

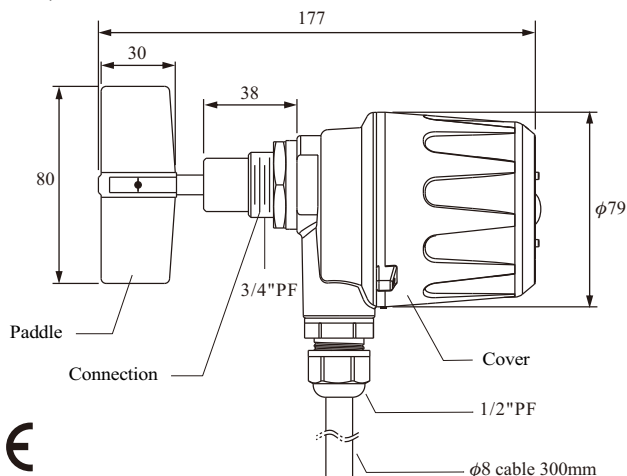
SE3X Rotary paddle level switch



Rotary paddle level switch is to detect the presence of solid/powdery material in most kinds of tanks, bins and containers. 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).

DIMENSION

(unit:mm)



Supply voltage	24/240Vac 50/60Hz, 24Vdc
Output voltage	5A/250Vac, 5A/30Vdc
Display status option	Green: Working Red: Stopped
Ambient temp.	-40~85 °C
Operating temp.	-40~85 °C
Housing material	Aluminum alloy (ADC-12)
IP rating	IP 65
Speed	1 RPM
Applicable S.G.	0.3~1 g/cm ³
Power consumption	Max.1.5 W
Explosion rate option	Dust Explosion DIP A20/21 T _A , T3~T6 I P65

HM 1412



ORDER INFORMATION

SE3 ()

Housing type

7: Ex proof type

8: General type

Housing cover

0: Aluminum cover

2: Plastic

※ 1 and 2 are not available for SE37.

1: Aluminum cover with LED lamp

Model

0: Standard

Supply voltage

D: 24Vac, 50/60Hz

B:

E: 24Vdc

C: 240Vac, 50/60Hz (std.)

Connection

Size for flange or screw	
C: 3/4"	I: 4"
D: 1"	J: 5"
3: 1-1/4"	K: 6"
E: 1-1/2"	S: Special
F: 2"	
G: 2-1/2"	
H: 3"	

Specification	
M: 5kg/cm ²	Z: PN40
N: 10kg/cm ²	Q: PT
O: 150Lbs	R: PF(G)
P: 300Lbs	T: BSP
W: PN10	U: NPT
X: PN16	S: Special
Y: PN25	

Paddle shape (mm)

G: Cross paddle

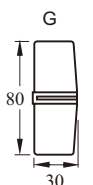
H: Scimitar paddle (std.)

I: 100x30 (WxH)

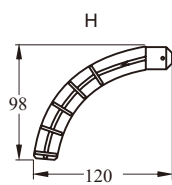
K: Folding paddle

S: Special

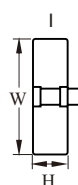
-. None



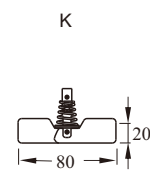
Material: PC



Material: PC



Material: Stainless steel



Material: Stainless steel

Cable length (mm)

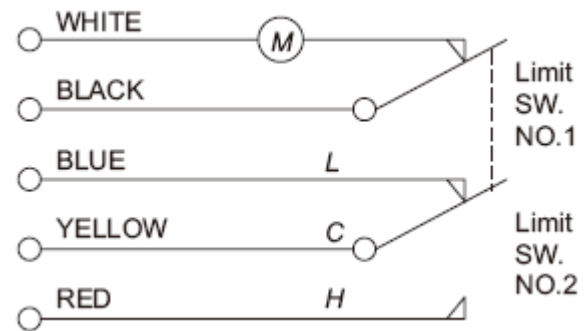
1000: 1000mm

5000: 5000mm



CONTROL SWITCH WORKING PRINCIPLE

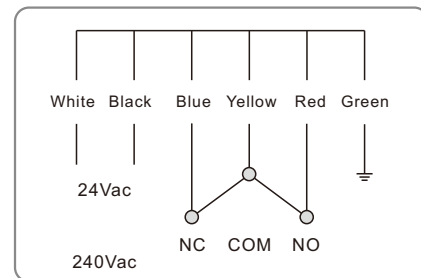
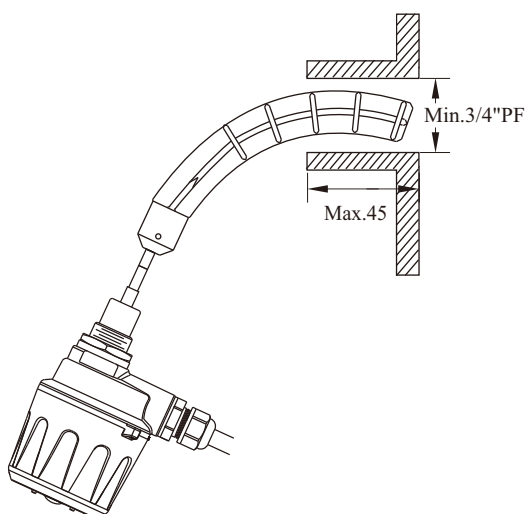
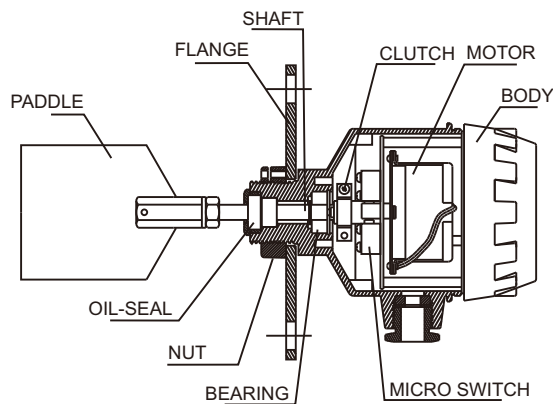
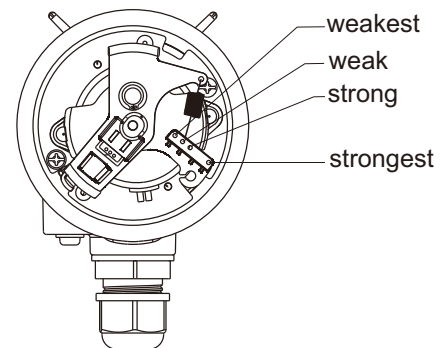
1. A synchronous turning motor indicates the tank or container's material isn't obstructing the paddles, C & L [COM & NC] are connected.
2. When the material is obstructing the paddles, C&L [COM & NC] are disconnected, C&H [COM & NO] are connected and the motor's current is cut off.
3. When the material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



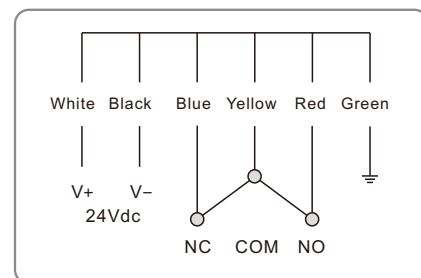
TORQUE ADJUSTING MECHANISM AND WIRING

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.



AC type



DC type

Side mount the sensor at a downward angle of 15° ~20° to decrease the material inflow impact.