Design	Modes		ζ	ωd*(F1)*	T2	τ
With Weight	long.	hugoid *(3)*	0.0316368			
		sp *(1)*	0.713855			
	lateral	spiral *(4)*			9.62487	
		roll *(1)*				0.0369038
		dutch *(2)*	0.110662	0.588521		

Design	Modes		ζ	ωd*(F1)*	T2	τ
Without Weight	long.	hugoid *(3)*	0.0340302			
		sp *(1)*	0.789599			
	lateral	spiral *(4)*			8.30405	
		roll *(1)*				0.0318011
		dutch *(2)*	0.138086	0.588212		

NOTES

Make sure inertia extracted from solidworks/fusion is wrt the same axes corresponding to those in xflr5

assumed dutch maximum wd=.6

LVL 1 (Best)

LVL 2

LVL 3 (Least)

Dangerous

Too much stability

Damping ratio

Damped natural frequency () or F1

Time to double (T2) or (t2) (for unstable system)

Time constant ()