



IDC housings:

- MF 7234 / 7235
- MF 7236 / 7237
- MF 7238 / 7239
- MF 7242 / 7243
- MF 7274 / 7278
- MF 7534 / 7535
- MF 7538 / 7539
- MF 7934
- MF 7838

Pin connectors for THT:

- MS 7230, MS 7231
- MS 7232

for SMT:

- MS 7246, MS 7247

for potting solution:

- MS 7251

in press-fit:

- MS 7530



Versions for vertical or horizontal PC board assembly

Pin connectors for Panel mounting:

- MS 7321, MS 7322, MS 7323

Pin connector in chain for THT:

- MS 7250

APPLICATION

- Indirect and direct connectors with IDC termination
- The connector are used in the domestic appliances industries and in many other electronic applications.

FEATURE

- In accordance with the RAST 2.5 standard specification for domestic appliances
- Meeting RoHS requirements
- Complex cable assemblies with fully automated terminating capability
- Highly economical
- Cable exit at 90°
- Trimming polarizing pegs to individual requirements produces a large number of clearly defined connector combinations
- With direct edge versions, polarizing and locking feature for PCB





TECHNICAL DATA

Mechanical

Pitch	2.5 mm
Positions	2 - 20
Termination	IDC
Wire size	0.12 - 0.14 mm ² / 0.22 - 0.35 mm ²
Insulation Ø	max. 1.6 mm
Hardness of insulation	Shore A 90° ± 5
Type of wire	solid, stranded
Temperature range	-40° C up to +130° C*)
Board thickness	1.55 ± 0.19 mm

Electrical

Rated current	2 A
Rated voltage	Pitch 2.5 mm: 32 V Pitch 5 mm: 250 V
Dialectical strength	Fully assembled 2.5 mm: 1.4 KV Partially assembled 5 mm: 2.8 KV
Insulation resistance	> 10 ⁹ Ohm
Contact resistance	< 10 m Ohm
Air gap and creeping distances	Pitch 2.5 mm: > 1 mm Pitch 5 mm: > 3 mm
Creeping strength	CTI ≥ 400
Approved by	DIN EN 61984 (IEC 61984) UL/ ULC E96569 IDC housings according to LV 214 / USCAR 2

*) The following applies: Upper limit temperature (contact carrier) RTI (electrical) of the UL Yellow Card.

ECO-TRONIC

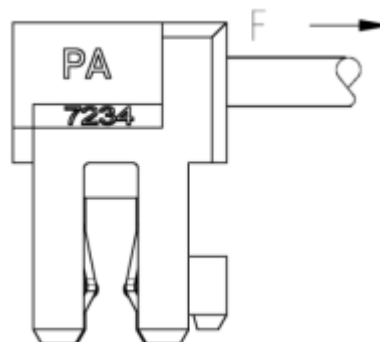
TECHNICAL DATA

Materials

Contact	Socket: CuSn, Cu-alloy Pin: CuZn
Contact finishing	Socket : Sn, NiAu Pin: NiSn
Housing	PA66-V0, glow wire resistant, GWT 750 °C acc. to IEC 60 335-1
SMT pin connector	PA4T-V0, glow wire resistant, GWT 750 °C acc. to IEC 60 335-1
Color of housing	natural
Polarizing	to RAST 2.5

Wire extraction force

Wire size	pull-out strength
0,22 mm ²	> 30 N
0,35 mm ²	> 30 N



IDC housing

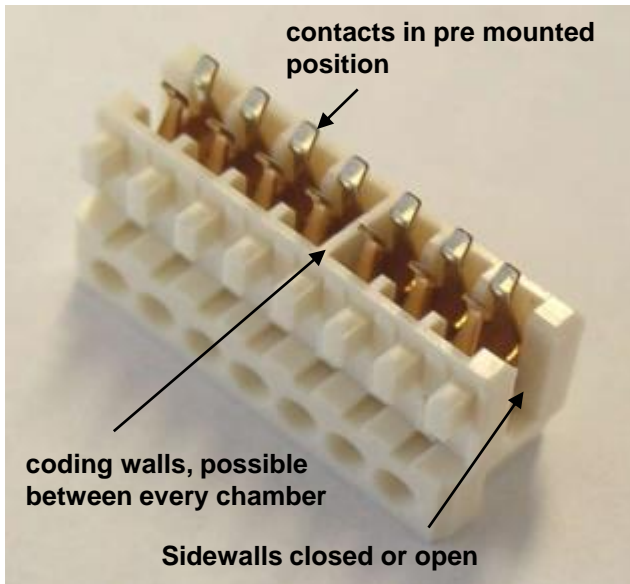
MF 7234 2- up to 20-poles

Standard housing

- pluggable on pin connector
- pluggable on PCB

MF 7235

- The only difference to series MF 7234 is the open line channel.



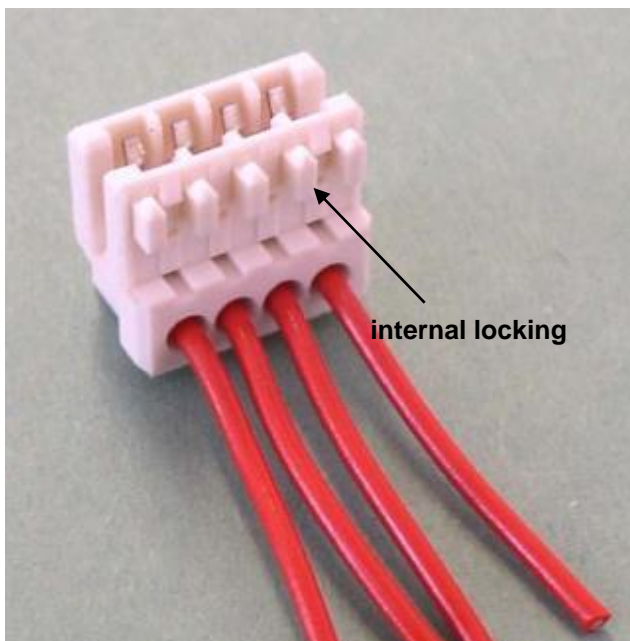
MF 7236 2- up to 20-poles

Housing with internal locking

- suitable for Pin Connector Series 7231 (without locking ledge)

MF 7237

- The only difference to series MF 7236 is the open line channel.



IDC housing

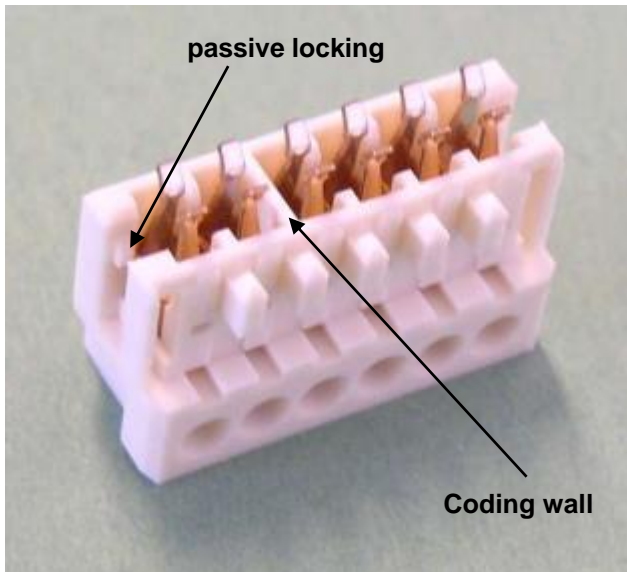
MF 7238 2- up to 20-poles

Housing with passive locking

- pluggable direct to PCB
- no missing pitch

MF 7239

- The only difference to series MF 7238 is the open line channel.



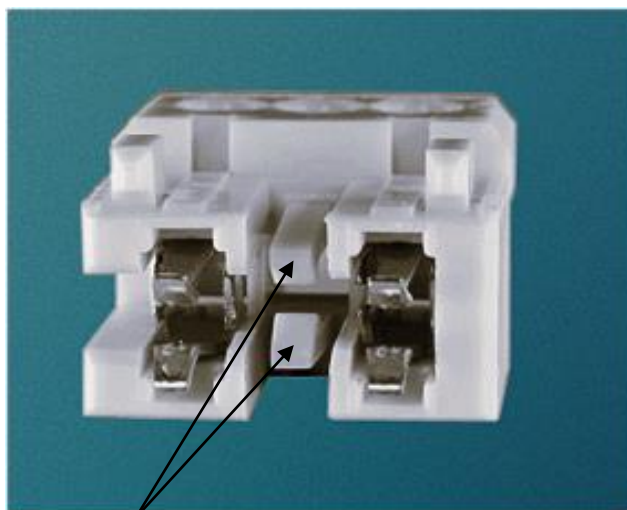
MF 7242 3- up to 20-poles

Housing with active locking

- pluggable direct to PCB
- missing pitch

MF 7243

- The only difference to series MF 7242 is the open line channel.



Two active locking

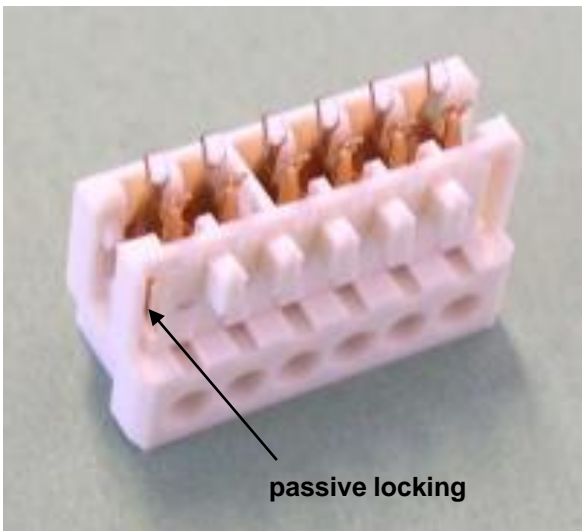
IDC housing



MF 7274 2- up to 20-poles

housing for smaller cable cross sections

- The only difference to series MF 7234 is the wire size
0.12 mm² - 0.14 mm² / AWG 26
- pluggable on pin connector
- pluggable on PCB



MF 7278 2- up to 20-poles

housing for smaller cable cross sections

- The only difference to series MF 7238 is the wire size
0.12 mm² - 0.14 mm² / AWG 26

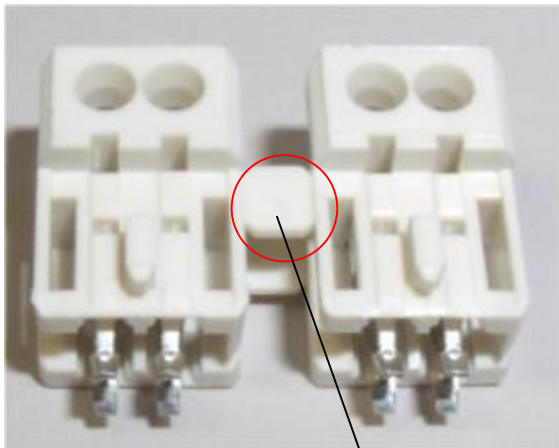
Housing with passive locking

- pluggable direct to PCB
- no missing pitch

The 2-way housings of series

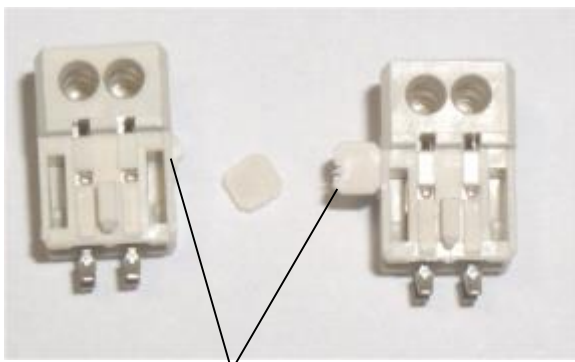
- MF 7234
- MF 7235
- MF 7236
- MF 7237
- MF 7238
- MF 7239

are only available as 2 housings in chain



2-way housing in chain

The separation of the housings takes place via Removing the bar between the housings.



Breaking points, no correct separation!
remainder-cut off on the housing

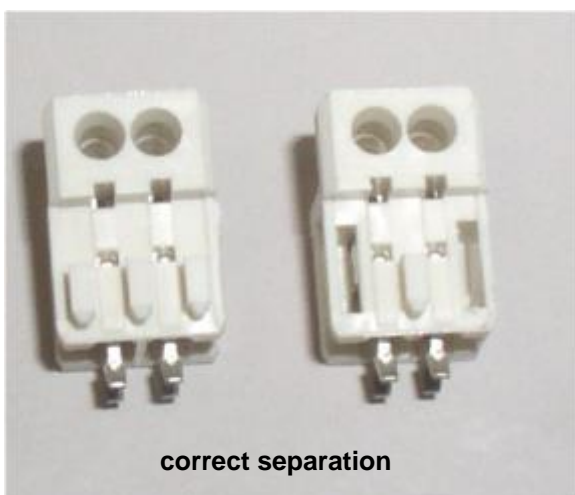
This can be done:

- a) through breakup by hand
- b) with a cutting tool (e.g cutter)

Attention:

when breaking the bar, it may not come to damages of the housing!

And it may no remainder-cut off on the housing!



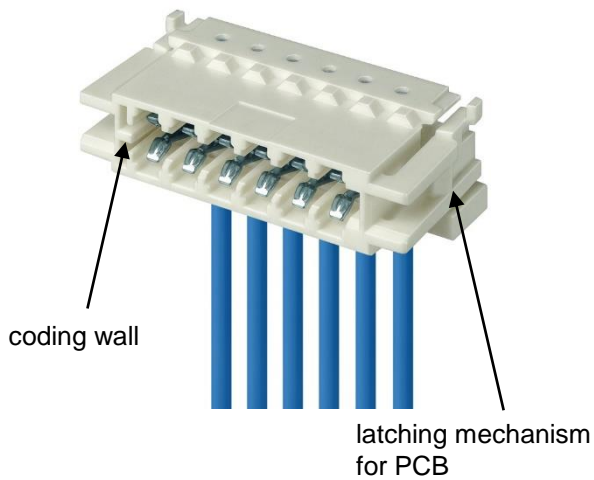
correct separation

Housing

MF 7934 3- up to 12-poles

ECO-TRONIC PL

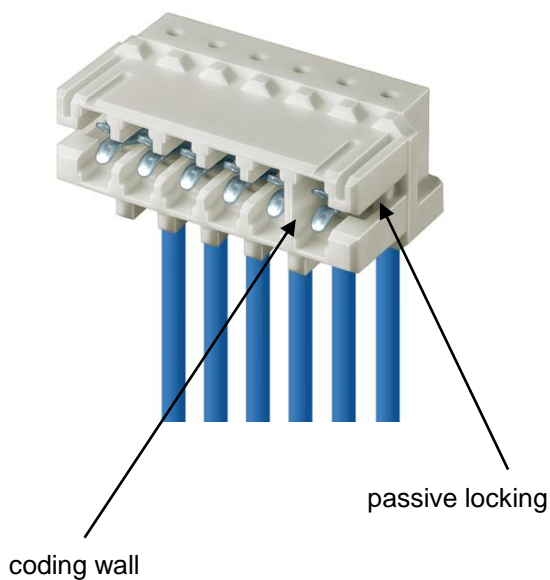
- pluggable on PCB
- lateral PCB latching
- coding walls possible
- closed sidewalls possible
- wire size 0,22 mm² and 0,35 mm²
- Retention force > 80 N



MF 7838 2- up to 20-poles

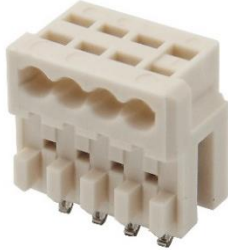
ECO-TRONIC FB

- for PCB with 1 mm thickness $\pm 0,1$ mm
- passive locking
- pluggable on PCB
- wire size 0,22 mm² and 0,35 mm²



Housing

MF 7534-003-



ECO-TRONIC RC

MF 7534 2- up to 13-poles

- pluggable on pin connector
- pluggable direct on PCB
- housing without locking
- for ribbon cable
- wire size 0,22 mm²

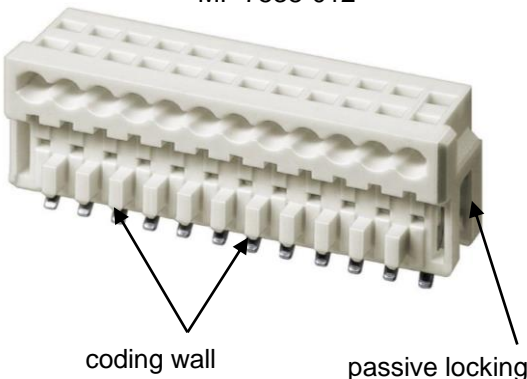
MF 7535-012-



MF 7535 2- up to 13-poles

- pluggable on pin connector without locking latch
- pluggable direct on PCB
- housing without locking
- daisy chain connector
- for ribbon cable
- wire size 0,22 mm²

MF 7538-012-



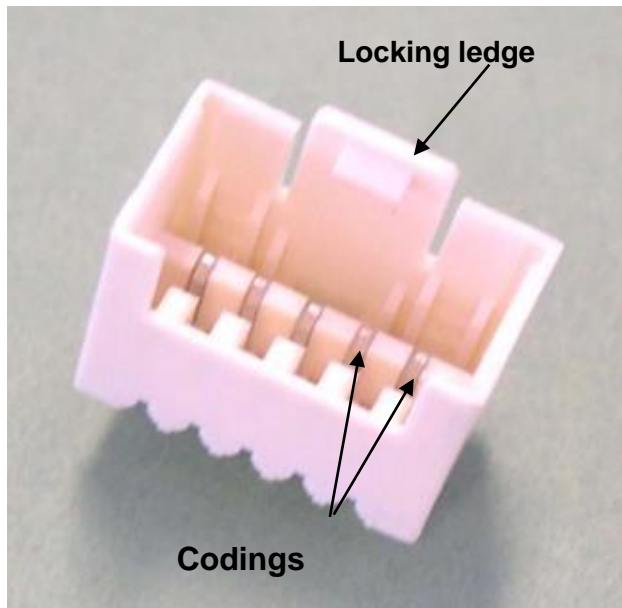
MF 7538 2- up to 13-poles

- housing with passive locking
- pluggable direct on PCB
- for ribbon cable
- wire size 0,22 mm²

MF 7539 2- up to 13-poles

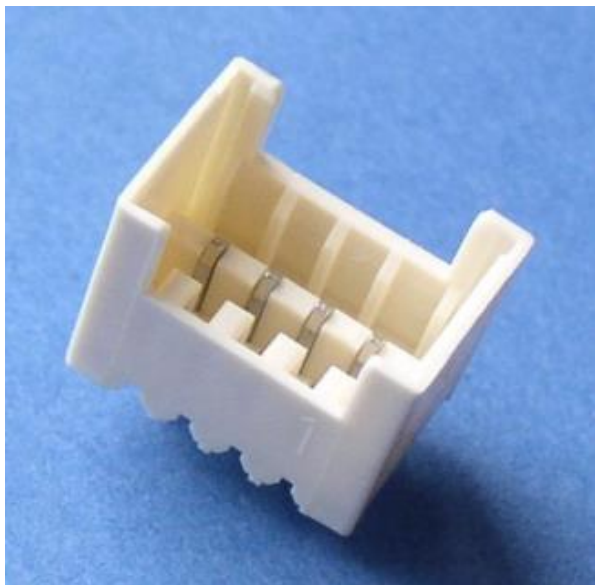
- housing with passive locking
- pluggable direct on PCB
- daisy chain connector
- for ribbon cable
- wire size 0,22 mm²

Pin connectors for THT



MS 7230 2- up to 20-ways

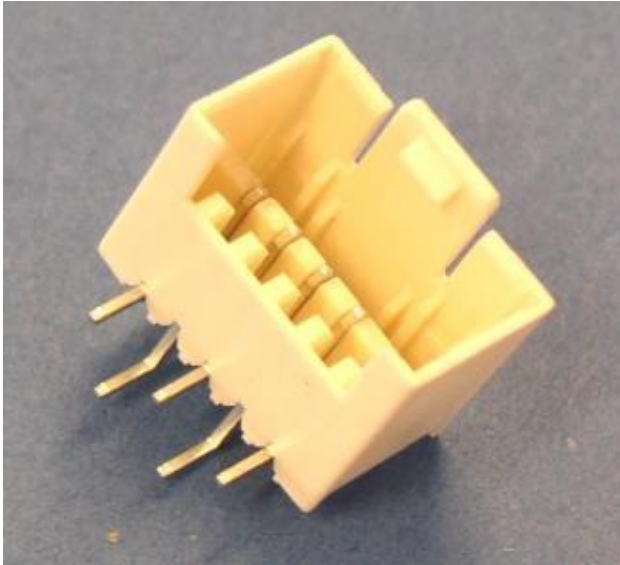
- for vertical connections
- with locking ledge



MS 7231 3- up to 20-ways

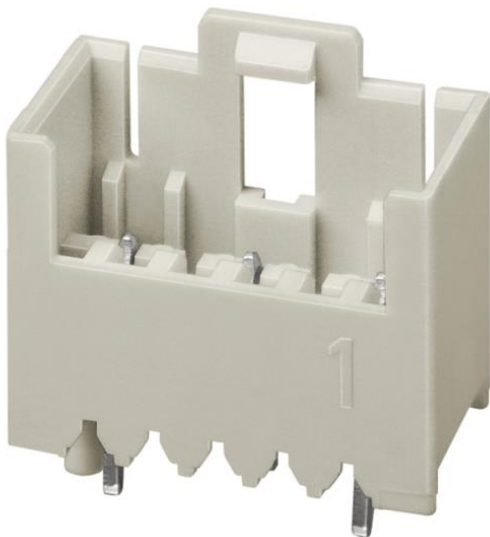
- for vertical connections
- without locking ledge for housings MF 7236 / 7237

Pin connectors for THT



MS 7232 3- up to 20-ways

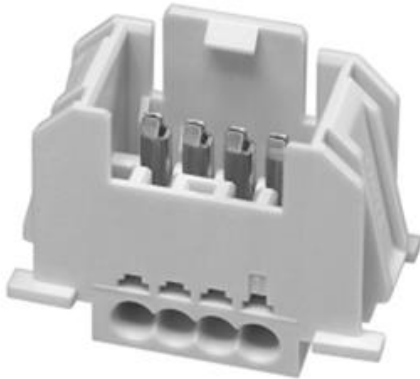
- for horizontal connections



MS 7251 3- up to 20-ways

- pottable version
- potting height max. 8,0 mm
- for vertical connection
- for counter parts according to RAST 2.5
- coding according to RAST 2.5

Pin connectors for panel mounting



MS 7321 4-way

- Pitch 2,5 mm
- wire size 0.5 mm²
- for max. Iso Ø 2.15 mm
- with IDC termination
- nom. Voltage 32 V
- for 0.8-0.9 mm panel thickness
- for counter parts according to RAST 2.5
- coding according to RAST 2.5



MS 7322 3- up to 17-ways

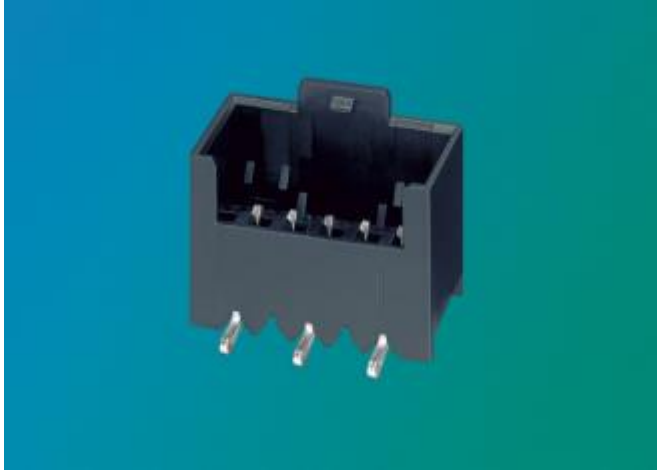
- Pitch 2,5 mm
- wire size 0.22 - 0.35 mm²
- for max. Iso Ø 1.65 mm
- with IDC termination
- nom. Voltage 32 V
- for 0.8-0.9 mm panel thickness
- for counter parts according to RAST 2.5
- coding according to RAST 2.5



MS 7323 2- up to 9-ways

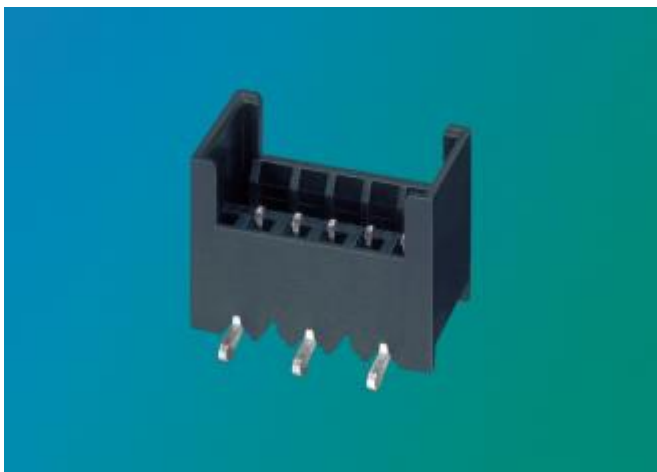
- Pitch 5,0 mm
- wire size 0.5 mm²
- for max. Iso Ø 2.15 mm
- with IDC termination
- nom. Voltage 250 V
- for 0.8-0.9 mm panel thickness
- for counter parts according to RAST 2.5
- coding according to RAST 2.5

Pin connectors for SMT



MS 7246 3- up to 10-ways

- for vertical connections
- with locking ledge
- for counter parts according to RAST 2.5
- coding according to RAST 2.5



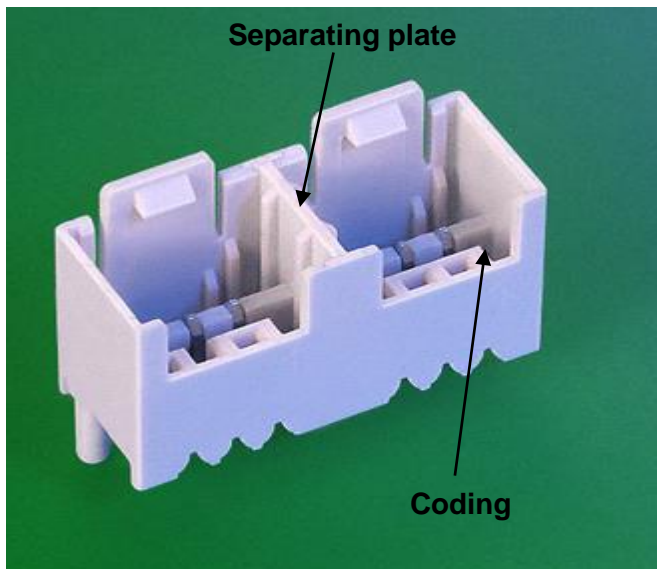
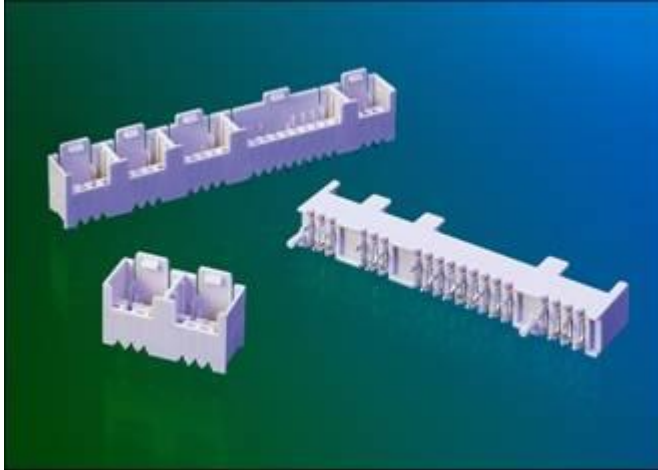
MS 7247 3- up to 10-ways

- for vertical connections
- without locking ledge
- for counter parts according to RAST 2.5
- coding according to RAST 2.5

Pin Connectors in chain for THT

MS 7250

- for vertical connections
- 6-, 10-, 12- and 22-ways
- for counter parts according to RAST 2.5
- coding according to RAST 2.5



press-fit connector

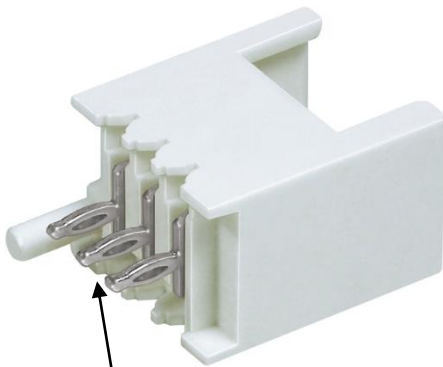
MS 7530 2- up to 20-ways

- connector with pre-assembled press-fit pins
- for vertical connections
- with locking latch
- nom. Voltage 32V / 250V
- current rating 2A / 6A
- for counter parts according to RAST 2.5
- coding according to RAST 2.5

locking latch



Locating pin



Press-fit contact

Terminating technology/ service hand tools

Service hand tool WZ / P-R 2,5 pro

hand tool for ECO-TRONIC and ECO-TRONIC pro connector systems



Service hand tool WZ / P- ET PM

hand tool for ECO-TRONIC panel mount connectors
MS 7321, MS 7322, MS 7323



Terminating technology/ service hand tools

Service hand tool WZ/P-ET-ET pro B

hand tool for ECO-TRONIC and ECO-TRONIC pro daisy chain connector systems

MF 7235

MF 7237

MF 7239

MF 7243

MF 7261, MF 7263



Service hand tool WZ/P-ET FB 1mm

hand tool for ECO-TRONIC FB connector systems

MF 7838



Terminating technology/ Tool heads

Tool head WK/P-R2,5

for ECO-TRONIC connector systems



Tool head WK/P-ET B

for ECO-TRONIC daisy chain connector systems



Tool head WK/P-ET PM

for ECO-TRONIC panel mounting connector systems
MS 7321, MS 7322, MS 7323



Terminating technology/ tools

Tool head WK/P-ET FB 1mm

for ECO-TRONIC FB connector systems

MF 7838



WZ 63

Hand grip for tool heads



WA 30

Adapter to operate STOCKO IDC tool heads with crimping machines





Terminating technology/ terminating machines

KM Corporate

MIC 25

Semi-automated machine for terminating connector versions

ECO-TRONIC and ECO-TRONIC pro

- Terminating connector versions:
 - ECO-TRONIC 2 - 20-ways
 - ECO-TRONIC pro 2 - 10-ways
- Bench mounted
- Single wire termination
- Programmable for unloaded cavities
- Operated by switch pedal

Terminating technology/ terminating machines

STOCKOMAT ECO-TRONIC economy line

WT 365

Semi automated system for terminating connector systems ECO-TRONIC, ECO-TRONIC pro



- Terminating connector versions:
 - ECO-TRONIC 2 - 20-ways
 - ECO-TRONIC pro 2 - 10-ways
- No separation of housings in chain
- Single wire termination
- Programmable for unloaded cavities
- Positions check of the wire

STOCKOMAT ECO-TRONIC Panel mount xtra line

WT 370

Semi automated system for terminating of ECO-TRONIC panel mount connectors



- Terminating connector versions:
 - 2- to 4-way: Series MS 7321
 - 2- to 17-way: Series MS 7322
 - 2- to 9-way: Series MS 7323
- Operating panel with touch screen
- Single wire termination
- Programmable for unloaded cavities
- Quality assurance by integrated testing units:
 - Positions check of the wire
 - short-circuit test of adjacent chambers

Terminating technology/ terminating machines

STOCKOMAT ECO-TRONIC daisy chain xtra line

WT 375

Semi automated system for terminating of ECO-TRONIC daisy chain connectors



- Terminating connector versions:
 - ECO-TRONIC daisy chain connector series MF 7235, 7237, 7239
- Processing of harnesses, which are already terminated on one side with a connector
- Manual wire insertion of the daisy chain connectors
- Simultaneous termination of all contacts of the daisy chain connectors with an electrically driven multiple punch contacting device
- Dependent on connector type, closed side walls or solid internal coding elements, an exchange of the multiple punch may be necessary.
- Control and operating panel with touch screen and plain language display

Terminating technology/ terminating machines

STOCKOMAT ECO-TRONIC rc extra line

WT 465

Semi automated machine for terminating ECO-TRONIC connectors for Ribbon Cable

- Terminating connectors:
 - ECO-TRONIC RC 2 - 13-ways of the series MF 7534, MF 7538
- Bench mounted
- No separation of housings in chain
- Multiple termination
- Positions check of the wire



Terminating technology/ terminating machines

STOCKOMAT ECO-TRONIC professional line

WT 165

Semi automated machine for terminating ECO-TRONIC and ECO-TRONIC pro



- Easy and clear to operate
- SPS control with plain language display
- Automated connector feeding
- Single wire termination
- Empty-chamber programming
- Small, compact machine size
- Low power consumption
- Quality assurances by integrated testing unit

Terminating technology/ terminating machines

KM Corporate

INTECON S / INTECON S CRIMP

Fully automated terminating machine for connector series ECO-TRONIC and ECO-TRONIC pro, optional Crimp Module for standard crimping integrated

- Fully automatic production of complex harnesses can be processed within a lot
- Simple to operate with low setting-up times
- Simultaneous processing up to 5 different connectors
- Connector packaging in economical product Magazine
- Optional processing of Crimp contacts until max three different contacts

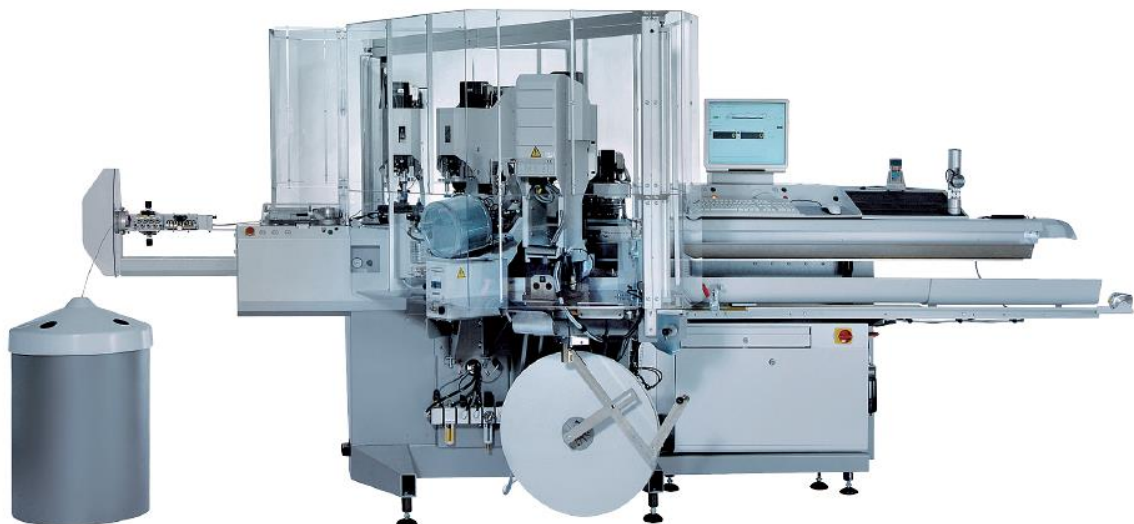


Terminating technology/ terminating machines

KOMAX

ALPHA 356

- Integration to crimping automation KOMAX ALPHA 356
- fully automated production of cable-assemblies with single sided terminated IDC-connectors ECO-TRONIC or ECO-TRONIC pro and crimp-contacts
- Transfer handling from the Alpha 356 to the integrated STOCKOMAT ECO-TRONIC professional line
- Configuration of the connector housing via the control panel of the ECO-TRONIC professional line
- short wire lengths from 40mm on
- Integrated bad wire handling



Terminating technology/ terminating machines

Komax ZETA 633/ WT 165



Integration of STOCKOMAT ECO-TRONIC professional line to crimping automation Komax Zeta 633, for a fully automated production of single sided IDC- terminated harnesses.

- Production of cable-assemblies with crimp and IDC contacts
- The STOCKOMAT professional line machine can also be used as stand-alone individual machine
- Cable length if terminated at both ends: 200-3000 mm
- Manufacturing cycle: Approx. 2000 assemblies/hour
- Cable length with double crimp: 240-3000 mm
- Manufacturing cycle: Approx. 1000 assemblies/hour



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