



## Features

- Large switching capacity up to 40A
- Small size and light weight
- PCB pin and quick connect mounting available
- Suitable for automobile and lamp accessories
- Manufactured in compliance with QS-9000 and ISO-9002



## Contact Data\*

Contact Arrangement	1A = SPST N.O. 1B = SPST N.C. 1C = SPDT	Contact Resistance	< 30 milliohms initial
Contact Rating	NO NC	Contact Material	AgSnO <sub>2</sub>
	40A @ 14VDC, resistive 20A @ 28VDC, resistive 2A @ 48VDC, resistive	Maximum Switching Power	630W
	30A @ 14VDC, resistive 15A @ 28VDC, resistive 1A @ 48VDC, resistive	Maximum Switching Voltage	75VDC
		Maximum Switching Current	40A

## Coil Data\*

Coil Voltage VDC		Coil Resistance Ω +/- 10%		Pick Up Voltage VDC (max)	Release Voltage VDC (min)	Coil Power W	Operate Time ms	Release Time ms
Rated	Max	1.6W	1.9W	65% of rated voltage	10% of rated voltage			
6	7.8	22.5	19.0	3.9	.6	1.6 1.9	7	5
12	15.6	90.0	75.8	7.8	1.2			
24	31.2	360.0	303.2	15.6	2.4			
48	62.4	1440.0	1212.0	31.2	4.8			

## General Data\*

Electrical Life @ rated load	100K cycles, average	
Mechanical Life	10M cycles, average	
Insulation Resistance	100M Ω min. @ 500VDC initial	
Dielectric Strength	Coil to Contact	750V rms min. @ sea level initial
	Contact to Contact	500V rms min. @ sea level initial
Shock Resistance	147m/s <sup>2</sup> for 11 ms	
Vibration Resistance	1.5mm double amplitude 10~40Hz	
Terminal (Copper Alloy) Strength	8N (quick connect), 4N (PCB pins)	
Operating Temperature	-40°C to +125°C	
Storage Temperature	-40°C to +155°C	
Solderability	260°C for 5 s	
Weight	31g	

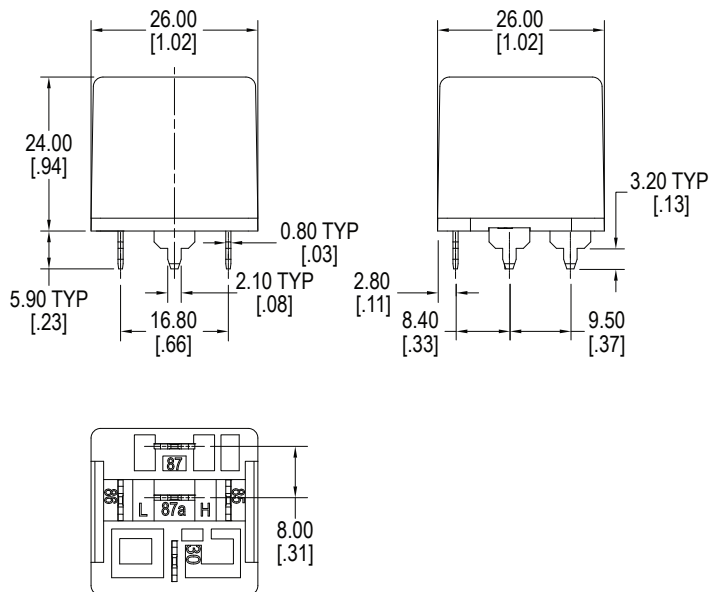
\* Values can change due to the switching frequency, desired reliability levels, environmental conditions and in-rush load levels. It is recommended to test actual load conditions for the application. It is the user's responsibility to determine the performance suitability for their specific application.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

## Ordering Information

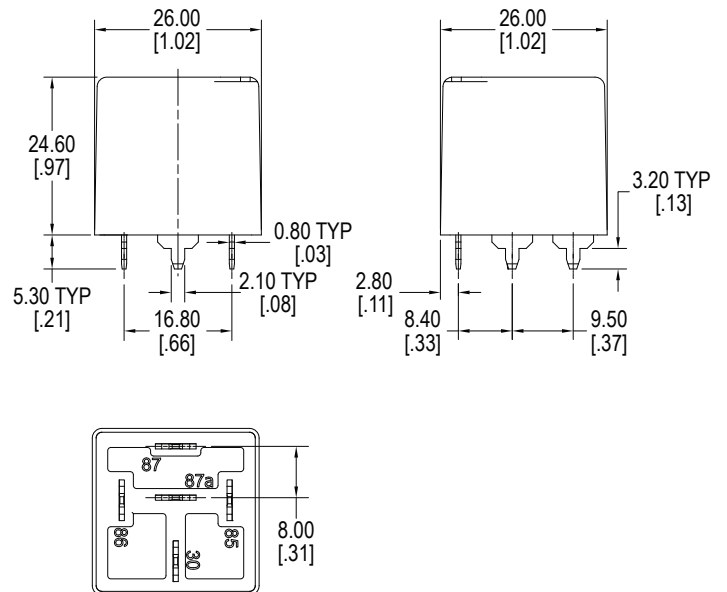
1. Series	A2	1C	S	Q	12VDC	1.6
A2 standard A2F with mounting flange A2M with metal bracket A2S with metal bracket and shroud						
2. Contact Arrangement 1A = SPST N.O. 1B = SPST N.C. 1C = SPDT						
3. Sealing Option S = Sealed C = Dust Cover *not available with A2S						
4. Termination P = PCB Pins *not available with A2S Q = Quick Connect						
5. Coil Voltage 6VDC 12VDC 24VDC 48VDC						
6. Coil Power 1.6 = 1.6W 1.9 = 1.9W						
7. Coil Suppression Blank = Standard D = Diode (1N4005) Cathode on "86" terminal R = Resistor (180Ω for 6VDC; 680Ω for 12VDC; 2700Ω for 24VDC) ** Consult factory if other values are needed						

## Dimensions

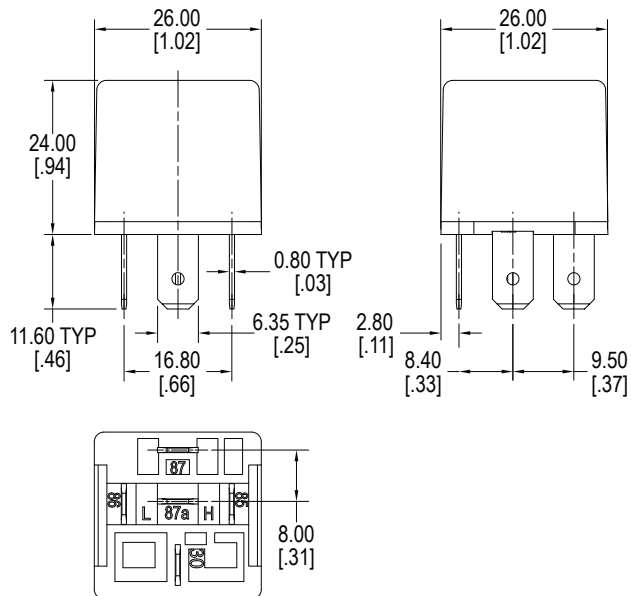
Units = mm



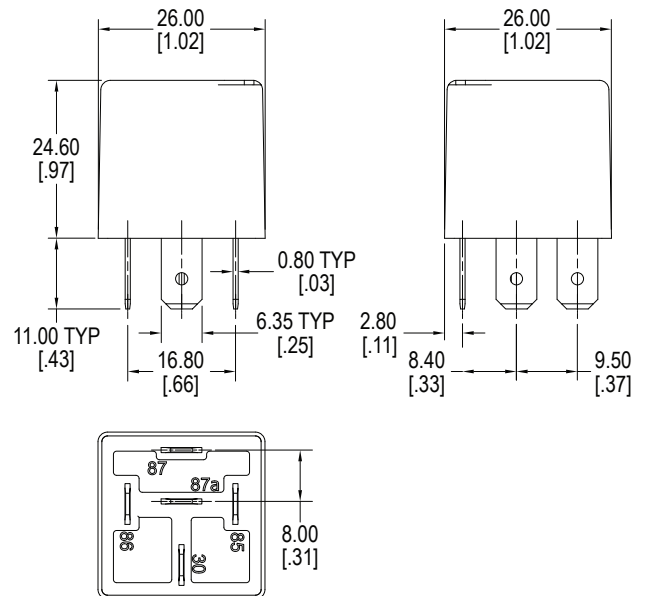
**A2 with PC Pins, Dust Cover**



**A2 with PC Pins, Sealed**



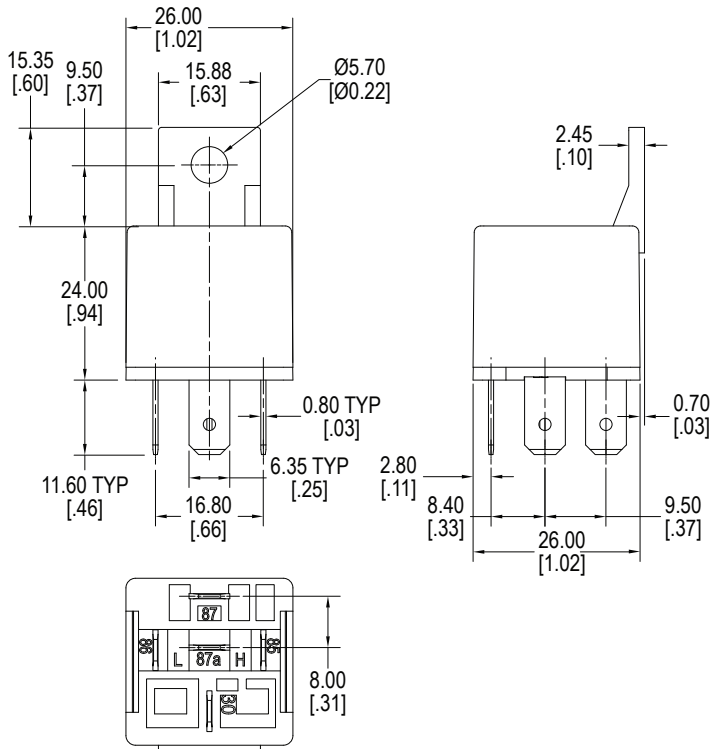
**A2 with Quick Connect, Dust Cover**



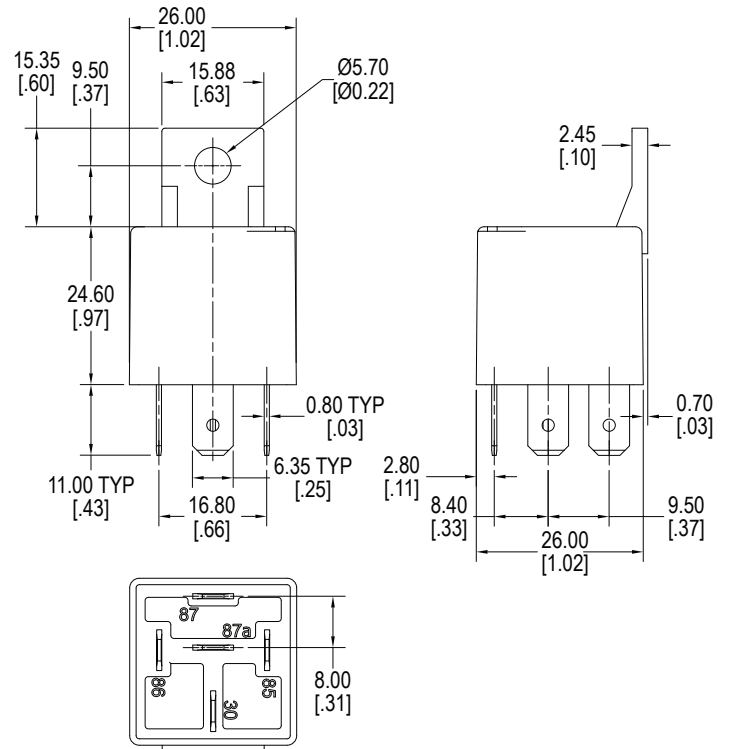
**A2 with Quick Connect, Sealed**

## Dimensions

Units = mm



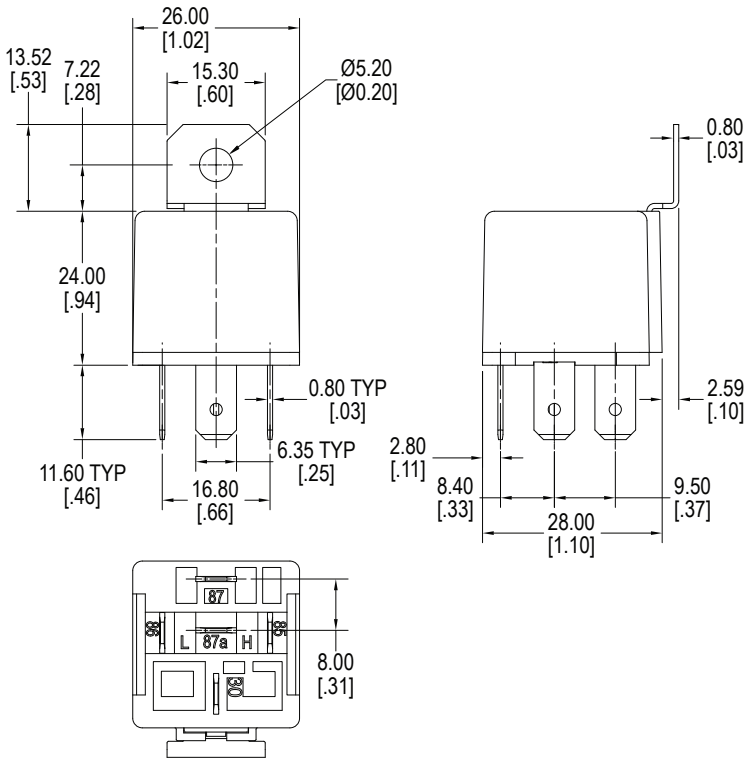
**A2F with Quick Connect, Dust Cover**



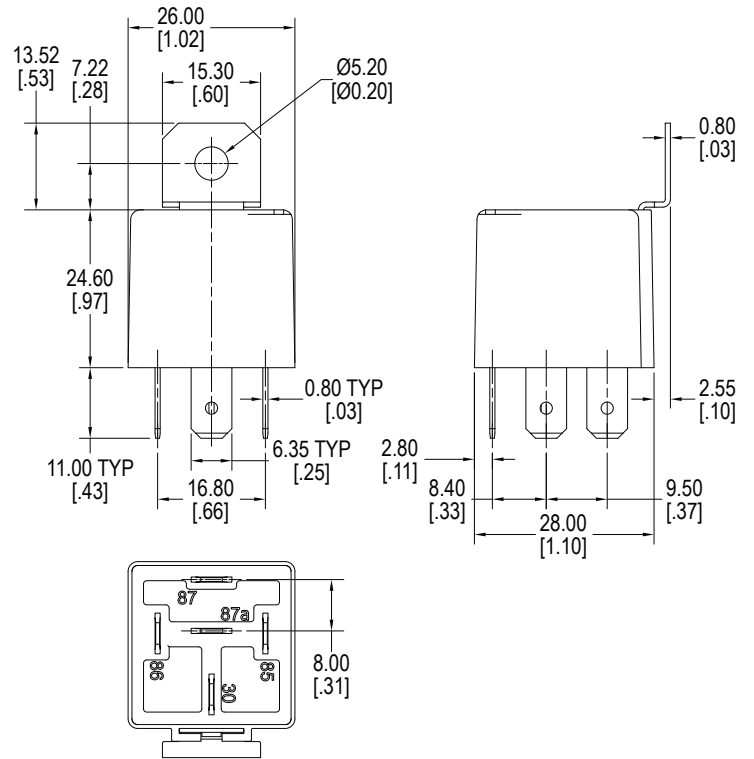
**A2F with Quick Connect, Sealed**

## Dimensions

Units = mm



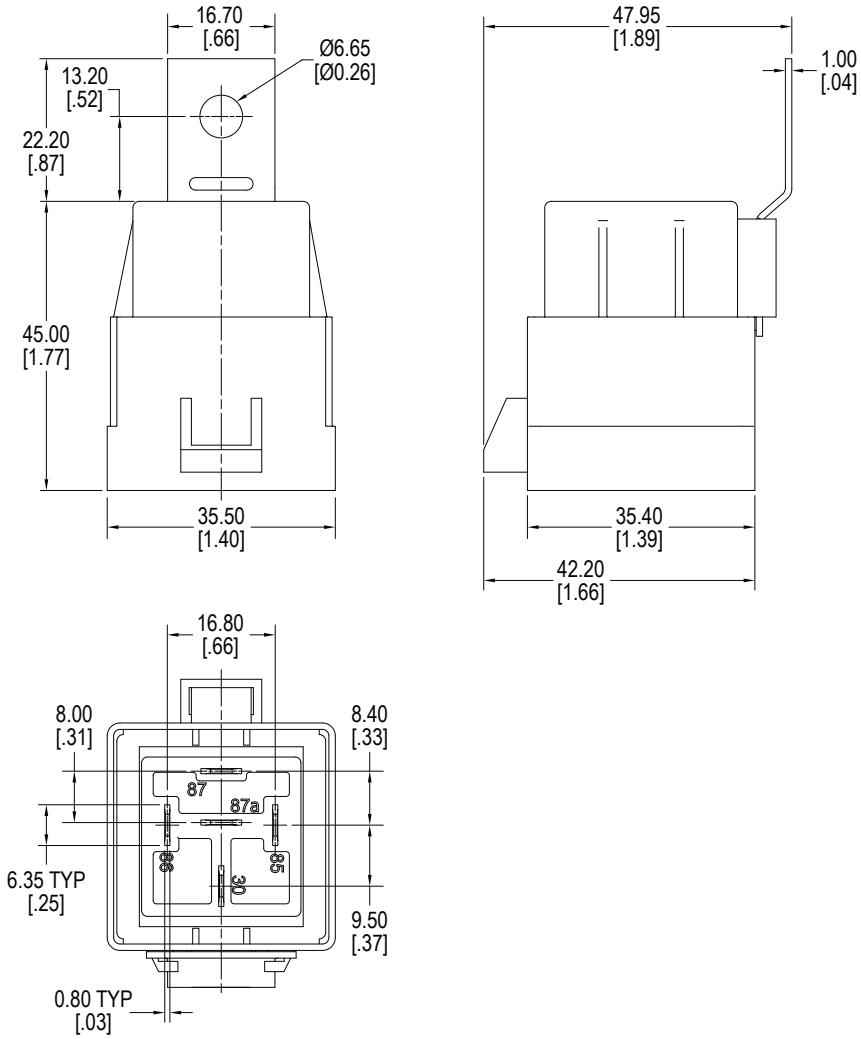
**A2M with Quick Connect, Dust Cover**



**A2M with Quick Connect, Sealed**

**Dimensions**

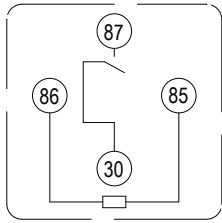
Units = mm



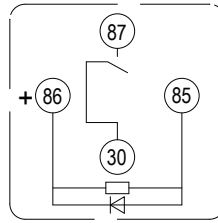
**A2S, Quick Connect, Sealed**

## Schematics

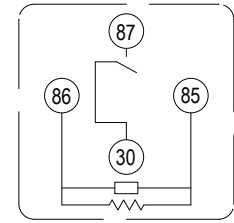
### Bottom Views



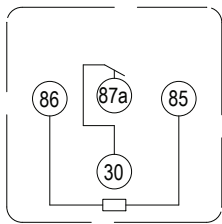
**1A**



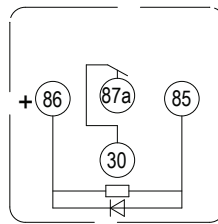
**1A with Diode**



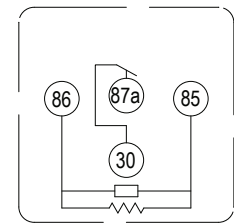
**1A with Resistor**



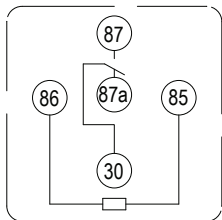
**1B**



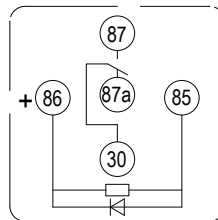
**1B with Diode**



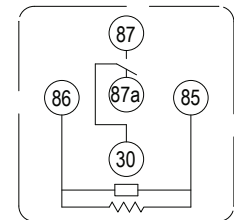
**1B with Resistor**



**1C**



**1C with Diode**



**1C with Resistor**

## PC Layout

### Bottom View

