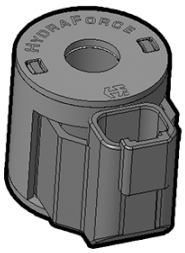
E COIL 08 SIZE

## Overview



### Construction

Magnet wire wound on a bobbin and encapsulated with 30% glass filled polyester resin or 12% glass filled nylon. overmolded coil is framed in steel.

## Ratings

### Properties

**Magnet wire:** U.S. class N 200 °C (392 °F) minimum rating

**Mating connector:** DT06-2S-P012 note: DEUTSCH DT04-2P

DELPHI/PACKARD number 12052641 note: METRI-PACK 150-2M

**Coil metal frame:** Plated for 1,000 hours of salt spray per ASTM B117-09 before corrosion (red rust)

**Weight:** 0.16 kg (0.35 lb)

### Electrical Specifications

| Voltage | Resistance | Inductance | Initial current draw | Initial power |
|---|---|---|---|---|
| 10 | 6.19 Ohm ±3% | 6.22 mH ±5% | 1.62 A | 16.16 W |
| 12 | 8.82 Ohm ±3% | 10.61 mH ±5% | 1.36 A | 16.33 W |
| 16 | 15.6 Ohm ±5% | 17.58 mH ±5% | 1.03 A | 16.48 W |
| 20 | 23.86 Ohm ±5% | 30.48 mH ±5% | 0.84 A | 16.76 W |
| 24 | 33.75 Ohm ±5% | 44 mH ±5% | 0.71 A | 17.07 W |
| 28 | 46.53 Ohm ±5% | 62.27 mH ±5% | 0.60 A | 16.85 W |
| 36 | 78.53 Ohm ±5% | 95.71 mH ±5% | 0.46 A | 16.5 W |

### Diodes

### Bidirectional Zener Diode Parameters

**Maximum clamping voltage:** 45.7 V note: 12 Vdc coil

64.8 V note: 16, 24 Vdc coil

**Maximum peak pulse current:** 13.2 A note: 12 Vdc coil

9.3 A note: 16, 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 µA

**Breakdown voltage:** 31.4 to 34.7 V note: 12 Vdc coil

44.7 to 49.4 V note: 16, 24 Vdc coil

**Diode part number:** 6110163 note: 12 Vdc coil (ref)

4000063 note: 16, 24 Vdc coil (rev)

### Ultra-fast Diode Parameters (12/24 Vdc Coil)

**Average forward current:** 3.5 A

**Repetitive peak reverse voltage:** 600 V

**Diode part number:** 4002474

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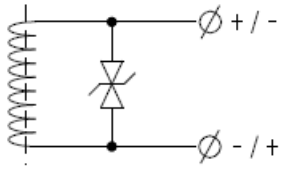
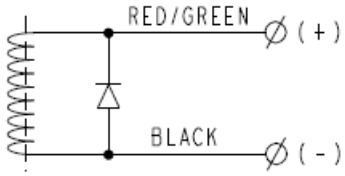
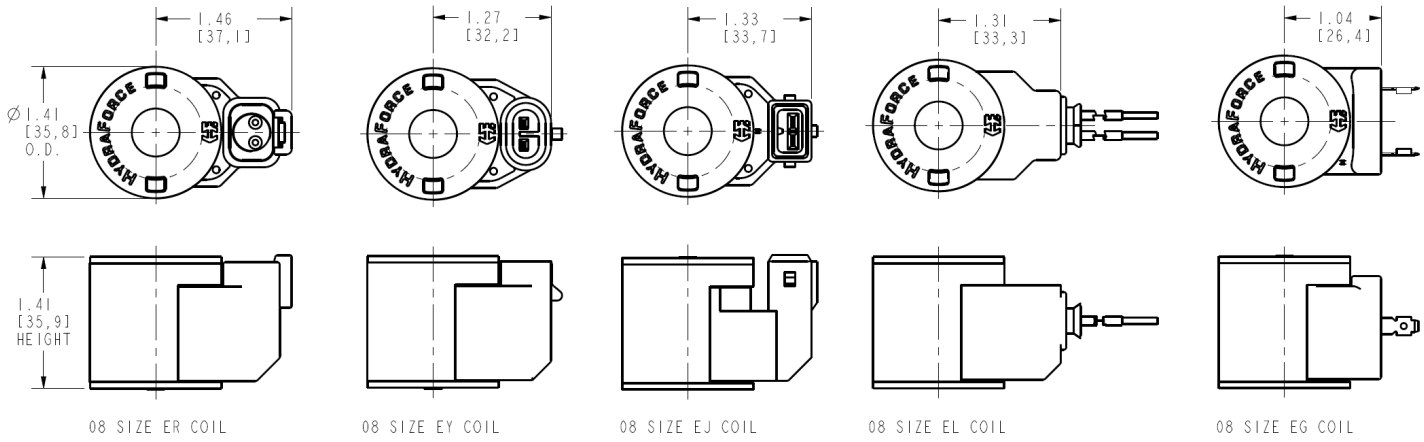
| DIODE TYPE | DIODE TYPE CODE | CIRCUIT DIAGRAM |
|---|---|---|
| BI-DIRECTIONAL ZENER DIODE | Z |   |
| ULTRA-FAST DIODE | D |   |

## Dimensions




ALL DIMENSIONS ARE FOR REFERENCE ONLY

## Coil Part Numbers

### Standard Coils

| Old Number | New Number | Code | Vols | Termination | UL | Diode |
|---|---|---|---|---|---|---|
| 4305110 | R930091044 | 10 EL | 10 | DUAL LEADS, IP69K | false | false |
| 4308710 | R935004029 | 10 EL | 10 | DUAL LEADS, IP69K | false | false |
| 4325510 | R935207850 | 10 ER/A | 10 | DEUTSCH DT04-2P, IP69K | false | false |
| 4325410 | R935207842 | 10 ER/A/Z | 10 | DEUTSCH DT04-2P, IP69K | false | true |
| 4306112 | R930091068 | 12 EJ | 12 | AMP Jr. TIMER, IP67 | false | false |
| 4305912 | R930091065 | 12 EJ/Z | 12 | AMP Jr. TIMER, IP67 | false | true |
| 4308712 | R930091084 | 12 EL | 12 | DUAL LEADS, IP69K | false | false |
| 4306812 | R930091072 | 12 EL/Z | 12 | DUAL LEADS, IP69K | false | true |
| 4325512 | R935207852 | 12 ER/A | 12 | DEUTSCH DT04-2P, IP69K | false | false |
| 4325412 | R935207851 | 12 ER/A/Z | 12 | DEUTSCH DT04-2P, IP69K | false | true |
| 4325520 | R935207883 | 20 ER/A | 20 | DEUTSCH DT04-2P, IP69K | false | false |
| 4325420 | R935207904 | 20 ER/A/Z | 20 | DEUTSCH DT04-2P, IP69K | false | true |
| 4304020 | R930091035 | 20 ER/Z | 20 | DEUTSCH DT04-2P, IP69K | false | true |
| 4306124 | R930091070 | 24 EJ | 24 | AMP Jr. TIMER, IP67 | false | false |

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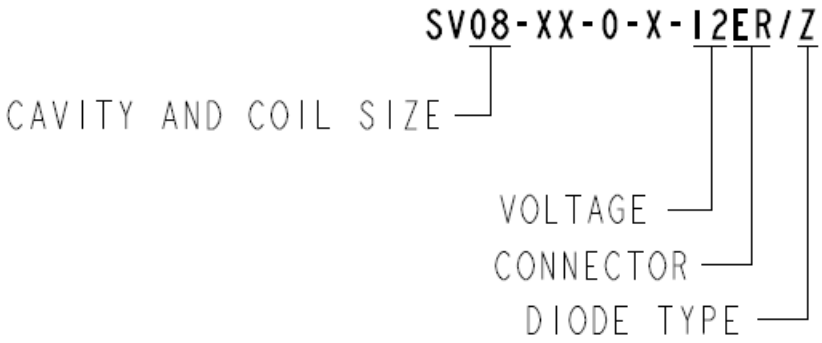
| Old Number | New Number | Code | Vols | Termination | UL | Diode |
|---|---|---|---|---|---|---|
| 4305924 | R930091066 | 24 EJ/Z | 24 | AMP Jr. TIMER, IP67 | false | true |
| 4325524 | R935207887 | 24 ER/A | 24 | DEUTSCH DT04-2P, IP69K | false | false |
| 4325424 | R935207885 | 24 ER/A/Z | 24 | DEUTSCH DT04-2P, IP69K | false | true |
| 4325536 | R935207889 | 36 ER/A | 36 | DEUTSCH DT04-2P, IP69K | false | false |
| 4303648 | R935178589 | 48 ER | 48 | DEUTSCH DT04-2P, IP69K | false | false |

## Optional Coils

| Old Number | New Number | Code | Vols | Termination | UL | Diode |
|---|---|---|---|---|---|---|
| 4303610 | R930091023 | 10 ER | 10 | DEUTSCH DT04-2P, IP69K | true | false |
| 4304010 | R930091034 | 10 ER/Z | 10 | DEUTSCH DT04-2P, IP69K | true | true |
| 4305862 | R930091056 | 12 EG | 12 | DIN 43650, IP65 | true | false |
| 4305872 | R930091058 | 12 EG/Z | 12 | DIN 43650, IP65 | true | true |
| 4305112 | R930091045 | 12 EL | 12 | DUAL LEADS, IP69K | true | false |
| 4303612 | R935003798 | 12 ER | 12 | DEUTSCH DT04-2P, IP69K | true | false |
| 4304012 | R930097096 | 12 ER/Z | 12 | DEUTSCH DT04-2P, IP69K | true | true |
| 4303412 | R930093096 | 12 EY | 12 | METRI-PACK 150 2M, IP69K | true | false |
| 4303812 | R930091031 | 12 EY/Z | 12 | METRI-PACK 150 2M, IP69K | true | true |
| 4303620 | R935003809 | 20 ER | 20 | DEUTSCH DT04-2P, IP69K | true | false |
| 4305864 | R930091057 | 24 EG | 24 | DIN 43650, IP65 | true | false |
| 4305874 | R930091059 | 24 EG/Z | 24 | DIN 43650, IP65 | true | true |
| 4305124 | R930091046 | 24 EL | 24 | DUAL LEADS, IP69K | true | false |
| 4303624 | R930095095 | 24 ER | 24 | DEUTSCH DT04-2P, IP69K | true | false |
| 4304024 | R930091036 | 24 ER/Z | 24 | DEUTSCH DT04-2P, IP69K | true | true |
| 4303424 | R935003783 | 24 EY | 24 | METRI-PACK 150 2M, IP69K | true | false |
| 4303824 | R935003842 | 24 EY/Z | 24 | METRI-PACK 150 2M, IP69K | true | true |

MODEL CODE EXAMPLE: