

Parker Meggitt Motion, Power & Sensing Rte de Moncor 4 1701 Fribourg Switzerland

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VibroSmart Reliability

Dear Customer,

The VibroSmart is a family of networkable devices developed to implement a machinery protection system (MPS) and/or condition-monitoring system (CMS) solutions with a low-to-medium measurement channel density that can be installed wherever they are required. It was developed using rigorous processes and industry best practices, as evidenced by its long service life and proven reliability over many years. The failure rates and Meant Time Between Failures (MTBF) are presented below.

In terms of underlying calculations, failure rate as been determined by using the followings two different estimates.

Empirical estimate – Failure Rate and MTBF is based on actual deliveries, accumulated operating hours, and failures in service encountered in the field.

Statistical estimate – in addition to Empirical estimates, Failure Rate and MTBF has been estimated by using the Chi-Square statistic at $2 \times (number of failures +1)$ degrees of freedom and a Confidence Factor of 60%.

	Total considered operating time [hours]	FR / MTBF	
		FR [hours-1]	MTBF [hours]
VSV30x	1.60E+08	2.45E-07	4.07E+06
VSB300	1.94E+08	1.39E-07	7.20E+06
VSI010	2.93E+07	2.15E-07	4.65E+06
VSB010	3.10E+07	1.35E-07	7.43E+06
VSN010	1.48E+07	2.11E-07	4.75E+06



Michaël Hafner

Product Manager Product Development Aerospace / Motion Power & Sensing Division

D: +41 (0)26 407 18 58 M: +41 (0)79 961 28 76 **E:** michael.hafner@parker.com



Ricardo Madureira Product Compliance Manager

Product Development Aerospace / Motion Power & Sensing Division

D: +41 (0)26 407 17 53 M: +41 (0)79 956 80 86 E: <u>ricardo.madureira@parker.com</u>