

Product Features

- High Voltage Inter Lock
- IP67 & Shielding
- Automatic Secondary Lock
- 1-3Positions Available
- 90 D and 180 D plug
- 6Keys(1POS),2Keys(2POS & 3POS)

Applications

- New Energy Electric Vehicles
- Frequency Converter
- Inverter
- Battery Connection

Technical Data

DC Current Rating	90-500A
DC Voltage Rating	1000V
Temperature Range	-40°C to +125°C
Flammability	UL94 V-0
Mating Cycle	Min. 100
Mutil Polarization	6Keys(1POS) 2Keys(2POS & 3POS)

PowerLok Recommended Cable Size & Current Rating

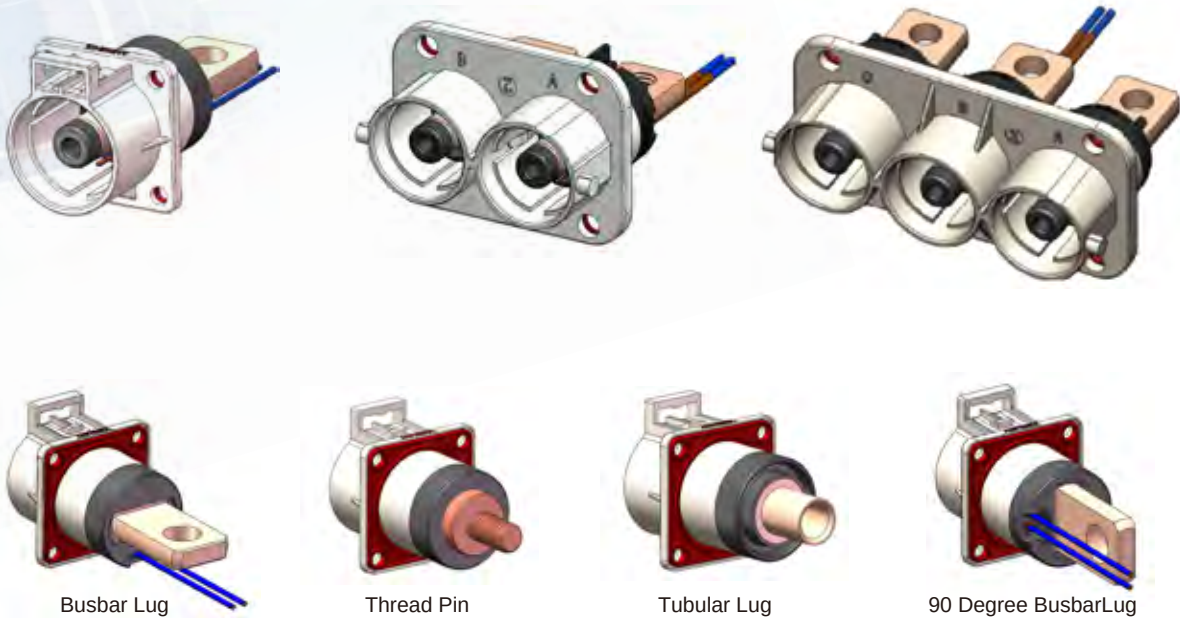
Current Rating of Connector(A)	Accepted Cbl Size(mm)²	Current Rating of Cable(A)
120 Series	16	90
	25	120
200 Series	25	120
	35	150
300 Series	50	200
	35	150
	50	200
	70	250
400 Series	95	300
	70	250
	95	300
	120	400
500 Series	135	450
	95	300
	120	400
	135	450
	150	500

PowerLok Connector Plug



PowerLok™ Plug Ordering Information

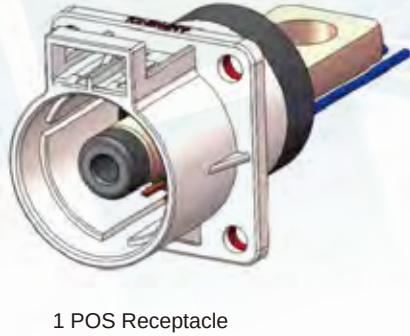
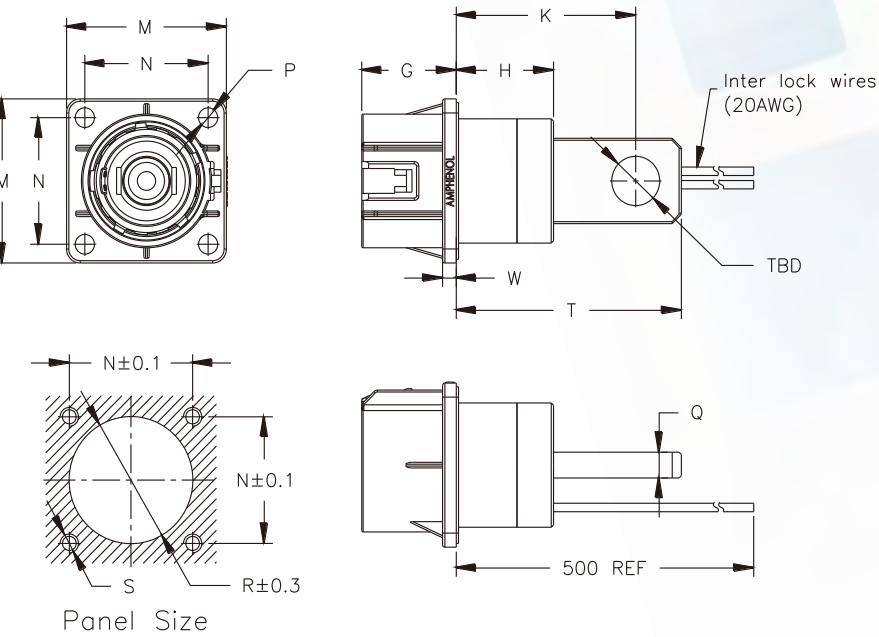
Product Type		(A) Plug Type		(B) Polarization		(C) Series		(D) Cable Size (mm ²)	(E) Versions	
PL	PowerLok™	10	Overmolded Cable Assembly, Straight	X	1 POS ,Key "X" Orange	120	120 Series	Refer to "PowerLok™ Recommended Cable Size & Current Rating" Chart		Blank:Rev 1
		20	Overmolded Cable Assembly, Right Angle	Y	1 POS ,Key "Y" Black	121	120 Series With HVIL		2	Rev 2
		18	Plug Connector, Straight,Shield	U	1 POS ,Key "U" Yellw	200	200 Series			
		28	Plug Connector, Right Angle,Shield	V	1 POS ,Key "V" Green	201	201 Series With HVIL			
		48	Plug Connector, Straight,Un-Shield	W	1 POS ,Key "W" Red	300	300 Series			
		58	Plug Connector, Right Angle,Un-Shield	T	1 POS ,Key "T" Blue	301	300 Series with HVIL			
				2X	2 POS ,Key "X"	400	400 Series			
				2Y	2 POS ,Key "Y"	401	400 Series with HVIL			
				3X	3 POS ,Key "X"	500	500 Series			
				3Y	3 POS ,Key "Y"	501	500 Series with HVIL			



PowerLok™ Receptacle Ordering Information

		PL		00		X		- 301		- 10		M10		- 2	
Product Type		(A) Connector Type		(B) Polarization & (Touch Proof Cover) Color		(C) Series		(D) Termination Type		(E) Termination Size		(F) Versions			
PL	PowerLok™	00	1 POS Receptacle	X	Key "X" Orange	120	120 Series	10	Lug	M+Stud Size	D+Stud Size	Blank:Rev 1			
		08	2 POS & 3 POS Receptacle	Y	Key "Y" Black	121	120 Series with HVIL	20	Thread Pin	M+Thread Size		2	Rev 2		
				U	Key "U" Yellw	200	200 Series	30	Crimping Lug	D+Cable Size	D+Stud Size				
				V	Key "V" Green	201	200 Series with HVIL	90	90D Lug	M+Stud Size					
				W	Key "W" Blue	300	300 Series								
				T	Key "T" Red	301	300 Series with HVIL								
				2X	2 POS ,Key "X"	400	400 Series								
				2Y	2 POS ,Key "Y"	401	400 Series with HVIL								
				3X	3 POS ,Key "X"	500	500 Series								
				3Y	3 POS ,Key "Y"	501	500 Series with HVIL								

PowerLok™ 1POS Receptacle

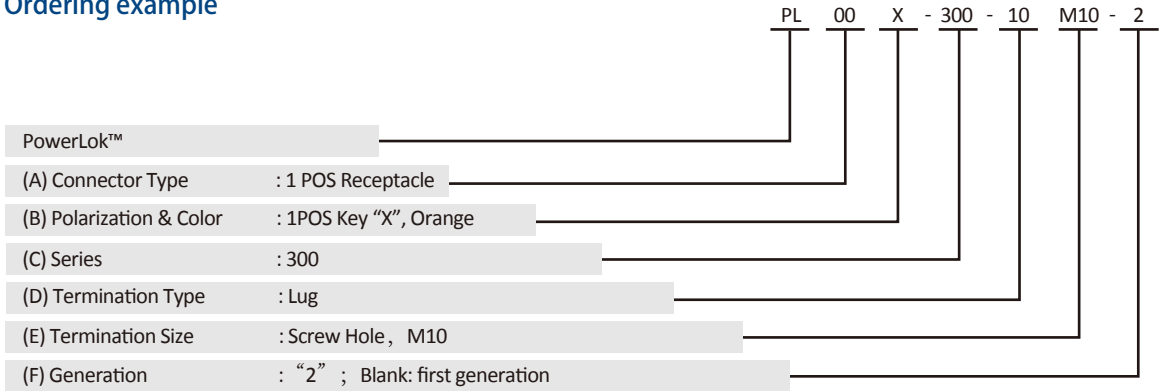


1 POS Receptacle

PowerLok™ 1POS Receptacle Parameter

Series	PowerLok Receptacle Size										
	G(mm)	H(mm)	K(mm)	M(mm)	N(mm)	P(mm)PEF	Q(mm)	R(mm)	S(mm)	T(mm)	W(mm)
120	18.0	13.0	25.5	28.0	20.0	3.6	2.8	Φ20.5	M3	31.5	3.0
200	20.7	19.3	32.3	33.0	25.0	4.2	5.5	Φ23.5	M4	39.3	3.0
300	20.7	21.3	39.3	35.0	27.0	4.2	5.5	Φ27.5	M4	49.3	3.0
400	27.2	25.0	45.2	43.0	33.5	4.3	7.0	Φ35.5	M4	55.2	3.5
500	27.2	25.0	46.0	43.0	33.5	4.3	7.0	Φ35.5	M4	56.0	3.5

Ordering example



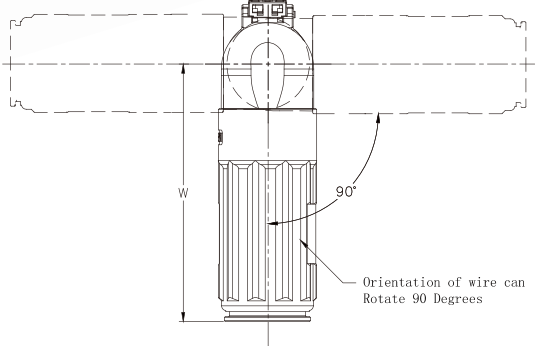
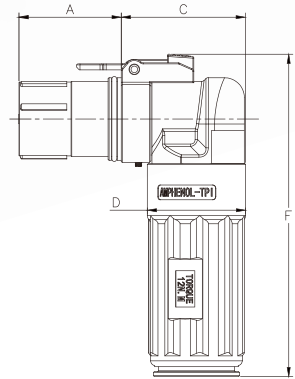
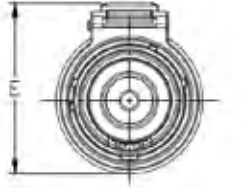
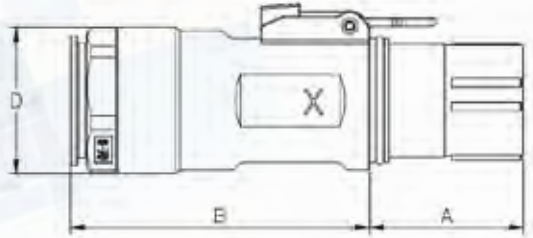
PowerLok™ 1POS Assembled Plug



1POS Plug Straight



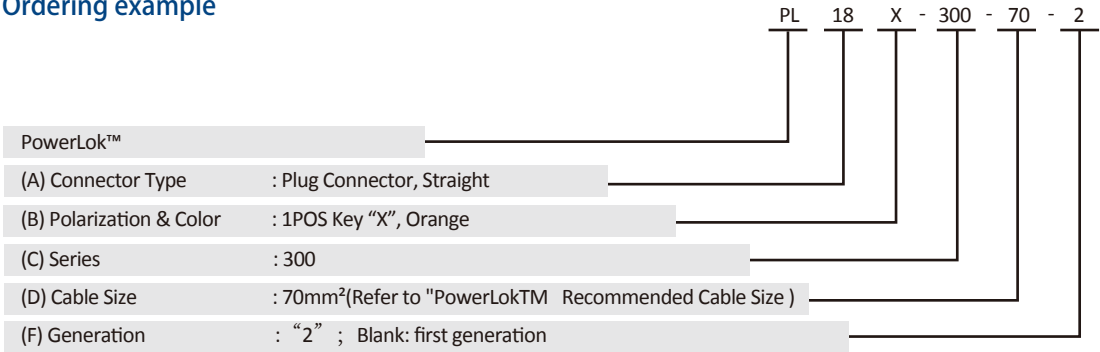
1POS Plug Right Angle



PowerLok™ 1POS Assembly Plug Connector Parameter

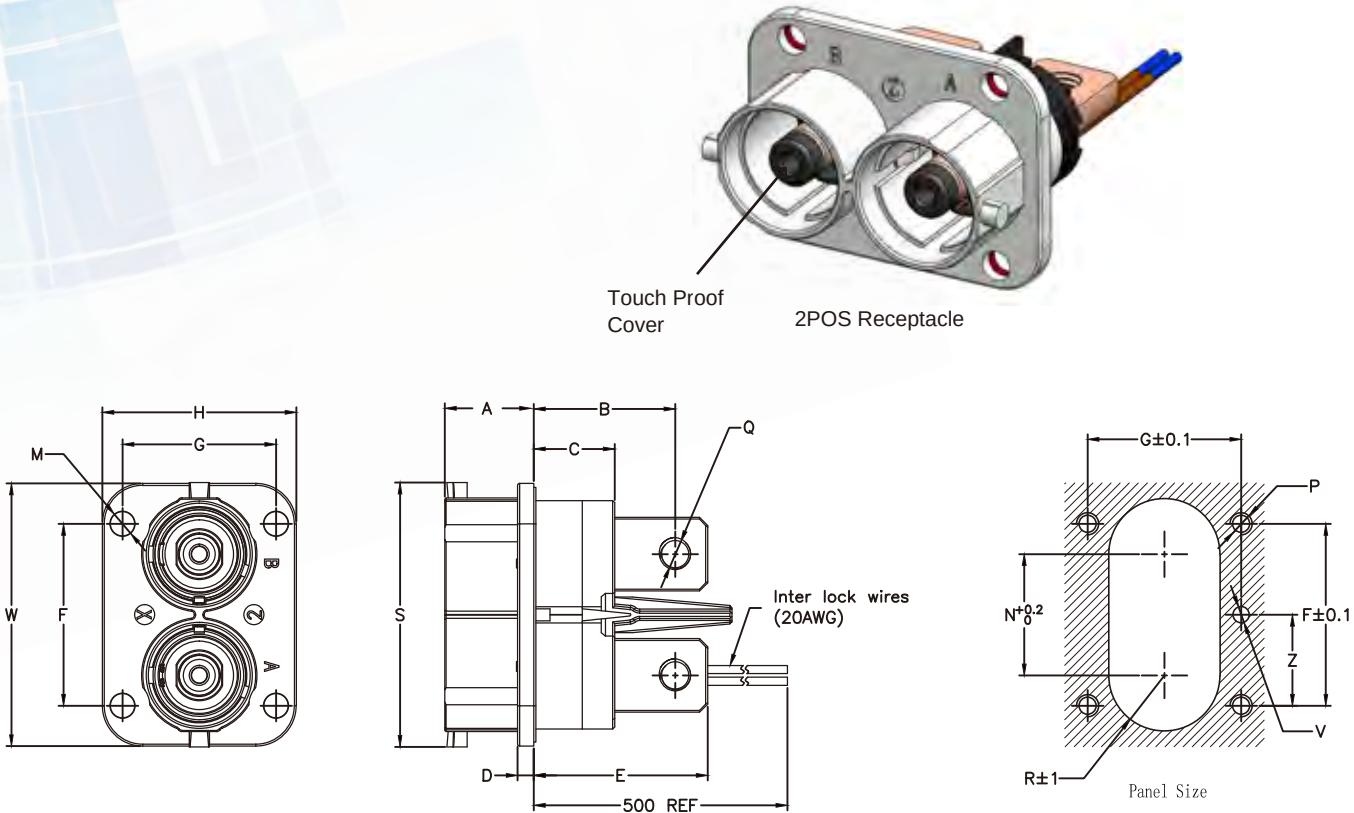
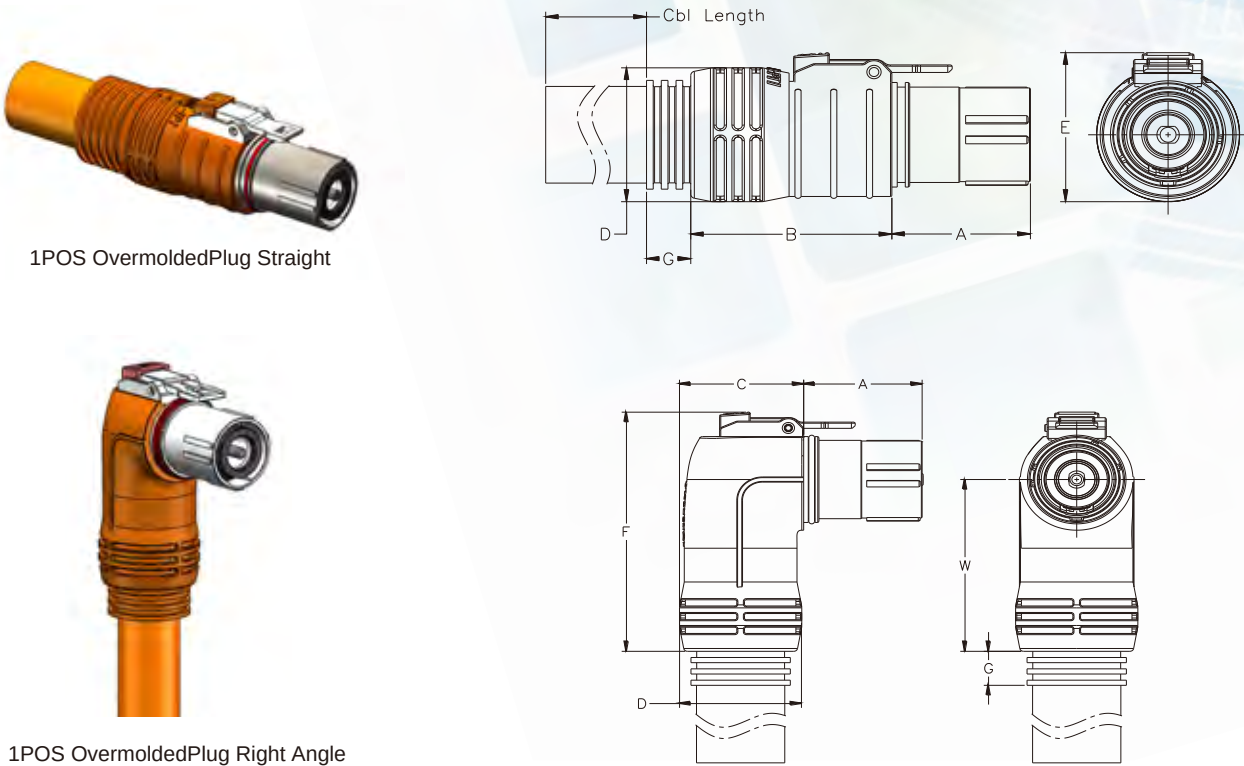
Series	PowerLok™ 1POS Plug Connector Size						
	A(mm)	B(mm)	C(mm)	D(mm)	E(mm)	F(mm)PEF	W(mm)
200	29.8	54.3	34.7	Φ25.9	30.9REF	86.7REF	68.8
300	31.0	63.1	37.6	Φ29.5	34.4REF	97.7REF	78.1
400	33.6	76.9	39.5	Φ34.0	39.4REF	115.3REF	92.7
500	41.1	77.0	47.8	Φ38.0	43.0REF	117.7REF	93.7

Ordering example



PowerLok™ 1POS Overmolded Plug

PowerLok™ 2POS Receptacle



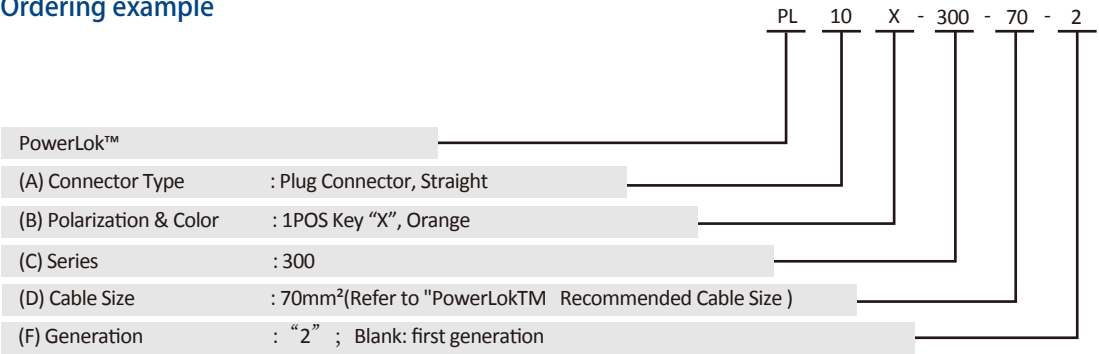
PowerLok™ 1POS Overmolded Plug Connector Parameter

Series	PowerLok™ 1POS OvermoldedPlug Connector Size								
	A(mm)	B(mm)	C(mm)	D(mm)	E(mm)	F(mm)PEF	G(mm)	W(mm)	Cable Length
120	22.5	39.0	25.3	Φ24.6	28.5	55.8	9.9	40.0	TBD
300	31.0	45.0	32.5	Φ32.0	35.6	69.6	9.9	50.0	
400	41.1	52.0	43.0	Φ42.0	43.6	78.6	9.9	55.0	
500	41.1	52.0	43.0	Φ42.0	43.6	78.6	9.9	55.0	

PowerLok™ 2POS Receptacle Parameter

Series	PowerLok™ 2POS Receptacle Size																
	A(mm)	B(mm)	C(mm)	D(mm)	E(mm)	F(mm)	G(mm)	H(mm)	M(mm)	N(mm)	P	S(mm)	V(mm)	W(mm)	R(mm)	Q	Z(mm)
120	18.5	23.5	14.5	3.0	29.5	35.0	25.5	34.0	Φ3.6	22.0	M3	49.0	3.5	48.0	10.3	TBD	17.5
300	22.0	35.0	21.2	3.0	43.0	45.0	38.0	48.0	Φ6.2	30.0	M6	65.4	4.0	65.0	13.8	TBD	22.5

Ordering example



Ordering example

