

## **ZENNER FHD Fire Hydrant Backflow Meter with RPZ**

3" Model FHD30S\*\*-RP U.S.A. Patent No. US 6363782 B1 U.S.A. Patent No. D560,132

**INTRODUCTION:** FHD Fire Hydrant Backflow Meters, with built -in dual check valves and RPZ dump valve, are designed to measure a wide variety of cold potable water flows from fire hydrants where flows are in one direction. These Meters are light weight portable units designed for temporary installations. The built-in dual check valves help provide a practical solution to help prevent backflow into the primary water source. The RPZ (Reduced Pressure Zone) Dump Valve allows this assembly to dump to atmosphere when the check valves are fouled.

**OPERATION:** Water flows through the turbine section causing the rotor to turn proportionately to the quantity of water flowing through the meter. A drive magnet transmits the motion of the rotor to a driven magnet located within the hermetically sealed register. The magnet is connected to a gear train which translates the rotations into volume totalization displayed on the register dial face.

**CONSTRUCTION:** FHD Fire Hydrant Meters consist of several basic components: light weight aluminum main case, turbine type measuring element assembly, sealed register, aluminum cover plate, stainless steel hardware, brass lid assembly, alumi-





num or brass swivel and nipple, aluminum or stainless steel handles, front and rear 3" check valves, RPZ Dump Valve and adjustable support stand. The measuring element assembly includes the rotor assembly, vertical shaft and a calibration vane which eliminates the need for calibration change gears.

**MAINTENANCE:** FHD Fire Hydrant Meters are engineered and manufactured to provide long-term service and operate virtually maintenance free. If maintenance is necessary the measuring element can be removed from the main case. The 3" Check Valves and RPZ can be easily serviced.

**CONFORMANCE**: FHD Hydrant Meters are tested and comply with AWWA C701 Class II performance standards.

**STRAINERS:** FHD Fire Hydrant Meters come with a built-in 54 square inch strainer after the first check valve and in front of the Turbine Measuring Element.

**CONNECTIONS:** FHD Fire Hydrant Meters are typically configured with bronze fire hose connections, although aluminum connections are available.

**OPTIONS**: Locking devices, special order connections, gate valves, "add-on" restrictor plates, etc.



MODEL		FHD30S**-RP
SIZE		3"
Flow Rate Maximum Intermittent	USGPM	650
Maximum Continuous	USGPM	450
Optimum Operating Flow Range	USGPM	3 - 450
Low Flow rate	USGPM	2-1/2
Maximum Working Pressure	P.S.I.	175
Maximum Temperature	Deg. F	140
Length	Inches	27
Weight	Pounds	55



