$$
\mathbf{K_e} = \frac{E}{l}\left[\begin{array}{cccccc|cccccc}
A & & & & & & & & & & & \\
0 & \frac{12I_z}{l^2(1+\Phi_y)} & & & & & & & & & & \\
0 & 0 & \frac{12I_y}{l^2(1+\Phi_z)} & & & & & & & Symmetric & & \\
0 & 0 & 0 & \frac{GJ}{E} & & & & & & & & \\
0 & 0 & \frac{-6I_y}{l(1+\Phi_z)} & 0 & \frac{(4+\Phi_z)I_y}{1+\Phi_z} & & & & & & & \\
0 & \frac{6I_z}{l(1+\Phi_y)} & 0 & 0 & 0 & \frac{(4+\Phi_y)I_z}{1+\Phi_y} & & & & & & \\
\hline
-A & 0 & 0 & 0 & 0 & 0 & A & & & & & \\
0 & \frac{-12I_z}{l^2(1+\Phi_y)} & 0 & 0 & 0 & \frac{-6I_z}{l(1+\Phi_y)} & 0 & \frac{12I_z}{l^2(1+\Phi_y)} & & & & \\
0 & 0 & \frac{-12I_y}{l^2(1+\Phi_z)} & 0 & \frac{6I_y}{l(1+\Phi_z)} & 0 & 0 & 0 & \frac{12I_y}{l^2(1+\Phi_z)} & & & \\
0 & 0 & 0 & \frac{-GJ}{l} & 0 & 0 & 0 & 0 & 0 & \frac{GJ}{E} & & \\
0 & 0 & \frac{6I_y}{l(1+\Phi_z)} & 0 & \frac{(2-\Phi_z)I_y}{1+\Phi_z} & 0 & 0 & 0 & \frac{6I_y}{l(1+\Phi_z)} & 0 & \frac{(4+\Phi_z)I_y}{l(1+\Phi_z)} & \\
0 & \frac{6I_z}{l(1+\Phi_y)} & 0 & 0 & 0 & \frac{(2-\Phi_y)I_z}{1+\Phi_y} & 0 & \frac{-6I_z}{l(1+\Phi_y)} & 0 & 0 & 0 & \frac{(4+\Phi_y)I_z}{1+\Phi_y}
\end{array}\right]
$$