VOLUME = 5.4425986e+05 MM^3

SURFACE AREA = 2.8773969e+05 MM^2

AVERAGE DENSITY = 2.1914597e-06 KILOGRAM / MM^3

MASS = 1.1927236e+00 KILOGRAM

CENTER OF GRAVITY with respect to URDF\_KNEE coordinate frame:

X Y Z 1.4549221e+01 -2.0785942e+01 -1.9572282e+02 MM

INERTIA with respect to URDF\_KNEE coordinate frame: (KILOGRAM \* MM^2)

INERTIA TENSOR:

Ixx Ixy Ixz 8.1518889e+04 3.6071031e+02 3.3965272e+03

Iyx Iyy Iyz 3.6071031e+02 8.1472666e+04 -5.4554119e+03

Izx Izy Izz 3.3965272e+03 -5.4554119e+03 2.0980579e+03

INERTIA at CENTER OF GRAVITY with respect to URDF\_KNEE coordinate frame: (KILOGRAM \* MM^2)

INERTIA TENSOR:

Ixx Ixy Ixz 3.5313402e+04 0.0000000e+00 1.1029574e-01

Iyx Iyy Iyz 0.0000000e+00 3.5530025e+04 -6.0307457e+02

Izx Izy Izz 1.1029574e-01 -6.0307457e+02 1.3302597e+03

PRINCIPAL MOMENTS OF INERTIA: (KILOGRAM \* MM^2)

I1 I2 I3 1.3196285e+03 3.5313402e+04 3.5540656e+04

ROTATION MATRIX from URDF\_KNEE orientation to PRINCIPAL AXES:

0.00000 1.00000 0.00003

0.01763 -0.00003 0.99984

0.99984 0.00000 -0.01763

ROTATION ANGLES from URDF\_KNEE orientation to PRINCIPAL AXES (degrees):

angles about x y z -91.010 0.000 -90.000

RADII OF GYRATION with respect to PRINCIPAL AXES:

R1 R2 R3 3.3262580e+01 1.7206791e+02 1.7262068e+02 MM

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MASS PROPERTIES OF COMPONENTS OF THE ASSEMBLY

(in assembly units and the URDF\_KNEE coordinate frame)

DENSITY MASS C.G.: X Y Z

PH0002 MATERIAL: UNKNOWN

2.19146e-06 1.19272e+00 1.45492e+01 -2.07859e+01 -1.95723e+02