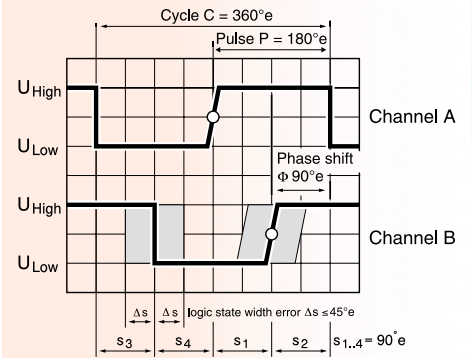
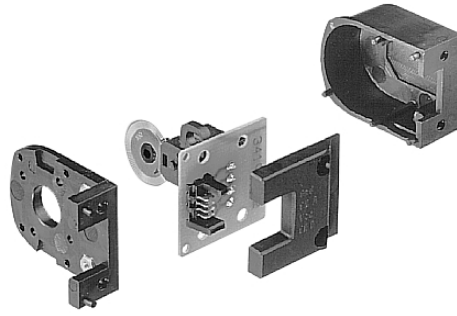
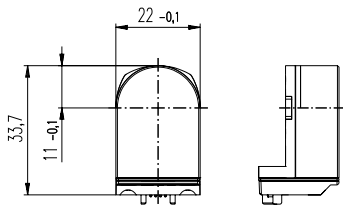


# Digital Encoder Ø22 mm, 100 Counts per turn, 2 Channels



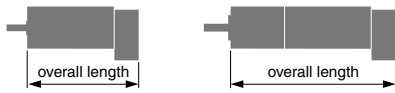
maxon tacho

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

## Order Number

103937	143330	103935	110520	168045	110521
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Type	Shaft diameter	mm	2	2	3	2	3	3
	Orientation encoder to motor mounting defined			± 5°			± 5°	



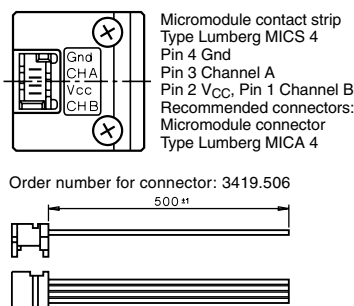
## Combination

+ Motor	Page	+ Gearhead	Page	Overall length [mm] / ● see: + Gearhead
F 2130, 3 W	90			45.0
F 2130, 3 W	90	GS 30, 0.07 - 0.2 Nm	194	●
F 2140, 6 W	93			65.5
F 2140, 6 W	93	GS 38, 0.1 - 0.6 Nm	200	●
A-max 19	106			43.3
A-max 19	106	GP 19, 0.1 - 0.3 Nm	187	●
A-max 19	106	GP 22, 0.5 - 1.0 Nm	190	●
A-max 19	106	GP 22, 0.5 - 2.0 Nm	191	●
A-max 19	106	GS 24, 0.1 Nm	192	●
A-max 19	108			45.9
A-max 19	108	GP 19, 0.1 - 0.3 Nm	187	●
A-max 19	108	GP 22, 0.5 - 1.0 Nm	190	●
A-max 19	108	GP 22, 0.5 - 2.0 Nm	191	●
A-max 19	108	GS 24, 0.1 Nm	192	●
A-max 22	110/112			46.3
A-max 22	110/112	GP 22, 0.2 - 0.6 Nm	188	●
A-max 22	110/112	GP 22, 0.1 - 0.3 Nm	189	●
A-max 22	110/112	GP 22, 0.5 - 1.0 Nm	190	●
A-max 22	110/112	GP 22, 0.5 - 2.0 Nm	191	●
A-max 22	110/112	GS 24, 0.1 Nm	192	●
A-max 26	114-120			59.1
A-max 26	114-120	GP 26, 0.5 - 2.0 Nm	193	●
A-max 26	114-120	GS 30, 0.07 - 0.2 Nm	194	●
A-max 26	114-120	GP 32, 0.75 - 4.5 Nm	195	●
A-max 26	114-120	GP 32, 1.0 - 6.0 Nm	197	●
A-max 26	114-120	GP 32, 0.4 - 2.0 Nm	199	●
A-max 26	114-120	GS 38, 0.1 - 0.6 Nm	200	●

## Technical Data

Supply voltage	5 V ± 10 %
Output signal	TTL compatible
Number of channels	2
Counts per turn	100
Phase shift $\Phi$ (nominal)	90°e
Logic state width s	min. 45°e
Signal rise time (typical at $C_L = 25$ pF, $R_L = 11$ k $\Omega$ , 25°C)	200 ns
Signal fall time (typical at $C_L = 25$ pF, $R_L = 11$ k $\Omega$ , 25°C)	50 ns
Operating temperature range	-20 ... +85°C
Moment of inertia of code wheel	≤ 0,05 gcm <sup>2</sup>
Output current per channel	min. -1 mA, max. 5 mA
Max. operating frequency	min. 20 kHz

## Pin Allocation



## Connection Example

