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Woltman Water Meter
Irrigation Water Meter
Combination Water Meter

Product Catalogue

WOLTMAN WATER METER (WPH)



LXLC-(50~300)E

Applicant:
Measuring the volume of cold (hot) water passing through the pipeline

Features:
Removable element structure, easy installation and maintenance, long term clear reading, inter-exchangeable spare parts, magnetic drive, small pressure loss, 360° circle, long working life, dry dial

Working Condition:
Water temperature: $\leq 40^{\circ}\text{C}$ (90°C for hot water)
Water pressure: $\leq 1\text{MPa}$ (1.6 Mpa optional)

Compliance with standard : GB/T778.1~3-2007 (ISO 4064-1~3:2005IDT)

Main technical data

Maximum Permissible Error:

In the lower zone from Q1 inclusive up to but excluding Q2 is $\pm 5\%$

In the upper zone from Q2 inclusive up to and including Q4 is $\pm 2\%$

Type	Size	Flow rate		Q3 m3/h	Min.Reading m3	Max.Reading m3
		Q3/Q1	Q2/Q1			
LXLC-50	50	50 / 63 80 / 100	1.6 / 2.5 4 / 6.3	25	0.001	9999.999
LXLC-65	65			40	0.001	9999.999
LXLC-80	80			63	0.001	9999.999
LXLC-100	100			100	0.001	9999.999
LXLC-125	125			160	0.001	99999.999
LXLC-150	150			250	0.01	99999.999
LXLC-200	200			400	0.01	99999.999
LXLC-250	250			630	0.01	99999.999
LXLC-300	300	1000	0.01	99999.999		

Dimensions and weight

Type	Size	Flange			L mm	B mm	H mm	Weight KG
		flange OD	bolt circle	bolt (n-M)				
LXLC-50	50	165	125	4-M16	200	185	250	12.5
LXLC-65	65	185	145	4-M16	200	185	250	13.5
LXLC-80	80	200	160	8-M16	225	200	255	13.8
LXLC-100	100	220	180	8-M16	250	215	265	16.2
LXLC-125	125	250	210	8-M16	250	250	290	19
LXLC-150	150	280	240	8-M20	300	285	310	24.5
LXLC-200	200	340	295	8-M20	350	340	350	37
LXLC-250	250	395	350	12-M20	400	400	430	65
LXLC-300	300	445	400	12-M20	450	450	460	85

WOLTMAN WATER METER (WPH)



LXLC-(50~300)E
with impulse

Applicant:
Measuring the volume of cold (hot) water passing through the pipeline

Features:
Removable element structure, easy installation and maintenance, long term clear reading, inter-exchangeable spare parts, magnetic drive, small pressure loss, 360° circle, long working life, dry dial

Working Condition:
Water temperature: $\leq 40^{\circ}\text{C}$ (90°C for hot water)
Water pressure: $\leq 1\text{MPa}$ (1.6 Mpa optional)

No need power in common, except when meter reading
Voltage: DC9-15V (RS-485); DC24-42V(M-BUS)
Communication mode: RS-485,M-BUS
Transmission frequency: 1200/2400 bps
Max transmission distance: 1200m

Compliance with standard : GB/T778.1~3-2007(ISO 4064-1~3:2005IDT)

Main technical data

Maximum Permissible Error:

In the lower zone from Q1 inclusive up to but excluding Q2 is $\pm 5\%$

In the upper zone from Q2 inclusive up to and including Q4 is $\pm 2\%$



Type	Size	Flow rate		Q3 m3/h	Min.Reading m3	Max.Reading m3
		Q3/Q1	Q2/Q1			
LXLC-50	50	50 / 63 80 / 100	1.6 / 2.5 4 / 6.3	25	0.001	9999.999
LXLC-65	65			40	0.001	9999.999
LXLC-80	80			63	0.001	9999.999
LXLC-100	100			100	0.001	9999.999
LXLC-125	125			160	0.001	99999.999
LXLC-150	150			250	0.01	99999.999
LXLC-200	200			400	0.01	99999.999
LXLC-250	250			630	0.01	99999.999
LXLC-300	300	1000	0.01	99999.999		

WOLTMAN WATER METER (WPH)



Applicant:
Measuring the volume of cold (hot) water passing through the pipeline

Features:
Removable element structure, easy installation and maintenance, long term clear reading, inter-exchangeable spare parts, magnetic drive, small pressure loss, long working life

Working Condition:
Water temperature: $\leq 40^{\circ}\text{C}$
(90°C for hot water)
Water pressure: $\leq 1\text{MPa}$ (1.6 Mpa optional)

LXLC-(50~300)E
Old type

Compliance with standard : GB/T778.1~3-2007
(ISO 4064-1~3:2005IDT)

Main technical data

Maximum Permissible Error:

In the lower zone from Q1 inclusive up to but excluding Q2 is $\pm 5\%$

In the upper zone from Q2 inclusive up to and including Q4 is $\pm 2\%$

Type	Size	Flow rate		Q3 m ³ /h	Min. Reading m ³	Max. Reading m ³
		Q3/Q1	Q2/Q1			
LXLC-50	50	50 / 63 80 / 100	1.6 / 2.5 4 / 6.3	25	0.01	999.999
LXLC-65	65			40	0.01	999.999
LXLC-80	80			63	0.01	999.999
LXLC-100	100			100	0.01	999.999
LXLC-125	125			160	0.01	999.999
LXLC-150	150			250	0.1	9999.999
LXLC-200	200			400	0.1	9999.999
LXLC-250	250			630	0.1	9999.999
LXLC-300	300	1000	0.1	9999.999		

Dimensions and weight

Type	Size	Flange			L mm	B mm	H mm	Weight KG
		flange OD	bolt circle	bolt (n-M)				
LXLC-50	50	165	125	4-M16	200	185	250	12.5
LXLC-65	65	185	145	4-M16	200	185	250	13.5
LXLC-80	80	200	160	8-M16	225	200	255	13.8
LXLC-100	100	220	180	8-M16	250	215	265	16.2
LXLC-125	125	250	210	8-M16	250	250	290	19
LXLC-150	150	280	240	8-M20	300	285	310	24.5
LXLC-200	200	340	295	8-M20	350	340	350	37
LXLC-250	250	395	350	12-M20	400	400	430	65
LXLC-300	300	445	400	12-M20	450	450	460	85

WOLTMAN WATER METER (WPH)



Applicant:
Measuring the volume of cold (hot) water passing through the pipeline

Features:
Removable element structure, easy installation and maintenance, long term clear reading, inter-exchangeable spare parts, magnetic drive, small pressure loss, 360° circle, long working life, dry dial

Working Condition:
Temperature standard: T30 / T90
Pressure standard: MAP 10 / MAP 16

LXLC-(50~65)E
Small Vane Wheel

Compliance with standard : GB/T778.1~3-2007
(ISO 4064-1~3:2005IDT)

Main technical data

Maximum Permissible Error:

In the lower zone from Q1 inclusive up to but excluding Q2 is $\pm 5\%$

In the upper zone from Q2 inclusive up to and including Q4 is $\pm 2\%$

Type	Size	Flow rate		Q3 m ³ /h	Min. Reading m ³	Max. Reading m ³
		Q3/Q1	Q2/Q1			
LXLC-50	50	50 / 63	4 / 6.3	25	0.001	9999.999
LXLC-65	65			40	0.001	9999.999

Dimensions

Type	Size	Flange			L mm	B mm	H mm	Weight KG
		flange OD	bolt circle	bolt (n-M)				
LXLC-50	50	165	125	4-M16	200	175	230	11
LXLC-65	65	185	145	4-M16	200	185	230	12.5



WOLTMAN WATER METER (WPH)



LXLC-(150~300)E
Medium Vane Wheel

Applicant:
Measuring the volume of cold (hot) water passing through the pipeline

Features:
Removable element structure, easy installation and maintenance, long term clear reading, inter-exchangeable spare parts, magnetic drive, small pressure loss, 360° circle, long working life, dry dial

Working Condition:
Temperature standard: T30
Pressure standard: MAP 10 / MAP 16

Compliance with standard : GB/T778.1~3-2007
(ISO 4064-1~3:2005IDT)



Main technical data

Maximum Permissible Error:

In the lower zone from Q1 inclusive up to but excluding Q2 is $\pm 5\%$
In the upper zone from Q2 inclusive up to and including Q4 is $\pm 2\%$

Type	Size	Flow rate		Q3 m3/h	Min.Reading m3	Max.Reading m3
		Q3/Q1	Q2/Q1			
LXLC-150	150	50	6.3	250	0.01	99999.999
LXLC-200	200			400	0.01	99999.999
LXLC-250	250			630	0.01	99999.999
LXLC-300	300			1000	0.01	99999.999

Dimensions

Type	Size	Flange			L mm	B mm	H mm	Weight KG
		flange OD	bolt circle	bolt (n-M)				
LXLC-150	150	285	240	8-M20	300	285	370	26
LXLC-200	200	340	295	8-M20	350	340	390	48
LXLC-250	250	405	355	12-M24	400	405	450	80
LXLC-300	300	460	410	12-M24	500	460	480	95

WOLTMAN WATER METER (WPH)



LXLC-(250~500)E
Large Vane Wheel

Applicant:
Measuring the volume of cold (hot) water passing through the pipeline

Features:
Removable element structure, easy installation and maintenance, long term clear reading, inter-exchangeable spare parts, magnetic drive, small pressure loss, 360° circle, long working life, dry dial

Working Condition:
Temperature standard: T30
Pressure standard: MAP 10 / MAP 16

Compliance with standard : GB/T778.1~3-2007
(ISO 4064-1~3:2005IDT)



Main technical data

Maximum Permissible Error:

In the lower zone from Q1 inclusive up to but excluding Q2 is $\pm 5\%$
In the upper zone from Q2 inclusive up to and including Q4 is $\pm 2\%$

Type	Size	Flow rate		Q3 m3/h	Min.Reading m3	Max.Reading m3
		Q3/Q1	Q2/Q1			
LXLC-250	250	50	6.3	630	0.001	99999.999
LXLC-300	300			1000	0.001	99999.999
LXLC-400	400			1600	0.001	99999.999
LXLC-500	500			2500	0.001	99999.999

Dimensions

Type	Size	Flange			L mm	B mm	H mm	Weight KG
		flange OD	bolt circle	bolt (n-M)				
LXLC-250	250	395	350	12-M20	450	470	660	85
LXLC-300	300	445	400	12-M20	500	492	660	105
LXLC-400	400	565	515	16-M24	600	631	750	199
LXLC-500	500	670	620	20-M24	800	740	840	320

IRRIGATION WATER METER (Wi)



LXXG -50~300

Applicant:

Measuring the volume of cold (hot) water passing through the pipeline

Features:

1. Removable element structure, easy installation and maintenance,
2. dry-dial, magnetic drive.
3. large flow capacity, small pressure loss,
4. resist water hammer and pollution
5. vacuum sealed register ensures the dial keep free from condensation and keep the reading clear in a long term service
6. selected high quality materials for steady and reliable characteristic
7. can add impulse

Technical data conforms to ISO 4064 standard for horizontal installation

Water temperature : T30/T90

Water pressure: 1.0 Mpa / 1.6 Mpa

Maximum Permissible Error:

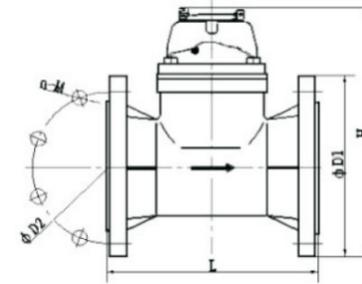
In the lower zone from Q_{min} inclusive up to but excluding Q_t is $\pm 5\%$
 In the upper zone from Q_t inclusive up to and including Q_{max} is $\pm 2\%$



Type	Size(mm)	Class	qsOverloadFlow	qpPermanentFlow	qtTransitional Flow	qminMin.Flow	Min. Reading	Max. Reading
			m3/h					
LXXG-50	50	A	30	15	4.5	1.2	0.0002	999,999
LXXG-65	65	A	50	25	7.5	2.0	0.002	999,999
LXXG-80	80	A	80	40	12	3.2	0.002	999,999
LXXG-100	100	A	120	60	18	4.8	0.002	999,999
LXXG-125	125	A	200	100	30	8	0.002	999,999
LXXG-150	150	A	300	150	45	12	0.002	999,999
LXXG-200	200	A	500	250	75	20	0.002	999,999
LXXG-250	250	A	800	400	120	32	0.02	9,999,999
LXXG-300	300	A	1200	600	180	48	0.02	9,999,999

IRRIGATION WATER METER (Wi)

Dimensions



Type	Size	L Length	H Height	Connecting flange		
				φD1 Outside diameter	φD2 Bolt circle diameter	Connecting Bolts (n-M)
LXXG-50	50	200	253	165	125	4-M16
LXXG-65	65	200	268	185	145	4-M16
LXXG-80	80	225	284	200	160	8-M16
LXXG-100	100	250	295	220	180	8-M16
LXXG-125	125	250	310	250	210	8-M16
LXXG-150	150	300	339	285	240	8-M20
LXXG-200	200	350	382	340	295	8-M20(1.0MPa)
						12-M20(1.6MPa)
LXXG-250	250	400	433	395	350	12-M20(1.0MPa)
						12-M24(1.6MPa)
LXXG-300	300	450	483	445	400	12-M20(1.0MPa)
						12-M24(1.6MPa)



Code	Description	Material	QTY
1	Screw M5×45 For Sealing	Stainless Steel	1
2	Screw M5×45	Stainless Steel	1
3	Cover With Lid	Assembly	1
4	Sealed Register	Assembly	1
5	Fixing pin	Brass	1
6	Retainer Ring	ABS	1
7	Screw	Brass	4
8	Pin	Stainless Steel	1
9	Support	ABS	1
10	Bolt For Sealing	Stainless Steel	2
11	Bolt M12×35	Stainless Steel	2
12	Gasket	Stainless Steel	4
13	Adjusting Nut	Brass	1
14	Flange Plate	Cast Iron	1
15	O-ring	Silicon Rubber	1
16	O-ring	Silicon Rubber	1
17	Bush For Adjustment	Brass	1
18	Upper Bearing Plate	Brass	1
19	Screw	Brass	4
20	Lower Central Gear	Component	1
21	Cover Plate	MPPO	1
22	O-ring For Adjustment	Rubber	2
23	Transmission Gear Component	Assembly	1
24	Adjusting Lever	Brass	1
25	Turbine	Component	1
26	Adjusting Plate	MPPO	1
27	Bush with Agate	Nylon with Graphite	1
28	Measuring Chamber	MPPO	1
29	Fixing Screw	Brass	3
30	O-ring	Rubber	1
31	Body	Cast Iron	1

COMBINATION WATER METER

Model: LXF-50~150

DN50



DN80~150



Applicant

For measurement of high flows of cold potable water passing through the pipeline

Features

1. Wide measuring range: from Q_{min} of the small caliber water meter to Q_{max} of the large caliber water meter
2. As a dry meter, deposits in the register are avoided, this ensures a clear reading in long term service
3. The main register may rotate more than 360 degrees for easily reading in any position
4. Low head loss
5. Lower starting flow
6. Novel structure, simple maintenance
7. Can be equipped with reed switch option
8. Particularly suited in commercial, institutional places of assembly and facilities with fluctuating usage and flow rates

Construction

The meter model LXF-50~150 combines a large caliber water meter (model LXLC-B) on the main line, a small water meter (model LXSG) on the bypass line, and a flow changeover valve

Annotation: LXLC-B removable element woltman water meter
 LXSG multi-jet dry type vane wheel water meter
 or LXSJ multi-jet liquid type vane wheel water meter

Installation

1. The meter must be installed with the direction of the flow as indicated by the arrow cast in the meter body
2. A horizontal position with the register face upwards is recommended
3. The meter must have 10 diameters straight pipe ahead of meter and 5 diameter straight pipe after to insure proper flow through the meter
4. The valves must be installed in the front and the back of the water meter

COMBINATION WATER METER

Working condition

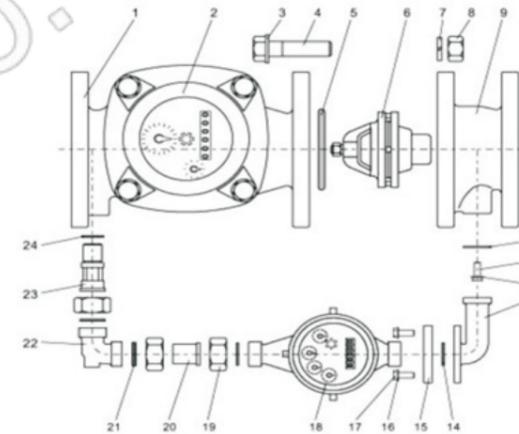
Water temperature: $\leq 50^{\circ}\text{C}$

Water pressure: $\leq 1.6\text{ Mpa}$

Attachment

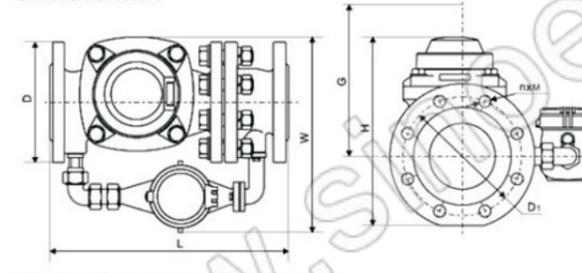
With every water meter, there will be two flange gaskets

If you need the connection flanges (two pieces), pls. specially request that



No.	Name	Qty	No.	Name	Qty	No.	Name	Qty
1	Body(mainwatermeter)	1	9	Adapting flange	1	17	Bolt	2
2	LXLC-B except for the body	1	10	Coupling gasket 2	1	18	Bypass meter (LXSC-E)	1
3	Flat washer	8	11	Bolt	2	19	Nut	3
4	Bolt	8	12	Flat washer	2	20	Coupling 2	1
5	Flange o-ring	1	13	Street elbow 2	1	21	Coupling o-ring	1
6	Changeover vale	1	14	Coupling gasket	3	22	Street1elbow111with1non-return valve	1
7	Spring washer	8	15	Connecting plate	1	23	Coupling 1	1
8	Nut	8	16	Spring washer	2	24	Coupling gasket 1	1

Dimension Picture



Dimensions and Weights

Type	Size DN	Length L	Width W	Height H	Height G	Connecting flange			Weight kg
						D Outer dia.	D1 Bolt circle dia.	Connecting Bolt nxM	
LXF-80	80mmx20mm	370	310	276	400	200	160	8XM16	27.5
LXF-100	100mmx20mm	370	320	286	400	220	180	8XM16	33
LXF-150	150mmx40mm	500	445	345	500	285	240	8XM20	64

Maximum Permissible Error:

In the lower zone from Q_{min} inclusive up to but excluding Q_t is $\pm 5\%$

In the upper zone from Q_t inclusive up to and including Q_{max} is $\pm 2\%$

Main Technical Data Comforms to Q/ZN 184-2003 (company standard)

Type	Size(mm)	q_s Max Flow	q_p Nominal Flow	q_t Transitional Flow	q_{min} Min. Flow	Min. Reading	Max. Reading
LXF-80	80mmx20mm	80	40	0.20	0.05	0.0001	999999+99999
LXF-100	100mmx20mm	120	60	0.20	0.05	0.0001	999999+99999
LXF-150	150mmx40mm	300	150	0.80	0.20	0.001	999999+99999

WOLTMAN VERTICAL WATER METER (WS)

Applicant
Measuring the volume of the cold (hot) water flowing through the pipeline

WS- 50~150E



- Features**
1. big flow capacity, small pressure loss
 2. dry magnetic transmission mechanism of liquid seal wet type structure, counter is clean, and readings
 3. six figures increasing digital word wheel display reading, reading more clearly
 4. detachable measuring machine structure, easy to dismantle and maintain
 5. debugging within the structure, prevent to adjustable table
 6. pry proof protective cover device
 7. high wear resistance of bearing system
 8. can be equipped with transmission counters, multiple pulse signal output

Working conditions:
water temperature: T30/ T90
water pressure: 1.0 Mpa / 1.6 Mpa

Compliance with standard : GB/T778.1~3-2007 (ISO 4064-1~3:2005IDT)

Main technical data

Maximum Permissible Error:

- In the lower zone from Q1 inclusive up to but excluding Q2 is $\pm 5\%$
- In the upper zone from Q2 inclusive up to and including Q4 is $\pm 2\%$

Type	Size	Flow rate		Q3 m3/h	Min.Reading m3	Max.Reading m3
		Q3/Q1	Q2/Q1			
WS-50	50	50 / 63 80 / 100	6.3	25	0.001	9999.999
WS-80	80			63	0.001	9999.999
WS-100	100			100	0.001	9999.999
WS-150	150			250	0.001	9999.999

Dimensions

Type	Size	Flange			L mm	B mm	H mm	Weight KG
		flange OD	bolt circle	bolt (n-M)				
WS-50	50	165	125	4-M16	280	165	235	16
WS-80	80	200	160	8-M16	370	200	310	27
WS-100	100	220	180	8-M16	370	220	310	32
WS-150	150	285	240	8-M20	500	305	455	75

WOLTMAN VERTICAL WATER METER (WS)

LXS-(80~150)C



LXS-(80~150)D



Applicant
Measuring the volume of the cold (hot) water flowing through the pipeline

- Features**
1. big flow capacity, small pressure loss
 2. dry magnetic transmission mechanism of liquid seal wet type structure, counter is clean, and readings
 3. six figures increasing digital word wheel display reading, reading more clearly
 4. detachable measuring machine structure, easy to dismantle and maintain
 5. debugging within the structure, prevent to adjustable table
 6. pry proof protective cover device
 7. high wear resistance of bearing system
 8. can be equipped with transmission counters, multiple pulse signal output

Working conditions:
water temperature: T30/ T90
water pressure: 1.0 Mpa / 1.6 Mpa

Compliance with standard : GB/T778.1~3-2007 (ISO 4064-1~3:2005IDT)

Main technical data

Maximum Permissible Error:

- In the lower zone from Q1 inclusive up to but excluding Q2 is $\pm 5\%$
- In the upper zone from Q2 inclusive up to and including Q4 is $\pm 2\%$

Type	Size	Flow rate		Q3 m3/h	Min.Reading m3	Max.Reading m3
		Q3/Q1	Q2/Q1			
LXS-80	80	50	6.3	40	0.01	9999.999
LXS-100	100			63	0.01	9999.999
LXS-150	150			160	0.01	9999.999

Dimensions

Type	Size	Flange			L mm	B mm	H mm	Weight KG
		flange OD	bolt circle	bolt (n-M)				
LXS-80	80	200	160	4-M18	370	316	275	43
LXS-100	100	220	180	8-M18	370	328	300	45
LXS-150	150	285	240	8-M23	500	405	388	96

WATER METER MECHANISM



LXLC-(80-200)E



LXLC-(50-65)E



LXLC-(250-300)



LXLC-(50-65)E



WS-(50-150)



LXXG-(50-300)

WATER METER MECHANISM



LXLC-(50-65)E



LXS-(80-150)



Medium Vane Wheel LXLC-(150-300)E



LXLC-(250-500)E

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