

SWIFT® Evo 45 MEDIUM TRUCK SPECIFICATIONS

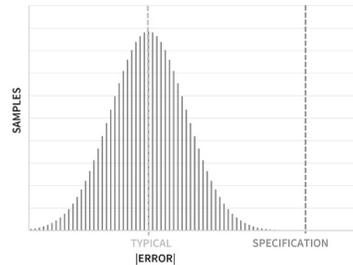
MEASURED VALUE		UNITS	TITANIUM SWIFT Evo 45T
Maximum Calibrated Load Ratings:			
Fx		kN (lb)	120 (26,977)
Fy		kN (lb)	48 (10,791)
Fz		kN (lb)	120 (26,977)
Mx		kN-m (lb-ft)	28 (20,652)
My		kN-m (lb-ft)	30 (22,127)
Mz		kN-m (lb-ft)	28 (20,652)
Noise Level Peak to Peak (0-500 Hz)		N	8
Maximum Usable RPM		RPM	2400*
Maximum Speed (15 in. rolling radius)		kph (mph)	240 (150)
Maximum Operating Temperature (measured at the spindle hub)		°C (°F)	125 (257)
Shock Resistance; Each Axis		G	60
SWIFT Evo Environmental Protection Rating			IP67
Input Voltage Required		VDC	10-28
Input Power Required per Transducer		W	6
Output Voltage Full Scale Calibrated Load		VDC	±10
SAE J267 Half Axle Rating		kg (lb)	3,629 (8,000)
SAE Bending Moment Seen on Cell		kN-m (lb-ft)	23.3 (17,167)
		Specification % (Typical Performance %**)	
Nonlinearity	Force	% FS	0.40 (0.2)
	Moment	% FS	0.7 (0.2)
Hysteresis	Force	% FS	0.2 (0.2)
	Moment	% FS	0.3 (0.2)
Crosstalk	Fy → Fx,Fz	% FS	0.2 (0.2)
	Fx ↔ Fz	% FS	0.5 (0.2)
	Fx,Fz → Fy	% FS	0.9 (0.6)
Assembly Weight Information:			
Transducer		kg (lb)	10.7 (23.6)
Washer Plate		kg (lb)	4.1 (9.0)
Hub Adapter		kg (lb)	4.1 (9.1)
Slip Ring Assembly		kg (lb)	0.9 (2.0)
19.5" x 6.75" Modified Rim		kg (lb)	41.8 (92.2)
Modified Lug Nuts (Qty 5)		kg (lb)	0.5 (1.1)
Sensor Mounting Fasteners		kg (lb)	3.1 (6.8)
Total Weight		kg (lb)	65.3 (143.8)
Reference Weight of Standard Unmodified 15" x 6" Rim and Lug Nuts		kg (lb)	27.7 (61)
Weight Differential***		kg (lb)	37.6 (82.8)
Minimum Rim Size		mm (in)	444.5 (17.5)
Typical Lug Nut Bolt Circle Accomodated		mm	165 to 225
Output Connector Type			BNC
Auto Shunt Calibration			On Vehicle or Test Rig

NOTES:

- Based on loads at the center of the transducer.
- Each SWIFT Evo sensor will be calibrated on an MTS calibration machine. MTS provides complete documentation of calibration values by serial number for each SWIFT Evo unit. Unique calibration values are stored electronically and transferred to the transducer interface unit (TI box) shipped with each SWIFT Evo 45.
- Periodic recalibration services can be provided by MTS/PCB®.
- MTS/PCB can manufacture rims designed in accordance with SAE J267 criteria.
- Proper rim design is essential for optimum performance.
- For applications involving non-listed wheel sizes, contact your PCB application engineer.
- Reference rim weights based on 19.5" x 6.75" truck rim with 5.5" offset, 10 hole 225mm bolt circle. Single wheel configuration.

Specifications are subject to change without notice.

TYPICAL VS. SPECIFICATION



*3000 rpm for tests lasting less than 30 minutes and 200 mph cooling air.

** "Typical Performance" listed is better than or equal to the median historical performance level.

*** Weight differential is calculated based on typical OEM alloy wheels versus rim and hub adaptors designed according to J267 load cases.