



GREEN ELECTRONICS



MCM

Terminal Blocks and Connectors for Printed Circuit Boards



ISO
9001



ISO
14001



BS OHSAS
18001:2007



SAUPI®
ELECTRONIC CONNECTORS

Functional characteristics



Dimensional class:
high



Standard colour:
green



Height:
14.45 mm (.569 in)



Max approved wire sections:
solid: 2.5 mm² (CE); 12 AWG (UL)
stranded: 2.5 mm² (CE); 12 AWG (UL)

Wire opening size:
2.4 x 2.5 mm (.094 x .098 in)



Versions:
modular

Single mould poles:
from 1 (modular)



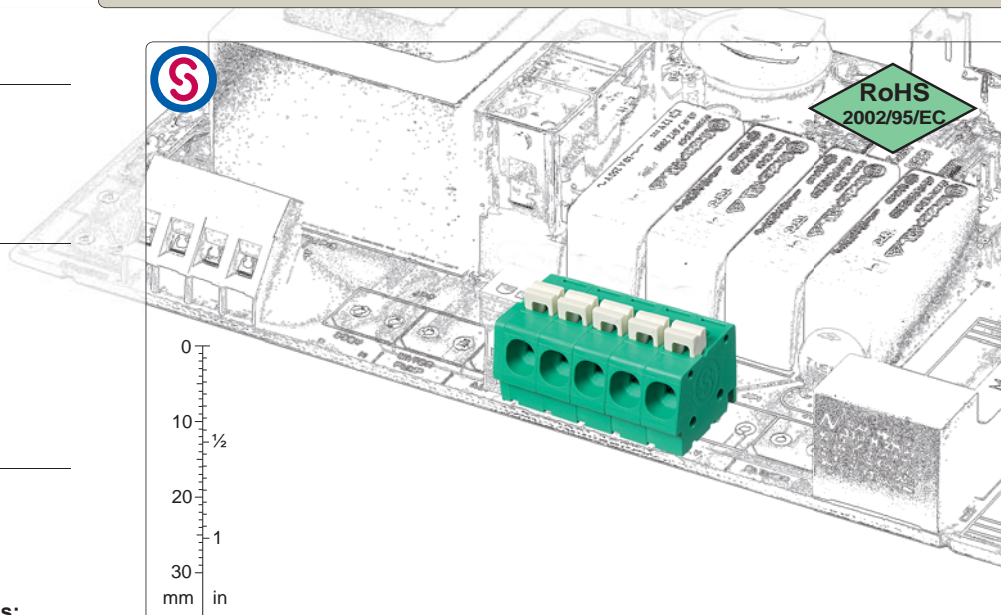
Pitches:
metric 5 mm, 7.5 mm, 10 mm
(.197 in, .295 in, .394 in)



imperial 5.08 mm, 7.62 mm, 10.16 mm
(.200 in, .300 in, .400 in)



Solderable at a temperature up to
270°C / 518°F



S 270°C

straight, modular-side entry
pitch 5.08 mm



S 270°C

straight, modular-side entry
pitch 7.5/7.62 mm



S 270°C

straight, modular-side entry
pitch 10/10.16 mm



n ew

MCM-BSC_
pitch 5/5.08 mm
pitch 7.5/7.62 mm
pitch 10/10.16 mm



n ew

BSC_0L_
pitch 5/5.08 mm: 9 poles
pitch 7.5/7.62: 5 poles
pitch 10/10.16 mm: 5 poles



n ew

S 270°C

MCM000M0
terminal plate

Brief description

The **MCM** series of terminal blocks allow a high current rating by means of a contact spring wiring system. This product maintains a tightening force which is comparable to the rising clamp system.

Moreover, by using a contact spring system wire connections can be **achieved quickly and they are not affected by vibrations**. It is possible to use rigid or flexible wires with ferrules, but flexible wires without ferrules can also be used by pressing on the appropriate switch.

It is available in metric pitches: 5 mm (.197 in), 7.5 mm (.295 in) and 10 mm (.394 in) and in imperial pitches: 5.08 mm (.200 in), 7.62 mm (.300 in) and 10.16 mm (.400 in) in a single pole housing block.

All the housings are modular, therefore it is possible to compose the

terminal block to any number of pole and/or colour. By taking advantage of this particular characteristic a minimum stock of basic terminal blocks can be kept.

Short circuit bridges are available to connect adjacent poles without obstructing the wire entry. They can be inserted either before or after soldering the terminal block to the PCB.

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

Characteristics of components

Steel clamping spring.

Polyamide housing.

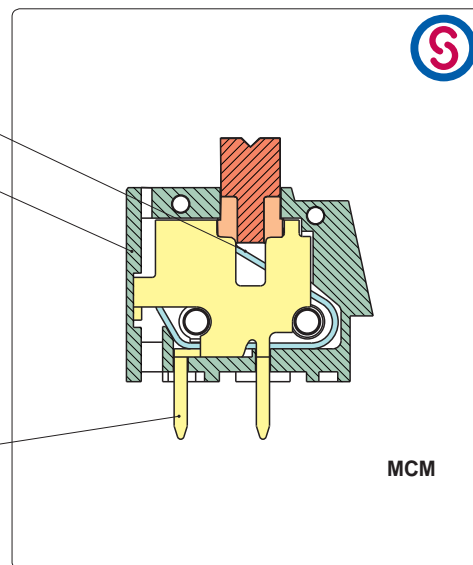
Standard colour: GREEN.

V0 self-extinguishing according to UL 94.

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

Easy to solder lead-free

tin-plated copper alloy pin.



Mechanical characteristics

PCB thickness:	max. 2.4 mm (.094 in)
PCB hole diameter:	min. 1.2 mm (.047 in)
Stripping length	10 / 11 mm (.394 / .433 in)
Operating temperature range	-40 °C ÷ +110 °C (-40 °F ÷ +230 °F)
Climatic category	40/110/21 according to EN 60068-1

Electrical characteristics*

Solid wire section	30÷12 AWG (UL)*; 0.2 ÷ 2.5 mm ² (VDE)*
Stranded wire section	30÷12 AWG (UL)*; 0.2 ÷ 2.5 mm ² (VDE)*
Rated voltage for 5 mm (.197 in) and 5.08 mm (.200 in)	300 V (UL)*
Rated voltage for 7.5 mm (.295 in), 7.62 mm (.300 in), 10 mm (.394 in) and 10.16 mm (.400 in)	750 V (VDE)*
Rated current	16 A (UL, VDE)*
Rated current	8 A
Contact resistance	<15 mΩ
Insulation resistance	>10 ⁹ Ω (500V DC)

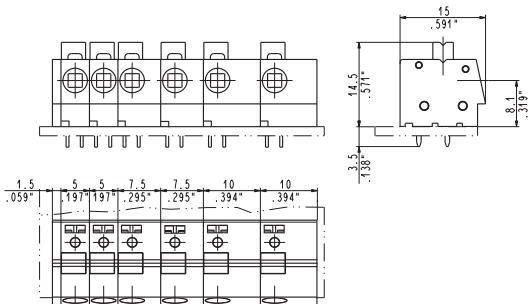
*All the above mentioned data refer to the highest values amongst the certified ones.

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

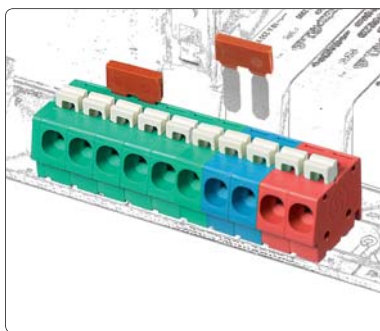
Approvals

IEC-EN	IEC:	250 V - 16 A - 2.5 mm ² - T 110 for 5 mm, 5.08 mm pitch
	EN 60998	750 V - 16 A - 2.5 mm ² - T 110 for 7.5 mm, 7.62 mm, 10 mm and 10.16 mm pitch
UL	UL:	300 V - 16 A - 30÷12 AWG for 5 mm, 5.08 mm, 7.5 mm and 7.62 mm pitch
	File E167473	600 V - 16 A - 30÷12 AWG for 10 mm and 10.16 mm pitch
		Application values for end-use equipment have to be in accordance to UL norms and applicable to them.
VDE	VDE:	250 V - 16 A - 2.5 mm ² - T 110 for 5 mm, 5.08 mm pitch
	File n.40029775	750 V - 16 A - 2.5 mm ² - T 110 for 7.5 mm, 7.62 mm, 10 mm and 10.16 mm pitch

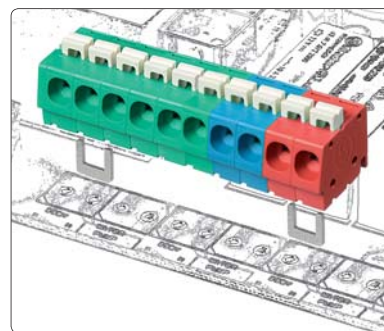
Examples of assembly



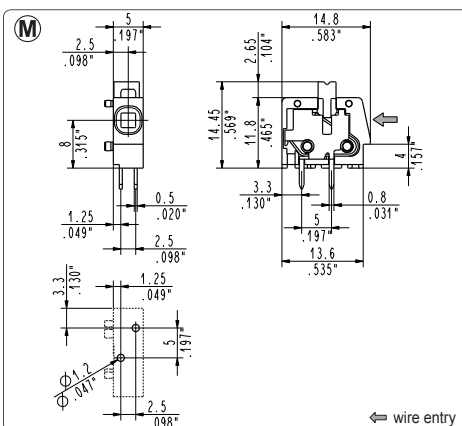
IT patent pending



Customization which can be modified
Bridges for short circuit to be inserted in the terminal block either before or after soldering.

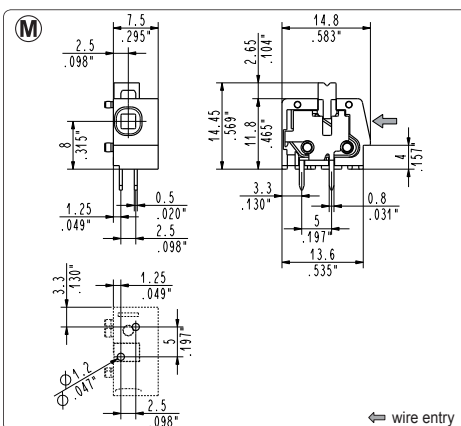


Customization which cannot be modified
after soldering
Bridges for short circuit to be inserted in the terminal block before soldering.



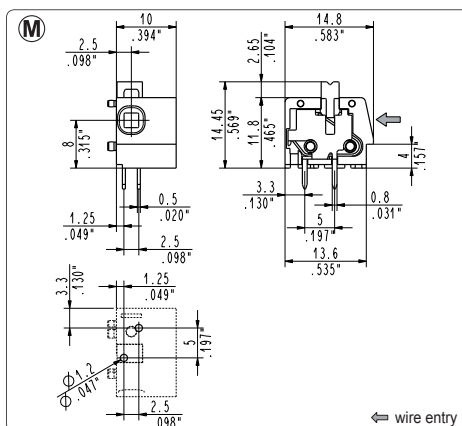
MCM_0M1 straight, modular
5 mm / .197" pitch Weight per pole: 1.20 g

Poles	Code	Pcs./pack.	W [kg]*	Pcs/Ind.**	W [kg]*
01	MCM010M1	500	0,60	1500	1,80



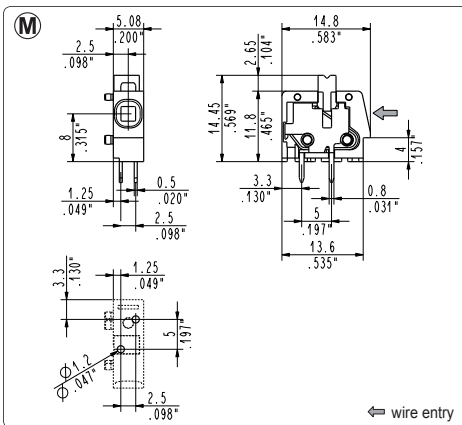
MCM_0M3 straight, modular
7.5 mm / .295" pitch Weight per pole: 1.25 g

Poles	Code	Pcs./pack.	W [kg]*	Pcs/Ind.**	W [kg]*
01	MCM010M3	400	0,50	1000	1,25



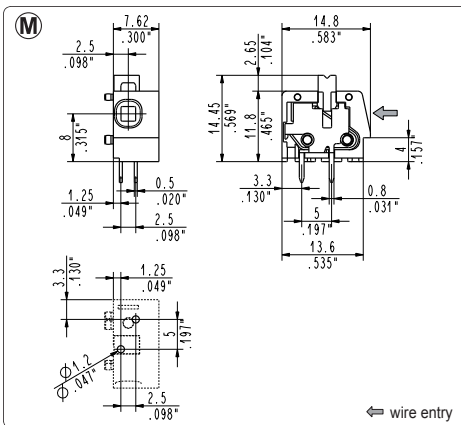
MCM_0M2 straight, modular
10 mm / .394" pitch Weight per pole: 1.30 g

Poles	Code	Pcs./pack.	W [kg]*	Pcs/Ind.**	W [kg]*
01	MCM010M2	400	0,52	1000	1,30



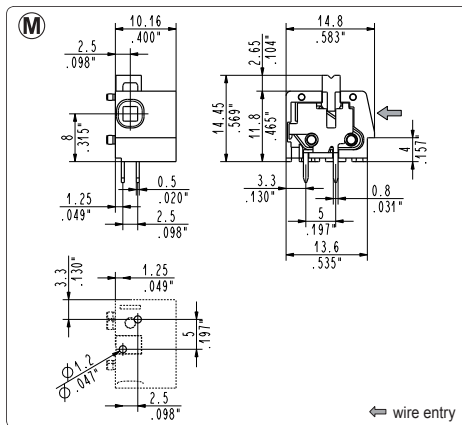
MCM_0M5 straight, modular
5.08 mm / .200" pitch Weight per pole: 1.20 g

Poles	Code	Pcs./pack.	W [kg]*	Pcs/Ind.**	W [kg]*
01	MCM010M5	500	0,60	1500	1,80



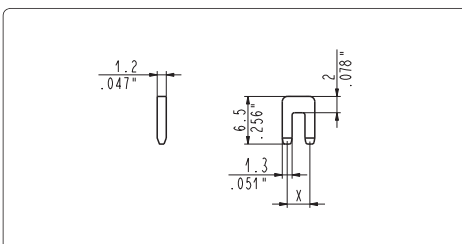
MCM_0M7 straight, modular
7.62 mm / .300" pitch Weight per pole: 1.25 g

Poles	Code	Pcs./pack.	W [kg]*	Pcs/Ind.**	W [kg]*
01	MCM010M7	400	0,50	1000	1,25



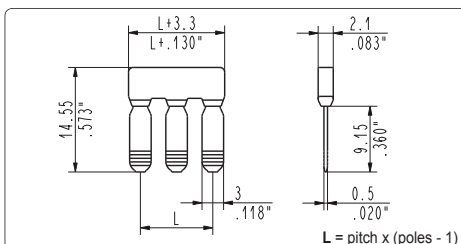
MCM_0M6 straight, modular
10.16 mm / .400" pitch Weight per pole: 1.30 g

Poles	Code	Pcs./pack.	W [kg]*	Pcs/Ind.**	W [kg]*
01	MCM010M6	400	0,52	1000	1,30



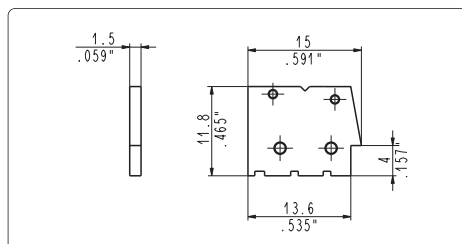
MCM-BSC_ bridge for MCM

Pitch	Code	Pcs./pack.	W [kg]*	Pcs/Ind.**	W [kg]*
5 mm / .197"	MCM-BSC1	250	0,05	1250	0,26
5.08 mm / .200"	MCM-BSC5	250	0,05	1250	0,26
7.5 mm / .295"	MCM-BSC3	200	0,04	1000	0,23
7.62 mm / .300"	MCM-BSC7	200	0,04	1000	0,23
10 mm / .394"	MCM-BSC2	200	0,04	1000	0,25
10.16 mm / .400"	MCM-BSC6	200	0,04	1000	0,25



BSC_0L_ removable bridge for MCM

Pitch	Code	Pcs./pack.	poles	Pcs/Ind.**	W [kg]*
5 mm / .197"	BSC_0L1	250	2-9	1250	0,26-1,17
5.08 mm / .200"	BSC_0L5	250	2-9	1250	0,26-1,17
7.5 mm / .295"	BSC_0L3	200	2-5	1000	0,23-0,58
7.62 mm / .300"	BSC_0L7	200	2-5	1000	0,23-0,58
10 mm / .394"	BSC_0L2	200	2-5	1000	0,25-0,62
10.16 mm / .400"	BSC_0L6	200	2-5	1000	0,25-0,62

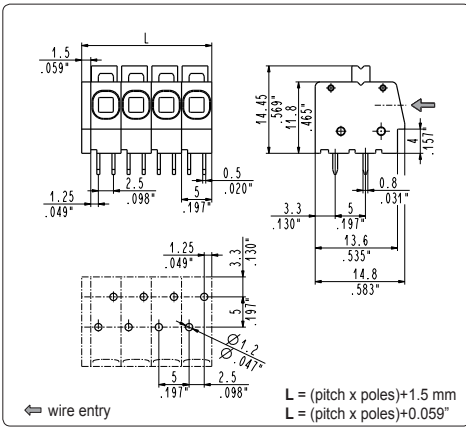


MCM000M0 terminal plate

Code	Pcs./pack.	W [kg]*	Pcs/Ind.**	W [kg]*
MCM000M0	250	0,08	1000	0,31

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

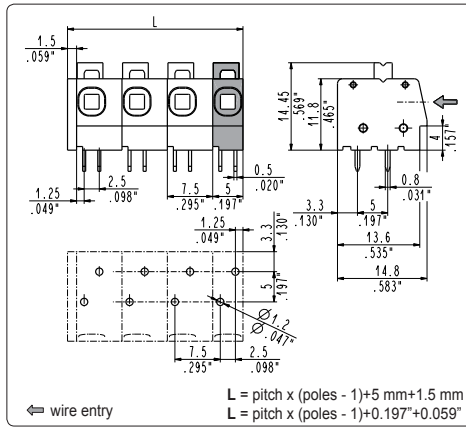
**industrial packaging: add "-00000E" at standard code



MCM_001 straight, side stackable

5 mm / .197" pitch

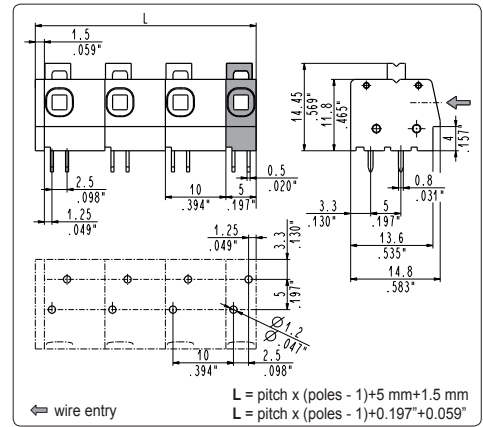
Poles	Code	Pcs/pack.	W [kg]*	Pcs/Ind.**	W [kg]*
02	MCM02001	350	0,84	1400	3,36
03	MCM03001	250	0,90	1000	3,60
04	MCM04001	175	0,84	700	3,36
05	MCM05001	150	0,90	600	3,60
06	MCM06001	125	0,90	500	3,60
07	MCM07001	100	0,84	400	3,36
08	MCM08001	100	0,96	400	3,84
09	MCM09001	75	0,81	300	3,24
10	MCM10001	75	0,90	300	3,60
11	MCM11001	75	0,99	300	3,96
12	MCM12001	75	1,08	300	4,32
13	MCM13001	60	0,94	240	3,34
14	MCM14001	60	1,01	240	4,03
15	MCM15001	60	1,08	240	4,32
16	MCM16001	50	0,96	200	3,84
17	MCM17001	50	1,02	200	4,08
18	MCM18001	45	0,97	180	3,89
19	MCM19001	45	1,03	180	4,10
20	MCM20001	40	0,96	160	3,84
21	MCM21001	40	1,01	160	4,03
22	MCM22001	35	0,92	140	3,70
23	MCM23001	35	0,97	140	3,86
24	MCM24001	30	0,86	120	3,46
25	MCM25001	30	0,90	120	3,60



MCM_003 straight, side stackable

7.5 mm / .295" pitch

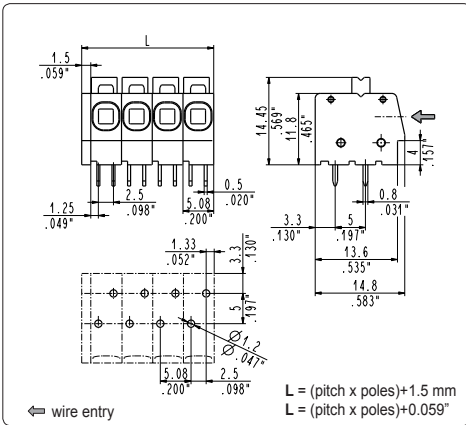
Poles	Code	Pcs/pack.	W [kg]*	Pcs/Ind.**	W [kg]*
02	MCM02003	250	0,63	1000	2,52
03	MCM03003	175	0,66	700	2,65
04	MCM04003	125	0,63	500	2,52
05	MCM05003	100	0,63	400	2,52
06	MCM06003	100	0,76	400	3,02
07	MCM07003	75	0,66	300	2,65
08	MCM08003	75	0,76	300	3,02
09	MCM09003	50	0,57	200	2,27
10	MCM10003	50	0,63	200	2,52
11	MCM11003	50	0,69	200	2,77
12	MCM12003	50	0,76	200	3,02



MCM_002 straight, side stackable

10 mm / .394" pitch

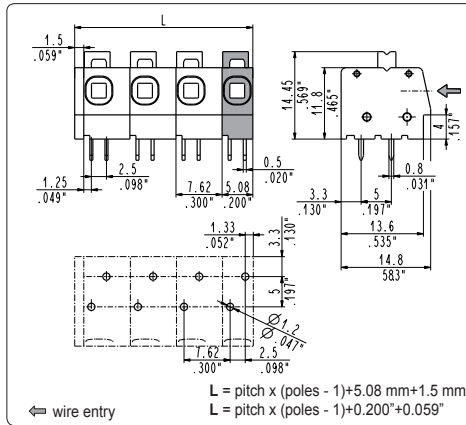
Poles	Code	Pcs/pack.	W [kg]*	Pcs/Ind.**	W [kg]*
02	MCM02002	175	0,46	700	1,82
03	MCM03002	150	0,59	600	2,34
04	MCM04002	100	0,52	400	2,08
05	MCM05002	100	0,65	400	2,60
06	MCM06002	100	0,78	400	3,12
07	MCM07002	75	0,68	300	2,73
08	MCM08002	75	0,78	300	3,12
09	MCM09002	45	0,53	180	2,11
10	MCM10002	30	0,39	120	1,56
11	MCM11002	30	0,43	120	1,72
12	MCM12002	30	0,47	120	1,87
13	MCM13002	30	0,51	120	2,03



MCM_005 straight, side stackable

5.08 mm / .200" pitch

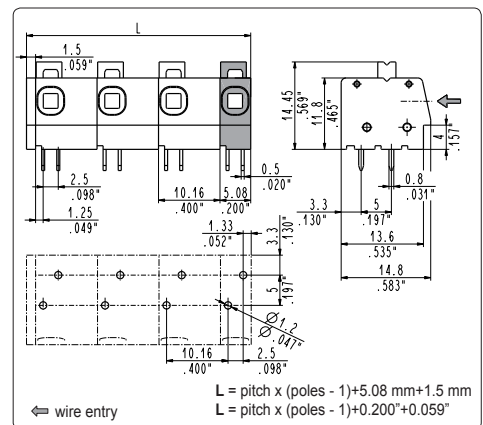
Poles	Code	Pcs/pack.	W [kg]*	Pcs/Ind.**	W [kg]*
02	MCM02005	350	0,84	1400	3,36
03	MCM03005	250	0,90	1000	3,60
04	MCM04005	175	0,84	700	3,36
05	MCM05005	150	0,90	600	3,60
06	MCM06005	125	0,90	500	3,60
07	MCM07005	100	0,84	400	3,36
08	MCM08005	100	0,96	400	3,84
09	MCM09005	75	0,81	300	3,24
10	MCM10005	75	0,90	300	3,60
11	MCM11005	75	0,99	300	3,96
12	MCM12005	75	1,08	300	4,32
13	MCM13005	60	0,94	240	3,34
14	MCM14005	60	1,01	240	4,03
15	MCM15005	60	1,08	240	4,32
16	MCM16005	50	0,96	200	3,84
17	MCM17005	50	1,02	200	4,08
18	MCM18005	45	0,97	180	3,89
19	MCM19005	45	1,03	180	4,10
20	MCM20005	40	0,96	160	3,84
21	MCM21005	40	1,01	160	4,03
22	MCM22005	35	0,92	140	3,70
23	MCM23005	35	0,97	140	3,86
24	MCM24005	30	0,86	120	3,46
25	MCM25005	30	0,90	120	3,60



MCM_007 straight, side stackable

7.62 mm / .300" pitch

Poles	Code	Pcs/pack.	W [kg]*	Pcs/Ind.**	W [kg]*
02	MCM02007	250	0,63	1000	2,52
03	MCM03007	175	0,66	700	2,65
04	MCM04007	125	0,63	500	2,52
05	MCM05007	100	0,63	400	2,52
06	MCM06007	100	0,76	400	3,02
07	MCM07007	75	0,66	300	2,65
08	MCM08007	75	0,76	300	3,02
09	MCM09007	50	0,57	200	2,27
10	MCM10007	50	0,63	200	2,52
11	MCM11007	50	0,69	200	2,77
12	MCM12007	50	0,76	200	3,02



MCM_006 straight, side stackable

10.16 mm / .400" pitch

Poles	Code	Pcs/pack.	W [kg]*	Pcs/Ind.**	W [kg]*
02	MCM02006	175	0,46	700	1,82
03	MCM03006	150	0,59	600	2,34
04	MCM04006	100	0,52	400	2,08
05	MCM05006	100	0,65	400	2,60
06	MCM06006	100	0,78	400	3,12
07	MCM07006	75	0,68	300	2,73
08	MCM08006	75	0,78	300	3,12
09	MCM09006	45	0,53	180	2,11
10	MCM10006	30	0,39	120	1,56
11	MCM11006	30	0,43	120	1,72
12	MCM12006	30	0,47	120	1,87
13	MCM13006	30	0,51	120	2,03