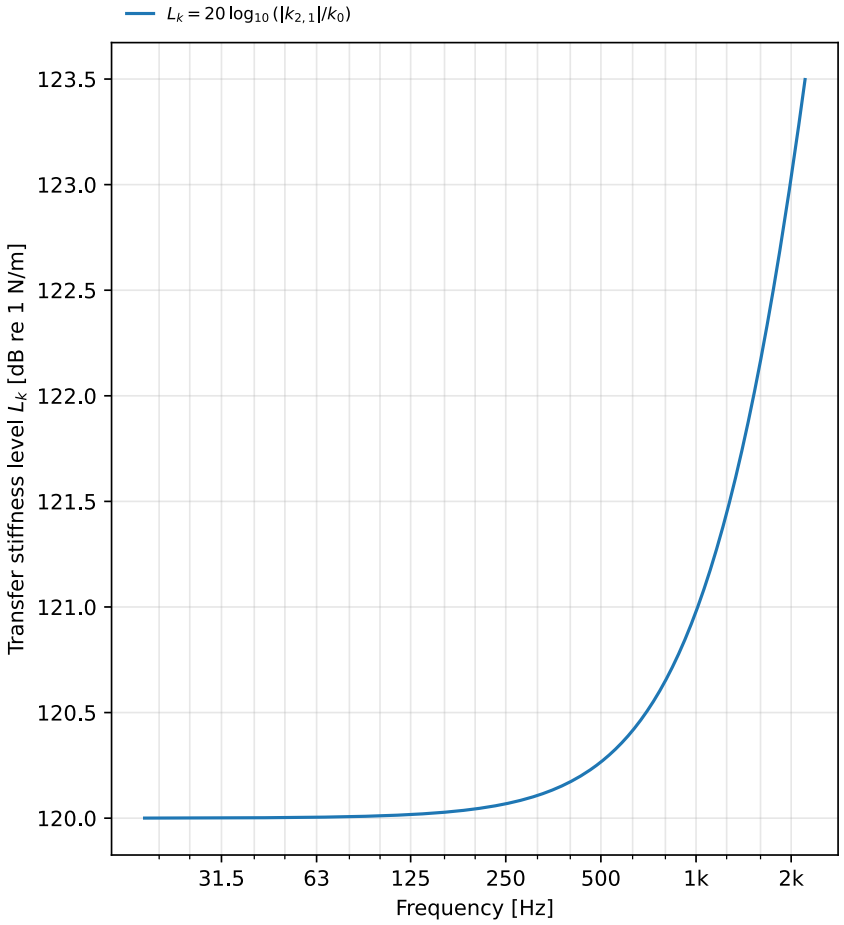
Dynamic transfer stiffness of a resilient element

Determination of the dynamic transfer stiffness $k_{2,1}$ of a resilient element by the direct method (ISO 10846-2:2008) (ISO 10846-1:2008, 3.7).

Client:	Example client	Manufacturer:	Example elastomers
Description:	Rubber vibration isolator (resilient mount)	Test facility:	Transfer-stiffness rig (example)
Instrumentation:	Force transducer + accelerometers (ISO 10846-2)	Date of test:	2026-07-22
Temperature [°C]:	21		

Transfer-stiffness characteristics

Method	direct method (ISO 10846-2: 2008)
Frequency range f [Hz]	18 to 2213.1
Low-frequency $\lvert k_{2,1}\rvert$ [MN/m]	1.00
Low-frequency L_k [dB re 1 N/m]	120.0
Loss factor η (low frequency)	0.009



One-third-octave band levels $L_{k,av}$ [dB re 1 N/m], squared-magnitude averages of the valid lines (n ≥ 5)

f [Hz]	20	25	31.5	40	50	63	80	100	125	160	200	250
$L_{k,av}$ [dB]	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.1

f [Hz]	315	400	500	630	800	1k	1.25k	1.6k	2k
$L_{k,av}$ [dB]	120.1	120.2	120.3	120.4	120.6	121.0	121.5	122.1	123.0

Low-frequency dynamic transfer stiffness level

L_k = **120.0 dB re 1 N/m**

Low-frequency stiffness $\lvert k_{2,1}\rvert$ = 1.00 MN/m at 18 Hz
Method: direct method (ISO 10846-2:2008)
Loss factor η = 0.009 (low frequency)

Laboratory: Phonometry reference example
Report no.: EXAMPLE-10846
Date: 2026-07-22
Operator: phonometry Signature: _____

■ The results relate only to the tested specimen.