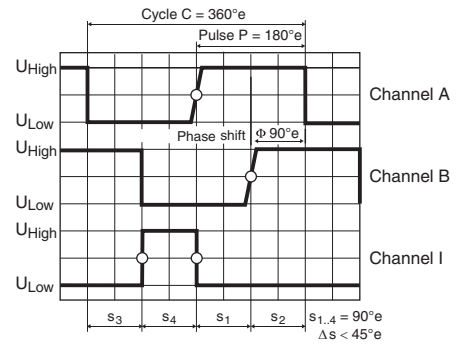
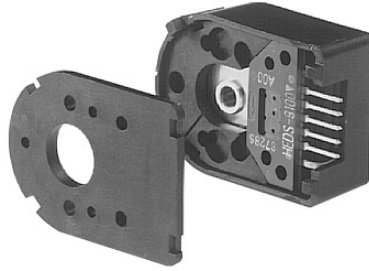
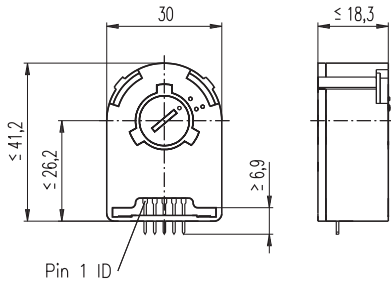


Encoder HEDS 5540 500 Counts per turn, 3 Channels

maxon sensor

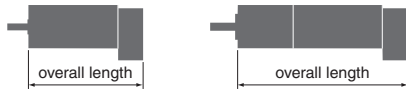


Direction of rotation cw (definition cw p. 48)

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

Order Number		
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

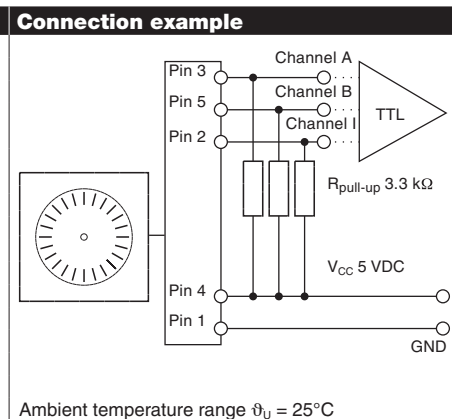


maxon Modular System						
+ Motor	Page	+ Gearhead	Page	+ Brake	Page	Overall length [mm] / ● see Gearhead
RE 25	77/79					75.3
RE 25	77/79	GP 26, 0.5 - 2.0 Nm	227			●
RE 25	77/79	GP 32, 0.75 - 4.5 Nm	229			●
RE 25	77/79	GP 32, 0.75 - 6.0 Nm	230/232			●
RE 25	77/79	KD 32, 1.0 - 4.5 Nm	235			●
RE 25	77/79	GP 32 S	249-251			●
RE 25, 20 W	79			AB 28	318	105.7
RE 25, 20 W	79	GP 26, 0.5 - 2.0 Nm	227	AB 28	318	●
RE 25, 20 W	79	GP 32, 0.75 - 4.5 Nm	231	AB 28	318	●
RE 25, 20 W	79	GP 32, 0.75 - 6.0 Nm	230/232	AB 28	318	●
RE 25, 20 W	79	KD 32, 1.0 - 4.5 Nm	235	AB 28	318	●
RE 25, 20 W	79	GP 32 S	249-251	AB 28	318	●
RE 35, 90 W	81					91.7
RE 35, 90 W	81	GP 32, 0.75 - 4.5 Nm	229			●
RE 35, 90 W	81	GP 32, 0.75 - 6.0 Nm	231/232			●
RE 35, 90 W	81	GP 32, 4.0 - 8.0 Nm	234			●
RE 35, 90 W	81	GP 42, 3.0 - 15 Nm	237			●
RE 35, 90 W	81	GP 32 S	249-251			●
RE 35, 90 W	81			AB 28	318	124.1
RE 35, 90 W	81	GP 32, 0.75 - 4.5 Nm	229	AB 28	318	●
RE 35, 90 W	81	GP 32, 0.75 - 6.0 Nm	231/232	AB 28	318	●
RE 35, 90 W	81	GP 32, 4.0 - 8.0 Nm	234	AB 28	318	●
RE 35, 90 W	81	GP 42, 3.0 - 15 Nm	237	AB 28	318	●
RE 35, 90 W	81	GP 32 S	249-251	AB 28	318	●
RE 40, 150 W	82					91.7
RE 40, 150 W	82	GP 42, 3.0 - 15 Nm	237			●
RE 40, 150 W	82	GP 52, 4.0 - 30 Nm	240			●
RE 40, 150 W	82			AB 28	318	124.2
RE 40, 150 W	82	GP 42, 3.0 - 15 Nm	237	AB 28	318	●
RE 40, 150 W	82	GP 52, 4.0 - 30 Nm	240	AB 28	318	●

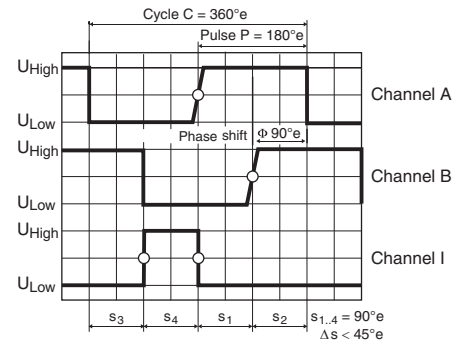
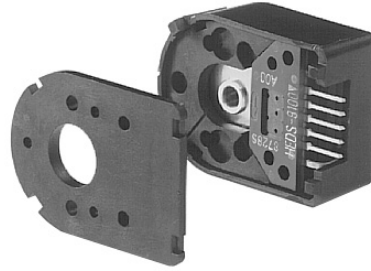
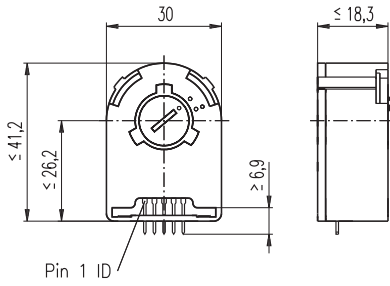
Technical Data	
Supply voltage V_{CC}	5 V \pm 10%
Output signal	TTL compatible
Phase shift Φ	90°e \pm 45°e
Signal rise time (typically, at $C_L = 25$ pF, $R_L = 2.7$ k Ω , 25°C)	180 ns
Signal fall time (typically, at $C_L = 25$ pF, $R_L = 2.7$ k Ω , 25°C)	40 ns
Index pulse width (nominal)	90°e
Operating 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

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

Pin Allocation		
	Encoder	Description
Pin 5	Channel B	Pin no. from 3409.506
Pin 4	V_{CC}	1
Pin 3	Channel A	2
Pin 2	Channel I	3
Pin 1	GND	4
	Cable with plug: maxon Art. Nr. 3409.506 The plug (Harting 918.906.6803) can be fixed in the required position.	5
	Cable with plug: (compatible with encoder HEDS5010) maxon Art. Nr. 3409.504 The plug (3M 89110-0101) can be fixed in the required position.	



Encoder HEDS 5540 500 Counts per turn, 3 Channels



Direction of rotation cw (definition cw p. 48)

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

Order Number

110511	110513	110515	110517
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Type	110511	110513	110515	110517
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



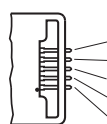
maxon Modular System

+ Motor	Page	+ Gearhead	Page	+ Brake	Page	Overall length [mm] / ● see Gearhead
RE 25	78					63.8
RE 25	78	GP 26, 0.5 - 2.0 Nm	227			●
RE 25	78	GP 32, 0.75 - 4.5 Nm	229			●
RE 25	78	GP 32, 0.75 - 6.0 Nm	230/232			●
RE 25	78	KD 32, 1.0 - 4.5 Nm	235			●
RE 25	78	GP 32 S	249-251			●
RE 25, 20 W	78			AB 28	318	94.3
RE 25, 20 W	78	GP 26, 0.5 - 2.0 Nm	227	AB 28	318	●
RE 25, 20 W	78	GP 32, 0.75 - 4.5 Nm	229	AB 28	318	●
RE 25, 20 W	78	GP 32, 0.75 - 6.0 Nm	230/232	AB 28	318	●
RE 25, 20 W	78	KD 32, 1.0 - 4.5 Nm	235	AB 28	318	●
RE 25, 20 W	78	GP 32 S	249-251	AB 28	318	●
RE 50, 200 W	83					128.7
RE 50, 200 W	83	GP 52, 4 - 30 Nm	241			●
RE 50, 200 W	83	GP 62, 8 - 50 Nm	242			●
RE 65, 250 W	84					157.3
RE 65, 250 W	84	GP 81, 20 - 120 Nm	243			●
A-max 26	102-108					63.5
A-max 26	102-108	GP 26, 0.5 - 2.0 Nm	227			●
A-max 26	102-108	GS 30, 0.07 - 0.2 Nm	228			●
A-max 26	102-108	GP 32, 0.75 - 4.5 Nm	229			●
A-max 26	102-108	GP 32, 0.75 - 6.0 Nm	230/233			●
A-max 26	102-108	GS 38, 0.1 - 0.6 Nm	236			●
A-max 26	102-108	GP 32 S				●
A-max 32	110/112					82.3
A-max 32	110/112	GP 32, 0.75 - 6.0 Nm	231/233			●
A-max 32	110/112	GS 38, 0.1 - 0.6 Nm	236			●
A-max 32	110/112	GP 32 S	249-251			●
EC 32, 80 W	154					78.4
EC 32, 80 W	154	GP 32, 0.75 - 6.0 Nm	231/233			●
EC 32, 80 W	154	GP 32 S				●
EC 40, 170 W	155					103.3
EC 40, 170 W	155	GP 42, 3.0 - 15 Nm	237			●
EC 40, 170 W	155	GP 52, 4.0 - 30 Nm	240			●

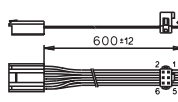
Technical Data

Supply voltage V_{CC}	5 V ± 10%
Output signal	TTL compatible
Phase shift ϕ	90°e ± 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

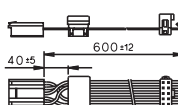
Pin Allocation



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

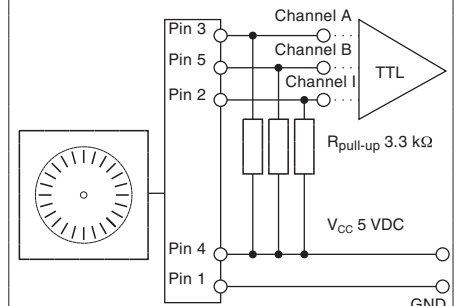


Cable with plug:
maxon Art. Nr. 3409.506
The plug (Harting 918.906.6803) can be fixed in the required position.



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

Connection example



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