Product Information

PRODUCTION BASES

Taiwan is the strongpoints where our high-torque,

high-precision stepping motors have been manufactured.

Integrated production ranging from parts production to their assembling

is being performed for stabilization of product quality.

Our response is globalized also to any transaction of OUT-OUT overseas.

Our delivery is most speedy.



TAIPEI MITSUMI CO., LTD.

(ISO 14001, 9002 certification) M25SP-3 · M25SP-4 M25SP-5 · M35SP-5 M35SP-6 · M35SP-7 M35SP-8 · M35SP-9 M35SP-12 · M42SP-4 M42SP-4NK · M42SP-5 M42SP-6NK · M42SP-7 M42SP-12K · M42SP-13NK M42SP-14NK · M49SP-1 M49SP-2K · M55SP-1

M55SP-2K

TAIWAN MITSUMI CO., LTD. (ISO 14001, 9002 certification)

M15SP-1N · M15LS-1N M25SP-3 · M25SP-4 M25SP-5 · M35SP-5 M35SP-6 · M35SP-7 M35SP-9 · M35SP-10N M35SP-11NK · M35SP-12 M42SP-4 · M42SP-5 M42SP-6NK · M42SP-7 M42SP-11NK · M42SP-12K M42SP-13NK · M42SP-14NK M49SP-1 · M49SP-2K · M55SP-2K M55SP-1



PRECAUTIONS TO BE TAKEN WHEN USING

- 1. Note that any use of our products out of their standard and specifications might markedly reduce their performance and service life. Draw your due attention especially to the voltage and other use ranges.
- 2. Storage of the motors in such places as exposed to high temperature and humidity as well as to extremely low temperature may cause to decrease motor's performance and longevity, which should be avoided as far as possible.
- 3. Never fail to check the loads applied, circuitry, etc. before you use the motors. It is recommendable to have preliminary arrangements with us before you proceed to your own designing of your equipment.

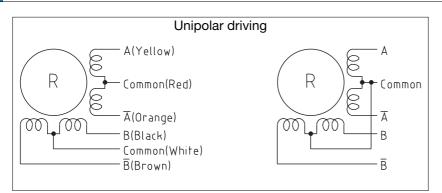
WHEN ORDERING

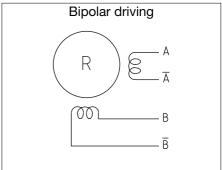
In order that we may discuss the characteristics and economy of your equipment, you are requested to inform us of the following items:

| 1. Features |
|--|
| ○Rated voltage |
| ○Step angle |
| ○Pull-in torque (at_PPS) |
| OPull-out torque (at_PPS) |
| Oprive circuit |
| ♦ Voltage, Current (_A/Phase) |
| ♦ Use IC |
| Excitation and drive methods |
| ♦ Single-phase, two-phase, Single/two-phase, other |
| ♦ Unipolar, Bipolar |
| ♦ Chopper current |
| ○Use temperature range |
| 2. Outer DiameterShaft diameter and lengthMotor outer diameter, overall length |
| 3. Others |
| ○Use |
| OMass production planning |
| Mass production period |
| OMonthly production |
| OTotal number of projects |
| OAnticipated prices |
| |

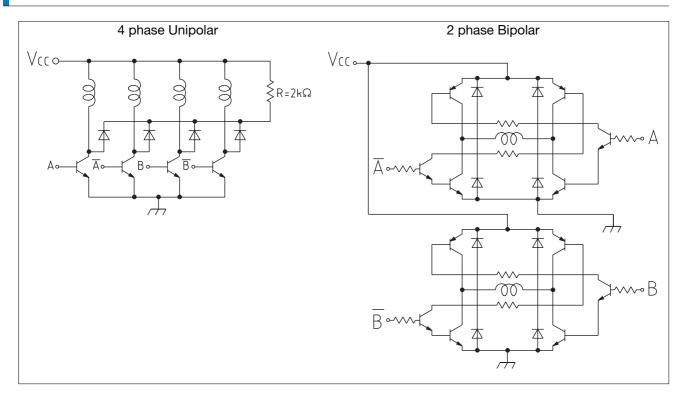
GENERAL DESCRIPTION

LEAD WIRE CONNECTION





DRIVING CIRCUITS

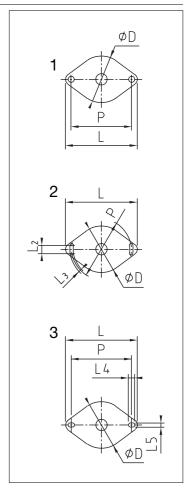


SPECIAL SPECIFICATIONS

| Coil resistance. |
|----------------------------------|
| Shaft dimensions. |
| Pinion. |
| Mounting plate. |
| Lead wire length and connectors. |

STANDARD FLANGE DIMENSIONS

| Туре | Р | L | ØD | Mounting | Shape | Model |
|-----------------|----------|----------|---|---|-------|------------------------------------|
| M25SP Series | 32±0.2 | 38±0.5 | 25 | Ø3.2 Hole, M3Burring | 1 | 3, 4, 5 |
| | 42±0.2 | 49.2±0.5 | 35 | Ø3.5 Hole | 1 | 5, 6, 7, 8, 9, 10N, 11NK, 12 |
| | 42±0.2 | 49.2±0.5 | 35 | Ø2.75 Hole, Burring | 1 | |
| M35SP | 42±0.2 | 49.2±0.5 | 35 | M3Burring | 1 | |
| Series | 40±0.2 | 47±0.5 | 35 | M2.6Burring | 1 | |
| | 42±0.2 | 50±0.5 | 35 | Long hole $\begin{array}{c} L_2=6.5 \\ L_3=3.3 \end{array}$ | 2 | |
| | 49.5±0.2 | 56.5±0.5 | 42 | Ø3.5 Hole | 1 | 4, 4NK, 5, 6NK, |
| | 49.5±0.2 | 56.5±0.5 | 42 | Ø2.75 Hole, Burring | 1 | |
| M42SP Series | 49.5±0.2 | 56.5±0.5 | 42 | M3Burring | 1 | 7, 11NK, 12NK, |
| | 49.5±0.2 | 57±0.5 | 42 | Long hole $\begin{array}{c} 	ext{L}_2=6.5 \\ 	ext{L}_3=3.3 \end{array}$ | 2 | 13NK, 14NK |
| | 49.5±0.2 | 56.7±0.5 | 42 | Ø3.5 Hole | 1 | |
| | 49.5±0.2 | 56.7±0.5 | 42 | M3Burring | 1 | |
| M49SP | 54.5±0.2 | 64±0.5 | 49 | Long hole $L_{4}=5.8$ $L_{5}=3.8$ | 3 | 1, 2K |
| Series | 56.5±0.2 | 64±0.5 | 49 | M3Burring | 1 | 1, 2K |
| Series | 57.5±0.2 | 64±0.5 | 49 | Ø4.0Hole | 1 | 1, 2K |
| | 59.5±0.2 | 68.5±0.5 | 49 | Ø5.0Hole | 1 | 1, 2K |
| M55SP | 66.7±0.2 | 79.4±0.5 | 55 | Ø4.3Hole | 1 | 1 |
| Series | | | Long hole $\begin{array}{c} L_2=4.6 \\ L_3=4.4 \end{array}$ | 2 | 1 | |



STANDARD OUTER DIMENSIONS

| Model | ØD | Ød1 | Ød ₂ | L ₁ | L2 | Step Angle |
|------------|----|-------|-----------------|----------------|-----|------------|
| M25SP-3 | 25 | 7 | 2 | 15 | 1 | 7.5° |
| M25SP-4 | 25 | 7 | 2 | 15 | 1 | 15° |
| M25SP-5 | 25 | 7 | 2 | 12 | 1.5 | 7.5° |
| M35SP-5 | 35 | 10 | 2 | 20 | 1.5 | 7.5° |
| M35SP-6 | 35 | 10 | 2 | 20 | 1.5 | 15° |
| M35SP-7 | 35 | 10 | 2 | 15 | 1.5 | 7.5° |
| M35SP-8 | 35 | 10 | 3 | 21.8 | 1.5 | 7.5° |
| M35SP-9 | 35 | 10 | 2 | 15 | 1.5 | 7.5° |
| M35SP-10N | 35 | 10 | 2 | 15 | 1.5 | 3.75° |
| M35SP-11NK | 35 | 10 | 2 | 8.7 | 1.5 | 3.75° |
| M35SP-12 | 35 | 10 | 2 | 15.9 | 0.7 | 7.5° |
| M42SP-4 | 42 | 10 | 3 | 15.7 | 1.5 | 3.75° |
| M42SP-4NK | 42 | 10 | 3 | 17.9 | 1.5 | 3.75° |
| M42SP-5 | 42 | 10 | 3 | 23 | 1.5 | 7.5° |
| M42SP-6NK | 42 | 10 | 3 | 17.9 | 1.5 | 7.5° |
| M42SP-7 | 42 | 10 | 3 | 15.7 | 1.5 | 7.5° |
| M42SP-11NK | 42 | 10 | 3 | 8.7 | 1.5 | 3.75° |
| M42SP-12K | 42 | 10 | 3 | 17.9 | 1.5 | 7.5° |
| M42SP-13NK | 42 | 10 | 3 | 17.9 | 1.5 | 3.75° |
| M42SP-14NK | 42 | 10 | 3 | 8.7 | 1.5 | 1.875° |
| M49SP-1 | 49 | 10 | 3 | 29.5 | 1.5 | 7.5° |
| M49SP-2K | 49 | 10 | 3 | 29.5 | 1.5 | 7.5° |
| M55SP-1 | 55 | 11.13 | 4 | 23 | 2 | 7.5° |

