



PowerLok™

PowerLok™ Features

- | | | |
|------------------------------|----------------------------|-----------------------------|
| • Voltage Rating : 1000V DC | • IP67 & Shielding | • 1 - 3 Positions Available |
| • Current Rating: 20 A~500 A | • Automatic Secondary Lock | • 90° and 180° Plug |
| • Low Contact Resistance | • HVIL | • 5 Keys |

Technical Data and Features

DC Current Rating	20 A~500 A
DC Voltage Rating	1000V
Temperature Range	-40°C to +125°C
Flammability	UL94 V-0
Mating Cycle	Min. 500
Protection	IP67
Shielding	Fully Shielding
HVIL	Optional
Multi Polarization	5 Keys

PowerLok™

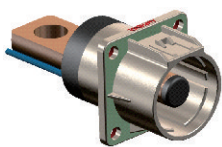
PowerLok™ Recommended Cable Size and Current Rating

Current Rating of Connector (A)	Accepted Cbl Size (mm²)	Current Rating of Cable (A)
60 Series	2.5	20
	4	25
	6	35
	10	60
120 Series	16	90
	25	120
300 Series	35	150
	50	200
	70	250
	95	300
500 Series	70	250
	95	300
	120	400
	150	500

PowerLok™ Products Overview

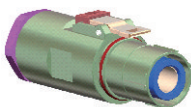
PowerLok™ 1-Position Products

Receptacle:

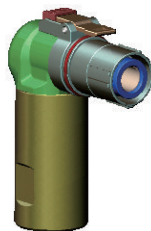


120 Series/300 Series/500 Series Available

Plug:



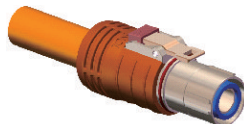
Straight



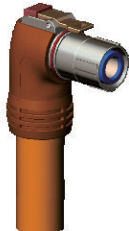
Right Angle

120 Series / 300 Series Available

Overmolded Plug:



Straight

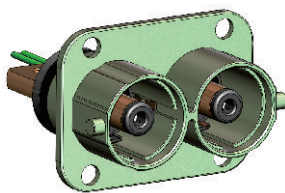


Right Angle

120 Series / 300 Series / 500 Series Available

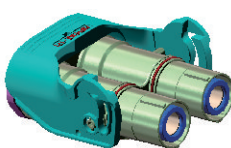
PowerLok™ 2-Position Products

Receptacle:

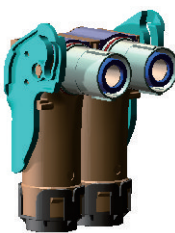


120 Series/300 Series Available

Plug:



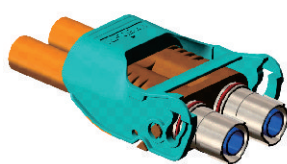
Straight



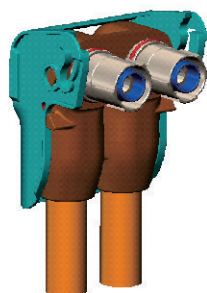
Right Angle

300 Series Available

Overmolded Plug:



Straight

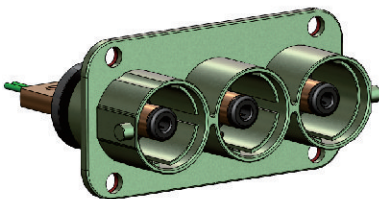


Right Angle

120 Series Available

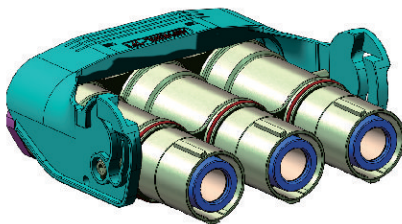
PowerLok™ 3-Position Products

Receptacle:



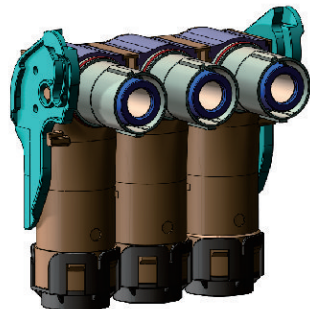
300 Series Available

Straight Plug:



300 Series Available

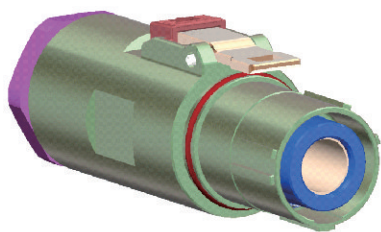
Right Angle Plug:



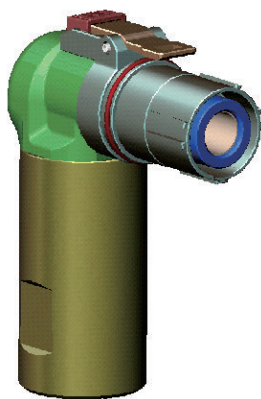
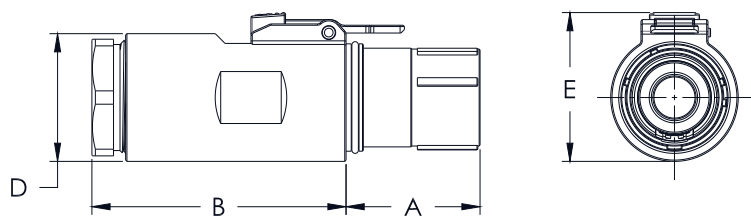
300 Series Available

PowerLok™ 1 POS Products

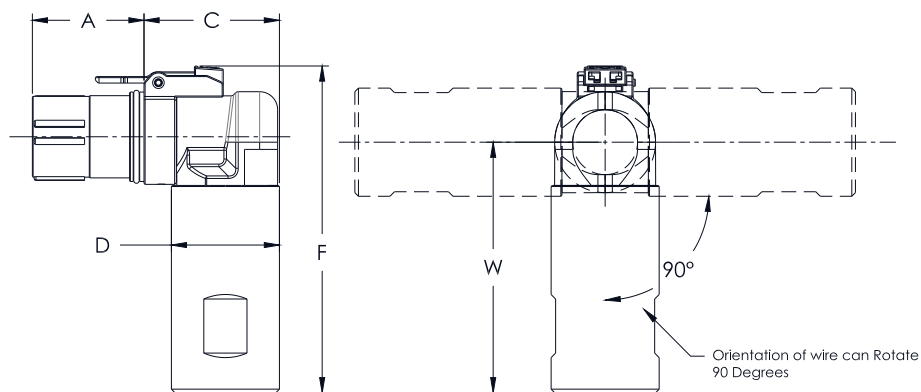
PowerLok™ 1POS Plug Connector



1 POS Plug Straight



1 POS Plug Right Angle



PowerLok™ 1POS Plug Connector Parameter

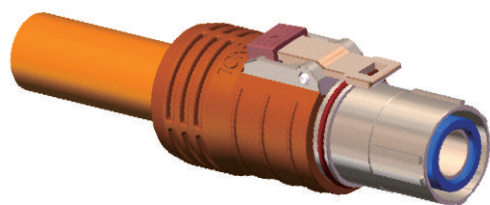
Series	PowerLok™ 1POS Plug Connector Size						
	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	W (mm)
120	22.5	45.0	30.0	Φ 18.0	24.8	69.3	53.5
300	31.0	58.8	37.6	Φ 29.5	34.4	90.6	71.0

Ordering Example

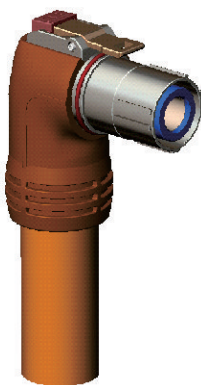
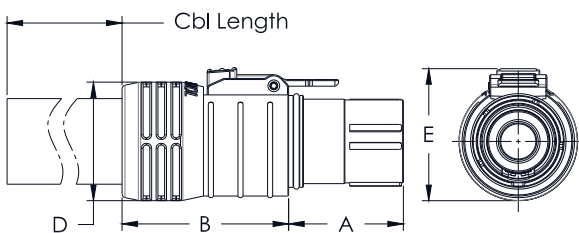
Powerlok™	PL	18	X	-	300	-70
(A)Connector Type	: Plug Connector, Straight					
(B)Polarization & Color	: 1POS Key "X", Orange					
(C)Series	: 300					
(D)Cable Size	: 70mm ²					

PowerLok™ 1 POS Products

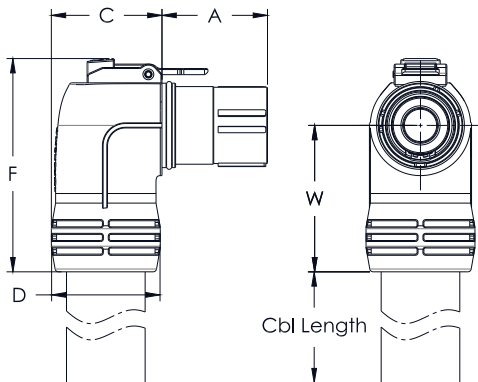
PowerLok™ 1POS Overmolded Plug



1 POS Overmolded Plug Straight



1 POS Overmolded Plug Right Angle



PowerLok™ 1 POS Overmolded Plug Parameter

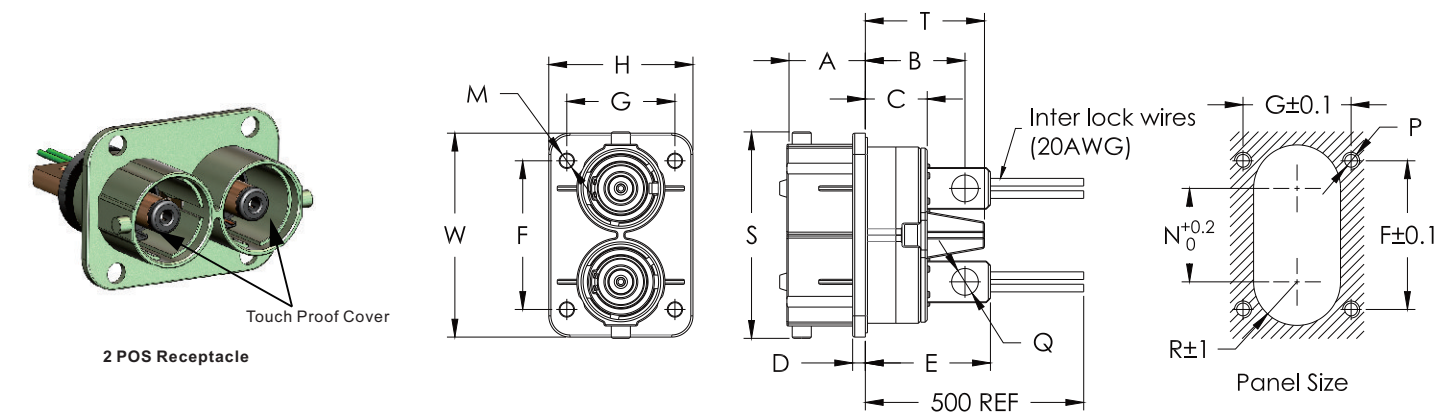
Series	PowerLok™ 1POS Overmolded Plug Size							Cable Length
	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	W (mm)	
120	22.5	39.0	25.3	Φ 24.6	28.5	50.8	35.0	TBD
300	31.0	45.0	32.5	Φ 32.0	35.6	62.6	43.0	
500	41.1	52.0	43.0	Φ 40.0	43.6	78.6	55.0	

Ordering Example

Powerlok™	PL	20	X	-	300	-	70
(A)Connector Type	: Overmolded Plug, Right Angle						
(B)Polarization & Color	: 1POS Key "X", Orange						
(C)Series	: 300						
(D)Cable Size	: 70mm²						

PowerLok™ 2 POS Products

PowerLok™ 2POS Receptacle



PowerLok™ 2 POS Receptacle Parameter

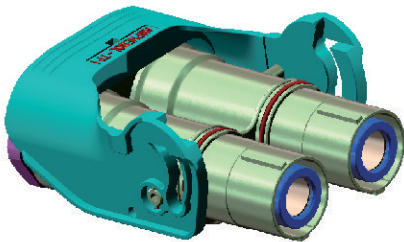
Series	PowerLok™ 2POS Receptacle Size															
	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)	H (mm)	M (mm)	N (mm)	P	S (mm)	T (mm)	W (mm)	R (mm)	Q
120	18.0	23.5	14.6	3.0	29.5	35.0	25.5	34.0	Φ 3.6	22.0	M3	48.6	27.8	48.0	10.3	TBD
300	22.0	35.0	20.7	3.0	43.0	45.0	38.0	48.0	Φ 6.2	30.0	M6	65.4	44.7	65.0	13.8	

Ordering Example

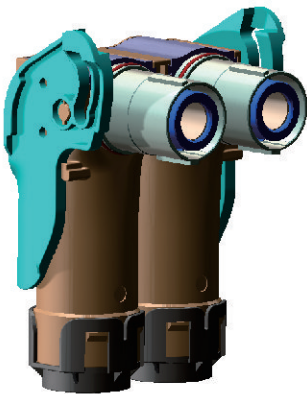
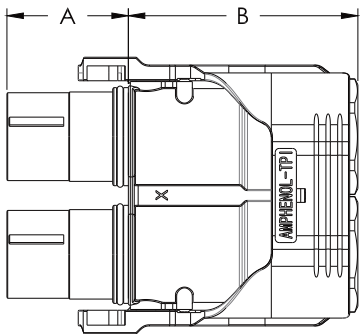
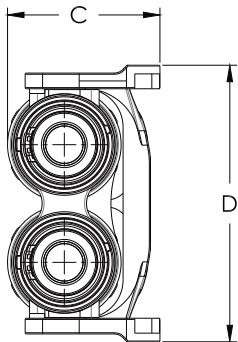
Powerlok™	PL	08	2X	-	300	-	10	M10
(A)Connector Type	: Receptacle							
(B)Polarization & Color	: 2 POS Key "X", Orange							
(C)Series	: 300							
(D)Termination Type	: Lug							
(E)Stud Size	: Screw Hole, M10							

PowerLok™ 2 POS Products

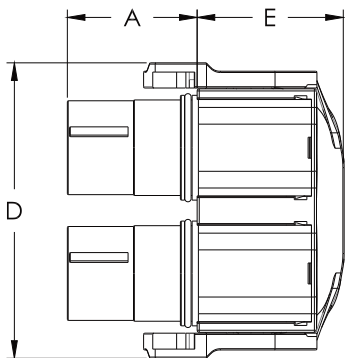
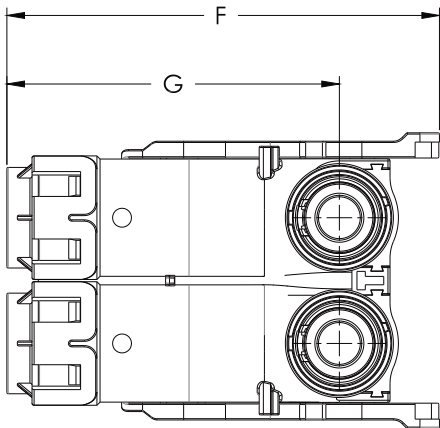
PowerLok™ 2POS Plug Connector



2 POS Plug Straight



2 POS Plug Right Angle



PowerLok™ 2POS Plug Connector Parameter

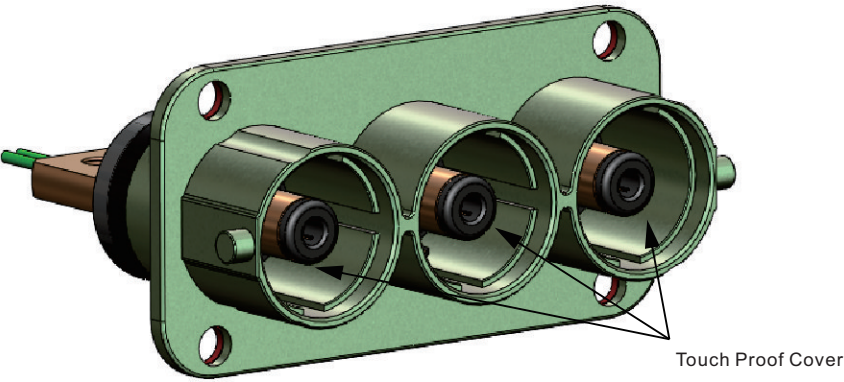
Series	PowerLok™ 2POS Plug Connector Size						
	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)
120	22.5	51.0	29.7	51.5	31.2	64.0	43.0
300	31.0	58.6	38.8	70.5	34.9	103.3	79.4

Ordering Example

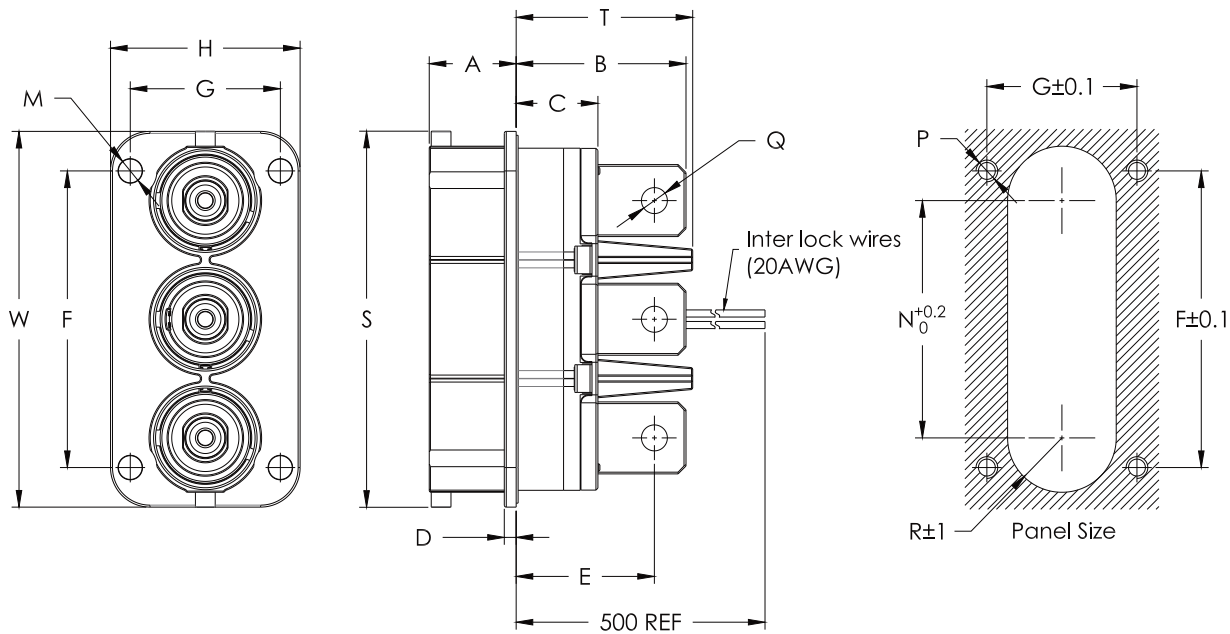
Powerlok™	PL	18	2X	-	300	-	70
(A)Connector Type	: Plug Connector, Straight						
(B)Polarization & Color	: 2 POS Key "X"						
(C)Series	: 300						
(D)Cable Size	: 70mm ²						

PowerLok™ 3 POS Products

PowerLok™ 3POS Receptacle



3POS Receptacle



PowerLok™ 3 POS Receptacle Parameter

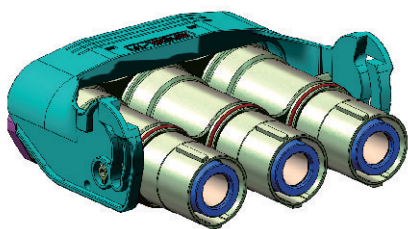
Series	PowerLok™ 3POS Receptacle Size														
	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)	H (mm)	M (mm)	N (mm)	P	S (mm)	T (mm)	W (mm)	Q
300	22.0	43.0	21.2	3.0	35.0	75.0	38.0	48.0	Φ 6.2	60.0	M6	95.1	44.7	95.0	TBD

Ordering Example

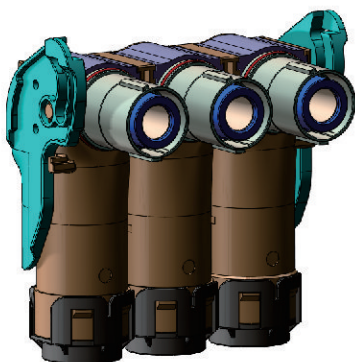
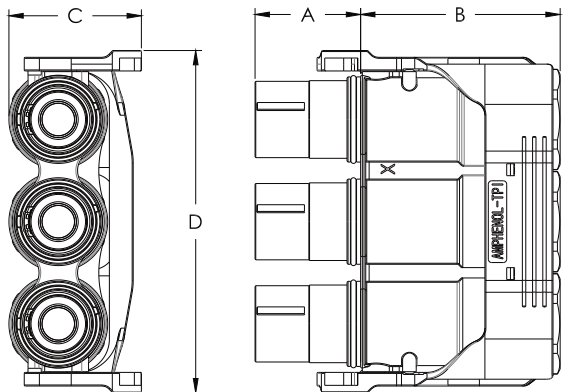
Powerlok™	PL	08	3X	-	300	-	10	M10
(A)Connector Type	: Receptacle							
(B)Polarization & Color	: 3 POS Key "X"							
(C)Series	: 300							
(D)Termination Type	: Lug							
(E)Stud Size	: Screw Hole, M10							

PowerLok™ 3 POS Products

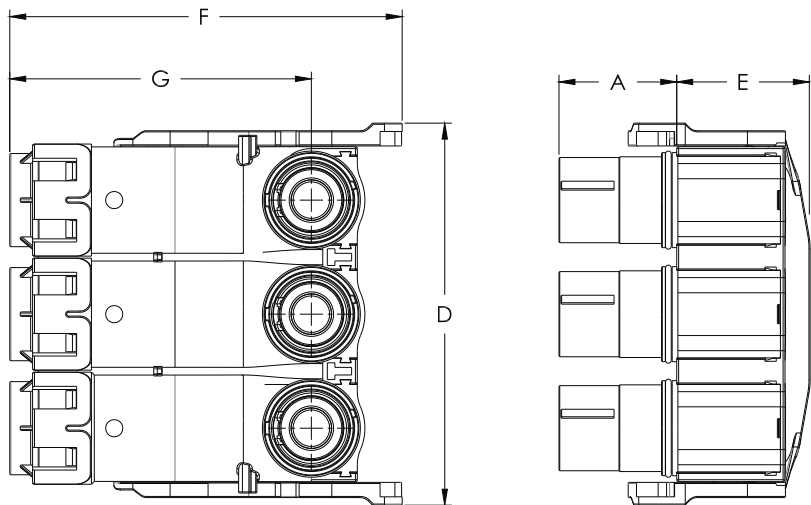
PowerLok™ 3POS Plug Connector



3 POS Plug Straight



3 POS Plug Right Angle



PowerLok™ 3POS Plug Connector Parameter

Series	PowerLok™ 3POS Plug Shielding Parameter						
	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)
300	31.0	58.6	38.9	100.5	34.9	103.3	79.4

Ordering Example

Powerlok™	PL	18	3X	-	300	-	70
(A)Connector Type	: Plug Connector, Straight						
(B)Polarization & Color	: 3 POS Key "X"						
(C)Series	: 300						
(D)Cable Size	: 70mm ²						

PowerLok™ Ordering Information

PowerLok™ Receptacle Ordering Information

Product Type		(A) Connector Type		(B) Polarization & (Touch Proof Cover) color		(C) Series		(D) Termination Type		(E) Termination Size	
PL	PowerLok™	00	1 POS Receptacle	X	Key "X" Orange	120	120 Series	10	Lug	M+Stud Size	Screw Hole
		08	2 POS & 3 POS Receptacle	Y	Key "Y" Black	121	120 Series with HVIL	20	Thread Pin	D+Stud Size	Through Hole
				U	Key "U" Yellow	300	300 Series	30	Crimping Lug	M+Thread Size	Thread Size
				V	Key "V" Green	301	300 Series with HVIL	90	90D Lug		
				W	Key "W" Red	500	500 Series				
				2X	2 POS ,Key "X"	501	500 Series with HVIL				
				2Y	2 POS ,Key "Y"						
				3X	3 POS ,Key "X"						
				3Y	3 POS ,Key "Y"						

PowerLok™ Plug Ordering Information

Product Type		(A) Plug Type		(B) Polarization		(C) Series		(D) Cable Size (mm²)	
PL	PowerLok™	10	Overmolded Cble Assembly, Straight	X	1 POS ,Key "X" Orange	120	120 Series	Refer to "PowerLok™ Recommended Cable Size & Current Rating" Chart	
		20	Overmolded Cble Assembly, Right Angle	Y	1 POS ,Key "Y" Black	121	120 Series With HVIL		
		18	Plug Connector, Straight	U	1 POS ,Key "U" Yellw	300	300 Series		
		28	Plug Connector, Right Angle	V	1 POS ,Key "V" Green	301	300 Series with HVIL		
				W	1 POS ,Key "W" Red	500	500 Series		
				2X	2 POS ,Key "X"	501	500 Series with HVIL		
				2Y	2 POS ,Key "Y"				
				3X	3 POS ,Key "X"				
				3Y	3 POS ,Key "Y"				

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

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