

# Amphenol

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Amphenol  
**GEC | TPI**  
**POWERLOK**



# PowerLok™ G2 Series Connector



AMPHENOL

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## ABOUT US

Amphenol is a technology leader in the design, manufacture and supply of high-performance interconnect systems, sensors and antennas for a broad range of industrial applications.

Amphenol's core competencies include application-specific industrial interconnect solutions utilizing integrated assemblies with both cable and flexible printed circuits, high-power interconnects requiring advance engineering and system integration. Our innovative solutions facilitate the increasing demands of embedded computing and power distribution. Applying years of experience, we offer specialist engineering services to help customer fulfill any requirement or specification. We anticipate our customers' needs and exceed their expectations.

### ■ Application

**POWERLOK G2 series is** a high performance, compact, aluminum alloy interconnect solution utilizing RADSOK contact technology for EV and Hybrid transportation applications. G2 provides electrical ratings up to 1000VDC and 450A (@ 50° C Ambient) with IP67/9K sealing, 360° shielding, multiple keying options, straight and right angle configurations, and up to 3 positions. G2 is available as field assembled connectors which accommodate shielding cable sizes from 50mm<sup>2</sup> to 120mm<sup>2</sup>. POWERLOK G2 series connectors are engineered for a diverse set of applications including electric power distribution for automotive, truck, bus, agricultural, construction, and off-road vehicles.

### ■ Key Features

- Voltage Rating: 1000VDC
- DC Current Rating: up to 450A at 50° C Ambient
- Insulation Resistance: 500MΩ
- IP rating: IP67&IP6K9K(mated), IP2X(unmated)
- Salt Spray: 480H (ISO 9227)
- Mating Cycle: 100Min
- Temperature range: -40 / +125 ° C
- UL 94 V-0 compliance (plastic components)
- Lever lock with CPA
- Modular design, Common Internal Components
- Vibration class : LV214 Level 2
- 1POS, 2POS, 3POS Positions Available
- 90D(Right angle) and 180D(Straight) Plug Orientations
- Multiple Keys Available:
  - 1POS (X,Y,U,V,W,T keys)
  - 2POS (X,Y,U,V keys)
  - 3POS (X,Y keys)
- RADSOK Contact Technology
- High Voltage Interlock
- 360° Shielding, Low Shielding Resistance
- RoHS/REACH Compliant

### ■ PowerLok™ G2 Recommended Cable Size & Current Rating

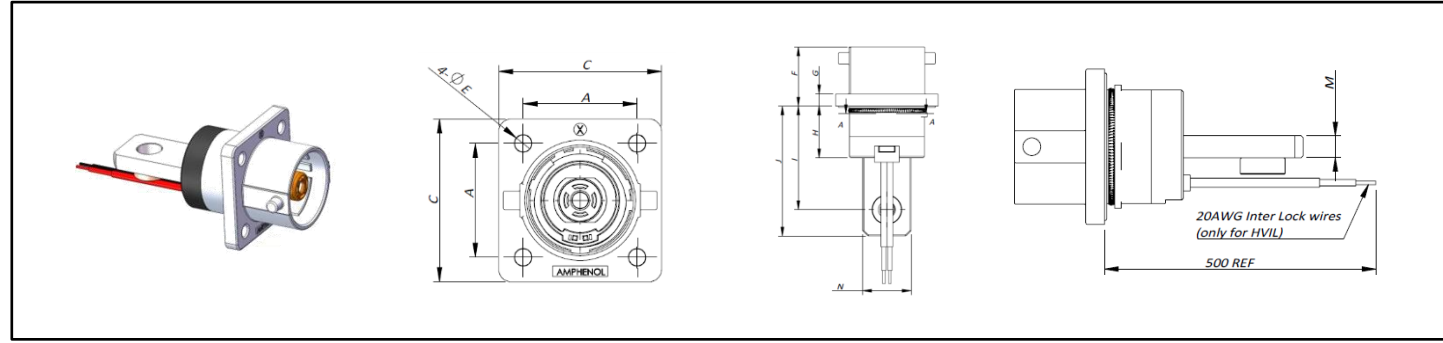
Series	Accepted Cable Size	Current Rating
300 Series	50mm <sup>2</sup>	200A
	70mm <sup>2</sup>	250A
500 Series	70mm <sup>2</sup>	250A
	95mm <sup>2</sup>	300A
	120mm <sup>2</sup>	400A

\*Contact us for customization options.

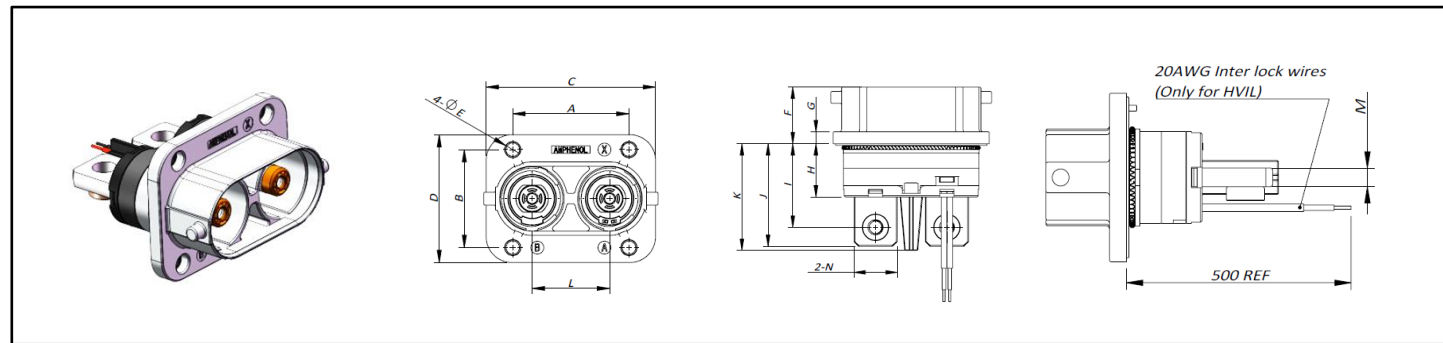
# PowerLok™ G2 Receptacle

Series	180 Degree Busbar Lug						90 Degree Busbar Lug		Thread Pin	
	1 POS		2 POS		3 POS		1 POS		2 POS	
	With HVIL	W/O HVIL	With HVIL	W/O HVIL	With HVIL	W/O HVIL	With HVIL	W/O HVIL	With HVIL	W/O HVIL
300A	*	*	*	*	*	*	*	*	*	*
500A	*	*					*	*		

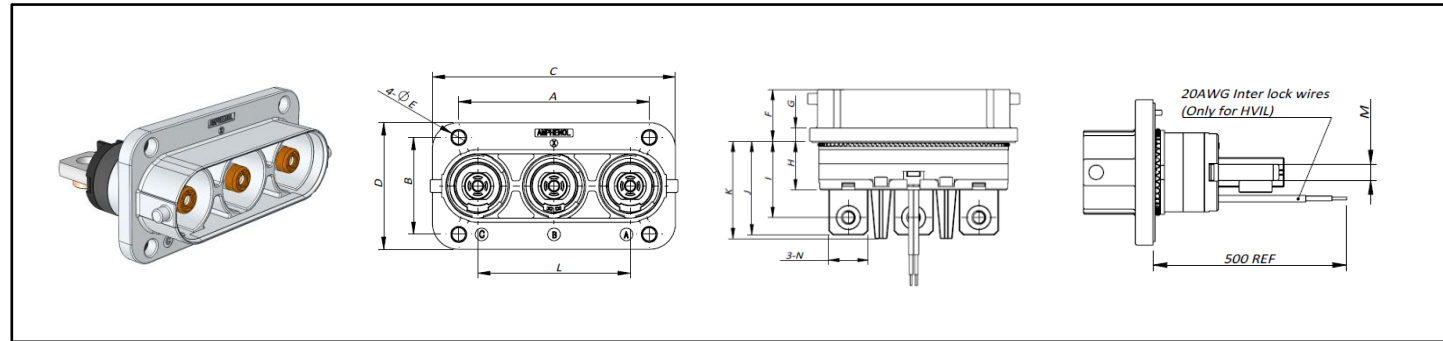
## 180 Degree Busbar Lug Receptacle



Product	180 Degree Busbar Lug 1POS Dimensions (mm)										
	Series	A	C	E	F	G	H	I	J	M	N
PowerLok™ 1POS 180 Degree Busbar Lug Receptacle	300A	27.00	38.60	φ4.20	22.40	4.70	19.60	39.30	49.30	5.50	18.20
	500A	33.50	45.00	φ4.30	28.90	5.70	23.80	46.00	56.00	7.00	21.00

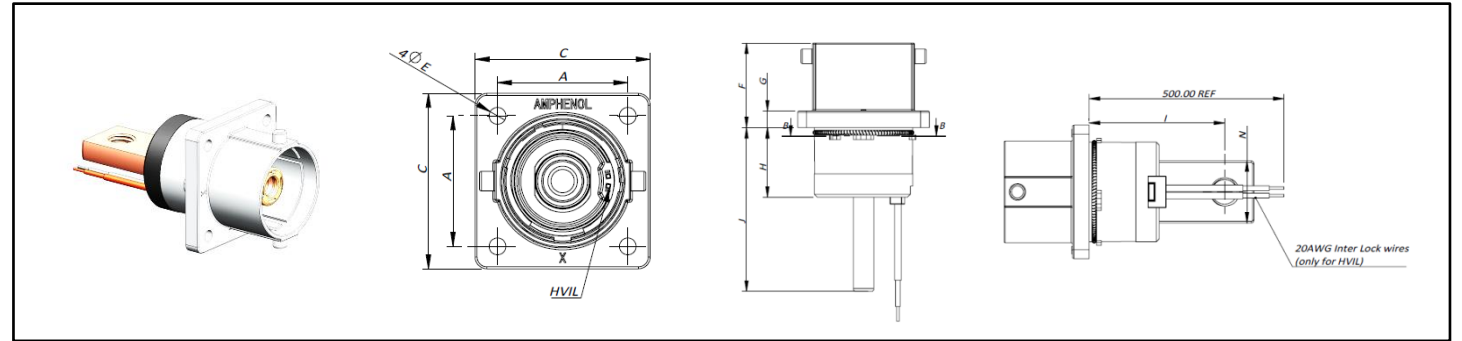


Product	180 Degree Busbar Lug 2POS Dimensions (mm)														
	Series	A	B	C	D	E	F	G	H	I	J	K	L	M	N
PowerLok™ 2POS 180 Degree Busbar Lug Receptacle	300A	45.00	38.00	65.60	49.60	φ6.30	23.70	5.00	22.30	35.00	43.00	44.70	30.00	5.50	18.20



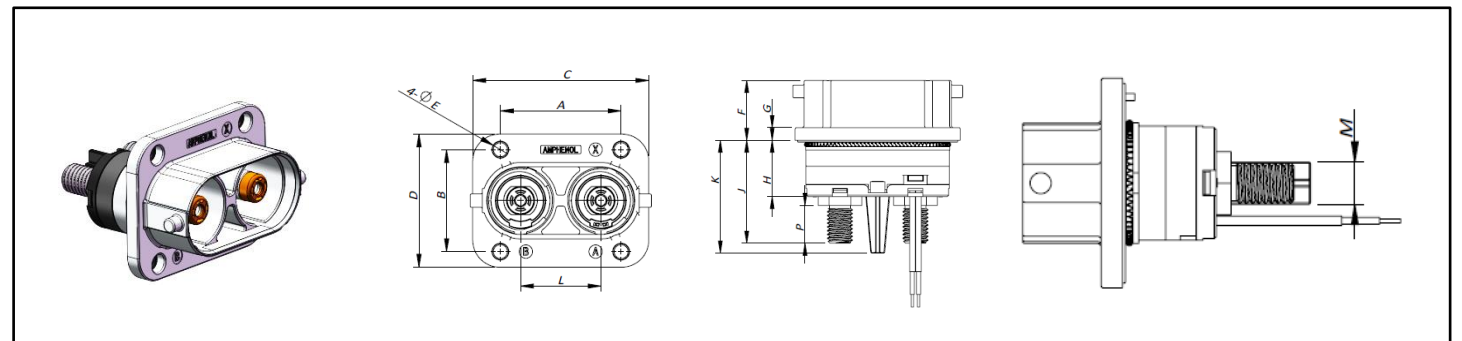
Product	180 Degree Busbar Lug 3POS Dimensions (mm)														
	Series	A	B	C	D	E	F	G	H	I	J	K	L	M	N
PowerLok™ 3POS 180 Degree Busbar Lug Receptacle	300A	75.00	38.00	95.60	49.60	φ6.30	23.70	6.00	22.30	35.00	43.00	44.70	60.00	5.50	18.20

## 90 Degree Busbar Lug Receptacle



Product	90 Degree Busbar Lug 1POS Dimensions (mm)										
	Series	A	C	E	F	G	H	I	J	M	N
PowerLok™ 1POS 90 Degree Busbar Lug Receptacle	500A	33.50	45.00	φ4.30	28.90	5.70	23.80	46.00	56.00	7.00	21.00

## Thread Pin Receptacle

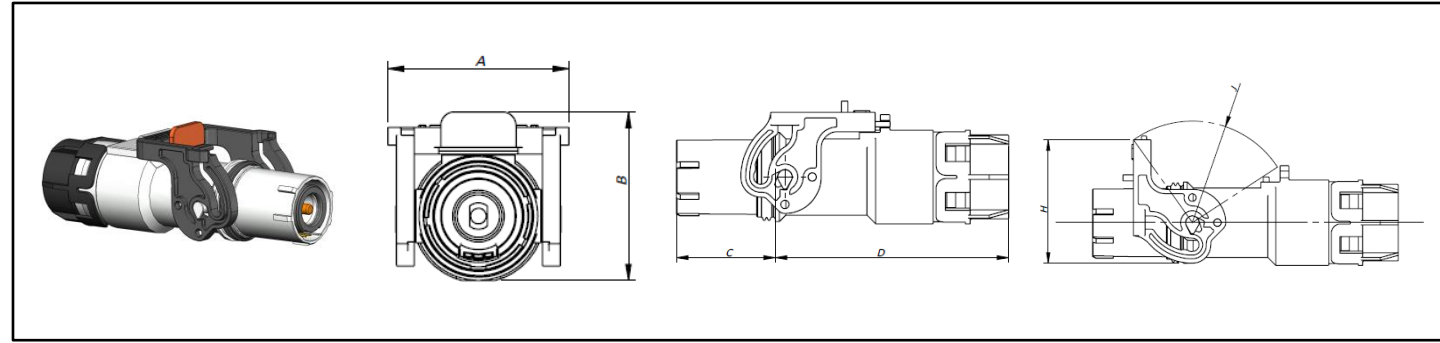


Product	Thread Pin 2POS Dimensions (mm)													
	Series	A	B	C	D	E	F	G	H	J	K	L	M	P
PowerLok™ 2POS Thread Pin Receptacle	300A	45.00	38.00	65.60	49.60	φ10.00	23.70	5.00	22.30	37.80			M6	12.00
										40.80	44.70	30.00	M8	15.00
										40.80			M10	15.00

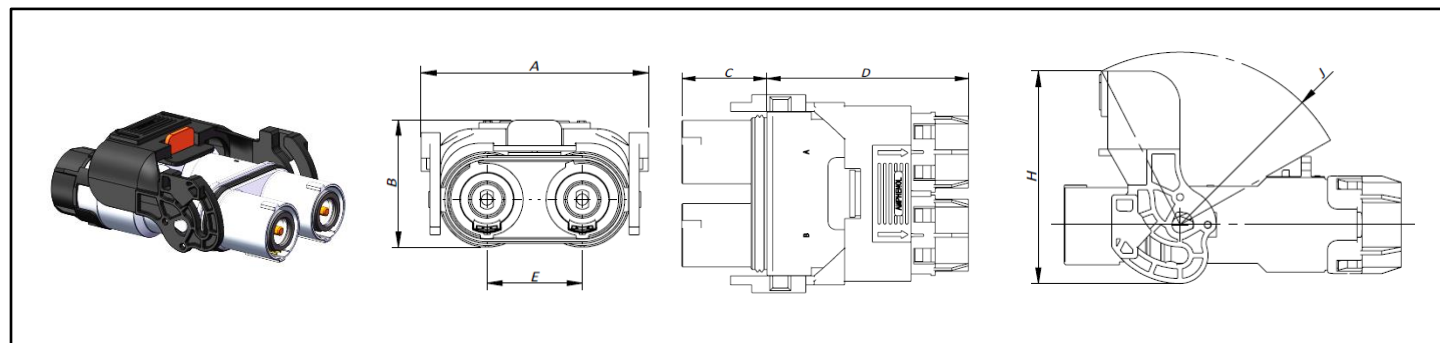
## PowerLok™ G2 Plug

Series	1 POS		2POS		3POS	
	Assembly Type		Assembly Type		Assembly Type	
	Straight	Right Angle	Straight	Right Angle	Straight	Right Angle
300A	*	*	*	*	*	*
500A	*	*				

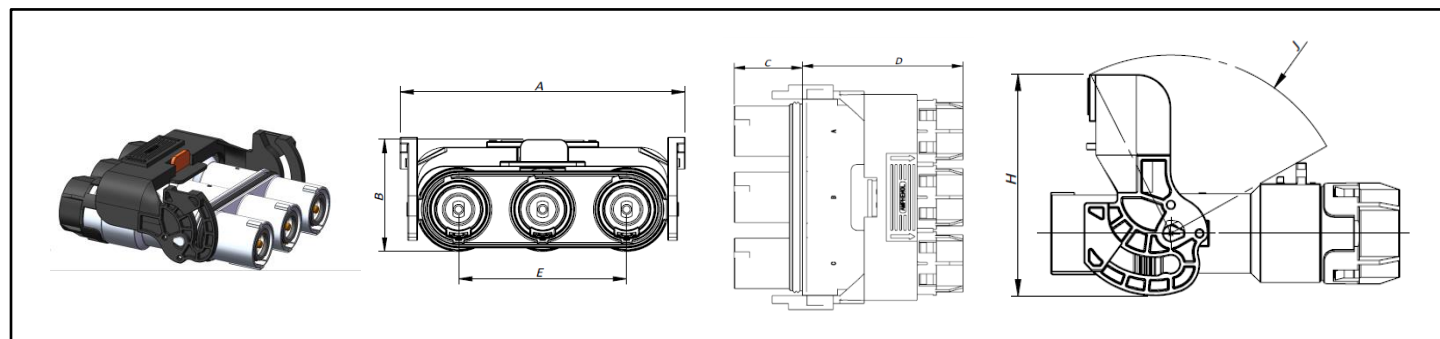
### Straight Assembly Plug



Product	Straight Plug 1POS Dimensions (mm)						
	Series	A	B	C	D	H	J
PowerLok™ 1POS Straight Assembly Plug	300A	41.00	38.00	30.80	72.70	41.90	R34.40
	500A	47.20	43.55	41.10	74.70	49.90	R38.40

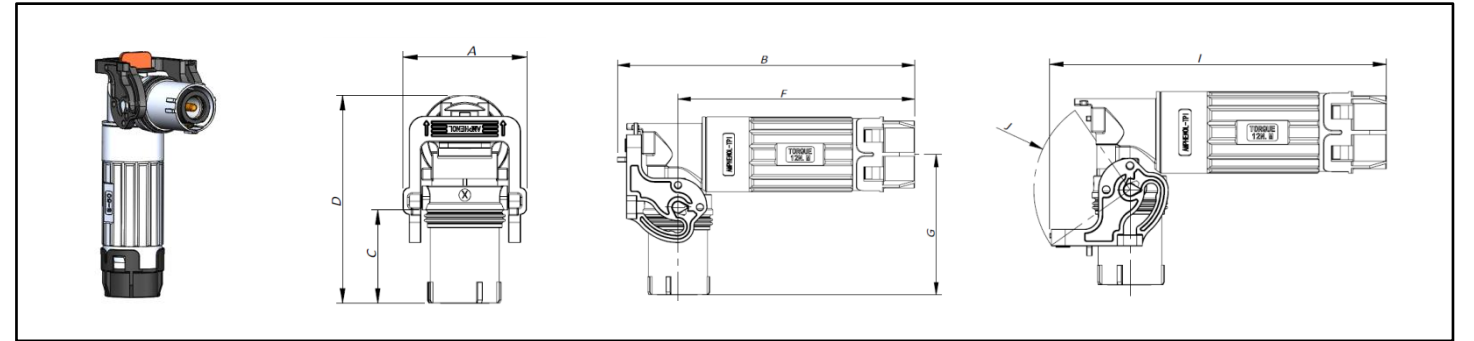


Product	Straight Plug 2POS Dimensions (mm)							
	Series	A	B	C	D	E	H	J
PowerLok™ 2POS Straight Assembly Plug	300A	71.50	39.95	30.80	72.70	30.00	65.20	R53.00

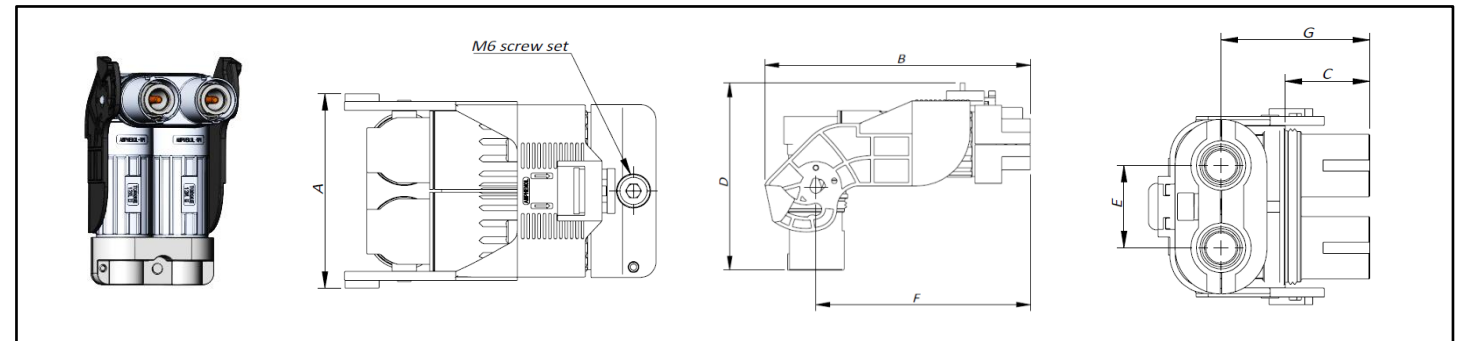


Product	Straight Plug 3POS Dimensions (mm)							
	Series	A	B	C	D	E	H	J
PowerLok™ 3POS Straight Assembly Plug	300A	101.80	39.95	30.80	72.70	60.00	65.70	R52.90

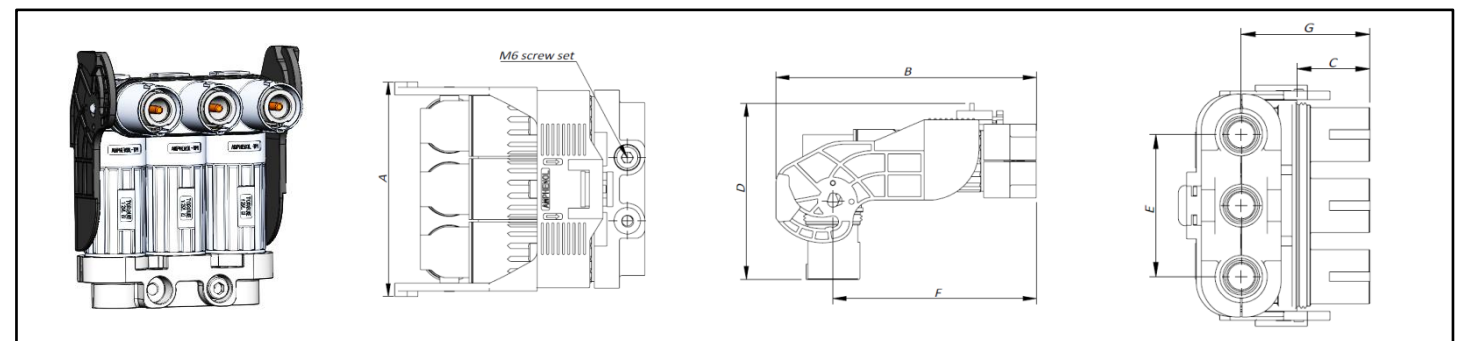
### Right Angle Assembly Plug



Product	Right Angle Plug 1POS Dimensions (mm)								
	Series	A	B	C	D	F	G	I	J
PowerLok™ 1POS Right Angle Assembly Plug	300A	41.00	115.10	30.50	68.60	91.60	54.30	120.30	R34.40
	500A	47.20	128.05	41.10	87.85	102.00	69.95	134.50	R38.40



Product	Right Angle Plug 2POS Dimensions (mm)										
	Series	A	B	C	D	E	F	G	H	I	J
PowerLok™ 2POS Right Angle Assembly Plug	300A	71.50	114.80	30.80	80.65	30.00	92.80	54.20	118.25	115.95	R83.80



Product	Right Angle Plug 3POS Dimensions (mm)										
	Series	A	B	C	D	E	F	G	H	I	J
PowerLok™ 3POS Right Angle Assembly Plug	300A	101.80	118.80	30.80	118.80	60.00	92.80	54.20	109.50	137.85	R83.80



## Ordering Information - Receptacle

### PowerLok™ G2 1POS Receptacle (180 Degree Busbar Lug)

Product Type	Connector Type	Key	Current & HVIL	Termination Size
PowerLok™ G2	00 1POS Receptacle	X Orange Y Black U Yellow V Green W Red T Blue	300 300A W/O HVIL 301 300A W HVIL 500 500A W/O HVIL 501 500A W HVIL	180 Degree Busbar Lug D+Stud Size M+Stud Size PM+Stud Size

Series	Key	180 Degree Busbar Lug (1POS)					
		Termination & HVIL	Description	Part Number	Termination & HVIL	Description	Part Number
300A	X	M6 With HVIL	PL00X-301-10M6-2	AC-HA010668	M6 W/O HVIL	PL00X-300-10M6-2	AC-HA010632
	Y		PL00Y-301-10M6-2	AC-HA010669		PL00Y-300-10M6-2	AC-HA010633
	U		PL00U-301-10M6-2	AC-HA010670		PL00U-300-10M6-2	AC-HA010634
	V		PL00V-301-10M6-2	AC-HA010671		PL00V-300-10M6-2	AC-HA010635
	W		PL00W-301-10M6-2	AC-HA010672		PL00W-300-10M6-2	AC-HA010636
	T		PL00T-301-10M6-2	AC-HA010673		PL00T-300-10M6-2	AC-HA010637
	X	M8 With HVIL	PL00X-301-10M8-2	AC-HA010674	M8 W/O HVIL	PL00X-300-10M8-2	AC-HA010638
	Y		PL00Y-301-10M8-2	AC-HA010675		PL00Y-300-10M8-2	AC-HA010639
	U		PL00U-301-10M8-2	AC-HA010676		PL00U-300-10M8-2	AC-HA010640
	V		PL00V-301-10M8-2	AC-HA010677		PL00V-300-10M8-2	AC-HA010641
	W		PL00W-301-10M8-2	AC-HA010678		PL00W-300-10M8-2	AC-HA010642
	T		PL00T-301-10M8-2	AC-HA010679		PL00T-300-10M8-2	AC-HA010643
	X	D6 With HVIL	PL00X-301-10D6-2	AC-HA010686	D6 W/O HVIL	PL00X-300-10D6-2	AC-HA010650
	Y		PL00Y-301-10D6-2	AC-HA010687		PL00Y-300-10D6-2	AC-HA010651
	U		PL00U-301-10D6-2	AC-HA010688		PL00U-300-10D6-2	AC-HA010652
	V		PL00V-301-10D6-2	AC-HA010689		PL00V-300-10D6-2	AC-HA010653
	W		PL00W-301-10D6-2	AC-HA010690		PL00W-300-10D6-2	AC-HA010654
	T		PL00T-301-10D6-2	AC-HA010691		PL00T-300-10D6-2	AC-HA010655
	X	D8 With HVIL	PL00X-301-10D8-2	AC-HA010692	D8 W/O HVIL	PL00X-300-10D8-2	AC-HA010656
	Y		PL00Y-301-10D8-2	AC-HA010693		PL00Y-300-10D8-2	AC-HA010657
	U		PL00U-301-10D8-2	AC-HA010694		PL00U-300-10D8-2	AC-HA010658
	V		PL00V-301-10D8-2	AC-HA010695		PL00V-300-10D8-2	AC-HA010659
	W		PL00W-301-10D8-2	AC-HA010696		PL00W-300-10D8-2	AC-HA010660
	T		PL00T-301-10D8-2	AC-HA010697		PL00T-300-10D8-2	AC-HA010661
X	D10 With HVIL	PL00X-301-10D10-2	AC-HA010698	D10 W/O HVIL	PL00X-300-10D10-2	AC-HA010662	
Y		PL00Y-301-10D10-2	AC-HA010699		PL00Y-300-10D10-2	AC-HA010663	
U		PL00U-301-10D10-2	AC-HA010700		PL00U-300-10D10-2	AC-HA010664	
V		PL00V-301-10D10-2	AC-HA010701		PL00V-300-10D10-2	AC-HA010665	
W		PL00W-301-10D10-2	AC-HA010702		PL00W-300-10D10-2	AC-HA010666	
T		PL00T-301-10D10-2	AC-HA010703		PL00T-300-10D10-2	AC-HA010667	
X	PM6 With HVIL	PL00X-301-10PM6-2	AC-HA012144	PM6 W/O HVIL	PL00X-300-10PM6-2	AC-HA012138	
Y		PL00Y-301-10PM6-2	AC-HA012145		PL00Y-300-10PM6-2	AC-HA012139	
U		PL00U-301-10PM6-2	AC-HA012146		PL00U-300-10PM6-2	AC-HA012140	
V		PL00V-301-10PM6-2	AC-HA012147		PL00V-300-10PM6-2	AC-HA012141	
W		PL00W-301-10PM6-2	AC-HA012148		PL00W-300-10PM6-2	AC-HA012142	
T		PL00T-301-10PM6-2	AC-HA012149		PL00T-300-10PM6-2	AC-HA012143	

500A	X	M8 With HVIL	PL00X-501-10M8-2	AC-HA011180	M8 W/O HVIL	PL00X-500-10M8-2	AC-HA011160
	Y		PL00Y-501-10M8-2	AC-HA011181		PL00Y-500-10M8-2	AC-HA011161
	U		PL00U-501-10M8-2	AC-HA011182		PL00U-500-10M8-2	AC-HA011162
	V		PL00V-501-10M8-2	AC-HA011183		PL00V-500-10M8-2	AC-HA011163
	W		PL00W-501-10M8-2	AC-HA011184		PL00W-500-10M8-2	AC-HA011164
	T		PL00T-501-10M8-2	AC-HA011974		PL00T-500-10M8-2	AC-HA011970
	X	M10 With HVIL	PL00X-501-10M10-2	AC-HA011185	M10 W/O HVIL	PL00X-500-10M10-2	AC-HA011165
	Y		PL00Y-501-10M10-2	AC-HA011186		PL00Y-500-10M10-2	AC-HA011166
	U		PL00U-501-10M10-2	AC-HA011187		PL00U-500-10M10-2	AC-HA011167
	V		PL00V-501-10M10-2	AC-HA011188		PL00V-500-10M10-2	AC-HA011168
	W		PL00W-501-10M10-2	AC-HA011189		PL00W-500-10M10-2	AC-HA011169
	T		PL00T-501-10M10-2	AC-HA011975		PL00T-500-10M10-2	AC-HA011971
	X	D8 With HVIL	PL00X-501-10D8-2	AC-HA011190	D8 W/O HVIL	PL00X-500-10D8-2	AC-HA011170
	Y		PL00Y-501-10D8-2	AC-HA011191		PL00Y-500-10D8-2	AC-HA011171
	U		PL00U-501-10D8-2	AC-HA011192		PL00U-500-10D8-2	AC-HA011172
	V		PL00V-501-10D8-2	AC-HA011193		PL00V-500-10D8-2	AC-HA011173
	W		PL00W-501-10D8-2	AC-HA011194		PL00W-500-10D8-2	AC-HA011174
	T		PL00T-501-10D8-2	AC-HA011973		PL00T-500-10D8-2	AC-HA011969
	X	D10 With HVIL	PL00X-501-10D10-2	AC-HA011195	D10 W/O HVIL	PL00X-500-10D10-2	AC-HA011175
	Y		PL00Y-501-10D10-2	AC-HA011196		PL00Y-500-10D10-2	AC-HA011176
	U		PL00U-501-10D10-2	AC-HA011197		PL00U-500-10D10-2	AC-HA011177
	V		PL00V-501-10D10-2	AC-HA011198		PL00V-500-10D10-2	AC-HA011178
	W		PL00W-501-10D10-2	AC-HA011199		PL00W-500-10D10-2	AC-HA011179
	T		PL00T-501-10D10-2	AC-HA011976		PL00T-500-10D10-2	AC-HA011972

## Ordering Information - Receptacle

### PowerLok™ G2 1POS Receptacle (90 Degree Busbar Lug)

Product Type	Connector Type	Key	Current & HVIL	Termination Type	Termination Size
PowerLok™ G2	00 1POS Receptacle	X Orange	500 500A W/O HVIL	90 90 Degree Busbar Lug	D+Stud Size
		Y Black	501 500A W HVIL		M+Stud Size
		U Yellow			
		V Green			
		W Red			
		T Blue			

Series	Key	90 Degree Busbar Lug (1POS)							
		Termination & HVIL	Description	Part Number	Termination & HVIL	Description	Part Number		
500A	X	M8 With HVIL	PL00X-501-90M8-2	AC-HA014541	M8 W/O HVIL	PL00X-500-90M8-2	AC-HA014517		
	Y		PL00Y-501-90M8-2	AC-HA014542		PL00Y-500-90M8-2	AC-HA014518		
	U		PL00U-501-90M8-2	AC-HA014543		PL00U-500-90M8-2	AC-HA014519		
	V		PL00V-501-90M8-2	AC-HA014544		PL00V-500-90M8-2	AC-HA014520		
	W		PL00W-501-90M8-2	AC-HA014545		PL00W-500-90M8-2	AC-HA014521		
	T		PL00T-501-90M8-2	AC-HA014546		PL00T-500-90M8-2	AC-HA014522		
	X		M10 With HVIL	PL00X-501-90M10-2		AC-HA014547	M10 W/O HVIL	PL00X-500-90M10-2	AC-HA014523
	Y			PL00Y-501-90M10-2		AC-HA014548		PL00Y-500-90M10-2	AC-HA014524
	U	PL00U-501-90M10-2		AC-HA014549	PL00U-500-90M10-2	AC-HA014525			
	V	PL00V-501-90M10-2		AC-HA014550	PL00V-500-90M10-2	AC-HA014526			
	W	PL00W-501-90M10-2		AC-HA014551	PL00W-500-90M10-2	AC-HA014527			
	T	PL00T-501-90M10-2		AC-HA014552	PL00T-500-90M10-2	AC-HA014528			
	X	D8 With HVIL		PL00X-501-90D8-2	AC-HA014553	D8 W/O HVIL		PL00X-500-90D8-2	AC-HA014529
	Y			PL00Y-501-90D8-2	AC-HA014554			PL00Y-500-90D8-2	AC-HA014530
	U		PL00U-501-90D8-2	AC-HA014555	PL00U-500-90D8-2		AC-HA014531		
	V		PL00V-501-90D8-2	AC-HA014556	PL00V-500-90D8-2		AC-HA014532		
	W		PL00W-501-90D8-2	AC-HA014557	PL00W-500-90D8-2		AC-HA014533		
	T		PL00T-501-90D8-2	AC-HA014558	PL00T-500-90D8-2		AC-HA014534		
	X		D10 With HVIL	PL00X-501-90D10-2	AC-HA014559		D10 W/O HVIL	PL00X-500-90D10-2	AC-HA014535
	Y			PL00Y-501-90D10-2	AC-HA014560			PL00Y-500-90D10-2	AC-HA014536
	U	PL00U-501-90D10-2		AC-HA014561	PL00U-500-90D10-2	AC-HA014537			
	V	PL00V-501-90D10-2		AC-HA014562	PL00V-500-90D10-2	AC-HA014538			
	W	PL00W-501-90D10-2		AC-HA014563	PL00W-500-90D10-2	AC-HA014539			
	T	PL00T-501-90D10-2		AC-HA014564	PL00T-500-90D10-2	AC-HA014540			

### PowerLok™ G2 2POS Receptacle (180 Degree Busbar Lug)

Product Type	Connector Type	Key	Current & HVIL	Termination Type	Termination Size
PowerLok™ G2	082 2 POS Receptacle	X Orange	300 300A W/O HVIL	10 180 Degree Busbar Lug	D+Stud Size
		Y Black	301 300A W HVIL		M+Stud Size
		U Yellow			
		V Green			

Series	Key	180 Degree Busbar Lug (2POS)					
		Termination & HVIL	Description	Part Number	Termination & HVIL	Description	Part Number
300A	X	M6 With HVIL	PL082X-301-10M6-2	AC-HA010944	M6 W/O HVIL	PL082X-300-10M6-2	AC-HA010932
	Y		PL082Y-301-10M6-2	AC-HA010945		PL082Y-300-10M6-2	AC-HA010933
	U		PL082U-301-10M6-2	AC-HA016991		PL082U-300-10M6-2	AC-HA016971
	V		PL082V-301-10M6-2	AC-HA016992		PL082V-300-10M6-2	AC-HA016972
	X	M8 With HVIL	PL082X-301-10M8-2	AC-HA010946	M8 W/O HVIL	PL082X-300-10M8-2	AC-HA010934
	Y		PL082Y-301-10M8-2	AC-HA010947		PL082Y-300-10M8-2	AC-HA010935
	U		PL082U-301-10M8-2	AC-HA016995		PL082U-300-10M8-2	AC-HA016975
	V		PL082V-301-10M8-2	AC-HA016996		PL082V-300-10M8-2	AC-HA016976
	X	D6 With HVIL	PL082X-301-10D6-2	AC-HA010950	D6 W/O HVIL	PL082X-300-10D6-2	AC-HA010938
	Y		PL082Y-301-10D6-2	AC-HA010951		PL082Y-300-10D6-2	AC-HA010939
	U		PL082U-301-10D6-2	AC-HA016999		PL082U-300-10D6-2	AC-HA016979
	V		PL082V-301-10D6-2	AC-HA017000		PL082V-300-10D6-2	AC-HA016980
	X	D8 With HVIL	PL082X-301-10D8-2	AC-HA010952	D8 W/O HVIL	PL082X-300-10D8-2	AC-HA010940
	Y		PL082Y-301-10D8-2	AC-HA010953		PL082Y-300-10D8-2	AC-HA010941
	U		PL082U-301-10D8-2	AC-HA017003		PL082U-300-10D8-2	AC-HA016983
	V		PL082V-301-10D8-2	AC-HA017004		PL082V-300-10D8-2	AC-HA016984
	X	D10 With HVIL	PL082X-301-10D10-2	AC-HA010954	D10 W/O HVIL	PL082X-300-10D10-2	AC-HA010942
	Y		PL082Y-301-10D10-2	AC-HA010955		PL082Y-300-10D10-2	AC-HA010943
	U		PL082U-301-10D10-2	AC-HA017007		PL082U-300-10D10-2	AC-HA016987
	V		PL082V-301-10D10-2	AC-HA017008		PL082V-300-10D10-2	AC-HA016988
	X	PM6 With HVIL	PL082X-301-10PM6-2	AC-HA011979	PM6 W/O HVIL	PL082X-300-10PM6-2	AC-HA011977
	Y		PL082Y-301-10PM6-2	AC-HA011980		PL082Y-300-10PM6-2	AC-HA011978
	U		PL082U-301-10PM6-2	AC-HA017015		PL082U-300-10PM6-2	AC-HA017011
	V		PL082V-301-10PM6-2	AC-HA017016		PL082V-300-10PM6-2	AC-HA017012

## Ordering Information - Receptacle

### PowerLok™ G2 2POS Receptacle (Thread Pin)

Product Type	Connector Type	Key	Current & HVIL	Termination Type	Termination Size
PowerLok™ G2	082 2 POS Receptacle	X Orange	300 300A W/O HVIL	20 Thread Pin	D+Stud Size
		Y Black	301 300A W HVIL		M+Stud Size
		U Yellow			PM+Stud Size
		V Green			

Series	Key	Thread Pin (2POS)					
		Termination & HVIL	Description	Part Number	Termination & HVIL	Description	Part Number
300A	X	M6 With HVIL	PL082X-301-20M6-2	AC-HA015859	M6 W/O HVIL	PL082X-300-20M6-2	AC-HA015853
	Y		PL082Y-301-20M6-2	AC-HA015860		PL082Y-300-20M6-2	AC-HA015854
	U		PL082U-301-20M6-2	AC-HA016529		PL082U-300-20M6-2	AC-HA016523
	V		PL082V-301-20M6-2	AC-HA016530		PL082V-300-20M6-2	AC-HA016524
	X	M8 With HVIL	PL082X-301-20M8-2	AC-HA015861	M8 W/O HVIL	PL082X-300-20M8-2	AC-HA015855
	Y		PL082Y-301-20M8-2	AC-HA015862		PL082Y-300-20M8-2	AC-HA015856
	U		PL082U-301-20M8-2	AC-HA016531		PL082U-300-20M8-2	AC-HA016525
	V		PL082V-301-20M8-2	AC-HA016532		PL082V-300-20M8-2	AC-HA016526
	X	M10 With HVIL	PL082X-301-20M10-2	AC-HA015863	M10 W/O HVIL	PL082X-300-20M10-2	AC-HA015857
	Y		PL082Y-301-20M10-2	AC-HA015864		PL082Y-300-20M10-2	AC-HA015858
	U		PL082U-301-20M10-2	AC-HA016533		PL082U-300-20M10-2	AC-HA016527
	V		PL082V-301-20M10-2	AC-HA016534		PL082V-300-20M10-2	AC-HA016528

### PowerLok™ G2 3POS Receptacle (180 Degree Busbar Lug)

Product Type	Connector Type	Key	Current & HVIL	Termination Type	Termination Size
PowerLok™ G2	083 3 POS Receptacle	X Orange	300 300A W/O HVIL	10 180 Degree Busbar Lug)	D+Stud Size
		Y Black	301 300A W HVIL		M+Stud Size
					PM+Stud Size

Series	Key	180 Degree Busbar Lug (3POS)					
		Termination & HVIL	Description	Part Number	Termination & HVIL	Description	Part Number
300A	X	M6 With HVIL	PL083X-301-10M6-2	AC-HA011060	M6 W/O HVIL	PL083X-300-10M6-2	AC-HA011048
	Y		PL083Y-301-10M6-2	AC-HA011061		PL083Y-300-10M6-2	AC-HA011049
	X	M8 With HVIL	PL083X-301-10M8-2	AC-HA011062	M8 W/O HVIL	PL083X-300-10M8-2	AC-HA011050
	Y		PL083Y-301-10M8-2	AC-HA011063		PL083Y-300-10M8-2	AC-HA011051
	X	D6 With HVIL	PL083X-301-10D6-2	AC-HA011066	D6 W/O HVIL	PL083X-300-10D6-2	AC-HA011054
	Y		PL083Y-301-10D6-2	AC-HA011067		PL083Y-300-10D6-2	AC-HA011055
	X	D8 With HVIL	PL083X-301-10D8-2	AC-HA011068	D8 W/O HVIL	PL083X-300-10D8-2	AC-HA011056
	Y		PL083Y-301-10D8-2	AC-HA011069		PL083Y-300-10D8-2	AC-HA011057
	X	D10 With HVIL	PL083X-301-10D10-2	AC-HA011070	D10 W/O HVIL	PL083X-300-10D10-2	AC-HA011058
	Y		PL083Y-301-10D10-2	AC-HA011071		PL083Y-300-10D10-2	AC-HA011059
	X	PM6 With HVIL	PL083X-301-10PM6-2	AC-HA011983	PM6 W/O HVIL	PL083X-300-10PM6-2	AC-HA011981
	Y		PL083Y-301-10PM6-2	AC-HA011984		PL083Y-300-10PM6-2	AC-HA011982

## Ordering Information - Plug

### PowerLok™ G2 1POS Plug

Product Type	Connector Type	Key	Current & HVIL	Accepted Cable Size (mm²)	Current Rating (A)
PowerLok™ G2	18 Plug Connector, Straight, Shield	X Orange	300 300A W/O HVIL	50	200
	28 Plug Connector, Right Angle, Shield	Y Black	301 300A W HVIL	70	250
		U Yellow	500 500A W/O HVIL 501 500A W HVIL	70	250
		V Green		95	300
		W Red		120	400
		T Blue			

Series	Key	18: Plug Connector, Straight, Shield (1POS)					
		Cable Size & HVIL	Description	Part Number	Cable Size & HVIL	Description	Part Number
300A	X	50mm² With HVIL	PL18X-301-50-2-5	AC-HA010818	50mm² W/O HVIL	PL18X-300-50-2-5	AC-HA010794
	Y		PL18Y-301-50-2-5	AC-HA010819		PL18Y-300-50-2-5	AC-HA010795
	U		PL18U-301-50-2-5	AC-HA010820		PL18U-300-50-2-5	AC-HA010796
	V		PL18V-301-50-2-5	AC-HA010821		PL18V-300-50-2-5	AC-HA010797
	W		PL18W-301-50-2-5	AC-HA010822		PL18W-300-50-2-5	AC-HA010798
	T		PL18T-301-50-2-5	AC-HA010823		PL18T-300-50-2-5	AC-HA010799
	X	70mm² With HVIL	PL18X-301-70-2-5	AC-HA010824	70mm² W/O HVIL	PL18X-300-70-2-5	AC-HA010800
	Y		PL18Y-301-70-2-5	AC-HA010825		PL18Y-300-70-2-5	AC-HA010801
	U		PL18U-301-70-2-5	AC-HA010826		PL18U-300-70-2-5	AC-HA010802
	V		PL18V-301-70-2-5	AC-HA010827		PL18V-300-70-2-5	AC-HA010803
	W		PL18W-301-70-2-5	AC-HA010828		PL18W-300-70-2-5	AC-HA010804
	T		PL18T-301-70-2-5	AC-HA010829		PL18T-300-70-2-5	AC-HA010805
500A	X	70mm² With HVIL	PL18X-501-70-2-5	AC-HA012924	70mm² W/O HVIL	PL18X-500-70-2-5	AC-HA012918
	Y		PL18Y-501-70-2-5	AC-HA012925		PL18Y-500-70-2-5	AC-HA012919
	U		PL18U-501-70-2-5	AC-HA012926		PL18U-500-70-2-5	AC-HA012920
	V		PL18V-501-70-2-5	AC-HA012927		PL18V-500-70-2-5	AC-HA012921
	W		PL18W-501-70-2-5	AC-HA012928		PL18W-500-70-2-5	AC-HA012922
	T		PL18T-501-70-2-5	AC-HA012929		PL18T-500-70-2-5	AC-HA012923
	X	95mm² with HVIL	PL18X-501-95-2-5	AC-HA011921	95mm² W/O HVIL	PL18X-500-95-2-5	AC-HA011927
	Y		PL18Y-501-95-2-5	AC-HA011922		PL18Y-500-95-2-5	AC-HA011928
	U		PL18U-501-95-2-5	AC-HA011923		PL18U-500-95-2-5	AC-HA011929
	V		PL18V-501-95-2-5	AC-HA011924		PL18V-500-95-2-5	AC-HA011930
	W		PL18W-501-95-2-5	AC-HA011925		PL18W-500-95-2-5	AC-HA011931
	T		PL18T-501-95-2-5	AC-HA011926		PL18T-500-95-2-5	AC-HA011932
X	120mm² with HVIL	PL18X-501-120-2-5	AC-HA011933	120mm² W/O HVIL	PL18X-500-120-2-5	AC-HA011939	
Y		PL18Y-501-120-2-5	AC-HA011934		PL18Y-500-120-2-5	AC-HA011940	
U		PL18U-501-120-2-5	AC-HA011935		PL18U-500-120-2-5	AC-HA011941	
V		PL18V-501-120-2-5	AC-HA011936		PL18V-500-120-2-5	AC-HA011942	
W		PL18W-501-120-2-5	AC-HA011937		PL18W-500-120-2-5	AC-HA011943	
T		PL18T-501-120-2-5	AC-HA011938		PL18T-500-120-2-5	AC-HA011944	



## Ordering Information - Plug

### PowerLok™ G2 1POS Plug

Series	Key	28: Plug Connector, Right Angle Shield (1POS)					
		Cable Size & HVIL	Description	Part Number	Cable Size & HVIL	Description	Part Number
300A	X	50mm <sup>2</sup> With HVIL	PL28X-301-50-2-5	AC-HA010914	50mm <sup>2</sup> W/O HVIL	PL28X-300-50-2-5	AC-HA010890
	Y		PL28Y-301-50-2-5	AC-HA010915		PL28Y-300-50-2-5	AC-HA010891
	U		PL28U-301-50-2-5	AC-HA010916		PL28U-300-50-2-5	AC-HA010892
	V		PL28V-301-50-2-5	AC-HA010917		PL28V-300-50-2-5	AC-HA010893
	W		PL28W-301-50-2-5	AC-HA010918		PL28W-300-50-2-5	AC-HA010894
	T		PL28T-301-50-2-5	AC-HA010919		PL28T-300-50-2-5	AC-HA010895
	X	70mm <sup>2</sup> With HVIL	PL28X-301-70-2-5	AC-HA010920	70mm <sup>2</sup> W/O HVIL	PL28X-300-70-2-5	AC-HA010896
	Y		PL28Y-301-70-2-5	AC-HA010921		PL28Y-300-70-2-5	AC-HA010897
	U		PL28U-301-70-2-5	AC-HA010922		PL28U-300-70-2-5	AC-HA010898
	V		PL28V-301-70-2-5	AC-HA010923		PL28V-300-70-2-5	AC-HA010899
	W		PL28W-301-70-2-5	AC-HA010924		PL28W-300-70-2-5	AC-HA010900
	T		PL28T-301-70-2-5	AC-HA010925		PL28T-300-70-2-5	AC-HA010901
500A	X	70mm <sup>2</sup> With HVIL	PL28X-501-70-2-5	AC-HA012906	70mm <sup>2</sup> W/O HVIL	PL28X-500-70-2-5	AC-HA012912
	Y		PL28Y-501-70-2-5	AC-HA012907		PL28Y-500-70-2-5	AC-HA012913
	U		PL28U-501-70-2-5	AC-HA012908		PL28U-500-70-2-5	AC-HA012914
	V		PL28V-501-70-2-5	AC-HA012909		PL28V-500-70-2-5	AC-HA012915
	W		PL28W-501-70-2-5	AC-HA012910		PL28W-500-70-2-5	AC-HA012916
	T		PL28T-501-70-2-5	AC-HA012911		PL28T-500-70-2-5	AC-HA012917
	X	95mm <sup>2</sup> with HVIL	PL28X-501-95-2-5	AC-HA011945	95mm <sup>2</sup> W/O HVIL	PL28X-500-95-2-5	AC-HA011951
	Y		PL28Y-501-95-2-5	AC-HA011946		PL28Y-500-95-2-5	AC-HA011952
	U		PL28U-501-95-2-5	AC-HA011947		PL28U-500-95-2-5	AC-HA011953
	V		PL28V-501-95-2-5	AC-HA011948		PL28V-500-95-2-5	AC-HA011954
	W		PL28W-501-95-2-5	AC-HA011949		PL28W-500-95-2-5	AC-HA011955
	T		PL28T-501-95-2-5	AC-HA011950		PL28T-500-95-2-5	AC-HA011956
X	120mm <sup>2</sup> with HVIL	PL28X-501-120-2-5	AC-HA011957	120mm <sup>2</sup> W/O HVIL	PL28X-500-120-2-5	AC-HA011963	
Y		PL28Y-501-120-2-5	AC-HA011958		PL28Y-500-120-2-5	AC-HA011964	
U		PL28U-501-120-2-5	AC-HA011959		PL28U-500-120-2-5	AC-HA011965	
V		PL28V-501-120-2-5	AC-HA011960		PL28V-500-120-2-5	AC-HA011966	
W		PL28W-501-120-2-5	AC-HA011961		PL28W-500-120-2-5	AC-HA011967	
T		PL28T-501-120-2-5	AC-HA011962		PL28T-500-120-2-5	AC-HA011968	

### PowerLok™ G2 1POS Plug (HVIL 90D)

PL 19 X - 500 - 95 - 2 - 5

Product Tyle	Connector Type	Key	Current & HVIL	Accepted Cable Size (mm <sup>2</sup> )	Current Rating (A)
PowerLok™ G2	19 Plug Connector, Straight, Shield, HVIL 90D	X Orange	500 500A W/O HVIL	70	250
	29 Plug Connector, Right Angle, Shield, HVIL 90D	Y Black	501 500A W HVIL	95	300
		U Yellow		120	400
		V Green			
		W Red			
		T Blue			

Series	Key	19: Plug Connector, Straight, shield, HVIL 90D					
		Cable Size & HVIL	Description	Part Number	Cable Size & HVIL	Description	Part Number
500A	X	70mm <sup>2</sup> With HVIL	PL19X-501-70-2-5	AC-HA014595	70mm <sup>2</sup> W/O HVIL	PL19X-500-70-2-5	AC-HA014577
	Y		PL19Y-501-70-2-5	AC-HA014596		PL19Y-500-70-2-5	AC-HA014578
	U		PL19U-501-70-2-5	AC-HA014597		PL19U-500-70-2-5	AC-HA014579
	V		PL19V-501-70-2-5	AC-HA014598		PL19V-500-70-2-5	AC-HA014580
	W		PL19W-501-70-2-5	AC-HA014599		PL19W-500-70-2-5	AC-HA014581
	T		PL19T-501-70-2-5	AC-HA014600		PL19T-500-70-2-5	AC-HA014582
	X	95mm <sup>2</sup> with HVIL	PL19X-501-95-2-5	AC-HA014583	95mm <sup>2</sup> W/O HVIL	PL19X-500-95-2-5	AC-HA014565
	Y		PL19Y-501-95-2-5	AC-HA014584		PL19Y-500-95-2-5	AC-HA014566
	U		PL19U-501-95-2-5	AC-HA014585		PL19U-500-95-2-5	AC-HA014567
	V		PL19V-501-95-2-5	AC-HA014586		PL19V-500-95-2-5	AC-HA014568
	W		PL19W-501-95-2-5	AC-HA014587		PL19W-500-95-2-5	AC-HA014569
	T		PL19T-501-95-2-5	AC-HA014588		PL19T-500-95-2-5	AC-HA014570
	X	120mm <sup>2</sup> with HVIL	PL19X-501-120-2-5	AC-HA014589	120mm <sup>2</sup> W/O HVIL	PL19X-500-120-2-5	AC-HA014571
	Y		PL19Y-501-120-2-5	AC-HA014590		PL19Y-500-120-2-5	AC-HA014572
	U		PL19U-501-120-2-5	AC-HA014591		PL19U-500-120-2-5	AC-HA014573
	V		PL19V-501-120-2-5	AC-HA014592		PL19V-500-120-2-5	AC-HA014574
	W		PL19W-501-120-2-5	AC-HA014593		PL19W-500-120-2-5	AC-HA014575
	T		PL19T-501-120-2-5	AC-HA014594		PL19T-500-120-2-5	AC-HA014576

Series	Key	29: Plug Connector, Right Angle, shield, HVIL 90D					
		Cable Size & HVIL	Description	Part Number	Cable Size & HVIL	Description	Part Number
500A	X	70mm <sup>2</sup> With HVIL	PL29X-501-70-2-5	AC-HA014631	70mm <sup>2</sup> W/O HVIL	PL29X-500-70-2-5	AC-HA014613
	Y		PL29Y-501-70-2-5	AC-HA014632		PL29Y-500-70-2-5	AC-HA014614
	U		PL29U-501-70-2-5	AC-HA014633		PL29U-500-70-2-5	AC-HA014615
	V		PL29V-501-70-2-5	AC-HA014634		PL29V-500-70-2-5	AC-HA014616
	W		PL29W-501-70-2-5	AC-HA014635		PL29W-500-70-2-5	AC-HA014617
	T		PL29T-501-70-2-5	AC-HA014636		PL29T-500-70-2-5	AC-HA014618
	X	95mm <sup>2</sup> with HVIL	PL29X-501-95-2-5	AC-HA014619	95mm <sup>2</sup> W/O HVIL	PL29X-500-95-2-5	AC-HA014601
	Y		PL29Y-501-95-2-5	AC-HA014620		PL29Y-500-95-2-5	AC-HA014602
	U		PL29U-501-95-2-5	AC-HA014621		PL29U-500-95-2-5	AC-HA014603
	V		PL29V-501-95-2-5	AC-HA014622		PL29V-500-95-2-5	AC-HA014604
	W		PL29W-501-95-2-5	AC-HA014623		PL29W-500-95-2-5	AC-HA014605
	T		PL29T-501-95-2-5	AC-HA014624		PL29T-500-95-2-5	AC-HA014606
	X	120mm <sup>2</sup> with HVIL	PL29X-501-120-2-5	AC-HA014625	120mm <sup>2</sup> W/O HVIL	PL29X-500-120-2-5	AC-HA014607
	Y		PL29Y-501-120-2-5	AC-HA014626		PL29Y-500-120-2-5	AC-HA014608
	U		PL29U-501-120-2-5	AC-HA014627		PL29U-500-120-2-5	AC-HA014609
	V		PL29V-501-120-2-5	AC-HA014628		PL29V-500-120-2-5	AC-HA014610
	W		PL29W-501-120-2-5	AC-HA014629		PL29W-500-120-2-5	AC-HA014611
	T		PL29T-501-120-2-5	AC-HA014630		PL29T-500-120-2-5	AC-HA014612



## Ordering Information - Plug

### PowerLok™ G2 2POS Plug

PL	182	X	-	300	-	70	-	2	-	5
Product Tyle	Connector Type		Key	Current & HVIL		Accepted Cable Size (mm <sup>2</sup> )	Current Rating (A)			
PowerLok™ G2	182	Plug Connector, Straight, Shield	X Orange	300	300A W/O HVIL	50	200			
			Y Black	301	300A W HVIL	70	250			
	282	Plug Connector, Right Angle, Shield	U Yellow							
			V Green							

Series	Key	182: Plug Connector, Straight, Shield (2POS)					
		Cable Size & HVIL	Description	Part Number	Cable Size & HVIL	Description	Part Number
300A	X	50mm <sup>2</sup> With HVIL	PL182X-301-50-2-5	AC-HA011010	50mm <sup>2</sup> W/O HVIL	PL182X-300-50-2-5	AC-HA011002
	Y		PL182Y-301-50-2-5	AC-HA011011		PL182Y-300-50-2-5	AC-HA011003
	U		PL182U-301-50-2-5	AC-HA016680		PL182U-300-50-2-5	AC-HA016672
	V		PL182V-301-50-2-5	AC-HA016681		PL182V-300-50-2-5	AC-HA016673
	X	70mm <sup>2</sup> With HVIL	PL182X-301-70-2-5	AC-HA011012	70mm <sup>2</sup> W/O HVIL	PL182X-300-70-2-5	AC-HA011004
	Y		PL182Y-301-70-2-5	AC-HA011013		PL182Y-300-70-2-5	AC-HA011005
	U		PL182U-301-70-2-5	AC-HA016684		PL182U-300-70-2-5	AC-HA016676
	V		PL182V-301-70-2-5	AC-HA016685		PL182V-300-70-2-5	AC-HA016677

Series	Key	282: Plug Connector, Right Angle Shield (2POS)					
		Cable Size & HVIL	Description	Part Number	Cable Size & HVIL	Description	Part Number
300A	X	50mm <sup>2</sup> With HVIL	PL282X-301-50-2-5	AC-HA011042	50mm <sup>2</sup> W/O HVIL	PL282X-300-50-2-5	AC-HA011034
	Y		PL282Y-301-50-2-5	AC-HA011043		PL282Y-300-50-2-5	AC-HA011035
	U		PL282U-301-50-2-5	AC-HA016696		PL282U-300-50-2-5	AC-HA016688
	V		PL282V-301-50-2-5	AC-HA016697		PL282V-300-50-2-5	AC-HA016689
	X	70mm <sup>2</sup> With HVIL	PL282X-301-70-2-5	AC-HA011044	70mm <sup>2</sup> W/O HVIL	PL282X-300-70-2-5	AC-HA011036
	Y		PL282Y-301-70-2-5	AC-HA011045		PL282Y-300-70-2-5	AC-HA011037
	U		PL282U-301-70-2-5	AC-HA016700		PL282U-300-70-2-5	AC-HA016692
	V		PL282V-301-70-2-5	AC-HA016701		PL282V-300-70-2-5	AC-HA016693

### PowerLok™ G2 3POS Plug

PL	183	X	-	300	-	70	-	2	-	5
Product Tyle	Connector Type		Key	Current & HVIL		Accepted Cable Size (mm <sup>2</sup> )	Current Rating (A)			
PowerLok™ G2	183	Plug Connector, Straight, Shield	X Orange	300	300A W/O HVIL	50	200			
	283	Plug Connector, Right Angle, Shield	Y Black	301	300A W HVIL	70	250			

Series	Key	183: Plug Connector, Straight, Shield (3POS)					
		Cable Size & HVIL	Description	Part Number	Cable Size & HVIL	Description	Part Number
300A	X	50mm <sup>2</sup>	PL183X-301-50-2-5	AC-HA011989	50mm <sup>2</sup>	PL183X-300-50-2-5	AC-HA011985
	Y	With HVIL	PL183Y-301-50-2-5	AC-HA011990	W/O HVIL	PL183Y-300-50-2-5	AC-HA011986
	X	70mm <sup>2</sup>	PL183X-301-70-2-5	AC-HA011991	70mm <sup>2</sup>	PL183X-300-70-2-5	AC-HA011987
	Y	With HVIL	PL183Y-301-70-2-5	AC-HA011992	W/O HVIL	PL183Y-300-70-2-5	AC-HA011988

Series	Key	283: Plug Connector, Right Angle Shield (3POS)					
		Cable Size & HVIL	Description	Part Number	Cable Size & HVIL	Description	Part Number
300A	X	50mm <sup>2</sup>	PL283X-301-50-2-5	AC-HA011997	50mm <sup>2</sup>	PL283X-300-50-2-5	AC-HA011993
	Y	With HVIL	PL283Y-301-50-2-5	AC-HA011998	W/O HVIL	PL283Y-300-50-2-5	AC-HA011994
	X	70mm <sup>2</sup>	PL283X-301-70-2-5	AC-HA011999	70mm <sup>2</sup>	PL283X-300-70-2-5	AC-HA011995
	Y	With HVIL	PL283Y-301-70-2-5	AC-HA012000	W/O HVIL	PL283Y-300-70-2-5	AC-HA011996



**The information contained in this data sheet is for reference only**

GEC/TPI provides the above product specifications for the standard PowerLok™ G2 series of connectors to assist users in identifying the correct product for the system to which the connectors may be applied. 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. Specifications are typical and may not apply to all connectors. Note that these specifications are derived from relevant global standards used in the automotive and industrial transportation markets, but they are not a substitute for system level design validation testing, which is the sole responsibility of the system designer and/or end user.

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