

Amphenol®



UPC Connectors for HEV

UPC (Ultimate 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 at 200 A or 400 A, 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:

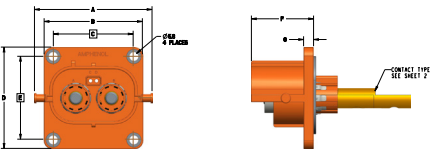
- Plastic shell, light weight
- Compact design for space considerations with EVs
- Wide amperage range (200-400A)
- Low mating/un-mating force
- Durability: 500 cycles
- Touch-Proof: UL 2251
- Flammability: UL 94V-0
- HVIL
- EMI Shielding (60db/100M)
- IP67 & IP69k when mated
- RoHS Compliant

www.amphenol-industrial.com



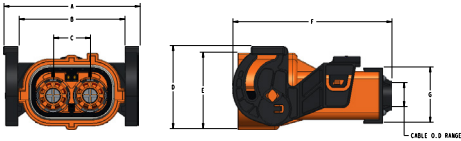
Technical Data							
Current Rating	Up to 400A (200A max 9.1mm w/50mm ² cable)	Test Voltage (sea level)	3000 VAC RMS	Waterproof	IP67 & IP69k (Mated)	Finger Proof	YES
Contact Size	9.1mm / 12mm RADSOK®	Operating Temperature	-40 °C to 125°C	EMI	360° (60db/100M)	HVIL	Integrated
Operating Voltage	1000V	Durability	500 (Min) Mating Cycles	Flammability	UL 94 V-0	Recommended Torque	M5.6~8N.M

2-Pole Receptacle



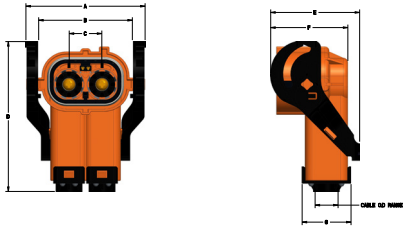
Size	2-Pole Receptacle Dimensions						
	A	B	C	D	E	F	G
9.1mm	76.6	64	52	66	54	40.5	6.5

2-Pole Plug



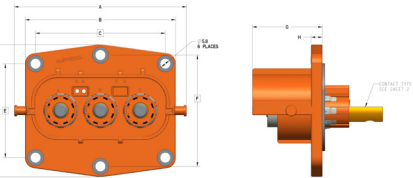
Size	2-Pole Plug Dimensions							
	A	B	C	D	E	F	G	Cable O.D Range
9.1mm	85	66	23	51.9	47.8	99.4	34.5	Ø15~17

90° Angular 2-Pole Plug



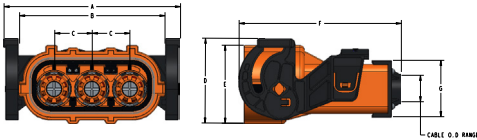
Size	90° Angular 2-Pole Plug Dimensions								
	A	B	C	D	E	F	G	H	Cable O.D Range
9.1mm	64	66	23	106	63	54	34.5	106	Ø15~16

3-Pole Receptacle



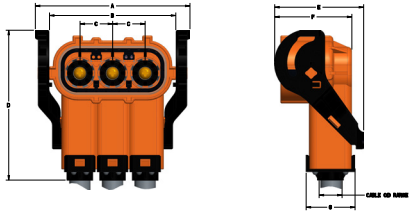
Size	3-Pole Receptacle Dimensions							
	A	B	C	D	E	F	G	H
9.1mm	100	87	75	76	54	64	40.5	6.5

3-Pole Plug



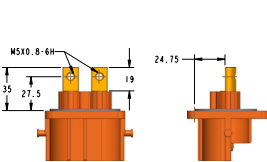
Size	3-Pole Plug Dimensions							
	A	B	C	D	E	F	G	Cable O.D Range
9.1mm	108	89	23	51.9	47.8	99.4	34.5	Ø15~17

90° Angular 3-Pole Plug

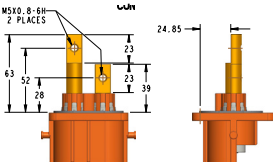


Size	90° Angular 3-Pole Plug Dimensions							
	A	B	C	D	E	F	G	Cable O.D Range
9.1mm	109	89	23	106	63	54	34.5	Ø15~16

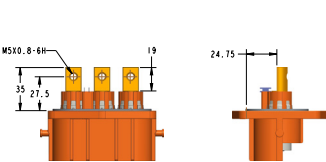
2-Pole Receptacle Termination Busbar Type 1



Busbar Type 2

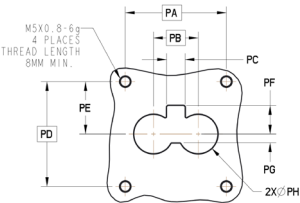


3-Pole Receptacle Termination Busbar Type 1



Cut-Out Panel Layout of 2-Pole

Size	9.1mm
PA	52
PB	23
PC	9.5
PD	54
PE	27
PF	14.7
PG	4.5
PH	22.5



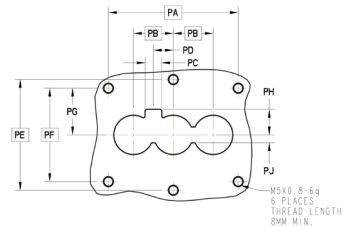
How To Order

RECEPTACLE	Product Series: UPC	Connector Type	RADSOK® Contact Size	Pole Number	Coding Selection	HVIL Selection	EMI Selection	Contact Type
	UPC	R Box Mount Receptacle	01 9.1mm	2 2-Pole	A Code A	L HVIL	S W/ Shielding Shell	1 Busbar type 1
			02 12.0mm	3 3-Pole	B Code B	N No HVIL	N W/O Shielding Shell	2 Busbar type 2
					C Code C			
					D Code D			

PLUG	Product Series: UPC	Connector Type	RADSOK® Contact Size	Pole Number	Coding Selection	HVIL Selection	EMI Selection	Crimp Wire Size
	UPC	P 90° Angular Plug	01 9.1mm	2 2-Pole	A Code A	L HVIL	S W/ Shielding Shell	1 35mm ² (9.1mm Only)
		IP Straight Plug	02 12.0mm	3 3-Pole	B Code B	N No HVIL	N W/O Shielding Shell	2 50mm ² (9.1mm Only)
					C Code C			3 70mm ² (12.0mm Only)
					D Code D			4 95mm ² (12.0mm Only)
								5 25mm ² (9.1mm Only)

Cut-Out Panel Layout of 3-Pole

Size	9.1mm
PA	75
PB	23
PC	9.5
PD	11.5
PE	54
PF	64
PG	27
PH	14.7
PJ	4.5



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