

## Parallel PowerCable (PPC)<sup>™</sup>

Parallel PowerCable (PPC) is a flexible, low-inductance cable designed for power distribution and grounding applications. PPC's unique construction offers significantly lower inductance than equivalent round cable. Tin-plated wires are extruded in parallel allowing more current per Circular Mil Area (CMA) than round cable. PPC's innovative design makes it lighter than conventional power cable and, in many applications, the flat construction is easier to route and can improve system airflow.





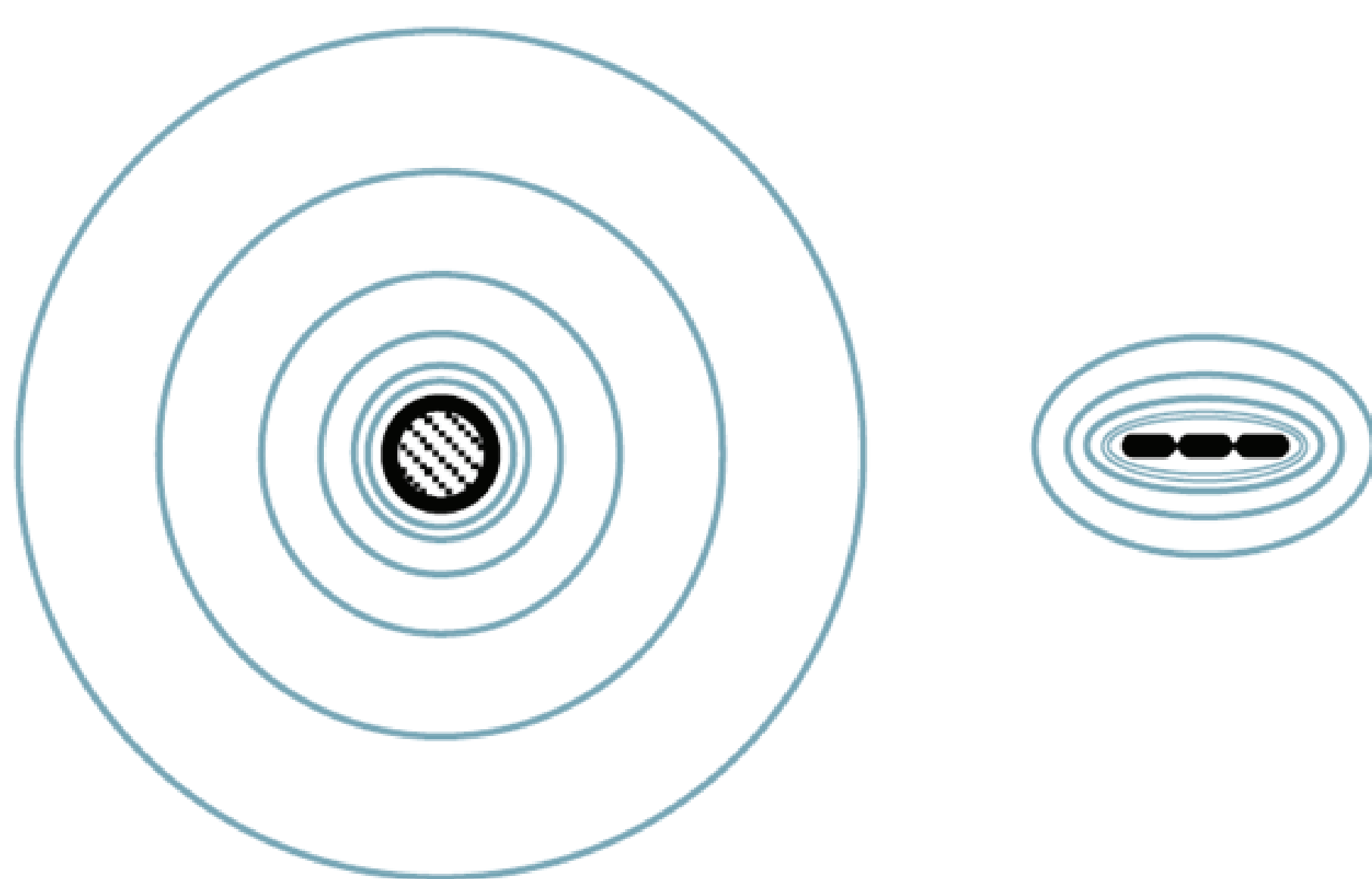
# Parallel PowerCable (PPC)<sup>™</sup>

## Construction

- Lower inductance than Round Cable
- Highly flexible
- Durable TPE (Thermoplastic Elastomer) Jacket
- High Abrasion Resistance
- Tinned Copper Wires
- UL and CSA Rated to 600 Volts, 105°C
- UL VW-1, CSA FT1
- Jacket Oxygen Index is 30%
- UL Style 21078
- Available in Black or Red

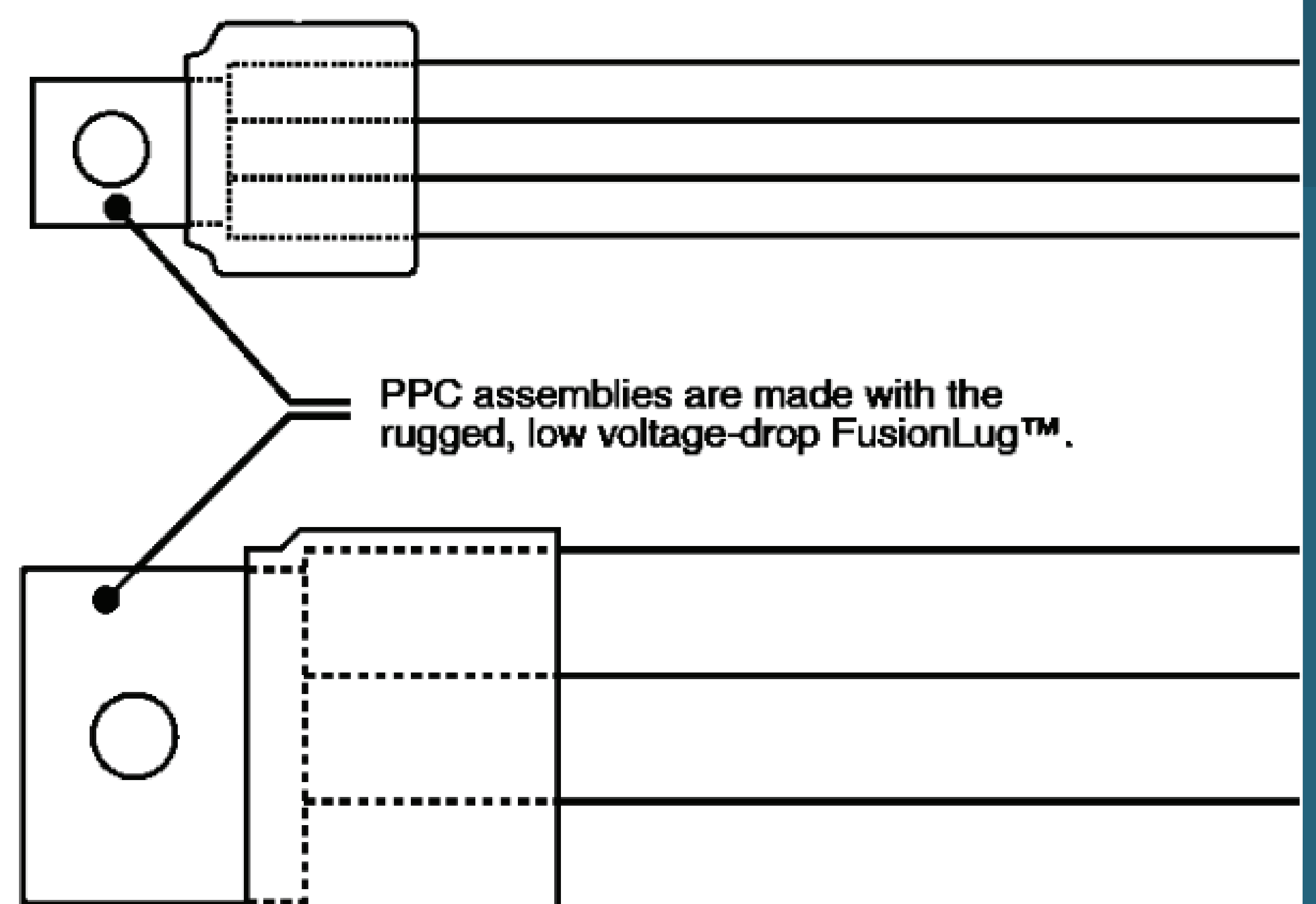
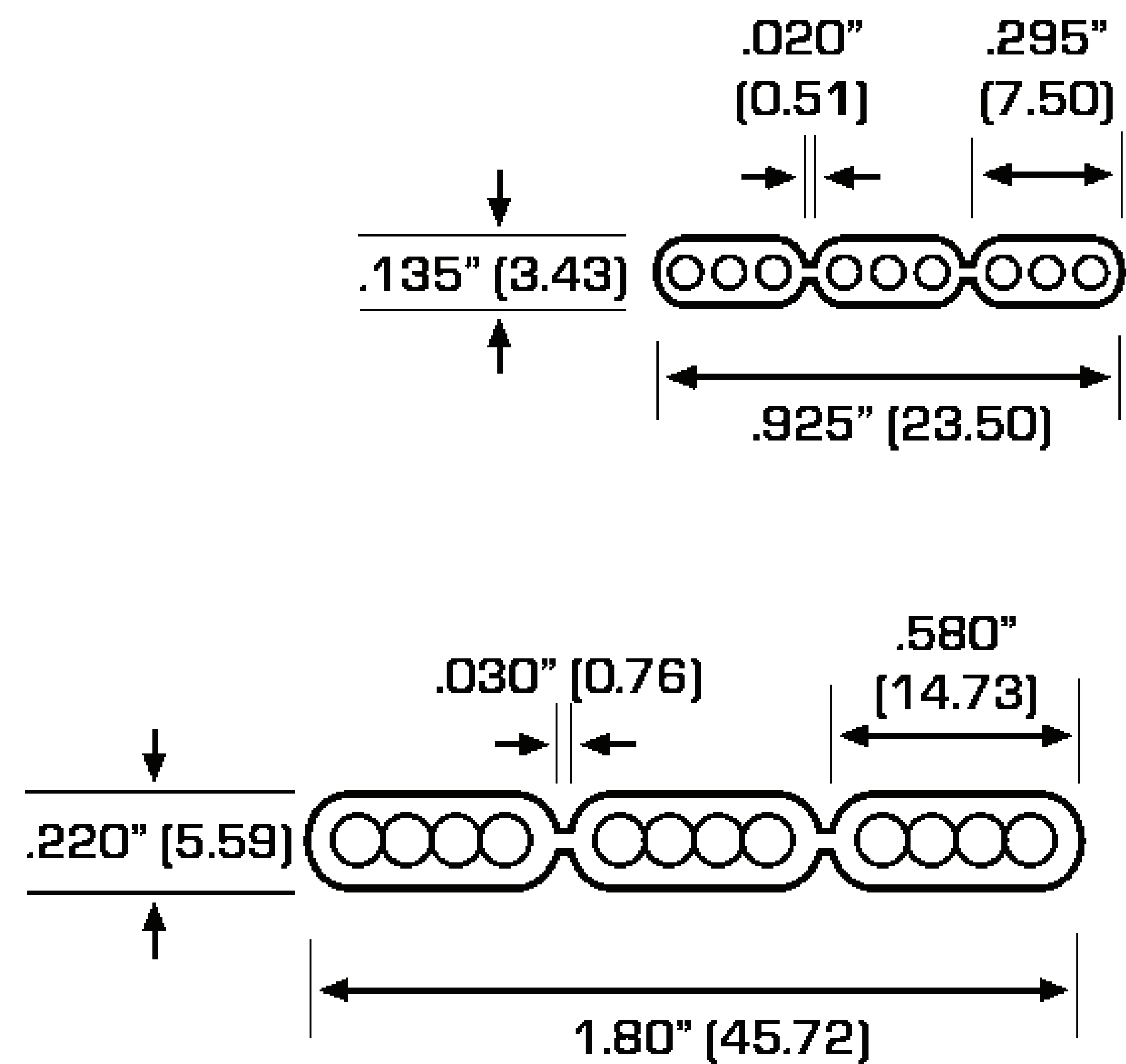
## Inductance Comparison Round Cable vs. PPC

PPC has about 1/2 the inductance of equivalent ampacity-rated round cable. Lower inductance means faster power supply response quick current changes. More importantly, the high frequency current present in most DC current-carrying cables results in radiated noise, which is undesirable. PPC minimizes this unwanted radiated noise.



INDUCTANCE COMPARISON: ROUND CABLE VS PPC				
CURRENT	ROUND CABLE	ROUND CABLE INDUCTANCE	PPC	PPC INDUCTANCE
100 AMPS	4 AWG (21.2mm <sup>2</sup> )	215 nh/ft (710 nh/m)	3 POD: 9/16 AWG (9/1.3mm <sup>2</sup> )	119 nh/ft (393 nh/m)
350 AMPS	4/0 AWG (107mm <sup>2</sup> )	190 nh/ft (627 nh/m)	3 POD: 12/10 AWG (12/5.3mm <sup>2</sup> )	112 nh/ft (370 nh/m)

## Dimensions in Inches (mm)



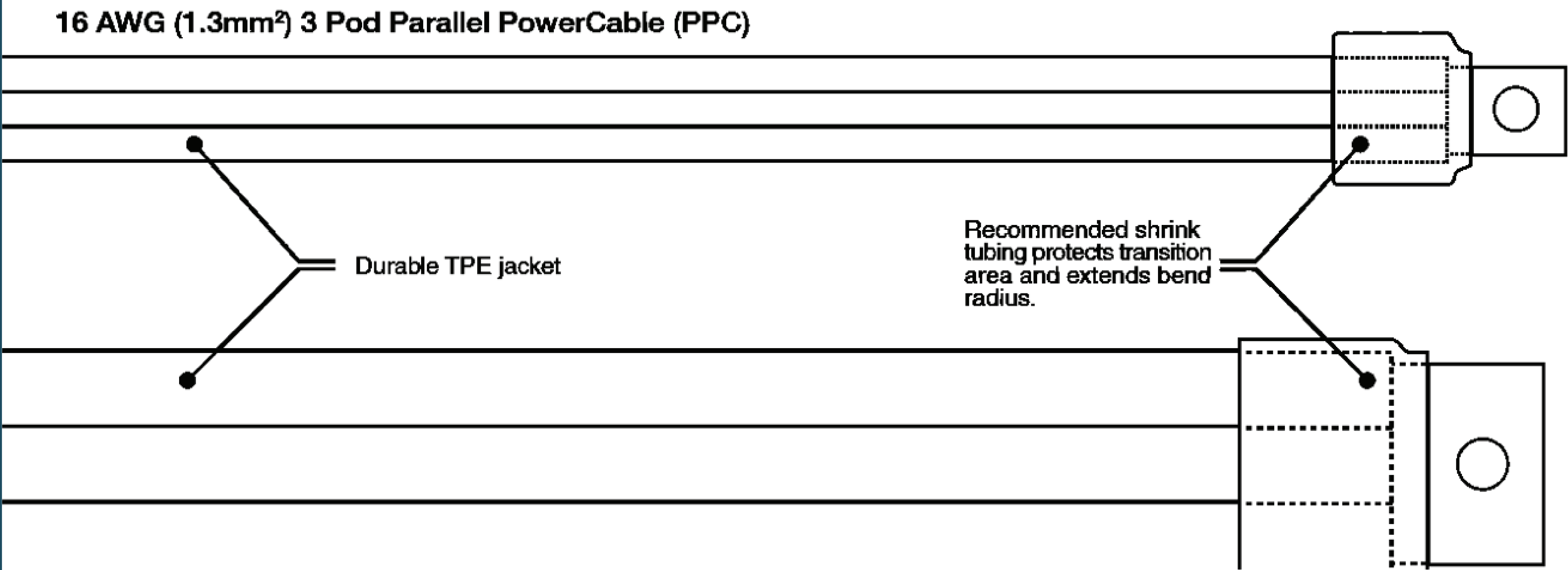
# Parallel PowerCable (PPC)<sup>™</sup>

PPC is available in red and black and in two sizes: 9/16 AWG (9/1.3mm<sup>2</sup>) and 12/10 AWG (12/5.3mm<sup>2</sup>). Each PPC size is divided into 3 “pods” which isolate parallel wires into individual groups for design flexibility. All PPC assemblies are manufactured with FusionLugs<sup>™</sup>.

9/16 AWG (9/1.3mm <sup>2</sup> )						
PART NUMBER	CABLE SIZE	NO. OF PODS	STRAND CONSTRUCTION	COLOR	*NOMINAL CAPACITY (AMPS)	RESISTANCE (OHMS PER 1000 FT.)
CD-0321-3B	9/16 AWG (9/1.3mm <sup>2</sup> )	3	65/34	Black	110	0.52 (1.7 OHMS/KM)
CD-0324-3R	9/16 AWG (9/1.3mm <sup>2</sup> )	3	65/34	Red	110	0.52 (1.7 OHMS/KM)
CD-0322-2B	6/16 AWG (6/1.3mm <sup>2</sup> )	2	65/34	Black	85	0.78 (2.6 OHMS/KM)
CD-0325-2R	6/16 AWG (6/1.3mm <sup>2</sup> )	2	65/34	Red	85	0.78 (2.6 OHMS/KM)
CD-0323-1B	3/16 AWG (3/1.3mm <sup>2</sup> )	1	65/34	Black	50	1.56 (5.1 OHMS/KM)
CD-0326-1R	3/16 AWG (3/1.3mm <sup>2</sup> )	1	65/34	Red	50	1.56 (5.1 OHMS/KM)

12/10 AWG (12/5.3mm <sup>2</sup> )						
PART NUMBER	CABLE SIZE	NO. OF PODS	STRAND CONSTRUCTION	COLOR	*NOMINAL CAPACITY (AMPS)	RESISTANCE (OHMS PER 1000 FT.)
CD-0327-3B	12/10 AWG (12/5.3mm <sup>2</sup> )	3	105/30	Black	335	0.1 (0.33 OHMS/KM)
CD-0330-3R	12/10 AWG (12/5.3mm <sup>2</sup> )	3	105/30	Red	335	0.1 (0.33 OHMS/KM)
CD-0328-2B	8/10 AWG (8/5.3mm <sup>2</sup> )	2	105/30	Black	250	0.15 (0.50 OHMS/KM)
CD-0331-2R	8/10 AWG (8/5.3mm <sup>2</sup> )	2	105/30	Red	250	0.15 (0.50 OHMS/KM)
CD-0329-1B	4/10 AWG (4/5.3mm <sup>2</sup> )	1	105/30	Black	150	0.29 (0.96 OHMS/KM)
CD-0332-1R	4/10 AWG (4/5.3mm <sup>2</sup> )	1	105/30	Red	150	0.29 (0.96 OHMS/KM)

\* Nominal current capacity tested at 30°C rise above ambient. Test cable was 18 inches long and terminated with FusionLugs on both ends.

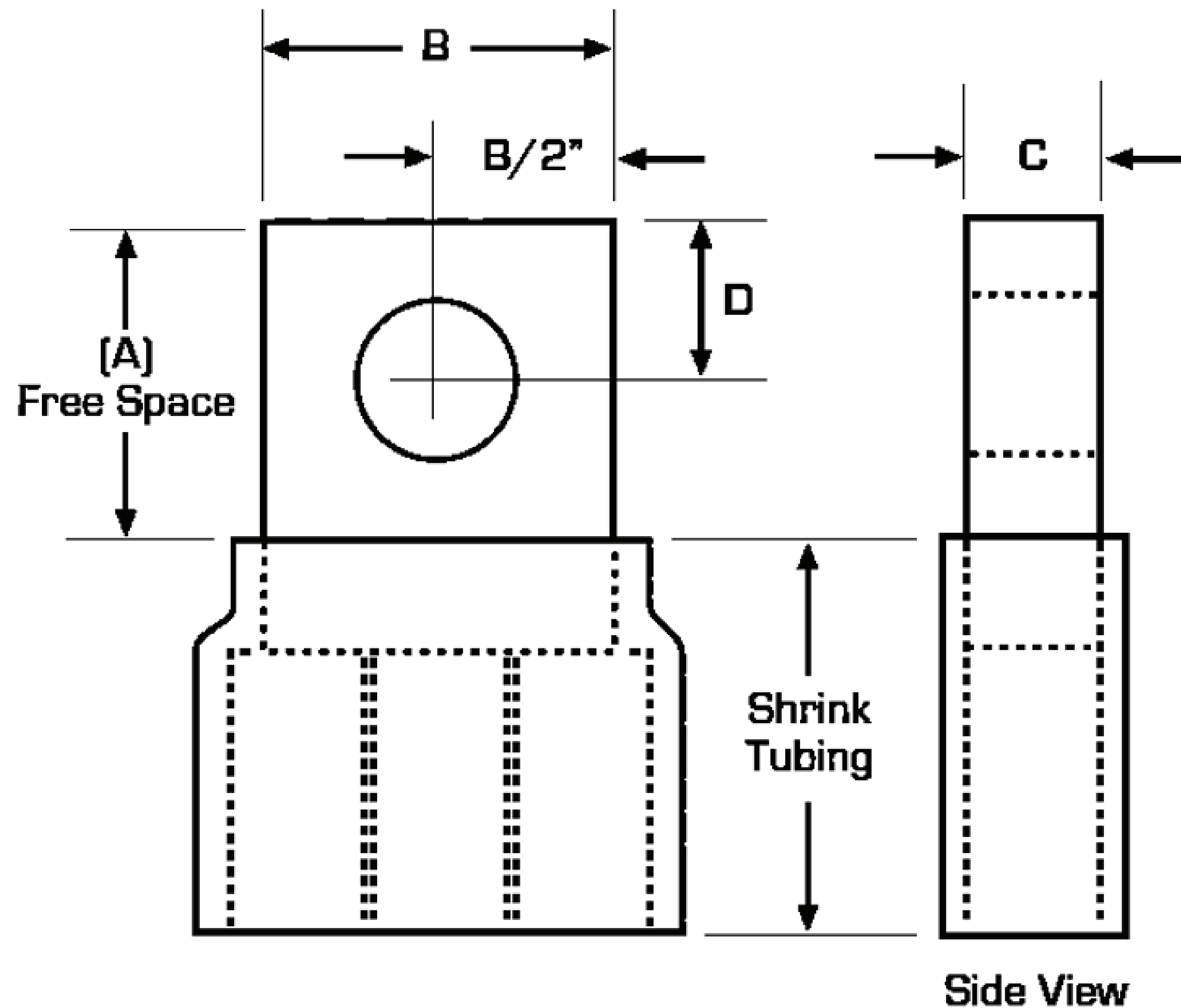


**10 AWG (5.3mm<sup>2</sup>) 3 Pod Parallel PowerCable (PPC)**



# Parallel PowerCable (PPC)<sup>TM</sup>

## Parallel PowerCable FusionLug

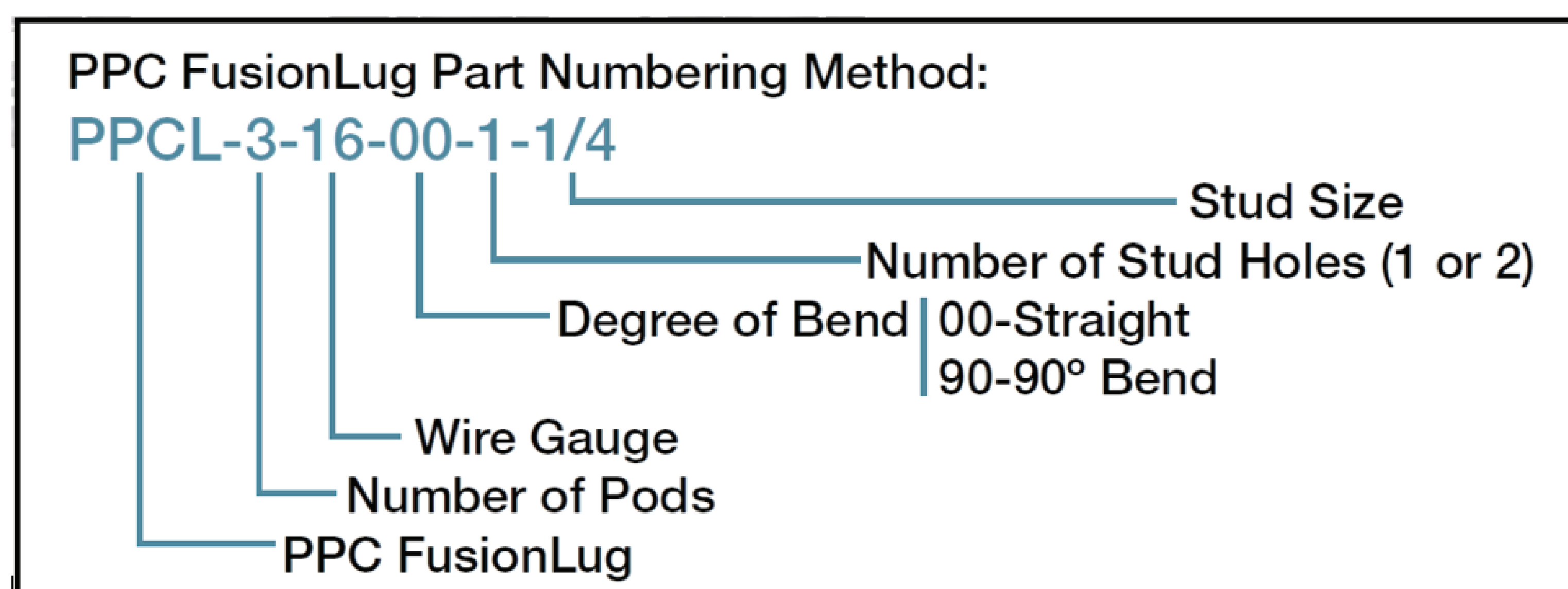


All Dimensions are in inches. (mm)

NO. OF PODS	WIRE GAUGE	PART NUMBER	ONE HOLE STANDARD				STUD HOLE		CLEARANCE HOLE		SHRINK TUBING
			A	B	C	D	STD.	METRIC	STD.	METRIC	
3	9/16 (9/1.3mm <sup>2</sup> )	PPCL-3-16-XX-X-X	1.00 (25.4)	0.850 (21.6)	0.110 (2.8)	0.43 (10.9)	1/4	M6	0.265 (6.7)	0.257 (6.5)	1.00 (25.4)
2	6/16 (6/1.3mm <sup>2</sup> )	PPCL-2-16-XX-X-X	1.00 (25.4)	0.550 (14.0)	0.100 (2.5)	0.28 (7.1)	1/4	M6	0.265 (6.7)	0.257 (6.5)	1.00 (25.4)
1	3/16 (3/1.3mm <sup>2</sup> )	PPCL-1-16-XX-X-X	1.00 (25.4)	0.350 (8.9)**	0.100 (2.5)	0.18 (4.6)	#10	M5	0.200 (5.1)	0.209 (5.3)	1.00 (25.4)
3	12/10 (12/5.3mm <sup>2</sup> )	PPCL-3-10-XX-X-X	1.25 (31.8)	1.600 (40.6)	0.180 (4.6)	0.80 (20.3)	3/8	M10	0.397 (10.1)	0.413 (10.5)	1.50 (38.1)
2	8/10 (8/5.3mm <sup>2</sup> )	PPCL-2-10-XX-X-X	1.25 (31.8)	1.250 (31.8)	0.180 (4.6)	0.63 (16.0)	3/8	M10	0.397 (10.1)	0.413 (10.5)	1.50 (38.1)
1	4/10 (4/5.3mm <sup>2</sup> )	PPCL-1-10-XX-X-X	1.25 (31.8)	0.500 (12.7)	0.160 (4.1)	0.25 (6.4)	1/4	M6	0.265 (6.7)	0.257 (6.5)	1.50 (38.1)

\*B/2= Half of B

\*\*#10 Stud Hole or Smaller



### Tolerances:

A = Length	+0.1/-0 (+2.5/-0)
B = Width	+/- 0.02 (+/- 0.51)
C = Thickness	Max
Hole Diameter, B/2, D	+/- 0.01 (+/- 0.25)

Bent Lugs available upon request.  
Two hole standards are available upon request.

Terminology: 9/16 means 9 conductors of 16 AWG, 3 per pod  
12/10 means 12 conductors of 10 AWG, 4 per pod.