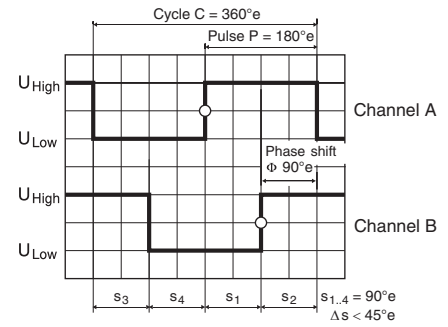
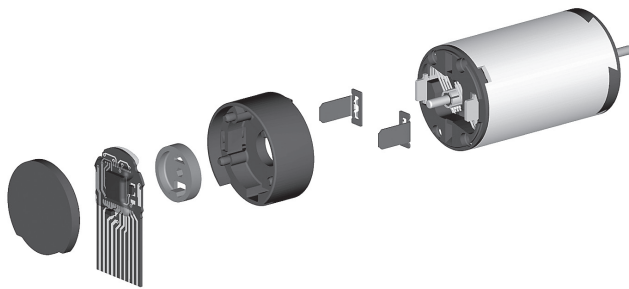


# Encoder MR Type S, 64–256 CPT, 2 Channels, with Line Driver



Direction of rotation cw (definition cw p. 150)

- 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						Overall length [mm] / ● see Gearhead			
+ Motor	Page	+ Gearhead	Page	+ Brake	Page				
RE 8, 0.5 W, A	153						22.6		
RE 8, 0.5 W, A	153	GP 8, 0.01 - 0.1 Nm	312				●		
RE 8, 0.5 W, A	153	GP 8 S	363–364				●		
RE 10, 0.75 W	155					22.8		22.8	22.8
RE 10, 0.75 W	155	GP 10, 0.005 - 0.15 Nm	313/314			●		●	●
RE 10, 1.5 W	157					30.4		30.4	30.4
RE 10, 1.5 W	157	GP 10, 0.005 - 0.15 Nm	313/314			●		●	●
RE 13, 0.75 W	160					26.3		26.3	26.3
RE 13, 0.75 W	161					28.7		28.7	28.7
RE 13, 0.75 W	161	GP 13, 0.05 - 0.15 Nm	316			●		●	●
RE 13, 0.75 W	161	GP 13, 0.2 - 0.35 Nm	317			●		●	●
RE 13, 2 W	164					38.5		38.5	38.5
RE 13, 2 W	165					40.9		40.9	40.9
RE 13, 2 W	165	GP 13, 0.05 - 0.15 Nm	316			●		●	●
RE 13, 2 W	165	GP 13, 0.2 - 0.35 Nm	317			●		●	●
RE 13, 1.5 W	168					28.4		28.4	28.4
RE 13, 1.5 W	169					30.8		30.8	30.8
RE 13, 1.5 W	169	GP 13, 0.05 - 0.15 Nm	316			●		●	●
RE 13, 1.5 W	169	GP 13, 0.2 - 0.35 Nm	317			●		●	●
RE 13, 3 W	172					40.6		40.6	40.6
RE 13, 3 W	173					43.0		43.0	43.0
RE 13, 3 W	173	GP 13, 0.05 - 0.15 Nm	316			●		●	●
RE 13, 3 W	173	GP 13, 0.2 - 0.35 Nm	317			●		●	●
A-max 12, 0.5 W	192					25.3		25.3	25.3
A-max 12, 0.5 W	192	GP 10, 0.01 - 0.15 Nm	314			●		●	●
A-max 12, 0.5 W	192	GS 12, 0.01 - 0.03 Nm	315			●		●	●
A-max 12, 0.5 W	192	GP 13, 0.05 - 0.15 Nm	316			●		●	●
A-max 12, 0.5 W	192	GP 13, 0.2 - 0.35 Nm	317			●		●	●
RE-max 13, 0.75 W	220					25.2		25.2	25.2
RE-max 13, 0.75 W	220	GP 13, 0.05 - 0.15 Nm	316			●		●	●
RE-max 13, 0.75 W	220	GP 13, 0.2 - 0.35 Nm	317			●		●	●
RE-max 13, 2 W	222					36.2		36.2	36.2
RE-max 13, 2 W	222	GP 13, 0.05 - 0.15 Nm	316			●		●	●
RE-max 13, 2 W	222	GP 13, 0.2 - 0.35 Nm	317			●		●	●

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

Pin Allocation	
<b>Part Numbers 323049–323054</b>	
Pin 1–10 / X = 0.3 ± 0.05 / Y = 11 -0.1 / L = 80 ± 3	
Compatible connector: Molex 52207-1033, Tyco 1-84953-0	
Pitch 1.0 mm, top contact style	
	<b>Part Numbers 334910</b> Pin 1–8 / X = 0.3 ± 0.03 / Y = 4.5 ± 0.07 / L = 84 ± 3 Compatible connector: Molex 52745-0833

