

## **OPERATION MANUAL**

External exhaust valve

# MODEL G3-M



#### No.G3-M-941B1-A

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## 1. Introduction

Thank you very much for purchasing COSMO's G3-M External exhaust valve. Before using the product, read this manual carefully to assure proper handling.

#### **Safety Hints**

Instructions to abide by for using the product safely without risking physical injury to the user and other persons, and property damage, are given below:

Marking	Explanation
<b>MARNING</b>	Failure to take or avoid a specific action could result in death or serious physical harm to the user.
<b>CAUTION</b>	Failure to take or avoid a specified action could result in small physical harm to the user or property damage.



## **WARNING**

- A) Use particular care when installing the unit in an environment where water or oils are used nearby.
- B) This unit is not customer-serviceable. Customer servicing could result in fires or electrical shock hazards.
- C) Discontinue using the unit when:
  - The unit smokes.
  - The unit emits abnormal noises.
  - The unit developed problems not covered in the operations manual.
  - The unit cannot be operated as indicated in the operations manual.



## **CAUTION**

- A) Do not use the unit in places that are damp, that are exposed to direct sunlight or that are outside the temperature range of 5 to 40 . Using the unit in such environments could result in malfunctions or failures.
- B) Ensure correct cabling. Incorrect cabling may cause damage to the unit and surrounding hardware.
- C) Mount the unit in firm position in a frame capable of fully sustaining its load. Do not install the unit in a violently vibrating, sloped or any other rickety place. If installed in these environments, the unit could fall down or drop, resulting in physical harm.
- D) Do not disassemble the unit. If disassembled, the unit could malfunction, resulting in physical harm or electrical shock hazards.

#### 2. General Information And Features

External exhaust valve, G3-M, is used to prevent the leak tester from being contaminated by externally discharging the filthy air contains water and oil from tested parts. The exhaust valve is installed between the tested part and the master and the leak tester to effect external exhaust.

G3-M is controlled by the leak tester.

## Feature of the built-in Air-operated valve:

- Highly durable: Special structure called Guard type, which functions stably over long period of time even if contaminated air goes through.
- Internal deformation and thermal effects are minimized, which is most suitable for air leak test.

## 3. Primary Specifications

Model: G3-M

Corresponding tester circuit

Medium pressure: M circuit with External exhaust valve ready G.

Medium low pressure L2 circuit with External exhaust valve ready G.

Low pressure L or L1 circuit with External exhaust valve ready G.

Allowable pressure: 700 kPa
Proof pressure: 1 MPa

Tubing port inner diameter: Ports to master and tested part: Rc (PT) 1/4

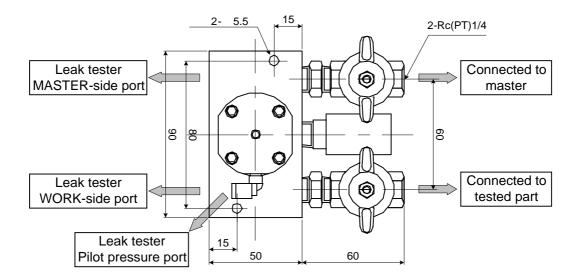
Ports to air leak tester: Rc (PT) 1/4

Pilot pressure: Clean air regulated from 400 to 700 kPa (300 kPa min.) supplied from

the air leak tester.

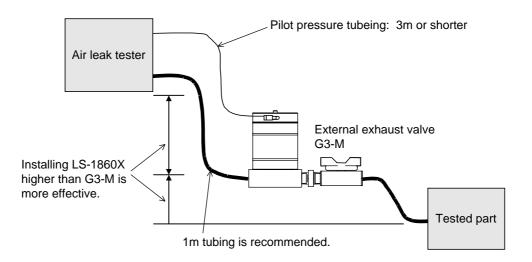
Pilot pressure tubing length: 3 m max.

**Accessories:** Pilot pressure tubing ( 4.0, 3 m).



## 4. Connection method

- 1) Connect WORK and MASTER-sides ports of the G3-M to WORK and MASTER-sides ports of the air leak tester
- 2) Connect the tested part and master to the G3-M (stop valves).
- 3) Connect attached pilot pressure tubing to the G3 PILOT PRESSURE port on the rear panel of the air leak tester and to the G3-M.
- **CAUTION:** 1: Keep the tubing for pilot pressure 3 m or shorter. Excessively long tubing may cause incorrect action.
  - 2: Install G3-M horizontally, as close to the tested part as possible and lower than air leak tester. See the below diagram



## 5. Pneumatic Circuit

Connection example

