

SAIE-M12B-4S-H6.75TL

Weidmüller Interface GmbH & Co. KG

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Germany

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Weidmüller is one of the industry's leading international providers of connectors. An important mainstay in this product family are the circular connectors, which Weidmüller groups under the product name SAI. In the development of SAI products, Weidmüller engineers have always concentrated on achieving rational, cost-effective installation concepts, and – in cooperation with major users – have supplied the markets with well-conceived products which set standards in terms of functionality and quality across the globe. The best examples are the new power distributors with S and T coded M12. These modules are characterised by particularly high currents and voltages. This enables them to also be used, for example, with three-phase motors.

General ordering data

| Туре | SAIE-M12B-4S-H6.75TL |
|------------|--|
| Order No. | <u>2421880000</u> |
| Version | Built-in plugs, M12, M 12, Number of poles: 4, |
| | Rear panel mounting |
| GTIN (EAN) | 4050118430479 |
| Qty. | 10 pc(s). |



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Technical data

| D | imens | ions | and | weights | |
|---|-------|------|------|---------|--|
| | | | uiiu | **** | |

| Net weight | 20 g |
|------------|------|

Environmental Product Compliance

REACH SVHC Lead 7439-92-1

Technical data of PCB plug-in connector

| Coding | Α | Housing surface | nickel-plated |
|-----------------------|------------------------------|-----------------------|--|
| Housings | M12 socket | Mounting height | 6.75 mm |
| Mounting thread | M16 | Number of poles | 4 |
| Shield connection | Yes | Type of mounting | Rear panel mounting |
| Rated voltage | 250 V | Rated voltage (text) | 250 V (4-pole) / 60 V (5- pole) / 30 V (8-pole) |
| Rated current | 4 A | Rated current | 4 A (5-pole)/ 2 A (8-pole) |
| Temperature range | -3080 °C | Protection degree | IP67 |
| Contact surface | Au (Gold) | Housing main material | CuZn, nickel-plated |
| Connection thread | M12 | Tightening torque | M12: 0.8 Nm |
| Mounting thread | M 16 | Mounting torque range | 1.2 Nm |
| Mounting onto the PCB | THT solder connection | Insulation strength | 100 ΜΩ |
| Pollution severity | 3 (2 within the sealed area) | Plugging cycles | ≥ 100 |
| Contact material | CuZn | Lock nut material | Nickel-plated CuZn |

Material data

| Contact material | CuZn | Contact surface | Au (Gold) |
|------------------|------|-----------------|--------------|
| oomast materia. | O | 00 | , ta (CC.a.) |

System parameters

| Mounting onto the PCB | THT solder connection | Insulation strength | 100 ΜΩ |
|-----------------------|-----------------------|---------------------|--------|
| Number of poles | 4 | Pin series quantity | 1 |
| Plugging cycles | ≥ 100 | Protection degree | IP67 |

Classifications

| ETIM 6.0 | EC002638 | ETIM 7.0 | EC002638 |
|-------------|-------------|------------|-------------|
| eClass 9.0 | 27-44-03-09 | eClass 9.1 | 27-44-03-09 |
| eClass 10.0 | 27-44-03-09 | | |

Approvals

| ROHS | Conform |
|------|---------|

Downloads

| Brochure/Catalogue | <u>FL FIELDWIRING EN</u> | |
|--------------------|--------------------------|--|
| Engineering Data | <u>STEP</u> | |



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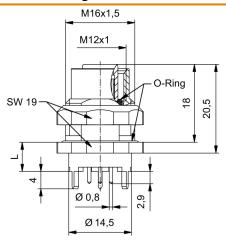
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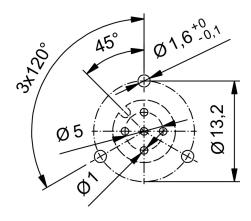
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Drawings

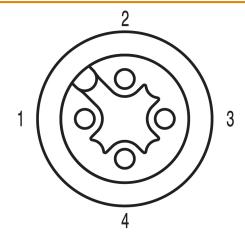
Dimensioned drawing



PCB design



Pole scheme





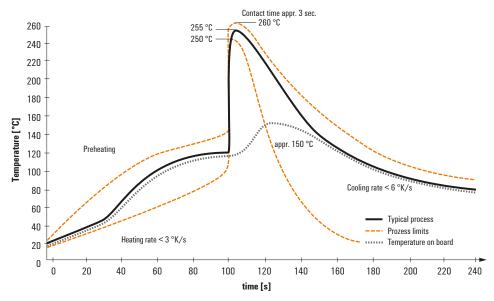
Recommended wave solderding profiles

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Single Wave:



Double Wave:



Wave soldering profiles

Wired connection elements should be processed in accordance with the DIN EN 61760-1 standard. We have included two recommendations for practical wave soldering profiles, with which Weidmüller PCB terminals and connectors are qualified.

When choosing a suitable profile for your application, the following factors also need to be considered:

- PCB thickness
- Proportion of Cu in the layers
- Single/double-sided assembly
- Product range
- Heating and cooling rates

The single and double wave profiles each indicate the recommended operating range, including the maximum soldering temperature of 260°C. In practice, the maximum soldering temperature is quite often well below the above maximum profile.