

Functional characteristics



Dimensional class:
medium



Standard colour:
green



Height:
15.2 mm (.598 in)



Max approved wire sections:
solid: 2.5 mm² (VDE); 12 AWG (UL)
stranded: 2.5 mm² (VDE); 12 AWG (UL)
Clamp opening size:
2.5 x 2.3 mm (.098 x .087 in)



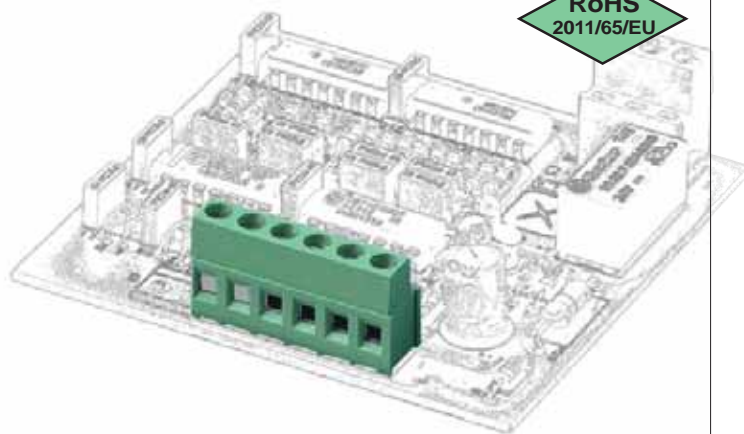
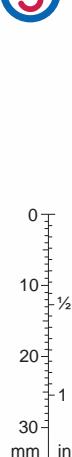
Versions:
modular
Single mould poles:
from 2 to 25



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)



pitch 5/5.08 mm
version straight,
modular



pitch 7.5/7.62 mm
version straight,
modular



pitch 10/10.16 mm
version straight,
modular



version 90°,
modular



version 90°,
modular



version 270°,
modular

new



"T" version with central pin,
modular



available accessories:
BSC_00_-0R from 2 to 9 poles
BSC for rising clamp

Brief description

With the **MSS** modular series terminal blocks for PCBs, wires up to 2.5 mm² (12 AWG) can be used and consequently a current range of 24A certified can be reached.

The particular design makes it the only terminal block with a **real zero gap when it is tightened**, thus eliminating the risk of "false" wiring.

In the **90° T version**, the central position of the pin ensures high mechanical stability when tightening with screws; moreover resins for sealing can be used for the PCB.

It is available in 5 mm (.197 in), 7.5 mm (.294 in) and 10 mm (.394 in) metric pitches, and in 5.08 mm (.200 in), 7.62 mm (.300 in) and 10.16

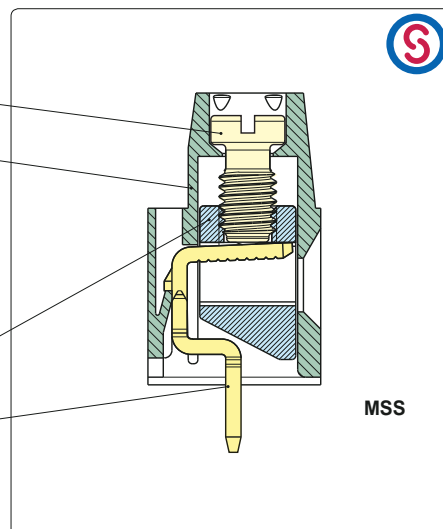
mm (.400 in) Imperial pitches, in monolithic blocks from 2 to 25 poles, with insertion of the wire parallel or vertical in relation to the PCB.

All the housings are modular, therefore it is possible to compose the monolithic terminal blocks from 2 to 25 poles separately, or to compose the basic terminal blocks until any number of poles is obtained. By taking advantage of this particular characteristic a minimum stock of basic terminal blocks can be kept.

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

Characteristics of components

- M3 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 to health halogens.
Material Group I (CTI \geq 600 V)
- Nickel plated copper alloy clamp
- Easy to solder lead-free
tin-plated copper alloy pin.



Mechanical characteristics

Recommended/highest tightening torque	0.5/0.6 Nm (4.42/5.31 lbf-in)
PCB thickness:	max. 2.4 mm (.094 in)
PCB hole diameter:	min. 1.4 mm (.055 in)
Stripping length	5.5 ÷ 6.5 mm (.22 ÷ .26 in)
Operating temperature range	-40 °C ÷ +110 °C (-40 °F ÷ +230 °F)
Climatic category	40/110/21 according to EN 60068-1

Electric characteristics*

Solid wire section	30÷12 AWG (UL)* 0.05÷2.5 mm ² (VDE, IMQ)*
Stranded wire section	30÷12 AWG (UL)* 0.05÷2.5 mm ² (VDE, IMQ)*
Rated voltage for 5 mm (.197 in) and 5.08 mm (.200 in)	300 V (UL)*
Rated voltage for 7.5 mm (.295 in) and 7.62 mm (.300 in)	750 V (IMQ)*
Rated voltage for 10 mm (.394 in) and 10.16 mm (.400 in)	750 V (IMQ)*
Rated current	24 A (VDE, IMQ)*
Contact resistance	<15 mΩ
Insulation resistance	>10 ⁹ Ω (500V DC)

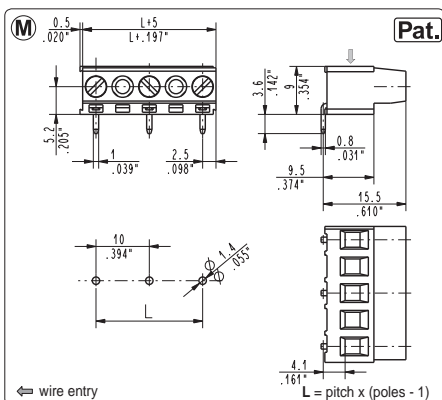
*All the above mentioned data refer to the highest values amongst the certificated ones.

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

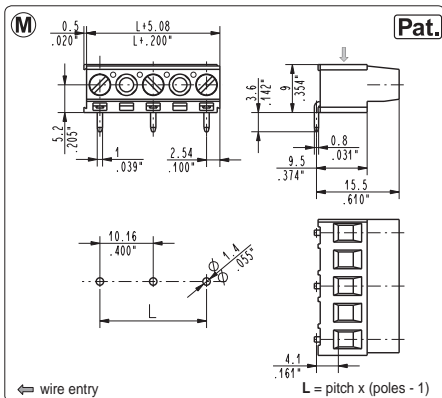
Approvals

IEC-EN	IEC:	250 V - 24 A - 2.5 mm ² - T 110 for 5 mm and 5.08 mm pitch
	EN 60998	750 V - 24 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 - 17.5 A (factory wiring), 15A (field wiring) - 30÷12 AWG - 7 lbf-in for 5 mm, 5.08 mm, 7.5 mm and 7.62 mm pitch
	File E167473	600 V - 17.5 A (factory wiring), 15A (field wiring) - 30÷12 AWG - 7 lbf-in 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 it.
VDE	VDE:	250 V - 24 A - 2.5 mm ² - T 110 for 5 mm and 5.08 mm pitch
	File n. 40022745	750 V - 24 A - 2.5 mm ² - T 110 for 7.5 mm, 7.62 mm, 10 mm and 10.16 mm pitch
IMQ	IMQ:	250 V - 24 A - 2.5 mm ² - T 110 for 5 mm and 5.08 mm pitch
	File: EA022	750 V - 24 A - 2.5 mm ² - T 110 for 7.5 mm, 7.62 mm, 10 mm and 10.16 mm pitch
CSA	CSA:	300 V - 17.5 A - 30÷12 AWG for 5 mm, 5.08 mm, 7.5 mm and 7.62 mm pitch
	File LR102896	600 V - 17.5 A - 30÷12 AWG for 10 mm and 10.16 mm pitch

See also "Certifications", page 8

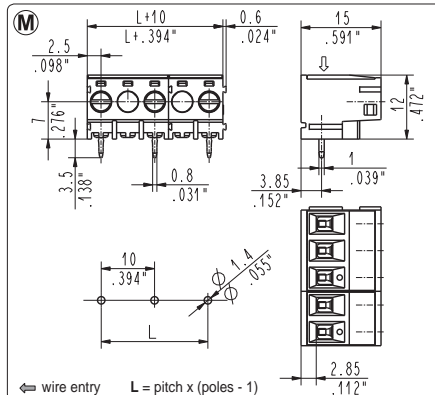
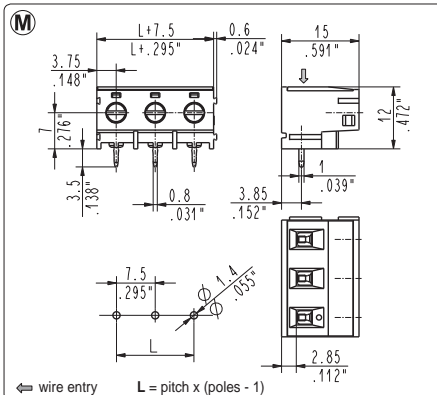
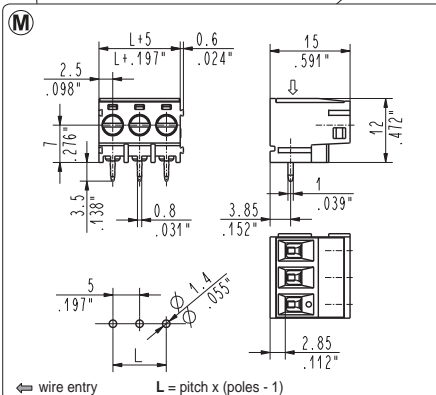


MSS_092 90°, modular

[illegible]

MSS_096 90°, modular

[illegible]



TERMINAL BLOCKS

MSS_TM1 90° "T" version, modular

5 mm / .197" pitch

Poles	Code	Pcs/pack.	W [kg]*	Pcs/Ind.**	W [kg]*
02	MSS02TM1	900	3,24	1500	5,40
03	MSS03TM1	600	3,24	1000	5,40
04	MSS04TM1	400	2,88	750	5,40
05	MSS05TM1	350	3,15	750	6,75
06	MSS06TM1	300	3,24	500	5,40
07	MSS07TM1	250	3,15	500	6,30
08	MSS08TM1	200	2,88	500	7,20
09	MSS09TM1	175	2,84	250	4,05
10	MSS10TM1	175	3,15	250	4,50
11	MSS11TM1	150	2,97	250	4,95
12	MSS12TM1	150	3,24	250	5,40

MSS_TM3 90° "T" version, modular

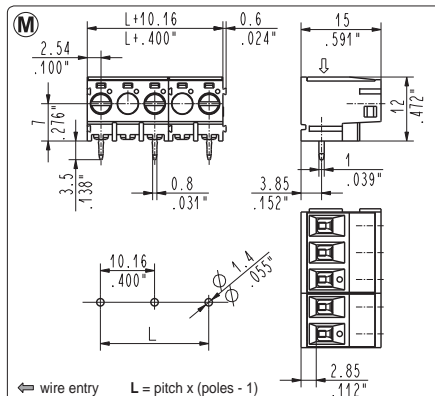
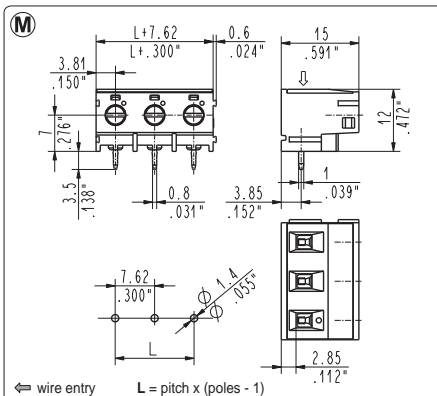
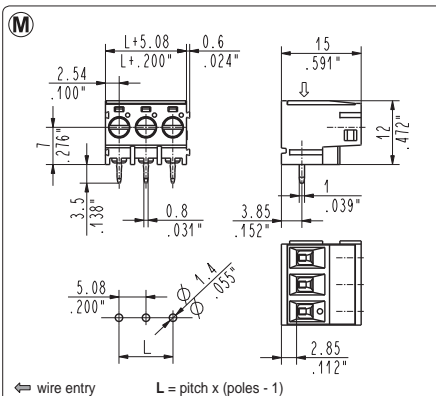
7.5 mm / .295" pitch

Poles	Code	Pcs/pack.	W [kg]*	Pcs/Ind.**	W [kg]*
02	MSS02TM3	300	1,26	1000	4,20
03	MSS03TM3	200	1,26	750	4,73

MSS_TM2 90° "T" version, modular

10 mm / .394" pitch

Poles	Code	Pcs/pack.	W [kg]*	Pcs/Ind.**	W [kg]*
01	MSS01TM2	450	0,95	1500	3,18
02	MSS02TM2	300	1,27	1000	4,24
03	MSS03TM2	175	1,11	750	4,77
04	MSS04TM2	125	1,06	500	4,24
05	MSS05TM2	100	1,06	250	2,65
06	MSS06TM2	75	0,95	250	3,18

**MSS_TM5 90° "T" version, modular**

5.08 mm / .200" pitch

Poles	Code	Pcs/pack.	W [kg]*	Pcs/Ind.**	W [kg]*
02	MSS02TM5	900	3,24	1500	5,40
03	MSS03TM5	600	3,24	1000	5,40

MSS_TM7 90° "T" version, modular

7.62 mm / .300" pitch

Poles	Code	Pcs/pack.	W [kg]*	Pcs/Ind.**	W [kg]*
02	MSS02TM7	300	1,26	1000	4,20
03	MSS03TM7	200	1,26	750	4,73

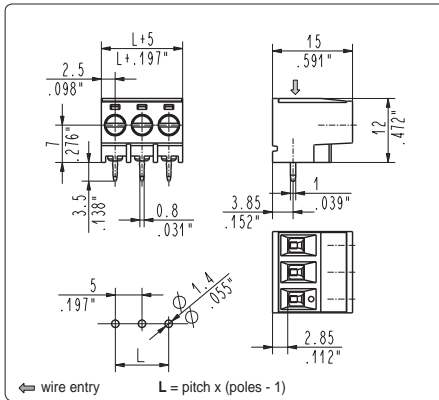
MSS_TM6 90° "T" version, modular

10.16 mm / .400" pitch

Poles	Code	Pcs/pack.	W [kg]*	Pcs/Ind.**	W [kg]*
01	MSS01TM6	450	0,95	1000	2,12
02	MSS02TM6	300	1,27	750	3,18

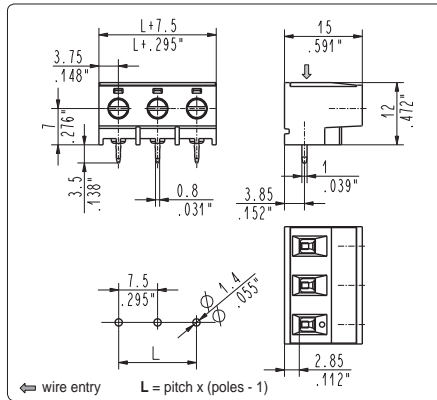
*W [kg]: approximate weight per box in kg

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

**MSS_TA1 90° "T" version, side stackable**

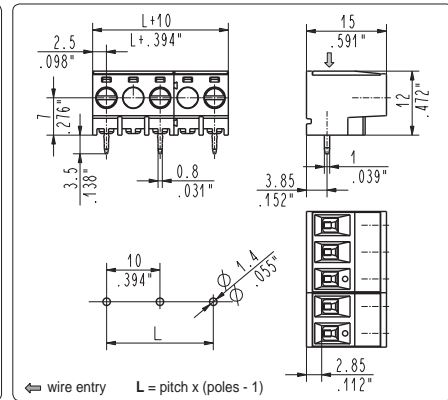
5 mm / .197" pitch

Poles	Code	Pcs/pack.	W [kg]*	Pcs/Ind.**	W [kg]*
02	MSS02TA1	900	3,24	1500	5,40
03	MSS03TA1	600	3,24	1000	5,40
04	MSS04TA1	400	2,88	750	5,40
05	MSS05TA1	350	3,15	750	6,75
06	MSS06TA1	300	3,24	500	5,40
07	MSS07TA1	250	3,15	500	6,30
08	MSS08TA1	200	2,88	500	7,20
09	MSS09TA1	175	2,84	250	4,05
10	MSS10TA1	175	3,15	250	4,50
11	MSS11TA1	150	2,97	250	4,95
12	MSS12TA1	150	3,24	250	5,40

**MSS_TA3 90° "T" version, side stackable**

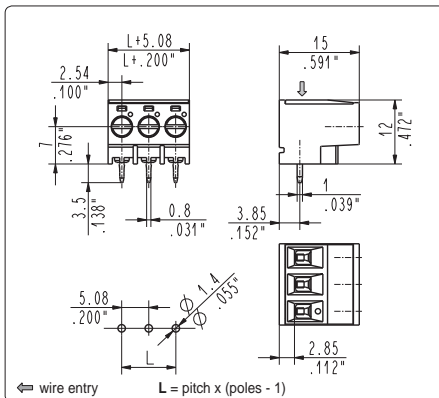
7.5 mm / .295" pitch

Poles	Code	Pcs/pack.	W [kg]*	Pcs/Ind.**	W [kg]*
02	MSS02TA3	300	1,26	1000	4,20
03	MSS03TA3	200	1,26	750	4,73

**MSS_TA2 90° "T" version, side stackable**

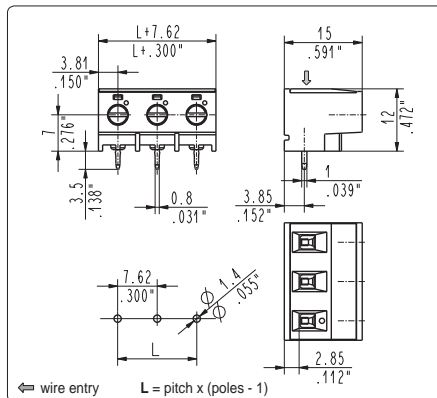
10 mm / .394" pitch

Poles	Code	Pcs/pack.	W [kg]*	Pcs/Ind.**	W [kg]*
02	MSS02TA2	300	1,27	1000	4,24
03	MSS03TA2	175	1,11	750	4,77
04	MSS04TA2	125	1,06	500	4,24
05	MSS05TA2	100	1,06	250	2,65
06	MSS06TA2	75	0,95	250	3,18

**MSS_TA5 90° "T" version, side stackable**

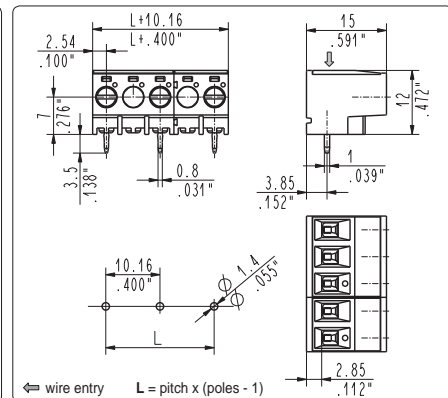
5.08 mm / .200" pitch

Poles	Code	Pcs/pack.	W [kg]*	Pcs/Ind.**	W [kg]*
02	MSS02TA5	900	3,24	1500	5,40
03	MSS03TA5	600	3,24	1000	5,40
04	MSS04TA5	400	2,88	750	5,40
05	MSS05TA5	350	3,15	750	6,75
06	MSS06TA5	300	3,24	500	5,40
07	MSS07TA5	250	3,15	500	6,30
08	MSS08TA5	200	2,88	500	7,20

**MSS_TA7 90° "T" version, side stackable**

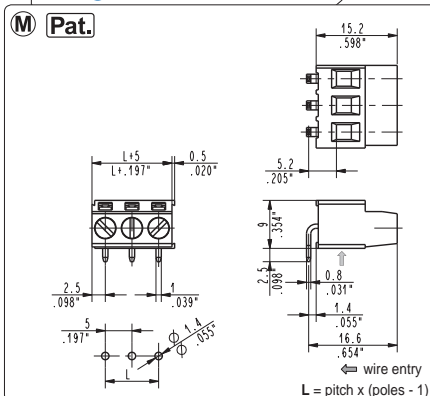
7.62 mm / .300" pitch

Poles	Code	Pcs/pack.	W [kg]*	Pcs/Ind.**	W [kg]*
02	MSS02TA7	300	1,26	1000	4,20
03	MSS03TA7	200	1,26	750	4,73

**MSS_TA6 90° "T" version, side stackable**

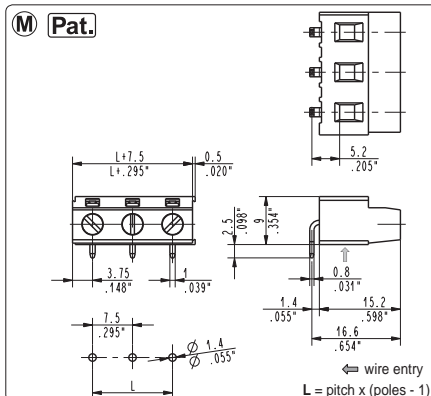
10.16 mm / .400" pitch

Poles	Code	Pcs/pack.	W [kg]*	Pcs/Ind.**	W [kg]*
02	MSS02TA6	500	2,12	1000	4,24
03	MSS03TA6	400	2,54	750	4,77
04	MSS04TA6	300	2,54	500	4,24

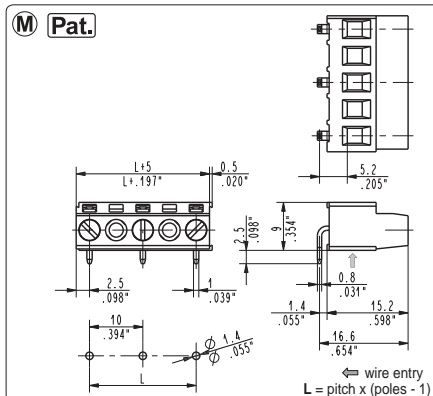


MSS_051 270° bottom entry, modular

5 mm / .197" pitch					
Poles	Code	Pcs/pack.	W [K]*	Pcs/Ind.**	W [K]**
02	MSS02051	900	2,90	2000	6,44
03	MSS03051	600	2,90	1750	8,45
04	MSS04051	400	2,58	1500	9,66
05	MSS05051	350	2,82	1000	8,05
06	MSS06051	300	2,90	750	7,25
07	MSS07051	250	2,82	750	8,45
08	MSS08051	200	2,58	750	9,66
09	MSS09051	175	2,54	500	7,25
10	MSS10051	175	2,82	500	8,05
11	MSS11051	150	2,66	500	8,86
12	MSS12051	150	2,90	500	9,66
13	MSS13051	75	1,57	500	10,47
14	MSS14051	75	1,69	250	5,64
15	MSS15051	75	1,81	250	6,04
16	MSS16051	75	1,93	250	6,44
17	MSS17051	75	2,05	250	6,84
18	MSS18051	75	2,17	250	7,25
19	MSS19051	50	1,53	250	7,65
20	MSS20051	50	1,61	250	8,05
21	MSS21051	50	1,69	250	8,45
22	MSS22051	50	1,77	250	8,86
23	MSS23051	50	1,85	250	9,26
24	MSS24051	50	1,93	250	9,66
25	MSS25051	50	2,01	250	10,06

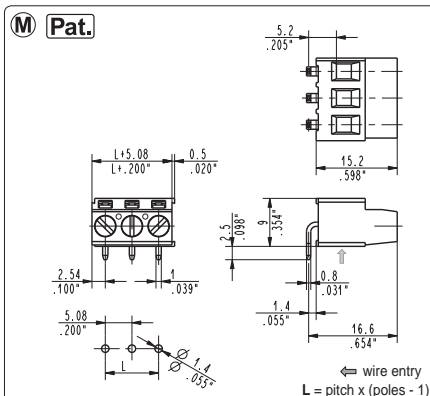


MSS_053 270° bottom entry, modular

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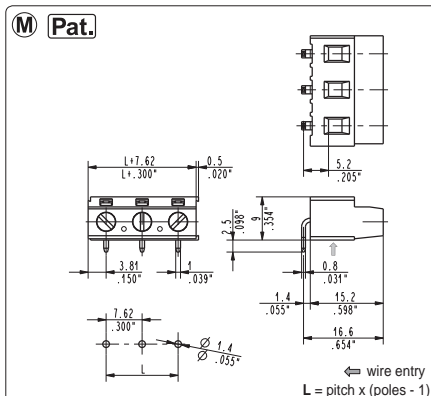
MSS_052 270° bottom entry, modular

Poles	Code	Pcs/pack.	W [kg]*	Pcs/Ind.**	W [kg]* ^a
01	MSS01052	450	0,82	2000	3,64
02	MSS02052	300	1,09	1750	6,37
03	MSS03052	175	0,96	1000	5,46
04	MSS04052	125	0,91	750	5,46
05	MSS05052	100	0,91	500	4,55
06	MSS06052	75	0,82	500	5,46
07	MSS07052	75	0,96	500	6,37
08	MSS08052	75	1,09	500	7,28
09	MSS09052	75	1,23	250	4,01
10	MSS10052	50	0,91	250	4,55
11	MSS11052	50	1,00	250	5,01
12	MSS12052	50	1,09	250	5,46
13	MSS13052	50	1,18	250	5,92

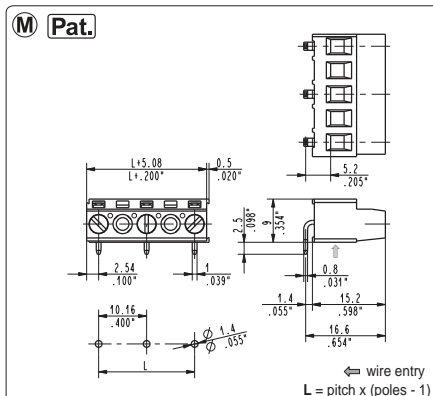


MSS__055 270° bottom entry, modular

5.08 mm / .200" pitch				
Poles	Code	Pcs/pack.	W [kg]*	Pcs/Ind.** W [kg]**
02	MSS02055	900	2,90	2000 6,44
03	MSS03055	600	2,90	1750 8,45
04	MSS04055	400	2,58	1500 9,66
05	MSS05055	350	2,82	1000 8,05
06	MSS06055	300	2,90	750 7,25
07	MSS07055	250	2,82	750 8,45
08	MSS08055	200	2,58	750 9,66
09	MSS09055	175	2,54	500 7,25
10	MSS10055	175	2,82	500 8,05
11	MSS11055	150	2,66	500 8,86
12	MSS12055	150	2,90	500 9,66
13	MSS13055	75	1,57	500 10,47
14	MSS14055	75	1,69	250 5,64
15	MSS15055	75	1,81	250 6,04
16	MSS16055	75	1,93	250 6,44
17	MSS17055	75	2,05	250 6,84
18	MSS18055	75	2,17	250 7,25
19	MSS19055	50	1,53	250 7,65
20	MSS20055	50	1,61	250 8,05
21	MSS21055	50	1,69	250 8,45
22	MSS22055	50	1,77	250 8,86
23	MSS23055	50	1,85	250 9,26
24	MSS24055	50	1,93	250 9,66
25	MSS25055	50	2,01	250 10,06



MSS__057 270° bottom entry, modular

[illegible]

MSS__056 270° bottom entry, modular

[illegible]

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

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