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# DA180 Series Intrinsically Safe Giant LED Clusters

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For clear indication from a distance and from the side

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**ATEX Certified Ex II 2G,  
Ex ia IIC T4**

**Available in six colors**

**Suitable for zones 1 & 2**

**Tough impact-resistant IP65  
housing**

**Low current (20mA)**

**Can be supplied as loose parts  
or as a wall mounting display**

**Two clusters operable from a  
single IIC power source**

**2.6" diameter lens**

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The DA180 range of Giant LED Clusters provides extremely clear indication of process conditions for use in both safe and hazardous area. The 2.6" diameter lens not only provides clear indication from a distance but is also visible from the side. Available in a choice of six colors (red, green, yellow, amber, blue and white), the DA180 is a perfect choice for many visual warning tasks.

All colors are matched for equal brightness and all are current limited to 20mA with an integral regulator.

In hazardous areas it is possible to combine LEDs from a single IS interface, two for IIC interfaces and four with a IIB interface. The standard LED Cluster can also be supplied pre-installed in a stainless steel or polycarbonate box ready for immediate mounting on-site.



# Technical Specification

## Colors

The DA180 Series of LED Clusters is available in six colors. Colors are red, green, yellow, amber, blue and white

## High Reliability

All LED lamps are designed to provide a minimum of 100,000 hours service life

## Low Current Consumption

All LED lamps operate at 20mA or less and feature integral current limiting to maintain consistent brightness over the operating range of the voltage supply

## Use in Hazardous Areas

In hazardous areas the LED lamps must be powered through suitable intrinsically safe Isolators or Barriers. Up to two LED lamps can be driven from a single IIC interface

## Configuration

It is a simple procedure to replace or change the color of a panel indicator. Access is from the front of the panel and no tools are required. Simply unscrew the lens and replace the BA9s LED lamp

## Certification

ATEX certified to EN60079-0:2006 and EN60079-11:2007

Group II, Category 2G, Ex ia IIC T4  
Ta -4 to 140°F (Ta -20 to 60°C)

## Location

Zones 1 or 2. Gas Group IIC, IIB or IIA, Temp Class up to T4

## Certificate No.

KEMA07ATEX0204X

## Safety Parameters

Pi = 1W

Ii = 2A

Ci = 0nF

Li = 0mH

Ui = Pi/Ii for a supply circuit with non-linear current limiting

Ui = 4Pi/Ii for a supply circuit with linear current limiting

The device must be powered from an Ex ia IIC certified interface with output parameters lower than those shown above

## Supply

With suitable certified interface  
18-35VDC, current 20mA

## Recommended Interfaces

Zener Barriers: MTL7728+  
IS Isolators: MTL5521

## Environment

Operating temperature:  
-4 to 140°F (-20°C to 60°C)

Storage temperature:  
-4 to 176°F (-20°C to 80°C)

Humidity: 0-95% RH, non condensing

## Compliance

Immunity to EN61000-6-2:2005  
Emissions to EN61000-6-4:2007

## Construction

Lens – Polycarbonate

## Protection

IP65 when panel mounted

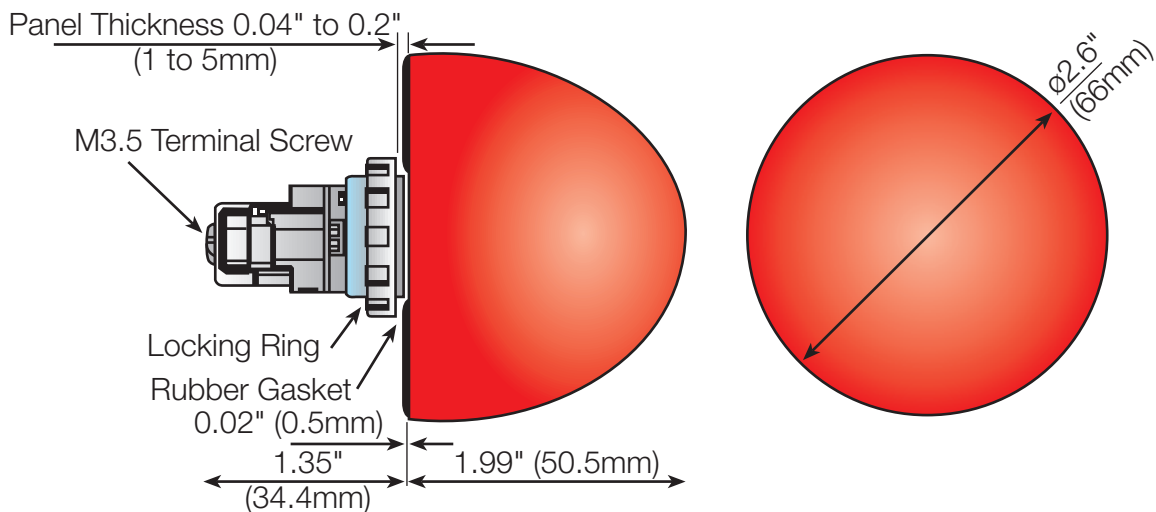
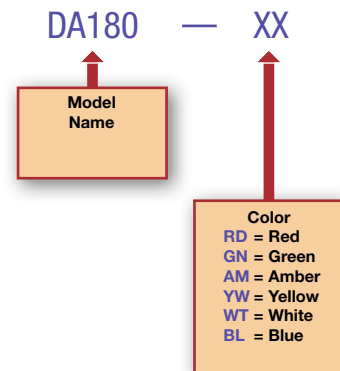
## Connections

M3.5 screw terminal for cables from 0.02" to 0.098" (0.5 to 2.5mm<sup>2</sup>)

## Mounting

0.89" (22.5mm) diameter hole 3.35" (85mm) apart

## Order Code



Due to our policy of continuous product development, we reserve the right to amend specifications without notice.



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