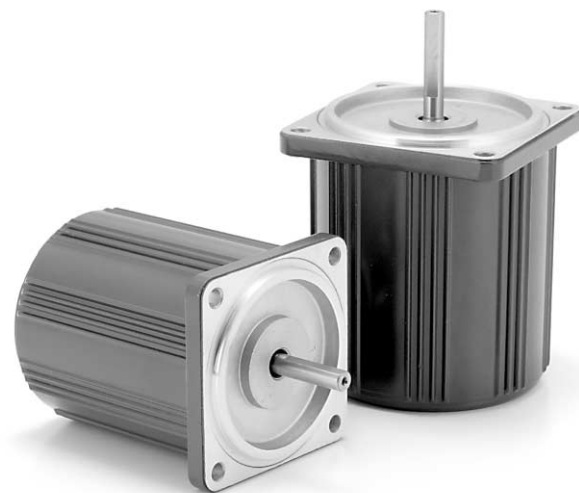
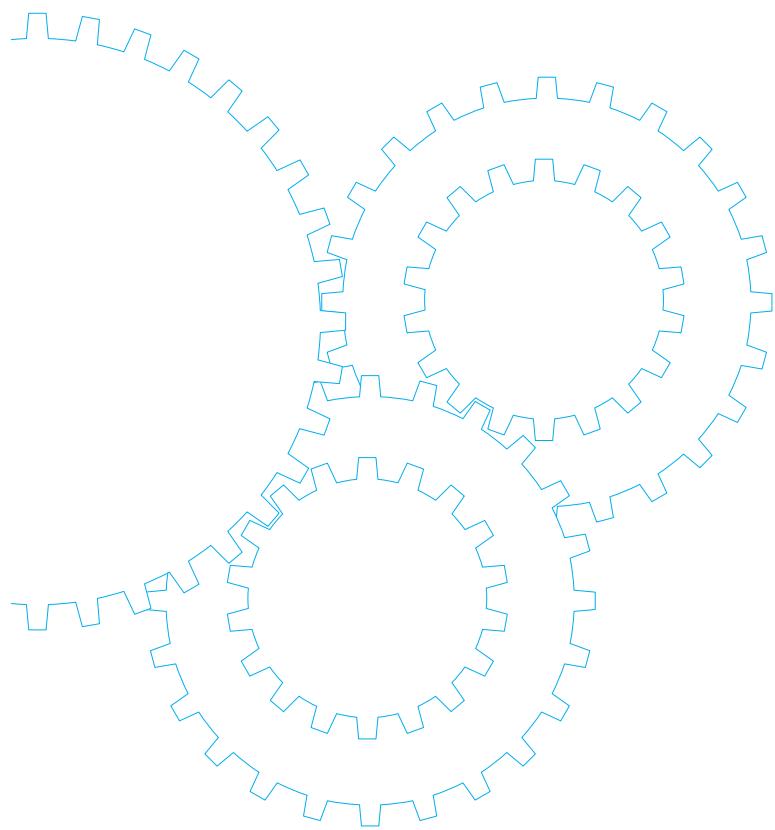


2-pole round shaft motor



Contents

- Motor Overview B-406
- Model list B-407
- Product information for each model B-408

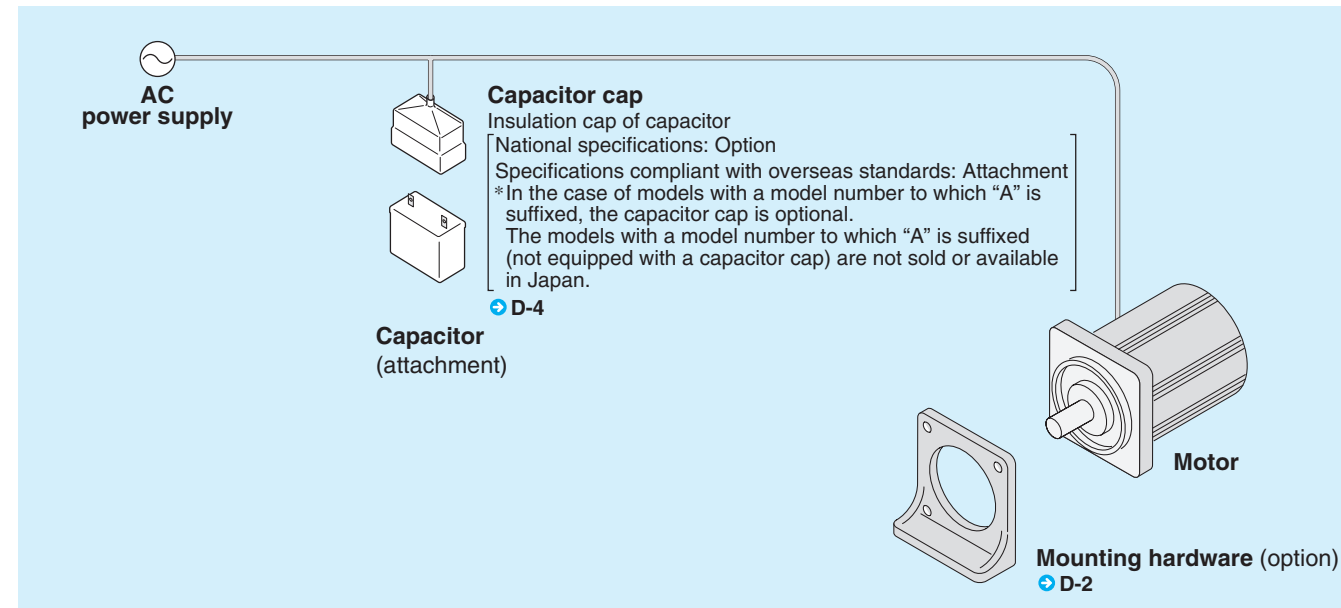
2-pole round shaft motor

Outline of motor

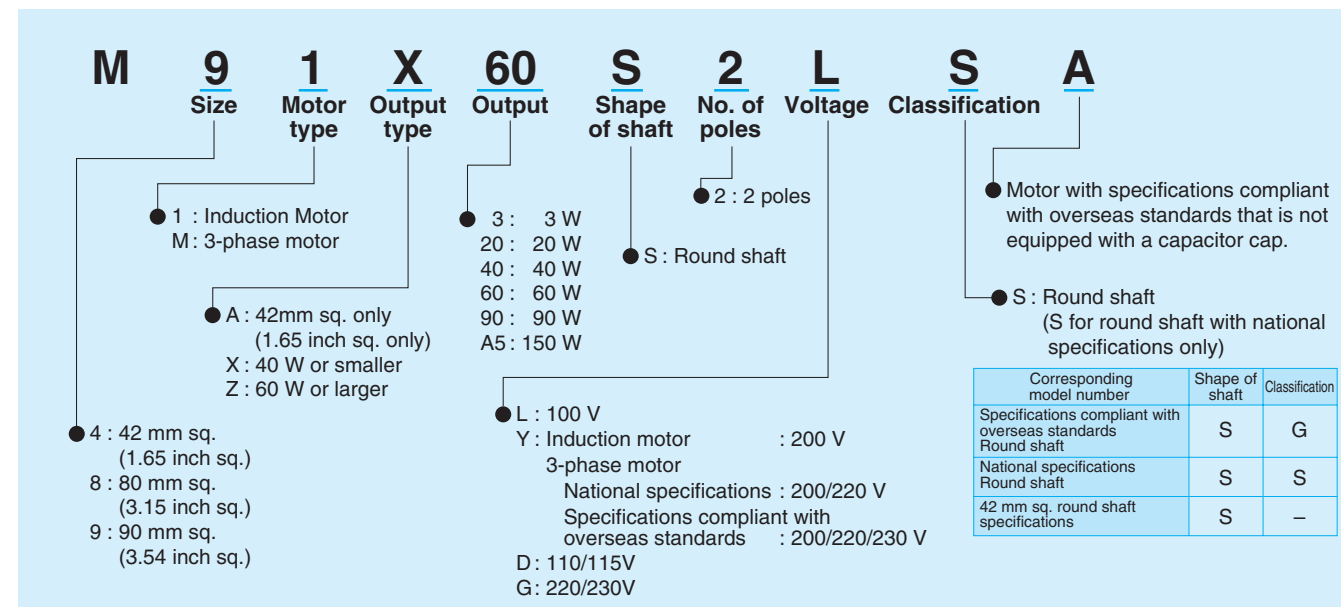
Features

- High-speed induction motor (50Hz: 3000min⁻¹, 60Hz: 3600min⁻¹)
- Continuous time rating

System configuration diagram



Coding system



Fit tolerance

Fit tolerance symbol is used in the outside dimension diagram of motor and gear head. For further information, see "Fit tolerance" on page A-33.

Model list

| Size | Output (W) | Single-phase induction motor | | | 3-phase motor | | | |
|---------------------------|------------|------------------------------|----------------|-------|---------------|----------------|----------------|-------|
| | | Model number | Specifications | Page | Model number | Specifications | Page | |
| 42 mm sq. (1.65 inch sq.) | 3 | M41A3S2L | 100V | B-344 | | | | |
| | | | | | | | | |
| 80 mm sq. (3.15 inch sq.) | 20 | M81X20S2LS | 100V | B-345 | | | | |
| | | M81X20S2YS | 200V | B-345 | | | | |
| | 40 | M81X40S2LS | 100V | B-346 | M8MX40S2YS | 200/220V | B-356 | |
| | | M81X40S2YS | 200V | B-346 | M8MX40S2YG(A) | 200/220/230V ⚡ | B-357 | |
| | | M81X40S2LG(A) | 100V ⚡ | B-347 | | | | |
| | | M81X40S2DG(A) | 110/115V ⚡ | B-347 | | | | |
| | | M81X40S2YG(A) | 200V ⚡ | B-347 | | | | |
| | | M81X40S2GG(A) | 220/230V ⚡ | B-347 | | | | |
| | | 60 | M81X60S2LS | 100V | B-348 | M8MX60S2YS | 200/220V | B-358 |
| | | | M81X60S2YS | 200V | B-348 | M8MX60S2YG(A) | 200/220/230V ⚡ | B-359 |
| M81X60S2LG(A) | 100V ⚡ | | B-349 | | | | | |
| M81X60S2DG(A) | 110/115V ⚡ | | B-349 | | | | | |
| M81X60S2YG(A) | 200V ⚡ | | B-349 | | | | | |
| M81X60S2GG(A) | 220/230V ⚡ | | B-349 | | | | | |
| 90 mm sq. (3.54 inch sq.) | 60 | M91X60S2LS | 100V | B-350 | M9MX60S2YS | 200/220V | B-360 | |
| | | M91X60S2YS | 200V | B-350 | M9MX60S2YG(A) | 200/220/230V ⚡ | B-361 | |
| | | M91X60S2LG(A) | 100V ⚡ | B-351 | | | | |
| | | M91X60S2DG(A) | 110/115V ⚡ | B-351 | | | | |
| | | M91X60S2YG(A) | 200V ⚡ | B-351 | | | | |
| | | M91X60S2GG(A) | 220/230V ⚡ | B-351 | | | | |
| | 90 | M91Z90S2LS | 100V | B-352 | M9MZ90S2YS | 200/220V | B-362 | |
| | | M91Z90S2YS | 200V | B-352 | M9MZ90S2YG(A) | 200/220/230V ⚡ | B-363 | |
| | | M91Z90S2LG(A) | 100V ⚡ | B-353 | | | | |
| | | M91Z90S2DG(A) | 110/115V ⚡ | B-353 | | | | |
| | | M91Z90S2YG(A) | 200V ⚡ | B-353 | | | | |
| | | M91Z90S2GG(A) | 220/230V ⚡ | B-353 | | | | |
| | | 150 | M91ZA5S2LS | 100V | B-354 | M9MZA5S2YS | 200/220V | B-364 |
| | | | M91ZA5S2YS | 200V | B-354 | M9MZA5S2YG(A) | 200/220/230V ⚡ | B-365 |
| M91ZA5S2LG(A) | 100V ⚡ | | B-355 | | | | | |
| M91ZA5S2DG(A) | 110/115V ⚡ | | B-355 | | | | | |
| M91ZA5S2YG(A) | 200V ⚡ | | B-355 | | | | | |
| M91ZA5S2GG(A) | 220/230V ⚡ | | B-355 | | | | | |

* The models with a motor model number to which "A" is suffixed are not equipped with a capacitor cap. The models with a motor model number to which "A" is suffixed are not sold or available in Japan.

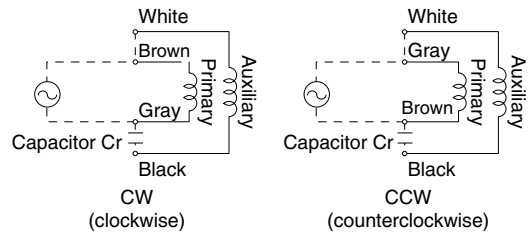
2-pole round shaft motor
(Induction motor)

42 mm (1.65 inch) sq. 3 W

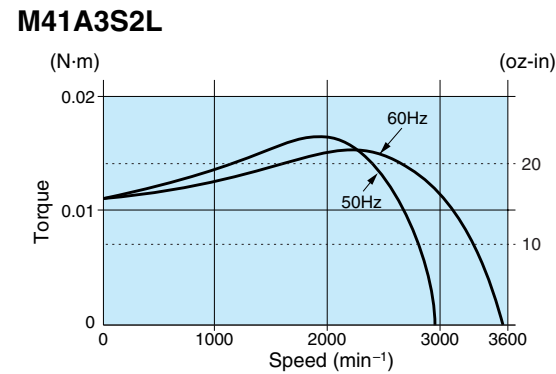
• Specifications

| Size | Motor model No. | Number of pole (P) | Output (W) | Voltage (V) | Frequency (Hz) | Rating (min) | Rating | | | | Starting current (A) | Starting torque N-m (oz-in) | Capacitor (μF) (rated voltage) |
|-----------|-----------------|--------------------|------------|-------------|----------------|--------------|-----------|-------------|----------------------------|--------------------|----------------------|-----------------------------|--------------------------------|
| | | | | | | | Input (W) | Current (A) | Speed (min ⁻¹) | Torque N-m (oz-in) | | | |
| 42 mm sq. | M41A3S2L | 2 | 3 | 100 | 50 | Cont. | 10 | 0.10 | 2625 | 0.011 (1.56) | 0.15 | 0.011 (1.56) | 1.5 (200V) |
| | | | | | | | 9 | 0.10 | 3250 | 0.009 (1.27) | 0.15 | 0.011 (1.56) | |

Connection diagram



Speed-torque characteristics

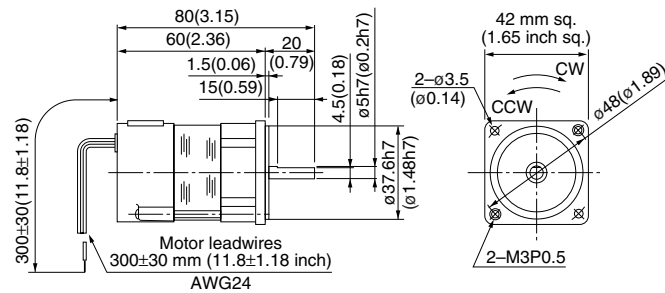


Motor (dimensions)

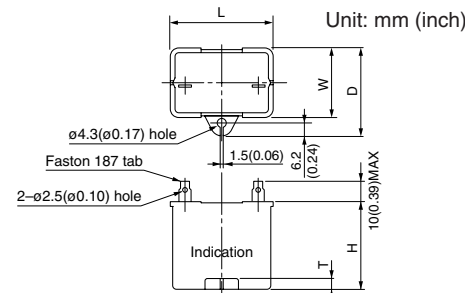
Scale: 1/3, Unit: mm (inch)

M41A3S2L 2P 3 W 100 V

Mass
0.3 kg
0.66 lb



Capacitor (dimensions) [attachment]



• Capacitor dimension list Unit: upper (mm) / lower (inch)

| Model number of motor | Model number of capacitor (attachment) | L | W | D | H | T | Capacitor cap (option) |
|-----------------------|--|-------------|-----------|-------------|-------------|----------|------------------------|
| M41A3S2L | M0PC1.5M20 | 39.5 (1.56) | 16 (0.63) | 26.5 (1.04) | 30.5 (1.20) | 4 (0.16) | M0PC3917 |

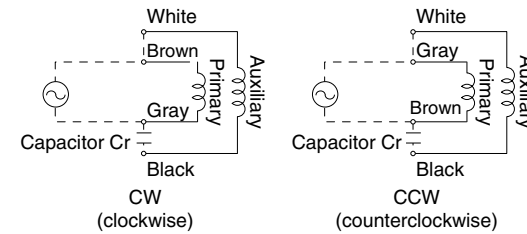
2-pole round shaft motor
(Induction motor)

80 mm (3.15 inch) sq. 20 W

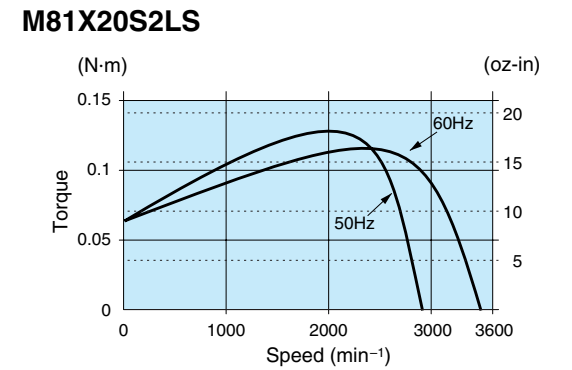
• Specifications

| Size | Motor model No. | Number of pole (P) | Output (W) | Voltage (V) | Frequency (Hz) | Rating (min) | Rating | | | | Starting current (A) | Starting torque N-m (oz-in) | Capacitor (μF) (rated voltage) |
|-----------|-----------------|--------------------|------------|-------------|----------------|--------------|-----------|-------------|----------------------------|--------------------|----------------------|-----------------------------|--------------------------------|
| | | | | | | | Input (W) | Current (A) | Speed (min ⁻¹) | Torque N-m (oz-in) | | | |
| 80 mm sq. | M81X20S2LS | 2 | 20 | 100 | 50 | Cont. | 40 | 0.40 | 2575 | 0.074 (10.5) | 0.83 | 0.064 (9.06) | 6 (200V) |
| | | | | | | | 38 | 0.38 | 3175 | 0.060 (8.50) | 0.82 | 0.064 (9.06) | |
| | M81X20S2YS | 2 | 20 | 200 | 50 | Cont. | 40 | 0.20 | 2575 | 0.074 (10.5) | 0.42 | 0.063 (8.92) | 1.5 (400V) |
| | | | | | | | 39 | 0.20 | 3150 | 0.061 (8.64) | 0.41 | 0.063 (8.92) | |

Connection diagram



Speed-torque characteristics

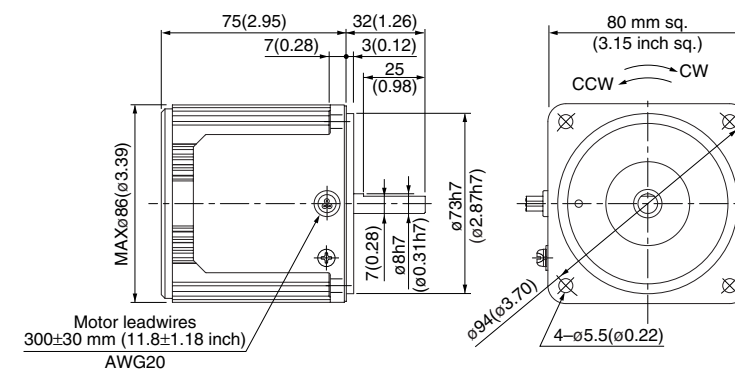


Motor (dimensions)

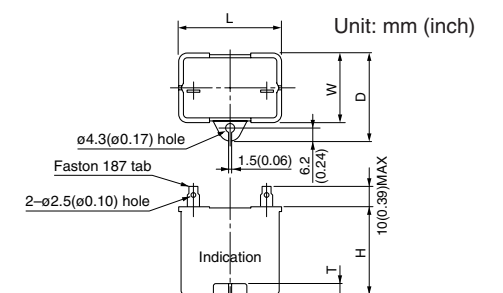
Scale: 1/3, Unit: mm (inch)

M81X20S2LS 2P 20 W 100 V
M81X20S2YS 2P 20 W 200 V

Mass
1.2 kg
2.65 lb



Capacitor (dimensions) [attachment]



• Capacitor dimension list Unit: upper (mm) / lower (inch)

| Model number of motor | Model number of capacitor (attachment) | L | W | D | H | T | Capacitor cap (option) |
|-----------------------|--|-------------|-------------|-------------|-------------|----------|------------------------|
| M81X20S2LS | M0PC6M20 | 39.5 (1.56) | 17.5 (0.69) | 28 (1.10) | 30.5 (1.20) | 4 (0.16) | M0PC3917 |
| M81X20S2YS | M0PC1.5M40 | 39.5 (1.56) | 22 (0.87) | 32.5 (1.28) | 32.5 (1.28) | 4 (0.16) | M0PC3922 |

• The models with a motor model number to which "A" is suffixed are not equipped with a capacitor cap.

(Note) Because the dimensions may be subject to change, also check the determinate dimensions if the gear head is to be used for design.

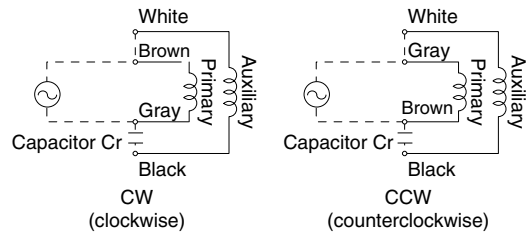
2-pole round shaft motor
(Induction motor)

80 mm (3.15 inch) sq. 40 W

• Specifications

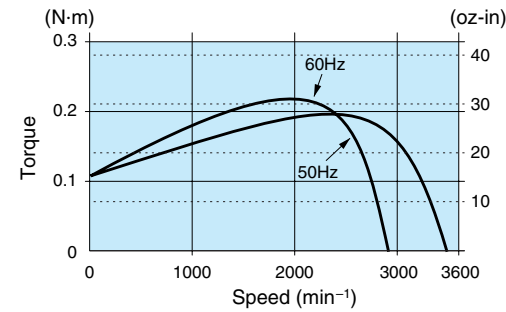
| Size | Motor model No. | Number of pole (P) | Output (W) | Voltage (V) | Frequency (Hz) | Rating (min) | Rating | | | | Starting current (A) | Starting torque N-m (oz-in) | Capacitor (μF) (rated voltage) |
|-----------|-----------------|--------------------|------------|-------------|----------------|--------------|-----------|-------------|----------------------------|--------------------|----------------------|-----------------------------|--------------------------------|
| | | | | | | | Input (W) | Current (A) | Speed (min ⁻¹) | Torque N-m (oz-in) | | | |
| 80 mm sq. | M81X40S2LS | 2 | 40 | 100 | 50 | Cont. | 70 | 0.70 | 2550 | 0.14 (19.8) | 1.5 | 0.10 (14.2) | 10 (200V) |
| | | | | | | | 68 | 0.70 | 3125 | 0.12 (17.0) | 1.4 | 0.10 (14.2) | |
| | M81X40S2YS | 2 | 40 | 200 | 50 | Cont. | 66 | 0.33 | 2525 | 0.14 (19.8) | 0.67 | 0.11 (15.6) | 2.5 (400V) |
| | | | | | | | 69 | 0.36 | 3075 | 0.12 (17.0) | 0.66 | 0.11 (15.6) | |

Connection diagram



Speed-torque characteristics

M81X40S2LS

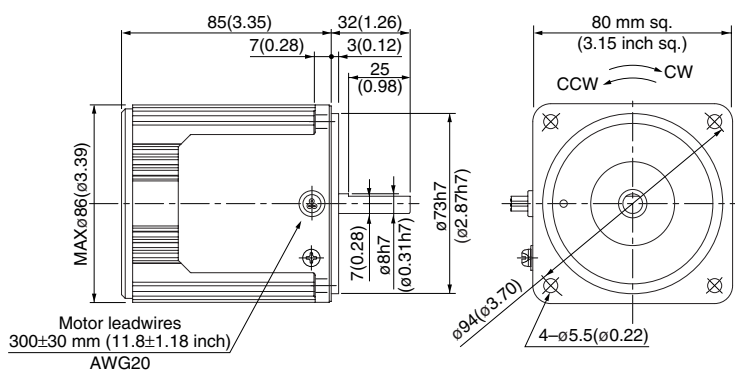


Motor (dimensions)

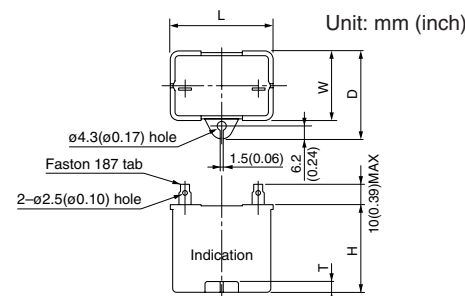
Scale: 1/3, Unit: mm (inch)

| | | | |
|------------|----|------|-------|
| M81X40S2LS | 2P | 40 W | 100 V |
| M81X40S2YS | 2P | 40 W | 200 V |

Mass
1.5 kg
3.31 lb



Capacitor (dimensions) [attachment]



• Capacitor dimension list Unit: upper (mm) / lower (inch)

| Model number of motor | Model number of capacitor (attachment) | L | W | D | H | T | Capacitor cap (option) |
|-----------------------|--|-------------|-------------|-------------|-------------|----------|------------------------|
| M81X40S2LS | M0PC10M20 | 39.5 (1.56) | 26.7 (1.05) | 37 (1.46) | 32 (1.26) | 4 (0.16) | M0PC3926 |
| M81X40S2YS | M0PC2.5M40 | 49.7 (1.96) | 24 (0.94) | 34.5 (1.36) | 34.5 (1.36) | 4 (0.16) | M0PC5026 |

* Please read your User's manual carefully so that you will understand the operation and safety precautions before attempting to operate the system.

2-pole round shaft motor
(Induction motor)

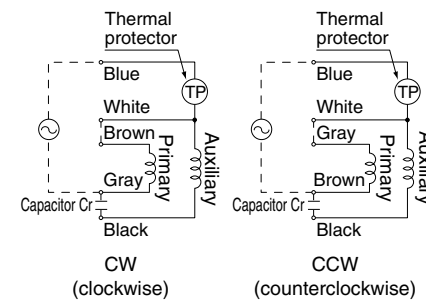
80 mm (3.15 inch) sq. 40 W

• Specifications

| Size | Motor model No. | Number of pole (P) | Output (W) | Voltage (V) | Frequency (Hz) | Rating (min) | Rating | | | | Starting current (A) | Starting torque N-m (oz-in) | Capacitor (μF) (rated voltage) | |
|-----------|---------------------------|--------------------|------------|-------------|----------------|--------------|-----------|-------------|----------------------------|--------------------|----------------------|-----------------------------|--------------------------------|------------|
| | | | | | | | Input (W) | Current (A) | Speed (min ⁻¹) | Torque N-m (oz-in) | | | | |
| 80 mm sq. | M81X40S2LG M81X40S2LGA | 2 | 40 | 100 | 50 | Cont. | 72 | 0.71 | 2575 | 0.15 (21.2) | 1.6 | 0.10 (14.2) | 10 (250V) | |
| | | | | | | | 70 | 0.70 | 3150 | 0.12 (17.0) | 1.5 | 0.10 (14.2) | | |
| | M81X40S2DG M81X40S2DGA | 2 | 40 | 110 | 115 | 60 | Cont. | 69 | 0.62 | 3225 | 0.12 (17.0) | 1.6 | 0.10 (14.2) | 8 (250V) |
| | | | | | | | | 71 | 0.62 | 3275 | 0.12 (17.0) | 1.7 | 0.10 (14.2) | |
| | M81X40S2YG M81X40S2YGA | 2 | 40 | 200 | 50 | 60 | Cont. | 71 | 0.36 | 2425 | 0.16 (22.7) | 0.65 | 0.10 (14.2) | 2.5 (450V) |
| | | | | | | | | 73 | 0.38 | 3025 | 0.13 (18.4) | 0.64 | 0.10 (14.2) | |
| | M81X40S2GG M81X40S2GGA | 2 | 40 | 220 | 230 | 50 | Cont. | 72 | 0.34 | 2525 | 0.15 (21.2) | 0.69 | 0.10 (14.2) | 1.7 (450V) |
| | | | | | | | | 66 | 0.30 | 3125 | 0.12 (17.0) | 0.67 | 0.10 (14.2) | |
| | | | | | | | | 73 | 0.33 | 2600 | 0.15 (21.2) | 0.71 | 0.10 (14.2) | |
| | | | | | | | | 65 | 0.29 | 3200 | 0.12 (17.0) | 0.69 | 0.10 (14.2) | |

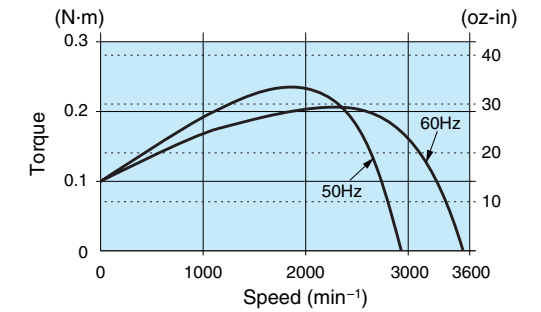
* The models with a motor model number to which "A" is suffixed are not equipped with a capacitor cap. The models with a motor model number to which "A" is suffixed are not sold or available in Japan.

Connection diagram



Speed-torque characteristics

M81X40S2LG(A)

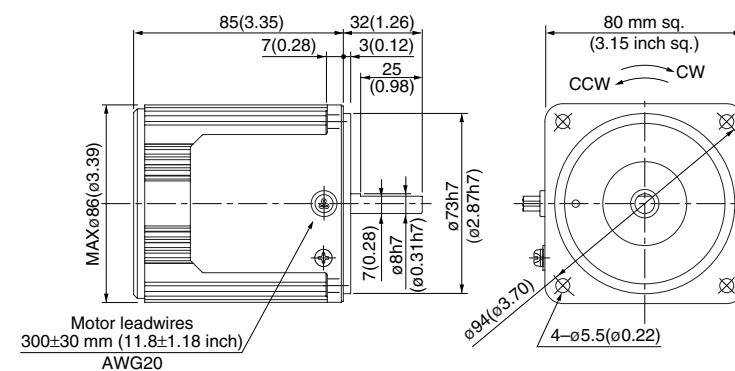


Motor (dimensions)

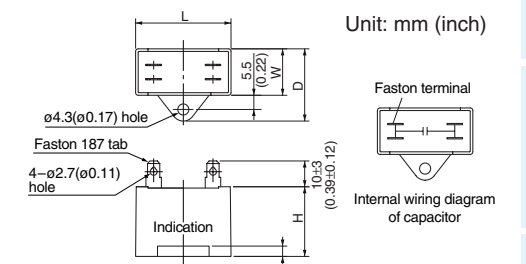
Scale: 1/3, Unit: mm (inch)

| | | | |
|---------------|----|------|---------------|
| M81X40S2LG(A) | 2P | 40 W | 100 V |
| M81X40S2DG(A) | 2P | 40 W | 110 V / 115 V |
| M81X40S2YG(A) | 2P | 40 W | 200 V |
| M81X40S2GG(A) | 2P | 40 W | 220 V / 230 V |

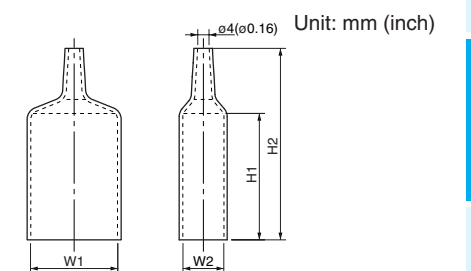
Mass
1.5 kg
3.31 lb



Capacitor (dimensions) [attachment]



Capacitor cap (dimensions)



• Capacitor dimension list Unit: upper (mm) / lower (inch)

| Model number of motor | Model number of capacitor (attachment) | L | W | D | H | T | Capacitor cap | W1 | W2 | H1 | H2 |
|-----------------------|--|-----------|-----------|-----------|-----------|----------|---------------|-----------|-----------|-----------|-----------|
| M81X40S2LG(A) | M0PC10M25G | 58 (2.28) | 21 (0.83) | 31 (1.22) | 31 (1.22) | 4 (0.16) | M0PC5821G | 58 (2.28) | 21 (0.83) | 55 (2.17) | 78 (3.07) |
| M81X40S2DG(A) | M0PC8M25G | 48 (1.89) | 21 (0.83) | 31 (1.22) | 31 (1.22) | 4 (0.16) | M0PC4821G | 48 (1.89) | 21 (0.83) | 55 (2.17) | 78 (3.07) |
| M81X40S2YG(A) | M0PC2.5M45G | 48 (1.89) | 21 (0.83) | 31 (1.22) | 31 (1.22) | 4 (0.16) | M0PC4821G | 48 (1.89) | 21 (0.83) | 55 (2.17) | 78 (3.07) |
| M81X40S2GG(A) | M0PC1.7M45G | 38 (1.50) | 21 (0.83) | 31 (1.22) | 31 (1.22) | 4 (0.16) | M0PC3821G | 38 (1.50) | 21 (0.83) | 55 (2.17) | 78 (3.07) |

* The models with a motor model number to which "A" is suffixed are not equipped with a capacitor cap.

(Note) Because the dimensions may be subject to change, also check the determinate dimensions if the gear head is to be used for design.

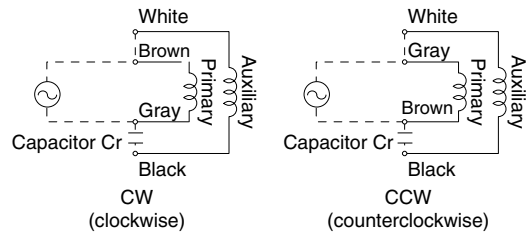
2-pole round shaft motor
(Induction motor)

80 mm (3.15 inch) sq. 60 W

• Specifications

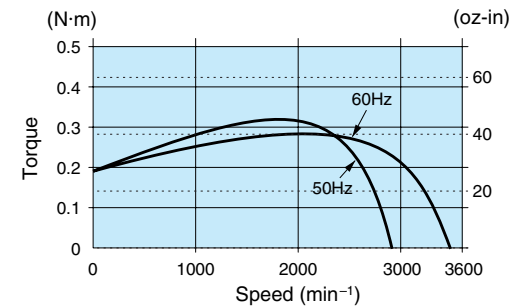
| Size | Motor model No. | Number of pole (P) | Output (W) | Voltage (V) | Frequency (Hz) | Rating (min) | Rating | | | | Starting current (A) | Starting torque N-m (oz-in) | Capacitor (μF) (rated voltage) |
|-----------|-----------------|--------------------|------------|-------------|----------------|--------------|-----------|-------------|----------------------------|--------------------|----------------------|-----------------------------|--------------------------------|
| | | | | | | | Input (W) | Current (A) | Speed (min ⁻¹) | Torque N-m (oz-in) | | | |
| 80 mm sq. | M81X60S2LS | 2 | 60 | 100 | 50 | Cont. | 111 | 1.1 | 2500 | 0.23 (32.6) | 1.9 | 0.19 (26.9) | 12 (200V) |
| | | | | | | | 114 | 1.2 | 3050 | 0.19 (26.9) | 1.9 | 0.19 (26.9) | |
| | M81X60S2YS | 2 | 60 | 200 | 50 | Cont. | 112 | 0.56 | 2475 | 0.23 (32.6) | 0.97 | 0.18 (25.5) | 3.0 (400V) |
| | | | | | | | 117 | 0.59 | 3025 | 0.20 (28.3) | 0.96 | 0.18 (25.5) | |

Connection diagram



Speed-torque characteristics

M81X60S2LS

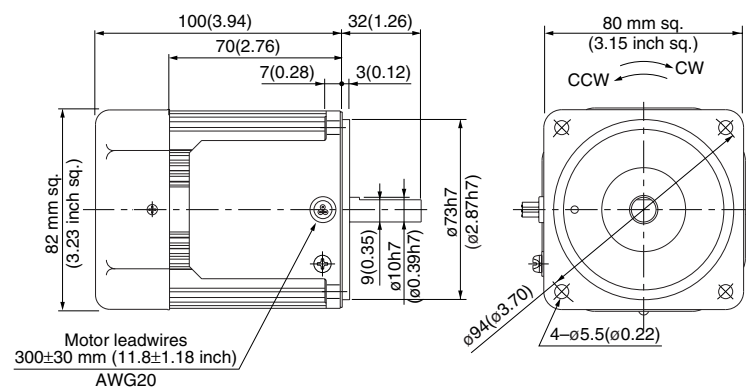


Motor (dimensions)

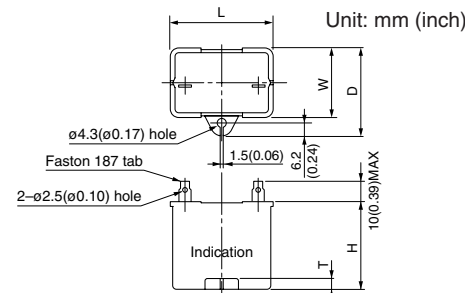
Scale: 1/3, Unit: mm (inch)

| | |
|------------|--------------------------|
| M81X60S2LS | 2P 60 W 100 V (with fan) |
| M81X60S2YS | 2P 60 W 200 V (with fan) |

Mass
1.8 kg
3.97 lb



Capacitor (dimensions) [attachment]



• Capacitor dimension list Unit: upper (mm) / lower (inch)

| Model number of motor | Model number of capacitor (attachment) | L | W | D | H | T | Capacitor cap (option) |
|-----------------------|--|-------------|-------------|-------------|-------------|----------|------------------------|
| M81X60S2LS | M0PC12M20 | 39.5 (1.56) | 26.7 (1.05) | 37 (1.46) | 32 (1.26) | 4 (0.16) | M0PC3926 |
| M81X60S2YS | M0PC3M40 | 49.7 (1.96) | 24 (0.94) | 34.5 (1.36) | 34.5 (1.36) | 4 (0.16) | M0PC5026 |

* Please read your User's manual carefully so that you will understand the operation and safety precautions before attempting to operate the system.

2-pole round shaft motor
(Induction motor)

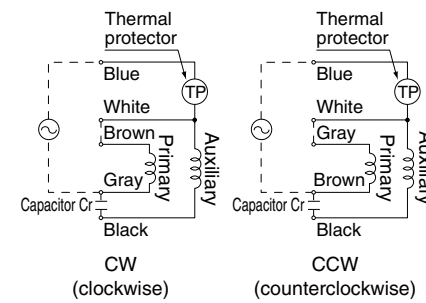
80 mm (3.15 inch) sq. 60 W

• Specifications

| Size | Motor model No. | Number of pole (P) | Output (W) | Voltage (V) | Frequency (Hz) | Rating (min) | Rating | | | | Starting current (A) | Starting torque N-m (oz-in) | Capacitor (μF) (rated voltage) |
|-----------|---------------------------|--------------------|------------|-------------|----------------|--------------|-----------|-------------|----------------------------|--------------------|----------------------|-----------------------------|--------------------------------|
| | | | | | | | Input (W) | Current (A) | Speed (min ⁻¹) | Torque N-m (oz-in) | | | |
| 80 mm sq. | M81X60S2LG M81X60S2LGA | 2 | 60 | 100 | 50 | Cont. | 113 | 1.1 | 2450 | 0.23 (32.6) | 1.9 | 0.18 (25.5) | 18 (250V) |
| | | | | | | | 118 | 1.2 | 3050 | 0.19 (26.9) | 1.9 | 0.18 (25.5) | |
| | M81X60S2DG M81X60S2DGA | 2 | 60 | 110 | 60 | Cont. | 105 | 0.95 | 3100 | 0.18 (25.5) | 1.9 | 0.18 (25.5) | 12 (250V) |
| | | | | | | | 108 | 0.94 | 3175 | 0.18 (25.5) | 2.0 | 0.18 (25.5) | |
| | M81X60S2YG M81X60S2YGA | 2 | 60 | 200 | 50 | Cont. | 126 | 0.64 | 2250 | 0.25 (35.4) | 0.82 | 0.18 (25.5) | 5 (450V) |
| | | | | | | | 143 | 0.74 | 2725 | 0.21 (29.7) | 0.87 | 0.18 (25.5) | |
| | M81X60S2GG M81X60S2GGA | 2 | 60 | 220 | 50 | Cont. | 114 | 0.52 | 2475 | 0.23 (32.6) | 0.84 | 0.18 (25.5) | 4 (450V) |
| | | | | | | | 122 | 0.58 | 3050 | 0.19 (26.9) | 0.86 | 0.18 (25.5) | |
| | | | | | | | 119 | 0.52 | 2550 | 0.22 (31.2) | 0.87 | 0.18 (25.5) | |
| | | | | | | | 125 | 0.57 | 3125 | 0.18 (25.5) | 0.90 | 0.18 (25.5) | |

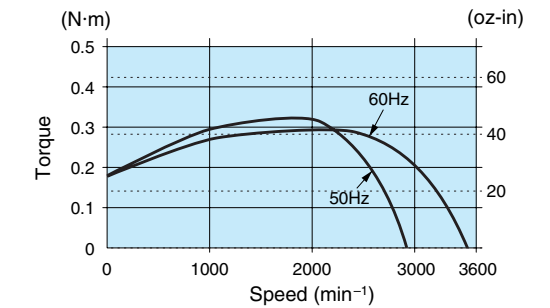
* The models with a motor model number to which "A" is suffixed are not equipped with a capacitor cap. The models with a motor model number to which "A" is suffixed are not sold or available in Japan.

Connection diagram



Speed-torque characteristics

M81X60S2LG(A)

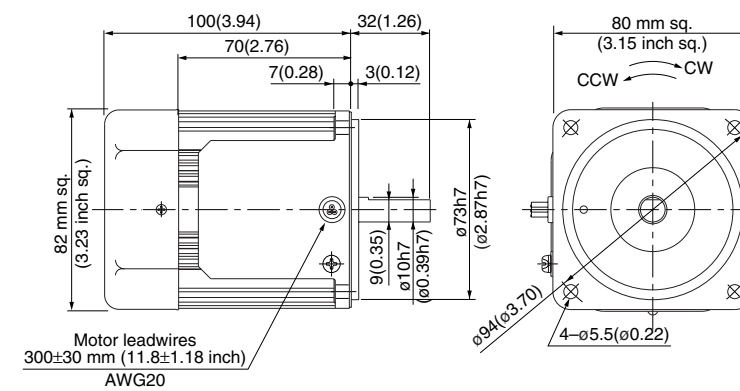


Motor (dimensions)

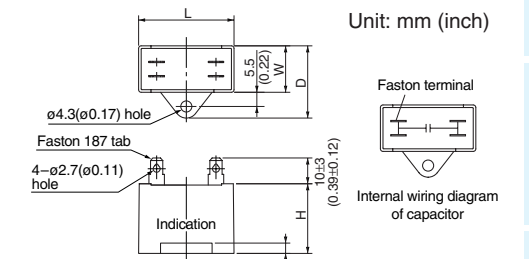
Scale: 1/3, Unit: mm (inch)

| | |
|---------------|----------------------------------|
| M81X60S2LG(A) | 2P 60 W 100 V (with fan) |
| M81X60S2DG(A) | 2P 60 W 110 V / 115 V (with fan) |
| M81X60S2YG(A) | 2P 60 W 200 V (with fan) |
| M81X60S2GG(A) | 2P 60 W 220 V / 230 V (with fan) |

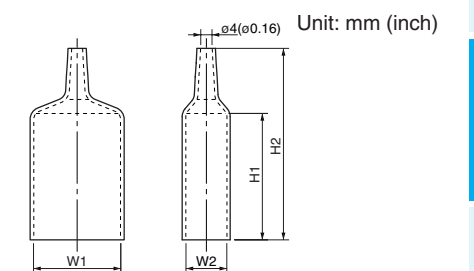
Mass
1.8 kg
3.97 lb



Capacitor (dimensions) [attachment]



Capacitor cap (dimensions)



• Capacitor dimension list Unit: upper (mm) / lower (inch)

| Model number of motor | Model number of capacitor (attachment) | L | W | D | H | T | Capacitor cap | W1 | W2 | H1 | H2 |
|-----------------------|--|-----------|-------------|-------------|-----------|----------|---------------|-----------|-------------|-----------|-----------|
| M81X60S2LG(A) | M0PC18M25G | 58 (2.28) | 29 (1.14) | 44 (1.73) | 41 (1.61) | 4 (0.16) | M0PC5829G | 58 (2.28) | 29 (1.14) | 55 (2.17) | 78 (3.07) |
| M81X60S2DG(A) | M0PC12M25G | 58 (2.28) | 22 (0.87) | 32 (1.26) | 35 (1.38) | 4 (0.16) | M0PC5822G | 58 (2.28) | 22 (0.87) | 55 (2.17) | 78 (3.07) |
| M81X60S2YG(A) | M0PC5M45G | 58 (2.28) | 29 (1.14) | 44 (1.73) | 41 (1.61) | 4 (0.16) | M0PC5829G | 58 (2.28) | 29 (1.14) | 55 (2.17) | 78 (3.07) |
| M81X60S2GG(A) | M0PC4M45G | 58 (2.28) | 23.5 (0.93) | 38.5 (1.52) | 37 (1.46) | 4 (0.16) | M0PC5823G | 58 (2.28) | 23.5 (0.93) | 55 (2.17) | 78 (3.07) |

* The models with a motor model number to which "A" is suffixed are not equipped with a capacitor cap.

(Note) Because the dimensions may be subject to change, also check the determinate dimensions if the gear head is to be used for design.

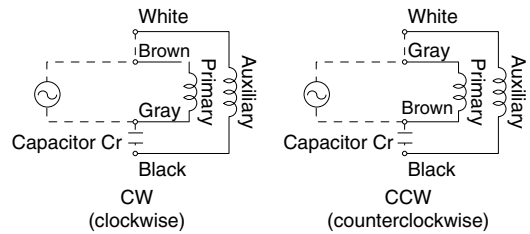
2-pole round shaft motor
(Induction motor)

90 mm (3.54 inch) sq. 60 W

• Specifications

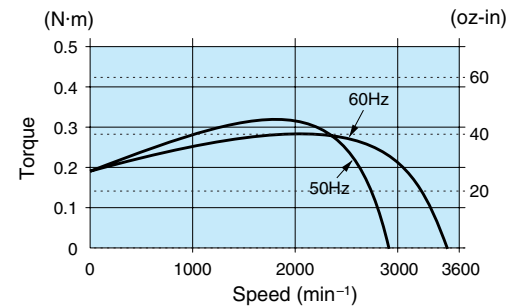
| Size | Motor model No. | Number of pole (P) | Output (W) | Voltage (V) | Frequency (Hz) | Rating (min) | Rating | | | | Starting current (A) | Starting torque N-m (oz-in) | Capacitor (μF) (rated voltage) |
|-----------|-----------------|--------------------|------------|-------------|----------------|--------------|-----------|-------------|----------------------------|--------------------|----------------------|-----------------------------|--------------------------------|
| | | | | | | | Input (W) | Current (A) | Speed (min ⁻¹) | Torque N-m (oz-in) | | | |
| 90 mm sq. | M91X60S2LS | 2 | 60 | 100 | 50 | Cont. | 92 | 0.95 | 2725 | 0.20 (28.3) | 2.9 | 0.17 (24.1) | 14 (200V) |
| | | | | | | | 89 | 0.90 | 3325 | 0.16 (22.7) | 2.8 | 0.17 (24.1) | |
| | M91X60S2YS | 2 | 60 | 200 | 50 | Cont. | 94 | 0.48 | 2725 | 0.20 (28.3) | 1.4 | 0.17 (24.1) | 3.5 (400V) |
| | | | | | | | 90 | 0.46 | 3300 | 0.16 (22.7) | 1.4 | 0.17 (24.1) | |

Connection diagram



Speed-torque characteristics

M91X60S2LS

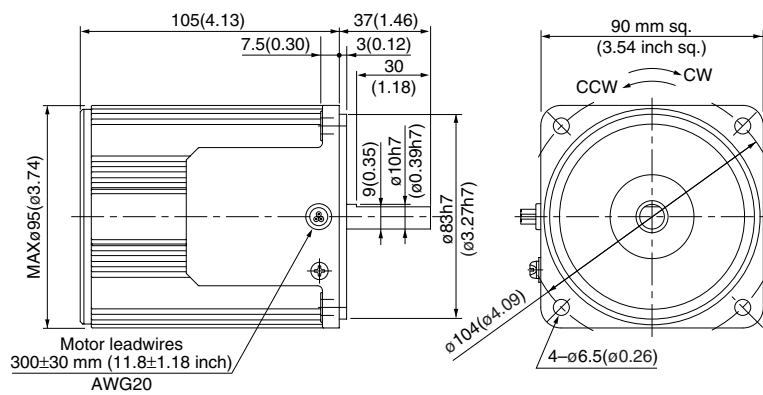


Motor (dimensions)

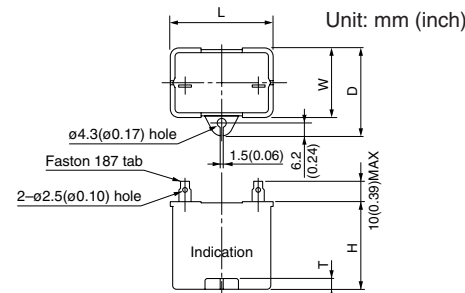
Scale: 1/3, Unit: mm (inch)

| | | | |
|------------|----|------|-------|
| M91X60S2LS | 2P | 60 W | 100 V |
| M91X60S2YS | 2P | 60 W | 200 V |

Mass
2.4 kg
5.29 lb



Capacitor (dimensions) [attachment]



• Capacitor dimension list Unit: upper (mm) / lower (inch)

| Model number of motor | Model number of capacitor (attachment) | L | W | D | H | T | Capacitor cap (option) |
|-----------------------|--|-------------|-------------|-------------|-------------|----------|------------------------|
| M91X60S2LS | M0PC14M20 | 39.5 (1.56) | 26.7 (1.05) | 37 (1.46) | 41 (1.61) | 4 (0.16) | M0PC3926 |
| M91X60S2YS | M0PC3.5M40 | 49.7 (1.96) | 24 (0.94) | 34.5 (1.36) | 34.5 (1.36) | 4 (0.16) | M0PC5026 |

* Please read your User's manual carefully so that you will understand the operation and safety precautions before attempting to operate the system.

2-pole round shaft motor
(Induction motor)

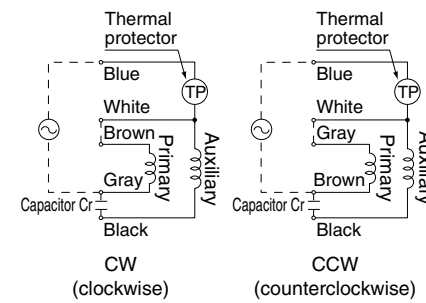
90 mm (3.54 inch) sq. 60 W

• Specifications

| Size | Motor model No. | Number of pole (P) | Output (W) | Voltage (V) | Frequency (Hz) | Rating (min) | Rating | | | | Starting current (A) | Starting torque N-m (oz-in) | Capacitor (μF) (rated voltage) |
|-----------|---------------------------|--------------------|------------|-------------|----------------|--------------|-----------|-------------|----------------------------|--------------------|----------------------|-----------------------------|--------------------------------|
| | | | | | | | Input (W) | Current (A) | Speed (min ⁻¹) | Torque N-m (oz-in) | | | |
| 90 mm sq. | M91X60S2LG M91X60S2LGA | 2 | 60 | 100 | 50 | Cont. | 93 | 0.98 | 2725 | 0.21 (29.7) | 3.1 | 0.16 (22.7) | 14 (250V) |
| | | | | | | | 89 | 0.90 | 3325 | 0.17 (24.1) | 2.9 | 0.16 (22.7) | |
| | M91X60S2DG M91X60S2DGA | 2 | 60 | 110 | 60 | Cont. | 91 | 0.83 | 3375 | 0.17 (24.1) | 3.2 | 0.16 (22.7) | 12 (250V) |
| | | | | | | | 94 | 0.82 | 3375 | 0.17 (24.1) | 3.3 | 0.16 (22.7) | |
| | M91X60S2YG M91X60S2YGA | 2 | 60 | 200 | 50 | Cont. | 92 | 0.46 | 2700 | 0.21 (29.7) | 1.3 | 0.16 (22.7) | 4 (450V) |
| | | | | | | | 98 | 0.53 | 3275 | 0.17 (24.1) | 1.3 | 0.16 (22.7) | |
| | M91X60S2GG M91X60S2GGA | 2 | 60 | 220 | 50 | Cont. | 93 | 0.45 | 2725 | 0.21 (29.7) | 1.4 | 0.16 (22.7) | 3 (450V) |
| | | | | | | | 91 | 0.42 | 3325 | 0.17 (24.1) | 1.4 | 0.16 (22.7) | |
| | | | | | | | 97 | 0.46 | 2750 | 0.21 (29.7) | 1.5 | 0.16 (22.7) | |
| | | | | | | | 92 | 0.41 | 3350 | 0.17 (24.1) | 1.4 | 0.16 (22.7) | |

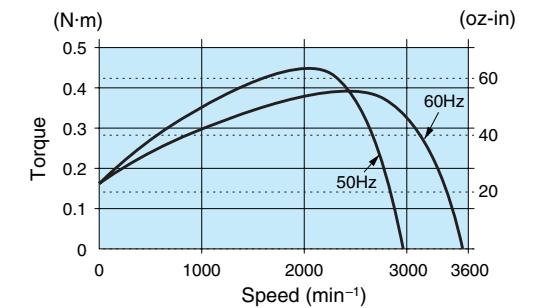
* The models with a motor model number to which "A" is suffixed are not equipped with a capacitor cap.
The models with a motor model number to which "A" is suffixed are not sold or available in Japan.

Connection diagram



Speed-torque characteristics

M91X60S2LG(A)

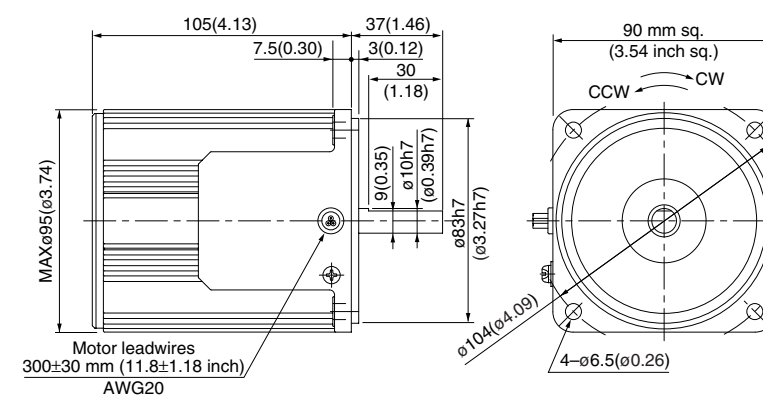


Motor (dimensions)

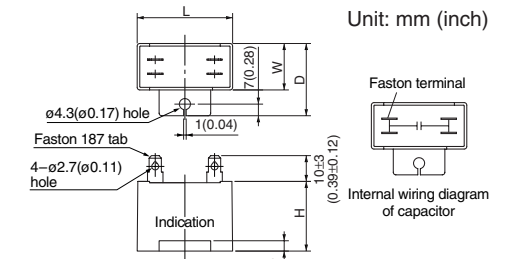
Scale: 1/3, Unit: mm (inch)

| | | | |
|---------------|----|------|---------------|
| M91X60S2LG(A) | 2P | 60 W | 100 V |
| M91X60S2DG(A) | 2P | 60 W | 110 V / 115 V |
| M91X60S2YG(A) | 2P | 60 W | 200 V |
| M91X60S2GG(A) | 2P | 60 W | 220 V / 230 V |

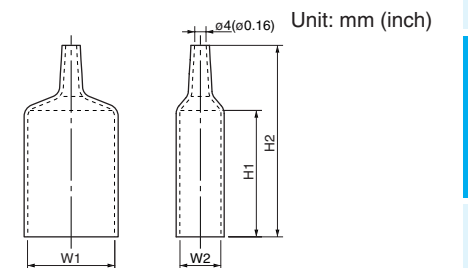
Mass
2.4 kg
5.29 lb



Capacitor (dimensions) [attachment]



Capacitor cap (dimensions)



• Capacitor dimension list Unit: upper (mm) / lower (inch)

| Model number of motor | Model number of capacitor (attachment) | L | W | D | H | T | Capacitor cap | W1 | W2 | H1 | H2 |
|-----------------------|--|-----------|-------------|-------------|-----------|----------|---------------|-----------|-------------|-----------|-----------|
| M91X60S2LG(A) | M0PC14M25G | 58 (2.28) | 22 (0.87) | 32 (1.26) | 35 (1.38) | 4 (0.16) | M0PC5822G | 58 (2.28) | 22 (0.87) | 55 (2.17) | 78 (3.07) |
| M91X60S2DG(A) | M0PC12M25G | 58 (2.28) | 22 (0.87) | 32 (1.26) | 35 (1.38) | 4 (0.16) | M0PC5822G | 58 (2.28) | 22 (0.87) | 55 (2.17) | 78 (3.07) |
| M91X60S2YG(A) | M0PC4M45G | 58 (2.28) | 23.5 (0.93) | 38.5 (1.52) | 37 (1.46) | 4 (0.16) | M0PC5823G | 58 (2.28) | 23.5 (0.93) | 55 (2.17) | 78 (3.07) |
| M91X60S2GG(A) | M0PC3M45G | 58 (2.28) | 21 (0.83) | 31 (1.22) | 31 (1.22) | 4 (0.16) | M0PC4821G | 48 (1.89) | 21 (0.83) | 55 (2.17) | 78 (3.07) |

* The models with a motor model number to which "A" is suffixed are not equipped with a capacitor cap.

(Note) Because the dimensions may be subject to change, also check the determinate dimensions if the gear head is to be used for design.

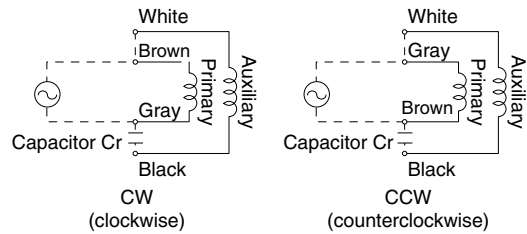
2-pole round shaft motor
(Induction motor)

90 mm (3.54 inch) sq. 90 W

• Specifications

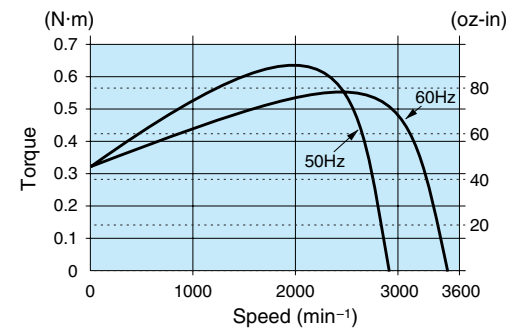
| Size | Motor model No. | Number of pole (P) | Output (W) | Voltage (V) | Frequency (Hz) | Rating (min) | Rating | | | | Starting current (A) | Starting torque N-m (oz-in) | Capacitor (μF) (rated voltage) |
|-----------|-----------------|--------------------|------------|-------------|----------------|--------------|-----------|-------------|----------------------------|--------------------|----------------------|-----------------------------|--------------------------------|
| | | | | | | | Input (W) | Current (A) | Speed (min ⁻¹) | Torque N-m (oz-in) | | | |
| 90 mm sq. | M91Z90S2LS | 2 | 90 | 100 | 50 | Cont. | 151 | 1.6 | 2700 | 0.32 (45.3) | 4.1 | 0.32 (45.3) | 25 (200V) |
| | | | | | | | 153 | 1.6 | 3275 | 0.26 (36.8) | 3.8 | 0.32 (45.3) | |
| | M91Z90S2YS | 2 | 90 | 200 | 50 | Cont. | 153 | 0.78 | 2675 | 0.32 (45.3) | 2.0 | 0.32 (45.3) | 6.2 (375V) |
| | | | | | | | 157 | 0.82 | 3250 | 0.26 (36.8) | 2.0 | 0.32 (45.3) | |

Connection diagram



Speed-torque characteristics

M91Z90S2LS

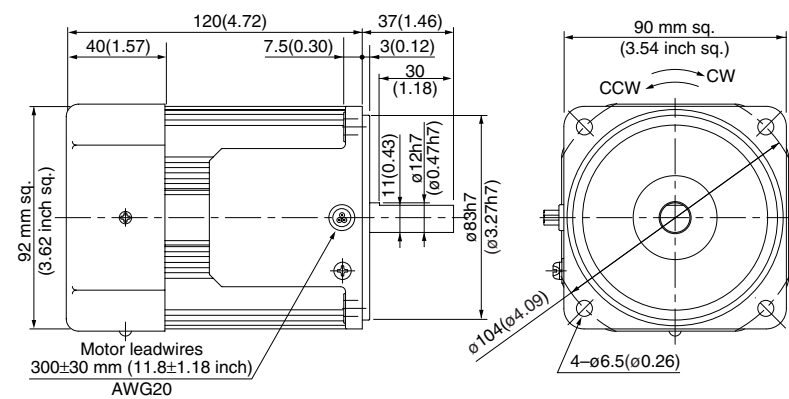


Motor (dimensions)

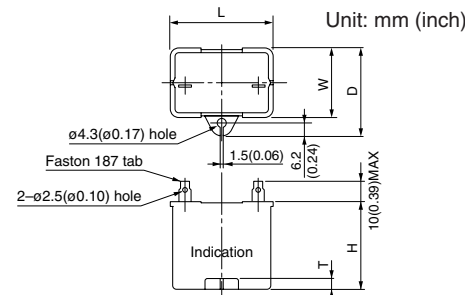
Scale: 1/3, Unit: mm (inch)

| | | | |
|------------|----|------|------------------|
| M91Z90S2LS | 2P | 90 W | 100 V (with fan) |
| M91Z90S2YS | 2P | 90 W | 200 V (with fan) |

Mass
2.7 kg
5.95 lb



Capacitor (dimensions) [attachment]



• Capacitor dimension list Unit: upper (mm) / lower (inch)

| Model number of motor | Model number of capacitor (attachment) | L | W | D | H | T | Capacitor cap (option) |
|-----------------------|--|-------------|-------------|-----------|-------------|----------|------------------------|
| M91Z90S2LS | M0PC25M20 | 50.2 (1.98) | 31 (1.22) | 41 (1.61) | 42 (1.65) | 5 (0.20) | M0PC5032 |
| M91Z90S2YS | M0PC6.2M38 | 50 (1.97) | 30.5 (1.20) | 41 (1.61) | 41.5 (1.63) | 4 (0.16) | M0PC5032 |

* Please read your User's manual carefully so that you will understand the operation and safety precautions before attempting to operate the system.

2-pole round shaft motor
(Induction motor)

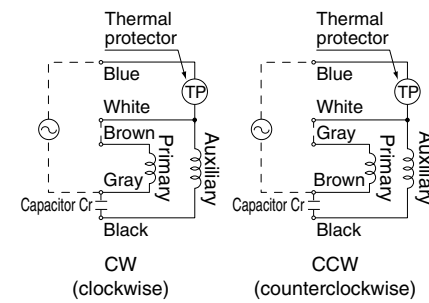
90 mm (3.54 inch) sq. 90 W

• Specifications

| Size | Motor model No. | Number of pole (P) | Output (W) | Voltage (V) | Frequency (Hz) | Rating (min) | Rating | | | | Starting current (A) | Starting torque N-m (oz-in) | Capacitor (μF) (rated voltage) |
|-----------|-----------------|--------------------|------------|-------------|----------------|--------------|-----------|-------------|----------------------------|--------------------|----------------------|-----------------------------|--------------------------------|
| | | | | | | | Input (W) | Current (A) | Speed (min ⁻¹) | Torque N-m (oz-in) | | | |
| 90 mm sq. | M91Z90S2LG | 2 | 90 | 100 | 50 | Cont. | 151 | 1.5 | 2675 | 0.32 (45.3) | 3.8 | 0.33 (46.7) | 28 (250V) |
| | | | | | | | 160 | 1.8 | 3250 | 0.26 (36.8) | 3.6 | 0.33 (46.7) | |
| | M91Z90S2DG | 2 | 90 | 110 | 60 | Cont. | 158 | 1.5 | 3300 | 0.26 (36.8) | 3.9 | 0.33 (46.7) | 25 (250V) |
| | | | | | | | 165 | 1.5 | 3325 | 0.26 (36.8) | 4.0 | 0.33 (46.7) | |
| | M91Z90S2YG | 2 | 90 | 200 | 50 | Cont. | 150 | 0.76 | 2600 | 0.33 (46.7) | 1.6 | 0.33 (46.7) | 7 (450V) |
| | | | | | | | 176 | 0.98 | 3175 | 0.27 (38.2) | 1.6 | 0.33 (46.7) | |
| | M91Z90S2GG | 2 | 90 | 220 | 50 | Cont. | 152 | 0.69 | 2650 | 0.32 (45.3) | 1.7 | 0.33 (46.7) | 6 (450V) |
| | | | | | | | 165 | 0.81 | 3225 | 0.27 (38.2) | 1.6 | 0.33 (46.7) | |
| | | | | | | | 162 | 0.72 | 2700 | 0.32 (45.3) | 1.7 | 0.33 (46.7) | |
| | | | | | | | 168 | 0.79 | 3275 | 0.26 (36.8) | 1.7 | 0.33 (46.7) | |

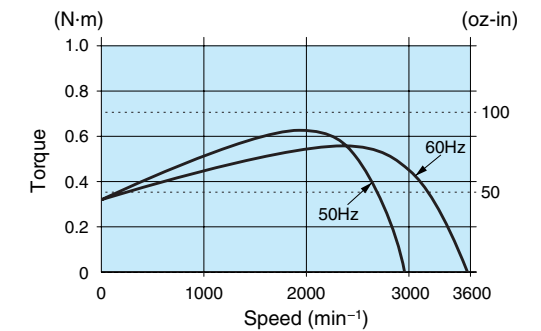
* The models with a motor model number to which "A" is suffixed are not equipped with a capacitor cap. The models with a motor model number to which "A" is suffixed are not sold or available in Japan.

Connection diagram



Speed-torque characteristics

M91Z90S2LG(A)

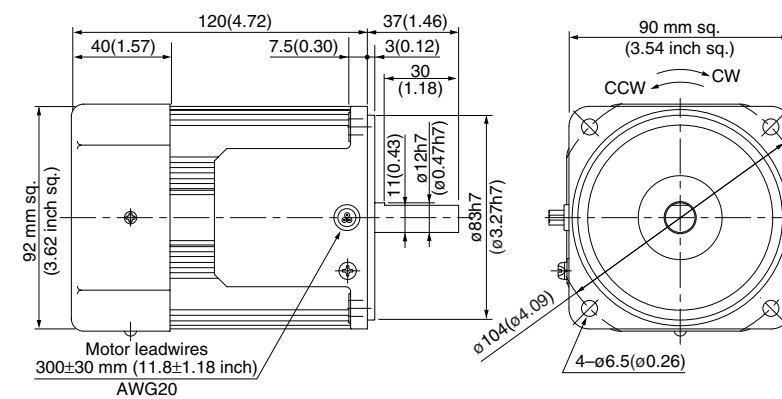


Motor (dimensions)

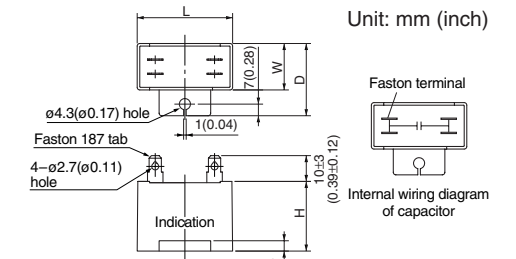
Scale: 1/3, Unit: mm (inch)

| | | | |
|---------------|----|------|--------------------------|
| M91Z90S2LG(A) | 2P | 90 W | 100 V (with fan) |
| M91Z90S2DG(A) | 2P | 90 W | 110 V / 115 V (with fan) |
| M91Z90S2YG(A) | 2P | 90 W | 200 V (with fan) |
| M91Z90S2GG(A) | 2P | 90 W | 220 V / 230 V (with fan) |

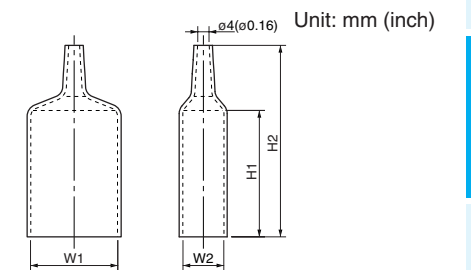
Mass
2.7 kg
5.95 lb



Capacitor (dimensions) [attachment]



Capacitor cap (dimensions)



• Capacitor dimension list Unit: upper (mm) / lower (inch)

| Model number of motor | Model number of capacitor (attachment) | L | W | D | H | T | Capacitor cap | W1 | W2 | H1 | H2 |
|-----------------------|--|-----------|-----------|-----------|-----------|----------|---------------|-----------|-----------|-----------|-----------|
| M91Z90S2LG(A) | M0PC28M25G | 58 (2.28) | 35 (1.38) | 50 (1.97) | 50 (1.97) | 4 (0.16) | M0PC5835G | 58 (2.28) | 35 (1.38) | 55 (2.17) | 78 (3.07) |
| M91Z90S2DG(A) | M0PC25M25G | 58 (2.28) | 35 (1.38) | 50 (1.97) | 50 (1.97) | 4 (0.16) | M0PC5835G | 58 (2.28) | 35 (1.38) | 55 (2.17) | 78 (3.07) |
| M91Z90S2YG(A) | M0PC7M45G | 58 (2.28) | 35 (1.38) | 50 (1.97) | 50 (1.97) | 4 (0.16) | M0PC5835G | 58 (2.28) | 35 (1.38) | 55 (2.17) | 78 (3.07) |
| M91Z90S2GG(A) | M0PC6M45G | 58 (2.28) | 29 (1.14) | 44 (1.73) | 41 (1.61) | 4 (0.16) | M0PC5829G | 58 (2.28) | 29 (1.14) | 55 (2.17) | 78 (3.07) |

* The models with a motor model number to which "A" is suffixed are not equipped with a capacitor cap.

(Note) Because the dimensions may be subject to change, also check the determinate dimensions if the gear head is to be used for design.

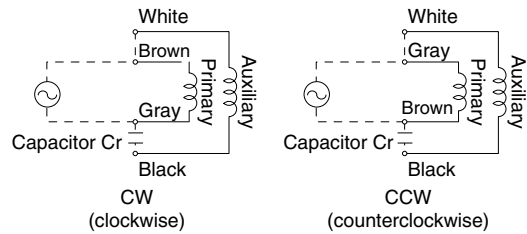
2-pole round shaft motor
(Induction motor)

90 mm (3.54 inch) sq. 150 W

• Specifications

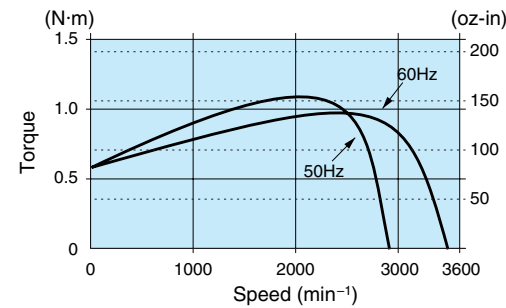
| Size | Motor model No. | Number of pole (P) | Output (W) | Voltage (V) | Frequency (Hz) | Rating (min) | Rating | | | | Starting current (A) | Starting torque N-m (oz-in) | Capacitor (μF) (rated voltage) |
|-----------|-----------------|--------------------|------------|-------------|----------------|--------------|-----------|-------------|----------------------------|--------------------|----------------------|-----------------------------|--------------------------------|
| | | | | | | | Input (W) | Current (A) | Speed (min ⁻¹) | Torque N-m (oz-in) | | | |
| 90 mm sq. | M91ZA5S2LS | 2 | 150 | 100 | 50 | Cont. | 240 | 2.5 | 2700 | 0.53 (75.1) | 6.1 | 0.58 (82.1) | 40 (180V) |
| | | | | | | | 251 | 2.7 | 3275 | 0.44 (62.3) | 5.9 | 0.58 (82.1) | |
| | M91ZA5S2YS | 2 | 150 | 200 | 50 | Cont. | 235 | 1.2 | 2725 | 0.53 (75.1) | 3.2 | 0.53 (75.1) | 10 (400V) |
| | | | | | | | 240 | 1.3 | 3300 | 0.43 (60.9) | 3.0 | 0.53 (75.1) | |

Connection diagram



Speed-torque characteristics

M91ZA5S2LS

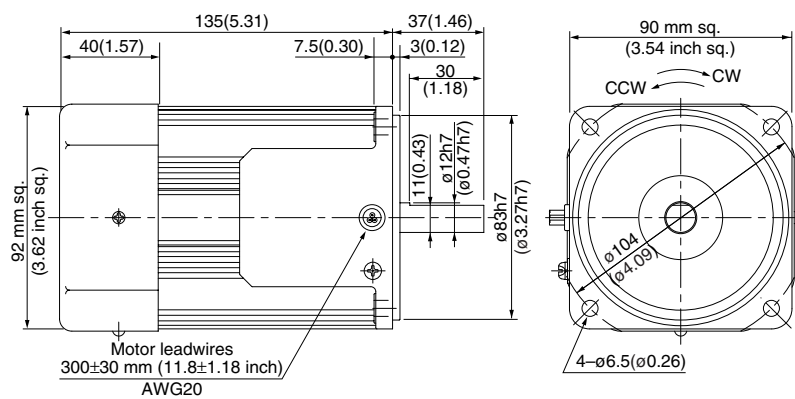


Motor (dimensions)

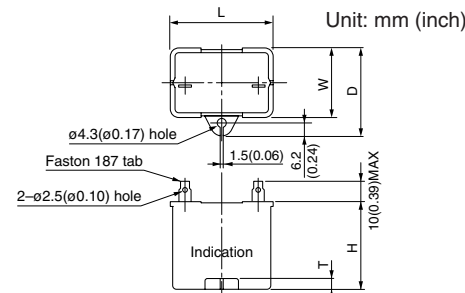
Scale: 1/3, Unit: mm (inch)

| | | | |
|------------|----|-------|------------------|
| M91ZA5S2LS | 2P | 150 W | 100 V (with fan) |
| M91ZA5S2YS | 2P | 150 W | 200 V (with fan) |

Mass
3.2 kg
7.05 lb



Capacitor (dimensions) [attachment]



• Capacitor dimension list Unit: upper (mm) / lower (inch)

| Model number of motor | Model number of capacitor (attachment) | L | W | D | H | T | Capacitor cap (option) |
|-----------------------|--|-------------|-----------|-------------|-----------|----------|------------------------|
| M91ZA5S2LS | M0PC40M18 | 50.2 (1.98) | 35 (1.38) | 45.5 (1.79) | 47 (1.85) | 5 (0.20) | — |
| M91ZA5S2YS | M0PC10M40 | 50 (1.97) | 34 (1.34) | 45 (1.77) | 45 (1.77) | 6 (0.24) | — |

* Please read your User's manual carefully so that you will understand the operation and safety precautions before attempting to operate the system.

2-pole round shaft motor
(Induction motor)

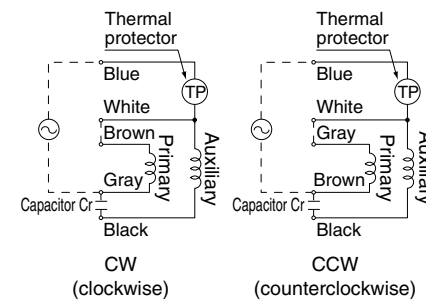
90 mm (3.54 inch) sq. 150 W

• Specifications

| Size | Motor model No. | Number of pole (P) | Output (W) | Voltage (V) | Frequency (Hz) | Rating (min) | Rating | | | | Starting current (A) | Starting torque N-m (oz-in) | Capacitor (μF) (rated voltage) |
|-----------|---------------------------|--------------------|------------|-------------|----------------|--------------|-----------|-------------|----------------------------|--------------------|----------------------|-----------------------------|--------------------------------|
| | | | | | | | Input (W) | Current (A) | Speed (min ⁻¹) | Torque N-m (oz-in) | | | |
| 90 mm sq. | M91ZA5S2LG M91ZA5S2LGA | 2 | 150 | 100 | 50 | Cont. | 232 | 2.3 | 2625 | 0.55 (77.9) | 5.4 | 0.50 (70.8) | 40 (250V) |
| | | | | | | | 250 | 2.7 | 3200 | 0.45 (63.7) | 5.2 | 0.50 (70.8) | |
| | M91ZA5S2DG M91ZA5S2DGA | 2 | 150 | 110 | 60 | Cont. | 238 | 2.3 | 3275 | 0.44 (62.3) | 5.6 | 0.53 (75.1) | 35 (250V) |
| | | | | | | | 253 | 2.2 | 3300 | 0.43 (60.9) | 5.8 | 0.53 (75.1) | |
| | M91ZA5S2YG M91ZA5S2YGA | 2 | 150 | 200 | 50 | Cont. | 236 | 1.3 | 2525 | 0.57 (80.7) | 2.3 | 0.50 (70.8) | 10 (450V) |
| | | | | | | | 271 | 1.5 | 3075 | 0.47 (66.6) | 2.2 | 0.50 (70.8) | |
| | M91ZA5S2GG M91ZA5S2GGA | 2 | 150 | 220 | 50 | Cont. | 230 | 1.1 | 2625 | 0.55 (77.9) | 2.4 | 0.47 (66.6) | 8 (450V) |
| | | | | | | | 243 | 1.2 | 3200 | 0.45 (63.7) | 2.3 | 0.47 (66.6) | |
| | | | | | | | 237 | 1.1 | 2650 | 0.54 (76.5) | 2.5 | 0.53 (75.1) | |
| | | | | | | | 245 | 1.2 | 3250 | 0.44 (62.3) | 2.4 | 0.53 (75.1) | |

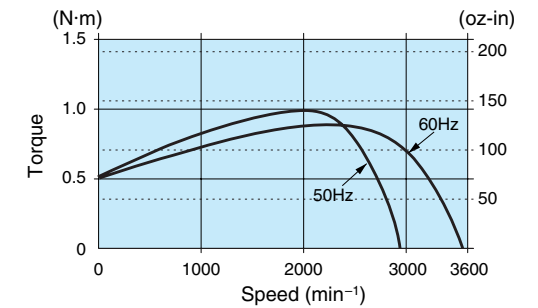
* The models with a motor model number to which "A" is suffixed are not equipped with a capacitor cap. The models with a motor model number to which "A" is suffixed are not sold or available in Japan.

Connection diagram



Speed-torque characteristics

M91ZA5S2LG(A)

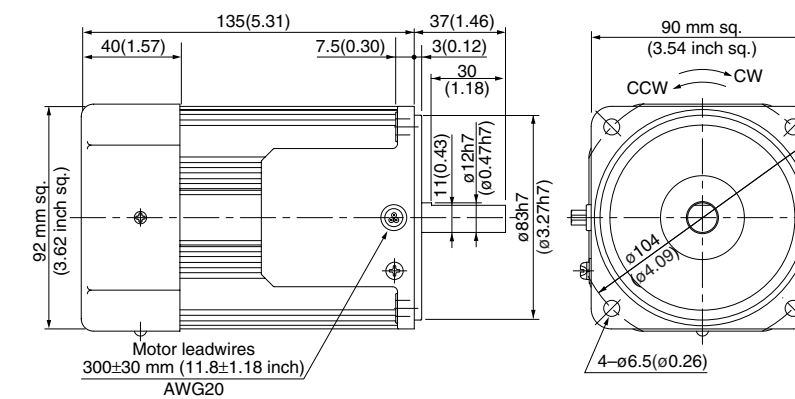


Motor (dimensions)

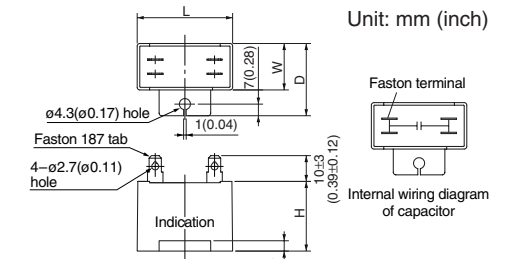
Scale: 1/3, Unit: mm (inch)

| | | | |
|---------------|----|-------|--------------------------|
| M91ZA5S2LG(A) | 2P | 150 W | 100 V (with fan) |
| M91ZA5S2DG(A) | 2P | 150 W | 110 V / 115 V (with fan) |
| M91ZA5S2YG(A) | 2P | 150 W | 200 V (with fan) |
| M91ZA5S2GG(A) | 2P | 150 W | 220 V / 230 V (with fan) |

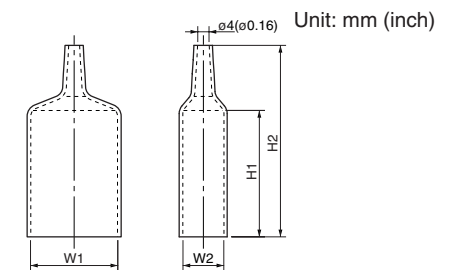
Mass
3.2 kg
7.05 lb



Capacitor (dimensions) [attachment]



Capacitor cap (dimensions)



• Capacitor dimension list Unit: upper (mm) / lower (inch)

| Model number of motor | Model number of capacitor (attachment) | L | W | D | H | T | Capacitor cap | W1 | W2 | H1 | H2 |
|-----------------------|--|-----------|-----------|-----------|-----------|----------|---------------|-----------|-----------|-----------|-----------|
| M91ZA5S2LG(A) | M0PC40M25G | 58 (2.28) | 41 (1.61) | 56 (2.20) | 58 (2.28) | 4 (0.16) | M0PC5841G | 58 (2.28) | 41 (1.61) | 55 (2.17) | 78 (3.07) |
| M91ZA5S2DG(A) | M0PC35M25G | 58 (2.28) | 41 (1.61) | 56 (2.20) | 58 (2.28) | 4 (0.16) | M0PC5841G | 58 (2.28) | 41 (1.61) | 55 (2.17) | 78 (3.07) |
| M91ZA5S2YG(A) | M0PC10M45G | 58 (2.28) | 35 (1.38) | 50 (1.97) | 50 (1.97) | 4 (0.16) | M0PC5835G | 58 (2.28) | 35 (1.38) | 55 (2.17) | 78 (3.07) |
| M91ZA5S2GG(A) | M0PC8M45G | 58 (2.28) | 35 (1.38) | 50 (1.97) | 50 (1.97) | 4 (0.16) | M0PC5835G | 58 (2.28) | 35 (1.38) | 55 (2.17) | 78 (3.07) |

* The models with a motor model number to which "A" is suffixed are not equipped with a capacitor cap.

(Note) Because the dimensions may be subject to change, also check the determinate dimensions if the gear head is to be used for design.

Induction motor
Reversible motor
3-phase motor
Electromagnetic brake motor
Variable speed induction motor
Variable speed motor
Variable speed electromagnetic brake single-phase motor
Variable speed unit motor
C&B motor
2-pole round shaft motor
Gear head
Gear head -inch (U.S.A.)

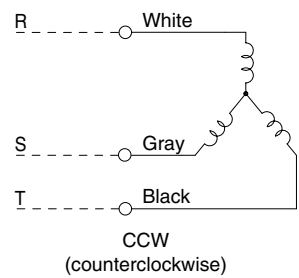
2-pole round shaft motor
(3-phase motor)

80 mm (3.15 inch) sq. 40 W

• Specifications

| Size | Motor model No. | Number of pole (P) | Output (W) | Voltage (V) | Frequency (Hz) | Rating (min) | Rating | | | | Starting current (A) | Starting torque N·m (oz-in) |
|-----------|-----------------|--------------------|------------|-------------|----------------|--------------|-----------|-------------|----------------------------|--------------------|----------------------|-----------------------------|
| | | | | | | | Input (W) | Current (A) | Speed (min ⁻¹) | Torque N·m (oz-in) | | |
| 80 mm sq. | M8MX40S2YS | 2 | 40 | 200 | 50 | Cont. | 68 | 0.24 | 2525 | 0.14 (19.8) | 0.66 | 0.30 (42.5) |
| | | | | | 60 | | 67 | 0.22 | 3050 | 0.12 (17.0) | 0.64 | 0.24 (34.0) |
| | | | | 220 | 50 | | 69 | 0.24 | 2650 | 0.13 (18.4) | 0.72 | 0.37 (52.4) |
| | | | | | 60 | | 65 | 0.22 | 3175 | 0.12 (17.0) | 0.70 | 0.29 (41.1) |

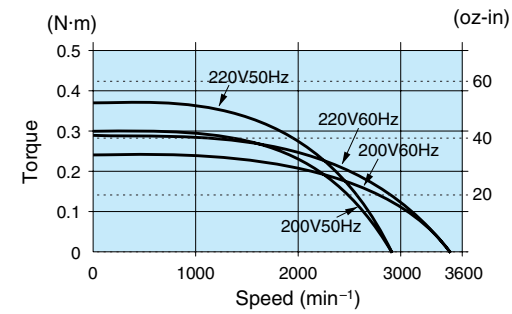
Connection diagram



Change any two lead wires of R, S and T for CW rotation.

Speed-torque characteristics

M8MX40S2YS

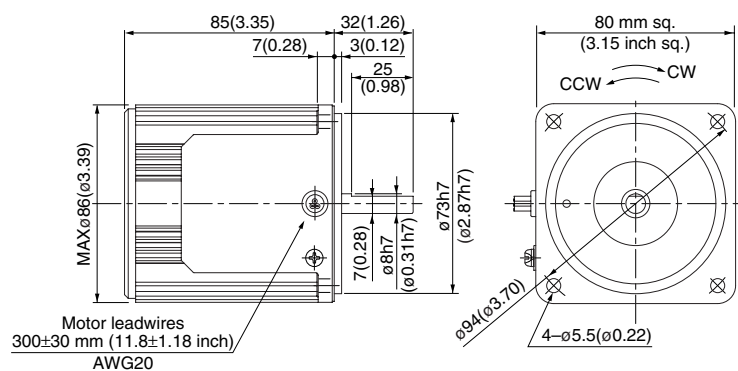


Motor (dimensions)

Scale: 1/3, Unit: mm (inch)

M8MX40S2YS 2P 40 W 200 V / 220 V

Mass
1.5 kg
3.31 lb



2-pole round shaft motor
(3-phase motor)

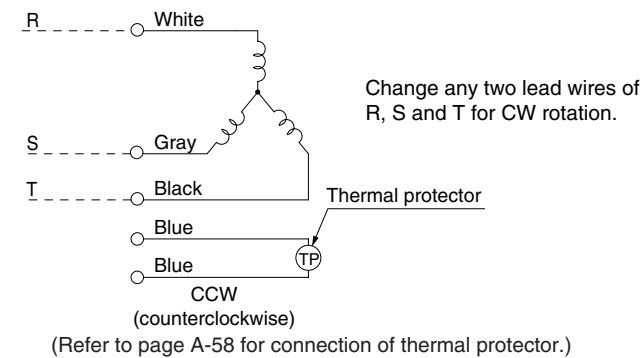
UL US CE 80 mm (3.15 inch) sq. 40 W

• Specifications

| Size | Motor model No. | Number of pole (P) | Output (W) | Voltage (V) | Frequency (Hz) | Rating (min) | Rating | | | | Starting current (A) | Starting torque N·m (oz-in) |
|-----------|---------------------------|--------------------|------------|-------------|----------------|--------------|-----------|-------------|----------------------------|--------------------|----------------------|-----------------------------|
| | | | | | | | Input (W) | Current (A) | Speed (min ⁻¹) | Torque N·m (oz-in) | | |
| 80 mm sq. | M8MX40S2YG M8MX40S2YGA | 2 | 40 | 200 | 50 | Cont. | 72 | 0.24 | 2525 | 0.14 (19.8) | 0.66 | 0.30 (42.5) |
| | | | | | 60 | | 67 | 0.22 | 3050 | 0.12 (17.0) | 0.64 | 0.24 (34.0) |
| | | | | 220 | 60 | | 68 | 0.22 | 3175 | 0.12 (17.0) | 0.70 | 0.29 (41.1) |
| | | | | | 60 | | 68 | 0.22 | 3200 | 0.12 (17.0) | 0.70 | 0.31 (43.9) |

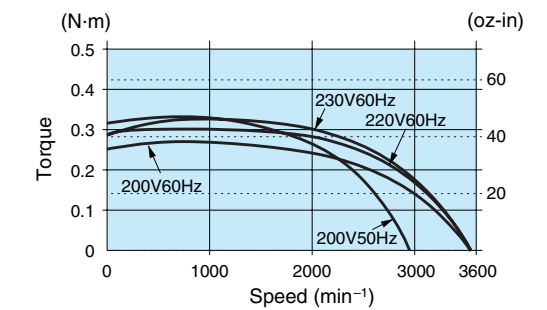
• The models with a motor model number to which "A" is suffixed are not sold or available in Japan.

Connection diagram



Speed-torque characteristics

M8MX40S2YG(A)

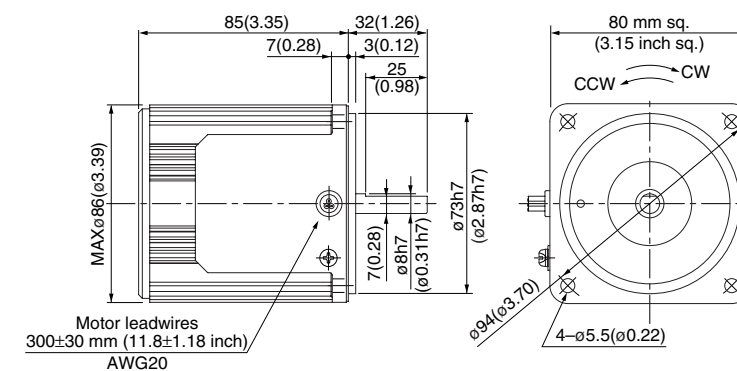


Motor (dimensions)

Scale: 1/3, Unit: mm (inch)

M8MX40S2YG(A) 2P 40 W 200 V / 220 V / 230 V

Mass
1.5 kg
3.31 lb



* Please read your User's manual carefully so that you will understand the operation and safety precautions before attempting to operate the system.

(Note) Because the dimensions may be subject to change, also check the determinate dimensions if the gear head is to be used for design.

Induction motor
Reversible motor
3-phase motor
Electromagnetic brake motor
Variable speed induction motor
Variable speed reversible motor
Variable speed electromagnetic brake single-phase motor
Variable speed unit motor
C&B motor
2-pole round shaft motor
Gear head
Gear head - inch (U.S.A.)

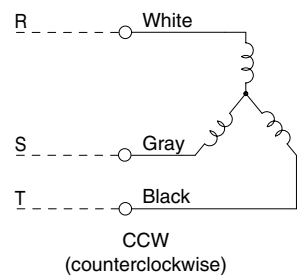
2-pole round shaft motor
(3-phase motor)

80 mm (3.15 inch) sq. 60 W

• Specifications

| Size | Motor model No. | Number of pole (P) | Output (W) | Voltage (V) | Frequency (Hz) | Rating (min) | Rating | | | | Starting current (A) | Starting torque N·m (oz-in) |
|-----------|-----------------|--------------------|------------|-------------|----------------|--------------|-----------|-------------|----------------------------|--------------------|----------------------|-----------------------------|
| | | | | | | | Input (W) | Current (A) | Speed (min ⁻¹) | Torque N·m (oz-in) | | |
| 80 mm sq. | M8MX60S2YS | 2 | 60 | 200 | 50 | Cont. | 115 | 0.38 | 2325 | 0.24 (34.0) | 0.85 | 0.38 (53.8) |
| | | | | | 60 | | 118 | 0.37 | 2750 | 0.20 (28.3) | 0.81 | 0.30 (42.5) |
| | | | | 220 | 50 | 113 | 0.38 | 2525 | 0.22 (31.2) | 0.92 | 0.44 (62.3) | |
| | | | | | 60 | 105 | 0.33 | 3025 | 0.18 (25.5) | 0.88 | 0.36 (51.0) | |

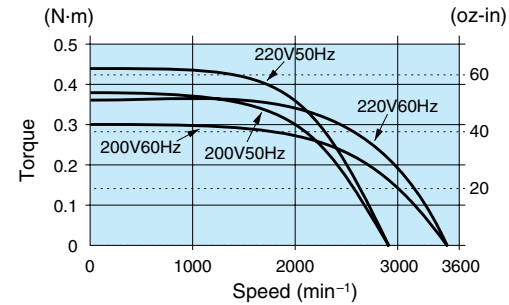
Connection diagram



Change any two lead wires of R, S and T for CW rotation.

Speed-torque characteristics

M8MX60S2YS

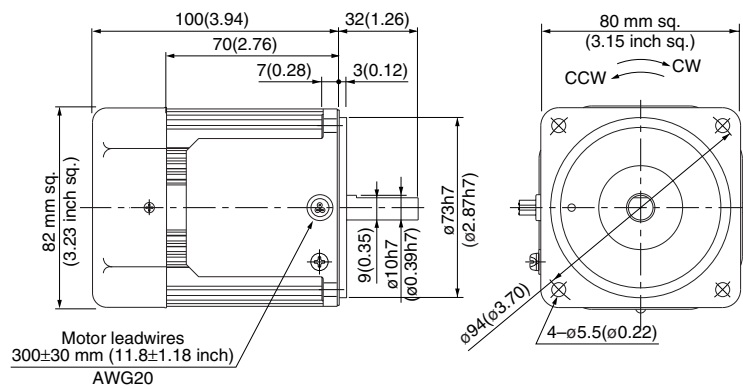


Motor (dimensions)

Scale: 1/3, Unit: mm (inch)

M8MX60S2YS 2P 60 W 200 V / 220 V (with fan)

Mass
1.8 kg
3.97 lb



2-pole round shaft motor
(3-phase motor)

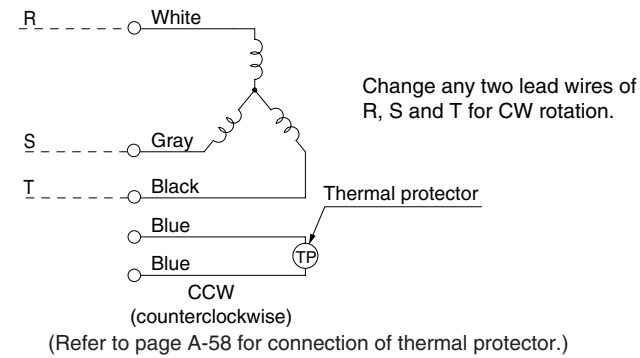
80 mm (3.15 inch) sq. 60 W

• Specifications

| Size | Motor model No. | Number of pole (P) | Output (W) | Voltage (V) | Frequency (Hz) | Rating (min) | Rating | | | | Starting current (A) | Starting torque N·m (oz-in) |
|-----------|---------------------------|--------------------|------------|-------------|----------------|--------------|-----------|-------------|----------------------------|--------------------|----------------------|-----------------------------|
| | | | | | | | Input (W) | Current (A) | Speed (min ⁻¹) | Torque N·m (oz-in) | | |
| 80 mm sq. | M8MX60S2YG M8MX60S2YGA | 2 | 60 | 200 | 50 | Cont. | 115 | 0.38 | 2325 | 0.24 (34.0) | 0.85 | 0.38 (53.8) |
| | | | | | 60 | | 118 | 0.37 | 2750 | 0.20 (28.3) | 0.81 | 0.30 (42.5) |
| | | | | 220 | 60 | 105 | 0.33 | 3025 | 0.18 (25.5) | 0.88 | 0.36 (51.0) | |
| | | | | | 230 | 60 | 105 | 0.33 | 3050 | 0.18 (25.5) | 0.88 | 0.39 (55.2) |

• The models with a motor model number to which "A" is suffixed are not sold or available in Japan.

Connection diagram

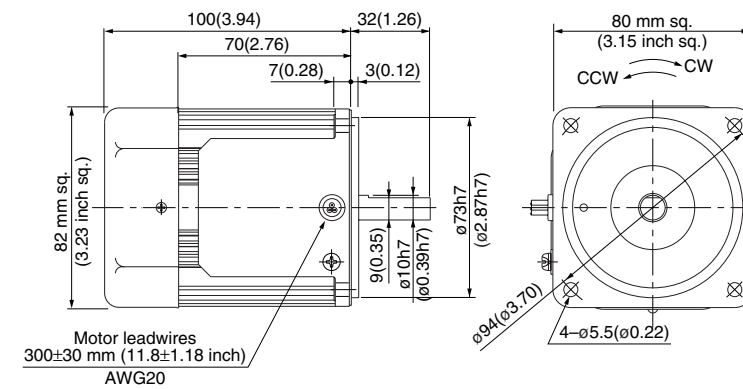


Motor (dimensions)

Scale: 1/3, Unit: mm (inch)

M8MX60S2YG(A) 2P 60 W 200 V / 220 V / 230 V (with fan)

Mass
1.8 kg
3.97 lb



* Please read your User's manual carefully so that you will understand the operation and safety precautions before attempting to operate the system.

(Note) Because the dimensions may be subject to change, also check the determinate dimensions if the gear head is to be used for design.

Induction motor
Reversible motor
3-phase motor
Electromagnetic brake motor
Variable speed induction motor
Variable speed reversible motor
Variable speed electromagnetic brake single-phase motor
Variable speed unit motor
C&B motor
2-pole round shaft motor
Gear head
Gear head - inch (U.S.A.)

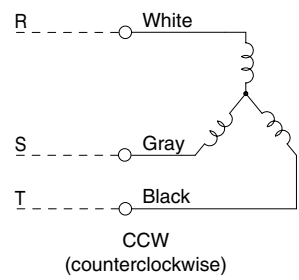
2-pole round shaft motor
(3-phase motor)

90 mm (3.54 inch) sq. 60 W

• Specifications

| Size | Motor model No. | Number of pole (P) | Output (W) | Voltage (V) | Frequency (Hz) | Rating (min) | Rating | | | | Starting current (A) | Starting torque N·m (oz·in) |
|-----------|-----------------|--------------------|------------|-------------|----------------|--------------|-----------|-------------|----------------------------|--------------------|----------------------|-----------------------------|
| | | | | | | | Input (W) | Current (A) | Speed (min ⁻¹) | Torque N·m (oz·in) | | |
| 90 mm sq. | M9MX60S2YS | 2 | 60 | 200 | 50 | Cont. | 82 | 0.32 | 2825 | 0.20 (28.3) | 1.9 | 0.96 (136) |
| | | | | | | | 79 | 0.29 | 3400 | 0.16 (22.7) | 1.7 | 0.69 (97.7) |
| | | | | | | | 86 | 0.32 | 2875 | 0.20 (28.3) | 2.1 | 1.1 (156) |
| | | | | | | | | | | | | |

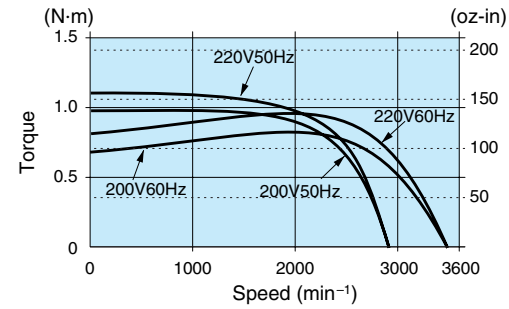
Connection diagram



Change any two lead wires of R, S and T for CW rotation.

Speed-torque characteristics

M9MX60S2YS

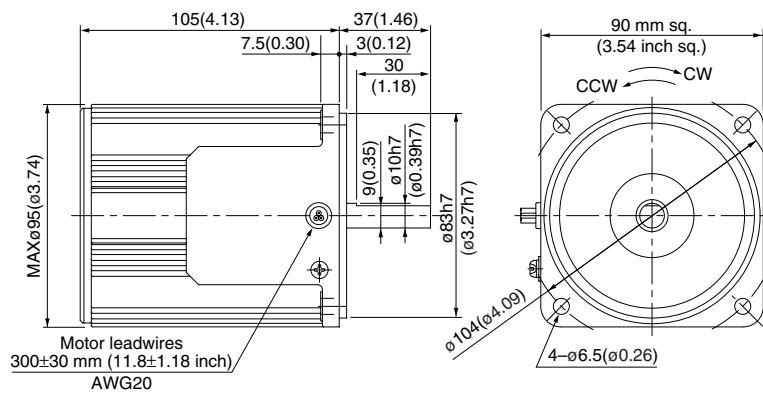


Motor (dimensions)

Scale: 1/3, Unit: mm (inch)

M9MX60S2YS 2P 60 W 200 V / 220 V (with fan)

Mass
2.4 kg
5.29 lb



2-pole round shaft motor
(3-phase motor)

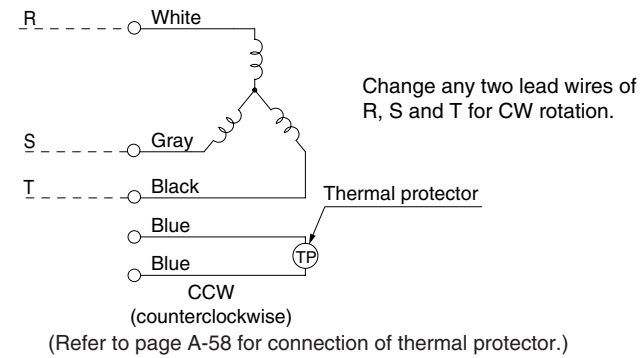
90 mm (3.54 inch) sq. 60 W

• Specifications

| Size | Motor model No. | Number of pole (P) | Output (W) | Voltage (V) | Frequency (Hz) | Rating (min) | Rating | | | | Starting current (A) | Starting torque N·m (oz·in) |
|-----------|---------------------------|--------------------|------------|-------------|----------------|--------------|-----------|-------------|----------------------------|--------------------|----------------------|-----------------------------|
| | | | | | | | Input (W) | Current (A) | Speed (min ⁻¹) | Torque N·m (oz·in) | | |
| 90 mm sq. | M9MX60S2YG M9MX60S2YGA | 2 | 60 | 200 | 50 | Cont. | 87 | 0.32 | 2825 | 0.20 (28.3) | 1.9 | 0.96 (136) |
| | | | | | | | 87 | 0.31 | 3400 | 0.17 (24.1) | 1.7 | 0.69 (97.7) |
| | | | | | | | 87 | 0.30 | 3450 | 0.17 (24.1) | 1.9 | 0.84 (119) |
| | | | | | | | | | | | | |

• The models with a motor model number to which "A" is suffixed are not sold or available in Japan.

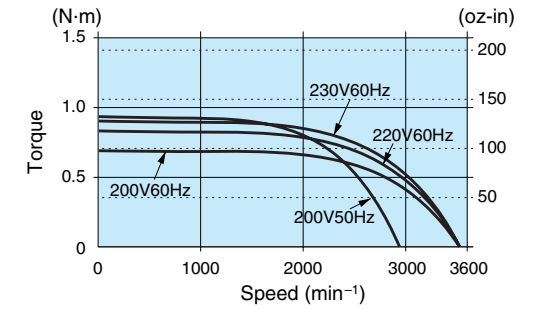
Connection diagram



(Refer to page A-58 for connection of thermal protector.)

Speed-torque characteristics

M9MX60S2YG(A)

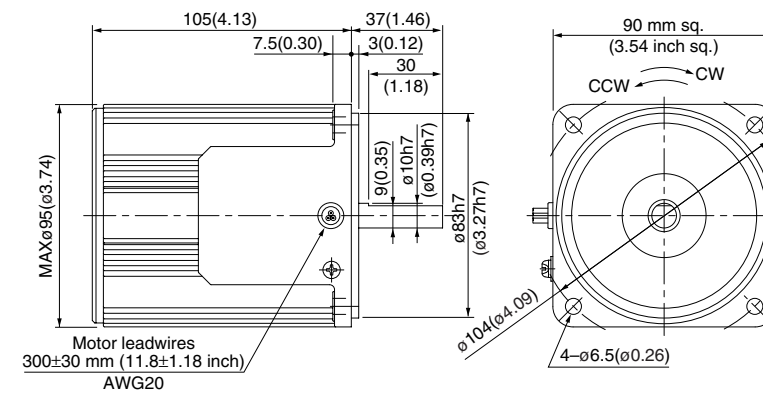


Motor (dimensions)

Scale: 1/3, Unit: mm (inch)

M9MX60S2YG(A) 2P 60W 200 V / 220 V / 230 V (with fan)

Mass
2.4 kg
5.29 lb



* Please read your User's manual carefully so that you will understand the operation and safety precautions before attempting to operate the system.

(Note) Because the dimensions may be subject to change, also check the determinate dimensions if the gear head is to be used for design.

Induction motor
Reversible motor
3-phase motor
Electromagnetic brake motor
Variable speed induction motor
Variable speed reversible motor
Variable speed electromagnetic brake single-phase motor
Variable speed unit motor
C&B motor
2-pole round shaft motor
Gear head
Gear head -inch (U.S.A.)

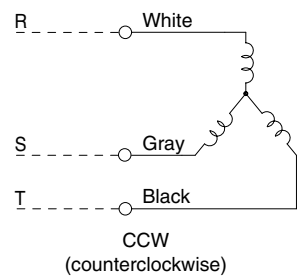
2-pole round shaft motor
(3-phase motor)

90 mm (3.54 inch) sq. 90 W

• Specifications

| Size | Motor model No. | Number of pole (P) | Output (W) | Voltage (V) | Frequency (Hz) | Rating (min) | Rating | | | | Starting current (A) | Starting torque N·m (oz-in) |
|-----------|-----------------|--------------------|------------|-------------|----------------|--------------|-----------|-------------|----------------------------|--------------------|----------------------|-----------------------------|
| | | | | | | | Input (W) | Current (A) | Speed (min ⁻¹) | Torque N·m (oz-in) | | |
| 90 mm sq. | M9MZ90S2YS | 2 | 90 | 200 | 50 | Cont. | 144 | 0.71 | 2700 | 0.31 (43.9) | 2.3 | 1.6 (227) |
| | | | | | 60 | | 134 | 0.53 | 3225 | 0.26 (36.8) | 2.1 | 1.2 (170) |
| | | | | | 220 | 50 | 167 | 0.96 | 2750 | 0.31 (43.9) | 2.5 | 1.9 (269) |
| | | | | | | 60 | 137 | 0.59 | 3300 | 0.25 (35.4) | 2.3 | 1.4 (198) |

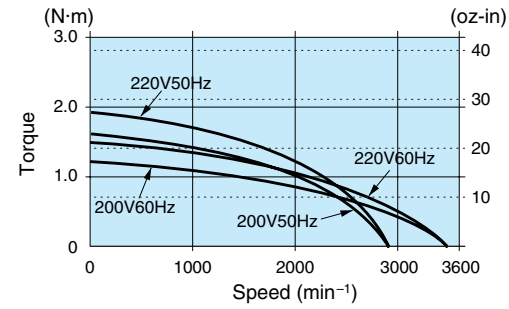
Connection diagram



Change any two lead wires of R, S and T for CW rotation.

Speed-torque characteristics

M9MZ90S2YS

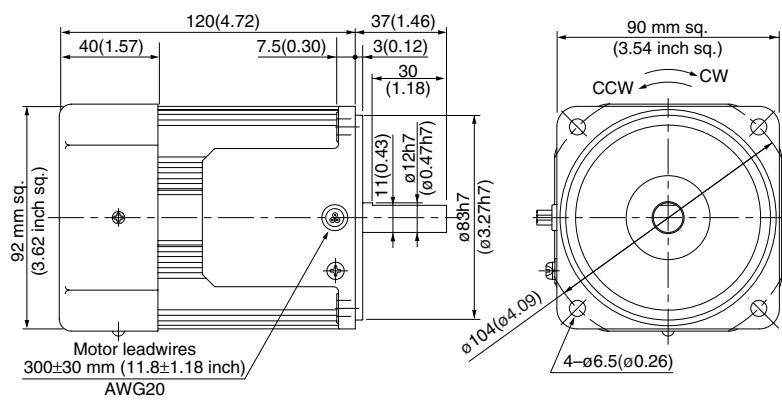


Motor (dimensions)

Scale: 1/3, Unit: mm (inch)

M9MZ90S2YS 2P 90 W 200 V / 220 V (with fan)

Mass
2.7 kg
5.95 lb



* Please read your User's manual carefully so that you will understand the operation and safety precautions before attempting to operate the system.

2-pole round shaft motor
(3-phase motor)

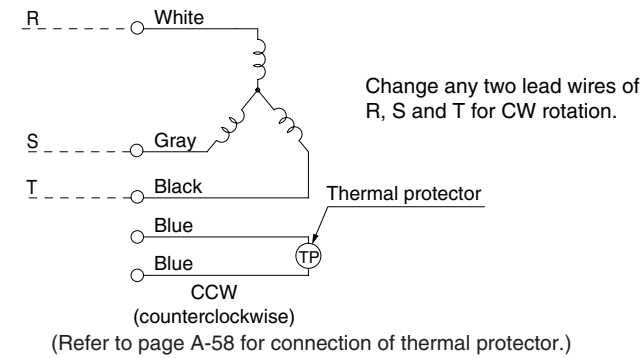
90 mm (3.54 inch) sq. 90 W

• Specifications

| Size | Motor model No. | Number of pole (P) | Output (W) | Voltage (V) | Frequency (Hz) | Rating (min) | Rating | | | | Starting current (A) | Starting torque N·m (oz-in) |
|-----------|---------------------------|--------------------|------------|-------------|----------------|--------------|-----------|-------------|----------------------------|--------------------|----------------------|-----------------------------|
| | | | | | | | Input (W) | Current (A) | Speed (min ⁻¹) | Torque N·m (oz-in) | | |
| 90 mm sq. | M9MZ90S2YG M9MZ90S2YGA | 2 | 90 | 200 | 50 | Cont. | 144 | 0.71 | 2700 | 0.32 (45.3) | 2.3 | 1.6 (227) |
| | | | | | | | 134 | 0.53 | 3225 | 0.27 (38.2) | 2.1 | 1.2 (170) |
| | | | | | | | 137 | 0.59 | 3300 | 0.26 (36.8) | 2.3 | 1.4 (198) |
| | | | | | | | 142 | 0.65 | 3325 | 0.26 (36.8) | 2.4 | 1.5 (212) |

* The models with a motor model number to which "A" is suffixed are not sold or available in Japan.

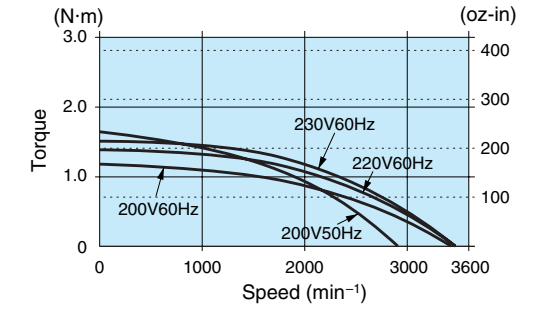
Connection diagram



(Refer to page A-58 for connection of thermal protector.)

Speed-torque characteristics

M9MZ90S2YG(A)

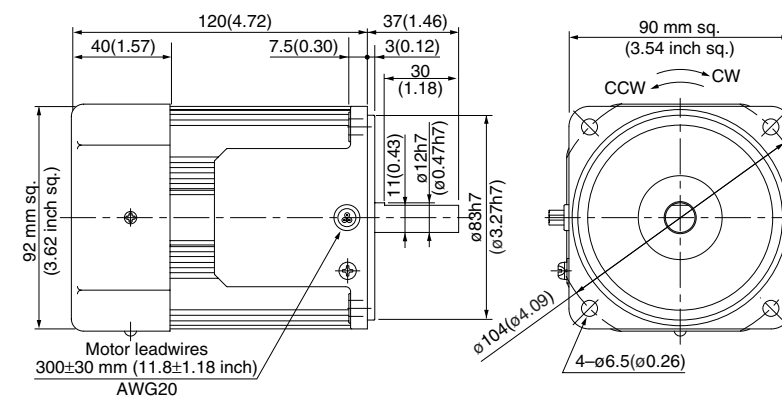


Motor (dimensions)

Scale: 1/3, Unit: mm (inch)

M9MZ90S2YG(A) 2P 90 W 200 V / 220 V / 230 V (with fan)

Mass
2.7 kg
5.95 lb



(Note) Because the dimensions may be subject to change, also check the determinate dimensions if the gear head is to be used for design.

Induction motor
Reversible motor
3-phase motor
Electromagnetic brake motor
Variable speed induction motor
Variable speed reversible motor
Variable speed electromagnetic brake single-phase motor
Variable speed unit motor
C&B motor
2-pole round shaft motor
Gear head
Gear head -inch (U.S.A.)

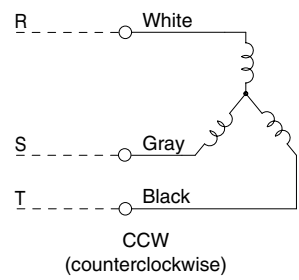
2-pole round shaft motor
(3-phase motor)

90 mm (3.54 inch) sq. 150 W

• Specifications

| Size | Motor model No. | Number of pole (P) | Output (W) | Voltage (V) | Frequency (Hz) | Rating (min) | Rating | | | | Starting current (A) | Starting torque N·m (oz-in) |
|-----------|-----------------|--------------------|------------|-------------|----------------|--------------|-----------|-------------|----------------------------|--------------------|----------------------|-----------------------------|
| | | | | | | | Input (W) | Current (A) | Speed (min ⁻¹) | Torque N·m (oz-in) | | |
| 90 mm sq. | M9MZA5S2YS | 2 | 150 | 200 | 50 | Cont. | 235 | 1.1 | 2850 | 0.51 (72.2) | 5.2 | 2.6 (368) |
| | | | | | | | 227 | 0.81 | 3400 | 0.43 (60.9) | | |
| | | | | | | | 274 | 1.5 | 2875 | 0.50 (70.8) | | |
| | | | | | | | 233 | 0.87 | 3450 | 0.43 (60.9) | | |

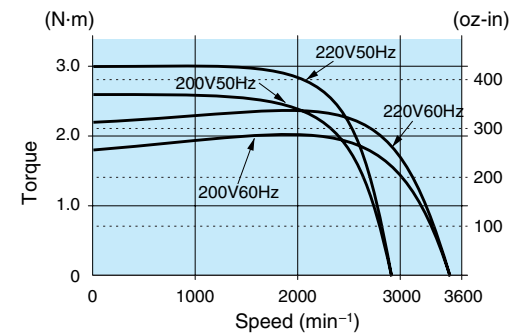
Connection diagram



Change any two lead wires of R, S and T for CW rotation.

Speed-torque characteristics

M9MZA5S2YS

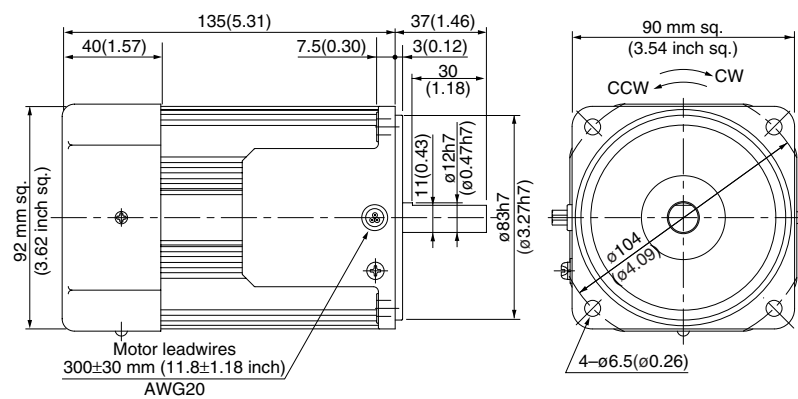


Motor (dimensions)

Scale: 1/3, Unit: mm (inch)

M9MZA5S2YS 2P 150 W 200 V / 220 V (with fan)

Mass
3.2 kg
7.05 lb



2-pole round shaft motor
(3-phase motor)

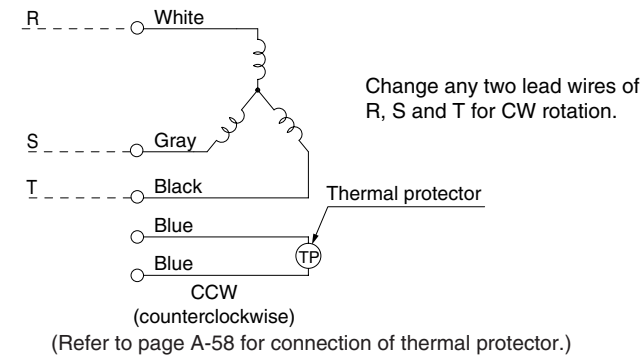
90 mm (3.54 inch) sq. 150 W

• Specifications

| Size | Motor model No. | Number of pole (P) | Output (W) | Voltage (V) | Frequency (Hz) | Rating (min) | Rating | | | | Starting current (A) | Starting torque N·m (oz-in) |
|-----------|---------------------------|--------------------|------------|-------------|----------------|--------------|-----------|-------------|----------------------------|--------------------|----------------------|-----------------------------|
| | | | | | | | Input (W) | Current (A) | Speed (min ⁻¹) | Torque N·m (oz-in) | | |
| 90 mm sq. | M9MZA5S2YG M9MZA5S2YGA | 2 | 150 | 200 | 50 | Cont. | 236 | 1.3 | 2850 | 0.50 (70.8) | 5.2 | 2.5 (354) |
| | | | | | | | 207 | 0.84 | 3425 | 0.42 (59.5) | | |
| | | | | | | | 218 | 0.99 | 3475 | 0.41 (58.1) | | |
| | | | | | | | 229 | 1.2 | 3475 | 0.41 (58.1) | | |
| | | | | | | | 220 | 0.60 | 3425 | 0.42 (59.5) | | |

• The models with a motor model number to which "A" is suffixed are not sold or available in Japan.

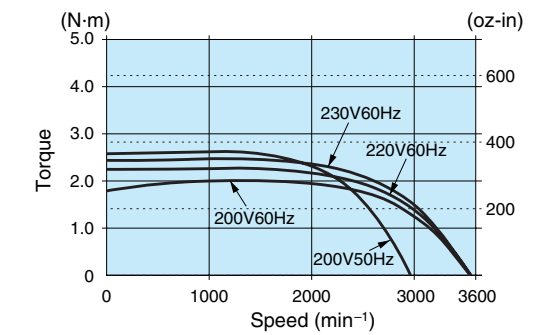
Connection diagram



(Refer to page A-58 for connection of thermal protector.)

Speed-torque characteristics

M9MZA5S2YG(A)

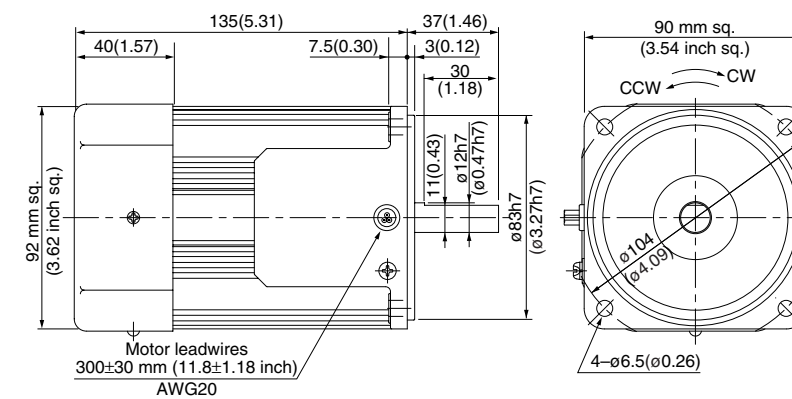


Motor (dimensions)

Scale: 1/3, Unit: mm (inch)

M9MZA5S2YG(A) 2P 150 W 200 V / 220 V / 230 V (with fan)

Mass
3.2 kg
7.05 lb



* Please read your User's manual carefully so that you will understand the operation and safety precautions before attempting to operate the system.

(Note) Because the dimensions may be subject to change, also check the determinate dimensions if the gear head is to be used for design.

Induction motor
Reversible motor
3-phase motor
Electromagnetic brake motor
Variable speed induction motor
Variable speed reversible motor
Variable speed electromagnetic brake single-phase motor
Variable speed unit motor
C&B motor
2-pole round shaft motor
Gear head
Gear head - inch (U.S.A.)

