

Yamatake-Honeywell

SPECIFICATION

Specifications

Measuring range:

NKI 15; 0~0.7 to 0~7 kg/cm²
 NKI 16; 0~0.2 to 0~2 kg/cm²
 NKI 17; 0~50 to 0~500 mm Hg
 NKI 18; 0~10 to 0~100 mm Hg

Process connection:

PT 1/2 or 3/4 (ISO R7 1/2" or 3/4") or NPT 1/2 or 3/4 tap thread

Electric conduit connection:

PF 1/2 (ISO R228 1/2") tap thread

Power supply:

DC 21.6~44V

Output:

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

Operating pressure:

NKI 15; -1~+10.5 kg/cm²G
 NKI 16; -1~+3 kg/cm²G
 NKI 17; -500~+500 mmHgG
 NKI 18; -100~+100 mmHgG

Operating temperature:

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

Operating humidity:

10~90% RH

Overload protection:

NKI 15; Up to 14 kg/cm²G
 NKI 16; Up to 4 kg/cm²G
 NKI 17; Up to 4 kg/cm²G
 NKI 18; Up to 4 kg/cm²G

Transmitter housing:

Explosion-proof type; When with an explosion-proof terminal box, Class d2G4 of JIS C0903 code for hazardous location 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):

	NKI 15 (kg/cm ² G)	NKI 16 (kg/cm ² G)	NKI 17 (mmHgG)	NKI 18 (mmHgG)
Suppression	Up to -1	Up to -0.8	Up to 200	Up to 40
Elevation	Up to 1.5	Up to 0.4	Up to 100	Up to 20
Span plus elevation	Up to 10.5	Up to 3	Up to 500	Up to 100

Note: 1) For NKI 16—hi suppression (-0.8~-1.0kg/cm²G) applications, use the spring No. 3 instead.
 2) Suppression and elevation exceeding above limit also available as an option.

Accuracy:

±0.5% FS (±0.75% for NKI 18 range 0~70 mmHg.)

Dead band:

Within 0.1% FS (Sensitivity is 0.05% FS)

Materials:

Bellows; SUS 316 st. st.
 Gasket; Teflon
 Wet-part; Carbon steel (SF 45) and SUS 316 st. st.
 Indicator window;
 Explosion-proof type . . . glass
 Weatherproof and Intrinsic safety type . . . Poly-carbonate
 Transmitter case; Aluminum alloy sheel mold

Finish:

Acryl baking finish
 (For corrosion-resistant and silver finish, refer to the optional specification.)

Color of finish:

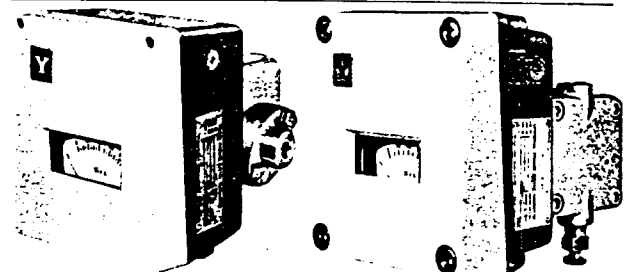
Cover; Light beige (Munsell 4Y 7.2/1.3)
 Case; Dark beige (Munsell 10YR 4.7/0.5)

Mounting:

On vertical or horizontal 2 inch pipe.

ELECTRONIC PROCESS PRESSURE TRANSMITTER BELLOWS TYPE (LOW PRESSURE RANGE)

MODEL ; NKI 15/16/17/18



NKI 15/16

NKI 17/18

(Intrinsic safety type housing) (Explosion-proof type housing)

Net weight (Explosion-proof type):

NKI 15/16 Approx. 11.3 kg

NKI 17/18 Approx. 13.5 kg

(Add 1.6 kg for explosion-proof terminal box with adapter.)

Options (Accessories)

Following options are available.

Item (1), (2) are the standard options.

(1) High elevation:

	Spring No. 2 High elevation-1 (kg/cm ² G)	Spring No. 4 High elevation-2 (kg/cm ² G)	Span plus elevation (kg/cm ² G)
NKI 15	1.5~6	6~9.8	Up to 10.5
NKI 16	0.4~1.8	1.8~2.8	Up to 3

	Spring No. 2 High elevation-1 (mmHgG)	Spring No. 3 High suppression (mmHgG)	Span plus elevation (mmHgG)
NKI 17	100~450	200~500	Up to 500
NKI 18	20~90	40~100	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 is addition.)

Item (3) ~ (8) 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) Steam jacket (Y 113)

Maximum operating pressure; 50 kg/cm²G
 Maximum operating temperature; 200°C
 (Body temperature must not exceed 120°C.)
 Connection; PT 1/2 (ISO R7 1/2") or NPT 1/2 tap thread
 Material; Carbon steel (SF 45)

(6) Blind type transmitter (Y 126)

(7) 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.)

(8) Induction lightning arrester (Y145)

Yamatake-Honeywell Co. Ltd.

Process Control Division

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

Model Number Table

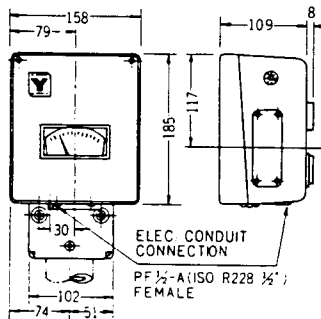
Ex.: NKI 15-22E-5, 8A

Basic Model No.		Wet-part Mat'l	Element Mat'l	Housing	Option	Description
Type	Range					
NKI	1					Electronic, Process Pressure
						Gage Pressure
		5				0~0.7 to 0~7 kg/cm ²
		6				0~0.2 to 0~2 kg/cm ²
		7				0~50 to 0~500 mmHg
	8				0~10 to 0~100 mmHg	
		-1				Carbon Steel (SF 45) [For NKI 17, 18]
		-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)	

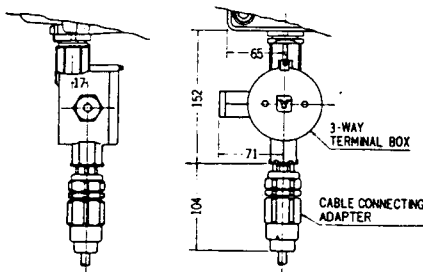
Note: When specifying semi-standard options (Y□), write in "Y" as follows and put an additional remarks for "Y" numbers.
Example: NKI 15Y-22E-5, 8A and add "Y" number in writing.

Dimensions

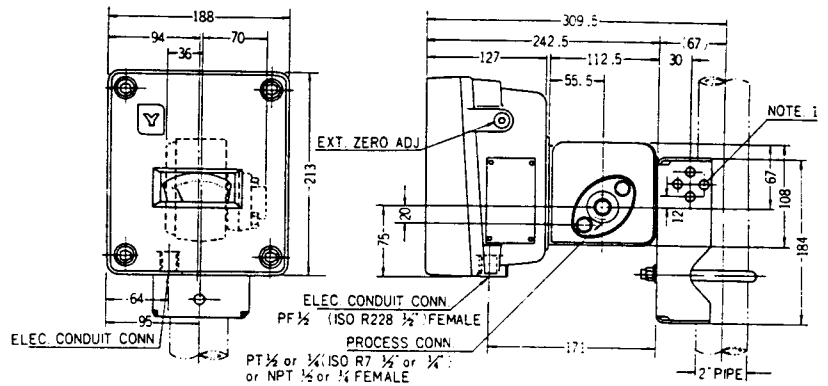
Weatherproof and Intrinsic Safety Type



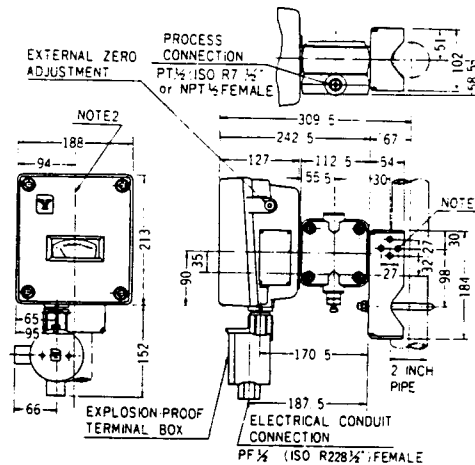
WITH EXPL-PROOF TERMINAL BOX AND ADAPTER



NKI 15/16 Explosion-proof Type (without terminal box)



NKI 17/18 Explosion-proof Type (with terminal box)



- 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 exceeds 5 degrees from vertical in either directions.

※ Specifications are subject to change without notice.

Ordering Information

When ordering, please specify:

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

※ Reference instruction manual . . OM2-513-110

※ Reference specification sheet . . SS2-519-050 (Steam jacket)