Carbon Dioxide

CO_2

Grade	4N	4N5	ULSI 5N
Purity, %	99.99	99.995	99.999
Oxygen	≤20.0 ppmv	≤10.0 ppmv	≤1 ppmv
Nitrogen	≤50.0 ppmv	≤20.0 ppmv	≤1 ppmv
Carbon Monoxide			≤0.2 ppmv
Total Hydrocarbons (CH_4)		≤5 ppmv	≤4 ppmv
Water		≤5 ppmv	≤2 ppmv
Hydrogen			≤1 ppmv

- A lot analysis is provided for each order. – Individual analysis is also available upon request.
- Pneumatic valves and JIS connections are available upon request.
- A FLET (Full Length Educator Tube) is available upon request.

CYLINDER

Internal Volume	Liters	43.8	17.1
Cylinder Sizes >>		**QF/QA/QB**	**GF/GA**
Content	lbs	60	24
	kg	27.2	10.9
Change Point*	lbs	19.56	7.64

*Recommended Cylinder Change Point at NTP, based on Phase Break, or the amount of product left in the cylinder when the liquid phase has completely evaporated and only gaseous product is left (estimate based on ideal gas behavior).

SHIP

DOT Shipping Name	Carbon Dioxide	UN Number	UN 1013	Shipped as
DOT Classification	2.2 (Non-Flammable Gas)	ECCN #	1C980	Liquefied
DOT Label	NON-FLAMMABLE GAS	Harmonized #	2811.21.0000	Gas

TECHNICAL DATA

Cylinder Pressure @NTP	830 psig 59.4 atm
Specific Volume @NTP	0.54 m^3/kg 8.74 ft^3/lb
CAS No	124-38-9
CGA/DISS/JIS	320/716/W22-14R
Molecular Weight	44.01 g/mol

Critical Temperature	31°C	87.9°F
Critical Pressure	72.85 atm	1,071 psia

NTP = 21°C or 70°F and 101.3 kPa or 1 atm

Cylinder	Treatment	Nominal Diameter (OD)xHeight*		Material of Construction	
		cm	Inches	Cylinder	Valve
QF	ULTRA-LINE®	23x130/134/143	9x51/52.5/56	CS	SS
QA	ULTRA-LINE®	23x130/134/143	9x51/52.5/56	CS	Brass
QB	ULTRA-LINE II®	23x130/134/143	9x51/52.5/56	CS	SS
GF	ULTRA-LINE®	23x66/70/79	9x26/27.5/31	CS	SS
GA	ULTRA-LINE®	23x66/70/79	9x26/27.5/31	CS	Brass

*Height is reported as the distance from the bottom of the cylinder to the cylinder neck/ center of the valve outlet/ top of the handwheel
CS: Carbon Steel SS: Stainless Steel

⚠ WARNING: This product can expose you to chemicals including Carbon Monoxide, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

MATHESON
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