VEICHI

SD700 Series

High-performance Servo System

VEICHI

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*Version:2023 V1.2

About us

Veichi （stock code：688698） has always committed to electric drive and industrial control since it's foundation. As an all-round company engaged in R & D, manufacturing and sales on high-tech industrial automation products, Veichi has been identified with several honorary titles such as Jiangsu provincial-level Enterprise Technology Center, Jiangsu Private-own Technical Enterprise, Specialized and sophisticated enterprises that produce new and unique products, Jiangsu Engineering Research Center, Jiangsu New and High-tech Enterprise and Suzhou city-level Gazelle Company (High Growth Enterprise) and has obtained the highest level of enterprise credit. Through years of independent research and development, Veichi now has authorized patents totaling 148 by the end of 12, 2022, and among them 36 are for invention. Having established R & D center and manufacturing bases in Suzhou,Shenzhen and Xi'an, added with the wholly-owned subsidiary in India, Veichi now are dealing with customers from several nations and regions and has the full capability to provide safe, competitive and trustworthy products and services to customers from the larger world.

Veichi provides various products including inverters from 0.4kW to 5,600kW, servo systems from 50W to 200kW, motion controllers, PLC and HMI, which are applied in all sorts of fields occasions like lifting, mining, rail traffic, machine tools, compressors, plastic equipment, photo-voltaic pumping, construction, robots/mechanical arms, printing and packaging, chemical fibers for textile use, metallurgy, municipal works, petrol work and chemical engineering.

20 service stations and 182 contracted distributors cover 31 provinces on China mainland and Hong Kong, Macao and Taiwan regions, which guarantees a massive and efficient network for sales and services for our customers.

Veichi will continue to abide by the operation philosophy, that is, guided by market demand and driven by technical innovation, enlarge and enhance its core business like inverters, servo systems, control systems and SIoTs. And Veichi will always be hard at providing quality products and services for customers and further make contributions to the development of electric drives and industrial controls.

2005
- Business started in Shenzhen
- First generation of inverter on the market

2013
- Suzhou Veichi Electric Co., Ltd established
- First generation of servo system on the market

2014
- Suzhou Veichi first-stage project put into construction

2015
- Advanced integrated product development mode (IPD) initiated

2016
- Suzhou Veichi first-stage project put into operation
- First generation of motion control system on the market

2017
- Veichi honored with New High-tech Enterprise

2018
- Veichi honored with secondary enterprise of standardized production safety among Jiangsu province

2019
- Veichi restructured to a company limited by shares
- Indian subsidiary established
- Veichi honored with Jiangsu Province Enterprise Technology Center

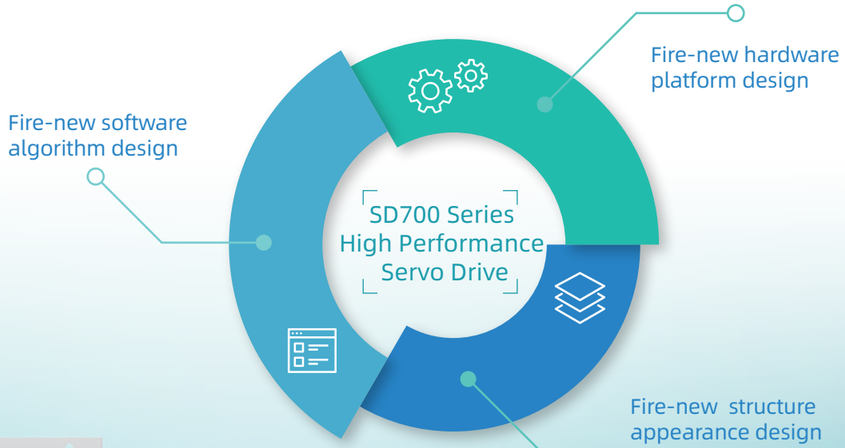
2020
- A-share science and technology innovation board landing successfully
- Veichi honored with Jiangsu Province Specialized and Sophisticated Enterprise That Produces New and Unique Products
- Veichi honored with Jiangsu Province Engineering Technology Research Center of Medium& high Power Inverters and Servo motion Controllers

2021
- Veichi subsidiary corporation established
- Veichi honored with national -level Specialized and Sophisticated Enterprise That Produces New and Unique Products

2022
- Xi'an R&D center established
- Veichi digital energy subsidiary corporation established
- Veichi honored with AAA certificate of integrating IT application with industrialization

2023
- Suzhou Veichi second-stage project put into operation
- Suzhou Veichi third-stage project put into construction
- Veichi medical facility subsidiary established

SD700 Series
High-Performance Servo System

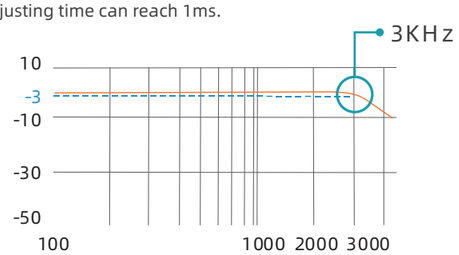


Faster & more efficient

Product features

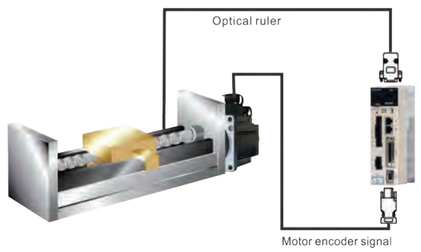
3KHz speed loop response bandwidth

The unique current algorithm can effectively improve the speed loop bandwidth which can greatly reduce the adjusting time and improve production efficiency. The fastest adjusting time can reach 1ms.



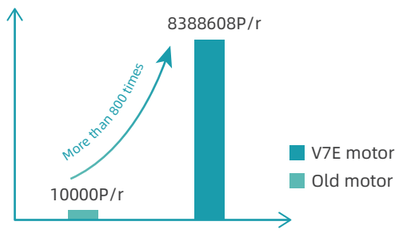
Support full closed-loop mode

The full closed loop mode supports external second encoder or grating ruler to reduce mechanical transmission gaps and increase the actual positioning accuracy. (Supported by all the models)



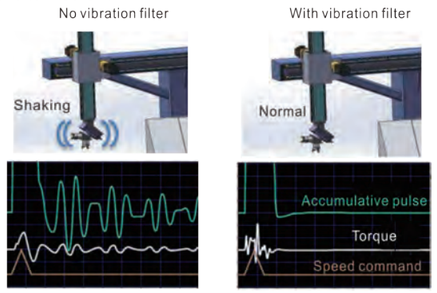
23-Bit absolute encoder

Pulses per turn reach up to 8388608 on a standard 23-bit multi-turn absolute encoder, communication speed up to 2.5Mpps and thus positioning is more accurate, low speed running is smoother, and loss of position caused by power failure will not be lost.



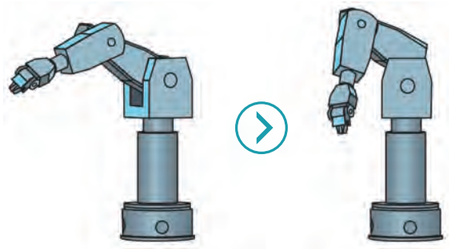
Low frequency vibration suppression function

The vibration filter can be set via the PC software to effectively eliminate the inherent vibration frequency, greatly reducing axis jitter (sloshing) when it's stopped and and effectively suppressing vibration within
0~100Hz. This function is often used to eliminate the end shaking when the injection molding manipulators and stacker are turned off.



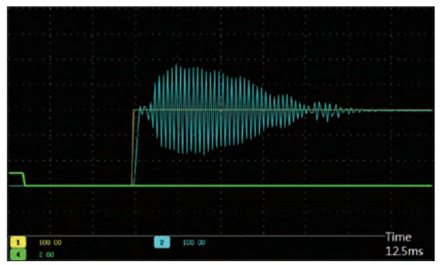
Robust control

The latest method enables smooth operation without parameter adjustment even if the load rotational inertia changes within 30 times during motion. It's ready for use on installation and widely used on mechanical arms.



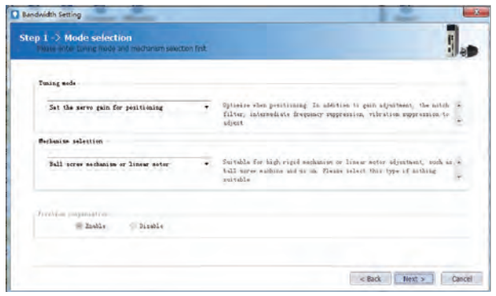
Auto notch filter setting

It features easiness of use and the whole process is no longer than 70ms.
Noise and vibration caused by mechanical resonance can be greatly reduced for faster response. It is widely used on machine tools.



Intelligent setting

Automatic gain adjustment, boot setting mode and sequential setting are all for using servo gain and it won't cost too much time and energy.
More modes are available according to mechanical structures and processing properties to deliver best performance.

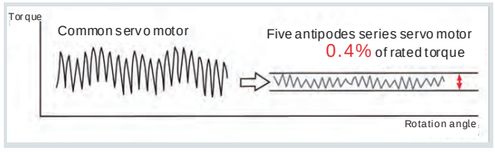


Powerful bus communication function

Support RS-485, EtherCAT, CANopen, MECHATROLINK II , MECHATROLINKIII and other mainstream bus protocols.

Significant reduction of motor pulsating torque, for more stable running at low speed

10-stage rotor and 12-slot stator, together with the special magnetic circuit, can effectively suppress the cogging and, greatly reduce torque pulsation, thus ensuring smoother motor operation at fixed speed and low speed.



Down-sized motor and uplifted dynamic performance

The latest manufacturing techniques are adopted here to optimize magnetic circuit and reduce magnetic loss, achieving motor high dynamic response;
The motor length is shortened by about 2cm, and the temperature rise is reduced by 5 ~ 10℃ to deliver higher shaft jump accuracy and eaiser wiring. All products in this series are designed with IP67 protection.

V7E motor

VM7 motor

If taking 400W as an example, the length is shortened by 20 mm.

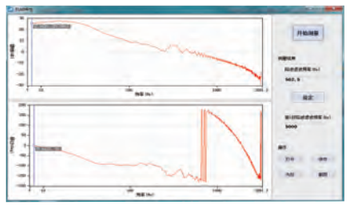
Powerful PC software

No need to install any debugging software since connection between the drive and computer works via USB cord.

Batch parameter reading and writing

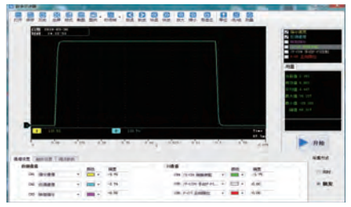
Inertia identification

PID parameters for different mechanical structures



Mechanical characteristics analysis, automatic resonance suppression

Internal position loop program JOG, easy to debug



The online oscilloscope monitoring real-time (125us) via multi-channels

Model description

SD 700 - 3R3 A - P A □

SD:
Servo product code

700:
High performance servo drive series

Rated current

(A) 220VAC				(D) 400VAC							
1R8	1.8A	120	12A	3R8	3.8A	240	24A	700	70A	321	320A
3R3	3.3A	160	16A	6R0	6.0A	300	30A	800	80A	421	420A
5R5	5.5A			8R4	8.4A	400	40A	121	120A	521	520A
7R6	7.6A			110	11A	500	50A	171	170A		
9R5	9.5A			170	17A	600	60A	221	220A		

Product management code
Standard product default

Encoder type
A: Absolute type
B: Biss type

Drive type
P: pulse type
S: standard type
C: CANopen bus type
E: EtherCAT bus type
M: MECHATROLINK II bus type
L: MECHATROLINK III bus type
N: PROFINET bus type
F: Multi IO interface type

Rated voltage
A: 220VAC
D: 400VAC

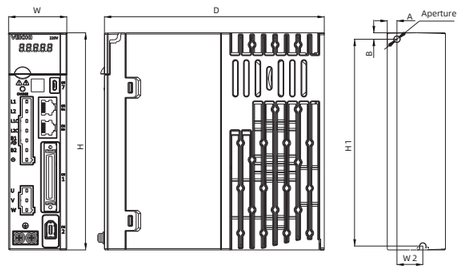
Code	Model	Pulse input	16 bit analog	Full closed loop	RS485	CANopen	EtherCAT	MECHATRO LINK II	MECHATRO LINK III	PROFINET
P	Pulse type	√	O	√	√	×	×	×	×	×
S	Standard type	√	√	√	√	√	×	×	×	×
C	CANopen type	√	O	×	√	√	×	×	×	×
E	EtherCAT type	×	×	×	√	×	√	×	×	×
M	MECHATROLINK II type	×	×	×	√	×	×	√	×	×
L	MECHATROLINK III type	×	×	×	√	×	×	×	√	×
N	PROFINET type	×	×	×	√	×	×	×	×	√

O support 12 bit analog √ standard configured △ optional × not configured

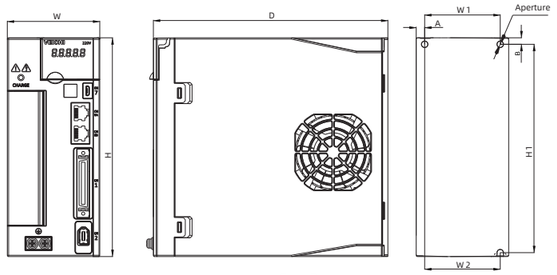
Drive power & Case volume

Model	Input	Output		Case volume
	Rated voltage (V)	Rated current (A)	Instantaneous current (A)	
SD700-1R8A	Single phase 220	1.8	6.3	A
SD700-3R3A	Single phase 220	3.3	11.6	
SD700-5R5A	Single / three phase 220	5.5	16.5	B
SD700-7R6A	Single / three phase 220	7.6	22.8	
SD700-9R5A	Three phase 220	9.5	23.8	
SD700-120A	Three phase 220	12.0	36.0	C
SD700-160A	Three phase 220	16.0	40.0	
SD700-3R8D	Three phase 400	3.8	11.4	B
SD700-6R0D	Three phase 400	6.0	18.0	C
SD700-8R4D	Three phase 400	8.4	25.2	
SD700-110D	Three phase 400	11.0	27.5	
SD700-170D	Three phase 400	17.0	42.5	D
SD700-240D	Three phase 400	24.0	60.0	
SD700-300D	Three phase 400	30.0	70.0	
SD700-400D	Three phase 400	40.0	80.0	E
SD700-500D	Three phase 400	50.0	115.0	F
SD700-600D	Three phase 400	60.0	120.0	
SD700-700D	Three phase 400	70.0	140.0	G
SD700-800D	Three phase 400	80.0	160.0	
SD700-121D	Three phase 400	120.0	240.0	
SD700-171D	Three phase 400	170.0	340.0	H
SD700-221D	Three phase 400	220.0	440.0	I
SD700-321D	Three phase 400	320.0	640.0	J
SD700-421D	Three phase 400	420.0	840.0	K
SD700-521D	Three phase 400	520.0	1040.0	L

Drive appearance & Installation dimension

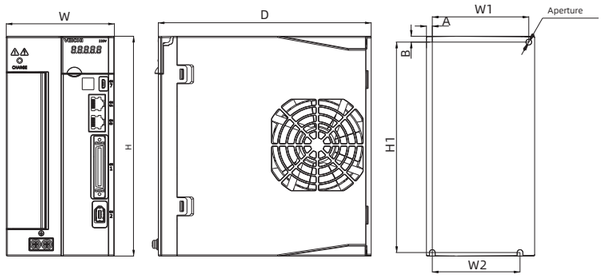


Size A

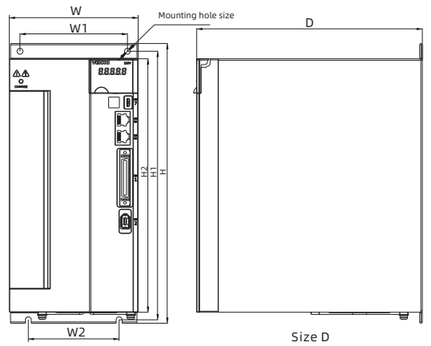


Size B

Chassis size	Model	Overall dimension(mm)			Installation dimension (mm)						Mounting hole size
		W	H	D	W1	W2	H1	H2	A	B	
A	SD700-1R8A-**	45	168	170	\	20	160	\	7.5	5	2-M4
	SD700-3R3A-**										
B	SD700-5R5A-**	71	168	180	58	58	160	\	6.5	5	3-M4
	SD700-7R6A-**										
	SD700-9R5A-**										
	SD700-2R5D-**										
	SD700-3R8D-**										

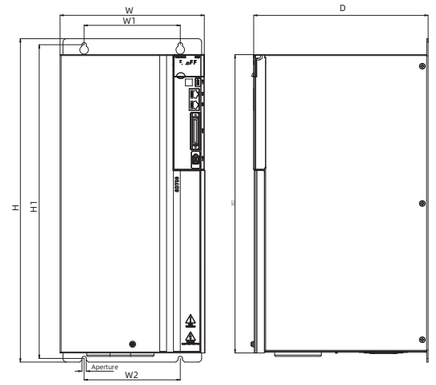


Size C



Size D

Chassis size	Model	Overall dimension(mm)			Installation dimension (mm)						Mounting hole size
		W	H	D	W1	W2	H1	H2	A	B	
C	SD700-120A-**	92.5	188	182	82.5	75	180	\	5	5	3-M4
	SD700-160A-**										
	SD700-6R0D-**										
	SD700-8R4D-**										
	SD700-110D-**										
D	SD700-170D-**	120	260	210	100	84.5	250	236	\	\	4-M5
	SD700-240D-**										
	SD700-300D-**										



Chassis size	Model	Overall dimension(mm)			Installation dimension (mm)						Aperture
		W	H	D	W1	W2	H1	H2	A	B	
E	SD700-400D-**	180	413	240	125	125	404.5	413	\	\	4-M6
F	SD700-500D-**	210	471	254	140	140	457	434.5	\	\	4-M6
	SD700-600D-**										
G	SD700-700D-**	240	558	310	176	176	544	520	\	\	4-M6
	SD700-800D-**										
	SD700-121D-**										
H	SD700-171D-**	270	638	350	195	195	615	580	\	\	4-M10
I	SD700-221D-**	350	738	405	220	220	715	680	\	\	4-M10
J	SD700-321D-**	360	940	495	200	200	911	880	\	\	4-M18
K	SD700-421D-**	370	1140	565	200	200	1111	1080	\	\	4-M18
L	SD700-521D-**	420	1250	590	240	240	1213	1180	\	\	4-M20

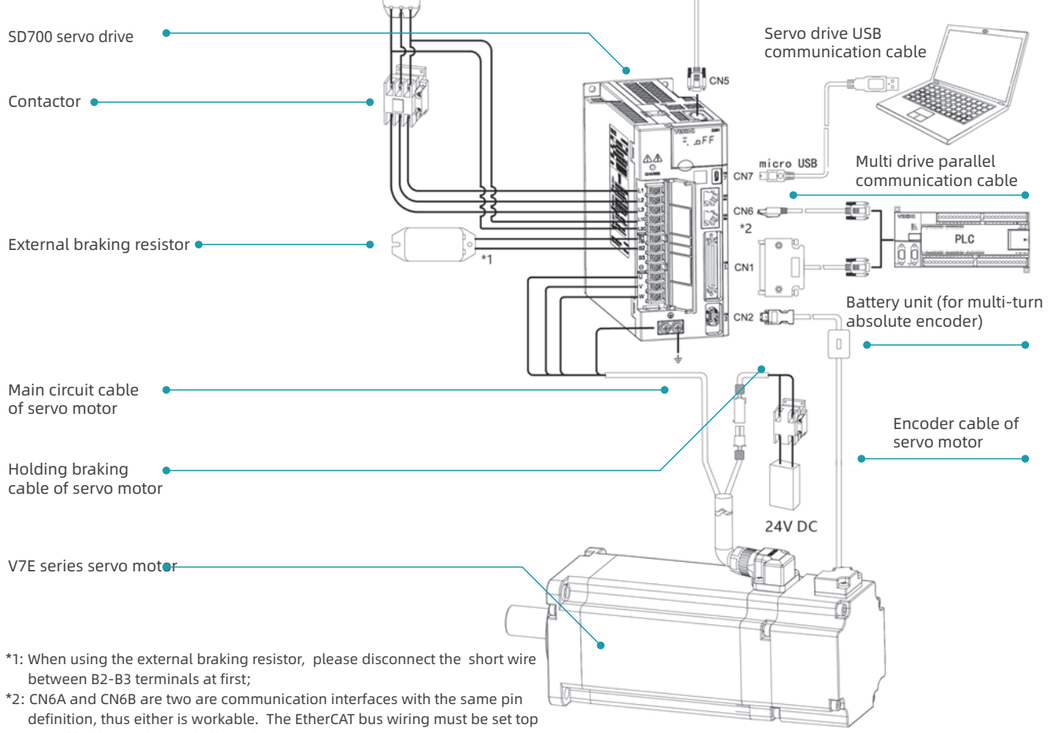
Drive specifications

Items			Specifications
Control mode			IGBT PWM control; sine wave current drive mode
Feedback	Rotating motor combination		Serial Communication Type Encoder: 17-bit, 23-bit absolute encoder
Environmental condition	Ambient temperature		-5℃ ~ 55℃(derating use at 55℃ ~ 60℃)
	Storage temperature		-20℃ ~ 85℃
	Ambient humidity		Below 95%RH (no freezing, no condensation)
	Storage humidity		Below 95%RH (no freezing, no condensation)
	Vibration resistance		4.9m/s²
	Impact resistance		19.6m/s²
	Protection class		IP20
	Cleanliness		No corrosive gases or flammable gases
			No water, oil or chemicals
			Environment with less dust, ash, salt, and metal powders
	Altitude		Below 1000m (derating use at 1000m to 2000m)
	Others		No static interference, strong electric field, strong magnetic sound, radiation and so on
Applicable standard			EN 61800-5-1:2007 EN 61800-3:2004/A1:2012
Installation type			Base mounting type: all models
Performance	Speed control range		1: 6000 (the lower limit of speed control range is the value under the condition of not stop with rated torque load)
	Speed fluctuation rate	Load fluctuation	The lower limit of speed control also means the requirement not to shop when operation at rated torque with loads
		Voltage fluctuation	Rated speed 0% (rated voltage±10%)
		Temperature fluctuation	Below rated speed ±0.1% (temperature fluctuation:25±25℃)
	Torque control accuracy		±1%
Soft start time setting			0~30s (acceleration and deceleration can be set separately)
Communication function	Host communication	Communication mode	RS485、CANOpen、EtherCAT、MECHATROLINK- Ⅱ 、MECHATROLINK-Ⅲ、PROFINET
		Axis address setting	Parameters setting
	USB communication	Equipment connection	Computer
			According to USB1.1 specifications(12M)
Display function			CHARGE indicator light
Keypad operator function			Button switch ×4

Items						Specifications
Input/ output signal	Encoder pulse output of frequency division					A phase, B phase, C phase: number of pulse frequency-division output for linear drive can be arbitrarily set
	Sequential control input signal	Assignable input signal				Working voltage range：DC24V±20%
						Input points:9
						Input mode: common collector input, common emitter input
						Input signal
						Servo ON (/S-ON)
						P action/P-CON
						Origin reset deceleration switch signal (/DEC)
						Forward drive banned (P-OT), reverse drive banned (N-OT)
						Alarm reset (/ALM-RST)
						Torque limit selection (/TLC)
						Speed rotation direction selection signal (/SPD-D)
						Internal speed setting selection (/SPD-A, /SPD-B)
						Control mode switch (/C-SEL)
						Zero position fixed (/ZCLAMP)
						Command pulse inhibited (/INHIBIT)
						Magnetic poles detection input (/P-DET) signal
						Gain switch (/G-SEL)
						Command pulse input rate switch (/PSEL)
						Assignable output signals and positive / negative logic switch
	Sequential control output signal	Fixed output				Working voltage range：DC5V~DC30V
						Output points:1
						Output signal:servo alarm （ALM）
		Assignable output signals				Working voltage range：DC5V~DC30V
						Output points:3
						Input method: optocoupler output (isolated)
						Output signal
						Position finished(/COIN)
						Rotational detection (/TGON)
						Servo ready(S-RDY)
						Torque limited detection (/CLT)
						Speed limit detection (/VLT)
						Brake (/BK)
						Warning (/WARN)
						Location nearby (/NEAR)
						Assignable output signals and change positive / negative logic
Dynamic brake						Operate when the main power OFF, servo alarm, servo OFF, Over travel(OT) (only for AC220V A,B model)
Regeneration treatment						Built-in function, see “Brake resistance selection”
Over travel (OT) prevention						Dynamic brake (DB) stop, DEC stop, or free stop when P-OT, N-OT inputs operate
Protection function						Over current, over voltage, under voltage, overload, regeneration fault, etc
Auxiliary function						Gain adjustment, alarm record, JOG operation, origin search, etc
Control	Position control	Feedforward compensation				0%~100%
		Position arrived range				0~1073741824 Command unit
		Input signal	Command pulse	command pulse pattern		Choose one of the following
						Symbol + pulse sequence, CW+CCW pulse sequence,two-phase pulse of 90°difference
				Input pattern		Linear drive, open collector
				Maximum input frequency	linear	Symbol + pulse sequence, CW+CCW pulse sequence: 4Mpps
						Two-phase pulse of 90°difference: 1Mpps
					Open collector	Symbol + pulse sequence, CW+CCW pulse sequence: 200Kpps
						Two-phase pulse of 90°difference: 200Kpps
				Input rate switching		1~100 times
			signal clearance			Clearance of position deviation

Items				Specifications
Control	speed control	Soft start time setting		0 ~ 30s(set acceleration and deceleration respectively)
		Input signal	Command voltage	Maximum input voltage: ±10V (motor runs forwardly under positive voltage command)
				Rated speed at DC6V [factory setting]
				Variable input gain setting
			Input impedance	About 14KΩ
		Internal set speed control	Loop time parameter	30μs
			Rotation direction selection	Inner speed set selection (/SPD-A,/SDP-B)
			Speed selection	Rotary direction selection (/SPD-D)
				Stop or change to other control modes when both sides are OFF
	Torque control	Input signal	Command voltage	Maximum input voltage: ±10V (motor runs forwardly under positive voltage command)
				Rated torque at DC3V [factory setting]
				Variable input gain setting
			Input impedance	About 14KΩ
			Loop time setting	16μs

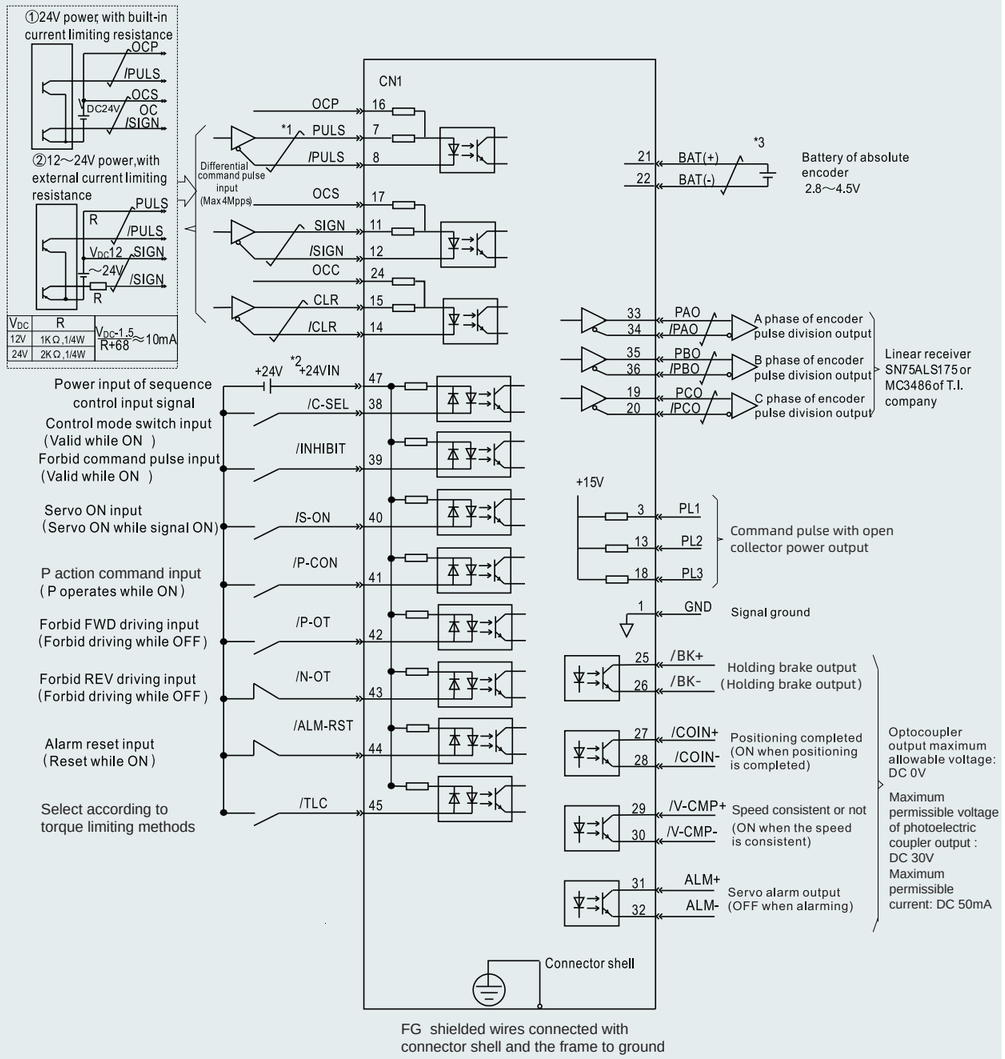
System configuration drawing



*1: When using the external braking resistor, please disconnect the short wire between B2-B3 terminals at first;

*2: CN6A and CN6B are two are communication interfaces with the same pin definition, thus either is workable. The EtherCAT bus wiring must be set top in and bottom out except Ethercat.

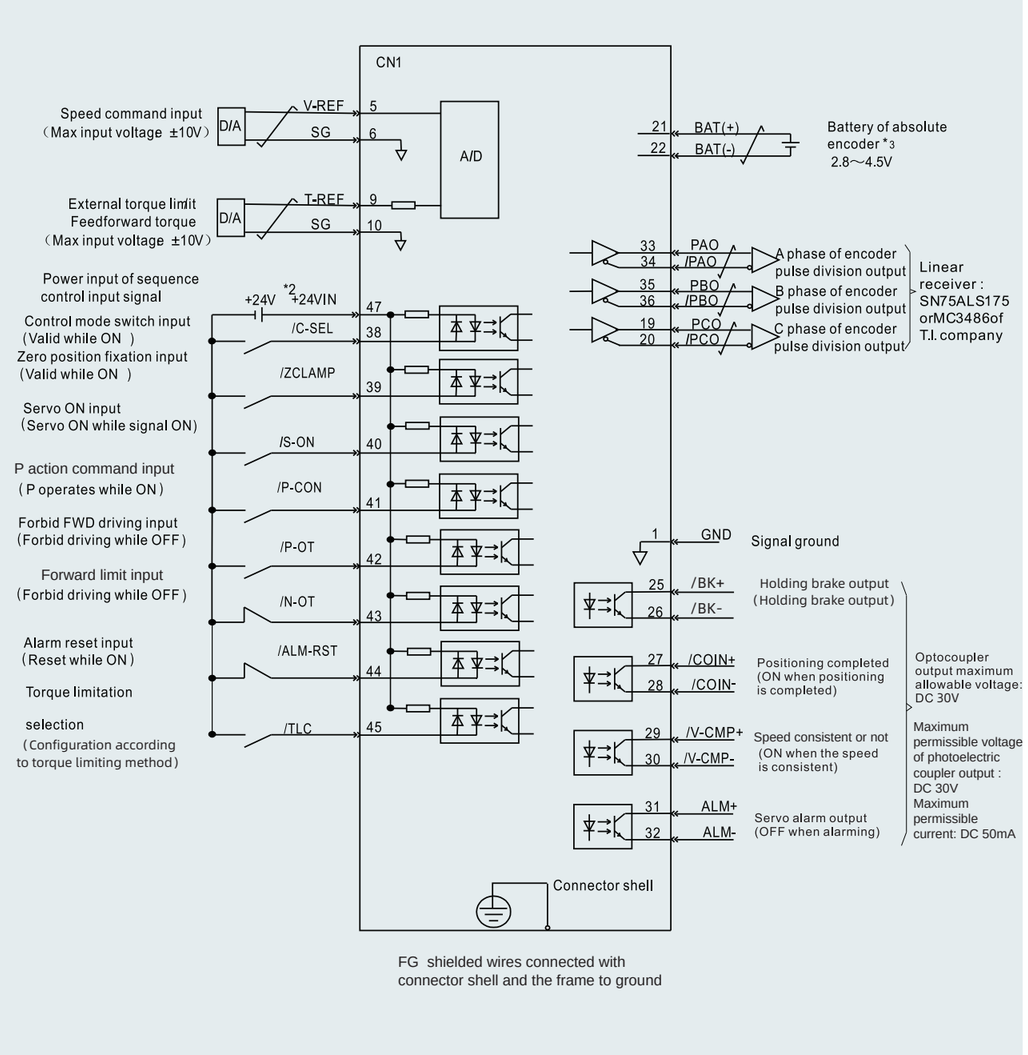
Standard wiring diagram - position mode



FG shielded wires connected with connector shell and the frame to ground

*1. ≠ is the twisted shields.
*2. DC24V power should be prepared by user.Double insulation or reinforced insulation equipments should be used for DC24V power.
*3. Connected while using absolute encoder.But never connect with CN1-21, CN1-22 pins while using encoder cables with battery unit
*4. Output signal should be received by linear receiver.
（Note）While using 24V braker， DC24V power should be separated from the power for input and output signal （CN1）.Please prepare other power individually, otherwise,there may be misoperation of input and output signal while power on.

Standard wiring diagram - speed / torque mode



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Servo motor model description

V7E - L 06 A - R40 30 - D 1 □

Product series
V7E
VM7

Inertia level
L: low inertia
M: medium inertia
H: high inertia

Flange
04:40mm 18:180mm
06:60mm 20:200mm
08:80mm 26:260mm
11:110mm 32:320mm
13:130mm 40:400mm

Rated voltage
A: 220V AC
D: 400V AC

Rated power

Mark	Power	Mark	Power	Mark	Power	Mark	Power
R05	50W	1R2	1.2KW	4R4	4.4KW	037	37KW
R10	100W	1R3	1.3KW	5R5	5.5KW	045	45KW
R20	200W	1R5	1.5KW	7R5	7.5KW	055	55KW
R40	400W	1R8	1.8KW	011	11KW	075	75KW
R60	600W	2R0	2.0KW	015	15KW	090	90KW
R75	750W	2R3	2.3KW	020	20KW	110	110KW
R85	850W	2R9	2.9KW	022	22KW	150	150KW
1R0	1.0KW	3R0	3.0KW	030	30KW	200	200KW

Factory management code

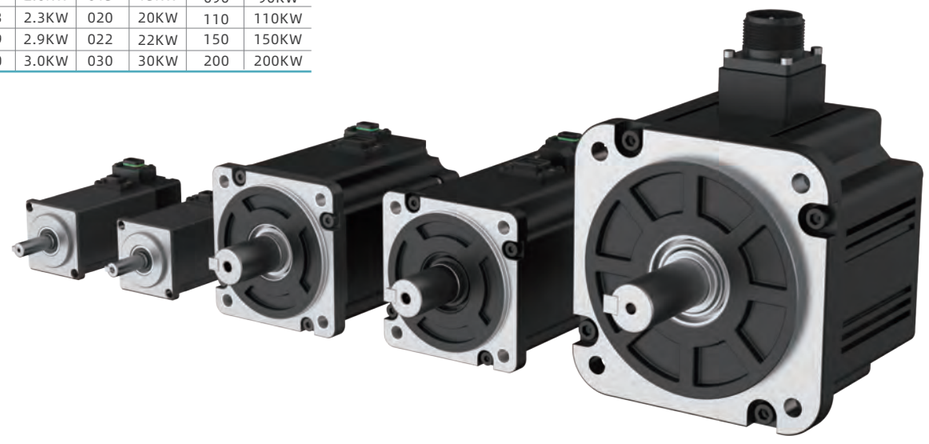
Mark	Axis		Oil seal		Brake	
	light axis	key axis	Yes	No	Yes	No
1		•	•			•
2		•	•		•	

Encoder type
D: 23 bit multi-turn absolute optical encoder
Q: 17 bit single-turn absolute magnetic encoder
R: 17 bit multi-turn absolute magnetic encoder
S: 20 bit multi-turn absolute optical cross shaft encoder

Rated speed (RPM)
15:1500
20:2000
25:2500
30:3000

Motor braking power chart (Estimated):

Flange	Braking power
40	7W
60	10W
80	15W
110	15W
130	20W
180	30W



Servo motor specifications (General model)

V7E model	Voltage (V)	Power (W)	Rated torque (N·m)	Rated speed (RPM)	Max speed (RPM)	Rated current (A)	Max current (A)	Moment of inertia
V7E-L04A-R1030-□1	220	100	0.32	3000	6000	1	3	0.051kg·cm²
V7E-L04A-R1030-□2	220	100	0.32	3000	6000	1	3	0.052kg·cm²
V7E-L06A-R2030-□1	220	200	0.64	3000	6000	1.7	5.1	0.18kg·cm²
V7E-L06A-R2030-□2	220	200	0.64	3000	6000	1.7	5.1	0.2kg·cm²
V7E-L06A-R4030-□1	220	400	1.27	3000	6000	2.6	7.8	0.34kg·cm²
V7E-L06A-R4030-□2	220	400	1.27	3000	6000	2.6	7.8	0.36kg·cm²
V7E-M06A-R4030-□1	220	400	1.27	3000	6000	2.6	7.8	0.67kg·cm²
V7E-M06A-R4030-□2	220	400	1.27	3000	6000	2.6	7.8	0.69kg·cm²
V7E-L06A-R6030-□1	220	600	1.91	3000	5000	3.3	9.9	0.51kg·cm²
V7E-L06A-R6030-□2	220	600	1.91	3000	5000	3.3	9.9	0.53kg·cm²
V7E-L08A-R7530-□1	220	750	2.38	3000	6000	4.6	13.8	1.02kg·cm²
V7E-L08A-R7530-□2	220	750	2.38	3000	6000	4.6	13.8	1.13kg·cm²
V7E-M08A-R7530-□1	220	750	2.38	3000	6000	4.6	13.8	2.3kg·cm²
V7E-M08A-R7530-□2	220	750	2.38	3000	6000	4.6	13.8	2.41kg·cm²
V7E-L08A-1R030-□1	220	1000	3.18	3000	5000	5	16.5	1.34kg·cm²
V7E-L08A-1R030-□2	220	1000	3.18	3000	5000	5	16.5	1.45kg·cm²
V7E-M11A-1R230-□1	220	1200	3.82	3000	5000	6.3	18.9	4.91kg·cm²
V7E-M11A-1R230-□2	220	1200	3.82	3000	5000	6.3	18.9	5.52kg·cm²
V7E-M11A-1R530-□1	220	1500	4.78	3000	5000	7.6	22.8	6.1kg·cm²
V7E-M11A-1R530-□2	220	1500	4.78	3000	5000	7.6	22.8	6.71kg·cm²
V7E-M11A-1R830-□1	220	1800	5.73	3000	5000	9.3	27.9	7.28kg·cm²
V7E-M11A-1R830-□2	220	1800	5.73	3000	5000	9.3	27.9	7.89kg·cm²
V7E-M13A-1R020-□1	220	1000	4.78	2000	3000	4.9	14.7	12.98kg·cm²
V7E-M13A-1R020-□2	220	1000	4.78	2000	3000	4.9	14.7	15.12kg·cm²
V7E-M13A-1R520-□1	220	1500	7.16	2000	3000	7.1	21.3	18.38kg·cm²
V7E-M13A-1R520-□2	220	1500	7.16	2000	3000	7.1	21.3	20.52kg·cm²
V7E-M13A-2R020-□1	220	2000	9.55	2000	3000	9.4	28.2	25.58kg·cm²
V7E-M13A-2R020-□2	220	2000	9.55	2000	3000	9.4	28.2	27.72kg·cm²
V7E-M13A-3R020-□1	220	3000	14.33	2000	3000	14	42	36.38kg·cm²
V7E-M13A-3R020-□2	220	3000	14.33	2000	3000	14	42	38.52kg·cm²
V7E-M18A-2R915-□1	220	2900	18.46	1500	2000	12	30	49.56kg·cm²
V7E-M18A-2R915-□2	220	2900	18.46	1500	2000	12	30	56.05kg·cm²
V7E-M18A-4R415-□1	220	4400	28.01	1500	1800	16	40	68.9kg·cm²
V7E-M18A-4R415-□2	220	4400	28.01	1500	1800	16	40	75.39kg·cm²
V7E-M13D-1R020-□1	380	1000	4.78	2000	3000	3.2	9.6	12.98kg·cm²
V7E-M13D-1R020-□2	380	1000	4.78	2000	3000	3.2	9.6	15.12kg·cm²
V7E-M13D-1R520-□1	380	1500	7.16	2000	3000	4.4	13.2	18.38kg·cm²
V7E-M13D-1R520-□2	380	1500	7.16	2000	3000	4.4	13.2	20.52kg·cm²
V7E-M13D-2R020-□1	380	2000	9.55	2000	3000	5.5	16.5	25.58kg·cm²
V7E-M13D-2R020-□2	380	2000	9.55	2000	3000	5.5	16.5	27.72kg·cm²
V7E-M13D-3R020-□1	380	3000	14.33	2000	3000	8.3	24.9	36.38kg·cm²
V7E-M13D-3R020-□2	380	3000	14.33	2000	3000	8.3	24.9	38.52kg·cm²
V7E-M18D-2R915-□1	380	2900	18.46	1500	2000	7.1	17.8	49.56kg·cm²
V7E-M18D-2R915-□2	380	2900	18.46	1500	2000	7.1	17.8	56.05kg·cm²

Servo motor specifications (General model)

V7E model	Voltage（V）	Power（W）	Rated torque (N·m)	Rated speed (RPM)	Max speed (RPM)	Rated current (A)	Max current (A)	Moment of inertia
V7E-M18D-4R415-□1	380	4400	28.01	1500	2000	10.9	27.3	68.9kg· cm²
V7E-M18D-4R415-□2	380	4400	28.01	1500	2000	10.9	27.3	75.39kg· cm²
V7E-M18D-5R515-□1	380	5500	35.02	1500	2000	13.4	33.5	110.11kg· cm²
V7E-M18D-5R515-□2	380	5500	35.02	1500	2000	13.4	33.5	116.6kg· cm²
V7E-M18D-7R515-□1	380	7500	47.75	1500	2000	17	42.5	156.61kg· cm²
V7E-M18D-7R515-□2	380	7500	47.75	1500	2000	17	42.5	163.09kg· cm²

Servo motor specifications (Purposed model)

V7E model	Voltage（V）	Power（W）	Rated torque (N·m)	Rated speed (RPM)	Max speed (RPM)	Rated current (A)	Max current (A)	Moment of inertia
V7E-L08A-R7520-□1L	220	750	3.58	2000	2500	2.8	8.4	1.34kg· cm²
V7E-L08A-R7520-□2L	220	750	3.58	2000	2500	2.8	8.4	1.45kg· cm²
V7E-L08A-R7530-□1L	220	750	2.38	3000	4000	3.1	9.3	1.02kg· cm²
V7E-L08A-R7530-□2L	220	750	2.38	3000	4000	3.1	9.3	1.13kg· cm²
V7E-M13A-R8515-□1	220	850	5.41	1500	3000	5.4	16.2	12.98kg· cm²
V7E-M13A-R8515-□2	220	850	5.41	1500	3000	5.4	16.2	15.12kg· cm²
V7E-M13A-R8515-□1B	220	850	5.41	1500	3000	5.4	16.2	12.98kg· cm²
V7E-M13A-R8515-□2B	220	850	5.41	1500	3000	5.4	16.2	15.12kg· cm²
V7E-M13A-1R815-□1	220	1800	11.46	1500	3000	10.9	32.7	25.85kg· cm²
V7E-M13A-1R815-□2	220	1800	11.46	1500	3000	10.9	32.7	27.72kg· cm²
V7E-M13A-1R815-□1B	220	1800	11.46	1500	3000	10.9	32.7	25.58kg· cm²
V7E-M13A-1R815-□2B	220	1800	11.46	1500	3000	10.9	32.7	27.72kg· cm²
V7E-M13A-1R315-□1	220	1300	8.28	1500	3000	8.2	24.6	18.38kg· cm²
V7E-M13A-1R315-□2	220	1300	8.28	1500	3000	8.2	24.6	20.52kg· cm²
V7E-M13A-2R315-□1	220	2300	14.64	1500	3000	14	42	36.38kg· cm²
V7E-M13A-2R315-□2	220	2300	14.64	1500	3000	14	42	38.52kg· cm²
V7E-M13A-2R315-□1L	220	2300	14.64	1500	2000	9.5	28.5	36.38kg· cm²
V7E-M13A-2R315-□2L	220	2300	14.64	1500	2000	9.5	28.5	38.52kg· cm²
V7E-M18A-2R915-□1H	220	2900	18.46	1500	3000	16	40	49.56kg· cm²
V7E-M18A-2R915-□2H	220	2900	18.46	1500	3000	16	40	56.05kg· cm²
V7E-M13D-R8515-□1B	380	850	5.41	1500	3000	3.3	9.9	12.98kg· cm²
V7E-M13D-R8515-□2B	380	850	5.41	1500	3000	3.3	9.9	15.12kg· cm²
V7E-M13D-R8515-□1	380	850	5.41	1500	3000	3.3	9.9	12.98kg· cm²
V7E-M13D-R8515-□2	380	850	5.41	1500	3000	3.3	9.9	15.12kg· cm²
V7E-M13D-1R315-□1	380	1300	8.28	1500	3000	4.8	14.4	18.38kg· cm²
V7E-M13D-1R315-□2	380	1300	8.28	1500	3000	4.8	14.4	20.52kg· cm²
V7E-M13D-1R815-□1B	380	1800	11.46	1500	3000	6.6	19.8	25.58kg· cm²
V7E-M13D-1R815-□2B	380	1800	11.46	1500	3000	6.6	19.8	27.72kg· cm²
V7E-M13D-1R815-□1	380	1800	11.46	1500	3000	6.6	19.8	25.58kg· cm²
V7E-M13D-1R815-□2	380	1800	11.46	1500	3000	6.6	19.8	27.72kg· cm²

Servo motor specifications (Purposed model)

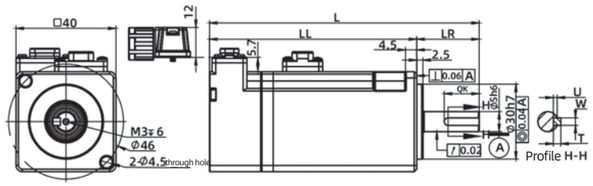
V7E model	Voltage（V）	Power（W）	Rated torque (N·m)	Rated speed (RPM)	Max speed (RPM)	Rated current (A)	Max current (A)	Moment of inertia
V7E-M13D-2R315-□1L	380	2300	14.64	1500	2000	5.6	16.8	36.38kg· cm²
V7E-M13D-2R315-□2L	380	2300	14.64	1500	2000	5.6	16.8	38.52kg· cm²
V7E-M13D-2R315-□1	380	2300	14.64	1500	3000	8.4	25.2	36.38kg· cm²
V7E-M13D-2R315-□2	380	2300	14.64	1500	3000	8.4	25.2	38.52kg· cm²
V7E-M18D-2R915-□1H	380	2900	18.46	1500	3000	10.7	26.8	49.56kg· cm²
V7E-M18D-2R915-□2H	380	2900	18.46	1500	3000	10.7	26.8	56.05kg· cm²
V7E-M18D-4R415-□1H	380	4400	28.01	1500	3000	16.2	40.5	68.9kg· cm²
V7E-M18D-4R415-□2H	380	4400	28.01	1500	3000	16.2	40.5	75.39kg· cm²
V7E-M18D-5R515-□1H	380	5500	35.02	1500	3000	19	47.5	110.11kg· cm²
V7E-M18D-5R515-□2H	380	5500	35.02	1500	3000	19	47.5	116.6kg· cm²
V7E-M18D-5R515-□1BH	380	5500	35.02	1500	3000	19	47.5	110.11kg· cm²
V7E-M18D-5R515-□2BH	380	5500	35.02	1500	3000	19	47.5	116.6kg· cm²
V7E-M18D-7R515-□1H	380	7500	47.75	1500	3000	27.6	69	156.6kg· cm²
V7E-M18D-7R515-□2H	380	7500	47.75	1500	3000	27.6	69	163.09kg· cm²
V7E-M18D-7R515-□1BH	380	7500	47.75	1500	3000	27.6	69	156.6kg· cm²
V7E-M18D-7R515-□2BH	380	7500	47.75	1500	3000	27.6	69	163.09kg· cm²

Servo motor specifications (big power)

V7E model	Voltage（V）	Power	Rated torque (N·m)	Rated speed (RPM)	Max speed (RPM)	Rated current (A)	Max current (A)	Moment of inertia
VM7-M20D-01115-D1FNS	380	11000	70	1500	2000	21	42	70kg· cm²
VM7-M20D-01115-D2FN	380	11000	70	1500	2000	21	42	80kg· cm²
VM7-M20D-01515-D1FNS	380	15000	96	1500	2000	29	58	100kg· cm²
VM7-M20D-01515-D2FN	380	15000	96	1500	2000	29	58	110kg· cm²
VM7-M20D-02015-D1FN	380	20000	127	1500	2000	38.5	77	147kg· cm²
VM7-M20D-02015-D2FN	380	20000	127	1500	2000	38.5	77	157kg· cm²
VM7-M20D-02215-D1FN	380	22000	140	1500	2000	42	84	171kg· cm²
VM7-M20D-02215-D2FN	380	22000	140	1500	2000	42	84	180kg· cm²
VM7-M26D-03015-D1FN	380	30000	191	1500	2000	58	116	372kg· cm²
VM7-M26D-03015-D2FN	380	30000	191	1500	2000	58	116	382kg· cm²
VM7-M26D-03715-D1FN	380	37000	236	1500	2000	72	144	445kg· cm²
VM7-M26D-03715-D2FN	380	37000	236	1500	2000	72	144	461kg· cm²
VM7-M26D-04515-D1FN	380	45000	286	1500	2000	87	174	529kg· cm²
VM7-M26D-04515-D2FN	380	45000	286	1500	2000	87	174	550kg· cm²
VM7-M26D-05515-D1FN	380	55000	350	1500	2000	106	212	639kg· cm²
VM7-M32D-05510-S1FN	380	55000	525	1000	1300	110	215	1370kg· cm²
VM7-M32D-07510-S1FN	380	75000	716	1000	1300	142	280	1830kg· cm²
VM7-H40D-07506-S1W	380	75000	1200	600	720	160	352	5294kg· cm²
VM7-M32D-09010-S1FN	380	90000	859	1000	1300	171	339	2290kg· cm²
VM7-M32D-10815-S1FN	380	108000	690	1500	2000	206	412	1830kg· cm²
VM7-M32D-11010-S1FN	380	110000	1050	1000	1300	199	385	2750kg· cm²

Servo motor installation dimension

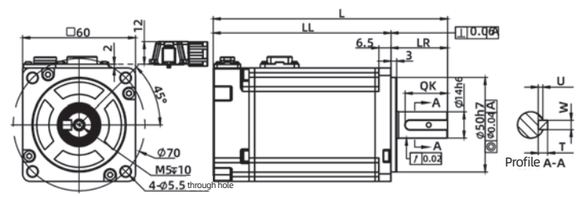
40mm flange



Unit: mm

Model	L	LL	LR	S	QK	U	W	T
V7E-L04A-R1030-□1	108	83	25	8	14	1.5	3	3
V7E-L04A-R1030-□2	134	109	25	8	14	1.5	3	3

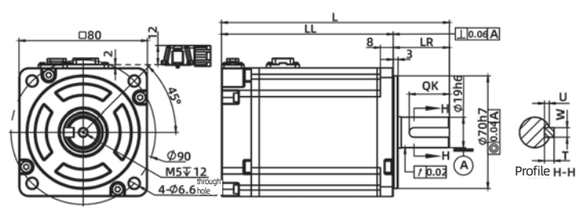
60mm flange



Unit: mm

Model	L	LL	LR	S	QK	U	W	T
V7E-L06A-R2030-□1	105.5	75.5	30	14	22.5	2.5	5	5
V7E-L06A-R2030-□2	136.5	106.5	30	14	22.5	2.5	5	5
V7E-L06A-R4030-□1	124.5	94.5	30	14	22.5	2.5	5	5
V7E-L06A-R4030-□2	155.5	125.5	30	14	22.5	2.5	5	5
V7E-M06A-R4030-□1	134.5	104.5	30	14	22.5	2.5	5	5
V7E-M06A-R4030-□2	165.5	135.5	30	14	22.5	2.5	5	5
V7E-L06A-R6030-□1	143.5	113.5	30	14	22.5	2.5	5	5
V7E-L06A-R6030-□2	174.5	144.5	30	14	22.5	2.5	5	5

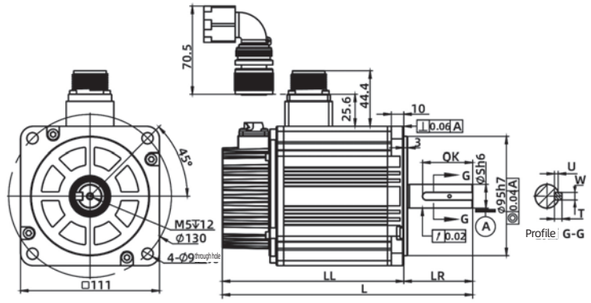
80mm flange



Unit: mm

Model	L	LL	LR	S	QK	U	W	T
V7E-L08A-R7520-□1L	156	121	35	19	25	3	6	6
V7E-L08A-R7520-□2L	188	153	35	19	25	3	6	6
V7E-L08A-R7530-□1L	142	107	35	19	25	3	6	6
V7E-L08A-R7530-□2L	174	139	35	19	25	3	6	6
V7E-M08A-R7530-□1L	152	117	35	19	25	3	6	6
V7E-M08A-R7530-□2L	184.5	149.5	35	19	25	3	6	6
V7E-L08A-R7530-□1	142	107	35	19	25	3	6	6
V7E-L08A-R7530-□2	174	139	35	19	25	3	6	6
V7E-M08A-R7530-□1	152	117	35	19	25	3	6	6
V7E-M08A-R7530-□2	184.5	149.5	35	19	25	3	6	6
V7E-L08A-1R030-□1	156	121	35	19	25	3	6	6
V7E-L08A-1R030-□2	188	153	35	19	25	3	6	6

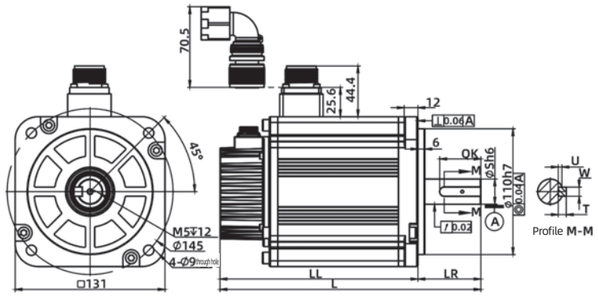
110mm flange



Unit: mm

Model	L	LL	LR	S	QK	U	W	T
V7E-M11A-1R230-□1	190	135	55	19	40	3	6	6
V7E-M11A-1R230-□2	221.2	166.2	55	19	40	3	6	6
V7E-M11A-1R530-□1	200	145	55	19	40	3	6	6
V7E-M11A-1R530-□2	231.2	176.2	55	19	40	3	6	6
V7E-M11A-1R830-□1	210	155	55	19	40	3	6	6
V7E-M11A-1R830-□2	241.2	186.2	55	19	40	3	6	6

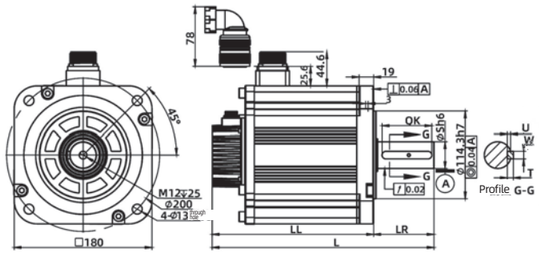
130mm flange



Unit: mm

Model	L	LL	LR	S	QK	U	W	T
V7E-M13A-R8515-□1	193	138	55	22	36	3.2	8	7
V7E-M13A-R8515-□2	221.2	166.2	55	22	36	3.2	8	7
V7E-M13A-1R020-□1	193	138	55	22	36	3.2	8	7
V7E-M13A-1R020-□2	221.2	166.2	55	22	36	3.2	8	7
V7E-M13A-1R315-□1	208	153	55	22	36	3.2	8	7
V7E-M13A-1R315-□2	236.2	181.2	55	22	36	3.2	8	7
V7E-M13A-1R520-□1	208	153	55	22	36	3.2	8	7
V7E-M13A-1R520-□2	236.2	181.2	55	22	36	3.2	8	7
V7E-M13A-1R815-□1	228	173	55	22	36	3.2	8	7
V7E-M13A-1R815-□2	256.2	201.2	55	22	36	3.2	8	7
V7E-M13A-2R020-□1	228	173	55	22	36	3.2	8	7
V7E-M13A-2R020-□2	256.2	201.2	55	22	36	3.2	8	7
V7E-M13A-2R315-□1L	258	203	55	22	36	3.2	8	7
V7E-M13A-2R315-□2L	286.2	231.2	55	22	36	3.2	8	7
V7E-M13A-3R020-□1	258	203	55	22	36	3.2	8	7
V7E-M13A-3R020-□2	286.2	231.2	55	22	36	3.2	8	7
V7E-M13D-R8515-□1	193	138	55	22	36	3.2	8	7
V7E-M13D-R8515-□2	221.2	166.2	55	22	36	3.2	8	7
V7E-M13D-1R020-□1	193	138	55	22	36	3.2	8	7
V7E-M13D-1R020-□2	221.2	166.2	55	22	36	3.2	8	7
V7E-M13D-1R315-□1	208	153	55	22	36	3.2	8	7
V7E-M13D-1R315-□2	236.2	181.2	55	22	36	3.2	8	7
V7E-M13D-1R520-□1	208	153	55	22	36	3.2	8	7
V7E-M13D-1R520-□2	236.2	181.2	55	22	36	3.2	8	7
V7E-M13D-1R815-□1	228	173	55	22	36	3.2	8	7
V7E-M13D-1R815-□2	256.2	201.2	55	22	36	3.2	8	7
V7E-M13D-2R020-□1	228	173	55	22	36	3.2	8	7
V7E-M13D-2R020-□2	256.2	201.2	55	22	36	3.2	8	7
V7E-M13D-2R315-□1L	258	203	55	22	36	3.2	8	7
V7E-M13D-2R315-□2L	286.2	231.2	55	22	36	3.2	8	7
V7E-M13D-3R020-□1	258	203	55	22	36	3.2	8	7
V7E-M13D-3R020-□2	286.2	231.2	55	22	36	3.2	8	7
V7E-M13A-R8515-□1B	193	138	55	19	40	3.1	6	6
V7E-M13A-R8515-□2B	221.2	166.2	55	19	40	3.1	6	6
V7E-M13A-1R815-□1B	228	173	55	24	36	3.3	8	7
V7E-M13A-1R815-□2B	256.2	201.2	55	24	36	3.3	8	7
V7E-M13D-R8515-□1B	193	138	55	19	40	3.1	6	6
V7E-M13D-R8515-□2B	221.2	166.2	55	19	40	3.1	6	6
V7E-M13D-1R815-□1B	228	173	55	24	36	3.3	8	7
V7E-M13D-1R815-□2B	256.2	201.2	55	24	36	3.3	8	7

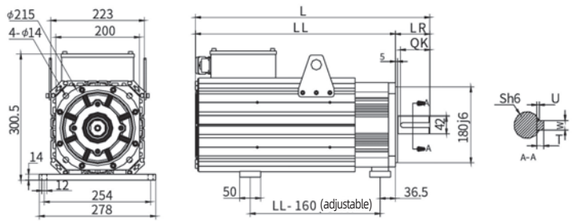
180mm flange



Unit: mm

Model	L	LL	LR	S	QK	U	W	T
V7E-M18A-2R915-□1	266	187	79	35	65	4.3	10	8
V7E-M18A-2R915-□2	307.5	228.5	79	35	65	4.3	10	8
V7E-M18A-4R415-□1	290	211	79	35	65	4.3	10	8
V7E-M18A-4R415-□2	331.5	252.5	79	35	65	4.3	10	8
V7E-M18D-2R915-□1	266	187	79	35	65	4.3	10	8
V7E-M18D-2R915-□2	307.5	228.5	79	35	65	4.3	10	8
V7E-M18D-2R915-□1H	266	187	79	35	65	4.3	10	8
V7E-M18D-2R915-□2H	307.5	228.5	79	35	65	4.3	10	8
V7E-M18D-4R415-□1	290	211	79	35	65	4.3	10	8
V7E-M18D-4R415-□2	331.5	252.5	79	35	65	4.3	10	8
V7E-M18D-4R415-□1H	290	211	79	35	65	4.3	10	8
V7E-M18D-4R415-□2H	331.5	252.5	79	35	65	4.3	10	8
V7E-M18D-5R515-□1	325.5	246.5	79	35	65	4.3	10	8
V7E-M18D-5R515-□2	367	288	79	35	65	4.3	10	8
V7E-M18D-5R515-□1H	325.5	246.5	79	35	65	4.3	10	8
V7E-M18D-5R515-□2H	367	288	79	35	65	4.3	10	8
V7E-M18D-7R515-□1	372.5	293.5	79	35	65	4.3	10	8
V7E-M18D-7R515-□2	414	335	79	35	65	4.3	10	8
V7E-M18D-7R515-□1H	372.5	293.5	79	35	65	4.3	10	8
V7E-M18D-7R515-□2H	414	335	79	35	65	4.3	10	8
V7E-M18D-5R515-□1BH	359.5	246.5	113	42	96	4.2	12	10
V7E-M18D-5R515-□2BH	401	288	113	42	96	4.2	12	10
V7E-M18D-7R515-□1BH	406.5	293.5	113	42	96	4.2	12	10
V7E-M18D-7R515-□2BH	448	335	113	42	96	4.2	12	10

200mm flange

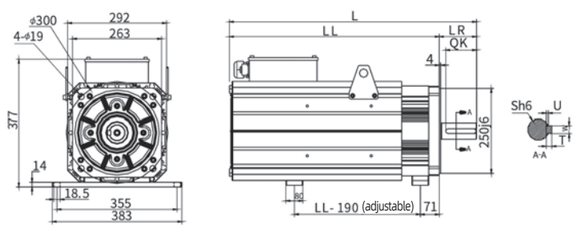


Unit: mm

Model	L	LL	LR	S	U	W	T	QK
VM7-M20D-01115-□1FNS	455	373	82	42	5	12	8	56
VM7-M20D-01515-□1FNS	528	446	82	42	5	12	8	56
VM7-M20D-02015-□1FN	560	478	82	42	4	12	8	70
VM7-M20D-02215-□1FN	607	525	82	42	4	12	8	70

Note 1: The foot plate of 200mm flange motor (optional).
Model code: S18 Material code: 6010000008

263mm flange



Unit: mm

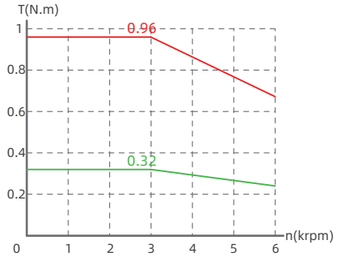
Model	L	LL	LR	S	U	W	T	QK
VM7-M26D-03015-□1FN	640	530	110	48	4.5	14	9	90
VM7-M26D-03715-□1FN	684	574	110	48	4.5	14	9	90
VM7-M26D-04515-□1FN	727	617	110	48	4.5	14	9	90
VM7-M26D-05515-□1FN	795	685	110	48	4.5	14	9	90

Note 2: The foot plate of 263mm flange motor (except VM7-M26D-05515 model is standard configured, other models are optional).
Model code: S25F Material code: 2800050433

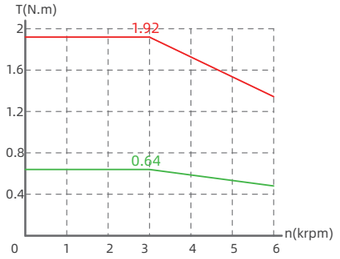
Servo motor torque characteristics

Note:"___" is the rated torque, "____" is the instantaneous maximum torque.

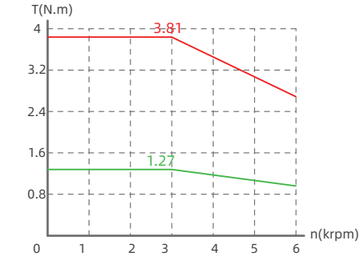
V7E-L04A-R1030- □□



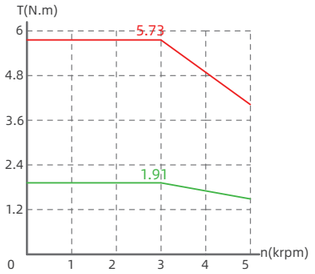
V7E-L06A-R2030 -□□



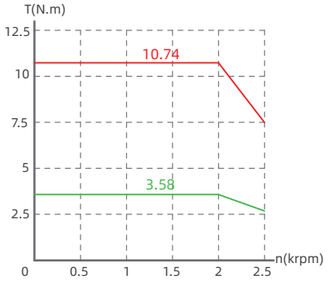
V7E-□06A-R4030- □□



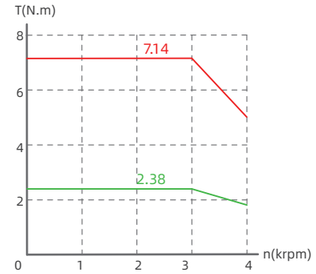
V7E-L06A-R6030- □□



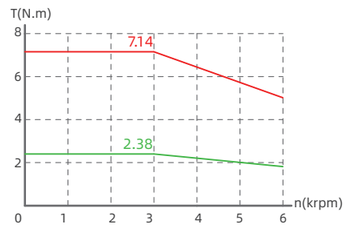
V7E-L08A-R7520- □□L



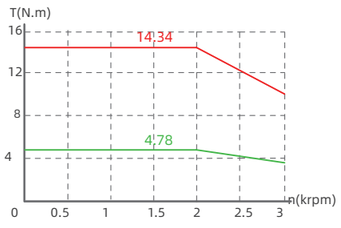
V7E-L08A-R7530- □□L



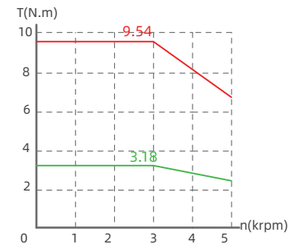
V7E-□08A-R7530- □□



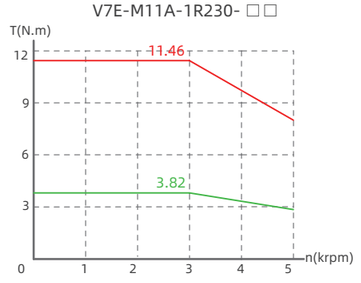
V7E-M13□-1R020-□□



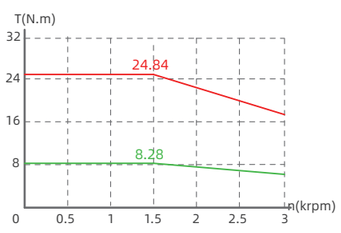
V7E-L08A-1R030- □□



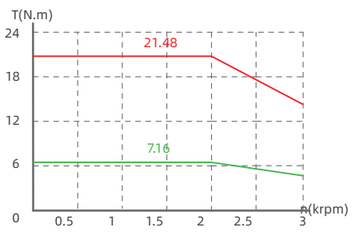
V7E-M11A-1R230- □□



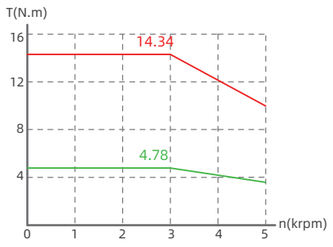
V7E-M13□-1R315-□□



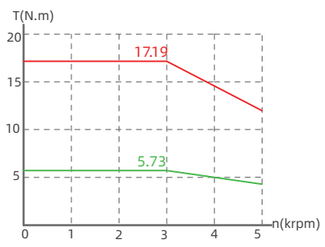
V7E-M13□-1R520-□□



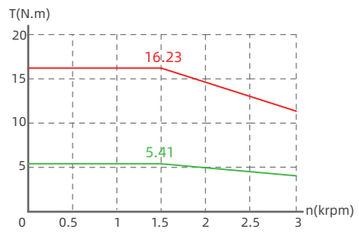
V7E-M11A-1R530- □□



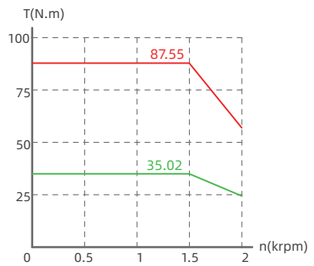
V7E-M11A-1R830- □□



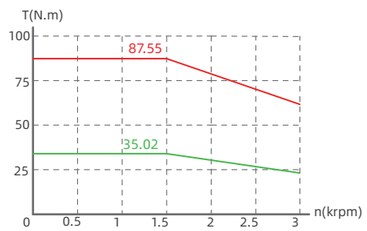
V7E-M13□-R8515-□□



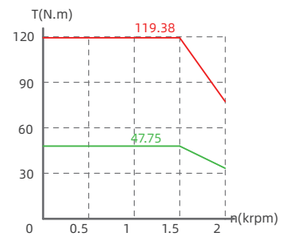
V7E-M18□-5R515-□□



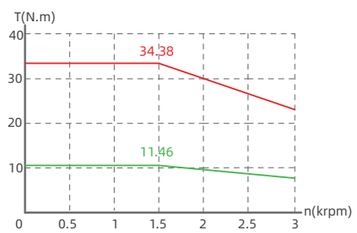
V7E-M18□-5R515-□□H



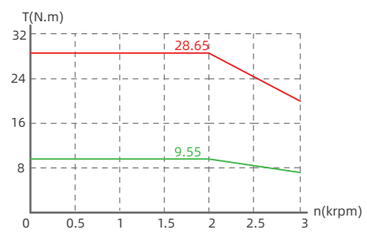
V7E-M18□-7R515-□□



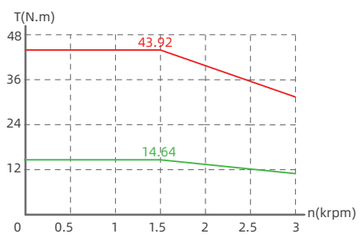
V7E-M13□-1R815-□□



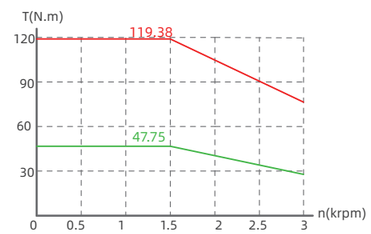
V7E-M13□-2R020-□□



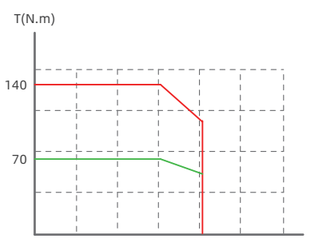
V7E-M13□-2R315-□□



V7E-M18□-7R515-□□H



VM7-M20D-01115-□1FNS



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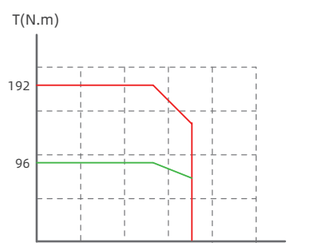

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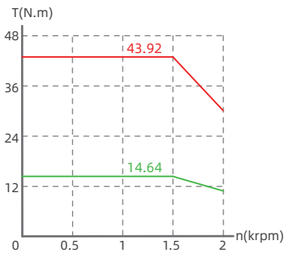
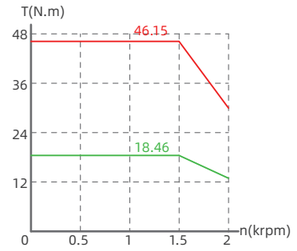
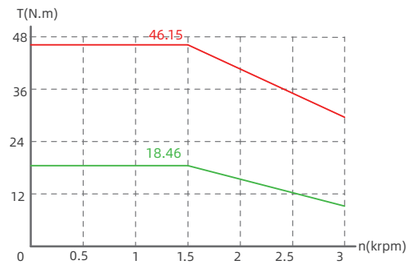


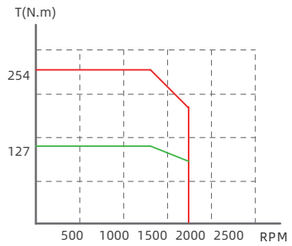
V7E-M18□-2R915-□□



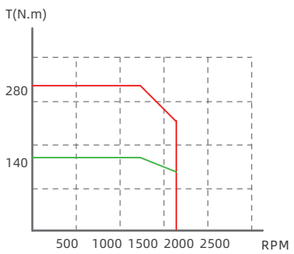
V7E-M18□-2R915-□□H



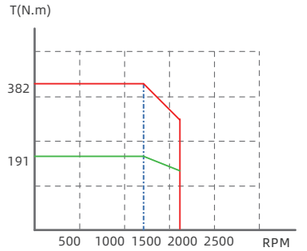
VM7-M20D-02015-□1FN



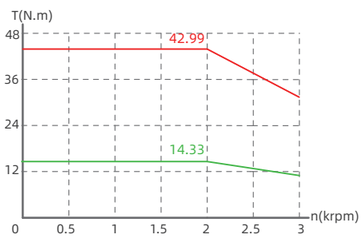
VM7-M20D-02215-□1FN



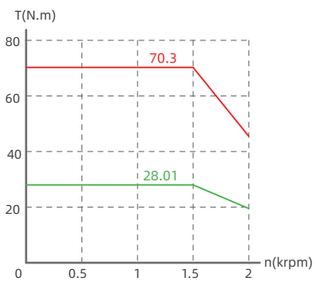
VM7-M26D-03015-□1FN



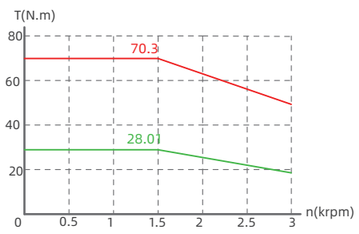
V7E-M13□-3R020-□□



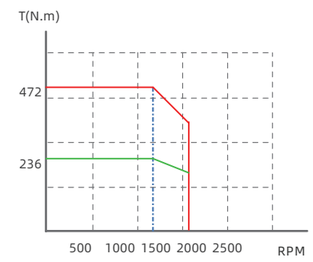
V7E-M18□-4R415-□□



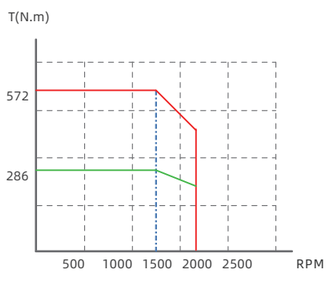
V7E-M18□-4R415-□□H



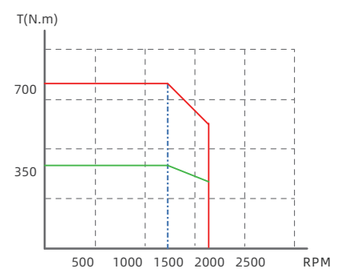
VM7-M26D-03715-□1FN



VM7-M26D-04515-□1FN



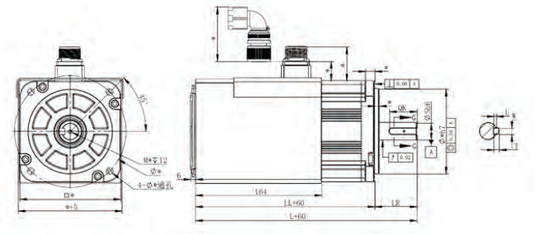
VM7-M26D-05515-□1FN



Fan column

Fans are optional for 110 / 130 / 180 flange motors. For motors with fans, add "F" after the original model.

Motor dimension with fans



After the motor is equipped with fan, the machine length is increased by 60mm, and the other dimensions remain unchanged。

Fan specification

	F12038N27A230
Voltage level / V	230±15AC
Rated current / A	0.135A
Rated air volume / CFM	89
Rated speed / rpm	2650

Brake column

	Model	Static torque / N.m	Rated voltage/ V	Rated current / A
40	Z092-S040B(24V)0.38G8.5-001	0.38	24±10%	0.25
60	Z029-S060B(24V)1.5G12	1.5	24±10%	0.32
80	Z122-S080B(24V)3.8G16-002	3.8	24±10%	0.35
110	Z029-S110B(24V)10G21	10	24±10%	0.81
130	Z092-S130B(24V)16C25-002	16	24±10%	1
180	Z176-S180(24V)50C38	50	24±10%	2

SD700 Servo drive cable introduction

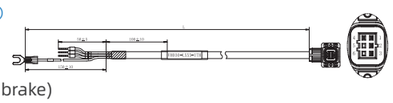
Power cable naming rules

V M 050 - L030 - O T L

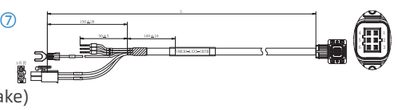
- Product series: V
- Power cable: M
- Cable diameter: 050
  - 030: 0.3mm² cable ≤ 4.5A current
  - 050: 0.5mm² cable ≤ 6A current
  - 075: 0.75mm² cable ≤ 7A current
  - 150: 1.5mm² cable ≤ 11A current
  - 250: 2.5mm² cable ≤ 18A current
  - 400: 4mm² cable ≤ 30A current
- Cable length: L030
  - L030：3m
  - L050：5m
  - L100：10m
  - L150：15m
  - L200：20m
  - L250：25m
  - L300：30m
- Motor end plug: O
  - A-VM7 motor 40/60/80 flange non-holding brake
  - U- V7E motor 40 flange non-holding
  - UB- V7E motor 40 flange with holding brake
  - O- V7E motor 60/80 flange non holding brake
  - OB- V7E motor 60/80 flange with holding brake
  - WP- VM7 motor 40/60/80 flange with waterproof connetor,non-holding brake
  - WB- VM7 motor 40/60/80 flange with waterproof connector and holding brake
  - K-VM7/V7E motor 110/130 flange non-holding brake
  - H- VM7/V7E motor 110/130 flange with holding brake
  - M- VM7/V7E motor 180 flange non-holding brake
- Drive end plug: T
  - N: None (Bare wire / U terminal)
  - T: Fork type cold pressed or pre-insulated tube type terminal)
- Cable material: L
  - L: Standard cable (bending times over 2million)
  - H: Flexible cable (bending times over 10 million)

Motor power cable

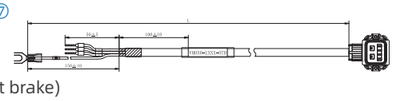
VM030-④-UT⑦
40 flange motor power cable (without brake)



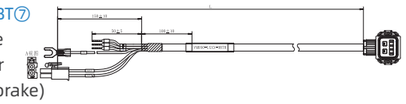
VM030-④-UBT⑦
40 flange motor power cable (with brake)



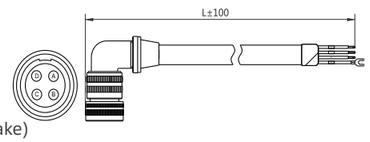
VM050-④-0T⑦
60/80 flange motor power cable (without brake)



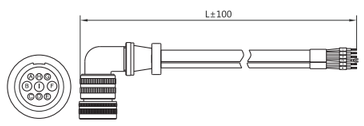
VM050-④-0BT⑦
60/80 flange motor power cable (with brake)



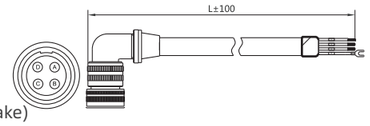
VM150-④-KN⑦
VM250-④-KN⑦
110/130 flange motor power cable (without brake)



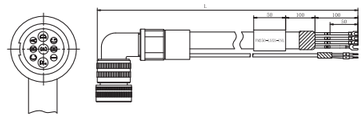
VM150-④-HN⑦
VM250-④-HN⑦
110/130 flange motor power cable



VM250-④-MN⑦
VM400-④-MN⑦
180 flange motor power cable (without brake)



VM250-④-IN⑦
VM400-④-IN⑦
180 flange motor power cable (with brake)



Encoder cable naming rules

V E 04 - L030 - 2 S N L

Product series

Encoder cable

Number of lines

04: 4-pin twisted shielded cable (no external battery power cable)
06: 6-pin twisted shielded cable (with external battery power cable)

Cable length

L030: 3m L200: 20m
L050: 5m L250: 25m
L100: 10m L300: 30m
L150: 15m

Cable material

L: Standard cable (bending times over 2 million)
H: Flexible cable (bending times over 10 million)
C: Hardy flexible towline cable (meet the ambient temperature of -25℃)

Battery

N: No battery
D: With battery
F: With battery box, but no battery (Battery free)

Motor end plug

A: 16M-9A(9-pin integrated injection molding aviation plug)
S: SC-MC7S-A6 (7-pin motor connector)

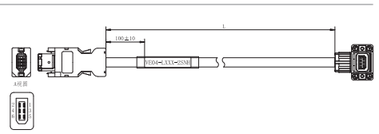
Drive end plug

2: 6 pin 1394 plug

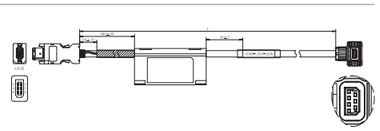
Note: The wire length of the encoder wire defined as " 2S" is more than 15 meters, you need to use the solution of the encoder wire defined as " 2A" plus the adapter wire.

Encoder cable

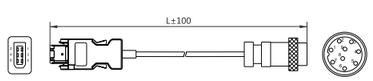
VE04-④-2SN⑧
40/60/80 flange motor encoder cable (no battery)



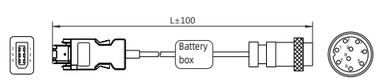
VE06-④-2SD⑧
40/60/80 flange motor encoder cable (with battery)



VE04-④-2AN⑧
110 flange and above motor encoder cable (no battery box)

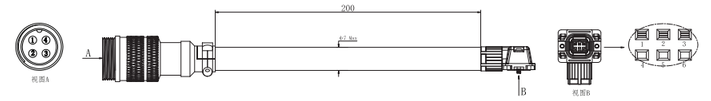


VE06-④-2AD⑧
110 flange and above motor encoder cable (with battery box)

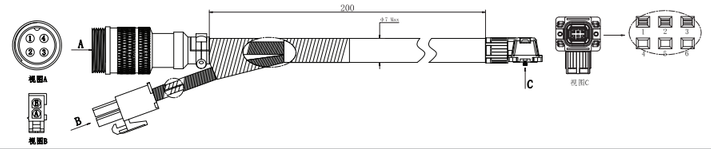


Transfer cable

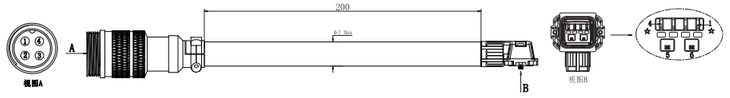
D-VM050-L020-A1-L
VM7 to V7E, 40 flange power transfer cable (0.2m)



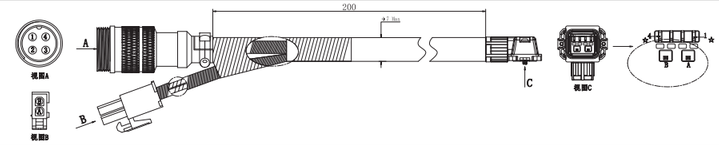
D-VM050-L020-AB2-L
VM7 to V7E, 40 flange power transfer cable (with brake, 0.2m)



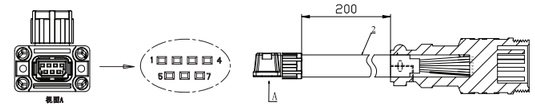
D-VM050-L020-AC1-L
VM7 to V7E, 60/80 flange power transfer cable (0.2m)



D-VM050-L020-AC2-L
VM7 to V7E, 60/80 flange power transfer cable (with brake, 0.2m)



VEF07-L020-ANL
VM7 to V7E, 40/60/80 flange encoder transfer cable (0.2m)



Braking resistor selection

Model	Braking voltage	Internal resistor	Min external resistance	Max external resistance
SD700-1R8A	380V	None	40Ω	200Ω
SD700-3R3A	380V	None	40Ω	100Ω
SD700-5R5A	380V	40Ω 60W	25Ω	70Ω
SD700-7R6A	380V	40Ω 60W	15Ω	50Ω
SD700-9R5A	380V	40Ω 60W	15Ω	40Ω
SD700-120A	380V	30Ω 200W	10Ω	30Ω
SD700-160A	380V	30Ω 200W	10Ω	30Ω
SD700-2R5D	700V	80Ω 60W	80Ω	220Ω
SD700-3R8D	700V	80Ω 60W	55Ω	180Ω
SD700-6R0D	700V	40Ω 60W	35Ω	110Ω
SD700-8R4D	700V	40Ω 60W	25Ω	85Ω
SD700-110D	700V	40Ω 60W	25Ω	70Ω
SD700-170D	700V	30Ω 200W	30Ω	50Ω
SD700-240D	700V	30Ω 200W	15Ω	40Ω
SD700-300D	700V	30Ω 200W	15Ω	30Ω
SD700-500D	700V	None	10Ω	20Ω
SD700-600D	700V	None	10Ω	20Ω
SD700-700D	700V	None	10Ω	15Ω
SD700-800D	700V	None	10Ω	15Ω
SD700-121D	700V	None	8Ω	10Ω
SD700-171D	700V	None	6Ω	8Ω