

MF200

METAL TUBE FLOW METER MF200

Technical Data

MF200 for low flow of gas, liquid and steam

Material: aluminum alloy painted for case; body in stainless steel.

Indication: via magnetic coupling (no seals)

Scales: calibrated in l/h, m³/h, kg/h, %

Flow rate: water—0.4 l/h up to 6000 l/h
air—21 NL/h up to 150,000 NL/h

Connection types: BSP, NPT, flange type on request

Working Temperature:

Combine with electronic parts: -40°C~+150°C

Combine without electronic parts: -40°C~+180°C

Working Pressure: standard 100 kg/cm²; other options upon request

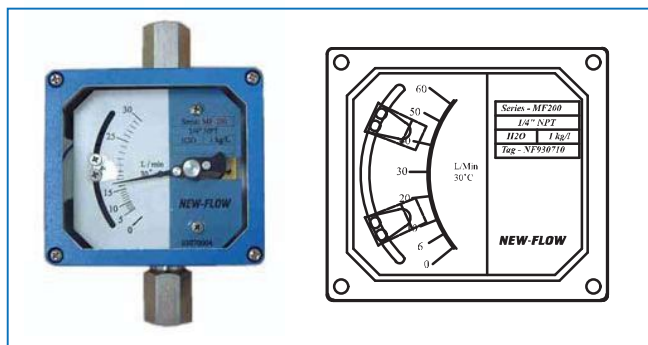
Connection size: 1/4" ~ 2"

Protection Class: IP65

Accuracy: ± 2% F.S (± 1.6% F.S option)

Alarm Option

MF200—C (Inductive Switch)



• Adjustable inductive alarm switch

Inductive sensors slotted type : 3.5mm slot switch
DC, voltage 2 wire's to DIN19234(NAMUR) for use in hazardous areas.

— **Power supply:** 8 Vdc(Ri.approx. 1kΩ)

— **Current consumption:** active face uncovered 3mA
active face covered 1mA

— **Ambient temp:** -25°C ~ +100°C

Isolated barriers output relay for inductive sensor :

- Rail mounting
- Control circuit EEx ia IIC
- EMC acc to NAMUR NE21
- Contact loading 253 VAC 2A SPDT 40 VDC 2A

1 adjustable alarm

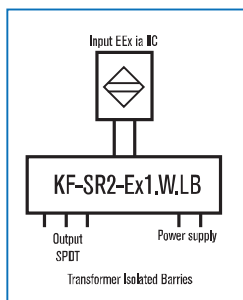
Contact setting point should be within 10% to 100% of F.S.

For 24VDC : KFD2-SR2-Ex1.W
115VAC : KFA5-SR2-Ex1.W
230VAC : KFA6-SR2-Ex1.W

2 adjustable alarm

The second setting point should be a gap 35% from first setting point.

For 24VDC : KFD2-SR2-Ex2.W
115VAC : KFA5-SR2-Ex2.W
230VAC : KFA6-SR2-Ex2.W



MF200—R (Reed Switch)



• Adjustable reed alarm switch

Alarm Switch: one or two setting points, form A bistable type (N.O. type)

Switch Rating: AC 125V 0.5A / DC 100V 10W /
Max. DC 250V < 1mA

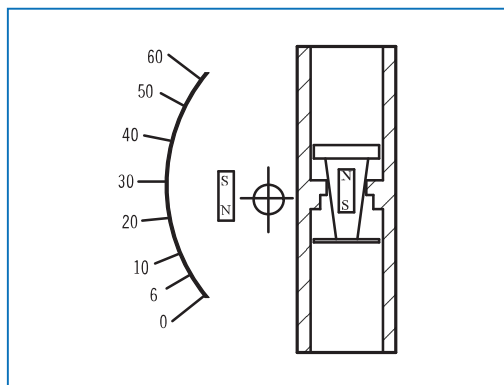
1 adjustable alarm

Contact setting point should be within 20% to 100% of F.S.

2 adjustable alarm

The second setting point should be a gap 20% from first setting point.

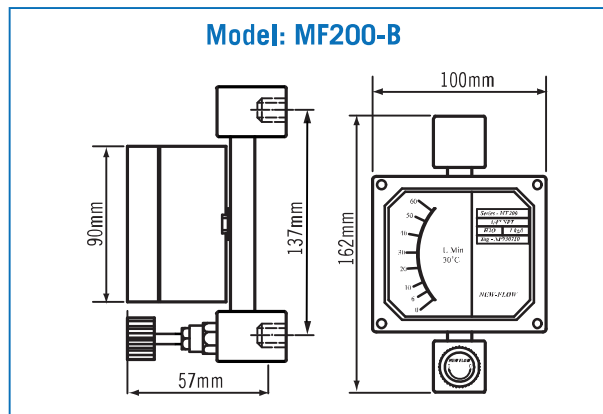
Principle



Dimensional Drawings

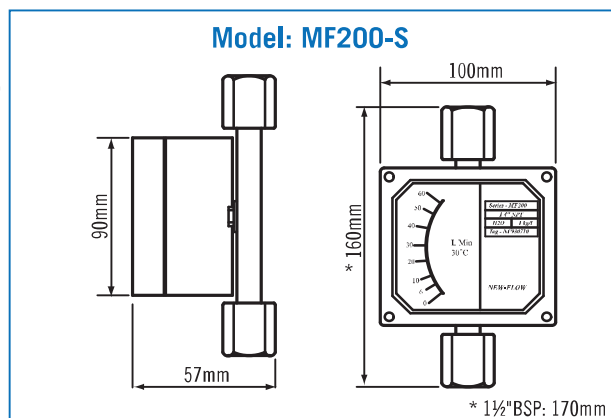
MF200-B Metal Tube Flow Meter

Basic Model:
Rear connection + needle valve



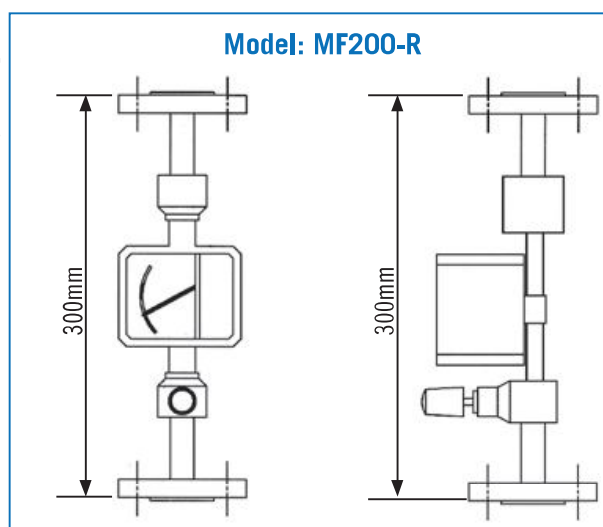
MF200-S Metal Tube Flow Meter

Basic Model:
Thread connection



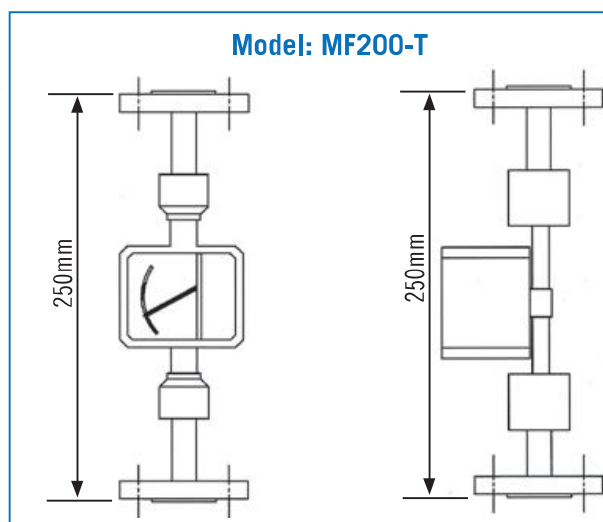
MF200-R Metal Tube Flow Meter

Flange-needle Model:
flange connection + needle valve



MF200-T Metal Tube Flow Meter

Flange Model:
flange connection



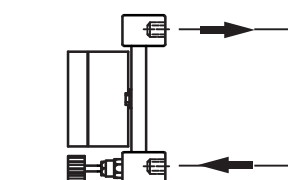
Standard Scales

Tube	L/H 20°C Water	NL/H Air 20°C 1.013 bar	ΔPmm Water	BSP/NPT
MF2001	0.4 ~ 4	21~210	340	1/4"
MF2002	0.6 ~ 6	33~330	340	1/4"
MF2003	1 ~ 10	48~480	340	1/4"
MF2004	1.5 ~ 15	60~600	340	1/4"
MF2005	2 ~ 20	72~720	340	1/4"
MF2006	3 ~ 30	90~900	340	1/4"
MF2007	5 ~ 50	120~1200	340	1/4"
MF2008	6 ~ 60	180~1800	340	1/4"
MF2009	10 ~ 100	300~3000	340	1/4"
MF2010	15 ~ 150	500~5000	340	1/2"
MF2011	25 ~ 250	750~7500	340	1/2"
MF2012	40 ~ 400	1200~12000	340	1/2"
MF2013	60 ~ 600	1800~18000	340	1/2"
MF2014	75~750	2000~20000	340	1"
MF2015	100 ~ 1000	3000~30000	340	1"
MF2016	150~1500	5000~50000	450	1-1/2"
MF2017	200~2000	7500~75000	450	1-1/2"
MF2018	300~3000	9000~90000	450	1-1/2"
MF2019	350~3500	11000~110000	450	1-1/2"
MF2020	400~4000	12000~120000	450	1-1/2"
MF2021	600~6000	15000~150000	520	2"

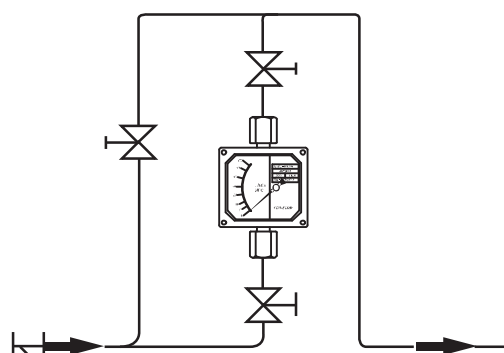
NOTE

Performance Technical Data are effective with date of issue and are subject to change without prior notice.

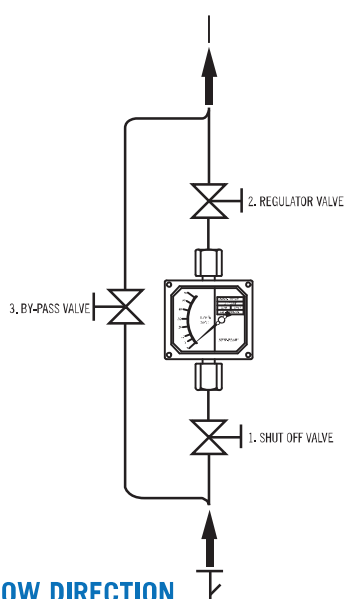
Installation



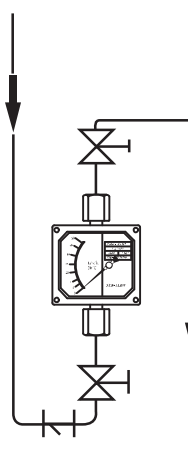
REAR FLOW DIRECTION



HORIZONTAL FLOW DIRECTION



UP FLOW DIRECTION



FALLING FLOW DIRECTION

SPECIAL NOTE

No minimum length requirement for straight pipe.

NOTE:

1. Custom-made flow range and flange size upon request.
2. Please fill in the ordering information and service condition, and fax this sheet along with your inquiry to 886-7-8225588.

Special instruction, if any:

Service Condition:

Fluid name: _____

Sp. Gr. (density): _____

Viscosity: _____

Press.: _____

Temp.: _____

Full scale: _____

MF200	Code	Connection		Code	Connection size				
	S	Thread connection		4B	1/4" BSP (Female)				
	R	Connection with needle valve		4N	1/4" NPT (Female)				
	T	Flange connection		2B	1/2" BSP (Female)				
	B	Rear connection with needle valve		2N	1/2" NPT (Female)				
		Code	Type	6B	3/4" BSP (Female)				
		G	Indicating only	6N	3/4" NPT (Female)				
		GS	Indicating + switch	1B	1" BSP (Female)				
		Code	Alarm	1N	1" NPT (Female)				
		0	Without alarm switch	15B	1½" BSP (Female)				
		C1	One inductive alarm switch	15N	1½" NPT (Female)				
		C2	Two inductive alarm switches	20B	2" BSP (Female)				
		R1	One reed switch	20N	2" NPT (Female)				
		R2	Two reed switches	2F	½" Flange				
			Code	Body material	6F	¾" Flange			
			A	SS316	10F	1" Flange			
			Code	Float & Wetted part material	15F	1 ½" Flange			
			A	SS316	20F	2" Flange			
				Code	Connection rating	Code	Protection Class		
				0	Thread connection	IP	IP65		
				5	JIS 5K		Code	Fluid	
			10	JIS 10K		G	Gas		
			20	JIS 20K		O	Oil		
			15	ANSI 150#		L	Liquid		
			30	ANSI 300#		S	Steam		
			40	ANSI 400#			Code	Range	
			60	ANSI 600#		S	Standard range		
			T	Other: _____			Please directly fill out the flow range in the order code.		
MF200									Complete ordering code

Complete ordering code