

MSP

Functional characteristics



Dimensional class:
high



Standard colour:
green



Height:
21.5 mm (.846 in)



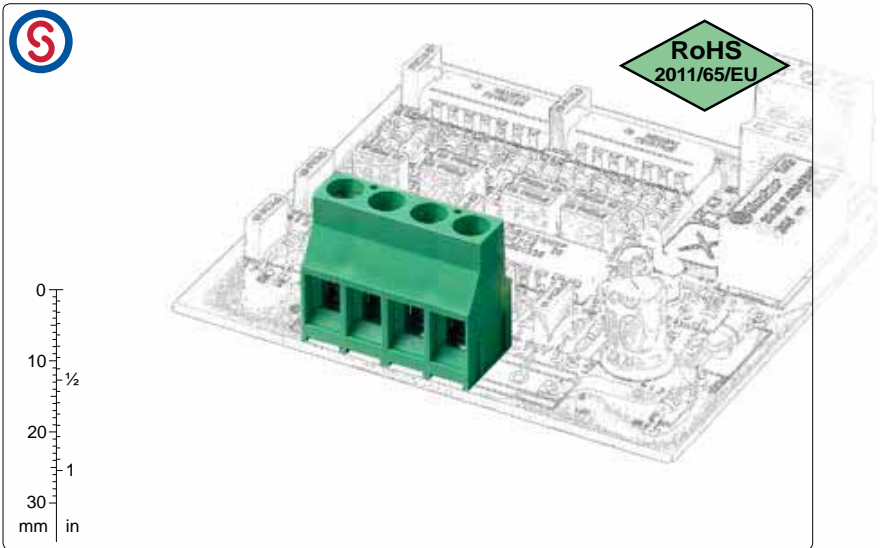
Max approved wire sections:
solid: 6 mm² (IMQ); 10 AWG (UL)
stranded: 4 mm² (IMQ); 10 AWG (UL)
Clamp opening size:
3.8 x 3.2 mm (.150 x .126 in)



Versions:
modular
Single mould poles:
from 2 to 5



Pitches:
imperial 6.35 mm, 7.62 mm, 9.52 mm, 12.7 mm
(.250 in, .300 in, .375 in, 0.500 in)



Brief description

With the **MSP** modular series terminal blocks for PCBs, wires up to 6 mm² (10 AWG) can be used and therefore a current range of 41A certified can be reached.

It is available in 6.35 mm (.250 in), 7.62 mm (.300 in), 9.52 mm (.375 in) and 12.7 mm (.500 in) Imperial pitches, in monolithic blocks from 2 to 12 poles, with insertion of the wire parallel, inclined at 35° or vertical with respect to the PCB.

All housings are modular, therefore it is possible to combine monolithic

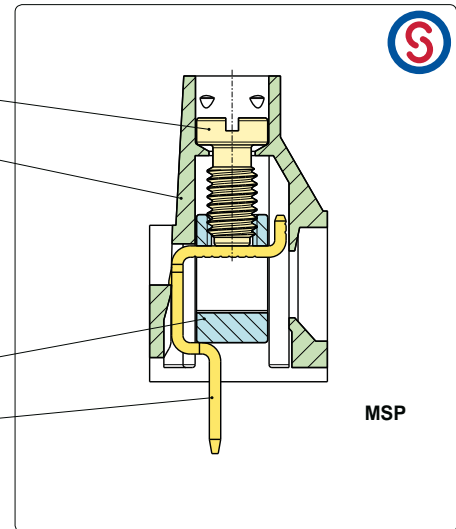
terminal blocks from 2 to 25 poles separately, or to combine basic terminal blocks until any number of poles is obtained. By making the most of this particular feature a minimum quantity of basic terminal blocks can be stored.

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



Components features

- M3.5 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 ≥ 600 V)
- Nickel plated copper alloy clamp
- Easy to solder lead-free tin-plated copper alloy pin.



Mechanical features

Recommended/highest tightening torque	0.8/1.0 Nm (7/8.85 lbf-in)
PCB thickness:	max. 4 mm (.157 in)
PCB hole diameter:	min. 1.3 mm (.051 in)
Stripping length	7÷8 mm (.28÷.31 in)
Operating temperature range	-40 °C ÷ +110 °C (-40 °F ÷ +230 °F)
Climatic category	40/110/21 according to EN 60068-1

Electrical features*

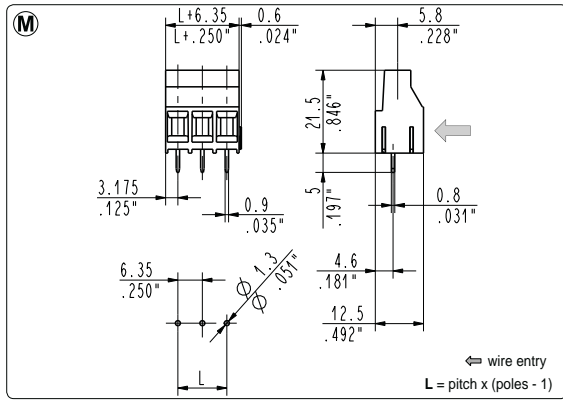
Solid wire section	30÷10 AWG (UL)* 0.05÷6 mm ² (IMQ)*
Stranded wire section	30÷10 AWG (UL)* 0.05÷4 mm ² (IMQ)*
Rated voltage for 6.35 mm (.250 in) and 7.62 mm (.300 in)	450 V (UL)*
Rated voltage for 9.52 mm (.375 in) and 12.7 mm (.500 in)	750 V (IMQ)*
Rated current	41 A (IMQ)*
Rated current for low rated version	24 A (UL)*
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:	450 V - T 110 - 41 A - 6 mm ² solid (32 A - 4 mm ² stranded) for 6.35 mm (.250 in) and 7.62 mm (.300 in) pitch
	EN 60998	750 V - T 110 - 41 A - 6 mm ² solid (32 A - 4 mm ² stranded) for 9.52 mm (.375 in) and 12.7 mm (.500 in) pitch
	UL:	300 V - 30 A (24 A for low rated current versions) - 30÷10 AWG - 7 lbf-in for 6.35 mm (.250 in) and 7.62mm (.300 in) pitch
	File E167473	600 V - 30 A (24 A for low rated current versions) - 30÷10 AWG - 7 lbf-in for 9.52 mm (.375 in) and 12.7 mm (.500 in) pitch Application values for end-use equipment have to be in accordance to UL norms and applicable to it.
	VDE:	450 V - 32 A - T 110 - 4 mm ² for 6.35 mm (.250 in) pitch
	File n. 40021758	750 V - 32 A - T 110 - 4 mm ² for 9.52 mm (.375 in) pitch
	IMQ:	450 V - T 110 - 41 A - 6 mm ² solid (32 A - 4 mm ² stranded) for 6.35 mm (.250 in) pitch
	File: CA02.00899	750 V - T 110 - 41 A - 6 mm ² solid (32 A - 4 mm ² stranded) for 9.52 mm (.375 in) pitch
	CSA:	300 V - 32 A - 30÷10 AWG for 6.35 mm (.250 in) pitch
	File LR102896	600 V - 32 A - 30÷10 AWG for 9.52 mm (.375 in) pitch

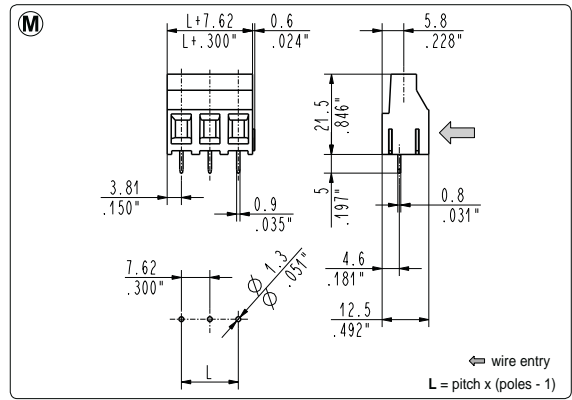
See also "Certifications", page 8



MSP_00S straight, modular

6.35 mm / .250" pitch

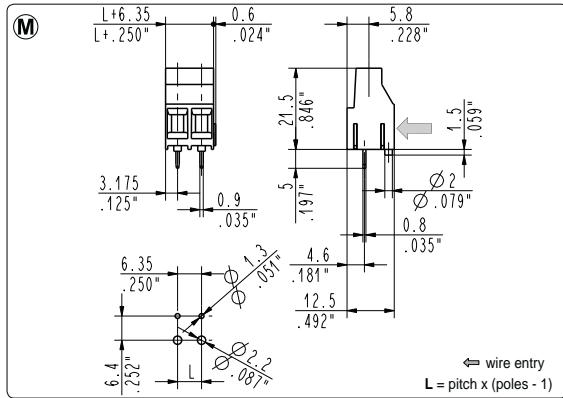
Poles	Code	Pcs/pack.	W [kg]*
02	MSP0200S	720	4,46
03	MSP0300S	480	4,46
04	MSP0400S	360	4,46
05	MSP0500S	280	4,34



MSP_007 straight, modular

7.62 mm / .300" pitch

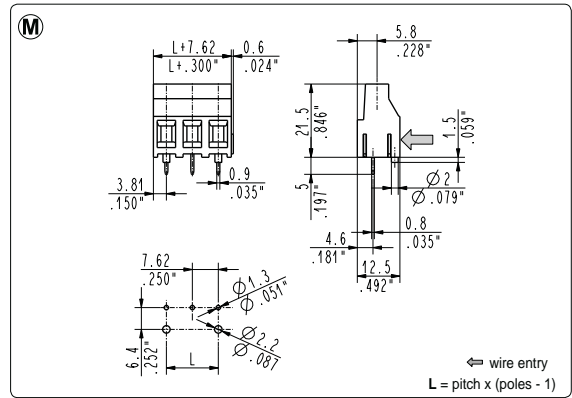
Poles	Code	Pcs/pack.	W [kg]*
02	MSP02007	600	3,90
03	MSP03007	400	3,90



MSP_00S-0000P straight, modular with VDE pegs

6.35 mm / .250" pitch

Poles	Code	Pcs/pack.	W [kg]*
02	MSP0200S-0000P	720	4,46
03	MSP0300S-0000P	480	4,46



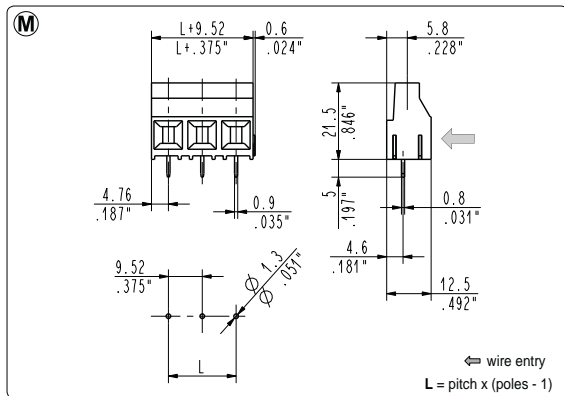
MSP_007-0000P straight, modular with VDE pegs

7.62 mm / .300" pitch

Poles	Code	Pcs/pack.	W [kg]*
02	MSP02007-0000P	600	3,90
03	MSP03007-0000P	400	3,90

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

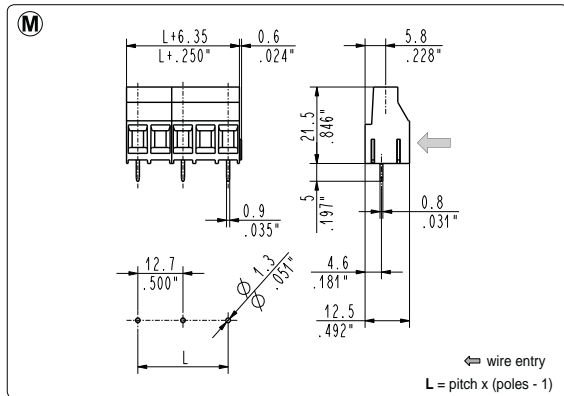
**industrial packaging: add "-00000E" at standard code



MSP_00N straight, modular

9.52 mm / .375" pitch

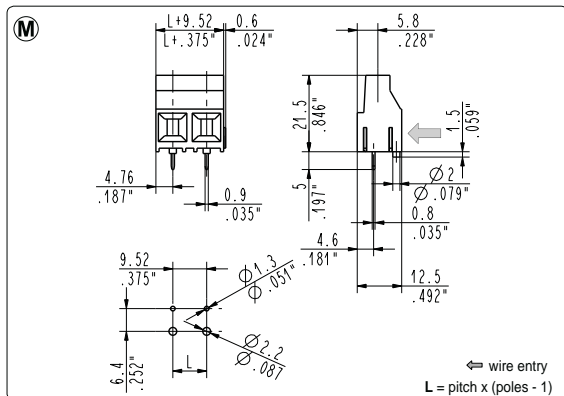
Poles	Code	Pcs./pack.	W [kg]*
02	MSP0200N	480	3,30
03	MSP0300N	320	3,30



MSP_00U straight, modular

12.7 mm / .500" pitch

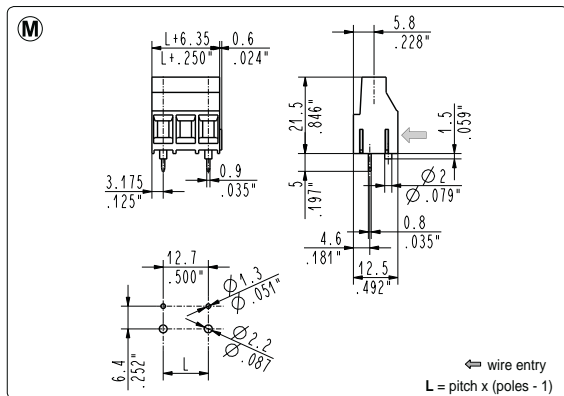
Poles	Code	Pcs./pack.	W [kg]*
01	MSP0100U	720	2,59
02	MSP0200U	480	3,46
03	MSP0300U	280	3,02



MSP_00N-0000P straight, modular with VDE pegs

9.52 mm / .375" pitch

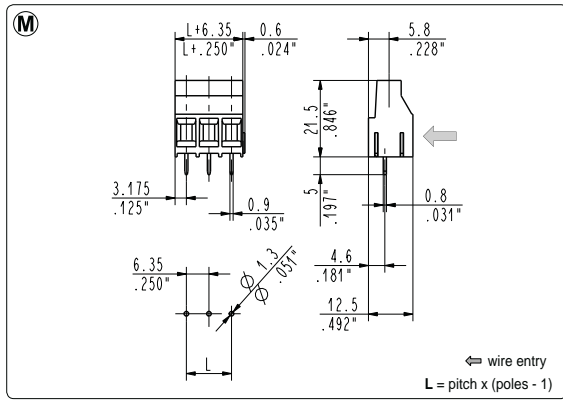
Poles	Code	Pcs./pack.	W [kg]*
02	MSP0200N-0000P	480	3,30
03	MSP0300N-0000P	320	3,30



MSP_00U-0000P straight, modular with VDE pegs

12.7 mm / .500" pitch

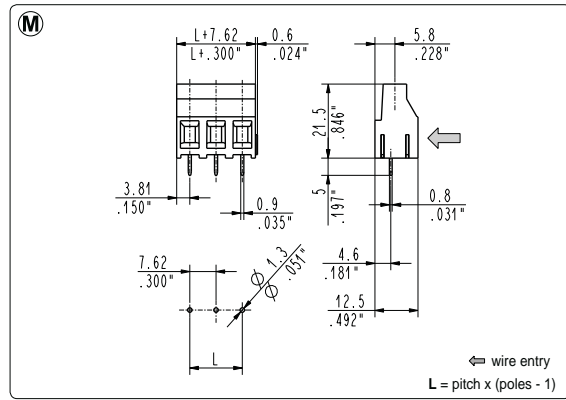
Poles	Code	Pcs./pack.	W [kg]*
02	MSP0200U-0000P	720	2,59
03	MSP0300U-0000P	480	3,46



MSP_00S-000E straight, modular, low ampere rating

6.35 mm / .250" pitch

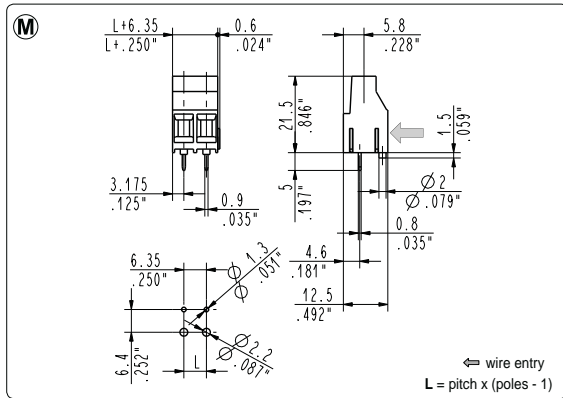
Poles	Code	Pcs/pack.	W [kg]*
02	MSP0200S-000E	720	4,46
03	MSP0300S-000E	480	4,46
04	MSP0400S-000E	360	4,46
05	MSP0500S-000E	280	4,34



MSP_007-000E straight, modular, low ampere rating

7.62 mm / .300" pitch

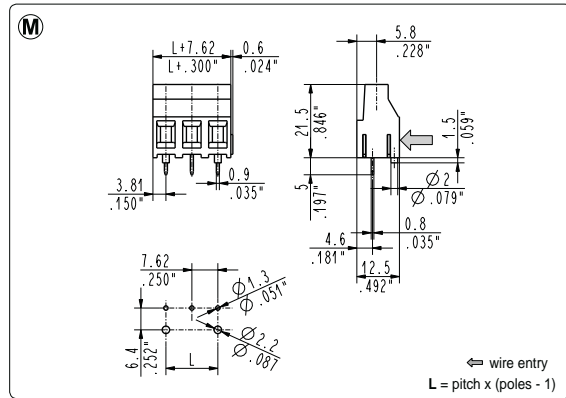
Poles	Code	Pcs/pack.	W [kg]*
02	MSP02007-000E	600	3,90
03	MSP03007-000E	400	3,90



MSP_00S-000EP straight, modular, low ampere rating with pegs

6.35 mm / .250" pitch

Poles	Code	Pcs/pack.	W [kg]*
02	MSP0200S-000EP	720	4,46
03	MSP0300S-000EP	480	4,46



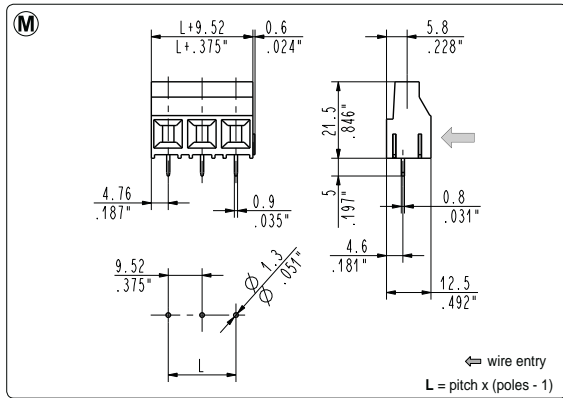
MSP_007-000EP straight, modular, low ampere rating with pegs

7.62 mm / .300" pitch

Poles	Code	Pcs/pack.	W [kg]*
02	MSP02007-000EP	600	3,90
03	MSP03007-000EP	400	3,90

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

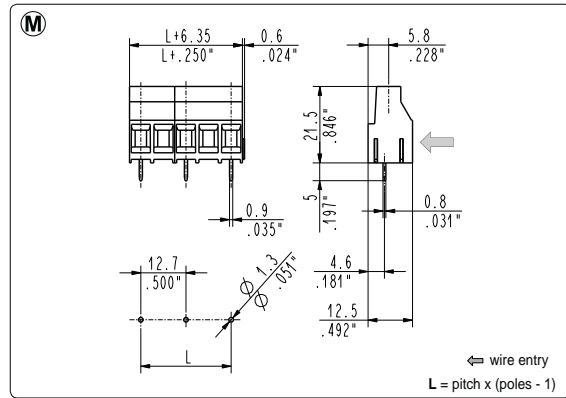
**industrial packaging: add "-00000E" at standard code



MSP_00N-000E straight, modular, low ampere rating

9.52 mm / .375" pitch

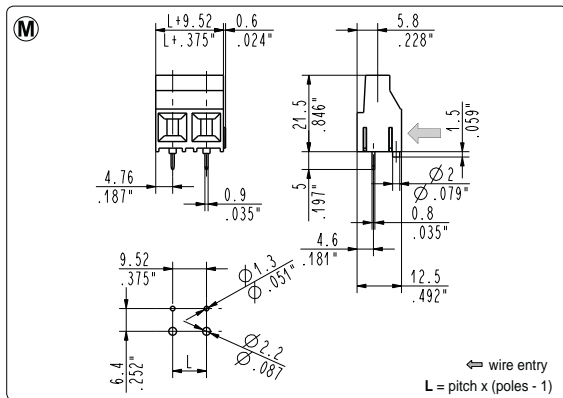
Poles	Code	Pcs/pack.	W [kg]*
02	MSP0200N-000E	480	3,30
03	MSP0300N-000E	320	3,30



MSP_00U-000E straight, modular, low ampere rating

12.7 mm / .500" pitch

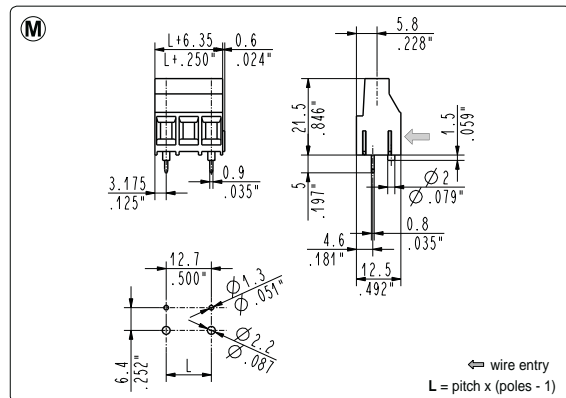
Poles	Code	Pcs/pack.	W [kg]*
01	MSP0100U-000E	720	2,59
02	MSP0200U-000E	480	3,46
03	MSP0300U-000E	280	3,02



MSP_00N-000EP straight, modular, low ampere rating with pegs

9.52 mm / .375" pitch

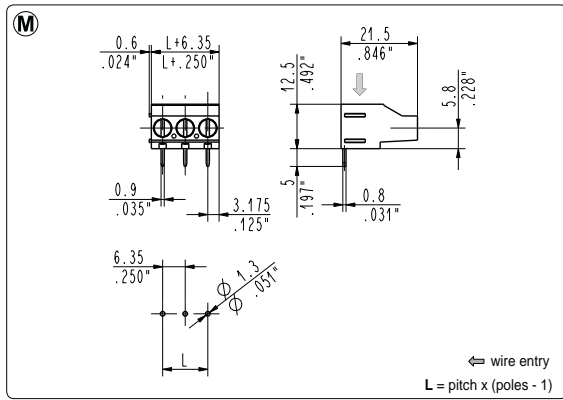
Poles	Code	Pcs/pack.	W [kg]*
02	MSP0200N-000EP	480	3,30
03	MSP0300N-000EP	320	3,30



MSP_00U-000EP straight, modular, low ampere rating with pegs

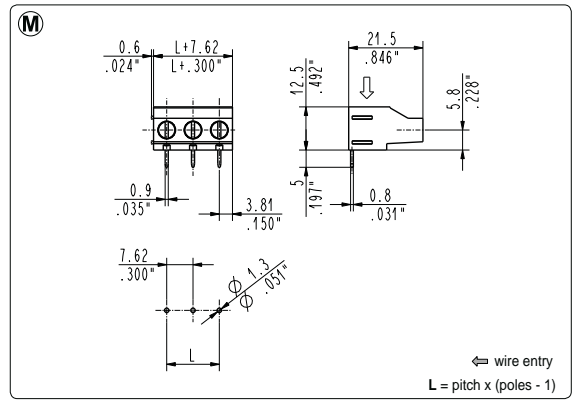
12.7 mm / .500" pitch

Poles	Code	Pcs/pack.	W [kg]*
02	MSP0200U-000EP	720	2,59
03	MSP0300U-000EP	480	3,46



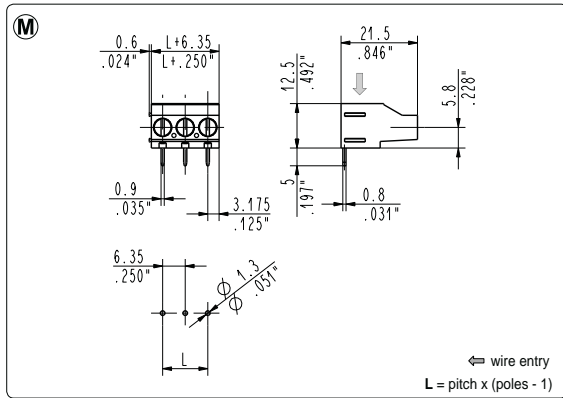
MSP_09S 90°, modular

6.35 mm / .250" pitch			
Poles	Code	Pcs/pack.	W [kg]*
02	MSP0209S	720	4,46
03	MSP0309S	480	4,46
04	MSP0409S	360	4,46
05	MSP0509S	280	4,34



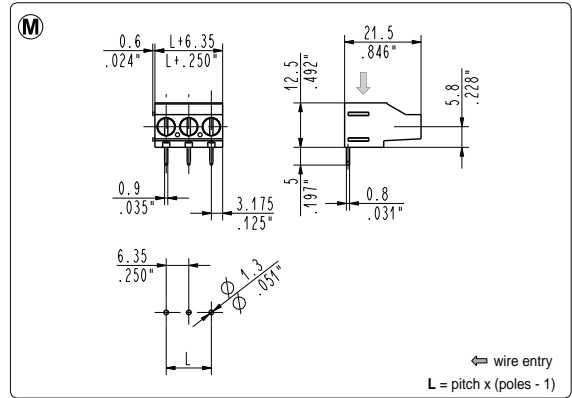
MSP_097 90°, modular

7.62 mm / .300" pitch			
Poles	Code	Pcs/pack.	W [kg]*
02	MSP02097	600	3,90
03	MSP03097	400	3,90



MSP_09S-000E 90°, low ampere rating, modular

6.35 mm / .250" pitch			
Poles	Code	Pcs/pack.	W [kg]*
02	MSP0209S-000E	720	4,46
03	MSP0309S-000E	480	4,46
04	MSP0409S-000E	360	4,46
05	MSP0509S-000E	280	4,34

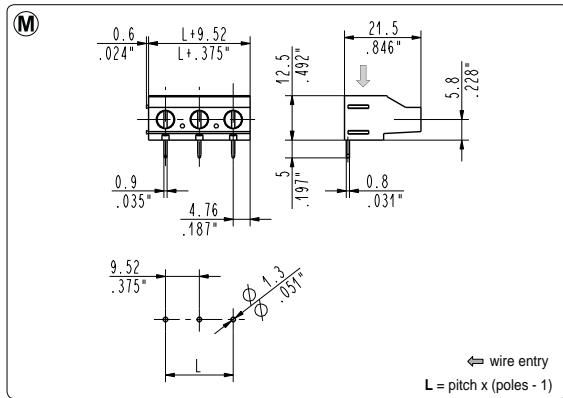


MSP_097-000E 90°, low ampere rating, modular

7.62 mm / .300" pitch			
Poles	Code	Pcs/pack.	W [kg]*
02	MSP02097-000E	600	3,90
03	MSP03097-000E	400	3,90

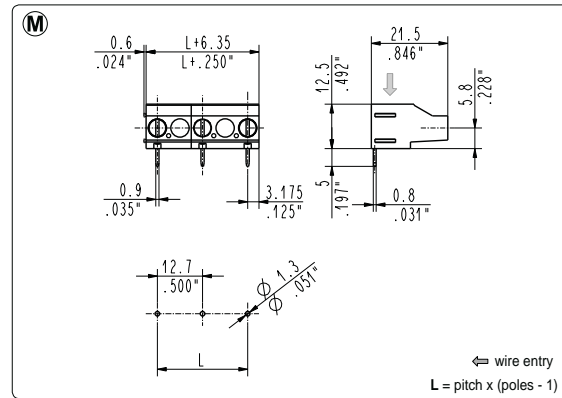
*W [kg]: approximate weight per box in kg

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



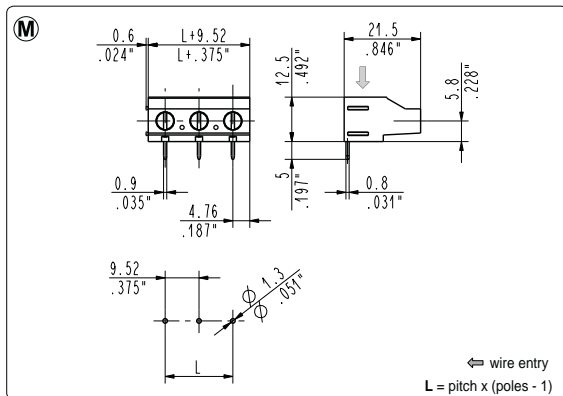
MSP_09N 90°, modular

9.52 mm / .375" pitch		Pcs/pack.	W [kg]*
Poles	Code		
02	MSP0209N	480	3,30
03	MSP0309N	320	3,30



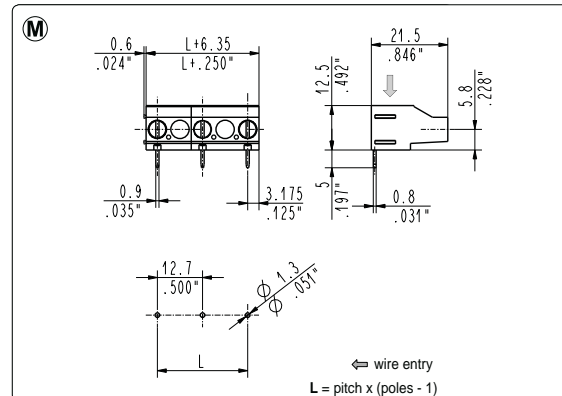
MSP_09U 90°, modular

12.7 mm / .500" pitch		Pcs/pack.	W [kg]*
Poles	Code		
01	MSP0109U	720	2,59
02	MSP0209U	480	3,46
03	MSP0309U	280	3,02



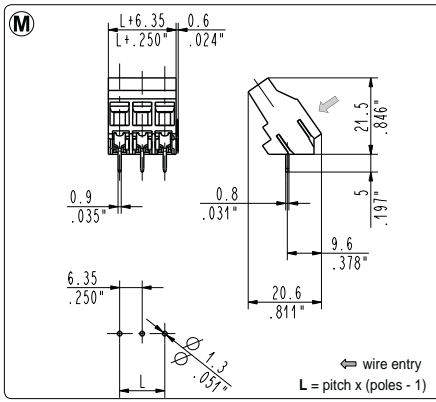
MSP_09N-000E 90°, low ampere rating, modular

9.52 mm / .375" pitch		Pcs/pack.	W [kg]*
Poles	Code		
02	MSP0209N-000E	480	3,30
03	MSP0309N-000E	320	3,30



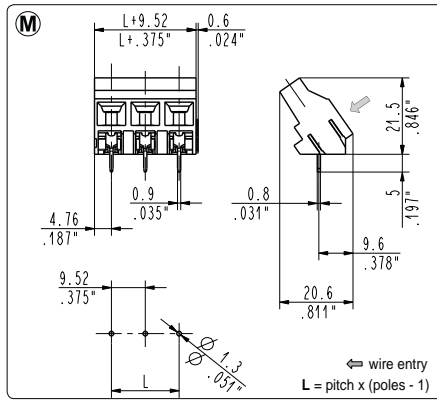
MSP_09U-000E 90°, low ampere rating, modular

12.7 mm / .500" pitch		Pcs/pack.	W [kg]*
Poles	Code		
01	MSP0109U-000E	720	2,59
02	MSP0209U-000E	480	3,46
03	MSP0309U-000E	280	3,02



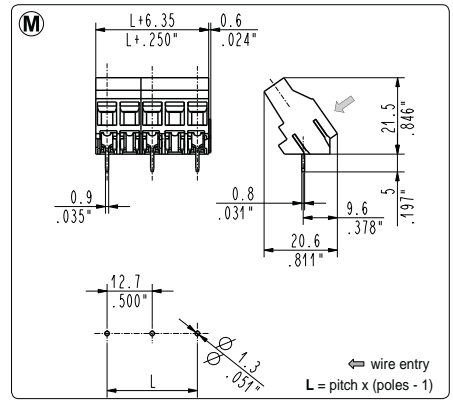
MSP_04S 35°, modular

6.35 mm / .250" pitch					
Poles	Code	Pcs/pack.	W [kg]*	Pcs/Ind.**	W [kg]*
02	MSP0204S	200	1,19	1000	5,94
03	MSP0304S	200	1,19	1000	5,94



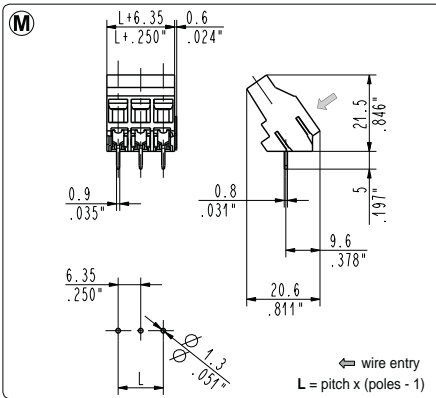
MSP_04N 35°, modular

9.52 mm / .375" pitch					
Poles	Code	Pcs/pack.	W [kg]*	Pcs/Ind.**	W [kg]*
02	MSP0204N	150	1,03	750	5,15
03	MSP0304N	100	1,03	500	5,15



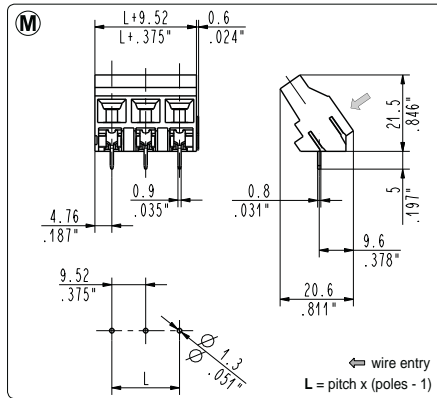
MSP_04U 35°, modular

12.7 mm / .500" pitch					
Poles	Code	Pcs/pack.	W [kg]*	Pcs/Ind.**	W [kg]*
01	MSP0104U	125	0,89	750	5,37
02	MSP0204U	75	0,81	500	5,37



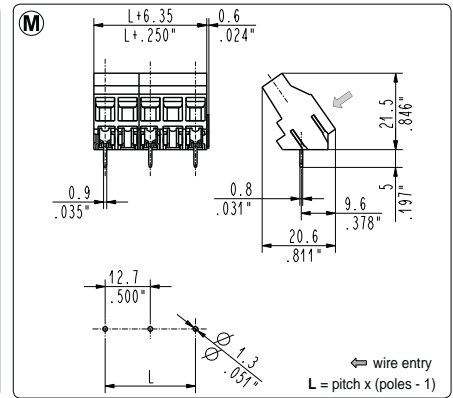
MSP_04S-000E 35°, modular, low ampere rating

6.35 mm / .250" pitch					
Poles	Code	Pcs/pack.	W [kg]*	Pcs/Ind.**	W [kg]*
02	MSP0204S-000E	200	1,19	1000	5,94
03	MSP0304S-000E	200	1,19	1000	5,94



MSP_04N-000E 35°, modular, low ampere rating

9.52 mm / .375" pitch					
Poles	Code	Pcs/pack.	W [kg]*	Pcs/Ind.**	W [kg]*
02	MSP0204N-000E	150	1,03	750	5,15
03	MSP0304N-000E	100	1,03	500	5,15



MSP_04U-000E 35°, modular, low ampere rating

12.7 mm / .500" pitch					
Poles	Code	Pcs/pack.	W [kg]*	Pcs/Ind.**	W [kg]*
01	MSP0104U-000E	125	0,89	750	5,37
02	MSP0204U-000E	75	0,81	500	5,37

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

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