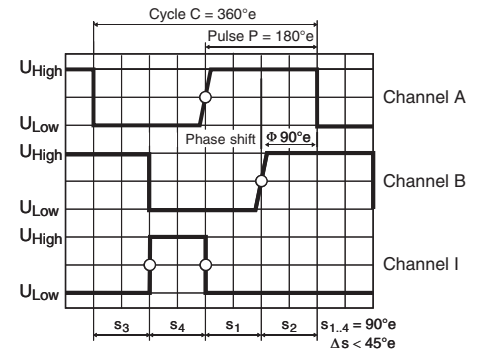
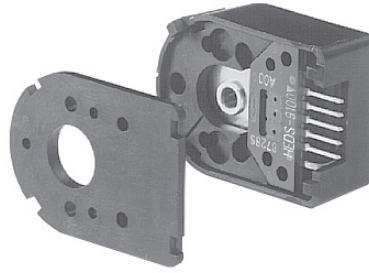
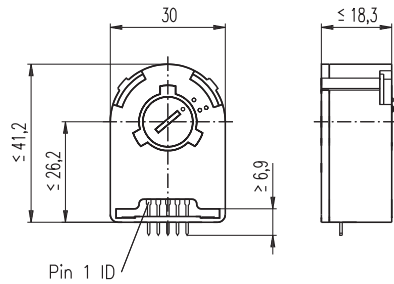


Encoder HEDS 5540 500 CPT, 3 Channels



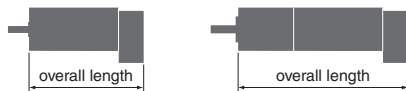
Direction of rotation cw (definition cw p. 78)

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

Part Numbers

110511 110513 110515

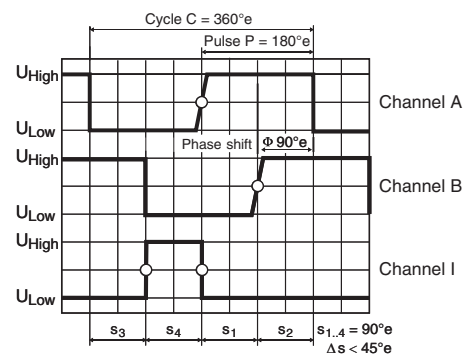
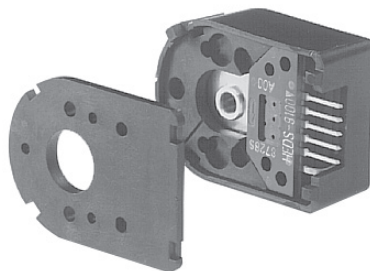
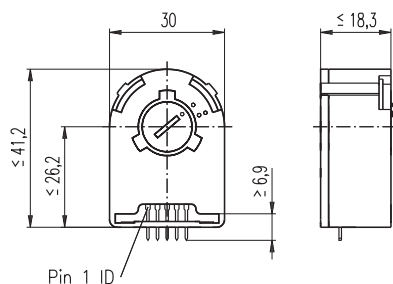
Type			
Counts per turn	500	500	500
Number of channels	3	3	3
Max. operating frequency (kHz)	100	100	100
Max. speed (rpm)	12000	12000	12000
Shaft diameter (mm)	3	4	6



maxon Modular System						
+ Motor	Page	+ Gearhead	Page	+ Brake	Page	Overall length [mm] / • see Gearhead
RE 25	107/109					75.3
RE 25	107/109	GP 26, 0.75 - 2.0 Nm	270			•
RE 25	107/109	GP 32, 0.75 - 6.0 Nm	272-276			•
RE 25	107/109	KD 32, 1.0 - 4.5 Nm	281			•
RE 25	107/109	GP 32 S	301-303			•
RE 25, 20 W	109			AB 28	372	105.8
RE 25, 20 W	109	GP 26, 0.75 - 2.0 Nm	270	AB 28	372	•
RE 25, 20 W	109	GP 32, 0.75 - 6.0 Nm	272-276	AB 28	372	•
RE 25, 20 W	109	KD 32, 1.0 - 4.5 Nm	281	AB 28	372	•
RE 25, 20 W	109	GP 32 S	301-303	AB 28	372	•
RE 30, 15 W	110					88.8
RE 30, 15 W	110	GP 32, 0.75 - 4.5 Nm	274			•
RE 30, 60 W	111					88.8
RE 30, 60 W	111	GP 32, 0.75 - 6.0 Nm	272-278			•
RE 30, 60 W	111	KD 32, 1.0 - 4.5 Nm	281			•
RE 30, 60 W	111	GP 32 S	301-303			•
RE 35, 90 W	112					91.7
RE 35, 90 W	112	GP 32, 0.75 - 8.0 Nm	272-279			•
RE 35, 90 W	112	GP 42, 3.0 - 15 Nm	283			•
RE 35, 90 W	112	GP 32 S	301-303			•
RE 35, 90 W	112			AB 28	372	124.3
RE 35, 90 W	112	GP 32, 0.75 - 8.0 Nm	272-279	AB 28	372	•
RE 35, 90 W	112	GP 42, 3.0 - 15 Nm	283	AB 28	372	•
RE 35, 90 W	112	GP 32 S	301-303	AB 28	372	•
RE 40, 25 W	113					91.7
RE 40, 150 W	114					91.7
RE 40, 150 W	114	GP 42, 3.0 - 15 Nm	283			•
RE 40, 150 W	114	GP 52, 4.0 - 30 Nm	287			•
RE 40, 150 W	114			AB 28	372	124.3
RE 40, 150 W	114	GP 42, 3.0 - 15 Nm	283	AB 28	372	•
RE 40, 150 W	114	GP 52, 4.0 - 30 Nm	287	AB 28	372	•

Technical Data	Pin Allocation	Connection example
Supply voltage V_{CC} 5 V \pm 10% Output signal TTL compatible Phase shift Φ 90°e \pm 45°e Signal rise time (typically, at $C_L = 25$ pF, $R_L = 2.7$ k Ω , 25°C) 180 ns Signal fall time (typically, at $C_L = 25$ pF, $R_L = 2.7$ k Ω , 25°C) 40 ns Index pulse width (nominal) 90°e Operating temperature range -40...+100°C Moment of inertia of code wheel ≤ 0.6 gcm ² Max. angular acceleration 250 000 rad s ⁻² Output current per channel min. -1 mA, max. 5 mA	<p>Encoder Description</p> <p>Pin no. from 3409.506</p> <p>Pin 5 Channel B 1 Pin 4 Vcc 2 Pin 3 Channel A 3 Pin 2 Channel I 4 Pin 1 GND 5</p> <p>Cable with plug: maxon part number 3409.506 The plug (Harting 918.906.6803) can be fixed in the required position.</p> <p>Cable with plug (compatible with encoder HEDS5010): maxon part number 3409.504 The plug (3M 89110-0101) can be fixed in the required position.</p>	<p>Ambient temperature range $\vartheta_U = 25^\circ\text{C}$</p>

Encoder HEDS 5540 500 CPT, 3 Channels



Direction of rotation cw (definition cw p. 78)

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

Part Numbers

110511 110513 110515 110517

Type

Counts per turn	500	500	500	500
Number of channels	3	3	3	3
Max. operating frequency (kHz)	100	100	100	100
Max. speed (rpm)	12000	12000	12000	12000
Shaft diameter (mm)	3	4	6	8

maxon Modular System

+ Motor	Page	+ Gearhead	Page	+ Brake	Page	Overall length [mm] / • see Gearhead
RE 25, 20 W	108					63.8
RE 25, 20 W	108	GP 26, 0.75 - 2.0 Nm	270			•
RE 25, 20 W	108	GP 32, 0.75 - 4.5 Nm	272			•
RE 25, 20 W	108	GP 32, 0.75 - 6.0 Nm	273/276			•
RE 25, 20 W	108	KD 32, 1.0 - 4.5 Nm	281			•
RE 25, 20 W	108	GP 32 S	301-303			•
RE 25, 20 W	108			AB 28	372	94.3
RE 25, 20 W	108	GP 22, 0.5 Nm	262			•
RE 25, 20 W	108	GP 26, 0.75 - 2.0 Nm	270	AB 28	372	•
RE 25, 20 W	108	GP 32, 0.75 - 4.5 Nm	272	AB 28	372	•
RE 25, 20 W	108	GP 32, 0.75 - 6.0 Nm	273/276	AB 28	372	•
RE 25, 20 W	108	KD 32, 1.0 - 4.5 Nm	281	AB 28	372	•
RE 25, 20 W	108	GP 32 S	301-303	AB 28	372	•
RE 50, 200 W	115					128.7
RE 50, 200 W	115	GP 52, 4 - 30 Nm	288			•
RE 50, 200 W	115	GP 62, 8 - 50 Nm	289			•
RE 65, 250 W	116					157.3
RE 65, 250 W	116	GP 81, 20 - 120 Nm	290			•
A-max 26	134-140					63.1
A-max 26	134-140	GP 26, 0.75 - 4.5 Nm	270			•
A-max 26	134-140	GS 30, 0.07 - 0.2 Nm	271			•
A-max 26	134-140	GP 32, 0.75 - 4.5 Nm	272			•
A-max 26	134-140	GP 32, 0.75 - 6.0 Nm	273/277			•
A-max 26	134-140	GS 38, 0.1 - 0.6 Nm	282			•
A-max 26	134-140	GP 32 S	301-303			•
A-max 32	142/144					82.3
A-max 32	142/144	GP 32, 0.75 - 6.0 Nm	272-277			•
A-max 32	142/144	GS 38, 0.1 - 0.6 Nm	282			•
A-max 32	142/144	GP 32 S	301-303			•
EC 32, 80 W	192					78.4
EC 32, 80 W	192	GP 32, 0.75 - 6.0 Nm	272-278			•
EC 32, 80 W	192	GP 32 S	301-303			•
EC 40, 170 W	193					103.4
EC 40, 170 W	193	GP 42, 3.0 - 15 Nm	283			•
EC 40, 170 W	193	GP 52, 4.0 - 30 Nm	287			•

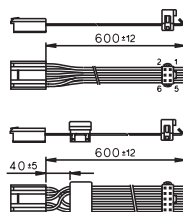
Technical Data

Supply voltage V_{CC}	5 V \pm 10%
Output signal	TTL compatible
Phase shift Φ	90°e \pm 45°e
Signal rise time (typically, at $C_L = 25$ pF, $R_L = 2.7$ k Ω , 25°C)	180 ns
Signal fall time (typically, at $C_L = 25$ pF, $R_L = 2.7$ k Ω , 25°C)	40 ns
Index pulse width	90°e
Operating temperature range	-40...+100°C
Moment of inertia of code wheel	≤ 0.6 gcm ²
Max. angular acceleration	250000 rad s ⁻²
Output current per channel	min. -1 mA, max. 5 mA

The index signal I is synchronized with channel A or B.

Pin Allocation

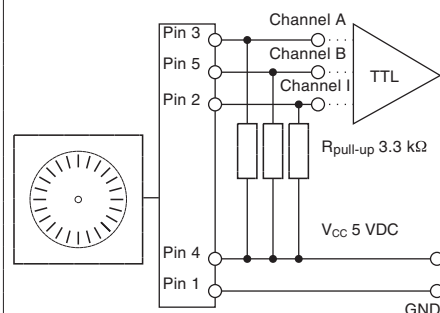
Encoder	Description	Pin no. from 3409.506
Pin 5	Channel B	1
Pin 4	V_{CC}	2
Pin 3	Channel A	3
Pin 2	Channel I	4
Pin 1	GND	5



Cable with plug:
maxon part number 3409.506
The plug (Harting 918.906.6803) can be fixed in the required position.

Cable with plug (compatible with encoder HEDS5010):
maxon part number 3409.504
The plug (3M 89110-0101) can be fixed in the required position.

Connection example



Ambient temperature range $\vartheta_{U} = 25^{\circ}\text{C}$