



# ARC ARC Series™

## Harsh Environment Rectangular Connectors

Available in 24, 40 and 70 position

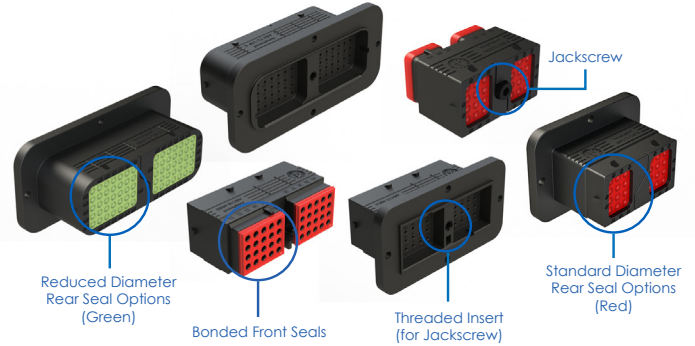
Amphenol Sine Systems **ARC Series™ Connectors** are a rugged, heavy-duty, environmentally-sealed, thermoplastic, rectangular connector series where high pin-counts are required in situations with controlled and/or uncontrolled environmental conditions. Amphenol Sine Systems **ARC Series™ Connectors** are currently available as In-Line Plugs and Flange Mount Receptacles.

All Plugs and Receptacles are IP68/69K rated (in mated condition)

### Key Features

- Accepts contact Size 16 (13A) / 14-20AWG
- Jackscrew w Threaded Insert for Mating
- Bonded Front Seals on Plugs
- Standard or Reduced Diameter Rear Seals
- Available in A, B, C and D Keying Options
- Compatible with existing standard products industry-wide
- Utilizes **A Series™** Contacts

**Applications:** Transportation, Heavy Equipment, Agricultural, Automotive, Off-Highway, Alternate Energy, Marine and other demanding interconnect architectures.



### Technical Specifications

Temperature Range	-55°C to +125°C
Max. Current (AMP)	13A
Voltage Rating (AC/DC)	250V
Contact Size	16
Wire AWG Range	14-20AWG
IP Rating	IP68 (1M of Water for 24 Hours), IP69K mated
Housing	Thermoplastic, Black
Sealing Material	Silicone Rubber
Threaded Insert/Jackscrew	Stainless Steel
Mating Cycle Durability	>100
Dielectric Value	Less than 2 mA current leakage @1500V AC

Insulation Resistance	1000 megohms minimum at 25°C
Vibration	No unlocking or unmating and exhibits no mechanical or physical damage after sinusoidal vibration levels of 20 G's at 10 to 2000 Hz in each of the three mutually perpendicular planes. No electrical discontinuities longer than 1 micro-second.
Durability	No electrical or mechanical defects after 100 cycles of engagement and disengagement
Thermal Shock	Subjected to 20 cycles at -55°C to +125°C with no cracking, chipping or other damage detrimental to the normal operation of the connector
RoHS	Compliant

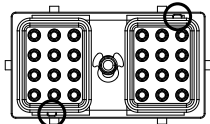


**A Series™ Family**

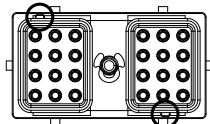


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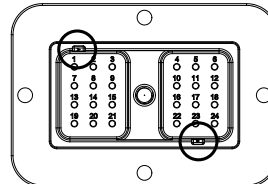
ARC Series™ 24 Position Plug and Receptacle - Keying Options (A, B, C and D)



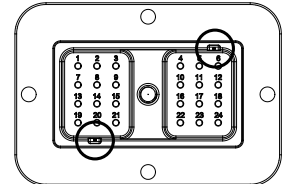
24 Pos Plug - Key A



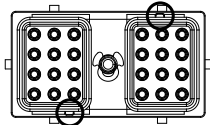
24 Pos Plug - Key B



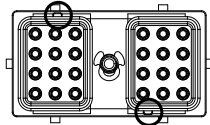
24 Pos Receptacle - Key A



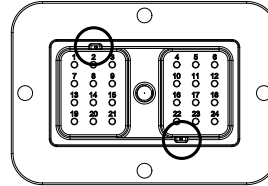
24 Pos Receptacle - Key B



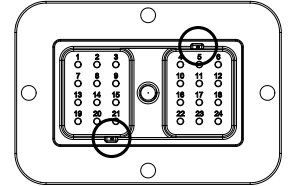
24 Pos Plug - Key C



24 Pos Plug - Key D

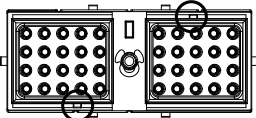


24 Pos Receptacle - Key C

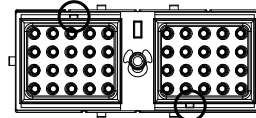


24 Pos Receptacle - Key D

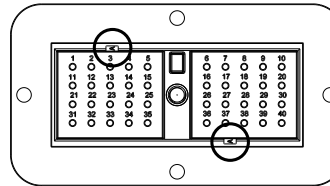
ARC Series™ 40 Position Plug & Receptacle - Keying Options (A, B, C and D)



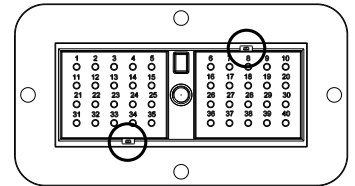
40 Pos Plug - Key A



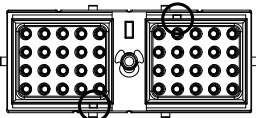
40 Pos Plug - Key B



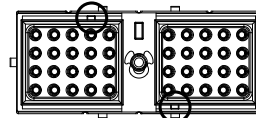
40 Pos Receptacle - Key A



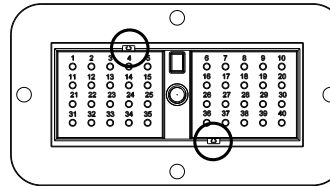
40 Pos Receptacle - Key B



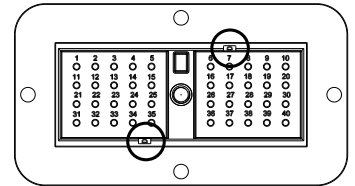
40 Pos Plug - Key C



40 Pos Plug - Key D

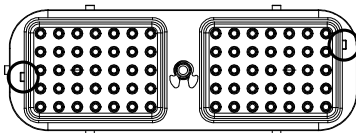


40 Pos Receptacle - Key C

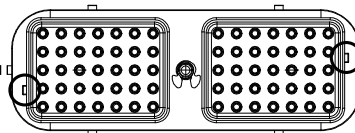


40 Pos Receptacle - Key D

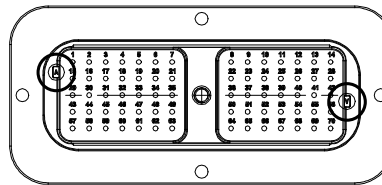
ARC Series™ 70 Position Plug & Receptacle - Keying Options (A, B, C and D)



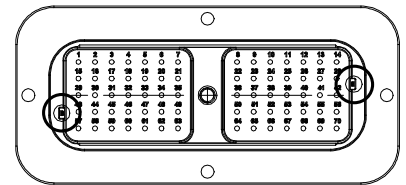
70 Pos Plug - Key A



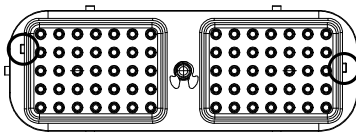
70 Pos Plug - Key B



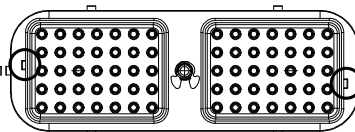
70 Pos Receptacle - Key A



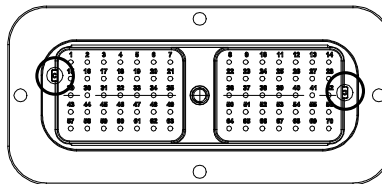
70 Pos Receptacle - Key B



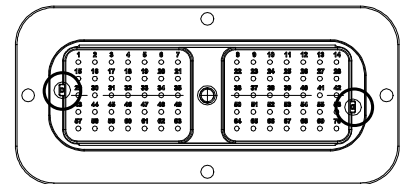
70 Pos Plug - Key C



70 Pos Plug - Key D

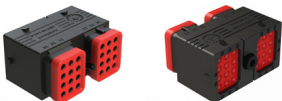
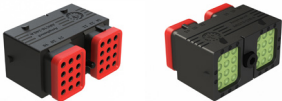


70 Pos Receptacle - Key C





70 Pos Receptacle - Key D

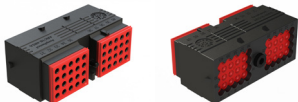
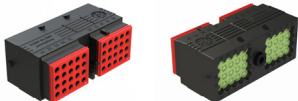
24 Position - ARC Series™ Plugs

Image	Part Number	Description	AWG	Amp
	ARC16-24SA-P013	24 Position, Plug, Socket, Size 16, ARC Series™, Jackscrew, Bonded Front Seal, Keyed A, Standard Diameter Rear Seal (Red), Black Body	14-20AWG (2.0-0.5mm <sup>2</sup> )	13A
	ARC16-24SB-P013	24 Position, Plug, Socket, Size 16, ARC Series™, Jackscrew, Bonded Front Seal, Keyed B, Standard Diameter Rear Seal (Red), Black Body	14-20AWG (2.0-0.5mm <sup>2</sup> )	13A
	ARC16-24SC-P013	24 Position, Plug, Socket, Size 16, ARC Series™, Jackscrew, Bonded Front Seal, Keyed C, Standard Diameter Rear Seal (Red), Black Body	14-20AWG (2.0-0.5mm <sup>2</sup> )	13A
	ARC16-24SD-P013	24 Position, Plug, Socket, Size 16, ARC Series™, Jackscrew, Bonded Front Seal, Keyed D, Standard Diameter Rear Seal (Red), Black Body	14-20AWG (2.0-0.5mm <sup>2</sup> )	13A
	ARC16-24SAR-P013	24 Position, Plug, Socket, Size 16, ARC Series™, Jackscrew, Bonded Front Seal, Keyed A, Reduced Diameter Rear Seal (Green), Black Body	14-20AWG (2.0-0.5mm <sup>2</sup> )	13A
	ARC16-24SBR-P013	24 Position, Plug, Socket, Size 16, ARC Series™, Jackscrew, Bonded Front Seal, Keyed B, Reduced Diameter Rear Seal (Green), Black Body	14-20AWG (2.0-0.5mm <sup>2</sup> )	13A
	ARC16-24SCR-P013	24 Position, Plug, Socket, Size 16, ARC Series™, Jackscrew, Bonded Front Seal, Keyed C, Reduced Diameter Rear Seal (Green), Black Body	14-20AWG (2.0-0.5mm <sup>2</sup> )	13A
	ARC16-24SDR-P013	24 Position, Plug, Socket, Size 16, ARC Series™, Jackscrew, Bonded Front Seal, Keyed D, Reduced Diameter Rear Seal (Green), Black Body	14-20AWG (2.0-0.5mm <sup>2</sup> )	13A



24 Position - ARC Series™ Receptacles

	ARC12-24PA	24 Position, Receptacle, Pin, Size 16, ARC Series™, Threaded Insert for Jackscrew, Keyed A, Flanged, Standard Diameter Rear Seal (Red), Black Body	14-20AWG (2.0-0.5mm <sup>2</sup> )	13A
	ARC12-24PB	24 Position, Receptacle, Pin, Size 16, ARC Series™, Threaded Insert for Jackscrew, Keyed B, Flanged, Standard Diameter Rear Seal (Red), Black Body	14-20AWG (2.0-0.5mm <sup>2</sup> )	13A
	ARC12-24PC	24 Position, Receptacle, Pin, Size 16, ARC Series™, Threaded Insert for Jackscrew, Keyed C, Flanged, Standard Diameter Rear Seal (Red), Black Body	14-20AWG (2.0-0.5mm <sup>2</sup> )	13A
	ARC12-24PD	24 Position, Receptacle, Pin, Size 16, ARC Series™, Threaded Insert for Jackscrew, Keyed D, Flanged, Standard Diameter Rear Seal (Red), Black Body	14-20AWG (2.0-0.5mm <sup>2</sup> )	13A
	ARC12-24PAR	24 Position, Receptacle, Pin, Size 16, ARC Series™, Threaded Insert for Jackscrew, Keyed A, Flanged, Reduced Diameter Rear Seal (Green), Black Body	14-20AWG (2.0-0.5mm <sup>2</sup> )	13A
	ARC12-24PBR	24 Position, Receptacle, Pin, Size 16, ARC Series™, Threaded Insert for Jackscrew, Keyed B, Flanged, Reduced Diameter Rear Seal (Green), Black Body	14-20AWG (2.0-0.5mm <sup>2</sup> )	13A
	ARC12-24PCR	24 Position, Receptacle, Pin, Size 16, ARC Series™, Threaded Insert for Jackscrew, Keyed C, Flanged, Reduced Diameter Rear Seal (Green), Black Body	14-20AWG (2.0-0.5mm <sup>2</sup> )	13A
	ARC12-24PDR	24 Position, Receptacle, Pin, Size 16, ARC Series™, Threaded Insert for Jackscrew, Keyed D, Flanged, Reduced Diameter Rear Seal (Green), Black Body	14-20AWG (2.0-0.5mm <sup>2</sup> )	13A



40 Position - ARC Series™ Plugs

	ARC18-40SA-P013	40 Position, Plug, Socket, Size 16, ARC Series™, Jackscrew, Bonded Front Seal, Keyed A, Standard Diameter Rear Seal (Red), Black Body	14-20AWG (2.0-0.5mm <sup>2</sup> )	13A
	ARC18-40SB-P013	40 Position, Plug, Socket, Size 16, ARC Series™, Jackscrew, Bonded Front Seal, Keyed B, Standard Diameter Rear Seal (Red), Black Body	14-20AWG (2.0-0.5mm <sup>2</sup> )	13A
	ARC18-40SC-P013	40 Position, Plug, Socket, Size 16, ARC Series™, Jackscrew, Bonded Front Seal, Keyed C, Standard Diameter Rear Seal (Red), Black Body	14-20AWG (2.0-0.5mm <sup>2</sup> )	13A
	ARC18-40SD-P013	40 Position, Plug, Socket, Size 16, ARC Series™, Jackscrew, Bonded Front Seal, Keyed D, Standard Diameter Rear Seal (Red), Black Body	14-20AWG (2.0-0.5mm <sup>2</sup> )	13A
	ARC18-40SAR-P013	40 Position, Plug, Socket, Size 16, ARC Series™, Jackscrew, Bonded Front Seal, Keyed A, Reduced Diameter Rear Seal (Green), Black Body	14-20AWG (2.0-0.5mm <sup>2</sup> )	13A
	ARC18-40SBR-P013	40 Position, Plug, Socket, Size 16, ARC Series™, Jackscrew, Bonded Front Seal, Keyed B, Reduced Diameter Rear Seal (Green), Black Body	14-20AWG (2.0-0.5mm <sup>2</sup> )	13A
	ARC18-40SCR-P013	40 Position, Plug, Socket, Size 16, ARC Series™, Jackscrew, Bonded Front Seal, Keyed C, Reduced Diameter Rear Seal (Green), Black Body	14-20AWG (2.0-0.5mm <sup>2</sup> )	13A
	ARC18-40SDR-P013	40 Position, Plug, Socket, Size 16, ARC Series™, Jackscrew, Bonded Front Seal, Keyed D, Reduced Diameter Rear Seal (Green), Black Body	14-20AWG (2.0-0.5mm <sup>2</sup> )	13A



40 Position - ARC Series™ Receptacles

Image	Part Number	Description	AWG	Amp
	ARC12-40PA	40 Position, Receptacle, Pin, Size 16, ARC Series™, Threaded Insert for Jack-screw, Keyed A, Flanged, Standard Diameter Rear Seal (Red), Black Body	14-20AWG (2.0-0.5mm <sup>2</sup> )	13A
	ARC12-40PB	40 Position, Receptacle, Pin, Size 16, ARC Series™, Threaded Insert for Jack-screw, Keyed B, Flanged, Standard Diameter Rear Seal (Red), Black Body	14-20AWG (2.0-0.5mm <sup>2</sup> )	13A
	ARC12-40PC	40 Position, Receptacle, Pin, Size 16, ARC Series™, Threaded Insert for Jack-screw, Keyed C, Flanged, Standard Diameter Rear Seal (Red), Black Body	14-20AWG (2.0-0.5mm <sup>2</sup> )	13A
	ARC12-40PD	40 Position, Receptacle, Pin, Size 16, ARC Series™, Threaded Insert for Jack-screw, Keyed D, Flanged, Standard Diameter Rear Seal (Red), Black Body	14-20AWG (2.0-0.5mm <sup>2</sup> )	13A
	ARC12-40PAR	40 Position, Receptacle, Pin, Size 16, ARC Series™, Threaded Insert for Jack-screw, Keyed A, Flanged, Reduced Diameter Rear Seal (Green), Black Body	14-20AWG (2.0-0.5mm <sup>2</sup> )	13A
	ARC12-40PBR	40 Position, Receptacle, Pin, Size 16, ARC Series™, Threaded Insert for Jack-screw, Keyed B, Flanged, Reduced Diameter Rear Seal (Green), Black Body	14-20AWG (2.0-0.5mm <sup>2</sup> )	13A
	ARC12-40PCR	40 Position, Receptacle, Pin, Size 16, ARC Series™, Threaded Insert for Jack-screw, Keyed C, Flanged, Reduced Diameter Rear Seal (Green), Black Body	14-20AWG (2.0-0.5mm <sup>2</sup> )	13A
	ARC12-40PDR	40 Position, Receptacle, Pin, Size 16, ARC Series™, Threaded Insert for Jack-screw, Keyed D, Flanged, Reduced Diameter Rear Seal (Green), Black Body	14-20AWG (2.0-0.5mm <sup>2</sup> )	13A

70 Position - ARC Series™ Plugs

	ARC16-70SA-P013	70 Position, Plug, Socket, Size 16, ARC Series™, Jackscrew, Bonded Front Seal, Keyed A, Standard Diameter Rear Seal (Red), Black Body	14-20AWG (2.0-0.5mm <sup>2</sup> )	13A
	ARC16-70SB-P013	70 Position, Plug, Socket, Size 16, ARC Series™, Jackscrew, Bonded Front Seal, Keyed B, Standard Diameter Rear Seal (Red), Black Body	14-20AWG (2.0-0.5mm <sup>2</sup> )	13A
	ARC16-70SC-P013	70 Position, Plug, Socket, Size 16, ARC Series™, Jackscrew, Bonded Front Seal, Keyed C, Standard Diameter Rear Seal (Red), Black Body	14-20AWG (2.0-0.5mm <sup>2</sup> )	13A
	ARC16-70SD-P013	70 Position, Plug, Socket, Size 16, ARC Series™, Jackscrew, Bonded Front Seal, Keyed D, Standard Diameter Rear Seal (Red), Black Body	14-20AWG (2.0-0.5mm <sup>2</sup> )	13A
	ARC16-70SAR-P013	70 Position, Plug, Socket, Size 16, ARC Series™, Jackscrew, Bonded Front Seal, Keyed A, Reduced Diameter Rear Seal (Green), Black Body	14-20AWG (2.0-0.5mm <sup>2</sup> )	13A
	ARC16-70SBR-P013	70 Position, Plug, Socket, Size 16, ARC Series™, Jackscrew, Bonded Front Seal, Keyed B, Reduced Diameter Rear Seal (Green), Black Body	14-20AWG (2.0-0.5mm <sup>2</sup> )	13A
	ARC16-70SCR-P013	70 Position, Plug, Socket, Size 16, ARC Series™, Jackscrew, Bonded Front Seal, Keyed C, Reduced Diameter Rear Seal (Green), Black Body	14-20AWG (2.0-0.5mm <sup>2</sup> )	13A
	ARC16-70SDR-P013	70 Position, Plug, Socket, Size 16, ARC Series™, Jackscrew, Bonded Front Seal, Keyed D, Reduced Diameter Rear Seal (Green), Black Body	14-20AWG (2.0-0.5mm <sup>2</sup> )	13A

70 Position - ARC Series™ Receptacles

	ARC12-70PA	70 Position, Receptacle, Pin, Size 16, ARC Series™, Threaded Insert for Jack-screw, Keyed A, Flanged, Standard Diameter Rear Seal (Red), Black Body	14-20AWG (2.0-0.5mm <sup>2</sup> )	13A
	ARC12-70PB	70 Position, Receptacle, Pin, Size 16, ARC Series™, Threaded Insert for Jack-screw, Keyed B, Flanged, Standard Diameter Rear Seal (Red), Black Body	14-20AWG (2.0-0.5mm <sup>2</sup> )	13A
	ARC12-70PC	70 Position, Receptacle, Pin, Size 16, ARC Series™, Threaded Insert for Jack-screw, Keyed C, Flanged, Standard Diameter Rear Seal (Red), Black Body	14-20AWG (2.0-0.5mm <sup>2</sup> )	13A
	ARC12-70PD	70 Position, Receptacle, Pin, Size 16, ARC Series™, Threaded Insert for Jack-screw, Keyed D, Flanged, Standard Diameter Rear Seal (Red), Black Body	14-20AWG (2.0-0.5mm <sup>2</sup> )	13A
	ARC12-70PAR	70 Position, Receptacle, Pin, Size 16, ARC Series™, Threaded Insert for Jack-screw, Keyed A, Flanged, Reduced Diameter Rear Seal (Green), Black Body	14-20AWG (2.0-0.5mm <sup>2</sup> )	13A
	ARC12-70PBR	70 Position, Receptacle, Pin, Size 16, ARC Series™, Threaded Insert for Jack-screw, Keyed B, Flanged, Reduced Diameter Rear Seal (Green), Black Body	14-20AWG (2.0-0.5mm <sup>2</sup> )	13A
	ARC12-70PCR	70 Position, Receptacle, Pin, Size 16, ARC Series™, Threaded Insert for Jack-screw, Keyed C, Flanged, Reduced Diameter Rear Seal (Green), Black Body	14-20AWG (2.0-0.5mm <sup>2</sup> )	13A
	ARC12-70PDR	70 Position, Receptacle, Pin, Size 16, ARC Series™, Threaded Insert for Jack-screw, Keyed D, Flanged, Reduced Diameter Rear Seal (Green), Black Body	14-20AWG (2.0-0.5mm <sup>2</sup> )	13A



ARC Series™ Accessories

Image	Part Number	Description	AWG	Amp
	ARC24-BT	24 Position, Boot, Black (For use on both Plug and Receptacle)	-	-
	ARC24-GKT	24 Position Gasket, Receptacle, Black	-	-
	ARC40-BT	40 Position, Boot, Black (For use on both Plug and Receptacle)	-	-
	ARC40-BT-RA	40 Position, 90 Degree Boot, Black (For use on both Plug and Receptacle)	-	-
	ARC40-GKT	40 Position Gasket, Receptacle, Black	-	-
	ARC70-BT	70 Position, Boot, ARC Series, Black Body (For use on both Plug and Receptacle)	-	-
	ARC70-GKT	70 Position, Gasket, Receptacle, ARC Series, Black Body	-	-
	A114017	Sealing Plugs, Size 16, White	-	-

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

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