

CGM - accident prevention PCB output

Functional Characteristics



Dimensional Class:
Medium



Standard Colour:
Green



Dimensions:
19.3 x 15 mm (.760 x .591 in)



Max Approved Wire Size:
solid: 2.5 mm² (CE); 12 AWG
stranded: 1.5 mm² (CE); 12 AWG

Clamp Opening Size:
2.5 x 2.4 mm (.098 x .094 in)



Versions:
Modular,

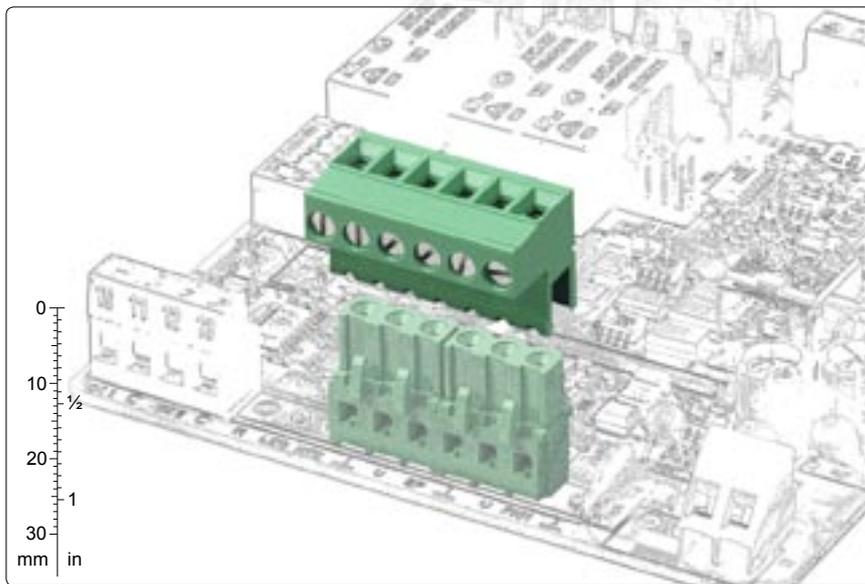
Single Mould Poles:
from 2 to 3



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
from 2 to 3 poles
modular



pitch 7.5/7.62 mm
from 2 to 3 poles
modular



pitch 10/10.16 mm
from 2 to 3 poles
modular

Pat.



available accessories:
from 2 to 9 poles BSC
for rising clamp



example of use of
CIM-SC1



CIM-SC1
coding splines

Brief Description

The **CGM** series is composed of **male contacts with screw connection** and it has been designed so that the female contacts to be soldered, which could be electrically powered, are inaccessible. By using male and female connectors to be soldered on the same board, the inputs (male) can be clearly seen from the outputs (female).

The **CGM** is available in metric pitches from 5 mm (.197 in) from 7.5 mm (.295 in) and from 10 mm (.394 in) and in Imperial pitches from 5.08 mm (.200 in), from 7.62 mm (300 in) and from 10.16 mm (.400 in), in blocks from 2 to 25 poles, in side-stackable or modular versions. It is possible to connect the relative male parallel or vertical to the PCB.

The **CGM** male connector series with screw connection is characterized by an asymmetric profile, so mistakes are prevented when connections are made with the relative female **CGF** soldered onto the board. By taking advantage of its compatibility with the **CIF** and **CVF** female con-

nectors, it is possible to have wire to wire connections.

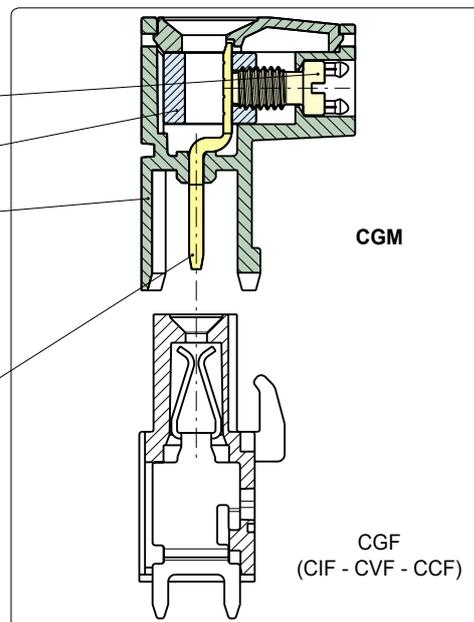
Further safety when connecting can be obtained by using the **CIF-LC1** and **CIM-SCI** Coding Splines and Coding Clips (see page 20-21) or **COF-SP1** Polarization Pegs (see page 18-19).

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

- M3 nickel plated Copper Alloy Screw.
- Nickel-plated Copper Alloy Rising Clamp.
- 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.
- 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)
Recommended/Highest tightening torque	0.5/0.6 Nm (4.42/5.3 lb*in)
Stripping length	6 ÷ 7.5 mm (.24 ÷ .30 in)
Operating temperature range	-40 °C ÷ +110 °C (-40 °F ÷ +230 °F)
Climatic category	40/110/21 According to EN 60068-1

Electric Characteristics*

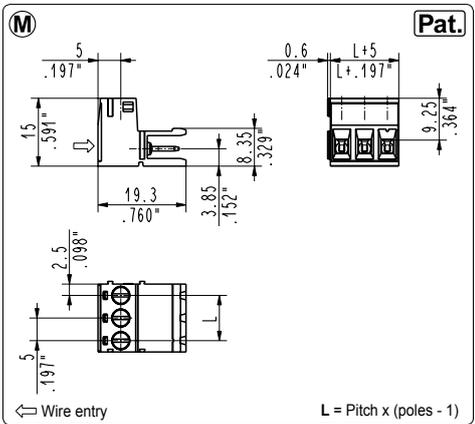
Solid wire section	0.05 ÷ 2.5 mm ² (CE)* 30÷12 AWG
Stranded wire section	0.05 ÷ 1.5 mm ² (CE)* 30÷12 AWG
Rated voltage for 5 mm (.197 in) and 5.08 mm (.200 in) pitch	300 V (CE)*
Rated voltage for 7.5 mm (.295 in) and 7.62 mm (.300 in) pitch	750 V (CE)*
Rated voltage for 10 mm (.394 in) and 10.16 mm (.400 in) pitch	750 V (CE)*
Rated current	15 A (CE)*
Contact resistance	<15 mΩ
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

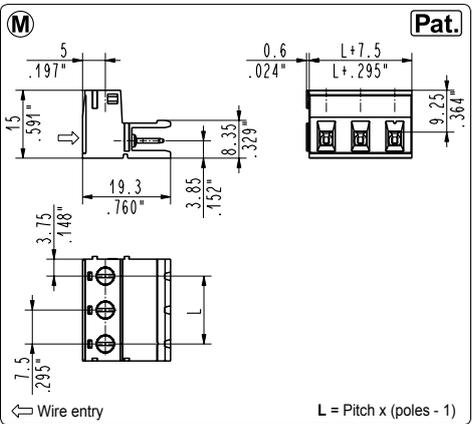
	CE:	250 V - T 110 - 15 A - 2.5 mm ² solid (12 A - 1.5 mm ² stranded) for 5 mm (.197 in) and 5.08 mm (.200 in) pitch
		750 V - T 110 - 15 A - 2.5 mm ² solid (12 A - 1.5 mm ² stranded) for 7.5 mm (.295 in) and 7.62 mm (.300 in) pitch
		750 V - T 110 - 15 A - 2.5 mm ² solid (12 A - 1.5 mm ² stranded) for 10 mm (.394 in) and 10.16 mm (.400 in) pitch
	UL:	300 V - 15 A - 30÷12 AWG for 5 mm (.197 in), 5.08 mm (.200 in), 7.5 mm (.295 in) and 7.62 mm (.300 in) pitch
	pending	600 V - 15 A - 30÷12 AWG for 10 mm (.394 in) and 10.16 mm (.400 in) pitch
		Application values for end-use equipment have to be in accordance to UL norms and applicable to it.

See also "Certifications of Products", page 14



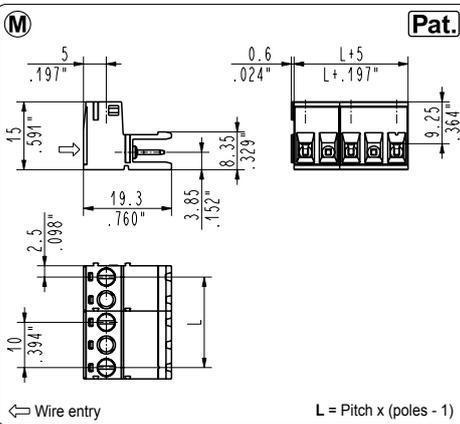
CGM_0M1 **Modular Male**
5 mm / .197" Pitch **Weight per pole: 1.8 g**

Poles	STD Code	Pcs/pack.	W [kg]*	Pcs/Ind.**	W [kg]*
02	CGM020M1	500	1,80	1500	5,40
03	CGM030M1	400	2,16	1000	5,40



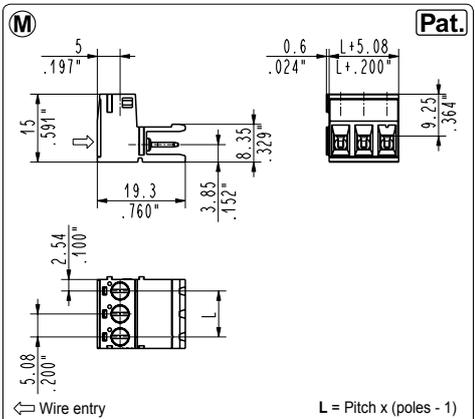
CGM_0M3 **Modular Male**
7.5 mm / .295" Pitch **Weight per pole: 2.1 g**

Poles	STD Code	Pcs/pack.	W [kg]*	Pcs/Ind.**	W [kg]*
02	CGM020M3	400	1,68	1000	4,20
03	CGM030M3	250	1,58	750	4,73



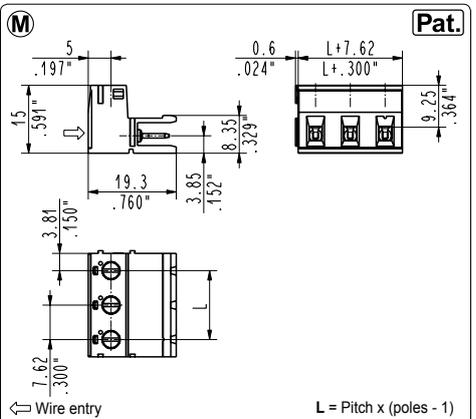
CGM_0M2 **Modular Male**
10 mm / .394" Pitch **Weight per pole: 2.12 g**

Poles	STD Code	Pcs/pack.	W [kg]*	Pcs/Ind.**	W [kg]*
01	CGM010M2	400	0,85	1000	2,12
02	CGM020M2	250	1,06	750	3,18



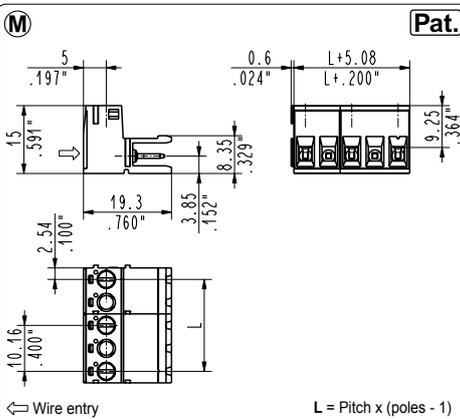
CGM_0M5 **Modular Male**
5.08 mm / .200" Pitch **Weight per pole: 0.71 g**

Poles	STD Code	Pcs/pack.	W [kg]*	Pcs/Ind.**	W [kg]*
02	CGM020M5	500	0,71	1500	2,13
03	CGM030M5	400	0,85	1000	2,13



CGM_0M7 **Modular Male**
7.62 mm / .300" Pitch **Weight per pole: 2.1 g**

Poles	STD Code	Pcs/pack.	W [kg]*	Pcs/Ind.**	W [kg]*
02	CGM020M7	400	1,68	1000	4,20
03	CGM030M7	250	1,58	750	4,73



CGM_0M6 **Modular Male**
10.16 mm / .400" Pitch **Weight per pole: 2.12 g**

Poles	STD Code	Pcs/pack.	W [kg]*	Pcs/Ind.**	W [kg]*
01	CGM010M6	400	0,85	1000	2,12
02	CGM020M6	250	1,06	750	3,18

*W [kg]: Approximate Weight per box in kg

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