



Specification Sheet:

Medical Gas Cylinders for Homecare

Medical Gas Storage Cylinders You Can Trust.

Luxfer's medical gas cylinders are expertly engineered to deliver safe, reliable, and portable oxygen therapy - ideal for patients in the homecare environment. Crafted from high-strength, lightweight aluminum, our cylinders provide comfort, mobility, and peace of mind for users and caregivers alike.

Designed for Comfort, Built for Confidence

Experience the assurance of medical gas cylinders designed for everyday homecare applications. Luxfer combines advanced engineering with trusted durability to support patients' needs at home.

What Sets Us Apart?

Our unwavering commitment to patient-centric design means we offer purpose-designed cylinders specifically tailored for homecare needs. Furthermore, each Luxfer cylinder undergoes thorough inspection to ensure the highest levels of quality and safety, giving you peace of mind.

Applications

Luxfer's medical oxygen cylinders are designed for a range of homecare applications, including:

- Long-term oxygen therapy.
- Ambulatory oxygen support.
- Emergency oxygen supply backup.
- Palliative and post-operative care at home.

Why Choose Luxfer?

- **Complete Product Range:** Luxfer is the only manufacturer to offer a full range of medical oxygen cylinders - covering a variety of weights, sizes and pressures. This ensures homecare providers and patients have access to the right solution from a trusted source.
- **Lightweight Cylinders for All Ages:** Our aluminum cylinders are much lighter than other cylinders in the market, making them easier for anyone - children, adults, or seniors - to handle and carry. Type 3 cylinders offer the greatest weight reduction, with small 1L and 2L versions ideal for portable use at home or on the go.
- **Durability and Safety:** The full carbon fiber wrap and seamless aluminum liner of Type 3 cylinders provide durability, improved resistance to corrosion, whilst providing weight savings.

Our Proprietary Aluminum Alloys

- L6X is our specific formula of 6061-T6 aluminum alloy. It was introduced in 1987 and has been exclusively used by Luxfer since 1988. L6X has become standard in the industry for various applications. Our L6X aluminum alloy has been specifically optimized to improve durability, fracture toughness, corrosion resistance and cylinder weight.
- Introduced in 2002, L7X is our higher-strength 7000-series aluminum alloy. L7X represents a significant metallurgical advancement, allowing us to improve cylinder strength, increase filling pressures, provide greater gas capacity and optimize cylinder weight.

Cylinder Technologies for Your Medical Gas Applications

- Type 1 cylinders are manufactured using aluminum billets, through a cold-extrusion process – providing a seamless, complete cylinder. Type 1 cylinders have a flat base, so they can be free standing without the need for additional support.
- Type 2 cylinders contain the liner of a Type 1 cylinder, which is then wrapped with carbon fiber around the body of the cylinder to provide lighter weight cylinders, without compromising performance. Type 2 cylinders have a flat base, so they can be free standing without the need for additional support.
- Type 3 cylinders are manufactured by fully wrapping an aluminum cylinder liner with carbon fiber. This provides extra strength and support for the cylinder, allowing it to be filled to higher pressures. Type 3 cylinders have a rounded base, requiring additional support to stand upright.

Medical Gas Cylinder Working Pressures

- Across the UK and Europe, many existing medical gas systems, regulators, and networks are designed and rated for 200bar pressure. At Luxfer, we provide 200bar medical gas cylinders for existing gas infrastructure, and 300bar medical gas cylinders for those upgrading infrastructure to take advantage of the benefits of higher-pressure gas cylinders.
- For applications where lightweight, high gas capacity and ease of handling are paramount, our L6X composite Type 3 cylinders are available at 300bar pressure.
- In standard cylinder sizes (2L to 10L), Luxfer's L7X 300bar gas cylinders provide significantly higher gas capacity with a minimal change in cylinder size and weight.

Medical Gas Cylinder Services

- Clean Valving Room: For your safety and peace of mind, our medical cylinders can be valved in a controlled environment. Since 2019, our Nottingham facility has met the ISO13485 standard, ensuring world-class quality management for the valving of medical gas cylinders.
- Beyond the Cylinder: We offer a complete suite of services including custom sleeves, painting, valving, and cages, providing tailored solutions for your specific requirements.

Medical Gas Cylinders for Homecare

Part Number	Standard	Aluminum & Cylinder Type	Water Volume (l)	Service Pressure (bar)	Diameter (mm)	Length (mm)	Weight (kg)	Oxygen Capacity (l)	Thread Size
A695/1/Q	TPED	Type 1 L6X	1	200	102	240	1.68	213.2	17E
A637/1/Q	TPED	Type 1 L6X	2	200	102	395	2.6	426.5	17E
A834/1/Q	TPED	Type 1 L6X	2	200	102	390	2.7	426.5	25E
P3338N	TPED	Type 1 L6X	10	200	176	660	12.91	2132.5	25E
P3340N	TPED	Type 1 L6X	10	200	140	965	11.59	2132.5	25E
P7029N	TPED	Type 1 L7X	2	200	102	360	1.85	426.5	17E
P7052N	TPED	Type 1 L7X	2	200	102	360	1.85	426.5	25E
P7048N	TPED	Type 1 L7X	3	200	117	415	2.8	639.7	25E
P7033N	TPED	Type 1 L7X	10	200	140	930	10	2132.5	25E
A714/1/N	TPED	Type 1 L7X	1	300	90	273	1.48	305.9	17E
P7046N	TPED	Type 1 L7X	2	300	102	415	2.8	611.8	25E
P7060N	TPED	Type 1 L7X	10	300	140	975	11.8	3058.9	25E
P7040S	TPED	Type 2 L7X	3	200	111	425	2.1	639.7	25E
P7050S	TPED	Type 2 L7X	2	300	97	390	1.9	611.8	25E
M10J*	TPED	Type 3 L6X	1	300	86	291	0.85	305	17E
M19J*	TPED	Type 3 L6X	2	300	101	386	1.45	611	17E
L29C**	TPED	Type 3 L6X	3	300	114	443	1.9	917	M18 x 1.5 CLASS 6H

Please contact us if you require information about additional cylinder sizes.

*Service Life (years) = NLL

** Service life (years) = 15