

H57 SERIES VARIABLE AREA FLOWMETERS



Model No. : H57
Model Type : Digital Type



Model No. : H57
Model Type : Analog Type



Model No. : H57
Model Type : Stainless Steel Type

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Model No. : H57

The most common design of variable area meter is the cone-and-float type, which is also known as a rotameter

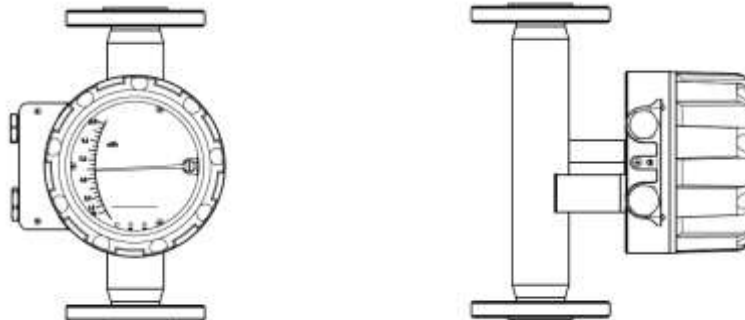
It is applied to gas supply facilities, electricity-related, petroleum, chemical-related, metallurgy, pharmaceutical industry, etc., and the type can be selected according to the use and requirements. Variable area flowmeter H57 has three types: Digital Type, Mechanical Type, and Stainless Steel Type.

Features :

- Mechanical display and LCD display
- Short-stroke design can measure high flow rates using relatively short metering tubes.
- Special applications with hazardous or aggressive fluids, high temperatures and high pressure velocities.
- All stainless steel design provides safe measurement of a wide variety of liquids, gases and vapors. The measuring section can be equipped with a heating jacket.
- Support vertical installation

GENERAL SPECIFICATIONS

Measuring range	0.03 m ³ /h ~ 3000 m ³ /h	
Accuracy	±1.5% of rate, ±1.0% of rate	
Pressure rating	DN15~DN50 < 4.0Mpa, DN80~DN200 < 1.6Mpa (Common) DN15~DN50 < 32Mpa, DN80~DN200 < 16Mpa (Special)	
Pressure loss	7kPa ~ 70mPa	
Medium temperature	SS304 (-40°C~+100°C), PTFE (0°C~+100°C), High temp. (+110°C~+450°C)	
Viscosity	DN15 : <5mPa.s, <30mPa.s	
	DN25 : 250mPa.s	
	DN50~DN150 : <300mPa.s	
Ambient temperature	Pointer type	-40°C~+100°C
	Remote type :	-40°C~+85°C (liquid crystal is not damage) -30°C~+80°C (liquid type is able to operate)
Electrical interface	Cable piping : 1/2 NPT, M2x1.5	
Power supply	4~20mA, 24V DC (12V DC~32V DC) 2 wires system	
	Alarm type : 4~20mA, 24V DC (18V DC~28V DC) 4 wires system)	
	85~265V AC 50Hz Battery : 3.6V @7.5AH	
Protection	IP65	
Explosion proof	ExiallCT1-6, ExdIIBT1-6	



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FLOW RANGE					
Diameter	Flow Segment	Water (L/H)		Air (m ³ /h)	Pressure Loss (kPa)
		Material (SS304, SS316, SS316L)	Material (PTFE)	20°C @1atm (Standard)	60/66
DN15	1A	1.0 ~ 10	*	0.03 ~ 0.3	6.8
	1B	1.6 ~ 16	*	0.05 ~ 0.5	6.8
	1C	2.5 ~ 25	1.6 ~ 16	0.07 ~ 0.7	6.8
	1D	4.0 ~ 40	2.5 ~ 25	0.12 ~ 1.2	6.8
	1E	6.3 ~ 63	4.0 ~ 40	0.18 ~ 1.8	7
	1F	10 ~ 100	6.0 ~ 60	0.3 ~ 3	7.2
	1G	16 ~ 160	10 ~ 100	0.48 ~ 4.8	7.8
	1H	25 ~ 250	16 ~ 160	0.7 ~ 7	9
	1I	40 ~ 400	25 ~ 250	1.2 ~ 12	12
	1J	63 ~ 630	40 ~ 400	1.8 ~ 18	13
	1K	100 ~ 1000	*	3 ~ 30	16
DN25	2A	30 ~ 300	*	1.4 ~ 14	3.8
	2B	63 ~ 630	400	2.1 ~ 21	3.8
	2C	100 ~ 1000	630	3 ~ 30	4.2
	2D	160 ~ 1600	1000	4.8 ~ 48	5.7
	2E	250 ~ 2500	1600	7 ~ 70	6
	2F	320 ~ 3200	*	10 ~ 100	6.6
	2G	400 ~ 4000	2000	13 ~ 130	7.8
	2H	500 ~ 5000	2500	15 ~ 150	8.8
	2I	620 ~ 6300	3200	18 ~ 180	10.3
	2J	1000 ~ 10000	*	*	16
DN50	3A	400 ~ 4000	*	13 ~ 130	4.2
	3B	630 ~ 6300	400 ~ 4000	18 ~ 180	4.7
	3C	1000 ~ 10000	630 ~ 6300	30 ~ 300	6
	3D	1600 ~ 16000	1000 ~ 10000	50 ~ 500	6
	3E	2000 ~ 20000	1600 ~ 16000	60 ~ 600	6.5
	3F	2500 ~ 25000	*	70 ~ 700	7
DN80	4A	1000 ~ 10000	*	*	6
	4B	1600 ~ 16000	1600 ~ 16000	50 ~ 500	6.8
	4C	2500 ~ 25000	2500 ~ 25000	70 ~ 700	7
	4D	4000 ~ 40000	4000 ~ 40000	180 ~ 1800	13
	4E	6300 ~ 63000	*	120 ~ 1200	15
DN150	6A	8000 ~ 80000	*	250 ~ 2500	22
	6B	10000 ~ 100000	*	300 ~ 3000	50
	6C	15000 ~ 150000	*	*	60
DN200	7A	15000 ~ 150000	* Contact for customization		50
	7B	20000 ~ 200000			70

H56 SERIES VARIABLE AREA FLOWMETERS



Model No. : H56
Model Type : Battery Type

- Digital LCD display (flow and total flow)
- Powered by 3.6V lithium battery



Model No. : H56
Model Type : Explosion-proof Type

- Digital mechanical indicator with explosion-proof housing
- One or two limit switches selectable.
 - ① KG22 limit switch (K1, K2)
 - ② KG23 limit switch (KR1, KR2).



Model No. : H56
Model Type : 4-20mA Type

- Explosion-proof modular design
 - ① Intrinsically safe type
 - ② Explosion-proof type
- Digital LCD display indicator
- 2-wire electrical signal output (4-20) mA / hart communication test plan.
- One or two limit switches selectable
 - ① Limit switch KG22 (K1, K2);
 - ② Limit switch KG2

H56 SERIES VARIABLE AREA FLOWMETERS



The area-type flowmeters H56 series are metal cone variable-area flowmeters used for instantaneous and cumulative flow measurement. It is suitable for liquid, gas and vapor metering in closed pipelines, and the principle of measuring the flow value in the field or electronic remote control is based on the hydrodynamic effect. This moves the float from bottom to top in a vertical pipe. Since the displacement of the float is related to the flow rate, it is read from the indicator by means of a magnetic drive system. The flow meter also outputs an electrical signal. Area flow meter H56 series can be configured with a wide range of (4-20)mA / HART communication protocol warning switch / integrated flow PCB depending on the type.

GENERAL SPECIFICATIONS

Medium	Liquids, gases, vapors	
Range (conversion to 100% value of reference fluid)	Water : 20°C	(10~3000000)L/h, on request
	Air : 0.1013MPa, 20°C	(0.7~3000)Nm ³ /h, on request
The turn-down ratio	10 : 1	
Accuracy class	Mechanical indicator	1.0, 1.5, 2.0, 2.5
	Mechanical indicator with LCD (battery powered, 2 years service life)	1.0, 1.5, 2.0, 2.5
	Mechanical indicator with two-wire single output (4~20)mA/hart communication	1.0, 1.5, 2.0, 2.5
Medium temperature	Machinery indicator	-80°C~+300°C (PTFE: 0~80°C) High temperature 400°C
	Mechanical indicator with LCD (battery powered, 2 years service life)	-80°C~+120°C (PTFE: 0~80°C) High temperature 400°C
	Mechanical indicator with two-wire single output (4~20)mA/hart communication protocol	-80°C~+120°C (PTFE: 0~80°C) High temperature 400°C
Ambient temperature	Mechanical indicator	-40°C~+120°C
	Mechanical indicator with LCD (battery powered, 2 years service life)	-20°C~+60°C
	Mechanical indicator with two-wire single output (4~20)mA/hart communication	-20°C~+60°C
Viscosity of fluid	DN15: F15.00~F15.03 $n < 5$ mPa.s, F15.04~15.30 $n < 30$ mPa.s DN25: $n < 250$ mPa.s DN50~250: $n < 300$ mPa.s	
Nominal pressure	DN15~DN50	4.0MPa (Max DN15: 42MPa, DN25: 42MPa, DN50: 32MPa)
	DN80~DN250	1.6MPa (Max DN80: 10MPa, DN100: 6.5MPa, DN125: 4.0MPa, DN200: 2.5MPa, DN250: 2.5MPa)
Process connection	Flange connection, Standard: DIN2501, ANSI, JIS	
	Hygiene clamp, screw joint are selected in the order	
Electrical connection	M20x1.5 1/2"G 1/2"NPT 3/4"G 3/4"NPT	
Installation	Vertical mounting (bottom in up out and up in bottom out), Horizontal mounting (left in right out and right in left out) bottom in side out, side in side out	
Straight unimpeded inlet run	≥50	
Straight unimpeded outlet run	≥250mm	
Degree of protection	IP67 (Others need specify in the order)	
Ex marking	EEx ia II CT5	
	EEx d II CT6	
Ex electrical data	Ui = 28V li = 93mA Pi = 0,65W Ci ≤ 5nF Li = 0mH	
Safety barrier data	Uo ≤ 28V lo ≤ 93mA Po ≤ 0.65W Co ≥ Ci+Cc Lo ≥ Li+Lc	
Carried standard	JB/T 6844-93	