

## ZENNER Fire Hydrant Meters

3" Models FHZ20, FHZ25 and FHZ30

**INTRODUCTION:** ZENNER Hydrant Meters 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.

**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. The only moving parts in the meter are the rotor assembly and vertical shaft .

**CONSTRUCTION:** ZENNER 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, aluminum or brass swivel and nip-



FHZ25S\*\*
Stainless Steel Double
Strap Handle

ple, aluminum or stainless steel handles, etc. The measuring element assembly includes the rotor assembly, vertical shaft and a calibration vane which eliminates the need for calibration change gears.

**RESTRICTOR PLATE:** The standard ZENNER Hydrant Meter (FHZ25) has a permanent flow restrictor machined into the main case. This limits the maximum flow of water through the meter and provides protection for the measuring element from being overrun when the meter discharges. The restrictor plate may be enlarged for specific utility requirements.

**MAINTENANCE:** ZENNER 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.

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

**STRAINERS:** ZENNER Hydrant Meters come with an inlet strainer built into the Swivel.

**CONNECTIONS:** ZENNER Hydrant Meters are typically configured with bronze connections, although aluminum connections are available.

**OPTIONS**: Gate Valves, check valves, reduced pressure backflow preventers, locking devices, special order connections, stainless steel double handles, pistol grip handles, "add -on" restrictor plates and stands.



FHZ25S\*\*-GV
Configured with 2-1/2" Gate Valve



| MODEL                          |        | FHZ20#** | FHZ20#**<br>-GV | FHZ20#**<br>-W975 | FHZ25#** | FHZ25#**<br>-GV | FHZ25#**<br>-CV | FHZ30#** | FHZ30#**<br>-GV | FHZ30#**<br>-CV |
|--------------------------------|--------|----------|-----------------|-------------------|----------|-----------------|-----------------|----------|-----------------|-----------------|
| Flow Rate Maximum Intermittent | USGPM  | 600      | 600             | 250               | 600      | 600             | 300             | 600      | 600             | 500             |
| Maximum Continuous             | USGPM  | 500      | 500             | 160               | 500      | 500             | 200             | 500      | 500             | 400             |
| Optimum Operating Flow Range   | USGPM  | 3 - 350  | 3 - 350         | 3 - 250           | 3 - 350  | 3 - 350         | 3 - 250         | 3 - 350  | 3 - 350         | 3 - 350         |
| Low Flow rate                  | USGPM  | 2-1/2    | 2-1/2           | 2-1/2             | 2-1/2    | 2-1/2           | 2-1/2           | 2-1/2    | 2-1/2           | 2-1/2           |
| Maximum Working Pressure       | P.S.I. | 175      | 175             | 175               | 175      | 175             | 175             | 175      | 175             | 175             |
| Maximum Temperature            | Deg. F | 140      | 140             | 140               | 140      | 140             | 140             | 140      | 140             | 140             |
| Length                         | Inches | 15       | 19              | 27                | 15       | 20              | 16              | 15       | 21              | 17              |
| Weight                         | Pounds | 17       | 22              | 46                | 17       | 23              | 18              | 17       | 25              | 20              |

## FHZ Housing Configurations:

- FHZ20: 2-1/2" FIPT Inlet x 2" FIPT Outlet (For applications with attached RPZ Backflow device)
- FHZ25: 2-1/2" FIPT Inlet x 2-1/2" FIPT Outlet with machined in Restrictor (Standard Configuration)
- FHZ30: 3" FIPT Inlet x 3" FIPT Outlet (For higher flow applications)

## FHZ Handle Options:

- FHZ20S / FHZ25S / FHZ30S: Stainless Steel Double Handles FHZ20P / FHZ25P / FHZ30P: Padlock Single Aluminum Handle
- FHZ20B / FHZ25B / FHZ30B: Barrel Lock Single Aluminum Handle
- FHZ20N / FHZ25N / FHZ30N: No Handles

## FHZ Optional Outlet Configurations:

- FHZ20#\*\*-GV with 2" Gate Valve
- FHZ20#\*\*-W975 with Zurn Wilkins 2" 975LXL Dual Check RPZ Backflow Assembly, 2" Gate Valve and Stand
- FHZ25#\*\*-GV with 2-1/2" Gate Valve
- FHZ25#\*\*-CV with NC2525B-CV Check Valve Assembly
- FHZ25#\*\*-GVCV with 2-1/2" Gate Valve and NC2525B-CV Check Valve Assembly
- FHZ30#\*\*-GV with 2-1/2" Gate Valve
- FHZ30#\*\*-CV with NC2530B-CV Check Valve Assembly
- FHZ30#\*\*-GVCV with 3" Gate Valve and NC2530B-CV Check Valve Assembly



FHZ25P\*\* **Padlock Single Handle** 



FHZ25S\*\*



FHZ25B\*\* **Barrel Lock Single Handle** 





FHZ30S\*\*-GVCV
Configured with 3" Gate Valve and NC2530B-CV Check Valve Assembly



FHZ20S\*\*-W975
Configured with Dual Check RPZ
Backflow Preventer and Stand



FHZ20S\*\*-GV
Configured with 2" Gate Valve



FHZ25S\*\*-CV Configured with NC2525B-CV Check Valve Assembly



FHZ30S\*\*-CV Configured with NC2530B-CV Check Valve Assembly