

Yamatake-Honeywell

SPECIFICATION

Specifications

Measuring range:

NKI 25; 0~0.7 to 0~7 kg/cm² abs.
 NKI 26; 0~0.2 to 0~2 kg/cm² abs.
 NKI 27; 0~50 to 0~500 mmHg abs.
 NKI 28; 0~10 to 0~100 mmHg abs.

Process connection: PT $\frac{1}{2}$ (ISO R7 $\frac{1}{2}$ ") or NPT $\frac{1}{4}$,
 PT $\frac{1}{4}$ (ISO R7 $\frac{1}{4}$ ") or NPT $\frac{1}{4}$ tap thread

Electrical conduit connection: PF $\frac{1}{2}$ (ISO R228 $\frac{1}{2}$ ") tap thread
Power supply: DC 21.6~44 V

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

Pressure limit: NKI 25; 0~7 kg/cm² abs.
 NKI 26; 0~2 kg/cm² abs.
 NKI 27; 0~500 mmHg abs.
 NKI 28; 0~100 mmHg abs.

Temperature:

At meter body (process fluid); -40~+120°C
 At transmitter (ambient); -30~+80°C

Relative humidity: 10~90% RH

Overload protection: NKI 25; Up to 14 kg/cm² abs.
 NKI 26; Up to 6 kg/cm² abs.
 NKI 27; Up to 4 kg/cm² abs.
 NKI 28; Up to 4 kg/cm² abs.

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; DC 23~27.5 V
 Ambient temperature limit; -30~+60°C)

Elevation (Zero spring):

	NKI 25 (kg/cm ² abs.)	NKI 26 (kg/cm ² abs.)	NKI 27 (mmHg abs.)	NKI 28 (mmHg abs.)
Spring No. 1 Elevation	Up to 1.4	Up to 0.4	Up to 100	Up to 20

Note: Elevation exceeding above limit is also available as an option.

Accuracy: $\pm 0.5\%$ FS ($\pm 0.75\%$ for NKI 28 over 70mmHg abs.)

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

Materials: Bellows; SUS 316 st. st.
 Wet-part; Carbon steel and SUS 316 st. st.
 Vent-drain plug; SUS 316 st. st.
 Gasket; Teflon
 Indicator window;
 Explosion-proof type . . . Glass
 Weatherproof and intrinsic safety type . . . Polycarbonate
 Transmitter case; Aluminum-alloy shell mold

Finish: Acryl baking finish
 (For corrosion-resistant feature, refer to the optional specification.)

Color of finish: Cover; Light beige (Munsell 4Y 7.2/1.3)
 Case; Dark beige (Munsell 10YR 4.7/0.5)

Mounting: On vertical or horizontal 2 inch pipe.

Net weights:

Explosion-proof type; Approx. 13.5 kg (Add 1.6 kg for explosion-proof terminal box with adapter)
 Weather-proof type and Intrinsic safety type; Approx. 9.5 kg

Options (Accessories)

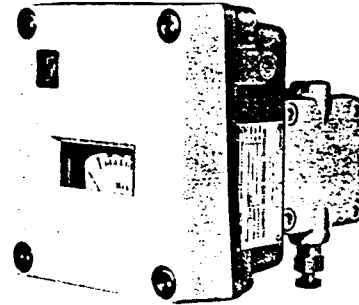
Following accessories are optionally available.
 Item (1), (2) are the standard options.

ELECTRONIC

ABSOLUTE PRESSURE TRANSMITTER

BELLOWS TYPE

MODEL ; NKI 25/26/27/28



NKI25~28 (Explosion-proof type housing)

(1) High elevation:

	NKI 25 (kg/cm ² abs.)	NKI 26 (kg/cm ² abs.)	NKI 27 (mmHg abs.)	NKI 28 (mmHg abs.)
Spring No. 2 High elevation	1.4~6.3	0.4~1.8	100~450	20~90
Span plus elevation	Up to 7	Up to 2	Up to 500	Up to 100

(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) PTB (West Germany) approved intrinsic safety: (Y 59)

Power supply; DC 23~28 V
 Ambient temperature; -30~+40°C

(4) Oil free (Y 67): Degreased

(5) For vacuum service ΔP transmitter (Y 108)

Deviations from standard specifications.
 Measuring range; 0~10 mmHg to 0~7 kg/cm²
 Pressure limit; NKI 27Y/28Y . . . 0~1 kg/cm² abs.
 Suppression;

	NKI 25Y (kg/cm ² abs.)	NKI 26Y (kg/cm ² abs.)	NKI 27Y (mmHg abs.)	NKI 28Y (mmHg abs.)
Spring No. 1	Up to 4.2	Up to 1.2	Up to 300	Up to 60
Spring No. 3	4.2~7	1.2~2	300~500	60~100

Materials (LP side); Cover; Only carbon steel
 Filter screen (JIS 20 mesh); SUS 316 st. st.
 Seal tube; Ni-Span C

(6) Steam jacket (Y 113):

Maximum working pressure; 50 kg/cm²G
 Maximum working temperature; 200°C
 (Body temperature must not exceed 120°C)
 Connection; PT $\frac{1}{4}$ (ISO R7 $\frac{1}{4}$ ") or NPT $\frac{1}{4}$ tap thread
 Material; Carbon steel (SF 45)

(7) Blind type transmitter: (Y 126)

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

Corrosion-resistant (Acryl baking) finish (Y 138A);
 Resistance for corrosive gases.
 Corrosion-proof (Epoxy baking) finish (Y 138B);
 Resistance for corrosive liquids.
 Silver-normal (Acryl baking) finish (Y 138C);
 Protection for temperature rise of device caused by direct sun light, radiation heat, etc.
 Silver-corrosion-resistant (Acryl baking) finish (Y 138D);
 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)

Yamatake-Honeywell Co. Ltd.

Process Control Division

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Model Number Table

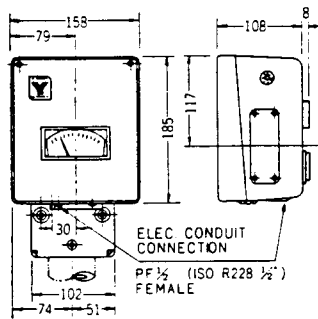
Ex. NKI 25-12E-5, 8

Basic Model No.		Wet-part Mat'l	Element Mat'l	Housing	Option	Description
Type	Range					
NKI	2					Electronic, Process Pressure
						Absolute Pressure
		5				0~0.7 to 0~7 kg/cm ² abs.
		6				0~0.2 to 0~2 kg/cm ² abs.
		7				0~50 to 0~500mmHg abs.
	8				0~10 to 0~100mmHg abs.	
			-1			Carbon Steel (SF 45)
			-2			Stainless Steel (SUS 316)
				2		Stainless Steel (SUS 316)
					W	Weatherproof Type
				E	Explosion-proof Type	
				H	Intrinsic Safety Type	
				-5	High Elevation	
				-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	

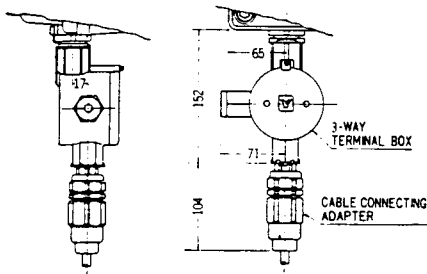
Note: When specifying semi-standard options (Y□), write in "Y" as follows and put an additional remarks for "Y" numbers.
 Example: NKI 25Y-12E-5, 8 and add "Y" number in writing.
 (Please consult with factory in case of a multiple of "Y" spec. are required.)

Overall Dimensions

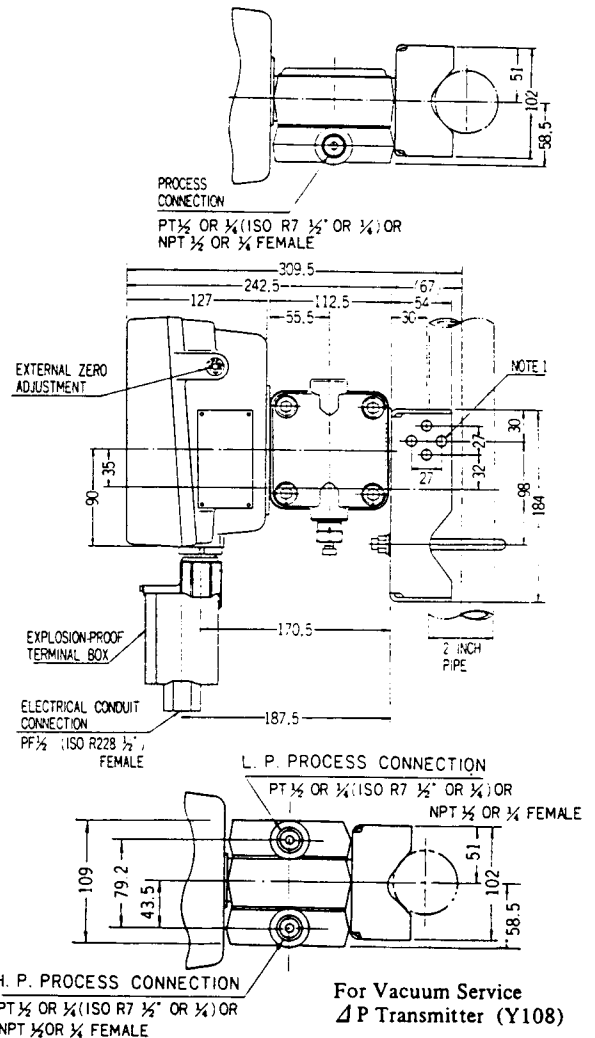
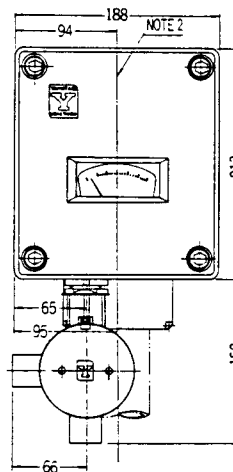
Weatherproof and Intrinsic Safety Type



WITH EXPL-PROOF TERMINAL BOX AND ADAPTER



Explosion-proof Type



Notes: 1. Universal mounting bracket enables the meter to be mounted to either vertical or horizontal 2 inch pipe.
 2. Vertically mount the transmitter. Do not exceed 5 degrees from vertical in either directions.

Ordering Information

When ordering, please specify:

- 1) Model No.
- 2) Pressure range
- 3) Options

- * Specifications are subject to change without notice.
- * Reference instruction manual . . . OM2-513-250
- * Reference specification sheet . . . SS2-519-050 (Steam jacket)