Motor

For Mini Linear Units MGBS & MGTB and MCE & MSCE Mini Electric Cylinders & Sliders.

See documentation below for more information.

Dimensions in mm.

Ambient Temperature (°C): –10 ~ +50
Ambient Humidity: Max. 85 % (non-condensing)
Protection Class: IP65
Duty Cycle: 100 %



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General Data

Designation	Compatible with	Motor Type	Motor Size (mm)	Brake	Voltage (V DC)
STMN-42-L-E	MGBS/MGTB 32 & 45, MCE/MSCE 32 & 45	Stepper	42	Without	3.15
STMN-42-L-E-B	MGBS/MGTB 32 & 45, MCE/MSCE 32 & 45	Stepper	42	With	3.15
STMN-56-L-E	MGBS/MGTB 45 & 60, MCE/MSCE 45	Stepper	56	Without	2.4
STMN-56-L-E-B	MGBS/MGTB 45 & 60, MCE/MSCE 45	Stepper	56	With	2.4

Designation	Current per Phase (A)	Mass Moment of Inertia (kg cm²)	Holding Torque (Nm)	Step Angle (°)	Resistance per Phase (Ohm)	Inductance per Phase (mH)
STMN-42-L-E	1.8	0.082	0.5	1.8 ± 5 %	1.75 ± 15 %	3.3 ± 20 %
STMN-42-L-E-B	1.8	0.095	0.5 (motor); 0.4 (brake)	1.8 ± 5 %	1.75 ± 15 %	3.3 ± 20 %
STMN-56-L-E	4.2	0.480	1.87	1.8 ± 5 %	0.58 ± 15 %	1.9 ± 20 %
STMN-56-L-E-B	4.2	0.501	1.87 (motor) ; 1.0 (brake)	1.8 ± 5 %	0.58 ± 15 %	1.9 ± 20 %

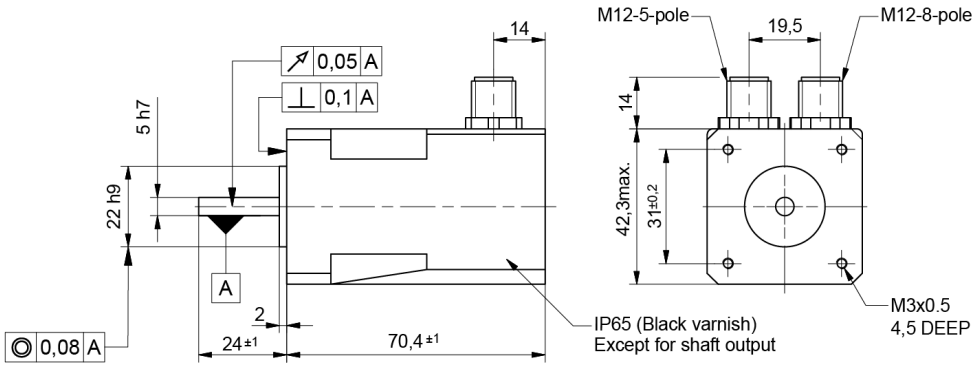
Designation	Voltage Constant (mV/min⁻¹)	Mass (kg)	Type	Measuring Principle	Interface	Resolution
STMN-42-L-E	23	0.44	Incremental	Opto-electrical	Line drive	500/2000 (cpr/ppr)
STMN-42-L-E-B	23	0.57	Incremental	Opto-electrical	Line drive	500/2000 (cpr/ppr)
STMN-56-L-E	32.5	1.14	Incremental	Opto-electrical	Line drive	500/2000 (cpr/ppr)
STMN-56-L-E-B	32.5	1.33	Incremental	Opto-electrical	Line drive	500/2000 (cpr/ppr)

Designation	Operating Voltage (V DC)	Rated Output (W)
STMN-42-L-E	5	8
STMN-42-L-E-B	5 (encoder) ; 24 (+6/–10 %) (brake)	8
STMN-56-L-E	5	10
STMN-56-L-E-B	5 (encoder) ; 24 (+6/–10 %) (brake)	10

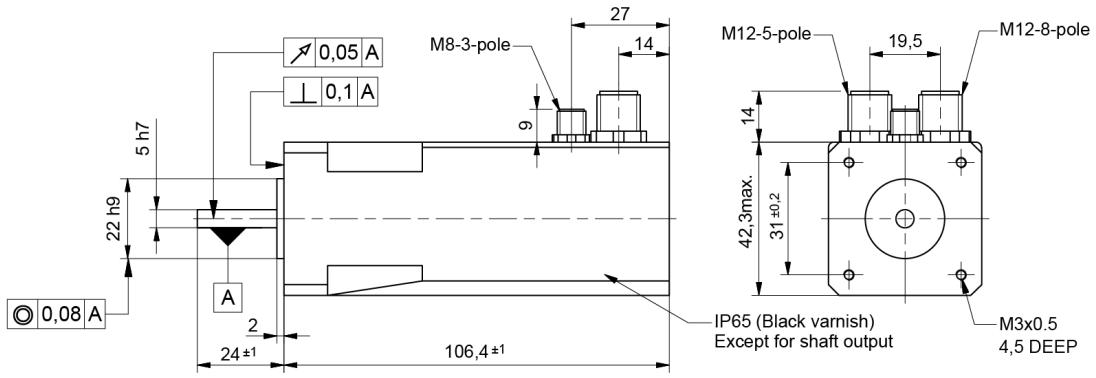
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Dimensions

Motor without brake STMN-42-L-E

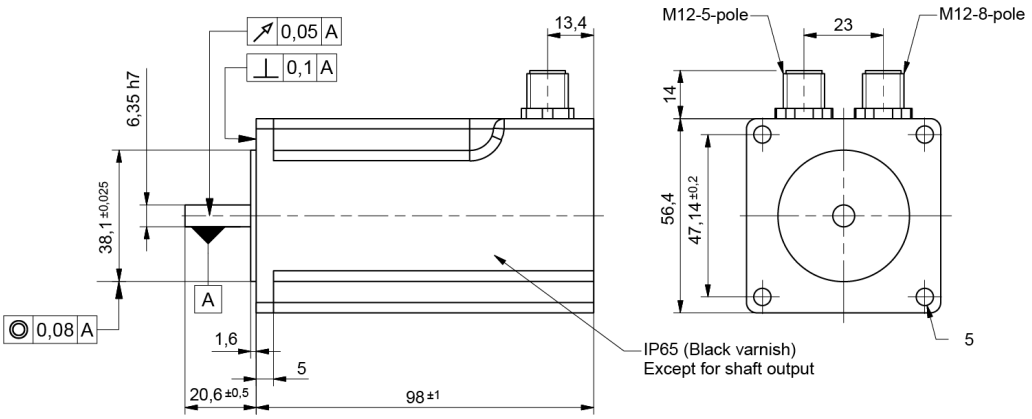


Motor with brake STMN-42-L-E-B

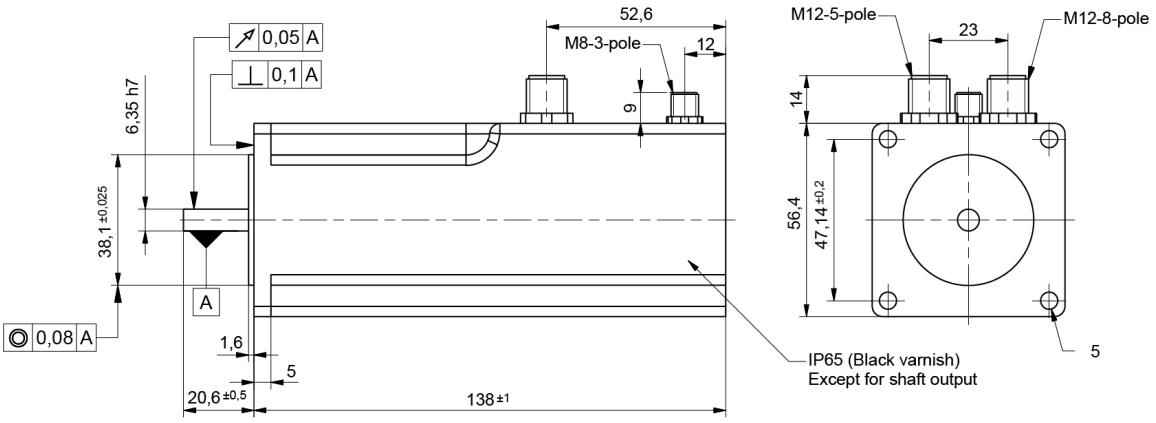


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Motor without brake STMN-56-L-E



Motor with brake STMN-56-L-E-B



Designation	E1	E2	E3	E4	E5	E6	E7	E8	E9
STMN-42-L-E	M12 5-pole	M12 8-pole	-	14	14	19.5	-	-	70.4
STMN-42-L-E-B	M12 5-pole	M12 8-pole	M8 3-pole	14	14	19.5	9	27	106.4
STMN-56-L-E	M12 5-pole	M12 8-pole	-	14	13.4	23	-	-	98
STMN-56-L-E-B	M12 5-pole	M12 8-pole	M8 3-pole	14	52.4	23	9	12	138

Designation	E10
STMN-42-L-E	42.3
STMN-42-L-E-B	42.3
STMN-56-L-E	56.4
STMN-56-L-E-B	56.4

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