



## Overview

### Description

Magnet wire wound on a molded 30% glass filled bobbin framed in steel and encapsulated with 30% glass filled polyester resin. Coil impregnated with anerobic sealant.

## Ratings

### Properties

|                  |                                                                                                                                                 |
|------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|
| Magnet wire      | U.S. class H 180 °C (356 °F) minimum rating                                                                                                     |
| Mating connector | DT06-2S-P012 - <b>Note:</b> DEUTSCH DT04-2P<br>DELPHI/PACKARD number 12010973 - <b>Note:</b> Weather-Pack 2 terminal male,<br>lead wires 18 AWG |

### Electrical Parameters

|                                |                    |                                               |
|--------------------------------|--------------------|-----------------------------------------------|
| Coil resistance                | 4.83 ohm $\pm 3\%$ | - <b>Note:</b> At 20 °C (68 °F), 10 Vdc coil  |
|                                | 7.2 ohm $\pm 3\%$  | - <b>Note:</b> At 20 °C (68 °F), 12 Vdc coil  |
|                                | 19.0 ohm $\pm 5\%$ | - <b>Note:</b> At 20 °C (68 °F), 20 Vdc coil  |
|                                | 28.8 ohm $\pm 5\%$ | - <b>Note:</b> At 20 °C (68 °F), 24 Vdc coil  |
|                                | 64.8 ohm $\pm 5\%$ | - <b>Note:</b> At 20 °C (68 °F), 36 Vdc coil  |
|                                | 568 ohm            | - <b>Note:</b> At 20 °C (68 °F), 115 Vdc coil |
| Coil initial current draw      | 2304 ohm           | - <b>Note:</b> At 20 °C (68 °F), 230 Vdc coil |
|                                | 2.07 A             | - <b>Note:</b> 10 Vdc coil                    |
|                                | 1.67 A             | - <b>Note:</b> 12 Vdc coil                    |
|                                | 1.05 A             | - <b>Note:</b> 20 Vdc coil                    |
|                                | 0.83 A             | - <b>Note:</b> 24 Vdc coil                    |
|                                | 0.56 A             | - <b>Note:</b> 36 Vdc coil                    |
|                                | 0.17 A             | - <b>Note:</b> 115 Vac coil                   |
|                                | 0.09 A             | - <b>Note:</b> 230 Vac coil                   |
| Coil initial power consumption | 20 W               |                                               |

### Bidirectional Zener Diode Parameters

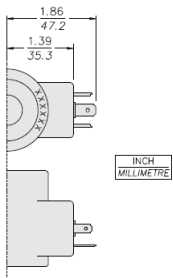
|                            |                |                                  |
|----------------------------|----------------|----------------------------------|
| Maximum clamping voltage   | 45.7 V         | - <b>Note:</b> 12 Vdc coil       |
|                            | 64.8 V         | - <b>Note:</b> 24 Vdc coil       |
| Maximum peak pulse current | 13.2 A         | - <b>Note:</b> 12 Vdc coil       |
|                            | 9.3 A          | - <b>Note:</b> 24 Vdc coil       |
| Reverse standoff voltage   | 28.2 V         | - <b>Note:</b> 12 Vdc coil       |
|                            | 40.2 V         | - <b>Note:</b> 24 Vdc coil       |
| Maximum reverse leakage    | 5.0 $\mu$ A    | - <b>Note:</b> 12, 24 Vdc coil   |
| Breakdown voltage          | 31.4 to 34.7 V | - <b>Note:</b> 12 Vdc coil       |
|                            | 44.7 to 49.4 V | - <b>Note:</b> 24 Vdc coil       |
| Diode part number          | 6110163        | - <b>Note:</b> 12 Vdc coil (ref) |
|                            | 4000063        | - <b>Note:</b> 24 Vdc coil (ref) |

### Unidirectional Diode Parameters

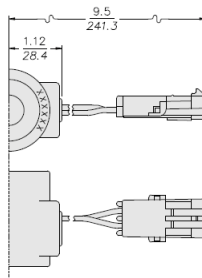
|                                         |       |                                     |
|-----------------------------------------|-------|-------------------------------------|
| Average forward current                 | 3.0 A | - <b>Note:</b> Maximum, 12 Vdc coil |
|                                         | 1 A   | - <b>Note:</b> Maximum, 24 Vdc coil |
| Maximum repetitive peak reverse voltage | 50 V  | - <b>Note:</b> 12 Vdc coils         |
|                                         | 400 V | - <b>Note:</b> 24 Vdc coils         |



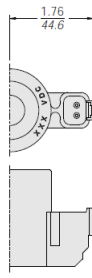
## Dimensions



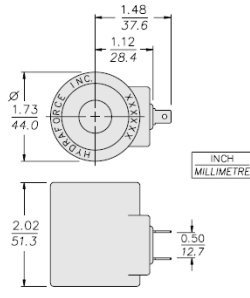
**G**  
**DIN 43650**  
**Connector**  
Pins 1 and 2 are not  
polarity-sensitive.  
Ground pin is not used.



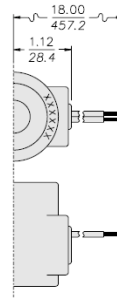
**W**  
**Dual 18 Gauge Leads with**  
**Weather Pack® Connector**  
For use with Packard  
part no. 12015792 female plug



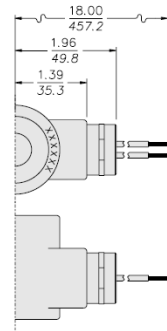
**DR**  
**Integral Deutsch**  
**Connector**  
DR Models without Diode  
DR/D Models with Diode  
DR/Z Models with Zener Diode



**S**  
**Dual Spades**  
**SAE J858a**



**L**  
**Dual Leads**  
**18 Gauge**  
Optional 36-inch leads  
available. Consult factory.



**P**  
**1/2" Conduit &**  
**18 Gauge Leads**



## Coil Part Numbers

| Model code | Part no. | Voltage | Connector                  | IP rating | Diode                     |
|------------|----------|---------|----------------------------|-----------|---------------------------|
| 24AG       | 6366024  | 24      | DIN 43650                  |           |                           |
| 115AG      | 6366115  | 115     | DIN 43650                  |           |                           |
| 230AG      | 6366230  | 230     | DIN 43650                  |           |                           |
| 24AP       | 6365024  | 24      | 1/2-14 NPT internal thread |           |                           |
| 115AP      | 6365115  | 115     | 1/2-14 NPT internal thread |           |                           |
| 230AP      | 6365230  | 230     | 1/2-14 NPT internal thread |           |                           |
| 10DG       | 6356010  | 10      | DIN 43650                  |           |                           |
| 12DG       | 6356012  | 12      | DIN 43650                  |           |                           |
| 24DG       | 6356024  | 24      | DIN 43650                  |           |                           |
| 10DL       | 6352010  | 10      | Dual leads/no connector    |           |                           |
| 12DL       | 6352012  | 12      | Dual leads/no connector    |           |                           |
| 12DL       | 6357012  | 12      | Dual leads/no connector    |           |                           |
| 24DL       | 6352024  | 24      | Dual leads/no connector    |           |                           |
| 12DL/W     | 6359412  | 12      | Dual leads/no connector    |           |                           |
| 24DL/W     | 6359424  | 24      | Dual leads/no connector    |           |                           |
| 12DL/W/D   | 6359732  | 12      | Dual leads/no connector    |           | Ultra-fast diode          |
| 24DL/W/D   | 6359739  | 24      | Dual leads/no connector    |           | Ultra-fast diode          |
| 24DP       | 6355024  | 24      | 1/2-14 NPT internal thread |           |                           |
| 12DR       | 4301612  | 12      | Deutsch DT04-2P            |           |                           |
| 24DR       | 4301624  | 24      | Deutsch DT04-2P            |           |                           |
| 10DR/D     | 4301891  | 10      | Deutsch DT04-2P            |           | Ultra-fast diode          |
| 12DR/D     | 4301892  | 12      | Deutsch DT04-2P            |           | Ultra-fast diode          |
| 20DR/D     | 4301893  | 20      | Deutsch DT04-2P            |           | Ultra-fast diode          |
| 24DR/D     | 4301894  | 24      | Deutsch DT04-2P            |           | Ultra-fast diode          |
| 12DR/Z     | 4301862  | 12      | Deutsch DT04-2P            |           | Bidirectional zener diode |
| 10DS       | 6351010  | 10      | Dual spade                 |           |                           |
| 12DS       | 6351012  | 12      | Dual spade                 |           |                           |
| 20DS       | 6351020  | 20      | Dual spade                 |           |                           |
| 24DS       | 6351024  | 24      | Dual spade                 |           |                           |
| 36DS       | 6351036  | 36      | Dual spade                 |           |                           |