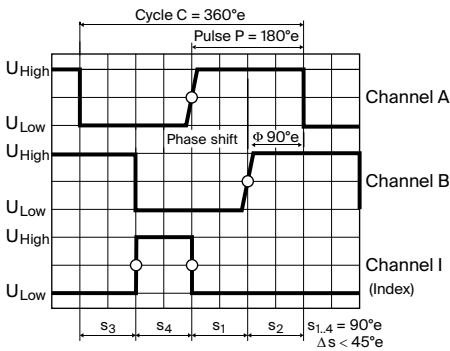
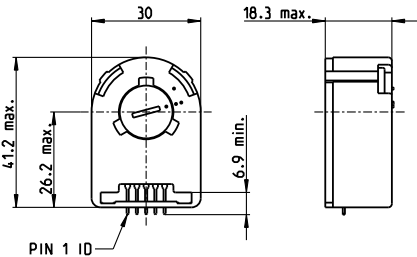


Encoder HEDS 5540 500 CPT, 3 channels



sensor

Direction of rotation cw (definition cw p. 90)

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

Part numbers			
110511	110513	110515	110517

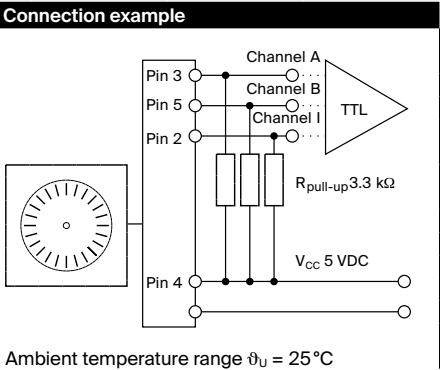
Type				
Counts per turn	500	500	500	500
Number of channels	3	3	3	3
Max. operating frequency (kHz)	100	100	100	100
Max. speed (rpm)	12 000	12 000	12 000	12 000
Shaft diameter (mm)	3	4	6	8



Modular system						Overall length [mm] / • see Gearhead	
+ Motor	Page	+ Gearhead	Page	+ Brake	Page		
RE 25	156/158					75.3	
RE 25	156/158	GP 26, 0.75 - 4.5 Nm	425			•	
RE 25	156/158	GP 32, 0.75 - 6.0 Nm	426-429			•	
RE 25	156/158	KD 32, 1.0 - 4.5 Nm	435			•	
RE 25	156/158	GP 32 S	474-482			•	
RE 25, 20 W	157					63.8	
RE 25, 20 W	157	GP 26/GP 32	425/426			•	
RE 25, 20 W	157	GP 32, 0.75 - 6.0 Nm	427/429			•	
RE 25, 20 W	157	KD 32, 1.0 - 4.5 Nm	435			•	
RE 25, 20 W	157	GP 32 S	474-482			•	
RE 25, 20 W	157			AB 28	587	94.3	
RE 25, 20 W	157	GP 22, 0.5 Nm	419			•	
RE 25, 20 W	157	GP 26, 0.75 - 4.5 Nm	425	AB 28	587	•	
RE 25, 20 W	157	GP 32, 0.75 - 4.5 Nm	426	AB 28	587	•	
RE 25, 20 W	157	GP 32, 0.75 - 6.0 Nm	427/429	AB 28	587	•	
RE 25, 20 W	157	KD 32, 1.0 - 4.5 Nm	435	AB 28	587	•	
RE 25, 20 W	157	GP 32 S	474-482	AB 28	587	•	
RE 25, 20 W	158			AB 28	587	105.8	
RE 25, 20 W	158	GP 26, 0.75 - 4.5 Nm	425	AB 28	587	•	
RE 25, 20 W	158	GP 32, 0.75 - 6.0 Nm	426-429	AB 28	587	•	
RE 25, 20 W	158	KD 32, 1.0 - 4.5 Nm	435	AB 28	587	•	
RE 25, 20 W	158	GP 32 S	474-482	AB 28	587	•	
RE 30, 15 W	159					88.8	
RE 30, 15 W	159	GP 32, 0.75 - 4.5 Nm	427			•	
RE 30, 60 W	160					•	
RE 30, 60 W	160	GP 32, 0.75 - 6.0 Nm	426-431			•	
RE 30, 60 W	160	KD 32, 1.0 - 4.5 Nm	435			•	
RE 30, 60 W	160	GP 32 S	474-482			•	
RE 35, 90 W	161					91.7	
RE 35, 90 W	161	GP 32, 0.75 - 8.0 Nm	426-432			•	
RE 35, 90 W	161	GP 42, 3.0 - 15 Nm	439			•	
RE 35, 90 W	161	GP 32 S	474-482			•	
RE 35, 90 W	161			AB 28	587	124.3	
RE 35, 90 W	161	GP 32, 0.75 - 8.0 Nm	426-432	AB 28	587	•	
RE 35, 90 W	161	GP 42, 3.0 - 15 Nm	439	AB 28	587	•	
RE 35, 90 W	161	GP 32 S	474-482	AB 28	587	•	

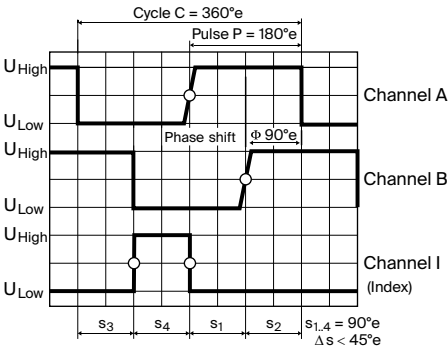
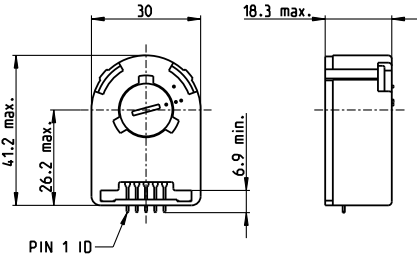
Technical data	
Supply voltage V _{CC}	5 V ±10%
Typical current draw	55 mA
Output signal	TTL compatible
Phase shift ϕ	90°e ±45°e
Signal rise time (typically, at C _L = 25 pF, R _L = 2.7 k Ω , 25°C)	180 ns
Signal fall time (typically, at C _L = 25 pF, R _L = 2.7 k Ω , 25°C)	40 ns
Index pulse width (nominal)	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

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



Encoder HEDS 5540 500 CPT, 3 channels

sensor



Direction of rotation cw (definition cw p. 90)

	Stock program	Part numbers			
	Standard program				
	Special program (on request)				
		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)		12 000	12 000	12 000	12 000
Shaft diameter (mm)		3	4	6	8

Modular system						
+ Motor	Page	+ Gearhead	Page	+ Brake	Page	Overall length [mm] / • see Gearhead
RE 40, 25 W	162					91.7
RE 40, 150 W	163					•
RE 40, 150 W	163	GP 42, 3.0-15 Nm	439			•
RE 40, 150 W	163	GP 52, 4.0-30 Nm	443			•
RE 40, 150 W	163			AB 28	587	124.3
RE 40, 150 W	163	GP 42, 3.0-15 Nm	439	AB 28	587	•
RE 40, 150 W	163	GP 52, 4.0-30 Nm	443	AB 28	587	•
RE 50, 200 W	164					128.7
RE 50, 200 W	164	GP 52, 4-30 Nm	443			•
RE 50, 200 W	164	GP 62, 6.2-38.5 Nm	445			•
RE 65, 250 W	165					157.3
RE 65, 250 W	165	GP 81, 15.4-92.3 Nm	446			•
A-max 26	183-186					63.5
A-max 26	183-186	GP 26, 0.75-4.5 Nm	425			•
A-max 26	183-186	GP 32, 0.75-4.5 Nm	426			•
A-max 26	183-186	GP 32, 0.75-6.0 Nm	428/429			•
A-max 26	183-186	GP 32 S	474-482			•
A-max 32	188					82.3
A-max 32	188	GP 32, 0.75-6.0 Nm	426-431			•
A-max 32	188	GP 32 S	474-482			•
EC 32, 80 W	271					78.4
EC 32, 80 W	271	GP 32, 0.75-6.0 Nm	426-431			•
EC 32, 80 W	271	GP 32 S	474-482			•
EC 40, 170 W	272					103.4
EC 40, 170 W	272	GP 42, 3.0-15 Nm	439			•
EC 40, 170 W	272	GP 52, 4.0-30 Nm	443			•
EC 40, 170 W	272			AB 32	587	141.1
EC 40, 170 W	272	GP 42, 3.0-15 Nm	439	AB 32	587	•
EC 40, 170 W	272	GP 52, 4.0-30 Nm	443	AB 32	587	•

Technical data

Supply voltage V_{CC} 5 V $\pm 10\%$

Typical current draw 55 mA

Output signal TTL compatible

Phase shift Φ $90^\circ e \pm 45^\circ e$

Signal rise time (typically, at $C_L = 25$ pF, $R_L = 2.7$ k Ω , 25 $^\circ C$) 180 ns

Signal fall time (typically, at $C_L = 25$ pF, $R_L = 2.7$ k Ω , 25 $^\circ C$) 40 ns

Index pulse width $90^\circ e$

Operating temperature range $-40...+100^\circ C$

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

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

Connection example

Channel A Channel B Channel I TTL

$R_{pull-up} 3.3$ k Ω

V_{CC} 5 VDC

GND

Ambient temperature range $\vartheta_U = 25^\circ C$

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