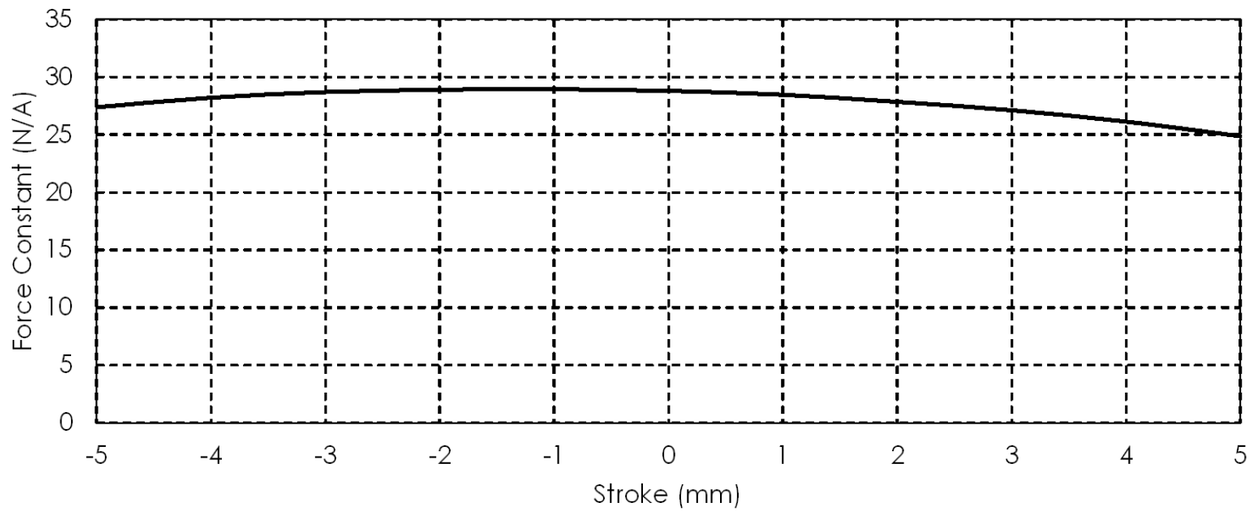
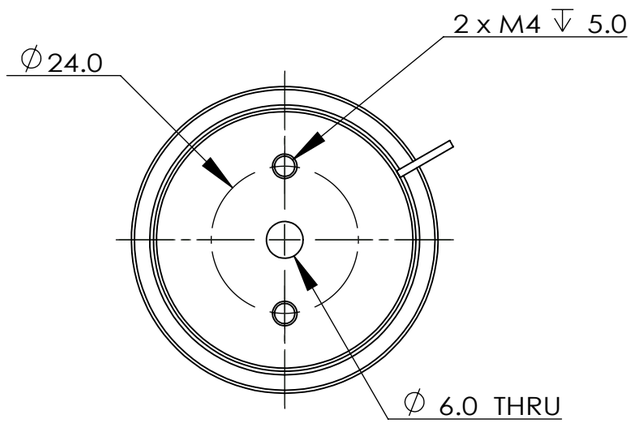
AVM50-HF-10

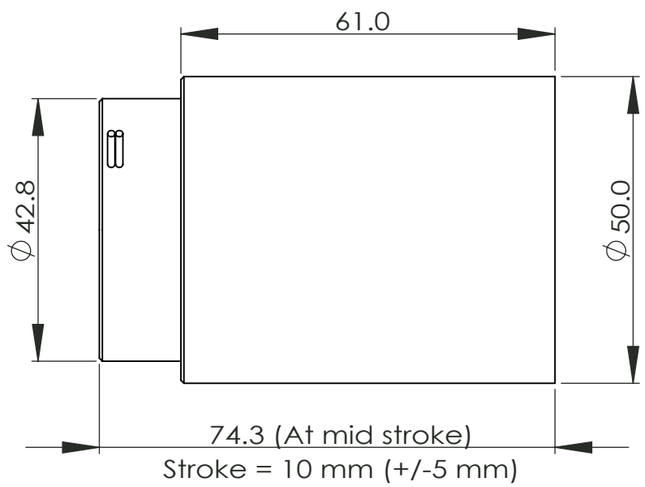
REV	DESCRIPTION	BY	DATE	APPD
0	INITIAL RELEASE	SL	2021/10/26	YX

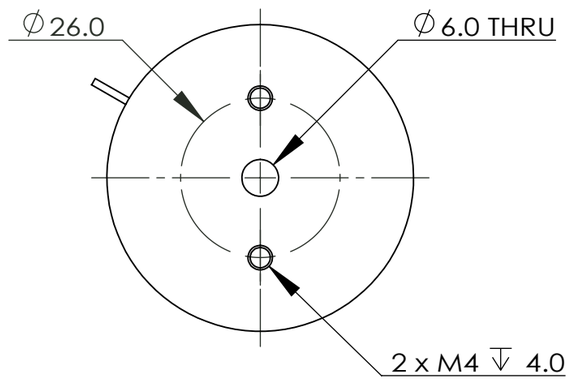
Performance Parameters	Symbol	Unit	AVM50-HF-10
Stroke	S	mm	10.0
Continuous Force @100°C[1][2]	F_c	N	34.6
Peak Force[2]	F_{pk}	N	141.4
Force Constant ±10%[2]	K_f	N/A	28.8
Back EMF Constant ±10%[2]	K_e	V/(m/s)	28.8
Motor Constant @25°C[2]	K_m	N/Sqrt(W)	9.88
Resistance @25°C ±10%[3]	R_{25}	Ω	8.50
Inductance ±20%[4]	L	mH	5.20
Electrical Time Constant	τ_e	ms	0.61
Continuous Current @100°C[1]	I_c	A	1.2
Peak Current	I_{pk}	A	5.0
Continuous Power Dissipation @100°C[1]	P_c	W	15.8
Max. Coil Temperature	t_{max}	°C	100
Thermal Dissipation Constant[1]	K_{th}	W/°C	0.210
Max. Voltage	U_{max}	Vdc	60
Coil Mass	m_{coil}	g	148.0
Core Mass	m_{core}	g	553.0
Running Clearance	L_{gap}	mm	0.60

[1] Measurement is taken at ambient temperature 25°C. Value depends on the thermal environment.
[2] The values are at mid stroke.
[3] Resistance is measured by DC current with 0.5 m lead wire.
[4] Inductance is measured by current frequency of 1 kHz.
The contents of datasheet are subject to change without prior notice.









AKRIBIS SYSTEMS CONFIDENTIAL:
THIS DOCUMENT AND THE INFORMATION CONTAINED IN IT ARE CONFIDENTIAL, AND CANNOT BE COPIED OR DISCLOSED IN WHOLE OR IN PART WITHOUT WRITTEN CONSENT OF AKRIBIS SYS PTE LTD

UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS IN mm

REMOVE ALL SHARP EDGES

GENERAL TOLERANCE
X ± 0.25mm
X.X ± 0.1mm
X.XX ± 0.05mm
X.XXX ± 0.025mm

3rd ANGLE PROJECTION

Designed	SL	2021/10/25
Drawn	SL	2021/10/25
Checked	YH	2021/10/26
Approved	YX	2021/10/26
Material	NA	
Surface Treatment	NA	
Heat Treatment	NA	
Quantity	NA	

Akribis
Systems Pte Ltd
©2004. All rights reserved.

Model:	AVM50-HF-10_Customer Drawing
Title :	AVM50-HF-10_Customer Drawing
Dwg No:	AVM50-HF-10
Sheet:	1 OF1
Rev:	0