



ROTARY PADDLE LEVEL SWITCH



PRINCIPLE

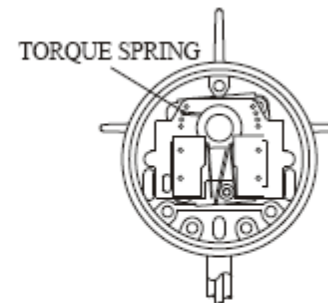
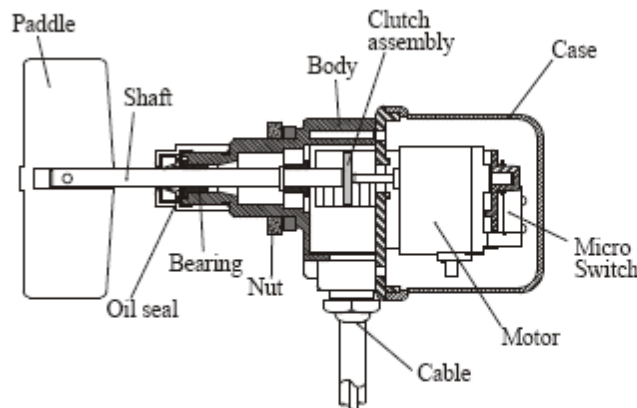
The SE series operating principle is simple. A unit is usually located through a bin wall at the top, middle or low level of a bin. During normal operation (no material present) a synchronous motor rotates the paddle at 1 RPM. When this paddle rotation is impeded by material, surrounding the paddle, motor will stall and cause the Micro-switch to change state. (indicating an alarm or control)

APPLICATIONS

Suitable for powdery producing & processing industries such as plastic, chemical, medical, forage, cement and fertilizer powders.

FEATURES

- Airtight sealing device, outdoor application is available.
- Unique sealing ring design, it can perform good dust protection to avoid the dust permeate into housing body along with the shaft.
- The torque force is adjustable.
- The performance of torsion is stable and reliable.
- If the rotary paddle bears an extra overload, the motor will be appeared slide to prevent the inside mechanism damaged.
- It is rationally designed, the inside mechanisms are easily tore down for checking, maintenance and replacement. It doesn't necessary to remove the complete set from the tank.
- Very suitable for small tank and material of low density

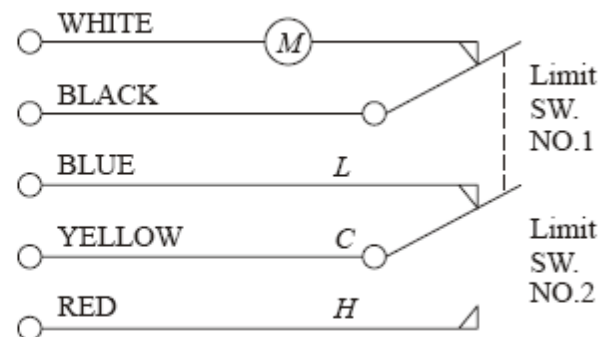


MINI TYPE

WORKING PRINCIPLE & TORQUE ADJUSTING

CONTROL SWITCH DEVICES WORKING PRINCIPLE

1. When the synchronous motor is turning. It means that material isn't touching the paddles, the (C.L) stands for "terminal point connected".
2. When material is touching the paddles, (C.L) stands for "cut-off", (C.H) stands for "connected" the synchronous motor's current is to be cut off.
3. When the material drops away from the paddles, the synchronous motor runs again and the terminal point is connected, (C.L) show that the cycle has begun again.



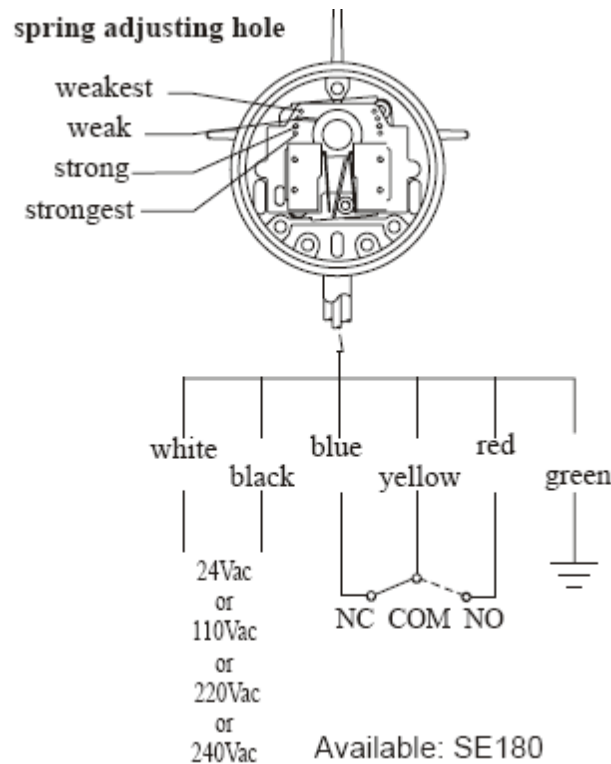


TORQUE ADJUSTING MECHANISM

The torque spring is applied to adjust the shaft output torque force, which is set at "weak" position at factory side, it is adjustable as per customer side target measuring material S.G. (special gravity), if the measured material with higher S.G., please try to release it to more

stronger spring force position step until you found the proper orientation. The paddle sensitivity will be interacted by more weaker, otherwise, the low S.G. material will release torque spring to the weakest position, which will cause the paddle performance to be more sensitive.

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



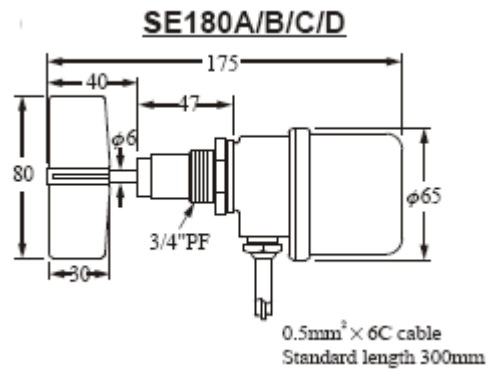
STANDARD SPECIFICATION

- **Power source** : A-110Vac, B-220Vac, C-240Vac, D-24Vac 50/60Hz
- **Power consumption** : 1.5W
- **Contact capacity** : 3A/250Vac
- **Rotary speed** : 1 R.P.M.
- **Protection/ material** : IP65 / PC
- **Temp.** : -10°C ~ 70°C
- **Cable length** : 30cm (available for custom length)
- **Torque** : 30 ~100 kg-cm
- **Specific gravity** : 0.3g/cm³ (20Lb/ft³)


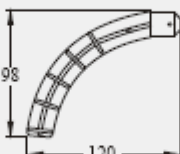
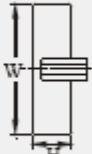


Order No. SE180A/B/C/D
Model No. RP80A/B/C/D
CROSS-LIKE 4
BLADE PADDLE

- Horizontal mounting
- Weight : 0.42 kg



■ Paddle Introduction (Mini)

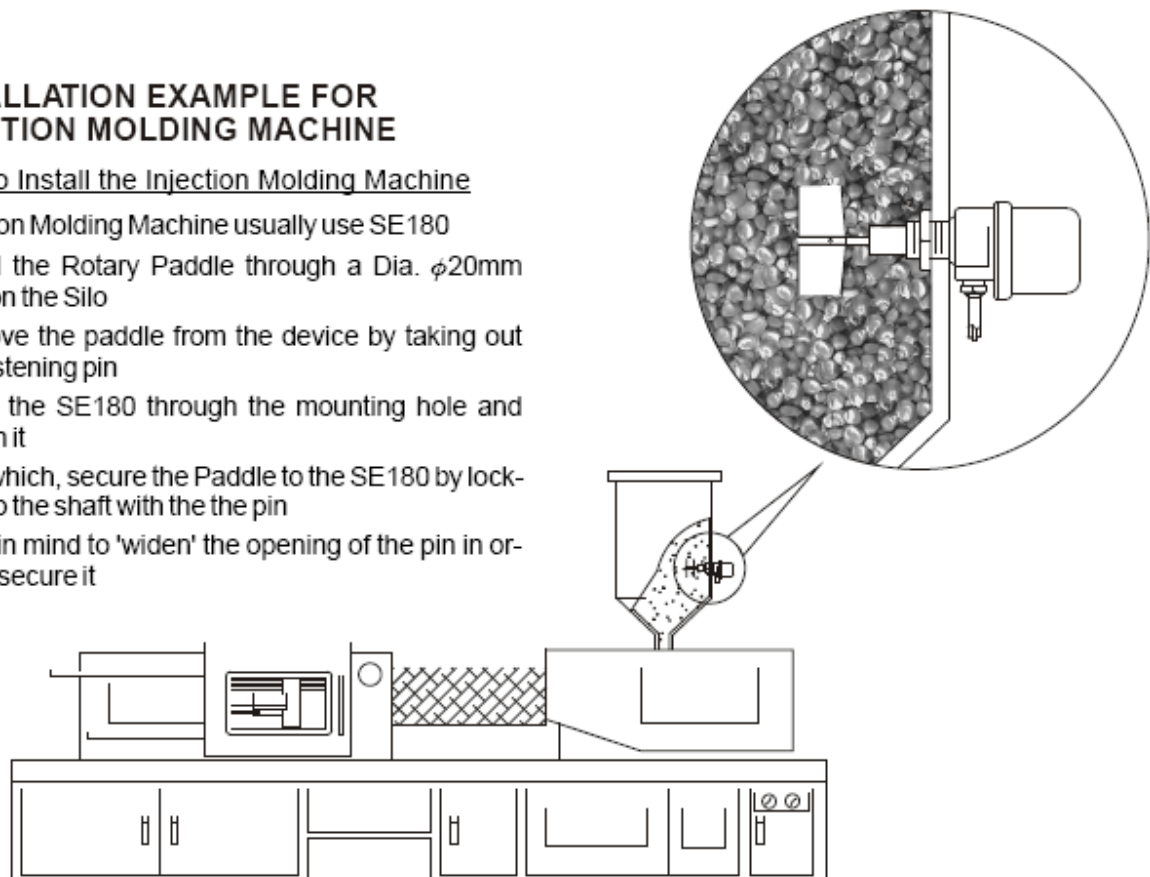
 <p>(G) Cross type paddle material: PC</p>	 <p>(H) Scimitar type paddle, directly screwed through 3/4" diameter fixed hole. Material: PC</p>	 <p>(I) 100x30 (WxH) Material: SUS304</p>
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EXAMPLES OF MOUNTING

INSTALLATION EXAMPLE FOR INJECTION MOLDING MACHINE

Steps to Install the Injection Molding Machine

- Injection Molding Machine usually use SE180
- Install the Rotary Paddle through a Dia. $\phi 20$ mm Hole on the Silo
- Remove the paddle from the device by taking out the fastening pin
- Insert the SE180 through the mounting hole and tighten it
- After which, secure the Paddle to the SE180 by locking it to the shaft with the the pin
- Keep in mind to 'widen' the opening of the pin in order to secure it





INSTALLATION NOTICES

1. Please side mount the sensor by inclined 15° ~ 20° to decrease the material inflowing impact.
2. For High Temperature application whereby the temperature inside the tank is more than 70°C
Please use SE14□ Series.
3. SE110~SE140 on 1" connection pipe inlet, please apply scimitar type to screw directly.
4. SE130, SE146 family items are with flexible and extensible shaft.
5. Please ensure that the Cable Gland point downwards and the nut must be fastened to secure the device.