

SGMAH-□, SGMPH-□, SGMGH-□,SGMSH-□,SGMUH-□,SGMBH-□

Sigma-II rotary servo motors

The ideal servo family for motion control. Fast response, high speed, and high accuracy.

- 6 different designs provide a complete range of servo motors to meet the power, speed and performance required per each application.
- Peak torque 300% of nominal during 3 seconds
- Automatic motor recognition by servo drive
- IP67 and shaft oil seal available
- High resolution encoders
- Absolute multiturn encoder solution
- Compact design and robust construction

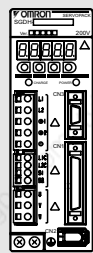
Ratings

- 230 VAC from 30 W to 1.5k W (rated torque from 0.09 to 4.77 Nm)
- 400 VAC from 300 W to 55 kW (rated torque from 0.95 Nm to 350 Nm)



System configuration

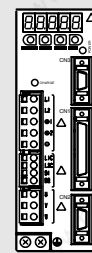
(Refer to servo drive chapter)



Servo drive with option boards for flexible system configuration

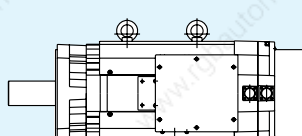
Sigma-II Servo Drive

Drive options

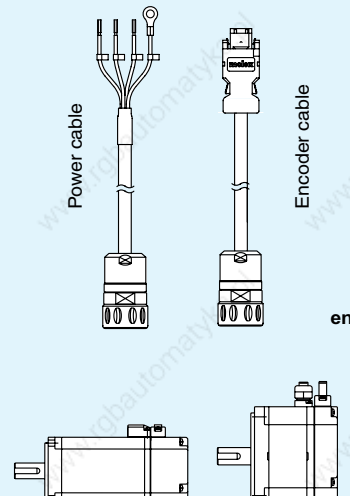


Intelligent Servo Drive

XtraDrive

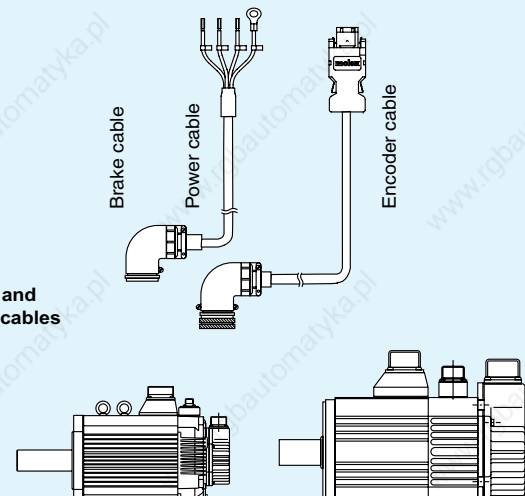


SGMBH Servo Motor
1500 rpm
(22 kW-55 kW)



SGMAH Servo Motor
3000 rpm
(30-750 W)

SGMPH Servo Motor
3000 rpm
(100-1500 W)









SGMGH Servo Motor
1500 rpm
(450W-15 kW)

SGMUH Servo Motor
3000 rpm
(1-5 kW)

SGMSH Servo Motor
6000 rpm
(1-4 kW)

Servo motor / servo drive combination

| | Sigma-II rotary servo motor | | | | Sigma-II servo drive | | XtraDrive servo drive | |
|---|-----------------------------|--------------|------------|----------------|----------------------|-----------------|-----------------------|-----------------|
| | Voltage | Rated torque | Capacity | Model | 230 V (1-phase) | 400 V (3-phase) | 230 V (1-phase) | 400 V (3-phase) |
|  SGMAH (3000 min ⁻¹) | 230 V | 0.0955 N.m | 30 W | SGMAH-A3A□ | SGDH-A3AE-OY | - | XD-P3-MN01 | - |
| | | 0.159 N.m | 50 W | SGMAH-A5A□ | SGDH-A5AE-OY | - | XD-P5-MN01 | - |
| | | 0.318 N.m | 100 W | SGMAH-01A□ | SGDH-01AE-OY | - | XD-01-MN01 | - |
| | | 0.637 N.m | 200 W | SGMAH-02A□ | SGDH-02AE-OY | - | XD-02-MN01 | - |
| | | 1.27 N.m | 400 W | SGMAH-04A□ | SGDH-04AE-OY | - | XD-04-MN01 | - |
| | 2.39 N.m | 750 W | SGMAH-08A□ | SGDH-08AE-S-OY | - | XD-08-MN | - | |
| | 400 V | 0.955 N.m | 300 W | SGMAH-03D□ | - | SGDH-05DE-OY | - | XD-05-TN |
| | | 2.07 N.m | 650 W | SGMAH-07D□ | - | SGDH-10DE-OY | - | XD-10-TN |
|  SGMPH (3000 min ⁻¹) | 230 V | 0.318 N.m | 100 W | SGMPH-01A□ | SGDH-01AE-OY | - | XD-01-MN01 | - |
| | | 0.637 N.m | 200 W | SGMPH-02A□ | SGDH-02AE-OY | - | XD-02-MN01 | - |
| | | 1.27 N.m | 400 W | SGMPH-04A□ | SGDH-04AE-OY | - | XD-04-MN01 | - |
| | | 2.39 N.m | 750 W | SGMPH-08A□ | SGDH-08AE-S-OY | - | XD-08-MN | - |
| | | 4.77 N.m | 1500 W | SGMPH-15A□ | SGDH-15AE-S-OY | - | XD-15-MN | - |
| | 400 V | 0.637 N.m | 200 W | SGMPH-02D□ | - | SGDH-05DE-OY | - | XD-05-TN |
| | | 1.27 N.m | 400 W | SGMPH-04D□ | - | SGDH-05DE-OY | - | XD-05-TN |
| | | 2.39 N.m | 750 W | SGMPH-08D□ | - | SGDH-10DE-OY | - | XD-10-TN |
|  SGMGH (1500 min ⁻¹) | 400 V | 2.84 N.m | 0.45 kW | SGMGH-05D□ | - | SGDH-05DE-OY | - | XD-05-TN |
| | | 5.39 N.m | 0.85 kW | SGMGH-09D□ | - | SGDH-10DE-OY | - | XD-10-TN |
| | | 8.34 N.m | 1.3 kW | SGMGH-13D□ | - | SGDH-15DE-OY | - | XD-15-TN |
| | | 11.5 N.m | 1.8 kW | SGMGH-20D□ | - | SGDH-20DE-OY | - | XD-20-TN |
| | | 18.6 N.m | 2.9 kW | SGMGH-30D□ | - | SGDH-30DE-OY | - | XD-30-TN |
| | | 28.4 N.m | 4.4 kW | SGMGH-44D□ | - | SGDH-50DE-OY | - | XD-50-TN |
| | | 35.0 N.m | 5.5 kW | SGMGH-55D□ | - | SGDH-60DE-OY | - | - |
| | | 48.0 N.m | 7.5 kW | SGMGH-75D□ | - | SGDH-75DE-OY | - | - |
| | | 70.0 N.m | 11 kW | SGMGH-1AD□ | - | SGDH-1ADE-OY | - | - |
| | | 95.4 N.m | 15 kW | SGMGH-1ED□ | - | SGDH-1EDE-OY | - | - |
|  SGMSH (3000 min ⁻¹) | 400 V | 3.18 N.m | 1.0 kW | SGMSH-10D□ | - | SGDH-10DE-OY | - | XD-10-TN |
| | | 4.90 N.m | 1.5 kW | SGMSH-15D□ | - | SGDH-15DE-OY | - | XD-15-TN |
| | | 6.36 N.m | 2.0 kW | SGMSH-20D□ | - | SGDH-20DE-OY | - | XD-20-TN |
| | | 9.80 N.m | 3.0 kW | SGMSH-30D□ | - | SGDH-30DE-OY | - | XD-30-TN |
| | | 12.6 N.m | 4.0 kW | SGMSH-40D□ | - | SGDH-50DE-OY | - | XD-50-TN |
| | | 15.8 N.m | 5.0 kW | SGMSH-50D□ | - | SGDH-50DE-OY | - | XD-50-TN |
|  SGMUH (6000 min ⁻¹) | 400 V | 1.59 N.m | 1.0 kW | SGMUH-10D□ | - | SGDH-10DE-OY | - | XD-10-TN |
| | | 2.45 N.m | 1.5 kW | SGMUH-15D□ | - | SGDH-15DE-OY | - | XD-15-TN |
| | | 4.9 N.m | 3.0 kW | SGMUH-30D□ | - | SGDH-30DE-OY | - | XD-30-TN |
| | | 6.3 N.m | 4.0 kW | SGMUH-40D□ | - | SGDH-50DE-OY | - | XD-50-TN |
|  SGMBH (1500 min ⁻¹) | 400 V | 140 Nm | 22 kW | SGMBH-2BD□ | - | SGDH-2BDE | - | - |
| | | 191 Nm | 30 kW | SGMBH-3ZD□ | - | SGDH-3ZDE | - | - |
| | | 236 Nm | 37 kW | SGMBH-3GD□ | - | SGDH-3GDE | - | - |
| | | 286 Nm | 45 kW | SGMBH-4ED□ | - | SGDH-4EDE | - | - |
| | | 350 Nm | 55 kW | SGMBH-5ED□ | - | SGDH-5EDE | - | - |

- Note:**
1. For servo motor and cables part numbers refer to ordering information at the end of this chapter
 2. Refer to the servo drive chapter for drive options selection and detailed specifications

Type designation

Servo motor

SGMAH - 01 A 1 A 6 S D - OY

Sigma-II servo motor type

- SGMAH: Super high power rate type
- SGMPH: Cube type
- SGMGH: High-speed feed type
- SGMSH: Super high power rate type
- SGMUH: High speed type

Capacity (kW)

| Code | SGMAH | SGMPH | SGMGH | SGMSH | SGMUH |
|------|------------------------|------------------------|------------------------|------------------------|------------------------|
| | 3000 min ⁻¹ | 3000 min ⁻¹ | 1500 min ⁻¹ | 3000 min ⁻¹ | 6000 min ⁻¹ |
| A3 | 0.03 | | | | |
| A5 | 0.05 | | | | |
| 01 | 0.1 | 0.1 | | | |
| 02 | 0.2 | 0.2 | | | |
| 03 | 0.3 | | | | |
| 04 | 0.4 | 0.4 | | | |
| 05 | | | 0.45 | | |
| 06 | | | | | |
| 07 | 0.65 | | | | |
| 08 | 0.75 | 0.75 | | | |
| 09 | | | 0.85 | | |
| 10 | | | | 1.0 | 1.0 |
| 12 | | | | | |
| 13 | | | 1.3 | | |
| 15 | | 1.5 | | 1.5 | 1.5 |
| 20 | | | 1.8 | 2.0 | |
| 22 | | | | | |
| 30 | | | 2.9 | 3.0 | 3.0 |
| 32 | | | | | |
| 40 | | | | 4.0 | 4.0 |
| 44 | | | 4.4 | | |
| 50 | | | | 5.0 | |
| 55 | | | 5.5 | | |
| 60 | | | | | |
| 75 | | | 7.5 | | |
| 1A | | | 11 | | |
| 1E | | | 15 | | |

Voltage

- A: 230 V
- D: 400 V

Connector specifications

| | |
|-------|----------------------------------|
| Blank | No option |
| D | Hypertac connector (SGMAH,SGMPH) |

Brake, oil seal specifications

| | |
|---|----------------------------|
| 1 | No brake, no oil/dust seal |
| S | Oil seal |
| B | 90 V brake |
| C | 24 V brake |
| D | Oil seal + 90 DC brake |
| E | Oil seal + 24 VDC brake |
| F | Dust seal |
| G | Dust seal + 90 VDC brake |
| H | Dust seal + 24 VDC brake |

Shaft end specifications

| Code | Shaft end | Type | | | | |
|------|-----------------------|-------|-------|-------|-------|-------|
| | | SGMAH | SGMPH | SGMGH | SGMSH | SGMUH |
| 2 | Straight, no key | ○ | ○ | ○ | ○ | |
| 4 | Straight, key | ○ | ○ | | | |
| 6 | Straight, key, tapped | ● | ● | ● | ● | ● |
| 8 | Straight, tapped | ○ | ○ | | | |

●: Standard ○: Option

Design procedure:

- A: Standard
- E: SGMPH (IP67)
- F: SGMAH (prepared for oil seal mounting)

Serial encoder specifications

| Code | Encoder | Type | | | | |
|------|--------------------|-------|-------|-------|-------|-------|
| | | SGMAH | SGMPH | SGMGH | SGMSH | SGMUH |
| 1 | 16-bit absolute | ○ | ○ | | | |
| 2 | 17-bit absolute | | | ○ | ○ | |
| A | 13-bit incremental | ● | ● | | | |
| B | 16-bit incremental | ○ | ○ | | | |
| C | 17-bit incremental | | | ● | ● | ● |

●: Standard ○: Option

SGMBH - 2 B D 2 A □ □

Sigma-II series large

Type : SGMBH

Motor output

- 2B: 22 kW 4E: 45 kW
- 3Z: 30 kW 5E: 55 kW
- 3G: 37 kW

Voltage

D:400 V

Encoder specifications

- 2:17-bit absolute (standard)
- C:17-bit incremental (standard)
- 3: 20-bit absolute (option)

Design revision

A: Max. torque 200%

Option

- 1: Oil seal (V type)
- B: Oil seal (V type) and holding brake (90 VDC)
- C: Oil seal (V type) and holding brake (24 VDC)
- S: Oil seal (S type)
- D: Oil seal (S type) and holding brake (90 VDC)
- E: Oil seal (S type) and holding brake (24 VDC)
- Note : Options are not available for 55 kW motors.

Motor specifications

- 2: Flange, straight shaft
 - 6: Flange, straight shaft (with key and tap)
 - K: Foot mount, straight shaft
 - L: Foot mount, straight shaft (with key and tap)
- } For 45 kW or less
- } For 37 kW or more

Servo motor specifications

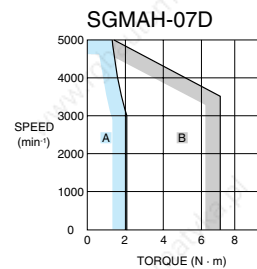
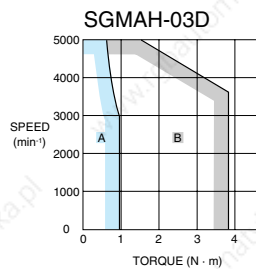
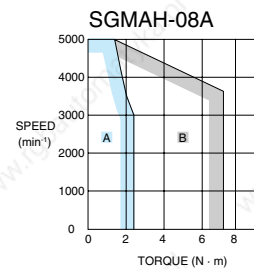
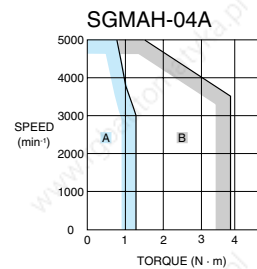
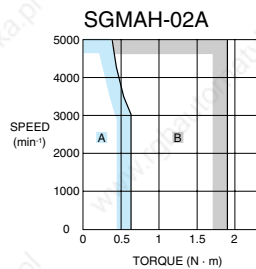
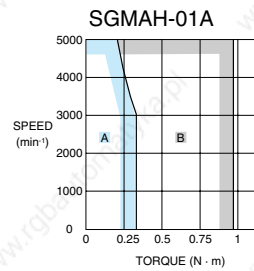
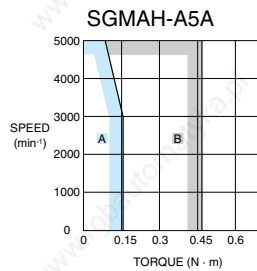
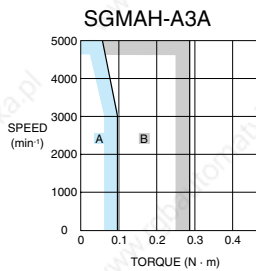
Type SGMAH, 230 V/400 V

Ratings and specifications

| Applied voltage | | 230 V | | | | | | 400 V | |
|---------------------------------------|-------------------------------------|---|-------|-------|-------|-------|-------|-------|-------|
| Servo motor model SGMAH-□ | | A3A□ | A5A□ | 01A□ | 02A□ | 04A□ | 08A□ | 03D□ | 07D□ |
| Rated output | W | 30 | 50 | 100 | 200 | 400 | 750 | 300 | 650 |
| Rated torque | N·m | 0.096 | 0.159 | 0.318 | 0.637 | 1.27 | 2.39 | 0.955 | 2.07 |
| Instantaneous peak torque | N·m | 0.286 | 0.477 | 0.955 | 1.91 | 3.82 | 7.16 | 3.82 | 7.16 |
| Rated current | A (rms) | 0.44 | 0.64 | 0.91 | 2.1 | 2.8 | 4.4 | 1.3 | 2.2 |
| Instantaneous max. current | A (rms) | 1.3 | 2.0 | 2.8 | 6.5 | 8.5 | 13.4 | 5.1 | 7.7 |
| Rated speed | min ⁻¹ | 3000 | | | | | | | |
| Max. speed | min ⁻¹ | 5000 | | | | | | | |
| Torque constant | N·m/A (rms) | 0.238 | 0.268 | 0.378 | 0.327 | 0.498 | 0.590 | 0.837 | 1.02 |
| Rotor moment of inertia (JM) | kg·m ² ×10 ⁻⁴ | 0.017 | 0.022 | 0.036 | 0.106 | 0.173 | 0.672 | 0.173 | 0.672 |
| Allowable load moment of inertia (JL) | Multiple of (JM) | 30 | | | | | | 20 | |
| Rated power rate | kW/s | 5.49 | 11.5 | 27.8 | 38.2 | 93.7 | 84.8 | 52.9 | 63.8 |
| Rated angular acceleration | rad/s ² | 57500 | 72300 | 87400 | 60100 | 73600 | 35500 | 55300 | 30800 |
| Applicable encoder | Standard | Incremental encoder (13 bits) | | | | | | | |
| | Option | Incremental/absolute encoder (16 bits) | | | | | | | |
| Holding brake moment of inertia J | kg·m ² ×10 ⁻⁴ | 0.0085 | | | 0.058 | | 0.14 | 0.058 | 0.14 |
| Basic specifications | Time rating | Continuous | | | | | | | |
| | Insulation class | Class B | | | | | | | |
| | Ambient temperature | 0 to +40 °C | | | | | | | |
| | Ambient humidity | 20 to 80% (non-condensing) | | | | | | | |
| | Vibration class | 15 µm or below | | | | | | | |
| | Enclosure | Totally-enclosed, self-cooled, IP55 (excluding shaft opening) | | | | | | | |
| | Vibration resistance | Vibration acceleration 49 m/s ² | | | | | | | |
| | Mounting | Flange-mounted | | | | | | | |

Torque-speed characteristics

(A : Continuous duty zone B : Intermittent duty zone)



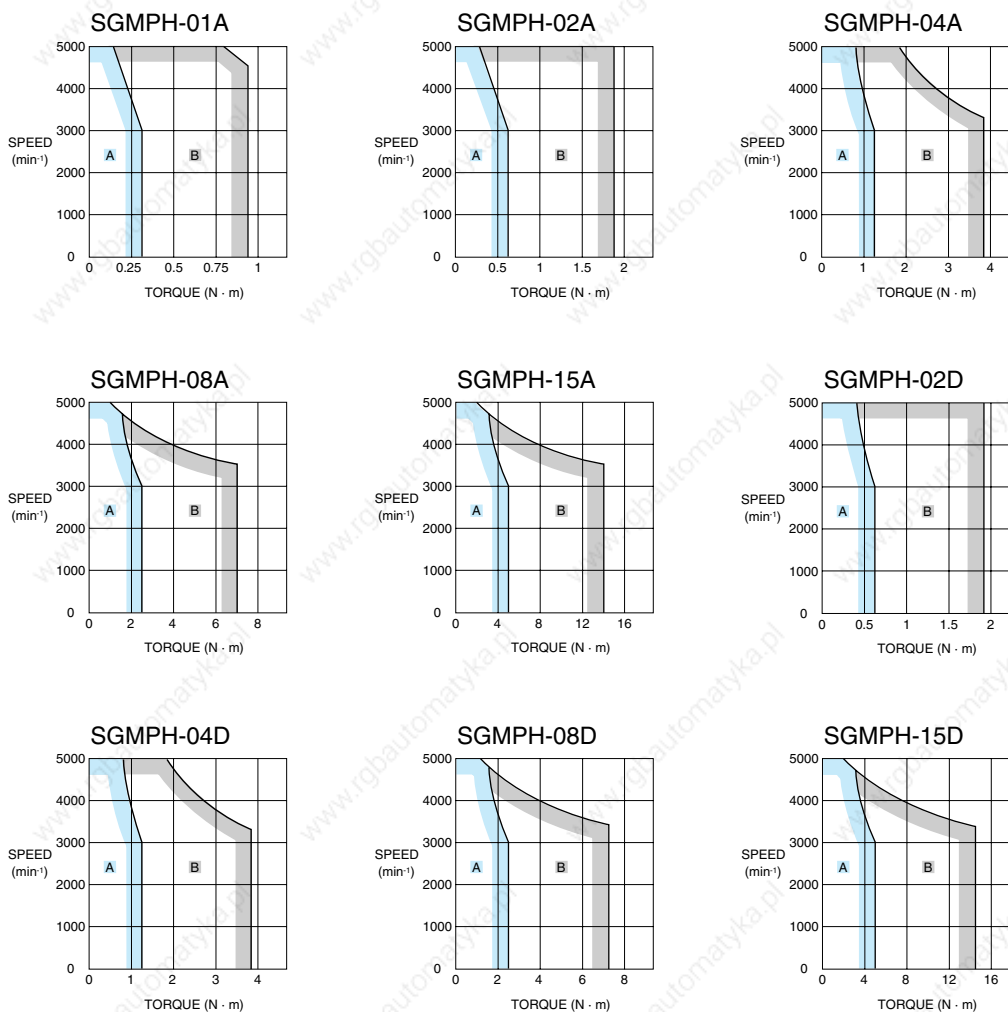
Type SGMPH, 230 V/400 V

Ratings and specifications

| Applied voltage | | 230 V | | | | | 400 V | | | |
|---------------------------------------|-------------------------------------|---|-------|-------|-------|-------|-------|-------|-------|-------|
| Servo motor model SGMPH-□ | | 01A□ | 02A□ | 04A□ | 08A□ | 15A□ | 02D□ | 04D□ | 08D□ | 15D□ |
| Rated output | W | 100 | 200 | 400 | 750 | 1500 | 200 | 400 | 750 | 1500 |
| Rated torque | N·m | 0.318 | 0.637 | 1.27 | 2.39 | 4.77 | 0.637 | 1.27 | 2.39 | 4.77 |
| Instantaneous peak torque | N·m | 0.955 | 1.91 | 3.82 | 7.16 | 14.3 | 1.91 | 3.82 | 7.16 | 14.3 |
| Rated current | A (rms) | 0.89 | 2.0 | 2.6 | 4.1 | 7.5 | 1.4 | 1.4 | 2.6 | 4.5 |
| Instantaneous max. current | A (rms) | 2.8 | 6.0 | 8.0 | 13.9 | 23.0 | 4.6 | 4.4 | 7.8 | 13.7 |
| Rated speed | min ⁻¹ | 3000 | | | | | | | | |
| Max. speed | min ⁻¹ | 5000 | | | | | | | | |
| Torque constant | N·m/A (rms) | 0.392 | 0.349 | 0.535 | 0.641 | 0.687 | 0.481 | 0.963 | 0.994 | 1.14 |
| Rotor moment of inertia (JM) | kg·m ² ×10 ⁻⁴ | 0.0491 | 0.193 | 0.331 | 2.10 | 4.02 | 0.193 | 0.331 | 2.10 | 4.02 |
| Allowable load moment of inertia (JL) | Multiple of (JM) | 25 | 15 | 7 | 5 | | 15 | 7 | 5 | |
| Rated power rate | kW/s | 20.6 | 21.0 | 49.0 | 27.1 | 56.7 | 21.0 | 49.0 | 27.1 | 56.7 |
| Rated angular acceleration | rad/s ² | 64800 | 33000 | 38500 | 11400 | 11900 | 33000 | 38500 | 11400 | 11900 |
| Applicable encoder | Standard | Incremental encoder (13 bits) | | | | | | | | |
| | Option | Incremental/absolute encoder (16 bits) | | | | | | | | |
| Holding brake moment of inertia J | kg·m ² ×10 ⁻⁴ | 0.029 | 0.109 | 0.875 | | | 0.109 | | 0.875 | |
| Basic specifications | Time rating | Continuous | | | | | | | | |
| | Insulation class | Class B | | | | | | | | |
| | Ambient temperature | 0 to +40 °C | | | | | | | | |
| | Ambient humidity | 20 to 80% (non-condensing) | | | | | | | | |
| | Vibration class | 15 μm or below | | | | | | | | |
| | Enclosure | Totally-enclosed, self-cooled, IP55 (excluding shaft opening) | | | | | | | | |
| | Vibration resistance | Vibration acceleration 49 m/s ² | | | | | | | | |
| | Mounting | Flange-mounted | | | | | | | | |

Torque-speed characteristics

(A : Continuous duty zone B : Intermittent duty zone)



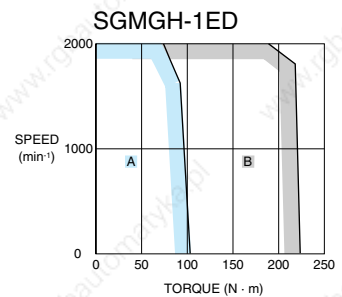
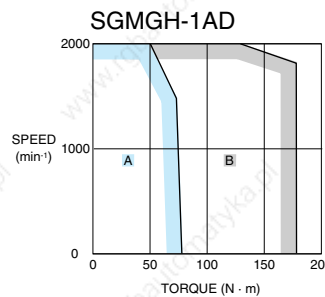
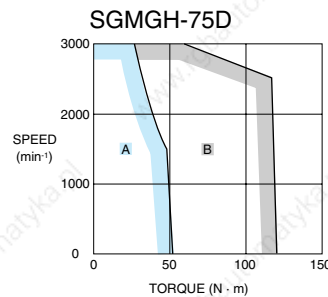
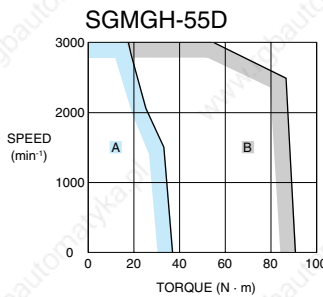
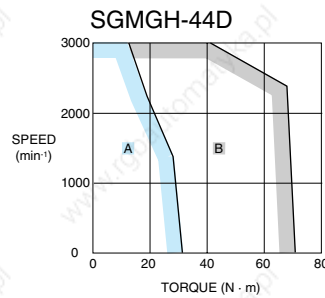
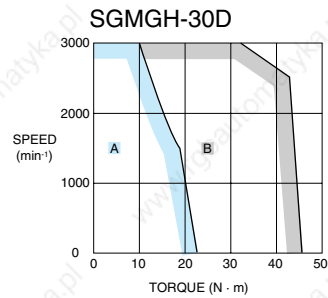
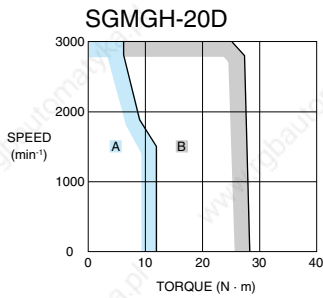
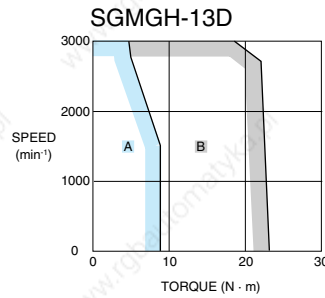
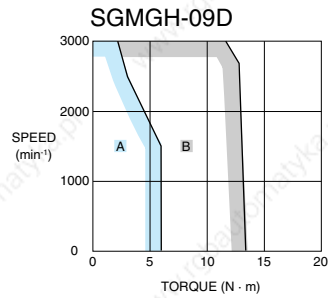
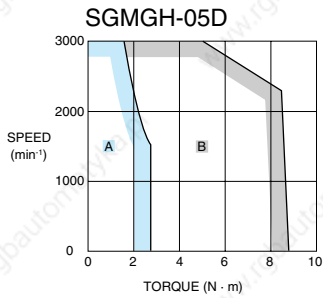
Type SGMGH, 400 V

Ratings and specifications

| Applied voltage | | 400 V | | | | | | | | | |
|---------------------------------------|-------------------------------------|---|------|------|------|------|------|------|------|------|------|
| Servo motor model SGMGH-□ | | 05D□ | 09D□ | 13D□ | 20D□ | 30D□ | 44D□ | 55D□ | 75D□ | 1AD□ | 1ED□ |
| Rated output | kW | 0.45 | 0.85 | 1.3 | 1.8 | 2.9 | 4.4 | 5.5 | 7.5 | 11 | 15 |
| Rated torque | N·m | 2.84 | 5.39 | 8.34 | 11.5 | 18.6 | 28.4 | 35.0 | 48.0 | 70.0 | 95.4 |
| Instantaneous peak torque | N·m | 8.92 | 13.8 | 23.3 | 28.7 | 45.1 | 71.1 | 90.7 | 123 | 175 | 221 |
| Rated current | A (rms) | 1.9 | 3.5 | 5.4 | 8.4 | 11.9 | 16.5 | 20.8 | 25.4 | 28.1 | 37.2 |
| Instantaneous max. current | A (rms) | 5.5 | 8.5 | 14 | 20 | 28 | 40.5 | 55 | 65 | 70 | 85 |
| Rated speed | min ⁻¹ | 1500 | | | | | | | | | |
| Max. speed | min ⁻¹ | 3000 | | | | | | | | 2000 | |
| Torque constant | N·m/A (rms) | 1.64 | 1.65 | 1.68 | 1.46 | 1.66 | 1.82 | 1.74 | 2.0 | 2.56 | 2.64 |
| Rotor moment of inertia (JM) | kg·m ² ×10 ⁻⁴ | 7.24 | 13.9 | 20.5 | 31.7 | 46.0 | 67.5 | 89.0 | 125 | 281 | 315 |
| Allowable load moment of inertia (JL) | Multiple of (JM) | 5 | | | | | | | | | |
| Rated power rate | kW/s | 11.2 | 20.9 | 33.8 | 41.5 | 75.3 | 120 | 137 | 184 | 174 | 289 |
| Rated angular acceleration | rad/s ² | 3930 | 3880 | 4060 | 3620 | 4050 | 4210 | 3930 | 3850 | 2490 | 3030 |
| Applicable encoder | Standard | Incremental encoder (17 bits) | | | | | | | | | |
| | Option | Absolute encoder (17 bits) | | | | | | | | | |
| Holding brake moment of inertia J | kg·m ² ×10 ⁻⁴ | 2.10 | | | | 8.50 | | | | 18.8 | 37.5 |
| Basic specifications | Time rating | Continuous | | | | | | | | | |
| | Insulation class | Class F | | | | | | | | | |
| | Ambient temperature | 0 to +40 °C | | | | | | | | | |
| | Ambient humidity | 20 to 80% (non-condensing) | | | | | | | | | |
| | Vibration class | 15 µm or below | | | | | | | | | |
| | Enclosure | Totally-enclosed, self-cooled, IP67 (excluding shaft opening) | | | | | | | | | |
| | Vibration resistance | Vibration acceleration 24.5 m/s ² | | | | | | | | | |
| | Mounting | Flange-mounted | | | | | | | | | |

Torque-speed characteristics

(**A** : Continuous duty zone **B** : Intermittent duty zone)



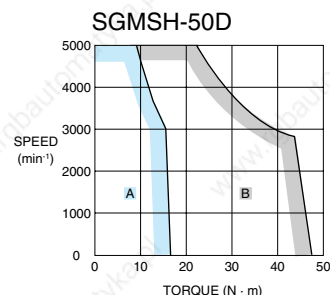
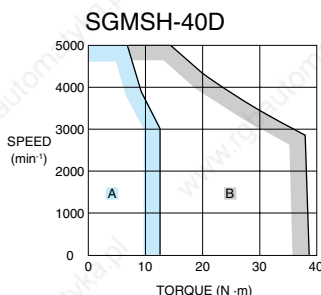
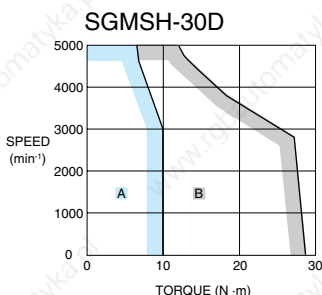
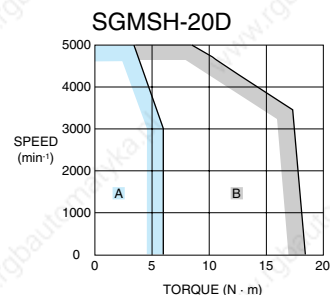
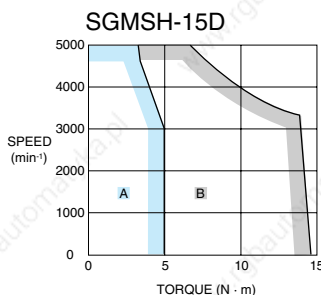
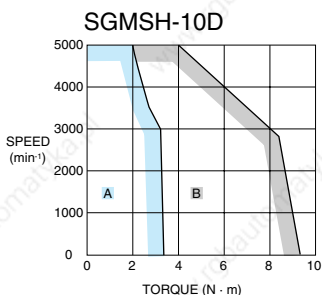
Type SGMSH, 400 V

Ratings and specifications

| Applied voltage | | 400 V | | | | | |
|---------------------------------------|-------------------------------------|---|-------|-------|-------|-------|-------|
| Servo motor model SGMSH-□ | | 10D□ | 15D□ | 20D□ | 30D□ | 40D□ | 50D□ |
| Rated output | kW | 1.0 | 1.5 | 2.0 | 3.0 | 4.0 | 5.0 |
| Rated torque | N·m | 3.18 | 4.9 | 6.36 | 9.8 | 12.6 | 15.8 |
| Instantaneous peak torque | N·m | 9.54 | 14.7 | 19.1 | 29.4 | 37.8 | 47.6 |
| Rated current | A (rms) | 2.8 | 4.7 | 6.2 | 8.9 | 12.5 | 13.8 |
| Instantaneous max. current | A (rms) | 8.5 | 14 | 19.5 | 28 | 38 | 42 |
| Rated speed | min ⁻¹ | 3000 | | | | | |
| Max. speed | min ⁻¹ | 5000 | | | | | |
| Torque constant | N·m/A (rms) | 1.27 | 1.15 | 1.12 | 1.19 | 1.07 | 1.24 |
| Rotor moment of inertia (JM) | kg·m ² ×10 ⁻⁴ | 1.74 | 2.47 | 3.19 | 7.0 | 9.60 | 12.3 |
| Allowable load moment of inertia (JL) | Multiple of (JM) | 5 | | | | | |
| Rated power rate | kW/s | 57.9 | 97.2 | 127 | 137 | 166 | 202 |
| Rated angular acceleration | rad/s ² | 18250 | 19840 | 19970 | 14000 | 13160 | 12780 |
| Applicable encoder | Standard | Incremental encoder (17 bits) | | | | | |
| | Option | Absolute encoder (17 bits) | | | | | |
| Holding brake moment of inertia J | kg·m ² ×10 ⁻⁴ | 0.325 | | | | 2.10 | |
| | Time rating | Continuous | | | | | |
| Basic specifications | Insulation class | Class F | | | | | |
| | Ambient temperature | 0 to +40 °C | | | | | |
| | Ambient humidity | 20 to 80% (non-condensing) | | | | | |
| | Vibration class | 15 μm or below | | | | | |
| | Enclosure | Totally-enclosed, self-cooled, IP67 (excluding shaft opening) | | | | | |
| | Vibration resistance | Vibration acceleration 24.5 m/s ² | | | | | |
| | Mounting | Flange-mounted | | | | | |

Torque-speed characteristics

(A : Continuous duty zone B : Intermittent duty zone)



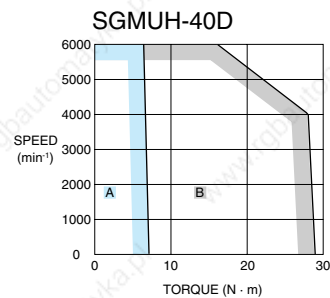
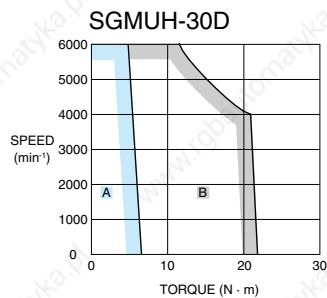
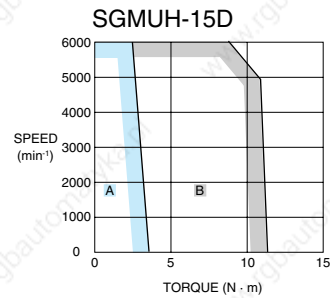
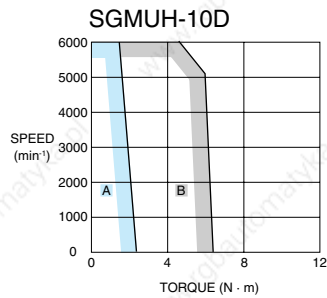
Type SGMUH, 400V

Ratings and specifications

| Applied voltage | | 400 V | | | |
|---------------------------------------|-------------------------------------|---|------|------|------|
| Servo motor model SGMUH-□ | | 10D□ | 15D□ | 30D□ | 40D□ |
| Rated output | kW | 1.0 | 1.5 | 3.0 | 4.0 |
| Rated torque | N·m | 1.59 | 2.45 | 4.9 | 6.3 |
| Instantaneous peak torque | N·m | 6.5 | 11 | 21.5 | 29 |
| Rated current | A (rms) | 2.7 | 4.1 | 8.1 | 9.6 |
| Instantaneous max. current | A (rms) | 8.5 | 14 | 28 | 38.5 |
| Rated speed | min ⁻¹ | 6000 | | | |
| Max. speed | min ⁻¹ | 6000 | | | |
| Torque constant | N·m/A (rms) | 0.81 | 0.83 | 0.81 | 0.80 |
| Rotor moment of inertia (JM) | kg·m ² ×10 ⁻⁴ | 1.74 | 2.47 | 7.0 | 9.6 |
| Allowable load moment of inertia (JL) | Multiple of (JM) | 5 | | | |
| Rated power rate | kW/s | 14.5 | 24.3 | 34.3 | 41.3 |
| Rated angular acceleration | rad/s ² | 9130 | 9910 | 7000 | 6550 |
| Applicable encoder | Standard | Incremental encoder (17 bits) | | | |
| | Option | - | | | |
| Holding brake moment of inertia J | kg·m ² ×10 ⁻⁴ | 0.25 | | 2.10 | |
| | | | | | |
| Basic specifications | Time rating | Continuous | | | |
| | Insulation class | Class F | | | |
| | Ambient temperature | 0 to +40 °C | | | |
| | Ambient humidity | 20 to 80% (non-condensing) | | | |
| | Vibration class | 15 μm or below | | | |
| | Enclosure | Totally-enclosed, self-cooled, IP67 (excluding shaft opening) | | | |
| | Vibration resistance | Vibration acceleration 24.5 m/s ² | | | |
| | Mounting | Flange-mounted | | | |

Torque-speed characteristics

(A : Continuous duty zone B : Intermittent duty zone)



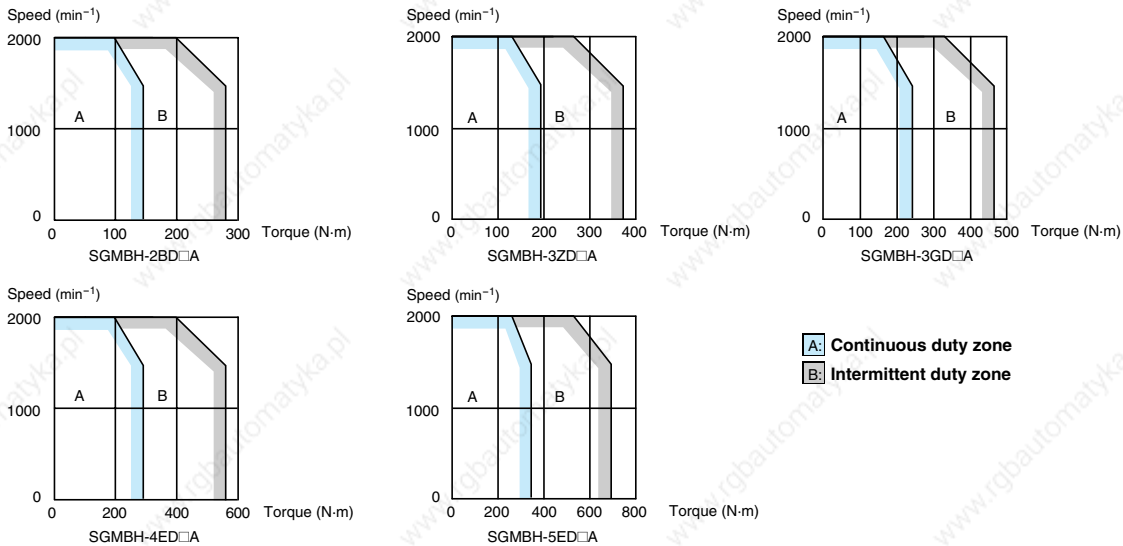
Type SGMBH, 400 V

Ratings and specifications

| Type | SGMBH-□ | 2BD□A | 3ZD□A | 3GD□A | 4ED□A | 5ED□A | |
|-------------------|----------------------------|--------------------------------|-----------|--------------------------------|-------|------------|-----|
| Performance | Rated output | kW | 22 | 30 | 37 | 45 | 55 |
| | Rated torque | N·m | 140 | 191 | 236 | 286 | 350 |
| | Stalling torque | N·m | 140 | 191 | 236 | 286 | 350 |
| | Instantaneous peak torque | N·m | 280 | 382 | 471 | 572 | 700 |
| | Rated current | A(rms) | 58 | 80 | 100 | 127 | 150 |
| | Instantaneous max. current | A(rms) | 120 | 170 | 210 | 260 | 310 |
| | Rated/max. speed | min ⁻¹ | 1500/2000 | | | | |
| Rotor inertia | kg·m ² | 0.0592 | 0.0773 | 0.139 | 0.151 | 0.197 | |
| Structure | Protective enclosure | IP44 | | | | | |
| | Mounting method | Flange | | Flange foot mount ¹ | | Foot mount | |
| Encoder | Standard | Incremental, absolute: 17 bits | | | | | |
| | Option | Absolute: 20 bits | | | | | |
| Usage temperature | 0 to 40 °C | | | | | | |
| Usage humidity | 20 to 80% (non-condensing) | | | | | | |

Note: 1. 37 kW and 45 kW motors with brakes are foot mount type.

Torque-speed characteristics

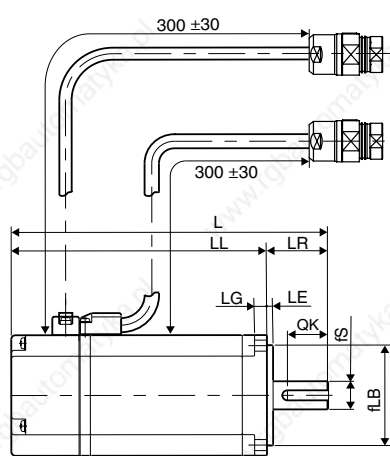


Dimensions

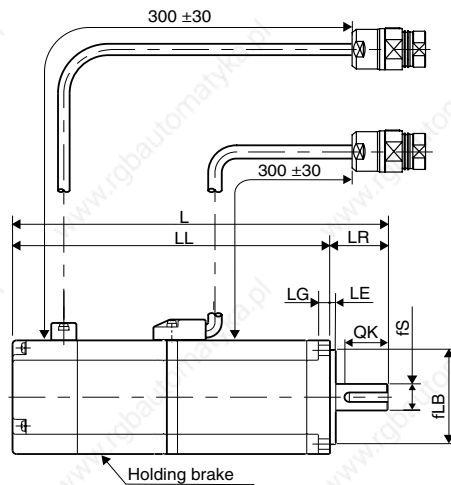
Servo motors

Type SGMAH (230/400 V)

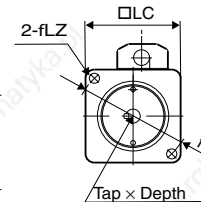
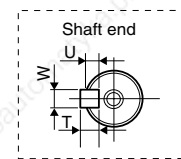
| Dimensions (mm) | Without brake | | With brake | | LR | Flange surface | | | | | | Shaft end | | | | | Aprox. Mass (Kg) | | |
|-------------------|---------------|-------|------------|-------|----|----------------|------------------|----|-----|----|-----|------------------|----|---|---|-----|------------------|---------------|------------|
| | L | LL | L | LL | | LA | LB | LC | LE | LG | LZ | S | QK | W | T | U | Tap × depth | Without brake | With brake |
| SGMAH-A3A□A6□D-OY | 94.5 | 69.5 | 126 | 101 | 25 | 46 | 30 ^{h7} | 40 | 2.5 | 5 | 4.3 | 6 ^{h6} | 14 | 2 | 2 | 1.2 | M2.5 x 5L | 0.3 | 0.6 |
| SGMAH-A5A□A6□D-OY | 102.0 | 77 | 133.5 | 108.5 | | 46 | 30 ^{h7} | 40 | 2.5 | 5 | 4.3 | 6 ^{h6} | 14 | 3 | 3 | 1.8 | M3 x 6L | 0.4 | 0.7 |
| SGMAH-01A□A6□D-OY | 119.5 | 94.5 | 160 | 135 | | 46 | 30 ^{h7} | 40 | 2.5 | 5 | 4.3 | 6 ^{h6} | 14 | 3 | 3 | 1.8 | M3 x 6L | 0.5 | 0.8 |
| SGMAH-02A□A6□D-OY | 126.5 | 96.5 | 166 | 136 | 30 | 70 | 50 ^{h7} | 60 | 3 | 6 | 5.5 | 14 ^{h6} | 20 | 5 | 5 | 3 | M5 x 8L | 1.1 | 1.6 |
| SGMAH-03D□A6□D-OY | 154.5 | 124.5 | 194 | 164 | | 70 | 50 ^{h7} | 60 | 3 | 6 | 5.5 | 14 ^{h6} | 20 | 5 | 5 | 3 | | 1.7 | 2.2 |
| SGMAH-04A□A6□D-OY | | | | | 40 | 90 | 70 ^{h7} | 80 | 3 | 8 | 7 | 16 ^{h6} | 30 | | | | | 1.7 | 2.2 |
| SGMAH-07D□A6□D-OY | 185 | 145 | 229.5 | 189.5 | | 90 | 70 ^{h7} | 80 | 3 | 8 | 7 | 16 ^{h6} | 30 | | | | | 3.4 | 4.3 |
| SGMAH-08A□A6□D-OY | | | | | | 90 | 70 ^{h7} | 80 | 3 | 8 | 7 | 16 ^{h6} | 30 | | | | | 3.4 | 4.3 |



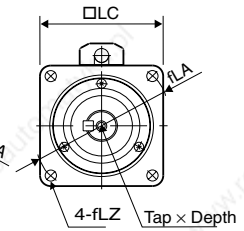
Models without brake



Models with brake



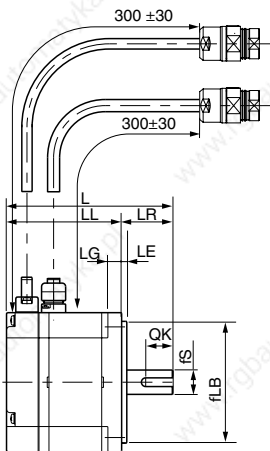
SGMAH-A3, -A5, -01



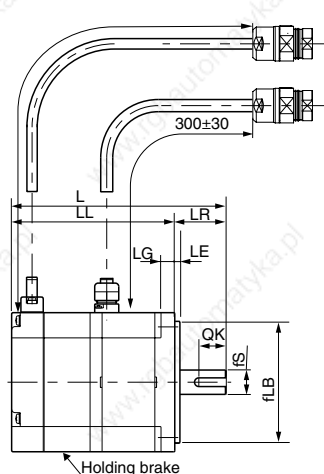
SGMAH-02 to -08

Type SGMPH (230/400 V)

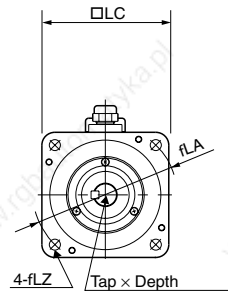
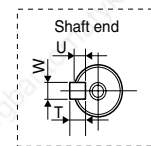
| Dimensions (mm) | Without brake | | With brake | | LR | Flange surface | | | | | | Shaft end | | | | | Aprox. Mass (Kg) | | |
|-------------------|---------------|-------|------------|-------|----|----------------|-------------------|-----|-----|----|-----|------------------|----|----|---|-----|------------------|---------------|------------|
| | L | LL | L | LL | | LA | LB | LC | LE | LG | LZ | S | QK | W | T | U | Tap × depth | Without brake | With brake |
| SGMPH-01□□□6□D-OY | 87 | 62 | 116 | 91 | 25 | 70 | 50 ^{h7} | 60 | 3 | 6 | 5.5 | 8 ^{h6} | 14 | 3 | 3 | 1.8 | M3x6L | 0.7 | 0.9 |
| SGMPH-02□□□6□D-OY | 97 | 67 | 128.5 | 98.5 | 30 | 90 | 70 ^{h7} | 80 | 3 | 8 | 7 | 14 ^{h6} | 16 | 5 | 5 | 3 | M5x8L | 1.4 | 1.9 |
| SGMPH-04□□□6□D-OY | 117 | 87 | 148.5 | 118.5 | 30 | 90 | 70 ^{h7} | 80 | 3 | 8 | 7 | 14 ^{h6} | 16 | 5 | 5 | 3 | | 2.1 | 2.6 |
| SGMPH-08□□□6□D-OY | 126.5 | 86.5 | 160 | 120 | 40 | 145 | 110 ^{h7} | 120 | 3.5 | 10 | 10 | 16 ^{h6} | 22 | | | | | 4.2 | 5.7 |
| SGMPH-15□□□6□D-OY | 154.5 | 114.5 | 188 | 148 | | 145 | 110 ^{h7} | 120 | 3.5 | 10 | 10 | 16 ^{h6} | | 22 | 6 | 6 | 3.5 | M6x10L | 6.6 |



Models without brake

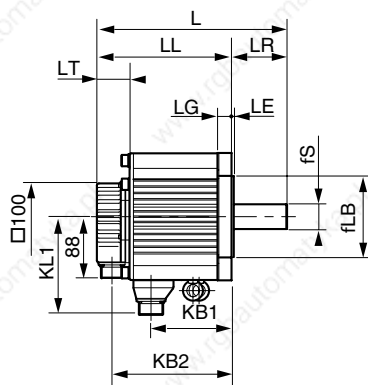


Models with brake

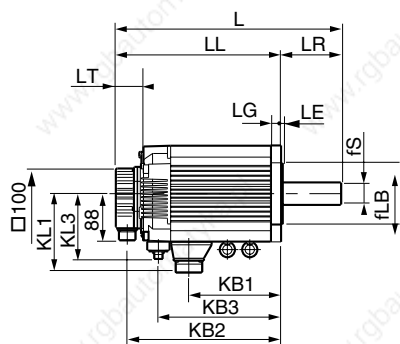


Type SGMGH (400 V)

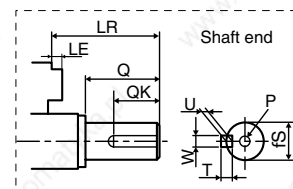
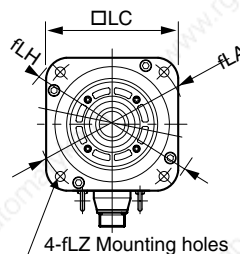
| Dimensions (mm) | Without brake | | | With brake | | | | LR | LT | KB1 | KL1 | Flange surface | | | | | | | Shaft end | | | | | | Aprox. Mass (Kg) | | | | |
|------------------|---------------|-----|-----|------------|-----|-----|-----|-----|-----|-----|-----|----------------|-----|-------|-----|-----|----|-----|-----------|----|-----|-----|----|----|------------------|-----|----------------|------------|-----|
| | L | LL | KB2 | L | LL | KB2 | KB3 | | | | | KL3 | LA | LB | LC | LE | LG | LH | LZ | S | Q | QK | W | T | U | P | With-out brake | With brake | |
| SGMGH-05D□A6□-OY | 196 | 138 | 117 | 234 | 176 | 154 | 109 | 98 | 58 | 46 | 65 | 109 | 145 | 110 | 130 | 6 | 12 | 165 | 9 | 19 | 40 | 25 | 5 | 5 | 3 | M5 | 5.5 | 7.5 | |
| SGMGH-09D□A6□-OY | 219 | 161 | 140 | 257 | 199 | 177 | 132 | | | | 88 | | | | | | | | | | | | | | | | 7.6 | 9.6 | |
| SGMGH-13D□A6□-OY | 243 | 185 | 164 | 281 | 223 | 201 | 156 | | | | 112 | | | | | | | | | | 22 | | 6 | 6 | 3.5 | | 9.6 | 12 | |
| SGMGH-20D□A6□-OY | 245 | 166 | 144 | 296 | 217 | 195 | 137 | 123 | 79 | 47 | 89 | 140 | 200 | 114.3 | 180 | 3.2 | 18 | 230 | 13.5 | 35 | 76 | 60 | 10 | 8 | 5 | M12 | 14 | 19 | |
| SGMGH-30D□A6□-OY | 271 | 192 | 170 | 322 | 243 | 221 | 163 | | | | 115 | | | | | | | | | | | | | | | | 18 | 23.5 | |
| SGMGH-44D□A6□-OY | 305 | 226 | 204 | 356 | 277 | 255 | 197 | | | | 149 | | | | | | | | | | | | | | | | 23 | 28.5 | |
| SGMGH-55D□A6□-OY | 373 | 260 | 238 | 424 | 311 | 289 | 231 | | | | 174 | 150 | | | | | | | | | 42 | 110 | 90 | 12 | | M16 | 30 | 35 | |
| SGMGH-75D□A6□-OY | 447 | 334 | 312 | 498 | 385 | 363 | 305 | | | | 248 | | | | | | | | | | | | | | | | 40 | 45.5 | |
| SGMGH-1AD□A6□-OY | 454 | 338 | 316 | 499 | 383 | 362 | 315 | 142 | 116 | 47 | 251 | 168 | 235 | 200 | 220 | 4 | 18 | 270 | 13.5 | 42 | 110 | 90 | 12 | 8 | 5 | M16 | 57.5 | 65 | |
| SGMGH-1ED□A6□-OY | 573 | 457 | 435 | 635 | 519 | 497 | 415 | | | | 48 | 343 | | | | | | | | | | | | | | | | 86 | 100 |



Models without brake

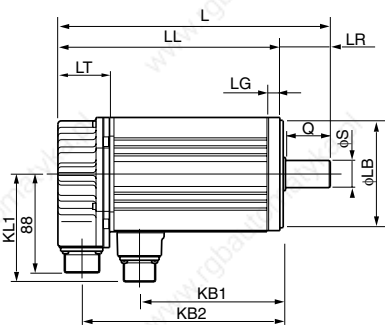


Models with brake

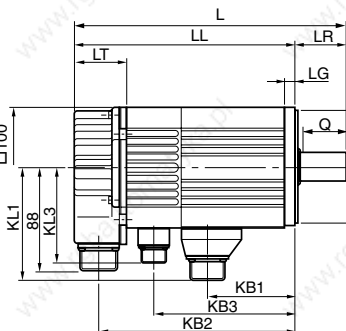


Type SGMSh (400 V)

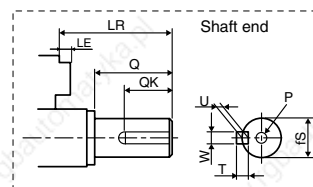
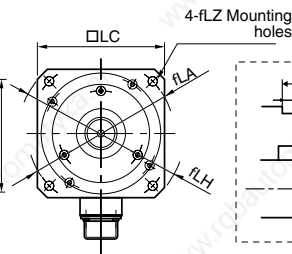
| Dimensions (mm) | Without brake | | | With brake | | | | LR | LT | KB1 | KL1 | Flange surface | | | | | | | Shaft end | | | | | | Aprox. Mass (Kg) | | | |
|------------------|---------------|-----|-----|------------|-----|-----|-----|----|----|-----|-----|----------------|-----|-------------------|-----|----|----|-----|-----------|------------------|----|----|---|---|------------------|----|----------------|------------|
| | L | LL | KB2 | L | LL | KB2 | KB3 | | | | | KL3 | LA | LB | LC | LE | LG | LH | LZ | S | Q | QK | W | T | U | P | With-out brake | With brake |
| SGMSh-10D□A6□-OY | 194 | 149 | 128 | 238 | 193 | 171 | 120 | 85 | 45 | 46 | 76 | 96 | 115 | 95 ^{h1} | 100 | 3 | 10 | 130 | 7 | 24 ^{h6} | 40 | 32 | 8 | 7 | 4 | M8 | 4.6 | 6.0 |
| SGMSh-15D□A6□-OY | 220 | 175 | 154 | 264 | 219 | 197 | 146 | | | | 102 | | | | | | | | | | | | | | | | 5.8 | 7.5 |
| SGMSh-20D□A6□-OY | 243 | 198 | 177 | 287 | 242 | 220 | 169 | | | | 125 | | | | | | | | | | | | | | | | 7.0 | 8.5 |
| SGMSh-30D□A6□-OY | 262 | 199 | 178 | 300 | 237 | 216 | 170 | 98 | 63 | | 124 | 114 | 145 | 110 ^{h7} | 130 | 6 | 12 | 165 | 9 | 28 ^{h6} | 55 | 50 | | | | | 11 | 14 |
| SGMSh-40D□A6□-OY | 299 | 236 | 215 | 337 | 274 | 253 | 207 | | | | 161 | | | | | | | | | | | | | | | | 14 | 17 |
| SGMSh-50D□A6□-OY | 339 | 276 | 255 | 377 | 314 | 293 | 247 | | | | 201 | | | | | | | | | | | | | | | | 17 | 20 |



Models without brake

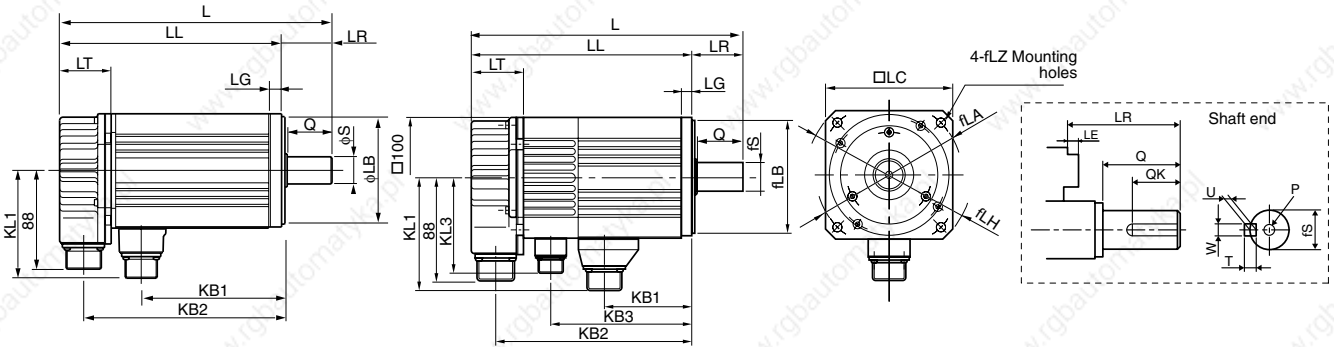


Models with brake



Type SGMUH (400 V)

| Dimensions (mm) | Without brake | | | With brake | | | | | LR | LT | KB1 | KL1 | Flange surface | | | | | | | Shaft end | | | | | | Aprox. Mass (Kg) | | | | |
|------------------|---------------|-----|-----|------------|-----|-----|-----|-----|----|----|-----|-----|----------------|-----|-----|-----|----|-----|----|------------------|-----|----|------------------|----|-----|------------------|---------------|------------|------|------|
| | L | LL | KB2 | L | LL | KB2 | KB3 | KL3 | | | | | LA | LB | LC | LE | LG | LH | LZ | S | Q | QK | W | T | U | P | Without brake | With brake | | |
| SGMUH-10D□A6□-OY | 194 | 149 | 128 | 238 | 193 | 171 | 120 | 85 | 45 | 46 | 76 | 96 | 130 | 110 | 116 | 3.5 | 10 | 150 | 9 | 24 ^{h6} | 40 | 32 | 8 | 7 | 4 | M8 | 4.8 | 6.2 | | |
| SGMUH-15D□A6□-OY | 220 | 175 | 154 | 264 | 219 | 197 | 146 | | | | 102 | | | | | | | | | | | | | | 16L | 6.0 | 7.7 | | | |
| SGMUH-30D□A6□-OY | 262 | 202 | 181 | 300 | 237 | 219 | 173 | 98 | 60 | | 127 | 114 | 165 | 130 | 155 | | | | | 12 | 190 | 11 | 28 ^{h6} | 55 | 50 | | | | 11.5 | 14.5 |
| SGMUH-40D□A6□-OY | 327 | 269 | 245 | 362 | 302 | 281 | 210 | | | 71 | 164 | | | | | | | | | | | | | | | | | 15 | 18 | |

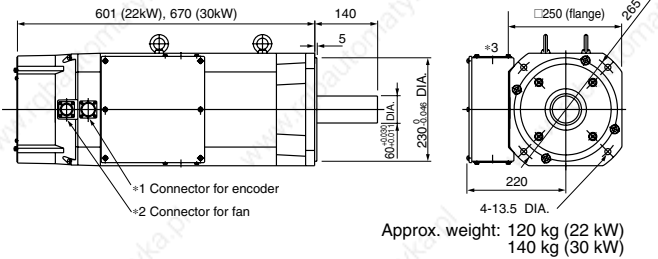


Models without brake

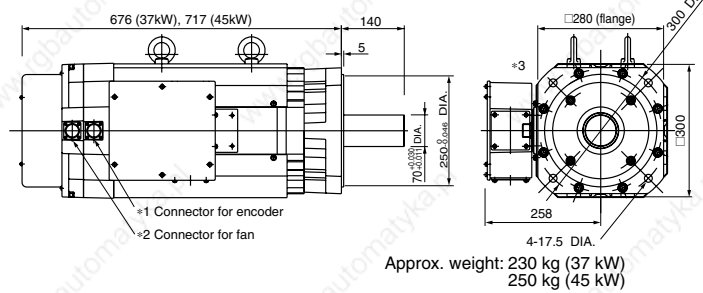
Models with brake

Type SGMBH (400 V)

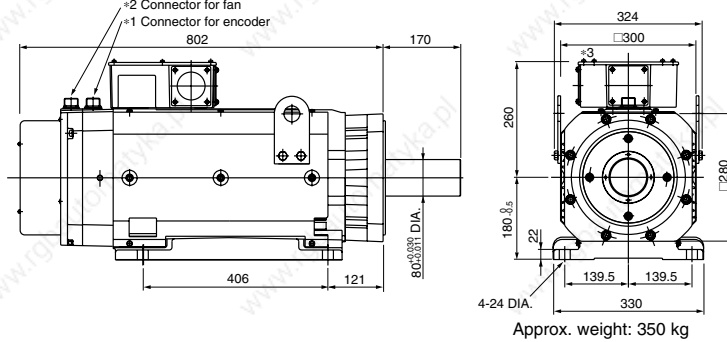
Type: SGMBH-2BD □A/-3ZD □A (22/30kW)



Type: SGMBH-3GD □A /-4E □A37/45kW



Type: SGMBH-5ED □A (55kW)

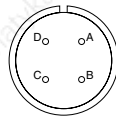


*1 Connector for encoder

*2 Connector for fan



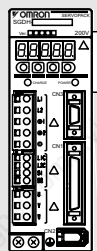
Receptacle: 97F-3102E20-29P
Plug IP67 (L-shape): MS3108E20-29S



Receptacle: CE05-2A18-10PD-B
Plug IP67 (L-shape): MS3108E18-10S

Ordering information

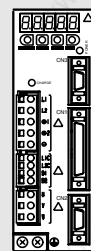
(Refer to servo drive chapter)



Servo drive with option boards for flexible system configuration

② **Sigma-II Servo Drive**

Drive options



Intelligent servo drive

② **XtraDrive**

① **SGMBH Servo Motor**
1500 rpm
(22 kW-55 W)

④ Power cable

③ Encoder cable

① **SGMAH Servo Motor**
3000 rpm
(30-750 W)

① **SGMPH Servo Motor**
3000 rpm
(100-1500 W)

⑤ Brake cable

④ Power cable

③ Encoder cable

① **SGMGH Servo Motor**
1500 rpm
(450W-15 kW)

① **SGMUH Servo Motor**
3000 rpm
(1-5 kW)

① **SGMSH Servo Motor**
6000 rpm
(1-4 kW)

Note: The symbols ①②③... show the recommended sequence to select the servo motor and cables

Servo motor


- ① Select motor from families SGMAH, SGMPH, SGMGH, SGMUH, SGMSH, SGMBH using motor tables in next pages.

Servo drive


Note: Choosing Sigma-II drive or XtraDrive affects to the encoder cable needed.

- ② Refer to Sigma-II servo drive or XtraDrive chapter for detailed drive specifications and selection of drive accessories.


SGMAH - cylindrical servo motors 3000 r/min (30 - 750 W)

| Symbol | Specifications | | | | Servo motor model | Compatible servo drives (2) | | |
|---|----------------|---|---------------|----------|-------------------|-----------------------------|----------------|------------|
| | Voltage | Encoder and design | Rated torque | Capacity | | Sigma-II | XtraDrive | |
|  | 230 V | Incremental encoder (13 bit) Straight shaft with key & tap | Without brake | 0.096 Nm | 30 W | SGMAH-A3AAA61D-OY | SGDH-A3AE-OY | XD-P3-MN01 |
| | | | | 0.159 Nm | 50 W | SGMAH-A5AAA61D-OY | SGDH-A5AE-OY | XD-P5-MN01 |
| | | | | 0.318 Nm | 100 W | SGMAH-01AAA61D-OY | SGDH-01AE-OY | XD-01-MN01 |
| | | | | 0.637 Nm | 200 W | SGMAH-02AAA61D-OY | SGDH-02AE-OY | XD-02-MN01 |
| | | | 1.27 Nm | 400 W | SGMAH-04AAA61D-OY | SGDH-04AE-OY | XD-04-MN01 | |
| | | | 2.39 Nm | 750 W | SGMAH-08AAA61D-OY | SGDH-08AE-S-OY | XD-08-MN | |
| | | | With brake | 0.096 Nm | 30 W | SGMAH-A3AAA6CD-OY | SGDH-A3AE-OY | XD-P3-MN01 |
| | | | | 0.159 Nm | 50 W | SGMAH-A5AAA6CD-OY | SGDH-A5AE-OY | XD-P5-MN01 |
| | | 0.318 Nm | | 100 W | SGMAH-01AAA6CD-OY | SGDH-01AE-OY | XD-01-MN01 | |
| | | 0.637 Nm | | 200 W | SGMAH-02AAA6CD-OY | SGDH-02AE-OY | XD-02-MN01 | |
| | | Absolute encoder (16 bit) Straight shaft with key & tap | Without brake | 0.096 Nm | 30 W | SGMAH-A3A1A61D-OY | SGDH-A3AE-OY | XD-P3-MN01 |
| | | | | 0.159 Nm | 50 W | SGMAH-A5A1A61D-OY | SGDH-A5AE-OY | XD-P5-MN01 |
| | | | | 0.318 Nm | 100 W | SGMAH-01A1A61D-OY | SGDH-01AE-OY | XD-01-MN01 |
| | | | | 0.637 Nm | 200 W | SGMAH-02A1A61D-OY | SGDH-02AE-OY | XD-02-MN01 |
| | | | With brake | 1.27 Nm | 400 W | SGMAH-04A1A61D-OY | SGDH-04AE-OY | XD-04-MN01 |
| | | | | 2.39 Nm | 750 W | SGMAH-08A1A61D-OY | SGDH-08AE-S-OY | XD-08-MN |
| | 0.096 Nm | | | 30 W | SGMAH-A3A1A6CD-OY | SGDH-A3AE-OY | XD-P3-MN01 | |
| | 0.159 Nm | | | 50 W | SGMAH-A5A1A6CD-OY | SGDH-A5AE-OY | XD-P5-MN01 | |
| | 400 V | Incremental encoder (13 bit) Straight shaft with key | Without brake | 0.955 Nm | 300 W | SGMAH-03DAA61D-OY | SGDH-05DE-OY | XD-05-TN |
| | | | | 2.07 Nm | 650 W | SGMAH-07DAA61D-OY | SGDH-10DE-OY | XD-10-TN |
| | | | With brake | 0.955 Nm | 300 W | SGMAH-03DAA6CD-OY | SGDH-05DE-OY | XD-05-TN |
| | | | | 2.07 Nm | 650 W | SGMAH-07DAA6CD-OY | SGDH-10DE-OY | XD-10-TN |
| | | Absolute encoder (16 bit) Straight shaft with key | Without brake | 0.955 Nm | 300 W | SGMAH-03D1A61D-OY | SGDH-05DE-OY | XD-05-TN |
| | | | | 2.07 Nm | 650 W | SGMAH-07D1A61D-OY | SGDH-10DE-OY | XD-10-TN |
| | | | With brake | 0.955 Nm | 300 W | SGMAH-03D1A6CD-OY | SGDH-05DE-OY | XD-05-TN |
| | | | | 2.07 Nm | 650 W | SGMAH-07D1A6CD-OY | SGDH-10DE-OY | XD-10-TN |


SGMPH - flat type servo motors 3000 r/min (100 - 1500 W)

| Symbol | Specifications | | | | Servo motor model | Compatible servo drives (2) | | |
|---|----------------|---|---------------|----------|-------------------|-----------------------------|----------------|------------|
| | Voltage | Encoder and design | Rated torque | Capacity | | Sigma-II | XtraDrive | |
|  | 230 V | Incremental encoder (13 bit) Straight shaft with key & tap | Without brake | 0.318 Nm | 100 W | SGMPH-01AAA61D-OY | SGDH-01AE-OY | XD-01-MN01 |
| | | | | 0.637 Nm | 200 W | SGMPH-02AAA61D-OY | SGDH-02AE-OY | XD-02-MN01 |
| | | | | 1.27 Nm | 400 W | SGMPH-04AAA61D-OY | SGDH-04AE-OY | XD-04-MN01 |
| | | | | 2.39 Nm | 750 W | SGMPH-08AAA61D-OY | SGDH-08AE-S-OY | XD-08-MN |
| | | | With brake | 4.77 Nm | 1500 W | SGMPH-15AAA61D-OY | SGDH-15AE-S-OY | XD-15-MN |
| | | | | 0.318 Nm | 100 W | SGMPH-01AAA6CD-OY | SGDH-01AE-OY | XD-01-MN01 |
| | | | | 0.637 Nm | 200 W | SGMPH-02AAA6CD-OY | SGDH-02AE-OY | XD-02-MN01 |
| | | | | 1.27 Nm | 400 W | SGMPH-04AAA6CD-OY | SGDH-04AE-OY | XD-04-MN01 |
| | | Absolute encoder (16 bit) Straight shaft with key & tap | Without brake | 2.39 Nm | 750 W | SGMPH-08AAA6CD-OY | SGDH-08AE-S-OY | XD-08-MN |
| | | | | 4.77 Nm | 1500 W | SGMPH-15AAA6CD-OY | SGDH-15AE-S-OY | XD-15-MN |
| | | | | 0.318 Nm | 100 W | SGMPH-01A1A61D-OY | SGDH-01AE-OY | XD-01-MN01 |
| | | | | 0.637 Nm | 200 W | SGMPH-02A1A61D-OY | SGDH-02AE-OY | XD-02-MN01 |
| | | | With brake | 1.27 Nm | 400 W | SGMPH-04A1A61D-OY | SGDH-04AE-OY | XD-04-MN01 |
| | | | | 2.39 Nm | 750 W | SGMPH-08A1A61D-OY | SGDH-08AE-S-OY | XD-08-MN |
| | | | | 4.77 Nm | 1500 W | SGMPH-15A1A61D-OY | SGDH-15AE-S-OY | XD-15-MN |
| | | | | 0.318 Nm | 100 W | SGMPH-01A1A6CD-OY | SGDH-01AE-OY | XD-01-MN01 |
| | 400 V | Incremental encoder (13 bit) Straight shaft with key | Without brake | 0.637 Nm | 200 W | SGMPH-02DAA61D-OY | SGDH-05DE-OY | XD-05-TN |
| | | | | 1.27 Nm | 400 W | SGMPH-04DAA61D-OY | SGDH-05DE-OY | XD-05-TN |
| | | | | 2.39 Nm | 750 W | SGMPH-08DAA61D-OY | SGDH-10DE-OY | XD-10-TN |
| | | | | 4.77 Nm | 1500 W | SGMPH-15DAA61D-OY | SGDH-15DE-OY | XD-15-TN |
| | | | With brake | 0.637 Nm | 200 W | SGMPH-02DAA6CD-OY | SGDH-05DE-OY | XD-05-TN |
| | | | | 1.27 Nm | 400 W | SGMPH-04DAA6CD-OY | SGDH-05DE-OY | XD-05-TN |
| | | | | 2.39 Nm | 750 W | SGMPH-08DAA6CD-OY | SGDH-10DE-OY | XD-10-TN |
| | | | | 4.77 Nm | 1500 W | SGMPH-15DAA6CD-OY | SGDH-15DE-OY | XD-15-TN |
| | | Absolute encoder (16 bit) Straight shaft with key | Without brake | 0.637 Nm | 200 W | SGMPH-02D1A61D-OY | SGDH-05DE-OY | XD-05-TN |
| | | | | 1.27 Nm | 400 W | SGMPH-04D1A61D-OY | SGDH-05DE-OY | XD-05-TN |
| | | | | 2.39 Nm | 750 W | SGMPH-08D1A61D-OY | SGDH-10DE-OY | XD-10-TN |
| | | | | 4.77 Nm | 1500 W | SGMPH-15D1A61D-OY | SGDH-15DE-OY | XD-15-TN |
| With brake | | | 0.637 Nm | 200 W | SGMPH-02D1A6CD-OY | SGDH-05DE-OY | XD-05-TN | |
| | | | 1.27 Nm | 400 W | SGMPH-04D1A6CD-OY | SGDH-05DE-OY | XD-05-TN | |
| | | | 2.39 Nm | 750 W | SGMPH-08D1A6CD-OY | SGDH-10DE-OY | XD-10-TN | |
| | | | 4.77 Nm | 1500 W | SGMPH-15D1A6CD-OY | SGDH-15DE-OY | XD-15-TN | |

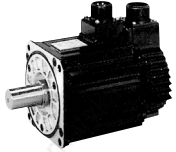
SGMGH - servo motors 1500 r/min (0.45 - 15 kW)

| Symbol | Specifications | | | | Servo motor model | Compatible servo drives (2) | | |
|--|----------------|--|---------------|------------------|-------------------|-----------------------------|--------------|-----------|
| | Voltage | Encoder and design | | Rated torque | | Capacity | Sigma-II | XtraDrive |
| ①  | 400 V | Incremental encoder (17 bit) Straight shaft with key & tap | Without brake | 2.84 Nm | 0.45 kW | SGMGH-05DCA6F-OY | SGDH-05DE-OY | XD-05-TN |
| | | | | 5.39 Nm | 0.85 kW | SGMGH-09DCA6F-OY | SGDH-10DE-OY | XD-10-TN |
| | | | | 8.34 Nm | 1.3 kW | SGMGH-13DCA6F-OY | SGDH-15DE-OY | XD-15-TN |
| | | | | 11.5 Nm | 1.8 kW | SGMGH-20DCA6F-OY | SGDH-20DE-OY | XD-20-TN |
| | | | | 18.6 Nm | 2.9 kW | SGMGH-30DCA6F-OY | SGDH-30DE-OY | XD-30-TN |
| | | | | 28.4 Nm | 4.4 kW | SGMGH-44DCA6F-OY | SGDH-50DE-OY | XD-50-TN |
| | | | | 35.0 Nm | 5.5 kW | SGMGH-55DCA6F-OY | SGDH-60DE-OY | - |
| | | | | 48.0 Nm | 7.5 kW | SGMGH-75DCA6F-OY | SGDH-75DE-OY | - |
| | | | | 70.0 Nm | 11.5 kW | SGMGH-1ADCA6F-OY | SGDH-1ADE-OY | - |
| | | | 95.4 Nm | 15.0 kW | SGMGH-1EDCA6F-OY | SGDH-1EDE-OY | - | |
| | | | With brake | 2.84 Nm | 0.45 kW | SGMGH-05DCA6H-OY | SGDH-05DE-OY | XD-05-TN |
| | | | | 5.39 Nm | 0.85 kW | SGMGH-09DCA6H-OY | SGDH-10DE-OY | XD-10-TN |
| | | | | 8.34 Nm | 1.3 kW | SGMGH-13DCA6H-OY | SGDH-15DE-OY | XD-15-TN |
| | | | | 11.5 Nm | 1.8 kW | SGMGH-20DCA6H-OY | SGDH-20DE-OY | XD-20-TN |
| | | | | 18.6 Nm | 2.9 kW | SGMGH-30DCA6H-OY | SGDH-30DE-OY | XD-30-TN |
| | | | | 28.4 Nm | 4.4 kW | SGMGH-44DCA6H-OY | SGDH-50DE-OY | XD-50-TN |
| | | | | 35.0 Nm | 5.5 kW | SGMGH-55DCA6H-OY | SGDH-60DE-OY | - |
| | | | | 48.0 Nm | 7.5 kW | SGMGH-75DCA6H-OY | SGDH-75DE-OY | - |
| | | 70.0 Nm | | 11.5 kW | SGMGH-1ADCA6H-OY | SGDH-1ADE-OY | - | |
| | | 95.4 Nm | 15.0 kW | SGMGH-1EDCA6H-OY | SGDH-1EDE-OY | - | | |
| | | Absolute encoder (17 bit) Straight shaft with key & tap | Without brake | 2.84 Nm | 0.45 kW | SGMGH-05D2A6F-OY | SGDH-05DE-OY | XD-05-TN |
| | | | | 5.39 Nm | 0.85 kW | SGMGH-09D2A6F-OY | SGDH-10DE-OY | XD-10-TN |
| | | | | 8.34 Nm | 1.3 kW | SGMGH-13D2A6F-OY | SGDH-15DE-OY | XD-15-TN |
| | | | | 11.5 Nm | 1.8 kW | SGMGH-20D2A6F-OY | SGDH-20DE-OY | XD-20-TN |
| | | | | 18.6 Nm | 2.9 kW | SGMGH-30D2A6F-OY | SGDH-30DE-OY | XD-30-TN |
| | | | | 28.4 Nm | 4.4 kW | SGMGH-44D2A6F-OY | SGDH-50DE-OY | XD-50-TN |
| | | | | 35.0 Nm | 5.5 kW | SGMGH-55D2A6F-OY | SGDH-60DE-OY | - |
| | | | | 48.0 Nm | 7.5 kW | SGMGH-75D2A6F-OY | SGDH-75DE-OY | - |
| | | | | 70.0 Nm | 11.5 kW | SGMGH-1AD2A6F-OY | SGDH-1ADE-OY | - |
| | | | 95.4 Nm | 15.0 kW | SGMGH-1ED2A6F-OY | SGDH-1EDE-OY | - | |
| | | | With brake | 2.84 Nm | 0.45 kW | SGMGH-05D2A6H-OY | SGDH-05DE-OY | XD-05-TN |
| | | | | 5.39 Nm | 0.85 kW | SGMGH-09D2A6H-OY | SGDH-10DE-OY | XD-10-TN |
| | | | | 8.34 Nm | 1.3 kW | SGMGH-13D2A6H-OY | SGDH-15DE-OY | XD-15-TN |
| | | | | 11.5 Nm | 1.8 kW | SGMGH-20D2A6H-OY | SGDH-20DE-OY | XD-20-TN |
| | | | | 18.6 Nm | 2.9 kW | SGMGH-30D2A6H-OY | SGDH-30DE-OY | XD-30-TN |
| | | | | 28.4 Nm | 4.4 kW | SGMGH-44D2A6H-OY | SGDH-50DE-OY | XD-50-TN |
| 35.0 Nm | 5.5 kW | | | SGMGH-55D2A6H-OY | SGDH-60DE-OY | - | | |
| 48.0 Nm | 7.5 kW | | | SGMGH-75D2A6H-OY | SGDH-75DE-OY | - | | |
| 70.0 Nm | 11.5 kW | SGMGH-1AD2A6H-OY | | SGDH-1ADE-OY | - | | | |
| 95.4 Nm | 15.0 kW | SGMGH-1ED2A6H-OY | SGDH-1EDE-OY | - | | | | |


SGMSH - servo motors 3000 r/min (1 - 5 kW)

| Symbol | Specifications | | | | Servo motor model | Compatible servo drives (2) | | |
|--|----------------|--|---------------|--------------|-------------------|-----------------------------|--------------|-----------|
| | Voltage | Encoder and design | | Rated torque | | Capacity | Sigma-II | XtraDrive |
| ①  | 400 V | Incremental encoder (17 bit) Straight shaft with key & tap | Without brake | 3.18 Nm | 1.0 kW | SGMSH-10DCA6F-OY | SGDH-10DE-OY | XD-10-TN |
| | | | | 4.9 Nm | 1.5 kW | SGMSH-15DCA6F-OY | SGDH-15DE-OY | XD-15-TN |
| | | | | 6.36 Nm | 2.0 kW | SGMSH-20DCA6F-OY | SGDH-20DE-OY | XD-20-TN |
| | | | | 9.8 Nm | 3.0 kW | SGMSH-30DCA6F-OY | SGDH-30DE-OY | XD-30-TN |
| | | | | 12.6 Nm | 4.0 kW | SGMSH-40DCA6F-OY | SGDH-50DE-OY | XD-50-TN |
| | | | | 15.8 Nm | 5.0 kW | SGMSH-50DCA6F-OY | SGDH-50DE-OY | XD-50-TN |
| | | | With brake | 3.18 Nm | 1.0 kW | SGMSH-10DCA6H-OY | SGDH-10DE-OY | XD-10-TN |
| | | | | 4.9 Nm | 1.5 kW | SGMSH-15DCA6H-OY | SGDH-15DE-OY | XD-15-TN |
| | | | | 6.36 Nm | 2.0 kW | SGMSH-20DCA6H-OY | SGDH-20DE-OY | XD-20-TN |
| | | | | 9.8 Nm | 3.0 kW | SGMSH-30DCA6H-OY | SGDH-30DE-OY | XD-30-TN |
| | | | | 12.6 Nm | 4.0 kW | SGMSH-40DCA6H-OY | SGDH-50DE-OY | XD-50-TN |
| | | | | 15.8 Nm | 5.0 kW | SGMSH-50DCA6H-OY | SGDH-50DE-OY | XD-50-TN |
| | | Absolute encoder (17 bit) Straight shaft with key & tap | Without brake | 3.18 Nm | 1.0 kW | SGMSH-10D2A6F-OY | SGDH-10DE-OY | XD-10-TN |
| | | | | 4.9 Nm | 1.5 kW | SGMSH-15D2A6F-OY | SGDH-15DE-OY | XD-15-TN |
| | | | | 6.36 Nm | 2.0 kW | SGMSH-20D2A6F-OY | SGDH-20DE-OY | XD-20-TN |
| | | | | 9.8 Nm | 3.0 kW | SGMSH-30D2A6F-OY | SGDH-30DE-OY | XD-30-TN |
| | | | | 12.6 Nm | 4.0 kW | SGMSH-40D2A6F-OY | SGDH-50DE-OY | XD-50-TN |
| | | | | 15.8 Nm | 5.0 kW | SGMSH-50D2A6F-OY | SGDH-50DE-OY | XD-50-TN |
| | | | With brake | 3.18 Nm | 1.0 kW | SGMSH-10D2A6H-OY | SGDH-10DE-OY | XD-10-TN |
| | | | | 4.9 Nm | 1.5 kW | SGMSH-15D2A6H-OY | SGDH-15DE-OY | XD-15-TN |
| | | | | 6.36 Nm | 2.0 kW | SGMSH-20D2A6H-OY | SGDH-20DE-OY | XD-20-TN |
| | | | | 9.8 Nm | 3.0 kW | SGMSH-30D2A6H-OY | SGDH-30DE-OY | XD-30-TN |
| | | | | 12.6 Nm | 4.0 kW | SGMSH-40D2A6H-OY | SGDH-50DE-OY | XD-50-TN |
| | | | | 15.8 Nm | 5.0 kW | SGMSH-50D2A6H-OY | SGDH-50DE-OY | XD-50-TN |

SGMUH - servo motors 6000 r/min (1 - 4 kW)

| Symbol | Specifications | | | | Servo motor model | Compatible servo drives (2) | | |
|---|----------------|---|---------------|----------|-------------------|-----------------------------|--------------|----------|
| | Voltage | Encoder and design | Rated torque | Capacity | | Sigma-II | XtraDrive | |
|  | 400 V | Incremental encoder (17 bit) Straight shaft with key | Without brake | 1.59 Nm | 1.0 kW | SGMUH-10DCA61-OY | SGDH-10DE-OY | XD-10-TN |
| | | | | 2.45 Nm | 1.5 kW | SGMUH-15DCA61-OY | SGDH-15DE-OY | XD-15-TN |
| | | | | 4.9 Nm | 3.0 kW | SGMUH-30DCA61-OY | SGDH-30DE-OY | XD-30-TN |
| | | | | 6.3 Nm | 4.0 kW | SGMUH-40DCA61-OY | SGDH-50DE-OY | XD-50-TN |
| | | | With brake | 1.59 Nm | 1.0 kW | SGMUH-10DCA6C-OY | SGDH-10DE-OY | XD-10-TN |
| | | | | 2.45 Nm | 1.5 kW | SGMUH-15DCA6C-OY | SGDH-15DE-OY | XD-15-TN |
| | | | | 4.9 Nm | 3.0 kW | SGMUH-30DCA6C-OY | SGDH-30DE-OY | XD-30-TN |
| | | | | 6.3 Nm | 4.0 kW | SGMUH-40DCA6C-OY | SGDH-50DE-OY | XD-50-TN |

SGMBH - servo motors 1500 r/min (22 - 55 kW)

| Symbol | Specifications | | | | Servo motor model | Compatible drives (2) | | | |
|---|----------------|---|-------------------------------|--|-------------------------------|-----------------------|---------------|---------------|-----------|
| | Voltage | Encoder and design | Rated torque | Capacity | | Sigma-II | | | |
|  | 400 V | Incremental encoder (17 bit) Straight shaft with key & tap | Without brake Flange mount | 140 Nm | 22 kW | SGMBH-2BDCA61 | SGDH-2BDE | | |
| | | | | 191 Nm | 30 kW | SGMBH-3ZDCA61 | SGDH-3ZDE | | |
| | | | | 236 Nm | 37 kW | SGMBH-3GDCA61 | SGDH-3GDE | | |
| | | | | 286 Nm | 45 kW | SGMBH-4EDCA61 | SGDH-4EDE | | |
| | | | | Without brake Foot mount | 236 Nm | 37 kW | SGMBH-3GDAL1 | SGDH-3GDE | |
| | | | | | 286 Nm | 45 kW | SGMBH-4EDAL1 | SGDH-4EDE | |
| | | | 350 Nm | | 55 kW | SGMBH-5EDAL1 | SGDH-5EDE | | |
| | | | With brake Flange mount | 140 Nm | 22 kW | SGMBH-2BDCA6C | SGDH-2BDE | | |
| | | | | 191 Nm | 30 kW | SGMBH-3ZDCA6C | SGDH-3ZDE | | |
| | | | | With brake Foot mount | 236 Nm | 37 kW | SGMBH-3GDALC | SGDH-3GDE | |
| | | | | | 286 Nm | 45 kW | SGMBH-4EDALC | SGDH-4EDE | |
| | | | | Absolute encoder (17 bit) Straight shaft with key & tap | Without brake Flange mount | 140 Nm | 22 kW | SGMBH-2BD2A61 | SGDH-2BDE |
| | | | | | | 191 Nm | 30 kW | SGMBH-3ZD2A61 | SGDH-3ZDE |
| | | | 236 Nm | | | 37 kW | SGMBH-3GD2A61 | SGDH-3GDE | |
| | | | Without brake Foot mount | | 286 Nm | 45 kW | SGMBH-4ED2A61 | SGDH-4EDE | |
| | | | | | 236 Nm | 37 kW | SGMBH-3GD2AL1 | SGDH-3GDE | |
| | | | | | 286 Nm | 45 kW | SGMBH-4ED2AL1 | SGDH-4EDE | |
| | | | With brake Flange mount | 140 Nm | 22 kW | SGMBH-2BD2A6C | SGDH-2BDE | | |
| 191 Nm | 30 kW | SGMBH-3ZD2A6C | | SGDH-3ZDE | | | | | |
| With brake Foot mount | 236 Nm | 37 kW | SGMBH-3GD2ALC | SGDH-3GDE | | | | | |
| | 286 Nm | 45 kW | SGMBH-4ED2ALC | SGDH-4EDE | | | | | |

Encoder Cables


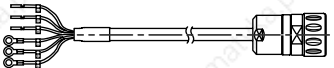

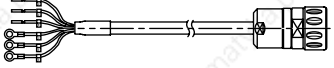

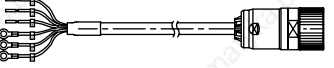


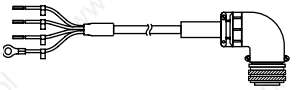



for sigma-II servo drive

| Symbol | Specifications | Model | Appearance |
|--------|---|-------|------------------|
| ③ | Sigma-II encoder cable for SGMAH/PH Servo motors SGMAH-□□□□□□□□D-OY SGMPH-□□□□□□□□D-OY | 3 m | R88A-CRWA003C-DE |
| | | 5 m | R88A-CRWA005C-DE |
| | | 10 m | R88A-CRWA010C-DE |
| | | 15 m | R88A-CRWA015C-DE |
| | | 20 m | R88A-CRWA020C-DE |
| | Sigma-II encoder cable for SGMGH/SH/UH Servo motors SGMGH-□ SGMSH-□ SGMUH-□, SGMBH-□ | 3 m | R88A-CRWB003N-E |
| | | 5 m | R88A-CRWB005N-E |
| | | 10 m | R88A-CRWB010N-E |
| | | 15 m | R88A-CRWB015N-E |
| | | 20 m | R88A-CRWB020N-E |

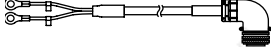
for XtraDrive servo drive

| Symbol | Specifications | Model | Appearance |
|--------|--|-------|---------------|
| ③ | XtraDrive encoder cable for Sigma-II (SGMAH/PH) Servo motors SGMAH-□□□□□□□□D-OY SGMPH-□□□□□□□□D-OY | 3 m | XD-CRWA003-DE |
| | | 5 m | XD-CRWA005-DE |
| | | 10 m | XD-CRWA010-DE |
| | | 15 m | XD-CRWA015-DE |
| | | 20 m | XD-CRWA020-DE |
| | XtraDrive encoder cable for Sigma-II (SGMGH/SH/UH/BH) Servo motors SGMGH-□ SGMSH-□ SGMUH-□ | 3 m | XD-CRWB003N-E |
| | | 5 m | XD-CRWB005N-E |
| | | 10 m | XD-CRWB010N-E |
| | | 15 m | XD-CRWB015N-E |
| | | 20 m | XD-CRWB020N-E |

Power cables

| Symbol | Specifications | Model | Appearance | |
|--|--|-----------------|---|---|
| ④ | For 200 V servo motors without brake SGMAH-□□A□□□1D-OY SGMPH-(01/02/04/08)A□□41D-OY | 3 m | R88A-CAWA003S-DE |  |
| | | 5 m | R88A-CAWA005S-DE | |
| | | 10 m | R88A-CAWA010S-DE | |
| | | 15 m | R88A-CAWA015S-DE | |
| | | 20 m | R88A-CAWA020S-DE | |
| | For 200 V servo motors with brake SGMAH-□□A□□□CD-OY SGMPH-(01/02/04/08)A□□4CD-OY | 3 m | R88A-CAWA003B-DE |  |
| | | 5 m | R88A-CAWA005B-DE | |
| | | 10 m | R88A-CAWA010B-DE | |
| | | 15 m | R88A-CAWA015B-DE | |
| | | 20 m | R88A-CAWA020B-DE | |
| | For 200 V servo motors without brake SGMPH-15A□□□1D-OY | 3 m | R88A-CAWB003S-DE |  |
| | | 5 m | R88A-CAWB005S-DE | |
| | | 10 m | R88A-CAWB010S-DE | |
| | | 15 m | R88A-CAWB015S-DE | |
| | | 20 m | R88A-CAWB020S-DE | |
| | For 200 V servo motors with brake SGMPH-15A□□□CD-OY | 3 m | R88A-CAWB003B-DE |  |
| | | 5 m | R88A-CAWB005B-DE | |
| | | 10 m | R88A-CAWB010B-DE | |
| | | 15 m | R88A-CAWB015B-DE | |
| | | 20 m | R88A-CAWB020B-DE | |
| | For 400 V servo motors without brake SGMAH-□□D□□□1D-OY SGMPH-□□D□□□1D-OY | 3 m | R88A-CAWK003S-DE |  |
| | | 5 m | R88A-CAWK005S-DE | |
| | | 10 m | R88A-CAWK010S-DE | |
| | | 15 m | R88A-CAWK015S-DE | |
| | | 20 m | R88A-CAWK020S-DE | |
| | For 400 V servo motors with brake SGMAH-□□D□□□CD-OY SGMPH-□□D□□□CD-OY | 3 m | R88A-CAWK003B-DE |  |
| | | 5 m | R88A-CAWK005B-DE | |
| | | 10 m | R88A-CAWK010B-DE | |
| | | 15 m | R88A-CAWK015B-DE | |
| | | 20 m | R88A-CAWK020B-DE | |
| | For 400 V servo motors SGMGH-(05/09/13)D□ SGMSH-(10/15/20)D□ SGMUH-(10/15)D□ For servomotors with brake, a separate cable (R88A-CAWC0□□B-E) is needed | 3 m | R88A-CAWC003S-E |  |
| | | 5 m | R88A-CAWC005S-E | |
| | | 10 m | R88A-CAWC010S-E | |
| | | 15 m | R88A-CAWC015S-E | |
| | | 20 m | R88A-CAWC020S-E | |
| | For 400 V servo motors SGMGH-(20/30)D□ SGMSH-(30/40/50)D□ SGMUH-(30/40)D□ For servomotors with brake, a separate cable (R88A-CAWC0□□B-E) is needed | 3 m | R88A-CAWD003S-E |  |
| | | 5 m | R88A-CAWD005S-E | |
| | | 10 m | R88A-CAWD010S-E | |
| | | 15 m | R88A-CAWD015S-E | |
| | | 20 m | R88A-CAWD020S-E | |
| For 400 V servo motors SGMGH-44D□ For servomotors with brake, a separate cable (R88A-CAWC0□□B-E) is needed | 3 m | R88A-CAWG003S-E |  | |
| | 5 m | R88A-CAWG005S-E | | |
| | 10 m | R88A-CAWG010S-E | | |
| | 15 m | R88A-CAWG015S-E | | |
| | 20 m | R88A-CAWG020S-E | | |
| For 400 V servo motors SGMGH-55D□ For servomotors with brake, a separate cable (R88A-CAWC0□□B-E) is needed | 3 m | R88A-CAWF003S-E |  | |
| | 5 m | R88A-CAWF005S-E | | |
| | 10 m | R88A-CAWF010S-E | | |
| | 15 m | R88A-CAWF015S-E | | |
| | 20 m | R88A-CAWF020S-E | | |
| For 400 V servo motors SGMGH-(75/1A)D□ For servomotors with brake, a separate cable (R88A-CAWC0□□B-E) is needed | 3 m | R88A-CAWH003S-E |  | |
| | 5 m | R88A-CAWH005S-E | | |
| | 10 m | R88A-CAWH010S-E | | |
| | 15 m | R88A-CAWH015S-E | | |
| | 20 m | R88A-CAWH020S-E | | |
| For 400 V servo motors SGMGH-1ED□ For servomotors with brake, a separate cable (R88A-CAWC0□□B-E) is needed | 3 m | R88A-CAWJ003S-E |  | |
| | 5 m | R88A-CAWJ005S-E | | |
| | 10 m | R88A-CAWJ010S-E | | |
| | 15 m | R88A-CAWJ015S-E | | |
| | 20 m | R88A-CAWJ020S-E | | |

Brake cable (for SGMGH/SH/UH Motors)

| Symbol | Specifications | Model | Appearance | |
|--------|--|-------|-----------------|---|
| ⑤ | Brake cable only. For 400 V servo motors with brake SGMGH-□□D□ SGMSH-□□D□ SGMUH-□□D□ | 3 m | R88A-CAWC003B-E |  |
| | | 5 m | R88A-CAWC005B-E | |
| | | 10 m | R88A-CAWC010B-E | |
| | | 15 m | R88A-CAWC015B-E | |
| | | 20 m | R88A-CAWC020B-E | |

Connectors

| Specification | Model |
|--|------------------|
| Hypertac power connector IP67 (for 200 V motors SGMAH/PH-□□A□□□□D-OY) | SPOC-06K-FSDN169 |
| Hypertac power connector IP67 (for 400 V motors SGMAH/PH-□□D□□□□D-OY) | LPRA-06B-FRBN170 |
| Hypertac encoder connector IP67 (for motors SGMAH/PH-□□□□□□□D-OY) | SPOC-17H-FRON169 |
| Military power connector IP67 (for 400 V motors SGMGH-(05/10/13)D□, SGMSh-(10/15/20)D□, SGMUH-(10/15)D□) (for SGMbH-□ fan) | MS3108E18-10S |
| Military power connector IP67 (for 400 V motors SGMGH-(20/30/44)D□, SGMSh-(30/40/50)D□, SGMUH-(30/40)D□) | MS3108E22-22S |
| Military power connector IP67 (for 400 V motors SGMGH-(55/75/1A/1E)D□) | MS3108E32-17S |
| Military brake connector IP67 (for 400 V servo motors SGMGH-□, SGMSh-□, SGMUH-□) | MS3108E10SL-3S |
| Military encoder connector IP67 (for motors SGMGH-□, SGMSh-□, SGMUH-□, SGMbH-□) | MS3108E20-29S |
| Spare part, hypertac power connector male (connector included with the motor for 200 V models SGMAH/PH-□□A□□□□D-OY) | SRUC-06J-MSCN236 |
| Spare part, hypertac power connector male (connector included with the motor for 400 V motors SGMAH/PH-□□D□□□□D-OY) | LRRA-06A-MRPN182 |
| Spare part, hypertac encoder connector male (connector included with the motor for motors SGMAH/PH-□□□□□□□D-OY) | SRUC-17G-MRWN087 |

ALL DIMENSIONS SHOWN ARE IN MILLIMETERS.
To convert millimeters into inches, multiply by 0.03937. To convert grams into ounces, multiply by 0.03527.