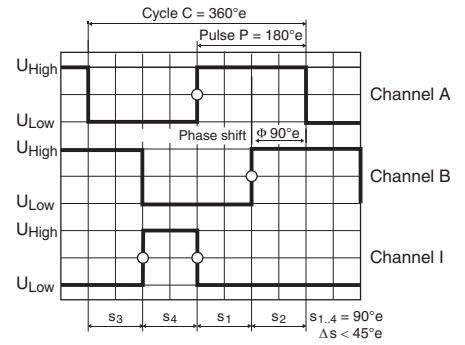


Encoder MR Type ML, 128 - 1000 CPT, 3 Channels, with Line Driver



Direction of rotation cw (definition cw p. 48)

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

Order Number

225771 225773 225778 225805 225780

Type	225771	225773	225778	225805	225780
Counts per turn	128	256	500	512	1000
Number of channels	3	3	3	3	3
Max. operating frequency (kHz)	80	160	200	320	200
Max. speed (rpm)	37500	37500	24000	37500	12000



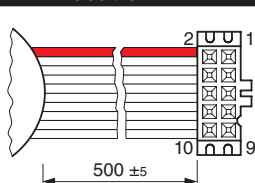
maxon Modular System

+ Motor	Page	+ Gearhead	Page	+ Brake	Page	Overall length [mm] / ● see Gearhead				
RE 25	77/79					65.5	65.5	65.5	65.5	65.5
RE 25	77/79	GP 26, 0.5 - 2.0 Nm	227			●	●	●	●	●
RE 25	77/79	GP 32, 0.75 - 6.0 Nm	229-233			●	●	●	●	●
RE 25	77/79	KD 32, 1.0 - 4.5 Nm	235			●	●	●	●	●
RE 25	77/79	GP 32 S	249-251			●	●	●	●	●
RE 25, 20 W	78					54.0	54.0	54.0	54.0	54.0
RE 25, 20 W	78	GP 26, 0.5 - 2.0 Nm	227			●	●	●	●	●
RE 25, 20 W	78	GP 32, 0.75 - 6.0 Nm	229-233			●	●	●	●	●
RE 25, 20 W	78	KD 32, 1.0 - 4.5 Nm	235			●	●	●	●	●
RE 25, 20 W	78	GP 32 S	249-251			●	●	●	●	●
A-max 26	102-108					53.5	53.5	53.5	53.5	53.5
A-max 26	102-108	GP 26, 0.5 - 2.0 Nm	227			●	●	●	●	●
A-max 26	102-108	GS 30, 0.07 - 0.2 Nm	228			●	●	●	●	●
A-max 26	102-108	GP 32, 0.75 - 6.0 Nm	229-233			●	●	●	●	●
A-max 26	102-108	GS 38, 0.1 - 0.6 Nm	236			●	●	●	●	●
A-max 26	102-108	GP 32 S	249-251			●	●	●	●	●
RE-max 29	131-134					53.5	53.5	53.5	53.5	53.5
RE-max 29	131-134	GP 26, 0.5 - 2.0 Nm	227			●	●	●	●	●
RE-max 29	131-134	GP 32, 0.75 - 6.0 Nm	230-233			●	●	●	●	●
RE-max 29	131-134	GP 32 S	249-251			●	●	●	●	●
EC-max 30, 40 W	166							54.2		54.2
EC-max 30, 40 W	166	GP 32, 1 - 8.0 Nm	233/234			●	●	●	●	●
EC-max 30, 40 W	166	KD 32, 1.0 - 4.5 Nm	235			●	●	●	●	●
EC-max 30, 40 W	166	GP 32 S	249-251			●	●	●	●	●
EC-max 30, 60 W	167							76.2		76.2
EC-max 30, 60 W	167	GP 32, 8 Nm	234			●	●	●	●	●
EC-max 30, 60 W	167	KD 32, 1.0 - 4.5 Nm	235			●	●	●	●	●
EC-max 30, 60 W	167	GP 42, 3 - 15 Nm	238			●	●	●	●	●
EC-4pole 30	175							59.2		59.2
EC-4pole 30	175	GP 32, 4.0 - 8.0 Nm	234			●	●	●	●	●
EC-4pole 30	175	GP 42, 3 - 15 Nm	238			●	●	●	●	●
EC-4pole 30	176							76.2		76.2
EC-4pole 30	176	GP 32, 4.0 - 8.0 Nm	234			●	●	●	●	●
EC-4pole 30	176	GP 42, 3 - 15 Nm	238			●	●	●	●	●

Technical Data

Supply voltage V_{CC}	5 V \pm 5%
Output signal	TTL compatible
Phase shift Φ	90° \pm 45°e
Index pulse width	90° \pm 45°e
Operating temperature range	-25 ... +85°C
Moment of inertia of code wheel	\leq 0.7 gcm ²
Output current per channel	max. 5 mA

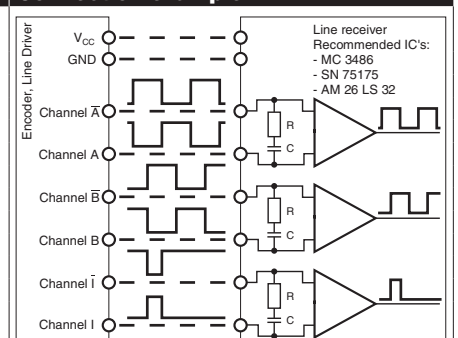
Pin Allocation



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

DIN Connector 41651
flat band cable AWG 28

Connection example



Terminal resistance $R =$ typical 120 Ω
Capacitor $C \geq$ 0.1 nF per m line length