NEXT-100 Parameters DRAFT March 8, 2011, D. Shuman	value	units
Active Mass Xenon (inside QT array)	100.00	kg
Active mass length to diameter ratio	1.25	
Nominal Operating Pressure (Xe or N2)	15.00	bar(abs.)
Maximum Allowable Pressure (Xe or N2)	16.40	bar(abs.)
Active Volume radius (cyl. radius inscribed in QT array)	51.90	cm
Active Volume Length (cathode reflector to SiPM plane)	130.00	cm
Quartz Tube Outer diameter	4.20	cm
QT/WLS/PMT array nominal Radius	54.00	cm
Number of QT/WLS/PMT assemblies	72	
Xenon vessel inner radius	57.00	cm
Xenon Vessel Wall Thickness, maximum	1.00	cm
Buffer gas annulus width	8.00	cm
Pressure vessel inner radius	66.00	cm
Pressure vessel material	CP Titanium -gr. 3	
Pressure vessel minimum wall thickness	0.810	cm
Detector overall height	2.440	m
Detector overall radius, maximum, at service flange	0.800	m
Buffer gas	N2	
Drift Field Gradient	1.000	kV/cm
Cathode Voltage (est)	154	kV
EL gradient (E/p)	4.000	kV/(cm*bar)
EL gap width	4.000	mm
EL start grid voltage	24	kV
EL end grid voltage (SiPM plane)	0	V
Pressure Vessel Service Flange Thickness (est)	13.00	cm
PMT shield axial length (PMT base to leading edge)	20.00	cm
PMT shield width, in radial direction, max	11.50	cm
PMT shield inner radius	40.00	cm
PMT shield outer radius	51.50	cm
SiPM plane outer radius	50.00	cm