

# HIGH PRESSURE CYLINDERS

(at 70° F corresponding to minimum cylinder volume)

## Approximate Capacity at Rated Service Pressure

## Approximate Capacity at 10% Overfill

Model	Min. Cylinder Volume	Nom. Cylinder Weight	Nom. Dimensions			DOT Service Pressure	Air	Oxygen	Nitrogen	Argon	Helium	Hydrogen	10% Overfill Pressure	Air	Oxygen	Nitrogen	Argon	Helium
			OD	L	tmin													
	(in <sup>3</sup> )	(lb)	(in)	(in)	(in)	(psi)	(ft <sup>3</sup> )						(psi)	(ft <sup>3</sup> )				
	(liter)	(kg)	(mm)	(mm)	(mm)	(bar)	(m <sup>3</sup> )						(bar)	(m <sup>3</sup> )				

### Standard DOT /TC Specification High Pressure Cylinders <sup>1</sup>

6BC20	214	9.6	5.23	14	0.108	2015	17.2	18.2	16.8	18.1	16.0	15.7	2216	18.8	20.0	18.4	19.9	17.5
	3.5	4.4	132.8	356	2.7	139	0.49	0.51	0.48	0.51	0.45	0.45	153	0.53	0.57	0.52	0.56	0.50
7BC40	475	22	6.73	18.25	0.139	2015	38.1	40.3	37.3	40.2	35.6	35.0	2216	41.7	44.4	40.8	44.3	38.9
	7.8	10.0	170.9	464	3.5	139	1.08	1.14	1.06	1.14	1.01	0.99	153	1.18	1.26	1.15	1.25	1.10
7BC55	632	26.3	6.73	23.5	0.139	2015	50.7	53.7	49.7	53.5	47.3	46.5	2216	55.5	59.1	54.2	58.9	51.7
	10.4	11.9	170.9	597	3.5	139	1.44	1.52	1.41	1.52	1.34	1.32	153	1.57	1.67	1.54	1.67	1.46
6BC80	960	46	7.09	32.5	0.144	2015	77.1	81.5	75.5	81.3	71.9	70.6	2216	84.3	89.7	82.4	89.5	78.6
	15.7	20.9	180.1	826	3.7	139	2.18	2.31	2.14	2.30	2.04	2.00	153	2.39	2.54	2.33	2.53	2.22
6BC90	960	47	7.09	32.5	0.160	2265	86.0	91.7	84.1	91.4	80.2	78.6	2491	93.6	100.7	91.5	100.4	87.5
	15.7	21.3	180.1	826	4.1	156	2.44	2.60	2.38	2.59	2.27	2.22	172	2.65	2.85	2.59	2.84	2.48
6BC110	1320	61	7.09	43.0	0.144	2015	106.0	112.1	103.8	111.8	98.9	97.1	2216	115.9	123.4	113.3	123.0	108.0
	21.6	27.7	180.1	1092	3.7	139	3.00	3.17	2.94	3.17	2.80	2.75	153	3.28	3.49	3.21	3.48	3.06
6BC125	1320	62	7.09	43.0	0.162	2265	118.3	126.1	115.6	125.7	110.2	108.0	2491	128.7	138.5	125.8	138.0	120.3
	21.6	28.1	180.1	1092	4.1	156	3.35	3.57	3.27	3.56	3.12	3.06	172	3.64	3.92	3.56	3.91	3.41
7BC150	1630	65	7.49	46.0	0.150	2015	130.9	138.4	128.1	138.1	122.1	119.9	2216	143.1	152.4	139.9	151.9	133.4
	26.7	29.5	190.2	1168	3.8	139	3.71	3.92	3.63	3.91	3.46	3.40	153	4.05	4.31	3.96	4.30	3.78
8BC75A	3058	136	9.28	56.5	0.215	2300	277.8	296.7	271.5	295.7	259.0	253.7	2530	302.3	325.7	295.4	324.6	282.7
	50.1	61.7	235.7	1435	5.5	159	7.87	8.40	7.69	8.37	7.33	7.18	174	8.56	9.22	8.36	9.19	8.00
8BC200	2395	101	8.75	51.0	0.174	2015	192.3	203.4	188.3	202.9	179.4	176.2	2216	210.2	223.9	205.5	223.2	196.0
	39.2	45.8	222.3	1295	4.4	139	5.45	5.76	5.33	5.75	5.08	4.99	153	5.95	6.34	5.82	6.32	5.55
8BC200S	2040	94	8.75	45.5	0.155	1800	147.1	154.5	144.3	154.3	137.5	135.4	1980	161.1	170.2	157.7	169.8	150.3
	33.4	42.6	222.3	1156	3.9	124	4.16	4.38	4.09	4.37	3.89	3.83	137	4.56	4.82	4.47	4.81	4.26
8BC220	2640	114	9.28	51.0	0.187	2015	212.0	224.2	207.5	223.7	197.8	194.3	2216	231.7	246.8	226.5	246.0	216.0
	43.3	51.7	235.7	1295	4.7	139	6.00	6.35	5.88	6.33	5.60	5.50	153	6.56	6.99	6.41	6.97	6.12
8BC220S	2270	104	9.28	45.0	0.211	2265	203.4	216.9	198.8	216.2	189.6	185.8	2491	221.3	238.2	216.3	237.3	206.9
	37.2	47.2	235.7	1143	5.4	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	0.211	2265	236.6	252.2	231.2	251.4	220.5	216.0	2491	257.4	277.0	251.6	276.0	240.6
	43.3	52.2	235.7	1295	5.4	156	6.70	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	0.266	2900	273.3	297.4	266.4	296.4	256.3	249.3	3190	296.4	325.2	288.7	324.0	279.5
	40.1	61.2	229.0	1283	6.8	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	0.224	2400	282.6	303.2	276.4	302.1	263.9	258.2	2640	307.5	332.4	300.2	331.2	287.8
	49.1	60.8	235.7	1410	5.7	165	8.00	8.58	7.83	8.55	7.47	7.31	182	8.71	9.41	8.50	9.38	8.15
8BC345	2557	170	9.31	51	0.336	3600	342.1	379.1	333.1	377.8	325.7	314.6	3960	369.3	411.7	358.8	410.5	354.6
	41.9	77.1	236.5	1295	8.5	248	9.69	10.74	9.43	10.70	9.22	8.91	273	10.46	11.66	10.16	11.63	10.04
8BC370	3058	161.0	9.02	61	0.266	2900	341.5	371.7	332.9	370.4	320.3	311.6	3190	370.4	406.4	360.8	404.9	349.3
	50.1	73.0	229.0	1549	6.8	200	9.67	10.53	9.43	10.49	9.07	8.82	220	10.49	11.51	10.22	11.47	9.89
8BC435	2285	267.0	9.37	51	0.568	6000	441.9	507.0	426.8	502.9	454.1	425.8	6600	466.5	538.0	450.7	531.9	491.4
	37.4	121.1	238.0	1295	14.4	414	12.51	14.36	12.08	14.24	12.86	12.06	455	13.21	15.23	12.76	15.06	13.91
10BC100A	4079	188.0	10.69	58	0.250	2300	370.5	395.7	362.2	394.4	345.5	338.4	2530	403.2	434.5	394.0	432.9	377.0
	66.8	85.3	271.5	1473	6.4	159	10.49	11.21	10.26	11.17	9.78	9.58	174	11.42	12.30	11.16	12.26	10.68
10BC400	3960	186	10.69	56	0.258	2400	373.6	400.8	365.5	399.4	348.9	341.4	2640	406.5	439.5	396.9	437.9	380.5
	64.9	84.4	271.5	1422	6.6	165	10.58	11.35	10.35	11.31	9.88	9.67	182	11.51	12.45	11.24	12.40	10.78
11BC439	5000	210	11.125	64.25	0.257	2300	454.2	485.1	444.0	483.5	423.5	414.8	2530	494.3	532.6	483.0	530.7	462.2
	81.9	95.3	282.6	1632	6.5	159	12.86	13.74	12.57	13.69	11.99	11.75	174	14.00	15.08	13.68	15.03	13.09
11BC615	4893	270	11.25	64	0.343	3000	563.3	614.7	548.8	612.5	528.9	513.8	3300	609.5	670.8	593.7	668.4	576.2
	80.2	122.5	285.8	1626	8.7	207	15.95	17.41	15.54	17.34	14.98	14.55	228	17.26	18.99	16.81	18.93	16.32

### DOT Exemption / TC Permit Cylinders <sup>2</sup>

8BC360	2640	115	9.25	51	0.211	3280	327.2	359.9	318.7	358.6	309.2	N/A	10% Overfill not allowed for these cylinders				
	43.3	52.2	235.0	1295	5.4	226	9.27	10.19	9.03	10.15	8.76	N/A					
8BC440	3181	144	9.40	57.5	0.219	3330	399.3	439.7	388.9	438.1	377.7	N/A	10% Overfill not allowed for these cylinders				
	52.1	65.3	238.8	1461	5.6	230	11.31	12.45	11.01	12.41	10.69	N/A					
8HP500	2750	140	9.44	51	0.260	4500	437.1	491.2	424.3	490.6	426.8	N/A	10% Overfill not allowed for these cylinders				
	45.1	63.5	239.7	1295	6.6	310	12.38	13.91	12.01	13.89	12.09	N/A					
8HP535	2750	158	9.40	52.25	0.291	5000	472.0	531.3	456.2	532.2	467.7	N/A	10% Overfill not allowed for these cylinders				
	45.1	71.7	238.8	1327	7.4	345	13.37	15.04	12.92	15.07	13.24	N/A					
8HP550	3058	155	9.44	57	0.260	4500	486.0	546.2	471.8	545.6	474.6	N/A	10% Overfill not allowed for these cylinders				
	50.1	70.3	239.7	1448	6.6	310	13.76	15.47	13.36	15.45	13.44	N/A					
8HP585	2640	185	9.40	52	0.358	6000	510.5	585.8	493.1	581.0	524.6	N/A	10% Overfill not allowed for these cylinders				
	43.3	83.9	238.8	1321	9.1	414	14.46	16.59	13.96	16.45	14.85	N/A					

#### Notes:

<sup>1</sup> DOT regulations permit filling these cylinders with 10% overcharge (from DOT rated pressure) provided certain other requirements are met.

<sup>2</sup> 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 " NPT internal threads, unless specified otherwise.
- Nominal weight includes necking but excludes the valve and cap. Add 1 1/2 lb (0.7 kg) for valve and 2 lb (0.91 kg) for cap.
- Cap adds approximately 5" (127 mm) to cylinder height.
- Cylinder capacities are approximate at 70° F (21° C).