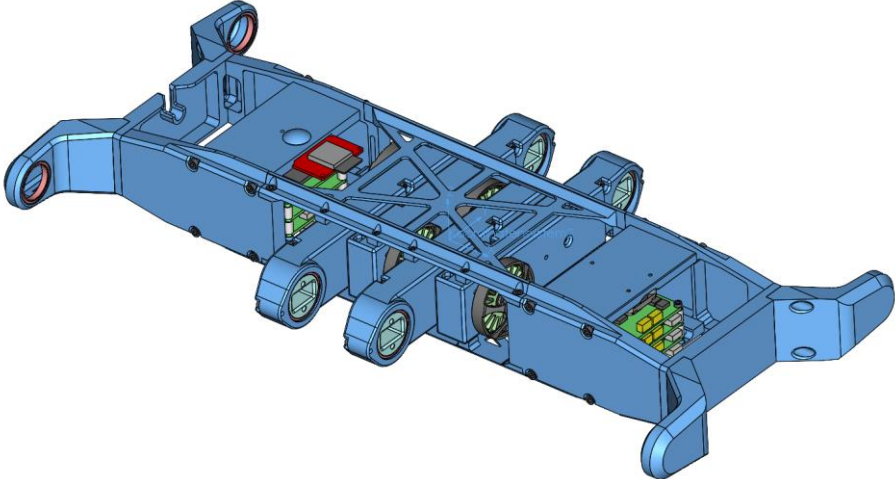
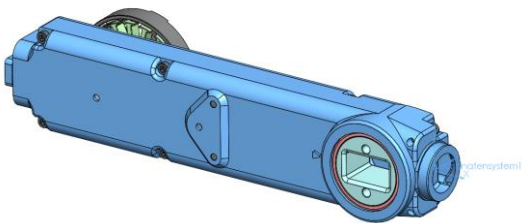
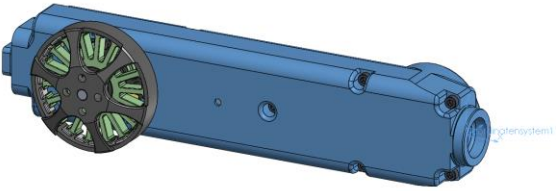
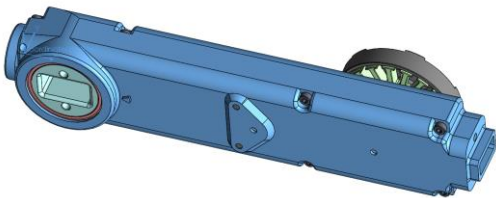
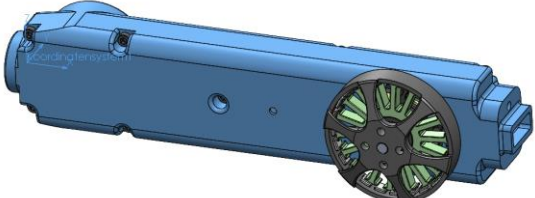
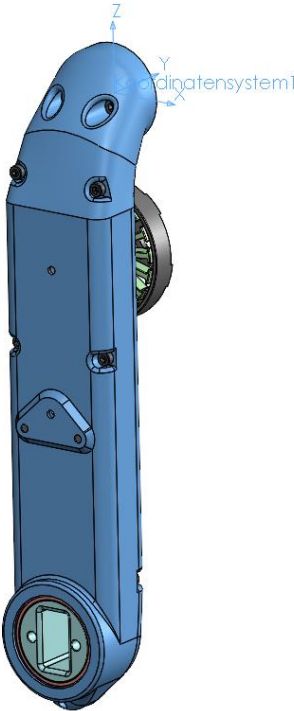
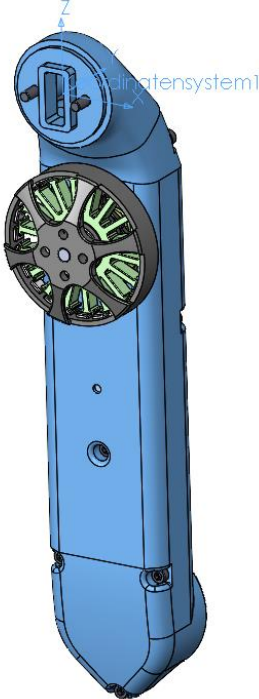


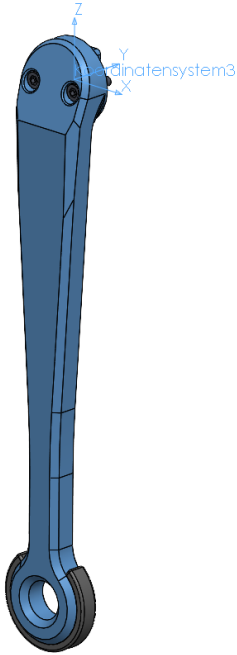
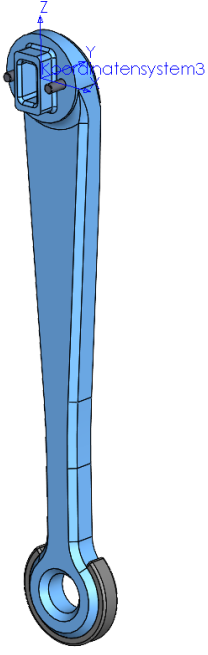
Quadruped Robot 12dof v1 Inertia Parameters 16.8.2022

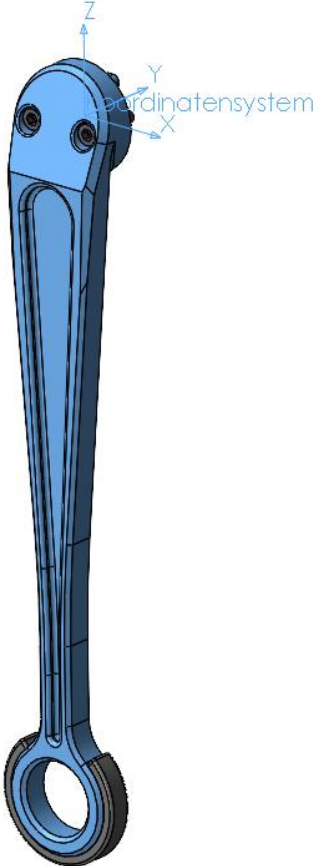
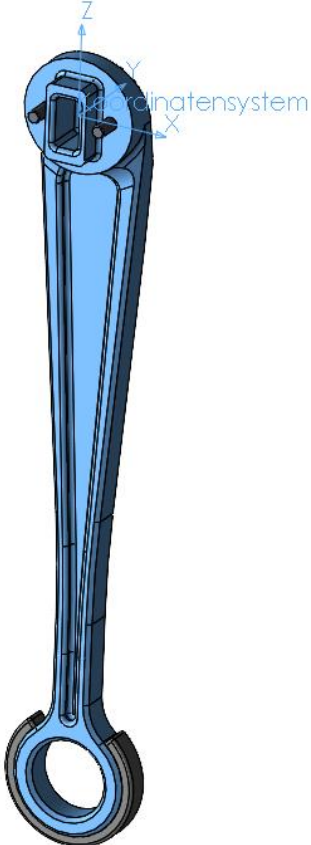
	Body
Mass [kg]	1.25123725
Center of Mass Position [m] with respect to the URDF coordinate system.	X = -0.00082966 Y = 0.00000105 Z = -0.00060210
Inertia [kg*m ²] with respect to the center of mass aligned to the URDF coordinate system.	Lxx = 0.00266220 Lxy = -0.00003684 Lxz = -0.00001716 Lyx = -0.00003684 Lyy = 0.01388510 Lyz = -0.00000009 Lzx = -0.00001716 Lzy = -0.00000009 Lzz = 0.01605370
Screenshot	 A 3D CAD model of a quadruped robot chassis, rendered in blue. The model shows a central body with four legs extending outwards. The legs are composed of multiple segments, with joints visible. The robot is shown from a perspective view, highlighting its symmetrical design and the internal structure of the legs.

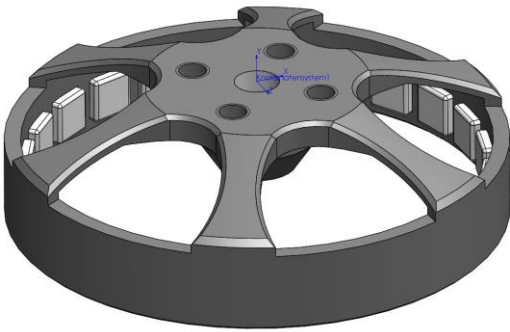
	Hip FE Module Front Right Leg	Hip FE Module Front Left Leg
Mass [kg]	0.14196048	0.14196048
Center of Mass Position [m] with respect to the URDF coordinate system.	X = -0.09407251 Y = 0.00438935 Z = -0.00001384	X = -0.09407251 Y = -0.00438935 Z = 0.00001384
Inertia [kg*m²] with respect to the center of mass aligned to the URDF coordinate system.	Lxx = 0.00002802 Lxy = -0.00003687 Lxz = 0.00000009 Lyx = -0.00003687 Lyy = 0.00038264 Lyz = 0.00000000 Lzx = 0.00000009 Lzy = 0.00000000 Lzz = 0.00038050	Lxx = 0.00002802 Lxy = 0.00003687 Lxz = -0.00000009 Lyx = 0.00003687 Lyy = 0.00038264 Lyz = 0.00000000 Lzx = -0.00000009 Lzy = 0.00000000 Lzz = 0.00038050
Screenshot		

	Hip FE Module Hind Right Leg	Hip FE Module Hind Left Leg
Mass [kg]	0.14196048	0.14196048
Center of Mass Position [m] with respect to the URDF coordinate system.	X = 0.09407251 Y = 0.00438935 Z = 0.00001384	X = 0.09407251 Y = -0.00438935 Z = -0.00001384
Inertia [kg*m ²] with respect to the center of mass aligned to the URDF coordinate system.	Lxx = 0.00002802 Lxy = 0.00003687 Lxz = 0.00000009 Lyx = 0.00003687 Lyy = 0.00038264 Lyz = 0.00000000 Lzx = 0.00000009 Lzy = 0.00000000 Lzz = 0.00038050	Lxx = 0.00002802 Lxy = -0.00003687 Lxz = -0.00000009 Lyx = -0.00003687 Lyy = 0.00038264 Lyz = 0.00000000 Lzx = -0.00000009 Lzy = 0.00000000 Lzz = 0.00038050
Screenshot		

	Upper Leg Module Right Side	Upper Module Leg Left Side
Mass [kg]	0.14737324	0.14737324
Center of Mass Position [m] with respect to the URDF coordinate system.	X = -0.00001530 Y = -0.01767640 Z = -0.07838230	X = 0.00001530 Y = 0.01767640 Z = -0.07838230
Inertia [kg*m ²] with respect to the center of mass aligned to the URDF coordinate system.	Lxx = 0.00041540 Lxy = 0.00000000 Lxz = -0.00000010 Lyx = 0.00000000 Lyy = 0.00041637 Lyz = 0.00004589 Lzx = -0.00000010 Lzy = 0.00004589 Lzz = 0.00002982	Lxx = 0.00041540 Lxy = 0.00000000 Lxz = 0.00000010 Lyx = 0.00000000 Lyy = 0.00041637 Lyz = -0.00004589 Lzx = 0.00000010 Lzy = -0.00004589 Lzz = 0.00002982
Screenshot		

	Lower Leg v2 Right Side	Lower Leg v2 Left Side
Mass [kg]	0.02318294	0.02318294
Center of Mass Position [m] with respect to the URDF coordinate system.	X = 0.00000000 Y = -0.00776716 Z = -0.07003876	X = 0.00000000 Y = 0.00776716 Z = -0.07003876
Inertia [kg*m ²] with respect to the center of mass aligned to the URDF coordinate system.	Lxx = 0.00008508 Lxy = 0.00000000 Lxz = 0.00000000 Lyx = 0.00000000 Lyy = 0.00008580 Lyz = 0.00000200 Lzx = 0.00000000 Lzy = 0.00000200 Lzz = 0.00000139	Lxx = 0.00008508 Lxy = 0.00000000 Lxz = 0.00000000 Lyx = 0.00000000 Lyy = 0.00008580 Lyz = -0.00000200 Lzx = 0.00000000 Lzy = -0.00000200 Lzz = 0.00000139
Screenshot		

	Lower Leg v23 Right Side	Lower Leg v3 Left Side
Mass [kg]	0.02426237	0.02426237
Center of Mass Position [m] with respect to the URDF coordinate system.	X = 0.00000000 Y = -0.00794521 Z = -0.05882309	X = 0.00000000 Y = 0.00794521 Z = -0.05882309
Inertia [kg*m ²] with respect to the center of mass aligned to the URDF coordinate system.	Lxx = 0.00008841 Lxy = 0.00000000 Lxz = 0.00000000 Lyx = 0.00000000 Lyy = 0.00008916 Lyz = 0.00000292 Lzx = 0.00000000 Lzy = 0.00000292 Lzz = 0.00000155	Lxx = 0.00008841 Lxy = 0.00000000 Lxz = 0.00000000 Lyx = 0.00000000 Lyy = 0.00008916 Lyz = -0.00000292 Lzx = 0.00000000 Lzy = -0.00000292 Lzz = 0.00000155
Screenshot		

Motor Rotor Antigravity 4004	Inertia [kg*m²]
	<p>$L_{xx} = 0.00000245$ $L_{xy} = 0.00000000$ $L_{xz} = 0.00000000$ $L_{yx} = 0.00000000$ $L_{yy} = 0.00000447$ $L_{yz} = 0.00000000$ $L_{zx} = 0.00000000$ $L_{zy} = 0.00000000$ $L_{zz} = 0.00000245$</p> <p>The reflected inertia at the output joint is 81 times higher compared to the inertia of the motor rotor. For rotation around the motor axis only the L_{yy} value should be relevant.</p>