



NANJING OCEAN INDUSTRY CO., LTD
NANJING OCEAN GROUP CO., LIMITED

ALUMINUM CYLINDERS

-THE PROFESSIONAL SUPPLIER OF ALUMINUM CYLINDERS



CATALOG 2025

ALUMINUM ALLOY CYLINDERS

Our multiple types aluminum alloy cylinders from 0.5L to 50L as per customers' requirements. These cylinders are manufactured using high-strength aluminum alloy 6061 and comply with the standards GB11640, ISO7866, DOT-3AL, EN1975, and TC-3ALM.

Our aluminum gas cylinders are designed to store various gases for a wide range of applications, including ultra-high purity gases for electronics manufacturing, special and calibration gases, industrial gases, and more.

ALUMINUM CYLINDER FOR CO₂

Our gas cylinders participate in the fields of soft drink and draft beer systems, planted and saltwater aquarium's CO₂ systems, greenhouse gas cycles in agriculture, and more.

Material: Aluminum 6061

Standard: GB11640 / ISO7866 / DOT-3AL

Thread: PZ27.8 / 1.125-12UNF/ Other Size

Surface Finishing: Clear Coating / Powder Coating Painting

Accessories: Valve / ABS Guard / Steel Cap



Model	Outside Diameter	Water Capacity	Cylinder Length	Cylinder Weight	Service Pressure	CO ₂ Capacity (60% Fill)	
	mm	L	mm	kg	Bar/ Psi	kg	lbs
HG-108-1.5-15	108	1.5	273	1.6	150/ 2175	1.6	2.0
HG-108-1.7-15		1.7	300	1.8		1.8	2.2
HG-108-1.9-15		1.9	326	2.0		2.0	2.5
HG-120-3.4-15	120	3.4	445	3.2		3.2	4.4
HG-140-3.8-15	140	3.8	405	3.9		3.9	5.0
HG-140-5.0-15		5.0	508	5.1		5.1	6.6
HG-140-7.6-15		7.6	702	7.0		7.0	10.0
HG-140-8.3-15		8.3	740	7.2		7.2	11.0
HG-203-11.3-15	203	11.3	558	11.2		11.2	15.0
HG-203-13.4-15		13.4	640	12.9		12.9	17.6
HG-203-15.1-15		15.1	702	14.2		14.2	20.0
HG-203-16.7-15		16.7	764	15.5		15.5	22.1
HG-203-25-15		25.0	1085	22.5		22.5	33.1
HG-203-26.5-15		26.5	1145	23.6		23.6	35.0
HG-232-33.3-15	232	33.3	1125	30.5		30.5	44.1
HG-232-37.8-15		37.8	1255	34.5		34.5	50.0

ALUMINUM CYLINDER FOR INDUSTRIAL & SPECIALTY GASES

Our aluminum cylinders are ideal for safely transport and store compressed industrial gases, specialty gases, calibration gases, stable gases, rare gases, which are commonly used in manufacturing, welding, transportation, biotechnology, materials processing, environmental, foods, semiconductors, laboratory and research purposes, and in many other essential industries.



When storing compressed industrial and specialty gases, aluminum cylinder is a popular choice thanks to its remarkable cost-effectiveness, portability, corrosion resistance, as well as its excellent durability.

Cylinder Model	O.D (mm)	Water Capacity (L)	Height (mm)	Weight (kg)	Material	W.P(Bar)	T.P(Bar)
HG60-0.5-300-5.6	Φ60	0.5	325	0.9	Aolly 6061	300	450
HG60-0.6-300-5.6		0.6	380	1.0			
HG60-0.7-300-5.6		0.7	433	1.1			
HG60-0.5-150-3.0	Φ60	0.5	267	0.4		150	250
HG60-0.6-150-3.0		0.6	310	0.5			
HG60-0.7-150-3.0		0.7	379	0.7			
HG89-1.0-150-4.5	Φ89	1.0	206	1.0			
HG89-1.4-150-4.5		1.4	367	1.3			
HG89-1.7-150-4.5		1.7	415	1.7			
HG108-1.0-150-5.5	Φ108	1.0	210	1.3			
HG108-1.4-150-5.5		1.4	264	1.6			
HG108-2.0-150-5.5		2.0	365	2.2			
HG108-3.0-150-5.5		3.0	490	3.0			
HG111-2.0-150-5.4	Φ111	2.0	318	2.1			
HG111-2.5-150-5.4		2.5	390	2.5			
HG111-2.9-150-5.4		2.9	442	2.8			
HG111-4.0-150-5.4		4.0	572	3.4			
HG111-4.6-150-5.4		4.6	648	3.7			
HG140-6.0-150-6.8	Φ140	6.0	551	4.8			
HG140-8.0-150-6.8		8.0	711	6.1			
HG140-10.0-150-6.8		10.0	870	7.3			
HG159-10.0-150-8.0	Φ159	10.0	711	8.2			
HG180-10.0-150-8.8	Φ180	10.0	406	8.4			
HG203-12.0-150-9.9	Φ203	12.0	552	11.8			
HG203-13.4-150-9.9		13.4	606	12.7			
HG203-15.0-150-9.9		15.0	666	13.7			
HG203-20.0-150-9.9		20.0	856	16.8			
HG232-30.0-150-11.6	Φ232	30.0	1236	23.0			
HG232-40.0-150-11.6		40.0	1281	30.0			
HG232-50.0-150-11.6		50.0	1573	36.4			
HG250-50.0-200-16.2	Φ250	50.0	1477	50.2		200	300

ALUMINUM CYLINDER FOR MEDICAL GASES

Made from high-strength aluminum alloy, our aluminum cylinders are advantageous in terms of weight, making them more convenient to transport and handle.

The aluminum material we use is durable enough to safely withstand accidental bumps and impacts. This is especially important if the gas it stores is noxious or combustible. Aluminum cylinder is an ideal choice for medical gas storage in various healthcare and life support scenarios, including emergency medical services, pre-hospital care and hospitals, and other medical institutions.



Model	Outside Diameter	Water Capacity	Cylinder Length	Cylinder Weight	Service Pressure	
	mm	L	mm	kg	Bar	Psi
ML6	111	1.2	200	1.3	139	2015
M7		1.4	231	1.5		
M9		1.7	285	1.9		
MD		2.9	427	2.9		
ME		4.6	660	4.0		
M150	203	28.9	1194	22.1	153	2216
M6	81	1.0	309	1.16		
M22	133	4.0	445	4.5		
M60	184	10.5	620	11.0		
M90		15.7	828	13.7		
M122	203	21.4	920	18.6		
M265	250	46.4	1305	38.7		

ALUMINUM CYLINDER FOR SCUBA DIVING

Our scuba tanks are crafted with precision and engineered for safety, durability, and performance. Designed to meet the demands of professional and recreational divers alike, each cylinder undergoes rigorous quality checks to ensure compliance with international standards.

Material: Aluminum 6061

Standard: GB1640 / ISO7866 / DOT-3AL

Thread: G3/4 / 3/4-14NPSM/ Other Size

Surface Finishing: Inside Shot Blasting /

Clear Coating / Powder Coating Painting

Accessories: DIN & YOKE Convertible Valve



No.	Type	Outside Diameter (mm)	Working Pressure (Bar)	Test Pressure (Bar)	Material	Design Wall Thickness (mm)	Water Capacity(L)	Height (mm)	Weight (kg)
1	85-1.0-310.5	85	207	310.5	AA6061	5.6	1	310	1.5
2	111-2.0-310.5	111	207	310.5	AA6061	7.59	2.0	360	3.1
3	111-2.5-310.5						2.5	430	3.6
4	111-3.0-310.5						3.0	500	4.1
5	111-3.5-310.5						3.5	570	4.6
6	111-4.0-310.5						4.0	640	5.0
7	152-4.0-310.5	152	207	310.5	AA6061	10.39	4.0	400	6.3
8	152-5.0-310.5						5.0	475	7.3
9	152-6.0-310.5						6.0	550	8.2
10	152-7.0-310.5						7.0	625	9.2
11	152-8.0-310.5						8.0	700	10.2
12	152-10.0-310.5						10.0	850	12.2
13	185-5.0-310.5	185	207	310.5	AA6061	12.64	5.0	355	8.5
14	185-8.0-310.5						8.0	505	11.3
15	185-11.1-310.5						11.1	660	14.3
16	185-12.0-310.5	203	207	310.5	AA6061	13.87	12.0	705	15.2
17	203-8.0-310.5						8.0	445	12.5
18	203-11.1-310.5						11.1	575	15.6
19	203-12.0-310.5	204	207	310.5	AA6061	13.5	12.0	615	16.5
20	204-15.0-310.5						15	735	18.7

ALUMINUM CYLINDER WITH CARBON FIBER FOR SCBA

Suitable for firefighting and industrial application, HG-IG provides durable lightweight composite cylinders that are part of self-contained breathing apparatus (SCBA) sets. The HG-IG carbon fiber cylinder consists of an aluminum alloy inner liner, a high-strength carbon fiber overwrap, a protective fiberglass layer, and an outer layer of epoxy resin.

The complete composite materials produce a lightweight, anti-impact, corrosion and high temperature resistant cylinder that can be filled to high pressure.

Material: Aluminum 6061 & Carbon Fiber

Standard: GB28053 | EN28053 | ISO11119 | DOT-CFFC

Thread: M18*1.5

Accessories: KF1-6 Valves



Model	Capacity (L)	Max Gas Capacity (L)	W.P (Bar)	Flow (L/Min)	Total Weight (kg)	Using Temperature	Max Using Time(min)
HG-SCBA3.0/300	3.0	900	300	1000	6.2	-30~60 °C	30
HG-SCBA6.8/300	6.8	2040			8.0		65
HG-SCBA2*6.8/300	2*6.8	4080			13.2		135
HG-SCBA9.0/300	9.0	2700			9.3		85

CARBON FIBER CYLINDER FOR HYDROGEN GAS

--in Hydrogen Fuel Cell Vehicles

Model	Outside Diameter	Water Capacity	Cylinder Length	Cylinder Weight	Service Pressure	
	mm	L	mm	kg	Bar	Psi
CHG3-347-60-35-S/A	378	60	900	33	350	5075
CHG3-347-70-35-S/A		70	1015	38		
CHG3-347-80-35-S/A		80	1130	43		
CHG3-347-100-35-S/A		100	1360	53		
CHG3-347-120-35-S/A		120	1590	63		
CHG3-347-140-35-S/A		140	1800	73		
CHG3-384-100-35-S/A	420	100	1180	55		
CHG3-384-130-35-S/A		130	1410	67		
CHG3-384-180-35-S/A		180	1870	92		
CHG3-103-3.0-35 T/A	110	3	455	1.1		
CHG3-142-5.0-35 T/A	148	5	423	1.9		
CHG3-160-9.0-35 T/A	166	9	575	2.9		
CHG3-192-12-35 T/A	200	12	555	4.0		
CHG3-192-20-35 T/A	200	20	850	6.0		

CARBON FIBER CYLINDER FOR LEISURE & SPORTING

Model	Outside Diameter	Water Capacity	Cylinder Length	Cylinder Weight	Service Pressure	
	mm	L	mm	kg	Bar	Psi
CRPIII-50-0.22-30-T	54	0.22	194	0.34	300	4350
CRPIII-50-0.3-30-T		0.3	251	0.46		
CRPIII-50-0.37-30-T		0.37	295	0.52		
CRPIII-55-0.35-30-T	61.5	0.35	228	0.48		
CRPIII-55-0.36-30-T		0.36				
CRPIII-55-0.42-30-T		0.42	259	0.50		
CRPIII-55-0.45-30-T		0.45	275	0.55		
CRPIII-55-0.5-30-T		0.5	300	0.60		
CRPIII-69-0.6-30-T	78	0.6	253	0.84		
CRPIII-69-0.8-30-T		0.8	318	1.02		
CRPIII-78-1.1-30-T	86.5	1.1	311	1.06		
CRPIII-93-0.8-30-T(48CI)	102	0.8	200	0.72		
CRPIII-93-1.12-30-T(68CI)		1.12	250	0.90		
CRPIII-55-0.7-30-T	61.5	0.7	395	0.70		
CRPIII-58-0.3-30-T	62	0.3	196	0.36		
CRPIII-58-0.48-30-T		0.48	270	0.45		
CRPIII-58-0.58-30-T		0.58	315	0.55		
CRPIII-58-0.7-30-T		0.7	370	0.62		
CRIII-106-2.0-30-T	115	2.0	330	1.5		
CRIII-106-3.0-30-T		3.0	465	2.2		
CRIII-120-2.5-30-T	129	2.5	310	1.6		
CRIII-124-2.7-30-T	132	2.7		1.7		
CRIII-124-4.7-30-T		4.7	485	2.7		
CRIII-145-6.8-30-T	157	6.8	537	4.1		
CRIII-161-9.0-30-T	174	9.0	575	5.2		
CRIII-192-12.0-30-T	208	12.0	555	6.5		
CRIII-192-20.0-30-T		20.0	840	9.0		

