

#### **RADLOK™**

## Rugged, Compact & Cost Effective Power Interconnect Solution

Utilizing Amphenol latest RADSOK $^{\circ}$  technology, Amphenol RADLOK $^{\intercal}$  product line was designed with compactness and robustness in mind.

Power Interconnect products on today's market often require additional mounting hardware (e.g. washers, clamps, bolts, nuts) prone to costly labor and consume human resources upon installation and maintenance routine.

Coupling with Amphenol's RADLOK™ PIN, the one finger operated lock feature allows user connects any power distribution/storage system in a quick and secure manner.

RADLOK  $^{\text{TM}}$  product line is the answer to industries where a custom, reliable, easy to install, rugged, and cost effective solution is required.

#### **FEATURES**

Current Rating: 70A - 400A

DC Voltage Rating: 1000V

Tool-Free Mechanical Locking

High cycle durability (500 mating cycles)

RoHS complaint

1 of 5 Rev 1.4 2014-02

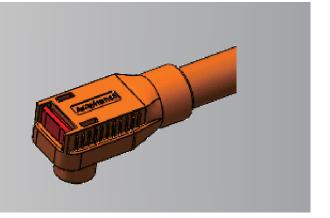
#### **Technical Data**

DC Current Rating	70A - 400A
DC Voltage Rating	1000V
Temperature Range	-40°C to +125°C
Flammability	UL94 V-0
Mating Cycle	500

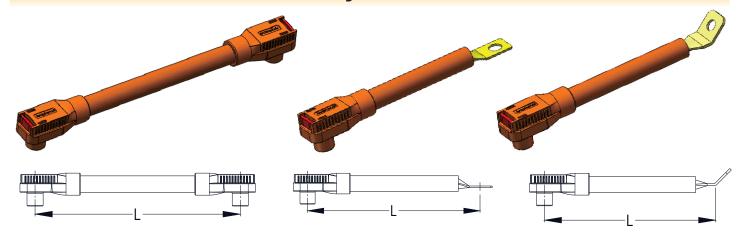


#### RADLOK™ Recommended Cable Size & Current

RADSOK® Size (mm)	Recommended Cbl Size (m m²)	Current (A)		
3.6	10	70		
5.7	16	90		
0.1	25	120		
8.0	35	150		
	50	200		
	50	200		
10.0	70	250		
	95	300		
10.3	95	350		
12.0	120	400		



## **RADLOK™** Cable Assembly



RADLOK™ + RADLOK™

RADLOK™ + Power Lug

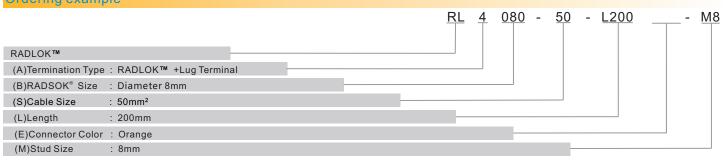
RADLOK™ + Power Lug 45 Degree

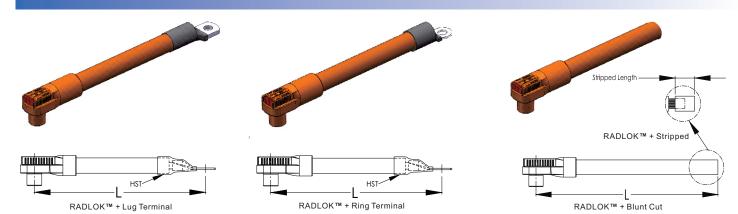
#### **RADLOK™** Cable Assembly Ordering Information

P	roduct Type	(A) Termination Type		(B) RADSOK® Size (mm)		(S) Cable Size	(L) Length (mm)		(E) Connector Color		(M) Stud Size
		1	RADLOK <sup>™</sup> + RADLOK <sup>™</sup>	036	3.6					Blank for Orange	N/A
		2	RADLOK <sup>TM</sup> + Power Lug	057	5.7				BK	Black	*M / E + Stud Size
	· ·	3	RADLOK <sup>TM</sup> + Power Lug 45 Degree	080	8.0	Refer to "RADLOK <sup>TM</sup> Recommended Cable Size & Current" Chart		L+Length	RE	Red	*M / E + Stud Size
RL	RADLOK™	4	RADLOK <sup>TM</sup> + Lug Terminal	100	10.0						*M / E + Stud Size
		5	RADLOK <sup>™</sup> + Ring Terminal	103	10.3						*M / E + Stud Size
	(	6	RADLOK <sup>™</sup> + Blunt Cut	120	12.0						N/A
		7	RADLOK <sup>TM</sup> + Stripped								Stripped Length(mm)

\*Note : For "Stud Size",M for Metric Unit & E for Imperial Unit. For example,M8 means the Stud Size is 8mm; E3/4 means the Stud Size is 3/4inch.

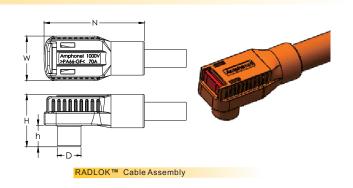
#### Ordering example





#### RADLOK™ Cable Assembly

RADSOK® Size	Recommended	RADSOK <sup>®</sup> Size (mm)							
(mm)	Cbl Size (mm²)	w	N	Н	h	D			
3.6	10	15.5	36.0	18.3	7.3	Ф 8.1			
5.7	16 & 25	18.5	47.0	21.9	9.4	Ф 11.2			
8.0	35 & 50	21.6	55.3	27.0	11.8	Ф 14.6			
	35 & 50	26.0	53.0	33.8	15.9	Ф 17.5			
10.0	70	26.0	63.2	34.3	15.9	Ф 17.5			
	95	26.0	65.5	37.0	15.9	Ф 17.5			
10.3	95	26.0	65.5	37.0	15.9	Ф 17.5			
12.0	120	28.5	76.0	37.3	15.0	Ф 20.0			



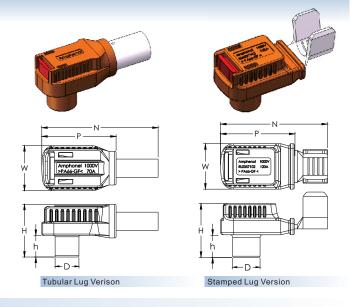
### **RADLOK™** Connector

#### **RADLOK™** Connector Parameter (Tubular Version)

RADSOK® Size(mm)	RADSOK® Size (mm)									
KADSOK SIZE(IIIII)	W	N	Н	h	D	Р				
3.6	15.5	38.0	18.3	7.3	Ф 8.1	27.0				
5.7	18.5	47.7	22.9	9.4	Ф 11.2	33.0				
8.0	21.6	56.0	27.7	11.8	Ф 14.6	38.8				
10.0	31.0	61.0	35.3	15.9	Ф 17.5	37.0				
10.3	31.0	61.0	35.3	15.9	Ф 17.5	37.0				
12.0	33.0	70.5	35.9	15.0	Ф 20.0	44.5				

#### **RADLOK™ Connector Parameter (Stamped Version)**

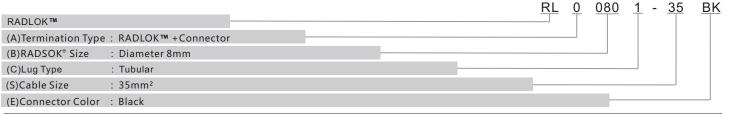
RADSOK® Size(mm)	RADSOK® Size (mm)									
KADSOK SIZE(IIIII)	W	N	Н	h	D	Р				
5.7	18.5	46.0	21.9	9.2	Ф 11.2	30.0				
8.0	21.7	54.4	27.7	12.5	Ф 14.6	34.3				
10.0	25.7	65.0	33.3	16.1	Ф 17.5	35.7				



#### **RADLOK™** Connector Ordering Information

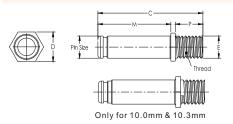
Product Type		(A) Termination Type		(B) RADSOK <sup>®</sup> Size (mm)		(C) Lug Type		(S) Cbl Size		(E) Connector Color	
			036	3.6	1	Tubular			Blank for Orange		
			RADLOK <sup>TM</sup> Connector	057	5.7	2	Stamped	Refer to "RADLOK <sup>TM</sup> Recommended Cable Size & Current" Chart	BK	Black	
RL	RADLOK™	0		080	8.0				RE	Red	
KL	KADLOK		RADLOR Connector	100	10.0						
				103	10.3						
				120	12.0						

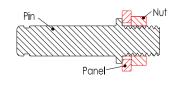
#### Ordering example

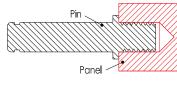


3 of 5 Rev 1.4 2014-02

### **RADLOK™** Pin







Instruction 1

Instruction 2

#### **RADLOK™** Pin Data

KAD	KADLOK ** FIII Data															
		RADLOK™	Current						RA	DLOK™ D	imension	s (mm)				
Pin Type	Pin End	Pin Size (mm)	e (A)	С	D	E	G	L	М	N	Р	Q	s	w	Thread	Torque Force (N·m)
		3.6	70	28.0	7.0				17.5		8.0				M 4 x 0.7-6g	2.5±0.2
		5.7	120	34.1	10.0				21.1		10.0				M 6 x 1.0-6g	4.0±0.4
Pin	N/A	8.0	200	42.4	13.0	N/A	N/A	N/A	26.4	N/A	12.0	N/A	N/A	N/A	M 8 x 1.25-6g	7.5±0.5
		10.0	300	53.2	16.0				32.2		16.0			1077	M 10 x 1.5-6g	20.0±1.0
		10.3	350	53.2	16.0				32.2		16.0				M 10 x 1.5-6g	20.0±1.0
		12.0	400	58.6	18.0	+ 44.0			32.6		20.0				M 12 x 1.75-6g	24.0±1.0
		3.6	70	43.9	Ф 11.9	Ф 11.9	15.2	22.2	14.0	21.0	8.0	M3	2.8		M 4 x 0.7-6g	2.5±0.2
		5.7	120	49.6	Ф 15.2	Ф 14.7	18.2	24.2	17.0	25.0	10.0				M 6 x 1.0-6g	4.0±0.4
	Thread	8.0	200	56.4	Ф 19.6	Ф 18.2	23.7	25.0	21.0	30.0	12.0			N/A	M 8 x 1.25-6g	7.5±0.5
	Ę	10.0	300	67.0	Ф 23.0	Ф 20.6	25.7	29.0	24.0	33.0	16.0	M4	4.2	IV/A	M 10 x 1.5-6g	20.0±1.0
		10.3	350	67.0	Ф 23.0	Ф 20.6	25.7	29.0	24.0	33.0	16.0		4.2		M 10 x 1.5-6g	20.0±1.0
		12.0	400	72.0	Ф 25.5	Ф 23.3	27.7	33.0	26.0	36.0	20.0				M 12 x 1.75-6g	24.0±1.0
		3.6	70	46.7	Ф 11.9	Ф 12.5	10.3	5.0	14.0	21.0	13.5	M3	4.2	4.2		
		5.7	120	53.6	Ф 15.2	Ф 14.5	12.4	7.0	17.0	25.0	16.0			6.3		i i
Feed	6n	8.0	200	62.5	Ф 19.6	Ф 22.1	15.6	10.0	21.0	30.0	22.5			8.5		
Thru Pin	3	10.0	300	70.0	Ф 23.0	Ф 25.6	17.6	12.5	24.0	33.0	24.0	M4	N/A	10.5	N/A	N/A
		10.3	350	70.0	Ф 23.0	Ф 25.6	17.6	12.5	24.0	33.0	24.0			10.5		i i
		12.0	400	77.5	Ф 25.5	Ф 27.6	19.6	14.0	26.0	36.0	27.5			13.0		i i
		3.6	70	41.3	Ф 11.9	Ф 11.9	15.2		14.0	21.0		M3				
		5.7	120	50.0	Ф 15.2	Ф 14.7	18.2		17.0	25.0			2.8			i i
	_	8.0	200	60.8	Ф 19.6	Ф 18.2	23.7		21.0	30.0						
	P.	10.0	300	74.5	Ф 23.0	Ф 20.6	25.7	N/A	24.0	33.0	N/A	M4		N/A	N/A	N/A
		10.3	350	74.5	Ф 23.0	Ф 20.6	25.7		24.0	33.0		4.2	4.2			
		12.0	400	78.0	Ф 25.5	Ф 23.3	27.7		26.0	36.0						

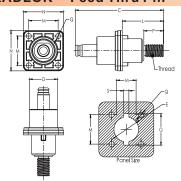




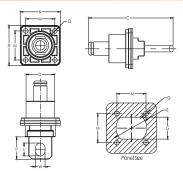




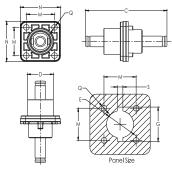
#### RADLOK™ Feed Thru Pin







RADLOK™ Feed Thru Pin(Pin - Lug)

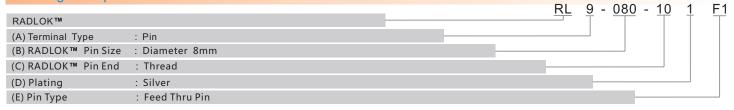


RADLOK™ Feed Thru Pin(Pin - Pin)

#### **RADLOK™** Pin Ordering Information

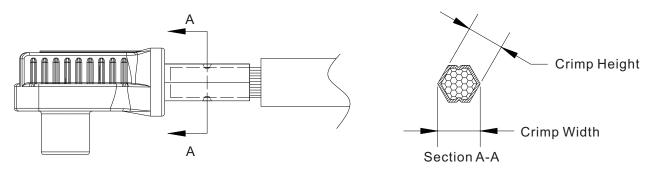
Product Type (A) Termination Type		(B) RADSOK® Size (mm)		(C) Pin End		(D) Plating Type		(E) Modification		
			036	3.6	10	Thread	1	Silv er		Blunk for Standard Pin
			057	5.7	20	Lug	2	Tin	F1	Feed Thru Pin
RL RADLOK™	9	RADLOK <sup>™</sup> Pin	080	8.0	30	Pin-Pin	3	Nickel		
KL KADLOK	9		100	10.0						
			103	10.3						
			120	12.0						

$\sim$				
()rd	erinc	$1 \triangle V 2$	mn	
$\mathbf{v}_{\mathbf{l}}$		ı Caa	וטווו	



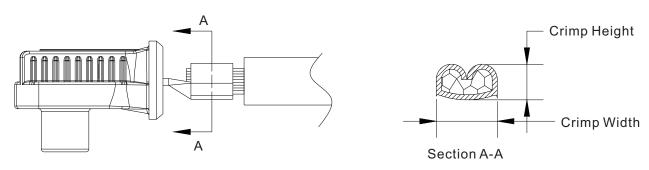
### **RADLOK™** Crimping Specification

#### RADLOK™ Connector Crimping Specification (Tubular Version)



Ordering Number	Wire Size (mm²)	Crimp Height (mm)	Crimp Width (mm)	Pullout Force (N)
RL00361-35	10	5.5±0.1	6.0±0.1	600
RL00571-35	25	8.3±0.1	9.0±0.1	1900
RL00801-35	35	9.5±0.1	10.5±0.1	2200
RL00801-50	50	11.4±0.1	12.8±0.1	2700
RL01001-50	50	11.4±0.1	12.8±0.1	2700
RL01001-70	70	13.3±0.1	14.8±0.1	3300
RL01001-95	95	16.7±0.1	18.2±0.1	3700
RL01201-120	120	17.3±0.1	19.0±0.1	4000

#### **RADLOK™** Connector Crimping Specification (Stamped Version)



Ordering Number	Wire Size (mm²)	Crimp Height (mm)	Crimp Width (mm)	Pullout Force (N)
RL00362-35	10	5.0±0.1	7.4±0.1	600
RL00572-35	25	7.2±0.1	10.9±0.1	1900
RL00802-35	35	9.5±0.1	12.4±0.1	2200
RL00802-50	50	10.4±0.1	12.5±0.1	2700
RL01002-35	35	9.4±0.1	12.3±0.1	2200
RL01002-50	50	10.2±0.1	12.4±0.1	2200
RL01002-70	70	13.0±0.1	18.4±0.1	3300
RL01002-95	95	14.7±0.1	18.8±0.1	3700
RL01202-120	120	17.0±0.1	21.3±0.1	4000

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

Notice: 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. The user should assume that all safety measures are indicated or that other measures may not be required. Specifications are typical and may not apply to all connectors. AMPHENOL is a registered trademark of Amphenol Corporation.

#### For further information on your individual application requirements, contact: Amphenol Corporation

### **Amphenol** Technical Products International Co.

2110 Notre Dame Avenue Winnipeg, MB Canada R3H OK1

Telephone: 1-204-697-2222 Fax: 1-204-694-6164 www.tpil.com Amphenol Sincere Flex Crcuits Co., Ltd. No.A, WanAn Industrial Park LanHe Town, Nansha District, Guangzhou - China 511480

5 of 5

Telephone: 020-3483-9801 Fax: 020-3483-9800 www.amphenol-gasf.com

#### **Amphenol** Industrial Operations

40-60 Delaware Street Sindny, New York 13838-1395 - USA Telephone: 020-3483-9801

Fax: 020-3483-9800 www.amphenol-industrial.com

Rev 1.4 2014-02