



PRODUCT LINE UP



Temperature Controller

- AH series High accuracy / Fenwal Flagship model
- AG series Fenwal Standard model / AR series retro-fit model
- AL series Durable / Reliable / Easy operation
- AM series Low cost / Small size model
- DG series Pipe heating exclusive use / SSR include



Thermoswitch

- 17000 series Fast response / Close control / Extreme sensitivity
- 20000 series Liquid expansion type / Vibration resistance
- 30000 series Surface mounting type / Narrow temp. differential

Wafer Sensor

For reduce the sensor radiation, the point of sensor fill in the wafer
For 0.1mmφ, 0.2mmφ wiring make quickly response

Smoke Detector for Equipment / F series

Smallest / High sensitivity / Self-correction function
For preventive maintenance

Compensation Rate type Heat Detector

Detect-A-Fire / resisting pressure explosion-proof type fire detector is
only one certified products by TIIS No. 38363 in Japan.

Temperature Controller Lineup

AH series



High accuracy
5 digit display
Dual channel input
Communications

Size : W96 x H96 x D100

Accuracy :

$\pm 0.1\%$ or $\pm 1^\circ\text{C}$ whichever is greater (T/C)

$\pm 0.1\%$ or $\pm 0.2^\circ\text{C}$ whichever is greater (PT)

Control : PID / On/Off

AG series



Fenwal Standard
AR retro-fit model

Size :

AG24 : W48 x H96 x D100

AG33 : W72 x H72 x D100

AG42 : W96 x H48 x D100

AG44 : W96 x H96 x D100

AL series



Digital Controller
with communication
and timer.

**Multiple external
settings** (Analog
input and contact
point input)

Size : W48 x H96 x D100

High temp. (60°C) operation.

Less wiring when operating multiple controllers

Waterproof specification (IP64)

AM series

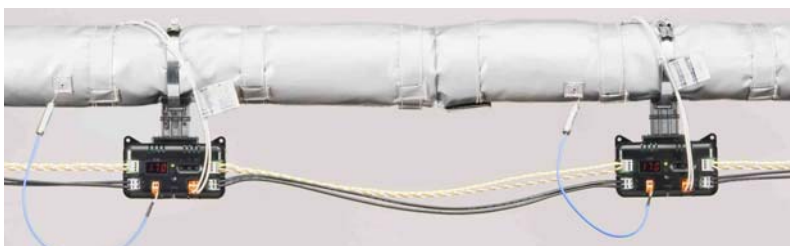


**Fenwal
Smallest
model**

Size : W48 x H48 x D77

Option : 3 alarms, communication, CT
input
SV shift

DG series



Exclusive use for exhaust
piping

Easy set up by

Daisy Chain connect

Enable to set up any place

Size : W109 x H46 x D59

Input : K-thermocouple

Control output : Internal SSR [5A]

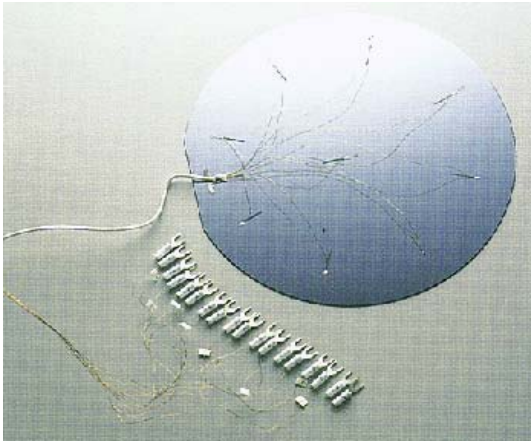
System current Max. : 15A

Other

We also make the control box or control system.

Please inform us your specifications if required.

Wafer Thermocouple



High accuracy

Quick response

Reduce error of radiation

Wafer size : 100, 125, 150, 200, 300mm
 Temp. range : 0 ~ 250°C : Low range
 200 ~ 600°C : Middle range
 550 ~ 1200°C : High range

Thermoswitch

17000 series

20000 series

30000 series



Thermoswitch

Fast response
 Extreme Sensitivity
 -70°C to 300°C NC type
 0°C to 60°C NO type



**Snap-Action Thermoswitch
 Liquid Expansion**

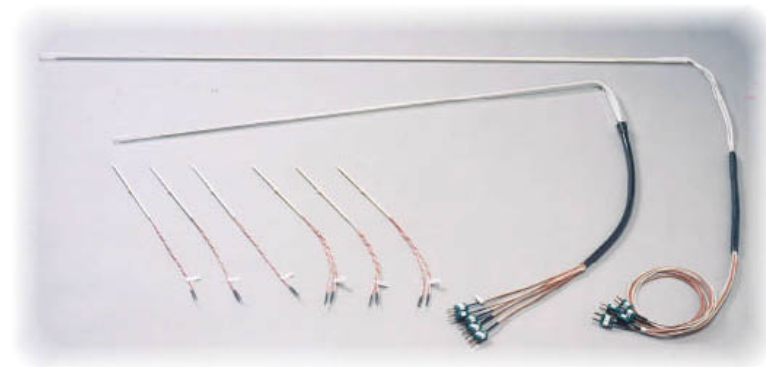
Fast response
 Vibration resistance
 -60°C to 50°C
 -4°C to 100°C
 40°C to 150°C



**Surface mounting
 Thermoswitch**

Narrow temperature differential
 Compact size
 10°C to 300°C NC type

R-type Thermocouple for semiconductor



Profile Thermocouples
 Spike Thermocouples
 Ratio Thermocouples
 etc.

Enable to manufacture
 Fresh sensor & Recast sensor

Smoke Detector



F series system can detect smoke in equipment.

Smoke caused by ...
 Layer shorts or insulation degradation
 Overheat under raised access floor
 Overload in power supply panel

The world smallest size smoke detector
 Φ28mm x 57h [include base]
 Power supply : DC24V
 Smoke sensitivity : 5%
 3 % ~ 10 % [factory setting]



Application

Semiconductor plants, power supply systems of facilities, communications facilities, server rooms or etc.

F1H Stand alone detector

F1H is stand alone type smoke detector for equipment.

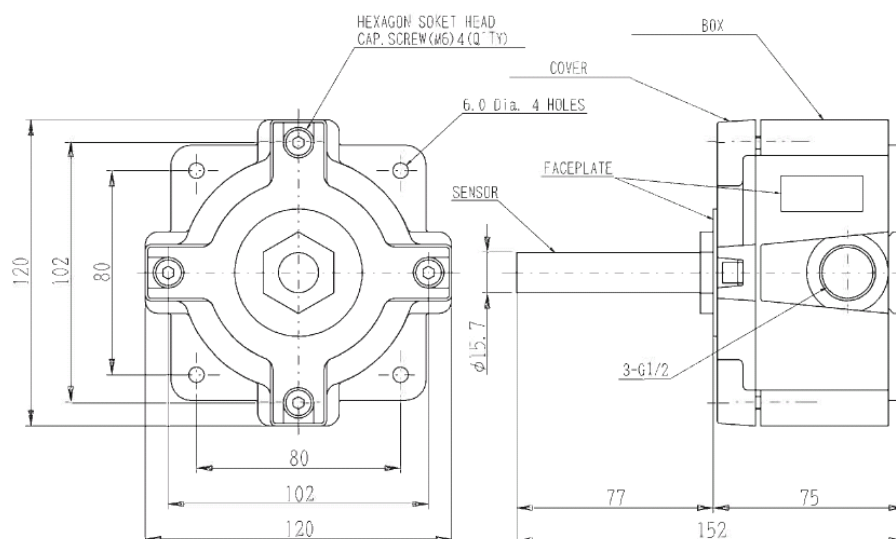
The smoke sensitivity is same as F series.

Power supply : DC10-30V
 Alert switch/ Trouble switch



Compensation Rate type Heat Detector

FFH-2E



Fenwal Original Heat Detector finds fire reliably in any environment at general building, factory and plant. Especially, resisting pressure explosion-proof type fire detector is only one certified products by TIIS No. 38363 in Japan.

Fenwal FENWAL CONTROLS OF JAPAN, LTD.

Kyohan Kudan Bldg, 5-10, 1-chome Iidabashi,
 Chiyoda-ku, Tokyo 102-0072, Japan
 Tel. +81-3-3237-3568 Fax. +81-3-3237-3569
<http://www.fenwal.co.jp>