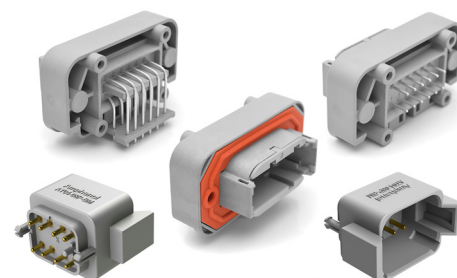




# BL BoardLock™ Family



Available in 2, 3, 4, 6, 8, 12 and 13 Position

Amphenol Sine Systems' **BoardLock™ Family** combines flanged or flangeless, 180° straight or 90° right angle pin-oriented, wire-to-board versatility with the proven reliability of the A Series™ environmentally-sealed thermoplastic connection system with a maximum current rating up to 25A. Featuring a compact, durable, low-profile and lightweight design, perfect for power or data signal applications in Heavy Equipment, Transportation, Industrial, Off-Road and Harsh Environments. All **BoardLock™** product lines accept A Series™ components and are compatible with other industry standard mating connectors.

## Potential Applications

Power & Signal Connectivity, Data Acquisition, HVAC Systems, Farming Implementation, Boating, Sealed Environments

## Features

- Flanged or Flangeless
- 180° Straight or 90° Right Angle Pin Orientation
- Snap-Lock or Screw-Lock Mounting
- Potted or Unpotted



## BoardLock™ Family Specifications Overview





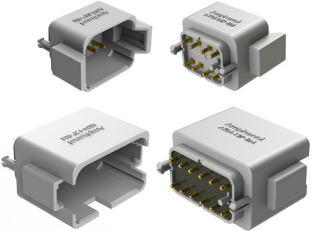
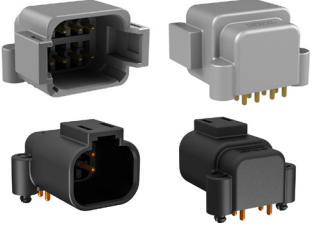
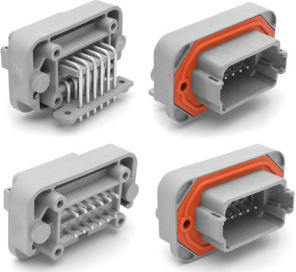
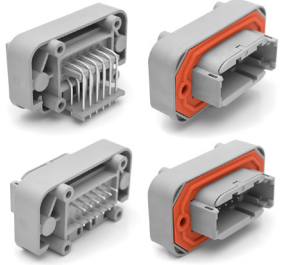
Positions	2, 3, 4, 6, 8, 12, and 13
Current Rating	(ATM) 7.5A / (AT) 13A / (Mixed) 25A
Pin Orientation	180° Straight or 90° Right Angle
Mounting Type	Snap-Lock or Screw-Lock
Flange	Flange or Flangeless (See individual series)
Contact Material/Plating	Copper Alloy/Gold, Nickel or Tin Plating
Contact Milivolt Drop	See individual series specs
Contact Termination	Direct Solder
Contact Types	Machined, PC Tail
Dielectric Value	Meets or exceeds 1500 volts minimum
Housing/Latch	Thermoplastic/Integrated
Insulation Resistance	1000 megohms minimum at 25°C
IP Rating	IP67 mated condition
Keying Options	Available in 6, 8 and 12 position only

Mating Cycles	100 Cycles
Operating Voltage	250 VDC
Seal Material	Silicone Rubber (depending on series)
Temperature Range	-55°C to +125°C at rated current
Shock	No latch disengagement or discontinuity shall be the result when subjected to 50 g's in each of three axis (X, Y & Z)
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
Vibration	Continued continuity without degradation to mechanical or physical attributes following vibration. (Max acceleration 20 g's at Sine sweep of 10-2000Hz)



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**BoardLock™ Series Comparison Chart**

Series	 BoardLock™ AT	 BoardLock™ ATF13	 BoardLock™ AT13/15	 BoardLock™ ATM13/15
Image				
Positions	2, 3, 4, 6, 8 and 12 13 position avail. only in 90° RA	2, 3, 4, 6, 8 and 12 13 (Mixed Power and Signal)	2, 4, 6, 8 and 12	2, 3, 4, 6, 8, and 12
Current Rating	2, 3, 4, 6, 8, 12 pos: Size 16, 13A 13 pos: Size 16, 13A; Size 12, 25A	2, 3, 4, 6, 8, 12 pos: Size 16, 13A 13 pos: Size 16, 13A; Size 12, 25A	13A	7.5A
Pin Orientation	2, 3, 4, 6, 8, 12 pos: 180° Straight; 13 pos: 90° Right Angle	90° Right Angle	<b>AT13:</b> 90° Right Angle <b>AT15:</b> 180° Straight	<b>ATM13:</b> 90° Right Angle <b>ATM15:</b> 180° Straight
Mounting Type	Snap-Lock or Screw-Lock	Snap-Lock or Screw-Lock	Screw-Lock	Screw-Lock
Flange	Flangeless	Flangeless	Flanged	Flanged
Contact Material/Plating	Copper Alloy/Gold, Nickel Plating	Copper Alloy/Gold, Nickel Plating	Copper Alloy/Gold, Nickel Plating	Copper Alloy/Gold, Nickel Plating
Contact Milivolt Drop	100 mV drop max at 13A test current	100 mV drop max at 13A test current	100 mV drop max at 13A test current	100 mV drop max at 7.5A test current
Contact Termination	Direct Solder	Direct Solder	Direct Solder	Direct Solder
Contact Types	Machined, PC Tail	Machined, PC Tail	Machined, PC Tail	Machined, PC Tail
Dielectric Value	Meets or exceeds 1500 volts minimum	Meets or exceeds 1500 volts minimum	Meets or exceeds 1500 volts minimum	Meets or exceeds 1500 volts minimum
Housing/Latch	Thermoplastic/Integrated	Thermoplastic/Integrated	Thermoplastic/Integrated	Thermoplastic/Integrated
Insulation Resistance	1000 megohms minimum at 25°C	1000 megohms minimum at 25°C	1000 megohms minimum at 25°C	1000 megohms minimum at 25°C
IP Rating	IP67 mated condition	IP67 mated condition	IP67 mated condition	IP67 mated condition
Keying Options	Available in 8, 12 pos only	Available in 6, 8, 12 pos only	Available in 6, 8, 12 pos only	Available in 8, 12 pos only
Mating Cycles	100 Cycles	100 Cycles	100 Cycles	100 Cycles
Operating Voltage	250 VDC	250 VDC	250 VDC	250 VDC
Seal Material	n/a	n/a	Silicone Rubber	Silicone Rubber
Temperature Range	-55°C to +125°C at rated current	-55°C to +125°C at rated current	-55°C to +125°C at rated current	-55°C to +125°C at rated current
Shock	No latch disengagement or discontinuity shall be the result when subjected to 50 g's in each of three axis (X, Y & Z)	No latch disengagement or discontinuity shall be the result when subjected to 50 g's in each of three axis (X, Y & Z)	No latch disengagement or discontinuity shall be the result when subjected to 50 g's in each of three axis (X, Y & Z)	No latch disengagement or discontinuity shall be the result when subjected to 50 g's in each of three axis (X, Y & Z)
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	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	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	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
Vibration	Continued continuity without degradation to mechanical or physical attributes following vibration. (Max acceleration 20 g's at Sine sweep of 10-2000Hz)	Continued continuity without degradation to mechanical or physical attributes following vibration. (Max acceleration 20 g's at Sine sweep of 10-2000Hz)	Continued continuity without degradation to mechanical or physical attributes following vibration. (Max acceleration 20 g's at Sine sweep of 10-2000Hz)	Continued continuity without degradation to mechanical or physical attributes following vibration. (Max acceleration 20 g's at Sine sweep of 10-2000Hz)

**For more information, contact: Customer Service, +1 800 394 7732, [csr@amphenol-sine.com](mailto:csr@amphenol-sine.com)**

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