Systemic Hypotension

Blood pressure Thresholds: 3rd percentile			
GA/PMA	**Systolic**	**Mean**	**Diastolic**
24 weeks	32	26	15
25 weeks	34	26	16
26 weeks	36	27	17
27 weeks	38	27	17
28 weeks	40	28	18
29 weeks	42	28	19
30 weeks	43	29	20
31 weeks	45	30	20
32 weeks	46	30	21
33 weeks	47	30	22
34 weeks	48	31	23
35 weeks	49	32	24
36 weeks	50	32	25

Type of hypotension	Pathophysiology	Possible causes
Systolic blood pressure < 3rd percentile	↓ LV stroke output	1. PPHN 2. Septic (cold) shock 3. Cardiogenic shock
Diastolic blood pressure < 3rd percentile	↓ SVR	1. Systemic hypovolemia 2. Warm shock 3. PDA
Systolic and diastolic blood pressure < 3rd percentile	Possible cardiac systolic dysfunction	1. Progression of severity after an initial period of low systolic blood pressure 1. Progression of severity after an initial period of low diastolic blood pressure 2. Both systolic and diastolic low at presenting (profound hypotension)

Reference: Giesinger RE, McNamara PJ. Hemodynamic instability in the critically ill neonate: An approach to cardiovascular support based on disease pathophysiology. Semin Perinatol. 2016;40(3):174-88.