



General Characteristics of Cable Insulating and Sheathing Compounds

Temperature Ratings

| Material | Limiting Temperature | | | Resistance to Ozone | Resistance to Weather | Resistance to Oil | Resistance to Water | Resistance to Chemicals | Resistance to Solvents | Resistance to Abrasion | Flame Retardance | Resistance to Mechanical Damage | Insulation | Sheath |
|-----------------|------------------------------------|------------------|----------------|---------------------|-----------------------|-------------------|---------------------|-------------------------|------------------------|------------------------|------------------|---------------------------------|------------|----------------|
| | Max Continuous Conductor Operation | Min flexing duty | Min installing | | | | | | | | | | | |
| Natural Rubber | 60 | -55 | -55 | Poor | Poor | Poor | Good | Fair | Poor | Fair/Good | Poor | Fair | Good | Fair/Good |
| EPR | 90 | -40 | -50 | Excellent | Good | Poor | Good | Fair | Poor | Poor | Poor | Poor | Excellent | Fair/Good |
| PCP | 70 | -30 | -40 | Good | Good | Good | Fair/Good | Fair/Good | Good | Good | Good | Excellent | — | Good |
| /Excellent | 2182Y | H03VV-F2 | | | | | | | | | | | | |
| CSP | 85 | -30 | -35 | Excellent | Excellent | Good | Fair/Good | Good | Good | Good/Excellent | Good | Excellent | Fair | Good/Excellent |
| Silicone Rubber | 150 | -55 | -55 | Excellent | Excellent | Fair | Good | Fair | Poor | Fair/Poor | Fair | Poor | Excellent | Fair/Good |
| CPE | 85 | -30 | -35 | Excellent | Excellent | Good | Fair/Good | Good | Good | Good/Excellent | Good | Good/Excellent | Fair | Good/Excellent |
| EVA | 85 | -20 | -30 | Excellent | Fair/Good | Fair | Fair | Fair/Good | Fair | Poor | Good | Good/Excellent | — | Good/Excellent |
| EMA | 85 | -20 | -30 | Excellent | Good | Good | Fair | Fair/Good | Good | Poor | Good | Good/Excellent | — | Good/Excellent |
| XLPE | 90 | -30 | -40 | Good | Fair/Good | Good | Good | Good | Good | Fair | Poor | — | Excellent | — |
| PVC | 70 | 0 | 0 | Excellent | Good | Good | Good | Good | Fair | Good | Fair/Good | Fair/Good | Good | Good/Excellent |
| PTFE | 260 | -50 | -75 | Good | Excellent | Excellent | Excellent | Excellent | Excellent | Fair | Excellent | — | Excellent | Good/Excellent |
| FEP | 200 | -50 | -75 | Good | Good | Excellent | Excellent | Excellent | Excellent | Fair | Good | — | Excellent | Good/Excellent |
| ETFE | 150 | -50 | -75 | Good | Good | Excellent | Excellent | Excellent | Excellent | Fair | Fair | — | Excellent | — |
| PEEK | 200 | -50 | -75 | — | Good | Excellent | Good | Excellent | Good | Good | Good | — | Excellent | — |
| KAPTON | 200 | -50 | -75 | Good | Good | Excellent | Excellent | Excellent | Excellent | Fair/Good | Excellent | — | Excellent | — |
| Paper | 80 | 0 | 0 | — | — | — | Good | — | — | Poor | Fair | Poor | Excellent | — |
| Polythene | 70 | — | -60 | Excellent | Good | Fair | Excellent | Good | Good | Good | Poor | Good/Excellent | Excellent | Fair/Good |
| LSF | 90 | 90 | -10 | Fair | Good | Fair | Good | Fair | Fair | Good | Excellent | Fair/Good | Excellent | Excellent |
| MI CABLES | 250 | — | No Limit | Excellent | Excellent | Excellent | Excellent | Fair | Fair | Excellent | Excellent | Excellent | Excellent | Excellent |

Mass Impregnated with non-draining compound
 Low smoke and Fume emission in a fire situation
 Heat Resisting PVC (85°C) is also available
 Characteristics shown are for copper sheathed cables
 They may be affected by the application of further finishes (e.g PVC over sheath)