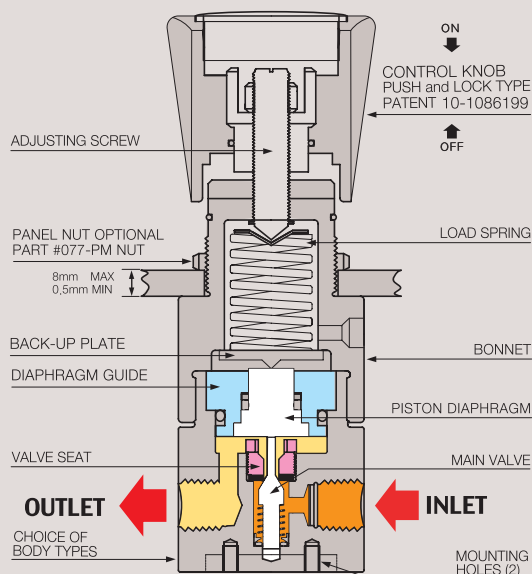


ORK82

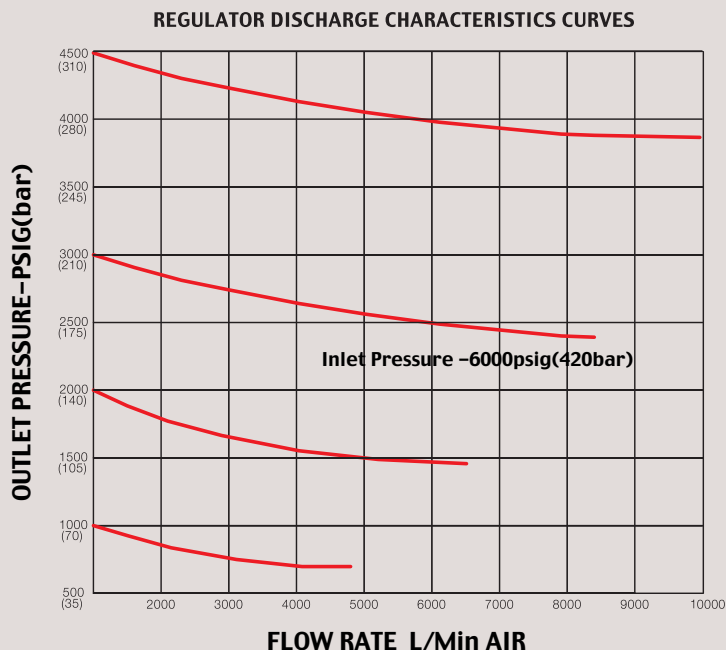
SERIES

This is revision by Jan of 2013

FUNCTIONAL SCHEMATIC



FLOW CHART



HIGH-PRESSURE REGULATOR

ORK82 SERIES

ORK82 Series gas regulators are specially designed to regulate the high pressure gases safely. As the product's body and all internal parts are made of stainless steel 316L(082S Series) that is strong for corrosiveness and liquid and brass (ORK82B Series), they can be also used for ultra-pure six-nine(99.9999) gases. As these models can be connected by 4-ports 1/4" F NPT, they are suitable for semi-conductor equipment production line and ultra-precision plumbing line. max. inlet pressure is 6000 psig(420 bar) and outlet pressure, 1000 psi(70 bar), 2000 psi(140 bar), and 3000 psi(210 bar).ORK82 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" 4-ports NPT type
Leak Rate Certification	to 2x10 ⁻⁸ atm cc/sec Helium available.
Body Materials	ORK82S-0000-1S / Stainless steel 316L ORK82B-0000-1S / Brass
Bonnet Materia	Nickel Plated Forged Brass / Stainless steel 316L
Main Valve	Stainless steel 316L
Valve Spring	Stainless steel 316L
Valve Seat	Teflon® (Kel-F, Polyimide, etc.. Optional)
Inlet Pressure Range	6,000psig(420bar)
Outlet Pressure Ranges	1000(70bar), 2000(140bar), 3000psig(210bar), 4500psig(310bar)
Self-Venting	082X-0000-1S-V, Optional
Operating Temperature	-40°C - +70°C(-40°F - +160°F) (standard) ORK82S-0000-1S-H1, +120°C (Optional) ORK82S-0000-1S-H2,
Flow Capacity	+250°C (Optional) Cv=0.06 (Cv=0.2
Standard Optional	etc.. Optional) CGA, Inlet and Outlet Gauges, etc..

REFERENCE

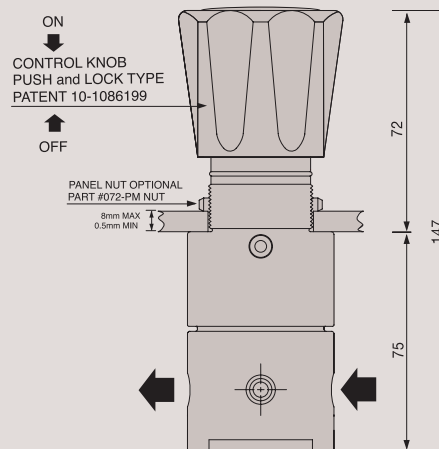
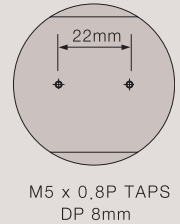
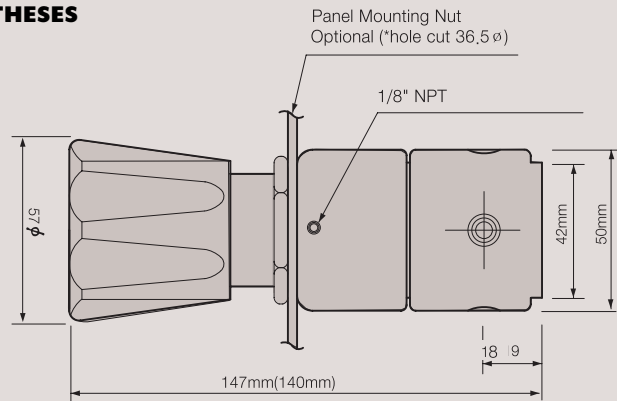
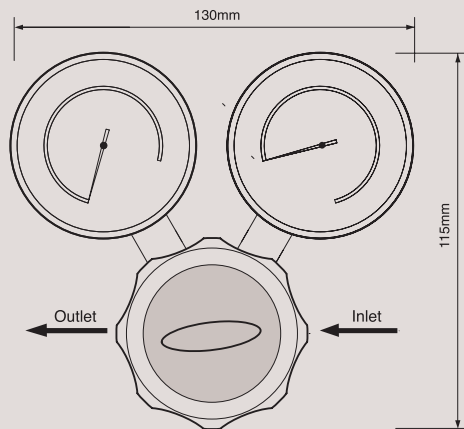
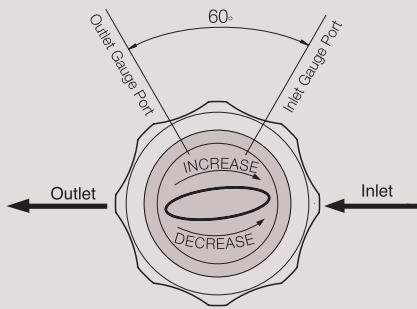
This catalogue is printed as of January 2013, and the dimensions and/or specifications in this catalogue can be changed without prior notice in the course of constant upgrading and improvement of our products.

ORKIMSAN LTD.

INSTALLATION DIMENSIONS

METRIC EQUIVALENTS ARE IN PARENTHESES

■ GAUGE PORT OPTIONS



Features

- Piston- Diaphragm Type Regulator of 1/4" NPT Type
- Suitable for the High-Pressure Regulator
- Inlet 6000psig(420bar)
- Outlet 1000(70bar), 2000(140bar), 3000(210bar)psig, 4500(310bar)
- Panel mounting nut option

Recommendations

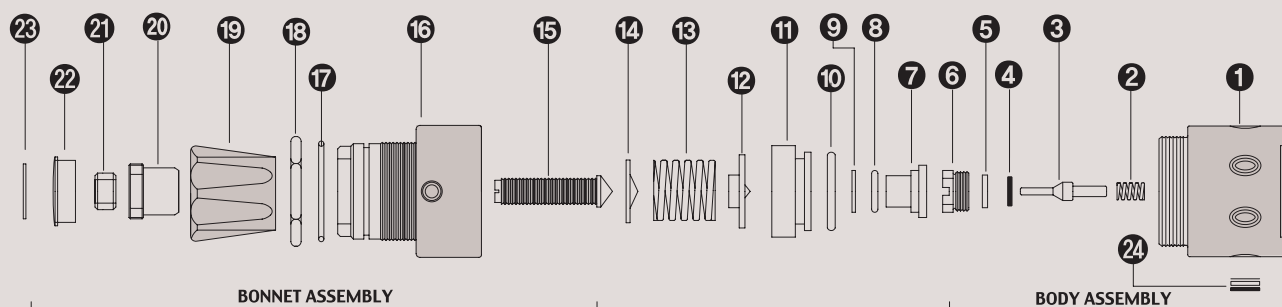
Each product is manufactured since being taken into consideration of the best safety and easy manipulation. However in order to use the regulator in most safe and effective way, you are recommended to use the actual pressure within the range of its 25% ~ 75%. For making precise, smooth movement and to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

ORDERING INFORMATION

ORK82 S - 1000 - 1S H - V - H1

BASIS SERIES NUMBER	BODY MATERIAL	OUTLET PRESSURE RANGE	FLOW CAPACITY	DIAPHRAGM MATERIAL	SELF VENTING	HIGH TEMPE- RATURE
Standard Inlet Pressure 6000psig (420 bar)	B = Brass S = Stainless Steel 316L	1000 = 10-1000psi (7-70bar) 2000 = 20-2000psi (15-140bar) 3000 = 30-3000psi (20-210bar) 4500 = 30-4500psi (30-310bar)	1 = 1/4" Female NPT 1S = Cv 0.06 Standard 1O = Cv 0.2 Optional	STS 316L Standard H = Hastelloy-C Optional	V = Self-Venting Optional	H1 = 120°C H2 = 250°C Optional

ORK82 SERIES PART LIST



STANDARD MODEL SERIES

Item No.	Description	Part No.	Model Application
01	Body	082-02-01	02-01 Stainless Steel 316L / 02-02 Brass Body / 02-03 Monel
02	Valve Spring	082-04-01	04-01 STS 316L / 04-03 Hastelloy C-22 / 04-04 Monel
03	Main Valve	082-06-01	06-01 STS 316L / 06-03 Hastelloy C-275 / 04-04 Monel
04	Valve Seat	082-10-01	10-01 PFA / 10-05 Vespel / 10-06 Peek
05	Valve Seat Cartridge	082-08-01	All Model Same
06	Locking Screw	082-12-01	All Model Same
07	Piston Diaphragm	082-18-01	All Model Same
08	Piston Diaphragm O-ring	082-18-00	All Model Same
09	Diaphragm Teflon Ring	082-18-00	All Model Same
10	Diaphragm Guide O-ring	082-18-00	All Model Same
11	Piston Diaphragm Guide	082-20-01	20-01 Series Stainless steel 316L / 20-02 Brass
12	Spring Plate	082-30-01	All Model Same
13	Load Spring	082-38-01	38-08 1000psi / 38-09 2000psi / 38-10 3000psi / 38-11 4500psi
14	Pivot	082-40-01	All Model Same
15	Adjusting Screw	082-42-01	All Model Same
16	Bonnet	082-44-02	44-02 Brass / 44-01 Stainless steel 304 Bonnet Optional
17	Push & Lock O-Ring	082-46-01	All Model Same
18	Panel mount Nut	082-48-01	All Model Same
19	Control Knob	082-50-01	50-01 ABS / 50-04 Aluminum Control knob Optional)
20	Push & Lock Handle nut	082-52-01	All Model Same
21	Locking Nut	082-54-01	All Model Same
22	Name Cap	082-56-01	56-01 ABS
23	Name Cap Plate	082-58-07	58-08 1000psi / 58-09 2000psi / 58-10 3000psi / 58-11 4500psi
24	Filter Assembly	082-60-02	All Model Same