BL BoardLock™ Family

Available in AT, ATHD, ATM and ATP
1, 2, 3, 4, 6, 8, 12, 13 and 18 position (See individual series)

Amphenol Sine Systems' **BoardLock™ Family** options include **flanged or flangeless, 180° straight or 90° right angle pin-oriented, snap-fit or self-threading**, wire-to-board versatility with the proven reliability of the A Series™ environmentally-sealed thermoplastic connection system with a maximum current rating up to 100A. Featuring a compact, durable, low-profile and lightweight design, perfect for power or data signal applications.

All **BoardLock™** product lines accept A Series™ components and are compatible with other industry standard mating connectors.

Applications
Power & Signal Connectivity, Data Acquisition, HVAC Systems, Farming Implementation, Boating, Sealed Environments, Heavy Equipment, Transportation, Industrial, Off-Road and Harsh Environments

Features
- Flanged or Flangeless
- 180° Straight or 90° Right Angle Pin Orientation
- Snap-Fit or Self-Threading
- Potted or Unpotted

IP68

BoardLock™ Family Specifications Overview

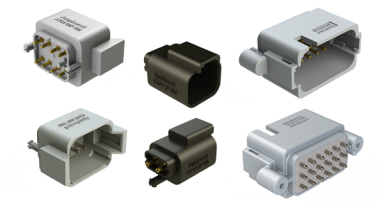
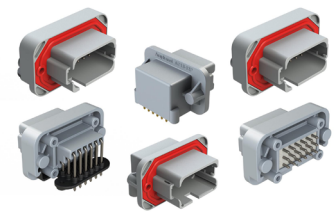
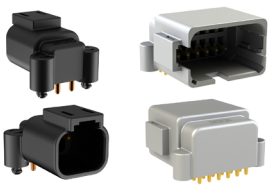
Positions	1, 2, 3, 4, 6, 8, 12, 13 and 18 (See individual series)
Current Rating	7.5A to 100A (See individual datasheets)
Pin Orientation	Straight or 90° Right Angle
Mounting Type	Snap-Fit or Self-Threading (See individual series)
Flange	Flanged or Flangeless (See individual series)
Contact Material/Plating	Copper Alloy/Gold, Nickel or Tin Plating
Contact Milivolt Drop	See individual series
Contact Termination	Direct Solder
Contact Types	Machined, PC Tail
Housing Material	Thermoplastic
Insulation Resistance	1000 megohms minimum at 25°C
IP Rating	IP68 (in mated condition)
Keying Options	See individual datasheets

Mating Cycles	100 Cycles
Operating Voltage	250V to 500V
Seal Material	Silicone Rubber (See individual datasheets)
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)

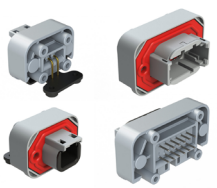
A ASeries™ Family

Standard products. Custom solutions
Customer Service +1 800 394 7732

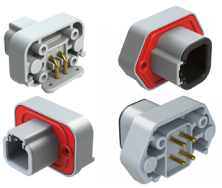
BoardLock™ Family Comparison Chart

Series	BoardLock™ AT	BoardLock™ AT13/15	BoardLock™ ATF13
Image			
Positions	2, 3, 4, 6, 8, 12 and 18	2, 4, 6, 8, 12, 13 (Mixed) and 18	2, 3, 4, 6, 8, 12 and 13 (Mixed)
Current Rating	Size 16, 13A	2, 4, 6, 8, 12, 18 pos: Size 16, 13A 13 pos (Mixed): Size 12/16, 25A/13A	2, 3, 4, 6, 8. 12 pos: Size 16, 13A 13 pos (Mixed): Size 12/16, 25A/13A
Flange	Flangeless	Flanged	Flangeless
Mounting Type	Snap-Fit (2-12 Pos) or Self-Threading (18 Pos)	Self-Threading	Snap-Fit or Self-Threading
Pin Orientation	180° Straight	**AT13**: 90° Right Angle / **AT15**: 180° Straight	90° Right Angle
Contact Material/Plating	Copper Alloy/Gold, Nickel Plating	Copper Alloy/Gold, Tin Plating	Copper Alloy/Gold, Tin Plating
Contact Millivolt Drop	100 mV drop max at 13A current	2,4,6,8,12 and 18 pos: 100mV drop max at 13A current 13 (11+2) pos: 100mV drop max at 13A/25A current	100 mV drop max at 13A current
Contact Termination	Direct Solder	Direct Solder	Direct Solder
Contact Types	Machined, PC Tail	Machined, PC Tail	Machined, PC Tail
Dielectric Value	Less than 2 milliamps current leakage @ 1500 volts AC	Less than 2 milliamps current leakage @ 1500 volts AC	Less than 2 milliamps current leakage @ 1500 volts AC
Housing Material	Thermoplastic	Thermoplastic	Thermoplastic
Insulation Resistance	1000 megohms minimum at 25°C	1000 megohms minimum at 25°C	1000 megohms minimum at 25°C
IP Rating	IP68 (in mated condition)	IP68 (in mated condition)	IP68 (in mated condition)
Keying Options	Available in 8, 12 and 18 pos only	Available in 6, 8, 12 and 18 pos only	Available in 6, 8, 12 pos only
Mating Cycles	100 Cycles	100 Cycles	100 Cycles
Operating Voltage	250 VDC	250 VDC	250 VDC
Seal Material	n/a	Silicone Rubber	n/a
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
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)
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
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)

BoardLock™ Family Comparison Chart, cont.

Series	BoardLock™ ATFHD13	BoardLock™ ATHD	BoardLock™ ATM13/15
Image			
Positions	Single Position	Single Position	2, 3, 4, 6, 8, and 12
Current Rating	Size 4, 100A	Size 4, 8 or 12; 25A to 100A	Size 20, 7.5A
Flange	Flangeless	Flangeless	Flanged
Mounting Type	Snap-Fit or Self-Threading	Self-Threading	Self-Threading
Pin Orientation	90° Right Angle	180° Straight	**ATM13**: 90° Right Angle / **ATM15**: 180° Straight
Contact Material/Plating	Copper Alloy/Gold, Tin Plating	Copper Alloy/Gold, Nickel, Tin Plating	Copper Alloy/Gold, Tin Plating
Contact Milivolt Drop	100 mV drop max at 100A current	100 mV drop max at 100A current	100 mV drop max at 7.5A current
Contact Termination	Direct Solder	Direct Solder	Direct Solder
Contact Types	Machined, PC Tail	Machined, PC Tail	Machined, PC Tail
Dielectric Value	Less than 2 milliamps current leakage @ 3000 volts AC	Less than 2 milliamps current leakage @ 3000 volts AC	Less than 2 milliamps current leakage @ 1500 volts AC
Housing Material	Thermoplastic	Thermoplastic	Thermoplastic
Insulation Resistance	1000 megohms minimum at 25°C	1000 megohms minimum at 25°C	1000 megohms minimum at 25°C
IP Rating	IP68 (in mated condition)	IP68 (in mated condition)	IP68 (in mated condition)
Keying Options	Not Applicable	Not Applicable	Available in 8, 12 pos only
Mating Cycles	100 Cycles	100 Cycles	100 Cycles
Operating Voltage	250V to 500V	250V to 500V	250 VDC
Seal Material	Silicone Rubber	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
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)
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
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)

BoardLock™ Family Comparison Chart, cont.

Series	BoardLock™ ATP	BoardLock™ ATP13/15	BoardLock™ ATPF13/15
Image			
Positions	2, 4 and 6	2 and 4	2, 4 and 6
Current Rating	Size 12, 25A	Size 12, 25A	Size 12, 25A
Flange	Flangeless	Flanged	Flangeless
Mounting Type	Snap-Fit or Self-Threading	Self-Threading	Self-Threading
Pin Orientation	180° Straight	**ATP13**: 90° Right Angle / **ATP15**: 180° Straight	**ATP13**: 90° Right Angle / **ATP15**: 180° Straight
Contact Material/Plating	Copper Alloy/Gold, Tin Plating	Copper Alloy/Gold, Tin Plating	Copper Alloy/Gold, Tin Plating
Contact Milivolt Drop	100 mV drop max at 25A current	100 mV drop max at 25A current	100 mV drop max at 25A current
Contact Termination	Direct Solder	Direct Solder	Direct Solder
Contact Types	Machined, PC Tail	Machined, PC Tail	Machined, PC Tail
Dielectric Value	Less than 2 milliamps current leakage @ 1500 volts AC	Less than 2 milliamps current leakage @ 1500 volts AC	Less than 2 milliamps current leakage @ 1500 volts AC
Housing Material	Thermoplastic	Thermoplastic	Thermoplastic
Insulation Resistance	1000 megohms minimum at 25°C	1000 megohms minimum at 25°C	1000 megohms minimum at 25°C
IP Rating	IP68 (in mated condition)	IP68 (in mated condition)	IP68 (in mated condition)
Keying Options	Not Applicable	Available in ATP15-, 4 pos only (A, B, C and D)	Not Applicable
Mating Cycles	100 Cycles	100 Cycles	100 Cycles
Operating Voltage	250 VDC	250 VDC	250 VDC
Seal Material	Silicone Rubber	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
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)
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
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)