



RECORDALL® TURBO SERIES METERS RCDL TURBO SERIES



DESCRIPTION

The **Badger Meter Recordall Turbo Series meters** meet or exceed the most recent revision of AWWA Standard C701 Class II Standards and are available in a lead-free bronze alloy for sizes 1-1/2" through 10" and cast iron for 12" meters. Turbo Series meters comply with the lead-free provisions of the Safe Drinking Water Act. Sizes 1-1/2" through 10" meters are also certified to NSF/ANSI Standards 61 and 372 (Trade Designation: Turbo Series LL-NS) and carry the NSF-61 mark on the housing. All components of the lead-free alloy meter (housing, measuring element, seals and so on) comprise the certified system.

Operation & Performance: Direct magnetic drive is achieved when the magnet carrier is driven by a gear train coupled to the rotor. The gear train consists of two sets of gears connected by a vertical transmission shaft. One gear set is at the magnet carrier, the other is a worm gear set at the rotor shaft. When water flows into the Turbo Series meter measuring element, it contacts the multi-vaned rotor. The resulting rotor rotation is then transmitted by magnetic coupling to a sealed register or encoder. The direct magnetic drive is built to provide a reliable meter-to-registration coupling.



Industrial Turbo Meters

FEATURES

- **Models 160 through 6200 are designed for 1-1/2" through 12" applications**
- **Direct coupled turbine based on an exclusive "floating rotor" design that reduces bearing friction—and associated wear and tear**
- **Low pressure loss for improved system efficiency**
- **Exceptional registration accuracy across low flow rate, normal operating flow rate and maximum continuous operation flow**
- **Permanently sealed, tamper-resistant register or encoder**
- **Integral strainer option for sizes 1-1/2" through 4" help protect your system from damaging debris and related downtime**
- **NSF/ANSI Standards 61 and 372 Certified**
- **One year warranty**
- **Applied for billing applications**

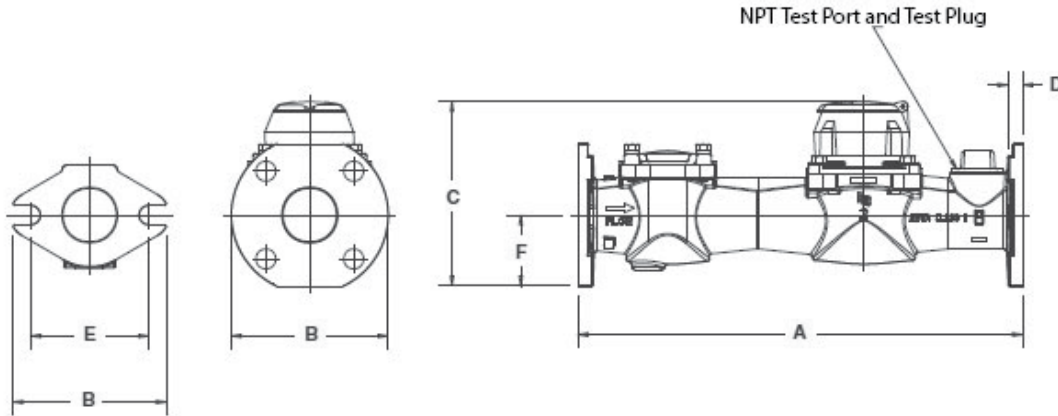
APPLICATION

Recordall Turbo Series meters are designed for submetering and billing of cold water, commercial and industrial applications where flows are consistent medium to high flows. Applications include hotels, apartment buildings, irrigations centers and manufacturing and processing plants. Turbo Series meters help reduce day-to-day maintenance costs while delivering accurate and efficient performance.

SPECIFICATIONS							
Turbo Series Model	160 1-1/2" (40 mm)	200 2" (50 mm)	450 3" (80 mm)	1000 4" (100 mm)	2000 6" (150 mm)	3500 8" (200 mm)	5500 10" (250 mm)
Meter Flanges AWWA 125 Pound Class	Elliptical	Elliptical or Round	Round	Round	Round	Round	Round
Typical Operating Range (100% ± 1.5%)	4...200 gpm (0.9...45.4 m ³ /h)	4...310 gpm (0.9...70.4 m ³ /h)	5...550 gpm (1.1...124.9 m ³ /h)	10...1250 gpm (2.3...284 m ³ /hr)	20...2500 gpm (4.5...568 m ³ /h)	30...4500 gpm (6.8...1022 m ³ /h)	50...7000 gpm (11.4...1590 m ³ /h)
Typical Low Flow (95% min.)	2.5 gpm (0.6 m ³ /h)	2.5 gpm (0.6 m ³ /h)	4 gpm (0.9 m ³ /h)	6 gpm (1.4 m ³ /h)	12 gpm (2.7 m ³ /h)	20 gpm (4.5 m ³ /h)	30 gpm (6.8 m ³ /h)
Max. Continuous Flow	160 gpm (36 m ³ /h)	200 gpm (45.4 m ³ /h)	450 gpm (102.2 m ³ /h)	1000 gpm (227.1 m ³ /h)	2000 gpm (454 m ³ /h)	3500 gpm (795 m ³ /h)	5500 gpm (1250 m ³ /h)
Maximum Intermittent Flow	200 gpm (45.4 m ³ /h)	310 gpm (70.4 m ³ /h)	550 gpm (124.9 m ³ /h)	1250 gpm (284 m ³ /h)	2500 gpm (568 m ³ /h)	4500 gpm (1022 m ³ /h)	7000 gpm (1590 m ³ /h)
Pressure Loss at Max. Continuous Flow	3.8 psi (0.26 bar)	3.1 psi (0.21 bar)	1.8 psi (0.12 bar)	7.3 psi (0.50 bar)	4.8 psi (0.33 bar)	2.5 psi (0.17 bar)	1.6 psi (0.11 bar)
Pressure Loss at Max. Continuous Flow: With Integral Strainer	9.9 psi (0.68 bar)	8.3 psi (0.57 bar)	5 psi (0.43 bar)	17.8 psi (1.2 bar)	—		
Max. Operating Pressure	150 psi (10 bar)						
Max. Operating Temperature	120° F (49° C)						
Optional Integral Strainer	Built into inlet end. Removable cover plate permits access to strainer for cleaning.					—	
Optional External Strainer	— Available for Models 200, 450, 1000, 2000, 3500, 5500 and 6200.						
Test Plug	Standard with integral strainer; optional for other models.				Optional for Models 2000 and 3500.		—



DIMENSIONS OF METERS WITH INTEGRAL STRAINER



Turbo Series Model	160	200	200	450	1000	2000	3500	5500
Meter Flanges	1-1/2" Elliptical	2" Elliptical	2" Round	3" Round	4" Round	6" Round	8" Round	10" Round
Meter & Pipe Size	1-1/2" (40 mm)	2" (50 mm)	2" (50 mm)	3" (80 mm)	4" (100 mm)	6" (150 mm)	8" (200 mm)	10" (250 mm)
Net Weight	14.3 lb (6.5 kg)	14.9 lb (6.8 kg)	17.4 lb (7.9 kg)	31 lb (14.1 kg)	40 lb (18.1 kg)	77 lb (35 kg)	123 lb (55.7 kg)	210 lb (95.3 kg)
Shipping Weight	16.8 lb (7.6 kg)	16.4 lb (7.4 kg)	18.9 lb (8.6 kg)	34 lb (15.4 kg)	45 lb (20.4 kg)	89 lb (40.4 kg)	147 lb (66.6 kg)	235 lb (106.6 kg)
Qty. of Bolts	2	2	4	4	8	8	8	12
NPT Test Port & Test Plug (optional)	1" (25.4 mm)	1-1/2" (40 mm)	1-1/2" (40 mm)	2" (50 mm)	2" (50 mm)	2" (50 mm)	2" (50 mm)	—
Length (A)	13" (330 mm)	10" (254 mm)	10" (254 mm)	12" (305 mm)	14" (356 mm)	18" (457 mm)	20" (508 mm)	26" (660.4 mm)
Width (B)	5-7/32" (133 mm)	5-27/32" (148 mm)	6" (152 mm)	7-1/2" (191 mm)	9" (229 mm)	11" (280 mm)	13-1/2" (343 mm)	16" (406.4 mm)
Height (C)	6-9/32" (159 mm)	6-1/2" (165 mm)	7-3/32" (180 mm)	8-11/16" (220 mm)	9-21/32" (245 mm)	13-5/16" (338 mm)	15-3/16" (385 mm)	17-15/32" (443 mm)
Flange (D)	51/64" (20 mm)	25/32" (20 mm)	5/8" (16 mm)	3/4" (19 mm)	13/16" (21 mm)	7/8" (22 mm)	1" (25 mm)	1-1/16" (27 mm)
Bolt Circle (E)	4" (102 mm)	4-1/2" (114 mm)	4-3/4" (121 mm)	6" (152 mm)	7-1/2" (191 mm)	9-1/2" (241 mm)	11-3/4" (298 mm)	14-1/4" (362 mm)
Centerline (F)	1-27/32" (47 mm)	2-1/16" (52 mm)	2-5/8" (67 mm)	3-11/32" (85 mm)	4-5/16" (109 mm)	5-1/4" (133 mm)	6-3/8" (162 mm)	7-7/8" (199.4 mm)

ORDERING INFORMATION

MODEL

RT-150BEWPISX-TS-GA
 RT-0200BRWPISX-TS-GA
 RT-0200BEWPISX-TS-GA
 RT-0300BRWPISX-TS-GA
 RT-0400BRWPISX-TS-GA
 RT-0600BRWPNSX-TS-GA
 RT-0800BRWPNSX-TS-GA
 RT-1000BRWPNSX-TS-GA

DESCRIPTION

1.5" Turbo Water Meter Bronze Elliptical with Pulse RTR GAL
 2.0" Turbo Water Meter Bronze Round with Pulse RTR GAL
 2.0" Turbo Water Meter Bronze Elliptical with Pulse RTR GAL
 3.0" Turbo Water Meter Bronze Round with Pulse RTR GAL
 4.0" Turbo Water Meter Bronze Round with Pulse RTR GAL
 6.0" Turbo Water Meter Bronze Round with Pulse RTR GAL
 8.0" Turbo Water Meter Bronze Round with Pulse RTR GAL
 10" Turbo Water Meter Bronze Round with Pulse RTR GAL

STR-0600BR-S4
 STR-0800BR-Z1

ACCESSORIES

6.0" External Strainer Bronze Housing
 8.0" External Strainer Iron Housing