

"ankle\_angle" = 70  
"knee\_angle" = 70  
"hip\_angle" = 30

"ankle\_angle\_max" = 120  
"ankle\_angle\_min" = 50  
"knee\_angle\_max" = 120  
"knee\_angle\_min" = 0  
"hip\_angle\_max" = 90  
"hip\_angle\_min" = -60

"spring\_ankle\_parallel\_arm\_diameter" = 1.5  
"spring\_ankle\_parallel\_arm\_length" = 13  
"spring\_ankle\_parallel\_intern\_diameter" = 5.7  
"spring\_ankle\_parallel\_angle" = "ankle\_angle"  
"spring\_ankle\_parallel\_turns" = 3  
"spring\_ankle\_parallel\_pitch" = "spring\_ankle\_parallel\_arm\_diameter" \* 1.01  
"spring\_ankle\_parallel\_cutting\_distance" = (1 - "spring\_ankle\_parallel\_angle" / 360) \*  
"spring\_ankle\_parallel\_pitch"  
"spring\_ankle\_parallel\_nominal\_diameter" = "spring\_ankle\_parallel\_arm\_diameter" +  
"spring\_ankle\_parallel\_intern\_diameter"

"spring\_ankle\_serial\_arm\_diameter" = 1.91  
"spring\_ankle\_serial\_arm\_length" = 10  
"spring\_ankle\_serial\_intern\_diameter" = 5.7  
"spring\_ankle\_serial\_angle" = "90"  
"spring\_ankle\_serial\_turns" = 3  
"spring\_ankle\_serial\_pitch" = "spring\_ankle\_serial\_arm\_diameter" \* 1.01  
"spring\_ankle\_serial\_cutting\_distance" = (1 - "spring\_ankle\_serial\_angle" / 360) \* "spring\_ankle\_serial\_pitch"  
"spring\_ankle\_serial\_nominal\_diameter" = "spring\_ankle\_serial\_arm\_diameter" +  
"spring\_ankle\_serial\_intern\_diameter"

"spring\_knee\_parallel\_arm\_diameter" = 1.5  
"spring\_knee\_parallel\_arm\_length" = 13  
"spring\_knee\_parallel\_intern\_diameter" = 5.7  
"spring\_knee\_parallel\_angle" = -"knee\_angle" + 90  
"spring\_knee\_parallel\_turns" = 3  
"spring\_knee\_parallel\_pitch" = "spring\_knee\_parallel\_arm\_diameter" \* 1.01  
"spring\_knee\_parallel\_cutting\_distance" = (1 - ("spring\_knee\_parallel\_angle" / 360) \*  
"spring\_knee\_parallel\_pitch"  
"spring\_knee\_parallel\_nominal\_diameter" = "spring\_knee\_parallel\_arm\_diameter" +  
"spring\_knee\_parallel\_intern\_diameter"

"spring\_knee\_serial\_arm\_diameter" = 1.91  
"spring\_knee\_serial\_arm\_length" = 10  
"spring\_knee\_serial\_intern\_diameter" = 5.7  
"spring\_knee\_serial\_angle" = "90"  
"spring\_knee\_serial\_turns" = 3  
"spring\_knee\_serial\_pitch" = "spring\_knee\_serial\_arm\_diameter" \* 1.01  
"spring\_knee\_serial\_cutting\_distance" = (1 - "spring\_knee\_serial\_angle" / 360) \* "spring\_knee\_serial\_pitch"  
"spring\_knee\_serial\_nominal\_diameter" = "spring\_knee\_serial\_arm\_diameter" +  
"spring\_knee\_serial\_intern\_diameter"