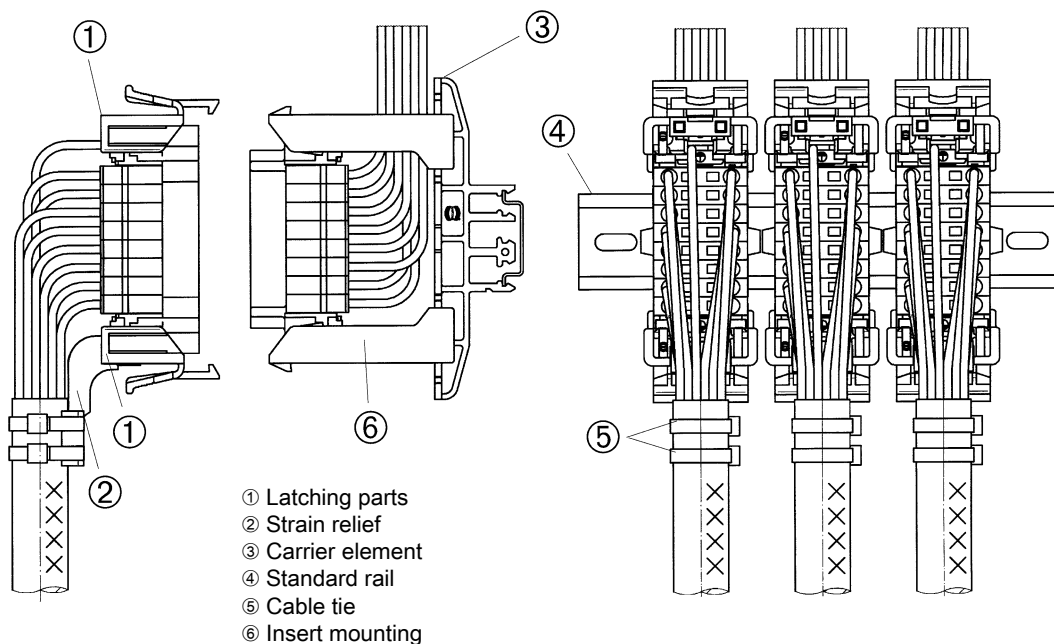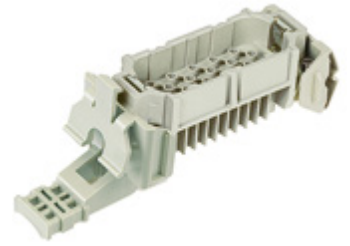# Han-Snap®

Contents	Page

Note:

A connector mounted with Han-Snap® elements does not offer finger safe protection to the relevant standards. In this case protection against electric shock must be provided by the installation methods of the user. The fixing of the PE terminal must be conducted on equal side of the connector insert to avoid ground interruptions.

- The Han-Snap® system is ideal for connectors within closed electrical operating environments.
  These can be rooms, cabinets or termination boxes.

- The Han-Snap® components are an innovative design which offer the following advantages and characteristics:
  - reduction of material and assembly costs;
  - fast and easy installation;
  - preassembly of Han connectors;
  - secure and rigid mounting of Han connectors;
  - frequent use of latching systems is possible (up to several thousand cycles).

- The Han-Snap® elements are compatible with the standard inserts and terminal block connectors of the following series (named series Han B as follows)
  - Han D®, 40 and 64 pins
  - Han DD®
  - Han E®
  - Han® EE
  - Han® EEE
  - Han® ES
  - Han Hv E®
  - Han® Hv ES
  - Han® HsB
  - Han-Com®
  - Han-Modular®

- With the Han-Snap® adapter the following standard inserts are compatible (named series Han A as follows):
  - Han D®, 15 and 25 pins
  - Han A®, 10 and 16 pins

- The Han-Snap® elements are a mechanical system for the mounting assembly and security of Han connectors.
  Normally the elements are assembled to the connector insert using the standard insert fixing screws.
  If coding is required the standard fixing screws may be replaced by either code pins or guide pins and bushes.

- On free connectors the wires or cables can be secured to the strain relief element with standard cable ties of 5 mm width maximum.

Han-Snap® on standard rail

① Latching parts
② Strain relief
③ Carrier element
④ Standard rail
⑤ Cable tie
⑥ Insert mounting

Han 11.2

Latching parts

Features

- Compact design saves space
- Practical and easy handling
- Reduction of material and assembly costs

Technical characteristics

Limiting temperature	-40 ... +125 °C
Degree of protection acc. to IEC 60529	IP20
Retention force	200 N Without guiding, 300 N With guiding
Material (accessories)	Polycarbonate
Colour (accessories)	RAL 7032 (pebble grey)
Material flammability class acc. to UL 94	V-0
RoHS	compliant

Specifications and approvals

IEC 60068-2-6 Vibration (sinusoidal)
IEC 60068-2-27 Shock

Details

Inserts can be mounted on the panel mounting part and the latching part with the standard insert mounting screws.
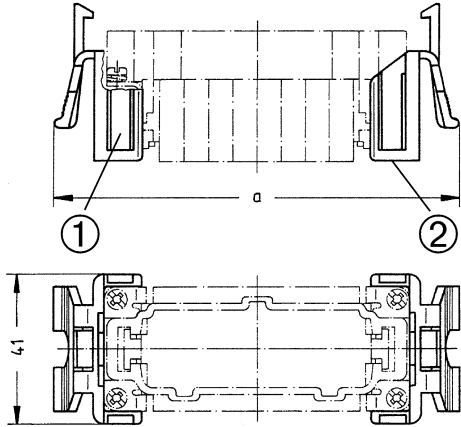
High mechanical security of the fixings.

No functional impairment is caused by slight over tightening of the fixing screws.

Alternatively, Han® coding elements (code pins or guide pins and bushes) may be used.

Label 9 x 20 mm may be fitted in both sides of each latching element. Label 7 x 20 mm may be fitted to the top of the latching part without the strain relief element.

Up to 2 cable ties with max. 5 mm width can be used on the strain relief.

Please note: The strain relief element should be assembled to the latching part at the end of the insert opposite to the ground screw.

Identification	Part number	Drawing (dimensions in mm)
Han-Snap®, Latching parts, Pack contents: 2 latching parts	09 33 000 9987	① Slot for identification strip 9 x 20 ② Slot for identification strip 7 x 20 6 B: a= 78.5 10 B: a= 91.5 16 B: a= 112.5 24 B: a= 138.5

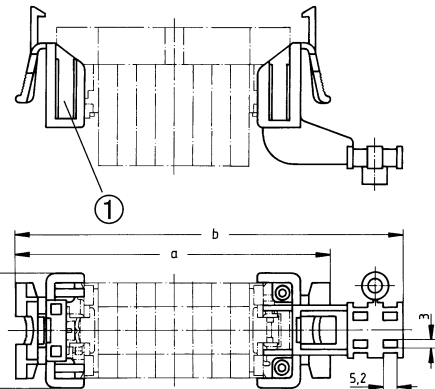**Han 11.3**

Han-Snap

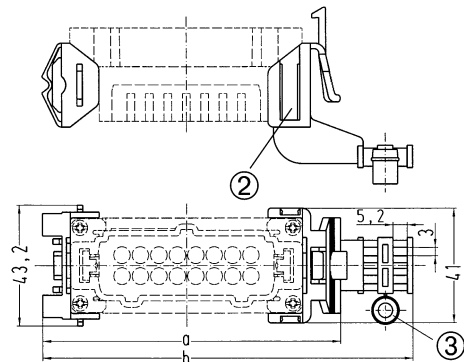| Identification	Part number	Drawing (dimensions in mm)
Han-Snap®, Latching parts, With strain relief, Pack contents: 1 latching part with strain relief, 1 latching part	09 33 000 9991	① Slot for identification strip 9 x 20 6 B: a=78.5; b=105 10 B: a=91.5; b=118 16 B: a=112.5; b=138.5 24 B: a=138.5; b=165
Han-Snap®, Latching parts, With strain relief, and panel mounting parts, Pack contents: 1 latching part with strain relief, 1 panel mounting part	09 33 000 9990	② Slot for identification strip 9 x 20 ③ Distance bush 6 B: a=75; b=101 10 B: a=88; b=114 16 B: a=108.5; b=134.5 24 B: a=135; b=161

Plastic panel mounting

Features

- Snap element for sheet-metal cut out
- Compact design saves space
- Practical and easy handling
- Reduction of material and assembly costs

Technical characteristics

Limiting temperature	-40 ... +125 °C
Retention force	≥250 N in the sheet-metal cut out
Material (accessories)	Polycarbonate
Colour (accessories)	RAL 7032 (pebble grey)
Material flammability class acc. to UL 94	V-0
RoHS	compliant

Specifications and approvals

IEC 60068-2-6 Vibration (sinusoidal)
IEC 60068-2-27 Shock

Details

Connector inserts and terminal block connectors can be fixed on elements for panel mounting with standard insert mounting screws.

High mechanical security of the fixings. No functional impairment is caused by slight over tightening of the fixing screws.

Alternatively, Han® coding elements (code pins or guide pins and bushes) may be used.

Connector assembly into the panel (sheet-metal) cut out or two parallel mounted rails is possible from mating or termination side.

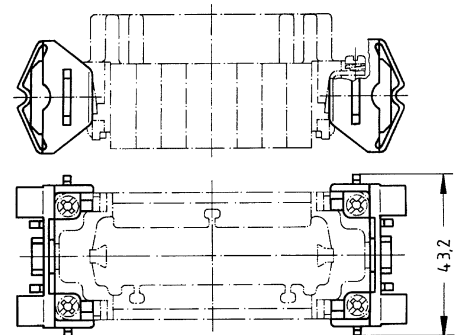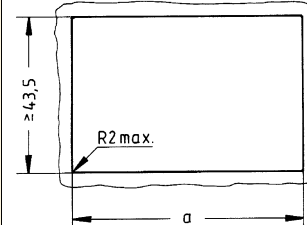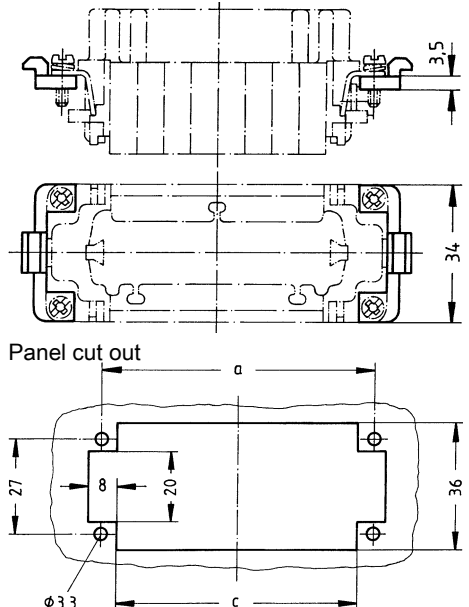| Identification	Part number	Drawing (dimensions in mm)
Han-Snap®, Panel mounting parts, Pack contents: 2 plastic panel mounting parts sufficient for one insert or terminal block connector Size 10 A / 16 A by using the corresponding adapter!	09 33 000 9985	

Panel cut out
Sheet-metal thickness: 1.3 ... 3 mm

6 B: $a^{+0.5}$= 65
10 B: $a^{+0.5}$= 78
16 B: $a^{+0.5}$= 98
24 B: $a^{+0.5}$= 125
10 A: $a^{+0.5}$= 81.5
16 A: $a^{+0.5}$= 98

**Han
11
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5**

Features

- Snap element for sheet-metal cut out
- Compact design saves space
- Practical and easy handling
- Reduction of material and assembly costs

Technical characteristics

Limiting temperature	-40 ... +125 °C
Material (accessories)	Zinc die-cast
RoHS	compliant

Specifications and approvals

IEC 60068-2-6 Vibration (sinusoidal)
IEC 60068-2-27 Shock

Details

Connector inserts and terminal block connectors can be fixed on elements for panel mounting with standard insert mounting screws.

High mechanical security of the fixings.

Alternatively, Han® coding elements (code pins or guide pins and bushes) may be used.

Connector assembly into the panel (sheet-metal) cut out or two parallel mounted rails is possible from mating or termination side.

Identification	Part number	Drawing (dimensions in mm)
Han-Snap®, Panel mounting parts, Pack contents: 2 metallic panel mounting parts sufficient for one insert or terminal block connector	09 33 000 9984	Panel cut out 6 B: a=44; c=36 10 B: a=57; c=49 16 B: a=77.5; c=69.5 24 B: a=104; c=96
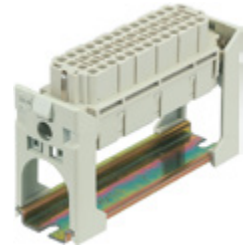
Features

- Insert is mounted with carrier element
- A practical solution to fix the insert directly on a standard rail
- Insert can be assembled to Han-Snap® element with screw-driver
- Compact design saves space

Technical characteristics

Limiting temperature	-40 ... +125 °C
Retention force	≥300 N On rail (tension), ≥1.000 N On rail (pressure)
Material (accessories)	Polycarbonate
Colour (accessories)	RAL 7032 (pebble grey)
Material flammability class acc. to UL 94	V-0
RoHS	compliant

Specifications and approvals

IEC 60068-2-6 Vibration (sinusoidal)
IEC 60068-2-27 Shock

Details

The insert mounting locks directly on standard rail 35 x 15 or 35 x 7.5 mm.

Inserts can be assembled on the insert mounting with the standard insert fixing screws.

High mechanical security of the fixings.

No functional impairment is caused by slight over tightening of the fixing screws.

Alternatively, Han® coding elements (code pins or guide pins and bushes) may be used.

The following labels may be fitted alternatively to the insert mounting parts for circuit identification purposes:

Label 7 x 20 mm or 9 x 20 mm
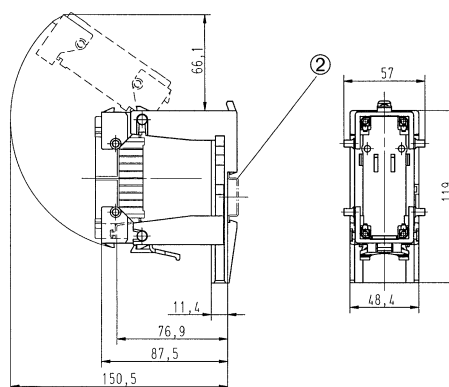
Identification	Part number	Drawing (dimensions in mm)
Han-Snap®, Insert mounting, Pack contents: 2 insert mounting parts	09 33 000 9980	
Size 10 A / 16 A by using the corresponding adapter!		
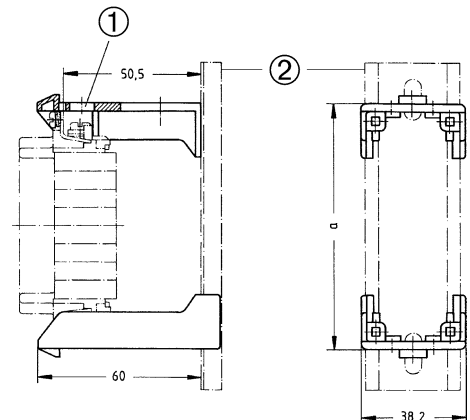
① Slot for identification strip
② Rail IEC 60715-35 x 7.5 or -35 x 15
6 B: a= 57
10 B: a= 70 / 10 A: a= 74
16 B / 16 A: a= 90.5
24 B: a= 117

Features

- Insert is mounted with carrier element
- A practical solution to fix the insert directly on a standard rail
- Insert can be assembled to Han-Snap® element with screw-driver
- Compact design saves space

Technical characteristics

Limiting temperature	-40 ... +125 °C
Retention force	≥450 N On rail
Material (accessories)	Polycarbonate
Colour (accessories)	RAL 7032 (pebble grey)
Material flammability class acc. to UL 94	V-0
RoHS	compliant

Specifications and approvals

IEC 60068-2-6 Vibration (sinusoidal)
IEC 60068-2-27 Shock

Details

The carrier element is the basic element to mount the inserts in the cross direction on standard rails, for example:

- Caprail, 35 x 7.5 or 35 x 15 acc. to DIN EN 60 715
- C-rail, C 30 acc. to DIN EN 60 715
- G-rail, G 32 acc. to DIN EN 60 715

Where vibration is likely to be encountered, use the 35 x 15 mounting rails. When using the large carrier element, the 35 x 15 mounting rails are recommended to give greater stability.

Insert mounting type 6/10 is suitable for inserts of sizes Han 6 B and Han 10 B.

Insert mounting type 6/24 is suitable for all insert sizes: Han 6 B / 10 B / 16 B / 24 B, Han 16 A with the corresponding adapter.

Inserts can be assembled to the insert mountings with the standard insert mounting screws.

High mechanical security of the fixings. No functional impairment is caused by slight over tightening of the fixing screws.

Alternatively, Han® coding elements (code pins or guide pins and bushes) may be used.

The following labels may be fitted to the insert mounting parts for circuit identification purposes:

Label 7 x 20 mm or 9 x 20 mm

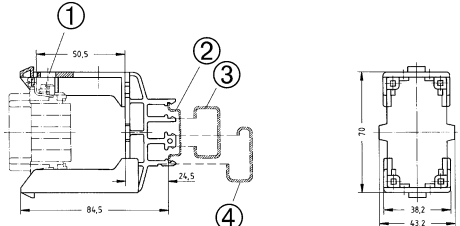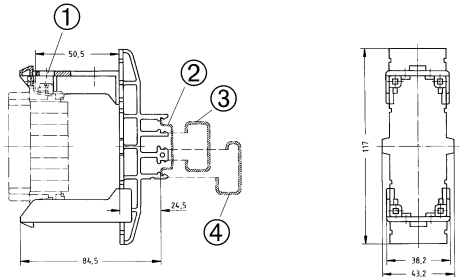| Identification	Part number	Drawing (dimensions in mm)
Han-Snap®, Insert mounting, Swinging, for standard inserts	09 33 000 9801	② Rail IEC 60715-35 x 7.5 or -35 x 15
Han-Snap®, Insert mounting, Swinging, for Han-Modular® hinged frames	09 33 000 9803	

HARTING

Identification	Part number	Drawing (dimensions in mm)
Han-Snap®, Insert mounting, With carrier element, Type 6/10, Pack contents: 2 insert mounting parts, 1 carrier element	09 33 000 9988	① Slot for identification strip ② Rail IEC 60715-35 x 7.5 or -35 x 15 ③ C-rail IEC 60715-C30 ④ G-rail IEC 60715-G32
Han-Snap®, Insert mounting, With carrier element, Type 6/24, Pack contents: 2 insert mounting parts, 1 carrier element	09 33 000 9989	① Slot for identification strip ② Rail IEC 60715-35 x 7.5 or -35 x 15 ③ C-rail IEC 60715-C30 ④ G-rail IEC 60715-G32

Shell housing

Features

- Ideal for use within closed electrical operation enviroments
- Allows use off preassembled cables
- Optimised cost of material and assembly
- Insert can be assembled to Han-Snap® element with screwdriver

Technical characteristics

Limiting temperature	-40 ... +125 °C
Retention force	≥300 N in locked position
Material (hood/housing)	Polycarbonate
Colour (hood/housing)	RAL 7032 (pebble grey)
Material flammability class acc. to UL 94	V-0
RoHS	compliant

Specifications and approvals

IEC 60068-2-6 Vibration (sinusoidal)
IEC 60068-2-27 Shock

Details

2 identical half shells form a shell housing.

Each housing has 3 cable entries, one on top and one at each end. 2 x cable entries can be closed by enclosed blind plugs.

In the area of cable entries there are rectangular openings for mounting of cable ties up to max. 5 mm width.

In the mating area both housing shells are fixed by the standard insert fixing screws.

To release the half shells use screw driver (3.5 x 0.5).

Alternatively, Han® coding elements (code pins or guide pins and bushings) may be used.

High mechanical security of the fixings.

No functional impairment is caused by slight over tightening of the fixing screws. The blind plugs have slots for identification strips.

The following labels can be fitted: label 7 x 20 mm or 9 x 20 mm
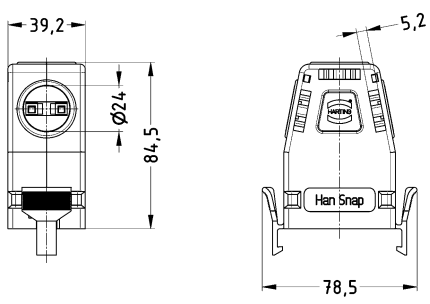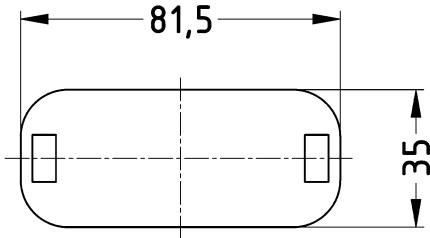
Size 16 A by using the corresponding adapter

Inserts can be assembled to the adapters with the standard insert fixing screws.

With the included screws the adapter can be fixed to the selected Han-Snap® element.
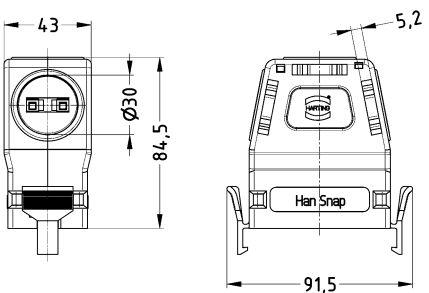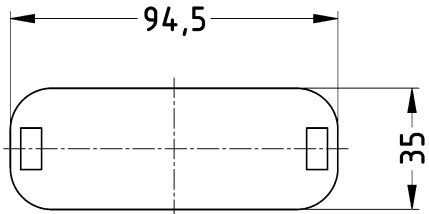
Snap-in latches

Han-Snap

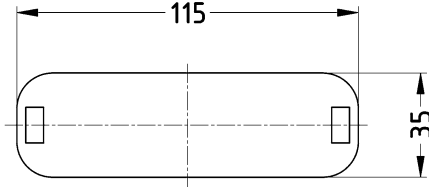| Identification	Part number	Drawing (dimensions in mm)
Han-Snap®, Shell housing, Top/side entry, Pack contents: 2 half shells with blind plugs	09 33 006 0401	39,2 Ø24 84,5 5,2 Han Snap 78,5
Han-Snap®, Protection cover, Thermoplastic	09 33 006 5401	81,5 35

Han-Snap

Snap-in latches

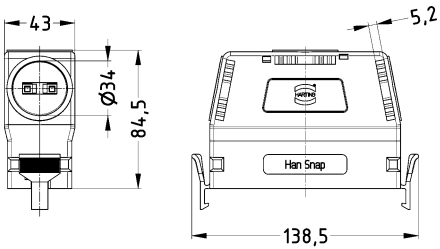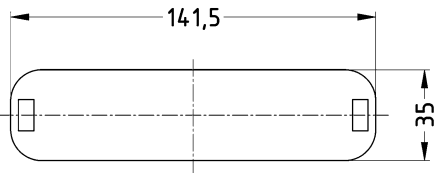| Identification	Part number	Drawing (dimensions in mm)
Han-Snap®, Shell housing, Top/side entry, Pack contents: 2 half shells with blind plugs	09 33 010 0401	
Han-Snap®, Protection cover, Thermoplastic	09 33 010 5401	

Snap-in latches

Identification	Part number	Drawing (dimensions in mm)
Han-Snap®, Shell housing, Top/side entry, Pack contents: 2 half shells with blind plugs Size 16 A by using the corresponding adapter!	09 33 016 0401	43, Ø34, 84,5, 5,2, Han Snap, 112
Han-Snap®, Protection cover, Thermoplastic	09 33 016 5401	115, 35

Snap-in latches

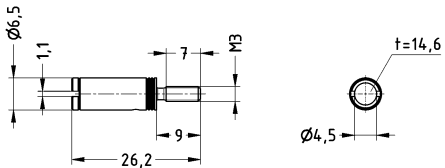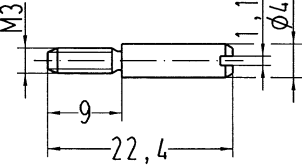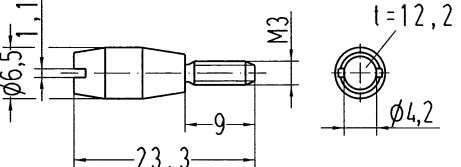| Identification	Part number	Drawing (dimensions in mm)
Han-Snap®, Shell housing, Top/side entry, Pack contents: 2 half shells with blind plugs	09 33 024 0401	43 Ø34 84,5 5,2 Han Snap 138,5
Han-Snap®, Protection cover, Thermoplastic	09 33 024 5401	141,5 35

Accessories
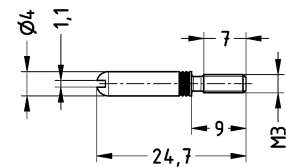
Technical characteristics

RoHS	compliant with exemption

Technical characteristics

RoHS exemptions	**6a:** Lead as an alloying element in steel for machining purposes and in galvanised steel containing up to 0.35 % lead by weight

Identification	Part number Male	Female	Drawing (dimensions in mm)
Coding, With guide pins/bushes, for application "insert with screw adapter" with/ without grip frame	09 33 000 9808	09 33 000 9809	
Han-Snap®, Coding, Only for swinging insert mountings	09 33 000 9956	09 33 000 9957	

Han-
Snap

Technical characteristics

Material (accessories)	Polycarbonate

Technical characteristics

Colour (accessories)	RAL 7032 (pebble grey)
RoHS	compliant
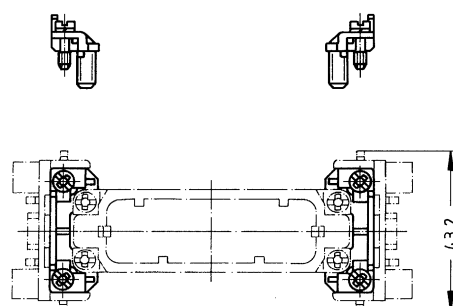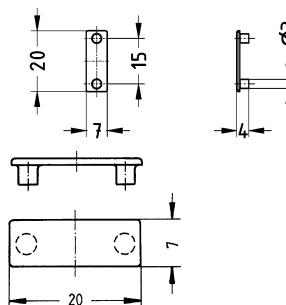
Identification	Part number	Drawing (dimensions in mm)
Han A®, Adapter, Pack contents: 2 adapters, 4 fixing screws	09 20 000 9933	 43,2
Han-Snap®, Identification strip, Pack contents: Single	09 33 000 9981	 20 15 Ø3 7 4 7 20
Han-Snap®, Identification strip, Pack contents: 20 pieces in one block	09 33 000 9982	 9 19,8 3,4 83,5 133