

Amphenol®



UPC Connectors for HEV

UPC (Universal Power Connector) is a plastic power connector series especially designed to be used in the hybrid electric vehicle market. The 2-pole and 3-pole connectors incorporate the patented RADSOK® technology for higher amperage, lower T-rise and voltage drop, and less resistance. RADSOK's twisted grid configuration allows for up to 50% more current to pass through the same size pin, while providing increased reliability and cycle durability, as well as lower mating forces.

The compact, plastic shell structure is light weight with a small footprint, has continuous power of up to 400A, and is field installable and repairable. These attributes make UPC robust and the interconnect of choice for the EV and Hybrid markets.

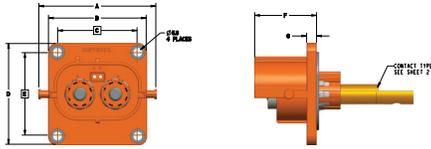
Features and Benefits:

- Plastic shell, light weight
- Compact design for space considerations with EVs
- Wide amperage range (200-400A)
- Low mating/un-mating force
- Durability: 500 mating cycles minimum
- Touch-Proof (UL 2251)
- UL 94V-0
- HVIL
- EMI (60db/100M)



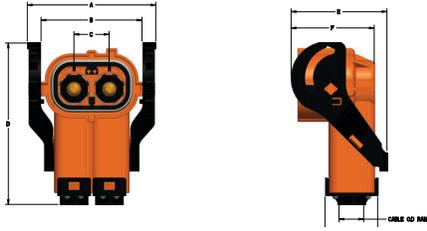
Technical Data							
Current Rating	Up to 400A	Test Voltage (sea level)	3000 VAC RMS	Waterproof	IP67 (Mated)	Touch-Proof	UL 2251
Contact Size	9.1mm / 12mm RADSOK®	Operating Temperature	-40 °C to 125°C	EMI	360°	HVIL	Integrated
Operating Voltage	1000V	Durability	500 (Min) Mating Cycles	Flammability	UL 94V-0	Recommended Torque	M5: 6 ~ 8N.M

2-Pole Receptacle



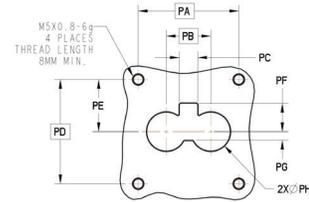
Size	Receptacle Dimensions						
	A	B	C	D	E	F	G
9.1mm	76.6	64	52	66	54	40.5	6.5

2-Pole Plug



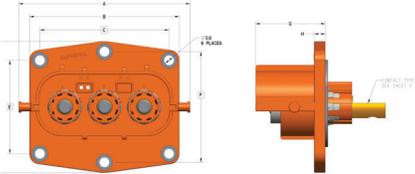
Size	Plug Dimensions							Cable O.D. Range
	A	B	C	D	E	F	G	
9.1mm	76.6	64	52	66	54	40.5	6.5	Ø15~16

Cut-Out Panel Layout of 2-Pole



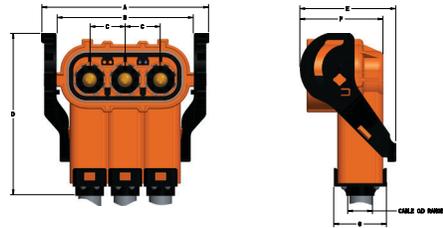
Size	Cut-Out Panel Dimensions							
	PA	PB	PC	PD	PE	PF	PG	PH
9.1mm	52	23	9.5	54	27	14.7	4.5	22.5

3-Pole Receptacle



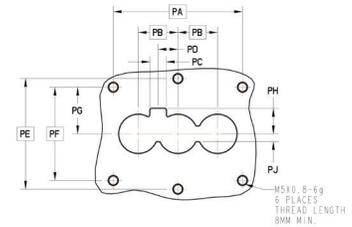
Size	Receptacle Dimensions							
	A	B	C	D	E	F	G	H
9.1mm	100	87	75	76	54	64	40.5	6.5

3-Pole Plug



Size	Plug Dimensions							Cable O.D. Range
	A	B	C	D	E	F	G	
9.1mm	109	89	23	106	63	54	34.5	Ø15~16

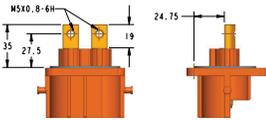
Cut-Out Panel Layout of 3-Pole



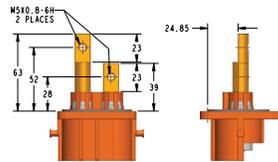
Size	Cut-Out Panel Dimensions								
	PA	PB	PC	PD	PE	PF	PG	PJ	
9.1mm	75	23	9.5	11.5	64	54	27	14.7	4.5

2-Pole Receptacle Termination

Busbar Type 1

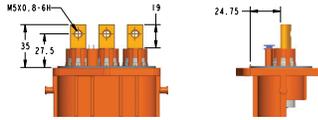


Busbar Type 2



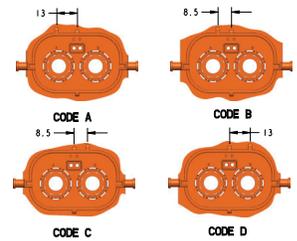
3-Pole Receptacle Termination

Busbar Type 1

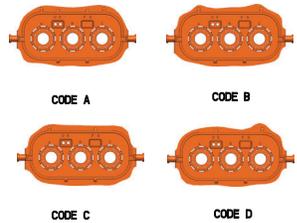


Codings

2-Pole Receptacle



3-Pole Receptacle



How To Order

Product Series: UPC	Connector Type	RADSOK® Contact Size	Pole Number	Coding Selection	HVIL Selection	EMI Selection	Crimp Wire Size														
								Product Series: UPC	Connector Type	RADSOK® Contact Size	Pole Number	Coding Selection	HVIL Selection	EMI Selection	Contact Type						
PLUG	P	90° Angular Plug	01	9.1mm 250A	2	2-Pole	A	Code A	L	HVIL	S	W/ Shielding Shell	1	35mm² (9.1mm Only)							
	UPC	IP	Straight Plug	02	12.0mm 400A	3	3-Pole	B	Code B	N	No HVIL	N	W/O Shielding Shell	2	50mm² (9.1mm Only)						
								C	Code C					3	70mm² (9.1mm and 12.0mm)						
								D	Code D					4	95mm² (12.0mm Only)						
RECEPTACLE	R	Box Mount Receptacle	01	9.1mm 250A	2	2-Pole	A	Code A	L	HVIL	S	W/ Shielding Shell	1	Busbar type 1							
							UPC	R	Box Mount Receptacle	02	12.0mm 400A	3	3-Pole	B	Code B	N	No HVIL	N	W/O Shielding Shell	2	Busbar type 2
														C	Code C						
														D	Code D						

Notice: Specifications are subject to change without notice. Contact your nearest Amphenol Corporation Sales Office for the latest specifications. All statements, information and data given herein are believed to be accurate and reliable but are presented without guarantee, warranty, or responsibility of any kind, expressed or implied. Statements of suggestions concerning possible use of our products are made without representation or warranty that any such use is free of patent infringement and are not recommendations to infringe any patent. The user should assume that all safety measures are indicated or that other measures may not be required. Specifications are typical and may not apply to all connectors.

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