MODEL KRE / KSD SYSTEM

Features

- Usable in hazardous locations
- Up to 200 meters separation distance
- Adjustable at remote safe location

Technical Notes:

1. Since the KRE and KSD systems are approved as the complete assembly, place your order for the sensor and the amplifier together.
2. Return to NOHKEN for repair and/or replacement, when modification, disassembly, or replacement of parts is needed.

General Description

For application in hazardous area, the KRE or KSD systems are recommended. The KRE65 series sensor and KRE6000 series amplifier is intrinsically type of KRV series. The KSD series sensor and KSI amplifier is intrinsically safe type of KSV series. These systems are approved as intrinsically safe (i3aG5) by Technical Institute of Industrial Safety (TIIS), Japanese Ministry of Labor.

The remote amplifier can be mounted up to 200 meters away from sensor, using co-axial cable (RG62A/U is recommended.) for KRE and 3-core shielded cable for KSD. All field adjustments are made by remote at safe location.

Ordering Information

1. Sensor

KRE65	Intrinsically safe for KRV
KSD	Intrinsically safe for KSV
2	Standard
3	Heavy duty
5	Flash probe
6	Wire extension
9	High sensitivity
N	Plug mounting
F	Flange mounting
T	with heat radiation fin
P	FEP tubing (for 2F only)
PT	FEP tubing with heat radiation fin (for 2F only)
A	Foam detection
0	Flat-face flange
1	Raised-face flange
4	Plug mounting
J	JIS flange
A	ANSI flange
D	DIN flange
G	G plug
R	R plug
T	NPT plug
S	304 stainless steel
S6	316 stainless steel
F	Insulator, PTFE for 2, 3, 9, and PE for 5, 6.
C	Ceramic insulator for high temp.
0	Viton shield
1	Asbestos shield
2	Kalrez shield
□□□□	The probe length

KRE65	2	N		4	R	S	F	0	250	= KRE65-2N-4RSF0-250

* The mounting size should be specified when you order.
* The length of electrode and insulator should be specified in mm if required.
* The medium must be informed for sensitivity setting when you order.
* The operating temp, and pressure should be informed for correct model selection.

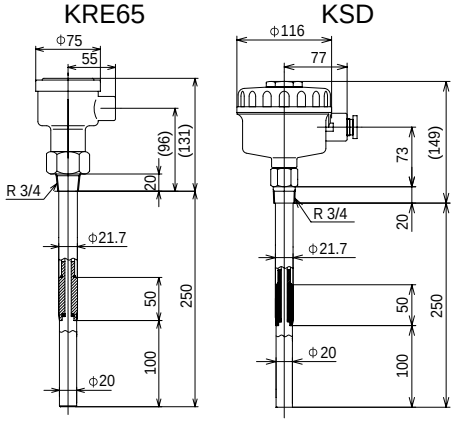
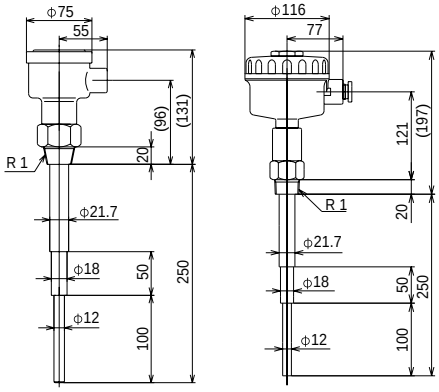
2. Amplifier

KRE6000	Connect with KRE65 for mounting at site
KRE6200	Connect with KRE65 for mounting indoor
KSI	Connect with KSD
1	100/200V AC
2	110/220V AC
3	120/240V AC for KSI only

KRE6000	1	=KRE6000-1

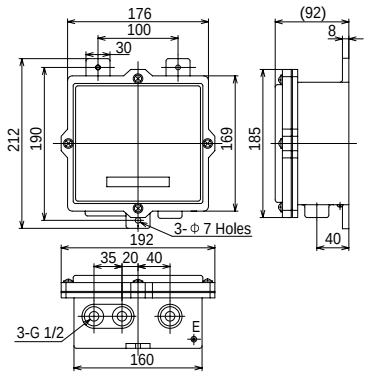
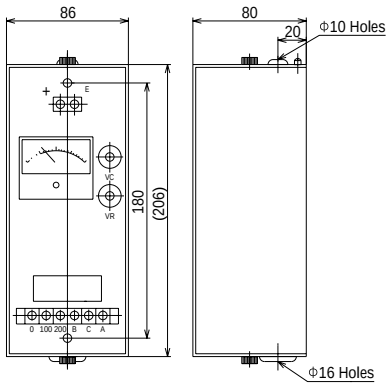
Specifications

Sensor

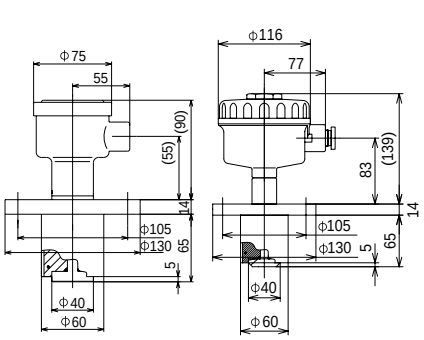
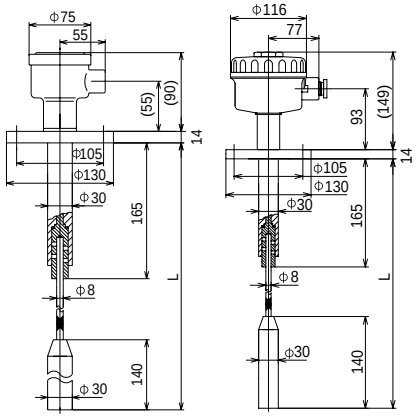
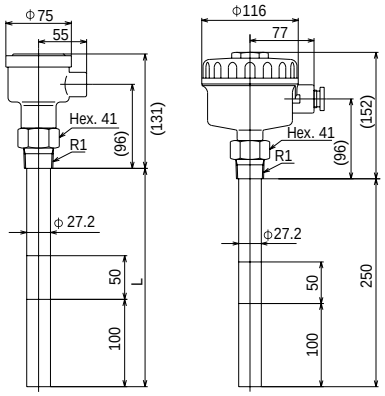
Model		2N/2F		3N/3F	
Description		Standard		Heavy duty	
Drawing		KRE65 KSD  Drawings show N type.		KRE65 KSD  Drawings show N type.	
Mounting		R3/4	JIS5K25A	R1	JIS5K25A
Operating Temperature	Housing	-10˚C to 40˚C (Recognized by TIIS for using in hazardous location)			
	Electrode	-20˚C to 60˚C (180˚CMax. for Heat proof type)			
Maximum Pressure		1MPa / 10bar		3MPa / 30bar	
Maximum Humidity		85% RH			
Material	Housing	ADC12			
	Electrode	304SS*			
	Insulator	PTFE*			
	O-ring	Viton*			
Cable Entry		G1/2			
Protection		IP65			
Length of Electrode	Standard	250mm			
	Option	50 to 4000mm		100 to 1000mm	

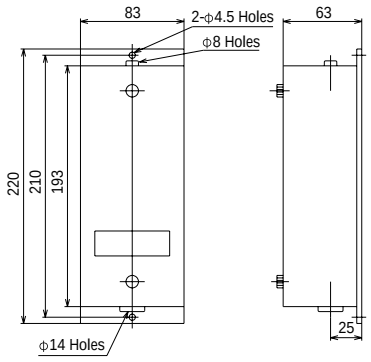
*Other materials are available.

Amplifier

Model	KRE6000	KRE6200
Drawing		
Supply Power	100/200, 110/220V AC, 50/60Hz	
Power Consumption	Approx. 2.5VA Max.	
Relay Output	1 SPDT, 250V 2A AC/30V 2A DC (Resistive) C-A: Normally Open contact C-B: Normally Closed contact	
Operating Temperature	-10˚C to 40˚C	
Maximum Humidity	85% RH	
Sensitivity	0.5 to 4000pF	
Material	AC	Steel structure and Acryl
Cable Entries	3-G1/2	ϕ10 and ϕ16 holes
Protection	IP54	IP10
Recommended Cable	RG 62 A/U	

*Specify the distance between Sensor and Amplifier

5F	6F	9N/9F	
Flash probe	Wire extension	High sensitivity	
KRE65 KSD 	KRE65 KSD 	KRE65 KSD  Drawings show N type.	
JIS5K50A	JIS5K50A	R1	JIS5K50A
-10˚C to 40˚C (Recognized by TIIS for using in hazardous location)			
-20˚C to 60˚C (180˚C Max. for Heat proof type)			
1MPa / 10bar	500kPa / 5bar	1MPa / 10bar	
85% RH			
ADC12			
304SS*			
PE*		PTFE*	
Viton*			
G1/2			
IP65			
65mm	1000mm	250mm	
5 to 500mm	500 to 10000mm	50 to 4000mm	

KSI

100/200, 110/220, 120/240V AC, 50/60Hz
Approx. 4VA Max.
1 SPDT, 250V 2A AC/30V 2A DC (Resistive) C-A: Normally Open contact C-B: Normally Closed contact
-10˚C to 40˚C
85% RH
More than 5pF or 90pF
Steel structure
ϕ8 and ϕ12 holes
IP10
3-core shielded cable