

COMPRESSED GAS CYLINDER OUTLET CONNECTIONS

USA OR CANADA - CGA			
Connector Type	Connector Thread	Gas or Gas Mixture	Remarks
CGA 110	0.3125 - 32 UNEF INT	All Gases	Small Cylinders
CGA 170	9/16" - 18 UNF INT	Argon, Helium	Non Corrosive, Small Cylinders
CGA 180	5/8" - 18 UNF INT	All Gases	Small Cylinders
CGA 240	3/8" - 18 NPT	Ammonia	Toxic
CGA 296	0.803" - 14 UNS INT	Oxygen Mix > 23%	Oxidizing Mixtures
CGA 300	0.825" - 14 NGO	Ethyl Chloride	Refrigerant
CGA 320	0.825" - 14 NGO	Carbon Dioxide	Non Flammable
CGA 326	0.825" - 14 NGO	Air	Oxidizer
CGA 330	0.825" - 14 NGO LH	Hydrogen Chloride	Toxic
CGA 346	0.825" - 14 NGO	Air	Oxidizer
CGA 350	0.825" - 14 NGO LH	Hydrogen Methane	Flammable
CGA 510	0.825" - 14 NGO LH INT	Propane	Flammable
CGA 540	0.903" - 14 NGO	Oxygen	Oxidizer
CGA 580	0.965" - 14 NGO INT	Argon, Nitrogen	Inerts
CGA 590	0.965" - 14 NGO LM INT	Air	Oxidizer
CGA 660	1.030" - 14 NGO	Hydrogen Sulphide	Toxic
CGA 679	1.030" - 14 NGO LH	Nitrogen	High Pressure
CGA 705	1.125" - 14 UNS LH	Ammonia	Toxic

ARGENTINA - IRAM 2539			
Connector Type	Connector Thread	Gas or Gas Mixture	Remarks
IRAM 2539 No. 1	3/4" BSP x 1/14" - INT	Acetylene	Flammable
IRAM 2539 No. 2	W 21.8 - 1 1/4	Oxygen, Sulphur Hexafluoride	Various
IRAM 2539 No. 3	5/8" BSP - INT	Argon, Nitrogen	Non Flammable
IRAM 2539 No. 4	W 21.8 - 1/4	Ethane, Hydrogen	Flammable
IRAM 2539 No. 5	3/8" BSP - INT	Nitrous Oxide	Oxidizer

AUSTRALIA & NEW ZEALAND - AS 2473.2			
Connector Type	Connector Thread	Gas or Gas Mixture	Remarks
Type 10	G 5/8" RH INT	Argon, Helium, Oxygen =< 20,000 kPa	Non Flammable
Type 11	G 5/8" RH INT Extended nipple	Oxygen >20,000 kPa, =< 25,000 kPa	Oxidizer
Type 20	G 5/8" LH INT	Acetylene, Hydrogen, Ethylene, Methane	Flammable
Type 21	0.885" - 14 NGO LH INT	LPG, Propane	Flammable
Type 30	0.860" - 14 BSW RH EXT	Carbon Dioxide, Nitrous Oxide	Non Flammable / Oxidizer
Type 31	G 5/8"	Sulphur Hexafluoride, Phosgene, Methyl Bromide	Chemical Gases
Type 32	G 1/2"	Ammonia, Sulphur Dioxide	Toxic
Type 33	G 1/4"	Small cyls <4.5l water capacity	Non Toxic, Non Flammable Mixtures
Type 34	G 3/4"	R134a	Refrigerant

continued from previous page

AUSTRALIA & NEW ZEALAND - AS 2473.2			
Connector Type	Connector Thread	Gas or Gas Mixture	Remarks
Type 40	G 5/8" LH EXT	Ethylene Oxide	Toxic
Type 41	G 3/8" BSP LH EXT	LPG, Propane	Flammable
Type 42	G 1/2" LH EXT	Methylamine	Flammable
Type 43	0.825" - 14 NGO LH EXT	Hydrogen Chloride, Hydrogen Sulphide	Toxic / Corrosive
Type 44	G 3/8" BSP	Calibration gas mixtures	Toxic, Non Flammable Mixtures
Type 50	24x2 Whit	Nitrogen =<20,000 kPa	Inert
Type 51	1.045" - 14 NGO RH INT	Nitrogen >20,000 kPa	Inert
Type 60	27x2 Whit	Air =<20,000 kPa	Non Flammable
Type 61	0.825" - 14 NGO	Air >20,000 kPa	Non Flammable

BRAZIL - ABNT			
Connector Type	Connector Thread	Gas or Gas Mixture	Remarks
ABNT 172-1	3/8" -18 NGT INT	Ammonia	Toxic
ABNT 218-1	W 21.8 x 1/14" INT	Air, Oxygen, Oxygen Mix >20%	Oxidizer
ABNT 218-2	W 21.8 x 1/14" LH INT	Hydrogen, Methane	Flammable
ABNT 225-2	0.885" - 14 NGO LH	Acetylene, Butane	Flammable
ABNT 245-1	0.960" - 14 NGO	Argon, Helium, Nitrogen	Inerts
ABNT 245-1	0.960" - 14 NGO	Inert gases + Oxygen Mix <20%	Inerts
ABNT 245-2	0.960" - 14 NGO LH	Sulphur Hexafluoride	Non Flammable
ABNT 262-1	1.035" - 14 NGO INT	Sulphur Dioxide, Chlorine	Toxic
ABNT 209-1	0.830" - 14 NGO INT	Carbon Dioxide	Non Flammable
ABNT 209-2	0.830" - 14 NGO LH INT (Round Nipple)	Carbon Monoxide, Phosphine, Silane	Toxic, Flammable
ABNT 209-4	0.830" - 14 NGO LH INT (Flat Nipple)	Hydrogen Chloride, Hydrogen Sulphide	Toxic
ABNT 166-1	G 3/8" A - ISO 228-1	Nitrous Oxide	Oxidizer

FRANCE - AFNOR			
Connector Type	Connector Thread	Gas or Gas Mixture	Remarks
NF B	W 30 x 1.75	Industrial Air	Toxic
NF C	SI 21.7 x 1.814	Argon, Helium, Nitrogen	Oxidizer
NF E	SI 21.7 x 1.814 LH	Hydrogen, Hydrogen Mix >4%	Flammable
NF F	SI 22.94 x 1.814 INT	Oxygen	Flammable
NF G	SI 26 x 1.5 INT	Nitrous Oxide	Inert
NF H	W 22.91 x 1.814 LH INT	Acetylene	Inert
NF J	W 25.4 x 3.175	Chlorine	Non Flammable
NF K	W 27 x 2	Hydrogen Chloride	Toxic
NF L	W 27 x 2	Inert gases + Oxygen Mix > 21%	Oxidizer
NF M	W 30 x 2	Inert gases + Oxygen Mix > 21% & CO2 < 7%Silane	Oxidizer
NF P	W 27 x 2	Nitric Oxide, Nitrogen DioxideSulphide	Oxidizer or Corrosive

GERMANY (AND MOST EUROPEAN COUNTRIES) - DIN 477

Connector Type	Connector Thread	Gas or Gas Mixture	Remarks
DIN 477 No. 1	W 21.8 x 1/14" LH	Hydrogen, Propane	Flammable
DIN 477 No. 2	W 21.8" x 1/14" LH	Propane	Flammable
DIN 477 No. 3	Yoke	Acetylene	Flammable
DIN 477 No. 3.1	M 24 x 2" LH	Acetylene	Flammable
DIN 477 No. 5	W 1" x 1/8" LH	Carbon Monoxide	Toxic
DIN 477 No. 6	W 21.8 x 1/14"	Argon, Helium, Carbon Dioxide	Various
DIN 477 No. 7	G 5/8"	Sulphur Dioxide	Toxic
DIN 477 No. 8	W 1" x 1/8"	Boron Trichloride	Toxic
DIN 477 No. 9	G 3/4"	Oxygen	Oxidizer
DIN 477 No. 10	W 24.32 x 1/14" RH	Nitrogen	Inerts
DIN 477 No. 11	G 3/8"	Nitrous Oxide (<3 l size)	Oxidizer
DIN 477 No. 12	G 3/4" INT	Nitrous Oxide (<3 l size)	Oxidizer
DIN 477 No. 13	G 5/8" INT	Air	Non Flammable
DIN 477 No. 14	M 19 x 1.5 LH	Mixtures	Various

ITALY - UNI

Connector Type	Connector Thread	Gas or Gas Mixture	Remarks
UNI 4405	W 20 x 1/14" LH	Hydrogen	Flammable
UNI 4406	W 21.7 x 1/14"	Carbon Dioxide, Oxygen	Non Flammable / Oxidizer
UNI 4407	W 30 x 1/14"	Ammonia	Toxic
UNI 4408	W 1" x 1/8"	Chlorine	Toxic
UNI 4409	W 21.7 x 1/14"	Nitrogen	Inert
UNI 4410	W 30 x 1/14"	Air	Non Flammable
UNI 4411	W 22.9 x 1/14"	Acetylene	Flammable
UNI 4412	W 24.5 x 1/14"	Argon, Helium	Inerts
UNI 9097	G 3/8" EXT	Nitrous Oxide	Oxidizer

NETHERLANDS - NEN 3268

Connector Type	Connector Thread	Gas or Gas Mixture	Remarks
LU 0	M 19 x 1.5 LH	Flammable Mixtures	Flammable Mixtures
LU 1	W 21.8 - 1/14" LH	Hydrogen, Methane	Flammable
LU 4	W 25.4 x 3.175" LH	Hydrogen Cyanide	Toxic
RI 2	G 22.91 x 1.814" RH	Oxygen	Oxidizer
RU 1	W 21.8 - 1/14"	Ammonia, Carbon Dioxide	Refrigerants
RU 3	W 24.32 - 1/14"	Argon, Helium, Nitrogen	Inerts
RU 4	W 25.4 x 3.175" RH	Chlorine, Hydrogen Chloride, Sulphur Dioxide	Toxic
RU 6	W 28.81 x 1.814" RH	Air	Oxidizer

SPAIN - ITC EP6

Connector Type	Connector Thread	Gas or Gas Mixture	Remarks
TIPO B	M 30 x 1.75	Air	Non Flammable
TIPO C	W 21.7 x 1/14"	Argon, Helium, Nitrogen	Inerts

continued from previous page

SPAIN - ITC EP6			
Connector Type	Connector Thread	Gas or Gas Mixture	Remarks
TIPO E	W 21.7 x 1/14" LH	Hydrogen, Methane, Propane	Flammable
TIPO F	G 5/8" INT	Oxygen	Oxidizer
TIPO G	M 26 x 1.5 INT	Oxygen Mix > 23%	Oxidizing Mixtures
TIPO H	G 5/8" LH INT	Acetylene	Flammable
TIPO J	W 1"	Hydrogen Chloride, Hydrogen Bromide	Toxic and Corrosive
TIPO M	M 19 x 1.5 LH	Calibration Gas Mixtures	Mixtures
TIPO T	W 31.75 x 1/7" 237	Chlorine Drum Tanks	Toxic or Corrosive
TIPO U	G 3/8"	Nitrous Oxide	Oxidizer

UK - BS 341			
Connector Type	Connector Thread	Gas or Gas Mixture	Remarks
BS 341 No. 2	G 5/8" LH	Acetylene	Flammable
BS 341 No. 3	G 5/8" INT	Air, Argon, Neon, Nitrogen	Inert
BS 341 No. 3	G 5/8" INT	Oxygen	Oxidizer
BS 341 No. 4	G 5/8" LH INT	Acetylene, Hydrogen	Flammable
BS 341 No. 4	G 5/8"	Carbon Monoxide, Methane, Natural Gas	Flammable
BS 341 No. 6	G 5/8" LH	Chlorine, Hydrogen Chloride	Toxic
BS 341 No. 7	W 0.860" x 14 TPI	Flammable Refrigerants	Flammable Refrigerants
BS 341 No. 8	W 0.860" x 14 TPI	Carbon Dioxide	Non Flammable
BS 341 No. 10	G 1/2"	Ammonia	Toxic
BS 341 No. 12	G 1/2"	Sulphur Dioxide	Toxic
BS 341 No. 13	W 11/16" - 20 TPI	Nitrous Oxide	Oxidizer
BS 341 No. 14	G 3/8"	Hydrogen Cyanide, Nitric Oxide	Toxic
BS 341 No. 5	G 3/8" LH	Carbonyl Sulphide, Hydrogen Sulphide	Toxic