### Solenoid Valve

# KSV05 Series KSV05A



# PVC WIRE 1095 28 AWG BLACK COLOR 20 ±5 MARKING 10 ±0.5 Dittimm

# Concept

A solenoid valve is an electromechanical controlled valve. The valve features a solenoid, which is an electric coil with a movable ferromagnetic core in its center. This core is called the plunger. In rest position, the plunger with a rubber gasket on the bottom closes off a small orifice. Thus, a small spring holds the plunger down to close the valve. An electric current through the coil creates a magnetic field. The magnetic field exerts a force on the plunger. As a result, the plunger is pulled toward the center of the coil so that the orifice opens.

When the solenoid is not powered, the magnetic field disappears, making the spring goes back up and the orifice will be closed.

### **Features**

- ► Compact size
- Low air leakage
- ▶ High stability

# **Application**

- ➤ Medical Instruments
- ➤ Wrist-type electric BPM
- ▶ Combustion analyzers
- ➤ Patient Monitoring
- ► Household appliances
- ▶ Healthcare devices

# Model Key

| Product | KOGE | Solenoid | Category | Inner Core Diameter | SeriesA-Z | Voltage | Series | Output    |
|---------|------|----------|----------|---------------------|-----------|---------|--------|-----------|
| Valve   | K    | S        | V        | 05                  | А         | 3       | А      | KSV05A-3A |

# **Specifications**

| Part Number       | KSV05A  |   |   |   |  |  |  |
|-------------------|---|---|---|---|--|--|--|
| Voltage           | DC 3V   | DC 6V                                       | DC 12V  | DC 24V  | DC 32V   |  |  |
| Operating Voltage | DC 2.2 ~ 3V                                       | DC 3.3 ~6 V                                 | DC 10.8V~12V                                      | DC 18.0V~24V                                      | DC 28.0~35V                                      |  |  |
| Max. Pressure     | 330mmHg   | 350mmHg                                     | 350mmHg   | 350mmHg   | 350mmHg  |  |  |
| Max. Current      | 130mA   | 60 mA                                       | 45mA  | 63mA  | 110mA  |  |  |
| Туре              | Normally Open                                     | Normally Open                               | Normally Open                                     | Normally Open                                     | Normally Open                                    |  |  |
| DC Resistance     | 23Ω±10%   | 100 $\Omega$ ± 10%                          | 270Ω±10%  | 380Ω±10%  | 293 Ω ±10%                                       |  |  |
| Life              | 30,000 cycles                                     | 30,000 cycles                               | 30,000 cycles                                     | 30,000 cycles                                     | 30,000 cycles                                    |  |  |
| Testing Cycle     | On 1S ,Off 1S                                     | On 1S ,Off 1S                               | On1S,Off1S  | On 1S ,Off 1S                                     | On 1S ,Off 1S                                    |  |  |
| Exhaust Speed     | <3.0s (from 300<br>mmHg to 15mmHg<br>@100cc tank) | <6.0s (from 300 mmHg to 10mmHg @500cc tank) | <8.0s (from 300<br>mmHg to 10mmHg<br>@500cc tank) | <3.0s (from 300<br>mmHg to 10mmHg<br>@300cc tank) | <2.25s (from 300 mmHg to 15mmHg @500cc tank with |  |  |
|                   | as rooso tariit)                                  | (Cooos tarik)                               | (Cooos tarit)                                     | (Cooosialik)                                      | DC 28V)  |  |  |

## Materials

| Metal nozzle | Steel         |
|--------------|---------------|
| Bobbin       | Plastic 130°C |
| Washer       | Rubber        |

### Similar Products

| 3V          |           | 12V        | 24V        | 32V        |
|-------------|-----------|------------|------------|------------|
| KSV05B-3D02 | KSV05A-6C | KSV05A-12B | KSV05B-24A | KSV05B-32B |
|             | KSV05B    | KSV05B-12A |            |            |