



WMAG 21



WIRATAMA CATALOG

ELECTROMAGNETIC FLOW METER

General

WMAG21 series electromagnetic flow meters are specializing in measuring conductive liquid (conductivity > 5 μ S/cm). These series flow meters have high applicability for low flow rate, sewage, acid and alkali liquid, low abrasive slurry. Our products have advance intellectual-tech, field show and communicator.

WMAG21 series electromagnetic flow meter

Applications

Electromagnetic flow sensors WMAG21 are precision measuring devices, suitable for determining the flow rate of nearly any electrically conductive fluid, but also for substances such as sludge, pulp and paste. Due to the magnetic field, the device can be used to measure flow rates up to 12 m/s (39.3 ft/s) and a minimum conductivity of 5 μ S/cm, when using a synchronized static field. The entire measuring device comprises a flow sensor and a dedicated transmitter. Those can be delivered either separately or as a compact unit. The electromagnetic flow sensors WMAG30 are applied mainly in the following

- Water and sewage plants
- Chemical and pharmaceutical industry
- Food and beverage industry
- Mining, cement and mineral mate
- Pulp and paper industry , Energy industry
- Steel industry, public utilities

Features

- Offer easy installation, User-friendliness operation.
- Keep in long-time use in 150 degree hot water
- High temperature sensor
- High temperature industrial components
- Insulating temperature parts between sensor and converter



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www.wma.co.id

Technical Data

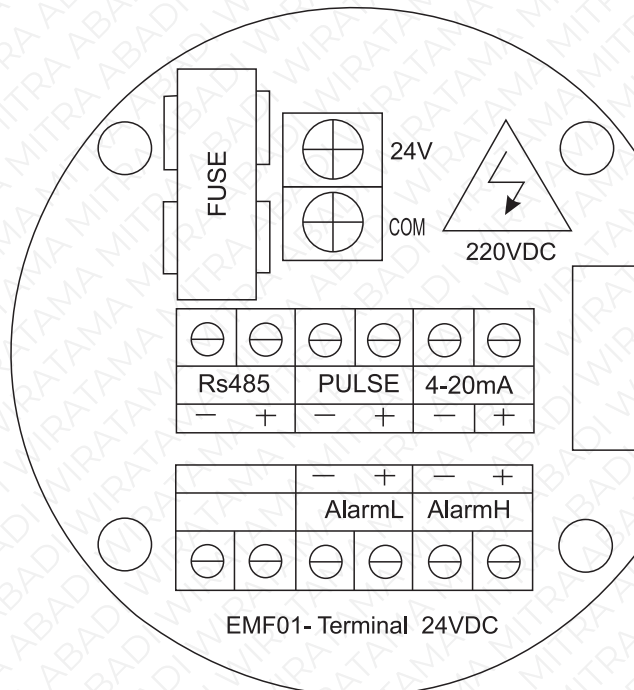
Velocity range	0.01m/s to 10 m/s
Accuracy	±0.5% or ±0.2% ten point nonlinear correctionauto zero calculation and empty check function bidirectional measurementselectrode
Size	3/8 inch to 72 inch
Pressure rating	PN1.6 to PN40 MPa,Class150/300/600/900,JIS10k/20k
Body material	carbon or sus304 or 316L stainless steel
Flange material	carbon or sus304 or 316L stainless steel
Cover materila of sensor	carbon or sus304 or 316L
Process connect	flange or threaded or clamp connect
Lining material	ptfe or chloroprene rubber or fep or pu
Electrode material	316L or hastelloy alloy or titanium or tantalum
Power supply	24VDC or 110VAC or 220VAC
Output signal	4-20mA and pulse
Alarm signal	high and low alarm output
Communcion	Hart or RS485(modbus)
Display	LCD , 4-line, flow rate and total flow
Unit	m3,liter, gallon, ton(t) ,kg
Fluid temperature	up to180 °C

Flow Range

Size	Qmin (m³/h)	Qmax(m³/h)	Size	Qmin(m³/h)	Qmax(m³/h)	Size	Qmin(m³/h)	Qmax(m³/h)
Dn 20	0.11	11	Dn125	4.4	441	500	71	7065
Dn 25	0.18	18	Dn150	6.4	635	600	102	10170
Dn 32	0.29	29	Dn200	11.3	1130	700	139	13840
Dn 40	0.45	45	Dn250	17.7	1766	800	181	18080
Dn 50	0.71	71	Dn300	25.5	2543	900	229	22890
Dn 65	1.19	119	Dn350	34.5	3461	1000	283	28260
Dn 80	1.81	180	Dn400	45.2	4521			
Dn 100	1.83	282	Dn450	57.3	5722			

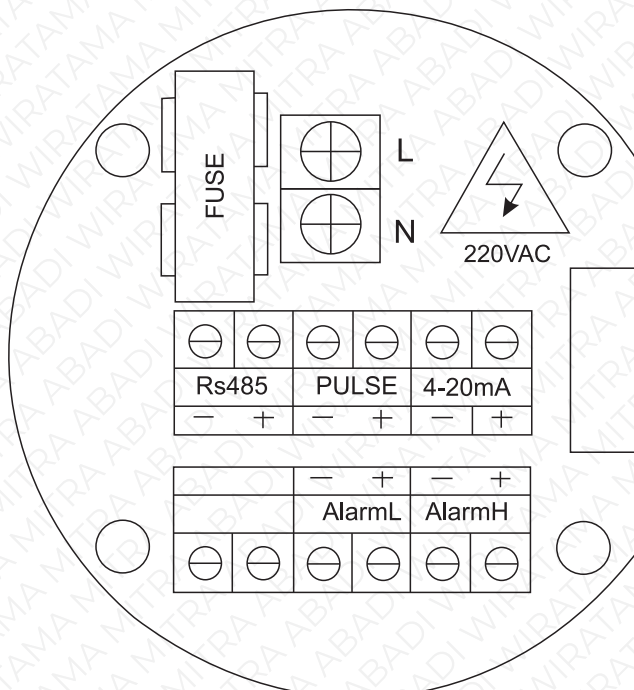


Power 24VDC



24VDC POWER SUPPLY TERMINAL BLOCK SCHEMATIC

Power 220VAC

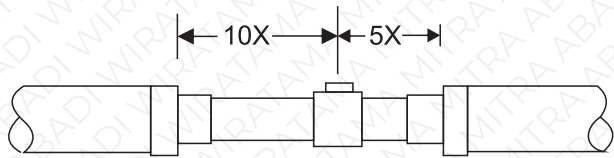


220VAC POWER SUPPLY TERMINAL BLOCK SCHEMATIC

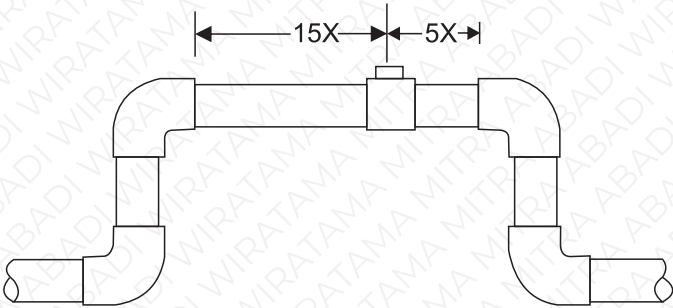


**NUMBER OF PIPE DIAMETER
(X = Diameter)**

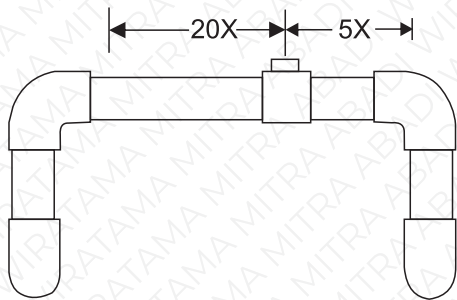
Reduced Pipe



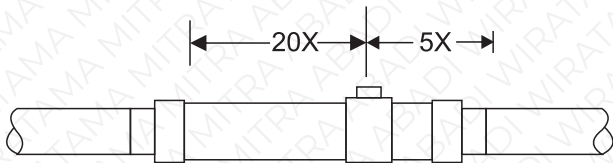
Two Elbows, In Plane



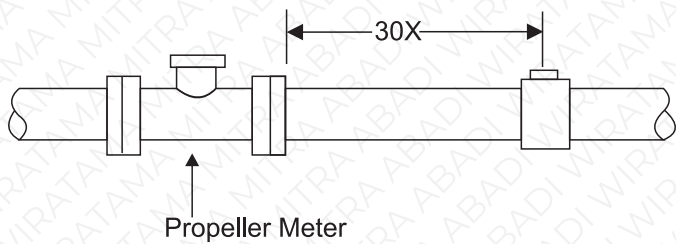
Two Elbows, Out Of Plane



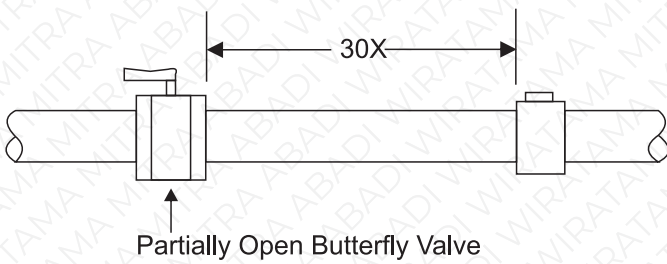
Expanded Pipe



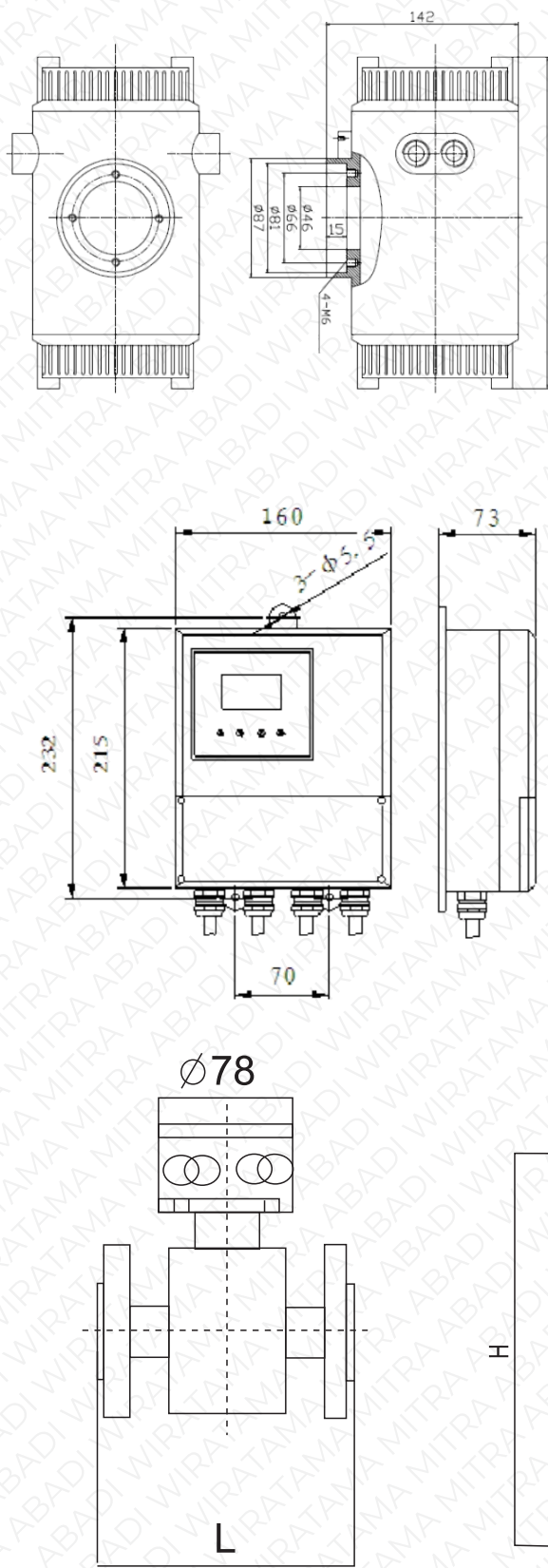
Spiral Flow



Swirling Flow

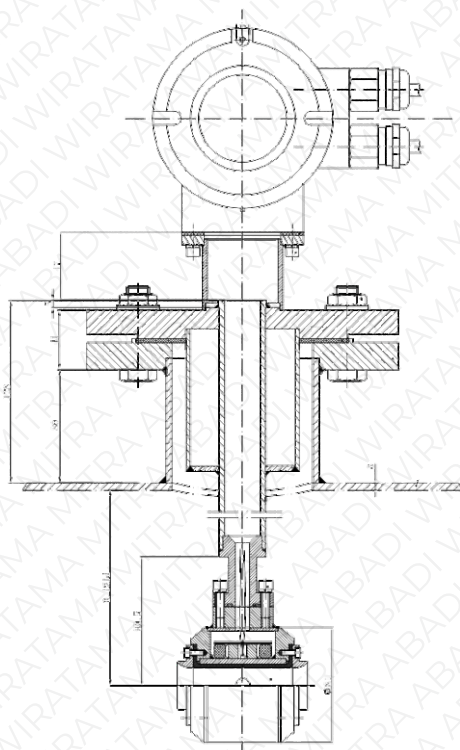


Dimension



Size Data

SIZE	L mm	SIZE	L mm
DN10	160	DN250	400
DN15	160	DN300	500
DN20	160	DN350	500
DN25	160	DN400	600
DN32	160	DN450	600
DN40	200	DN500	600
DN50	200	DN600	600
DN65	200	DN700	700
DN80	200	DN800	800
DN100	250	DN900	900
DN125	250	DN1000	1000
DN150	300	DN1200	1200
DN200	350	DN1400	1400



Model Table

WMAG21	I1	10	16	2A	1	OO	R	/N	Detail description
	I1								Inline
	I2								Insertion
		20							DN20
									-
		1000							DN100
			10						PN1.0 Mpa
			16						PN1.6MPa
			25						PN2.5MPa
			40						PN4.0MPa
				2A					PTFE lining,316L electrode
				1A					rubber lining,316L electrode
					0				220V.AC
					1				24V.DC
						OO			Integral type, IP65
						10			Split type, IP65
						11			Split type, IP698
							R		RS485(modbuse protocol)
							N		No communication
								/N	No cable (integral type)
								/**m	**meter cable (split type)

