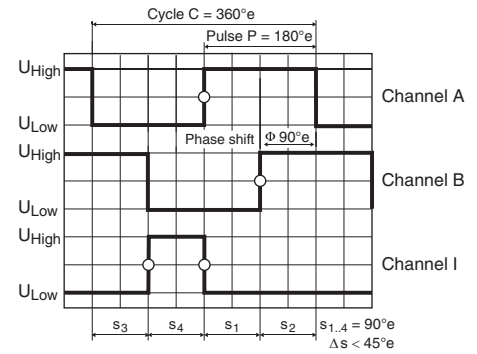
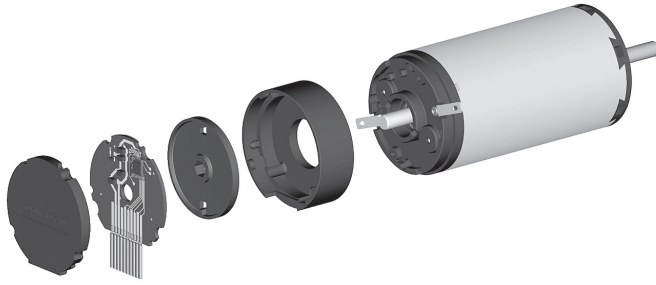


Encoder MR Type L, 256–1024 CPT, 3 Channels, with Line Driver



Direction of rotation cw (definition cw p. 150)

- █ Stock program
- Standard program
- Special program (on request)

Part Numbers

| 225783 | 228452 | 225785 | 228456 | 225787 |
|--------|--------|--------|--------|--------|
|--------|--------|--------|--------|--------|

| Type | | | | | | |
|--------------------------------|--|-------|-------|-------|-------|-------|
| Counts per turn | | 256 | 500 | 512 | 1000 | 1024 |
| Number of channels | | 3 | 3 | 3 | 3 | 3 |
| Max. operating frequency (kHz) | | 80 | 200 | 160 | 200 | 320 |
| Max. speed (rpm) | | 18750 | 24000 | 18750 | 12000 | 18750 |



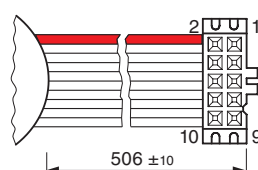
maxon Modular System

| + Motor | Page | + Gearhead | Page | + Brake | Page | Overall length [mm] / ● see Gearhead | | | | |
|------------------|---------|----------------------|---------|---------|------|--------------------------------------|-------|-------|-------|-------|
| RE 30, 15 W | 182 | | | | | 79.4 | 79.4 | 79.4 | 79.4 | 79.4 |
| RE 30, 15 W | 182 | GP 32, 0.75 - 4.5 Nm | 340 | | | ● | ● | ● | ● | ● |
| RE 30, 60 W | 183 | | | | | 79.4 | 79.4 | 79.4 | 79.4 | 79.4 |
| RE 30, 60 W | 183 | GP 32, 0.75 - 4.5 Nm | 338 | | | ● | ● | ● | ● | ● |
| RE 30, 60 W | 183 | GP 32, 0.75 - 6.0 Nm | 340-344 | | | ● | ● | ● | ● | ● |
| RE 30, 60 W | 183 | GP 32 S | 370-372 | | | ● | ● | ● | ● | ● |
| RE 35, 90 W | 184 | | | | | 82.4 | 82.4 | 82.4 | 82.4 | 82.4 |
| RE 35, 90 W | 184 | GP 32, 0.75 - 4.5 Nm | 338 | | | ● | ● | ● | ● | ● |
| RE 35, 90 W | 184 | GP 32, 0.75 - 6.0 Nm | 340-344 | | | ● | ● | ● | ● | ● |
| RE 35, 90 W | 184 | GP 32, 4.0 - 8.0 Nm | 345 | | | ● | ● | ● | ● | ● |
| RE 35, 90 W | 184 | GP 42, 3 - 15 Nm | 349 | | | ● | ● | ● | ● | ● |
| RE 35, 90 W | 184 | GP 32 S | 370-372 | | | ● | ● | ● | ● | ● |
| RE 40, 25 W | 185 | | | | | 82.4 | 82.4 | 82.4 | 82.4 | 82.4 |
| RE 40, 150 W | 186 | | | | | 82.4 | 82.4 | 82.4 | 82.4 | 82.4 |
| RE 40, 150 W | 186 | GP 42, 3 - 15 Nm | 349 | | | ● | ● | ● | ● | ● |
| RE 40, 150 W | 186 | GP 52, 4 - 30 Nm | 354 | | | ● | ● | ● | ● | ● |
| A-max 32 | 214/216 | | | | | 72.7 | 72.7 | 72.7 | 72.7 | 72.7 |
| A-max 32 | 214/216 | GP 32, 0.75 - 6.0 Nm | 340-343 | | | ● | ● | ● | ● | ● |
| A-max 32 | 214/216 | GS 38, 0.1 - 0.6 Nm | 348 | | | ● | ● | ● | ● | ● |
| A-max 32 | 214/216 | GP 32 S | 370-372 | | | ● | ● | ● | ● | ● |
| EC-max 40, 70 W | 266 | | | | | 73.9 | 73.9 | 73.9 | 73.9 | 73.9 |
| EC-max 40, 70 W | 266 | GP 42, 3 - 15 Nm | 350 | | | ● | ● | ● | ● | ● |
| EC-max 40, 120 W | 267 | | | | | 103.9 | 103.9 | 103.9 | 103.9 | 103.9 |
| EC-max 40, 120 W | 267 | GP 52, 4 - 30 Nm | 355 | | | ● | ● | ● | ● | ● |

Technical Data

| | |
|---------------------------------|------------------------|
| Supply voltage V_{CC} | 5 V ± 5% |
| Output signal | TTL compatible |
| Phase shift Φ | 90°e ± 45°e |
| Index pulse width | 90°e ± 45°e |
| Operating temperature range | -25...+85°C |
| Moment of inertia of code wheel | ≤ 1.7 gcm ² |
| Output current per channel | max. 5 mA |

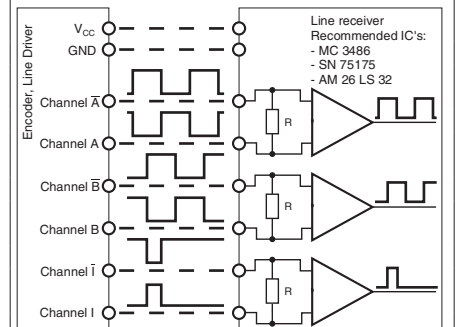
Pin Allocation



- 1 N.C.
- 2 V_{CC}
- 3 GND
- 4 N.C.
- 5 Channel A
- 6 Channel A
- 7 Channel B
- 8 Channel B
- 9 Channel I (Index)
- 10 Channel I (Index)

DIN Connector 41651/
EN 60603-13
flat band cable AWG 28

Connection example



Opt. terminal resistance $R > 1 \text{ k}\Omega$