Automotive Plug-In / PCB Mini ISO Relay

PC792A



FEATURES

- 40 Amps Continuus Carrying Current
- Internal Diode or Resistor Option
- Sockets Available
- Fully Automated Assembly

RoHS COMPLIANT

CONTACT RATINGS

Contact Form		1A SPST N.O. 1AA SPST N.O. 1C SPDT
Contact Rating	1A	40A @ 14VDC, resistive 20A @ 28VDC, resistive
	1AA	2x20A @ 14VDC, resistive 2x10A @ 28VDC, resistive
	1C	NO 40A @ 14VDC, resistive NC 30A @ 14VDC, resistive NO 20A @ 28VDC, resistive NC 15A @ 28VDC, resistive

CHARACTERISTICS

Insulation Resistance	100 MΩ min. at 500 VDC
Dielectric Strength	500 Vrms, 50 Hz, between contacts 750 Vrms, 50 Hz, between coil & contacts
Power Consumption	1.6W, 1.9W, 2.3W
Terminal Strength	8N quick connect, 4N PCB pins
Solderability	260°C 5 s ± 0.5 s
Operating Temperature	-40ºC to 125ºC
Storage Temperature	-40ºC to 155ºC
Shock Resistance	147 m/s^2 11 ms
Vibration Resistance	10-40Hz; 1.5mm double amplitude
Weight	31.0g

CONTACT DATA

Maximum Switching Power		560 W
Maximum Switching Voltage		75 VDC
Maximum Continuous Current		40 A
Material		$AgSnO_2$
Initial Contact Resistance		30 mΩ max.
Service Life	Mechanical	1 x 10^7 operations
	Electrical	1 x 10^5 operations

Values can change due to the switching frequency, desired reliability levels, environmental conditions, and in-rush current levels. It is recommended to test to actual load conditions for the applicaiton. It is the users responsibility to determine the performance suitability for their specific application. The use of any coil voltage less than the rated coil voltage may compromise the operation of the relay.

ORDERING INFORMATION

Example	PC792A	-1C	-C	-12	S	1.9	-D	N	-X
Model:	PC792A								
Contact Form:	1A 1AA 1C								
Mounting Version:	C = Plug-In C1 = Plastic Bracket C2 = Metal Bracket C3 = Weatherproof Case with Metal Bracket P = PC Pins								
Coil Voltage:	6 = 6VDC 9 = 9VDC 12 = 12VDC 24 = 24VDC 48 = 48VDC								
Enclosure:	C = Dust Cover S = Sealed S1 = Flux Tight (1)								
Coil Power:	Nil = 1.6W 1.9 = 1.9W 2.3 = 2.3W (2)								
Parallel Component:	Nil = None D = Diode (1N4005) D1 = Reverse Diode (1N4005) R = Resistor (680 Ohms for 12VDC, 2700 for 24VDC)								
Terminal Plating:	Nil = PC Pin N = Tin Plated Terminals, standard on all Plug-In models								
RoHS Compliant:	-X								

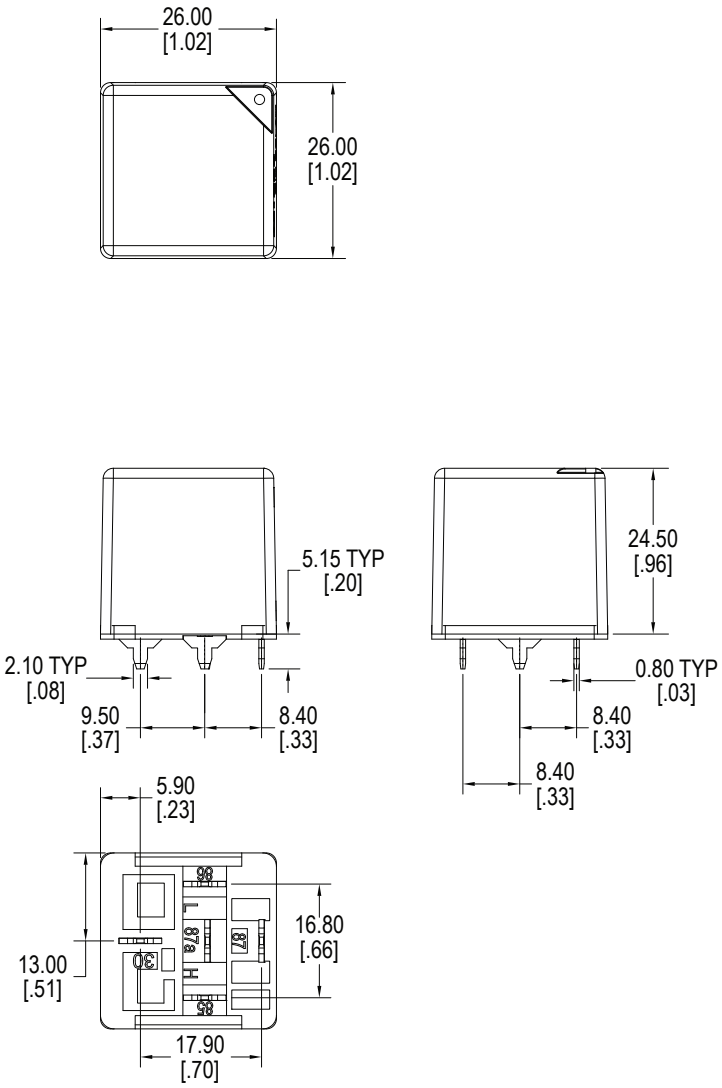
(1) Flux Tight relays are constructed such that Flux will not enter the relay in an automated soldering process, they are NOT suitable for water wash cleaning.
(2) Special coil - minimum order quantities apply.

COIL DATA

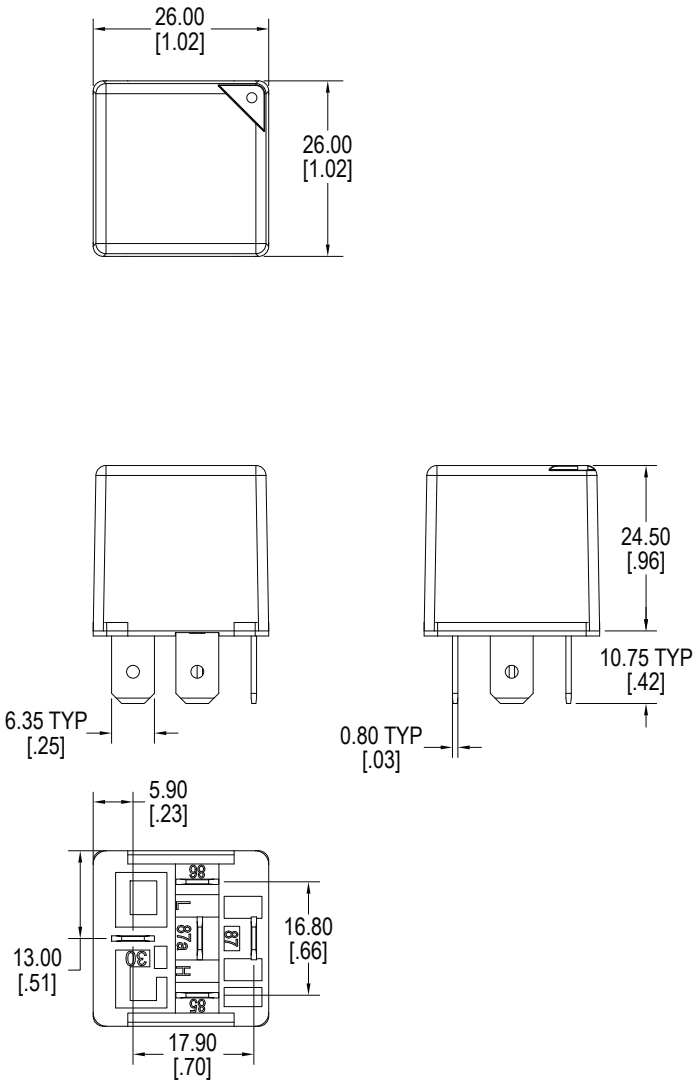
Coil Voltage		Resistance (Ohms ± 10%)			Pick Up Voltage Max. VDC	Release Voltage Min. VDC	Coil Power W	Operate Time ms	Release Time ms
Rated	Maximum	1.6W	1.9W	2.3W					
6	7.8	22.5	19	15.6	3.9	0.6	1.6W, 1.9W or 2.3W	≤10	≤10
9	11.7	50.6	n/a	n/a	5.9	0.9			
12	15.6	90	75.8	62.6	7.8	1.2			
24	31.2	360	303.2	250.4	15.6	2.4			
48	62.4	1440	1212	n/a	31.2	4.8			

DIMENSIONS *mm (inches)*

Standard with PC Pins (P)

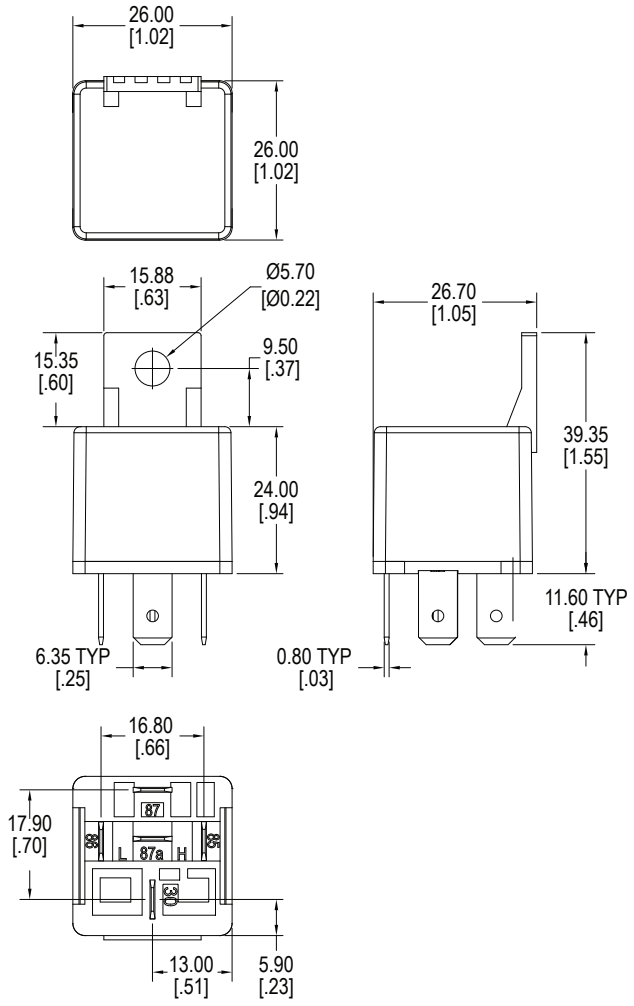


Standard with Quick Connect (C)

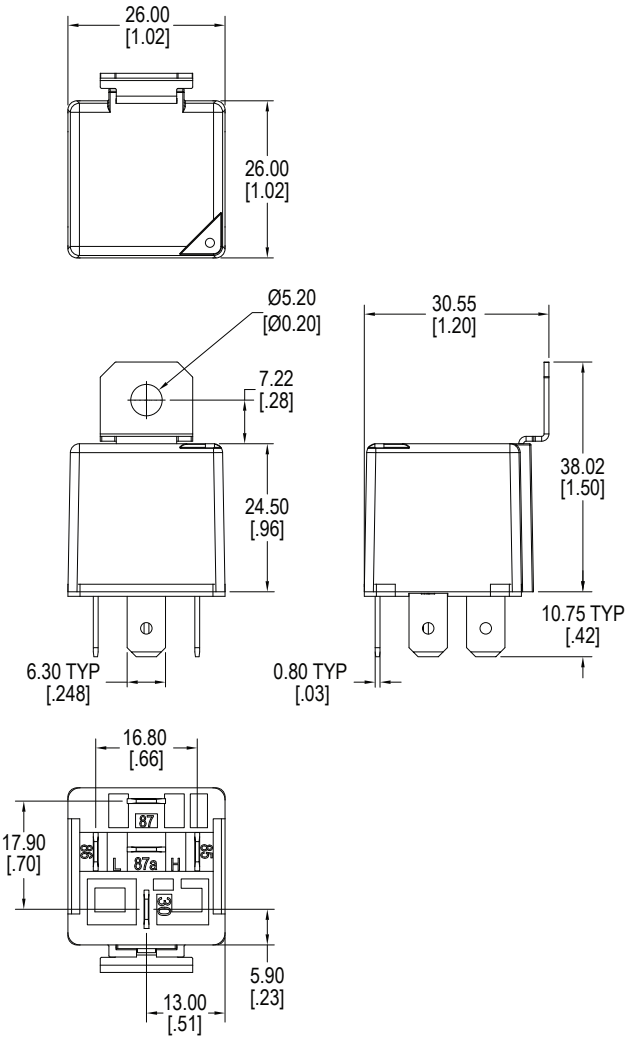


DIMENSIONS *mm (inches)*

Quick Connect with Plastic Bracket (C1)

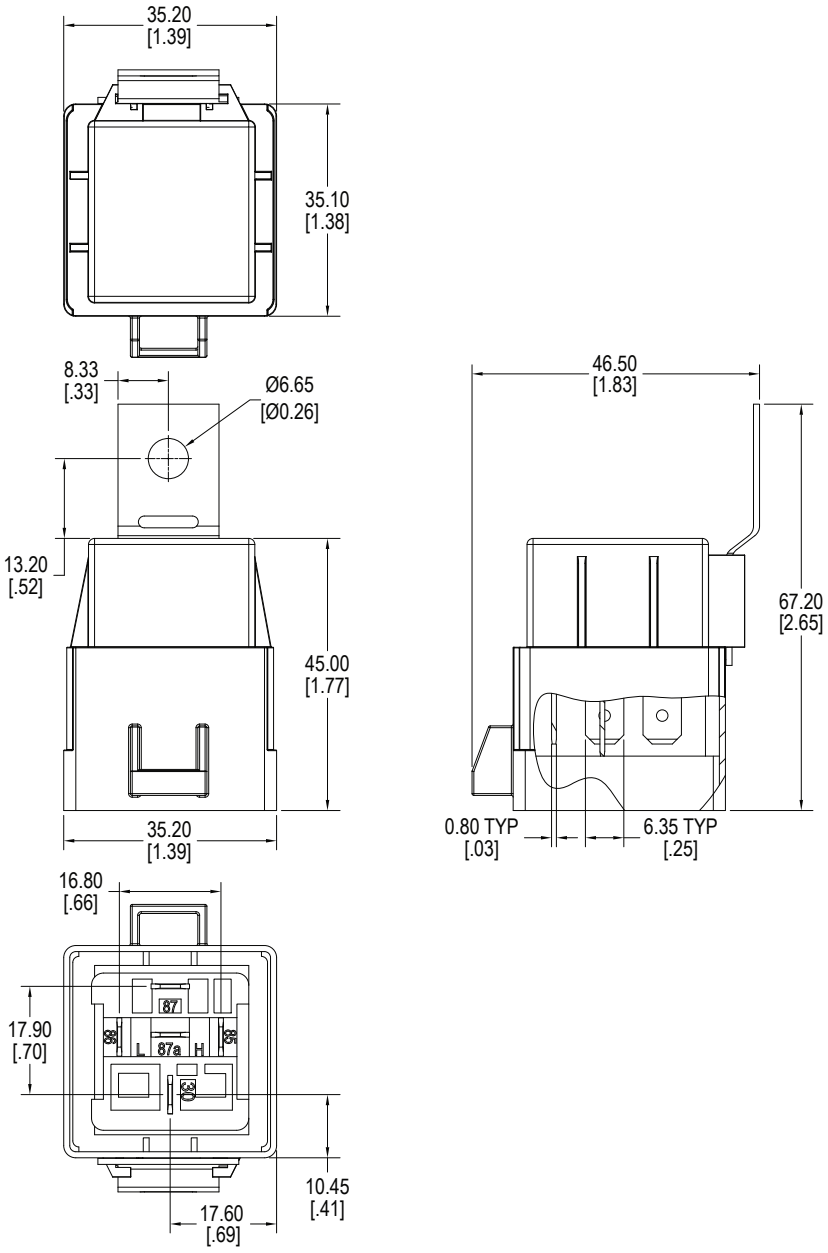


Quick Connect with Metal Bracket (C2)



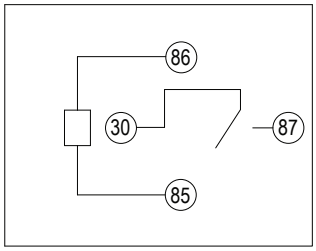
DIMENSIONS *mm (inches)*

Quick Connect with Weatherproof Shroud (C3)

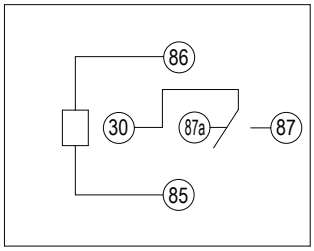


SCHEMATICS *Bottom Views*

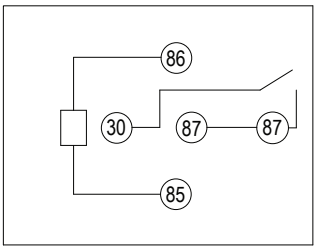
1A



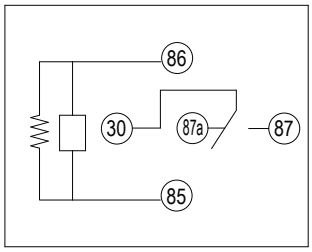
1C



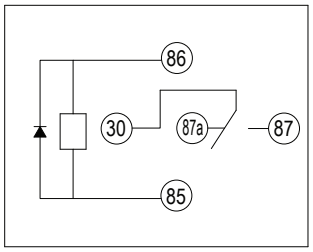
1AA



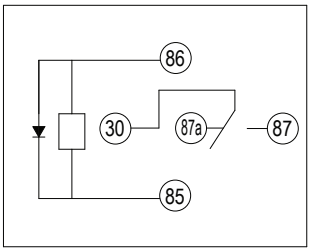
1C with Resistor



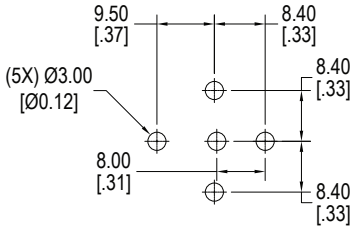
1C with Diode



1C with Reverse Diode

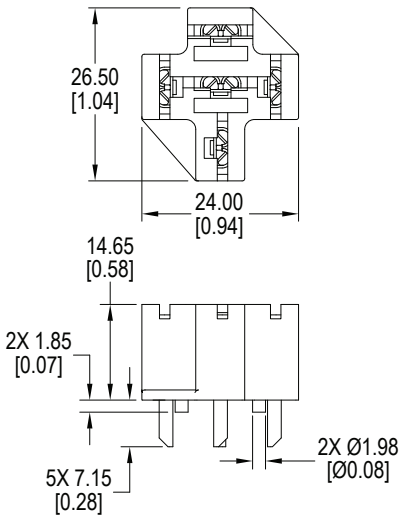


PC LAYOUT

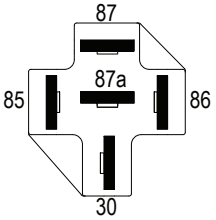


SOCKETS *mm (inches)*

RS2105

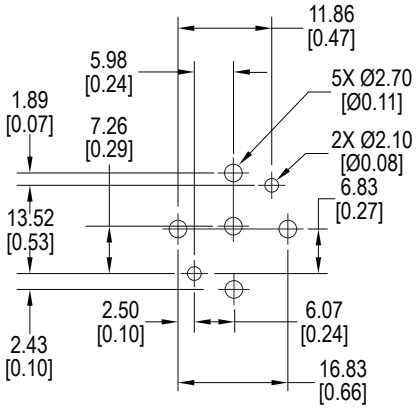






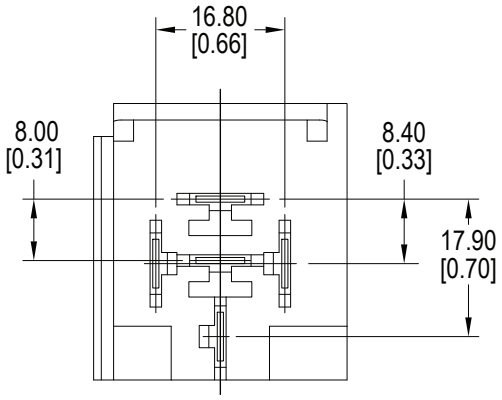
Suggested PC Layout

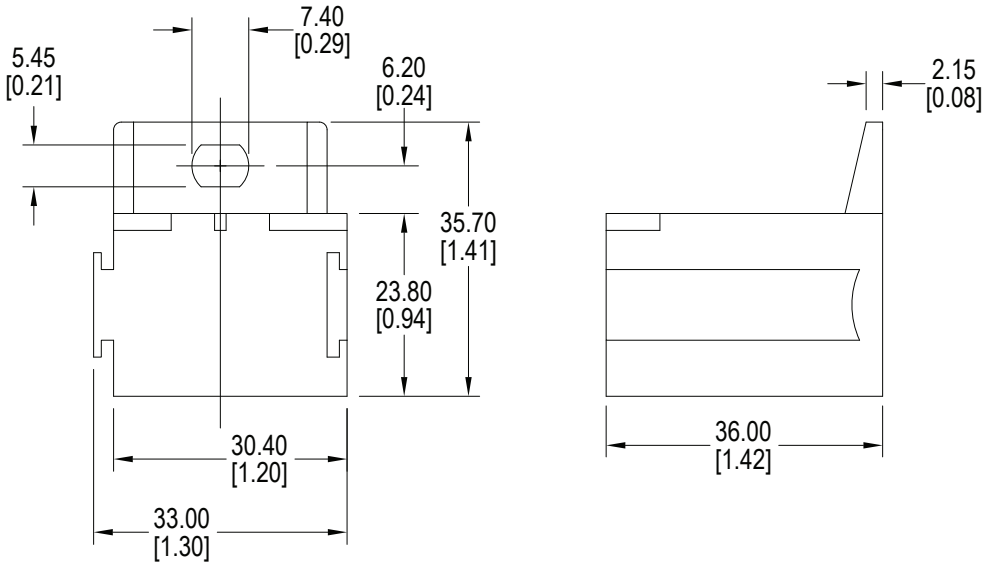
Top View



SOCKETS *mm (inches)*

RS2200







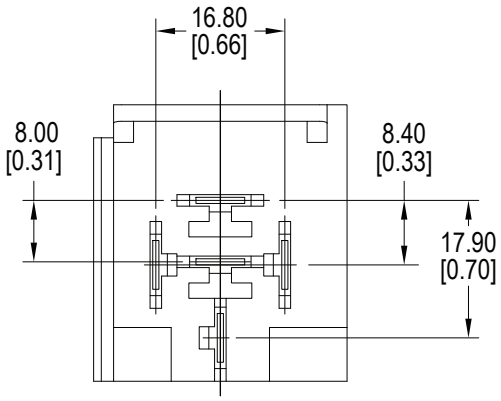
Metal Crimp Terminal Compatibility

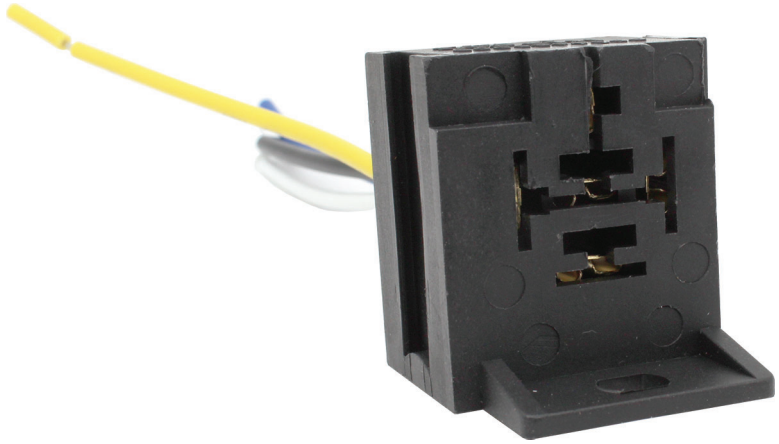
Mfr.	Part Number	Wire AWG	Blade
TE	42100-2	14-18	1/4”
TE	42881-1	14-19	1/4”
TE	42904-2	12-16	1/4”
TE	**60249-3**	**12-16**	**1/4”**
TE	**60253-2**	**12-14**	**1/4”**

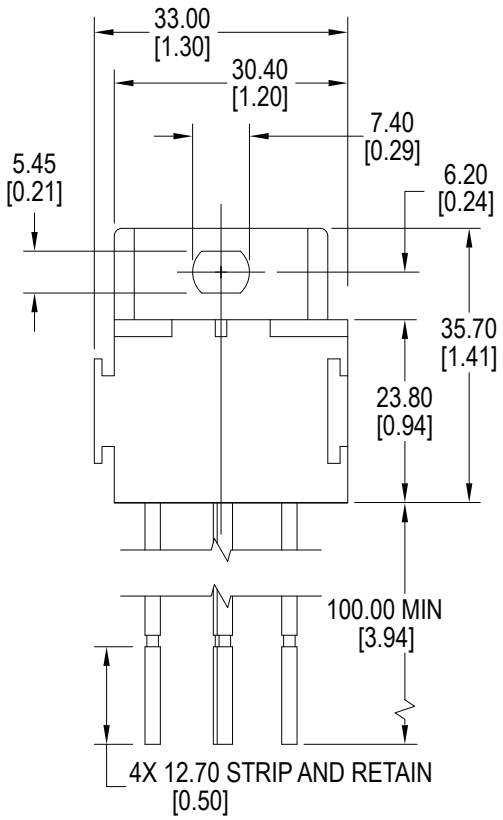
CIT Relay & Switch references these female quick connect terminals to be used with our automotive sockets. Current capability of the terminals depends on the gauge of the wire used, the quality of the crimp, the addition of solder or a weld, operating conditions, ambient temperature, and so forth. Terminals to be purchased separately from the manufacturer.

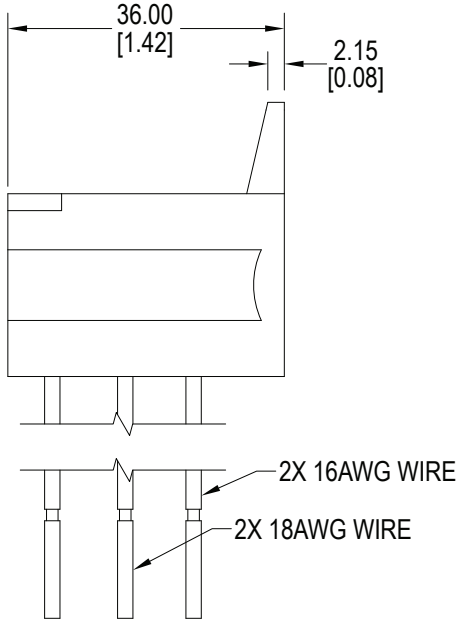
SOCKETS *mm (inches)*

RS2214



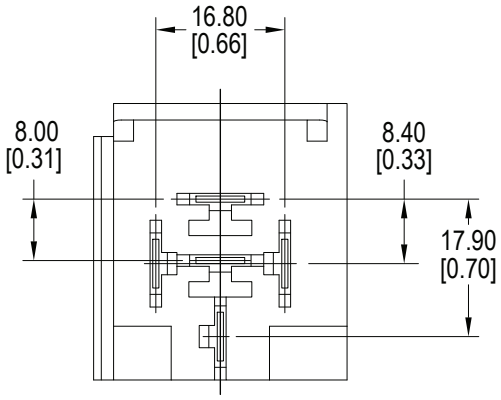


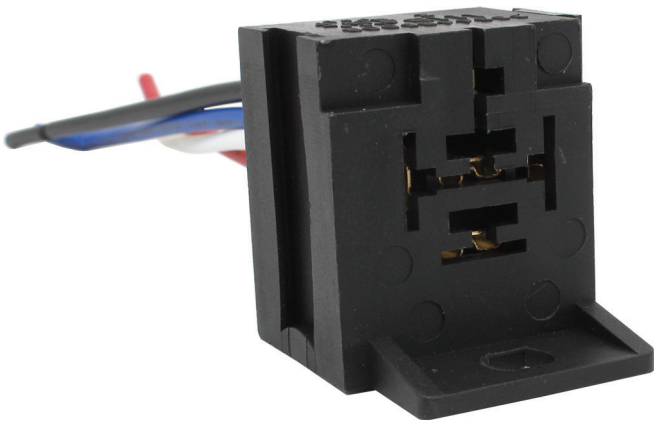


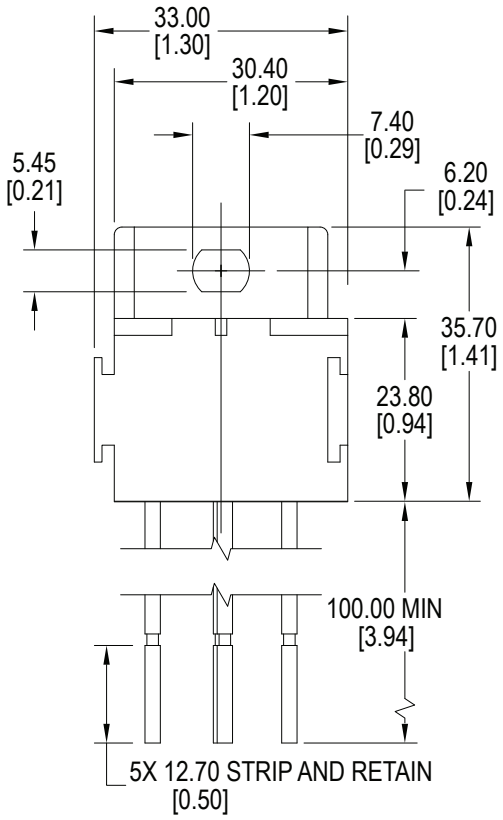


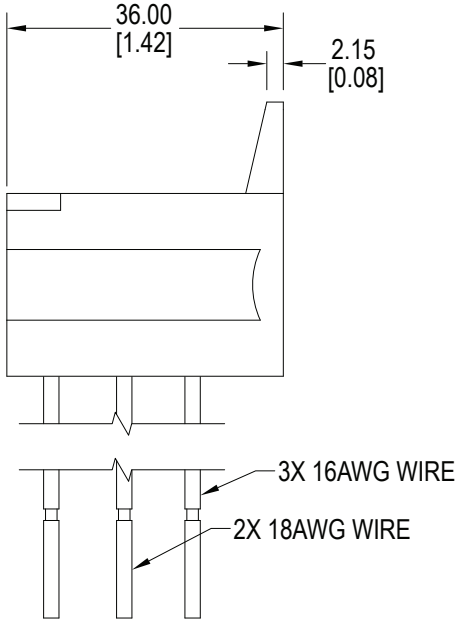
SOCKETS *mm (inches)*

RS2215



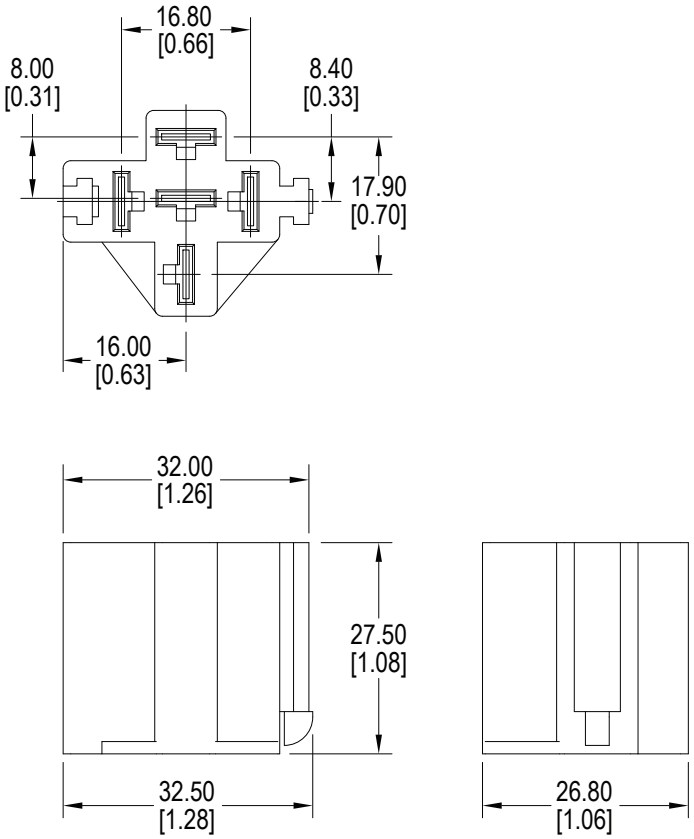






SOCKETS *mm (inches)*

RS2300





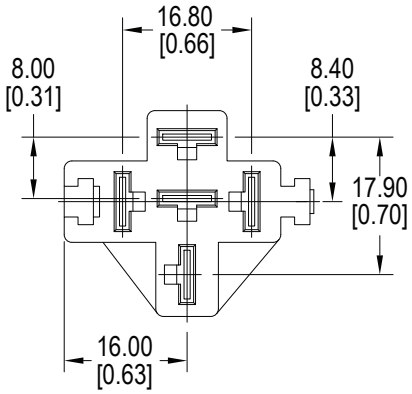
Metal Crimp Terminal Compatibility

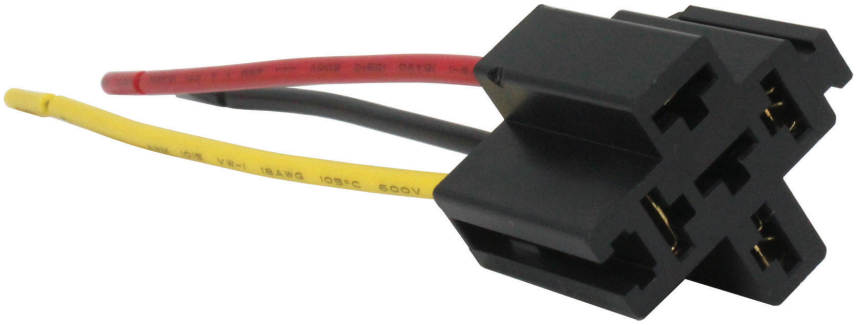
Mfr.	Part Number	Wire AWG	Blade
TE	42100-2	14-18	1/4”
TE	42881-1	14-19	1/4”
TE	42904-2	12-16	1/4”
TE	**60249-3**	**12-16**	**1/4”**
TE	**60253-2**	**12-14**	**1/4”**

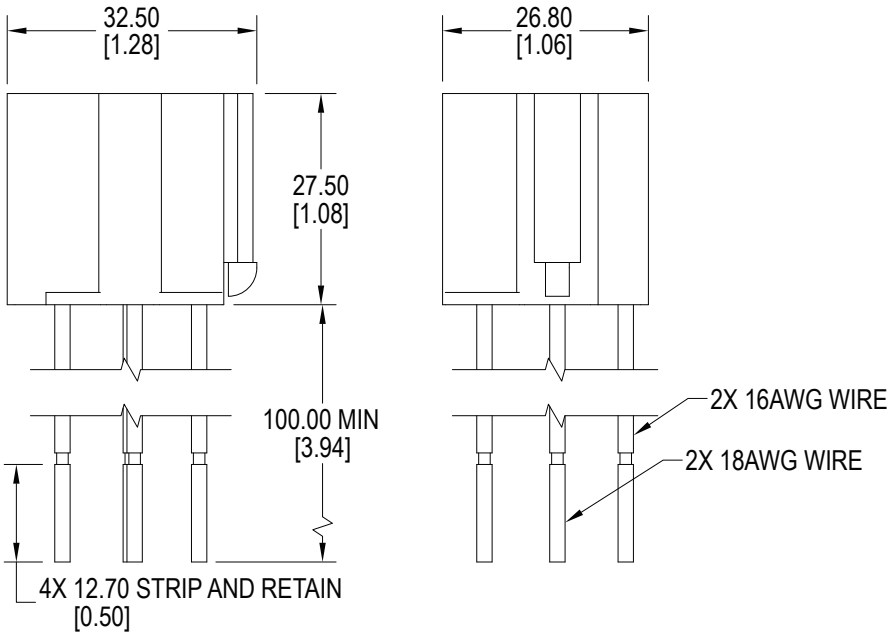
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SOCKETS *mm (inches)*

RS2314

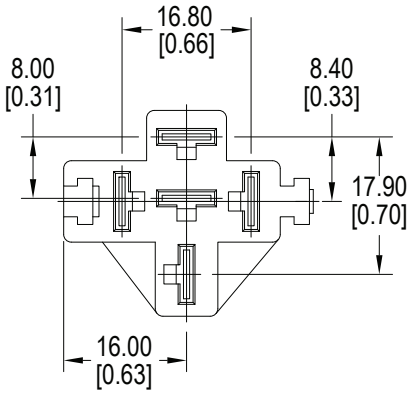


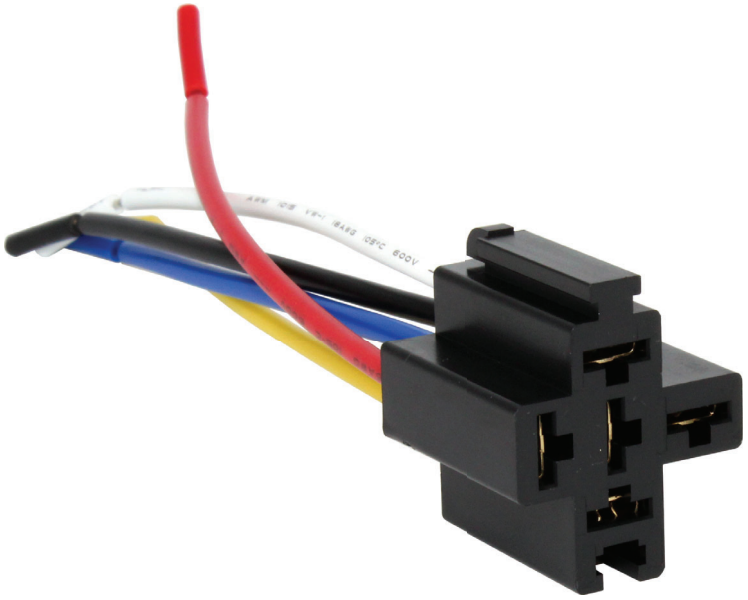


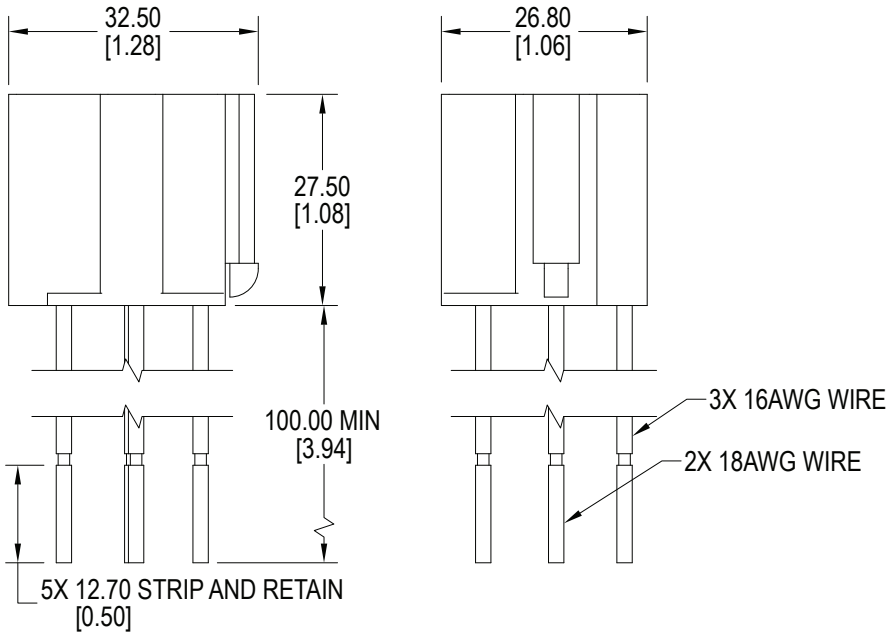


SOCKETS *mm (inches)*

RS2315

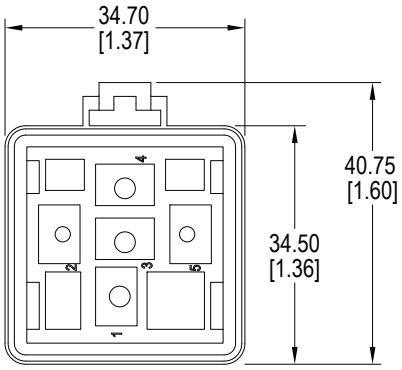


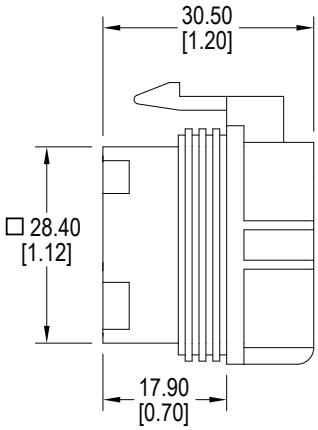




SOCKETS *mm (inches)*

RS2400

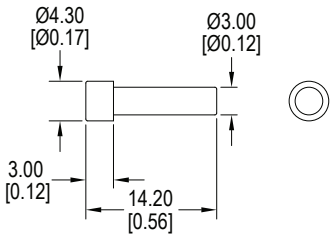






RS Plug

RS Plug is available for custoemrs to plug any unused wire cavity in the socket seal.



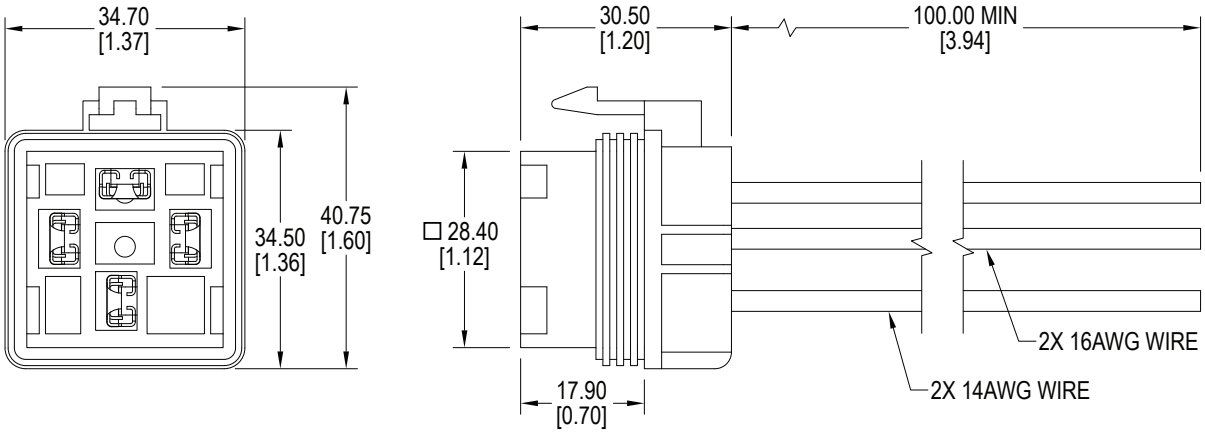
Metal Crimp Terminal Compatibility

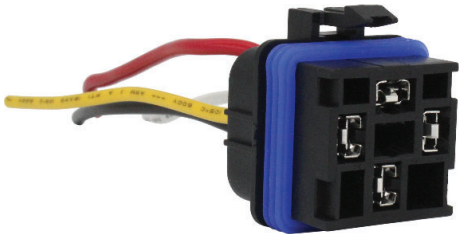
Mfr.	Part Number	Wire AWG	Blade
Aptiv	12066614	14-17	1/4”
Aptiv	12020156	18-20	1/4”
Aptiv	12176854	10-12	1/4”
Aptiv	12033997	12	1/4”

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SOCKETS *mm (inches)*

RS2414





SOCKETS *mm (inches)*

RS2415

