

# **Table of Contents**





# PowerArc and CoronaArc Igniter Power Packs

We provide power packs for marine and industrial applications. Our patented PowerArc and CoronaArc circuit ensures reliable ignition from natural gas to the most challenging heavy fuel oil.



## PowerArc Igniter Power Pack Specifications

Model No.	Input Voltage	Output Voltage	Output Energy (Joules)	Spark Rate	Power Consumption (Watts)	Dimensions (in.)	Mounting Holes (in.)	Weight (lbs.)	Enclosure Size (in.)	Approvals
M2099-12PA6	120/240 VAC 50/60 Hz	2000 VDC	12	9 -12 Hz	500	11 x 9 x 4 %	10 ¼ x 8 ¼	18	12 x 10 x 6	FM
M2099-12J-SLPA	120/240 VAC 50/60 Hz	2000 VDC	12	2 Hz	80	11 x 9 x 4 %	10 ¼ x 8 ¼	12	12 x 10 x 6	-
M2120E-12J-SLPA	120/240 VAC 50/60 Hz	2000 VDC	12	2 Hz	80	9 x 7 x 4 %	8 ¼ x 6 ¼	11	10 x 8 x 6	-
FM96-19F	120/240 VAC 50/60 Hz	2000 VDC	4	3 - 6 Hz	120	7 x 5 ½ x 4 %	6 ¼ x 4 ¼	9	10 x 8 x 6	FM
UL96-19F	120/240 VAC 50/60 Hz	2000 VDC	4	3 - 6 Hz	120	7 x 5 ½ x 4 %	6 ¼ x 4 ¼	9	10 x 8 x 6	UL/CSA
M29-4JPAR5	120/240 VAC 50/60 Hz	2000 VDC	4	4 - 6 Hz	120	9 x 7 x 4 %	8 ¼ x 6 ¼	10	10 x 8 x 6	-
76-90 Power Supply *	120/240 VAC 50/60 Hz	2000 VDC	12	9-12 Hz	500	10 x 9 ¾ x 3	8 ¾ x 1 ½	15	12 x 10 x 6	-
I-1253 Red Head *	120/240 VAC 50/60 Hz	2000 VDC	12	9-12 Hz	500	9 ½ x 5 ¼ x 3	N/A	5	N/A	-

<sup>\*</sup>Our 76-90 Power Supply and I-1253 Red Head are used concurrently and are both required for operation.

# CoronaArc Igniter Power Pack Specifications

Model No.	Input Voltage	Output Voltage	Output Energy (Joules)	Spark Rate	Power Consumption (Watts)	Dimensions (in.)	Mounting Holes (in.)	Weight (lbs.)	Enclosure Size (in.)	Approvals
M28CA-RF12C	120/240 VAC 50/60 Hz	2000 VDC & 15,000 VDC	12	9 Hz	600	11 x 9 x 4 %	10 ¼ x 8 ¼	18	12 x 10 x 6	-
M2013-4JCA2	120/240 VAC 50/60 Hz	2000 VDC & 14,000 VDC	4	5 Hz	110	11 x 9 x 4 %	10 ¼ x 8 ¼	12	12 x 10 x 6	-
M24V4-4JCA2	120 VAC 50/60 Hz	2000 VDC & 14,000 VDC	4	5 Hz	110	9 x 7 x 4 %	8 ¼ x 6 ¼	11	10 x 8 x 6	-

## **Enclosure Part Identification**

To specify the enclosure type you'd like to order, please select the features required and build the part number using the option codes below. See example below. Please call +1 (410) 876-3616 or email info@icimarine.com for assistance with ordering options not listed below.



Enclosure	Size	Material	Rating	Latch Options*	Cover Options*
	1086 = 10" x 8" x 6"	C = Carbon Steel	N12 = NEMA12	CL = Screw Clamp Latch**	HC = Hinged Cover**
	12106 = 12" x 10" x 6"	SS = Stainless Steel	N4 = NEMA4	QT = Quarter Turn Latch	SC = Screw On Cover
		F = Fiberglass	N4X = NEMA4X	QR = Quick Release Latch	LC = Lift Off Cover
		A = Aluminum	NEXP = Explosion Proof	PL = Padlock Latch	W = Window Cover
		P = Polycarbonate			

<sup>\*</sup>Only available in some materials and ratings

<sup>\*\*</sup>Standard options unless otherwise specifed.

<sup>\*\*\*</sup>We use a combination of manufacturers such as Hoffman, Saginaw, Weigmann, Hammond, Rittal, and Killark based on availability and customer need.

# PowerArc and CoronaArc Igniter Probes

We offer replaceable igniter probes and customized probe solutions to meet your needs. Our probes can withstand temperatures ranging from 800° F - 2000° F. The self-cleaning tip offers increased reliability even in moisture dense environments. The choice of 4 different probe connection adapters allows for easy adaptability.





## **PowerArc Igniter Probe Specifications**

Model No.	Dimension A (in.)	Dimension B (in.)	Dimension C (in.)	Connection Type D	Required Socket Adapter	Tip Material	Continuous Operating Temp.	Maximum Operating Temp.	Body Material	Center Electrode Material
I-1140	12	3/8	9/16	3/4 - 20	I-1001D	Carbon Steel	800° F	1000° F	304SS	304SS
I-1140HD	12	9/16	9/16	3/4 - 20	I-1001D	Inconel	1000° F	1200° F	304SS	304SS
I-1140Z	12	3/8	1/2	7/16 - 20	I-1001Z	Carbon Steel	800° F	1000° F	304SS	304SS
I-1140HDZ	12	1/2	1/2	7/16 - 20	I-1001Z	Inconel	1000° F	1200° F	304SS	304SS
I-1568	22 1/4	9/16	9/16	1/4 NPT	I-1342	Carbon Steel	800° F	1000° F	304SS	304SS
I-1568HD	22 1/4	9/16	9/16	1/4 NPT	I-1342	Inconel	1000° F	1200° F	304SS	304SS

<sup>-</sup> Custom Probes available upon request.

## CoronaArc Igniter Probe Specifications

Model No.	Dimension A (in.)	Dimension B (in.)	Dimension C (in.)	Connection Type D	Required Socket Adapter	Tip Material	Continuous Operating Temp.	Maximum Operating Temp.	Body Material	Center Electrode Material
I-2694	20 ½	1/2	9/16	9/16 - 24	I-2725	Nichrome	1500° F	2000° F	310SS	310SS

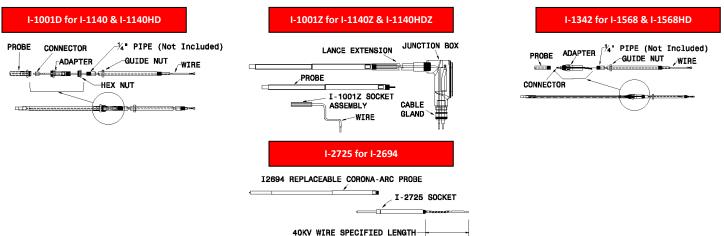
<sup>-</sup> Custom Probes available upon request.

## **High Tension Igniter Probe Specifications**

Model No.	Dimension A (in.)	Dimension B (in.)	Dimension C (in.)	Connection Type D	Required Socket Adapter	Tip Material	Continuous Operating Temp.	Maximum Operating Temp.	Body Material	Center Electrode Material
I-3628	12	1/2	1/2	7/16 - 20	I-1001Z	Inconel	1200° F	1500° F	304SS	304SS

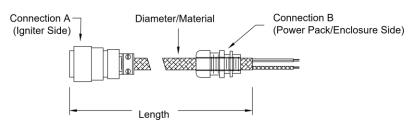
<sup>-</sup> Custom Probes available upon request.

# Igniter Probe Socket Adapter Configurations



Our selection of igniter power cables ensure power is directed where you need it most. We have the customized cabling solution to meet your needs; from standard PVC jacketed, braided stainless steel, or class 1 division 2 seal tight.





## PowerArc Igniter Cables

Model No.	Connection A	Connection A Connection B		Material	Wire	Length	Bend Radius (in.)
I-1275	2 Pin Mil-Spec Quick Disconnect Socket	Cable Gland (12" wire strip)	0.45	PVC Insulated	12AWG 2 Conductor	Customer Specified	2"
1-3624	2 Pin Mil-Spec Quick Disconnect Socket	Seal Tight Cable Gland (12" wire strip)	0.7	PVC Jacket/ Steel Core	12AWG 2 Conductor	Customer Specified	5"
I-3626	Seal Tight Cable Gland (12" wire strip)	Seal Tight Cable Gland (12" wire strip)	0.7	PVC Jacket/ Steel Core	12AWG 2 Conductor	Customer Specified	5″
I-3632*	2 Pin Mil-Spec Quick Disconnect Socket	2 Pin Mil-Spec Quick Disconnect Socket	0.7	PVC Jacket/ Steel Core	12AWG 2 Conductor	Customer Specified	5"

<sup>-</sup> Custom cables available upon request.

# CoronaArc Igniter Cables

Model No.	Connection A	Connection B	Diameter (in.)	Material	Wire	Length	Bend Radius
I-2582SS	%-20 Quick Disconnect	Grounded Cable Gland	0.525	Braided Stainless	12AWG Single Conductor	Customer Specified	3″
I-2542	¾-20 Connector	Grounded Cable Gland	0.525	Braided Bronze	12AWG Single Conductor	Customer Specified	2"

 $<sup>\</sup>hbox{-} \hbox{ Custom cables available upon request.}\\$ 

# **High Tension Igniter Cables**

Model No.	Connection A	Connection B	Diameter (in.)	Material	Wire	Length	Bend Radius
I-3630	Seal Tight Cable Gland (12" wire strip)	Seal Tight Cable Gland (12" wire strip)	0.7	PVC Jacket/ Steel Core	12AWG 2 Conductor	Customer Specified	5"

<sup>-</sup> Custom cables available upon request.

<sup>\*</sup>Requires additional quick disconnect plug mounted in enclosure.



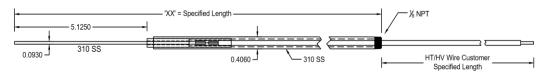
# Flame Rods / Spark Rods

We design and manufacturer customized flame and spark rods to meet your requirements. Below are some examples of flame and spark rods we produce which can be reconfigured in any way. Our concentric disc design eliminates the need for realignment and promotes improved wear characteristics.

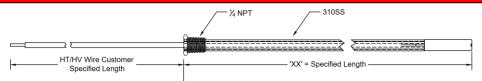


# SC5104-XX Flame Rod 'XX' = Specifies Length 0.2500 0.4840 0.3125 310SS Ceramic 310SS

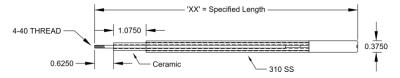
## I-2586-XX Flame Rod



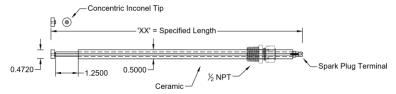
#### I-2186-XX Spark Rod



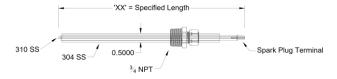
#### H5061-XX Spark Rod



## I-2803-XX Spark Rod



## I-3600-XX Spark Rod



We offer a variety of retract configurations to extend the lifecycle of igniter probes under high radiant heat conditions. Options include stroke length, proximity switches providing proof of insertion and retraction, cylinder boot cover, 24V or 120V valve, junction box configuration, quick disconnect and more.



## **Standard Retract**



- Customer specified stroke length (8" Standard)
- Guide tube union or flange easily adapts to existing burner fronts
- Can be used with our 4 or 12 Joule PowerArc Power Pack
- Junction box can be configured to have quick disconnect power cable using Mil-Spec connectors

## **Red Head Retract**



- Customer specified stroke length (8" Standard)
- Guide tube union or flange easily adapts to existing burner front
- 12 Joule configuration using our retract mounted Red Head in conjunction with our 76-90 Power Supply
- Junction box can be configured to have quick disconnect power cable using Mil-Spec connectors

## **Through-Bore Retract**



- Customer specified stroke length (8" Standard)
- Adapter flange can be mounted directly on burner front at desired angle
- Compact design decreases overall footprint
- Can be configured using our standard retract junction box or red head design

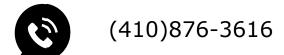


Frederick Cowan Products by ICI has served the industrial marketplace for over 60 years. We are committed to the design, manufacture, and supply of Igniter products for challenging applications throughout the industrial marketplace. Our facility offers service, technical support, and repair. We carry a full line of spares to ensure you stay running with minimal downtime.

Our patented technology is unique, and we continuously strive to improve our products through on-going design enhancements to supply you with unrivaled and innovative solutions.

# "Ignite the Credibility of Your System Today!"







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