

remote_center_manipulator.xacro

p4_rcm_instrument_holder
link11

needle_driver_house
link12

p4_rcm_instrument_holder_upper_bar_joint
..upper_bar ▶
instr..holder
axis=[0 -1 0]
mimick hand_pitch
multiplier: 1

p4_rcm_parallel_ogram_upper_bar
link10

p4_instrument_slide
..holder ▶
..house
axis=[0 0 1]

p4_hand_roll
p4_rcm_base ▶
pivot_plate
axis=[1 0 0]

p4_rcm_parallel_ogram_base
link9

p4_hand_pitch
pivot_pl.. ▶
par..base
axis=[0 -1 0]

p4_rcm_pivot_plate
link8

p4_rcm_base
link7

p4_arm_yaw4

needle_driver_neck
link13

p4_instrument_pitch
needle_driver_neck ▶
needle_driver_head
axis=[-1 0 0]

needle_driver.xacro

needle_driver_neck
link13

z_0
 x_0
 y_0

needle_driver_head
link14

p4_instrument_jaw_left
needle_driver_head ▶
..jawbone_left
axis=[0 0 -1]

p4_instrument_jaw_right
needle_driver_head ▶
..jawbone_right
axis=[0 0 1]

needle_driver_jawbone_left
link15L

needle_driver_jawbone_right
link15R

side view
front view