



STEVAL-SPIMD20

STEVAL-SPIMD20 demonstration kit based on the SPIMD20 integrated motor drive

Data brief

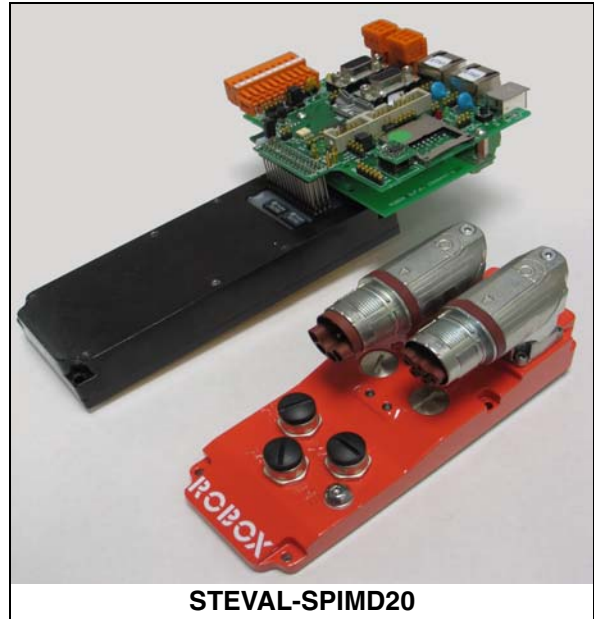
Features

- Complete with:
 - 2 kW shuttle module (SPIMD20)
 - connection board adapter
 - junction tower for mounting on motor
 - all required cables and connectors
 - software package
 - documentation
- RoHS compliant

Description

The STEVAL-SPIMD20 demonstration kit provides a complete demonstration platform for evaluating the functionality and the performance of the SPIMD20 power drive system designed by STMicroelectronics in cooperation with ROBOX S.p.A.

The SPIMD20 is an integrated motor drive with real-time connectivity enabling brushless motor manufacturers to create a proprietary motion control system based on a general purpose brick.



1 Connector diagrams

Figure 1. AS3036.001 junction tower layout

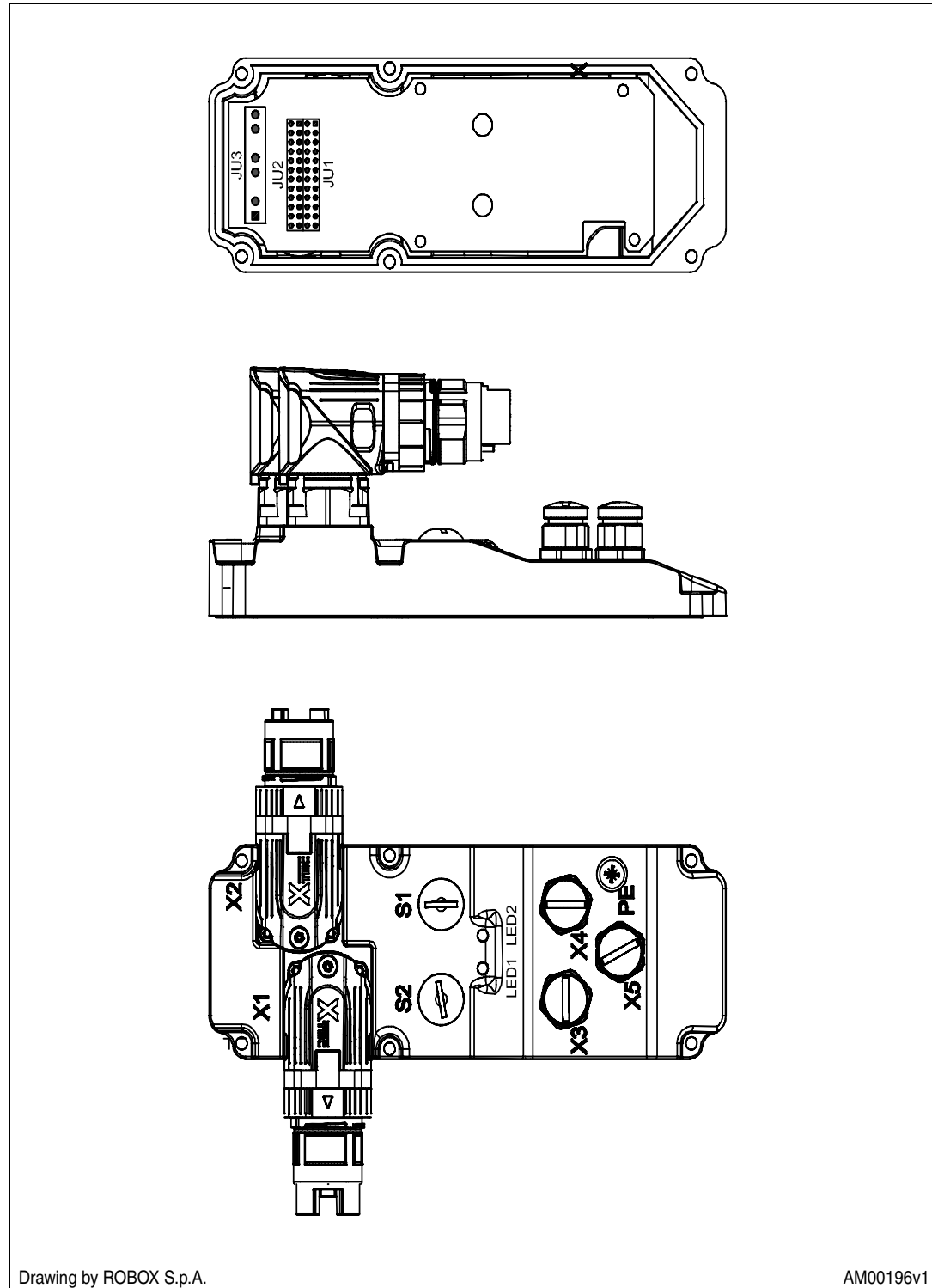
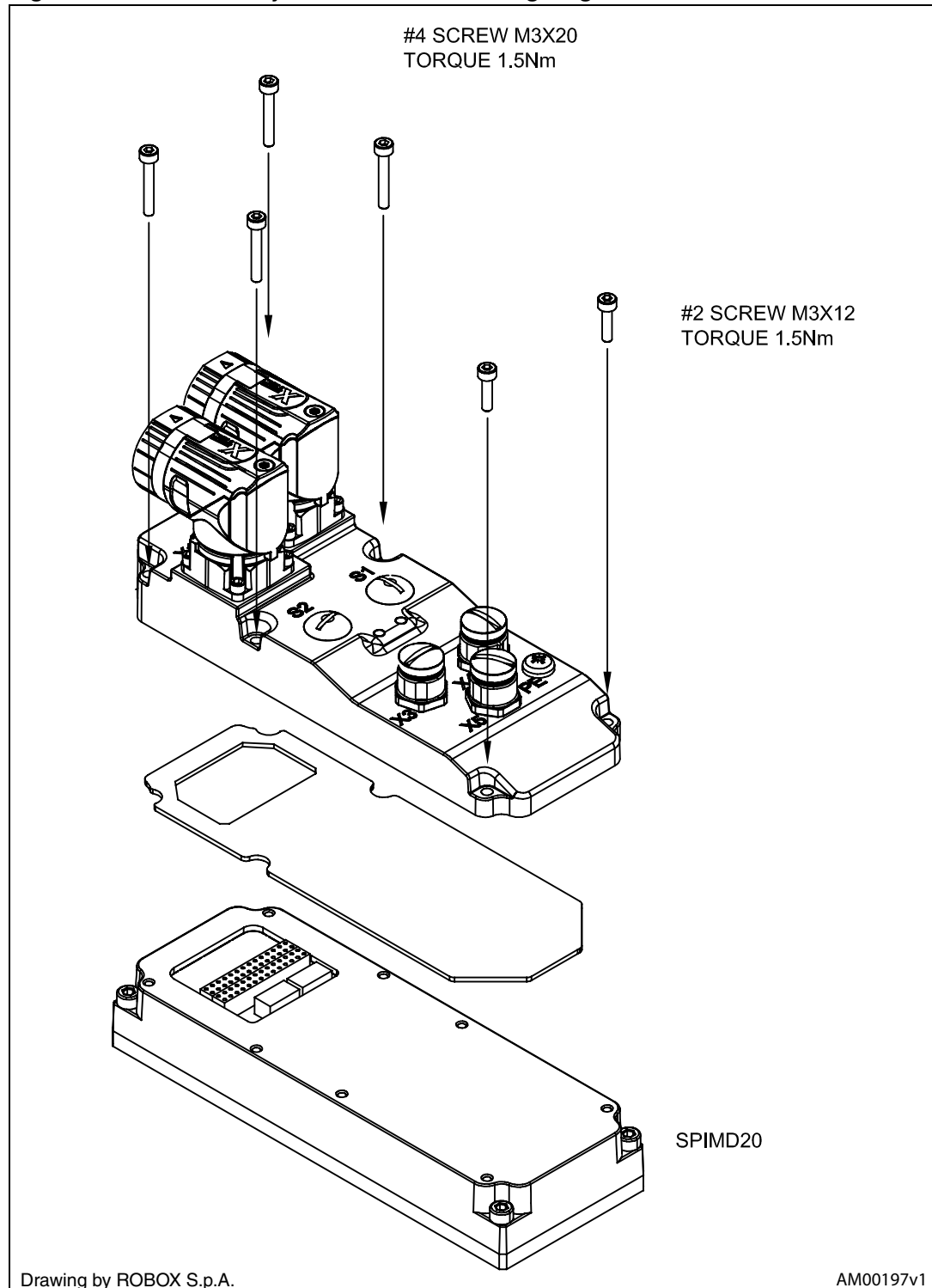


Figure 2. AS3036.001 junction tower mounting diagram



Wiring Diagram for ROBOX 1000 Robot Head

Connector X1 (Male):

- 1: +VDC AUX
- 2: +VDC PWR
- 3: GND PWR
- 4: GND AUX
- 5: PE
- 6: 4
- 7: 5
- 8: 6
- 9: +SERV. BUS
- 10: -SERV. BUS
- 11: GND SERV. BUS
- 12: SHIELD
- 13: +TX
- 14: -TX
- 15: +RX
- 16: -RX

Connector X2 (Female):

- 1: +VDC AUX
- 2: +VDC PWR
- 3: GND PWR
- 4: GND AUX
- 5: PE
- 6: 4
- 7: 5
- 8: 6
- 9: +SERV. BUS
- 10: -SERV. BUS
- 11: GND SERV. BUS
- 12: SHIELD
- 13: +TX
- 14: -TX
- 15: +RX
- 16: -RX

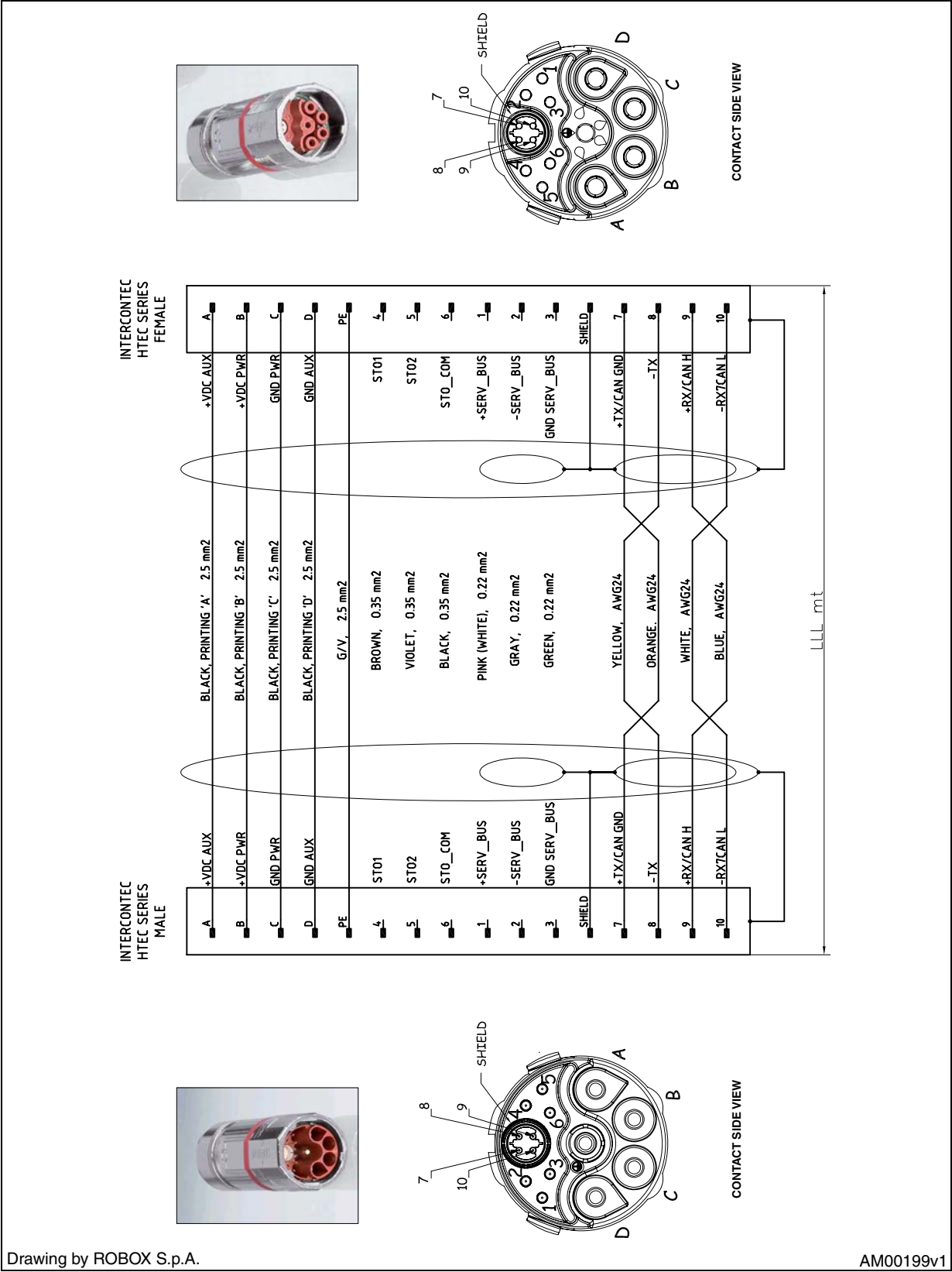
Wiring Connections:

- JU1 (PIN 9):** Connected to X1 Pin 13 (+TX)
- JU1 (PIN 10):** Connected to X1 Pin 14 (-TX)
- JU1 (PIN 11):** Connected to X1 Pin 15 (+RX)
- JU1 (PIN 12):** Connected to X1 Pin 16 (-RX)
- JU2 (PIN 1):** Connected to X2 Pin 9 (+SERV. BUS)
- JU2 (PIN 2):** Connected to X2 Pin 10 (-SERV. BUS)
- JU2 (PIN 3):** Connected to X2 Pin 11 (GND SERV. BUS)
- JU2 (PIN 4):** Connected to X2 Pin 12 (SHIELD)
- JU2 (PIN 5):** Connected to X2 Pin 13 (+TX)
- JU2 (PIN 6):** Connected to X2 Pin 14 (-TX)
- JU2 (PIN 13):** Connected to X2 Pin 9 (+SERV. BUS)
- JU2 (PIN 14):** Connected to X2 Pin 10 (-SERV. BUS)
- JU2 (PIN 15):** Connected to X2 Pin 11 (GND SERV. BUS)
- JU2 (PIN 16):** Connected to X2 Pin 12 (SHIELD)

Power and Ground Connections:

- PE (Power Earth):** Connected to X1 Pin 5 and X2 Pin 5.
- Shield:** Connected to X1 Pin 12 and X2 Pin 12.

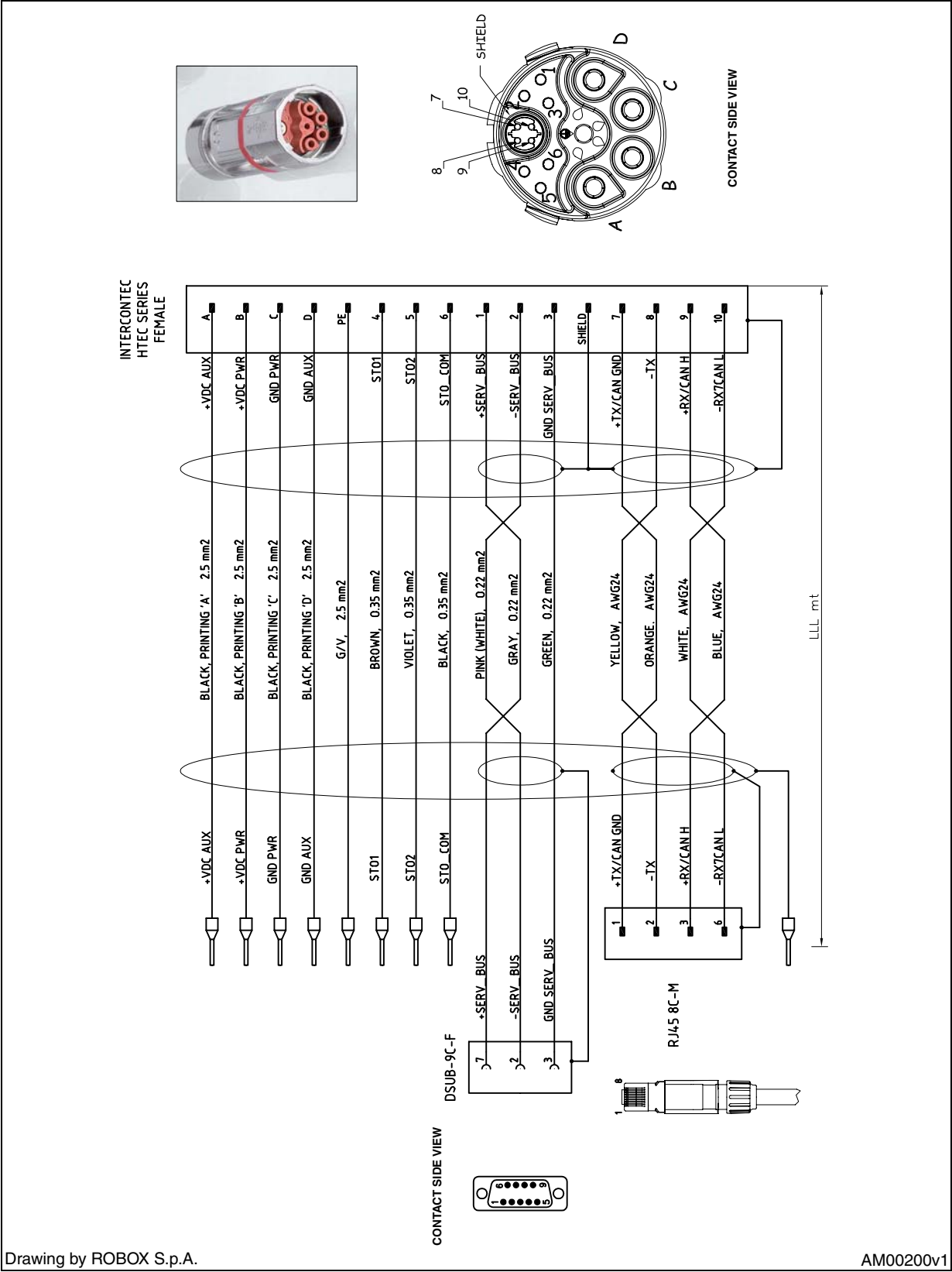
Figure 4. CAVO1SPIMD/2.5 connector



Drawing by ROBOX S.p.A.

AM00199v1

Figure 5. CAVO2SPIMD/2.5/2 connector



Drawing by ROBOX S.p.A.

AM00200v1

Figure 6. CAVO1SPIMD terminal

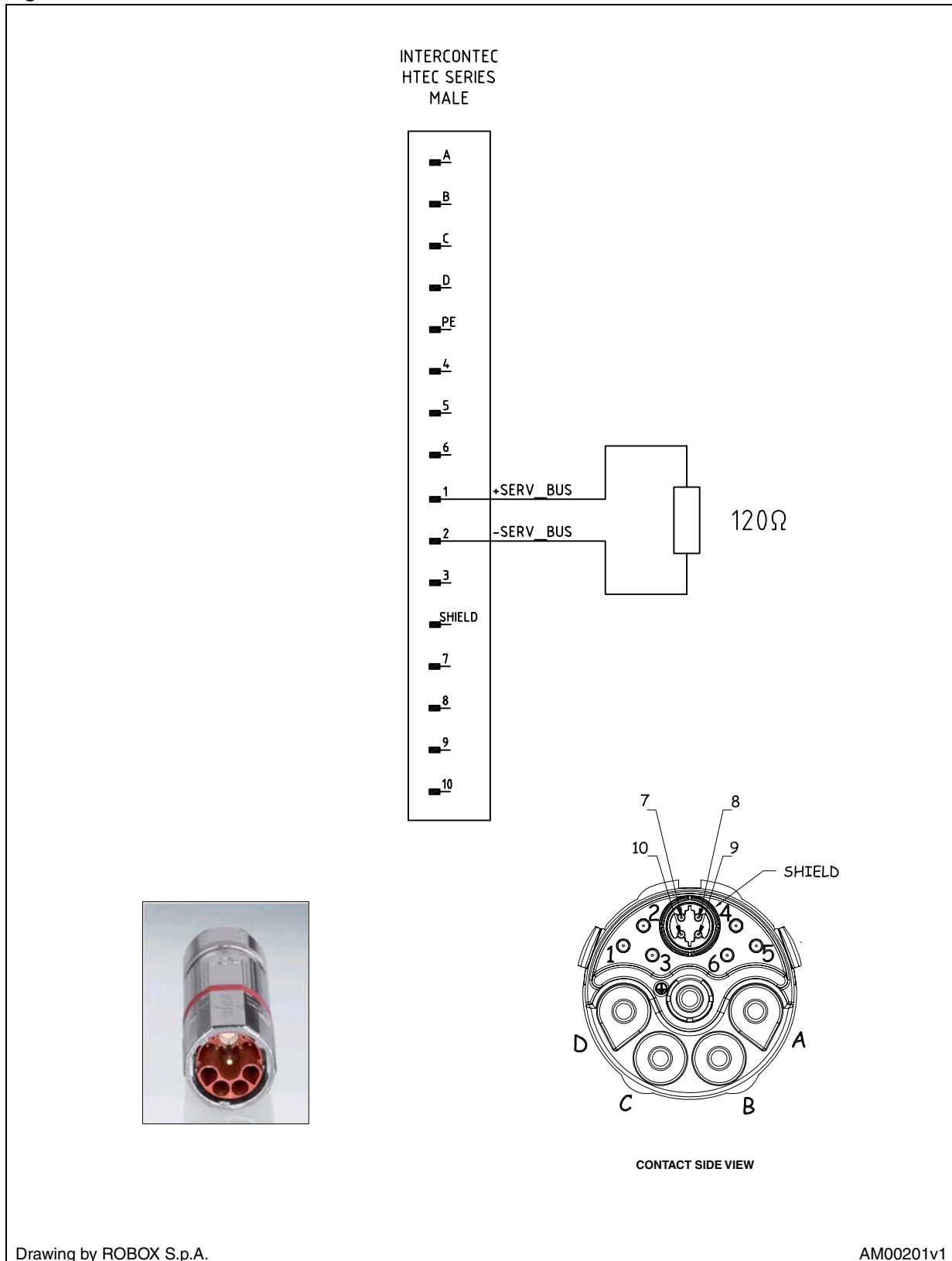
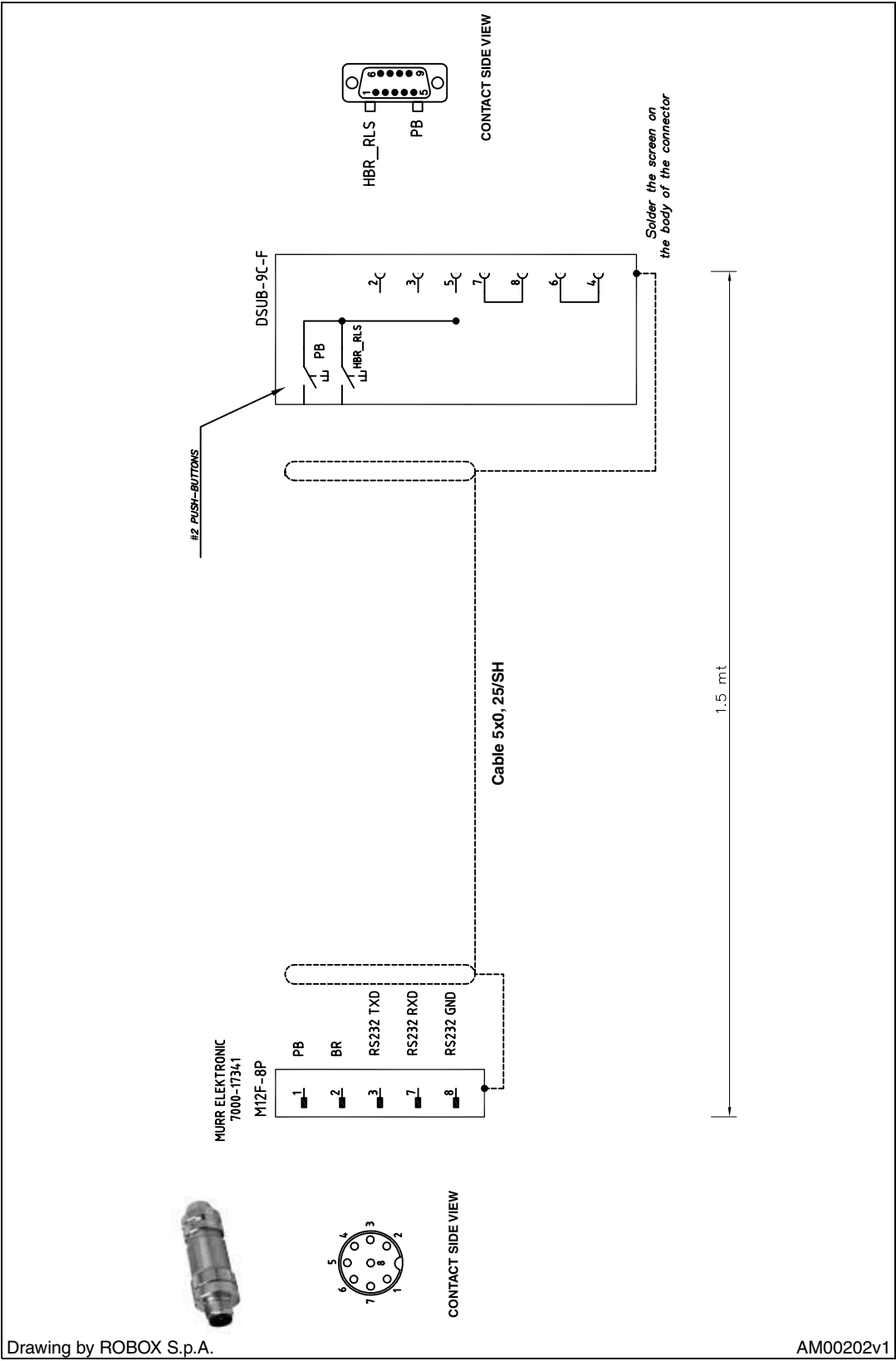


Figure 7. CAVO1SPIMD/RS232/1.5 connector diagram



2 Revision history

Table 1. Document revision history

Date	Revision	Changes
22-Apr-2011	1	Initial release.

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