

ROTATION MATRIX from URDF_FRAME_FA_JOINT_4 orientation to Hand_robot_inteface:

1.00000	0.0000000000	0.0000000000	0.0000000000
0.0000000000	1.00000	0.0000000000	0.0000000000
0.0000000000	0.0000000000	1.00000	-69.5000

ROTATION MATRIX from Hand_robot_inteface orientation to CONTROL_FRAME:

0.992375	0.0871557	-0.0871532	16.0000
-0.0868216	0.996195	0.00762492	0.0000000000
0.0874861	0.0000000000	0.996166	-125.500

VOLUME = 5.2035786e+05 MM³
SURFACE AREA = 4.0122552e+05 MM²
AVERAGE DENSITY = 2.7364359e-06 KILOGRAM / MM³
MASS = 1.4239259e+00 KILOGRAM

CENTER OF GRAVITY with respect to HAND_ROBOT_INTERFACE coordinate frame:
X Y Z 2.0955992e+00 4.3009755e+00 -6.0792229e+01 MM

INERTIA at CENTER OF GRAVITY with respect to HAND_ROBOT_INTERFACE coordinate frame: (KILOGRAM * MM²)

INERTIA TENSOR:
Ixx Ixy Ixz 4.6340021e+03 -5.6301252e+01 2.1001241e+02
Iyx Iyy Iyz -5.6301252e+01 5.2222303e+03 2.0916976e+02
Izx Izy Izz 2.1001241e+02 2.0916976e+02 1.3961628e+03

PRINCIPAL MOMENTS OF INERTIA: (KILOGRAM * MM²)
I1 I2 I3 1.3708864e+03 4.6444848e+03 5.2370242e+03

ROTATION MATRIX from HAND_ROBOT_INTERFACE orientation to PRINCIPAL AXES (degrees):

-0.06508	0.99502	-0.07553
-0.05506	0.07200	0.99588
0.99636	0.06897	0.05010