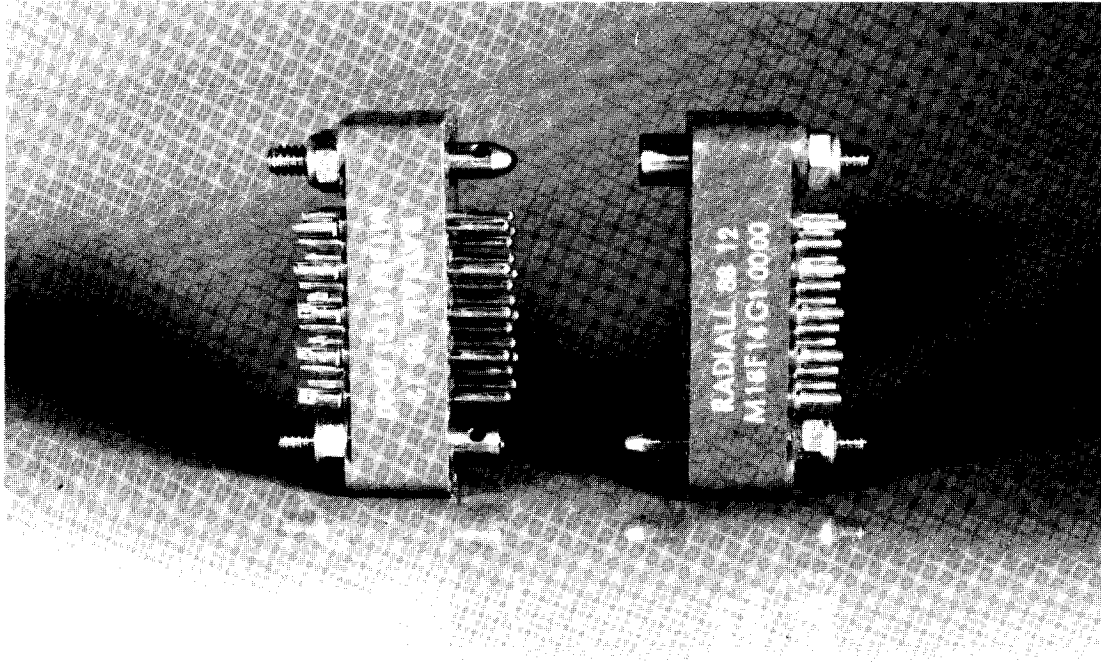


Miniature rectangular multicontact connectors M series



This series consists of five sizes of connector with contact arrangements of 7, 14, 18, 26, and 34 size 20 contacts (.039 (1) dia.) with solder pot for wire and straight solder pin for printed circuits terminations.

These connectors can be fitted with rack guides at each end with or without ground continuity, or with fixed or rotating jackscrews.

Soldered termination protection and cable strain relief can be achieved using either top or side entry hoods.

CHARACTERISTICS

ELECTRICAL

Conforming to MIL-C-28748 performance requirements and UTE-C-93426 HE601 standard

- *Current rating* : 7.5 A
- *Test voltage at sea level* : 1500 Vrms / 50 Hz
- *Operating voltage (sea level)* : 500 Vrms / 50 Hz
- *Operating voltage (70,000 feet)* : 100 Vrms / 50 Hz
- *Insulation resistance* : > 5000 MΩ
- *Contact resistance* : < 5 mΩ

MECHANICAL

Conforming to MIL-C-28748 performance requirements and UTE-C-93426 HE601 standard

- *Temperature range* : -55°C +125°C
- *Durability* : 500 mating cycles
- *Shock* : 50 g/11 ms
- *Vibration* : 20 g / 10-2000 Hz
- *Humidity* : 56 days
- *Contact insertion force* : 2 N

MATERIALS

| | |
|--|--|
| <i>Insulator</i> : | <i>glass filled diallylphthalate conforming to MIL-M-14SDG-F</i> |
| <i>Pin contact</i> : | <i>copper alloy, plating : gold over nickel</i> |
| <i>Socket contact</i> : | <i>copper alloy, plating : gold over nickel</i> |
| <i>Rack guides</i> : | <i>stainless steel</i> |
| <i>Fixed and rotating jackscrews</i> : | <i>stainless steel</i> |
| <i>Ground continuity guides</i> : | <i>copper alloy, plating : gold over nickel</i> |
| <i>Hoods</i> : | <i>Yellow anodized aluminum alloy</i> |

CONNECTOR MATED PAIR WEIGHT (g)

| Contact arrangement | 07 | 14 | 18 | 26 | 34 |
|--|------|------|------|------|------|
| without guides | 9.7 | 13.4 | 18.2 | 24.8 | 35 |
| with rack guides | 15.2 | 18.9 | 23.7 | 30.3 | 40.5 |
| with guides and hoods with rotating jackscrews | 29.5 | 31.5 | 40.7 | 51.4 | 77.8 |

M 26 F 11 GV 00 00

SERIES

Contact arrangement (see page 8)

07 – 14 – 18 – 26 – 34

Contact type

M : pin
F : socket

Termination style (see page 8)

11 : solder pot
14 : straight solder pin for PCB

Guides and jackscrews (see page 10)

00 : without guides and jackscrews (1)
G1 : with UNC rack guides (2)
G6 : with ISO rack guides (2)
G7 : with ISO ground continuity guides (2)
GV : with ISO fixed jackscrews (2)
VL : with ISO long rotating jackscrews

Without rotating jackscrews or threaded posts

Without hood

- (1) connectors to be used with hoods HC and HV (see pages 12–13).
(2) these connectors can be fitted with hoods HA and HL (see pages 12–13).

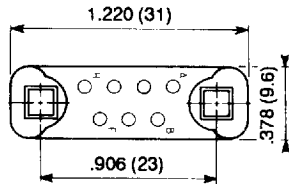
CONNECTOR IDENTIFICATION

The part number is printed on the insulator side.

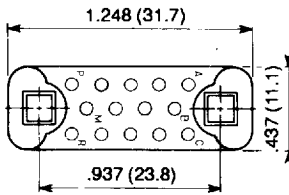
Part number for hoods pages 12–13.

MALE CONNECTOR – WIRING SIDE

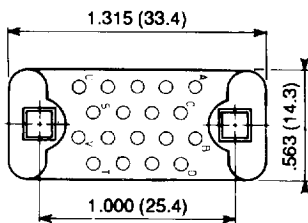
07



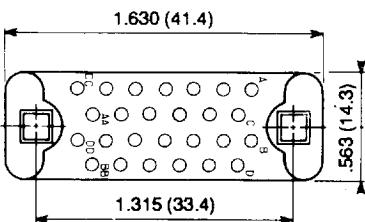
14



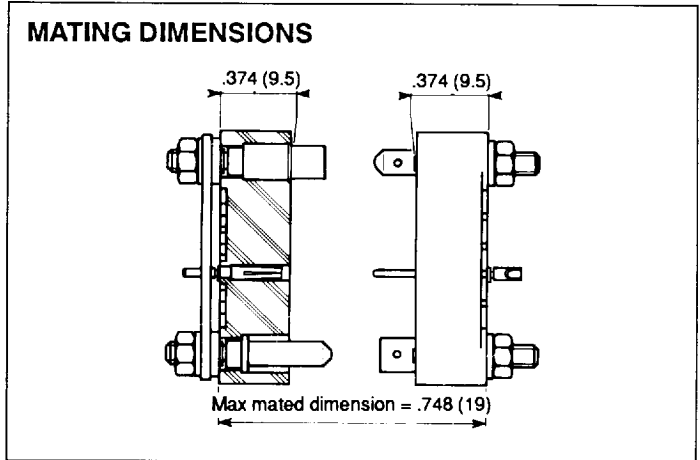
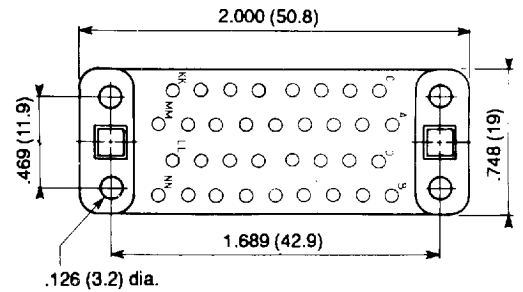
18



26

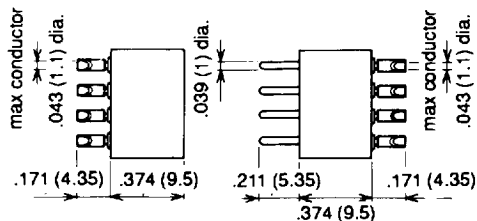


34



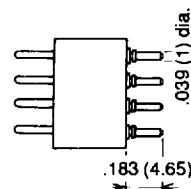
TYPE 11

Solder pot



TYPE 14

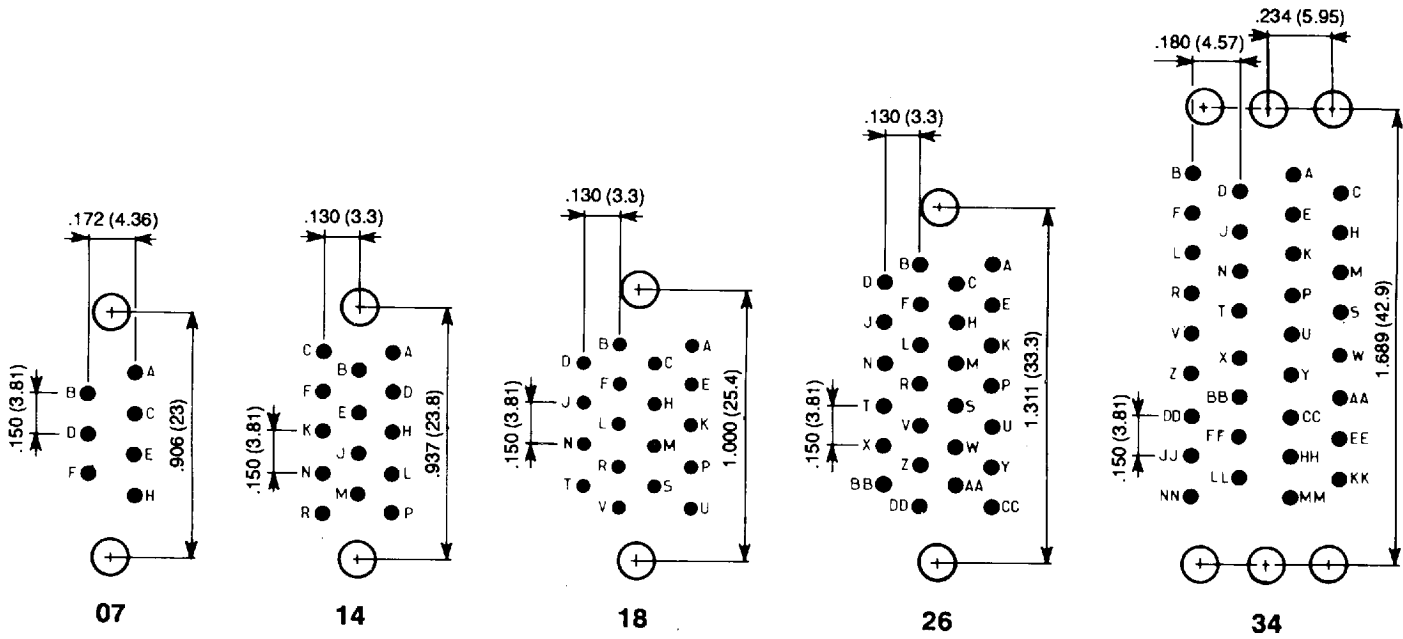
Straight solder pin for PCB



For termination style type 14, the connectors are supplied with insulating washers which act as spacers between the insulator and the PCB.

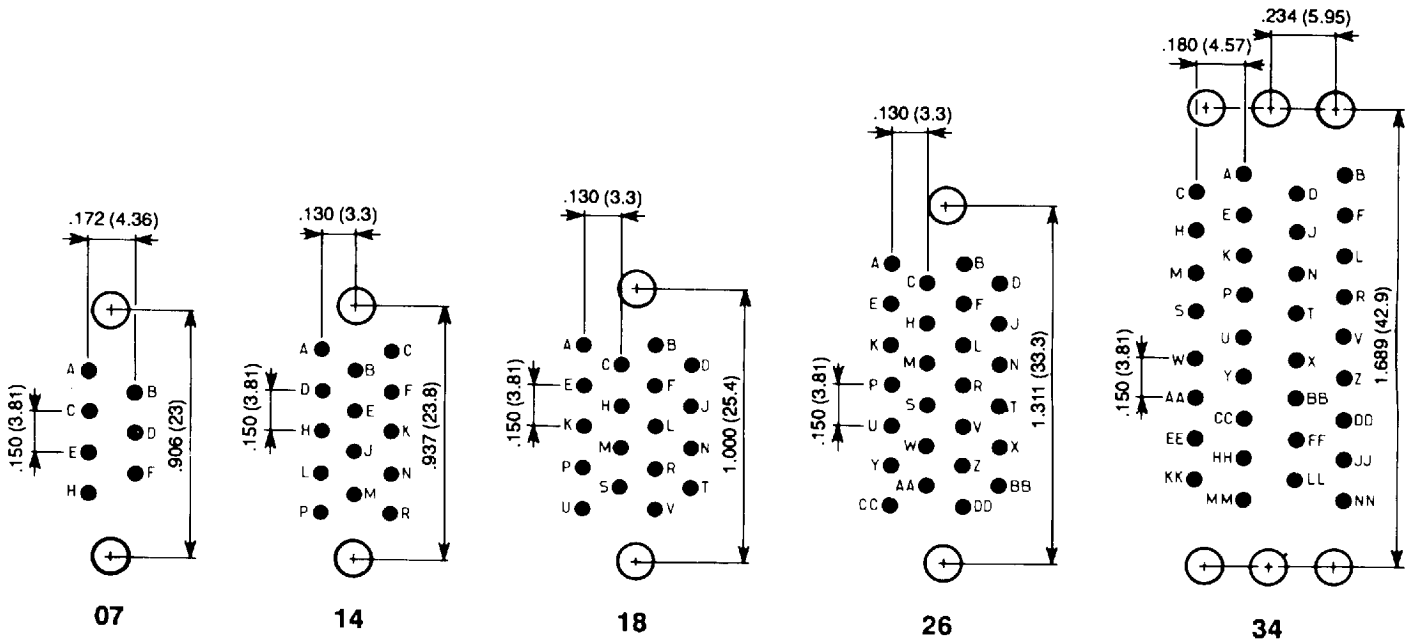
TYPE 14 TERMINATION STYLE – Connector with pin contacts

PCB component side view



TYPE 14 TERMINATION STYLE – Connector with socket contacts

PCB component side view



● Printed circuit drilling .043 +.004 (1.1 +0.1)

○ Drilling to fix the connector .126 (3,2) dia.. Required for guides G1 – G6 – G7 and GV fixing only.

Stainless steel guides and jackscrews (except G7) are supplied with either ISO (M3 x 0.5) or UNC (4-40 UNC) threads and jackscrews.

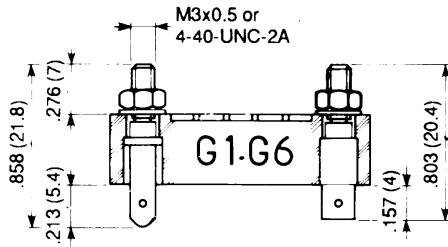
The guides type : G1 – G6 – G7 – GV and VL required are to be defined in the part number (see page 7).

The standard configuration of guides and jackscrews is :

Male guide (or jackscrew) at the end nearest contact A of the female connector.

Female guide (or jackscrew) at the end nearest contact A of the male connector.

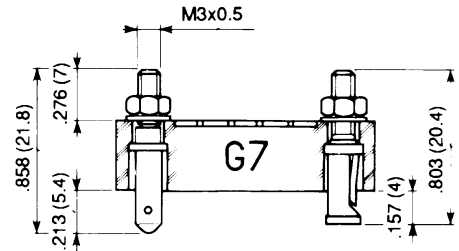
RACK GUIDES TYPE G1-G6



Type G1 : UNC (4-40 UNC)

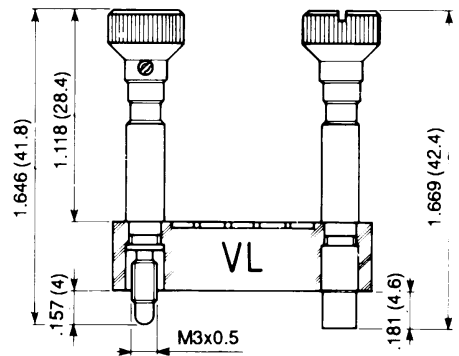
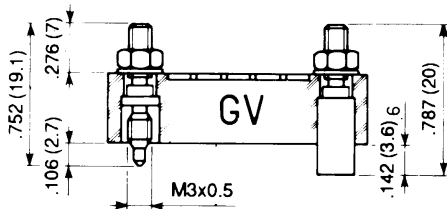
Type G6 : ISO (M3 x 0.5)

GROUND CONTINUITY GUIDES TYPE G7



Male guide : brass gold over nickel plated
Female guide : phosphor bronze gold over nickel plated

FIXED AND ROTATING JACKSCREWS TYPE GV-VL



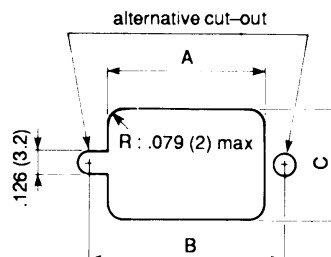
G1 – G6 – G7 – GV guides and jackscrews can be used with hood HA and HL

Mating force : 3cm/daN
Cannot be used with any hoods

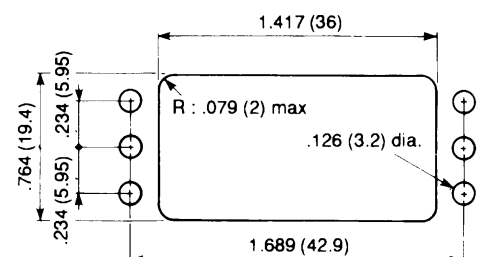
DIMENSIONS

| Contacts arrangements | A | B | C |
|-----------------------|-------------|--------------|-------------|
| 07 | .669 (17) | .905 (23) | .039 (10) |
| 14 | .807 (20.5) | .937 (23.8) | .453 (11.5) |
| 18 | .807 (20.5) | 1.000 (25.4) | .579 (14.7) |
| 26 | 1.102 (28) | 1.311 (33.3) | .579 (14.7) |

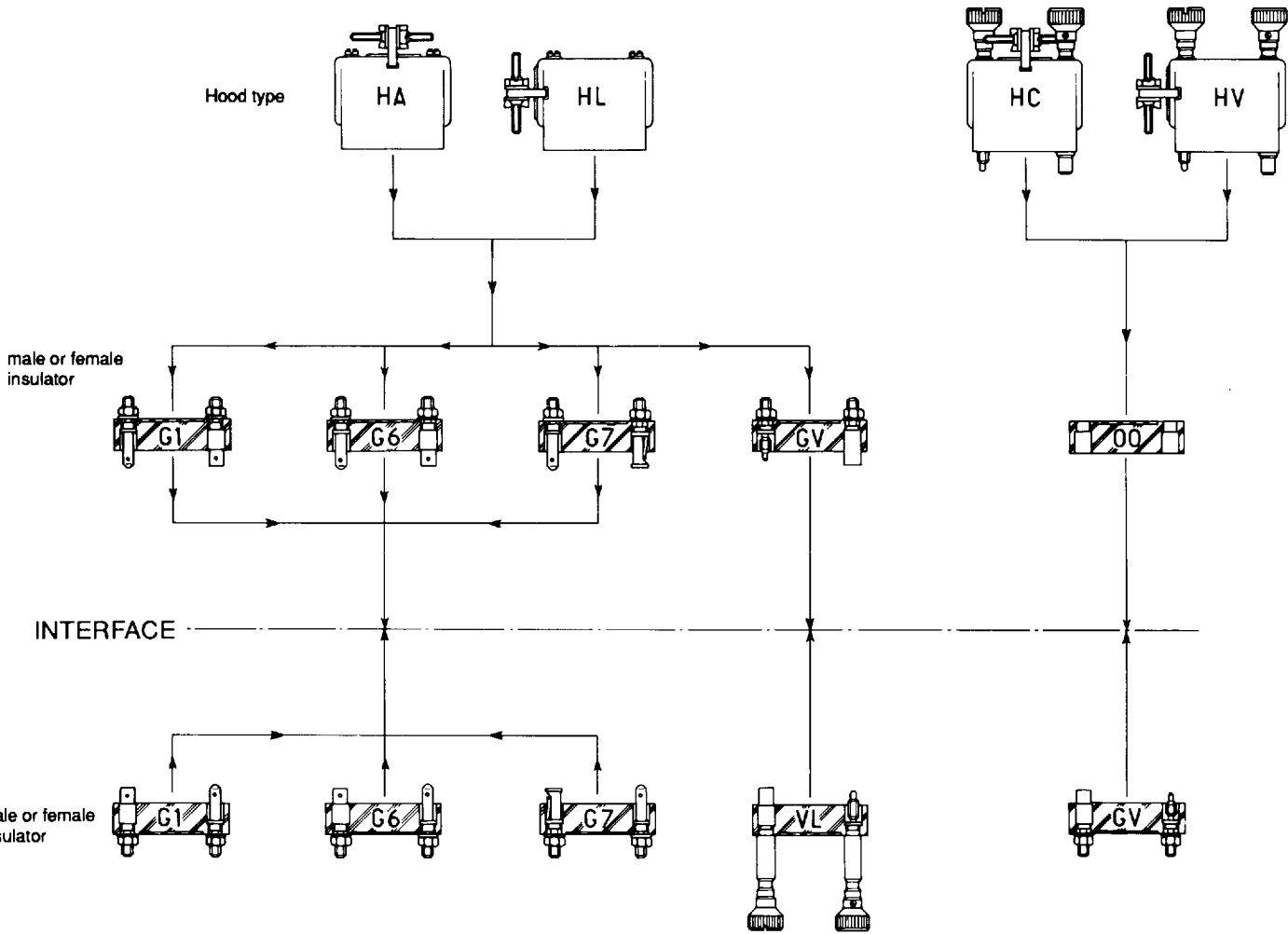
07 – 14 – 18 – 26



34



USE WITH HOOD (Termination style type 11 only)



USE WITHOUT HOOD (Termination style type 11 and 14)

| THREAD | | HOOD | | THREAD | |
|---------------|----------------|------------|-----------|----------------|---------------|
| NC (4-40 UNC) | ISO (M3 x 0.5) | Side entry | Top entry | ISO (M3 x 0.5) | NC (4-40 UNC) |
| 07 | 07 | | | 07 | 07 |
| 14 | 14 | | | 14 | 14 |
| 18 | 18 | | | 18 | 18 |
| 26 | 26 | | | 26 | 26 |
| 34 | 34 | | | 34 | 34 |
| Not available | 14 | | | 07 | Not available |
| | 18 | | | 14 | |
| | 26 | | | 18 | |
| | 34 | | | 26 | |

Fixing of hoods only suitable for insulator with termination style type 11 (solder pot).

TYPE HA

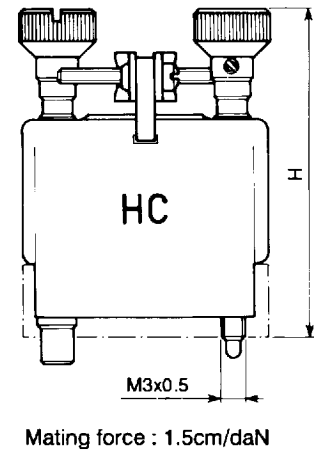
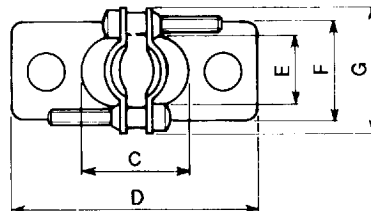
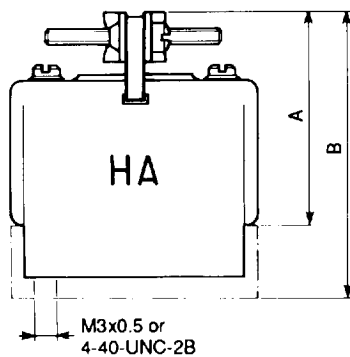
Hoods supplied with two internal threaded posts which are screwed into the guides G1, G6, G7 type or GV jackscrews.

TYPE HC

Hoods supplied with two long rotating jackscrews. These hoods are mounted on connectors without guides or jackscrews (code 00).

PART NUMBERS

| Contacts arrangements | Type HA | | Type HC |
|-----------------------|-----------------------|-----------------------|-----------------------|
| | with threads M3 x 0.5 | with threads 4-40 UNC | with screws M3 x 0.50 |
| 07 | M 07 HA IS | M 07 HA NC | M 07 HC IS |
| 14 | M 14 HA IS | M 14 HA NC | M 14 HC IS |
| 18 | M 18 HA IS | M 18 HA NC | M 18 HC IS |
| 26 | M 26 HA IS | M 26 HA NC | M 26 HC IS |
| 34 | M 34 HA IS | M 34 HA NC | M 34 HC IS |

**DIMENSIONS**

| Contacts arrangements | A | B | C | D | E | F | G | H |
|-----------------------|--------------|--------------|--------------|--------------|-------------|-------------|-------------|--------------|
| 07 | 1.299 (33) | 1.673 (42.5) | .590 (15) | 1.220 (31) | .311 (7.9) | .440 (11.2) | .622 (15.8) | 2.110 (53.6) |
| 14 | 1.047 (26.6) | 1.421 (36.1) | .590 (15) | 1.252 (31.8) | .378 (9.6) | .500 (12.7) | .622 (15.8) | 1.76 (44.7) |
| 18 | 1.252 (31.8) | 1.626 (41.3) | .610 (15.5) | 1.311 (33.3) | .440 (11.2) | .642 (16.3) | 1.063 (27) | 2.110 (53.6) |
| 26 | 1.780 (45.2) | 2.153 (54.7) | .780 (19.8) | 1.630 (41.4) | .440 (11.2) | .642 (16.3) | 1.063 (27) | 2.488 (63.2) |
| 34 | 1.752 (44.5) | 2.126 (54) | 1.059 (26.9) | 2.000 (50.8) | .563 (14.3) | .827 (21) | 1.063 (27) | 2.488 (63.2) |

Fixing of hoods only suitable for insulator with termination style type 11 (solder pot).

TYPE HL

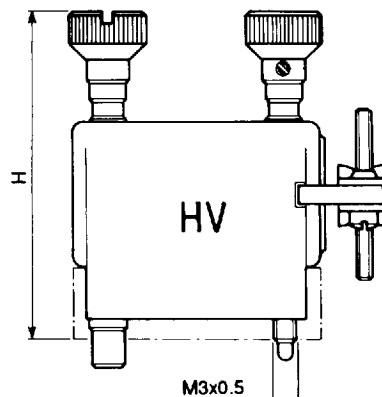
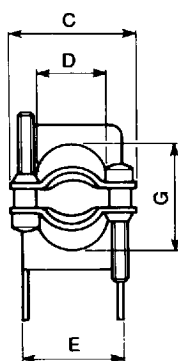
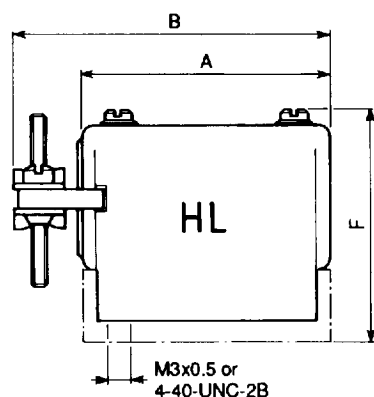
Hoods supplied with two internal threaded posts which are screwed into the guides G1, G6, G7 types or GV jackscrews.

TYPE HV

Hoods supplied with two long rotating jackscrews. These hoods are mounted on the connectors without guides or jackscrews.

PAPT NUMBERS

| Contacts arrangements | Type HL | | Type HV |
|-----------------------|-----------------------|-----------------------|----------------------|
| | with threads M3 x 0.5 | with threads 4-40 UNC | with screws M3 x 0.5 |
| 07 | M 07 HL IS | M 07 HL NC | — |
| 14 | M 14 HL IS | M 14 HL NC | M 14 HV IS |
| 18 | M 18 HL IS | M 18 HL NC | M 18 HV IS |
| 26 | M 26 HL IS | M 26 HL NC | M 26 HV IS |
| 34 | M 34 HL IS | M 34 HL NC | M 34 HV IS |



Mating force : 1.5cm/daN

DIMENSIONS

| Contacts arrangements | A | B | C | D | E | F | G | H |
|-----------------------|--------------|--------------|-------------|-------------|-------------|--------------|-------------|--------------|
| 07 | 1.220 (31) | 1.535 (39) | - | .311 (7.9) | .440 (11.2) | 1.457 (37) | .311 (7.9) | - |
| 14 | 1.252 (31.8) | 1.547 (39.3) | .622 (15.8) | .378 (9.6) | .500 (12.7) | 1.736 (44.1) | .591 (15) | 2.110 (53.6) |
| 18 | 1.311 (33.3) | 1.811 (46) | 1.063 (27) | .440 (11.2) | .642 (16.3) | 1.736 (44.1) | .689 (17.5) | 2.110 (53.6) |
| 26 | 1.630 (41.4) | 2.126 (54) | 1.063 (27) | .440 (11.2) | .642 (16.3) | 1.736 (44.1) | .780 (19.8) | 2.110 (53.6) |
| 34 | 2.000 (50.8) | 2.421 (61.5) | 1.063 (27) | .563 (14.3) | .827 (21) | 1.744 (44.3) | .811 (20.6) | 2.110 (53.6) |

Hood type HL for contact arrangement 07 is fitted with a longitudinal cable clamp and is not available in hood type HV.

Fixing of hoods only suitable for insulator with termination style type 11 (solder pot).