

# TECHNICAL BRIEF

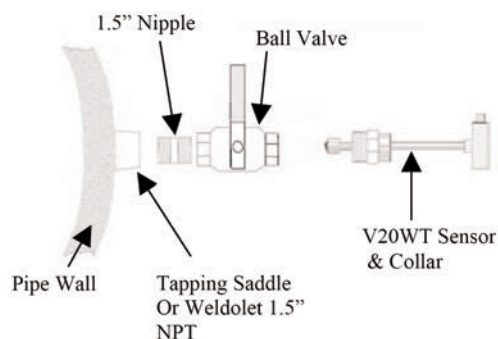
## V20WT 1-1/2" HOT SHOT SENSORS

### Description:

The V20WT hot shot sensor is designed to be used on reinforced concrete (RCP) or concrete cylinder pipes (RCCP) or any pipe material that is not conducive to the transmission of acoustic energy. It may also be used in raw sewage applications so the user can clean the tips of the sensors if necessary because of pipe wall build up. The V20WT hotshot sensors are supplied with 1-1/2" ball valves and tail piece assemblies. It will be necessary to provide either weldolets or tapping saddles to hot tap the pipe to use the V20WT hotshot sensors. Upon request, Eastech Flow Controls Inc. can provide a template to assure the proper sensor separations on the pipe prior to tapping.

### Material of Construction:

V20WT Sensor: PVC & 304 Stainless Steel  
 Sensor cable: Triax (Belden 9222) with PVC coating.  
 Max. Temp.: -30° F to 150° F  
 Max pressure: 300 psi  
 Valve: 1-1/2" Ball Valve, Bronze, 600 PSI  
 Nipple: 1-1/2" male NPT, Brass  
 Sensor Collar: Brass



### Where do I place my pool in relation to upstream and downstream conditions?

The ultrasonic transit time flow meter accuracies are based upon well developed velocity profiles. Below is recommended straight runs to assure meter accuracies.

Device	Upstream	Downstream
Tees & elbows	10-15	2-3
Reducers	10	2-3
Increases	20	2-3
Valves (fully opened)	10-15	2-3
Valves (modulating)	20-25	2-3
Pumps	20-25	2-3

### V20WT System Diagram

