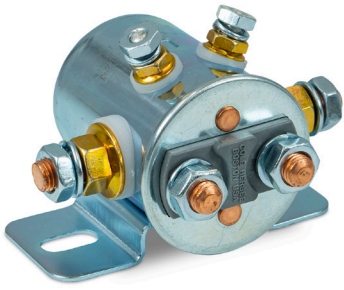


# CONTINUOUS-DUTY SPDT SERIES

## 16 V DC and 32 V DC Max Changeover Solenoid Relays



24401



24401-04-BX



24401-01-BX

Designed for forward and reverse systems, including those in forklift trucks, electric golf carts, and winches, these Continuous-Duty SPDT Series Changeover Solenoid Relays feature normally closed (NC) contacts rated for 35 A maximum continuous current and normally open (NO) contacts rated for 85 A maximum continuous current.

These specialty Cole Hersee brand continuous-duty solenoid relays are available in various configurations, including 16 V max insulated or grounded models with a 12 V coil or a 32 V max insulated model with a 24 V coil.

### Web Resources

Download 2D print, installation guide and technical resources at: [littelfuse.com/ContDuty](https://www.littelfuse.com/ContDuty)

### Specifications

|                                   |  |
|-----------------------------------|--|
| <b>Max Voltage Rating:</b>        | 16, 32 VDC   |
| <b>Current Rating Continuous:</b> | Normally Closed Contacts: 35 A<br>Normally Open Contacts: 85 A |
| <b>Coil Voltage:</b>              | 12, 24 VDC   |
| <b>Circuitry:</b>                 | SPDT   |
| <b>Housing:</b>                   | Plated Steel Housing   |
| <b>Contacts:</b>                  | Normally Open/ Normally Closed                                 |
| <b>Recommended Torque:</b>        | #10-32 = 15 IN-LBS [1.69 Nm]<br>5/16-24 = 35 IN-LBS [3.95 Nm]  |
| <b>Coil Terminals:</b>            | Steel Plated Stud #10-32                                       |
| <b>Normal Position:</b>           | Cir #1 Normally Closed<br>Cir #2 Normally Open                 |

### Applications

- Electric Golf Carts
- Forklift Trucks
- Winches
- Lawn Tractors

### Features and Benefits

- 35 A (NC) and 85 A (NO) maximum continuous current ratings
- Options include 16 V max versions with a 12 V insulated or grounded coil and a 32 V max model with a 24 V insulated coil
- Plated steel housing offers a robust design for use in harsh automotive environments
- 5/16"-24 copper stud input terminals
- #10-32 steel plated stud coil terminals
- Lstyle flat bracket with holes of 5/16" x 19/32" (7.9 x 15.1 mm) on 2-13/64" (56 mm) centers
- Included hardware (hex nuts and lock washers) may be assembled or bagged depending on the model number

# CONTINUOUS-DUTY SPDT SERIES

## 16 V DC and 32 V DC Max Changeover Solenoid Relays

### Ordering Information

| PART NUMBER | DESCRIPTION  | COIL TYPE | COIL IMPEDANCE | HARDWARE  | POWER TERMINALS         | MOUNTING METHOD   |
|-------------|--|-----------|----------------|---|-------------------------|---|
| 24401       | 16 V DC Max Changeover Solenoid Relay with 12 V DC Insulated Coil                              | Insulated | 17.5 Ω         | Bagged,<br>4x Hex Nut 5/16-24<br>4x Lock Washer 5/16<br>2x Hex Nut #10-32<br>2x Lock Washer Size #12      | Copper Stud<br>5/16"-24 | BRACKET STYLE "L" FLAT with holes of 5/16" x 19/32" (7.9 x 15.1 mm) on 2 13/64" (56 mm) centers |
| 24401-01    | 16 V DC Max Changeover Solenoid Relay with 12 V DC Grounded Coil                               | Grounded  | 17.5 Ω         | Assembled,<br>4x Hex Nut 5/16-24<br>4x Lock Washer 5/16<br>1x Hex Nut #10-32<br>1x Lock Washer Size #12   | Copper Stud<br>5/16"-24 | BRACKET STYLE "L" FLAT with holes of 5/16" x 19/32" (7.9 x 15.1 mm) on 2 13/64" (56 mm) centers |
| 24401-04    | 16 V DC Max Changeover Solenoid Relay with 12 V DC Insulated Coil and External Sealant         | Insulated | 17.5 Ω         | Assembled,<br>4x Hex Nut 5/16-24<br>4x Lock Washer 5/16<br>2x Hex Nut #10-32<br>2x Lock Washer Size #12   | Copper Stud<br>5/16"-24 | BRACKET STYLE "L" FLAT with holes of 5/16" x 19/32" (7.9 x 15.1 mm) on 2 13/64" (56 mm) centers |
| 24402       | 32 V DC Max Changeover Solenoid Relay with 24 V DC Insulated Coil                              | Insulated | 71 Ω           | Assembled,<br>4x Hex Nut 5/16-24<br>4x Lock Washer 5/16<br>2x Hex Nut #10-32<br>2x Lock Washer Size #12   | Copper Stud<br>5/16"-24 | BRACKET STYLE "L" FLAT with holes of 5/16" x 19/32" (7.9 x 15.1 mm) on 2 13/64" (56 mm) centers |
| 24401-01-BX | 16 V DC Max Changeover Solenoid Relay with 12 V DC Grounded Coil - Boxed                       | Grounded  | 17.5 Ω         | Assembled,<br>4x Hex Nut 5/16-24<br>4x Lock Washer 5/16<br>1x Hex Nut #10-32<br>1x Lock Washer Size #12   | Copper Stud<br>5/16"-24 | BRACKET STYLE "L" FLAT with holes of 5/16" x 19/32" (7.9 x 15.1 mm) on 2 13/64" (56 mm) centers |
| 24401-04-BX | 16 V DC Max Changeover Solenoid Relay with 12 V DC Insulated Coil and External Sealant - Boxed | Insulated | 17.5 Ω         | Assembled,<br>4x Hex Nut 5/16-24<br>4x Lock Washer 5/16<br>2x Hex Nut #10-32<br>2x Lock Washer Size #12   | Copper Stud<br>5/16"-24 | BRACKET STYLE "L" FLAT with holes of 5/16" x 19/32" (7.9 x 15.1 mm) on 2 13/64" (56 mm) centers |
| 24401-BX    | 16 V DC Max Changeover Solenoid Relay with 12 V DC Insulated Coil - Boxed                      | Insulated | 17.5 Ω         | Bagged,<br>4x Hex Nut 5/16-24<br>4x Lock Washer 5/16<br>2x Hex Nut #10-32<br>2x Lock Washer Size #12      | Copper Stud<br>5/16"-24 | BRACKET STYLE "L" FLAT with holes of 5/16" x 19/32" (7.9 x 15.1 mm) on 2 13/64" (56 mm) centers |
| 24402-BX    | 32 V DC Max Changeover Solenoid Relay with 24 V DC Insulated Coil - Boxed                      | Insulated | 71 Ω           | "Assembled,<br>4x Hex Nut 5/16-24<br>4x Lock Washer 5/16<br>2x Hex Nut #10-32<br>2x Lock Washer Size #12" | Copper Stud<br>5/16"-24 | BRACKET STYLE "L" FLAT with holes of 5/16" x 19/32" (7.9 x 15.1 mm) on 2 13/64" (56 mm) centers |