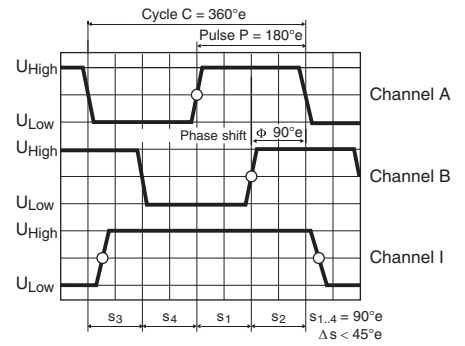
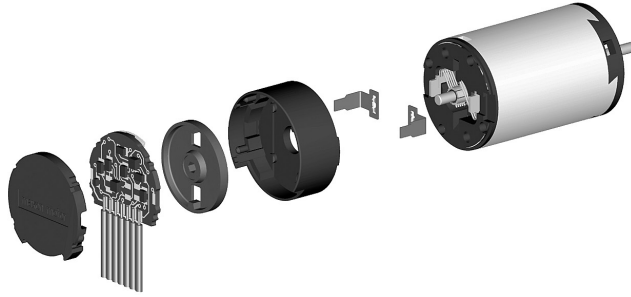


# Encoder MR Type M, 32 Counts per turn, 2/3 Channels



Direction of rotation cw (definition cw p. 48)

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

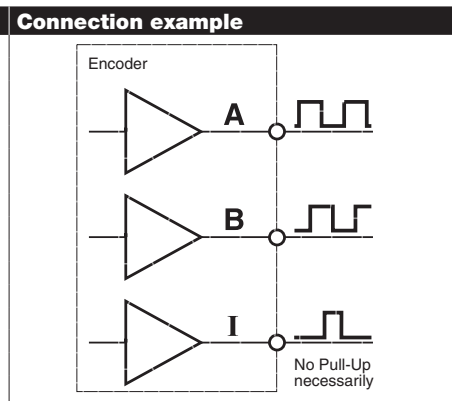
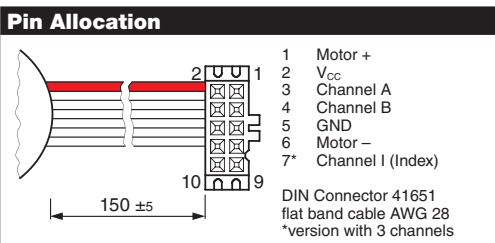
Order Number	
201935	201938

Type	201935	201938
Counts per turn	32	32
Number of channels	2	3
Max. operating frequency (kHz)	8	8
Max. speed (rpm)	15000	15000



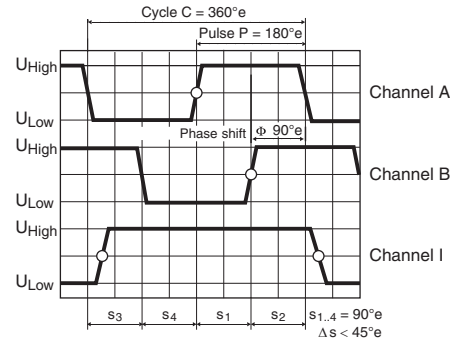
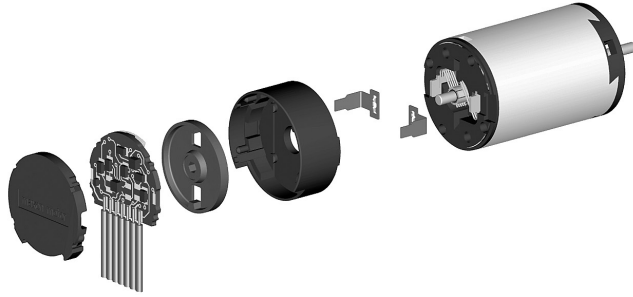
maxon Modular System						
+ Motor	Page	+ Gearhead	Page	+ Brake	Page	Overall length [mm] / ● see Gearhead
RE 16, 2 W	72					28.0 / 28.0
RE 16, 2 W	72	GP 16, 0.06 - 0.18 Nm	214			● / ●
RE 16, 2 W	72	GP 16, 0.1 - 0.3 Nm	215			● / ●
RE 16, 3.2 W	74					45.4 / 45.4
RE 16, 3.2 W	74	GP 16, 0.06 - 0.18 Nm	214			● / ●
RE 16, 3.2 W	74	GP 16, 0.1 - 0.3 Nm	215			● / ●
RE 16, 4.5 W	76					48.4 / 48.4
RE 16, 4.5 W	76	GP 16, 0.06 - 0.18 Nm	214			● / ●
RE 16, 4.5 W	76	GP 16, 0.1 - 0.3 Nm	215			● / ●
A-max 16	90/92					30.4 / 30.4
A-max 16	90/92	GS 16, 0.01 - 0.1 Nm	210-213			● / ●
A-max 16	90/92	GP 16, 0.06 - 0.18 Nm	214			● / ●
A-max 16	90/92	GP 16, 0.1 - 0.3 Nm	215			● / ●
A-max 19, 1.5 W	94					34.0 / 34.0
A-max 19, 1.5 W	94	GP 19, 0.1 - 0.3 Nm	217			● / ●
A-max 19, 1.5 W	94	GP 22, 0.5 - 2.0 Nm	219/222			● / ●
A-max 19, 1.5 W	94	GS 24, 0.1 Nm	226			● / ●
A-max 19, 1.5 W	94	GP 22 S	247/248			● / ●
A-max 19, 2.5 W	96					35.8 / 35.8
A-max 19, 2.5 W	96	GP 19, 0.1 - 0.3 Nm	217			● / ●
A-max 19, 2.5 W	96	GS 20, 0.06 - 0.25 Nm	218			● / ●
A-max 19, 2.5 W	96	GP 22, 0.1 - 2.0 Nm	219/222			● / ●
A-max 19, 2.5 W	96	GS 24, 0.1 Nm	226			● / ●
A-max 19, 2.5 W	96	GP 22 S	247/248			● / ●
A-max 22	98/100					36.9 / 36.9
A-max 22	98/100	GP 22, 0.1 - 0.6 Nm	219/220			● / ●
A-max 22	98/100	GP 22, 0.5 - 2.0 Nm	219-222			● / ●
A-max 22	98/100	GS 24, 0.1 Nm	226			● / ●
A-max 22	98/100	GP 22 S	247/248			● / ●
RE-max 17	120/122					30.4 / 30.4
RE-max 17	120/122	GP 16, 0.06 - 0.18 Nm	214			● / ●
RE-max 17	120/122	GP 16, 0.1 - 0.3 Nm	216			● / ●

Technical Data	
Supply voltage $V_{CC}$	2.7–5.5 V
Output signal $V_{CC} = 5$ VDC	TTL compatible
Phase shift $\Phi$	$90^\circ \pm 45^\circ$
Operating temperature range	-25 ... +85°C
Moment of inertia of code wheel	$\leq 0.09$ gcm <sup>2</sup>
Output current per channel	max. 5 mA



The index signal I is not synchronised with channel A or B. The length of the index signal can last more than one cycle.

# Encoder MR Type M, 32 Counts per turn, 2/3 Channels



Direction of rotation cw (definition cw p. 48)

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

## Order Number

201935      201938

## Type

Counts per turn	32	32
Number of channels	2	3
Max. operating frequency (kHz)	8	8
Max. speed (rpm)	15000	15000



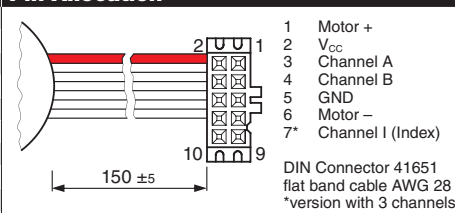
## maxon Modular System

+ Motor	Page	+ Gearhead	Page	+ Brake	Page	Overall length [mm] / ● see Gearhead
RE-max 21, 3.5 W	124					34.0      34.0
RE-max 21, 3.5 W	124	GP 22, 0.5 - 2.0 Nm	221/222			●      ●
RE-max 21, 3.5 W	124	GS 38, 0.1 - 0.6 Nm	236			●      ●
RE-max 21, 3.5 W	124	GP 22 S	247/248			●      ●
RE-max 21, 6 W	126					35.8      35.8
RE-max 21, 6 W	126	GP 22, 0.5 - 2.0 Nm	221/222			●      ●
RE-max 21, 6 W	126	GS 38, 0.1 - 0.6 Nm	236			●      ●
RE-max 21, 6 W	126	GP 22 S	247/248			●      ●
RE-max 24	128/130					36.9      36.9
RE-max 24	128/130	GP 22, 0.5 - 2.0 Nm	222			●      ●
RE-max 24	128/130	GS 38, 0.1 - 0.6 Nm	236			●      ●
RE-max 24	128/130	GP 22 S	247/248			●      ●

## Technical Data

Supply voltage $V_{CC}$	2.7–5.5 V
Output signal $V_{CC} = 5$ VDC	TTL compatible
Phase shift $\Phi$	$90^\circ e \pm 45^\circ e$
Operating temperature range	-25 ... +85°C
Moment of inertia of code wheel	$\leq 0.09$ gcm <sup>2</sup>
Output current per channel	max. 5 mA

## Pin Allocation



## Connection example

