R88M-K□, R88M-KH□

# Accurax G5 servo motors

**Servo family for accurate motion control.**
**Power range extended up to 15 kW.**

- Standard and high inertia servo motor models
- Peak torque 300% of rated torque during 3 seconds or more depending on model
- High resolution serial encoder provided by 20 bits encoder
- IP67 protection in all models
- Ultra-light and compact size motor
- Low speed ripple and low torque ripple due to low torque cogging
- Various shaft, brake and seal options

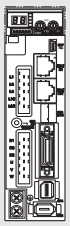
### Ratings

- 230 VAC from 50 W to 1.5 kW (rated torque from 0.16 to 8.59 Nm)
- 400 VAC from 400 W to 15 kW (rated torque from 1.91 Nm to 95.5 Nm)

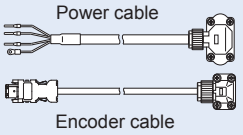
## System configuration

(Refer to servo drive chapter)

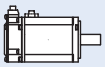
Servo drive options



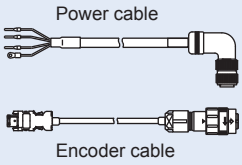
**Accurax G5 servo drives**
EtherCAT, ML2 and Analogue/pulse models

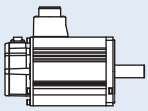



**Standard servo motors**

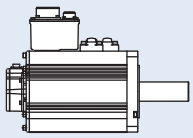


3000 rpm (50 W to 750 W)

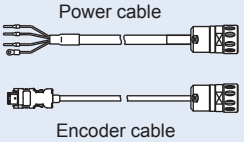


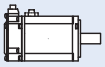
3000 rpm (750 W to 5 kW)
2000 rpm (400 W to 5 kW)
1000 rpm (900 W to 3 kW)



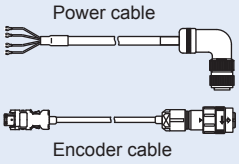
1500 rpm (7.5 kW to 15 kW)
1000 rpm (4.5 kW to 6 kW)

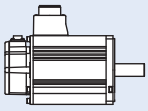



**High inertia servo motors**

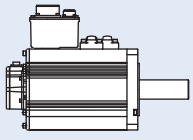


3000 rpm (200 W to 750 W)



2000 rpm (1 kW to 5 kW)



1500 rpm (7.5 kW)

## Servo motor / servo drive combination

### Standard servo motors

| Accurax G5 rotary servo motor | | | | | | Accurax G5 servo drive models | | |
|---|---|---|---|---|---|---|---|---|
| | Voltage | Speed | Rated torque | Capacity | Model | EtherCAT | Analog/pulse | MECHATROLINK-II |
| | 230 V | 3000 min$^{-1}$ | 0.16 Nm | 50 W | R88M-K05030(H/T)-□ | R88D-KN01H-ECT | R88D-KT01H | R88D-KN01H-ML2 |
| | | | 0.32 Nm | 100 W | R88M-K10030(H/T)-□ | R88D-KN01H-ECT | R88D-KT01H | R88D-KN01H-ML2 |
| | | | 0.64 Nm | 200 W | R88M-K20030(H/T)-□ | R88D-KN02H-ECT | R88D-KT02H | R88D-KN02H-ML2 |
| | | | 1.3 Nm | 400 W | R88M-K40030(H/T)-□ | R88D-KN04H-ECT | R88D-KT04H | R88D-KN04H-ML2 |
| | | | 2.4 Nm | 750 W | R88M-K75030(H/T)-□ | R88D-KN08H-ECT | R88D-KT08H | R88D-KN08H-ML2 |
| | | | 3.18 Nm | 1000 W | R88M-K1K030(H/T)-□ | R88D-KN15H-ECT | R88D-KT15H | R88D-KN15H-ML2 |
| | | | 4.77 Nm | 1500 W | R88M-K1K530(H/T)-□ | R88D-KN15H-ECT | R88D-KT15H | R88D-KN15H-ML2 |
| | 400 V | | 2.39 Nm | 750 W | R88M-K75030(F/C)-□ | R88D-KN10F-ECT | R88D-KT10F | R88D-KN10F-ML2 |
| | | | 3.18 Nm | 1000 W | R88M-K1K030(F/C)-□ | R88D-KN15F-ECT | R88D-KT15F | R88D-KN15F-ML2 |
| | | | 4.77 Nm | 1500 W | R88M-K1K530(F/C)-□ | R88D-KN15F-ECT | R88D-KT15F | R88D-KN15F-ML2 |
| | | | 6.37 Nm | 2000 W | R88M-K2K030(F/C)-□ | R88D-KN20F-ECT | R88D-KT20F | R88D-KN20F-ML2 |
| 230 V (1 kW to 1.5 kW) 400 V (400 W to 5 kW) | | | 9.55 Nm | 3000 W | R88M-K3K030(F/C)-□ | R88D-KN30F-ECT | R88D-KT30F | R88D-KN30F-ML2 |
| | | | 12.7 Nm | 4000 W | R88M-K4K030(F/C)-□ | R88D-KN50F-ECT | R88D-KT50F | R88D-KN50F-ML2 |
| | | | 15.9 Nm | 5000 W | R88M-K5K030(F/C)-□ | R88D-KN50F-ECT | R88D-KT50F | R88D-KN50F-ML2 |
| | 230 V | 2000 min$^{-1}$ | 4.77 Nm | 1000 W | R88M-K1K020(H/T)-□ | R88D-KN10H-ECT | R88D-KT10H | R88D-KN10H-ML2 |
| | | | 7.16 Nm | 1500 W | R88M-K1K520(H/T)-□ | R88D-KN15H-ECT | R88D-KT15H | R88D-KN15H-ML2 |
| | 400 V | | 1.91 Nm | 400 W | R88M-K40020(F/C)-□ | R88D-KN06F-ECT | R88D-KT06F | R88D-KN06F-ML2 |
| | | | 2.86 Nm | 600 W | R88M-K60020(F/C)-□ | R88D-KN06F-ECT | R88D-KT06F | R88D-KN06F-ML2 |
| | | | 4.77 Nm | 1000 W | R88M-K1K020(F/C)-□ | R88D-KN10F-ECT | R88D-KT10F | R88D-KN10F-ML2 |
| | | | 7.16 Nm | 1500 W | R88M-K1K520(F/C)-□ | R88D-KN15F-ECT | R88D-KT15F | R88D-KN15F-ML2 |
| | | | 9.55 Nm | 2000 W | R88M-K2K020(F/C)-□ | R88D-KN20F-ECT | R88D-KT20F | R88D-KN20F-ML2 |
| 7.5 KW to 15 kW | | | 14.3 Nm | 3000 W | R88M-K3K020(F/C)-□ | R88D-KN30F-ECT | R88D-KT30F | R88D-KN30F-ML2 |
| | | | 19.1 Nm | 4000 W | R88M-K4K020(F/C)-□ | R88D-KN50F-ECT | R88D-KT50F | R88D-KN50F-ML2 |
| | | | 23.9 Nm | 5000 W | R88M-K5K020(F/C)-□ | R88D-KN50F-ECT | R88D-KT50F | R88D-KN50F-ML2 |
| | 400 V | 1500 min$^{-1}$ | 47.8 Nm | 7500 W | R88M-K7K515C-□ | R88D-KN75F-ECT | R88D-KT75F | – |
| | | | 70.0 Nm | 11000 W | R88M-K11K015C-□ | R88D-KN150F-ECT | R88D-KT150F | – |
| | | | 95.5 Nm | 15000 W | R88M-K15K015C-□ | R88D-KN150F-ECT | R88D-KT150F | – |
| | 230 V | 1000 min$^{-1}$ | 8.59 Nm | 900 W | R88M-K90010(H/T)-□ | R88D-KN15H-ECT | R88D-KT15H | R88D-KN15H-ML2 |
| | 400 V | | 8.59 Nm | 900 W | R88M-K90010(F/C)-□ | R88D-KN15F-ECT | R88D-KT15F | R88D-KN15F-ML2 |
| | | | 19.1 Nm | 2000 W | R88M-K2K010(F/C)-□ | R88D-KN30F-ECT | R88D-KT30F | R88D-KN30F-ML2 |
| | | | 28.7 Nm | 3000 W | R88M-K3K010(F/C)-□ | R88D-KN50F-ECT | R88D-KT50F | R88D-KN50F-ML2 |
| | | | 43.0 Nm | 4500 W | R88M-K4K510C-□ | R88D-KN50F-ECT | R88D-KT50F | R88D-KN50F-ML2 |
| | | | 57.3 Nm | 6000 W | R88M-K6K010C-□ | R88D-KN75F-ECT | R88D-KT75F | – |

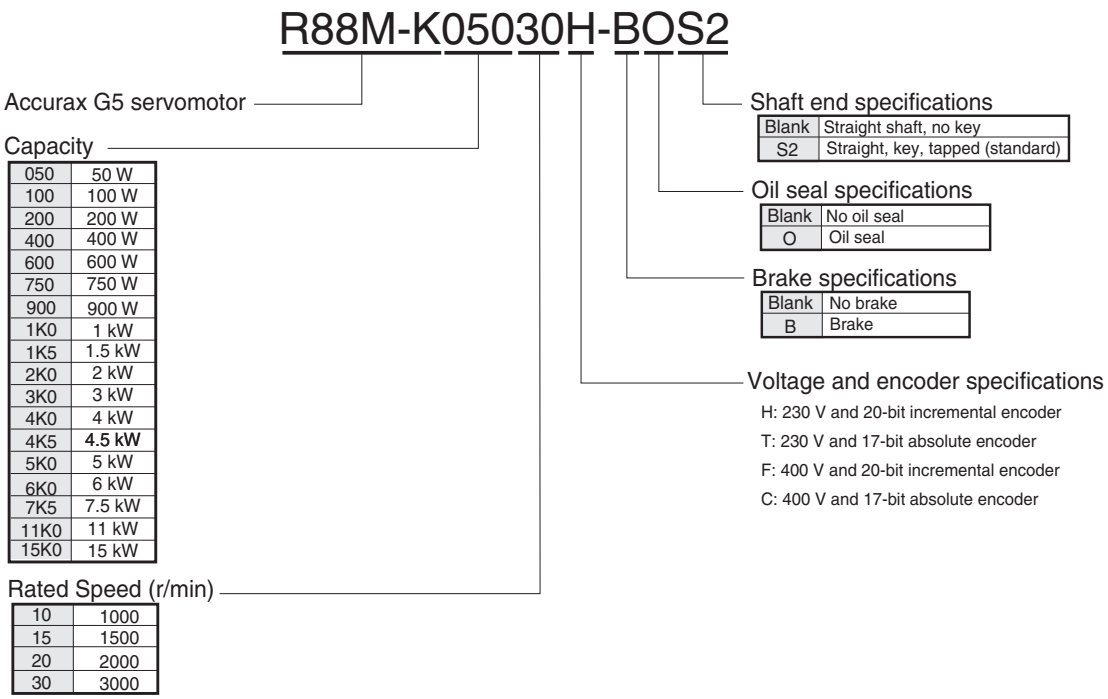
### High inertia servo motors

| Accurax G5 rotary servo motor | | | | | | Accurax G5 servo drive models | | |
|---|---|---|---|---|---|---|---|---|
| | Voltage | Speed | Rated torque | Capacity | Model | EtherCAT | Analog/pulse | MECHATROLINK-II |
| | 230 V | 3000 min$^{-1}$ | 0.64 Nm | 200 W | R88M-KH20030(H/T)-□ | R88D-KN02H-ECT | R88D-KT02H | R88D-KN02H-ML2 |
| | | | 1.3 Nm | 400 W | R88M-KH40030(H/T)-□ | R88D-KN04H-ECT | R88D-KT04H | R88D-KN04H-ML2 |
| | | | 2.4 Nm | 750 W | R88M-KH75030(H/T)-□ | R88D-KN08H-ECT | R88D-KT08H | R88D-KN08H-ML2 |
| | 400 V | 2000 min$^{-1}$ | 4.77 Nm | 1000 W | R88M-KH1K020(F/C)-□ | R88D-KN10F-ECT | R88D-KT10F | R88D-KN10F-ML2 |
| | | | 7.16 Nm | 1500 W | R88M-KH1K520(F/C)-□ | R88D-KN15F-ECT | R88D-KT15F | R88D-KN15F-ML2 |
| | | | 9.55 Nm | 2000 W | R88M-KH2K020(F/C)-□ | R88D-KN20F-ECT | R88D-KT20F | R88D-KN20F-ML2 |
| 1 kW to 5 kW | | | 14.3 Nm | 3000 W | R88M-KH3K020(F/C)-□ | R88D-KN30F-ECT | R88D-KT30F | R88D-KN30F-ML2 |
| | | | 19.1 Nm | 4000 W | R88M-KH4K020(F/C)-□ | R88D-KN50F-ECT | R88D-KT50F | R88D-KN50F-ML2 |
| | | | 23.9 Nm | 5000 W | R88M-KH5K020(F/C)-□ | R88D-KN50F-ECT | R88D-KT50F | R88D-KN50F-ML2 |
| | | 1500 min$^{-1}$ | 47.8 Nm | 7500 W | R88M-KH7K515C-□ | R88D-KN75F-ECT | R88D-KT75F | – |
| 7.5 KW | | | | | | | | |

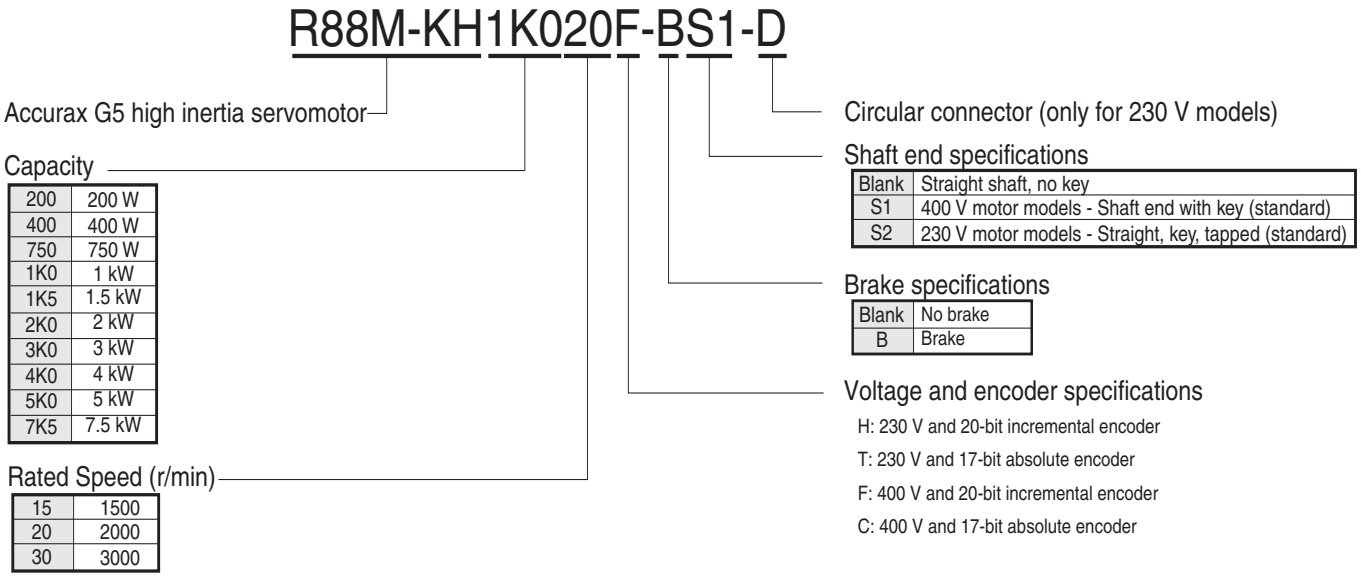
**Note: 1.** For servo motor and cables part numbers refer to ordering information at the end of this chapter
**2.** Refer to the servo drive chapter for drive options selection and detailed specifications

## Servo motor type designation

### Standard servo motors




### High inertia servo motors



# Servo motor specifications

## Standard servo motors 3000 r/min, 230 V

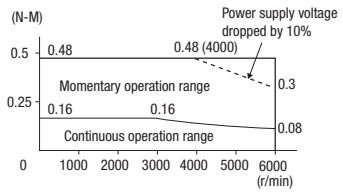
### Ratings and specifications

| Voltage | | | 230 V | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Servo motor model R88M-K□ | | 20-bit incremental encoder | 05030H-□ | 10030H-□ | 20030H-□ | 40030H-□ | 75030H-□ | 1K030H-□ | 1K530H-□ |
| | | 17-bit absolute encoder | 05030T-□ | 10030T-□ | 20030T-□ | 40030T-□ | 75030T-□ | 1K030T-□ | 1K530T-□ |
| Rated output | | W | 50 | 100 | 200 | 400 | 750 | 1000 | 1500 |
| Rated torque | | N·m | 0.16 | 0.32 | 0.64 | 1.3 | 2.4 | 3.18 | 4.77 |
| Instantaneous peak torque | | N·m | 0.48 | 0.95 | 1.91 | 3.8 | 7.1 | 9.55 | 14.3 |
| Rated current | | A (rms) | 1.1 | 1.1 | 1.5 | 2.4 | 4.1 | 6.6 | 8.2 |
| Instantaneous max. current | | A (rms) | 4.7 | 4.7 | 6.5 | 10.2 | 17.4 | 28 | 35 |
| Rated speed | | $min^{-1}$ | 3000 | | | | | | |
| Max. speed | | $min^{-1}$ | 6000 | | | | | 5000 | |
| Torque constant | | N·m/A | 0.11±10% | 0.21±10% | 0.31±10% | 0.39±10% | 0.42±10% | 0.37 | 0.45 |
| Rotor moment of inertia (JM) | | $kg·m^2×10^{-4}$ (without brake) | 0.025 | 0.051 | 0.14 | 0.26 | 0.87 | 2.03 | 2.84 |
| | | $kg·m^2×10^{-4}$ (with brake) | 0.027 | 0.054 | 0.16 | 0.28 | 0.97 | 2.35 | 3.17 |
| Allowable load moment of inertia (JL) | | Multiple of (JM) | 30*1 | | | | 20*1 | 15*1 | |
| Rated power rate | | kW/s (without brake) | 10.1 | 19.9 | 29.0 | 62.4 | 65.6 | 49.8 | 80.1 |
| | | kW/s (with brake) | 9.4 | 18.8 | 25.4 | 58 | 58.8 | 43 | 71.8 |
| Allowable radial load | | N | 68 | | 245 | | 490 | | |
| Allowable thrust load | | N | 58 | | 98 | | 196 | | |
| Approx. mass | | kg (without brake) | 0.32 | 0.47 | 0.82 | 1.2 | 2.3 | 3.5 | 4.4 |
| | | kg (with brake) | 0.53 | 0.68 | 1.3 | 1.7 | 3.1 | 4.5 | 5.4 |
| Brake specifications | Rated voltage | | 24 VDC ±10% | | | | | | |
| | Holding brake moment of inertia J | $kg·m^2×10^{-4}$ | 0.002 | | 0.0018 | | 0.33 | | |
| | Power consumption (at 20°C) | W | 7 | | 9 | | 17 | 19 | |
| | Current consumption (at 20°C) | A | 0.3 | | 0.36 | | 0.70±10% | 0.81±10% | |
| | Static friction torque | N.m (minimum) | 0.29 | | 1.27 | | 2.5 | 7.8 | |
| | Rise time for holding torque | ms (max.) | 35 | | 50 | | | | |
| | Release time | ms (max) | 20 | | 15 | | | | |
| Basic specifications | Time Rating | | Continuous | | | | | | |
| | Insulation class | | Type B | | | | | Type F | |
| | Ambient operating/ storage temperature | | 0 to +40°C/–20 to 65°C | | | | | | |
| | Ambient operating/ storage humidity | | 20% to 80% (non-condensing) | | | | | 20% to 85% (non-condensing) | |
| | Vibration class | | V-15 | | | | | | |
| | Insulation resistance | | 20 MΩ min. at 500 VDC between the power terminals and FG terminal | | | | | | |
| | Enclosure | | Totally-enclosed, self-cooling, IP67 (excluding shaft opening) | | | | | | |
| | Vibration resistance | | Vibration acceleration 49 $m/s^2$ | | | | | | |
| | Mounting | | Flange-mounted | | | | | | |

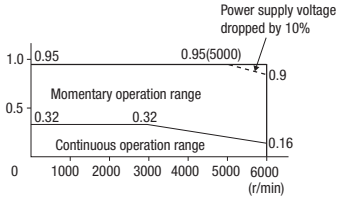
*1 Applicable load inertia: The operable load inertia ratio (load inertia/rotor inertia) depends on the mechanical configuration and its rigidity. For a machine with high rigidity, operation is possible even with high load inertia. Select an appropriate motor and confirm that operation is possible.

### Torque-speed characteristics

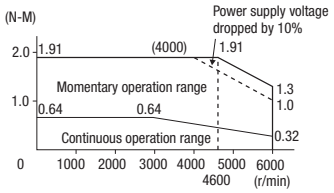
R88M-K05030H/T (50 W)



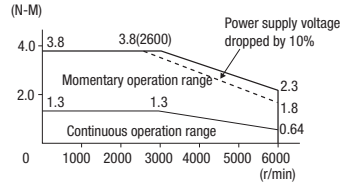

R88M-K10030H/T (100 W)



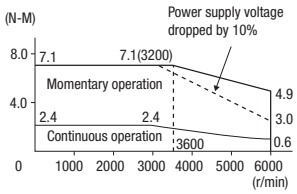

R88M-K20030H/T (200 W)



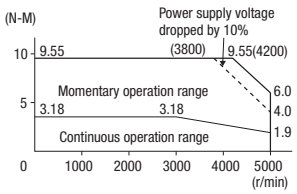

R88M-K40030H/T (400 W)



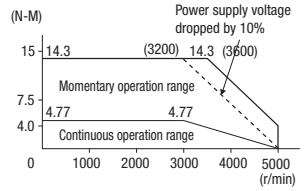

R88M-K75030H/T (750 W)




R88M-K1K030H/T (1 kW)




R88M-K1K530H/T (1.5 kW)



## Standard servo motors 3000 r/min, 400 V

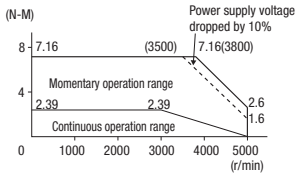
### Ratings and specifications

| Voltage | | | 400 V | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Servo motor model R88M-K□ | | 20-bit incremental encoder | 75030F-□ | 1K030F-□ | 1K530F-□ | 2K030F-□ | 3K030F-□ | 4K030F-□ | 5K030F-□ |
| | | 17-bit absolute encoder | 75030C-□ | 1K030C-□ | 1K530C-□ | 2K030C-□ | 3K030C-□ | 4K030C-□ | 5K030C-□ |
| Rated output | | W | 750 | 1000 | 1500 | 2000 | 3000 | 4000 | 5000 |
| Rated torque | | N·m | 2.39 | 3.18 | 4.77 | 6.37 | 9.55 | 12.7 | 15.9 |
| Instantaneous peak torque | | N·m | 7.16 | 9.55 | 14.3 | 19.1 | 28.6 | 38.2 | 47.7 |
| Rated current | | A (rms) | 2.4 | 3.3 | 4.2 | 5.7 | 9.2 | 9.9 | 12 |
| Instantaneous max. current | | A (rms) | 10 | 14 | 18 | 24 | 39 | 42 | 51 |
| Rated speed | | $min^{-1}$ | 3000 | | | | | | |
| Max. speed | | $min^{-1}$ | 5000 | | | | | 4500 | |
| Torque constant | | N·m/A | 0.78 | 0.75 | 0.89 | 0.87 | 0.81 | 0.98 | |
| Rotor moment of inertia (JM) | | $kg·m^2×10^{-4}$ (without brake) | 1.61 | 2.03 | 2.84 | 3.68 | 6.5 | 12.9 | 17.4 |
| | | $kg·m^2×10^{-4}$ (with brake) | 1.93 | 2.35 | 3.17 | 4.01 | 7.85 | 14.2 | 18.6 |
| Allowable load moment of inertia (JL) | | Multiple of (JM) | 20*1 | 15*1 | | | | | |
| Rated power rate | | kW/s (without brake) | 35.5 | 49.8 | 80.1 | 110 | 140 | 126 | 146 |
| | | kW/s (with brake) | 29.6 | 43 | 71.8 | 101 | 116 | 114 | 136 |
| Allowable radial load | | N | 490 | | | | | 784 | |
| Allowable thrust load | | N | 196 | | | | | 343 | |
| Approx. mass | | kg (without brake) | 3.1 | 3.5 | 4.4 | 5.3 | 8.3 | 11 | 14 |
| | | kg (with brake) | 4.1 | 4.5 | 5.4 | 6.3 | 9.4 | 12.6 | 16 |
| Brake specifications | Rated voltage | | 24 VDC ±10% | | | | | | |
| | Holding brake moment of inertia J | $kg·m^2×10^{-4}$ | 0.33 | | | | | | 1.35 |
| | Power consumption (at 20°C) | W | 17 | 19 | | | | 22 | |
| | Current consumption (at 20°C) | A | 0.70±10% | 0.81±10% | | | | 0.90±10% | |
| | Static friction torque | N.m (minimum) | 2.5 | 7.8 | | | 11.8 | 16.1 | |
| | Rise time for holding torque | ms (max.) | 50 | | | | | 110 | |
| | Release time | ms (max) | 15 | | | | | 50 | |
| Basic specifications | Time Rating | | Continuous | | | | | | |
| | Insulation class | | Type F | | | | | | |
| | Ambient operating/ storage temperature | | 0 to +40°C/–20 to 65°C | | | | | | |
| | Ambient operating/ storage humidity | | 20% to 85% (non-condensing) | | | | | | |
| | Vibration class | | V-15 | | | | | | |
| | Insulation resistance | | 20 MΩ min. at 500 VDC between the power terminals and FG terminal | | | | | | |
| | Enclosure | | Totally-enclosed, self-cooling, IP67(excluding shaft opening) | | | | | | |
| | Vibration resistance | | Vibration acceleration 49 m/s² | | | | | | |
| | Mounting | | Flange-mounted | | | | | | |

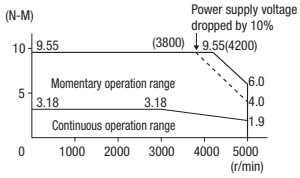
*1 Applicable load inertia: The operable load inertia ratio (load inertia/rotor inertia) depends on the mechanical configuration and its rigidity. For a machine with high rigidity, operation is possible even with high load inertia. Select an appropriate motor and confirm that operation is possible.

### Torque-speed characteristics

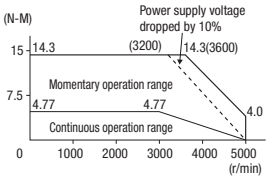
R88M-K75030F/C (750 W)



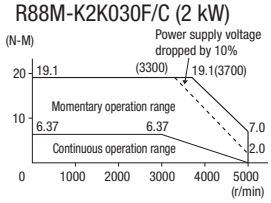

R88M-K1K030F/C (1 kW)



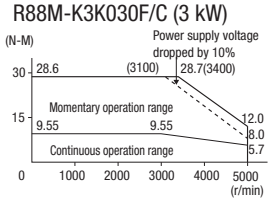

R88M-K1K530F/C (1.5 kW)



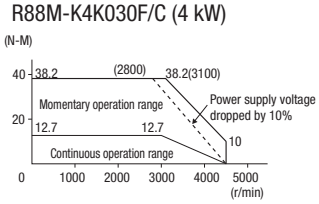

R88M-K2K030F/C (2 kW)



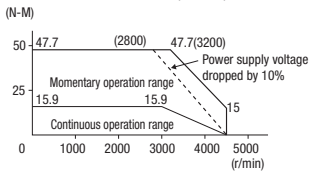

R88M-K3K030F/C (3 kW)




R88M-K4K030F/C (4 kW)




R88M-K5K030F/C (5 kW)



## Standard servo motors 2000 r/min, 230 V/400 V

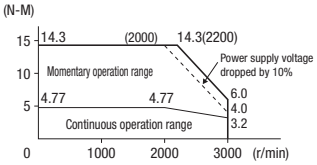
### Ratings and specifications

| Voltage | | | 230 V | | 400 V | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Servo motor model R88M-K□ | 20-bit incremental encoder | | 1K020H-□ | 1K520H-□ | 40020F-□ | 60020F-□ | 1K020F-□ | 1K520F-□ | 2K020F-□ | 3K020F-□ | 4K020F-□ | 5K020F-□ |
| | 17-bit absolute encoder | | 1K020T-□ | 1K520T-□ | 40020C-□ | 60020C-□ | 1K020C-□ | 1K520C-□ | 2K020C-□ | 3K020C-□ | 4K020C-□ | 5K020C-□ |
| Rated output | | W | 1000 | 1500 | 400 | 600 | 1000 | 1500 | 2000 | 3000 | 4000 | 5000 |
| Rated torque | | N·m | 4.77 | 7.16 | 1.91 | 2.86 | 4.77 | 7.16 | 9.55 | 14.3 | 19.1 | 23.9 |
| Instantaneous peak torque | | N·m | 14.3 | 21.5 | 5.73 | 8.59 | 14.3 | 21.5 | 28.7 | 43 | 57.3 | 71.6 |
| Rated current | | A (rms) | 5.7 | 9.4 | 1.2 | 1.5 | 2.8 | 4.7 | 5.9 | 8.7 | 10.6 | 13 |
| Instantaneous max. current | | A (rms) | 24 | 40 | 4.9 | 6.5 | 12 | 20 | 25 | 37 | 45 | 55 |
| Rated speed | | $min^{-1}$ | 2000 | | | | | | | | | |
| Max. speed | | $min^{-1}$ | 3000 | | | | | | | | | |
| Torque constant | | N·m/A | 0.63 | 0.58 | 1.27 | 1.38 | 1.27 | 1.16 | 1.27 | 1.18 | 1.40 | 1.46 |
| Rotor moment of inertia (JM) | | $kg·m^2×10^{-4}$ (without brake) | 4.60 | 6.70 | 1.61 | 2.03 | 4.60 | 6.70 | 8.72 | 12.9 | 37.6 | 48 |
| | | $kg·m^2×10^{-4}$ (with brake) | 5.90 | 7.99 | 1.90 | 2.35 | 5.90 | 7.99 | 10 | 14.2 | 38.6 | 48.8 |
| Max. load moment of inertia (JL) | | Multiple of (JM) | $10^{*1}$ | | | | | | | | | |
| Rated power rate | | kW/s (without brake) | 49.5 | 76.5 | 22.7 | 40.3 | 49.5 | 76.5 | 105 | 159 | 97.1 | 119 |
| | | kW/s (with brake) | 38.6 | 64.2 | 19.2 | 34.8 | 38.6 | 64.2 | 91.2 | 144 | 94.5 | 117 |
| Allowable radial load | | N | 490 | | | | | | | 784 | | |
| Allowable thrust load | | N | 196 | | | | | | | 343 | | |
| Approx. mass | | kg (without brake) | 5.2 | 6.7 | 3.1 | 3.5 | 5.2 | 6.7 | 8 | 11 | 15.5 | 18.6 |
| | | kg (with brake) | 6.7 | 8.2 | 4.1 | 4.5 | 6.7 | 8.2 | 9.5 | 12.6 | 18.7 | 21.8 |
| Brake specifications | Rated voltage | | 24VDC ±10% | | | | | | | | | |
| | Holding brake moment inertia | (J) $kg·m^2×10^{-4}$ | 1.35 | | | | | | | | 4.7 | |
| | Power consumption (20°C) | W | 14 | 19 | 17 | | 14 | 19 | | 22 | 31 | |
| | Current consumption (20°C) | A | 0.59±10% | 0.79±10% | 0.70 ±10% | | 0.59±10% | 0.79 ±10% | | 0.90±10% | 1.3±10% | 1.3 ±-10% |
| | Static friction torque | N.m (minimum) | 4.9 | 13.7 | 2.5 | | 4.9 | 13.7 | | 16.2 | 24.5 | |
| | Rise time for holding torque | ms (max.) | 80 | 100 | 50 | | 80 | 100 | | 110 | 80 | |
| | Release time | ms (max) | 70 | 50 | 15 | | 70 | 50 | | | 25 | |
| Basic specifications | Time Rating | | Continuous | | | | | | | | | |
| | Insulation class | | Type F | | | | | | | | | |
| | Ambient operating/ storage temperature | | 0 to +40°C/–20 to 65°C | | | | | | | | | |
| | Ambient operating/ storage humidity | | 20% to 85% (non-condensing) | | | | | | | | | |
| | Vibration class | | V-15 | | | | | | | | | |
| | Insulation resistance | | 20 MΩ min. at 500 VDC between the power terminals and FG terminal | | | | | | | | | |
| | Enclosure | | Totally-enclosed, self-cooling, IP67 (excluding shaft opening) | | | | | | | | | |
| | Vibration resistance | | Vibration acceleration 49 m/s² | | | | | | | | | |
| | Mounting | | Flange-mounted | | | | | | | | | |

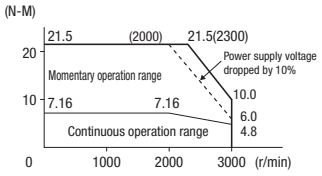
*1. Applicable load inertia: The operable load inertia ratio (load inertia/rotor inertia) depends on the mechanical configuration and its rigidity. For a machine with high rigidity, operation is possible even with high load inertia. Select an appropriate motor and confirm that operation is possible.

### Torque-speed characteristics

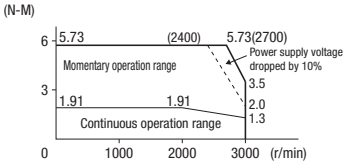
R88M-K1K020H/T (230V, 1 kW)



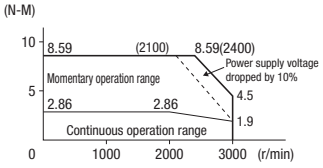

R88M-K1K520H/T (230V, 1.5 kW)



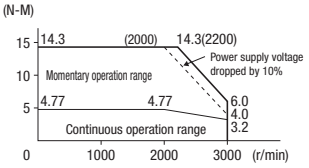

R88M-K40020F/C (400V, 400 W)



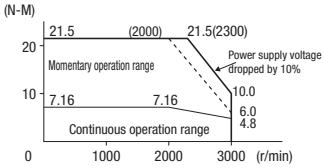

R88M-K60020F/C (400V, 600 W)



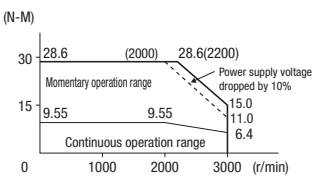

R88M-K1K020F/C (400V, 1 kW)



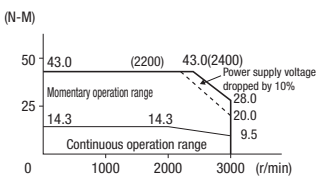

R88M-K1K520F/C (400V, 1.5 kW)



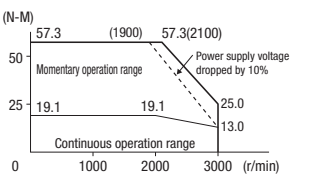

R88M-K2K020F/C (400V, 2 kW)



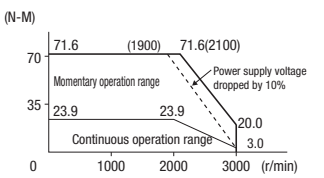

R88M-K3K020F/C (400V, 3 kW)




R88M-K4K020F/C (400V, 4 kW)




R88M-K5K020F/C (400V, 5 kW)



## Standard servo motors 1500 r/min, 400 V

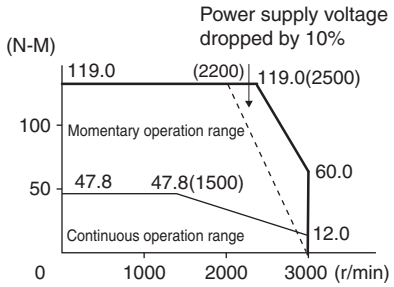
### Ratings and specifications

| Applied voltage | | | 400 V | | |
|---|---|---|---|---|---|
| **Servo motor model R88M-K□** | | **17-bit absolute encoder** | **7K515C-□** | **11K015C-□** | **15K015C-□** |
| Rated output | | W | 7500 | 11000 | 15000 |
| Rated torque | | N·m | 47.8 | 70.0 | 95.5 |
| Instantaneous peak torque | | N·m | 119.0 | 175.0 | 224.0 |
| Rated current | | A (rms) | 22.0 | 27.1 | 33.1 |
| Instantaneous max. current | | A (rms) | 83 | 101 | 118 |
| Rated speed | | $min^{-1}$ | 1500 | | |
| Max. speed | | $min^{-1}$ | 3000 | 2000 | |
| Torque constant | | N·m/A | 1.54 | 1.84 | 2.10 |
| Rotor moment of inertia (JM) | | $kg·m^2×10^{-4}$ (without brake) | 101 | 212 | 302 |
| | | $kg·m^2×10^{-4}$ (with brake) | 107 | 220 | 311 |
| Allowable load moment of inertia (JL) | | Multiple of (JM) | 10*1 | | |
| Rated power rate | | kW/s (without brake) | 226 | 231 | 302 |
| | | kW/s (with brake) | 213 | 223 | 293 |
| Allowable radial load | | N | 1176 | 2254 | |
| Allowable thrust load | | N | 490 | 686 | |
| Approx. mass | | kg (without brake) | 36.4 | 52.7 | 70.2 |
| | | kg (with brake) | 40.4 | 58.9 | 76.3 |
| Brake specifications | Rated voltage | | 24VDC ±10% | | |
| | Holding brake moment of inertia J | $kg·m^2×10^{-4}$ | 4.7 | 7.1 | |
| | Power consumption (at 20°C) | W | 34 | 26 | |
| | Current consumption (at 20°C) | A | 1.4±10% | 1.08±10% | |
| | Static friction torque | N·m (minimum) | 58.8 | 100 | |
| | Rise time for holding torque | ms (max.) | 150 | 300 | |
| | Release time | ms (max) | 50 | 140 | |
| Basic specifications | Time Rating | | Continuous | | |
| | Insulation class | | Type F | | |
| | Ambient operating/ storage temperature | | 0 to +40°C/–20 to 65°C | | |
| | Ambient operating/ storage humidity | | 20% to 85% RH (non-condensing) | | |
| | Vibration class | | V-15 | | |
| | Insulation resistance | | 20 MΩ min. at 500 VDC between the power terminals and FG terminal | | |
| | Enclosure | | Totally-enclosed, self-cooling, IP67 (excluding shaft opening) | | |
| | Vibration resistance | | Vibration acceleration 49 $m/s^2$ | | |
| | Mounting | | Flange-mounted | | |

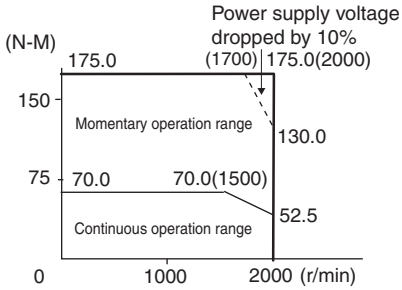
*1 Applicable load inertia: The operable load inertia ratio (load inertia/rotor inertia) depends on the mechanical configuration and its rigidity. For a machine with high rigidity, operation is possible even with high load inertia. Select an appropriate motor and confirm that operation is possible.

### Torque-speed characteristics

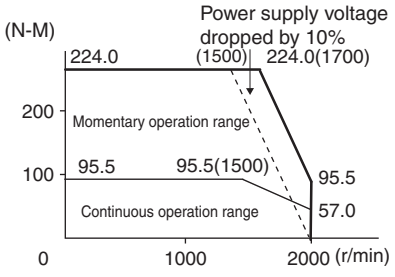
R88M-K7K515C (7.5 kW)




R88M-K11K015C (11 kW)




R88M-K15K015C (15 kW)



## Standard servo motors 1000 r/min, 230 V/400 V

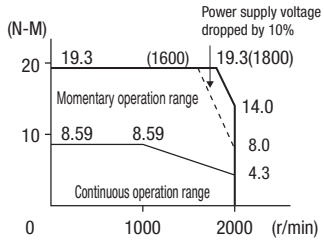
### Ratings and specifications

| Applied voltage | | 230 V | 400 V | | | | |
|---|---|---|---|---|---|---|---|
| **Servo motor model R88M-K□** | **20-bit incremental encoder** | **90010H-□** | **90010F-□** | **2K010F-□** | **3K010F-□** | | |
| | **17-bit absolute encoder** | **90010T-□** | **90010C-□** | **2K010C-□** | **3K010C-□** | **4K510C-□** | **6K010C-□** |
| Rated output | W | 900 | 900 | 2000 | 3000 | 4500 | 6000 |
| Rated torque | N·m | 8.59 | | 19.1 | 28.7 | 43.0 | 57.3 |
| Instantaneous peak torque | N·m | 19.3 | | 47.7 | 71.7 | 107.0 | 143.0 |
| Rated current | A (rms) | 7.6 | 3.8 | 8.5 | 11.3 | 14.8 | 19.4 |
| Instantaneous max. current | A (rms) | 24 | 12 | 30 | 40 | 55 | 74 |
| Rated speed | $min^{-1}$ | 1000 | | | | | |
| Max. speed | $min^{-1}$ | 2000 | | | | | |
| Torque constant | N·m/A | 0.86 | 1.72 | 1.76 | 1.92 | 2.05 | 2.08 |
| Rotor moment of inertia (JM) | $kg·m^2×10^{-4}$ (without brake) | 6.70 | | 30.3 | 48.4 | 79.1 | 101 |
| | $kg·m^2×10^{-4}$ (with brake) | 7.99 | | 31.4 | 49.2 | 84.4 | 107 |
| Allowable load moment of inertia (JL) | Multiple of (JM) | 10*1 | | | | | |
| Rated power rate | kW/s (without brake) | 110 | | 120 | 170 | 233 | 325 |
| | kW/s (with brake) | 92.4 | | 116 | 167 | 219 | 307 |
| Allowable radial load | N | 686 | | 1176 | 1470 | | 1764 |
| Allowable thrust load | N | 196 | | 490 | | | 588 |
| Approx. mass | kg (without brake) | 6.7 | | 14 | 20 | 29.4 | 36.4 |
| | kg (with brake) | 8.2 | | 17.5 | 23.5 | 33.3 | 40.4 |
| Brake specifications | Rated voltage | 24VDC ±10% | | | | | |
| | Holding brake moment of inertia J | $kg·m^2×10^{-4}$ | 1.35 | | 4.7 | | |
| | Power consumption (at 20°C) | W | 19 | 31 | 34 | | |
| | Current consumption (at 20°C) | A | 0.79±10% | 1.3±10% | 1.4±10% | | |
| | Static friction torque | N·m (minimum) | 13.7 | 24.5 | 58.8 | | |
| | Rise time for holding torque | ms (max.) | 100 | 80 | 150 | | |
| | Release time | ms (max) | 50 | 25 | 50 | | |
| Basic specifications | Time Rating | Continuous | | | | | |
| | Insulation class | Type F | | | | | |
| | Ambient operating/ storage temperature | 0 to +40°C/–20 to 65°C | | | | | |
| | Ambient operating/ storage humidity | 20% to 85% RH (non-condensing) | | | | | |
| | Vibration class | V-15 | | | | | |
| | Insulation resistance | 20 MΩ min. at 500 VDC between the power terminals and FG terminal | | | | | |
| | Enclosure | Totally-enclosed, self-cooling, IP67 (excluding shaft opening) | | | | | |
| | Vibration resistance | Vibration acceleration 49 $m/s^2$ | | | | | |
| | Mounting | Flange-mounted | | | | | |

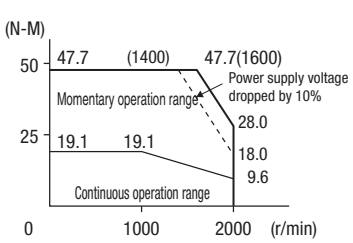
*1 Applicable load inertia: The operable load inertia ratio (load inertia/rotor inertia) depends on the mechanical configuration and its rigidity. For a machine with high rigidity, operation is possible even with high load inertia. Select an appropriate motor and confirm that operation is possible.

### Torque-speed characteristics

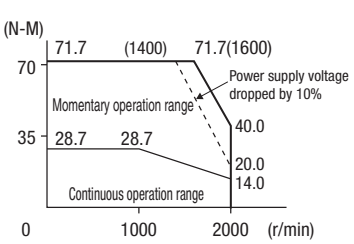
R88M-K90010H/T/F/C



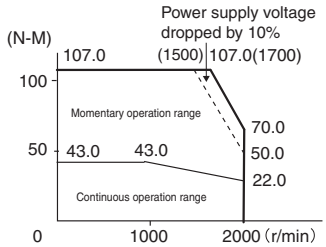

R88M-K2K010F/C



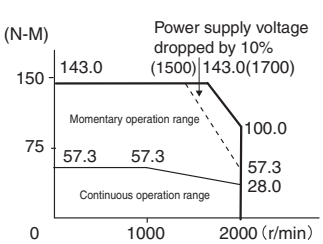

R88M-K3K010F/C




R88M-K4K510C




R88M-K6K010C



## High inertia servo motors 3000 r/min, 230 V

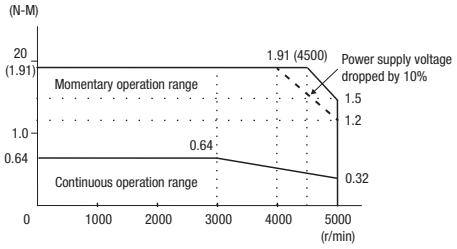
### Ratings and specifications

| Voltage | | | 230 V | | |
|---|---|---|---|---|---|
| **Servo motor model R88M-KH□** | | **20-bit incremental encoder** | **20030H-□** | **40030H-□** | **75030H-□** |
| | | **17-bit absolute encoder** | **20030T-□** | **40030T-□** | **75030T-□** |
| Rated output | | W | 200 | 400 | 750 |
| Rated torque | | N·m | 0.64 | 1.3 | 2.4 |
| Instantaneous peak torque | | N·m | 1.91 | 3.8 | 7.1 |
| Rated current | | A (rms) | 1.6 | 2.6 | 4.0 |
| Instantaneous max. current | | A (rms) | 6.9 | 11.0 | 17.0 |
| Rated speed | | $min^{-1}$ | 3000 | | |
| Max. speed | | $min^{-1}$ | 5000 | | 4500 |
| Torque constant | | N·m/A | 0.29±10% | 0.36±10% | 0.45±10% |
| Rotor moment of inertia (JM) | | $kg·m^2×10^{-4}$ (without brake) | 0.42 | 0.67 | 1.51 |
| | | $kg·m^2×10^{-4}$ (with brake) | 0.45 | 0.70 | 1.61 |
| Allowable load moment of inertia (JL) | | Multiple of (JM) | 30 *1 | | 20 *1 |
| Rated power rate | | kW/s (without brake) | 9.58 | 24.1 | 37.7 |
| | | kW/s (with brake) | 9.06 | 23.3 | 35.3 |
| Allowable radial load | | N | 245 | | 392 |
| Allowable thrust load | | N | 98 | | 147 |
| Approx. mass | | kg (without brake) | 0.96 | 1.4 | 2.5 |
| | | kg (with brake) | 1.4 | 1.8 | 3.3 |
| Brake specifications | Rated voltage | | 24 VDC ±5% | | |
| | Holding brake moment of inertia J | $kg·m^2×10^{-4}$ | 0.018 | | 0.075 |
| | Power consumption (at 20°C) | W | 9 | | 10 |
| | Current consumption (at 20°C) | A | 0.36 | | 0.42 |
| | Static friction torque | N.m (minimum) | 1.27 | | 2.45 |
| | Rise time for holding torque | ms (max.) | 50 | | 70 |
| | Release time | ms (max) | 15 | | 20 |
| Basic specifications | Time Rating | | Continuous | | |
| | Insulation class | | Type B | | |
| | Ambient operating/ storage temperature | | 0 to +40°C/–20 to 65°C | | |
| | Ambient operating/ storage humidity | | 20% to 85% RH (non-condensing) | | |
| | Vibration class | | V-15 | | |
| | Insulation resistance | | 20 MΩ min. at 500 VDC between the power terminals and FG terminal | | |
| | Enclosure | | Totally-enclosed, self-cooling, IP65 (excluding shaft opening and lead wire ends) | | |
| | Vibration resistance | | Vibration acceleration 49 $m/s^2$ | | |
| | Mounting | | Flange-mounted | | |

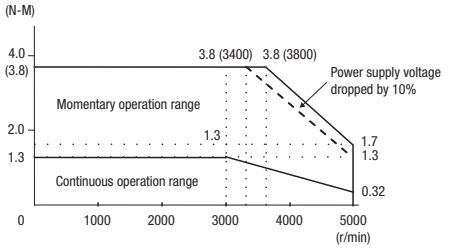
*1 Applicable load inertia: The operable load inertia ratio (load inertia/rotor inertia) depends on the mechanical configuration and its rigidity. For a machine with high rigidity, operation is possible even with high load inertia. Select an appropriate motor and confirm that operation is possible.

### Torque-speed characteristics

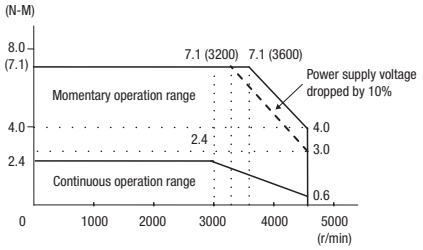
R88M-KH20030H/T (230 V, 200 W)




R88M-KH40030H/T (230 V, 400 W)




R88M-KH75030H/T (230 V, 750 W)



## High inertia servo motors 2000 and 1500 r/min, 400 V

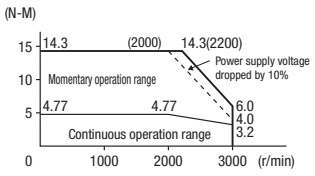
### Ratings and specifications

| R/min, Voltage | | 2000 r/min, 400 V | | | | | | 1500 r/min, 400 V |
|---|---|---|---|---|---|---|---|---|
| Servo motor model R88M-KH□ | 20-bit incremental encoder | 1K020F-□ | 1K520F-□ | 2K020F-□ | 3K020F-□ | 4K020F-□ | 5K020F-□ | |
| | 17-bit absolute encoder | 1K020C-□ | 1K520C-□ | 2K020C-□ | 3K020C-□ | 4K020C-□ | 5K020C-□ | 7K515C-□ |
| Rated output | W | 1000 | 1500 | 2000 | 3000 | 4000 | 5000 | 7500 |
| Rated torque | N·m | 4.77 | 7.16 | 9.55 | 14.3 | 19.1 | 23.9 | 47.8 |
| Instantaneous peak torque | N·m | 14.3 | 21.5 | 28.6 | 43.0 | 57.3 | 71.6 | 119 |
| Rated current | A (rms) | 2.9 | 4.7 | 5.5 | 8.0 | 10.5 | 13.0 | 22.0 |
| Instantaneous max. current | A (rms) | 12 | 20 | 24 | 34 | 45 | 55 | 83 |
| Rated speed | $min^{-1}$ | 2000 | | | | | | 1500 |
| Max. speed | $min^{-1}$ | 3000 | | | | | | 3000 |
| Torque constant | N·m/A | 1.27 | 1.16 | 1.31 | 1.34 | 1.38 | 1.39 | 1.54 |
| Rotor moment of inertia (JM) | $kg·m^2×10^{-4}$ (without brake) | 24.7 | 37.1 | 57.8 | 90.2 | 112 | 162 | 273 |
| | $kg·m^2×10^{-4}$ (with brake) | 26.0 | 38.4 | 62.9 | 95.3 | 117 | 167 | 279 |
| Max. load moment of inertia (JL) | Multiple of (JM) | 5*1 | | | | | | |
| Rated power rate | kW/s (without brake) | 9.2 | 13.8 | 15.8 | 22.7 | 32.5 | 35.1 | 86.7 |
| | kW/s (with brake) | 8.8 | 13.4 | 14.5 | 21.5 | 31.1 | 34.1 | 85.1 |
| Allowable radial load | N | 490 | | 784 | | | | 1176 |
| Allowable thrust load | N | 196 | | 343 | | | | 490 |
| Approx. mass | kg (without brake) | 6.7 | 8.6 | 12.2 | 16.0 | 18.6 | 23.0 | 42.3 |
| | kg (with brake) | 8.1 | 10.1 | 15.5 | 19.2 | 21.8 | 26.2 | 46.2 |
| Brake specifications: Rated voltage | | 24 VDC ±10% | | | | | | |
| Brake specifications: Holding brake moment of inertia | (J) $kg·m^2×10^{-4}$ | 1.35 | | 4.7 | | | | |
| Brake specifications: Power consumption (20°C) | W | 14 | 19 | 31 | | | | 34 |
| Brake specifications: Current consumption (20°C) | A | 0.59±10% | 0.79±10% | 1.30±10% | | | | 1.40±10% |
| Brake specifications: Static friction torque | N·m (minimum) | 4.9 | 13.7 | 24.5 | | | | 58.8 |
| Brake specifications: Rise time for holding torque | ms (max.) | 80 | 100 | 80 | | | | 150 |
| Brake specifications: Release time | ms (max) | 70 | 50 | 25 | | | | 50 |
| Basic specifications: Time Rating | | Continuous | | | | | | |
| Basic specifications: Insulation class | | Type F | | | | | | |
| Basic specifications: Ambient operating/ storage temperature | | 0 to +40°C/–20 to 65°C | | | | | | |
| Basic specifications: Ambient operating/ storage humidity | | 20% to 85% RH (non-condensing) | | | | | | |
| Basic specifications: Vibration class | | V-15 | | | | | | |
| Basic specifications: Insulation resistance | | 20 MΩ min. at 500 VDC between the power terminals and FG terminal | | | | | | |
| Basic specifications: Enclosure | | Totally-enclosed, self-cooling, IP67 (excluding shaft opening) | | | | | | |
| Basic specifications: Vibration resistance | | Vibration acceleration 49 $m/s^2$ | | | | | | |
| Basic specifications: Mounting | | Flange-mounted | | | | | | |

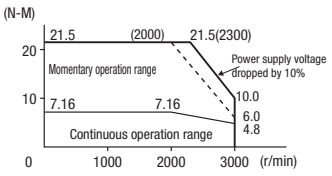
*1 Applicable load inertia: The operable load inertia ratio (load inertia/rotor inertia) depends on the mechanical configuration and its rigidity. For a machine with high rigidity, operation is possible even with high load inertia. Select an appropriate motor and confirm that operation is possible.

### Torque-speed characteristics

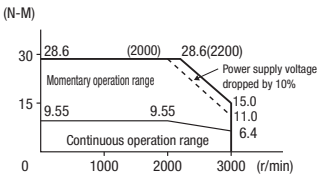
R88M-KH1K020F/C (400 V, 1 kW)



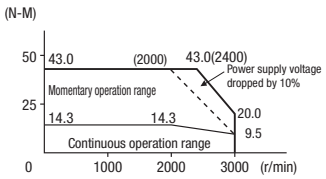

R88M-KH1K520F/C (400 V, 1.5 kW)



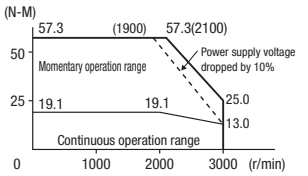

R88M-KH2K020F/C (400 V, 2 kW)



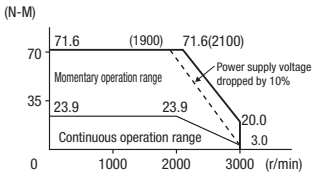

R88M-KH3K020F/C (400 V, 3 kW)



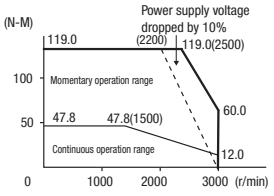

R88M-KH4K020F/C (400 V, 4 kW)




R88M-KH5K020F/C (400 V, 5 kW)




R88M-KH7K515C (7.5 kW)

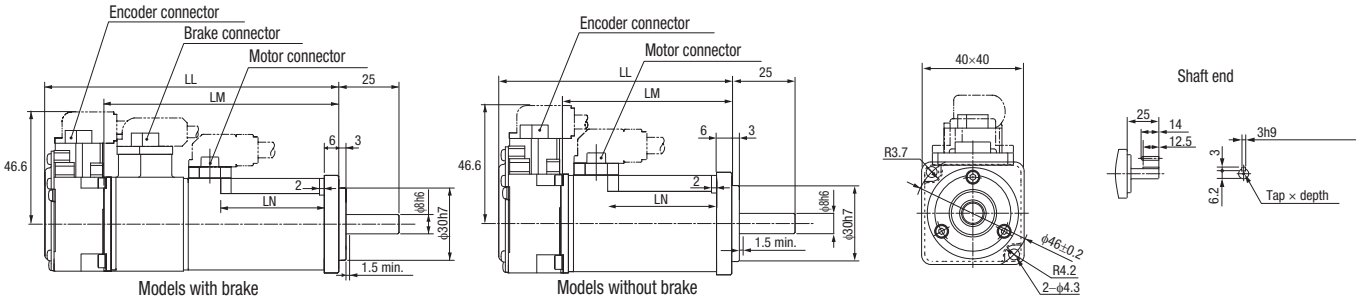


# Dimensions

## Standard servo motors

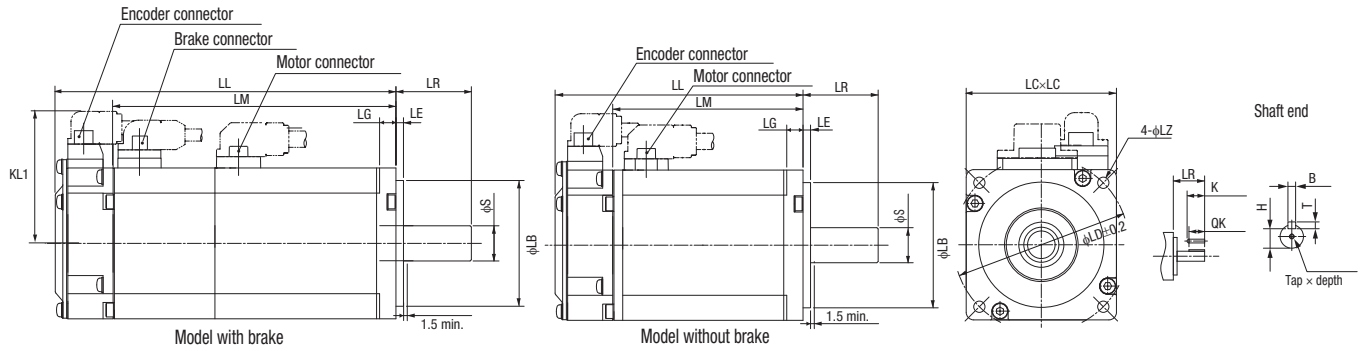
### Type 3000 r/min motors (230 V, 50 to 100 W)

| Dimensions (mm) | Without brake | | With brake | | LN | Shaft end dimensions | Approx. mass (kg) | |
|---|---|---|---|---|---|---|---|---|
| Model | LL | LM | LL | LM | | Tap × Depth | Without brake | With brake |
| R88M-K05030(H/T)-□S2 | 72 | 48 | 102 | 78 | 23 | M3 × 6L | 0.32 | 0.53 |
| R88M-K10030(H/T)-□S2 | 92 | 68 | 122 | 98 | 43 | | 0.47 | 0.68 |



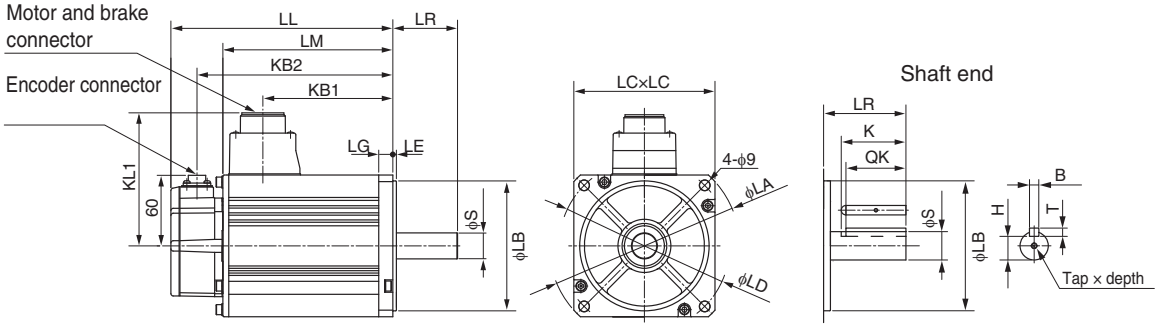

### Type 3000 r/min motors (230 V, 200 to 750 W)

| Dimensions (mm) | Without brake | | | With brake | | | LR | Flange surface | | | | | | Shaft end dimensions | | | | | | | Approx. mass kg | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Model | LL | LM | KL1 | LL | LM | KL1 | | LB | LC | LD | LE | LG | LZ | S | K | QK | H | B | T | Tap × Depth | Without brake | With brake |
| R88M-K20030(H/T)-□S2 | 79.5 | 56.5 | 52.5 | 116 | 93 | 52.5 | 30 | $50^{h7}$ | 60 | 70 | 3 | 6.5 | 4.5 | $11^{h6}$ | 20 | 18 | 8.5 | $4^{h9}$ | 4 | M4 × 8L | 0.82 | 1.3 |
| R88M-K40030(H/T)-□S2 | 99 | 76 | 52.5 | 135.5 | 112.5 | 52.5 | | | | | | | | $14^{h6}$ | 25 | 22.5 | 11 | $5^{h9}$ | 5 | M5 × 10L | 1.2 | 1.7 |
| R88M-K75030(H/T)-□S2 | 112.2 | 86.2 | 60 | 148.2 | 122.2 | 61.6 | 35 | $70^{h7}$ | 80 | 90 | | 8 | 6 | $19^{h6}$ | | 22 | 15.5 | $6^{h9}$ | 6 | | 2.3 | 3.1 |



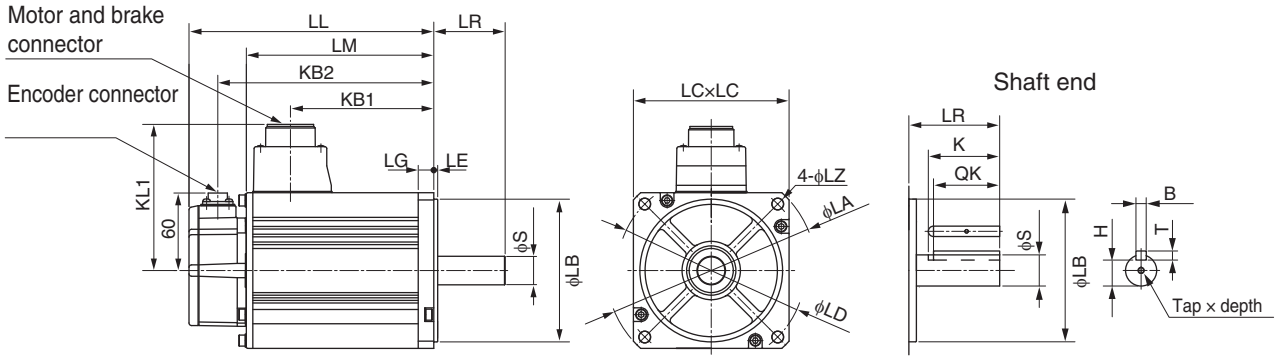

### Type 3000 r/min motors (230 V, 1 to 1.5 kW/400V, 750 W to 5 kW)

| Dimensions (mm) | | Without brake | | | | | With brake | | | | | LR | Flange surface | | | | | | Shaft end dimensions | | | | | | | Approx. Mass (kg) | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Voltage | Model R88M-K□ | LL | LM | KB1 | KB2 | KL1 | LL | LM | KB1 | KB2 | KL1 | | LA | LB | LC | LD | LE | LG | S | Tap × Depth | K | QK | H | B | T | Without brake | With brake |
| 230 | 1K030(H/T)-□S2 | 141 | 97 | 66 | 119 | 101 | 168 | 124 | 66 | 146 | 101 | 55 | 135 | $95^{h7}$ | 100 | 115 | 3 | 10 | $19^{h6}$ | M5 × 12L | 45 | 42 | 15.5 | $6^{h9}$ | 6 | 3.5 | 4.5 |
| | 1K530(H/T)-□S2 | 159.5 | 115.5 | 84.5 | 137.5 | | 186.5 | 142.5 | 84.5 | 164.5 | | | | | | | | | | | | | | | | 4.4 | 5.4 |
| 400 | 75030(F/C)-□S2 | 131.5 | 87.5 | 56.5 | 109.5 | | 158.5 | 114.5 | 53.5 | 136.5 | 103 | | | | | | | | | | | | | | | 3.1 | 4.1 |
| | 1K030(F/C)-□S2 | 141 | 97 | 66 | 119 | | 168 | 124 | 63 | 146 | | | | | | | | | | | | | | | | 3.5 | 4.5 |
| | 1K530(F/C)-□S2 | 159.5 | 115.5 | 84.5 | 137.5 | | 186.5 | 142.5 | 81.5 | 164.5 | | | | | | | | | | | | | | | | 4.4 | 5.4 |
| | 2K030(F/C)-□S2 | 178.5 | 134.5 | 103.5 | 156.5 | | 205.5 | 161.5 | 100.5 | 183.5 | | | | | | | | | | | | | | | | 5.3 | 6.3 |
| | 3K030(F/C)-□S2 | 190 | 146 | 112 | 168 | 113 | 215 | 171 | 112 | 193 | 113 | | 162 | $110^{h7}$ | 120 | 145 | | 12 | $22^{h6}$ | | | 41 | 18 | $8^{h9}$ | 7 | 8.3 | 9.4 |
| | 4K030(F/C)-□S2 | 208 | 164 | 127 | 186 | 118 | 233 | 189 | 127 | 211 | 118 | 65 | 165 | | 130 | | 6 | | $24^{h6}$ | M8 × 20L | 55 | 51 | 20 | | | 11 | 12.6 |
| | 5K030(F/C)-□S2 | 243 | 199 | 162 | 221 | | 268 | 224 | 162 | 246 | | | | | | | | | | | | | | | | 14 | 16 |



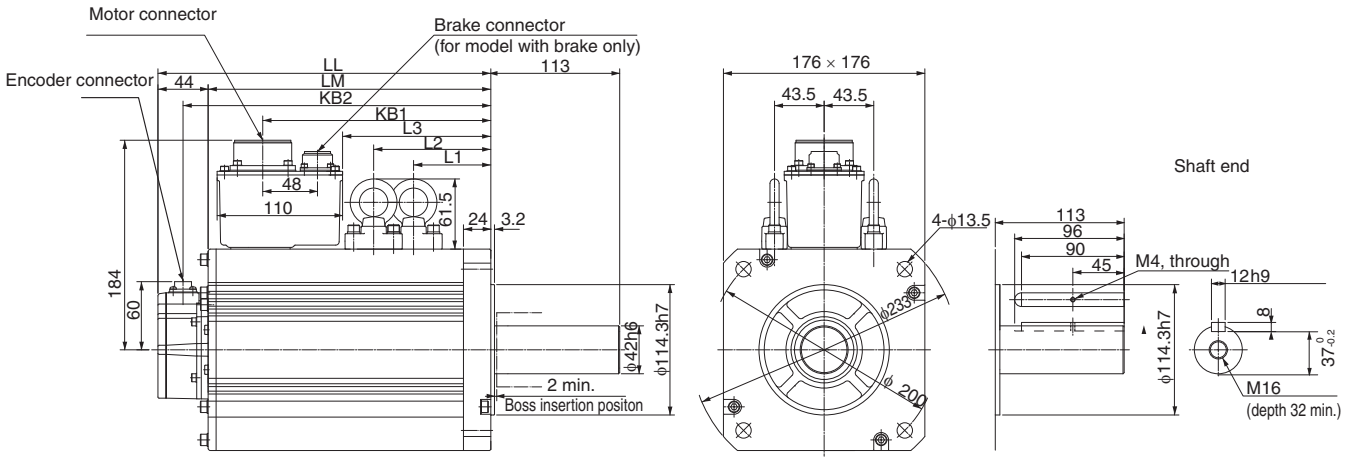
## Type 2000 r/min motors (230 V, 1 to 1.5 kW /400 V, 400 W to 5 kW)

| Dimensions (mm) | | Without brake | | | | | With brake | | | | | LR | Flange surface | | | | | | | Shaft end dimensions | | | | | | | Approx. mass (kg) | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Voltage | Model R88M-K□ | LL | LM | KB1 | KB2 | KL1 | LL | LM | KB1 | KB2 | KL1 | | LA | LB | LC | LD | LE | LG | LZ | S | Tap × Depth | K | QK | H | B | T | Without brake | With brake |
| 230 | 1K020(H/T)-□S2 | 138 | 94 | 60 | 116 | 116 | 163 | 119 | 60 | 141 | 116 | 55 | 165 | $110^{h7}$ | 130 | 145 | 6 | 12 | 9 | $22^{h6}$ | M5 × 12L | 45 | 41 | 18 | $8^{h9}$ | 7 | 5.2 | 6.7 |
| | 1K520(H/T)-□S2 | 155.5 | 111.5 | 77.5 | 133.5 | | 180.5 | 136.5 | 77.5 | 158.5 | | | | | | | | | | | | | | | | | 6.7 | 8.2 |
| 400 | 40020(F/C)-□S2 | 131.5 | 87.5 | 56.5 | 109.5 | 101 | 158.5 | 114.5 | 53.5 | 136.5 | 103 | | 135 | $95^{h7}$ | 100 | 115 | 3 | 10 | | $19^{h6}$ | | | 42 | 15.5 | $6^{h9}$ | 6 | 3.1 | 4.1 |
| | 60020(F/C)-□S2 | 141 | 97 | 66 | 119 | | 168 | 124 | 63 | 146 | | | | | | | | | | | | | | | | | 3.5 | 4.5 |
| | 1K020(F/C)-□S2 | 138 | 94 | 60 | 116 | 116 | 163 | 119 | 57 | 141 | 118 | | 165 | $110^{h7}$ | 130 | 145 | 6 | 12 | | $22^{h6}$ | | | 41 | 18 | $8^{h9}$ | 7 | 5.2 | 6.7 |
| | 1K520(F/C)-□S2 | 155.5 | 111.5 | 77.5 | 133.5 | | 180.5 | 136.5 | 74.5 | 158.5 | | | | | | | | | | | | | | | | | 6.7 | 8.2 |
| | 2K020(F/C)-□S2 | 173 | 129 | 95 | 151 | | 198 | 154 | 92 | 176 | | | | | | | | | | | | | | | | | 8 | 9.5 |
| | 3K020(F/C)-□S2 | 208 | 164 | 127 | 186 | 118 | 233 | 189 | 127 | 211 | | 65 | | | | | | | | $24^{h6}$ | M8 × 20L | 55 | 51 | 20 | | | 11 | 12.6 |
| | 4K020(F/C)-□S2 | 177 | 133 | 96 | 155 | 140 | 202 | 158 | 96 | 180 | 140 | 70 | 233 | $114.3^{h7}$ | 176 | 200 | 3.2 | 18 | 13.5 | $35^{h6}$ | M12 × 25L | | 50 | 30 | $10^{h9}$ | 8 | 15.5 | 18.7 |
| | 5K020(F/C)-□S2 | 196 | 152 | 115 | 174 | | 221 | 177 | 115 | 199 | | | | | | | | | | | | | | | | | 18.6 | 21.8 |



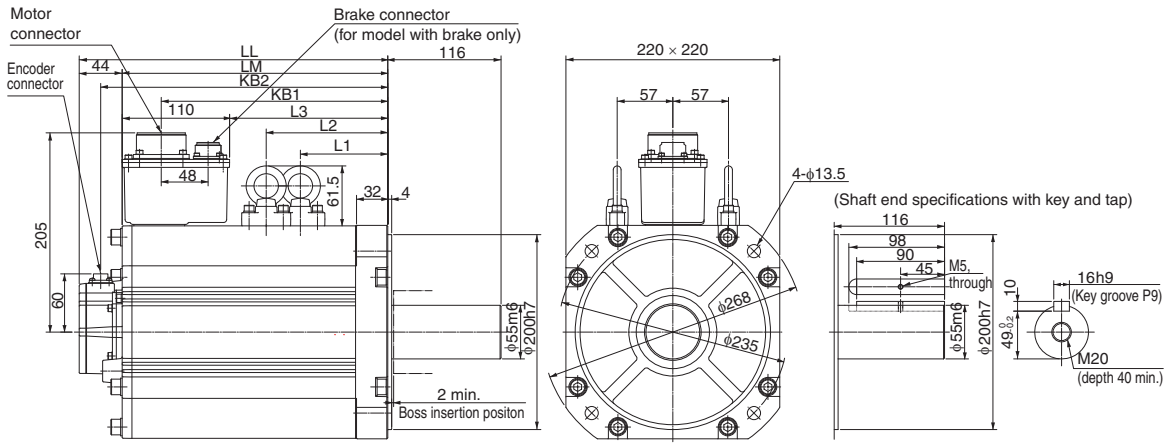

## Type 1500 r/min motors (400 V, 7.5kW)

| Dimensions (mm) | | Without brake | | | | | | | With brake | | | | | | | Approx. mass (kg) | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Voltage | Model R88M-K□ | LL | LM | KB1 | KB2 | L1 | L2 | L3 | LL | LM | KB1 | KB2 | L1 | L2 | L3 | Without brake | With brake |
| 400 | 7K515C-□S2 | 312 | 268 | 219 | 290 | 117.5 | 117.5 | 149 | 337 | 293 | 253 | 315 | 117.5 | 152.5 | 183 | 36.4 | 40.4 |



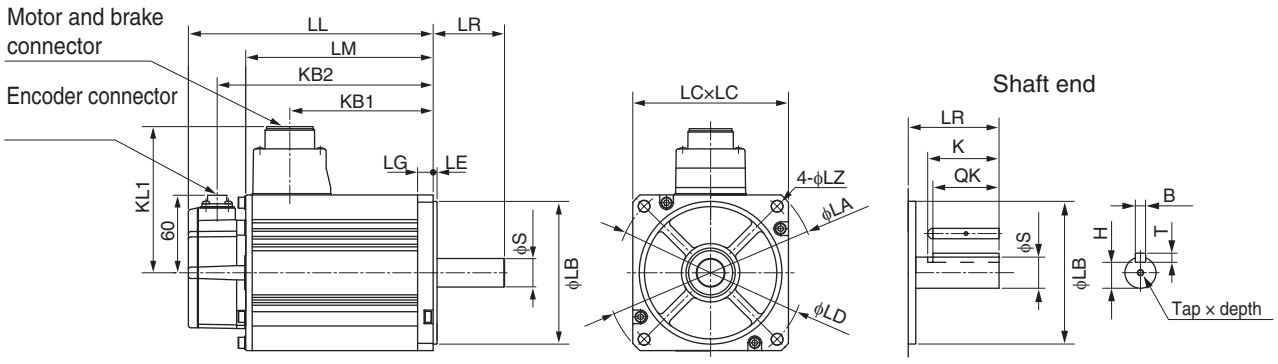
## Type 1500 r/min motors (400 V, 11 to 15 kW)

| Dimensions (mm) | | Without brake | | | | | | | With brake | | | | | | | Approx. Mass (kg) | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Voltage | Model R88M-K□ | LL | LM | KB1 | KB2 | L1 | L2 | L3 | LL | LM | KB1 | KB2 | L1 | L2 | L3 | Without brake | With brake |
| 400 | 11K015C-□S2 | 316 | 272 | 232 | 294 | 124.5 | 124.5 | 162 | 364 | 320 | 266 | 342 | 124.5 | 159.5 | 196 | 52.7 | 58.9 |
| | 15K015C-□S2 | 384 | 340 | 300 | 362 | 158.5 | 158.5 | 230 | 432 | 388 | 334 | 410 | 158.5 | 193.5 | 264 | 70.2 | 76.3 |



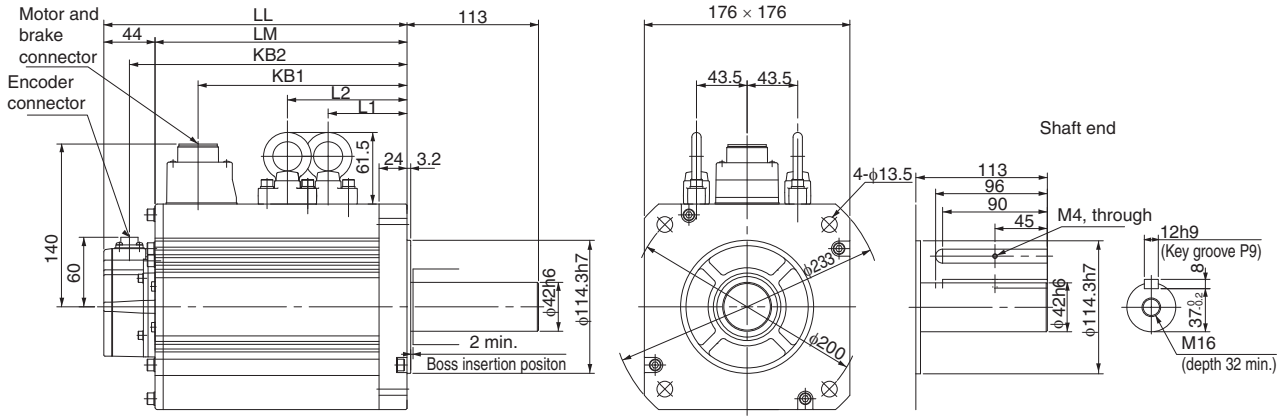

## Type 1000 r/min motors (230 V, 900W/400 V, 900 W to 3 kW)

| Dimensions (mm) | | Without brake | | | | | With brake | | | | | LR | Flange surface | | | | | | | Shaft end dimensions | | | | | | | Approx. mass (kg) | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Voltage | Model R88M-K□ | LL | LM | KB1 | KB2 | KL1 | LL | LM | KB1 | KB2 | KL1 | | LA | LB | LC | LD | LE | LG | LZ | S | Tap × Depth | K | QK | H | B | T | Without brake | With brake |
| 230 | 90010(H/T)-□S2 | 155.5 | 111.5 | 77.5 | 133.5 | 116 | 180.5 | 136.5 | 77.5 | 158.5 | 116 | 70 | 165 | $110^{h7}$ | 130 | 145 | 6 | 12 | 9 | $22^{h6}$ | M5 × 12L | 45 | 41 | 18 | $8^{h9}$ | 7 | 6.7 | 8.2 |
| 400 | 90010(F/C)-□S2 | | | | | | | | 74.5 | | 118 | | | | | | | | | | | | | | | | | |
| | 2K010(F/C)-□S2 | 163.5 | 119.5 | 82.5 | 141.5 | 140 | 188.5 | 144.5 | 82.5 | 166.5 | 140 | 80 | 233 | $114.3^{h7}$ | 176 | 200 | 3.2 | 18 | 13.5 | $35^{h6}$ | M12 × 25L | 55 | 50 | 30 | $10^{h9}$ | 8 | 14 | 17.5 |
| | 3K010(F/C)-□S2 | 209.5 | 165.5 | 128.5 | 187.5 | | 234.5 | 190.5 | 128.5 | 212.5 | | | | | | | | | | | | | | | | | 20 | 23.5 |



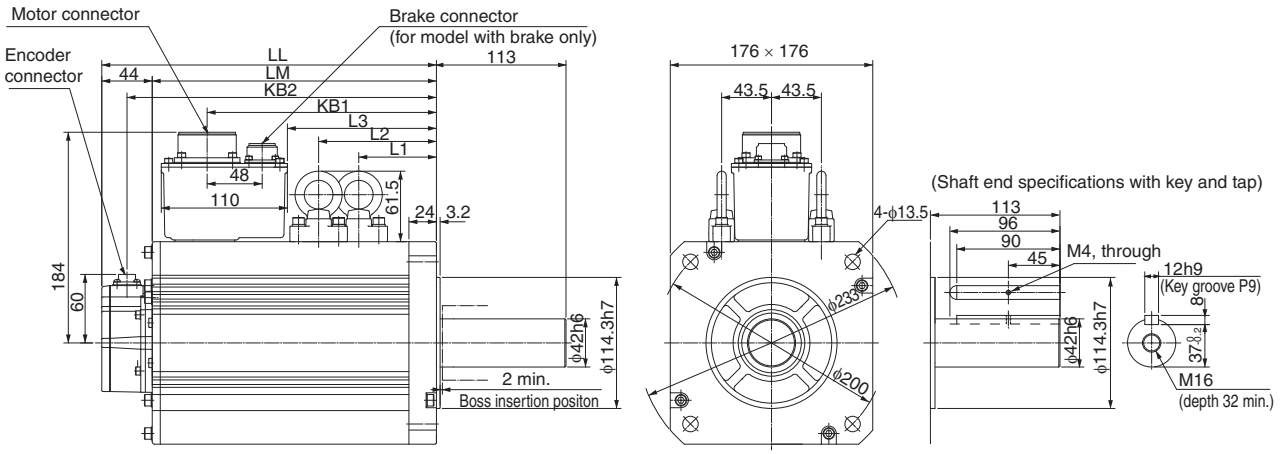
## Type 1000 r/min motors (400 V, 4.5 kW)

| Dimensions (mm) | | Without brake | | | | | | With brake | | | | | | Approx. mass (kg) | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Voltage | Model<br>R88M-K□ | LL | LM | KB1 | KB2 | L1 | L2 | LL | LM | KB1 | KB2 | L1 | L2 | Without brake | With brake |
| 400 | 4K510C-□S2 | 266 | 222 | 185 | 244 | 98 | 98 | 291 | 247 | 185 | 269 | 98 | 133 | 29.4 | 33.3 |




## Type 1000 r/min motors (400 V, 6 kW)

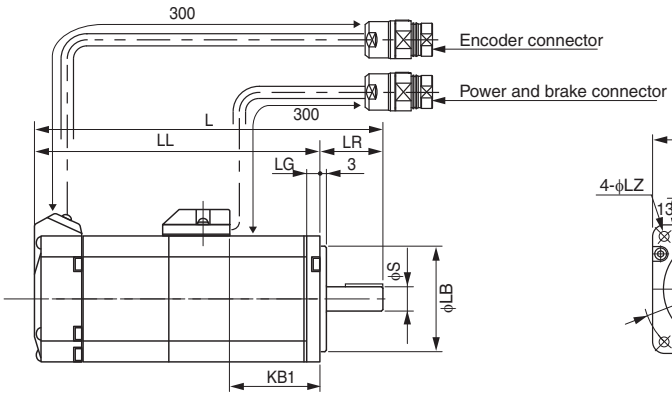
| Dimensions (mm) | | Without brake | | | | | | | With brake | | | | | | | Approx. mass (kg) | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Voltage | Model<br>R88M-K□ | LL | LM | KB1 | KB2 | L1 | L2 | L3 | LL | LM | KB1 | KB2 | L1 | L2 | L3 | Without brake | With brake |
| 400 | 6K010C-□S2 | 312 | 268 | 219 | 290 | 117.5 | 117.5 | 149 | 337 | 293 | 253 | 315 | 117.5 | 152.5 | 183 | 36.4 | 40.4 |

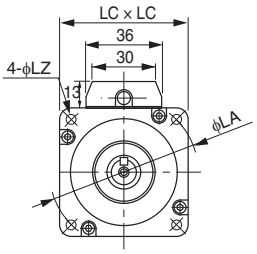


## High inertia servo motors

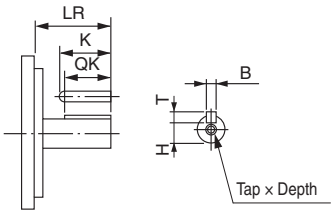
### Type 3000 r/min motors (230 V, 200 W to 750 W)

| Dimensions (mm) | | Without brake | | With brake | | KB1 | LR | Flange surface | | | | | Shaft end dimensions | | | | | | | Approx. mass (kg) | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Voltage | Model<br>R88M-KH□ | L | LL | L | LL | | | LA | LB | LC | LG | LZ | S | Tap x Depth | K | QK | H | B | T | Without brake | With brake |
| 230 | 20030(H/T)-□S2-D | 129 | 99 | 165.5 | 135.5 | 42 | 30 | 70 | $50^{h7}$ | 60 | 6.5 | 4.5 | $11^{h6}$ | M4x8L | 20 | 18 | 8.5 | $4^{h9}$ | 4 | 0.96 | 1.4 |
| | 40030(H/T)-□S2-D | 148.5 | 118.5 | 185 | 155 | 61.5 | | | | | | | $14^{h6}$ | M5x10L | 25 | 22.5 | 11 | $5^{h9}$ | 5 | 1.4 | 1.8 |
| | 75030(H/T)-□S2-D | 162.2 | 127.2 | 199.2 | 164.2 | 67.2 | 35 | 90 | $70^{h7}$ | 80 | 8 | 6 | $19^{h6}$ | M5x10L | 25 | 22 | 15.5 | $6^{h9}$ | 6 | 2.5 | 3.3 |




(Dimensions of shaft end with key and tap)




Encoder connector wiring

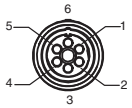
Cable length 300±30
Connector optional
Made by Hypertac
SRUC-17G-MRWN040 (MALE)

| Encoder connector | |
|---|---|
| Pin No. | Signal |
| 1 | BAT - (0 V) |
| 2 | BAT + |
| 3 | S + |
| 4 | S - |
| 5 to 7 | Free |
| 8 | E5V (power supply) |
| 9 | E0V (power supply) |
| 10 to 17 | Free |
| Connector case | FG (Ground) |

*Note: Pins 1 and 2 used only for motors with ABS encoder.

Mating connector:
Plug type: SPOC-17H-FRON169 (FEMALE)

Power and brake connector wiring




Cable length 300±30
Connector optional
Made by Hypertac
SRUC-06J-MSCN236 (MALE)

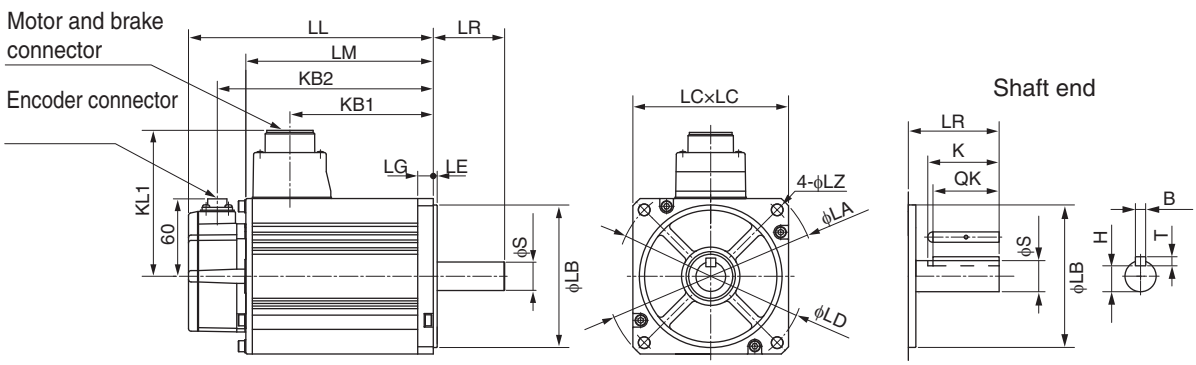
| Power and brake connector | |
|---|---|
| Pin No. | Output |
| 1 | Phase U |
| 2 | Phase V |
| 3 | Phase W |
| 4 | *Brake terminal |
| 5 | *Brake terminal |
| 6 | FG (ground) |

*Note: Pins 4 and 5 used only for motors with brake.

Mating connector:
Plug type: SPOC-06K-FSDN169 (FEMALE)

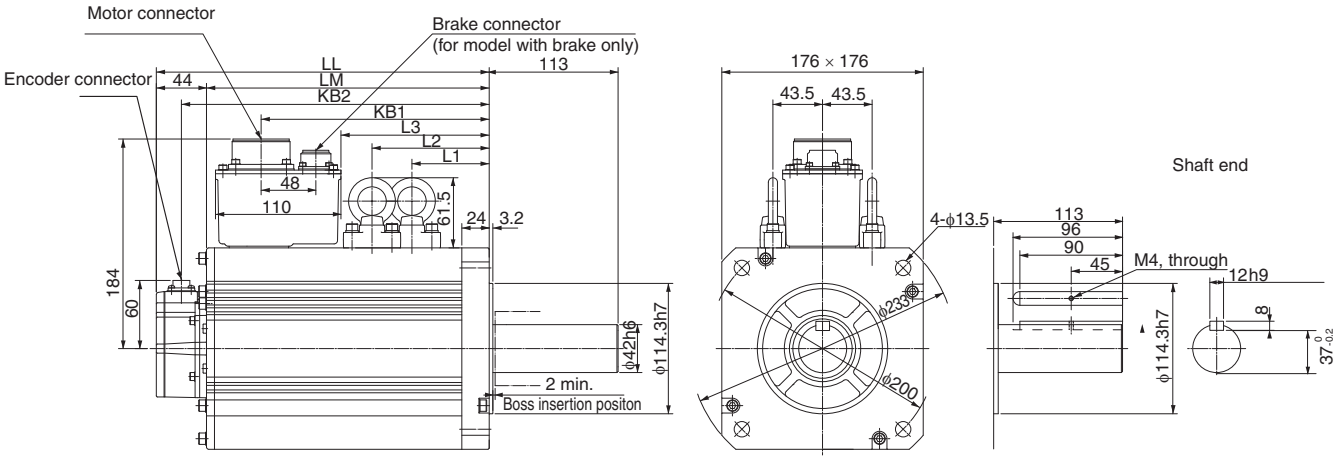
### Type 2000 r/min motors (400 V, 1 kW to 5 kW)

| Dimensions (mm) | | Without brake | | | | | With brake | | | | | LR | Flange surface | | | | | | | Shaft end dimensions | | | | | | Approx. mass (kg) | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Voltage | Model<br>R88M-KH□ | LL | LM | KB1 | KB2 | KL1 | LL | LM | KB1 | KB2 | KL1 | | LA | LB | LC | LD | LE | LG | LZ | S | K | QK | H | B | T | Without brake | With brake |
| 400 | 1K020(F/C)-□S1 | 173 | 129 | 95 | 151 | 116 | 201 | 157 | 92 | 179 | 118 | 70 | 165 | $110^{h7}$ | 130 | 145 | 6 | 12 | 9 | $22^{h6}$ | 45 | 41 | 18 | $8^{h9}$ | 7 | 6.7 | 8.1 |
| | 1K520(F/C)-□S1 | 190.5 | 146.5 | 112.5 | 168.5 | | 218.5 | 174.5 | 109.5 | 196.5 | | | | | | | | | | | | | | | | 8.6 | 10.1 |
| | 2K020(F/C)-□S1 | 177 | 133 | 96 | 155 | 140 | 206 | 162 | 96 | 184 | 140 | 80 | 233 | $114.3^{h7}$ | 176 | 200 | 3.2 | 18 | 13.5 | $35^{h6}$ | 55 | 50 | 30 | $10^{h9}$ | 8 | 12.2 | 15.5 |
| | 3K020(F/C)-□S1 | 196 | 152 | 115 | 174 | | 225 | 181 | 115 | 203 | | | | | | | | | | | | | | | | 16.0 | 19.2 |
| | 4K020(F/C)-□S1 | 209.5 | 165.5 | 128.5 | 187.5 | | 238.5 | 194.5 | 128.5 | 216.5 | | | | | | | | | | | | | | | | 18.6 | 21.8 |
| | 5K020(F/C)-□S1 | 238.5 | 194.5 | 157.5 | 216.5 | | 267.5 | 223.5 | 157.5 | 245.5 | | | | | | | | | | | | | | | | 23.0 | 26.2 |



## Type 1500 r/min motors (400 V, 7.5 kW)

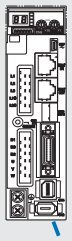
| Dimensions (mm) | | Without brake | | | | | | | With brake | | | | | | | Approx. mass (kg) | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Voltage | Model<br>R88M-KH□ | LL | LM | KB1 | KB2 | L1 | L2 | L3 | LL | LM | KB1 | KB2 | L1 | L2 | L3 | Without brake | With brake |
| 400 | 7K515C-□S1 | 357 | 313 | 264 | 335 | 146.5 | 146.5 | 194 | 382 | 338 | 298 | 360 | 146.5 | 181.5 | 228 | 42.3 | 46.2 |



## Ordering information

(Refer to servo drive chapter)

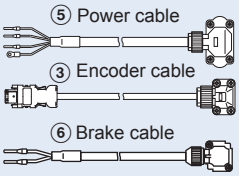
② Drive options

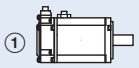


**Accurax G5 servo drive**
EtherCAT, ML2 and
Analogue/pulse models

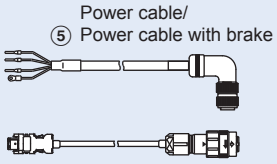
④ Extension cable for absolute encoder (with battery holder)

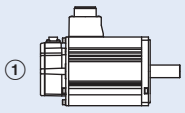
**Standard servo motors**



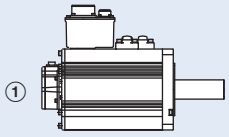




3000 rpm (50 W to 750 W)



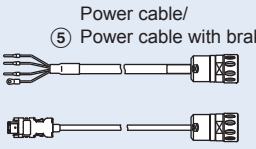



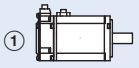

3000 rpm (750 W to 5 kW)
2000 rpm (400 W to 5 kW)
1000 rpm (900 W to 3 kW)



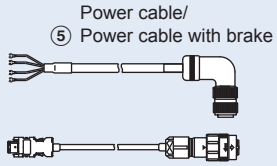

1500 rpm (7.5 kW to 15 kW)
1000 rpm (4.5 kW to 6 kW)

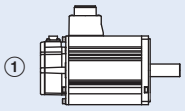
**High inertia servo motors**



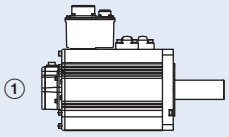




3000 rpm (200 W to 750 W)




2000 rpm (1 kW to 5 kW)




1500 rpm (7.5 kW)

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

**Servo motor**

① Select motor from R88M-K or R88M-KH families using motor tables in next pages.

**Servo drive**

② Refer to Accurax G5 servo drive chapter for detailed drive specifications and selection of drive accessories.

## Standard servo motors

### Servo motors 3000 r/min (50 to 5000 W)

| Symbol | Specifications | | | | | Servo motor model | Compatible servo drives ② | |
|---|---|---|---|---|---|---|---|---|
| | Voltage | Encoder and design | | Rated torque | Capacity | | G5 EtherCAT/ ML2 | G5 Analog/pulse |
| ① 230V (50 to 750 W) 230 V (1 kW to 1.5 kW) 400 V (750 W to 5 kW) | 230 V | **Incremental encoder (20 bit)** Straight shaft with key and tap | Without brake | 0.16 Nm | 50 W | R88M-K05030H-S2 | R88D-KN01H-□ | R88D-KT01H |
| | | | | 0.32 Nm | 100 W | R88M-K10030H-S2 | R88D-KN01H-□ | R88D-KT01H |
| | | | | 0.64 Nm | 200 W | R88M-K20030H-S2 | R88D-KN02H-□ | R88D-KT02H |
| | | | | 1.3 Nm | 400 W | R88M-K40030H-S2 | R88D-KN04H-□ | R88D-KT04H |
| | | | | 2.4 Nm | 750 W | R88M-K75030H-S2 | R88D-KN08H-□ | R88D-KT08H |
| | | | | 3.18 Nm | 1000 W | R88M-K1K030H-S2 | R88D-KN15H-□ | R88D-KT15H |
| | | | | 4.77 Nm | 1500 W | R88M-K1K530H-S2 | R88D-KN15H-□ | R88D-KT15H |
| | | | With brake | 0.16 Nm | 50 W | R88M-K05030H-BS2 | R88D-KN01H-□ | R88D-KT01H |
| | | | | 0.32 Nm | 100 W | R88M-K10030H-BS2 | R88D-KN01H-□ | R88D-KT01H |
| | | | | 0.64 Nm | 200 W | R88M-K20030H-BS2 | R88D-KN02H-□ | R88D-KT02H |
| | | | | 1.3 Nm | 400 W | R88M-K40030H-BS2 | R88D-KN04H-□ | R88D-KT04H |
| | | | | 2.4 Nm | 750 W | R88M-K75030H-BS2 | R88D-KN08H-□ | R88D-KT08H |
| | | | | 3.18 Nm | 1000 W | R88M-K1K030H-BS2 | R88D-KN15H-□ | R88D-KT15H |
| | | | | 4.77 Nm | 1500 W | R88M-K1K530H-BS2 | R88D-KN15H-□ | R88D-KT15H |
| | | **Absolute encoder (17 bit)** Straight shaft with key and tap | Without brake | 0.16 Nm | 50 W | R88M-K05030T-S2 | R88D-KN01H-□ | R88D-KT01H |
| | | | | 0.32 Nm | 100 W | R88M-K10030T-S2 | R88D-KN01H-□ | R88D-KT01H |
| | | | | 0.64 Nm | 200 W | R88M-K20030T-S2 | R88D-KN02H-□ | R88D-KT02H |
| | | | | 1.3 Nm | 400 W | R88M-K40030T-S2 | R88D-KN04H-□ | R88D-KT04H |
| | | | | 2.4 Nm | 750 W | R88M-K75030T-S2 | R88D-KN08H-□ | R88D-KT08H |
| | | | | 3.18 Nm | 1000 W | R88M-K1K030T-S2 | R88D-KN15H-□ | R88D-KT15H |
| | | | | 4.77 Nm | 1500 W | R88M-K1K530T-S2 | R88D-KN15H-□ | R88D-KT15H |
| | | | With brake | 0.16 Nm | 50 W | R88M-K05030T-BS2 | R88D-KN01H-□ | R88D-KT01H |
| | | | | 0.32 Nm | 100 W | R88M-K10030T-BS2 | R88D-KN01H-□ | R88D-KT01H |
| | | | | 0.64 Nm | 200 W | R88M-K20030T-BS2 | R88D-KN02H-□ | R88D-KT02H |
| | | | | 1.3 Nm | 400 W | R88M-K40030T-BS2 | R88D-KN04H-□ | R88D-KT04H |
| | | | | 2.4 Nm | 750 W | R88M-K75030T-BS2 | R88D-KN08H-□ | R88D-KT08H |
| | | | | 3.18 Nm | 1000 W | R88M-K1K030T-BS2 | R88D-KN15H-□ | R88D-KT15H |
| | | | | 4.77 Nm | 1500 W | R88M-K1K530T-BS2 | R88D-KN15H-□ | R88D-KT15H |
| | 400 V | **Incremental encoder (20 bit)** Straight shaft with key and tap | Without brake | 2.39 Nm | 750 W | R88M-K75030F-S2 | R88D-KN10F-□ | R88D-KT10F |
| | | | | 3.18 Nm | 1000 W | R88M-K1K030F-S2 | R88D-KN15F-□ | R88D-KT15F |
| | | | | 4.77 Nm | 1500 W | R88M-K1K530F-S2 | R88D-KN15F-□ | R88D-KT15F |
| | | | | 6.37 Nm | 2000 W | R88M-K2K030F-S2 | R88D-KN20F-□ | R88D-KT20F |
| | | | | 9.55 Nm | 3000 W | R88M-K3K030F-S2 | R88D-KN30F-□ | R88D-KT30F |
| | | | | 12.7 Nm | 4000 W | R88M-K4K030F-S2 | R88D-KN50F-□ | R88D-KT50F |
| | | | | 15.9 Nm | 5000 W | R88M-K5K030F-S2 | R88D-KN50F-□ | R88D-KT50F |
| | | | With brake | 2.39 Nm | 750 W | R88M-K75030F-BS2 | R88D-KN10F-□ | R88D-KT10F |
| | | | | 3.18 Nm | 1000 W | R88M-K1K030F-BS2 | R88D-KN15F-□ | R88D-KT15F |
| | | | | 4.77 Nm | 1500 W | R88M-K1K530F-BS2 | R88D-KN15F-□ | R88D-KT15F |
| | | | | 6.37 Nm | 2000 W | R88M-K2K030F-BS2 | R88D-KN20F-□ | R88D-KT20F |
| | | | | 9.55 Nm | 3000 W | R88M-K3K030F-BS2 | R88D-KN30F-□ | R88D-KT30F |
| | | | | 12.7 Nm | 4000 W | R88M-K4K030F-BS2 | R88D-KN50F-□ | R88D-KT50F |
| | | | | 15.9 Nm | 5000 W | R88M-K5K030F-BS2 | R88D-KN50F-□ | R88D-KT50F |
| | | **Absolute encoder (17 bit)** Straight shaft with key and tap | Without brake | 2.39 Nm | 750 W | R88M-K75030C-S2 | R88D-KN10F-□ | R88D-KT10F |
| | | | | 3.18 Nm | 1000 W | R88M-K1K030C-S2 | R88D-KN15F-□ | R88D-KT15F |
| | | | | 4.77 Nm | 1500 W | R88M-K1K530C-S2 | R88D-KN15F-□ | R88D-KT15F |
| | | | | 6.37 Nm | 2000 W | R88M-K2K030C-S2 | R88D-KN20F-□ | R88D-KT20F |
| | | | | 9.55 Nm | 3000 W | R88M-K3K030C-S2 | R88D-KN30F-□ | R88D-KT30F |
| | | | | 12.7 Nm | 4000 W | R88M-K4K030C-S2 | R88D-KN50F-□ | R88D-KT50F |
| | | | | 15.9 Nm | 5000 W | R88M-K5K030C-S2 | R88D-KN50F-□ | R88D-KT50F |
| | | | With brake | 2.39 Nm | 750 W | R88M-K75030C-BS2 | R88D-KN10F-□ | R88D-KT10F |
| | | | | 3.18 Nm | 1000 W | R88M-K1K030C-BS2 | R88D-KN15F-□ | R88D-KT15F |
| | | | | 4.77 Nm | 1500 W | R88M-K1K530C-BS2 | R88D-KN15F-□ | R88D-KT15F |
| | | | | 6.37 Nm | 2000 W | R88M-K2K030C-BS2 | R88D-KN20F-□ | R88D-KT20F |
| | | | | 9.55 Nm | 3000 W | R88M-K3K030C-BS2 | R88D-KN30F-□ | R88D-KT30F |
| | | | | 12.7 Nm | 4000 W | R88M-K4K030C-BS2 | R88D-KN50F-□ | R88D-KT50F |
| | | | | 15.9 Nm | 5000 W | R88M-K5K030C-BS2 | R88D-KN50F-□ | R88D-KT50F |

## Servo motors 2000 r/min (1 to 5 kW)

| Symbol | Specifications | | | | | Servo motor model | Compatible servo drives ② | |
|---|---|---|---|---|---|---|---|---|
| | Voltage | Encoder and design | | Rated torque | Capacity | | G5 EtherCAT/ ML2 | G5 Analog/pulse |
| ① | 230 V | **Incremental encoder (20 bit)** Straight shaft with key and tap | Without brake | 4.77 Nm | 1000 W | R88M-K1K020H-S2 | R88D-KN10H-□ | R88D-KT10H |
| | | | | 7.16 Nm | 1500 W | R88M-K1K520H-S2 | R88D-KN15H-□ | R88D-KT15H |
| | | | With brake | 4.77 Nm | 1000 W | R88M-K1K020H-BS2 | R88D-KN10H-□ | R88D-KT10H |
| | | | | 7.16 Nm | 1500 W | R88M-K1K520H-BS2 | R88D-KN15H-□ | R88D-KT15H |
| | | **Absolute encoder (17 bit)** Straight shaft with key and tap | Without brake | 4.77 Nm | 1000 W | R88M-K1K020T-S2 | R88D-KN10H-□ | R88D-KT10H |
| | | | | 7.16 Nm | 1500 W | R88M-K1K520T-S2 | R88D-KN15H-□ | R88D-KT15H |
| | | | With brake | 4.77 Nm | 1000 W | R88M-K1K020T-BS2 | R88D-KN10H-□ | R88D-KT10H |
| | | | | 7.16 Nm | 1500 W | R88M-K1K520T-BS2 | R88D-KN15H-□ | R88D-KT15H |
| | 400 V | **Incremental encoder (20 bit)** Straight shaft with key and tap | Without brake | 1.91 Nm | 400 W | R88M-K40020F-S2 | R88D-KN06F-□ | R88D-KT06F |
| | | | | 2.86 Nm | 600 W | R88M-K60020F-S2 | R88D-KN06F-□ | R88D-KT06F |
| | | | | 4.77 Nm | 1000 W | R88M-K1K020F-S2 | R88D-KN10F-□ | R88D-KT10F |
| | | | | 7.16 Nm | 1500 W | R88M-K1K520F-S2 | R88D-KN15F-□ | R88D-KT15F |
| | | | | 9.55 Nm | 2000 W | R88M-K2K020F-S2 | R88D-KN20F-□ | R88D-KT20F |
| | | | | 14.3 Nm | 3000 W | R88M-K3K020F-S2 | R88D-KN30F-□ | R88D-KT30F |
| | | | | 19.1 Nm | 4000 W | R88M-K4K020F-S2 | R88D-KN50F-□ | R88D-KT50F |
| | | | | 23.9 Nm | 5000 W | R88M-K5K020F-S2 | R88D-KN50F-□ | R88D-KT50F |
| | | | With brake | 1.91 Nm | 400 W | R88M-K40020F-BS2 | R88D-KN06F-□ | R88D-KT06F |
| | | | | 2.86 Nm | 600 W | R88M-K60020F-BS2 | R88D-KN06F-□ | R88D-KT06F |
| | | | | 4.77 Nm | 1000 W | R88M-K1K020F-BS2 | R88D-KN10F-□ | R88D-KT10F |
| | | | | 7.16 Nm | 1500 W | R88M-K1K520F-BS2 | R88D-KN15F-□ | R88D-KT15F |
| | | | | 9.55 Nm | 2000 W | R88M-K2K020F-BS2 | R88D-KN20F-□ | R88D-KT20F |
| | | | | 14.3 Nm | 3000 W | R88M-K3K020F-BS2 | R88D-KN30F-□ | R88D-KT30F |
| | | | | 19.1 Nm | 4000 W | R88M-K4K020F-BS2 | R88D-KN50F-□ | R88D-KT50F |
| | | | | 23.9 Nm | 5000 W | R88M-K5K020F-BS2 | R88D-KN50F-□ | R88D-KT50F |
| | | **Absolute encoder (17 bit)** Straight shaft with key and tap | Without brake | 1.91 Nm | 400 W | R88M-K40020C-S2 | R88D-KN06F-□ | R88D-KT06F |
| | | | | 2.86 Nm | 600 W | R88M-K60020C-S2 | R88D-KN06F-□ | R88D-KT06F |
| | | | | 4.77 Nm | 1000 W | R88M-K1K020C-S2 | R88D-KN10F-□ | R88D-KT10F |
| | | | | 7.16 Nm | 1500 W | R88M-K1K520C-S2 | R88D-KN15F-□ | R88D-KT15F |
| | | | | 9.55 Nm | 2000 W | R88M-K2K020C-S2 | R88D-KN20F-□ | R88D-KT20F |
| | | | | 14.3 Nm | 3000 W | R88M-K3K020C-S2 | R88D-KN30F-□ | R88D-KT30F |
| | | | | 19.1 Nm | 4000 W | R88M-K4K020C-S2 | R88D-KN50F-□ | R88D-KT50F |
| | | | | 23.9 Nm | 5000 W | R88M-K5K020C-S2 | R88D-KN50F-□ | R88D-KT50F |
| | | | With brake | 1.91 Nm | 400 W | R88M-K40020C-BS2 | R88D-KN06F-□ | R88D-KT06F |
| | | | | 2.86 Nm | 600 W | R88M-K60020C-BS2 | R88D-KN06F-□ | R88D-KT06F |
| | | | | 4.77 Nm | 1000 W | R88M-K1K020C-BS2 | R88D-KN10F-□ | R88D-KT10F |
| | | | | 7.16 Nm | 1500 W | R88M-K1K520C-BS2 | R88D-KN15F-□ | R88D-KT15F |
| | | | | 9.55 Nm | 2000 W | R88M-K2K020C-BS2 | R88D-KN20F-□ | R88D-KT20F |
| | | | | 14.3 Nm | 3000 W | R88M-K3K020C-BS2 | R88D-KN30F-□ | R88D-KT30F |
| | | | | 19.1 Nm | 4000 W | R88M-K4K020C-BS2 | R88D-KN50F-□ | R88D-KT50F |
| | | | | 23.9 Nm | 5000 W | R88M-K5K020C-BS2 | R88D-KN50F-□ | R88D-KT50F |

## Servo motors 1500 r/min (7.5 to 15 KW)

| Symbol | Specifications | | | | | Servo motor model | Compatible servo drives ② | |
|---|---|---|---|---|---|---|---|---|
| | Voltage | Encoder and design | | Rated torque | Capacity | | G5 EtherCAT | G5 Analog/pulse |
| ① | 400 V | **Absolute encoder (17 bit)** Straight shaft with key and tap | Without brake | 47.8 Nm | 7500 W | R88M-K7K515C-S2 | R88D-KN75F-ECT | R88D-KT75F |
| | | | | 70.0 Nm | 11000 W | R88M-K11K015C-S2 | R88D-KN150F-ECT | R88D-KT150F |
| | | | | 95.5 Nm | 15000 W | R88M-K15K015C-S2 | R88D-KN150F-ECT | R88D-KT150F |
| | | | With brake | 47.8 Nm | 7500 W | R88M-K7K515C-BS2 | R88D-KN75F-ECT | R88D-KT75F |
| | | | | 70.0 Nm | 11000 W | R88M-K11K015C-BS2 | R88D-KN150F-ECT | R88D-KT150F |
| | | | | 95.5 Nm | 15000 W | R88M-K15K015C-BS2 | R88D-KN150F-ECT | R88D-KT150F |

## Servo motors 1000 r/min (900 to 6000 W)

| Symbol | Specifications | | | | | Servo motor model | Compatible servo drives ② | |
|---|---|---|---|---|---|---|---|---|
| | Voltage | Encoder and design | | Rated torque | Capacity | | G5 EtherCAT/ML2 | G5 Analog/pulse |
| ① 900 W - 3 kW 4.5 kW - 6 kW | 230 V | **Incremental encoder (20 bit)** Straight shaft with key and tap | No brake | 8.59 Nm | 900 W | R88M-K90010H-S2 | R88D-KN15H-□ | R88D-KT15H |
| | | | With brake | 8.59 Nm | 900 W | R88M-K90010H-BS2 | R88D-KN15H-□ | R88D-KT15H |
| | | **Absolute encoder (17 bit)** Straight shaft with key and tap | No brake | 8.59 Nm | 900 W | R88M-K90010T-S2 | R88D-KN15H-□ | R88D-KT15H |
| | | | With brake | 8.59 Nm | 900 W | R88M-K90010T-BS2 | R88D-KN15H-□ | R88D-KT15H |
| | 400 V | **Incremental encoder (20 bit)** Straight shaft with key and tap | No brake | 8.59 Nm | 900 W | R88M-K90010F-S2 | R88D-KN15F-□ | R88D-KT15F |
| | | | | 19.1 Nm | 2000 W | R88M-K2K010F-S2 | R88D-KN30F-□ | R88D-KT30F |
| | | | | 28.7 Nm | 3000 W | R88M-K3K010F-S2 | R88D-KN50F-□ | R88D-KT50F |
| | | | With brake | 8.59 Nm | 900 W | R88M-K90010F-BS2 | R88D-KN15F-□ | R88D-KT15F |
| | | | | 19.1 Nm | 2000 W | R88M-K2K010F-BS2 | R88D-KN30F-□ | R88D-KT30F |
| | | | | 28.7 Nm | 3000 W | R88M-K3K010F-BS2 | R88D-KN50F-□ | R88D-KT50F |
| | | **Absolute encoder (17 bit)** Straight shaft with key and tap | No brake | 8.59 Nm | 900 W | R88M-K90010C-S2 | R88D-KN15F-□ | R88D-KT15F |
| | | | | 19.1 Nm | 2000 W | R88M-K2K010C-S2 | R88D-KN30F-□ | R88D-KT30F |
| | | | | 28.7 Nm | 3000 W | R88M-K3K010C-S2 | R88D-KN50F-□ | R88D-KT50F |
| | | | | 43.0 Nm | 4500 W | R88M-K4K510C-S2 | R88D-KN50F-□ | R88D-KT50F |
| | | | | 57.3 Nm | 6000 W | R88M-K6K010C-S2 | R88D-KN75F-ECT | R88D-KT75F |
| | | | With brake | 8.59 Nm | 900 W | R88M-K90010C-BS2 | R88D-KN15F-□ | R88D-KT15F |
| | | | | 19.1 Nm | 2000 W | R88M-K2K010C-BS2 | R88D-KN30F-□ | R88D-KT30F |
| | | | | 28.7 Nm | 3000 W | R88M-K3K010C-BS2 | R88D-KN50F-□ | R88D-KT50F |
| | | | | 43.0 Nm | 4500 W | R88M-K4K510C-BS2 | R88D-KN50F-□ | R88D-KT50F |
| | | | | 57.3 Nm | 6000 W | R88M-K6K010C-BS2 | R88D-KN75F-ECT | R88D-KT75F |

### High inertia servo motors

## Servo motors 3000 r/min (200 to 750 W)

| Symbol | Specifications | | | | | Servo motor model | Compatible servo drives ② | |
|---|---|---|---|---|---|---|---|---|
| | Voltage | Encoder and design | | Rated torque | Capacity | | G5 EtherCAT/ ML2 | G5 Analog/pulse |
| ① | 230 V | **Incremental encoder (20 bit)** Straight shaft with key and tap | Without brake | 0.64 Nm | 200 W | R88M-KH20030H-S2-D | R88D-KN02H-□ | R88D-KT02H |
| | | | | 1.3 Nm | 400 W | R88M-KH40030H-S2-D | R88D-KN04H-□ | R88D-KT04H |
| | | | | 2.4 Nm | 750 W | R88M-KH75030H-S2-D | R88D-KN08H-□ | R88D-KT08H |
| | | | With brake | 0.64 Nm | 200 W | R88M-KH20030H-BS2-D | R88D-KN02H-□ | R88D-KT02H |
| | | | | 1.3 Nm | 400 W | R88M-KH40030H-BS2-D | R88D-KN04H-□ | R88D-KT04H |
| | | | | 2.4 Nm | 750 W | R88M-KH75030H-BS2-D | R88D-KN08H-□ | R88D-KT08H |
| | | **Absolute encoder (17 bit)** Straight shaft with key and tap | Without brake | 0.64 Nm | 200 W | R88M-KH20030T-S2-D | R88D-KN02H-□ | R88D-KT02H |
| | | | | 1.3 Nm | 400 W | R88M-KH40030T-S2-D | R88D-KN04H-□ | R88D-KT04H |
| | | | | 2.4 Nm | 750 W | R88M-KH75030T-S2-D | R88D-KN08H-□ | R88D-KT08H |
| | | | With brake | 0.64 Nm | 200 W | R88M-KH20030T-BS2-D | R88D-KN02H-□ | R88D-KT02H |
| | | | | 1.3 Nm | 400 W | R88M-KH40030T-BS2-D | R88D-KN04H-□ | R88D-KT04H |
| | | | | 2.4 Nm | 750 W | R88M-KH75030T-BS2-D | R88D-KN08H-□ | R88D-KT08H |

## Servo motors 2000 r/min (1 to 5 kW)

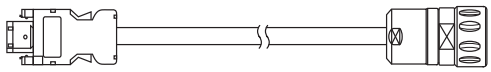
| Symbol | Specifications | | | | | Servo motor model | Compatible servo drives ② | |
|---|---|---|---|---|---|---|---|---|
| | Voltage | Encoder and design | | Rated torque | Capacity | | G5 EtherCAT/ML2 | G5 Analog/pulse |
| ① | 400 V | **Incremental encoder (20 bit)** Shaft end with key | Without brake | 4.77 Nm | 1000 W | R88M-KH1K020F-S1 | R88D-KN10F-□ | R88D-KT10F |
| | | | | 7.16 Nm | 1500 W | R88M-KH1K520F-S1 | R88D-KN15F-□ | R88D-KT15F |
| | | | | 9.55 Nm | 2000 W | R88M-KH2K020F-S1 | R88D-KN20F-□ | R88D-KT20F |
| | | | | 14.3 Nm | 3000 W | R88M-KH3K020F-S1 | R88D-KN30F-□ | R88D-KT30F |
| | | | | 19.1 Nm | 4000 W | R88M-KH4K020F-S1 | R88D-KN50F-□ | R88D-KT50F |
| | | | | 23.9 Nm | 5000 W | R88M-KH5K020F-S1 | R88D-KN50F-□ | R88D-KT50F |
| | | | With brake | 4.77 Nm | 1000 W | R88M-KH1K020F-BS1 | R88D-KN10F-□ | R88D-KT10F |
| | | | | 7.16 Nm | 1500 W | R88M-KH1K520F-BS1 | R88D-KN15F-□ | R88D-KT15F |
| | | | | 9.55 Nm | 2000 W | R88M-KH2K020F-BS1 | R88D-KN20F-□ | R88D-KT20F |
| | | | | 14.3 Nm | 3000 W | R88M-KH3K020F-BS1 | R88D-KN30F-□ | R88D-KT30F |
| | | | | 19.1 Nm | 4000 W | R88M-KH4K020F-BS1 | R88D-KN50F-□ | R88D-KT50F |
| | | | | 23.9 Nm | 5000 W | R88M-KH5K020F-BS1 | R88D-KN50F-□ | R88D-KT50F |
| | | **Absolute encoder (17 bit)** Shaft end with key | Without brake | 4.77 Nm | 1000 W | R88M-KH1K020C-S1 | R88D-KN10F-□ | R88D-KT10F |
| | | | | 7.16 Nm | 1500 W | R88M-KH1K520C-S1 | R88D-KN15F-□ | R88D-KT15F |
| | | | | 9.55 Nm | 2000 W | R88M-KH2K020C-S1 | R88D-KN20F-□ | R88D-KT20F |
| | | | | 14.3 Nm | 3000 W | R88M-KH3K020C-S1 | R88D-KN30F-□ | R88D-KT30F |
| | | | | 19.1 Nm | 4000 W | R88M-KH4K020C-S1 | R88D-KN50F-□ | R88D-KT50F |
| | | | | 23.9 Nm | 5000 W | R88M-KH5K020C-S1 | R88D-KN50F-□ | R88D-KT50F |
| | | | With brake | 4.77 Nm | 1000 W | R88M-KH1K020C-BS1 | R88D-KN10F-□ | R88D-KT10F |
| | | | | 7.16 Nm | 1500 W | R88M-KH1K520C-BS1 | R88D-KN15F-□ | R88D-KT15F |
| | | | | 9.55 Nm | 2000 W | R88M-KH2K020C-BS1 | R88D-KN20F-□ | R88D-KT20F |
| | | | | 14.3 Nm | 3000 W | R88M-KH3K020C-BS1 | R88D-KN30F-□ | R88D-KT30F |
| | | | | 19.1 Nm | 4000 W | R88M-KH4K020C-BS1 | R88D-KN50F-□ | R88D-KT50F |
| | | | | 23.9 Nm | 5000 W | R88M-KH5K020C-BS1 | R88D-KN50F-□ | R88D-KT50F |

## Servo motors 1500 r/min (7.5 kW)

| Symbol | Specifications | | | | | Servo motor model | Compatible servo drives ② | |
|---|---|---|---|---|---|---|---|---|
| | Voltage | Encoder and design | | Rated torque | Capacity | | G5 EtherCAT | G5 Analog/pulse |
| ① | 400 V | Absolute encoder (17 bit)<br>Shaft end with key | Without brake | 47.8 Nm | 7500 W | R88M-KH7K515C-S1 | R88D-KN75F-ECT | R88D-KT75F |
| | | | With brake | 47.8 Nm | 7500 W | R88M-KH7K515C-BS1 | R88D-KN75F-ECT | R88D-KT75F |

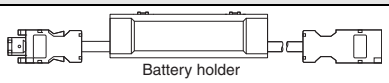
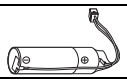
### Encoder cables

#### For absolute and incremental encoders

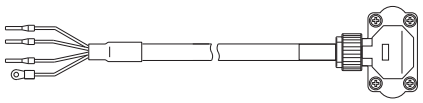
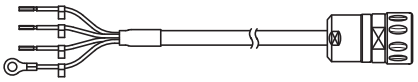
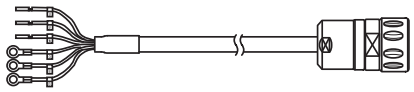
| Symbol | Specifications | | Model | Appearance |
|---|---|---|---|---|
| ③ | Encoder cable for servomotors<br>R88M-K(050/100/200/400/750)30(H/T)□ | 1.5 m | R88A-CRKA001-5CR-E | |
| | | 3 m | R88A-CRKA003CR-E | |
| | | 5 m | R88A-CRKA005CR-E | |
| | | 10 m | R88A-CRKA010CR-E | |
| | | 15 m | R88A-CRKA015CR-E | |
| | | 20 m | R88A-CRKA020CR-E | |
| | Encoder cable for servomotors<br>R88M-KH(200/400/750)30(H/T)□ | 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 | |
| | Encoder cable for servomotors<br>R88M-K(1K0/1K5)30(H/T)□<br>R88M-K(750/1K0/1K5/2K0/3K0/4K0/5K0)30(F/C)□<br>R88M-K(400/600/1K0/1K5/2K0/3K0/4K0/5K0)20□<br>R88M-K(7K5/11K0/15K0)15□<br>R88M-K(900/2K0/3K0/4K5/6K0)10□<br>R88M-KH(1K0/1K5/2K0/3K0/4K0/5K0)20(F/C)□<br>R88M-KH7K515C□ | 1.5 m | R88A-CRKC001-5NR-E | |
| | | 3 m | R88A-CRKC003NR-E | |
| | | 5 m | R88A-CRKC005NR-E | |
| | | 10 m | R88A-CRKC010NR-E | |
| | | 15 m | R88A-CRKC015NR-E | |
| | | 20 m | R88A-CRKC020NR-E | |

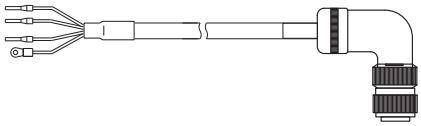
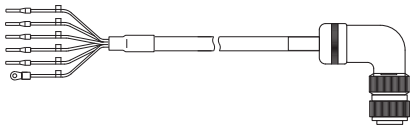
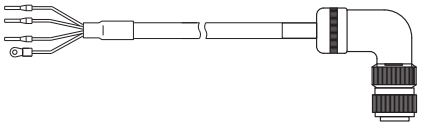
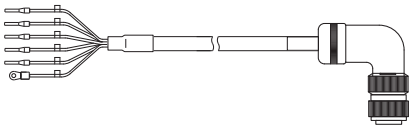
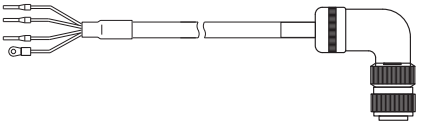
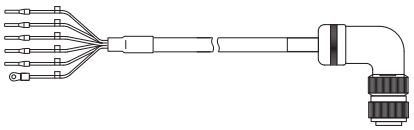
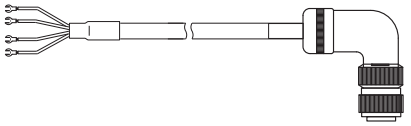
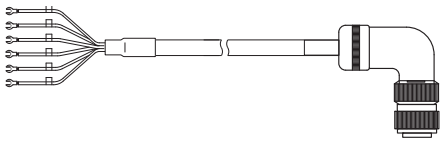
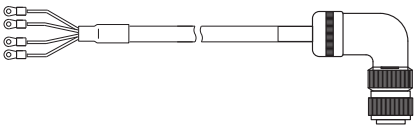
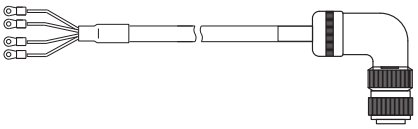
**Note:** For servomotors fitted with an absolute encoder you have to add the extension battery cable R88A-CRGD0R3C□ (see below) or connect a backup battery in the CN1 I/O connector.

#### Absolute encoder battery cable (encoder extension cable only)

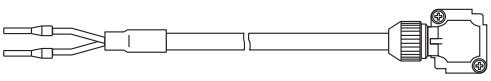
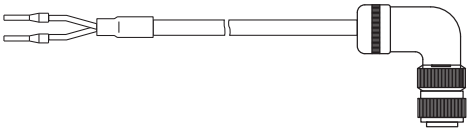
| Symbol | Specifications | | | Model | Appearance |
|---|---|---|---|---|---|
| ④ | Absolute encoder battery cable | Battery not included | 0.3 m | R88A-CRGD0R3C-E |  |
| | | Battery included | 0.3 m | R88A-CRGD0R3C-BS-E | |
| | Absolute encoder backup battery | 2,000 mA.h 3.6V | - | R88A-BAT01G |  |

### Power cables

| Symbol | Specifications | | | Model | Appearance |
|---|---|---|---|---|---|
| ⑤ | For 200 V servomotors<br>R88M-K(050/100/200/400/750)30(H/T)-□□S2<br>**Note:** for servomotors with brake R88M-K(050/100/200/400/750)30(H/T)-BS2, the separate brake cable R88A-CAKA□□□BR-E is needed | Power cable only (without brake) | 1.5 m | R88A-CAKA001-5SR-E |  |
| | | | 3 m | R88A-CAKA003SR-E | |
| | | | 5 m | R88A-CAKA005SR-E | |
| | | | 10 m | R88A-CAKA010SR-E | |
| | | | 15 m | R88A-CAKA015SR-E | |
| | | | 20 m | R88A-CAKA020SR-E | |
| | For 200 V servomotors<br>R88M-KH(200/400/750)30(H/T)-□□S2 | without brake | 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 | |
| | | with brake | 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 | |

| Symbol | Specifications | | | Model | Appearance |
|---|---|---|---|---|---|
| ⑤ | For 200 V servomotors<br>R88M-K(1K0/1K5)30(H/T)-□□S2<br>R88M-K(1K0/1K5)20(H/T)-□□S2<br>R88M-K90010(H/T)-□□S2 | without brake | 1.5 m | R88A-CAGB001-5SR-E |  |
| | | | 3 m | R88A-CAGB003SR-E | |
| | | | 5 m | R88A-CAGB005SR-E | |
| | | | 10 m | R88A-CAGB010SR-E | |
| | | | 15 m | R88A-CAGB015SR-E | |
| | | | 20 m | R88A-CAGB020SR-E | |
| | | with brake | 1.5 m | R88A-CAGB001-5BR-E |  |
| | | | 3 m | R88A-CAGB003BR-E | |
| | | | 5 m | R88A-CAGB005BR-E | |
| | | | 10 m | R88A-CAGB010BR-E | |
| | | | 15 m | R88A-CAGB015BR-E | |
| | | | 20 m | R88A-CAGB020BR-E | |
| | For 400 V servomotors<br>R88M-K(750/1K0/1K5/2K0)30(F/C)-□□S2<br>R88M-K(400/600/1K0/1K5/2K0)20(F/C)-□□S2<br>R88M-K90010(F/C)-□□S2<br>R88M-KH(1K0/1K5)20(F/C)-□S1 | without brake | 1.5 m | R88A-CAGB001-5SR-E |  |
| | | | 3 m | R88A-CAGB003SR-E | |
| | | | 5 m | R88A-CAGB05SR-E | |
| | | | 10 m | R88A-CAGB010SR-E | |
| | | | 15 m | R88A-CAGB015SR-E | |
| | | | 20 m | R88A-CAGB020SR-E | |
| | | with brake | 1.5 m | R88A-CAKF001-5BR-E |  |
| | | | 3 m | R88A-CAKF003BR-E | |
| | | | 5 m | R88A-CAKF005BR-E | |
| | | | 10 m | R88A-CAKF010BR-E | |
| | | | 15 m | R88A-CAKF015BR-E | |
| | | | 20 m | R88A-CAKF020BR-E | |
| | For 400 V servomotors<br>R88M-KH2K020(F/C)-□S1 | without brake | 1.5 m | R88A-CAKC001-5SR-E |  |
| | | | 3 m | R88A-CAKC003SR-E | |
| | | | 5 m | R88A-CAKC005SR-E | |
| | | | 10 m | R88A-CAKC010SR-E | |
| | | | 15 m | R88A-CAKC015SR-E | |
| | | | 20 m | R88A-CAKC020SR-E | |
| | | with brake | 1.5 m | R88A-CAKF001-5BR-E |  |
| | | | 3 m | R88A-CAKF003BR-E | |
| | | | 5 m | R88A-CAKF005BR-E | |
| | | | 10 m | R88A-CAKF010BR-E | |
| | | | 15 m | R88A-CAKF015BR-E | |
| | | | 20 m | R88A-CAKF020BR-E | |
| | For 400 V servomotors<br>R88M-K(3K0/4K0/5K0)30(F/C)-□□S2<br>R88M-K(3K0/4K0/5K0)20(F/C)-□□S2<br>R88M-K(2K0/3K0)10(F/C)-□□S2<br>R88M-K4K510C-□□S2<br>R88M-KH(3K0/4K0/5K0)20(F/C)-□S1 | without brake | 1.5 m | R88A-CAGD001-5SR-E |  |
| | | | 3 m | R88A-CAGD003SR-E | |
| | | | 5 m | R88A-CAGD005SR-E | |
| | | | 10 m | R88A-CAGD010SR-E | |
| | | | 15 m | R88A-CAGD015SR-E | |
| | | | 20 m | R88A-CAGD020SR-E | |
| | | with brake | 1.5 m | R88A-CAGD001-5BR-E |  |
| | | | 3 m | R88A-CAGD003BR-E | |
| | | | 5 m | R88A-CAGD005BR-E | |
| | | | 10 m | R88A-CAGD010BR-E | |
| | | | 15 m | R88A-CAGD015BR-E | |
| | | | 20 m | R88A-CAGD020BR-E | |
| | For 400 V servomotors<br>R88M-K6K010C-□□S2<br>R88M-K7K515C-□□S2<br>R88M-KH7K515C-□S1<br>**Note:** for servomotors with brake R88M- K(6K010/7K515)C-BS2 and R88M-KH7K515C-BS1 the separate brake cable R88A-CAGE□□□BR-E is needed | Power cable only (without brake) | 1.5 m | R88A-CAKE001-5SR-E |  |
| | | | 3 m | R88A-CAKE003SR-E | |
| | | | 5 m | R88A-CAKE005SR-E | |
| | | | 10 m | R88A-CAKE010SR-E | |
| | | | 15 m | R88A-CAKE015SR-E | |
| | | | 20 m | R88A-CAKE020SR-E | |
| | For 400 V servomotors<br>R88M-K(11K0/15K0)15C-□□S2<br>**Note:** for servomotors with brake R88M-K(11K0/15K0)15C-BS2, the separate brake cable R88A-CAGE□□□BR-E is needed | Power cable only (without brake) | 1.5 m | R88A-CAKG001-5SR-E |  |
| | | | 3 m | R88A-CAKG003SR-E | |
| | | | 5 m | R88A-CAKG005SR-E | |
| | | | 10 m | R88A-CAKG010SR-E | |
| | | | 15 m | R88A-CAKG015SR-E | |
| | | | 20 m | R88A-CAKG020SR-E | |

### Brake cables (for 200 V 50 to 750 W servo motors and 400 V 6 to 15 kW servo motors)

| Symbol | Specifications | | Model | Appearance |
|---|---|---|---|---|
| ⑥ | Brake cable only.<br>For 200 V servo motors with brake<br>R88M-K(050/100/200/400/750)30(H/T)-BS2 | 1.5 m | R88A-CAKA001-5BR-E |  |
| | | 3 m | R88A-CAKA003BR-E | |
| | | 5 m | R88A-CAKA005BR-E | |
| | | 10 m | R88A-CAKA010BR-E | |
| | | 15 m | R88A-CAKA015BR-E | |
| | | 20 m | R88A-CAKA020BR-E | |
| | Brake cable only.<br>For 400 V servo motors with brake<br>R88M-K6K010C-BS2<br>R88M-K(7K5/11K0/15K0)15C-BS2<br>R88M-KH7K515C-BS1 | 1.5 m | R88A-CAGE001-5BR-E |  |
| | | 3 m | R88A-CAGE003BR-E | |
| | | 5 m | R88A-CAGE005BR-E | |
| | | 10 m | R88A-CAGE0010BR-E | |
| | | 15 m | R88A-CAGE015BR-E | |
| | | 20 m | R88A-CAGE020BR-E | |

### Connectors for encoder, power and brake cables

| Specifications | | Applicable Servomotor | Model |
|---|---|---|---|
| Connectors for making encoder cables | Drive side (CN2) | All models | R88A-CNW01R |
| | Motor side | R88M-K(050/100/200/400/750)30(H/T)□ | R88A-CNK02R |
| | Motor side | R88M-KH(200/400/750)□ | SPOC-17H-FRON169 |
| | Motor side | R88M-K(1K0/1K5)30(H/T)□<br>R88M-K(750/1K0/1K5/2K0/3K0/4K0/5K0)30(F/C)□<br>R88M-K(400/600/1K0/1K5/2K0/3K0/4K0/5K0)20□<br>R88M-K(900/2K0/3K0)10□<br>R88M-K(4K5/6K0)10C-□<br>R88M-K(7K5/11K0/15K0)15C-□<br>R88M-KH(1K0/1K5/2K0/3K0/4K0/5K0/7K5)□ | R88A-CNK04R |
| Connectors for making power cables | Motor side | R88M-K(050/100/200/400/750)30(H/T)□ | R88A-CNK11A |
| | Motor side | R88M-KH(200/400/750)30(H/T)□ | SPOC-06K-FSDN169 |
| | Motor side | R88M-K(1K0/1K5)30(H/T)-S2<br>R88M-K(1K0/1K5)20(H/T)-S2<br>R88M-K90010(H/T)-S2<br>R88M-K(750/1K0/1K5/2K0)30(F/C)-S2,<br>R88M-K(400/600/1K0/1K5/2K0)20(F/C)-S2<br>R88M-K90010(F/C)-S2<br>R88M-KH(1K0/1K5)20(F/C)-S1 | MS3108E20-4S |
| | Motor side | R88M-K(1K0/1K5)30(H/T)-BS2<br>R88M-K(1K0/1K5)20(H/T)-BS2<br>R88M-K90010(H/T)-BS2 | MS3108E20-18S |
| | Motor side | R88M-K(750/1K0/1K5/2K0/3K0/4K0/5K0)30(F/C)-BS2<br>R88M-K(400/600/1K0/1K5/2K0/3K0/4K0/5K0)20(F/C)-BS2<br>R88M-K(900/2K0/3K0)10(F/C)-BS2<br>R88M-K4K510C-BS2<br>R88M-KH(1K0/1K5/2K0/3K0/4K0/5K0)20(F/C)-BS1 | MS3108E24-11S |
| | Motor side | R88M-K(3K0/4K0/5K0)30(F/C)-S2<br>R88M-K(3K0/4K0/5K0)20(F/C)-S2<br>R88M-K(2K0/3K0)10(F/C)-S2<br>R88M-K4K510C-S2<br>R88M-KH(2K0/3K0/4K0/5K0)20(F/C)-S1 | MS3108E22-22S |
| | Motor side | R88M-K6K010C-□<br>R88M-K(7K5/11K0/15K0)15C-□<br>R88M-KH7K515C-□S1 | MS3108E32-17S |
| Connector for brake cable | Motor side | R88M-K(050/100/200/400/750)30(H/T)-BS2 | R88A-CNK11B |
| | Motor side | R88M-K6K010C-BS2<br>R88M-K(7K5/11K0/15K0)15C-BS2<br>R88M-KH7K515C-BS1 | MS3108E14S-2S |

**Note: 1.** All cables listed are flexible and shielded (except the R88A-CAKA□□□-BR-E which is only a flexible cable).
**2.** All connectors and cables listed have IP67 class (except R88A-CNW01R connector and R88A-CRGD0R3C cable).

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

Cat. No. I100E-EN-04A In the interest of product improvement, specifications are subject to change without notice.

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Компания «Океан Электроники» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

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- Поставка специализированных компонентов военного и аэрокосмического уровня качества (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Actel, Aeroflex, Peregrine, VPT, Syfer, Eurofarad, Texas Instruments, MS Kennedy, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

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