

# Thiele/Small Parameters

## 45KM104

Re	3.745	Ohm	electrical voice coil resistance at DC
Krm	0.0058	Ohm	WRIGHT inductance model
Erm	0.855		WRIGHT inductance model
Kxm	0.02645	Ohm	WRIGHT inductance model
Exm	0.76		WRIGHT inductance model
Cmes	730.875	µF	electrical capacitance representing moving mass
Lces	36.515	mH	electrical inductance representing driver compliance
Res	119.675	Ohm	resistance due to mechanical losses
fs	30.8	Hz	driver resonance frequency
Mms voice coil	112.0935	g	mechanical mass of driver diaphragm assembly including air load and
Mmd	105.0155	g	mechanical mass of voice coil and diaphragm without air load
Rms	1.2815	kg/s	mechanical resistance of total-driver losses
Cms	0.238	mm/N	mechanical compliance of driver suspension
Kms	4.2	N/mm	mechanical stiffness of driver suspension
Bl	12.384	Tm	force factor (Bl product)
Lambda	0.007		suspension creep factor
Qtp	0.5815		total Q-factor considering all losses
Qms	16.931		mechanical Q-factor of driver in free air considering Rms only
Qes	0.529		electrical Q-factor of driver in free air considering Re only
Qts	0.513		total Q-factor considering Re and Rms only
Vas	38.9067	l	equivalent air volume of suspension
n0	0.2065	%	reference efficiency (2 pi-radiation using Re)
Lm	85.355	dB	characteristic sound pressure level (SPL at 1m for 1W @ Re)
Ln0m	85.64	dB	nominal sensitivity (SPL at 1m for 1W @ Zn)
rmse Z	3.055	%	root-mean-square fitting error of driver impedance Z(f)
rmse Hx	1.895	%	root-mean-square fitting error of transfer function Hx (f)
Sd	339.79	cm <sup>2</sup>	diaphragm area
Xmax	10.3	mm	