

Well-Mate Pressure Tanks Drawdown or Acceptance Factors

Cut-out Pressure PSIG	Cut-in Pressure in PSIG																			
	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	
30	0.21																			
35	0.28	0.19																		
40	0.34	0.26	0.17																	
45	0.39	0.32	0.24	0.16																
50	0.44	0.37	0.30	0.22	0.15															
55	0.47	0.41	0.34	0.28	0.21	0.14														
60	0.5	0.44	0.38	0.32	0.26	0.19	0.13													
65	0.53	0.48	0.42	0.36	0.30	0.24	0.18	0.12												
70	0.56	0.5	0.45	0.4	0.34	0.29	0.23	0.17	0.11											
75		0.53	0.48	0.43	0.38	0.32	0.27	0.22	0.16	0.11										
80			0.5	0.46	0.41	0.36	0.31	0.26	0.21	0.15	0.1									
85				0.48	0.43	0.39	0.34	0.29	0.24	0.2	0.15	0.1								
90					0.46	0.42	0.37	0.32	0.28	0.23	0.19	0.14	0.09							
95						0.44	0.4	0.35	0.31	0.27	0.22	0.18	0.13	0.09						
100							0.42	0.38	0.34	0.3	0.26	0.21	0.17	0.13	0.09					
105								0.41	0.37	0.33	0.29	0.25	0.2	0.16	0.13	0.08				
110									0.39	0.35	0.31	0.27	0.24	0.2	0.16	0.12	0.08			
115										0.38	0.34	0.3	0.26	0.23	0.19	0.15	0.11	0.08		
120											0.36	0.33	0.29	0.25	0.22	0.18	0.15	0.11	0.07	
125												0.35	0.32	0.28	0.25	0.21	0.18	0.14	0.11	

In keeping with current industry standards, drawdown factors are based on Boyle's law. Actual drawdown will vary depending upon system variables including the accuracy and operation of the pressure switch and gauge, actual precharge pressure, and operating temperature of the system.

Example:

What is the drawdown of a WellMate 119.7 Gallon WB35WB with a 40 PSI cut-in and 60 PSI Cut-out?

- 1) Find 40 PSIG under the Cut-In Pressure in PSIG on the second row at the top of the chart
- 2) Find 60 PSIG on the first column under Cut-Out Pressure in PSIG
- 3) Find the the drawdown factor 0.26 where the 60 PSI row meets the 40 PSI column
- 4) To find the drawdown of the WB35WB multiply the 119.7 tank capacity by the 0.26 factor = 31.12 Gallon drawdown

Drawdown is the amount of water that can be removed from a tank, when it is full, before the tank pressure drops and the pump is turned on to refill the tank. A larger tank gives more drawdown which means that more water is available before the pump is needed.