## Specialty Gas Cylinder Information





## Specialty Gas Cylinder Dimensions

| Size | Product Number Description Digits | DOT Specification | $\left.\begin{array}{c}\text { Nominal } \\ \text { Dimensions } \\ \text { (Excluding Valve and Cap) } \\ \text { in } \\ \text { (cm) }\end{array}\right)$. |  |  |  | $\substack{\text { Average } \\ \text { Internal } \\ \text { Volume } \\ \\ \mathrm{ft}^{3} \\ \\ \text { (L) }}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| High Pressure |  |  |  |  |  |  |  |  |
| A | 01 | 3AA2400 | $9 \times 55$ | ( $23 \times 140$ ) | 137 | (62) | 1.76 | (49.8) |
| B | 02 | 3AA2265 | $9 \times 51$ | $(23 \times 130)$ | 119 | (54) | 1.55 | (43.9) |
| C | 03 | 3A2015 | $7 \times 33$ | $(18 \times 84)$ | 57 | (26) | 0.56 | (15.9) |
| D-1 | 04 | 3A2015 | $7 \times 19$ | $(18 \times 48)$ | 26 | (12) | 0.26 | (7.4) |
| D | 05 | 3AA2015 | $4 \times 17$ | $(10 \times 43)$ | 9 | (4) | 0.10 | (2.8) |
| 4X | 46 | 3AA2015 | $4 \times 13$ | $(10 \times 33)$ | 6.6 | (3) | 0.075 | (2.12) |
| L.B.I. | X6 | 3E1800 | $2 \times 12$ | $(5 \times 30)$ | 2 | (0.7) | 0.015 | (0.43) |
| L.B. | 06 | 3E1800 | $2 \times 12$ | $(5 \times 30)$ | 2 | (0.9) | 0.015 | (0.43) |
| Medical E | 07 | 3AA2015 | $4 \times 26$ | $(10 \times 66)$ | 14 | (6) | 0.16 | (4.5) |
| BX | 88 | 3AA6000 | $10 \times 51$ | $(25 \times 130)$ | 300 | (136) | 1.49 | (42.2) |
| BY | 89 | 3AA3500 | $9 \times 51$ | ( $23 \times 130$ ) | 187 | (85) | 1.53 | (43.3) |
| Low Pressure |  |  |  |  |  |  |  |  |
| A | 09 | 3 A480 | $10 \times 49$ | ( $25 \times 124$ ) | 85 | (39) | 1.93 | (54.7) |
| B | 10 | 3A480 | $10 \times 36$ | $(25 \times 91)$ | 90 | (41) | 1.28 | (36.2) |
| C | 11 | 3A480 | $8 \times 22$ | $(20 \times 56)$ | 33 | (15) | 0.53 | (15.0) |
| AA | 08 | 4AA480 | $15 \times 52$ | $(38 \times 132)$ | 160 | (73) | 4.46 | (126.3) |
| A-1 | 91 | 4BW240 | $16 \times 50$ | $(41 \times 127)$ | 75 | (34) | 3.83 | (108.5) |
| A-2 | 90 | 4BW240 | $22 \times 48$ | $(56 \times 122)$ | 167 | (76) | 7.64 | (216.4) |
| A-3 | 92 | 4BA240 | $12 \times 45$ | (30 x 114) | 48 | (22) | 2.31 | (65.4) |
| A-5 | 81 | 4BW240 | $30 \times 57$ | $(76 \times 145)$ | 315 | (143) | 16.00 | (453.0) |
| LP2. 5 | 92 | $4 \mathrm{B240}$ | $9 \times 17$ | $(23 \times 43)$ | 14 | (6) | 0.4 | (11.3) |
| LP5 | 93 | 4B240 | $12 \times 18$ | $(30 \times 46)$ | 18 | (8) | 0.77 | (21.8) |
| $\mathrm{C}_{2} \mathrm{H}_{2}$ |  |  |  |  |  |  |  |  |
| A | 18 | 8/8AL | $12 \times 41$ | (30 x 104) | 185 | (84) | 2.36 | (66.8) |
| HCI, Bulk Electronic Gases |  |  |  |  |  |  |  |  |
| Y | 37 | 3A1800 | $24 \times 90$ | (61 $\times 229$ ) | 1,108 | (503) | 15.83 | (448) |
| $\mathrm{H}_{2} \mathrm{~S}$ |  |  |  |  |  |  |  |  |
| T | 38 | 106A800X | $30 \times 82$ | (76 x 208) | 2,254 | $(1,022)$ | 25.82 | (731) |
| $\mathrm{SO}_{2}, \mathrm{C}_{2} \mathrm{H}_{5} \mathrm{Cl}, \mathrm{Cl}_{2}, \mathrm{CH}_{3} \mathrm{Cl}$ |  |  |  |  |  |  |  |  |
| T | 45 | 106A500X | $30 \times 82$ | (76 x 208) | 1,400 | (635) | 25.64 | (726) |
| Aluminum |  |  |  |  |  |  |  |  |
| A(Al) | 31 | 3AL2216 | $10 \times 52$ | ( $25 \times 132$ ) | 90 | (41) | 1.64 | (46.4) |
| B(AI) | 28 | 3AL2015 | $8 \times 48$ | (20 x 122) | 48 | (22) | 1.04 | (29.5) |
| C(Al) | 29 | 3AL2216 | $7 \times 33$ | $(18 \times 84)$ | 32 | (15) | 0.56 | (15.8) |
| D-1(Al) | 30 | 3AL2216 | $7 \times 16$ | $(18 \times 41)$ | 15 | (7) | 0.21 | (5.9) |
| 4X(Al) | 34 | 3AL1800 | $4 \times 10$ | $(10 \times 26)$ | 3.3 | (1.6) | 0.057 | (1.61) |
| Nickel |  |  |  |  |  |  |  |  |
| B | 61 | 3BN400 | $7 \times 45$ | (18 x 14) | 88 | (40) | 0.65 | (18.4) |
| D-1 | 56 | 3BN400 | $7 \times 22$ | $(18 \times 56)$ | 48 | (22) | 0.28 | (8.0) |
| D-2 | 58 | 3BN400 | $5 \times 15$ | $(12 \times 38)$ | 10 | (4) | 0.10 | (2.9) |
| Stainless Steel |  |  |  |  |  |  |  |  |
| 55 gallon | 52 | UN1A1 | $24 \times 45$ | (61 x 114) | 175 | (79) | 7.35 | (208.2) |
| 10 gallon | 50 | UN1A1 | $14 \times 29$ | $(35 \times 74)$ | 50 | (23) | 1.34 | (37.8) |
| 5 gallon | 51 | UN1A1 | $9 \times 24$ | $(23 \times 61)$ | 25 | (11) | 0.67 | (18.9) |
| *These dimensions are not exact. They should not be used for engineering drawings or equipment specifications. |  |  |  |  |  |  |  |  |

## Specialty Gas Cylinder Size Comparison Chart

$\left.\begin{array}{|l|l|c|c|c|c|c|c|c|c|}\hline \begin{array}{c}\text { Approximate } \\ \text { Dimensions } \\ \text { (inches) }\end{array} & \begin{array}{c}\text { Air } \\ \text { Products }\end{array} & \text { AGA } & \text { Airgas } & \begin{array}{c}\text { BOC } \\ \text { (Airco) }\end{array} & \begin{array}{c}\text { Alphagaz } \\ \text { (Liquid Air) }\end{array} & \text { Praxair } & \text { Matheson } & \text { MG } \\ \text { Specialty } \\ \text { Gases }\end{array}\right]$

## Additional Supply Modes Bulk Specialty Gases and Chemicals

Many Air Products specialty gases and chemicals can be supplied in bulk quantity. Products available in bulk quantity are identified throughout the catalog by the symbols shown below:


Tank trucks are used for over-the-road transportation of cryogenic liquids. Liquid product is then transfilled to cryogenic storage tanks at customer locations.


Tube trailers (T.T.) provide over-the-road shipment of high-pressure gases, gaseous chemicals, and gas mixtures. The trailers serve as on-site storage systems at customer locations.


Cryogenic liquids such as nitrogen and helium are supplied in dewars (low-pressure cryogenic tanks) for larger requirements near customers' point of use.

If you are considering bulk supply, a representative from Air Products can discuss your requirements and the economics of alternate supply systems.

## Cylinder Identification

## Packaging and Color

Air Products uses a unicolor paint scheme to identify specialty gas cylinders. Here are the highlights of our cylinder packaging and color codes.

- Virtually all steel cylinder bodies are painted uniformly dark blue and covered with a protective plastic diamond mesh.
- A cylinder neck ring is permanently fixed below the base of the valve. Each cylinder neck ring is color-coded to help identify cylinder contents and gas category (e.g., yellow for corrosive, red for flammables).
- A color-coded shoulder label indicates the product's shipping name and identification number. On pure products, a grade label is also applied to the cylinder shoulder. The color-coded label border correlates with neck ring color for product identification. The shoulder label also specifies gas grade information.
- Some cylinders are painted with a vertical stencil identifying cylinder contents.


## Markings

Air Products specialty gas cylinders are stamped with markings designed to indicate ownership, specifications, pressure ratings, and other important data. Air Products also utilizes a bar code label for product identification and tracking.

## 1. Cylinder Specification:

- DOT—Department of Transportation (previously ICC - Interstate Commerce Commission), which is the regulatory body that governs the use of cylinders.
- Specification of the cylinder type of material of construction (e.g., 3AA).
- Service or working pressure in pounds per square inch (e.g., 2,265 psi).


## 2. Cylinder Serial Number:

- The letters SG precede the serial numbers for Specialty Gas cylinders.



## 3. Registered Owner Symbol:

- Symbol used to indicate the original owner of the cylinders.
- APROINC is a Registered Owner Symbol for Air Products.


## 4. Date of Manufacture:

- This date (month-year) also indicates the original hydrostatic test.


## 5. Neck Ring Identification:

- The cylinder neck ring displays the name of the current owner of the cylinder.


## 6. Retest Markings:

- The format for a retest marking is: Month - Facility - Year - Plus Rating Star Stamp.
- The + symbol (Plus Rating) indicates that the cylinder qualifies for 10\% overfill.
- The $\star$ symbol (Star Stamp) indicates that the cylinder meets the requirements for 10-year retest.


## 7. CylinderTrak ${ }^{\text {TM }}$ Bar Code Label:

- The CylinderTrak bar code label provides a unique cylinder identifier and is used by computer systems to track cylinders throughout the fill process. As an optional service, we have the capability of tracking cylinders to and from customers.

8. Cylinder Manufacturer's Inspection Marking
9. Cylinder Tare (Empty) Weight:

- This value is preceded by the letters TW.


