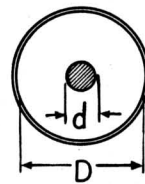




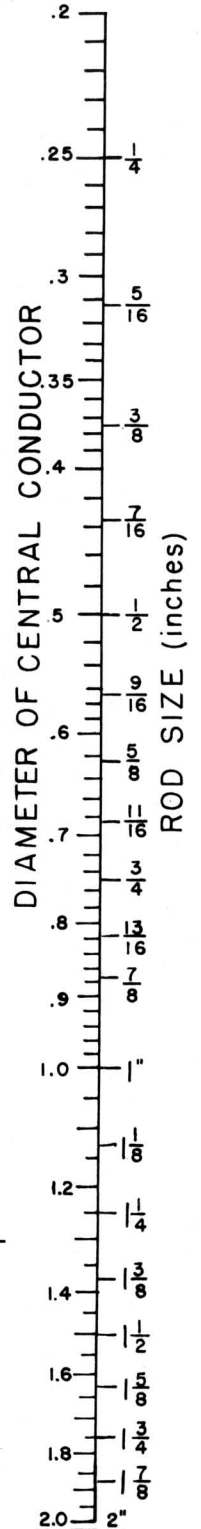
# Technical data

## CHARACTERISTIC IMPEDANCE OF LINES

### CONCENTRIC LINE—AIR SPACED



$$Z_0 = 138 \log_{10} \frac{D}{d}$$



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**CHARACTERISTIC IMPEDANCE OF LINES**  
**CONCENTRIC LINE—AIR SPACED**

This chart gives the theoretically exact characteristic impedance of a coaxial line for any ratio of diameters, assuming perfect conductors and a lossless dielectric (vacuum, air, or a gas). The maximum impedance obtainable on this chart is 150 ohms. A line connecting  $D$  to  $d$  will cross the  $Z_0$  scale at the surge impedance.