Amphenol Sine Systems





AT Series Board | Lock™

2, 3, 4, 6, 8, 12 and 13 Pos. / Size 16, 13A 13 Pos. (Mixed Power & Signal) / Size 12, 25A; Size 16, 13A



The Amphenol Board | Lock[™] series combines flangeless wire-to-board versatility with the proven reliability of the A Series[™] environmentally sealed thermoplastic connection system. Perfect for power or data signal applications, Board | Lock[™] features a unique design which is compact, low-profile, lightweight and delivers proven durability in off-road and harsh environments. The snap-in board features allow for rapid placement and the enclosed latch-receiver design benefits potting and over-mold applications. When combined with the economical A Series[™] positive polarization & available coding options, mis-mating occurrences are dramatically reduced.

Our engineering teams can provide unique mixed-power & signal arrangements, 90° or straight PCB pins, or custom flange mount designs to reduce overall connector size and save space. We are committed to work with you to ensure a design that meets your needs.

| Wire Range | Size 12 contacts will accept wire ranges of 12-14AWG; Size 16 contacts will accept 14-20AWG | | | |
|-------------------------|---|--|--|--|
| Temperature | Operating temperature range: -55°C to +125°C at rated current | | | |
| Housing/Latch | Thermoplastic/Integrated latch for mating | | | |
| Dielectric Value | Meets or exceeds 1500 volts minimum | | | |
| Shock | No latch disengagement or discontinuity shall be the result when subjected to 50 g's in each of three axis (X, Y & Z) | | | |
| Vibration | Continued continuity without degradation to mechanical or physical attributes following vibration. (max acceleration 20 g's at Sine sweep of 10-2000Hz) | | | |
| Connector Retention | A mated connector subjected to a pulling force by the exiting wire bundle at 25 lbs. times the number of contacts to a maximum of 100 lbs. applying load for 30 seconds | | | |
| Thermal Shock | Subjected to 10 cycles at -55°C to +125°C with no cracking, chipping or other damage detrimental to the normal operation of the connector | | | |
| Insulation Resistance | 1000 megohms minimum at 25°C | | | |
| Mating Cycle Durability | Following 100 cycles of connection engagement and disengagement, degradation either mechanical or electrical is n evident | | | |
| Contact Millivolt Drop | Size 16 contacts with 16AWG conductor - 100 mV drop max at 13A test current | | | |
| Water Immersion | A mated connection, properly wired, placed in an oven at +125°C for 1 hour, then placed immediately in a depth of water of 1 meter without loss of electronic performance | | | |

AT Series Board | Lock™ meets all the performance criteria and specifications of the AT Series™, and is also available in a wide variety of custom colors. Consult factory for complete specifications.

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| | Part Number | Description | Contact Size (Included) | Amperage |
|---------|-----------------|--|----------------------------|----------|
| | AT04-2P-BM01 | 2 Pos. Recep., Pin, Gold contact plating, PCB, Board Mount, No potting, Black | 16 | 13 |
| | AT04-2P-BM02 | 2 Pos. Recep., Pin, Gold contact plating, PCB, Board Mount, Potting, Black | 16 | 13 |
| | AT04-2P-BM03 | 2 Pos. Recep., Pin, Nickel contact plating, PCB, Board Mount, No potting, Black | 16 | 13 |
| | AT04-2P-BM04 | 2 Pos. Recep., Pin, Nickel contact plating, PCB, Board Mount, Potting, Black | 16 | 13 |
| | AT04-3P-BM01 | 3 Pos. Recep., Pin, Gold contact plating, PCB, Board Mount, No potting, Black | 16 | 13 |
| | AT04-3P-BM02 | 3 Pos. Recep., Pin, Gold contact plating, PCB, Board Mount, Potting, Black | 16 | 13 |
| | AT04-3P-BM03 | 3 Pos. Recep., Pin, Nickel contact plating, PCB, Board Mount, No potting, Black | 16 | 13 |
| | AT04-3P-BM04 | 3 Pos. Recep., Pin, Nickel contact plating, PCB, Board Mount, Potting, Black | 16 | 13 |
| | AT04-4P-BM01 | 4 Pos. Recep., Pin, Gold contact plating, PCB, Board Mount, No potting, Black | 16 | 13 |
| | AT04-4P-BM02 | 4 Pos. Recep., Pin, Gold contact plating, PCB, Board Mount, Potting, Black | 16 | 13 |
| | AT04-4P-BM03 | 4 Pos. Recep., Pin, Nickel contact plating, PCB, Board Mount, No potting, Black | 16 | 13 |
| | AT04-4P-BM04 | 4 Pos. Recep., Pin, Nickel contact plating, PCB, Board Mount, Potting, Black | 16 | 13 |
| | AT04-6P-BM01 | 6 Pos. Recep., Pin, Gold contact plating, PCB, Board Mount, No potting, Black | 16 | 13 |
| | AT04-6P-BM02 | 6 Pos. Recep., Pin, Gold contact plating, PCB, Board Mount, Potting, Black | 16 | 13 |
| | AT04-6P-BM03 | 6 Pos. Recep., Pin, Nickel contact plating, PCB, Board Mount, No potting, Black | 16 | 13 |
| | AT04-6P-BM04 | 6 Pos. Recep., Pin, Nickel contact plating, PCB, Board Mount, Potting, Black | 16 | 13 |
| | AT04-08PA-BM01 | 8 Pos. Recep., Pin, Gold contact plating, PCB, Board Mount, No potting, Gray | 16 | 13 |
| | AT04-08PA-BM02 | 8 Pos. Recep., Pin, Gold contact plating, PCB, Board Mount, Potting, Gray | 16 | 13 |
| | AT04-08PA-BM03 | 8 Pos. Recep., Pin, Nickel contact plating, PCB, Board Mount, No potting, Gray | 16 | 13 |
| | AT04-08PA-BM04 | 8 Pos. Recep., Pin, Nickel contact plating, PCB, Board Mount, Potting, Gray | 16 | 13 |
| | AT04-08PB-BM01 | 8 Pos. Recep., Pin, Gold contact plating, PCB, Board Mount, No potting, Black | 16 | 13 |
| | AT04-08PB-BM02 | 8 Pos. Recep., Pin, Gold contact plating, PCB, Board Mount, Potting, Black | 16 | 13 |
| | AT04-08PB-BM03 | 8 Pos. Recep., Pin, Nickel contact plating, PCB, Board Mount, No potting, Black | 16 | 13 |
| | AT04-08PB-BM04 | 8 Pos. Recep., Pin, Nickel contact plating, PCB, Board Mount, Potting, Black | 16 | 13 |
| | AT04-08PC-BM01 | 8 Pos. Recep., Pin, Gold contact plating, PCB, Board Mount, No potting, Green | 16 | 13 |
| | AT04-08PC-BM02 | 8 Pos. Recep., Pin, Gold contact plating, PCB, Board Mount, Potting, Green | 16 | 13 |
| | AT04-08PC-BM03 | 8 Pos. Recep., Pin, Nickel contact plating, PCB, Board Mount, No potting, Green | 16 | 13 |
| | AT04-08PC-BM04 | 8 Pos. Recep., Pin, Nickel contact plating, PCB, Board Mount, Potting, Green | 16 | 13 |
| | AT04-08PD-BM01 | 8 Pos. Recep., Pin, Gold contact plating, PCB, Board Mount, No potting, Brown | 16 | 13 |
| | AT04-08PD-BM02 | 8 Pos. Recep., Pin, Gold contact plating, PCB, Board Mount, Potting, Brown | 16 | 13 |
| | AT04-08PD-BM03 | 8 Pos. Recep., Pin, Nickel contact plating, PCB, Board Mount, No potting, Brown | 16 | 13 |
| | AT04-08PD-BM04 | 8 Pos. Recep., Pin, Nickel contact plating, PCB, Board Mount, Potting, Brown | 16 | 13 |
| | AT04-12PA-BM01 | 12 Pos. Recep., Pin, Gold contact plating, PCB, Board Mount, No potting, Gray | 16 | 13 |
| | AT04-12PA-BM02 | 12 Pos. Recep., Pin, Gold contact plating, PCB, Board Mount, Potting, Gray | 16 | 13 |
| | AT04-12PA-BM03 | 12 Pos. Recep., Pin, Nickel contact plating, PCB, Board Mount, No potting, Gray | 16 | 13 |
| | AT04-12PA-BM04 | 12 Pos. Recep., Pin, Nickel contact plating, PCB, Board Mount, Potting, Gray | 16 | 13 |
| | AT04-12PB-BM01 | 12 Pos. Recep., Pin, Gold contact plating, PCB, Board Mount, No potting, Black | 16 | 13 |
| | AT04-12PB-BM02 | 12 Pos. Recep., Pin, Gold contact plating, PCB, Board Mount, Potting, Black | 16 | 13 |
| | AT04-12PB-BM03 | 12 Pos. Recep., Pin, Nickel contact plating, PCB, Board Mount, No potting, Black | 16 | 13 |
| 171 I 1 | AT04-12PB-BM04 | 12 Pos. Recep., Pin, Nickel contact plating, PCB, Board Mount, Potting, Black | 16 | 13 |
| | AT04-12PC-BM01 | 12 Pos. Recep., Pin, Gold contact plating, PCB, Board Mount, No potting, Green | 16 | 13 |
| | AT04-12PC-BM02 | 12 Pos. Recep., Pin, Gold contact plating, PCB, Board Mount, Potting, Green | 16 | 13 |
| | AT04-12PC-BM03 | 12 Pos. Recep., Pin, Nickel contact plating, PCB, Board Mount, No potting, Green | 16 | 13 |
| | AT04-12PC-BM04 | 12 Pos. Recep., Pin, Nickel contact plating, PCB, Board Mount, Potting, Green | 16 | 13 |
| | AT04-12PD-BM01 | 12 Pos. Recep., Pin, Gold contact plating, PCB, Board Mount, No potting, Brown | 16 | 13 |
| | AT04-12PD-BM02 | 12 Pos. Recep., Pin, Gold contact plating, PCB, Board Mount, Potting, Brown | 16 | 13 |
| | AT04-12PD-BM03 | 12 Pos. Recep., Pin, Nickel contact plating, PCB, Board Mount, No potting, Brown | 16 | 13 |
| | AT04-12PD-BM03 | 12 Pos. Recep., Pin, Nickel contact plating, PCB, Board Mount, Potting, Brown | 16 | 13 |
| | AT1612-13PBNF13 | 13 Pos. 90° Recep., Pin, Nickel contact plating, PCB, Board Mount, No potting, Black, Keyed B | 12, 16 | 25,13 |
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