



GREEN ELECTRONICS



CRM

Terminal Blocks and Connectors for Printed Circuit Boards



ISO
9001



ISO
14001



BS OHSAS
18001:2007



SAUR[®]
ELECTRONIC CONNECTORS

Functional characteristics



Dimensional class:
medium



Standard colour:
green



Dimensions:
28.5 x 22 mm (1.122 x .866 in)



Versions:
modular,
polarized,



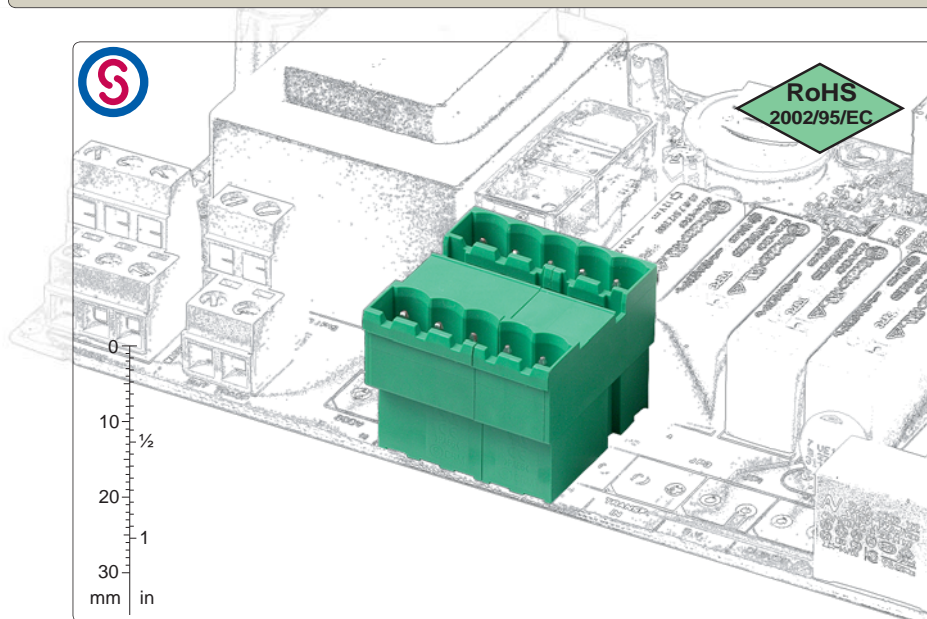
Single mould poles:
from 2 to 25 (modular and side stackable)



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



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



pitch 5/5.08 mm
from 2 to 5 poles
straight version, modular



pitch 10/10.16 mm
from 2 to 5 poles
90° version, modular



pitch 10/10.16 mm
from 2 to 25 poles
straight version, polarized



pitch 10/10.16 mm
from 1 to 13 poles
90° version, polarized



CIM-SC1 coding splines

Brief description

The CRM Plurimo male connector series is available in 5 mm (.197 in) and 10 mm (.394 in) metric pitches and in 5.08 mm (.200 in) and 10.16 mm (.400 in) Imperial pitches, in blocks from 2 to 25 poles, in polarized or modular versions. It is possible to connect the relative female parallel or vertical to the PCB.

The CRM connector series for PCBs is characterized by an asymmetric profile, so mistakes are prevented when connections are made with the relative CIF or CVF with screw connection to the wire or CGF soldered to the board. Further safety when connecting can be obtained by using the CIF-LC1 and CIM-SCI Coding Splines and Coding Clips (see page

20-21) or COF-SP1 Polarization Pegs (see page 18-19).

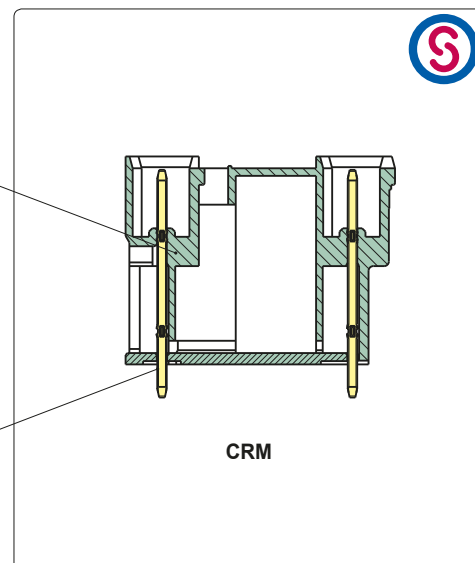
It is possible to side-stack or assemble the basic modular connectors in order to obtain any number of poles without losing the pitch. By taking advantage of this particular characteristic a minimum stock of basic connectors can be kept.

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

PA 6.6 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)

Easy to solder lead-free
 tin-plated copper alloy pin.



Mechanical characteristics

Insertion force per pole	max 3 N (.674 lbf)
Withdrawal force per pole	min 1,5 N (.337 lbf)
PCB thickness	max 2.4 mm (.094 in)
PCB hole diameter	min 1.4 mm (.055 in)
Operating temperature range	-40 °C ÷ +110 °C (-40 °F ÷ +230 °F)
Climatic category	40/110/21 According to EN 60068-1

Electric characteristics*

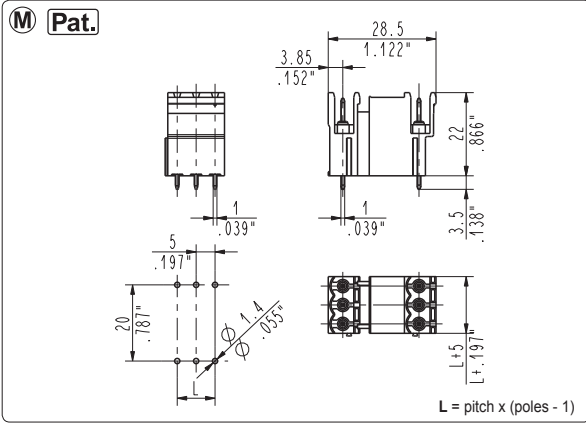
Rated voltage for 5 mm (.197 in) and 5.08 mm (.200 in) pitch	320 V (UL, CSA)*
Rated voltage for 10 mm (.394 in) and 10.16 mm (.400 in) pitch	800 V (IMQ)*
Rated current	16 A (VDE)*
Contact resistance	<15 m Ω
Insulation resistance	>10 ⁹ Ω (500V DC)

*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.

Approvals

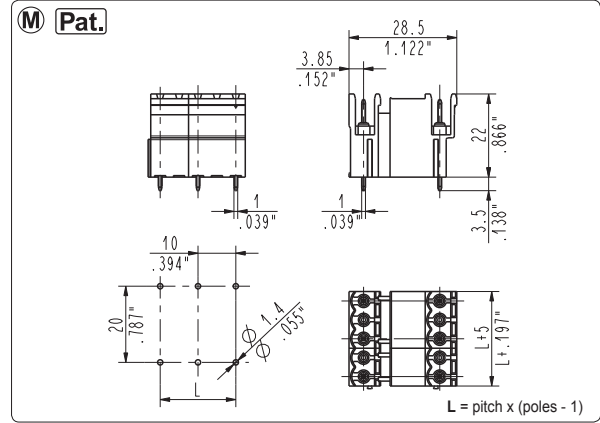
IEC-EN	IEC:	for 5 mm and 5.08 mm pitch:	200 V - 16 A - 2.5 mm ² - T110 - 4kV - 3 / 320 V - 16 A - 2.5 mm ² - T110 - 4kV - 2
	EN 61984	for 10 mm and 10.16 mm pitch:	500 V - 16 A - 2.5 mm ² - T110 - 8kV - 3 / 800 V - 16 A - 2.5 mm ² - T110 - 8kV - 2
UL	UL:	300 V - 15 A - 30÷12 AWG for 5 mm and 5.08 mm pitch	
	File E167473	600 V - 15 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 it.		
VDE	VDE:	for 5 mm and 5.08 mm pitch:	250 V - 16 A - 2.5 mm ² - T110 - 2,5kV - 2
	File n. 40027448	for 10 mm and 10.16 mm pitch:	750 V - 16 A - 2.5 mm ² - T110 - 6kV - 2
IMQ	IMQ:	for 5 mm and 5.08 mm pitch:	200 V - 16 A - 2.5 mm ² - T110 - 4kV - 3 / 320 V - 16 A - 2.5 mm ² - T110 - 4kV - 2
	File n. EM672	for 10 mm and 10.16 mm pitch:	500 V - 16 A - 2.5 mm ² - T110 - 8kV - 3 / 800 V - 16 A - 2.5 mm ² - T110 - 8kV - 2

See also "Certifications of Products"



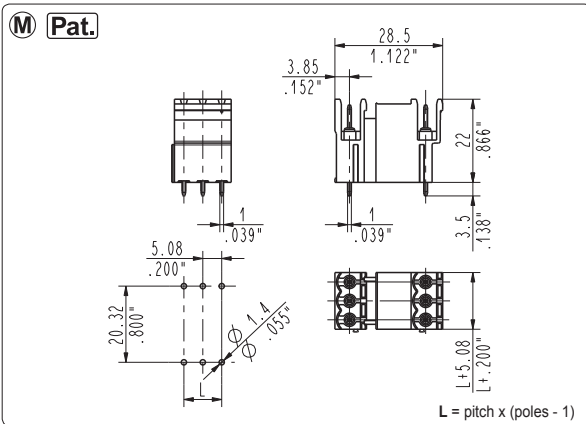
CRM_0M1 straight, modular male

5 mm / .197" pitch						
Poles	Code	Pcs/pack.	W [kg]*	Pcs/Ind.**	W [kg]*	
02	CRM020M1	225	0,84	500	1,86	
03	CRM030M1	150	0,84	500	2,79	



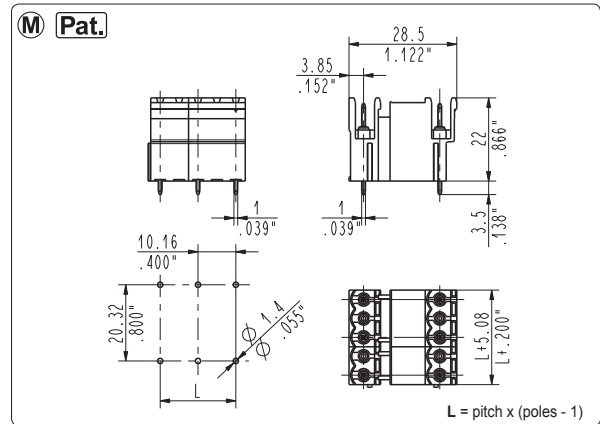
CRM_0M2 straight, modular male

10 mm / .394" pitch						
Poles	Code	Pcs/pack.	W [kg]*	Pcs/Ind.**	W [kg]*	
01	CRM010M2	225	0,61	500	1,35	
02	CRM020M2	150	0,81	500	2,70	
03	CRM030M2	120	0,97	500	4,05	
04	CRM040M2	80	0,86	250	2,70	
05	CRM050M2	50	0,68	250	3,38	
06	CRM060M2	50	0,81	250	4,05	
07	CRM070M2	40	0,76	250	4,73	
08	CRM080M2	40	0,86	250	5,40	
09	CRM090M2	40	0,97	250	6,08	
10	CRM100M2	30	0,81	125	3,38	
11	CRM110M2	30	0,89	125	3,71	
12	CRM120M2	30	0,97	125	4,05	
13	CRM130M2	20	0,70	125	4,39	



CRM_0M5 straight, modular male

5.08 mm / .200" pitch						
Poles	Code	Pcs/pack.	W [kg]*	Pcs/Ind.**	W [kg]*	
02	CRM020M5	225	0,84	500	1,86	
03	CRM030M5	150	0,84	500	2,79	

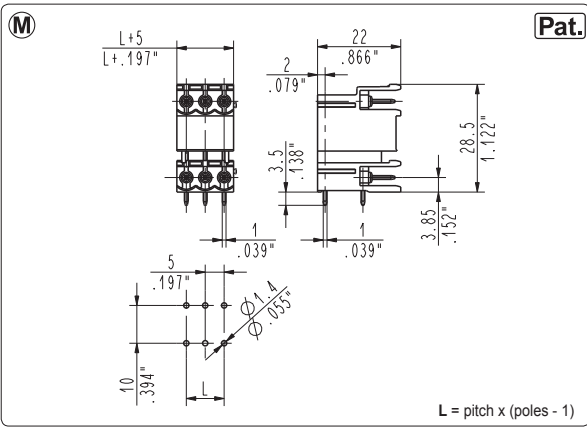


CRM_0M6 straight, modular male

10.16 mm / .400" pitch						
Poles	Code	Pcs/pack.	W [kg]*	Pcs/Ind.**	W [kg]*	
01	CRM010M6	225	0,61	500	1,35	
02	CRM020M6	150	0,81	500	2,70	
03	CRM030M6	120	0,97	500	4,05	
04	CRM040M6	80	0,86	250	2,70	
05	CRM050M6	50	0,68	250	3,38	
06	CRM060M6	50	0,81	250	4,05	
07	CRM070M6	40	0,76	250	4,73	
08	CRM080M6	40	0,86	250	5,40	
09	CRM090M6	40	0,97	250	6,08	
10	CRM100M6	30	0,81	125	3,38	
11	CRM110M6	30	0,89	125	3,71	
12	CRM120M6	30	0,97	125	4,05	
13	CRM130M6	20	0,70	125	4,39	

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

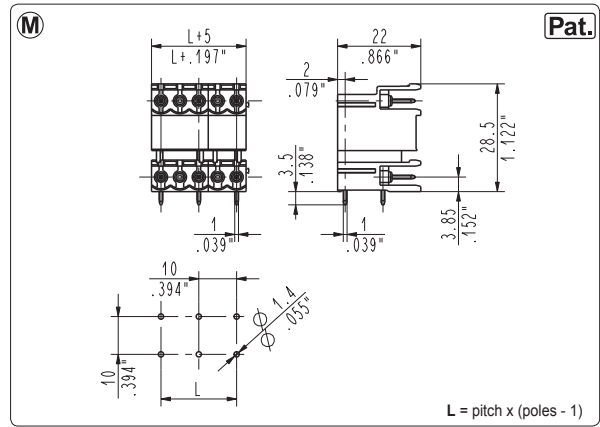
**Industrial packaging: add "-00000E" at standard code



CRM_9M1 90°, modular male

5 mm / .197" pitch

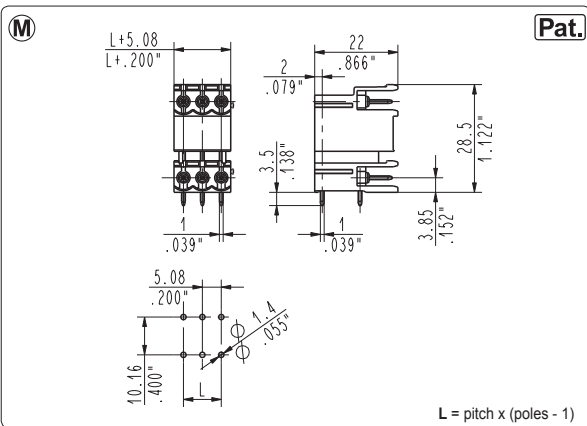
Poles	Code	Pcs/pack.	W [kg]*	Pcs/Ind.**	W [kg]*
02	CRM029M1	225	0,84	500	1,88
03	CRM039M1	150	0,84	500	2,82



CRM_9M2 90°, modular male

10 mm / .394" pitch

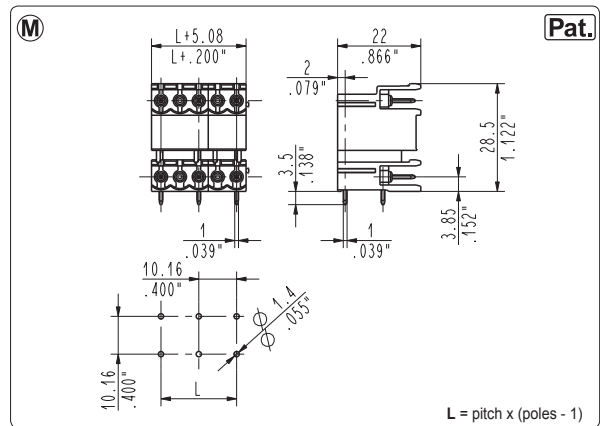
Poles	Code	Pcs/pack.	W [kg]*	Pcs/Ind.**	W [kg]*
01	CRM019M2	225	0,61	500	1,35
02	CRM029M2	150	0,81	500	2,70
03	CRM039M2	120	0,97	500	4,05
04	CRM049M2	80	0,86	250	2,70
05	CRM059M2	50	0,68	250	3,38
06	CRM069M2	50	0,81	250	4,05
07	CRM079M2	40	0,76	250	4,73
08	CRM089M2	40	0,86	250	5,40
09	CRM099M2	40	0,97	250	6,08
10	CRM109M2	30	0,81	125	3,38
11	CRM119M2	30	0,89	125	3,71
12	CRM129M2	30	0,97	125	4,05
13	CRM139M2	20	0,70	125	4,39



CRM_9M5 90°, modular male

5.08 mm / .200" pitch

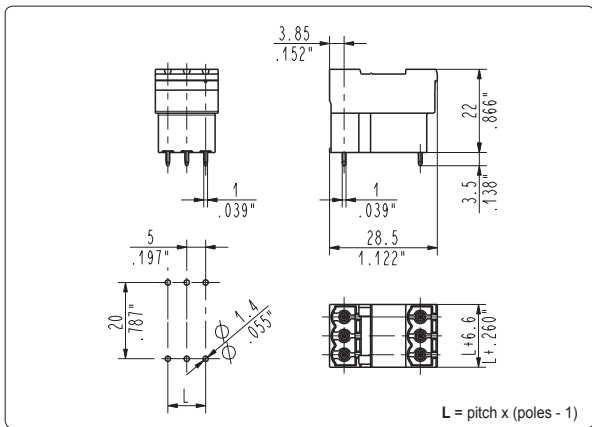
Poles	Code	Pcs/pack.	W [kg]*	Pcs/Ind.**	W [kg]*
02	CRM029M5	225	0,84	500	1,88
03	CRM039M5	150	0,84	500	2,82



CRM_9M6 90°, modular male

10.16 mm / .400" pitch

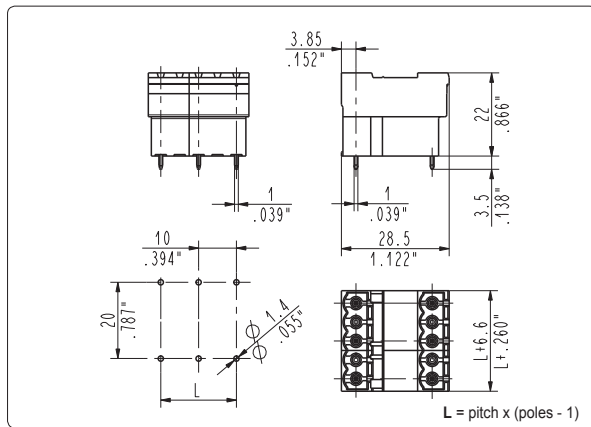
Poles	Code	Pcs/pack.	W [kg]*	Pcs/Ind.**	W [kg]*
01	CRM019M6	225	0,61	500	1,35
02	CRM029M6	150	0,81	500	2,70
03	CRM039M6	120	0,97	500	4,05
04	CRM049M6	80	0,86	250	2,70
05	CRM059M6	50	0,68	250	3,38
06	CRM069M6	50	0,81	250	4,05
07	CRM079M6	40	0,76	250	4,73
08	CRM089M6	40	0,86	250	5,40
09	CRM099M6	40	0,97	250	6,08
10	CRM109M6	30	0,81	125	3,38
11	CRM119M6	30	0,89	125	3,71
12	CRM129M6	30	0,97	125	4,05
13	CRM139M6	20	0,70	125	4,39



L = pitch x (poles - 1)

CRM_0P1 straight, polarized male

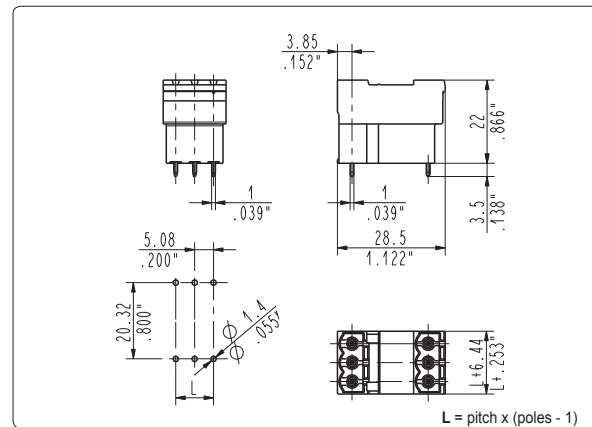
5 mm / .197" pitch						
Poles	Code	Pcs/pack.	W [kg]*	Pcs/Ind.**	W [kg]*	
02	CRM020P1	225	0,89	500	1,98	
03	CRM030P1	150	0,89	500	2,97	
04	CRM040P1	150	1,19	500	3,96	
05	CRM050P1	120	1,19	250	2,48	
06	CRM060P1	100	1,19	250	2,97	
07	CRM070P1	80	1,11	250	3,47	
08	CRM080P1	80	1,27	250	3,96	
09	CRM090P1	50	0,89	250	4,46	
10	CRM100P1	50	0,99	250	4,95	
11	CRM110P1	50	1,09	250	5,45	
12	CRM120P1	40	0,95	125	2,97	
13	CRM130P1	40	1,03	125	3,22	
14	CRM140P1	40	1,11	125	3,47	
15	CRM150P1	40	1,19	125	3,71	
16	CRM160P1	40	1,27	125	3,96	
17	CRM170P1	40	1,35	125	4,21	
18	CRM180P1	30	1,07	125	4,46	
19	CRM190P1	30	1,13	125	4,70	
20	CRM200P1	30	1,19	125	4,95	
21	CRM210P1	30	1,25	125	5,20	
22	CRM220P1	30	1,31	125	5,45	
23	CRM230P1	30	1,37	100	4,55	
24	CRM240P1	30	1,43	100	4,75	
25	CRM250P1	20	0,99	100	4,95	



L = pitch x (poles - 1)

CRM_0P2 straight, polarized male

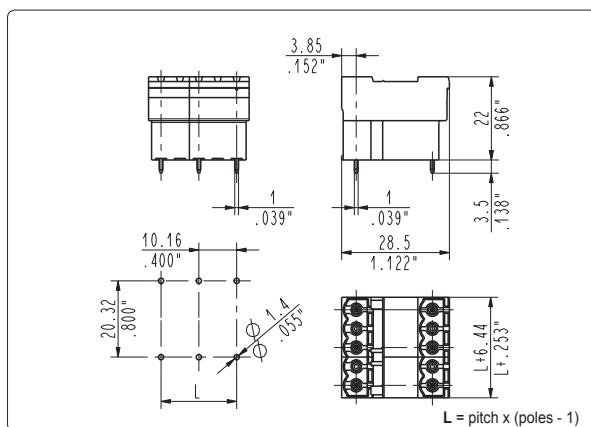
10 mm / .394" pitch						
Poles	Code	Pcs/pack.	W [kg]*	Pcs/Ind.**	W [kg]*	
02	CRM020P2	150	0,81	500	2,70	
03	CRM030P2	120	0,97	500	4,05	
04	CRM040P2	80	0,86	250	2,70	
05	CRM050P2	50	0,68	250	3,38	
06	CRM060P2	50	0,81	250	4,05	
07	CRM070P2	40	0,76	125	2,36	
08	CRM080P2	40	0,86	125	2,70	
09	CRM090P2	40	0,97	125	3,04	
10	CRM100P2	30	0,81	125	3,38	
11	CRM110P2	30	0,89	125	3,71	
12	CRM120P2	30	0,97	100	3,24	
13	CRM130P2	20	0,70	100	3,51	



L = pitch x (poles - 1)

CRM_0P5 straight, polarized male

5,08 mm / .200" pitch						
Poles	Code	Pcs/pack.	W [kg]*	Pcs/Ind.**	W [kg]*	
02	CRM020P5	225	0,89	500	1,98	
03	CRM030P5	150	0,89	500	2,97	
04	CRM040P5	150	1,19	500	3,96	
05	CRM050P5	120	1,19	250	2,48	
06	CRM060P5	100	1,19	250	2,97	
07	CRM070P5	80	1,11	250	3,47	
08	CRM080P5	80	1,27	250	3,96	
09	CRM090P5	50	0,89	250	4,46	
10	CRM100P5	50	0,99	250	4,95	
11	CRM110P5	50	1,09	250	5,45	
12	CRM120P5	40	0,95	125	2,97	
13	CRM130P5	40	1,03	125	3,22	
14	CRM140P5	40	1,11	125	3,47	
15	CRM150P5	40	1,19	125	3,71	
16	CRM160P5	40	1,27	125	3,96	
17	CRM170P5	40	1,35	125	4,21	
18	CRM180P5	30	1,07	125	4,46	
19	CRM190P5	30	1,13	125	4,70	
20	CRM200P5	30	1,19	125	4,95	
21	CRM210P5	30	1,25	125	5,20	
22	CRM220P5	30	1,31	125	5,45	
23	CRM230P5	30	1,37	100	4,55	
24	CRM240P5	30	1,43	100	4,75	
25	CRM250P5	20	0,99	100	4,95	



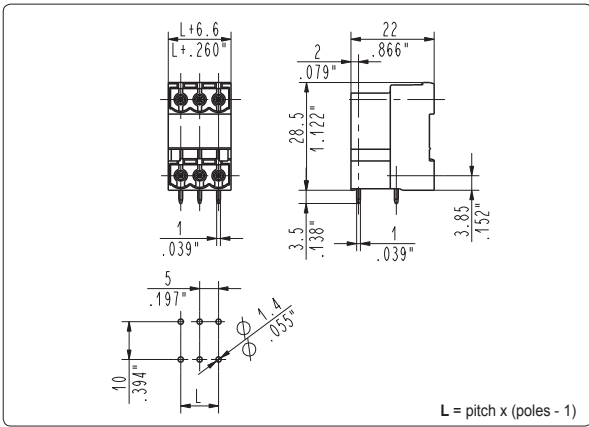
L = pitch x (poles - 1)

CRM_0P6 straight, polarized male

10,16 mm / .400" pitch						
Poles	Code	Pcs/pack.	W [kg]*	Pcs/Ind.**	W [kg]*	
02	CRM020P6	150	0,81	500	2,70	
03	CRM030P6	120	0,97	500	4,05	
04	CRM040P6	80	0,86	250	2,70	
05	CRM050P6	50	0,68	250	3,38	
06	CRM060P6	50	0,81	250	4,05	
07	CRM070P6	40	0,76	125	2,36	
08	CRM080P6	40	0,86	125	2,70	
09	CRM090P6	40	0,97	125	3,04	
10	CRM100P6	30	0,81	125	3,38	
11	CRM110P6	30	0,89	125	3,71	
12	CRM120P6	30	0,97	100	3,24	
13	CRM130P6	20	0,70	100	3,51	

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

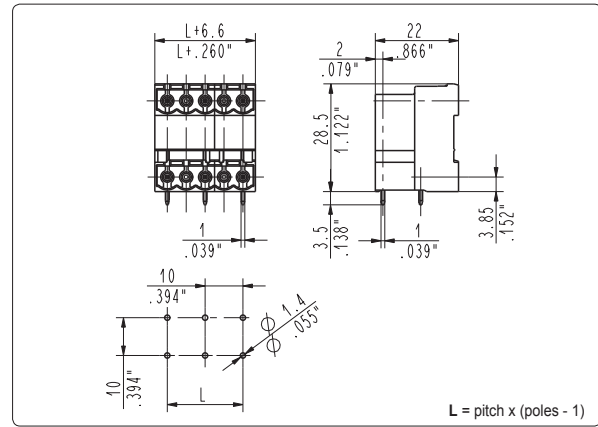
**Industrial packaging: add "-00000E" at standard code



CRM_9P1 90°, polarized male

5 mm / .197" pitch

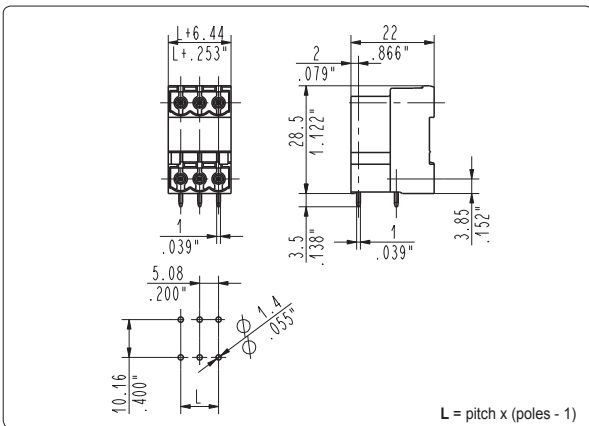
Poles	Code	Pcs/pack.	W [kg]*	Pcs/Ind.**	W [kg]*
02	CRM029P1	225	0,89	500	1,98
03	CRM039P1	150	0,89	500	2,97
04	CRM049P1	150	1,19	500	3,96
05	CRM059P1	120	1,19	250	2,48
06	CRM069P1	100	1,19	250	2,97
07	CRM079P1	80	1,11	250	3,47
08	CRM089P1	80	1,27	250	3,96
09	CRM099P1	50	0,89	250	4,46
10	CRM109P1	50	0,99	250	4,95
11	CRM119P1	50	1,09	250	5,45
12	CRM129P1	40	0,95	125	2,97
13	CRM139P1	40	1,03	125	3,22
14	CRM149P1	40	1,11	125	3,47
15	CRM159P1	40	1,19	125	3,71
16	CRM169P1	40	1,27	125	3,96
17	CRM179P1	40	1,35	125	4,21
18	CRM189P1	30	1,07	125	4,46
19	CRM199P1	30	1,13	125	4,70
20	CRM209P1	30	1,19	125	4,95
21	CRM219P1	30	1,25	125	5,20
22	CRM229P1	30	1,31	125	5,45
23	CRM239P1	30	1,37	100	4,55
24	CRM249P1	30	1,43	100	4,75
25	CRM259P1	20	0,99	100	4,95



CRM_9P2 90°, polarized male

10 mm / .394" pitch

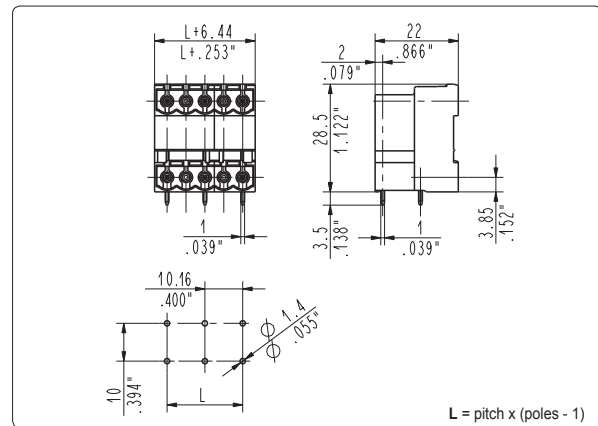
Poles	Code	Pcs/pack.	W [kg]*	Pcs/Ind.**	W [kg]*
02	CRM029P2	150	0,81	500	2,70
03	CRM039P2	120	0,97	500	4,05
04	CRM049P2	80	0,86	250	2,70
05	CRM059P2	60	0,81	250	3,38
06	CRM069P2	50	0,81	250	4,05
07	CRM079P2	40	0,76	125	2,36
08	CRM089P2	40	0,86	125	2,70
09	CRM099P2	40	0,97	125	3,04
10	CRM109P2	30	0,81	125	3,38
11	CRM119P2	30	0,89	125	3,71
12	CRM129P2	30	0,97	100	3,24
13	CRM139P2	20	0,70	100	3,51



CRM_9P5 90°, polarized male

5.08 mm / .200" pitch

Poles	Code	Pcs/pack.	W [kg]*	Pcs/Ind.**	W [kg]*
02	CRM029P5	225	0,89	500	1,98
03	CRM039P5	150	0,89	500	2,97
04	CRM049P5	150	1,19	500	3,96
05	CRM059P5	120	1,19	250	2,48
06	CRM069P5	100	1,19	250	2,97
07	CRM079P5	80	1,11	250	3,47
08	CRM089P5	80	1,27	250	3,96
09	CRM099P5	50	0,89	250	4,46
10	CRM109P5	50	0,99	250	4,95
11	CRM119P5	50	1,09	250	5,45
12	CRM129P5	40	0,95	125	2,97
13	CRM139P5	40	1,03	125	3,22
14	CRM149P5	40	1,11	125	3,47
15	CRM159P5	40	1,19	125	3,71
16	CRM169P5	40	1,27	125	3,96
17	CRM179P5	40	1,35	125	4,21
18	CRM189P5	30	1,07	125	4,46
19	CRM199P5	30	1,13	125	4,70
20	CRM209P5	30	1,19	125	4,95
21	CRM219P5	30	1,25	125	5,20
22	CRM229P5	30	1,31	125	5,45
23	CRM239P5	30	1,37	100	4,55
24	CRM249P5	30	1,43	100	4,75
25	CRM259P5	20	0,99	100	4,95



CRM_9P6 90°, polarized male

10.16 mm / .400" pitch

Poles	Code	Pcs/pack.	W [kg]*	Pcs/Ind.**	W [kg]*
02	CRM029P6	150	0,81	500	2,70
03	CRM039P6	120	0,97	500	4,05
04	CRM049P6	80	0,86	250	2,70
05	CRM059P6	60	0,81	250	3,38
06	CRM069P6	50	0,81	250	4,05
07	CRM079P6	40	0,76	125	2,36
08	CRM089P6	40	0,86	125	2,70
09	CRM099P6	40	0,97	125	3,04
10	CRM109P6	30	0,81	125	3,38
11	CRM119P6	30	0,89	125	3,71
12	CRM129P6	30	0,97	100	3,24
13	CRM139P6	20	0,70	100	3,51