

## S P E C I F I C A T I O N S

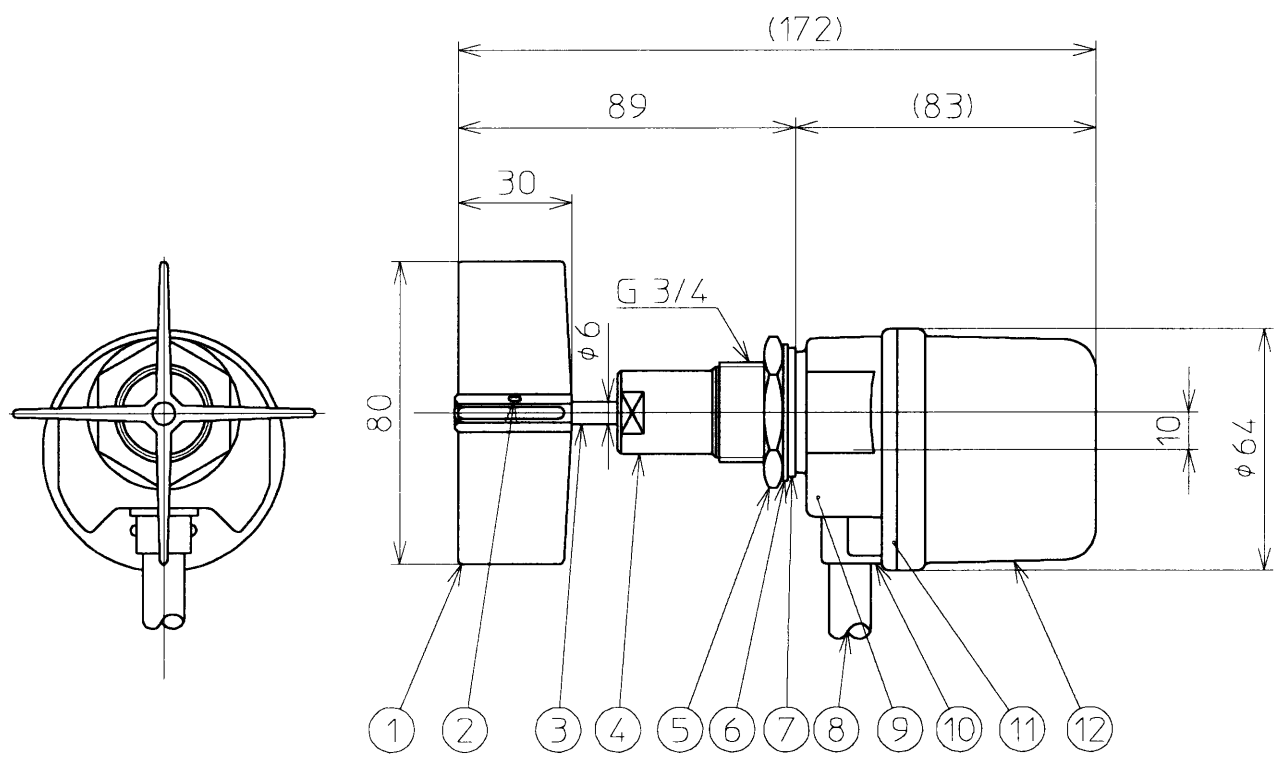
1. NAME : ROTATING-PADDLE LEVEL SENSOR
2. MODEL : R7-X
3. MEASURING OBJECT : Powders and Particles
4. OPERATION CHARACTERISTICS
  - 4.1 Rotational Frequency :  $1.65 \times 10^{-2} \text{ s}^{-1}$  (50 Hz)  
 $2.0 \times 10^{-2} \text{ s}^{-1}$  (60 Hz)
  - 4.2 Detection Torque : Approx. 5.0 N·cm
  - 4.3 Life Expectancy :  $1 \times 10^5$  operating Min. (microswitch)  
 (125 V 5 A AC Resistive load)
5. ELECTRICAL CHARACTERISTICS
  - 5.1 Power Supply : 100/110/115/120/200/220/230/240/24 V AC, 50/60 Hz  
 (Choose one of these Power Supply)
  - 5.2 Contact Rating : 250 V 3 A AC, 30 V 4 A DC (Resistive load)
  - 5.3 Power Consumption : Approx. 1.5 VA
6. WORKING TEMPERATURE : Detection part ; -10 to +70 °C  
 Housing ; -10 to +45 °C
7. CONSTRUCTION : Detection part ; Water-proof construction (IP68)  
 Housing ; Non-splashproof construction (IP40)
8. PHYSICAL
  - 8.1 Mass : Approx. 0.5 kg
  - 8.2 Mounting : Plug mounting
  - 8.3 Mounting Size : G 3/4
  - 8.4 Cable : VCTF  $5 \times 0.5 \text{ mm}^2$  ( $\phi 10.5 \times 300 \text{ mm}$ )
  - 8.5 Material of Detection part : Polycarbonate, 304 stainless steel,  
 Brass (nickel plating), Aluminium die casting (ADC12)
  - 8.6 Housing Color : Muncell 10B 4.5/5

## W A R R A N T Y

NOHKEN INC. products are warranted for a period of 1(one) year from date of original factory shipment, provided that handling, operation and maintenance of products shall be subjected to " NOHKEN's INSTRUCTION MANUAL ".

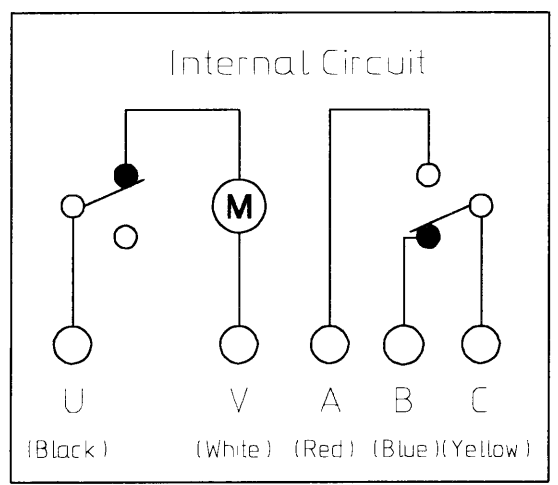
REVISIONS				
REV	DATE	DESCRIPTION	BY	APP. BY
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DRAWING NO. SA 901152 △



Electric Rated

Power Supply	V AC 50/60Hz
Contact Capacity	250V 3A AC (Resistance load) 30V 4A DC (Resistance load)
Rotational Frequency	1 r.p.m. ( $1.65 \times 10^{-2} S^{-1}$ ) (50Hz) 1.2 r.p.m. ( $2.0 \times 10^{-2} S^{-1}$ ) (60Hz)



12	Cover	1	Polycarbonate
11	Set Plate	1	Polycarbonate
10	Cable Bush	1	Polycarbonate
9	Housing	1	Aluminum Alloys Die Castings
8	Cable	0.3m	VCT 5X0.5mm <sup>2</sup>
7	Gasket	1	Acrylonitrile Butadiene Rubber
6	Washer	1	Brass(Nickel Plating)
5	Fiting Nut	1	Brass(Nickel Plating)
4	Cap	1	Brass(Nickel Plating)
3	Spindle	1	304 Stainless Steel
2	Split Pin	1	304 Stainless Steel
1	Paddle	1	Polycarbonate
P.No.	Name	Qty.	Material

DATE 07-29-'99	DR. BY <i>[Signature]</i>	TITLE OUTLINE DRAWINGT OF ROTATING-PADDLE LEVEL SENSOR	
SCALE N.T.S.	CH. BY <i>[Signature]</i>	MODEL R7-X REFERENCE	
UNITS MILLIMETERS	APP. BY <i>[Signature]</i>	DRAWING NO. SA 901152 △	
<b>NOHKEN INC.</b> OSAKA, JAPAN			

## S P E C I F I C A T I O N S

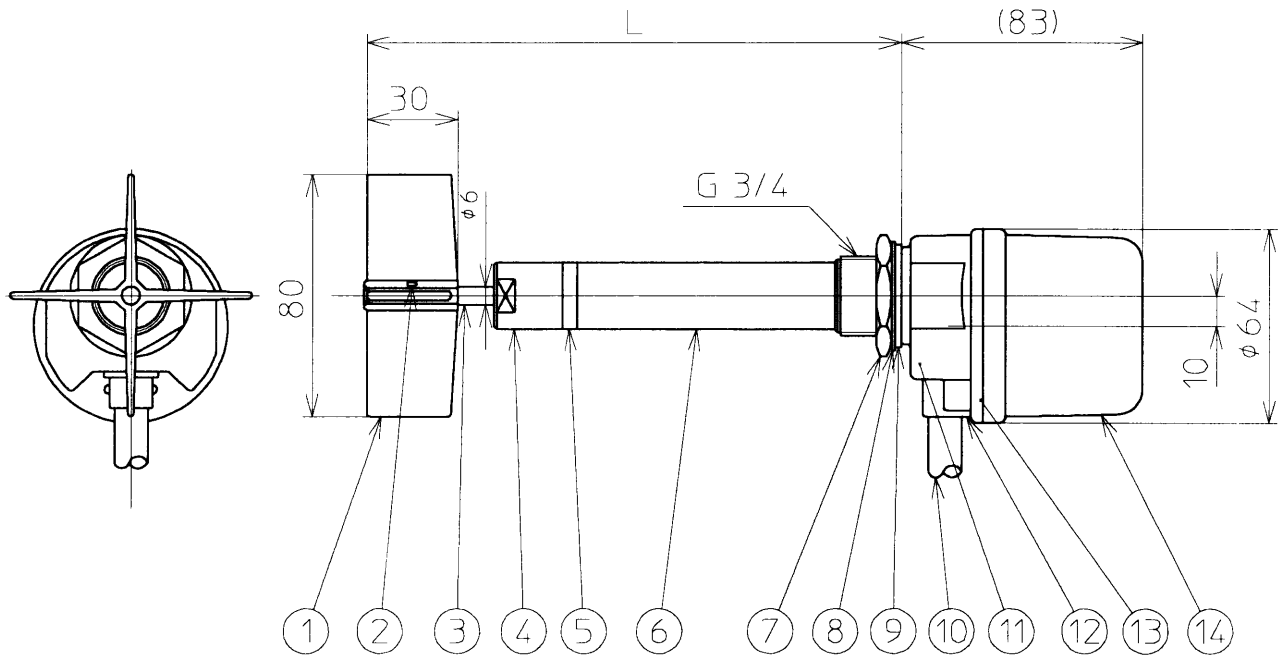
1. NAME : ROTATING-PADDLE LEVEL SENSOR
2. MODEL : R7-XL
3. MEASURING OBJECT : Powders and Particles
4. OPERATION CHARACTERISTICS
  - 4.1 Rotational Frequency :  $1.65 \times 10^{-2} \text{ s}^{-1}$  (50 Hz)  
 $2.0 \times 10^{-2} \text{ s}^{-1}$  (60 Hz)
  - 4.2 Detection Torque : Approx. 5.0 N·cm
  - 4.3 Life Expectancy :  $1 \times 10^5$  operating Min. (microswitch)  
(125 V 5 A AC Resistive load)
5. ELECTRICAL CHARACTERISTICS
  - 5.1 Power Supply : 100/110/115/120/200/220/230/240/24 V AC, 50/60 Hz  
(Choose one of these Power Supply)
  - 5.2 Contact Rating : 250 V 3 A AC, 30 V 4 A DC (Resistive load)
  - 5.3 Power Consumption : Approx. 1.5 VA
6. WORKING TEMPERATURE : Detection part ; -10 to +70 °C  
Housing ; -10 to +45 °C
7. CONSTRUCTION : Detection part ; Water-proof construction (IP68)  
Housing ; Non-splashproof construction (IP40)
8. PHYSICAL
  - 8.1 Mass : Approx. 1.6 kg (L=1000 mm)
  - 8.2 Mounting : Plug mounting
  - 8.3 Mounting Size : G 3/4
  - 8.4 Cable : VCTF  $5 \times 0.5 \text{ mm}^2$  ( $\phi 10.5 \times 300 \text{ mm}$ )
  - 8.5 Material of Detection part : Polycarbonate, 304 stainless steel,  
Brass (nickel plating), Aluminium die casting (ADC12)
  - 8.6 Housing Color : Muncell 10B 4.5/5

## W A R R A N T Y

NOHKEN INC. products are warranted for a period of 1(one) year from date of original factory shipment, provided that handling, operation and maintenance of products shall be subjected to " NOHKEN's INSTRUCTION MANUAL ".

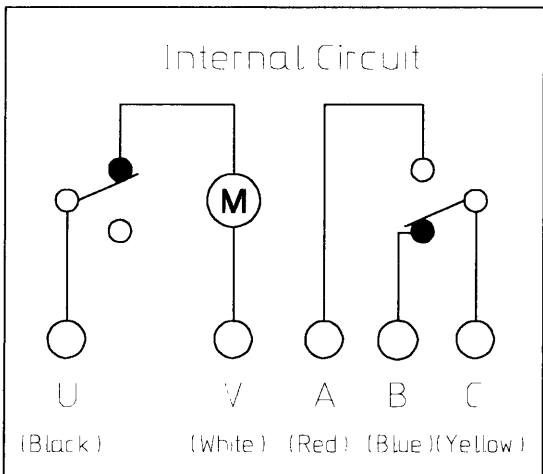
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DRAWING NO. SA 901153 △



Electric Rated

Power Supply	V AC 50/60Hz
Contact Capacity	250V 3A AC (Resistance load) 30V 4A DC (Resistance load)
Rotational Frequency	1 r.p.m. ( $1.65 \times 10^{-2} S^{-1}$ ) (50Hz) 1.2 r.p.m. ( $2.0 \times 10^{-2} S^{-1}$ ) (60Hz)



14	Cover	1	Polycarbonate
13	Set Plate	1	Polycarbonate
12	Cable Bush	1	Polycarbonate
11	Housing	1	Aluminium Alloys Die Castings
10	Cable	0.3m	VCT 5x0.5mm <sup>2</sup>
9	Gasket	1	Acrylonitrile Butadiene Rubber
8	Washer	1	Brass(Nickel Plating)
7	Fiting Nut	1	Brass(Nickel Plating)
6	Pipe	1	Brass(Nickel Plating)
5	Holder	1	Brass(Nickel Plating)
4	Cap	1	Brass(Nickel Plating)
3	Spindle	1	304 Stainless Steel
2	Spring Pin	1	304 Stainless Steel
1	Paddle	1	Polycarbonate
P.No.	Name	Qty.	Material

DATE 07-29-'99	DR. BY <i>[Signature]</i>	TITLE OUTLINE DRAWING OF ROTATING-PADDLE LEVEL SENSOR	
SCALE N.T.S.	CH. BY <i>[Signature]</i>	MODEL R7-XL      REFERENCE	
UNITS MILLIMETERS	APP. BY <i>[Signature]</i>	DRAWING NO. SA 901153 △	
<b>NOHKEN INC.</b> OSAKA, JAPAN			

## S P E C I F I C A T I O N S

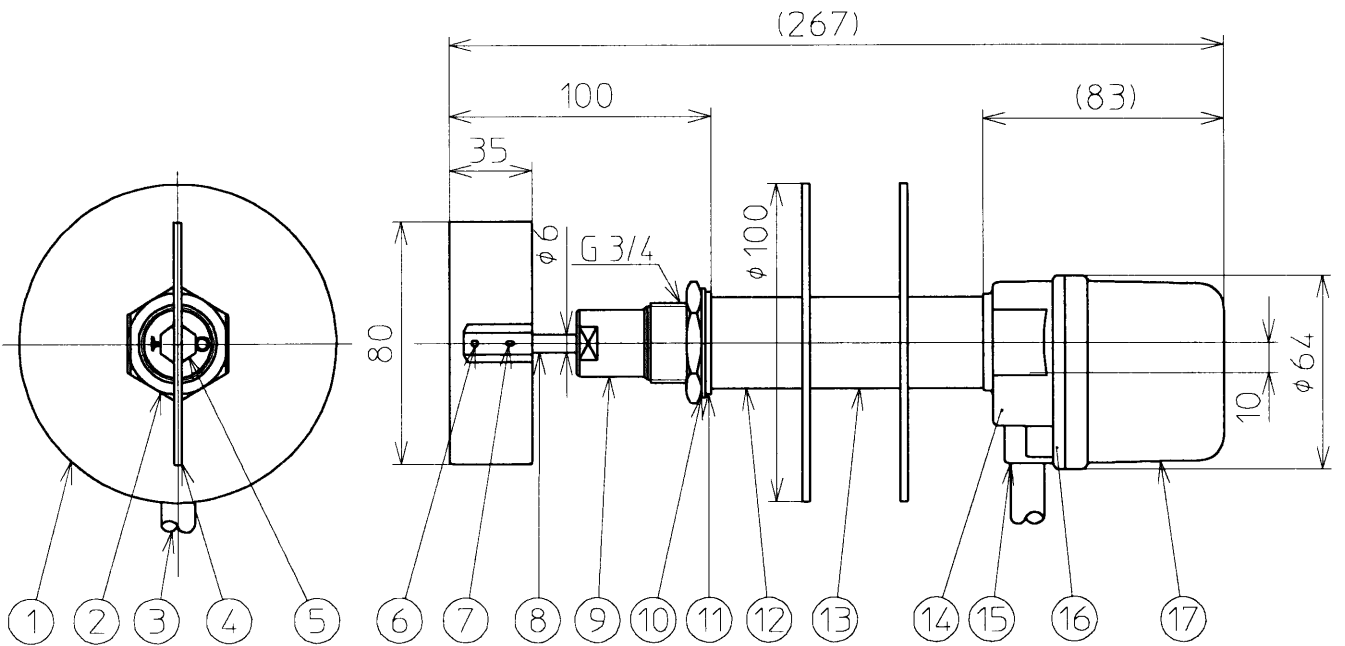
1. NAME : ROTATING-PADDLE LEVEL SENSOR
2. MODEL : R7-X T
3. MEASURING OBJECT : Powders and Particles
4. OPERATION CHARACTERISTICS
  - 4.1 Rotational Frequency :  $1.65 \times 10^{-2} \text{ s}^{-1}$  (50 Hz)  
 $2.0 \times 10^{-2} \text{ s}^{-1}$  (60 Hz)
  - 4.2 Detection Torque : Approx. 5.0 N·cm
  - 4.3 Life Expectancy :  $1 \times 10^5$  operating Min. (microswitch)  
 (125 V 5 A AC Resistive load)
5. ELECTRICAL CHARACTERISTICS
  - 5.1 Power Supply : 100/110/115/120/200/220/230/240/24 V AC, 50/60 Hz  
 (Choose one of these Power Supply)
  - 5.2 Contact Rating : 250 V 3 A AC, 30 V 4 A DC (Resistive load)
  - 5.3 Power Consumption : Approx. 1.5 VA
6. WORKING TEMPERATURE : Detection part ; -10 to +120 °C  
 Housing ; -10 to + 45 °C
7. CONSTRUCTION : Detection part ; Water-proof construction (IP68)  
 Housing ; Non-splashproof construction (IP40)
8. PHYSICAL
  - 8.1 Mass : Approx. 1.5 kg
  - 8.2 Mounting : Plug mounting
  - 8.3 Mounting Size : G 3/4
  - 8.4 Cable : VCTF  $5 \times 0.5 \text{ mm}^2$  ( $\phi 10.5 \times 300 \text{ mm}$ )
  - 8.5 Material of Detection part : 304 stainless steel, Brass (nickel plating)  
 Aluminium die casting (ADC12)
  - 8.6 Housing Color : Muncell 10B 4.5/5

## W A R R A N T Y

NOHKEN INC. products are warranted for a period of 1(one) year from date of original factory shipment, provided that handling, operation and maintenance of products shall be subjected to " NOHKEN's INSTRUCTION MANUAL ".

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DRAWING NO. SA 901154 △

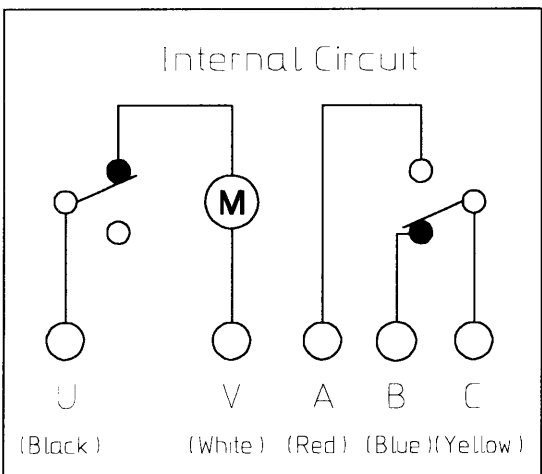


Temperature 120 °C Max.

Electric Rated

Power Supply	V AC 50/60Hz
Contact Capacity	250V 3A AC (Resistance load) 30V 4A DC (Resistance load)
Rotational Frequency	1 r.p.m. ( $1.65 \times 10^{-2} S^{-1}$ ) (50Hz) 1.2 r.p.m. ( $2.0 \times 10^{-2} S^{-1}$ ) (60Hz)

17	Cover	1	Polycarbonate
16	Set Plate	1	Polycarbonate
15	Cable Bush	1	Polycarbonate
14	Housing	1	Aluminium Alloys Die Castings
13	Spacer	2	Aluminium
12	Socket	1	Aluminium
11	Gasket	1	Acrylonitrile Butadiene Rubber
10	Washer	1	Brass(Nickel Plating)
9	Cap	1	Brass(Nickel Plating)
8	Spindle	1	304 Stainless Steel
7	Split Pin	1	304 Stainless Steel
6	Spring Pin	1	304 Stainless Steel
5	Paddle Holder	1	304 Stainless Steel
4	Paddle	1	304 Stainless Steel
3	Cable	0.3m	VCT 5X0.5mm <sup>2</sup>
2	Fiting Nut	1	Brass(Nickel Plating)
1	Fin	1	Aluminium
P.No.	Name	Qty.	Material



DATE 07-29-'99	DR. BY <i>[Signature]</i>
SCALE N.T.S.	CH. BY <i>[Signature]</i>
UNITS MILLIMETERS	APP. BY <i>[Signature]</i>

TITLE		OUTLINE DRAWING OF ROTATING-PADDLE LEVEL SENSOR	
MODEL		R7-XT	REFERENCE
DRAWING NO.		SA 901154 △	

## S P E C I F I C A T I O N S

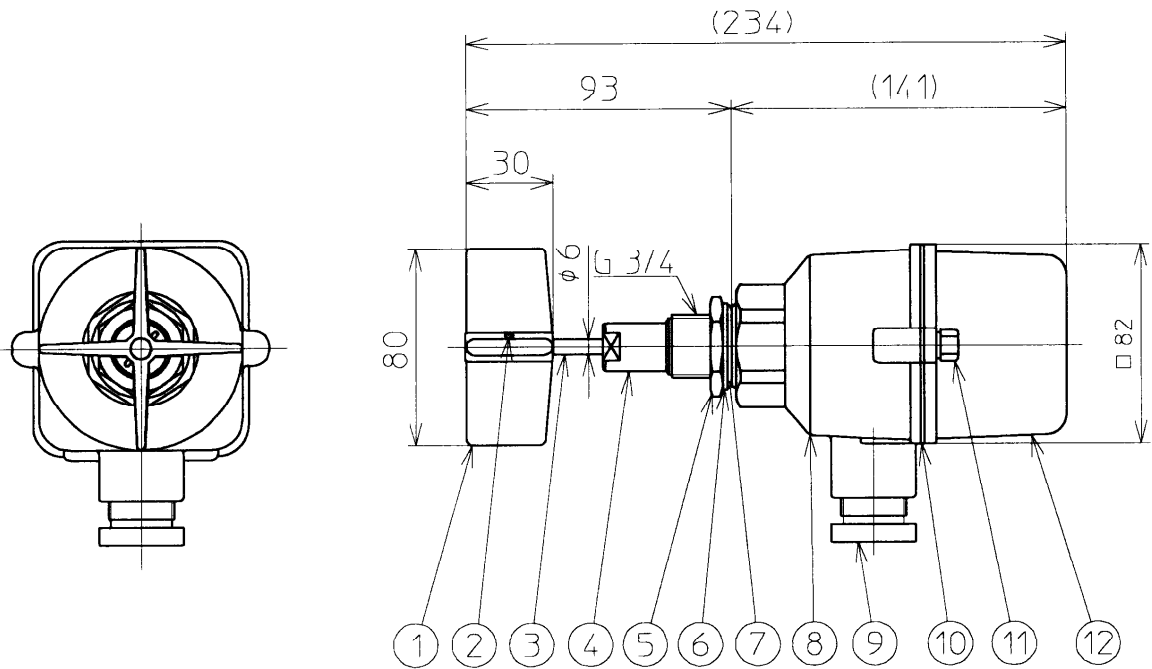
1. NAME : ROTATING-PADDLE LEVEL SENSOR
2. MODEL : R7-Z
3. MEASURING OBJECT : Powders and Particles
4. OPERATION CHARACTERISTICS
  - 4.1 Rotational Frequency :  $1.65 \times 10^{-2} \text{ s}^{-1}$  (50 Hz)  
 $2.0 \times 10^{-2} \text{ s}^{-1}$  (60 Hz)
  - 4.2 Detection Torque : Approx. 5.0 N·cm
  - 4.3 Life Expectancy :  $1 \times 10^5$  operating Min. (microswitch)  
 (125 V 5 A AC Resistive load)
5. ELECTRICAL CHARACTERISTICS
  - 5.1 Power Supply : 100/110/115/120/200/220/230/240/24 V AC, 50/60 Hz  
 (Choose one of these Power Supply)
  - 5.2 Contact Rating : 250 V 3 A AC, 30 V 4 A DC (Resistive load)
  - 5.3 Power Consumption : Approx. 1.5 VA
6. WORKING TEMPERATURE : Detection part ; -10 to +70 °C  
 Housing ; -10 to +45 °C
7. CONSTRUCTION : Detection part ; Water-proof construction (IP68)  
 Housing ; Jet-proof construction (IP65)
8. PHYSICAL
  - 8.1 Mass : Approx. 0.7 kg
  - 8.2 Mounting : Plug mounting
  - 8.3 Mounting Size : G 3/4
  - 8.4 Material of Detection part : Polycarbonate, 304 stainless steel,  
 Brass(nickel plating), Aluminium die casting(ADC12)
  - 8.5 Cable Inlet : JIS F 15c (G 1/2) or JIS F 20a (G 3/4)
  - 8.6 Housing Color : Muncell 10B 5/6

## W A R R A N T Y

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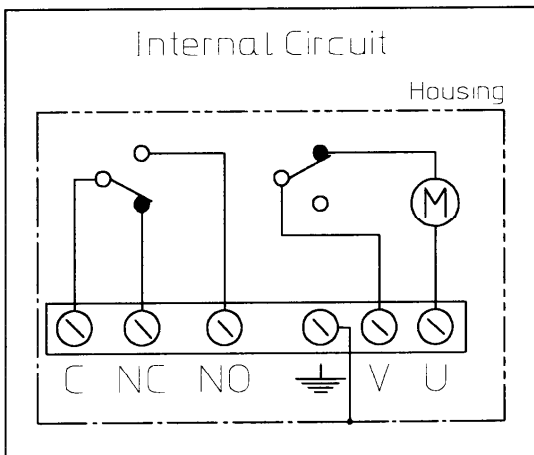
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DRAWING NO SA 901150



Electric Rated

Power Supply	V AC 50/60Hz
Contact Capacity	250V 3A AC (Resistance load) 30V 4A DC (Resistance load)
Rotational Frequency	1 r.p.m. ( $1.65 \times 10^{-2} s^{-1}$ ) (50Hz) 1.2 r.p.m. ( $2.0 \times 10^{-2} s^{-1}$ ) (60Hz)
Cable inlet	JIS F 15c (G 1/2)



12	Cover	1	Polycarbonate
11	Cover Bolt	2	Polycarbonate
10	Cover Gasket	1	Chlorprene rubber
9	Cable Gland	1	Brass(Nickel Plating)
8	Housing	1	Aluminium Alloys Die Castings
7	Gasket	1	Acrylonitrile Butadiene Rubber
6	Washer	1	Brass(Nickel Plating)
5	Fiting Nut	1	Brass(Nickel Plating)
4	Cap	1	Brass(Nickel Plating)
3	Spindle	1	304 Stainless Steel
2	Spring Pin	1	304 Stainless Steel
1	Paddle	1	Polycarbonate
P.No.	Name	Qty.	Material

DATE 07-29- '99	DR. BY <i>[Signature]</i>
SCALE N.T.S.	CH. BY <i>[Signature]</i>
UNITS MILLIMETERS	APP. BY <i>[Signature]</i>
<b>NOHKEN INC.</b> OSAKA, JAPAN	

TITLE OUTLINE DRAWING OF ROTATING-PADDLE LEVEL SENSOR	
MODEL R7-Z	REFERENCE
DRAWING NO. SA 901150 △	

## S P E C I F I C A T I O N S

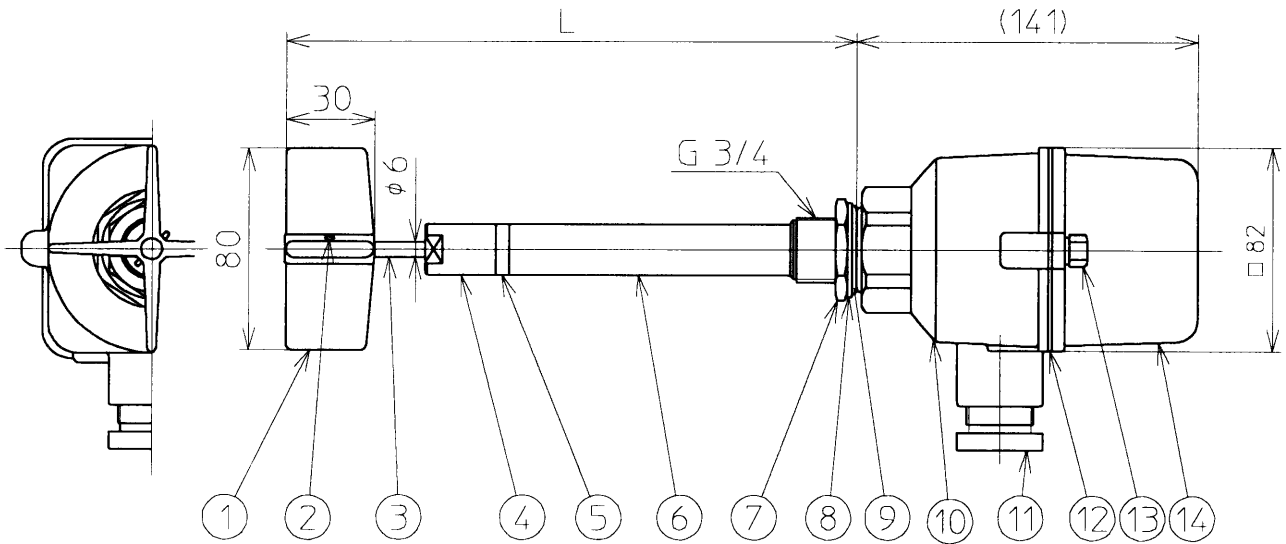
1. NAME : ROTATING-PADDLE LEVEL SENSOR
2. MODEL : R7-ZL
3. MEASURING OBJECT : Powders and Particles
4. OPERATION CHARACTERISTICS
  - 4.1 Rotational Frequency :  $1.65 \times 10^{-2} \text{ s}^{-1}$  (50 Hz)  
 $2.0 \times 10^{-2} \text{ s}^{-1}$  (60 Hz)
  - 4.2 Detection Torque : Approx. 5.0 N·cm
  - 4.3 Life Expectancy :  $1 \times 10^5$  operating Min. (microswitch)  
(125 V 5 A AC Resistive load)
5. ELECTRICAL CHARACTERISTICS
  - 5.1 Power Supply : 100/110/115/120/200/220/230/240/24 V AC, 50/60 Hz  
(Choose one of these Power Supply)
  - 5.2 Contact Rating : 250 V 3 A AC, 30 V 4 A DC (Resistive load)
  - 5.3 Power Consumption : Approx. 1.5 VA
6. WORKING TEMPERATURE : Detection part ; -10 to +70 °C  
Housing ; -10 to +45 °C
7. CONSTRUCTION : Detection part ; Water-proof construction (IP68)  
Housing ; Jet-proof construction (IP65)
8. PHYSICAL
  - 8.1 Mass : Approx. 1.8 kg (L=1000 mm)
  - 8.2 Mounting : Plug mounting
  - 8.3 Mounting Size : G 3/4
  - 8.4 Material of Detection part : Polycarbonate, 304 stainless steel,  
Brass(nickel plating), Aluminium die casting(ADC12)
  - 8.5 Cable Inlet : JIS F 15c (G 1/2) or JIS F 20a (G 3/4)
  - 8.6 Housing Color : Muncell 10B 5/6

## W A R R A N T Y

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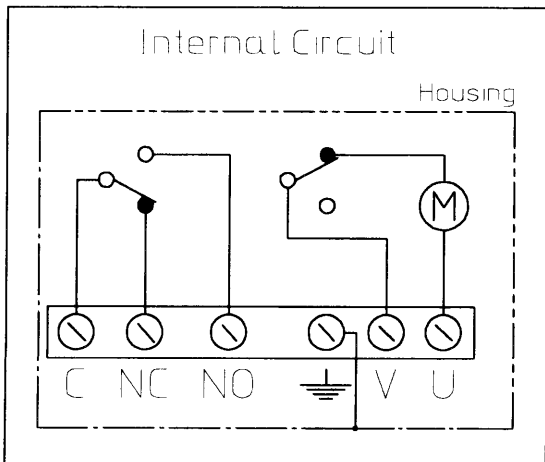
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DRAWING NO. SA 901151 △



Electric Rated

Power Supply	V AC 50/60Hz
Contact Capacity	250V 3A AC (Resistance load) 30V 4A DC (Resistance load)
Rotational Frequency	1 r.p.m. ( $1.65 \times 10^{-2} \text{ s}^{-1}$ ) (50Hz) 1.2 r.p.m. ( $2.0 \times 10^{-2} \text{ s}^{-1}$ ) (60Hz)
Cable inlet	JIS F 15c (G 1/2)



P.No.	Name	Qty.	Material
14	Cover	1	Acrylonitrile Butadiene Styrene
13	Cover Bolt	2	XM7 Stainless Steel
12	Cover Gasket	1	Chloroprene rubber
11	Cable Gland	1	Brass(Nickel Plating)
10	Housing	1	Aluminium Alloys Die Castings
9	Gasket	1	Acrylonitrile Butadiene Rubber
8	Washer	1	Brass(Nickel Plating)
7	Fiting Nut	1	Brass(Nickel Plating)
6	Pipe	1	304 Stainless Steel
5	Holger	1	Brass(Nickel Plating)
4	Cap	1	Brass(Nickel Plating)
3	Spindle	1	304 Stainless Steel
2	Spring Pin	1	304 Stainless Steel
1	Paddle	1	Polycarbonate

DATE 07-29-'99	DR. BY <i>[Signature]</i>
SCALE N.T.S.	CH. BY <i>[Signature]</i>
UNITS MILLIMETERS	APP. BY <i>[Signature]</i>

TITLE  
OUTLINE DRAWING OF ROTATING-PADDLE  
LEVEL SENSOR

MODEL R7-ZL REFERENCE



**NOHKEN INC.**  
OSAKA, JAPAN

DRAWING NO

SA 901151 △