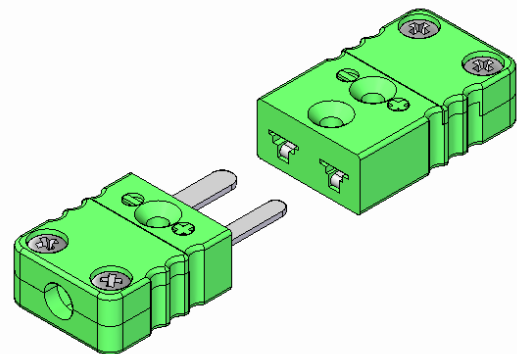
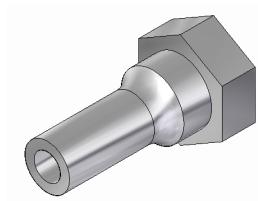
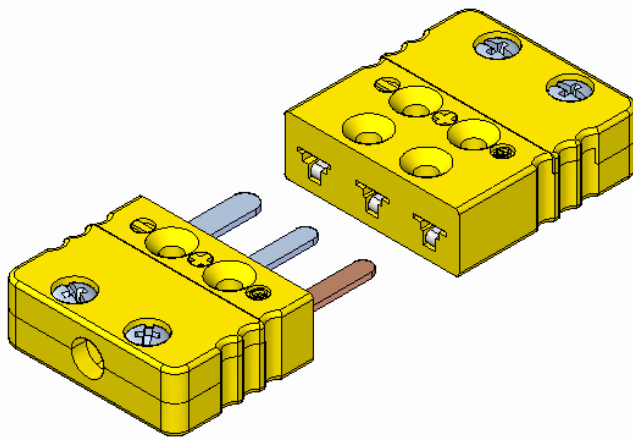
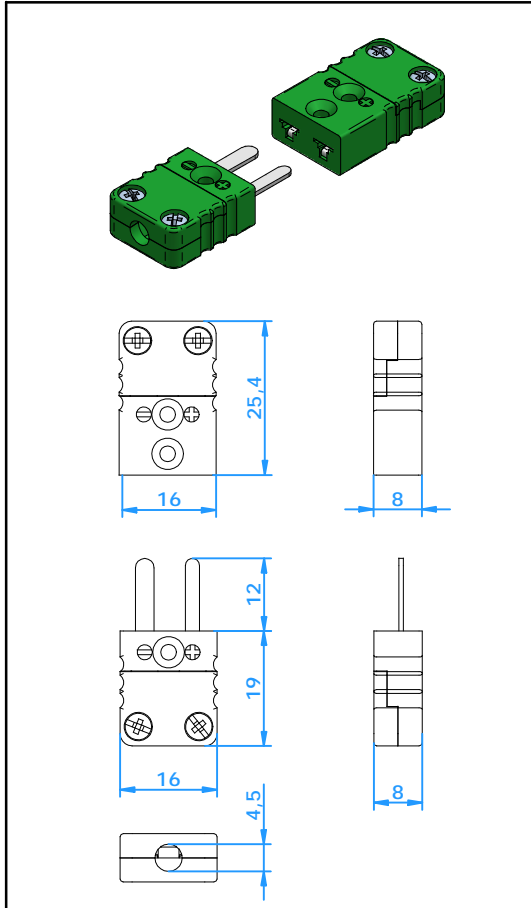


# Miniature connectors & Accessories



# Connectors

## Miniature Connector



### Application

Connector for thermocouple and RTD circuits. Suited for small wires and mineral insulated cables.

### Construction

- Glass filled high quality thermoplastic body with original thermocouple material pins and springloaded inserts.
- Polarized pins ensure proper connection.
- Easy wire connection through sandwich construction.
- Molded barriers prevent short circuit.
- Rugged one body design.
- Stainless Steel screws with combination head (Slotted and Phillips)

### Wire size

- Accepts wires from 0,002 mm to 0,6 mm.
- Maximum cable diameter 4,5 mm.

### Temperature rating

- 200 °C Max.

### Color Code

- Available in all color code standards incl. NFE, BS, JIS, etc.

### Accessories:

- See separate specification sheet.

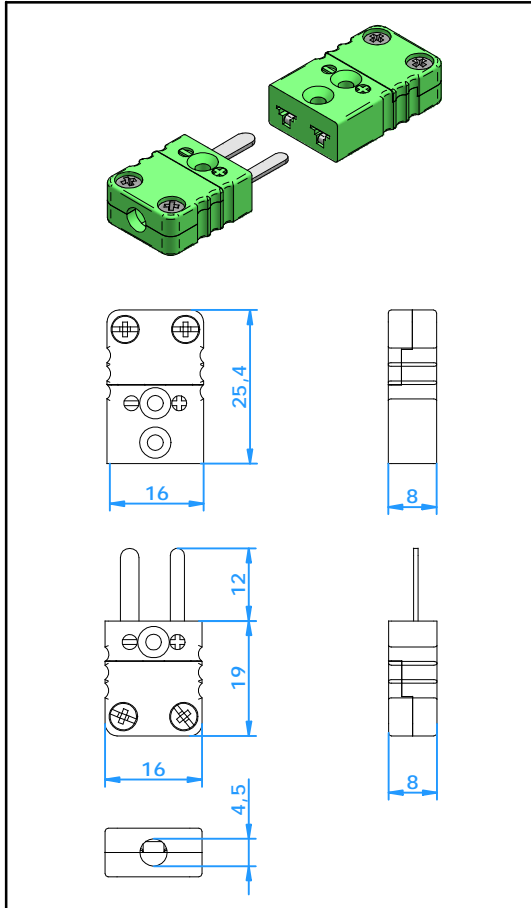
Ordering Code Plug: CMP-xx  
Jack: CMJ-xx

For last two digits 'xx' see table below

Calibration Code	E	J	K	N	T	U	R/S	C	B
Compensation material for							Pt13Rh/ Pt	W5Re/ W26Re	Pt6Rh/ Pt30Rh
Material Positive	NiCr	Fe	NiCr	NiCrSi	Cu	Cu	Cu	CPX	Cu
Material Negative	CuNi	CuNi	NiAl	NiSi	CuNi	Cu	Alloy #11	CNX	Cu
IEC Color Code									
Color Body	Violet	Black	Green	Pink	Brown	White	Orange	Red	Grey
Code	EI	JI	KI	NI	TI	UI	RI	C	BI
ANSI Color Code									
Color Body	Violet	Black	Yellow	Orange	Blue	White	Green	Red	Grey
Code	EI	JI	KA	NA	TA	UI	RA	C	BI
DIN Color Code									
Color Body		Blue	Green		Brown		White		Grey
Code		JD	KI		TI		RD		BI

# Connectors

## Miniature Connector Economy



### Application

Connector for thermocouple circuits. Suited for small wires and mineral insulated cables. Especially designed for cost sensitive applications.

### Construction

- Glass filled Nylon body with original thermocouple material pins and springloaded inserts.
- Polarized pins ensure proper connection.
- Molded barriers prevent short circuit.
- Rugged one body design.
- Zinc plated steel screws with slotted head

### Wire size

- Accepts wires from 0,002 mm to 0,6 mm.
- Maximum cable diameter 4,5 mm.

### Temperature rating

- 200 °C Max.

### Color Code

- Available according to ANSI and IEC, see table below

### Accessories

- See separate specification sheet.

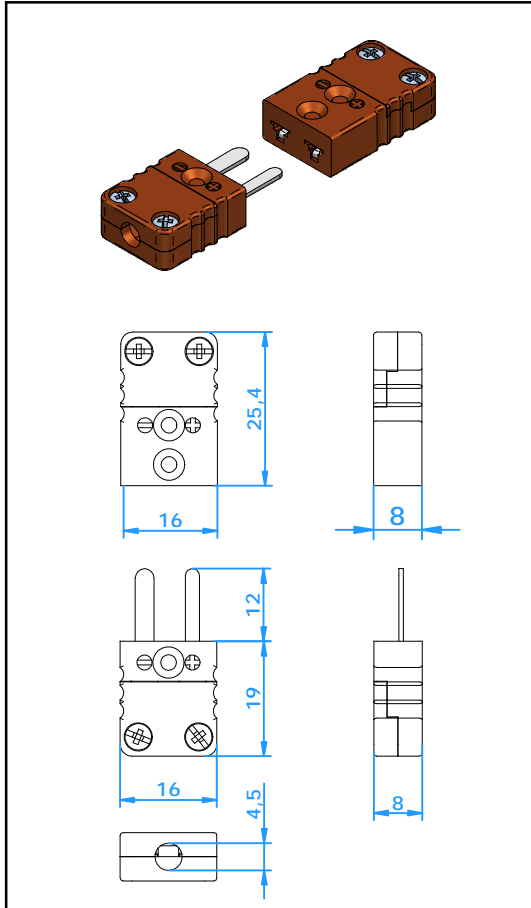
Ordering Code Plug: CMPE-xx  
Jack: CMJE-xx

For last two digits 'xx' see table below

Calibration Code	J	K	N	T	R/S
Compensation Material for Contact Material Positive	Fe	NiCr	NiCrSi	Cu	Pt13Rh/Pt
Contact Material Negative	CuNi	NiAl	NiSi	CuNi	Cu Alloy #11
IEC Color Code					
Color Body	Black	Green	Pink	Brown	Orange
Code	JI	KI	NI	TI	RI
ANSI Color Code					
Color Body	Black	Yellow	Pink	Blue	Green
Code	JI	KA	NA	TA	RA

# Connectors

## Miniature Connector High Temperature



### Application

Connector for thermocouple and RTD circuits. Suited for small wires and mineral insulated cables. Thermoset material designed for use at high temperatures.

### Construction

- body of thermoset material with original thermocouple material pins and springloaded inserts.
- Polarized pins ensure proper connection.
- Easy wire connection through sandwich construction.
- Molded barriers prevent short circuit.
- Rugged one body design.

### Wire size

- Accepts wires from 0,002 mm to 0,6 mm.
- Maximum cable diameter 4,5 mm.

### Temperature rating

- 350 °C Max.

### Color Code

- Body color brown. Calibration indication printed on cover.

### Accessories

- See separate specification sheet.

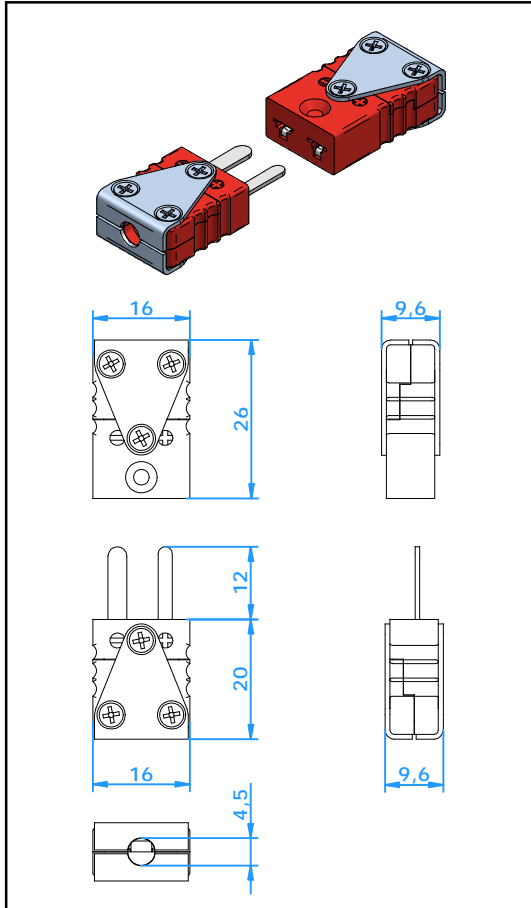
Ordering Code Plug: CMPH-x 'x' is Calibration Code (see tabel below)  
 Jack: CMJH-x

Calibration Code	E	J	K	N	T	U	R/S	C	B
Compensation material for							Pt13Rh/ Pt	W5Re/ W26Re	Pt6Rh/ Pt30Rh
Material Positive	NiCr	Fe	NiCr	NiCrSi	Cu	Cu <sup>1)</sup>	Cu	CPX	Cu <sup>1)</sup>
Material Negative	CuNi	CuNi	NiAl	NiSi	CuNi	Cu <sup>1)</sup>	Alloy #11	CNX	Cu <sup>1)</sup>

Note <sup>1)</sup> Copper pins are also available with a hard nickel plating, please add "NP" after the calibration code

# Connectors

## Miniature Connector Ultra High Temperature



### Application

Connector for thermocouple and RTD circuits. Suited for small wires and mineral insulated cables. Plastic compound designed for use at elevated temperatures.

### Construction

- body of ultra high temp thermoset compound with original thermocouple material pins and springloaded inserts.
- Polarized pins ensure proper connection.
- Easy wire connection through sandwich construction.
- Molded barriers prevent short circuit.
- Rugged one body design.
- Stainless steel bracket and screws to increase strength of the connector body

### Wire size

- Accepts wires from 0,002 mm to 0,6 mm.
- Maximum cable diameter 4,5 mm.

### Temperature rating

- 425 °C continuous, 540 °C intermittent

### Color Code

- Body color brown. Calibration indication stamped on the stainless steel top-bracket.

### Accessories

- See separate specification sheet.

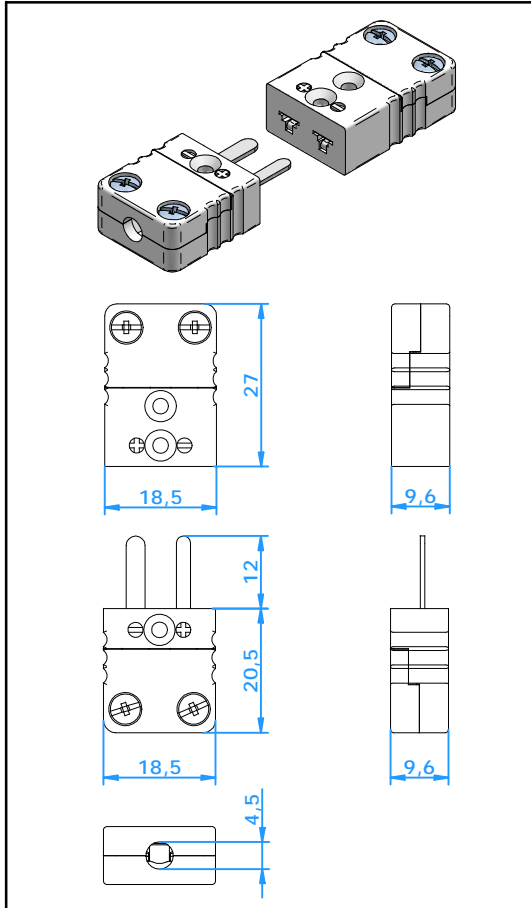
Ordering Code Plug: CMPU-x 'x' is Calibration Code (see tabel below)  
 Jack: CMJU-x

Calibration Code	E	J	K	N	T	U	R/S	C	B
Compensation material for							Pt13Rh/ Pt	W5Re/ W26Re	Pt6Rh/ Pt30Rh
Material Positive	NiCr	Fe	NiCr	NiCrSi	Cu	Cu <sup>1)</sup>	Cu	CPX	Cu <sup>1)</sup>
Material Negative	CuNi	CuNi	NiAl	NiSi	CuNi	Cu <sup>1)</sup>	Alloy #11	CNX	Cu <sup>1)</sup>

Note <sup>1)</sup> Copper pins are also available with a hard nickel plating, please add "NP" after the calibration code

# Connectors

## Miniature Connector Ceramic



### Application

Connector for thermocouple and RTD circuits. Suited for small wires and mineral insulated cables.

### Construction

- Ceramic body with original thermocouple material pins and springloaded inserts.
- Polarized pins ensure proper connection.
- Oversize screw head for easy wiring.
- One body design
- High purity alumina body material

### Wire size

- Accepts wires from 0,1 mm to 0,6 mm.
- Maximum cable diameter 4,5 mm.

### Temperature rating:

- 650 °C Max.

### Color Code

- Body color white. Calibration indication by colored dot

### Accessories:

- Crimp-inserts and wire clamp bracket available, please see separate specification sheet

Ordering Code Plug: CMPC-xx  
Jack: CMJC-xx

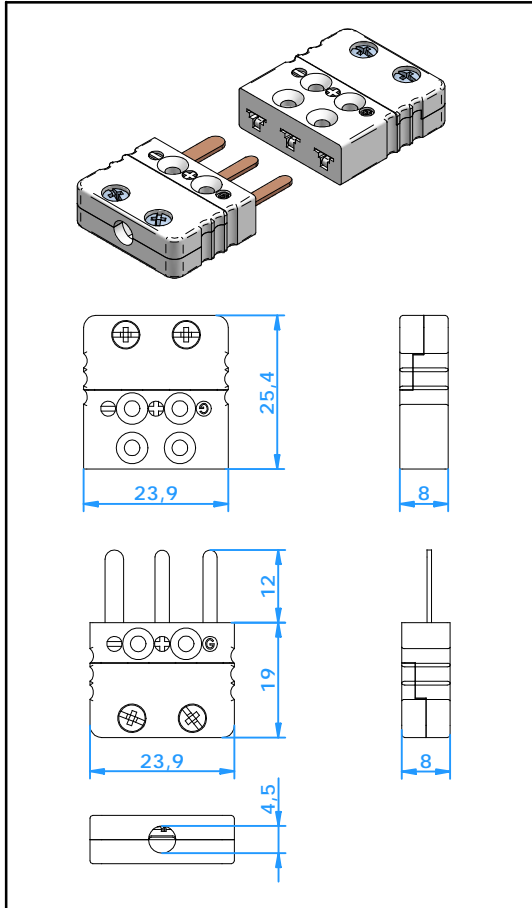
For last two digits 'xx' see table below

Calibration Code	E	J	K	N	T	U	R/S	C	B
Compensation material for							Pt13Rh/ Pt	W5Re/ W26Re	Pt6Rh/ Pt30Rh
Material Positive	NiCr	Fe	NiCr	NiCrSi	Cu	Cu <sup>1)</sup>	Cu	CPX	Cu <sup>1)</sup>
Material Negative	CuNi	CuNi	NiAl	NiSi	CuNi	Cu <sup>1)</sup>	Alloy #11	CNX	Cu <sup>1)</sup>
IEC Color Code									
Color Dot	Violet	Black	Green	Pink	Brown	White	Orange	Red	Grey
Code	EI	JI	KI	NI	TI	UI	RI	C	BI
ANSI Color Code									
Color Dot	Violet	Black	Yellow	Orange	Blue	White	Green	Red	Grey
Code	EI	JI	KA	NA	TA	UI	RA	C	BI
DIN Color Code									
Color Dot		Blue	Green		Brown		White		Grey
Code		JD	KI		TI		RD		BI

Note <sup>1)</sup> Copper pins are also available with a hard nickel plating, please add "NP" after the calibration code

# Connectors

## Miniature Connector Three Pin



### Application

Connector for thermocouple and RTD circuits. Suited for small wires and mineral insulated cable.

Third connection for ground or continuous shield connection or for three wire RTD's.

### Construction

- Glass filled thermoplastic body with original thermocouple material pins and springloaded inserts.
- Polarized pins ensure proper connection.
- Easy wire connection through sandwich construction.
- Molded barriers prevent short circuit.
- Rugged one body design.

### Wire size

- Accepts wires from 0,002 mm to 0,6 mm.
- Maximum cable diameter 4,5 mm.

### Temperature rating

- 200 °C Max.

### Color code

- Available in all color code standards. Incl NFE, BS, JIS, etc.

### Accessories

- Most accessories for the miniature connectors can be fitted. See separate specification sheet.

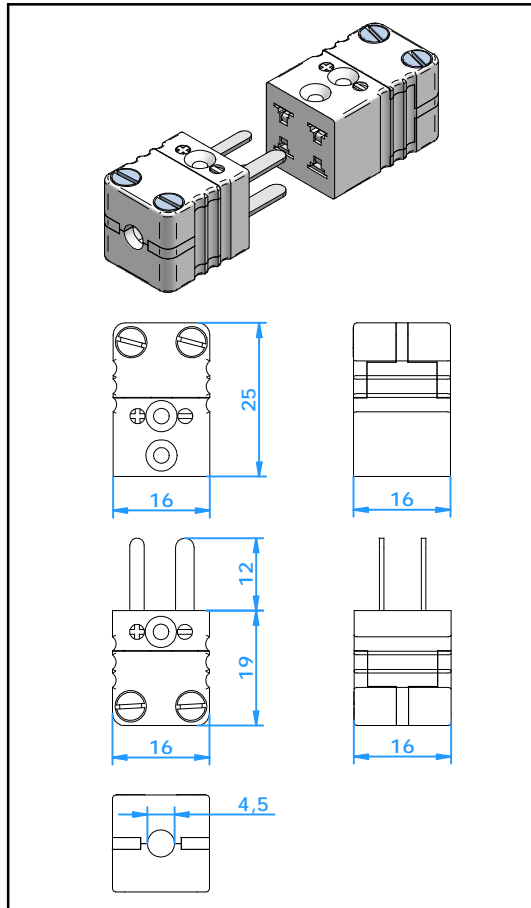
Ordering Code Plug: CMPT-xx  
Jack: CMJT-xx

For last two digits 'xx' see table below

Calibration Code	E	J	K	N	T	U	R/S	C	B
Compensation material for							Pt13Rh/ Pt	W5Re/ W26Re	Pt6Rh/ Pt30Rh
Material Positive	NiCr	Fe	NiCr	NiCrSi	Cu	Cu	Cu	CPX	Cu
Material Negative	CuNi	CuNi	NiAl	NiSi	CuNi	Cu	Alloy #11	CNX	Cu
IEC Color Code									
Color Body	Violet	Black	Green	Pink	Brown	White	Orange	Red	Grey
Code	EI	JI	KI	NI	TI	UI	RI	C	BI
ANSI Color Code									
Color Body	Violet	Black	Yellow	Orange	Blue	White	Green	Red	Grey
Code	EI	JI	KA	NA	TA	UI	RA	C	BI
DIN Color Code									
Color Body		Blue	Green		Brown		White		Grey
Code		JD	KI		TI		RD		BI

# Connectors

## Miniature Connector Duplex



### Application

Connector for thermocouple and RTD circuits. Suited for small wires and mineral insulated cable. Can be used for 4-wire RTD's.

### Construction

- Glass filled thermoplastic body with original thermocouple material pins and springloaded inserts.
- Polarized pins ensure proper connection.
- Easy wire connection through sandwich construction.
- Molded barriers prevent short circuit.
- Rugged one body design.

### Wire size

- Accepts wires from 0,002 mm to 0,6 mm.
- Maximum cable diameter 4,5 mm.

### Temperature rating

- 200 °C Max.

### Color code

- Body color white. Calibration indication printed on cover.
- Colored dot indication optional.

### Accessories

- Crimpinserts and wire clamp bracket, see separate specification sheet.

Ordering Code Plug: CMPD-x  
Jack: CMJD-x

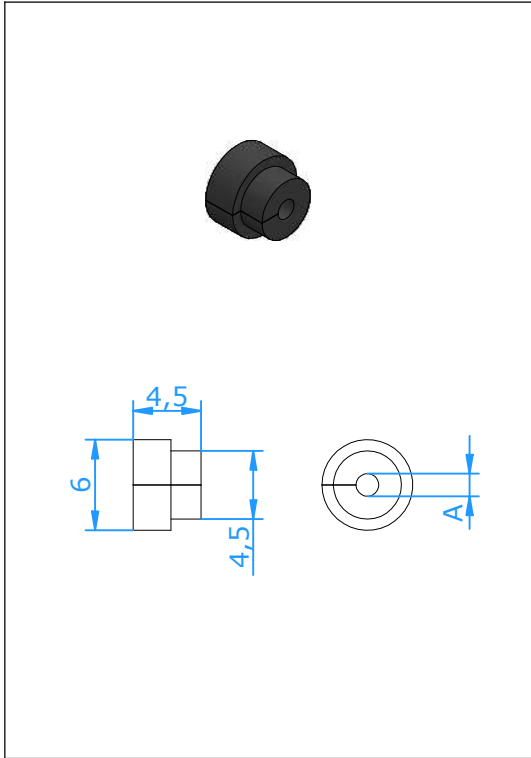
'x' is Calibration Code (see tabel below)

Calibration Code	E	J	K	N	T	U	R/S	C	B
Compensation material for							Pt13Rh/ Pt	W5Re/ W26Re	Pt6Rh/ Pt30Rh
Material Positive	NiCr	Fe	NiCr	NiCrSi	Cu	Cu <sup>1)</sup>	Cu	CPX	Cu <sup>1)</sup>
Material Negative	CuNi	CuNi	NiAl	NiSi	CuNi	Cu <sup>1)</sup>	Alloy #11	CNX	Cu <sup>1)</sup>

Note <sup>1)</sup> Copper pins are also available with a hard nickel plating, please add "NP" after the calibration code

# Accessories

## Miniature Connector



### Grommet miniature

#### Application

Grommet can be fitted in the entrance hole of the connector to prevent moisture and dirt from entering the connector. Has limited strain relief capabilities.

#### Construction

Silicone ring, slit for easy mounting over wire. Will compress on the wire when the cover is fitted.

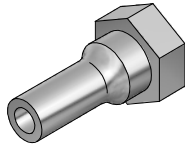
#### Temperature rating

- 200 °C Max.

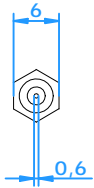
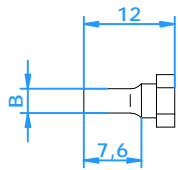
Part Nr.	A
20.031-1	3,00 mm
20.031-2	0,50 mm
20.031-3	1,50 mm

# Accessories

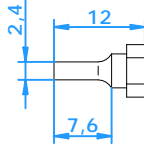
## Miniature Connector Crimp-insert



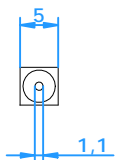
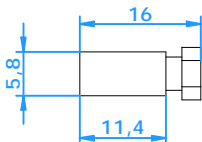
**20.024-x**



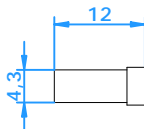
**20.225**



**20.051**



**20.279-2**



### Application

Designed for soldering or crimping on mineral insulated cable or crimping on insulated wire.

### Construction

Brass machined, nickel plated insert with 0,1 mm tolerance on the cable OD

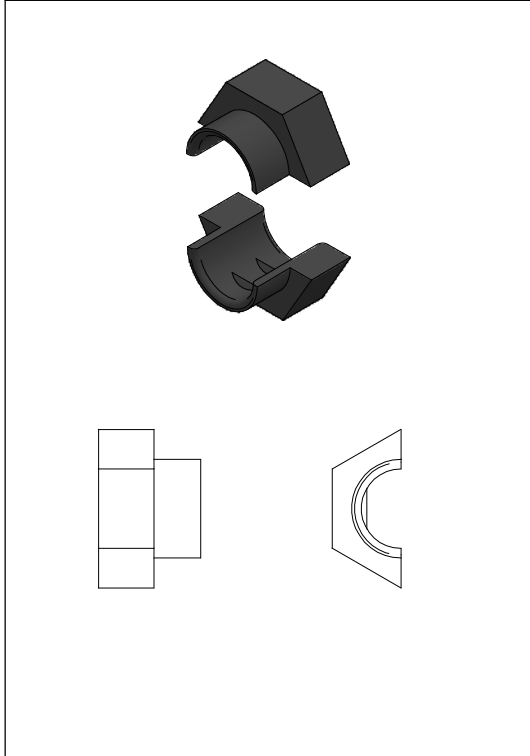
Part Nr.	A	B
20.024-1	1,10 mm	2,40 mm
20.024-2	1,60 mm	2,40 mm
20.024-3	1,70 mm	2,40 mm
20.024-4	2,10 mm	3,20 mm
20.024-5	2,40 mm	3,20 mm
20.024-6	3,10 mm	4,50 mm
20.024-7	3,30 mm	4,50 mm
20.024-8		4,50 mm
20.024-9	3,90 mm	4,50 mm
20.024-10	2,80 mm	4,50 mm
20.024-11	2,70 mm	4,50 mm
20.024-12	1,90 mm	3,20 mm
20.024-13	3,50 mm	4,50 mm
20.024-14	0,90 mm	2,40 mm
20.024-15	3,80 mm	4,50 mm

Part Nr.	A	B
20.225	0,6 mm	2,4 mm
20.051	5,0 mm	5,8 mm
20.279-2	1,1 mm	4,3 mm

Note: 20.279-2 is for mini ceramic connectors only

# Accessories

## Miniature Connector Wire Insert



### Application

A set wire inserts fitted in the entrance hole of the connector will provide a very good strain relief without any protruding parts from the connector.

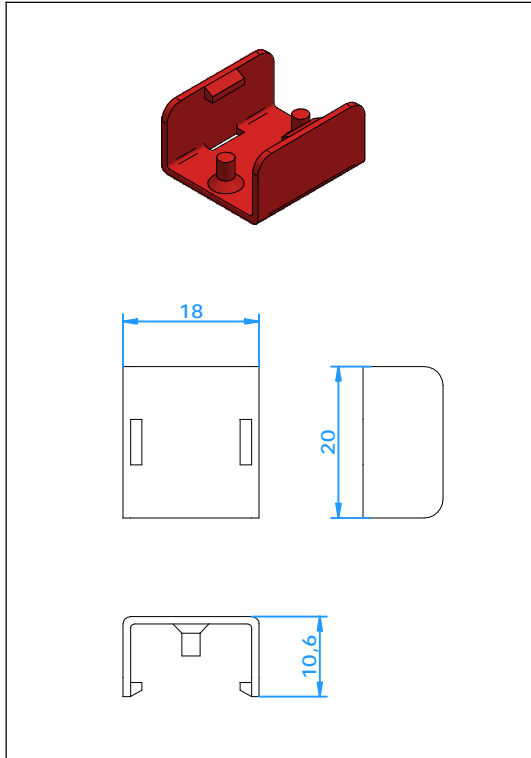
### Construction

Thermoplastic material with a round or oval hole to fit around a specific wire.

Part Nr .	Round/Oval	Wire
20.075-1	Round	1,5 mm
20.075-5	Round	3,5 mm
20.075-24	Oval	2,0 x 1,5 mm

# Accessories

## Miniature Connector Locking Clip



### Application

Miniature connectors donot have a retention groove. In order to prevent accidental disconnection a locking plate can be used.

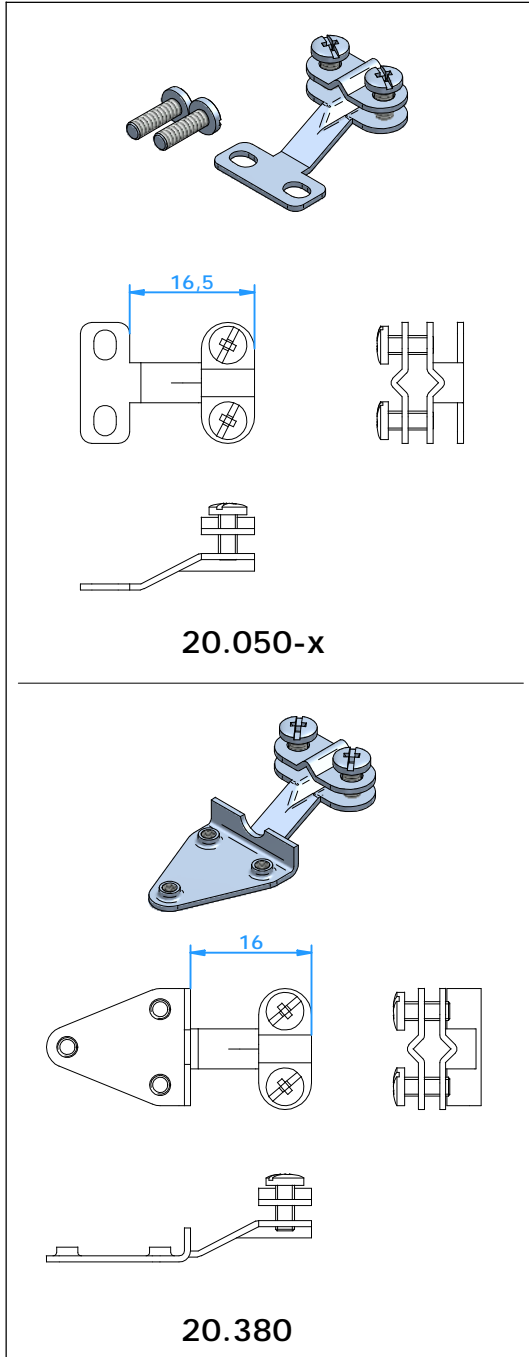
### Construction

- Glass filled thermoplastic with the same temperature rating as the connector body (200°C)
- Red color indicates clearly that circuits are protected
- Can be placed and removed without any tools.

Part Nr. 20.096

# Accessories

## Miniature Connector Wire Clamp Bracket



### Application

Wire clamp bracket will provide optimum strain relief.  
Construction allows a large difference in maximum and minimum wire diameter.

### Construction

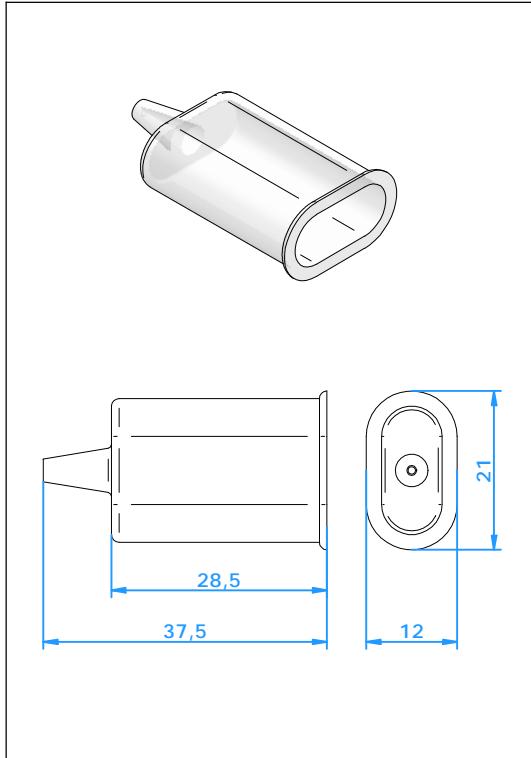
All stainless steel, incl stainless steel screws

### Part Nr.

- 20.050-1 **miniature connector**  
fits on all connectors CMP, CMJ, CMPH, CMJH, CMPT and CMJT
- 20.050-2 **miniature connector ceramic**  
fits on all connectors CMPC, CMJC
- 20.050-3 **miniature connector duplex**  
fits on all connectors CMPD, CMJD
  
- 20.380 **miniature connector ultra high temp**  
fits on all connectors CMPU, CMJU

# Accessories

## Miniature Connector Protection Boot



### Application

The two flexible silicone rubber boots will cover the connector set snugly and prevent moisture, water and dirt entering the connector.

### Temperature Rating

- 200 °C

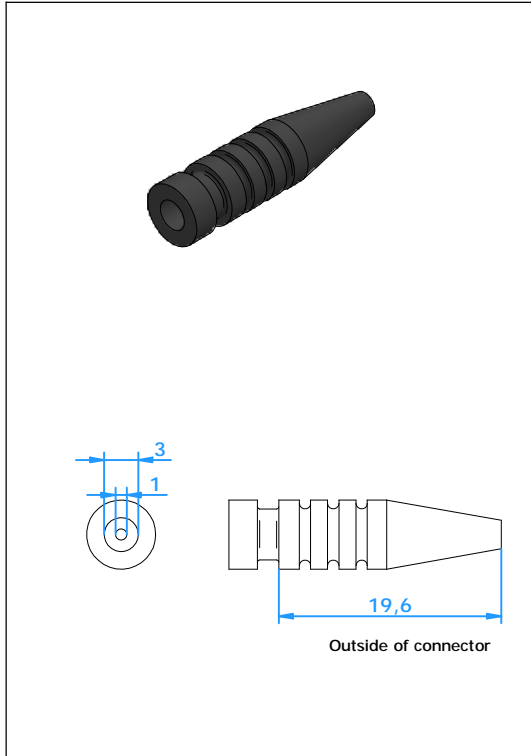
### Construction

- Silicone cover with retention ring prevent disconnection due to vibration.
- Tapered entrance hole to ensure proper sealing on most cable diameters.

**Part Nr.** 20.030 (for one set order 2 pcs)

# Accessories

## Miniature Connector Bending Protection



### Application

Bending protection for thermocouples and wire being used with miniature connectors. Prevents mechanical damage of wires at entrance point of the connector.

### Construction

- Silicon rubber insert, tapered entrance hole ensures proper sealing on cable

### Temperature Rating

- 200 °C

Part Nr. 20.293



**kamet**  
**thermoccomponents**

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