

SOLARIS SERIES

Amphenol Pcd



Amphenol Pcd is one of the world's leading suppliers of interconnect products for Military, Commercial Aerospace and Industrial applications. Located north of Boston in Beverly, Massachusetts, the company designs and manufactures a wide range of products; System Attachments, Junction Modules, Relay Sockets, Terminal Blocks, Rectangular & Circular Connectors, Cable Assemblies and Adapters. Each product is made and engineered with the highest quality standards in the industry. With facilities in North America and Asia, Amphenol Pcd products are chosen by thousands of OEMs around the world, reliant on Amphenol's technical excellence, global network of distributors, and cost-effective solutions for custom systems.

Amphenol Pcd

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SOLARIS Series

SOLARIS is a small, plastic, easy-to-use rectangular connector designed specifically for low and medium power applications.

Solaris' spring-loaded slide lock mechanism is a snap to use - simply push to lock, and slide to unlock. The slide lock provides convenient single handed & tool-less mating, eliminating the Foreign Object Debris (FOD), found in typical screw mount D-Subs. Each housing has raised finger ridges for a sure grip, and built-in cable tie access hole provides a "zero footprint" method to secure the connector to a bulkhead or cable bundle.

High grade polyetherimide plastic makes SOLARIS suitable for man/machine interfaces with high mating cycles, and provides a wide operating temperature range. Ultrasonically welded components means void free joints, sealing out humidity for long lasting, crack free operation over the life of the installation. Interfacial seal and wire seal grommets provide IP67 sealing, meaning your application is free from dust, moisture and corrosion when exposed to the real world.

So when you need a small, rugged, lightweight, easy to use rectangular connector - think SOLARIS!

Features & Benefits

Low profile rectangular form factor

Less than 0.5" tall. Fits into seat arms, backs, tray tables and compartments, as well as lower profile ceiling and side panels.

Slide Latch

Easy to use, FOD free, tool-less mating

Integrated Tie Wrap hole

Zero footprint tie down to pipes, bundles and bulkheads

Interfacial & Wire sealing

IP67 performance for use in human interface, wet and damp applications

Polyetherimide Housings

High temperature resistance, chemical resistance, long working life & high mating cycles

Integral boot ridge

Integrated feature for tying off protective sheathing and braids w/o adding backshells or saddle clamps

Snap-on strain relief

Tool-less, FOD free accessory that helps prevent wear and tear at cable / connector ingress

Reverse gender capability

Plugs & Receptacles may be configured with pins or sockets, allowing live power connector to be either plug or receptacle, depending on application requirements

Key Connector Specifications

(Preliminary)

Shock	100G sawtooth, 6msec
Vibration	15G peak sinusoidal, 16G peak random
Flammability & Toxicity	Meets FAR Par 25 Appendix F, Part 1
Sealing	IP67 when mated
Fluid Resistance	Skydrol, Ethylene Glycol, Jet A, more
DWV	1500Vac @ sea level, 300Vac @ 70k ft
IR	500Vdc
Salt Spray	5% solution @ 70K ft
Temperature	-65C to +150C
Mating Cycles	500 minimum
Contacts	M39029/58 & /57 size 16, 20, & 22D
Keying	4 hard coded keys, color matched to housing

Size	Pin	Socket	Power	Sealing Plug
22	m39029/58360	m39029/57-354	5a	MS27488-22-1
20	m39029/58-363	m39029/57-357	7.5a	MS27488-20-1
16	m39029/58-364	m39029/57-358	13.5a	MS27488-16-1

Standard Configurations

(Gender Reversible)

Key & Type	Part Number	Type	Size	# of Contacts	Contact Size																		
A, Socket	SQR320150	Plug	1	3	20																		
A, Pin	SQR320200	Receptacle	1	3	20																		
A, Pin	SQR320500	Flange Receptacle	1	3	20																		
A, Socket	SQR216150	Plug	2	2	16																		
A, Pin	SQR216200	Receptacle	2	2	16																		
A, Pin	SQR216500	Flange Receptacle	2	2	16																		
A, Socket	SQR422150	Plug	1	4	22																		
A, Pin	SQR422200	Receptacle	1	4	22																		
A, Pin	SQR422500	Flange Receptacle	1	4	22																		
A, Socket	SQR620150	Plug	2	6	20																		
A, Pin	SQR620200	Receptacle	2	6	20																		
A, Pin	SQR620500	Flange Receptacle	2	6	20 </tr <tr> <td>A, Socket</td> <td>SQR822150</td> <td>Receptacle</td> <td>2</td> <td>8</td> <td>22</td> </tr> <tr> <td>A, Pin</td> <td>SQR822200</td> <td>Plug</td> <td>2</td> <td>8</td> <td>22</td> </tr> <tr> <td>A, Pin</td> <td>SQR822500</td> <td>Flange Receptacle</td> <td>2</td> <td>8</td> <td>22</td> </tr>	A, Socket	SQR822150	Receptacle	2	8	22	A, Pin	SQR822200	Plug	2	8	22	A, Pin	SQR822500	Flange Receptacle	2	8	22
A, Socket	SQR822150	Receptacle	2	8	22																		
A, Pin	SQR822200	Plug	2	8	22																		
A, Pin	SQR822500	Flange Receptacle	2	8	22																		

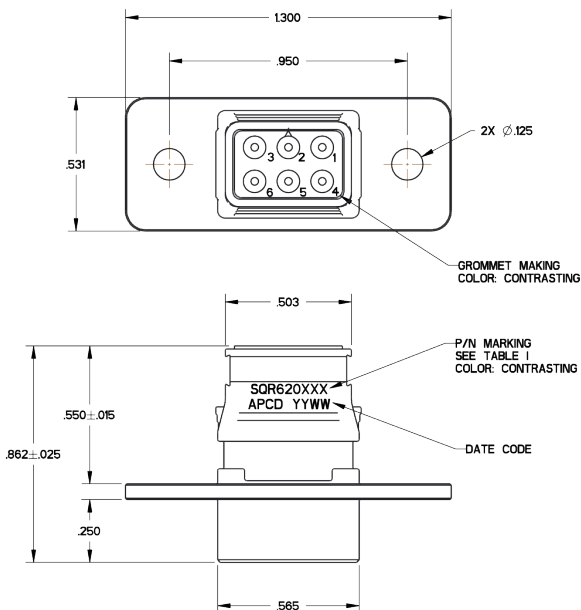
REV A Configurations

(Not Gender Reversible)

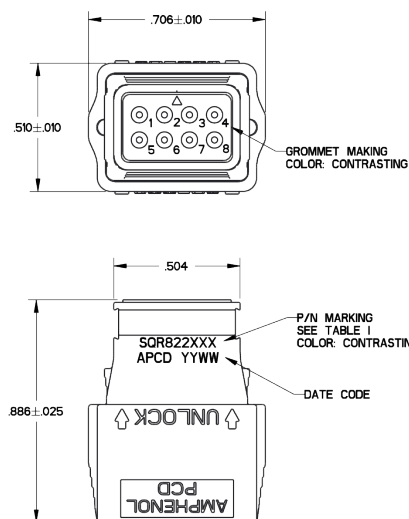
Part Number	Type	Size	# of Positions	AWG
SQR320110-3	Plug	1	3	20
SQR320120-3	Receptacle	1	3	20
SQR322110-4	Plug	1	4	22
SQR322120-4	Receptacle	1	4	22



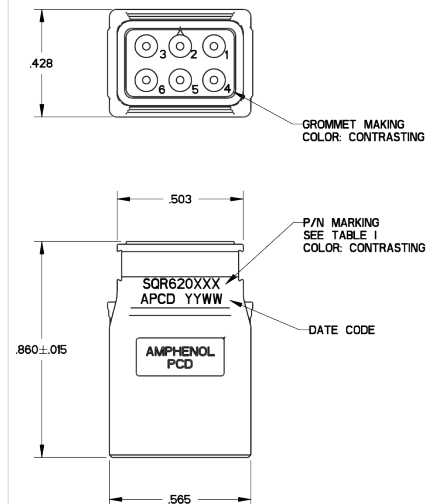
FrontFlange Mount Shell size 2



Receptacle Shell size 2



Plug Shell size 2



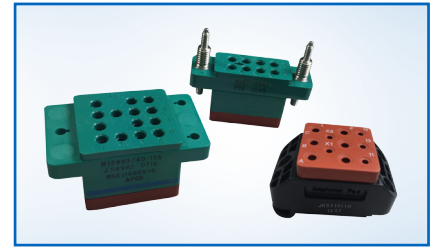
Amphenol Pcd Products



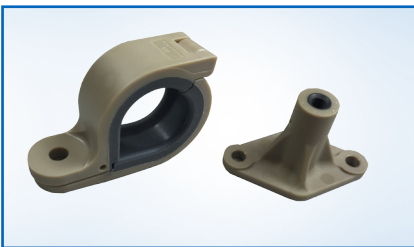
Backshells



Cable Solutions &
Cable Adapters
NEW



Relay Sockets



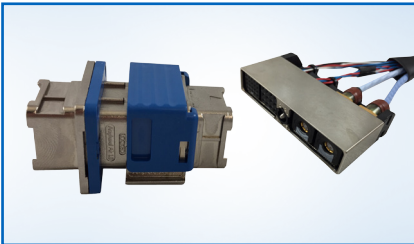
System
Attachments



Luminus Series



Junction Modules



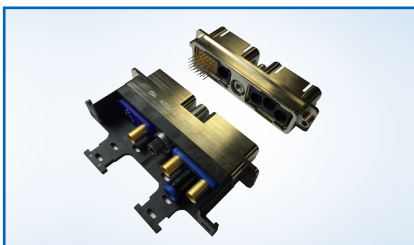
SIM



Pegasus Series
NEW



Circular



EN4644



Rugged Solutions



Military Audio
/Power