



DC3 Series Electrode Assemblies

DC3 Series Electrode Assemblies are used with Direct Spark Ignition (DSI) systems. Various combinations of electrodes, ground rods, and sensing probes are available. Consult BASO Gas Products regarding electrode assembly details required for your specific application.

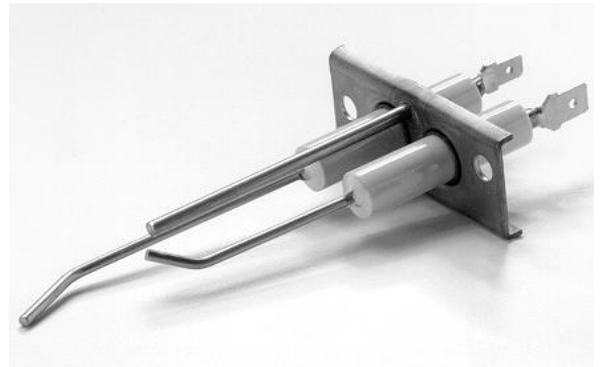


Figure 1: DC3 Electrode Assembly

Features and Benefits	
<input type="checkbox"/> Compact Design	Permits installation in a variety of DSI applications
<input type="checkbox"/> Electrodes Cut to Length and Configured	Maximizes performance on DSI applications
<input type="checkbox"/> 2.9 mm (0.114 in.) Diameter Electrodes Available	Allows for use with high temperature applications
<input type="checkbox"/> Detachable Lead Wires	Allows individual wires to be replaced instead of the entire assembly

Operation

A DC3 electrode, in either single, double, or triple rod construction, directly ignites the main burner by a spark transmitted by the DSI ignition control. If main burner flame is sensed within the trial for ignition period, the ignition control allows the main gas valve to remain open until the appliance thermostat is satisfied.

General Construction

The DC3 is Kanthal D or Hoskins 815 rods in a Steatite ceramic insulator mounted to a plated cold rolled steel bracket. Standard rod diameter is 2.9 mm (0.114 in.). Electrodes and sensors are also available with 2.13 mm (0.084 in.) diameter rods. Sensor and high voltage cables are available in lengths from 152 to 1,220 mm (6 to 48 in.), in 152 mm (6 in.) increments. Insulated terminals on the sensor and high voltage cable are optional. Straight and right angle boots are available for connection of the high voltage cable to the ignition control.

Note: The high voltage cable must not be in continuous contact with a metal surface.

Bend Specifications

The minimum distance between bends is 6.35 mm (0.25 in.). The minimum distance from the ceramic insulator to the first bend is 6.35 mm (0.25 in.). The maximum bend angle is 90 degrees, and the minimum bend radius is 1.60 mm (0.063 in.). The maximum number of bends per rod is two. See Figure 2.

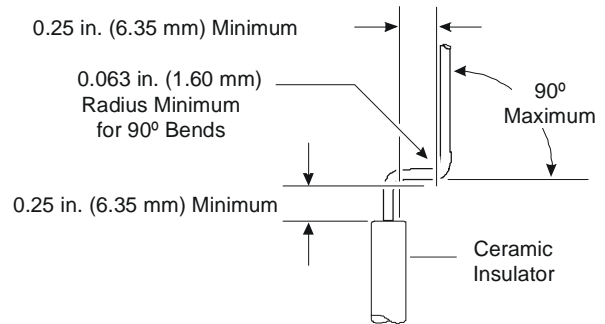


Figure 2: Y58 Bend Specifications

Dimensions

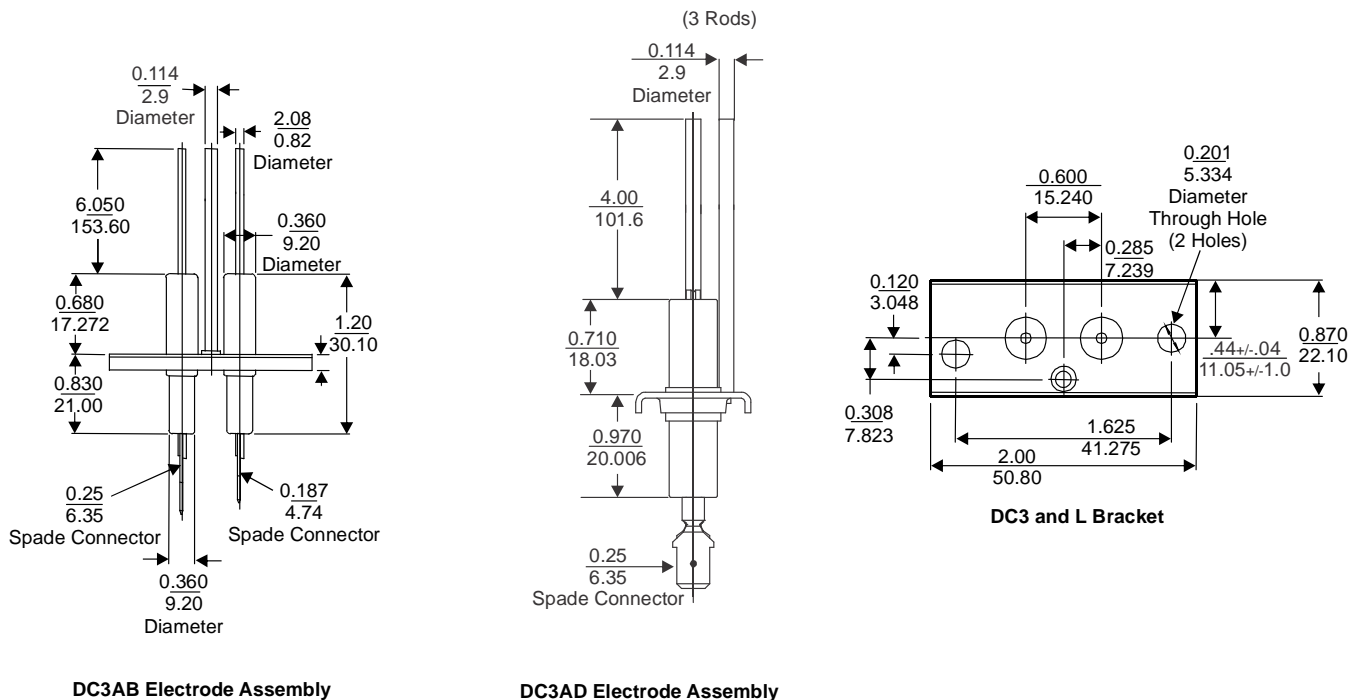
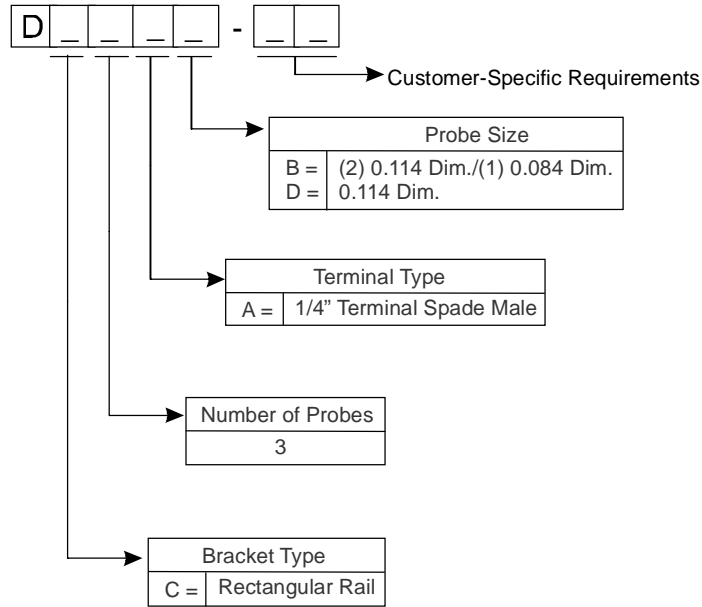


Figure 3: DC3 Dimensions, in. (mm)

Ordering Information



The presence of a particular construction in this information does not guarantee its availability. Consult BASO Gas Products for available constructions.

Figure 4: Ordering Matrix

Specifications

Product	DC3 Series Electrode Assemblies		
Material	Rod:	Kanthal D or Hoskins 815	
	Ceramic:	Steatite	
	Bracket:	Plated steel	
Maximum Temperature	Rod:	1800°F (980°C)	
	Ceramic:	1000°F (538°C)	
Lead Length	6 in. (152 mm) minimum, 48 in. (1,220 mm) maximum, in increments of 6 in. (152 mm)		
High Voltage Lead	Gauge:	18 AWG; overall diameter	
	Maximum temperature:	446°F (230°C)	
	Connection to electrode:	0.25 in. (6.35 mm) spade terminal	
	Connection to ignition control:	0.25 in. (6.35 mm) spade terminal, Rajah, and none	
Sensor Lead		Standard	High Temperature
	Gauge:	18 AWG	same as standard
	Maximum temperature:	302°F (150°C)	482°F (250°C)
	Connection to sensor:	0.187 in. (4.74 mm) or 0.25 in. (6.35 mm) spade terminal	same as standard
	Connection to ignition control:	0.25 in. (6.35 mm) spade terminal	same as standard
	Maximum rod length:	4 in. (101.6 mm)	
	Maximum bends per rod:	2	
	Maximum bend angle:	90 degrees	
Configurations	Minimum bend radius:	0.063 in. (1.60 mm)	
	Minimum distance between bends:	0.25 in. (6.35 mm)	
	Minimum distance from ceramic to first bend:	0.25 in. (6.35 mm)	
Agency Listings	CSA Certificate Number 229521-1656071		
Specification Standards	ANSI Z21.20, CAN1-6.4		

Performance specifications are nominal and conform to acceptable industry standards. All agency certification of BASO products is performed under dry and controlled indoor environmental conditions. Use of BASO products beyond these conditions is not recommended and may void the warranty. Product must be protected if exposed to water (dripping, spraying, rain, etc.) or other harsh environments. The original equipment manufacturer or end user is responsible for the correct application of BASO products. Consult BASO Gas Products LLC for questionable applications. BASO Gas Products LLC shall not be liable for damages or product malfunctions resulting from misapplication or misuse of its products.

Refer to the *Pilot Burner and Direct Spark Ignition (DSI) Applications with Flame Rectification Sensing Application Note* (Part No. BASO-AP-PILOT_BURNER/Direct Spark Ignition for necessary information on the installation, use, and servicing of this product.

1007 South 12th Street
PO Box 170
Watertown, WI 53094
1-877-227-6427 (1-877-BASOGAS)

www.baso.com
Printed in U.S.A.