

**FORMULA 4.275.1**

$$\int_0^1 \left[ \left( \ln \frac{1}{x} \right)^{q-1} - x^{p-1} (1-x)^{q-1} \right] dx = \frac{\Gamma(q)}{\Gamma(p-q)} [\Gamma(p+q) - \Gamma(p)]$$