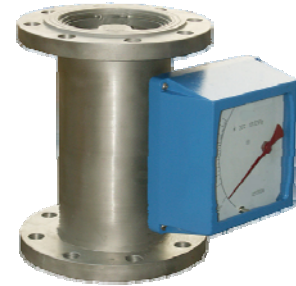




## GENERAL

**ALVAMT** rugged metal tube variable area meters (rotameters) are ideal for high pressure, high temperature and other demanding flow applications where safety is a concern. Features include: globally-recognized approvals for use in hazardous environments; analog and digital LCD local display options, multiple process connection options; several available materials of construction for metering of aggressive fluids and corrosion resistance; HART enabled 4-20mA output to provide for remote monitoring and control. The ALVAMT's excellent repeatability makes it a good choice for batching applications. For versions without electronic output, no power supply is required. The ALVAMT's low-pressure drop provides additional value by allowing for economical pump selection.



## FEATURES

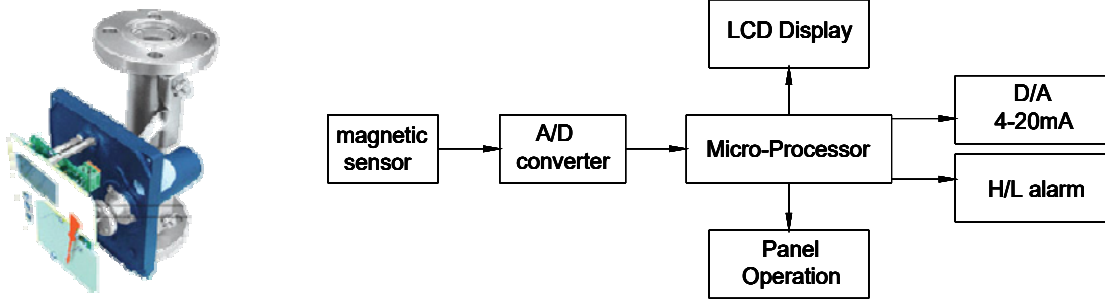
- ❑ Excellent low-flow performance
- ❑ Versatile design may be used for gas, steam, and liquids
- ❑ Low pressure loss for gas and steam applications
- ❑ Suitable for high pressure and high temperature applications
- ❑ Turn-down ratio of 10:1
- ❑ Local indication and intelligent remote LCD display
- ❑ Easy-to-read analog pointer style indicator
- ❑ Intrinsically safe & explosion proof for hazardous area applications

## SPECIFICATION

● Size	: 15 ~ 200mm	● Signal Output	4-20mA (2-wire)
● Measuring Range	Water (20°C) 1.6 ~ 150,000 l/h Air (20°C, 0.1013MPa) 0.05 ~ 4,000 m <sup>3</sup> /h	● Local Display	: Mechanical Indicator (standard)
● Temperature	Standard (E) -80 ~ +200°C, PTFE: 0 ~ 85°C High temperature (H): +200 ~ +300°C	● Digital Display	: Rate 0 ~ 50000 Total: 0 ~ 99999999 (with decimal)
● Pressure Loss	6.5 ~ 15.6 KPa	● Power Supply	: 85~264V <sub>AC</sub> 50-60 Hz : 24V <sub>DC</sub> 3.6V <sub>DC</sub> @ 5.2 AmpHours Lithium
● Pressure	Standard: 1.6MPa (DN65 - DN150) 4.0MPa (DN15 - DN50) High: 2.5MPa (DN65 - DN150) 6.4MPa (DN15 - DN50)	● Approvals	Isolation: Exd II CT5 Intrinsic Safety: Exia II C
● Viscosity	15m ~ 20 mm - < 30 CP 25mm ~ 40 mm - < 250 CP 50mm ~ 200mm - < 300 CP Top enter、Top exit	● Alarms	High / Low limit alarm maximum 1A @ 24V <sub>DC</sub>
● Wetted parts	SS #304 standard, SS #316 optional Tantalum (flow tube) PTEE (flow tube) PTFE lining	● Data Storage	EEPROM (up to 10 years)
● Flanges	ANSI and DIN-type available	● Flow Orientation	Top enter/top exit, Standard Bottom enter/Top exit Right enter/Left exit Left enter/Right exit
● Accuracy	±1.5%(Standard) ±2.5%(PTFE liner)	● Protection	IP 65
● Repeatability	: ±0.5% of reading	● Housing Material	: Aluminum
		● Cable Connector:	M20x1.5 or ½" NPT



## Principle



## Flow range for various fluids

Meter	Float	Water (LPH)		Air in SCMH
		Material of measuring tube Metal	Material of measuring tube Metal w/ PTFE liner	
DN15	KV15.0	2.5~25		0.07~0.7
	KV15.1	4.0~40	2.5~25	0.11~1.1
	KV15.2	6.0~60	4.0~40	0.18~1.8
	KV15.3	10~100	6.0~60	0.28~2.8
	KV15.4	16~160	10~100	0.4~4.0
	KV15.5	25~250	16~160	0.7~7.0
	KV15.6	40~400	25~250	1.0~10
	KV15.7	60~600	40~400	1.6~16
DN25	KV25.0	100~1,000	60~600	3~30
	KV25.1	160~1,600	100~1,000	4.5~45
	KV25.2	250~2,500	160~1,600	7~70
	KV25.3	400~4,000	250~2,500	11~110
DN50	KV50.0	600~6,000	400~4,000	18~180
	KV50.1	1,000~10,000	600~6,000	25~250
	KV50.2	1,600~16,000	1,000~10,000	40~400
DN80	KV80.0	2,500~25,000	1,600~16,000	75~750
	KV80.1	4,000~40,000	2,500~25,000	100~1,000
DN100	KV100.0	6,000~60,000	4,000~40,000	150~1,500
	KV100.1		6,000~60,000	
DN125	KV125.0	8,000~80,000		
	KV125.1	10,000~100,000		
DN150	KV150.0	15,000~150,000	8,000~80,000	
	KV150.1			
DN200	KV200.0	15,000~150,000		



www.cstc.tw

台灣冠瑄: TEL: +886 7 7532980

Taiwan: E-Mail: TW@CSTC.TW

冠瑄科技有限公司

Creation Service Technology Co., Ltd.

上海可翔国际贸易有限公司

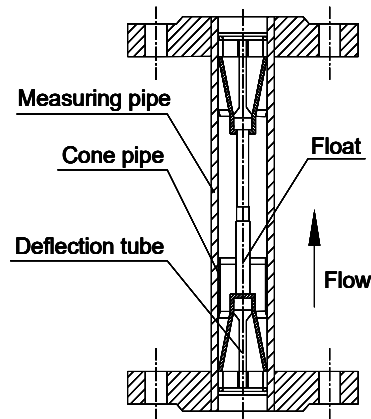
Shanghai Creation International Trading Co., Ltd.

上海可翔: TEL: +86 21 57558972

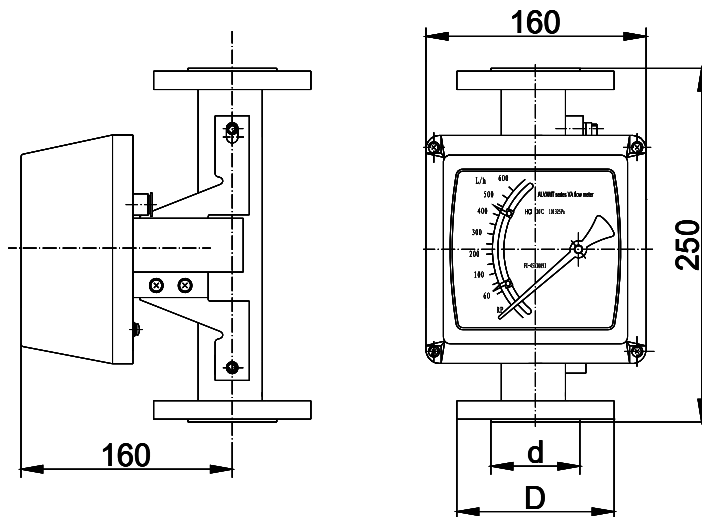
Shanghai: E-Mail: SH@CSTC.TW

➤ Bottom enter and top exist (FA type)

● Principle



● Dimension



Meter	FA series		
Size	d (mm)	D (mm)	Weight (kg)
DN15	46	95	3.7
DN25	65	115	5.2
DN50	99	165	8.7
DN80	132	200	14.2
DN100	156	220	15.2
DN125	184	250	33.7
DN150	211	285	48.7



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 台湾冠瑄: TEL: +886 7 7532980  
 Taiwan: E-Mail: TW@CSTC.TW

冠瑄科技有限公司

Creation Service Technology Co., Ltd.  
 上海可翔国际贸易有限公司  
 Shanghai Creation International Trading Co., Ltd.  
 上海可翔: TEL: +86 21 57558972  
 Shanghai: E-Mail: SH@CSTC.TW

**\*\* Please contact your local SMC application engineer**

**You also need to provide the following information:**

Type of Fluid	Please provide the name of your fluid, including operating density and viscosity
Full Scale Flow	Maximum and minimum flow rates, units must be m <sup>3</sup> /hr, LPM or GPM
Line Size	Please indicate the pipe size as well as connection type (flange, threaded, etc..)
Pressure and Temperature	We will calibrate your flowmeter as close to your operating conditions as possible

**➤ Model Selection Guide**

ALVAMT Series															
Example: ALVAMT-100-FA-R0-T-KV100.2-N-E-M1-111-S0															
ALVAMT-	**_	**_	**_	**_	**_	**_	**_	**_	**_	**_	**_	**_	**_	**_	Description
code ** = DN**	**														Size
Bottom entry, top exit	FA														Meter Structure
Bottom entry, top exit horizontal	FB T														
Bottom entry horizontal, top exit horizontal	FC Z														
Right entry, left exit	FDR														
Left entry, right exit	FD														
0Cr <sub>18</sub> Ni <sub>9</sub> (304)	R0														Material of wetted Tube
SS #316	RL														
PTFE	RP														
Titanium	Ti														
Non	O														Special Type
Jacket	T														
Damping	Z														
Float Number	KV**														Float Number
Standard pressure rating	N														Pressure
High pressure	H														
-80 ~ +150 °C	E														Temperature
-80 ~ +300 °C	H														
Local indicator, square housing	M1														Indicator
Intelligent indicator, square housing	M2														
Intelligent indicator, circular housing (Exid)	M3														
None	0														Signal Output
4-20mA	1														
Without	0														Matching Flange
CS	1														
SS	2														
220V <sub>AC</sub>	0														Power Supply
24V <sub>DC</sub>	1														
3.6V Battery	2														
ANSI 150#	S														Flange Standard
ANSI 300#	S3														
PN1.0	1														
None	0														Extra Device
With lining	1														
With PTFE lining	2														

