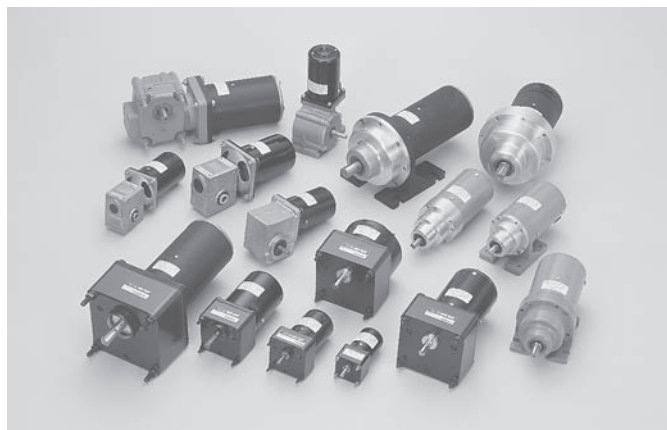


# SUMMARY OF D.C. GEARED MOTOR

## 自動化、省力化機器に、特殊電装のD.C.ギヤードモータ

### 小型軽量、高性能、高品質、多機種、多用途

TOKUSHUDENSO D.C. Geared Motors for your Automatic and Laborsaving Equipments.  
Small-Sized and Lightweight, High Performance, High Quality, and Versatile Motor.



#### 特長

1. 用途に応じた設計ができる様に平ギヤタイプ、遊星ギヤタイプ及びウォームギヤタイプとそれぞれシリーズで揃えております。
2. マグネットモータ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。
3. 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。
4. 正逆転が電源の極性を変えるだけで簡単にでき又、スピードも電圧を可変するだけで簡単に変わります。
5. 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。
6. 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。
7. 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。

#### 注意事項

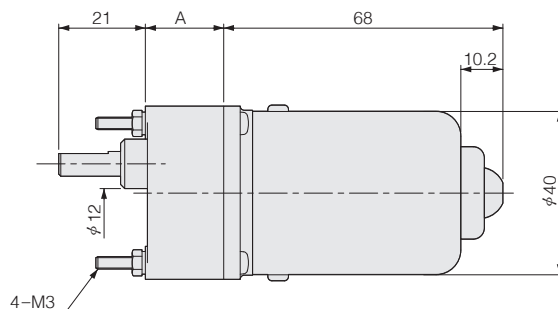
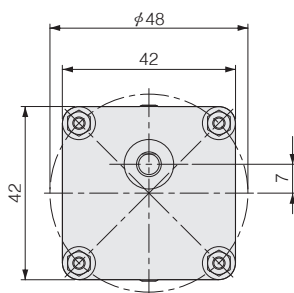
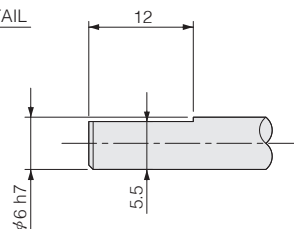
1. 電源は純直流（電池電源）を標準としております。整流電源等のリップルの多い電源を使用する場合は、モータの特性、振動、騒音、耐久及び温度上昇に影響しますので定格トルクの60%以下で使用するか、リップルを取る回路を入れてご使用下さい。
2. 出力軸トルクは最大許容トルクを示します。変動負荷及び起動トルクの大きい場合、又は連続使用で耐久性を必要とする場合はランクが上の機種を選定して下さい。
3. 回転方向は正逆両用ですから、リード線又は端子の極性を逆に接続すれば逆回転致します。但し、急速な正逆転は避ける様設計して下さい。
4. D. C. 48V以上の高い電圧仕様の場合は安全上から、モータケースにアースをとってご使用下さい。
5. 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。
6. ブレーキ付モータは雰囲気温度0～+40℃、湿度 80%RH 以下（結露しない）でご使用ください。
7. ブレーキ付は構造上、摩擦面に狭いエアギャップを有しており、水分や油分、細かいゴミ等が入りますと摩擦力の低下や動作不良となる恐れがあります。このような環境が想定される場合は対策をご検討下さい。（結露不可）
8. ブレーキの電源電圧は定格電圧に対して ±10%の範囲でご使用下さい。範囲を超えて使用した場合異常な発熱や正常に動作しない恐れがあります。
9. 装置の負荷に対してブレーキトルクが満足している事をご確認ください。
10. モータ運転時や静止状態でもブレーキ通電時はブレーキ本体は高温となりますので手や部品が触れないようにして下さい。
11. 配線、制御等に関して壊れない使用方法を確認し、ご使用ください。
12. モータとブレーキは時定数が異なりますので起動・停止タイミングは個別に制御されることを推奨します。  
また、OFF時にモータの惰性による誘起電圧がブレーキ電源端子に流れますとブレーキの動作に遅れが生じますのでご注意ください。又、ブレーキ付の場合、バックサージ吸収素子などを設けることを推奨します。

# D.C. GEARED MOTOR (SPUR GEAR)

TD2585G



SHAFT DETAIL



## D.C. MOTOR

## SPEED – TORQUE CHARACTERISTICS

| Part No. | Voltage | Torque |      | Current | Speed | Output | Duty  |
|----------|---------|--------|------|---------|-------|--------|-------|
|          |         | kgf·cm | mN·m | Amp     | r/min | Watts  |       |
| TD2585G  | -06H    | 6      | 0.1  | 9.8     | 3000  | 3      | Cont. |
|          | -12H    | 12     |      |         |       |        |       |
|          | -24H    | 24     |      |         |       |        |       |

## MODEL – 4G D.C. GEARED MOTOR

## SPEED – TORQUE CHARACTERISTICS

| Model       | Torque |      | Reduction Ratio | Speed | Gear Length-A | Mass |      |
|-------------|--------|------|-----------------|-------|---------------|------|------|
|             | kgf·cm | mN·m |                 | r/min |               |      |      |
| Motor-Gear  |        |      |                 |       |               |      |      |
| TD2585G-□□H | -4G6   | 0.4  | 39.2            | 6     | 500           | 19   |      |
|             | -4G10  | 0.7  | 68.6            | 10    | 300           |      |      |
|             | -4G18  | 1    | 98.1            | 18    | 166.6         |      |      |
|             | -4G30  | 2    | 196.1           | 30    | 100           | 21.5 |      |
|             | -4G50  | 3    | 294.2           | 50    | 60            |      |      |
|             | -4G60  | 4    | 392.3           | 60    | 50            |      |      |
|             | -4G75  | 5    | 490.4           | 75    | 40            | 24   |      |
|             | -4G100 | 6    | 588.4           | 100   | 30            |      |      |
|             | -4G120 |      |                 | 120   | 25            |      |      |
|             | -4G150 |      |                 | 150   | 20            |      |      |
|             | -4G180 |      |                 | 180   | 16.6          |      |      |
|             | -4G200 |      |                 | 200   | 15            |      |      |
|             | -4G250 |      |                 | 250   | 12            |      |      |
|             | -4G300 |      |                 | 300   | 10            |      |      |
|             | -4G500 |      |                 | 500   | 6             |      |      |
|             | -4G600 |      |                 | 600   | 5             |      |      |
| -4G750      | 750    |      |                 | 4     |               |      |      |
| -4G900      | 900    |      |                 | 3.3   |               |      |      |
| -4G1000     | 1000   |      |                 | 3     |               |      |      |
|             |        |      |                 |       |               |      | 26.5 |
|             |        |      |                 |       |               |      |      |
|             |        |      |                 |       |               |      |      |
|             |        |      |                 |       |               |      | 29   |
|             |        |      |                 |       |               |      |      |
|             |        |      |                 |       |               |      |      |
|             |        |      |                 |       |               |      |      |

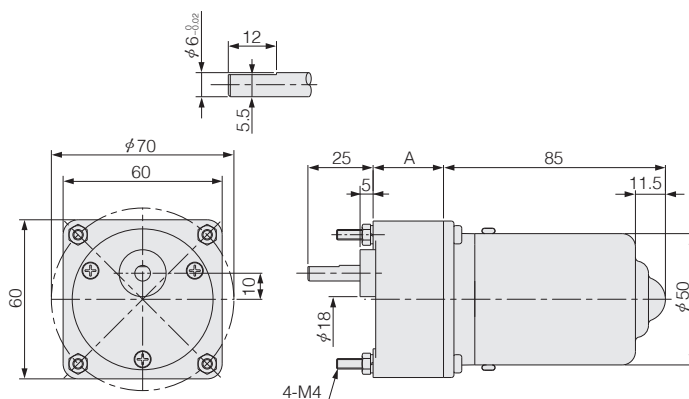
リード線黒に(-)を印加した場合、    の回転方向は出力軸から見てCCW(左回転)になります。

# D.C. GEARED MOTOR (SPUR GEAR)

TD2511G



SHAFT DETAIL



## D.C. MOTOR

## SPEED-TORQUE CHARACTERISTICS

| Part No. | Voltage | Torque |      | Current | Speed | Output | Duty  |
|----------|---------|--------|------|---------|-------|--------|-------|
|          |         | kgf·cm | mN·m | Amp     | r/min | Watts  |       |
| TD2511G- | 12E     | 0.22   | 21.5 | 1       | 1800  | 4      | Cont. |
|          | 24E     |        |      | 0.5     |       |        |       |
|          | 12H     | 0.26   | 25.5 | 1       | 1500  |        |       |
|          | 24H     |        |      | 0.5     |       |        |       |

## MODEL-6BH D.C. GEARED MOTOR

## SPEED-TORQUE CHARACTERISTICS

| Model    | Motor-Gear | Torque  |     | Reduction Ratio | Speed | Length A | Mass |         |
|----------|------------|---------|-----|-----------------|-------|----------|------|---------|
|          |            | kgf·cm  | N·m |                 | r/min |          |      | mm      |
| TD2511G- | □□E<br>□□H | -6B5H   | 0.9 | 0.09            | 5     | 360      | 27   | 0.7~0.8 |
|          |            |         | 1.1 | 0.10            |       | 300      |      |         |
|          | □□E<br>□□H | -6B15H  | 2.7 | 0.26            | 15    | 120      |      |         |
|          |            |         | 3.2 | 0.31            |       | 100      |      |         |
|          | □□E<br>□□H | -6B30H  | 4.8 | 0.47            | 30    | 60       |      |         |
|          |            |         | 5.7 | 0.56            |       | 50       |      |         |
|          | □□E<br>□□H | -6B50H  | 8   | 0.79            | 50    | 36       |      |         |
|          |            |         | 9.5 | 0.93            |       | 30       |      |         |
|          | □□E<br>□□H | -6B100H | 10  | 0.98            | 100   | 18       |      |         |
|          |            |         |     |                 |       | 15       |      |         |
|          | □□E<br>□□H | -6B150H | 10  | 0.98            | 150   | 12       |      |         |
|          |            |         |     |                 |       | 10       |      |         |
|          | □□E<br>□□H | -6B300H | 10  | 0.98            | 300   | 6        |      |         |
|          |            |         |     |                 |       | 5        |      |         |

上記以外のギヤー比については別途ご相談ください。

Please ask us about the gear ratio except for the above separately, too.

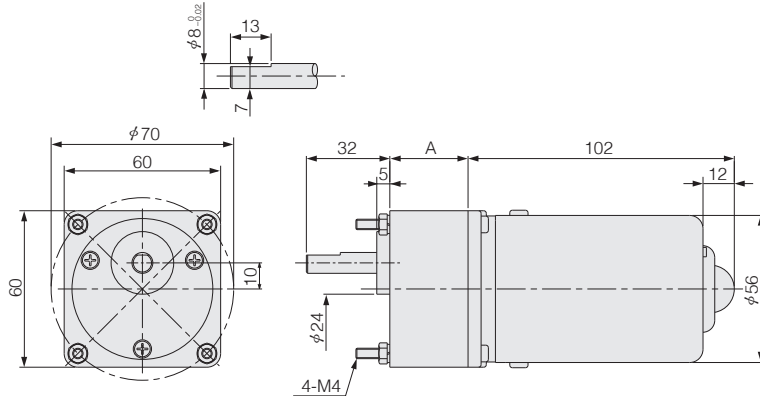
リード線黒に(-)を印加した場合、 の回転方向は出力軸から見てCCW(左回転)になります。

# D.C. GEARED MOTOR (SPUR GEAR)

## TD2586G



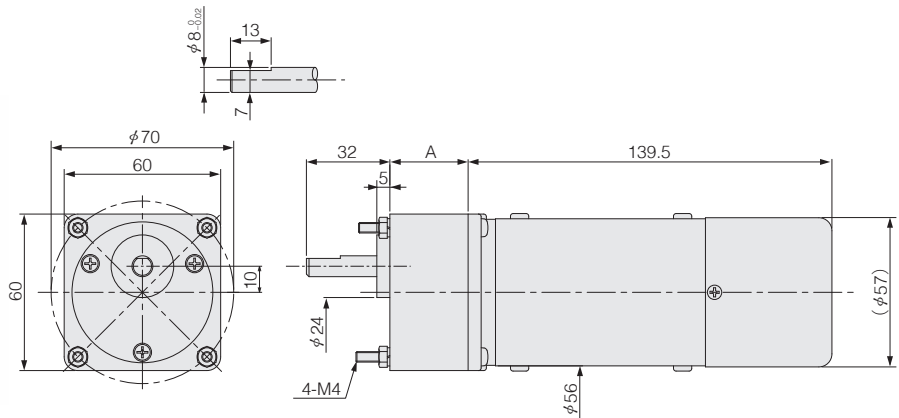
SHAFT DETAIL



## TD3186G



SHAFT DETAIL



|   |               |     |             |     |       |
|---|---------------|-----|-------------|-----|-------|
| 無励磁動作ブレーキ [制動用]<br>NEGATIVE ACTUATED TYPE<br>ELECTROMAGNETIC BRAKE<br>[FOR BRAKING] | Static Torque |     | Coil (20°C) |     |       |
|   | kgf·cm        | N·m | Voltage     | Amp | Watts |
|   | 2             | 0.2 | 24          | 0.2 | 5     |

### D.C. MOTOR

### SPEED-TORQUE CHARACTERISTICS

| Part No. | Voltage | Torque |      | Current<br>Amp | Speed<br>r/min | Output<br>Watts | Duty  |
|----------|---------|--------|------|----------------|----------------|-----------------|-------|
|          |         | kgf·cm | mN·m |                |                |                 |       |
| TD2586G— | 12J     | 12     | 0.54 | 1.5            | 1800           | 10              | Cont. |
|          | 24J     |        |      |                |                |                 |       |
|          | 12F     | 24     | 0.65 | 0.8            | 1500           |                 |       |
|          | 24F     |        |      |                |                |                 |       |
| TD3186G— | 24F     | 24     | 0.65 | 0.8            | 1500           |                 |       |

### MODEL-6BG D.C. GEARED MOTOR

### SPEED-TORQUE CHARACTERISTICS

| Model<br>Motor-Gear | Torque       |      | Reduction<br>Ratio | Speed<br>r/min | Length A<br>mm | Mass<br>kg         |
|---------------------|--------------|------|--------------------|----------------|----------------|--------------------|
|                     | kgf·cm       | N·m  |                    |                |                |                    |
| TD2586G—            | □□ J —6B5G   | 2.2  | 0.21               | 5              | 360            | TD2586G<br>1.1~1.3 |
|                     | □□ F —6B5G   | 2.6  | 0.26               |                |                |                    |
|                     | □□ J —6B15G  | 6.6  | 0.64               | 15             | 120            |                    |
|                     | □□ F —6B15G  | 7.9  | 0.77               |                |                |                    |
| TD3186G—            | □□ J —6B30G  | 11.8 | 1.16               | 30             | 60             | TD3186G<br>1.4~1.6 |
|                     | □□ F —6B30G  | 14.2 | 1.40               |                |                |                    |
|                     | □□ J —6B50G  | 17.8 | 1.75               | 50             | 36             |                    |
|                     | □□ F —6B50G  | 21.5 | 2.10               |                |                |                    |
| TD3186G—            | □□ J —6B100G | 25   | 2.45               | 100            | 18             | TD3186G<br>1.4~1.6 |
|                     | □□ F —6B100G |      |                    |                | 15             |                    |
|                     | □□ J —6B150G | 150  | 12                 | 10             |                |                    |
|                     | □□ F —6B150G |      |                    |                |                |                    |

上記以外のギヤー比については別途ご相談ください。

Please ask us about the gear ratio except for the above separately, too.

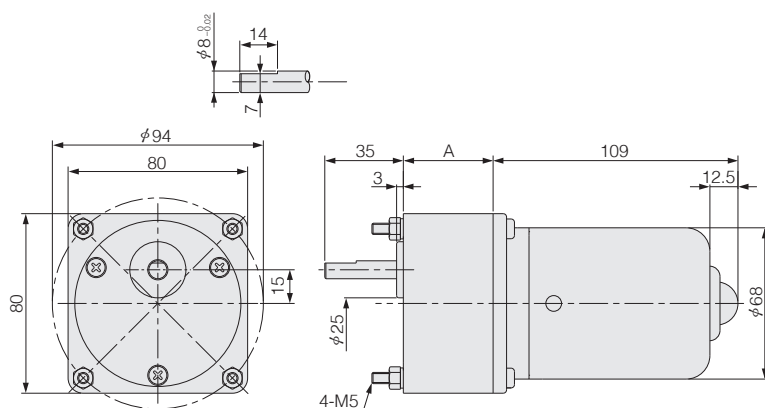
リード線黒に(-)を印加した場合、 の回転方向は出力軸から見てCCW(左回転)になります。

# D.C. GEARED MOTOR (SPUR GEAR)

TD2444G



SHAFT DETAIL



## D.C. MOTOR

## SPEED-TORQUE CHARACTERISTICS

| Part No. | Voltage | Torque |      | Current | Speed | Output | Duty |       |
|----------|---------|--------|------|---------|-------|--------|------|-------|
|          |         | kgf·cm | mN·m | Amp     | r/min | Watts  |      |       |
| TD2444G  | 12E     | 12     | 0.83 | 81.3    | 2.2   | 1800   | 15   | Cont. |
|          | 24E     | 24     |      |         |       |        |      |       |
|          | 12H     | 12     | 1    | 98.1    | 2.2   | 1500   |      |       |
|          | 24H     | 24     |      |         |       |        |      |       |

## MODEL-8BH D.C. GEARED MOTOR

## SPEED-TORQUE CHARACTERISTICS

| Model   | Motor-Gear | Torque  |      | Reduction Ratio | Speed | Length A | Mass |         |
|---------|------------|---------|------|-----------------|-------|----------|------|---------|
|         |            | kgf·cm  | N·m  |                 | r/min |          |      | mm      |
| TD2444G | □□E<br>□□H | -8B5H   | 3.4  | 0.33            | 5     | 360      | 40   | 1.4~1.8 |
|         |            |         | 4.1  | 0.40            |       | 300      |      |         |
|         | □□E<br>□□H | -8B15H  | 10.1 | 0.99            | 15    | 120      |      |         |
|         |            |         | 12.2 | 1.19            |       | 100      |      |         |
|         | □□E<br>□□H | -8B30H  | 18.2 | 1.78            | 30    | 60       |      |         |
|         |            |         | 21.9 | 2.15            |       | 50       |      |         |
|         | □□E<br>□□H | -8B50H  | 30.3 | 2.97            | 50    | 36       |      |         |
|         |            |         | 36.5 | 3.58            |       | 30       |      |         |
|         | □□E<br>□□H | -8B100H | 40   | 3.92            | 100   | 18       |      |         |
|         |            |         |      |                 |       | 15       |      |         |
|         | □□E<br>□□H | -8B150H | 40   | 3.92            | 150   | 12       |      |         |
|         |            |         |      |                 |       | 10       |      |         |

上記以外のギヤー比については別途ご相談ください。

Please ask us about the gear ratio except for the above separately, too.

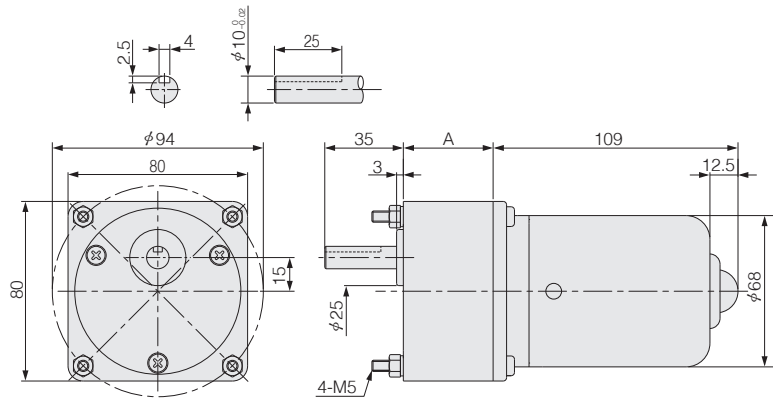
リード線黒に(-)を印加した場合、 の回転方向は出力軸から見てCCW(左回転)になります。

# D.C. GEARED MOTOR (SPUR GEAR)

## TD2444G



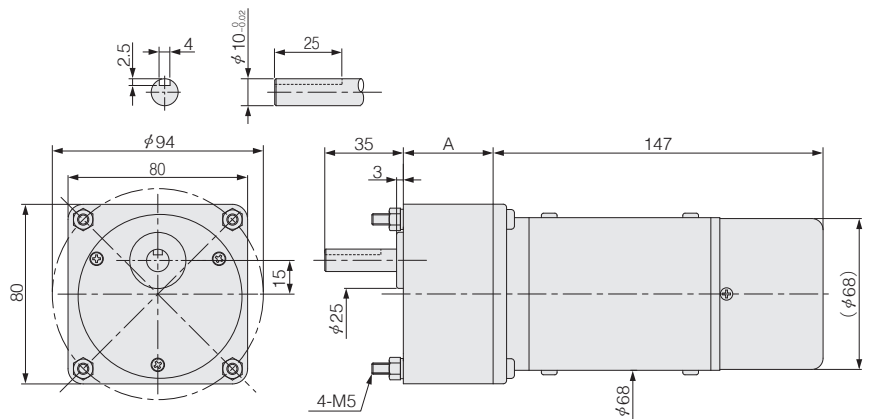
SHAFT DETAIL



## 電磁ブレーキ付 [WITH BRAKE] TD3208G



SHAFT DETAIL



| 無励磁作動ブレーキ [制動用]<br>NEGATIVE ACTUATED TYPE<br>ELECTROMAGNETIC BRAKE<br>[FOR BRAKING] | Static Torque |     | Coil (20°C) |      |       |
|---|---------------|-----|-------------|------|-------|
|   | kgf·cm        | N·m | Voltage     | Amp  | Watts |
|   | 5             | 0.5 | 24          | 0.29 | 7     |

### D.C. MOTOR

### SPEED-TORQUE CHARACTERISTICS

| Part No. | Voltage | Torque |      | Current<br>Amp | Speed<br>r/min | Output<br>Watts | Duty  |
|----------|---------|--------|------|----------------|----------------|-----------------|-------|
|          |         | kgf·cm | mN·m |                |                |                 |       |
| TD2444G- | 612     | 12     | 118  | 3.4            | 2000           | 25              | Cont. |
|          | 624     | 24     |      | 1.7            |                |                 |       |
|          | 12J     | 12     |      | 3.2            | 1800           | 22              |       |
|          | 24J     | 24     |      | 1.6            |                |                 |       |
|          | 12F     | 12     |      | 3.2            |                |                 |       |
| 24F      | 24      | 1.5    | 1.6  | 1500           | 23             |                 |       |
| TD3208G- | 24F     | 24     | 147  | 1.6            | 1500           | 23              |       |

### MODEL-8BG D.C. GEARED MOTOR

### SPEED-TORQUE CHARACTERISTICS

| Model<br>Motor-Gear |       | Torque |      | Reduction<br>Ratio | Speed<br>r/min | Length A<br>mm     | Mass<br>kg         |
|---------------------|-------|--------|------|--------------------|----------------|--------------------|--------------------|
|                     |       | kgf·cm | N·m  |                    |                |                    |                    |
| TD2444G-            | 6 □ □ | 4.9    | 0.48 | 5                  | 400            | 32                 | TD2444G<br>1.4~1.8 |
|                     | □ □ J |        |      |                    | 360            |                    |                    |
|                     | □ □ F |        |      |                    | 300            |                    |                    |
|                     | 6 □ □ | 14.6   | 1.43 | 15                 | 133            |                    |                    |
|                     | □ □ J | 18.2   | 1.79 |                    | 120            |                    |                    |
|                     | □ □ F | 100    |      |                    |                |                    |                    |
| TD2444G-            | 6 □ □ | 26.3   | 2.58 | 30                 | 67             | TD3208G<br>1.8~2.2 |                    |
|                     | □ □ J | 32.9   | 3.22 |                    | 60             |                    |                    |
|                     | □ □ F | 50     |      |                    |                |                    |                    |
| TD3208G-            | 6 □ □ | 39.6   | 3.88 | 50                 | 40             |                    | 45                 |
|                     | □ □ J |        |      |                    | 36             |                    |                    |
|                     | □ □ F |        |      |                    | 30             |                    |                    |
|                     | 6 □ □ | 79.2   | 7.77 | 100                | 20             |                    |                    |
|                     | □ □ J |        |      |                    | 18             |                    |                    |
|                     | □ □ F |        |      |                    | 15             |                    |                    |
| TD3208G-            | 6 □ □ | 80     | 7.85 | 150                | 13             |                    |                    |
|                     | □ □ J |        |      |                    | 12             |                    |                    |
|                     | □ □ F |        |      |                    | 10             |                    |                    |

上記以外のギヤ比については別途ご相談ください。

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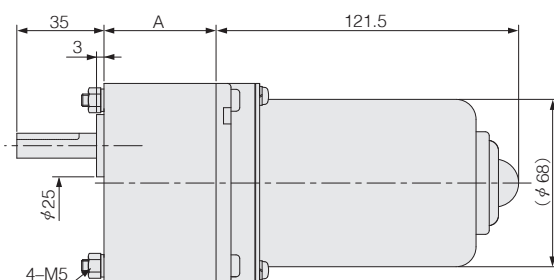
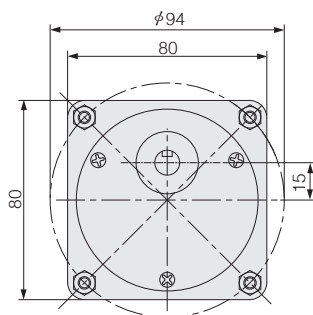
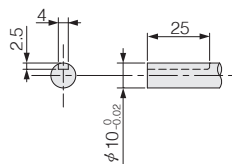
リード線黒に(-)を印加した場合、の回転方向は出力軸から見てCCW(左回転)になります。

# D.C. GEARED MOTOR (SPUR GEAR)

TD3338G



SHAFT DETAIL



## D.C. MOTOR

## SPEED-TORQUE CHARACTERISTICS

| Part No. | Voltage | Torque |      | Current<br>Amp | Speed<br>r/min | Output<br>Watts | Duty |
|----------|---------|--------|------|----------------|----------------|-----------------|------|
|          |         | kgf·cm | mN·m |                |                |                 |      |
| TD3338G— | 180     | 100    | 1.2  | 118            | 0.33           | 1800            | 22   |
|          | 150     |        | 1.5  | 147            | 0.36           | 1500            | 23   |

## MODEL-8BG D.C. GEARED MOTOR

## SPEED-TORQUE CHARACTERISTICS

| Model<br>Motor-Gear | Torque |         | Reduction<br>Ratio | Speed<br>r/min | Length A<br>mm | Mass<br>kg |
|---------------------|--------|---------|--------------------|----------------|----------------|------------|
|                     | kgf·cm | N·m     |                    |                |                |            |
| TD3338G—            | 180    | —8B5G   | 5                  | 360            | 32             | 1.6~1.8    |
|                     | 150    |         |                    | 300            |                |            |
|                     | 180    | —8B15G  | 15                 | 120            |                |            |
|                     | 150    |         |                    | 100            |                |            |
|                     | 180    | —8B30G  | 30                 | 60             | 45             |            |
|                     | 150    |         |                    | 50             |                |            |
|                     | 180    | —8B50G  | 50                 | 36             |                |            |
|                     | 150    |         |                    | 30             |                |            |
|                     | 180    | —8B100G | 100                | 18             |                |            |
|                     | 150    |         |                    | 15             |                |            |
|                     | 180    | —8B150G | 150                | 12             |                |            |
|                     | 150    |         |                    | 10             |                |            |

定格電圧が230V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 230V have been produced for sale. Also, motors of other various rated voltage can be produced per your technical specifications.

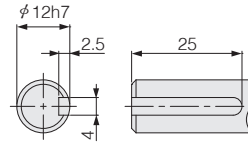
リード線黒に(-)を印加した場合、の回転方向は出力軸から見てCCW(左回転)になります。

# D.C. GEARED MOTOR (SPUR GEAR)

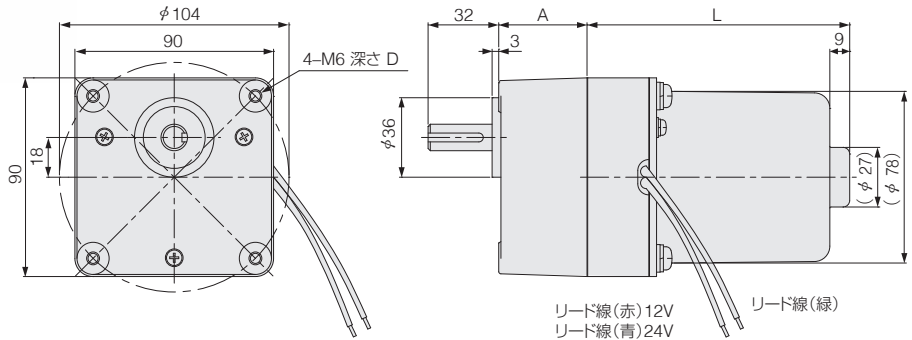
M76G



SHAFT DETAIL



| Gear          | D  |
|---------------|----|
| -GB, GC5~25   | 12 |
| -GB, GC30~180 | 18 |



D.C. MOTOR

SPEED-TORQUE CHARACTERISTICS

| Part No. | Voltage | Torque |      | Current | Speed | Output | Duty  |
|----------|---------|--------|------|---------|-------|--------|-------|
|          |         | kgf·cm | N·m  | Amp     | r/min | Watts  |       |
| M76G02A  | 12      | 3      | 0.29 | 6.5     | 2000  | 60     | Cont. |
| M76G05A  | 24      |        |      | 3.5     |       |        |       |

MODEL-GB·GC D.C. GEARED MOTOR

SPEED-TORQUE CHARACTERISTICS

| Model              | Torque |     | Reduction Ratio | Speed r/min | Gear Length-A | Length-L | Mass |
|--------------------|--------|-----|-----------------|-------------|---------------|----------|------|
|                    | kgf·cm | N·m |                 |             |               |          |      |
| M76G02A<br>M76G05A | -GB5   | 13  | 1.27            | 5           | 400           | 45       | 2.7  |
|                    | -GB10  | 25  | 2.45            | 10          | 200           |          |      |
|                    | -GB25  | 65  | 6.37            | 25          | 80            |          |      |
|                    | -GB30  | 71  | 6.96            | 30          | 67            | 60       | 119  |
|                    | -GB50  | 100 | 9.81            | 50          | 40            |          |      |
|                    | -GB60  |     |                 | 60          | 33            |          |      |
|                    | -GB75  |     |                 | 75          | 27            |          |      |
|                    | -GB100 |     |                 | 100         | 20            |          |      |
|                    | -GB150 |     |                 | 150         | 13            |          |      |
|                    | -GB180 |     |                 | 180         | 11            |          |      |
|                    | -GC5   | 13  | 1.27            | 5           | 400           | 45       | 2.7  |
|                    | -GC10  | 25  | 2.45            | 10          | 200           |          |      |
|                    | -GC25  | 65  | 6.37            | 25          | 80            |          |      |
|                    | -GC30  | 71  | 6.96            | 30          | 67            | 60       | 119  |
|                    | -GC50  | 119 | 11.7            | 50          | 40            |          |      |
|                    | -GC60  | 142 | 13.9            | 60          | 33            |          |      |
|                    | -GC75  | 150 | 14.7            | 75          | 27            |          |      |
|                    | -GC100 |     |                 | 100         | 20            |          |      |
| -GC150             | 150    |     |                 | 13          |               |          |      |
| -GC180             | 180    |     |                 | 11          |               |          |      |

上記以外に下記のギヤー比も可能です。

1/15, 1/20, 1/36, 1/90, 1/120

MP 量産対応品です。数量については別途お問い合わせください。

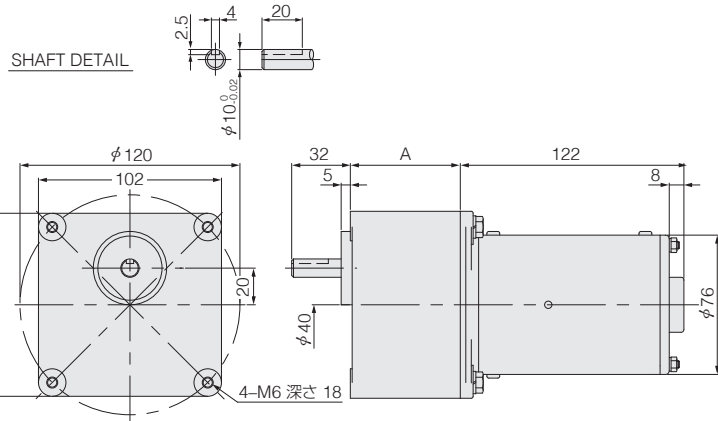
MP=Mass Production type. Please give us an inquiry about minimum quantity.

リード線緑に(-)を印加した場合、の回転方向は出力軸から見てCCW(左回転)になります。

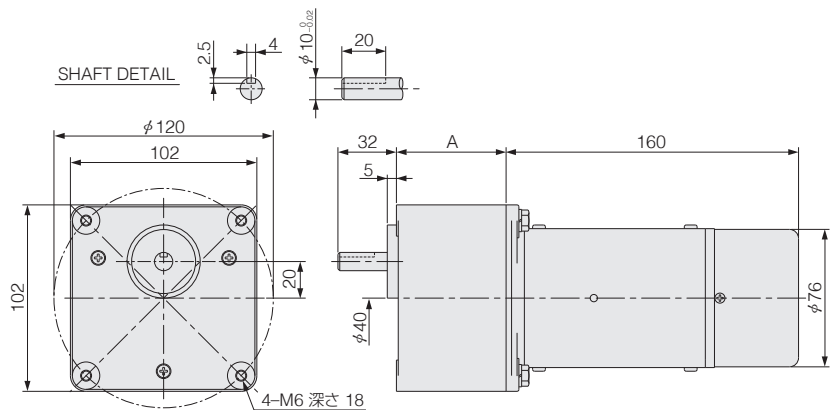


# D.C. GEARED MOTOR (SPUR GEAR)

## TD2557G



## 電磁ブレーキ付 [WITH BRAKE] TD3236G



| 無励磁作動ブレーキ [制動用]<br>NEGATIVE ACTUATED TYPE<br>ELECTROMAGNETIC BRAKE<br>[FOR BRAKING] | Static Torque |     | Coil (20°C) |      |       |
|---|---------------|-----|-------------|------|-------|
|   | kgf·cm        | N·m | Voltage     | Amp  | Watts |
|   | 5             | 0.5 | 24          | 0.29 | 7     |

### D.C. MOTOR

### SPEED-TORQUE CHARACTERISTICS

| Part No. | Voltage | Torque |      | Current | Speed | Output | Duty  |
|----------|---------|--------|------|---------|-------|--------|-------|
|          |         | kgf·cm | N·m  | Amp     | r/min | Watts  |       |
| TD2557G  | -12H    | 2.6    | 0.25 | 5.2     | 1500  | 40     | Cont. |
|          | -24H    |        |      | 2.6     |       |        |       |
| TD3236G  | -24H    |        |      | 2.6     |       |        |       |

### MODEL-10KG D.C. GEARED MOTOR

### SPEED-TORQUE CHARACTERISTICS

| Model       | Torque    |     | Reduction Ratio | Speed | Gear Length-A | Weight              |
|-------------|-----------|-----|-----------------|-------|---------------|---------------------|
|             | kgf·cm    | N·m |                 | r/min |               |                     |
| TD2557G-□□H | -10KG5    | 11  | 1.08            | 5     | 60            | TD2557G<br>2.6~2.85 |
|             | -10KG12.5 | 26  | 2.55            | 12.5  |               |                     |
|             | -10KG15   | 32  | 3.14            | 15    |               |                     |
|             | -10KG25   | 53  | 5.20            | 25    |               |                     |
|             | -10KG30   | 63  | 6.18            | 30    |               |                     |
| TD3236G-24H | -10KG50   | 95  | 9.32            | 50    | 60            | TD3236G<br>3.0~3.25 |
|             | -10KG75   | 100 | 9.81            | 75    |               |                     |
|             | -10KG100  |     |                 | 100   |               |                     |
|             | -10KG150  |     |                 | 150   |               |                     |

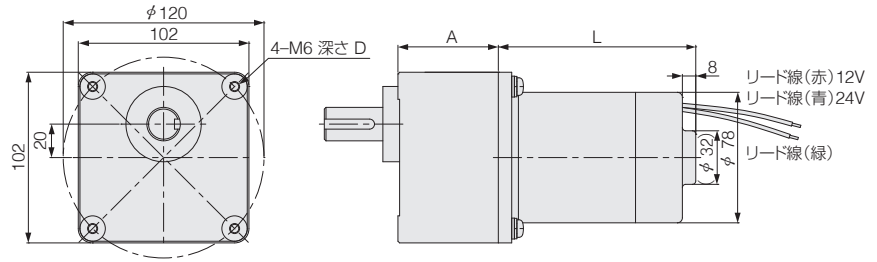
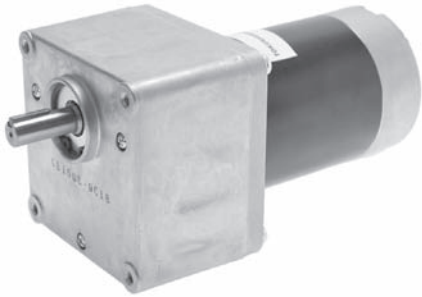
上記以外のギヤー比については別途ご相談ください。

Please ask us about the gear ratio except for the above separately, too.

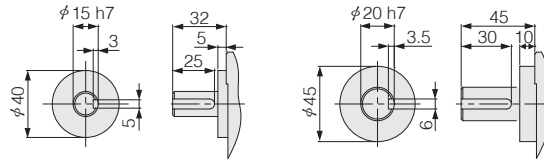
リード線黒に(-)を印加した場合、 の回転方向は出力軸から見てCCW(左回転)になります。

# D.C. GEARED MOTOR (SPUR GEAR)

M75G



SHAFT DETAIL



GE, GF TYPE

GH TYPE

| Gear              | D  |
|-------------------|----|
| -GE, GF, GH5~25   | 12 |
| -GE, GF, GH30~180 | 18 |

## D.C. MOTOR

## SPEED-TORQUE CHARACTERISTICS

| Part No. | Voltage | Torque |     | Current | Speed | Output | Duty  |
|----------|---------|--------|-----|---------|-------|--------|-------|
|          |         | kgf·cm | N·m | Amp     | r/min | Watts  |       |
| M75G     | 12      | 12A    | 3   | 0.29    | 2000  | 60     | Cont. |
|          |         | 12H    | 5   | 0.49    |       | 100    | 1hr   |
|          | 24      | 24A    | 3   | 0.29    |       | 60     | Cont. |
|          |         | 24H    | 5   | 0.49    |       | 100    |       |

## MODEL-GE·GF·GH D.C. GEARED MOTOR

## SPEED-TORQUE CHARACTERISTICS

| Model              | Torque |      | Reduction Ratio | Speed r/min | Gear Length-A | Length-L | Mass    |
|--------------------|--------|------|-----------------|-------------|---------------|----------|---------|
|                    | kgf·cm | N·m  |                 |             |               |          |         |
| Motor-Gear         |        |      |                 |             |               |          |         |
| M75G12A<br>M75G24A | -GE5   | 13   | 1.27            | 5           | 60            | 130      | 3.2~3.5 |
|                    | -GE10  | 25   | 2.45            | 10          |               |          |         |
|                    | -GE20  | 51   | 5.0             | 20          |               |          |         |
|                    | -GE30  | 71   | 6.96            | 30          |               |          |         |
|                    | -GE50  | 118  | 11.6            | 50          |               |          |         |
|                    | -GE75  |      |                 | 75          |               |          |         |
|                    | -GE100 | 150  | 14.7            | 100         |               |          |         |
|                    | -GE150 |      |                 | 150         |               |          |         |
|                    | -GE180 |      |                 | 180         |               |          |         |
|                    | -GF5   | 13   | 1.27            | 5           |               |          | 3.3~3.6 |
|                    | -GF10  | 25   | 2.45            | 10          |               |          |         |
|                    | -GF20  | 51   | 5.0             | 20          |               |          |         |
|                    | -GF30  | 71   | 6.96            | 30          |               |          |         |
|                    | -GF50  | 118  | 11.6            | 50          |               |          |         |
|                    | -GF75  | 164  | 16.1            | 75          |               |          |         |
|                    | -GF100 | 200  | 19.6            | 100         |               |          |         |
|                    | -GF150 |      |                 | 150         |               |          |         |
|                    | -GF180 |      |                 | 180         |               |          |         |
| M75G12H<br>M75G24H | -GH5   | 21   | 2.06            | 5           | 80            | 150      | 4.0~4.4 |
|                    | -GH10  | 43   | 4.22            | 10          |               |          |         |
|                    | -GH20  | 86   | 8.43            | 20          |               |          |         |
|                    | -GH30  | 118  | 11.6            | 30          |               |          |         |
|                    | -GH50  | 197  | 19.3            | 50          |               |          |         |
|                    | -GH75  | 273  | 26.8            | 75          |               |          |         |
| -GH100             | 365    | 35.8 | 100             | 20          |               |          |         |

上記以外に下記のギヤー比も可能です。

GE・GF Type 1/15, 1/25, 1/36, 1/60, 1/90, 1/120 GH Type 1/15, 1/25, 1/36, 1/60, 1/90

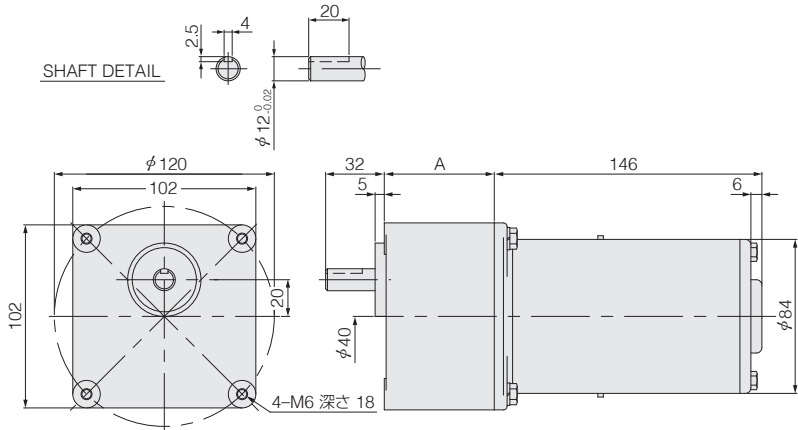
MP 量産対応品です。数量については別途お問い合わせください。

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

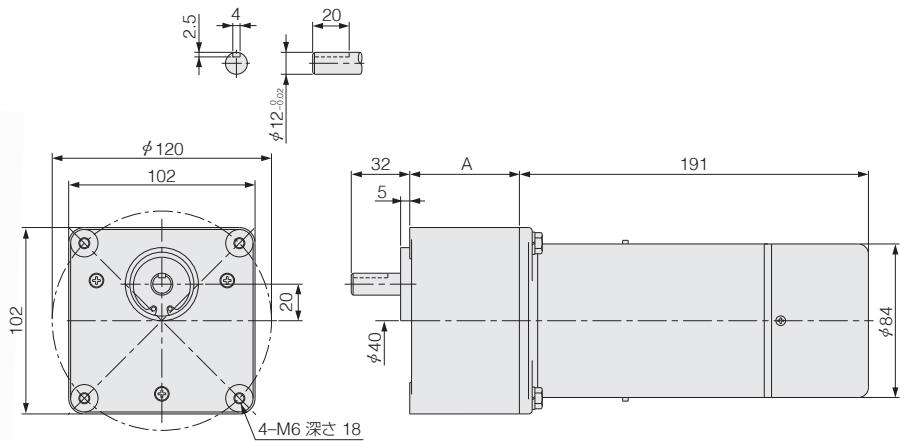
リード線緑に(-)を印加した場合、の回転方向は出力軸から見てCCW(左回転)になります。

# D.C. GEARED MOTOR (SPUR GEAR)

## TD2542G



## 電磁ブレーキ付 [WITH BRAKE] TD3116G



|   |               |     |             |      |       |
|---|---------------|-----|-------------|------|-------|
| 無励磁作動ブレーキ [制動用]<br>NEGATIVE ACTUATED TYPE<br>ELECTROMAGNETIC BRAKE<br>[FOR BRAKING] | Static Torque |     | Coil (20°C) |      |       |
|   | kgf·cm        | N·m | Voltage     | Amp  | Watts |
|   | 10            | 1   | 24          | 0.41 | 10    |

### D.C. MOTOR

### SPEED-TORQUE CHARACTERISTICS

| Part No. | Voltage | Torque |     | Current | Speed | Output | Duty  |
|----------|---------|--------|-----|---------|-------|--------|-------|
|          |         | kgf·cm | N·m | Amp     | r/min | Watts  |       |
| TD2542G  | -12F    | 12     | 3.9 | 0.38    | 7.5   | 60     | Cont. |
|          | -24F    | 24     |     |         | 3.7   |        |       |
|          | -00F    | 100    |     |         | 0.9   |        |       |
| TD3116G  | -24F    | 24     |     |         | 3.7   |        |       |

### MODEL-10KGFB D.C. GEARED MOTOR

### SPEED-TORQUE CHARACTERISTICS

| Model       | Torque      |     | Reduction Ratio | Speed | Gear Length-A | Weight             |
|-------------|-------------|-----|-----------------|-------|---------------|--------------------|
|             | kgf·cm      | N·m |                 | r/min |               |                    |
| TD2542G-□□F | -10KG5FB    | 16  | 1.57            | 5     | 60            | TD2542G<br>3.8~4.1 |
|             | -10KG12.5FB | 40  | 3.92            | 12.5  |               |                    |
|             | -10KG15FB   | 47  | 4.61            | 15    |               |                    |
|             | -10KG25FB   | 71  | 6.96            | 25    |               |                    |
|             | -10KG30FB   | 85  | 8.34            | 30    |               |                    |
| TD3116G-24F | -10KG50FB   | 142 | 13.9            | 50    | 60            | TD3116G<br>4.5~4.8 |
|             | -10KG75FB   | 150 | 14.7            | 75    |               |                    |
|             | -10KG100FB  |     |                 | 100   |               |                    |
|             | -10KG150FB  |     |                 | 150   |               |                    |

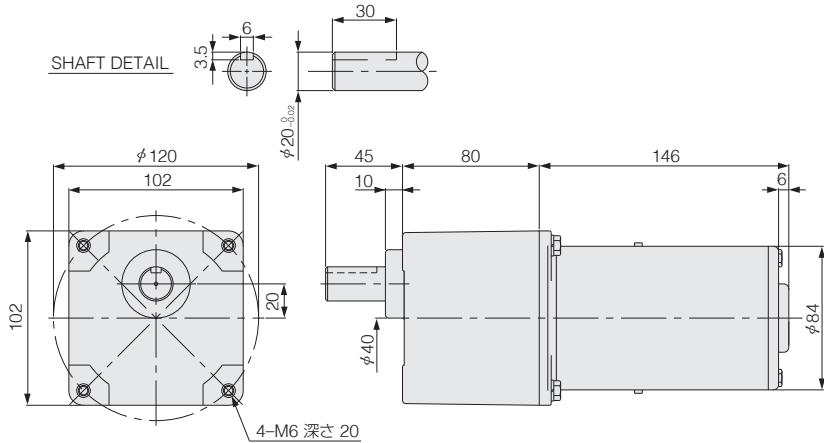
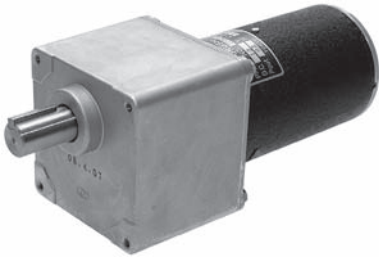
上記以外のギヤー比については別途ご相談ください。

Please ask us about the gear ratio except for the above separately, too.

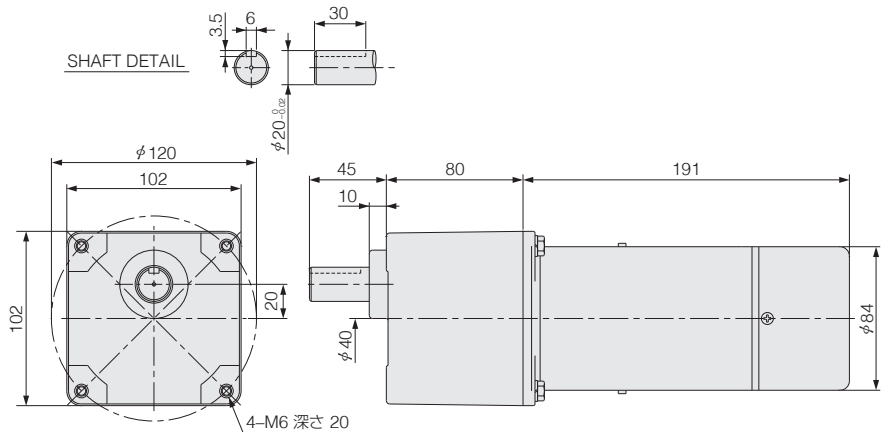
リード線黒に(-)を印加した場合、の回転方向は出力軸から見てCCW(左回転)になります。

# D.C. GEARED MOTOR (SPUR GEAR)

## TD3239G



## 電磁ブレーキ付 [WITH BRAKE] TD3402G



|   |               |     |             |      |       |
|---|---------------|-----|-------------|------|-------|
| 無励磁作動ブレーキ [制動用]<br>NEGATIVE ACTUATED TYPE<br>ELECTROMAGNETIC BRAKE<br>[FOR BRAKING] | Static Torque |     | Coil (20°C) |      |       |
|   | kgf·cm        | N·m | Voltage     | Amp  | Watts |
|   | 10            | 1   | 24          | 0.41 | 10    |

### D.C. MOTOR

### SPEED-TORQUE CHARACTERISTICS

| Part No. | Voltage | Torque |     | Current | Speed | Output | Duty |       |
|----------|---------|--------|-----|---------|-------|--------|------|-------|
|          |         | kgf·cm | N·m | Amp     | r/min | Watts  |      |       |
| TD3239G  | -12F    | 12     | 4.5 | 0.44    | 10.4  | 2000   | 92   | Cont. |
|          | -24F    | 24     |     |         | 5.2   |        |      |       |
|          | -00F    | 100    |     |         | 1.3   |        |      |       |
| TD3402G  | -240    | 24     |     |         | 5.2   |        |      |       |


### MODEL-10K\_K D.C. GEARED MOTOR

### SPEED-TORQUE CHARACTERISTICS

| Model       | Torque   |      | Reduction Ratio | Speed r/min | Max Torque |     | Mass kg |                    |
|-------------|----------|------|-----------------|-------------|------------|-----|---------|--------------------|
|             | kgf·cm   | N·m  |                 |             | kgf·cm     | N·m |         |                    |
| TD3239G-□□F | -10K5K   | 19.3 | 1.89            | 5           | 400        | 60  | 5.8     | TD3239G<br>4.3~4.7 |
|             | -10K10K  | 38.7 | 3.80            | 10          | 200        | 100 | 9.8     |                    |
|             | -10K15K  | 58.0 | 5.69            | 15          | 133        | 200 | 19.6    |                    |
|             | -10K20K  | 77.4 | 7.59            | 20          | 100        |     |         |                    |
|             | -10K25K  | 88.8 | 8.71            | 25          | 80         | 300 | 29.4    |                    |
| -10K30K     | 107      | 10.5 | 30              | 67          |            |     |         |                    |
| TD3402G-240 | -10K36K  | 128  | 12.6            | 36          | 56         | 400 | 39.2    | TD3402G<br>5.0~5.4 |
|             | -10K50K  | 178  | 17.5            | 50          | 40         |     |         |                    |
|             | -10K75K  | 246  | 24.1            | 75          | 27         | 500 | 49.0    |                    |
|             | -10K90K  | 296  | 29.0            | 90          | 22         |     |         |                    |
|             | -10K100K | 329  | 32.3            | 100         | 20         |     |         |                    |
|             | -10K150K | 493  | 48.3            | 150         | 13         |     |         |                    |
| -10K180K    | 500      | 49.0 | 180             | 11          |            |     |         |                    |

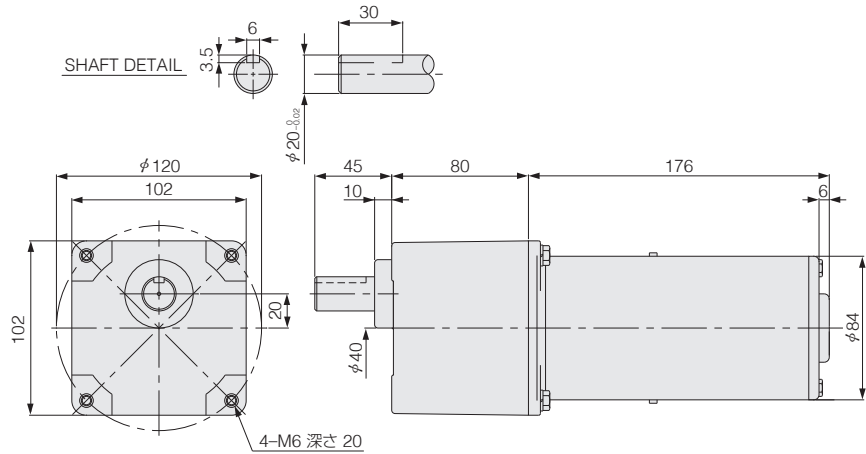
上記以外のギヤ比については別途ご相談ください。

Please ask us about the gear ratio except for the above separately, too.

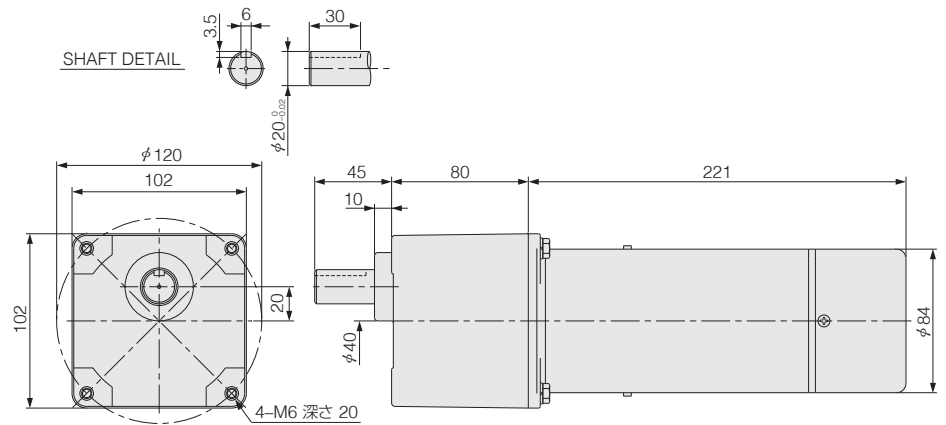
リード線黒に(-)を印加した場合、の回転方向は出力軸から見てCCW(左回転)になります。

# D.C. GEARED MOTOR (SPUR GEAR)

## TD3391G



## 電磁ブレーキ付 [WITH BRAKE] TD3403G



| 無励磁作動ブレーキ [制動用]<br>NEGATIVE ACTUATED TYPE<br>ELECTROMAGNETIC BRAKE<br>[FOR BRAKING] | Static Torque |     | Coil (20°C) |      |       |
|---|---------------|-----|-------------|------|-------|
|   | kgf·cm        | N·m | Voltage     | Amp  | Watts |
|   | 10            | 1   | 24          | 0.41 | 10    |

### D.C. MOTOR

### SPEED-TORQUE CHARACTERISTICS

| Part No. | Voltage | Torque |     | Current | Speed | Output | Duty |       |
|----------|---------|--------|-----|---------|-------|--------|------|-------|
|          |         | kgf·cm | N·m | Amp     | r/min | Watts  |      |       |
| TD3391G  | -12F    | 12     | 6.0 | 0.59    | 13    | 2000   | 123  | Cont. |
|          | -24F    | 24     |     |         | 6.5   |        |      |       |
|          | -00F    | 100    |     |         | 1.4   |        |      |       |
| TD3403G  | -240    | 24     |     |         | 6.5   |        |      |       |

### MODEL-10K\_K D.C. GEARED MOTOR

### SPEED-TORQUE CHARACTERISTICS

| Model       | Torque   |      | Reduction Ratio | Speed | Max Torque |     | Mass |                    |     |      |
|-------------|----------|------|-----------------|-------|------------|-----|------|--------------------|-----|------|
|             | kgf·cm   | N·m  |                 | r/min | kgf·cm     | N·m | kg   |                    |     |      |
| TD3391G-□□F | -10K5K   | 25.8 | 2.53            | 5     | 400        | 60  | 5.8  | TD3391G<br>5.1~5.5 |     |      |
|             | -10K10K  | 51.6 | 5.06            | 10    | 200        | 100 | 9.8  |                    |     |      |
|             | -10K15K  | 77.4 | 7.59            | 15    | 133        | 200 | 19.6 |                    |     |      |
|             | -10K20K  | 103  | 10.1            | 20    | 100        |     |      |                    |     |      |
|             | -10K25K  | 119  | 11.7            | 25    | 80         | 300 | 29.4 |                    |     |      |
|             | -10K30K  | 142  | 13.9            | 30    | 67         |     |      |                    |     |      |
| TD3403G-240 | -10K36K  | 171  | 16.8            | 36    | 56         | 400 | 39.2 | TD3403G<br>5.8~6.2 |     |      |
|             | -10K50K  | 237  | 23.2            | 50    | 40         |     |      |                    |     |      |
|             | -10K75K  | 329  | 32.3            | 75    | 27         |     |      |                    | 500 | 49.0 |
|             | -10K90K  | 394  | 38.6            | 90    | 22         |     |      |                    |     |      |
|             | -10K100K | 438  | 43.0            | 100   | 20         |     |      |                    |     |      |
|             | -10K150K | 500  | 49.0            | 150   | 13         |     |      |                    |     |      |
| -10K180K    | 180      |      |                 | 11    |            |     |      |                    |     |      |

上記以外のギヤー比については別途ご相談ください。

Please ask us about the gear ratio except for the above separately, too.

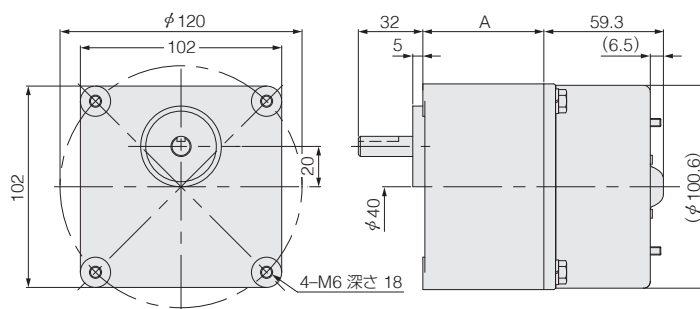
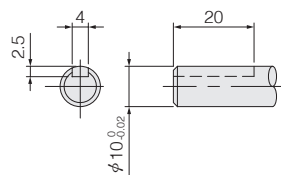
リード線黒に(-)を印加した場合、の回転方向は出力軸から見てCCW(左回転)になります。

# D.C. FLAT GEARED MOTOR (SPUR GEAR)

TD2756G



SHAFT DETAIL



## D.C. MOTOR

## SPEED-TORQUE CHARACTERISTICS

| Part No. | Voltage | Torque |      | Current | Speed | Output | Duty  |
|----------|---------|--------|------|---------|-------|--------|-------|
|          |         | kgf·cm | N·m  | Amp     | r/min | Watts  |       |
| TD2756G  | -12H    | 2.5    | 0.25 | 6.6     | 1800  | 46     | Cont. |
|          | -24H    |        |      | 3.3     |       |        |       |

## MODEL - 10KG D.C. GEARED MOTOR

## SPEED - TORQUE CHARACTERISTICS

| Model       | Torque    |     | Reduction Ratio | Speed | Gear Length-A | Mass |      |
|-------------|-----------|-----|-----------------|-------|---------------|------|------|
|             | kgf·cm    | N·m |                 | r/min |               |      |      |
| TD2756G-□□H | -10KG5    | 10  | 0.98            | 5     | 60            | 2.2  |      |
|             | -10KG12.5 | 25  | 2.45            | 12.5  |               |      |      |
|             | -10KG15   | 30  | 2.94            | 15    |               |      |      |
|             | -10KG25   | 51  | 5.00            | 25    |               | 72   | 2.3  |
|             | -10KG30   | 61  | 5.98            | 30    |               | 60   |      |
|             | -10KG50   | 91  | 8.92            | 50    |               | 36   |      |
|             | -10KG75   | 100 | 9.81            | 75    |               | 24   | 2.45 |
|             | -10KG100  |     |                 | 100   |               | 18   |      |
|             | -10KG150  |     |                 | 150   |               | 12   |      |

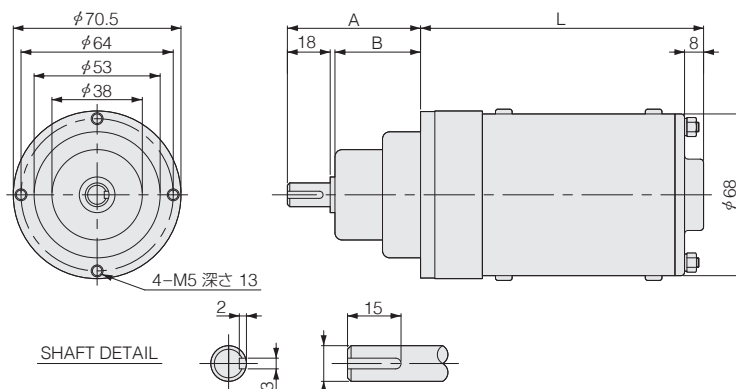
上記以外のギヤー比については別途ご相談ください。

The product of the gear ratio except for the above can be manufactured, too.

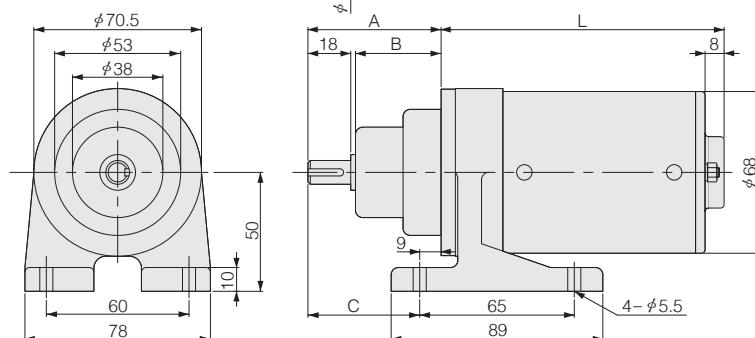
リード線黒に(-)を印加した場合、の回転方向は出力軸から見てCCW(左回転)になります。

# D.C. GEARED MOTOR (PLANETARY GEAR)

## TD2544 • TD2544H



## TD2544L • TD2544HL



### D.C. MOTOR

### SPEED-TORQUE CHARACTERISTICS

| Part No.      | Voltage | Torque |      | Current<br>Amp | Speed<br>r/min | Output<br>Watts | Duty  |
|---------------|---------|--------|------|----------------|----------------|-----------------|-------|
|               |         | kgf·cm | N·m  |                |                |                 |       |
| TD2544 -300   | 12      | 0.97   | 0.1  | 3.8            | 2500           | 25              | Cont. |
| TD2544L -500  | 24      |        |      | 1.9            |                |                 |       |
| TD2544H -300  | 12      | 1.95   | 0.19 | 6.6            | 2500           | 50              |       |
| TD2544HL -500 | 24      |        |      | 3.3            |                |                 |       |

### MODEL-AA D.C. GEARED MOTOR

### SPEED-TORQUE CHARACTERISTICS

| Model<br>Motor-Gear          | Torque |      | Reduction<br>Ratio | Speed<br>r/min | A<br>mm | B<br>mm | C<br>mm | L<br>mm | Mass<br>kg |                      |
|------------------------------|--------|------|--------------------|----------------|---------|---------|---------|---------|------------|----------------------|
|                              | kgf·cm | N·m  |                    |                |         |         |         |         |            |                      |
| TD2544 -□□□<br>TD2544L-□□□   | -AA5   | 4.4  | 0.43               | 5              | 500     | 56      | 36      | 47      | 119        | 1.5~1.7<br>(1.7~1.9) |
|                              | -AA10  | 8.7  | 0.85               | 10             | 250     |         |         |         |            |                      |
|                              | -AA25  | 19.4 | 1.9                | 25             | 100     | 67      | 47      | 58      |            |                      |
|                              | -AA50  | 38.8 | 3.8                | 50             | 50      |         |         |         |            |                      |
|                              | -AA100 | 40.8 | 4.0                | 100            | 25      |         |         |         |            |                      |
| TD2544H -□□□<br>TD2544HL-□□□ | -AA5   | 8.8  | 0.86               | 5              | 500     | 56      | 36      | 47      | 129        | 1.6~1.8<br>(1.8~2.0) |
|                              | -AA10  | 17.5 | 1.72               | 10             | 250     |         |         |         |            |                      |
|                              | -AA25  | 39   | 3.82               | 25             | 100     | 67      | 47      | 58      |            |                      |
|                              | -AA50  | 40.8 | 4.0                | 50             | 50      |         |         |         |            |                      |
|                              | -AA100 |      |                    | 100            | 25      |         |         |         |            |                      |

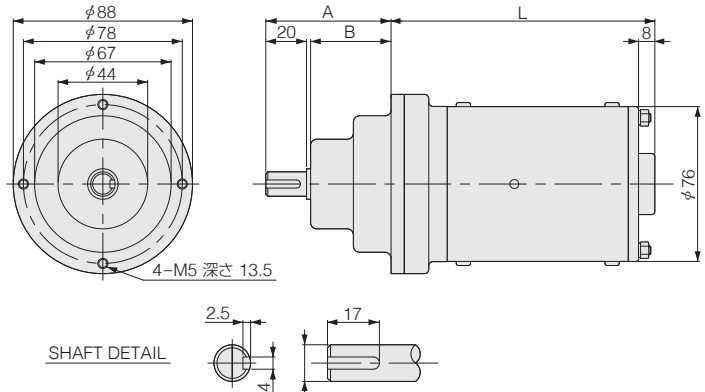
AA25~AA100は100個以上の受注となります。AA25~AA100 require minimum order quantity 100 pieces or more. ( ) - LType  
ブレーキ付の製品も製作致します。We produce the product which built in electromagnetic brakes.

# D.C. GEARED MOTOR (PLANETARY GEAR)

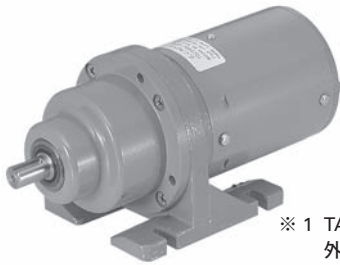
## TD2545 • TD2545H



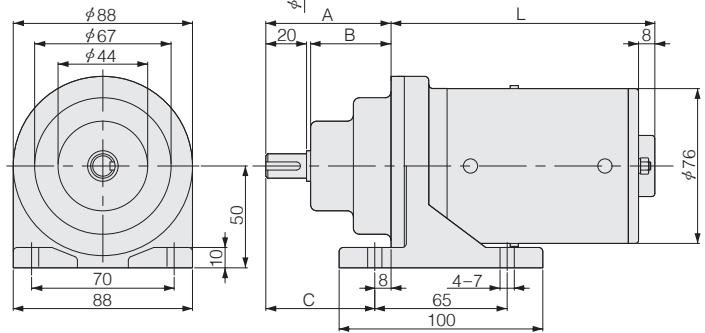
※1 TAB5、TAB10 ギヤケース  
外観はアルミ無処理となり  
写真とは異なります。



## TD2545L • TD2545HL



※1 TAB5、TAB10 ギヤケース  
外観はアルミ無処理となり  
写真とは異なります。



### D.C. MOTOR

### SPEED-TORQUE CHARACTERISTICS

| Part No.      | Voltage | Torque |      | Current<br>Amp | Speed<br>r/min | Output<br>Watts | Duty  |
|---------------|---------|--------|------|----------------|----------------|-----------------|-------|
|               |         | kgf·cm | N·m  |                |                |                 |       |
| TD2545 -300   | 12      | 1.95   | 0.19 | 6.4            | 2500           | 50              | Cont. |
| TD2545L -500  | 24      |        |      | 3.2            |                |                 |       |
| TD2545H -300  | 12      | 2.6    | 0.25 | 8.7            | 2500           | 67              |       |
| TD2545HL -500 | 24      |        |      | 4.2            |                |                 |       |

### MODEL-TAB D.C. GEARED MOTOR

### SPEED-TORQUE CHARACTERISTICS

| Model<br>Motor-Gear          | Torque   |      | Reduction<br>Ratio | Speed<br>r/min | A<br>mm | B<br>mm | C<br>mm | L<br>mm | Mass<br>kg |                      |
|------------------------------|----------|------|--------------------|----------------|---------|---------|---------|---------|------------|----------------------|
|                              | kgf·cm   | N·m  |                    |                |         |         |         |         |            |                      |
| TD2545 -□□□<br>TD2545L-□□□   | ※1-TAB5  | 8.8  | 0.86               | 5              | 500     | 61.5    | 39.5    | 53.5    | 129.5      | 2.3~2.8<br>(2.5~3.0) |
|                              | ※1-TAB10 | 17.5 | 1.72               | 10             | 250     |         |         |         |            |                      |
|                              | -TAB25   | 39   | 3.82               | 25             | 100     | 74.5    | 52.5    | 66.5    |            |                      |
|                              | -TAB50   | 71.3 | 7.0                | 50             | 50      |         |         |         |            |                      |
|                              | -TAB100  | 91.7 | 9.0                | 100            | 25      | 86.5    | 64.5    | 78.5    |            |                      |
|                              | -TAB150  |      |                    | 150            | 16.7    |         |         |         |            |                      |
|                              | -TAB300  |      |                    | 300            | 8.3     |         |         |         |            |                      |
| TD2545H -□□□<br>TD2545HL-□□□ | ※1-TAB5  | 11.7 | 1.15               | 5              | 500     | 61.5    | 39.5    | 53.5    | 139.5      | 2.5~3.0<br>(2.7~3.2) |
|                              | ※1-TAB10 | 23.4 | 2.29               | 10             | 250     |         |         |         |            |                      |
|                              | -TAB25   | 52   | 5.1                | 25             | 100     | 74.5    | 52.5    | 66.5    |            |                      |
|                              | -TAB50   | 71.3 | 7.0                | 50             | 50      |         |         |         |            |                      |
|                              | -TAB100  | 91.7 | 9.0                | 100            | 25      | 86.5    | 64.5    | 78.5    |            |                      |
|                              | -TAB150  |      |                    | 150            | 16.7    |         |         |         |            |                      |
|                              | -TAB300  |      |                    | 300            | 8.3     |         |         |         |            |                      |

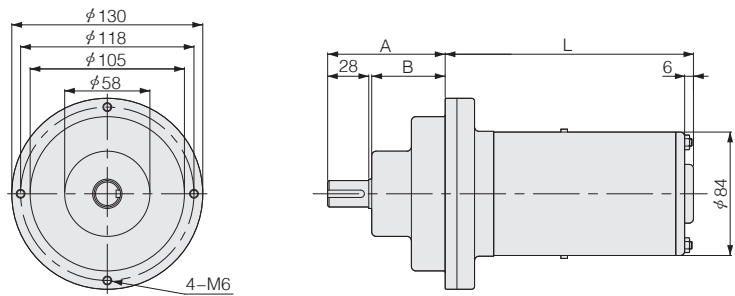
ブレーキ付の製品も製作致します。We produce the product which built in electromagnetic brakes.

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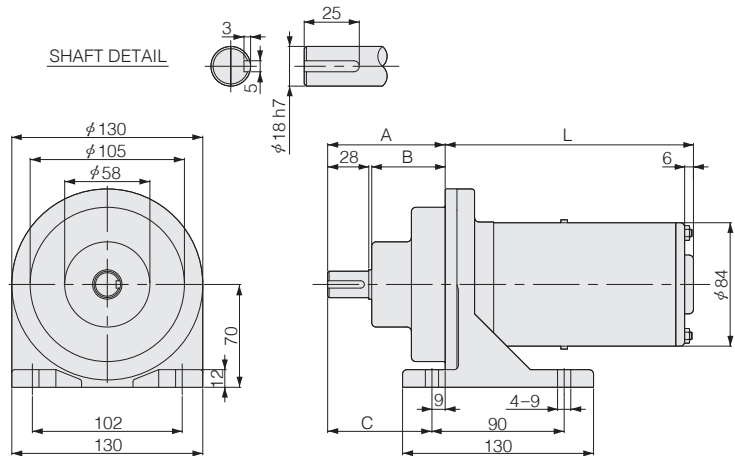
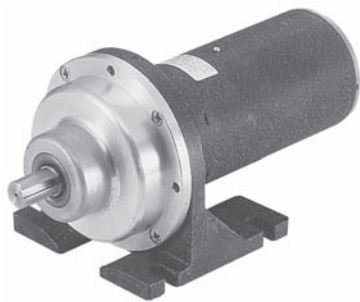


# D.C. GEARED MOTOR (PLANETARY GEAR)

## TD2546 • TD2546H



## TD2546L • TD2546HL



### D.C. MOTOR

### SPEED-TORQUE CHARACTERISTICS

| Part No. | Voltage | Torque |     | Current<br>Amp | Speed<br>r/min | Output<br>Watts | Duty  |
|----------|---------|--------|-----|----------------|----------------|-----------------|-------|
|          |         | kgf·cm | N·m |                |                |                 |       |
| TD2546   | -300    | 12     | 2.6 | 0.25           | 2400           | 64              | Cont. |
| TD2546L  | -500    | 24     |     |                |                |                 |       |
|          | -700    | 100    |     |                |                |                 |       |
| TD2546H  | -300    | 12     | 3.9 | 0.38           | 2300           | 92              |       |
| TD2546HL | -500    | 24     |     |                |                |                 |       |
|          | -700    | 100    |     |                |                |                 |       |

### MODEL-AC D.C. GEARED MOTOR

### SPEED-TORQUE CHARACTERISTICS

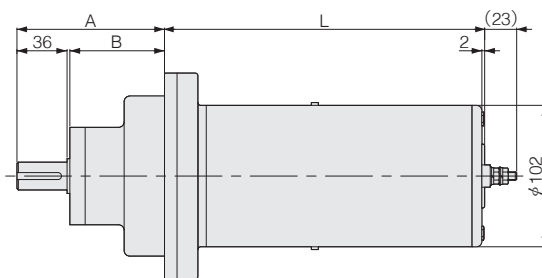
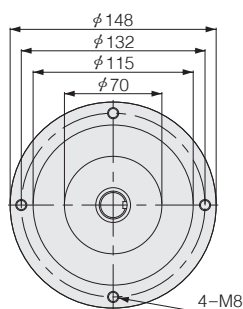
| Model<br>Motor-Gear          | Torque |      | Reduction<br>Ratio | Speed<br>r/min | A<br>mm | B<br>mm | C<br>mm | L<br>mm | Mass<br>kg |                      |
|------------------------------|--------|------|--------------------|----------------|---------|---------|---------|---------|------------|----------------------|
|                              | kgf·cm | N·m  |                    |                |         |         |         |         |            |                      |
| TD2546 -□□□<br>TD2546L-□□□   | -AC5   | 11.7 | 1.15               | 5              | 480     | 80      | 50      | 71      | 169        | 4.4~5.5<br>(4.7~5.8) |
|                              | -AC10  | 23.4 | 2.29               | 10             | 240     |         |         |         |            |                      |
|                              | -AC25  | 52   | 5.1                | 25             | 96      |         |         |         |            |                      |
|                              | -AC50  | 104  | 10.2               | 50             | 48      | 96      | 66      | 87      |            |                      |
|                              | -AC100 | 183  | 18                 | 100            | 24      |         |         |         |            |                      |
|                              | -AC150 | 204  | 20                 | 150            | 16      | 111     | 81      | 102     |            |                      |
|                              | -AC300 |      |                    | 300            | 8       |         |         |         |            |                      |
| TD2546H -□□□<br>TD2546HL-□□□ | -AC5   | 17.5 | 1.72               | 5              | 460     | 80      | 50      | 71      | 199        | 5.4~6.5<br>(5.7~6.8) |
|                              | -AC10  | 35.1 | 3.44               | 10             | 230     |         |         |         |            |                      |
|                              | -AC25  | 78   | 7.64               | 25             | 92      |         |         |         |            |                      |
|                              | -AC50  | 156  | 15.3               | 50             | 46      | 96      | 66      | 87      |            |                      |
|                              | -AC100 | 183  | 18                 | 100            | 23      |         |         |         |            |                      |
|                              | -AC150 | 204  | 20                 | 150            | 15.3    | 111     | 81      | 102     |            |                      |
|                              | -AC300 |      |                    | 300            | 7.6     |         |         |         |            |                      |

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

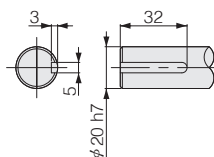
( ) - LType

# D.C. GEARED MOTOR (PLANETARY GEAR)

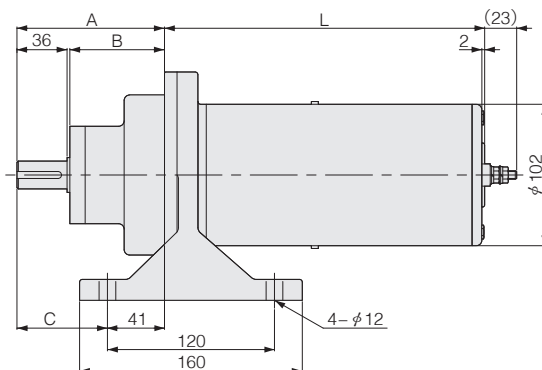
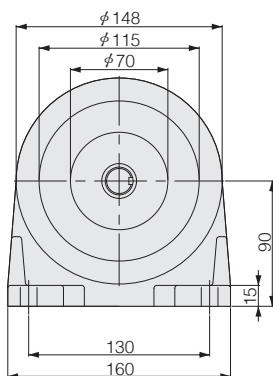
## TD2547



SHAFT DETAIL



## TD2547L



● 100V仕様は、ビニールキャブタイヤコードとなります。

### D.C. MOTOR

### SPEED-TORQUE CHARACTERISTICS

| Part No.     | Voltage | Torque |      | Current<br>Amp | Speed<br>r/min | Output<br>Watts | Duty  |
|--------------|---------|--------|------|----------------|----------------|-----------------|-------|
|              |         | kgf·cm | N·m  |                |                |                 |       |
| TD2547 -012  | 12      | 7.8    | 0.76 | 14.0           | 1350           | 108             | Cont. |
| TD2547L -024 | 24      |        |      | 7.0            |                |                 |       |
| -100         | 100     |        |      | 1.6            |                |                 |       |

### MODEL-SC D.C. GEARED MOTOR

### SPEED-TORQUE CHARACTERISTICS

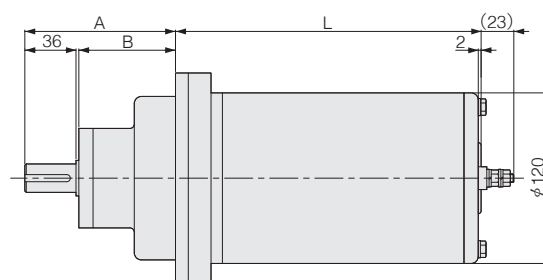
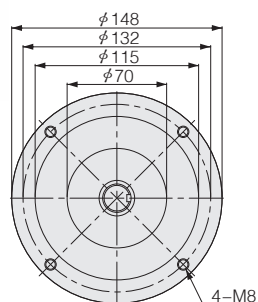
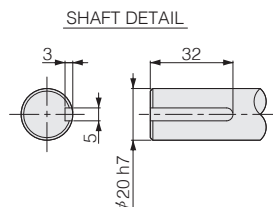
| Model<br>Motor-Gear        | Torque |      | Reduction<br>Ratio | Speed<br>r/min | A<br>mm | B<br>mm | C<br>mm | L<br>mm | Mass<br>kg |                          |
|----------------------------|--------|------|--------------------|----------------|---------|---------|---------|---------|------------|--------------------------|
|                            | kgf·cm | N·m  |                    |                |         |         |         |         |            |                          |
| TD2547 -□□□<br>TD2547L-□□□ | -SC5   | 35.1 | 3.44               | 5              | 270     | 106     | 68      | 65      | 230        | 10.5~12.2<br>(11.2~12.9) |
|                            | -SC10  | 70.2 | 6.88               | 10             | 135     |         |         |         |            |                          |
|                            | -SC25  | 156  | 15.3               | 25             | 54      |         |         |         |            |                          |
|                            | -SC50  | 312  | 30.5               | 50             | 27      | 124     | 86      | 83      |            |                          |
|                            | -SC100 |      |                    | 100            | 13.5    |         |         |         |            |                          |

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

( ) - LType

# D.C. GEARED MOTOR (PLANETARY GEAR)

TD3233



● 48V仕様は、ビニールキャブタイヤコードとなります。

## D.C. MOTOR

## SPEED-TORQUE CHARACTERISTICS

| Part No. | Voltage | Torque |      | Current | Speed | Output | Duty  |    |
|----------|---------|--------|------|---------|-------|--------|-------|----|
|          |         | kgf·cm | N·m  | Amp     | r/min | Watts  |       |    |
| TD3233   | -012    | 12     | 13.6 | 1.33    | 1650  | 230    | Cont. |    |
|          | -024    | 24     |      |         |       |        |       | 24 |
|          | -048    | 48     |      |         |       |        |       | 12 |

## MODEL-SC D.C. GEARED MOTOR

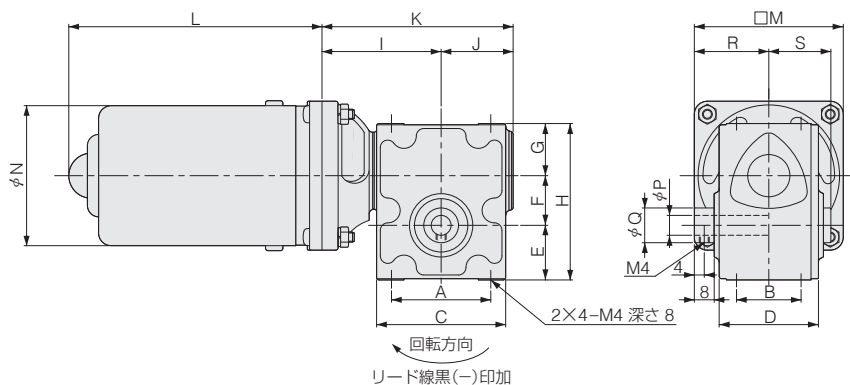
## SPEED-TORQUE CHARACTERISTICS

| Model<br>Motor-Gear | Torque |       | Reduction<br>Ratio | Speed | A    | B   | L  | Mass |           |
|---------------------|--------|-------|--------------------|-------|------|-----|----|------|-----------|
|                     | kgf·cm | N·m   |                    | r/min | mm   | mm  | mm | kg   |           |
| TD3233-□□□          | -SC5   | 61.2  | 6.0                | 5     | 330  | 106 | 68 | 215  | 12.3~14.0 |
|                     | -SC10  | 122.4 | 12                 | 10    | 165  |     |    |      |           |
|                     | -SC25  | 272   | 26.7               | 25    | 66   | 124 | 86 |      |           |
|                     | -SC50  | 311   | 30.5               | 50    | 33   |     |    |      |           |
|                     | -SC100 |       |                    | 100   | 16.5 |     |    |      |           |

定格電圧が100Vの製品も製作可能です。 Motors of rated voltage of 100V can be produced  
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. GEARED MOTOR (WORM GEAR)

## TD2963WG • TD2964WG



〈寸法表〉 Dimensions

| Part No. | A  | B  | C  | D  | E  | F  | G  | H  | I  | J    | K    | L     | □M | φN | φP                                | φQ | R  | S  |
|----------|----|----|----|----|----|----|----|----|----|------|------|-------|----|----|-----------------------------------|----|----|----|
| TD2963WG | 40 | 26 | 52 | 40 | 22 | 20 | 21 | 63 | 48 | 29   | 77   | 102.1 | 60 | 56 | 8 <sup>+0.015</sup> <sub>0</sub>  | 14 | 30 | 25 |
| TD2964WG | 50 | 28 | 62 | 44 | 25 | 25 | 24 | 74 | 53 | 35.5 | 88.5 | 119.1 | 80 | 68 | 10 <sup>+0.015</sup> <sub>0</sub> | 18 | 32 | 27 |

### D.C. MOTOR

### SPEED-TORQUE CHARACTERISTICS

| Part No. | Voltage | Torque |      | Current | Speed | Output | Duty  |
|----------|---------|--------|------|---------|-------|--------|-------|
|          |         | kgf·cm | mN·m | Amp     | r/min | Watts  |       |
| TD2963WG | -151    | 12     | 0.9  | 88.3    | 1500  | 14     | Cont. |
|          | -152    | 24     |      |         |       |        |       |
| TD2964WG | -151    | 12     | 2.0  | 196.1   |       | 31     |       |
|          | -152    | 24     |      |         |       |        |       |

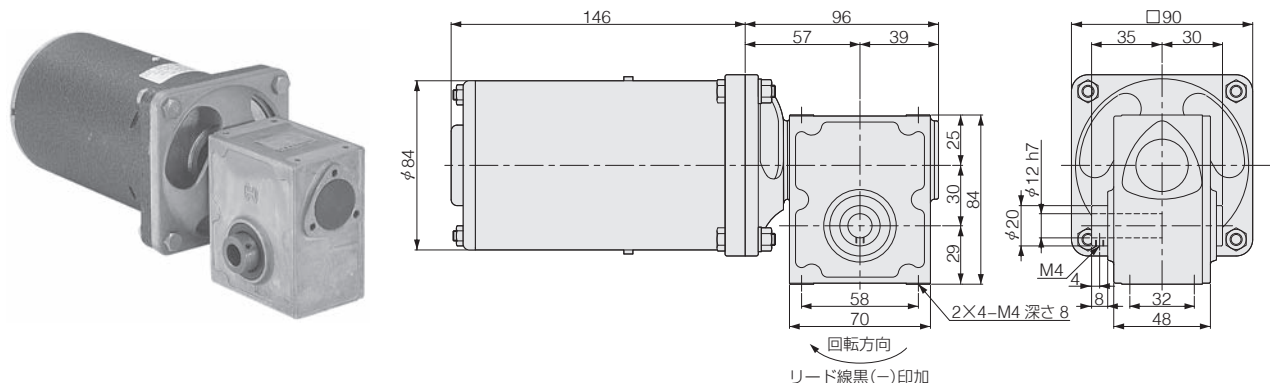
### D. C. GEARED MOTOR

### SPEED-TORQUE CHARACTERISTICS

| Model        | Torque |      | Reduction Ratio | Speed | Mass |
|--------------|--------|------|-----------------|-------|------|
|              | kgf·cm | N·m  |                 | r/min |      |
| TD2963WG-□□□ | -MRA10 | 7    | 0.69            | 10    | 1.1  |
|              | -MRA20 | 12.5 | 1.23            | 20    |      |
|              | -MRA30 | 15.5 | 1.52            | 30    |      |
|              | -MRA40 | 18   | 1.77            | 40    |      |
|              | -MRA50 | 22   | 2.16            | 50    |      |
|              | -MRA60 | 24   | 2.35            | 60    |      |
| TD2964WG-□□□ | -MRB10 | 16.5 | 1.62            | 10    | 1.7  |
|              | -MRB20 | 28   | 2.75            | 20    |      |
|              | -MRB30 | 36.5 | 3.58            | 30    |      |
|              | -MRB40 | 43   | 4.22            | 40    |      |
|              | -MRB50 | 51   | 5.00            | 50    |      |
|              | -MRB60 | 56.5 | 5.54            | 60    |      |

# D.C. GEARED MOTOR (WORM GEAR)

## TD2965WG



### D.C. MOTOR

### SPEED-TORQUE CHARACTERISTICS

| Part No. | Voltage | Torque |     | Current<br>Amp | Speed<br>r/min | Output<br>Watts | Duty  |
|----------|---------|--------|-----|----------------|----------------|-----------------|-------|
|          |         | kgf·cm | N·m |                |                |                 |       |
| TD2965WG | -151    | 12     | 4.5 | 0.44           | 1500           | 70              | Cont. |
|          | -152    | 24     |     |                |                |                 |       |
|          | -150    | 100    |     |                |                |                 |       |

### D.C. GEARED MOTOR

### SPEED-TORQUE CHARACTERISTICS

| Model<br>Motor-Gear | Torque |       | Reduction<br>Ratio | Speed<br>r/min | Mass<br>kg |
|---------------------|--------|-------|--------------------|----------------|------------|
|                     | kgf·cm | N·m   |                    |                |            |
| TD2965WG-□□□        | -MRC10 | 37    | 3.63               | 10             | 3.4        |
|                     | -MRC20 | 65    | 6.37               | 20             |            |
|                     | -MRC30 | 82    | 8.04               | 30             |            |
|                     | -MRC40 | 102.5 | 10.1               | 40             |            |
|                     | -MRC50 | 113   | 11.1               | 50             |            |
|                     | -MRC60 | 94    | 9.22               | 60             |            |

〈TD2963WG, TD2964WG, TD2965WG, 共通事項〉

- 出力軸は中空軸タイプになっています。
- ギヤボックス上下両面にそれぞれ4ヶ所 M4ネジ加工がされています。
- 取付姿勢はモータ軸が水平になる様取付してください。

〈TD2963WG, TD2964WG, TD2965WG, Common Particular〉

- The output shaft is a hollow type.
- Upper and lower surfaces of the gear box are threaded for four screws, M4, respectively.
- The motor shaft orientation must be horizontal when the motor is mounted.