

## Yamatake-Honeywell

## SPECIFICATION

## Specifications

**Measuring range:** 0~20 to 0~120mmH<sub>2</sub>O, continuously adjustable.

**Process connections:** PT½ (ISO R7 ½") or NPT½ tap thread, 54mm center to center.

**Electrical conduit connection:** PF½ (ISO R228 ½") tap thread.

**Power supply:** DC 21.6~44V

**Output:** 4~20mA DC (External load; 600 ohms at 24V, 1,400 ohms at 42V)

**Operating pressure:** -150mmH<sub>2</sub>O~+5 kg/cm<sup>2</sup>G

**Operating temperature:**

At meter body (process fluid); -40~+120°C

At transmitter (ambient); -30~+80°C

**Relative humidity:** 10~90% RH

**Overload protection:** To 5 kg/cm<sup>2</sup> G in either direction.

**Damping adjustment:** Continuously adjustable. (Time constant is 30 sec. or more at maximum damping.)

**Transmitter housing:**

Explosion-proof type; When with an explosion-proof terminal box, Class d2G4 of JIS C0903 code approved (JIS F8001 Class 3 splash-proof included). Also suitable for the NEC Class 1, Group D, Division 1.

Weatherproof type; Equivalent to JIS F8001 Class 3 splash-proof construction.

Intrinsic safety type; Class i3nG5 of JIS C0903 code for hazardous location, including above splash-proof construction.

(Note: Intrinsic safety type ...  
Power supply; DC23~27.5V  
Ambient temperature; -30~+60°C)

**Suppression and elevation (zero spring):**

Spring No.1

Suppression; Up to 70mmH<sub>2</sub>O

Elevation; Up to 30mmH<sub>2</sub>O

(Span plus elevation; Up to 120mmH<sub>2</sub>O)

(Note: Suppression and elevation exceeding above limits are also available as an option.)

**Accuracy:** ±0.5% FS

**Dead band:** Within 0.1% FS (Sensitivity is 0.05% FS.)

**Materials:**

Cover (Pressure chamber);

Carbon steel (SF 45), SUS316 st. st.

Seal diaphragm; SUS316 st. st.

Wet part gasket; Teflon

Indicator window;

Explosion-proof type . . . . Glass

Weatherproof and Intrinsic safety type . . . . Poly-carbonate

Transmitter case; Aluminum alloy shell mold

**Finish:** Acryl baking finish

(For corrosion-resistant and silver finish, refer to the optional specifications.)

**Color of finish:** Cover; Light beige (Munsell 4Y 7.2/1.3)

Case; Dark beige (Munsell 10YR 4.7/0.5)

**Mounting:** On vertical 2 inch pipe.

**Net weight:**

Explosion-proof type; 23.2kg (Add 1.6kg for explosion-proof terminal box with adapter.)

Weatherproof type; 19.2kg

Intrinsic safety type; 19.2kg

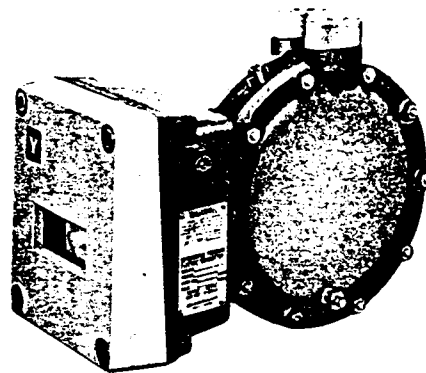
#### Options (Accessories)

Following options are available.

(1) High suppression and high elevation:

## ELECTRONIC DIFFERENTIAL PRESSURE TRANSMITTER (LOWEST DIFFERENTIAL PRESSURE RANGE)

MODEL : NDI 44



NDI44

(Explosion-proof type housing)

Spring No. 2

High elevation; 30~100mmH<sub>2</sub>O

(Span plus elevation; Up to 120mmH<sub>2</sub>O)

Spring No. 3

High suppression; 70~120mmH<sub>2</sub>O

(2) Explosion-proof terminal box: 3 way.

Flame-proof conduit screw-coupling type. (When flame-proof packing type is employed, the JIS explosion-proof requirements can be met by using the adapter in addition.)

Item (3)~(9) are the semi-standard options

(3) Half range: (Y 20)

Measuring range; 0~10 to 0~60mmH<sub>2</sub>O

Accuracy; ±0.75% FS (±1% for span less than 20mmH<sub>2</sub>O.)

Suppression; Up to 120mmH<sub>2</sub>O

Elevation; Up to 110mmH<sub>2</sub>O (Span plus elevation; Up to 120mmH<sub>2</sub>O)

(4) Oil free: (Y 21)

Wet part material; SUS316 st. st.

Sealing liquid; Daifloil

Operating temperature (Fluid and ambient); -20~+45°C

(5) PTB (West Germany) approved intrinsic safety (Y59)

Power supply; DC23~28V

Ambient temperature; -30~+40°C

(6) SUS 304 stainless steel body bolts (Y 66)

(7) Blind type transmitter (Y 126)

(8) Corrosion-resistant and silver finish (Y138A~D)

Corrosion-resistant (Acryl baking) finish (Y138A);

Resistance for corrosive gases.

Corrosion-proof (Epoxy baking) finish (Y138B);

Resistance for corrosive liquids.

Silver-normal (Acryl baking) finish (Y138C);

Protection for temperature rise of device caused by direct sun light, radiation heat, etc.

Silver-corrosion-resistant (Acryl baking) finish (Y138D)

Protection for above-mentioned temperature rise and resistance for corrosive gases.

(Note: Silver finish is not applicable for alkaline gases.)

(9) Induction lightning arrester (Y 145)

(10) Reverser unit:

Material; Carbon steel (SF 45) or SUS 316 st. st.

**Yamatake-Honeywell Co. Ltd.**

**Process Control Division**

**Sales Headquarters :** Nagai International Bldg., 12-19, Shibuya 2 chome, Shibuya-ku, Tokyo, 150 Japan

Tel : (03) 409-7171 Telex : J22902 Cable : YAMATAKE CO

### Model Number Table

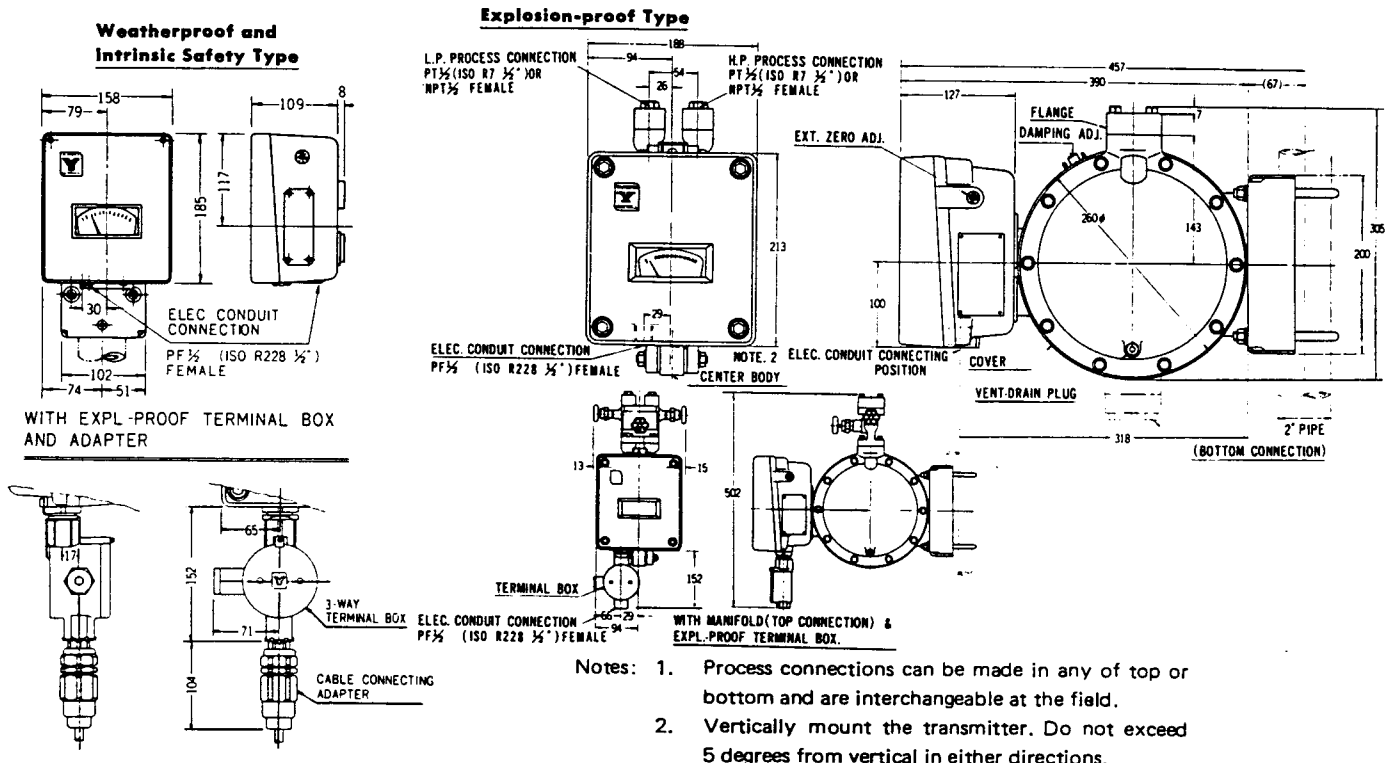
Ex.: NDI 44-1122E-5, 8A

| Basic Model No. | Cover Mat'l |     | Diaphragm Mat'l |     | Housing | Option   | Description               |
|-----------------|-------------|-----|-----------------|-----|---------|--|---------------------------|
|                 | H.P         | L.P | H.P             | L.P |         |  |                           |
| NDI 44          |             |     |                 |     |         |  | Electronic, Lowest Range  |
|                 | -1          |     |                 |     |         |  | Carbon Steel (SF 45)      |
|                 | -2          |     |                 |     |         |  | Stainless Steel (SUS 316) |
|                 |             |     | 1               |     |         |  | Carbon Steel (SF 45)      |
|                 |             |     | 2               |     |         |  | Stainless Steel (SUS 316) |
|                 |             |     |                 | 2   |         |  | Stainless Steel (SUS 316) |
|                 |             |     |                 |     | 2       |  | Stainless Steel (SUS 316) |
|                 |             |     |                 |     |         | W  | Weatherproof Type         |
|                 |             |     |                 |     |         | E  | Explosion-proof Type      |
|                 |             |     |                 |     |         | H  | Intrinsic Safety Type     |
|                 |             |     |                 |     | -5      | High Elevation   |                           |
|                 |             |     |                 |     | -6      | High Suppression   |                           |
|                 |             |     |                 |     | -8      | Explosion-proof Terminal Box                                     |                           |
|                 |             |     |                 |     | -8A     | .. (With One Flame-proof Packing Type Cable Connecting Adapter)  |                           |
|                 |             |     |                 |     | -8B     | .. (With Two Flame-proof Packing Type Cable Connecting Adapters) |                           |

Note: When specifying semi-standard options (Y□), write in "Y" as follows and put an additional remarks for "Y" numbers.

Example: NDI 44Y-1122E-5, 8A and add "Y" number in writing. (Please consult with factory in case of a multiplied of "Y" spec. are required.)

### Overall Dimensions



\* Specifications are subject to change without notice.

### Ordering Information

When ordering, please specify:

- 1) Model No.
- 2) Differential range
- 3) Options
- 4) Process connections (Top connections standard. Changeable in the field to bottom connections.)

- \* Reference instruction manual . . . OM2-511-440
- \* Reference specification sheet . . . SS2-519-050 (Steam jacket) SS2-519-060 (Corrosion-proof type)