

DIN W48×H24mm, W72×H36mm Loop powered digital scaling meter [M4NS/M4YS Series]

Ordering information

M	4	N	S	N	A	
					Measuring input range	A DC4-20mA
					Power supply	N Loop powered type
					Measuring function	S Scaling
					Size	N DIN W48×H24mm Y DIN W72×H36mm
					Digit	4 9999(4digit)
					Item	M Meter

Specifications

Model	M4NS-NA	M4YS-NA
Appearances & Dimensions	 [W48×H24×L48mm]	 [W72×H36×L77mm]
Power supply	Loop powered type	
Display method	7 Segment LED display	
Character height	10mm	14mm
Display accuracy*1	F.S. 0.3% rdg ±1digit	
Display cycle	Selectable 0.5sec./1sec./2sec./3sec./4sec./5sec.	
Resolution	12,000 resolution	
Max. display range	-1999 to 9999	
Setting type	Setting type with the front keys	
Measuring input range*2	DC4-20mA	
Self-diagnosis function	Error display function(HHHH/LLLL)	
Insulation resistance	Min. 100MΩ(at 500VDC megger)	
Dielectric strength	2000VAC 50/60Hz for 1minute	
Vibration	Mechanical	0.75mm amplitude at frequency of -10 to 55Hz(for 1 min.) in each of X, Y, Z directions for 1hour
	Malfunction	0.5mm amplitude at frequency of -10 to 55Hz(for 1 min.) in each of X, Y, Z directions for 10minute
Shock	Mechanical	300m/s ² (approx. 30G) in each of X, Y, Z directions for 3 times
	Malfunction	100m/s ² (approx. 10G) in each of X, Y, Z directions for 3 times
Environ-ment	Ambient temperature	-10 to 50°C, storage: -25 to 60°C
	Ambient humidity	35 to 85%RH, storage: 35 to 85%RH
Unit weight	Approx. 44g	Approx. 110g

※1: Ambient temperature(25°C±5°C): F.S. 0.3% rdg of ±1Digit(-10 to 50°C: F.S. 0.4% rdg ±1Digit)

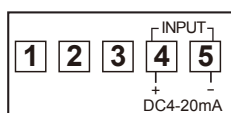
※2: Impedance between input lines: Max. 600Ω(based on 24VDC)

Please be aware that activating input power is based on 24VDC, and the recommended impedance also will be lowered if the activating power is lower.

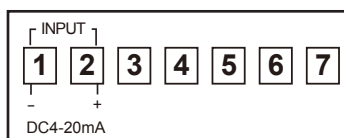
※Environment resistance is rated at no freezing or condensation.

Connections

• M4NS-NA



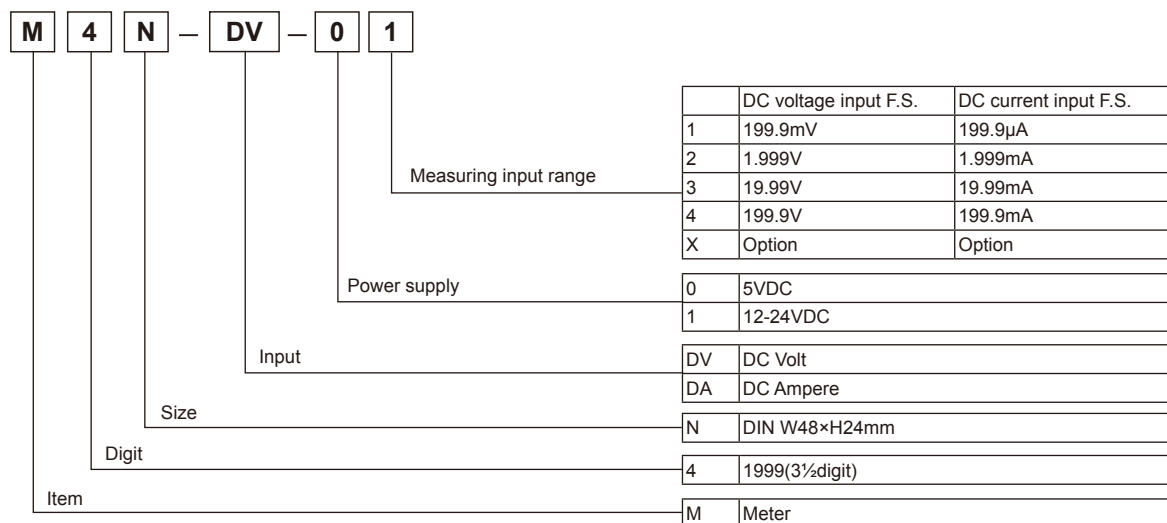
• M4YS-NA



DIN W48×H24mm Small size digital panel meter [M4N Series]

■ Ordering information

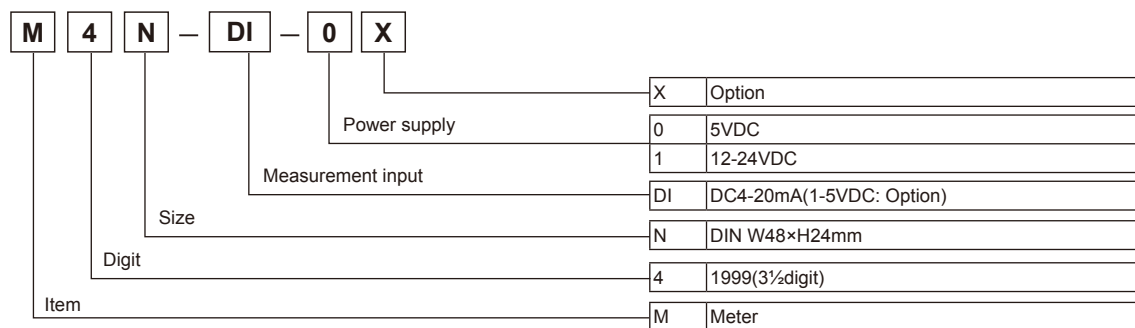
© DC VOLT METER / DC AMPERE METER



※M4N series is to measure DC only. AC voltage and AC current is not available to be measured.

※Measuring range for direct connection is max. 200VDC, max. DC200mA.

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※1-5VDC measuring input is optional.

If there is no additional order, its factory default is DC4-20mA.

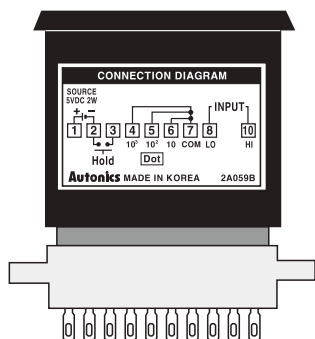
Photo electric sensor
Fiber optic sensor
Door/Area sensor
Proximity sensor
Pressure sensor
Rotary encoder
Connector/ Socket
Temp. controller
SSR/ Power controller
Counter
Timer
Panel meter
Tacho/ Speed/ Pulse meter
Display unit
Sensor controller
Switching mode power supply
Stepper motor& Driver&Controller
Graphic/ Logic panel
Field network device

Specifications

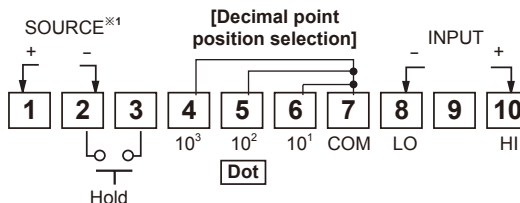
Model	M4N-DV-□□	M4N-DA-□□	M4N-DI-□□
Appearances & Dimensions			
	W48×H24×L59mm		
Measurement input	DC voltage	DC ampere	DC4-20mA
Power supply	5VDC, 12-24VDC		
Allowable voltage range	90 to 110% of rated voltage		
Power consumption	2W		
Display method	7 Segment red LED display(Character height : 10mm)		
Max. display range	Max. 1999		
Display accuracy	F-S ±0.2% rdg ±1digit		
Sampling period	300ms		
A/D switching method	Dual integral method		
Response time	Approx. 2sec.(0 to 1999)		
Max. allowable input	150% of measurement input range		
Sampling time	2.5 times/sec.		
Insulation resistance	Min. 100MΩ(at 500VDC megger)		
Dielectric strength	2000VAC 50/60Hz for 1 minute		
Noise strength	±100V the square wave noise(pulse width : 1μs) by the noise simulator		
Vibration	Mechanical	0.75mm amplitude at frequency of 10 to 55Hz(for 1 min.) in each of X, Y, Z directions for 1hour	
	Malfunction	0.5mm amplitude at frequency of 10 to 55Hz(for 1 min.) in each of X, Y, Z directions for 10minutes	
Shock	Mechanical	300m/s²(approx. 30G) in each of X, Y, Z directions for 3 times	
	Malfunction	100m/s²(approx. 10G)in each of X, Y, Z directions for 3 times	
Environ-ment	Ambient temperature	-10 to 50°C, storage : -20 to 60°C	
	Ambient humidity	35 to 85%RH, storage : 35 to 95%RH	
Unit weight	Approx. 44g		

※Environment resistance is rated at no freezing or condensation.

Connection



※Socket Pin No : 1 2 3 4 5 6 7 8 9 10



※1: 5VDC, 12-24VDC

※In case of changing position of decimal point, disconnect switching pattern point on PCB and connect terminal contact according point to be changed.

※Socket pin 9, NC terminal, is not connected at inside.

DIN W48×H24mm Small Digital Multi Panel Meter [M4NN Series]

Ordering information

M	4	N	N	-	DV	-	1	N	
									Control output
									Power supply
									Input type
									Type
									Size
									Digit
									Item
									N
									1
									2
									1
									DV
									DA
									AV
									AA
									N
									N
									4
									M

Specifications

Model	M4NN-DV-1□	M4NN-DA-1□	M4NN-AV-1□	M4NN-AA-1□
Appearances & Dimensions	NEW CE  [W48×H24×L54mm]			
Input	DC voltage	DC current	AC voltage, frequency	AC current, frequency
Max. allowable input	-110% to 110% of the rated measurement input range (when not using MINUS input : -10% to 110%)		110% of the rated measurement input range	
Power supply	5-24 VDC			
Allowable voltage range	5-26.4VDC			
Power consumption	3W			
Display method	7 segment LED Display(red), character height: 11mm			
Display accuracy	•23°C±5°C-DC type : ±0.1% F.S. ±2digit / AC Type ±0.3% F.S. ±3digit ※For 5A terminal of M4NN-DA, AA type, within ±0.3% F.S. ±3digit •-10°C to 50°C-DC/AC type : ±0.5% F.S. ±3digit / Frequency : ±0.5% F.S. ±3digit ※For 5A terminal of M4NN-DA, AA type, ±1% F.S. ±3digit			
Display cycle	Setting displays cycle in RUN mode(selectable per 0.1 sec. within 0.1 to 5.0 sec.)			
A/D conversion method	Practical oversampling using successive approximation ADC			
Sampling cycle	50ms(resolution 1/12,000) 16.6ms(resolution 1/12,000)			
Max. display range	-1999 to 9999(4 digit)			
Preset output※1	NPN/PNP Open Collector output: 12-24VDC±2V 50mA Max.(resistance load)			
AC measurement※2	—		Average value (AVG) measurement	
Frequency measurement ※2	—		Measurement range : 0.100 to 9999Hz(variable by decimal point position)	
Insulation resistance	Min. 100MΩ (at 500VDC megger)			
Dielectric strength	2,000VAC for 1 min.(between external terminals and case)			
Noise resistance	±2kV the square wave noise (pulse width: 1μs) by the noise simulator			

※1. Indicator (M4NN-□□-1N) model does not have output function.

※2. AC, frequency measurement functions are only for AC measurement type.

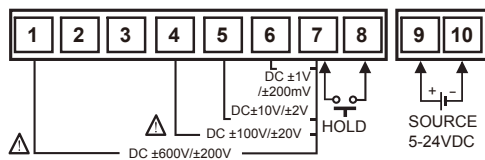
Specifications

Model		M4NN-DV-1□	M4NN-DA-1□	M4NN-AV-1□	M4NN-AA-1□
Vibration	Mechanical	0.75mm amplitude at frequency of 10 to 55Hz(for 1 min.) in each of X, Y, Z directions for 2 hours			
	Malfunction	0.5mm amplitude at frequency of 10 to 55Hz(for 1 min.) in each of X, Y, Z directions for 10 min.			
Shock	Mechanical	100m/s ² (approx. 10G) in each of X, Y, Z directions for 3 times			
	Malfunction	300m/s ² (approx. 30G) in each of X, Y, Z directions for 3 times			
Environment	Ambient temperature	-10 to 50°C, storage: -20 to 60°C			
	Ambient humidity	35 to 85%RH, storage: 35 to 85%RH			
Connection		Plug/Socket terminal block(accessory)			
Insulation type		Double insulation or reinforced insulation (mark: □, dielectric strength between the measured input part and the power part: 1kV)			
Unit weight		Approx. 28g			

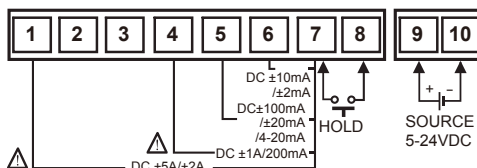
※ Environment resistance is rated at no freezing or condensation.

Connections

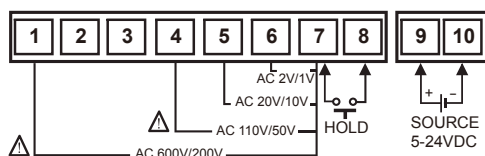
• M4NN-DV-1□



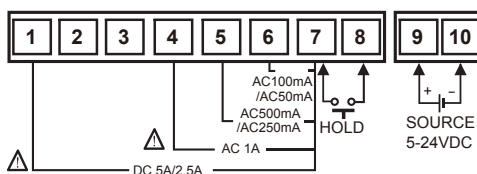
• M4NN-DA-1□



• M4NN-AV-1□

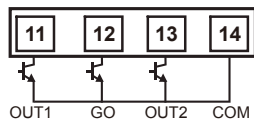


• M4NN-AA-1□

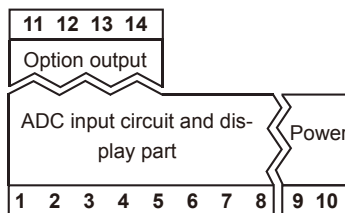
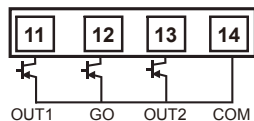


※Input and output are insulated from the power.

• NPN Open Collector



• PNP Open Collector



W75×H25mm Digital graphic panel meter for mosaic panel [M4V]

Specifications

Model	M4V				
Appearances & Dimensions	 [W75×H25×L91mm]				
Measurement function	DC voltage			DC ampere	
Measurement input ※1	0-2VDC	1-5VDC	0-10VDC	DC0-1mA	DC4-20mA
Max. allowable input	110% of measurement input				
Power supply	12-24VDC				
Allowable voltage range	90 to 110% of rated voltage				
Power consumption	Approx. 2W				
Display method	7 Segment red LED display(Segment height : 14mm)				
Display accuracy	0 to 50°C : F.S. ±0.2% rdg ±1digit -10 to 0°C : F.S. ±0.3% rdg ±1digit				
Sampling period	500ms				
Setting method	Scale set by front swithces				
Set-diagnosis	Error indication				
Insulation resistance	Min. 100MQ(at 500VDC megger)				
Dielectric strength	2000VAC 50/60Hz for 1 minute				
Noise strength	±300V the square wave noise(pulse width : 1μs) by the noise simulator				
Vibration	Mechanical	0.75mm amplitude at frequency of 10 to 50Hz(for 1 min.) in each of X, Y, Z directions for 1hour			
	Malfunction	0.5mm amplitude at frequency of 10 to 50Hz(for 1 min.) in each of X, Y, Z directions for 10minutes			
Shock	Mechanical	300m/s²(approx. 30G) in X, Y, Z direction for 3 times			
	Malfunction	100m/s²(approx. 10G) in X, Y, Z directions for 3 times			
Environ-ment	Ambient temperature	-10 to 50°C, storage : 20 to 60°C			
	Ambient humidity	35 to 85%RH, storage : 35 to 85%RH			
Accessory	Mosaic graphic panel mounting bracket				
Unit weight	Approx. 83g				

※1: It is enable to customized with another specifications except for standard one.

※Environment resistance is rated at no freezing or condensation.

Application of Connections

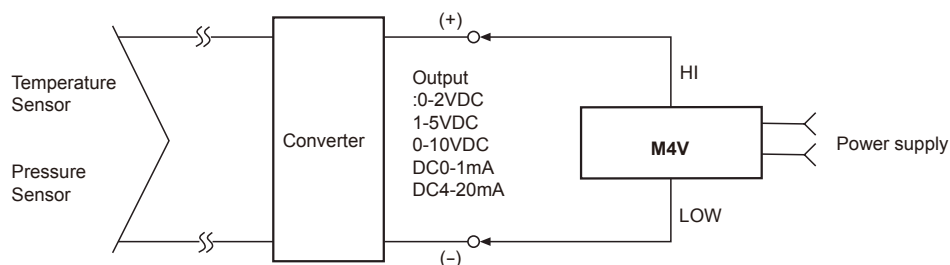


Photo electric sensor

Fiber optic sensor

Door/Area sensor

Proximity sensor

Pressure sensor

Rotary encoder

Connector/Socket

Temp. controller

SSR/Power controller

Counter

Timer

Panel meter

Tacho/Speed/ Pulse meter

Display unit

Sensor controller

Switching mode power supply

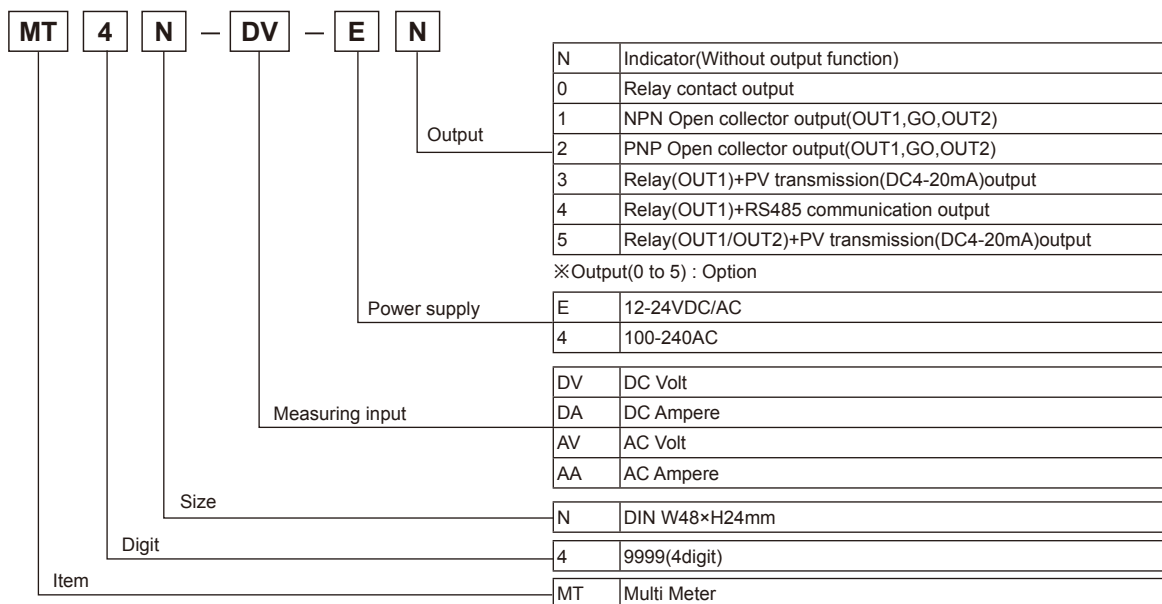
Stepper motor& Driver&Controller

Graphic/Logic panel

Field network device

DIN W48×H24mm Small size digital multi panel meter [MT4N Series]

■ Ordering information



※To measure the current over 5ADC, please select DV type because the shunt should be used.

■ Specifications

Series	MT4N-DV-E ☐	MT4N-DA-E ☐	MT4N-AV-E ☐	MT4N-DA-4 ☐	MT4N-AA-4 ☐
Appearances & Dimensions	CE  [W48×H24×L83mm]				
Measurement input	DC voltage, ampere	AC voltage, ampere, Frequency		DC voltage, ampere	AC voltage, ampere, Frequency
Power supply	12-24VDC/AC			100-240VAC	
Allowable voltage range	90 to 110%				
Power consumption	DC: 3W, AC: 5VA / For MT4N-□□-E5 - DC: 5W, AC: 8VA			5VA	
Display method	7Segment LCD display, Character height: 9mm				
Display accuracy	• 23°C±5°C - DC type: F.S. ±0.1% rdg ±2digit / AC type : F.S. ±0.3% rdg ±3digit DC/AC type : F.S. +0.3% rdg +3digit max. only for 5A terminal. • -10°C to 50°C - DC/AC type: F.S. ±0.5% rdg ±3digit				
Max. allowable input	110% F.S. for each measured input range				
A/D conversion method	Practical oversampling using successive approximation ADC				
Sampling cycle	DC type : 50ms, AC type : 16.6ms				
Max. display range	-1999 to 9999(4digit)				
Preset output	• Relay output - Contact capacity : 125VAC 0.3A, 30VDC 1A/Contact composition : N.O(1a) • NPN/PNP Open Collector output - Max. 12-24VDC ±2V 50mA(Load resistance)				

Specifications

Series		MT4N-DV-E□ MT4N-DA-E□	MT4N-AV-E□ MT4N-AA-E□	MT4N-DV-4□ MT4N-DA-4□	MT4N-AV-4□ MT4N-AA-4□
Sub output (Transmission output)		• RS485 communication output - Baud rate : 1200/2400/4800/9600, Communication method : 2 wires half duplex, Synchronous method: Sub-synchronization, Protocol : Modbus type • DC4-20mA output - Resolution : 12,000 division(Load resistance max. 600Ω)			
AC measuring function※ ¹		Selectable RMS or AVG			
Frequency measuring function※ ¹		Measurement range : 0.100 to 9999Hz(Differ according to decimal point position)			
Hold function※ ²		Includes(Outer hold function)			
Insulation resistance		Min. 20MΩ(at 500VDC megger)			
Dielectric strength		1000VAC for 1 minute (Between external terminal and case)		2000VAC for 1 minute (Between external terminal and case)	
Noise strength		±2kV the square wave noise(pulse width: 1μs) by the noise simulator			
Vibration	Mechanical	0.75mm amplitude at frequency of 10 to 55Hz(for 1 min.) in each of X, Y, Z directions for 2hour			
	Malfunction	0.5mm amplitude at frequency of 10 to 55Hz(for 1 min.) in each of X, Y, Z directions for 10minutes			
Shock	Mechanical	100m/s ² (approx. 10G) in each of X, Y, Z directions for 3 times			
	Malfunction	300m/s ² (approx. 30G) in each of X, Y, Z directions for 3 times			
Environ- ment	Ambient temperature	-10 to 50°C, storage: -20 to 60°C			
	Ambient humidity	35 to 85%RH, storage: 35 to 85%RH			
Insulation type		Double insulation or reinforced insulation(Mark: □, dielectric strength between the measuring input part and the power part: 1kV)			
Approval		CE		—	
Weight※ ³		Approx. 125g(approx. 64g)			

※1: AC measuring function, and frequency measuring function are only for AC measuring input type.

※2: The indicator has no Hold function.

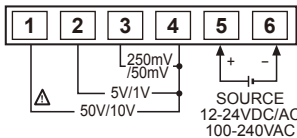
※3: The weight with packaging and the weight in parentheses is only unit weight.

※Environment resistance is rated at no freezing or condensation.

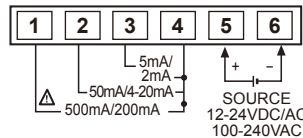
Connections

Measuring input terminal connection

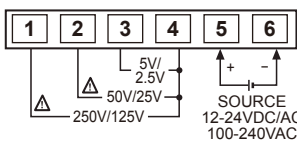
MT4N-DV-□□



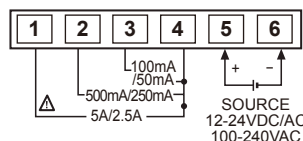
MT4N-DA-□□



MT4N-AV-□□

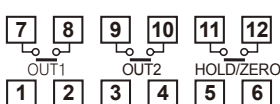


MT4N-AA-□□

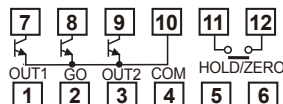


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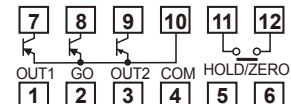
Relay output [MT4N-□□□0]



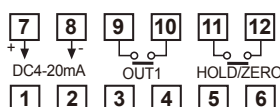
NPN open collector output [MT4N-□□□1]



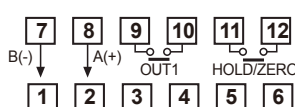
PNP open collector output [MT4N-□□□2]



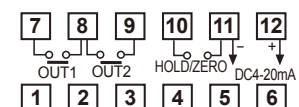
Relay+Current(DC4-20mA) output [MT4N-□□□3]



Relay+RS485 communication output [MT4N-□□□4]

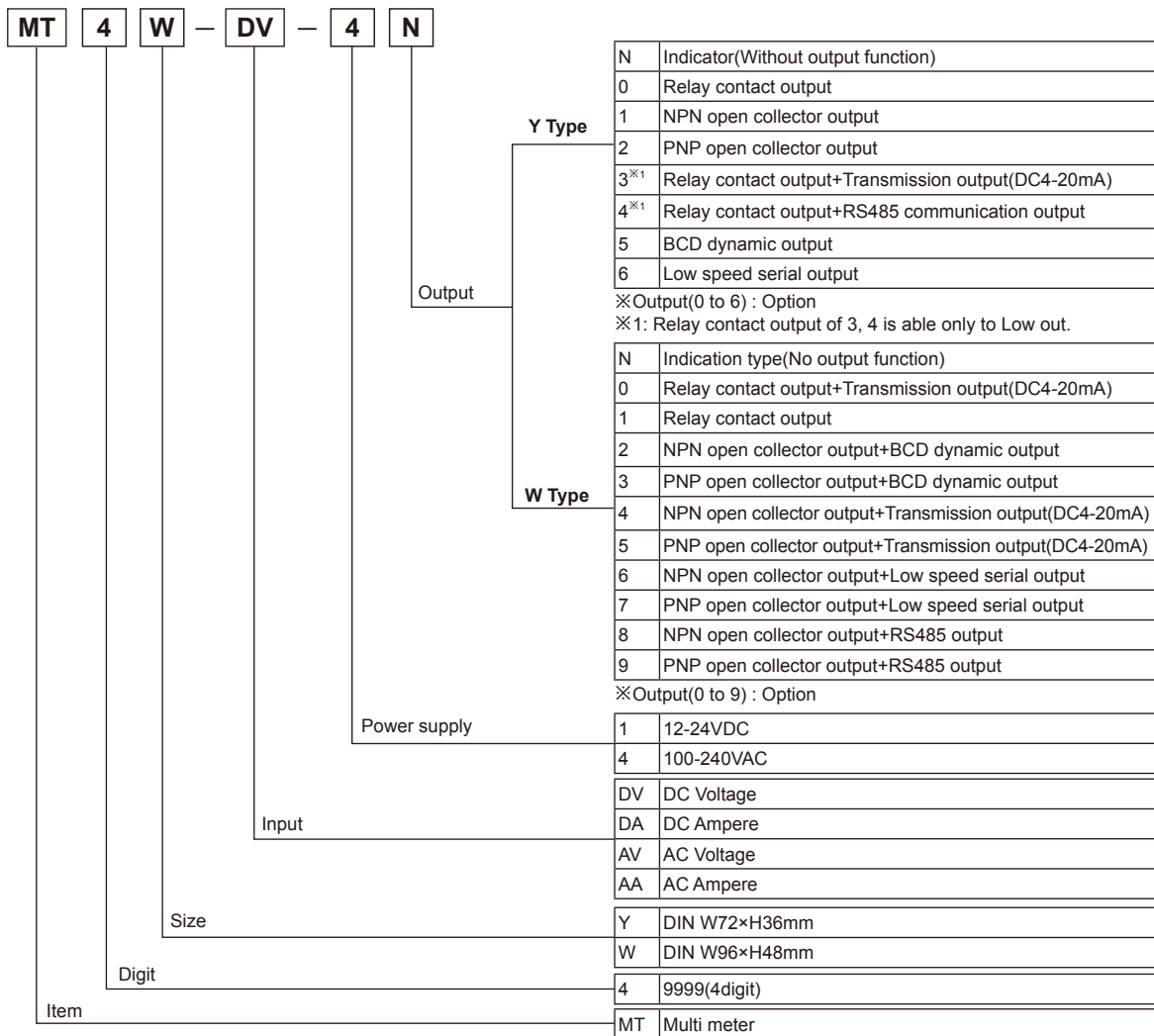


Relay 2+Current(DC4-20mA) output [MT4N-□□□5]



**DIN W72×H36mm, W96×H48mm, digital multi panel meter
[MT4Y/MT4W Series]**

■ Ordering information



※To measure the current over DC 5A, please select DV type because the shunt should be used.

※In case of selecting frequency display, no output will be provided even if it is output support models. (Main output, Sub output and RS485 output)

■ Specifications

Series	MT4Y-DV-4 ☐ MT4Y-DA-4 ☐		MT4Y-AV-4 ☐ MT4Y-AA-4 ☐		MT4W-DV-4 ☐ MT4W-DA-4 ☐		MT4W-AV-4 ☐ MT4W-AA-4 ☐		MT4W-DV-1 ☐ MT4W-DA-1 ☐		MT4W-AV-1 ☐ MT4W-AA-1 ☐	
Appearances & Dimensions	CE  us  [W72×H36×L77mm]				CE  us  [W96×H48×L100mm]							
	Measurement input		DC voltage, ampere	AC voltage, ampere, Frequency	DC voltage, ampere		AC voltage, ampere, Frequency	DC voltage, ampere		AC voltage, ampere, Frequency		
Power supply	100-240VAC 50/60Hz (Allowable voltage range: 90 to 110%)								12-24VDC (Allowable voltage range: 90 to 110%)			
Power consumption	5VA								5W			
Display method	7Segment LED display(red)(Character height: 14.2mm)											
Display accuracy	• 23°C±5°C - DC Type: F.S. ±0.1% rdg±2digit / AC Type: F.S. ±0.3% rdg±3digit DC/AC Type F.S. +0.3% rdg +3digit max. only for 5A terminal. • -10°C to 50°C - DC/AC Type: F.S.±0.5% rdg±3digit											
Max. allowable input	110% F.S for each measured input range											
A/D conversion method	Practical oversampling using successive approximation ADC											
Sampling cycle	DC type: 50ms, AC type: 16.6ms											
Max. indication range	-1999 to 9999(4digit)											
Preset output	• Relay output - Contact capacity: 250VAC 3A, 30VDC 3A / Contact composition: N.O(1a) • NPN/PNP Open collector output - 12-24VDC ±2V 50mA Max. (Resistive load)											
Sub output (Transmission output)	• RS485 communication output - Baud rate: 1200/2400/4800/9600, Communication method: 2-wire half duplex, Synchronous method: Asynchronous method, Protocol: Modbus type • Serial/BCD output - NPN Open collector output: 12-24VDC Max. 50mA(Resistive load) • DC4-20mA output - Resolution: 12,000 division(Load resistance max. 600Ω)											
AC measuring function ^{※1}	Selectable RMS or AVG											
Frequency measurement function ^{※1}	Measurement range : 0.100 to 9999Hz(Variable by decimal point position)											
Hold function ^{※2}	Includes(External hold function)											
Insulation resistance	Min. 100MΩ(at 500VDC megger) between external terminal and case											
Dielectric strength	2,000VAC for 1minute between external terminal and case											
Noise strength	±2kV the square wave noise(pulse width : 1μs) by the noise simulator											
Vibration	Mechanical	0.75mm amplitude at frequency of 10 to 55Hz(for 1 min.) in each of X, Y, Z directions for 2hours										
	Malfunction	0.5mm amplitude at frequency of 10 to 55Hz(for 1 min.) in each of X, Y, Z directions for 10minutes										
Shock	Mechanical	100m/s ² (approx. 10G) in each of X, Y, Z directions for 3 times										
	Malfunction	300m/s ² (approx. 30G) in each of X, Y, Z directions for 3 times										
Relay life cycle	Malfunction	Min. 20,000,000 operations										
	Mechanical	Min. 100,000 operations(250VAC 3A Load current)										
Environ-ment	Ambient temperature	-10 to 50°C, storage: -20 to 60°C										
	Ambient humidity	35 to 85%RH, storage: 35 to 85%RH										
Insulation type	Double insulation or reinforced insulation (Mark:  , dielectric strength between the measuring input part and the power part: 1kV)											
Approval	CE  us								CE			
Unit weight	Approx. 134g					Approx. 211g						

※1: AC measuring function, and frequency measuring function are only for AC measuring input type.

If only frequency input the AC type(display method of measuring input) which option is in MT4V, MT4W will operate the only indicating type.

※2: MT4Y-□-4N model has no hold function.

※Environment resistance is rated at no freezing or condensation.

Photo
electric
sensor

Fiber
optic
sensor

Door/Area
sensor

Proximity
sensor

Pressure
sensor

Rotary
encoder

Connector/
Socket

Temp.
controller

SSR/
Power
controller

Counter

Timer

Panel
meter

Tacho/
Speed/ Pulse
meter

Display
unit

Sensor
controller

Switching
mode power
supply

Stepper
motor&
Driver&Controller

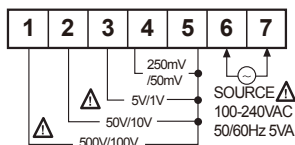
Graphic/
Logic
panel

Field
network
device

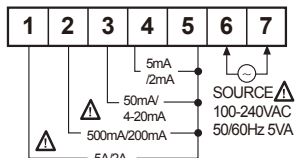
■ Connections

◎ Measuring input connection of MT4Y Series

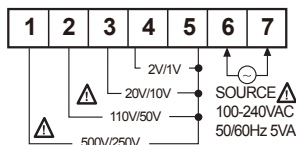
● MT4Y-DV-4□



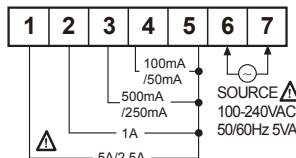
● MT4Y-DA-4□



● MT4Y-AV-4□

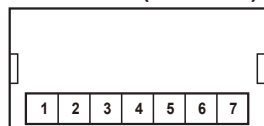


● MT4Y-AA-4□



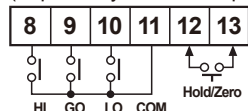
◎ Output terminal connection of MT4Y Series

● MT4Y-□-4N (Indicator)



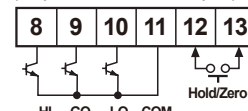
● MT4Y-□-40

(Triple relay contact output)



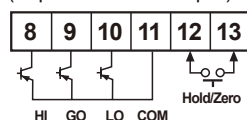
● MT4Y-□-41

(Triple NPN O.C output)



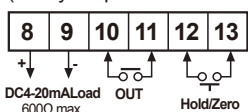
● MT4Y-□-42

(Triple PNP O.C output)



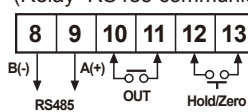
● MT4Y-□-43

(Relay output+Transmission output)



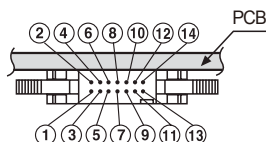
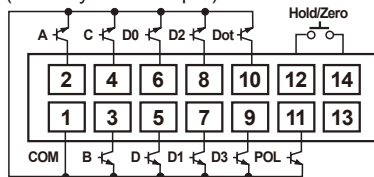
● MT4Y-□-44

(Relay+RS485 communication output)



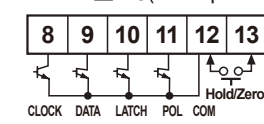
● MT4Y-□-45

(BCD Dynamic output)



※ Hirose connector pin header model of the unit : HIF3BA-14PA-2.54DS
 ※ Contact Hirose Electric to purchase socket and wires of Hirose connector.
 [Socket : HIF3BA-14D-2.54R]

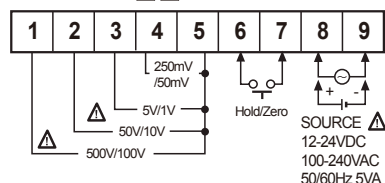
● MT4Y-□-46 (Low speed serial output)



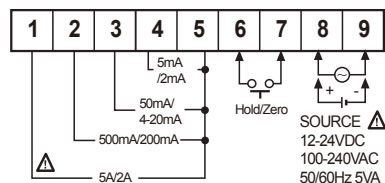
※ POL : When a display value is "-", the signal of "-" will be outputted.

◎ Measuring input connection of MT4W Series

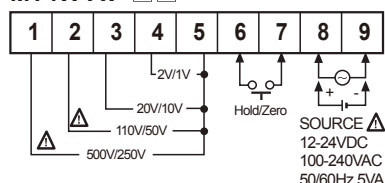
● MT4W-DV-□□



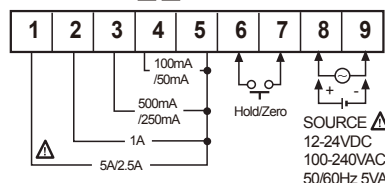
● MT4W-DA-□□



● MT4W-AV-□□

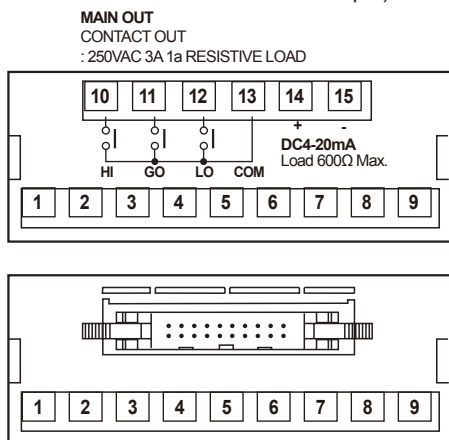


● MT4W-AA-□□

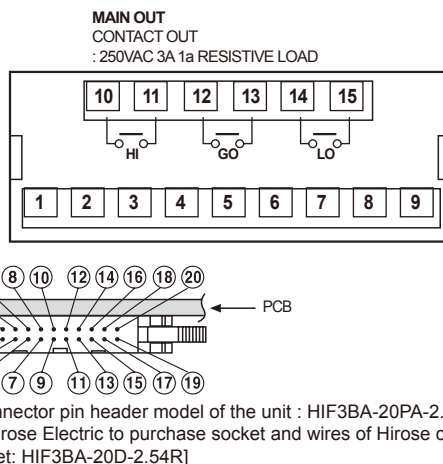


◎ Output terminal connection of MT4W Series

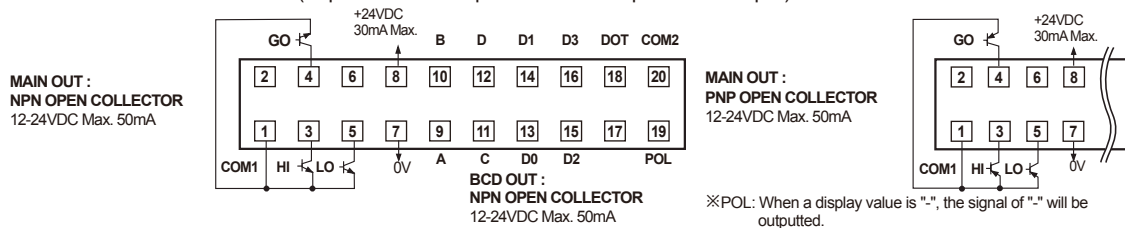
- **MT4W-□□0** (Triple relay contact output + Transmission output)



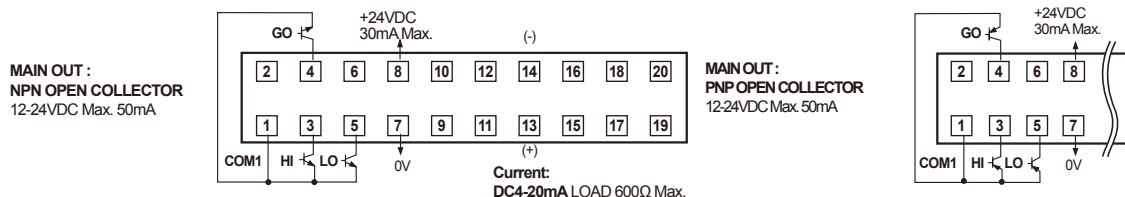
- **MT4W-□□1** (Triple relay contact output)



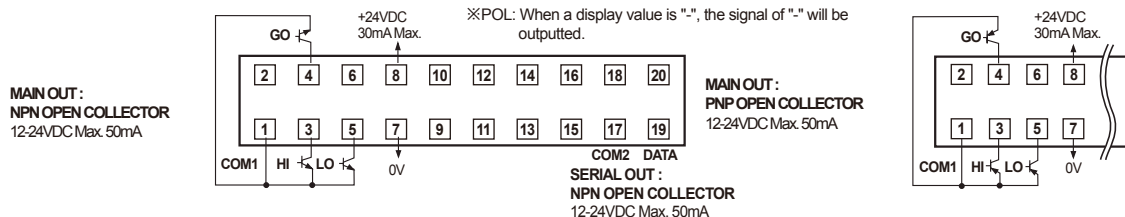
- **MT4W-□□2 / MT4W-□□3** (Triple NPN/PNP open collector output+BCD output)



- **MT4W-□□4/ MT4W-□□5** (Triple NPN/PNP open collector output+Transmission output)



- **MT4W-□□6/ MT4W-□□7** (Triple NPN/PNP open collector output+Low speed serial output)



- **MT4W-□□8/ MT4W-□□9** (Triple NPN/PNP open collector output+RS485 output)

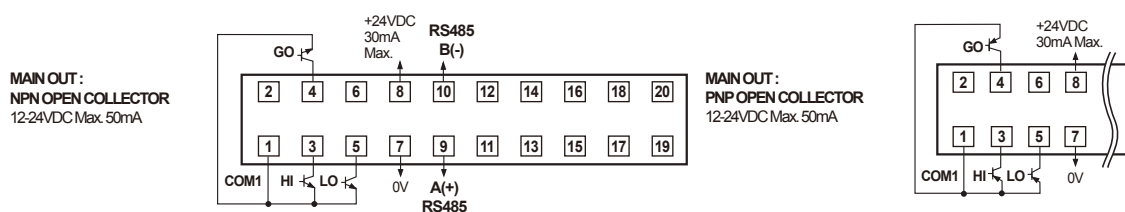


Photo electric sensor
Fiber optic sensor
Door/Area sensor
Proximity sensor
Pressure sensor
Rotary encoder
Connector/Socket
Temp. controller
SSR/ Power controller
Counter
Timer
Panel meter
Tacho/ Speed/ Pulse meter
Display unit
Sensor controller
Switching mode power supply
Stepper motor & Driver/Controller
Graphic/ Logic panel
Field network device

Digital panel meter [M4Y/M4W/M5W/M4M Series]

■ Specifications

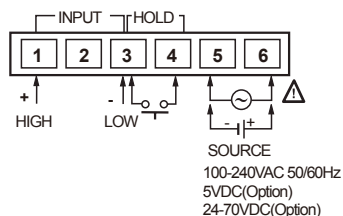
M4Y		M4W		M5W		M4M	
							
[W72×H36×L93mm]		[W96×H48×L104mm]		[W96×H48×L104mm]		[W72×H72×L113mm]	
Appearances & Dimensions							
Classification		Indicator		Single preset output type		Dual preset output type	
Measurement	DC, AC voltage	M4Y-DV-□ M4Y-AV□-□ M5W-DV-□ M5W-AV-□	M4W-DV-□ M4W-AV□-□ M4M-DV-□ M4M-AV□-□	M4W1P-DV-□ M4W1P-AV□-□ M4M1P-DV-□ M4M1P-AV□-□	M4W2P-DV-□ M4W2P-AV□-□ M4M2P-DV-□ M4M2P-AV□-□		
	DC, AC ampere	M4Y-DA-□ M4Y-AA□-□ M5W-DA-□ M5W-AA-□	M4W-DA-□ M4W-AA□-□ M4M-DA-□ M4M-AA□-□	M4W1P-DA-□ M4W1P-AA□-□ M4M1P-DA-□ M4M1P-AA□-□	M4W2P-DA-□ M4W2P-AA□-□ M4M2P-DA-□ M4M2P-AA□-□		
	AC power (0-10VDC)	M4Y-W-□ M5W-W-□	M4W-W-□ M4M-W-□	M4W1P-W-□ M4M1P-W-□	M4W2P-W M4M2P-W		
	rpm, speed (0-10VDC) (0-10VAC)	M4Y-T□-□ M4Y-S□-□ M5W-T-□ M5W-S-□	M4W-T□-□ M4W-S□-□ M4M-T-□ M4M-S-□	M4W1P-T□-□ M4W1P-S□-□ M4M1P-T-□ M4M1P-S-□	M4W2P-T□-□ M4W2P-S□-□ M4M2P-T-□ M4M2P-S-□		
	Power factor (DC4-20mA)	—	M4W-P (Refer to the 261 page)	—	—		
Max. allowable input		150% for each input specification(At 400VAC:120%)					
Power supply		100-240VAC 50/60Hz ★ 5VDC (Except for M5W) ★ 24-70VDC		110/220VAC 50/60Hz ★ 24-70VDC ★ 100-240VAC 50/60Hz			
Allowable voltage range		90 to 110% of rated voltage					
Power consumption		DC: 2W, AC: 4VA			DC: 3W, AC: 5VA		
Display method		7 Segment LED display					
Character height		M4Y, M4W, M5W : 14mm / M4W1P, M4W2P, M4M1P, M4M2P : 10mm					
Display accuracy		DC : F.S. ±0.2% rdg ±1digit AC : F.S. ±0.5% rdg ±1digit					
Sampling period		300ms					
A/D conversion method		Dual slope integral method					
Response time		2sec.(0 to Max.)					
Display frequency		2.5 times/sec.					
Contact capacity		—			Relay contact output : 250VAC 3A 1c		Relay contact output : 250VAC 3A 1c×2
Insulation resistance		100MΩ(at 500VDC megger)					
Dielectric strength		2000VAC 50/60Hz for 1 minute					
Noise strength		±1kV the square wave noise (pulse width: 1us) by the noise simulator					
Vibration	Mechanical	0.75mm amplitude at frequency of 10 to 55Hz(for 1 min.) in each of X, Y, Z directions for 1 hour					
	Malfunction	0.5mm amplitude at frequency of 10 to 55Hz(for 1 min.) in each of X, Y, Z directions for 10 minutes					
Shock	Mechanical	300m/s²(approx. 30G) in X, Y, Z directions for 3 times					
	Malfunction	100m/s²(approx. 10G) in X, Y, Z directions for 3 times					
Relay life cycle	Mechanical	—			Min. 10,000,000 operations		
	Malfunction	—			Min. 100,000 operations (250VAC 3A resistive load)		
Environ-ment	Ambient temperature	-10 to 50°C, storage: -20 to 60°C					
	Ambient humidity	35 to 85%RH, storage: 35 to 85%RH					
Unit weight		M4Y: Approx. 144g M5W: Approx. 172g	M4W: Approx. 168g M4M: Approx. 262g (M4M-P: Approx. 268g)	M4W1P: Approx. 253g M4M1P: Approx. 290g	M4W2P: Approx. 278g M4M2P: Approx. 316g		

※"★" symbol in power supply is optional. (customizable)

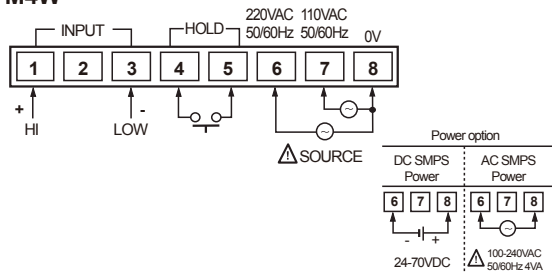
※Environment resistance is rated at no freezing or condensation.

Connections

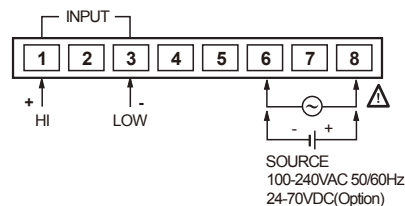
• M4Y



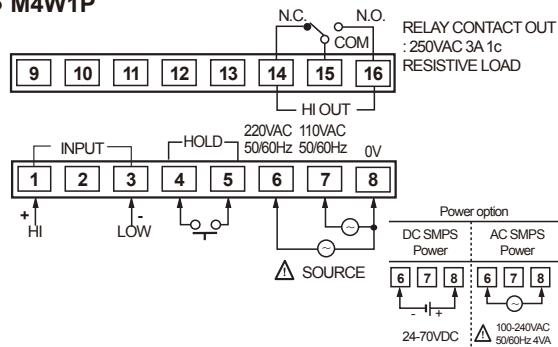
• M4W



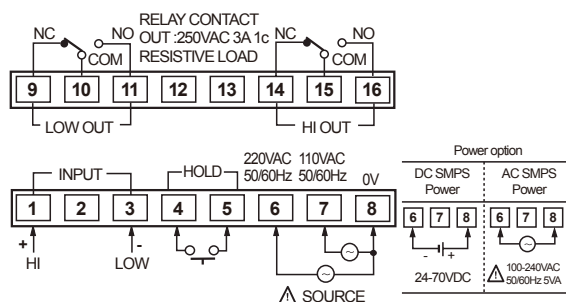
• M5W



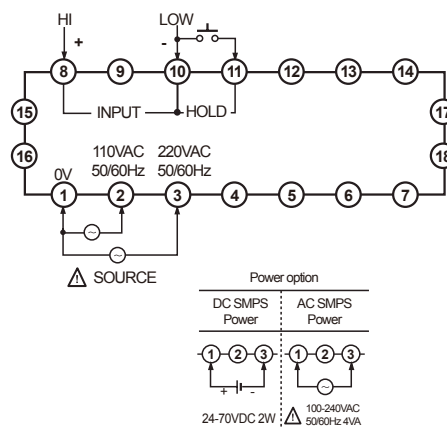
• M4W1P



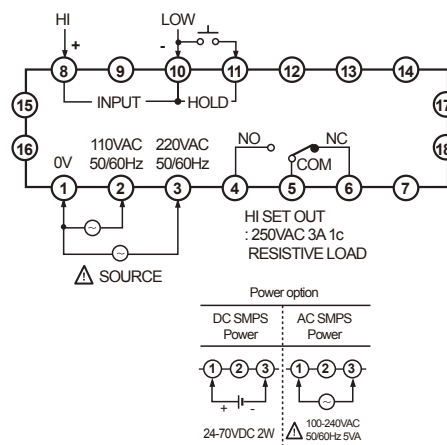
• M4W2P



• M4M



• M4M1P



• M4M2P

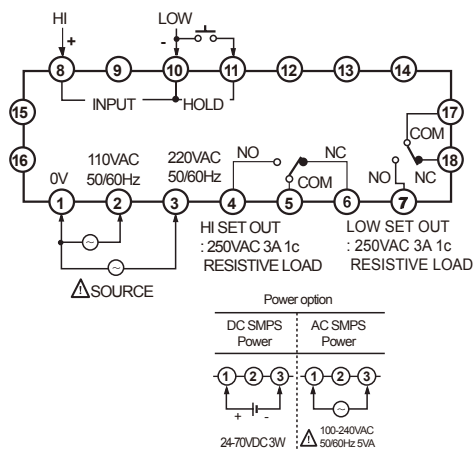


Photo electric sensor

Fiber optic sensor

Door/Area sensor

Proximity sensor

Pressure sensor

Rotary encoder

Connector/Socket

Temp. controller

SSR/Power controller

Counter

Timer

Panel meter

Tacho/Speed/ Pulse meter

Display unit

Sensor controller

Switching mode power supply

Stepper motor/ Driver&Controller

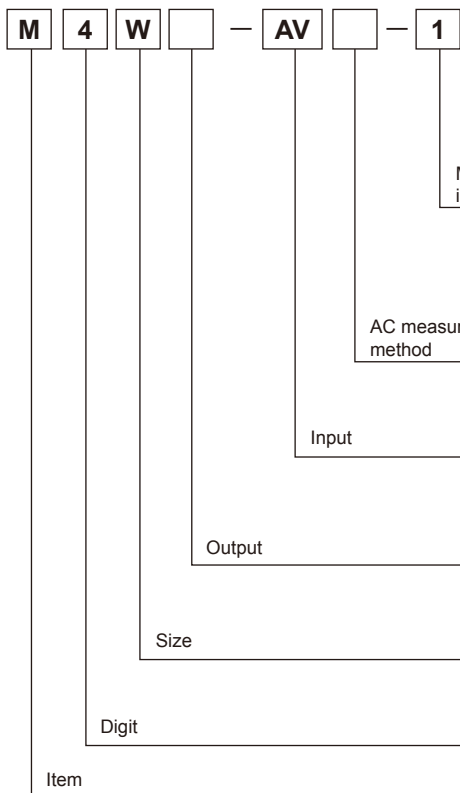
Graphic/ Logic panel

Field network device

DIN W72×H36mm, W96×H48mm, W72×H72mm

Digital panel meter for measuring voltage

■ Ordering information



NO	M4Y / M4W / M4M		M5W	
	DC INPUT (F.S.)	AC INPUT (F.S.)	DC INPUT (F.S.)	AC INPUT (F.S.)
1	199.9mV	199.9mV	199.99mV	199.99mV
2	1.999V	1.999V	1.9999V	1.9999V
3	19.99V	19.99V	19.999V	19.999V
4	199.9V	199.9V	199.99V	199.99V
5※ ²	300V	—	300.0V	400.0V
6※ ²	—	400V	—	—
XX	Option		Option	
No mark	AVG value			
R※ ³	RMS value			
DV	DC Volt			
DA	DC Ampere			
AV	AC Volt			
AA	AC Ampere			
No mark	Indicator			
1P	Single setting			
2P	Dual setting			
Y※ ⁴	DIN W72×H36mm			
W※ ⁴	DIN W96×H48mm			
M	DIN W72×H72mm			
4	1999(3¼digit)			
5	19999(4¼digit)			
M	Meter			

※1: Measuring input and display are 1:1.

※2: Available input can be direct connection if under 300VDC, 400VAC.

※3: M5W AC measurement type has RMS only. It does not have "R" in model name.

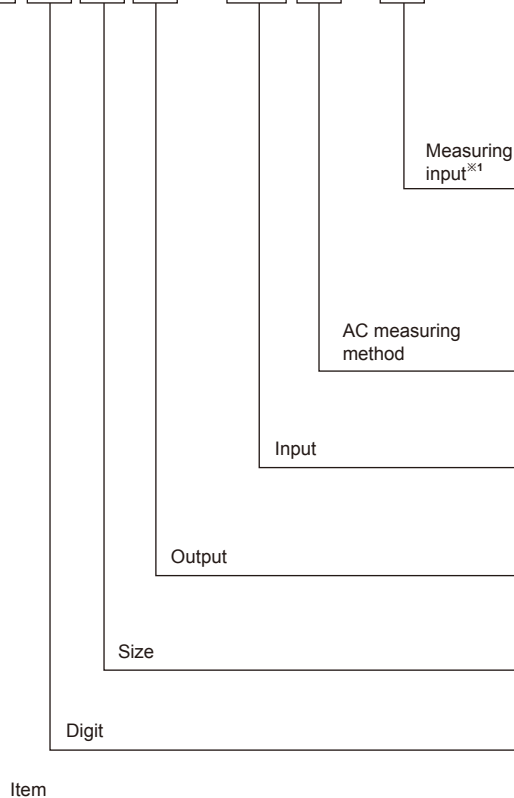
※4: M4Y, M5W are indicator.

DIN W72×H36mm, W96×H48mm, W72×H72mm

Digital panel meter for measuring ampere

■ Ordering information

M 4 W — AA — 1



NO	M4Y / M4W / M4M		M5W	
	DC INPUT (F.S.)	AC INPUT (F.S.)	DC INPUT (F.S.)	AC INPUT (F.S.)
1	199.9μA	19.99mA	199.99μA	19.999mA
2	1.999mA	199.9mA	1.9999mA	199.99mA
3	19.99mA	1.999A	19.999mA	1.9999A
4	199.9mA	19.99A	199.99mA	19.999A
5	1.999A	199.9A	1.9999A	199.99A
6	19.99A	1999A	19.999A	1999.9A
7	199.9A	—	199.99A	—
8	1999A	—	1999.9A	—
XX	Option		Option	
No mark	AVG value			
R ^{※2}	RMS value			
DV	DC Volt			
DA	DC Ampere			
AV	AC Volt			
AA	AC Ampere			
No mark	Indicator			
1P	Single setting			
2P	Dual setting			
Y ^{※3}	DIN W72×H36mm			
W ^{※3}	DIN W96×H48mm			
M	DIN W72×H72mm			
4	1999(3½digit)			
5	19999(4½digit)			
M	Meter			

※1: Measuring input and display is 1:1 for DC INPUT No.1to 5 and AC INPUT No.1 to 3, DC INPUT No.6 to 8 is used with DC50mV Shunt, AC INPUT No.4 to 6 are used with C.T(Current transformer)

※2: M5W AC measurement type has RMS only. It does not have "R" in model name.

※3: M4Y, M5W are indicator.

Photo electric sensor

Fiber optic sensor

Door/Area sensor

Proximity sensor

Pressure sensor

Rotary encoder

Connector/Socket

Temp. controller

SSR/ Power controller

Counter

Timer

Panel meter

Tacho/ Speed/ Pulse meter

Display unit

Sensor controller

Switching mode power supply

Stepper motor& Driver&Controller

Graphic/ Logic panel

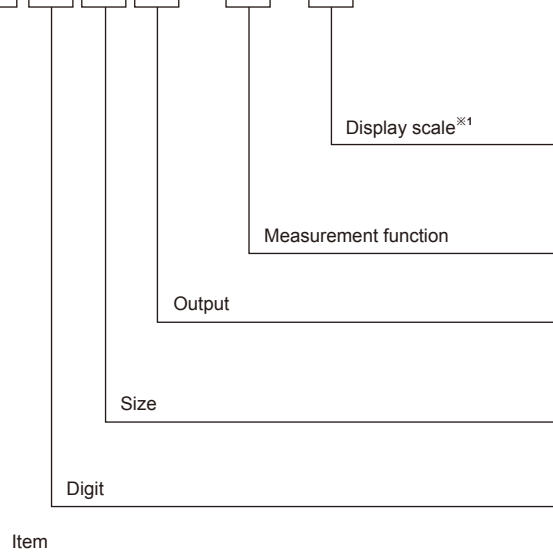
Field network device

DIN W72×H36mm, W96×H48mm, W72×H72mm

Digital panel meter for measuring power

Ordering information

M 4 W - W - 1



NO	M4Y / M4W / M4M	M5W
	DISPLAY(F.S.)	DISPLAY(F.S.)
1	199.9W	199.99W
2	1.999kW	1.9999kW
3	19.99kW	19.999kW
4	199.9kW	199.99kW
5	1999kW	1999.9kW
XX	Option	Option
W	Watt Meter	
No mark	Indicator	
1P	Single setting	
2P	Dual setting	
Y ^{※2}	DIN W72×H36mm	
W ^{※2}	DIN W96×H48mm	
M	DIN W72×H72mm	
4	1999(3½digit)	
5	19999(4½digit)	
M	Meter	

※1: When output specification of power converter is 0-10VDC, display value is maximum.

※2: M4Y, M5W are indicator.

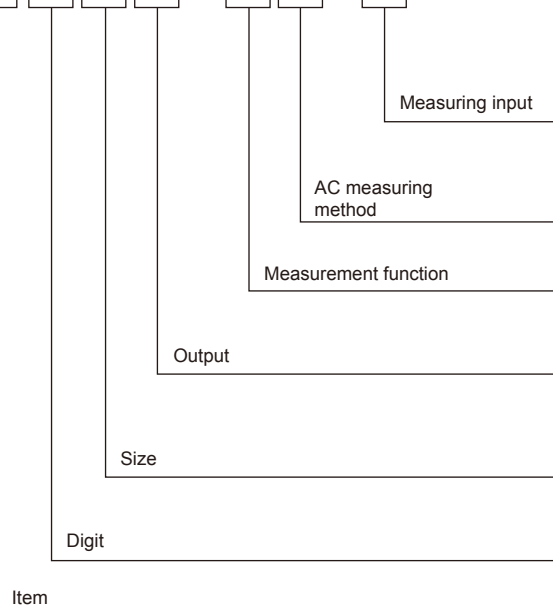
※If output specification of Converter or power converter is DC4-20mA or 1-5VDC, please use scaling meter.

DIN W72×H36mm, W96×H48mm, W72×H72mm

Digital panel meter for measuring Revolution/Speed

Ordering information

M 4 W - T - 1



NO	M4Y / M4W / M4M	M5W
	INPUT (F.S.)	INPUT (F.S.)
1	0-10VDC / 1999	0-10VDC / 1999.9
2	0-10VAC / 1999	0-10VAC / 1999.9
DX	DC Input option	DC Input option
XX	AC Input option	AC Input option
No mark	AVG value	
R ^{※1}	RMS value	
T	Tachometer(rpm)	
S	Line Speed Meter(m/min)	
No mark	Indicator	
1P	Single setting output	
2P	Dual setting output	
Y ^{※2}	DIN W72×H36mm	
W ^{※2}	DIN W96×H48mm	
M	DIN W72×H72mm	
4	1999(3½digit)	
5	19999(4½digit)	
M	Meter	

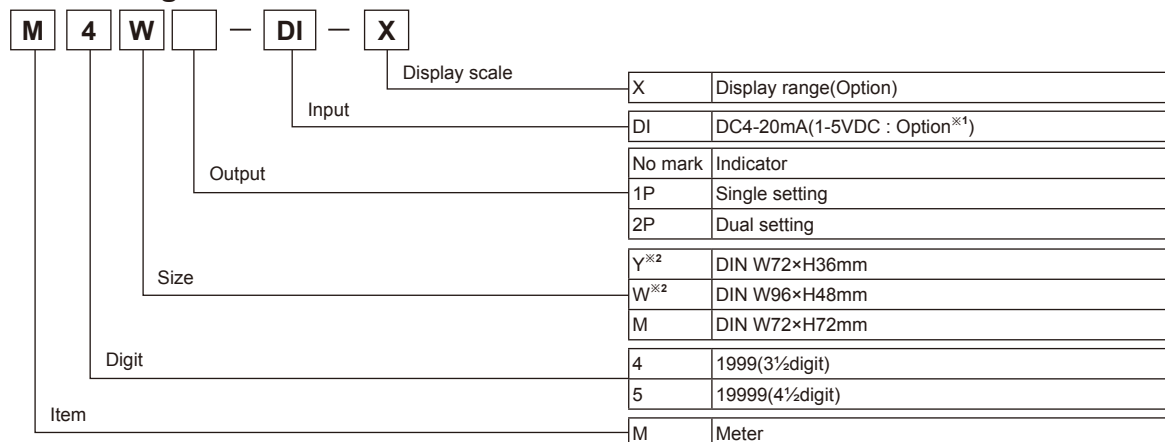
※1: AC measuring type of M5W only applies to RMS and it is not marked with "R" in the model name.

※2: M4Y, M5W are indicator.

DIN W72×H36mm, W96×H48mm, W72×H72mm

■ Ordering information

Digital scaling meter



※1: 1-5VDC of measuring input specification is available by option. It will be a default value if there is no request for order.

※2: M4Y, M5W are indicator.

DIN W96×H48mm, Digital panel meter for displaying power factor [M4W-P]

■ Specifications

Model	M4W-P	
Appearances & Dimensions		
Measurement function	Power factor	
Input	DC4-20mA	
Display	-0.50 to 1.00 to +0.50 cos ϕ	
Power supply	110/220VAC 50/60Hz	
Allowable voltage range	90 to 110% of rated voltage	
Power consumption	4VA	
Display method	7 Segment LED display	
Character height	14mm	
Display accuracy	F.S: $\pm 3\%$ rdg ± 1 digit	
Sampling period	300ms	
Response speed	2sec.(0 to Max.)	
Point display	Fixed point	
Insulation resistance	Min. 100M Ω (at 500VDC megger)	
Dielectric strength	2000VAC 50/60Hz for 1 minute	
Noise strength	± 1 kV the square wave noise(pulse width : 1 μ s) by the noise simulator	
Vibration	Mechanical	0.75mm amplitude at frequency of 10 to 55Hz (for 1 min.) in each of X, Y, Z directions for 1 hour
	Malfunction	0.5mm amplitude at frequency of 10 to 55Hz (for 1 min.) in each of X, Y, Z directions for 10 minutes
Shock	Mechanical	300m/s ² (approx. 30G) in each of X, Y, Z directions for 3 times
	Malfunction	100m/s ² (approx. 10G) in each of X, Y, Z directions for 3 times
Environ ment	Ambient temperature	-10 to 50°C, storage : -25 to 60°C
	Ambient humidity	35 to 85%RH, storage : 35 to 85%RH
Unit weight	Approx. 317g	

※Environment resistance is rated at no freezing or condensation.

Connections

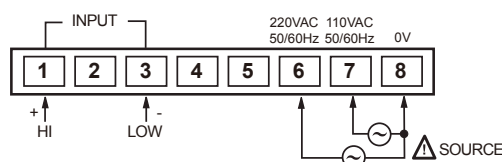


Photo
electric
sensor

Fiber
optic
sensor

Door/Area

Proximity

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11

Rotary encoder

Connector

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control

Power controller

[illegible]

[illegible]Panel
meter

Tacho/

unit

Sensor controller

Switching

Supply	

motor&
Driver&Controller

**Graphic/
Logic**

[illegible]

device