

Compressed Air Cylinders

Designed using leading technology and advanced materials, Dräger's range of Composite Cylinders can be used in any application where breathing becomes difficult or impossible.



ST-1456-2004

Through continuous product improvement and investment in technology, Dräger provides the highest quality pneumatics, carrying systems and high performance, ultra lightweight, carbon composite cylinders. Because Dräger manufacture all elements of the breathing apparatus system – mask, carrying system, pneumatics and cylinder – you can be assured of the highest quality and maximum performance.

Dräger cylinders are manufactured and tested using automated, computer controlled processes. Continuous re-investment in plant and equipment ensures that Dräger cylinders are manufactured and tested in accordance with the most technologically advanced processes available. Automatic data collection ensures full traceability of materials used and the effective monitoring of critical process parameters.

These ranges of cylinders are manufactured from a seamless aluminium liner, which is subsequently over wrapped with carbon

and glass fibres. The aluminium liner is cold drawn from AA 6061 aluminium plate and then wrapped with carbon fibre in an epoxy matrix, using a computer controlled 4 axis wrapping machine.

An external layer of glass fibre in an epoxy matrix is then wrapped onto the cylinder. This external layer of glass fibre is applied to enhance the resistance of the cylinder to impact and abrasion in service.

Following a high temperature curing of the epoxy matrix, an external gel coat is applied to the surface of the cylinder. This coating provides a smooth, easily cleaned surface for the cylinder.

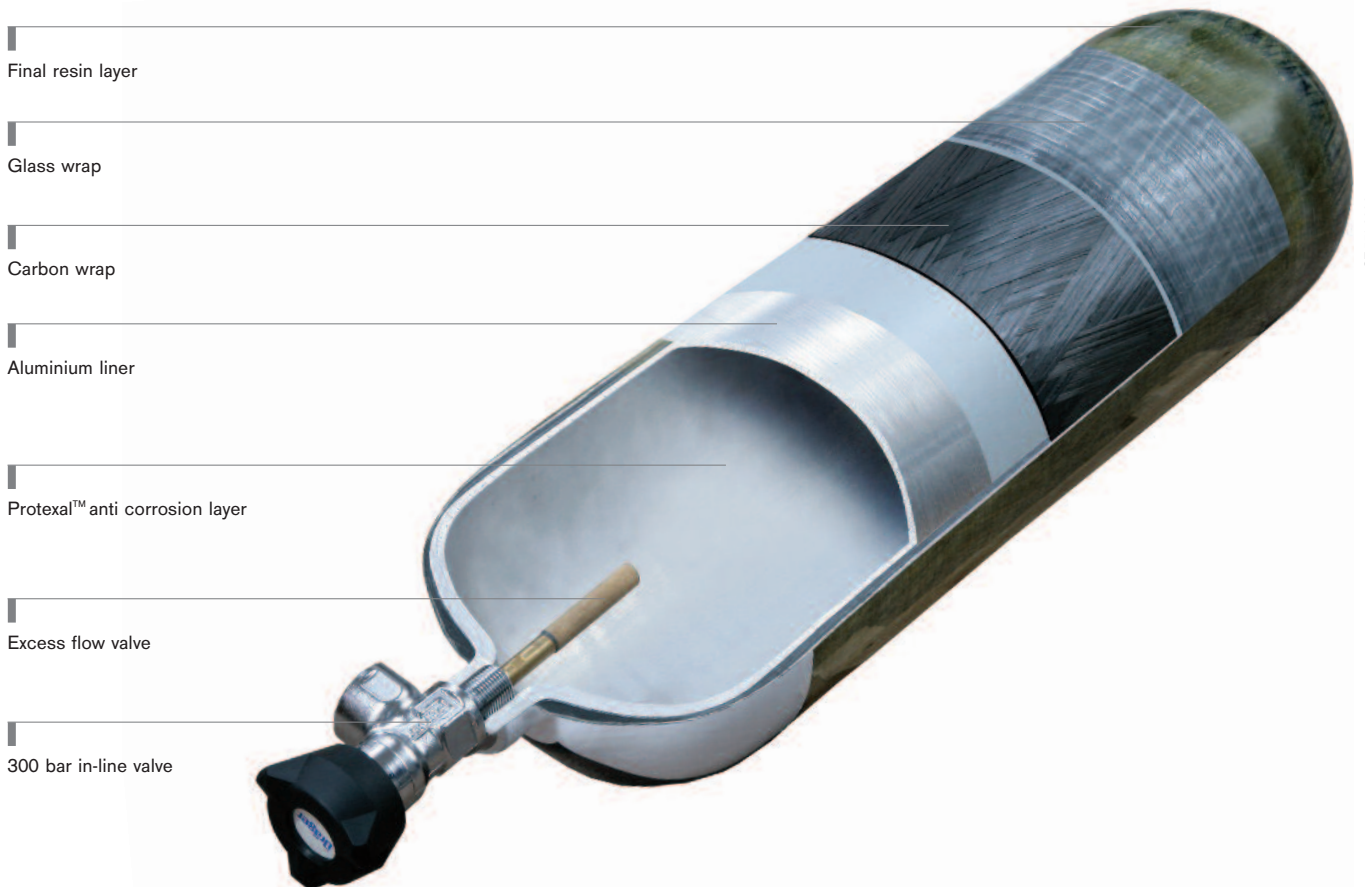
Every batch of 200 cylinders is subjected to exhaustive testing in accordance with the legislative design and manufacturing codes (EN 12245 and 97/23/EC), under the supervision of a Notified Body. All relevant production data is retained electronically for the full working life of the cylinder.



ST-573-2006

Valved carbon composite cylinder

HIGH PERFORMANCE LIGHT WEIGHT COMPRESSED AIR CYLINDER



Extended range

Dräger offers a further selection of cylinders ranging from the 2l short duration to 4.7l cylinders with the same choice of valves offered for Dräger manufactured cylinders, with final assembly PED approved.

The cylinder Twin Pack is a dedicated twin cylinder package designed to be used with Dräger's professional range of Compressed Air Breathing Apparatus.

In addition Dräger offer a range of steel cylinders to suit low cost applications such as the marine industry, whilst maintaining a continuous high standard of application.

All Dräger valved cylinder assemblies are fully approved to the European Pressure Equipment Directive and PED approved to BS EN 1964-1:1999

Cylinder valves

A wide range of cylinder valves for use with breathing apparatus produced by Dräger are available for use with Dräger cylinders and are approved to EN 144-1 and EN 144-2.

The Excess flow valve, available as an option, prevents uncontrolled flow on accidental opening. Components within the valve allow the excess flow feature to be enabled or disabled by the user as it is not detrimental to the performance when not activated.

Operation is simple with single valve activation and ratchet to prevent inadvertent valve closure, in accordance with EN 137.

Quality Standards & Approvals

Dräger's commitment to design and manufacturing excellence is further underlined by our BS EN ISO 9001:2000 quality system approval. The cylinders themselves have been given approval to EN12245:2002, module combination B+D, as well as a wide range of national approvals around the world.

All European variants are CE marked in accordance with the requirements of the Pressure Equipment Directive 97/23 EC and EN 12245:2002.

ORDER INFORMATION

Cylinders (Notified Body Lloyd's Register)

200 bar Steel cylinder

6.0l / 200 bar Steel, in line valve (V 11 130)	33 54 635
6.0l / 200 bar Steel, in line ratchet valve (33 53 876)	33 54 638
9.0l / 200 bar Steel, in line valve (V 11 130)	33 54 637
9.0l / 200 bar Steel, in line ratchet valve (33 53 876)	33 54 640

300 bar Steel cylinder

6.0l / 300 bar Steel, in line valve (V 11 110)	33 54 636
6.0l / 300 bar Steel, in line ratchet valve (33 53 875)	33 54 639

300 bar Carbon Composite

6.8l / 300 bar Carbon Composite in line valve (V 11 110)	33 52 653
6.8l / 300 bar Carbon Composite in line ratchet valve (33 53 875)	33 54 626
6.8l / 300 bar Carbon Composite right angled valve (33 53 871)	33 54 629
6.8l / 300 bar Carbon Composite right angled ratchet valve (33 53 872)	33 54 632
9.0l / 300 bar Carbon Composite in line valve (V 11 110)	33 52 652
9.0l / 300 bar Carbon Composite in line ratchet valve (33 53 875)	33 54 627
9.0l / 300 bar Carbon Composite right angled valve (33 53 871)	33 54 630
9.0l / 300 bar Carbon Composite right angled ratchet valve (33 53 872)	33 54 633

200 bar Carbon Composite

9.0l / 200 bar Carbon Composite in line valve (V 11 110)	33 54 501
9.0l / 200 bar Carbon Composite in line ratchet valve (33 53 876)	33 54 628
9.0l / 200 bar Carbon Composite right angled valve (33 53 873)	33 54 631
9.0l / 200 bar Carbon Composite right angled ratchet valve (33 53 874)	33 54 634

Accessories

Cylinder Covers

Cylinder Cover 6.0l / 200 bar Steel	33 31 041
Cylinder Cover 9.0l / 200 bar Steel	33 31 248
Cylinder Cover PVC (zipped), 6.8l / 300 bar Composite	33 10 619
Cylinder Cover PVC (zipped), 9.0l / 200 bar Composite	33 10 620
Cylinder Cover PVC (zipped), 9.0l / 300 bar Composite	33 10 621
Cylinder Cover Nomex 6.8l / 300 bar Composite	33 10 622
Cylinder Cover Nomex 9.0l / 200 bar Composite	33 10 623
Cylinder Cover Nomex 9.0l / 300 bar Composite	33 10 624

Connection Pieces for Cylinders

Connection piece, 300 bar	33 37 660
Connection piece, 200 bar	33 39 615

Charging Connector

Direct Charging Connector, 300 bar	33 37 702
------------------------------------	-----------

Charging Hoses

Direct Charging Hose 1.5 m (without gauge)	33 36 645
Direct Charging Hose 1.5 m (with gauge)	33 36 641
Direct Charging Hose 3 m (with gauge)	33 36 642

Upgrade Kits

Excess Flow Valve (EFV) Upgrade Kit (1 x grey handwheel, 1 x nut, 1 x EFV)	V 11 134
Excess Flow Valve	V 11 011

Transit Blanks

300 bar G 5/8" Connection	V 06 567
200 bar G 5/8" Connection	V 05 501
300 bar M25 x 2 Connection	V 11 003
200 bar M25 x 2 Connection	33 56 247



ST-3969-2005

200 bar in-line valve
With flame retardant hand wheel.



ST-3968-2005

300 bar in-line valve with integrated gauge
With flame retardant hand wheel.



ST-3965-2005

Right-angle valve
With flame retardant hand wheel.



ST-3970-2005

Excess Flow Valve (EFV)

TECHNICAL DATA

Composite Cylinders

Water Capacity (litres)	6.0	6.8	9.0	4.7
Free Air Capacity (litres)	1636	1854	2454	1274
Working Duration (minutes)	41	46	60	32
Nominal Duration (minutes)	31	36	50	22
Service Pressure (bar)	300	300	300	300
Weight (kg)	3.70	4.09	5.30	3.40
Diameter (mm)	152.5 / 154.0	152.5 / 154.0	175.5 / 177.0	137
Length (mm)	492 / 495	546 / 549	549.5 / 552.5	490
Design Life (years)	20	20	20	15
Thread	M18 x 1.5	M18 x 1.5	M18 x 1.5	M18 x 1.5
Certification	EN 12245:2002	EN 12245:2002	EN 12245:2002	EN 12245:2002



HEADQUARTERS:

Dräger Safety AG & Co. KGaA
Revalstrasse 1
23560 Lübeck, Germany

www.draeger.com

SUBSIDIARIES:

AUSTRALIA

Draeger Safety Pacific Pty. Ltd.
Axxess Corporate Park
Unit 99, 45 Gilby Road
Mt. Waverley, Vic 3149
Tel +61 3 92 65 50 00
Fax +61 3 92 65 50 95

CANADA

Draeger Canada Ltd.
7555 Danbro Crescent
Mississauga,
Ontario L5N 6P9
Tel +1 905 821 89 88
Fax +1 905 821 25 65

P. R. CHINA

Beijing Fortune Draeger
Safety Equipment Co., Ltd.
Yu An Lu A 22, B Area
Beijing Tianzhu Airport
Industrial Zone
Houshayu Shunyi District
Beijing 101300
Tel +86 10 80 49 80 00
Fax +86 10 80 49 80-05

FRANCE

Dräger Safety France SAS
3c route de la Fédération,
BP 80141
67025 Strasbourg Cedex 1
Tel +33 3 88 40 59 29
Fax +33 3 88 40 76 67

USA

Draeger Safety, Inc.
101 Technology Drive
Pittsburgh, PA 15275
Tel +1 412 787 83 83
Fax +1 412 787 22 07

MEXICO

Draeger Safety S.A. de C.V.
Av. Peñuelas No. 5
Bodega No. 37
Fraccionamiento Industrial
San Pedrito
Querétaro, Qro México
Tel +52 442 246-1113
Fax +52 442 246-1114

NETHERLANDS

Dräger Safety Nederland B.V.
Edisonstraat 53
2700 AH Zoetermeer
Tel +31 79 344 46 66
Fax +31 79 344 47 90

REP. OF SOUTH AFRICA

Dräger South Africa (Pty) Ltd.
P.O.Box 68601
Bryanston 2021
Tel +27 11 465 99 59
Fax +27 11 465 69 53

SINGAPORE

Draeger Safety Asia Pte. Ltd.
67 Ayer Rajah Crescent # 06 03
139950 Singapore
Tel +65 68 72 92 88
Fax +65 67 73 20 33

SPAIN

Draeger Safety Hispania S.A.
Calle Xaudaró 5
28034 Madrid
Tel +34 91 728 34 00
Fax +34 91 729 48 99

UNITED KINGDOM

Draeger Safety UK Ltd.
Blyth Riverside Business Park
NE24 4RG
Tel +44 1670 352 891
Fax +44 1670 356 266