

Adjustable Turbine Flow Meters

The TX100/200 series, adjustable insertion turbine flow meters, use ruby bearings and a non-drag pick-off to achieve a wide flow range and long life. A sensor mounted in the body of the turbine flow meter detects the passage of miniature magnets in the rotor blades. (Magnets are in 2 or 4 blades only.) The resulting square-wave signal can be sent from the turbine flow meters for hundreds of feet without a transmitter, over unshielded cable. This square wave signal can be sent directly to a PLC, other controllers, or can be converted using an optional output converter module.

Designed for modularity and versatility, the TX100/200 series, adjustable insertion turbine flow meters, have a current-sinking pulse output, which can be combined with the appropriate transmitter or indicator depending on the application. For rate and total display the FT415 (battery powered, pulse output only) or FT420 (loop powered, pulse and 4-20mA output) flow indicator can be mounted directly on the TX100/200 series adjustable insertion turbine flow meters or on a convenient wall. For a 4-20mA analog output only, the AO55 blind 4-20mA converter can be mounted directly onto the turbine flow meter or onto a nearby wall. If the TX100/200 series, adjustable insertion turbine flow meters, are being used with a programmable controller, the output signal can be fed directly into the controller with no other conditioning required.

The TX100/200-Series are adjustable depth turbine flow meters that come in brass or 316 stainless models with a male NPT adapter and can be directly threaded into standard 1-1/2 inch (101/201) or 2 inch (115/215) FNPT threaded fittings such as saddles and weldolets. A depth adjustment system integrated into the design of the turbine flow meters allow two basic meter sizes to monitor flows in pipes with sizes ranging from 3 to 40 inches.

The "hot-tap" adjustable turbine flow meters models (TX115/215) can be installed or serviced without shutting down the line by means of a 2

- Two sizes fit entire pipe range: 3 to 12 inches and 12 to 40 inches
- Turbine rotor to optimize minimum flow limits
- High quality ruby bearings for long life
- One easily-replaced moving part
- Uses standard NPT threaded pipe fittings or saddles
- Optional 4-20mA flow rate and totalizer display
- Hot-tap option available



TX100 Adjustable Turbine Flow Meter



TX115B Hot Tap Adjustable Turbine Flow Meter

Specifications

Instrument Specifications

Accuracy	+1.5% of full scale Flow
Flow Range	0.5 - 30 ft/sec (0.15 - 9.14 m/sec)
Sensor/Output	Magneto-resistive - current sinking pulse
Maximum Pipe Pressure	200 psi (14 bar)
Maximum Temperature	200° F (93° C)
Pipe Size	TX101/115: 3-12 inches (50-300mm) TX201/215: 12-40 inches (300-1000mm)
Fitting Size	TX101/201: 1-1/2 inch FNPT TX115/215: 2 inch FNPT
Insertion Force	.44 x pressure in pipe
Power	6 - 40 VDC, <2 mA
Materials	Sensor Body: Brass or 316 SS Rotor: PVDF Shaft: Nickel-bound tungsten carbide Bearings: Ruby Cable: #22 AWG 3-con 18 ft (6m)
Maximum Cable Run	2,000 ft (650m)
Dimensions	TX101: 4 inch square x 12 inch long (10cm square x 30.5cm long) TX201: 4 inch square x 17 inch long (10cm square x 43.2cm long) TX115: 15-3/4 in (40 cm) tall w/ 2 inch male NPT TX215: 21-3/4 in (55 cm) tall w/ 2 inch male NPT
Weight	TX101: 3 lbs (1.36 kg) TX201: 3.4 lbs (1.54 kg)
For Ordering information and Options; please visit www.globalw.com/products/TX100.html	