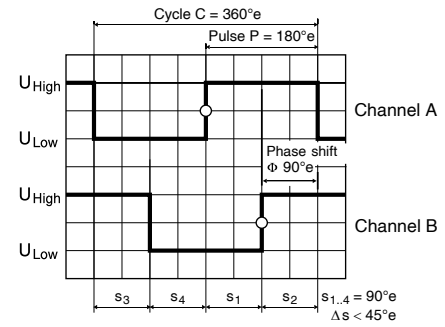


# Encoder MR Type S, 64–256 CPT, 2 channels, with line driver



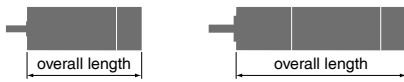
sensor

Direction of rotation cw (definition cw p. 78)

- 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	Ø Enc [mm]	Overall length [mm] / • see Gearhead	
RE 8, 0.5 W, A	118			8	22.6	
RE 8, 0.5 W, A	118	GP 8, 0.01 - 0.1 Nm	369	8	•	
RE 8, 0.5 W, A	118	GP 8 S	419-420	8	•	
RE 10, 0.75 W	120			10	22.8	22.8
RE 10, 0.75 W	120	GP10, 0.005-0.15Nm	370/371	10	•	•
RE 10, 1.5 W	122			10	30.4	30.4
RE 10, 1.5 W	122	GP10, 0.005-0.15Nm	370/371	10	•	•
RE 13, 0.75 W	125			13	26.3	26.3
RE 13, 0.75 W	126			13	28.7	28.7
RE 13, 0.75 W	126	GP 13, 0.05-0.15 Nm	373	13	•	•
RE 13, 0.75 W	126	GP 13, 0.2-0.35 Nm	374	13	•	•
RE 13, 2 W	129			13	38.5	38.5
RE 13, 2 W	130			13	40.9	40.9
RE 13, 2 W	130	GP 13, 0.05-0.15 Nm	373	13	•	•
RE 13, 2 W	130	GP 13, 0.2-0.35 Nm	374	13	•	•
RE 13, 1.5 W	133			13	28.4	28.4
RE 13, 1.5 W	134			13	30.8	30.8
RE 13, 1.5 W	134	GP 13, 0.05-0.15 Nm	373	13	•	•
RE 13, 1.5 W	134	GP 13, 0.2-0.35 Nm	374	13	•	•
RE 13, 3 W	137			13	40.6	40.6
RE 13, 3 W	138			13	43.0	43.0
RE 13, 3 W	138	GP 13, 0.05-0.15 Nm	373	13	•	•
RE 13, 3 W	138	GP 13, 0.2-0.35 Nm	374	13	•	•
A-max 12, 0.5 W	158			12	25.3	25.3
A-max 12, 0.5 W	158	GP10, 0.01-0.15Nm	371	12	•	•
A-max 12, 0.5 W	158	GS12, 0.01-0.03 Nm	372	12	•	•
A-max 12, 0.5 W	158	GP 13, 0.05-0.15 Nm	373	12	•	•
A-max 12, 0.5 W	158	GP 13, 0.2-0.35 Nm	374	12	•	•

Technical Data	
Supply voltage $V_{CC}$	$5 V \pm 5\%$
Typical current draw	11 mA
Output signal	TTL compatible
Phase shift $\phi$	$90^\circ e \pm 45^\circ e$
Operating temperature range	$-25...+85^\circ C$
Moment of inertia of code wheel	$\leq 0.005 \text{ gcm}^2$
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 52207-1033, Tyco 1-84953-0  
 Pitch 1.0 mm, top contact style

**Part Numbers 334910**  
 Pin 1-8 / X =  $0.3 \pm 0.05$  / Y =  $4.5 \pm 0.07$  / L =  $84 \pm$   
 Compatible connector:  
 Molex 52745-0897

**Connection example**

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