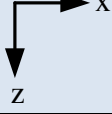
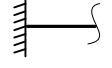
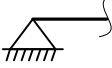
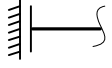
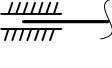
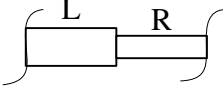
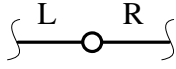
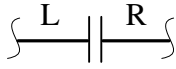
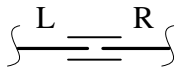


## Rand- und Übergangsbedingungen

|                                 | Zug / Druck |                 | Biegung                      |                 |
|------------------------------------------------------------------------------------------------------------------|-------------|-----------------|------------------------------|-----------------|
|                                                                                                                  | Verformung  | Schnittgrößen   | Verformung                   | Schnittgrößen   |
|                                 | $u = 0$     | —               | $w = 0, w' = 0$              | —               |
|                                 | $u = 0$     | —               | $w = 0$                      | $M = 0$         |
|                                 | —           | $N = 0$         | $w = 0$                      | $M = 0$         |
|                                 | $u = 0$     | —               | $w' = 0$                     | $V = 0$         |
|                               | —           | $N = 0$         | $w = 0, w' = 0$              | —               |
|                               | —           | $N = 0$         | —                            | $V = 0, M = 0$  |
| <b>Steifigkeitssprung</b><br> | $u_L = u_R$ | —               | $w'_L = w'_R$<br>$w_L = w_R$ | —               |
| <b>Momentengelenk</b><br>     | $u_L = u_R$ | —               | $w_L = w_R$                  | $M_L = M_R = 0$ |
| <b>Querkraftgelenk</b><br>    | $u_L = u_R$ | —               | $w'_L = w'_R$                | $V_L = V_R = 0$ |
| <b>Normalkraftgelenk</b><br>  | —           | $N_L = N_R = 0$ | $w_L = w_R$<br>$w'_L = w'_R$ | —               |