

MXL Motors

Low Inertia High Speed Servo Motors

Motors Matched to DX Drives

The MXL family of servo motors include solutions with 17-bit or 23-bit encoders, are suitable for application speeds up to 6000 rpm, include variants with an integrated brake.

Low inertia allows very fast response times and these motors develop a very high torque despite their small size. In combination with our servo drives, they are ideal for applications with high dynamic responses and fast and precise positioning.

Our servo drive systems can be used in a wide range of applications thanks to their high performance, available power range and compact dimensions.

AT A GLANCE

- * Power range:
50W to 3kW (200V)
1kW to 5kW (400V)
- * Low inertia
- * Rated speed 3000 RPM (Max speed 6000 RPM)
- * 23-bit absolute encoder or 17-bit absolute encoder
- * IP65 rated
- * Oil seal as standard
- * Optional brake
- * Compatible with Trio DX drives



40mm
50W – 100W

60mm
200W – 400W

80mm
750W – 1kW

100mm
1.5kW – 2kW

130mm
3kW – 5kW

MXL Motors

Low Inertia High Speed Servo Motors

Specifying Your Motors

| Model | Rated Power | Supply Voltage | Flange | Rated Speed | Encoder | Revision | Shaft End | Option | Connector Type |
|--------------|-------------|----------------|-----------|-------------|----------|----------|-----------|----------|----------------|
| MXL - | 04 | A | 06 | 30 | L | A | 2 | 2 | 2 |

| | |
|-----------|--------------|
| A5 | 0.05kW |
| 01 | 0.1kW |
| 02 | 0.2kW |
| 04 | 0.4kW |
| 08 | 0.75kW |
| 10 | 1kW |
| 15 | 1.5kW |
| 20 | 2kW |
| 30 | 3kW |
| 40 | 4kW |
| 50 | 5kW |

| | |
|----------|-------------|
| A | 200V |
| D | 400V |

| | |
|-----------|-------------|
| 04 | 40mm |
| 06 | 60mm |
| 08 | 80mm |
| 10 | 100mm |
| 13 | 130mm |

| | |
|-----------|----------------|
| 30 | 3000RPM |
| T | 17 Bit abs |
| L | 23 Bit abs |

| | | | | | |
|----------|-----------------|----------|----------------------|----------|-------------|
| 2 | With Key | 2 | With oil seal | 2 | IP65 |
| 4 | Oil + brake | 4 | On motor | | |

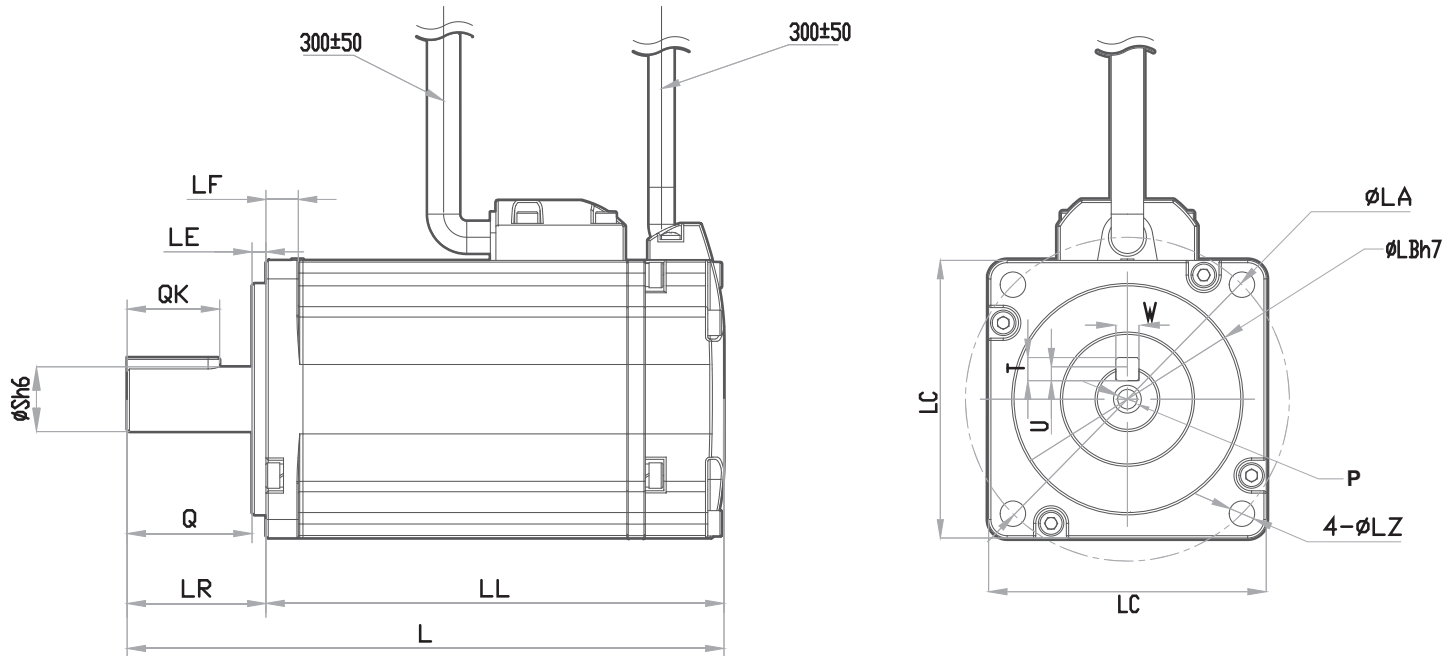


| | MXL | DX3 | DX4 | DX5 |
|------|-------|-------|-----|-----|
| 200V | 50W | ✓ | ✓ | |
| | 100W | ✓ | ✓ | ✓ |
| | 200W | ✓ | ✓ | ✓ |
| | 400W | ✓ | ✓ | ✓ |
| | 750kW | ✓ | ✓ | ✓ |
| | 1kW | ✓ | ✓ | |
| | 1.5kW | ✓ | ✓ | |
| | 2kW | ✓ | ✓ | |
| | 3kW | | ✓ | |
| | 400V | 1.5kW | ✓ | |
| 2kW | | ✓ | | |
| 3kW | | ✓ | | |
| 4kW | | ✓ | | |
| 5kW | | ✓ | | |

MXL Motors

50W - 1kW

Specification



| Power W | MXL- | L | LL | Flange Side | | | | | | | S | P | Key | | | | |
|------------|------|---------------|---------------|-------------|-----|----|----|----|----|-----|----|--------|-----|-------|---|---|------|
| | | | | LR | LE | LF | LC | LA | LB | LZ | | | QK | W | T | U | Q |
| 50 | A5AL | 87.5 (121) | 62.5 (96) | 25 | 2.5 | 5 | 40 | 46 | 30 | 4.3 | 8 | M3x 6 | 14 | 22 | 3 | 3 | 22.5 |
| 100 | 01AL | 103.5 (137) | 78.5 (112) | 25 | 2.5 | 5 | 40 | 46 | 30 | 4.3 | 8 | M3x 6 | 14 | 22.5 | 3 | 3 | 22.5 |
| 100 | 01AT | 113.5 (147) | 88.5 (122) | 25 | 2.5 | 5 | 40 | 46 | 30 | 4.3 | 8 | M3x 6 | 14 | 22.5 | 3 | 3 | 27 |
| 200 | 02AL | 108 (137) | 78 (102) | 30 | 3 | 7 | 60 | 70 | 50 | 5.5 | 14 | M5x 12 | 20 | 27 | 5 | 5 | 27 |
| 200 | 02AT | 126.5 (155.5) | 96.5 (125.5) | 30 | 3 | 7 | 60 | 70 | 50 | 5.5 | 14 | M5x 12 | 20 | 27 | 5 | 5 | 37 |
| 400 | 04AL | 129 (158) | 99 (128) | 30 | 3 | 7 | 60 | 70 | 50 | 5.5 | 14 | M5x 12 | 20 | 27 | 5 | 5 | 37 |
| 400 | 04AT | 147.5 (176.5) | 117.5 (146.5) | 30 | 3 | 7 | 60 | 70 | 50 | 5.5 | 14 | M5x 12 | 20 | 27 | 5 | 5 | 27 |
| 750 | 08AL | 151 (184) | 111 (144) | 40 | 3 | 8 | 80 | 90 | 70 | 6.6 | 19 | M6x 12 | 25 | 37/35 | 6 | 6 | 27 |
| 750 | 08AT | 167.5 (200.5) | 127.5 (160.5) | 40 | 3 | 8 | 80 | 90 | 70 | 6.6 | 19 | M6x 12 | 25 | 37 | 6 | 6 | 37 |
| 1000 | 10AL | 165 (198) | 125 (158) | 40 | 3 | 8 | 80 | 90 | 70 | 6.6 | 19 | M6x 12 | 25 | 37 | 6 | 6 | 37 |
| 1000 | 10AT | 185 (214.5) | 141.5 (175.5) | 40 | 3 | 8 | 80 | 90 | 70 | 6.6 | 19 | M6x 12 | 25 | 37 | 6 | 6 | 37 |

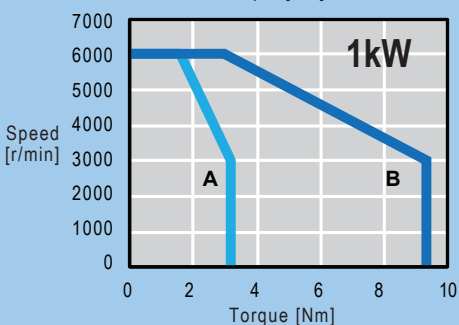
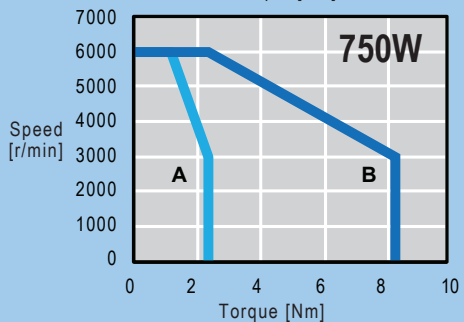
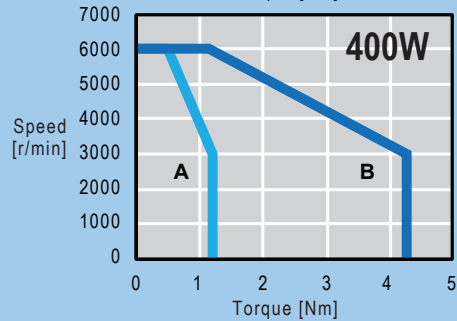
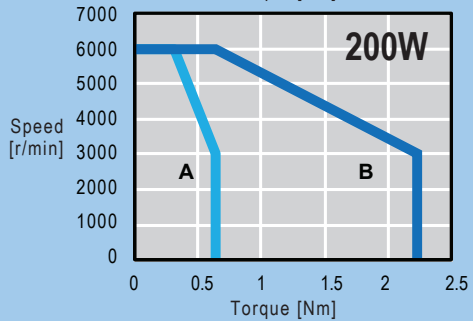
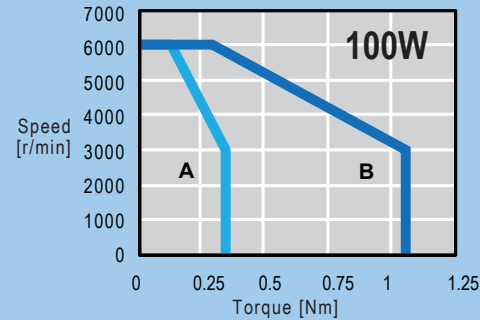
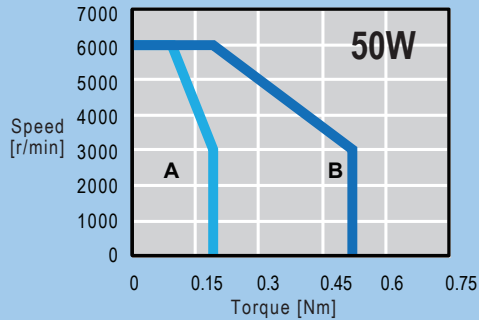
N.B: Numbers in parentheses represent the value with brake.



MXL Motors

50W - 1kW

Specification



A: Continuous Working Area
B: Cyclic Working Area

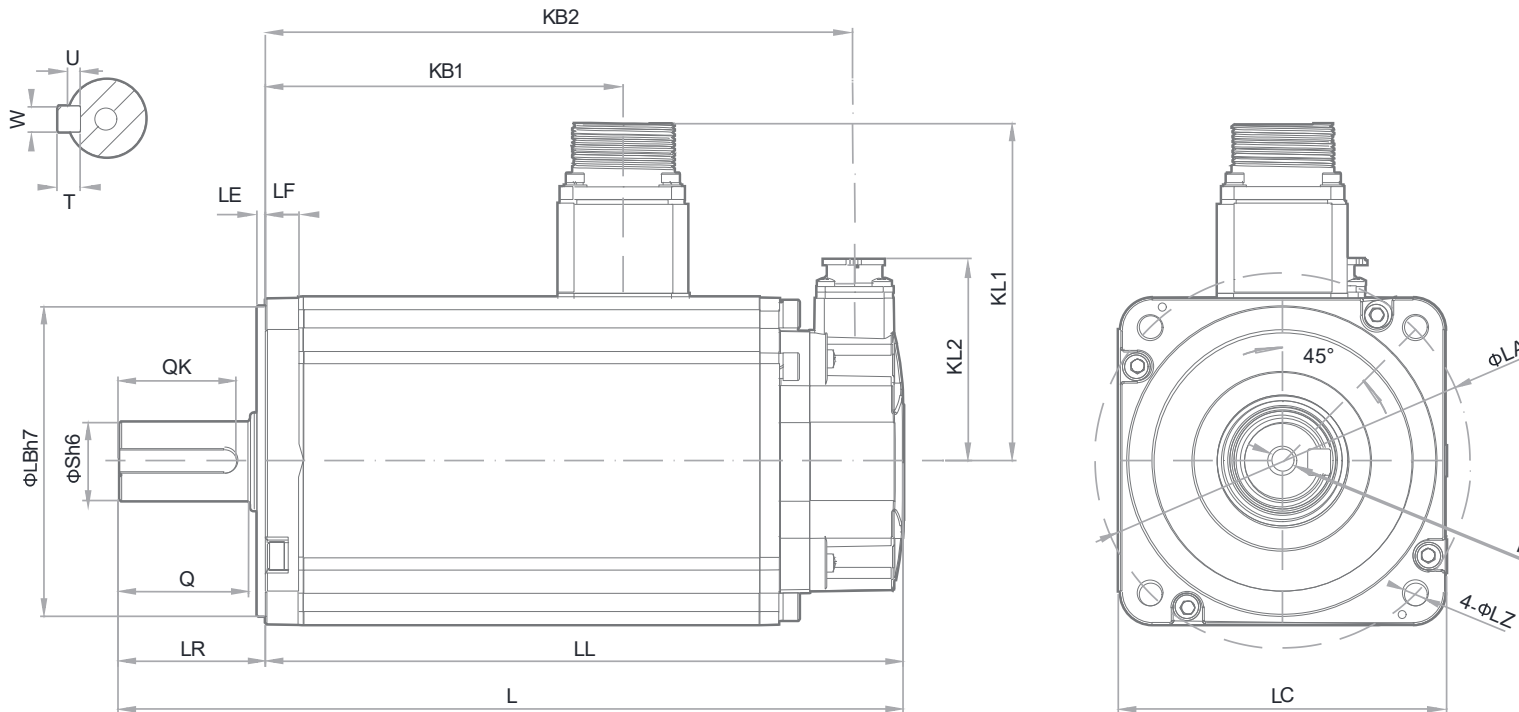
| | MXL- | A5A | 01A | 02A | 04A | 08A | 10A |
|----------------------------|-------------------------------------|---|--------------------|--|------------------|-----------------|----------------|
| Rated Output | kW | 0.05 | 0.1 | 0.2 | 0.4 | 0.75 | 1.0 |
| Rated Torque | Nm | 0.159 | 0.318 | 0.630 | 1.270 | 2.390 | 3.180 |
| Instantaneous Peak Torque | Nm | 0.557 | 1.110 | 2.210 | 4.450 | 8.370 | 9.550 |
| Rated Current | Arms | 0.9 | 1.1 | 1.5 | 2.9 | 5.1 | 6.9 |
| Instantaneous Max. Current | Arms | 3.3 | 4.0 | 5.8 | 11.5 | 19.5 | 21.0 |
| Rated Speed | rpm | 3000 | 3000 | 3000 | 3000 | 3000 | 3000 |
| Max. Speed | rpm | 6000 | 6000 | 6000 | 6000 | 6000 | 6000 |
| Rotor Moment of Inertia | x10 ⁻⁴ kg m ² | 0.0230 (0.0268) | 0.0428 (0.0465) | 0.147 (0.179) | 0.244 (0.276) | 0.909 (1.07) | 1.14 (1.30) |
| Weight | kg | 0.368 (0.588) | 0.491 (0.696) | 0.9 (1.3) | 1.3 (1.7) | 2.6 (3.2) | 3.1 (3.8) |
| Brake Rated Voltage | | 24 Vdc ± 10% | | | | | |
| Brated Rated Torque | Nm | ≥0.32 | | ≥1.5 | | ≥3.2 | |
| Flange | mm | 40 | 40 | 60 | 60 | 80 | 80 |
| Encoder Types | | L (23-bit absolute) | | L (23-bit absolute), T (17-bit absolute) | | | |
| Shaft end load (Radial) | Nm | 78 | 78 | 245 | 245 | 392 | 392 |
| Shaft end load (Axial) | Nm | 54 | 54 | 74 | 74 | 147 | 147 |
| Insulation Class | | F | | | | | |
| Ambient Temperature | | 0 ~ +40°C (No freezing) | | | | | |
| Ambient Humidity | | 20% ~ 80% RH (No condensing) | | | | | |
| Vibration | | Dynamic ≤ 49m/s ² (5G); Static ≤ 24.5m/s ² ; Shock ≤ 98m/s ² (10G) | | | | | |
| Enclosure | | Totally enclosed, Self cooled, IP65 | | | | | |

| Model | Rated Power | Supply Voltage | Flange | Rated Speed | Encoder | Revision | Shaft End | Option | Connector Type | | | | | | |
|-----------------|-------------|----------------|-----------|-------------|----------|----------|-----------|----------|----------------|---|----------|---|---------------|---|------|
| MXL - 04 | 04 | A | 06 | 30 | L | A | 2 | 2 | 2 | | | | | | |
| A5 | 0.05kW | A | 200V | 04 | 40mm | 30 | 3000RPM | T | 17 Bit abs | 2 | With Key | 2 | With oil seal | 2 | IP65 |
| 01 | 0.1kW | D | 400V | 06 | 60mm | | | L | 23 Bit abs | | | 4 | Oil + brake | | |
| 02 | 0.2kW | | | 08 | 80mm | | | | | | | | | | |
| 04 | 0.4kW | | | | | | | | | | | | | | |
| 08 | 0.75kW | | | | | | | | | | | | | | |
| 10 | 1kW | | | | | | | | | | | | | | |

MXL Motors

1.5kW - 5kW

Specification



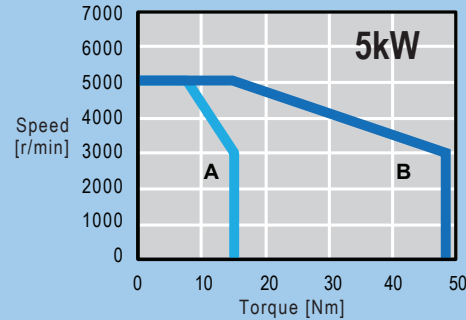
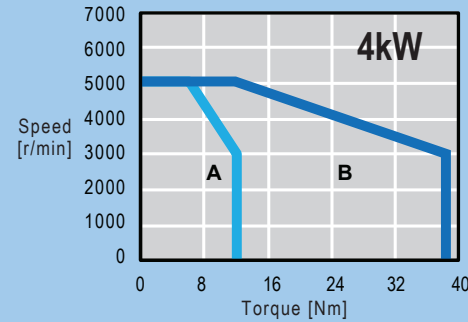
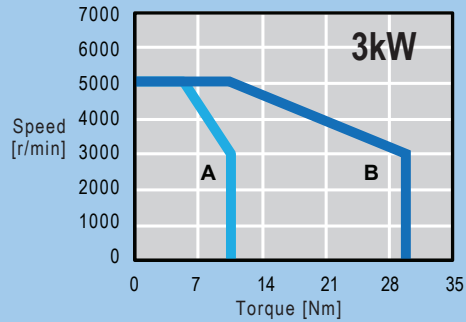
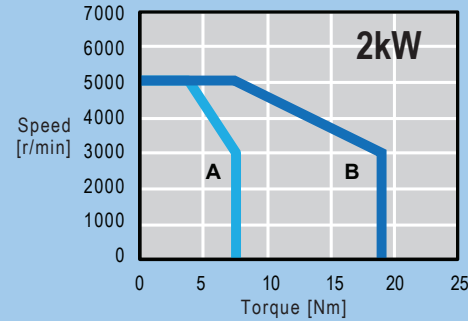
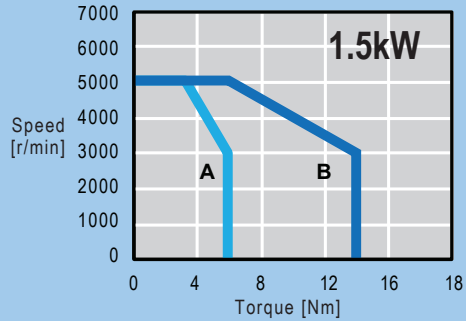
| Power kW | MXL- | L | LL | KB1 | KB2 | KL1 | KL2 | Flange Side | | | | | | | S | P | Key | | | | |
|----------|---------|-------------|-------------|-----------|-------------|-----|-----|-------------|----|----|-----|-----|-----|----|----|---------|-----|---|---|---|----|
| | | | | | | | | LR | LE | LF | LC | LA | LB | LZ | | | QK | W | T | U | Q |
| 1.5 | 15A/15D | 210 (240) | 165 (195) | 97 (109) | 150 (180) | 102 | 60 | 45 | 3 | 10 | 100 | 115 | 95 | 7 | 24 | M8 x 16 | 36 | 8 | 7 | 4 | 40 |
| 2.0 | 20A/20D | 230 (260) | 185 (215) | 117 (129) | 170 (200) | 102 | 60 | 45 | 3 | 10 | 100 | 115 | 95 | 7 | 24 | M8 x 16 | 36 | 8 | 7 | 4 | 40 |
| 3.0 | 30D | 257 (298.5) | 194 (226.5) | 160.5 | 179 (211.6) | 110 | 60 | 63 | 6 | 12 | 130 | 145 | 110 | 9 | 28 | M8 x 16 | 54 | 8 | 7 | 4 | 55 |
| 4.0 | 40D | 284 (316.5) | 221 (253.5) | 187.5 | 206 (238.5) | 110 | 60 | 63 | 6 | 12 | 130 | 145 | 110 | 9 | 28 | M8 x 16 | 54 | 8 | 7 | 4 | 55 |
| 5.0 | 50D | 324 (356.5) | 261 (293.5) | 227.5 | 246 (278.5) | 110 | 60 | 63 | 6 | 12 | 130 | 145 | 110 | 9 | 28 | M8 x 16 | 54 | 8 | 7 | 4 | 55 |

N.B: Numbers in parentheses represent the value with brake.

MXL Motors

1.5kW - 5kW

Specification



A: Continuous Working Area
B: Cyclic Working Area

| | MXL- | 15A | 15D | 20A | 20D | 30A | 30D | 40D | 50D | |
|----------------------------|---|----------------|----------------|----------------|----------------|----------------|---------------------|-----------------|-----------------|--|
| Voltage | VAC | 200 | 400 | 200 | 400 | 300 | 400 | 400 | 400 | |
| Rated Output | kW | 1.5 | 1.5 | 2.0 | 2.0 | 3.0 | 3.0 | 4.0 | 5.0 | |
| Rated Torque | Nm | 4.78 | 4.78 | 6.37 | 6.37 | 9.80 | 9.80 | 12.80 | 15.90 | |
| Instantaneous Peak Torque | Nm | 14.30 | 14.30 | 19.10 | 19.10 | 29.40 | 29.40 | 38.40 | 47.70 | |
| Rated Current | Arms | 9.5 | 4.9 | 12.6 | 6.4 | 20.5 | 10.5 | 13.0 | 15.9 | |
| Instantaneous Max. Current | Arms | 31.6 | 16.3 | 42.0 | 20.5 | 68.0 | 33.0 | 40.0 | 50.0 | |
| Rated Speed | rpm | 3000 | 3000 | 3000 | 3000 | 3000 | 3000 | 3000 | 3000 | |
| Max. Speed | rpm | 5000 | 5000 | 5000 | 5000 | 5000 | 5000 | 5000 | 5000 | |
| Rotor Moment of Inertia | $\times 10^{-4} \text{kg m}^2$ | 2.33 (3.10) | 2.33 (3.10) | 2.95 (3.72) | 2.95 (3.72) | 7.72 (9.00) | 7.72 (9.00) | 10.24 (11.6) | 14.00 (15.4) | |
| Weight | kg | 5.1 (6.4) | 5.1 (6.4) | 6.1 (7.5) | 6.1 (7.5) | 10 (12.0) | 10.0 (12.0) | 12.0 (14.0) | 15.5 (17.5) | |
| Brake Rated Voltage | 24 Vdc \pm 10% | | | | | | | | | |
| Brated Rated Torque | Nm | ≥ 8 | | | | | ≥ 20 | | | |
| Flange | mm | 100 | | | | | 130 | | | |
| Encoder Types | L (23-bit absolute), T (17-bit absolute) | | | | | | L (23-bit absolute) | | | |
| Shaft end load (Radial) | Nm | 686 | | | | | 980 | | | |
| Shaft end load (Axial) | Nm | 196 | | | | | 392 | | | |
| Insulation Class | F | | | | | | | | | |
| Ambient Temperature | 0 ~ +40°C (No freezing) | | | | | | | | | |
| Ambient Humidity | 20% ~ 80% RH (No condensing) | | | | | | | | | |
| Vibration | Dynamic $\leq 49 \text{m/s}^2$ (5G); Static $\leq 24.5 \text{m/s}^2$; Shock $\leq 98 \text{m/s}^2$ (10G) | | | | | | | | | |
| Enclosure | Totally Enclosed, Self cooled, IP65 | | | | | | | | | |

| Model | Rated Power | Supply Voltage | Flange | Rated Speed | Encoder | Revision | Shaft End | Option | Connector Type |
|-----------------|-------------|----------------|------------|--------------|----------------|----------|--------------|-------------------|----------------|
| MXL - 15 | 15 | A | 10 | 30 | L | A | 2 | 2 | 4 |
| | 15 1.5kW | A 200V | 10 100mm | 30 3000RPM | T 17 Bit abs | | 2 With Key | 2 With oil seal | 4 On motor |
| | 20 2kW | D 400V | 13 130mm | | L 23 Bit abs | | | 4 Oil + brake | |
| | 30 3kW | | | | | | | | |
| | 40 4kW | | | | | | | | |
| | 50 5kW | | | | | | | | |

MXL Motors

50W - 1kW

Component Selection

| Description | Trio Motor Part # | Motor Model | Trio Encoder Cable Part # | Encoder Cable (with battery) | Trio Encoder Cable Part # (no battery) | Encoder Cable (no battery) | Trio Power Cable Part # | Power Cable |
|--|-------------------|------------------|---------------------------|------------------------------|--|----------------------------|-------------------------|---------------|
| 200V, 50W, 23-bit encoder, no brake | M0758 | MXL-A5A0430LA222 | X0405-X0409 | EC3S-A1724-RX-nn | X0400-X0404 | EC3S-I1724-RX-nn | X0500-X0504 | EC3P-N8718-nn |
| 200V, 50W, 23-bit encoder, with brake | M0759 | MXL-A5A0430LA242 | X0405-X0409 | EC3S-A1724-RX-nn | X0400-X0404 | EC3S-I1724-RX-nn | X0505-X0509 | EC3P-B8718-nn |
| 200V, 100W, 23-bit encoder, no brake | M0756 | MXL-01A0430LA222 | X0405-X0409 | EC3S-A1724-RX-nn | X0400-X0404 | EC3S-I1724-RX-nn | X0500-X0504 | EC3P-N8718-nn |
| 200V, 100W, 23-bit encoder, with brake | M0757 | MXL-01A0430LA242 | X0405-X0409 | EC3S-A1724-RX-nn | X0400-X0404 | EC3S-I1724-RX-nn | X0505-X0509 | EC3P-B8718-nn |
| 200V, 100W, 17-bit encoder, no brake | M0835 | MXL-01A0430TA222 | X0405-X0409 | EC3S-A1724-RX-nn | X0400-X0404 | EC3S-I1724-RX-nn | X0500-X0504 | EC3P-N8718-nn |
| 200V, 100W, 17-bit encoder, with brake | M0836 | MXL-01A0430TA242 | X0405-X0409 | EC3S-A1724-RX-nn | X0400-X0404 | EC3S-I1724-RX-nn | X0505-X0509 | EC3P-B8718-nn |
| 200V, 200W, 23-bit encoder, no brake | M0654 | MXL-02A0630LA222 | X0405-X0409 | EC3S-A1724-RX-nn | X0400-X0404 | EC3S-I1724-RX-nn | X0500-X0504 | EC3P-N8718-nn |
| 200V, 200W, 23-bit encoder, with brake | M0655 | MXL-02A0630LA242 | X0405-X0409 | EC3S-A1724-RX-nn | X0400-X0404 | EC3S-I1724-RX-nn | X0505-X0509 | EC3P-B8718-nn |
| 200V, 200W, 17-bit encoder, no brake | M0837 | MXL-02A0630TA222 | X0405-X0409 | EC3S-A1724-RX-nn | X0400-X0404 | EC3S-I1724-RX-nn | X0500-X0504 | EC3P-N8718-nn |
| 200V, 200W, 17-bit encoder, with brake | M0838 | MXL-02A0630TA242 | X0405-X0409 | EC3S-A1724-RX-nn | X0400-X0404 | EC3S-I1724-RX-nn | X0505-X0509 | EC3P-B8718-nn |
| 200V, 400W, 23-bit encoder, no brake | M0646 | MXL-04A0630LA222 | X0405-X0409 | EC3S-A1724-RX-nn | X0400-X0404 | EC3S-I1724-RX-nn | X0500-X0504 | EC3P-N8718-nn |
| 200V, 400W, 23-bit encoder, with brake | M0647 | MXL-04A0630LA242 | X0405-X0409 | EC3S-A1724-RX-nn | X0400-X0404 | EC3S-I1724-RX-nn | X0505-X0509 | EC3P-B8718-nn |
| 200V, 400W, 17-bit encoder, no brake | M0839 | MXL-04A0630TA222 | X0405-X0409 | EC3S-A1724-RX-nn | X0400-X0404 | EC3S-I1724-RX-nn | X0500-X0504 | EC3P-N8718-nn |
| 200V, 400W, 17-bit encoder, with brake | M0840 | MXL-04A0630TA242 | X0405-X0409 | EC3S-A1724-RX-nn | X0400-X0404 | EC3S-I1724-RX-nn | X0505-X0509 | EC3P-B8718-nn |
| 200V, 750W, 23-bit encoder, no brake | M0638 | MXL-08A0830LA222 | X0405-X0409 | EC3S-A1724-RX-nn | X0400-X0404 | EC3S-I1724-RX-nn | X0500-X0504 | EC3P-N8718-nn |
| 200V, 750W, 23-bit encoder, with brake | M0639 | MXL-08A0830LA242 | X0405-X0409 | EC3S-A1724-RX-nn | X0400-X0404 | EC3S-I1724-RX-nn | X0505-X0509 | EC3P-B8718-nn |
| 200V, 750W, 17-bit encoder, no brake | M0841 | MXL-08A0830TA222 | X0405-X0409 | EC3S-A1724-RX-nn | X0400-X0404 | EC3S-I1724-RX-nn | X0500-X0504 | EC3P-N8718-nn |
| 200V, 750W, 17-bit encoder, with brake | M0842 | MXL-08A0830TA242 | X0405-X0409 | EC3S-A1724-RX-nn | X0400-X0404 | EC3S-I1724-RX-nn | X0505-X0509 | EC3P-B8718-nn |
| 200V, 1kW, 23-bit encoder, no brake | M0630 | MXL-10A0830LA222 | X0405-X0409 | EC3S-A1724-RX-nn | X0400-X0404 | EC3S-I1724-RX-nn | X0500-X0504 | EC3P-N8718-nn |
| 200V, 1kW, 23-bit encoder, with brake | M0631 | MXL-10A0830LA242 | X0405-X0409 | EC3S-A1724-RX-nn | X0400-X0404 | EC3S-I1724-RX-nn | X0505-X0509 | EC3P-B8718-nn |
| 200V, 1kW, 17-bit encoder, no brake | M0843 | MXL-10A0830TA222 | X0405-X0409 | EC3S-A1724-RX-nn | X0400-X0404 | EC3S-I1724-RX-nn | X0500-X0504 | EC3P-N8718-nn |
| 200V, 1kW, 17-bit encoder, with brake | M0844 | MXL-10A0830TA242 | X0405-X0409 | EC3S-A1724-RX-nn | X0400-X0404 | EC3S-I1724-RX-nn | X0505-X0509 | EC3P-B8718-nn |

The "nn" at the end of the ENCODER CABLE code represents the cable length: E.g: EC3S-I1724-RX-10 = 10 metre cable
valid lengths are: 1M5, 05, 10, 15, 20. All lengths are in Metres

All "RX" cable are flexible and suitable for drag chain applications

MXL Motors

1.5kW - 5kW

Component Selection

| Description | Trio Motor Part # | Motor Model | Trio Encoder Cable Part # | Encoder Cable (with battery) | Trio Encoder Cable Part # (no battery) | Encoder Cable (no battery) | Trio Power Cable Part # | Power Cable |
|---|-------------------|------------------|---------------------------|------------------------------|--|----------------------------|-------------------------|---------------|
| 200V, 1.5kW, 23-bit encoder, no brake | M0761 | MXL-15A1030LB224 | X0440-X0444 | EC3S-A1924-RX-nn | X0435-X0439 | EC3S-I1924-RX-nn | X0510-X0514 | EC3P-N9314-nn |
| 200V, 1.5kW, 23-bit encoder, with brake | M0762 | MXL-15A1030LB244 | X0440-X0444 | EC3S-A1924-RX-nn | X0435-X0439 | EC3S-I1924-RX-nn | X0515-X0519 | EC3P-B9314-nn |
| 200V, 1.5kW, 17-bit encoder, no brake | M0773 | MXL-15A1030TB224 | X0440-X0444 | EC3S-A1924-RX-nn | X0435-X0439 | EC3S-I1924-RX-nn | X0510-X0514 | EC3P-N9314-nn |
| 200V, 1.5kW, 17-bit encoder, with brake | M0774 | MXL-15A1030TB244 | X0440-X0444 | EC3S-A1924-RX-nn | X0435-X0439 | EC3S-I1924-RX-nn | X0515-X0519 | EC3P-B9314-nn |
| 400V, 1.5kW, 23-bit encoder, no brake | M0775 | MXL-15D1030LB224 | X0440-X0444 | EC3S-A1924-RX-nn | X0435-X0439 | EC3S-I1924-RX-nn | X0510-X0514 | EC3P-N9314-nn |
| 400V, 1.5kW, 23-bit encoder, with brake | M0776 | MXL-15D1030LB244 | X0440-X0444 | EC3S-A1924-RX-nn | X0435-X0439 | EC3S-I1924-RX-nn | X0515-X0519 | EC3P-B9314-nn |
| 400V, 1.5kW, 17-bit encoder, no brake | M0777 | MXL-15D1030TB224 | X0440-X0444 | EC3S-A1924-RX-nn | X0435-X0439 | EC3S-I1924-RX-nn | X0510-X0514 | EC3P-N9314-nn |
| 400V, 1.5kW, 17-bit encoder, with brake | M0778 | MXL-15D1030TB244 | X0440-X0444 | EC3S-A1924-RX-nn | X0435-X0439 | EC3S-I1924-RX-nn | X0515-X0519 | EC3P-B9314-nn |
| 200V, 2kW, 23-bit encoder, no brake | M0763 | MXL-20A1030LB224 | X0440-X0444 | EC3S-A1924-RX-nn | X0435-X0439 | EC3S-I1924-RX-nn | X0510-X0514 | EC3P-N9314-nn |
| 200V, 2kW, 23-bit encoder, with brake | M0764 | MXL-20A1030LB244 | X0440-X0444 | EC3S-A1924-RX-nn | X0435-X0439 | EC3S-I1924-RX-nn | X0515-X0519 | EC3P-B9314-nn |
| 200V, 2kW, 17-bit encoder, no brake | M0779 | MXL-20A1030TB224 | X0440-X0444 | EC3S-A1924-RX-nn | X0435-X0439 | EC3S-I1924-RX-nn | X0510-X0514 | EC3P-N9314-nn |
| 200V, 2kW, 17-bit encoder, with brake | M0780 | MXL-20A1030TB244 | X0440-X0444 | EC3S-A1924-RX-nn | X0435-X0439 | EC3S-I1924-RX-nn | X0515-X0519 | EC3P-B9314-nn |
| 400V, 2kW, 23-bit encoder, no brake | M0781 | MXL-20D1030LB224 | X0440-X0444 | EC3S-A1924-RX-nn | X0435-X0439 | EC3S-I1924-RX-nn | X0510-X0514 | EC3P-N9314-nn |
| 400V, 2kW, 23-bit encoder, with brake | M0772 | MXL-20D1030LB244 | X0440-X0444 | EC3S-A1924-RX-nn | X0435-X0439 | EC3S-I1924-RX-nn | X0515-X0519 | EC3P-B9314-nn |
| 400V, 2kW, 17-bit encoder, no brake | M0782 | MXL-20D1030TB224 | X0440-X0444 | EC3S-A1924-RX-nn | X0435-X0439 | EC3S-I1924-RX-nn | X0510-X0514 | EC3P-N9314-nn |
| 400V, 2kW, 17-bit encoder, with brake | M0783 | MXL-20D1030TB244 | X0440-X0444 | EC3S-A1924-RX-nn | X0435-X0439 | EC3S-I1924-RX-nn | X0515-X0519 | EC3P-B9314-nn |
| 200V, 3kW, 23-bit encoder, no brake | M0765 | MXL-30A1330LA224 | X0440-X0444 | EC3S-A1924-RX-nn | X0435-X0439 | EC3S-I1924-RX-nn | X0510-X0514 | EC3P-N9314-nn |
| 200V, 3kW, 23-bit encoder, with brake | M0766 | MXL-30A1330LA244 | X0440-X0444 | EC3S-A1924-RX-nn | X0435-X0439 | EC3S-I1924-RX-nn | X0515-X0519 | EC3P-B9314-nn |
| 400V, 3kW, 23-bit encoder, no brake | M0784 | MXL-30D1330LA224 | X0440-X0444 | EC3S-A1924-RX-nn | X0435-X0439 | EC3S-I1924-RX-nn | X0510-X0514 | EC3P-N9314-nn |
| 400V, 4kW, 23-bit encoder, no brake | M0786 | MXL-40D1330LA224 | X0440-X0444 | EC3S-A1924-RX-nn | X0435-X0439 | EC3S-I1924-RX-nn | X0580-X0584 | EC3P-N9319-nn |
| 400V, 4kW, 23-bit encoder, with brake | M0787 | MXL-40D1330LA244 | X0440-X0444 | EC3S-A1924-RX-nn | X0435-X0439 | EC3S-I1924-RX-nn | X0585-X0589 | EC3P-B9319-nn |
| 400V, 5kW, 23-bit encoder, no brake | M0788 | MXL-50D1330LA224 | X0440-X0444 | EC3S-A1924-RX-nn | X0435-X0439 | EC3S-I1924-RX-nn | X0580-X0584 | EC3P-N9319-nn |
| 400V, 5kW, 23-bit encoder, with brake | M0789 | MXL-50D1330LA244 | X0440-X0444 | EC3S-A1924-RX-nn | X0435-X0439 | EC3S-I1924-RX-nn | X0585-X0589 | EC3P-B9319-nn |

The "nn" at the end of the ENCODER CABLE code represents the cable length: E.g: EC3S-I1724-RX-10 = 10 metre cable
valid lengths are: 1M5, 05, 10, 15, 20. All lengths are in Metres

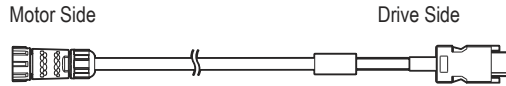
All "RX" cable are flexible and suitable for drag chain applications

CABLES

Encoder Cables

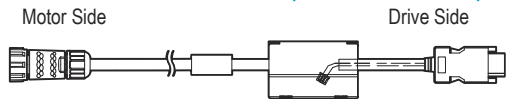
MXL Motors (50W - 1kW)

EC3S-I1724-RX-nn (Inc Encoder)

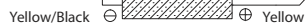


| Pin | Signal | Pin | Signal |
|-----|--------|-------|--------|
| 1 | S+ | 7 | S+ |
| 2 | S- | 8 | S- |
| 3 | BAT+ | 9 | BAT+ |
| 4 | MA+ | 5 | MA+ |
| 5 | MA- | 6 | MA- |
| 6 | PG5V | 1 | PG5V |
| 7 | PG0V | 2 | PG0V |
| 8 | BAT- | 10 | BAT- |
| 9 | FG | Shell | FG |

EC3S-A1724-RX-nn (Abs Encoder)

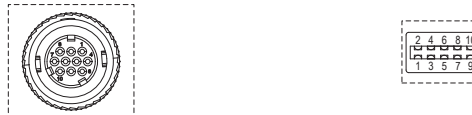
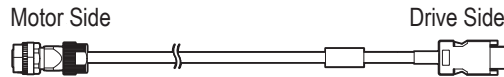


| Pin | Signal | Pin | Signal |
|-----|--------|-------|--------|
| 1 | S+ | 7 | S+ |
| 2 | S- | 8 | S- |
| 3 | BAT+ | 9 | BAT+ |
| 4 | MA+ | 5 | MA+ |
| 5 | MA- | 6 | MA- |
| 6 | PG5V | 1 | PG5V |
| 7 | PG0V | 2 | PG0V |
| 8 | BAT- | 10 | BAT- |
| 9 | FG | Shell | FG |



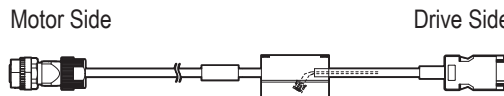
MXL Motors (1.5kW - 5kW)

EC3S-I1924-RX-nn (Inc Encoder)



| Pin | Signal | Colour | Pin | Signal | Colour |
|-----|--------|--------------|-------|--------|--------------|
| 1 | S+ | Blue | 7 | S+ | Blue |
| 2 | S- | Blue/Black | 8 | S- | Blue/Black |
| 3 | BAT+ | Yellow | 9 | BAT+ | Yellow |
| 4 | BAT- | Yellow/Black | 10 | BAT- | Yellow/Black |
| 8 | PG5V | Red | 1 | PG5V | Red |
| 7 | PG0V | Black | 2 | PG0V | Red |
| 10 | FG | - | shell | FG | - |

EC3S-A1924-RX-nn (Abs Encoder)



| Pin | Signal | Colour | Pin | Signal | Colour |
|-----|--------|--------------|-------|--------|--------------|
| 1 | S+ | Blue | 7 | S+ | Blue |
| 2 | S- | Blue/Black | 8 | S- | Blue/Black |
| 3 | BAT+ | Yellow | 9 | BAT+ | Yellow |
| 4 | BAT- | Yellow/Black | 10 | BAT- | Yellow/Black |
| 8 | PG5V | Red | 1 | PG5V | Red |
| 7 | PG0V | Black | 2 | PG0V | Red |
| 10 | FG | - | shell | FG | - |

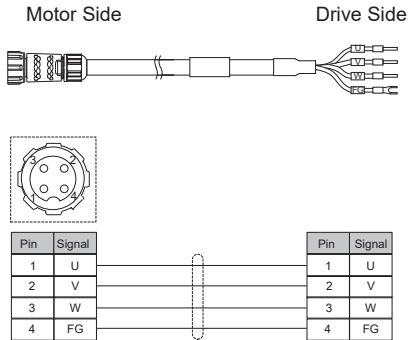


CABLES

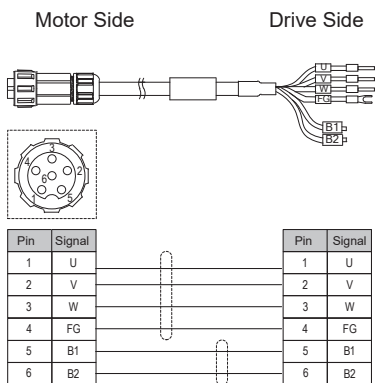
Power Cables

MXL Motors (50W - 1kW)

EC3P-N8718-RX-nn (No Brake)

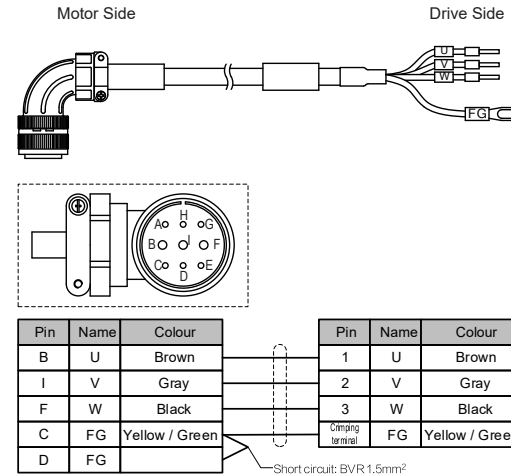


EC3P-B8718-RX-nn (Brake)

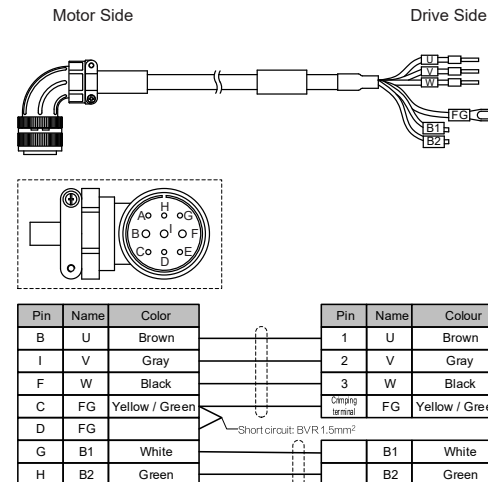


MXL Motors (1.5kW - 3kW)

EC3P-N9314-RX-nn (No Brake)

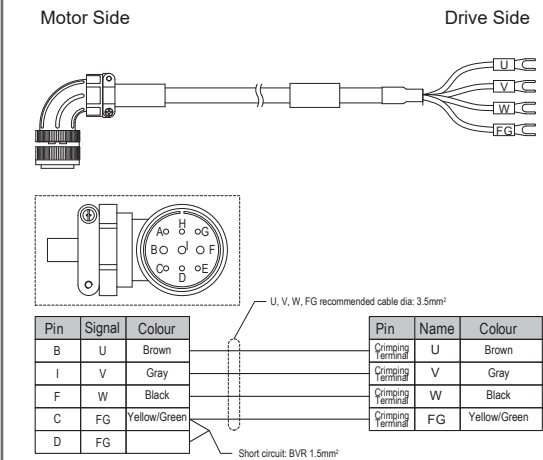


EC3P-B9314-RX-nn (Brake)

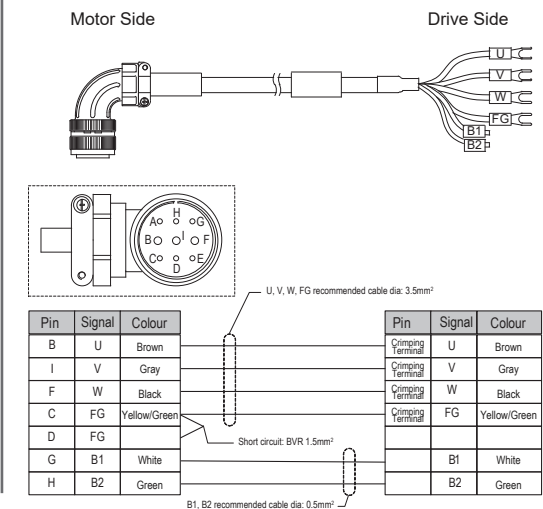


MXL Motors (4kW - 5kW)

EC3P-N9319-RX-nn (No Brake)



EC3P-B9319-RX-nn (Brake)



CABLES

Encoder Cables

Component Selection

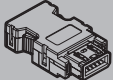
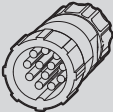
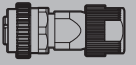
Encoder Cables Connectors

Component Selection

| Trio part # | Cable | Description |
|-------------|-------------------|---|
| X0400 | EC3S-I1724-RX-1M5 | 1.5m Encoder cable, no battery (50W - 1kW) |
| X0401 | EC3S-I1724-RX-05 | 5m Encoder cable, no battery (50W - 1kW) |
| X0402 | EC3S-I1724-RX-10 | 10m Encoder cable, no battery (50W - 1kW) |
| X0403 | EC3S-I1724-RX-15 | 15m Encoder cable, no battery (50W - 1kW) |
| X0404 | EC3S-I1724-RX-20 | 20m Encoder cable, no battery (50W - 1kW) |
| X0405 | EC3S-A1724-RX-1M5 | 1.5m Encoder cable, with battery (50W - 1kW) |
| X0406 | EC3S-A1724-RX-05 | 5m Encoder cable, with battery (50W - 1kW) |
| X0407 | EC3S-A1724-RX-10 | 10m Encoder cable, with battery (50W - 1kW) |
| X0408 | EC3S-A1724-RX-15 | 15m Encoder cable, with battery (50W - 1kW) |
| X0409 | EC3S-A1724-RX-20 | 20m Encoder cable, with battery (50W - 1kW) |
| X0435 | EC3S-I1924-RX-1M5 | 1.5m Encoder cable, no battery (1.5kW - 5kW) |
| X0436 | EC3S-I1924-RX-05 | 5m Encoder cable, no battery (1.5kW - 5kW) |
| X0437 | EC3S-I1924-RX-10 | 10m Encoder cable, no battery (1.5kW - 5kW) |
| X0438 | EC3S-I1924-RX-15 | 15m Encoder cable, no battery (1.5kW - 5kW) |
| X0439 | EC3S-I1924-RX-20 | 20m Encoder cable, no battery (1.5kW - 5kW) |
| X0440 | EC3S-A1924-RX-1M5 | 1.5m Encoder cable, with battery (1.5kW - 5kW) |
| X0441 | EC3S-A1924-RX-05 | 5m Encoder cable, with battery (1.5kW - 5kW) |
| X0442 | EC3S-A1924-RX-10 | 10m Encoder cable, with battery (1.5kW - 5kW) |
| X0443 | EC3S-A1924-RX-15 | 15m Encoder cable, with battery (1.5kW - 5kW) |
| X0444 | EC3S-A1924-RX-20 | 20m Encoder cable, with battery (1.5kW - 5kW) |
| X0600 | EC3S-I1724-XX | Encoder cable connectors only, no battery (50W - 1kW) |
| X0601 | EC3S-A1724-XX | Encoder cable connectors only, with battery (50W - 1kW) |
| X0606 | EC3S-I1924-XX | Encoder cable connectors only, no battery (1.5kW - 5kW) |
| X0607 | EC3S-A1924-XX | Encoder cable connectors only, with battery (1.5kW - 5kW) |

The "nn" at the end of the ENCODER CABLE code represents the cable length:
E.g: EC3S-I1724-RX-10 = 10 metre cable
valid lengths are: 1M5, 05, 10, 15, 20. All lengths are in Metres

All "RX" cable are flexible and suitable for drag chain applications

| Description | Function | |
|---|--|---|
| Encoder plug (Drive) | DX Drive X0600, X0601, X0607, X0608 |  |
| Encoder plug (Motor) (waterproof lead) | MXL motor (0.05kW ~ 1kW) X0600 - EC3S-I1724-XX X0601 - EC3S-A1724-XX |  |
| Encoder plug (Motor) (straight, 10pin, 3A) | MXL motor (1.5kW ~ 5kW) X0606 - EC3S-I1924-XX X0607 - EC3S-A1924-XX |  |

N.B: Encoder cable connector pack includes motor side and drive drive side connector

CABLES

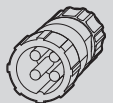
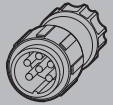

Power Cables

Component Selection

Motor Cables Connectors

Component Selection

| Trio part # | Cable | Description |
|-------------|-------------------|--|
| X0500 | EC3P-N8718-RX-1M5 | 1.5m Power cable, no brake (50W - 1kW) |
| X0501 | EC3P-N8718-RX-05 | 5m Power cable, no brake (50W - 1kW) |
| X0502 | EC3P-N8718-RX-10 | 10m Power cable, no brake (50W - 1kW) |
| X0503 | EC3P-N8718-RX-15 | 15m Power cable, no brake (50W - 1kW) |
| X0504 | EC3P-N8718-RX-20 | 20m Power cable, no brake (50W - 1kW) |
| X0505 | EC3P-B8718-RX-1M5 | 1.5m Power cable, with brake (50W - 1kW) |
| X0506 | EC3P-B8718-RX-05 | 5m Power cable, with brake (50W - 1kW) |
| X0507 | EC3P-B8718-RX-10 | 10m Power cable, with brake (50W - 1kW) |
| X0508 | EC3P-B8718-RX-15 | 15m Power cable, with brake (50W - 1kW) |
| X0509 | EC3P-B8718-RX-20 | 20m Power cable, with brake (50W - 1kW) |
| X0510 | EC3P-N9314-RX-1M5 | 1.5m Power cable, no brake (1.5kW - 3kW) |
| X0511 | EC3P-N9314-RX-05 | 5m Power cable, no brake (1.5kW - 3kW) |
| X0512 | EC3P-N9314-RX-10 | 10m Power cable, no brake (1.5kW - 3kW) |
| X0513 | EC3P-N9314-RX-15 | 15m Power cable, no brake (1.5kW - 3kW) |
| X0514 | EC3P-N9314-RX-20 | 20m Power cable, no brake (1.5kW - 3kW) |
| X0515 | EC3P-N9314-RX-1M5 | 1.5m Power cable, with brake (1.5kW - 3kW) |
| X0516 | EC3P-N9314-RX-05 | 5m Power cable, with brake (1.5kW - 3kW) |
| X0517 | EC3P-N9314-RX-10 | 10m Power cable, with brake (1.5kW - 3kW) |
| X0518 | EC3P-N9314-RX-15 | 15m Power cable, with brake (1.5kW - 3kW) |
| X0519 | EC3P-N9314-RX-20 | 20m Power cable, with brake (1.5kW - 3kW) |
| X0580 | EC3P-N9319-RX-1M5 | 1.5m Power cable, no brake (4kW - 5kW) |
| X0581 | EC3P-N9319-RX-05 | 5m Power cable, no brake (4kW - 5kW) |
| X0582 | EC3P-N9319-RX-10 | 10m Power cable, no brake (4kW - 5kW) |
| X0583 | EC3P-N9319-RX-15 | 15m Power cable, no brake (4kW - 5kW) |
| X0584 | EC3P-N9319-RX-20 | 20m Power cable, no brake (4kW - 5kW) |
| X0585 | EC3P-B9319-RX-1M5 | 1.5m Power cable, with brake (4kW - 5kW) |
| X0586 | EC3P-B9319-RX-05 | 5m Power cable, with brake (4kW - 5kW) |
| X0587 | EC3P-B9319-RX-10 | 10m Power cable, with brake (4kW - 5kW) |
| X0588 | EC3P-B9319-RX-15 | 15m Power cable, with brake (4kW - 5kW) |
| X0589 | EC3P-B9319-RX-20 | 20m Power cable, with brake (4kW - 5kW) |
| X0708 | EC3P-N8718-XX | Power cable connector only, no brake (50W - 1kW) |
| X0709 | EC3P-B8718-XX | Power cable connector only, with brake (50W - 1kW) |
| X0710 | EC3P-N9314-XX | Power cable connector only, no brake (1.5kW - 3kW) |
| X0711 | EC3P-B9314-XX | Power cable connector only, with brake (1.5kW - 3kW) |
| X0718 | EC3P-N9319-XX | Power cable connector only, no brake (4kW - 5kW) |
| X0719 | EC3P-B9319-XX | Power cable connector only, with brake (4kW - 5kW) |

| Description | Function | |
|---|---|---|
| Motor power plug (without brake, waterproof lead) | MXL motor (0.05kW ~ 1kW) X0708 - EC3P-N8718-XX X0709 - EC3P-B8718-XX |  |
| Motor power plug (with brake, waterproof lead) | MXL motor (0.05kW ~ 1kW) X0708 - EC3P-N8718-XX X0709 - EC3P-B8718-XX |  |
| Motor power plug (right angle, 9pin, 13A, 23A) | MXL motor (1.5kW~5.0kW) X0710 - EC3P-N9314-XX X0711 - EC3P-B9313-XX X0718 - EC3P-N9319-XX X0719 - EC3P-B9139-XX |  |

N.B: Power cable connector pack includes only motor side connector as drive side connector is included with the drive

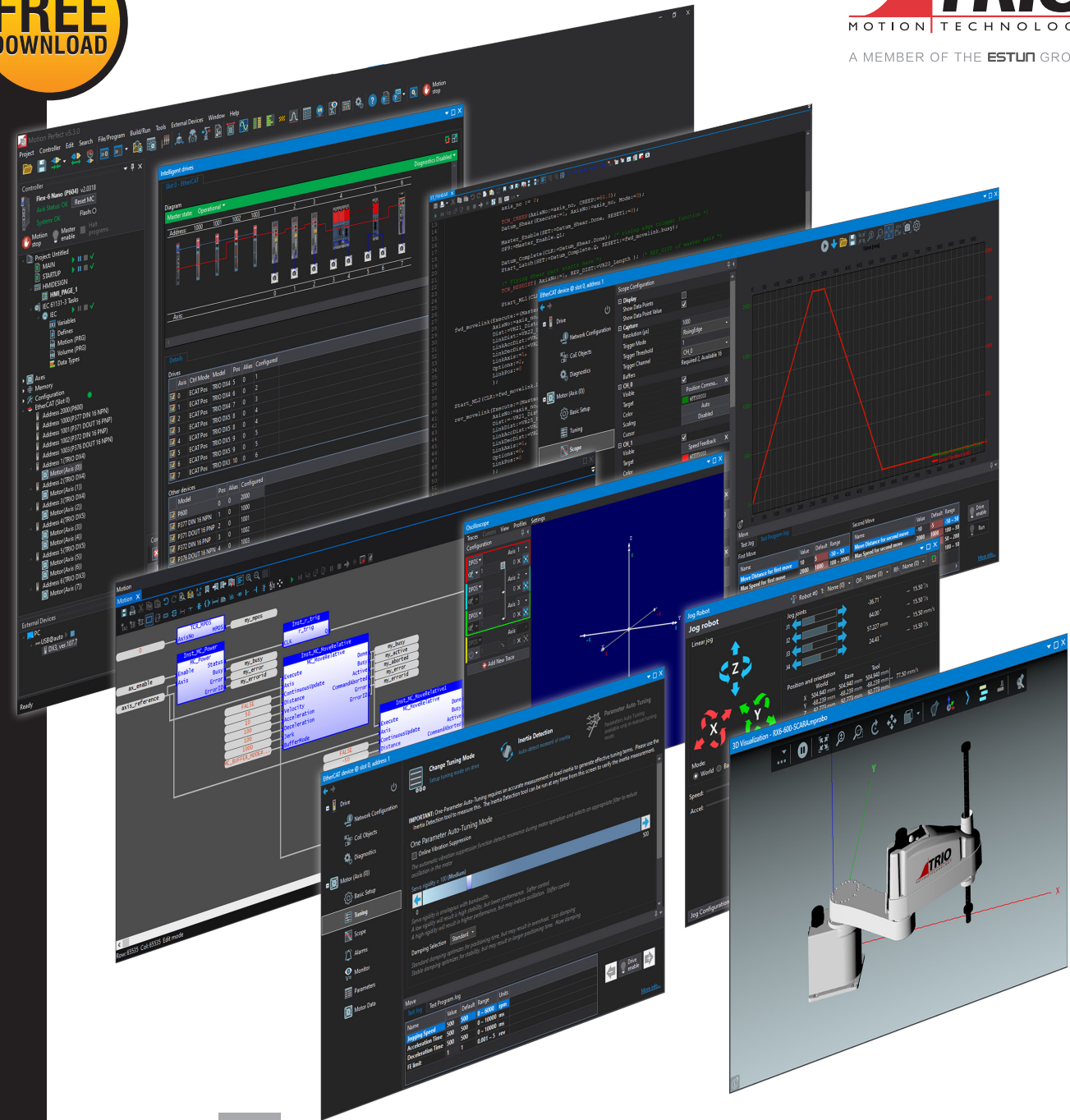
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