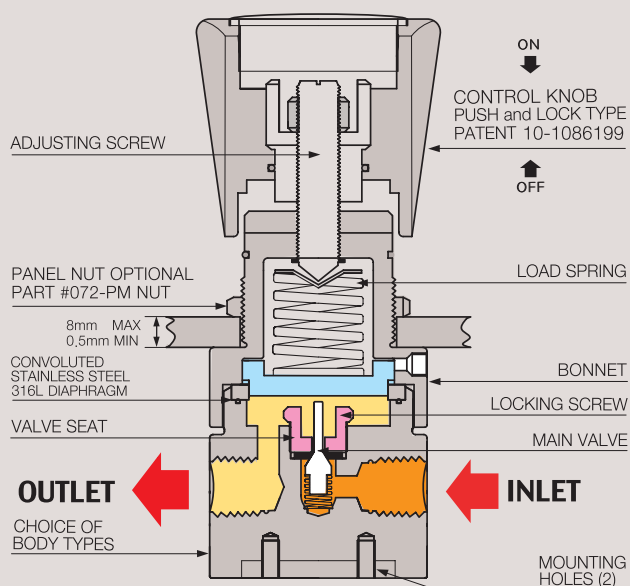


# ORK72

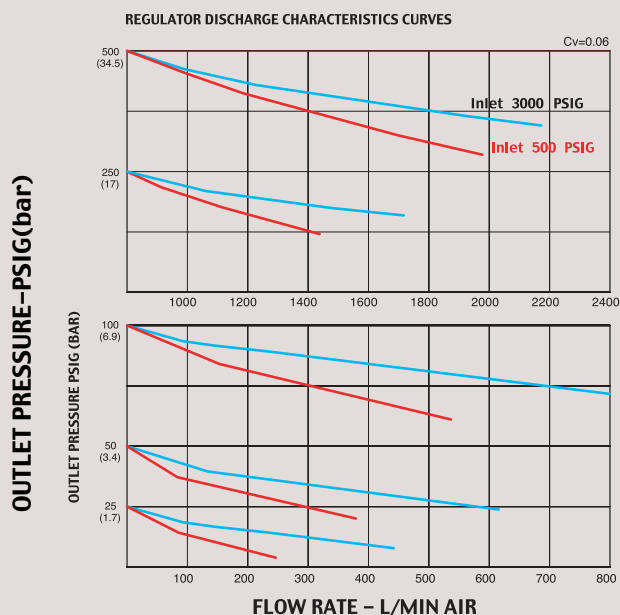
## SERIES

This is revision by Jan of 2013

### FUNCTIONAL SCHEMATIC



### FLOW CHART



## GAS AND LIQUID PRESSURE REDUCING REGULATOR

### ORK72 SERIES

**ORK72 Series** gas regulators are specially designed to regulate the high-corrosive gas and liquid and suitable for semi-conductor equipment production line where the special gases are used and liquid line. As the product's body and all internal parts are made of stainless steel 316L ORK 72 S Series, they can be also used for ultra-pure six-nine(99.9999) gases. 3-ports or 4-ports 1/4" F NPT can be connected to this ORK 72 S Series. Regulators are designed and manufactured for easier operation by equipping with the push and lock type handle which completely prevents the self-change of pre-set value which can be caused by the vibration from outside or minute vibration at the gas pipeline. You can prevent the self-changing of pre-set value just by pushing the handle and reset the value freely by drawing the handle.



### SPECIFICATIONS

Ports	1/4" NPT type ORK72X-0000L-1S, 3-ports ORK72X-0000C-1S, 4-ports
Leak Rate Certification	to 2x10 <sup>-8</sup> atm cc/sec Helium available.
Body Materials	ORK72S-0000-1S / Stainless steel 316L ORK72B-0000-1S / Brass
Bonnet Material	Nickel Plated Brass / Stainless steel 316L
Diaphragm	Stainless steel 316L
Main Valve	Stainless steel 316L
Valve Spring	Stainless steel 316L
Valve Seat	Teflon® (Kel-F, Polyimide, etc.. Optional)
Inlet Pressure Ranges	ORK72X-0000-1S, 3,500psig (238bar) ORK72X-0000-1S-5, 500psig (35bar)
Outlet Pressure Ranges	25(1.7bar), 50(3.4bar), 100(7bar), 250(17bar), 500psig(35bar) ORK72X-0000-1S-V, Optional
Self-Venting	
Operating Temperature	-40°C - +70°C (-40°F - +160°F) (standard) ORK72x-0000-1S-H1, +120°C (Optional) ORK72x-0000-1S-H2, +250°C (Optional)
Flow Capacity	Cv=0.06 (Cv=0.2 etc.. Optional)
Standard Optional	CGA, Inlet and Outlet Gauges, etc..



## REFERENCE

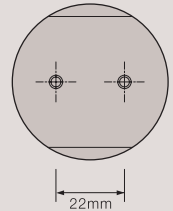
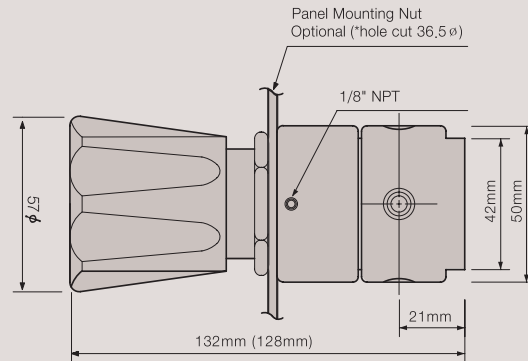
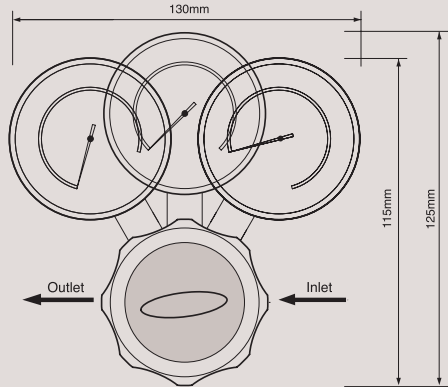
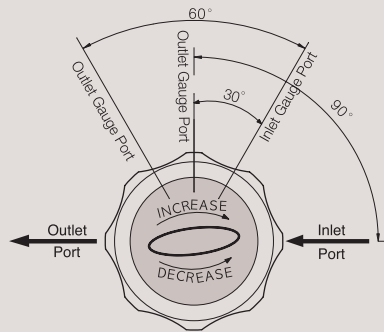
This catalogue is printed as of January 2013, and the dimensions and/or specifications in this catalogue can be changed without prior notice in the course of constant upgrading and improvement of our products.

ORKIMSAN LTD.

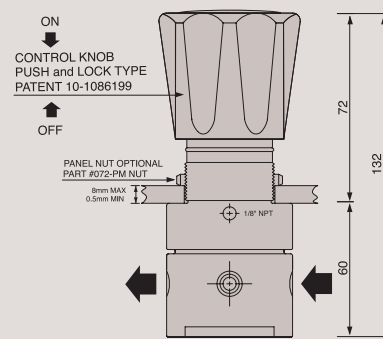
# INSTALLATION DIMENSIONS

## METRIC EQUIVALENTS ARE IN PARENTHESES

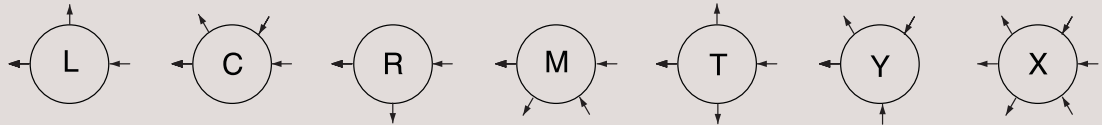
### ■ GAUGE PORT OPTIONS



M5 x 0.8P TAPS  
DP 8mm



### Ports Type



## Features

- Precision control of 1/4" NPT type Regulator
- Suitable for the research labs, industrial control
- Inlet 3500 or 500 psig
- Outlet 25psig(1.7bar), 50psig(3.5bar), 100psig(7bar), 250psig(17bar), 500psig(35bar)
- Panel mounting nut option
- WORK72S-0000x-10 / W MODEL IS ONLY TYPE for LIQUID or WATER

## Recommendations

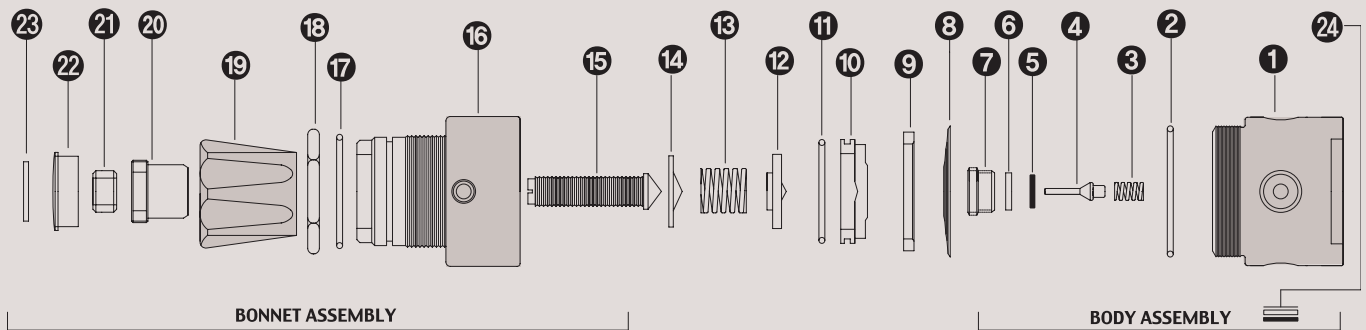
Each product is manufactured since being taken into consideration of the best safety and easy manipulation. However in order to use the regulator in most safe and effective way, you are recommended to use the actual pressure within the range of its 25% ~ 75%. For making precise, smooth movement and to prolong product life, strongly recommended to make a use within above mentioned range.

## ORDERING INFORMATION

W ORK72 S - 0025 L - 1S H - 5 - V - H1

W MODEL	BASIS SERIES NUMBER	BODY MATERIAL	OUTLET PRESSURE RANGE	PORT TYPE	FLOW CAPACITY	DIAPHRAGM MATERIAL	INLET PRESSURE	SELF VENTING	HIGH TEMPERATURE
W model is only type for Liquid or Water	Standard Inlet Pressure 3500psig (238 bar)	B = Brass S = Stainless Steel 316L	0025 = 25psi(1.7bar) 0050 = 50psi(3.5bar) 0100 = 100psi(7bar) 0250 = 250psi(17bar) 0500 = 500psi(35bar)	L = 3-Ports C = 4-Ports R = 3-Ports M = 4-Ports T = 4-Ports Y = 4-Ports X = 6-Ports	1 = 1/4" NPT type  1S = Cv 0.06 Standard  10 = Cv 0.2 Optional	STS 316L Standard  H = Hastelloy-C  Optional	5 = Inlet 500psi(35bar)  Optional	V = Self-Venting  Optional	H1 = 120°C H2 = 250°C  Optional

### ORK72 SERIES PART LIST



### STANDARD MODEL SERIES

Item No.	Description	Part No.	Model Application
01	Body	072-02-01	02-01 Stainless Steel 316L body / 02-02 Brass body
02	Boby O-Ring	072-02-00	All Model Same
03	Valve Spring	072-04-01	04-01 STS 316L / 04-03 Hastelloy-C-22 / 04-04 Monel
04	Main Valve	072-06-01	06-01 STS 316L / 06-03 Hastelloy-C-22 / 06-04 Monel
05	Valve Seat	072-10-01	10-01 PFA / 10-05 Vespel / 10-06 Peek
06	Valve Seat Cartridge	072-08-01	08-01 Stainless Steel 316L / 08-02 Brass
07	Locking Screw	072-12-01	All Model Same
08	Diaphragm	072-16-01	16-01 STS 316L / 16-02 Hastelloy C-22
09	Diaphragm Plate	072-22-02	All Model Same
10	Back-up Plate	072-26-03	All Model Same
11	Back-up Plate O-Ring	072-28-01	All Model Same
12	Spring Plate	072-30-01	All Model Same
13	Load Spring	072-38-01	11-01 25psi / 11-02 50psi / 11-03 100psi / 11-05 250psi / 11-07 500psi
14	Pivot	072-40-01	All Model Same
15	Adjusting Screw	072-42-01	All Model Same
16	Bonnet	072-44-02	44-01 Stainless steel 316L / 44-02 Brass
17	Push & Lock O-Ring	072-46-01	All Model Same
18	Panel mount Nut	072-48-01	All Model Same
19	Control Knob	072-50-01	50-01 ABS / 50-04 Aluminum Control knob
20	Push & Lock Handle nut	072-52-01	All Model Same
21	Locking Nut	072-54-01	All Model Same
22	Name Cap	072-56-01	56-01 ABS
23	Name Cap Plate	072-58-01	58-01 25psi/58-02 50psi/58-03 100psi/58-04 200psi/58-06 350psi/58-07 500psi
24	Filter Assembly	072-60-01	All Model Same