# MSG



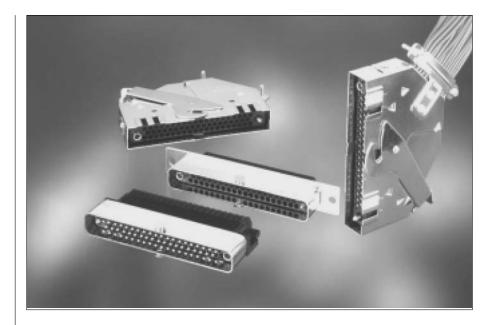
# High performance Low profile rectangular MSG connectors

#### Description

MSG Series connectors is a 50 and 59 position low profile, compact design rectangular I/O connector. MSG has been developed for industrial and railway control equipments which require a easy handling and high density connector. In addition to its panel mount version, a PCB mount version has been especially designed to fit 19 inch Euro-rack system.

#### Features and benefits

- Connectors supplied pre-assembled.
- Available in 50 and 59 contact versions.
- PCB mount version fully equipped with male contacts. Selective contact loading optional.
- Accessories : polarizing screws (receptacle) polarizing plate (plug) dust cap (plug)



### Performance characteristics

| Operating       |                      |
|-----------------|----------------------|
| temperature:    | -55°C to +125°C      |
| Insulation      |                      |
| resistance:     | 5000 MΩ min.         |
| Test potential: | 2000 VAC             |
| Current         | 7.5A - cable to PCB  |
| rating:         | 13A - cable to cable |
| Creepage        | 2.5mm (50 positions) |
| distance:       | 2.2mm (59 positions) |
| Durability:     | 500 matings and      |
|                 | unmatings.           |
| Vibration       | Per JIS-C STD 0040   |
| Salt Spray:     | Per JIS-C STD 0023   |
|                 |                      |

#### Construction

| Connector Material :  | Glass filled         |
|-----------------------|----------------------|
|                       | thermoplast          |
| Flammability rating : | UL94-V0              |
| Hoods, skirts :       | Steel, nickel plated |
| Cable clamps:         | Steel, nickel plated |
| Guiding hardware:     | Stainless steel      |
| Contacts receptacle : | Copper alloy         |
|                       | (Au over Ni)         |

#### **Contact accommodation**

- "MSG" Rectangular connectors accept TRIM TRIO size 16 crimp-type removable contacts (see contact section)
- For the plug connector and the panel mount receptacle, contacts have to be ordered separately.

### How to order

| Number of<br>contacts | Part number  | Description                                     |
|-----------------------|--------------|---|
| 59                    | MSG59P-L11   | Plug for cable up                               |
|                       | MSG59P-L21   | Plug for cable down                             |
|                       | MSG59R-PL110 | Panel mount receptacle                          |
|                       | MSG59R-RL111 | Right angle PCB mount receptacle without flange |
|                       | MSG59R-FL111 | Right angle PCB mount receptacle with flange    |
| 50 -                  | MSG50P-L11   | Cable plug                                      |
|                       | MSG50RG-L111 | Right angle PCB mount receptacle with flange    |

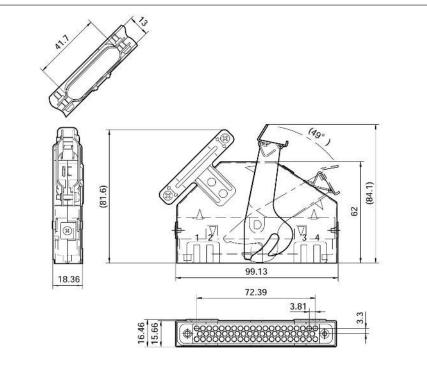




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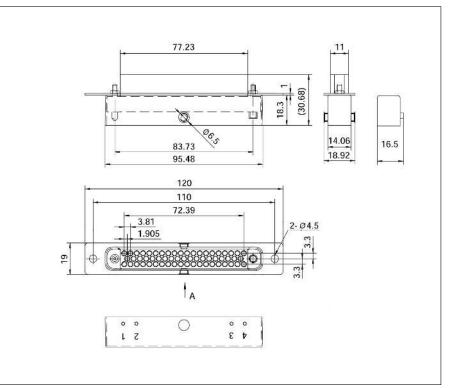
# Plug connector with metal hood (MSG59P-L11)





### Panel mount receptacle (MSG59RP-L110)



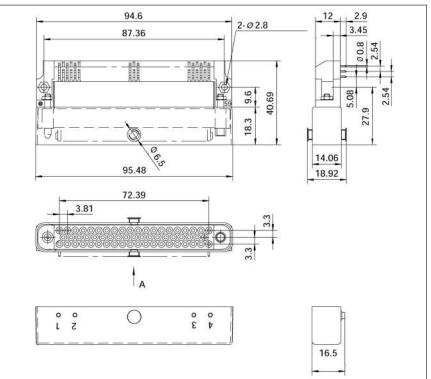






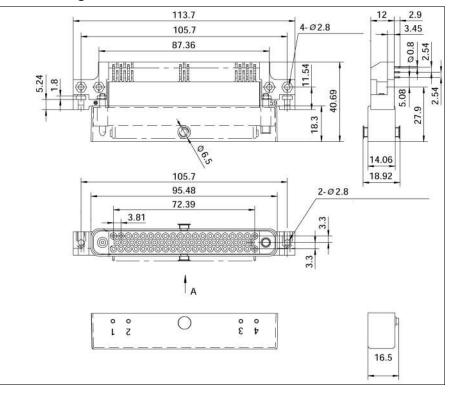
# Right angle PCB mount receptacle without flange (MSG59RR-L111)





### Right angle PCB mount receptacle with flange (MSG59RF-L111)

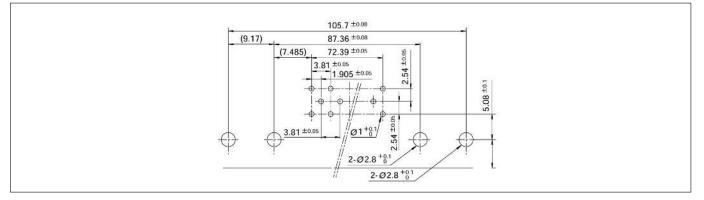




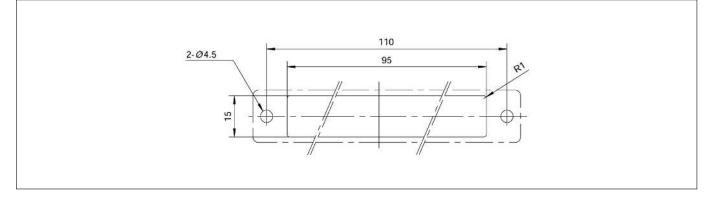


#### MSG59 recommended drilling hole pattern (for PCB) (MSG59RR-L111, MSG59RF-L111)

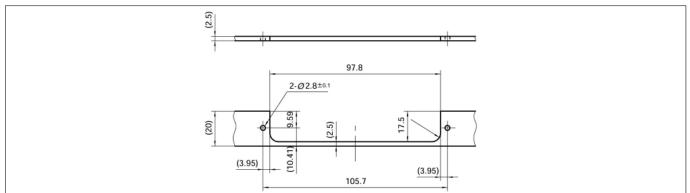
**MSG** 



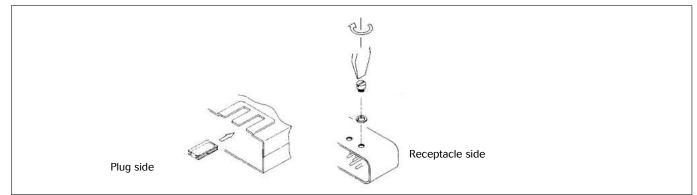
#### MSG59 recommended panel cut-out (front mount) (MSG59RR-L110)



#### MSG59 recommended for front mount (MSG59RR-L111, MSG59RF-L111)



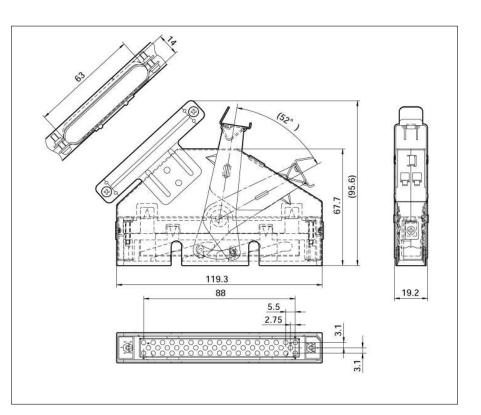
# **Polarizing hardware**



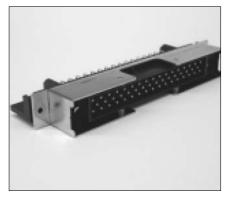
# MSG

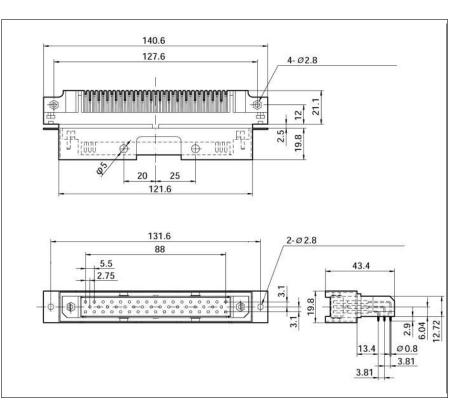
### (MSG50P-L11)





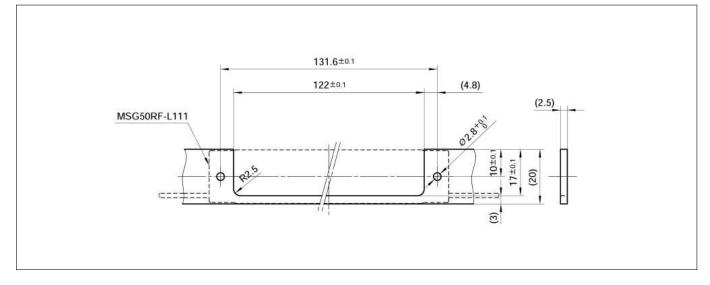
### (MSG50RF-L111)





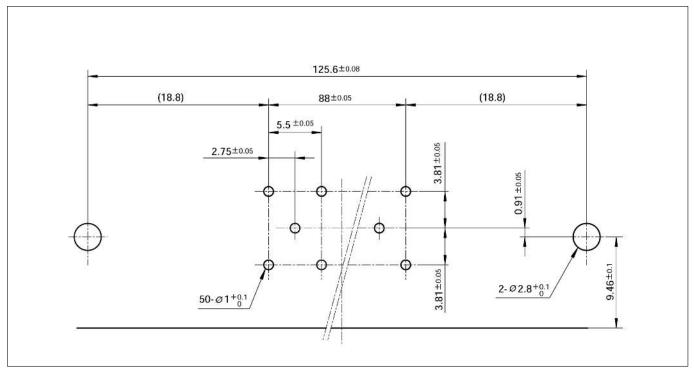


# (MSG50RF-L111)



MSG

#### (MSG50RF-L111)



# MB



# **Robust lever locking** connector

### Description

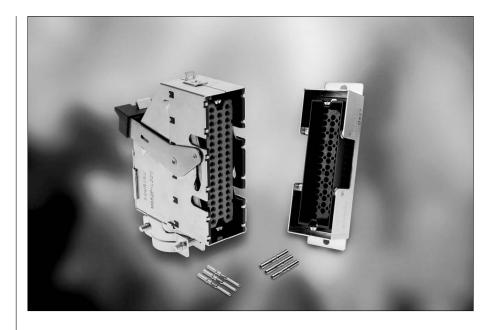
- 52 contact, rectangular, one action lever locking connector
- Same receptacle can be front or rear mounted
- 2 cable clamp orientations available: perpendicular or parallel to mating face
- Anti Jack knife system, guide plate on plug and wide entry docket contact for a smooth and reliable mating
- Adapted to shielded cable
- Easy assembly

# Application

Signalling

#### **Mechanical**

- Hood: Steel, Nickel plated
- Lever: stainless steel
- Grip and insulator: glass filled PBT
- Contact body: copper
- Contact plating: consult us
- Endurance: 500 mating/unmating operations
- Vibration: per JIS C 0040



#### Electrical

- Withstanding voltage 2000 Veff
- Insulation resistance: 5000M
- Current rating: 13A
- Contact accommodation: standard TRIM TRIO size 16 contacts

#### Environmental

- Temperature range: -55°C + 125°C
- Flammability rating: UL94V0

### How to order

#### Receptacle

| neeep taele        |                                      |    |    |   |    |   |   |   |
|--------------------|--------------------------------------|----|----|---|----|---|---|---|
| Basic series       |                                      | МВ | 52 | R | -L | 1 | 1 | 0 |
| Number of contacts | 52                                   |    |    |   |    |   |   |   |
| Receptacle:        |                                      |    |    |   |    |   |   |   |
| Lever type:        |                                      |    |    |   |    |   |   |   |
| Contact type:      | 1: TRIM TRIO contact                 |    |    |   |    |   |   |   |
| Cable clamp:       | 1: Lever down; 2: Lever up           |    |    |   |    |   |   |   |
| Variation:         | 0: contacts to be ordered separately |    |    |   |    |   |   |   |
|                    |                                      |    |    |   |    |   |   |   |

# Plug

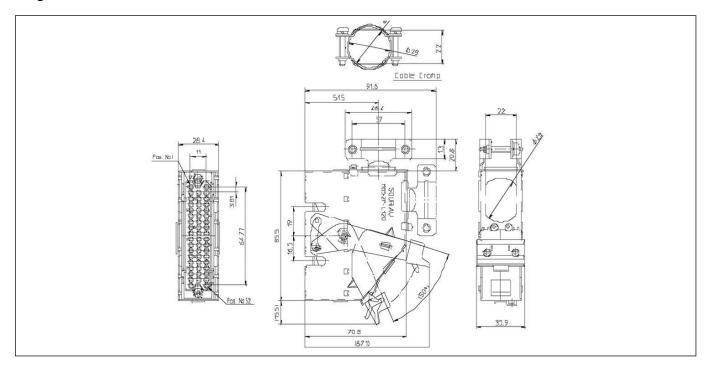
| Basic series       |  | MB | 52 | Р | -L | 1 | 1 | 0 |
|--------------------|--|----|----|---|----|---|---|---|
| Number of contacts | 52   |    |    |   |    |   |   |   |
| Plug               |  |    |    |   |    |   |   |   |
| Lever              |  |    |    |   |    |   |   |   |
| Cable clamp:       | 1: Lever down; 2: Lever up                   |    |    |   |    |   |   |   |
| Cable direction    | 1: Parallel; 2: Perpendicular to mating face |    |    |   |    |   |   |   |
| Variation          | 0  |    |    |   |    |   |   |   |

MB



# **Dimensions**

#### Plug MB52P-L120



#### **Receptacle MB52R-L110**

