

# ZCS1-70/71

## HIGH CURRENT SOLENOIDS

### FEATURES

- High current handling capability
- Isolated or grounded coils
- Enclosed in dust-resistant case



### ORDERING INFORMATION

**ZCS1-70**   **A**   **1**   **DC6V**   **C**   **2**  
**1**   **2**   **3**   **4**   **5**   **6**

- Series Number:** ZCS1-70, ZCS1-71
- Contact Form:** A = 1A (SPNO); C = 1C (SPDT)
- Coil Termination:**
  1. = Isolated coil, Ag contacts
  2. = Coil grounded to case, all Ag contacts
  3. = Isolated coil, Cu NO & Ag NC contacts
  4. = Coil grounded to case, Cu NO & Ag NC contacts
  5. = Coil common to NO, Cu NO & Ag NC contacts
- Coil Voltage:** DC6V; DC12V; DC18V; DC24V; DC36V
- Coil Type:** C = Continuous  
I = Intermittent
- Hardware:**
  2. Hardware loosely assembled
  5. Hardware bulk packed
  7. No Hardware included

### COIL PARAMETERS

- Termination; #10-32 UNF - 2A thread
- Connections:
  1. Coil isolated (two terminals)
  2. One coil lead grounded to case (one terminal)
  3. One coil lead common to NO terminal marked "BAT" (one terminal)
- Coil data:

Part	Coil Voltage (VDC)		Coil Resistance (ohm)		Must-Operate Voltage (VDC)		Coil Power (W)	
	Rated	Max	Int.	Cont.	Int.	Cont.	Int.	Cont.
ZCS1-70	6	6.6	1.5	4.0	4.02	4.5	23	9
	12	13.2	6.2	16.0	8.04	9.0		
	18	19.8	20.3	37.4	12.06	13.5		
	24	26.4	23.9	60.4	16.08	18.0		
	36	39.5	60.4	114.0	24.12	27.0		
ZCS1-71	6	6.6	1.4	3.5	4.02	4.5	25	10
	12	13.2	4.9	13.5	8.04	9.0		
	18	19.8	13.5	38.0	12.06	13.5		
	24	26.4	20.1	57.1	16.08	18.0		
	36	39.8	57.1	131.0	24.12	27.0		

### CONTACT DATA

- Contact Arrangement: 1A (SPNO), 1C (SPDT)
- Contact Material: 1A- Cu or Ag; 1C- Cu and Ag, or all Ag
- UL Pending

Part	Coil Voltage (VDC)	Normally Open Contact		Normally Closed Contact	
		Cont. (A)	In-rush (A)	Cont. (A)	In-rush (A)
ZCS1-70	6	80	800	60	100
	12	80	400	60	60
	18, 24 & 36	50	200	30	30
ZCS1-71	6	80	1000	60	100
	12	80	500	60	60
	18, 24 & 36	50	250	30	30



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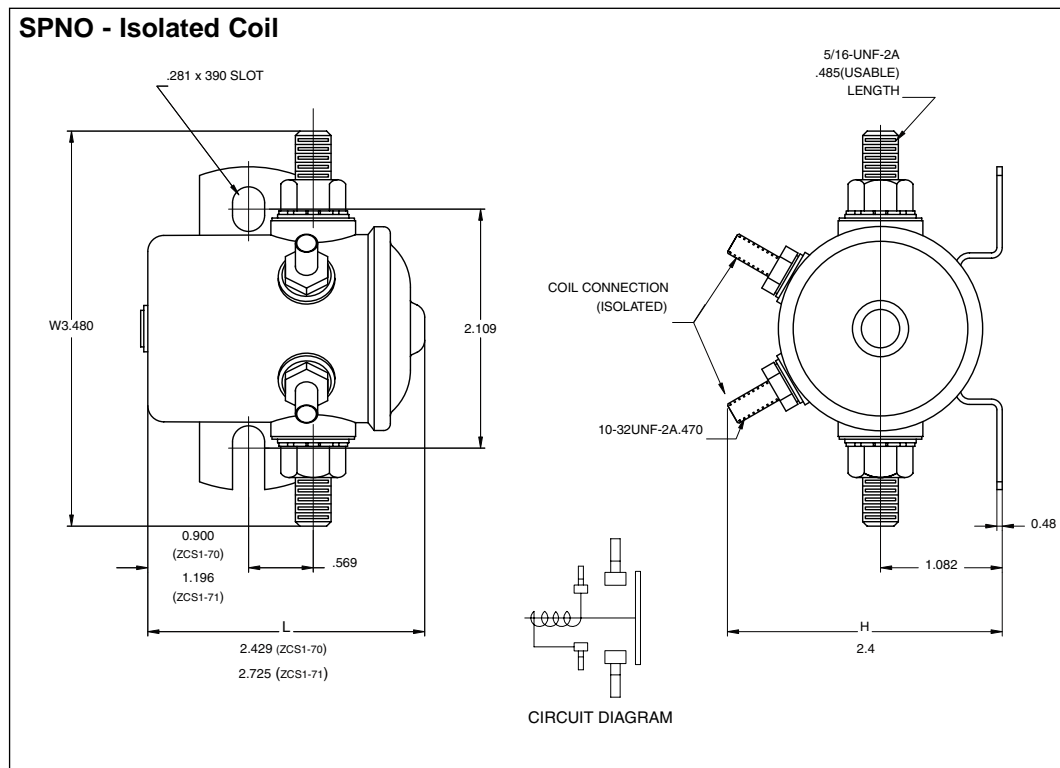
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## GENERAL DATA

<b>Dielectric Strength</b>	500 Volts
<b>Temperature Range</b>	-40°F~-122°F (-40°C~50°C)
<b>Mechanical Life (no load)</b>	250,000 cycles
<b>Electrical Life (rated load)</b>	100,000 cycles
<b>Mounting position (Recommended)</b>	Plunger vertical with cap down
<b>Duty Cycle</b>	Continuous;
	Intermittent: At 10 sec "on" maximum requires minimum of 60 sec "off". With a 60 sec "on" max there is a minimum of 6 min "off."
<b>Hardward Torque specification</b>	44-55 in-lbs (Contact terminal); 12-18 in-lbs (Coil terminal)
<b>Weight</b>	398g (ZCS1-70); 483g (ZCS1-71)

## MECHANICAL DATA



### APPLICATION NOTES:

- 1.) Not all number combinations are available. Please contact your Sales Representative for available part numbers.
- 2.) Solenoid applied in battery charging circuits should be protected from higher than rated voltage during charging. The service life may be affected by this condition and the solenoid may or may not operate the circuit as intended.
- 3.) Circuits should be designed to provide safe operation should the solenoid fail in either the open or closed position.
- 4.) A back-up wrench must be used to hold the bottom nut stationary during installation.

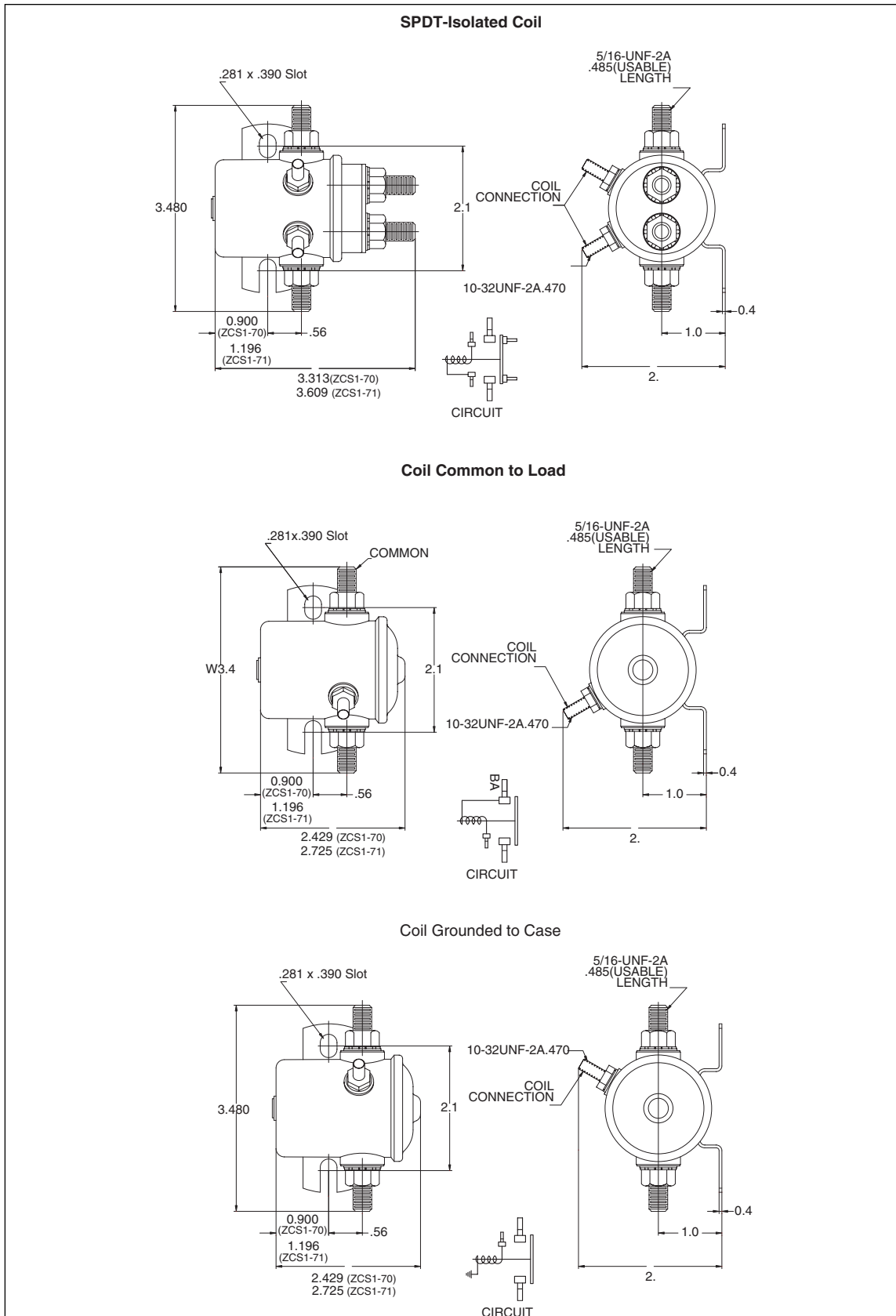


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