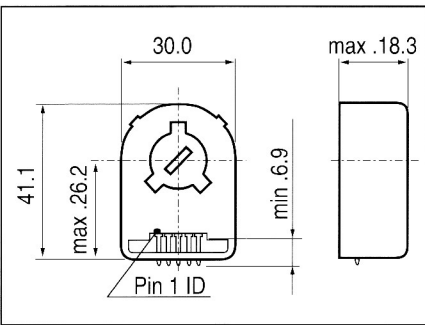


Digital Encoder

HEDS 55



Product combinations

- 2-40/07 __ -5
- 2-40/12 __ -5
- 2-29/02 __ -5
- 3-30/05 __ -5
- 3-38/25 __ -5

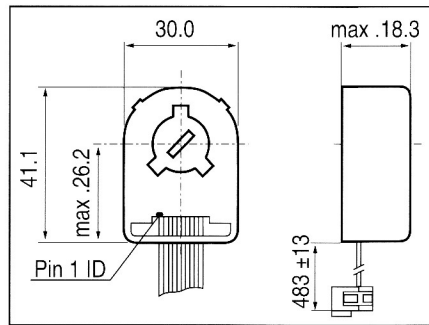
Technical Data HEDS 5540

Supply voltage	5 V + 10%
Output signal	TTL compatible
Number of channels	2 + 1 Index channel
Counts per turn	100 200 500
Phase shift ϕ (nominal)	90°e
Logic state width s	min. 45°e
Rise time	180 ns
(typical at $C_i = 25$ pF, $R_i = 11$ k Ω , 25°C)	
Fall time	40 ns
Index pulse width (nominal) Option	90°e
Operating temperature range	-40/+100°C
Moment of inertia of code wheel	≤ 0.6 gcm ²
Max. acceleration	250'000 rad s ⁻²
Output current per channel	min. -1 mA, max. 5 mA
Max. operating frequency	min. 100 kHz

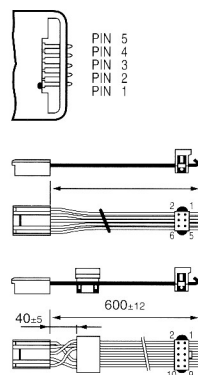
Technical Data HEDL 5540 with Line Driver

Supply voltage	5 V + 10%
Output signal	EIA Standard RS 422
drivers used	DS26LS31
Number of channels	2 + 1 Index channel (not at 1000 Imp.)
Counts per turn	500
Phase shift ϕ (nominal)	90°e
Logic state width s	min. 45°e
Rise time	180ns
(typical at $C_i = 25$ pF, $R_i = 11$ k Ω , 25°C)	
Fall time	40 ns
Index pulse width (nominal) Option	90°e
Operating temperature range	-40/+100°C
Moment of inertia of code wheel	~ 0.6 gcm ²
Max. acceleration	250'000 rad s ⁻²
Output current per channel	approx. 20 mA
Max. operating frequency	min. 100kHz

HEDL 55 with Line Driver



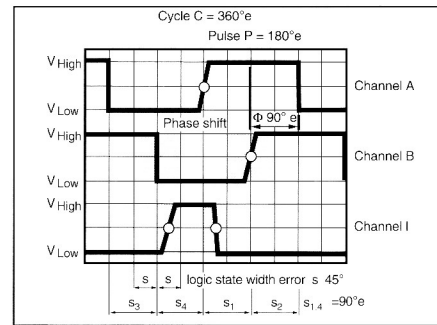
Pin Allocation



- Pin 5 Channel B
- Pin 4 V_{cc}
- Pin 3 Channel A
- Pin 2 Channel I
- Pin 1 Gnd

The plug (Harting 918.906.6803) can be fixed in the required position

The plug (3M 89110-0101) can be fixed in the required position.



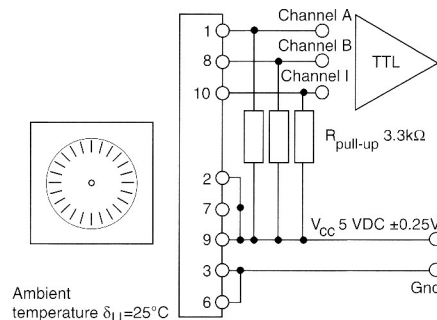
Stock versions

- 2 Channel
- HEDS - 5500 C11 100 CPT
- HEDS - 5500 E11 200 CPT
- HEDS - 5500 A11 500 CPT

- 3 Channel
- HEDS - 5540 A11 500 CPT

- 3 Channel + Line Driver
- HEDL - 5540 A11 500 CPT

Test circuit



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

Pin Allocation

Type	No.	Colour	Designation
	1	brown	N.C.
	2	red	V _{cc}
	3	orange	Gnd
	4	yellow	N.C.
	5	green	Channel Ā
	6	blue	Channel A
	7	violet	Channel B̄
	8	grey	Channel B
	9	white	Channel Ī (Index)
	10	black	Channel I (Index)

