Metal Tube VA Flow Meters

FITD

LIQUID

OVERVIEW

Operation

Bass Instruments FITD series VA meter operation is based on the variable area principle. The all metal meter is ideal for a variety of gas,liquid and steam applications. These meters are indispensable where high pressure and/or high temperature operating conditions exist. The primary meter is available in 316/316L stainless steel as well as with a PTFE liner. But a wide range of corrosion resistant materials of construction are available which makes it a perfect fit for metering of aggressive applications. A broad range of connection sizes and types such as ASME, DIN and JIS flange choices along with several threaded options provide for flexible installations.

Application

- Pharmaceutical industry
- Chemical processes
- Mechanical engineering
- Liquid Filling Machines

Features

- Easy to install
- High accuracy
- Stainless steel rigid design
- Broad range of connection sizes
- Cost-effective solution
- Easy reading
- High sensitivity

OPERATING DATA

Working Pressure	40 Bar, 320 Bar opsiyonel for DN15-DN50 16 Bar, 100 Bar opsiyonel for DN80-DN250
Temperature Limit	
FITD.PK	-80°C...+300°C standard 0°C...+80°C for PTFE High Temperature 400°C
FITD.BT/ SK/ GK	-40°C...120°C 0°C...+80°C for PTFE High Temperature 400°C
Ambient Temperature	
FITD.PK	-40°C...+120°C
FITD.BT/ SK/ GK	-20°C...+60°C
Accuracy	±1%, ±1.5% ,±2% ,±2.5% of FS
Enclosure	IP67
Turndown Ratio	10:1
Straight Run Pipe Requi.	Inlet : ≥5D Outlet : ≥250 mm
Viscosity	DN15: <30 mPa.s; DN25: n<250 mPa.s; DN50-250: n<300 mPa.s
Hazardous Area	EEx ia II CT5 EEx d II CT6

MATERIALS

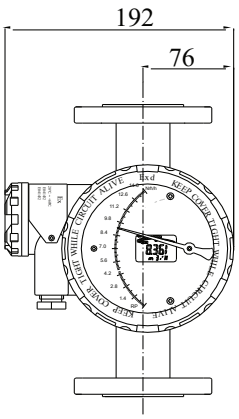
Tube	AISI 304, AISI 316, PV, PP, Hastelloy
Flange	AISI 304, AISI 316, PV, PP
Float	AISI 304, AISI 316, PV, PP, Hastelloy, Cu, Al

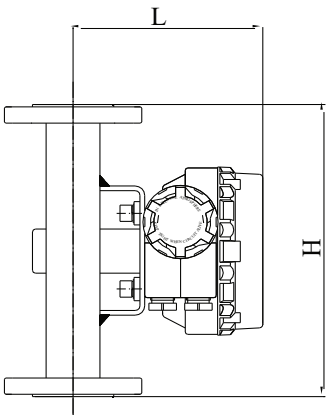
MEASURING RANGES

Water	20°C, 10-300000 L/h others on request
Air	0.1013 MPa, 20°C, 0.7-3000 Nm³/h others on request

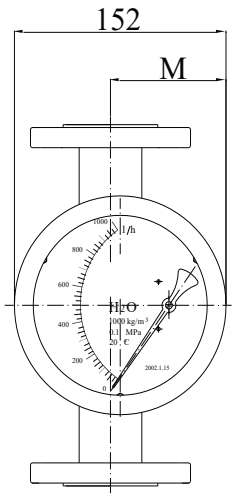
Type	Water	Air	Connection
FITD.PK.015	1...10 l/h	0,03...0,3 Nm³/h	DN15
	2,5...25 l/h	0,06...0,6 Nm³/h	
	6...60 l/h	0,1...1 Nm³/h	
	10...100 l/h	0,16...1,6 Nm³/h	
	16...160 l/h	0,75...7 Nm³/h	
	25...250 l/h	1...10 Nm³/h	
	40...400 l/h	1,5...15 Nm³/h	
	60...600 l/h	1,8...18 Nm³/h	
	100...1000 l/h	2,4...24 Nm³/h	
FITD.PK.020	160...1600 l/h	4,8...48 Nm³/h	DN20
	250...2500 l/h	7,5...75 Nm³/h	
FITD.PK.025	160...1600 l/h	7,5...75 Nm³/h	DN25
	250...2500 l/h	10...100 Nm³/h	
	400...4000 l/h	15...150 Nm³/h	
	600...6000 l/h	18...180 Nm³/h	
FITD.PK.040	600...6000 l/h	18...180 Nm³/h	DN40
	800...8000 l/h	24...240 Nm³/h	
	1000...10000 l/h	30...300 Nm³/h	
FITD.PK.050	800...8000 l/h	30...300 Nm³/h	DN50
	1...10 m³/h	48...480 Nm³/h	
	1,6...16 m³/h	60...600 Nm³/h	
	2...20 m³/h	75...750 Nm³/h	
FITD.PK.065	1,6...16 m³/h	60...600 Nm³/h	DN65
	2...20 m³/h	75...750 Nm³/h	
	2,5...25 m³/h	90...900 Nm³/h	
FITD.PK.080	2,5...25 m³/h	120...1200 Nm³/h	DN80
	3...30 m³/h	150...1500 Nm³/h	
	6...60 m³/h	180...1800 Nm³/h	
FITD.PK.100	8...80 m³/h	210...2100 Nm³/h	DN100
	10...100 m³/h	240...2400 Nm³/h	
FITD.PK.125	12,5...125 m³/h	300...3000 Nm³/h	DN125
	15...150 m³/h	380...3800 Nm³/h	
FITD.PK.150	15...150 m³/h	380...3800 Nm³/h	DN150
	18...180 m³/h	450...4500 Nm³/h	
	20...200 m³/h	500...5000 Nm³/h	

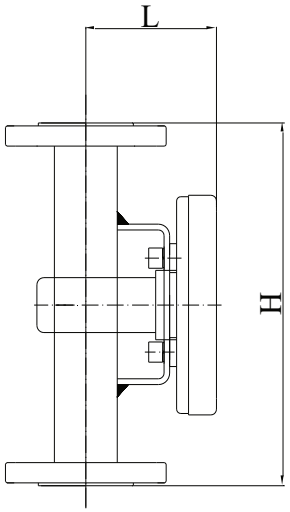
TECHNICAL DRAWINGS AND DIMENSIONS





Dimensions		H	L
Nominal size	DN15	250	150
	DN20	250	156
	DN25	250	159
	DN32	250	165
	DN40	250	171
	DN50	250	174
	DN65	250	181
	DN80	250	188
	DN100	250	197
	DN125	400	207
	DN150	400	221
	DN200	450	246
	DN250	500	273





Dimensions		H	L	M
Nominal size	DN15	250	56	78
	DN20	250	62	83
	DN25	250	65	87
	DN32	250	71	93
	DN40	250	77	98
	DN50	250	80	101
	DN65	250	88	110
	DN80	250	95	115
	DN100	250	103	125
	DN125	400	113	134
	DN150	400	127	150
	DN200	450	152	174
	DN250	500	178	200

ELECTRICAL DATA(FOR GK, SK, BT)

Signal Output	Pulse (push-pull) 4...20 mA or 0...10 V DC on request
Power Supply	15-70 VDC, 220 VAC/45-65 Hz
Electrical Connection	M20x1.5, 1/2"G, 1/2"NPT, 3/4"G, 3/4"NPT (for type GK and SK)
Display"relay operating"	LED
Ex Electrical Information	Ui= 28 V, Ii= 93 mA, Pi= 0.65 W, Ci≤ 5 nF, Li= 0 mH
Ex Barrier Information	Uo≤ 28 V, Io≤ 93 mA, Po≤ 0.65 W, Co≥ Ci+Cc Lo≥ Li+Lc

ORDERING

FITD.PK								Mechanical indicator
FITD.GK								Mechanical indicator with LCD display
FITD.SK								Mechanical indicator with switches selectable
FITD.BT								Mechanical indicator battery powered (LCD display)
Pipe Diameter	XXX							Specify in standard pipe diameter max. DN250 (example DN50: 050)
Tube Material		04						AISI 304 stainless steel
		16						AISI 316 stainless steel
		PV						PVC
		PP						PP (Polypropylene)
		HA						Hastelloy
Flange Material			04					AISI 304 stainless steel
			16					AISI 316 stainless steel
			PV					PVC
			PP					PP (Polypropylene)
Float Material				04				AISI 304 stainless steel
				16				AISI 316 stainless steel
				PV				PVC
				PP				PP (Polypropylene)
				HA				Hastelloy
				CU				Copper
				AI				Aluminum
Accuracy					10			±1% FS
					15			±1.5% FS
					20			±2% FS
					25			±2.5% FS
Connection						F		Flange
						T		Thread
						H		Hygiene Clamp
Enclosure							1	IP67
							2	IP68
Hazardous Area								N None
								Xi EEx ia II CT5
								Xd EEx d II CT6

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