

SWIFT EVO 50 HEAVY TRUCK SPECIFICATIONS

MEASURED VALUE		UNITS	TITANIUM SWIFT EVO 50T	STAINLESS STEEL SWIFT EVO 50SS
Maximum Calibrated Load Ratings:				
Fx		kN (lb)	150 (33,721)	220 (49,458)
Fy		kN (lb)	60 (13,489)	100 (22,481)
Fz		kN (lb)	150 (33,721)	220 (49,458)
Mx		kN-m (lb-ft)	37 (27,290)	50 (36,878)
My		kN-m (lb-ft)	40 (29,503)	50 (36,878)
Mz		kN-m (lb-ft)	37 (27,290)	50 (36,878)
Noise Level Peak to Peak (0-500 Hz)		N	30	40
Maximum Usable RPM		RPM	2400*	2400*
Maximum Operating Temperature (measured at the spindle hub)		°C (°F)	121 (250)	121 (250)
Shock Resistance; Each Axis		G	60	60
SWIFT Evo Environmental Protection Rating	IP67			
Input Voltage Required		VDC	10-28	10-28
Input Power Required per Transducer		W	6	6
Output Voltage Full Scale Calibrated Load		VDC	±10	±10
SAE J267 Half Axle Rating		kg (lb)	4,536 (10,000)	6,577 (14,500)
SAE Bending Moment Seen on Cell		kN-m (lb-ft)	38.5 (28,395)	55.8 (41,173)
Specification % (Typical Performance %**)				
Nonlinearity	Force	%FS	0.75 (0.4)	0.75 (0.4)
	Moment	%FS	0.75 (0.4)	0.75 (0.4)
Hysteresis	Force	%FS	0.5 (0.25)	0.5 (0.25)
	Moment	%FS	0.75 (0.4)	0.75 (0.4)
Crosstalk	Fy → Fx, Fz	%FS	0.25 (0.15)	0.25 (0.15)
	Fx ↔ Fz	%FS	0.25 (0.15)	0.25 (0.15)
	Fx, Fz → Fy	%FS	1.25 (0.75)	1.25 (0.75)
Assembly Information:				
Transducer Weight	Euro - 335 mm BC	kg (lb)	21.8 (48.0)	37.2 (82.0)
	NA - 285.75 mm BC	kg (lb)	24.6 (54.3)	42.2 (93.0)
Minimum Rim Size		mm (in)	571.5 (22.5)	571.5 (22.5)
Typical Lug Nut Bolt Circle Accommodated		mm	Up to 335	
Output Connector Type			BNC	
Auto Shunt Calibration			On Vehicle or Test Rig	

*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.

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 50.
- 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.

Specifications are subject to change without notice.

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