VOLUME = 5.8384419e+05 MM^3

SURFACE AREA = 4.8900626e+05 MM^2

AVERAGE DENSITY = 3.9497273e-06 KILOGRAM / MM^3

MASS = 2.3060254e+00 KILOGRAM

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

X Y Z 1.4694302e+01 -2.4958301e+01 -1.3680738e+02 MM

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

INERTIA TENSOR:

Ixx Ixy Ixz 6.3115576e+04 8.7774986e+02 4.6539882e+03

Iyx Iyy Iyz 8.7774986e+02 6.0982119e+04 -9.9081919e+03

Izx Izy Izz 4.6539882e+03 -9.9081919e+03 6.6867498e+03

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

INERTIA TENSOR:

Ixx Ixy Ixz 1.8518946e+04 3.2027015e+01 1.8210933e+01

Iyx Iyy Iyz 3.2027015e+01 1.7324028e+04 -2.0343149e+03

Izx Izy Izz 1.8210933e+01 -2.0343149e+03 4.7523651e+03

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

I1 I2 I3 4.4313357e+03 1.7644072e+04 1.8519931e+04

ROTATION MATRIX from URDF\_KNEE orientation to PRINCIPAL AXES:

-0.00163 -0.03290 -0.99946

0.15586 0.98724 -0.03275

0.98778 -0.15583 0.00352

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

angles about x y z 83.870 -88.113 92.839

RADII OF GYRATION with respect to PRINCIPAL AXES:

R1 R2 R3 4.3836441e+01 8.7471661e+01 8.9616432e+01 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

3.94973e-06 2.30603e+00 1.46943e+01 -2.49583e+01 -1.36807e+02