

MTS

Functional characteristics



Dimensional class:

low



Standard colour:

green



Height:

12.6 mm (.496 in)



Max approved wire sections:

solid: 1.5 mm² (IMQ); 14 AWG (UL)

stranded: 1 mm² (IMQ); 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:

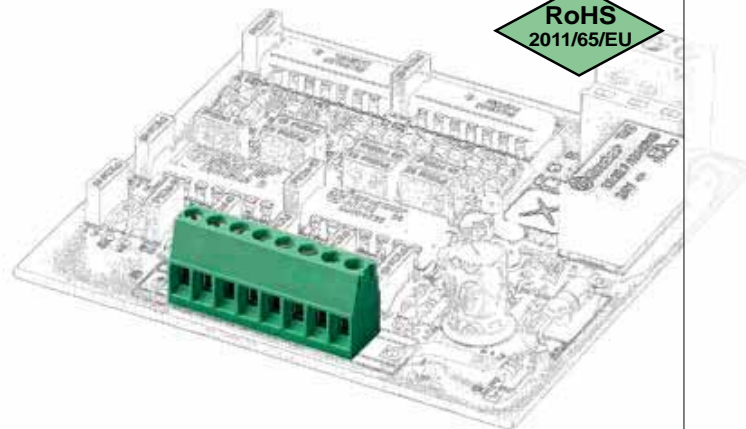
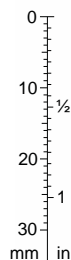
metric 3.5 mm, 7 mm

(.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 mm² (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.

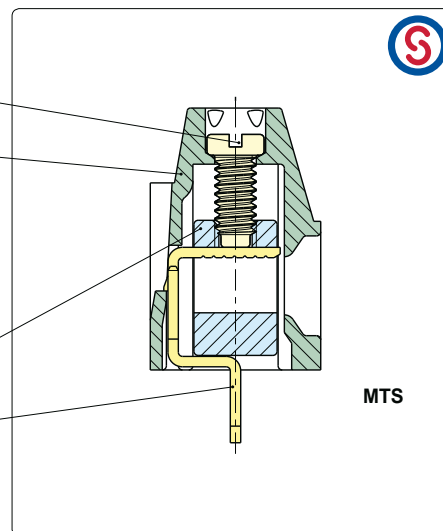
V0 self-extinguishing according to UL 94.

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

Material Group I (CTI \geq 600 V)

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*

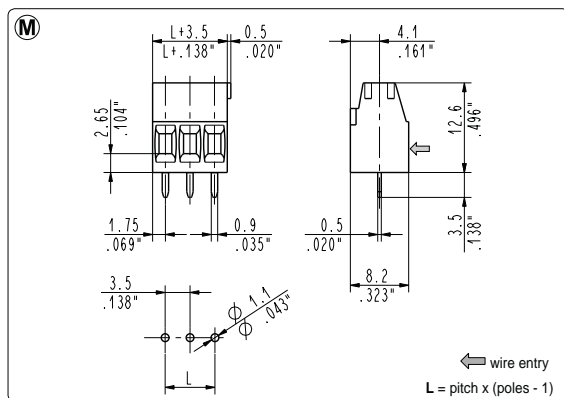
Solid wire section	30÷14 AWG (UL)* 0.05÷1.5 mm ² (IMQ)*
Stranded wire section	30÷14 AWG (UL)* 0.05÷1 mm ² (IMQ)*
Rated voltage for 3.5 mm (.100 in) and 3.81 mm (.150 in)	300 V (UL)*
Rated voltage for 7 mm (.275 in) and 7.62 mm (.300 in)	750 V (IMQ)*
Rated current	17.5 A (IMQ)*
Contact resistance	<15 mΩ
Insulation resistance	>10 ⁹ 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.

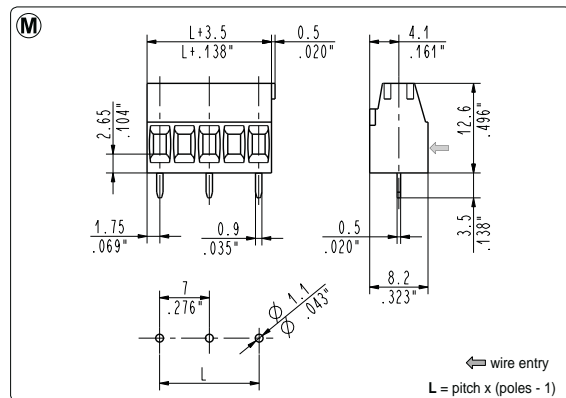
Approvals

	IEC:	130 V - T 110 - 17.5 A - 1.5 mm ² solid (12 A - 1 mm ² stranded) for 3.5 mm and 3.81 mm pitch
	EN 60998	750 V - T 110 - 17.5 A - 1.5 mm ² solid (12 A - 1 mm ² stranded) for 7 mm and 7.62 mm pitch
	UL:	300 V - 12 A - 30÷14 AWG - 2.2 lbf-in for 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 mm ² for 3.5 mm and 3.81 mm mm pitch
	File n. 40021759	450 V - 12 A - T 110 - 1 mm ² for 7 mm and 7.62 mm pitch
	IMQ:	130 V - T 110 - 17.5 A - 1.5 mm ² solid (12 A - 1 mm ² 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 mm ² solid (12 A - 1 mm ² stranded) - 0.25 Nm for 7 mm and 7.62 mm pitch
	CSA:	300 V - 12 A - 30÷14 AWG for for 3.5 mm, 3.81 mm, 7 mm and 7.62 mm pitch
	File LR102896	


MTS_008 straight, modular

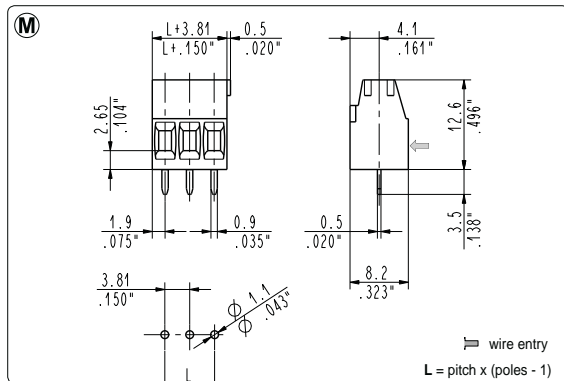
3.5 mm / .138" pitch

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_009 straight, modular

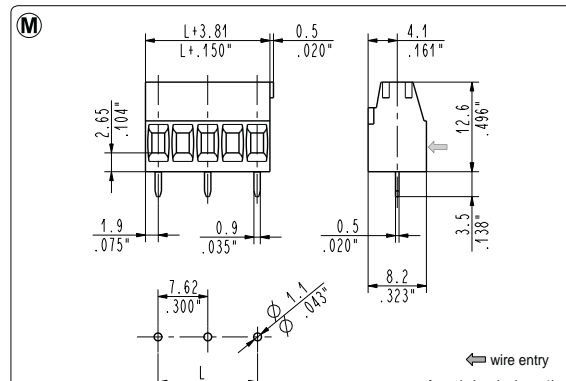
7 mm / .276" pitch

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_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

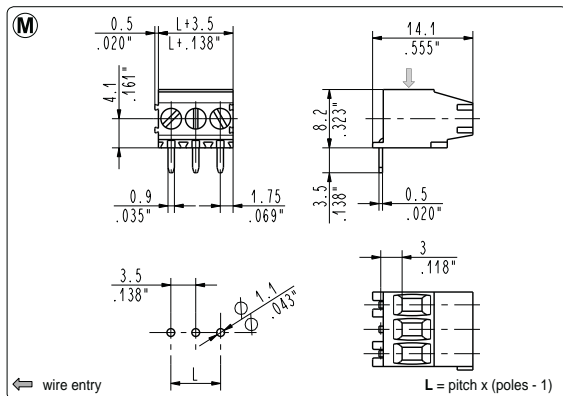

MTS_007 straight, modular

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

*W [kg]: approximate weight per box in kg

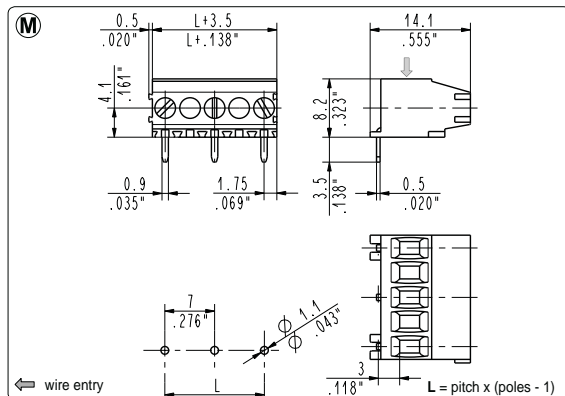
**industrial packaging: add "-00000E" at standard code



MTS_098 90°, modular

3.5 mm / .138" pitch

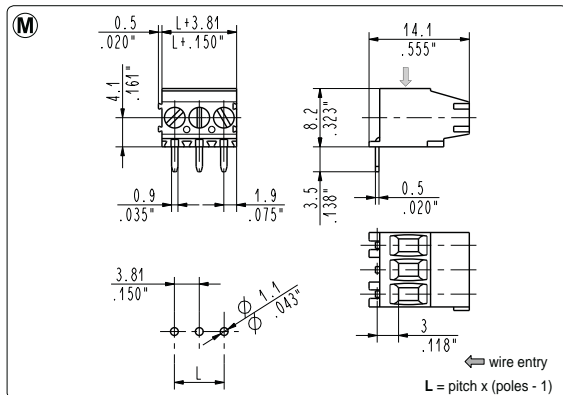
Poles	Code	Pcs/pack.	W [kg]*	Pcs/Ind.**	W [kg]*
02	MTS02098	1200	1,95	3500	5,67
03	MTS03098	840	2,05	2250	5,47
04	MTS04098	600	1,95	2000	6,48
05	MTS05098	480	1,95	1500	6,08
06	MTS06098	420	2,05	1000	4,86
07	MTS07098	360	2,05	1000	5,67
08	MTS08098	300	1,95	750	4,86
09	MTS09098	240	1,75	750	5,47
10	MTS10098	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_099 90°, modular

7 mm / .276" pitch

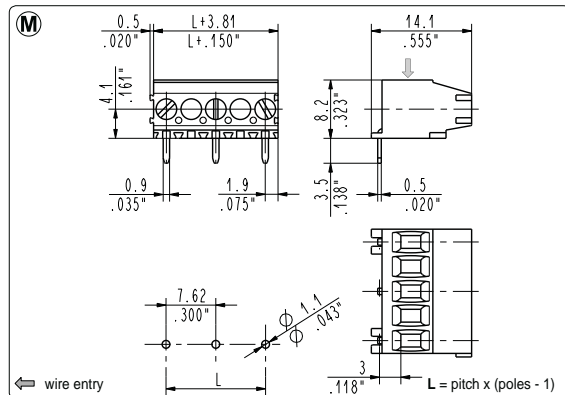
Poles	Code	Pcs/pack.	W [kg]*	Pcs/Ind.**	W [kg]*
01	MTS01099	1200	1,12	3500	3,29
02	MTS02099	840	1,57	2250	4,23
03	MTS03099	480	1,35	1500	4,23
04	MTS04099	360	1,35	1000	3,76
05	MTS05099	240	1,12	750	3,53
06	MTS06099	180	0,90	750	4,23
07	MTS07099	180	1,18	750	4,94
08	MTS08099	120	0,90	500	3,76
09	MTS09099	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_09T 90°, modular

3.81 mm / .150" pitch

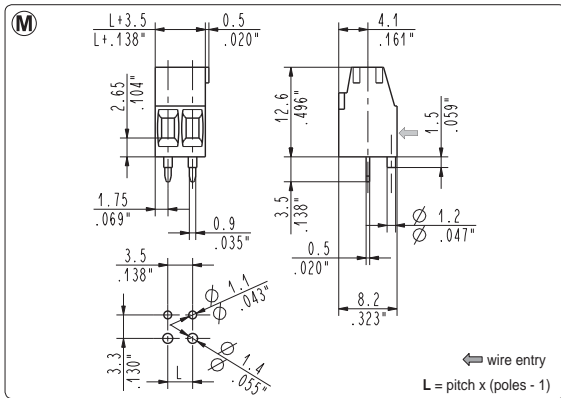
Poles	Code	Pcs/pack.	W [kg]*	Pcs/Ind.**	W [kg]*
02	MTS0209T	1200	1,95	3500	5,67
03	MTS0309T	840	2,05	2250	5,47
04	MTS0409T	600	1,95	2000	6,48
05	MTS0509T	480	1,95	1500	6,08
06	MTS0609T	420	2,05	1000	4,86
07	MTS0709T	360	2,05	1000	5,67
08	MTS0809T	300	1,95	750	4,86
09	MTS0909T	240	1,75	750	5,47
10	MTS1009T	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_09T 90°, modular

7.62 mm / .300" pitch

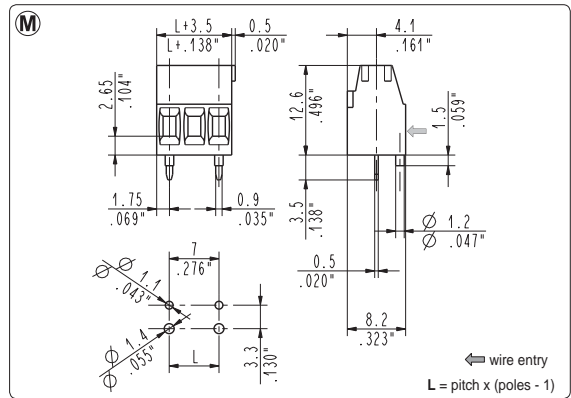
Poles	Code	Pcs/pack.	W [kg]*	Pcs/Ind.**	W [kg]*
01	MTS0109T	1200	1,12	3500	3,29
02	MTS0209T	840	1,57	2250	4,23
03	MTS0309T	480	1,35	1500	4,23
04	MTS0409T	360	1,35	1000	3,76
05	MTS0509T	240	1,12	750	3,53
06	MTS0609T	180	0,90	750	4,23
07	MTS0709T	180	1,18	750	4,94
08	MTS0809T	120	0,90	500	3,76
09	MTS0909T	120	1,01	500	4,23
10	MTS1009T	120	1,12	500	4,70
11	MTS1109T	120	1,24	500	5,17
12	MTS1209T	60	0,67	500	5,64
13	MTS1309T	60	0,73	250	3,06



MTS_008-0000P straight, modular with VDE pegs

3.5 mm / .138" pitch

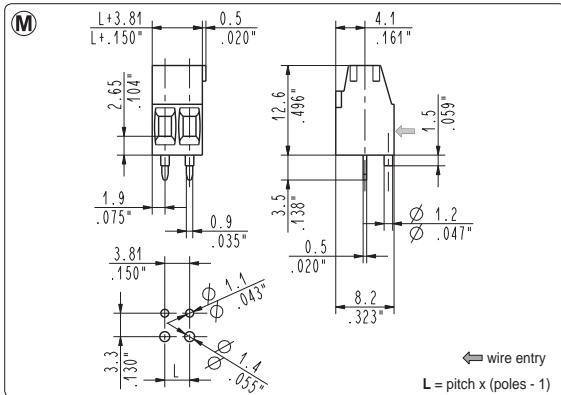
Poles	Code	Pcs/pack.	W [kg]*	Pcs/Ind.**	W [kg]*
02	MTS02008-0000P	1200	1,95	3500	5,67
03	MTS03008-0000P	840	2,05	2250	5,47



MTS_009-0000P straight, modular with VDE pegs

7 mm / .276" pitch

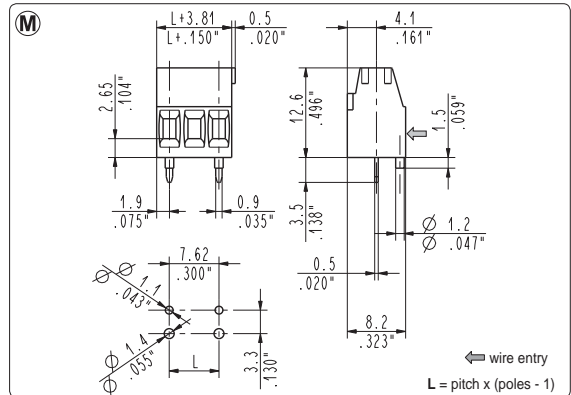
Poles	Code	Pcs/pack.	W [kg]*	Pcs/Ind.**	W [kg]*
02	MTS02009-0000P	840	1,57	2250	4,23
03	MTS03009-0000P	480	1,35	1500	4,23



MTS_00T-0000P straight, modular with VDE pegs

3.81 mm / .150" pitch

Poles	Code	Pcs/pack.	W [kg]*	Pcs/Ind.**	W [kg]*
02	MTS0200T-0000P	1200	1,95	3500	5,67
03	MTS0300T-0000P	840	2,05	2250	5,47



MTS_007-0000P straight, modular with VDE pegs

7.62 mm / .300" pitch

Poles	Code	Pcs/pack.	W [kg]*	Pcs/Ind.**	W [kg]*
02	MTS02007-0000P	840	1,57	2250	4,23
03	MTS03007-0000P	480	1,35	1500	4,23