

Chamber Dive Air Requirements Calculator

Benton Zwart, MD, MPH

Depth (FSW)	ATA	Vent CFM Per Person	Vent SCFM Per Person	# People	Vent SCFM Rqd	Segment Time (Minutes)	Cu Ft Surface Air Rqd	Total Cu Ft Rqd for Dive	Vent Differential PSI Buffer	PSIA Remaining in Flasks
0										
30	1.91	4	7.64	2	15.27	5	76.36	385.45	201.75	233.81
60	2.82	4	11.27	2	22.55	75	1690.91	2076.36	117.37	162.79
45	2.36	4	9.45	2	18.91	30	567.27	2643.64	100.22	138.97
30	1.91	4	7.64	2	15.27	135	2061.82	4705.45	20.31	52.37
15	1.45	4	5.82	2	11.64	30	349.09	5054.55	12.33	37.71
0	1.00	4	4.00	2	8.00	0	0.00	5054.55	19.01	37.71
0	1.00	4	4.00	2	8.00	0	0.00	5054.55	19.01	37.71
0	1.00	4	4.00	2	8.00	0	0.00	5054.55	19.01	37.71
0	1.00	4	4.00	2	8.00	0	0.00	5054.55	19.01	37.71
0	1.00	4	4.00	2	8.00	0	0.00	5054.55	19.01	37.71
0	1.00	4	4.00	2	8.00	0	0.00	5054.55	19.01	37.71
0	1.00	4	4.00	2	8.00	0	0.00	5054.55	19.01	37.71
0	1.00	4	4.00	2	8.00	0	0.00	5054.55	19.01	37.71
0	1.00	4	4.00	2	8.00	0	0.00	5054.55	19.01	37.71

Chamber Volume (CF)	Max Depth	Cu Ft Rqd From 1 ATA Start	Open Flask Volume	Number of Flasks	Flask PSIA	Total SCF in Flasks	Buffer (Red is Bad)
170	60	309.09	70	5	250	5952.38	897.84

Differential PSI for 4 CFM vent on your system = 2.00
(Accumulator to Chamber differential)

Max PSI = 4.00
Rqd for Vent

Instructions: Fill in all the required data (yellow) for each segment of the chamber profile. Calculator uses the average of the start and finish depths for transitions (you must enter transition TIME!)
Red buffer value means insufficient air available to run dive as entered.