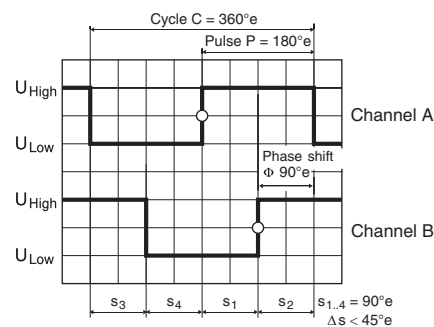


# Encoder MR Type S, 64–256 CPT, 2 Channels, with Line Driver



Direction of rotation cw (definition cw p. 70)

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

### Part Numbers

323049 323050 334910 323051 323052 323053 323054

Type	323049	323050	334910	323051	323052	323053	323054
Counts per turn	64	64	100	128	128	256	256
Number of channels	2	2	2	2	2	2	2
Max. operating frequency (kHz)	80	80	100	160	160	320	320
Max. speed (rpm)	75000	75000	60000	75000	75000	75000	75000



### maxon Modular System

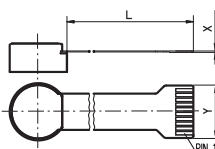
+ Motor	Page	+ Gearhead	Page	+ Brake	Page	Overall length [mm] / ● see Gearhead
RE 8, 0.5 W	73					22.6
RE 8, 0.5 W	73	GP 8, 0.01 - 0.1	231			●
RE 8, 0.5 W	73	GP 8 S	279–280			●
RE 10, 0.75 W	75					22.8
RE 10, 0.75 W	75	GP 10, 0.005 - 0.15 Nm	232/233			●
RE 10, 1.5 W	77					30.4
RE 10, 1.5 W	77	GP 10, 0.005 - 0.15 Nm	232/233			●
RE 13, 0.75 W	80					26.3
RE 13, 0.75 W	81					28.7
RE 13, 0.75 W	81	GP 13, 0.05 - 0.15 Nm	235			●
RE 13, 0.75 W	81	GP 13, 0.2 - 0.35 Nm	236			●
RE 13, 2 W	84					38.5
RE 13, 2 W	85					40.9
RE 13, 2 W	85	GP 13, 0.05 - 0.15 Nm	235			●
RE 13, 2 W	85	GP 13, 0.2 - 0.35 Nm	236			●
RE 13, 1.5 W	88					28.4
RE 13, 1.5 W	89					30.8
RE 13, 1.5 W	89	GP 13, 0.05 - 0.15 Nm	235			●
RE 13, 1.5 W	89	GP 13, 0.2 - 0.35 Nm	236			●
RE 13, 3 W	92					40.6
RE 13, 3 W	93					43.0
RE 13, 3 W	93	GP 13, 0.05 - 0.15 Nm	235			●
RE 13, 3 W	93	GP 13, 0.2 - 0.35 Nm	236			●
A-max 12, 0.5 W	112					25.3
A-max 12, 0.5 W	112	GP 10, 0.01 - 0.15 Nm	233			●
A-max 12, 0.5 W	112	GS 12, 0.01 - 0.03 Nm	234			●
A-max 12, 0.5 W	112	GP 13, 0.05 - 0.15 Nm	235			●
A-max 12, 0.5 W	112	GP 13, 0.2 - 0.35 Nm	236			●
RE-max 13, 0.75 W	140					25.2
RE-max 13, 0.75 W	140	GP 13, 0.05 - 0.15 Nm	235			●
RE-max 13, 0.75 W	140	GP 13, 0.2 - 0.35 Nm	236			●
RE-max 13, 2 W	142					36.2
RE-max 13, 2 W	142	GP 13, 0.05 - 0.15 Nm	235			●
RE-max 13, 2 W	142	GP 13, 0.2 - 0.35 Nm	236			●

### Technical Data

Supply voltage $V_{CC}$	5 V $\pm$ 5%
Output signal	TTL compatible
Phase shift $\phi$	90°e $\pm$ 45°e
Operating temperature range	-25...+85°C
Moment of inertia of code wheel	$\leq$ 0.005 gcm <sup>2</sup>
Output current per channel	max. 5 mA

### Pin Allocation

**Part Numbers 323049–323054**  
 Pin 1–10 / X = 0.3  $\pm$  0.05 / Y = 11 -0.1 / L = 80  $\pm$  3  
 Compatible connector:  
 Molex 52207-1085, Tyco 1-84953-0  
 Adapter print to DIN 41651, Art. No. 327086  
 Pitch 1.0 mm, top contact style

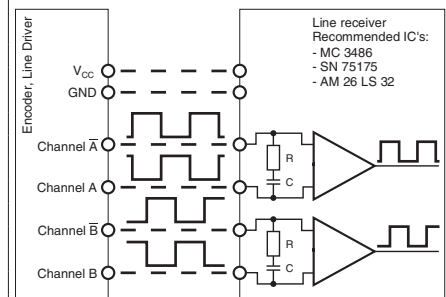


**Part Numbers 334910**  
 Pin 1–8 / X = 0.3  $\pm$  0.03 / Y = 4.5  $\pm$  0.07 / L = 84  $\pm$  3  
 Compatible connector:  
 Molex 52745-0896

- 1 Motor +
- 2  $V_{CC}$
- 3 GND
- 4 Motor -
- 5 Channel A
- 6 Channel A
- 7 Channel B
- 8 Channel B
- 9 N.C.
- 10 N.C.

- 1 Motor +
- 2  $V_{CC}$
- 3 GND
- 4 Motor -
- 5 Channel A
- 6 Channel A
- 7 Channel B
- 8 Channel B

### Connection example



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