



YOSO
LINEAR MOTION

**STEPPER
MOTOR**

YOSO MOTION STEPPER MOTOR

Stepper Motor (No encoder)

Stepper Motor Naming Rule

11 - HS - 33 - 06 - S

S: Single axis D: Dual axis
B: Screw motor H: Hollow shaft
**Non-standard customization/with brake

Rated current

Motor length

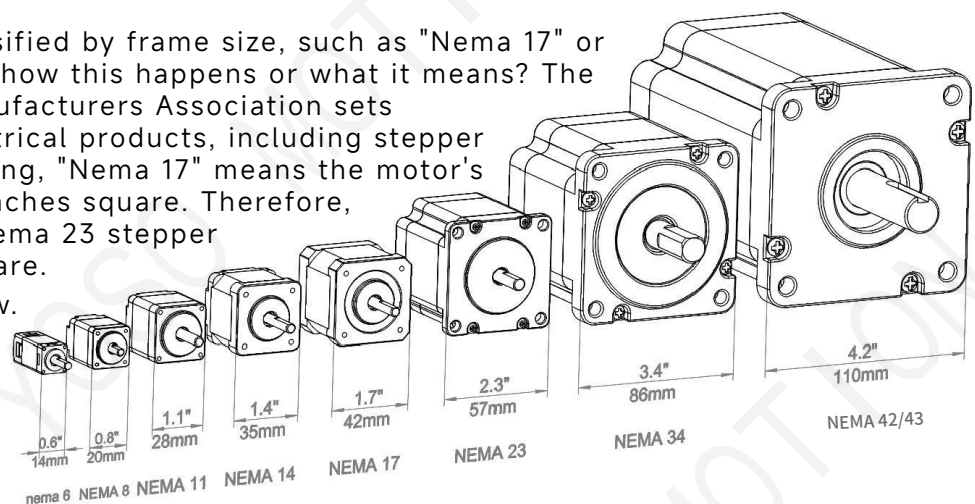
Motor series

Motor specifications

Stepper Motor Size

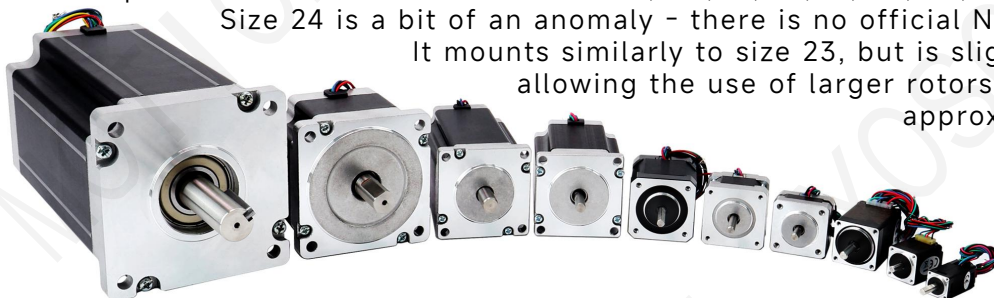
Stepper motors are classified by frame size, such as "Nema 17" or "Nema 23". Ever wonder how this happens or what it means? The American Electrical Manufacturers Association sets standards for many electrical products, including stepper motors. Generally speaking, "Nema 17" means the motor's mounting surface is 1.7inches square. Therefore, the dimensions of the Nema 23 stepper motor are 2.3inches square.

Or 57mm as shown below.



The photo below includes Nema size 06, 08, 11, 14, 17, 23, 24, 34, and 42 stepper motors. Size 24 is a bit of an anomaly - there is no official Nema definition for size 24.

It mounts similarly to size 23, but is slightly wider (approx. 4mm), allowing the use of larger rotors and stators and therefore approximately 30% more torque.



Essentially, manufacturers agree on the proposed standard. This gives manufacturers greater design flexibility because they know in advance that one Nema 17 motor will fit another Nema 17 mount without having to redesign anything; especially if they choose to change motor suppliers.

Selection List of Stepper Motor Drivers

TB6600 Stepper Motor Driver

Driver Model	Input Voltage	Driver Appearance	Motor Appearance	Applicable Model	Applicable Motor Torque
TB6600	DC: 9-42V			42 Open-loop Stepper	0.24N
					0.28N
					0.4N
					0.55N
					0.7N
				57 Open-loop Stepper	0.64N
					1.35N
					2.3N
					3.1N
					3.6N

DM542 Stepper Motor Driver

Driver Model	Input Voltage	Driver Appearance	Motor Appearance	Applicable Model	Applicable Motor Torque
DM542	DC: 20-50V			42 Open-loop Stepper	0.24N
					0.28N
					0.4N
					0.55N
					0.7N
				57 Open-loop Stepper	0.64N
					1.35N
					2.3N
					3.1N
					3.6N

LW556 Stepper Motor Driver

Driver Model	Input Voltage	Driver Appearance	Motor Appearance	Applicable Model	Applicable Motor Torque
LW556	DC: 20-50V			57 Open-loop Stepper	0.64N
					1.35N
					2.3N
					3.1N
					3.6N

DM86H Stepper Motor Driver

Driver Model	Input Voltage	Driver Appearance	Motor Appearance	Applicable Model	Applicable Motor Torque
DM86H	DC: 40-80V AC: 36-60V			86 Open-loop Stepper	4.5N
					6.5N
					8.5N
					10N
					12.5N

YOSO MOTION STEPPER MOTOR

Selection List of Stepper Motor Drivers

LW860 Stepper Motor Driver

Driver Model	Input Voltage	Driver Appearance	Motor Appearance	Applicable Model	Applicable Motor Torque
LW860	DC: 40-80V AC: 36-60V			86 Open-loop Stepper	4.5N
					6.5N
					8.5N
					10N
					12.5N

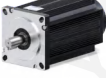
DM542 Stepper Motor Driver

Driver Model	Input Voltage	Driver Appearance	Motor Appearance	Applicable Model	Applicable Motor Torque
DM542	Three-phase AC 220V			42 Open-loop Stepper	0.24N
					0.28N
					0.4N
					0.55N
				57 Open-loop Stepper	0.7N
					0.64N
					1.35N
					2.3N

DM3722 Stepper Motor Driver

Driver Model	Input Voltage	Driver Appearance	Motor Appearance	Applicable Model	Applicable Motor Torque
DM3722	Three-phase AC 220V			110 Open-loop Stepper	20N
					24N
				130 Open-loop Stepper	20N
					24N
					28N
					37N

DM3922 Stepper Motor Driver

Driver Model	Input Voltage	Driver Appearance	Motor Appearance	Applicable Model	Applicable Motor Torque
DM3922	Three-phase AC 220V			130 Open-loop Stepper	50N
					60N

Selection List of Stepper Motor Drivers

HB808C Stepper Motor Driver

Driver Model	Input Voltage	Driver Appearance	Motor Appearance	Applicable Model	Applicable Motor Torque
HB808C	DC: 24-80V			57 Open-loop Stepper	1.35N
					2.3N
					3.1N
					3.6N

HBS57H Stepper Motor Driver

Driver Model	Input Voltage	Driver Appearance	Motor Appearance	Applicable Model	Applicable Motor Torque
HBS57H	DC: 24-90V AC: 24-55V			57 Open-loop Stepper	1.35N
					2.3N
					3.1N
					3.6N

HBS86H-V4 Stepper Motor Driver

Driver Model	Input Voltage	Driver Appearance	Motor Appearance	Applicable Model	Applicable Motor Torque
HBS86H-V4	DC: 18-110V AC: 18-80V			86 Open-loop Stepper	4.5N
					6.5N
					8.5N
					10N
					12.5N

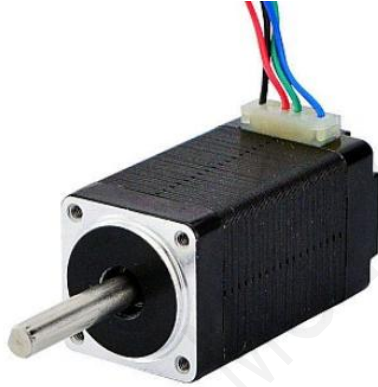
DL86 Stepper Motor Driver

Driver Model	Input Voltage	Driver Appearance	Motor Appearance	Applicable Model	Applicable Motor Torque
DL86	DC: 18-110V AC: 18-80V			86 Open-loop Stepper	4.5N
					6.5N
					8.5N
					10N
					12.5N

YOSO MOTION STEPPER MOTOR

SERIES HYBRID STEPPING MOTOR

(8HS)mini Series,1.8deg/step 2/4-Phase Hybrid Stepper Motors

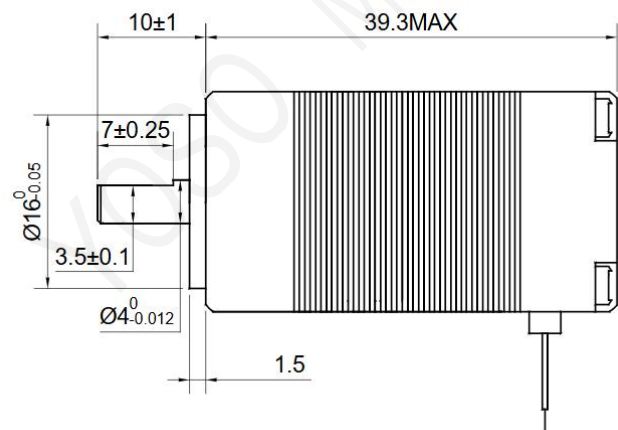
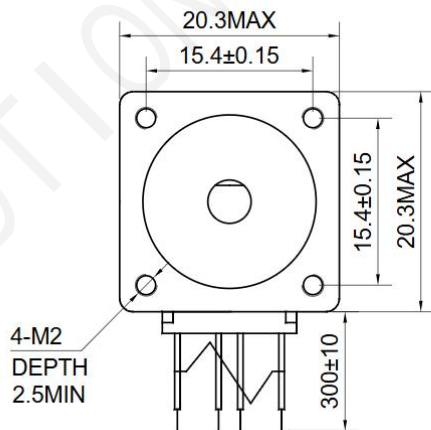


Item	Specifications
Step Angle Accuracy	±5%(full step,no load)
Resistance Accuracy	±10%
Inductance Accuracy	±20%
Temperature Rise	80°C Max.(rated current, 2phase on)
Ambient Temperature	-20°C~+50°C
Insulation Resistance	100MΩ Min 500VDC
Dielectric Strength	500VAC for one minute

Electrical Specification										
Series Model	Step Angle (°)	Motor Length (mm)	Rated Current (A)	Phase Resistance (Ω)	Phase Inductance (mH)	Holding Torque (N.cm Min)	Detent Torque (N.cm Max)	Rotor Inertia (g.cm²)	Lead Wire (No.)	Motor Weight (g)
8HS2802	1.8	28	0.2	23	8.2	1.4	1.4	2.5	4	50
8HS3402	1.8	34	0.2	25	8.4	1.8	1.8	3.2	4	70
8HS3406	1.8	34	0.6	4.5	1.2	1.8	1.8	3.2	4	70
8HS4006	1.8	40	0.6	5.8	1.6	2.6	2.6	4.5	4	82

*Note:We can manufacture products according to customer's requirements.

(Mechanical Dimensions) unit=mm



SERIES HYBRID STEPPING MOTOR

(11HS) Series, 1.8deg/step 2/4-Phase Hybrid Stepper Motors

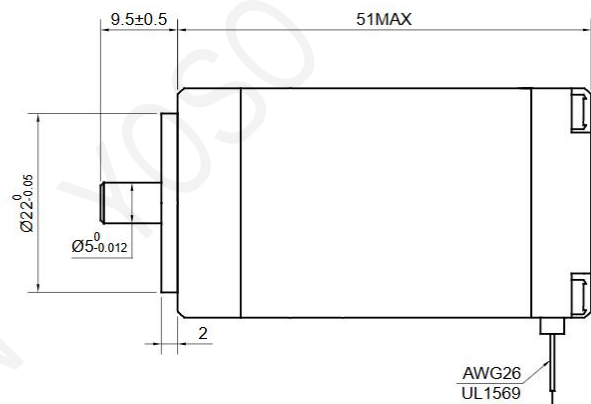
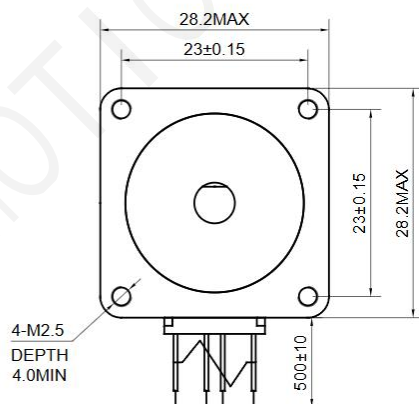


Item	Specifications
Step Angle Accuracy	±5% (full step, no load)
Resistance Accuracy	±10%
Inductance Accuracy	±20%
Temperature Rise	80°C Max. (rated current, 2phase on)
Ambient Temperature	-20°C ~ +50°C
Insulation Resistance	100MΩ Min 500VDC
Dielectric Strength	500VAC for one minute

Electrical Specification										
Series Model	Step Angle (°)	Motor Length (mm)	Rated Current (A)	Phase Resistance (Ω)	Phase Inductance (mH)	Holding Torque (N.cm Min)	Detent Torque (N.cm Max)	Rotor Inertia (g.cm²)	Lead Wire (No.)	Motor Weight (g)
11HS3306	1.8	33	0.6	5.5	3.2	6	0.4	8	4	110
11HS3304	1.8	33	0.35	15	9.2	6	0.4	8	4	110
11HS4106	1.8	41	0.6	7	6	6	0.5	11	4	140
11HS4104	1.8	41	0.35	20	15	6	0.5	11	4	140
11HS5006	1.8	50	0.6	9	7.2	10	0.8	13	4	180
11HS5004	1.8	50	0.35	24	18.5	10	0.8	13	4	180

*Note: We can manufacture products according to customer's requirements.

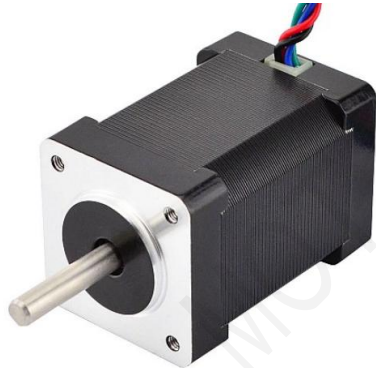
(Mechanical Dimensions) unit=mm



YOSO MOTION STEPPER MOTOR

SERIES HYBRID STEPPING MOTOR

(14HS) Series, 1.8deg/step 2/4-Phase Hybrid Stepper Motors

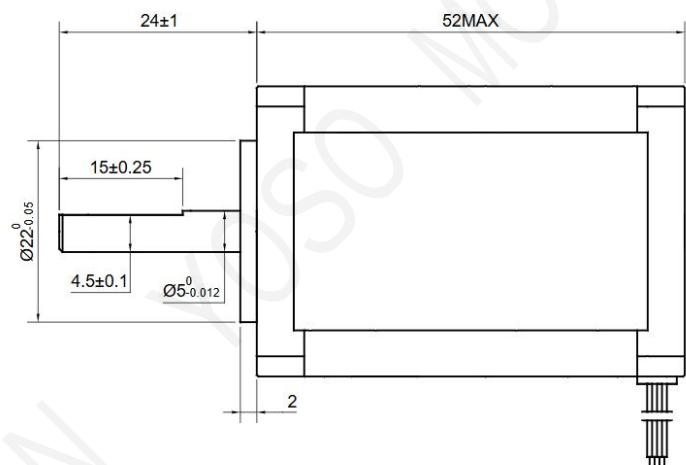
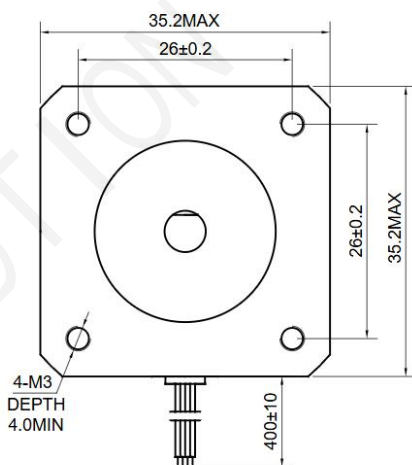


Item	Specifications
Step Angle Accuracy	±5% (full step, no load)
Resistance Accuracy	±10%
Inductance Accuracy	±20%
Temperature Rise	80°C Max. (rated current, 2phase on)
Ambient Temperature	-20°C ~ +50°C
Insulation Resistance	100MΩ Min 500VDC
Dielectric Strength	500VAC for one minute

Electrical Specification										
Series Model	Step Angle (°)	Motor Length (mm)	Rated Current (A)	Phase Resistance (Ω)	Phase Inductance (mH)	Holding Torque (N.cm Min)	Detent Torque (N.cm Max)	Rotor Inertia (g.cm²)	Lead Wire (No.)	Motor Weight (g)
14HS3306	1.8	33	0.6	5.5	3.2	6	0.4	8	4	110
14HS3304	1.8	33	0.35	15	9.2	6	0.4	8	4	110
14HS4106	1.8	41	0.6	7	6	6	0.5	11	4	140

*Note: We can manufacture products according to customer's requirements.

(Mechanical Dimensions) unit=mm



SERIES HYBRID STEPPING MOTOR

(16HS) Series, 1.8deg/step 2/4-Phase Hybrid Stepper Motors

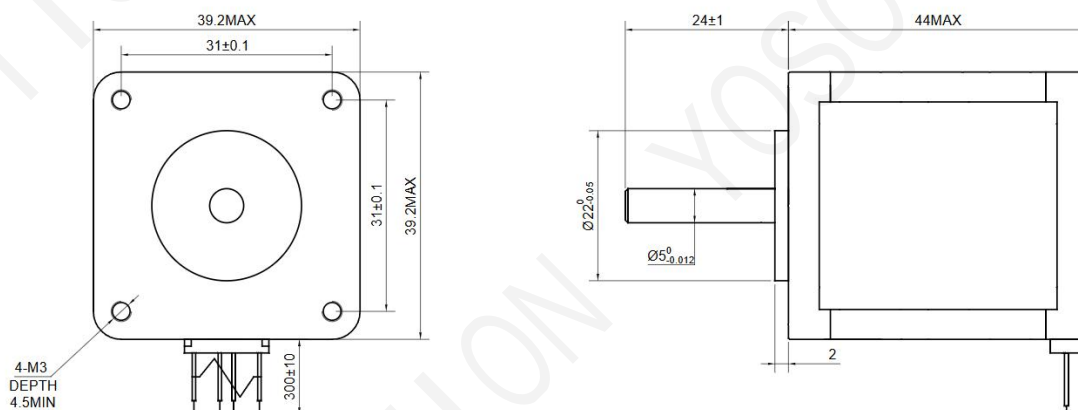


Item	Specifications
Step Angle Accuracy	±5% (full step, no load)
Resistance Accuracy	±10%
Inductance Accuracy	±20%
Temperature Rise	80°C Max. (rated current, 2phase on)
Ambient Temperature	-20°C~+50°C
Insulation Resistance	100MΩ Min 500VDC
Dielectric Strength	500VAC for one minute

Electrical Specification										
Series Model	Step Angle (°)	Motor Length (mm)	Rated Current (A)	Phase Resistance (Ω)	Phase Inductance (mH)	Holding Torque (N.cm Min)	Detent Torque (N.cm Max)	Rotor Inertia (g.cm ²)	Lead Wire (No.)	Motor Weight (g)
16HS2204	1.8	22	0.4	18	14	10	0.5	10	4	100
16HS2606	1.8	26	0.6	9	10	14	0.8	14	4	120
16HS3406	1.8	34	0.6	12	13	18	1.0	19	4	160
16HS3404	1.8	34	0.4	30	14	12	1.0	19	4	160
16HS4006	1.8	40	0.6	12	20	24	1.2	24	4	210
16HS4012	1.8	40	1.2	3.8	6.5	24	1.2	24	4	210
16HS4004	1.8	40	0.4	30	22	18	1.2	24	4	210

*Note: We can manufacture products according to customer's requirements.

(Mechanical Dimensions) unit=mm



YOSO MOTION STEPPER MOTOR

SERIES HYBRID STEPPING MOTOR

(17HS) Series, 1.8deg/step 2/4-Phase Hybrid Stepper Motors



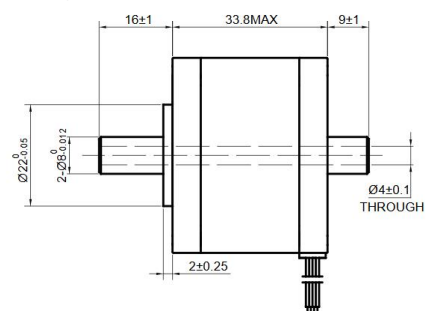
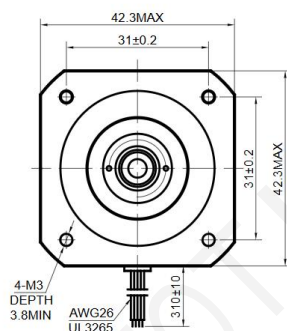
Item	Specifications
Step Angle Accuracy	±5% (full step, no load)
Resistance Accuracy	±10%
Inductance Accuracy	±20%
Temperature Rise	80°C Max. (rated current, 2phase on)
Ambient Temperature	-20°C ~ +50°C
Insulation Resistance	100MΩ Min 500VDC
Dielectric Strength	500VAC for one minute

Electrical Specification

Series Model	Step Angle (°)	Motor Length (mm)	Rated Current (A)	Phase Resistance (Ω)	Phase Inductance (mH)	Holding Torque (N.cm Min)	Detent Torque (N.cm Max)	Rotor Inertia (g.cm²)	Lead Wire (No.)	Motor Weight (g)
17HS2806	1.8	28	0.6	8	10	12	1.6	34	4	150
17HS3312	1.8	33	1.2	2.0	0.6	25	1.6	34	4	220
17HS3305	1.8	33	0.5	24	19	21	1.6	34	4	220
17HS3405	1.8	34	0.5	30	35	21	1.6	34	4	220
17HS3405-A	1.8	34	0.5	20	16	20	1.6	34	6	220
17HS3417	1.8	34	1.7	1.9	2.5	28	1.6	34	4	220
17HS3412	1.8	34	1.2	2.3	3.8	28	2.2	54	4	280
17HS4005	1.8	40	0.5	30	44	28	2.2	54	4	280
17HS4008	1.8	40	0.8	7.2	4	30	2.2	54	4	280
17HS4015	1.8	40	1.5	2	40	38	2.2	54	4	280
17HS4010	1.8	40	1.0	7.2	7.3	30	2.2	54	6	350
17HS4805	1.8	48	0.5	30	20	40	2.6	68	4	350
17HS4823	1.8	48	2.3	1	1.8	50	2.6	68	4	350
17HS4818	1.8	48	1.8	1.7	3.2	50	2.6	68	4	350
17HS6018	1.8	60	1.8	2.2	5.0	65	2.8	102	4	500

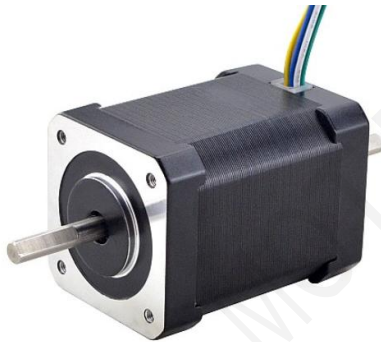
*Note: We can manufacture products according to customer's requirements.

(Mechanical Dimensions) unit=mm



SERIES HYBRID STEPPING MOTOR

(17HM) Series, 1.8deg/step 2/4-Phase Hybrid Stepper Motors

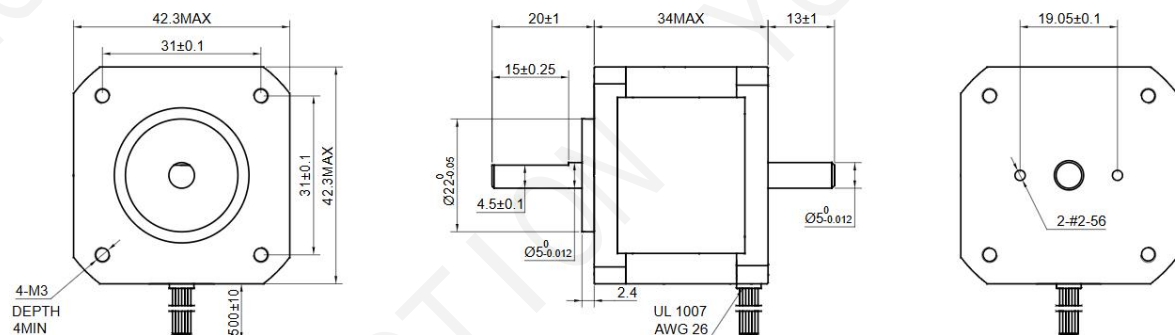


Item	Specifications
Step Angle Accuracy	±5% (full step, no load)
Resistance Accuracy	±10%
Inductance Accuracy	±20%
Temperature Rise	80°C Max. (rated current, 2phase on)
Ambient Temperature	-20°C~+50°C
Insulation Resistance	100MΩ Min 500VDC
Dielectric Strength	500VAC for one minute

Electrical Specification										
Series Model	Step Angle (°)	Motor Length (mm)	Rated Current (A)	Phase Resistance (Ω)	Phase Inductance (mH)	Holding Torque (N.cm Min)	Detent Torque (N.cm Max)	Rotor Inertia (g.cm²)	Lead Wire (No.)	Motor Weight (g)
17HM2806	0.9	28	0.6	9	9	10	0.9	20	4	150
17HM3413	0.9	34	1.3	2.4	3.6	24	1.2	34	4	220
17HM3417	0.9	34	1.7	1.2	2.2	24	1.2	34	4	220
17HM3404	0.9	34	0.4	30	45	24	1.2	34	4	220
17HM3404-A	0.9	34	0.4	30	22	20	1.2	34	6	220
17HM4017	0.9	40	1.7	1.5	3.8	36	1.8	54	4	220
17HM4013	0.9	40	1.3	2.5	6.2	36	1.8	54	4	280
17HM4012	0.9	40	1.2	3.2	3.8	26	1.8	54	6	280
17HM4004	0.9	40	0.4	30	34	26	1.8	54	6	280
17HM4817	0.9	48	1.7	1.8	4.0	42	2.2	68	4	350
17HM4813	0.9	48	1.3	30	7.0	36	2.2	68	4	350
17HM4823	0.9	48	2.3	1.2	2.0	42	2.2	68	4	350
17HM4804	0.9	48	0.4	30	28	27	2.2	68	6	350

*Note: We can manufacture products according to customer's requirements.

(Mechanical Dimensions) unit=mm



YOSO MOTION STEPPER MOTOR

SERIES HYBRID STEPPING MOTOR

(23HS) Series, 1.8deg/step 2/4-Phase Hybrid Stepper Motors



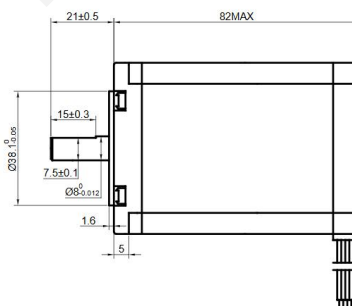
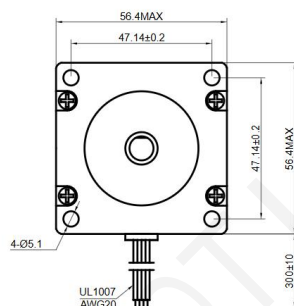
Item	Specifications
Step Angle Accuracy	±5%(full step,no load)
Resistance Accuracy	±10%
Inductance Accuracy	±20%
Temperature Rise	80°C Max.(rated current, 2phase on)
Ambient Temperature	-20°C~+50°C
Insulation Resistance	100MΩ Min 500VDC
Dielectric Strength	500VAC for one minute

Electrical Specification

Series Model	Step Angle (°)	Motor Length (mm)	Rated Current (A)	Phase Resistance (Ω)	Phase Inductance (mH)	Holding Torque (N.cm Min)	Detent Torque (N.cm Max)	Rotor Inertia (g.cm ²)	Lead Wire (No.)	Motor Weight (g)
23HS4110	1.8	41	1.0	5.2	5.5	40	2.5	150	6	470
23HS4120	1.8	41	2.0	1.2	2.5	55	2.5	150	4	470
23HS4506	1.8	45	0.62	12	26	80	2.8	190	4	520
23HS4525	1.8	45	2.5	1.0	2.2	80	2.8	190	4	520
23HS5125	1.8	51	2.5	1.2	3.2	110	2.8	190	4	520
23HS5108	1.8	51	0.8	6.8	9.2	62	3.0	230	6	590
23HS5615	1.8	56	1.5	3.2	5.5	90	3.5	280	6	590
23HS5625	1.8	56	2.5	1.3	4.2	110	3.5	280	4	680
23HS5630	1.8	56	3.0	0.8	2.4	110	3.5	280	4	680
23HS6430	1.8	64	3.0	0.8	2.3	150	5.0	380	4	850
23HS7615	1.8	76	1.5	4.5	7.8	140	6.0	440	6	1050
23HS7625	1.8	76	2.5	1.8	6.5	170	6.0	440	4	1050
23HS7630	1.8	76	3.0	1.0	3.5	170	6.0	440	4	1050
23HS8230	1.8	82	3.0	1.1	3.6	190	6.0	440	4	1150
23HS10030	1.8	100	3.0	1.4	5.5	250	10	680	4	1250
23HS11230	1.8	112	3.0	1.6	6.8	280	12	800	4	1400
23HS11242	1.8	112	4.2	0.9	3.8	280	12	800	4	1400

*Note: We can manufacture products according to customer's requirements.

(Mechanical Dimensions) unit=mm



SERIES HYBRID STEPPING MOTOR

(23HM) Series, 0.9deg/step 2/4-Phase Hybrid Stepper Motors

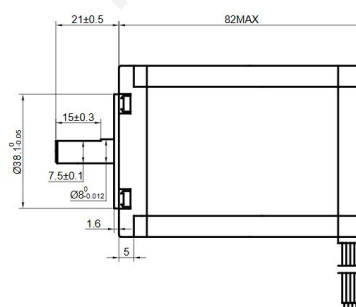
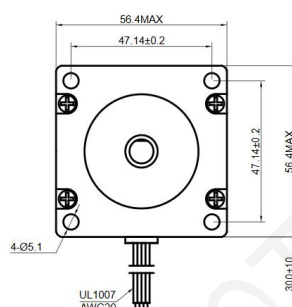


Item	Specifications
Step Angle Accuracy	±5% (full step, no load)
Resistance Accuracy	±10%
Inductance Accuracy	±20%
Temperature Rise	80°C Max. (rated current, 2phase on)
Ambient Temperature	-20°C~+50°C
Insulation Resistance	100MΩ Min 500VDC
Dielectric Strength	500VAC for one minute

Electrical Specification										
Series Model	Step Angle (°)	Motor Length (mm)	Rated Current (A)	Phase Resistance (Ω)	Phase Inductance (mH)	Holding Torque (N.cm Min)	Detent Torque (N.cm Max)	Rotor Inertia (g.cm²)	Lead Wire (No.)	Motor Weight (g)
23HM4110	0.9	41	1.0	5.2	6.2	24	2.5	150	6	470
23HM4106	0.9	41	0.62	1.2	28	32	2.5	150	4	470
23HM4120	0.9	41	2.0	12	3.0	32	2.5	150	4	470
23HM4525	0.9	45	2.5	1.0	3.0	62	2.8	190	4	520
23HM5106	0.9	51	0.62	13	34	70	3.0	230	4	590
23HM5125	0.9	51	2.5	1.5	3.8	70	3.0	230	4	590
23HM5615	0.9	56	1.5	3.2	6.5	82	3.5	280	6	680
23HM5625	0.9	56	2.5	1.3	5.2	100	3.5	280	4	680
23HM5630	0.9	56	3.0	0.8	2.8	100	3.5	280	4	680
23HM5642	0.9	56	4.2	0.4	1.5	100	3.5	280	4	680
23HM6410	0.9	64	1.0	7.5	28	110	5.0	380	4	850
23HM6425	0.9	64	2.5	1.5	5.8	110	5.0	380	4	850
23HM6430	0.9	64	3.0	0.8	3.0	110	5.0	380	4	850
23HM7615	0.9	76	1.5	4.5	10	125	6.0	440	6	1050
23HM7625	0.9	76	2.5	1.8	8.2	150	6.0	440	4	1050
23HM7630	0.9	76	3.0	1.0	4.3	150	6.0	440	4	1050
23HM8230	0.9	82	3.0	1.2	4.8	170	6.8	440	4	1050

*Note: We can manufacture products according to customer's requirements.

(Mechanical Dimensions) unit=mm



YOSO MOTION STEPPER MOTOR

SERIES HYBRID STEPPING MOTOR

(24HS)mini Series,1.8deg/step 2/4-Phase Hybrid Stepper Motors



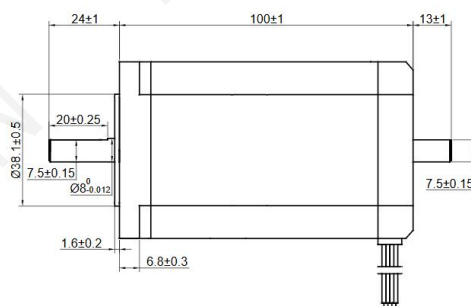
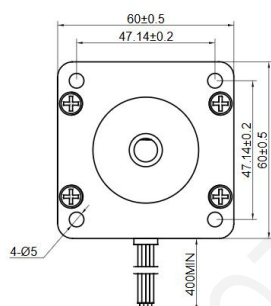
Item	Specifications
Step Angle Accuracy	±5%(full step,no load)
Resistance Accuracy	±10%
Inductance Accuracy	±20%
Temperature Rise	80°C Max.(rated current, 2phase on)
Ambient Temperature	-20°C~+50°C
Insulation Resistance	100MΩ Min 500VDC
Dielectric Strength	500VAC for one minute

Electrical Specification

Series Model	Step Angle (°)	Motor Length (mm)	Rated Current (A)	Phase Resistance (Ω)	Phase Inductance (mH)	Holding Torque (N.cm Min)	Detent Torque (N.cm Max)	Rotor Inertia (g.cm²)	Lead Wire (No.)	Motor Weight (g)
24HS4120	1.8	41	2.0	1.2	2.5	75	3.0	180	4	500
24HS4525	1.8	45	2.5	1.0	2.2	85	3.5	200	4	550
24HS5125	1.8	51	2.5	1.0	3.2	140	4.0	250	4	580
24HS5625	1.8	56	2.5	1.3	4.2	160	4.0	350	4	580
24HS5630	1.8	56	3.0	0.8	2.4	160	4.0	350	4	580
24HS5642	1.8	56	4.2	0.4	1.2	160	4.0	350	4	580
24HS6425	1.8	64	2.5	1.5	4.5	180	5.0	450	4	850
24HS6430	1.8	64	3.0	0.8	2.3	180	5.0	450	4	850
24HS6442	1.8	64	4.2	0.55	1.2	180	5.0	450	4	850
24HS7625	1.8	76	2.5	1.8	6.5	220	7.0	550	4	1150
24HS7630	1.8	76	3.0	1.0	3.5	220	7.0	550	4	1150
24HS7642	1.8	76	4.2	0.6	1.8	220	7.2	550	4	1150
24HS8825	1.8	88	2.5	2	4.5	260	12	780	4	1400
24HS8842	1.8	88	4.2	0.8	3.0	260	12	780	4	1400

*Note:We can manufacture products according to customer's requirements.

(Mechanical Dimensions) unit=mm



SERIES HYBRID STEPPING MOTOR

(34HS) Series, 1.8deg/step 2/4-Phase Hybrid Stepper Motors

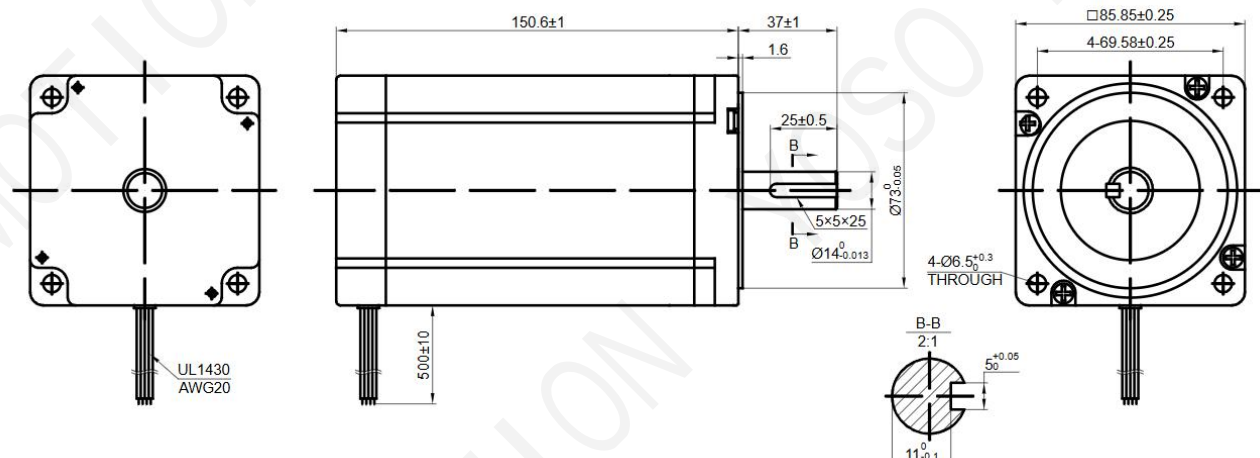


Item	Specifications
Step Angle Accuracy	±5% (full step, no load)
Resistance Accuracy	±10%
Inductance Accuracy	±20%
Temperature Rise	80°C Max. (rated current, 2phase on)
Ambient Temperature	-20°C~+50°C
Insulation Resistance	100MΩ Min 500VDC
Dielectric Strength	500VAC for one minute

Electrical Specification										
Series Model	Step Angle (°)	Motor Length (mm)	Rated Current (A)	Phase Resistance (Ω)	Phase Inductance (mH)	Holding Torque (N.cm Min)	Detent Torque (N.cm Max)	Rotor Inertia (g.cm²)	Lead Wire (No.)	Motor Weight (kg)
34HS6940	1.8	69	4.0	0.6	1.6	220	5.5	0.85	4	1.7
34HS6930	1.8	69	3.0	1.1	3.2	220	5.5	0.85	4	1.7
34HS7840	1.8	78	4.0	0.9	4.0	300	6.5	1.05	4	2.3
34HS7840-A	1.8	78	4.0	1.6	5.5	300	6.5	1.05	6	2.3
34HS9842	1.8	98	4.2	0.8	2.4	500	9.5	1.55	8	2.7
34HS11442	1.8	114	4.2	0.75	3.2	700	12.5	1.8	8	3.8
34HS12842	1.8	128	4.2	0.85	3.4	850	18.5	2.2	8	4.2
34HS15442	1.8	154	4.2	0.9	5.2	10	24.5	2.5	8	5.4
34HS19242	1.8	192	4.2	1.0	6.3	12	28	2.9	8	6.5

*Note: We can manufacture products according to customer's requirements.

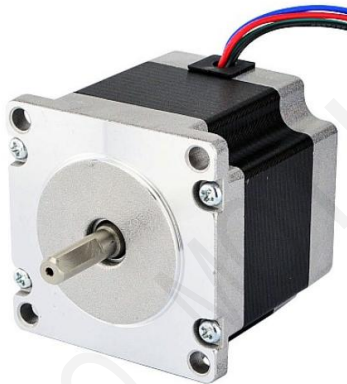
(Mechanical Dimensions) unit=mm



YOSO MOTION STEPPER MOTOR

THREE-PHASE HYBRID STEPPER MOTOR

(23HS) 1.2°57mm (3 phase Hybrid Stepper Motor)

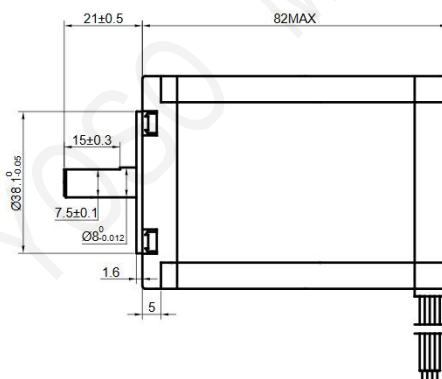
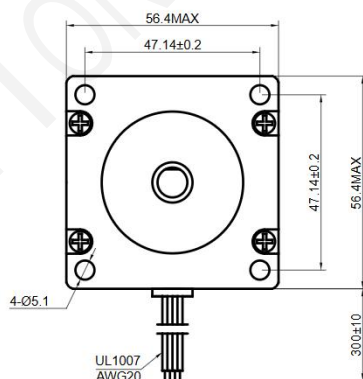


Item	Specifications
Step Angle Accuracy	1.2°
Temperature Rise	80°Cmax
Ambient Temperature	-20°C~+50°C
Insulation Resistance	100MΩ Min 500VDC
Dielectric Strength	500VAC for one minute
Shaft Radial Play	0.02Max. (450g-load)
Shaft Axial Play	0.08Max. (450g-load)
Max. radial force	75N (20mm from the flange)
Max. axial force	15N

Electrical Specification									
Series Model	Step Angle (°)	Motor Length (L)mm	Rated Current (A)	Phase Resistance (Ω)	Phase Inductance (mH)	Holding Torque (kg.cm)	Detent Torque (g.cm)	Rotor Inertia (g.cm ²)	Motor Weight (kg)
24HS3P5656	1.2	56	5.6	0.7	1.7	9.0	400	300	0.75
24HS3P7858	1.2	78	5.8	1.05	2.4	15	680	480	1.01

Above only for representative products, products of special request can be made according to the customer request

(Mechanical Dimensions) unit=mm



THREE-PHASE HYBRID STEPPER MOTOR

(34HS3P)Series,1.2deg/step3-Phase Hybrid Stepper Motors

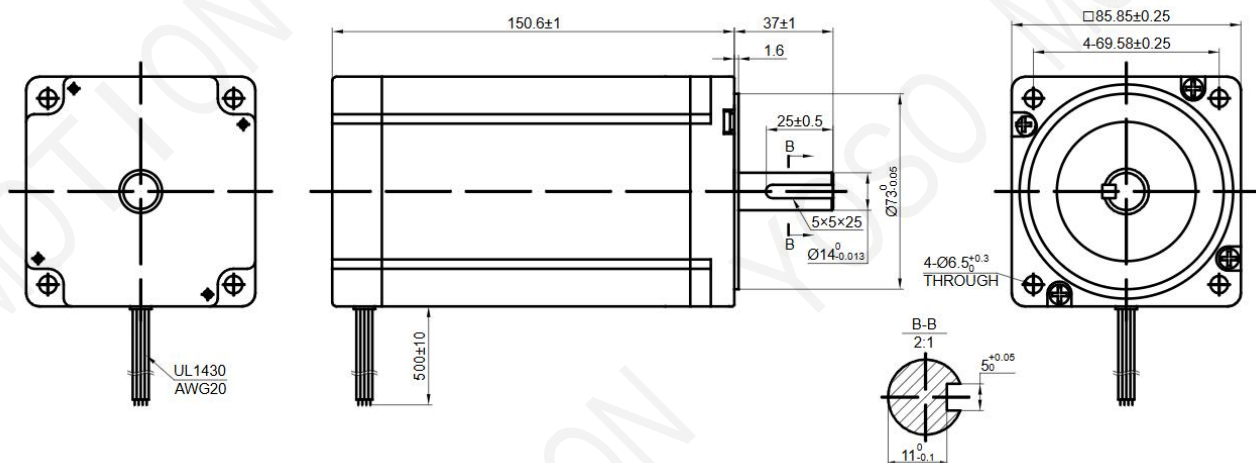


Item	Specifications
Step Angle Accuracy	±5%(full step,no load)
Resistance Accuracy	±10%
Inductance Accuracy	±20%
Temperature Rise	80°C Max.(rated current, 2phase on)
Ambient Temperature	-20°C~+50°C
Insulation Resistance	100MΩ Min 500VDC
Dielectric Strength	500VAC for one minute

Electrical Specification										
Series Model	Step Angle (°)	Motor Length (mm)	Rated Current (A)	Phase Resistance (Ω)	Phase Inductance (mH)	Holding Torque (N.cm Min)	Detent Torque (N.cm Max)	Rotor Inertia (g.cm ²)	Lead Wire (No.)	Motor Weight (kg)
34HS3P6645	1.2	66	4.5	0.7	10	210	3.5	0.85	3	1.65
34HS3P6935	1.2	69	3.5	1.2	2.5	210	3.5	0.85	3	1.7
34HS3P7855	1.2	78	5.5	0.46	4.0	270	5.8	1.05	3	2.3
34HS3P9852	1.2	98	5.2	0.6	3.0	450	8.5	1.05	3	2.7
34HS3P11452	1.2	114	5.2	0.9	5.9	500	11.0	1.8	3	3.4
34HS3P12652	1.2	126	5.2	0.75	2.4	600	16.5	2.2	3	3.8
34HS3P15052	1.2	150	5.2	1.5	3.0	700	20.5	2.5	3	4.6

*Note:We can manufacture products according to customer's requirements.

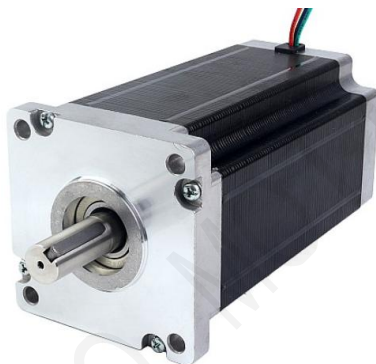
(Mechanical Dimensions) unit=mm



YOSO MOTION STEPPER MOTOR

THREE-PHASE HYBRID STEPPER MOTOR

(42/43HM) 1.2° 110mm (3 phase Hybrid Stepper Motor)

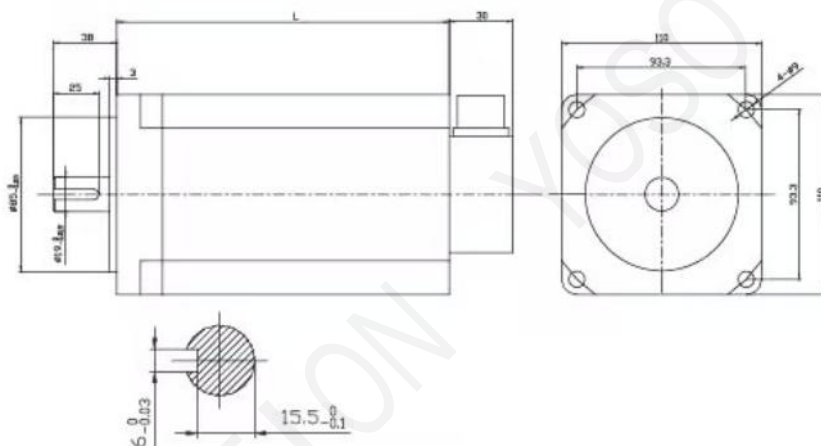


Item	Specifications
Step Angle Accuracy	1.2°
Temperature Rise	80°Cmax
Ambient Temperature	-20°C~+50°C
Insulation Resistance	100MΩ Min 500VDC
Dielectric Strength	500VAC for one minute
Shaft Radial Play	0.02Max. (450g-load)
Shaft Axial Play	0.08Max. (450g-load)
Max. radial force	75N (20mm from the flange)
Max. axial force	15N

Electrical Specification							
Series Model	Step Angle (°)	Motor Length (mm)	Rated Current (A)	Phase Resistance (Ω)	Phase Inductance (mH)	Holding Torque (N.cm Min)	Motor Weight (kg)
42/43HM3P1023	1.2	102	3	3.15	17	8	5
42/43HM3P1323	1.2	132	3	4.2	22.6	12	6.6
42/43HM3P1835	1.2	183	5	2.14	17.5	16	9
42/43HM3P2205	1.2	220	5	2.4	24.4	20	11.1
42/43HM3P2505	1.2	250	5	2.9	27	24	13

Above only for representative products, products of special request can be made according to the customer request

(Mechanical Dimensions) unit=mm



Stepper Series(No encoder)

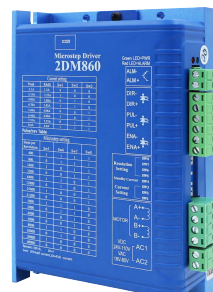
P20



2DM415

- ◆ Output(A): 0.21-1.50A
- ◆ Match motor
- Frame size:
 - ☑20mm(name8)/☑28mm(name11)
 - ☑35mm(name14)/☑42mm(name17)

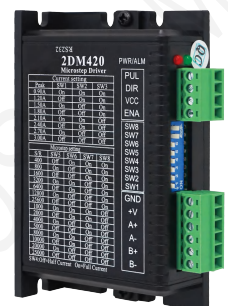
P25



2DM860

- ◆ Output(A): 2.1-8.4A
- ◆ Match motor
- Frame size:
 - ☑57mm(name23)
 - ☑86mm(name34)
 - ☑110mm(name42)

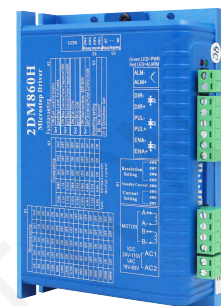
P21



2DM420

- ◆ Output(A): 0.9-3.0A
- ◆ Match motor
- Frame size:
 - ☑42mm(name17)
 - ☑57mm(name23)

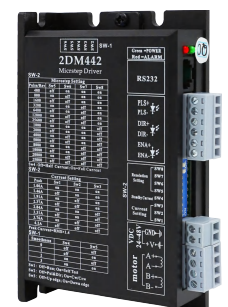
P26



2DM860H

- ◆ Output(A): 2.1-8.4A
- ◆ Match motor
- Frame size:
 - ☑57mm(name23)
 - ☑86mm(name34)
 - ☑110mm(name42)

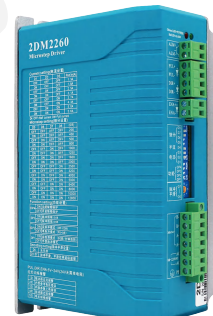
P22



2DM422

- ◆ Output(A): 1.0-4.2A
- ◆ Match motor
- Frame size:
 - ☑42mm(name17)
 - ☑57mm(name23)

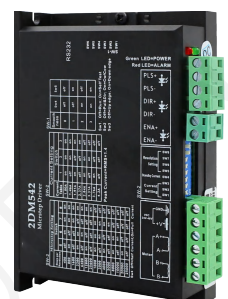
P27



2DM2260

- ◆ Output(A): 1.3-5.6A
- ◆ Match motor
- Frame size:
 - ☑86mm(name34)
 - ☑110mm(name42)

P23



2DM542

- ◆ Output(A): 1.0-4.2A
- ◆ Match motor
- Frame size:
 - ☑57mm(name23)
 - ☑86mm(name34)

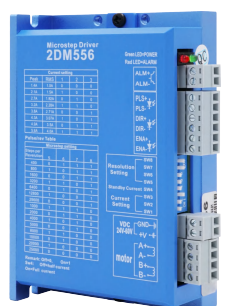
P28



2DM2280

- ◆ Output(A): 2.2-8.2A
- ◆ Match motor
- Frame size:
 - ☑110mm(name42)
 - ☑130mm(name52)

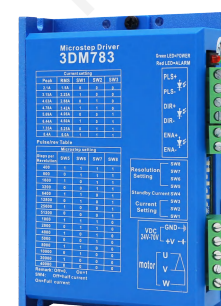
P24



2DM556

- ◆ Output(A): 1.4-5.6A
- ◆ Match motor
- Frame size:
 - ☑57mm(name23)
 - ☑86mm(name34)

P29



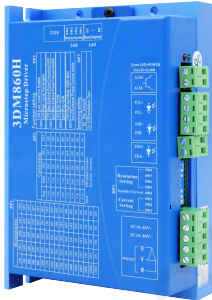
3DM783

- ◆ Output(A): 1.8-8.3A
- ◆ Match motor
- Frame size:
 - ☑57mm(name23)
 - ☑86mm(name34)

YOSO MOTION STEPPER DRIVER

Stepper Series(No encoder)

P30



3DM860H

◆ **Output(A):** 2.0-8.3A

◆ **Match motor**

Frame size:

☑ 57mm(name23)

☑ 86mm(name34)

P31



3DM2060H

◆ **Output(A):** 1.3-5.6A

◆ **Match motor**

Frame size:

☑ 86mm(name34)

☑ 110mm(name42)

P32



3DM2080

◆ **Output(A):** 2.0-8.0A

◆ **Match motor**

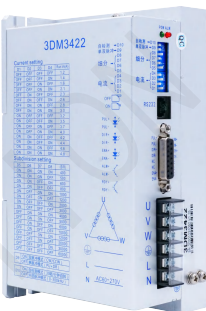
Frame size:

☑ 86mm(name34)

☑ 110mm(name42)

☑ 130mm(name52)

P33



3DM3422

◆ **Output(A):** 1.2-4.8A

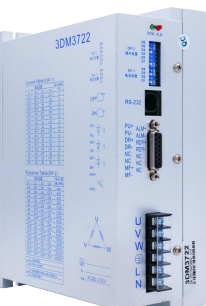
◆ **Match motor**

Frame size:

☑ 86mm(name34)

☑ 110mm(name42)

P34



3DM3722

◆ **Output(A):** 1.2-7.0A

◆ **Match motor**

Frame size:

☑ 110mm(name42)

☑ 130mm(name52)

Stepper Motor



◆ **20mm** Phase:2/1.8°
Torque: 0.27(N.m)

◆ **28mm** Phase:2/1.8°
Torque: 0.065/0.1(N.m)

◆ **35mm** Phase:2/1.8°
Torque: 0.12(N.m)

◆ **42mm** Phase:2/1.8°
Torque: 0.17/0.4/0.48/0.85(N.m)

◆ **57mm** Phase:2/1.8°
Torque: 0.75/0.85/1.2/2.0/
2.2/2.8/3.0(N.m)

◆ **86mm** Phase:2/1.8°
Torque: 3.2/4.5/7.5/8.5/12.2(N.m)

◆ **110mm** Phase:2/1.8°
Torque: 12/20/24(N.m)

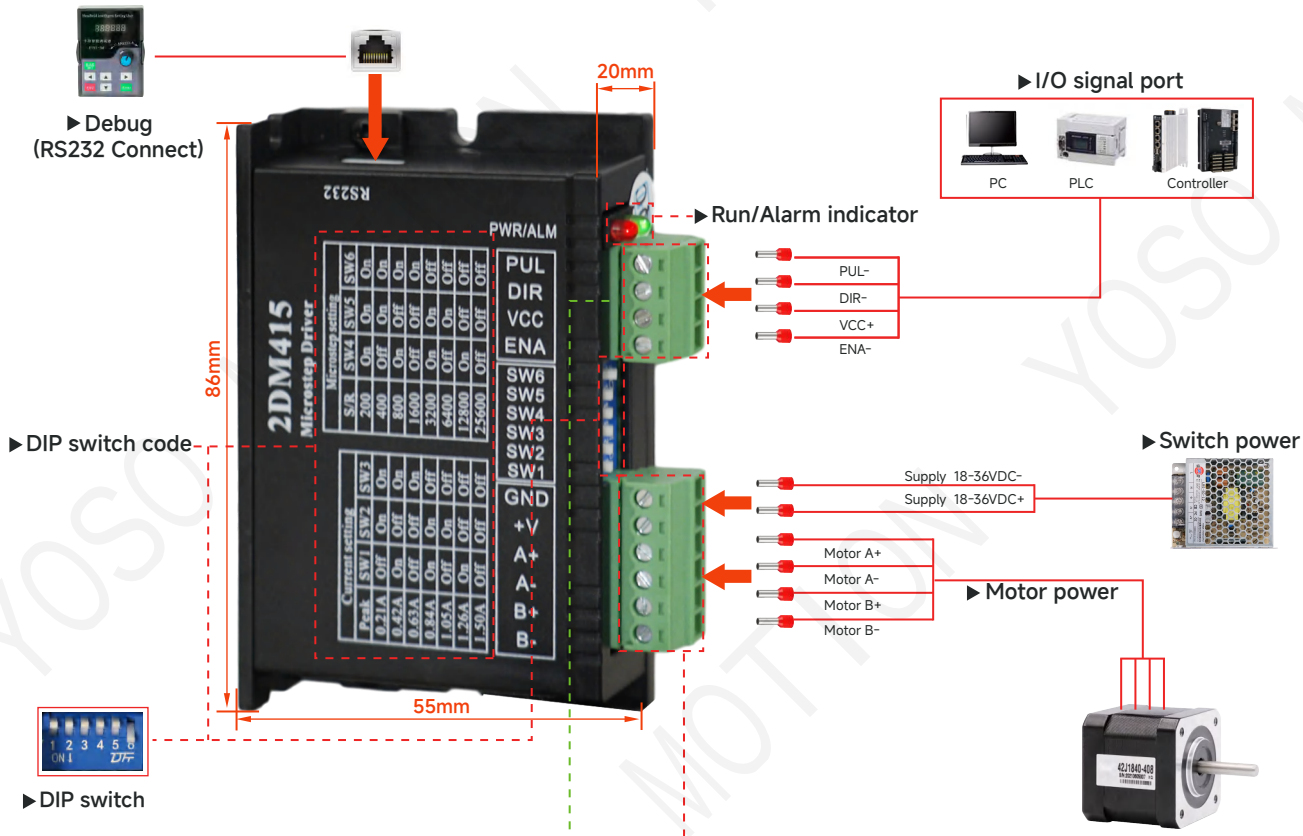
◆ **57mm** Phase:3/1.2°
Torque: 0.9/1.5/1.8(N.m)

◆ **86mm** Phase:3/1.2°
Torque: 2.8/4.5/7/7.8(N.m)

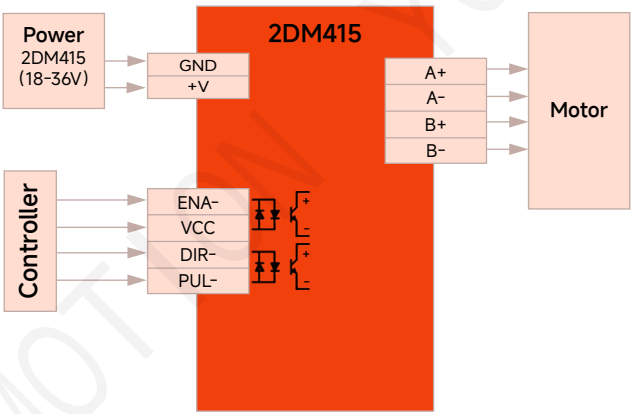
◆ **110mm** Phase:3/1.2°
Torque: 12/16/20(N.m)

◆ **130mm** Phase:3/1.2°
Torque: 24/28/35/50(N.m)

Stepper Driver



Schematic diagram



Power ports

Port	Definition	Description
①GND	Supply -	Power input: DC18V~36V
②+V	Supply+	
③A+	Motor A+	Motor A-phase
④A-	Motor A-	
⑤B+	Motor B+	Motor B-phase
⑥B-	Motor B-	

Control ports

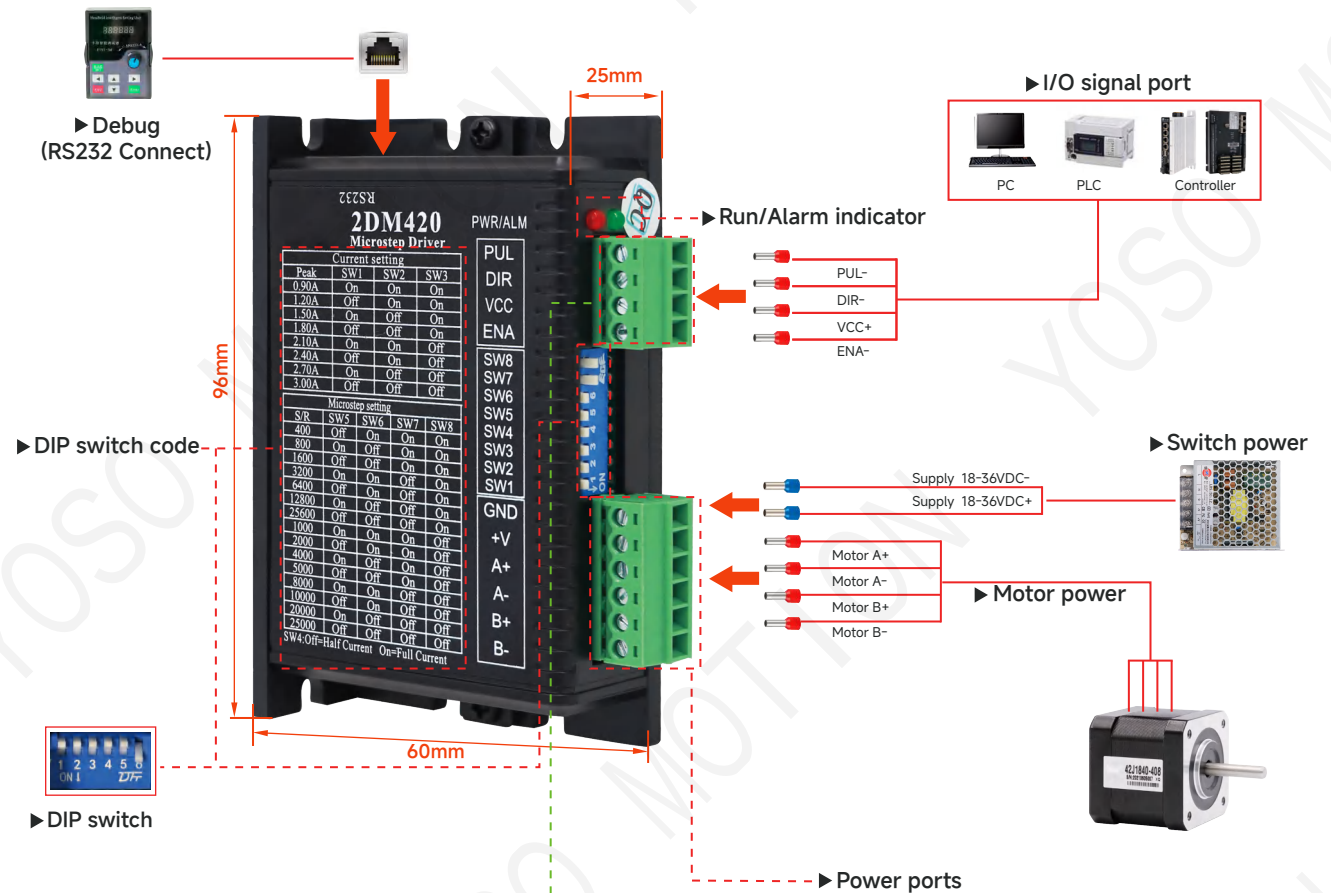
Port	Definition	Description
①PUL	Pulse input -	Signal : 5V 24V : Must series 2~3K resistors
②DIR	Pulse input -	
③VCC	Public integrity +	
④ENA	Enable input -	

Datasheet

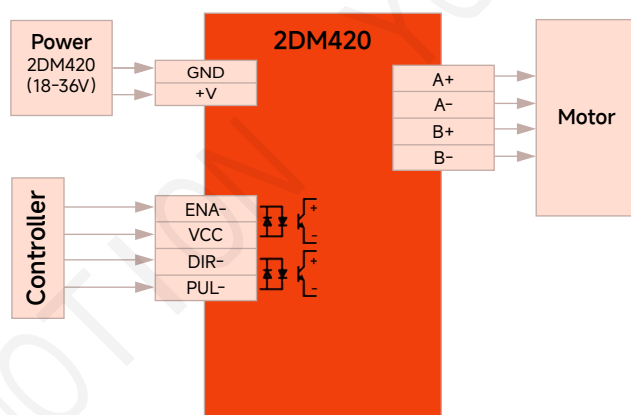
Phase/ Step angle	Output(A)	Supply(V)	Control Mode	Signal	Microstep	Weight	Brake model	Match motor
2/1.8°	0.21-1.5A	18-36V(DC)	Step/Dire	5V	2-128	0.1kg	2DM415-SC	20mm/28mm 35mm/39mm /42mm

YOSO MOTION STEPPER DRIVER

Stepper Driver



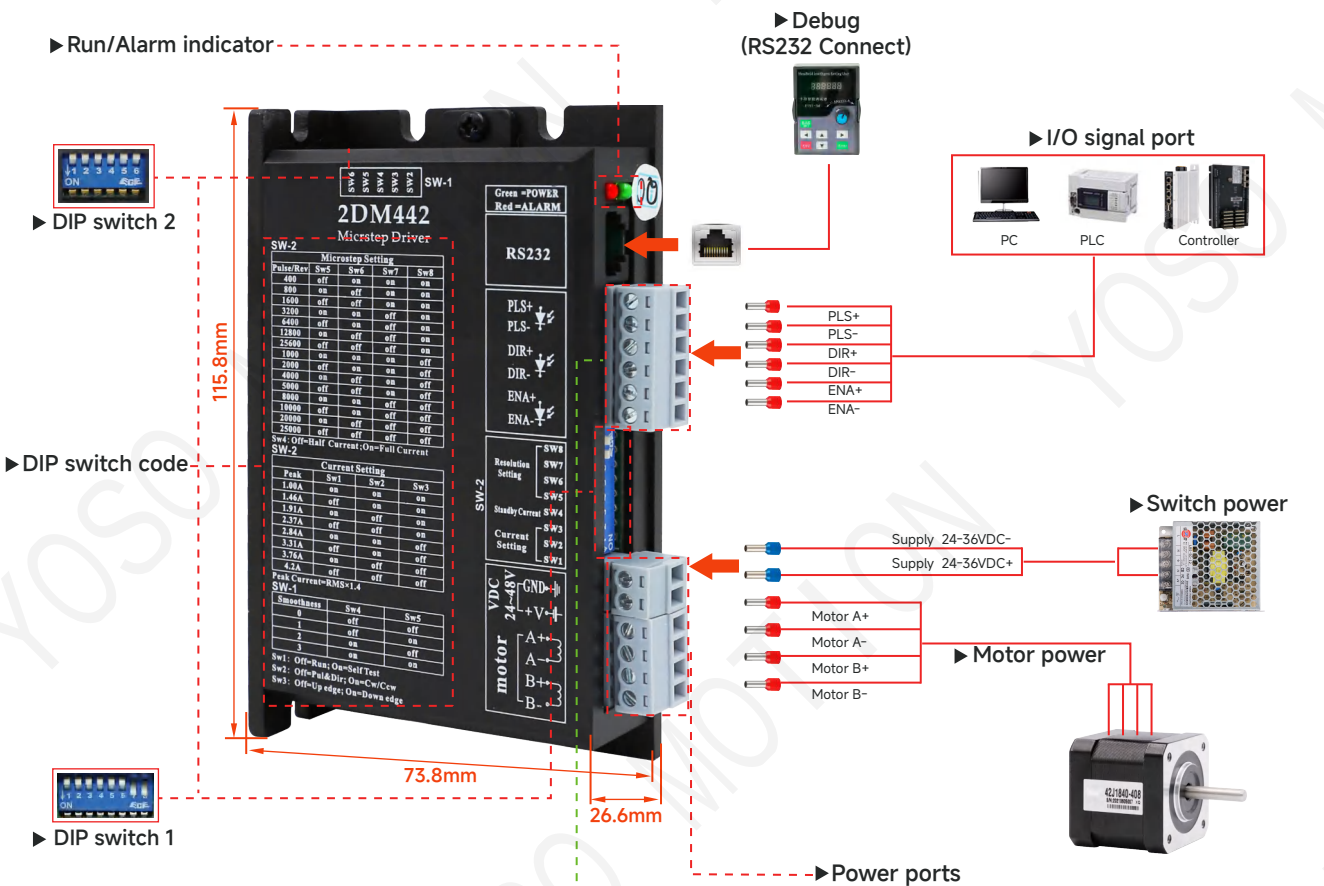
Schematic diagram



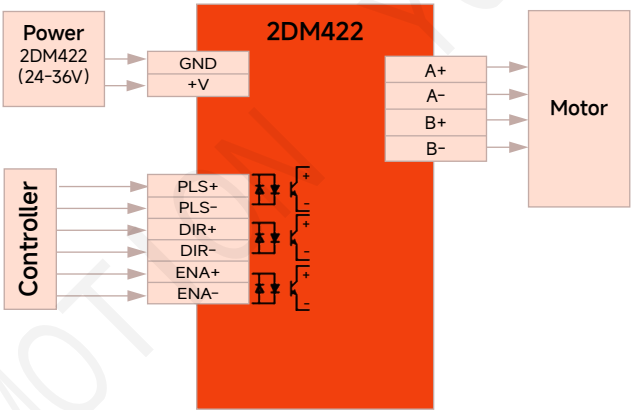
Datasheet

Phase/ Step angle	Output(A)	Supply(V)	Control Mode	Signal	Microstep	Weight	Brake model	Match motor
2/1.8°	0.9-3.0A	18-36V(DC)	Step/Dire	5V	2-128,5-125	0.15kg	2DM420-SC	42mm/ 57mm

Stepper Driver



Schematic diagram



Datasheet

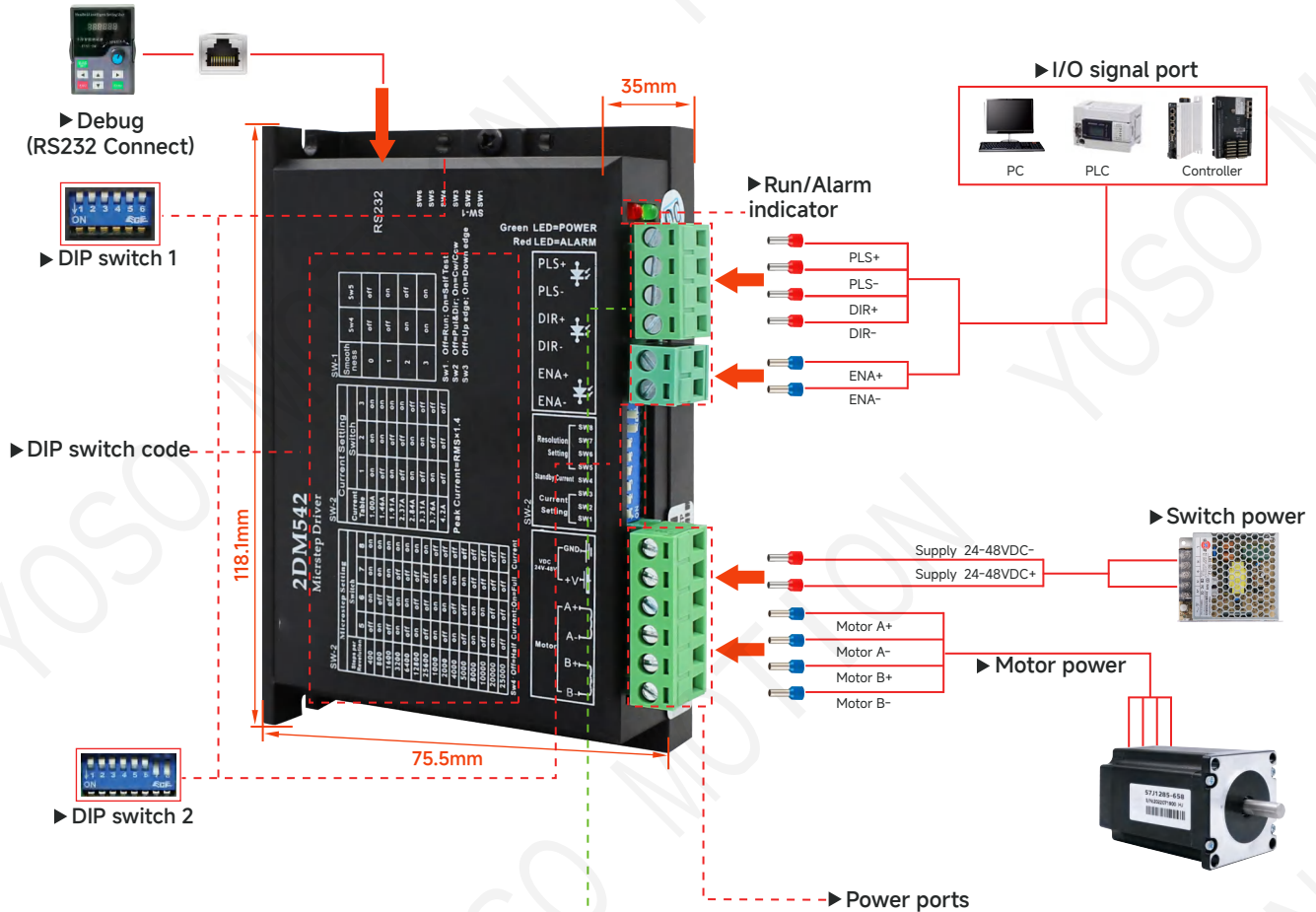
Port	Definition	Description
①GND	Supply -	Power input: DC24V~36V
②+V	Supply+	
③A+	Motor A+	Motor A-phase
④A-	Motor A-	
⑤B+	Motor B+	Motor B-phase
⑥B-	Motor B-	

Port	Definition	Description
①PLS+	Pulse input -	Compatible with 5V~24V
②PLS-	Pulse input +	
③DIR+	Direction input +	
④DIR-	Direction input -	
⑤ENA+	Enable input +	
⑥ENA-	Enable input -	

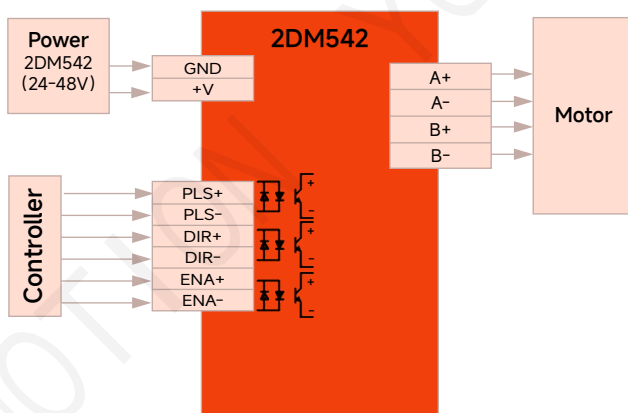
Phase/ Step angle	Output(A)	Supply(V)	Control Mode	Signal	Microstep	Weight	Brake model	Match motor
2/1.8°	1.0-4.2A	24-36V(DC)	Step/Dire +CW/CCW	5-24V	2-128,5-125	0.2kg	2DM422-SC	42mm/ 57mm

YOSO MOTION STEPPER DRIVER

Stepper Driver



Schematic diagram



Datasheet

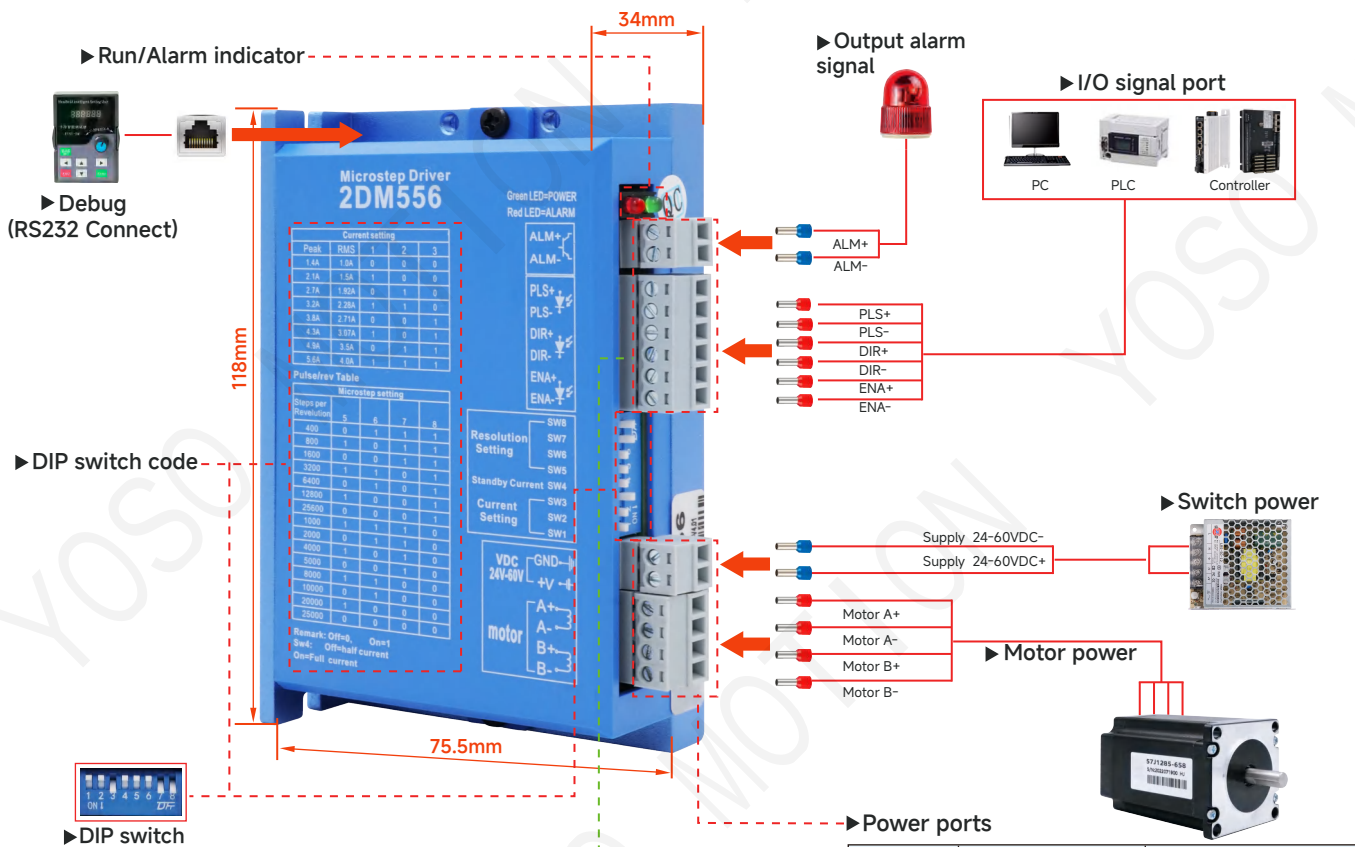
Port	Definition	Description
①GND	Supply -	Power input: DC24V~48V
②+V	Supply+	
③A+	Motor A+	Motor A-phase
④A-	Motor A-	
⑤B+	Motor B+	Motor B-phase
⑥B-	Motor B-	

Control ports

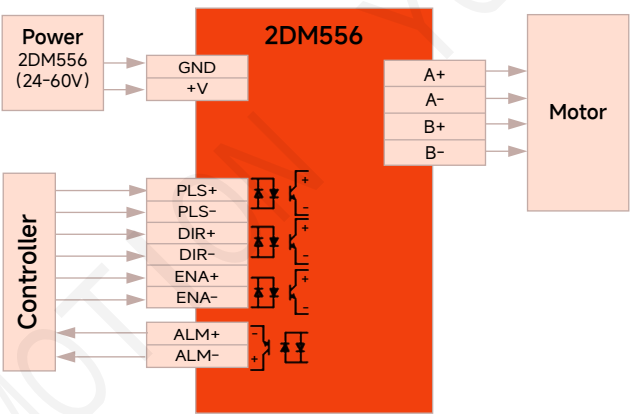
Port	Definition	Description
①PLS+	Pulse input -	Compatible with 5V~24V
②PLS-	Pulse input +	
③DIR+	Direction input +	
④DIR-	Direction input -	
⑤ENA+	Enable input +	
⑥ENA-	Enable input -	

Phase/ Step angle	Output(A)	Supply(V)	Control Mode	Signal	Microstep	Weight	Brake model	Match motor
2/1.8°	1.0-4.2A	24-48V(DC)	Step/Dire +CW/CCW	5-24V	2-128,5-125	0.27kg	2DM542-SC	57mm/ 86mm

Stepper Driver



Schematic diagram



Datasheet

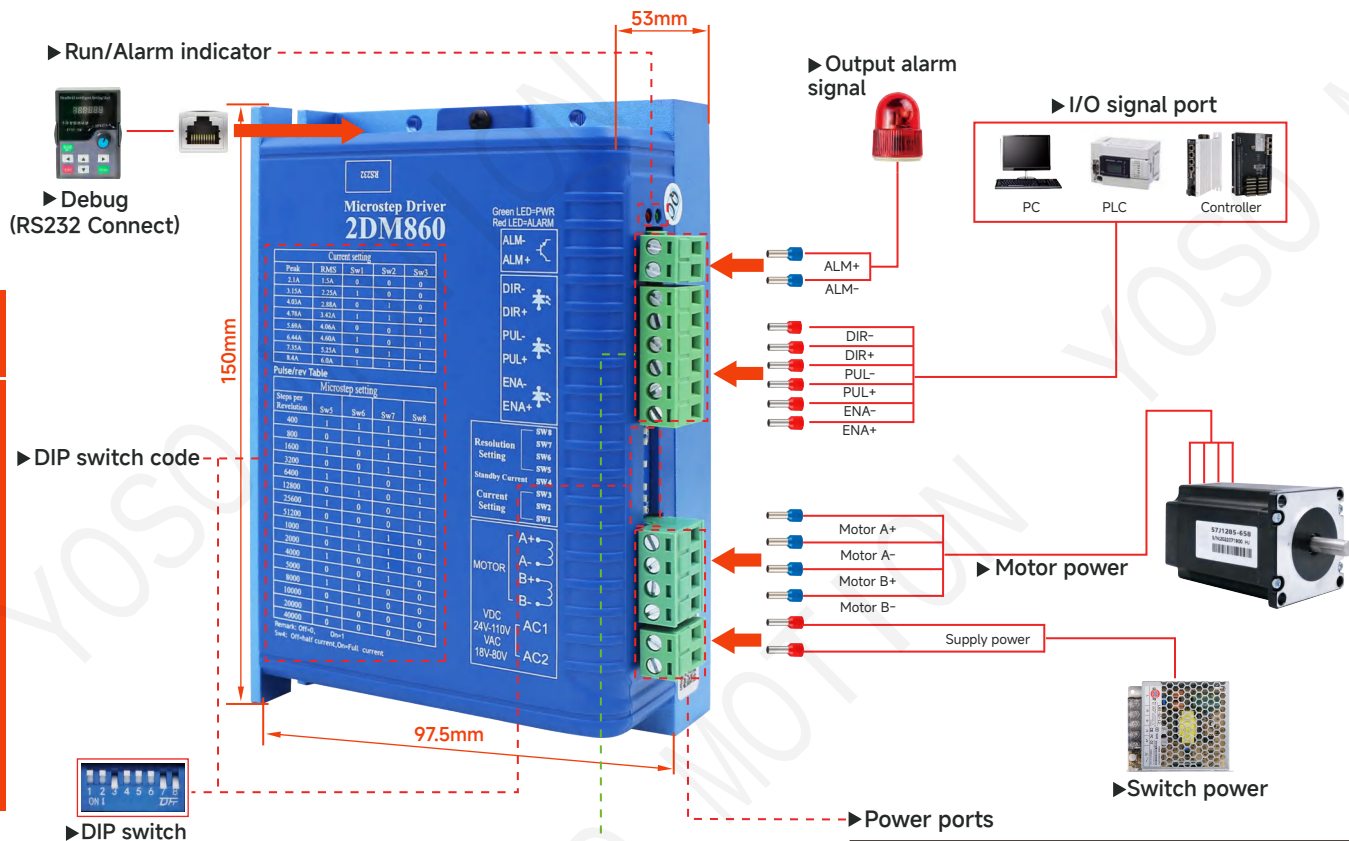
Port	Definition	Description
①GND	Supply -	Power input: DC24V~60V
②+V	Supply+	
③A+	Motor A+	Motor A-phase
④A-	Motor A-	
⑤B+	Motor B+	Motor B-phase
⑥B-	Motor B-	

Port	Definition	Description
①ALM+	Alarm output +	
②ALM-	Alarm output -	
①PLS+	Pulse input -	Compatible with 5V~24V
②PLS-	Pulse input +	
③DIR+	Direction input +	
④DIR-	Direction input -	
⑤ENA+	Enable input +	
⑥ENA-	Enable input -	

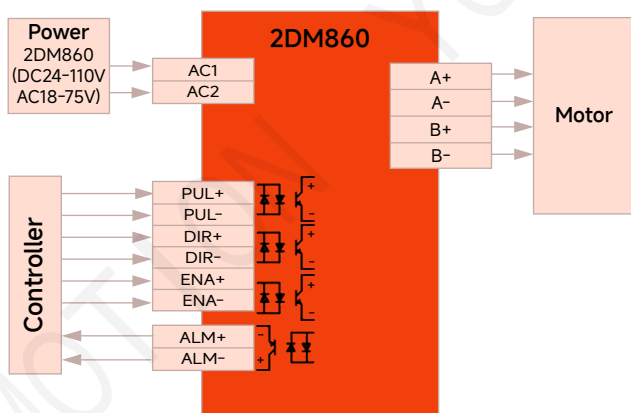
Phase/ Step angle	Output(A)	Supply(V)	Control Mode	Signal	Microstep	Weight	Brake model	Match motor
2/1.8°	1.4-5.6A	24-60V(DC)	Step/Dire +CW/CCW	5-24V	2-128,5-125	0.27kg	2DM556-SC	57mm/ 86mm

YOSO MOTION STEPPER DRIVER

Stepper Driver



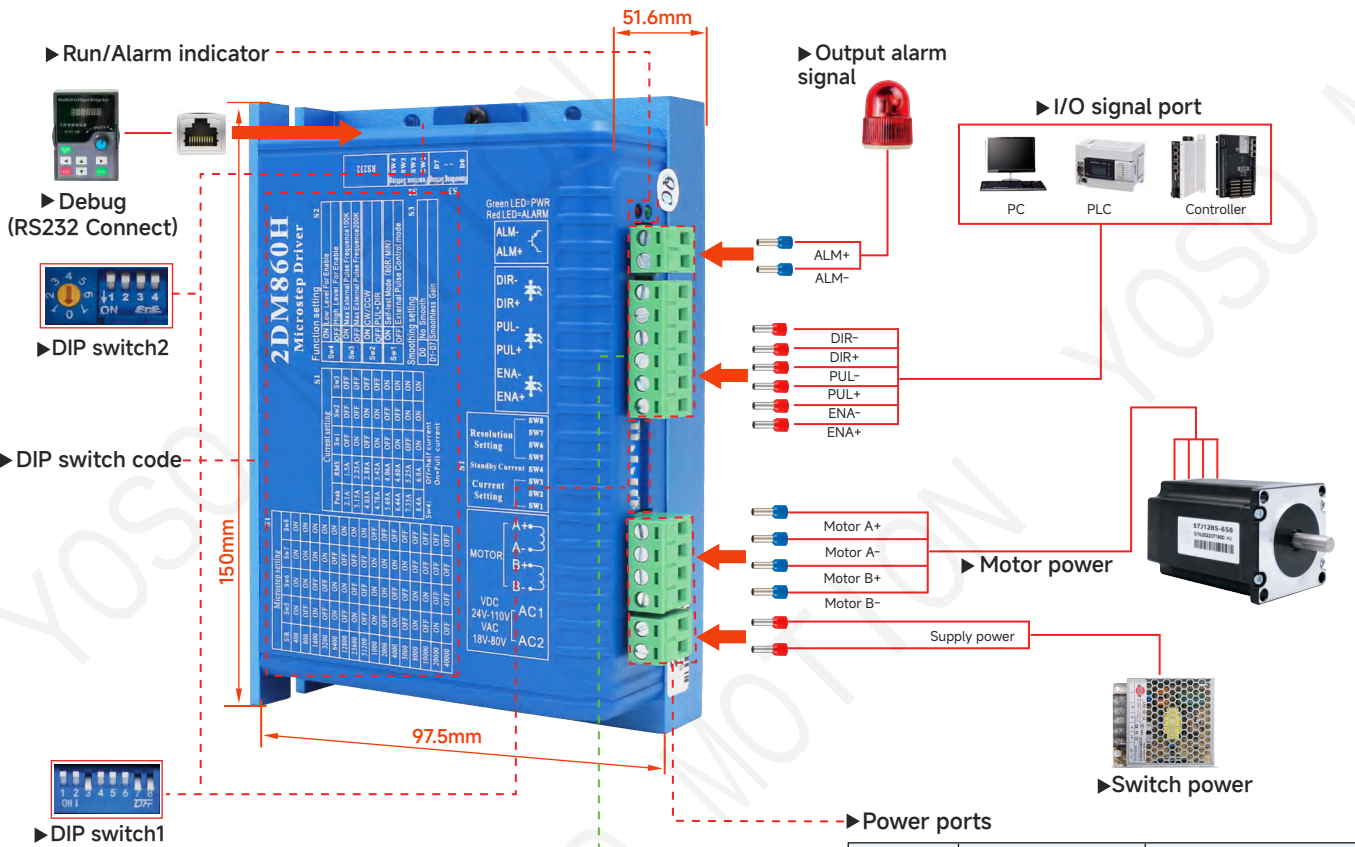
Schematic diagram



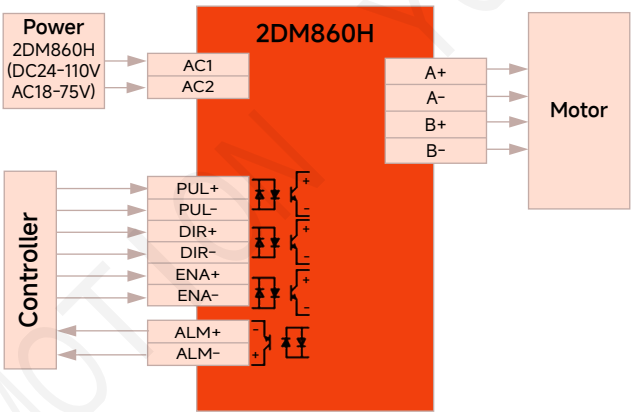
Datasheet

Phase/ Step angle	Output(A)	Supply(V)	Control Mode	Signal	Microstep	Weight	Brake model	Match motor
2/1.8°	2.1-8.4A	24-110V(DC) 18-75V(AC)	Step/Dire +CW/CCW	5-24V	2-256,5-200	0.6kg	2DM860-SC	57mm/86mm 110mm

Stepper Driver



Schematic diagram



Datasheet

Port	Definition	Description
①A+	Motor A+	Motor A-phase
②A-	Motor A-	
③B+	Motor B+	Motor B-phase
④B-	Motor B-	
⑤AC1	Supply1	Power input: DC24V~110V/AC18V~75V
⑥AC2	Supply2	

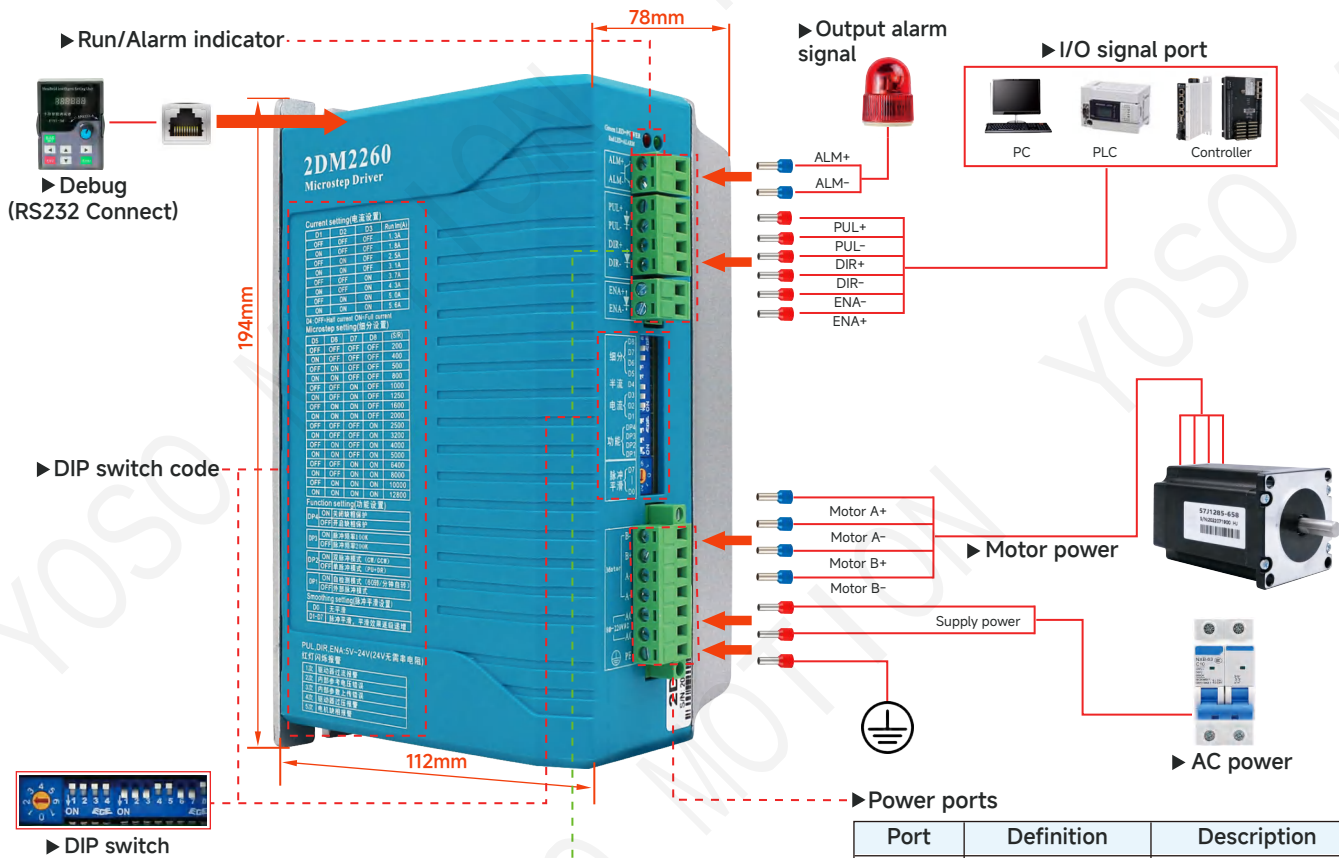
Control ports

Port	Definition	Description
①ALM+	Alarm output +	
②ALM-	Alarm output -	
①DIR+	Direction input +	Compatible with 5V~24V
②DIR-	Direction input -	
③PUL-	Pulse input -	
④PUL+	Pulse input +	
⑤ENA-	Enable input -	
⑥ENA+	Enable input +	

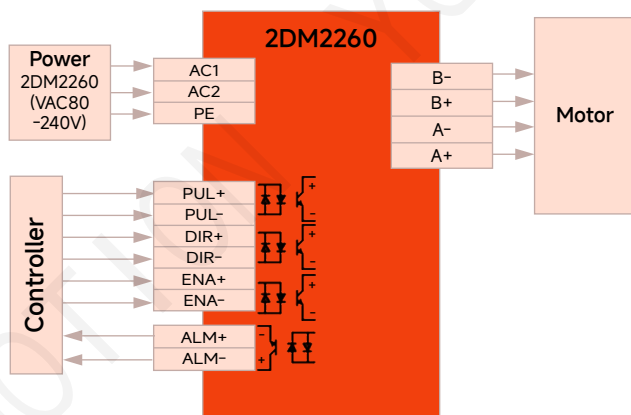
Phase/ Step angle	Output(A)	Supply(V)	Control Mode	Signal	Microstep	Weight	Brake model	Match motor
2/1.8°	2.1-8.4A	24-110V(DC) 18-75V(AC)	Step/Dire +CW/CCW	5-24V	2-256,5-200	0.6kg	2DM860H-SC	57mm/86mm 110mm

YOSO MOTION STEPPER DRIVER

Stepper Driver



Schematic diagram



Datasheet

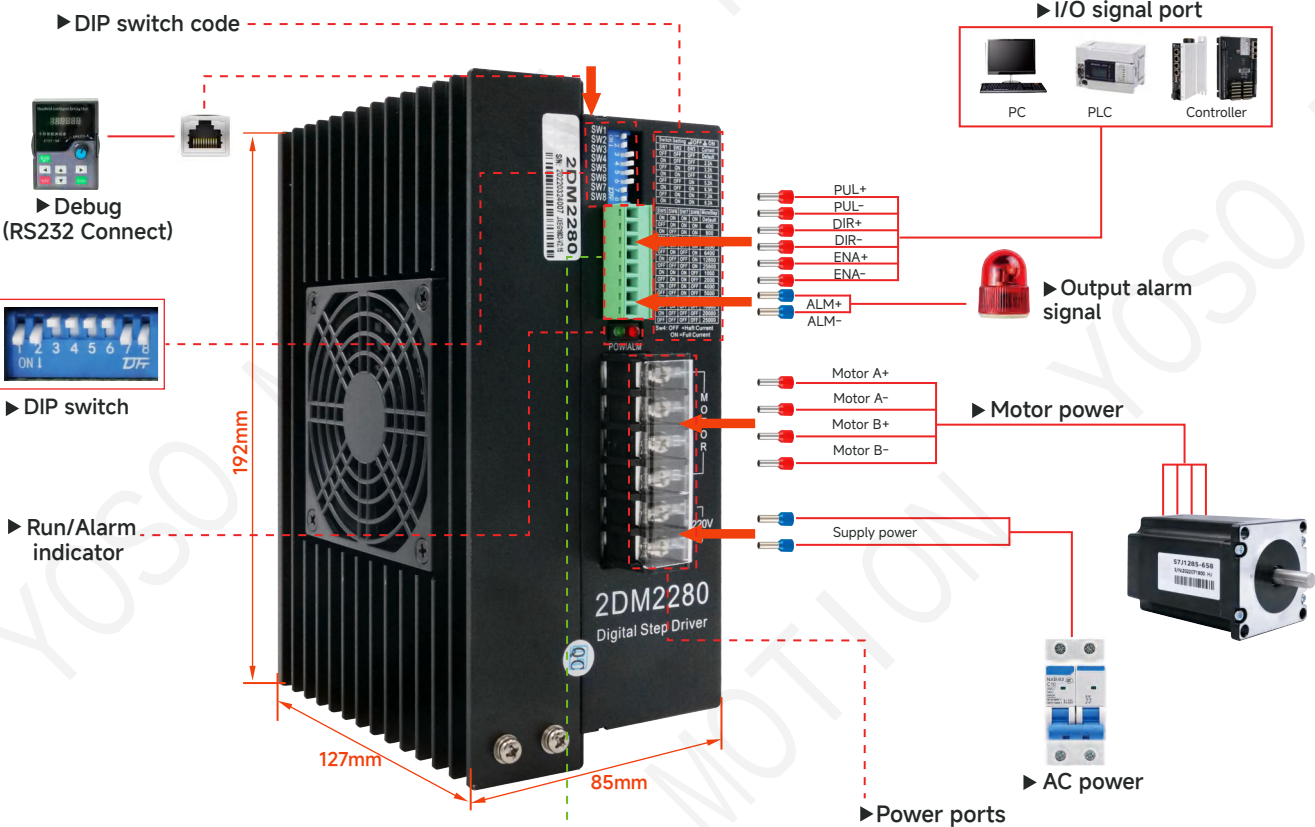
Port	Definition	Description
①A+	Motor A+	Motor A-phase
②A-	Motor A-	
③B+	Motor B+	Motor B-phase
④B-	Motor B-	
⑤AC1	Supply 1	Power input: AC80V~240V
⑥AC2	Supply 2	
⑦PE	Connect the shielded wire or leave it idle	

Control ports

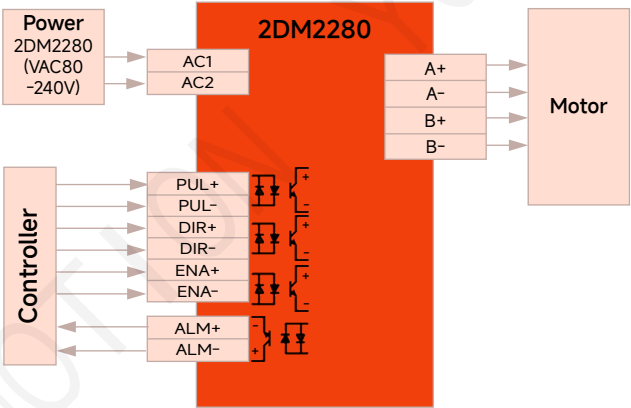
Port	Definition	Description
①ALM+	Alarm output +	
②ALM-	Alarm output -	
①DIR+	Direction input +	Compatible with 5V~24V
②DIR-	Direction input -	
③PUL-	Pulse input -	
④PUL+	Pulse input +	
⑤ENA-	Enable input -	
⑥ENA+	Enable input +	

Phase/Step angle	Output(A)	Supply(V)	Control Mode	Signal	Microstep	Weight	Brake model	Match motor
2/1.8°	1.3-5.6A	80-240V(AC)	Step/Dire +CW/CCW	5-24V	1-64,2.5-50	1.5kg	2DM2260-SC	86mm/110mm

Stepper Driver



Schematic diagram

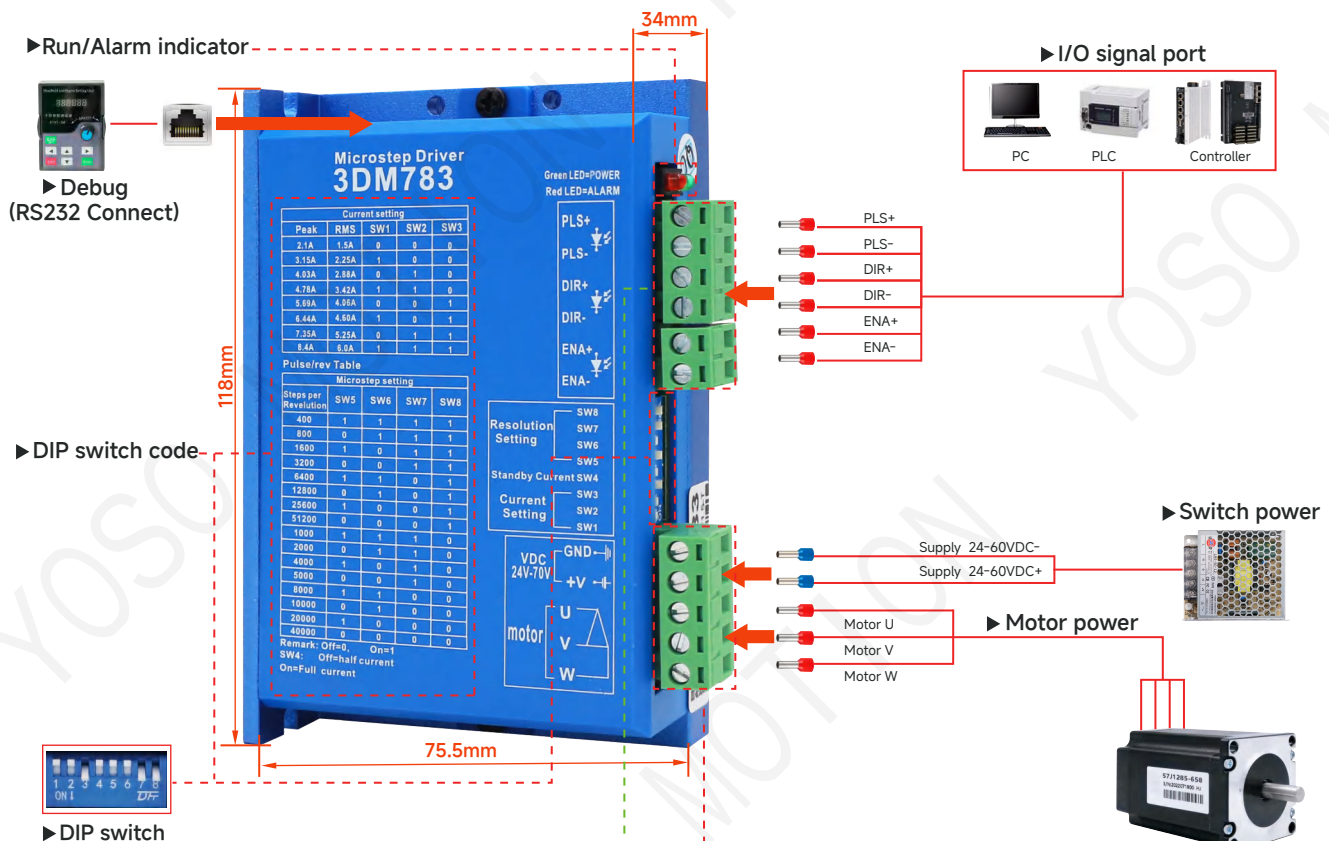


Datasheet

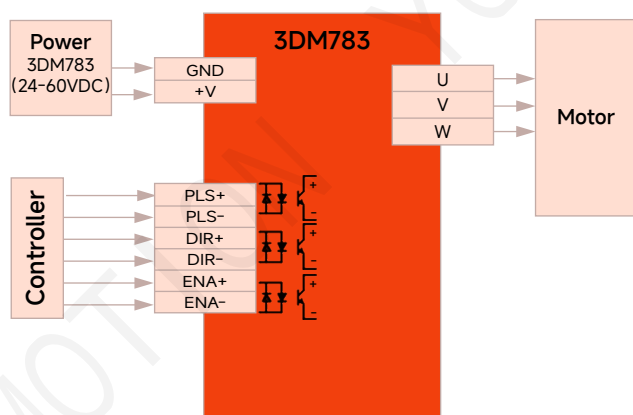
Phase/ Step angle	Output(A)	Supply(V)	Control Mode	Signal	Microstep	Weight	Brake model	Match motor
2/1.8°	2.2-8.2A	80-240V(AC)	Step/Dire +CW/CCW	5-24V	2-128,5-125	1.5kg	2DM2280-SC	110mm/ 130mm

YOSO MOTION STEPPER DRIVER

Stepper Driver



Schematic diagram



Power ports

Port	Definition	Description
①GND	Motor A+	Power input: DC24V~60V
②+V	Motor A-	
③U	Motor U phase	
④V	Motor V-phase	
⑤W	Motor W-phase	

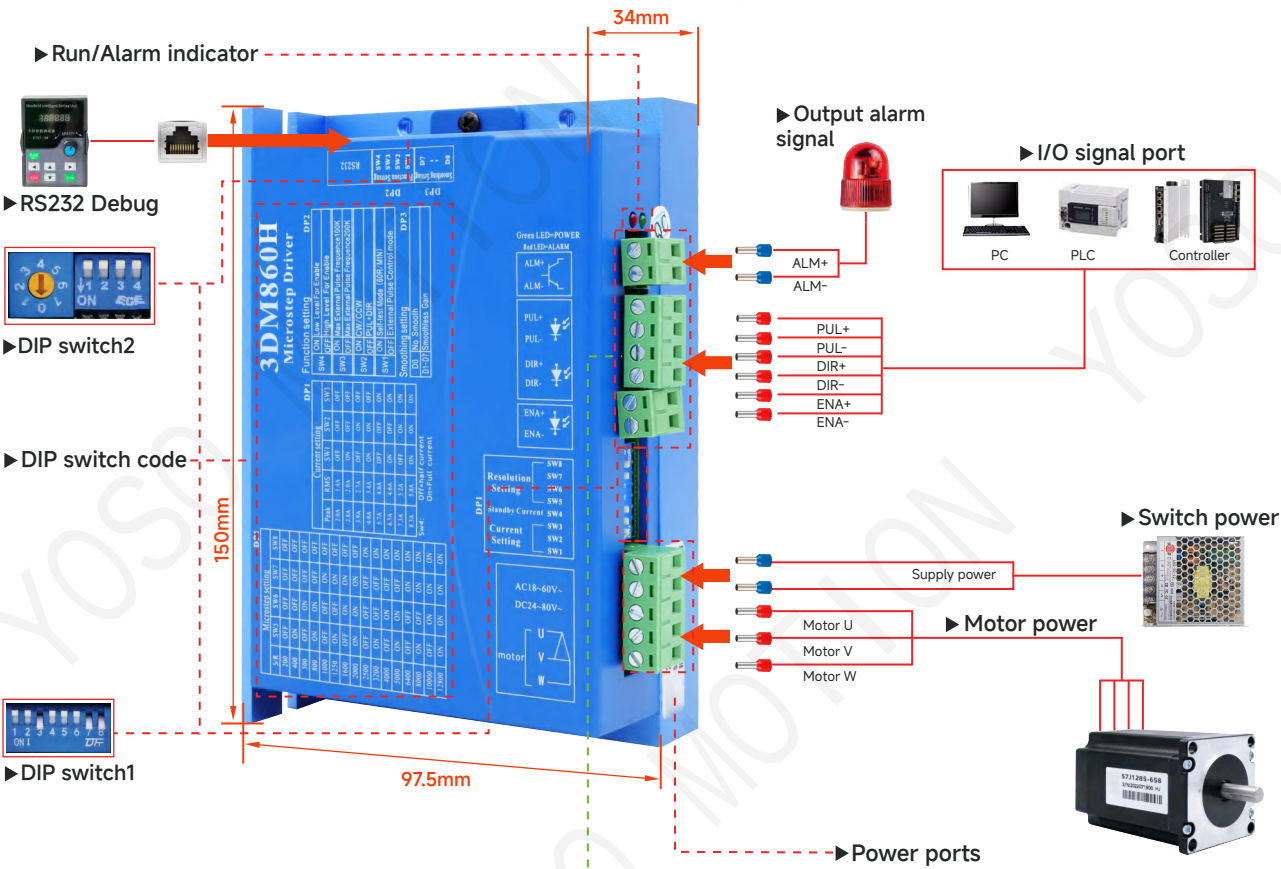
Control ports

Port	Definition	Description
①PLS+	Pulse input +	Compatible with 5V~24V
②PLS-	Pulse input -	
③DIR+	Direction input +	
④DIR-	Direction input -	
⑤ENA+	Enable input -	
⑥ENA-	Enable input +	

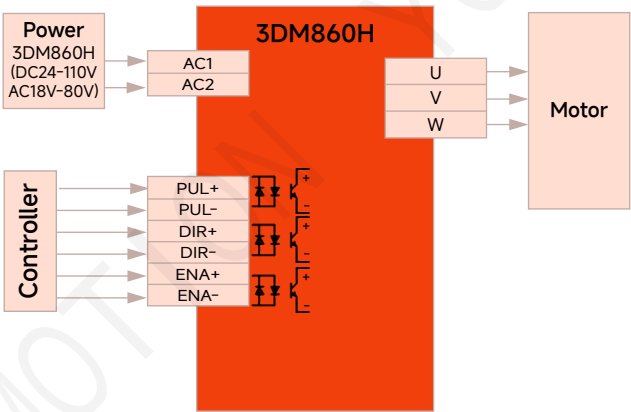
Datasheet

Phase/Step angle	Output(A)	Supply(V)	Control Mode	Signal	Microstep	Weight	Brake model	Match motor
3/1.2°	1.8-8.3A	24-60V(DC)	Step/Dire +CW/CCW	5-24V	2-256,5-200	0.6kg	3DM783-SC	57mm /86mm

Stepper Driver



Schematic diagram



Datasheet

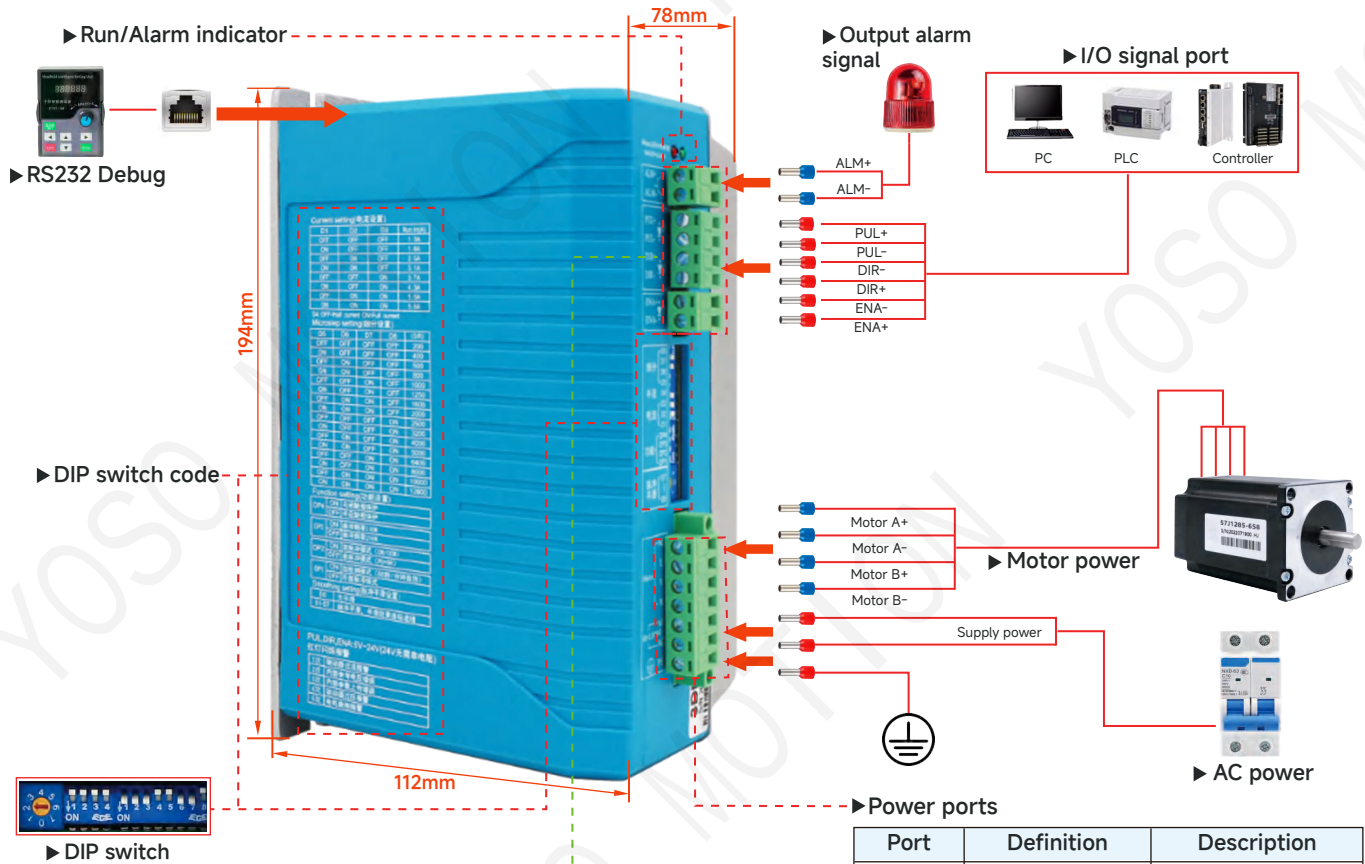
Port	Definition	Description
①AC1	Supply 1	Power input: DC24V~110V AC18V~80V
②AC2	Supply 2	
③U	Motor U phase	
④V	Motor V-phase	
⑤W	Motor W-phase	

Port	Definition	Description
①ALM+	Alarm output +	
②ALM-	Alarm output -	
①PUL-	Pulse input -	Compatible with 5V~24V
②PUL+	Pulse input +	
③DIR+	Direction input +	
④DIR-	Direction input -	
⑤ENA-	Enable input -	
⑥ENA+	Enable input +	

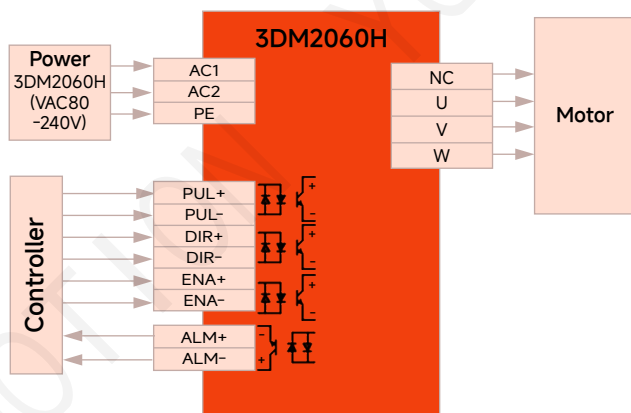
Phase/ Step angle	Output(A)	Supply(V)	Control Mode	Signal	Microstep	Weight	Brake model	Match motor
3/1.2°	2.0-8.3A	24-110V(DC) 18-80V(AC)	Step/Dire +CW/CCW	5-24V	1-64,2.5-50	0.55kg	3DM860H-SC	57mm/ 86mm

YOSO MOTION STEPPER DRIVER

Stepper Driver



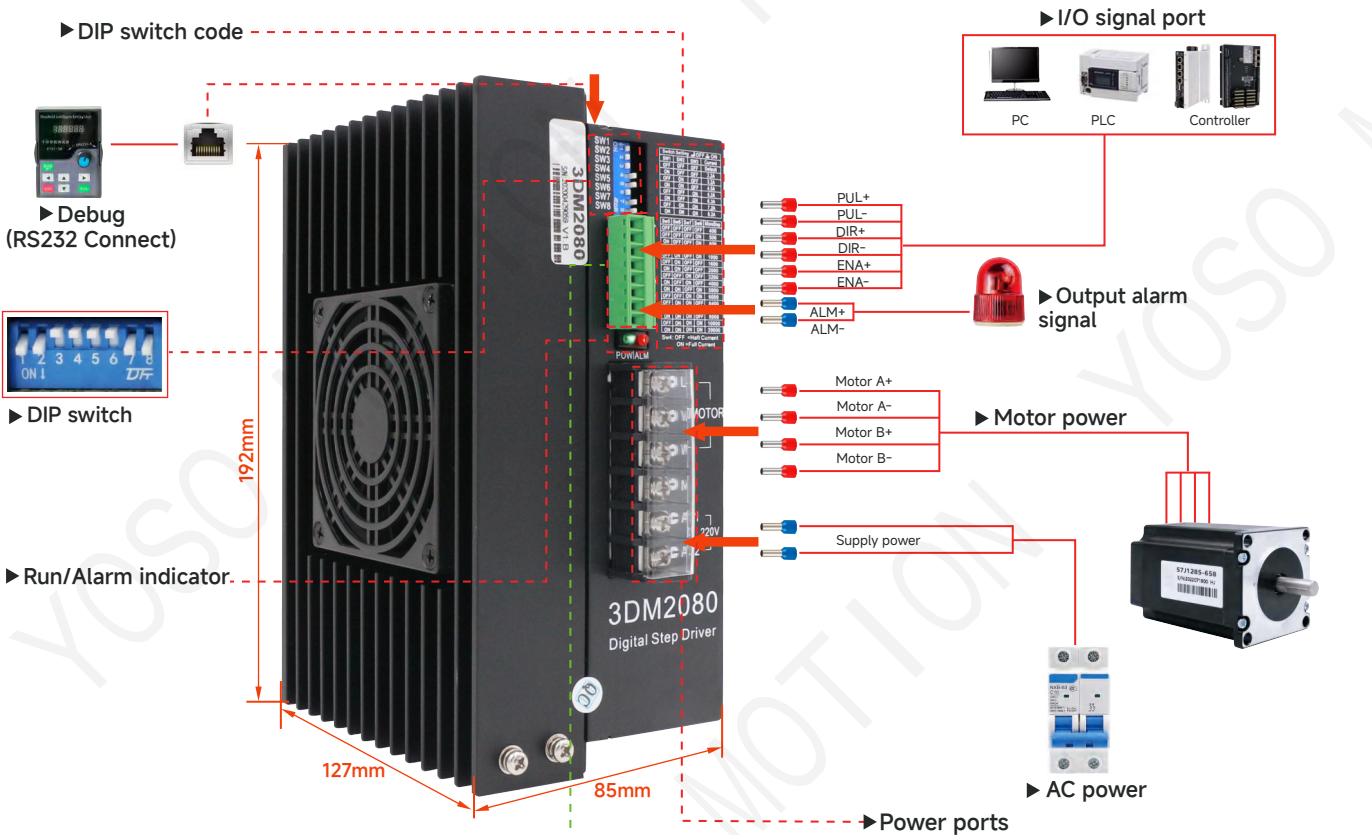
Schematic diagram



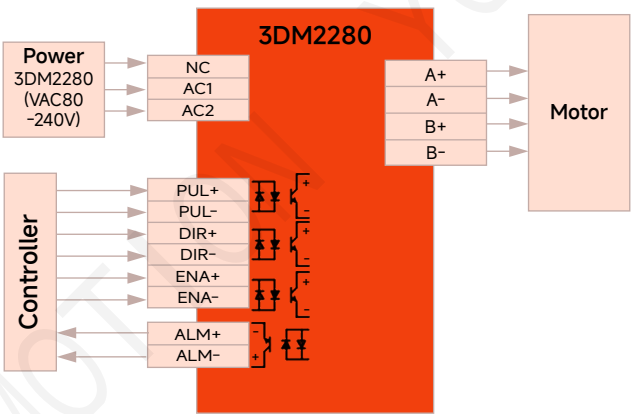
Datasheet

Phase/Step angle	Output(A)	Supply(V)	Control Mode	Signal	Microstep	Weight	Brake model	Match motor
3/1.2°	1.3-5.6A	80-240V(AC)	Step/Dire +CW/CCW	5-24V	1-64,2.5-50	1.5kg	3DM2060H-SC	86mm/110mm

Stepper Driver



Schematic diagram



Datasheet

Port	Definition	Description
①U	Motor U end	Motor U, V, W phases
②V	Motor V end	
③W	Motor W end	
④NC	None	
⑤AC1	Supply 1	Power input: AC80V~240V
⑥AC2	Supply 2	

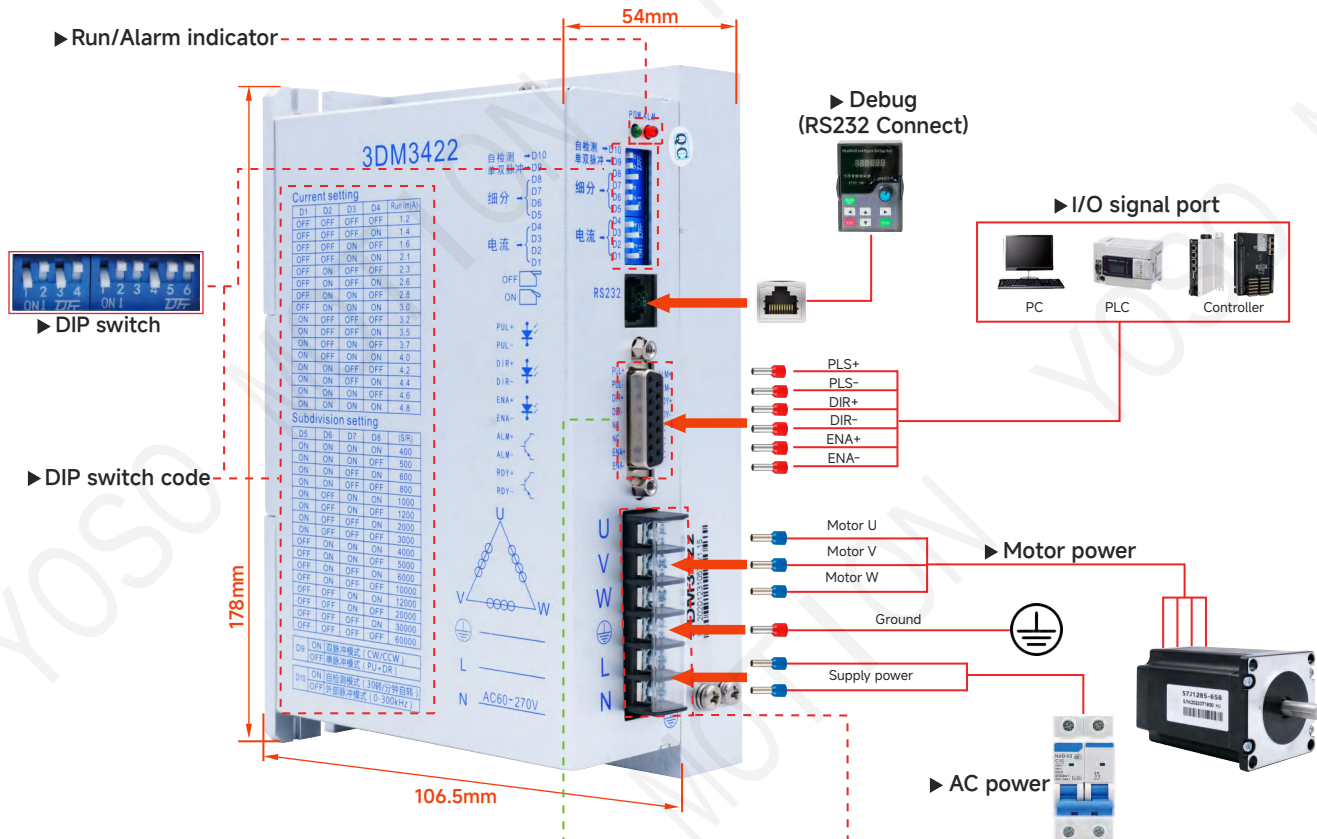
Control ports

Port	Definition	Description
①PUL+	Pulse input +	Compatible with 5V~24V
②PUL-	Pulse input -	
③DIR+	Direction input +	
④DIR-	Direction input -	
⑤ENA+	Enable input +	
⑥ENA-	Enable input -	
⑦ALM+	Alarm output +	
⑧ALM-	Alarm output -	

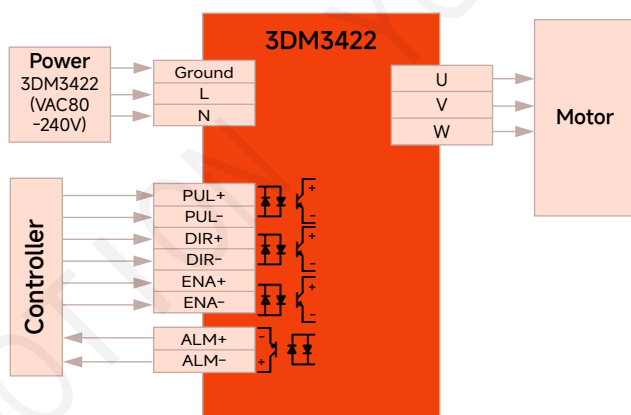
Phase/ Step angle	Output(A)	Supply(V)	Control Mode	Signal	Microstep	Weight	Brake model	Match motor
3/1.2°	2.0-8.0A	80-240V(AC)	Step/Dire +CW/CCW	5-24V	2-128,2.5-50	1.5kg	3DM2280-SC	86mm/110mm /130mm

YOSO MOTION STEPPER DRIVER

Stepper Driver



Schematic diagram



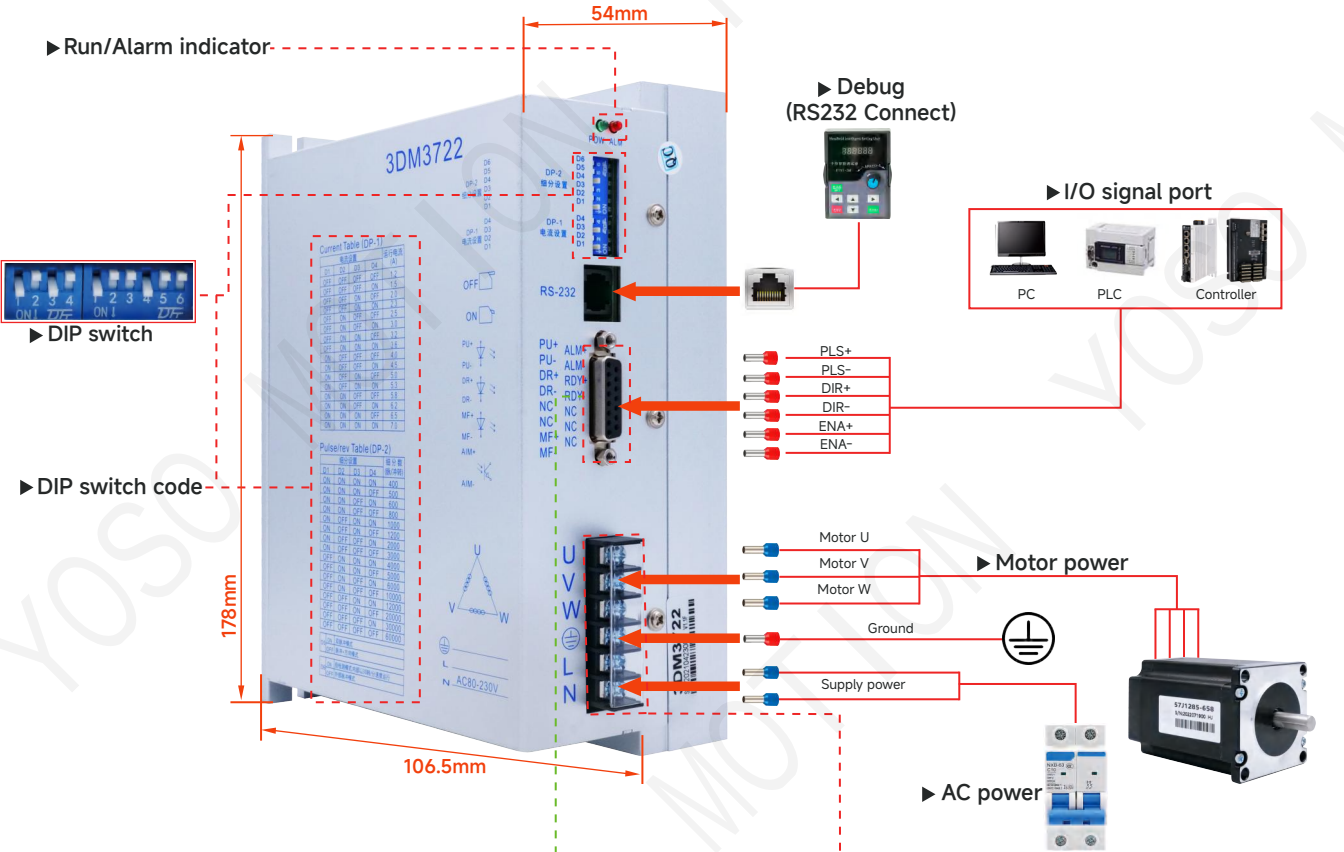
Datasheet

Port	Definition	Description
①U	Motor U end	Motor U, V, W phases
②V	Motor V end	
③W	Motor W end	
④NC	None	
⑤AC1	Power input: AC80V~240V	
⑥AC2		

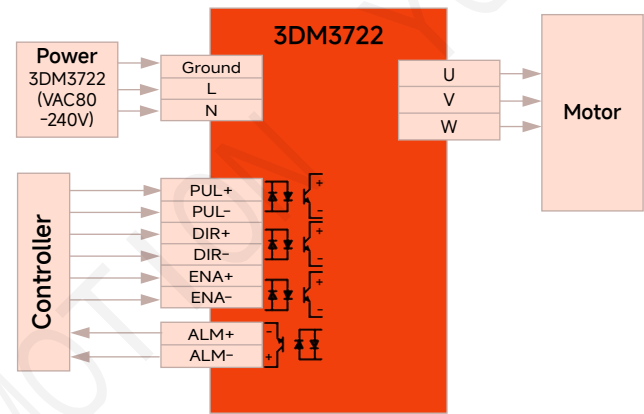
Port	Definition	Description
①PUL+	Pulse input+	Compatible with 5V~24V
②PUL-	Pulse input -	
③DIR+	Direction input+	
④DIR-	Direction input-	
⑤ENA+	Enable input+	
⑥ENA-	Enable input-	
⑦ALM+	Alarm output+	
⑧ALM-	Alarm output-	
⑨RDY+	Remain output	
⑩RDY-	Remain output	

Phase/Step angle	Output(A)	Supply(V)	Control Mode	Signal	Microstep	Weight	Brake model	Match motor
3/1.2°	1.2-3.7A	80-240V(AC)	Step/Dire +CW/CCW	5-24V	2-300	1.5kg	3DM3422-SC	86mm/110mm

Stepper Driver



Schematic diagram



Datasheet

Port	Definition	Description
①U	Motor U end	Motor U, V, W phases
②V	Motor V end	
③W	Motor W end	
④NC	Grounding	
⑤AC1	Power input: AC80V~240V	
⑥AC2		

Port	Definition	Description
①PUL+	Pulse input+	Compatible with 5V~24V
②PUL-	Pulse input -	
③DIR+	Direction input+	
④DIR-	Direction input-	
⑤ENA+	Enable input+	
⑥ENA-	Enable input-	
⑦ALM+	Alarm output+	
⑧ALM-	Alarm output-	
⑨RDY+	Remain output	
⑩RDY-	Remain output	

Phase/ Step angle	Output(A)	Supply(V)	Control Mode	Signal	Microstep	Weight	Brake model	Match motor
3/1.2°	1.2-7.0A	80-240V(AC)	Step/Dire +CW/CCW	5-24V	2-300	1.5kg	3DM3722-SC	110mm/ 130mm



YOSO German quality, Industrie 4.0 best platform



Precise



Controllability



Stable

Focus on the research, development and manufacturing of high-precision stepper motors and drivers

Jingpeng Machinery Equipment (Shanghai) Co., Ltd.

Contact information:

☎ Telephone: 0086-13636560152

📍 Address: Room 123, Building 11, Block B, No. 1101 Huyi Road, Jiading District, Shanghai

Website: www.yosomove.com



Whatsapp