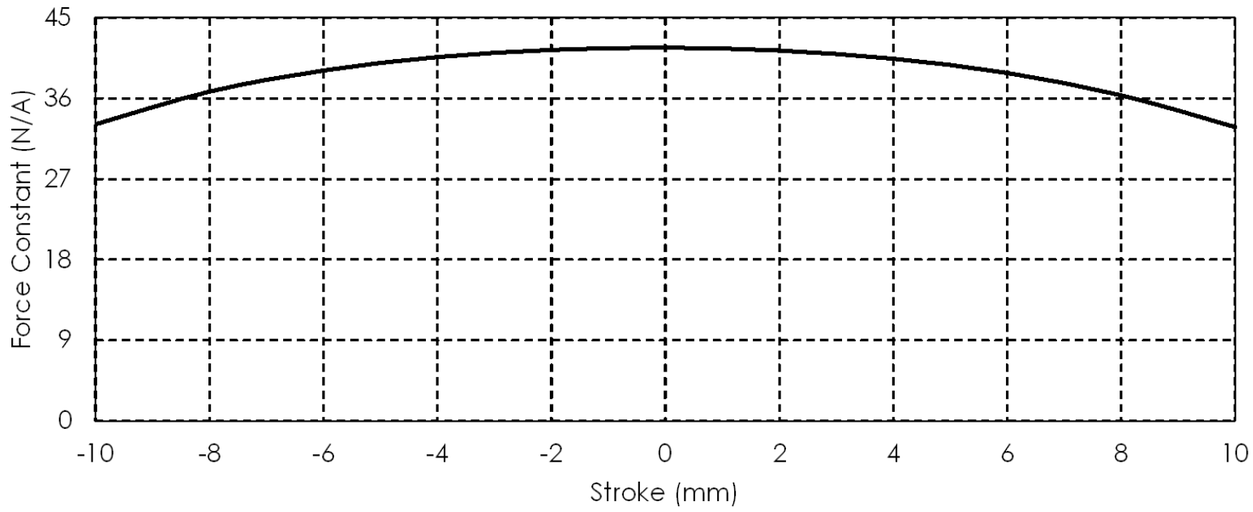
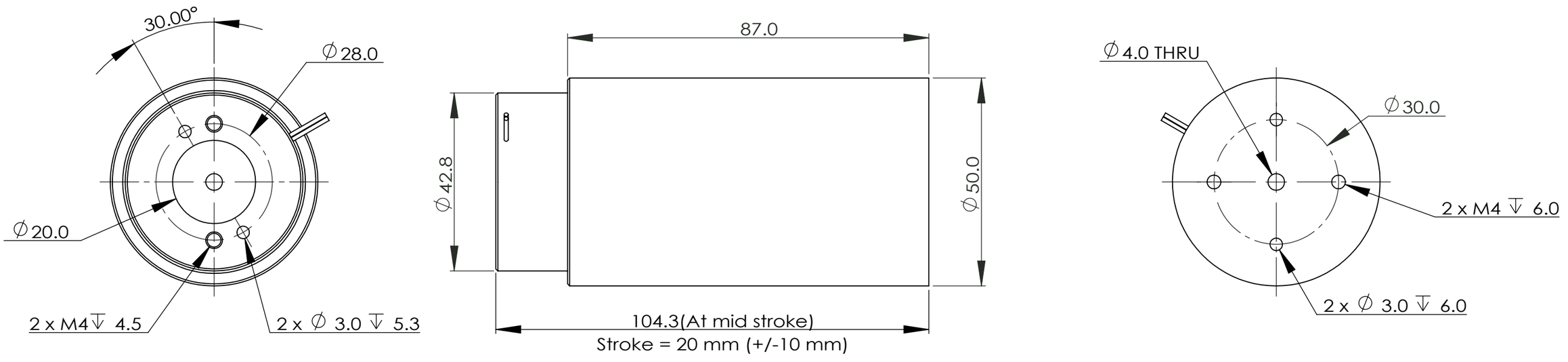
Performance Parameters	Symbol	Unit	AVM50-HF-20
Stroke	S	mm	20.0
Continuous Force @100°C[1][2]	F_c	N	50.0
Peak Force[2]	F_{pk}	N	208.5
Force Constant ±10%[2]	K_f	N/A	41.6
Back EMF Constant ±10%[2]	K_e	V/(m/s)	41.6
Motor Constant @25°C[2]	K_m	N/Sqrt(W)	12.0
Resistance @25°C ±10%[3]	R_{25}	Ω	11.9
Inductance ±20%[4]	L	mH	8.2
Electrical Time Constant	τ_e	ms	0.69
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	22.2
Max. Coil Temperature	t_{max}	°C	100
Thermal Dissipation Constant[1]	K_{th}	W/°C	0.295
Max. Voltage	U_{max}	Vdc	60
Coil Mass	m_{coil}	g	195.0
Core Mass	m_{core}	g	931.1
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.

AVM50-HF-20

REV	DESCRIPTION	BY	DATE	APPD
0	INITIAL RELEASE	SL	2021/10/26	YX
1	Coil weight and inductance updated	WSM	2022/11/22	YX





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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	

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Model:	AVM50-HF-20_Customer Drawing
Title :	AVM50-HF-20_Customer Drawing
Dwg No:	AVM50-HF-20
Sheet:	1 OF1 Rev: 1