



Cable Connector Housings

for D-Subminiature connectors, Series TMC



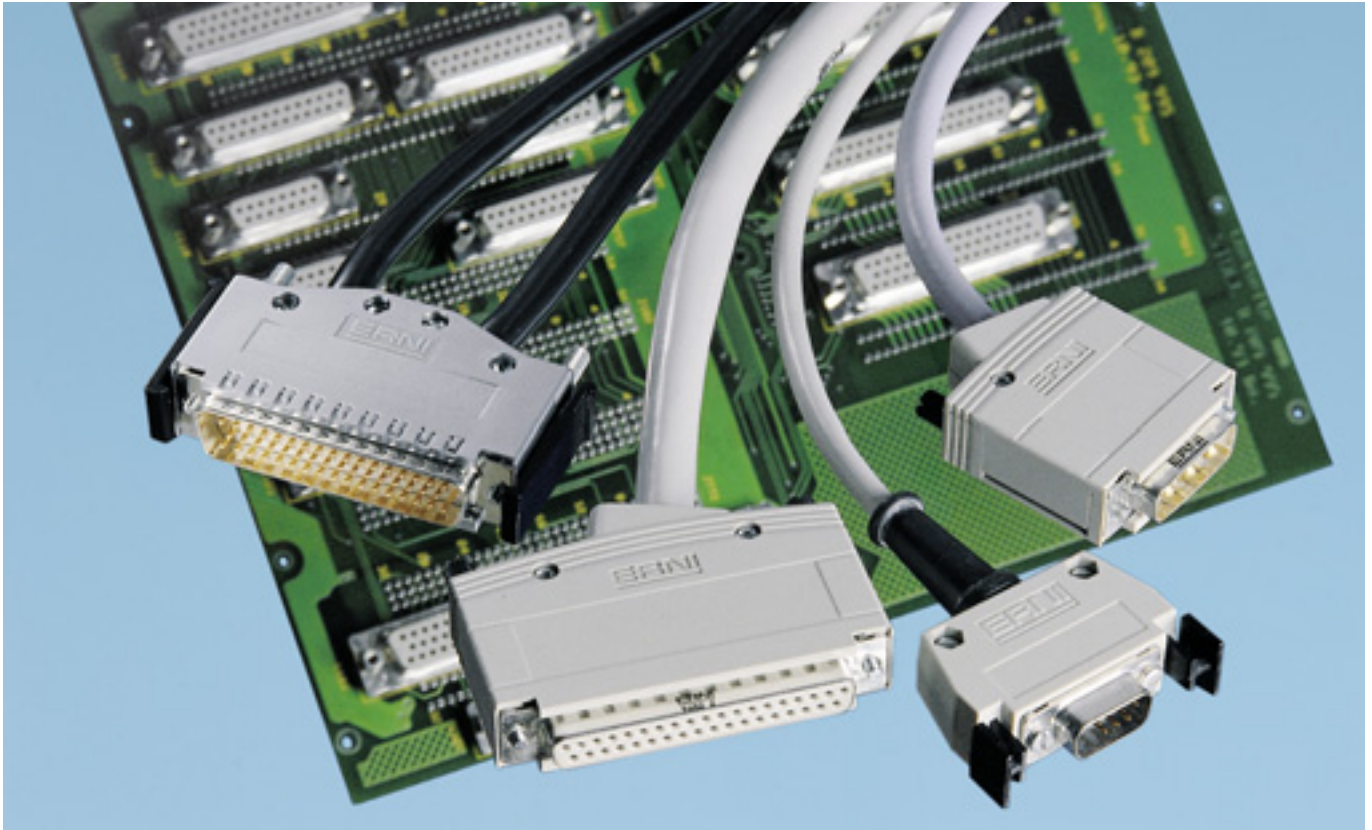


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Cable Connector Housings for D-Sub Connectors

Housing Versions KSG 200, KSG 185 and KSG 183



General

ERNI offers three different versions of connector housing for Series TMC connectors acc. To DIN 41 652 and MIL C-24308.

- **KSG 200 Fully insulated housing with integrated shielding plates**
- **KSG 185 Housing with snap-in latches and/or screw locking, integrated coding**
- **KSG 183 Housing with snap-in latches**

All three versions of housing are of two-shell design which allows the wiring of the female or male connectors prior to housing assembly. All three housing versions can easily be disassembled.

With the KSG 185 (cable connector housing Series KSG 185) it is possible to lock the two shell halves with snap-in latches. There is also a screw for vibration-proof applications. The connector shell halves of Series KSG 183 are screwed together after wiring.

For applications with screw locking the KSG 185 offers locking parts for thread types M3 and #4/40 NC-2 A.

Features

- Fully insulated housing
- Two-shell design to facilitate assembly
- Various types of locking such as snap-in, slide and screw locking
- Reliable strain relief with strain relief clamp
- Cable entry:
 - KSG 200 one 15° entry
 - KSG 185 sizes 9 and 15, one 75° entry sizes 25, 37 and 50 two 75° entries
 - KSG 183 size 9, one 90° entry-sizes 15, 25, 37 and 50, three 30° and 90° entries
- Cable sleeves and blind plugs included
- All parts needed to mount the housing are supplied
- KSG 200 with optimal ESD-protection and high EMI/RFI shielding
- KSG 200 with integrated shielding plates
- KSG 185 with integrated coding
- KSG 185 available in metallized version as well

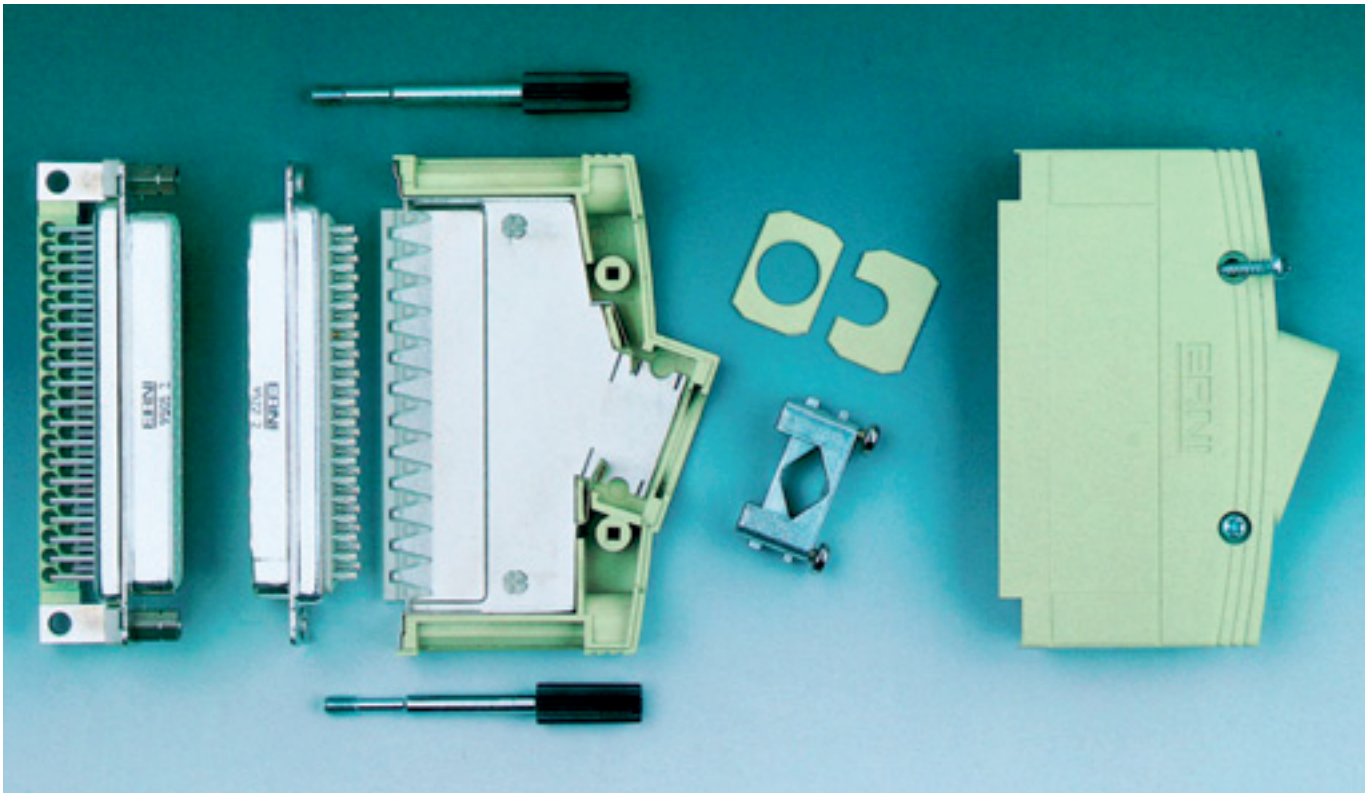
Cable Connector Housings for D-Sub Connectors

Series KSG 200



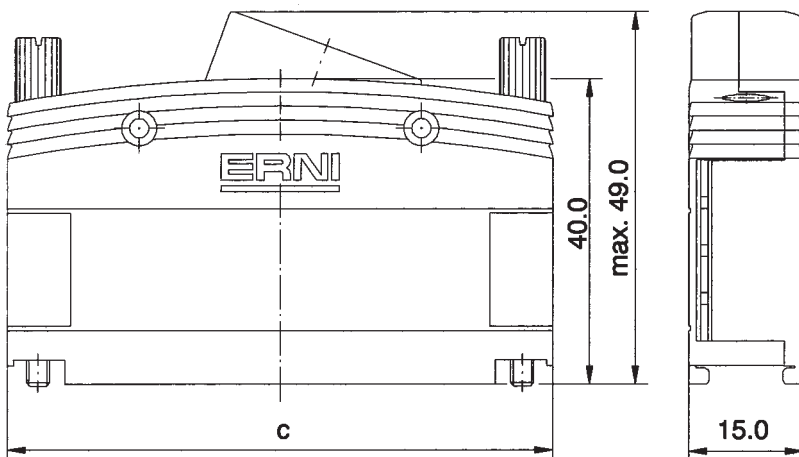
Fully insulated housing with integrated shielding plates

The illustration below shows a 37 pin housing



Dimensions of cable connector housing Series KSG 200

The illustration below shows a 37 pin housing



| Number of Pins | c | Cable diameter |
|----------------|------|----------------|
| 9 | 33.0 | 4-8.5 |
| 15 | 41.3 | 4-11 |
| 25 | 55.0 | 4-11 |
| 37 | 71.5 | 4-11 |
| 50 | - | - |

Cable Connector Housings for D-Sub Connectors

Series KSG 200



Design of strain relief elements

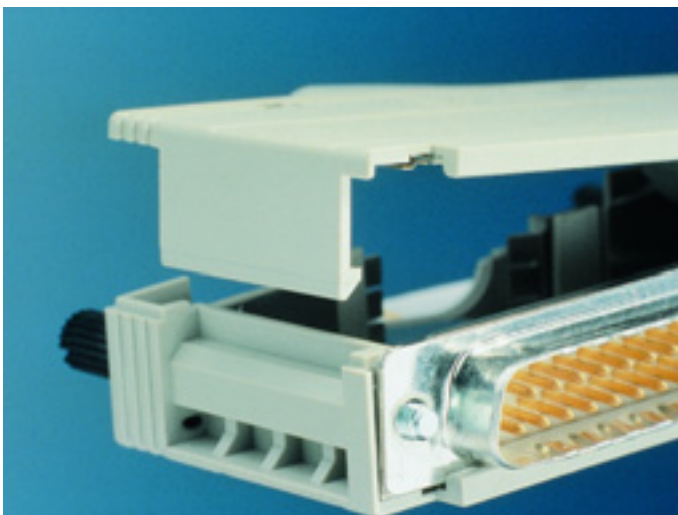
The strain relief elements consist of two die-cast zinc components.

Contact with the braided shield is accomplished by the clamps, as the screws are tightened.



Design of interface between shielding and D-Sub

The lamellar indents of the shielding plates will guide the ground connections from the cable shield via the strain relief clamp to the D-Sub connector. These lamellar indents make contact along the entire length of the connector.



Easy assembly

The KSG 200 consists of two half-shells which simply latch together. These latches can be opened again if the device needs to be serviced.

The two half-shells can also be screwed together.

Cable Connector Housings for D-Sub Connectors

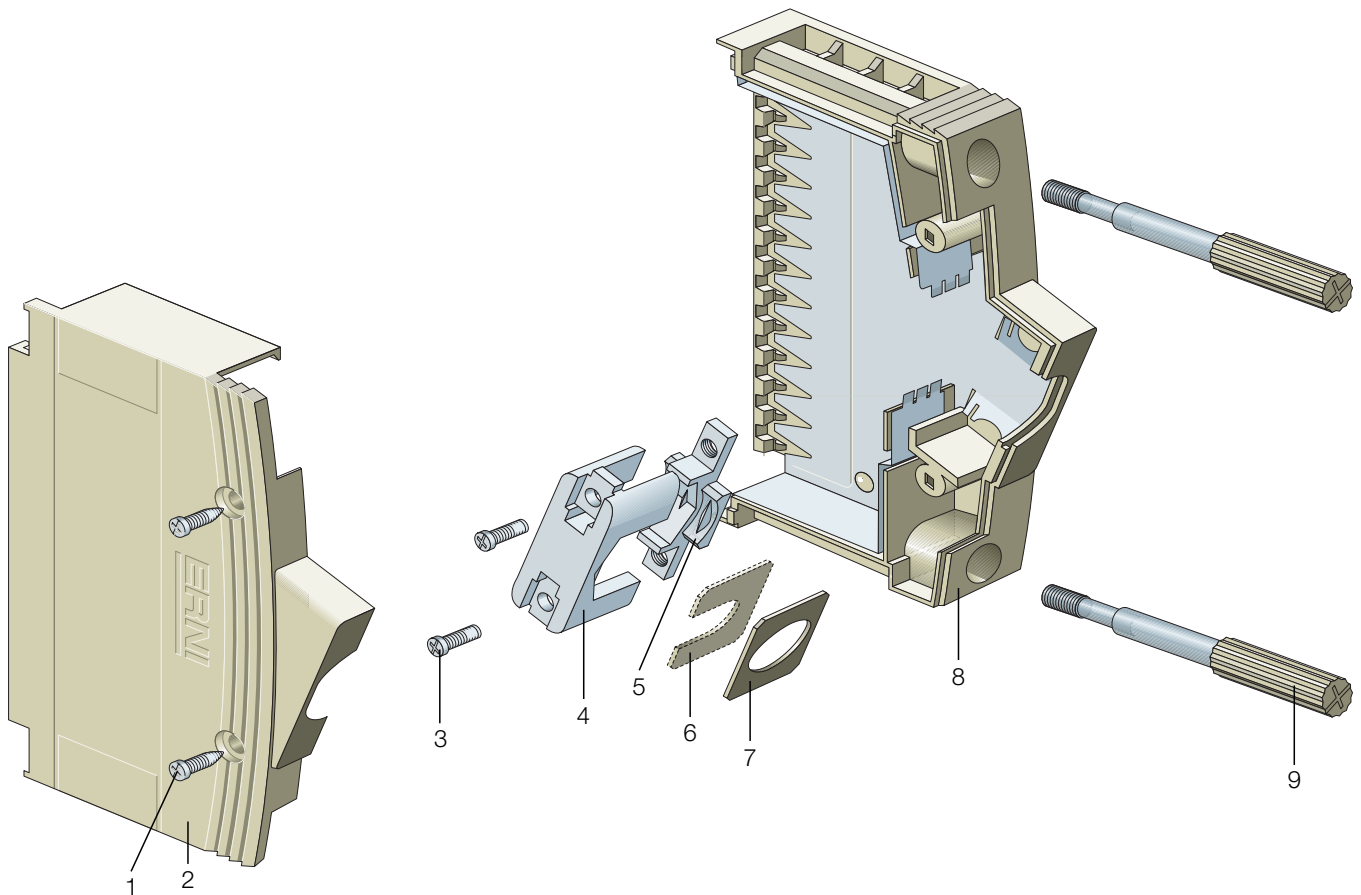
Series KSG 200



Individual parts of cable connectors housing Series KSG 200

Housing with internal shielding plates

The illustration below shows a 37 pin housing



Individual parts

| Item | Description | Material |
|------|---|----------------------|
| 1 | Roundhead tapping screws B 2.2 x 9.5 DIN 7981 | Galvanized steel |
| 2 | Connector housing upper part with riveted shielding plate | PC / German Silver |
| 3 | Flathead screws ISO 7405 M 2.5 x 10.0 – H | Galvanized steel |
| 4 | Terminal (upper Part) | Die-cast zinc |
| 5 | Terminal (lower Part) | Die-cast zinc |
| 6 | Cover plate ø 6.0 mm | PC |
| 7 | Cover plate ø 9.0 mm (only 25 and 37 pin) | PC |
| 8 | Connector housing lower part with riveted shielding plate | PC / German Silver |
| 9 | Knurled screws M3 or #4/40 | Galvanized steel /PC |

Cable Connector Housings for D-Sub Connectors

Series KSG 200



Kits of cable connector housing Series KSG 200

Cable connector housings of Series KSG 200 are supplied as kits or as spare parts. The internal shielding plates are permanently attached by rivets.

Standard packaging unit contains 1 pcs as kits.

Larger packaging units are also available on request (e.g. a complete package contains 250 pcs.)

Ordering Information



with riveted shielding plates incl. knurled screws M3

| Housing Size | Packaged as kits / Part Number |
|--------------|--------------------------------|
| 9 | 063385 |
| 15 | 063384 |
| 25 | 063383 |
| 37 | 063380 |
| 50 | - |

with riveted shielding plates incl. knurled screws #4/40

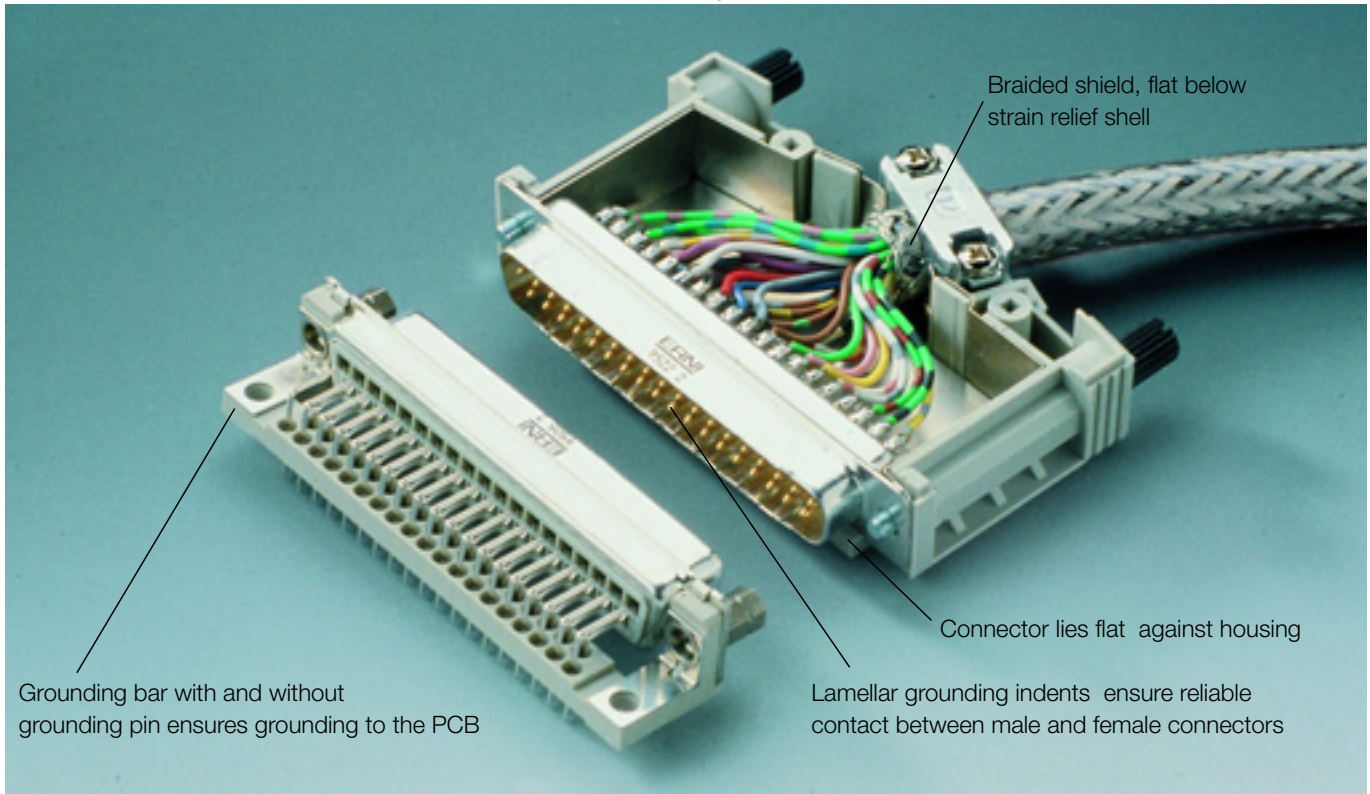
| Housing Size | Packaged as kits / Part Number |
|--------------|--------------------------------|
| 9 | 063389 |
| 15 | 063388 |
| 25 | 063387 |
| 37 | 063386 |
| 50 | - |

Cable Connector Housings for D-Sub Connectors

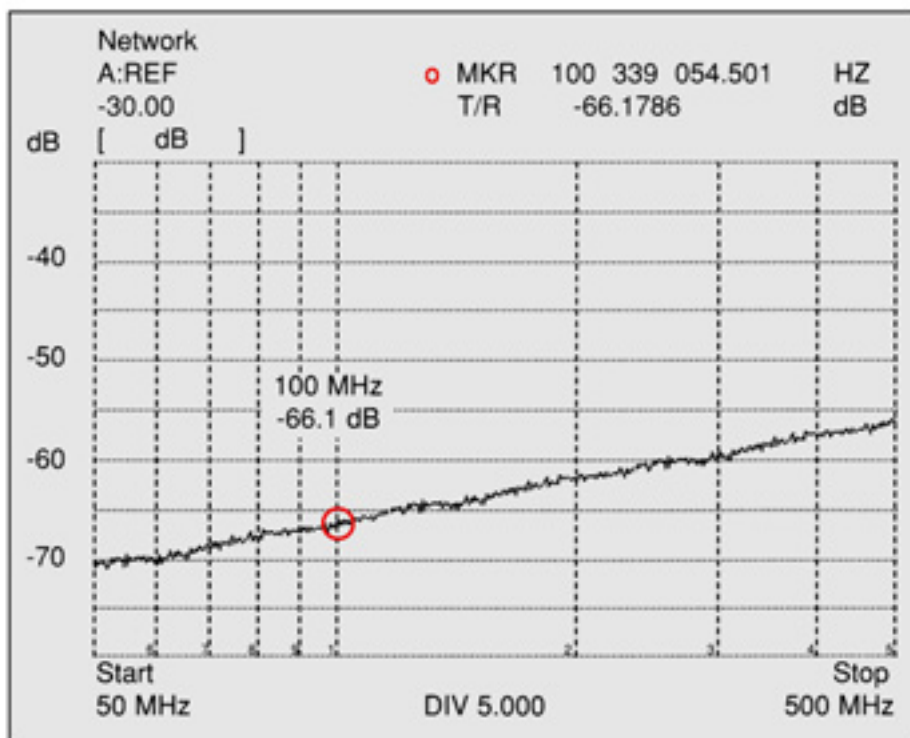
Series KSG 200



Structure of KSG 200 with construction details for shielding and ESD protection



Shield attenuation diagram, measured using wire injection method

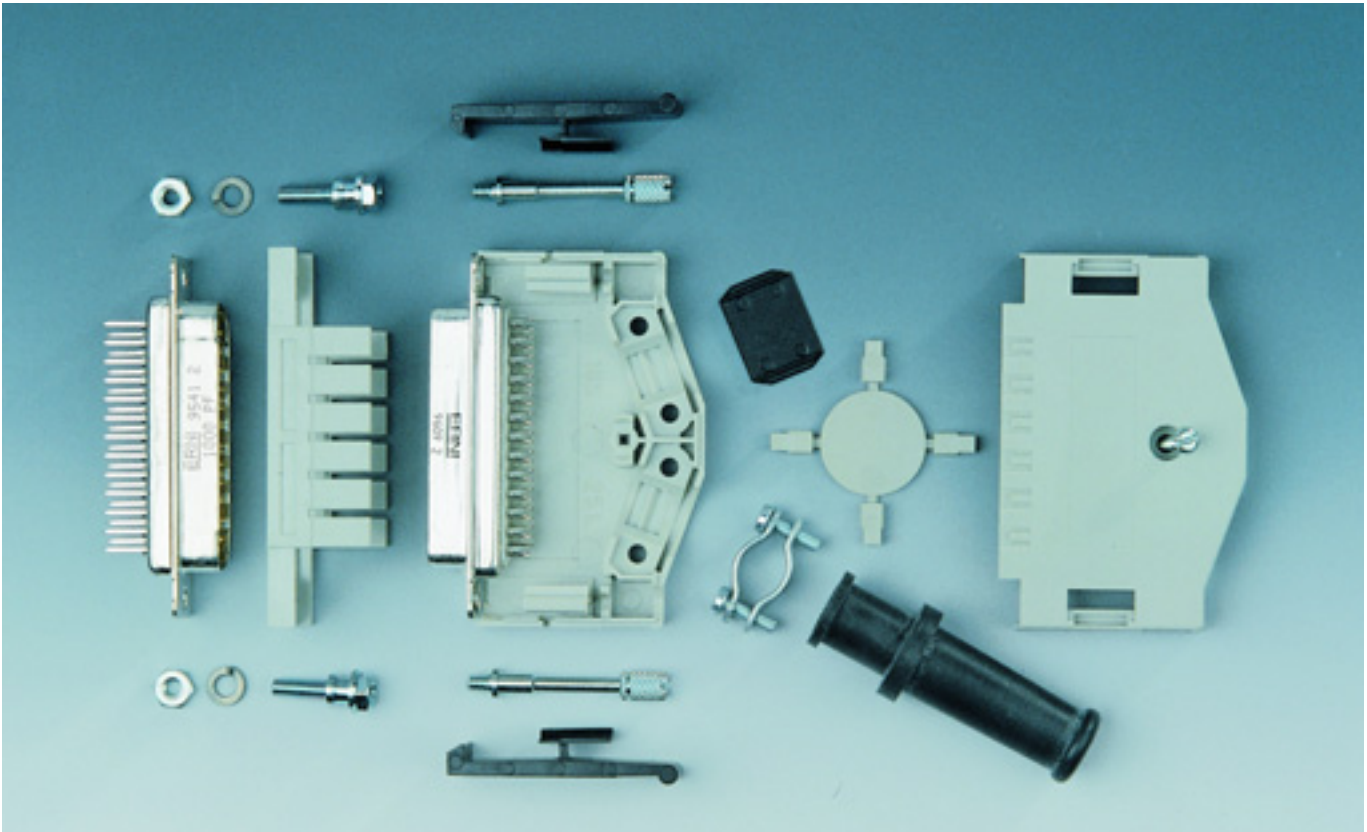


Cable Connector Housings for D-Sub Connectors

Series KSG 185



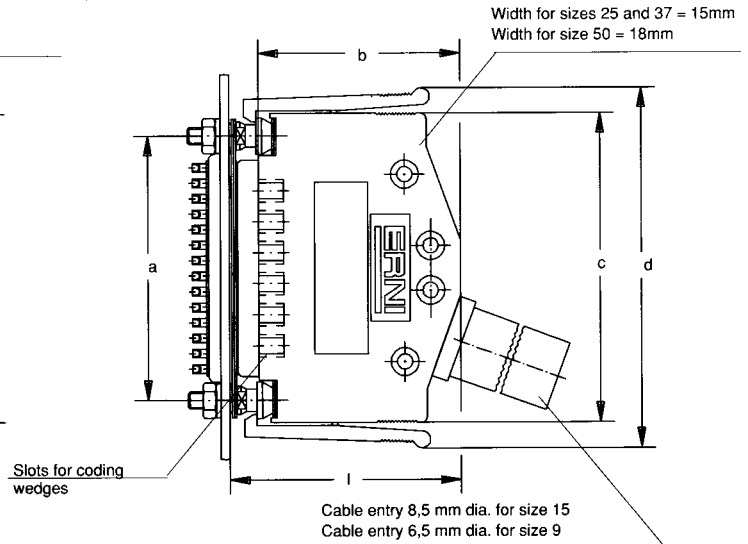
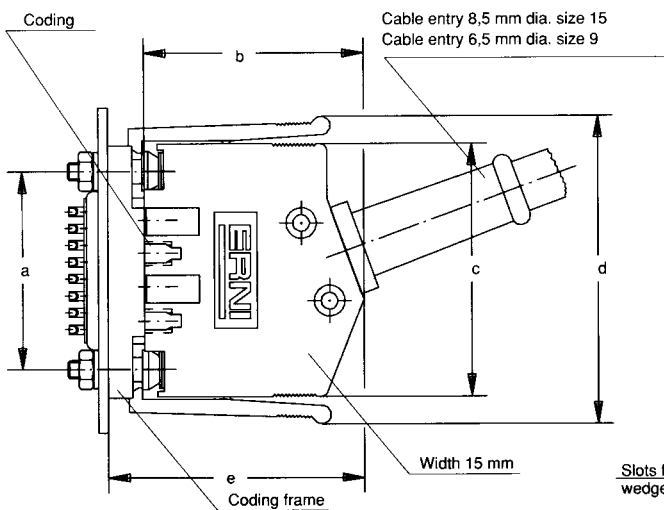
With engagement and / or screw locking; integrated coding; metallized version



Dimensions of cable connector housing Series KSG 185

Dimensions with coding frame
Illustrated for 9 and 15 pin housing sizes

Dimensions without coding frame
Illustrated for 25, 37 and 50 pin housing sizes

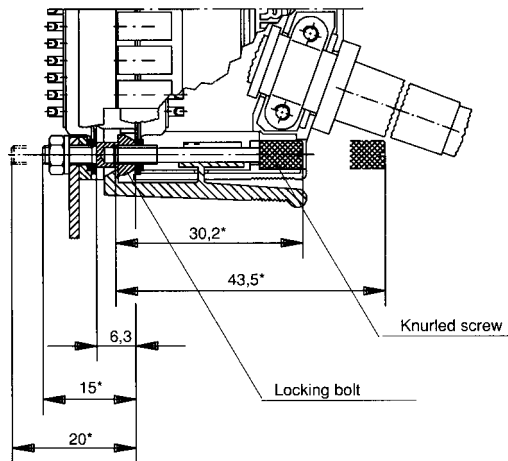


Cable Connector Housings for D-Sub Connectors

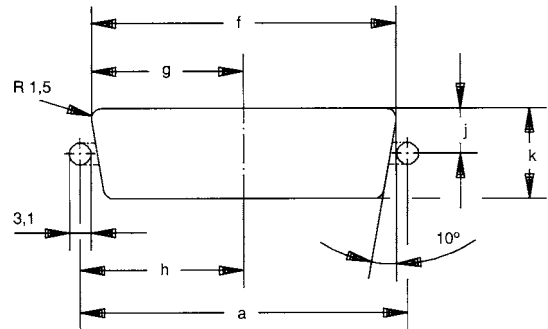
Series KSG 185



Dimensions of locking parts



Dimensions of panel cutout



Dimensions of cable coupler cable connector housing Series KSG 185

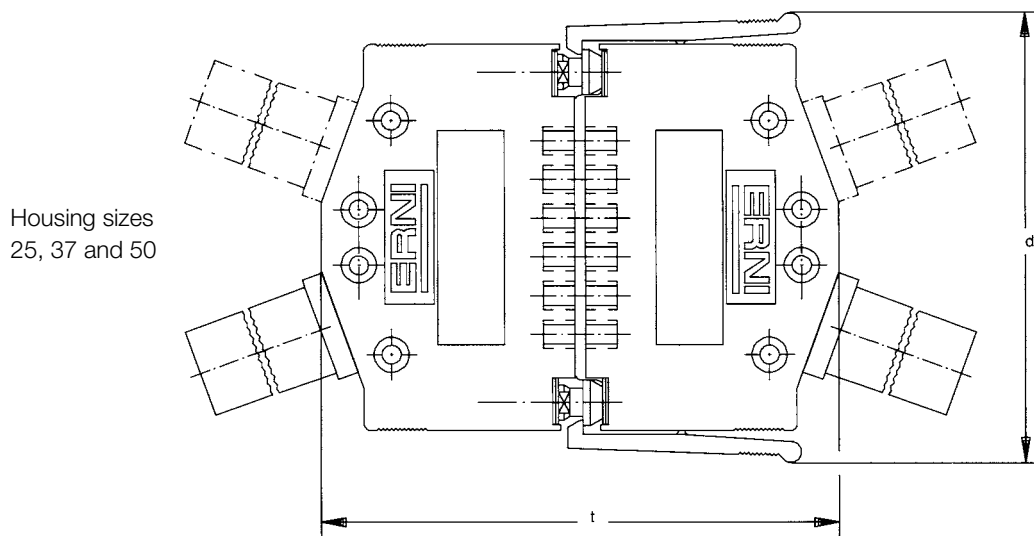


Table of dimensions cable connector housing Series KSG 185

| Sizes | a | b | c | d | e | f | g | h | j | k | l | t |
|-----------|------|------|------|------|------|------|-------|-------|-----|------|------|------|
| 9 | 25.0 | 36.0 | 33.0 | 42.0 | 43.0 | 22,2 | 11,1 | 12,5 | 6,5 | 13.0 | 41,5 | 74.0 |
| 15 | 33,3 | 36.0 | 41,3 | 50,3 | 43.0 | 30,5 | 15,25 | 16,65 | 6,5 | 13.0 | 41,5 | 74.0 |
| 25 | 47.0 | 36.0 | 55.0 | 64.0 | 43.0 | 44,3 | 22,15 | 23,5 | 6,5 | 13.0 | 41,5 | 74.0 |
| 37 | 63,5 | 36.0 | 71,5 | 80,5 | 43.0 | 60,7 | 30,35 | 31,75 | 6,5 | 13.0 | 41,5 | 74.0 |
| 50 | 61,1 | 36.0 | 69,1 | 78,1 | 43.0 | 58,3 | 29,15 | 30,55 | 7,9 | 15,8 | 41,5 | 74.0 |

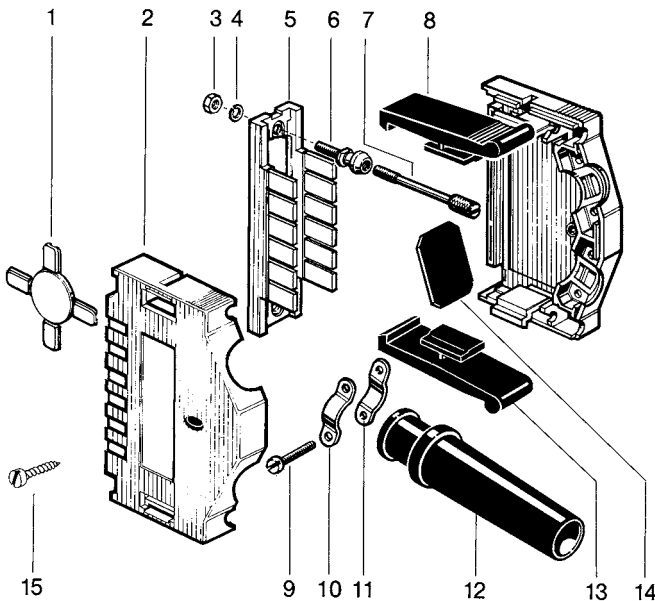
Cable Connector Housings for D-Sub Connectors

Series KSG 185



Individual parts cable connector housing Series KSG 185

Housing material: polycarbonate

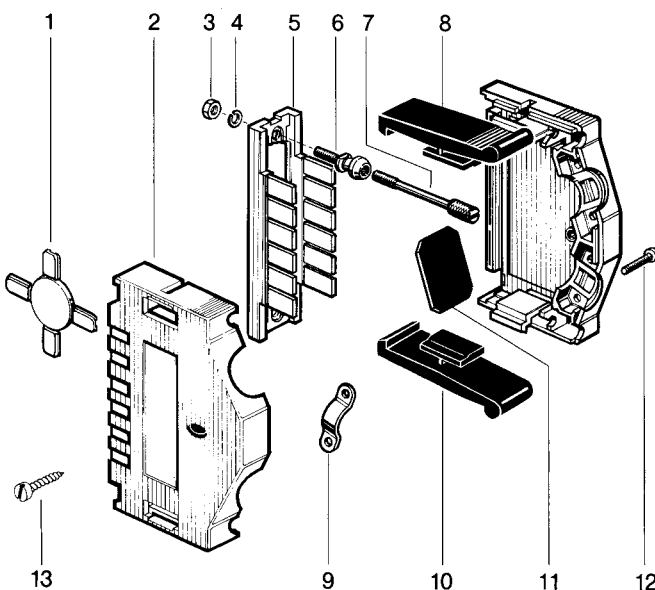


Individual parts

| Item | Description |
|------|--|
| 1 | Coding star |
| 2 | Connector housing shell halves |
| 3 | Hex nut M3 DIN 934 |
| 4 | Spring washer A3 DIN 127 |
| 5 | Coding frame |
| 6 | Locking bolt |
| 7 | Knurled screw |
| 8 | Latch-lever, left |
| 9 | Cheese-head screw B 2.5 x 8.0 DIN 84 |
| 10 | Strain relief clamp |
| 11 | Strain relief clamp |
| 12 | Cable sleeve: \varnothing 6.5 mm for size 9 \varnothing 8.5 mm for size 15 and 25 \varnothing 10.5 mm for size 37 and 50 |
| 13 | Latch-lever, right |
| 14 | Blind plug |
| 15 | Cheese-head tapping screw: 9 – 37 pin: B 2.2 x 9.5 DIN 7971 50 pin: B 2.2 x 13.0 DIN 7971 |

Items 1, 5, 6, 7, 8, and 13 are accessories and not included

Housing material ABS metallized



Individual parts

| Item | Description |
|------|--|
| 1 | Coding star |
| 2 | Connector housing shell halves |
| 3 | Hex nut M3 DIN 934 |
| 4 | Spring washer A3 DIN 127 |
| 5 | Coding frame |
| 6 | Locking bolt |
| 7 | Knurled screw |
| 8 | Latch-lever, left |
| 9 | Strain relief clamp |
| 10 | Latch-lever, right |
| 11 | Blind plug |
| 12 | Cheese-head screw: M 2.5 x 10.0 ISO 1207 M 2.5 x 12.0 ISO 1207 |
| 13 | Pan-head tapping screw: 9 – 37 pin: B 2.2 x 9.5 DIN 7971 50 pin: B 2.2 x 13.0 DIN 7971 |

Items 1, 5, 6, 7, 8, and 10 are accessories and not included in the connector housing kit.

Explanation:

If the metallized cable connector housing is used, only one strain relief clamp is required. It is screwed directly to the connector shell half to make contact with the screening. There is no need for the cable sleeve.

Cable Connector Housings for D-Sub Connectors

Series KSG 185



Kits of cable connector housing Series KSG 185


Cable connector housings series KSG 185 are supplied as kits.
 Items 2,9,10,11,12,14 and 15 are not included in the kit of the non-metallized version, housing material PC.
 Metallized cable connector housings are also packed as kits. Items included: 2,9,11,12 and 13.

Larger packaging units are available on request (i.e. housing kits in a complete package).

Ordering Information


Housing material polycarbonate 30% GV Color pebble gray, RAL 7032

| Housing Size | Part-No. Kit |
|--------------|--------------|
| 9 | 423554 |
| 15 | 423555 |
| 25 | 423556 |
| 37 | 423557 |
| 50 | 423558 |



Housing material ABS metallized

| Housing Size | Part-No. Kit |
|--------------|--------------|
| 9 | 423559 |
| 15 | 423560 |
| 25 | 423561 |
| 37 | 423562 |
| 50 | 423563 |




The ordering details specified apply to connector housings with one cable entry. Kits with accessories for two cable entries on request

Kits of locking bolts and #4/40 for cable connector housing Series KSG 185

Material:
Steel, surface-treated

| Total length | Part-No. Kit |
|---------------|--------------|
| M3 15.0 mm | 024912 |
| M3 20.0 mm | 024913 |
| #4/40 15.0 mm | 024915 |
| NC2A 20.0 mm | 024914 |





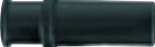
Cable Connector Housings for D-Sub Connectors

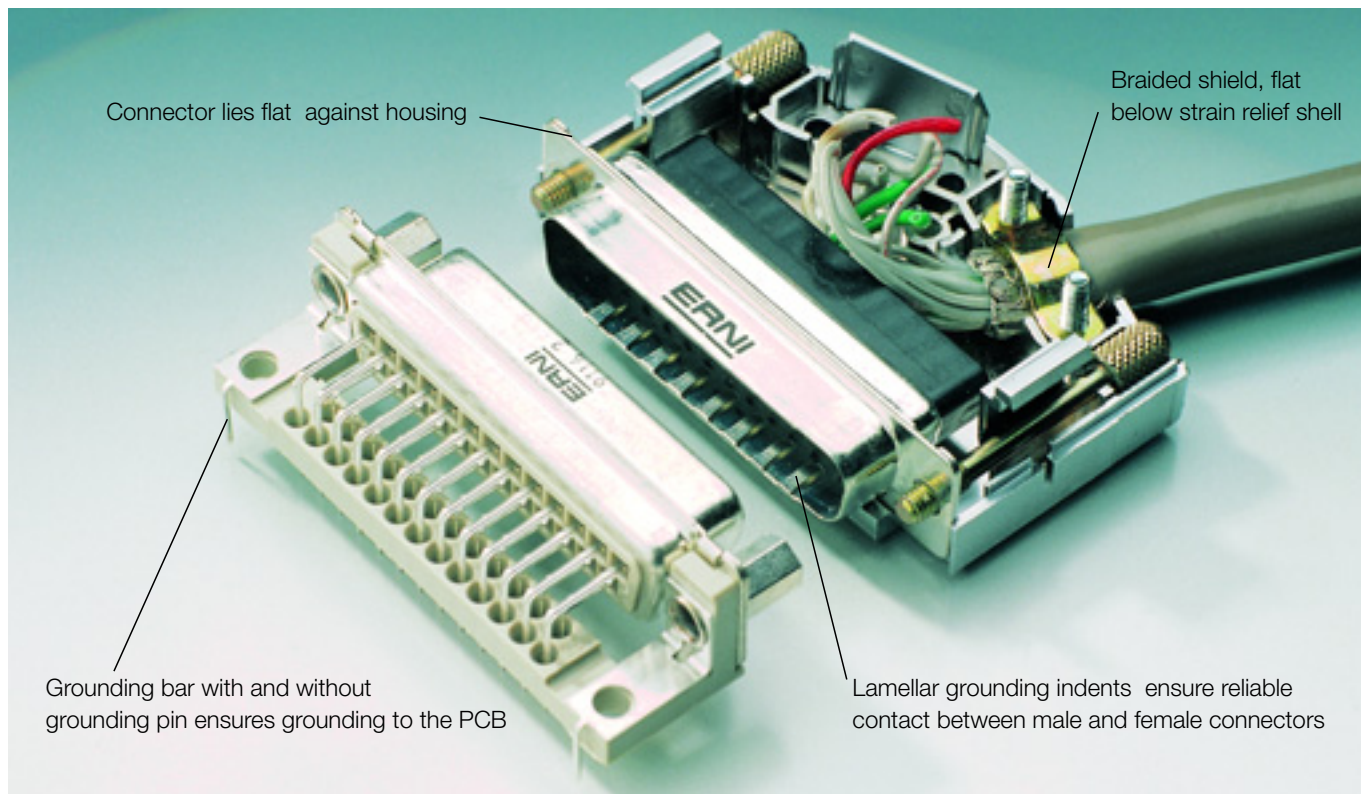
Series KSG 185



Separate accessories for cable connector housing Series KSG 185

| Description | | Quantity | Material | Part Number |
|-------------------------------------|---|----------|------------------------|---------------|
| Latch-lever, right |  | 1 | PC black | 423215 |
| Latch-lever, left | | 1 | PC black | 423080 |
| Knurled screw M3, length 29.5 mm |  | 2 | Steel, surface-treated | 014865 |
| Knurled screw M3, length 42.8 mm |  | 2 | Steel, surface-treated | 014863 |
| Knurled screw #4/40, length 29.5 mm |  | 2 | Steel, surface-treated | 014869 |
| Knurled screw #4/40, length 42.8mm |  | 2 | Steel, surface-treated | 014871 |
| Coding star with 4 coding wedges | | | | 033014 |

| Description | | Inner diameter | Material | Part Number |
|--------------|---|---|--------------|---------------|
| Cable sleeve |  | 6.5 mm (1 in a set for housing sizes 9) | Rubber black | 423895 |
| Cable sleeve |  | 8.5 mm (1 in a set for housing sizes 15, 25) | Rubber black | 423894 |
| Cable sleeve |  | 10.5 mm (1 in a set for housing sizes 37, 50) | Rubber black | 083351 |

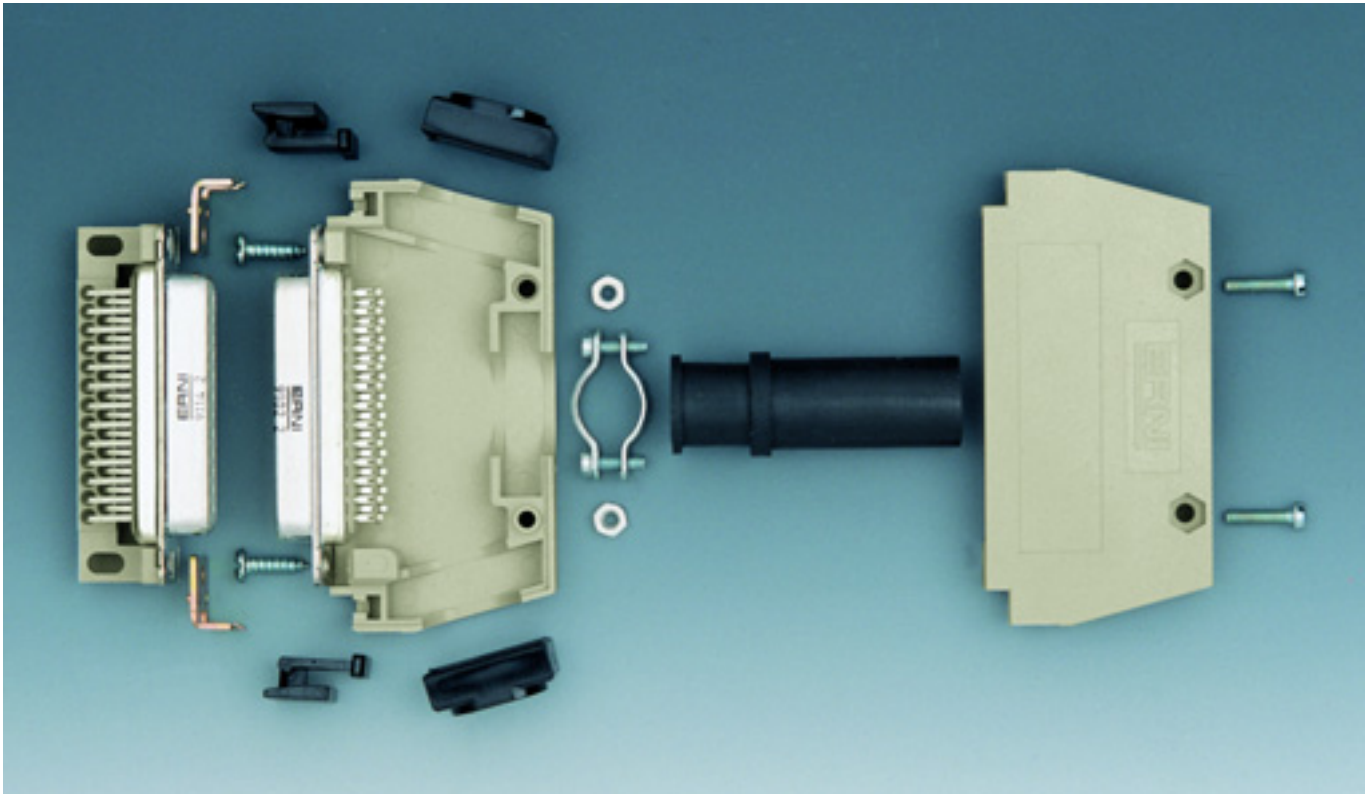


Cable Connector Housings for D-Sub Connectors

Series KSG 183



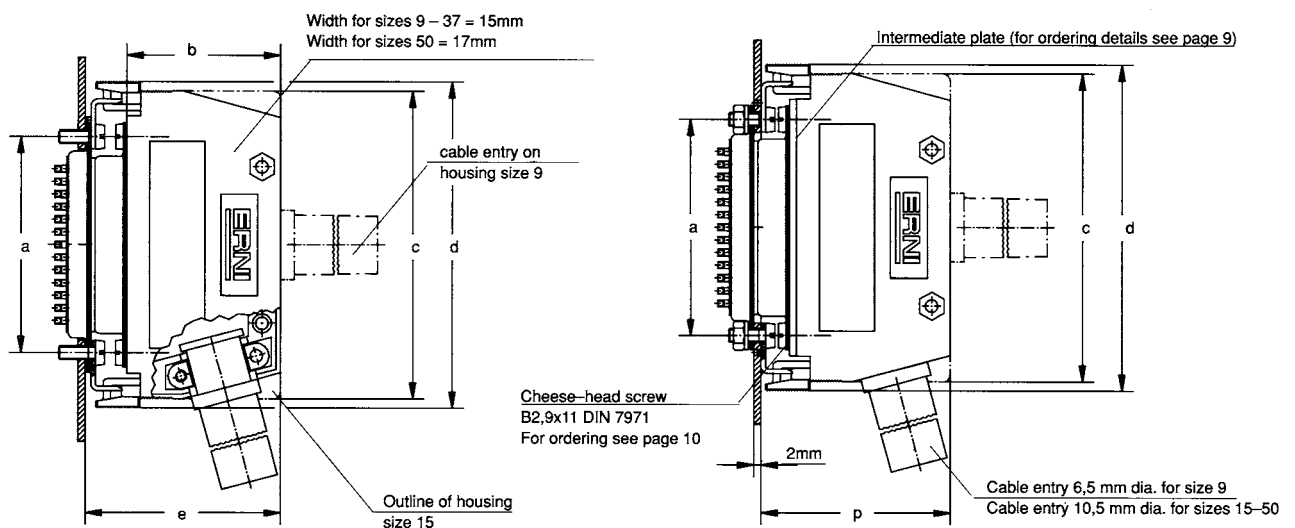
With snap-in locking



Dimensions of cable connector housing Series KSG 183

Front-panel assembly

Back-panel assembly



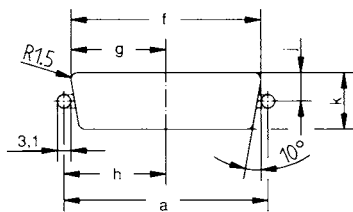
Cable Connector Housings for D-Sub Connectors

Series KSG 183

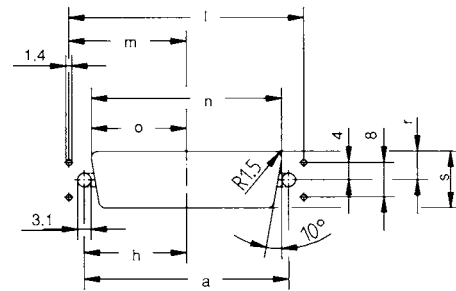


Dimensions of panel cutout cable connector housing Series KSG 183

Front-panel assembly



Back-panel assembly



Dimensions of cable coupler cable connector housing Series KSG 183

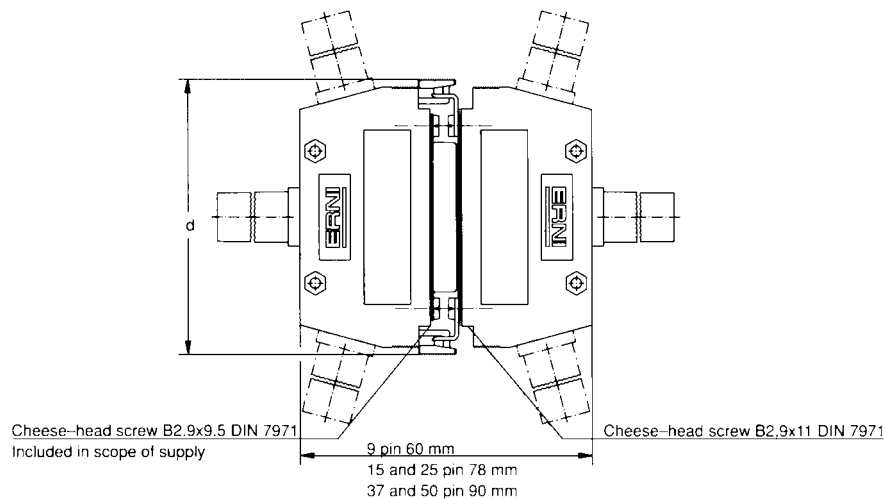


Table of dimensions cable connector housing Series KSG 183

| Sizes | a | b | c | d | e | f | g | h | j | k | l | m |
|-----------|------|------|------|------|------|------|-------|-------|-----|------|------|-------|
| 9 | 25.0 | 25.0 | 45.0 | 49.0 | 35.0 | 22.2 | 11.1 | 12.5 | 6.5 | 13.0 | 32.0 | 16.0 |
| 15 | 33.3 | 34.0 | 53.0 | 57.0 | 44.0 | 30.5 | 15.25 | 16.65 | 6.5 | 13.0 | 40.3 | 20.15 |
| 25 | 47.0 | 34.0 | 67.0 | 71.0 | 44.0 | 44.3 | 22.15 | 23.5 | 6.5 | 13.0 | 54.0 | 27.0 |
| 37 | 63.5 | 40.0 | 83.0 | 87.0 | 50.0 | 60.7 | 30.35 | 31.75 | 6.5 | 13.0 | 70.5 | 35.25 |
| 50 | 61.1 | 40.0 | 81.0 | 85.0 | 50.0 | 58.3 | 29.15 | 30.55 | 7.9 | 15.8 | 68.1 | 34.05 |

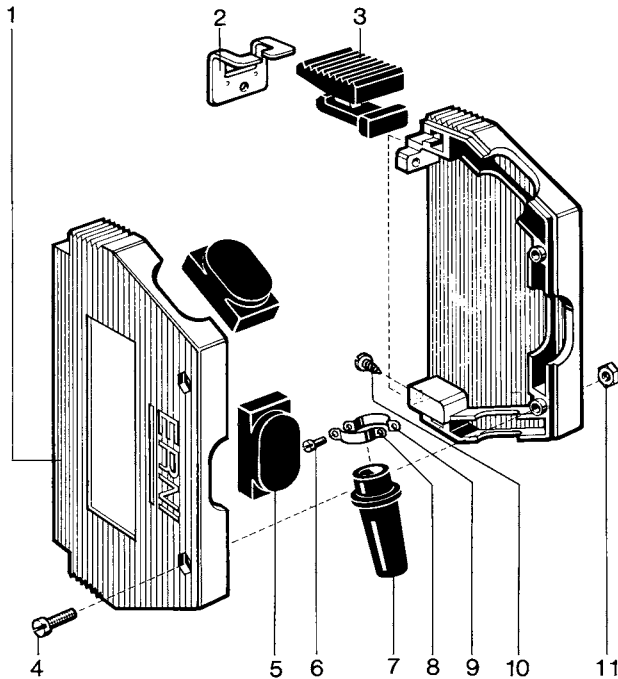
| Sizes | n | o | p | r | s |
|-----------|------|-------|------|------|------|
| 9 | 20.5 | 10.25 | 34.0 | 5.7 | 11.4 |
| 15 | 28.8 | 14.4 | 43.0 | 5.7 | 11.4 |
| 25 | 42.5 | 21.25 | 43.0 | 5.7 | 11.4 |
| 37 | 59.1 | 29.55 | 49.0 | 5.7 | 11.4 |
| 50 | 56.3 | 28.15 | 49.0 | 7.05 | 14.1 |

Cable Connector Housings for D-Sub Connectors

Series KSG 183



Individual parts cable connector housing Series KSG 183



Individual parts

| Item | Description |
|------|-------------|
|------|-------------|

- | | |
|----|---|
| 1 | Connector housing shell halves |
| 2 | latching bracket |
| 3 | Latch-lever |
| 4 | Cheese-head screw M 2.5 x 10.0 DIN 84 |
| 5 | Blind plug |
| 6 | Cheese-head screw M 2.5 x 8.0 DIN 84 |
| 7 | Cable sleeve 6,5 mm dia, for size 9, 10,5mm dia, for size 15 to 50 |
| 8 | Strain relief clamp |
| 9 | Strain relief clamp |
| 10 | Cheese-head screw B 2.9 x 9.5 DIN 7971 |
| 11 | Hex nut M2.5 DIN 934 |

Items 2 and 3 are accessories and not included in the connector housing kit.

Kits of cable connector housings Series KSG 183

Series KSG 183 cable connector housings are supplied as kits.
Items included: 1, 4, 5, 6, 7, 8, 9, 10, 11.

Larger packaging units are available on request (e.g. 100 housing kits in a complete package).

Ordering Information

Housing material polycarbonate 30% GV
Color pebble gray, RAL 7032

| Housing Size | Part-No. Kit |
|--------------|---------------|
| 9 | 183001 |
| 15 | 183020 |
| 25 | 183040 |
| 37 | 183060 |
| 50 | 183080 |





The ordering details specified apply to connector housings with one cable entry. Kits with accessories for two cable entries on request

Cable Connector Housings for D-Sub Connectors


Series KSG 183



Seperate accessories for cable connector housings Series KSG 183



| Description | | Quantity* | Material | Part Number |
|---|---|-----------|------------------------|---------------|
| Latch-lever |  | 2 | PC black | 183130 |
| Latching bracket |  | 2 | Steel, surface-treated | 014915 |
| Cheese-headscrew B2.9 x 11.0 DIN 7971 for back-panel assembly and for cable couplers | | 2 | Steel, surface-treated | 413346 |

* per cable connector housing

| Description | | Size | Material* | Part Number |
|-----------------------|--|------|---------------|---------------|
| PC intermediate plate |  | 9 | Polycarbonate | 183132 |
| | | 15 | Polycarbonate | 183135 |
| | | 25 | Polycarbonate | 183138 |
| | | 37 | Polycarbonate | 183141 |
| | | 50 | Polycarbonate | 183144 |

* Polycarbonate 30% GV grey Ral 7032

For advice on usaging the intermediate plate please see page 15

| Description | | Inner diameter | Material | Part Number |
|--------------|---|--|--------------|---------------|
| Cable sleeve |  | 10.5 mm (1 in a set for housing sizes 15-50) | Rubber black | 423894 |
| Cable sleeve |  | 6.5 mm (1 in a set for housing size 9) | Rubber black | 083352 |

Cable Connector Housings for D-Sub Connectors

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