# MOTION SOLUTIONS FOR DARK RIDES AND 4D THEATERS

Moog Brings Your Concepts to Reality with Proven Design



# EXCEPTIONAL OFF-THE-SHELF AND CUSTOM HIGH PERFORMANCE MOTION SOLUTIONS FOR DARK RIDES AND 4D THEATERS

We give your attractions reliability, expertise and fun... so that your safe and thrilling concepts come to life.

## Reliability.

Moog designs for high reliability. Did you know that you will get more than 99.5% availability on your all-electric motion technology solution. We also design, develop and produce our safety software and components to keep riders safe and secure. Moog motion solutions also have the highest payload human-rated systems to maximize your ride's throughput.

### Expertise.

As the worldwide leader in simulation motion solutions Moog has placed over 600 human rated motion systems in the field. Our knowledgeable engineers and worldwide field service assure you the best outcomes. Moog controls total engineering, design and manufacture of all critical components.

#### Fun.

Our motion solutions provide unending fun for 4D Theaters and Dark Rides with incredibly realistic motion cues. Look to maximize thrills with high accelerations and unleash imagination across all six degrees of freedom.

Performance you can trust... Excitement you can count on.

# **ADVANTAGES**

- Meets all global safety standards
- Unrivaled project management for exceptional results
- Increased flexibility with off the shelf and customer designs





# SPECIFICATIONS AND APPLICATIONS

## Motion brings your concepts to life.

Moog's high performance human rated motion solutions provide the performance and safety that the entertainment market demands.

From understanding your exacting needs to offering full support for the complete system Moog can be your partner to supply thrilling and safe attractions.



Requirements Development Motion System Design Motion System Qualification Production Global Support



### FOUR POPULAR MOTION BASES

	6D0F/26/1800KG	6D0F/10/3000KG	6D0F/60/14000KG	6D0F/60/16000KG
Payload Weight	1,800 kg (3,968 lb)	3,091 kg (6,614 lb)	14,000 kg (30,865 lb)	17,237 kg (38,000 lb)
Stroke	.6 m (24.0 in)	.254 m (10.0 in)	1.50 m (60.0 in)	1.50 m (60.0 in)
Velocity (DOF max.)				
Surge	0.80 m/s (31.4 in/s)	±0.30 m/s (11.8 in/s)	±1.00 m/s (39.4 m/s)	±0.711 m/s (28.0 in/s)
Sway	0.80 m/s (31.4 in/s)	±0.30 m/s (11.8 in/s)	±1.00 m/s (39.4 m/s)	±0.711 m/s (28.0 in/s)
Heave	0.60 m/s (23.6 in/s)	±0.30 m/s (11.8 in/s)	±0.80 m/s (31.5 m/s)	±0.610 m/s (24.0 in/s)
Roll	±35.0°/s	±30.0°/s	±22.0°/s	±20.0°/s
Pitch	±35.0°/s	±30.0°/s	±21.0°/s	±20.0°/s
Yaw	±40.0°/s	±30.0°/s	±25.0°/s	±20.0°/s
Acceleration (DOF max.)				
Surge	7 m/s <sup>2</sup> (0.7 g)	$\pm 3.0 \text{ m/s}^2 (0.3 \text{ g})$	±7.0 m/s² (0.71 g)	±5.89 m/s² (231.89 in/s)
Sway	7 m/s <sup>2</sup> (0.7 g)	$\pm 3.0 \text{ m/s}^2 (0.3 \text{ g})$	±7.0 m/s² (0.71 g)	±5.89 m/s <sup>2</sup> (231.89 in/s)
Heave	$10 \text{ m/s}^2 (1.0 \text{ g})$	$\pm 3.0 \text{ m/s}^2 (0.3 \text{ g})$	±9.0 m/s² (0.91 g)	±7.85 m/s² (309.06 in/s)
Roll	250°/s²	±300°/s²	±150°/s²	±100°/s²
Pitch	250°/s²	±300°/s²	±150°/s²	±100°/s²
Yaw	500°/s²	±300°/s²	±150°/s²	±100°/s²

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CALL US TO FIND OUT HOW OUR TECHNOLOGY CAN TAKE YOUR CONCEPTS TO REALITY...NOW!

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