

## Identification of medical grade gas cylinders

The contents of BOC medical gas cylinders appear on the product label affixed to the shoulder, body or cylinder collar. Cylinder shoulders are colour-coded and cylinders are fitted with different valve outlets to provide product differentiation. A cylinder without a legible product label should not be used. Please return to supplier to obtain a replacement.

### Colour-coded identification

Gas	Inhalo® O <sub>2</sub>	Oxygen O <sub>2</sub>	Nitrous oxide N <sub>2</sub> O	Entonox® N <sub>2</sub> O/O <sub>2</sub>	Air	Carbon dioxide CO <sub>2</sub>	Carbon dioxide CO <sub>2</sub>	Carbogen CO <sub>2</sub> /O <sub>2</sub>	Helium He	Heliox He/O <sub>2</sub>	Pin index valve
Shoulder colour:	White	White	Ultramarine	Ultramarine & White	Black & White	Green/Grey	Green/Grey	Green/Grey & White	Brown	Brown & White	
Gas code:	400	400	610	570	470 480	530	530	500	590	655	
Sizes:	CD	B, C, D, E, G	C, D, E, G	C, D, E, G	C, D, E, G EHP	C, D, E, G	DE, EE	C, D, E, G	C, D, G	CD, ED	
Pin index:	Integrated Valve	2,5	3,5	Single centered pin	1,5	1,6	1,6	2,6	4,6	Integrated Valve	Pin configuration differs with gas type.

### Dangerous Goods class

All medical gases are Class 2 Dangerous Goods.

- A green diamond indicates that the contents are non-flammable and non-toxic as defined by the Australian Dangerous Goods Code.
- A yellow diamond indicates an oxidising gas.



Class 2.1  
 Gases of Class 2.1 shall be segregated from those of Class 2.3 and 2.2/5.1 by at least 3m

Class 2.2  
 Gases of class 2.3 shall be segregated from gases of Class 2.1 or 2.2/5.1 by at least 3m

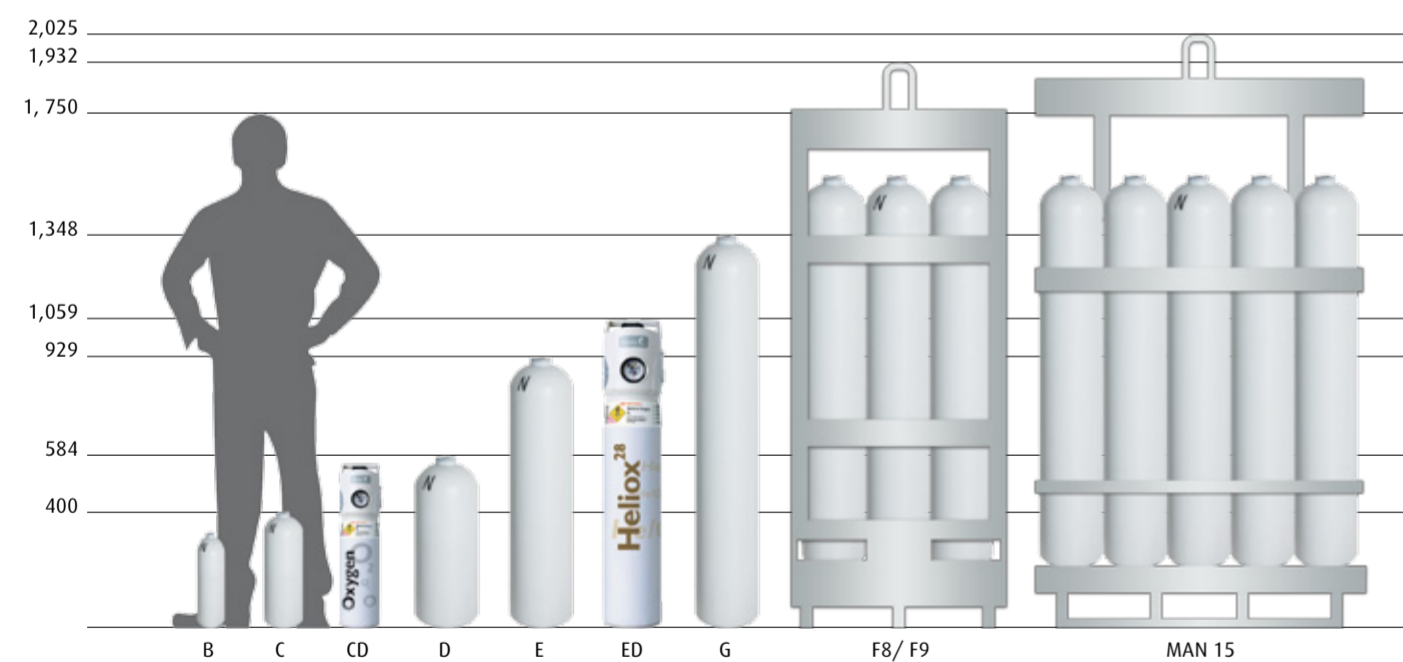
Class 2.2/5.1  
 Gases of class 2.3 shall be segregated from gases of Class 2.1 or 2.2/5.1 by at least 3m

Class 2.3

### Cylinder labelling identification

Labels include: Barcode, Gas code (400), Size (CD), Content (Oxygen Compressed), Grade (EP), and Pin Index (1072). It also features a Class diamond (yellow) and safety instructions.

### Size identification



Note: Cylinder heights are approximations only and do not include valves except for CD & ED cylinders with the INHALO® integrated valve device. For cylinder height with valve add an additional 80 – 105 mm.

### Medical Oxygen cylinder duration in hours and minutes (h:m)

Code	400 B	400 C	400 CD	400 ND	400 NE	400 NG	400 NF9	400 NMAN15
Contents *	170	490	630	1,600	4,000	8,075	51,930	126,000
1 lpm	2:50	8:10	10:30	26:40	66:40	134:35	856:30	2,100:00
2 lpm	1:25	4:05	5:15	13:20	33:20	67:17	432:45	1,050:00
3 lpm	0:56	2:43	3:30	8:53	22:13	44:51	288:30	700:00
4 lpm	0:42	2:03	2:37	6:40	16:40	33:38	216:22	525:00
5 lpm	0:34	1:38	2:06	5:20	13:20	26:55	173:06	420:00
6 lpm	0:28	1:21	1:45**	4:26	11:06	22:25	144:15	350:00
7 lpm	0:24	1:10	1:30**	3:48	9:31	19:13	123:38	300:00
8 lpm	0:21	1:01	1:18	3:20	8:20	16:49	108:11	262:30
10 lpm	0:17	0:49	1:03	2:40	6:40	13:27	86:33	210:00
15 lpm	0:11	0:32	0:42	1:46	4:26	8:58	57:42	140:00

Duration is an approximation only. \*Gas volume - Litres (at 101.3 kPa 15 °C). \*\*Available only from sleeved index outlet with flowmeter attached.

### Weight of full cylinders (kg)

Gas type (code)	B	C	CD	D	E	G	F8	F9	MAN15
Medical Air (470)	-	3.94	-	12.4	27.1	66.4	593	-	1437
Carbogen (500)	-	3.93	-	13.1	33.3	60.7	-	-	-
Carbon Dioxide (530)	-	5.14	-	16.0	37.0	75.0	-	-	-
Entonox (570)	-	4.32	-	13.2	29.5	-	-	-	-
Heliox (655)	-	-	4.7	-	25.4*	-	-	-	-
Helium (590)	-	3.37	-	11.2	-	51.2	-	-	-
Nitrous Oxide (610)	-	5.16	-	16.6	39.0	94.0	763	-	-
Oxygen (400)	2.12	4.28	4.4*	12.4	28.1	68.6	-	542	1466

Full cylinder weights are approximations only and may vary within specification. \*ED size. \*\*Twin pack weight 11.0kg

### Handle medical gases safely

- Store in well ventilated areas
- Secure upright with restraint
- Check cylinder for unique barcode
- Read labels before use
- Keep full and empty cylinders separate
- Wear safety clothing
- Never move cylinder with the wrong type of a trolley
- Keep free from sources of ignition
- Never knock violently or allow to fall
- Keep free from oil and grease
- Do not use force when opening or closing valves