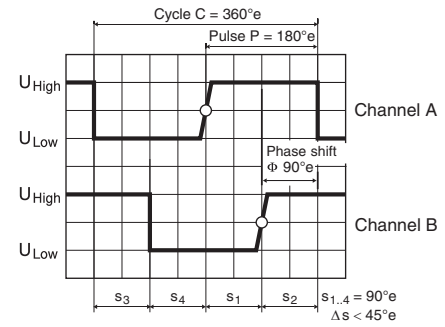
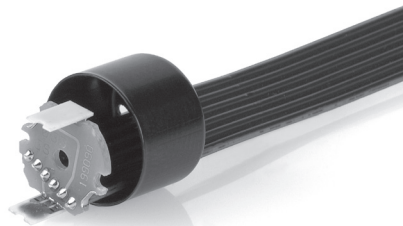
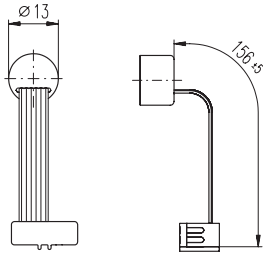


Encoder MEnc 13 16 CPT, 2 Channels



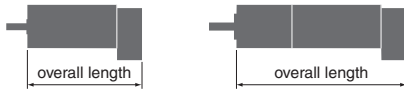
Direction of rotation cw (definition cw p. 150)

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

Part Numbers

110778

Type	
Counts per turn	16
Number of channels	2
Max. operating frequency (kHz)	20
Max. speed (rpm)	75 000



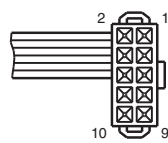
maxon Modular System

+ Motor	Page	+ Gearhead	Page	Overall length [mm] / ● see Gearhead
RE 13, 0.75 W	160/161			27.0/29.4
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	164/165			39.2/41.6
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	168/169			30.3/32.7
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	172/173			42.5/44.9
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	●
RE 16, 3.2 W	176			46.5
RE 16, 3.2 W	176	GP 16, 0.1 - 0.6 Nm	323/324	●
RE 16, 3.2 W	176	GP 16 S	365/366	●
RE 16, 4.5 W	178			49.7
RE 16, 4.5 W	178	GP 16, 0.1 - 0.6 Nm	323/324	●
RE 16, 4.5 W	178	GP 16 S	365/366	●
A-max 16	194/196			33.5
A-max 16	194/196	GS 16, 0.01 - 0.03 Nm	319/320	●
A-max 16	194/196	GS 16, 0.06 - 0.1 Nm	321/322	●
A-max 16	194/196	GP 16, 0.1 - 0.3 Nm	323	●
A-max 16	194/196	GP 16 S	365/366	●
A-max 19	198/200			36.4/39.0
A-max 19	198/200	GP 19, 0.1 - 0.3 Nm	325	●
A-max 19	198/200	GP 22, 0.5 - 2.0 Nm	329/331	●
A-max 19	198/200	GS 24, 0.1 Nm	335	●
A-max 19	198/200	GP 22 S	368/369	●

Technical Data

Supply voltage V_{CC}	3.8 - 24 V
Output signal $V_{CC} = 5$ VDC	TTL compatible
Phase shift Φ	$90^\circ e \pm 45^\circ e$
Power input at $V_{CC} = 5$ VDC	max. 8 mA
Inertia of the magnetic disc	0.07 gcm^2
Operating temperature range	$-20 \dots +80^\circ \text{C}$
Open collector output with integrated pull-up resistance	$10 \text{ k}\Omega \pm 20\%$

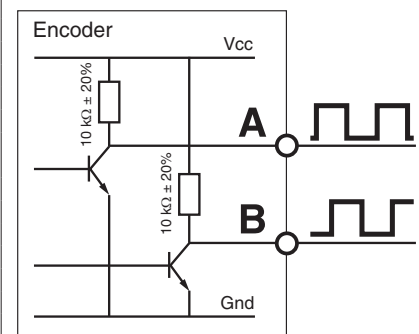
Pin Allocation



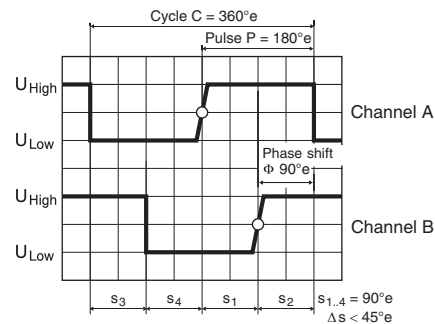
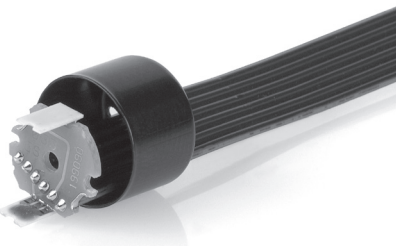
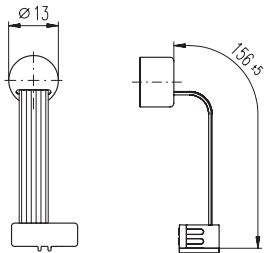
- 1 Motor +
- 2 V_{CC}
- 3 Channel A
- 4 Channel B
- 5 GND
- 6 Motor -

Pin type
DIN 41651/EN 60603-13
(Type 3M 89110-0101 HA)
flat band cable AWG 28

Connection example



Encoder MEnc 13 16 CPT, 2 Channels



Direction of rotation cw (definition cw p. 150)

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

Part Numbers

110778

Type

Counts per turn	16
Number of channels	2
Max. operating frequency (kHz)	20
Max. speed (rpm)	75000



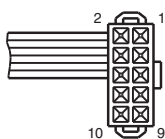
maxon Modular System

+ Motor	Page	+ Gearhead	Page	Overall length [mm] / ● see Gearhead
A-max 22	202/204			39.0
A-max 22	202/204	GP 22, 0.1 - 0.6 Nm	327/328	●
A-max 22	202/204	GP 22, 0.5 - 2.0 Nm	329/331	●
A-max 22	202/204	GS 24, 0.1 Nm	335	●
A-max 22	202/204	GP 22 S	368/369	●
A-max 26	206-212			51.8
A-max 26	206-212	GP 26, 0.75 - 4.5 Nm	336	●
A-max 26	206-212	GS 30, 0.07 - 0.2 Nm	337	●
A-max 26	206-212	GP 32, 0.75 - 4.5 Nm	338	●
A-max 26	206-212	GP 32, 0.75 - 6.0 Nm	339	●
A-max 26	206-212	GS 38, 0.1 - 0.6 Nm	348	●
A-max 26	206-212	GP 32 S	370-372	●

Technical Data

Supply voltage V_{CC}	3.8 - 24 V
Output signal $V_{CC} = 5$ VDC	TTL compatible
Phase shift Φ	$90^\circ \pm 45^\circ$
Power input at $V_{CC} = 5$ VDC	max. 8 mA
Inertia of the magnetic disc	0.07 gcm ²
Operating temperature range	-20...+80 °C
Open collector output with integrated pull-up resistance	10 k $\Omega \pm 20\%$

Pin Allocation



- 1 Motor +
 - 2 V_{CC}
 - 3 Channel A
 - 4 Channel B
 - 5 GND
 - 6 Motor -
- Pin type
DIN 41651/EN 60603-13
(Type 3M 89110-0101 HA)
flat band cable AWG 28

Connection example

