



# HEIDENHAIN

## SALES & SERVICE:

**A Tech Authority, Inc.**  
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## Product Information

### **LS 683 C**

### **LS 673 C**

Incremental Linear Encoders



# Pin layout

## TTL

	① 9-pin D-sub connector (male)				② 15-pin D-sub connector (male)						③ 12-pin M23 connector (male)		
	Power supply				Incremental signals						Other signals		
①	7	7 <sup>1)</sup>	6	6 <sup>1)</sup>	2	3	4	5	9	8	/	/	/
②	4	12	2	10	1	9	3	11	14	7	13	5/6/8	15 <sup>2)</sup>
③	12	2	10	11	5	6	8	1	3	4	7	/	9
	$U_P$	Sensor $U_P$	0V	Sensor 0V	$U_{a1}$	$\overline{U}_{a1}$	$U_{a2}$	$\overline{U}_{a2}$	$U_{a0}$	$\overline{U}_{a0}$	$\overline{U}_{aS}$	Vacant	Reserved, do not assign <sup>3)</sup>
	Black		White		Green	Yellow	Pink	Red	Brown	Gray	Blue	/	Ecru

Cable shield connected to housing;  $U_P$  = Power supply voltage

Sensor: The sense line is connected in the encoder with the corresponding power supply line.

Vacant pins or wires must not be used!

<sup>1)</sup> Only ID 617513-xx, ID 626015-xx

<sup>2)</sup> No connection: ID 309783-xx, ID 309784-xx, ID 310196-xx, ID 310199-xx

<sup>3)</sup> Conversion from TTL to 11  $\mu A_{PP}$  for PWT; otherwise not assigned

## 1V<sub>pp</sub>

	① 15-pin D-sub connector (male)				② 15-pin D-sub connector (female)						③ 12-pin M23 connector (male)		
	Power supply				Incremental signals						Other signals		
①	4	12	2	10	1	9	3	11	14	7	5/6/8	13	15 <sup>1)</sup>
②	1	9	2	11	3	4	6	7	10	12	13/14/15	8	5
③	12	2	10	11	5	6	8	1	3	4	/	7	9
	$U_P$	Sensor $U_P$	0V	Sensor 0V	A+	A-	B+	B-	R+	R-	Vacant	Reserved, do not assign <sup>2)</sup>	Reserved, do not assign <sup>3)</sup>
	Black		White		Green	Yellow	Pink	Red	Brown	Gray	/	Blue	Ecru

<sup>1)</sup> No connection: ID 310196-xx

<sup>2)</sup> Serial interface (clock)

<sup>3)</sup> Serial interface (data)

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### More information:

To ensure proper and intended use, comply with the specifications in the following document:

- Brochure *Digital Readouts / Linear Encoders*

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