

Regulator Inlet Fitting Chart

Most countries have their own Standards for cylinder valve connections. Some gases have their own unique connections, while some gases with similar properties may share the same connection type. One gas, or group of gases, may have several different connection specifications according to cylinder size or maximum cylinder fill pressure. Cylinder connections either seal metal-to-metal, or by the use of a soft sealing washer, (some metal-to-metal connections types may allow the use of an o-ring seal). PTFE tape should not be used on cylinder valve outlet connections.

Regulator inlet connections are normally available in brass or stainless steel. Some fittings may not be available in brass depending on the properties of the gas they are intended to be used with. A good guideline is to follow the cylinder valve material, (ie. if the cylinder valve is brass, brass or stainless regulators and fittings should be acceptable, if the cylinder valve is stainless steel brass regulators and fittings should not be used.).

With so many different internationally recognised gas cylinder valve connections being used, there is some inter-changeability of fittings between different countries. Advice from a reliable source should be sought before using fittings from one Standard on cylinder valves from another Standard. Most cylinder valve fittings are available for purchase as separate components, but a few types will only be sold as part of a complete regulator due to the "high risk" nature of the gas the fitting is intended to be used with.

More detailed information on cylinder valve connections can be downloaded from the "useful information" page on the Gascon web site (www.gascon.com.au).

Australian AS Inlet Fittings:

Australian threaded gas cylinder valve connections are specified in AS2473.2. They are generally referred to as "Type XX" fittings, where XX is a two digit number. The Australian Standard clearly defines what connections should be used for pure gases, but unfortunately is not so well defined on the connections to be used for gas mixtures. It is recommended that before ordering equipment for gas mixtures that the user contacts their gas supplier to confirm exactly what type cylinder valve connection it will be supplied with. Some speciality gases may be imported from overseas, and these will most likely be supplied with an overseas Standard cylinder valve connection. Once again it is recommended that the user confirm the connection with their gas supplier.



Connection Type	Gascon Numbering Code
Type 10	T10
Type 11	T11
Type 20	T20
Type 21	T21
Type 30	T30
Type 31	T31
Type 32	T32
Type 40	T40
Type 44	T44
Type 45	T45
Type 50	T50
Type 51	T51
Type 60	T60
Type 61	T61
Others	Call Gascon Systems

American CGA Inlet Fittings:

North American cylinder valve connections are specified in CGA V-1, (CGA = Compressed Gas Association). They are generally referred to as "CGA XXX" fittings, where XXX is a three digit number. CGA cylinder connections are in wide use in Australia. The CGA V-1 Standard also includes medical pin indexed yoke connections. Recently a range of ultra high purity gas specific cylinder connections was introduced by the CGA. These are not currently in



Connection Type	Gascon Numbering Code
CGA170	170
CGA180	180
CGA300	300
CGA320	320
CGA326	326
CGA330	330
CGA346	346
CGA347	347
CGA350	35
CGA510	510
CGA540	540
CGA580	580
CGA590	590
CGA660	660
CGA626	626
CGA705	705
Others	Call Gascon System

British BS Inlet Fittings:

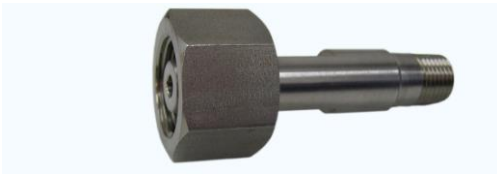
British threaded gas cylinder valves connections are specified in BS341-3. They are general referred to as “BS Number XX” fittings, where XX is a two digit number. Many of the Australian cylinder valve connections were based on the British Standard and can be used as equivalents, (although gases and pressure rating maybe different).



Connection Type	Gascon Numbering Code
BS341 No 2 & 4	B02, B04 or T20
BS341 No 3	B03 or T10
BS341 No 6	B06
BS341 No 7	B07
BS341 No 8	B08 or T30
BS341 No 10	B10 or T32
BS341 No 11	B11 or T42
BS341 No 13	B13
BS341 No 14	B14 or T44
BS341 No 15	B15 or T45
BS341 No 16	B16
BS341 No 17	B17
Others	Call Gascon Systems

German DIN Inlet Fittings:

German threaded gas cylinder valves connections are specified in DIN 477 Part 1. They are general referred to as “DIN Number XX” fittings, where XX is a two digit number. DIN cylinders connections are occasionally used in Australia.



Connection Type	Gascon Numbering Code
DIN No1	D01
DIN No 5	D05
DIN No 6	D06
DIN No 7	D07
DIN No 8	D08
DIN No 9	D09
DIN No 10	D10
DIN No 11	D11
DIN No 12	D12
DIN No 13	D13
DIN No 14	D14
DIN No 15	D15
Others	Call Gascon Systems

French AFNOR Inlet Fittings:

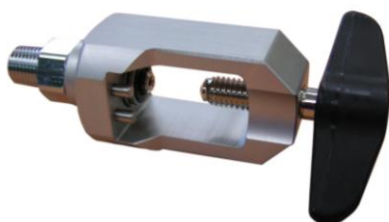
French threaded gas cylinder valves connections are specified in AFNOR NFE29-650. They are general referred to as “AFNOR or NF X” fittings, where X is a letter. AFNOR cylinders connections are occasionally used in Australia.



Connection Size	Gascon Numbering Code
NF B	“B”
NF C	“C”
NF D	“D”
NF E	“E”
Others	Call Gascon Systems

Medical Pin Indexed Yoke Inlet Fittings:

The medical pin indexed yoke connection is one of the few globally harmonised gas cylinder valve connections type. It is specified in several Standards such as AS2473.2, CGA V-1, ISO 407. Each medical gas has its own specific set of indexing pins to form a gas specific connection. Yoke connections are available in two types, a fixed position version that is intended for regulators, and a swivel version that is intended for high pressure flexible leads. The standard yoke body material is anodised aluminium, but brass and chrome plated brass bodies are also available.



Connection Type	Gascon Numbering Code
As each gas has its own specific connection, just use the letter “Y” and the gas type to specify as yoke connection	Y