



## INDUSTRIAL CONNECTOR **SELECTION GUIDE**



WHEN THE DESIGN MATTERS  
**PEI-Genesis DELIVERS**

# QUALITY

You need to protect your customers' and your brand's reputation by using the highest quality products.

# EXPERTISE

You're the expert in your products; let us be the expert for your interconnects.

# SPEED

In your world, you need products quickly without any lost production time.

# VALUE-ADD

Enjoy better access to the brands you trust. We provide manufacturing capabilities with distribution flexibility.



PEI-Genesis maintains an AS9100C:2009 and ISO9001:2008 certified quality management system at its corporate headquarters in Philadelphia, PA, and at production facilities in South Bend, IN; Chandler, AZ; and Southampton, UK. PEI's Zhuhai, China facility achieved AS9100D and ISO9001:2015 in September 2017.





IN THE MOST RUGGED ENVIRONMENTS

PEI-Genesis has a wide range of high reliability, harsh environment connectors to solve the problem, regardless of the demands of the application.

LIGHTING SYSTEMS







A Series™  
Sure-Seal® Series  
ecomate®

STEERING & MOTION







Amphe-Lite™  
Trident TNM  
UTG

MONITORING & CONTROL







M8/M12  
X-Lok  
ModICE®

DATA







USB  
RJ45  
Self-Closing Caps

CABIN INTERFACE










CTC  
APD  
Trident Neptune

POWER MANAGEMENT







SurLok Plus™  
PowerLok™  
RADLOK™

POWERTRAIN SYSTEM







CB/CA-B/CIR  
GT/PT  
851





FOR THE HEAVIEST OF DUTIES

From communications, to engine signals, to braking systems; PEI-Genesis has the connector solutions to perform in the harshest conditions.

LIGHTING SYSTEMS



CTC  
HS-Lok  
UTS

STEERING & MOTION



Amphe-Lite™  
UTG  
Trident Neptune

MONITORING & CONTROL



M12 Shielded  
K Series  
Sensor Island

DATA



M12-X Coded  
UTS RJ45  
ModICE® - Breather

CABIN INTERFACE



APD / Modular APD  
DuraMate™  
Han-Eco®

POWER MANAGEMENT



PowerLok™  
MSD  
UPC

POWERTRAIN SYSTEM



Amphe-Lite™  
M Series Threaded  
GT/PT





WHERE THE RUBBER MEETS THE OFF-ROAD////////////////////

Agricultural equipment and off-road vehicles demand highly resistant and sealed connectors to withstand extreme conditions. PEI-Genesis offers a complete range.

LIGHTING SYSTEMS



AT Series® SR  
UTL  
ecomate® Aquarius™

STEERING & MOTION



97 Series  
CB  
CIR

MONITORING & CONTROL



Push Pull V4  
B Series  
HS-Lok

DATA



ModICE® RF  
M8-D coded (PoE)  
Cable Assemblies

CABIN INTERFACE



Modular APD  
Han-Modular®  
ISO-Bus

POWER MANAGEMENT



SurLok Plus™  
ATP  
5015 Radsok









POWERTRAIN SYSTEM



Amphe-Lite™  
CB/CA-B/CIR  
UTO






CONNECTOR  
SELECTOR









	A Series™	CTC	SSL 1.2	Dura Mate™
				
	AMPHENOL	ITT CANNON	AMPHENOL	AMPHENOL
Features and Benefits	Superior environmental seal retention  High performance, cost effective  Intermateable and interchangeable with DT Series	Up to IP69K with no wedge locks or blind seals required  Up to 24 way layouts with hand insertable contacts (no special tools required)  Utilizes Trident stamped and machine contacts	Effective IP68 signal connector solution  Wire-to-wire, board-to-wire, board-to-board range  From 2 to 6 pins available	High density signal and mixed power insert configurations  High current configurations incorporating revolutionary Radsok contacts  High strength impact resistant & lightweight thermoplastic housings
Harsh Environment		■	■	■
RoHS Compliant				
IP Rating	IP67	IP69K	IP68	IP67 / IP69K
Wire Gauge Range	22 to 12 AWG	24 to 16 AWG	22 to 20 AWG	14 to 7 AWG
Number of Circuits	2 to 12	8 to 24	2 to 4	7 to 47
EMI/RFI-Shielding	No	No	No	No
Style	Rectangular	Rectangular	Rectangular	Circular
Operating Voltage	500 VAC	48 VDC	250 VDC	1,500 VAC
Current Rating (Amps)	25	Up to 16	5	Up to 100
Power & Signal on Same Layout	No	No	No	Available
Operating Temperature	-67°F to 257°F -55°C to 125°C	-67°F to 221°F -55°C to 105°C	-40°F to 221°F -40°C to 105°C	-67°F to 257°F -55°C to 125°C
Individual Wire Sealing	Available	No	Available	Available
Cable Jacket Sealing	Available	No	No	Available
Type of Coupling	Latch Lock	Push-Pull	Latch Lock	Wide Thread
Life in Mating Cycles (min.)	100	500	30	100
Shell Material	Thermoplastic	Thermoplastic	Thermoplastic UI94v-0	Thermoplastic
Shell Plating	None	None	None	None
Shell Color	Black or Gray	Black or Gray	Natural White	Black
Positive Shell Polarization	Available	No	No	Available
Insert Polarization Options	No	No	No	No
User Polarization	No	No	No	No
Standards/Associated Specs.	-	UL94 V0	UL1977/cUL/CSA C22.2 (Field Installable) UL 2238 CSA C22.2 No. 182.3 (Overmolded Cable)	-
Contact Plating	Copper, Nickel	Gold, Silver, or Tin	Gold, Nickel	Gold, Nickel, or Silver
Contact Styles	Pin / Socket	Pin / Socket	Pin / Socket	Pin / Socket
Termination Type	Crimp	Crimp	Crimp or Stamped and Formed	Machined or Stamped and Formed
Co-ax				
Fiber Optic				
High Voltage				■
Ethernet				
First-Mate Last-Break				

Dura Mate™ ISO-Bus	ISO-Bus	APD	Modular APD	Amphe-Lite™
				
AMPHENOL	SURE-SEAL	ITT CANNON	ITT CANNON	AMPHENOL
Compatible to ISO 11783-2  Sealing up to IP69K  Rapid and secure assembly with field installable connectors as well as overmolded cable assemblies available	Compatible to ISO 11783-2  Cost competitive range for IP65 / IP67 requirements  Overmolded customized solutions	Signal and power connectors in 1 to 51 ways variants"  Sealing up to IP69K  Resistant to engine, transmission, and brake fluids	Fully customizable plate and modules  Sealing up to IP65 and simple to install  Space saving and reduction of assembly time and complexity	360° EMI Shielding  Excellent anti-scoop system  Self-Locking interconnect systems excellent for high vibration and harsh environments
■	■	■	■	■
				
IP67 / IP6K9K	IP65	IP69K	IP6K5	IP67
0.5 to 16 mm²	0.5 to 16 mm²	28 to 0 AWG	28 to 0 AWG	28 to 8 AWG
9	9	1 to 51	1 to 306	2 to 128
No	No	No	No	Available
Circular	Circular	Circular	Circular	Circular
24 VDC	Up to 60 VDC	48 VDC	48 VDC	450 VDC / 300 VAC to 1,250 VDC / 900 VAC
Up to 60	Up to 40	16 to 240	16 to 240	1.5 to 46
Available	Available	No	Available	Available
-40°F to 257°F -40°C to 125°C	-40°F to 185°F -40°C to 85°C	-40°F to 284°F -40°C to 140°C	-40°F to 185°F -40°C to 85°C	-67°F to 257°F -55°C to 125°C
No	No	Available	Available	Available
Available	Available	Available	Available	Available
Quick-Lock / Bayonet	Quick-Lock / Bayonet	Reverse Bayonet	Reverse Bayonet	Threaded
100	100	50	50	500
Polyamide black	PA Plastic + GF	PBT Housing, PA Plastic Coupling Nut	PBT GF 30 (Frame), PBT GF 10 for modules	Composite
None	None	None	None	Electroless Nickel or Unplated
Black	Blue	Black, Blue, Green, Red, or Yellow	Black	Black or Silver
No	No	Available	No	Available
No	No	Available	No	No
No	No	No	No	No
ISO 11783-2	ISO 11783-2	DIN-72585	-	UL E115497
Copper Alloy, Gold, or Nickel	Gold, Nickel	Gold, Silver, or Tin	Gold, Silver, or Tin	Gold
Pin / Socket	Pin / Socket	Pin / Socket	Pin / Socket	Pin / Socket
Crimp, Machined, or Stamped and Formed	Crimp	Crimp or Solder	Crimp, IDC, Screw, or Solder	Crimp
			■	■
		■	■	■
		■	■	
			■	







CONNECTOR  
SELECTOR






	ecomate®	UTS	UTL	CLC
				
	AMPHENOL	SOURIAU	SOURIAU	ITT CANNON
Features and Benefits	Flexible, quick, & easy to assemble  Sealing up to IP65 / IP69K in mated condition  Screwed cable gland with clamping ring	1/3 turn bayonet coupling High resistance to UV and corrosion  Sealing up to IP68 / IP69K even in dynamic situations  Uses Trim-Trio contact system platform”	Blind mating due to key shape design  Sealing up to IP68 / IP69K  Uses Trim-Trio contact system platform	Clip lock  Extremely small size  Strong resistance to environmental contaminants
Harsh Environment		■	■	■
RoHS Compliant				
IP Rating	IP67	IP69K	IP69K	IP68
Wire Gauge Range	26 to 14 AWG	30 to 8 AWG	30 to 14 AWG	20 to 16 AWG
Number of Circuits	4 to 7	2 to 32	4 to 8	2 & 4
EMI/RFI-Shielding	No	No	No	No
Style	Circular	Circular	Circular	Circular
Operating Voltage	400 VAC / 250 VAC	400 VDC	277 VDC	1,000 VAC
Current Rating (Amps)	10 to 16	4 to 44	16	5
Power & Signal on Same Layout	No	Available	Available	No
Operating Temperature	-40°F to 212°F -40°C to 100°C	-40°F to 221°F -40°C to 105°C	-40°F to 221°F -40°C to 105°C	-40°F to 302°F -40°C to 150°C
Individual Wire Sealing	No	Available	No	Available
Cable Jacket Sealing	Available	Available	Available	No
Type of Coupling	Threaded	Bayonet	Push-Pull	Clip Lock
Life in Mating Cycles (min.)	500	250	1,000	25
Shell Material	PA6.6 / PA6	Thermoplastic	Thermoplastic	Thermoplastic
Shell Plating	None	None	None	None
Shell Color	Black or Blue	Black	Black	Black
Positive Shell Polarization	No	No	No	No
Insert Polarization Options	No	No	No	No
User Polarization	No	No	No	No
Standards/Associated Specs.	VDE1781, 1780; SEV00.0394; UL E63093; CSA 48932: German Lloyd 14108/84	UL, IEC	UL, IEC, VDE	-
Contact Plating	Gold or Silver	Gold, Silver, or Tin	Gold or Tin	Gold
Contact Styles	Pin / Socket	Pin / Socket	Pin / Socket	Pin / Socket
Termination Type	Crimp, IDC, or Solder	Crimp, IDC, or Solder	Crimp or IDC	Crimp
Co-ax		■	■	
Fiber Optic		■		
High Voltage				
Ethernet				
First-Mate Last-Break		■	■	

	SLC	44 Series	Sure-Seal®	HS-Lok
				
	ITT CANNON	AMPHENOL	SURE-SEAL	AMPHENOL
Shared tooling with CLC				
Convertible mounting		High performance, cost effective	Long-term resistance against environmental impacts	Push-lock system, blind mating
Strong connector snap locks		Superior environmental seal retention	Sealing up to IP65 / IP67	Sealing up to IP68
	■		■	■
				
IP68	IP68	IP67	IP67	IP68
20 to 16 AWG	20 to 16 AWG	18 to 14 AWG	20 to 4 AWG	24 AWG (2A), 20 AWG (5A)
5 & 10	5 & 10	1 to 6	1 to 10	2 to 6
No	No	No	No	No
Circular	Circular	Circular	Circular / Rectangular	Circular Plastic
1,000 VAC	1,000 VAC	250 VAC	400 VAC	30 VAC
5	5	8	8 to 85	2, 5, 5+2
No	No	No	No	Available
-40°F to 302°F -40°C to 150°C	-40°F to 302°F -40°C to 150°C	-40°F to 221°F -40°C to 105°C	-40°F to 221°F -40°C to 105°C	-40°F to 221°F -40°C to 105°C
Available	Available	Available	Available	Available
No	No	No	Available	Available
Slide Lock	Slide Lock	Friction-Fit	Push-Pull	Push-Lock
25	25	25 (Max)	50 / 100	2,000
Thermoplastic	Thermoplastic	Santoprene or Thermoplastic Rubber	Elastomeric	Thermoplastic, UI Recognized
None	None	None	None	None
Black	Black	Black	Black	Black
No	No	No	Available	No
No	No	No	No	No
No	No	No	No	No
-	-	-	UL E176866, CSA LR109871-1	UL 2238, CSA C22.2 No. 182.3
Gold	Gold	Tin	Gold or Tin	Gold
Pin / Socket	Pin / Socket	Pin / Socket	Pin / Socket	Pin / Socket
Crimp	Crimp	Crimp	Crimp	Crimp, Screw, or Solder







CONNECTOR  
SELECTOR

	X-Lok	M8	M12	M8
				
	AMPHENOL	HARTING	HARTING	SURE-SEAL
Features and Benefits	Overmolded cable and field installable solutions  Sealing up to IP68 in unmated or mated condition  Power, data, signal, and mix layouts available	Shielded solution  PoE capable  30% smaller than conventional M12 connectors	Fast Ethernet applications (up to 10G)  Metal shielded versions available  Threaded and push-pull available	Wide range of configurations available  Customized versions to fit any application  Overmolded and shielding available
Harsh Environment	■	■	■	■
RoHS Compliant	🌿	🌿	🌿	🌿
IP Rating	IP68	IP67	IP67	IP65 / IP67
Wire Gauge Range	22 to 12 AWG	0.1 to 0.35 mm <sup>2</sup>	0.08 to 2.5 mm <sup>2</sup>	26 to 24 AWG
Number of Circuits	2 to 18	3 to 4	2 to 12	3 to 8
EMI/RFI-Shielding	No	No	Available	Available
Style	Circular Plastic	Circular	Circular	Circular
Operating Voltage	1,000 VDC	32 VDC	63 VDC	30 VDC (4 to 8 pin) or 60 VDC (3 pin)
Current Rating (Amps)	5 to 20	4	0.5 to 16	1 to 3
Power & Signal on Same Layout	Available	No	Available	No
Operating Temperature	-40°F to 221°F -40°C to 105°C	-40°F to 185°F -40°C To 85°C	-40°F to 185°F -40°C To 85°C	-40°F to 176°F -40°C To 80°C
Individual Wire Sealing	Available	No	No	No
Cable Jacket Sealing	Available	Available	Available	Available
Type of Coupling	Push-Lock	Screw	Push-Pull / Threaded	Screw, Snap-in
Life in Mating Cycles (min.)	1000	100	Up To 500	100
Shell Material	Nylon+GF, UL Recognized	Copper Zinc Alloy, Polyamide	LCP, Polyamide, Stainless Steel, or Zinc Die-Cast	Brass, TPU, or Zinc Alloy
Shell Plating	None	None	None	Nickel
Shell Color	Black	Black, Gray	Black, Gray	Black, Silver
Positive Shell Polarization	No	No	No	No
Insert Polarization Options	No	No	No	No
User Polarization	No	No	No	No
Standards/Associated Specs.	UL 1977 CSA C22.2 No. 182.3	-	IEC 61 076-2-101	IEC 61076-2-104
Contact Plating	Gold	Gold	Gold and Silver	Gold
Contact Styles	Pin / Socket	Pin / Socket	Pin / Socket	Pin / Socket
Termination Type	Crimped, Field Installable, Screw, or Soldered	HARAX (IDC), or Screw	Crimp, HARAX (IDC), Screw, Surface Mount, or Through Hole	Flying Leads, Molded Cable, PCB, Screw, or Solder
Co-ax				
Fiber Optic				
High Voltage				
Ethernet			100 Mbit to 10 Gbit	
First-Mate Last-Break				

M12	SMS	ModICE® (SHS)	Han-Eco®	Han-Modular®
				
SURE-SEAL	SOURIAU	CINCH	HARTING	HARTING
Wide range of configurations available  Customized versions to fit any application  Overmolded and shielding available	Quick release  Railway EN45545 flame retardant option  UL-Recognized / CSA Certified	4 different sizes with multiple header configurations  Sealing up to IP69K with breathing options  Customization of front header with a variety of solutions	Thermoplastic housing offers weight reduction  Fast assembly process without tools  Range of Han-Mondular® inserts and housings available: power, signal, data, F.O., pneumatics	Space savings, integration of multiple connectors into a single unit  Low maintenance  Range of inserts and housings available: power, signal, data, F.O., pneumatics
■		■	■	■
🌿	🌿	🌿	🌿	🌿
IP67 / IP69K	IP40	IP69K	IP65	IP69K
26 to 22 AWG	30 to 14 AWG	20 to 16 AWG	0.08 to 35 mm <sup>2</sup>	0.08mm to 240 mm <sup>2</sup>
3 to 12	2 to 36	18 to 60	1 to 175	1 to 150
Available	No	No	No	Available
Circular	Rectangular	Rectangular	Rectangular	Rectangular
30 VDC (6 to 12 pin), 50 VAC / 60 VDC (8 pin X-coded), 60 VDC (5 pin, 4 pin T-coded), 250 VDC (3 or 4 pin), 630 VDC (4 pin S-coded)	250 VDC	500 VDC	1,000 VDC	5,000 VDC
0.5 to 12	10	10	Up to 100	Up to 650
No	No	No	Available	Available
-40°F to 176°F -40°C To 80°C	-67°F to 221°F -55°C to 105°C	-40°F to 257°F -40°C to 125°C	-40°F to 257°F -40°C to 125°C	-40°F to 257°F -40°C to 125°C
No	No	Available	No	No
Available	No	No	Available	Available
Screw	Quick Disconnect	Center Jackscrew	Single and Double Lever	Single and Double Lever
-	500	-	500	10,000*
Brass or Zinc Alloy	Polyamide	Thermoplastic	Polyamide Fiber Glass Reinforced	Aluminum or Zinc Die-Cast
Nickel	None	None	None	Chromated, Epoxy Powder Paint, Powder Coated
Black, Silver	Black or White (Fire Resistant)	Black, Blue	RAL9005 (Black)	Black or Gray
No	Available	No	No	No
Available	No	No	Available	Available
No	Available	No	No	No
IEC 61076-2-101	UL E238675 or CSA LR44961-21	-	EN 45545-2	-
Gold	Gold, Silver, or Tin	Tin	Gold and Silver	Gold and Silver
Pin / Socket	Pin / Socket	Pin / Socket	Pin / Socket	Pin / Socket
Flying Leads, Molded Cable, PCB, Screw, or Solder	Crimp	Crimp	Cage-Clamp, Crimp, IDC, Quick-Lock, or Screw	Cage-Clamp, Crimp, IDC, Quick-Lock, or Screw
			■	■
			■	■
			■	■
CAT6A / CAT7 (8 pin X-coded)			100 Mbit to 10 Gbit	100 Mbit to 10 Gbit
			■	■







CONNECTOR  
SELECTOR



	Trident Neptune	Trident Ringlock	Trident TNM	UTG
				
	ITT CANNON	ITT CANNON	ITT CANNON	SOURIAU
Features and Benefits	Mixed signal and 30A power contact version  Sealing up to IP67  Uses Trident contact system	Rugged metal coupling nut with positive bayonet locking  Sealing up to IP67  Uses Trident contact system	Mixed signal and 30A power contact version  Sealing up to IP67  Uses Trident contact system	Fast and secure connection, 1/3-turn-bayonet coupling  Heavy duty connector, with excellent resistance to shock and vibration  Uses Trim-Trio contact system platform
Harsh Environment	■	■	■	■
RoHS Compliant	🌿	🌿	🌿	🌿
IP Rating	IP67	IP67	IP67	IP65
Wire Gauge Range	28 to 12 AWG	28 to 14 AWG	28 to 8 AWG	30 to 8 AWG
Number of Circuits	12 to 48	4 to 48	4 to 19	3 to 48
EMI/RFI-Shielding	No	No	Available	No
Style	Circular	Circular	Circular	Circular
Operating Voltage	250 VAC	250 VAC	250 VAC	660 VDC
Current Rating (Amps)	30	16	16 to 40	Up to 40
Power & Signal on Same Layout	Available	No	Available	Available
Operating Temperature	-67°F to 221°F -55°C to 105°C	-67°F to 221°F -55°C to 105°C	-67°F to 221°F -55°C to 105°C	-67°F to 257°F -55°C to 125°C
Individual Wire Sealing	Available	No	Available	No
Cable Jacket Sealing	Available	Available	Available	No
Type of Coupling	Bayonet	Bayonet	Bayonet	Bayonet
Life in Mating Cycles (min.)	500	500	500	500
Shell Material	UL94V0 Plastic Shell / Copper Alloy Coupling Ring	UL94V0 Plastic Shell / Copper Alloy Coupling Ring	Zinc Alloy	UL94V0 Plastic Shell / Copper-Zinc Alloy
Shell Plating	Nickel (Coupling Ring)	Nickel (Coupling Ring)	Nickel	Nickel (Coupling Ring)
Shell Color	Black	Black	Silver	Black / Silver
Positive Shell Polarization	Available	Available	Available	No
Insert Polarization Options	No	No	No	No
User Polarization	Available	Available	Available	No
Standards/Associated Specs.	UL	UL	UL	UL
Contact Plating	Gold or Tin	Gold or Tin	Gold or Tin	Gold, Silver, or Tin
Contact Styles	Pin / Socket	Pin / Socket	Pin / Socket	Pin / Socket
Termination Type	Crimp or Solder	Crimp or Solder	Crimp or Solder	Crimp
Co-ax	■	■		
Fiber Optic				
High Voltage	■			
Ethernet				
First-Mate Last-Break				■

SPEC Pak® SEALED	Powerpole® Pak	SBS® Multipole	RADLOK™	SurLOK Plus™
				
ANDERSON	ANDERSON	ANDERSON	AMPHENOL	AMPHENOL
Power, signal, and ground in a single interconnect  Sealing up to IP68  Keyed and color coded housings	Stackable modular housings  Self securing design  Keyed and color coded housings	Auxiliary or ground positions available  Hot plugging AC or DC  Keyed and color coded housings	Quick locking feature to replace cable lugs  Sealing up to IP40 in mated condition  R4 Radsok® Contact Technology	Quick lock and press-to-release design  Sealing up to IP67 in mated condition  R4 Radsok® Contact Technology
■				
🌿	🌿	🌿	🌿	🌿
IP68	-	IP64	-	IP67
24 to 3/0 AWG	20 to 10 AWG	1.3 to 152 mm²	6 to 4/0 AWG	8 to 2/0 AWG
3 to 24	2 to 8	2 to 3	1	1
No	No	No	No	No
Circular / Rectangular	Rectangular	Rectangular	Circular	Circular
600 VAC / VDC	600 VAC / VDC	600 VAC / VDC	1,000 VAC / VDC	1,000 VAC / VDC
15 to 310	55	Up to 500	70 to 400	70 to 300
Available	Available	No	No	No
-40°F to 221°F -40°C to 105°C	-4°F to 221°F -20°C to 105°C	-4°F to 221°F -20°C to 105°C	-40°F to 257°F -40°C to 125°C	-40°F to 257°F -40°C to 125°C
Available	No	No	No	No
Available	No	No	No	No
Latch	Quick Disconnect	Quick Disconnect	Press to Release	Press to Release
500 / 1,500	10,000	10,000	500	500
PC / PBT	PBT	Polycarbonate / PBT Blend	Composite	Composite
None	None	None	None	None
Black	Black	Black, Blue, Green, Orange, Red, or Yellow	Black, Orange, or Red	Black, Orange, or Red
Available	Available	No	Available	Available
Available	Available	No	Available	Available
Available	Available	No	No	No
UL, CSA, IEC	UL, CSA	UL1977, UL94	-	UL 1977
Gold, Silver, or Tin	Gold or Silver	Silver	Nickel, Silver, or Tin	Silver
Flat or Pin / Socket	Flat or Pin / Socket	Flat or Pin / Socket	Pin / Socket	Pin / Socket
Crimp or Solder	Crimp	Crimp	Crimp or IDC	Crimp or IDC
■			■	■







CONNECTOR  
SELECTOR






	PowerLok™	HVSL	UPC	ePower-Lite
				
	AMPHENOL	AMPHENOL	AMPHENOL	AMPHENOL
Features and Benefits	Low insert force and high cycle durability	High EMI / RFI 60DB shielding performance	High EMI / RFI 60DB shielding performance	Plastic shell, light weight, and small footprint
	Sealing up to IP67	Sealing up to IP67 - IP69K	Sealing up to IP67	Sealing up to IP67
	R4 Radsok® Contact Technology	R4 Radsok® Contact Technology	R4 Radsok® Contact Technology	R4 Radsok® Contact Technology
Harsh Environment	■	■	■	■
RoHS Compliant	🌿	🌿	🌿	🌿
IP Rating	IP67	IP67 / IP69K	IP67	IP67
Wire Gauge Range	2.5 to 150mm²	14 to 2/0 AWG	2 to 2/0 AWG	14 to 8 AWG
Number of Circuits	1 to 4	1 to 3	2 To 3	2 to 4
EMI/RFI-Shielding	Available	Available	Available	Available
Style	Circular	Circular	Rectangular	Rectangular
Operating Voltage	1,000 VDC	1,000 VDC	1,000 VDC	1,000 VDC
Current Rating (Amps)	Up to 500	250	400	70
Power & Signal on Same Layout	Available	Available	Available	Available
Operating Temperature	-40°F to 257°F -40°C to 125°C	-40°F to 257°F -40°C to 125°C	-40°F to 257°F -40°C to 125°C	-40°F to 257°F -40°C to 125°C
Individual Wire Sealing	Available	Available	Available	Available
Cable Jacket Sealing	Available	Available	Available	Available
Type of Coupling	Push-Pull With Secondary Lock	Push-Pull With Secondary Lock	Push-Pull With Secondary Lock	Push-Pull With Secondary Lock
Life in Mating Cycles (min.)	500	50	500	100
Shell Material	Zinc Alloy	Thermoplastic	Thermoplastic	Thermoplastic
Shell Plating	Zinc Alloy	None	None	None
Shell Color	Orange	Orange	Orange	Orange
Positive Shell Polarization	Available	Available	Available	Available
Insert Polarization Options	No	No	No	No
User Polarization	No	No	No	No
Standards/Associated Specs.	-	USCAR-2, USCAR-37	-	-
Contact Plating	Radsok - Grid: Silver, Sleeves: Tinned	Radsok - Grid: Silver, Sleeves: Tinned	Radsok - Grid: Silver, Sleeves: Tinned	Radsok - Grid: Silver, Sleeves: Tinned
Contact Styles	Radsok Pin / Socket	Radsok Pin / Socket	Radsok Pin / Socket	Radsok Pin / Socket
Termination Type	Busbar, Crimp, or Threaded	Busbar or Crimp	Busbar or Crimp	Crimp
Co-ax				
Fiber Optic				
High Voltage	■	■	■	■
Ethernet				
First-Mate Last-Break				

	MSD	HVCO COMBO	JBX	Push-Pull V4
				
	AMPHENOL	AMPHENOL	SOURIAU	HARTING
Features and Benefits	Extremely reliable manual safety disconnect to protect the battery from short circuit	Water drainage system	Audible and tactile confirmed mating	Easy to install
	Sealing up to IP67	Sealing up to IP55 in mated condition	Flammability rating of UL94 V-0	Sealing up to IP67 - IP68
	Durability over 50 mating cycles	Temperature sensor for over heat protection	360° EMI Shielding (55 DB up to 100MHz)	360° EMI Shielding
	■	■		■
	🌿	🌿	🌿	🌿
	IP67/ IP69K	IP44	IP67 / IP68	IP67 / IP68
	-	-	32 to 12 AWG	18 to 14 AWG
	-	9	2 to 30	2 to 20
	2	No	Available	Available
	Rectangular	Rectangular	Circular	Rectangular
	1,500 VDC	1,000 VDC	3,300 VAC	24 to 690 VDC
	300	125	30	16
	Available	Available	Available	Available
	-40°F to 158°F -40°C to 70°C	-22°F to 122°F -30°C to 50°C	-40°F to 257°F -40°C to 125°C	-40°F to 185°F -40°C to 85°C
	No	No	No	No
	No	No	No	Available
	Push-Pull With Secondary Lock	Push-Pull With Secondary Lock	Push-Pull	Push-Pull
	50	10,000	5,000	10,000
	Thermoplastic	Thermoplastic	Brass	Thermoplastic / Zinc Die-Cast
	None	None	Chrome or Black Chrome over Nickel	Nickel
	Orange	Black / White	Black or Silver	Black / Gray
	No	No	Available	No
	No	No	Available	No
	No	No	No	No
	USCAR-2, USCAR-37	IEC 62196-2, IEC 62196-3	UL 1977	-
	Radsok - Grid: Silver, Sleeves: Tinned	Radsok - Grid: Silver, Sleeves: Tinned	Gold	Nickel
	Radsok Pin / Socket	Radsok Pin / Socket	Pin / Socket	Pin / RJ45 / Socket / USB
	Busbar	Crimp	Crimp or Solder	Crimp
				■







CONNECTOR  
SELECTOR

	B Series	E Series	K Series	M Series
				
	LEMO	LEMO	LEMO	LEMO
Features and Benefits	Secure Push-Pull self-latching system  High-packing density for space savings on panel  Crimp, solder, PCB straight, or elbow contacts	Multi-pole with stepped inserts  Over 22 shell styles  UL-recognized	Crimp, print, or solder contacts  High-packing density for space savings on panel  360° EMI Shielding	Triple-start, fast-locking ratchet mechanism  Vibration secure and sealed  360° EMI Shielding
Harsh Environment		■	■	■
RoHS Compliant	🌿	🌿	🌿	🌿
IP Rating	IP68	IP68	IP68	IP68
Wire Gauge Range	32 to 6 AWG	32 to 0 AWG	32 to 6 AWG	32 to 16 AWG
Number of Circuits	2 to 64	1 to 106	2 to 64	2 to 114
EMI/RFI-Shielding	Available	Available	Available	Available
Style	Circular	Circular	Circular	Circular
Operating Voltage	3,000 VAC	3,000 VAC	3,000 VAC	1,000 VAC
Current Rating (Amps)	50	230	Up to 50	Up to 23
Power & Signal on Same Layout	Available	Available	Available	Available
Operating Temperature	-67°F to 482°F -55°C to 250°C	-67°F to 392°F -55°C to 200°C	-67°F to 392°F -55°C to 200°C	-67°F to 392°F -55°C to 200°C
Individual Wire Sealing	No	No	No	No
Cable Jacket Sealing	No	Available	Available	Available
Type of Coupling	Push-Pull	Push-Pull	Push-Pull	Ratcheted Twist
Life in Mating Cycles (min.)	5,000	5,000	5,000	3,000
Shell Material	Aluminum, Brass, or Stainless Steel	Brass or Stainless Steel	Aluminum, Brass, or Stainless Steel	Aluminum or Brass
Shell Plating	Anodize or Chrome	Anodize or Chrome	Anodize or Chrome	Anthracite Nickel or Chrome
Shell Color	Black or Silver	Black or Silver	Black or Silver	Dull Gray or Silver
Positive Shell Polarization	Available	Available	Available	Available
Insert Polarization Options	Available	Available	Available	Available
User Polarization	No	No	No	No
Standards/Associated Specs.	-	-	-	-
Contact Plating	Gold	Gold	Gold	Gold
Contact Styles	Pin / Socket	Pin / Socket	Pin / Socket	Pin / Socket
Termination Type	Crimp or Solder	Crimp or Solder	Crimp, IDC, or Solder	Solder
Co-ax	■	■		
Fiber Optic	■			
High Voltage	■	■	■	
Ethernet			■	
First-Mate Last-Break	■		■	

ecomate® rm	AIB/GT	Micro-B	CB/CA-B-Bayonet	CIR
				
AMPHENOL	AMPHENOL	AMPHENOL	ITT CANNON	VEAM (ITT CANNON)
Quick & easy to assemble	SAE-AS50151 (MIL-DTL-5015) specification	High strength, aluminum, cost effective high signal connector	Intermateable with all VG95234 connectors	Broad temperature range
Sealing up to IP67 in mated condition	Intermateable with all VG95234 connectors	500H salt spray, high shock and vibration resistance	Rugged shell	Rugged shell
Screwed cable gland with clamping ring	Wide range of current-carrying capability	Excellent shell-to-shell EMI shielding with bayonet coupling	Shock and vibration resistant	Wide range of current-carrying capability
	■	■	■	■
🌿	🌿	🌿	🌿	🌿
IP67	IP67	IP67	IP69K	IP67
30 to 3/0 AWG	24 to 4/0 AWG	22 to 16 AWG	26 to 0 AWG	26 to 4/0 AWG
1 to 48	1 to 85	7 to 23	1 to 65	1 to 159
Available	Available	Available	Available	Available
Circular	Circular	Circular	Circular	Circular
150 to 630 VAC	250 VDC / 200 VAC to 4,200 VDC / 3,000 VAC	250 VDC	250 VDC / 200 VAC to 2,450 VDC / 1,750 VAC	250 VDC / 200 VAC to 2,450 VDC / 1,750 VAC
5 to 300	13 to 225	Up to 3	13 to 150	7.5 to 225
Available	Available	No	Available	Available
-40°F to 221°F -40°C to 105°C	-67°F to 257°F -55°C to 125°C	-40°F to 257°F -40°C to 125°C	-67°F to 257°F -55°C to 125°C	-67°F to 257°F -55°C to 125°C
Available	Available	No	Available	Available
Available	Available	Available	Available	Available
Bayonet	Reverse Bayonet	Bayonet	Reverse Bayonet	Reverse Bayonet
500	500 / 2,000	500	500 / 2,000	2,000
Zinc Alloy Shell and Aluminum Alloy Coupling Ring	Aluminum Alloy	Aluminum	Aluminum Alloy	Aluminum Alloy
Nickel	Black Anodized, Cadmium or Gray Zinc Nickel, Electroless Nickel, Green or Black Zinc Cobalt	Electroless Nickel or Gray Zinc Nickel	Cadmium, Electroless Nickel, or Black, Blue, or Green Nickel Zinc Cobalt	Black Anodized, Electroless Nickel, or Black, Cadmium, or Green Zinc Cobalt
Silver	Black, Gray, Green, Olive Drab, or Silver	Gray	Black, Green, Olive Drab, or Silver	Black, Green, Olive Drab, or Silver
No	Available	Available	Available	Available
No	Available	No	Available	Available
No	No	No	No	No
UL 1977 #E339831	UL #E115497, VG95234	EIA-364-28D and EIA-364-32D	VG95234	VG95234
Gold, Silver, or Tin	Gold or Silver	Gold	Gold or Silver	Gold or Silver
Pin / Socket	Pin / Socket	Pin / Socket	Pin / Socket	Pin / Socket
Crimp	Crimp or Solder	Crimp, Machined, PC Tail, or Stamped and Formed	Crimp or Solder	Crimp or Solder
	■	■		
			■	■
	■		■	

CONNECTOR  
SELECTOR

	AIT / MS	CT/MS E/F/R	KPSE	KPT
				
	AMPHENOL	ITT CANNON	ITT CANNON	ITT CANNON
Features and Benefits	SAE-AS50151 (MIL-DTL-5015) specification	MIL-DTL-5015 specification	MIL-DTL-26482 VG95328 specification	MIL-DTL-26482 VG95328 specification
	Broad temperature range	Rugged shell	Resistant to harsh environments	Resistant to harsh environments
	Wide range of current-carrying capability	Resilient insulator and grommet	Wide range of current-carrying capability	Wide range of current-carrying capability
Harsh Environment	■	■	■	■
RoHS Compliant	🌿	🌿	🌿	🌿
IP Rating	IP67	IP67	IP68	IP68
Wire Gauge Range	24 to 2/0 AWG	26 to 0 AWG	24 to 16 AWG	24 to 16 AWG
Number of Circuits	1 to 85	1 to 65	3 to 61	2 to 61
EMI/RFI-Shielding	Available	Available	Available	Available
Style	Circular	Circular	Circular	Circular
Operating Voltage	250 VDC / 200 VAC to 4,200 VDC / 3,000 VAC	250 VDC / 200 VAC to 2,450 VDC / 1,750 VAC	850 VDC / 600 VAC or 1,275 VDC / 1,000 VAC	850 VDC / 600 VAC or 1,275 VDC / 1,000 VAC
Current Rating (Amps)	13 to 225	13 to 150	7.5 to 13	7.5 to 13
Power & Signal on Same Layout	Available	Available	Available	Available
Operating Temperature	-67°F to 257°F -55°C to 125°C	-67°F to 257°F -55°C to 125°C	-67°F to 257°F -55°C to 125°C	-67°F to 257°F -55°C to 125°C
Individual Wire Sealing	Available	Available	Available	Available
Cable Jacket Sealing	Available	Available	Available	Available
Type of Coupling	Threaded	Threaded	Bayonet	Bayonet
Life in Mating Cycles (min.)	100	100	500	500
Shell Material	Aluminum Alloy	Aluminum Alloy	Aluminum Alloy	Aluminum Alloy
Shell Plating	Black Anodized, Black or Green Zinc Cobalt, Cadmium or Gray Zinc Nickel, or Electroless Nickel	Black or Green Zinc Cobalt, Cadmium, or Electroless Nickel	Black Zinc Cobalt, Cadmium, or, Electroless Nickel	Black Zinc Cobalt, Cadmium, or, Electroless Nickel
Shell Color	Black, Gray, Green, Olive Drab, or Silver	Black, Green, Olive Drab, or Silver	Black, Olive Drab, or Silver	Black, Olive Drab, or Silver
Positive Shell Polarization	Available	Available	Available	Available
Insert Polarization Options	Available	Available	Available	Available
User Polarization	No	No	No	No
Standards/Associated Specs.	SAE-AS50151	MIL-DTL-5015	MIL-DTL-26482 Series I, VG 95328	MIL-DTL-26482 Series I
Contact Plating	Gold or Silver	Gold or Silver	Gold	Gold
Contact Styles	Pin / Socket	Pin / Socket	Pin / Socket	Pin / Socket
Termination Type	Crimp or Solder	Crimp or Solder	Crimp	Solder
Co-ax	■			
Fiber Optic				
High Voltage		■		
Ethernet				
First-Mate Last-Break		■		

	PTSE	PT	851	UTO
				
	AMPHENOL	AMPHENOL	SOURIAU	SOURIAU
VG95328	VG95328	VG95328	VG95328	VG95328
Rugged shell	Rugged shell	Rugged shell	Rugged shell	Rugged shell
Solder or crimp gold-plated contacts	Solder or crimp gold-plated contacts	Solder or crimp gold-plated contacts	Solder or crimp gold-plated contacts	Solder or crimp gold-plated contacts
■	■	■	■	■
🌿	🌿	🌿	🌿	🌿
IP67	IP67	IP67	IP68	IP67 / IP69K
24 to 12 AWG	24 to 12 AWG	24 to 12 AWG	24 to 16 AWG	30 to 8 AWG
3 to 61	1 to 61	1 to 61	2 to 61	3 to 61
Available	Available	Available	Available	Available
Circular	Circular	Circular	Circular	Circular
850 VDC / 600 VAC or 1,275 VDC / 1,000 VAC	850 VDC / 600 VAC or 1,275 VDC / 1,000 VAC	850 VDC / 600 VAC or 1,275 VDC / 1,000 VAC	850 VDC / 600 VAC or 1,275 VDC / 1,000 VAC	600 VAC
7.5 to 23	7.5 to 23	7.5 to 23	7.5 to 13	44
Available	Available	Available	Available	Available
-67°F to 257°F -55°C to 125°C	-67°F to 257°F -55°C to 125°C	-67°F to 257°F -55°C to 125°C	-67°F to 257°F -55°C to 125°C	-40°F to 221°F -40°C to 105°C
Available	Available	Available	Available	No
Available	Available	Available	Available	Available
Bayonet	Bayonet	Bayonet	Bayonet	Bayonet
500	500	500	500	500
Aluminum Alloy	Aluminum Alloy	Aluminum Alloy	Aluminum Alloy	Aluminum Alloy or Zinc Alloy
Black Anodize, Black Zinc Cobalt, Cadmium, Electroless Nickel, or Gray Zinc Nickel	Black Anodize, Black Zinc Cobalt, Cadmium, Electroless Nickel, or Gray Zinc Nickel	Black Anodize, Black Zinc Cobalt, Cadmium, Electroless Nickel, or Gray Zinc Nickel	Black Anodize, Black Zinc Nickel, Cadmium, or Electroless Nickel	Nickel
Black, Gray, Olive Drab, or Silver	Black, Gray, Olive Drab, or Silver	Black, Gray, Olive Drab, or Silver	Black, Olive Drab, or Silver	Silver
Available	Available	Available	Available	Available
Available	Available	Available	Available	No
No	No	No	No	No
MIL-DTL-26482 Series I, VG 95328	MIL-DTL-26482 Series I	MIL-DTL-26482 Series I	MIL-DTL-26482 Series I	UL, CSA, IEC
Gold	Gold	Gold	Gold or Gold / Tin	Gold, Silver, or Tin
Pin / Socket	Pin / Socket	Pin / Socket	Pin / Socket	Pin / Socket
Crimp	Solder	Solder	Crimp or Solder	Crimp
■	■	■		■
■				■





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# PEI-Genesis Customer Process



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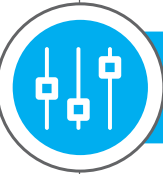
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