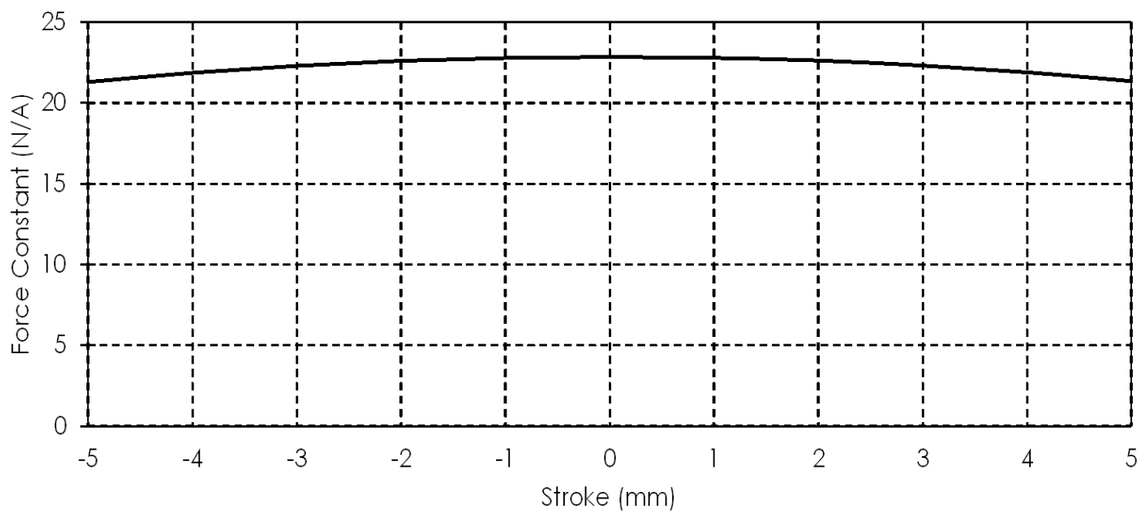
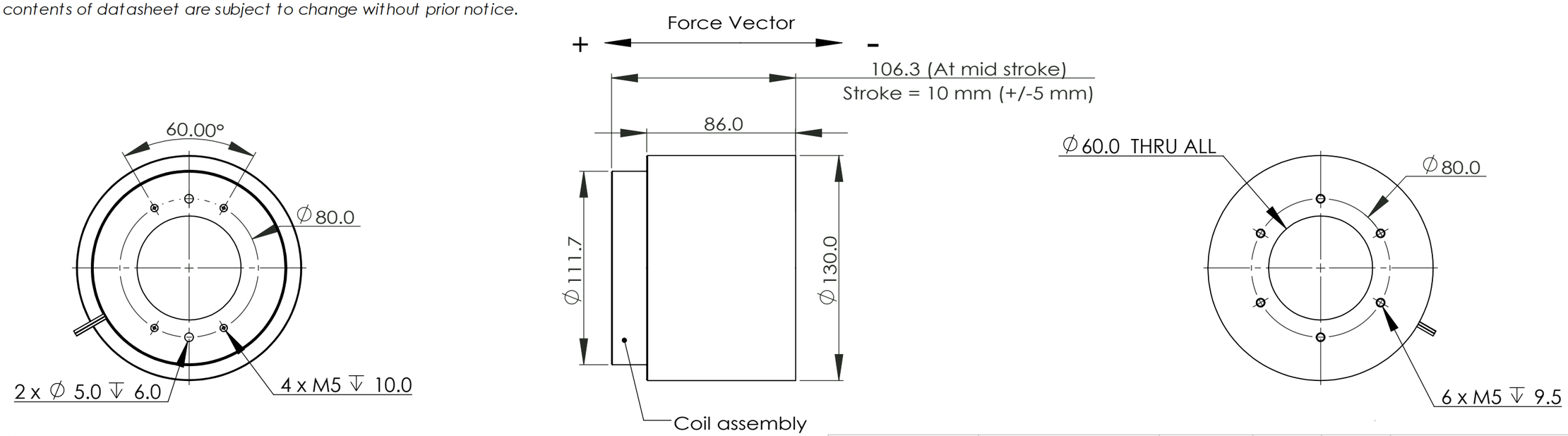
AVM130-HF-10

REV	DESCRIPTION	BY	DATE	APPD
0	INITIAL RELEASE	SL	2021/10/26	YX
1	Add cable information , update the parameter table	WSM	2022/7/1	YX

Performance Parameters	Symbol	Unit	AVM130-HF-10
Stroke	S	mm	10.0
Continuous Force @100°C[1] [2]	F_c	N	150.8
Peak Force[2]	F_{pk}	N	452.3
Force Constant ±10%[2]	K_f	N/A	22.8
Back EMF Constant ±10%[2]	K_e	V/(m/s)	22.8
Motor Constant @25°C[2]	K_m	N/Sqrt(W)	26.4
Resistance @25°C ±10%[3]	R_{25}	Ω	0.75
Inductance ±20%[4]	L	mH	0.75
Electrical Time Constant	τ_e	ms	1.00
Continuous Current @100°C[1]	I_c	A	6.60
Peak Current	I_{pk}	A	19.8
Continuous Power Dissipation @100°C[1]	P_c	W	42.1
Max. Coil Temperature	t_{max}	°C	120
Thermal Dissipation Constant[1]	K_{th}	W/°C	0.56
Max. Voltage	U_{max}	Vdc	120
Coil Mass	m_{coil}	g	1080.0
Core Mass	m_{core}	g	5300.0
Running Clearance	L_{gap}	mm	0.55

[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.





NOTE:
1.LEAD WIRE (Rohs, Reach applicable) : 18 AWG , Number of strands : 1
Insulation O.D.=1.83 mm , Color : white and black , Bending radius: 14.6 mm ;
2.The default cable length is 0.5 m; Coming with flying leads, which can be used in cablecovey for motion ;
3.A positive(+) voliage applied to the white lead will produce a force on the coil assembly in the negative (-) direction.

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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:	AVM130-HF-10
Title :	AVM130-HF-10_Customer Drawing
Dwg No:	AVM130-HF-10
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Rev:	1