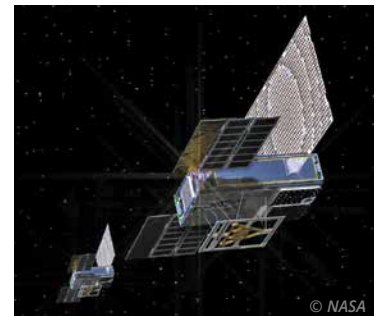# SOFTRIDE FAMILY

Moog SoftRide systems have been providing custom vibration isolation solutions for components and whole spacecraft for decades. The SoftRide family is a collection of "Ready for Flight" off-the-shelf isolators designed with emerging space markets in mind. Specifically sized to be compatible with smaller interfaces (15" ports or larger) and the higher loads of a multi-manifest or small launch vehicle environment, the SoftRide Family is a qualified system that can be integrated quickly into your analysis and physical stacks with minimum effort and maximum postive impact.

With the SoftRide Family you are still getting all of the benefits of a traditional custom Moog SoftRide system. Utilizing the SoftRide Family offers benefits across the space community. For traditional space, SmallSats and New Space spacecraft, imagine designing with reduced launch loads on optical components, batteries, tanks, struts, avionics, scientific equipment and more. For Multi-Manifest missions, SoftRide Family can be used to mitigate the effects of stack changes on your mission. For launch vehicles, SoftRide Family opens up your market to include payloads with varied environmental needs. For everyone, SoftRide family offers:

- Integration of isolation when you need it, quickly and with a proven track record
- Eliminating component requalification
- Eliminating component redesign
- Reducing launch loads on components
- Reducing analysis time
- Reducing design effort
- Reducing weight of overdesigned structure
- Reducing loads sensitivity to structural design changes
- Reducing stack sensitivity to changes in Multi-manifest missions
- Eliminating workmanship level random vibe tests
- Reducing expense
- Decreasing risk

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SoftRide FAMILY

NOMINAL AXIAL STIFFNESS AND STRUCTURAL DAMPING FOR UNIFLEX FAMILY					
40F (4C)		68F (20C)		86F (30C)	
Stiffness (lb/in)	Damping (%Struct)	Stiffness (lb/in)	Damping (%Struct)	Stiffness (lb/in)	Damping (%Struct)
UniFlex 1000 lb/in 1100	11	1000	3	980	1
UniFlex 3000 lb/in 3600	17	3000	5	2900	1
UniFlex 6500 lb/in 7800	18	6500	5	6300	1

NOMINAL AXIAL STIFFNESS AND STRUCTURAL DAMPING FOR OMNIFLEX FAMILY					
40F (4C)		68F (20C)		86F (30C)	
Stiffness (lb/in)	Damping (%Struct)	Stiffness (lb/in)	Damping (%Struct)	Stiffness (lb/in)	Damping (%Struct)
OmniFlex 1000 lb/in 1300	16	1000	11	970	3
OmniFlex 3000 lb/in 4200	28	3070	10	2900	3
OmniFlex 5000 lb/in 6900	27	5100	10	4700	2

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