# **DOLPHIN**<sup>TM</sup> **SHOWER ACTUATOR/OSCILLATOR**

# Lightweight and economical - ideal where fixed stroke length and stroke rate is acceptable - no control panel required

- Compact design for easy installation and maintenance.
- Handles any shower lengths up to 278 inches (7 meters).
- Standard stroke lengths of 6 inches (152 mm) and 12 inches (305 mm).
- Four (4) fixed speeds or adjustable stroke rate available.

#### GENERAL

The **Dolphin**<sup>™</sup> Actuator is a basic model in a series of highly specialized shower actuators optimized for their respective range of applications. The oil lubricated "Ball-Reverser" design has three balls in tracks in a ball reverser screw. The actuator can develop 1000 lbs of thrust. Length of stroke is fixed as determined by the length of screw flights installed in the unit. Dimensions are identical to the ROLLTECH<sup>®</sup> Actuator.

The **Dolphin<sup>™</sup> Actuator** is mounted in a gimbal mounting near the balance point of the actuator allowing some multi-directional movement which provides a non-binding movement of the actuator. This arrangement is very forgiving of slight misalignment of the actuator and shower and prevents premature failure due to excessive binding loads.

Split bearings with UHMW Polyethlene liners and anti-rotation bars keep the shower in correct position and allow removing the shower from the paper machine and replacing it again without realigning the bearings.

#### **TECHNICAL DATA**

| Туре          | Dolphin <sup>™</sup> actuator for oscillating paper<br>machine showers to achieve complete<br>coverage cleaning.   |
|---------------|--|
| Manufacturer  | Vooner Paper Machinery,<br>Greeneville, TN, USA  |
| Wetted Parts  | All wetted parts 316SS   |
| Lubrication   | The Dolphin <sup>™</sup> actuator ships with oil and will not need lubrication during it's life.   |
| Maintenance   | None   |
| Control Panel | Only needed for variable stroke speed<br>applications.<br>NEMA 4X, H - 20 inches,<br>W - 18 inches, D - 9 inches, door safety<br>switch , material fiberglass. 110VAC<br>power, (2) 4 amp thermal breakers, PLC is<br>Modicon Twido start/stop button, manual/<br>auto switch. Three (3) lights: start, pulse,<br>and alarm<br>4-20 ma connections for DCS |

- Variable speed requires control panel, fixed speed does not require control panel.
- "Ball Reverser" design is simple, no reversing switches, no need to reverse motor, instant turn around at end of stroke.
- "Gimbal Mounting" for reduced load during oscillation.
- Integral felt protection proximity switch recommended.
- 12 month warranty.

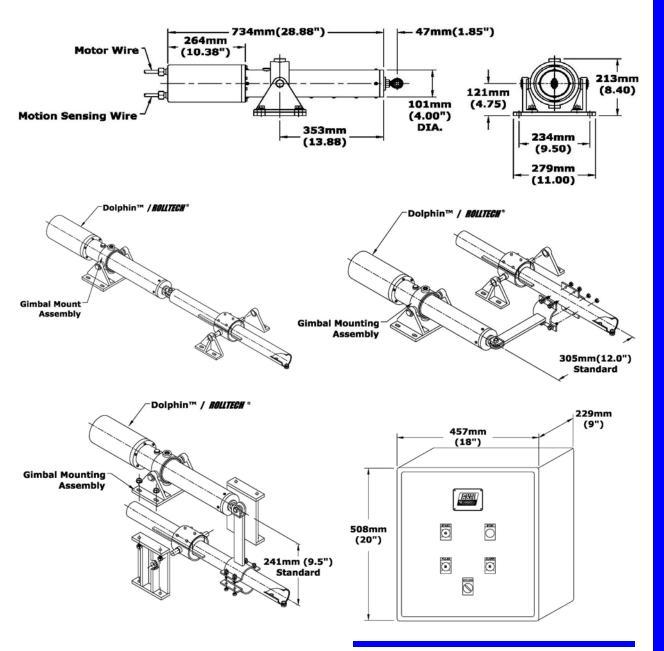


 $\mathbf{Dolphin}^{^{\mathrm{TM}}}$  shower actuator with gimbal mounting attached.

| Motor<br>(variable speed) | 0.013 horsepower (0.0097 kw)<br>220 VAC, three phase, 0.3 amp, 50/60<br>HZ, motor speed 60/72 rpm. An integral<br>gear box is attached for stroke rate.   |
|---------------------------|---|
| Motors<br>(fixed speed)   | 0.013 horsepower (0.0097 kw)<br>110 VAC, single phase, 0.4 amp, <b>(OR)</b><br>220 VAC, single phase, 0.2 amp, 50/60<br>HZ, motor speed 60/72 rpm. An integral<br>gear box is attached for stroke rate.           |
| Motion Sensing            | 24-volt DC. (optional 110VAC for DCS systems)   |
| Proximity Switch          | <u>Note</u> two wires from motor housing, a<br>motor lead and a proximity switch<br>lead clearly marked as to how to<br>connect. A separate power<br>connection, 110 VAC, is needed for a<br>panel board if used. |
| Weight                    | Actuator weight 50 lbs, attached gimbal<br>mounting weight 12 lbs (without<br>trunnions), total assembly weight 62 lbs  |
| Temperature               | Motor cover will reach 43°-54° C (110° - 130° F). Maximum motor shell temperature is 100° C (212° F). A water cooled jacket is available for higher temperature environments.                                     |
|                           | -   |



## **DIMENSIONS AND MOUNTING**



**DOLPHIN SHOWER ACTUATOR** 

### **SERVICE**

- Spare actuators, parts, and rebuild services are located in Greeneville, Tennessee.
- Onsite technical service is available from Greeneville, Tennessee.

