

SUMMARY OF D.C. MOTORS

各種産業機械に、特殊電装のD.C.モータ

小型軽量、高性能、高品質、多機種、多用途

TOKUSHUDENSO D.C. Motors for Various Industry Machines. Small-Sized and Light, High Performance, High Quality, and Versatile Motor.



特長

- 1.用途に応じた設計ができる様にモータ外径 $\phi 40$ から $\phi 140$ まで、出力2Wから1kWまで各種シリーズ揃えております。
- 2.取付方法もフランジタイプ、ステータイプと各種揃えております。
- 3.界磁にマグネット（永久磁石）を使用していますのでイナーシャが少なく起動停止の応答性に優れています。
- 4.小型軽量で高トルクを出せますので産業機器、ロボット等、広範囲にわたりご使用いただいております。
- 5.電源の電圧を可変するだけで簡単に回転数を変化させられます。
- 6.長年の実績から、性能、品質共に安定しており、安心してご使用いただけます。
- 7.定格電圧はD.C.12V、24Vが標準ですが他の電圧仕様もご希望により製作致しております。
- 8.回転制御用にモータ仕様に合わせたコントローラも製作しておりますのでお問い合わせ下さい。

Features

- 1.We have stocked the various series motors of which the outside diameter is 40mm ϕ ~ 140mm ϕ (1.57" ϕ ~ 5.51" ϕ) and the output is 2W ~ 1 kW in order to satisfy many purposes.
- 2.We have many types of fitting procedure with the flange and stay types.
- 3.Since the field system is used with the Permanent magnet, the inertia motion is very low and also the starting and stopping responses are excellent.
- 4.Since the motors are small size, light weight and high torque, the motors are being used for industrial machines and robots for wide purposes.
- 5.Revolution can easily be converted by variable voltages of power supply.
- 6.The motors can safely be used because we have great experience in motor production for a long time and also both performance and quality are stabilized.
- 7.The rated voltage to be applied as the standard is D.C.12V or 24V. if requested, we are prepared to manufacture a special motor which works on a different voltage.
- 8.Please ask us as we produce the controller to meet the specific motors for the controlled revolution.

注意事項

- 1.電源は純直流(電池電源)を標準としております。整流電源等のリップルの多い電源を使用する場合はモータの特性、振動、騒音、耐久及び温度上昇に影響しますので定格トルクの60%以下で使用するかリップルを取る回路を入れてご使用下さい。
- 2.出力軸トルクは最大許容トルクを示します。変動負荷及び起動トルクの大きい場合、又は連続使用で耐久性を必要とする場合はランクが上の機種を選定して下さい。
- 3.回転方向は正逆両用ですから、リード線又は端子の極性を逆に接続すれば逆回転致します。但し、急速な正逆転は避ける様設計して下さい。
- 4.一方方向回転専用でお使いになりたい場合には回転方向をご指定下さい。但し、一方方向に設定したモータの場合は極性を間違えて逆回転に接続しますと、温度上昇、耐久性に影響し、事故につながる場合がありますのでご注意下さい。
- 5.モータの極性はカタログの図中で示す以外は、原則として以下の通りとなります。
リード線タイプ : +側 青色又は赤色 -側 黒色
端子タイプ : +側 右側 -側 左側
- 6.モータ外径 $\phi 40$ のものは内部構造上、D.C.100V用は製作できませんのでご了承下さい。
- 7.D.C.48V以上の高い電圧仕様のものは安全上からモータケースにアースをとってご使用下さい。
- 8.形状、寸法等は簡易寸法を記入してあります。又、予告なく変更することもあります。

Special Notes :

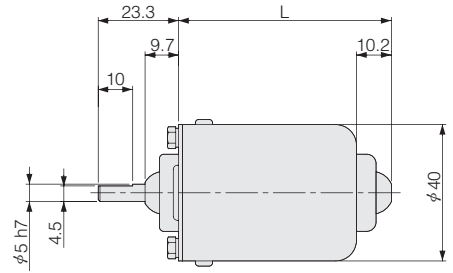
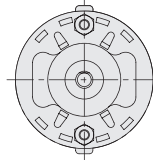
- 1.The standard power supply is simple direct current that is battery power supply. In case of use the power supply which has many ripples and commutation power supply, etc., the motors have effects on characteristic, vibration, noise, durability and increasing temperature. Therefore, they are used under 60% of the rated torque or fitted with a circuit which eliminates the ripple.
- 2.The output shaft torque is same as the max. allowable torque. In case, the fluctuating load and start torque are large or lengthy duration is required, the high ranking models should be selected.
- 3.The direction of the revolution is both clockwise and counterclockwise. Therefore, if lead wire or poles of terminal are connected with position of each side, the direction becomes reverse direction. However, please do not make the direction of clockwise or counterclockwise rapidly.
- 4.Please tell us the revolution direction when use it by a turn of direction. But, please pay attention, if the poles of power supply are connected to each other by mistake, the motor will turn reverse and low level durability may happen and also cause motor damage when you use the motor which is used of turn specification of one direction.
- 5.The polarity of the motor is as follows as a general rule except indicate it in the diagram of the catalogue.
Lead Type : + Blue or Red - Black
Terminal Type : + Right - Left
- 6.The motor, outside dia. 40mm ϕ (1.57" ϕ), cannot be produced for D.C. 100V due to internal restraints.
- 7.Please ground the motor case when the high voltage motors which are specified more than D.C.48V as a safety procedure.
- 8.The shape and dimensions of the motors are briefly illustrated and summarized in the catalog. Therefore, they may be altered without notice.

D.C. MOTORS

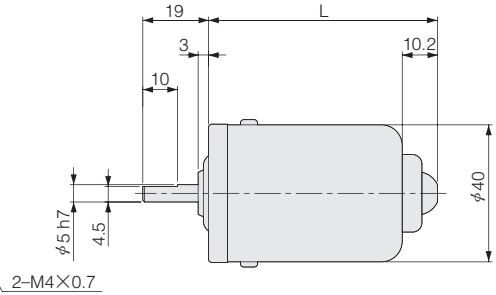
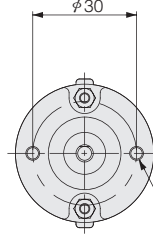
TD2683 • TD2585 • TD2764



S - TYPE



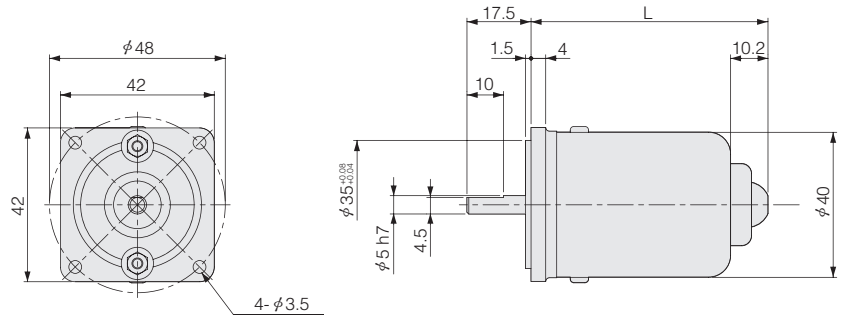
M - TYPE



Part No.	Voltage	Torque		Current Amp	Speed r/min	Output Watts	Duty	Length-L (mm)		Mass g
		gf·cm	mN·m					S-Type	M-Type	
TD2683S TD2683M	12	100	9.8	0.44	2000	2.1	Cont.	58.9	63.2	220
				0.52	2500	2.6				
				0.60	3000	3.1				
				0.68	3500	3.6				
				0.76	4000	4.1				
	24			0.22	2000	2.1				
				0.26	2500	2.6				
				0.30	3000	3.1				
				0.34	3500	3.6				
				0.38	4000	4.1				
TD2585S TD2585M	12	150	14.7	0.54	2000	3.1	Cont.	61.9	66.2	230
				0.65	2500	3.9				
				0.74	3000	4.6				
				0.85	3500	5.4				
				0.96	4000	6.2				
	24			0.27	2000	3.1				
				0.33	2500	3.9				
				0.37	3000	4.6				
				0.42	3500	5.4				
				0.48	4000	6.2				
TD2764S TD2764M	12	220	21.6	0.75	2000	4.5	Cont.	71.9	76.2	300
				0.92	2500	5.6				
				1.07	3000	6.8				
				1.22	3500	7.9				
				1.37	4000	9.0				
	24			0.38	2000	4.5				
				0.46	2500	5.6				
				0.53	3000	6.8				
				0.61	3500	7.9				
				0.68	4000	9.0				

D.C. MOTORS

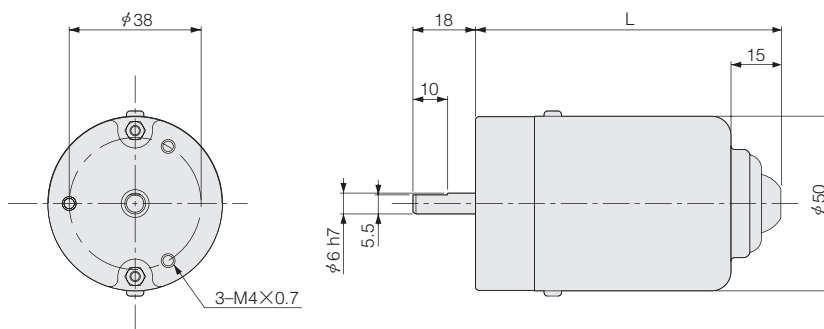
TD2683F • TD2585F • TD2764F



Part No.	Voltage	Torque		Current Amp	Speed r/min	Output Watts	Duty	Length-L mm	Mass g
		gf·cm	mN·m						
TD2683F	12	100	9.8	0.39	2000	2.1	Cont.	64.7	220
				0.47	2500	2.6			
				0.56	3000	3.1			
				0.64	3500	3.6			
				0.71	4000	4.1			
	24			0.20	2000	2.1			
				0.24	2500	2.6			
				0.28	3000	3.1			
				0.32	3500	3.6			
				0.36	4000	4.1			
TD2585F	12	150	14.7	0.50	2000	3.1	Cont.	67.7	230
				0.63	2500	3.9			
				0.74	3000	4.6			
				0.86	3500	5.4			
				0.97	4000	6.2			
	24			0.26	2000	3.1			
				0.32	2500	3.9			
				0.37	3000	4.6			
				0.43	3500	5.4			
				0.48	4000	6.2			
TD2764F	12	220	21.6	0.69	2000	4.5	Cont.	77.7	300
				0.86	2500	5.6			
				1.03	3000	6.8			
				1.20	3500	7.9			
				1.34	4000	9.0			
	24			0.35	2000	4.5			
				0.43	2500	5.6			
				0.52	3000	6.8			
				0.60	3500	7.9			
				0.67	4000	9.0			

D.C. MOTORS

TD2447N

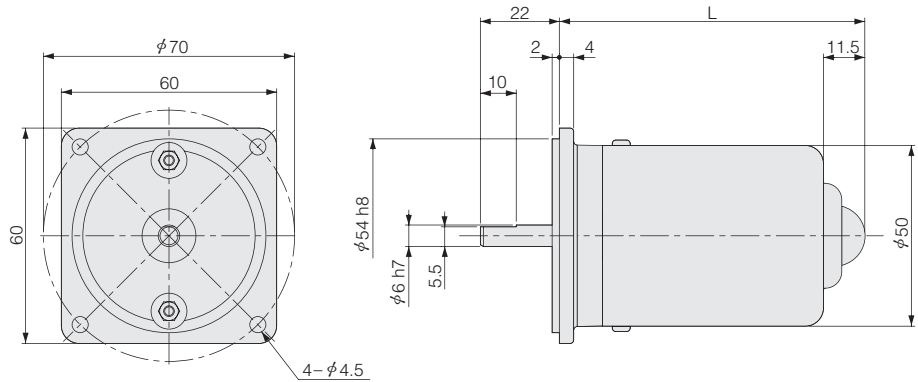
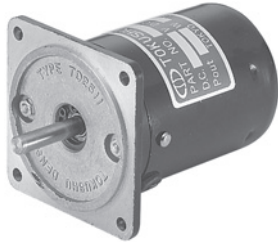


Part No.	Voltage	Torque		Current Amp	Speed r/min	Output Watts	Duty	Length-L mm	Mass g		
		gf·cm	mN·m								
TD2447N	12	250	24.5	1.2	2000	5.1	Cont.	88.5	470		
				1.3	2200	5.6					
				1.4	2400	6.2					
				1.5	2600	6.7					
				1.6	2800	7.2					
				1.6	3000	7.7					
	1.7			3200	8.2						
	24			24	0.6	2000				5.1	
					0.6	2200				5.6	
					0.7	2400				6.2	
					0.7	2600				6.7	
					0.8	2800				7.2	
		0.8	3000		7.7						
	12	300	29.4	1.2	2000	6.2					
				1.3	2200	6.8					
				1.4	2400	7.4					
				1.5	2600	8.0					
				1.6	2800	8.6					
				1.6	3000	9.2					
				1.7	3200	9.9					
				24	24	0.6				2000	6.2
						0.6				2200	6.8
						0.7				2400	7.4
						0.7				2600	8.0
0.8						2800	8.6				
0.8	3000	9.2									

定格電圧が48Vまたは、100Vの製品もあります。その他の電圧の製品もご希望により製作致します。
Motors of rated voltages of 48V and 100V have been produced for sale. Also, motors of other various rated voltage can be produced per your technical specifications.

D.C. MOTORS

TD2511M

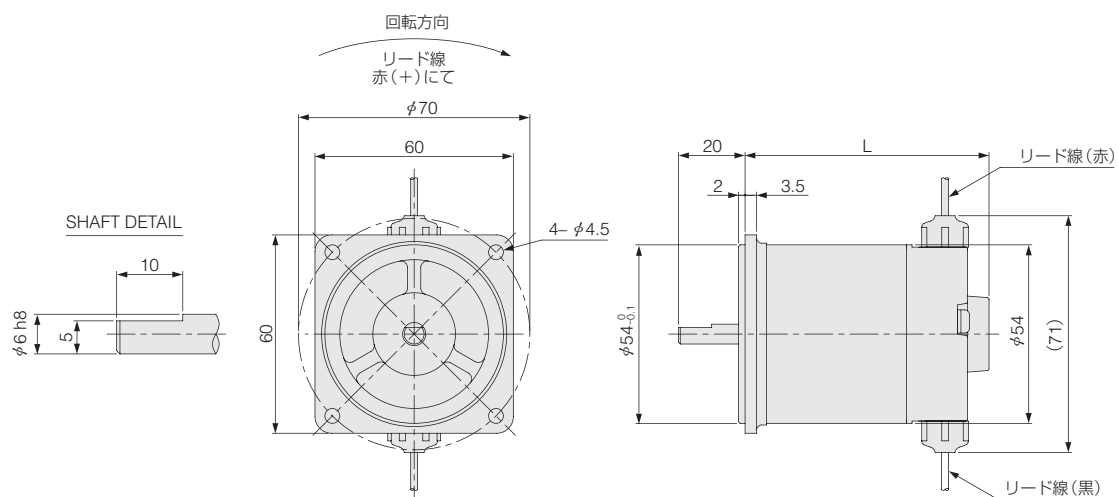


Part No.	Voltage	Torque		Current Amp	Speed r/min	Output Watts	Duty	Length-L mm	Mass g	
		gf·cm	mN·m							
TD2511M	12	250	24.5	0.71	1500	3.9	Cont.	85	450	
				0.83	1750	4.5				
				0.93	2000	5.1				
				1.16	2500	6.4				
				1.37	3000	7.7				
				1.59	3500	9.0				
	24			24	0.35	1500				3.9
					0.41	1750				4.5
					0.46	2000				5.1
					0.58	2500				6.4
					0.67	3000				7.7
					0.78	3500				9.0
	12	12	300	29.4	0.80	1500				4.6
					0.94	1750				5.4
					1.05	2000				6.2
					1.31	2500				7.7
					1.54	3000				9.2
					1.80	3500				10.8
					2.05	4000				12.3
					24	24				0.39
0.46							1750	5.4		
0.51							2000	6.2		
0.64							2500	7.7		
0.76							3000	9.2		
0.88							3500	10.8		
1.01							4000	12.3		

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D.C. MOTORS

M51A



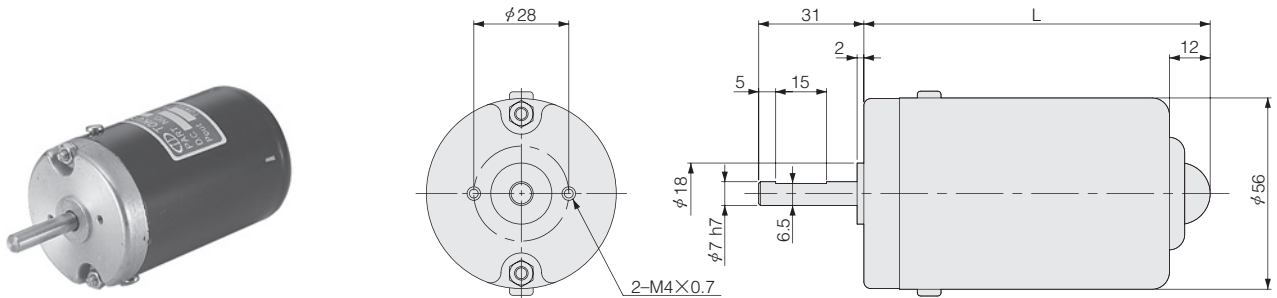
Part No.	Voltage	Torque		Current	Speed	Output	Duty	Length-L	Mass
		kgf·cm	mN·m	Amp	r/min	Watts		mm	kg
M51A	01A	12	0.65	63.7	3000	20	Cont.	75	0.5
	20A	24	0.65	63.7		20			
	30A		1.0	98.1		2.1	30		

ⓂP 量産対応品です。数量については別途ご相談ください。

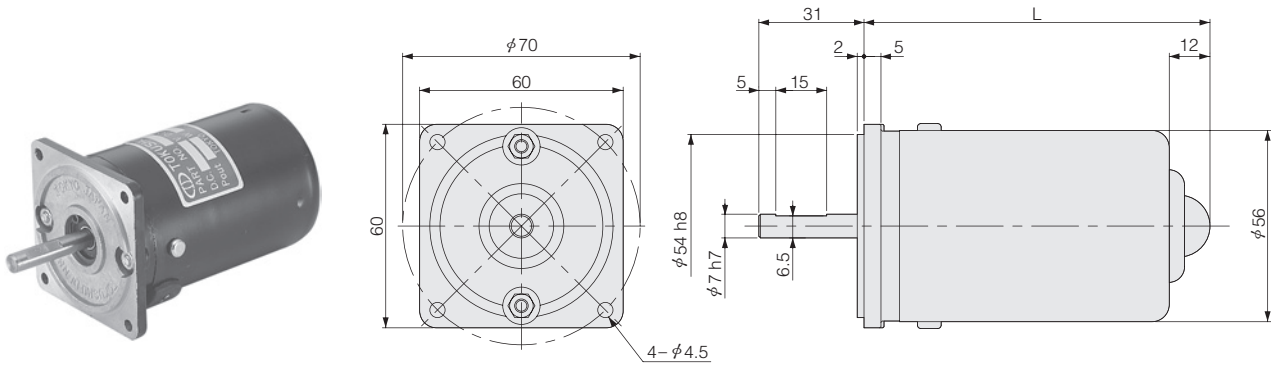
MP=Mass Production type. Please give us an inquiry about minimum quantity.

D.C. MOTORS

TD2541



TD2586

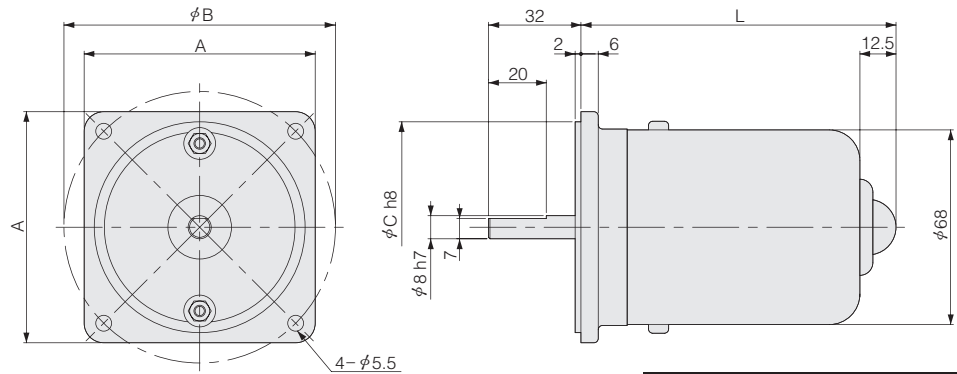


Part No.	Voltage	Torque		Current Amp	Speed r/min	Output Watts	Length-L mm	Duty	Mass (kg)	
		gf·cm	mN·m						TD2541	TD2586
TD2541Z TD2586Z	12	750	73.6	2.4	2000	15.4	102	Cont.	0.72	0.73
				2.9	2500	19.3				
				3.5	3000	23.1				
	24			1.2	2000	15.4				
				1.5	2500	19.3				
				1.8	3000	23.1				
TD2541M TD2586M	12	900	88.3	2.1	1500	13.9				
				2.4	1750	16.2				
				3.4	2500	23.1				
				4.0	3000	27.7				
				4.6	3500	32.4				
				24	1.1	1500				
	1.2				1750	16.2				
	1.7				2500	23.1				
	2.0				3000	27.7				
	2.3			3500	32.4					

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D.C. MOTORS

TD2722 • TD2444



Part No.	A	B	C
TD2722	70	82	64
TD2444	80	94	73

Part No.	Voltage	Torque		Current Amp	Speed r/min	Output Watts	Duty	Length-L mm	Mass (kg)								
		kgf·cm	mN·m						TD2722	TD2444							
TD2722M TD2444M	12	1.0	98	2.2	1500	15.4	Cont.	109	0.95	1.0							
				2.5	1750	18.0											
				2.8	2000	20.5											
				3.6	2500	25.7											
				4.2	3000	30.8											
				1.1	1500	15.4											
	24			1.3	1750	18.0											
				1.4	2000	20.5											
				1.8	2500	25.7											
				2.1	3000	30.8											
				12	1.5	147					3.1	1500	23.1	1hr	109	0.95	1.0
											3.6	1750	27.0				
4.0	2000	30.8															
4.9	2500	38.5															
5.8	3000	46.2															
1.6	1500	23.1															
24	1.8	1750	27.0														
	2.0	2000	30.8														
	2.5	2500	38.5														
	2.9	3000	46.2														
	12	1.2	118	3.4			2000	25.0	Cont.	109	0.95	1.0					
				1.7													
TD2722H TD2444H	12	2.5	245	5.2	1500	38.5	1/2hr	119	1.15	1.2							
				6.0	1750	44.9											
				6.7	2000	51.4											
				8.2	2500	64.2											
				9.7	3000	77.0											
				2.6	1500	38.5											
	24			3.0	1750	44.9											
				3.4	2000	51.4											
				4.1	2500	64.2											
				4.9	3000	77.0											

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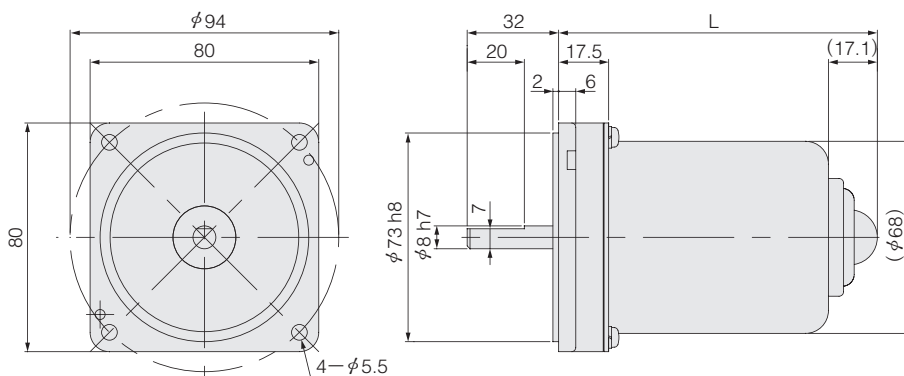
D.C. MOTORS

TD3332 • TD3338



● 特 徴

- 高電圧対応可能… DC100V、DC230V（耐電圧 AC2000V 保証／初期値）
- 過負荷（モーターロック）保護素子内蔵可能



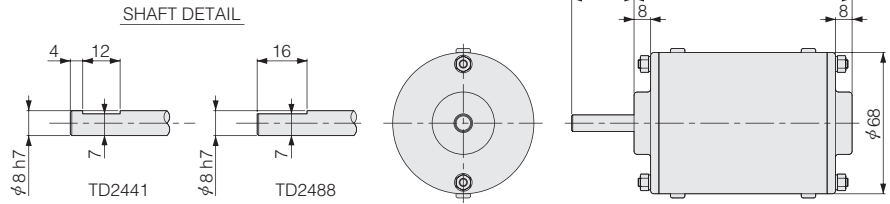
Part No.	Voltage	Torque		Current	Speed	Output	Duty	Length-L	Mass
		kgf·cm	mN·m	Amp	r/min	Watts		mm	kg
TD3332	-512	12	98	2.50	2000	21	Cont.	111.5	1.0
	-524	24		1.25					
	-100	100		0.30					
	-230	230		0.13					
TD3338	-512	12	147	3.70		31		121.5	1.1
	-524	24		1.85					
	-100	100		0.45					
	-230	230		0.20					

量産対応品です。数量については別途ご相談ください。

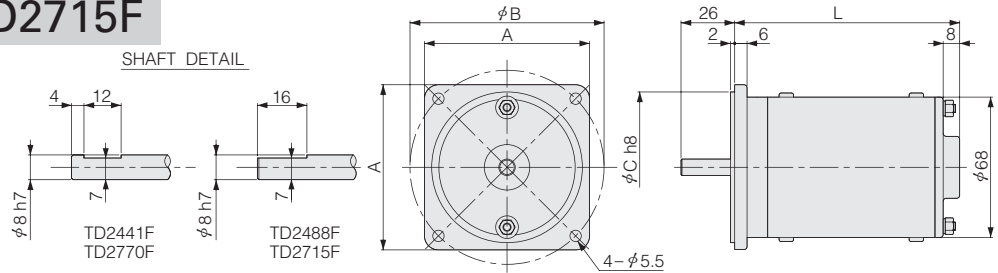
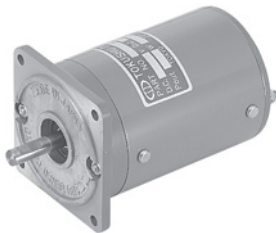
MP=Mass Production type. Please give us an inquiry about minimum quantity.

D.C. MOTORS

TD2441 • TD2488



TD2441F • TD2770F TD2488F • TD2715F



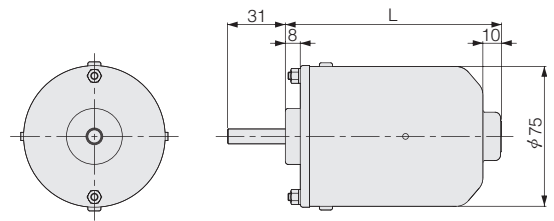
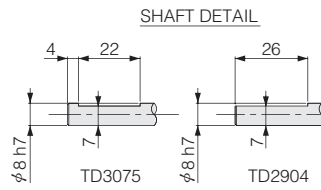
Part No.	A	B	C
TD2441F,TD2488F	70	82	64
TD2770F,TD2715F	80	94	73

Part No.	Voltage	Torque		Current Amp	Speed r/min	Output Watts	Duty	Length-L	Mass				
		kgf•cm	mN•m					mm	kg				
TD2441 TD2441F TD2770F	12	2.0	196	3.9	1500	31	Cont.	TD2441 : 105 TD2441F : 109 TD2770F : 109	1.1				
				4.9	1900	39							
				5.8	2300	47							
		24	1.8	177	5.8	2550				47			
					6.6	2900				54			
					7.1	3200				59			
	2.0		196	196	1.9	1500				31			
					2.4	1900				39			
					2.9	2300				47			
		1.8	177	177	2.8	2550				47			
					3.2	2900				54			
					3.5	3200				59			
TD2488 TD2488F TD2715F	12	2.7	265	5.5	1600	44	Cont.	TD2488 : 115 TD2488F : 119 TD2715F : 119	1.3				
				2.5	245	6.8				2000	55		
						7.1				2100	58		
		7.1	2300			59							
		7.8	2500			64							
		8.6	2800			72							
		9.5	3100			80							
		24	2.7	265	265	2.7				1600	44		
						3.4				2000	55		
	3.5					2100				58			
	2.5		245	245	3.5	2300				59			
					3.9	2500				64			
					4.3	2800				72			
					4.7	3100				80			

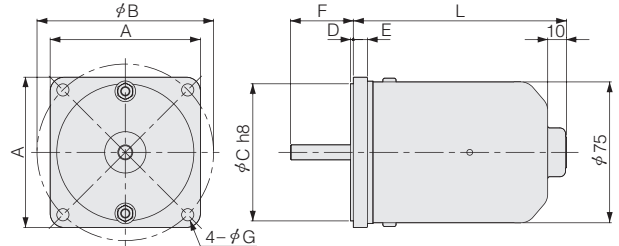
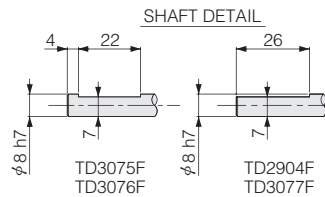
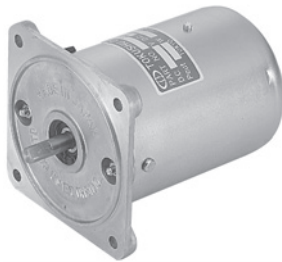
定格電圧が48Vまたは、100Vの製品もあります。その他の電圧の製品もご希望により製作致します。また、ブレーキ付の製品も製作致します。
Motors of rated voltages of 48V and 100V have been produced for sale. Also, motors of other various rated voltage can be produced per your technical specifications. And we produce the product which built in electromagnetic brakes.

D.C. MOTORS

TD3075 • TD2904



TD3075F • TD3076F
TD2904F • TD3077F



Part No.	A	B	C	D	E	F	G
TD3075F,TD2904F	80	94	73	1.5	7.5	33.5	5.5
TD3076F,TD3077F	90	104	83	2	8	34	6.5

Part No.	Voltage	Torque		Current Amp	Speed r/min	Output Watts	Duty	Length-L mm	Mass kg
		kgf•cm	mN•m						
TD3075 TD3075F TD3076F	12	2.7	265	5.4	1600	44	Cont.	TD3075 : 116 TD3075F : 113.5 TD3076F : 113	1.3
				6.0	1800	50			
				6.7	2000	55			
		7.4	2200	61					
		7.8	2650	65					
		9.4	3200	79					
	24	2.7	265	2.7	1600	44			
				3.0	1800	50			
				3.4	2000	55			
				3.7	2200	61			
		2.4	235	3.9	2650	65			
				4.7	3200	79			
				4.9	3400	84			
TD2904 TD2904F TD3077F	12	3.5	343	6.4	1500	54	Cont.	TD2904 : 126 TD2904F : 123.5 TD3077F : 123	1.5
				7.3	1700	61			
				8.3	1950	70			
		8.9	2300	76					
		9.8	2550	84					
		10.6	2750	90					
	24	3.5	343	3.2	1500	54			
				3.7	1700	61			
				4.2	1950	70			
				4.5	2300	76			
		3.2	314	4.9	2550	84			
				5.3	2750	90			

• 定格電圧が48Vまたは、100Vの製品もあります。その他の電圧の製品もご希望により製作致します。

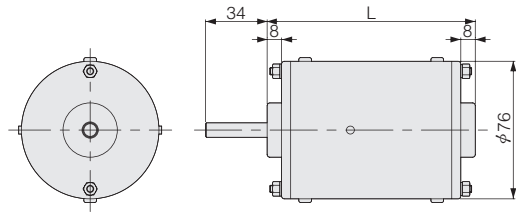
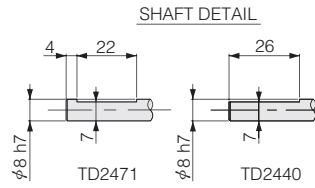
• 量産対応品です。数量については別途ご相談ください。

• Motors of rated voltages of 48V and 100V have been produced for sale. Also, motors of other various rated voltage can be produced per your technical specifications.

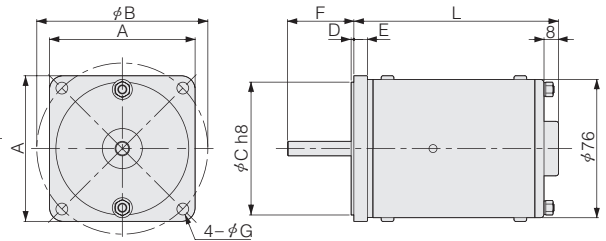
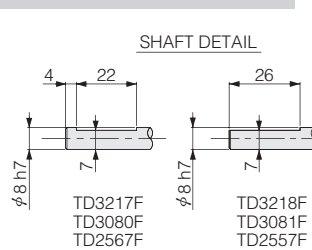
• MP=Mass Production type. Please give us an inquiry about minimum quantity.

D.C. MOTORS

TD2471 • TD2440



TD3217F • TD3080F • TD2567F TD3218F • TD3081F • TD2557F



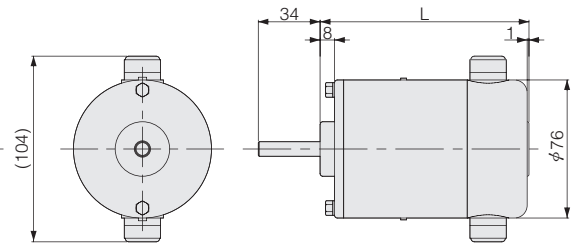
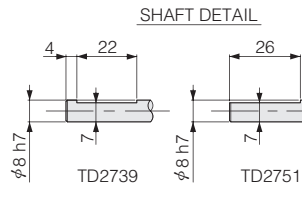
Part No.	A	B	C	D	E	F	G
TD3217F,TD3218F	80	94	73	1.5	7.5	36.5	5.5
TD3080F,TD3081F	90	104	83	2	8	37	6.5
TD2567F,TD2557F	102	120	94	2.5	7	37	6.5

Part No.	Voltage	Torque		Current Amp	Speed r/min	Output Watts	Duty	Length-L	Mass
		kgf·cm	mN·m					mm	kg
TD2471 TD3217F TD3080F TD2567F	12	2.7	265	5.4	1600	44	Cont.	TD2471 : 115 TD3217F : 112.5 TD3080F : 112 TD2567F : 112	1.3
				6.0	1800	50			
				6.7	2000	55			
		7.4	2200	61					
		7.8	2650	65					
		9.4	3200	79					
	24	2.7	265	2.7	1600	44			
				3.0	1800	50			
				3.4	2000	55			
				3.7	2200	61			
		2.4	235	3.9	2650	65			
				4.7	3200	79			
				4.9	3400	84			
TD2440 TD3218F TD3081F TD2557F	12	3.5	343	6.4	1500	54	Cont.	TD2440 : 125 TD3218 : 122.5 TD3081F : 122 TD2557F : 122	1.6
				7.3	1700	61			
				8.3	1950	70			
		8.9	2300	76					
		9.8	2550	84					
		10.6	2750	90					
	24	3.5	343	3.2	1500	54			
				3.7	1700	61			
				4.2	1950	70			
				4.5	2300	76			
		3.2	314	4.9	2550	84			
				5.3	2750	90			

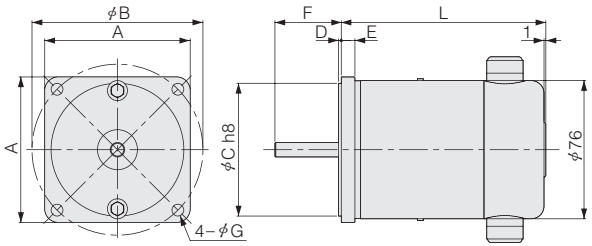
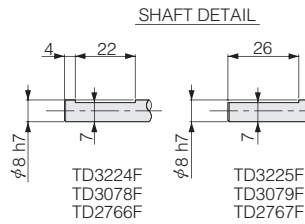
定格電圧が48Vまたは、100Vの製品もあります。その他の電圧の製品もご希望により製作致します。また、ブレーキ付の製品も製作致します。
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D.C. MOTORS

TD2739 • TD2751



TD3224F • TD3078F • TD2766F TD3225F • TD3079F • TD2767F



Part No.	A	B	C	D	E	F	G
TD3224F,TD3225F	80	94	73	1.5	7.5	36.5	5.5
TD3078F,TD3079F	90	104	83	2	8	37	6.5
TD2766F,TD2767F	102	120	94	2.5	7	37	6.5

Part No.	Voltage	Torque		Current Amp	Speed r/min	Output Watts	Duty	Length-L	Mass kg
		kgf•cm	mN•m					mm	
TD2739 TD3224F TD3078F TD2766F	12	2.7	265	5.4	1600	44	Cont.	TD2739 : 114 TD3224F : 112.5 TD3078F : 112 TD2766F : 112	1.4
				6.0	1800	50			
				6.7	2000	55			
		7.4	2200	61					
		2.4	235	7.8	2650	65			
				9.4	3200	79			
	9.8			3400	84				
	24	2.7	265	2.7	1600	44			
				3.0	1800	50			
				3.4	2000	55			
		2.4	235	3.7	2200	61			
				3.9	2650	65			
4.7				3200	79				
4.9	3400	84							
TD2751 TD3225F TD3079F TD2767F	12	3.5	343	6.4	1500	54	Cont.	TD2751 : 124 TD3225F : 122.5 TD3079F : 122 TD2767F : 122	1.7
				7.3	1700	61			
				8.3	1950	70			
		3.2	314	8.9	2300	76			
				9.8	2550	84			
				10.6	2750	90			
	24	3.5	343	3.2	1500	54			
				3.7	1700	61			
				4.2	1950	70			
		3.2	314	4.5	2300	76			
				4.9	2550	84			
				5.3	2750	90			

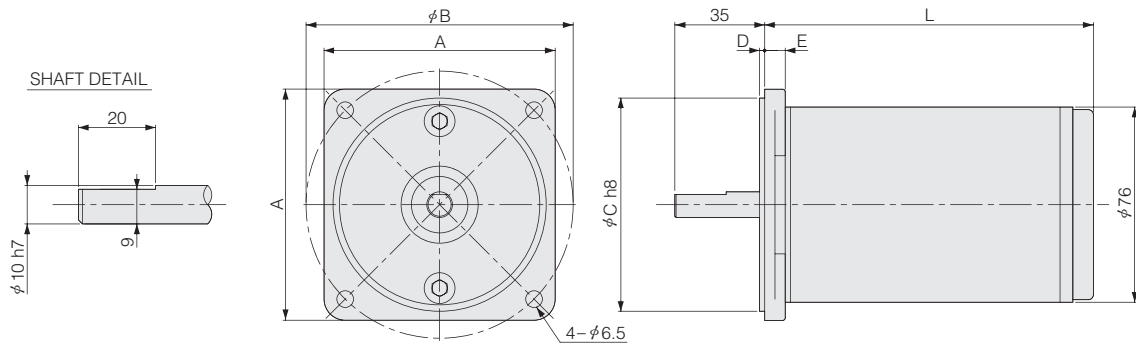
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D.C. MOTORS

TD3191F • TD3192F



Part No.	A	B	C	D	E
TD3191F	90	104	83	2.0	8
TD3192F	102	120	94	2.5	7

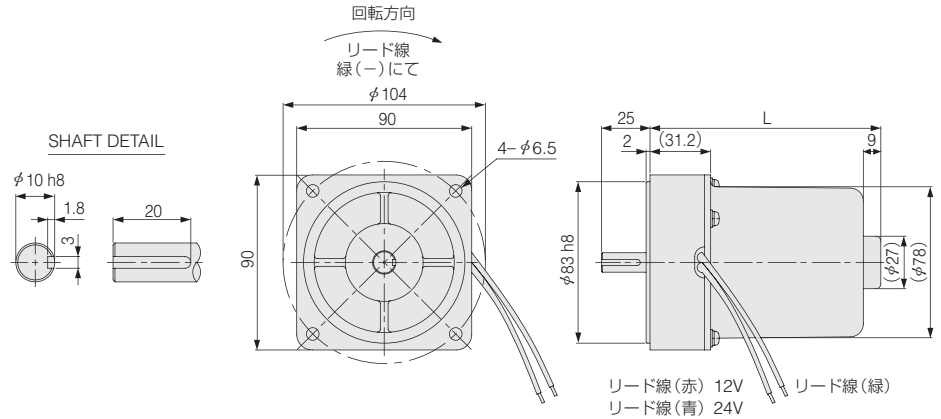


Part No.	Voltage	Torque		Current	Speed	Output	Duty	Length-L	Mass
		kgf·cm	mN·m	Amp	r/min	Watts		mm	kg
TD3191F TD3192F	12	4.5	441	8.1	1650	76	Cont.	128	1.85
				8.9	1850	85			
				10.1	2100	97			
				11.9	2450	113			
				12.8	2650	122			
	24			4.0	1650	76			
				4.4	1850	85			
				5.0	2100	97			
				5.9	2450	113			
				6.4	2650	122			

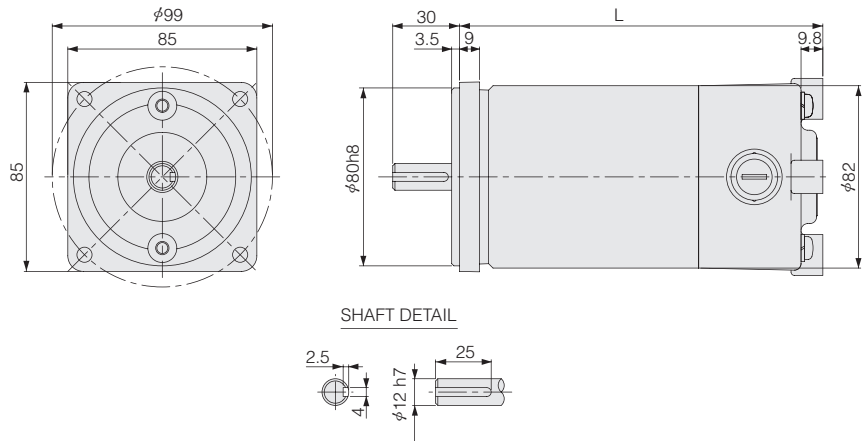
- ブレーキ付の製品も製作致します。
- We produce the product which built in electromagnetic brakes.

D.C. MOTORS

M76A



M7268 • M7269



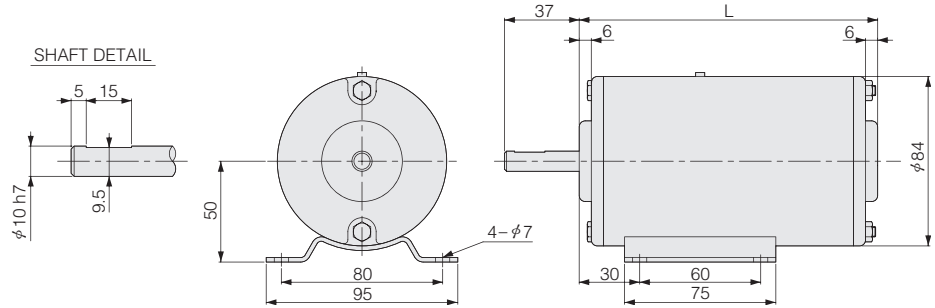
Part No.	Voltage	Torque		Current	Speed	Output	Duty	Length-L	Mass
		kgf·cm	mN·m	Amp	r/min	Watts		mm	kg
M76A	12	2	196	5.2	2000	40	Cont.	119	1.7
		3	294	7.4		60			1.9
		5	490	13.7		100	1hr	139	2.3
	24	2	196	2.6		40	Cont.	119	1.7
		3	294	3.6		60			1.9
		5	490	5.6		100	139	2.3	
M7268	100	4.5	441	1.1	2000	92	Cont.	163.4	3.0
	200			0.6					
M7269	100	5.5	539	1.4		113		183.4	3.6
	200			0.7					

量産対応品です。数量については別途ご相談ください。

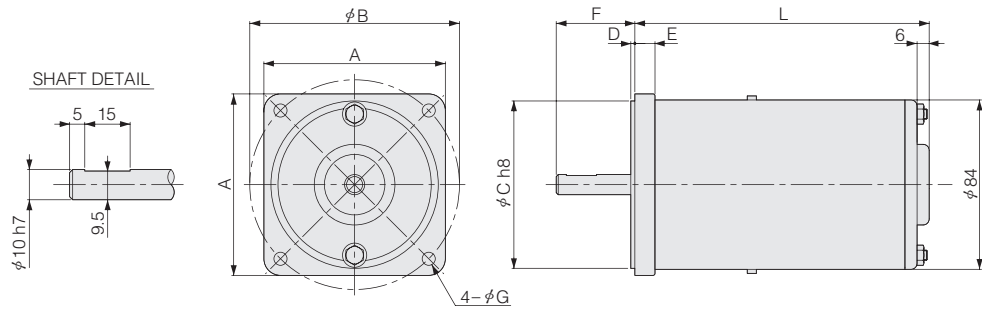
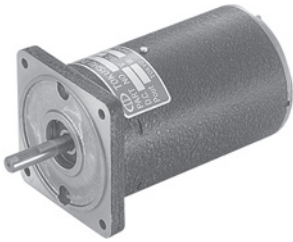
MP=Mass Production type. Please give us an inquiry about minimum quantity.

D.C. MOTORS

TD2542



TD2542FA • TD2631F TD2542F • TD2568F



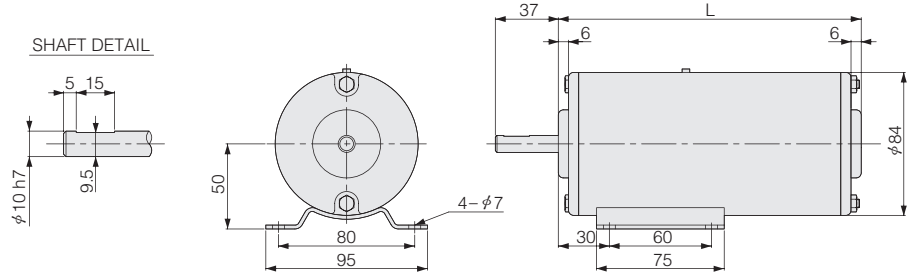
Part No.	A	B	C	D	E	F	G
TD2542FA	84	99	80	2.5	7	39	6.5
TD2631F	90	104	83	2	10	39	6.5
TD2542F	102	120	94	2.5	7	39	6.5
TD2568F	124	146	114	2.5	10	38	9

Part No.	Voltage	Torque		Current Amp	Speed r/min	Output Watts	Duty	Length-L	Mass kg
		kgf·cm	mN·m					mm	
TD2542 TD2542FA TD2631F TD2542F TD2568F	12	4.5	441	6.5	1200	55	Cont.	TD2542 :148 TD2542FA :146 TD2631F :146 TD2542F :146 TD2568F :147	2.6~3.0
				7.2	1350	62			
				8.4	1600	74			
				10.4	2000	92			
				12.0	2300	106			
				13.9	2700	125			
	24			16.9	3300	153			
				3.3	1200	55			
				3.6	1350	62			
				4.2	1600	74			
				5.2	2000	92			
				6.0	2300	106			
				7.0	2700	125			
				8.5	3300	153			

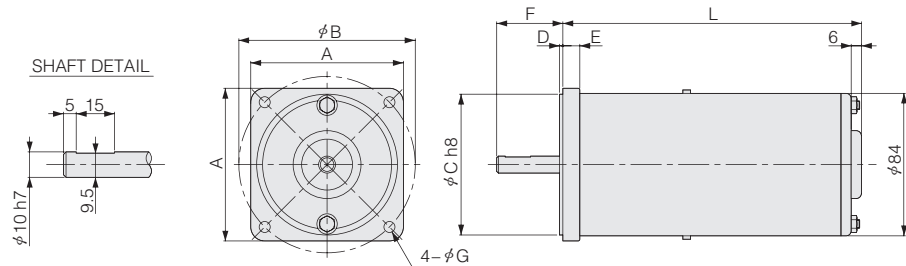
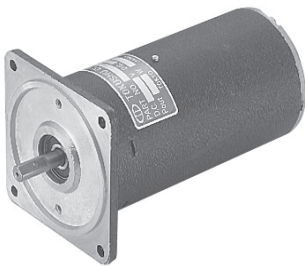
定格電圧が48Vまたは、100Vの製品もあります。その他の電圧の製品もご希望により製作致します。また、ブレーキ付の製品も製作致します。
Motors of rated voltages of 48V and 100V have been produced for sale. Also, motors of other various rated voltage can be produced per your technical specifications. And we produce the product which built in electromagnetic brakes.

D.C. MOTORS

TD2531



TD2531FA • TD2632F TD2531F • TD2558F



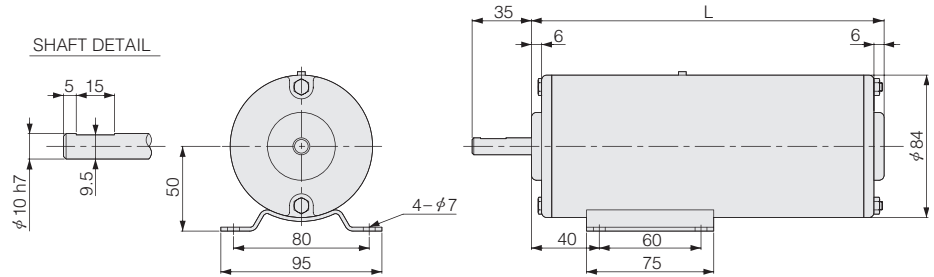
Part No.	A	B	C	D	E	F	G
TD2531FA	84	99	80	2.5	7	39	6.5
TD2632F	90	104	83	2.0	10	39	6.5
TD2531F	102	120	94	2.5	7	39	6.5
TD2558F	124	146	114	2.5	10	38	9.0

Part No.	Voltage	Torque		Current Amp	Speed r/min	Output Watts	Duty	Length-L	Mass
		kgf·cm	mN·m					mm	kg
TD2531 TD2531FA TD2632F TD2531F TD2558F	12	7	686	8.6	1100	79	Cont.	TD2531 : 178 TD2531FA : 176 TD2632F : 176 TD2531F : 176 TD2558F : 177	3.4~3.8
				10.4	1350	97			
				11.9	1550	111			
				14.0	1850	133			
				17.4	2300	165			
				21.7	2900	208			
	24	7	686	4.3	1100	79			
				5.2	1350	97			
				5.9	1550	111			
				7.0	1850	133			
				8.7	2300	165			
				10.9	2900	208			

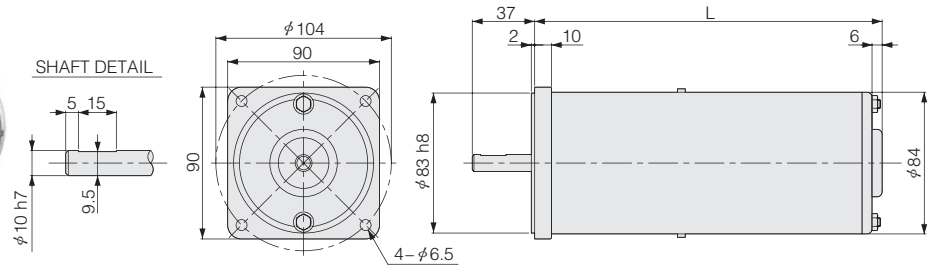
定格電圧が48Vまたは、100Vの製品もあります。その他の電圧の製品もご希望により製作致します。また、ブレーキ付の製品も製作致します。
Motors of rated voltages of 48V and 100V have been produced for sale. Also, motors of other various rated voltage can be produced per your technical specifications. And we produce the product which built in electromagnetic brakes.

D.C. MOTORS

TD2636



TD2636F



Part No.	Voltage	Torque		Current Amp	Speed r/min	Output Watts	Duty	Length-L (mm)		Mass kg
		kgf·cm	mN·m					TD2636	TD2636F	
TD2636 TD2636F	24	9.5	932	6.1	1200	117	1hr	208	206	4.3~4.7
				8.0	1600	156				
				9.9	2000	195				
				12.0	2500	244				
				14.5	3000	293				
	48			3.0	1200	117	1/2hr	208	206	
				4.0	1600	156				
				4.9	2000	195				
				6.0	2500	244				
				7.3	3000	293				

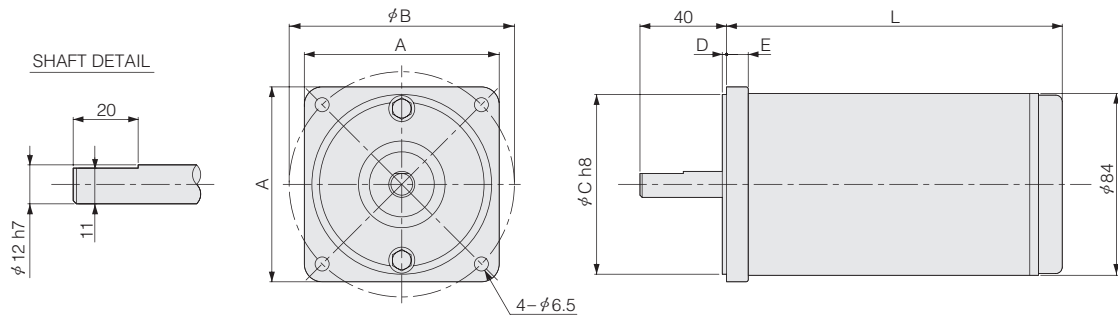
定格電圧が 100 V の製品もあります。その他の電圧の製品もご希望により製作致します。また、ブレーキ付の製品も製作致します。
Motors of rated voltages of 100V have been produced for sale. Also, motors of other various rated voltage can be produced per your technical specifications. And we produce the product which built in electromagnetic brakes.

D.C. MOTORS

TD3204F • TD3205F
TD3220F • TD3221F



Part No.	A	B	C	D	E
TD3204F, TD3220F	90	104	83	2.0	10
TD3205F, TD3221F	102	120	94	2.5	7



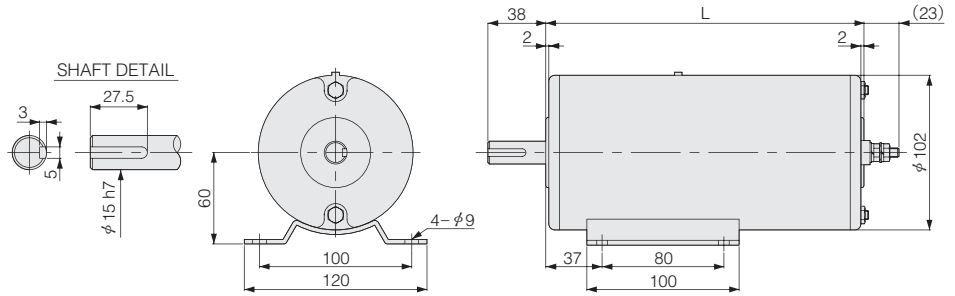
Part No.	Voltage	Torque		Current Amp	Speed r/min	Output Watts	Duty	Length-L mm	Mass kg	
		kgf·cm	mN·m							
TD3204F TD3205F	12	5.5	539	10.2	1750	99	Cont.	155	2.8	
				11.4	2000	113				
				12.4	2200	124				
				13.6	2400	136				
				15.2	2650	150				
	24			5.1	1750	99	Cont.			
				5.7	2000	113				
				6.2	2200	124				
				6.8	2400	136				
				7.6	2650	150				1hr
TD3220F TD3221F	12	8.0	785	13.4	1650	136	Cont.	185	3.6	
				15.0	1850	152				
				16.6	2050	168				
				18.8	2300	189	1hr			
				21.6	2650	218				
				24	6.7	1650				136
	7.5				1850	152				
	8.3				2050	168				
	9.4				2300	189				
	10.8				2650	218	1hr			

ブレーキ付の製品も製作致します。

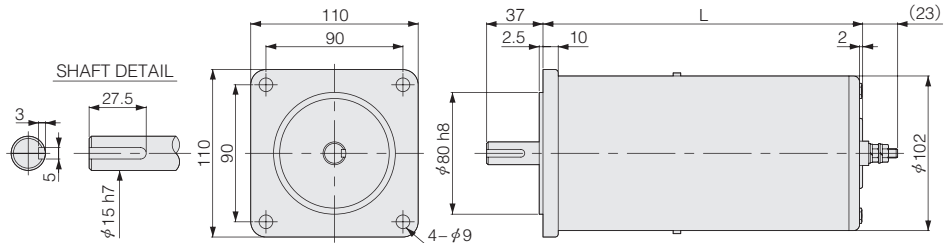
We produce the product which built in electromagnetic brakes.

D.C. MOTORS

TD2529



TD2529F

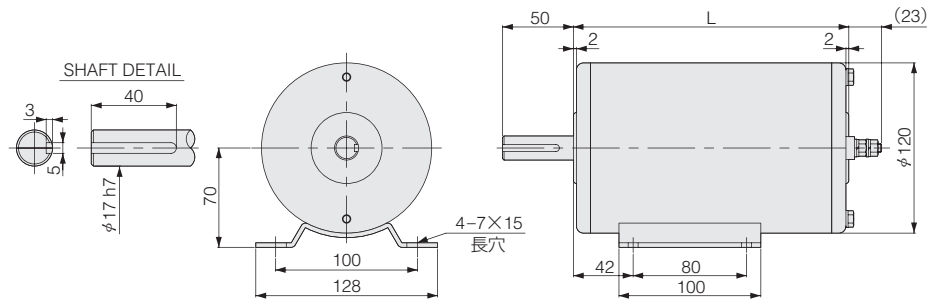


Part No.	Voltage	Torque		Current Amp	Speed r/min	Output Watts	Duty	Length-L (mm)		Mass kg
		kgf·cm	N·m					TD2529	TD2529F	
TD2529 TD2529F	12	12	1.18	8.6	560	69	Cont.	209	210	6.8
				9.7	630	78				
				10.5	700	86				
				12.5	850	105				
				15.0	1100	136				
				19.0	1350	166				
	24.0			1750	216	1hr				
	7.8			1150	142	Cont.				
	8.5			1270	157					
	9.5			1400	173					
	10.8			1550	191					
	12.8			1850	228					
	15.0			2300	283					
	17.5			2700	333	1hr				
	7.3			1600	197	Cont.				
	8.0			1750	216					
	8.8			1950	240					
	10.0			2200	271					
10.8	2500	308								
12.8	3000	370								
15.0	3800	468	1hr							

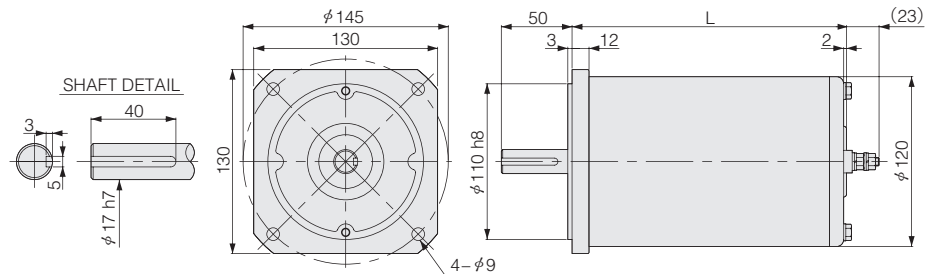
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D.C. MOTORS

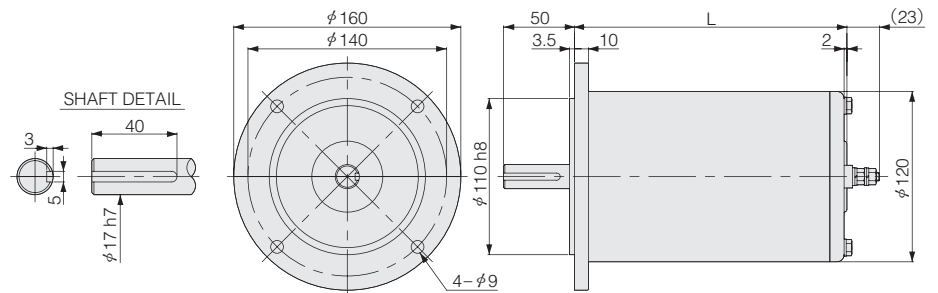
TD3197 • TD3200



TD3198F • TD3201F



TD3199F • TD3202F

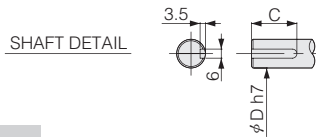
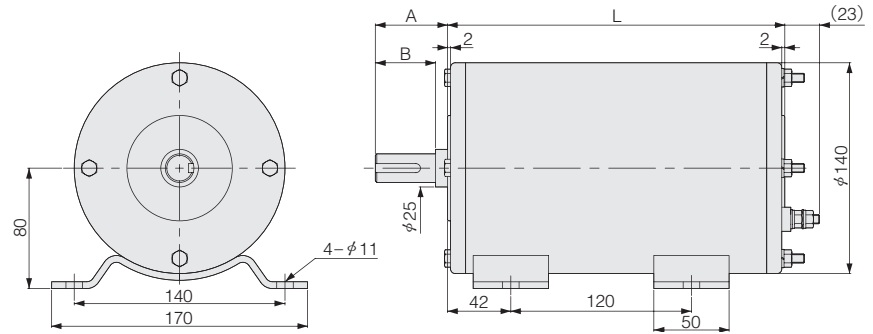


Part No.	Voltage	Torque		Current Amp	Speed r/min	Output Watts	Duty	Length-L	Mass
		kgf·cm	N·m					mm	kg
TD3197 TD3198F TD3199F	-200 -201 -202 -203 -204	14	1.37	11.5	1600	230	Cont.	TD3197 : 194 TD3198F : 194 TD3199F : 192	9
	13.5			1850	266				
	15.0			2000	288				
	16.5			2200	316				
TD3200 TD3201F TD3202F	-200 -201 -202 -203 -204	20	1.96	14.2	1350	277	Cont.	TD3200 : 224 TD3201F : 224 TD3202F : 222	11
	15.6			1500	308				
	17.5			1700	349				
	20.6			2000	411				
				24.0	2350	483			

定格電圧が48Vまたは、100Vの製品もあります。その他の電圧の製品もご希望により製作致します。また、ブレーキ付の製品も製作致します。
Motors of rated voltages of 48V and 100V have been produced for sale. Also, motors of other various rated voltage can be produced per your technical specifications. And we produce the product which built in electromagnetic brakes.

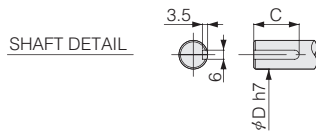
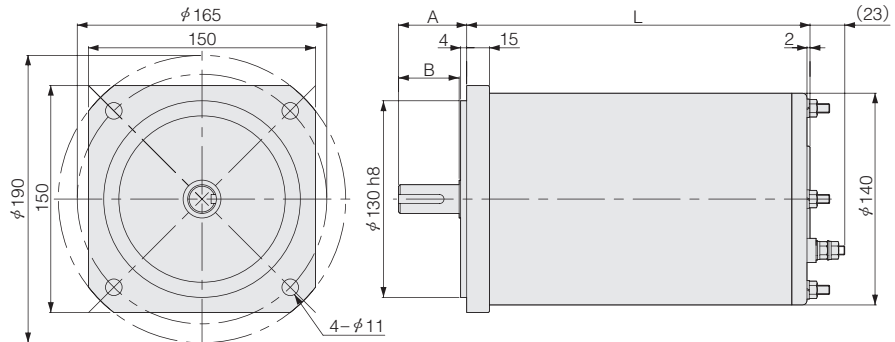
D.C. MOTORS

TD2648 • TD2649



Part No.	A	B	C	D
TD2648	48	40	30	19
TD2649	58	50	40	22

TD2648F • TD2649F



Part No.	A	B	C	D
TD2648F	45	40	30	19
TD2649F	55	50	40	22

● 48V、75V仕様は、ビニールキャブタイヤコードとなります。

Part No.	Voltage	Torque		Current Amp	Speed r/min	OutPut Watts	Duty	Length-L mm	Mass kg	
		kgf·cm	N·m							
TD2648 TD2648F	24	20	1.96	11.0	1000	205	Cont.	TD2648 : 224 TD2648F : 227	12.7	
				13.2	1200	246				
				16.5	1500	308	1hr			
				19.2	1750	359				
	48			5.5	1000	205	Cont.			
				6.6	1200	246				
				75	3.5	1000				205
					4.2	1200				246
TD2649 TD2649F	24	40	3.92	21.4	1000	411	Cont.	TD2649 : 289 TD2649F : 292	18.1	
				25.7	1200	493				
				32.1	1500	616	1hr			
				42.5	2000	822				
	48			10.7	1000	411	Cont.			
				12.8	1200	493				
				75	6.8	1000				411
					8.2	1200				493

定格電圧が 100 V の製品もあります。その他の電圧の製品もご希望により製作致します。

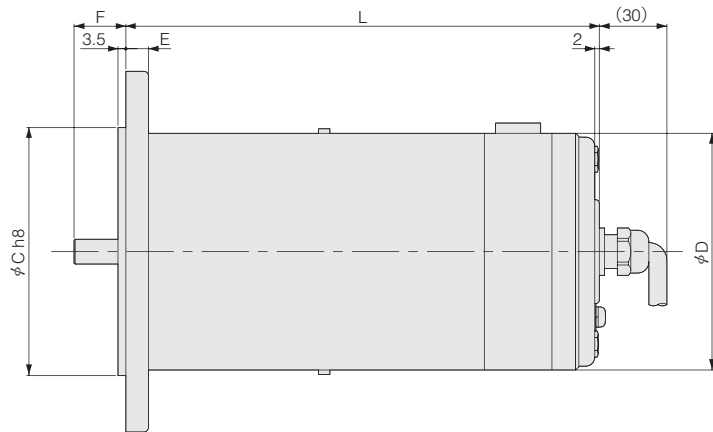
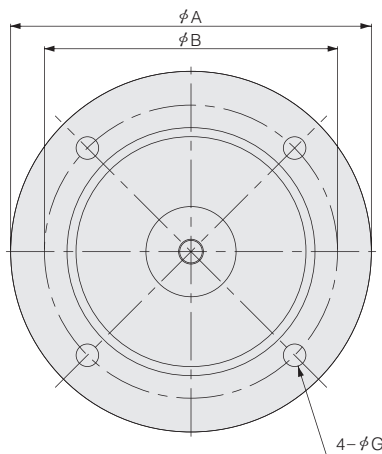
Motors of rated voltages of 100V have been produced for sale. Also, motors of other various rated voltage can be produced per your technical specifications.

D.C. MOTORS

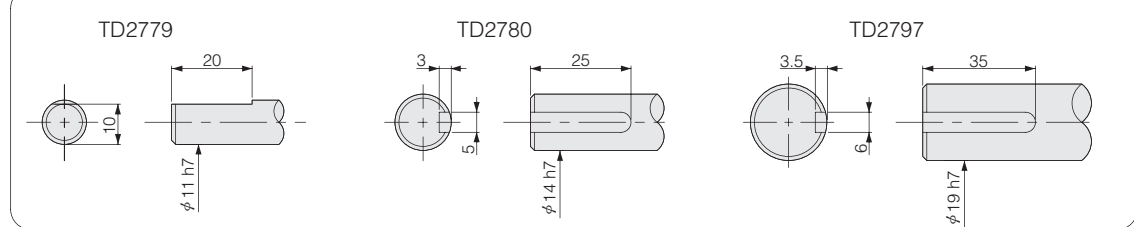
TD2779 • TD2780 • TD2797



Part No.	A	B	C	D	E	F	G
TD2779	160	130	110	105	9.5	23	10
TD2780	160	130	110	105	9.5	30	10
TD2797	200	165	130	140	12	40	12



SHAFT DETAIL



Part No.	Voltage	Torque		Current Amp	Speed r/min	Output Watts	Duty	Length-L	Mass	
		kgf·cm	N·m					mm	kg	
TD2779	-100	100	11	1.08	1750	200	Cont.	210	8.2	
	-200	200								1.1
TD2780	-100	100	22	2.16		4.5		400	290	
	-200	200								2.2
TD2797	-100	100	41.7	4.09		9.5	750	1hr	292	
	-200	200								4.2

- モータ定格は純直流電源における仕様を表示してあります。
- 駆動電源方式によって、モータ有効出力が下記の様に異なります。
モータ有効出力 = 減定格率 × モータ定格出力

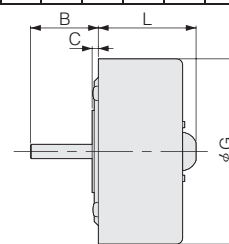
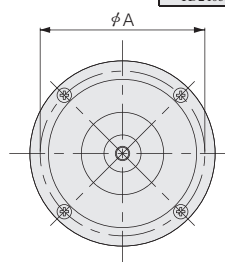
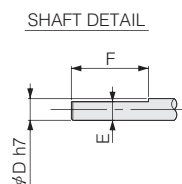
減定格率	単相全波 三相半波 三相全波	50~60% 70~80% 90~95%
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- Specifications of the rated motors are shown in the table with simple D.C. power supply.
- Effective output of the motor is different for each driving power supply system.
Effective output of the motor = Reducing rated rate × Rated output of the motor.

Reducing rated rate :	
Singl-phase full wave	50~60%
Three-phase full wave	90~95%
Three-phase half wave	70~80%

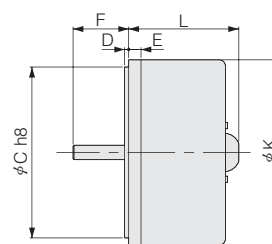
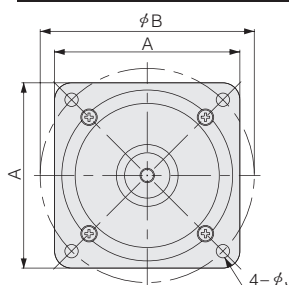
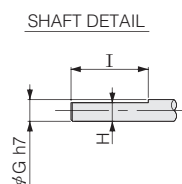
D.C. FLAT MOTORS

TD2719M • TD2733M • TD2409M



Part No.	A	B	C	D	E	F	G
TD2719M	80	33	2.8	7	6.5	25	90
TD2733M	90	31	2.8	8	7	25	100.6
TD2409M	100	38	3	10	9	25	113.2

TD2755F • TD2756F • TD2757F



Part No.	A	B	C	D	E	F	G	H	I	J	K
TD2755F	90	104	83	2	6	27	7	6.5	25	6.5	90
TD2756F	102	120	94	2	5.8	27	8	7	25	6.5	100.6
TD2757F	124	146	114	2	5.8	34	10	9	25	9	113.2

注) TD2755F, TD2719M, TD2757F, TD2409M は、回転方向が一方（右回転）のみの仕様となっております。

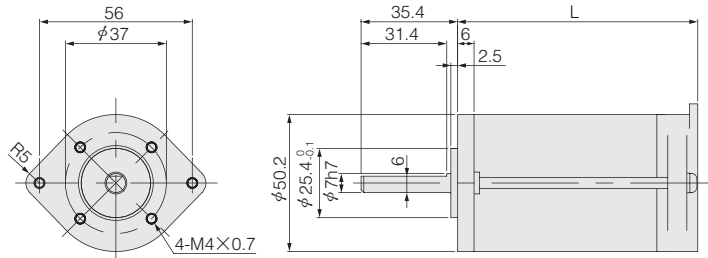
Part No.	Voltage	Torque		Current Amp	Speed r/min	Output Watts	Duty	Length-L mm	Mass kg
		kgf·cm	mN·m						
TD2755F TD2719M	12	1.7	167	3.8	1500	26	Cont.	TD2755F : 53.5 TD2719M : 47.5	0.95
				4.4	1750	31			
				4.9	2000	35			
				6.1	2500	44			
				7.2	3000	52			
	24	1.7	167	1.9	1500	26	Cont.		
				2.2	1750	31			
				2.5	2000	35			
				3.0	2500	44			
				3.6	3000	52			
TD2756F TD2733M	12	2.5	245	5.5	1500	39	Cont.	TD2756F : 59.3 TD2733M : 53.3	1.3
				6.3	1750	45			
				7.1	2000	51			
				8.8	2500	64			
				10.4	3000	77			
	24	2.5	245	2.8	1500	39	Cont.		
				3.2	1750	45			
				3.5	2000	51			
				4.4	2500	64			
				5.2	3000	77			
TD2757F TD2409M	12	3.0	294	7.3	1500	46	Cont.	TD2757F : 55.6 TD2409M : 51.6	1.7
				8.3	1750	54			
				11.7	2300	71			
				13.8	2800	86			
				3.6	1500	46			
	24	3.0	294	4.2	1750	54			
				5.8	2300	71			
				6.9	2800	86			
				3.6	1500	46	1/4hr		
				24	3.0	294			
5.8	2300	71							
6.9	2800	86							
3.6	1500	46	1/4hr						
24	3.0	294					4.2	1750	54
				5.8	2300	71			
				6.9	2800	86			

※変動負荷及び起動トルクの大きい場合、お問合せの上お使い下さい。
In case the fluctuating load and start torque are large please ask us

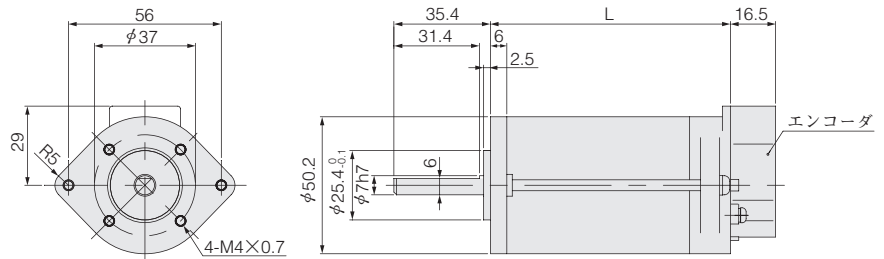
D.C. MOTORS (RARE EARTH-MAGNET MOTORS)

〈小型・高出力モータ〉

TD3388

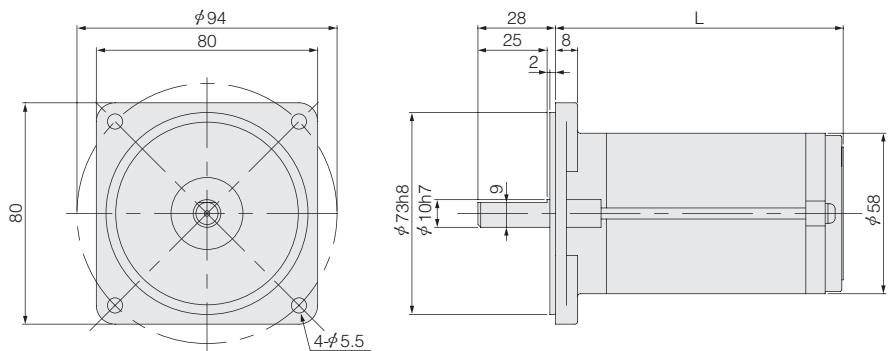


TD3389



●エンコーダ付きタイプ

TD3364



Part No.	Voltage	Torque		Current Amp	Speed r/min	Output Watts	Duty	Length-L mm	Mass kg
		kgf·cm	mN·m						
TD3388-240	24	1.5	147	2.3	2500	39	Cont.	88	0.7
TD3389-240									
TD3364-240	24	3.0	294	4.4	2500	77	Cont.	104	1.2

- TD3389は光学式エンコーダ付（A相、B相）です。パルス数は400pと1000pがございます。
- 量産対応品です。数量については別途ご相談ください。
- Optical encoder (2 channels : A and B) is equipped to TD3389. Pulse-number type are 400P/R and 1000P/R.
- MP=Mass Production type. Please give us an inquiry about minimum quantity.