Muons in manganese (Mn)

Z	A [g/mol]	ρ [g/cm^3]	I [eV]	a	$k = m_s$	x_0	x_1	$\overline{C}$	δ_0
25 (Mn)	54.938044 (3)	7.440	272.0	0.14973	2.9796	0.0447	3.1074	4.2702	0.14

T	p [MeV/c]	Ionization	Brems	Pair prod [MeV cm^2/g]	Photonucl	Total	CSDA range [g/cm^2]
10.0 MeV	4.704×10^1	5.414				5.414	1.039×10^0
14.0 MeV	5.616×10^1	4.257				4.257	1.881×10^0
20.0 MeV	6.802×10^1	3.347				3.347	3.488×10^0
30.0 MeV	8.509×10^1	2.613				2.613	6.915×10^0
40.0 MeV	1.003×10^2	2.239				2.239	1.108×10^1
80.0 MeV	1.527×10^2	1.689				1.689	3.229×10^1
100. MeV	1.764×10^2	1.590				1.590	4.452×10^1
140. MeV	2.218×10^2	1.491				1.492	7.061×10^1
200. MeV	2.868×10^2	1.440				1.440	1.117×10^2
274. MeV	3.642×10^2	1.428			0.000	1.428	*Minimum ionization*
300. MeV	3.917×10^2	1.429			0.000	1.429	1.816×10^2
400. MeV	4.945×10^2	1.443	0.000		0.000	1.443	2.513×10^2
800. MeV	8.995×10^2	1.521	0.000		0.000	1.522	5.210×10^2
1.00 GeV	1.101×10^3	1.554	0.001		0.000	1.555	6.509×10^2
1.40 GeV	1.502×10^3	1.607	0.001	0.000	0.001	1.609	9.036×10^2
2.00 GeV	2.103×10^3	1.664	0.002	0.001	0.001	1.667	1.270×10^3
3.00 GeV	3.104×10^3	1.728	0.003	0.002	0.001	1.735	1.857×10^3
4.00 GeV	4.104×10^3	1.773	0.004	0.003	0.002	1.782	2.425×10^3
8.00 GeV	8.105×10^3	1.875	0.010	0.010	0.003	1.898	4.592×10^3
10.0 GeV	1.011×10^4	1.905	0.013	0.014	0.004	1.937	5.635×10^3
14.0 GeV	1.411×10^4	1.949	0.020	0.022	0.006	1.997	7.667×10^3
20.0 GeV	2.011×10^4	1.993	0.031	0.036	0.008	2.069	1.062×10^4
30.0 GeV	3.011×10^4	2.040	0.050	0.063	0.012	2.165	1.534×10^4
40.0 GeV	4.011×10^4	2.071	0.071	0.092	0.016	2.250	1.987×10^4
80.0 GeV	8.011×10^4	2.141	0.161	0.220	0.031	2.553	3.653×10^4
100. GeV	1.001×10^5	2.162	0.209	0.289	0.038	2.699	4.414×10^4
140. GeV	1.401×10^5	2.194	0.306	0.432	0.054	2.987	5.823×10^4
200. GeV	2.001×10^5	2.228	0.460	0.658	0.076	3.422	7.698×10^4
300. GeV	3.001×10^5	2.265	0.722	1.038	0.114	4.140	1.035×10^5
358. GeV	3.585×10^5	2.282	0.879	1.267	0.136	4.565	*Muon critical energy*
400. GeV	4.001×10^5	2.292	0.993	1.432	0.152	4.870	1.258×10^5
800. GeV	8.001×10^5	2.357	2.115	3.051	0.307	7.832	1.900×10^5
1.00 TeV	1.000×10^6	2.378	2.693	3.881	0.386	9.339	2.133×10^5
1.40 TeV	1.400×10^6	2.411	3.852	5.537	0.547	12.348	2.505×10^5
2.00 TeV	2.000×10^6	2.445	5.627	8.067	0.792	16.932	2.918×10^5
3.00 TeV	3.000×10^6	2.485	8.593	12.272	1.212	24.564	3.406×10^5
4.00 TeV	4.000×10^6	2.514	11.603	16.525	1.639	32.282	3.760×10^5
8.00 TeV	8.000×10^6	2.584	23.751	33.630	3.410	63.377	4.628×10^5
10.0 TeV	1.000×10^7	2.608	29.878	42.233	4.321	79.040	4.910×10^5
14.0 TeV	1.400×10^7	2.643	42.101	59.394	6.192	110.331	5.336×10^5
20.0 TeV	2.000×10^7	2.681	60.556	85.254	9.062	157.554	5.789×10^5
30.0 TeV	3.000×10^7	2.725	91.279	128.281	14.027	236.313	6.304×10^5
40.0 TeV	4.000×10^7	2.757	122.126	171.419	19.113	315.416	6.669×10^5
80.0 TeV	8.000×10^7	2.836	245.739	344.102	40.383	633.061	7.546×10^5
100. TeV	1.000×10^8	2.861	307.670	430.530	51.380	792.442	7.828×10^5