

MM & MB series

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INTRODUCTION

The Radiall miniature and subminiature rectangular multicontact connectors meet the requirements of the standard MIL-C-28748 performance requirements.

They are rugged connectors and offer high performance for high contact density.

The connectors in each series consist of an insulator with male and female contacts which include several pin sizes.

FEATURES

Each connector features a male guide at one end and a female guide at the other. This arrangement ensures polarization of the connector when coupled. These guides can be smooth (rack guides) or screw closing (fixed or rotating jackscrews).

The **contacts male or female** are made of copper base alloy plated gold over nickel. The female contacts have 4 slots which ensures perfect mating, constant contact pressure and excellent mechanical and electrical performance. The contacts have a slight amount of float in order to allow self alignment during mating.

Each series includes a different termination type; solder pot, straight or right angle solder pin for PCB, and wrapping.

The MM series

This series consists of six sizes of connector with contact arrangements for 7, 14, 20, 26, 34 and 50 size 22 contacts \emptyset 0.76mm / 0.030inch.

The series offers four types of terminations:

- Solder pot for wire (AWG22 max)
- Straight solder pin for PBC
- Right angle solder pin for PBC
- Wire wrap

These connectors are fitted with rack guides or fixed or rotating jackscrews at each end. A protective covering for wire terminations can be installed on the connector.

The MB series

This series consists of twelve sizes of connectors with contact arrangements for 2, 3, 5, 11, 14, 20, 25, 34, 42, 50 and 75 size 20 contacts \emptyset 1mm / 0.039inch.

The series offers three types of terminations:

- Solder pot for wire (AWG20 max)
- Straight solder pin for PBC
- Right angle solder pin for PBC

These connectors are fitted with rack guides or fixed or rotating jackscrews at each end.

Wires and soldered terminations for wire can be protected by either top or side entry backshells or by potting covers for 2 to 14 contacts connectors.

A range of **top and side entry backshells** with cable clamps in yellow anodized aluminium alloy are available. They are designed to protect the soldered wire connections, provide strain relief to the cable and facilitate the disengagement of the mated connectors.

Fitted with threaded posts they are suitable for connectors fitted with rack guides or fixed jackscrews. When fitted with rotating jackscrew guides they are fixed to the connectors without guides and jackscrews.

For the MB series there are also thermoplastic covers for "potting" ensuring that the terminated wires at the back of the insulator are protected.

Their mass and volume make them particularly suitable for the following applications: civil and military, in-flight equipments, instrumentation, missile, etc...

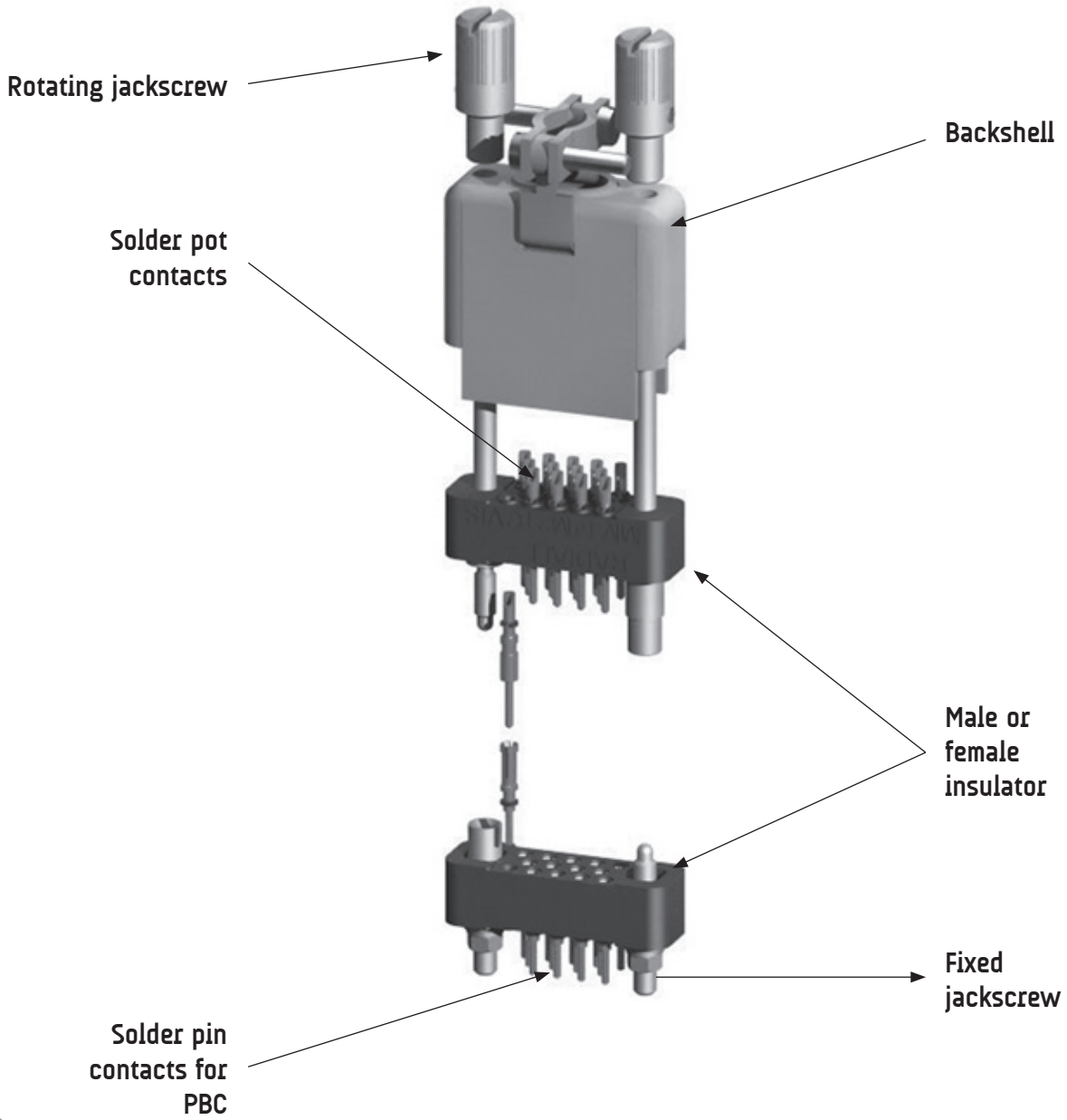
Originally developed for rack and panel assemblies they can be adapted for cable to cable applications with cable clamp backshell.



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PRODUCT OVERVIEW

Detailed view of the various parts of this series connector.



ELECTRICAL

Conform to MIL-C-28748 performance requirements and UTE-C-93426 HE611 standard.

- Current rating: 5A
- Test voltage @ sea level: 1000 Vrms / 50 Hz
- Operating voltage @ sea level: 350 Vrms / 50 Hz
- Operating voltage @ 70,000 feet: 90 Vrms / 50 Hz
- Insulation resistance: > 5000 MΩ
- Contact resistance: < 5 mΩ

MECHANICAL & ENVIRONMENTAL

Conform to MIL-C-28748 performance requirements and UTE-C-93426 HE611 standard.

- Temperature range: - 55°C (-131°F) to 125°C (257°F)
- Durability: 500 mating cycles
- Shock: 100g / 6ms
- Vibration: 20g / 10-2000 Hz
- Humidity: 56 days
- Contact insertion force: 3N

MATERIALS

| Description | Material | Finish |
|---------------------|--|------------------|
| Insulator | glass filled diallylphthalate conform to MIL-M-14SDG-F | / |
| Pin contact | copper alloy | gold over nickel |
| Socket contact | copper alloy | gold over nickel |
| Guides & jackscrews | stainless steel | / |
| Backshells | aluminium alloy | yellow anodized |

MASSES g (oz)

Weight of connectors mated.

| Contact arrangement | 07 | 14 | 20 | 26 | 34 | 50 |
|--|------------|-------------|------------|-------------|-------------|-------------|
| Without guides | 2.8 (0.99) | 5 (0.18) | 6.6 (0.23) | 8.1 (0.29) | 12.1 (0.43) | 15 (0.53) |
| With rack guides | 4.7 (0.17) | 7 (0.25) | 8.4 (0.30) | 10 (0.35) | 13 (0.46) | 17.1 (0.60) |
| With backshells and guides or jackscrews | 12 (0.42) | 15.5 (0.55) | 17 (0.60) | 19.4 (0.68) | 23.2 (0.81) | 32.8 (1.16) |

HOW TO ORDER CONNECTORS

| | | | | | |
|----|----|---|----|----|----|
| MM | 34 | M | 20 | VL | IS |
|----|----|---|----|----|----|

Series
MM series

Contact arrangement (refer to page 9-9)
07 - 14 - 20 - 26 - 34 - 50

Contact type
M: pin
F: socket

Termination style (refer to page 9-10)
20 - solder pot
21 - straight solder pin for PBC
22 - right angle solder pin for PBC
23 - wrapping contact 1 wrap
24 - wrapping contact 2 wrap
25 - wrapping contact 3 wrap

Guides and jackscrews (refer to page 9-13)
00 - without guides and jackscrews ⁽¹⁾
G3 - rack guides ⁽²⁾
GV - fixed jackscrews ⁽²⁾
VR - short rotating jackscrews
VL - long rotating jackscrews ⁽³⁾

Thread, guides or jackscrews
00 - without guides and jackscrews
IS - ISO (M2 x 0.4)
NC - 2-56 UNC

CONNECTOR IDENTIFICATION

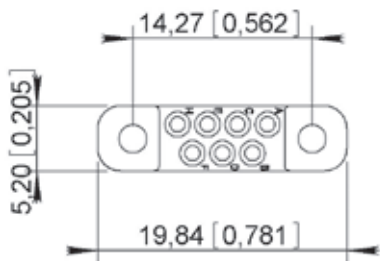
The part number is printed on the insulator side.

- NOTES:**
 (1) Connectors to be used with backshell HC (see page 9-15) and rotating jackscrews.
 (2) Connectors to be used with backshell HA (see page 9-15).
 (3) VL jackscrew assembly is not available for termination style type 22.

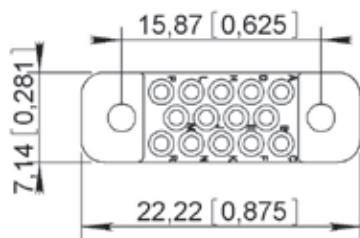
CONTACT ARRANGEMENTS

MM series

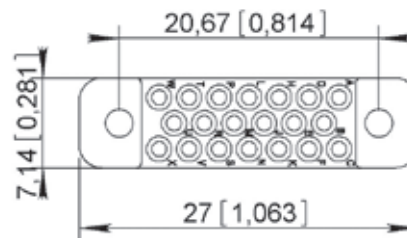
Male connector - wiring side dimensions mm (inch)



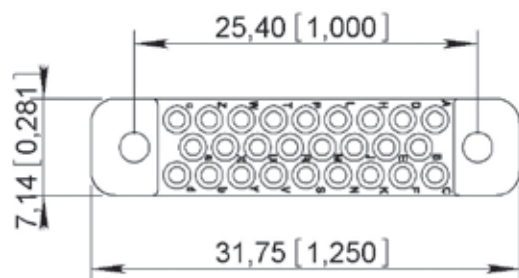
07



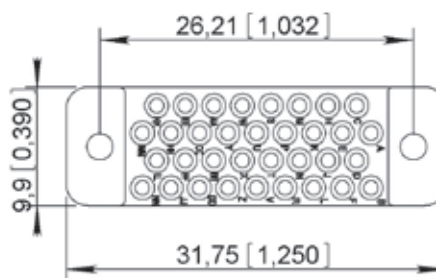
14



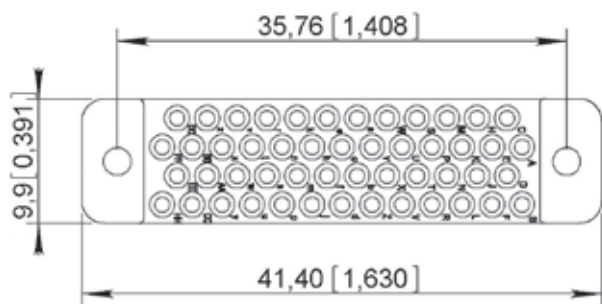
20



26

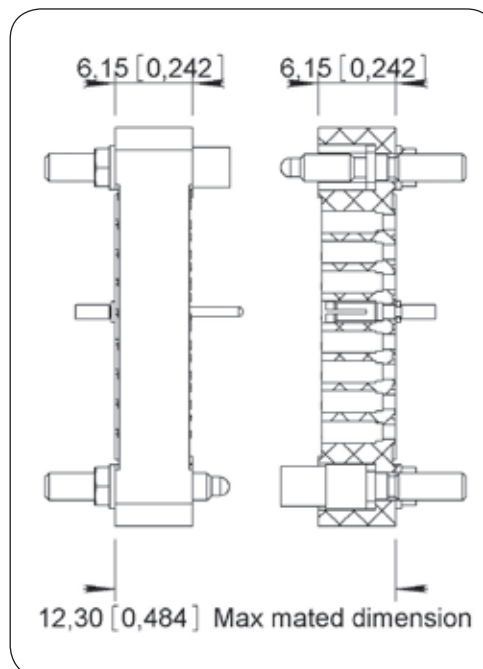


34



50

Mating dimensions

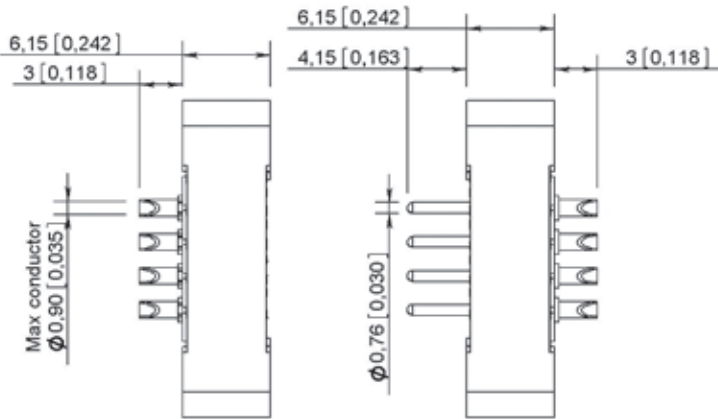


TERMINATION STYLES

dimensions mm (inch)

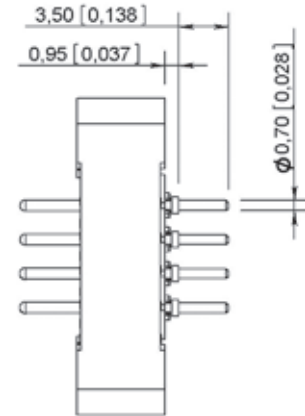
TYPE 20

Solder pot



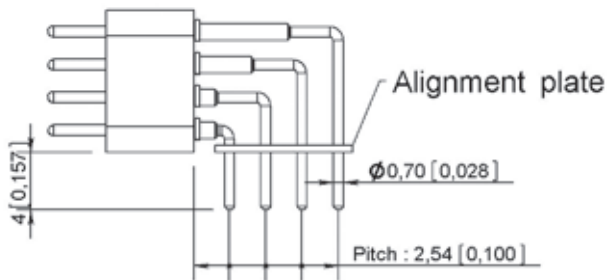
TYPE 21 ⁽¹⁾

Straight solder pin for PCB



TYPE 22

Right angle solder pin for PCB

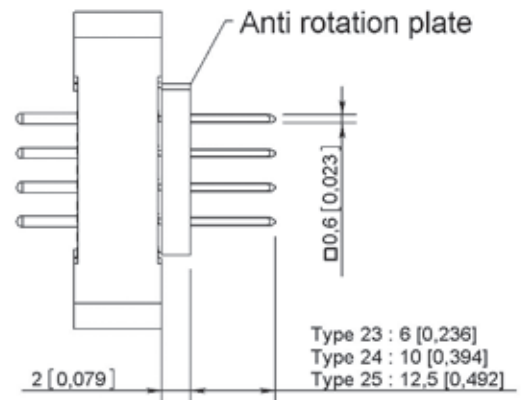


TYPE 23 - 24 - 25

23: wire wrap termination (1 level)

24: wire wrap termination (2 level)

25: wire wrap termination (3 level)



NOTE:

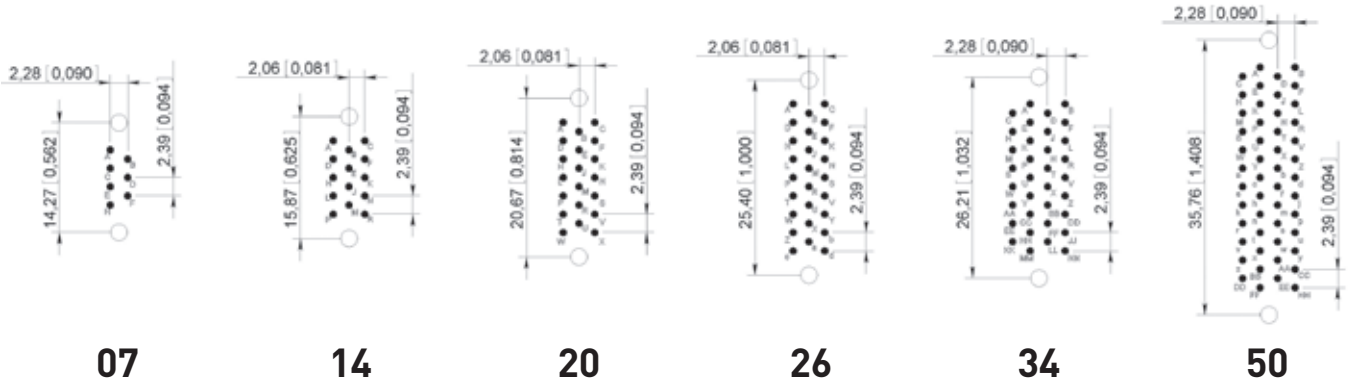
(1) For termination style type 21, the connectors are supplied with insulating washers in order to make space between the insulator and the PCB.

PRINTED CIRCUIT DRILL PATTERN

MM series

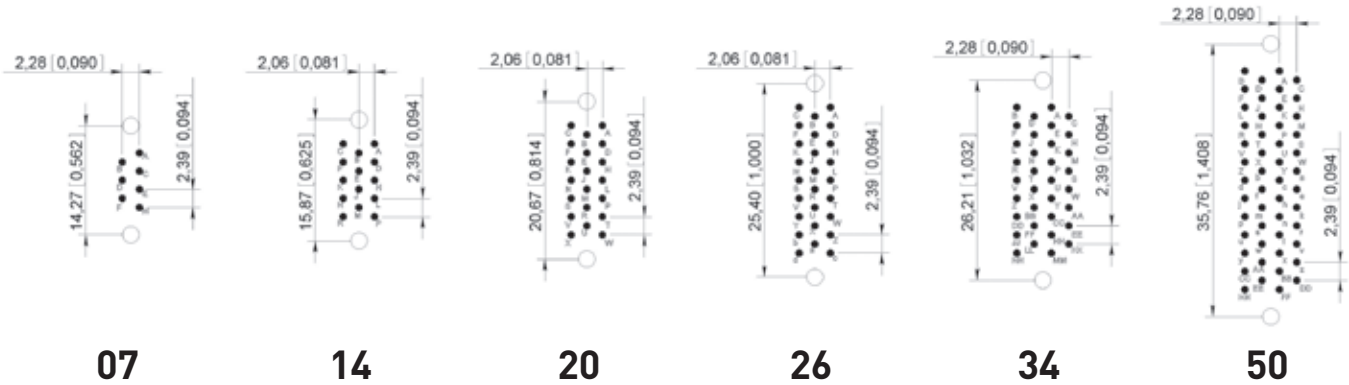
TYPE 21 Termination style - Connector with socket contacts

PCB component side view



TYPE 21 Termination style - Connector with pin contacts

PCB component side view



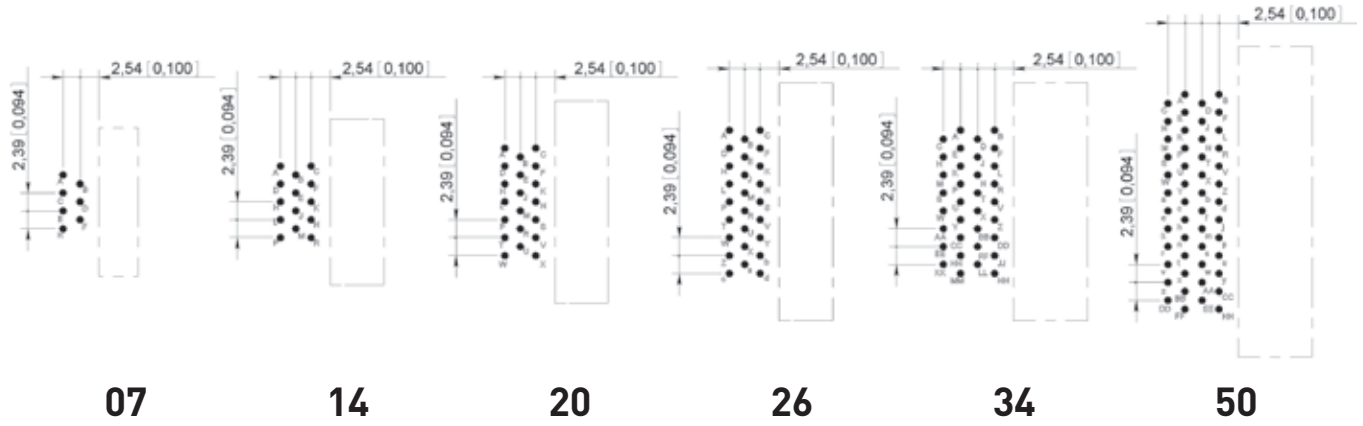
NOTES:

- Printed circuit drilling 0.8 mm ±0.05 (0.031 ±0.002)
- Drilling to fix the connector. Required for guides G3 and GV fixing only:
2.2mm (0.087) for ISO guides and 2.4mm (0.094) for UNC guides

PRINTED CIRCUIT DRILL PATTERN

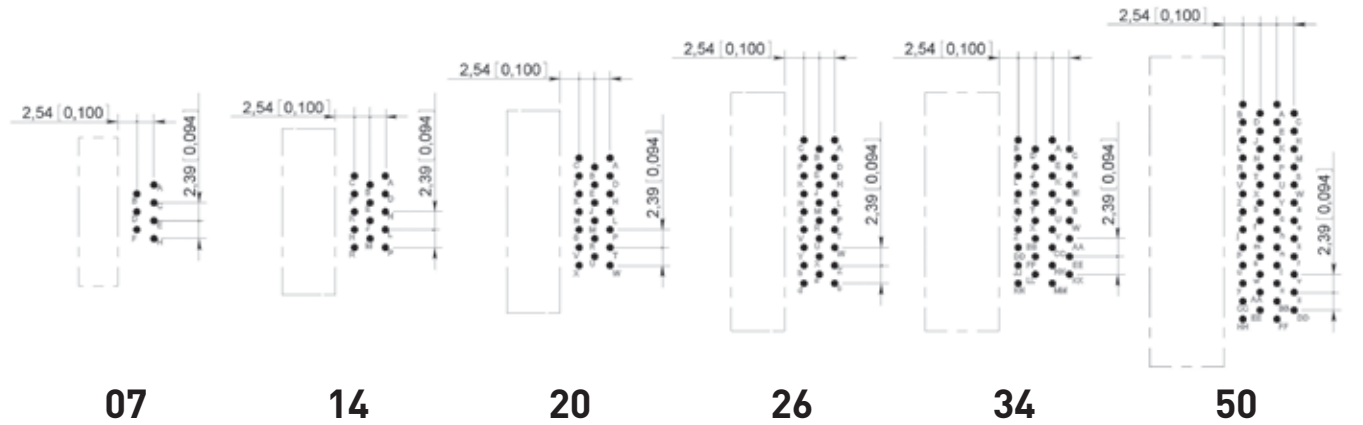
TYPE 22 Termination style - Connector with socket contacts

PCB component side view



TYPE 22 Termination style - Connector with pin contacts

PCB component side view



NOTE:

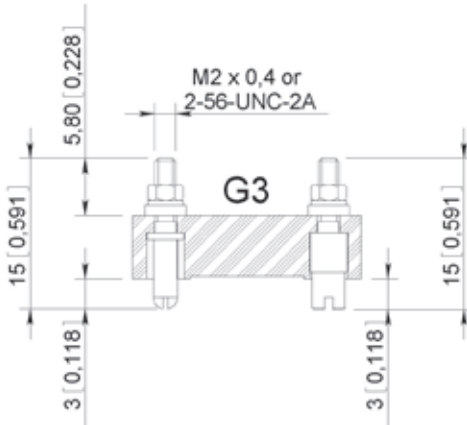
- Printed circuit drilling 0.8 mm ±0.05 (0.031 ±0.002)

Stainless steel guides and jackscrews are supplied with either ISO (M2 x 0.4) or UNC (2-56 UNC) threads. The guides or jackscrews types (G3 – GV – VL – VR) and the type of thread (ISO or UNC) required are to be defined in the part number on page 9-8.

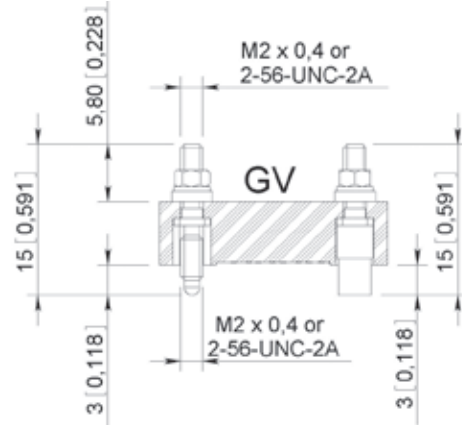
The standard configuration of guides and jackscrews is:

- 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 G3

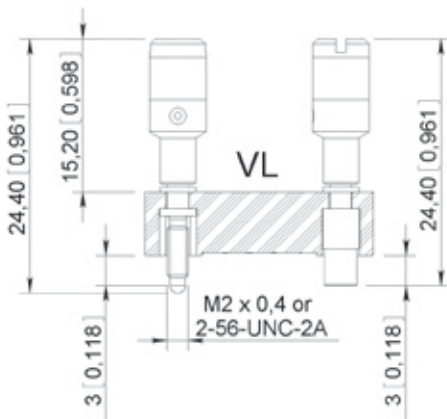


FIXED JACKSCREWS TYPE GV



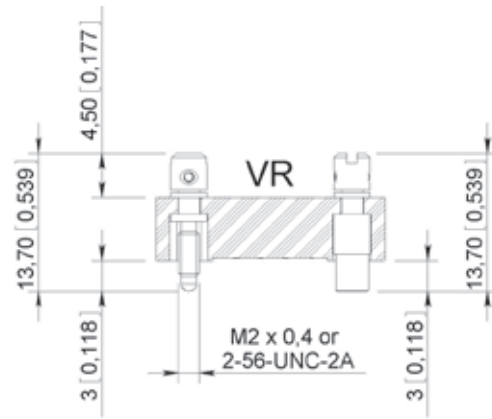
These guide and jackscrews can be used with backshell HA.

LONG AND SHORT ROTATING JACKSCREWS TYPE VL – VR



Mating torque: 0.2N.m

Not available for termination style type 22
Cannot be used with any backshell

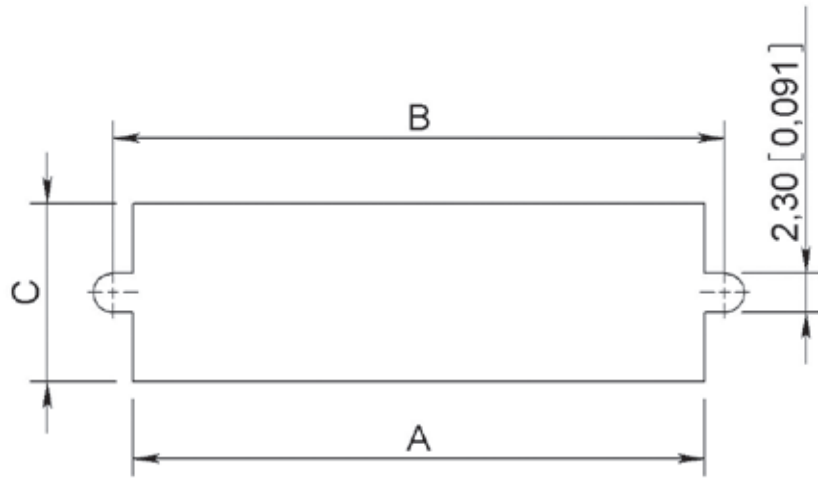


Mating torque: 0.2N.m

Cannot be used with any backshell

PANEL CUT-OUT

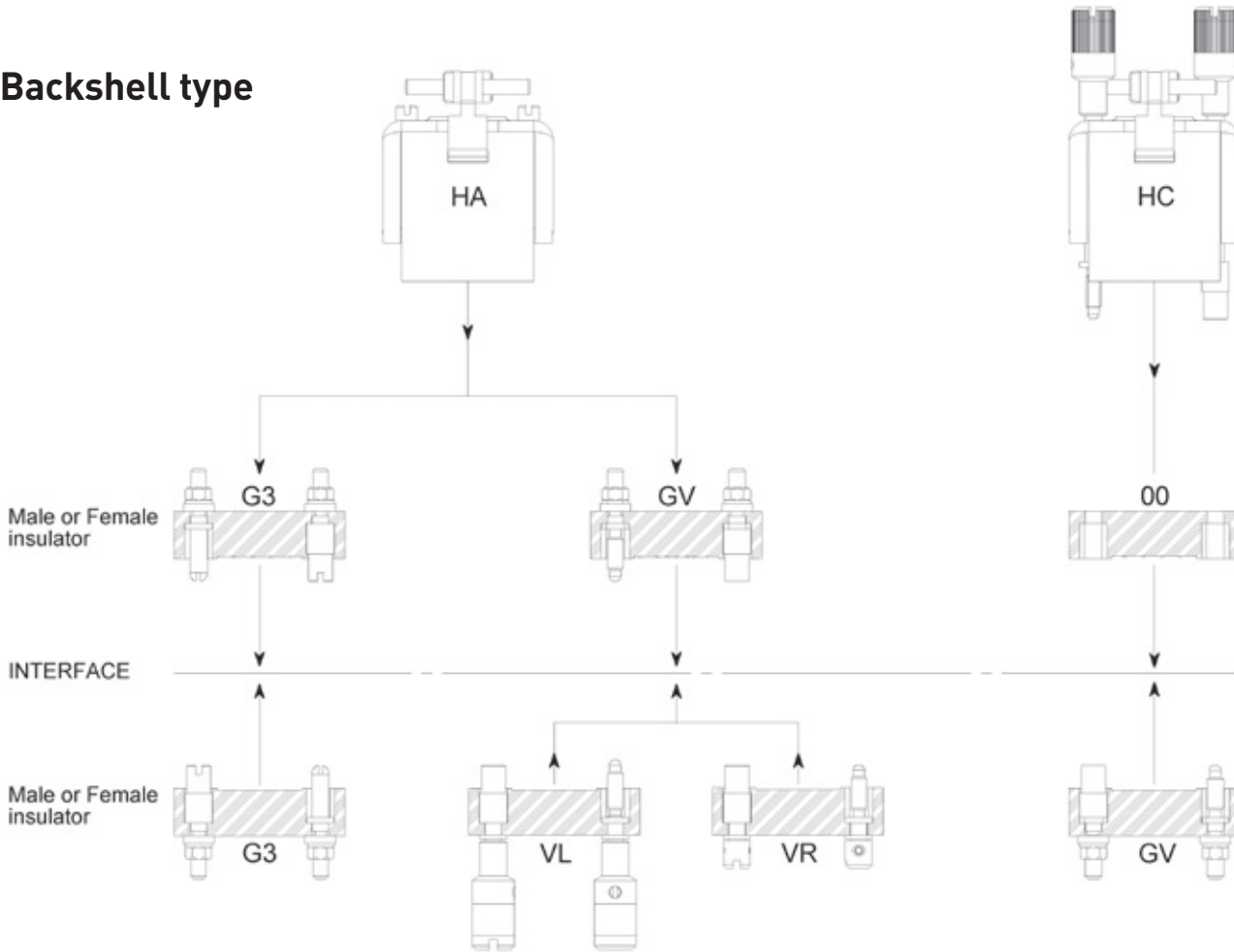
| Contact Arrangement | Dimensions mm (inch) | | |
|---------------------|----------------------|---------------|--------------|
| | A | B | C |
| 07 | 11.9 (0.468) | 14.27 (0.562) | 5.8 (0.228) |
| 14 | 13.5 (0.531) | 15.87 (0.625) | 7.6 (0.299) |
| 20 | 18.3 (0.720) | 20.67 (0.814) | |
| 26 | 23 (0.905) | 25.4 (1) | |
| 34 | 23.9 (0.940) | 26.2 (1.031) | 10.4 (0.409) |
| 50 | 33.4 (1.315) | 35.76 (1.408) | |



CONNECTOR MATING COMPATIBILITY

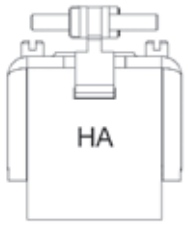

Use with backshell – Termination style type 20 only

Backshell type



Use without backshell – All termination style type

BACKSHELL TYPE AVAILABILITY

| Thread | | Hood | | Thread | |
|------------------|-------------------|---|---|-------------------|------------------|
| NC (2-56 UNC) | ISO (M2 x 0.4) |  |  | ISO (M2 x 0.4) | NC (2-56 UNC) |
| 07 | 07 | | | 07 | 07 |
| 14 | 14 | | | 14 | 14 |
| 20 | 20 | | | 20 | 20 |
| 26 | 26 | | | 26 | 26 |
| 34 | 34 | | | 34 | 34 |
| 50 | 50 | | | 50 | 50 |

Fixing of hoods only suitable for insulator with termination style type 20 (solder pot).

TOP ENTRY BACKSHELLS

TYPE HA

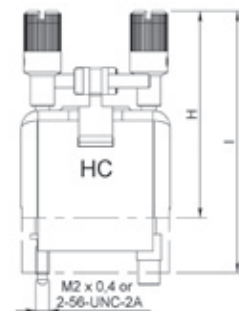
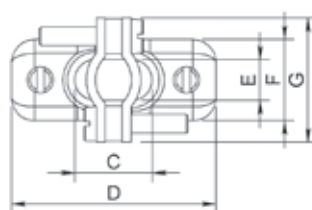
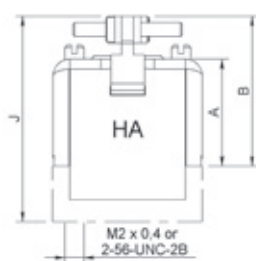
Backshells supplied with two internal threaded posts which are screwed into the guides G3 or jackscrews GV.

TYPE HC

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

PART NUMBERS

| Contacts Arrangements | Type HA | | Type HC | |
|-----------------------|-----------------------|-----------------------|----------------------|----------------------|
| | With threads M2 x 0.4 | With threads 2-56 UNC | With screws M2 x 0.4 | With screws 2-56 UNC |
| 07 | MM07HAIS | MM07HANC | MM07HCIS | MM07HCNC |
| 14 | MM14HAIS | MM14HANC | MM14HCIS | MM14HCNC |
| 20 | MM20HAIS | MM20HANC | MM20HCIS | MM20HCNC |
| 26 | MM26HAIS | MM26HANC | MM26HCIS | MM26HCNC |
| 34 | MM34HAIS | MM34HANC | MM34HCIS | MM34HCNC |
| 50 | MM50HAIS | MM50HANC | MM50HCIS | MM50HCNC |



DIMENSIONS mm (inch)

Mating torque: 0.15N.m

| Contact Arrangement | A | B | C | D | E | F | G | H | I | J | | |
|---------------------|-----------------|------------------|-----------------|-----------------|----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| 07 | 15.9 (0.626) | 23.15 (0.911) | 5.5 (0.216) | 19.8 (0.779) | 4 (0.157) | 6.8 (0.268) | 13.5 (0.531) | 31.9 (1.256) | 38.2 (1.504) | 29.4 (1.157) | | |
| 14 | | | 10 (0.394) | 22.2 (0.874) | 6 (0.236) | 8.8 (0.346) | | | | | | |
| 20 | | | 14 (0.551) | 27 (1.063) | | | | | | | | |
| 26 | | | 19 (0.748) | 31.8 (1.252) | 9.5 (0.374) | 11.8 (0.464) | 15.7 (0.618) | | | | | |
| 34 | | | 30.5 (1.201) | 38.5 (1.516) | | | | | | | 29.7 (1.169) | 41.4 (1.630) |
| 50 | | | | | | | | | | | | |

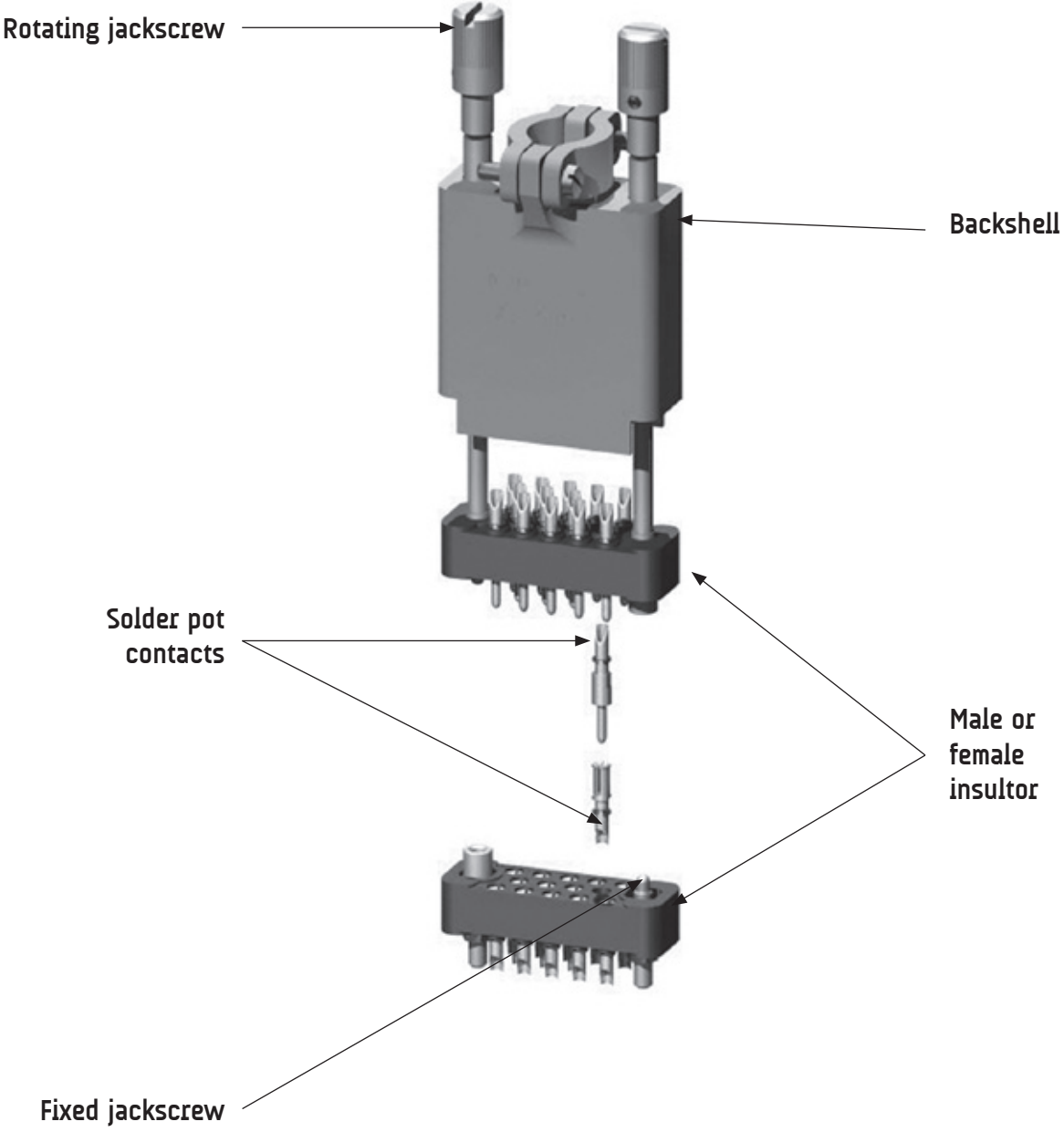
NOTE:

Fixing of backshells only suitable for insulator with termination style type 20 (solder pot).

PRODUCT OVERVIEW

MB series

Detailed view of the various parts of this series connector.



ELECTRICAL

Conform to MIL-C-28748 performance requirements standard.

- Current rating: 7.5A
- Test voltage @ sea level: 1500 Vrms / 50 Hz
- Operating voltage @ sea level: 500 Vrms / 50 Hz
- Insulation resistance: > 5000 MΩ
- Contact resistance: < 5 mΩ

MECHANICAL & ENVIRONMENTAL

- Temperature range: - 55°C (-131°F) to 125°C (257°F)
- Durability: 500 mating cycles
- Shock: 50g / 11ms
- Vibration: 20g / 10-2000 Hz
- Humidity: 21 days
- Contact insertion force: 3N

MATERIALS

| Description | Material | Finish |
|---------------------|--|------------------|
| Insulator | glass filled diallylphthalate conform to MIL-M-14SDG-F | / |
| Pin contact | copper alloy | gold over nickel |
| Socket contact | copper alloy | gold over nickel |
| Guides & jackscrews | stainless steel | / |
| Backshells | aluminium alloy | yellow anodized |
| Spring lever clamps | stainless steel | / |
| Potting moulds | nylon | / |

MASSES g (oz)

Weight of connectors mated.

| Contact arrangement | 02 | 03 | 05 | 07 | 11 | 14 | 20 | 26 | 34 | 42 | 50 | 75 |
|-------------------------------|---------------|----------------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| Without guides | 2.2 (0.07) | 2.30 (0.81) | 4 (0.14) | 3.7 (0.13) | 5.6 (0.20) | 6.4 (0.23) | 8.6 (0.30) | 11 (0.39) | 15.2 (0.54) | 17.6 (0.62) | 20.5 (0.72) | 32.7 (1.15) |
| With rack guides | 3.9 (0.14) | 4 (0.14) | 4.7 (0.17) | 5.4 (0.19) | 7.3 (0.26) | 8.1 (0.29) | 10.3 (0.36) | 12.7 (0.45) | 16.9 (0.60) | 19.3 (0.68) | 22.2 (0.78) | 36.2 (1.28) |
| With backshells and jackscrew | - | - | - | 12.4 (0.44) | 17.5 (0.62) | 20.4 (0.72) | 28 (0.99) | 31.5 (1.11) | 37.2 (1.31) | - | 45.2 (1.59) | 62 (2.19) |

HOW TO ORDER CONNECTORS

| | | | | | | |
|----|----|---|----|----|----|----|
| MB | 34 | M | 20 | VL | 00 | IS |
|----|----|---|----|----|----|----|

Series

MB series

Contact arrangement (refer to page 9-21)

02 – 03 – 05 – 07 – 11 – 14
 20 – 26 – 34 – 42 – 50 – 75

Contact type

M: pin
 F: socket

Termination style (refer to page 9-22)

85 – solder pot
 86 – straight solder pin for PCB
 87 – right angle solder pin for PCB

Guides and jackscrews (refer to page 9-28)

00 – without guides and jackscrews ⁽¹⁾
 G1 – rack guides ⁽²⁾
 GV – fixed jackscrews ⁽²⁾
 VR – short rotating jackscrews
 VL – long rotating jackscrews ⁽³⁾

Shipment without backshell and accessories

Thread, guides or jackscrews

00 – without guides and jackscrews
 IS – ISO (M2 x 0.4)
 NC – 2-56 UNC

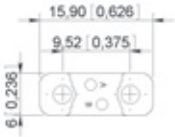
NOTES:

- (1) Connectors to be used with backshell HC and HV [see page 9-29] or rack guides G1.
- (2) Connectors to be used with backshell HA and HL [see page 9-29].
 A spring clip locking system can be fitted [see page 9-33]
- (3) VL jackscrews assembly is only available for termination style type 85.

CONTACT ARRANGEMENTS

MB series

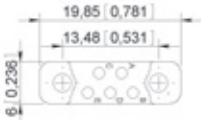
02



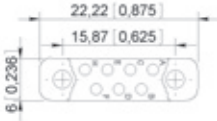
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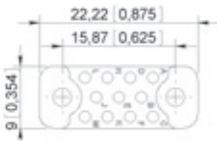
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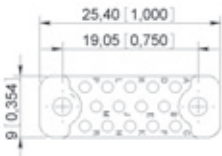
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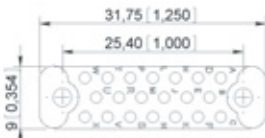
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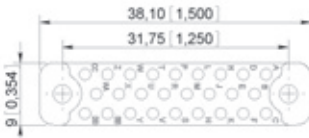
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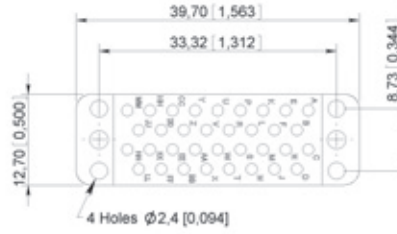
20



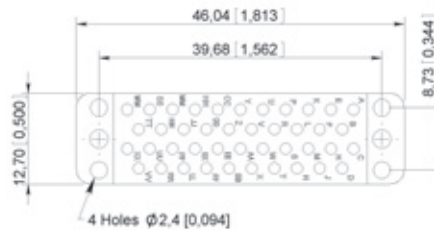
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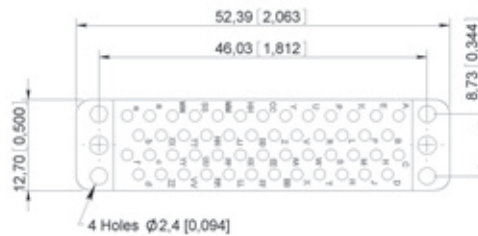
34



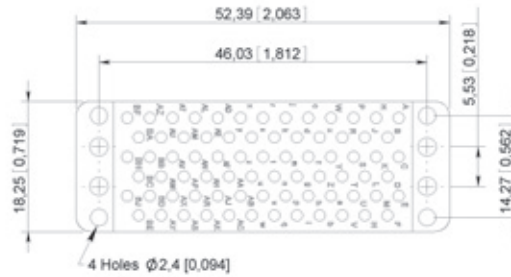
42



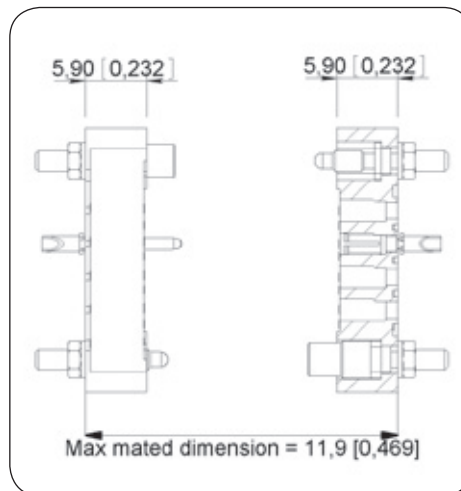
50



75



Mating dimensions



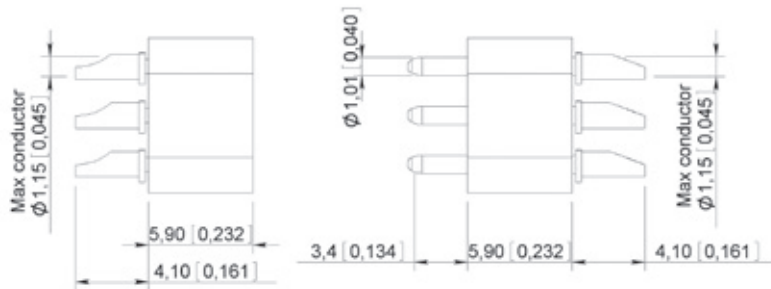
TERMINATION STYLES

dimensions mm (inch)

All contacts arrangement and termination style have contacts stopped in rotation (except contact arrangements 42, 50 and 75 for these please contact us).

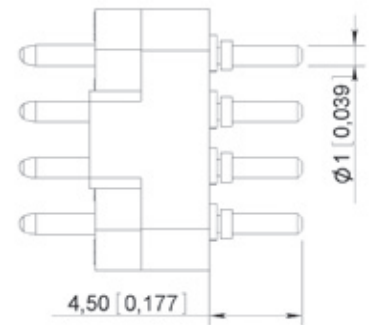
TYPE 85

Solder pot



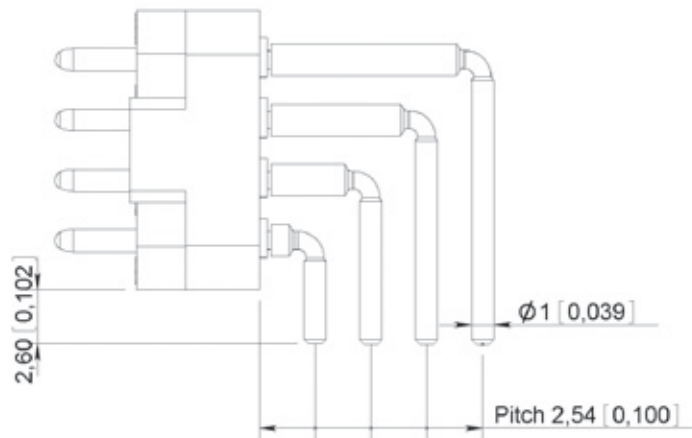
TYPE 86 ⁽¹⁾

Straight solder pin for PCB



TYPE 87

Right angle solder pin for PCB

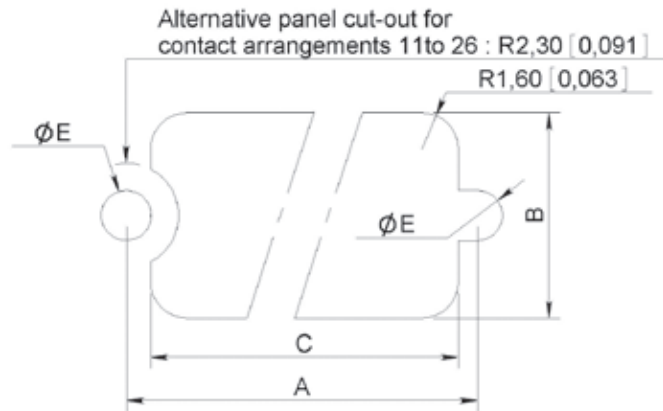


NOTE:

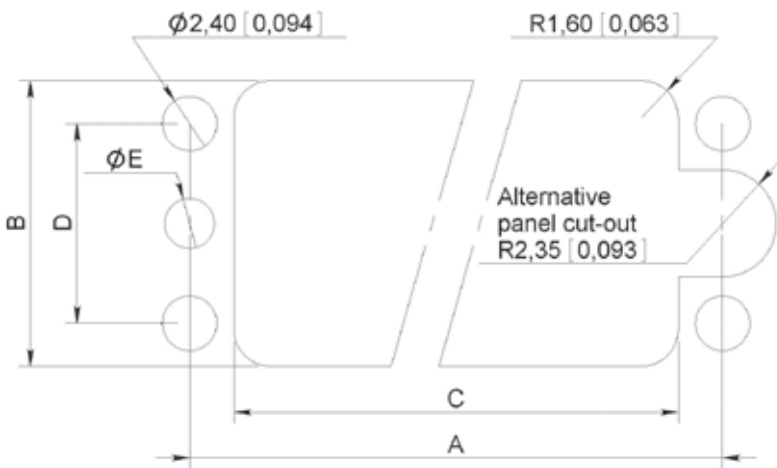
(1) The connectors are supplied with insulating washers which act as spacers between the insulator and the PCB.

| Dimensions | | | | | | | | | | | | |
|-------------|-----------------|-----------------|------------------|------------------|------------------|------------------|-----------------|------------------|------------------|------------------|------------------|------------------|
| | 02 | 03 | 05 | 07 | 11 | 14 | 20 | 26 | 34 | 42 | 50 | 75 |
| A | 9.52 (0.375) | 9.52 (0.375) | 13.48 (0.531) | 15.87 (0.625) | 15.87 (0.625) | 19.05 (0.750) | 25.4 (1) | 31.75 (1.250) | 33.34 (1.313) | 39.68 (1.562) | 46.03 (1.812) | 46.03 (1.812) |
| B | 6 (0.236) | 6 (0.236) | 6 (0.236) | 6 (0.236) | 9 (0.354) | 9 (0.354) | 9 (0.354) | 9 (0.354) | 12.5 (0.500) | 12.5 (0.500) | 12.5 (0.500) | 18.28 (0.720) |
| C | 7.2 (0.283) | 7.2 (0.283) | 11 (0.433) | 13.5 (0.531) | 13.5 (0.531) | 17 (0.669) | 23.5 (0.925) | 29.5 (1.161) | 29.46 (1.160) | 35.81 (1.410) | 42.16 (1.660) | 42.16 (1.660) |
| D | - | - | - | - | - | - | - | - | 8.73 (0.344) | 8.73 (0.344) | 8.73 (0.344) | 14.27 (0.562) |
| ØE (ISO) | 2.2 (0.087) | 2.2 (0.087) | 2.2 (0.087) | 2.2 (0.087) | 2.2 (0.087) | 2.2 (0.087) | 2.2 (0.087) | 2.2 (0.087) | 2.2 (0.087) | 2.2 (0.087) | 2.2 (0.087) | 2.2 (0.087) |
| ØE (NC) | 2.4 (0.094) | 2.4 (0.094) | 2.4 (0.094) | 2.4 (0.094) | 2.4 (0.094) | 2.4 (0.094) | 2.4 (0.094) | 2.4 (0.094) | 2.4 (0.094) | 2.4 (0.094) | 2.4 (0.094) | 2.4 (0.094) |

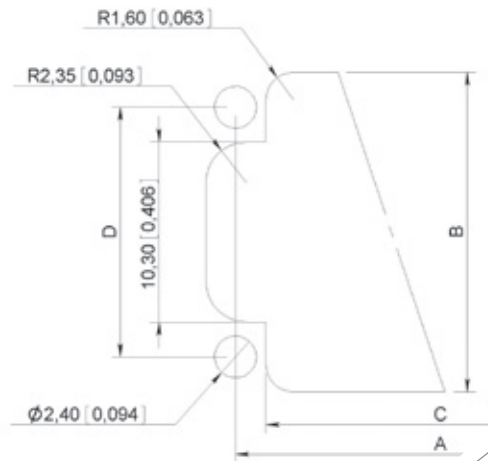
Contact arrangements 02 - 03 - 05 - 07 - 11 - 14 - 20 - 26



Contact arrangements 34 - 42 - 50

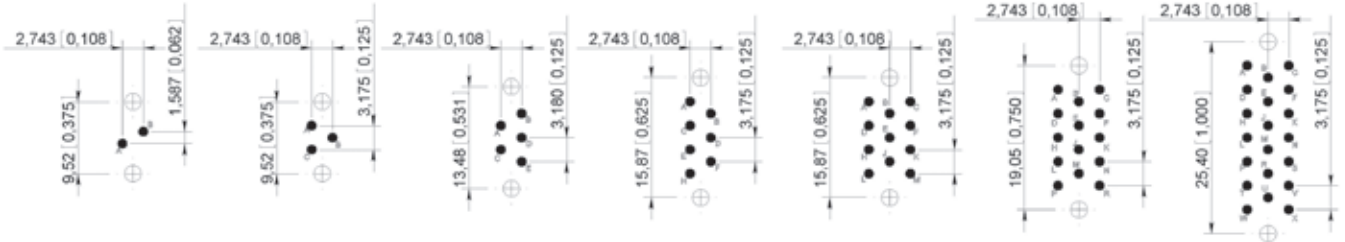


Contact arrangement 75



PRINTED CIRCUIT DRILL PATTERN

TYPE 86 Termination style - connector with SOCKET contacts - PCB component side view in mm (inch)



02

03

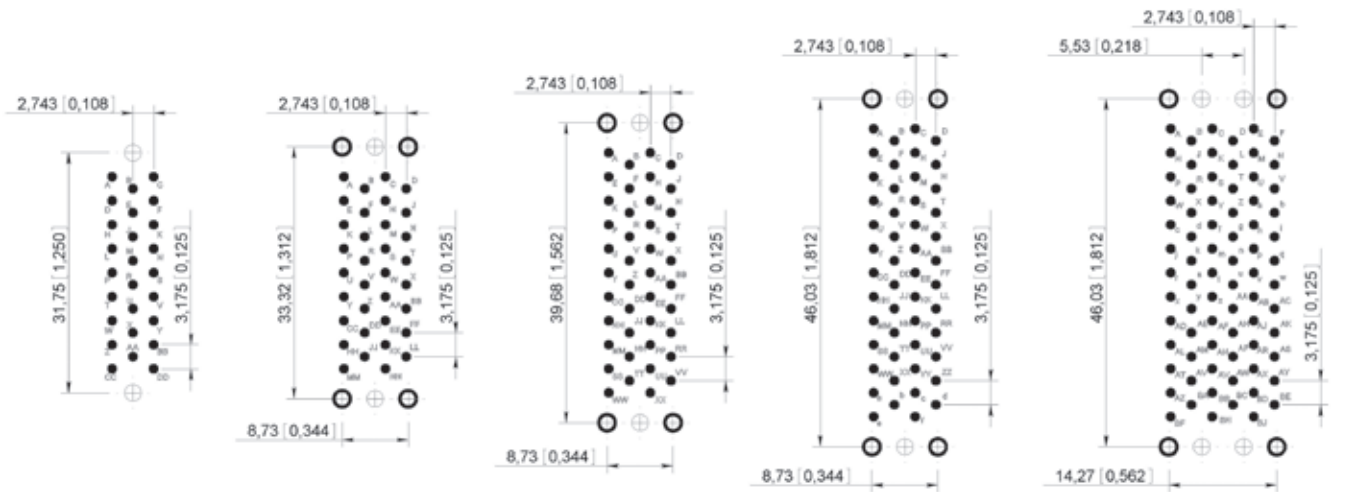
05

07

11

14

20



26

34

42

50

75

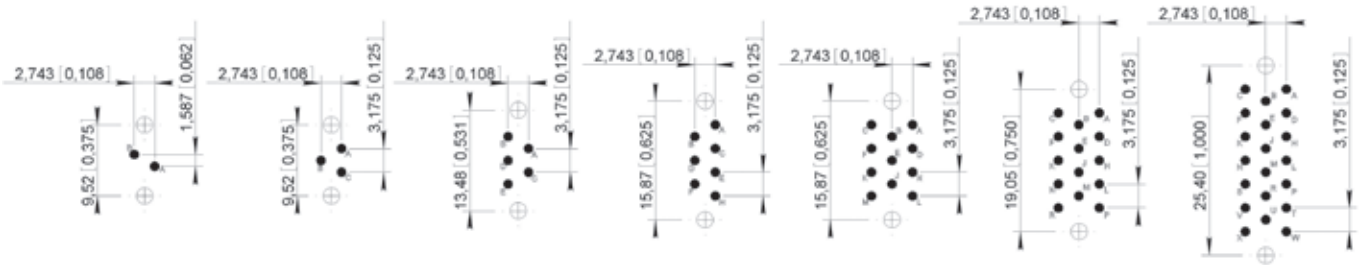
NOTES:

- Printed circuit drilling $\varnothing 1.1 +0.1 (0.043 +0.003)$
- Drilling to fix the connector $\varnothing 2.4 (0.094)$
- ⊕ Drilling to fix the connector. Required for guides G1 and GV fixing only:
 $2.2 (0.087) \varnothing$ for ISO guides
 $2.4 (0.094) \varnothing$ for UNC guides

PRINTED CIRCUIT DRILL PATTERN

MB series

TYPE 86 Termination style - connector with PIN contacts - PCB component side view in mm (inch)



02

03

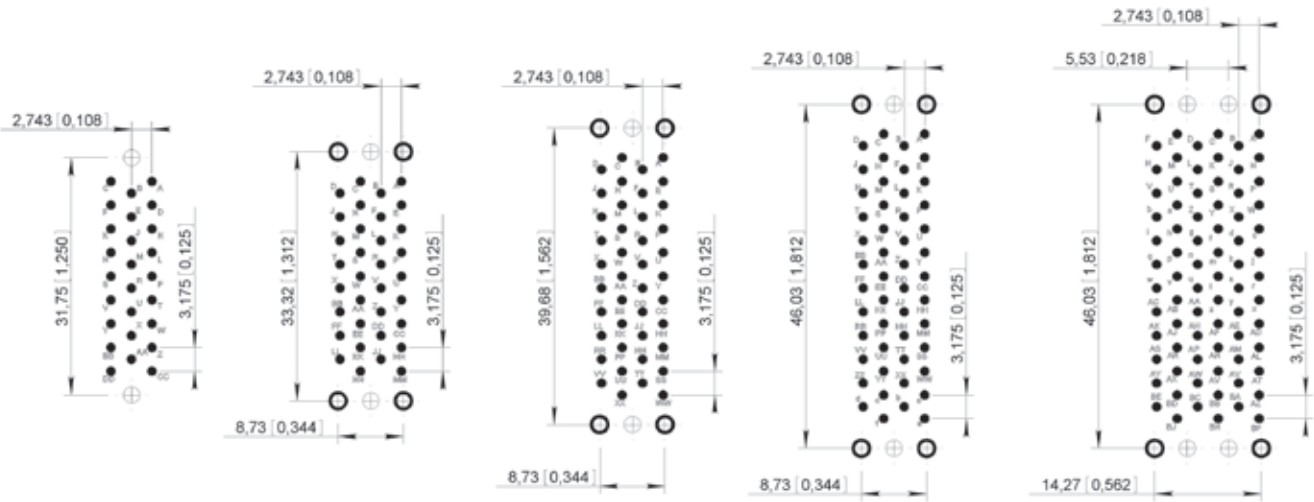
05

07

11

14

20



26

34

42

50

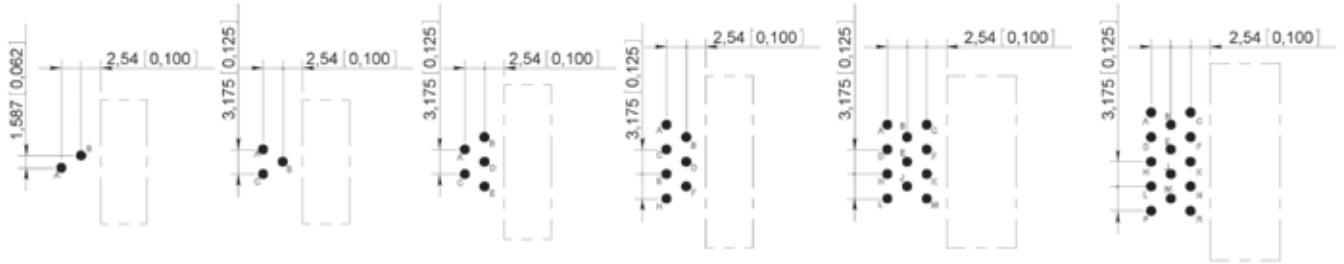
75

NOTES:

- Printed circuit drilling $\varnothing 1.1 +0.1 [0.043 +0.003]$
- Drilling to fix the connector $\varnothing 2.4 [0.094]$
- ⊕ Drilling to fix the connector. Required for guides G1 and GV fixing only:
 - 2.2 [0.087] \varnothing for ISO guides
 - 2.4 [0.094] \varnothing for UNC guides

PRINTED CIRCUIT DRILL PATTERN

TYPE 87 Termination style - connector with SOCKET contacts - PCB component side view in mm (inch)



02

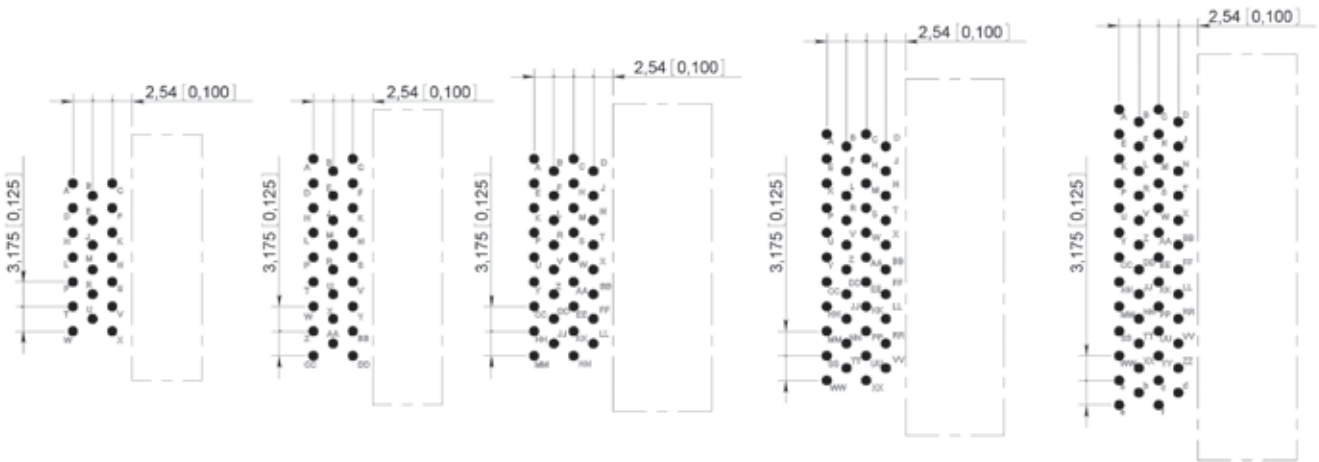
03

05

07

11

14



20

26

34

42

50

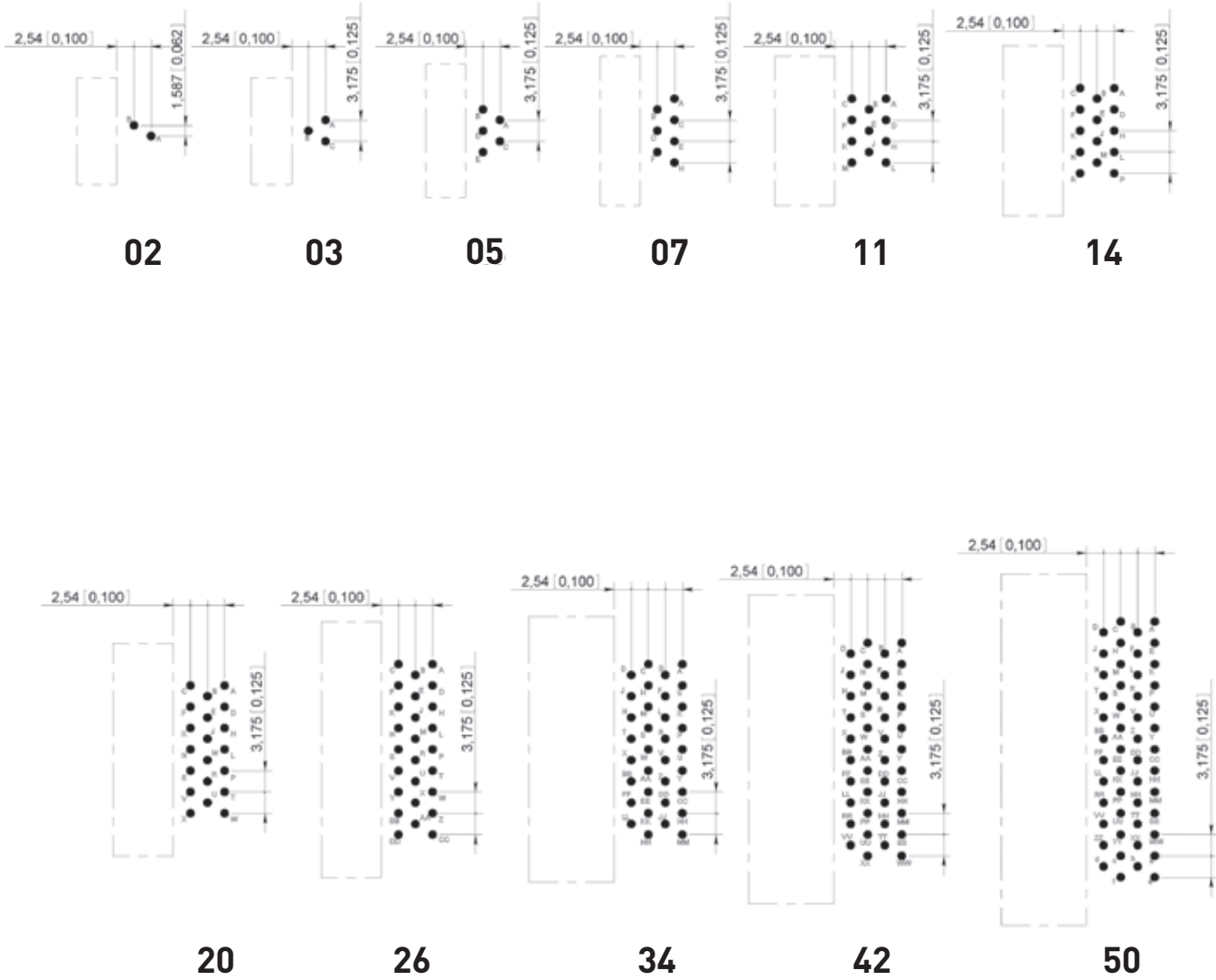
NOTE:

- Printed circuit drilling $\varnothing 1.1 +0.1 [0.043 +0.003]$

PRINTED CIRCUIT DRILL PATTERN

MB series

TYPE 87 Termination style - connector with PIN contacts - PCB component side view in mm (inch)



NOTE:
 ● Printed circuit drilling $\varnothing 1.1 +0.1 (0.043 +0.003)$

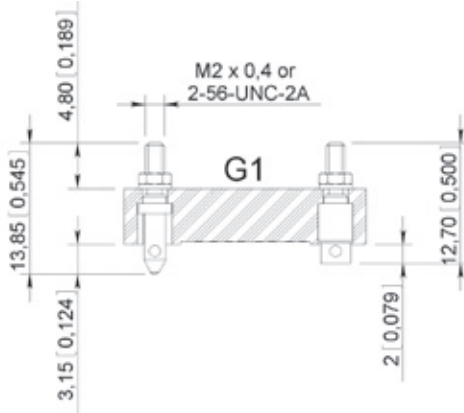
GUIDES AND JACKSCREWS

Stainless steel guides and jackscrews are supplied with either ISO (M2 x 0.4) or UNC (2-56 UNC) threads. The guides or jackscrews types G1 – GV – VL and VR and type of thread (ISO or UNC) required are to be defined in the part number on page 9-20.

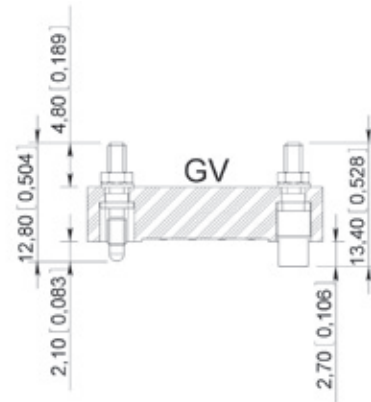
The standard configuration of guides and jackscrews is:

- 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



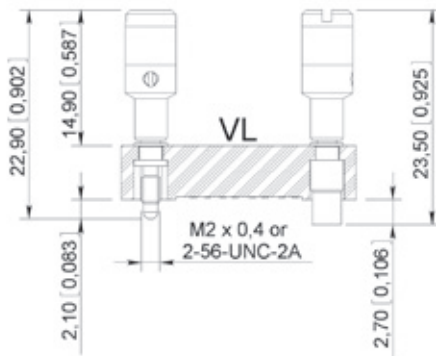
FIXED JACKSCREWS TYPE GV



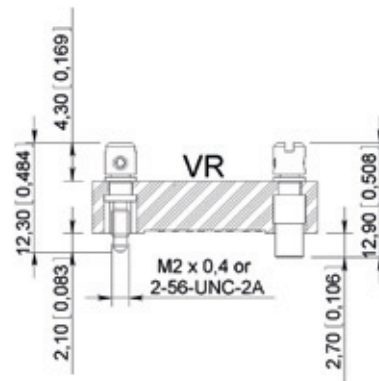
The 2,3, 5 and 7 way GV jackscrews are held securely in place by two flats on the jackscrews whereas the jackscrews for the other contact arrangements have a square section to avoid rotation.

These guide and jackscrews can be used with backshells HA and HL.

LONG AND SHORT ROTATING JACKSCREWS TYPE VL – VR



Mating torque: 0.2N.m
 Not available for termination style type 87
 Cannot be used with backshell

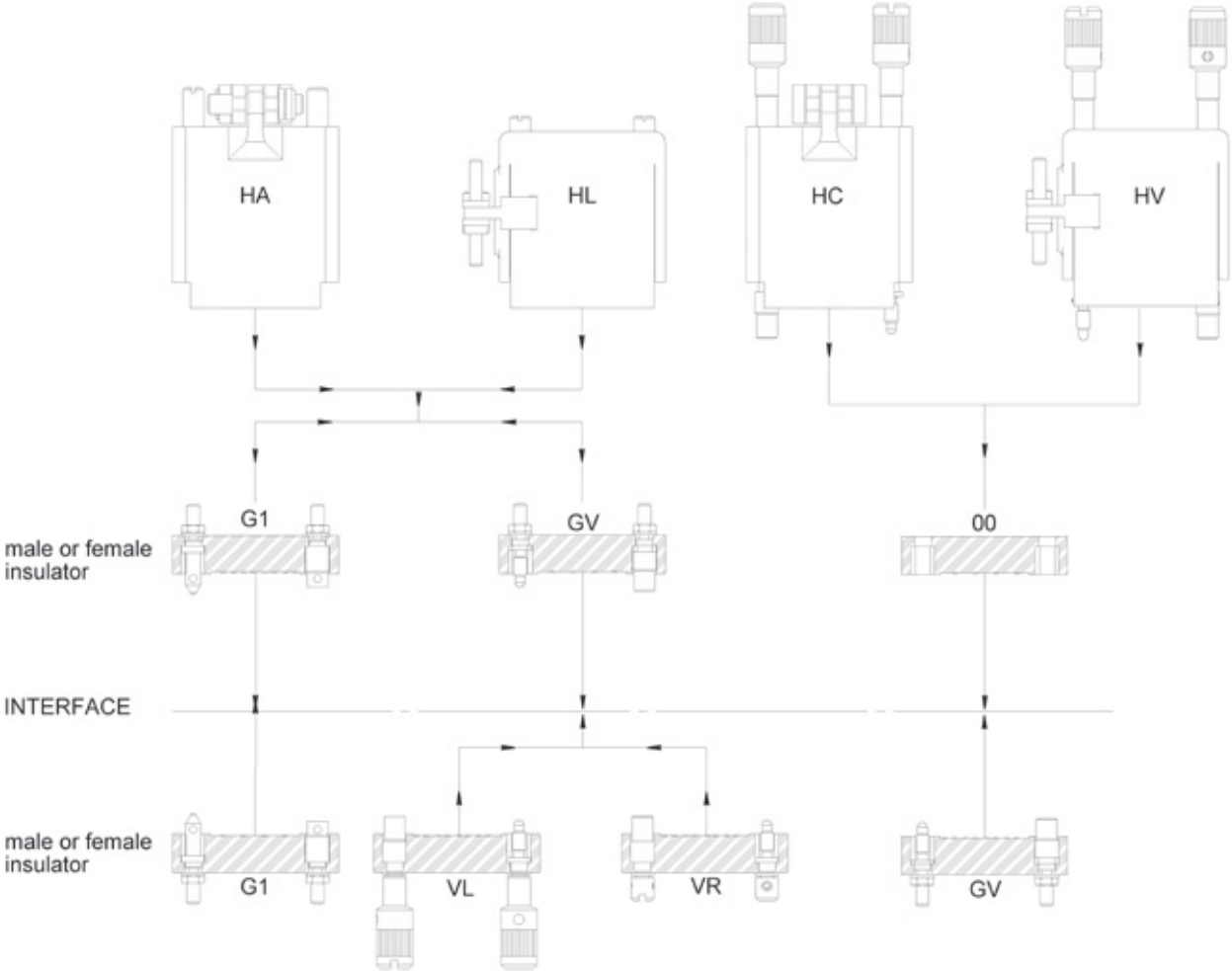


Mating torque: 0.2N.m
 Cannot be used with backshell

CONNECTOR MATING COMPATIBILITY


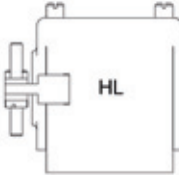
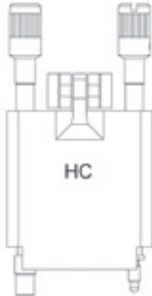
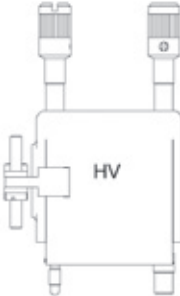
MB series

Use with backshell – Termination style type 85 only



Use without backshell – All termination style type

BACKSHELL TYPE AVAILABILITY

| Thread | | Backshell | | Thread | |
|------------------|-------------------|--|---|-------------------|-------------------|
| NC (2-56 UNC) | ISO (M2 x 0.4) |  |  | ISO (M2 x 0.4) | NC (2-56 UNC) |
| 07 | 07 | | | - | - |
| 11 | 11 | | | 11 | 11 |
| 14 | 14 | | | 14 | 14 |
| 20 | 20 | | | - | - |
| 26 | 26 | | | 26 | 26 |
| 34 | 34 | | | 34 | 34 |
| 50 | 50 | | | 50 | 50 |
| 75 | 75 | | | - | 75 ⁽¹⁾ |
| 07 | 07 | | | - | - |
| 11 | 11 |  |  | 11 | 11 |
| 14 | 14 | | | 14 | 14 |
| 20 | 20 | | | - | - |
| 26 | 26 | | | 26 | 26 |
| 34 | 34 | | | 34 | 34 |
| 50 | 50 | | | 50 | 50 |
| 75 | 75 | | | - | 75 ⁽¹⁾ |

Fixing of backshells only suitable for insulator with termination style type 85 (solder pot).

NOTE:
 (1) Available for male contact arrangement only.

TYPE HA

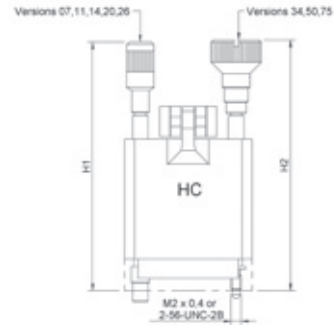
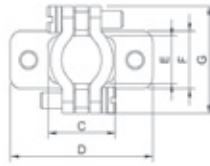
Backshells supplied with two internal threaded posts which are screwed into the guides G1 or jackscrews GV.

TYPE HC

Backshells supplied with two long rotating jackscrews. These backshells are mounted on connectors without guides or jackscrews.

PART NUMBERS

| Contacts Arrangements | Type HA | | Type HC | |
|-----------------------|-----------------------|-----------------------|----------------------|----------------------|
| | With threads M2 x 0.4 | With threads 2-56 UNC | With screws M2 x 0.4 | With screws 2-56 UNC |
| 07 | MB07HAIS2 | MB07HANC | MB07HCIS | MB07HCNC |
| 11 | MB11HAIS2 | MB11HANC | MB11HCIS | MB11HCNC |
| 14 | MB14HAIS2 | MB14HANC | MB14HCIS | MB14HCNC |
| 20 | MB20HAIS2 | MB20HANC | MB20HCIS | MB20HCNC |
| 26 | MB26HAIS2 | MB26HANC | MB26HCIS | MB26HCNC |
| 34 | MB34HAIS2 | MB34HANC | MB34HCIS | MB34HCNC |
| 50 | MB50HAIS2 | MB50HANC | MB50HCIS | MB50HCNC |
| 75 | MB75HAIS2 | MB75HANC | MB75HCIS | MB75HCNC |



Mating torque: 0.15N.m

DIMENSIONS mm (inch)

| Contacts arrangements ⁽¹⁾ | A | B | C | D | E | F | G | H1 | H2 ⁽²⁾ | |
|--------------------------------------|------------------|-----------------|------------------|-----------------|------------------|-----------------|------------------|------------------|-------------------|-----------------|
| 07 | 9.52 (0.375) | 22.9 (0.902) | 9.13 (0.359) | 22.2 (0.874) | 5.95 (0.234) | 7.5 (0.295) | 13.5 (0.531) | 30.62 (1.205) | n/a | |
| 11 | 23.8 (0.937) | 37.2 (1.465) | 11.9 (0.468) | | | | | | 8.7 (0.342) | 10.3 (0.405) |
| 14 | | | 12.7 (0.500) | 25.4 (1) | n/a | | | | | |
| 20 | 30.16 (1.187) | 48.4 (1.905) | 18.26 (0.719) | 31.7 (1.248) | 12.7 (0.500) | 14.3 (0.563) | 26.98 (1.062) | n/a | n/a | |
| 26 | | | 23 (0.905) | 38.1 (1.500) | | | | | n/a | |
| 34 | | | 20.6 (0.811) | 39.7 (1.563) | | | | | 52.4 (2.063) | 55.6 (2.189) |
| 50 | | | 22.2 (0.874) | 52.4 (2.063) | | | | | | |
| 75 | 23 (0.905) | 23 (0.905) | 18.2 (0.716) | 19.8 (0.779) | 34.52 (1.359) | n/a | n/a | | | |

NOTES:

- (1) Fixing of backshells only suitable for insulator with termination style type 85 (solder pot).
- (2) Backshells 34, 50 and 75 are fitted with 4 screws to be fixed to the connector block.

SIDE ENTRY BACKSHELLS

TYPE HA

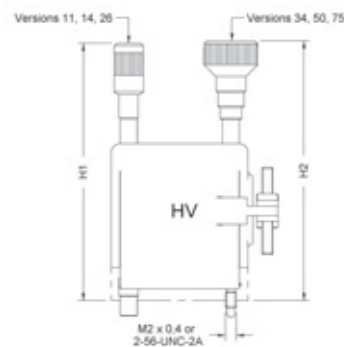
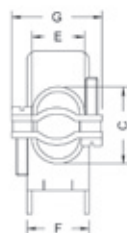
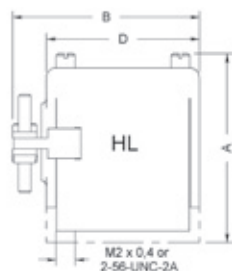
Backshells supplied with two internal threaded posts which are screwed into the guides G1 or jackscrews GV.

TYPE HC

Backshells supplied with two long rotating jackscrews. These backshells are mounted on connectors without guides or jackscrews.

PART NUMBERS

| Contacts Arrangements | Type HA | | Type HC | |
|-----------------------|-----------------------|-------------------------|----------------------|-------------------------|
| | With threads M2 x 0.4 | With threads 2-56 UNC | With screws M2 x 0.4 | With screws 2-56 UNC |
| 11 | MB11HLIS2 | MB11HLNC | MB11HVIS | MB11HVNC |
| 14 | MB14HLIS2 | MB14HLNC | MB14HVIS | MB14HVNC |
| 26 | MB26HLIS2 | MB26HLNC | MB26HVIS | MB26HVNC |
| 34 | MB34HLIS2 | MB34HLNC | MB34HVIS | MB34HVNC |
| 50 | MB50HLIS2 | MB50HLNC | MB50HVIS | MB50HVNC |
| 75 | - | MB75HLNC ⁽¹⁾ | - | MB75HVNC ⁽¹⁾ |



Mating torque: 0.15N.m

DIMENSIONS mm (inch)

| Contacts arrangements ⁽²⁾ | A | B | C | D | E | F | G | H1 | H2 ⁽³⁾ |
|--------------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|------------------|-----------------|-------------------|
| 11 | 31.7 (1.248) | 29.8 (1.173) | 11.9 (0.469) | 22.2 (0.874) | 8.7 (0.343) | 10.3 (0.406) | 15.87 (0.625) | 48.8 (1.921) | n/a |
| 14 | | 32.9 (1.295) | 12.7 (0.500) | 25.4 (1) | | | 23.8 (0.937) | | n/a |
| 26 | 37.7 (1.484) | 49.2 (1.937) | 23 (0.906) | 38.1 (1.500) | 8.72 (0.343) | 14.3 (0.563) | 26.98 (1.062) | n/a | n/a |
| 34 | | 51.6 (2.031) | 20.6 (0.811) | 39.7 (1.563) | 12.7 (0.500) | | n/a | 49.2 (1.937) | |
| 50 | | 64.3 (2.531) | 22.2 (0.874) | 52.4 (2.063) | 18.2 (0.717) | 19.8 (0.780) | 34.52 (1.359) | | n/a |
| 75 | | 65.5 (2.579) | 23 (0.906) | 52.4 (2.063) | | | | | |

NOTES:

(1) Available for male contact arrangement only.

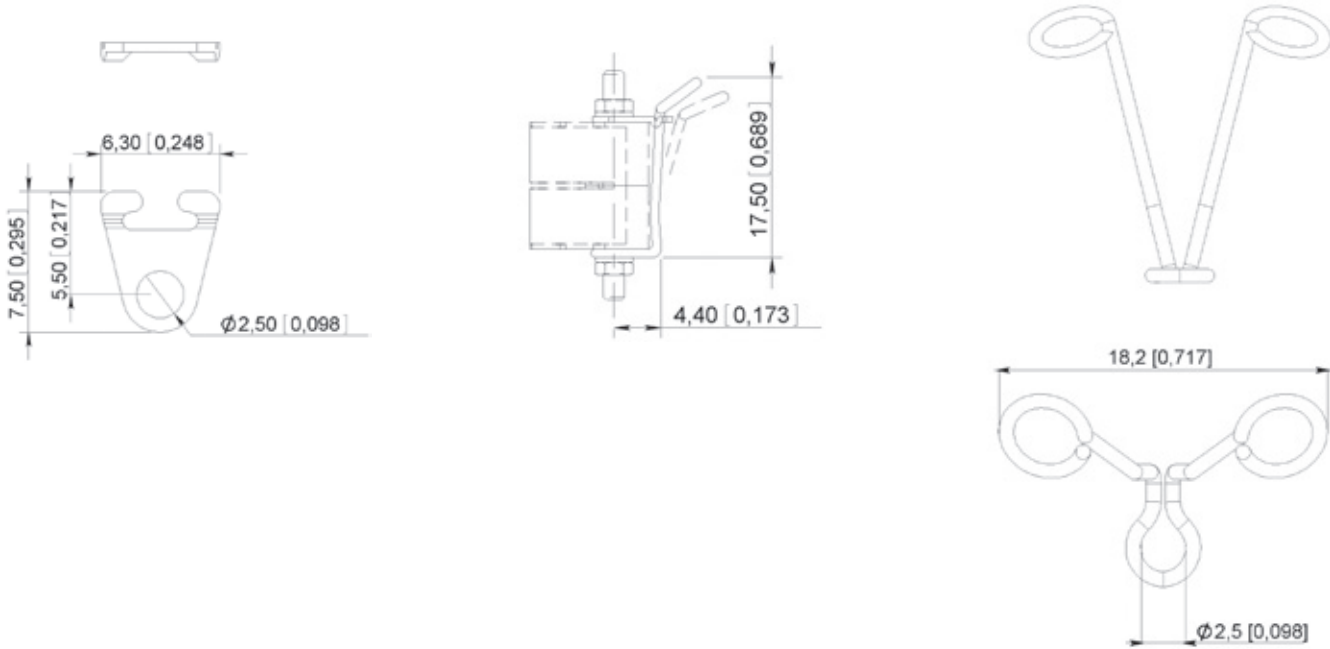
(2) Fixing of backshells only suitable for insulator with termination style type 85 (solder pot).

(3) Backshells 34, 50 and 75 are fitted with 4 screws to be fixed to the connector block.

SPRING LOCKING SYSTEM

This simple locking system avoids accidental disconnection of connector fitted to equipment which may be subjected to severe vibration. This system can be used where connector fitted with G1 guides are used with or without backshell.

Part number of a pair: 624895



POTTING MOULDS

The plastic potting moulds are designed to fit onto the wiring side of the connectors in order that the wiring and back end can be encapsulated. They can be used with connectors fitted with G1 guides and GV and VR jackscrews.

| Contacts Arrangements | Part numbers | Type HA | |
|-----------------------|--------------|-------------|--------------|
| | | A | B |
| 02 -03 | 624994 | 5.9 (0.232) | 9.5 (0.374) |
| 05 | 624992 | 5.9 (0.232) | 13.5 (0.531) |
| 07 | 624991 | 5.9 (0.232) | 15.9 (0.626) |
| 11 | 624993 | 9 (0.354) | 15.9 (0.626) |
| 14 | 624995 | 9 (0.354) | 19 (0.748) |

