



## Overview

### Symbol

### 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 N 200 °C (392 °F) minimum rating
Mating connector	DT06-2S-P012 - <b>Note:</b> DEUTSCH DT04-2P DELPHI/PACKARD number 12010973 - <b>Note:</b> Weather-Pack 2 terminal male, lead wires 18 AWG

### Electrical Parameters

Coil resistance at 20 °C (68 °F)	6.8 ohm $\pm$ 3% - <b>Note:</b> 10 Vdc coil
	9.8 ohm $\pm$ 3% - <b>Note:</b> 12 Vdc coil
	27.2 ohm $\pm$ 5% - <b>Note:</b> 20 Vdc coil
	39.3 ohm $\pm$ 5% - <b>Note:</b> 24 Vdc coil
	88.3 ohm $\pm$ 5% - <b>Note:</b> 36 Vdc coil
	765.5 ohm $\pm$ 8% - <b>Note:</b> 115 Vdc coil
	3035 ohm $\pm$ 8% - <b>Note:</b> 230 Vdc coil
Coil inductance at 20 °C (68 °F)	485.7 mH $\pm$ 5% - <b>Note:</b> 115 Vac coil
	2026.1 mH $\pm$ 5% - <b>Note:</b> 230 Vac coil
Coil initial current draw	1.47 A - <b>Note:</b> 10 Vdc coil
	1.22 A - <b>Note:</b> 12 Vdc coil
	0.74 A - <b>Note:</b> 20 Vdc coil
	0.61 A - <b>Note:</b> 24 Vdc coil
	0.41 A - <b>Note:</b> 36 Vdc coil
	0.14 A - <b>Note:</b> 115 Vac coil, @ 60 Hz
	0.15 A - <b>Note:</b> 115 Vac coil, @ 50 Hz (calculated using winding inductance)
	0.07 A - <b>Note:</b> 230 Vac coil, @ 60 Hz
	0.74 A - <b>Note:</b> 230 Vac coil, @ 50 Hz (calculated using winding inductance)
Coil initial power consumption	14.7 W - <b>Note:</b> DC Coils
	8.55 W - <b>Note:</b> AC Coils

### Electrical Parameters



Stabilized AC current draw      98.4 mA - **Note:** 115 Vac coil, @ 60 Hz  
 49 mA - **Note:** 230 Vac coil, @ 60 Hz

### **Bridge Rectifier (AC coils)**

Rectifier      4x IN5399

Average rectified forward current rating      1.5 A - **Note:** at 75 °C (167 °F)

Peak reverse voltage      1000 V

### **Bidirectional Zener Diode Parameters**

Maximum clamping voltage      45.7 V - **Note:** 12 Vdc coil  
 64.8 V - **Note:** 24 Vdc coil

Maximum peak pulse current      13.2 A - **Note:** 12 Vdc coil  
 9.3 A - **Note:** 24 Vdc coil

Reverse standoff voltage      28.2 V - **Note:** 12 Vdc coil  
 40.2 V - **Note:** 24 Vdc coil

Maximum reverse leakage      5.0 mA - **Note:** 12, 24 Vdc coil

Breakdown voltage      31.4 to 34.7 V - **Note:** 12 Vdc coil  
 44.7 to 49.4 V - **Note:** 24 Vdc coil

Diode part number      6110163 - **Note:** 12 Vdc coil (ref)  
 4000063 - **Note:** 24 Vdc coil (ref)

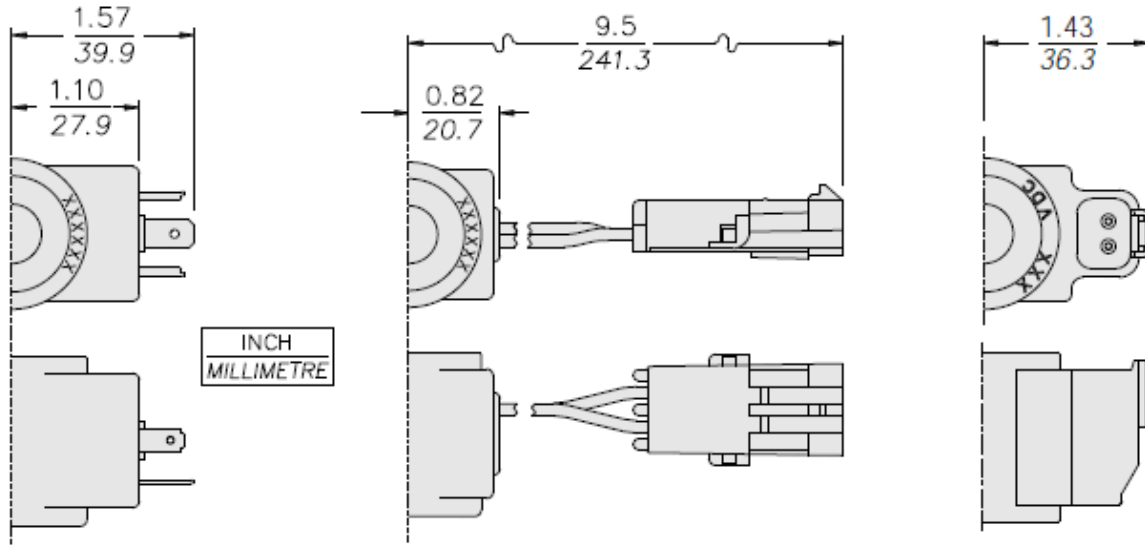
### **Unidirectional Diode Parameters**

Average forward current      3.0 A - **Note:** Maximum, 12 Vdc coil  
 1 A - **Note:** Maximum, 24 Vdc coil

Maximum repetitive peak reverse voltage      50 V

Diode part number      4002474

## Dimensions



**G**

**DIN 43650 Connector**

Pins 1 and 2 are not polarity-sensitive.  
Ground pin is not used.

**W**

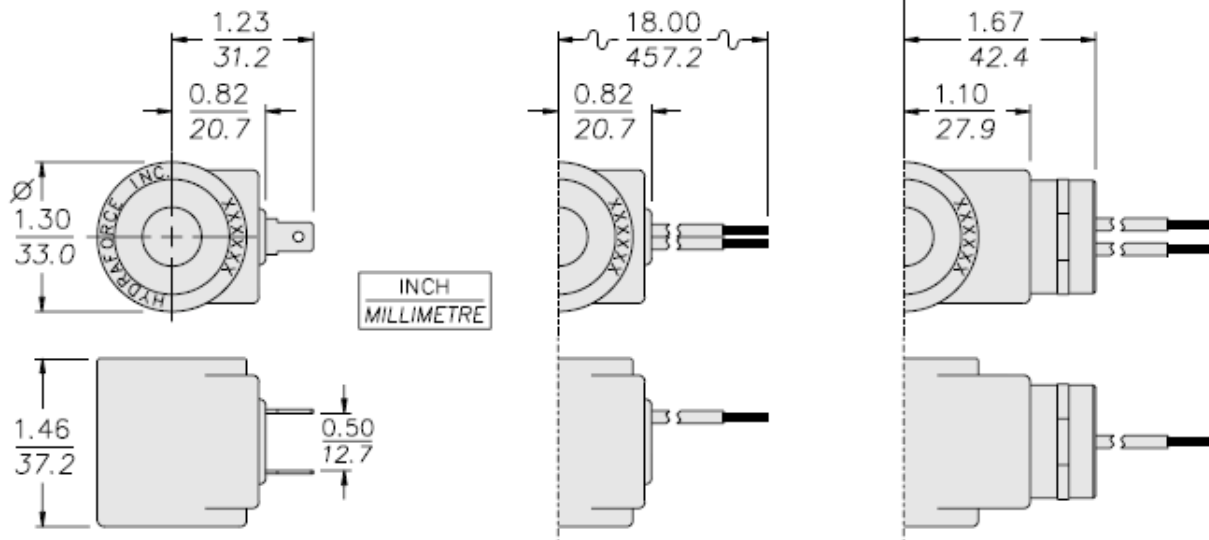
**Dual 18 Gauge Leads with Weather Pack® Connector**

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**

**L**

**P**

**Coil Part Numbers**



Model code	Part no.	Voltage	Connector	IP rating	Diode
24AG	6316024	24	DIN 43650	IP65	
115AG	6316115	115	DIN 43650	IP65	
230AG	6316230	230	DIN 43650	IP65	
24AP	6315024	24	1/2-14 NPT internal thread	IP65	
115AP	6315115	115	1/2-14 NPT internal thread	IP65	
230AP	6315230	230	1/2-14 NPT internal thread	IP65	
12DG	6306012	12	DIN 43650	IP65	
20DG	6306020	20	DIN 43650	IP65	
<b>24DG</b>	<b>6306024</b>	<b>24</b>	<b>DIN 43650</b>	<b>IP65</b>	
36DG	6306036	36	DIN 43650	IP65	
10DL	6302010	10	Dual leads/no connector	IP65	
12DL	6302012	12	Dual leads/no connector	IP65	
12DL	6307012	12	Dual leads/no connector	IP65	
24DL	6302024	24	Dual leads/no connector	IP65	
24DL	6307024	24	Dual leads/no connector	IP65	
12DL/W	6309412	12	Dual leads/no connector	IP65	
24DL/W	6309424	24	Dual leads/no connector	IP65	
12DL/W/D	6309737	12	Dual leads/no connector	IP65	Ultra-fast diode
12DR	4301512	12	Deutsch DT04-2P	IP65	
24DR	4301524	24	Deutsch DT04-2P	IP65	
10DR/D	4301871	10	Deutsch DT04-2P	IP65	Ultra-fast diode
12DR/D	4301872	12	Deutsch DT04-2P	IP65	Ultra-fast diode
24DR/D	4301874	24	Deutsch DT04-2P	IP65	Ultra-fast diode
12DR/Z	4301852	12	Deutsch DT04-2P	IP65	Bidirectional zeener diode
24DR/Z	4301854	24	Deutsch DT04-2P	IP65	Bidirectional zeener diode
10DS	6301010	10	Dual spade	IP65	
12DS	6301012	12	Dual spade	IP65	
20DS	6301020	20	Dual spade	IP65	
24DS	6301024	24	Dual spade	IP65	
36DS	6301036	36	Dual spade	IP65	