

CGF - accident prevention PCB output

Functional Characteristics



Dimensional Class:
Medium



Standard Colour:
Green



Dimensions:
18.9 x 10.2 mm (.744 x .402 in)



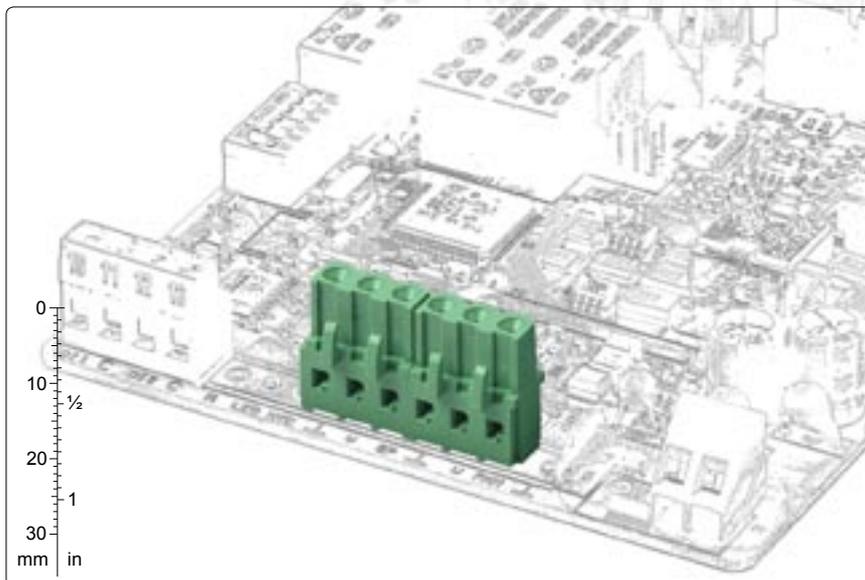
Versions:
Modular,
Single Mould Poles:
from 2 to 3



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



pitch 5/5.08 mm
from 2 to 3 poles
90° modular



example of use of
CIF-LC1



CIF-LC1
coding splines

Brief Description

The CGF series of female connectors, which are to be soldered, were created so that the contacts to be soldered onto the board, which could be electrically charged, are inaccessible. By using male connectors to be soldered on the same board, the inputs (male) can be clearly seen from the outputs (female).

The CGF 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 CGF female connector series to be soldered for PCBs is characterized by an asymmetric profile, so mistakes are prevented when connections are made. By taking advantage of its compatibility with the CIM, CPM or CRM male series which can be soldered to the board, it is

possible to have board-board 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).

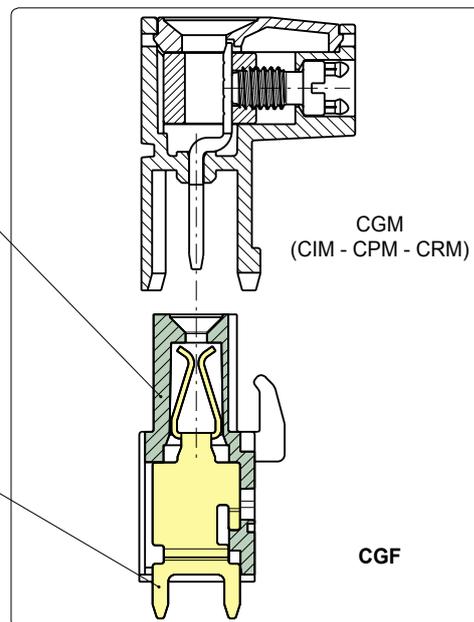
It is possible to side-stack or assemble the basic modular connectors in order to obtain any number of poles without losing the pitch. By taking advantage of this particular characteristic a minimum stock of basic connectors can be kept.

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

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)
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*

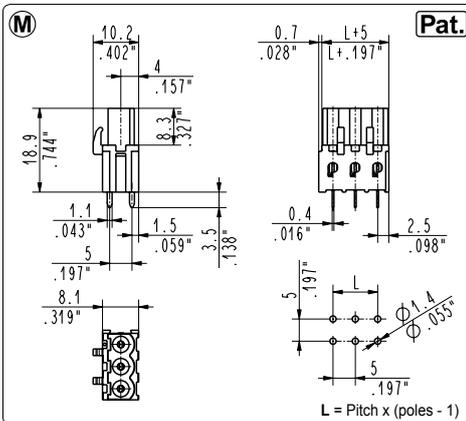
Rated voltage for 5 mm (.197 in) and 5.08 mm (.200 in) pitch	250 V (CE)*
Rated voltage for 7.5 mm (.295 in) and 7.62 mm (.300 in) pitch	750 V (CE)*
Rated voltage for 10 mm (.394 in) and 10.16 mm (.400 in) pitch	750 V (CE)*
Rated current	15 A (CE)*
Contact resistance	<15 mΩ
Insulation resistance	>10 ⁹ 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 for 5 mm (.197 in) and 5.08 mm (.200 in) pitch
		750 V - T 110 - 15 A for 7.5 mm (.295 in) and 7.62 mm (.300 in) pitch
		750 V - T 110 - 15 A for 10 mm (.394 in) and 10.16 mm (.400 in) pitch
	UL:	300 V - 15 A 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 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.

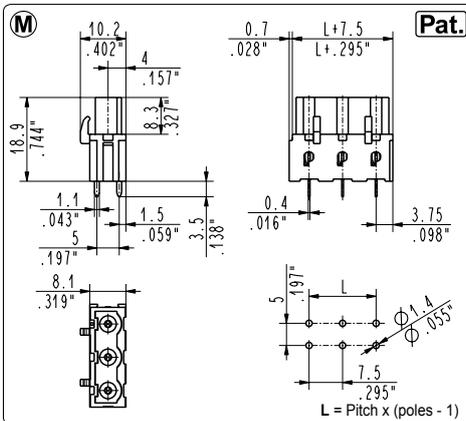
See also "Certifications of Products", page 14



CGF_0M1 Straight, Modular Female
5 mm / .197" Pitch Weight per pole: **0.71 g**

Poles	STD Code	Pcs/pack.	W [kg]*	Pcs/Ind.**	W [kg]*
02	CGF020M1	500	0,71	1500	2,13
03	CGF030M1	400	0,85	1000	2,13

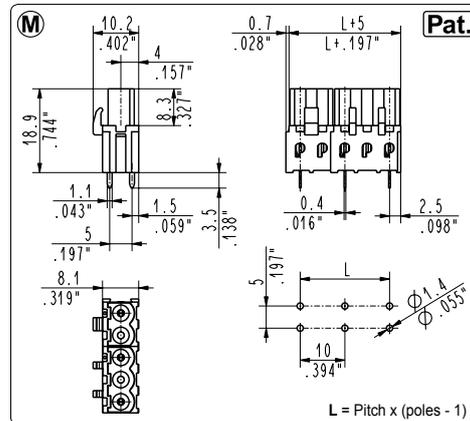
max 12 poles can be combined



CGF_0M3 Straight, Modular Female
7.5 mm / .295" Pitch Weight per pole: **0.90 g**

Poles	STD Code	Pcs/pack.	W [kg]*	Pcs/Ind.**	W [kg]*
02	CGF020M3	400	0,72	1000	1,80
03	CGF030M3	250	0,68	750	2,03

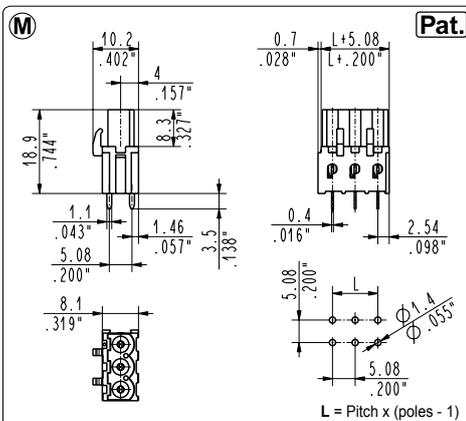
max 8 poles can be combined



CGF_0M2 Straight, Modular Female
10 mm / .394" Pitch Weight per pole: **1.05 g**

Poles	STD Code	Pcs/pack.	W [kg]*	Pcs/Ind.**	W [kg]*
01	CGF010M2	400	0,42	1500	1,58
02	CGF020M2	250	0,53	1000	2,10

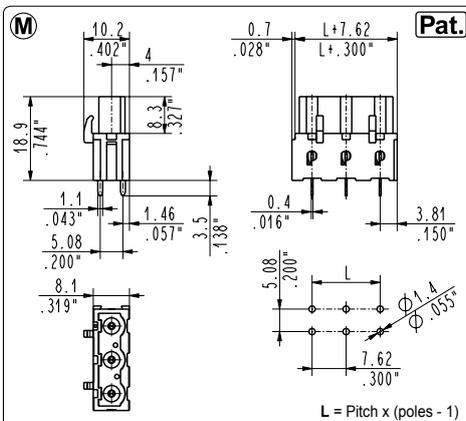
max 6 poles can be combined



CGF_0M5 Straight, Modular Female
5.08 mm / .200" Pitch Weight per pole: **0.71 g**

Poles	STD Code	Pcs/pack.	W [kg]*	Pcs/Ind.**	W [kg]*
02	CGF020M5	500	0,71	1500	2,13
03	CGF030M5	400	0,85	1000	2,13

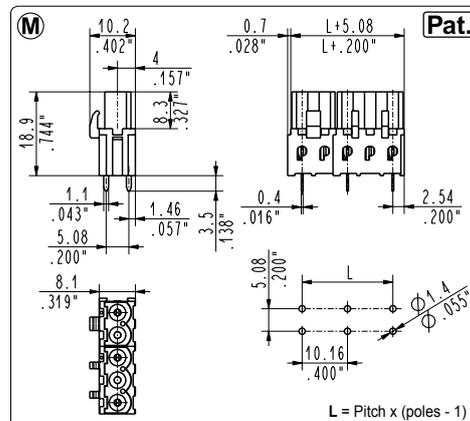
max 12 poles can be combined



CGF_0M7 Straight, Modular Female
7.62 mm / .300" Pitch Weight per pole: **0.90 g**

Poles	STD Code	Pcs/pack.	W [kg]*	Pcs/Ind.**	W [kg]*
02	CGF020M7	400	0,72	1000	1,80
03	CGF030M7	250	0,68	750	2,03

max 8 poles can be combined



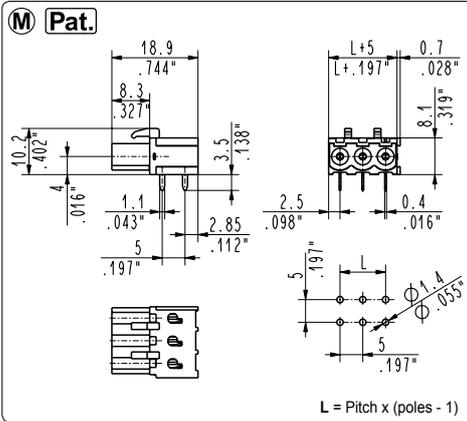
CGF_0M6 Straight, Modular Female
10.16 mm / .400" Pitch Weight per pole: **1.05 g**

Poles	STD Code	Pcs/pack.	W [kg]*	Pcs/Ind.**	W [kg]*
01	CGF010M6	400	0,42	1500	1,58
02	CGF020M6	250	0,53	1000	2,10

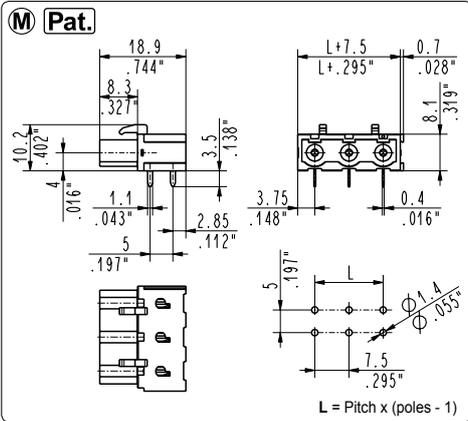
max 6 poles can be combined

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

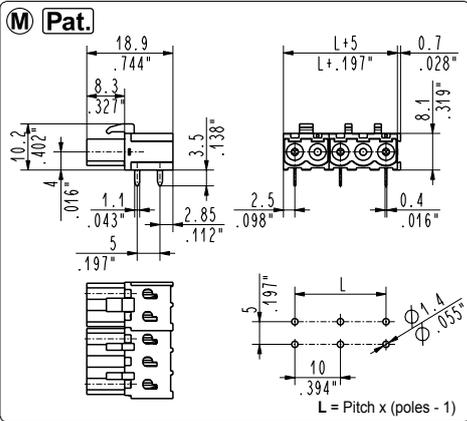
**Industrial packaging: add "-00000E" at standard code



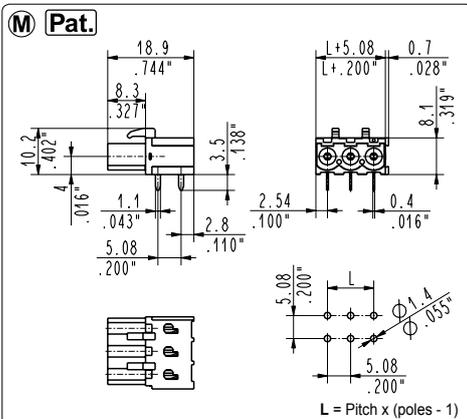
CGF_9M1 90°, Modular Female
5 mm / .197" Pitch Weight per pole: 0.71 g
 Poles STD Code Pcs/pack. W [kg]* Pcs/Ind.** W [kg]*
 02 CGF029M1 500 0,71 1500 2,13
 03 CGF039M1 400 0,85 1000 2,13
 max 12 poles can be combined



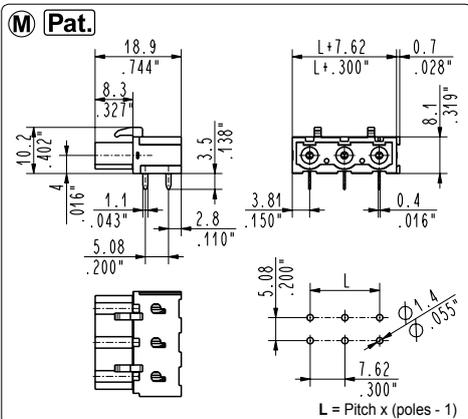
CGF_9M3 90°, Modular Female
7.5 mm / .295" Pitch Weight per pole: 0.90 g
 Poles STD Code Pcs/pack. W [kg]* Pcs/Ind.** W [kg]*
 02 CGF029M3 400 0,72 1000 1,80
 03 CGF039M3 250 0,68 750 2,03
 max 8 poles can be combined



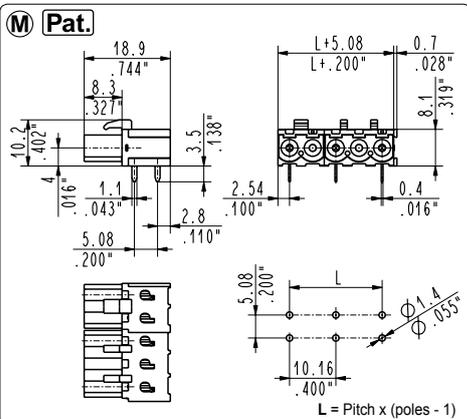
CGF_9M2 90°, Modular Female
10 mm / .394" Pitch Weight per pole: 1.05 g
 Poles STD Code Pcs/pack. W [kg]* Pcs/Ind.** W [kg]*
 01 CGF019M2 400 0,42 1500 1,58
 02 CGF029M2 250 0,53 1000 2,10
 max 6 poles can be combined



CGF_9M5 90°, Modular Female
5.08 mm / .200" Pitch Weight per pole: 0.71 g
 Poles STD Code Pcs/pack. W [kg]* Pcs/Ind.** W [kg]*
 02 CGF029M5 500 0,71 1500 2,13
 03 CGF039M5 400 0,85 1000 2,13
 max 12 poles can be combined



CGF_9M7 90°, Modular Female
7.62 mm / .300" Pitch Weight per pole: 0.90 g
 Poles STD Code Pcs/pack. W [kg]* Pcs/Ind.** W [kg]*
 02 CGF029M7 400 0,72 1000 1,80
 03 CGF039M7 250 0,68 750 2,03
 max 8 poles can be combined



CGF_9M6 90°, Modular Female
10.16 mm / .400" Pitch Weight per pole: 1.05 g
 Poles STD Code Pcs/pack. W [kg]* Pcs/Ind.** W [kg]*
 01 CGF019M6 400 0,42 1500 1,58
 02 CGF029M6 250 0,53 1000 2,10
 max 6 poles can be combined