

**Table 3: Expansion Characteristics of Steel Conduit and Tubing**Coefficient of Thermal Expansion =  $6.50 \times 10^{-6}$  in./in./ °F\*

Temperature Changes in Degrees F	Length Change Steel Conduit in./100 feet	Temperature Changes in Degrees F	Length Change Steel Conduit in./100 feet	Temperature Changes in Degrees F	Length Change Steel Conduit in./100 feet	Temperature Changes in Degrees F	Length Change Steel Conduit in./100 feet
5	0.04	55	0.44	105	0.82	155	1.21
10	0.08	60	0.47	110	0.86	160	1.25
15	0.12	65	0.51	115	0.90	165	1.29
20	0.16	70	0.55	120	0.94	170	1.33
25	0.20	75	0.59	125	0.98	175	1.37
30	0.23	80	0.62	130	1.01	180	1.40
35	0.27	85	0.66	135	1.05	185	1.44
40	0.31	90	0.70	140	1.09	190	1.48
45	0.35	95	0.74	145	1.13	195	1.52
50	0.39	100	0.78	150	1.17	200	1.56

\*A Fine Print Note in Section 300.7(B) of the NEC® refers the user to the Expansion Characteristics of PVC ,Table 352.44(A) for Rigid Nonmetallic Conduit and suggests multiplying the lengths in that table by 0.20 in order to obtain a nominal number for steel conduit. Since the coefficient of steel conduit is between 2-3 times less than that of PVC conduit you would need more expansion fittings for PVC conduit, for a given temperature and length than for steel conduit. We have used the coefficient of expansion of steel, rather than the 0.20 multiplier, to calculate the exact length of change figures in Table 3.