

USER MANUAL

ITEM : ACCESSORIES FOR PRESSURE GAUGE

MODEL : A010, A020, A030, A040, A050, A060, A070, A080



WISE[®] WISE Control Inc.
www.wisecontrol.com

Instruction Manual for Correct and Safe Use

To use the product correctly and safely, please read this manual carefully before operating.

Misuse of the product might cause damage and serious injury to the user.

WARNING

1. Do not apply more pressure than given range.
2. Do not use the product with a corrosive fluid.
3. Use the product within the given temperature range.
Excess use of given temperature range can cause the damage to the product, and leads to the destruction.
4. When removing the products from its operating line, make sure to close the valve before removing to prevent the fluid or other substances to release; it might cause the destruction of surroundings.
5. When installing the product on site, please follow the instruction manual.
6. Do not modify the product for other purpose. Please consult the manufacturer for repair.
7. Be sure to open and close the valve in order. When the valve is mishandled, it might cause the destruction of instrument due to overpressure or declining pressure.

Table of Contents

MODEL : A010(Union)

1. summary
2. feature

MODEL : A020(Gauge Union)

1. summary
2. feature

MODEL : A030(Syphon Tube)

1. summary
2. feature

MODEL : A040(Pulsation Dampner)

1. summary
2. feature

MODEL : A050(Snubber)

1. summary
2. feature

MODEL : A060(Condensate Pot)

1. summary
2. feature

MODEL : A070(Gauge Protector)

1. summary
2. feature

MODEL : A080(Instrument Valve)

1. summary
2. feature

MODEL : A010

1. Summary

A010 Union accessory : When installing the pressure instrument if the screw thread is not fit up with connection, use this accessory as a adapter.



2. Feature

- 1) Gauge Connection and Process Connection is available to use both FEMALE and MALE.
- 2) Connection size : 1/8", 1/4", 3/8", 1/2", 3/4", 1", 1 1/4", 1 1/2", 2" PT, NPT&PF etc.
- 3) Material : BRASS, 304SS, 304LSS, 316SS, 316LSS, PVC etc.
Special material : TEFLON, MONEL etc. (made by quotation)
- 4) Total length of UNION is made in accordance with WISE standard drawing, but it can be made by quotation on spcial occasion.

MODEL : A020

1. Summary

A020 Gauge Union accessory : When installing the pressure gauge it can be installed in all directions.



2. Feature

- 1) Gauge Connection and Process Connection is available to use both FEMALE and MALE.
- 2) Gauge is installed in direction you want, and when the length of connection part is short it can be used as a extended nipple.
- 3) Connection size : 1/8", 1/4", 3/8", 1/2", 3/4", 1", 1-1/4", 1-1/2", 2" PT, NPT&PF etc.
- 4) Material : 304SS, 304LSS, 316SS, 316LSS etc.
Special material : MONEL etc. (made by quotation)
- 5) Total length of GAUGE UNION is made in accordance with WISE standard drawing, but it can be made by quotation on spcial occasion.
- 6) Type : "N", "P", "Q", "R", "S", "T" ("T" type as a Flange type is made by code or standard.)

MODEL : A030

1. Summary

A030 Syphon Tube accessory : Use when protecting the instruments from high process temperature condition like steam.

Also use to decrease the flow of urgent pressure.



2. Feature

- 1) Syphon Tube is a dropping the temperature and it can be decreased 70% of the temperature through 1 core(1 round standard).
- 2) Gauge Connection and Process Connection is available to use both FEMALE and MALE.
- 3) Connection Size : 1/8", 1/4", 3/8", 1/2", 3/4", 1", 1-1/4", 1-1/2", 2" PT, NPT&PF etc.
- 4) Material : 304SS, 304LSS, 316SS, 316LSS etc.

Special material : MONEL etc. (made by quotation)

Total length of Syphon Tube is made in accordance with WISE standard drawing, but it can be made by quotation on special occasion.

Type : "P", "N", "M", "B", "C", "B*", "C*" ("C*" type as a Flange type is made by code or standard)

Allowable pressure : 3/8"(17.3Φ) X SCH 40 (2.3t) = about 250bar

Allowable pressure : 3/8"(17.3Φ) X SCH 80 (3.2t) = about 350bar

Allowable pressure : 1/2"(21.7Φ) X SCH 40 (2.8t) = about 250bar

Allowable pressure : 1/2"(21.7Φ) X SCH 80 (3.7t) = about 350bar

Allowable pressure : 1/2"(21.7Φ) X SCH 160 (4.7t) = about 450bar

The pressure by each temperature is a theoretical figures, it can be influenced by ambient temperature, and rapid increase and decrease of pressure.

※ This data is written on the basis of Seamless Pipe.

In case of general pipe, reduce by about 50~80%.

MODEL : A040

1. Summary

A040 Pulsation Dampner accessory :

Use to decrease the pulsation of pump and air compressor, and to read a pressure easily.

It should be installed in the clean fluid and air condition.

Also Use as a bumper.



2. Feature

- 1) Dampner is a device which can reduce the pulsation. It can be used as a sudden plus and stop. After it is locked completely, the gauge can be attached and removed.
- 2) Gauge Connection is available to use as a FEMALE and Process Connection is a MALE.
- 3) Connection Size : 1/4", 3/8", 1/2", PT, NPT&PF etc.
- 4) Material : 304SS, 304LSS, 316SS, 316LSS etc.
- 5) Total length of Dampner is made in accordance with WISE standard drawing, but it can be made by quotation on spcial occasion.
- 6) Maximum pressure is a 250 bar.

MODEL : A050

1. Summary

A050 Snubber model : Use to control the pulsation and to prevent from spark.

Also use with a adjustable needle valve to restrict



pressure flow.



2. Feature

- 1) Snubber is a device which can reduce the pulsation. It can be used as a sudden plus and stop. It is excellent for protection of pulsation in the low pressure condition.
- 2) Gauge Connection is available to use as a FEMALE and Process Connection is a MALE.
- 3) Size connection : 1/4", 3/8", 1/2", PT, NPT&PF etc.
- 4) Material : 304SS, 304LSS, 316SS, 316LSS etc.
- 5) Total length of Snubber is made in accordance with WISE standard drawing, but it can be made by quotation on special occasion.
- 6) It has a built-in metal filter to remove residue and impurities.

MODEL : A060

1. Summary

A060 Condensate Pot accessory : Use when protecting the instruments from high process temperature condition like steam.

It is excellent for protecting in the higher process temperature than syphon tube.

Use with a pressure and differential pressure transmitter.



2. Feature

- 1) In the ultra high temperature condition, it is installed in the line which Syphon Tube cannot control the temperature.
- 2) Gauge Connection and Process Connection is available to use both 1/2" PT, NPT FEMALE.
- 3) Material : S25C, 304SS, 316SS, etc.
- 4) Total length of Pot is made in accordance with WISE standard drawing, but it can be made by quotation on special occasion.
- 5) It is divided Flat type and Globe type.

- 6) Size : 3"(89.1Φ) X SCH 40 (5.5t)
- 3"(89.1Φ) X SCH 80 (7.6t)
- 3"(89.1Φ) X SCH 160 (11.1t)

MODEL : A070

1. Summary

A070 Gauge Protector accessory : Use to protect the pressure from overpressure.

If the pressure is higher than set pressure, shut-off the pressure automatically to protect the pressure gauge.



2. Feature

- 1) Gauge Protector is a pressure cutting device, when the pressure is higher than set pressure.
- 2) Gauge Connection is available to use as a FEMALE and Process Connection is a MALE.
- 3) Only 1/2", PT, NPT is available, any other connection is made by quotation.
- 4) Material : 304SS, 304LSS, 316SS, 316LSS etc.
Special material : MONEL etc. (made by quotation)

MODEL : A080

1. Summary

2 WAY MANIFOLD VALVE :

This accessory convert the flow of pressure between connection terminal and connection terminal.

Use with a pressure gauge and transmitter.



3 WAY MANIFOLD VALVE :

This accessory convert the flow of pressure between two different connection terminal and one common



connection terminal.

Use with a differential pressure gauge and differential pressure transmitter.

2. Feature

- 1) After installing the 2 way manifold valve, it can be easy to attach and remove the gauge at any time. It can control the pressure on the flow of pressure, and it has a vent function.
It is very useful.
- 2) Gauge Connection and Process Connection of 2 way manifold valve is available to use both FEMALE and MALE.
- 3) Gauge Connection and Process Connection of 3 way , 5way manifold valve is available to use only FEMALE. When customer want as a MALE, use with UNION.
- 3) Material : 316SS, 316LSS etc.
Special material : MONEL, INCONEL etc. (made by quotation)
- 4) On the temperature below about 200°C use the general type (Teflon Packing).
On the high temperature use the Graphite Packing.
- 5) There are two types of 3 way, 5way valve. One is a Gauge type(Pipe to Pipe) and the other is a transmitter type (Pipe to Flange).