

# Voice Coil Series AVM



AVM 90H

**Voice coil motors and  
Miniature guide  
Voice coil module**

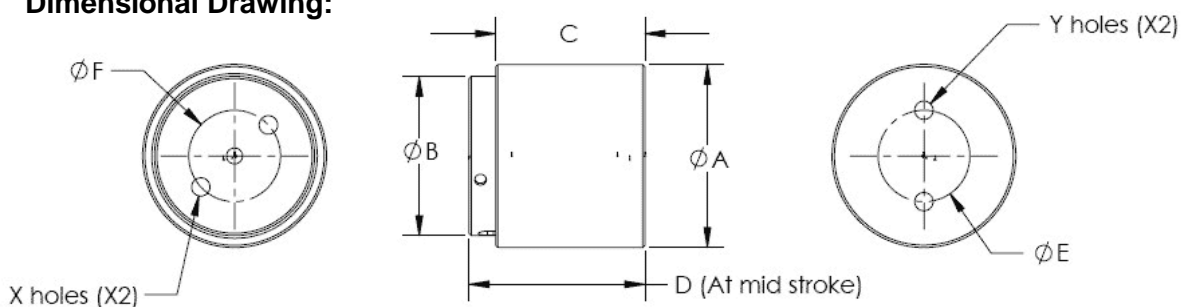
# AVM Series Voice coil motors

## Features:

- 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 at low speeds with limitless resolution (depends on feedback device)

Model		AVM 20-10	AVM 30-15	AVM 40-20	AVM 60-25	AVM 90-30	AVM 90H-10
Stroke	mm	10	15	20	25	35	10
Force constant (at mid stroke)	N/A	1,9	7,5	13,1	15,7	19,6	40,2
Back EMF constant	V/m/s	1,9	7,5	13,1	15,7	19,6	40,2
Continuous force (coil at 100°C)*	N	1,48	4,73	10,09	24,34	64,68	140,7
Continuous force (coil at 155°C) *	N	2,07	6,00	13,36	31,40	84,28	180,9
Peak force	N	6,2	18,0	40,1	94,2	252,8	542,7
Resistance	Ohm	3,5	10,6	11,0	5,2	2,9	3,4
Inductance	mH	0,40	2,94	6,22	6,42	6,61	7,52
Recommended bus voltage	VDC	24	24	24	24	48	48
Continuous current (coil at 100°C)*	A	0,78	0,63	0,77	1,55	3,3	3,5
Continuous current (coil at 155°C) *	A	1,09	0,80	1,02	2,00	4,3	4,5
Peak current	A	2,3	1,9	2,3	4,7	9,9	10,5
Clearance of coil	mm	0,5	0,6	0,6	0,6	0,65	0,65
Power at peak force	W	19,2	37,9	58,7	112,4	284,2	374,9
Max. coil temperature	°C	155	155	155	155	155,0	155,0
Coil assembly mass	g	8,8	24,1	63,3	204,8	757,6	941,6
Core assembly mass	g	30,3	92,7	205	660	1750	2000

## Dimensional Drawing:



AVM	20	30	40	60	90
A	20	30	40	60	90
B	16,6	25,2	34,8	50,6	81,7
C	19	24,5	32,5	43,5	53,0
D	31	39	49,8	66,1	80,8
E	10	16	20	30	48,0
F	10	12,6	20	30	40,0
X	M3	M3	M4	M5	M6
Y	M3	M3	M4	M5	M6

All dimensions in mm

## Order Code:

