

NEW

HIGHLIGHTS

- IP65-rated housing
- Holding torque up to 930 Ncm
- Four frame sizes from 42 to 86 mm
- Multiple encoder options
- M12 connectors for motor and encoder

ASA series

IP65 stepper motors with encoder and UL certification

The ASA series comprises high-performance 1.8° stepper motors with integrated encoder and robust IP65-rated housing. Available in four frame sizes (42, 56, 60 and 86 mm), each with two motor lengths, the series covers holding torques from 28 to 930 Ncm. For larger quantities, an integrated holding brake is available upon request.



ASA42 ASA56 ASA60 ASA86

Broad encoder selection

The ASA series offers incremental encoders with index and line driver, providing up to 4,096 CPR/16,384 PPR, as well as absolute multi-turn encoders with SSI interface (17-bit single-turn, 16-bit multi-turn). For the ASA42 and ASA60, additional options include BiSS interfaces and magnetic incremental encoders with 500 or 1,024 CPR.

Designed for industrial environments

The motors come in NEMA 17, 23, 24 and 34. Depending on the model, winding currents range from 1.8 to 9.5 A. UL- and CSA-certified versions are available for ASA56 and ASA86, with certification for the ASA42 and ASA60 expected from Q2 2027.

MODEL OVERVIEW

	ASA42* NEW		ASA56		ASA60* NEW		ASA86	
Model	ASA4218M18	ASA4218L18	ASA5618M42	ASA5618L42	ASA6018M42	ASA6018L42	ASA8618M95	ASA8618L95
Length	66.9 – 68.4 mm	77.4 – 78.9 mm	88 mm	108.5 mm	93 mm	124.5 mm	125 mm	155 mm
Holding torque	28 Ncm	50 Ncm	140 Ncm	230 Ncm	166 Ncm	354 Ncm	590 Ncm	930 Ncm
Current	1.8 A	1.8 A	4.2 A	4.2 A	4.2 A	4.2 A	9.5 A	9.5 A
Rotor inertia	57 gcm²	82 gcm²	300 gcm²	480 gcm²	400 gcm²	840 gcm²	1,900 gcm²	3,000 gcm²

ENCODER OPTIONS

Encoder	Interface	Resolution	Supply	ASA42	ASA56	ASA60	ASA86
NME3, incremental	A, B, I (line driver)	4,096 CPR/16,384 PPR	5 VDC	•	•	•	•
NME3, incremental	A, B, I (line driver)	500 CPR/2,000 PPR	5 VDC	L version	–	•	–
NME3, incremental	A, B, I (line driver)	1,024 CPR/4,096 PPR	24 VDC	L version	–	•	–
NMM1, absolute multi-turn	SSI	17 bit ST/16 bit MT	4.75 – 15 VDC	•	•	•	•
NMM1, absolute multi-turn	BiSS	17 bit ST/16 bit MT	4.75 – 15 VDC	•	–	•	–
without encoder	–	–	–	•	–	•	–

SERIES FEATURES

	ASA42*	ASA56	ASA60*	ASA86
Frame size	42 mm (NEMA 17)	56 mm (NEMA 23)	60 mm (NEMA 24)	86 mm (NEMA 34)
Shaft diameter	5 mm	6.35 mm	8 mm	14 mm
Max. axial/radial force	15 N/20 N	10 N/28 N	15 N/52 N	60 N/220 N
Motor connector X1	M12, 5-pole, A-coded	M12, 4-pole, L-coded	M12, 4-pole, L-coded	M12, 4-pole, L-coded
Encoder connector X2	M12, 8-pole, A-coded			
Protection class	IP65 (except shaft outlet), shaft outlet IP54			
Ambient temperature	-10 to +40 °C	-10 to +50 °C	-10 to +40 °C	-10 to +50 °C
UL/CSA certification	yes (approx. Q2 2027)*	yes	yes (approx. Q2 2027)*	yes

*ASA42 and ASA60 available from Q1 2027 without UL/CSA certification; UL/CSA-certified versions expected to be available from approximately Q2 2027.

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