

1. INSPECTION

This instrument has been thoroughly tested at the factory before shipment. When you receive it, visually inspect it for damage and check the accessories.

1.1 Model number and specification check

Check to see the model number and specifications on the nameplate attached to the front cover of the instrument are as ordered.

1.2 Contents of the instruction manual

This instruction manual provides instructions on how to mount, external wiring and maintenance of the instrument.

2. GENERAL

This instrument receives pneumatic signal from various transmitters and converts it into isolated 4~20mA DC signal.

Accessories:

| | |
|-------------------|---|
| Mounting block | 2 |
| Tag number label | 1 |
| Mounting screw M4 | 2 |

3. MOUNTING METHOD

JUXTA signal conditioners can be mounted on racks, walls or DIN rails.

3.1 Rack mounting

Use panel (FRK-16) and install it on an angle as shown in Fig.1. This is a convenient method for high density mounting of the instrument on 19-inch rack panel. (See Fig. 7.)

3.2 Wall mounting

Use panel (FRK-16) and mount the instrument on the wall as shown in Fig. 2 or directly mount it on the wall. (See Figs. 7 and 8 for mounting dimensions.)

3.3 DIN rail mounting

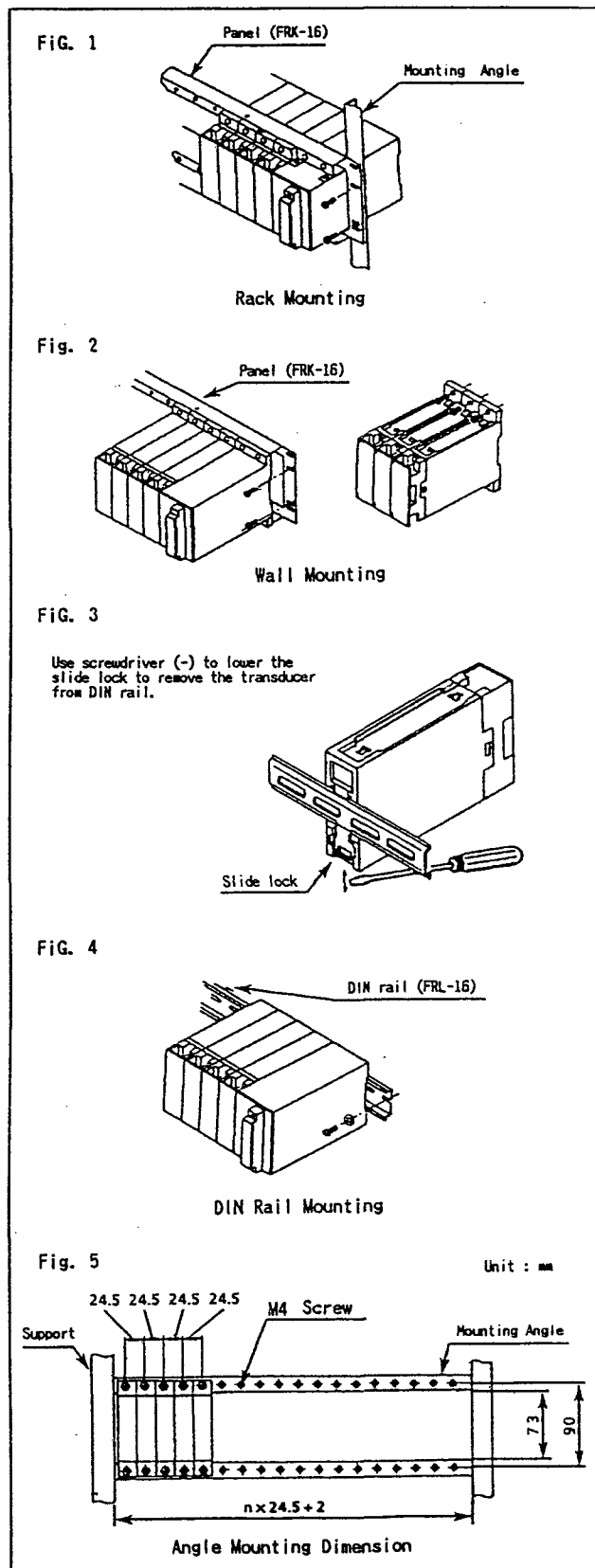
Insert a DIN rail into the upper section of the DIN rail groove on the rear of the instrument and lock the rail in position by the slide lock at the base of the instrument as shown in Figs. 3 and 4.

3.4 Angle mounting

If the instrument is mounted without using the panel (FRK-16), refer to Fig. 5 for its mounting.

3.5 Mounting block installation and removal

Insert a mounting block into groove of the instrument and slide it until it locks in position by the stopper as shown in Fig.6. To remove it, lift up stopper by the screwdriver (-) and slide the mounting block along the groove.



4. EXTERNAL WIRING

Open the terminal cover of the instrument and wire the terminals. Flexible twisted wire and good contact of durable round crimp-on terminals (JIS C2805) are recommended to be used.

4.1 Piping

Connect air pipe to transducer. Air connecting hole of transducer has PT1/8 female screw. Fastening torque recommended is 3~5N·m. Beware of unnecessary over torque to prevent damage on the mould.

4.2 Signal Cable

Nominal cross-sectional area of conductor:
0.5~0.75 mm²

Example of suitable cable:
Twisted vinyl cord (VSF) (JIS C3306)

4.3 Wiring

- ① See Fig. 9 for the terminal arrangement.
- ② Connect distributor input terminal (+) to transducer terminal 4 (+) and input terminal (-) to transducer terminal 5 (-).

Note this instrument is supplied power from distributor input terminals.

5. ITEMS TO BE CHECKED BEFORE TURNING THE POWER SWITCH ON

- ① Make sure that input terminals of the distributor are connected to the correct polarities, (+) (-).
- ② Confirm that the external wiring to the terminal board is correct.
- ③ Check that the mounting, ambient conditions (temperature, humidity, dust and vibration) are normal.

Confirm the above items before turning the power on. The transducer needs 5 minutes warm-up to meet its specified accuracy.

6. MAINTENANCE

(Caution)

Carry out the following calibration after warming up the equipment for more than 5 minutes.

6.1 Calibration equipment

- Pneumatic signal generator (Yokogawa Type 2656 or equivalent) 1
- Voltmeter (Yokogawa Type 2502A or equivalent) 1
- Precision resistor 250Ω ±0.01%, 1W 1

6.2 Calibration

- ① Connect each equipment as shown in Fig.11.
- ② Input/output characteristic check
Use pneumatic signal generator and apply input signals 0, 25, 50, 75 and 100% to the transducer. Check that corresponding transducer outputs are 0, 25, 50, 75 and 100% respectively and are within specified accuracy rating range.
*If output signal is out of tolerance, adjust it by the span and zero adjustment trimmers on front panel of the instrument.

Fig. 6

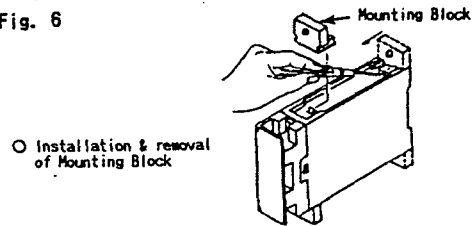


Fig. 7

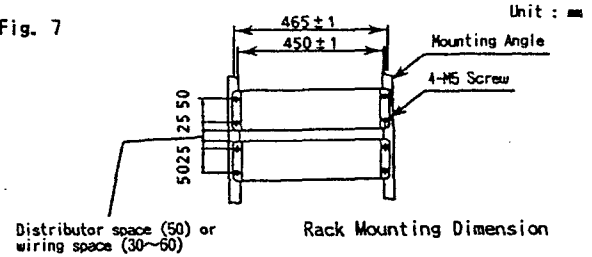


Fig. 8

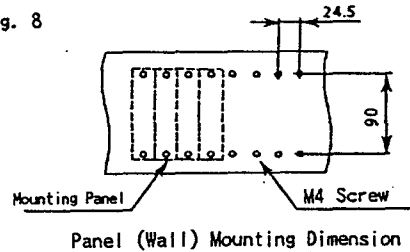


Fig. 9

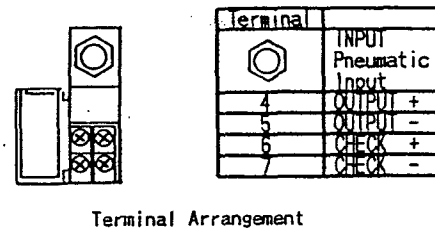


Fig. 10

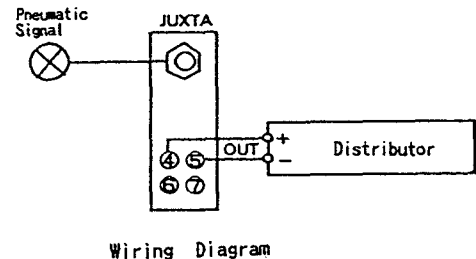
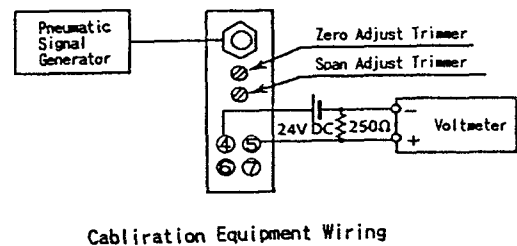


Fig. 11



Subject to change without notice for grade up quality and performance.