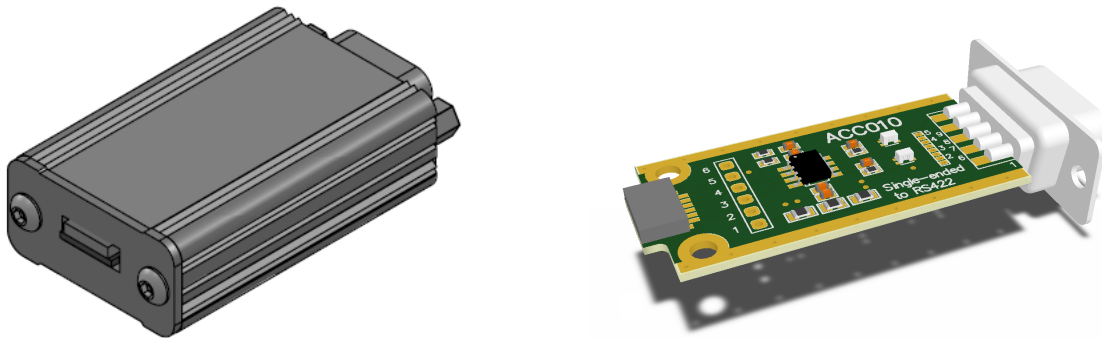


## Single-ended LVTTTL to RS422 differential converter



For use with AksIM™ MBA-type encoders with BiSS or SSI communication interfaces to allow connection to RS422 compatible controllers or encoder interfaces. Integrated voltage protection limits voltage spikes to maximum 5.6 V. Differential lines are terminated with RC circuits for lower current consumption. Available with or without housing.

### Electrical connections - Encoder side

FFC connector, 6-pin, 1 mm pitch, contacts on the bottom  
 Pin count and signal direction is matched to the pinout on AksIM™ MBA readheads.

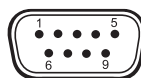
Pin	BiSS	SSI
6	0 V (GND)	0 V (GND)
5	-	-
4	MA	Clock
3	SLO	Data
2	-	-
1	5 V supply	5 V supply

For connection to the encoder FFC cable with same termination on both sides is required (type A-A).  
 Recommended: ACC006 (available by RLS / Renishaw), Molex 98267-0211 or similar (6-pin, 1 mm pitch).

### Electrical connections - Controller side

Pin	SSI	BiSS
Case	Encoder/machine case (Earth connection)	Encoder/machine case (Earth connection)
1	0 V (GND)	0 V (GND)
2	Clock+	MA+
3	Clock-	MA-
4	-	-
5	5 V supply	5 V supply
6	Data+	SLO+
7	Data-	SLO-
8	-	-
9	0 V (GND)	0 V (GND)

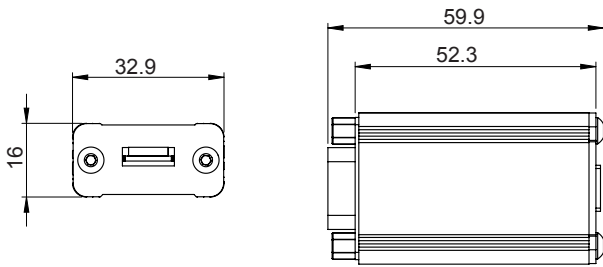
D-SUB, 9-pin, male



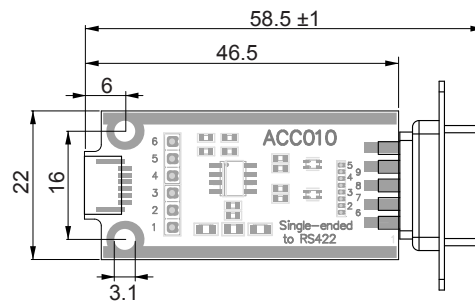
## Dimensions

Dimensions in mm.

### ACC009



### ACC010



## Electrical and environmental data

<b>Power supply</b>	5 V ±5 %
<b>Isolation</b>	No
<b>Max. signalling rate</b>	30 Mbps
<b>ESD protection</b>	12 kV HBM
<b>Mounting holes</b>	Grounded
<b>Operating temperature</b>	-40 °C to +85 °C

## Part numbering

ACC009	Adapter for conversion of single ended signals to RS422, for use with ACC006 FFC cable
ACC010	Adapter for conversion of single ended signals to RS422, for use with ACC006 FFC cable, without housing
ACC006	Molex Premo-Flex™ FFC Jumper, 6 Circuits, 152 mm, 1 mm pitch

## Head office

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## Document issues

Issue	Date	Page	Corrections made
1	3. 8. 2016	-	New document
2	19. 9. 2016	2	Dimension drawing amended