ACTIVE ISOLATION SYSTEM

QUIET POD

Large variant

Data sheet

Version 1.2

ETEL

PRODUCT ARCHITECTURE	
Architecture	4x PODs
Isolation type	Active
DOFs - Drive force cancellation	6
Axes name	X, Y, Z, Rx, Ry, Rz
Thrust transmitter: DD (direct drive) or ID (indirect drive)	DD

CONFIGURATION (1)	UNIT	
Control power level	-	Standard = 2x AccurET VHP100 (10/30A) Boosted = 4x AccurET VHP100 (10/30A)
Motion controller	-	ULTIMET ADVANCED
Static mass range	kg	ML1 from 1000 to 1600 kg ML2 from 1600 to 2800 kg ML3 from 2800 to 4500 kg
Rated input voltage	VDC	100
Ambient temperature	°C	22 ± 1

CODIFICATION	Q4L2800NAA0124PG0062OG22OG					
	Q	**4**	**L**	**2800**	**N**	**AA0124PG0062OG22OG**
Digit meaning	QUIET	Nb of POD in the kit	Format L = Large	Max. static mass	Cooling N = Natural A = Forced Air	Motors and sensors configuration

POD DIMENSIONAL DATA	UNIT	
Width	mm	360 without fan / 401 with fans
Length	mm	375 without fan / 413 with fans
Height	mm	200
Total mass (without payload)	kg	32 to 48 (depending on the configuration and options)

DYNAMIC PERFORMANCE	UNIT	
Communication with stage controllers	-	Digital / TRANSNET
Drive force compensated axes	-	up to 10
Typical feedforward accuracy	%	From 95 to 99

OPTIONS / ACCESSORIES	
Cooling	Fans for forced air cooling
Controllers	Control kit or fully populated rack available

SOFTWARE	
Commissioning tool	QUIET Commissioning tool (QCT) needed for configuration, tuning and diagnosis

Notes: (1) Based on the typical frame value: eigenfrequency > 160 Hz and stiffness of 10^7 N/m.

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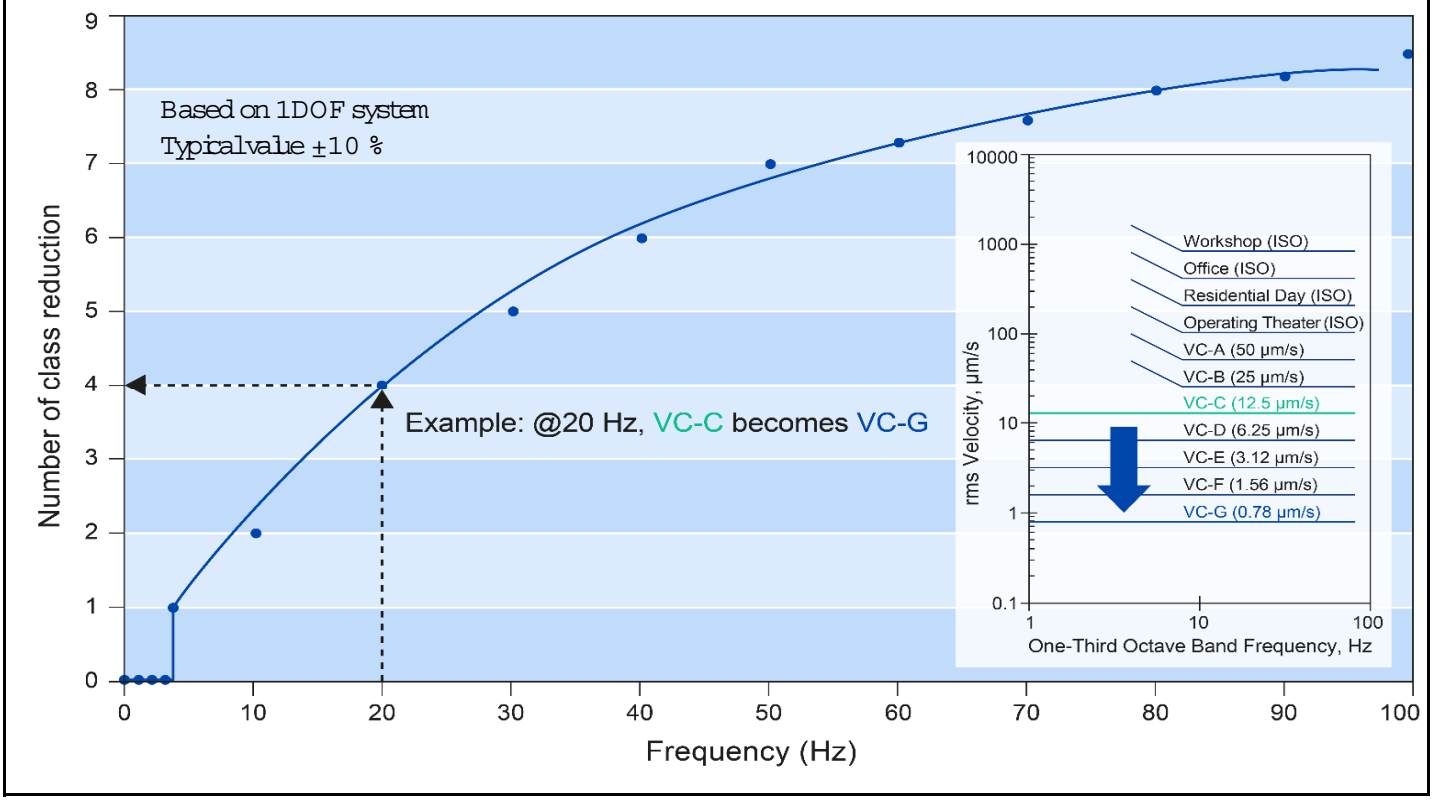
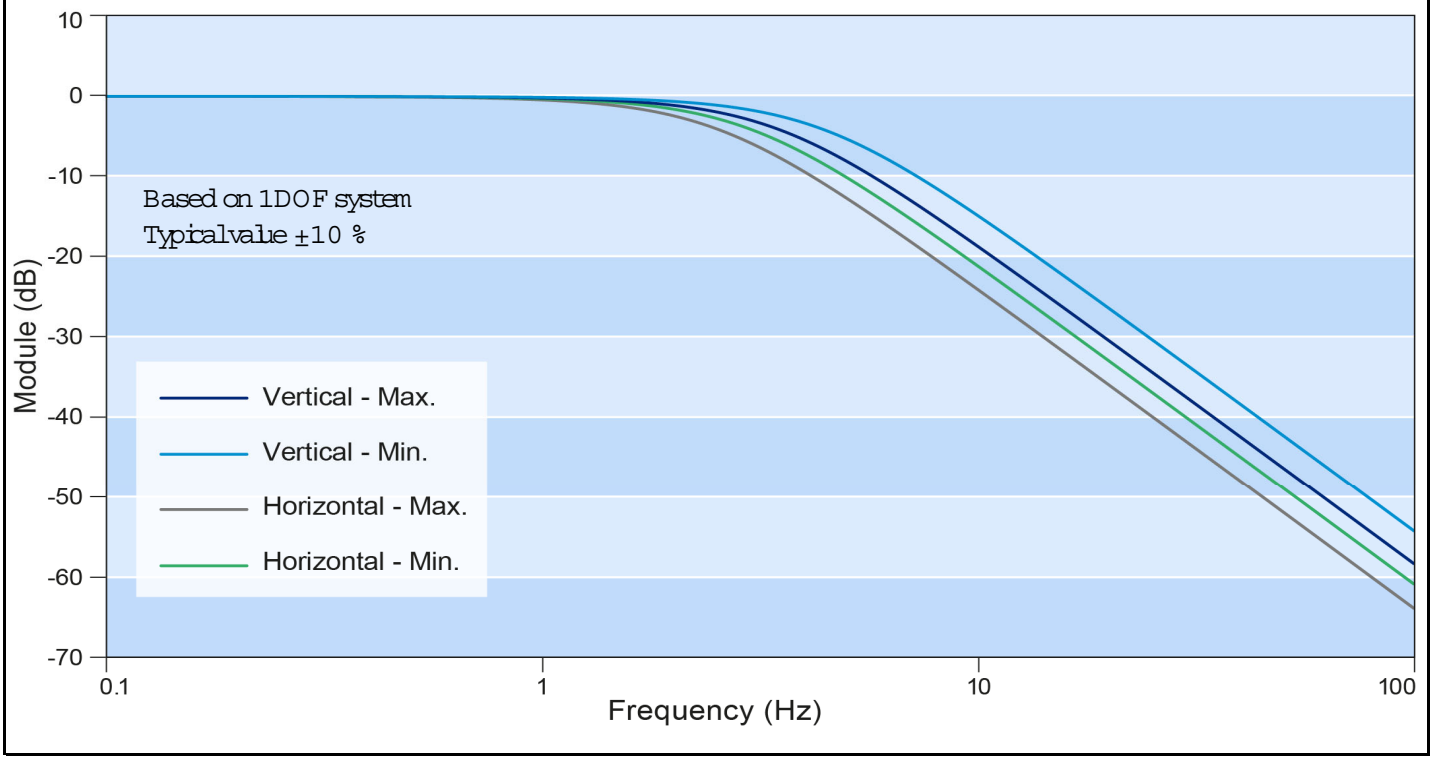
FORCE CAPABILITIES			Part number	Continuous force / peak force (N) in STANDARD power (2 VHP) configuration	
Codification				**In plane (XY directions)**	**Out of plane (Z direction)**
Natural air cooling	Q4L1600N	AA0084NF0042NF2NF	1407980-01	636 / 1516	1272 / 3032
		AA0084OG0042OG2OG	1407980-18	868 / 1564	1736 / 3128
		AA0084PG0042PG2PG	1407980-20	1048 / 2044	2096 / 4088
	Q4L2800N	AA0124NF0062NF2NF	1407980-16	636 / 1516	1272 / 3032
		AA0124OG0062OG2OG	1407980-02	868 / 1564	1736 / 3128
		AA0124PG0062PG2PG	1407980-21	1048 / 2044	2096 / 4088
	Q4L4500N	AA0254NF0092NF2NF	1407980-17	636 / 1516	1272 / 3032
		AA0254OG0092OG2OG	1407980-19	868 / 1564	1736 / 3128
		AA0254PG0092PG2PG	1407980-07	1048 / 2044	2096 / 4088
Forced Air cooling	Q4L1600A	AA0084NF0042NF2NF	1407980-08	902 / 1516	1804 / 3032
		AA0084OG0042OG2OG	1407980-24	1354 / 1564	2708 / 3128
		AA0084PG0042PG2PG	1407980-26	1354 / 2044	2708 / 4088
	Q4L2800A	AA0124NF0062NF2NF	1407980-22	902 / 1516	1804 / 3032
		AA0124OG0062OG2OG	1407980-09	1354 / 1564	2708 / 3128
		AA0124PG0062PG2PG	1407980-27	1354 / 2044	2708 / 4088
	Q4L4500A	AA0124PG0062PG2PG	1407980-23	902 / 1516	1804 / 3032
		AA0254OG0092OG2OG	1407980-25	1354 / 1564	2708 / 3128
		AA0254PG0092PG2PG	1407980-06	1354 / 2044	2708 / 4088

				Continuous force / peak force (N) in BOOSTED power (4 VHP) configuration	
Codification				**In plane (XY directions)**	**Out of plane (Z direction)**
Natural air cooling	Q4L1600N	AA0084NF0042NF2NF	1407980-01	636 / 3034	1272 / 6068
		AA0084OG0042OG2OG	1407980-18	868 / 3130	1736 / 6260
		AA0084PG0042PG2PG	1407980-20	1048 / 4086	2096 / 8172
	Q4L2800N	AA0124NF0062NF2NF	1407980-16	636 / 3034	1272 / 6068
		AA0124OG0062OG2OG	1407980-02	868 / 3130	1736 / 6260
		AA0124PG0062PG2PG	1407980-21	1048 / 4086	2096 / 8172
	Q4L4500N	AA0254NF0092NF2NF	1407980-17	636 / 3034	1272 / 6068
		AA0254OG0092OG2OG	1407980-19	868 / 3130	1736 / 6260
		AA0254PG0092PG2PG	1407980-07	1048 / 4086	2096 / 8172
Forced Air cooling	Q4L1600A	AA0084NF0042NF2NF	1407980-08	974 / 3034	1948 / 6068
		AA0084OG0042OG2OG	1407980-24	1460 / 3130	2920 / 6260
		AA0084PG0042PG2PG	1407980-26	1946 / 4086	3892 / 8172
	Q4L2800A	AA0124NF0062NF2NF	1407980-22	974 / 3034	1948 / 6068
		AA0124OG0062OG2OG	1407980-09	1460 / 3130	2920 / 6260
		AA0124PG0062PG2PG	1407980-27	1946 / 4086	3892 / 8172
	Q4L4500A	AA0254NF0092NF2NF	1407980-23	974 / 3034	1948 / 6068
		AA0254OG0092OG2OG	1407980-25	1460 / 3130	2920 / 6260
		AA0254PG0092PG2PG	1407980-06	1946 / 4086	3892 / 8172

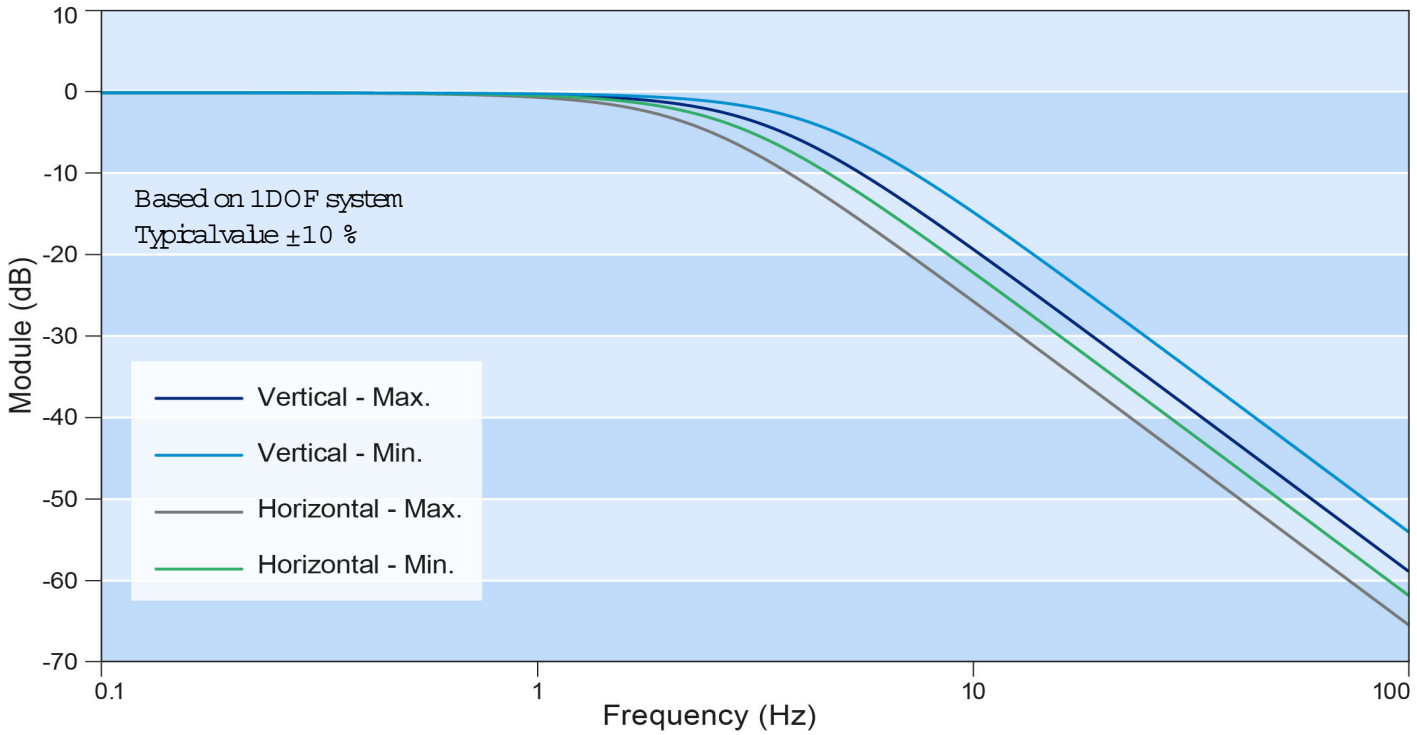
THEORETICAL VC CLASS REDUCTION



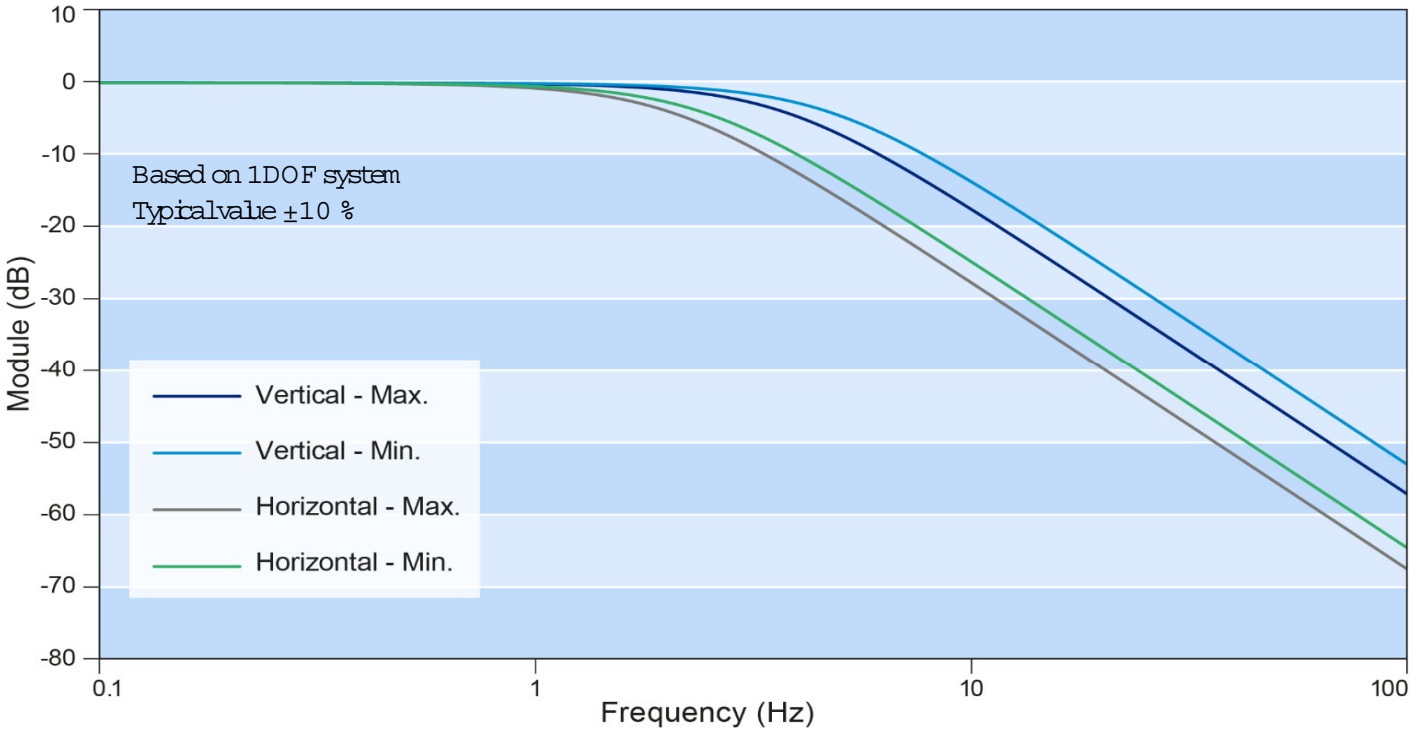
THEORETICAL TRANSMISSIBILITY CURVE - ML1: 1000 to 1600 kg



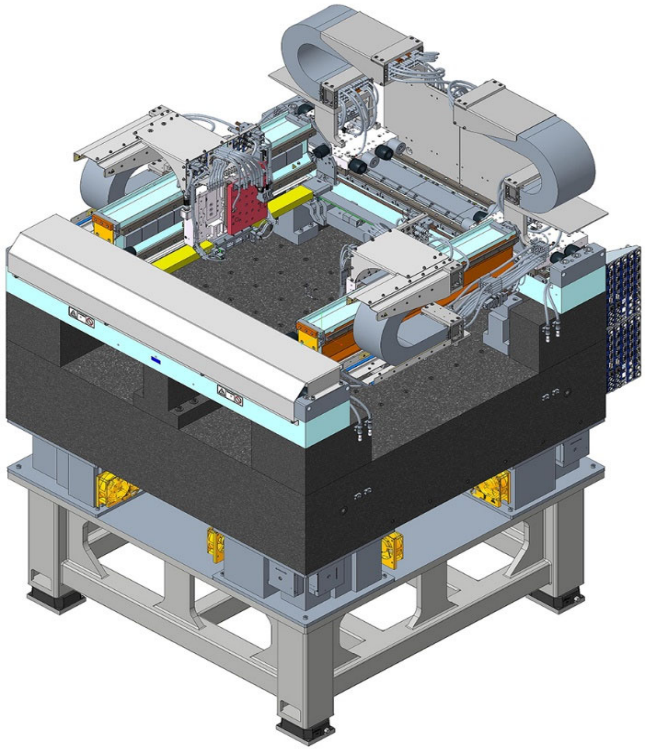
THEORETICAL TRANSMISSIBILITY CURVE - ML2: 1600 to 2800 kg



THEORETICAL TRANSMISSIBILITY CURVE - ML3: 2800 to 4500 kg

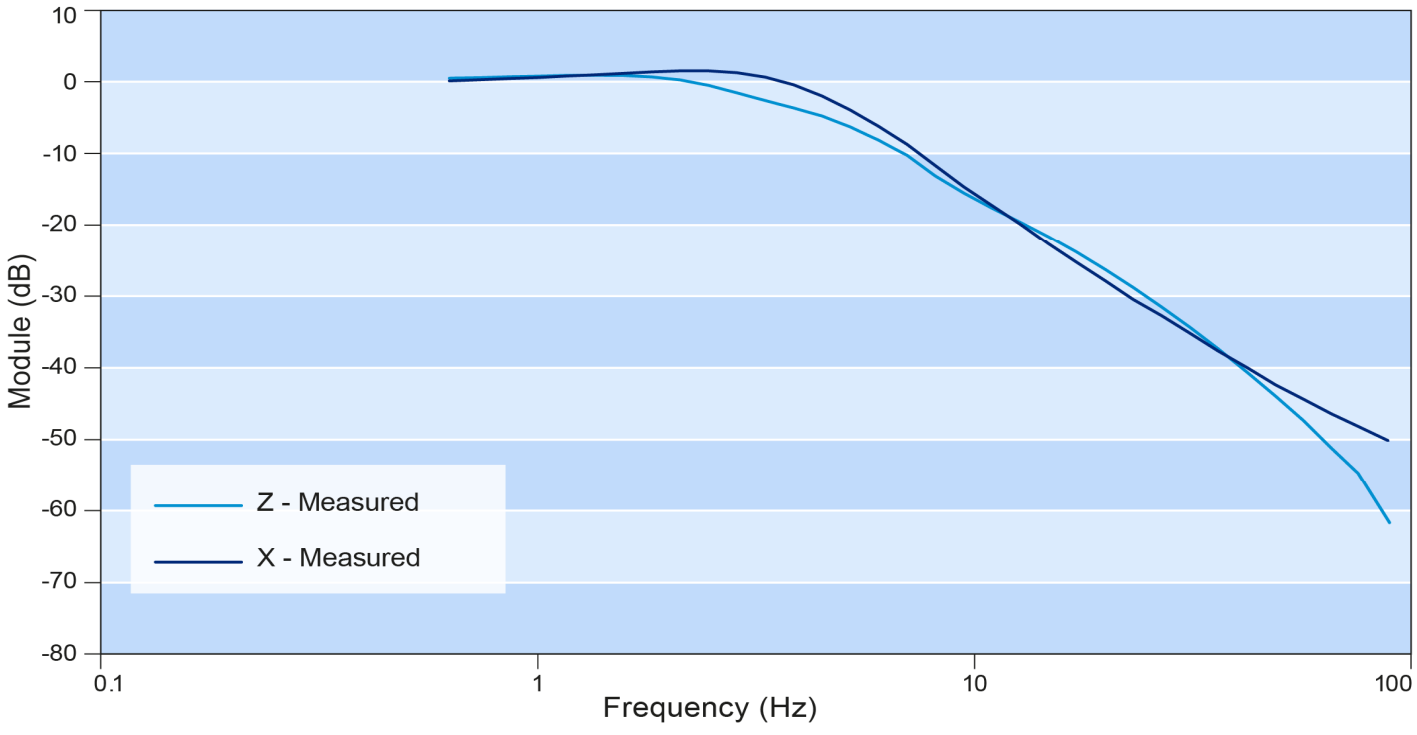


TYPICAL USE CASE: TELICA V3 GANTRY SYSTEM



- Static Mass: 2500 kg
- VC-C Floor

TYPICAL USE CASE: MEASURED TRANSMISSIBILITY



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