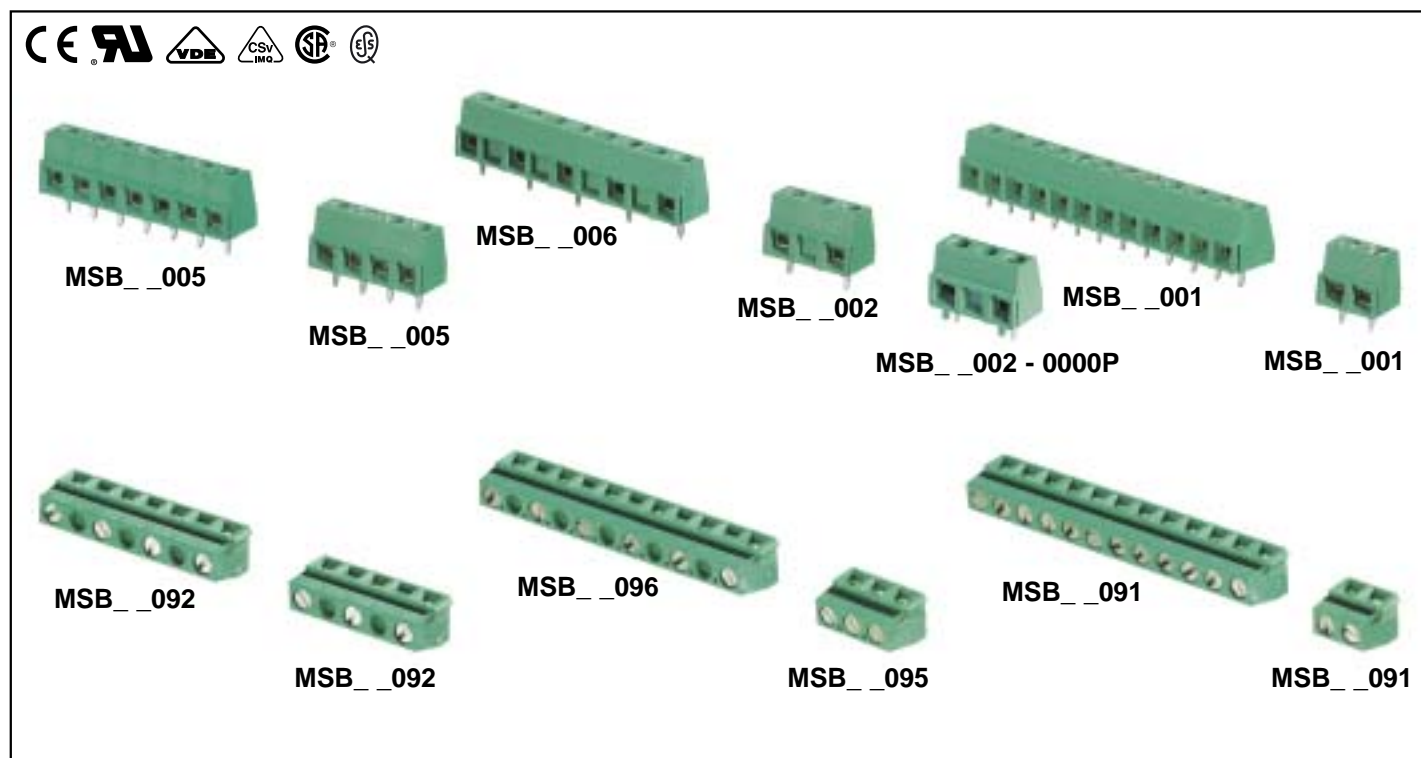




<b>Dimensional class:</b>	<b>LOW</b>
<b>Standard Color:</b>	<b>GREEN</b>
<b>Height:</b>	.394 in (10.0 mm) Straight - .323 in (8.2 mm) 90°
<b>Clamp Opening Size:</b>	.098 x .067 in (2.5 x 1.7 mm)
<b>Wire Diameter:</b>	max. .067 in (2.27 mm <sup>2</sup> )
<b>Versions:</b>	Modular with Dovetails
<b>Single Mold Poles:</b>	from 2 to 25
<b>Metric Pitches:</b>	.197 in (5 mm), .394 in (10 mm)
<b>Imperial Pitches:</b>	.200 in (5.08 mm), .400 in (10.16 mm)

<b>Classe Dimensionale:</b>	<b>BASSA</b>
<b>Colore Standard:</b>	<b>VERDE</b>
<b>Altezza:</b>	10,0 mm Diritto - 8,2 mm 90°
<b>Apertura Introduzione Filo:</b>	2,5 x 1,7 mm
<b>Diametro Filo Inseribile:</b>	max. 1,7 mm (2,27 mm <sup>2</sup> )
<b>Versioni:</b>	Modulare con incastro a coda di rondine
<b>Vie Monolitiche:</b>	da 2 a 25
<b>Passi Metrici:</b>	5 mm, 10 mm
<b>Passi in Pollici:</b>	5,08 mm, 10,16 mm



The modular MSB terminal block Series for printed circuit boards satisfies the user's mounting needs with the following possibilities:

- using individual single mold terminal blocks from 2 to 25 poles;
- combining single mold terminal blocks from 2 to 25 poles to obtain any number of poles; all MSB products, including single mold versions, have dovetail capabilities;
- minimizing the stock by storing only some base terminal blocks (ex. 2 - 3... 25 poles) to enable combinations as described above;
- being included in a custom Kit package to simplify the product management (part-numbers reduction), to minimize the stock, to improve the assembly and to reduce production errors.

**MSB with Pegs**

The Straight 2 poles MSB is also available with clamping pegs molded in the plastic housing to secure it to the board.

This solution increases the connector tightening torque and allows it to pass the most restrictive guidelines set by the international standards.

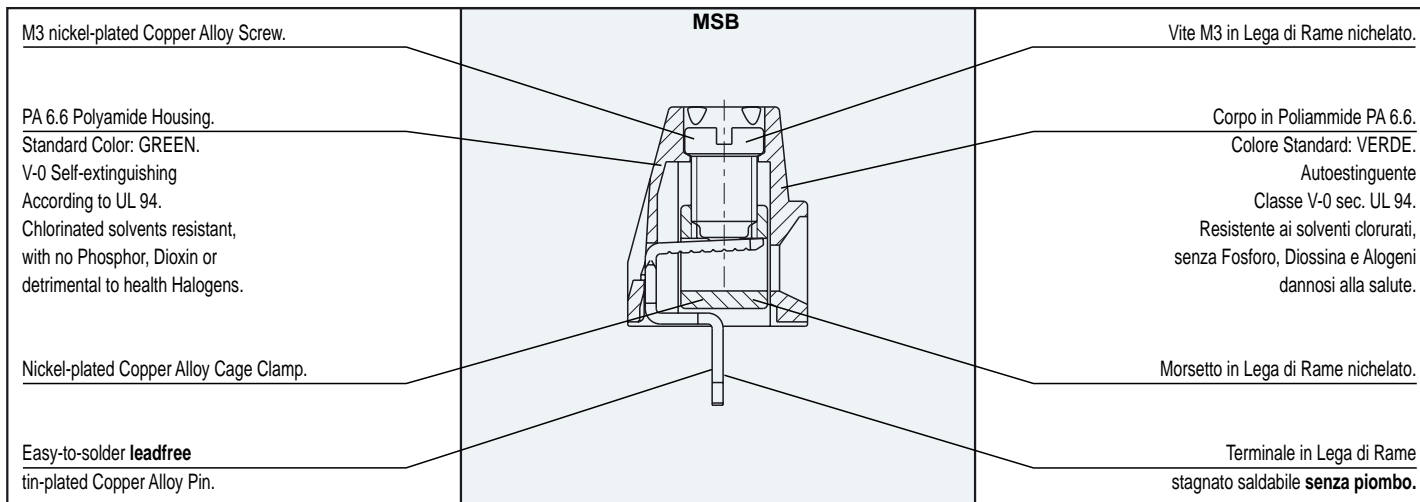
La morsettiere modulare Serie MSB per circuiti stampati soddisfa le esigenze di montaggio dell'utilizzatore; infatti è possibile:

- utilizzare singolarmente le morsettiere base monolitiche da 2 a 25 vie;
- comporre le morsettiere base monolitiche da 2 a 25 vie per ottenere qualsiasi numero di vie;
- gestire uno stoccaggio minimo di morsettiere base (es. 2 - 3... 25 vie) per ottenere quanto sopra;
- utilizzare le confezioni Kit che permettono una semplificazione della gestione del prodotto (riduzione dei part-number), del magazzino, dell'assemblaggio, nonché una riduzione dei rischi d'errore.

**MSB con Piolini**

La morsettiere MSB 2 vie Diritta è disponibile anche con piolini di ancoraggio a scheda, integrati nel corpo plastico.

Questa soluzione consente di scaricare la coppia di serraggio a scheda e di superare le prescrizioni più restrittive richieste da alcune normative internazionali.



### Mechanical Characteristics

Recommended tightening torque:	0.67 Nm (UL)*
PCB thickness:	max. .094 in (max. 2.4 mm)
PCB hole diameter:	min. .043 in (min. 1.1 mm)
Stripping length:	.20 ÷ .24 in (5 ÷ 6 mm)
Operating temperature range:	-40 °F ÷ +230 °F (-40 °C ÷ +110 °C)
Climatic category:	40/110/21 According to IEC 68-1

### Electrical Characteristics

Solid wire section:	30÷15 AWG - 0.05÷1.5 mm <sup>2</sup> (UL, CSA)*
Stranded wire section:	30÷15 AWG - 0.05÷1 mm <sup>2</sup> (UL, CSA)*
Rated voltage:	.197 in (5 mm) and .200 in (5.08 mm) pitch 300 V (UL, CSA)* .394 in (10 mm) and .400 in (10.16 mm) pitch 750 V (IMQ)*
Rated current:	17.5 A (IMQ)*
Contact resistance:	<15 mΩ
Insulation resistance:	>10 <sup>9</sup> Ω (500V DC)

\*All the a.m. 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.

### Caratteristiche Meccaniche

Coppia di serraggio consigliata:	0,67 Nm (UL)*
Spessore circuito stampato:	max. 2,4 mm
Diametro fori circuito stampato:	min. 1,1 mm
Lunghezza di spellatura:	5 ÷ 6 mm
Temperature di funzionamento:	-40 °C ÷ +110 °C
Categoria climatica:	40/110/21 Secondo IEC 68-1

### Caratteristiche Elettriche

Conduttore connettibile rigido:	0,05÷1,5 mm <sup>2</sup> - 30÷15 AWG (UL, CSA)*
Conduttore connettibile flessibile:	0,05÷1 mm <sup>2</sup> - 30÷15 AWG (UL, CSA)*
Tensione nominale:	passo 5 mm e 5,08 mm 300 V (UL, CSA)* passo 10 mm e 10,16 mm 750 V (IMQ)*
Corrente nominale:	17,5 A (IMQ)*
Resistenza di contatto:	<15 mΩ
Resistenza di isolamento:	>10 <sup>9</sup> Ω (500V CC)

\*Per ogni caratteristica, i dati riportati si riferiscono ai massimi valori fra quelli certificati ( ). I valori di tensione **V** corrente **I** e, coppia di serraggio sono legati alle norme applicabili al prodotto ed al tipo di utilizzo.

### Approvals

(see also "Certifications", page 22)

**VDE:** **Reg. N. 5659 ÜG**  
250 V - 13.5 A - T 110 - 1 mm<sup>2</sup> for 5 mm and 5.08 mm pitch  
750 V - 13.5 A - T 110 - 1 mm<sup>2</sup> for 10 mm and 10.16 mm pitch

**IMQ:** **Certificate with Surveillance IMQ CSv EC318**  
**ESS:** 250 V - T 110 - 17.5 A - 1.5 mm<sup>2</sup> solid (13.5 A - 1 mm<sup>2</sup> stranded) for 5 mm and 5.08 mm pitch  
750 V - T 110 - 17.5 A - 1.5 mm<sup>2</sup> solid (13.5 A - 1 mm<sup>2</sup> stranded) for 10 mm and 10.16 mm pitch

**CSA:** **File LR 102896-1**  
300 V - 13.5 A - 30÷15 AWG for 5 mm and 5.08 mm pitch  
600 V - 13.5 A - 30÷15 AWG for 10 mm and 10.16 mm pitch

**UL:** **File E 167473**  
300 V - 13.5 A (Factory Wiring), 10 A (Field Wiring) - 30÷16 AWG for 5 mm and 5.08 mm pitch  
600 V - 13.5 A (Factory Wiring), 10 A (Field Wiring) - 30÷16 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 it.

### Certificazioni

(vedi anche "Certificazioni", pag. 22)

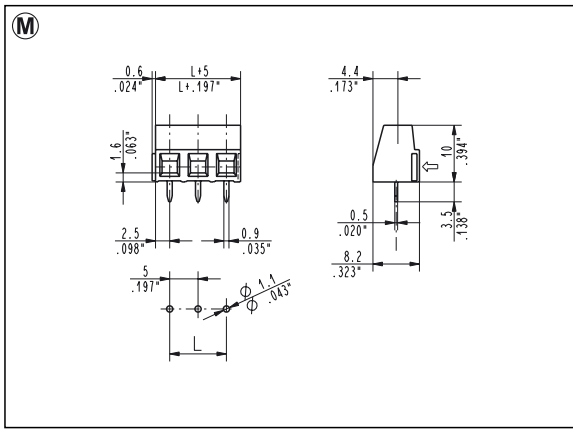


**VDE:** **Reg. N. 5659 ÜG**  
250 V - 13,5 A - T 110 - 1 mm<sup>2</sup> per passo 5 mm e 5,08 mm  
750 V - 13,5 A - T 110 - 1 mm<sup>2</sup> per passo 10 mm e 10,16 mm

**IMQ:** **Certificato con Sorveglianza IMQ CSv EC318**  
**ESS:** 250 V - T 110 - 17,5 A - 1,5 mm<sup>2</sup> rigido (13,5 A - 1 mm<sup>2</sup> flessibile) per passo 5 mm e 5,08 mm  
750 V - T 110 - 17,5 A - 1,5 mm<sup>2</sup> rigido (13,5 A - 1 mm<sup>2</sup> flessibile) per passo 10 mm e 10,16 mm

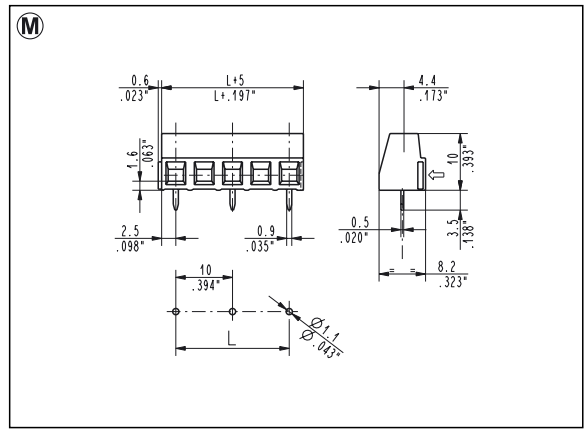
**CSA:** **File LR 102896-1**  
300 V - 13,5 A - 30÷15 AWG per passo 5 mm e 5,08 mm  
600 V - 13,5 A - 30÷15 AWG per passo 10 mm e 10,16 mm

**UL:** **File E 167473**  
300 V - 13,5 A (Factory Wiring), 10 A (Field Wiring) - 30÷16 AWG per passo 5 mm e 5,08 mm  
600 V - 13,5 A (Factory Wiring), 10 A (Field Wiring) - 30÷16 AWG per passo 10 mm e 10,16 mm  
I valori di utilizzo per l'apparecchiatura finale devono essere conformi alle norme UL ad essa applicabili.



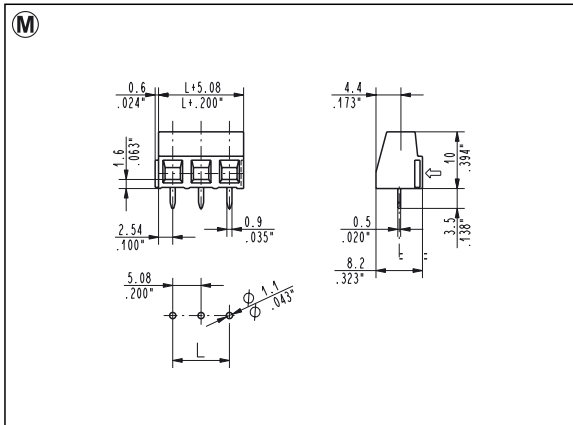
**MSB\_001** Straight, Side Entry  
5 mm / .197" Pitch Weight per pole: 0.89 g

Poles	STD Code	L [mm]	L [inch]	Pcs/pack.	W [kg]
02	MSB02001	5.00	0.197	800	1.43
03	MSB03001	10.00	0.394	500	1.34
04	MSB04001	15.00	0.591	400	1.43
05	MSB05001	20.00	0.787	300	1.34
06	MSB06001	25.00	0.984	250	1.34
07	MSB07001	30.00	1.181	200	1.25
08	MSB08001	35.00	1.378	175	1.25
09	MSB09001	40.00	1.575	150	1.21
10	MSB10001	45.00	1.772	125	1.12
11	MSB11001	50.00	1.969	125	1.23
12	MSB12001	55.00	2.165	100	1.07
13	MSB13001	60.00	2.362	100	1.16
14	MSB14001	65.00	2.559	100	1.25
15	MSB15001	70.00	2.756	100	1.34
16	MSB16001	75.00	2.953	100	1.43
17	MSB17001	80.00	3.150	100	1.52
18	MSB18001	85.00	3.346	100	1.61
19	MSB19001	90.00	3.543	100	1.70
20	MSB20001	95.00	3.740	100	1.79
21	MSB21001	100.00	3.937	100	1.88
22	MSB22001	105.00	4.134	100	1.97
23	MSB23001	110.00	4.331	100	2.06
24	MSB24001	115.00	4.528	100	2.15
25	MSB25001	120.00	4.724	75	1.68



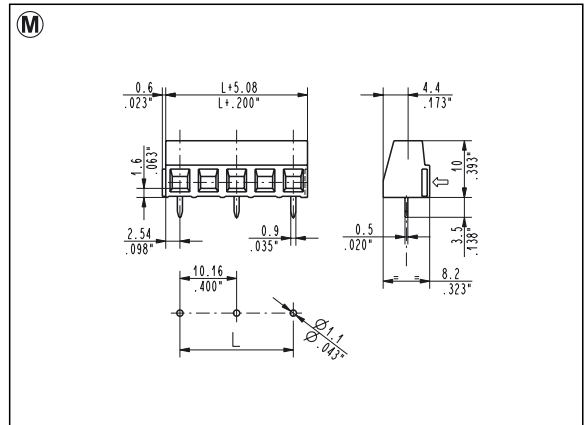
**MSB\_002** Straight, Side Entry  
10 mm / .394" Pitch Weight per pole: 1.02 g

Poles	STD Code	L [mm]	L [inch]	Pcs/pack.	W [kg]
02	MSB02002	10.00	0.394	500	1.02
03	MSB03002	20.00	0.787	300	0.92
04	MSB04002	30.00	1.181	200	0.82
05	MSB05002	40.00	1.575	150	0.76
06	MSB06002	50.00	1.969	125	0.76
07	MSB07002	60.00	2.362	100	0.71
08	MSB08002	70.00	2.756	100	0.82
09	MSB09002	80.00	3.150	100	0.92
10	MSB10002	90.00	3.543	100	1.02
11	MSB11002	100.00	3.937	100	1.12
12	MSB12002	110.00	4.331	100	1.22
13	MSB13002	120.00	4.724	75	0.99



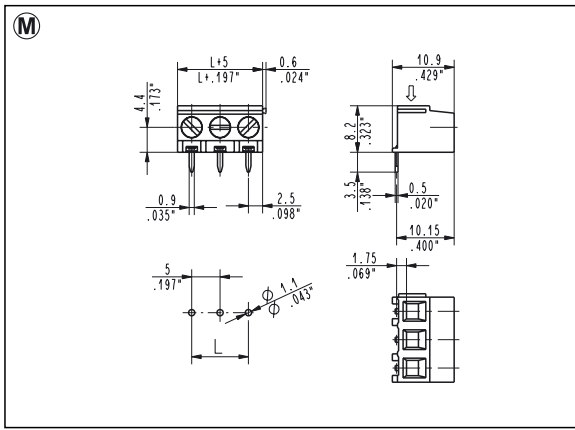
**MSB\_005** Straight, Side Entry  
5.08 mm / .200" Pitch Weight per pole: 0.89 g

Poles	STD Code	L [mm]	L [inch]	Pcs/pack.	W [kg]
02	MSB02005	5.08	0.200	800	1.43
03	MSB03005	10.16	0.400	500	1.34
04	MSB04005	15.24	0.600	400	1.43
05	MSB05005	20.32	0.800	300	1.34
06	MSB06005	25.40	1.000	250	1.34
07	MSB07005	30.48	1.200	200	1.25
08	MSB08005	35.56	1.400	175	1.25
09	MSB09005	40.64	1.600	150	1.21
10	MSB10005	45.72	1.800	125	1.12
11	MSB11005	50.80	2.000	125	1.23
12	MSB12005	55.88	2.200	100	1.07
13	MSB13005	60.96	2.400	100	1.16
14	MSB14005	66.04	2.600	100	1.25
15	MSB15005	71.12	2.800	100	1.34
16	MSB16005	76.20	3.000	100	1.43
17	MSB17005	81.28	3.200	100	1.52
18	MSB18005	86.36	3.400	100	1.61
19	MSB19005	91.44	3.600	100	1.70
20	MSB20005	96.52	3.800	100	1.79
21	MSB21005	101.60	4.000	100	1.88
22	MSB22005	106.68	4.200	100	1.97
23	MSB23005	111.76	4.400	100	2.06
24	MSB24005	116.84	4.600	100	2.15
25	MSB25005	121.92	4.800	75	1.68



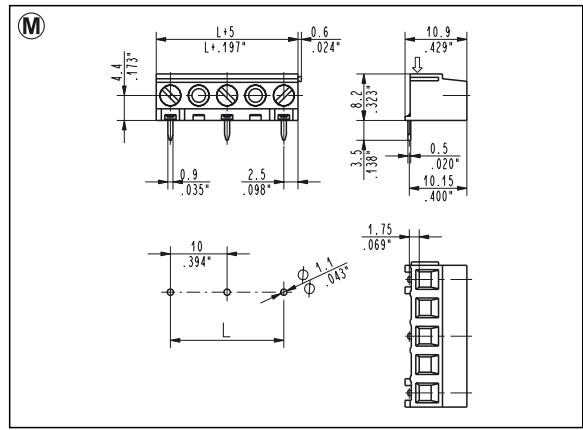
**MSB\_006** Straight, Side Entry  
10.16 mm / .400" Pitch Weight per pole: 1.02 g

Poles	STD Code	L [mm]	L [inch]	Pcs/pack.	W [kg]
02	MSB02006	10.16	0.400	500	1.02
03	MSB03006	20.32	0.800	300	0.92
04	MSB04006	30.48	1.200	200	0.82
05	MSB05006	40.64	1.600	150	0.76
06	MSB06006	50.80	2.000	125	0.76
07	MSB07006	60.96	2.400	100	0.71
08	MSB08006	71.12	2.800	100	0.82
09	MSB09006	81.28	3.200	100	0.92
10	MSB10006	91.44	3.600	100	1.02
11	MSB11006	101.60	4.000	100	1.12
12	MSB12006	111.76	4.400	100	1.22
13	MSB13006	121.92	4.800	75	0.99



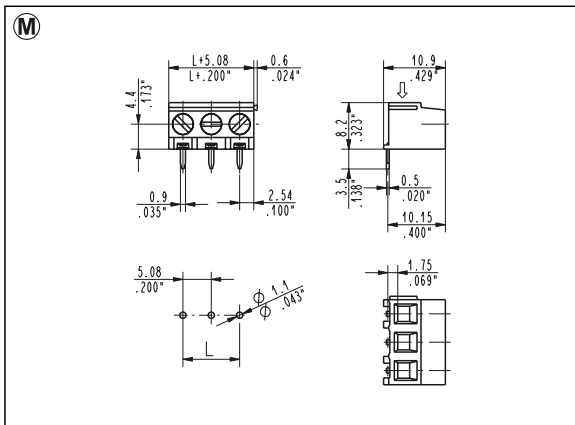
**MSB\_091** 90°, Top Entry  
5 mm / .197" Pitch Weight per pole: 0.89 g

Poles	STD Code	L [mm]	L [inch]	Pcs/pack.	W [kg]
02	MSB02091	5.00	0.197	800	1.43
03	MSB03091	10.00	0.394	500	1.34
04	MSB04091	15.00	0.591	400	1.43
05	MSB05091	20.00	0.787	300	1.34
06	MSB06091	25.00	0.984	250	1.34
07	MSB07091	30.00	1.181	200	1.25
08	MSB08091	35.00	1.378	175	1.25
09	MSB09091	40.00	1.575	150	1.21
10	MSB10091	45.00	1.772	125	1.12
11	MSB11091	50.00	1.969	125	1.23
12	MSB12091	55.00	2.165	100	1.07
13	MSB13091	60.00	2.362	100	1.16
14	MSB14091	65.00	2.559	100	1.25
15	MSB15091	70.00	2.756	100	1.34
16	MSB16091	75.00	2.953	100	1.43
17	MSB17091	80.00	3.150	100	1.52
18	MSB18091	85.00	3.346	100	1.61
19	MSB19091	90.00	3.543	100	1.70
20	MSB20091	95.00	3.740	100	1.79
21	MSB21091	100.00	3.937	100	1.88
22	MSB22091	105.00	4.134	100	1.97
23	MSB23091	110.00	4.331	100	2.06
24	MSB24091	115.00	4.528	100	2.15
25	MSB25091	120.00	4.724	75	1.68



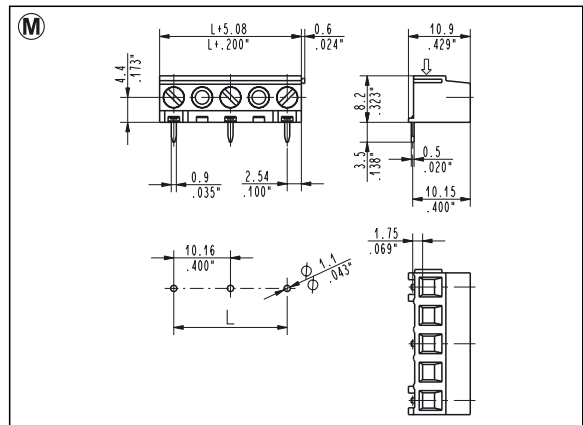
**MSB\_092** 90°, Top Entry  
10 mm / .394" Pitch Weight per pole: 1.02 g

Poles	STD Code	L [mm]	L [inch]	Pcs/pack.	W [kg]
02	MSB02092	10.00	0.394	500	1.02
03	MSB03092	20.00	0.787	300	0.92
04	MSB04092	30.00	1.181	200	0.82
05	MSB05092	40.00	1.575	150	0.76
06	MSB06092	50.00	1.969	125	0.76
07	MSB07092	60.00	2.362	100	0.71
08	MSB08092	70.00	2.756	100	0.82
09	MSB09092	80.00	3.150	100	0.92
10	MSB10092	90.00	3.543	100	1.02
11	MSB11092	100.00	3.937	100	1.12
12	MSB12092	110.00	4.331	100	1.22
13	MSB13092	120.00	4.724	75	0.99



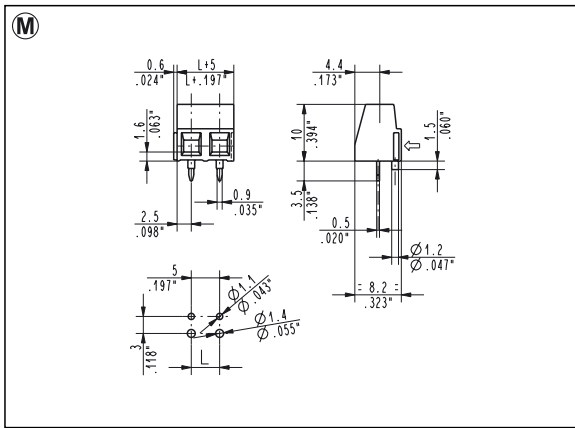
**MSB\_095** 90°, Top Entry  
5.08 mm / .200" Pitch Weight per pole: 0.89 g

Poles	STD Code	L [mm]	L [inch]	Pcs/pack.	W [kg]
02	MSB02095	5.08	0.200	800	1.43
03	MSB03095	10.16	0.400	500	1.34
04	MSB04095	15.24	0.600	400	1.43
05	MSB05095	20.32	0.800	300	1.34
06	MSB06095	25.40	1.000	250	1.34
07	MSB07095	30.48	1.200	200	1.25
08	MSB08095	35.56	1.400	175	1.25
09	MSB09095	40.64	1.600	150	1.21
10	MSB10095	45.72	1.800	125	1.12
11	MSB11095	50.80	2.000	125	1.23
12	MSB12095	55.88	2.200	100	1.07
13	MSB13095	60.96	2.400	100	1.16
14	MSB14095	66.04	2.600	100	1.25
15	MSB15095	71.12	2.800	100	1.34
16	MSB16095	76.20	3.000	100	1.43
17	MSB17095	81.28	3.200	100	1.52
18	MSB18095	86.36	3.400	100	1.61
19	MSB19095	91.44	3.600	100	1.70
20	MSB20095	96.52	3.800	100	1.79
21	MSB21095	101.60	4.000	100	1.88
22	MSB22095	106.68	4.200	100	1.97
23	MSB23095	111.76	4.400	100	2.06
24	MSB24095	116.84	4.600	100	2.15
25	MSB25095	121.92	4.800	75	1.68



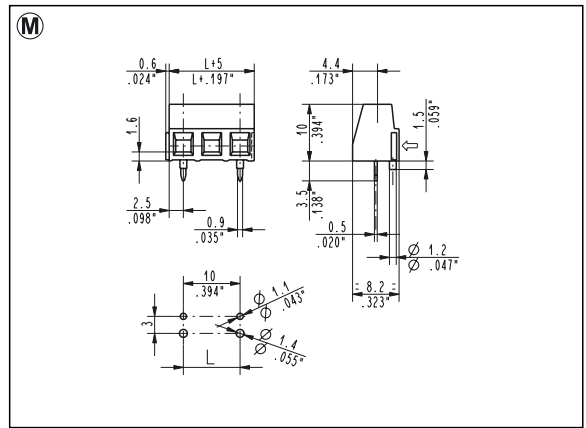
**MSB\_096** 90°, Top Entry  
10.16 mm / .400" Pitch Weight per pole: 1.02 g

Poles	STD Code	L [mm]	L [inch]	Pcs/pack.	W [kg]
02	MSB02096	10.16	0.400	500	1.02
03	MSB03096	20.32	0.800	300	0.92
04	MSB04096	30.48	1.200	200	0.82
05	MSB05096	40.64	1.600	150	0.76
06	MSB06096	50.80	2.000	125	0.76
07	MSB07096	60.96	2.400	100	0.71
08	MSB08096	71.12	2.800	100	0.82
09	MSB09096	81.28	3.200	100	0.92
10	MSB10096	91.44	3.600	100	1.02
11	MSB11096	101.60	4.000	100	1.12
12	MSB12096	111.76	4.400	100	1.22
13	MSB13096	121.92	4.800	75	0.99



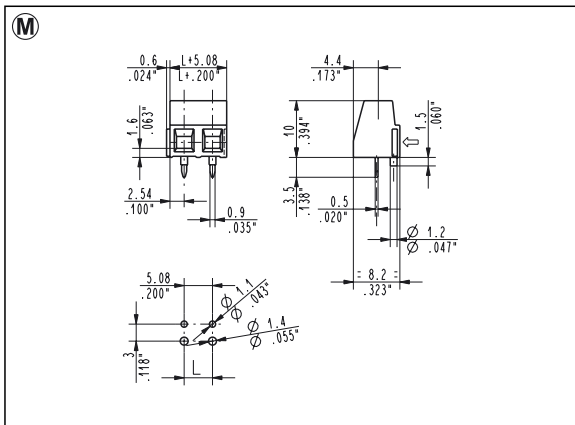
**MSB02001 - 0000P Straight with Vde Pegs, Side Entry**  
**5 mm / .197" Pitch Weight per pole: 0.89 g**

Poles	STD Code	L [mm]	L [inch]	Pcs/pack.	W [kg]
02	MSB02001-0000P	5.00	0.197	800	1.43



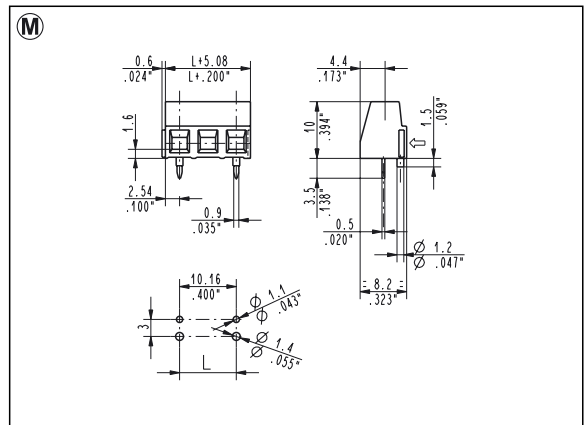
**MSB02002 - 0000P Straight with Vde Pegs, Side Entry**  
**10 mm / .394" Pitch Weight per pole: 1.02 g**

Poles	STD Code	L [mm]	L [inch]	Pcs/pack.	W [kg]
02	MSB02002-0000P	10.00	0.394	500	1.02



**MSB02005 - 0000P Straight with Vde Pegs, Side Entry**  
**5.08 mm / .200" Pitch Weight per pole: 0.89 g**

Poles	STD Code	L [mm]	L [inch]	Pcs/pack.	W [kg]
02	MSB02005-0000P	5.08	0.200	800	1.43



**MSB02006 - 0000P Straight with Vde Pegs, Side Entry**  
**10.16 mm / .400" Pitch Weight per pole: 1.02 g**

Poles	STD Code	L [mm]	L [inch]	Pcs/pack.	W [kg]
02	MSB02006-0000P	10.16	0.400	500	1.02