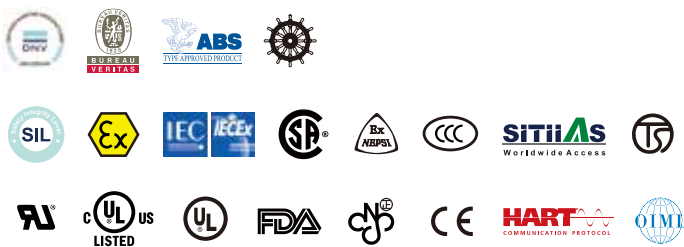




Rotary Paddle Level Switch



PRODUCT INTRODUCTION

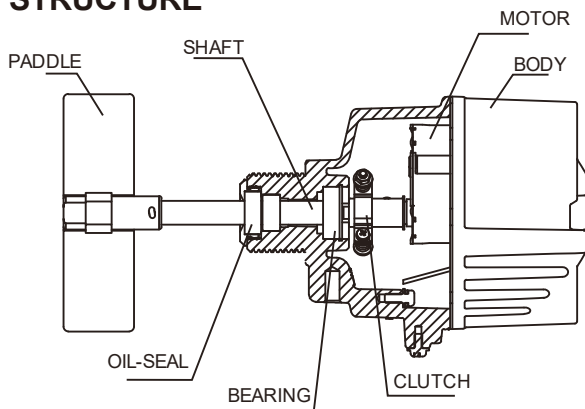
WORKING PRINCIPLE

The purpose of the rotary paddle level switch is to detect the presence of solid/powdery material in most kinds of tanks, bins and containers. The unit is usually located through a bin wall at the top, middle or low level of a bin. During normal operation (no material present) a synchronous motor rotates the paddle at RPM. When this paddle rotation is impeded by material, surrounding the paddle, motor will stall and cause the Micro-switch to change state (indicating an alarm or control).

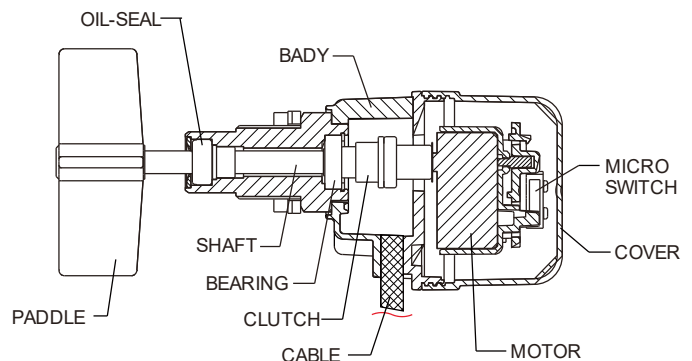
APPLICATIONS

- Plastics and synthetics
- Chemicals and fertilizer
- Pharmaceuticals
- Food and beverage,
- Agriculture and fodder mills/depots
- Cement as well as ceramics
- Power plants
- Various incinerators

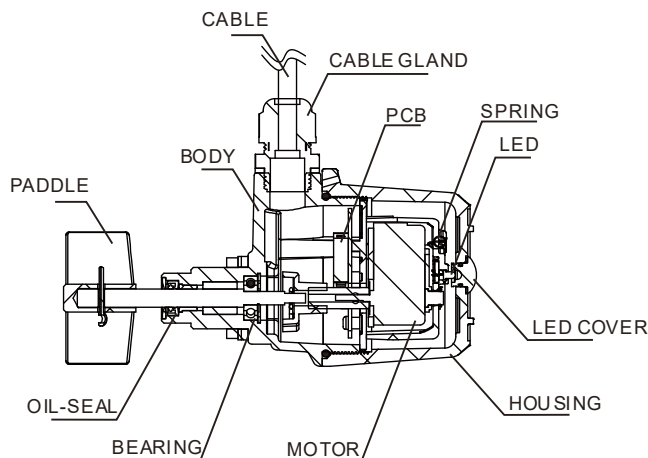
STRUCTURE



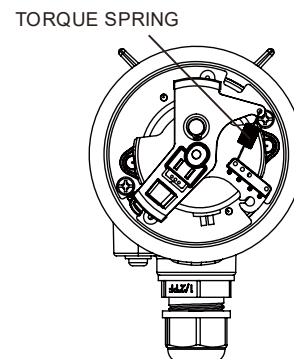
STANDARD TYPE SEX5



MINI TYPE SEX4



MINI TYPE SEX3



FEATURES

- Rugged sealing ring prevents dust from infiltrating the housing body along the shaft.
- Adjustable torque.
- If the rotary paddle encounters overloading, the motor will automatically shut down the motor to prevent damage to the inner mechanisms and extend motor life.
- Very suitable for small tanks and low density materials
- Adjustable and extendible shaft models available
- A wide variety of paddles are available

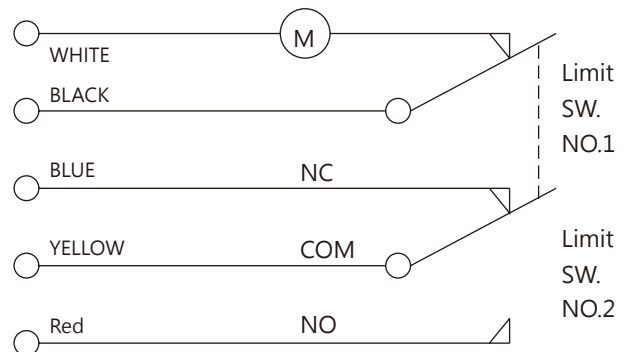
BENEFITS

- Airtight sealed device.
- Outdoor and strenuous environment application
- Stable and reliable performance.
- Lightweight and easy to install
- Practically designed to allow maintenance, checks and replacement
- Not necessary to remove the complete set from the tank.

WORKING PRINCIPLE & TORQUE ADJUSTING

CONTROL SWITCH WORKING PRINCIPLE

1. A synchronous turning motor indicates the tank or container's material isn't obstructing the paddles, C & L [COM & NC] are connected.
2. When the material is obstructing the paddles, C&L [COM & NC] are disconnected, C&H [COM & NO] are connected and the motor's current is cut off.
3. When the material drops away from the paddles and the motor starts again C & L [COM & NC] connect and the cycle has begun once again.

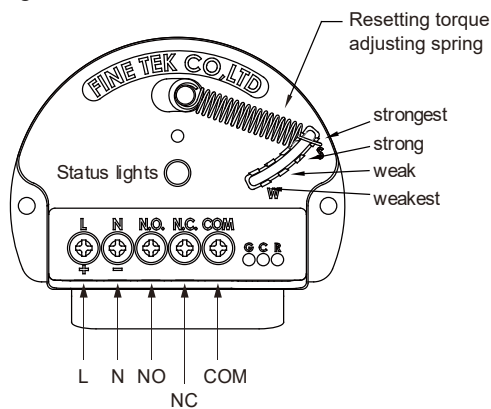


※Do not tamper with the spring as it may cause the Rotary Paddle to malfunction.

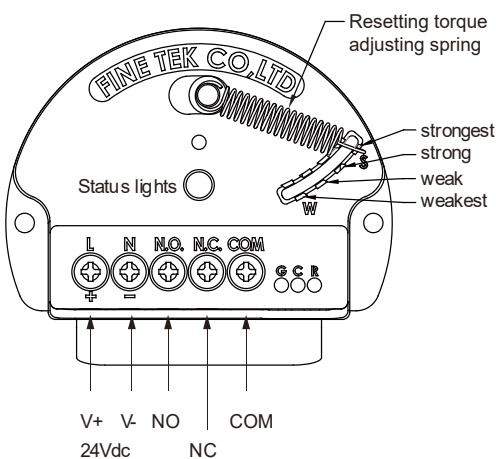
TORQUE ADJUSTING MECHANISM AND WIRING

The torque spring is applied to adjust the shaft output torque. Default settings are "weak" and can be adjusted to the customer's target based on the tank contents and S.G. (special gravity) of the material.

Higher S.G. materials require stronger torque settings. Start with high settings and slowly release the torque force until the appropriate setting is found.

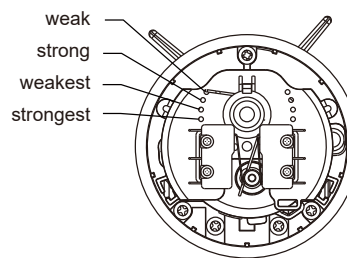


Available: SEX5 AC TYPE

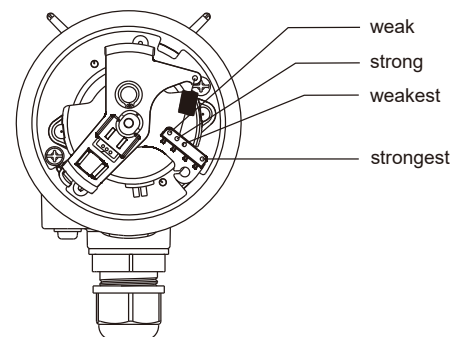


Available: SEX5 DC TYPE

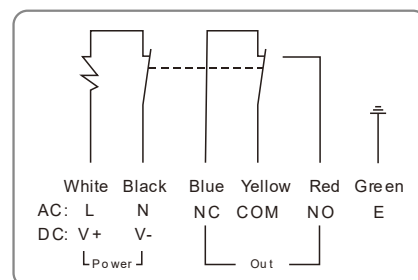
SPRING ADJUSTING HOLE



SEX4



SEX2



Available:SEX2/SEX4

GENERAL TYPE - SEX5

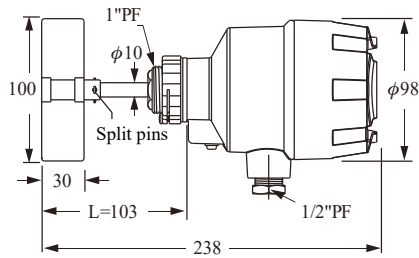
Power source : (A)110Vac,(B)220Vac,(C)240Vac,
(D)24Vac,50/60Hz,(E)24Vdc
Power consumptio : 3W
Contact capacity : SPDT 5A/250Vac
Rotary speed : 1 R.P.M.
Insulation test voltage : 2500V

Connection : 1"PF screw or JIS 2-1/2"x5kg/cm²
Protection/ material : IP65/ADC-12
Conduit : 1/2"PF
Material density : 0.5g/cm³ (30Lb/ft³)

SE110

SCREW TYPE

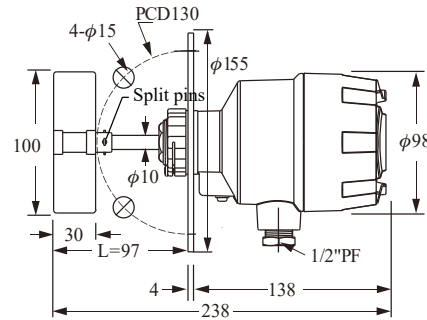
Horizontal mounting
Operation Temp.: -20°C ~ 70°C
Weight: 1.2 kg



SE111

FLANGE TYPE

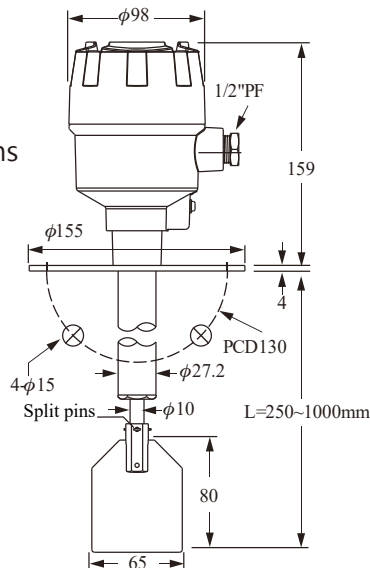
Horizontal mounting
Operation Temp.: -20°C ~ 70°C
Weight: 1.7 kg



SE120

SHAFT PROTECTIVE TUBE TYPE

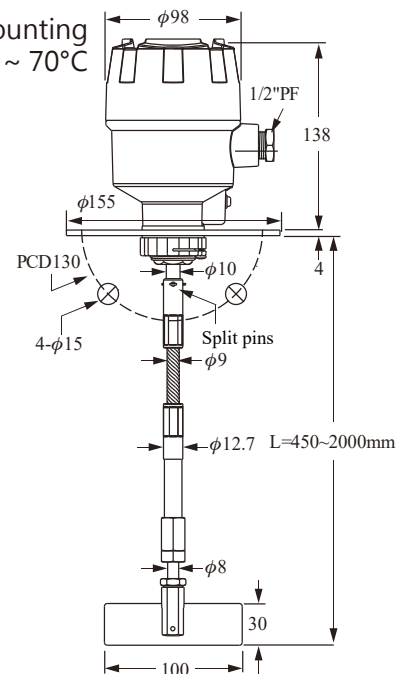
Horizontal / Vertical mounting
Operation Temp.: -20°C ~ 70°C
Weight: 1.2 kg
Standard Length:
L--250mm (2.2 kg)
L--500mm (2.5 kg)
L--750mm (2.8 kg)
(Customized lengths
available)

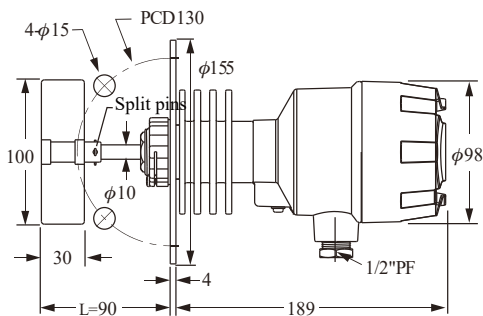


SE130

SHAFT LENGTH ADJUSTABLE TYPE

Horizontal / Vertical mounting
Operation Temp.: -20°C ~ 70°C
Weight: 1.2 kg
Standard Length:
L--630mm(2.5 kg)
L--1000mm(2.8 kg)
L--1200mm(3.0 kg)
(Customized lengths
available)

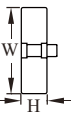
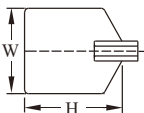
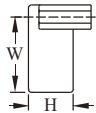
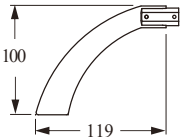
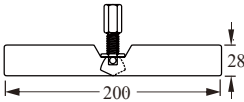
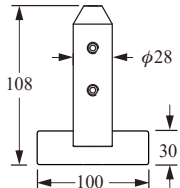
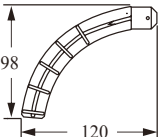
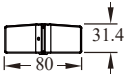




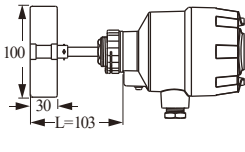
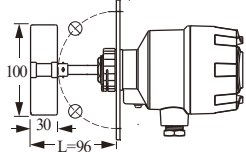
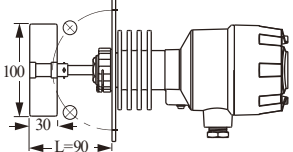
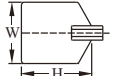
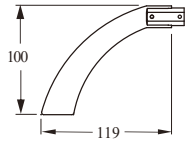
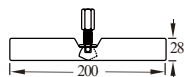
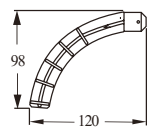
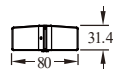
MODEL NUMBER / ORDER CODE COMPARISON TABLE

Model Number	Order Code
SE110	SEX50000-AA
SE111	
SE120	SEX50000-AB
SE130	SEX50000-AC
SE140	SEX50200-AA
SE141	SEX50200-AB
SE146	SEX50200-AC
SE160	SEX50000-AD

NEW / OLD PADDLE MODEL COMPARISON TABLE

New	Figure		Dimension(WxH)	Old
B	Rectangular shaped type		100x30	A
C	Shovel shaped type		65x80	B
D			65x120	C
E			80x80	D
F	Rectangular type, one sided		50x30	E
G	Scimitar shaped type		100x119	F
H	Folding type		200x28	J
K	Weights type		100x108	X
N	Scimitar shaped type (PC)		98x120	
P	Cross bladed type (PC)		80x32	

PROBE LENGTH LIST FOR GENERAL TYPE (WITH DIFFERENT PADDLES)

Product model Paddle model		SE110 	SE111 	SE140 
Rectangular shaped type 	100x30	L=103	L=96	L=90
Shovel shaped type 	65x80	L=153	L=146	L=142
	65x120	L=193	L=186	L=182
	80x80	L=153	L=146	L=142
Rectangular type, one sided 	50x30	L=104	L=97	L=94
Scimitar shaped type 	100x119	L=192	L=184	L=182
Folding type 	200x28	L=126	L=119	L=114
Scimitar shaped type(PC) 	98x120	L=175	L=168	Not suitable for high temp.(>120°C) Stainless steel paddle suggested
Cross bladed type(PC) 	80x32	L=81	L=74	

ORDER INFORMATION

General Type

SEX5 ⁰⁵ ⁰⁶ 0 0 - A ¹⁰ ¹¹ ¹² ¹³ ¹⁴ ¹⁵ ¹⁶ ¹⁷ ¹⁸ ¹⁹ ²⁰ ²¹ ²²

⁰⁵ ⁰⁶ Model

00: Standard
02: Hi-temperature

¹⁰ Construction

A: General type
B: Shaft protective tube type
C: Shaft length adjustable type
D: Cable wire type

¹¹ Power supply

A: AC110V
B: AC220V
C: AC240V
D: AC24V
E: DC24V

Connection

¹² ¹³

Flange item
AK: JIS-FF
AN: ANSI-RF
AS: DIN-FF
BC: Standard thin flange
(Suitable for 2-1/2" dimension)

¹⁴ ¹⁵

A8: 1"
B1: 1-1/2"
B2: 2"
B4: 2-1/2"

¹⁶ ¹⁷

01: PT male
03: PF male
07: NPT male
39: 5 kg/cm²x4T(Thin flange)
40: 5 kg/cm²
42: 10 kg/cm²
48: 150 Lbs
49: 300 Lbs
57: PN10
58: PN16

¹⁸ Paddle model

A: None
B: 100x30(WxH)
C: 65x80(WxH)
F: 50x30(WxH)
G: Scimitar type 100x131(WxH)
H: Folding type 200x28(WxH)
K: Cable wire type only 100x108(WxH)
N: Scimitar shaped type(PC) 98x120(WxH)
P: Cross bladed type(PC) 80x32(WxH)

※N type and P type not suitable for high temperature(>120°C)

¹⁹ ²⁰ ²¹ ²² Length

Code	Length range
0001~4000	0001~4000mm

※The General power socket is not shared with the warning type and explosion proof type.

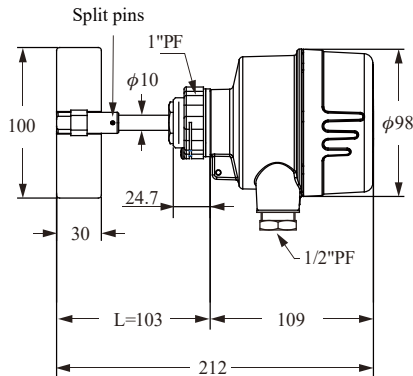
Power consumption : 3W
Contact capacity : SPDT 5A/250Vac
Rotary speed : 1 R.P.M.
Insulation test voltage : 2500V

Connection : 1"PF screw or JIS 2-1/2"x5kg/cm²
Upper cover protection / material : IP67 / Pc cover
Terminal box protection / material : IP67 / ADC-12
Conduit : 1/2"PF
Material density : 0.5g/cm³ (30Lb/ft³)

SE110

SCREW TYPE

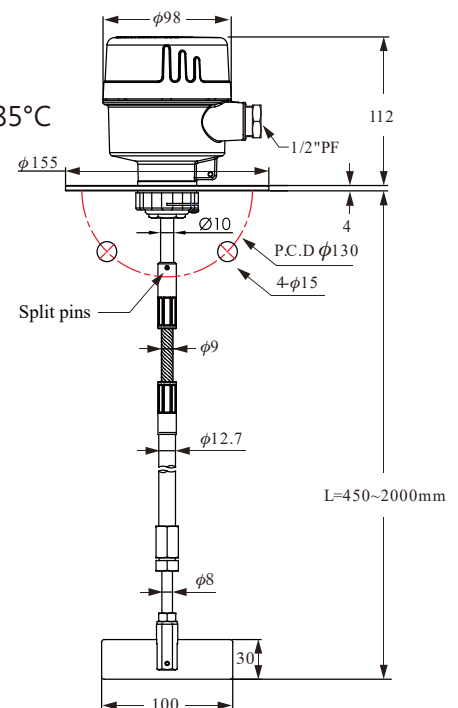
Horizontal mounting
Operation Temp.: -20°C ~ 85°C
Weight: 1.2 kg



SE130

SHAFT LENGTH ADJUSTABLE TYPE

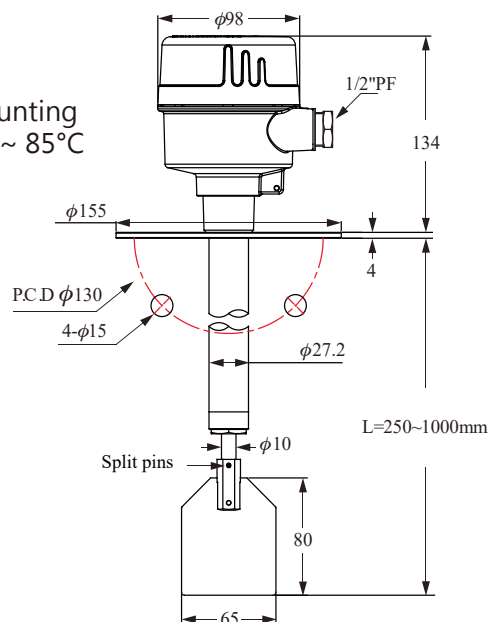
Vertical mounting
Operation Temp.: -20°C ~ 85°C
Weight: 1.2 kg
Standard Length: φ1.5"
L--630mm(2.5 kg)
L--1000mm(2.8 kg)
L--1200mm(3.0 kg)
(Customized lengths available) Split



SE120

SHAFT PROTECTIVE TUBE TYPE

Horizontal / Vertical mounting
Operation Temp.: -20°C ~ 85°C
Weight: 1.2 kg
Standard Length:
L--250mm (2.2 kg)
L--500mm (2.5 kg)
L--750mm (2.8 kg)
(Customized lengths
available)



WARNING LIGHT TYPE - SEX5

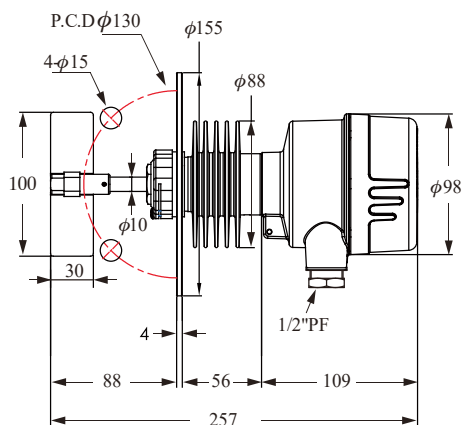
SE140

SCREW TYPE

Horizontal mounting

Operation Temp.: Max.200°C

Weight: 2.1 kg



SE146

HI-TEMP SHAFT LENGTH ADJUSTABLE TYPE

Vertical mounting

Operation Temp.: Max.200°C

Weight: 1.2 kg

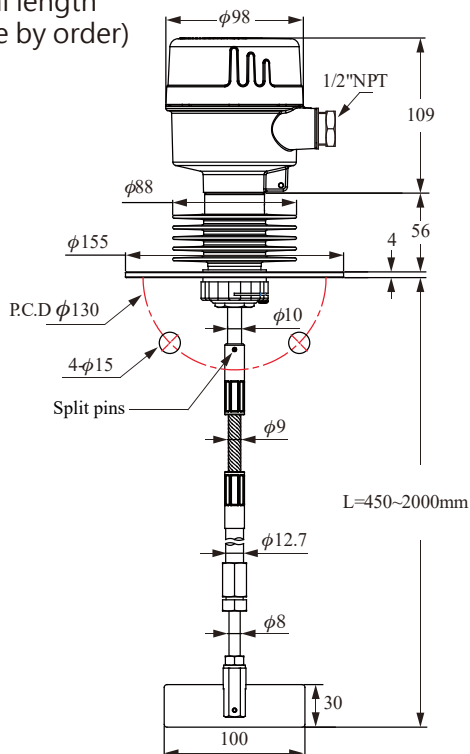
Standard Length:

L-- 450~630mm (3 kg)

L-- 650~1000mm (3.3 kg)

L-- 750~1200mm (3.5 kg)

(Special length
is made by order)



SE141

HI-TEMP TYPE
PROTECTIVE TUBE TYPE

Horizontal / Vertical mounting

Operation Temp.: Max.200°C

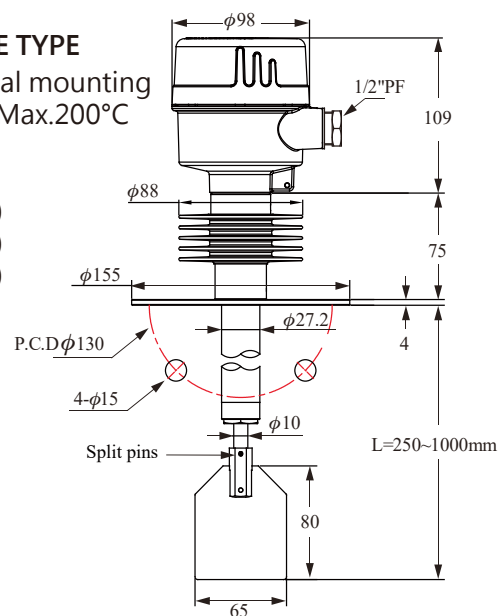
Weight: 1.2 kg

Standard Length:
L--250mm (2.6 kg)

L--500mm (2.9 kg)

L--750mm (3.2 kg)

(Special length
is made by order)



SE160

CABLE WIRE TYPE

Vertical mounting

Operation Temp.: -20°C ~ 85°C

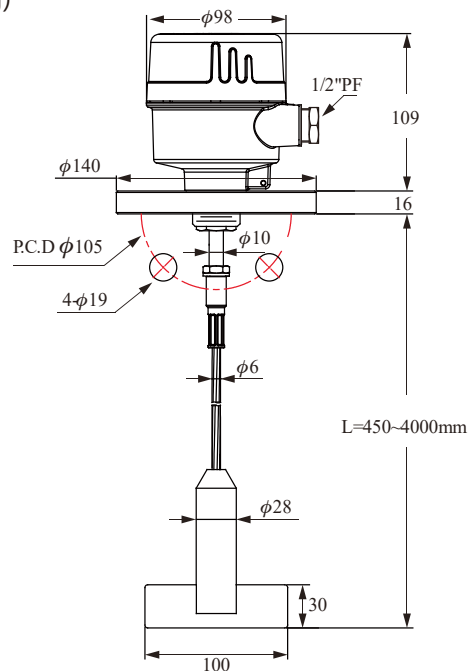
Weight: 1.2 kg

Standard Length:
L-- 450mm (2.5 kg)

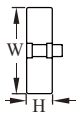
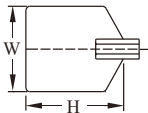
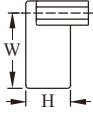
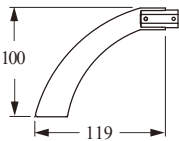
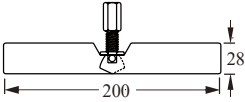
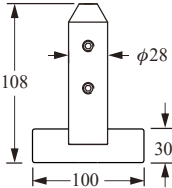
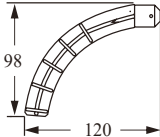
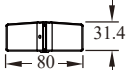
L-- 650mm (2.8 kg)

L-- 750mm (3 kg)

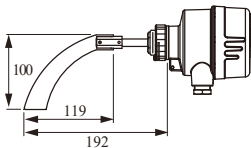
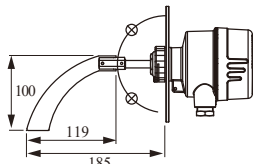
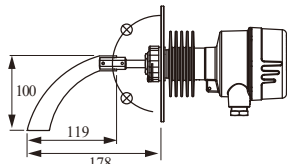
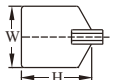
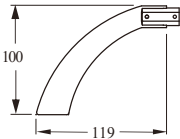
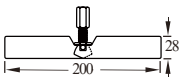
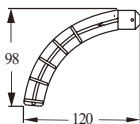
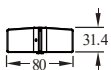
(Special length
is made by order)



NEW / OLD PADDLE MODEL COMPARISON TABLE

New	Figure		Dimension(WxH)	Old
B	Rectangular shaped type		100x30	A
C	Shovel shaped type		65x80	B
D			65x120	C
E			80x80	D
F	Rectangular type, one sided		50x30	E
G	Scimitar shaped type		100x119	F
H	Folding type		200x28	J
K	Weights type		100x108	X
N	Scimitar shaped type (PC)		98x120	
P	Cross bladed type (PC)		80x32	

PROBE LENGTH LIST FOR WARNING LIGHT TYPE (WITH DIFFERENT PADDLES)

Product model		SE110	SE111	SE140
Paddle model				
Rectangular shaped type 	100x30	L=103	L=96	L=88
Shovel shaped type 	65x80	L=153	L=146	L=138
	65x120	L=193	L=186	L=178
	80x80	L=153	L=146	L=138
Rectangular type, one sided 	50x30	L=104	L=97	L=89
Scimitar shaped type 	100x119	L=192	L=185	L=178
Folding type 	200x28	L=126	L=119	L=112
Scimitar shaped type(PC) 	98x120	L=175	L=168	Not suitable for high temp.(>120°C) Stainless steel paddle suggested
Cross bladed type(PC) 	80x32	L=81	L=74	

ORDER INFORMATION

General Type

SEX5 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22
SEX5 0 0 - **B**

⑤⑥ Model

00: Standard
02: Hi-temperature

⑩ Construction

A: General type
B: Shaft protective tube type
C: Shaft length adjustable type
D: Cable wire type

⑪ Power supply

A: AC110V
B: AC220V
C: AC240V
D: AC24V
E: DC24V

Connection

⑫⑬

Flange item
AK: JIS-FF
AN: ANSI-RF
AS: DIN-FF
BC: Standard thin flange
(Suitable for 2-1/2" dimension)

⑭⑮

A8: 1"
B1: 1-1/2"
B2: 2"
B4: 2-1/2"

⑯⑰

01: PT male
03: PF male
07: NPT male
39: 5 kg/cm²x4T(Thin flange)
40: 5 kg/cm²
42: 10 kg/cm²
48: 150 Lbs
49: 300 Lbs
57: PN10
58: PN16

⑱ Paddle model

A: None
B: 100x30(WxH)
C: 65x80(WxH)
F: 50x30(WxH)
G: Scimitar type 100x131(WxH)
H: Folding type 200x28(WxH)
K: Cable wire type only 100x108(WxH)
N: Scimitar shaped type(PC) 98x120(WxH)
P: Cross bladed type(PC) 80x32(WxH)

※N type and P type not suitable for high temperature(>120°C)

⑲⑳㉑㉒ Length

Code	Length range
0001~4000	0001~4000mm

※The General power socket is not shared with the warning type and explosion proof type.

EXPLOSION PROOF TYPE - SEX5

ATEX II 1D/2D Ex ta/tb IIIC T85°C...T200°C
 IECEx Ex ta/tb IIIC T85°C...T200°C Da/Db
 CSA Ex ta/tb IIIC T85°C...T200°C Da/Db
 Zone 20 / Zone 21 AEx ta/tb IIIC T85°C...T200°C Da/Db
 Class II, Division 1, Groups E, F, G, T200°C

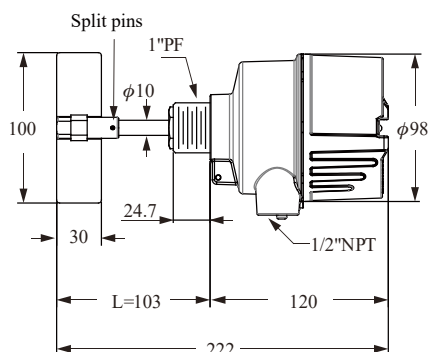
Power source : (A)110Vac,(B)220Vac,(C)240Vac,
 (D)24Vac,50/60Hz,(E)24Vdc
 Power consumptio : 3W
 Contact capacity : SPDT 5A/250Vac
 Rotary speed : 1 R.P.M.
 Insulation test voltage : 2500V

Connection : 1"PF screw (minimum)
 Protection/ material : IP67 / ADC-12
 Conduit : 1/2"NPT/ADC-12
 Material density : 0.5g/cm³ (30Lb/ft³)

SE110

SCREW TYPE

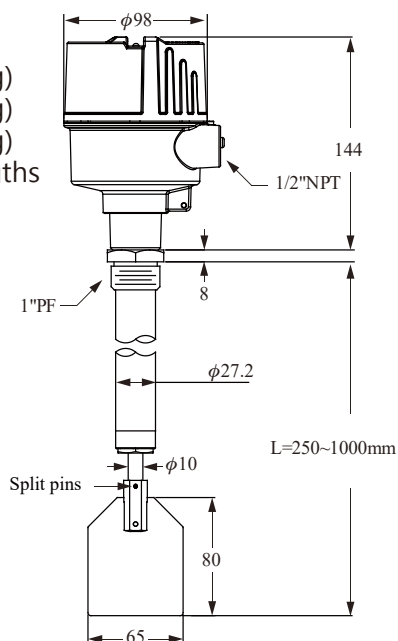
Horizontal mounting
 Operation Temp.: -20°C ~ 85°C
 Weight: 1.2 kg



SE120

SHAFT PROTECTIVE TUBE TYPE

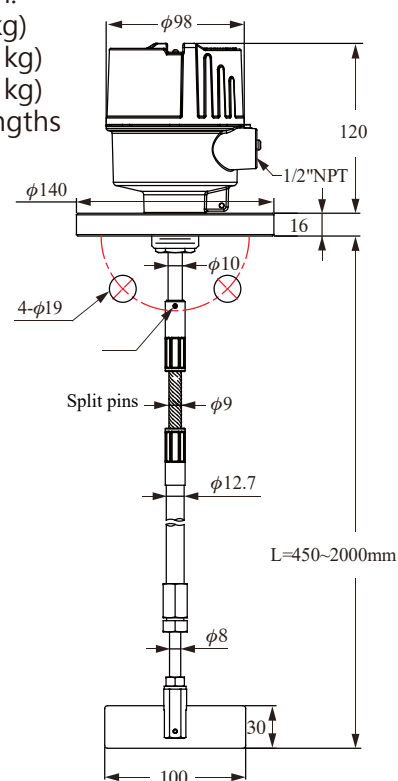
Horizontal / Vertical mounting
 Operation Temp.: -20°C ~ 85°C
 Weight: 1.2 kg
 Standard Length:
 L--250mm (2.2 kg)
 L--500mm (2.5 kg)
 L--750mm (2.8 kg)
 (Customized lengths available)



SE130

SHAFT LENGTH ADJUSTABLE TYPE

Horizontal / Vertical mounting
 Operation Temp.: -20°C ~ 85°C
 Weight: 1.2 kg
 Standard Length:
 L--630mm(2.5 kg)
 L--1000mm(2.8 kg)
 L--1200mm(3.0 kg)
 (Customized lengths available)



EXPLOSION PROOF TYPE - SEX5

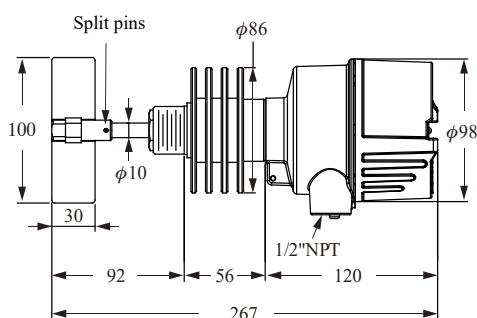
SE140

HI-TEMP TYPE

Horizontal mounting

Operation Temp.: Max.200°C

Weight: 2.1 kg



SE146

HI-TEMP SHAFT LENGTH ADJUSTABLE TYPE

Vertical mounting

Operation Temp.: Max.200°C

Standard Length:

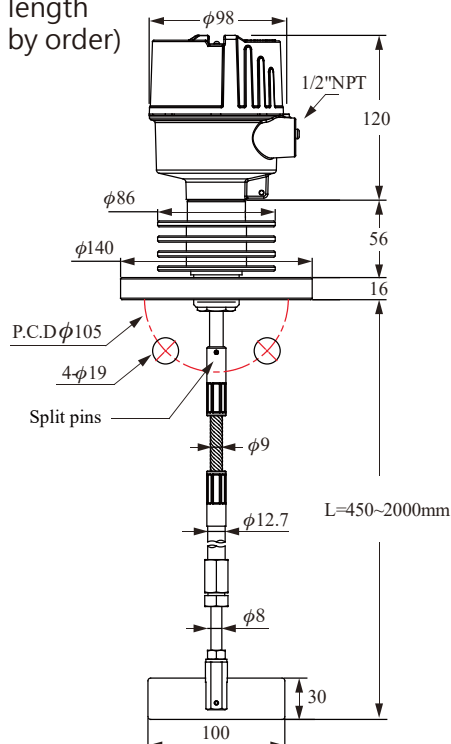
(Option)

L-- 450~630mm (3 kg)

L-- 650~1000mm (3.3 kg)

L-- 750~1200mm (3.5 kg)

(Special length
is made by order)



SE141

HI-TEMP TYPE

PROTECTIVE TUBE TYPE

Horizontal / Vertical mounting

Operation Temp. : Max.200°C

Standard Length:

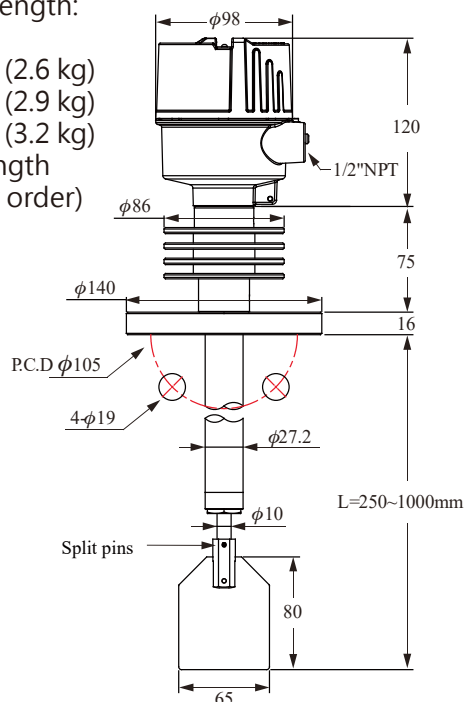
(Option)

L--250mm (2.6 kg)

L--500mm (2.9 kg)

L--750mm (3.2 kg)

(Special length
is made by order)



SE160

CABLE WIRE TYPE

Vertical mounting

Operation Temp.: -20°C ~ 85°C

Standard Length:

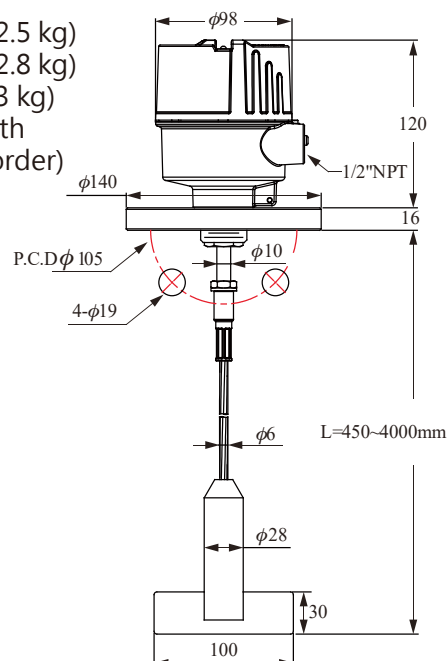
(Option)

L-- 450mm (2.5 kg)

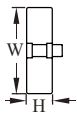
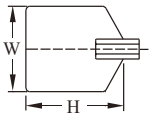
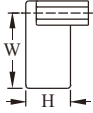
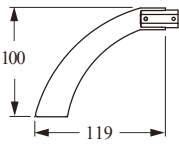
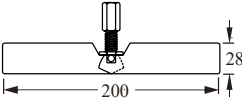
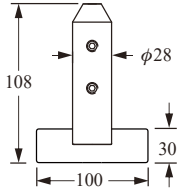
L-- 650mm (2.8 kg)

L-- 750mm (3 kg)

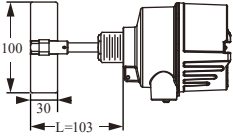
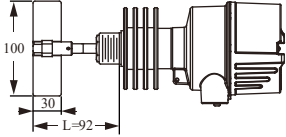
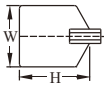
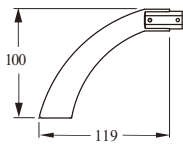
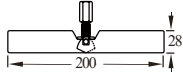
(Special length
is made by order)



NEW / OLD PADDLE MODEL COMPARISON TABLE

New	Figure		Dimension(WxH)	Old
B	Rectangular shaped type		100x30	A
C	Shovel shaped type		65x80	B
D			65x120	C
E			80x80	D
F	Rectangular type, one sided		50x30	E
G	Scimitar shaped type		100x119	F
H	Folding type		200x28	J
K	Weights type		100x108	X

PROBE LENGTH LIST FOR WARNING LIGHT TYPE (WITH DIFFERENT PADDLES)

Product model Paddle model		SE110 	SE140 
Rectangular shaped type 	100x30	L=103	L=92
	65x80	L=153	L=142
	65x120	L=193	L=182
Shovel shaped type 	80x80	L=153	L=142
	50x30	L=104	L=93
Rectangular type, one sided 			
Scimitar shaped type 	100x119	L=192	L=181
Folding type 	200x28	L=126	L=115

Code	Length range
0001~4000	0001~4000mm

EXPLOSION PROOF TYPE



TS Ex d IIB T6...T3 Gb
NEPSI Ex d IIC T3~T6 Gb
Ex tD A20/A21 IP65 T80°C / T95°C / T130°C / T190°C
ATEX II 2G Ex d IIB T3 or T4 or T5 or T6 Gb
II 2D Ex tb IIIC T200°C or T135°C or T100°C or T85°C Db
IECEX Ex db IIB T3 or T4 or T5 or T6 Gb
Ex tb IIIC T200°C or T135°C or T100°C or T85°C Db

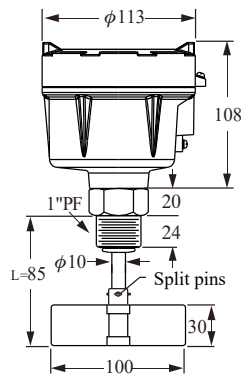
Power source : (A)110Vac,(B)220Vac,(C)240Vac,
(D)24Vac,50/60Hz
Power consumptio : 3W
Contact capacity : SPDT 3A/250Vac
Rotary speed : 1 R.P.M.
Insulation test voltage : AC 1500Vx1minute

Connection : 1"PF screw or flange 1"~6"
2-1/2"x5kg/cm² (std.)
Housing material : AL Alloy, ADC-12
Conduit : 1/2" (std.) or 3/4"NPT
Material density : 0.5g/cm³

SE170

EXPLOSION PROOF CONNECTION TYPE

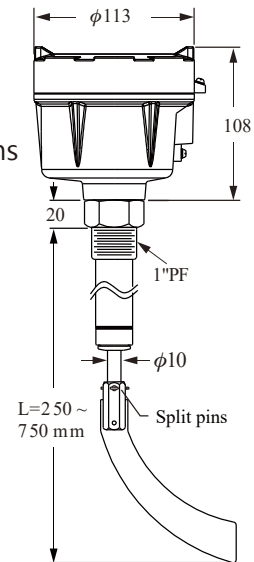
Horizontal mounting
Operation Temp.: 20°C ~ 70°C



SE172

EXPLOSION PROOF CONNECTION TYPE

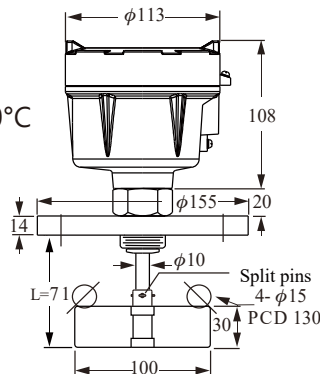
Horizontal mounting
Operation Temp.: 20°C ~ 70°C
Standard Length:
(Option)
L-- 250 mm
L-- 500 mm
L-- 750 mm
(Customized lengths available)



SE171

EXPLOSION PROOF FLANGE TYPE

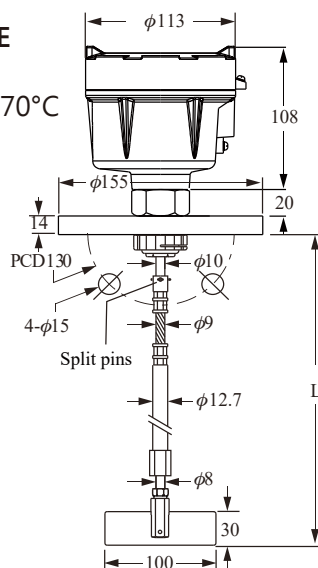
Horizontal mounting
Operation Temp.: 20°C ~ 70°C



SE173

EXPLOSION PROOF ADJUSTABLE SHAFT TYPE

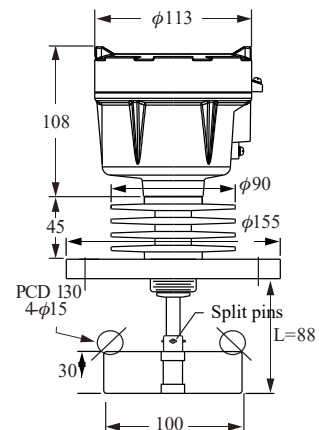
Vertical mounting
Operation Temp.: -20°C ~ 70°C
Standard Length:
(Option)
L-- 450~630mm
L-- 650~1000mm
L-- 750~1200mm
(Special length is made by order)



SE174

EXPLOSION PROOF FLANGE TYPE

Horizontal mounting
Operation Temp.: Max.190°C



EXPLOSION PROOF TYPE

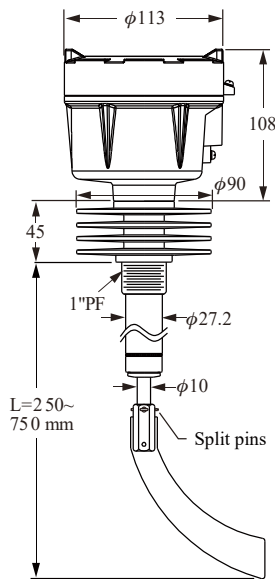


TS Ex d IIB T6...T3 Gb
NEPSI Ex d IIC T3~T6 Gb
Ex tD A20/A21 IP65 T80°C / T95°C / T130°C / T190°C
ATEX II 2G Ex d IIB T3 or T4 or T5 or T6 Gb
II 2D Ex tb IIC T200°C or T135°C or T100°C or T85°C Db
IECEx Ex db IIB T3 or T4 or T5 or T6 Gb
Ex tb IIC T200°C or T135°C or T100°C or T85°C Db

SE175

EXPLOSION PROOF HI-TEMP SHAFT PROTECTIVE TUBE TYPE

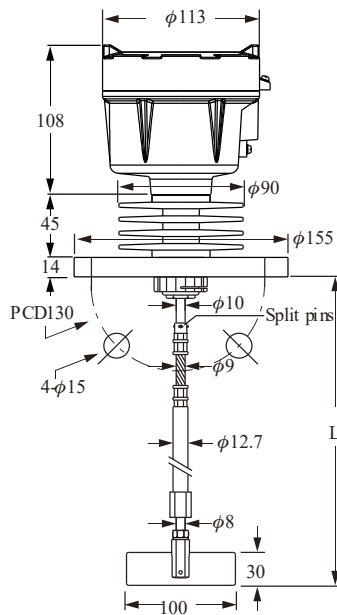
Horizontal mounting
Operation Temp.: Max.190°C
Special length is made by order



SE176

EXPLOSION PROOF HI-TEMP ADJUSTABLE SHAFT TYPE

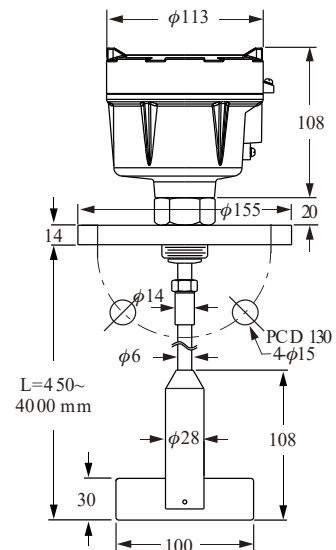
Vertical mounting
Operation Temp.: Max.190°C
Special length is made by order



SE177

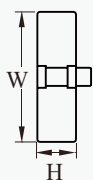
EXPLOSION PROOF CABLE WIRE TYPE

Vertical mounting
Operation Temp.: -20°C ~ 70°C
Special length is made by order



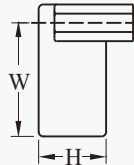
PADDLE INTRODUCTION

A



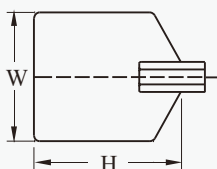
(A) 100x30(WxH), Min. fixed hole diameter size $\phi 90$ mm.

E



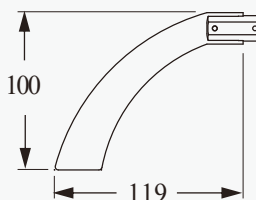
(E) 50x30 (WxH), Suitable for high S.G. raw materials. Use a small size paddle to decrease the impact of material falling directly on paddle.

B,C,D



(B) 65x80 (WxH), Directly mounted into 2-1/2" fixed hole.
(C) 65x120 (WxH), Directly mounted into 2-1/2" fixed hole.
(D) 80x80 (WxH)

F



(F) Scimitar model paddle, Screw tightly on the 1" diameter fixed hole, It is easier to mount and dismount.

MODEL NUMBER / ORDER CODE COMPARISON TABLE

Model Number	Order Code
SE170	SEX300□□-AA
SE171	
SE172	SEX300□□-AB
SE173	SEX300□□-AC
SE174	SEX302□□-AA
SE175	SEX302□□-AB
SE176	SEX302□□-AC
SE177	SEX300□□-AD

ACCESSORIES

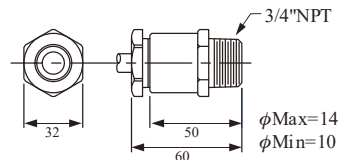
Cable Conduit - Ex d IIC

Material: Washer ---NBR

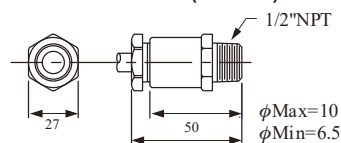
Body--- Copper alloy(3/4"NPT)

Nickel plated(1/2"NPT)

HP415-A23100MH01(29-1104)



HP415-A23000MG01(29-1108)



NEW / OLD PADDLE MODEL COMPARISON TABLE

New	Figure		Dimension(WxH)	Old
B	Rectangular shaped type		100x30	A
C	Shovel shaped type		65x80	B
D			65x120	C
E			80x80	D
F	Rectangular type, one sided		50x30	E
G	Scimitar shaped type		100x119	F
H	Folding type		200x28	J
K	Weights type		100x108	X

ORDER INFORMATION

	05	06	07	08	-	A	10	11	12	13	14	15	16	17	18	19	20	21	22	
SEX3																				
05 06 Model																				
00: Standard																				
02: Hi-temperature																				
07 08 Certification																				
1C: ATEX-Exd																				
2C: IECEx-Exd																				
5C: TS-Exd																				
7C: NEPSI-Exd																				
10 Construction																				
A: General type																				
B: Shaft protective tube type																				
C: Shaft length adjustable type																				
D: Cable wire type																				
11 Power supply																				
A: AC110V																				
B: AC220V																				
C: AC240V																				
D: AC24V																				
Connection																				
12 13																				
Flange item																				
AK: JIS-FF																				
AN: ANSI-RF																				
AS: DIN-FF																				
14 15																				
A8: 1"																				
B1: 1-1/2"																				
B2: 2"																				
B4: 2-1/2"																				
16 17																				
01: PT male																				
03: PF male																				
07: NPT male																				
40: 5 kg/cm ²																				
42: 10 kg/cm ²																				
48: 150 Lbs																				
49: 300 Lbs																				
57: PN10																				
58: PN16																				
18 Paddle model																				
A: None																				
B: 100x30(WxH)																				
C: 65x80(WxH)																				
F: 50x30(WxH)																				
G: Scimitar type																				
K: 100x108(WxH)(Cable wire type only)																				
19 20 21 22 Length																				

Code	Length range
0001~4000	0001~4000mm

MINI TYPE(ALUMINUM ALLOY COVER)

Housing cover code:
0: Aluminum cover
1: Aluminum cover with LED lamp

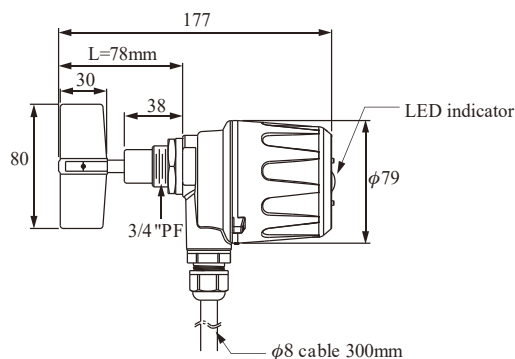
Power source : (A)110Vac,(B)220Vac,(C)240Vac,
(D)24Vac,50/60Hz,(E)24Vdc
Power consumptio : 1.5W
Contact capacity : 5A/250Vac, 5A/30Vdc
Rotary speed : 1 R.P.M.
IP rating : IP65

Housing material : Aluminum alloy
Ambient temperature : -40°C ~ 85°C
Cable length : 300mm (available for custom length)
Display status : Green(Working), Red(Stopped)
Material density : 0.3g/cm³

SE38□0

STANDARD TYPE

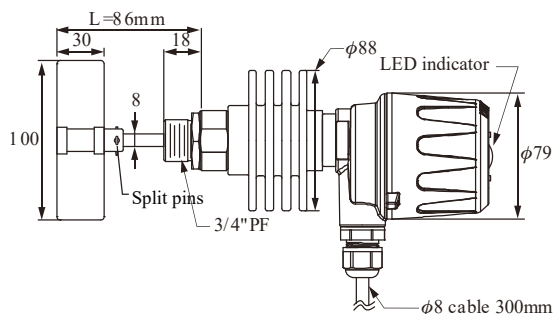
Operation Temp.: -40°C ~ 85°C
Paddle material: PC



SE38□4

HIGH TEMPERATURE TYPE

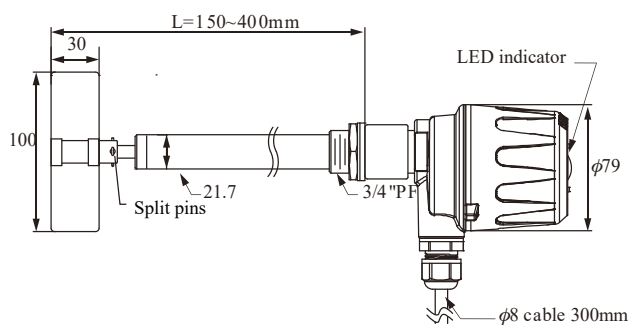
Operation Temp.: -40°C ~ 200°C
Paddle material: SUS304



SE38□2

SHAFT PROTECTIVE TUBE TYPE

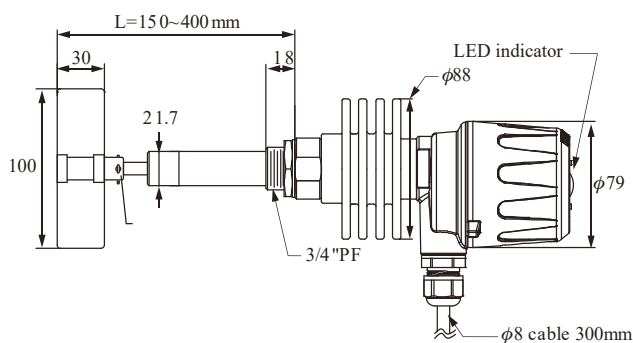
Operation Temp.: -40°C ~ 85°C
Paddle material: SUS304



SE38□5

HIGH TEMPERATURE SHAFT PROTECTIVE TUBE TYPE

Operation Temp.: -40°C ~ 200°C
Paddle material: SUS304



MINI TYPE(EXPLOSION PROOF)



Ex tD A20/21 IP65 T80°C~T195°C

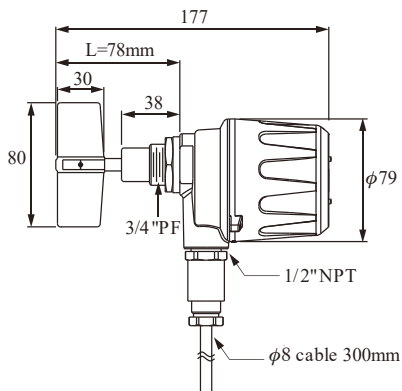
Power source : (A)110Vac,(B)220Vac,(C)240Vac,
(D)24Vac,50/60Hz,(E)24Vdc
Power consumptio : 1.5W
Contact capacity : 5A/250Vac, 5A/30Vdc
Rotary speed : 1 R.P.M.
IP rating : IP65

Housing material : Aluminum alloy
Ambient temperature : -40°C ~ 85°C
Cable length : 300mm (available for custom length)
Material density : 0.3g/cm³

SE3700

STANDARD TYPE

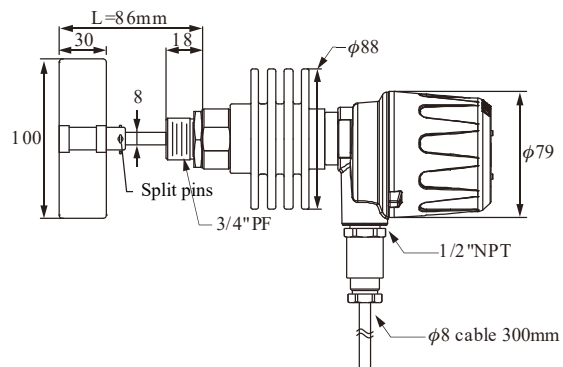
Operation Temp.: -40°C ~ 80°C
Paddle material: PC



SE3704

HIGH TEMPERATURE TYPE

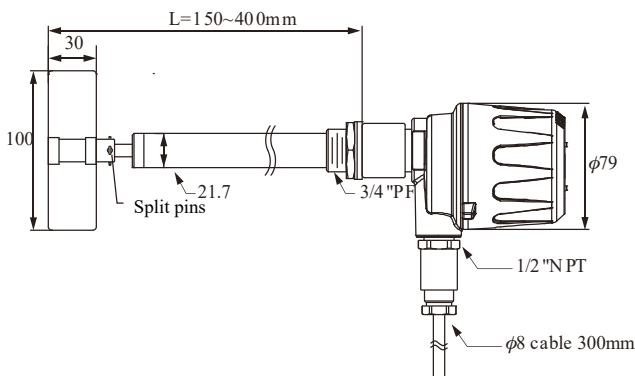
Operation Temp.: -40°C ~ 195°C
Paddle material: SUS304



SE3702

SHAFT PROTECTIVE TUBE TYPE

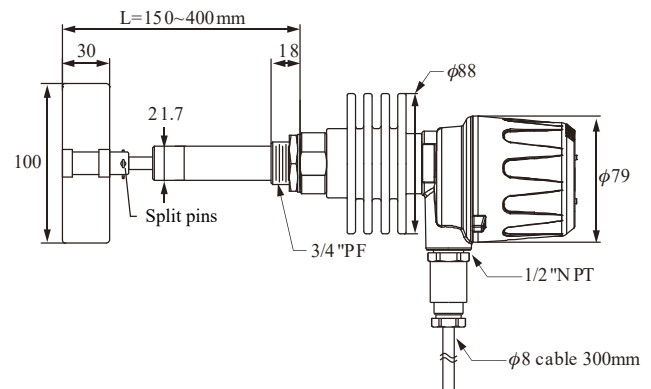
Operation Temp.: -40°C ~ 80°C
Paddle material: SUS304



SE3705

HIGH TEMPERATURE SHAFT PROTECTIVE TUBE TYPE

Operation Temp.: -40°C ~ 195°C
Paddle material: SUS304



MINI TYPE(PLASTIC COVER)

Power source : (A)110Vac,(B)220Vac,(C)240Vac,
(D)24Vac,50/60Hz,(E)24Vdc

Power consumptio : 1.5W

Contact capacity : 5A/250Vac, 5A/30Vdc

Rotary speed : 1 R.P.M.

IP rating : IP65

Housing material : Plastic cover

Ambient temperature : -40°C ~ 85°C

Cable length : 300mm (available for custom length)

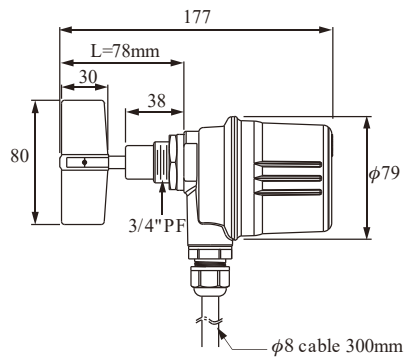
Material density : 0.3g/cm³

SE3820

STANDARD TYPE

Operation Temp.: -40°C ~ 85°C

Paddle material: PC

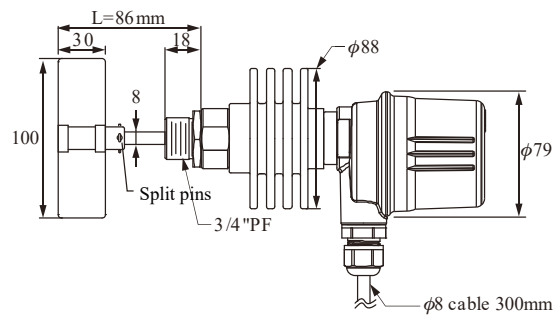


SE3824

HIGH TEMPERATURE TYPE

Operation Temp.: -40°C ~ 200°C

Paddle material: SUS304

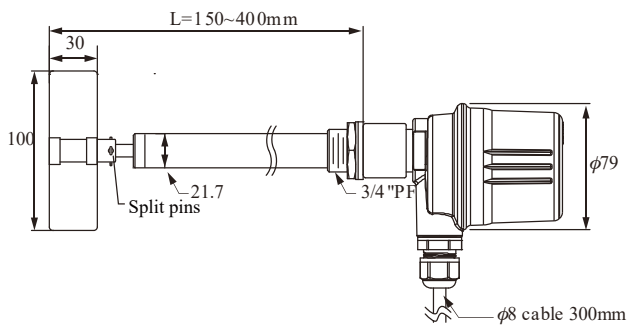


SE3822

SHAFT PROTECTIVE TUBE TYPE

Operation Temp.: -40°C ~ 85°C

Paddle material: SUS304

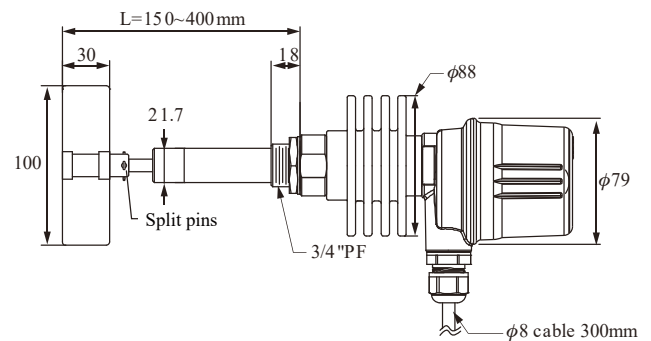


SE3825

HIGH TEMPERATURE SHAFT PROTECTIVE TUBE TYPE

Operation Temp.: -40°C ~ 200°C

Paddle material: SUS304

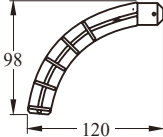
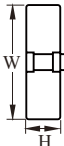
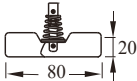


MODEL NUMBER / ORDER CODE COMPARISON TABLE

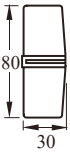
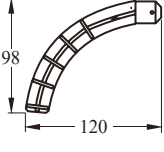
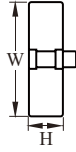
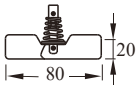
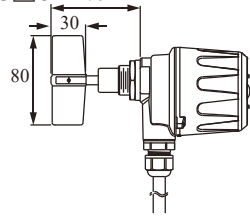
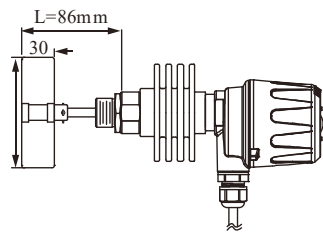
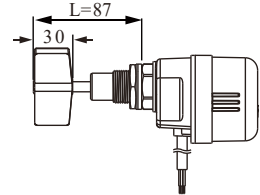
Model Number	Order Code
SE3700	SEX2007D-AA
SE3702	SEX2007D-AB
SE3704	SEX2027D-AA
SE3705	SEX2027D-AB
SE3800	SEX20000-AA
SE3810	SEX20000-BA
SE3820	SEX20000-CA
SE3802	SEX20000-AB

Model Number	Order Code
SE3812	SEX20000-BB
SE3822	SEX20000-CB
SE3804	SEX20200-AA
SE3814	SEX20200-BA
SE3824	SEX20200-CA
SE3805	SEX20200-AB
SE3815	SEX20200-BB
SE3825	SEX20200-CB

NEW / OLD PADDLE MODEL COMPARISON TABLE

New	Figure		Dimension(WxH)	Old
G	Cross bladed type		80x30	G
H	Scimitar shaped type		98x120	H
I	Rectangular shaped type		100x30	I
K	Hinged type		80x20	K

PROBE LENGTH LIST FOR MINI TYPE (WITH DIFFERENT PADDLES)

Paddle model				
Appearance diagram	Cross bladed type 80x30 (PC)	Scimitar shaped type 98x120 (PC)	Rectangular shaped type 100x30 (SUS)	Hinged type 80x20 (SUS)
SE38□0 	L=78	L=174	L=104	L=100
SE38□4 	Not suitable for high temperature (> 120°C) Stainless steel paddle suggested		L=86	L=82
SE2□0 	L=87	L=183	L=113	L=109

ORDER INFORMATION

SEX2

05

06

07

08

09

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

-

⑱ Paddle model _____

- A: None
- G: PC; Cross type
- H: PC; Scimitar type 120x98(WxH)
- I: SUS; 100x30(WxH)
- K: SUS; Folding type 80x20(WxH)

⑲ ⑳ ㉑ ㉒ Length _____

Code	Length range
0001~400	0001~400mm

㉓ ㉔ ㉕ ㉖ Cable wire length _____

Code	Length range
0300~5000	0300~5000mm

MINI TYPE(ECONOMY)

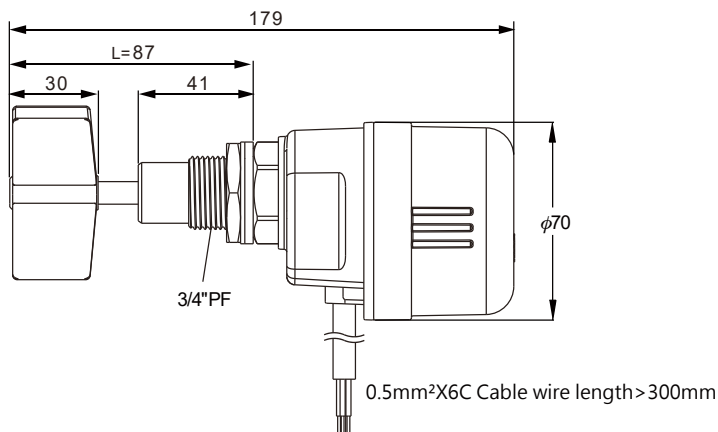
Power source : (A)110Vac,(B)220Vac,
(D)24Vac,50/60Hz,(E)24Vdc
Power consumptio : 1.5W
Contact capacity : 3A/250Vac, 3A/30Vdc
Rotary speed : 1 R.P.M.
IP rating : IP65

Housing material : Plastic cover
Ambient temperature : -20°C ~ 80°C
Cable length : >300mm (available for custom length)
Material density : 0.3g/cm³

SE290

STANDARD TYPE

Operation Temp.: -20°C ~ 80°C
Paddle material: PC



MODEL NUMBER / ORDER CODE COMPARISON TABLE

Model Number	Order Code
SE290A	SEX40000-CAA
SE290B	SEX40000-CAB
SE290D	SEX40000-CAD
SE290E	SEX40000-CAE

ORDER INFORMATION

SEX4 0 0 0 0 - C A

⑪⑫⑬⑭⑮⑯⑰⑱⑲⑳㉑㉒

⑪ Power supply

A: AC110V
B: AC220V
D: AC24V
E: DC24V

Connection

⑫⑬

⑭⑮

⑯⑰

Flange item
AK: JIS-FF
AN: ANSI-RF
AS: DIN-FF

Thread item
AA: JIS
AC: ANSI

A7: 3/4 "
A8: 1 "
B1: 1-1/2 "
B2: 2 "

01: PT male
03: PF male
07: NPT male
40: 5 kg/cm²
42: 10 kg/cm²
48: 150 Lbs
49: 300 Lbs
57: PN10
58: PN16

⑱ Paddle model

A: None
G: PC; Cross type
H: PC; Scimitar type 120x98(WxH)
I: SUS; 100x30(WxH)
K: SUS; Folding type 80x20(WxH)

⑲⑳㉑㉒ Cable wire length

Code	Length range
0300~5000	0300~5000mm

31

MOUNTING EXAMPLES

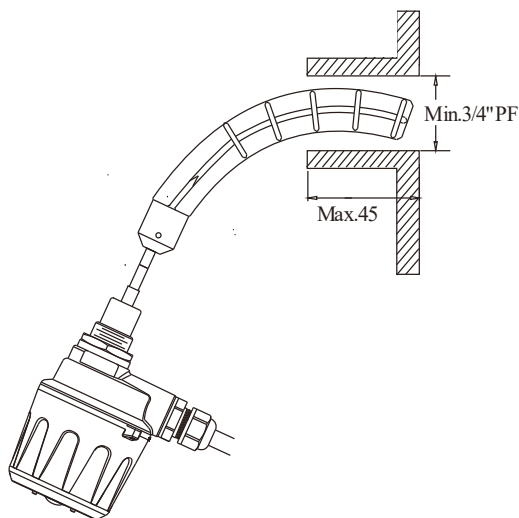
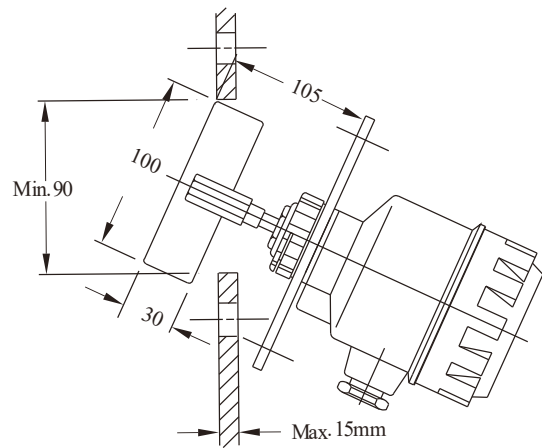
Regular models such as the SE11 should be installed directly on the tank side.

Mount at a 35° angle the blade through the tank opening or hole sliding the blade in first.

※ The SE170 series minimum hole size should be 95mm in diameter.

The scimitar model is directly installed on the tank wall method as shown below.

(Assuming an arc-shaped tank with a 3/4" connection) and then screwing it tight.



INJECTION MOLDING MACHINES

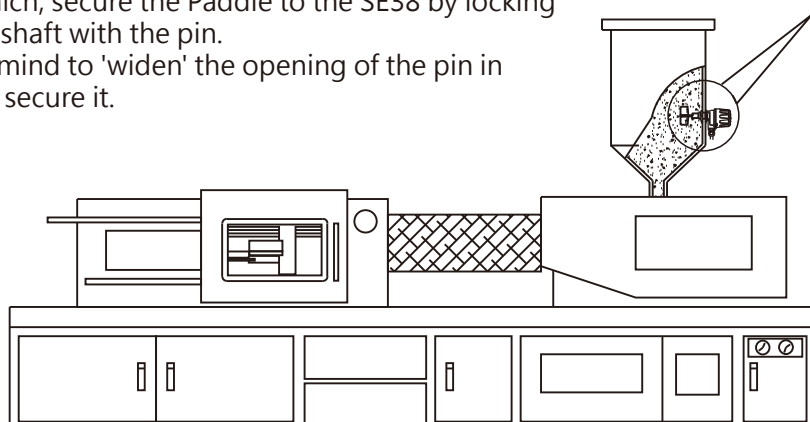
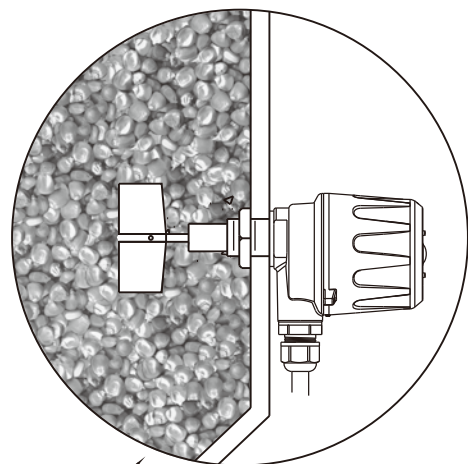
Injection Molding Machine usually require the SE38. Install the Rotary Paddle through a 20mm diameter hole on the tank/silo.

Remove the paddle from the device by taking out the fastening pin.

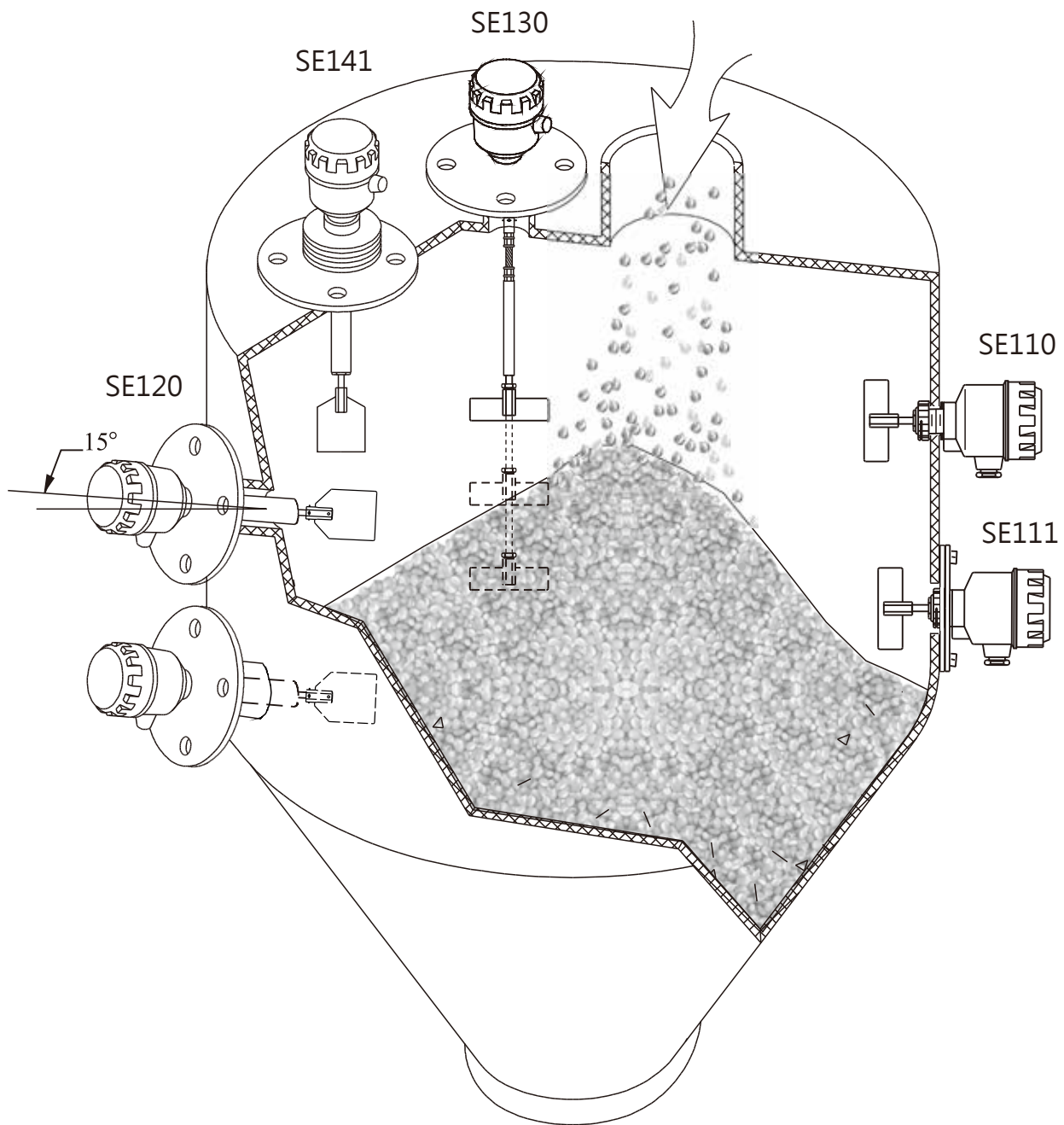
Insert the SE38 through the mounting hole and tighten it.

After which, secure the Paddle to the SE38 by locking it to the shaft with the pin.

Keep in mind to 'widen' the opening of the pin in order to secure it.



EXAMPLES



INSTALLATION NOTICESEXAMPLES

1. Side mount the sensor at a downward angle of 15° ~ 20° to decrease the material inflow impact.
2. For high temperature application (more than 70°C), please use the SE149 Series.
3. For SE110~SE140 using a 1" inlet, please apply the scimitar model and screw directly.
4. For SE130, SE146 series have flexible and extendible shafts.
5. Please ensure the lead wire enters the housing from the bottom and the nuts are fastened to secure the device.

Global Network



■ Head Quarter

- Taiwan
FineTek Co., Ltd. - Taipei Head Quarter
No.16, Tzuchiang St., Tucheng Industrial Park 
New Taipei City 236, Taiwan
TEL: 886-2-2269-6789
FAX: 886-2-2268-6682
EMAIL: info@fine-tek.com

■ North America

- California, U.S.
Aplus Finetek Sensor Inc. - US Office
355 S. Lemon Ave, Suite D
Walnut, CA 91789
TEL: 1 909 598 2488
FAX: 1 909 598 3188
EMAIL: info@aplusfine.com

■ Europe

- Germany
FineTek GmbH - Germany Office
Bei den Kämpen 26
21220 Seevetal-Ramelsloh, Germany
TEL: +49-(0)4185-8083-12
FAX: +49-(0)4185-8083-80
EMAIL: info@fine-tek.de

■ Asia

- China
Fine automation Co., Ltd. - Shanghai Factory 
No.451 DuHui Rd, MinHang District, Shanghai,
China 201109
TEL: 86-21-6490-7260
EMAIL: info.sh@fine-tek.com
- Singapore
FineTek Pte Ltd. - Singapore Office
37 Kaki Bukit Place, Level 4 Singapore 416215
TEL: 65-6452-6340
EMAIL: info.sg@fine-tek.com
- Indonesia
PT. FineTek Automation Indonesia - Indonesia Office 
PERGUDANGAN TUNAS BITUNG
JL. Raya Serang KM. 13,8, Blok C3 No. 12&15,
Bitung Cikupa, Tangerang 15710
TEL: 62 (021)-2958-1688
EMAIL: info.id@fine-tek.com



Distributor: