

FMW400 Series Series Waist Wheel Flowmeter

APPLICATION

- FMW400-AL cast iron waist wheel flowmeter is widely used in the measurement of various oil products and non-corrosive liquid medium of cast iron
- FMW400-EL cast steel waist wheel flowmeter is used for the measurement of high pressure and low corrosive media
- FMW400-LL cast aluminum light-duty waist wheel flowmeter is suitable for the measurement of low-viscosity, low-pressure and low-corrosive media.



OVERVIEW

FMW400 type waist wheel flowmeter is a kind of positive displacement flowmeter. The product has novel design, beautiful appearance and reasonable structure. FMW400 waist wheel flowmeter has the characteristics of light weight, high precision, convenient installation and use, etc. It is widely used in the measurement of oil products in petrochemical, electric power, metallurgy, transportation, national defense, and commerce and other departments.

Standards and licenses implemented by the product The product implements the professional standard of the People's Republic of China JJG667-2010 "Liquid Volumetric Flowmeter"; Type Approval Certificate for Measuring Instruments: No. 2018F047-34; Explosion-proof grade Exd IIC T6 Gb of the remote display site;

TECHNICAL PARAMETER

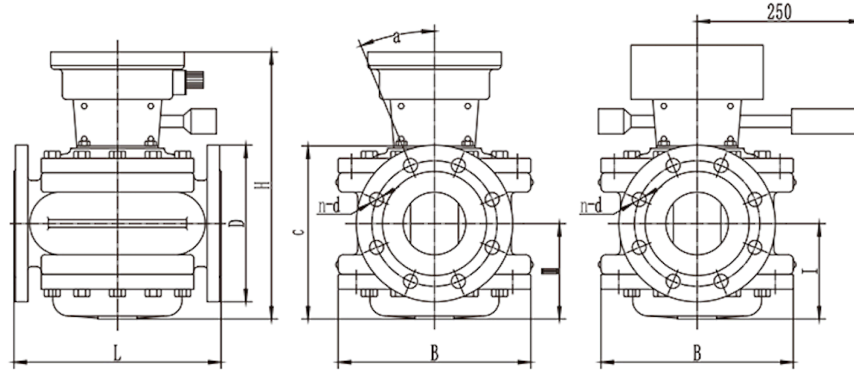
1. Working pressure (MPa): 0.6, 1.0, 1.6, 2.5, 4.0
2. Operating temperature: FMW400-AL series (-20C~+60°C), FMW400-EL, LL (-40C~+60C). For special requirements, design a high temperature heat sink Up to (60°C~200°C)
3. Accuracy level: 0.5, 0.3, 0.2
4. Flow range: m3/h

Nominal diameter mm	Liquid viscosity 2.0~150mpa.s		Liquid viscosity 0.6~2.0mpa.s		Liquid viscosity 2.0 ~150mpa.s		Liquid viscosity 0.6~2.0mpa.s		Liquid viscosity 2.0~150mpa.s		Liquid viscosity 0.6~2.0mpa.s	
15	0.3~3		0.6 ~3		0.6-3		0.8 ~3		0.8-3		1~3	
25	0.6 ~6		1.2 ~6		1.2~6		1.5 ~6		1.5-6		2~6	
40	1.6 ~16		3.2-16		3.2-16		4~16		4~16		5~16	
50	2.5 ~25		5~25		5~25		6~2 5		6~25		8~25	
65	6~50		12~50		12 ~50		15 ~50		15-50		20 ~50	
80	6~60		12 ~60		12~60		15~60		15 ~60		20 ~60	
100	10-100		20~100		20~100		25~100		25-100		33-100	
150	25~250		50~250		50~250		60~250		60~250		80~250	
Accuracy class	0.5				0.3				0.2			

• Main parts and materials combinations

Materials Parts	FMW400-AL (0.6,1.0,1.6Mpa)			FMW400-EL (2.5,4.0Mpa)				FMW400-LL (0.6,1.0,1.6Mpa)		
	Iron	Aluminum	Stainless	Cast	Aluminum	Stainless	Iron	Iron	Aluminum	Stainless
Shell	☆			☆				☆		
Rotor		☆			☆			☆		
Cover	☆						☆		☆	
Rotor shaft			☆			☆				☆
Bearing			☆			☆				☆

DIMENSION



Outline reference dimensions of cast iron/aluminum alloy type waist wheel flowmeter

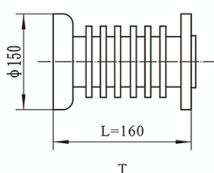
Model	Nominal diameter	L	H	I	B	D	D1	n- Φ	Weight kg/PC
FMW400-AL	15	160	227	67	95	95	65	4-14	6
	25	180	297	75	110	115	85	4-14	8
	25G	180	297	75	110	G1 1/4" (pipe thread connection)			10
	40	240	338	107	178	150	110	4-18	21
	50	265	362	120	178	165	125	4-18	26
	65	265	341	122	252	185	145	4-18	40
	80	265	341	122	252	200	160	8-18	40
	80 n	270	380	140	252	200	160	8-18	50
	100	350	423	163	310	220	180	8-18	86
	100n	390	423	163	310	220	180	8-18	115
150	560	550	232	455	285	240	8-22	202	

Outline reference dimensions of cast steel type waist wheel flowmeter

Model	Nominal diameter	L	H	I	B	D	D1	n- Φ	Weight kg/PC
FMW400-EL25	25	180	300	72	120	115	85	4-Φ14	12
FMW400-EL40	40	240	350	88	170	150	110	4-Φ18	30
FMW400-EL50	50	360	370	105	226	165	125	4-Φ18	41
FMW400-EL65	65	360	400	130	254	185	145	8-Φ18	52
FMW400-EL80	80	360	400	130	254	200	160	8-Φ18	52
FMW400-EL100	100	460	482	170	340	235	190	8-Φ22	110
FMW400-EL150	150	560	602	234	455	300	250	8-Φ26	215

Note:

- (1) "H" size is the size of the preparation counter;
- (2) About 85mm should be added to H with S1 instantaneous meter;
- (3) If a high temperature radiator is prepared, add the size of the radiator to the H dimension in the table, which is the total height of the high temperature flowmeter.



T appears in the model as a high temperature flowmeter, used for 60°C~120.C, without a transmitter or electronic counter can be equipped with a radiator, 12 (rC~200°C needs to be equipped with a radiator.

FLOWMETER CONFIGURATION

The flowmeter is generally shipped with the following configuration, see the model and performance parameters of the counter in the table below.

Counter	Performance parameters	Configuration
A5	Pointer indication, 6-bit roller accumulation, unit liter (L)	Pointer indication: 10L/circle below DN25: 100L/circle below DN80: 1000L/circle above DN100.
A6	Same as above, with single-shift 4-digit roller accumulation, can return to zero	
S1	Mechanical instantaneous flow pull indicator display.	Instantaneous flow value display
ELZ	Electronic liquid crystal flow indicator	Accumulated and instantaneous flow value display

ORDER CODE

Model	Code	Shell material	Rotor material	Nominal diameter	Pressure	Counter	Sender	Accuracy	Remark
FMW400									Waistwheel flowmeter
	G								pipe thread connection
	Q								Gasoline flow meter
	T								High temperature flowmeter with radiator
		A							Cast iron material
		E							Cast steel material
		L							aluminum alloy
			L						aluminum alloy
			B						stainless steel
				25					DN 25mm
			
				150					DN150mm
					0.06				0.6MPa
					.1				1.0MPa
					.2				1.6 MPa
					.3				2.5 MPa
					.4				4.0 MPa
						A5			counter
						A6、Z			Return to zero counter
						ELZ			electronic counter
						S1			With mechanical instantaneous flow display
							QF-I		12V/14V 3-wire photoelectric transmitter
							MF		4~20mA analog signal output
								J	Level 0.3 and above