

# MAXIMUM OPERATING DEPTHS FOR VARIOUS NITROX BLENDS 21% - 40% OXYGEN



PPO2 (ATA)	Nitrox blend (% O2)																			
	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
0.21	0.0																			
0.30	14.1	11.9	10.0	8.2	6.6	5.0	3.6	2.3	1.1											
0.35	21.9	19.4	17.1	15.0	13.1	11.4	9.7	8.2	6.8	5.5	4.2	3.1	2.0	1.0						
0.40	29.7	26.8	24.2	21.9	19.7	17.7	15.8	14.1	12.4	10.9	9.5	8.2	7.0	5.8	4.7	3.6	2.7	1.7	0.8	
0.45	37.5	34.3	31.4	28.7	26.2	24.0	21.9	19.9	18.1	16.4	14.8	13.3	11.9	10.6	9.4	8.2	7.1	6.0	5.0	4.1
0.50	45.3	41.8	38.5	35.5	32.8	30.3	27.9	25.8	23.8	21.9	20.1	18.5	16.9	15.4	14.1	12.8	11.5	10.4	9.3	8.2
0.55	53.1	49.2	45.6	42.4	39.4	36.6	34.0	31.6	29.4	27.3	25.4	23.6	21.9	20.3	18.7	17.3	16.0	14.7	13.5	12.3
0.60	60.9	56.7	52.8	49.2	45.9	42.9	40.1	37.5	35.1	32.8	30.7	28.7	26.8	25.1	23.4	21.9	20.4	19.0	17.7	16.4
0.65	68.7	64.1	59.9	56.0	52.5	49.2	46.2	43.4	40.7	38.3	36.0	33.8	31.8	29.9	28.1	26.4	24.8	23.3	21.9	20.5
0.70	76.6	71.6	67.0	62.9	59.1	55.5	52.3	49.2	46.4	43.7	41.3	39.0	36.8	34.7	32.8	31.0	29.3	27.6	26.1	24.6
0.75	84.4	79.0	74.2	69.7	65.6	61.8	58.3	55.1	52.0	49.2	46.6	44.1	41.8	39.6	37.5	35.5	33.7	31.9	30.3	28.7
0.80	92.2	86.5	81.3	76.6	72.2	68.1	64.4	60.9	57.7	54.7	51.9	49.2	46.7	44.4	42.2	40.1	38.1	36.3	34.5	32.8
0.85	100.0	94.0	88.4	83.4	78.7	74.4	70.5	66.8	63.4	60.1	57.2	54.3	51.7	49.2	46.9	44.7	42.6	40.6	38.7	36.9
0.90	107.8	101.4	95.6	90.2	85.3	80.8	76.6	72.6	69.0	65.6	62.4	59.5	56.7	54.0	51.6	49.2	47.0	44.9	42.9	41.0
0.95	115.6	108.9	102.7	97.1	91.9	87.1	82.6	78.5	74.7	71.1	67.7	64.6	61.6	58.9	56.2	53.8	51.4	49.2	47.1	45.1
1.00	123.4	116.3	109.8	103.9	98.4	93.4	88.7	84.4	80.3	76.6	73.0	69.7	66.6	63.7	60.9	58.3	55.9	53.5	51.3	49.2
1.05	131.2	123.8	117.0	110.7	105.0	99.7	94.8	90.2	86.0	82.0	78.3	74.8	71.6	68.5	65.6	62.9	60.3	57.8	55.5	53.3
1.10	139.0	131.2	124.1	117.6	111.5	106.0	100.9	96.1	91.6	87.5	83.6	80.0	76.6	73.3	70.3	67.4	64.7	62.2	59.7	57.4
1.15	146.9	138.7	131.2	124.4	118.1	112.3	106.9	101.9	97.3	93.0	88.9	85.1	81.5	78.2	75.0	72.0	69.2	66.5	63.9	61.5
1.20	154.7	146.1	138.4	131.2	124.7	118.6	113.0	107.8	103.0	98.4	94.2	90.2	86.5	83.0	79.7	76.6	73.6	70.8	68.1	65.6
1.25	162.5	153.6	145.5	138.1	131.2	124.9	119.1	113.7	108.6	103.9	99.5	95.3	91.5	87.8	84.4	81.1	78.0	75.1	72.3	69.7
1.30	170.3	161.1	152.6	144.9	137.8	131.2	125.2	119.5	114.3	109.4	104.8	100.5	96.4	92.6	89.1	85.7	82.5	79.4	76.6	73.8
1.35	178.1	168.5	159.8	151.7	144.4	137.5	131.2	125.4	119.9	114.8	110.1	105.6	101.4	97.5	93.7	90.2	86.9	83.7	80.8	77.9
1.40	185.9	176.0	166.9	158.6	150.9	143.9	137.3	131.2	125.6	120.3	115.4	110.7	106.4	102.3	98.4	94.8	91.3	88.1	85.0	82.0
1.45	193.7	183.4	174.0	165.4	157.5	150.2	143.4	137.1	131.2	125.8	120.7	115.9	111.3	107.1	103.1	99.3	95.8	92.4	89.2	86.1
1.50	201.5	190.9	181.2	172.2	164.0	156.5	149.5	143.0	136.9	131.2	125.9	121.0	116.3	111.9	107.8	103.9	100.2	96.7	93.4	90.2
1.55	209.3	198.3	188.3	179.1	170.6	162.8	155.5	148.8	142.5	136.7	131.2	126.1	121.3	116.8	112.5	108.4	104.6	101.0	97.6	94.3
1.60	217.2	205.8	195.4	185.9	177.2	169.1	161.6	154.7	148.2	142.2	136.5	131.2	126.3	121.6	117.2	113.0	109.1	105.3	101.8	98.4

Depth (Feet)

For normal diving use a PPO2 value of 1.4 ATA.  
PPO2 values over 1.4 ATA are for contingency use only.

A rough formula is given by:

$$\text{Depth} = \left( \frac{\text{Oxygen Allowance} \times 10}{\text{Oxygen ratio}} \right) - 10$$

eg. for Allowance of 1.4 and a Oxygen conc of 32%

$$\text{Depth} = \left( \frac{1.4 \times 10}{0.32} \right) - 10$$

$$\text{Depth} = (14 / 0.32) - 10$$

$$\text{Depth} = 43.75 - 10$$

$$\text{Depth} = 33.75\text{m} \times \text{Conversion Factor to Feet (3.2808399)} = 110.7 \text{ ft}$$