

AVA Series Rectangular Voice Coil Motors



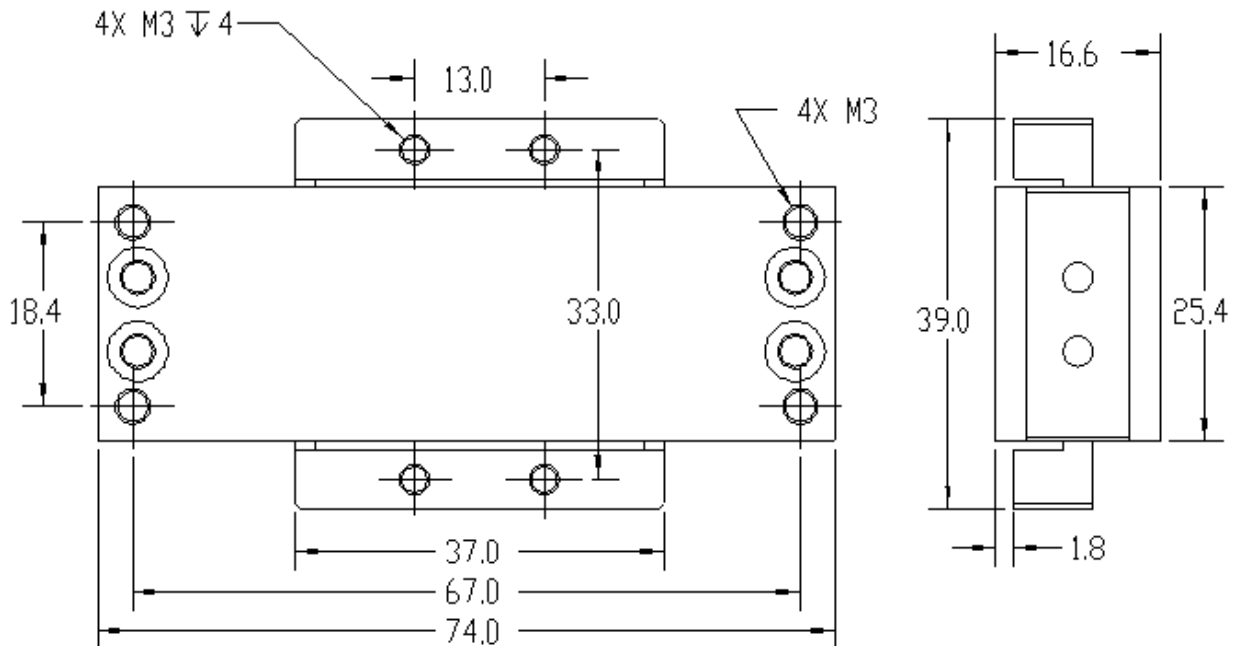
- **Direct drive, zero cogging, zero backlash voice coil motors**
- **Low coil mass with very fast response and bandwidth**
- **No contact between coil and core movement (no wear and tear)**
- **Smooth motion even at low speeds with limitless resolution**
(depends on feedback device)

Motor Parameter

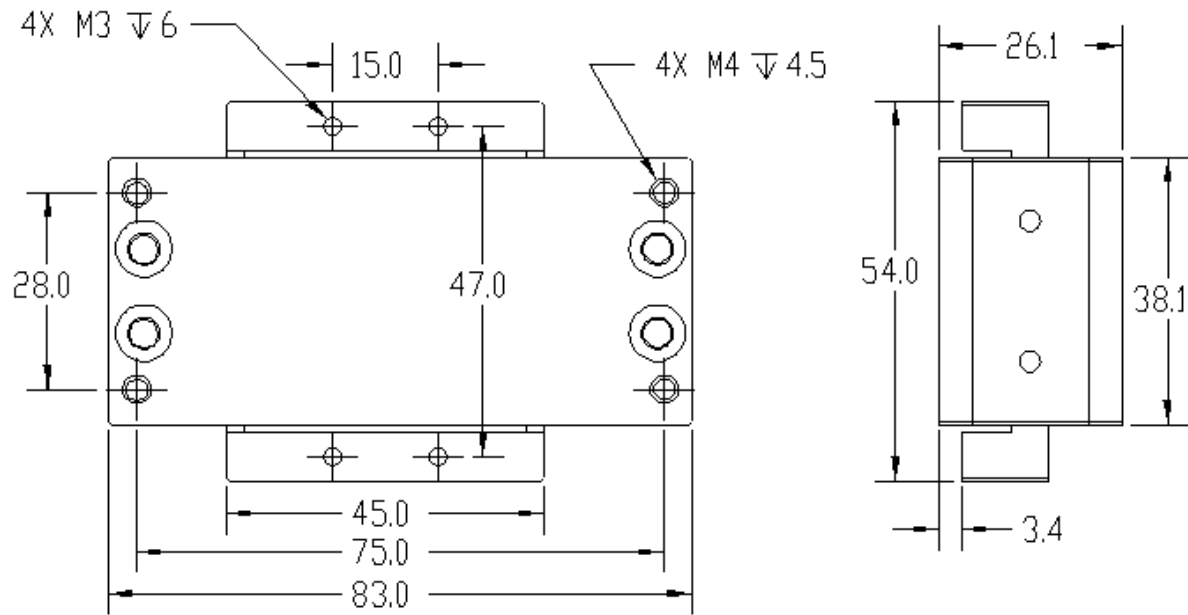
Model	Units	AVA 1-20	AVA 2-20	AVA 3-20
Stroke	mm	20	20	20
Force sensivity (at mid stroke)	N/A	1.37	7.20	6.40
Back EMF constant	V/m/s	1.37	7.20	6.40
Continuous force (at 100 °C) ¹	N	2.74	10.08	17.92
Peak force	N	8.2	30.2	53.8
Resistance ²	ohms	1.4	3.4	1.5
Inductance ²	mH	0.26	1.60	0.68
Voltage at peak force	V	24.0	24.0	24.0
Continuous current (coil at 100 °C)	A	2.00	1.40	2.80
Peak current	A	6.0	4.2	8.4
Actuator constant	N/SqRt(W)	1.16	3.90	5.23
Continuous power (at 100 °C)	W	5.60	6.66	11.76
Electrical time constant	ms	0.2	0.5	0.5
Mechanical time constant	ms	12.7	3.0	2.6
Clearance of coil	mm	0.60	0.60	0.60
Power at peak force	W	50.4	60.0	105.8
Thermal dissipation constant	W/°C	0.075	0.089	0.157
Max coil temperature	°C	155.0	155.0	155.0
Coil assembly mass	g	17.0	45.0	72.0
Total assembly mass	g	186.0	496.0	930.0

1. Continuous force measured without any additional mounting plate or heat sink on coil
2. Measured at 25 °C

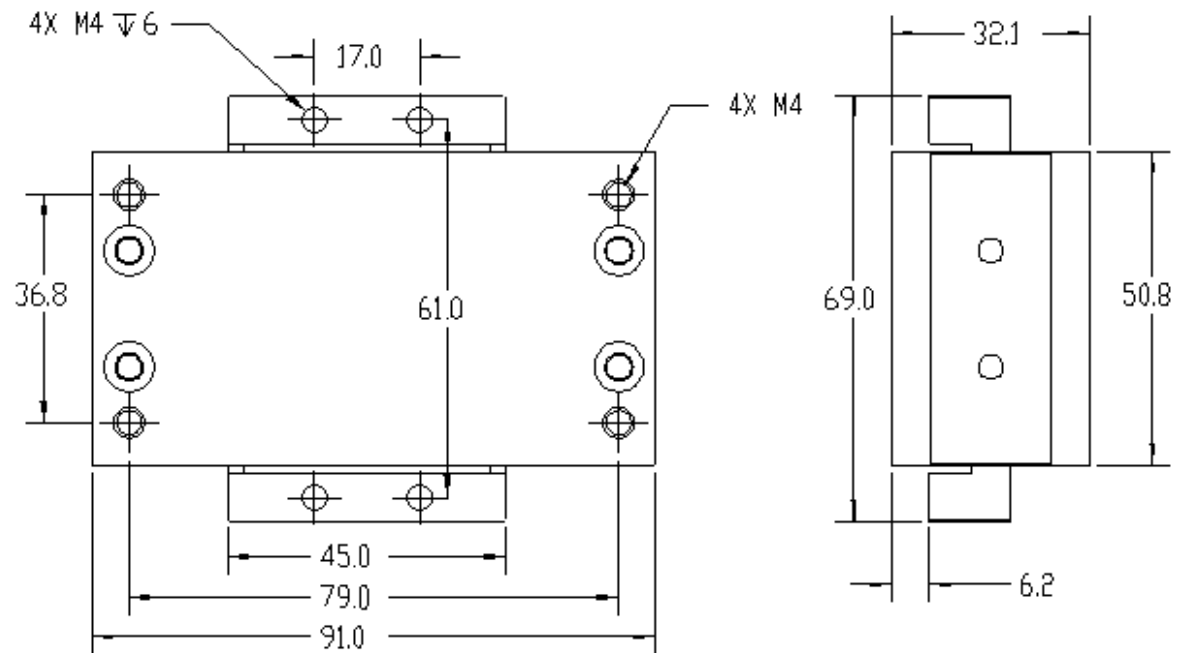
AVA 1



AVA 2



AVA 3



Part Numbering

Standard Models	
Model & Stroke	Cable Length (m)
AVA1-20	0.5
AVA2-20	
AVA3-20	

Example: AVM 30-15-0.5