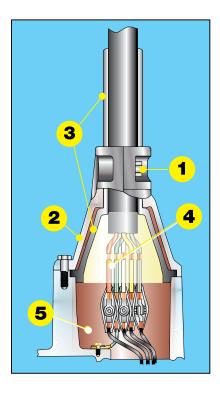
# STUFFING BOX CABLE ENTRANCE

Tsurumi has taken into account every possible condition that the submersible pump cable entrance will be subjected to during usage. The cable entrance show below is the product of many years of experience and practical application. Commonly offered on industrial sized Tsurumi pumps. This Tsurumi design feature has proven to be the most reliable cable entrance available

#### The Tsurumi design prevents the following problems that may occur during installation and operation.

- 1. Kinking or cracking of the cable jacket due to turbulence in the sump.
- 2. Abrading of the power cable at point of entry into the pump.
- 3. 360° compression sealing prevents incursion of water into the top of the motor.
- 4. Wicking of the pumpage into the motor, should the power cable be damaged or the end be accidentally submerged prior to or during installation.
- 5. Quick and easy repair or voltage change. Since the Tsurumi design allows the use of standard submersible cable, replacement cable can be purchased locally.



**NOTE:** All Tsurumi submersible pumps are provided with built in Strain Relief for the power and control cables. This is a separate feature from the cable entrance and provides protection of the cable entrance, should exceptional force be applied to the cable.

#### Incorporated in the Tsurumi design are the following features:

### **1** COMPRESSION GLAND

The limited tightening plate compresses the molded cable flange a full 360° and prevents over tightening of the cable entrance, insuring a water tight fit.

### 2 STUFFING BOX

The metal stuffing box provides for rigid connection for the cable to the motor's housing. Additionally it protects the wires from any environmental forces.

### **3** MOLDED CABLE BOOT

The cable boot portion extends the bending radius of the power cable and prevents abrading or kinking of the cable at the entry point. It also reduces fatigue and extends the flex life of the cable jacket.

## **4** ANTI-WICKING BLOCK

To prevent incursion of the pumpage into the top of the motor due to the phenomena know as "wicking", a portion of each conductor is stripped back exposing the copper conductor. Each conductor is then fed through a fiber conductor spacer, which fits into the bottom of the thermal expansion portion of the boot. Epoxy potting is then poured into the thermal expansion boot through a hole in the center of the conductor spacer. The epoxy seals the end of the power cable and flows in between each strand of the conductor. This unique feature prevents "wicking", through the fiber reinforcement found in standard submersible cable, and through the strands of the conductor itself.

# **5** LOWER CHAMBER

Provides a water tight junction box for the motor terminals. It also allows for quick and easy voltage change or replacement of the power cable. There is no need to remove the heavy and awkward motor cover.