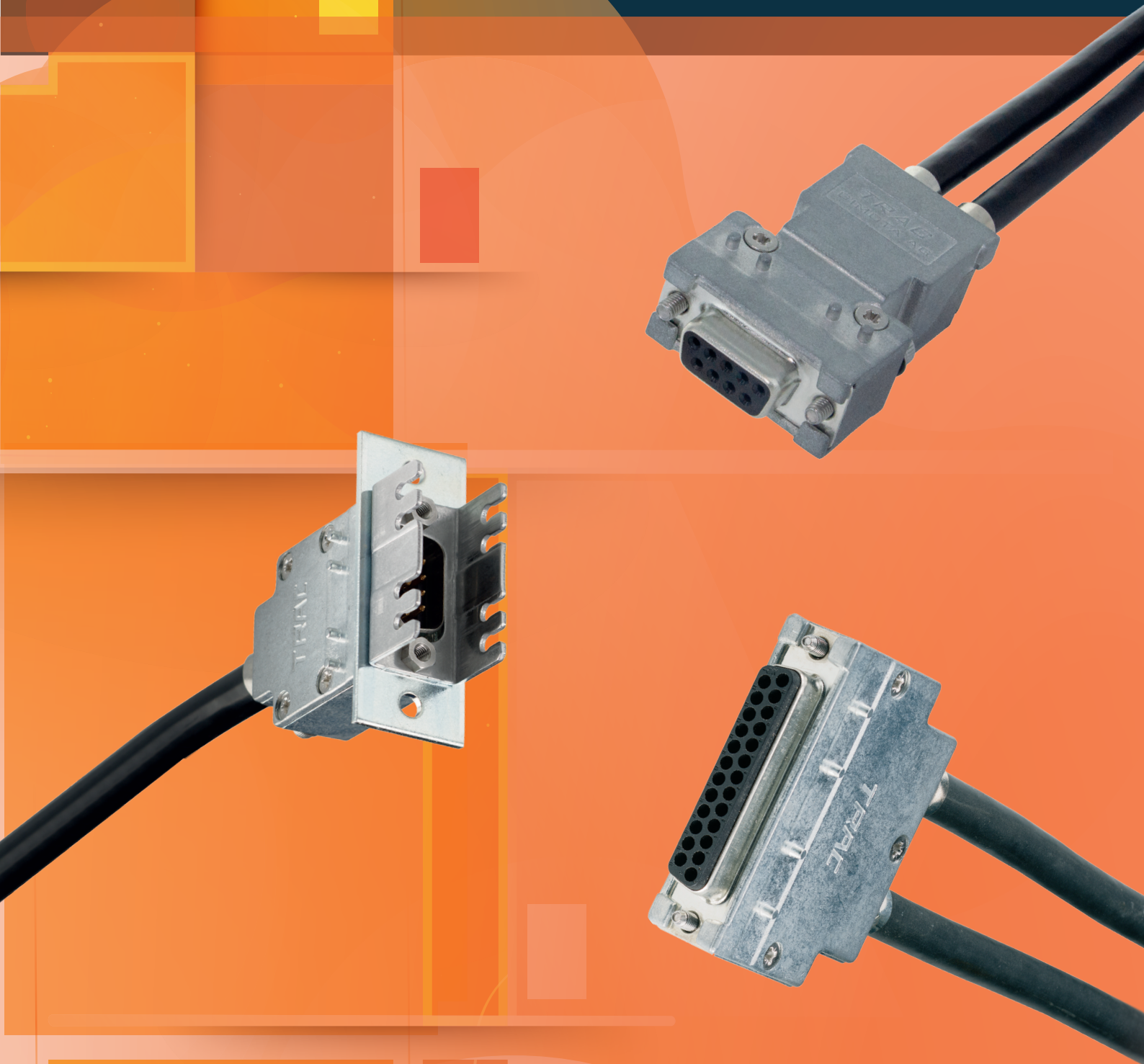


GIMOTA AG

Data connectors D-SUB Assembly Instructions 2020



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This assembly instruction replaces all previous editions.

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1 Assembly Instructions D-SUB TRAC / TRAC H

1.1 Preparation

Standard Part sets

Standard part sets conclude all single parts except shielding sleeves, contacts, shrinkable tubes cable ties.

Following parts sets are available in size 1 / 2 / 3

Connectors	TRACST	and	TRACHST
	TRAC2ST	and	TRACH2ST
Receptacles	TRACDO	and	TRACHDO
Mounting strips	TRACBE	and	TRACHBE

Strip the insulation from the wires on a length of 4.5 - 5.0 mm. For this purpose the GIMOTA stripper GIW-ACK is recommended.

Apart from standard TRAC/TRACH contact housings for 9-, 15-, and 25-pole size HD20 contacts (pins/sockets) other arrangements and combinations with size 8 power contacts are available on request. (acc. product catalogue data-connectors 3.2)

Contacts

Contacts are to be selected according to the relevant informations in this catalogue:

- Contact insert (Contact arrangement/Contact number) (acc. data-connector catalogue 3.2.1 - 3.2.4)
- Contact type Pin (P) or Socket (S) (acc. data-connector catalogue 3.2.9)
- Conductor cross section of contacts (acc. data-connector catalogue 3.2.9)
- Manufacturing mode (single contacts - on reels)
- Electrical properties (acc. data-connector catalogue 3.1.1)

Shielding sleeves

The shield sleeves must be selected according to the cable clamp, the following assignment applies:

Item number Cable clamp	requires shielding sleeve	colour
SUKABC06S	SUGSC297	silver
SUKABC067S	SUGSC297	silver
SUKABC09S	SUGSC460	silver
SUKABC10S	SUGSC460	silver
SUKABC12X	SUGSC375*	silver

*Supporting sleeve

Tools

Crimp tools for cable clamps (acc. data-connector catalogue 3.7.1)
Crimp tools for shielding sleeves (acc. data-connector catalogue 3.7.1)
Crimp tools for contacts (acc. data-connector catalogue 3.7.2)
Additional tools (acc. data-connector catalogue 3.7.4)

In addition, the tools listed below are required:

- Phillips screwdriver
- Wire stripper
- Cable knife
- Plastic Hammer

Accomplishing Material (optional)

- Cable tie SUKBV69K to cable clamp SUKABV69 (acc. chapter 1.2)
- Heat shrinkable tubes to single conductor bundles (acc. chapter 1.2)
- Heat shrinkable tubes for diameter adaptation (acc. chapter 1.2)
- Heat shrinkable tubes for conductor identification
- Label for connector identification

1.2 Cable set

Wire stripping [Table 1]

Wire cross-section	mm ²	0.2 - 0.56	0.8 - 8.0
Stripping length	mm	x = 2.5	x = 9.5
for contact type		HD20	Sz. 8

Single wire, non shielded [Figure a]:

Single wire bundles can be held together with the two-part cable clamp SUKABV69 for variable diameters from 6 - 9 mm.

- Strip the wire by (x) mm according to the table below
- For a better fixation, a heat shrink tube of approx. 25 mm length can be applied at the clamping area
- Close the cable clamp with cable tie SUKBV69K until the cable bundle is tight

	TRACST1 TRACD01	TRACST2 TRACD02	TRACST3 TRACD03
Approximate distance from the cable clamp to the end of the wire	a = 31 mm	a = 36 mm	a = 48 mm*

* depending on contact position and used cable entrance of the cover

Not suitable for housings of type TRAC2ST...

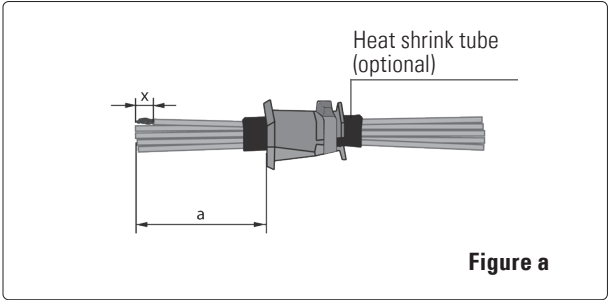


Figure a

Multi-core cable without shield [Figure b]:

For sufficient strain relief of unshielded cables, use cable clamps SUKABCxxx for cable diameters from 6 - 12 mm.

- Strip the wire by (x) mm according to the table below
- To increase the cable diameter, a heat shrinkable tube of approx. 25 mm can be fitted over the clamping area (optional if required)

	TRACST1 TRACD01	TRACST2 TRACD02	TRACST3 TRACD03
Approximate distance from the cable clamp to the end of the wire	a = 23 mm	a = 28 mm	a = 55 mm*
Approximate distance from Cable sheath (insulation) to the end of the wire	b = 33 mm	b = 38 mm	b = 50 - 65 mm*

* depending on contact position and used cable entrance of the cover

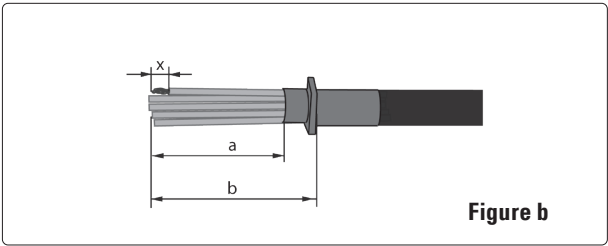


Figure b

	TRAC2ST1	TRAC2ST2	TRAC3ST3
Approximate distance from the cable clamp to the end of the wire	a = 27 mm	a = 32 mm	a = 40 - 45 mm*
Approximate distance from Cable sheath (insulation) to the end of the wire	b = 37 mm	b = 42 mm	b = 50 - 55 mm*

* depending on contact position and used cable entrance of the cover

Shielded multi-core cable [Figure a]:

For sufficient strain relief and optimum shielding of shielded cables, use the cable clamp SUKABCxxx for cable diameters of 6 - 12 mm.

- Strip the wire by (x) mm according to the table below
- To increase the cable diameter, a heat shrinkable tube of approx. 25 mm can be fitted over the clamping area (optional if required)

	TRACST1 TRACD01	TRACST2 TRACD02	TRACST3 TRACD03
Approximate distance from the cable clamp to the end of the wire	a = 23 mm	a = 28 mm	a = 55 mm*
Approximate distance from Cable sheath (insulation) to the end of the wire	b = 33 mm	b = 38 mm	b = 50 - 65 mm*
Approximate distance from the shield to the end of the wire	c = 15 mm	c = 19 mm	c = 47 mm*

* depending on contact position and used cable entrance of the cover

	TRAC2ST1	TRAC2ST2	TRAC3ST3
Approximate distance from the cable clamp to the end of the wire	a = 27 mm	a = 32 mm	a = 40 - 45 mm*
Approximate distance from Cable sheath (insulation) to the end of the wire	b = 37 mm	b = 42 mm	b = 50 - 55 mm*
Approximate distance from the shield to the end of the wire	c = 19 mm	c = 24 mm	c = 32 - 37 mm*

* depending on contact position and used cable entrance of the cover

Attach cable clamp SUKABCxxS for cable strain relief

If the outer diameter of the cable is more than 1.0 mm smaller than the inner diameter of the cable clamp, a shrink/fill tube of approx. 25 mm has to be shrunk/applied. [Figure b]

Crimp the strain relief area on the cable clamp with the specified tool according to (chapter 3.7.1 in the data connector catalogue). [Figure c]

Attach the shield to the cable clamp SUKABCxxS

- After crimping the cable clamp, the shield should protrude max. 8 mm over the shield connection area
- Turn the shield back over the shield connection area according to [Figure d]
- Push the shielding sleeve onto the end of the cable clamp, see [Figure e] [Figure f]
- Crimp shielding sleeve with specified tool according to (chapter 3.7.1 data connector catalogue) [Figure g]

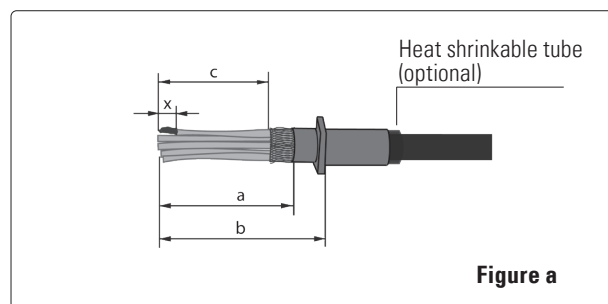


Figure a

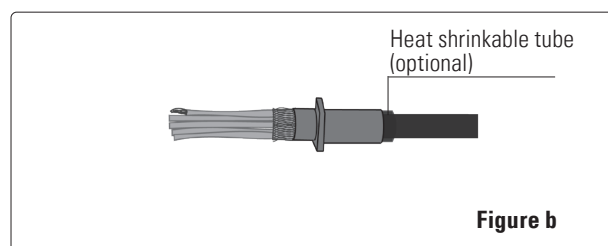


Figure b

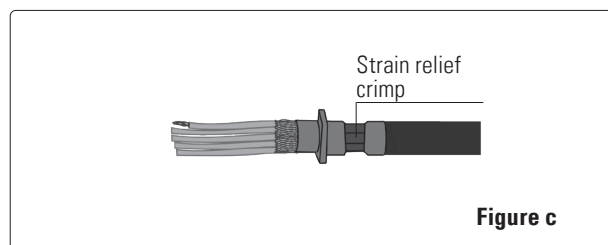


Figure c

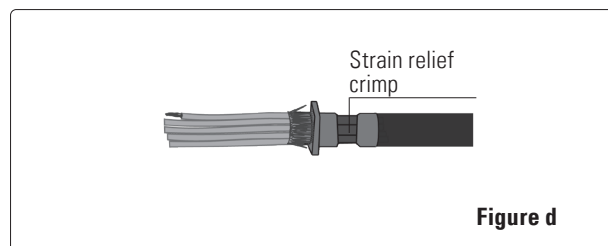


Figure d

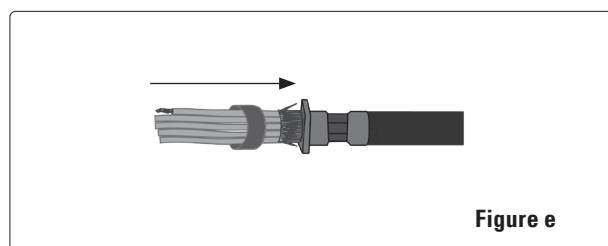


Figure e

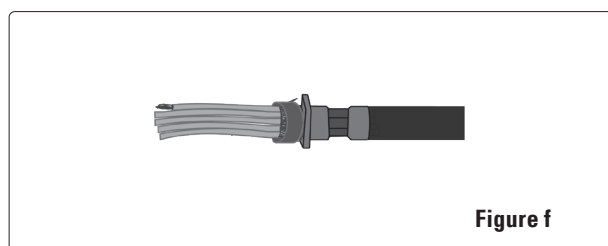


Figure f

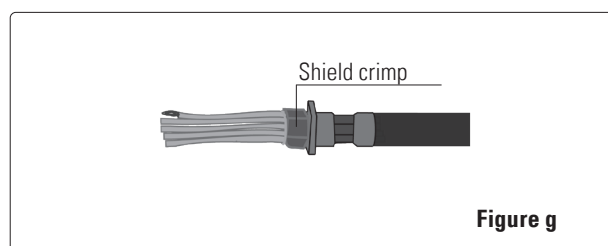


Figure g

Attaching the shield to the cable clamp SUKABC12X

- Slide the supporting sleeve over the wires **[Figure a]** up to the cable jacket **[Figure b]**
- Fold the screen back over the supporting sleeve **[Figure c]**
- Slide the cable clamp over the wires **[Figure d]** so that it is positioned on the supporting sleeve and the screen is fixed between the cable clamp and the supporting sleeve **[Figure e]**
- Crimp the cable clamp with specified tool according to (chapter 3.7.1 data connector catalogue) to the shielding sleeve **[Figure f]**
- Crimp the strain relief with specified tool according to (chapter 3.7.1 data connector catalogue) **[Figure g]**

Crimp contacts

Contact: Crimp the contacts with specified tool according to (chapter 3.7.2 data connector catalogue)

IMPORTANT: The crimping tool must be closed entirely until the automatic release of the tool.

Check

Crimping: Check the position and the shape of the crimp

Wires: No individual wires may stick out of the crimping area

Contact shape: The contacts shall not be deformed or damaged outside the crimping area

Apply heat shrink tubes

Optional: Heat shrinkable tubes may be applied at the connection area of each wire for identification and/or for support or additional insulation

1.3 Assembling

Insert contacts

Insert the contacts into the contact housing according to the assignment plan until they audibly snap into place. The correct contact fit can be checked by gently pulling on the wire.

Assembling the connector

Case: Check the housing for any contamination (e.g. wire residues), clean if necessary

Contact housing: Insert contact housing in correct position

Cable clamp: Press the cable clamp into the case (use plastic hammer if necessary)

Wire hole plug: Press the wire hole plug into the case (use plastic hammer if necessary)

Wires: check arrangement, put it in adequate order if necessary

Cover: Put the cover into the correct position it fits without any special effort
Tighten self-cutting cover screws to 0.6Nm
Apply the fixing screws including the spring washers

Optional: Apply self-adhesive label for connector identification

Optional: Remove the coding spigot according to the coding plan, insert the coding slides into the coding plate (tool according chapter 3.7.4 data connectors catalogue)

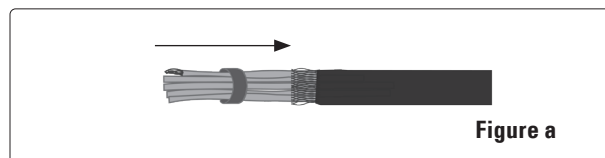


Figure a

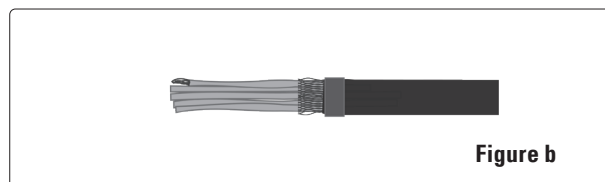


Figure b

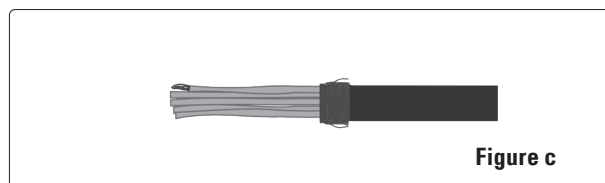


Figure c

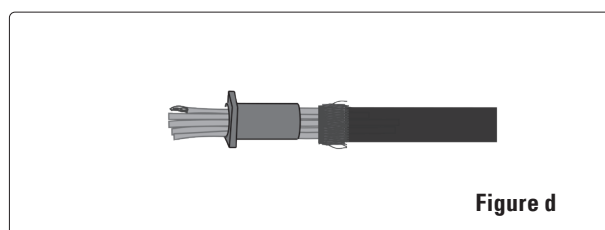


Figure d

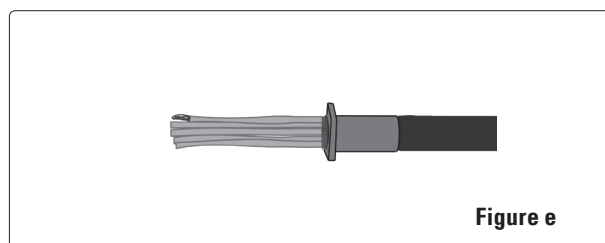


Figure e

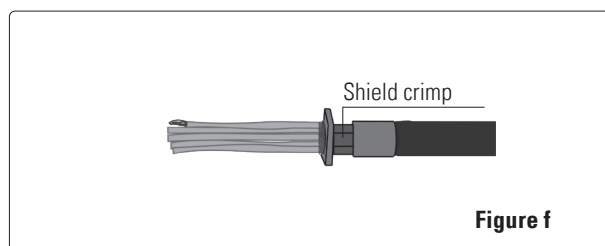


Figure f

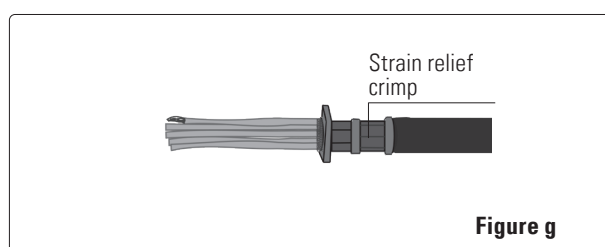


Figure g

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