

# Selecting Your **MASTERFLEX**® Tubing Pump System

Your complete system

Pump Head + Tubing + Drive

# 1

## Define your Application Requirements.

- A** What flow rate do I need?
- B** What chemical am I pumping?
- C** Do conditions such as fluid viscosity or back pressure play an important role in my application?

# 2

## Select a Pump Series Based on your Flow Rate.

- A** P/S® ..... 0.0005 to 3400 mL/min
- B** I/P® ..... 0.01 to 17 LPM
- C** B/T® ..... 0.67 to 37 LPM

# 3

## Select a Pump Head, Tubing, and Drive.

Each pump series is divided into three component categories—pump head, tubing, and drive. To complete your tubing pump system, choose a pump head, tubing, and drive from within the same series.

Purchase your Masterflex system by components . . .



Pump Head + Tubing + Drive

### WHAT TO CONSIDER:

- Flow rate**—Different pump heads have different flow rate capabilities.
- Tubing change frequency**—Some pump heads enable rapid tubing changes.
- Desired number of channels**—Pump heads are stackable in most cases.
- Chemical compatibility**—If chemicals spill, pump head materials become important.
- Accuracy**—Standard pump heads offer the most accurate, repeatable flow rates.

Pump Head + Tubing + Drive

### WHAT TO CONSIDER:

- Flow rate**—Tubing size directly affects flow rate.
- Chemical compatibility**—See tables on pages TD-12–13
- Tubing life**—See pages TD-16–33
- Fluid viscosity, presence of solids, back pressure, or suction lift**—High-performance tubing is best for these conditions. See pages TD-16–33
- Fluid temperature**—Information concerning the temperature range for each tubing formulation can be found on pages TD-8–11.

Pump Head + Tubing + Drive

### WHAT TO CONSIDER:

- Flow rate**—The rpm of the drive directly correlates to flow rate.
- Fixed- or variable-speed**—Variable-speed drives enable flow rate adjustment.
- Accuracy of flow rate or dispense volume**—Many drives have digital speed control circuitry for highly accurate and repeatable flow rates.
- Remote control or computer interface**—Some drives can connect to your process controller or can be operated by a foot switch.
- Environmental protection against hazards**—Many drives are sealed against dust and water exposure.