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Cable Connector Housings

for D-Subminiature connectors, Series TMC

www.erni.com



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Cable Connector Housings for D-Sub Connectors

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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

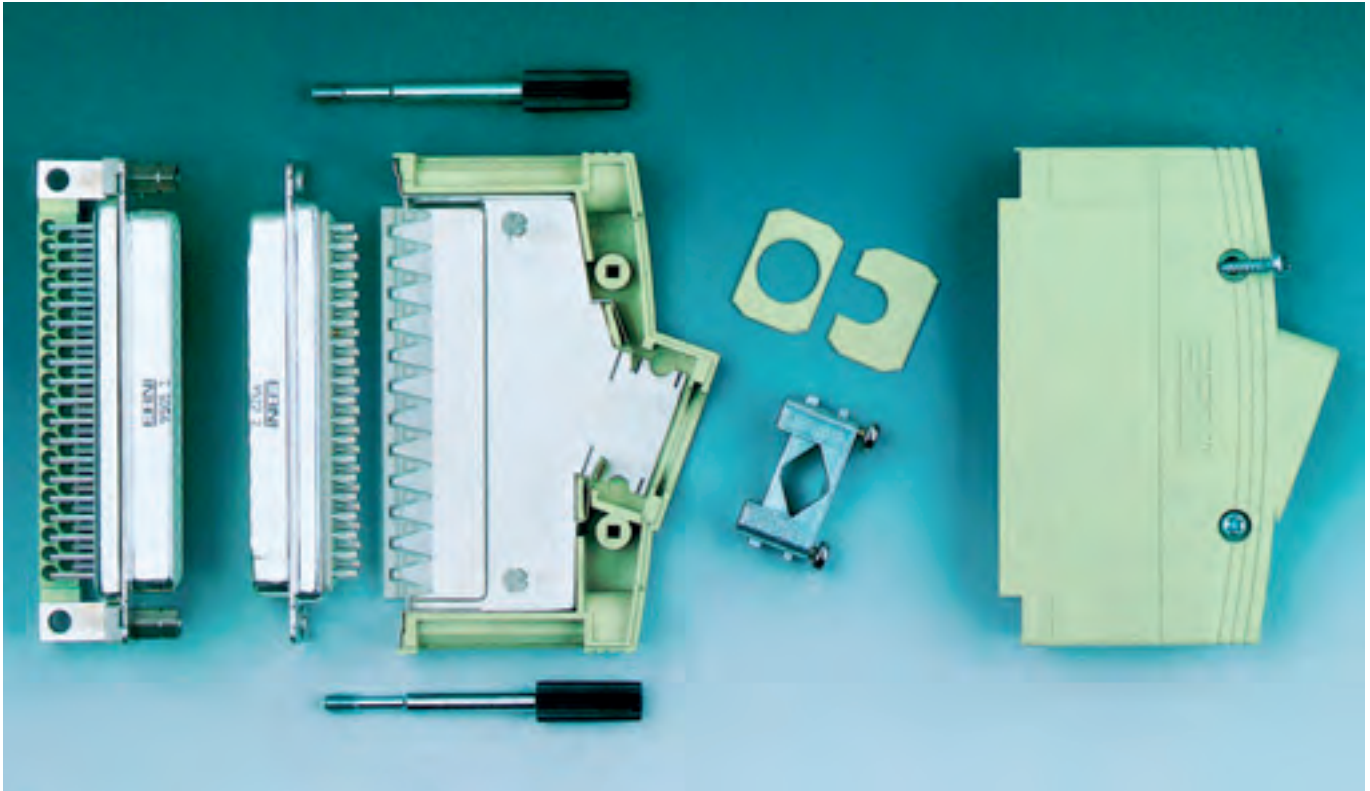
Cable Connector Housings for D-Sub Connectors

Series KSG 200



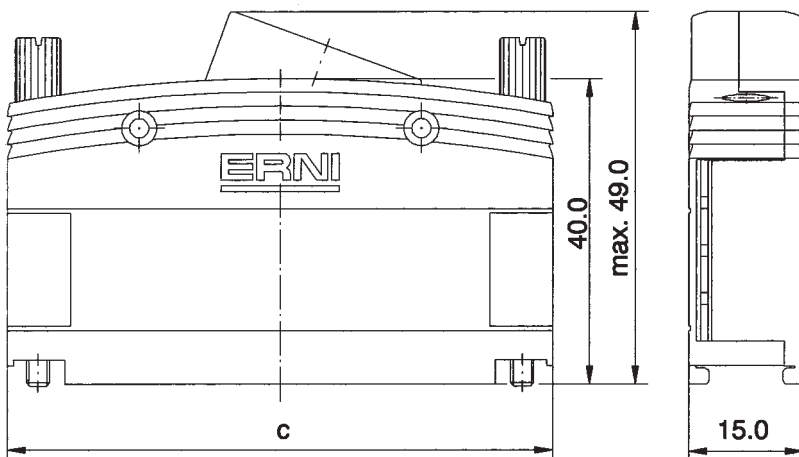
Fully insulated housing with integrated shielding plates

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.



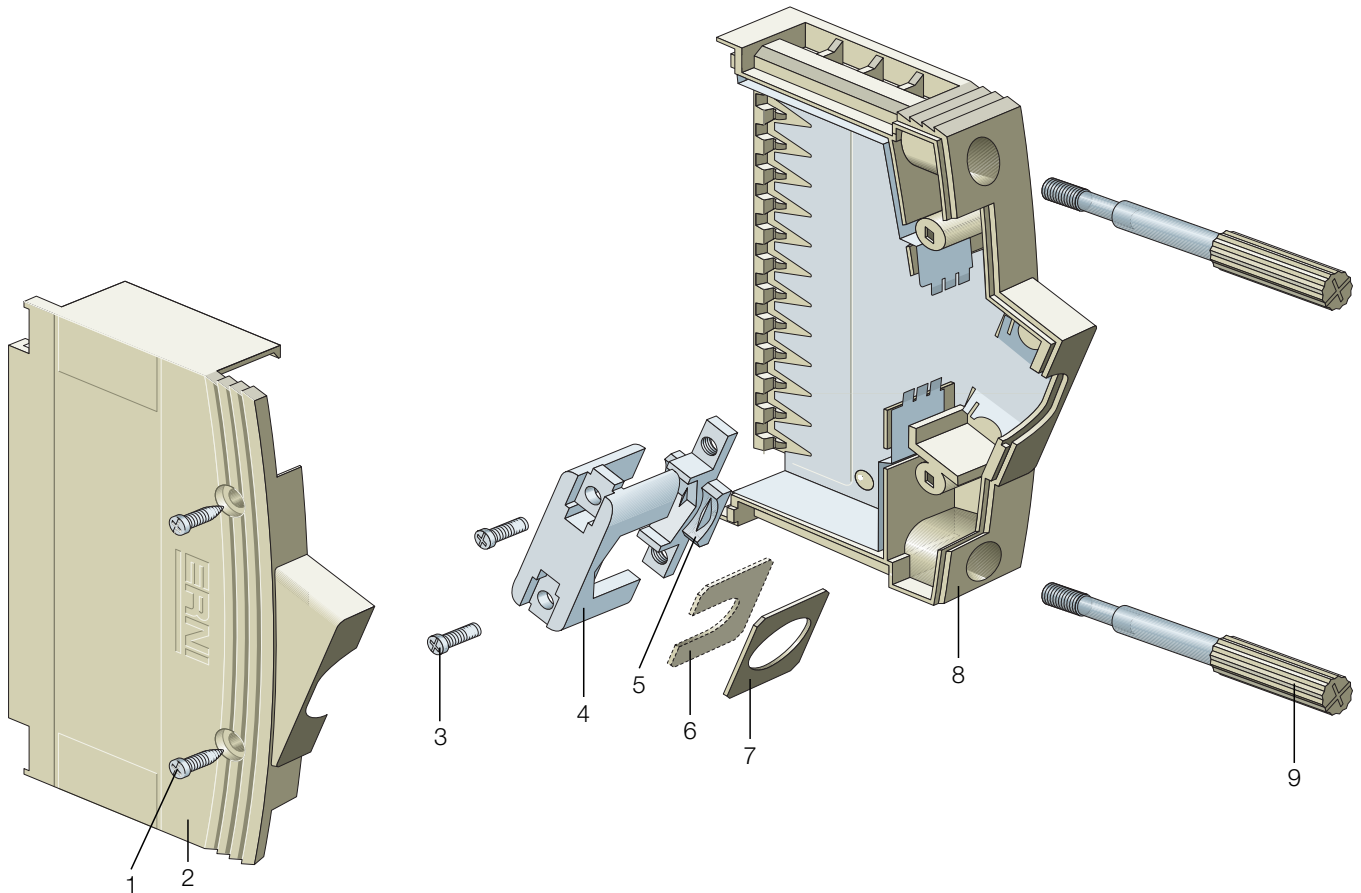
Cable Connector Housings for D-Sub Connectors

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

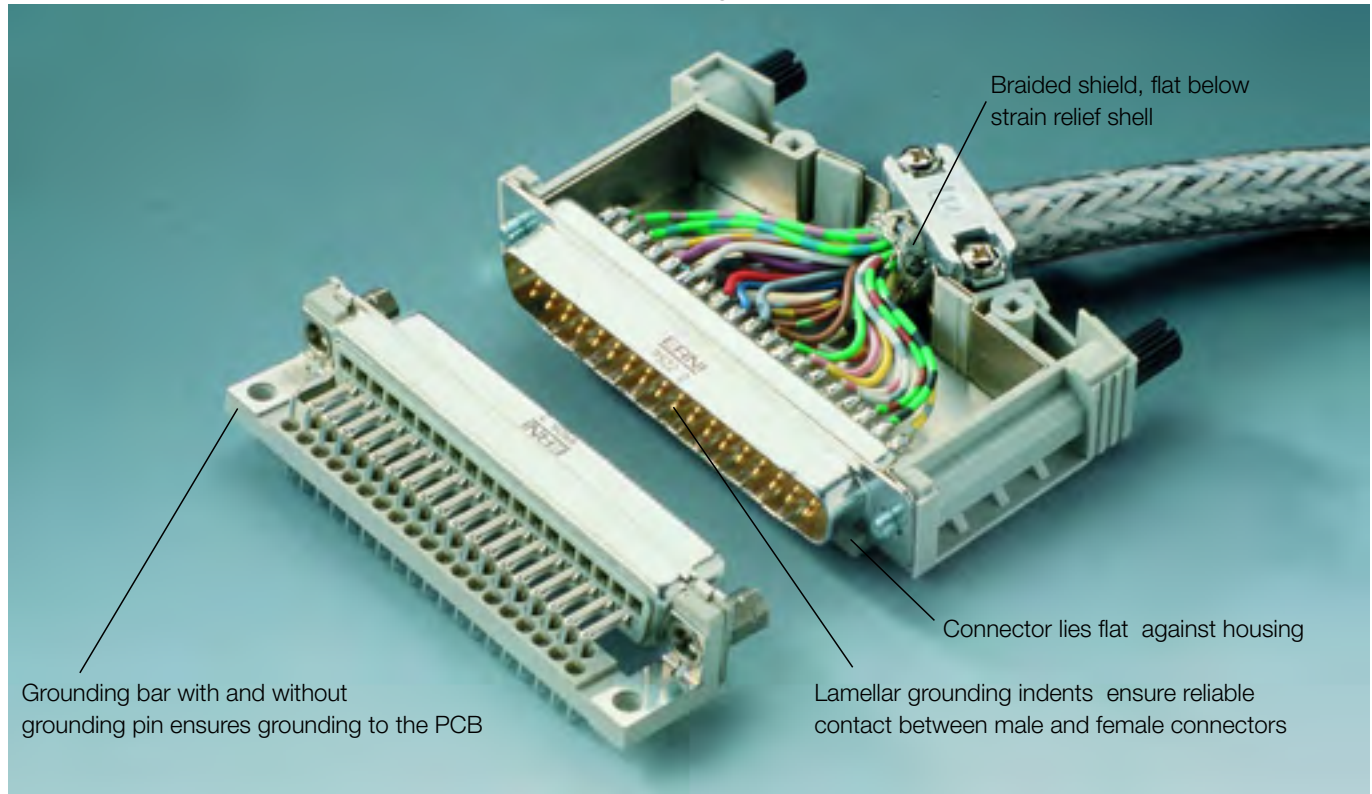
Housing Size	Packaged as kits / Part Number
9	063389
15	063388
25	063387
37	063386
50	-

Cable Connector Housings for D-Sub Connectors

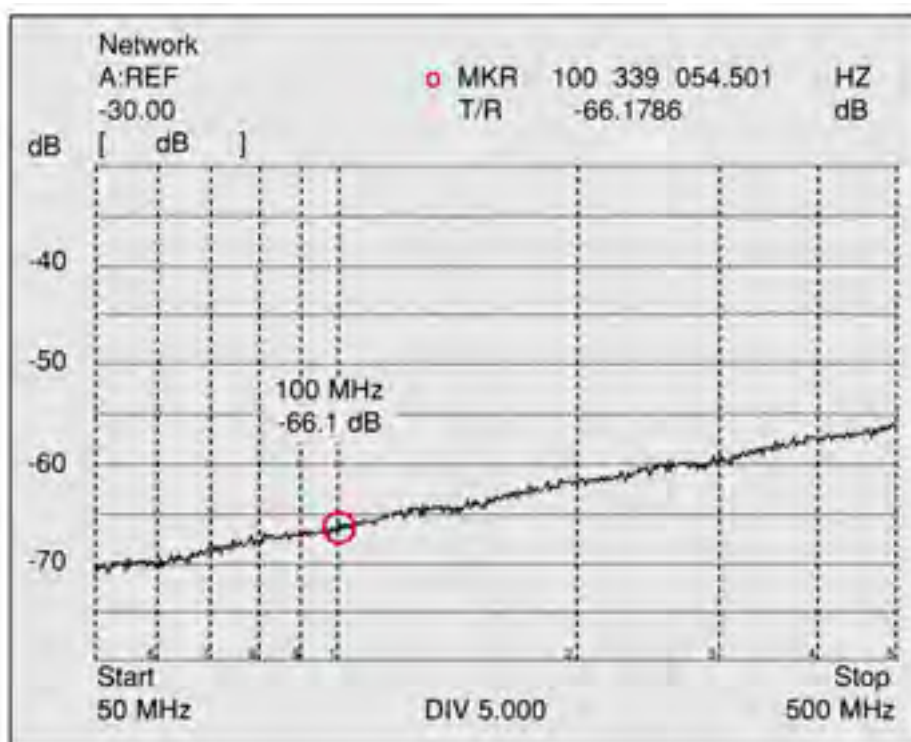
Series KSG 200



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



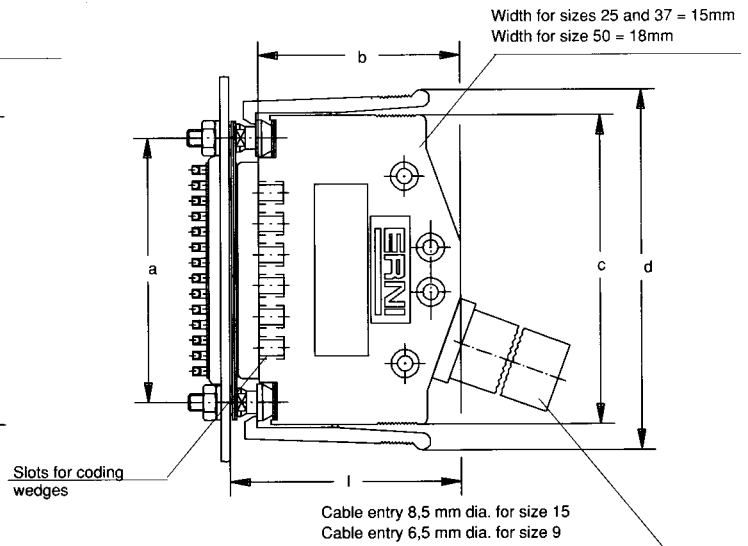
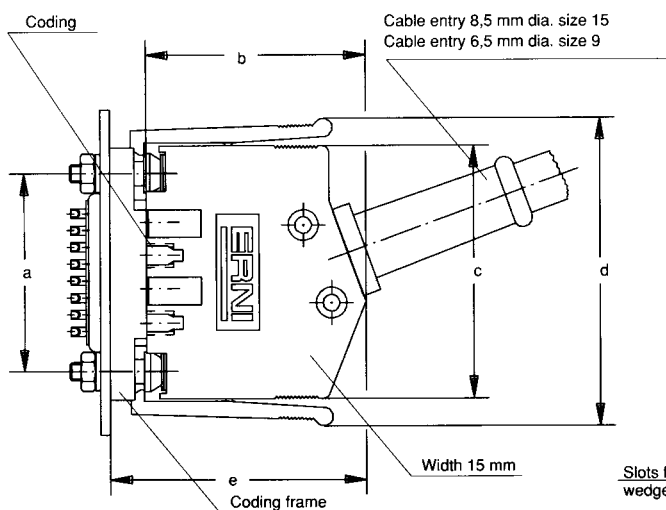
With engagement and / or screw locking; integrated coding; metallized version



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

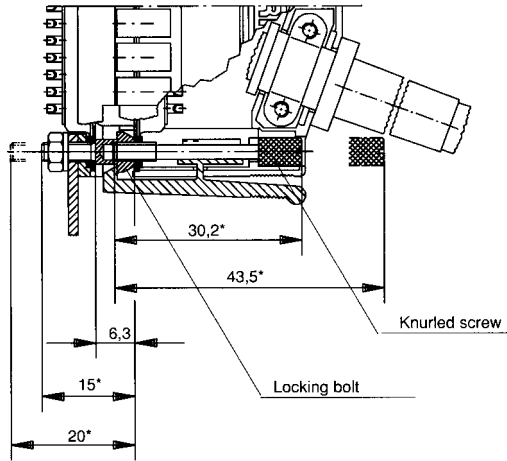


Cable Connector Housings for D-Sub Connectors

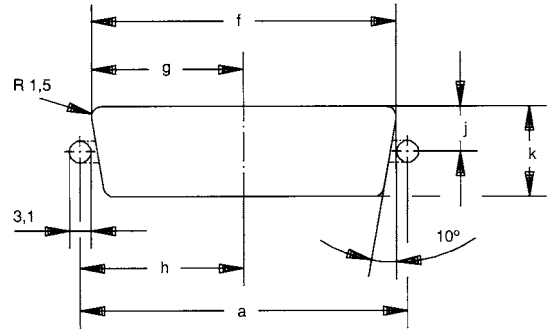
Series KSG 185



Dimensions of locking parts



Dimensions of panel cutout



Dimensions of cable coupler cable connector housing Series KSG 185

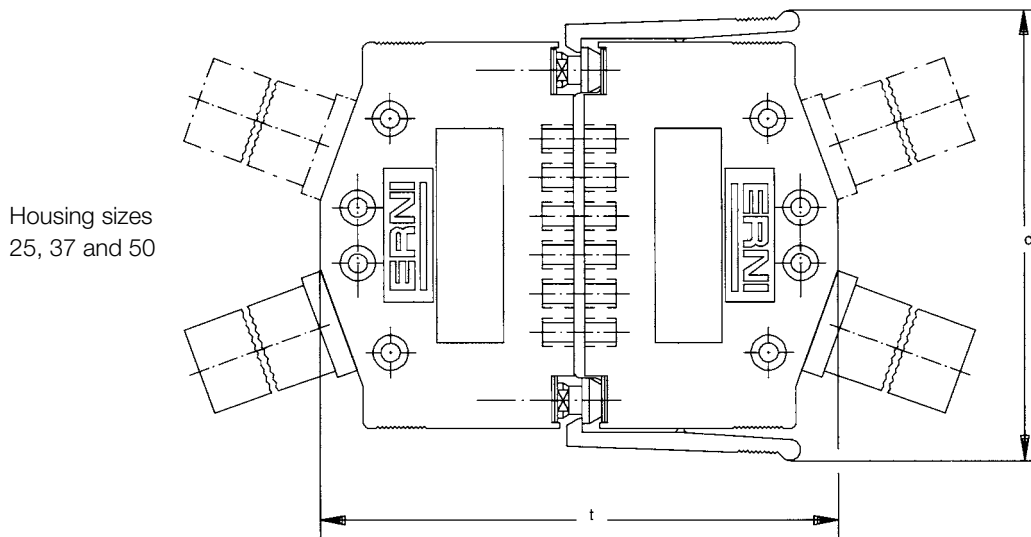


Table of dimensions cable connector housing Series KSG 185

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

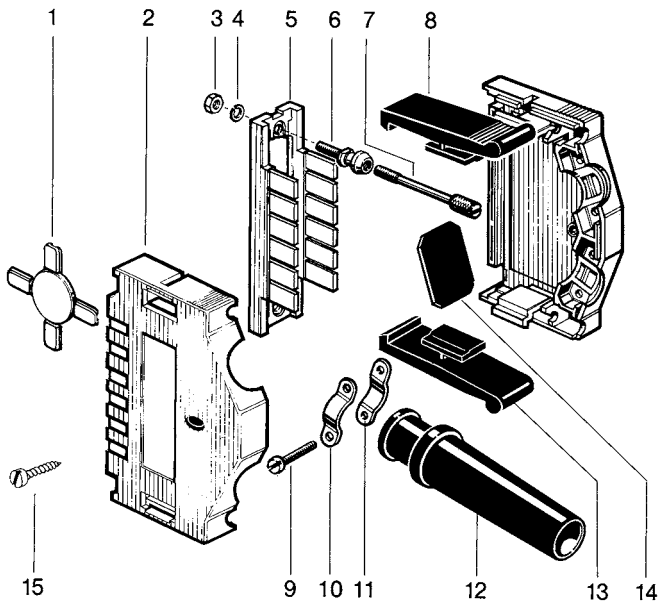


Cable Connector Housings for D-Sub Connectors

Series KSG 185

Individual parts cable connector housing Series KSG 185

Housing material: polycarbonate

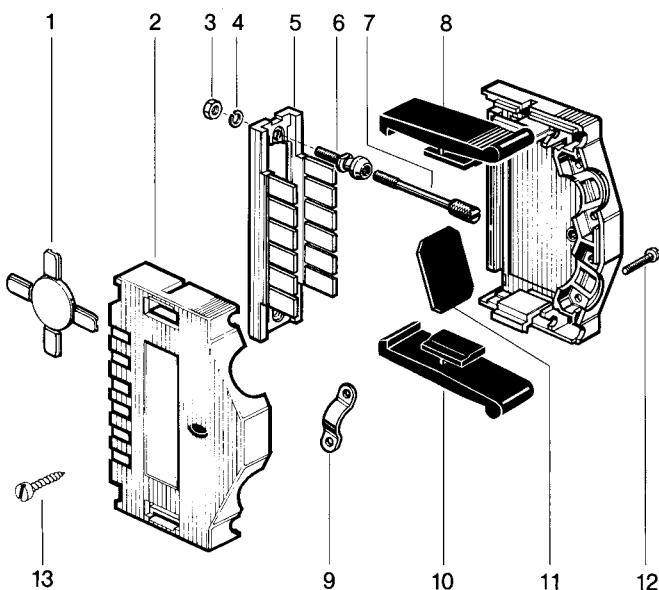


Individual parts

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

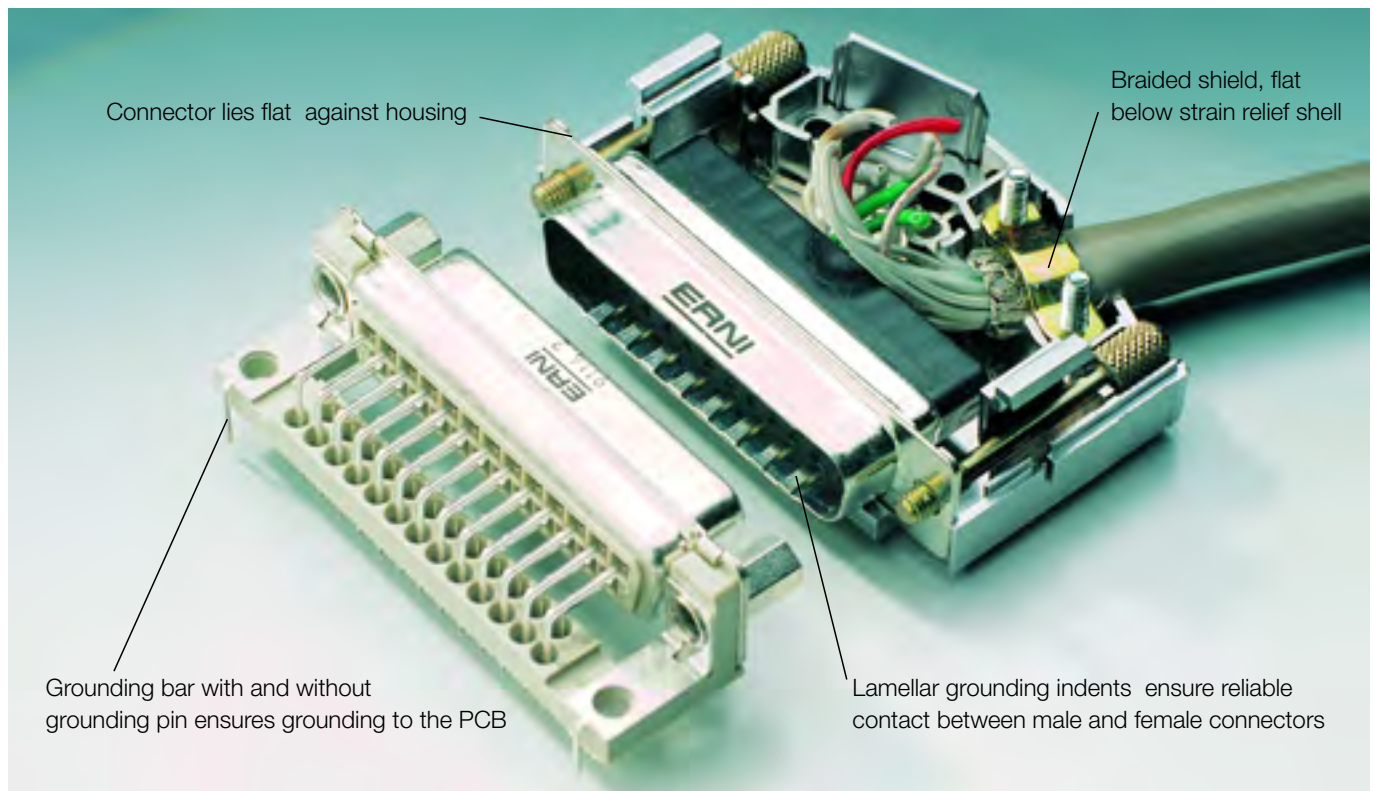
Series KSG 185



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

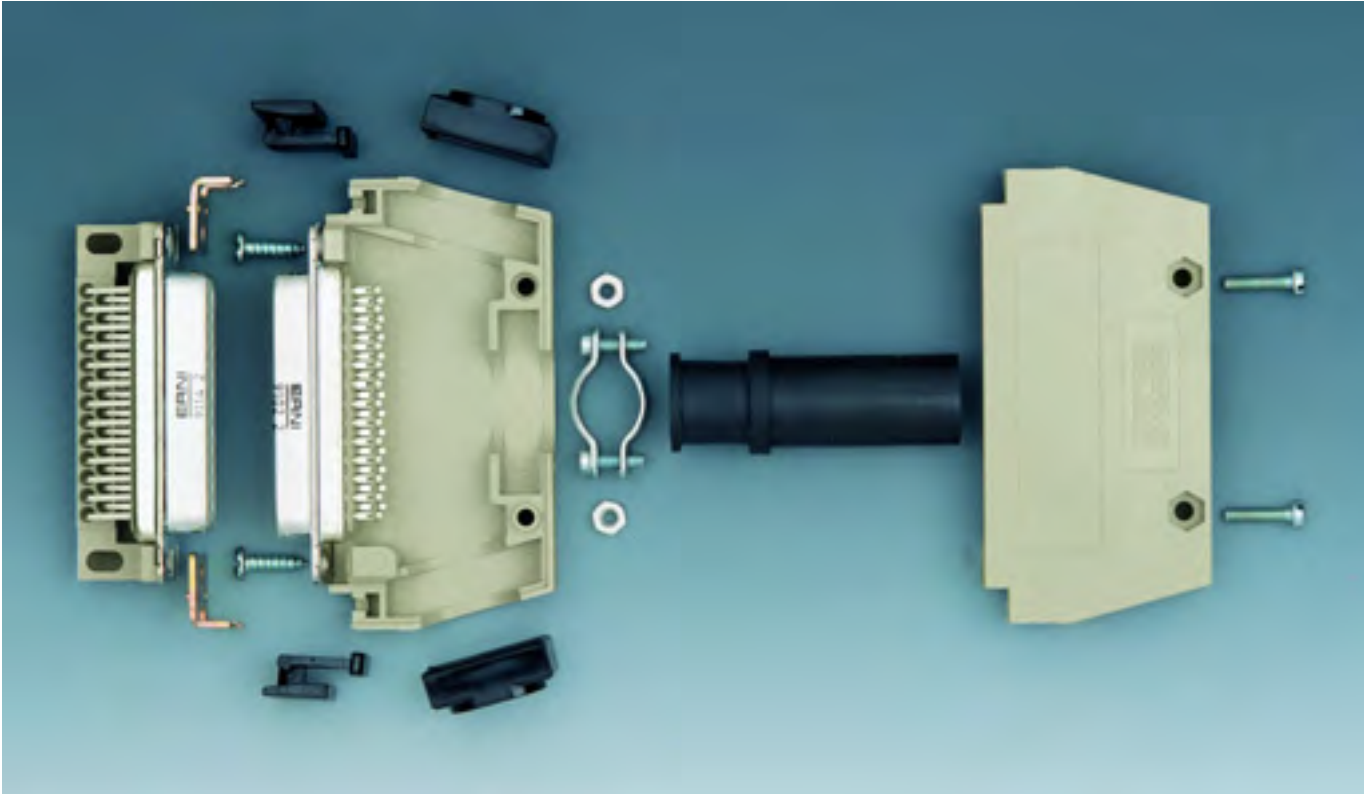


Cable Connector Housings for D-Sub Connectors

Series KSG 183



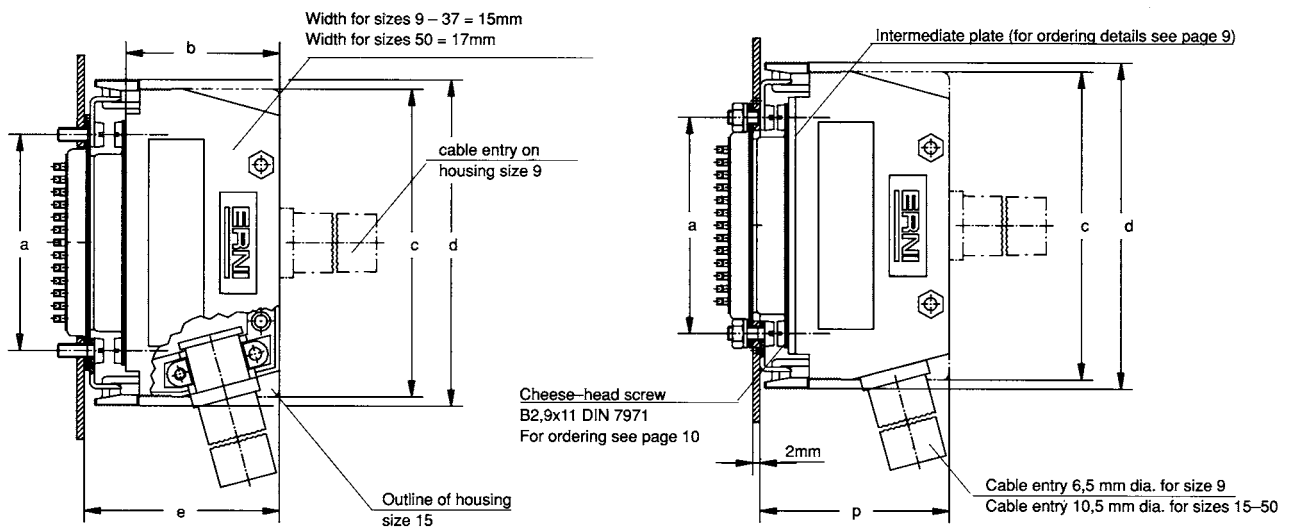
With snap-in locking



Dimensions of cable connector housing Series KSG 183

Front-panel assembly

Back-panel assembly



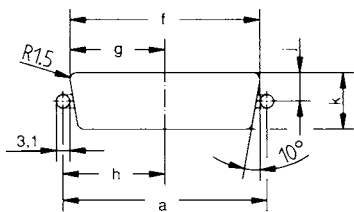
Cable Connector Housings for D-Sub Connectors

Series KSG 183

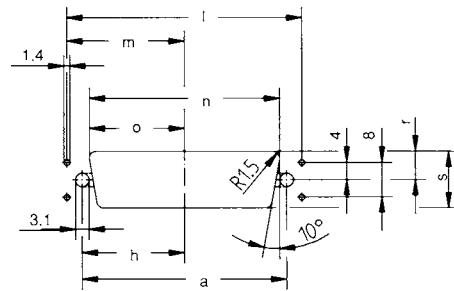


Dimensions of panel cutout cable connector housing Series KSG 183

Front-panel assembly



Back-panel assembly



Dimensions of cable coupler cable connector housing Series KSG 183

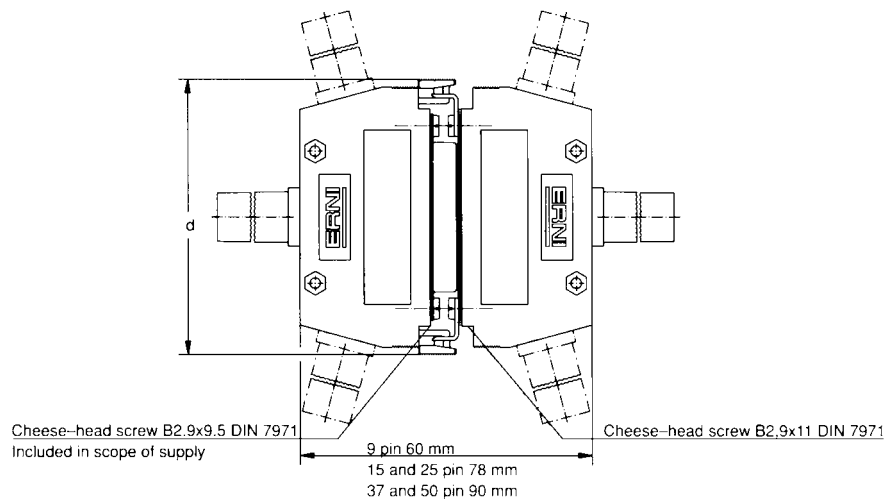


Table of dimensions cable connector housing Series KSG 183

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

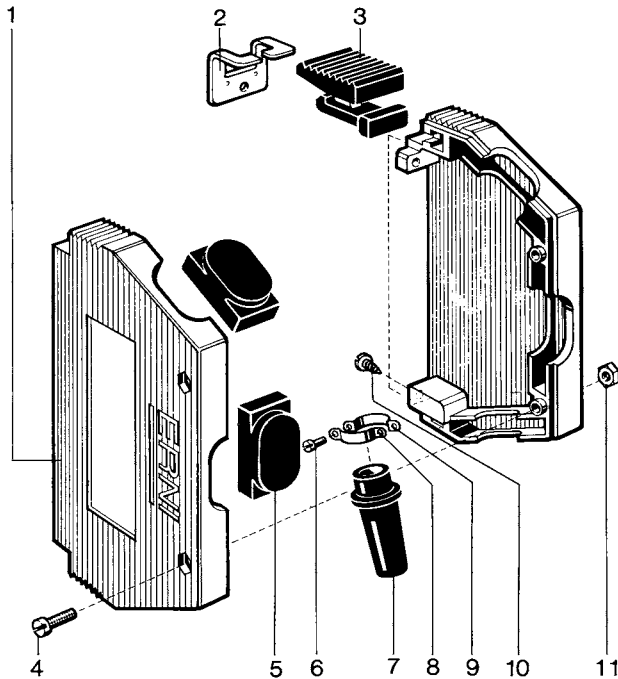
Sizes	n	o	p	r	s
9	20.5	10.25	34.0	5.7	11.4
15	28.8	14.4	43.0	5.7	11.4
25	42.5	21.25	43.0	5.7	11.4
37	59.1	29.55	49.0	5.7	11.4
50	56.3	28.15	49.0	7.05	14.1

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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