



GREEN ELECTRONICS



ISO  
9001



ISO  
14001



BS OHSAS  
18001:2007



**Sauro<sup>®</sup>**  
**ELECTRONIC CONNECTORS**  
*by the law*

**MTS**

Terminal Blocks

## Functional characteristics



**Dimensional class:**

low



**Standard colour:**

green



**Height:**

12.6 mm (.496 in)



**Max approved wire sections:**

solid: 1.5 mm<sup>2</sup> (1MQ); 14 AWG (UL)

stranded: 1 mm<sup>2</sup> (1MQ); 14 AWG (UL)

**Clamp opening size:**

2.6 x 1.7 mm (.102 x .067 in)



**Versions:**

modular

**Single mould poles:**

from 2 to 25



**Pitches:**

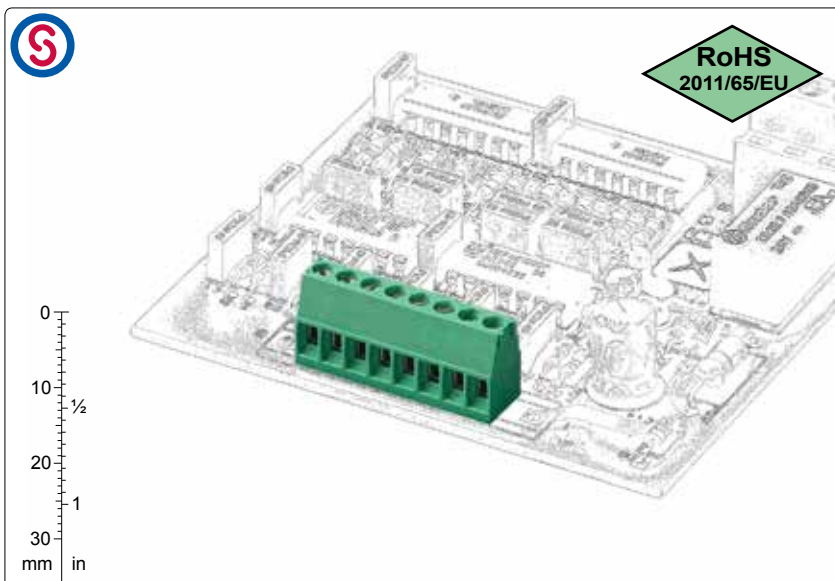
metric 3.5 mm, 7 mm

(.138 in, .275 in)



imperial 3.81 mm, 7.62 mm

(.150 in, .300 in)



pitch 3.5/3.81 mm  
straight version  
modular



pitch 3.5/3.81 mm  
90° version  
modular



pitch 7/7.62 mm  
straight version  
modular



2 poles with pegs  
straight version  
modular

## Brief description

With the **MTS** modular series terminal blocks for PCBs, wires up to **1.5 mm<sup>2</sup> (16 AWG)** can be used and therefore a current range of **17.5A certified** can be reached.

It is available in 3.5 mm (.138 in) and 7 mm (.275 in) metric pitches and in 3.81 mm (.100 in) and 7.62 mm (.300 in) Imperial pitches, in monolithic blocks from 2 to 25 poles, in both side-stackable and modular versions, with insertion of the wire parallel to the PCB or inclined at 90°.

All the housings are modular, so it is possible to combine monolithic terminal blocks **from 2 to 25 poles** separately, or to combine basic terminal blocks until any number of poles is obtained. By taking advantage of this particular feature a minimum quantity of basic terminal blocks can be stored.

It is simple to manage the product, its storage and the assembly with the **Kit packages** because several versions can be received with only one code, both the part-numbers and the risk of making mistakes are significantly reduced.

### MTS with VDE pegs

The straight 2 pole MTS is also available with clamping pegs moulded in the plastic housing to secure it to the PCB.

With this solution the nominal tightening torque can be applied and the most restrictive guidelines set by international standards (VDE) are respected.

## Characteristics of components

M2 nickel plated copper alloy screw.

Polyamide housing.

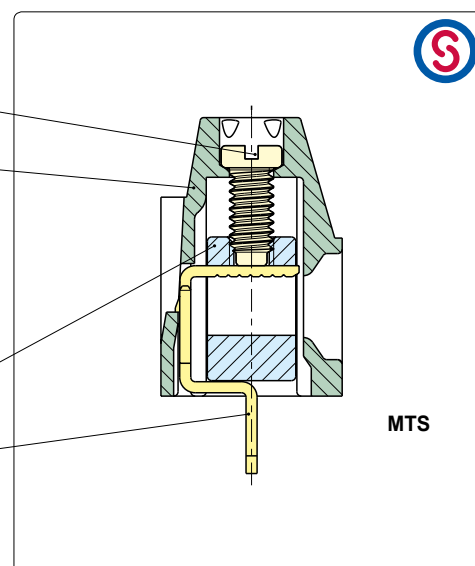
Standard colour: GREEN.

V0 self-extinguishing according to UL 94.

Chlorinated solvents resistant,  
with no phosphor, dioxin or  
detrimental halogens.

Nickel plated copper alloy clamp

Easy to solder lead-free  
tin-plated copper alloy pin.



## Mechanical features

|                                       |                                     |
|---------------------------------------|-------------------------------------|
| Recommended/highest tightening torque | 0.25/0.25 Nm (2.21/2.21 lbf-in)     |
| PCB thickness:                        | max. 2.4 mm (.094 in)               |
| PCB hole diameter:                    | min. 1.1 mm (.043 in)               |
| Stripping length                      | 5 ÷ 6 mm (.197 ÷ .24 in)            |
| Operating temperature range           | -40 °C ÷ +110 °C (-40 °F ÷ +230 °F) |
| Climatic category                     | 40/110/21 according to EN 60068-1   |

## Electrical features\*

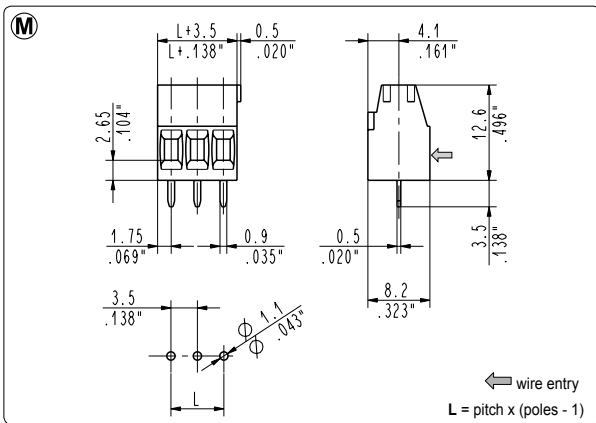
|                                                          |                                     |
|----------------------------------------------------------|-------------------------------------|
| Solid wire section                                       | 30÷14 AWG (UL)* 0.05÷1.5 mm² (IMQ)* |
| Stranded wire section                                    | 30÷14 AWG (UL)* 0.05÷1 mm² (IMQ)*   |
| Rated voltage for 3.5 mm (.100 in) and 3.81 mm (.150 in) | 300 V (UL)*                         |
| Rated voltage for 7 mm (.275 in) and 7.62 mm (.300 in)   | 750 V (IMQ)*                        |
| Rated current                                            | 17.5 A (IMQ)*                       |
| Contact resistance                                       | <15 mΩ                              |
| Insulation resistance                                    | >10 <sup>9</sup> Ω (500V DC)        |

\*All the above mentioned data refers to the highest values amongst the certified ones.

V voltage, I current values and tightening torque are related to the regulations to be applied to the product and to its use.

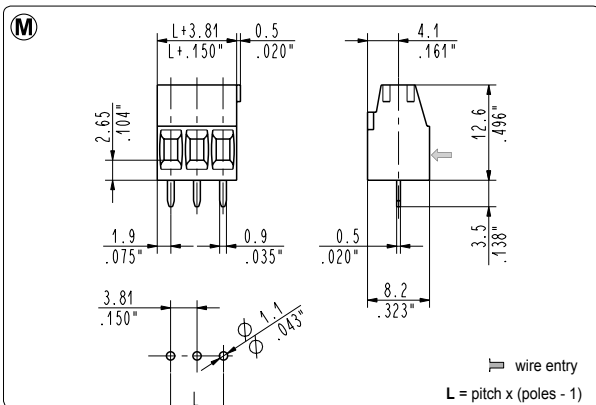
## Approvals

|                                                                                    |                  |                                                                                                       |
|------------------------------------------------------------------------------------|------------------|-------------------------------------------------------------------------------------------------------|
|  | IEC:             | 130 V - T 110 - 17.5 A - 1.5 mm² solid (12 A - 1 mm² stranded) for 3.5 mm and 3.81 mm pitch           |
|                                                                                    | EN 60998         | 750 V - T 110 - 17.5 A - 1.5 mm² solid (12 A - 1 mm² stranded) for 7 mm and 7.62 mm pitch             |
|  | UL:              | 300 V - 12 A - 30÷14 AWG - 2.2 lbf-in for 3.5 mm, 3.81 mm, 7 mm and 7.62 mm pitch                     |
|                                                                                    | File E167473     | Application values for end-use equipment have to be in accordance with UL norms and applicable to it. |
|  | VDE:             | 130 V - 12 A - T 110 - 1 mm² for 3.5 mm and 3.81 mm mm pitch                                          |
|                                                                                    | File n. 40021759 | 450 V - 12 A - T 110 - 1 mm² for 7 mm and 7.62 mm pitch                                               |
|  | IMQ:             | 130 V - T 110 - 17.5 A - 1.5 mm² solid (12 A - 1 mm² stranded) - 0.25 Nm for 3.5 mm and 3.81 mm pitch |
|                                                                                    | File: CA02.00146 | 750 V - T 110 - 17.5 A - 1.5 mm² solid (12 A - 1 mm² stranded) - 0.25 Nm for 7 mm and 7.62 mm pitch   |
|  | CSA:             | 300 V - 12 A - 30÷14 AWG for 3.5 mm, 3.81 mm, 7 mm and 7.62 mm pitch                                  |
|                                                                                    | File LR102896    |                                                                                                       |



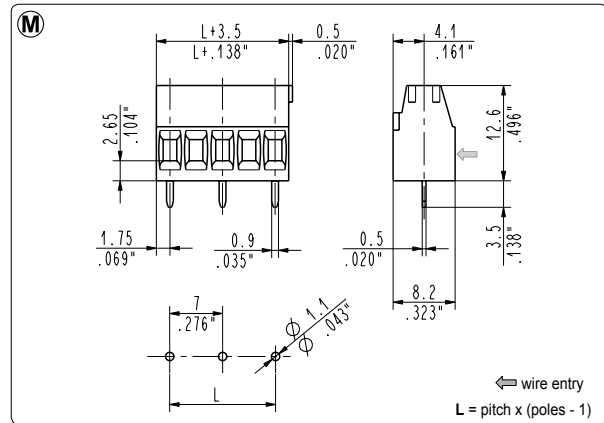
**MTS\_008** straight, modular

| 3.5 mm / .138" pitch |          |           |         |            |         |
|----------------------|----------|-----------|---------|------------|---------|
| Poles                | Code     | Pcs/pack. | W [kg]* | Pcs/Ind.** | W [kg]* |
| 02                   | MTS02008 | 1200      | 1,95    | 3500       | 5,67    |
| 03                   | MTS03008 | 840       | 2,05    | 2250       | 5,47    |
| 04                   | MTS04008 | 600       | 1,95    | 2000       | 6,48    |
| 05                   | MTS05008 | 480       | 1,95    | 1500       | 6,08    |
| 06                   | MTS06008 | 420       | 2,05    | 1000       | 4,86    |
| 07                   | MTS07008 | 360       | 2,05    | 1000       | 5,67    |
| 08                   | MTS08008 | 300       | 1,95    | 750        | 4,86    |
| 09                   | MTS09008 | 240       | 1,75    | 750        | 5,47    |
| 10                   | MTS10008 | 240       | 1,95    | 750        | 6,08    |
| 11                   | MTS11008 | 180       | 1,61    | 750        | 6,68    |
| 12                   | MTS12008 | 180       | 1,75    | 750        | 7,29    |
| 13                   | MTS13008 | 180       | 1,90    | 750        | 7,90    |
| 14                   | MTS14008 | 180       | 2,05    | 750        | 8,51    |
| 15                   | MTS15008 | 120       | 1,46    | 500        | 6,08    |
| 16                   | MTS16008 | 120       | 1,56    | 500        | 6,48    |
| 17                   | MTS17008 | 120       | 1,66    | 500        | 6,89    |
| 18                   | MTS18008 | 120       | 1,75    | 500        | 7,29    |
| 19                   | MTS19008 | 120       | 1,85    | 500        | 7,70    |
| 20                   | MTS20008 | 120       | 1,95    | 500        | 8,10    |
| 21                   | MTS21008 | 120       | 2,05    | 500        | 8,51    |
| 22                   | MTS22008 | 120       | 2,14    | 500        | 8,91    |
| 23                   | MTS23008 | 60        | 1,12    | 500        | 9,32    |
| 24                   | MTS24008 | 60        | 1,17    | 500        | 9,72    |
| 25                   | MTS25008 | 60        | 1,22    | 250        | 5,06    |



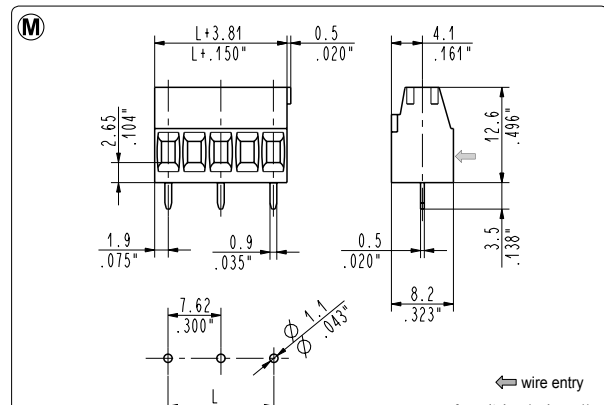
**MTS\_00T** straight, modular

| 3.81 mm / .150" pitch |          |           |         |            |         |
|-----------------------|----------|-----------|---------|------------|---------|
| Poles                 | Code     | Pcs/pack. | W [kg]* | Pcs/Ind.** | W [kg]* |
| 02                    | MTS0200T | 1200      | 1,95    | 3500       | 5,67    |
| 03                    | MTS0300T | 840       | 2,05    | 2250       | 5,47    |
| 04                    | MTS0400T | 600       | 1,95    | 2000       | 6,48    |
| 05                    | MTS0500T | 480       | 1,95    | 1800       | 7,29    |
| 06                    | MTS0600T | 420       | 2,05    | 1000       | 4,86    |
| 07                    | MTS0700T | 360       | 2,05    | 1000       | 5,67    |
| 08                    | MTS0800T | 300       | 1,95    | 750        | 4,86    |
| 09                    | MTS0900T | 240       | 1,75    | 750        | 5,47    |
| 10                    | MTS1000T | 240       | 1,95    | 750        | 6,08    |
| 11                    | MTS1100T | 180       | 1,61    | 750        | 6,68    |
| 12                    | MTS1200T | 180       | 1,75    | 750        | 7,29    |
| 13                    | MTS1300T | 180       | 1,90    | 750        | 7,90    |
| 14                    | MTS1400T | 180       | 2,05    | 750        | 8,51    |
| 15                    | MTS1500T | 120       | 1,46    | 500        | 6,08    |
| 16                    | MTS1600T | 120       | 1,56    | 500        | 6,48    |
| 17                    | MTS1700T | 120       | 1,66    | 500        | 6,89    |
| 18                    | MTS1800T | 120       | 1,75    | 500        | 7,29    |
| 19                    | MTS1900T | 120       | 1,85    | 500        | 7,70    |
| 20                    | MTS2000T | 120       | 1,95    | 500        | 8,10    |
| 21                    | MTS2100T | 120       | 2,05    | 500        | 8,51    |
| 22                    | MTS2200T | 120       | 2,14    | 500        | 8,91    |
| 23                    | MTS2300T | 60        | 1,12    | 500        | 9,32    |
| 24                    | MTS2400T | 60        | 1,17    | 500        | 9,72    |
| 25                    | MTS2500T | 60        | 1,22    | 250        | 5,06    |



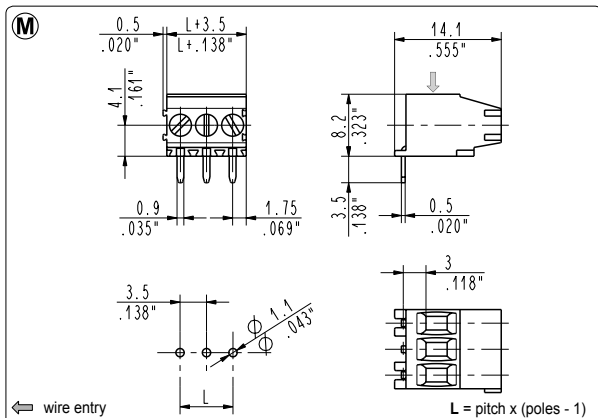
**MTS\_009** straight, modular

| 7 mm / .276" pitch |          |           |         |            |         |
|--------------------|----------|-----------|---------|------------|---------|
| Poles              | Code     | Pcs/pack. | W [kg]* | Pcs/Ind.** | W [kg]* |
| 01                 | MTS01009 | 1200      | 1,12    | 3500       | 3,29    |
| 02                 | MTS02009 | 840       | 1,57    | 2250       | 4,23    |
| 03                 | MTS03009 | 480       | 1,35    | 1500       | 4,23    |
| 04                 | MTS04009 | 360       | 1,35    | 1000       | 3,76    |
| 05                 | MTS05009 | 240       | 1,12    | 750        | 3,53    |
| 06                 | MTS06009 | 180       | 0,90    | 750        | 4,23    |
| 07                 | MTS07009 | 180       | 1,18    | 750        | 4,94    |
| 08                 | MTS08009 | 120       | 0,90    | 500        | 3,76    |
| 09                 | MTS09009 | 120       | 1,01    | 500        | 4,23    |
| 10                 | MTS10009 | 120       | 1,12    | 500        | 4,70    |
| 11                 | MTS11009 | 120       | 1,24    | 500        | 5,17    |
| 12                 | MTS12009 | 60        | 0,67    | 500        | 5,64    |
| 13                 | MTS13009 | 60        | 0,73    | 250        | 3,06    |

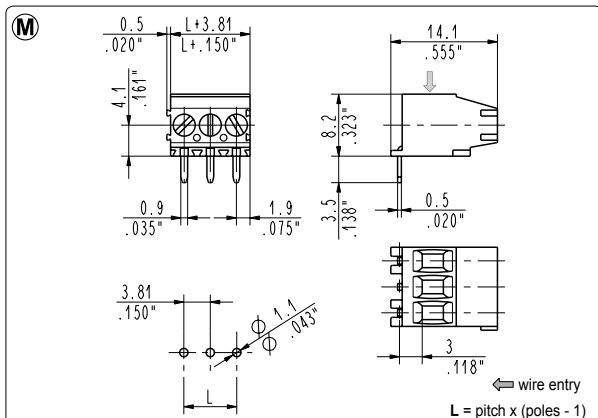


**MTS\_007** straight, modular

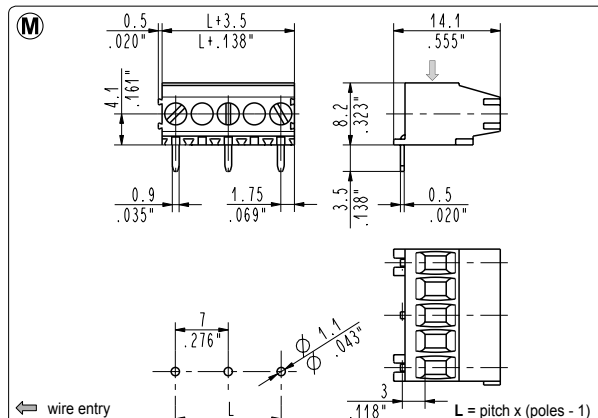
| 7.62 mm / .300" pitch |          |           |         |            |         |
|-----------------------|----------|-----------|---------|------------|---------|
| Poles                 | Code     | Pcs/pack. | W [kg]* | Pcs/Ind.** | W [kg]* |
| 01                    | MTS01007 | 1200      | 1,12    | 3500       | 3,29    |
| 02                    | MTS02007 | 840       | 1,57    | 2250       | 4,23    |
| 03                    | MTS03007 | 480       | 1,35    | 1500       | 4,23    |
| 04                    | MTS04007 | 360       | 1,35    | 1000       | 3,76    |
| 05                    | MTS05007 | 240       | 1,12    | 750        | 3,53    |
| 06                    | MTS06007 | 180       | 0,90    | 750        | 4,23    |
| 07                    | MTS07007 | 180       | 1,18    | 750        | 4,94    |
| 08                    | MTS08007 | 120       | 0,90    | 500        | 3,76    |
| 09                    | MTS09007 | 120       | 1,01    | 500        | 4,23    |
| 10                    | MTS10007 | 120       | 1,12    | 500        | 4,70    |
| 11                    | MTS11007 | 120       | 1,24    | 500        | 5,17    |
| 12                    | MTS12007 | 60        | 0,67    | 500        | 5,64    |
| 13                    | MTS13007 | 60        | 0,73    | 250        | 3,06    |


**MTS\_098** 90°, modular

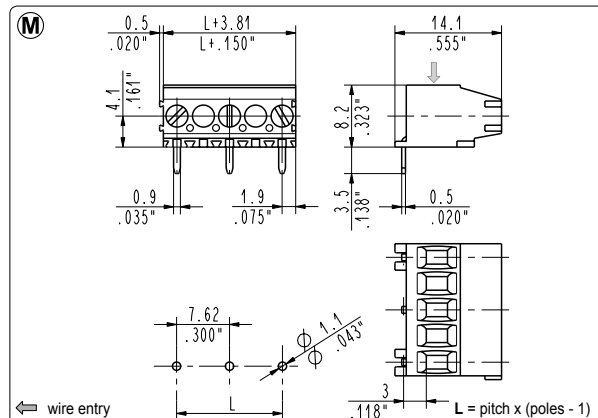
| 3.5 mm / .138" pitch |          |           |         |            |         |
|----------------------|----------|-----------|---------|------------|---------|
| Poles                | Code     | Pcs/pack. | W [kg]* | Pcs/Ind.** | W [kg]* |
| 02                   | MTS02098 | 1200      | 1,95    | 3500       | 5,67    |
| 03                   | MTS03098 | 840       | 2,05    | 2250       | 5,47    |
| 04                   | MTS04098 | 600       | 1,95    | 2000       | 6,48    |
| 05                   | MTS05098 | 480       | 1,95    | 1500       | 6,08    |
| 06                   | MTS06098 | 420       | 2,05    | 1000       | 4,86    |
| 07                   | MTS07098 | 360       | 2,05    | 1000       | 5,67    |
| 08                   | MTS08098 | 300       | 1,95    | 750        | 4,86    |
| 09                   | MTS09098 | 240       | 1,75    | 750        | 5,47    |
| 10                   | MTS10098 | 240       | 1,95    | 750        | 6,08    |
| 11                   | MTS11098 | 180       | 1,61    | 750        | 6,68    |
| 12                   | MTS12098 | 180       | 1,75    | 750        | 7,29    |
| 13                   | MTS13098 | 180       | 1,90    | 750        | 7,90    |
| 14                   | MTS14098 | 180       | 2,05    | 750        | 8,51    |
| 15                   | MTS15098 | 120       | 1,46    | 500        | 6,08    |
| 16                   | MTS16098 | 120       | 1,56    | 500        | 6,48    |
| 17                   | MTS17098 | 120       | 1,66    | 500        | 6,89    |
| 18                   | MTS18098 | 120       | 1,75    | 500        | 7,29    |
| 19                   | MTS19098 | 120       | 1,85    | 500        | 7,70    |
| 20                   | MTS20098 | 120       | 1,95    | 500        | 8,10    |
| 21                   | MTS21098 | 120       | 2,05    | 500        | 8,51    |
| 22                   | MTS22098 | 120       | 2,14    | 500        | 8,91    |
| 23                   | MTS23098 | 60        | 1,12    | 500        | 9,32    |
| 24                   | MTS24098 | 60        | 1,17    | 500        | 9,72    |
| 25                   | MTS25098 | 60        | 1,22    | 250        | 5,06    |


**MTS\_09T** 90°, modular

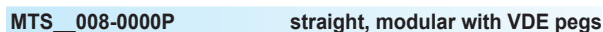
| 3.81 mm / .150" pitch |          |           |         |            |         |
|-----------------------|----------|-----------|---------|------------|---------|
| Poles                 | Code     | Pcs/pack. | W [kg]* | Pcs/Ind.** | W [kg]* |
| 02                    | MTS0209T | 1200      | 1,95    | 3500       | 5,67    |
| 03                    | MTS0309T | 840       | 2,05    | 2250       | 5,47    |
| 04                    | MTS0409T | 600       | 1,95    | 2000       | 6,48    |
| 05                    | MTS0509T | 480       | 1,95    | 1500       | 6,08    |
| 06                    | MTS0609T | 420       | 2,05    | 1000       | 4,86    |
| 07                    | MTS0709T | 360       | 2,05    | 1000       | 5,67    |
| 08                    | MTS0809T | 300       | 1,95    | 750        | 4,86    |
| 09                    | MTS0909T | 240       | 1,75    | 750        | 5,47    |
| 10                    | MTS1009T | 240       | 1,95    | 750        | 6,08    |
| 11                    | MTS1109T | 180       | 1,61    | 750        | 6,68    |
| 12                    | MTS1209T | 180       | 1,75    | 750        | 7,29    |
| 13                    | MTS1309T | 180       | 1,90    | 750        | 7,90    |
| 14                    | MTS1409T | 180       | 2,05    | 750        | 8,51    |
| 15                    | MTS1509T | 120       | 1,46    | 500        | 6,08    |
| 16                    | MTS1609T | 120       | 1,56    | 500        | 6,48    |
| 17                    | MTS1709T | 120       | 1,66    | 500        | 6,89    |
| 18                    | MTS1809T | 120       | 1,75    | 500        | 7,29    |
| 19                    | MTS1909T | 120       | 1,85    | 500        | 7,70    |
| 20                    | MTS2009T | 120       | 1,95    | 500        | 8,10    |
| 21                    | MTS2109T | 120       | 2,05    | 500        | 8,51    |
| 22                    | MTS2209T | 120       | 2,14    | 500        | 8,91    |
| 23                    | MTS2309T | 60        | 1,12    | 500        | 9,32    |
| 24                    | MTS2409T | 60        | 1,17    | 500        | 9,72    |
| 25                    | MTS2509T | 60        | 1,22    | 250        | 5,06    |


**MTS\_099** 90°, modular

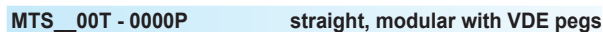
| 7 mm / .276" pitch |          |           |         |            |         |
|--------------------|----------|-----------|---------|------------|---------|
| Poles              | Code     | Pcs/pack. | W [kg]* | Pcs/Ind.** | W [kg]* |
| 01                 | MTS01099 | 1200      | 1,12    | 3500       | 3,29    |
| 02                 | MTS02099 | 840       | 1,57    | 2250       | 4,23    |
| 03                 | MTS03099 | 480       | 1,35    | 1500       | 4,23    |
| 04                 | MTS04099 | 360       | 1,35    | 1000       | 3,76    |
| 05                 | MTS05099 | 240       | 1,12    | 750        | 3,53    |
| 06                 | MTS06099 | 180       | 0,90    | 750        | 4,23    |
| 07                 | MTS07099 | 180       | 1,18    | 750        | 4,94    |
| 08                 | MTS08099 | 120       | 0,90    | 500        | 3,76    |
| 09                 | MTS09099 | 120       | 1,01    | 500        | 4,23    |
| 10                 | MTS10099 | 120       | 1,12    | 500        | 4,70    |
| 11                 | MTS11099 | 120       | 1,24    | 500        | 5,17    |
| 12                 | MTS12099 | 60        | 0,67    | 500        | 5,64    |
| 13                 | MTS13099 | 60        | 0,73    | 250        | 3,06    |


**MTS\_097** 90°, modular

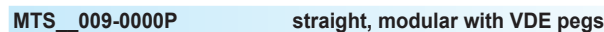
| 7.62 mm / .300" pitch |          |           |         |            |         |
|-----------------------|----------|-----------|---------|------------|---------|
| Poles                 | Code     | Pcs/pack. | W [kg]* | Pcs/Ind.** | W [kg]* |
| 01                    | MTS01097 | 1200      | 1,12    | 3500       | 3,29    |
| 02                    | MTS02097 | 840       | 1,57    | 2250       | 4,23    |
| 03                    | MTS03097 | 480       | 1,35    | 1500       | 4,23    |
| 04                    | MTS04097 | 360       | 1,35    | 1000       | 3,76    |
| 05                    | MTS05097 | 240       | 1,12    | 750        | 3,53    |
| 06                    | MTS06097 | 180       | 0,90    | 750        | 4,23    |
| 07                    | MTS07097 | 180       | 1,18    | 750        | 4,94    |
| 08                    | MTS08097 | 120       | 0,90    | 500        | 3,76    |
| 09                    | MTS09097 | 120       | 1,01    | 500        | 4,23    |
| 10                    | MTS10097 | 120       | 1,12    | 500        | 4,70    |
| 11                    | MTS11097 | 120       | 1,24    | 500        | 5,17    |
| 12                    | MTS12097 | 60        | 0,67    | 500        | 5,64    |
| 13                    | MTS13097 | 60        | 0,73    | 250        | 3,06    |



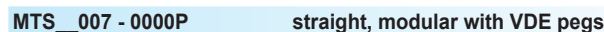
**MTS\_008-0000P** straight, modular with VDE pegs



**MTS\_00T - 0000P** straight, modular with VDE pegs



|               |                                 |
|---------------|---------------------------------|
| MTS_009-0000P | straight, modular with VDE pegs |
|---------------|---------------------------------|



|                        |                                        |
|------------------------|----------------------------------------|
| <b>MTS 007 - 0000P</b> | <b>straight, modular with VDE pegs</b> |
|------------------------|----------------------------------------|

**\*\*industrial packaging:** add “-00000E” at standard code