DeltaSM_AnguloSinFriccions

Design Description

Sebastian

DeltaSM_AnguloSinFriccions: Design Description

Sebastian

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Capítulo 1. Model Version

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Capítulo 2. Root System

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Figura 2.1. DeltaSM_AnguloSinFriccions
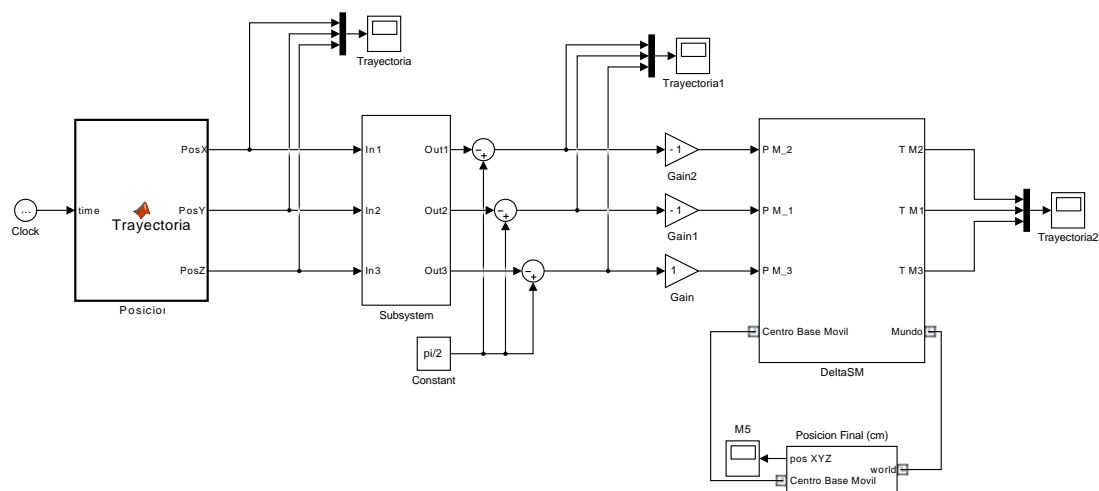
2.1. Blocks

2.1.1. Parameters

2.1.1.1. "Clock" (Clock)

Tabla 2.1. "Clock" Parameters

Parameter	Value
Display time	on
Decimation	10

2.1.1.2. "Constant" (Constant)

Tabla 2.2. "Constant" Parameters

Parameter	Value
Constant value	pi/2
Interpret vector parameters as 1-D	on

Parameter	Value
Sampling mode	Sample based
Output minimum	[]
Output maximum	[]
Output data type	Inherit: Inherit from 'Constant value'
Lock output data type setting against changes by the fixed-point tools	off
Sample time	inf
Frame period	inf

2.1.1.3. "Gain" (Gain)

Tabla 2.3. "Gain" Parameters

Parameter	Value
Gain	1
Multiplication	Element-wise(K.*u)
Parameter minimum	[]
Parameter maximum	[]
Parameter data type	Inherit: Inherit via internal rule
Output minimum	[]
Output maximum	[]
Output data type	Inherit: Inherit via internal rule
Lock output data type setting against changes by the fixed-point tools	off
Integer rounding mode	Floor
Saturate on integer overflow	off
Sample time (-1 for inherited)	-1

2.1.1.4. "Gain1" (Gain)

Tabla 2.4. "Gain1" Parameters

Parameter	Value
Gain	-1
Multiplication	Element-wise(K.*u)
Parameter minimum	[]
Parameter maximum	[]

Parameter	Value
Parameter data type	Inherit: Inherit via internal rule
Output minimum	[]
Output maximum	[]
Output data type	Inherit: Inherit via internal rule
Lock output data type setting against changes by the fixed-point tools	off
Integer rounding mode	Floor
Saturate on integer overflow	off
Sample time (-1 for inherited)	-1

2.1.1.5. "Gain2" (Gain)

Tabla 2.5. "Gain2" Parameters

Parameter	Value
Gain	-1
Multiplication	Element-wise(K.*u)
Parameter minimum	[]
Parameter maximum	[]
Parameter data type	Inherit: Inherit via internal rule
Output minimum	[]
Output maximum	[]
Output data type	Inherit: Inherit via internal rule
Lock output data type setting against changes by the fixed-point tools	off
Integer rounding mode	Floor
Saturate on integer overflow	off
Sample time (-1 for inherited)	-1

2.1.1.6. "Mux1" (Mux)

Tabla 2.6. "Mux1" Parameters

Parameter	Value
Number of inputs	3

Parameter	Value
Display option	bar

2.1.1.7. "Mux2" (Mux)

Tabla 2.7. "Mux2" Parameters

Parameter	Value
Number of inputs	3
Display option	bar

2.1.1.8. "Mux3" (Mux)

Tabla 2.8. "Mux3" Parameters

Parameter	Value
Number of inputs	3
Display option	bar

2.1.1.9. "Posicion " (MATLAB Function)

Tabla 2.9. Posicion Function Properties

Property	Value
Update Method	INHERITED
Sample Time	
Support variable-size arrays	1
Saturate on integer overflow	1
Treat these inherited Simulink signal types as fi objects	Fixed-point
Input fi math	fimath(...)
Description	

Tabla 2.10. Posicion Argument Summary

Name	Scope	Port	Data Type	Size
PosX	Output	1	double	1

Name	Scope	Port	Data Type	Size
PosY	Output	2	double	1
PosZ	Output	3	double	1
time	Input	1	double	1

Posicion Function Script

```
% function [PosX,PosY,PosZ] = Trayectoria(time)
%
%
% TIni=0;
%
% tf1=2;
% tf2=4;
% tf3=2;
% tf4=2;
%
% px2i=-40;
% px2f=40;
%
% pz1i=240;
% pz1f=170;
%
% pz3i=pz1f;
% pz3f=pz1i;
%
% pz4i=pz3f;
% pz4f=141.65;
%
% % %%%%%%%%%%%%%%%%%%%%%%%%%% funcion Z1
% a10z = pz1i;
% a11z = 0; %velocidad inicial
% a12z = 0; %aceleracion inicial
% a13z = (10*(pz1f-pz1i))/tf1^3;
% a14z = -(15*(pz1f-pz1i))/tf1^4;
% a15z = (6*(pz1f-pz1i))/tf1^5;
% %  z1(t) = a10z + a11z*t + a12z*t^2 + a13z*t^3 + a14z*t^4 + a15z*t^5;
%
% % %%%%%%%%%%%%%%%%%%%%%%%%%% funcion Z3
% a30z = pz3i;
% a31z = 0; %velocidad inicial
% a32z = 0; %aceleracion inicial
% a33z = (10*(pz3f-pz3i))/tf3^3;
% a34z = -(15*(pz3f-pz3i))/tf3^4;
% a35z = (6*(pz3f-pz3i))/tf3^5;
% % z3(t) = a30z + a31z*t + a32z*t^2 + a33z*t^3 + a34z*t^4 + a35z*t^5;
%
%
% % %%%%%%%%%%%%%%%%%%%%%%%%% funcion X2
% a10x = px2i;
% a11x = 0; %velocidad inicial
% a12x = 0; %aceleracion inicial
% a13x = (10*(px2f-px2i))/tf2^3;
```

```matlab
% a14x = -(15*(px2f-px2i))/tf2^4;
% a15x = (6*(px2f-px2i))/tf2^5;
%
%
% % %%%%%%%%%%%%%%%%%%%%%%%%%%% funcion Z4
% a40z = pz4i;
% a41z = 0; %velocidad inicial
% a42z = 0; %aceleracion inicial
% a43z = (10*(pz4f-pz4i))/tf4^3;
% a44z = -(15*(pz4f-pz4i))/tf4^4;
% a45z = (6*(pz4f-pz4i))/tf3^5;
% % z3(t) = a30z + a31z*t + a32z*t^2 + a33z*t^3 + a34z*t^4 + a35z*t^5;
%
% % x2(t) = a10x + a11x*t + a12x*t^2 + a13x*t^3 + a14x*t^4 + a15x*t^5;
% % if(time<=TIni)
% %    PosX=0;
% %    PosY=px2i;
% %    PosZ=170;
% if(time<tf1+TIni)
%    tiempo=time-TIni;
%    PosX=0;
%    PosY=px2i;
%    PosZ=a10z + a11z*tiempo + a12z*tiempo^2 + a13z*tiempo^3 + a14z*tiempo^4 + a15z
% elseif (time<tf2+tf1+TIni)
%    tiempo=time-tf1-TIni;
%    PosX=0;
%    PosY= a10x + a11x*tiempo + a12x*tiempo^2 + a13x*tiempo^3 + a14x*tiempo^4 + a15
%    PosZ=pz1f;
%
% elseif (time<tf2+tf1+tf3+TIni)
%    tiempo=time-tf2-tf1-TIni;
%    PosX=0;
%    PosY=px2f;
%    PosZ=a30z + a31z*tiempo + a32z*tiempo^2 + a33z*tiempo^3 + a34z*tiempo^4 + a35z
% elseif (time<tf2+tf1+tf3+TIni+tf4)
%    tiempo=time-tf2-tf1-TIni-tf3;
%    PosX=0;
%    PosY=px2f;
%    PosZ=a40z + a41z*tiempo + a42z*tiempo^2 + a43z*tiempo^3 + a44z*tiempo^4 + a45z
% else
%    tiempo=tf4;
%    PosX=0;
%    PosY=px2f;
%    PosZ=a40z + a41z*tiempo + a42z*tiempo^2 + a43z*tiempo^3 + a44z*tiempo^4 + a45z
% end


%
function [PosX,PosY,PosZ] = Trayectoria(time)


TIni=0;

tf1=1;
```

```matlab
    tf2=1;
    tf3=1;

%  px2i=-20;
%  px2f=40;
    px2i=-70;
    px2f=70;


    pz1i=-300;
    pz1f=-160;

    pz3i=pz1f;
    pz3f=-300;


%  %%%%%%%%%%%%%%%%%%%%%%%%%%% funcion Z1
    a10z = pz1i;
    a11z = 0; %velocidad inicial
    a12z = 0; %aceleracion inicial
    a13z = (10*(pz1f-pz1i))/tf1^3;
    a14z = -(15*(pz1f-pz1i))/tf1^4;
    a15z = (6*(pz1f-pz1i))/tf1^5;
%   z1(t) = a10z + a11z*t + a12z*t^2 + a13z*t^3 + a14z*t^4 + a15z*t^5;

%  %%%%%%%%%%%%%%%%%%%%%%%%%%% funcion Z3
    a30z = pz3i;
    a31z = 0; %velocidad inicial
    a32z = 0; %aceleracion inicial
    a33z = (10*(pz3f-pz3i))/tf3^3;
    a34z = -(15*(pz3f-pz3i))/tf3^4;
    a35z = (6*(pz3f-pz3i))/tf3^5;
%  z3(t) = a30z + a31z*t + a32z*t^2 + a33z*t^3 + a34z*t^4 + a35z*t^5;


%  %%%%%%%%%%%%%%%%%%%%%%%%% funcion X2
    a10x = px2i;
    a11x = 0; %velocidad inicial
    a12x = 0; %aceleracion inicial
    a13x = (10*(px2f-px2i))/tf2^3;
    a14x = -(15*(px2f-px2i))/tf2^4;
    a15x = (6*(px2f-px2i))/tf2^5;
%  x2(t) = a10x + a11x*t + a12x*t^2 + a13x*t^3 + a14x*t^4 + a15x*t^5;
%  if(time<=TIni)
%    PosX=0;
%    PosY=px2i;
%    PosZ=170;
    if(time<tf1+TIni)
      tiempo=time-TIni;
      PosX=0;
      PosY=px2i;
      PosZ=a10z + a11z*tiempo + a12z*tiempo^2 + a13z*tiempo^3 + a14z*tiempo^4 + a15z*t
    elseif (time<tf2+tf1+TIni)
      tiempo=time-tf1-TIni;
```

```
      PosX=0;
      PosY= a10x + a11x*tiempo + a12x*tiempo^2 + a13x*tiempo^3 + a14x*tiempo^4 + a15x*
      PosZ=pz1f;

   elseif (time<tf2+tf1+tf3+TIni)
      tiempo=time-tf2-tf1-TIni;
      PosX=0;
      PosY=px2f;
      PosZ=a30z + a31z*tiempo + a32z*tiempo^2 + a33z*tiempo^3 + a34z*tiempo^4 + a35z*t
   else
      tiempo=tf3;
      PosX=0;
      PosY=px2f;
      PosZ=a30z + a31z*tiempo + a32z*tiempo^2 + a33z*tiempo^3 + a34z*tiempo^4 + a35z*t
   end


   %
```

Tabla 2.11. Posicion Supporting Functions

Function	Defined By	Path
coder.internal.assert	MATLAB	
coder.internal.div	MATLAB	
coder.internal.isBuiltInNumeric	MATLAB	
coder.internal.scalarEg	MATLAB	
coder.internal.scalexpAlloc	MATLAB	
floor	MATLAB	
ismatrix	MATLAB	
mpower	MATLAB	
mrdivide	MATLAB	
power	MATLAB	
rdivide	MATLAB	

2.1.1.10. "Sum" (Sum)

Tabla 2.12. "Sum" Parameters

Parameter	Value
Icon shape	round
List of signs	|-+
Sum over	All dimensions

Parameter	Value
Dimension	1
Require all inputs to have the same data type	off
Accumulator data type	Inherit: Inherit via internal rule
Output minimum	[]
Output maximum	[]
Output data type	Inherit: Inherit via internal rule
Lock data type settings against changes by the fixed-point tools	off
Integer rounding mode	Floor
Saturate on integer overflow	off
Sample time (-1 for inherited)	-1

2.1.1.11. "Sum1" (Sum)

Tabla 2.13. "Sum1" Parameters

Parameter	Value
Icon shape	round
List of signs	|-+
Sum over	All dimensions
Dimension	1
Require all inputs to have the same data type	off
Accumulator data type	Inherit: Inherit via internal rule
Output minimum	[]
Output maximum	[]
Output data type	Inherit: Inherit via internal rule
Lock data type settings against changes by the fixed-point tools	off
Integer rounding mode	Floor
Saturate on integer overflow	off
Sample time (-1 for inherited)	-1

2.1.1.12. "Sum2" (Sum)

Tabla 2.14. "Sum2" Parameters

Parameter	Value
Icon shape	round
List of signs	|-+
Sum over	All dimensions
Dimension	1
Require all inputs to have the same data type	off
Accumulator data type	Inherit: Inherit via internal rule
Output minimum	[]
Output maximum	[]
Output data type	Inherit: Inherit via internal rule
Lock data type settings against changes by the fixed-point tools	off
Integer rounding mode	Floor
Saturate on integer overflow	off
Sample time (-1 for inherited)	-1

2.1.2. Block Execution Order

1. Clock [2] (Clock)
2. *Posicion*
3. Trayectoria [11] (Scope)
4. Transport Delay2 [286] (TransportDelay)
5. Transport Delay1 [286] (TransportDelay)
6. Transport Delay [286] (TransportDelay)
7. *Cinematica Inversa*
8. Constant [2] (Constant)
9. Sum [9] (Sum)
10. Sum1 [10] (Sum)
11. Sum2 [10] (Sum)
12. Trayectoria1 [11] (Scope)
13. Gain1 [3] (Gain)
14. reshape0 (Reshape)
15. Derivative [270] (Derivative)
16. reshape1 (Reshape)
17. Derivative1 [271] (Derivative)
18. reshape2 (Reshape)
19. EXEC_INPUT_1 (SimscapeExecutionBlock)
20. Gain2 [4] (Gain)

21. reshape0 (Reshape)
22. Derivative [274] (Derivative)
23. reshape1 (Reshape)
24. Derivative1 [274] (Derivative)
25. reshape2 (Reshape)
26. EXEC_INPUT_1 (SimscapeExecutionBlock)
27. Gain [3] (Gain)
28. reshape0 (Reshape)
29. Derivative [263] (Derivative)
30. reshape1 (Reshape)
31. Derivative1 [263] (Derivative)
32. reshape2 (Reshape)
33. EXEC_INPUT_1 (SimscapeExecutionBlock)
34. EXEC_STATE_1 (SimscapeExecutionBlock)
35. EXEC_OUTPUT_3 (SimscapeExecutionBlock)
36. reshape (Reshape)
37. reshape (Reshape)
38. reshape (Reshape)
39. Trayectoria2 [11] (Scope)
40. input (PMIOPort)
41. input (PMIOPort)
42. input (PMIOPort)
43. Trayectoria2 [254] (Scope)
44. output (PMIOPort)
45. Conn1 [274] (PMIOPort)
46. Trayectoria1 [254] (Scope)
47. output (PMIOPort)
48. Conn1 [270] (PMIOPort)
49. Trayectoria [254] (Scope)
50. output (PMIOPort)
51. Conn1 [263] (PMIOPort)
52. reshape (Reshape)
53. Scope [225] (Scope)
54. input (PMIOPort)
55. reshape (Reshape)
56. Scope1 [225] (Scope)
57. input (PMIOPort)
58. ReferenceFrame [23] (SimMechanicsBlock)
59. Solid [23] (SimMechanicsBlock)
60. F [23] (PMIOPort)
61. ReferenceFrame [38] (SimMechanicsBlock)
62. Solid [38] (SimMechanicsBlock)
63. F [38] (PMIOPort)
64. ReferenceFrame [80] (SimMechanicsBlock)
65. Solid [80] (SimMechanicsBlock)
66. F [80] (PMIOPort)
67. ReferenceFrame [287] (SimMechanicsBlock)
68. Solid [288] (SimMechanicsBlock)
69. F [287] (PMIOPort)
70. ReferenceFrame [302] (SimMechanicsBlock)
71. Solid [302] (SimMechanicsBlock)
72. F [302] (PMIOPort)
73. ReferenceFrame [96] (SimMechanicsBlock)
74. Transform [96] (SimMechanicsBlock)

75. Transform1 [97] (SimMechanicsBlock)
76. Transform2 [98] (SimMechanicsBlock)
77. Transform3 [98] (SimMechanicsBlock)
78. Transform4 [99] (SimMechanicsBlock)
79. Transform5 [100] (SimMechanicsBlock)
80. Transform6 [101] (SimMechanicsBlock)
81. F [95] (PMIOPort)
82. F1 [96] (PMIOPort)
83. ReferenceFrame [26] (SimMechanicsBlock)
84. Solid [26] (SimMechanicsBlock)
85. F [25] (PMIOPort)
86. ReferenceFrame [41] (SimMechanicsBlock)
87. Solid [41] (SimMechanicsBlock)
88. F [40] (PMIOPort)
89. ReferenceFrame [83] (SimMechanicsBlock)
90. Solid [83] (SimMechanicsBlock)
91. F [82] (PMIOPort)
92. ReferenceFrame [290] (SimMechanicsBlock)
93. Solid [290] (SimMechanicsBlock)
94. F [290] (PMIOPort)
95. ReferenceFrame [305] (SimMechanicsBlock)
96. Solid [305] (SimMechanicsBlock)
97. F [304] (PMIOPort)
98. ReferenceFrame [103] (SimMechanicsBlock)
99. Transform [103] (SimMechanicsBlock)
100. Transform1 [104] (SimMechanicsBlock)
101. Transform2 [105] (SimMechanicsBlock)
102. Transform3 [105] (SimMechanicsBlock)
103. Transform4 [106] (SimMechanicsBlock)
104. Transform5 [107] (SimMechanicsBlock)
105. Transform6 [108] (SimMechanicsBlock)
106. F [102] (PMIOPort)
107. F1 [103] (PMIOPort)
108. ReferenceFrame [28] (SimMechanicsBlock)
109. Solid [28] (SimMechanicsBlock)
110. F [28] (PMIOPort)
111. ReferenceFrame [43] (SimMechanicsBlock)
112. Solid [43] (SimMechanicsBlock)
113. F [43] (PMIOPort)
114. ReferenceFrame [85] (SimMechanicsBlock)
115. Solid [85] (SimMechanicsBlock)
116. F [85] (PMIOPort)
117. ReferenceFrame [292] (SimMechanicsBlock)
118. Solid [292] (SimMechanicsBlock)
119. F [292] (PMIOPort)
120. ReferenceFrame [307] (SimMechanicsBlock)
121. Solid [307] (SimMechanicsBlock)
122. F [307] (PMIOPort)
123. ReferenceFrame [110] (SimMechanicsBlock)
124. Transform [110] (SimMechanicsBlock)
125. Transform1 [111] (SimMechanicsBlock)
126. Transform2 [112] (SimMechanicsBlock)
127. Transform3 [112] (SimMechanicsBlock)
128. Transform4 [113] (SimMechanicsBlock)

129. Transform5 [114] (SimMechanicsBlock)
130. Transform6 [115] (SimMechanicsBlock)
131. F [109] (PMIOPort)
132. F1 [110] (PMIOPort)
133. ReferenceFrame [31] (SimMechanicsBlock)
134. Solid [31] (SimMechanicsBlock)
135. F [30] (PMIOPort)
136. ReferenceFrame [46] (SimMechanicsBlock)
137. Solid [46] (SimMechanicsBlock)
138. F [45] (PMIOPort)
139. ReferenceFrame [88] (SimMechanicsBlock)
140. Solid [88] (SimMechanicsBlock)
141. F [87] (PMIOPort)
142. ReferenceFrame [295] (SimMechanicsBlock)
143. Solid [295] (SimMechanicsBlock)
144. F [294] (PMIOPort)
145. ReferenceFrame [310] (SimMechanicsBlock)
146. Solid [310] (SimMechanicsBlock)
147. F [309] (PMIOPort)
148. ReferenceFrame [117] (SimMechanicsBlock)
149. Transform [117] (SimMechanicsBlock)
150. Transform1 [118] (SimMechanicsBlock)
151. Transform2 [119] (SimMechanicsBlock)
152. Transform3 [119] (SimMechanicsBlock)
153. Transform4 [120] (SimMechanicsBlock)
154. Transform5 [121] (SimMechanicsBlock)
155. Transform6 [122] (SimMechanicsBlock)
156. F [116] (PMIOPort)
157. F1 [117] (PMIOPort)
158. ReferenceFrame [33] (SimMechanicsBlock)
159. Solid [33] (SimMechanicsBlock)
160. F [33] (PMIOPort)
161. ReferenceFrame [48] (SimMechanicsBlock)
162. Solid [48] (SimMechanicsBlock)
163. F [48] (PMIOPort)
164. ReferenceFrame [90] (SimMechanicsBlock)
165. Solid [90] (SimMechanicsBlock)
166. F [90] (PMIOPort)
167. ReferenceFrame [297] (SimMechanicsBlock)
168. Solid [297] (SimMechanicsBlock)
169. F [297] (PMIOPort)
170. ReferenceFrame [312] (SimMechanicsBlock)
171. Solid [312] (SimMechanicsBlock)
172. F [312] (PMIOPort)
173. ReferenceFrame [124] (SimMechanicsBlock)
174. Transform [124] (SimMechanicsBlock)
175. Transform1 [125] (SimMechanicsBlock)
176. Transform2 [126] (SimMechanicsBlock)
177. Transform3 [126] (SimMechanicsBlock)
178. Transform4 [127] (SimMechanicsBlock)
179. Transform5 [128] (SimMechanicsBlock)
180. Transform6 [129] (SimMechanicsBlock)
181. F [123] (PMIOPort)
182. F1 [124] (PMIOPort)

183. ReferenceFrame [36] (SimMechanicsBlock)
184. Solid [36] (SimMechanicsBlock)
185. F [35] (PMIOPort)
186. ReferenceFrame [51] (SimMechanicsBlock)
187. Solid [51] (SimMechanicsBlock)
188. F [50] (PMIOPort)
189. ReferenceFrame [93] (SimMechanicsBlock)
190. Solid [93] (SimMechanicsBlock)
191. F [92] (PMIOPort)
192. ReferenceFrame [300] (SimMechanicsBlock)
193. Solid [300] (SimMechanicsBlock)
194. F [299] (PMIOPort)
195. ReferenceFrame [315] (SimMechanicsBlock)
196. Solid [315] (SimMechanicsBlock)
197. F [314] (PMIOPort)
198. ReferenceFrame [131] (SimMechanicsBlock)
199. Transform [131] (SimMechanicsBlock)
200. Transform1 [132] (SimMechanicsBlock)
201. Transform2 [132] (SimMechanicsBlock)
202. Transform3 [133] (SimMechanicsBlock)
203. Transform4 [134] (SimMechanicsBlock)
204. Transform5 [135] (SimMechanicsBlock)
205. Transform6 [135] (SimMechanicsBlock)
206. F [130] (PMIOPort)
207. F1 [131] (PMIOPort)
208. ReferenceFrame [168] (SimMechanicsBlock)
209. Solid [168] (SimMechanicsBlock)
210. Transform [170] (SimMechanicsBlock)
211. Transform1 [171] (SimMechanicsBlock)
212. Transform2 [171] (SimMechanicsBlock)
213. Transform3 [172] (SimMechanicsBlock)
214. Transform4 [173] (SimMechanicsBlock)
215. Transform5 [173] (SimMechanicsBlock)
216. Transform6 [174] (SimMechanicsBlock)
217. F3 [168] (PMIOPort)
218. F1 [167] (PMIOPort)
219. F2 [168] (PMIOPort)
220. F [167] (PMIOPort)
221. ReferenceFrame [175] (SimMechanicsBlock)
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224. ReferenceFrame [61] (SimMechanicsBlock)
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232. F [152] (PMIOPort)
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234. Transform [69] (SimMechanicsBlock)
235. Transform1 [69] (SimMechanicsBlock)
236. Transform2 [70] (SimMechanicsBlock)

237. Transform3 [71] (SimMechanicsBlock)
238. F [68] (PMIOPort)
239. ReferenceFrame [63] (SimMechanicsBlock)
240. Solid [63] (SimMechanicsBlock)
241. F [63] (PMIOPort)
242. ReferenceFrame [139] (SimMechanicsBlock)
243. Solid [139] (SimMechanicsBlock)
244. F [139] (PMIOPort)
245. ReferenceFrame [154] (SimMechanicsBlock)
246. Solid [154] (SimMechanicsBlock)
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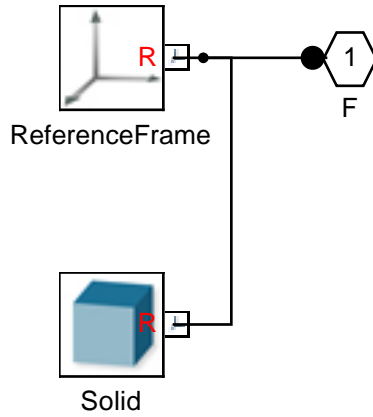
3.1.1. Blocks

3.1.1.1. Parameters

3.1.1.1.1. "F" (PMIOPort)

Tabla 3.1. "F" Parameters

Parameter	Value
Port number	1
Port location on parent subsystem	Left

3.1.1.1.2. "ReferenceFrame" (SimMechanicsBlock)

Tabla 3.2. "ReferenceFrame" Parameters

Parameter	Value
ClassName	ReferenceFrame
Block Function	simmechanics.library.frames_transforms.reference_frame

3.1.1.1.3. "Solid" (SimMechanicsBlock)

Tabla 3.3. "Solid" Parameters

Parameter	Value
ClassName	Solid
InertiaType	Custom
Mass	0.0084603864125170226
MassUnits	kg
CenterOfMass	[0 0 21.401769914256001]
CenterOfMassUnits	mm
MomentsOfInertia	[1.528689690565981 1.528689690565981 0.16837442398044505]
MomentsOfInertiaUnits	kg*mm^2
ProductsOfInertia	[0 0 0]
ProductsOfInertiaUnits	kg*mm^2
DensityBased	on
Density	1000
DensityUnits	kg/(m^3)
GraphicType	FromGeometry
MarkerShape	Sphere
MarkerSize	10
MarkerSizeUnits	m
GraphicVisPropType	SimpleVisualProperties
GraphicDiffuseColor	[0.898039215686627454 0.91764705882352937 0.92941176470588238]
GraphicSpecularColor	[0.5 0.5 0.5 1.0]
GraphicAmbientColor	[0.15 0.15 0.15 1.0]
GraphicEmissiveColor	[0.0 0.0 0.0 1.0]
GraphicShininess	75
GraphicOpacity	1
GeometryShape	FromFile
RectangleSize	[1 1]
RectangleSizeUnits	m
BrickDimensions	[1 1 1]
BrickDimensionUnits	m
CylinderRadius	1
CylinderRadiusUnits	m
CylinderLength	1
CylinderLengthUnits	m
SphereRadius	1
SphereRadiusUnits	m

Parameter	Value
EllipsoidRadii	[1 1 1]
EllipsoidRadiiUnits	m
ExtrusionCrossSection	[1 1; -1 1; -1 -1; 1 -1]
ExtrusionCrossSectionUnits	m
ExtrusionLength	1
ExtrusionLengthUnits	m
PolygonNumSides	3
PolygonOuterRadius	1
PolygonOuterRadiusUnits	m
ExtGeomFileType	STL
ExtGeomFileName	Acople-Antebrazo-RUniball_Predeterminado_sldprt.STL
ExtGeomFileUnits	mm
RevolutionCrossSection	[1 1; 1 -1; 2 -1; 2 1]
RevolutionCrossSectionUnits	m
RevolutionExtent	Full
RevolutionAngle	180
RevolutionAngleUnits	deg
Block Function	simmechanics.library.body_elements.solid

3.2. Acople_Antebrazo_RUniball_1_RIGID

Figura 3.2. DeltaSM_AnguloSinFriccions/DeltaSM/ AntebrazoCompleto_2_RIGID1/Acople_Antebrazo_RUniball_1_RIGID

3.2.1. Blocks

3.2.1.1. Parameters

3.2.1.1.1. "F" (PMIOPort)

Tabla 3.4. "F" Parameters

Parameter	Value
Port number	1
Port location on parent subsystem	Left

3.2.1.1.2. "ReferenceFrame" (SimMechanicsBlock)

Tabla 3.5. "ReferenceFrame" Parameters

Parameter	Value
ClassName	ReferenceFrame
Block Function	simmechanics.library.frames_transforms.reference_frame

3.2.1.1.3. "Solid" (SimMechanicsBlock)

Tabla 3.6. "Solid" Parameters

Parameter	Value
ClassName	Solid
InertiaType	Custom
Mass	0.0084603864125170226
MassUnits	kg
CenterOfMass	[0 0 21.401769914256001]
CenterOfMassUnits	mm
MomentsOfInertia	[1.528689690565981 1.528689690565981 0.16837442398044505]
MomentsOfInertiaUnits	kg*mm^2
ProductsOfInertia	[0 0 0]
ProductsOfInertiaUnits	kg*mm^2
DensityBased	on
Density	1000
DensityUnits	kg/(m^3)
GraphicType	FromGeometry
MarkerShape	Sphere
MarkerSize	10
MarkerSizeUnits	m
GraphicVisPropType	SimpleVisualProperties
GraphicDiffuseColor	[0.89803921568627454 0.91764705882352937 0.92941176470588238]
GraphicSpecularColor	[0.5 0.5 0.5 1.0]

Parameter	Value
GraphicAmbientColor	[0.15 0.15 0.15 1.0]
GraphicEmissiveColor	[0.0 0.0 0.0 1.0]
GraphicShininess	75
GraphicOpacity	1
GeometryShape	FromFile
RectangleSize	[1 1]
RectangleSizeUnits	m
BrickDimensions	[1 1 1]
BrickDimensionUnits	m
CylinderRadius	1
CylinderRadiusUnits	m
CylinderLength	1
CylinderLengthUnits	m
SphereRadius	1
SphereRadiusUnits	m
EllipsoidRadii	[1 1 1]
EllipsoidRadiiUnits	m
ExtrusionCrossSection	[1 1; -1 1; -1 -1; 1 -1]
ExtrusionCrossSectionUnits	m
ExtrusionLength	1
ExtrusionLengthUnits	m
PolygonNumSides	3
PolygonOuterRadius	1
PolygonOuterRadiusUnits	m
ExtGeomFileType	STL
ExtGeomFileName	Acople-Antebrazo-RUniball_Predeterminado_sldprt.STL
ExtGeomFileUnits	mm
RevolutionCrossSection	[1 1; 1 -1; 2 -1; 2 1]
RevolutionCrossSectionUnits	m
RevolutionExtent	Full
RevolutionAngle	180
RevolutionAngleUnits	deg
Block Function	simmechanics.library.body_elements.solid

3.3. Acople_Antebrazo_RUniball_1_RIGID

Figura 3.3. DeltaSM_AnguloSinFriccions/DeltaSM/ AntebrazoCompleto_3_RIGID1/Acople_Antebrazo_RUniball_1_RIGID
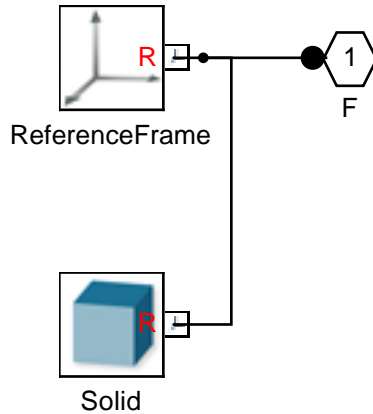
3.3.1. Blocks

3.3.1.1. Parameters

3.3.1.1.1. "F" (PMIOPort)

Tabla 3.7. "F" Parameters

Parameter	Value
Port number	1
Port location on parent subsystem	Left

3.3.1.1.2. "ReferenceFrame" (SimMechanicsBlock)

Tabla 3.8. "ReferenceFrame" Parameters

Parameter	Value
ClassName	ReferenceFrame
Block Function	simmechanics.library.frames_transforms.reference_frame

3.3.1.1.3. "Solid" (SimMechanicsBlock)

Tabla 3.9. "Solid" Parameters

Parameter	Value
ClassName	Solid
InertiaType	Custom
Mass	0.0084603864125170226
MassUnits	kg
CenterOfMass	[0 0 21.401769914256001]
CenterOfMassUnits	mm
MomentsOfInertia	[1.528689690565981 1.528689690565981 0.16837442398044505]
MomentsOfInertiaUnits	kg*mm^2
ProductsOfInertia	[0 0 0]
ProductsOfInertiaUnits	kg*mm^2
DensityBased	on
Density	1000
DensityUnits	kg/(m^3)
GraphicType	FromGeometry
MarkerShape	Sphere
MarkerSize	10
MarkerSizeUnits	m
GraphicVisPropType	SimpleVisualProperties
GraphicDiffuseColor	[0.898039215686627454 0.91764705882352937 0.92941176470588238]
GraphicSpecularColor	[0.5 0.5 0.5 1.0]
GraphicAmbientColor	[0.15 0.15 0.15 1.0]
GraphicEmissiveColor	[0.0 0.0 0.0 1.0]
GraphicShininess	75
GraphicOpacity	1
GeometryShape	FromFile
RectangleSize	[1 1]
RectangleSizeUnits	m
BrickDimensions	[1 1 1]
BrickDimensionUnits	m
CylinderRadius	1
CylinderRadiusUnits	m
CylinderLength	1
CylinderLengthUnits	m
SphereRadius	1
SphereRadiusUnits	m

Parameter	Value
EllipsoidRadii	[1 1 1]
EllipsoidRadiiUnits	m
ExtrusionCrossSection	[1 1; -1 1; -1 -1; 1 -1]
ExtrusionCrossSectionUnits	m
ExtrusionLength	1
ExtrusionLengthUnits	m
PolygonNumSides	3
PolygonOuterRadius	1
PolygonOuterRadiusUnits	m
ExtGeomFileType	STL
ExtGeomFileName	Acople-Antebrazo-RUniball_Predeterminado_sldprt.STL
ExtGeomFileUnits	mm
RevolutionCrossSection	[1 1; 1 -1; 2 -1; 2 1]
RevolutionCrossSectionUnits	m
RevolutionExtent	Full
RevolutionAngle	180
RevolutionAngleUnits	deg
Block Function	simmechanics.library.body_elements.solid

3.4. Acople_Antebrazo_RUniball_1_RIGID

Figura 3.4. DeltaSM_AnguloSinFriccions/DeltaSM/ AntebrazoCompleto_4_RIGID1/Acople_Antebrazo_RUniball_1_RIGID

3.4.1. Blocks

3.4.1.1. Parameters

3.4.1.1.1. "F" (PMIOPort)

Tabla 3.10. "F" Parameters

Parameter	Value
Port number	1
Port location on parent subsystem	Left

3.4.1.1.2. "ReferenceFrame" (SimMechanicsBlock)

Tabla 3.11. "ReferenceFrame" Parameters

Parameter	Value
ClassName	ReferenceFrame
Block Function	simmechanics.library.frames_transforms.reference_frame

3.4.1.1.3. "Solid" (SimMechanicsBlock)

Tabla 3.12. "Solid" Parameters

Parameter	Value
ClassName	Solid
InertiaType	Custom
Mass	0.0084603864125170226
MassUnits	kg
CenterOfMass	[0 0 21.401769914256001]
CenterOfMassUnits	mm
MomentsOfInertia	[1.528689690565981 1.528689690565981 0.16837442398044505]
MomentsOfInertiaUnits	kg*mm^2
ProductsOfInertia	[0 0 0]
ProductsOfInertiaUnits	kg*mm^2
DensityBased	on
Density	1000
DensityUnits	kg/(m^3)
GraphicType	FromGeometry
MarkerShape	Sphere
MarkerSize	10
MarkerSizeUnits	m
GraphicVisPropType	SimpleVisualProperties
GraphicDiffuseColor	[0.89803921568627454 0.91764705882352937 0.92941176470588238]
GraphicSpecularColor	[0.5 0.5 0.5 1.0]

Parameter	Value
GraphicAmbientColor	[0.15 0.15 0.15 1.0]
GraphicEmissiveColor	[0.0 0.0 0.0 1.0]
GraphicShininess	75
GraphicOpacity	1
GeometryShape	FromFile
RectangleSize	[1 1]
RectangleSizeUnits	m
BrickDimensions	[1 1 1]
BrickDimensionUnits	m
CylinderRadius	1
CylinderRadiusUnits	m
CylinderLength	1
CylinderLengthUnits	m
SphereRadius	1
SphereRadiusUnits	m
EllipsoidRadii	[1 1 1]
EllipsoidRadiiUnits	m
ExtrusionCrossSection	[1 1; -1 1; -1 -1; 1 -1]
ExtrusionCrossSectionUnits	m
ExtrusionLength	1
ExtrusionLengthUnits	m
PolygonNumSides	3
PolygonOuterRadius	1
PolygonOuterRadiusUnits	m
ExtGeomFileType	STL
ExtGeomFileName	Acople-Antebrazo-RUniball_Predeterminado_sldprt.STL
ExtGeomFileUnits	mm
RevolutionCrossSection	[1 1; 1 -1; 2 -1; 2 1]
RevolutionCrossSectionUnits	m
RevolutionExtent	Full
RevolutionAngle	180
RevolutionAngleUnits	deg
Block Function	simmechanics.library.body_elements.solid

3.5. Acople_Antebrazo_RUniball_1_RIGID

Figura 3.5. DeltaSM_AnguloSinFriccions/DeltaSM/ AntebrazoCompleto_5_RIGID1/Acople_Antebrazo_RUniball_1_RIGID
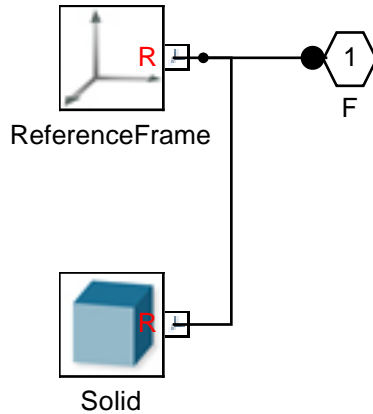
3.5.1. Blocks

3.5.1.1. Parameters

3.5.1.1.1. "F" (PMIOPort)

Tabla 3.13. "F" Parameters

Parameter	Value
Port number	1
Port location on parent subsystem	Left

3.5.1.1.2. "ReferenceFrame" (SimMechanicsBlock)

Tabla 3.14. "ReferenceFrame" Parameters

Parameter	Value
ClassName	ReferenceFrame
Block Function	simmechanics.library.frames_transforms.reference_frame

3.5.1.1.3. "Solid" (SimMechanicsBlock)

Tabla 3.15. "Solid" Parameters

Parameter	Value
ClassName	Solid
InertiaType	Custom
Mass	0.0084603864125170226
MassUnits	kg
CenterOfMass	[0 0 21.401769914256001]
CenterOfMassUnits	mm
MomentsOfInertia	[1.528689690565981 1.528689690565981 0.16837442398044505]
MomentsOfInertiaUnits	kg*mm^2
ProductsOfInertia	[0 0 0]
ProductsOfInertiaUnits	kg*mm^2
DensityBased	on
Density	1000
DensityUnits	kg/(m^3)
GraphicType	FromGeometry
MarkerShape	Sphere
MarkerSize	10
MarkerSizeUnits	m
GraphicVisPropType	SimpleVisualProperties
GraphicDiffuseColor	[0.898039215686627454 0.91764705882352937 0.92941176470588238]
GraphicSpecularColor	[0.5 0.5 0.5 1.0]
GraphicAmbientColor	[0.15 0.15 0.15 1.0]
GraphicEmissiveColor	[0.0 0.0 0.0 1.0]
GraphicShininess	75
GraphicOpacity	1
GeometryShape	FromFile
RectangleSize	[1 1]
RectangleSizeUnits	m
BrickDimensions	[1 1 1]
BrickDimensionUnits	m
CylinderRadius	1
CylinderRadiusUnits	m
CylinderLength	1
CylinderLengthUnits	m
SphereRadius	1
SphereRadiusUnits	m

Parameter	Value
EllipsoidRadii	[1 1 1]
EllipsoidRadiiUnits	m
ExtrusionCrossSection	[1 1; -1 1; -1 -1; 1 -1]
ExtrusionCrossSectionUnits	m
ExtrusionLength	1
ExtrusionLengthUnits	m
PolygonNumSides	3
PolygonOuterRadius	1
PolygonOuterRadiusUnits	m
ExtGeomFileType	STL
ExtGeomFileName	Acople-Antebrazo-RUniball_Predeterminado_sldprt.STL
ExtGeomFileUnits	mm
RevolutionCrossSection	[1 1; 1 -1; 2 -1; 2 1]
RevolutionCrossSectionUnits	m
RevolutionExtent	Full
RevolutionAngle	180
RevolutionAngleUnits	deg
Block Function	simmechanics.library.body_elements.solid

3.6. Acople_Antebrazo_RUniball_1_RIGID

Figura 3.6. DeltaSM_AnguloSinFriccions/DeltaSM/ AntebrazoCompleto_6_RIGID1/Acople_Antebrazo_RUniball_1_RIGID
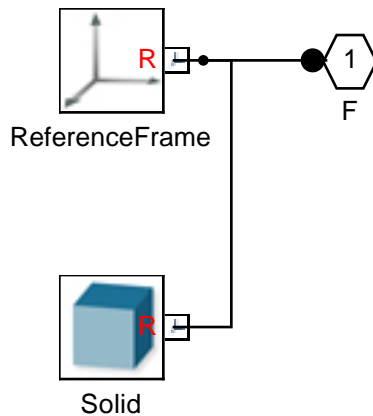
3.6.1. Blocks

3.6.1.1. Parameters

3.6.1.1.1. "F" (PMIOPort)

Tabla 3.16. "F" Parameters

Parameter	Value
Port number	1
Port location on parent subsystem	Left

3.6.1.1.2. "ReferenceFrame" (SimMechanicsBlock)

Tabla 3.17. "ReferenceFrame" Parameters

Parameter	Value
ClassName	ReferenceFrame
Block Function	simmechanics.library.frames_transforms.reference_frame
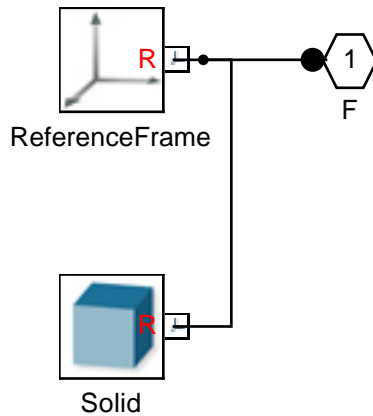
3.6.1.1.3. "Solid" (SimMechanicsBlock)

Tabla 3.18. "Solid" Parameters

Parameter	Value
ClassName	Solid
InertiaType	Custom
Mass	0.0084603864125170226
MassUnits	kg
CenterOfMass	[0 0 21.401769914256001]
CenterOfMassUnits	mm
MomentsOfInertia	[1.528689690565981 1.528689690565981 0.16837442398044505]
MomentsOfInertiaUnits	kg*mm^2
ProductsOfInertia	[0 0 0]
ProductsOfInertiaUnits	kg*mm^2
DensityBased	on
Density	1000
DensityUnits	kg/(m^3)
GraphicType	FromGeometry
MarkerShape	Sphere
MarkerSize	10
MarkerSizeUnits	m
GraphicVisPropType	SimpleVisualProperties
GraphicDiffuseColor	[0.89803921568627454 0.91764705882352937 0.92941176470588238]
GraphicSpecularColor	[0.5 0.5 0.5 1.0]

Parameter	Value
GraphicAmbientColor	[0.15 0.15 0.15 1.0]
GraphicEmissiveColor	[0.0 0.0 0.0 1.0]
GraphicShininess	75
GraphicOpacity	1
GeometryShape	FromFile
RectangleSize	[1 1]
RectangleSizeUnits	m
BrickDimensions	[1 1 1]
BrickDimensionUnits	m
CylinderRadius	1
CylinderRadiusUnits	m
CylinderLength	1
CylinderLengthUnits	m
SphereRadius	1
SphereRadiusUnits	m
EllipsoidRadii	[1 1 1]
EllipsoidRadiiUnits	m
ExtrusionCrossSection	[1 1; -1 1; -1 -1; 1 -1]
ExtrusionCrossSectionUnits	m
ExtrusionLength	1
ExtrusionLengthUnits	m
PolygonNumSides	3
PolygonOuterRadius	1
PolygonOuterRadiusUnits	m
ExtGeomFileType	STL
ExtGeomFileName	Acople-Antebrazo-RUniball_Predeterminado_sldprt.STL
ExtGeomFileUnits	mm
RevolutionCrossSection	[1 1; 1 -1; 2 -1; 2 1]
RevolutionCrossSectionUnits	m
RevolutionExtent	Full
RevolutionAngle	180
RevolutionAngleUnits	deg
Block Function	simmechanics.library.body_elements.solid

3.7. Acople_Antebrazo_RUniball_2_RIGID

Figura 3.7. DeltaSM_AnguloSinFriccions/DeltaSM/ AntebrazoCompleto_1_RIGID1/Acople_Antebrazo_RUniball_2_RIGID

3.7.1. Blocks

3.7.1.1. Parameters

3.7.1.1.1. "F" (PMIOPort)

Tabla 3.19. "F" Parameters

Parameter	Value
Port number	1
Port location on parent subsystem	Left

3.7.1.1.2. "ReferenceFrame" (SimMechanicsBlock)

Tabla 3.20. "ReferenceFrame" Parameters

Parameter	Value
ClassName	ReferenceFrame
Block Function	simmechanics.library.frames_transforms.reference_frame

3.7.1.1.3. "Solid" (SimMechanicsBlock)
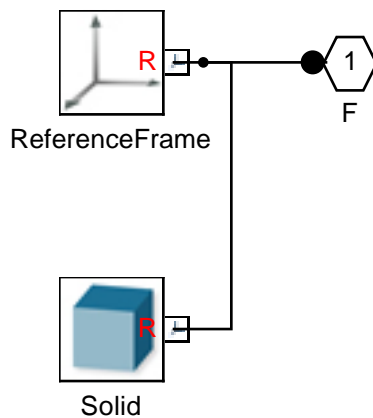
Tabla 3.21. "Solid" Parameters

Parameter	Value
ClassName	Solid
InertiaType	Custom
Mass	0.0084603864125170226
MassUnits	kg
CenterOfMass	[0 0 21.401769914256001]
CenterOfMassUnits	mm
MomentsOfInertia	[1.528689690565981 1.528689690565981 0.16837442398044505]
MomentsOfInertiaUnits	kg*mm^2
ProductsOfInertia	[0 0 0]
ProductsOfInertiaUnits	kg*mm^2
DensityBased	on
Density	1000
DensityUnits	kg/(m^3)
GraphicType	FromGeometry
MarkerShape	Sphere
MarkerSize	10
MarkerSizeUnits	m
GraphicVisPropType	SimpleVisualProperties
GraphicDiffuseColor	[0.89803921568627454 0.91764705882352937 0.92941176470588238]
GraphicSpecularColor	[0.5 0.5 0.5 1.0]
GraphicAmbientColor	[0.15 0.15 0.15 1.0]
GraphicEmissiveColor	[0.0 0.0 0.0 1.0]
GraphicShininess	75
GraphicOpacity	1
GeometryShape	FromFile
RectangleSize	[1 1]
RectangleSizeUnits	m
BrickDimensions	[1 1 1]
BrickDimensionUnits	m
CylinderRadius	1
CylinderRadiusUnits	m
CylinderLength	1
CylinderLengthUnits	m
SphereRadius	1
SphereRadiusUnits	m

Parameter	Value
EllipsoidRadii	[1 1 1]
EllipsoidRadiiUnits	m
ExtrusionCrossSection	[1 1; -1 1; -1 -1; 1 -1]
ExtrusionCrossSectionUnits	m
ExtrusionLength	1
ExtrusionLengthUnits	m
PolygonNumSides	3
PolygonOuterRadius	1
PolygonOuterRadiusUnits	m
ExtGeomFileType	STL
ExtGeomFileName	Acople-Antebrazo-RUniball_Predeterminado_sldprt.STL
ExtGeomFileUnits	mm
RevolutionCrossSection	[1 1; 1 -1; 2 -1; 2 1]
RevolutionCrossSectionUnits	m
RevolutionExtent	Full
RevolutionAngle	180
RevolutionAngleUnits	deg
Block Function	simmechanics.library.body_elements.solid

3.8. Acople_Antebrazo_RUniball_2_RIGID

Figura 3.8. DeltaSM_AnguloSinFriccions/DeltaSM/ AntebrazoCompleto_2_RIGID1/Acople_Antebrazo_RUniball_2_RIGID

3.8.1. Blocks

3.8.1.1. Parameters

3.8.1.1.1. "F" (PMIOPort)

Tabla 3.22. "F" Parameters

Parameter	Value
Port number	1
Port location on parent subsystem	Left

3.8.1.1.2. "ReferenceFrame" (SimMechanicsBlock)

Tabla 3.23. "ReferenceFrame" Parameters

Parameter	Value
ClassName	ReferenceFrame
Block Function	simmechanics.library.frames_transforms.reference_frame
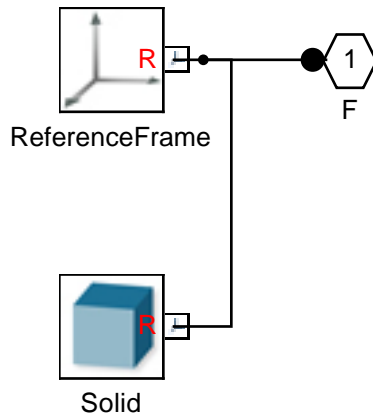
3.8.1.1.3. "Solid" (SimMechanicsBlock)

Tabla 3.24. "Solid" Parameters

Parameter	Value
ClassName	Solid
InertiaType	Custom
Mass	0.0084603864125170226
MassUnits	kg
CenterOfMass	[0 0 21.401769914256001]
CenterOfMassUnits	mm
MomentsOfInertia	[1.528689690565981 1.528689690565981 0.16837442398044505]
MomentsOfInertiaUnits	kg*mm^2
ProductsOfInertia	[0 0 0]
ProductsOfInertiaUnits	kg*mm^2
DensityBased	on
Density	1000
DensityUnits	kg/(m^3)
GraphicType	FromGeometry
MarkerShape	Sphere
MarkerSize	10
MarkerSizeUnits	m
GraphicVisPropType	SimpleVisualProperties
GraphicDiffuseColor	[0.89803921568627454 0.91764705882352937 0.92941176470588238]
GraphicSpecularColor	[0.5 0.5 0.5 1.0]

Parameter	Value
GraphicAmbientColor	[0.15 0.15 0.15 1.0]
GraphicEmissiveColor	[0.0 0.0 0.0 1.0]
GraphicShininess	75
GraphicOpacity	1
GeometryShape	FromFile
RectangleSize	[1 1]
RectangleSizeUnits	m
BrickDimensions	[1 1 1]
BrickDimensionUnits	m
CylinderRadius	1
CylinderRadiusUnits	m
CylinderLength	1
CylinderLengthUnits	m
SphereRadius	1
SphereRadiusUnits	m
EllipsoidRadii	[1 1 1]
EllipsoidRadiiUnits	m
ExtrusionCrossSection	[1 1; -1 1; -1 -1; 1 -1]
ExtrusionCrossSectionUnits	m
ExtrusionLength	1
ExtrusionLengthUnits	m
PolygonNumSides	3
PolygonOuterRadius	1
PolygonOuterRadiusUnits	m
ExtGeomFileType	STL
ExtGeomFileName	Acople-Antebrazo-RUniball_Predeterminado_sldprt.STL
ExtGeomFileUnits	mm
RevolutionCrossSection	[1 1; 1 -1; 2 -1; 2 1]
RevolutionCrossSectionUnits	m
RevolutionExtent	Full
RevolutionAngle	180
RevolutionAngleUnits	deg
Block Function	simmechanics.library.body_elements.solid

3.9. Acople_Antebrazo_RUniball_2_RIGID

Figura 3.9. DeltaSM_AnguloSinFriccions/DeltaSM/ AntebrazoCompleto_3_RIGID1/Acople_Antebrazo_RUniball_2_RIGID

3.9.1. Blocks

3.9.1.1. Parameters

3.9.1.1.1. "F" (PMIOPort)

Tabla 3.25. "F" Parameters

Parameter	Value
Port number	1
Port location on parent subsystem	Left

3.9.1.1.2. "ReferenceFrame" (SimMechanicsBlock)

Tabla 3.26. "ReferenceFrame" Parameters

Parameter	Value
ClassName	ReferenceFrame
Block Function	simmechanics.library.frames_transforms.reference_frame

3.9.1.1.3. "Solid" (SimMechanicsBlock)
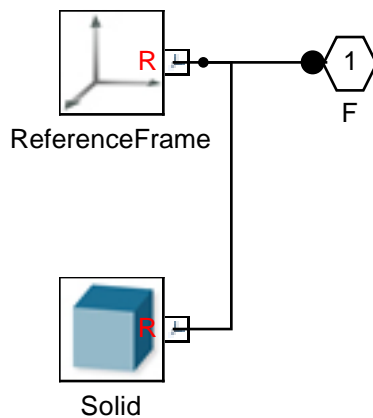
Tabla 3.27. "Solid" Parameters

Parameter	Value
ClassName	Solid
InertiaType	Custom
Mass	0.0084603864125170226
MassUnits	kg
CenterOfMass	[0 0 21.401769914256001]
CenterOfMassUnits	mm
MomentsOfInertia	[1.528689690565981 1.528689690565981 0.16837442398044505]
MomentsOfInertiaUnits	kg*mm^2
ProductsOfInertia	[0 0 0]
ProductsOfInertiaUnits	kg*mm^2
DensityBased	on
Density	1000
DensityUnits	kg/(m^3)
GraphicType	FromGeometry
MarkerShape	Sphere
MarkerSize	10
MarkerSizeUnits	m
GraphicVisPropType	SimpleVisualProperties
GraphicDiffuseColor	[0.89803921568627454 0.91764705882352937 0.92941176470588238]
GraphicSpecularColor	[0.5 0.5 0.5 1.0]
GraphicAmbientColor	[0.15 0.15 0.15 1.0]
GraphicEmissiveColor	[0.0 0.0 0.0 1.0]
GraphicShininess	75
GraphicOpacity	1
GeometryShape	FromFile
RectangleSize	[1 1]
RectangleSizeUnits	m
BrickDimensions	[1 1 1]
BrickDimensionUnits	m
CylinderRadius	1
CylinderRadiusUnits	m
CylinderLength	1
CylinderLengthUnits	m
SphereRadius	1
SphereRadiusUnits	m

Parameter	Value
EllipsoidRadii	[1 1 1]
EllipsoidRadiiUnits	m
ExtrusionCrossSection	[1 1; -1 1; -1 -1; 1 -1]
ExtrusionCrossSectionUnits	m
ExtrusionLength	1
ExtrusionLengthUnits	m
PolygonNumSides	3
PolygonOuterRadius	1
PolygonOuterRadiusUnits	m
ExtGeomFileType	STL
ExtGeomFileName	Acople-Antebrazo-RUniball_Predeterminado_sldprt.STL
ExtGeomFileUnits	mm
RevolutionCrossSection	[1 1; 1 -1; 2 -1; 2 1]
RevolutionCrossSectionUnits	m
RevolutionExtent	Full
RevolutionAngle	180
RevolutionAngleUnits	deg
Block Function	simmechanics.library.body_elements.solid

3.10. Acople_Antebrazo_RUniball_2_RIGID

Figura 3.10. DeltaSM_AnguloSinFriccions/DeltaSM/ AntebrazoCompleto_4_RIGID1/Acople_Antebrazo_RUniball_2_RIGID

3.10.1. Blocks

3.10.1.1. Parameters

3.10.1.1.1. "F" (PMIOPort)

Tabla 3.28. "F" Parameters

Parameter	Value
Port number	1
Port location on parent subsystem	Left

3.10.1.1.2. "ReferenceFrame" (SimMechanicsBlock)

Tabla 3.29. "ReferenceFrame" Parameters

Parameter	Value
ClassName	ReferenceFrame
Block Function	simmechanics.library.frames_transforms.reference_frame
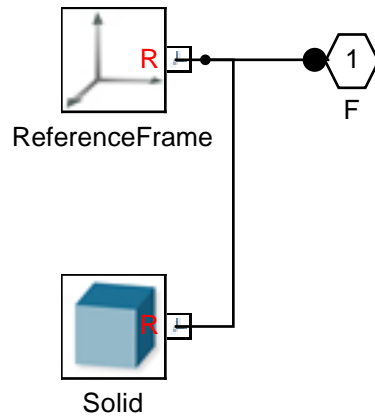
3.10.1.1.3. "Solid" (SimMechanicsBlock)

Tabla 3.30. "Solid" Parameters

Parameter	Value
ClassName	Solid
InertiaType	Custom
Mass	0.0084603864125170226
MassUnits	kg
CenterOfMass	[0 0 21.401769914256001]
CenterOfMassUnits	mm
MomentsOfInertia	[1.528689690565981 1.528689690565981 0.16837442398044505]
MomentsOfInertiaUnits	kg*mm^2
ProductsOfInertia	[0 0 0]
ProductsOfInertiaUnits	kg*mm^2
DensityBased	on
Density	1000
DensityUnits	kg/(m^3)
GraphicType	FromGeometry
MarkerShape	Sphere
MarkerSize	10
MarkerSizeUnits	m
GraphicVisPropType	SimpleVisualProperties
GraphicDiffuseColor	[0.89803921568627454 0.91764705882352937 0.92941176470588238]
GraphicSpecularColor	[0.5 0.5 0.5 1.0]

Parameter	Value
GraphicAmbientColor	[0.15 0.15 0.15 1.0]
GraphicEmissiveColor	[0.0 0.0 0.0 1.0]
GraphicShininess	75
GraphicOpacity	1
GeometryShape	FromFile
RectangleSize	[1 1]
RectangleSizeUnits	m
BrickDimensions	[1 1 1]
BrickDimensionUnits	m
CylinderRadius	1
CylinderRadiusUnits	m
CylinderLength	1
CylinderLengthUnits	m
SphereRadius	1
SphereRadiusUnits	m
EllipsoidRadii	[1 1 1]
EllipsoidRadiiUnits	m
ExtrusionCrossSection	[1 1; -1 1; -1 -1; 1 -1]
ExtrusionCrossSectionUnits	m
ExtrusionLength	1
ExtrusionLengthUnits	m
PolygonNumSides	3
PolygonOuterRadius	1
PolygonOuterRadiusUnits	m
ExtGeomFileType	STL
ExtGeomFileName	Acople-Antebrazo-RUniball_Predeterminado_sldprt.STL
ExtGeomFileUnits	mm
RevolutionCrossSection	[1 1; 1 -1; 2 -1; 2 1]
RevolutionCrossSectionUnits	m
RevolutionExtent	Full
RevolutionAngle	180
RevolutionAngleUnits	deg
Block Function	simmechanics.library.body_elements.solid

3.11. Acople_Antebrazo_RUniball_2_RIGID

Figura 3.11. DeltaSM_AnguloSinFriccions/DeltaSM/ AntebrazoCompleto_5_RIGID1/Acople_Antebrazo_RUniball_2_RIGID

3.11.1. Blocks

3.11.1.1. Parameters

3.11.1.1.1. "F" (PMIOPort)

Tabla 3.31. "F" Parameters

Parameter	Value
Port number	1
Port location on parent subsystem	Left

3.11.1.1.2. "ReferenceFrame" (SimMechanicsBlock)

Tabla 3.32. "ReferenceFrame" Parameters

Parameter	Value
ClassName	ReferenceFrame
Block Function	simmechanics.library.frames_transforms.reference_frame

3.11.1.1.3. "Solid" (SimMechanicsBlock)
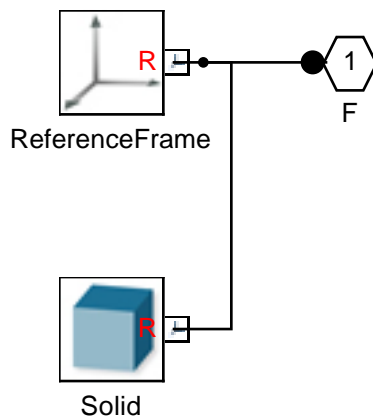
Tabla 3.33. "Solid" Parameters

Parameter	Value
ClassName	Solid
InertiaType	Custom
Mass	0.0084603864125170226
MassUnits	kg
CenterOfMass	[0 0 21.401769914256001]
CenterOfMassUnits	mm
MomentsOfInertia	[1.528689690565981 1.528689690565981 0.16837442398044505]
MomentsOfInertiaUnits	kg*mm^2
ProductsOfInertia	[0 0 0]
ProductsOfInertiaUnits	kg*mm^2
DensityBased	on
Density	1000
DensityUnits	kg/(m^3)
GraphicType	FromGeometry
MarkerShape	Sphere
MarkerSize	10
MarkerSizeUnits	m
GraphicVisPropType	SimpleVisualProperties
GraphicDiffuseColor	[0.898039215686627454 0.91764705882352937 0.92941176470588238]
GraphicSpecularColor	[0.5 0.5 0.5 1.0]
GraphicAmbientColor	[0.15 0.15 0.15 1.0]
GraphicEmissiveColor	[0.0 0.0 0.0 1.0]
GraphicShininess	75
GraphicOpacity	1
GeometryShape	FromFile
RectangleSize	[1 1]
RectangleSizeUnits	m
BrickDimensions	[1 1 1]
BrickDimensionUnits	m
CylinderRadius	1
CylinderRadiusUnits	m
CylinderLength	1
CylinderLengthUnits	m
SphereRadius	1
SphereRadiusUnits	m

Parameter	Value
EllipsoidRadii	[1 1 1]
EllipsoidRadiiUnits	m
ExtrusionCrossSection	[1 1; -1 1; -1 -1; 1 -1]
ExtrusionCrossSectionUnits	m
ExtrusionLength	1
ExtrusionLengthUnits	m
PolygonNumSides	3
PolygonOuterRadius	1
PolygonOuterRadiusUnits	m
ExtGeomFileType	STL
ExtGeomFileName	Acople-Antebrazo-RUniball_Predeterminado_sldprt.STL
ExtGeomFileUnits	mm
RevolutionCrossSection	[1 1; 1 -1; 2 -1; 2 1]
RevolutionCrossSectionUnits	m
RevolutionExtent	Full
RevolutionAngle	180
RevolutionAngleUnits	deg
Block Function	simmechanics.library.body_elements.solid

3.12. Acople_Antebrazo_RUniball_2_RIGID

Figura 3.12. DeltaSM_AnguloSinFriccions/DeltaSM/ AntebrazoCompleto_6_RIGID1/Acople_Antebrazo_RUniball_2_RIGID

3.12.1. Blocks

3.12.1.1. Parameters

3.12.1.1.1. "F" (PMIOPort)

Tabla 3.34. "F" Parameters

Parameter	Value
Port number	1
Port location on parent subsystem	Left

3.12.1.1.2. "ReferenceFrame" (SimMechanicsBlock)

Tabla 3.35. "ReferenceFrame" Parameters

Parameter	Value
ClassName	ReferenceFrame
Block Function	simmechanics.library.frames_transforms.reference_frame

3.12.1.1.3. "Solid" (SimMechanicsBlock)

Tabla 3.36. "Solid" Parameters

Parameter	Value
ClassName	Solid
InertiaType	Custom
Mass	0.0084603864125170226
MassUnits	kg
CenterOfMass	[0 0 21.401769914256001]
CenterOfMassUnits	mm
MomentsOfInertia	[1.528689690565981 1.528689690565981 0.16837442398044505]
MomentsOfInertiaUnits	kg*mm^2
ProductsOfInertia	[0 0 0]
ProductsOfInertiaUnits	kg*mm^2
DensityBased	on
Density	1000
DensityUnits	kg/(m^3)
GraphicType	FromGeometry
MarkerShape	Sphere
MarkerSize	10
MarkerSizeUnits	m
GraphicVisPropType	SimpleVisualProperties
GraphicDiffuseColor	[0.89803921568627454 0.91764705882352937 0.92941176470588238]
GraphicSpecularColor	[0.5 0.5 0.5 1.0]

Parameter	Value
GraphicAmbientColor	[0.15 0.15 0.15 1.0]
GraphicEmissiveColor	[0.0 0.0 0.0 1.0]
GraphicShininess	75
GraphicOpacity	1
GeometryShape	FromFile
RectangleSize	[1 1]
RectangleSizeUnits	m
BrickDimensions	[1 1 1]
BrickDimensionUnits	m
CylinderRadius	1
CylinderRadiusUnits	m
CylinderLength	1
CylinderLengthUnits	m
SphereRadius	1
SphereRadiusUnits	m
EllipsoidRadii	[1 1 1]
EllipsoidRadiiUnits	m
ExtrusionCrossSection	[1 1; -1 1; -1 -1; 1 -1]
ExtrusionCrossSectionUnits	m
ExtrusionLength	1
ExtrusionLengthUnits	m
PolygonNumSides	3
PolygonOuterRadius	1
PolygonOuterRadiusUnits	m
ExtGeomFileType	STL
ExtGeomFileName	Acople-Antebrazo-RUniball_Predeterminado_sldprt.STL
ExtGeomFileUnits	mm
RevolutionCrossSection	[1 1; 1 -1; 2 -1; 2 1]
RevolutionCrossSectionUnits	m
RevolutionExtent	Full
RevolutionAngle	180
RevolutionAngleUnits	deg
Block Function	simmechanics.library.body_elements.solid

3.13. Acople_Brazo_RUniball_1_RIGID

Figura 3.13. DeltaSM_AnguloSinFriccions/DeltaSM/BrazoCompleto_1_RIGID/ Acople_Brazo_RUniball_1_RIGID
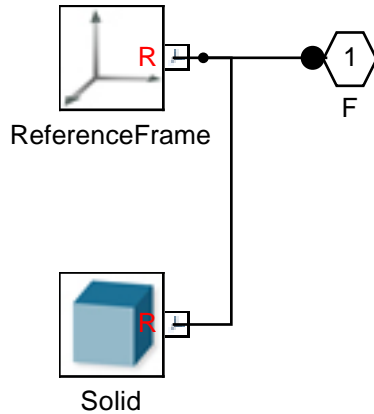
3.13.1. Blocks

3.13.1.1. Parameters

3.13.1.1.1. "F" (PMIOPort)

Tabla 3.37. "F" Parameters

Parameter	Value
Port number	1
Port location on parent subsystem	Left

3.13.1.1.2. "ReferenceFrame" (SimMechanicsBlock)

Tabla 3.38. "ReferenceFrame" Parameters

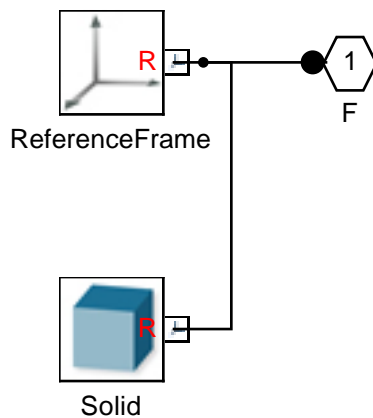| Parameter	Value
ClassName	ReferenceFrame
Block Function	simmechanics.library.frames_transforms.reference_frame

3.13.1.1.3. "Solid" (SimMechanicsBlock)

Tabla 3.39. "Solid" Parameters

Parameter	Value
ClassName	Solid
InertiaType	Custom
Mass	0.0066380360513841885
MassUnits	kg
CenterOfMass	[0 0 28.587236047663161]
CenterOfMassUnits	mm
MomentsOfInertia	[1.2931827368049982 1.2931827368049982 0.098334643129579166]
MomentsOfInertiaUnits	kg*mm^2
ProductsOfInertia	[0 0 0]
ProductsOfInertiaUnits	kg*mm^2
DensityBased	on
Density	1000
DensityUnits	kg/(m^3)
GraphicType	FromGeometry
MarkerShape	Sphere
MarkerSize	10
MarkerSizeUnits	m
GraphicVisPropType	SimpleVisualProperties
GraphicDiffuseColor	[0.89803921568627454 0.91764705882352937 0.92941176470588238]
GraphicSpecularColor	[0.5 0.5 0.5 1.0]
GraphicAmbientColor	[0.15 0.15 0.15 1.0]
GraphicEmissiveColor	[0.0 0.0 0.0 1.0]
GraphicShininess	75
GraphicOpacity	1
GeometryShape	FromFile
RectangleSize	[1 1]
RectangleSizeUnits	m
BrickDimensions	[1 1 1]
BrickDimensionUnits	m
CylinderRadius	1
CylinderRadiusUnits	m
CylinderLength	1
CylinderLengthUnits	m
SphereRadius	1
SphereRadiusUnits	m

Parameter	Value
EllipsoidRadii	[1 1 1]
EllipsoidRadiiUnits	m
ExtrusionCrossSection	[1 1; -1 1; -1 -1; 1 -1]
ExtrusionCrossSectionUnits	m
ExtrusionLength	1
ExtrusionLengthUnits	m
PolygonNumSides	3
PolygonOuterRadius	1
PolygonOuterRadiusUnits	m
ExtGeomFileType	STL
ExtGeomFileName	Acople-Brazo-RUniball_Predeterminado_sldprt.STL
ExtGeomFileUnits	mm
RevolutionCrossSection	[1 1; 1 -1; 2 -1; 2 1]
RevolutionCrossSectionUnits	m
RevolutionExtent	Full
RevolutionAngle	180
RevolutionAngleUnits	deg
Block Function	simmechanics.library.body_elements.solid

3.14. Acople_Brazo_RUniball_1_RIGID

Figura 3.14. DeltaSM_AnguloSinFriccions/DeltaSM/BrazoCompleto_2_RIGID/ Acople_Brazo_RUniball_1_RIGID

3.14.1. Blocks

3.14.1.1. Parameters

3.14.1.1.1. "F" (PMIOPort)

Tabla 3.40. "F" Parameters

Parameter	Value
Port number	1
Port location on parent subsystem	Left

3.14.1.1.2. "ReferenceFrame" (SimMechanicsBlock)

Tabla 3.41. "ReferenceFrame" Parameters

Parameter	Value
ClassName	ReferenceFrame
Block Function	simmechanics.library.frames_transforms.reference_frame
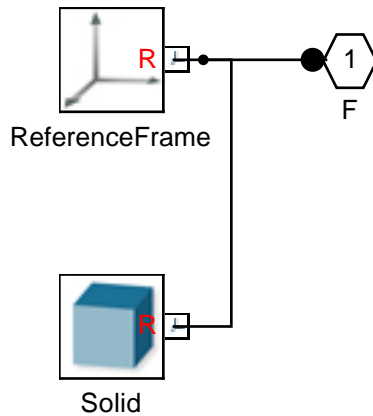
3.14.1.1.3. "Solid" (SimMechanicsBlock)

Tabla 3.42. "Solid" Parameters

Parameter	Value
ClassName	Solid
InertiaType	Custom
Mass	0.0066380360513841885
MassUnits	kg
CenterOfMass	[0 0 28.587236047663161]
CenterOfMassUnits	mm
MomentsOfInertia	[1.2931827368049982 1.2931827368049982 0.098334643129579166]
MomentsOfInertiaUnits	kg*mm^2
ProductsOfInertia	[0 0 0]
ProductsOfInertiaUnits	kg*mm^2
DensityBased	on
Density	1000
DensityUnits	kg/(m^3)
GraphicType	FromGeometry
MarkerShape	Sphere
MarkerSize	10
MarkerSizeUnits	m
GraphicVisPropType	SimpleVisualProperties
GraphicDiffuseColor	[0.89803921568627454 0.91764705882352937 0.92941176470588238]
GraphicSpecularColor	[0.5 0.5 0.5 1.0]

Parameter	Value
GraphicAmbientColor	[0.15 0.15 0.15 1.0]
GraphicEmissiveColor	[0.0 0.0 0.0 1.0]
GraphicShininess	75
GraphicOpacity	1
GeometryShape	FromFile
RectangleSize	[1 1]
RectangleSizeUnits	m
BrickDimensions	[1 1 1]
BrickDimensionUnits	m
CylinderRadius	1
CylinderRadiusUnits	m
CylinderLength	1
CylinderLengthUnits	m
SphereRadius	1
SphereRadiusUnits	m
EllipsoidRadii	[1 1 1]
EllipsoidRadiiUnits	m
ExtrusionCrossSection	[1 1; -1 1; -1 -1; 1 -1]
ExtrusionCrossSectionUnits	m
ExtrusionLength	1
ExtrusionLengthUnits	m
PolygonNumSides	3
PolygonOuterRadius	1
PolygonOuterRadiusUnits	m
ExtGeomFileType	STL
ExtGeomFileName	Acople-Brazo-RUniball_Predeterminado_sldprt.STL
ExtGeomFileUnits	mm
RevolutionCrossSection	[1 1; 1 -1; 2 -1; 2 1]
RevolutionCrossSectionUnits	m
RevolutionExtent	Full
RevolutionAngle	180
RevolutionAngleUnits	deg
Block Function	simmechanics.library.body_elements.solid

3.15. Acople_Brazo_RUniball_1_RIGID

Figura 3.15. DeltaSM_AnguloSinFriccions/DeltaSM/BrazoCompleto_3_RIGID/ Acople_Brazo_RUniball_1_RIGID

3.15.1. Blocks

3.15.1.1. Parameters

3.15.1.1.1. "F" (PMIOPort)

Tabla 3.43. "F" Parameters

Parameter	Value
Port number	1
Port location on parent subsystem	Left

3.15.1.1.2. "ReferenceFrame" (SimMechanicsBlock)

Tabla 3.44. "ReferenceFrame" Parameters

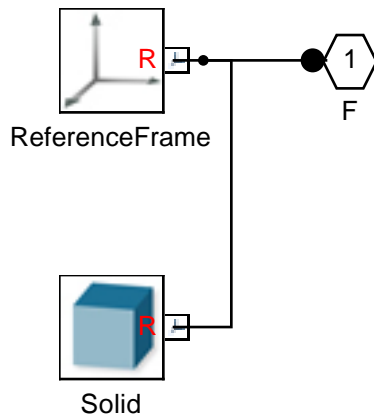| Parameter	Value
ClassName	ReferenceFrame
Block Function	simmechanics.library.frames_transforms.reference_frame
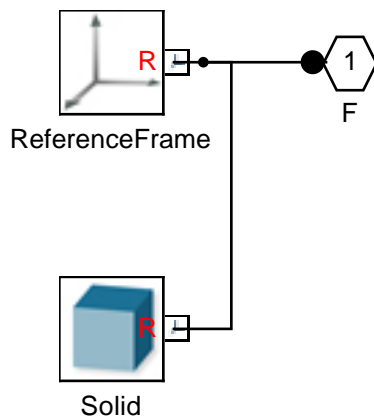
3.15.1.1.3. "Solid" (SimMechanicsBlock)

Tabla 3.45. "Solid" Parameters

Parameter	Value
ClassName	Solid
InertiaType	Custom
Mass	0.0066380360513841885
MassUnits	kg
CenterOfMass	[0 0 28.587236047663161]
CenterOfMassUnits	mm
MomentsOfInertia	[1.2931827368049982 1.2931827368049982 0.098334643129579166]
MomentsOfInertiaUnits	kg*mm^2
ProductsOfInertia	[0 0 0]
ProductsOfInertiaUnits	kg*mm^2
DensityBased	on
Density	1000
DensityUnits	kg/(m^3)
GraphicType	FromGeometry
MarkerShape	Sphere
MarkerSize	10
MarkerSizeUnits	m
GraphicVisPropType	SimpleVisualProperties
GraphicDiffuseColor	[0.898039215686627454 0.91764705882352937 0.92941176470588238]
GraphicSpecularColor	[0.5 0.5 0.5 1.0]
GraphicAmbientColor	[0.15 0.15 0.15 1.0]
GraphicEmissiveColor	[0.0 0.0 0.0 1.0]
GraphicShininess	75
GraphicOpacity	1
GeometryShape	FromFile
RectangleSize	[1 1]
RectangleSizeUnits	m
BrickDimensions	[1 1 1]
BrickDimensionUnits	m
CylinderRadius	1
CylinderRadiusUnits	m
CylinderLength	1
CylinderLengthUnits	m
SphereRadius	1
SphereRadiusUnits	m

Parameter	Value
EllipsoidRadii	[1 1 1]
EllipsoidRadiiUnits	m
ExtrusionCrossSection	[1 1; -1 1; -1 -1; 1 -1]
ExtrusionCrossSectionUnits	m
ExtrusionLength	1
ExtrusionLengthUnits	m
PolygonNumSides	3
PolygonOuterRadius	1
PolygonOuterRadiusUnits	m
ExtGeomFileType	STL
ExtGeomFileName	Acople-Brazo-RUniball_Predeterminado_sldprt.STL
ExtGeomFileUnits	mm
RevolutionCrossSection	[1 1; 1 -1; 2 -1; 2 1]
RevolutionCrossSectionUnits	m
RevolutionExtent	Full
RevolutionAngle	180
RevolutionAngleUnits	deg
Block Function	simmechanics.library.body_elements.solid

3.16. Acople_RUniball_BaseMovil_1_RIGID

Figura 3.16. DeltaSM_AnguloSinFriccions/DeltaSM/ BaseMovilCompleta_1_RIGID/acopleBaseMovilAntebrazo_1_RIGID/ Acople_RUniball_BaseMovil_1_RIGID

3.16.1. Blocks

3.16.1.1. Parameters

3.16.1.1.1. "F" (PMIOPort)

Tabla 3.46. "F" Parameters

Parameter	Value
Port number	1
Port location on parent subsystem	Left

3.16.1.1.2. "ReferenceFrame" (SimMechanicsBlock)

Tabla 3.47. "ReferenceFrame" Parameters

Parameter	Value
ClassName	ReferenceFrame
Block Function	simmechanics.library.frames_transforms.reference_frame

3.16.1.1.3. "Solid" (SimMechanicsBlock)

Tabla 3.48. "Solid" Parameters

Parameter	Value
ClassName	Solid
InertiaType	Custom
Mass	0.0020423610671578374
MassUnits	kg
CenterOfMass	[0 0 27.75]
CenterOfMassUnits	mm
MomentsOfInertia	[0.46282358631475862 0.4629504720922632 0.01263130726118355]
MomentsOfInertiaUnits	kg*mm^2
ProductsOfInertia	[0 0 0]
ProductsOfInertiaUnits	kg*mm^2
DensityBased	on
Density	1000
DensityUnits	kg/(m^3)
GraphicType	FromGeometry
MarkerShape	Sphere
MarkerSize	10

Parameter	Value
MarkerSizeUnits	m
GraphicVisPropType	SimpleVisualProperties
GraphicDiffuseColor	[0.792156862745098 0.81960784313725488 0.93333333333333335]
GraphicSpecularColor	[0.5 0.5 0.5 1.0]
GraphicAmbientColor	[0.15 0.15 0.15 1.0]
GraphicEmissiveColor	[0.0 0.0 0.0 1.0]
GraphicShininess	75
GraphicOpacity	1
GeometryShape	FromFile
RectangleSize	[1 1]
RectangleSizeUnits	m
BrickDimensions	[1 1 1]
BrickDimensionUnits	m
CylinderRadius	1
CylinderRadiusUnits	m
CylinderLength	1
CylinderLengthUnits	m
SphereRadius	1
SphereRadiusUnits	m
EllipsoidRadii	[1 1 1]
EllipsoidRadiiUnits	m
ExtrusionCrossSection	[1 1; -1 1; -1 -1; 1 -1]
ExtrusionCrossSectionUnits	m
ExtrusionLength	1
ExtrusionLengthUnits	m
PolygonNumSides	3
PolygonOuterRadius	1
PolygonOuterRadiusUnits	m
ExtGeomFileType	STL
ExtGeomFileName	Acople-RUniball-BaseMovil_Predeterminado_sldprt.STL
ExtGeomFileUnits	mm
RevolutionCrossSection	[1 1; 1 -1; 2 -1; 2 1]
RevolutionCrossSectionUnits	m
RevolutionExtent	Full
RevolutionAngle	180
RevolutionAngleUnits	deg
Block Function	simmechanics.library.body_elements.solid

3.17. Acople_RUniball_BaseMovil_1_RIGID

Figura 3.17. DeltaSM_AnguloSinFriccions/DeltaSM/ BaseMovilCompleta_1_RIGID/acopleBaseMovilAntebrazo_2_RIGID/ Acople_RUniball_BaseMovil_1_RIGID

3.17.1. Blocks

3.17.1.1. Parameters

3.17.1.1.1. "F" (PMIOPort)

Tabla 3.49. "F" Parameters

Parameter	Value
Port number	1
Port location on parent subsystem	Left

3.17.1.1.2. "ReferenceFrame" (SimMechanicsBlock)

Tabla 3.50. "ReferenceFrame" Parameters

Parameter	Value
ClassName	ReferenceFrame
Block Function	simmechanics.library.frames_transforms.reference_frame

3.17.1.1.3. "Solid" (SimMechanicsBlock)

Tabla 3.51. "Solid" Parameters

Parameter	Value
ClassName	Solid
InertiaType	Custom
Mass	0.0020423610671578374
MassUnits	kg
CenterOfMass	[0 0 27.75]
CenterOfMassUnits	mm
MomentsOfInertia	[0.46282358631475862 0.4629504720922632 0.01263130726118355]
MomentsOfInertiaUnits	kg*mm^2
ProductsOfInertia	[0 0 0]
ProductsOfInertiaUnits	kg*mm^2
DensityBased	on
Density	1000
DensityUnits	kg/(m^3)
GraphicType	FromGeometry
MarkerShape	Sphere
MarkerSize	10
MarkerSizeUnits	m
GraphicVisPropType	SimpleVisualProperties
GraphicDiffuseColor	[0.792156862745098 0.81960784313725488 0.93333333333333335]
GraphicSpecularColor	[0.5 0.5 0.5 1.0]
GraphicAmbientColor	[0.15 0.15 0.15 1.0]
GraphicEmissiveColor	[0.0 0.0 0.0 1.0]
GraphicShininess	75
GraphicOpacity	1
GeometryShape	FromFile
RectangleSize	[1 1]
RectangleSizeUnits	m
BrickDimensions	[1 1 1]
BrickDimensionUnits	m
CylinderRadius	1
CylinderRadiusUnits	m
CylinderLength	1
CylinderLengthUnits	m
SphereRadius	1
SphereRadiusUnits	m

Parameter	Value
EllipsoidRadii	[1 1 1]
EllipsoidRadiiUnits	m
ExtrusionCrossSection	[1 1; -1 1; -1 -1; 1 -1]
ExtrusionCrossSectionUnits	m
ExtrusionLength	1
ExtrusionLengthUnits	m
PolygonNumSides	3
PolygonOuterRadius	1
PolygonOuterRadiusUnits	m
ExtGeomFileType	STL
ExtGeomFileName	Acople-RUniball-BaseMovil_Predeterminado_sldprt.STL
ExtGeomFileUnits	mm
RevolutionCrossSection	[1 1; 1 -1; 2 -1; 2 1]
RevolutionCrossSectionUnits	m
RevolutionExtent	Full
RevolutionAngle	180
RevolutionAngleUnits	deg
Block Function	simmechanics.library.body_elements.solid

3.18. Acople_RUniball_BaseMovil_1_RIGID

Figura 3.18. DeltaSM_AnguloSinFriccions/DeltaSM/ BaseMovilCompleta_1_RIGID/acopleBaseMovilAntebrazo_3_RIGID/ Acople_RUniball_BaseMovil_1_RIGID
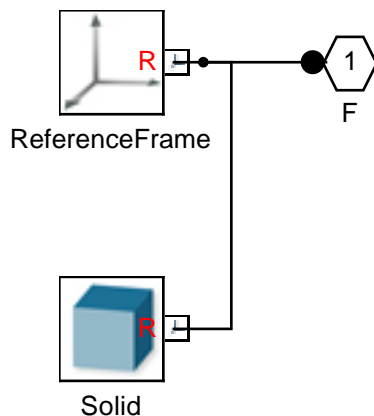
3.18.1. Blocks

3.18.1.1. Parameters

3.18.1.1.1. "F" (PMIOPort)

Tabla 3.52. "F" Parameters

Parameter	Value
Port number	1
Port location on parent subsystem	Left

3.18.1.1.2. "ReferenceFrame" (SimMechanicsBlock)

Tabla 3.53. "ReferenceFrame" Parameters

Parameter	Value
ClassName	ReferenceFrame
Block Function	simmechanics.library.frames_transforms.reference_frame

3.18.1.1.3. "Solid" (SimMechanicsBlock)

Tabla 3.54. "Solid" Parameters

Parameter	Value
ClassName	Solid
InertiaType	Custom
Mass	0.0020423610671578374
MassUnits	kg
CenterOfMass	[0 0 27.75]
CenterOfMassUnits	mm
MomentsOfInertia	[0.46282358631475862 0.4629504720922632 0.01263130726118355]
MomentsOfInertiaUnits	kg*mm^2
ProductsOfInertia	[0 0 0]
ProductsOfInertiaUnits	kg*mm^2
DensityBased	on
Density	1000
DensityUnits	kg/(m^3)
GraphicType	FromGeometry
MarkerShape	Sphere
MarkerSize	10

Parameter	Value
MarkerSizeUnits	m
GraphicVisPropType	SimpleVisualProperties
GraphicDiffuseColor	[0.792156862745098 0.81960784313725488 0.93333333333333335]
GraphicSpecularColor	[0.5 0.5 0.5 1.0]
GraphicAmbientColor	[0.15 0.15 0.15 1.0]
GraphicEmissiveColor	[0.0 0.0 0.0 1.0]
GraphicShininess	75
GraphicOpacity	1
GeometryShape	FromFile
RectangleSize	[1 1]
RectangleSizeUnits	m
BrickDimensions	[1 1 1]
BrickDimensionUnits	m
CylinderRadius	1
CylinderRadiusUnits	m
CylinderLength	1
CylinderLengthUnits	m
SphereRadius	1
SphereRadiusUnits	m
EllipsoidRadii	[1 1 1]
EllipsoidRadiiUnits	m
ExtrusionCrossSection	[1 1; -1 1; -1 -1; 1 -1]
ExtrusionCrossSectionUnits	m
ExtrusionLength	1
ExtrusionLengthUnits	m
PolygonNumSides	3
PolygonOuterRadius	1
PolygonOuterRadiusUnits	m
ExtGeomFileType	STL
ExtGeomFileName	Acople-RUniball-BaseMovil_Predeterminado_sldprt.STL
ExtGeomFileUnits	mm
RevolutionCrossSection	[1 1; 1 -1; 2 -1; 2 1]
RevolutionCrossSectionUnits	m
RevolutionExtent	Full
RevolutionAngle	180
RevolutionAngleUnits	deg
Block Function	simmechanics.library.body_elements.solid

3.19. acopleBaseMovilAntebrazo_1_RIGID

Figura 3.19. DeltaSM_AnguloSinFriccions/DeltaSM/ BaseMovilCompleta_1_RIGID/acopleBaseMovilAntebrazo_1_RIGID

3.19.1. Blocks

3.19.1.1. Parameters

3.19.1.1.1. "F" (PMIOPort)

Tabla 3.55. "F" Parameters

Parameter	Value
Port number	1
Port location on parent subsystem	Right

3.19.1.1.2. "ReferenceFrame" (SimMechanicsBlock)

Tabla 3.56. "ReferenceFrame" Parameters

Parameter	Value
ClassName	ReferenceFrame

Parameter	Value
Block Function	simmechanics.library.frames_transforms.reference_frame

3.19.1.1.3. "Transform" (SimMechanicsBlock)

Tabla 3.57. "Transform" Parameters

Parameter	Value
ClassName	RigidTransform
TranslationMethod	Cartesian
TranslationLengthUnit	mm
TranslationStandardAxis	+Z
TranslationStandardOffset	0
TranslationCartesianOffset	[-3.9841905829632802 7.6658901115671529 29.637997214089584]
TranslationROffset	0
TranslationROffsetUnits	m
TranslationZOffset	0
TranslationZOffsetUnits	m
TranslationThetaOffset	0
TranslationThetaOffsetUnits	deg
RotationMethod	None
RotationAngleUnits	deg
RotationStandardAxis	+Z
RotationAngle	0
RotationArbitraryAxis	[0 0 1]
FollAlignAxisA	+X
BaseAlignAxisA	+Y
FollAlignAxisB	+Y
BaseAlignAxisB	+Z
Block Function	simmechanics.library.frames_transforms.rigid_transform

3.19.1.1.4. "Transform1" (SimMechanicsBlock)

Tabla 3.58. "Transform1" Parameters

Parameter	Value
ClassName	RigidTransform
TranslationMethod	Cartesian

Parameter	Value
TranslationLengthUnit	mm
TranslationStandardAxis	+Z
TranslationStandardOffset	0
TranslationCartesianOffset	[-3.9841905829632736 7.665890111567208 33.337997214089583]
TranslationROffset	0
TranslationROffsetUnits	m
TranslationZOffset	0
TranslationZOffsetUnits	m
TranslationThetaOffset	0
TranslationThetaOffsetUnits	deg
RotationMethod	None
RotationAngleUnits	deg
RotationStandardAxis	+Z
RotationAngle	0
RotationArbitraryAxis	[0 0 1]
FollAlignAxisA	+X
BaseAlignAxisA	+Y
FollAlignAxisB	+Y
BaseAlignAxisB	+Z
Block Function	simmechanics.library.frames_transforms.rigid_transform

3.19.1.1.5. "Transform2" (SimMechanicsBlock)

Tabla 3.59. "Transform2" Parameters

Parameter	Value
ClassName	RigidTransform
TranslationMethod	Cartesian
TranslationLengthUnit	mm
TranslationStandardAxis	+Z
TranslationStandardOffset	0
TranslationCartesianOffset	[-3.9841905829632736 7.6658901115671529 81.437997214089577]
TranslationROffset	0
TranslationROffsetUnits	m
TranslationZOffset	0
TranslationZOffsetUnits	m
TranslationThetaOffset	0
TranslationThetaOffsetUnits	deg

Parameter	Value
RotationMethod	None
RotationAngleUnits	deg
RotationStandardAxis	+Z
RotationAngle	0
RotationArbitraryAxis	[0 0 1]
FollAlignAxisA	+X
BaseAlignAxisA	+Y
FollAlignAxisB	+Y
BaseAlignAxisB	+Z
Block Function	simmechanics.library.frames_transforms.rigid_transform

3.19.1.1.6. "Transform3" (SimMechanicsBlock)

Tabla 3.60. "Transform3" Parameters

Parameter	Value
ClassName	RigidTransform
TranslationMethod	Cartesian
TranslationLengthUnit	mm
TranslationStandardAxis	+Z
TranslationStandardOffset	0
TranslationCartesianOffset	[40.619127445907445 65.680058780245261 72.038766313154696]
TranslationROffset	0
TranslationROffsetUnits	m
TranslationZOffset	0
TranslationZOffsetUnits	m
TranslationThetaOffset	0
TranslationThetaOffsetUnits	deg
RotationMethod	ArbitraryAxis
RotationAngleUnits	rad
RotationStandardAxis	+Z
RotationAngle	1.5707963267948968
RotationArbitraryAxis	[1 0 6.4664413584901205e-17]
FollAlignAxisA	+X
BaseAlignAxisA	+Y
FollAlignAxisB	+Y
BaseAlignAxisB	+Z
Block Function	simmechanics.library.frames_transforms.rigid_transform

3.20. acopleBaseMovilAntebrazo_2_RIGID

**Figura 3.20. DeltaSM_AnguloSinFriccions/DeltaSM/
BaseMovilCompleta_1_RIGID/acopleBaseMovilAntebrazo_2_RIGID**
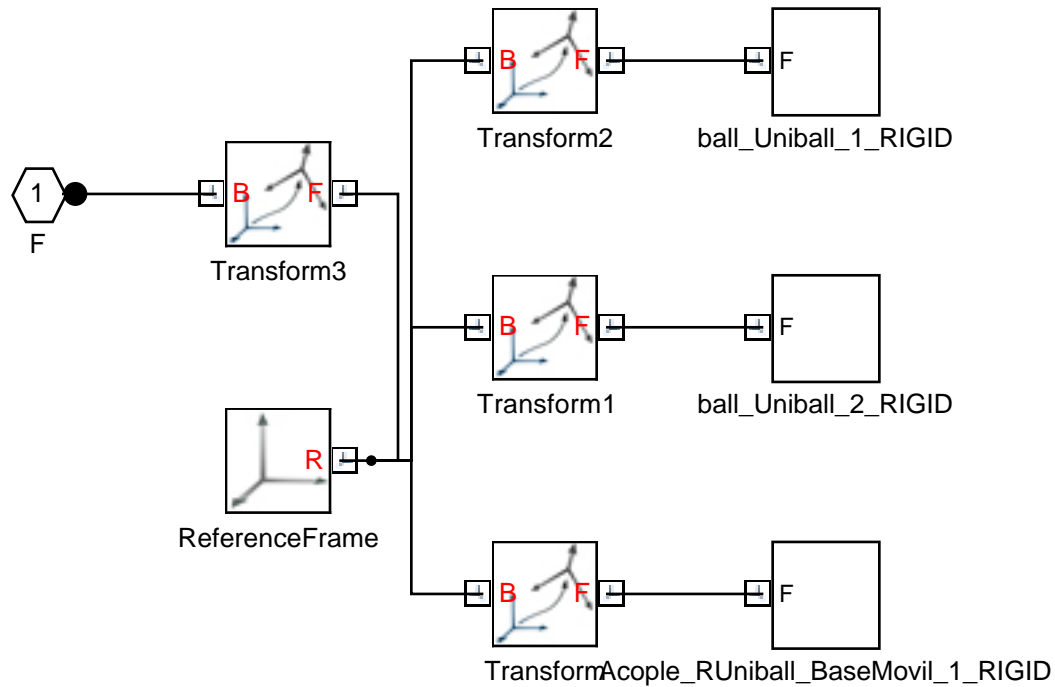
3.20.1. Blocks

3.20.1.1. Parameters

3.20.1.1.1. "F" (PMIOPort)

Tabla 3.61. "F" Parameters

Parameter	Value
Port number	1
Port location on parent subsystem	Right

3.20.1.1.2. "ReferenceFrame" (SimMechanicsBlock)

Tabla 3.62. "ReferenceFrame" Parameters

Parameter	Value
ClassName	ReferenceFrame

Parameter	Value
Block Function	simmechanics.library.frames_transforms.reference_frame

3.20.1.1.3. "Transform" (SimMechanicsBlock)

Tabla 3.63. "Transform" Parameters

Parameter	Value
ClassName	RigidTransform
TranslationMethod	Cartesian
TranslationLengthUnit	mm
TranslationStandardAxis	+Z
TranslationStandardOffset	0
TranslationCartesianOffset	[-3.9841905829632838 7.665890111567208 29.637997214089587]
TranslationROffset	0
TranslationROffsetUnits	m
TranslationZOffset	0
TranslationZOffsetUnits	m
TranslationThetaOffset	0
TranslationThetaOffsetUnits	deg
RotationMethod	None
RotationAngleUnits	deg
RotationStandardAxis	+Z
RotationAngle	0
RotationArbitraryAxis	[0 0 1]
FollAlignAxisA	+X
BaseAlignAxisA	+Y
FollAlignAxisB	+Y
BaseAlignAxisB	+Z
Block Function	simmechanics.library.frames_transforms.rigid_transform

3.20.1.1.4. "Transform1" (SimMechanicsBlock)

Tabla 3.64. "Transform1" Parameters

Parameter	Value
ClassName	RigidTransform
TranslationMethod	Cartesian

Parameter	Value
TranslationLengthUnit	mm
TranslationStandardAxis	+Z
TranslationStandardOffset	0
TranslationCartesianOffset	[-3.9841905829632838 7.665890111567208 33.33799721408959]
TranslationROffset	0
TranslationROffsetUnits	m
TranslationZOffset	0
TranslationZOffsetUnits	m
TranslationThetaOffset	0
TranslationThetaOffsetUnit	deg
RotationMethod	None
RotationAngleUnits	deg
RotationStandardAxis	+Z
RotationAngle	0
RotationArbitraryAxis	[0 0 1]
FollAlignAxisA	+X
BaseAlignAxisA	+Y
FollAlignAxisB	+Y
BaseAlignAxisB	+Z
Block Function	simmechanics.library.frames_transforms.rigid_transform

3.20.1.1.5. "Transform2" (SimMechanicsBlock)

Tabla 3.65. "Transform2" Parameters

Parameter	Value
ClassName	RigidTransform
TranslationMethod	Cartesian
TranslationLengthUnit	mm
TranslationStandardAxis	+Z
TranslationStandardOffset	0
TranslationCartesianOffset	[-3.9841905829632873 7.665890111567208 81.437997214089592]
TranslationROffset	0
TranslationROffsetUnits	m
TranslationZOffset	0
TranslationZOffsetUnits	m
TranslationThetaOffset	0
TranslationThetaOffsetUnit	deg

Parameter	Value
RotationMethod	None
RotationAngleUnits	deg
RotationStandardAxis	+Z
RotationAngle	0
RotationArbitraryAxis	[0 0 1]
FollAlignAxisA	+X
BaseAlignAxisA	+Y
FollAlignAxisB	+Y
BaseAlignAxisB	+Z
Block Function	simmechanics.library.frames_transforms.rigid_transform

3.20.1.1.6. "Transform3" (SimMechanicsBlock)

Tabla 3.66. "Transform3" Parameters

Parameter	Value
ClassName	RigidTransform
TranslationMethod	Cartesian
TranslationLengthUnit	mm
TranslationStandardAxis	+Z
TranslationStandardOffset	0
TranslationCartesianOffset	[36.541511008799858 63.368052456481792 72.038766313154696]
TranslationROffset	0
TranslationROffsetUnits	m
TranslationZOffset	0
TranslationZOffsetUnits	m
TranslationThetaOffset	0
TranslationThetaOffsetUnits	deg
RotationMethod	ArbitraryAxis
RotationAngleUnits	rad
RotationStandardAxis	+Z
RotationAngle	1.8234765819369751
RotationArbitraryAxis	[0.7745966692414834 -0.44721359549995782 -0.44721359549995782]
FollAlignAxisA	+X
BaseAlignAxisA	+Y
FollAlignAxisB	+Y
BaseAlignAxisB	+Z
Block Function	simmechanics.library.frames_transforms.rigid_transform

3.21. acopleBaseMovilAntebrazo_3_RIGID

Figura 3.21. DeltaSM_AnguloSinFriccions/DeltaSM/ BaseMovilCompleta_1_RIGID/acopleBaseMovilAntebrazo_3_RIGID

3.21.1. Blocks

3.21.1.1. Parameters

3.21.1.1.1. "F" (PMIOPort)

Tabla 3.67. "F" Parameters

Parameter	Value
Port number	1
Port location on parent subsystem	Right

3.21.1.1.2. "ReferenceFrame" (SimMechanicsBlock)

Tabla 3.68. "ReferenceFrame" Parameters

Parameter	Value
ClassName	ReferenceFrame

Parameter	Value
Block Function	simmechanics.library.frames_transforms.reference_frame

3.21.1.1.3. "Transform" (SimMechanicsBlock)

Tabla 3.69. "Transform" Parameters

Parameter	Value
ClassName	RigidTransform
TranslationMethod	Cartesian
TranslationLengthUnit	mm
TranslationStandardAxis	+Z
TranslationStandardOffset	0
TranslationCartesianOffset	[-3.9841905829632873 7.665890111567208 29.637997214089591]
TranslationROffset	0
TranslationROffsetUnits	m
TranslationZOffset	0
TranslationZOffsetUnits	m
TranslationThetaOffset	0
TranslationThetaOffsetUnits	deg
RotationMethod	None
RotationAngleUnits	deg
RotationStandardAxis	+Z
RotationAngle	0
RotationArbitraryAxis	[0 0 1]
FollAlignAxisA	+X
BaseAlignAxisA	+Y
FollAlignAxisB	+Y
BaseAlignAxisB	+Z
Block Function	simmechanics.library.frames_transforms.rigid_transform

3.21.1.1.4. "Transform1" (SimMechanicsBlock)

Tabla 3.70. "Transform1" Parameters

Parameter	Value
ClassName	RigidTransform
TranslationMethod	Cartesian

Parameter	Value
TranslationLengthUnit	mm
TranslationStandardAxis	+Z
TranslationStandardOffset	0
TranslationCartesianOffset	[-3.9841905829632944 7.665890111567208 33.337997214089597]
TranslationROffset	0
TranslationROffsetUnits	m
TranslationZOffset	0
TranslationZOffsetUnits	m
TranslationThetaOffset	0
TranslationThetaOffsetUnit	deg
RotationMethod	None
RotationAngleUnits	deg
RotationStandardAxis	+Z
RotationAngle	0
RotationArbitraryAxis	[0 0 1]
FollAlignAxisA	+X
BaseAlignAxisA	+Y
FollAlignAxisB	+Y
BaseAlignAxisB	+Z
Block Function	simmechanics.library.frames_transforms.rigid_transform

3.21.1.1.5. "Transform2" (SimMechanicsBlock)

Tabla 3.71. "Transform2" Parameters

Parameter	Value
ClassName	RigidTransform
TranslationMethod	Cartesian
TranslationLengthUnit	mm
TranslationStandardAxis	+Z
TranslationStandardOffset	0
TranslationCartesianOffset	[-3.9841905829633011 7.665890111567208 81.43799721408962]
TranslationROffset	0
TranslationROffsetUnits	m
TranslationZOffset	0
TranslationZOffsetUnits	m
TranslationThetaOffset	0
TranslationThetaOffsetUnit	deg

Parameter	Value
RotationMethod	None
RotationAngleUnits	deg
RotationStandardAxis	+Z
RotationAngle	0
RotationArbitraryAxis	[0 0 1]
FollAlignAxisA	+X
BaseAlignAxisA	+Y
FollAlignAxisB	+Y
BaseAlignAxisB	+Z
Block Function	simmechanics.library.frames_transforms.rigid_transform

3.21.1.1.6. "Transform3" (SimMechanicsBlock)

Tabla 3.72. "Transform3" Parameters

Parameter	Value
ClassName	RigidTransform
TranslationMethod	Cartesian
TranslationLengthUnit	mm
TranslationStandardAxis	+Z
TranslationStandardOffset	0
TranslationCartesianOffset	[-62.800542064944509 10.505559499579672 72.038766313154639]
TranslationROffset	0
TranslationROffsetUnits	m
TranslationZOffset	0
TranslationZOffsetUnits	m
TranslationThetaOffset	0
TranslationThetaOffsetUnits	deg
RotationMethod	ArbitraryAxis
RotationAngleUnits	rad
RotationStandardAxis	+Z
RotationAngle	1.8234765819369756
RotationArbitraryAxis	[0.77459666924148329 0.44721359549995804 0.44721359549995793]
FollAlignAxisA	+X
BaseAlignAxisA	+Y
FollAlignAxisB	+Y
BaseAlignAxisB	+Z
Block Function	simmechanics.library.frames_transforms.rigid_transform

3.22. Antebrazo_1_RIGID

Figura 3.22. DeltaSM_AnguloSinFriccions/DeltaSM/ AntebrazoCompleto_1_RIGID1/Antebrazo_1_RIGID

3.22.1. Blocks

3.22.1.1. Parameters

3.22.1.1.1. "F" (PMIOPort)

Tabla 3.73. "F" Parameters

Parameter	Value
Port number	1
Port location on parent subsystem	Left

3.22.1.1.2. "ReferenceFrame" (SimMechanicsBlock)

Tabla 3.74. "ReferenceFrame" Parameters

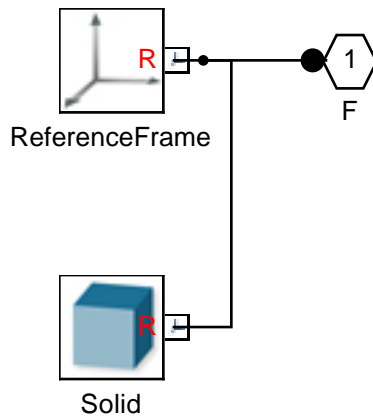| Parameter	Value
ClassName	ReferenceFrame
Block Function	simmechanics.library.frames_transforms.reference_frame

3.22.1.1.3. "Solid" (SimMechanicsBlock)

Tabla 3.75. "Solid" Parameters

Parameter	Value
ClassName	Solid
InertiaType	Custom
Mass	0.0078508400413208924
MassUnits	kg
CenterOfMass	[0 0 102]
CenterOfMassUnits	mm
MomentsOfInertia	[27.250756460927395 27.250756460927395 0.048086395253090462]
MomentsOfInertiaUnits	kg*mm^2
ProductsOfInertia	[0 0 0]
ProductsOfInertiaUnits	kg*mm^2
DensityBased	on
Density	1000
DensityUnits	kg/(m^3)
GraphicType	FromGeometry
MarkerShape	Sphere
MarkerSize	10
MarkerSizeUnits	m
GraphicVisPropType	SimpleVisualProperties
GraphicDiffuseColor	[0.792156862745098 0.81960784313725488 0.93333333333333335]
GraphicSpecularColor	[0.5 0.5 0.5 1.0]
GraphicAmbientColor	[0.15 0.15 0.15 1.0]
GraphicEmissiveColor	[0.0 0.0 0.0 1.0]
GraphicShininess	75
GraphicOpacity	1
GeometryShape	FromFile
RectangleSize	[1 1]
RectangleSizeUnits	m
BrickDimensions	[1 1 1]
BrickDimensionUnits	m
CylinderRadius	1
CylinderRadiusUnits	m
CylinderLength	1
CylinderLengthUnits	m
SphereRadius	1
SphereRadiusUnits	m

Parameter	Value
EllipsoidRadii	[1 1 1]
EllipsoidRadiiUnits	m
ExtrusionCrossSection	[1 1; -1 1; -1 -1; 1 -1]
ExtrusionCrossSectionUnits	m
ExtrusionLength	1
ExtrusionLengthUnits	m
PolygonNumSides	3
PolygonOuterRadius	1
PolygonOuterRadiusUnits	m
ExtGeomFileType	STL
ExtGeomFileName	Antebrazo_Predeterminado_sldprt.STL
ExtGeomFileUnits	mm
RevolutionCrossSection	[1 1; 1 -1; 2 -1; 2 1]
RevolutionCrossSectionUnits	m
RevolutionExtent	Full
RevolutionAngle	180
RevolutionAngleUnits	deg
Block Function	simmechanics.library.body_elements.solid

3.23. Antebrazo_1_RIGID

Figura 3.23. DeltaSM_AnguloSinFriccions/DeltaSM/ AntebrazoCompleto_2_RIGID1/Antebrazo_1_RIGID
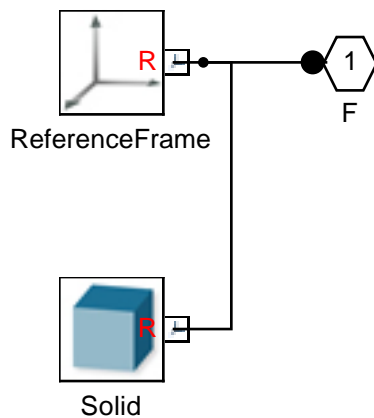
3.23.1. Blocks

3.23.1.1. Parameters

3.23.1.1.1. "F" (PMIOPort)

Tabla 3.76. "F" Parameters

Parameter	Value
Port number	1
Port location on parent subsystem	Left

3.23.1.1.2. "ReferenceFrame" (SimMechanicsBlock)

Tabla 3.77. "ReferenceFrame" Parameters

Parameter	Value
ClassName	ReferenceFrame
Block Function	simmechanics.library.frames_transforms.reference_frame

3.23.1.1.3. "Solid" (SimMechanicsBlock)

Tabla 3.78. "Solid" Parameters

Parameter	Value
ClassName	Solid
InertiaType	Custom
Mass	0.0078508400413208924
MassUnits	kg
CenterOfMass	[0 0 102]
CenterOfMassUnits	mm
MomentsOfInertia	[27.250756460927395 27.250756460927395 0.048086395253090462]
MomentsOfInertiaUnits	kg*mm^2
ProductsOfInertia	[0 0 0]
ProductsOfInertiaUnits	kg*mm^2
DensityBased	on
Density	1000
DensityUnits	kg/(m^3)
GraphicType	FromGeometry
MarkerShape	Sphere
MarkerSize	10
MarkerSizeUnits	m
GraphicVisPropType	SimpleVisualProperties
GraphicDiffuseColor	[0.792156862745098 0.81960784313725488 0.93333333333333335]
GraphicSpecularColor	[0.5 0.5 0.5 1.0]

Parameter	Value
GraphicAmbientColor	[0.15 0.15 0.15 1.0]
GraphicEmissiveColor	[0.0 0.0 0.0 1.0]
GraphicShininess	75
GraphicOpacity	1
GeometryShape	FromFile
RectangleSize	[1 1]
RectangleSizeUnits	m
BrickDimensions	[1 1 1]
BrickDimensionUnits	m
CylinderRadius	1
CylinderRadiusUnits	m
CylinderLength	1
CylinderLengthUnits	m
SphereRadius	1
SphereRadiusUnits	m
EllipsoidRadii	[1 1 1]
EllipsoidRadiiUnits	m
ExtrusionCrossSection	[1 1; -1 1; -1 -1; 1 -1]
ExtrusionCrossSectionUnits	m
ExtrusionLength	1
ExtrusionLengthUnits	m
PolygonNumSides	3
PolygonOuterRadius	1
PolygonOuterRadiusUnits	m
ExtGeomFileType	STL
ExtGeomFileName	Antebrazo_Predeterminado_sldprt.STL
ExtGeomFileUnits	mm
RevolutionCrossSection	[1 1; 1 -1; 2 -1; 2 1]
RevolutionCrossSectionUnits	m
RevolutionExtent	Full
RevolutionAngle	180
RevolutionAngleUnits	deg
Block Function	simmechanics.library.body_elements.solid

3.24. Antebrazo_1_RIGID

Figura 3.24. DeltaSM_AnguloSinFriccions/DeltaSM/ AntebrazoCompleto_3_RIGID1/Antebrazo_1_RIGID
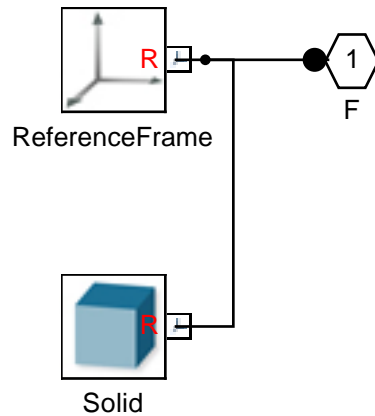
3.24.1. Blocks

3.24.1.1. Parameters

3.24.1.1.1. "F" (PMIOPort)

Tabla 3.79. "F" Parameters

Parameter	Value
Port number	1
Port location on parent subsystem	Left

3.24.1.1.2. "ReferenceFrame" (SimMechanicsBlock)

Tabla 3.80. "ReferenceFrame" Parameters

Parameter	Value
ClassName	ReferenceFrame
Block Function	simmechanics.library.frames_transforms.reference_frame

3.24.1.1.3. "Solid" (SimMechanicsBlock)

Tabla 3.81. "Solid" Parameters

Parameter	Value
ClassName	Solid
InertiaType	Custom
Mass	0.0078508400413208924
MassUnits	kg
CenterOfMass	[0 0 102]
CenterOfMassUnits	mm
MomentsOfInertia	[27.250756460927395 27.250756460927395 0.048086395253090462]
MomentsOfInertiaUnits	kg*mm^2
ProductsOfInertia	[0 0 0]
ProductsOfInertiaUnits	kg*mm^2
DensityBased	on
Density	1000
DensityUnits	kg/(m^3)
GraphicType	FromGeometry
MarkerShape	Sphere
MarkerSize	10
MarkerSizeUnits	m
GraphicVisPropType	SimpleVisualProperties
GraphicDiffuseColor	[0.792156862745098 0.81960784313725488 0.93333333333333335]
GraphicSpecularColor	[0.5 0.5 0.5 1.0]
GraphicAmbientColor	[0.15 0.15 0.15 1.0]
GraphicEmissiveColor	[0.0 0.0 0.0 1.0]
GraphicShininess	75
GraphicOpacity	1
GeometryShape	FromFile
RectangleSize	[1 1]
RectangleSizeUnits	m
BrickDimensions	[1 1 1]
BrickDimensionUnits	m
CylinderRadius	1
CylinderRadiusUnits	m
CylinderLength	1
CylinderLengthUnits	m
SphereRadius	1
SphereRadiusUnits	m

Parameter	Value
EllipsoidRadii	[1 1 1]
EllipsoidRadiiUnits	m
ExtrusionCrossSection	[1 1; -1 1; -1 -1; 1 -1]
ExtrusionCrossSectionUnits	m
ExtrusionLength	1
ExtrusionLengthUnits	m
PolygonNumSides	3
PolygonOuterRadius	1
PolygonOuterRadiusUnits	m
ExtGeomFileType	STL
ExtGeomFileName	Antebrazo_Predeterminado_sldprt.STL
ExtGeomFileUnits	mm
RevolutionCrossSection	[1 1; 1 -1; 2 -1; 2 1]
RevolutionCrossSectionUnits	m
RevolutionExtent	Full
RevolutionAngle	180
RevolutionAngleUnits	deg
Block Function	simmechanics.library.body_elements.solid

3.25. Antebrazo_1_RIGID

Figura 3.25. DeltaSM_AnguloSinFriccions/DeltaSM/ AntebrazoCompleto_4_RIGID1/Antebrazo_1_RIGID
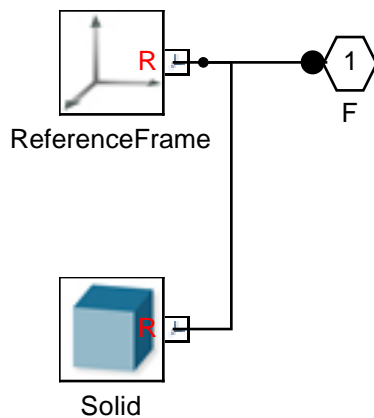
3.25.1. Blocks

3.25.1.1. Parameters

3.25.1.1.1. "F" (PMIOPort)

Tabla 3.82. "F" Parameters

Parameter	Value
Port number	1
Port location on parent subsystem	Left

3.25.1.1.2. "ReferenceFrame" (SimMechanicsBlock)

Tabla 3.83. "ReferenceFrame" Parameters

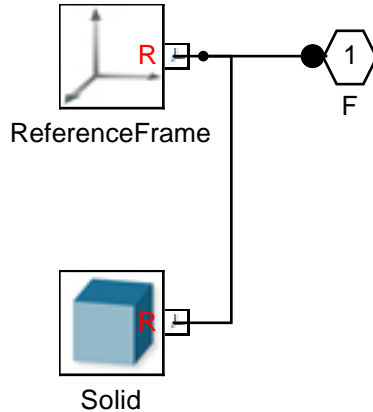| Parameter	Value
ClassName	ReferenceFrame
Block Function	simmechanics.library.frames_transforms.reference_frame

3.25.1.1.3. "Solid" (SimMechanicsBlock)

Tabla 3.84. "Solid" Parameters

Parameter	Value
ClassName	Solid
InertiaType	Custom
Mass	0.0078508400413208924
MassUnits	kg
CenterOfMass	[0 0 102]
CenterOfMassUnits	mm
MomentsOfInertia	[27.250756460927395 27.250756460927395 0.048086395253090462]
MomentsOfInertiaUnits	kg*mm^2
ProductsOfInertia	[0 0 0]
ProductsOfInertiaUnits	kg*mm^2
DensityBased	on
Density	1000
DensityUnits	kg/(m^3)
GraphicType	FromGeometry
MarkerShape	Sphere
MarkerSize	10
MarkerSizeUnits	m
GraphicVisPropType	SimpleVisualProperties
GraphicDiffuseColor	[0.792156862745098 0.81960784313725488 0.93333333333333335]
GraphicSpecularColor	[0.5 0.5 0.5 1.0]

Parameter	Value
GraphicAmbientColor	[0.15 0.15 0.15 1.0]
GraphicEmissiveColor	[0.0 0.0 0.0 1.0]
GraphicShininess	75
GraphicOpacity	1
GeometryShape	FromFile
RectangleSize	[1 1]
RectangleSizeUnits	m
BrickDimensions	[1 1 1]
BrickDimensionUnits	m
CylinderRadius	1
CylinderRadiusUnits	m
CylinderLength	1
CylinderLengthUnits	m
SphereRadius	1
SphereRadiusUnits	m
EllipsoidRadii	[1 1 1]
EllipsoidRadiiUnits	m
ExtrusionCrossSection	[1 1; -1 1; -1 -1; 1 -1]
ExtrusionCrossSectionUnits	m
ExtrusionLength	1
ExtrusionLengthUnits	m
PolygonNumSides	3
PolygonOuterRadius	1
PolygonOuterRadiusUnits	m
ExtGeomFileType	STL
ExtGeomFileName	Antebrazo_Predeterminado_sldprt.STL
ExtGeomFileUnits	mm
RevolutionCrossSection	[1 1; 1 -1; 2 -1; 2 1]
RevolutionCrossSectionUnits	m
RevolutionExtent	Full
RevolutionAngle	180
RevolutionAngleUnits	deg
Block Function	simmechanics.library.body_elements.solid

3.26. Antebrazo_1_RIGID

Figura 3.26. DeltaSM_AnguloSinFriccions/DeltaSM/ AntebrazoCompleto_5_RIGID1/Antebrazo_1_RIGID

3.26.1. Blocks

3.26.1.1. Parameters

3.26.1.1.1. "F" (PMIOPort)

Tabla 3.85. "F" Parameters

Parameter	Value
Port number	1
Port location on parent subsystem	Left

3.26.1.1.2. "ReferenceFrame" (SimMechanicsBlock)

Tabla 3.86. "ReferenceFrame" Parameters

Parameter	Value
ClassName	ReferenceFrame
Block Function	simmechanics.library.frames_transforms.reference_frame

3.26.1.1.3. "Solid" (SimMechanicsBlock)

Tabla 3.87. "Solid" Parameters

Parameter	Value
ClassName	Solid
InertiaType	Custom
Mass	0.0078508400413208924
MassUnits	kg
CenterOfMass	[0 0 102]
CenterOfMassUnits	mm
MomentsOfInertia	[27.250756460927395 27.250756460927395 0.048086395253090462]
MomentsOfInertiaUnits	kg*mm^2
ProductsOfInertia	[0 0 0]
ProductsOfInertiaUnits	kg*mm^2
DensityBased	on
Density	1000
DensityUnits	kg/(m^3)
GraphicType	FromGeometry
MarkerShape	Sphere
MarkerSize	10
MarkerSizeUnits	m
GraphicVisPropType	SimpleVisualProperties
GraphicDiffuseColor	[0.792156862745098 0.81960784313725488 0.93333333333333335]
GraphicSpecularColor	[0.5 0.5 0.5 1.0]
GraphicAmbientColor	[0.15 0.15 0.15 1.0]
GraphicEmissiveColor	[0.0 0.0 0.0 1.0]
GraphicShininess	75
GraphicOpacity	1
GeometryShape	FromFile
RectangleSize	[1 1]
RectangleSizeUnits	m
BrickDimensions	[1 1 1]
BrickDimensionUnits	m
CylinderRadius	1
CylinderRadiusUnits	m
CylinderLength	1
CylinderLengthUnits	m
SphereRadius	1
SphereRadiusUnits	m

Parameter	Value
EllipsoidRadii	[1 1 1]
EllipsoidRadiiUnits	m
ExtrusionCrossSection	[1 1; -1 1; -1 -1; 1 -1]
ExtrusionCrossSectionUnits	m
ExtrusionLength	1
ExtrusionLengthUnits	m
PolygonNumSides	3
PolygonOuterRadius	1
PolygonOuterRadiusUnits	m
ExtGeomFileType	STL
ExtGeomFileName	Antebrazo_Predeterminado_sldprt.STL
ExtGeomFileUnits	mm
RevolutionCrossSection	[1 1; 1 -1; 2 -1; 2 1]
RevolutionCrossSectionUnits	m
RevolutionExtent	Full
RevolutionAngle	180
RevolutionAngleUnits	deg
Block Function	simmechanics.library.body_elements.solid

3.27. Antebrazo_1_RIGID

Figura 3.27. DeltaSM_AnguloSinFriccions/DeltaSM/ AntebrazoCompleto_6_RIGID1/Antebrazo_1_RIGID
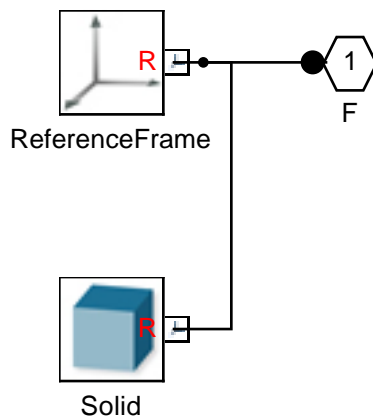
3.27.1. Blocks

3.27.1.1. Parameters

3.27.1.1.1. "F" (PMIOPort)

Tabla 3.88. "F" Parameters

Parameter	Value
Port number	1
Port location on parent subsystem	Left

3.27.1.1.2. "ReferenceFrame" (SimMechanicsBlock)

Tabla 3.89. "ReferenceFrame" Parameters

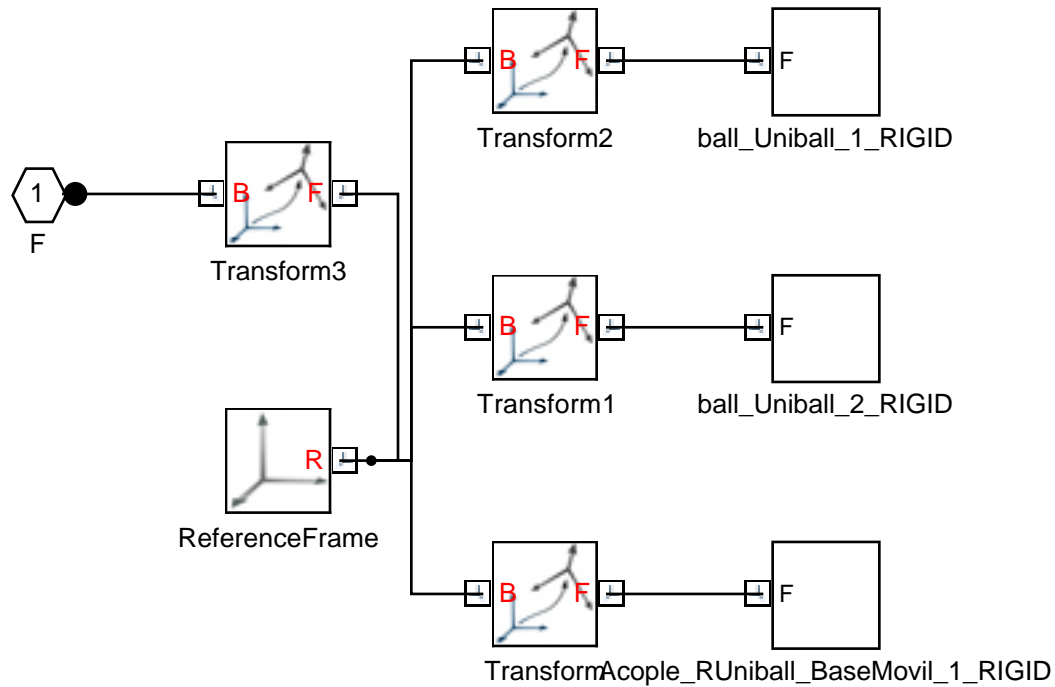| Parameter	Value
ClassName	ReferenceFrame
Block Function	simmechanics.library.frames_transforms.reference_frame

3.27.1.1.3. "Solid" (SimMechanicsBlock)

Tabla 3.90. "Solid" Parameters

Parameter	Value
ClassName	Solid
InertiaType	Custom
Mass	0.0078508400413208924
MassUnits	kg
CenterOfMass	[0 0 102]
CenterOfMassUnits	mm
MomentsOfInertia	[27.250756460927395 27.250756460927395 0.048086395253090462]
MomentsOfInertiaUnits	kg*mm^2
ProductsOfInertia	[0 0 0]
ProductsOfInertiaUnits	kg*mm^2
DensityBased	on
Density	1000
DensityUnits	kg/(m^3)
GraphicType	FromGeometry
MarkerShape	Sphere
MarkerSize	10
MarkerSizeUnits	m
GraphicVisPropType	SimpleVisualProperties
GraphicDiffuseColor	[0.792156862745098 0.81960784313725488 0.93333333333333335]
GraphicSpecularColor	[0.5 0.5 0.5 1.0]

Parameter	Value
GraphicAmbientColor	[0.15 0.15 0.15 1.0]
GraphicEmissiveColor	[0.0 0.0 0.0 1.0]
GraphicShininess	75
GraphicOpacity	1
GeometryShape	FromFile
RectangleSize	[1 1]
RectangleSizeUnits	m
BrickDimensions	[1 1 1]
BrickDimensionUnits	m
CylinderRadius	1
CylinderRadiusUnits	m
CylinderLength	1
CylinderLengthUnits	m
SphereRadius	1
SphereRadiusUnits	m
EllipsoidRadii	[1 1 1]
EllipsoidRadiiUnits	m
ExtrusionCrossSection	[1 1; -1 1; -1 -1; 1 -1]
ExtrusionCrossSectionUnits	m
ExtrusionLength	1
ExtrusionLengthUnits	m
PolygonNumSides	3
PolygonOuterRadius	1
PolygonOuterRadiusUnits	m
ExtGeomFileType	STL
ExtGeomFileName	Antebrazo_Predeterminado_sldprt.STL
ExtGeomFileUnits	mm
RevolutionCrossSection	[1 1; 1 -1; 2 -1; 2 1]
RevolutionCrossSectionUnits	m
RevolutionExtent	Full
RevolutionAngle	180
RevolutionAngleUnits	deg
Block Function	simmechanics.library.body_elements.solid

3.28. AntebrazoCompleto_1_RIGID1

Figura 3.28. DeltaSM_AnguloSinFriccions/DeltaSM/ AntebrazoCompleto_1_RIGID1
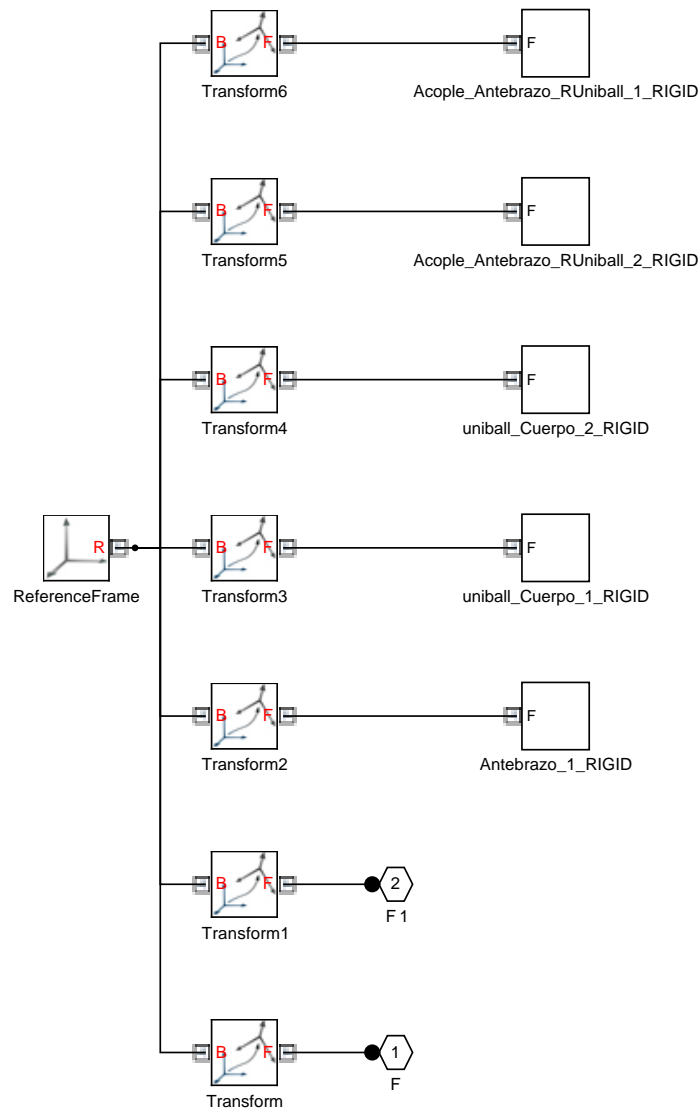
3.28.1. Blocks

3.28.1.1. Parameters

3.28.1.1.1. "F" (PMIOPort)

Tabla 3.91. "F" Parameters

Parameter	Value
Port number	1
Port location on parent subsystem	Left

3.28.1.1.2. "F1" (PMIOPort)

Tabla 3.92. "F1" Parameters

Parameter	Value
Port number	2
Port location on parent subsystem	Right

3.28.1.1.3. "ReferenceFrame" (SimMechanicsBlock)

Tabla 3.93. "ReferenceFrame" Parameters

Parameter	Value
ClassName	ReferenceFrame
Block Function	simmechanics.library.frames_transforms.reference_frame

3.28.1.1.4. "Transform" (SimMechanicsBlock)

Tabla 3.94. "Transform" Parameters

Parameter	Value
ClassName	RigidTransform
TranslationMethod	Cartesian
TranslationLengthUnit	mm
TranslationStandardAxis	+Z
TranslationStandardOffset	0
TranslationCartesianOffset	[-16.089268306127369 11.758961591624224 40.649351392904187]
TranslationROffset	0
TranslationROffsetUnits	m
TranslationZOffset	0

Parameter	Value
TranslationZOffsetUnits	m
TranslationThetaOffset	0
TranslationThetaOffsetUnits	deg
RotationMethod	ArbitraryAxis
RotationAngleUnits	rad
RotationStandardAxis	+Z
RotationAngle	0
RotationArbitraryAxis	[0 0 0]
FollAlignAxisA	+X
BaseAlignAxisA	+Y
FollAlignAxisB	+Y
BaseAlignAxisB	+Z
Block Function	simmechanics.library.frames_transforms.rigid_transform

3.28.1.1.5. "Transform1" (SimMechanicsBlock)

Tabla 3.95. "Transform1" Parameters

Parameter	Value
ClassName	RigidTransform
TranslationMethod	Cartesian
TranslationLengthUnit	mm
TranslationStandardAxis	+Z
TranslationStandardOffset	0
TranslationCartesianOffset	[-16.089268306127405 -263.24103840837569 40.64935139290418]
TranslationROffset	0
TranslationROffsetUnits	m
TranslationZOffset	0
TranslationZOffsetUnits	m
TranslationThetaOffset	0
TranslationThetaOffsetUnits	deg
RotationMethod	ArbitraryAxis
RotationAngleUnits	rad
RotationStandardAxis	+Z
RotationAngle	0
RotationArbitraryAxis	[0 0 0]
FollAlignAxisA	+X
BaseAlignAxisA	+Y

Parameter	Value
FollAlignAxisB	+Y
BaseAlignAxisB	+Z
Block Function	simmechanics.library.frames_transforms.rigid_transform

3.28.1.1.6. "Transform2" (SimMechanicsBlock)

Tabla 3.96. "Transform2" Parameters

Parameter	Value
ClassName	RigidTransform
TranslationMethod	Cartesian
TranslationLengthUnit	mm
TranslationStandardAxis	+Z
TranslationStandardOffset	0
TranslationCartesianOffset	[-16.089268306127391 -227.74103840837572 40.64935139290418]
TranslationROffset	0
TranslationROffsetUnits	m
TranslationZOffset	0
TranslationZOffsetUnits	m
TranslationThetaOffset	0
TranslationThetaOffsetUnits	deg
RotationMethod	ArbitraryAxis
RotationAngleUnits	rad
RotationStandardAxis	+Z
RotationAngle	2.7352803968007877
RotationArbitraryAxis	[-0.20599796797350461 0.69194105138761164 0.69194105138761164]
FollAlignAxisA	+X
BaseAlignAxisA	+Y
FollAlignAxisB	+Y
BaseAlignAxisB	+Z
Block Function	simmechanics.library.frames_transforms.rigid_transform

3.28.1.1.7. "Transform3" (SimMechanicsBlock)

Tabla 3.97. "Transform3" Parameters

Parameter	Value
ClassName	RigidTransform

Parameter	Value
TranslationMethod	Cartesian
TranslationLengthUnit	mm
TranslationStandardAxis	+Z
TranslationStandardOffset	0
TranslationCartesianOffset	[-16.089268306127391 11.758961591624317 40.64935139290418]
TranslationROffset	0
TranslationROffsetUnits	m
TranslationZOffset	0
TranslationZOffsetUnits	m
TranslationThetaOffset	0
TranslationThetaOffsetUnits	deg
RotationMethod	None
RotationAngleUnits	deg
RotationStandardAxis	+Z
RotationAngle	0
RotationArbitraryAxis	[0 0 1]
FollAlignAxisA	+X
BaseAlignAxisA	+Y
FollAlignAxisB	+Y
BaseAlignAxisB	+Z
Block Function	simmechanics.library.frames_transforms.rigid_transform

3.28.1.1.8. "Transform4" (SimMechanicsBlock)

Tabla 3.98. "Transform4" Parameters

Parameter	Value
ClassName	RigidTransform
TranslationMethod	Cartesian
TranslationLengthUnit	mm
TranslationStandardAxis	+Z
TranslationStandardOffset	0
TranslationCartesianOffset	[-16.089268306127405 -263.24103840837569 40.64935139290418]
TranslationROffset	0
TranslationROffsetUnits	m
TranslationZOffset	0
TranslationZOffsetUnits	m
TranslationThetaOffset	0

Parameter	Value
TranslationThetaOffsetUnit	deg
RotationMethod	ArbitraryAxis
RotationAngleUnits	rad
RotationStandardAxis	+Z
RotationAngle	3.1415926535897931
RotationArbitraryAxis	[-1.1167282376600691e-16 0 1]
FollAlignAxisA	+X
BaseAlignAxisA	+Y
FollAlignAxisB	+Y
BaseAlignAxisB	+Z
Block Function	simmechanics.library.frames_transforms.rigid_transform

3.28.1.1.9. "Transform5" (SimMechanicsBlock)

Tabla 3.99. "Transform5" Parameters

Parameter	Value
ClassName	RigidTransform
TranslationMethod	Cartesian
TranslationLengthUnit	mm
TranslationStandardAxis	+Z
TranslationStandardOffset	0
TranslationCartesianOffset	[-16.089268306127391 -51.741038408375672 40.64935139290418]
TranslationROffset	0
TranslationROffsetUnits	m
TranslationZOffset	0
TranslationZOffsetUnits	m
TranslationThetaOffset	0
TranslationThetaOffsetUnit	deg
RotationMethod	ArbitraryAxis
RotationAngleUnits	rad
RotationStandardAxis	+Z
RotationAngle	2.7352803968007877
RotationArbitraryAxis	[-0.20599796797350461 0.69194105138761164 0.69194105138761164]
FollAlignAxisA	+X
BaseAlignAxisA	+Y
FollAlignAxisB	+Y
BaseAlignAxisB	+Z

Parameter	Value
Block Function	simmechanics.library.frames_transforms.rigid_transform

3.28.1.1.10. "Transform6" (SimMechanicsBlock)

Tabla 3.100. "Transform6" Parameters

Parameter	Value
ClassName	RigidTransform
TranslationMethod	Cartesian
TranslationLengthUnit	mm
TranslationStandardAxis	+Z
TranslationStandardOffset	0
TranslationCartesianOffset	[-16.089268306127405 -199.74103840837572 40.64935139290418]
TranslationROffset	0
TranslationROffsetUnits	m
TranslationZOffset	0
TranslationZOffsetUnits	m
TranslationThetaOffset	0
TranslationThetaOffsetUnits	deg
RotationMethod	ArbitraryAxis
RotationAngleUnits	rad
RotationStandardAxis	+Z
RotationAngle	2.7352803968007877
RotationArbitraryAxis	[0.20599796797350461 0.69194105138761164 -0.69194105138761164]
FollAlignAxisA	+X
BaseAlignAxisA	+Y
FollAlignAxisB	+Y
BaseAlignAxisB	+Z
Block Function	simmechanics.library.frames_transforms.rigid_transform

3.29. AntebrazoCompleto_2_RIGID1

Figura 3.29. DeltaSM_AnguloSinFriccions/DeltaSM/ AntebrazoCompleto_2_RIGID1
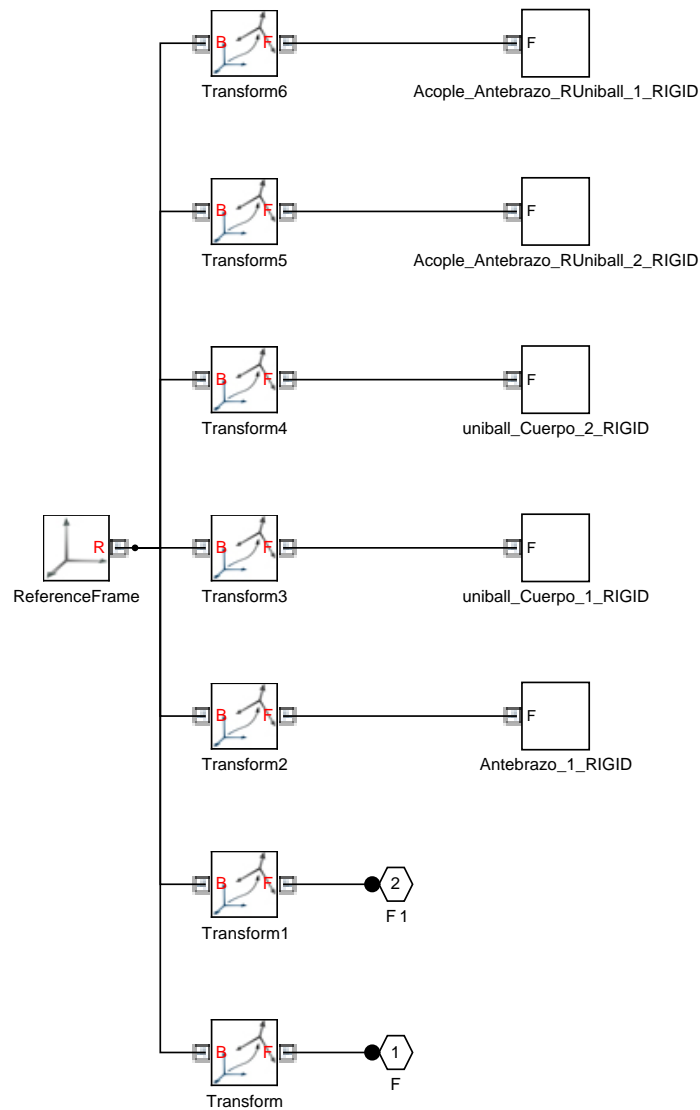
3.29.1. Blocks

3.29.1.1. Parameters

3.29.1.1.1. "F" (PMIOPort)

Tabla 3.101. "F" Parameters

Parameter	Value
Port number	1
Port location on parent subsystem	Left

3.29.1.1.2. "F1" (PMIOPort)

Tabla 3.102. "F1" Parameters

Parameter	Value
Port number	2
Port location on parent subsystem	Right

3.29.1.1.3. "ReferenceFrame" (SimMechanicsBlock)

Tabla 3.103. "ReferenceFrame" Parameters

Parameter	Value
ClassName	ReferenceFrame
Block Function	simmechanics.library.frames_transforms.reference_frame

3.29.1.1.4. "Transform" (SimMechanicsBlock)

Tabla 3.104. "Transform" Parameters

Parameter	Value
ClassName	RigidTransform
TranslationMethod	Cartesian
TranslationLengthUnit	mm
TranslationStandardAxis	+Z
TranslationStandardOffset	0
TranslationCartesianOffset	[-16.089268306127341 11.758961591624086 40.649351392904194]
TranslationROffset	0
TranslationROffsetUnits	m
TranslationZOffset	0

Parameter	Value
TranslationZOffsetUnits	m
TranslationThetaOffset	0
TranslationThetaOffsetUnits	deg
RotationMethod	ArbitraryAxis
RotationAngleUnits	rad
RotationStandardAxis	+Z
RotationAngle	0
RotationArbitraryAxis	[0 0 0]
FollAlignAxisA	+X
BaseAlignAxisA	+Y
FollAlignAxisB	+Y
BaseAlignAxisB	+Z
Block Function	simmechanics.library.frames_transforms.rigid_transform

3.29.1.1.5. "Transform1" (SimMechanicsBlock)

Tabla 3.105. "Transform1" Parameters

Parameter	Value
ClassName	RigidTransform
TranslationMethod	Cartesian
TranslationLengthUnit	mm
TranslationStandardAxis	+Z
TranslationStandardOffset	0
TranslationCartesianOffset	[-16.089268306127391 -263.24103840837569 40.649351392904165]
TranslationROffset	0
TranslationROffsetUnits	m
TranslationZOffset	0
TranslationZOffsetUnits	m
TranslationThetaOffset	0
TranslationThetaOffsetUnits	deg
RotationMethod	ArbitraryAxis
RotationAngleUnits	rad
RotationStandardAxis	+Z
RotationAngle	0
RotationArbitraryAxis	[0 0 0]
FollAlignAxisA	+X
BaseAlignAxisA	+Y

Parameter	Value
FollAlignAxisB	+Y
BaseAlignAxisB	+Z
Block Function	simmechanics.library.frames_transforms.rigid_transform

3.29.1.1.6. "Transform2" (SimMechanicsBlock)

Tabla 3.106. "Transform2" Parameters

Parameter	Value
ClassName	RigidTransform
TranslationMethod	Cartesian
TranslationLengthUnit	mm
TranslationStandardAxis	+Z
TranslationStandardOffset	0
TranslationCartesianOffset	[-16.089268306127376 -227.74103840837569 40.649351392904165]
TranslationROffset	0
TranslationROffsetUnits	m
TranslationZOffset	0
TranslationZOffsetUnits	m
TranslationThetaOffset	0
TranslationThetaOffsetUnits	deg
RotationMethod	ArbitraryAxis
RotationAngleUnits	rad
RotationStandardAxis	+Z
RotationAngle	2.7352803968007873
RotationArbitraryAxis	[-0.20599796797350473 0.69194105138761164 0.69194105138761175]
FollAlignAxisA	+X
BaseAlignAxisA	+Y
FollAlignAxisB	+Y
BaseAlignAxisB	+Z
Block Function	simmechanics.library.frames_transforms.rigid_transform

3.29.1.1.7. "Transform3" (SimMechanicsBlock)

Tabla 3.107. "Transform3" Parameters

Parameter	Value
ClassName	RigidTransform

Parameter	Value
TranslationMethod	Cartesian
TranslationLengthUnit	mm
TranslationStandardAxis	+Z
TranslationStandardOffset	0
TranslationCartesianOffset	[-16.089268306127405 11.758961591624317 40.649351392904165]
TranslationROffset	0
TranslationROffsetUnits	m
TranslationZOffset	0
TranslationZOffsetUnits	m
TranslationThetaOffset	0
TranslationThetaOffsetUnits	deg
RotationMethod	None
RotationAngleUnits	deg
RotationStandardAxis	+Z
RotationAngle	0
RotationArbitraryAxis	[0 0 1]
FollAlignAxisA	+X
BaseAlignAxisA	+Y
FollAlignAxisB	+Y
BaseAlignAxisB	+Z
Block Function	simmechanics.library.frames_transforms.rigid_transform

3.29.1.1.8. "Transform4" (SimMechanicsBlock)

Tabla 3.108. "Transform4" Parameters

Parameter	Value
ClassName	RigidTransform
TranslationMethod	Cartesian
TranslationLengthUnit	mm
TranslationStandardAxis	+Z
TranslationStandardOffset	0
TranslationCartesianOffset	[-16.089268306127391 -263.24103840837569 40.649351392904165]
TranslationROffset	0
TranslationROffsetUnits	m
TranslationZOffset	0
TranslationZOffsetUnits	m
TranslationThetaOffset	0

Parameter	Value
TranslationThetaOffsetUnits	deg
RotationMethod	ArbitraryAxis
RotationAngleUnits	rad
RotationStandardAxis	+Z
RotationAngle	3.1415926535897931
RotationArbitraryAxis	[-1.1091388224526713e-16 0 1]
FollAlignAxisA	+X
BaseAlignAxisA	+Y
FollAlignAxisB	+Y
BaseAlignAxisB	+Z
Block Function	simmechanics.library.frames_transforms.rigid_transform

3.29.1.1.9. "Transform5" (SimMechanicsBlock)

Tabla 3.109. "Transform5" Parameters

Parameter	Value
ClassName	RigidTransform
TranslationMethod	Cartesian
TranslationLengthUnit	mm
TranslationStandardAxis	+Z
TranslationStandardOffset	0
TranslationCartesianOffset	[-16.089268306127376 -51.741038408375701 40.649351392904158]
TranslationROffset	0
TranslationROffsetUnits	m
TranslationZOffset	0
TranslationZOffsetUnits	m
TranslationThetaOffset	0
TranslationThetaOffsetUnits	deg
RotationMethod	ArbitraryAxis
RotationAngleUnits	rad
RotationStandardAxis	+Z
RotationAngle	2.7352803968007873
RotationArbitraryAxis	[-0.20599796797350473 0.69194105138761164 0.69194105138761175]
FollAlignAxisA	+X
BaseAlignAxisA	+Y
FollAlignAxisB	+Y
BaseAlignAxisB	+Z

Parameter	Value
Block Function	simmechanics.library.frames_transforms.rigid_transform

3.29.1.1.10. "Transform6" (SimMechanicsBlock)

Tabla 3.110. "Transform6" Parameters

Parameter	Value
ClassName	RigidTransform
TranslationMethod	Cartesian
TranslationLengthUnit	mm
TranslationStandardAxis	+Z
TranslationStandardOffset	0
TranslationCartesianOffset	[-16.089268306127405 -199.74103840837566 40.649351392904165]
TranslationROffset	0
TranslationROffsetUnits	m
TranslationZOffset	0
TranslationZOffsetUnits	m
TranslationThetaOffset	0
TranslationThetaOffsetUnits	deg
RotationMethod	ArbitraryAxis
RotationAngleUnits	rad
RotationStandardAxis	+Z
RotationAngle	2.7352803968007873
RotationArbitraryAxis	[0.20599796797350473 0.69194105138761164 -0.69194105138761175]
FollAlignAxisA	+X
BaseAlignAxisA	+Y
FollAlignAxisB	+Y
BaseAlignAxisB	+Z
Block Function	simmechanics.library.frames_transforms.rigid_transform

3.30. AntebrazoCompleto_3_RIGID1

Figura 3.30. DeltaSM_AnguloSinFriccions/DeltaSM/ AntebrazoCompleto_3_RIGID1

3.30.1. Blocks

3.30.1.1. Parameters

3.30.1.1.1. "F" (PMIOPort)

Tabla 3.111. "F" Parameters

Parameter	Value
Port number	1
Port location on parent subsystem	Left

3.30.1.1.2. "F1" (PMIOPort)

Tabla 3.112. "F1" Parameters

Parameter	Value
Port number	2
Port location on parent subsystem	Right

3.30.1.1.3. "ReferenceFrame" (SimMechanicsBlock)

Tabla 3.113. "ReferenceFrame" Parameters

Parameter	Value
ClassName	ReferenceFrame
Block Function	simmechanics.library.frames_transforms.reference_frame

3.30.1.1.4. "Transform" (SimMechanicsBlock)

Tabla 3.114. "Transform" Parameters

Parameter	Value
ClassName	RigidTransform
TranslationMethod	Cartesian
TranslationLengthUnit	mm
TranslationStandardAxis	+Z
TranslationStandardOffset	0
TranslationCartesianOffset	[-16.089268306127408 11.758961591624292 40.649351392904201]
TranslationROffset	0
TranslationROffsetUnits	m
TranslationZOffset	0

Parameter	Value
TranslationZOffsetUnits	m
TranslationThetaOffset	0
TranslationThetaOffsetUnits	deg
RotationMethod	ArbitraryAxis
RotationAngleUnits	rad
RotationStandardAxis	+Z
RotationAngle	0
RotationArbitraryAxis	[0 0 0]
FollAlignAxisA	+X
BaseAlignAxisA	+Y
FollAlignAxisB	+Y
BaseAlignAxisB	+Z
Block Function	simmechanics.library.frames_transforms.rigid_transform

3.30.1.1.5. "Transform1" (SimMechanicsBlock)

Tabla 3.115. "Transform1" Parameters

Parameter	Value
ClassName	RigidTransform
TranslationMethod	Cartesian
TranslationLengthUnit	mm
TranslationStandardAxis	+Z
TranslationStandardOffset	0
TranslationCartesianOffset	[-16.089268306127362 -263.24103840837569 40.649351392904187]
TranslationROffset	0
TranslationROffsetUnits	m
TranslationZOffset	0
TranslationZOffsetUnits	m
TranslationThetaOffset	0
TranslationThetaOffsetUnits	deg
RotationMethod	ArbitraryAxis
RotationAngleUnits	rad
RotationStandardAxis	+Z
RotationAngle	0
RotationArbitraryAxis	[0 0 0]
FollAlignAxisA	+X
BaseAlignAxisA	+Y

Parameter	Value
FollAlignAxisB	+Y
BaseAlignAxisB	+Z
Block Function	simmechanics.library.frames_transforms.rigid_transform

3.30.1.1.6. "Transform2" (SimMechanicsBlock)

Tabla 3.116. "Transform2" Parameters

Parameter	Value
ClassName	RigidTransform
TranslationMethod	Cartesian
TranslationLengthUnit	mm
TranslationStandardAxis	+Z
TranslationStandardOffset	0
TranslationCartesianOffset	[-16.089268306127376 -227.74103840837583 40.649351392904215]
TranslationROffset	0
TranslationROffsetUnits	m
TranslationZOffset	0
TranslationZOffsetUnits	m
TranslationThetaOffset	0
TranslationThetaOffsetUnits	deg
RotationMethod	ArbitraryAxis
RotationAngleUnits	rad
RotationStandardAxis	+Z
RotationAngle	2.7352803968007873
RotationArbitraryAxis	[-0.20599796797350467 0.69194105138761175 0.69194105138761164]
FollAlignAxisA	+X
BaseAlignAxisA	+Y
FollAlignAxisB	+Y
BaseAlignAxisB	+Z
Block Function	simmechanics.library.frames_transforms.rigid_transform

3.30.1.1.7. "Transform3" (SimMechanicsBlock)

Tabla 3.117. "Transform3" Parameters

Parameter	Value
ClassName	RigidTransform

Parameter	Value
TranslationMethod	Cartesian
TranslationLengthUnit	mm
TranslationStandardAxis	+Z
TranslationStandardOffset	0
TranslationCartesianOffset	[-16.089268306127376 11.758961591624303 40.649351392904201]
TranslationROffset	0
TranslationROffsetUnits	m
TranslationZOffset	0
TranslationZOffsetUnits	m
TranslationThetaOffset	0
TranslationThetaOffsetUnits	deg
RotationMethod	None
RotationAngleUnits	deg
RotationStandardAxis	+Z
RotationAngle	0
RotationArbitraryAxis	[0 0 1]
FollAlignAxisA	+X
BaseAlignAxisA	+Y
FollAlignAxisB	+Y
BaseAlignAxisB	+Z
Block Function	simmechanics.library.frames_transforms.rigid_transform

3.30.1.1.8. "Transform4" (SimMechanicsBlock)

Tabla 3.118. "Transform4" Parameters

Parameter	Value
ClassName	RigidTransform
TranslationMethod	Cartesian
TranslationLengthUnit	mm
TranslationStandardAxis	+Z
TranslationStandardOffset	0
TranslationCartesianOffset	[-16.089268306127362 -263.24103840837569 40.649351392904187]
TranslationROffset	0
TranslationROffsetUnits	m
TranslationZOffset	0
TranslationZOffsetUnits	m
TranslationThetaOffset	0

Parameter	Value
TranslationThetaOffsetUnit	deg
RotationMethod	ArbitraryAxis
RotationAngleUnits	rad
RotationStandardAxis	+Z
RotationAngle	3.1415926535897931
RotationArbitraryAxis	[-8.4134088584875144e-17 0 1]
FollAlignAxisA	+X
BaseAlignAxisA	+Y
FollAlignAxisB	+Y
BaseAlignAxisB	+Z
Block Function	simmechanics.library.frames_transforms.rigid_transform

3.30.1.1.9. "Transform5" (SimMechanicsBlock)

Tabla 3.119. "Transform5" Parameters

Parameter	Value
ClassName	RigidTransform
TranslationMethod	Cartesian
TranslationLengthUnit	mm
TranslationStandardAxis	+Z
TranslationStandardOffset	0
TranslationCartesianOffset	[-16.089268306127376 -51.741038408375701 40.649351392904187]
TranslationROffset	0
TranslationROffsetUnits	m
TranslationZOffset	0
TranslationZOffsetUnits	m
TranslationThetaOffset	0
TranslationThetaOffsetUnit	deg
RotationMethod	ArbitraryAxis
RotationAngleUnits	rad
RotationStandardAxis	+Z
RotationAngle	2.7352803968007873
RotationArbitraryAxis	[-0.20599796797350467 0.69194105138761175 0.69194105138761164]
FollAlignAxisA	+X
BaseAlignAxisA	+Y
FollAlignAxisB	+Y
BaseAlignAxisB	+Z

Parameter	Value
Block Function	simmechanics.library.frames_transforms.rigid_transform

3.30.1.1.10. "Transform6" (SimMechanicsBlock)

Tabla 3.120. "Transform6" Parameters

Parameter	Value
ClassName	RigidTransform
TranslationMethod	Cartesian
TranslationLengthUnit	mm
TranslationStandardAxis	+Z
TranslationStandardOffset	0
TranslationCartesianOffset	[-16.089268306127362 -199.74103840837583 40.649351392904201]
TranslationROffset	0
TranslationROffsetUnits	m
TranslationZOffset	0
TranslationZOffsetUnits	m
TranslationThetaOffset	0
TranslationThetaOffsetUnit	deg
RotationMethod	ArbitraryAxis
RotationAngleUnits	rad
RotationStandardAxis	+Z
RotationAngle	2.7352803968007873
RotationArbitraryAxis	[0.20599796797350467 0.69194105138761175 -0.69194105138761164]
FollAlignAxisA	+X
BaseAlignAxisA	+Y
FollAlignAxisB	+Y
BaseAlignAxisB	+Z
Block Function	simmechanics.library.frames_transforms.rigid_transform

3.31. AntebrazoCompleto_4_RIGID1

Figura 3.31. DeltaSM_AnguloSinFriccions/DeltaSM/ AntebrazoCompleto_4_RIGID1

3.31.1. Blocks

3.31.1.1. Parameters

3.31.1.1.1. "F" (PMIOPort)

Tabla 3.121. "F" Parameters

Parameter	Value
Port number	1
Port location on parent subsystem	Left

3.31.1.1.2. "F1" (PMIOPort)

Tabla 3.122. "F1" Parameters

Parameter	Value
Port number	2
Port location on parent subsystem	Right

3.31.1.1.3. "ReferenceFrame" (SimMechanicsBlock)

Tabla 3.123. "ReferenceFrame" Parameters

Parameter	Value
ClassName	ReferenceFrame
Block Function	simmechanics.library.frames_transforms.reference_frame

3.31.1.1.4. "Transform" (SimMechanicsBlock)

Tabla 3.124. "Transform" Parameters

Parameter	Value
ClassName	RigidTransform
TranslationMethod	Cartesian
TranslationLengthUnit	mm
TranslationStandardAxis	+Z
TranslationStandardOffset	0
TranslationCartesianOffset	[-16.089268306127366 11.758961591624315 40.64935139290418]
TranslationROffset	0
TranslationROffsetUnits	m
TranslationZOffset	0

Parameter	Value
TranslationZOffsetUnits	m
TranslationThetaOffset	0
TranslationThetaOffsetUnits	deg
RotationMethod	ArbitraryAxis
RotationAngleUnits	rad
RotationStandardAxis	+Z
RotationAngle	0
RotationArbitraryAxis	[0 0 0]
FollAlignAxisA	+X
BaseAlignAxisA	+Y
FollAlignAxisB	+Y
BaseAlignAxisB	+Z
Block Function	simmechanics.library.frames_transforms.rigid_transform

3.31.1.1.5. "Transform1" (SimMechanicsBlock)

Tabla 3.125. "Transform1" Parameters

Parameter	Value
ClassName	RigidTransform
TranslationMethod	Cartesian
TranslationLengthUnit	mm
TranslationStandardAxis	+Z
TranslationStandardOffset	0
TranslationCartesianOffset	[-16.089268306127362 -263.24103840837574 40.64935139290418]
TranslationROffset	0
TranslationROffsetUnits	m
TranslationZOffset	0
TranslationZOffsetUnits	m
TranslationThetaOffset	0
TranslationThetaOffsetUnits	deg
RotationMethod	ArbitraryAxis
RotationAngleUnits	rad
RotationStandardAxis	+Z
RotationAngle	0
RotationArbitraryAxis	[0 0 0]
FollAlignAxisA	+X
BaseAlignAxisA	+Y

Parameter	Value
FollAlignAxisB	+Y
BaseAlignAxisB	+Z
Block Function	simmechanics.library.frames_transforms.rigid_transform

3.31.1.1.6. "Transform2" (SimMechanicsBlock)

Tabla 3.126. "Transform2" Parameters

Parameter	Value
ClassName	RigidTransform
TranslationMethod	Cartesian
TranslationLengthUnit	mm
TranslationStandardAxis	+Z
TranslationStandardOffset	0
TranslationCartesianOffset	[-16.089268306127376 -227.74103840837574 40.649351392904208]
TranslationROffset	0
TranslationROffsetUnits	m
TranslationZOffset	0
TranslationZOffsetUnits	m
TranslationThetaOffset	0
TranslationThetaOffsetUnits	deg
RotationMethod	ArbitraryAxis
RotationAngleUnits	rad
RotationStandardAxis	+Z
RotationAngle	2.7352803968007873
RotationArbitraryAxis	[-0.2059979679735047 0.69194105138761164 0.69194105138761164]
FollAlignAxisA	+X
BaseAlignAxisA	+Y
FollAlignAxisB	+Y
BaseAlignAxisB	+Z
Block Function	simmechanics.library.frames_transforms.rigid_transform

3.31.1.1.7. "Transform3" (SimMechanicsBlock)

Tabla 3.127. "Transform3" Parameters

Parameter	Value
ClassName	RigidTransform

Parameter	Value
TranslationMethod	Cartesian
TranslationLengthUnit	mm
TranslationStandardAxis	+Z
TranslationStandardOffset	0
TranslationCartesianOffset	[-16.089268306127376 11.758961591624317 40.64935139290418]
TranslationROffset	0
TranslationROffsetUnits	m
TranslationZOffset	0
TranslationZOffsetUnits	m
TranslationThetaOffset	0
TranslationThetaOffsetUnits	deg
RotationMethod	None
RotationAngleUnits	deg
RotationStandardAxis	+Z
RotationAngle	0
RotationArbitraryAxis	[0 0 1]
FollAlignAxisA	+X
BaseAlignAxisA	+Y
FollAlignAxisB	+Y
BaseAlignAxisB	+Z
Block Function	simmechanics.library.frames_transforms.rigid_transform

3.31.1.1.8. "Transform4" (SimMechanicsBlock)

Tabla 3.128. "Transform4" Parameters

Parameter	Value
ClassName	RigidTransform
TranslationMethod	Cartesian
TranslationLengthUnit	mm
TranslationStandardAxis	+Z
TranslationStandardOffset	0
TranslationCartesianOffset	[-16.089268306127362 -263.24103840837574 40.64935139290418]
TranslationROffset	0
TranslationROffsetUnits	m
TranslationZOffset	0
TranslationZOffsetUnits	m
TranslationThetaOffset	0

Parameter	Value
TranslationThetaOffsetUnits	deg
RotationMethod	ArbitraryAxis
RotationAngleUnits	rad
RotationStandardAxis	+Z
RotationAngle	3.1415926535897931
RotationArbitraryAxis	[-1.2143064331837647e-16 0 1]
FollAlignAxisA	+X
BaseAlignAxisA	+Y
FollAlignAxisB	+Y
BaseAlignAxisB	+Z
Block Function	simmechanics.library.frames_transforms.rigid_transform

3.31.1.1.9. "Transform5" (SimMechanicsBlock)

Tabla 3.129. "Transform5" Parameters

Parameter	Value
ClassName	RigidTransform
TranslationMethod	Cartesian
TranslationLengthUnit	mm
TranslationStandardAxis	+Z
TranslationStandardOffset	0
TranslationCartesianOffset	[-16.089268306127376 -51.741038408375708 40.649351392904194]
TranslationROffset	0
TranslationROffsetUnits	m
TranslationZOffset	0
TranslationZOffsetUnits	m
TranslationThetaOffset	0
TranslationThetaOffsetUnits	deg
RotationMethod	ArbitraryAxis
RotationAngleUnits	rad
RotationStandardAxis	+Z
RotationAngle	2.7352803968007873
RotationArbitraryAxis	[-0.20599796797735047 0.69194105138761164 0.69194105138761164]
FollAlignAxisA	+X
BaseAlignAxisA	+Y
FollAlignAxisB	+Y
BaseAlignAxisB	+Z

Parameter	Value
Block Function	simmechanics.library.frames_transforms.rigid_transform

3.31.1.1.10. "Transform6" (SimMechanicsBlock)

Tabla 3.130. "Transform6" Parameters

Parameter	Value
ClassName	RigidTransform
TranslationMethod	Cartesian
TranslationLengthUnit	mm
TranslationStandardAxis	+Z
TranslationStandardOffset	0
TranslationCartesianOffset	[-16.089268306127369 -199.74103840837574 40.649351392904208]
TranslationROffset	0
TranslationROffsetUnits	m
TranslationZOffset	0
TranslationZOffsetUnits	m
TranslationThetaOffset	0
TranslationThetaOffsetUnits	deg
RotationMethod	ArbitraryAxis
RotationAngleUnits	rad
RotationStandardAxis	+Z
RotationAngle	2.7352803968007873
RotationArbitraryAxis	[0.2059979679735047 0.69194105138761164 -0.69194105138761164]
FollAlignAxisA	+X
BaseAlignAxisA	+Y
FollAlignAxisB	+Y
BaseAlignAxisB	+Z
Block Function	simmechanics.library.frames_transforms.rigid_transform

3.32. AntebrazoCompleto_5_RIGID1

Figura 3.32. DeltaSM_AnguloSinFriccions/DeltaSM/ AntebrazoCompleto_5_RIGID1
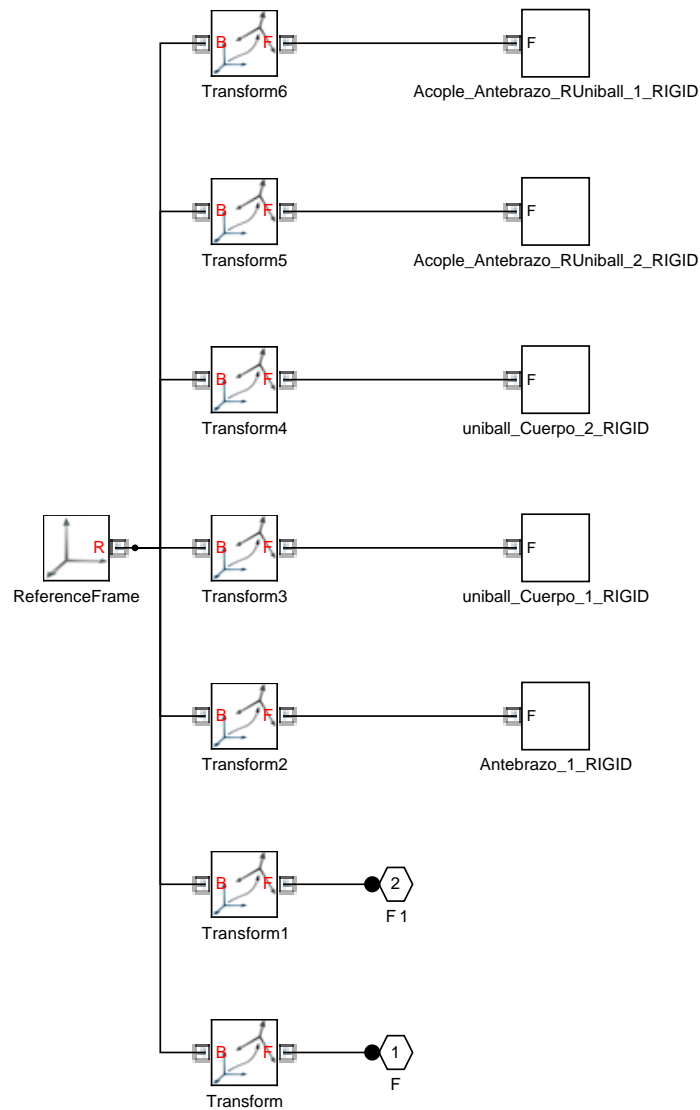
3.32.1. Blocks

3.32.1.1. Parameters

3.32.1.1.1. "F" (PMIOPort)

Tabla 3.131. "F" Parameters

Parameter	Value
Port number	1
Port location on parent subsystem	Left

3.32.1.1.2. "F1" (PMIOPort)

Tabla 3.132. "F1" Parameters

Parameter	Value
Port number	2
Port location on parent subsystem	Right

3.32.1.1.3. "ReferenceFrame" (SimMechanicsBlock)

Tabla 3.133. "ReferenceFrame" Parameters

Parameter	Value
ClassName	ReferenceFrame
Block Function	simmechanics.library.frames_transforms.reference_frame

3.32.1.1.4. "Transform" (SimMechanicsBlock)

Tabla 3.134. "Transform" Parameters

Parameter	Value
ClassName	RigidTransform
TranslationMethod	Cartesian
TranslationLengthUnit	mm
TranslationStandardAxis	+Z
TranslationStandardOffset	0
TranslationCartesianOffset	[-16.089268306127373 11.758961591624359 40.649351392904187]
TranslationROffset	0
TranslationROffsetUnits	m
TranslationZOffset	0

Parameter	Value
TranslationZOffsetUnits	m
TranslationThetaOffset	0
TranslationThetaOffsetUnits	deg
RotationMethod	ArbitraryAxis
RotationAngleUnits	rad
RotationStandardAxis	+Z
RotationAngle	0
RotationArbitraryAxis	[0 0 0]
FollAlignAxisA	+X
BaseAlignAxisA	+Y
FollAlignAxisB	+Y
BaseAlignAxisB	+Z
Block Function	simmechanics.library.frames_transforms.rigid_transform

3.32.1.1.5. "Transform1" (SimMechanicsBlock)

Tabla 3.135. "Transform1" Parameters

Parameter	Value
ClassName	RigidTransform
TranslationMethod	Cartesian
TranslationLengthUnit	mm
TranslationStandardAxis	+Z
TranslationStandardOffset	0
TranslationCartesianOffset	[-16.089268306127376 -263.24103840837569 40.649351392904208]
TranslationROffset	0
TranslationROffsetUnits	m
TranslationZOffset	0
TranslationZOffsetUnits	m
TranslationThetaOffset	0
TranslationThetaOffsetUnits	deg
RotationMethod	ArbitraryAxis
RotationAngleUnits	rad
RotationStandardAxis	+Z
RotationAngle	0
RotationArbitraryAxis	[0 0 0]
FollAlignAxisA	+X
BaseAlignAxisA	+Y

Parameter	Value
FollAlignAxisB	+Y
BaseAlignAxisB	+Z
Block Function	simmechanics.library.frames_transforms.rigid_transform

3.32.1.1.6. "Transform2" (SimMechanicsBlock)

Tabla 3.136. "Transform2" Parameters

Parameter	Value
ClassName	RigidTransform
TranslationMethod	Cartesian
TranslationLengthUnit	mm
TranslationStandardAxis	+Z
TranslationStandardOffset	0
TranslationCartesianOffset	[-16.089268306127362 -227.74103840837569 40.649351392904194]
TranslationROffset	0
TranslationROffsetUnits	m
TranslationZOffset	0
TranslationZOffsetUnits	m
TranslationThetaOffset	0
TranslationThetaOffsetUnits	deg
RotationMethod	ArbitraryAxis
RotationAngleUnits	rad
RotationStandardAxis	+Z
RotationAngle	2.7352803968007873
RotationArbitraryAxis	[-0.20599796797350475 0.69194105138761153 0.69194105138761164]
FollAlignAxisA	+X
BaseAlignAxisA	+Y
FollAlignAxisB	+Y
BaseAlignAxisB	+Z
Block Function	simmechanics.library.frames_transforms.rigid_transform

3.32.1.1.7. "Transform3" (SimMechanicsBlock)

Tabla 3.137. "Transform3" Parameters

Parameter	Value
ClassName	RigidTransform

Parameter	Value
TranslationMethod	Cartesian
TranslationLengthUnit	mm
TranslationStandardAxis	+Z
TranslationStandardOffset	0
TranslationCartesianOffset	[-16.089268306127376 11.758961591624331 40.649351392904194]
TranslationROffset	0
TranslationROffsetUnits	m
TranslationZOffset	0
TranslationZOffsetUnits	m
TranslationThetaOffset	0
TranslationThetaOffsetUnits	deg
RotationMethod	None
RotationAngleUnits	deg
RotationStandardAxis	+Z
RotationAngle	0
RotationArbitraryAxis	[0 0 1]
FollAlignAxisA	+X
BaseAlignAxisA	+Y
FollAlignAxisB	+Y
BaseAlignAxisB	+Z
Block Function	simmechanics.library.frames_transforms.rigid_transform

3.32.1.1.8. "Transform4" (SimMechanicsBlock)

Tabla 3.138. "Transform4" Parameters

Parameter	Value
ClassName	RigidTransform
TranslationMethod	Cartesian
TranslationLengthUnit	mm
TranslationStandardAxis	+Z
TranslationStandardOffset	0
TranslationCartesianOffset	[-16.089268306127376 -263.24103840837569 40.649351392904208]
TranslationROffset	0
TranslationROffsetUnits	m
TranslationZOffset	0
TranslationZOffsetUnits	m
TranslationThetaOffset	0

Parameter	Value
TranslationThetaOffsetUnits	deg
RotationMethod	ArbitraryAxis
RotationAngleUnits	rad
RotationStandardAxis	+Z
RotationAngle	3.1415926535897931
RotationArbitraryAxis	[-1.1015494072452725e-16 0 1]
FollAlignAxisA	+X
BaseAlignAxisA	+Y
FollAlignAxisB	+Y
BaseAlignAxisB	+Z
Block Function	simmechanics.library.frames_transforms.rigid_transform

3.32.1.1.9. "Transform5" (SimMechanicsBlock)

Tabla 3.139. "Transform5" Parameters

Parameter	Value
ClassName	RigidTransform
TranslationMethod	Cartesian
TranslationLengthUnit	mm
TranslationStandardAxis	+Z
TranslationStandardOffset	0
TranslationCartesianOffset	[-16.089268306127376 -51.741038408375701 40.64935139290418]
TranslationROffset	0
TranslationROffsetUnits	m
TranslationZOffset	0
TranslationZOffsetUnits	m
TranslationThetaOffset	0
TranslationThetaOffsetUnits	deg
RotationMethod	ArbitraryAxis
RotationAngleUnits	rad
RotationStandardAxis	+Z
RotationAngle	2.7352803968007873
RotationArbitraryAxis	[-0.20599796797350475 0.69194105138761153 0.69194105138761164]
FollAlignAxisA	+X
BaseAlignAxisA	+Y
FollAlignAxisB	+Y
BaseAlignAxisB	+Z

Parameter	Value
Block Function	simmechanics.library.frames_transforms.rigid_transform

3.32.1.1.10. "Transform6" (SimMechanicsBlock)

Tabla 3.140. "Transform6" Parameters

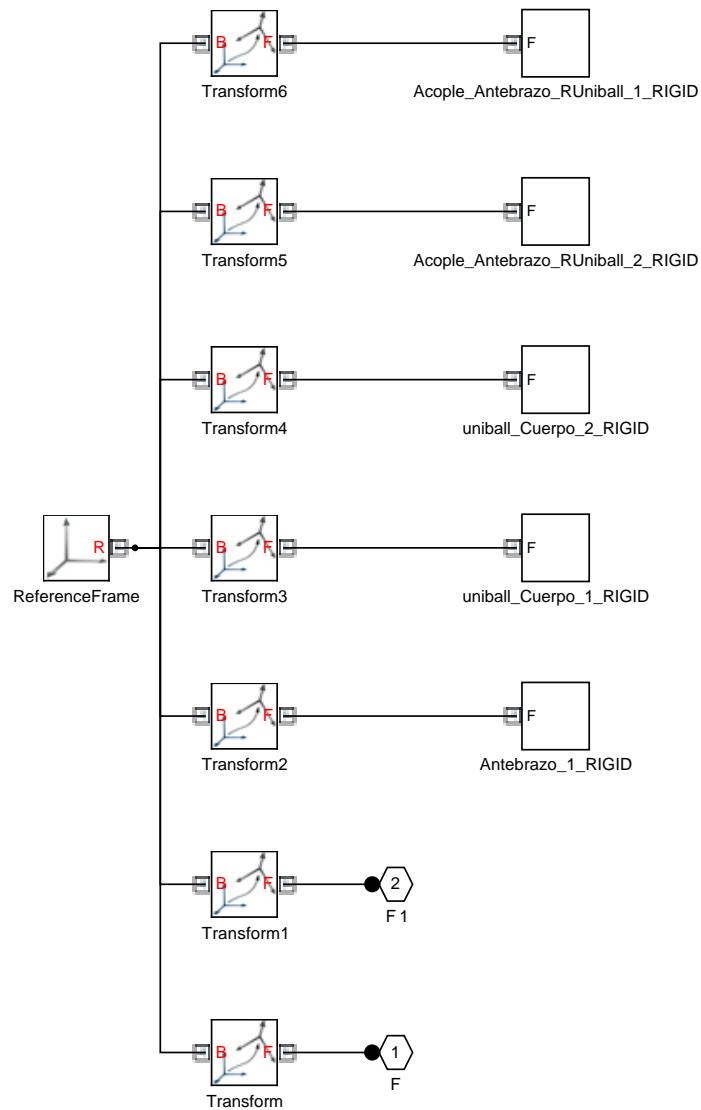| Parameter	Value
ClassName	RigidTransform
TranslationMethod	Cartesian
TranslationLengthUnit	mm
TranslationStandardAxis	+Z
TranslationStandardOffset	0
TranslationCartesianOffset	[-16.089268306127376 -199.74103840837577 40.64935139290418]
TranslationROffset	0
TranslationROffsetUnits	m
TranslationZOffset	0
TranslationZOffsetUnits	m
TranslationThetaOffset	0
TranslationThetaOffsetUnit	deg
RotationMethod	ArbitraryAxis
RotationAngleUnits	rad
RotationStandardAxis	+Z
RotationAngle	2.7352803968007873
RotationArbitraryAxis	[0.20599796797350475 0.69194105138761153 -0.69194105138761164]
FollAlignAxisA	+X
BaseAlignAxisA	+Y
FollAlignAxisB	+Y
BaseAlignAxisB	+Z
Block Function	simmechanics.library.frames_transforms.rigid_transform

3.33. AntebrazoCompleto_6_RIGID1

Figura   **3.33.**   **DeltaSM_AnguloSinFriccions/DeltaSM/ AntebrazoCompleto_6_RIGID1**
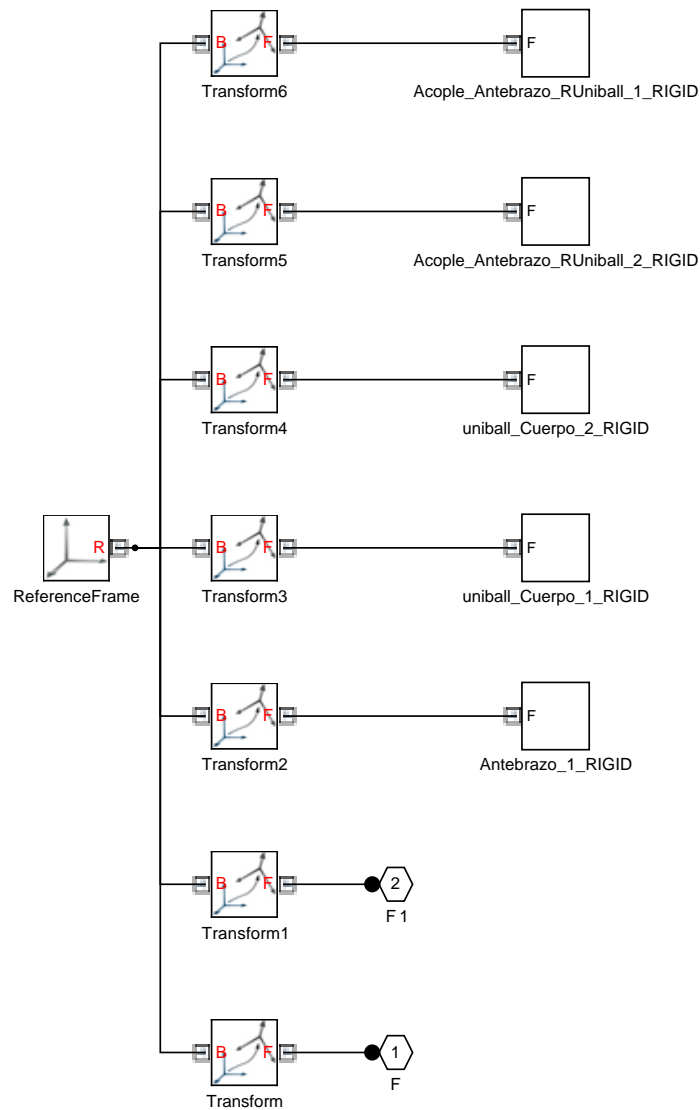
3.33.1. Blocks

3.33.1.1. Parameters

3.33.1.1.1. "F" (PMIOPort)

Tabla 3.141. "F" Parameters

Parameter	Value
Port number	1
Port location on parent subsystem	Left

3.33.1.1.2. "F1" (PMIOPort)

Tabla 3.142. "F1" Parameters

Parameter	Value
Port number	2
Port location on parent subsystem	Right

3.33.1.1.3. "ReferenceFrame" (SimMechanicsBlock)

Tabla 3.143. "ReferenceFrame" Parameters

Parameter	Value
ClassName	ReferenceFrame
Block Function	simmechanics.library.frames_transforms.reference_frame

3.33.1.1.4. "Transform" (SimMechanicsBlock)

Tabla 3.144. "Transform" Parameters

Parameter	Value
ClassName	RigidTransform
TranslationMethod	Cartesian
TranslationLengthUnit	mm
TranslationStandardAxis	+Z
TranslationStandardOffset	0
TranslationCartesianOffset	[-16.089268306127352 11.758961591624361 40.64935139290418]
TranslationROffset	0
TranslationROffsetUnits	m
TranslationZOffset	0
TranslationZOffsetUnits	m
TranslationThetaOffset	0
TranslationThetaOffsetUnits	deg

Parameter	Value
RotationMethod	ArbitraryAxis
RotationAngleUnits	rad
RotationStandardAxis	+Z
RotationAngle	0
RotationArbitraryAxis	[0 0 0]
FollAlignAxisA	+X
BaseAlignAxisA	+Y
FollAlignAxisB	+Y
BaseAlignAxisB	+Z
Block Function	simmechanics.library.frames_transforms.rigid_transform

3.33.1.1.5. "Transform1" (SimMechanicsBlock)

Tabla 3.145. "Transform1" Parameters

Parameter	Value
ClassName	RigidTransform
TranslationMethod	Cartesian
TranslationLengthUnit	mm
TranslationStandardAxis	+Z
TranslationStandardOffset	0
TranslationCartesianOffset	[-16.089268306127376 -263.24103840837574 40.649351392904151]
TranslationROffset	0
TranslationROffsetUnits	m
TranslationZOffset	0
TranslationZOffsetUnits	m
TranslationThetaOffset	0
TranslationThetaOffsetUnit	deg
RotationMethod	ArbitraryAxis
RotationAngleUnits	rad
RotationStandardAxis	+Z
RotationAngle	0
RotationArbitraryAxis	[0 0 0]
FollAlignAxisA	+X
BaseAlignAxisA	+Y
FollAlignAxisB	+Y
BaseAlignAxisB	+Z
Block Function	simmechanics.library.frames_transforms.rigid_transform

3.33.1.1.6. "Transform2" (SimMechanicsBlock)

Tabla 3.146. "Transform2" Parameters

Parameter	Value
ClassName	RigidTransform
TranslationMethod	Cartesian
TranslationLengthUnit	mm
TranslationStandardAxis	+Z
TranslationStandardOffset	0
TranslationCartesianOffset	[-16.089268306127376 -227.74103840837572 40.64935139290418]
TranslationROffset	0
TranslationROffsetUnits	m
TranslationZOffset	0
TranslationZOffsetUnits	m
TranslationThetaOffset	0
TranslationThetaOffsetUnits	deg
RotationMethod	ArbitraryAxis
RotationAngleUnits	rad
RotationStandardAxis	+Z
RotationAngle	2.7352803968007873
RotationArbitraryAxis	[-0.2059979679735047 0.69194105138761164 0.69194105138761175]
FollAlignAxisA	+X
BaseAlignAxisA	+Y
FollAlignAxisB	+Y
BaseAlignAxisB	+Z
Block Function	simmechanics.library.frames_transforms.rigid_transform

3.33.1.1.7. "Transform3" (SimMechanicsBlock)

Tabla 3.147. "Transform3" Parameters

Parameter	Value
ClassName	RigidTransform
TranslationMethod	Cartesian
TranslationLengthUnit	mm
TranslationStandardAxis	+Z
TranslationStandardOffset	0
TranslationCartesianOffset	[-16.089268306127391 11.758961591624331 40.649351392904165]
TranslationROffset	0
TranslationROffsetUnits	m

Parameter	Value
TranslationZOffset	0
TranslationZOffsetUnits	m
TranslationThetaOffset	0
TranslationThetaOffsetUnits	deg
RotationMethod	None
RotationAngleUnits	deg
RotationStandardAxis	+Z
RotationAngle	0
RotationArbitraryAxis	[0 0 1]
FollAlignAxisA	+X
BaseAlignAxisA	+Y
FollAlignAxisB	+Y
BaseAlignAxisB	+Z
Block Function	simmechanics.library.frames_transforms.rigid_transform

3.33.1.1.8. "Transform4" (SimMechanicsBlock)

Tabla 3.148. "Transform4" Parameters

Parameter	Value
ClassName	RigidTransform
TranslationMethod	Cartesian
TranslationLengthUnit	mm
TranslationStandardAxis	+Z
TranslationStandardOffset	0
TranslationCartesianOffset	[-16.089268306127376 -263.24103840837574 40.649351392904151]
TranslationROffset	0
TranslationROffsetUnits	m
TranslationZOffset	0
TranslationZOffsetUnits	m
TranslationThetaOffset	0
TranslationThetaOffsetUnits	deg
RotationMethod	ArbitraryAxis
RotationAngleUnits	rad
RotationStandardAxis	+Z
RotationAngle	3.1415926535897931
RotationArbitraryAxis	[-1.5092094240998219e-16 0 1]
FollAlignAxisA	+X
BaseAlignAxisA	+Y

Parameter	Value
FollAlignAxisB	+Y
BaseAlignAxisB	+Z
Block Function	simmechanics.library.frames_transforms.rigid_transform

3.33.1.1.9. "Transform5" (SimMechanicsBlock)

Tabla 3.149. "Transform5" Parameters

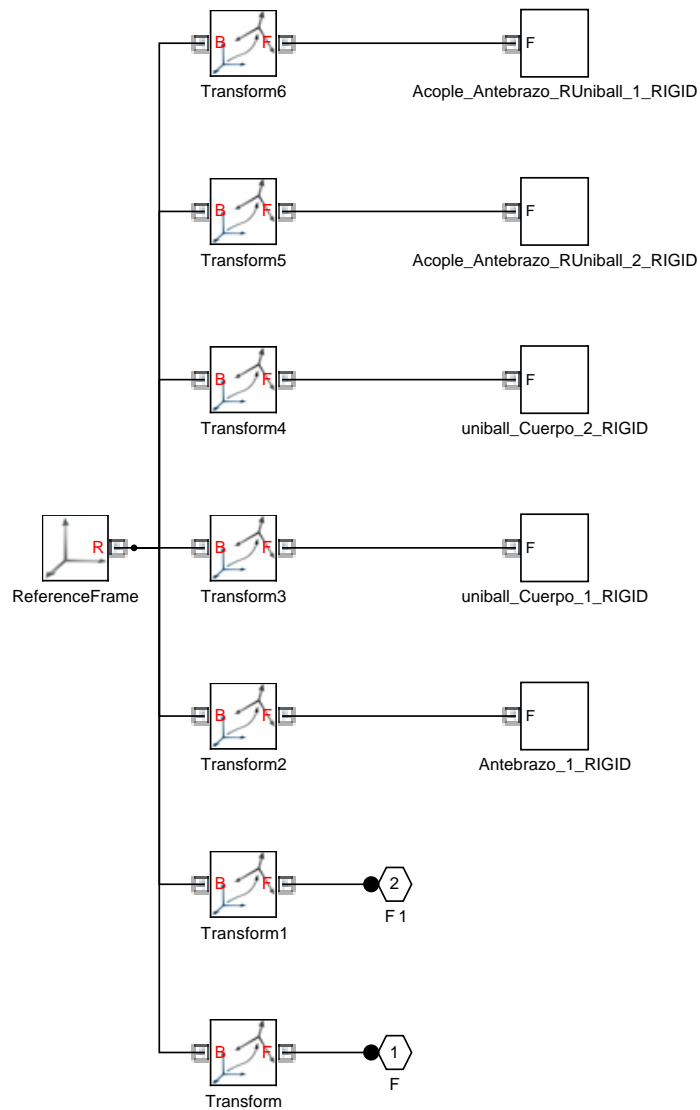| Parameter	Value
ClassName	RigidTransform
TranslationMethod	Cartesian
TranslationLengthUnit	mm
TranslationStandardAxis	+Z
TranslationStandardOffset	0
TranslationCartesianOffset	[-16.089268306127391 -51.741038408375701 40.64935139290418]
TranslationROffset	0
TranslationROffsetUnits	m
TranslationZOffset	0
TranslationZOffsetUnits	m
TranslationThetaOffset	0
TranslationThetaOffsetUnits	deg
RotationMethod	ArbitraryAxis
RotationAngleUnits	rad
RotationStandardAxis	+Z
RotationAngle	2.7352803968007873
RotationArbitraryAxis	[-0.2059979679735047 0.69194105138761164 0.69194105138761175]
FollAlignAxisA	+X
BaseAlignAxisA	+Y
FollAlignAxisB	+Y
BaseAlignAxisB	+Z
Block Function	simmechanics.library.frames_transforms.rigid_transform

3.33.1.1.10. "Transform6" (SimMechanicsBlock)

Tabla 3.150. "Transform6" Parameters

Parameter	Value
ClassName	RigidTransform
TranslationMethod	Cartesian

Parameter	Value
TranslationLengthUnit	mm
TranslationStandardAxis	+Z
TranslationStandardOffset	0
TranslationCartesianOffset	[-16.089268306127376 -199.74103840837577 40.64935139290418]
TranslationROffset	0
TranslationROffsetUnits	m
TranslationZOffset	0
TranslationZOffsetUnits	m
TranslationThetaOffset	0
TranslationThetaOffsetUnits	deg
RotationMethod	ArbitraryAxis
RotationAngleUnits	rad
RotationStandardAxis	+Z
RotationAngle	2.7352803968007873
RotationArbitraryAxis	[0.2059979679735047 0.69194105138761164 -0.69194105138761175]
FollAlignAxisA	+X
BaseAlignAxisA	+Y
FollAlignAxisB	+Y
BaseAlignAxisB	+Z
Block Function	simmechanics.library.frames_transforms.rigid_transform

3.34. ball_Uniball_1_RIGID

Figura 3.34. DeltaSM_AnguloSinFriccions/DeltaSM/ BaseMovilCompleta_1_RIGID/acopleBaseMovilAntebrazo_1_RIGID/ ball_Uniball_1_RIGID
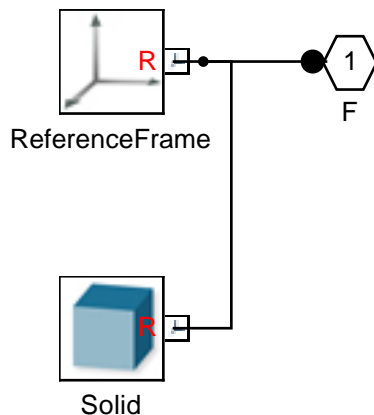
3.34.1. Blocks

3.34.1.1. Parameters

3.34.1.1.1. "F" (PMIOPort)

Tabla 3.151. "F" Parameters

Parameter	Value
Port number	1
Port location on parent subsystem	Left

3.34.1.1.2. "ReferenceFrame" (SimMechanicsBlock)

Tabla 3.152. "ReferenceFrame" Parameters

Parameter	Value
ClassName	ReferenceFrame
Block Function	simmechanics.library.frames_transforms.reference_frame

3.34.1.1.3. "Solid" (SimMechanicsBlock)

Tabla 3.153. "Solid" Parameters

Parameter	Value
ClassName	Solid
InertiaType	Custom
Mass	0.0055458151739754217
MassUnits	kg
CenterOfMass	[-2.6002689251073309e-05 0 0]
CenterOfMassUnits	mm
MomentsOfInertia	[0.091219033457233048 0.091225744336999384 0.12400458181757036]
MomentsOfInertiaUnits	kg*mm^2
ProductsOfInertia	[0 0 0]
ProductsOfInertiaUnits	kg*mm^2
DensityBased	on
Density	1000
DensityUnits	kg/(m^3)
GraphicType	FromGeometry
MarkerShape	Sphere
MarkerSize	10

Parameter	Value
MarkerSizeUnits	m
GraphicVisPropType	SimpleVisualProperties
GraphicDiffuseColor	[0.89803921568627454 0.89803921568627454 0.89803921568627454]
GraphicSpecularColor	[0.5 0.5 0.5 1.0]
GraphicAmbientColor	[0.15 0.15 0.15 1.0]
GraphicEmissiveColor	[0.0 0.0 0.0 1.0]
GraphicShininess	75
GraphicOpacity	1
GeometryShape	FromFile
RectangleSize	[1 1]
RectangleSizeUnits	m
BrickDimensions	[1 1 1]
BrickDimensionUnits	m
CylinderRadius	1
CylinderRadiusUnits	m
CylinderLength	1
CylinderLengthUnits	m
SphereRadius	1
SphereRadiusUnits	m
EllipsoidRadii	[1 1 1]
EllipsoidRadiiUnits	m
ExtrusionCrossSection	[1 1; -1 1; -1 -1; 1 -1]
ExtrusionCrossSectionUnits	m
ExtrusionLength	1
ExtrusionLengthUnits	m
PolygonNumSides	3
PolygonOuterRadius	1
PolygonOuterRadiusUnits	m
ExtGeomFileType	STL
ExtGeomFileName	ball_Uniball_?? ?????????_sldprt.STL
ExtGeomFileUnits	mm
RevolutionCrossSection	[1 1; 1 -1; 2 -1; 2 1]
RevolutionCrossSectionUnits	m
RevolutionExtent	Full
RevolutionAngle	180
RevolutionAngleUnits	deg
Block Function	simmechanics.library.body_elements.solid

3.35. ball_Uniball_1_RIGID

Figura 3.35. DeltaSM_AnguloSinFriccions/DeltaSM/ BaseMovilCompleta_1_RIGID/acopleBaseMovilAntebrazo_2_RIGID/ ball_Uniball_1_RIGID

3.35.1. Blocks

3.35.1.1. Parameters

3.35.1.1.1. "F" (PMIOPort)

Tabla 3.154. "F" Parameters

Parameter	Value
Port number	1
Port location on parent subsystem	Left

3.35.1.1.2. "ReferenceFrame" (SimMechanicsBlock)

Tabla 3.155. "ReferenceFrame" Parameters

Parameter	Value
ClassName	ReferenceFrame
Block Function	simmechanics.library.frames_transforms.reference_frame

3.35.1.1.3. "Solid" (SimMechanicsBlock)

Tabla 3.156. "Solid" Parameters

Parameter	Value
ClassName	Solid
InertiaType	Custom
Mass	0.0055458151739754217
MassUnits	kg
CenterOfMass	[-2.6002689251073309e-05 0 0]
CenterOfMassUnits	mm
MomentsOfInertia	[0.091219033457233048 0.091225744336999384 0.12400458181757036]
MomentsOfInertiaUnits	kg*mm^2
ProductsOfInertia	[0 0 0]
ProductsOfInertiaUnits	kg*mm^2
DensityBased	on
Density	1000
DensityUnits	kg/(m^3)
GraphicType	FromGeometry
MarkerShape	Sphere
MarkerSize	10
MarkerSizeUnits	m
GraphicVisPropType	SimpleVisualProperties
GraphicDiffuseColor	[0.89803921568627454 0.89803921568627454 0.89803921568627454]
GraphicSpecularColor	[0.5 0.5 0.5 1.0]
GraphicAmbientColor	[0.15 0.15 0.15 1.0]
GraphicEmissiveColor	[0.0 0.0 0.0 1.0]
GraphicShininess	75
GraphicOpacity	1
GeometryShape	FromFile
RectangleSize	[1 1]
RectangleSizeUnits	m
BrickDimensions	[1 1 1]
BrickDimensionUnits	m
CylinderRadius	1
CylinderRadiusUnits	m
CylinderLength	1
CylinderLengthUnits	m
SphereRadius	1
SphereRadiusUnits	m

Parameter	Value
EllipsoidRadii	[1 1 1]
EllipsoidRadiiUnits	m
ExtrusionCrossSection	[1 1; -1 1; -1 -1; 1 -1]
ExtrusionCrossSectionUnits	m
ExtrusionLength	1
ExtrusionLengthUnits	m
PolygonNumSides	3
PolygonOuterRadius	1
PolygonOuterRadiusUnits	m
ExtGeomFileType	STL
ExtGeomFileName	ball_Uniball_?? ?????????_sldprt.STL
ExtGeomFileUnits	mm
RevolutionCrossSection	[1 1; 1 -1; 2 -1; 2 1]
RevolutionCrossSectionUnits	m
RevolutionExtent	Full
RevolutionAngle	180
RevolutionAngleUnits	deg
Block Function	simmechanics.library.body_elements.solid

3.36. ball_Uniball_1_RIGID

Figura 3.36. DeltaSM_AnguloSinFriccions/DeltaSM/ BaseMovilCompleta_1_RIGID/acopleBaseMovilAntebrazo_3_RIGID/ ball_Uniball_1_RIGID

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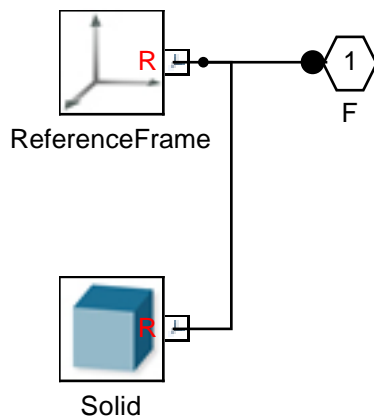
3.36.1. Blocks

3.36.1.1. Parameters

3.36.1.1.1. "F" (PMIOPort)

Tabla 3.157. "F" Parameters

Parameter	Value
Port number	1
Port location on parent subsystem	Left

3.36.1.1.2. "ReferenceFrame" (SimMechanicsBlock)

Tabla 3.158. "ReferenceFrame" Parameters

Parameter	Value
ClassName	ReferenceFrame
Block Function	simmechanics.library.frames_transforms.reference_frame

3.36.1.1.3. "Solid" (SimMechanicsBlock)

Tabla 3.159. "Solid" Parameters

Parameter	Value
ClassName	Solid
InertiaType	Custom
Mass	0.0055458151739754217
MassUnits	kg
CenterOfMass	[-2.6002689251073309e-05 0 0]
CenterOfMassUnits	mm
MomentsOfInertia	[0.091219033457233048 0.091225744336999384 0.12400458181757036]
MomentsOfInertiaUnits	kg*mm^2
ProductsOfInertia	[0 0 0]
ProductsOfInertiaUnits	kg*mm^2
DensityBased	on
Density	1000
DensityUnits	kg/(m^3)
GraphicType	FromGeometry
MarkerShape	Sphere
MarkerSize	10

Parameter	Value
MarkerSizeUnits	m
GraphicVisPropType	SimpleVisualProperties
GraphicDiffuseColor	[0.89803921568627454 0.89803921568627454 0.89803921568627454]
GraphicSpecularColor	[0.5 0.5 0.5 1.0]
GraphicAmbientColor	[0.15 0.15 0.15 1.0]
GraphicEmissiveColor	[0.0 0.0 0.0 1.0]
GraphicShininess	75
GraphicOpacity	1
GeometryShape	FromFile
RectangleSize	[1 1]
RectangleSizeUnits	m
BrickDimensions	[1 1 1]
BrickDimensionUnits	m
CylinderRadius	1
CylinderRadiusUnits	m
CylinderLength	1
CylinderLengthUnits	m
SphereRadius	1
SphereRadiusUnits	m
EllipsoidRadii	[1 1 1]
EllipsoidRadiiUnits	m
ExtrusionCrossSection	[1 1; -1 1; -1 -1; 1 -1]
ExtrusionCrossSectionUnits	m
ExtrusionLength	1
ExtrusionLengthUnits	m
PolygonNumSides	3
PolygonOuterRadius	1
PolygonOuterRadiusUnits	m
ExtGeomFileType	STL
ExtGeomFileName	ball_Uniball_?? ?????????_sldprt.STL
ExtGeomFileUnits	mm
RevolutionCrossSection	[1 1; 1 -1; 2 -1; 2 1]
RevolutionCrossSectionUnits	m
RevolutionExtent	Full
RevolutionAngle	180
RevolutionAngleUnits	deg
Block Function	simmechanics.library.body_elements.solid

3.37. ball_Uniball_1_RIGID

Figura 3.37. DeltaSM_AnguloSinFriccions/DeltaSM/BrazoCompleto_1_RIGID/ ball_Uniball_1_RIGID

3.37.1. Blocks

3.37.1.1. Parameters

3.37.1.1.1. "F" (PMIOPort)

Tabla 3.160. "F" Parameters

Parameter	Value
Port number	1
Port location on parent subsystem	Left

3.37.1.1.2. "ReferenceFrame" (SimMechanicsBlock)

Tabla 3.161. "ReferenceFrame" Parameters

Parameter	Value
ClassName	ReferenceFrame
Block Function	simmechanics.library.frames_transforms.reference_frame

3.37.1.1.3. "Solid" (SimMechanicsBlock)

Tabla 3.162. "Solid" Parameters

Parameter	Value
ClassName	Solid
InertiaType	Custom
Mass	0.0055458151739754217
MassUnits	kg
CenterOfMass	[-2.6002689251073309e-05 0 0]
CenterOfMassUnits	mm
MomentsOfInertia	[0.091219033457233048 0.091225744336999384 0.12400458181757036]
MomentsOfInertiaUnits	kg*mm^2
ProductsOfInertia	[0 0 0]
ProductsOfInertiaUnits	kg*mm^2
DensityBased	on
Density	1000
DensityUnits	kg/(m^3)
GraphicType	FromGeometry
MarkerShape	Sphere
MarkerSize	10
MarkerSizeUnits	m
GraphicVisPropType	SimpleVisualProperties
GraphicDiffuseColor	[0.89803921568627454 0.89803921568627454 0.89803921568627454]
GraphicSpecularColor	[0.5 0.5 0.5 1.0]
GraphicAmbientColor	[0.15 0.15 0.15 1.0]
GraphicEmissiveColor	[0.0 0.0 0.0 1.0]
GraphicShininess	75
GraphicOpacity	1
GeometryShape	FromFile
RectangleSize	[1 1]
RectangleSizeUnits	m
BrickDimensions	[1 1 1]
BrickDimensionUnits	m
CylinderRadius	1
CylinderRadiusUnits	m
CylinderLength	1
CylinderLengthUnits	m
SphereRadius	1
SphereRadiusUnits	m

Parameter	Value
EllipsoidRadii	[1 1 1]
EllipsoidRadiiUnits	m
ExtrusionCrossSection	[1 1; -1 1; -1 -1; 1 -1]
ExtrusionCrossSectionUnits	m
ExtrusionLength	1
ExtrusionLengthUnits	m
PolygonNumSides	3
PolygonOuterRadius	1
PolygonOuterRadiusUnits	m
ExtGeomFileType	STL
ExtGeomFileName	ball_Uniball_?? ?????????_sldprt.STL
ExtGeomFileUnits	mm
RevolutionCrossSection	[1 1; 1 -1; 2 -1; 2 1]
RevolutionCrossSectionUnits	m
RevolutionExtent	Full
RevolutionAngle	180
RevolutionAngleUnits	deg
Block Function	simmechanics.library.body_elements.solid

3.38. ball_Uniball_1_RIGID

Figura 3.38. DeltaSM_AnguloSinFriccions/DeltaSM/BrazoCompleto_2_RIGID/ball_Uniball_1_RIGID

3.38.1. Blocks

3.38.1.1. Parameters

3.38.1.1.1. "F" (PMIOPort)

Tabla 3.163. "F" Parameters

Parameter	Value
Port number	1
Port location on parent subsystem	Left

3.38.1.1.2. "ReferenceFrame" (SimMechanicsBlock)

Tabla 3.164. "ReferenceFrame" Parameters

Parameter	Value
ClassName	ReferenceFrame
Block Function	simmechanics.library.frames_transforms.reference_frame

3.38.1.1.3. "Solid" (SimMechanicsBlock)

Tabla 3.165. "Solid" Parameters

Parameter	Value
ClassName	Solid
InertiaType	Custom
Mass	0.0055458151739754217
MassUnits	kg
CenterOfMass	[-2.6002689251073309e-05 0 0]
CenterOfMassUnits	mm
MomentsOfInertia	[0.091219033457233048 0.091225744336999384 0.12400458181757036]
MomentsOfInertiaUnits	kg*mm^2
ProductsOfInertia	[0 0 0]
ProductsOfInertiaUnits	kg*mm^2
DensityBased	on
Density	1000
DensityUnits	kg/(m^3)
GraphicType	FromGeometry
MarkerShape	Sphere
MarkerSize	10
MarkerSizeUnits	m
GraphicVisPropType	SimpleVisualProperties
GraphicDiffuseColor	[0.89803921568627454 0.89803921568627454 0.89803921568627454]
GraphicSpecularColor	[0.5 0.5 0.5 1.0]

Parameter	Value
GraphicAmbientColor	[0.15 0.15 0.15 1.0]
GraphicEmissiveColor	[0.0 0.0 0.0 1.0]
GraphicShininess	75
GraphicOpacity	1
GeometryShape	FromFile
RectangleSize	[1 1]
RectangleSizeUnits	m
BrickDimensions	[1 1 1]
BrickDimensionUnits	m
CylinderRadius	1
CylinderRadiusUnits	m
CylinderLength	1
CylinderLengthUnits	m
SphereRadius	1
SphereRadiusUnits	m
EllipsoidRadii	[1 1 1]
EllipsoidRadiiUnits	m
ExtrusionCrossSection	[1 1; -1 1; -1 -1; 1 -1]
ExtrusionCrossSectionUnits	m
ExtrusionLength	1
ExtrusionLengthUnits	m
PolygonNumSides	3
PolygonOuterRadius	1
PolygonOuterRadiusUnits	m
ExtGeomFileType	STL
ExtGeomFileName	ball_Uniball_?? ?????????_sldprt.STL
ExtGeomFileUnits	mm
RevolutionCrossSection	[1 1; 1 -1; 2 -1; 2 1]
RevolutionCrossSectionUnits	m
RevolutionExtent	Full
RevolutionAngle	180
RevolutionAngleUnits	deg
Block Function	simmechanics.library.body_elements.solid

3.39. ball_Uniball_1_RIGID

Figura 3.39. DeltaSM_AnguloSinFriccions/DeltaSM/BrazoCompleto_3_RIGID/ ball_Uniball_1_RIGID
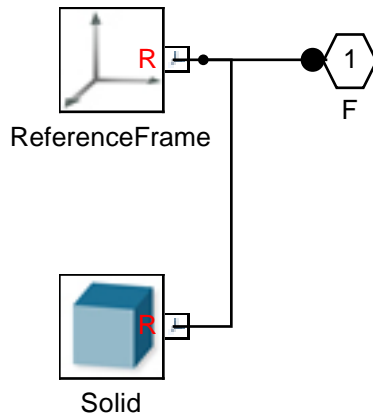
3.39.1. Blocks

3.39.1.1. Parameters

3.39.1.1.1. "F" (PMIOPort)

Tabla 3.166. "F" Parameters

Parameter	Value
Port number	1
Port location on parent subsystem	Left

3.39.1.1.2. "ReferenceFrame" (SimMechanicsBlock)

Tabla 3.167. "ReferenceFrame" Parameters

Parameter	Value
ClassName	ReferenceFrame
Block Function	simmechanics.library.frames_transforms.reference_frame

3.39.1.1.3. "Solid" (SimMechanicsBlock)

Tabla 3.168. "Solid" Parameters

Parameter	Value
ClassName	Solid
InertiaType	Custom
Mass	0.0055458151739754217
MassUnits	kg
CenterOfMass	[-2.6002689251073309e-05 0 0]
CenterOfMassUnits	mm
MomentsOfInertia	[0.091219033457233048 0.091225744336999384 0.12400458181757036]
MomentsOfInertiaUnits	kg*mm^2
ProductsOfInertia	[0 0 0]
ProductsOfInertiaUnits	kg*mm^2
DensityBased	on
Density	1000
DensityUnits	kg/(m^3)
GraphicType	FromGeometry
MarkerShape	Sphere
MarkerSize	10
MarkerSizeUnits	m
GraphicVisPropType	SimpleVisualProperties
GraphicDiffuseColor	[0.89803921568627454 0.89803921568627454 0.89803921568627454]
GraphicSpecularColor	[0.5 0.5 0.5 1.0]
GraphicAmbientColor	[0.15 0.15 0.15 1.0]
GraphicEmissiveColor	[0.0 0.0 0.0 1.0]
GraphicShininess	75
GraphicOpacity	1
GeometryShape	FromFile
RectangleSize	[1 1]
RectangleSizeUnits	m
BrickDimensions	[1 1 1]
BrickDimensionUnits	m
CylinderRadius	1
CylinderRadiusUnits	m
CylinderLength	1
CylinderLengthUnits	m
SphereRadius	1
SphereRadiusUnits	m

Parameter	Value
EllipsoidRadii	[1 1 1]
EllipsoidRadiiUnits	m
ExtrusionCrossSection	[1 1; -1 1; -1 -1; 1 -1]
ExtrusionCrossSectionUnits	m
ExtrusionLength	1
ExtrusionLengthUnits	m
PolygonNumSides	3
PolygonOuterRadius	1
PolygonOuterRadiusUnits	m
ExtGeomFileType	STL
ExtGeomFileName	ball_Uniball_?? ?????????_sldprt.STL
ExtGeomFileUnits	mm
RevolutionCrossSection	[1 1; 1 -1; 2 -1; 2 1]
RevolutionCrossSectionUnits	m
RevolutionExtent	Full
RevolutionAngle	180
RevolutionAngleUnits	deg
Block Function	simmechanics.library.body_elements.solid

3.40. ball_Uniball_2_RIGID

Figura 3.40. DeltaSM_AnguloSinFriccions/DeltaSM/ BaseMovilCompleta_1_RIGID/acopleBaseMovilAntebrazo_1_RIGID/ ball_Uniball_2_RIGID
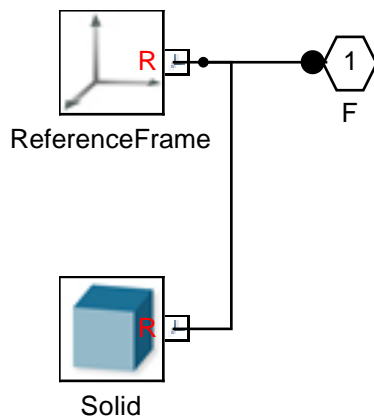
3.40.1. Blocks

3.40.1.1. Parameters

3.40.1.1.1. "F" (PMIOPort)

Tabla 3.169. "F" Parameters

Parameter	Value
Port number	1
Port location on parent subsystem	Left

3.40.1.1.2. "ReferenceFrame" (SimMechanicsBlock)

Tabla 3.170. "ReferenceFrame" Parameters

Parameter	Value
ClassName	ReferenceFrame
Block Function	simmechanics.library.frames_transforms.reference_frame

3.40.1.1.3. "Solid" (SimMechanicsBlock)

Tabla 3.171. "Solid" Parameters

Parameter	Value
ClassName	Solid
InertiaType	Custom
Mass	0.0055458151739754217
MassUnits	kg
CenterOfMass	[-2.6002689251073309e-05 0 0]
CenterOfMassUnits	mm
MomentsOfInertia	[0.091219033457233048 0.091225744336999384 0.12400458181757036]
MomentsOfInertiaUnits	kg*mm^2
ProductsOfInertia	[0 0 0]
ProductsOfInertiaUnits	kg*mm^2
DensityBased	on
Density	1000
DensityUnits	kg/(m^3)
GraphicType	FromGeometry
MarkerShape	Sphere
MarkerSize	10

Parameter	Value
MarkerSizeUnits	m
GraphicVisPropType	SimpleVisualProperties
GraphicDiffuseColor	[0.89803921568627454 0.89803921568627454 0.89803921568627454]
GraphicSpecularColor	[0.5 0.5 0.5 1.0]
GraphicAmbientColor	[0.15 0.15 0.15 1.0]
GraphicEmissiveColor	[0.0 0.0 0.0 1.0]
GraphicShininess	75
GraphicOpacity	1
GeometryShape	FromFile
RectangleSize	[1 1]
RectangleSizeUnits	m
BrickDimensions	[1 1 1]
BrickDimensionUnits	m
CylinderRadius	1
CylinderRadiusUnits	m
CylinderLength	1
CylinderLengthUnits	m
SphereRadius	1
SphereRadiusUnits	m
EllipsoidRadii	[1 1 1]
EllipsoidRadiiUnits	m
ExtrusionCrossSection	[1 1; -1 1; -1 -1; 1 -1]
ExtrusionCrossSectionUnits	m
ExtrusionLength	1
ExtrusionLengthUnits	m
PolygonNumSides	3
PolygonOuterRadius	1
PolygonOuterRadiusUnits	m
ExtGeomFileType	STL
ExtGeomFileName	ball_Uniball_?? ?????????_sldprt.STL
ExtGeomFileUnits	mm
RevolutionCrossSection	[1 1; 1 -1; 2 -1; 2 1]
RevolutionCrossSectionUnits	m
RevolutionExtent	Full
RevolutionAngle	180
RevolutionAngleUnits	deg
Block Function	simmechanics.library.body_elements.solid

3.41. ball_Uniball_2_RIGID

Figura 3.41. DeltaSM_AnguloSinFriccions/DeltaSM/ BaseMovilCompleta_1_RIGID/acopleBaseMovilAntebrazo_2_RIGID/ ball_Uniball_2_RIGID
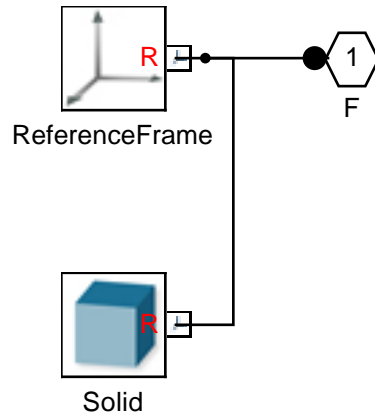
3.41.1. Blocks

3.41.1.1. Parameters

3.41.1.1.1. "F" (PMIOPort)

Tabla 3.172. "F" Parameters

Parameter	Value
Port number	1
Port location on parent subsystem	Left

3.41.1.1.2. "ReferenceFrame" (SimMechanicsBlock)

Tabla 3.173. "ReferenceFrame" Parameters

Parameter	Value
ClassName	ReferenceFrame
Block Function	simmechanics.library.frames_transforms.reference_frame

3.41.1.1.3. "Solid" (SimMechanicsBlock)

Tabla 3.174. "Solid" Parameters

Parameter	Value
ClassName	Solid
InertiaType	Custom
Mass	0.0055458151739754217
MassUnits	kg
CenterOfMass	[-2.6002689251073309e-05 0 0]
CenterOfMassUnits	mm
MomentsOfInertia	[0.091219033457233048 0.091225744336999384 0.12400458181757036]
MomentsOfInertiaUnits	kg*mm^2
ProductsOfInertia	[0 0 0]
ProductsOfInertiaUnits	kg*mm^2
DensityBased	on
Density	1000
DensityUnits	kg/(m^3)
GraphicType	FromGeometry
MarkerShape	Sphere
MarkerSize	10
MarkerSizeUnits	m
GraphicVisPropType	SimpleVisualProperties
GraphicDiffuseColor	[0.89803921568627454 0.89803921568627454 0.89803921568627454]
GraphicSpecularColor	[0.5 0.5 0.5 1.0]
GraphicAmbientColor	[0.15 0.15 0.15 1.0]
GraphicEmissiveColor	[0.0 0.0 0.0 1.0]
GraphicShininess	75
GraphicOpacity	1
GeometryShape	FromFile
RectangleSize	[1 1]
RectangleSizeUnits	m
BrickDimensions	[1 1 1]
BrickDimensionUnits	m
CylinderRadius	1
CylinderRadiusUnits	m
CylinderLength	1
CylinderLengthUnits	m
SphereRadius	1
SphereRadiusUnits	m

Parameter	Value
EllipsoidRadii	[1 1 1]
EllipsoidRadiiUnits	m
ExtrusionCrossSection	[1 1; -1 1; -1 -1; 1 -1]
ExtrusionCrossSectionUnits	m
ExtrusionLength	1
ExtrusionLengthUnits	m
PolygonNumSides	3
PolygonOuterRadius	1
PolygonOuterRadiusUnits	m
ExtGeomFileType	STL
ExtGeomFileName	ball_Uniball_?? ?????????_sldprt.STL
ExtGeomFileUnits	mm
RevolutionCrossSection	[1 1; 1 -1; 2 -1; 2 1]
RevolutionCrossSectionUnits	m
RevolutionExtent	Full
RevolutionAngle	180
RevolutionAngleUnits	deg
Block Function	simmechanics.library.body_elements.solid

3.42. ball_Uniball_2_RIGID

Figura 3.42. DeltaSM_AnguloSinFriccions/DeltaSM/ BaseMovilCompleta_1_RIGID/acopleBaseMovilAntebrazo_3_RIGID/ ball_Uniball_2_RIGID

3.42.1. Blocks

3.42.1.1. Parameters

3.42.1.1.1. "F" (PMIOPort)

Tabla 3.175. "F" Parameters

Parameter	Value
Port number	1
Port location on parent subsystem	Left

3.42.1.1.2. "ReferenceFrame" (SimMechanicsBlock)

Tabla 3.176. "ReferenceFrame" Parameters

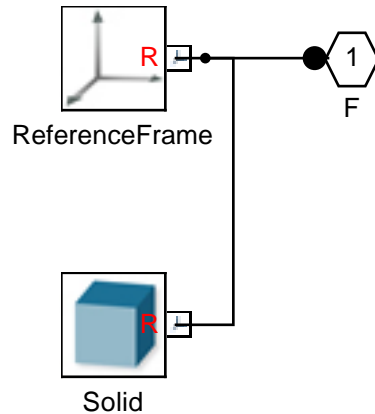| Parameter	Value
ClassName	ReferenceFrame
Block Function	simmechanics.library.frames_transforms.reference_frame

3.42.1.1.3. "Solid" (SimMechanicsBlock)

Tabla 3.177. "Solid" Parameters

Parameter	Value
ClassName	Solid
InertiaType	Custom
Mass	0.0055458151739754217
MassUnits	kg
CenterOfMass	[-2.6002689251073309e-05 0 0]
CenterOfMassUnits	mm
MomentsOfInertia	[0.091219033457233048 0.091225744336999384 0.12400458181757036]
MomentsOfInertiaUnits	kg*mm^2
ProductsOfInertia	[0 0 0]
ProductsOfInertiaUnits	kg*mm^2
DensityBased	on
Density	1000
DensityUnits	kg/(m^3)
GraphicType	FromGeometry
MarkerShape	Sphere
MarkerSize	10

Parameter	Value
MarkerSizeUnits	m
GraphicVisPropType	SimpleVisualProperties
GraphicDiffuseColor	[0.89803921568627454 0.89803921568627454 0.89803921568627454]
GraphicSpecularColor	[0.5 0.5 0.5 1.0]
GraphicAmbientColor	[0.15 0.15 0.15 1.0]
GraphicEmissiveColor	[0.0 0.0 0.0 1.0]
GraphicShininess	75
GraphicOpacity	1
GeometryShape	FromFile
RectangleSize	[1 1]
RectangleSizeUnits	m
BrickDimensions	[1 1 1]
BrickDimensionUnits	m
CylinderRadius	1
CylinderRadiusUnits	m
CylinderLength	1
CylinderLengthUnits	m
SphereRadius	1
SphereRadiusUnits	m
EllipsoidRadii	[1 1 1]
EllipsoidRadiiUnits	m
ExtrusionCrossSection	[1 1; -1 1; -1 -1; 1 -1]
ExtrusionCrossSectionUnits	m
ExtrusionLength	1
ExtrusionLengthUnits	m
PolygonNumSides	3
PolygonOuterRadius	1
PolygonOuterRadiusUnits	m
ExtGeomFileType	STL
ExtGeomFileName	ball_Uniball_?? ?????????_sldprt.STL
ExtGeomFileUnits	mm
RevolutionCrossSection	[1 1; 1 -1; 2 -1; 2 1]
RevolutionCrossSectionUnits	m
RevolutionExtent	Full
RevolutionAngle	180
RevolutionAngleUnits	deg
Block Function	simmechanics.library.body_elements.solid

3.43. ball_Uniball_2_RIGID

**Figura 3.43. DeltaSM_AnguloSinFriccions/DeltaSM/BrazoCompleto_1_RIGID/
ball_Uniball_2_RIGID**

3.43.1. Blocks

3.43.1.1. Parameters

3.43.1.1.1. "F" (PMIOPort)

Tabla 3.178. "F" Parameters

Parameter	Value
Port number	1
Port location on parent subsystem	Left

3.43.1.1.2. "ReferenceFrame" (SimMechanicsBlock)

Tabla 3.179. "ReferenceFrame" Parameters

Parameter	Value
ClassName	ReferenceFrame
Block Function	simmechanics.library.frames_transforms.reference_frame

3.43.1.1.3. "Solid" (SimMechanicsBlock)

Tabla 3.180. "Solid" Parameters

Parameter	Value
ClassName	Solid
InertiaType	Custom
Mass	0.0055458151739754217
MassUnits	kg
CenterOfMass	[-2.6002689251073309e-05 0 0]
CenterOfMassUnits	mm
MomentsOfInertia	[0.091219033457233048 0.091225744336999384 0.12400458181757036]
MomentsOfInertiaUnits	kg*mm^2
ProductsOfInertia	[0 0 0]
ProductsOfInertiaUnits	kg*mm^2
DensityBased	on
Density	1000
DensityUnits	kg/(m^3)
GraphicType	FromGeometry
MarkerShape	Sphere
MarkerSize	10
MarkerSizeUnits	m
GraphicVisPropType	SimpleVisualProperties
GraphicDiffuseColor	[0.89803921568627454 0.89803921568627454 0.89803921568627454]
GraphicSpecularColor	[0.5 0.5 0.5 1.0]
GraphicAmbientColor	[0.15 0.15 0.15 1.0]
GraphicEmissiveColor	[0.0 0.0 0.0 1.0]
GraphicShininess	75
GraphicOpacity	1
GeometryShape	FromFile
RectangleSize	[1 1]
RectangleSizeUnits	m
BrickDimensions	[1 1 1]
BrickDimensionUnits	m
CylinderRadius	1
CylinderRadiusUnits	m
CylinderLength	1
CylinderLengthUnits	m
SphereRadius	1
SphereRadiusUnits	m

Parameter	Value
EllipsoidRadii	[1 1 1]
EllipsoidRadiiUnits	m
ExtrusionCrossSection	[1 1; -1 1; -1 -1; 1 -1]
ExtrusionCrossSectionUnits	m
ExtrusionLength	1
ExtrusionLengthUnits	m
PolygonNumSides	3
PolygonOuterRadius	1
PolygonOuterRadiusUnits	m
ExtGeomFileType	STL
ExtGeomFileName	ball_Uniball_?? ?????????_sldprt.STL
ExtGeomFileUnits	mm
RevolutionCrossSection	[1 1; 1 -1; 2 -1; 2 1]
RevolutionCrossSectionUnits	m
RevolutionExtent	Full
RevolutionAngle	180
RevolutionAngleUnits	deg
Block Function	simmechanics.library.body_elements.solid

3.44. ball_Uniball_2_RIGID

Figura 3.44. DeltaSM_AnguloSinFriccions/DeltaSM/BrazoCompleto_2_RIGID/ball_Uniball_2_RIGID

3.44.1. Blocks

3.44.1.1. Parameters

3.44.1.1.1. "F" (PMIOPort)

Tabla 3.181. "F" Parameters

Parameter	Value
Port number	1
Port location on parent subsystem	Left

3.44.1.1.2. "ReferenceFrame" (SimMechanicsBlock)

Tabla 3.182. "ReferenceFrame" Parameters

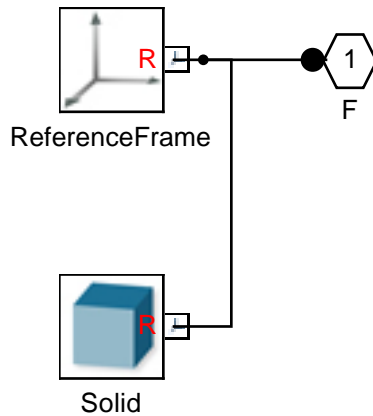| Parameter	Value
ClassName	ReferenceFrame
Block Function	simmechanics.library.frames_transforms.reference_frame

3.44.1.1.3. "Solid" (SimMechanicsBlock)

Tabla 3.183. "Solid" Parameters

Parameter	Value
ClassName	Solid
InertiaType	Custom
Mass	0.0055458151739754217
MassUnits	kg
CenterOfMass	[-2.6002689251073309e-05 0 0]
CenterOfMassUnits	mm
MomentsOfInertia	[0.091219033457233048 0.091225744336999384 0.12400458181757036]
MomentsOfInertiaUnits	kg*mm^2
ProductsOfInertia	[0 0 0]
ProductsOfInertiaUnits	kg*mm^2
DensityBased	on
Density	1000
DensityUnits	kg/(m^3)
GraphicType	FromGeometry
MarkerShape	Sphere
MarkerSize	10
MarkerSizeUnits	m
GraphicVisPropType	SimpleVisualProperties
GraphicDiffuseColor	[0.89803921568627454 0.89803921568627454 0.89803921568627454]
GraphicSpecularColor	[0.5 0.5 0.5 1.0]

Parameter	Value
GraphicAmbientColor	[0.15 0.15 0.15 1.0]
GraphicEmissiveColor	[0.0 0.0 0.0 1.0]
GraphicShininess	75
GraphicOpacity	1
GeometryShape	FromFile
RectangleSize	[1 1]
RectangleSizeUnits	m
BrickDimensions	[1 1 1]
BrickDimensionUnits	m
CylinderRadius	1
CylinderRadiusUnits	m
CylinderLength	1
CylinderLengthUnits	m
SphereRadius	1
SphereRadiusUnits	m
EllipsoidRadii	[1 1 1]
EllipsoidRadiiUnits	m
ExtrusionCrossSection	[1 1; -1 1; -1 -1; 1 -1]
ExtrusionCrossSectionUnits	m
ExtrusionLength	1
ExtrusionLengthUnits	m
PolygonNumSides	3
PolygonOuterRadius	1
PolygonOuterRadiusUnits	m
ExtGeomFileType	STL
ExtGeomFileName	ball_Uniball_?? ?????????_sldprt.STL
ExtGeomFileUnits	mm
RevolutionCrossSection	[1 1; 1 -1; 2 -1; 2 1]
RevolutionCrossSectionUnits	m
RevolutionExtent	Full
RevolutionAngle	180
RevolutionAngleUnits	deg
Block Function	simmechanics.library.body_elements.solid

3.45. ball_Uniball_2_RIGID

Figura 3.45. DeltaSM_AnguloSinFriccions/DeltaSM/BrazoCompleto_3_RIGID/ ball_Uniball_2_RIGID
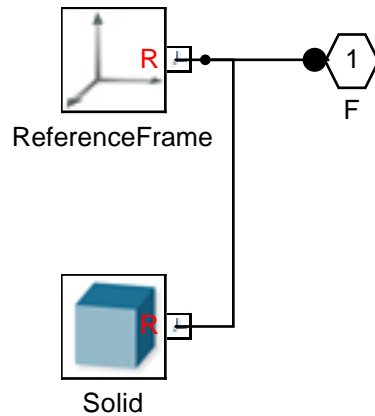
3.45.1. Blocks

3.45.1.1. Parameters

3.45.1.1.1. "F" (PMIOPort)

Tabla 3.184. "F" Parameters

Parameter	Value
Port number	1
Port location on parent subsystem	Left

3.45.1.1.2. "ReferenceFrame" (SimMechanicsBlock)

Tabla 3.185. "ReferenceFrame" Parameters

Parameter	Value
ClassName	ReferenceFrame
Block Function	simmechanics.library.frames_transforms.reference_frame

3.45.1.1.3. "Solid" (SimMechanicsBlock)

Tabla 3.186. "Solid" Parameters

Parameter	Value
ClassName	Solid
InertiaType	Custom
Mass	0.0055458151739754217
MassUnits	kg
CenterOfMass	[-2.6002689251073309e-05 0 0]
CenterOfMassUnits	mm
MomentsOfInertia	[0.091219033457233048 0.091225744336999384 0.12400458181757036]
MomentsOfInertiaUnits	kg*mm^2
ProductsOfInertia	[0 0 0]
ProductsOfInertiaUnits	kg*mm^2
DensityBased	on
Density	1000
DensityUnits	kg/(m^3)
GraphicType	FromGeometry
MarkerShape	Sphere
MarkerSize	10
MarkerSizeUnits	m
GraphicVisPropType	SimpleVisualProperties
GraphicDiffuseColor	[0.89803921568627454 0.89803921568627454 0.89803921568627454]
GraphicSpecularColor	[0.5 0.5 0.5 1.0]
GraphicAmbientColor	[0.15 0.15 0.15 1.0]
GraphicEmissiveColor	[0.0 0.0 0.0 1.0]
GraphicShininess	75
GraphicOpacity	1
GeometryShape	FromFile
RectangleSize	[1 1]
RectangleSizeUnits	m
BrickDimensions	[1 1 1]
BrickDimensionUnits	m
CylinderRadius	1
CylinderRadiusUnits	m
CylinderLength	1
CylinderLengthUnits	m
SphereRadius	1
SphereRadiusUnits	m

Parameter	Value
EllipsoidRadii	[1 1 1]
EllipsoidRadiiUnits	m
ExtrusionCrossSection	[1 1; -1 1; -1 -1; 1 -1]
ExtrusionCrossSectionUnits	m
ExtrusionLength	1
ExtrusionLengthUnits	m
PolygonNumSides	3
PolygonOuterRadius	1
PolygonOuterRadiusUnits	m
ExtGeomFileType	STL
ExtGeomFileName	ball_Uniball_?? ?????????_sldprt.STL
ExtGeomFileUnits	mm
RevolutionCrossSection	[1 1; 1 -1; 2 -1; 2 1]
RevolutionCrossSectionUnits	m
RevolutionExtent	Full
RevolutionAngle	180
RevolutionAngleUnits	deg
Block Function	simmechanics.library.body_elements.solid

3.46. BaseCompleta_1_RIGID

Figura 3.46. DeltaSM_AnguloSinFriccions/DeltaSM/BaseCompleta_1_RIGID
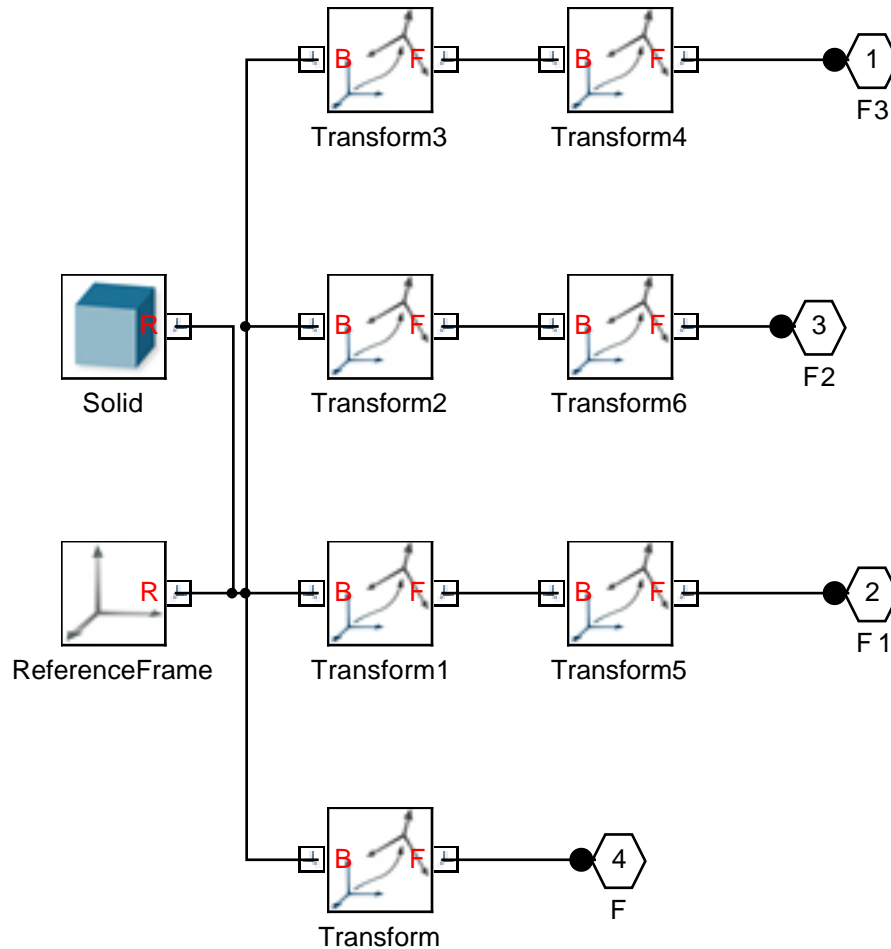
3.46.1. Blocks

3.46.1.1. Parameters

3.46.1.1.1. "F" (PMIOPort)

Tabla 3.187. "F" Parameters

Parameter	Value
Port number	4
Port location on parent subsystem	Left

3.46.1.1.2. "F1" (PMIOPort)

Tabla 3.188. "F1" Parameters

Parameter	Value
Port number	2
Port location on parent subsystem	Right

3.46.1.1.3. "F2" (PMIOPort)

Tabla 3.189. "F2" Parameters

Parameter	Value
Port number	3
Port location on parent subsystem	Right

3.46.1.1.4. "F3" (PMIOPort)

Tabla 3.190. "F3" Parameters

Parameter	Value
Port number	1
Port location on parent subsystem	Right

3.46.1.1.5. "ReferenceFrame" (SimMechanicsBlock)

Tabla 3.191. "ReferenceFrame" Parameters

Parameter	Value
ClassName	ReferenceFrame
Block Function	simmechanics.library.frames_transforms.reference_frame

3.46.1.1.6. "Solid" (SimMechanicsBlock)

Tabla 3.192. "Solid" Parameters

Parameter	Value
ClassName	Solid
InertiaType	Custom
Mass	0.13810452721903221
MassUnits	kg

Parameter	Value
CenterOfMass	[-4.5062155923240521 0 -4.277486502253776]
CenterOfMassUnits	mm
MomentsOfInertia	[258.59197461879108 258.58810647683998 484.80194129818653]
MomentsOfInertiaUnits	kg*mm^2
ProductsOfInertia	[0 0.0058178041696079815 0]
ProductsOfInertiaUnits	kg*mm^2
DensityBased	on
Density	1000
DensityUnits	kg/(m^3)
GraphicType	FromGeometry
MarkerShape	Sphere
MarkerSize	10
MarkerSizeUnits	m
GraphicVisPropType	SimpleVisualProperties
GraphicDiffuseColor	[0.792156862745098 0.81960784313725488 0.93333333333333335]
GraphicSpecularColor	[0.5 0.5 0.5 1.0]
GraphicAmbientColor	[0.15 0.15 0.15 1.0]
GraphicEmissiveColor	[0.0 0.0 0.0 1.0]
GraphicShininess	75
GraphicOpacity	1
GeometryShape	FromFile
RectangleSize	[1 1]
RectangleSizeUnits	m
BrickDimensions	[1 1 1]
BrickDimensionUnits	m
CylinderRadius	1
CylinderRadiusUnits	m
CylinderLength	1
CylinderLengthUnits	m
SphereRadius	1
SphereRadiusUnits	m
EllipsoidRadii	[1 1 1]
EllipsoidRadiiUnits	m
ExtrusionCrossSection	[1 1; -1 1; -1 -1; 1 -1]
ExtrusionCrossSectionUnits	m
ExtrusionLength	1
ExtrusionLengthUnits	m
PolygonNumSides	3

Parameter	Value
PolygonOuterRadius	1
PolygonOuterRadiusUnits	m
ExtGeomFileType	STL
ExtGeomFileName	BaseCompleta_Predeterminado_sldprt.STL
ExtGeomFileUnits	mm
RevolutionCrossSection	[1 1; 1 -1; 2 -1; 2 1]
RevolutionCrossSectionUnits	m
RevolutionExtent	Full
RevolutionAngle	180
RevolutionAngleUnits	deg
Block Function	simmechanics.library.body_elements.solid

3.46.1.1.7. "Transform" (SimMechanicsBlock)

Tabla 3.193. "Transform" Parameters

Parameter	Value
ClassName	RigidTransform
TranslationMethod	Cartesian
TranslationLengthUnit	mm
TranslationStandardAxis	+Z
TranslationStandardOffset	0
TranslationCartesianOffset	[0 0 0]
TranslationROffset	0
TranslationROffsetUnits	m
TranslationZOffset	0
TranslationZOffsetUnits	m
TranslationThetaOffset	0
TranslationThetaOffsetUnits	deg
RotationMethod	ArbitraryAxis
RotationAngleUnits	rad
RotationStandardAxis	+Z
RotationAngle	0
RotationArbitraryAxis	[0 0 0]
FollAlignAxisA	+X
BaseAlignAxisA	+Y
FollAlignAxisB	+Y
BaseAlignAxisB	+Z
Block Function	simmechanics.library.frames_transforms.rigid_transform

3.46.1.1.8. "Transform1" (SimMechanicsBlock)

Tabla 3.194. "Transform1" Parameters

Parameter	Value
ClassName	RigidTransform
TranslationMethod	Cartesian
TranslationLengthUnit	mm
TranslationStandardAxis	+Z
TranslationStandardOffset	0
TranslationCartesianOffset	[-44.010734985004049 49.934600438418464 -24.000000000000014]
TranslationROffset	0
TranslationROffsetUnits	m
TranslationZOffset	0
TranslationZOffsetUnits	m
TranslationThetaOffset	0
TranslationThetaOffsetUnit	deg
RotationMethod	ArbitraryAxis
RotationAngleUnits	rad
RotationStandardAxis	+Z
RotationAngle	2.4188584057763776
RotationArbitraryAxis	[-0.37796447300922714 -0.6546536707079772 0.6546536707079772]
FollAlignAxisA	+X
BaseAlignAxisA	+Y
FollAlignAxisB	+Y
BaseAlignAxisB	+Z
Block Function	simmechanics.library.frames_transforms.rigid_transform

3.46.1.1.9. "Transform2" (SimMechanicsBlock)

Tabla 3.195. "Transform2" Parameters

Parameter	Value
ClassName	RigidTransform
TranslationMethod	Cartesian
TranslationLengthUnit	mm
TranslationStandardAxis	+Z
TranslationStandardOffset	0
TranslationCartesianOffset	[58.5 9.2499999999999982 -24.000000000000004]
TranslationROffset	0

Parameter	Value
TranslationROffsetUnits	m
TranslationZOffset	0
TranslationZOffsetUnits	m
TranslationThetaOffset	0
TranslationThetaOffsetUnits	deg
RotationMethod	ArbitraryAxis
RotationAngleUnits	rad
RotationStandardAxis	+Z
RotationAngle	2.0943951023931953
RotationArbitraryAxis	[-0.57735026918962584 -0.57735026918962584 -0.57735026918962584]
FollAlignAxisA	+X
BaseAlignAxisA	+Y
FollAlignAxisB	+Y
BaseAlignAxisB	+Z
Block Function	simmechanics.library.frames_transforms.rigid_transform

3.46.1.1.10. "Transform3" (SimMechanicsBlock)

Tabla 3.196. "Transform3" Parameters

Parameter	Value
ClassName	RigidTransform
TranslationMethod	Cartesian
TranslationLengthUnit	mm
TranslationStandardAxis	+Z
TranslationStandardOffset	0
TranslationCartesianOffset	[-27.989265014991929 -59.184600438418421 -24.000000000000007]
TranslationROffset	0
TranslationROffsetUnits	m
TranslationZOffset	0
TranslationZOffsetUnits	m
TranslationThetaOffset	0
TranslationThetaOffsetUnits	deg
RotationMethod	ArbitraryAxis
RotationAngleUnits	rad
RotationStandardAxis	+Z
RotationAngle	1.8234765819369754
RotationArbitraryAxis	[-0.77459666924148329 -0.44721359549995809 0.44721359549995809]
FollAlignAxisA	+X

Parameter	Value
BaseAlignAxisA	+Y
FollAlignAxisB	+Y
BaseAlignAxisB	+Z
Block Function	simmechanics.library.frames_transforms.rigid_transform

3.46.1.1.11. "Transform4" (SimMechanicsBlock)

Tabla 3.197. "Transform4" Parameters

Parameter	Value
ClassName	RigidTransform
TranslationMethod	Cartesian
TranslationLengthUnit	mm
TranslationStandardAxis	+Z
TranslationStandardOffset	0
TranslationCartesianOffset	[0 0 0]
TranslationROffset	0
TranslationROffsetUnits	m
TranslationZOffset	0
TranslationZOffsetUnits	m
TranslationThetaOffset	0
TranslationThetaOffsetUnit	deg
RotationMethod	ArbitraryAxis
RotationAngleUnits	deg
RotationStandardAxis	+Z
RotationAngle	-180
RotationArbitraryAxis	[0 0 1]
FollAlignAxisA	+X
BaseAlignAxisA	+Y
FollAlignAxisB	+Y
BaseAlignAxisB	+Z
Block Function	simmechanics.library.frames_transforms.rigid_transform

3.46.1.1.12. "Transform5" (SimMechanicsBlock)

Tabla 3.198. "Transform5" Parameters

Parameter	Value
ClassName	RigidTransform

Parameter	Value
TranslationMethod	Cartesian
TranslationLengthUnit	mm
TranslationStandardAxis	+Z
TranslationStandardOffset	0
TranslationCartesianOffset	[0 0 0]
TranslationROffset	0
TranslationROffsetUnits	m
TranslationZOffset	0
TranslationZOffsetUnits	m
TranslationThetaOffset	0
TranslationThetaOffsetUnits	deg
RotationMethod	ArbitraryAxis
RotationAngleUnits	deg
RotationStandardAxis	+Z
RotationAngle	0
RotationArbitraryAxis	[0 0 0]
FollAlignAxisA	+X
BaseAlignAxisA	+Y
FollAlignAxisB	+Y
BaseAlignAxisB	+Z
Block Function	simmechanics.library.frames_transforms.rigid_transform

3.46.1.1.13. "Transform6" (SimMechanicsBlock)

Tabla 3.199. "Transform6" Parameters

Parameter	Value
ClassName	RigidTransform
TranslationMethod	Cartesian
TranslationLengthUnit	mm
TranslationStandardAxis	+Z
TranslationStandardOffset	0
TranslationCartesianOffset	[0 0 0]
TranslationROffset	0
TranslationROffsetUnits	m
TranslationZOffset	0
TranslationZOffsetUnits	m
TranslationThetaOffset	0
TranslationThetaOffsetUnits	deg

Parameter	Value
RotationMethod	ArbitraryAxis
RotationAngleUnits	deg
RotationStandardAxis	+Z
RotationAngle	90
RotationArbitraryAxis	[0 0 1]
FollAlignAxisA	+X
BaseAlignAxisA	+Y
FollAlignAxisB	+Y
BaseAlignAxisB	+Z
Block Function	simmechanics.library.frames_transforms.rigid_transform

3.47. BaseMovil_1_RIGID

Figura 3.47. DeltaSM_AnguloSinFriccions/DeltaSM/BaseMovilCompleta_1_RIGID/BaseMovil_1_RIGID
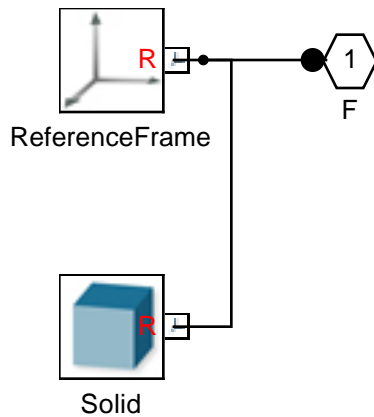
3.47.1. Blocks

3.47.1.1. Parameters

3.47.1.1.1. "F" (PMIOPort)

Tabla 3.200. "F" Parameters

Parameter	Value
Port number	1
Port location on parent subsystem	Left

3.47.1.1.2. "ReferenceFrame" (SimMechanicsBlock)

Tabla 3.201. "ReferenceFrame" Parameters

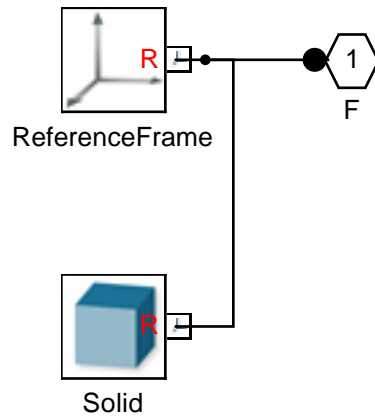| Parameter	Value
ClassName	ReferenceFrame
Block Function	simmechanics.library.frames_transforms.reference_frame

3.47.1.1.3. "Solid" (SimMechanicsBlock)

Tabla 3.202. "Solid" Parameters

Parameter	Value
ClassName	Solid
InertiaType	Custom
Mass	0.02181220141051193
MassUnits	kg
CenterOfMass	[-0.0047405556094963879 -0.035668575281843001 6.0449150976605539]
CenterOfMassUnits	mm
MomentsOfInertia	[5.5429429917029012 5.5427575163035288 10.515035910818296]
MomentsOfInertiaUnits	kg*mm^2
ProductsOfInertia	[4.4053174989595039e-05 5.7852757262833763e-06 -0.00069733115811243301]
ProductsOfInertiaUnits	kg*mm^2
DensityBased	on
Density	1000
DensityUnits	kg/(m^3)
GraphicType	FromGeometry
MarkerShape	Sphere
MarkerSize	10
MarkerSizeUnits	m
GraphicVisPropType	SimpleVisualProperties
GraphicDiffuseColor	[0.792156862745098 0.81960784313725488 0.93333333333333335]
GraphicSpecularColor	[0.5 0.5 0.5 1.0]
GraphicAmbientColor	[0.15 0.15 0.15 1.0]
GraphicEmissiveColor	[0.0 0.0 0.0 1.0]
GraphicShininess	75
GraphicOpacity	1
GeometryShape	FromFile
RectangleSize	[1 1]
RectangleSizeUnits	m
BrickDimensions	[1 1 1]

Parameter	Value
BrickDimensionUnits	m
CylinderRadius	1
CylinderRadiusUnits	m
CylinderLength	1
CylinderLengthUnits	m
SphereRadius	1
SphereRadiusUnits	m
EllipsoidRadii	[1 1 1]
EllipsoidRadiiUnits	m
ExtrusionCrossSection	[1 1; -1 1; -1 -1; 1 -1]
ExtrusionCrossSectionUnits	m
ExtrusionLength	1
ExtrusionLengthUnits	m
PolygonNumSides	3
PolygonOuterRadius	1
PolygonOuterRadiusUnits	m
ExtGeomFileType	STL
ExtGeomFileName	BaseMovil_Predeterminado_sldprt.STL
ExtGeomFileUnits	mm
RevolutionCrossSection	[1 1; 1 -1; 2 -1; 2 1]
RevolutionCrossSectionUnits	m
RevolutionExtent	Full
RevolutionAngle	180
RevolutionAngleUnits	deg
Block Function	simmechanics.library.body_elements.solid

3.48. BaseMovilCompleta_1_RIGID

**Figura   3.48.   DeltaSM_AnguloSinFriccions/DeltaSM/
BaseMovilCompleta_1_RIGID**
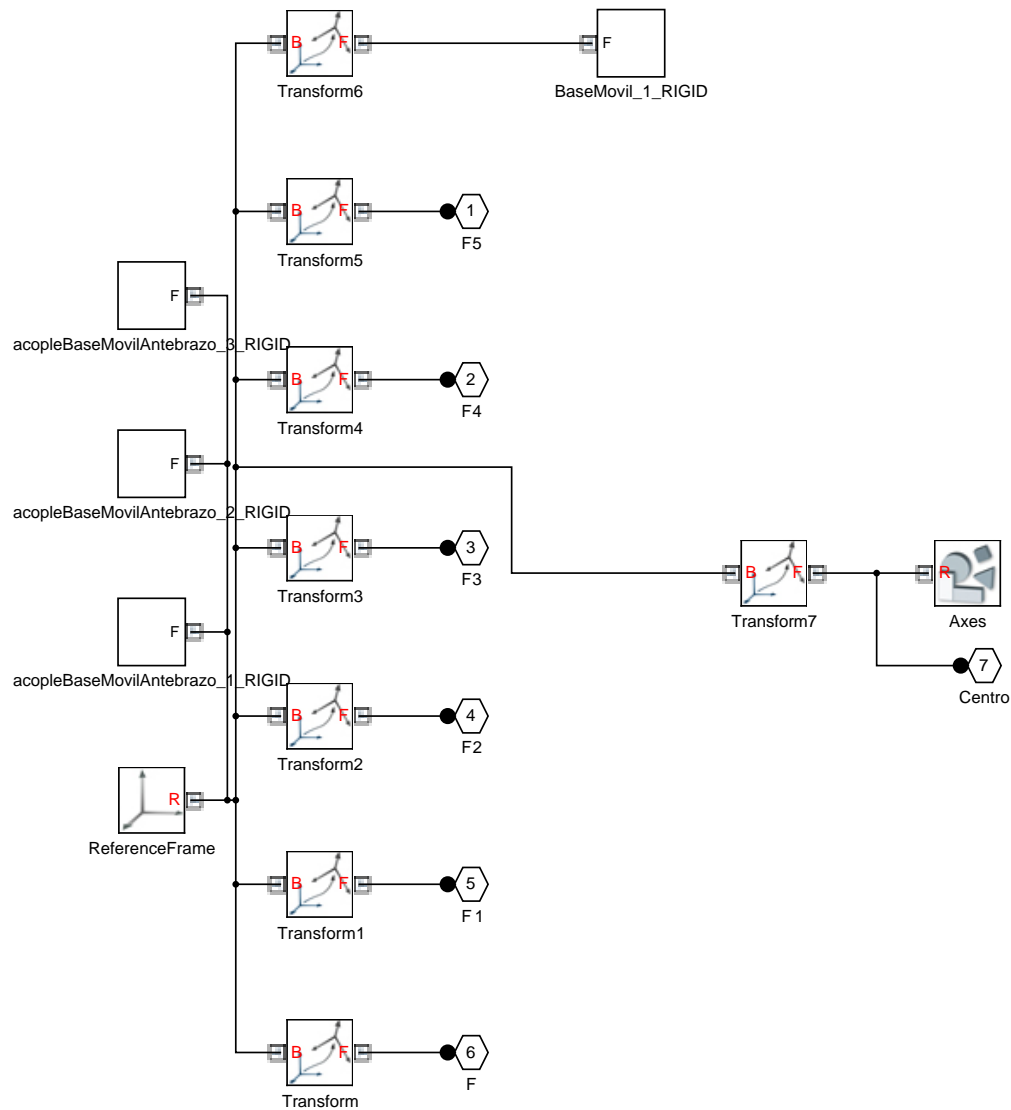
3.48.1. Blocks

3.48.1.1. Parameters

3.48.1.1.1. "Axes" (SimMechanicsBlock)

Tabla 3.203. "Axes" Parameters

Parameter	Value
ClassName	Graphic
GraphicType	Marker
MarkerShape	Frame
MarkerSize	25
MarkerSizeUnits	m
GraphicVisPropType	SimpleVisualProperties
GraphicDiffuseColor	[0.0 0.0 0.0]
GraphicSpecularColor	[0.2 0.2 0.2]
GraphicAmbientColor	[0.5 0.5 0.5]
GraphicEmissiveColor	[0.0 0.0 0.0 1.0]
GraphicShininess	24.0
GraphicOpacity	1.0
Block Function	simmechanics.library.body_elements.graphic

3.48.1.1.2. "Centro" (PMIOPort)

Tabla 3.204. "Centro" Parameters

Parameter	Value
Port number	7
Port location on parent subsystem	Right

3.48.1.1.3. "F" (PMIOPort)

Tabla 3.205. "F" Parameters

Parameter	Value
Port number	6
Port location on parent subsystem	Left

3.48.1.1.4. "F1" (PMIOPort)

Tabla 3.206. "F1" Parameters

Parameter	Value
Port number	5

Parameter	Value
Port location on parent subsystem	Left

3.48.1.1.5. "F2" (PMIOPort)

Tabla 3.207. "F2" Parameters

Parameter	Value
Port number	4
Port location on parent subsystem	Left

3.48.1.1.6. "F3" (PMIOPort)

Tabla 3.208. "F3" Parameters

Parameter	Value
Port number	3
Port location on parent subsystem	Left

3.48.1.1.7. "F4" (PMIOPort)

Tabla 3.209. "F4" Parameters

Parameter	Value
Port number	2
Port location on parent subsystem	Left

3.48.1.1.8. "F5" (PMIOPort)

Tabla 3.210. "F5" Parameters

Parameter	Value
Port number	1

Parameter	Value
Port location on parent subsystem	Left

3.48.1.1.9. "ReferenceFrame" (SimMechanicsBlock)

Tabla 3.211. "ReferenceFrame" Parameters

Parameter	Value
ClassName	ReferenceFrame
Block Function	simmechanics.library.frames_transforms.reference_frame

3.48.1.1.10. "Transform" (SimMechanicsBlock)

Tabla 3.212. "Transform" Parameters

Parameter	Value
ClassName	RigidTransform
TranslationMethod	Cartesian
TranslationLengthUnit	mm
TranslationStandardAxis	+Z
TranslationStandardOffset	0
TranslationCartesianOffset	[5.6778632186286586 50.149464107791815 79.70465642472179]
TranslationROffset	0
TranslationROffsetUnits	m
TranslationZOffset	0
TranslationZOffsetUnits	m
TranslationThetaOffset	0
TranslationThetaOffsetUnits	deg
RotationMethod	ArbitraryAxis
RotationAngleUnits	rad
RotationStandardAxis	+Z
RotationAngle	0
RotationArbitraryAxis	[0 0 0]
FollAlignAxisA	+X
BaseAlignAxisA	+Y
FollAlignAxisB	+Y
BaseAlignAxisB	+Z

Parameter	Value
Block Function	simmechanics.library.frames_transforms.rigid_transform

3.48.1.1.11. "Transform1" (SimMechanicsBlock)

Tabla 3.213. "Transform1" Parameters

Parameter	Value
ClassName	RigidTransform
TranslationMethod	Cartesian
TranslationLengthUnit	mm
TranslationStandardAxis	+Z
TranslationStandardOffset	0
TranslationCartesianOffset	[-35.977958703403075 26.099464107792173 79.704656424721634]
TranslationROffset	0
TranslationROffsetUnits	m
TranslationZOffset	0
TranslationZOffsetUnits	m
TranslationThetaOffset	0
TranslationThetaOffsetUnits	deg
RotationMethod	ArbitraryAxis
RotationAngleUnits	rad
RotationStandardAxis	+Z
RotationAngle	0
RotationArbitraryAxis	[0 0 0]
FollAlignAxisA	+X
BaseAlignAxisA	+Y
FollAlignAxisB	+Y
BaseAlignAxisB	+Z
Block Function	simmechanics.library.frames_transforms.rigid_transform

3.48.1.1.12. "Transform2" (SimMechanicsBlock)

Tabla 3.214. "Transform2" Parameters

Parameter	Value
ClassName	RigidTransform
TranslationMethod	Cartesian
TranslationLengthUnit	mm

Parameter	Value
TranslationStandardAxis	+Z
TranslationStandardOffset	0
TranslationCartesianOffset	[36.634936862944784 -15.757938433852615 79.704656424722785]
TranslationROffset	0
TranslationROffsetUnits	m
TranslationZOffset	0
TranslationZOffsetUnits	m
TranslationThetaOffset	0
TranslationThetaOffsetUnits	deg
RotationMethod	ArbitraryAxis
RotationAngleUnits	rad
RotationStandardAxis	+Z
RotationAngle	0
RotationArbitraryAxis	[0 0 0]
FollAlignAxisA	+X
BaseAlignAxisA	+Y
FollAlignAxisB	+Y
BaseAlignAxisB	+Z
Block Function	simmechanics.library.frames_transforms.rigid_transform

3.48.1.1.13. "Transform3" (SimMechanicsBlock)

Tabla 3.215. "Transform3" Parameters

Parameter	Value
ClassName	RigidTransform
TranslationMethod	Cartesian
TranslationLengthUnit	mm
TranslationStandardAxis	+Z
TranslationStandardOffset	0
TranslationCartesianOffset	[36.63493686294499 32.342061566147436 79.704656424721975]
TranslationROffset	0
TranslationROffsetUnits	m
TranslationZOffset	0
TranslationZOffsetUnits	m
TranslationThetaOffset	0
TranslationThetaOffsetUnits	deg
RotationMethod	ArbitraryAxis

Parameter	Value
RotationAngleUnits	rad
RotationStandardAxis	+Z
RotationAngle	0
RotationArbitraryAxis	[0 0 0]
FollAlignAxisA	+X
BaseAlignAxisA	+Y
FollAlignAxisB	+Y
BaseAlignAxisB	+Z
Block Function	simmechanics.library.frames_transforms.rigid_transform

3.48.1.1.14. "Transform4" (SimMechanicsBlock)

Tabla 3.216. "Transform4" Parameters

Parameter	Value
ClassName	RigidTransform
TranslationMethod	Cartesian
TranslationLengthUnit	mm
TranslationStandardAxis	+Z
TranslationStandardOffset	0
TranslationCartesianOffset	[-35.921084857727344 -9.613849365842313 79.704656424723197]
TranslationROffset	0
TranslationROffsetUnits	m
TranslationZOffset	0
TranslationZOffsetUnits	m
TranslationThetaOffset	0
TranslationThetaOffsetUnits	deg
RotationMethod	ArbitraryAxis
RotationAngleUnits	rad
RotationStandardAxis	+Z
RotationAngle	0
RotationArbitraryAxis	[0 0 0]
FollAlignAxisA	+X
BaseAlignAxisA	+Y
FollAlignAxisB	+Y
BaseAlignAxisB	+Z
Block Function	simmechanics.library.frames_transforms.rigid_transform

3.48.1.1.15. "Transform5" (SimMechanicsBlock)

Tabla 3.217. "Transform5" Parameters

Parameter	Value
ClassName	RigidTransform
TranslationMethod	Cartesian
TranslationLengthUnit	mm
TranslationStandardAxis	+Z
TranslationStandardOffset	0
TranslationCartesianOffset	[5.7347370643039142 -33.663849365842907 79.704656424724149]
TranslationROffset	0
TranslationROffsetUnits	m
TranslationZOffset	0
TranslationZOffsetUnits	m
TranslationThetaOffset	0
TranslationThetaOffsetUnits	deg
RotationMethod	ArbitraryAxis
RotationAngleUnits	rad
RotationStandardAxis	+Z
RotationAngle	0
RotationArbitraryAxis	[0 0 0]
FollAlignAxisA	+X
BaseAlignAxisA	+Y
FollAlignAxisB	+Y
BaseAlignAxisB	+Z
Block Function	simmechanics.library.frames_transforms.rigid_transform

3.48.1.1.16. "Transform6" (SimMechanicsBlock)

Tabla 3.218. "Transform6" Parameters

Parameter	Value
ClassName	RigidTransform
TranslationMethod	Cartesian
TranslationLengthUnit	mm
TranslationStandardAxis	+Z
TranslationStandardOffset	0
TranslationCartesianOffset	[2.134936862944163 8.2920615661556809 70.704656424721904]
TranslationROffset	0
TranslationROffsetUnits	m

Parameter	Value
TranslationZOffset	0
TranslationZOffsetUnits	m
TranslationThetaOffset	0
TranslationThetaOffsetUnits	deg
RotationMethod	None
RotationAngleUnits	deg
RotationStandardAxis	+Z
RotationAngle	0
RotationArbitraryAxis	[0 0 1]
FollAlignAxisA	+X
BaseAlignAxisA	+Y
FollAlignAxisB	+Y
BaseAlignAxisB	+Z
Block Function	simmechanics.library.frames_transforms.rigid_transform

3.48.1.1.17. "Transform7" (SimMechanicsBlock)

Tabla 3.219. "Transform7" Parameters

Parameter	Value
ClassName	RigidTransform
TranslationMethod	Cartesian
TranslationLengthUnit	mm
TranslationStandardAxis	+Z
TranslationStandardOffset	0
TranslationCartesianOffset	[2.1306 8.2592 79.7047]
TranslationROffset	0
TranslationROffsetUnits	m
TranslationZOffset	0
TranslationZOffsetUnits	m
TranslationThetaOffset	0
TranslationThetaOffsetUnits	deg
RotationMethod	ArbitraryAxis
RotationAngleUnits	rad
RotationStandardAxis	+Z
RotationAngle	0
RotationArbitraryAxis	[0 0 0]
FollAlignAxisA	+X

Parameter	Value
BaseAlignAxisA	+Y
FollAlignAxisB	+Y
BaseAlignAxisB	+Z
Block Function	simmechanics.library.frames_transforms.rigid_transform

3.49. Brazo_1_RIGID

Figura 3.49. DeltaSM_AnguloSinFriccions/DeltaSM/BrazoCompleto_1_RIGID/ Brazo_1_RIGID
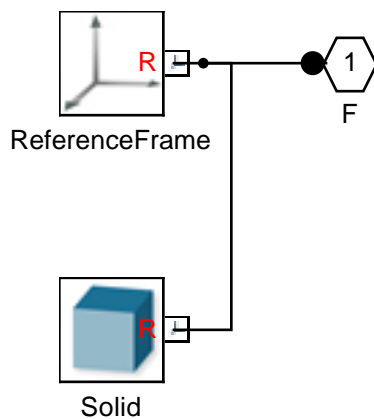
3.49.1. Blocks

3.49.1.1. Parameters

3.49.1.1.1. "F" (PMIOPort)

Tabla 3.220. "F" Parameters

Parameter	Value
Port number	1
Port location on parent subsystem	Left

3.49.1.1.2. "ReferenceFrame" (SimMechanicsBlock)

Tabla 3.221. "ReferenceFrame" Parameters

Parameter	Value
ClassName	ReferenceFrame

Parameter	Value
Block Function	simmechanics.library.frames_transforms.reference_frame

3.49.1.1.3. "Solid" (SimMechanicsBlock)

Tabla 3.222. "Solid" Parameters

Parameter	Value
ClassName	Solid
InertiaType	Custom
Mass	0.039779095334176229
MassUnits	kg
CenterOfMass	[0 15.149188933492065 3.2000000000000002]
CenterOfMassUnits	mm
MomentsOfInertia	[98.902663578429497 1.1255593715349028 99.756664325816416]
MomentsOfInertiaUnits	kg*mm^2
ProductsOfInertia	[0 0 0]
ProductsOfInertiaUnits	kg*mm^2
DensityBased	on
Density	1000
DensityUnits	kg/(m^3)
GraphicType	FromGeometry
MarkerShape	Sphere
MarkerSize	10
MarkerSizeUnits	m
GraphicVisPropType	SimpleVisualProperties
GraphicDiffuseColor	[0.898039215568627454 0.91764705882352937 0.92941176470588238]
GraphicSpecularColor	[0.5 0.5 0.5 1.0]
GraphicAmbientColor	[0.15 0.15 0.15 1.0]
GraphicEmissiveColor	[0.0 0.0 0.0 1.0]
GraphicShininess	75
GraphicOpacity	1
GeometryShape	FromFile
RectangleSize	[1 1]
RectangleSizeUnits	m
BrickDimensions	[1 1 1]
BrickDimensionUnits	m
CylinderRadius	1
CylinderRadiusUnits	m

Parameter	Value
CylinderLength	1
CylinderLengthUnits	m
SphereRadius	1
SphereRadiusUnits	m
EllipsoidRadii	[1 1 1]
EllipsoidRadiiUnits	m
ExtrusionCrossSection	[1 1; -1 1; -1 -1; 1 -1]
ExtrusionCrossSectionUnits	m
ExtrusionLength	1
ExtrusionLengthUnits	m
PolygonNumSides	3
PolygonOuterRadius	1
PolygonOuterRadiusUnits	m
ExtGeomFileType	STL
ExtGeomFileName	Brazo_Predeterminado_sldprt.STL
ExtGeomFileUnits	mm
RevolutionCrossSection	[1 1; 1 -1; 2 -1; 2 1]
RevolutionCrossSectionUnits	m
RevolutionExtent	Full
RevolutionAngle	180
RevolutionAngleUnits	deg
Block Function	simmechanics.library.body_elements.solid

3.50. Brazo_1_RIGID

Figura 3.50. DeltaSM_AnguloSinFriccions/DeltaSM/BrazoCompleto_2_RIGID/ Brazo_1_RIGID

189
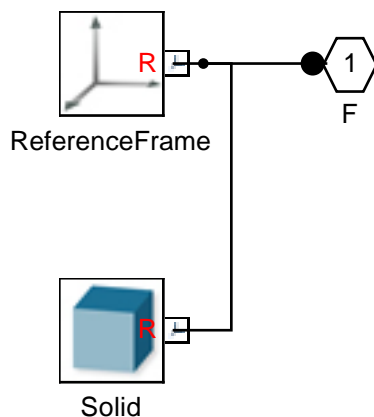
3.50.1. Blocks

3.50.1.1. Parameters

3.50.1.1.1. "F" (PMIOPort)

Tabla 3.223. "F" Parameters

Parameter	Value
Port number	1
Port location on parent subsystem	Left

3.50.1.1.2. "ReferenceFrame" (SimMechanicsBlock)

Tabla 3.224. "ReferenceFrame" Parameters

Parameter	Value
ClassName	ReferenceFrame
Block Function	simmechanics.library.frames_transforms.reference_frame

3.50.1.1.3. "Solid" (SimMechanicsBlock)

Tabla 3.225. "Solid" Parameters

Parameter	Value
ClassName	Solid
InertiaType	Custom
Mass	0.039779095334176229
MassUnits	kg
CenterOfMass	[0 15.149188933492065 3.2000000000000002]
CenterOfMassUnits	mm
MomentsOfInertia	[98.902663578429497 1.1255593715349028 99.756664325816416]
MomentsOfInertiaUnits	kg*mm^2
ProductsOfInertia	[0 0 0]
ProductsOfInertiaUnits	kg*mm^2
DensityBased	on
Density	1000
DensityUnits	kg/(m^3)
GraphicType	FromGeometry
MarkerShape	Sphere
MarkerSize	10

Parameter	Value
MarkerSizeUnits	m
GraphicVisPropType	SimpleVisualProperties
GraphicDiffuseColor	[0.89803921568627454 0.91764705882352937 0.92941176470588238]
GraphicSpecularColor	[0.5 0.5 0.5 1.0]
GraphicAmbientColor	[0.15 0.15 0.15 1.0]
GraphicEmissiveColor	[0.0 0.0 0.0 1.0]
GraphicShininess	75
GraphicOpacity	1
GeometryShape	FromFile
RectangleSize	[1 1]
RectangleSizeUnits	m
BrickDimensions	[1 1 1]
BrickDimensionUnits	m
CylinderRadius	1
CylinderRadiusUnits	m
CylinderLength	1
CylinderLengthUnits	m
SphereRadius	1
SphereRadiusUnits	m
EllipsoidRadii	[1 1 1]
EllipsoidRadiiUnits	m
ExtrusionCrossSection	[1 1; -1 1; -1 -1; 1 -1]
ExtrusionCrossSectionUnits	m
ExtrusionLength	1
ExtrusionLengthUnits	m
PolygonNumSides	3
PolygonOuterRadius	1
PolygonOuterRadiusUnits	m
ExtGeomFileType	STL
ExtGeomFileName	Brazo_Predeterminado_sldprt.STL
ExtGeomFileUnits	mm
RevolutionCrossSection	[1 1; 1 -1; 2 -1; 2 1]
RevolutionCrossSectionUnits	m
RevolutionExtent	Full
RevolutionAngle	180
RevolutionAngleUnits	deg
Block Function	simmechanics.library.body_elements.solid

3.51. Brazo_1_RIGID

Figura 3.51. DeltaSM_AnguloSinFriccions/DeltaSM/BrazoCompleto_3_RIGID/ Brazo_1_RIGID

3.51.1. Blocks

3.51.1.1. Parameters

3.51.1.1.1. "F" (PMIOPort)

Tabla 3.226. "F" Parameters

Parameter	Value
Port number	1
Port location on parent subsystem	Left

3.51.1.1.2. "ReferenceFrame" (SimMechanicsBlock)

Tabla 3.227. "ReferenceFrame" Parameters

Parameter	Value
ClassName	ReferenceFrame
Block Function	simmechanics.library.frames_transforms.reference_frame
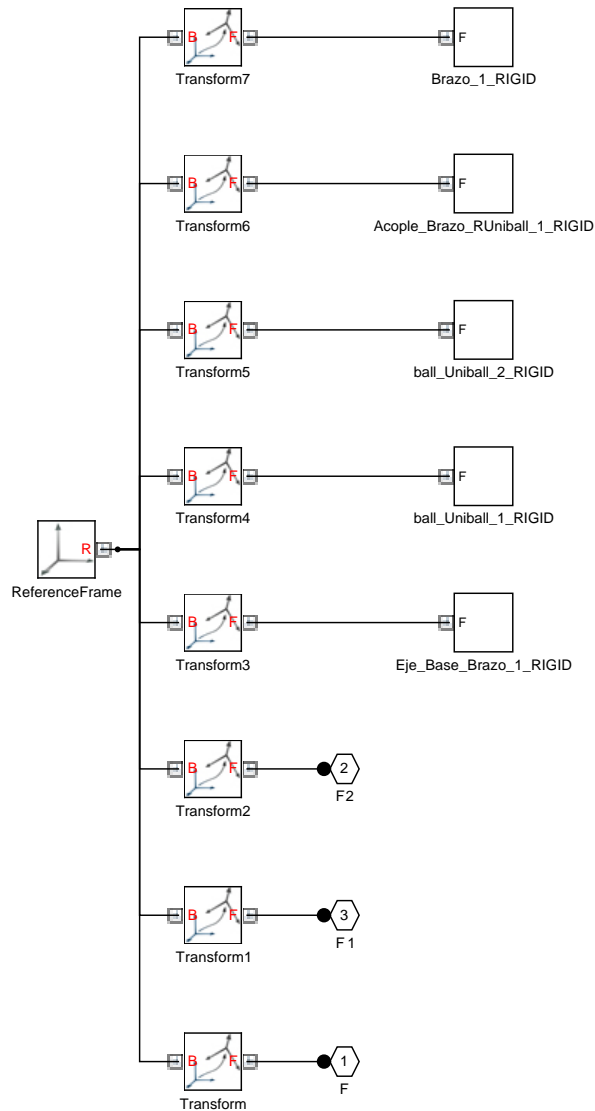
### 3.51.1.1.3. "Solid" (SimMechanicsBlock)

Tabla 3.228. "Solid" Parameters

Parameter	Value
ClassName	Solid
InertiaType	Custom
Mass	0.039779095334176229
MassUnits	kg
CenterOfMass	[0 15.149188933492065 3.2000000000000002]
CenterOfMassUnits	mm
MomentsOfInertia	[98.902663578429497 1.1255593715349028 99.756664325816416]
MomentsOfInertiaUnits	kg*mm^2
ProductsOfInertia	[0 0 0]
ProductsOfInertiaUnits	kg*mm^2
DensityBased	on
Density	1000
DensityUnits	kg/(m^3)
GraphicType	FromGeometry
MarkerShape	Sphere
MarkerSize	10
MarkerSizeUnits	m
GraphicVisPropType	SimpleVisualProperties
GraphicDiffuseColor	[0.898039215686627454 0.91764705882352937 0.92941176470588238]
GraphicSpecularColor	[0.5 0.5 0.5 1.0]
GraphicAmbientColor	[0.15 0.15 0.15 1.0]
GraphicEmissiveColor	[0.0 0.0 0.0 1.0]
GraphicShininess	75
GraphicOpacity	1
GeometryShape	FromFile
RectangleSize	[1 1]
RectangleSizeUnits	m
BrickDimensions	[1 1 1]
BrickDimensionUnits	m
CylinderRadius	1
CylinderRadiusUnits	m
CylinderLength	1
CylinderLengthUnits	m
SphereRadius	1
SphereRadiusUnits	m

Parameter	Value
EllipsoidRadii	[1 1 1]
EllipsoidRadiiUnits	m
ExtrusionCrossSection	[1 1; -1 1; -1 -1; 1 -1]
ExtrusionCrossSectionUnits	m
ExtrusionLength	1
ExtrusionLengthUnits	m
PolygonNumSides	3
PolygonOuterRadius	1
PolygonOuterRadiusUnits	m
ExtGeomFileType	STL
ExtGeomFileName	Brazo_Predeterminado_sldprt.STL
ExtGeomFileUnits	mm
RevolutionCrossSection	[1 1; 1 -1; 2 -1; 2 1]
RevolutionCrossSectionUnits	m
RevolutionExtent	Full
RevolutionAngle	180
RevolutionAngleUnits	deg
Block Function	simmechanics.library.body_elements.solid

3.52. BrazoCompleto_1_RIGID

Figura 3.52. DeltaSM_AnguloSinFriccions/DeltaSM/BrazoCompleto_1_RIGID

3.52.1. Blocks

3.52.1.1. Parameters

3.52.1.1.1. "F" (PMIOPort)

Tabla 3.229. "F" Parameters

Parameter	Value
Port number	1

Parameter	Value
Port location on parent subsystem	Left

3.52.1.1.2. "F1" (PMIOPort)

Tabla 3.230. "F1" Parameters

Parameter	Value
Port number	3
Port location on parent subsystem	Right

3.52.1.1.3. "F2" (PMIOPort)

Tabla 3.231. "F2" Parameters

Parameter	Value
Port number	2
Port location on parent subsystem	Right

3.52.1.1.4. "ReferenceFrame" (SimMechanicsBlock)

Tabla 3.232. "ReferenceFrame" Parameters

Parameter	Value
ClassName	ReferenceFrame
Block Function	simmechanics.library.frames_transforms.reference_frame

3.52.1.1.5. "Transform" (SimMechanicsBlock)

Tabla 3.233. "Transform" Parameters

Parameter	Value
ClassName	RigidTransform
TranslationMethod	Cartesian
TranslationLengthUnit	mm
TranslationStandardAxis	+Z
TranslationStandardOffset	0
TranslationCartesianOffset	[-6.0000000000000213 124.97640195117157 -12.450000000000028]
TranslationROffset	0
TranslationROffsetUnits	m

Parameter	Value
TranslationZOffset	0
TranslationZOffsetUnits	m
TranslationThetaOffset	0
TranslationThetaOffsetUnits	deg
RotationMethod	ArbitraryAxis
RotationAngleUnits	rad
RotationStandardAxis	+Z
RotationAngle	3.1415926535897931
RotationArbitraryAxis	[-1 -4.4756672009817877e-33 2.2681539119672926e-16]
FollAlignAxisA	+X
BaseAlignAxisA	+Y
FollAlignAxisB	+Y
BaseAlignAxisB	+Z
Block Function	simmechanics.library.frames_transforms.rigid_transform

3.52.1.1.6. "Transform1" (SimMechanicsBlock)

Tabla 3.234. "Transform1" Parameters

Parameter	Value
ClassName	RigidTransform
TranslationMethod	Cartesian
TranslationLengthUnit	mm
TranslationStandardAxis	+Z
TranslationStandardOffset	0
TranslationCartesianOffset	[-5.9999999999999911 -5.0235980488284868 -27.250000000000011]
TranslationROffset	0
TranslationROffsetUnits	m
TranslationZOffset	0
TranslationZOffsetUnits	m
TranslationThetaOffset	0
TranslationThetaOffsetUnits	deg
RotationMethod	ArbitraryAxis
RotationAngleUnits	rad
RotationStandardAxis	+Z
RotationAngle	0
RotationArbitraryAxis	[0 0 0]
FollAlignAxisA	+X
BaseAlignAxisA	+Y

Parameter	Value
FollAlignAxisB	+Y
BaseAlignAxisB	+Z
Block Function	simmechanics.library.frames_transforms.rigid_transform

3.52.1.1.7. "Transform2" (SimMechanicsBlock)

Tabla 3.235. "Transform2" Parameters

Parameter	Value
ClassName	RigidTransform
TranslationMethod	Cartesian
TranslationLengthUnit	mm
TranslationStandardAxis	+Z
TranslationStandardOffset	0
TranslationCartesianOffset	[-6.0000000000000053 -5.0235980488284868 20.849999999999991]
TranslationROffset	0
TranslationROffsetUnits	m
TranslationZOffset	0
TranslationZOffsetUnits	m
TranslationThetaOffset	0
TranslationThetaOffsetUnits	deg
RotationMethod	ArbitraryAxis
RotationAngleUnits	rad
RotationStandardAxis	+Z
RotationAngle	0
RotationArbitraryAxis	[0 0 0]
FollAlignAxisA	+X
BaseAlignAxisA	+Y
FollAlignAxisB	+Y
BaseAlignAxisB	+Z
Block Function	simmechanics.library.frames_transforms.rigid_transform

3.52.1.1.8. "Transform3" (SimMechanicsBlock)

Tabla 3.236. "Transform3" Parameters

Parameter	Value
ClassName	RigidTransform
TranslationMethod	Cartesian

Parameter	Value
TranslationLengthUnit	mm
TranslationStandardAxis	+Z
TranslationStandardOffset	0
TranslationCartesianOffset	[-6.0000000000000053 124.97640195117155 26.04999999999999]
TranslationROffset	0
TranslationROffsetUnits	m
TranslationZOffset	0
TranslationZOffsetUnits	m
TranslationThetaOffset	0
TranslationThetaOffsetUnits	deg
RotationMethod	ArbitraryAxis
RotationAngleUnits	rad
RotationStandardAxis	+Z
RotationAngle	3.1415926535897931
RotationArbitraryAxis	[-0 -1 -0]
FollAlignAxisA	+X
BaseAlignAxisA	+Y
FollAlignAxisB	+Y
BaseAlignAxisB	+Z
Block Function	simmechanics.library.frames_transforms.rigid_transform

3.52.1.1.9. "Transform4" (SimMechanicsBlock)

Tabla 3.237. "Transform4" Parameters

Parameter	Value
ClassName	RigidTransform
TranslationMethod	Cartesian
TranslationLengthUnit	mm
TranslationStandardAxis	+Z
TranslationStandardOffset	0
TranslationCartesianOffset	[-6.0000000000000053 -5.0235980488284868 20.849999999999991]
TranslationROffset	0
TranslationROffsetUnits	m
TranslationZOffset	0
TranslationZOffsetUnits	m
TranslationThetaOffset	0
TranslationThetaOffsetUnits	deg
RotationMethod	ArbitraryAxis

Parameter	Value
RotationAngleUnits	rad
RotationStandardAxis	+Z
RotationAngle	0.39309481042652006
RotationArbitraryAxis	[-1.4491918804836965e-16 4.736888055505285e-16 -1]
FollAlignAxisA	+X
BaseAlignAxisA	+Y
FollAlignAxisB	+Y
BaseAlignAxisB	+Z
Block Function	simmechanics.library.frames_transforms.rigid_transform

3.52.1.1.10. "Transform5" (SimMechanicsBlock)

Tabla 3.238. "Transform5" Parameters

Parameter	Value
ClassName	RigidTransform
TranslationMethod	Cartesian
TranslationLengthUnit	mm
TranslationStandardAxis	+Z
TranslationStandardOffset	0
TranslationCartesianOffset	[-5.9999999999999911 -5.0235980488284868 -27.250000000000011]
TranslationROffset	0
TranslationROffsetUnits	m
TranslationZOffset	0
TranslationZOffsetUnits	m
TranslationThetaOffset	0
TranslationThetaOffsetUnits	deg
RotationMethod	ArbitraryAxis
RotationAngleUnits	rad
RotationStandardAxis	+Z
RotationAngle	3.1415926535897931
RotationArbitraryAxis	[-0 -1 -9.7144514654701197e-17]
FollAlignAxisA	+X
BaseAlignAxisA	+Y
FollAlignAxisB	+Y
BaseAlignAxisB	+Z
Block Function	simmechanics.library.frames_transforms.rigid_transform

3.52.1.1.11. "Transform6" (SimMechanicsBlock)

Tabla 3.239. "Transform6" Parameters

Parameter	Value
ClassName	RigidTransform
TranslationMethod	Cartesian
TranslationLengthUnit	mm
TranslationStandardAxis	+Z
TranslationStandardOffset	0
TranslationCartesianOffset	[-6.0000000000000053 -5.0235980488284868 24.54999999999999]
TranslationROffset	0
TranslationROffsetUnits	m
TranslationZOffset	0
TranslationZOffsetUnits	m
TranslationThetaOffset	0
TranslationThetaOffsetUnits	deg
RotationMethod	ArbitraryAxis
RotationAngleUnits	rad
RotationStandardAxis	+Z
RotationAngle	3.1415926535897931
RotationArbitraryAxis	[-0 -1 -0]
FollAlignAxisA	+X
BaseAlignAxisA	+Y
FollAlignAxisB	+Y
BaseAlignAxisB	+Z
Block Function	simmechanics.library.frames_transforms.rigid_transform

### 3.52.1.1.12. "Transform7" (SimMechanicsBlock)

Tabla 3.240. "Transform7" Parameters

Parameter	Value
ClassName	RigidTransform
TranslationMethod	Cartesian
TranslationLengthUnit	mm
TranslationStandardAxis	+Z
TranslationStandardOffset	0
TranslationCartesianOffset	[-6.0000000000000053 44.82721301767949 0]
TranslationROffset	0
TranslationROffsetUnits	m

Parameter	Value
TranslationZOffset	0
TranslationZOffsetUnits	m
TranslationThetaOffset	0
TranslationThetaOffsetUnits	deg
RotationMethod	ArbitraryAxis
RotationAngleUnits	rad
RotationStandardAxis	+Z
RotationAngle	3.1415926535897931
RotationArbitraryAxis	[-0 -1 -0]
FollAlignAxisA	+X
BaseAlignAxisA	+Y
FollAlignAxisB	+Y
BaseAlignAxisB	+Z
Block Function	simmechanics.library.frames_transforms.rigid_transform

3.53. BrazoCompleto_2_RIGID

Figura 3.53. DeltaSM_AnguloSinFriccions/DeltaSM/BrazoCompleto_2_RIGID
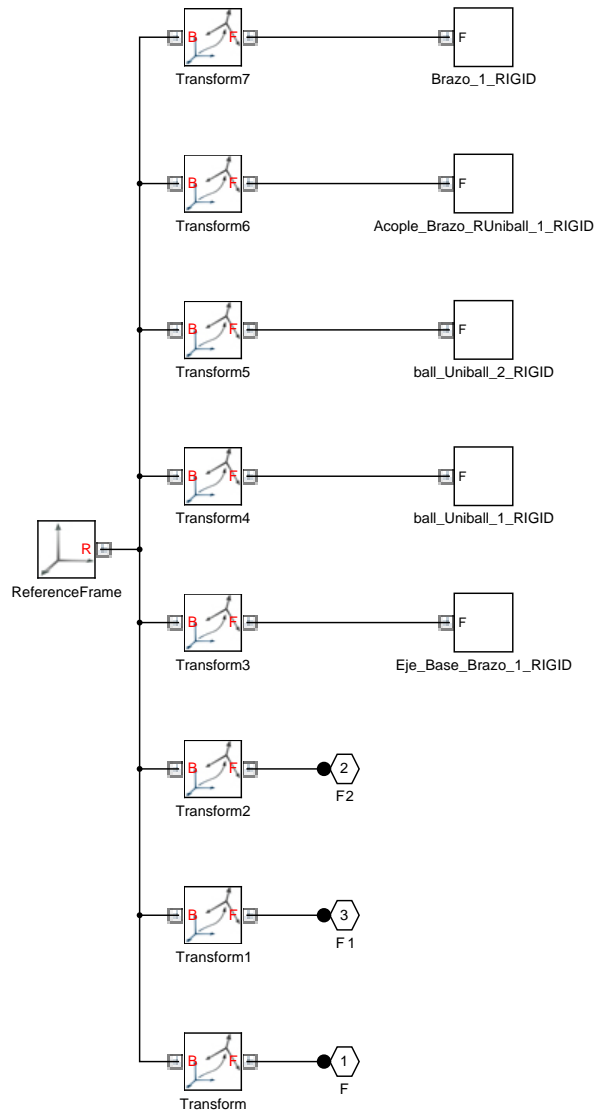
3.53.1. Blocks

3.53.1.1. Parameters

3.53.1.1.1. "F" (PMIOPort)

Tabla 3.241. "F" Parameters

Parameter	Value
Port number	1

Parameter	Value
Port location on parent subsystem	Left

3.53.1.1.2. "F1" (PMIOPort)

Tabla 3.242. "F1" Parameters

Parameter	Value
Port number	3
Port location on parent subsystem	Right

3.53.1.1.3. "F2" (PMIOPort)

Tabla 3.243. "F2" Parameters

Parameter	Value
Port number	2
Port location on parent subsystem	Right

3.53.1.1.4. "ReferenceFrame" (SimMechanicsBlock)

Tabla 3.244. "ReferenceFrame" Parameters

Parameter	Value
ClassName	ReferenceFrame
Block Function	simmechanics.library.frames_transforms.reference_frame

### 3.53.1.1.5. "Transform" (SimMechanicsBlock)

Tabla 3.245. "Transform" Parameters

Parameter	Value
ClassName	RigidTransform
TranslationMethod	Cartesian
TranslationLengthUnit	mm
TranslationStandardAxis	+Z
TranslationStandardOffset	0
TranslationCartesianOffset	[-6.0000000000000213 124.97640195117158 -12.450000000000017]
TranslationROffset	0
TranslationROffsetUnits	m

Parameter	Value
TranslationZOffset	0
TranslationZOffsetUnits	m
TranslationThetaOffset	0
TranslationThetaOffsetUnits	deg
RotationMethod	ArbitraryAxis
RotationAngleUnits	rad
RotationStandardAxis	+Z
RotationAngle	3.1415926535897931
RotationArbitraryAxis	[1 5.6234215136592416e-33 4.2651856011543809e-17]
FollAlignAxisA	+X
BaseAlignAxisA	+Y
FollAlignAxisB	+Y
BaseAlignAxisB	+Z
Block Function	simmechanics.library.frames_transforms.rigid_transform

3.53.1.1.6. "Transform1" (SimMechanicsBlock)

Tabla 3.246. "Transform1" Parameters

Parameter	Value
ClassName	RigidTransform
TranslationMethod	Cartesian
TranslationLengthUnit	mm
TranslationStandardAxis	+Z
TranslationStandardOffset	0
TranslationCartesianOffset	[-6.0000000000000124 -5.0235980488284735 -27.249999999999996]
TranslationROffset	0
TranslationROffsetUnits	m
TranslationZOffset	0
TranslationZOffsetUnits	m
TranslationThetaOffset	0
TranslationThetaOffsetUnits	deg
RotationMethod	ArbitraryAxis
RotationAngleUnits	rad
RotationStandardAxis	+Z
RotationAngle	0
RotationArbitraryAxis	[0 0 0]
FollAlignAxisA	+X
BaseAlignAxisA	+Y

Parameter	Value
FollAlignAxisB	+Y
BaseAlignAxisB	+Z
Block Function	simmechanics.library.frames_transforms.rigid_transform

3.53.1.1.7. "Transform2" (SimMechanicsBlock)

Tabla 3.247. "Transform2" Parameters

Parameter	Value
ClassName	RigidTransform
TranslationMethod	Cartesian
TranslationLengthUnit	mm
TranslationStandardAxis	+Z
TranslationStandardOffset	0
TranslationCartesianOffset	[-6.0000000000000124 -5.0235980488284868 20.850000000000005]
TranslationROffset	0
TranslationROffsetUnits	m
TranslationZOffset	0
TranslationZOffsetUnits	m
TranslationThetaOffset	0
TranslationThetaOffsetUnits	deg
RotationMethod	ArbitraryAxis
RotationAngleUnits	rad
RotationStandardAxis	+Z
RotationAngle	0
RotationArbitraryAxis	[0 0 0]
FollAlignAxisA	+X
BaseAlignAxisA	+Y
FollAlignAxisB	+Y
BaseAlignAxisB	+Z
Block Function	simmechanics.library.frames_transforms.rigid_transform

3.53.1.1.8. "Transform3" (SimMechanicsBlock)

Tabla 3.248. "Transform3" Parameters

Parameter	Value
ClassName	RigidTransform
TranslationMethod	Cartesian

Parameter	Value
TranslationLengthUnit	mm
TranslationStandardAxis	+Z
TranslationStandardOffset	0
TranslationCartesianOffset	[-6.0000000000000124 124.97640195117162 26.050000000000001]
TranslationROffset	0
TranslationROffsetUnits	m
TranslationZOffset	0
TranslationZOffsetUnits	m
TranslationThetaOffset	0
TranslationThetaOffsetUnits	deg
RotationMethod	ArbitraryAxis
RotationAngleUnits	rad
RotationStandardAxis	+Z
RotationAngle	3.1415926535897931
RotationArbitraryAxis	[0 1 0]
FollAlignAxisA	+X
BaseAlignAxisA	+Y
FollAlignAxisB	+Y
BaseAlignAxisB	+Z
Block Function	simmechanics.library.frames_transforms.rigid_transform

3.53.1.1.9. "Transform4" (SimMechanicsBlock)

Tabla 3.249. "Transform4" Parameters

Parameter	Value
ClassName	RigidTransform
TranslationMethod	Cartesian
TranslationLengthUnit	mm
TranslationStandardAxis	+Z
TranslationStandardOffset	0
TranslationCartesianOffset	[-6.0000000000000124 -5.0235980488284868 20.850000000000005]
TranslationROffset	0
TranslationROffsetUnits	m
TranslationZOffset	0
TranslationZOffsetUnits	m
TranslationThetaOffset	0
TranslationThetaOffsetUnits	deg
RotationMethod	ArbitraryAxis

Parameter	Value
RotationAngleUnits	rad
RotationStandardAxis	+Z
RotationAngle	0.39309481042652017
RotationArbitraryAxis	[0 0 -1]
FollAlignAxisA	+X
BaseAlignAxisA	+Y
FollAlignAxisB	+Y
BaseAlignAxisB	+Z
Block Function	simmechanics.library.frames_transforms.rigid_transform

3.53.1.1.10. "Transform5" (SimMechanicsBlock)

Tabla 3.250. "Transform5" Parameters

Parameter	Value
ClassName	RigidTransform
TranslationMethod	Cartesian
TranslationLengthUnit	mm
TranslationStandardAxis	+Z
TranslationStandardOffset	0
TranslationCartesianOffset	[-6.0000000000000124 -5.0235980488284735 -27.249999999999996]
TranslationROffset	0
TranslationROffsetUnits	m
TranslationZOffset	0
TranslationZOffsetUnits	m
TranslationThetaOffset	0
TranslationThetaOffsetUnits	deg
RotationMethod	ArbitraryAxis
RotationAngleUnits	rad
RotationStandardAxis	+Z
RotationAngle	3.1415926535897931
RotationArbitraryAxis	[0 1 1.0522279850453055e-16]
FollAlignAxisA	+X
BaseAlignAxisA	+Y
FollAlignAxisB	+Y
BaseAlignAxisB	+Z
Block Function	simmechanics.library.frames_transforms.rigid_transform

3.53.1.1.11. "Transform6" (SimMechanicsBlock)

Tabla 3.251. "Transform6" Parameters

Parameter	Value
ClassName	RigidTransform
TranslationMethod	Cartesian
TranslationLengthUnit	mm
TranslationStandardAxis	+Z
TranslationStandardOffset	0
TranslationCartesianOffset	[-6.0000000000000258 -5.0235980488284868 24.550000000000001]
TranslationROffset	0
TranslationROffsetUnits	m
TranslationZOffset	0
TranslationZOffsetUnits	m
TranslationThetaOffset	0
TranslationThetaOffsetUnits	deg
RotationMethod	ArbitraryAxis
RotationAngleUnits	rad
RotationStandardAxis	+Z
RotationAngle	3.1415926535897931
RotationArbitraryAxis	[0 1 0]
FollAlignAxisA	+X
BaseAlignAxisA	+Y
FollAlignAxisB	+Y
BaseAlignAxisB	+Z
Block Function	simmechanics.library.frames_transforms.rigid_transform

3.53.1.1.12. "Transform7" (SimMechanicsBlock)

Tabla 3.252. "Transform7" Parameters

Parameter	Value
ClassName	RigidTransform
TranslationMethod	Cartesian
TranslationLengthUnit	mm
TranslationStandardAxis	+Z
TranslationStandardOffset	0
TranslationCartesianOffset	[-6.0000000000000124 44.82721301767949 0]
TranslationROffset	0
TranslationROffsetUnits	m

Parameter	Value
TranslationZOffset	0
TranslationZOffsetUnits	m
TranslationThetaOffset	0
TranslationThetaOffsetUnits	deg
RotationMethod	ArbitraryAxis
RotationAngleUnits	rad
RotationStandardAxis	+Z
RotationAngle	3.1415926535897931
RotationArbitraryAxis	[0 1 0]
FollAlignAxisA	+X
BaseAlignAxisA	+Y
FollAlignAxisB	+Y
BaseAlignAxisB	+Z
Block Function	simmechanics.library.frames_transforms.rigid_transform

3.54. BrazoCompleto_3_RIGID

Figura 3.54. DeltaSM_AnguloSinFriccions/DeltaSM/BrazoCompleto_3_RIGID

3.54.1. Blocks

3.54.1.1. Parameters

3.54.1.1.1. "F" (PMIOPort)

Tabla 3.253. "F" Parameters

Parameter	Value
Port number	1

Parameter	Value
Port location on parent subsystem	Left

3.54.1.1.2. "F1" (PMIOPort)

Tabla 3.254. "F1" Parameters

Parameter	Value
Port number	3
Port location on parent subsystem	Right

3.54.1.1.3. "F2" (PMIOPort)

Tabla 3.255. "F2" Parameters

Parameter	Value
Port number	2
Port location on parent subsystem	Right

3.54.1.1.4. "ReferenceFrame" (SimMechanicsBlock)

Tabla 3.256. "ReferenceFrame" Parameters

Parameter	Value
ClassName	ReferenceFrame
Block Function	simmechanics.library.frames_transforms.reference_frame

3.54.1.1.5. "Transform" (SimMechanicsBlock)

Tabla 3.257. "Transform" Parameters

Parameter	Value
ClassName	RigidTransform
TranslationMethod	Cartesian
TranslationLengthUnit	mm
TranslationStandardAxis	+Z
TranslationStandardOffset	0
TranslationCartesianOffset	[-6.0000000000000426 124.97640195117162 -12.449999999999967]
TranslationROffset	0
TranslationROffsetUnits	m

Parameter	Value
TranslationZOffset	0
TranslationZOffsetUnits	m
TranslationThetaOffset	0
TranslationThetaOffsetUnits	deg
RotationMethod	ArbitraryAxis
RotationAngleUnits	rad
RotationStandardAxis	+Z
RotationAngle	4.5159153695772639e-16
RotationArbitraryAxis	[0.54102487993210191 -0.84100658695069364 -1.0273831376344183e-16]
FollAlignAxisA	+X
BaseAlignAxisA	+Y
FollAlignAxisB	+Y
BaseAlignAxisB	+Z
Block Function	simmechanics.library.frames_transforms.rigid_transform

3.54.1.1.6. "Transform1" (SimMechanicsBlock)

Tabla 3.258. "Transform1" Parameters

Parameter	Value
ClassName	RigidTransform
TranslationMethod	Cartesian
TranslationLengthUnit	mm
TranslationStandardAxis	+Z
TranslationStandardOffset	0
TranslationCartesianOffset	[-5.9999999999999911 -5.0235980488284868 -27.249999999999993]
TranslationROffset	0
TranslationROffsetUnits	m
TranslationZOffset	0
TranslationZOffsetUnits	m
TranslationThetaOffset	0
TranslationThetaOffsetUnits	deg
RotationMethod	ArbitraryAxis
RotationAngleUnits	rad
RotationStandardAxis	+Z
RotationAngle	0
RotationArbitraryAxis	[0 0 0]
FollAlignAxisA	+X

Parameter	Value
BaseAlignAxisA	+Y
FollAlignAxisB	+Y
BaseAlignAxisB	+Z
Block Function	simmechanics.library.frames_transforms.rigid_transform

3.54.1.1.7. "Transform2" (SimMechanicsBlock)

Tabla 3.259. "Transform2" Parameters

Parameter	Value
ClassName	RigidTransform
TranslationMethod	Cartesian
TranslationLengthUnit	mm
TranslationStandardAxis	+Z
TranslationStandardOffset	0
TranslationCartesianOffset	[-6.0000000000000053 -5.0235980488284868 20.850000000000001]
TranslationROffset	0
TranslationROffsetUnits	m
TranslationZOffset	0
TranslationZOffsetUnits	m
TranslationThetaOffset	0
TranslationThetaOffsetUnits	deg
RotationMethod	ArbitraryAxis
RotationAngleUnits	rad
RotationStandardAxis	+Z
RotationAngle	0
RotationArbitraryAxis	[0 0 0]
FollAlignAxisA	+X
BaseAlignAxisA	+Y
FollAlignAxisB	+Y
BaseAlignAxisB	+Z
Block Function	simmechanics.library.frames_transforms.rigid_transform

3.54.1.1.8. "Transform3" (SimMechanicsBlock)

Tabla 3.260. "Transform3" Parameters

Parameter	Value
ClassName	RigidTransform

Parameter	Value
TranslationMethod	Cartesian
TranslationLengthUnit	mm
TranslationStandardAxis	+Z
TranslationStandardOffset	0
TranslationCartesianOffset	[-6.0000000000000329 124.97640195117161 26.049999999999997]
TranslationROffset	0
TranslationROffsetUnits	m
TranslationZOffset	0
TranslationZOffsetUnits	m
TranslationThetaOffset	0
TranslationThetaOffsetUnits	deg
RotationMethod	ArbitraryAxis
RotationAngleUnits	rad
RotationStandardAxis	+Z
RotationAngle	3.1415926535897931
RotationArbitraryAxis	[1.1102230246251565e-16 1 0]
FollAlignAxisA	+X
BaseAlignAxisA	+Y
FollAlignAxisB	+Y
BaseAlignAxisB	+Z
Block Function	simmechanics.library.frames_transforms.rigid_transform

3.54.1.1.9. "Transform4" (SimMechanicsBlock)

Tabla 3.261. "Transform4" Parameters

Parameter	Value
ClassName	RigidTransform
TranslationMethod	Cartesian
TranslationLengthUnit	mm
TranslationStandardAxis	+Z
TranslationStandardOffset	0
TranslationCartesianOffset	[-6.0000000000000053 -5.0235980488284868 20.850000000000001]
TranslationROffset	0
TranslationROffsetUnits	m
TranslationZOffset	0
TranslationZOffsetUnits	m
TranslationThetaOffset	0
TranslationThetaOffsetUnits	deg

Parameter	Value
RotationMethod	ArbitraryAxis
RotationAngleUnits	rad
RotationStandardAxis	+Z
RotationAngle	0.39309481042652039
RotationArbitraryAxis	[0 2.173787820725543e-16 -1]
FollAlignAxisA	+X
BaseAlignAxisA	+Y
FollAlignAxisB	+Y
BaseAlignAxisB	+Z
Block Function	simmechanics.library.frames_transforms.rigid_transform

3.54.1.1.10. "Transform5" (SimMechanicsBlock)

Tabla 3.262. "Transform5" Parameters

Parameter	Value
ClassName	RigidTransform
TranslationMethod	Cartesian
TranslationLengthUnit	mm
TranslationStandardAxis	+Z
TranslationStandardOffset	0
TranslationCartesianOffset	[-5.9999999999999911 -5.0235980488284868 -27.249999999999993]
TranslationROffset	0
TranslationROffsetUnits	m
TranslationZOffset	0
TranslationZOffsetUnits	m
TranslationThetaOffset	0
TranslationThetaOffsetUnits	deg
RotationMethod	ArbitraryAxis
RotationAngleUnits	rad
RotationStandardAxis	+Z
RotationAngle	3.1415926535897931
RotationArbitraryAxis	[8.3266726846886741e-17 1 1.040834085586084e-16]
FollAlignAxisA	+X
BaseAlignAxisA	+Y
FollAlignAxisB	+Y
BaseAlignAxisB	+Z
Block Function	simmechanics.library.frames_transforms.rigid_transform

3.54.1.1.11. "Transform6" (SimMechanicsBlock)

Tabla 3.263. "Transform6" Parameters

Parameter	Value
ClassName	RigidTransform
TranslationMethod	Cartesian
TranslationLengthUnit	mm
TranslationStandardAxis	+Z
TranslationStandardOffset	0
TranslationCartesianOffset	[-5.9999999999999911 -5.0235980488284868 24.54999999999999]
TranslationROffset	0
TranslationROffsetUnits	m
TranslationZOffset	0
TranslationZOffsetUnits	m
TranslationThetaOffset	0
TranslationThetaOffsetUnits	deg
RotationMethod	ArbitraryAxis
RotationAngleUnits	rad
RotationStandardAxis	+Z
RotationAngle	3.1415926535897931
RotationArbitraryAxis	[1.1102230246251565e-16 1 0]
FollAlignAxisA	+X
BaseAlignAxisA	+Y
FollAlignAxisB	+Y
BaseAlignAxisB	+Z
Block Function	simmechanics.library.frames_transforms.rigid_transform

3.54.1.1.12. "Transform7" (SimMechanicsBlock)

Tabla 3.264. "Transform7" Parameters

Parameter	Value
ClassName	RigidTransform
TranslationMethod	Cartesian
TranslationLengthUnit	mm
TranslationStandardAxis	+Z
TranslationStandardOffset	0
TranslationCartesianOffset	[-6.0000000000000053 44.827213017679505 0]

Parameter	Value
TranslationROffset	0
TranslationROffsetUnits	m
TranslationZOffset	0
TranslationZOffsetUnits	m
TranslationThetaOffset	0
TranslationThetaOffsetUnits	deg
RotationMethod	ArbitraryAxis
RotationAngleUnits	rad
RotationStandardAxis	+Z
RotationAngle	3.1415926535897931
RotationArbitraryAxis	[1.1102230246251565e-16 1 0]
FollAlignAxisA	+X
BaseAlignAxisA	+Y
FollAlignAxisB	+Y
BaseAlignAxisB	+Z
Block Function	simmechanics.library.frames_transforms.rigid_transform

3.55. DeltaSM

Figura 3.55. DeltaSM_AnguloSinFriccions/DeltaSM
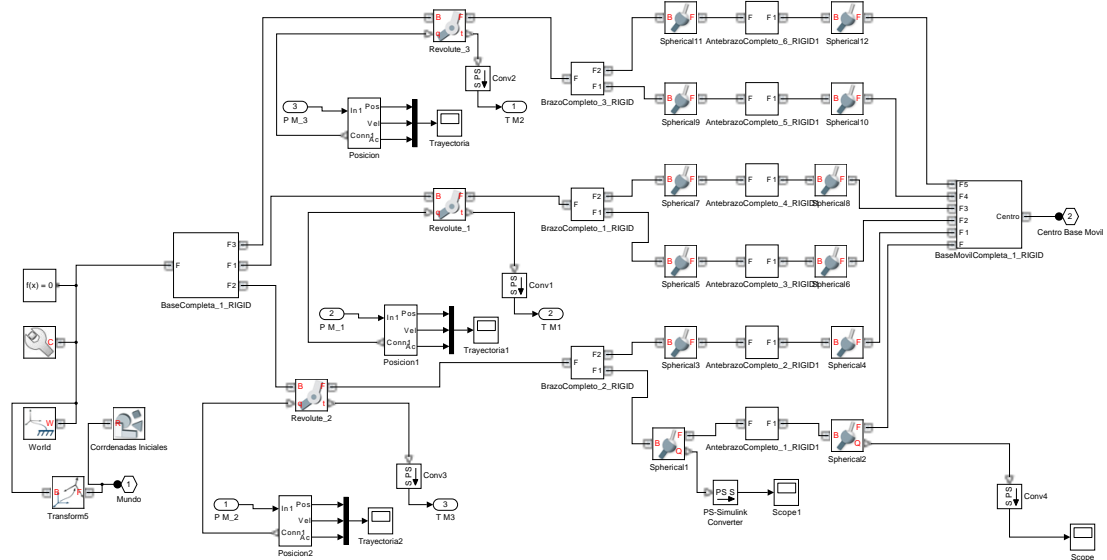
3.55.1. Blocks

3.55.1.1. Parameters

3.55.1.1.1. "Centro Base Movil" (PMIOPort)

Tabla 3.265. "Centro Base Movil" Parameters

Parameter	Value
Port number	2
Port location on parent subsystem	Left

3.55.1.1.2. "Corrdenadas Iniciales " (SimMechanicsBlock)

Tabla 3.266. "Corrdenadas Iniciales " Parameters

Parameter	Value
ClassName	Graphic
GraphicType	Marker
MarkerShape	Frame
MarkerSize	25
MarkerSizeUnits	m
GraphicVisPropType	SimpleVisualProperties
GraphicDiffuseColor	[0.0 0.0 0.0]
GraphicSpecularColor	[0.2 0.2 0.2]
GraphicAmbientColor	[0.5 0.5 0.5]
GraphicEmissiveColor	[0.0 0.0 0.0 1.0]
GraphicShininess	24.0
GraphicOpacity	1.0
Block Function	simmechanics.library.body_elements.graphic

3.55.1.1.3. "MechanismConfiguration" (SimMechanicsBlock)

Tabla 3.267. "MechanismConfiguration" Parameters

Parameter	Value
ClassName	MechanismConfiguration
UniformGravity	Constant
GravityVector	[0 0 -9.81]
GravityUnits	m/s^2
LinearizationDelta	0.001
Block Function	simmechanics.library.utilities.mechanism_configuration

3.55.1.1.4. "Mundo" (PMIOPort)

Tabla 3.268. "Mundo" Parameters

Parameter	Value
Port number	1
Port location on parent subsystem	Right

3.55.1.1.5. "Mux1" (Mux)

Tabla 3.269. "Mux1" Parameters

Parameter	Value
Number of inputs	3
Display option	bar

3.55.1.1.6. "Mux2" (Mux)

Tabla 3.270. "Mux2" Parameters

Parameter	Value
Number of inputs	3
Display option	bar

3.55.1.1.7. "Mux3" (Mux)

Tabla 3.271. "Mux3" Parameters

Parameter	Value
Number of inputs	3
Display option	bar

3.55.1.1.8. "P M_1" (Inport)

Tabla 3.272. "P M_1" Parameters

Parameter	Value
Port number	2
Port dimensions (-1 for inherited)	-1
Sample time (-1 for inherited)	-1

Parameter	Value
Minimum	[]
Maximum	[]
Data type	Inherit: auto

3.55.1.1.9. "P M_2" (Inport)

Tabla 3.273. "P M_2" Parameters

Parameter	Value
Port number	1
Port dimensions (-1 for inherited)	-1
Sample time (-1 for inherited)	-1
Minimum	[]
Maximum	[]
Data type	Inherit: auto

3.55.1.1.10. "P M_3" (Inport)

Tabla 3.274. "P M_3" Parameters

Parameter	Value
Port number	3
Port dimensions (-1 for inherited)	-1
Sample time (-1 for inherited)	-1
Minimum	[]
Maximum	[]
Data type	Inherit: auto

3.55.1.1.11. "Revolute_1" (SimMechanicsBlock)

Tabla 3.275. "Revolute_1" Parameters

Parameter	Value
ClassName	RevoluteJoint
SenseConstraintForce	off
SenseConstraintForceX	off

Parameter	Value
SenseConstraintForceY	off
SenseConstraintForceZ	off
SenseConstraintTorque	off
SenseConstraintTorqueX	off
SenseConstraintTorqueY	off
SenseConstraintTorqueZ	off
SenseTotalForce	off
SenseTotalForceX	off
SenseTotalForceY	off
SenseTotalForceZ	off
SenseTotalTorque	off
SenseTotalTorqueX	off
SenseTotalTorqueY	off
SenseTotalTorqueZ	off
CompositeWrenchDir	FollowerOnBase
CompositeWrenchFrame	BaseFrame
EquilibriumPosition	0
EquilibriumPositionUnits	rad
SpringStiffness	0
SpringStiffnessUnits	m*N/rad
DampingCoefficient	0
DampingCoefficientUnits	m*s*N/rad
TorqueActuationMode	ComputedTorque
MotionActuationMode	InputMotion
SensePosition	off
SenseVelocity	off
SenseAcceleration	off
SenseTorqueForce	on
PositionTargetValue	-154.29618803259041
PositionTargetValueUnits	deg
PositionTargetSpecify	off
PositionTargetPriority	Low
VelocityTargetValue	0
VelocityTargetValueUnits	deg/s
VelocityTargetSpecify	off
VelocityTargetPriority	High
Block Function	simmechanics.library.joints.revolute_joint

3.55.1.1.12. "Revolute_2" (SimMechanicsBlock)

Tabla 3.276. "Revolute_2" Parameters

Parameter	Value
ClassName	RevoluteJoint
SenseConstraintForce	off
SenseConstraintForceX	off
SenseConstraintForceY	off
SenseConstraintForceZ	off
SenseConstraintTorque	off
SenseConstraintTorqueX	off
SenseConstraintTorqueY	off
SenseConstraintTorqueZ	off
SenseTotalForce	off
SenseTotalForceX	off
SenseTotalForceY	off
SenseTotalForceZ	off
SenseTotalTorque	off
SenseTotalTorqueX	off
SenseTotalTorqueY	off
SenseTotalTorqueZ	off
CompositeWrenchDir	FollowerOnBase
CompositeWrenchFrame	BaseFrame
EquilibriumPosition	0
EquilibriumPositionUnits	rad
SpringStiffness	0
SpringStiffnessUnits	m*N/rad
DampingCoefficient	0
DampingCoefficientUnits	m*s*N/rad
TorqueActuationMode	ComputedTorque
MotionActuationMode	InputMotion
SensePosition	off
SenseVelocity	off
SenseAcceleration	off
SenseTorqueForce	on
PositionTargetValue	-72.758960975562829
PositionTargetValueUnits	deg
PositionTargetSpecify	off
PositionTargetPriority	Low

Parameter	Value
VelocityTargetValue	0
VelocityTargetValueUnits	deg/s
VelocityTargetSpecify	off
VelocityTargetPriority	High
Block Function	simmechanics.library.joints.revolute_joint

3.55.1.1.13. "Revolute_3" (SimMechanicsBlock)

Tabla 3.277. "Revolute_3" Parameters

Parameter	Value
ClassName	RevoluteJoint
SenseConstraintForce	off
SenseConstraintForceX	off
SenseConstraintForceY	off
SenseConstraintForceZ	off
SenseConstraintTorque	off
SenseConstraintTorqueX	off
SenseConstraintTorqueY	off
SenseConstraintTorqueZ	off
SenseTotalForce	off
SenseTotalForceX	off
SenseTotalForceY	off
SenseTotalForceZ	off
SenseTotalTorque	off
SenseTotalTorqueX	off
SenseTotalTorqueY	off
SenseTotalTorqueZ	off
CompositeWrenchDir	FollowerOnBase
CompositeWrenchFrame	BaseFrame
EquilibriumPosition	0
EquilibriumPositionUnits	rad
SpringStiffness	0
SpringStiffnessUnits	m*N/rad
DampingCoefficient	0
DampingCoefficientUnits	m*s*N/rad
TorqueActuationMode	ComputedTorque
MotionActuationMode	InputMotion
SensePosition	off

Parameter	Value
SenseVelocity	off
SenseAcceleration	off
SenseTorqueForce	on
PositionTargetValue	0
PositionTargetValueUnits	deg
PositionTargetSpecify	off
PositionTargetPriority	Low
VelocityTargetValue	0
VelocityTargetValueUnits	deg/s
VelocityTargetSpecify	off
VelocityTargetPriority	High
Block Function	simmechanics.library.joints.revolute_joint

3.55.1.1.14. "Spherical1" (SimMechanicsBlock)

Tabla 3.278. "Spherical1" Parameters

Parameter	Value
ClassName	SphericalJoint
SenseConstraintForce	off
SenseConstraintForceX	off
SenseConstraintForceY	off
SenseConstraintForceZ	off
SenseConstraintTorque	off
SenseConstraintTorqueX	off
SenseConstraintTorqueY	off
SenseConstraintTorqueZ	off
SenseTotalForce	off
SenseTotalForceX	off
SenseTotalForceY	off
SenseTotalForceZ	off
SenseTotalTorque	off
SenseTotalTorqueX	off
SenseTotalTorqueY	off
SenseTotalTorqueZ	off
CompositeWrenchDir	FollowerOnBase
CompositeWrenchFrame	BaseFrame
DefPosRotationMethod	None
DefPosRotationAngleUnits	deg

Parameter	Value
DefPosRotationStandardAxis	+Z
DefPosRotationAngle	0
DefPosRotationArbitraryAxis	[0 0 1]
DefPosFollAlignAxisA	+X
DefPosBaseAlignAxisA	+Y
DefPosFollAlignAxisB	+Y
DefPosBaseAlignAxisB	+Z
EqPosRotationMethod	None
EqPosRotationAngleUnits	deg
EqPosRotationStandardAxis	+Z
EqPosRotationAngle	0
EqPosRotationArbitraryAxis	[0 0 1]
EqPosFollAlignAxisA	+X
EqPosBaseAlignAxisA	+Y
EqPosFollAlignAxisB	+Y
EqPosBaseAlignAxisB	+Z
SpringStiffness	0
SpringStiffnessUnits	m*N/rad
DampingCoefficient	0
DampingCoefficientUnits	m*s*N/rad
ActuateTorqueX	off
ActuateTorqueY	off
ActuateTorqueZ	off
ActuateTorque	off
TorqueActuationMode	NoTorque
MotionActuationMode	ComputedMotion
ActuationFrame	BaseFrame
SensePosition	on
SenseVelocityX	off
SenseVelocityY	off
SenseVelocityZ	off
SenseVelocity	off
SenseAccelerationX	off
SenseAccelerationY	off
SenseAccelerationZ	off
SenseAcceleration	off
SenseTorqueX	off
SenseTorqueY	off

Parameter	Value
SenseTorqueZ	off
SenseTorqueForce	off
SensingFrame	BaseFrame
PositionTargetRotationMethod	ArbitraryAxis
PositionTargetRotationAngleUnits	rad
PositionTargetRotationStandardAxis	+Z
PositionTargetRotationAngle	0.382429444073158
PositionTargetRotationArbitraryAxis	[0.0723 0.9026 -0.1838]
PositionTargetFollAlignAxisA	+X
PositionTargetBaseAlignAxisA	+Y
PositionTargetFollAlignAxisB	+Y
PositionTargetBaseAlignAxisB	+Z
PositionTargetSpecify	off
PositionTargetPriority	Low
VelocityTargetValue	[0 0 0]
VelocityTargetValueUnits	deg/s
VelocityTargetSpecify	off
VelocityTargetPriority	High
VelocityTargetInFollowerFrame	on
Block Function	simmechanics.library.joints.spherical_joint

3.55.1.1.15. "Spherical10" (SimMechanicsBlock)

Tabla 3.279. "Spherical10" Parameters

Parameter	Value
ClassName	SphericalJoint
SenseConstraintForce	off
SenseConstraintForceX	off
SenseConstraintForceY	off
SenseConstraintForceZ	off
SenseConstraintTorque	off
SenseConstraintTorqueX	off
SenseConstraintTorqueY	off
SenseConstraintTorqueZ	off
SenseTotalForce	off
SenseTotalForceX	off
SenseTotalForceY	off
SenseTotalForceZ	off

Parameter	Value
SenseTotalTorque	off
SenseTotalTorqueX	off
SenseTotalTorqueY	off
SenseTotalTorqueZ	off
CompositeWrenchDir	FollowerOnBase
CompositeWrenchFrame	BaseFrame
DefPosRotationMethod	None
DefPosRotationAngleUnits	deg
DefPosRotationStandardAxis	Z
DefPosRotationAngle	0
DefPosRotationArbitraryAxis	[0 0 1]
DefPosFollAlignAxisA	+X
DefPosBaseAlignAxisA	+Y
DefPosFollAlignAxisB	+Y
DefPosBaseAlignAxisB	+Z
EqPosRotationMethod	None
EqPosRotationAngleUnits	deg
EqPosRotationStandardAxis	Z
EqPosRotationAngle	0
EqPosRotationArbitraryAxis	[0 0 1]
EqPosFollAlignAxisA	+X
EqPosBaseAlignAxisA	+Y
EqPosFollAlignAxisB	+Y
EqPosBaseAlignAxisB	+Z
SpringStiffness	0
SpringStiffnessUnits	m*N/rad
DampingCoefficient	0
DampingCoefficientUnits	m*s*N/rad
ActuateTorqueX	off
ActuateTorqueY	off
ActuateTorqueZ	off
ActuateTorque	off
TorqueActuationMode	NoTorque
MotionActuationMode	ComputedMotion
ActuationFrame	BaseFrame
SensePosition	off
SenseVelocityX	off
SenseVelocityY	off

Parameter	Value
SenseVelocityZ	off
SenseVelocity	off
SenseAccelerationX	off
SenseAccelerationY	off
SenseAccelerationZ	off
SenseAcceleration	off
SenseTorqueX	off
SenseTorqueY	off
SenseTorqueZ	off
SenseTorqueForce	off
SensingFrame	FollowerFrame
PositionTargetRotationMethod	None
PositionTargetRotationAngleUnits	deg
PositionTargetRotationStandardAxis	+Z
PositionTargetRotationAngle	0
PositionTargetRotationArbitraryAxis	[0 0 1]
PositionTargetFollAlignAxisA	+X
PositionTargetBaseAlignAxisA	+X
PositionTargetFollAlignAxisB	+Y
PositionTargetBaseAlignAxisB	+Z
PositionTargetSpecify	off
PositionTargetPriority	High
VelocityTargetValue	[0 0 0]
VelocityTargetValueUnits	deg/s
VelocityTargetSpecify	off
VelocityTargetPriority	High
VelocityTargetInFollowerFrame	on
Block Function	simmechanics.library.joints.spherical_joint

3.55.1.1.16. "Spherical11" (SimMechanicsBlock)

Tabla 3.280. "Spherical11" Parameters

Parameter	Value
ClassName	SphericalJoint
SenseConstraintForce	off
SenseConstraintForceX	off
SenseConstraintForceY	off
SenseConstraintForceZ	off

Parameter	Value
SenseConstraintTorque	off
SenseConstraintTorqueX	off
SenseConstraintTorqueY	off
SenseConstraintTorqueZ	off
SenseTotalForce	off
SenseTotalForceX	off
SenseTotalForceY	off
SenseTotalForceZ	off
SenseTotalTorque	off
SenseTotalTorqueX	off
SenseTotalTorqueY	off
SenseTotalTorqueZ	off
CompositeWrenchDir	FollowerOnBase
CompositeWrenchFrame	BaseFrame
DefPosRotationMethod	None
DefPosRotationAngleUnits	deg
DefPosRotationStandardAxis	+Z
DefPosRotationAngle	0
DefPosRotationArbitraryAxis	[0 0 1]
DefPosFollAlignAxisA	+X
DefPosBaseAlignAxisA	+Y
DefPosFollAlignAxisB	+Y
DefPosBaseAlignAxisB	+Z
EqPosRotationMethod	None
EqPosRotationAngleUnits	deg
EqPosRotationStandardAxis	+Z
EqPosRotationAngle	0
EqPosRotationArbitraryAxis	[0 0 1]
EqPosFollAlignAxisA	+X
EqPosBaseAlignAxisA	+Y
EqPosFollAlignAxisB	+Y
EqPosBaseAlignAxisB	+Z
SpringStiffness	0
SpringStiffnessUnits	m*N/rad
DampingCoefficient	0
DampingCoefficientUnits	m*s*N/rad
ActuateTorqueX	off
ActuateTorqueY	off

Parameter	Value
ActuateTorqueZ	off
ActuateTorque	off
TorqueActuationMode	NoTorque
MotionActuationMode	ComputedMotion
ActuationFrame	BaseFrame
SensePosition	off
SenseVelocityX	off
SenseVelocityY	off
SenseVelocityZ	off
SenseVelocity	off
SenseAccelerationX	off
SenseAccelerationY	off
SenseAccelerationZ	off
SenseAcceleration	off
SenseTorqueX	off
SenseTorqueY	off
SenseTorqueZ	off
SenseTorqueForce	off
SensingFrame	FollowerFrame
PositionTargetRotationMethod	AlignedAxes
PositionTargetRotationAngleUnits	deg
PositionTargetRotationStandardAxis	+Z
PositionTargetRotationAngle	0
PositionTargetRotationArbitraryAxis	[0 0 0]
PositionTargetFollAlignAxisA	Y
PositionTargetBaseAlignAxisA	Y
PositionTargetFollAlignAxisB	X
PositionTargetBaseAlignAxisB	X
PositionTargetSpecify	off
PositionTargetPriority	Low
VelocityTargetValue	[0 0 0]
VelocityTargetValueUnits	deg/s
VelocityTargetSpecify	off
VelocityTargetPriority	High
VelocityTargetInFollowerFrame	on
Block Function	simmechanics.library.joints.spherical_joint

3.55.1.1.17. "Spherical12" (SimMechanicsBlock)

Tabla 3.281. "Spherical12" Parameters

Parameter	Value
ClassName	SphericalJoint
SenseConstraintForce	off
SenseConstraintForceX	off
SenseConstraintForceY	off
SenseConstraintForceZ	off
SenseConstraintTorque	off
SenseConstraintTorqueX	off
SenseConstraintTorqueY	off
SenseConstraintTorqueZ	off
SenseTotalForce	off
SenseTotalForceX	off
SenseTotalForceY	off
SenseTotalForceZ	off
SenseTotalTorque	off
SenseTotalTorqueX	off
SenseTotalTorqueY	off
SenseTotalTorqueZ	off
CompositeWrenchDir	FollowerOnBase
CompositeWrenchFrame	BaseFrame
DefPosRotationMethod	None
DefPosRotationAngleUnits	deg
DefPosRotationStandardAxis	+Z
DefPosRotationAngle	0
DefPosRotationArbitraryAxis	[0 0 1]
DefPosFollAlignAxisA	+X
DefPosBaseAlignAxisA	+Y
DefPosFollAlignAxisB	+Y
DefPosBaseAlignAxisB	+Z
EqPosRotationMethod	None
EqPosRotationAngleUnits	deg
EqPosRotationStandardAxis	+Z
EqPosRotationAngle	0
EqPosRotationArbitraryAxis	[0 0 1]
EqPosFollAlignAxisA	+X
EqPosBaseAlignAxisA	+Y

Parameter	Value
EqPosFollAlignAxisB	+Y
EqPosBaseAlignAxisB	+Z
SpringStiffness	0
SpringStiffnessUnits	m*N/rad
DampingCoefficient	0
DampingCoefficientUnits	m*s*N/rad
ActuateTorqueX	off
ActuateTorqueY	off
ActuateTorqueZ	off
ActuateTorque	off
TorqueActuationMode	NoTorque
MotionActuationMode	ComputedMotion
ActuationFrame	BaseFrame
SensePosition	off
SenseVelocityX	off
SenseVelocityY	off
SenseVelocityZ	off
SenseVelocity	off
SenseAccelerationX	off
SenseAccelerationY	off
SenseAccelerationZ	off
SenseAcceleration	off
SenseTorqueX	off
SenseTorqueY	off
SenseTorqueZ	off
SenseTorqueForce	off
SensingFrame	FollowerFrame
PositionTargetRotationMethod	Node
PositionTargetRotationAngleUnits	deg
PositionTargetRotationStandardAxis	+Z
PositionTargetRotationAngle	0
PositionTargetRotationArbitraryAxis	[0 1 1]
PositionTargetFollAlignAxisA	+X
PositionTargetBaseAlignAxisA	+Y
PositionTargetFollAlignAxisB	+Y
PositionTargetBaseAlignAxisB	+Z
PositionTargetSpecify	off
PositionTargetPriority	High

Parameter	Value
VelocityTargetValue	[0 0 0]
VelocityTargetValueUnits	deg/s
VelocityTargetSpecify	off
VelocityTargetPriority	High
VelocityTargetInFollowerFrame	on
Block Function	simmechanics.library.joints.spherical_joint

3.55.1.1.18. "Spherical2" (SimMechanicsBlock)

Tabla 3.282. "Spherical2" Parameters

Parameter	Value
ClassName	SphericalJoint
SenseConstraintForce	off
SenseConstraintForceX	off
SenseConstraintForceY	off
SenseConstraintForceZ	off
SenseConstraintTorque	off
SenseConstraintTorqueX	off
SenseConstraintTorqueY	off
SenseConstraintTorqueZ	off
SenseTotalForce	off
SenseTotalForceX	off
SenseTotalForceY	off
SenseTotalForceZ	off
SenseTotalTorque	off
SenseTotalTorqueX	off
SenseTotalTorqueY	off
SenseTotalTorqueZ	off
CompositeWrenchDir	FollowerOnBase
CompositeWrenchFrame	BaseFrame
DefPosRotationMethod	None
DefPosRotationAngleUnits	deg
DefPosRotationStandardAxis	+Z
DefPosRotationAngle	0
DefPosRotationArbitraryAxis	[0 0 1]
DefPosFollAlignAxisA	+X
DefPosBaseAlignAxisA	+Y
DefPosFollAlignAxisB	+Y

Parameter	Value
DefPosBaseAlignAxisB	+Z
EqPosRotationMethod	None
EqPosRotationAngleUnits	deg
EqPosRotationStandardAxis	Z
EqPosRotationAngle	0
EqPosRotationArbitraryAxis	[0 0 1]
EqPosFollAlignAxisA	+X
EqPosBaseAlignAxisA	+Y
EqPosFollAlignAxisB	+Y
EqPosBaseAlignAxisB	+Z
SpringStiffness	0
SpringStiffnessUnits	m*N/rad
DampingCoefficient	0
DampingCoefficientUnits	m*s*N/rad
ActuateTorqueX	off
ActuateTorqueY	off
ActuateTorqueZ	off
ActuateTorque	off
TorqueActuationMode	InputTorque
MotionActuationMode	ComputedMotion
ActuationFrame	BaseFrame
SensePosition	on
SenseVelocityX	off
SenseVelocityY	off
SenseVelocityZ	off
SenseVelocity	off
SenseAccelerationX	off
SenseAccelerationY	off
SenseAccelerationZ	off
SenseAcceleration	off
SenseTorqueX	off
SenseTorqueY	off
SenseTorqueZ	off
SenseTorqueForce	off
SensingFrame	BaseFrame
PositionTargetRotationMethod	None
PositionTargetRotationAngleUnits	deg
PositionTargetRotationStandardAxis	+Z

Parameter	Value
PositionTargetRotationAngle	0
PositionTargetRotationArbitraryAxis	[0 1 0]
PositionTargetFollAlignAxisXA	X
PositionTargetBaseAlignAxisXA	Y
PositionTargetFollAlignAxisXB	Y
PositionTargetBaseAlignAxisZB	Z
PositionTargetSpecify	off
PositionTargetPriority	High
VelocityTargetValue	[0 0 0]
VelocityTargetValueUnits	deg/s
VelocityTargetSpecify	off
VelocityTargetPriority	High
VelocityTargetInFollowerFrame	on
Block Function	simmechanics.library.joints.spherical_joint

3.55.1.1.19. "Spherical3" (SimMechanicsBlock)

Tabla 3.283. "Spherical3" Parameters

Parameter	Value
ClassName	SphericalJoint
SenseConstraintForce	off
SenseConstraintForceX	off
SenseConstraintForceY	off
SenseConstraintForceZ	off
SenseConstraintTorque	off
SenseConstraintTorqueX	off
SenseConstraintTorqueY	off
SenseConstraintTorqueZ	off
SenseTotalForce	off
SenseTotalForceX	off
SenseTotalForceY	off
SenseTotalForceZ	off
SenseTotalTorque	off
SenseTotalTorqueX	off
SenseTotalTorqueY	off
SenseTotalTorqueZ	off
CompositeWrenchDir	FollowerOnBase
CompositeWrenchFrame	BaseFrame

Parameter	Value
DefPosRotationMethod	None
DefPosRotationAngleUnits	deg
DefPosRotationStandardAxis	Z
DefPosRotationAngle	0
DefPosRotationArbitraryAxis	[0 0 1]
DefPosFollAlignAxisA	+X
DefPosBaseAlignAxisA	+Y
DefPosFollAlignAxisB	+Y
DefPosBaseAlignAxisB	+Z
EqPosRotationMethod	None
EqPosRotationAngleUnits	deg
EqPosRotationStandardAxis	Z
EqPosRotationAngle	0
EqPosRotationArbitraryAxis	[0 0 1]
EqPosFollAlignAxisA	+X
EqPosBaseAlignAxisA	+Y
EqPosFollAlignAxisB	+Y
EqPosBaseAlignAxisB	+Z
SpringStiffness	0
SpringStiffnessUnits	m*N/rad
DampingCoefficient	0
DampingCoefficientUnits	m*s*N/rad
ActuateTorqueX	off
ActuateTorqueY	off
ActuateTorqueZ	off
ActuateTorque	off
TorqueActuationMode	NoTorque
MotionActuationMode	ComputedMotion
ActuationFrame	BaseFrame
SensePosition	off
SenseVelocityX	off
SenseVelocityY	off
SenseVelocityZ	off
SenseVelocity	off
SenseAccelerationX	off
SenseAccelerationY	off
SenseAccelerationZ	off
SenseAcceleration	off

Parameter	Value
SenseTorqueX	off
SenseTorqueY	off
SenseTorqueZ	off
SenseTorqueForce	off
SensingFrame	FollowerFrame
PositionTargetRotationMethod	ArbitraryAxis
PositionTargetRotationAngleUnits	deg
PositionTargetRotationStandardAxis	+Z
PositionTargetRotationAngle	179.68545876281846
PositionTargetRotationArbitraryAxis	[0.18941149759520341 -0.9818198677040586 -0.012317234538445599]
PositionTargetFollAlignAxisXA	X
PositionTargetBaseAlignAxisXA	Y
PositionTargetFollAlignAxisYB	Y
PositionTargetBaseAlignAxisZB	Z
PositionTargetSpecify	off
PositionTargetPriority	Low
VelocityTargetValue	[0 0 0]
VelocityTargetValueUnits	deg/s
VelocityTargetSpecify	off
VelocityTargetPriority	High
VelocityTargetInFollowerFrame	on
Block Function	simmechanics.library.joints.spherical_joint

3.55.1.1.20. "Spherical4" (SimMechanicsBlock)

Tabla 3.284. "Spherical4" Parameters

Parameter	Value
ClassName	SphericalJoint
SenseConstraintForce	off
SenseConstraintForceX	off
SenseConstraintForceY	off
SenseConstraintForceZ	off
SenseConstraintTorque	off
SenseConstraintTorqueX	off
SenseConstraintTorqueY	off
SenseConstraintTorqueZ	off
SenseTotalForce	off
SenseTotalForceX	off

Parameter	Value
SenseTotalForceY	off
SenseTotalForceZ	off
SenseTotalTorque	off
SenseTotalTorqueX	off
SenseTotalTorqueY	off
SenseTotalTorqueZ	off
CompositeWrenchDir	FollowerOnBase
CompositeWrenchFrame	BaseFrame
DefPosRotationMethod	None
DefPosRotationAngleUnits	deg
DefPosRotationStandardAxis	+Z
DefPosRotationAngle	0
DefPosRotationArbitraryAxis	[0 0 1]
DefPosFollAlignAxisA	+X
DefPosBaseAlignAxisA	+Y
DefPosFollAlignAxisB	+Y
DefPosBaseAlignAxisB	+Z
EqPosRotationMethod	None
EqPosRotationAngleUnits	deg
EqPosRotationStandardAxis	+Z
EqPosRotationAngle	0
EqPosRotationArbitraryAxis	[0 0 1]
EqPosFollAlignAxisA	+X
EqPosBaseAlignAxisA	+Y
EqPosFollAlignAxisB	+Y
EqPosBaseAlignAxisB	+Z
SpringStiffness	0
SpringStiffnessUnits	m*N/rad
DampingCoefficient	0
DampingCoefficientUnits	m*s*N/rad
ActuateTorqueX	off
ActuateTorqueY	off
ActuateTorqueZ	off
ActuateTorque	off
TorqueActuationMode	NoTorque
MotionActuationMode	ComputedMotion
ActuationFrame	BaseFrame
SensePosition	off

Parameter	Value
SenseVelocityX	off
SenseVelocityY	off
SenseVelocityZ	off
SenseVelocity	off
SenseAccelerationX	off
SenseAccelerationY	off
SenseAccelerationZ	off
SenseAcceleration	off
SenseTorqueX	off
SenseTorqueY	off
SenseTorqueZ	off
SenseTorqueForce	off
SensingFrame	FollowerFrame
PositionTargetRotationMethod	None
PositionTargetRotationAngleUnits	deg
PositionTargetRotationStandardAxis	+Z
PositionTargetRotationAngle	0
PositionTargetRotationArbitraryAxis	[0 0 1]
PositionTargetFollAlignAxisXA	X
PositionTargetBaseAlignAxisXA	Y
PositionTargetFollAlignAxisYB	Y
PositionTargetBaseAlignAxisZB	Z
PositionTargetSpecify	off
PositionTargetPriority	High
VelocityTargetValue	[0 0 0]
VelocityTargetValueUnits	deg/s
VelocityTargetSpecify	off
VelocityTargetPriority	High
VelocityTargetInFollowerFrame	on
Block Function	simmechanics.library.joints.spherical_joint

3.55.1.1.21. "Spherical5" (SimMechanicsBlock)

Tabla 3.285. "Spherical5" Parameters

Parameter	Value
ClassName	SphericalJoint
SenseConstraintForce	off
SenseConstraintForceX	off

Parameter	Value
SenseConstraintForceY	off
SenseConstraintForceZ	off
SenseConstraintTorque	off
SenseConstraintTorqueX	off
SenseConstraintTorqueY	off
SenseConstraintTorqueZ	off
SenseTotalForce	off
SenseTotalForceX	off
SenseTotalForceY	off
SenseTotalForceZ	off
SenseTotalTorque	off
SenseTotalTorqueX	off
SenseTotalTorqueY	off
SenseTotalTorqueZ	off
CompositeWrenchDir	FollowerOnBase
CompositeWrenchFrame	BaseFrame
DefPosRotationMethod	None
DefPosRotationAngleUnits	deg
DefPosRotationStandardAxis	+Z
DefPosRotationAngle	0
DefPosRotationArbitraryAxis	[0 0 1]
DefPosFollAlignAxisA	+X
DefPosBaseAlignAxisA	+Y
DefPosFollAlignAxisB	+Y
DefPosBaseAlignAxisB	+Z
EqPosRotationMethod	None
EqPosRotationAngleUnits	deg
EqPosRotationStandardAxis	+Z
EqPosRotationAngle	0
EqPosRotationArbitraryAxis	[0 0 1]
EqPosFollAlignAxisA	+X
EqPosBaseAlignAxisA	+Y
EqPosFollAlignAxisB	+Y
EqPosBaseAlignAxisB	+Z
SpringStiffness	0
SpringStiffnessUnits	m*N/rad
DampingCoefficient	0
DampingCoefficientUnits	m*s*N/rad

Parameter	Value
ActuateTorqueX	off
ActuateTorqueY	off
ActuateTorqueZ	off
ActuateTorque	off
TorqueActuationMode	NoTorque
MotionActuationMode	ComputedMotion
ActuationFrame	BaseFrame
SensePosition	off
SenseVelocityX	off
SenseVelocityY	off
SenseVelocityZ	off
SenseVelocity	off
SenseAccelerationX	off
SenseAccelerationY	off
SenseAccelerationZ	off
SenseAcceleration	off
SenseTorqueX	off
SenseTorqueY	off
SenseTorqueZ	off
SenseTorqueForce	off
SensingFrame	FollowerFrame
PositionTargetRotationMethod	ArbitraryAxis
PositionTargetRotationAngleUnits	deg
PositionTargetRotationStandardAxis	+Z
PositionTargetRotationAngle	16.91770774904721
PositionTargetRotationArbitraryAxis	[0.24815610542268141 -0.87193149755485788 0.42208294316779721]
PositionTargetFollAlignAxisXA	X
PositionTargetBaseAlignAxisXA	Y
PositionTargetFollAlignAxisYB	X
PositionTargetBaseAlignAxisYB	Z
PositionTargetSpecify	off
PositionTargetPriority	Low
VelocityTargetValue	[0 0 0]
VelocityTargetValueUnits	deg/s
VelocityTargetSpecify	off
VelocityTargetPriority	High
VelocityTargetInFollowerFrame	on
Block Function	simmechanics.library.joints.spherical_joint

3.55.1.1.22. "Spherical6" (SimMechanicsBlock)

Tabla 3.286. "Spherical6" Parameters

Parameter	Value
ClassName	SphericalJoint
SenseConstraintForce	off
SenseConstraintForceX	off
SenseConstraintForceY	off
SenseConstraintForceZ	off
SenseConstraintTorque	off
SenseConstraintTorqueX	off
SenseConstraintTorqueY	off
SenseConstraintTorqueZ	off
SenseTotalForce	off
SenseTotalForceX	off
SenseTotalForceY	off
SenseTotalForceZ	off
SenseTotalTorque	off
SenseTotalTorqueX	off
SenseTotalTorqueY	off
SenseTotalTorqueZ	off
CompositeWrenchDir	FollowerOnBase
CompositeWrenchFrame	BaseFrame
DefPosRotationMethod	None
DefPosRotationAngleUnits	deg
DefPosRotationStandardAxis	+Z
DefPosRotationAngle	0
DefPosRotationArbitraryAxis	[0 0 1]
DefPosFollAlignAxisA	+X
DefPosBaseAlignAxisA	+Y
DefPosFollAlignAxisB	+Y
DefPosBaseAlignAxisB	+Z
EqPosRotationMethod	None
EqPosRotationAngleUnits	deg
EqPosRotationStandardAxis	+Z
EqPosRotationAngle	0
EqPosRotationArbitraryAxis	[0 0 1]
EqPosFollAlignAxisA	+X

Parameter	Value
EqPosBaseAlignAxisA	+Y
EqPosFollAlignAxisB	+Y
EqPosBaseAlignAxisB	+Z
SpringStiffness	0
SpringStiffnessUnits	m*N/rad
DampingCoefficient	0
DampingCoefficientUnits	m*s*N/rad
ActuateTorqueX	off
ActuateTorqueY	off
ActuateTorqueZ	off
ActuateTorque	off
TorqueActuationMode	NoTorque
MotionActuationMode	ComputedMotion
ActuationFrame	BaseFrame
SensePosition	off
SenseVelocityX	off
SenseVelocityY	off
SenseVelocityZ	off
SenseVelocity	off
SenseAccelerationX	off
SenseAccelerationY	off
SenseAccelerationZ	off
SenseAcceleration	off
SenseTorqueX	off
SenseTorqueY	off
SenseTorqueZ	off
SenseTorqueForce	off
SensingFrame	FollowerFrame
PositionTargetRotationMethod	AlignedAxes
PositionTargetRotationAngleUnits	deg
PositionTargetRotationStandardAxis	+Z
PositionTargetRotationAngle	142.22394496936212
PositionTargetRotationArbitraryAxis	[0.40888864110725764 -0.6663402645250367 -0.62678913316779572]
PositionTargetFollAlignAxisA	+Y
PositionTargetBaseAlignAxisA	+X
PositionTargetFollAlignAxisB	+Z
PositionTargetBaseAlignAxisB	+Y
PositionTargetSpecify	off

Parameter	Value
PositionTargetPriority	Low
VelocityTargetValue	[0 0 0]
VelocityTargetValueUnits	deg/s
VelocityTargetSpecify	off
VelocityTargetPriority	High
VelocityTargetInFollowerFrame	on
Block Function	simmechanics.library.joints.spherical_joint

3.55.1.1.23. "Spherical7" (SimMechanicsBlock)

Tabla 3.287. "Spherical7" Parameters

Parameter	Value
ClassName	SphericalJoint
SenseConstraintForce	off
SenseConstraintForceX	off
SenseConstraintForceY	off
SenseConstraintForceZ	off
SenseConstraintTorque	off
SenseConstraintTorqueX	off
SenseConstraintTorqueY	off
SenseConstraintTorqueZ	off
SenseTotalForce	off
SenseTotalForceX	off
SenseTotalForceY	off
SenseTotalForceZ	off
SenseTotalTorque	off
SenseTotalTorqueX	off
SenseTotalTorqueY	off
SenseTotalTorqueZ	off
CompositeWrenchDir	FollowerOnBase
CompositeWrenchFrame	BaseFrame
DefPosRotationMethod	None
DefPosRotationAngleUnits	deg
DefPosRotationStandardAxis	+Z
DefPosRotationAngle	0
DefPosRotationArbitraryAxis	[0 0 1]
DefPosFollAlignAxisA	+X
DefPosBaseAlignAxisA	+Y

Parameter	Value
DefPosFollAlignAxisB	+Y
DefPosBaseAlignAxisB	+Z
EqPosRotationMethod	None
EqPosRotationAngleUnits	deg
EqPosRotationStandardAxis	Z
EqPosRotationAngle	0
EqPosRotationArbitraryAxis	[0 0 1]
EqPosFollAlignAxisA	+X
EqPosBaseAlignAxisA	+Y
EqPosFollAlignAxisB	+Y
EqPosBaseAlignAxisB	+Z
SpringStiffness	0
SpringStiffnessUnits	m*N/rad
DampingCoefficient	0
DampingCoefficientUnits	m*s*N/rad
ActuateTorqueX	off
ActuateTorqueY	off
ActuateTorqueZ	off
ActuateTorque	off
TorqueActuationMode	NoTorque
MotionActuationMode	ComputedMotion
ActuationFrame	BaseFrame
SensePosition	off
SenseVelocityX	off
SenseVelocityY	off
SenseVelocityZ	off
SenseVelocity	off
SenseAccelerationX	off
SenseAccelerationY	off
SenseAccelerationZ	off
SenseAcceleration	off
SenseTorqueX	off
SenseTorqueY	off
SenseTorqueZ	off
SenseTorqueForce	off
SensingFrame	FollowerFrame
PositionTargetRotationMethod	ArbitraryAxis
PositionTargetRotationAngleUnits	deg

Parameter	Value
PositionTargetRotationStandardAxis	+Z
PositionTargetRotationAngle	46.945910131238534
PositionTargetRotationArbitraryAxis	[0.24818280639664425 -0.87203382088706982 0.42185579270431239]
PositionTargetFollAlignAxisXA	X
PositionTargetBaseAlignAxisXA	Y
PositionTargetFollAlignAxisYB	N
PositionTargetBaseAlignAxisZB	Z
PositionTargetSpecify	off
PositionTargetPriority	Low
VelocityTargetValue	[0 0 0]
VelocityTargetValueUnits	deg/s
VelocityTargetSpecify	off
VelocityTargetPriority	High
VelocityTargetInFollowerFrame	on
Block Function	simmechanics.library.joints.spherical_joint

3.55.1.1.24. "Spherical8" (SimMechanicsBlock)

Tabla 3.288. "Spherical8" Parameters

Parameter	Value
ClassName	SphericalJoint
SenseConstraintForce	off
SenseConstraintForceX	off
SenseConstraintForceY	off
SenseConstraintForceZ	off
SenseConstraintTorque	off
SenseConstraintTorqueX	off
SenseConstraintTorqueY	off
SenseConstraintTorqueZ	off
SenseTotalForce	off
SenseTotalForceX	off
SenseTotalForceY	off
SenseTotalForceZ	off
SenseTotalTorque	off
SenseTotalTorqueX	off
SenseTotalTorqueY	off
SenseTotalTorqueZ	off
CompositeWrenchDir	FollowerOnBase

Parameter	Value
CompositeWrenchFrame	BaseFrame
DefPosRotationMethod	None
DefPosRotationAngleUnits	deg
DefPosRotationStandardAxis	+Z
DefPosRotationAngle	0
DefPosRotationArbitraryAxis	[0 0 1]
DefPosFollAlignAxisA	+X
DefPosBaseAlignAxisA	+Y
DefPosFollAlignAxisB	+Y
DefPosBaseAlignAxisB	+Z
EqPosRotationMethod	None
EqPosRotationAngleUnits	deg
EqPosRotationStandardAxis	+Z
EqPosRotationAngle	0
EqPosRotationArbitraryAxis	[0 0 1]
EqPosFollAlignAxisA	+X
EqPosBaseAlignAxisA	+Y
EqPosFollAlignAxisB	+Y
EqPosBaseAlignAxisB	+Z
SpringStiffness	0
SpringStiffnessUnits	m*N/rad
DampingCoefficient	0
DampingCoefficientUnits	m*s*N/rad
ActuateTorqueX	off
ActuateTorqueY	off
ActuateTorqueZ	off
ActuateTorque	off
TorqueActuationMode	NoTorque
MotionActuationMode	ComputedMotion
ActuationFrame	BaseFrame
SensePosition	off
SenseVelocityX	off
SenseVelocityY	off
SenseVelocityZ	off
SenseVelocity	off
SenseAccelerationX	off
SenseAccelerationY	off
SenseAccelerationZ	off

Parameter	Value
SenseAcceleration	off
SenseTorqueX	off
SenseTorqueY	off
SenseTorqueZ	off
SenseTorqueForce	off
SensingFrame	FollowerFrame
PositionTargetRotationMethod	None
PositionTargetRotationAngleUnits	deg
PositionTargetRotationStandardAxis	+Z
PositionTargetRotationAngle	0
PositionTargetRotationArbitraryAxis	[0 0 1]
PositionTargetFollAlignAxisXA	+X
PositionTargetBaseAlignAxisXA	+X
PositionTargetFollAlignAxisYB	+Y
PositionTargetBaseAlignAxisZB	+Z
PositionTargetSpecify	off
PositionTargetPriority	High
VelocityTargetValue	[0 0 0]
VelocityTargetValueUnits	deg/s
VelocityTargetSpecify	off
VelocityTargetPriority	High
VelocityTargetInFollowerFrame	on
Block Function	simmechanics.library.joints.spherical_joint

3.55.1.1.25. "Spherical9" (SimMechanicsBlock)

Tabla 3.289. "Spherical9" Parameters

Parameter	Value
ClassName	SphericalJoint
SenseConstraintForce	off
SenseConstraintForceX	off
SenseConstraintForceY	off
SenseConstraintForceZ	off
SenseConstraintTorque	off
SenseConstraintTorqueX	off
SenseConstraintTorqueY	off
SenseConstraintTorqueZ	off
SenseTotalForce	off

Parameter	Value
SenseTotalForceX	off
SenseTotalForceY	off
SenseTotalForceZ	off
SenseTotalTorque	off
SenseTotalTorqueX	off
SenseTotalTorqueY	off
SenseTotalTorqueZ	off
CompositeWrenchDir	FollowerOnBase
CompositeWrenchFrame	BaseFrame
DefPosRotationMethod	None
DefPosRotationAngleUnits	deg
DefPosRotationStandardAxis	+Z
DefPosRotationAngle	0
DefPosRotationArbitraryAxis	[0 0 1]
DefPosFollAlignAxisA	+X
DefPosBaseAlignAxisA	+Y
DefPosFollAlignAxisB	+Y
DefPosBaseAlignAxisB	+Z
EqPosRotationMethod	None
EqPosRotationAngleUnits	deg
EqPosRotationStandardAxis	+Z
EqPosRotationAngle	0
EqPosRotationArbitraryAxis	[0 0 1]
EqPosFollAlignAxisA	+X
EqPosBaseAlignAxisA	+Y
EqPosFollAlignAxisB	+Y
EqPosBaseAlignAxisB	+Z
SpringStiffness	0
SpringStiffnessUnits	m*N/rad
DampingCoefficient	0
DampingCoefficientUnits	m*s*N/rad
ActuateTorqueX	off
ActuateTorqueY	off
ActuateTorqueZ	off
ActuateTorque	off
TorqueActuationMode	NoTorque
MotionActuationMode	ComputedMotion
ActuationFrame	BaseFrame

Parameter	Value
SensePosition	off
SenseVelocityX	off
SenseVelocityY	off
SenseVelocityZ	off
SenseVelocity	off
SenseAccelerationX	off
SenseAccelerationY	off
SenseAccelerationZ	off
SenseAcceleration	off
SenseTorqueX	off
SenseTorqueY	off
SenseTorqueZ	off
SenseTorqueForce	off
SensingFrame	FollowerFrame
PositionTargetRotationMethod	ArbitraryAxis
PositionTargetRotationAngleUnits	deg
PositionTargetRotationStandardAxis	+Z
PositionTargetRotationAngle	44.800202815702534
PositionTargetRotationArbitraryAxis	[0.23452962304863 0.908251949695566 0.34724403703867479]
PositionTargetFollAlignAxisA	+X
PositionTargetBaseAlignAxisA	+Y
PositionTargetFollAlignAxisB	+Y
PositionTargetBaseAlignAxisB	+Z
PositionTargetSpecify	off
PositionTargetPriority	Low
VelocityTargetValue	[0 0 0]
VelocityTargetValueUnits	deg/s
VelocityTargetSpecify	off
VelocityTargetPriority	High
VelocityTargetInFollowerFrame	on
Block Function	simmechanics.library.joints.spherical_joint

3.55.1.1.26. "T M1" (Outport)

Tabla 3.290. "T M1" Parameters

Parameter	Value
Port number	2
Icon display	Port number

Parameter	Value
Minimum	[]
Maximum	[]
Data type	Inherit: auto
Lock output data type setting against changes by the fixed-point tools	off
Output as nonvirtual bus in parent model	off
Port dimensions (-1 for inherited)	-1
Variable-size signal	Inherit
Sample time (-1 for inherited)	-1
Source of initial output value	Dialog
Output when disabled	held
Initial output	[]

3.55.1.1.27. "T M2" (Outport)

Tabla 3.291. "T M2" Parameters

Parameter	Value
Port number	1
Icon display	Port number
Minimum	[]
Maximum	[]
Data type	Inherit: auto
Lock output data type setting against changes by the fixed-point tools	off
Output as nonvirtual bus in parent model	off
Port dimensions (-1 for inherited)	-1
Variable-size signal	Inherit
Sample time (-1 for inherited)	-1
Source of initial output value	Dialog
Output when disabled	held
Initial output	[]

3.55.1.1.28. "T M3" (Outport)

Tabla 3.292. "T M3" Parameters

Parameter	Value
Port number	3
Icon display	Port number
Minimum	[]
Maximum	[]
Data type	Inherit: auto
Lock output data type setting against changes by the fixed-point tools	off
Output as nonvirtual bus in parent model	off
Port dimensions (-1 for inherited)	-1
Variable-size signal	Inherit
Sample time (-1 for inherited)	-1
Source of initial output value	Dialog
Output when disabled	held
Initial output	[]

3.55.1.1.29. "Transform5" (SimMechanicsBlock)

Tabla 3.293. "Transform5" Parameters

Parameter	Value
ClassName	RigidTransform
TranslationMethod	Cartesian
TranslationLengthUnit	mm
TranslationStandardAxis	+Z
TranslationStandardOffset	0
TranslationCartesianOffset	[0 0 0]
TranslationROffset	0
TranslationROffsetUnits	m
TranslationZOffset	0
TranslationZOffsetUnits	m
TranslationThetaOffset	0

Parameter	Value
TranslationThetaOffsetUnits	deg
RotationMethod	ArbitraryAxis
RotationAngleUnits	deg
RotationStandardAxis	+Z
RotationAngle	0
RotationArbitraryAxis	[0 0 1]
FollAlignAxisA	+X
BaseAlignAxisA	+Y
FollAlignAxisB	+Y
BaseAlignAxisB	+Z
Block Function	simmechanics.library.frames_transforms.rigid_transform

3.55.1.1.30. "World" (SimMechanicsBlock)

Tabla 3.294. "World" Parameters

Parameter	Value
ClassName	WorldFrame
Block Function	simmechanics.library.frames_transforms.world_frame

3.56. Eje_Base_Brazo_1_RIGID

Figura 3.56. DeltaSM_AnguloSinFriccions/DeltaSM/BrazoCompleto_1_RIGID/ Eje_Base_Brazo_1_RIGID
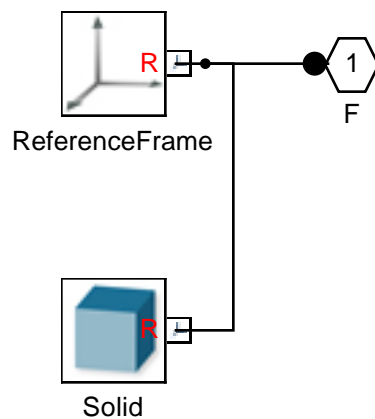
3.56.1. Blocks

3.56.1.1. Parameters

3.56.1.1.1. "F" (PMIOPort)

Tabla 3.295. "F" Parameters

Parameter	Value
Port number	1
Port location on parent subsystem	Left

3.56.1.1.2. "ReferenceFrame" (SimMechanicsBlock)

Tabla 3.296. "ReferenceFrame" Parameters

Parameter	Value
ClassName	ReferenceFrame
Block Function	simmechanics.library.frames_transforms.reference_frame

3.56.1.1.3. "Solid" (SimMechanicsBlock)

Tabla 3.297. "Solid" Parameters

Parameter	Value
ClassName	Solid
InertiaType	Custom
Mass	0.0025826712476659706
MassUnits	kg
CenterOfMass	[0 0 33.334706918231461]
CenterOfMassUnits	mm
MomentsOfInertia	[0.75171332300246652 0.75171332300246652 0.035543929752530228]
MomentsOfInertiaUnits	kg*mm^2
ProductsOfInertia	[0 0 0]
ProductsOfInertiaUnits	kg*mm^2
DensityBased	on
Density	1000
DensityUnits	kg/(m^3)
GraphicType	FromGeometry
MarkerShape	Sphere
MarkerSize	10
MarkerSizeUnits	m
GraphicVisPropType	SimpleVisualProperties
GraphicDiffuseColor	[0.792156862745098 0.81960784313725488 0.93333333333333335]
GraphicSpecularColor	[0.5 0.5 0.5 1.0]

Parameter	Value
GraphicAmbientColor	[0.15 0.15 0.15 1.0]
GraphicEmissiveColor	[0.0 0.0 0.0 1.0]
GraphicShininess	75
GraphicOpacity	1
GeometryShape	FromFile
RectangleSize	[1 1]
RectangleSizeUnits	m
BrickDimensions	[1 1 1]
BrickDimensionUnits	m
CylinderRadius	1
CylinderRadiusUnits	m
CylinderLength	1
CylinderLengthUnits	m
SphereRadius	1
SphereRadiusUnits	m
EllipsoidRadii	[1 1 1]
EllipsoidRadiiUnits	m
ExtrusionCrossSection	[1 1; -1 1; -1 -1; 1 -1]
ExtrusionCrossSectionUnits	m
ExtrusionLength	1
ExtrusionLengthUnits	m
PolygonNumSides	3
PolygonOuterRadius	1
PolygonOuterRadiusUnits	m
ExtGeomFileType	STL
ExtGeomFileName	Eje-Base-Brazo_Predeterminado_sldprt.STL
ExtGeomFileUnits	mm
RevolutionCrossSection	[1 1; 1 -1; 2 -1; 2 1]
RevolutionCrossSectionUnits	m
RevolutionExtent	Full
RevolutionAngle	180
RevolutionAngleUnits	deg
Block Function	simmechanics.library.body_elements.solid

3.57. Eje_Base_Brazo_1_RIGID

Figura 3.57. DeltaSM_AnguloSinFriccions/DeltaSM/BrazoCompleto_2_RIGID/ Eje_Base_Brazo_1_RIGID
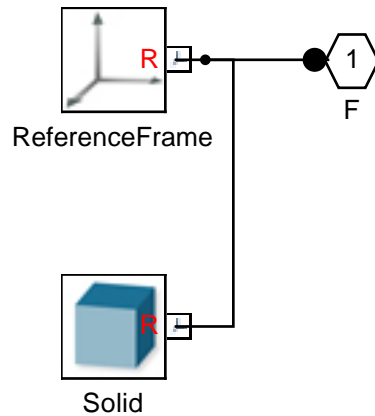
3.57.1. Blocks

3.57.1.1. Parameters

3.57.1.1.1. "F" (PMIOPort)

Tabla 3.298. "F" Parameters

Parameter	Value
Port number	1
Port location on parent subsystem	Left

3.57.1.1.2. "ReferenceFrame" (SimMechanicsBlock)

Tabla 3.299. "ReferenceFrame" Parameters

Parameter	Value
ClassName	ReferenceFrame
Block Function	simmechanics.library.frames_transforms.reference_frame

3.57.1.1.3. "Solid" (SimMechanicsBlock)

Tabla 3.300. "Solid" Parameters

Parameter	Value
ClassName	Solid
InertiaType	Custom
Mass	0.0025826712476659706
MassUnits	kg
CenterOfMass	[0 0 33.334706918231461]
CenterOfMassUnits	mm
MomentsOfInertia	[0.75171332300246652 0.75171332300246652 0.035543929752530228]
MomentsOfInertiaUnits	kg*mm^2
ProductsOfInertia	[0 0 0]
ProductsOfInertiaUnits	kg*mm^2
DensityBased	on
Density	1000
DensityUnits	kg/(m^3)
GraphicType	FromGeometry
MarkerShape	Sphere
MarkerSize	10
MarkerSizeUnits	m
GraphicVisPropType	SimpleVisualProperties
GraphicDiffuseColor	[0.792156862745098 0.81960784313725488 0.93333333333333335]
GraphicSpecularColor	[0.5 0.5 0.5 1.0]
GraphicAmbientColor	[0.15 0.15 0.15 1.0]
GraphicEmissiveColor	[0.0 0.0 0.0 1.0]
GraphicShininess	75
GraphicOpacity	1
GeometryShape	FromFile
RectangleSize	[1 1]
RectangleSizeUnits	m
BrickDimensions	[1 1 1]
BrickDimensionUnits	m
CylinderRadius	1
CylinderRadiusUnits	m
CylinderLength	1
CylinderLengthUnits	m
SphereRadius	1
SphereRadiusUnits	m

Parameter	Value
EllipsoidRadii	[1 1 1]
EllipsoidRadiiUnits	m
ExtrusionCrossSection	[1 1; -1 1; -1 -1; 1 -1]
ExtrusionCrossSectionUnits	m
ExtrusionLength	1
ExtrusionLengthUnits	m
PolygonNumSides	3
PolygonOuterRadius	1
PolygonOuterRadiusUnits	m
ExtGeomFileType	STL
ExtGeomFileName	Eje-Base-Brazo_Predeterminado_sldprt.STL
ExtGeomFileUnits	mm
RevolutionCrossSection	[1 1; 1 -1; 2 -1; 2 1]
RevolutionCrossSectionUnits	m
RevolutionExtent	Full
RevolutionAngle	180
RevolutionAngleUnits	deg
Block Function	simmechanics.library.body_elements.solid

3.58. Eje_Base_Brazo_1_RIGID

Figura 3.58. DeltaSM_AnguloSinFriccions/DeltaSM/BrazoCompleto_3_RIGID/ Eje_Base_Brazo_1_RIGID
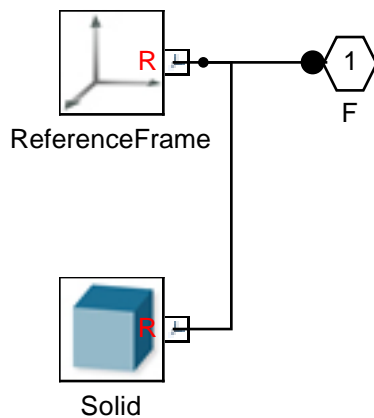
3.58.1. Blocks

3.58.1.1. Parameters

3.58.1.1.1. "F" (PMIOPort)

Tabla 3.301. "F" Parameters

Parameter	Value
Port number	1
Port location on parent subsystem	Left

3.58.1.1.2. "ReferenceFrame" (SimMechanicsBlock)

Tabla 3.302. "ReferenceFrame" Parameters

Parameter	Value
ClassName	ReferenceFrame
Block Function	simmechanics.library.frames_transforms.reference_frame

3.58.1.1.3. "Solid" (SimMechanicsBlock)

Tabla 3.303. "Solid" Parameters

Parameter	Value
ClassName	Solid
InertiaType	Custom
Mass	0.0025826712476659706
MassUnits	kg
CenterOfMass	[0 0 33.334706918231461]
CenterOfMassUnits	mm
MomentsOfInertia	[0.75171332300246652 0.75171332300246652 0.035543929752530228]
MomentsOfInertiaUnits	kg*mm^2
ProductsOfInertia	[0 0 0]
ProductsOfInertiaUnits	kg*mm^2
DensityBased	on
Density	1000
DensityUnits	kg/(m^3)
GraphicType	FromGeometry
MarkerShape	Sphere
MarkerSize	10
MarkerSizeUnits	m
GraphicVisPropType	SimpleVisualProperties
GraphicDiffuseColor	[0.792156862745098 0.81960784313725488 0.93333333333333335]
GraphicSpecularColor	[0.5 0.5 0.5 1.0]

Parameter	Value
GraphicAmbientColor	[0.15 0.15 0.15 1.0]
GraphicEmissiveColor	[0.0 0.0 0.0 1.0]
GraphicShininess	75
GraphicOpacity	1
GeometryShape	FromFile
RectangleSize	[1 1]
RectangleSizeUnits	m
BrickDimensions	[1 1 1]
BrickDimensionUnits	m
CylinderRadius	1
CylinderRadiusUnits	m
CylinderLength	1
CylinderLengthUnits	m
SphereRadius	1
SphereRadiusUnits	m
EllipsoidRadii	[1 1 1]
EllipsoidRadiiUnits	m
ExtrusionCrossSection	[1 1; -1 1; -1 -1; 1 -1]
ExtrusionCrossSectionUnits	m
ExtrusionLength	1
ExtrusionLengthUnits	m
PolygonNumSides	3
PolygonOuterRadius	1
PolygonOuterRadiusUnits	m
ExtGeomFileType	STL
ExtGeomFileName	Eje-Base-Brazo_Predeterminado_sldprt.STL
ExtGeomFileUnits	mm
RevolutionCrossSection	[1 1; 1 -1; 2 -1; 2 1]
RevolutionCrossSectionUnits	m
RevolutionExtent	Full
RevolutionAngle	180
RevolutionAngleUnits	deg
Block Function	simmechanics.library.body_elements.solid

3.59. Posicion

Figura 3.59. DeltaSM_AnguloSinFriccions/DeltaSM/Posicion
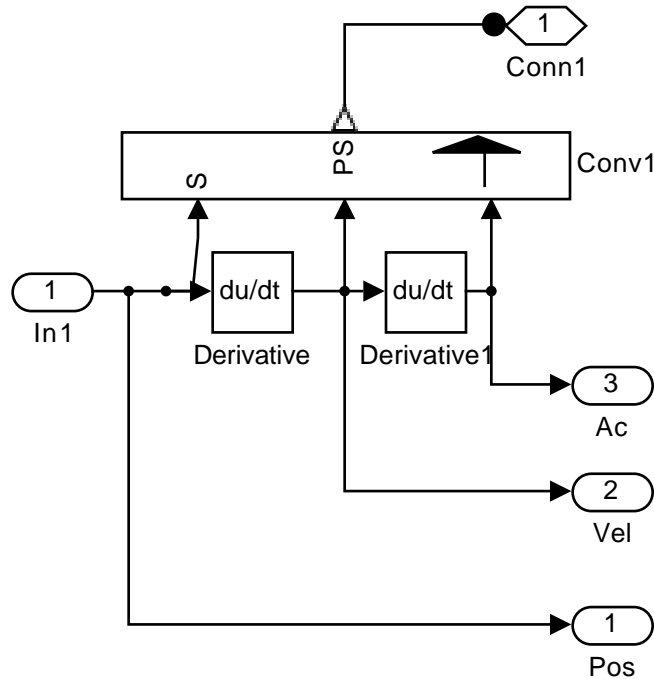
3.59.1. Blocks

3.59.1.1. Parameters

3.59.1.1.1. "Ac" (Outport)

Tabla 3.304. "Ac" Parameters

Parameter	Value
Port number	3
Icon display	Port number
Minimum	[]
Maximum	[]
Data type	Inherit: auto
Lock output data type setting against changes by the fixed-point tools	off
Output as nonvirtual bus in parent model	off

Parameter	Value
Port dimensions (-1 for inherited)	-1
Variable-size signal	Inherit
Sample time (-1 for inherited)	-1
Source of initial output value	Dialog
Output when disabled	held
Initial output	[]

3.59.1.1.2. "Conn1" (PMIOPort)

Tabla 3.305. "Conn1" Parameters

Parameter	Value
Port number	1
Port location on parent subsystem	Left

3.59.1.1.3. "Derivative" (Derivative)

Tabla 3.306. "Derivative" Parameters

Parameter	Value
Coefficient c in the transfer function approximation s/(c*s + 1) used for linearization	inf

3.59.1.1.4. "Derivative1" (Derivative)

Tabla 3.307. "Derivative1" Parameters

Parameter	Value
Coefficient c in the transfer function approximation s/(c*s + 1) used for linearization	inf

3.59.1.1.5. "In1" (Inport)

Tabla 3.308. "In1" Parameters

Parameter	Value
Port number	1
Port dimensions (-1 for inherited)	-1
Sample time (-1 for inherited)	-1
Minimum	[]
Maximum	[]
Data type	Inherit: auto

3.59.1.1.6. "Pos" (Outport)

Tabla 3.309. "Pos" Parameters

Parameter	Value
Port number	1
Icon display	Port number
Minimum	[]
Maximum	[]
Data type	Inherit: auto
Lock output data type setting against changes by the fixed-point tools	off
Output as nonvirtual bus in parent model	off
Port dimensions (-1 for inherited)	-1
Variable-size signal	Inherit
Sample time (-1 for inherited)	-1
Source of initial output value	Dialog
Output when disabled	held
Initial output	[]

3.59.1.1.7. "Vel" (Outport)

Tabla 3.310. "Vel" Parameters

Parameter	Value
Port number	2
Icon display	Port number
Minimum	[]
Maximum	[]
Data type	Inherit: auto
Lock output data type setting against changes by the fixed-point tools	off
Output as nonvirtual bus in parent model	off
Port dimensions (-1 for inherited)	-1
Variable-size signal	Inherit
Sample time (-1 for inherited)	-1
Source of initial output value	Dialog
Output when disabled	held
Initial output	[]

3.60. Posicion Final (cm)

Figura 3.60. DeltaSM_AnguloSinFriccions/Posicion Final (cm)
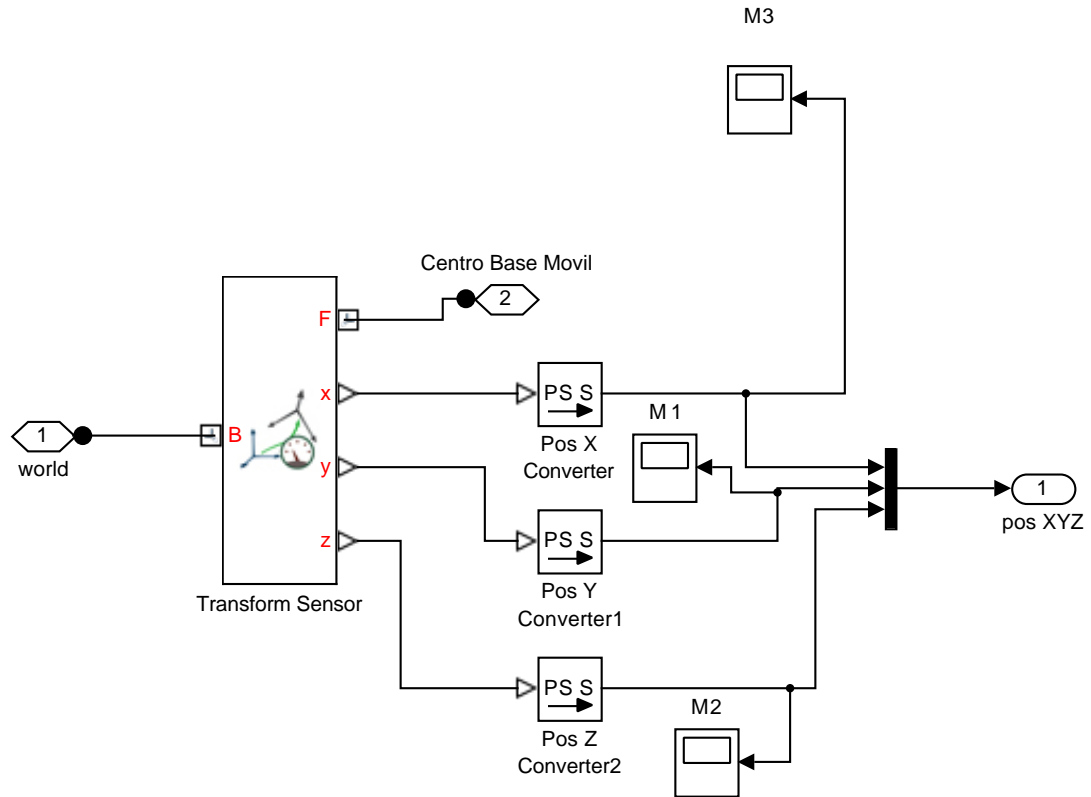
3.60.1. Blocks

3.60.1.1. Parameters

3.60.1.1.1. "Centro Base Movil" (PMIOPort)

Tabla 3.311. "Centro Base Movil" Parameters

Parameter	Value
Port number	2
Port location on parent subsystem	Right

3.60.1.1.2. "Mux" (Mux)

Tabla 3.312. "Mux" Parameters

Parameter	Value
Number of inputs	3
Display option	bar

3.60.1.1.3. "pos XYZ" (Outport)

Tabla 3.313. "pos XYZ" Parameters

Parameter	Value
Port number	1
Icon display	Port number
Minimum	[]
Maximum	[]
Data type	Inherit: auto
Lock output data type setting against changes by the fixed-point tools	off
Output as nonvirtual bus in parent model	off
Port dimensions (-1 for inherited)	-1
Variable-size signal	Inherit
Sample time (-1 for inherited)	-1
Source of initial output value	Dialog
Output when disabled	held
Initial output	[]

3.60.1.1.4. "Transform Sensor" (SimMechanicsBlock)

Tabla 3.314. "Transform Sensor" Parameters

Parameter	Value
ClassName	TransformSensor
MeasurementFrame	World
SenseAngle	off
SenseAxis	off
SenseAngle1	off
SenseAngle2	off

Parameter	Value
SenseAngle3	off
SenseQ	off
SenseR	off
SenseOmegaX	off
SenseOmegaY	off
SenseOmegaZ	off
SenseOmega1	off
SenseOmega2	off
SenseOmega3	off
SenseQDot	off
SenseRDot	off
SenseAlphaX	off
SenseAlphaY	off
SenseAlphaZ	off
SenseAlpha1	off
SenseAlpha2	off
SenseAlpha3	off
SenseQDDot	off
SenseRDDot	off
SenseX	on
SenseY	on
SenseZ	on
SenseRad	off
SenseAzim	off
SenseDist	off
SenseInc	off
SenseXDot	off
SenseYDot	off
SenseZDot	off
SenseRadDot	off
SenseAzimDot	off
SenseDistDot	off
SenseIncDot	off
SenseXDDot	off
SenseYDDot	off
SenseZDDot	off
SenseRadDDot	off
SenseAzimDDot	off

Parameter	Value
SenseDistDDot	off
SenseIncDDot	off
Block Function	simmechanics.library.frames_transforms.transform_sensor

3.60.1.1.5. "world" (PMIOPort)

Tabla 3.315. "world" Parameters

Parameter	Value
Port number	1
Port location on parent subsystem	Left

3.61. Posicion1

Figura 3.61. DeltaSM_AnguloSinFriccions/DeltaSM/Posicion1
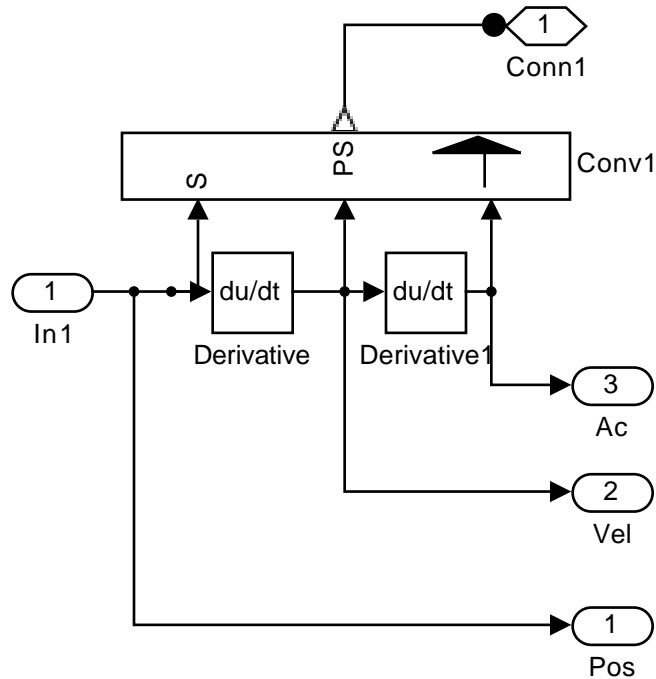
3.61.1. Blocks

3.61.1.1. Parameters

3.61.1.1.1. "Ac" (Outport)

Tabla 3.316. "Ac" Parameters

Parameter	Value
Port number	3
Icon display	Port number
Minimum	[]
Maximum	[]
Data type	Inherit: auto
Lock output data type setting against changes by the fixed-point tools	off
Output as nonvirtual bus in parent model	off
Port dimensions (-1 for inherited)	-1
Variable-size signal	Inherit
Sample time (-1 for inherited)	-1
Source of initial output value	Dialog
Output when disabled	held
Initial output	[]

3.61.1.1.2. "Conn1" (PMIOPort)

Tabla 3.317. "Conn1" Parameters

Parameter	Value
Port number	1
Port location on parent subsystem	Left

3.61.1.1.3. "Derivative" (Derivative)

Tabla 3.318. "Derivative" Parameters

Parameter	Value
Coefficient c in the transfer function	inf

Parameter	Value
approximation s/(c*s + 1) used for linearization	

3.61.1.1.4. "Derivative1" (Derivative)

Tabla 3.319. "Derivative1" Parameters

Parameter	Value
Coefficient c in the transfer function approximation s/(c*s + 1) used for linearization	inf

3.61.1.1.5. "In1" (Inport)

Tabla 3.320. "In1" Parameters

Parameter	Value
Port number	1
Port dimensions (-1 for inherited)	-1
Sample time (-1 for inherited)	-1
Minimum	[]
Maximum	[]
Data type	Inherit: auto

3.61.1.1.6. "Pos" (Outport)

Tabla 3.321. "Pos" Parameters

Parameter	Value
Port number	1
Icon display	Port number
Minimum	[]
Maximum	[]
Data type	Inherit: auto
Lock output data type setting against changes by the fixed-point tools	off

Parameter	Value
Output as nonvirtual bus in parent model	off
Port dimensions (-1 for inherited)	-1
Variable-size signal	Inherit
Sample time (-1 for inherited)	-1
Source of initial output value	Dialog
Output when disabled	held
Initial output	[]

3.61.1.1.7. "Vel" (Outport)

Tabla 3.322. "Vel" Parameters

Parameter	Value
Port number	2
Icon display	Port number
Minimum	[]
Maximum	[]
Data type	Inherit: auto
Lock output data type setting against changes by the fixed-point tools	off
Output as nonvirtual bus in parent model	off
Port dimensions (-1 for inherited)	-1
Variable-size signal	Inherit
Sample time (-1 for inherited)	-1
Source of initial output value	Dialog
Output when disabled	held
Initial output	[]

3.62. Posicion2

Figura 3.62. DeltaSM_AnguloSinFriccions/DeltaSM/Posicion2
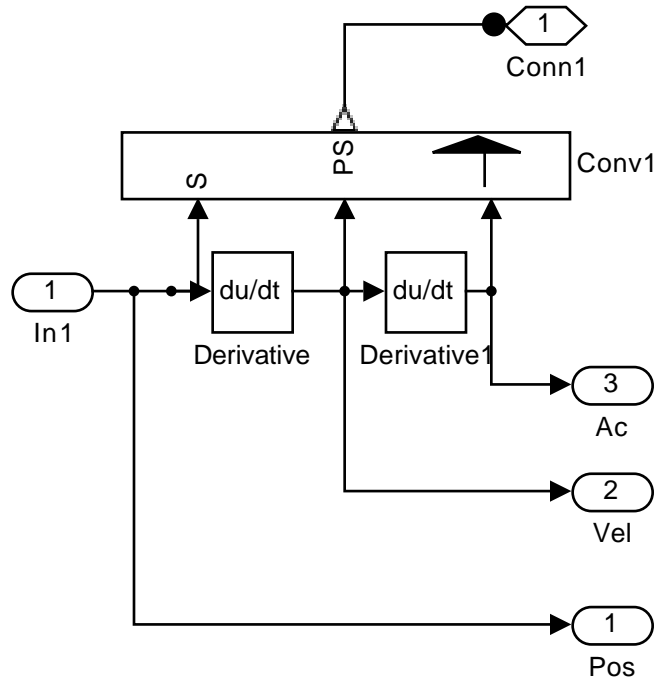
3.62.1. Blocks

3.62.1.1. Parameters

3.62.1.1.1. "Ac" (Outport)

Tabla 3.323. "Ac" Parameters

Parameter	Value
Port number	3
Icon display	Port number
Minimum	[]
Maximum	[]
Data type	Inherit: auto
Lock output data type setting against changes by the fixed-point tools	off
Output as nonvirtual bus in parent model	off

Parameter	Value
Port dimensions (-1 for inherited)	-1
Variable-size signal	Inherit
Sample time (-1 for inherited)	-1
Source of initial output value	Dialog
Output when disabled	held
Initial output	[]

3.62.1.1.2. "Conn1" (PMIOPort)

Tabla 3.324. "Conn1" Parameters

Parameter	Value
Port number	1
Port location on parent subsystem	Left

3.62.1.1.3. "Derivative" (Derivative)

Tabla 3.325. "Derivative" Parameters

Parameter	Value
Coefficient c in the transfer function approximation s/(c*s + 1) used for linearization	inf

3.62.1.1.4. "Derivative1" (Derivative)

Tabla 3.326. "Derivative1" Parameters

Parameter	Value
Coefficient c in the transfer function approximation s/(c*s + 1) used for linearization	inf

3.62.1.1.5. "In1" (Inport)

Tabla 3.327. "In1" Parameters

Parameter	Value
Port number	1
Port dimensions (-1 for inherited)	-1
Sample time (-1 for inherited)	-1
Minimum	[]
Maximum	[]
Data type	Inherit: auto

3.62.1.1.6. "Pos" (Outport)

Tabla 3.328. "Pos" Parameters

Parameter	Value
Port number	1
Icon display	Port number
Minimum	[]
Maximum	[]
Data type	Inherit: auto
Lock output data type setting against changes by the fixed-point tools	off
Output as nonvirtual bus in parent model	off
Port dimensions (-1 for inherited)	-1
Variable-size signal	Inherit
Sample time (-1 for inherited)	-1
Source of initial output value	Dialog
Output when disabled	held
Initial output	[]

3.62.1.1.7. "Vel" (Outport)

Tabla 3.329. "Vel" Parameters

Parameter	Value
Port number	2
Icon display	Port number
Minimum	[]
Maximum	[]
Data type	Inherit: auto
Lock output data type setting against changes by the fixed-point tools	off
Output as nonvirtual bus in parent model	off
Port dimensions (-1 for inherited)	-1
Variable-size signal	Inherit
Sample time (-1 for inherited)	-1
Source of initial output value	Dialog
Output when disabled	held
Initial output	[]

3.63. Subsystem

Figura 3.63. DeltaSM_AnguloSinFriccions/Subsystem
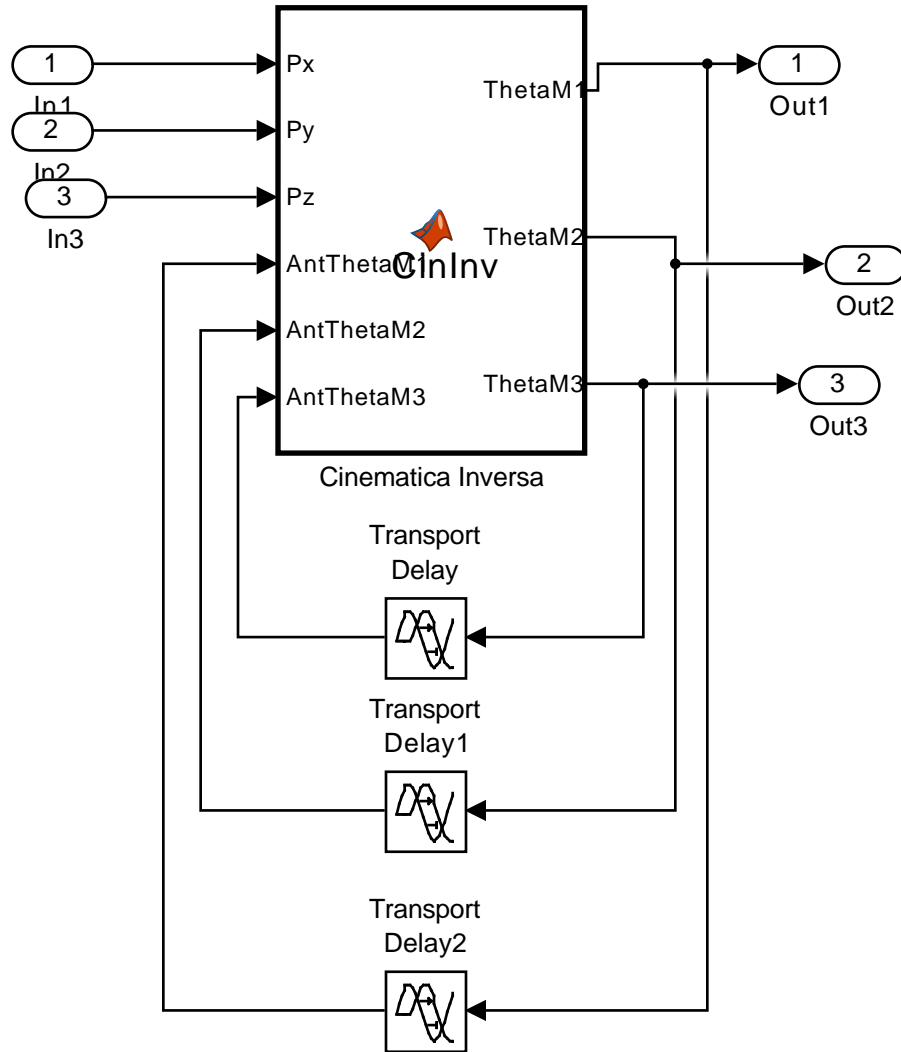
3.63.1. Blocks

3.63.1.1. Parameters

3.63.1.1.1. "Cinematica Inversa" (MATLAB Function)

Tabla 3.330. Cinematica Inversa Function Properties

Property	Value
Update Method	INHERITED

Property	Value
Sample Time	
Support variable-size arrays	1
Saturate on integer overflow	1
Treat these inherited Simulink signal types as fi objects	Fixed-point
Input fi math	fimath(...)
Description	

Tabla 3.331. Cinematica Inversa Argument Summary

Name	Scope	Port	Data Type	Size
Px	Input	1	double	1
Py	Input	2	double	1
Pz	Input	3	double	1
ThetaM1	Output	1	double	1
ThetaM2	Output	2	double	1
ThetaM3	Output	3	double	1
AntThetaM1	Input	4	double	1
AntThetaM2	Input	5	double	1
AntThetaM3	Input	6	double	1

Cinematica Inversa Function Script

```
function [ThetaM1, ThetaM2, ThetaM3] = CinInv(Px, Py, Pz,AntThetaM1, AntThetaM2, A
% function [ThetaM1,ThetaM2,ThetaM3] = CinInv(Px,Py,Pz)
%
%
% %
% % h  = 65.25; % 34.5
% % r  = 34.47;% 65.5;
% % a  = 130; % 130;
% % b  = 275; % 275;
% %
% % % angulos de las juntas
% % phi = [ 0+pi/2; 2*pi/3+pi/2; 4*pi/3+pi/2];
% %
% % % respuesta
% % theta = zeros(3,1);
% %
% % % para cada pata
% % for i=1:3
% %
% %      % Cinematica inversa para la primera pata
```

```
% %     Cxi =  cos(phi(i))*Px + sin(phi(i))*Py + h - r;
% %     Cyi = -sin(phi(i))*Px + cos(phi(i))*Py;
% %     Czi =  Pz;
% %
% %     t3i = acos( Cyi/b );
% %     K   = ( Cxi^2 + Cyi^2 + Czi^2 - a^2 - b^2 )/( 2*a*b*sin(t3i) );
% %     t2i = acos(K);
% %
% %     A = a + b*cos(t2i)*sin(t3i);
% %     B = b*sin(t2i)*sin(t3i);
% %     sint1i = (A*Czi - B*Cxi) / ( A*A+B*B );
% %     cost1i = (A*Cxi + B*Czi) / ( A*A+B*B );
% %
% %     theta(i,1) = atan2( sint1i, cost1i );
% % end
% %
% % %
% % ThetaM1=theta(1,1);
% % ThetaM2=theta(2,1);
% % ThetaM3=theta(3,1);
%
%
% % % % %%%%%%% %%%%%%%%%%
% % % % %  Parámetros  %
% %
% r = 34.5; %radio efector final
% R = 65.5;%radio de los ejes de los motores
% l1 = 130; %largo barra 1
% l2 = 275; %largo barra 2
%
% codo=sign(-1);%codo arriba o cado abajo
% % figure(1)
% %%%%%%%%%%%%%%%%
%  %  Cálculos  %
% %
% %  for Px=-600+beta:100:600+beta
% %     for Py=-600+beta:100:600+beta
% %         for Pz=-600+beta:100:0+beta
% %
%
% PC1 = rotz(0,'deg')*[Px; Py; Pz] + [r-R; 0; 0];
% PC2 = rotz(120,'deg')*[Px; Py; Pz] + [r-R; 0; 0];
% PC3 = rotz(240,'deg')*[Px; Py; Pz] + [r-R; 0; 0];
%
% %%%%%%%%%%%%%%%%%%%%%%%%%%%%    THETA 3
% %cosenos de theta 3
% C31=PC1(2)/l2;
% C32=PC2(2)/l2;
% C33=PC3(2)/l2;
% %senos de theta 3
% S31=codo*sqrt(1-C31^2);
% S32=codo*sqrt(1-C32^2);
% S33=codo*sqrt(1-C33^2);
%
```

```
% theta3_1 = atan2(S31,C31);
% theta3_2 = atan2(S32,C32);
% theta3_3 = atan2(S33,C33);
%
% %%%%%%%%%%%%%%%%%%%%%%%%       THETA 2
%
% %cosenos de theta 2
% C21=((PC1(1)^2+PC1(2)^2+PC1(3)^2-l1^2-l2^2)/(2*l1*l2*sin(theta3_1)));
% C22=((PC2(1)^2+PC2(2)^2+PC2(3)^2-l1^2-l2^2)/(2*l1*l2*sin(theta3_2)));
% C23=((PC3(1)^2+PC3(2)^2+PC3(3)^2-l1^2-l2^2)/(2*l1*l2*sin(theta3_3)));
% %senos de theta 2
% S21=codo*sqrt(1-C21^2);
% S22=codo*sqrt(1-C22^2);
% S23=codo*sqrt(1-C23^2);
%
% theta2_1 = atan2(S21,C21);
% theta2_2 = atan2(S22,C22);
% theta2_3 = atan2(S23,C23);
%
% CinInv_1 = [l1+l2*sin(theta3_1)*cos(theta2_1), -l2*...
%      sin(theta3_1)*sin(theta2_1); l2*sin(theta3_1)*sin(theta2_1), ...
%      l1+l2*sin(theta3_1)*cos(theta2_1)]^-1*[PC1(1), PC1(2)]';
% CinInv_2 = [l1+l2*sin(theta3_2)*cos(theta2_2), -l2*...
%      sin(theta3_2)*sin(theta2_2); l2*sin(theta3_2)*sin(theta2_2), ...
%      l1+l2*sin(theta3_2)*cos(theta2_2)]^-1*[PC2(1), PC2(2)]';
% CinInv_3 = [l1+l2*sin(theta3_3)*cos(theta2_3), -l2*...
%      sin(theta3_3)*sin(theta2_3); l2*sin(theta3_3)*sin(theta2_3), ...
%      l1+l2*sin(theta3_3)*cos(theta2_3)]^-1*[PC3(1), PC3(2)]';
%
%
% cos1_1 = CinInv_1(1,:);
% sin1_1 = CinInv_1(2,:);
%
% cos1_2 = CinInv_2(1,:);
% sin1_2 = CinInv_2(2,:);
%
% cos1_3 = CinInv_3(1,:);
% sin1_3 = CinInv_3(2,:);
%
% ThetaM1 = atan2(sin1_1,cos1_1);
% ThetaM2 = atan2(sin1_2,cos1_2);
% ThetaM3 = atan2(sin1_3,cos1_3);


%
%
%
%
%
%
%   if (isreal(theta2_1) && isreal(theta2_2) && isreal(theta2_3))
%   else
%      msgbox('numero imaginario')
%       quit cancel;
%    end
```

```matlab
%
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%



theta = zeros(3,1);
thetaA = zeros(3,1);
thetaB = zeros(3,1);
alpha = [ 0+pi/2; 2*pi/3+pi/2; 4*pi/3+pi/2];
R  = 65.25; % 34.5
r  = 34.47;% 65.5;
L1  = 130; % 130;
L2  = 275; % 275;

R1=R-r;
Si=1/L1*(-Px^2-Py^2-Pz^2+L2^2-L1^2-R1^2);
for i=1:3
Qi=2*Px*cos(alpha(i))+2*Py*sin(alpha(i));


S1=-2*Pz-sqrt(4*Pz^2+4*R1^2-Si^2+Qi^2*(1-(R1^2)/(L1^2))+Qi*((-2*R1*Si)/L1-4*R1));
C1=-2*R1-Qi*(R1/L1-1)-Si;


theta(i,1) = atan2( S1, C1 )*2;
thetaA(i,1) = atan2( S1, C1 )*2;
thetaB(i,1) = -atan2( S1, -C1 )*2;




%   while(theta(i,1)<pi/2)
%  theta(i,1)=theta(i,1)+pi;
%   end
%  while(theta(i,1)>(pi/2))
%  theta(i,1)=theta(i,1)-pi;
%  end

%  if (thetaA(i,1)>pi/2 || thetaB(i,1)>pi/2)
%   theta(i,1)=min(thetaA(i,1),thetaB(i,1)) ;
%  else
% theta(i,1)=max(thetaA(i,1),thetaB(i,1));
%  end
%
%
%
%
%  theta(i,1) = (atan2( -S1, C1 )*2)+10*pi;
%   while(theta(i,1)<pi)
%  theta(i,1)=theta(i,1)+pi/2;
%   end
%  while(theta(i,1)>(pi))
%  theta(i,1)=theta(i,1)-pi/2;
```

```matlab
    %   end

    end

    if(abs(thetaA(1,1)-AntThetaM1)<abs(thetaB(1,1)-AntThetaM1))
       ThetaM1=thetaA(1,1);
    else
        ThetaM1=thetaB(1,1);
    end


    if(abs(thetaA(2,1)-AntThetaM2)<abs(thetaB(2,1)-AntThetaM2))
       ThetaM2=thetaA(2,1);
    else
        ThetaM2=thetaB(2,1);
    end

    if(abs(thetaA(3,1)-AntThetaM3)<abs(thetaB(3,1)-AntThetaM3))
       ThetaM3=thetaA(3,1);
    else
        ThetaM3=thetaB(3,1);
    end

    %
    % ThetaM1=theta(1,1);
    % ThetaM2=theta(2,1);
    % ThetaM3=theta(3,1);
```

Tabla 3.332. Cinematica Inversa Supporting Functions

Function	Defined By	Path
abs	MATLAB	
atan2	MATLAB	
coder.internal.assert	MATLAB	
coder.internal.div	MATLAB	
coder.internal.isBuiltInNumeric	MATLAB	
coder.internal.scalarEg	MATLAB	
coder.internal.scalexpAlloc	MATLAB	
cos	MATLAB	
floor	MATLAB	
ismatrix	MATLAB	
mpower	MATLAB	
mrdivide	MATLAB	
power	MATLAB	
rdivide	MATLAB	
sin	MATLAB	

Function	Defined By	Path
sqrt	MATLAB	

3.63.1.1.2. "In1" (Inport)

Tabla 3.333. "In1" Parameters

Parameter	Value
Port number	1
Port dimensions (-1 for inherited)	-1
Sample time (-1 for inherited)	-1
Minimum	[]
Maximum	[]
Data type	Inherit: auto

3.63.1.1.3. "In2" (Inport)

Tabla 3.334. "In2" Parameters

Parameter	Value
Port number	2
Port dimensions (-1 for inherited)	-1
Sample time (-1 for inherited)	-1
Minimum	[]
Maximum	[]
Data type	Inherit: auto

3.63.1.1.4. "In3" (Inport)

Tabla 3.335. "In3" Parameters

Parameter	Value
Port number	3
Port dimensions (-1 for inherited)	-1

Parameter	Value
Sample time (-1 for inherited)	-1
Minimum	[]
Maximum	[]
Data type	Inherit: auto

3.63.1.1.5. "Out1" (Outport)

Tabla 3.336. "Out1" Parameters

Parameter	Value
Port number	1
Icon display	Port number
Minimum	[]
Maximum	[]
Data type	Inherit: auto
Lock output data type setting against changes by the fixed-point tools	off
Output as nonvirtual bus in parent model	off
Port dimensions (-1 for inherited)	-1
Variable-size signal	Inherit
Sample time (-1 for inherited)	-1
Source of initial output value	Dialog
Output when disabled	held
Initial output	[]

3.63.1.1.6. "Out2" (Outport)

Tabla 3.337. "Out2" Parameters

Parameter	Value
Port number	2
Icon display	Port number
Minimum	[]

Parameter	Value
Maximum	[]
Data type	Inherit: auto
Lock output data type setting against changes by the fixed-point tools	off
Output as nonvirtual bus in parent model	off
Port dimensions (-1 for inherited)	-1
Variable-size signal	Inherit
Sample time (-1 for inherited)	-1
Source of initial output value	Dialog
Output when disabled	held
Initial output	[]

3.63.1.1.7. "Out3" (Outport)

Tabla 3.338. "Out3" Parameters

Parameter	Value
Port number	3
Icon display	Port number
Minimum	[]
Maximum	[]
Data type	Inherit: auto
Lock output data type setting against changes by the fixed-point tools	off
Output as nonvirtual bus in parent model	off
Port dimensions (-1 for inherited)	-1
Variable-size signal	Inherit
Sample time (-1 for inherited)	-1
Source of initial output value	Dialog
Output when disabled	held
Initial output	[]

3.63.1.1.8. "Transport Delay" (TransportDelay)

Tabla 3.339. "Transport Delay" Parameters

Parameter	Value
Time delay	0.01
Initial output	0
Initial buffer size	1024
Use fixed buffer size	off
Direct feedthrough of input during linearization	off
Pade order (for linearization)	0

3.63.1.1.9. "Transport Delay1" (TransportDelay)

Tabla 3.340. "Transport Delay1" Parameters

Parameter	Value
Time delay	0.01
Initial output	0
Initial buffer size	1024
Use fixed buffer size	off
Direct feedthrough of input during linearization	off
Pade order (for linearization)	0

3.63.1.1.10. "Transport Delay2" (TransportDelay)

Tabla 3.341. "Transport Delay2" Parameters

Parameter	Value
Time delay	0.01
Initial output	0
Initial buffer size	1024
Use fixed buffer size	off
Direct feedthrough of input during linearization	off

Parameter	Value
Pade order (for linearization)	0

3.64. uniball_Cuerpo_1_RIGID

Figura 3.64. DeltaSM_AnguloSinFriccions/DeltaSM/ AntebrazoCompleto_1_RIGID1/uniball_Cuerpo_1_RIGID
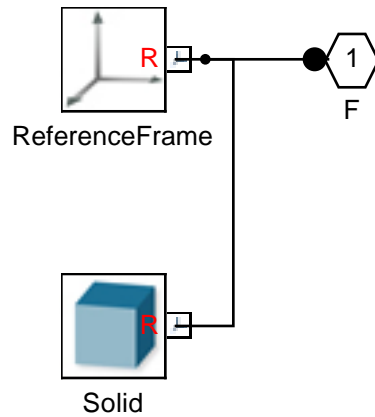
3.64.1. Blocks

3.64.1.1. Parameters

3.64.1.1.1. "F" (PMIOPort)

Tabla 3.342. "F" Parameters

Parameter	Value
Port number	1
Port location on parent subsystem	Left

3.64.1.1.2. "ReferenceFrame" (SimMechanicsBlock)

Tabla 3.343. "ReferenceFrame" Parameters

Parameter	Value
ClassName	ReferenceFrame

Parameter	Value
Block Function	simmechanics.library.frames_transforms.reference_frame

3.64.1.1.3. "Solid" (SimMechanicsBlock)

Tabla 3.344. "Solid" Parameters

Parameter	Value
ClassName	Solid
InertiaType	Custom
Mass	0.0025464824489193402
MassUnits	kg
CenterOfMass	[0 -11.014318270241464 0]
CenterOfMassUnits	mm
MomentsOfInertia	[0.45200885840518795 0.073957505770814544 0.41351692276291047]
MomentsOfInertiaUnits	kg*mm^2
ProductsOfInertia	[0 2.4767470549411023e-07 0]
ProductsOfInertiaUnits	kg*mm^2
DensityBased	on
Density	1000
DensityUnits	kg/(m^3)
GraphicType	FromGeometry
MarkerShape	Sphere
MarkerSize	10
MarkerSizeUnits	m
GraphicVisPropType	SimpleVisualProperties
GraphicDiffuseColor	[0.792156862745098 0.81960784313725488 0.93333333333333335]
GraphicSpecularColor	[0.5 0.5 0.5 1.0]
GraphicAmbientColor	[0.15 0.15 0.15 1.0]
GraphicEmissiveColor	[0.0 0.0 0.0 1.0]
GraphicShininess	75
GraphicOpacity	1
GeometryShape	FromFile
RectangleSize	[1 1]
RectangleSizeUnits	m
BrickDimensions	[1 1 1]
BrickDimensionUnits	m
CylinderRadius	1
CylinderRadiusUnits	m

Parameter	Value
CylinderLength	1
CylinderLengthUnits	m
SphereRadius	1
SphereRadiusUnits	m
EllipsoidRadii	[1 1 1]
EllipsoidRadiiUnits	m
ExtrusionCrossSection	[1 1; -1 1; -1 -1; 1 -1]
ExtrusionCrossSectionUnits	m
ExtrusionLength	1
ExtrusionLengthUnits	m
PolygonNumSides	3
PolygonOuterRadius	1
PolygonOuterRadiusUnits	m
ExtGeomFileType	STL
ExtGeomFileName	uniball-Cuerpo_Predeterminado_sldprt.STL
ExtGeomFileUnits	mm
RevolutionCrossSection	[1 1; 1 -1; 2 -1; 2 1]
RevolutionCrossSectionUnits	m
RevolutionExtent	Full
RevolutionAngle	180
RevolutionAngleUnits	deg
Block Function	simmechanics.library.body_elements.solid

3.65. uniball_Cuerpo_1_RIGID

Figura 3.65. DeltaSM_AnguloSinFriccions/DeltaSM/ AntebrazoCompleto_2_RIGID1/uniball_Cuerpo_1_RIGID
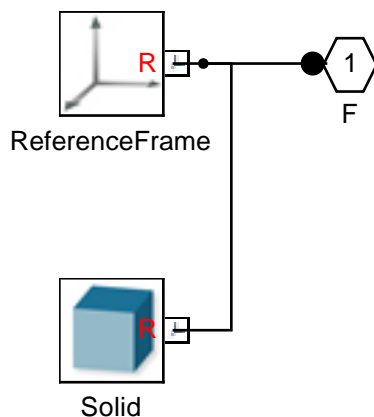
3.65.1. Blocks

3.65.1.1. Parameters

3.65.1.1.1. "F" (PMIOPort)

Tabla 3.345. "F" Parameters

Parameter	Value
Port number	1
Port location on parent subsystem	Left

3.65.1.1.2. "ReferenceFrame" (SimMechanicsBlock)

Tabla 3.346. "ReferenceFrame" Parameters

Parameter	Value
ClassName	ReferenceFrame
Block Function	simmechanics.library.frames_transforms.reference_frame

3.65.1.1.3. "Solid" (SimMechanicsBlock)

Tabla 3.347. "Solid" Parameters

Parameter	Value
ClassName	Solid
InertiaType	Custom
Mass	0.0025464824489193402
MassUnits	kg
CenterOfMass	[0 -11.014318270241464 0]
CenterOfMassUnits	mm
MomentsOfInertia	[0.45200885840518795 0.073957505770814544 0.41351692276291047]
MomentsOfInertiaUnits	kg*mm^2
ProductsOfInertia	[0 2.4767470549411023e-07 0]
ProductsOfInertiaUnits	kg*mm^2
DensityBased	on
Density	1000
DensityUnits	kg/(m^3)
GraphicType	FromGeometry
MarkerShape	Sphere
MarkerSize	10

Parameter	Value
MarkerSizeUnits	m
GraphicVisPropType	SimpleVisualProperties
GraphicDiffuseColor	[0.792156862745098 0.81960784313725488 0.93333333333333335]
GraphicSpecularColor	[0.5 0.5 0.5 1.0]
GraphicAmbientColor	[0.15 0.15 0.15 1.0]
GraphicEmissiveColor	[0.0 0.0 0.0 1.0]
GraphicShininess	75
GraphicOpacity	1
GeometryShape	FromFile
RectangleSize	[1 1]
RectangleSizeUnits	m
BrickDimensions	[1 1 1]
BrickDimensionUnits	m
CylinderRadius	1
CylinderRadiusUnits	m
CylinderLength	1
CylinderLengthUnits	m
SphereRadius	1
SphereRadiusUnits	m
EllipsoidRadii	[1 1 1]
EllipsoidRadiiUnits	m
ExtrusionCrossSection	[1 1; -1 1; -1 -1; 1 -1]
ExtrusionCrossSectionUnits	m
ExtrusionLength	1
ExtrusionLengthUnits	m
PolygonNumSides	3
PolygonOuterRadius	1
PolygonOuterRadiusUnits	m
ExtGeomFileType	STL
ExtGeomFileName	uniball-Cuerpo_Predeterminado_sldprt.STL
ExtGeomFileUnits	mm
RevolutionCrossSection	[1 1; 1 -1; 2 -1; 2 1]
RevolutionCrossSectionUnits	m
RevolutionExtent	Full
RevolutionAngle	180
RevolutionAngleUnits	deg
Block Function	simmechanics.library.body_elements.solid

3.66. uniball_Cuerpo_1_RIGID

Figura 3.66. DeltaSM_AnguloSinFriccions/DeltaSM/ AntebrazoCompleto_3_RIGID1/uniball_Cuerpo_1_RIGID

3.66.1. Blocks

3.66.1.1. Parameters

3.66.1.1.1. "F" (PMIOPort)

Tabla 3.348. "F" Parameters

Parameter	Value
Port number	1
Port location on parent subsystem	Left

3.66.1.1.2. "ReferenceFrame" (SimMechanicsBlock)

Tabla 3.349. "ReferenceFrame" Parameters

Parameter	Value
ClassName	ReferenceFrame
Block Function	simmechanics.library.frames_transforms.reference_frame

3.66.1.1.3. "Solid" (SimMechanicsBlock)

Tabla 3.350. "Solid" Parameters

Parameter	Value
ClassName	Solid
InertiaType	Custom
Mass	0.0025464824489193402
MassUnits	kg
CenterOfMass	[0 -11.014318270241464 0]
CenterOfMassUnits	mm
MomentsOfInertia	[0.45200885840518795 0.073957505770814544 0.41351692276291047]
MomentsOfInertiaUnits	kg*mm^2
ProductsOfInertia	[0 2.4767470549411023e-07 0]
ProductsOfInertiaUnits	kg*mm^2
DensityBased	on
Density	1000
DensityUnits	kg/(m^3)
GraphicType	FromGeometry
MarkerShape	Sphere
MarkerSize	10
MarkerSizeUnits	m
GraphicVisPropType	SimpleVisualProperties
GraphicDiffuseColor	[0.792156862745098 0.81960784313725488 0.93333333333333335]
GraphicSpecularColor	[0.5 0.5 0.5 1.0]
GraphicAmbientColor	[0.15 0.15 0.15 1.0]
GraphicEmissiveColor	[0.0 0.0 0.0 1.0]
GraphicShininess	75
GraphicOpacity	1
GeometryShape	FromFile
RectangleSize	[1 1]
RectangleSizeUnits	m
BrickDimensions	[1 1 1]
BrickDimensionUnits	m
CylinderRadius	1
CylinderRadiusUnits	m
CylinderLength	1
CylinderLengthUnits	m
SphereRadius	1
SphereRadiusUnits	m

Parameter	Value
EllipsoidRadii	[1 1 1]
EllipsoidRadiiUnits	m
ExtrusionCrossSection	[1 1; -1 1; -1 -1; 1 -1]
ExtrusionCrossSectionUnits	m
ExtrusionLength	1
ExtrusionLengthUnits	m
PolygonNumSides	3
PolygonOuterRadius	1
PolygonOuterRadiusUnits	m
ExtGeomFileType	STL
ExtGeomFileName	uniball-Cuerpo_Predeterminado_sldprt.STL
ExtGeomFileUnits	mm
RevolutionCrossSection	[1 1; 1 -1; 2 -1; 2 1]
RevolutionCrossSectionUnits	m
RevolutionExtent	Full
RevolutionAngle	180
RevolutionAngleUnits	deg
Block Function	simmechanics.library.body_elements.solid

3.67. uniball_Cuerpo_1_RIGID

Figura 3.67. DeltaSM_AnguloSinFriccions/DeltaSM/ AntebrazoCompleto_4_RIGID1/uniball_Cuerpo_1_RIGID
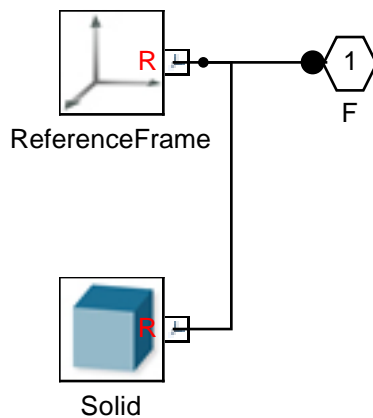
3.67.1. Blocks

3.67.1.1. Parameters

3.67.1.1.1. "F" (PMIOPort)

Tabla 3.351. "F" Parameters

Parameter	Value
Port number	1
Port location on parent subsystem	Left

3.67.1.1.2. "ReferenceFrame" (SimMechanicsBlock)

Tabla 3.352. "ReferenceFrame" Parameters

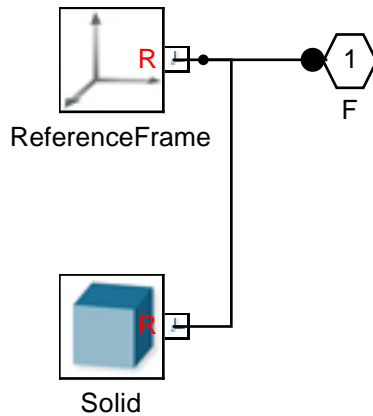| Parameter	Value
ClassName	ReferenceFrame
Block Function	simmechanics.library.frames_transforms.reference_frame

3.67.1.1.3. "Solid" (SimMechanicsBlock)

Tabla 3.353. "Solid" Parameters

Parameter	Value
ClassName	Solid
InertiaType	Custom
Mass	0.0025464824489193402
MassUnits	kg
CenterOfMass	[0 -11.014318270241464 0]
CenterOfMassUnits	mm
MomentsOfInertia	[0.45200885840518795 0.073957505770814544 0.41351692276291047]
MomentsOfInertiaUnits	kg*mm^2
ProductsOfInertia	[0 2.4767470549411023e-07 0]
ProductsOfInertiaUnits	kg*mm^2
DensityBased	on
Density	1000
DensityUnits	kg/(m^3)
GraphicType	FromGeometry
MarkerShape	Sphere
MarkerSize	10
MarkerSizeUnits	m
GraphicVisPropType	SimpleVisualProperties
GraphicDiffuseColor	[0.792156862745098 0.81960784313725488 0.93333333333333335]
GraphicSpecularColor	[0.5 0.5 0.5 1.0]

Parameter	Value
GraphicAmbientColor	[0.15 0.15 0.15 1.0]
GraphicEmissiveColor	[0.0 0.0 0.0 1.0]
GraphicShininess	75
GraphicOpacity	1
GeometryShape	FromFile
RectangleSize	[1 1]
RectangleSizeUnits	m
BrickDimensions	[1 1 1]
BrickDimensionUnits	m
CylinderRadius	1
CylinderRadiusUnits	m
CylinderLength	1
CylinderLengthUnits	m
SphereRadius	1
SphereRadiusUnits	m
EllipsoidRadii	[1 1 1]
EllipsoidRadiiUnits	m
ExtrusionCrossSection	[1 1; -1 1; -1 -1; 1 -1]
ExtrusionCrossSectionUnits	m
ExtrusionLength	1
ExtrusionLengthUnits	m
PolygonNumSides	3
PolygonOuterRadius	1
PolygonOuterRadiusUnits	m
ExtGeomFileType	STL
ExtGeomFileName	uniball-Cuerpo_Predeterminado_sldprt.STL
ExtGeomFileUnits	mm
RevolutionCrossSection	[1 1; 1 -1; 2 -1; 2 1]
RevolutionCrossSectionUnits	m
RevolutionExtent	Full
RevolutionAngle	180
RevolutionAngleUnits	deg
Block Function	simmechanics.library.body_elements.solid

3.68. uniball_Cuerpo_1_RIGID

Figura 3.68. DeltaSM_AnguloSinFriccions/DeltaSM/ AntebrazoCompleto_5_RIGID1/uniball_Cuerpo_1_RIGID
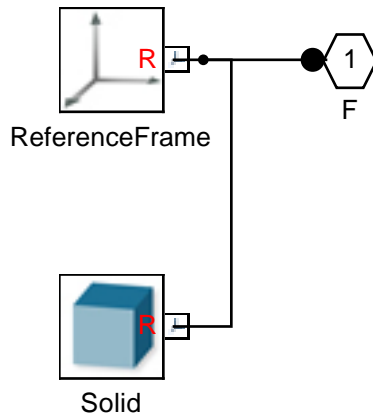
3.68.1. Blocks

3.68.1.1. Parameters

3.68.1.1.1. "F" (PMIOPort)

Tabla 3.354. "F" Parameters

Parameter	Value
Port number	1
Port location on parent subsystem	Left

3.68.1.1.2. "ReferenceFrame" (SimMechanicsBlock)

Tabla 3.355. "ReferenceFrame" Parameters

Parameter	Value
ClassName	ReferenceFrame
Block Function	simmechanics.library.frames_transforms.reference_frame

3.68.1.1.3. "Solid" (SimMechanicsBlock)

Tabla 3.356. "Solid" Parameters

Parameter	Value
ClassName	Solid
InertiaType	Custom
Mass	0.0025464824489193402
MassUnits	kg
CenterOfMass	[0 -11.014318270241464 0]
CenterOfMassUnits	mm
MomentsOfInertia	[0.45200885840518795 0.073957505770814544 0.41351692276291047]
MomentsOfInertiaUnits	kg*mm^2
ProductsOfInertia	[0 2.4767470549411023e-07 0]
ProductsOfInertiaUnits	kg*mm^2
DensityBased	on
Density	1000
DensityUnits	kg/(m^3)
GraphicType	FromGeometry
MarkerShape	Sphere
MarkerSize	10
MarkerSizeUnits	m
GraphicVisPropType	SimpleVisualProperties
GraphicDiffuseColor	[0.792156862745098 0.81960784313725488 0.93333333333333335]
GraphicSpecularColor	[0.5 0.5 0.5 1.0]
GraphicAmbientColor	[0.15 0.15 0.15 1.0]
GraphicEmissiveColor	[0.0 0.0 0.0 1.0]
GraphicShininess	75
GraphicOpacity	1
GeometryShape	FromFile
RectangleSize	[1 1]
RectangleSizeUnits	m
BrickDimensions	[1 1 1]
BrickDimensionUnits	m
CylinderRadius	1
CylinderRadiusUnits	m
CylinderLength	1
CylinderLengthUnits	m
SphereRadius	1
SphereRadiusUnits	m

Parameter	Value
EllipsoidRadii	[1 1 1]
EllipsoidRadiiUnits	m
ExtrusionCrossSection	[1 1; -1 1; -1 -1; 1 -1]
ExtrusionCrossSectionUnits	m
ExtrusionLength	1
ExtrusionLengthUnits	m
PolygonNumSides	3
PolygonOuterRadius	1
PolygonOuterRadiusUnits	m
ExtGeomFileType	STL
ExtGeomFileName	uniball-Cuerpo_Predeterminado_sldprt.STL
ExtGeomFileUnits	mm
RevolutionCrossSection	[1 1; 1 -1; 2 -1; 2 1]
RevolutionCrossSectionUnits	m
RevolutionExtent	Full
RevolutionAngle	180
RevolutionAngleUnits	deg
Block Function	simmechanics.library.body_elements.solid

3.69. uniball_Cuerpo_1_RIGID

Figura 3.69. DeltaSM_AnguloSinFriccions/DeltaSM/ AntebrazoCompleto_6_RIGID1/uniball_Cuerpo_1_RIGID
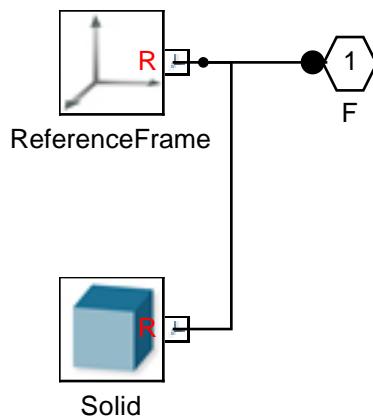
3.69.1. Blocks

3.69.1.1. Parameters

3.69.1.1.1. "F" (PMIOPort)

Tabla 3.357. "F" Parameters

Parameter	Value
Port number	1
Port location on parent subsystem	Left

3.69.1.1.2. "ReferenceFrame" (SimMechanicsBlock)

Tabla 3.358. "ReferenceFrame" Parameters

Parameter	Value
ClassName	ReferenceFrame
Block Function	simmechanics.library.frames_transforms.reference_frame

3.69.1.1.3. "Solid" (SimMechanicsBlock)

Tabla 3.359. "Solid" Parameters

Parameter	Value
ClassName	Solid
InertiaType	Custom
Mass	0.0025464824489193402
MassUnits	kg
CenterOfMass	[0 -11.014318270241464 0]
CenterOfMassUnits	mm
MomentsOfInertia	[0.45200885840518795 0.073957505770814544 0.41351692276291047]
MomentsOfInertiaUnits	kg*mm^2
ProductsOfInertia	[0 2.4767470549411023e-07 0]
ProductsOfInertiaUnits	kg*mm^2
DensityBased	on
Density	1000
DensityUnits	kg/(m^3)
GraphicType	FromGeometry
MarkerShape	Sphere
MarkerSize	10
MarkerSizeUnits	m
GraphicVisPropType	SimpleVisualProperties
GraphicDiffuseColor	[0.792156862745098 0.81960784313725488 0.93333333333333335]
GraphicSpecularColor	[0.5 0.5 0.5 1.0]

Parameter	Value
GraphicAmbientColor	[0.15 0.15 0.15 1.0]
GraphicEmissiveColor	[0.0 0.0 0.0 1.0]
GraphicShininess	75
GraphicOpacity	1
GeometryShape	FromFile
RectangleSize	[1 1]
RectangleSizeUnits	m
BrickDimensions	[1 1 1]
BrickDimensionUnits	m
CylinderRadius	1
CylinderRadiusUnits	m
CylinderLength	1
CylinderLengthUnits	m
SphereRadius	1
SphereRadiusUnits	m
EllipsoidRadii	[1 1 1]
EllipsoidRadiiUnits	m
ExtrusionCrossSection	[1 1; -1 1; -1 -1; 1 -1]
ExtrusionCrossSectionUnits	m
ExtrusionLength	1
ExtrusionLengthUnits	m
PolygonNumSides	3
PolygonOuterRadius	1
PolygonOuterRadiusUnits	m
ExtGeomFileType	STL
ExtGeomFileName	uniball-Cuerpo_Predeterminado_sldprt.STL
ExtGeomFileUnits	mm
RevolutionCrossSection	[1 1; 1 -1; 2 -1; 2 1]
RevolutionCrossSectionUnits	m
RevolutionExtent	Full
RevolutionAngle	180
RevolutionAngleUnits	deg
Block Function	simmechanics.library.body_elements.solid

3.70. uniball_Cuerpo_2_RIGID

Figura 3.70. DeltaSM_AnguloSinFriccions/DeltaSM/ AntebrazoCompleto_1_RIGID1/uniball_Cuerpo_2_RIGID

3.70.1. Blocks

3.70.1.1. Parameters

3.70.1.1.1. "F" (PMIOPort)

Tabla 3.360. "F" Parameters

Parameter	Value
Port number	1
Port location on parent subsystem	Left

3.70.1.1.2. "ReferenceFrame" (SimMechanicsBlock)

Tabla 3.361. "ReferenceFrame" Parameters

Parameter	Value
ClassName	ReferenceFrame
Block Function	simmechanics.library.frames_transforms.reference_frame

3.70.1.1.3. "Solid" (SimMechanicsBlock)

Tabla 3.362. "Solid" Parameters

Parameter	Value
ClassName	Solid
InertiaType	Custom
Mass	0.0025464824489193402
MassUnits	kg
CenterOfMass	[0 -11.014318270241464 0]
CenterOfMassUnits	mm
MomentsOfInertia	[0.45200885840518795 0.073957505770814544 0.41351692276291047]
MomentsOfInertiaUnits	kg*mm^2
ProductsOfInertia	[0 2.4767470549411023e-07 0]
ProductsOfInertiaUnits	kg*mm^2
DensityBased	on
Density	1000
DensityUnits	kg/(m^3)
GraphicType	FromGeometry
MarkerShape	Sphere
MarkerSize	10
MarkerSizeUnits	m
GraphicVisPropType	SimpleVisualProperties
GraphicDiffuseColor	[0.792156862745098 0.81960784313725488 0.93333333333333335]
GraphicSpecularColor	[0.5 0.5 0.5 1.0]
GraphicAmbientColor	[0.15 0.15 0.15 1.0]
GraphicEmissiveColor	[0.0 0.0 0.0 1.0]
GraphicShininess	75
GraphicOpacity	1
GeometryShape	FromFile
RectangleSize	[1 1]
RectangleSizeUnits	m
BrickDimensions	[1 1 1]
BrickDimensionUnits	m
CylinderRadius	1
CylinderRadiusUnits	m
CylinderLength	1
CylinderLengthUnits	m
SphereRadius	1
SphereRadiusUnits	m

Parameter	Value
EllipsoidRadii	[1 1 1]
EllipsoidRadiiUnits	m
ExtrusionCrossSection	[1 1; -1 1; -1 -1; 1 -1]
ExtrusionCrossSectionUnits	m
ExtrusionLength	1
ExtrusionLengthUnits	m
PolygonNumSides	3
PolygonOuterRadius	1
PolygonOuterRadiusUnits	m
ExtGeomFileType	STL
ExtGeomFileName	uniball-Cuerpo_Predeterminado_sldprt.STL
ExtGeomFileUnits	mm
RevolutionCrossSection	[1 1; 1 -1; 2 -1; 2 1]
RevolutionCrossSectionUnits	m
RevolutionExtent	Full
RevolutionAngle	180
RevolutionAngleUnits	deg
Block Function	simmechanics.library.body_elements.solid

3.71. uniball_Cuerpo_2_RIGID

Figura 3.71. DeltaSM_AnguloSinFriccions/DeltaSM/ AntebrazoCompleto_2_RIGID1/uniball_Cuerpo_2_RIGID

3.71.1. Blocks

3.71.1.1. Parameters

3.71.1.1.1. "F" (PMIOPort)

Tabla 3.363. "F" Parameters

Parameter	Value
Port number	1
Port location on parent subsystem	Left

3.71.1.1.2. "ReferenceFrame" (SimMechanicsBlock)

Tabla 3.364. "ReferenceFrame" Parameters

Parameter	Value
ClassName	ReferenceFrame
Block Function	simmechanics.library.frames_transforms.reference_frame

3.71.1.1.3. "Solid" (SimMechanicsBlock)

Tabla 3.365. "Solid" Parameters

Parameter	Value
ClassName	Solid
InertiaType	Custom
Mass	0.0025464824489193402
MassUnits	kg
CenterOfMass	[0 -11.014318270241464 0]
CenterOfMassUnits	mm
MomentsOfInertia	[0.45200885840518795 0.073957505770814544 0.41351692276291047]
MomentsOfInertiaUnits	kg*mm^2
ProductsOfInertia	[0 2.4767470549411023e-07 0]
ProductsOfInertiaUnits	kg*mm^2
DensityBased	on
Density	1000
DensityUnits	kg/(m^3)
GraphicType	FromGeometry
MarkerShape	Sphere
MarkerSize	10
MarkerSizeUnits	m
GraphicVisPropType	SimpleVisualProperties
GraphicDiffuseColor	[0.792156862745098 0.81960784313725488 0.93333333333333335]
GraphicSpecularColor	[0.5 0.5 0.5 1.0]

Parameter	Value
GraphicAmbientColor	[0.15 0.15 0.15 1.0]
GraphicEmissiveColor	[0.0 0.0 0.0 1.0]
GraphicShininess	75
GraphicOpacity	1
GeometryShape	FromFile
RectangleSize	[1 1]
RectangleSizeUnits	m
BrickDimensions	[1 1 1]
BrickDimensionUnits	m
CylinderRadius	1
CylinderRadiusUnits	m
CylinderLength	1
CylinderLengthUnits	m
SphereRadius	1
SphereRadiusUnits	m
EllipsoidRadii	[1 1 1]
EllipsoidRadiiUnits	m
ExtrusionCrossSection	[1 1; -1 1; -1 -1; 1 -1]
ExtrusionCrossSectionUnits	m
ExtrusionLength	1
ExtrusionLengthUnits	m
PolygonNumSides	3
PolygonOuterRadius	1
PolygonOuterRadiusUnits	m
ExtGeomFileType	STL
ExtGeomFileName	uniball-Cuerpo_Predeterminado_sldprt.STL
ExtGeomFileUnits	mm
RevolutionCrossSection	[1 1; 1 -1; 2 -1; 2 1]
RevolutionCrossSectionUnits	m
RevolutionExtent	Full
RevolutionAngle	180
RevolutionAngleUnits	deg
Block Function	simmechanics.library.body_elements.solid

3.72. uniball_Cuerpo_2_RIGID

Figura 3.72. DeltaSM_AnguloSinFriccions/DeltaSM/ AntebrazoCompleto_3_RIGID1/uniball_Cuerpo_2_RIGID

3.72.1. Blocks

3.72.1.1. Parameters

3.72.1.1.1. "F" (PMIOPort)

Tabla 3.366. "F" Parameters

Parameter	Value
Port number	1
Port location on parent subsystem	Left

3.72.1.1.2. "ReferenceFrame" (SimMechanicsBlock)

Tabla 3.367. "ReferenceFrame" Parameters

Parameter	Value
ClassName	ReferenceFrame
Block Function	simmechanics.library.frames_transforms.reference_frame

3.72.1.1.3. "Solid" (SimMechanicsBlock)

Tabla 3.368. "Solid" Parameters

Parameter	Value
ClassName	Solid
InertiaType	Custom
Mass	0.0025464824489193402
MassUnits	kg
CenterOfMass	[0 -11.014318270241464 0]
CenterOfMassUnits	mm
MomentsOfInertia	[0.45200885840518795 0.073957505770814544 0.41351692276291047]
MomentsOfInertiaUnits	kg*mm^2
ProductsOfInertia	[0 2.4767470549411023e-07 0]
ProductsOfInertiaUnits	kg*mm^2
DensityBased	on
Density	1000
DensityUnits	kg/(m^3)
GraphicType	FromGeometry
MarkerShape	Sphere
MarkerSize	10
MarkerSizeUnits	m
GraphicVisPropType	SimpleVisualProperties
GraphicDiffuseColor	[0.792156862745098 0.81960784313725488 0.93333333333333335]
GraphicSpecularColor	[0.5 0.5 0.5 1.0]
GraphicAmbientColor	[0.15 0.15 0.15 1.0]
GraphicEmissiveColor	[0.0 0.0 0.0 1.0]
GraphicShininess	75
GraphicOpacity	1
GeometryShape	FromFile
RectangleSize	[1 1]
RectangleSizeUnits	m
BrickDimensions	[1 1 1]
BrickDimensionUnits	m
CylinderRadius	1
CylinderRadiusUnits	m
CylinderLength	1
CylinderLengthUnits	m
SphereRadius	1
SphereRadiusUnits	m

Parameter	Value
EllipsoidRadii	[1 1 1]
EllipsoidRadiiUnits	m
ExtrusionCrossSection	[1 1; -1 1; -1 -1; 1 -1]
ExtrusionCrossSectionUnits	m
ExtrusionLength	1
ExtrusionLengthUnits	m
PolygonNumSides	3
PolygonOuterRadius	1
PolygonOuterRadiusUnits	m
ExtGeomFileType	STL
ExtGeomFileName	uniball-Cuerpo_Predeterminado_sldprt.STL
ExtGeomFileUnits	mm
RevolutionCrossSection	[1 1; 1 -1; 2 -1; 2 1]
RevolutionCrossSectionUnits	m
RevolutionExtent	Full
RevolutionAngle	180
RevolutionAngleUnits	deg
Block Function	simmechanics.library.body_elements.solid

3.73. uniball_Cuerpo_2_RIGID

Figura 3.73. DeltaSM_AnguloSinFriccions/DeltaSM/ AntebrazoCompleto_4_RIGID1/uniball_Cuerpo_2_RIGID

3.73.1. Blocks

3.73.1.1. Parameters

3.73.1.1.1. "F" (PMIOPort)

Tabla 3.369. "F" Parameters

Parameter	Value
Port number	1
Port location on parent subsystem	Left

3.73.1.1.2. "ReferenceFrame" (SimMechanicsBlock)

Tabla 3.370. "ReferenceFrame" Parameters

Parameter	Value
ClassName	ReferenceFrame
Block Function	simmechanics.library.frames_transforms.reference_frame

3.73.1.1.3. "Solid" (SimMechanicsBlock)

Tabla 3.371. "Solid" Parameters

Parameter	Value
ClassName	Solid
InertiaType	Custom
Mass	0.0025464824489193402
MassUnits	kg
CenterOfMass	[0 -11.014318270241464 0]
CenterOfMassUnits	mm
MomentsOfInertia	[0.45200885840518795 0.073957505770814544 0.41351692276291047]
MomentsOfInertiaUnits	kg*mm^2
ProductsOfInertia	[0 2.4767470549411023e-07 0]
ProductsOfInertiaUnits	kg*mm^2
DensityBased	on
Density	1000
DensityUnits	kg/(m^3)
GraphicType	FromGeometry
MarkerShape	Sphere
MarkerSize	10
MarkerSizeUnits	m
GraphicVisPropType	SimpleVisualProperties
GraphicDiffuseColor	[0.792156862745098 0.81960784313725488 0.93333333333333335]
GraphicSpecularColor	[0.5 0.5 0.5 1.0]

Parameter	Value
GraphicAmbientColor	[0.15 0.15 0.15 1.0]
GraphicEmissiveColor	[0.0 0.0 0.0 1.0]
GraphicShininess	75
GraphicOpacity	1
GeometryShape	FromFile
RectangleSize	[1 1]
RectangleSizeUnits	m
BrickDimensions	[1 1 1]
BrickDimensionUnits	m
CylinderRadius	1
CylinderRadiusUnits	m
CylinderLength	1
CylinderLengthUnits	m
SphereRadius	1
SphereRadiusUnits	m
EllipsoidRadii	[1 1 1]
EllipsoidRadiiUnits	m
ExtrusionCrossSection	[1 1; -1 1; -1 -1; 1 -1]
ExtrusionCrossSectionUnits	m
ExtrusionLength	1
ExtrusionLengthUnits	m
PolygonNumSides	3
PolygonOuterRadius	1
PolygonOuterRadiusUnits	m
ExtGeomFileType	STL
ExtGeomFileName	uniball-Cuerpo_Predeterminado_sldprt.STL
ExtGeomFileUnits	mm
RevolutionCrossSection	[1 1; 1 -1; 2 -1; 2 1]
RevolutionCrossSectionUnits	m
RevolutionExtent	Full
RevolutionAngle	180
RevolutionAngleUnits	deg
Block Function	simmechanics.library.body_elements.solid

3.74. uniball_Cuerpo_2_RIGID

Figura 3.74. DeltaSM_AnguloSinFriccions/DeltaSM/ AntebrazoCompleto_5_RIGID1/uniball_Cuerpo_2_RIGID

3.74.1. Blocks

3.74.1.1. Parameters

3.74.1.1.1. "F" (PMIOPort)

Tabla 3.372. "F" Parameters

Parameter	Value
Port number	1
Port location on parent subsystem	Left

3.74.1.1.2. "ReferenceFrame" (SimMechanicsBlock)

Tabla 3.373. "ReferenceFrame" Parameters

Parameter	Value
ClassName	ReferenceFrame
Block Function	simmechanics.library.frames_transforms.reference_frame

3.74.1.1.3. "Solid" (SimMechanicsBlock)

Tabla 3.374. "Solid" Parameters

Parameter	Value
ClassName	Solid
InertiaType	Custom
Mass	0.0025464824489193402
MassUnits	kg
CenterOfMass	[0 -11.014318270241464 0]
CenterOfMassUnits	mm
MomentsOfInertia	[0.45200885840518795 0.073957505770814544 0.41351692276291047]
MomentsOfInertiaUnits	kg*mm^2
ProductsOfInertia	[0 2.4767470549411023e-07 0]
ProductsOfInertiaUnits	kg*mm^2
DensityBased	on
Density	1000
DensityUnits	kg/(m^3)
GraphicType	FromGeometry
MarkerShape	Sphere
MarkerSize	10
MarkerSizeUnits	m
GraphicVisPropType	SimpleVisualProperties
GraphicDiffuseColor	[0.792156862745098 0.81960784313725488 0.93333333333333335]
GraphicSpecularColor	[0.5 0.5 0.5 1.0]
GraphicAmbientColor	[0.15 0.15 0.15 1.0]
GraphicEmissiveColor	[0.0 0.0 0.0 1.0]
GraphicShininess	75
GraphicOpacity	1
GeometryShape	FromFile
RectangleSize	[1 1]
RectangleSizeUnits	m
BrickDimensions	[1 1 1]
BrickDimensionUnits	m
CylinderRadius	1
CylinderRadiusUnits	m
CylinderLength	1
CylinderLengthUnits	m
SphereRadius	1
SphereRadiusUnits	m

Parameter	Value
EllipsoidRadii	[1 1 1]
EllipsoidRadiiUnits	m
ExtrusionCrossSection	[1 1; -1 1; -1 -1; 1 -1]
ExtrusionCrossSectionUnits	m
ExtrusionLength	1
ExtrusionLengthUnits	m
PolygonNumSides	3
PolygonOuterRadius	1
PolygonOuterRadiusUnits	m
ExtGeomFileType	STL
ExtGeomFileName	uniball-Cuerpo_Predeterminado_sldprt.STL
ExtGeomFileUnits	mm
RevolutionCrossSection	[1 1; 1 -1; 2 -1; 2 1]
RevolutionCrossSectionUnits	m
RevolutionExtent	Full
RevolutionAngle	180
RevolutionAngleUnits	deg
Block Function	simmechanics.library.body_elements.solid

3.75. uniball_Cuerpo_2_RIGID

Figura 3.75. DeltaSM_AnguloSinFriccions/DeltaSM/ AntebrazoCompleto_6_RIGID1/uniball_Cuerpo_2_RIGID

3.75.1. Blocks

3.75.1.1. Parameters

3.75.1.1.1. "F" (PMIOPort)

Tabla 3.375. "F" Parameters

Parameter	Value
Port number	1
Port location on parent subsystem	Left

3.75.1.1.2. "ReferenceFrame" (SimMechanicsBlock)

Tabla 3.376. "ReferenceFrame" Parameters

Parameter	Value
ClassName	ReferenceFrame
Block Function	simmechanics.library.frames_transforms.reference_frame

3.75.1.1.3. "Solid" (SimMechanicsBlock)

Tabla 3.377. "Solid" Parameters

Parameter	Value
ClassName	Solid
InertiaType	Custom
Mass	0.0025464824489193402
MassUnits	kg
CenterOfMass	[0 -11.014318270241464 0]
CenterOfMassUnits	mm
MomentsOfInertia	[0.45200885840518795 0.073957505770814544 0.41351692276291047]
MomentsOfInertiaUnits	kg*mm^2
ProductsOfInertia	[0 2.4767470549411023e-07 0]
ProductsOfInertiaUnits	kg*mm^2
DensityBased	on
Density	1000
DensityUnits	kg/(m^3)
GraphicType	FromGeometry
MarkerShape	Sphere
MarkerSize	10
MarkerSizeUnits	m
GraphicVisPropType	SimpleVisualProperties
GraphicDiffuseColor	[0.792156862745098 0.81960784313725488 0.93333333333333335]

Parameter	Value
GraphicSpecularColor	[0.5 0.5 0.5 1.0]
GraphicAmbientColor	[0.15 0.15 0.15 1.0]
GraphicEmissiveColor	[0.0 0.0 0.0 1.0]
GraphicShininess	75
GraphicOpacity	1
GeometryShape	FromFile
RectangleSize	[1 1]
RectangleSizeUnits	m
BrickDimensions	[1 1 1]
BrickDimensionUnits	m
CylinderRadius	1
CylinderRadiusUnits	m
CylinderLength	1
CylinderLengthUnits	m
SphereRadius	1
SphereRadiusUnits	m
EllipsoidRadii	[1 1 1]
EllipsoidRadiiUnits	m
ExtrusionCrossSection	[1 1; -1 1; -1 -1; 1 -1]
ExtrusionCrossSectionUnits	m
ExtrusionLength	1
ExtrusionLengthUnits	m
PolygonNumSides	3
PolygonOuterRadius	1
PolygonOuterRadiusUnits	m
ExtGeomFileType	STL
ExtGeomFileName	uniball-Cuerpo_Predeterminado_sldprt.STL
ExtGeomFileUnits	mm
RevolutionCrossSection	[1 1; 1 -1; 2 -1; 2 1]
RevolutionCrossSectionUnits	m
RevolutionExtent	Full
RevolutionAngle	180
RevolutionAngleUnits	deg
Block Function	simmechanics.library.body_elements.solid

Capítulo 4. System Design Variables

Tabla de contenidos

4.1. Design Variable Summary

Tabla 4.1. Functions used in Design Variable Expressions

Function Name	Parent Blocks	Calling string
pi	Constant [2]	`pi/2`

Capítulo 5. Requirements Traceability

DeltaSM_AnguloSinFriccions does not contain requirements traceability links.

Capítulo 6. System Model Configuration

Tabla 6.1. DeltaSM_AnguloSinFriccions Configuration Set

Property	Value
Description	
Components	[DeltaSM_AnguloSinFriccions Configuration Set.Components(1) [319], DeltaSM_AnguloSinFriccions Configuration Set.Components(2) [320], DeltaSM_AnguloSinFriccions Configuration Set.Components(3) [321], DeltaSM_AnguloSinFriccions Configuration Set.Components(4) [322], DeltaSM_AnguloSinFriccions Configuration Set.Components(5) [325], DeltaSM_AnguloSinFriccions Configuration Set.Components(6) [326], DeltaSM_AnguloSinFriccions Configuration Set.Components(7) [326], DeltaSM_AnguloSinFriccions Configuration Set.Components(8) [327], DeltaSM_AnguloSinFriccions Configuration Set.Components(9) [329], DeltaSM_AnguloSinFriccions Configuration Set.Components(10) [329]]
Name	Configuration
SimulationMode	normal

Tabla 6.2. DeltaSM_AnguloSinFriccions Configuration Set.Components [319](1)

Property	Value
Name	Solver
Description	
Components	
StartTime	0.0
StopTime	3
AbsTol	auto
FixedStep	auto
InitialStep	auto
MaxNumMinSteps	-1
MaxOrder	5
ZcThreshold	auto

ConsecutiveZCsStepRelTol	10*100*eps
MaxConsecutiveZCs	1000
ExtrapolationOrder	4
NumberNewtonIterations	1
MaxStep	0.005
MinStep	auto
MaxConsecutiveMinStep	1
RelTol	1e-3
SolverMode	Auto
EnableConcurrentExecution	off
ConcurrentTasks	off
Solver	ode45
SolverName	ode45
SolverType	Variable-step
SolverJacobianMethodControl	auto
ShapePreserveControl	DisableAll
ZeroCrossControl	EnableAll
ZeroCrossAlgorithm	Nonadaptive
SolverResetMethod	Fast
PositivePriorityOrder	off
AutoInsertRateTranBlk	on
SampleTimeConstraint	Unconstrained
InsertRTBMode	Whenever possible
SampleTimeProperty	

Tabla 6.3. DeltaSM_AnguloSinFriccions Configuration Set.Components [319](2)

Property	Value
Name	Data Import/Export
Description	
Components	
Decimation	1
ExternalInput	[t, u]
FinalStateName	xFinal
InitialState	xInitial
LimitDataPoints	on
MaxDataPoints	1000
LoadExternalInput	off
LoadInitialState	off

SaveFinalState	off
SaveCompleteFinalSimState	off
SaveFormat	Array
SignalLoggingSaveFormat	Dataset
SaveOutput	on
SaveState	off
SignalLogging	on
DSMLogging	on
InspectSignalLogs	off
VisualizeSimOutput	on
SaveTime	on
ReturnWorkspaceOutputs	off
StateSaveName	xout
TimeSaveName	tout
OutputSaveName	yout
SignalLoggingName	logsout
DSMLoggingName	dsmout
OutputOption	RefineOutputTimes
OutputTimes	[]
ReturnWorkspaceOutputsName	out
Refine	1

Tabla   6.4.   DeltaSM_AnguloSinFriccions   Configuration Set.Components [319](3)

Property	Value
Name	Optimization
Description	
Components	
BlockReduction	on
BooleanDataType	on
ConditionallyExecuteInputs	on
InlineParams	off
UseIntDivNetSlope	off
UseFloatMulNetSlope	off
DefaultUnderspecifiedDataType	double
UseSpecifiedMinMax	off
InlineInvariantSignals	off
OptimizeBlockIOStorage	on
BufferReuse	on

GlobalBufferReuse	on
GlobalVariableUsage	None
StrengthReduction	off
AdvancedOptControl	
EnforceIntegerDowncast	on
ExpressionFolding	on
BooleansAsBitfields	off
BitfieldContainerType	uint_T
EnableMemcpy	on
MemcpyThreshold	64
PassReuseOutputArgsAs	Structure reference
PassReuseOutputArgsThreshold	12
FoldNonRolledExpr	on
LocalBlockOutputs	on
RollThreshold	5
SystemCodeInlineAuto	off
StateBitsets	off
DataBitsets	off
ActiveStateOutputEnumStorageType	Native Integer
UseTempVars	off
ZeroExternalMemoryAtStartup	on
ZeroInternalMemoryAtStartup	on
InitFltsAndDblsToZero	off
NoFixptDivByZeroProtection	off
EfficientFloat2IntCast	off
EfficientMapNaN2IntZero	on
OptimizeModelRefInitCode	off
LifeSpan	inf
EvaledLifeSpan	Inf
MaxStackSize	Inherit from target
BufferReusableBoundary	on
SimCompilerOptimization	Off
AccelVerboseBuild	off
ParallelExecutionInRapidAccelerator	on

Tabla 6.5. DeltaSM_AnguloSinFriccions Configuration Set.Components [319](4)

Property	Value
Name	Diagnostics

Description	
Components	
RTPrefix	error
ConsistencyChecking	none
ArrayBoundsChecking	none
SignalInfNanChecking	none
SignalRangeChecking	none
ReadBeforeWriteMsg	UseLocalSettings
WriteAfterWriteMsg	UseLocalSettings
WriteAfterReadMsg	UseLocalSettings
AlgebraicLoopMsg	warning
ArtificialAlgebraicLoopMsg	warning
SaveWithDisabledLinksMsg	warning
SaveWithParameterizedLinksMsg	warning
CheckSSInitialOutputMsg	on
UnderspecifiedInitializationDetection	Simplified
MergeDetectMultiDrivingBlocksExec	none
CheckExecutionContextPreStartOutputMsg	off
CheckExecutionContextRuntimeOutputMsg	off
SignalResolutionControl	UseLocalSettings
BlockPriorityViolationMsg	warning
MinStepSizeMsg	warning
TimeAdjustmentMsg	none
MaxConsecutiveZCsMsg	error
MaskedZcDiagnostic	warning
IgnoredZcDiagnostic	warning
SolverPrmCheckMsg	warning
InheritedTsInSrcMsg	warning
DiscreteInheritContinuousMsg	warning
MultiTaskDSMMsg	error
MultiTaskCondExecSysMsg	error
MultiTaskRateTransMsg	error
SingleTaskRateTransMsg	none
TasksWithSamePriorityMsg	warning
SigSpecEnsureSampleTimeMsg	warning
CheckMatrixSingularityMsg	none
IntegerOverflowMsg	warning
Int32ToFloatConvMsg	warning
ParameterDowncastMsg	error

ParameterOverflowMsg	error
ParameterUnderflowMsg	none
ParameterPrecisionLossMsg	warning
ParameterTunabilityLossMsg	warning
FixptConstUnderflowMsg	none
FixptConstOverflowMsg	none
FixptConstPrecisionLossMsg	none
UnderSpecifiedDataTypeMsg	none
UnnecessaryDatatypeConvMsg	none
VectorMatrixConversionMsg	none
InvalidFcnCallConnMsg	error
FcnCallInpInsideContextMsg	EnableAllAsError
SignalLabelMismatchMsg	none
UnconnectedInputMsg	warning
UnconnectedOutputMsg	warning
UnconnectedLineMsg	warning
SFcnCompatibilityMsg	none
FrameProcessingCompatibilityMsg	warning
UniqueDataStoreMsg	none
BusObjectLabelMismatch	warning
RootOutportRequireBusObject	warning
AssertControl	UseLocalSettings
Echo	
EnableOverflowDetection	off
ModelReferenceIOMsg	none
ModelReferenceVersionMismatchMessage	none
ModelReferenceIOMismatchMessage	none
ModelReferenceCSMismatchMessage	none
ModelReferenceSimTargetVerbose	off
UnknownTsInhSupMsg	warning
ModelReferenceDataLoggingMessage	warning
ModelReferenceSymbolNameMessage	warning
ModelReferenceExtraNoncontSigs	error
StateNameClashWarn	none
SimStateInterfaceChecksumMismatchMsg	warning
SimStateOlderReleaseMsg	error
InitInArrayFormatMsg	warning
StrictBusMsg	ErrorLevel1
BusNameAdapt	WarnAndRepair

NonBusSignalsTreatedAsBus	none
LoggingUnavailableSignals	error
SFUnusedDataAndEventsDiag	warning
SFUnexpectedBacktrackingDiag	warning
SFInvalidInputDataAccessInChartInitDiag	warning
SFNoUnconditionalDefaultTransitionDiag	warning
SFTransitionOutsideNaturalParentDiag	warning
SFUnconditionalTransitionShadowingDiag	warning
SFUndirectedBroadcastEventsDiag	warning
SFTransitionActionBeforeConditionDiag	warning

Tabla 6.6. DeltaSM_AnguloSinFriccions Configuration Set.Components [319](5)

Property	Value
Name	Hardware Implementation
Description	
Components	
ProdBitPerChar	8
ProdBitPerShort	16
ProdBitPerInt	32
ProdBitPerLong	32
ProdBitPerLongLong	64
ProdBitPerFloat	32
ProdBitPerDouble	64
ProdBitPerPointer	32
ProdLargestAtomicInteger	Char
ProdLargestAtomicFloat	None
ProdIntDivRoundTo	Undefined
ProdEndianess	Unspecified
ProdWordSize	32
ProdShiftRightIntArith	on
ProdLongLongMode	off
ProdHWDeviceType	32-bit Generic
TargetBitPerChar	8
TargetBitPerShort	16
TargetBitPerInt	32
TargetBitPerLong	32
TargetBitPerLongLong	64
TargetBitPerFloat	32

TargetBitPerDouble	64
TargetBitPerPointer	32
TargetLargestAtomicInteger	Char
TargetLargestAtomicFloat	None
TargetShiftRightIntArith	on
TargetLongLongMode	off
TargetIntDivRoundTo	Undefined
TargetEndianess	Unspecified
TargetWordSize	32
TargetTypeEmulationWarnSuppressLevel	0
TargetPreprocMaxBitsSint	32
TargetPreprocMaxBitsUint	32
TargetHWDeviceType	Specified
TargetUnknown	off
ProdEqTarget	on

Tabla 6.7. DeltaSM_AnguloSinFriccions Configuration Set.Components [319](6)

Property	Value
Name	Model Referencing
Description	
Components	
UpdateModelReferenceTargets	IfOutOfDateOrStructuralChange
CheckModelReferenceTargetMessage	error
EnableParallelModelReferenceBuilds	off
ParallelModelReferenceErrorOnInvalidPool	on
ParallelModelReferenceMATLABWorkerInit	None
ModelReferenceNumInstancesAllowed	Multi
PropagateVarSize	Infer from blocks in model
ModelDependencies	
ModelReferencePassRootInputsByReference	on
ModelReferenceMinAlgLoopOccurrences	off
PropagateSignalLabelsOutOfModel	off
SupportModelReferenceSimTargetCustomCode	off

Tabla 6.8. DeltaSM_AnguloSinFriccions Configuration Set.Components [319](7)

Property	Value
Name	Simulation Target

Description	
Components	
SimCustomSourceCode	
SimCustomHeaderCode	
SimCustomInitializer	
SimCustomTerminator	
SimReservedNameArray	
SimUserSources	
SimUserIncludeDirs	
SimUserLibraries	
SFSimEnableDebug	on
SFSimOverflowDetection	on
SFSimEcho	on
SimBlas	on
SimCtrlC	on
SimExtrinsic	on
SimIntegrity	on
SimUseLocalCustomCode	off
SimParseCustomCode	on
SimBuildMode	sf_incremental_build
SimDataInitializer	
SimGenImportedTypeDefs	off

Tabla 6.9. DeltaSM_AnguloSinFriccions Configuration Set.Components [319](8)

Property	Value
Name	Code Generation
SystemTargetFile	grt.tlc
TLCOptions	
CodeGenDirectory	
GenCodeOnly	off
MakeCommand	make_rtw
GenerateMakefile	on
PackageGeneratedCodeAndArtifacts	off
PackageName	
TemplateMakefile	grt_default_tmf
PostCodeGenCommand	
Description	
GenerateReport	off

SaveLog	off
RTWVerbose	on
RetainRTWFile	off
ProfileTLC	off
TLCDebug	off
TLCCoverage	off
TLCAssert	off
ProcessScriptMode	Default
ConfigurationMode	Optimized
ProcessScript	
ConfigurationScript	
ConfigAtBuild	off
RTWUseLocalCustomCode	off
RTWUseSimCustomCode	off
CustomSourceCode	
CustomHeaderCode	
CustomInclude	
CustomSource	
CustomLibrary	
CustomInitializer	
CustomTerminator	
Toolchain	Automatically locate an installed toolchain
BuildConfiguration	Faster Builds
CustomToolchainOptions	
IncludeHyperlinkInReport	off
LaunchReport	off
PortableWordSizes	off
GenerateErtSFunction	off
CreateSILPILBlock	None
CodeExecutionProfiling	off
CodeExecutionProfileVariable	executionProfile
CodeProfilingSaveOptions	SummaryOnly
CodeProfilingInstrumentation	off
SILDebugging	off
TargetLang	C
IncludeRootSignalInRTWFile	off
IncludeVirtualBlocksInRTWFileBlockHierarchyMap	off
IncludeRegionsInRTWFileBlockHierarchyMap	off
IncludeERTFirstTime	off

GenerateTraceInfo	off
GenerateTraceReport	off
GenerateTraceReportSl	off
GenerateTraceReportSf	off
GenerateTraceReportEml	off
GenerateCodeInfo	off
GenerateWebview	off
GenerateCodeMetricsReport	off
GenerateCodeReplacementReport	off
RTWCompilerOptimization	Off
ObjectivePriorities	
RTWCustomCompilerOptimizations	
CheckMdlBeforeBuild	Off
CustomRebuildMode	OnUpdate
DataInitializer	
Components	[DeltaSM_AnguloSinFriccions Configuration Set.Components(8).Components(1) [330], DeltaSM_AnguloSinFriccions Configuration Set.Components(8).Components(2) [331]]

Tabla 6.10. DeltaSM_AnguloSinFriccions Configuration Set.Components [319](9)

Property	Value
Description	HDL Coder custom configuration component
Components	
Name	HDL Coder

Tabla 6.11. DeltaSM_AnguloSinFriccions Configuration Set.Components [319](10)

Property	Value
Description	
Components	[DeltaSM_AnguloSinFriccions Configuration Set.Components(10).Components(1) [333], DeltaSM_AnguloSinFriccions Configuration Set.Components(10).Components(2) [334]]
Name	Simscape
EditingMode	Full
ExplicitSolverDiagnosticOptions	warning
GlobalZcOffDiagnosticOptions	warning
SimscapeLogType	none
SimscapeLogSimulationStatistics	off

SimscapeLogName	simlog
SimscapeLogDecimation	1
SimscapeLogLimitData	on
SimscapeLogDataHistory	5000
SelectedTab	
Version	1.0
ComponentsAttached	true
Listener	[DeltaSM_AnguloSinFriccions Configuration Set.Components(10).Listener(1) [334], DeltaSM_AnguloSinFriccions Configuration Set.Components(10).Listener(2) [334], DeltaSM_AnguloSinFriccions Configuration Set.Components(10).Listener(3) [335], DeltaSM_AnguloSinFriccions Configuration Set.Components(10).Listener(4) [335], DeltaSM_AnguloSinFriccions Configuration Set.Components(10).Listener(5) [335], DeltaSM_AnguloSinFriccions Configuration Set.Components(10).Listener(6) [335], DeltaSM_AnguloSinFriccions Configuration Set.Components(10).Listener(7) [335], DeltaSM_AnguloSinFriccions Configuration Set.Components(10).Listener(8) [335], DeltaSM_AnguloSinFriccions Configuration Set.Components(10).Listener(9) [335]]
someListenersNotInstalled	false
instanceId	

Tabla 6.12. DeltaSM_AnguloSinFriccions Configuration Set.Components(8).Components [329](1)

Property	Value
Name	Code Appearance
Description	
Components	
Comment	
ForceParamTrailComments	off
GenerateComments	on
CommentStyle	Auto
IgnoreCustomStorageClasses	on
IgnoreTestpoints	off
IncHierarchyInIds	off
MaxIdLength	31
PreserveName	off

PreserveNameWithParent	off
ShowEliminatedStatement	off
OperatorAnnotations	off
IncAutoGenComments	off
SimulinkDataObjDesc	off
SFDataObjDesc	off
MATLABFcnDesc	off
IncDataTypeInIds	off
PrefixModelToSubsysFcnNames	on
MangleLength	1
CustomSymbolStr	RN$M
CustomSymbolStrGlobalVar	RN$M
CustomSymbolStrType	NR$M_T
CustomSymbolStrField	NM
CustomSymbolStrFcn	RNMF
CustomSymbolStrFcnArg	rt$I$N$M
CustomSymbolStrBlkIO	rtb_NM
CustomSymbolStrTmpVar	NM
CustomSymbolStrMacro	RN$M
CustomSymbolStrUtil	NC
CustomCommentsFcn	
DefineNamingRule	None
DefineNamingFcn	
ParamNamingRule	None
ParamNamingFcn	
SignalNamingRule	None
SignalNamingFcn	
InsertBlockDesc	off
InsertPolySpaceComments	off
SimulinkBlockComments	on
MATLABSourceComments	off
EnableCustomComments	off
InternalIdentifier	Shortened
InlinedPrmAccess	Literals
ReqsInCode	off
UseSimReservedNames	off
ReservedNameArray	

Tabla 6.13. DeltaSM_AnguloSinFriccions Configuration Set.Components(8).Components [329](2)

Property	Value
Name	Target
Description	
Components	
IsERTTarget	off
TargetFcnLib	ansi_tfl_table_tmw.mat
TargetLibSuffix	
TargetPreCompLibLocation	
GenFloatMathFcnCalls	NOT IN USE
TargetLangStandard	C89/C90 (ANSI)
TargetFunctionLibrary	NOT IN USE
CodeReplacementLibrary	None
UtilityFuncGeneration	Auto
ERTMultiwordTypeDef	System defined
ERTMultiwordLength	256
MultiwordLength	2048
GenerateFullHeader	on
GenerateSampleERTMain	off
GenerateTestInterfaces	off
ModelReferenceCompliant	on
ParMdlRefBuildCompliant	on
CompOptLevelCompliant	on
ConcurrentExecutionCompliant	on
IncludeMdlTerminateFcn	on
GeneratePreprocessorConditionals	Disable all
CombineOutputUpdateFcns	on
CombineSignalStateStructs	off
SuppressErrorStatus	off
ERTFirstTimeCompliant	off
IncludeFileDelimiter	Auto
ERTCustomFileBanners	off
SupportAbsoluteTime	on
LogVarNameModifier	rt_
MatFileLogging	on
MultiInstanceERTCode	off
CodeInterfacePackaging	Nonreusable function
SupportNonFinite	on

SupportComplex	on
PurelyIntegerCode	off
SupportContinuousTime	on
SupportNonInlinedSFcns	on
SupportVariableSizeSignals	off
ParenthesesLevel	Nominal
GenerateClassInterface	off
ModelStepFunctionPrototypeControlCompliant	off
CPPClassGenCompliant	on
AutosarCompliant	off
GRTInterface	off
GenerateAllocFcn	off
UseToolchainInfoCompliant	on
ExtMode	off
ExtModeStaticAlloc	off
ExtModeTesting	off
ExtModeStaticAllocSize	1000000
ExtModeTransport	0
ExtModeMexFile	ext_comm
ExtModeMexArgs	
ExtModeIntrfLevel	Level1
RTWCAPISignals	off
RTWCAPIParams	off
RTWCAPIStates	off
RTWCAPIRootIO	off
GenerateASAP2	off
MultiInstanceErrorCode	Error

Tabla 6.14. DeltaSM_AnguloSinFriccions Configuration Set.Components(10).Components [329](1)

Property	Value
Description	
Components	
Name	SimMechanics
WarnOnRedundantConstraints	on
WarnOnSingularInitialAssembly	off
ShowCutJoints	off
VisOnUpdateDiagram	off
VisDuringSimulation	off

EnableVisSimulationTime	on
VisSampleTime	0
DisableBodyVisControl	off
ShowCG	on
ShowCS	on
ShowOnlyPortCS	off
HighlightModel	on
FramesToBeSkipped	0
AnimationDelay	3
RecordAVI	off
CompressAVI	on
AviFileName	
AutoFitVis	off
EnableSelection	on
LastVizWinPosition	[-1 -1 -1 -1]
CamPosition	[0 0 0]
CamTarget	[0 0 -1]
CamUpVector	[0 1 0]
CamHeight	-1
CamViewAngle	0
VisBackgroundColor	[0.9 0.9 0.95]
DefaultBodyColor	[1 0 0]
MDLBodyVisualizationType	Convex hull from body CS locations
OVRRIDBodyVisualizationType	NONE
VisConfigFile	

Tabla 6.15. DeltaSM_AnguloSinFriccions Configuration Set.Components(10).Components [329](2)

Property	Value
Description	SimMechanics 2G
Components	[DeltaSM_AnguloSinFriccions Configuration Set.Components(10).Components(2).Components(1) [335], DeltaSM_AnguloSinFriccions Configuration Set.Components(10).Components(2).Components(2) [335]]
Name	SimMechanics2G

DeltaSM_AnguloSinFriccions Configuration Set.Components(10).Listener(1) (handle.listener,)

Note: this object has no unfiltered properties.

DeltaSM_AnguloSinFriccions Configuration Set.Components(10).Listener(2) (handle.listener,)

Note: this object has no unfiltered properties.

DeltaSM_AnguloSinFriccions Configuration Set.Components(10).Listener(3) (handle.listener,)

Note: this object has no unfiltered properties.

DeltaSM_AnguloSinFriccions Configuration Set.Components(10).Listener(4) (handle.listener,)

Note: this object has no unfiltered properties.

DeltaSM_AnguloSinFriccions Configuration Set.Components(10).Listener(5) (handle.listener,)

Note: this object has no unfiltered properties.

DeltaSM_AnguloSinFriccions Configuration Set.Components(10).Listener(6) (handle.listener,)

Note: this object has no unfiltered properties.

DeltaSM_AnguloSinFriccions Configuration Set.Components(10).Listener(7) (handle.listener,)

Note: this object has no unfiltered properties.

DeltaSM_AnguloSinFriccions Configuration Set.Components(10).Listener(8) (handle.listener,)

Note: this object has no unfiltered properties.

DeltaSM_AnguloSinFriccions Configuration Set.Components(10).Listener(9) (handle.listener,)

Note: this object has no unfiltered properties.

Tabla 6.16. DeltaSM_AnguloSinFriccions Configuration Set.Components(10).Components(2).Components [334](1)

Property	Value
Description	Diagnostics
Components	
Name	DiagnosticsConfigSet
SimMechanicsInvalidVisualProperty	warning
SimMechanicsCrossSectionNullEdge	warning
SimMechanicsUnconnectedFramePorts	warning
SimMechanicsRedundantBlock	warning
SimMechanicsConflictingReferenceFrames	warning
SimMechanicsRigidlyBoundBlock	error
SimMechanicsUnsatisfiedHighPriorityTargets	warning
SimMechanicsJointTargetOverSpecification	error

Tabla 6.17. DeltaSM_AnguloSinFriccions Configuration Set.Components(10).Components(2).Components [334](2)

Property	Value

Description	Explorer
Components	
Name	ExplorerConfigSet
SimMechanicsOpenEditorOnUpdate	on
InternalSimMechanicsExplorerSettings	

Capítulo 7. Glossary

Atomic Subsystem.   A subsystem treated as a unit by an implementation of the design documented in this report. The implementation computes the outputs of all the blocks in the atomic subsystem before computing the next block in the parent system's block execution order (sorted list).

Block Diagram.   A Simulink block diagram represents a set of simultaneous equations that relate a system or subsystem's inputs to its outputs as a function of time. Each block in the diagram represents an equation of the form $y = f(t, x, u)$ where t is the current time, u is a block input, y is a block output, and x is a system state (see the Simulink documentation for information on the functions represented by the various types of blocks that make up the diagram). Lines connecting the blocks represent dependencies among the blocks, i.e., inputs whose current values are the outputs of other blocks. An implementation of a design described in this document computes a root or atomic system's outputs at each time step by computing the outputs of the blocks in an order determined by block input/output dependencies.

Block Parameter.   A variable that determines the output of a block along with its inputs, for example, the gain parameter of a Gain block.

Block Execution Order.   The order in which Simulink evaluates blocks during simulation of a model. The block execution order determined by Simulink ensures that a block executes only after all blocks on whose outputs it depends are executed.

Checksum.   A number that indicates whether different versions of a model or atomic subsystem differ functionally or only cosmetically. Different checksums for different versions of the same model or subsystem indicate that the versions differ functionally.

Design Variable.   A symbolic (MATLAB) variable or expression used as the value of a block parameter. Design variables allow the behavior of the model to be altered by altering the value of the design variable.

Signal.   A block output, so-called because block outputs typically vary with time.

Virtual Subsystem.   A subsystem that is purely graphical, i.e., is intended to reduce the visual complexity of the block diagram of which it is a subsystem. An implementation of the design treats the blocks in the subsystem as part of the first nonvirtual ancestor of the virtual subsystem (see Atomic Subsystem).

Capítulo 8. About this Report

Tabla de contenidos

8.1. Report Overview

This report describes the design of the DeltaSM_AnguloSinFriccions system. The report was generated automatically from a Simulink model used to validate the design. It contains the following sections:

Model Version.   Specifies information about the version of the model from which this design description was generated. Includes the model checksum, a number that indicates whether different versions of the model differ functionally or only cosmetically. Different checksums for different versions indicate that the versions differ functionally.

Root System.   Describes the design's root system.

Subsystems.   Describes each of the design's subsystems.

Design Variables.   Describes system design variables, i.e., MATLAB variables and expressions used as block parameter values.

System Model Configuration.   Lists the configuration parameters, e.g., start and stop time, of the model used to simulate the system described by this report.

Requirements Traceability.   Shows design requirements associated with elements of the design model. This section appears only if the design model contains requirements links.

Glossary.   Defines Simulink terms used in this report.

8.2. Root System Description

This section describes a design's root system. It contains the following sections:

Diagram.   Simulink block diagram that represents the algorithm used to compute the root system's outputs.

Description.   Description of the root system. This section appears only if the model's root system has a Documentation property or a Doc block.

Interface.   Name, data type, width, and other properties of the root system's input and output signals. The number of the block port that outputs the signal appears in angle brackets appended to the signal name. This section appears only if the root system has input or output ports.

Blocks.   This section has two subsections:

- **Parameters.**   Describes key parameters of blocks in the root system. This section also includes graphical and/or tabular representations of lookup table data used by lookup table blocks, i.e., blocks that use lookup tables to compute their outputs.

- **Block Execution Order.**   Order in which blocks must be executed at each time step in order to ensure that each block's inputs are available when it executes.

State Charts.   Describes state charts used in the root system. This section appears only if the root system contains Stateflow blocks.

8.3. Subsystem Descriptions

This section describes a design's subsystems. Each subsystem description contains the following sections:

Checksum.   This section appears only if the subsystem is an atomic subsystem. The checksum indicates whether the version of the model subsystem used to generate this report differs functionally from other versions of the model subsystem. If two model checksums differ, the corresponding versions of the model differ functionally.

Diagram.   Simulink block diagram that graphically represents the algorithm used to compute the subsystem's outputs.

Description.   Description of the subsystem. This section appears only if the subsystem has a Documentation property or contains a Doc block.

Interface.   Name, data type, width, and other properties of the subsystem's input and output signals. The number of the block port that outputs the signal appears in angle brackets appended to the signal name. This section appears only if the subsystem is atomic and has input or output ports.

Blocks.   Blocks that this subsystem contains. This section has two subsections:

- **Parameters.**   Key parameters of blocks in the subsystem. This section also includes graphical and/or tabular representations of lookup table data used by lookup table blocks, blocks that use lookup tables to compute their outputs.
- **Block Execution Order.**   Order in which the subsystem's blocks must be executed at each time step in order to ensure that each block's inputs are available when the block executes .This section appears only if the subsystem is atomic.

State Charts.   Describes state charts used in the subsystem. This section appears only if the root system contains Stateflow blocks.

8.4. State Chart Descriptions

This section describes the state machines used by Stateflow blocks to compute their outputs, i.e., Stateflow blocks. Each state machine description contains the following sections:

Chart.   Diagram representing the state machine.

States.   Describes the state machine's states. Each state description includes the state's diagram and diagrams and/or descriptions of graphical functions, Simulink functions, truth tables, and MATLAB functions parented by the state.

Transitions.   Transitions between the state machine's states. Each transition description specifies the values of key transition properties. Appears only if a transition has properties that do not appear on the chart.

Junctions.   Transition junctions. Each junction description specifies the values of key junction properties. Appears only if a junction has properties that do not appear on the chart.

Events.   Events that trigger state transitions. Each event description specifies the values of key event properties.

Data.   Data types and other properties of the Stateflow block's inputs, outputs, and other state machine data.

Targets.   Executable implementations of the state machine used to compute the outputs of the corresponding Stateflow block.

MATLAB Supporting Functions.   List of functions invoked by MATLAB functions defined in the chart.