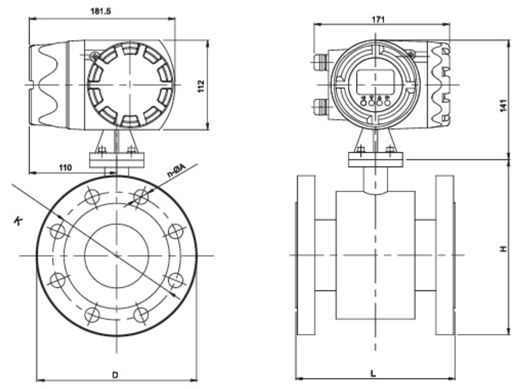
NINGBO KIO FLOW INSTRUMENTS CO., LTD

FLOWTECH®

The Series KF700E Battery-powered Electromagnetic Flowmeter

From 15mm to 600mm, ultra-low power design, no external power supply required for precise flow measurement.



The Series KF700E Battery-powered Electromagnetic Flowmeter features a micropower design and can operate for extended periods on low power. It is powered by lithium batteries, eliminating the need for an external power supply, making it suitable for remote or hard-to-power applications. It offers high measurement accuracy and can achieve remote meter reading and centralized data processing when paired with GPRS equipment. Employing electromagnetic measurement technology, it has no moving parts, enabling precise measurements even for liquids containing impurities, which reduces maintenance requirements. Its specially designed electrodes minimize fouling buildup, and its requirements for upstream and downstream straight pipe sections are minimal.

FEATURES

·Ultra-low power design, especially suitable for flow measurement in remote locations.

·On-site configuration via the display screen to meet application requirements

·Ensures accurate measurement even when temperature, density, or viscosity changes, thereby improving system efficiency;

·Features long service life, low cost, and minimal maintenance needs

·No moving parts, avoiding wear, tear, or damage

·Electrode design with anti-fouling and anti-damage properties

·Adopts an unobstructed flow measurement method, resulting in no pressure loss

APPLICATIONS

·Water Supply and Drainage

·Environmental Protection

·Agricultural Irrigation

·Field Scientific Research Base Station

SPECIFICATIONS

Pipe Size	From DN10 to DN600
Electrode Material	316L; optional: Hastelloy Hc, Hastelloy Hb, titanium alloy (Ti), platinum alloy (Pt), tantalum alloy (Ta)
Liner Material	Optional liners: Neoprene, PTFE, F46, PFA
Service	Conductive liquids compatible with the selected material
Medium Conductivity	>20μs/cm; optional low-conductivity measurement down to 1μs/cm
Accuracy	Within the range: ±1% RD
Flow Velocity Range	0.3m/s - 10m/s
Temperature Rating	Neoprene liner up to 80°C;PTFE liner up to 130°C;F46 liner up to 150°C;PFA liner up to 150°C
Pressure Rating	PN6, PN10, PN16, PN40 (varies by model)
Enclosure Rating	IP65, IP67, IP68 (varies by model)
Output Signal	Passive pulse (for flow calibration only)
Power Requirements	Battery-powered
Electrical Connections	M20*1.5

MODEL CHART

Example	KF700E	-A1	-2	-1	-A	-25	-L	-3	-2	
Series	KF700E									Battery-powered Electromagnetic Flowmeter
Converter Type		1								Integrated Type with MF820 Converter
		2								Remote Type with MF820 Converter
Connection			1							VA Thread Type: NPT
			2							VA Thread Type: BSP
			3							FA Flange: PN10
			4							FA Flange: ANSI 150 #RF
			5							FA Flange: JIS10K # RF
			6							KA Tri-clamp Type: DIN
Flange Material				1						A3 Carbon Steel
				2						304 Stainless Steel
				3						316 Stainless Steel
Body Material					A					A3 Carbon Steel
					B					304 Stainless Steel
					C					316 Stainless Steel
Pipe Size						15				DN15, 0.2m³/h - 4m³/h; L x D x K x n-ΦA= 150x105x75mm x 4-Φ14
						25				DN25, 0.5m³/h - 10m³/h; L x D x K x n-ΦA= 150x115x85mm x 4-Φ14
						32				DN32, 0.8m³/h - 16m³/h; L x D x K x n-ΦA= 150x140x100mm x 4-Φ18
						40				DN40, 1.2m³/h - 25m³/h; L x D x K x n-ΦA= 150x150x110mm x 4-Φ18
						50				DN50, 2m³/h - 40m³/h; L x D x K x n-ΦA= 200x165x125mm x 4-Φ18
						65				DN65, 3.5m³/h - 60m³/h; L x D x K x n-ΦA= 200x185x145mm x 8-Φ18
						80				DN80, 5m³/h - 100m³/h; L x D x K x n-ΦA= 200x200x160mm x 8-Φ18
						100				DN100, 8m³/h - 160m³/h; L x D x K x n-ΦA= 250x220x180mm x 8-Φ18
						125				DN125, 12m³/h - 250m³/h; L x D x K x n-ΦA= 250x250x210mm x 8-Φ18
						150				DN150, 18m³/h - 400m³/h; L x D x K x n-ΦA= 300x285x240mm x 8-Φ22
						200				DN200, 30m³/h - 600m³/h; L x D x K x n-ΦA= 350x340x295mm x 8-Φ22
						250				DN250, 50m³/h - 800m³/h; L x D x K x n-ΦA= 400x395x350mm x 12-Φ22
						300				DN300, 70m³/h - 1200m³/h; L x D x K x n-ΦA= 500x445x400mm x 12-Φ22
						350				DN350, 100m³/h - 1600m³/h; L x D x K x n-ΦA= 500x505x460mm x 16-Φ22
						400				DN400, 120m³/h - 2000m³/h; L x D x K x n-ΦA= 600x565x515mm x 16-Φ26
						450				DN450, 160m³/h - 2500m³/h; L x D x K x n-ΦA= 600x615x565mm x 20-Φ26
						500				DN500, 200m³/h - 3000m³/h; L x D x K x n-ΦA= 600x670x620mm x 20-Φ26
						600				DN600, 300m³/h - 4000m³/h; L x D x K x n-ΦA= 600x780x725mm x 20-Φ30
Electrode Material							L			316L Stainless Steel
							C			Hastelloy Hc
							B			Hastelloy Hb
							T			Titanium (Ti)
							P			Platinum (Pt)
							A			Tantalum (Ta)
Liner Material								1		Neoprene Rubber (DN50-DN2000), Temperature Resistance up to 80°C
								2		PTFE (DN25-DN2000), Temperature Resistance up to 130°C
								3		F46 (DN10-DN300), Temperature Resistance up to 150°C
								4		PFA (DN10-DN300), Temperature Resistance up to 150°C
Enclosure Rating									1	IP65
									2	IP67
									3	IP68 (for Remote Type)