

MDS-DN (DN15-DN2600) Electromagnetic Flowmeter

Product Overview

Strictly manufactured in accordance with the GB/T9119 Chinese national standard design. The product covers a nominal diameter range from DN15 to DN3000, offering two standard pressure ratings of 1.6MPa and 4.0MPa to meet the pressure requirements of different pipeline systems.



Its core dimensional parameters, such as flange outer diameter, bolt circle diameter, number of bolt holes, and thickness, are all standardized, ensuring precise matching and reliable sealing with valves, pumps, and other pipeline components. The product range is comprehensive and highly systematic, providing suitable models from small-scale civil pipelines to large-scale industrial main pipelines.

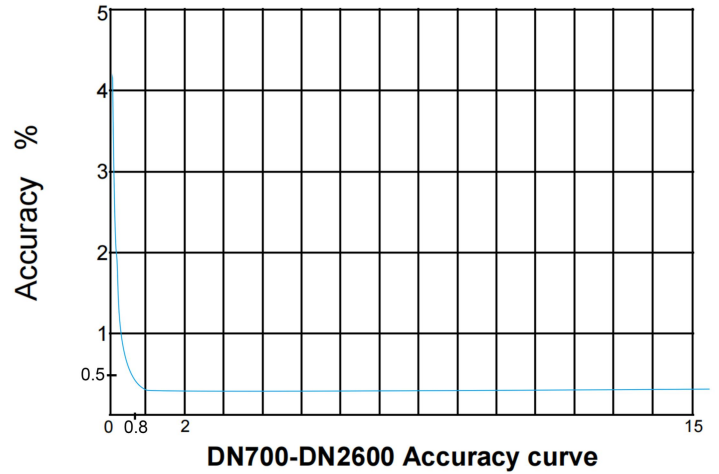
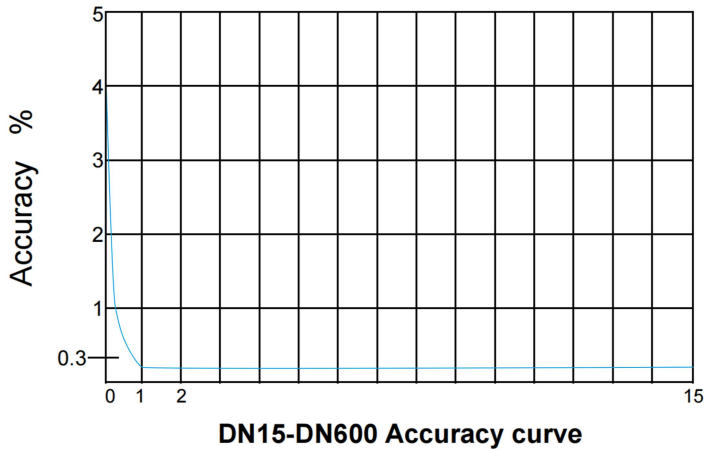
This series of flanges focuses on structural integrity and connection stability, making it suitable for water treatment, HVAC, chemical, and general industrial fluid transmission systems. All products are manufactured according to standard processes, guaranteeing their mechanical strength and long-term durability. They are key components for building safe and reliable pipeline connections. For specific detailed dimensional parameters, please refer to the product technical diagram.

Product Features

1. Measurement is unaffected by changes in fluid density, viscosity, temperature, pressure, and conductivity.
2. No moving parts obstruct flow inside the measuring tube, no pressure loss, relatively low requirement for straight pipe runs.
3. The series nominal diameter range DN6 - DN3000.
4. Various options for sensor lining and electrode materials.
5. The converter can be integrated with the sensor or of a remote type.
6. The converter uses a novel excitation method, resulting in low power consumption, stable zero point, and high accuracy.
7. Flow range ability up to 1500:1.
8. The converter uses a 16-bit high-performance microprocessor, 2X16 LCD display, convenient parameter setting, reliable programming.
9. The flowmeter is a bidirectional measurement system, containing three totalizers: forward total, reverse total, and net difference total; can display forward and reverse flow rates.
10. Equipped with multiple outputs: current, pulse, digital communication, HART.
11. The converter employs Surface Mount Technology (SMT), with self-check and self-diagnostic functions.
12. Rubber and polyurethane lined sensors have an intrinsically sealed structure; explosion-proof models can be used in corresponding hazardous areas.
13. Electromagnetic flowmeters are used to measure the volumetric flow of conductive liquids and slurries in closed pipes, suitable for industries such as chemical, electric power, metallurgy and mining, petroleum, water supply and drainage, paper making, pharmaceutical, and food processing.

Performance parameters

Accuracy curve



Carbon Steel Flange Dimensions – 1.6MPa (PN16)

Nominal Diameter	Inner Diameter	Outer Diameter	Center Distance	Platform Diameter	Platform Height	Thickness	Bolt Hole Diameter & Quantity
DN10	23	90	60	40	2	14	14*4
DN15	26	95	65	45	2	14	14*4
DN20	33	105	75	55	2	16	14*4
DN25	34	115	85	65	2	18	14*4
DN32	40	135	100	78	3	18	18*4
DN40	50	145	110	88	3	20	18*4
DN50	60	160	125	102	3	22	18*4
DN65	78	180	145	120	3	24	18*4
DN80	91	195	160	138	3	24	18*8
DN100	110	215	180	158	3	26	18*8
DN125	135	245	210	188	3	28	18*8
DN150	161	280	240	212	3	28	23*8
DN175	197	310	270	240	3	28	23*8
DN200	222	335	295	265	3	30	23*8
DN225	248	365	325	295	3	30	23*8
DN250	276	405	355	320	3	32	26*12
DN300	328	460	410	378	3	32	26*12
DN350	380	520	470	438	4	34	26*16
DN400	430	580	525	496	4	38	30*16
DN450	484	640	585	550	4	42	30*20
DN500	534	705	650	600	4	45	34*20
DN600	634	840	770	720	5	50	41*20
DN700	724	910	840	790	5	50	41*24
DN800	824	1025	950	898	5	52	41*24
DN900	924	1125	1050	998	5	54	41*28
DN1000	1024	1255	1170	1110	5	56	48*28
DN1200	1224	1485	1390	1325	5	58	54*32
DN1400	1424	1685	1590	1525	5	60	54*36
DN1600	1624	1930	1820	1750	5	63	58*40
DN1800	1824	2130	2020	1950	5	72	58*44
DN2000	2024	2345	2230	2150	5	80	58*48

Main technical parameters

Parameter	Specification		
Maximum Flow Velocity	15 m/s		
Accuracy	DN15 – DN600	±0.3% of rate (flow velocity ≥1 m/s)	
		±3 mm/s (flow velocity <1 m/s)	
	DN700 – DN3000	±0.5% of rate (flow velocity ≥0.8 m/s)	
		±4 mm/s (flow velocity <0.8 m/s)	
Nominal Pressure	DN15 – DN150	4.0 MPa	
	DN15 – DN600	1.6 MPa	
	DN200 – DN1000	1.0 MPa	
	DN700 – DN3000	0.6 MPa	
Ambient Temperature	Sensor	-25°C ~ +60°C	
	Converter & Compact Type	-10°C ~ +60°C	
Maximum Fluid Temperature	Liner Material	Separate Type	Compact Type
	PTFE (Teflon)	100°C, 150°C (special order required)	70°C
	FEP (Fluorinated Ethylene Propylene)	100°C, 150°C (special order required)	70°C
	PFA (Perfluoroalkoxy)	100°C, 150°C (special order required)	70°C
	Chloroprene Rubber	80°C, 120°C (special order required)	70°C
	Polyurethane	80°C	70°C
Flange Material	DN15 – DN600	Stainless Steel 1Cr18Ni9Ti	
	DN700 – DN3000	Carbon Steel	
Enclosure Protection (Ingress Protection)	Sensor: DN15-DN150 separate type with rubber or polyurethane liner	IP65, IP68 (special order)	
	Sensor: DN200-DN2600 separate type with rubber or polyurethane liner	IP68 (submersible up to 10m)	
	Other sensors and all converters	IP65	
Material (Electrodes & Flanges)	Signal Electrode & Grounding Electrode Materials	Stainless steel containing molybdenum, Hastelloy B, Hastelloy C, Titanium, Platinum-Iridium alloy, Stainless steel coated with tungsten carbide	
	Connecting Flange Material	Carbon Steel	
	Grounding Flange Material	Stainless Steel 1Cr18Ni9Ti	
Maximum Cable Distance (Separate Type)	Generally ≤100m between converter and sensor. >100m requires special order.		
Signal Electrode Type	Fixed type (DN15 – DN2600), Scraper type (DN300 – DN1600)		