

Comparison of servo couplings on critical performance characteristics

Key: ● Low ● Low to Moderate ● Moderate ● Moderate to High ● High ● Zero

	Torsional rigidity	Torsional strength	Maintenance required	Electrically isolating	Bearing loads	Inertia	Constant Velocity	Zero backlash	Cost	Angular misalignment	Parallel misalignment	Axial motion
Single beam, aluminum	●	●	No	No	●	●	Yes	Yes	●	●	●	●
Single beam, stainless steel	●	●	No	No	●	●	Yes	Yes	●	●	●	●
Multiple beam, aluminium	●	●	No	No	●	●	Yes	Yes	●	●	●	●
Multiple beam, stainless steel	●	●	No	No	●	●	Yes	Yes	●	●	●	●
Oldham, zero-backlash disk	●	●	Yes	Yes	●	●	Yes	Yes	●	●	●	●
Oldham, compliant insert	●	●	Yes	Yes	●	●	Yes	No	●	●	●	●
Curved, jaw coupling	●	●	Yes	Yes	●	●	Yes	Yes	●	●	●	●
Bellows coupling, stainless steel	●	●	No	No	●	●	Yes	Yes	●	●	●	●
Bellows coupling, nickel	●	●	No	No	●	●	Yes	Yes	●	●	●	●
Rigid coupling, aluminum	●	●	No	No	●	●	Yes	Yes	●	●	●	●
Single Disc coupling	●	●	No	No	●	●	Yes	Yes	●	●	●	●
Double Disc coupling	●	●	No	Yes/No	●	●	Yes	Yes	●	●	●	●