

MODEL QW500/QZ500

STAINLESS STEEL FLOWMETER

DESCRIPTION

Model QW500 and QZ500 Main Line Propeller Flowmeters are manufactured to comply with the applicable provisions of the American Water Works Association Standard No. C704-92 for propeller type flowmeters. The model QW500 is designed for a maximum continuous working pressure of up to 150 psi and is fitted with ANSI B16.5 Class 150 flanges. The model QZ500 is designed for a continuous working pressure of up to 300 psi and is fitted with ANSI B16.5 Class 300 flanges. The impeller and drive assembly are easily removed through the top flange connection. The meter flow tube is fabricated 304 stainless steel for maximum corrosion protection and integral flow straightening vanes reduce upstream flow turbulence. As with all McCrometer propeller flowmeters, standard features include a magnetically coupled drive, instantaneous flowrate indicator and straight-reading, six-digit totalizer.

Impellers are manufactured of high-temp thermoplastic, capable of retaining their shape and accuracy over the life of the meter. Each impeller is individually calibrated at the factory to accommodate the use of any standard

McCrometer register, and since no change gears are used, the QW500 and QZ500 can be field-serviced without the need for factory recalibration. Factory lubricated, stainless steel bearings are used to support the impeller shaft. The sealed bearing design limits the entry of materials and fluids into the bearing chamber providing maximum bearing protection.

The instantaneous flowrate indicator is standard and available in gallons per minute, cubic feet per second, liters per second and other units. The register is driven by a flexible steel cable encased within a protective teflon liner. The register housing protects both the register and cable drive system from moisture while allowing clear reading of the flowrate indicator and totalizer.

INSTALLATION

Standard installation is horizontal mount. If the meter is to be mounted in the vertical position, please advise the factory. A straight run of full pipe the length of five diameters ahead and one diameter behind the meter is the minimum normally recommended.



The McCrometer Propeller flowmeter comes with a standard instantaneous flowrate indicator and straight-reading totalizer. An optional electronic register is also available.
Typical face plates.



APPLICATIONS

The McCrometer propeller meter is preferred for industrial process control and wastewater treatment plants because of its unique self-cleaning design of the support system which prevent solids build up. Typical applications include:

- Industrial process control
- Return activated sludge
- Water and wastewater management
- Valve actuation and control
- Multi-stage pump actuation and control
- Remote indication totalization and recording
- Bi-directional measurement
- Heating/air conditioning systems



SHOWN: MODEL QW500

STAINLESS STEEL FLOWMETER MODEL QW500 / QZ500

SPECIFICATIONS

PERFORMANCE

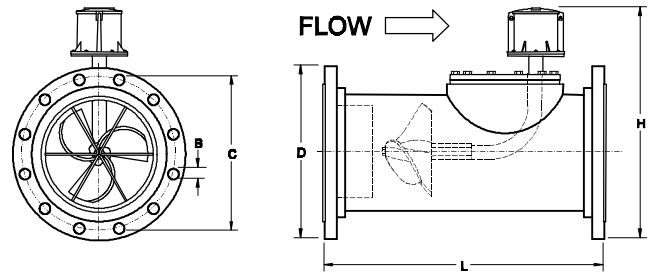
- ACCURACY:** ±2% of reading guaranteed throughout range.
RANGE: See dimensions chart below
MAXIMUM TEMPERATURE: 250°F constant in sizes 2" - 10"; 160°F in larger sizes
PRESSURE RATING: Model QW500: 150 psi
 Model QZ500: 300psi

MATERIALS

- BEARING ASSEMBLY:** Impeller shaft is 316 stainless steel. Ball bearings are 440C stainless steel.
MAGNETS: (Permanent type) Cast or sintered Alnico
BEARING HOUSING: 316 stainless steel
REGISTER: An instantaneous flowrate indicator and six-digit straight-reading totalizer are standard. The register is hermetically sealed within a die cast aluminum case. This protective housing includes a domed acrylic lens and hinged cover with locking hasp.
IMPELLER: Impellers are manufactured of high-temp thermoplastic, retaining their shape and accuracy over the life of the meter.

OPTIONS

- International flange standards available
- Other than standard laying lengths available
- Register extensions available
- Forward/reverse flow measurement
- "Over Run" bearing assembly for higher-than-normal flowrates (available only on 4" and larger)
- Electronic propeller meter available in all sizes of this model
- A complete line of flow recording/control instrumentation
- Certified calibration test results



McCrometer reserves the right to change design or specifications without notice.

QW500/QZ500	DIMENSIONS												
Meter and Nominal Pipe Size	2	2 1/2	3	4	6	8	10	12	14	16	18	20	24
Maximum Flow U.S. GPM	250	250	250	600	1200	1500	1800	2500	3000	4000	5000	6000	8500
Minimum Flow U.S. GPM	40	40	40	50	90	100	125	150	250	275	400	475	700
Approx. Head Loss in Inches at Max. Flow	29.50	29.50	29.50	23.00	17.00	6.75	3.75	2.75	2.00	1.75	1.50	1.25	1.00
QW500													
Approx. Shipping Weight-lbs.	36	36	43	54	115	135	197	325	465	530	744	890	1293
B (inches)	3/4	3/4	3/4	3/4	7/8	7/8	1	1	1 1/8	1 1/8	1 1/4	1 1/4	1 3/8
C (inches)	4 3/4	5 1/2	6	7 1/2	9 1/2	11 3/4	14 1/4	17	18 3/4	21 1/4	22 3/4	25	29 1/2
D (inches)	6	7	7 1/2	9	11	13 1/2	16	19	21	23 1/2	25	27 1/2	32
H (inches)	11 3/4	12 1/4	12 1/2	14.8	15.8	18.1	21.3	23.8	24.8	28.1	28.8	32.1	36.3
L (inches)	14	16	16	20	22	24	26	28	42	48	54	60	60
No. of Bolts per Flange	4	4	4	8	8	8	12	12	12	16	16	20	20
QZ500													
Approx. Shipping Weight-lbs.	50	55	62	90	145	220	340	430	650	820	1315	1508	2165
B (inches)	3/4	7/8	7/8	7/8	7/8	1	1 1/8	1 1/4	1 1/4	1 3/8	1 3/8	1 3/8	1 5/8
C (inches)	5	5 7/8	6 5/8	7 7/8	10 5/8	13	15 1/4	17 3/4	20 1/4	22 1/2	24 3/4	27	32
D (inches)	6 1/2	7 1/2	8 1/4	10	12 1/2	15	17 1/2	20 1/2	23	25 1/2	28	30 1/2	36
H (inches)	12	12 1/2	12 7/8	15 3/4	17	19 1/4	22 1/2	25	26 1/4	29 1/2	32 3/4	34	38 3/4
L (inches)	20	20	20	24	26	28	30	32	42	48	54	60	60
No. of Bolts per Flange	8	8	8	8	12	12	16	16	20	20	24	24	24

Note: Flanges meet ASTM-A-181 specs. Larger flowmeters on special order.

FOR MORE INFORMATION CONTACT:



3255 West Stetson Avenue
 Hemet CA 92545-7799 USA
 909-652-6811 / FAX 909-652-3078
 e-mail: info@mccrometer.com
 Web Site: http://www.mccrometer.com