

# Single-ended LVTTL to RS422 differential converter



For use with AksIM<sup>™</sup> 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



# Data sheet ACCD01\_02

### Dimensions

Dimensions in mm.

#### ACC009





ACC010



# Electrical and environmental data

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

# Part numbering

ACC009Adapter for convertion of single ended signals to RS422, for use with ACC006 FFC cableACC010Adapter for convertion of single ended signals to RS422, for use with ACC006 FFC cable, without housingACC006Molex 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

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