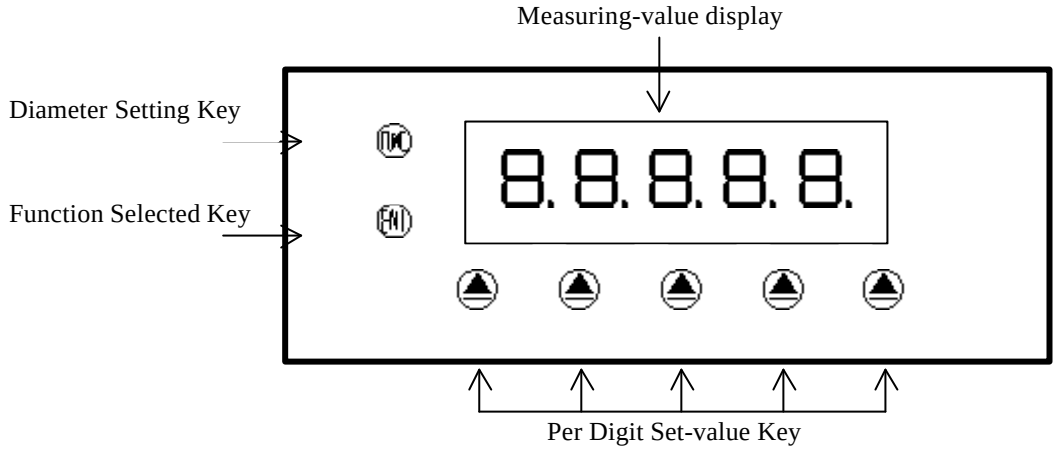
AXE MICROPROCESS RPM/LINE-SPEED/HZ METER

MF series

■FEATURES

◎ Accept more type sensor(MOS/TTL/NPN/PNP),finish RPM/LINE-SPEED /HZ measuring
◎ Accuracy 0.01% F.S.
◎ Readout range 0~99999
◎ Accepts input rates up to 50KHz
◎ Decimal point can be modified
◎ Input pulse of revolution can be modified(1~9999)
◎ Diameter(LINE-SPEED)/scale(RPM)can be modified(0.0001~9.9999)
◎ LINE-SPEED unit can be modified(Meter/Min,Foot/Min,Yard/Min) *Meter/Min is calculate base
◎ Input pulse cut-off sampling time can be modified(0.1~99.9 sec)
◎ Display average times can be modified(1~99 times)
◎ Display type of RPM or LINE-SPEED can be modified
◎ 0.56" highlight display
◎ Man-machine interface,easy to operate
◎ EEPROM saveing,data safekeeping about 10 years

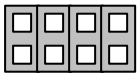
■NAME OF PARTS



■Input Function Jumper Description

◎SW 1&2 -> Input pulse type selection
◎SW 3 -> Input pulse trigger levels
◎SW 4 -> Ipunt pulse max. rate

SW

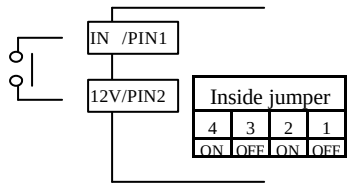


ON (close)
OFF (open)

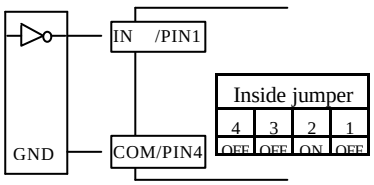
Description:
◎SW1=ON(SW2=OFF)->NPN pulse input(sinking)
◎SW2=ON(SW1=OFF)->PNP pulse input(source)
◎SW3=OFF -> Vin≧7.5V pulse trigger
Vin≦5.5V pulse no trigger
SW3=ON -> Vin≧3.7V pulse trigger
Vin≦2.0V pulse no trigger
◎SW4=OFF -> Input pulse max. rate 50KHz
SW4=ON -> Input pulse Max. rate 50Hz

■Connect Diagram

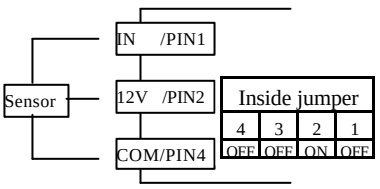
◎Contact input(PNP)



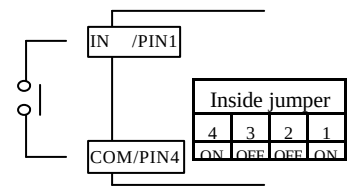
◎CMOS input(12V or 15V)



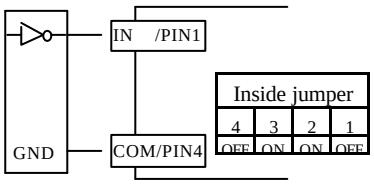
◎Sensor input(PNP 12V)



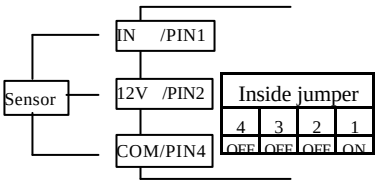
◎Contact input(NPN)



◎TTL input(5V)

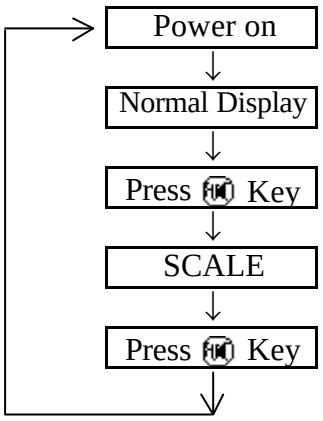


◎Sensor input(NPN 12V)

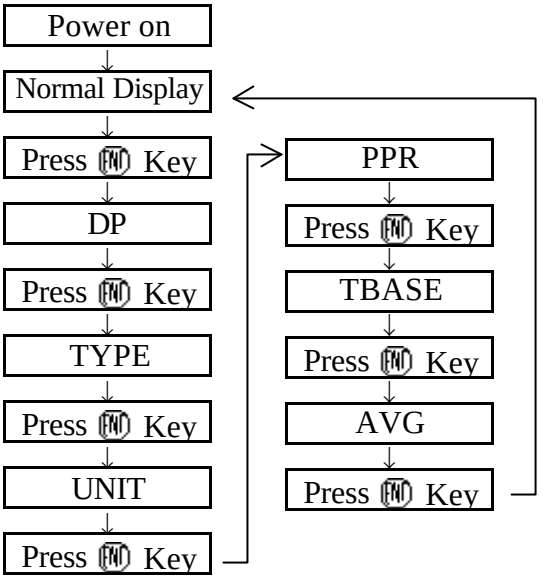


■Easy operation manual

(Diameter or Scale operation manual)



(Parameter operation manual)



註:Calculate Formula

RPM=Scale*Input Hz*60/PPR

LINE-SPEED=Diameter*RPM*3.1416*UNIT

Step	Parameter Mark Description	Parameter Mark	Operation Manual
1-1	Normal Display	12345	Press FUN key about 3 sec into step 1-2 DP setting page
1-2	DP(Decimal Point setting page)Value on EEPROM reset=LSB	dP 0	1. Decide decimal point position with per digit ▲ key 2. Press FUN key enter data and into TYPE setting page
1-3	TYPE(Input Type setting page)Value on EEPROM reset=RPM	tYPE rPn	1.Decide input type with per digit ▲ key(RPM/LINE) 2.Press FUN key enter data and into UNIT setting page
1-4	UNIT(LINE-SPEED Unit setting page)value on EEPROM reset=METER	Un.t nEtEr	1.Decide unit with per digit ▲ key(METER/FOOT/YARD) 2.Press FUN key enter data and into PPR setting page
1-5	PPR(Pulse Per Revolution setting page) Value on EEPROM reset=1	PPr 0001	1.Decide pulse per revolution with per digit ▲ key(1~9999) 2.Press FUN key enter data and into TBASE setting page
1-6	TBASE (Input sampling Time Base setting page) Value on EEPROM reset=2.0	tbASE 02.0	1.Decide input sampling time base with per digit ▲ key(0.1~99.9sec) 2.Press FUN key enter data and into AVG setting page
1-7	AVG (Display Average times setting page) Value on EEPROM reset=2	AvG 02	1.Decide display average times with per digit ▲ key(1~99) 2.Perss FUN key enter data and return normal display *When average times increment,display response time add 100mS
Step	Parameter Mark Description	Parameter Mark	Operation Manual
2-1	Normal Display	12345	Press FUN key,into SCALE setting page
2-2	SCALE (Display Scale setting page) Value on EEPROM reset=1	SCALE 1.0000	1.Decide display scale with per digit ▲ key(0.0001~9.9999) 2.Press FUN key enter data and return normal display

Appendix	Error Mark Description	Error Mark	Analyze & Description
1	Input over error detect	.oFL	Input over range(max. rate 50KHZ)
2	Display over error detect	doFL	Display over range(max. rate 99999)
3	EEPROM error detect	E-00	1.External interference when EEPROM read/write 2.EEPROM write over 100 million times(guarantee 10 years)