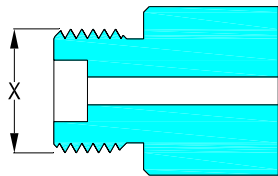
**CGA 580**

0.965" NGO RH Internal, 14 T.P.I.  
Internal angled sealing face, thread I.D. 22.6 mm  
Gases: argon, helium, krypton, neon, nitrogen, xenon



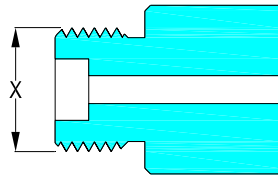
**CGA 590**

0.965" NGO LH Internal, 14 T.P.I.  
Internal angled sealing face, thread I.D. 22.6 mm  
Gases: sulphur hexafluoride



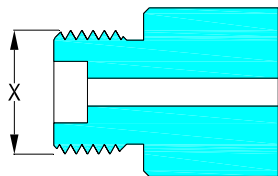
**CGA 660**

1.030" NGO RH External, 14 T.P.I.  
Flat end sealing face, thread O.D. 26.0mm  
Gases: cyanogen, nitric oxide, nitrogen dioxide, phosgene, refrigerant gases



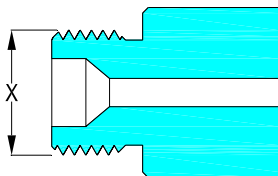
**CGA 668**

1.030" NGO RH External, 14 T.P.I.  
Internal flat sealing face, thread O.D. 26.0mm



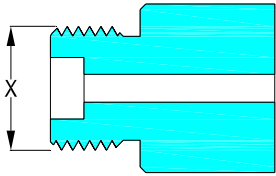
**CGA 670**

1.030" NGO LH External, 14 T.P.I.  
Flat end sealing face, thread O.D. 26.0mm



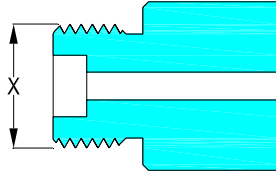
**CGA 677**

1.030" NGO LH External, 14 T.P.I.  
Internal angled sealing face, thread O.D. 26.0mm, centre hole 15.1mm x 7.1mm deep  
Gases (up to 7500 PSI): argon, helium, krypton, neon, nitrogen, xenon



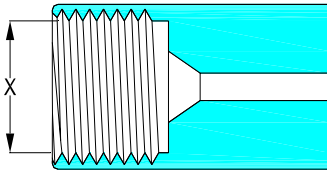
**CGA 678**

1.030" NGO LH External, 14 T.P.I.  
Internal flat sealing face, thread O.D. 26.0mm  
Gases: dichlorosilane



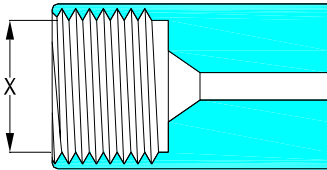
**CGA 679**

1.030" NGO LH External, 14 T.P.I.  
Internal flat sealing face, thread O.D. 26.0mm  
Gases: fluorine, oxygen difluoride



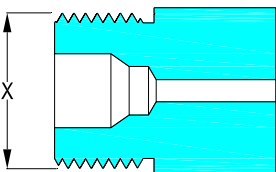
**CGA 680**

1.045" NGO RH Internal, 14 T.P.I.  
Internal angled sealing face, thread I.D. 24.6mm  
Gases (up to 5500 PSI): argon, helium, krypton, neon, nitrogen, xenon



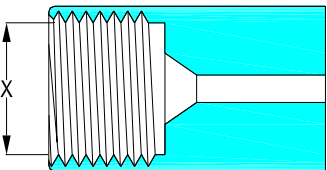
**CGA 695**

1.045" NGO LH Internal, 14 T.P.I.  
Internal angled sealing face, thread I.D. 24.6mm  
Gases (up to 5500 PSI): hydrogen, methane, natural gas, flammable gases



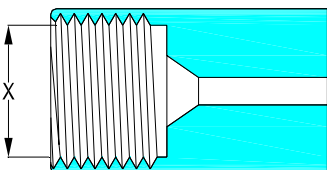
**CGA 701**

1.103" NGO RH External, 14 T.P.I.  
Internal angled sealing face, thread O.D. 27.9mm, centre hole 13.3mm x 10.2mm dep  
Gases (up to 5500 PSI): oxygen



**CGA 702**

1.125" NGO RH Internal, 14 T.P.I.  
Internal angled sealing face, thread I.D. 26.7mm  
Gases (up to 7500 PSI): air



**CGA 703**

1.125" NGO LH Internal, 14 T.P.I.  
Internal angled sealing face, thread I.D. 26.7mm  
Gases (up to 7500 PSI): hydrogen, methane, natural gas, flammable gases