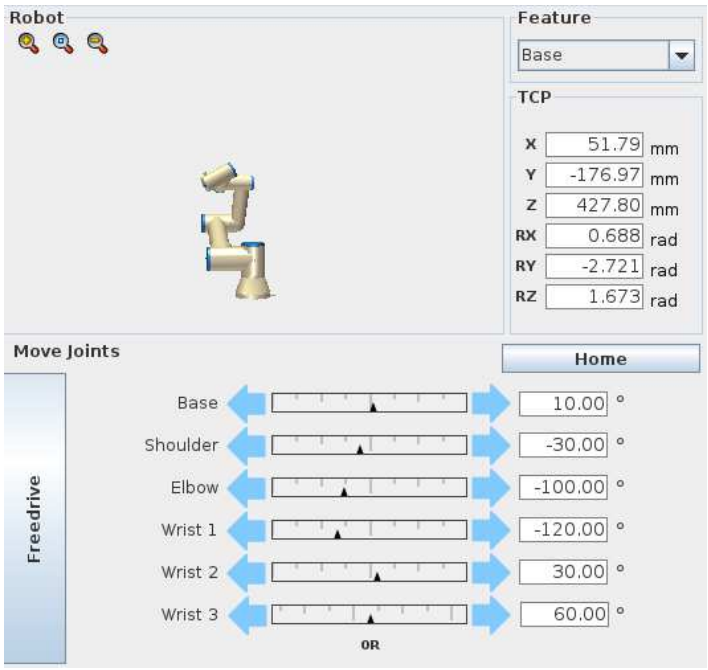
Rückwärtskinematik UR3 Zahlenbeispiel

Ausgangsstellung

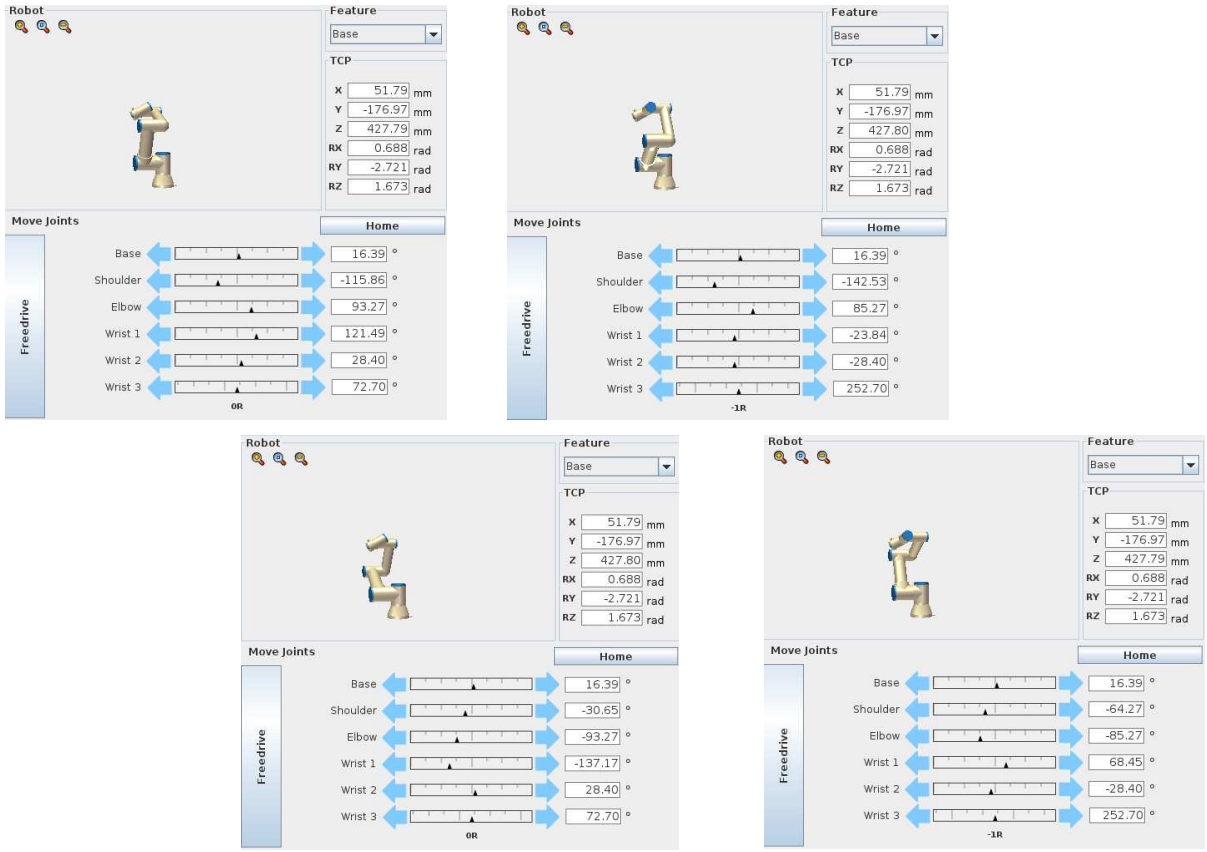
```
q = np.array([10, -30, -100, -120, 30, 60]) / 180 * np.pi
```



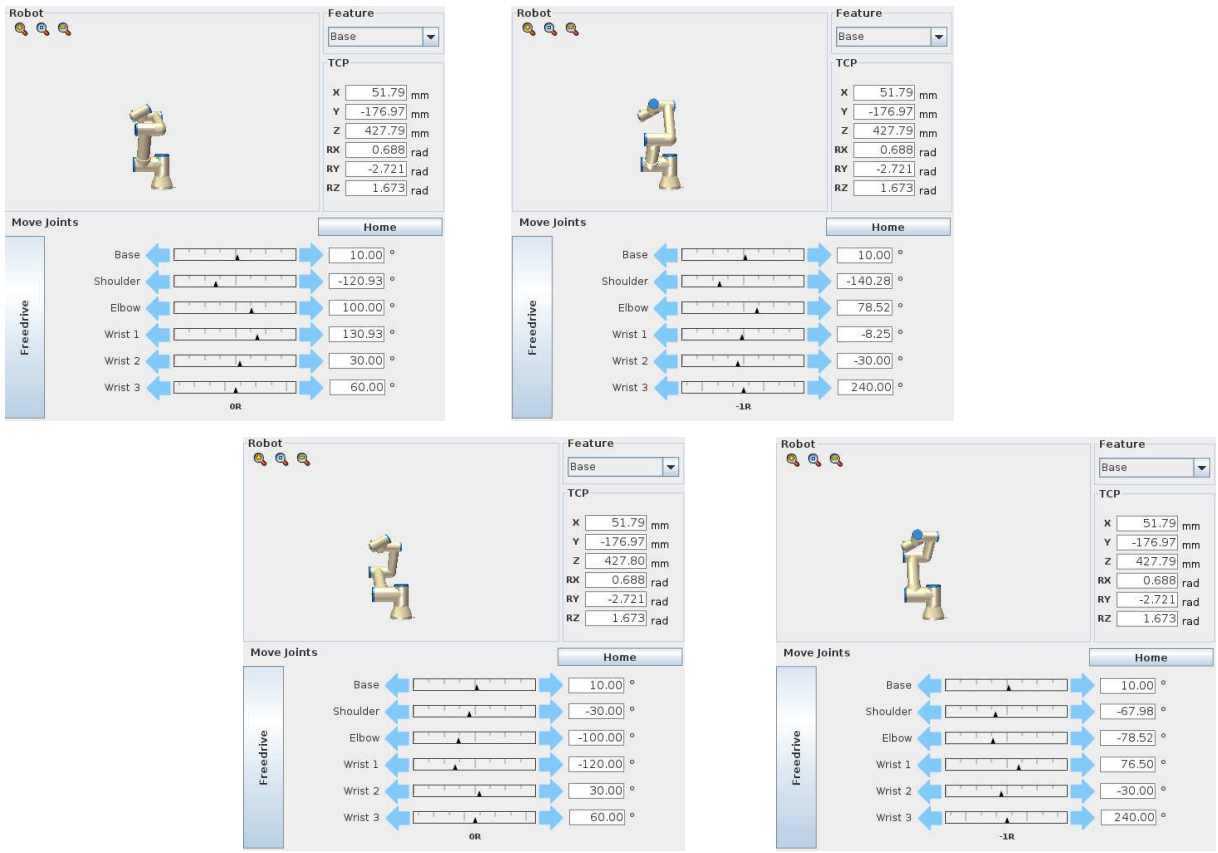
Alle 8 Lösungen

```
[  16.3886 -115.8649   93.2719  121.494    28.3967   72.701 ]
[  16.3886 -142.5334   85.2745  -23.8401  -28.3967 -107.299 ]
[  16.3886  -30.6524  -93.2719 -137.1748   28.3967   72.701 ]
[  16.3886  -64.2703  -85.2745   68.4458  -28.3967 -107.299 ]
[  10.     -120.9326  100.      130.9326   30.       60.    ]
[  10.     -140.2765   78.5241   -8.2476  -30.     -120.    ]
[  10.  -30. -100. -120.   30.   60.]
[  10.      -67.9783  -78.5241   76.5024  -30.     -120.    ]
```

Alle 8 Lösungen



Alle 8 Lösungen



Interne Variablen der Rückwärtskinematik für die Lösung `[ 10. -30. -100. -120. 30. 60.]`

```
O5_in_0:  [ 0.0257 -0.1096  0.4663  1.    ]

T_1_4:  [[-3.4202e-01  1.6691e-10  9.3969e-01 -7.3933e-02]
 [ 9.3969e-01  2.6585e-10  3.4202e-01  2.8518e-01]
 [-1.9273e-10  1.0000e+00 -2.4777e-10  1.1235e-01]
 [ 0.0000e+00  0.0000e+00  0.0000e+00  1.0000e+00]]

x:  -0.07393263067094559
y:  0.2851839765231004
phi:  1.9198621893133154

beta:  1.824457425355078
psi:  0.793536452537116
```