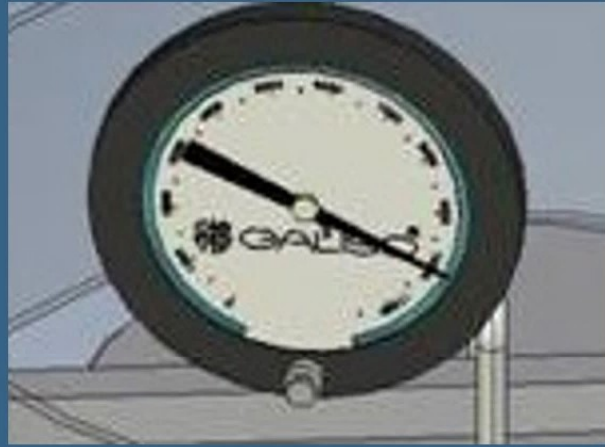


Testing Water Jacket by Cylinder Type



Galiso Pressure Indicating Device is .25% Accurate

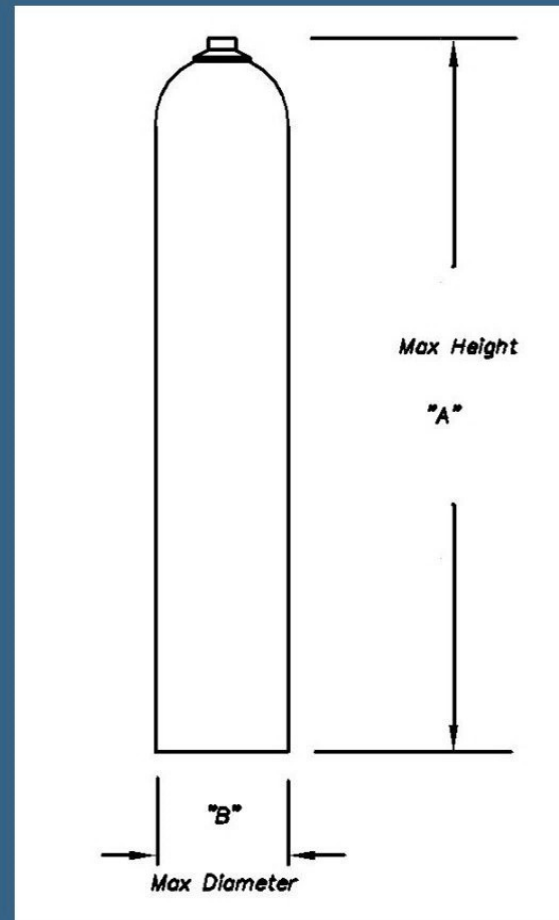
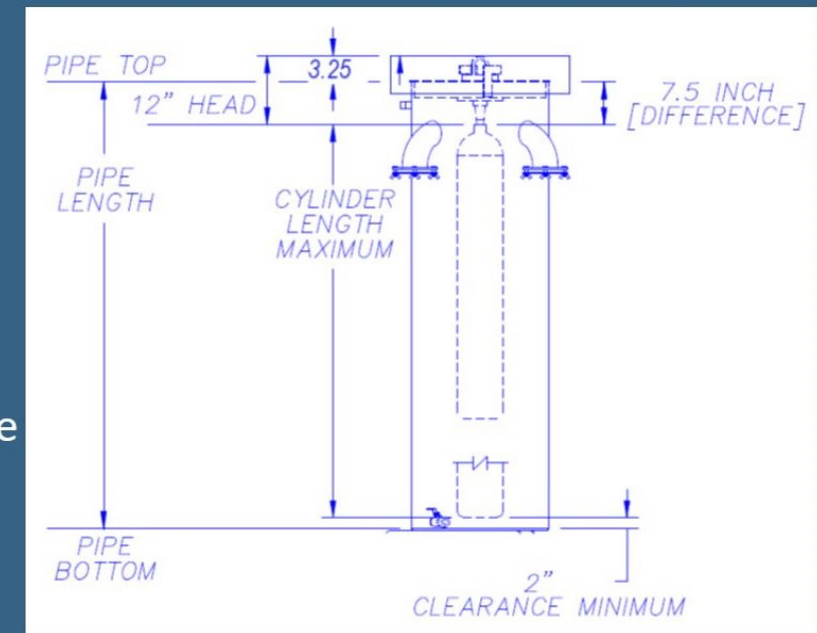
Regulations Require Accurate within $\pm 1\%$ of prescribed test pressure (3000psi Test pressure needs to be accurate within 30psi) of any cylinder tested that day. Accuracy of pressure indicating device can be demonstrated at any point within 500psi of actual test pressure above 3,000psi, Or 10% of the actual test pressure for pressures below 3,000psi.

Cylinder Length should be no more than the pipe length of the jacket minus 10"

Standard Tall Jacket Pipe Length 78"

Standard Short Jacket Pipe Length 42"

(pipe length is measurable distance inside test jacket from bottom to rim that the test head sets on)



Test pressure of cylinder:

DOT 3 = 3000psi

DOT 3A, 3AA, 3AL, 3AX, 3AAX, 3HT, 3T = 5/3 Service Pressure

DOT 4AA, 4B, 4BA, 4BW, 4B-240ET, 4D, 4DA, 4DS, 4E = 2x Service pressure

Note: Waterjacket not always required and exceptions apply see CFR49 180.209 Table 1

Cylinder diameter should allow for $\frac{1}{2}$ "-1" clearance with inside of jacket. Please reference following I.D.'s on

our test jackets:

12" = 12" ID

14" = 13.25" ID

18" = 17.25" ID

24" = 23.25" ID

30" = 29.25" ID

36" = 35.25" ID

Expansion Measuring Device

Needs to allow for readability within 1% of total expansion of cylinder or .1cc Whichever is greater

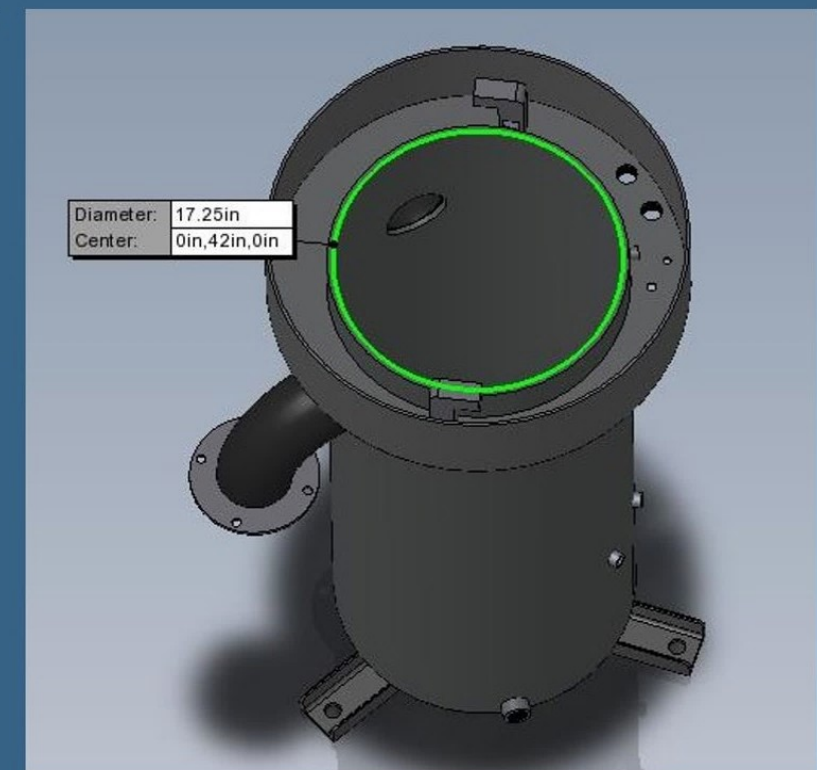
Scale capacity should account for total cylinder Expansion volume plus $\frac{1}{4}$ of the weigh bowl volume



22 Ponderosa Ct

Montrose, CO 81401

www.galiso.com (800)854-3789



Test systems can be configured for all cylinder types

List of Cylinder Trade Names and Sizes



SCBA and Life Support cylinders

Common Neck Thread Sizes: .875-14, M18 x 1.5 , .750-16(2216psi)

Trade Name	Dia	Length	spec	Service Pressure
5min/7cf	4.4"/112mm	9.3"/236mm	3AL	2216psi/153Bar
5min/8cf	3.3"/89mm	13.4"/340mm	HW	3000psi/207Bar
5min/9cf	4.4"/112mm	9.8"/249mm	3AL	3000psi/207Bar
10min/13cf	4.4"/112mm	13.1"/333mm	3AL	3000psi/207Bar
10min/15cf	4.5"/113mm	13.1"/333mm	HW	3000psi/207Bar
10min/17cf	3.8"/95mm	15.3"/388mm	HW	4500psi/310Bar
15min/23cf	4.6"/117mm	14.1"/358mm	FW	4500psi/310Bar
15min/24cf	5.4"/136mm	14.1"/358mm	HW	3000psi/207Bar
30min/45cf	6.8"/172mm	20.9"/530mm	3AL	2216psi/153Bar
30min/45cf	5.4"/137mm	19.8"/502mm	HW	4500psi/310Bar
45min/65cf	6.8"/172mm	18"/457mm	FW	4500psi/310Bar
60min/87cf	7"/178mm	21.7"/550mm	FW	4500psi/310Bar
45cf	6.8"/172mm	19.5"/494mm	3AL	2215psi/153Bar
51cf	5.6"/142mm	18.2"/464mm	FW	4500psi/310Bar
71cf	6.3"/160mm	19.8"/503mm	FW	4350psi/300Bar
74cf	6.3"/160mm	20.7"/526mm	FW	4500psi/310Bar
98cf	7"/177mm	20.9"/538mm	FW	4500psi/310Bar

SCUBA cylinders

Common Neck Thread Sizes: 3/4"NPSM

Trade Name	Dia	Length	spec	Service Pressure
4cf	3.2"/81.5mm	7.8"/198mm	3AL	3000psi/207Bar
6cf	3.2"/81.5mm	10.8"/274mm		3000psi/207Bar
13cf	4.4"/111mm	12.8"/325mm		3000psi/207Bar
19cf	4.4"/111mm	17.7"/450mm		3000psi/207Bar
30cf	5.3"/134mm	19.9"/505mm		3000psi/207Bar
40cf	5.3"/134mm	25.4"/645mm		3000psi/207Bar
45cf	6.9"/175mm	17.7"/450mm		3000psi/207Bar
50cf	6.9"/175mm	19.4"/493mm		3000psi/207Bar
53cf	7.3"/185mm	19.2"/488mm		3000psi/207Bar
60cf	7.3"/185mm	19.9"/506mm		3300psi/228Bar
63cf	7.3"/185mm	21.7"/551mm		3000psi/207Bar
80cf	7.3"/185mm	25.9"/658mm		3000psi/207Bar
80cf	7.3"/185mm	25.5"/648mm		3300psi/228Bar
100cf	8"/203mm	26.5"/648mm		3300psi/228Bar



High Pressure / ISO cylinders

Common Neck Thread Size: 3/4" Taper, 25E

Trade Name	Dia	Length	Spec	Service Pressure
20cf	5.3"/134mm	13.8"/350mm	3A 3AA	2015psi/139bar
40cf	7"/178mm	18"/457mm		2015psi/139bar
55cf	7"/178mm	22.9"/582mm		2015psi/139bar
80cf	6.9"/176mm	32.4"/823mm		2015psi/139bar
110cf	6.9"/176mm	43"/1092mm		2015psi/139bar
150cf	7.3"/184mm	46.5"/1181mm		2015psi/139bar
200cf	8.8"/222mm	51"/1295mm		2015psi/139bar
220cf	9.3"/236mm	51"/1295mm		2015psi/139bar
125cf	6.9"/176mm	43"/1092mm		2265psi/156bar
250cf	9.3"/236mm	51"/1295mm		2265psi/156bar
300cf	9.3"/236mm	55.5"/1410mm		2400psi/165bar
400cf	10.7"/272mm	56"/1422mm		2400psi/165bar
295cf	9"/229mm	50.5"/1283mm		2900psi/200bar
370cf	9"/229mm	61"/1550mm		2900psi/200bar
550cf	11.3"/286mm	64"/1626mm		3000psi/207bar
340cf	9.2"/233mm	51"/1295mm		3500psi/241bar
345cf	9.3"/236mm	51"/1295mm		3600psi/248bar
320cf	9"/229mm	38"/1422mm		4351psi/300bar
425cf	9"/229mm	50"/1270mm		4351psi/300bar
490cf	9"/229mm	56"/1422mm		4351psi/300bar
530cf	9"/229mm	60"/1520mm		4351psi/300bar
540cf	9"/229mm	60"/1520mm		4495psi/310bar
450cf	9"/229mm	51"/1295mm		4496psi/310bar
530cf	9.4"/239mm	53"/1340mm		5000psi/345bar
670cf	9.4"/239mm	57.5"/1461mm		5000psi/345bar
500cf	9.4"/239mm	51"/1295mm		6000psi/414bar
580cf	9.4"/239mm	52"/1321mm		6000psi/414bar
675cf	9.4"/239mm	59.3"/1510mm		6000psi/414bar



Paintball cylinders

Common Neck Thread Sizes: 5/8-18

Trade Name	Dia	Length	Service Pressure
9cf	4.3"/110mm	7.4"/188mm	4500psi/310Bar
12cf	4.3"/110mm	9.1"/231mm	4500psi/310Bar



Inflation Aerospace Cylinders

Trade Name	Dia	Length	Spec	Service Pressure
14cf	4"/102mm	14.6"/371mm	3AA/3HT Composite	3000psi/207Bar
23cf	5.1"/130mm	14.6"/371mm		3000psi/207Bar
41cf	6.1"/155mm	18.5"/470mm		3000psi/207Bar
50cf	5.4"/137mm	18.4"/467mm		4945psi/341Bar
59cf	6.8"/172mm	20.7"/526mm		3050psi/210Bar
65cf	6.9"/175mm	20.7"/526mm		3295psi/227Bar
73cf	6.9"/175mm	18.3"/465mm		4945psi/341Bar
88cf	5.9"/150mm	31.9"/810mm		4500psi/310Bar
96cf	5.9"/150mm	31.9"/810mm		4945psi/341Bar
139cf	7.7"/196mm	33"/838mm		3400psi/234Bar
178cf	8.1"/206mm	31.3"/795mm		4500psi/310Bar
307cf	9.4"/239mm	51"/1295mm		3100psi/214Bar
341cf	9.4"/239mm	51"/1295mm		3500psi/241Bar
956cf	14"/356mm	56.7"/1440mm		5000psi/345Bar



Extinguishing Agent cylinders

Trade Name	Dia	Length	Service Pressure
600lb	22"/559mm	58"/1478mm	500psi/34Bar
900lb	24"/610mm	70"/1789mm	500psi/34Bar



Aviation Cylinders

Trade Name	Dia	Length	Spec	Service Pressure
4CF	3.6"/91mm	9.3"/235mm	3AA/3HT	1800psi/124Bar
7CF	3.6"/91mm	13.4"/340mm		1800psi/124Bar
11CF	3.6"/91mm	18.8"/477mm		1800psi/124Bar
22CF	5.3"/135mm	18.3"/464mm		1800psi/124Bar
38CF	6.8"/172mm	19.3"/489mm		1800psi/124Bar
39CF	6.8"/172mm	19.1"/486mm		1850psi/128Bar
48CF	6.8"/172mm	23.5"/597mm		1800psi/124Bar
49CF	6.8"/172mm	23.4"/594mm		1850psi/128Bar
63CF	7.3"/184mm	26.8"/680mm		1800psi/124Bar
66CF	7.3"/184mm	36.6"/929mm		1850psi/128Bar
76CF	7.3"/184mm	29.8"/756mm		1850psi/128Bar
114CF	9"/229mm	29.6"/751mm		1850psi/128Bar



Airgun cylinders

Common Neck Thread Sizes: 3/4-16

Trade Name	Dia	Length	Service Pressure
3.88cf	2.4"/61mm	10.2"/259mm	3626psi/250Bar

Medical Cylinders

Common Neck Thread Size: .750-16,1.125-12(M60+)

Trade Name	Dia	Length	Spec	Service Pressure
M2	2.5"/64mm	5.9"/149mm	3AL	2216
M4	3.2"/81mm	9"/229mm	3AL	2216
M6	3.2"/81mm	11.8"/300mm	3AL	2216
MB08 / M7.5	3.2"/81mm	11.8"/300mm	3AL	3000
M6A	4.4"/112mm	7.9"/201mm	3AL	2015
M7.8	4.4"/112mm	7.8"/198mm	3AL	3000
M7	4.4"/112mm	9.2"/234mm	3AL	2015
M9	4.4"/112mm	10.6"/269mm	3AL	2015
MC13 / M12	4.4"/112mm	10.6"/269mm	3AL	3000
MD15	4.4"/112mm	16.3"/414mm	3AL	2015
MD22	4.4"/112mm	16.3"/414mm	3AL	3000
M20	4.4"/112mm	16.8"/427mm	3AL	3000
Jumbo D	5.3"/135mm	17.1"/434mm	3AL	2216
ME24	4.4"/112mm	25.3"/643mm	3AL	2015
ME36 / M32	4.4"/112mm	25.3"/643mm	3AL	3000
M60	7.3"/185mm	23.5"/597mm	3AL	2216
M74	7.3"/185mm	23.8"/605mm	3AL	3000
M90	7.3"/185mm	32.9"/836mm	3AL	2216
MM / M122	8"/203mm	36.3"/922mm	3AL	2216
M150	8"/203mm	47.9"/1217mm	3AL	2015
M200	8.6"/218mm	41.7"/1059mm	3AL	3000
M265	9.8"/249mm	51.4"/1306mm	3AL	2216
Med B	3.3"/84mm	13.3"/337mm	3A (steel)	2015
Med D	4.2"/106mm	16.8"/426mm	3A (steel)	2015
Med E	4.2"/106mm	25.8"/654mm	3A (steel)	2015
Med M	7"/178mm	43"/1092mm	3A (steel)	2015



Composite

M06D	3.3"/84mm	9.9"/251mm	3AL	3000
M09B	3.3"/84mm	12.2"/310mm	3AL	3000
M15A	4"/102mm	14.7"/373mm	3AL	3000
M22A	4.5"/114mm	15.5"/394mm	3AL	3000
M24A	4.5"/114mm	17.4"/442mm	3AL	3000
M66A	6.8"/172mm	20.7"/526mm	3AL	3000

200Bar/2900psi Cylinders

Common Neck Thread Size: 3/4" Tapered, W27.8 DIN 477

Trade Name	Dia	Length	Spec
Inergen			
20L	8"/204mm	36.9"/937mm	3AL
27L	8"/204mm	41.7"/1060mm	3AA
40L	8"/204mm	58.5"/1485mm	3AA
40L	9"/230mm	48"/1219mm	3AA
50L	9"/230mm	58"/1473mm	3AA
67L	10.5"/267mm	58.5"/1485mm	3AA
80L	10.5"/267mm	68.7"/1745mm	3AA



Chlorine Cylinders

Common Neck Thread Size: 3/4" Tapered

Trade Name	Dia	Length	Service Pressure
10CL100	10.5"/266mm	34"/864mm	480psi
10CL150	10.5"/266mm	48"/1219mm	480psi
1 ton	30.3"/770mm	82"/2082mm	480psi



CO₂ /Beverage/Fire Extinguisher/Nitrous 1800psi / 124Bar Cylinders

Common Neck Thread Size: .625-18,.750-16,1.125-12, 1.625-12

Trade Name	Dia	Length	Spec
1.0lb	3.2"/81mm	7.8"/198mm	3AL
1.3lb	3.2"/81mm	9.5"/241mm	3AL
1.5lb	3.2"/81mm	11.1"/282mm	3AL
1.6lb	3.2"/81mm	11.5"/292mm	3AL
1.8lb	3.2"/81mm	12.5"/318mm	3AL
2lb	4.4"/112mm	9"/229mm	3AL
2.5lb	4.4"/112mm	10.4"/264mm	3AL
5lb	5.3"/135mm	14.2"/361mm	3AL
10lb	6.9"/175mm	16.6"/422mm	3AL
15lb	6.9"/175mm	23.2"/589mm	3AL
16.3lb	8.6"/218mm	17.9"/454mm	3AA
20lb	8"/203mm	23.3"/592mm	3AA
22lb	8"/203mm	25.1"/638mm	3AA
35lb	8"/203mm	38"/965mm	3AA
50lb	8.6"/218mm	46.5"/1181mm	3AA
2.5lb	3.6"/91mm	14.7"/373.4mm	3AA
5lb	5.6"/142mm	13.8"/351mm	3AA
10lb	7"/178mm	18"/457mm	3AA
15lb	7"/178mm	22.9"/582mm	3AA
20lb	7.4"/188mm	25.5"/648mm	3AA
50lb	9.3"/236mm	44.5"/1130mm	3AA
75lb	9.3"/236mm	56.5"/1435mm	3AA
100lb	10.7"/272mm	58"/1473mm	3AA



Compressed Natural Gas CNG and NGV Cylinders

Common Neck Thread Size: 1.125-12

Trade Name	Dia	Length	Service Pressure
61L	14.2"/360mm	32"/813mm	Type I 3600psi/250bar
100L	12.6"/320mm	60"/1524mm	Type I 3600psi/250bar
122L	12.6"/320mm	72"/1829mm	Type I 3600psi/250bar
70L	15.6"/397mm	32.7"/830mm	Type III 3000psi/207bar
106L	18.1"/460mm	36.2"/920mm	Type III 3000psi/207bar
130L	18.1"/460mm	41.7"/1060mm	Type III 3000psi/207bar
32L	10"/263mm	34"/864mm	Type IV 3600psi/250bar
69L	10.8"/274mm	60"/1524mm	Type IV 3600psi/250bar
81L	10"/263mm	80"/2032mm	Type IV 3600psi/250bar
90L	13"/329mm	60"/1524mm	Type IV 3600psi/250bar
142L	14"/348mm	82"/2086mm	Type IV 3600psi/250bar
199L	16"/410mm	78"/1981mm	Type IV 3600psi/250bar
247L	18"/460mm	78"/1981mm	Type IV 3600psi/250bar
251L	21"/538mm	60"/1530mm	Type IV 3600psi/250bar
287L	22"/564mm	60"/1530mm	Type IV 3600psi/250bar
376L	26.5"/673mm	60"/1530mm	Type IV 3600psi/250bar
539L	21"/538mm	120"/3048mm	Type IV 3600psi/250bar
560L	26"/658mm	90"/2286mm	Type IV 3600psi/250bar
780L	26"/658mm	120"/3048mm	Type IV 3600psi/250bar
900L	26.5"/673mm	120"/3048mm	Type IV 3600psi/250bar
JUMBO			
1044L	22"/559mm	211"/5.36m	Type II 3600psi/250bar
2230L	22"/559mm	431"/10.95m	Type II 3600psi/250bar
2340L	22"/559mm	452"/11.48m	Type II 3600psi/250bar



Propane / Forklift / Marine Cylinders

Common Neck Thread Size: 3/4" Tapered

Trade Name	Dia	Length	Spec	Service Pressure
5lb	8"	12"	4B(A,W,E)240	240psi / 17Bar
10lb	8.9"	17.4"		
11lb	12.2"	12.4"		
20lb	12.2"	18"		
30lb	12.2"	23.4"		
33.5lb	12.2"	27.3"		
40lb	12.2"	29.4"		
43.5lb	12.2"	33.3"		
50lb	15.1"	27.4"		
60lb	12.2"	43.1"		
100lb	15.1"	46.6"		
200lb	24"	41.9"		
420lb	30"	53.8"		



Hydrogen H2 Fuel Cell Cylinders

Common Neck Thread Size: 2.000-12 Spec Type III

Trade Name	Dia	Length	Service Pressure
30L	11.7"/298mm	27.6"/700mm	5076psi/350Bar
42L	13.4"/340mm	29.1"/740mm	5076psi/350Bar
52L	13.4"/340mm	34.4"/875mm	5076psi/350Bar
74L	15.7"/400mm	35.4"/900mm	5076psi/350Bar
94L	13.4"/340mm	57.4"/1458mm	5076psi/350Bar
202L	16.3"/415mm	83.1"/2110mm	5076psi/350Bar
318L	16.3"/415mm	123.1"/3128mm	5076psi/350Bar

