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Welcome to know us：www.dorna.com.cn

DORNA™
SERVO SERIES

DS1/DM1 PRODUCT CATALOG

FROM TOP TECHNOLOGY

DORNA TECHNOLOGY CO., LTD

SMART INDUSTRY 4.0

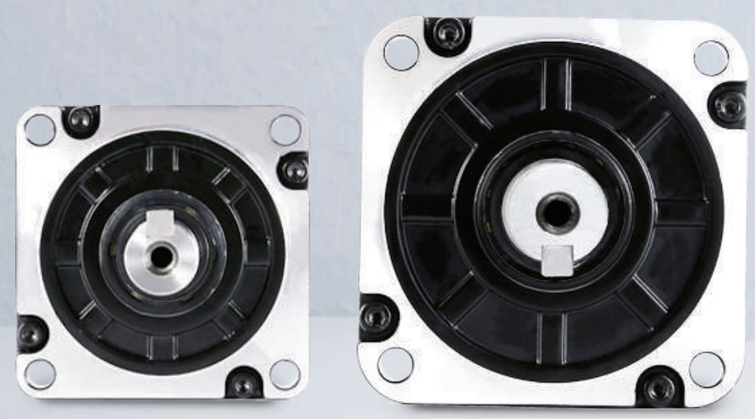
Provide High Performance,High Reliability,High Cost Performance Solution

Advanced algorithm

Advanced motor design

High performance platform

High speed EtherCAT communication



We focus on servo for 13 yrs

Ever since DORNA started in 2006, it has always been our prime objective to delivery value for customers of various machine OEM industries.

2006
DORNA established in Jiashan Zhejiang, China.

2007
Our first servo drive was developed.

2008
President Xi Jinping visited DORNA.

2010
Our servo R&D received national high-tech funding.

2012
EPS-B1 servo series was developed.

2013
New segmented motor design was developed.

2014
Strategic alliance with Beijing Hiconics.

2018年
All new DS1、DM1 were developed.

2019
New start

INTRODUCTION COMPANY

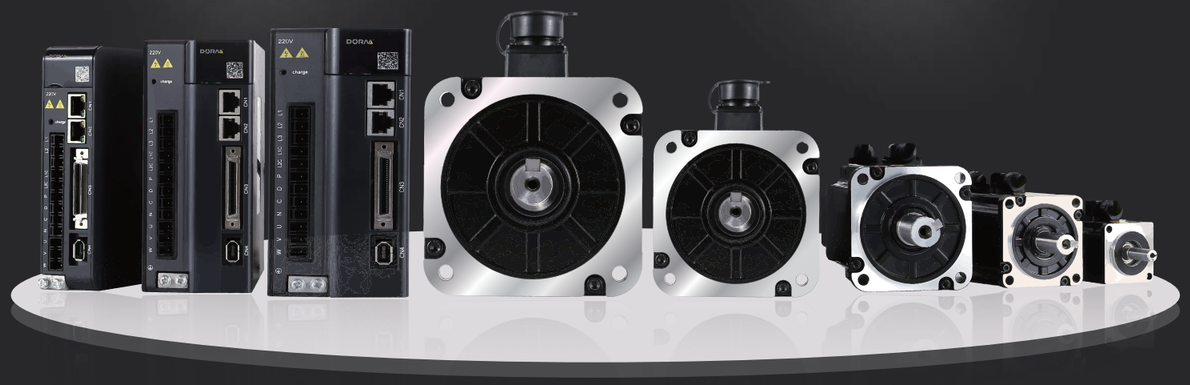
Dorna Technology Co., Ltd. is a high-tech enterprise specializing in R&D, production and sales of AC servo motor, servo driver, encoder and motion control system. Its core product "AC servo drive system" is a servo drive system developed independently, with excellent performance and reliability. High, widely used in CNC machine tools, engraving machinery, textile machinery, packaging and printing, 3C industry, robotics industry and other automation fields, and has a "three-system" certificate (ISO 9001 quality assurance system, ISO 14001 environmental management system, OHSAS 18001 occupational health and safety management system).

HONORARY QUALIFICATIONS

At present, the company has 85 patents, including 3 invention patents, 57 utility models and 25 appearance patents. It has developed and completed 12 provincial-level new products and national-level high-tech products. Among them, it has won 2 national-level innovation fund projects and 1 provincial key science and technology projects. It has been awarded "Zhejiang Software Enterprise", "Zhejiang Manufacturing", "National High-tech Enterprise", "Zhejiang Science and Technology Small and Medium-sized Enterprises", "Zhejiang Excellent Private Science and Technology Enterprise", "Zhejiang Research Institute" and so on. The company always pays attention to improving the ability of scientific and technological innovation, and attaches importance to scientific and technological cooperation and exchanges. At present, we have established a cooperative relationship with Tsinghua University, Zhejiang University, Zhejiang University of Science and Technology and other institutions of higher learning and scientific research institutes to jointly promote technological innovation in industrial control industry.

DORNA™

-PRODUCT FAMILY LINEUP-



DS1 SERIES			
100W	750W	1500W	4500W
200W	1000W	2000W	5500W
400w		3000W	7500W

DM1 SERIES					
□180	□130	□100	□80	□60	□40
2400W	850W	1000W	750W	200W	50W
4400W	1000W	1500W	1000W	400W	100W
5500W	1500W	2000W			
7500W	1800W	2500W			
	2000W				
	3000W				

DS1 SERIES SERVO DRIVE

Vibraion suppression

Auto tuning

High speed pulse

Safety

Automatic gain switchover

Resonance suppression

Fully closed-loop

Vibration control

Vibration suppression

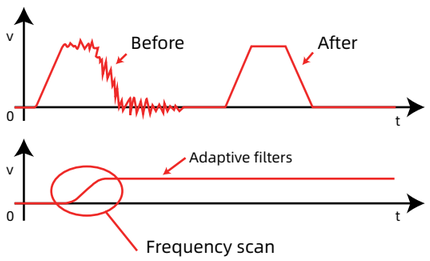
Descriptions

1、Up to 4 adpative filters to reduce vibrations.

2、Vibration pattern tracking.

Examples

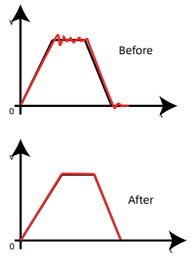
Industrial robot, welding equipment



Auto tuning

Descriptions

Simple operations to detect load inertia, friction torque low-pass filtering etc.



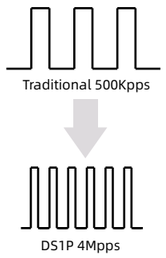
Examples

Most applications

High speed pulse input

Descriptions

Up to 4Mpps high speed pulse input to ensure high speed operations



Examples

Semi-conductor equipment, sealing machine, machine tools

Safety functions

Descriptions

Safety functions such as STO (opetional) to ensure persoanl and equipment safety.

Examples

Most applications.

Automatic gain switchover

Descriptions

This function can increase gains at positioning to shorten positioning time and decrease gains at stop to suppress vibrations.

Examples

Most applications

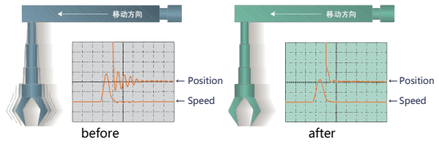
Resonance suppression

Descriptions

This function can be applied to remove intrinsic vibration frequencies to reduce vibrations at stop.

Examples

Sealing machine, manipulators



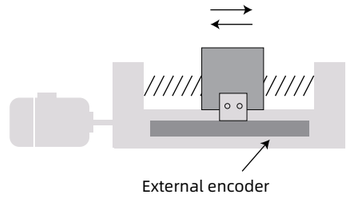
Fully closed-loop control

Descriptions

An external encoder is used together with the servo system to ensure conrolt accuracy not affected by mechanical or environmental factors.

Examples

Conveyors, bending machines



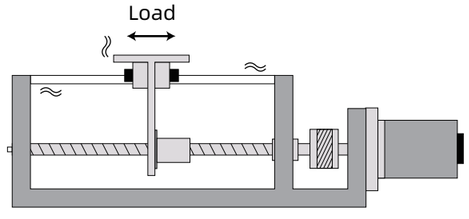
Load disturbance suppression

Descriptions

The servo can adjust itself automatically if load changes.

Examples

Most applications



NAMING RULES

DS1 series servo drives

Item	DS1	P	- 08	A	S	- *	- ****
Series							
Type	Pulse	P					
	EtherCAT	E					
Capacity	0.1KW		01				
	0.2KW		02				
	0.4KW		04				
	0.75KW		08				
	1.0KW		10				
	1.5KW		15				
	2.0KW		20				
	3.0KW		30				
	4.5KW		45				
	5.5KW		55				
	7.5KW		75				
Input voltage	220V			A			
	380V			B			
Encoder	17~23bit absolute				S		
	HIPERFACE DSL				D		
	Resolver				R		
Non standard	16bit high resolution analog					A	
	Standard					/	
Customerization	Standard						/

SPECIFICATIONS

DS1 series servo drives

General specifications												
DS1 ☐ -	A5A	01A	02A	04A	08A	10A	15A	20A	30B	45B	55B	75B
Capacity	50W	100W	200W	400W	750W	1KW	1.5KW	2KW	3KW	4.5KW	5.5KW	7.5KW
L (mm)	170	170	170	170	180	180	185	185	185	230	230	230
W (mm)	40	40	40	40	70	70	90	90	90	100	100	100
H (mm)	160	160	160	160	160	160	160	160	160	250	250	250

Basic specifications											
Input power	1PH AC220V ± 15% 50/60HZ							3PH AC380V ± 15% 50/60HZ			
Main circuit	1PH AC220V			1PH/3PH AC220V		3PH AC220V		3PH AC380V			
Capacity (Kw)	0.1	0.2	0.4	0.75	1.0	1.5	2.0	3.0	4.5	5.5	7.5
Rated current (A)	1.4	1.6	2.8	4.8	7.6	10.0	14.0	11.9	16.5	20.8	25.7
Max current (A)	4.9	5.6	9.8	16.8	26.6	30.0	42.0	29.8	41.3	52.0	64.3
Power capacity (kVA)	0.25	0.55	1.0	1.9/1.5	2.5/2.0	3.2	4.0	7.1	11.7	12.4	14.4
Regeneration	Not built-in. Can use external.			Built-in, can use external.							
Feedback	17bit (131072 ppr) 23bit (8388608 ppr)										

Use conditions	
Ambient temperature for use	0~45℃
Ambient temperature for storage	-20~65℃
Ambient humidity for use	0~90% RH (without condensing)
Ambient humidity for storage	0~90% RH (without condesning)
IP class/cleanness	Protection class: IP10; Cleanness: 2. But should be: •With no corrosive or combustible gas •With no water, oil or drug splashing •With little dust, ash, salt or metallic powder
Vibration	Below 5.8m/s² (0.6G) 0~60HZ (Not for continuous use in resonance)
Insulation	1500V 1min
Altitude	1000m or below

Others	
Applicable standard	CE
Structure	Pedestrial type
Display/operations	7 segment LEDx5, 4 keys
Overtravel (OT)	OT can take action at power OFF, servo alarm, etc.

CN7:PC communication

CN6:STO

CN5:Reserved

Display

CN1/CN2: communcation

- DS1E: EtherCAT
- DS1P: RS485

Main power indicator

L1/L2 main power supply

L1C/L2C control power supply

P/D/C regenerative resistors

U/V/W servo motor power

CN4 encoder feedback

CN3 User I/O

LED display

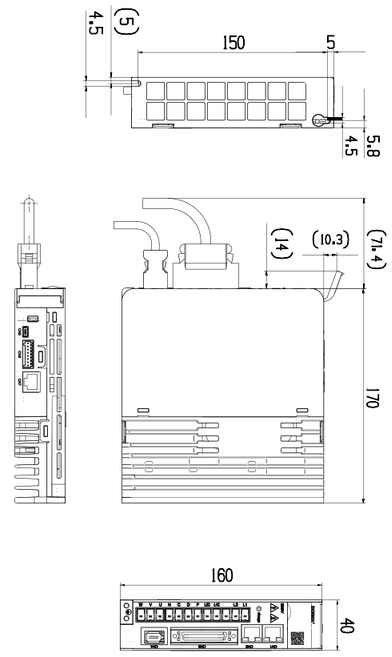
Keys

MODELS **DS1** series servo drives

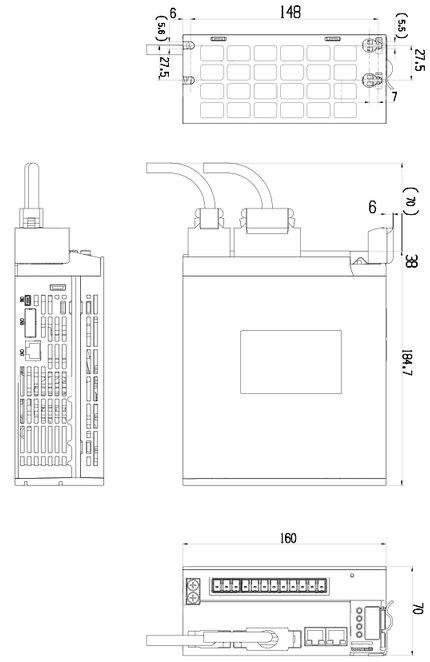
DS1E specifications	
EtherCAT slave specifications	
Protocol	EtherCAT
Standard	CoE (PDO、SDO)
Synchronous mode	DC-Distributed Clock
Physical layer	100BASE-TX
Baud rate	100 Mbit/s (100Base-TX)
Duplex mode	Full duplex
Topology	Ring type, serial type
Transmission media	Above level 5 with shielding
Transmission distance	Between nodes: up to 100 m
Number of slaves	In theory 65535, in real use less than 100
Communication ports	2ports (RJ45 connector) CN1 (RJ45): EtherCAT Signal OUT CN2 (RJ45): EtherCAT Signal IN
SyncManager	4
FMMU	3
Input/output signals	
Digital input	6 DI (optocoupler isolation input)
	POT, NOT, CLR, A-RST, GAIN,INHIBIT etc.
Digital output	4 DO (optocoupler isolation output)
	Change of signal distribution: ALM、COIN、CZ、BK、S-RDY
Others	
Display	Main power CHARGE, 5 segment LED display, 4 keys
	Status monitoring, parameter editing, auxiliary functions etc.
PC communication	Media: RS485
	Protocol: MODBUS
Protections	Over-current, over-voltage, under-voltage, over-load, regenerative fault, etc.
Auto tuning	Yes
Online FFT	Yes
Vibration suppression	Yes
PC software	Yes

DS1P series servo drive specifications	
Speed/torque control mode	
Speed control precision	1:5000
Speed fluctuation rate	Load fluctuation: 0 ~100% load: below 0.01% (at rated speed) Voltage fluctuation: Rated voltage ±10%: 0.001% (at rated speed) Temperature fluctuation: 25 ±25℃: below ±0.1% (at rated speed)
Torque control precision	±3% (repeatable)
Soft start time	10S
Speed instruction input	Instruction voltage: max.±10V (motor rotates in positive direction at positive voltage)
	Input impedance: approximately 9kΩ
Internal speed control	Speed selection: external I/O
Torque instruction input	Instruction voltage: max.±10V (motor rotates in positive direction at positive voltage)
	Input impedance: approximately 9kΩ
Position control mode	
Feedforward compensation	0~100% (Unit: 1%)
Position completion width	1~1073741824 instruction units
NEAR width setting	1~1073741824 instruction units
Instruction inputs	Low speed open-collector input High speed long line-driver input
Pulse form	PULS+SIGN, CW+CCW, A+B
Input pulse frequency	PULS+SIGN / CW+CCW / A+B / Min pulse width Long line-driver: 4Mbps / 4 Mpps / 1 Mpps / 0.125μs Line-driver: 500Kpps / 500Kpps / 125Kpps / 1μs Open-collector: 200Kpps / 200Kpps / 200Kpps / 2.5μs
Others	
Display	Line-driver
	Open-collector
Communication	Media: RS485
	Protocol: MODBUS
Protection function	Overload, overvoltage, overcurrent, power supply abnormality, encoder abnormality, position deviation too large
Automatic adjustment function	Yes
Online FFT function	Yes
Vibration suppression function	Yes
Software debugging function	Yes
I/O signals	
Position output	Output forms: A phase, B phase, Z phase; Z phase differential; Signal 0 output
	Frequency division: any
Digital input	8 DI (optocoupler isolation input)
	Change of signal distribution: S-ON、C-MOD、POT、 NOT、CLR、A-RST、GAIN、INHIBIT.
Digital output	4 DO (optocoupler isolation output)
	Change of signal distribution: ALM、COIN、CZ、BK、S-RDY.

Dimensions (100w、200w、400w)

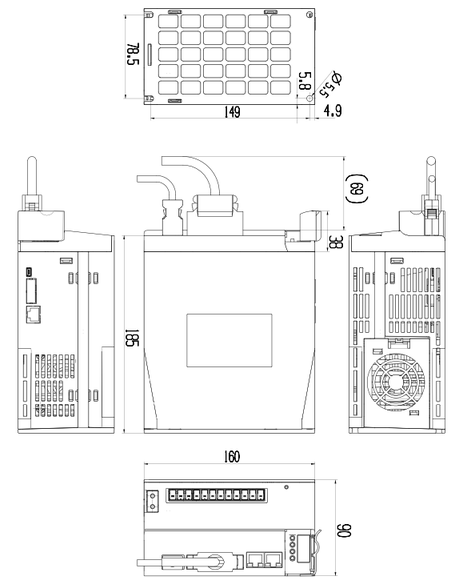


Dimensions (750w、1kw)

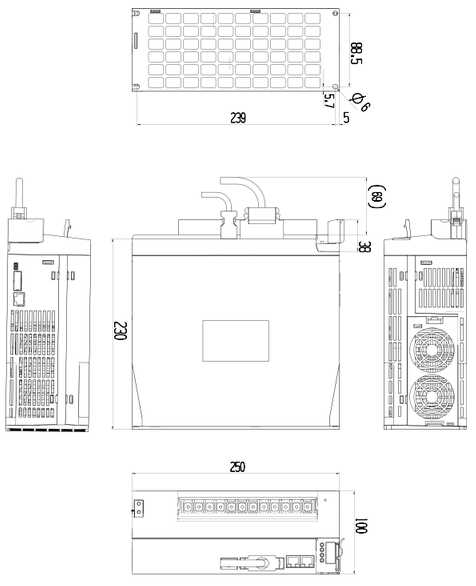


Unit: mm

Dimensions (1.5kw、2kw、3kw)



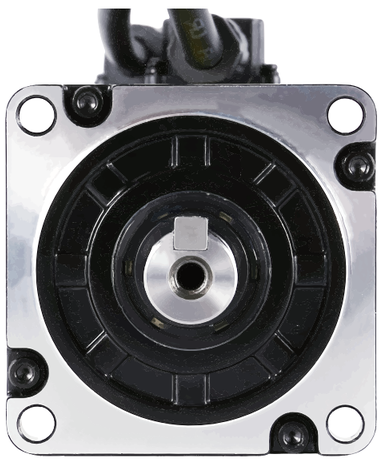
Dimensions (4.5kw、5.5kw、7.5kw)



Unit: mm

DM1 SERIES SERVO MOTORS

DM1 SERIES SERVO MOTOR FEATURES



High performance

17/23bit

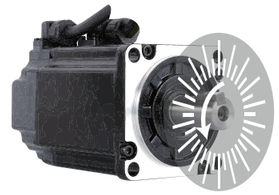
IP67

Vibration resistance

High performance

Descriptions

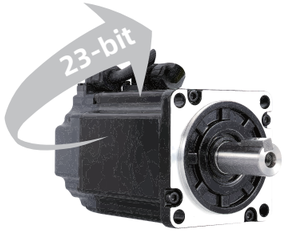
Max speed 6000RPM
Up to 3.5 times overload



17/23bit encoders

Descriptions

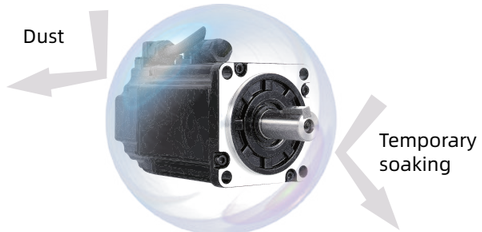
①17bit single turn absolute magnetic encoders, can work long time in oily environment.
②23bit absolute optical encoders, 8 million ppr, resolution up to 0.15 arc/sec.



IP67

Descriptions

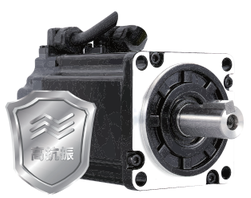
Up to IP67 protection class



High vibration resistance

Descriptions

Magnetic encoder can work in vibrations up to 20g.
Optical encoder can work in vibrations up to 5g.



NAMING RULES DM1 series servo motors

Item	DM	1	M	- 01	A	40	I	8	S	- **
Series										
Type	Design sequence	1								
Rotor inertia	Ultra low		U							
	Low		S							
	Medium		M							
	High		H							
	Ultra high		G							
Capacity	50W			A5						
	100W			01						
	200W			02						
	400W			04						
	750W			08						
	850W			09						
	1.0KW			10						
	1.3KW			13						
	1.5KW			15						
	1.8KW			18						
	2.0KW			20						
	2.5KW			25						
	2.9KW			29						
	3.0KW			30						
	4.4KW			44						
	5.5KW			55						
	7.5KW			75						
Voltage	220V				A					
	380V				B					

NAMING RULES DM1 series servo motors

Item	DM	1	M	- 01	A	40	I	8	S	- **
Flange size	☐40mm					40				
	☐60mm					60				
	☐80mm					80				
	☐100mm					100				
	☐130mm					130				
	☐180mm					180				
Encoder type	17-bit signle turn absolute magnetic encoder						I			
	17-bit multi-turn/23-bit single turn absolute optical encoder						L			
Shaft end	No keyway							7		
	With keyway, with screw hole							8		
Options	No brake, no oil seal								1	
	With brake, no oil seal								B	
	No brake, with oil seal								S	
	With brake, with oil seal								E	
Customization	Standard*									/
	IP67 connector（☐40、☐60、☐80）									-P
	Customerized									-**

*notes： ☐40、☐60、☐80：with oil seal IP65 protection class, except connectors
☐100、☐130、☐180：with oil seal, IP67 protection class

SPECIFICATIONS

DM1 series servo motor

Flange	□40		□60		□80		□100			
Capacity	50W	100W	200W	400W	750W	1.0KW	1.0KW	1.5KW	2.0KW	2.5KW
Voltage	220V									
Rated time	Continuous									
Heat resistance grade	F									
Insulation resistance	DC500V，1S，≥100MΩ									
Dielectric Strength	AC1800V，1S，leak current≤8mA									
Excitation mode	Permanent magnetic									
Installation	Flange type									
Connection	Direct connection									
Rotating direction	Position direction: CCW when viewing from load side									
Vibraiton class	V15									
Environment condition										
Ambient temperature for use	0℃-40℃									
Ambient humidity for use	20%-80%RH（no condensing）									
Environment for use	● indoor places without corrosive or explosive gas ● places with good ventilation, less dust, garbage and moisture ● places convenient for inspection and cleaning ● < 1000m above sea level (when 1000m-2000m, it can be used after the derating) ● places without strong magnetic field									
Environment for storage	Please observe the following environmental requirements when keeping the motor in the state of no power supply. Storage temperature: - 20 ℃ - + 60 ℃ (not frozen) Storage humidity: 20% - 80% RH (no condensing)									
Impact strength										
Impact acceleration (based on the standard of flange)	490m/s²									
Impact times	2time									
Vibration resistance										
Vibration acceleration (based on the standard of flange)	490m/s²						49m/s²(front and end direction 24.5m/s²)			

DM1 Motor parameters

Flange	□130							□180			
Capacity	1.0KW	1.5KW	2.0KW	3.0KW	850W	1.3KW	1.8KW	2.9KW	4.4KW	5.5KW	7.5KW
Voltage	220V				380V						
Rated time	Continuous										
Heat resistance grade	F										
Insulation resistance	DC500V，1S，≥100MΩ										
Dielectric Strength	AC1800V，1S，leak current≤8mA				AC2200V，1S，leak current≤8mA						
Excitation mode	Permanent magnetic										
Installation	Flange type										
Connection	Direct connection										
Rotating direction	Position direction: CCW when viewing from load side										
Vibraiton class	V15										
Environment condition											
Ambient temperature for use	0℃-40℃										
Ambient humidity for use	20%-80%RH（no condensing）										
Environment for use	● indoor places without corrosive or explosive gas ● places with good ventilation, less dust, garbage and moisture ● places convenient for inspection and cleaning ● < 1000m above sea level (when 1000m-2000m, it can be used after the derating) ● places without strong magnetic field										
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Impact strength											
Impact acceleration (based on the standard of flange)	490m/s²										
Impact times	2time										
Vibration resistance											
Vibration acceleration (based on the standard of flange)	49m/s²(front and end direction 24.5m/s²)										24.5m/s²

MODELS DM1 series servo motors

Flange size	□40		□60		□80	
Rated capacity（kW）	0.05	0.1	0.2	0.4	0.75	1
Rated voltage（v）	220	220	220	220	220	220
Rated torque（N·m）	0.16	0.32	0.64	1.27	2.39	3.18
Max torque（N·m）	0.56	1.12	2.24	4.50	8.40	11.13
Rated current（A）	1.30	1.30	1.50	2.80	4.80	6.40
Max current（A）	4.55	4.55	5.25	10.80	16.80	22.4
Rated speed（rpm）	3000	3000	3000	3000	3000	3000
Max speed（rpm）	6000	6000	6000	6000	6000	6000
Rotary inertia（10-4kg.m²）	0.026	0.041	0.207	0.376	1.38	1.75
Brake type	Holding	Holding	Holding	Holding	Holding	Holding
Brake capacity（w）	6.1	6.1	7.3	7.3	8.5	8.5
Brake voltage（v）	24	24	24	24	24	24
Brake friction torque（N·m）	0.32	0.32	1.27	1.27	3.18	3.18
Brake suction time（ms）	100	100	100	100	100	100
Brake release time（ms）	60	60	80	80	80	80
Brake inertia（10-4kg.m²）	0.002	0.002	0.013	0.013	0.05	0.05

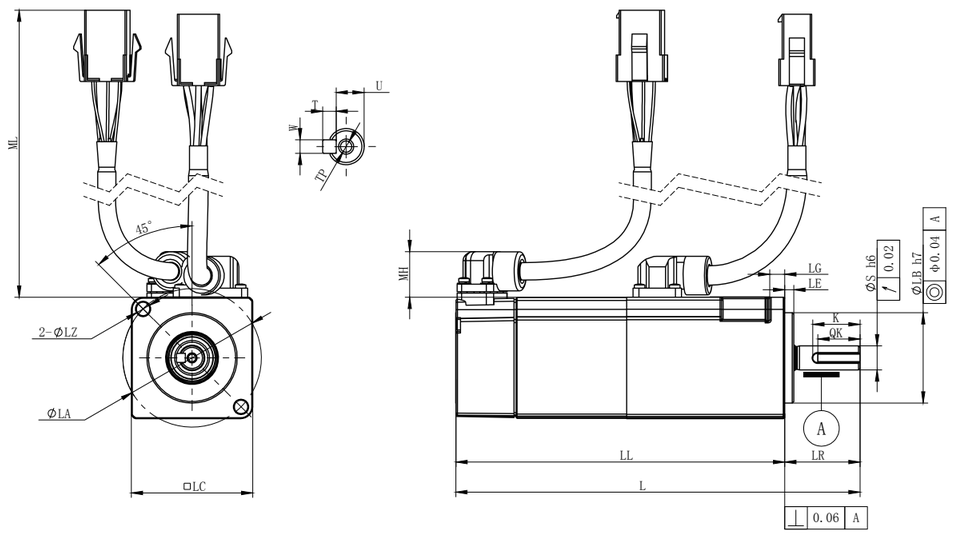
Flange size	□100				
Rated capacity（kW）	1	1.5	2	2.5	
Rated voltage（v）	220	220	220	220	
Rated torque（N·m）	3.18	4.77	6.37	7.96	
Max torque（N·m）	9.55	14.30	19.10	23.88	
Rated current（A）	6.60	8.20	11.30	14.69	
Max current（A）	28.00	35.00	48.00	63.17	
Rated speed（rpm）	3000	3000	3000	3000	
Max speed（rpm）	5000	5000	5000	5000	
Rotary inertia（10-4kg.m²）	2.15	3.1	4.06	5.02	
Brake type	Holding	Holding	Holding	Holding	
Brake capacity（w）	14.4	14.4	14.4	14.4	
Brake voltage（v）	24	24	24	24	
Brake friction torque（N·m）	8	8	8	8	
Brake suction time（ms）	120	120	120	120	
Brake release time（ms）	60	60	60	60	
Brake inertia（10-4kg.m²）	0.35	0.35	0.35	0.35	

Flange size	□130						
Rated capacity（kW）	1	1.5	2	3	0.85	1.3	1.8
Rated voltage（v）	220	220	220	220	380	380	380
Rated torque（N·m）	4.77	7.16	9.55	14.32	5.39	8.34	11.50
Max torque（N·m）	14.30	21.50	28.60	42.96	16.17	25.02	34.50
Rated current（A）	5.20	7.65	9.90	16.92	3.30	5.00	6.60
Max current（A）	15.60	24.00	29.70	50.76	9.90	15.00	19.80
Rated speed（rpm）	2000	2000	2000	1500	1500	1500	1500
Max speed（rpm）	3000	3000	3000	3000	3000	3000	3000
Rotary inertia（10-4kg.m²）	6.74	9.66	12	13.68	12.9	19.9	26
Brake type	Holding	Holding	Holding	Holding	Holding	Holding	Holding
Brake capacity（w）	23	23	23	23	23	23	23
Brake voltage（v）	24	24	24	24	24	24	24
Brake friction torque（N·m）	16	16	16	16	16	16	16
Brake suction time（ms）	100	100	100	100	100	100	100
Brake release time（ms）	80	80	80	80	80	80	80
Brake inertia（10-4kg.m²）	1.22	1.22	1.22	1.22	1.22	1.22	1.22

Flange size	□180				
Rated capacity（kW）	2.9	4.4	5.5	7.5	
Rated voltage（v）	380	380	380	380	
Rated torque（N·m）	18.60	28.40	35.00	48.00	
Max torque（N·m）	46.50	71.00	87.50	120.00	
Rated current（A）	11.90	16.50	20.85	25.70	
Max current（A）	29.75	41.25	52.13	64.25	
Rated speed（rpm）	1500	1500	1500	1500	
Max speed（rpm）	3000	3000	3000	3000	
Rotary inertia（10-4kg.m²）	51.8	85.7	103.8	137.8	
Brake type	Holding	Holding	Holding	Holding	
Brake capacity（w）	32.2	32.2	32.2	32.2	
Brake voltage（v）	24	24	24	24	
Brake friction torque（N·m）	48	48	48	48	
Brake suction time（ms）	100	100	100	100	
Brake release time（ms）	80	80	80	80	
Brake inertia（10-4kg.m²）	2.43	2.43	2.43	2.43	

DM1 series servo motor dimensions

40 flange motors (unit: mm)

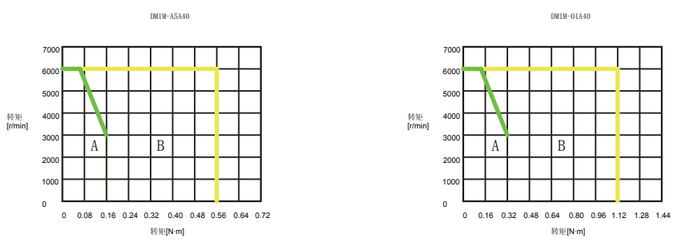


☐40 flange motor dimensions (unit: mm)

Capacity	L	LL	LR	LA	LB	LC	LE	LG
50W	88（120）	63（95）	25	46	30	40	3	3.5
100W	102（134）	77（109）	25	46	30	40	3	3.5

LZ	S	K	QK	W	T	U	TP
4.5	8	15.7	14	3	3	6.2	M3 deep 7
4.5	8	15.7	14	3	3	6.2	M3 deep 7

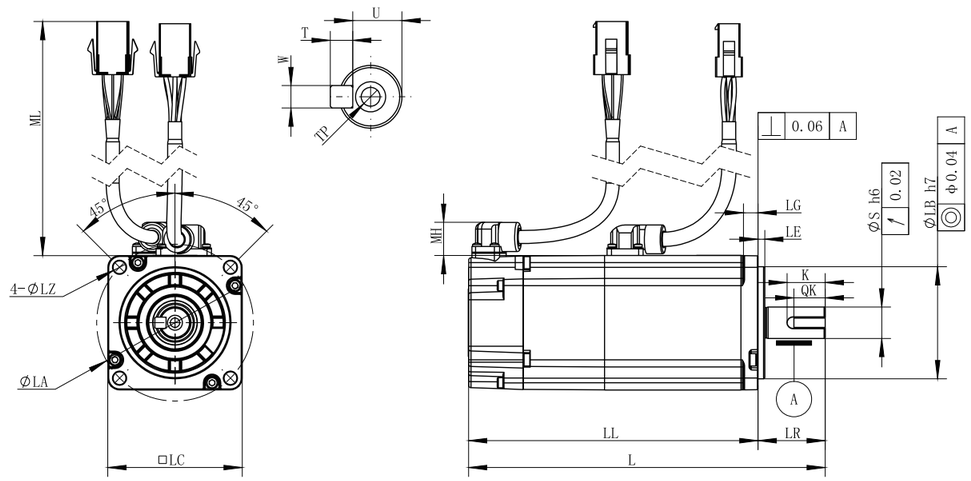
(with brackets): dimensions with brake



DM1 series servo motor T-N curves

DM1 series servo motor dimensions

60 flange motors (unit: mm)

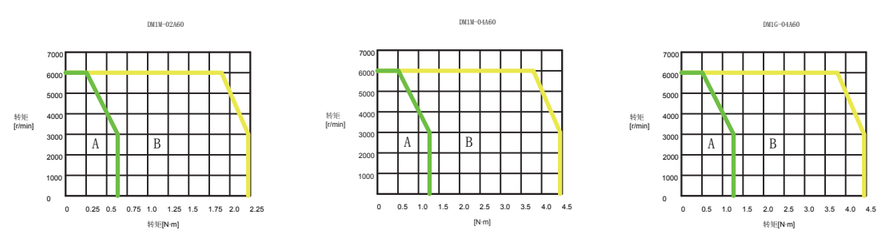


☐60 flange motor dimensions (unit: mm)

Capacity	L	LL	LR	LA	LB	LC	LE	LG
200W	108.5（142）	78.5（112）	30	70	50	60	3	6.5
400W	126.5（60）	96.5（130）	30	70	50	60	3	6.5

LZ	S	K	QK	W	T	U	TP
5.5	14	17	14	5	5	11	M5 deep 12
5.5	14	17	14	5	5	11	M5 deep 12

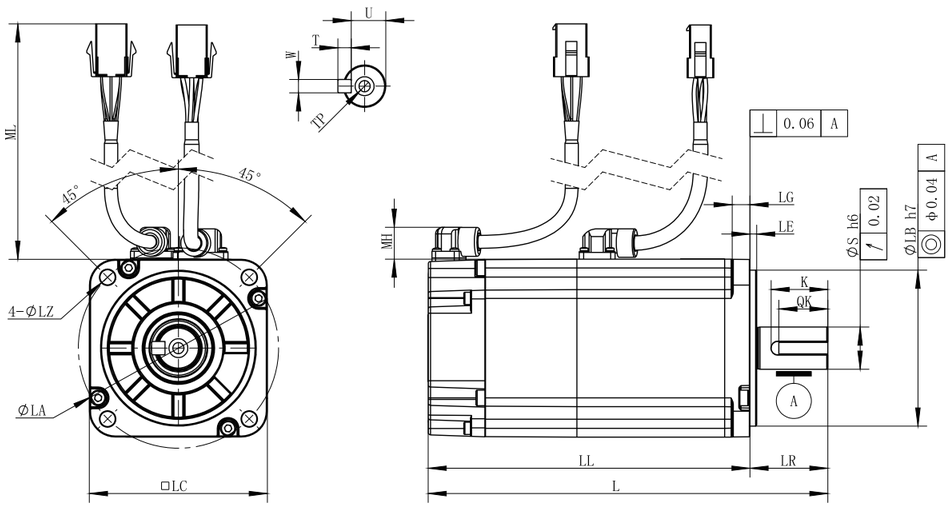
(with brackets): dimensions with brake



DM1 series servo motor T-N curves

DM1 series servo motor dimensions

80 flange motors (unit: mm)

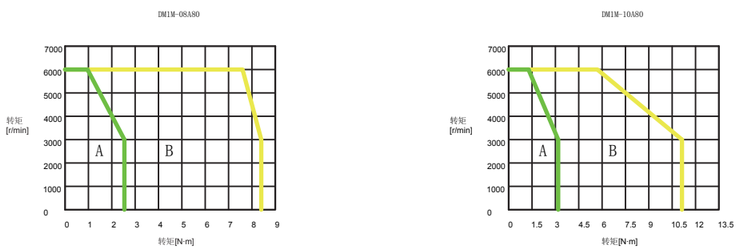


☐80 flange motor dimensions (unit: mm)

Capacity	L	LL	LR	LA	LB	LC	LE	LG	LZ
750W	143（180）	108（145）	35	90	70	80	3	8	6.6
1000W	155（192）	120（157）	35	90	70	80	3	8	6.6

S	K	QK	W	T	U	TP
19	22	25.5	6	6	15.5	M6 deep 14
19	22	25.5	6	6	15.5	M6 deep 14

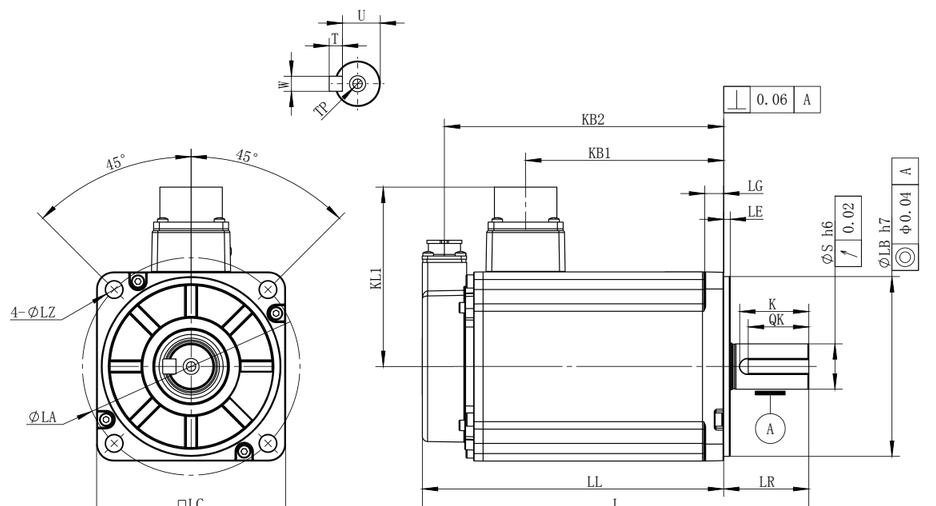
(with brackets): dimensions with brake



DM1 series servo motor T-N curves

DM1 series servo motor dimensions

100 flange motors (unit: mm)

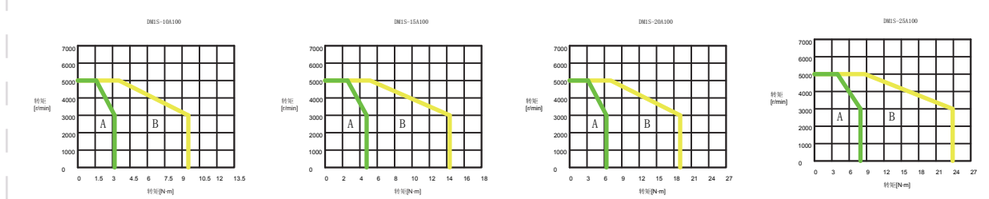


☐100 flange motor dimensions (unit: mm)

Capacity	L	LL	LR	KB1	KB2	KL1	LA	LB
1KW	165	120（160）	45	65	108（148）	95	115	95
1.5KW	185	140（180）	45	85	128（168）	95	115	95
2KW	205	160（200）	45	105	148（188）	95	115	95
2.5KW	225	180（220）	45	125	168（208）	95	115	95

LC	LE	LG	LZ	S	K	QK	W	T	U	TP
100	3.5	10	9	24	36.5	32	8	7	20	M6 deep 16
100	3.5	10	9	24	36.5	32	8	7	20	M6 deep 16
100	3.5	10	9	24	36.5	32	8	7	20	M6 deep 16
100	3.5	10	9	24	36.5	32	8	7	20	M6 deep 16

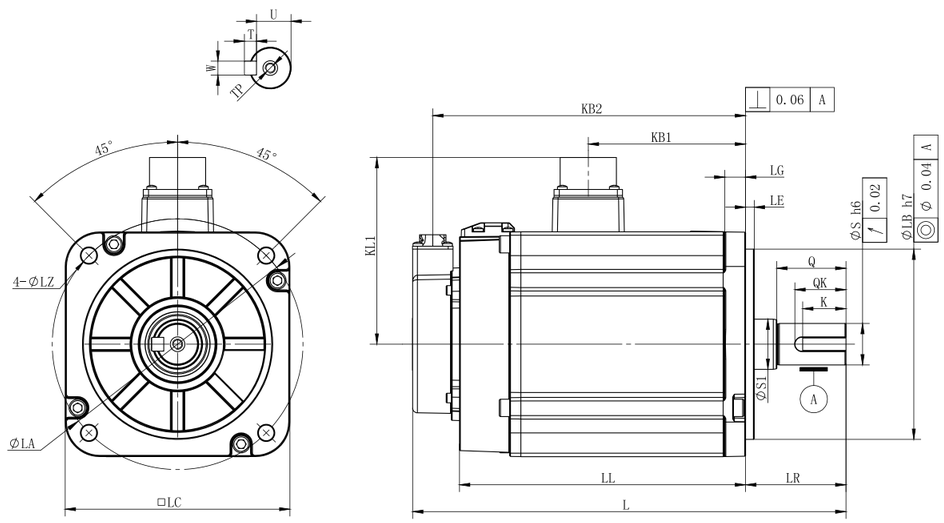
(with brackets): dimensions with brake



DM1 series servo motor T-N curves

DM1 series servo motor dimensions

130（Minor inertia） flange motors (unit: mm)

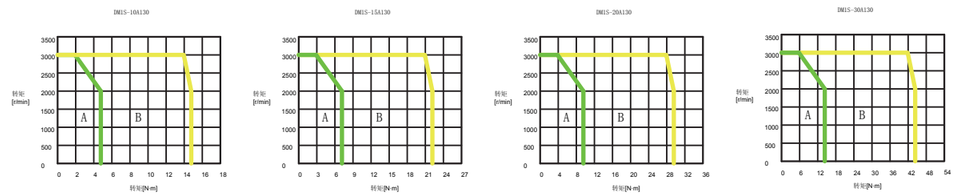


□130 flange motor dimensions (unit: mm)

Capacity	L	LL	LR	KB1	KB2	KL1	LA	LB	LC
1KW	172（201）	117（146）	55	61	105（134）	108	145	110	130
1.5KW	187（216）	132（161）	55	76	120（149）	108	145	110	130
2KW	202（231）	147（176）	55	91	135（164）	108	145	110	130
3KW	232（271）	177（206）	55	121	165（194）	108	145	110	130

LE	LG	LZ	S	S1	Q	K	QK	W	T	U	TP
5	12	9	22	28	49	32	36.5	8	7	18	M6 deep 16
5	12	9	22	28	49	32	36.5	8	7	18	M6 deep 16
5	12	9	22	28	49	32	36.5	8	7	18	M6 deep 16
5	12	9	22	28	49	32	36.5	8	7	18	M6 deep 16

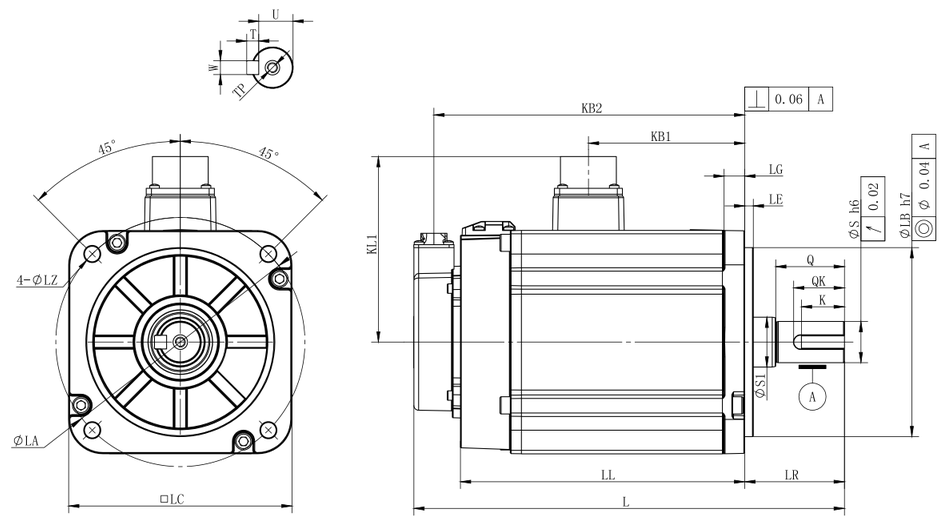
(with brackets): dimensions with brake



DM1 series servo motor T-N curves

DM1 series servo motor dimensions

130（Middle inertia） flange motors (unit: mm)



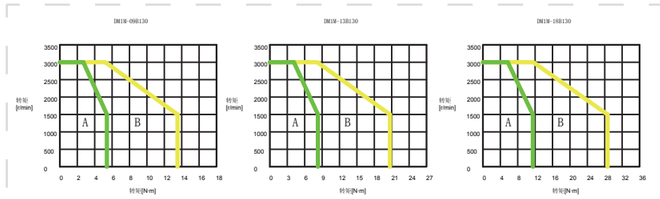
□130 flange motor dimensions (unit: mm)

Capacity	L	LL	LR	KB1	KB2	KL1	LA	LB
0.85KW	195（219）	137（166）	58	61	125（152）	108	145	110
1.3KW	211（238）	153（185）	58	76	141（168）	108	145	110
1.8KW	229（256）	171（203）	58	91	159（185）	108	145	110

LC	LE	LG	LZ	S	S1	Q	K	QK	W
130	5	12	9	19	28	40	27.5	25	5
130	5	12	9	22	28	40	28.5	25	6
130	5	12	9	24	28	40	29.5	25	8

T	U	TP
5	16	M5 deep 12
6	18.5	M5 deep 12
7	20	M5 deep 12

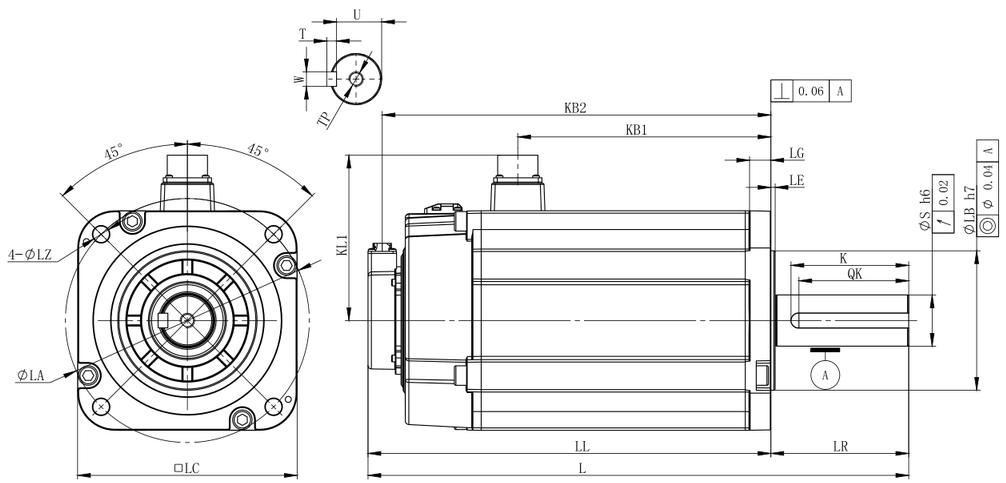
(with brackets): dimensions with brake



DM1 series servo motor T-N curves

DM1 series servo motor dimensions

180 flange motors (unit: mm)

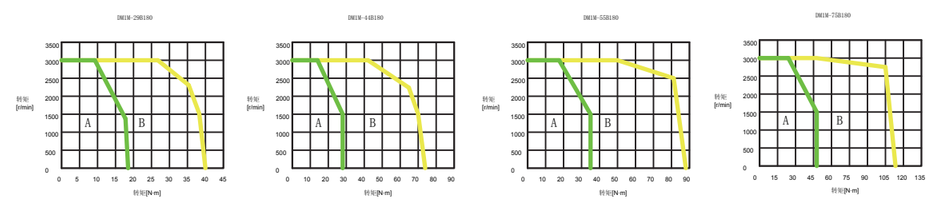


□180 flange motor dimensions (unit: mm)

Capacity	L	LL	LR	KB1	KB2	KL1	LA	LB	LC
2.9KW	244 (297)	165 (218)	79	95	153 (206)	136	200	114.3	180
4.4KW	272 (325)	193 (246)	79	123	181 (234)	136	200	114.3	180
5.5KW	235 (388)	222 (275)	113	152	210 (263)	136	200	114.3	180
7.5KW	391 (444)	278 (331)	113	208	266 (319)	136	200	114.3	180

LE	LG	LZ	S	K	QK	W	T	U	TP
3.5	17.5	13.5	35	65.5	60	10	8	30	M12 deep 25
3.5	17.5	13.5	35	65.5	60	10	8	30	M12 deep 25
3.5	17.5	13.5	42	96.5	90	12	8	37	M16 deep 32
3.5	17.5	13.5	42	96.5	90	12	8	37	M16 deep 32

(with brackets): dimensions with brake



DM1 series servo motor T-N curves

TECHNOLOGY LEADS THE MARKET,
QUALITY CASTS BENCHMARK