



DOT High Pressure Cylinders

	Nom. Dimensions					DOT Service Pressure	Approximate Capacity at Rate Service Pressure						10% Overfill Pressure	Approximate Capacity at 10% Overfill ₁						
	Min. Cylinder Volume	Nom. Cylinder Weight	OD	L	tmin		Air	Oxygen	Nitrogen	Argon	Helium	Hydrogen		Air	Oxygen	Nitrogen	Argon	Helium		
	(in ³)	(lb)	(in)	(in)	(in)		(psi)	(ft ³)						(psi)	(ft ³)					
	(liter)	(kg)	(mm)	(mm)	(mm)		(bar)	(m ³)						(bar)	(m ³)					
Standard DOT/TC Specification High Pressure Cylinders₁																				
20CF	220	10.5	5.26	13.75	0.11	2015	17.7	18.7	17.3	18.6	16.5	16.5	2216	19.3	20.6	19	20.5	18		
	3.6	4.8	134	349	2.87	138.9	0.5	0.53	0.49	0.53	0.47	0.46	153	0.54	0.58	0.54	0.58	0.5		
40CF	500	27	7	18	0.14	2015	40.1	41.7	38.5	41.5	36.7	37.5	2216	43.9	45.9	42.4	45.7	40.4		
	8.2	12.2	178	457	3.66	138.9	1.13	1.18	1.09	1.18	1.04	1.06	153	1.24	1.3	1.2	1.29	1.14		
55CF	650	32	7	22.88	0.14	2015	53	57	52.7	56.8	50.2	49.4	2216	57.9	62.7	57.9	62.4	55.2		
	10.6	14.5	178	581	3.66	139	1.5	1.61	1.49	1.61	1.42	1.39	153	1.64	1.78	1.64	1.77	1.56		
80CF	940	46	6.9	32.38	0.14	2015	79.9	85.9	79.4	85.6	75.7	74.5	2216	87.3	94.5	87.3	94.1	83.3		
	15.4	20.9	176	822.3	3.66	138.9	2.23	2.43	2.25	2.42	2.14	2.1	153	2.47	2.68	2.47	2.67	2.36		
110CF	1379	62	6.9	43	0.14	2015	111	115.7	106.9	115.2	101.9	103.3	2216	121	127.3	117.6	126.7	112.1		
	22.6	28.1	175	1092	3.66	138.9	3.13	3.28	3.03	3.26	2.89	2.92	153	3.42	3.6	3.33	3.59	3.18		
125CF	1379	62	6.9	43	0.16	2265	124	130.1	119.1	129.5	113.6	115.2	2491	134	143.1	131	142.5	124.9		
	22.6	28.1	177	1092	4.1	156.2	3.49	3.68	3.37	3.67	3.22	3.26	172	3.8	4.05	3.71	4.04	3.54		
150CF	1650	67.5	7.3	46.5	0.15	2015	133	141.2	130.5	140.6	124.4	123.6	2216	145	155.3	143.5	154.7	136.8		
	27	30.6	185	1181	3.81	138.9	3.75	4	3.69	3.98	3.52	3.5	153	4.1	4.4	4.06	4.38	3.88		
8BC75A	3058	136	9.28	56.5	0.22	2300	278	296.7	271.5	295.7	259	253.7	2530	302	325.7	295.4	324.6	282.7		
	50.1	61.7	236	1435	5.5	159	7.87	8.4	7.69	8.37	7.33	7.18	174	8.56	9.22	8.36	9.19	8		
8BC200	2395	101	8.75	51	0.17	2015	192	203.4	188.3	202.9	179.4	176.2	2216	210	223.9	205.5	223.2	196		
	39.2	45.8	222	1295	4.42	139	5.45	5.76	5.33	5.75	5.08	4.99	153	5.95	6.34	5.82	6.32	5.55		
8BC220	2640	114	9.28	51	0.19	2015	212	224.2	207.5	223.7	197.8	194.3	2216	232	246.8	226.5	246	216		
	43.3	51.7	236	1295	4.75	139	6	6.35	5.88	6.33	5.6	5.5	153	6.56	6.99	6.41	6.97	6.12		
8BC220S	2270	104	9.28	45	0.21	2265	203	216.9	198.8	216.2	189.6	185.8	2491	221	238.2	216.3	237.3	206.9		
	37.2	47.2	236	1143	5.36	156	5.76	6.14	5.63	6.12	5.37	5.26	172	6.27	6.74	6.13	6.72	5.86		
8BC250	2640	115	9.28	51	0.21	2265	237	252.2	231.2	251.4	220.5	216	2491	257	277	251.6	276	240.6		
	43.3	52.2	236	1295	5.36	156	6.7	7.14	6.55	7.12	6.24	6.12	172	7.29	7.84	7.12	7.82	6.81		
8BC295	2447	135	9.02	50.5	0.27	2900	273	297.4	266.4	296.4	256.3	249.3	3190	296	325.2	288.7	324	279.5		
	40.1	61.2	229	1283	6.75	200	7.74	8.42	7.54	8.39	7.26	7.06	220	8.39	9.21	8.17	9.17	7.91		
8BC300	2995	134	9.28	55.5	0.22	2400	283	303.2	276.4	302.1	263.9	258.2	2640	308	332.4	300.2	331.2	287.8		
	49.1	60.8	236	1410	5.69	165	8	8.58	7.83	8.55	7.47	7.31	182	8.71	9.41	8.5	9.38	8.15		

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	Min. Cylinder Volume	Nom. Cylinder Weight	OD	L	tmin		Air	Oxygen	Nitrogen	Argon	Helium	Hydrogen		Air	Oxygen	Nitrogen	Argon	Helium		
	(in ³)	(lb)	(in)	(in)	(in)		(psi)	(ft ³)						(psi)	(ft ³)					
	(liter)	(kg)	(mm)	(mm)	(mm)		(bar)	(m ³)						(bar)	(m ³)					
8BC340	2557	170	9.15	51	0.33	3500	335	370.1	325.9	368.8	317.6	307.2	3850	361	401.5	350.6	400.3	345.6		
	41.9	77.1	233	1295	8.28	241	9.47	10.48	9.22	10.44	8.99	8.69	266	10.2	11.36	9.92	11.33	9.78		
8BC345	2557	170	9.31	51	0.34	3600	341	378.1	332.1	376.9	325.3	314.1	3960	369	411.7	358.8	410.5	354.6		
	41.9	77.1	237	1295	8.53	248	9.66	10.7	9.4	10.67	9.21	8.89	273	10.5	11.66	10.16	11.63	10.04		
8BC370	3058	161	9.02	61	0.27	2900	342	371.7	332.9	370.4	320.3	311.6	3190	370	406.4	360.8	404.9	349.3		
	50	73	229	1550	6.75	200	9.67	10.53	9.43	10.49	9.07	8.82	220	10.5	11.51	10.22	11.47	9.89		
8BC435	2285	267	9.37	51	0.57	6000	442	507	426.8	502.9	454.1	425.8	660	467	538	450.7	531.9	491.4		
	37.4	121.1	238	1295	14.4	414	12.5	14.36	12.08	14.24	12.86	12.06	455	13.2	15.23	12.76	15.06	13.91		
10BC100A	4079	188	10.7	58	0.25	2300	371	395.7	362.2	394.4	346.5	338.4	2530	403	434.5	394	432.9	377		
	66.8	85.3	272	1473	6.35	159	10.5	11.21	10.26	11.17	9.78	9.58	174	11.4	12.3	11.16	12.26	10.68		
10BC400	3960	186	10.7	56	0.26	2400	374	400.8	365.5	399.4	348.9	341.4	2640	407	439.5	396.9	437.9	380.5		
	64.9	84.4	272	1422	6.55	165	10.6	11.35	10.35	11.31	9.88	9.67	182	11.5	12.45	11.24	12.4	10.78		
11BC615	4893	270	11.3	64	0.34	3000	563	614.7	548.8	612.5	528.9	513.8	3300	610	670.8	593.7	668.4	576.2		
	80.2	122.5	286	1626	8.71	207	16	17.41	15.54	17.34	14.98	14.55	228	17.3	18.99	16.81	18.93	16.32		
DOT Special Permits SP10869 / TC Equivalency Certificates SU 4369₂																				
8HP500C	2750	140	9.41	50.5	0.27	4500	437	491	424.1	490.5	426.6	NA								
	45	63.5	239	1282	6.96	310	12.4	13.9	12.01	13.89	12.08	NA								
8HP535C	2750	170	9.41	52.5	0.31	5000	472	531.1	456	532	467.5	NA								
	45.1	77.1	239	1334	7.85	345	13.4	15.04	12.91	15.06	13.23	NA								
8HP585C	2641	195	9.41	52	0.37	6000	511	585.8	493.1	581	524.6	NA								
	43.3	88.5	239	1321	9.47	414	14.5	16.58	13.96	16.45	14.85	NA								
8HP500LC	2850	146	9.41	52.5	0.27	4500	452	508	438.8	507.4	441.4	NA								
	46.7	66.1	239	1334	6.96	310	12.8	14.38	12.42	14.36	12.5	NA								
8HP550C	3051	159	9.41	56.5	0.27	4500	486	546.2	471.8	545.6	474.6	NA								
	50	72.1	239	1435	6.96	310	13.8	15.47	13.36	15.45	13.44	NA								
8HP575C	3210	167	9.41	58.25	0.27	4500	511	574.6	496.3	574	499.3	NA								
	52.6	75.7	239	1479	6.96	310	14.5	16.27	14.05	16.25	14.14	NA								

Notes:

- 1 DOT Regulations permit filling these cylinders with 10% overcharge (from DOT rated pressure) provided certain other
- 2 Under no circumstances are these cylinders to be filled to a pressure exceeding the marked service pressure at 70 F.
- All Cylinders furnished with 3/4" NGT inlet threads, unless specified otherwise.
- Nominal weight includes neckring but excludes the valve and cap.
- Cylinder capacities are approximate at 70 F (21 C).