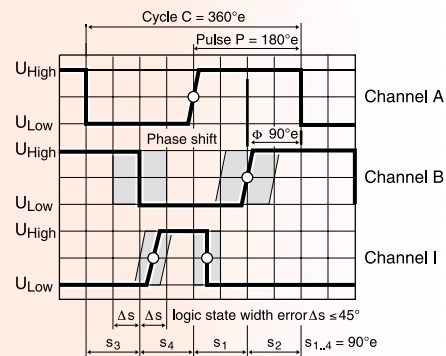
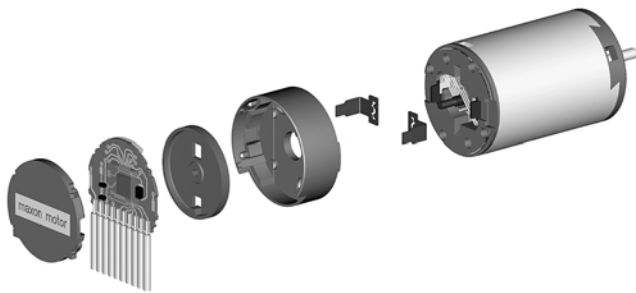


Digital MR Encoder with Line Driver 5 mA, Type M



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

Order Number					
228179	228177	228181	228182	201937	201940

Type						
Counts per turn		128	128	256	256	512
Number of channels		2	3	2	3	3
Max. operating frequency (kHz)		80	80	160	160	320



Combination											
+ Motor	Page	+ Gearhead	Page	+ Brake	Page	Overall length [mm] / ● see:		+ Gearhead			
RE 16, 3.2 W	73					45.4	45.4	45.4	45.4	45.4	45.4
RE 16, 3.2 W	73	GP 16, 0.1 - 0.3 Nm	185			●	●	●	●	●	●
RE 16, 3.2 W	73	GP 16, 0.06 - 0.18 Nm	186			●	●	●	●	●	●
RE 16, 4.5 W	75					48.4	48.4	48.4	48.4	48.4	48.4
RE 16, 4.5 W	75	GP 16, 0.1 - 0.3 Nm	185			●	●	●	●	●	●
RE 16, 4.5 W	75	GP 16, 0.06 - 0.18 Nm	186			●	●	●	●	●	●
A-max 16	102/104					30.4	30.4	30.4	30.4	30.4	30.4
A-max 16	102/104	GS 16, 0.015 Nm	181			●	●	●	●	●	●
A-max 16	102/104	GS 16, 0.01 - 0.1 Nm	182-184			●	●	●	●	●	●
A-max 16	102/104	GP 16, 0.1 - 0.3 Nm	185			●	●	●	●	●	●
A-max 16	102/104	GP 16, 0.06 - 0.18 Nm	186			●	●	●	●	●	●
A-max 19	106					34.0	34.0	34.0	34.0	34.0	34.0
A-max 19	106	GP 19, 0.1 - 0.3 Nm	187			●	●	●	●	●	●
A-max 19	106	GP 22, 0.5 - 2.0 Nm	190/191			●	●	●	●	●	●
A-max 19	106	GS 24, 0.1 Nm	192			●	●	●	●	●	●
A-max 19	108					35.8	35.8	35.8	35.8	35.8	35.8
A-max 19	108	GP 19, 0.1 - 0.3 Nm	187			●	●	●	●	●	●
A-max 19	108	GP 22, 0.5 - 2.0 Nm	190/191			●	●	●	●	●	●
A-max 19	108	GS 24, 0.1 Nm	192			●	●	●	●	●	●
A-max 22	110/112					36.9	36.9	36.9	36.9	36.9	36.9
A-max 22	110/112	GP 22, 0.1 - 0.6 Nm	188/189			●	●	●	●	●	●
A-max 22	110/112	GP 22, 0.5 - 2.0 Nm	190/191			●	●	●	●	●	●
A-max 22	110/112	GS 24, 0.1 Nm	192			●	●	●	●	●	●
RE-max 17	132/134					30.4	30.4	30.4	30.4	30.4	30.4
RE-max 17	132/134	GP 16, 0.1 - 0.3 Nm	185			●	●	●	●	●	●
RE-max 17	132/134	GP 16, 0.06 - 0.18 Nm	186			●	●	●	●	●	●
RE-max 21	136					34.0	34.0	34.0	34.0	34.0	34.0
RE-max 21	136	GP 22, 0.5 - 2.0 Nm	190/191			●	●	●	●	●	●
RE-max 21	136	GS 38, 0.1 - 0.6 Nm	200			●	●	●	●	●	●
RE-max 21	138					35.8	35.8	35.8	35.8	35.8	35.8
RE-max 21	138	GP 22, 0.5 - 2.0 Nm	190/191			●	●	●	●	●	●
RE-max 21	138	GS 38, 0.1 - 0.6 Nm	200			●	●	●	●	●	●
RE-max 24	140/142					36.9	36.9	36.9	36.9	36.9	36.9
RE-max 24	140/142	GP 22, 0.5 - 2.0 Nm	191			●	●	●	●	●	●
RE-max 24	140/142	GS 38, 0.1 - 0.6 Nm	200			●	●	●	●	●	●

Technical Data	
Supply voltage V _{CC}	5 V ± 5 %
Output signal	TTL compatible
Index pulse width (nominal)	90°e
Operating temperature range	-25 ... +85°C
Moment of inertia of code wheel	≤ 0.09 gcm ²
Output current per channel	max. 5 mA

Pin Allocation

- 1 Motor +
- 2 V_{CC}
- 3 Gnd
- 4 Motor -
- 5 Channel A
- 6 Channel A
- 7 Channel B
- 8 Channel B
- 9* Channel I (Index)
- 10* Channel I (Index)

DIN Connector 41651
Flat cables AWG 28
*version with 3 channels

