

CIF

Functional Characteristics

**Dimensional Class:**

Medium

**Standard Colour:**

Green

**Dimensions:**

18.4 x 15.5 mm (.724 x .610 in)

**Max Approved Wire Size:**solid: 2.5 mm² (IMQ); 12 AWG (UL)stranded: 1.5 mm² (VDE); 12 AWG (UL)**Clamp Opening Size:**

2.5 x 2.4 mm (.098 x .094 in)

**Versions:**

Side Stackable,

Modular,

Locking Screw Flanges

**Single Mould Poles:**

from 2 to 25 (Modular and Side Stackable)

from 2 to 23 (Locking Screw Flanges)

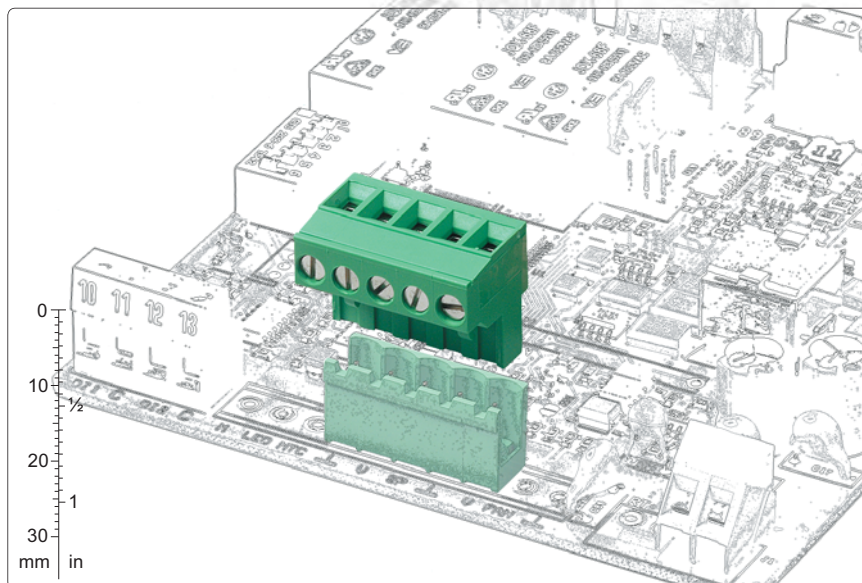
**Pitches:**

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 25 poles
modularpitch 7.5/7.62 mm
from 2 to 12 poles
side stackablefrom 2 to 23 poles
locking screw flangesavailable accessories:
from 2 to 9 poles
BSC for rising clamp
See also "Accessories", page 268CIF-LC1
coding splines

Brief Description

The **CIF** female connector series makes it possible to use wires up to 2.5mm² (12 AWG) and consequently a current range of 15A certified can be reached.

It is available in 5 mm (.197 in), 7.5 mm (.295 in) and 10 mm (.394 in) metric pitches and in 5.08 mm (.200 in), 7.62 (.300 in) and 10.16 mm (.400 in) Imperial pitches, in monolithic blocks from 2 to 25 poles, in side-stackable or modular versions or with flanges.

The **CTM** connector series for PCBs is characterized by an asymmetric profile, so mistakes are prevented when connections are made with the relative **CIM**, **CPM** or **CRM** male connectors soldered to the board or the **CGM** connectors with screw connection to the wire. Further safety when

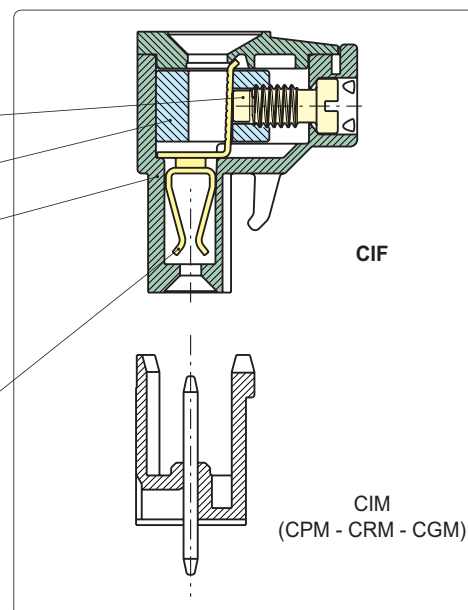
connecting can be obtained by using the CIF-LC1 and CIM-SCI Coding Splines and Coding Clips (see page 20-21) or COF-SP1 Polarization Pegs (see page 18-19).

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.
- Leadfree tin-plated Copper Alloy Spring.



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 (4.42/5.30 lbf*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 (IMQ)* 30÷12 AWG (UL, CSA)*
Stranded wire section	0.05 ÷ 1.5 mm ² (IMQ)* 30÷12 AWG (UL, CSA)*
Rated voltage for 5 mm (.197 in) and 5.08 mm (.200 in) pitch	300 V (UL, CSA)*
Rated voltage for 7.5 mm (.295 in) and 7.62 mm (.300 in) pitch	750 V (IMQ)*
Rated voltage for 10 mm (.394 in) and 10.16 mm (.400 in) pitch	750 V (IMQ)*
Rated current	15 A (IMQ)*
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.

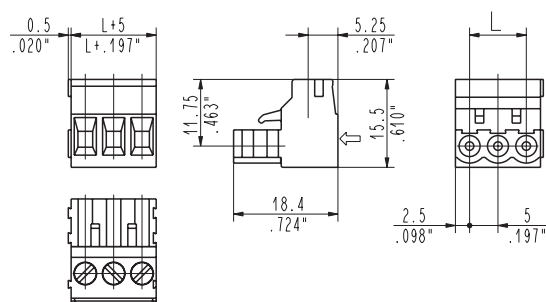
Approvals

CE	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	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
	File E 167473	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.
CSA	CSA:	300 V - 15 A - 30÷12 AWG for 5 mm (.197 in) and 5.08 mm (.200 in) pitch
	File LR 102896	450 V - 15 A - 30÷12 AWG for 7.5 mm (.295 in) and 7.62 mm (.300 in) pitch
		600 V - 15 A - 30÷12 AWG for 10 mm (.394 in) and 10.16 mm (.400 in) pitch
VDE	VDE:	250 V - 12 A - T 110 - 1.5 mm ² for 5 mm (.197 in) and 5.08 mm (.200 in) pitch
	Reg. N. 112754 ÜG	500 V - 12 A - T 110 - 1.5 mm ² for 7.5 mm (.295 in) and 7.62 mm (.300 in) pitch
		750 V - 12 A - T 110 - 1.5 mm ² for 10 mm (.394 in) and 10.16 mm (.400 in) pitch
IMQ	IMQ:	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
	File EM672	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

See also "Certifications of Products", page 14



(M) Pat.



↔ Wire entry

L = Pitch x (poles - 1)

CIF_0M1

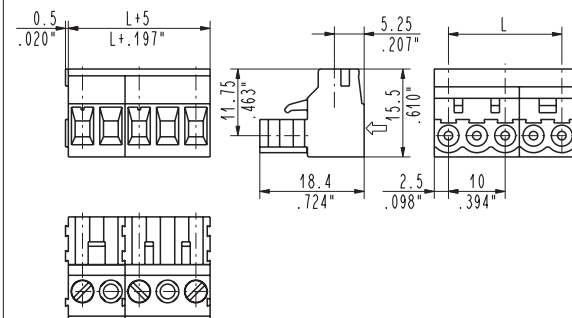
Modular Female

5 mm / .197" Pitch

Weight per pole: 2.08 g

Poles	STD Code	Pcs/pack.	W [kg]*	Pcs/Ind.**	W [kg]*
02	CIF020M1	500	2,08	1500	6,24
03	CIF030M1	400	2,50	1000	6,24
04	CIF040M1	300	2,50	750	6,24
05	CIF050M1	250	2,60	750	7,80

(M) Pat.



↔ Wire entry

L = Pitch x (poles - 1)

CIF_0M2

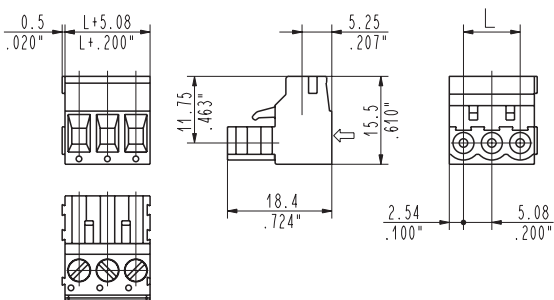
Modular Female

10 mm / .394" Pitch

Weight per pole: 2.35 g

Poles	STD Code	Pcs/pack.	W [kg]*	Pcs/Ind.**	W [kg]*
01	CIF010M2	500	1,18	1000	2,35
02	CIF020M2	400	0,28	750	0,10
03	CIF030M2	250	0,56	500	0,09

(M) Pat.



↔ Wire entry

L = Pitch x (poles - 1)

CIF_0M5

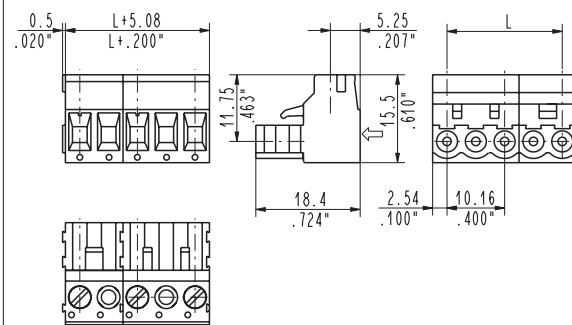
Modular Female

5.08 mm / .200" Pitch

Weight per pole: 2.08 g

Poles	STD Code	Pcs/pack.	W [kg]*	Pcs/Ind.**	W [kg]*
02	CIF020M5	500	2,08	1500	6,24
03	CIF030M5	400	2,50	1000	6,24
04	CIF040M5	300	2,50	750	6,24
05	CIF050M5	250	2,60	750	7,80

(M) Pat.



↔ Wire entry

L = Pitch x (poles - 1)

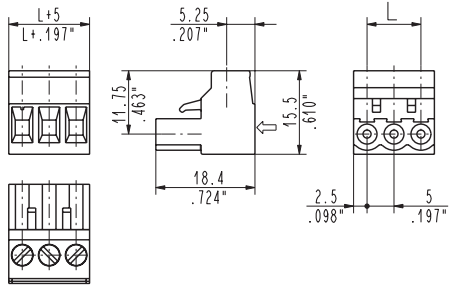
CIF_0M6

Modular Female

10.16 mm / .400" Pitch

Weight per pole: 2.35 g

Poles	STD Code	Pcs/pack.	W [kg]*	Pcs/Ind.**	W [kg]*
01	CIF010M6	500	1,18	1000	2,35
02	CIF020M6	400	0,28	750	0,10
03	CIF030M6	250	0,56	500	0,09

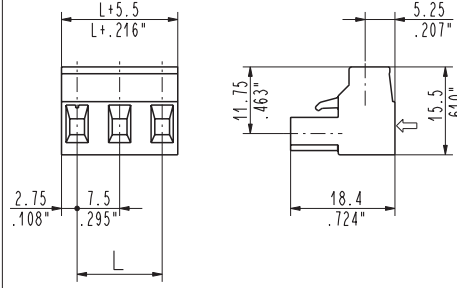


Wire entry

L = Pitch x (poles - 1)

CIF_001**Side Stackable Female**

5 mm / .197" Pitch		Weight per pole: 2.08 g			
Poles	STD Code	Pcs/pack.	W [kg]*	Pcs/Ind.**	W [kg]*
02	CIF02001	500	2,08	1500	6,24
03	CIF03001	400	2,50	1000	6,24
04	CIF04001	300	2,50	750	6,24
05	CIF05001	250	2,60	750	7,80
06	CIF06001	200	2,50	500	6,24
07	CIF07001	175	2,55	500	7,28
08	CIF08001	150	2,50	500	8,32
09	CIF09001	125	2,34	250	4,68
10	CIF10001	100	2,08	250	5,20
11	CIF11001	100	2,29	250	5,72
12	CIF12001	75	1,87	250	6,24
13	CIF13001	75	2,03	250	6,76
14	CIF14001	75	2,18	250	7,28
15	CIF15001	75	2,34	250	7,80
16	CIF16001	75	2,50	250	8,32
17	CIF17001	50	1,77	250	8,84
18	CIF18001	50	1,87	250	9,36
19	CIF19001	50	1,98	125	4,94
20	CIF20001	50	2,08	125	5,20
21	CIF21001	50	2,18	125	5,46
22	CIF22001	50	2,29	125	5,72
23	CIF23001	50	2,39	125	5,98
24	CIF24001	50	2,50	125	6,24
25	CIF25001	50	2,60	125	6,50

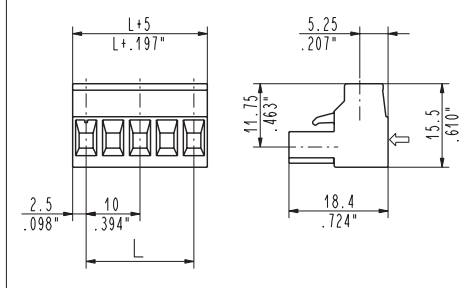


Wire entry

L = Pitch x (poles - 1)

CIF_003**Side Stackable Female**

7.5 mm / .295" Pitch		Weight per pole: 2.29 g			
Poles	STD Code	Pcs/pack.	W [kg]*	Pcs/Ind.**	W [kg]*
02	CIF02003	400	1,83	1000	4,58
03	CIF03003	250	1,72	1000	6,87
04	CIF04003	200	1,83	500	4,58
05	CIF05003	150	1,72	500	5,73
06	CIF06003	125	1,72	250	3,44
07	CIF07003	100	1,60	250	4,01
08	CIF08003	75	1,37	250	4,58
09	CIF09003	75	1,55	250	5,15
10	CIF10003	75	1,72	250	5,73
11	CIF11003	50	1,26	250	6,30
12	CIF12003	50	1,37	250	6,87

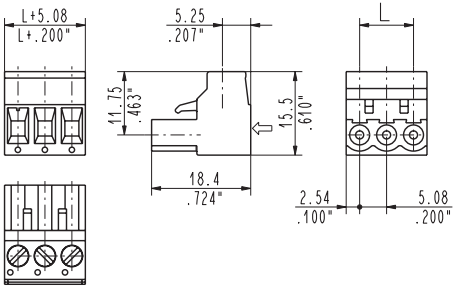


Wire entry

L = Pitch x (poles - 1)

CIF_002**Side Stackable Female**

10 mm / .394" Pitch		Weight per pole: 2.58 g			
Poles	STD Code	Pcs/pack.	W [kg]*	Pcs/Ind.**	W [kg]*
02	CIF02002	400	2,06	1000	5,16
03	CIF03002	250	1,94	750	5,81
04	CIF04002	175	1,81	500	5,16
05	CIF05002	125	1,61	250	3,23
06	CIF06002	100	1,55	250	3,87
07	CIF07002	75	1,35	250	4,52
08	CIF08002	75	1,55	250	5,16
09	CIF09002	50	1,16	250	5,81
10	CIF10002	50	1,29	250	6,45
11	CIF11002	50	1,42	250	7,01
12	CIF12002	50	1,55	250	7,74
13	CIF13002	50	1,68	250	8,39

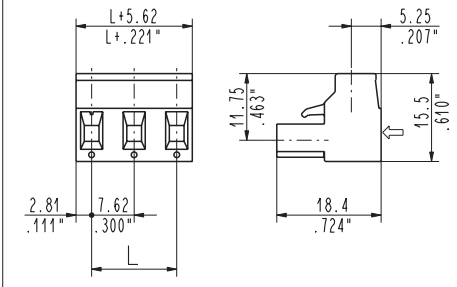


Wire entry

L = Pitch x (poles - 1)

CIF_005**Side Stackable Female**

5.08 mm / .200" Pitch		Weight per pole: 2.08 g			
Poles	STD Code	Pcs/pack.	W [kg]*	Pcs/Ind.**	W [kg]*
02	CIF02005	500	2,08	1500	6,24
03	CIF03005	400	2,50	1000	6,24
04	CIF04005	300	2,50	750	6,24
05	CIF05005	250	2,60	750	7,80
06	CIF06005	200	2,50	500	6,24
07	CIF07005	175	2,55	500	7,28
08	CIF08005	150	2,50	500	8,32
09	CIF09005	125	2,34	250	4,68
10	CIF10005	100	2,08	250	5,20
11	CIF11005	100	2,29	250	5,72
12	CIF12005	75	1,87	250	6,24
13	CIF13005	75	2,03	250	6,76
14	CIF14005	75	2,18	250	7,28
15	CIF15005	75	2,34	250	7,80
16	CIF16005	75	2,50	250	8,32
17	CIF17005	50	1,77	250	8,84
18	CIF18005	50	1,87	250	9,36
19	CIF19005	50	1,98	125	4,94
20	CIF20005	50	2,08	125	5,20
21	CIF21005	50	2,18	125	5,46
22	CIF22005	50	2,29	125	5,72
23	CIF23005	50	2,39	125	5,98
24	CIF24005	50	2,50	125	6,24
25	CIF25005	50	2,60	125	6,50

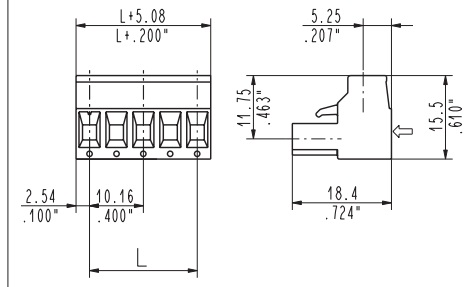


Wire entry

L = Pitch x (poles - 1)

CIF_007**Side Stackable Female**

7.62 mm / .300" Pitch		Weight per pole: 2.39 g			
Poles	STD Code	Pcs/pack.	W [kg]*	Pcs/Ind.**	W [kg]*
2	CIF02007	400	1,91	1000	4,78
03	CIF03007	250	1,79	1000	7,17
04	CIF04007	200	1,91	500	4,78
05	CIF05007	150	1,79	500	5,98
06	CIF06007	125	1,79	250	3,59
07	CIF07007	100	1,67	250	4,18
08	CIF08007	75	1,43	250	4,78
09	CIF09007	75	1,61	250	5,38
10	CIF10007	75	1,79	250	5,98
11	CIF11007	50	1,31	250	6,57
12	CIF12007	50	1,43	250	7,17



Wire entry

L = Pitch x (poles - 1)

CIF_006**Side Stackable Female**

10.16 mm / .400" Pitch		Weight per pole: 2.58 g			
Poles	STD Code	Pcs/pack.	W [kg]*	Pcs/Ind.**	W [kg]*
02	CIF02006	400	2,06	1000	5,16
03	CIF03006	250	1,94	750	5,81
04	CIF04006	175	1,81	500	5,16
05	CIF05006	125	1,61	250	3,23
06	CIF06006	100	1,55	250	3,87
07	CIF07006	75	1,35	250	4,52
08	CIF08006	75	1,55	250	5,16
09	CIF09006	50	1,16	250	5,81
10	CIF10006	50	1,29	250	6,45
11	CIF11006	50	1,42	250	7,01
12	CIF12006	50	1,55	250	7,74
13	CIF13006	50	1,68	250	8,39

****industrial packaging:** add “-00000E” at standard code

