

Performance Parameters	Symbol	Unit	AVM80-12
Stroke	S	mm	12.0
Continuous Force @100°C ^{[1][2]}	F _c	N	47.9
Peak Force ^[2]	F _{pk}	N	205.9
Force Constant ±10% ^[2]	K _f	N/A	32.8
Back EMF Constant ±10% ^[2]	K _e	V/(m/s)	32.8
Motor Constant @25°C ^[2]	K _m	N/Sqrt(W)	12.0
Resistance @25°C ±10% ^[3]	R ₂₅	Ω	7.50
Inductance ±20% ^[4]	L	mH	4.10
Electrical Time Constant	τ _e	ms	0.55
Continuous Current @100°C ^[1]	I _c	A	1.5
Peak Current	I _{pk}	A	6.2
Continuous Power Dissipation @100°C ^[1]	P _c	W	20.6
Max. Coil Temperature	t _{max}	°C	100
Thermal Dissipation Constant ^[1]	K _{th}	W/°C	0.275
Max. Voltage	U _{max}	Vdc	60
Coil Mass	m _{coil}	g	235.3
Core Mass	m _{core}	g	1265.0
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.

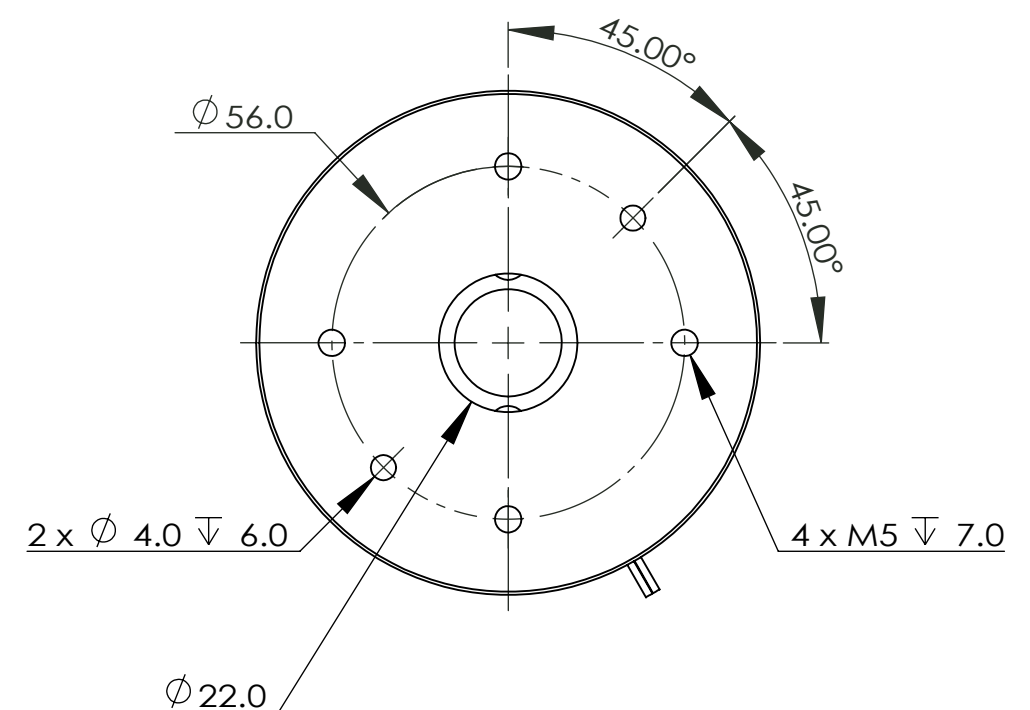
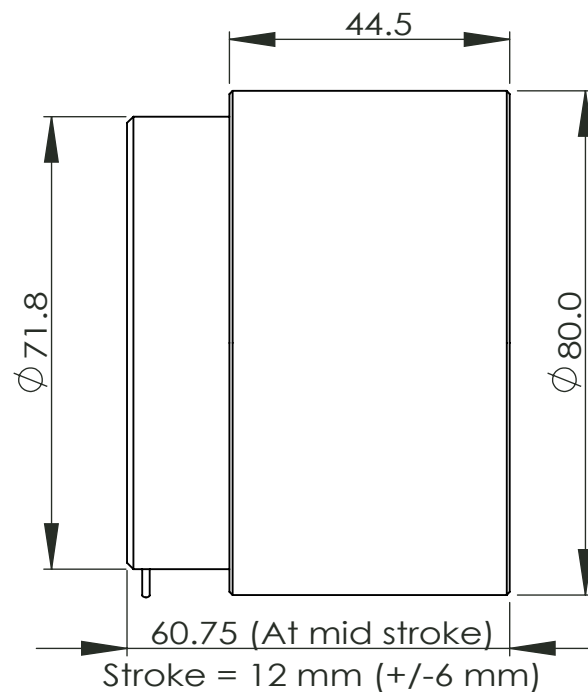
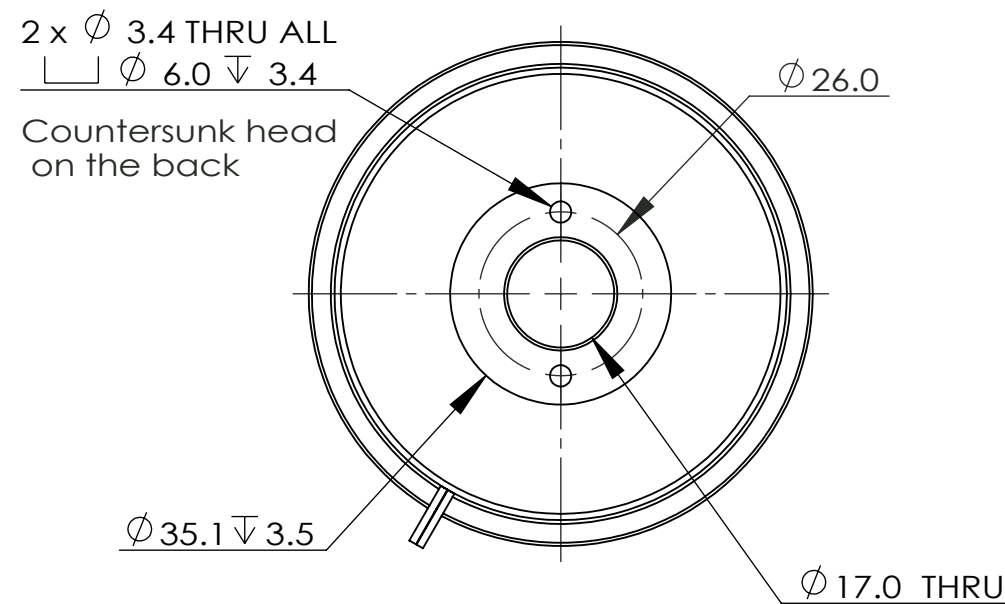
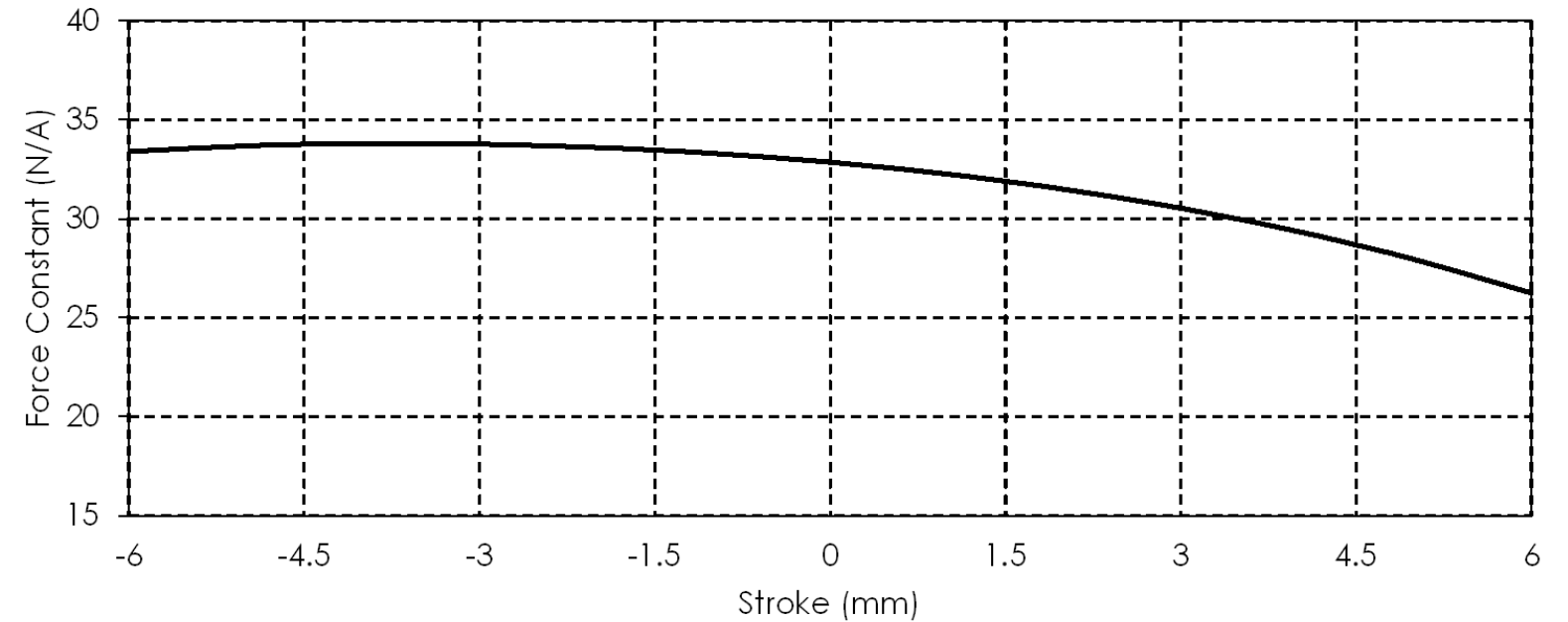
[3] Resistance is measured by DC current with 0.5 m lead wire.

[4] Inductance is measured by current frequency of 1 kHz.

The contents of datasheet are subject to change without prior notice.

AVM80-12

REV	DESCRIPTION	BY	DATE	APPD
0	INITIAL RELEASE	WSM	2021/10/26	YX
1	Inductance Value Correction	WQY	2025/01/20	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



Designed	SL	2021/10/25
Drawn	WSM	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:	AVM80-12_Customer Drawing
Title:	AVM80-12_Customer Drawing
Dwg No:	AVM80-12
Sheet:	1 OF 1
Rev:	0