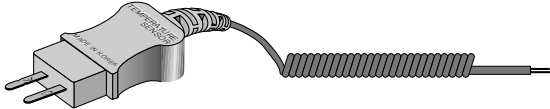
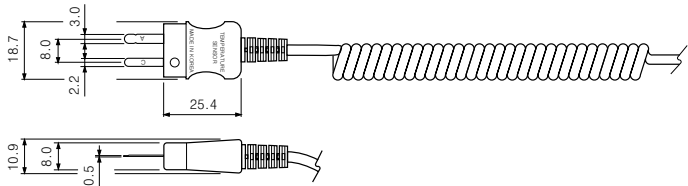
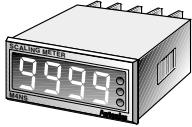



SELECTION GUIDE

THERMOCOUPLE CONNECTOR CABLE




Model	DY - 2100
Appearances	
Thermocouple	K, J, T, E, R/S(CA, IC, CC, CRC)
Dimensions	

SCALING METER(INDICATOR) ※NON-VOLTAGE TYPE


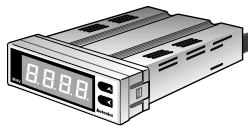

Model	M4NS-NA	M4YS-NA
Appearances & Dimensions	<p>※It is available to set a various display value by prescale function.</p>  <p>[W48×H24×L53.5mm]</p>	 <p>[W72×H36×L106mm] ※Coming soon</p>
Power supply	Loop powered type	
Input	4-20mADC	
Max. display range	-1999 to 9999	
Display method	7Segment LED Display(4digit)	
Display accuracy	0.3% full scale of ±1Digit	
Display cycle	Selectable 0.5sec/1sec/2sec/3sec/4sec/5sec	
Various display unit	<p>V \bar{V} kV \bar{kV} μV mV \bar{mV} A \bar{A} kA \bar{kA} mA \bar{mA} VA kVA W kW mm cm m km m²</p> <p>mS² mS km/h M_{min} kg_{cent} kg_{cent} mg kg g °C °F Ω kΩ rpm % %RH mmHg var kvar</p> <p>dB N J μbar H_P kWh cal cosφ Hz ℓ \bar{CO}_2 lx</p>	
Resolution	12,000 resolution	
Setting type	Front push buttons	
Self-diagnosis function	Error display function(HHHH/LLLL)	
Prescale function	Input value × Scale value (1.000 to 5.000) = Display value (Changeable Dot position)	

SELECTION GUIDE

MULTI PANEL METER


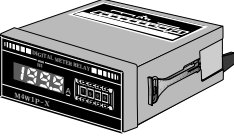
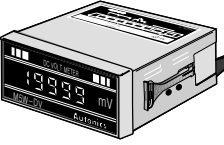
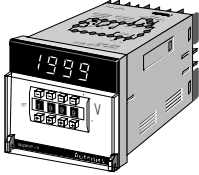
Series	MT4Y-DV	MT4Y-DA	MT4Y-AV	MT4Y-AA	MT4W-DV	MT4W-DA	MT4W-AV	MT4W-AA
Appearances & Dimensions	 [W72×H36×L106mm]					 [W96×H48×L102mm]		
Power supply	100 to 240VAC 50/60Hz(90 to 110% of rated voltage)							
Max. input specification	500VDC	5ADC	500VAC	5AAC	500VDC	5ADC	500VAC	5AAC
Max. display range	-1999 to 9999							
Display method	7Segment LED Display(4digit)							
Various display unit	V \sqrt{V} kV \sqrt{kV} μ V mV mV A \sqrt{A} kA \sqrt{kA} mA \sqrt{mA} mA VA kVA W kW mm cm m km m ² m ³ m ³ /h M _{min} kg _{cent} kg _{cent} mg kg g °C °F Ω kΩ rpm % %RH mmHg var kvar dB N J μ bar HP kWh cal cosφ Hz ℓ $\frac{cm^3}{m^3}$ lx							
Prescale function	• Input value×Scale value(0.100 to 5.000)=Display value(But, scale vale is depends on dot position)							
Error correction	Correct the error of high/low-limit							
Preset output	• NPN open collector output(12 to 24VDC Max. 50mA) • PNP open collector output(12 to 24VDC Max. 50mA)				• Relay output(3output 3A 250VAC, 3A 30VDC) • NPN open collector output(12 to 24VDC Max. 50mA) • PNP open collector output(12 to 24VDC Max. 50mA)			
Optional	• RS485 communication output • Low-speed serial output • BCD output • 4 to 20mA Analog output							
Monitoring function	Check Max/Min value and display(Monitoring delay time setting function 0~30sec)							
Display cycle delay function	Display cycle delay setting function(Selectable 0.5/1/2/3/4/5 sec)							
AC measuring method	Selectable RMS or AVG							
HOLD function	Built-in				Built-in(Outer hold function)			

DIGITAL PANEL METER

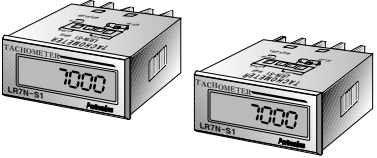
Series	M4N	M4V	M4W-P
Appearances & Dimensions	 [W48×H24×L59mm]	 [W75×H25×L108mm]	 [W96×H48×L99.6mm]
Max. measurement input	Volt Meter 200VDC Ampere Meter 199.9mADC Scaling Meter 4 to 20mADC, 1 to 5VDC(Option)	*Graphic panel meter 0 to 2 VDC 0 to 10 VDC 1 to 5 VDC 0 to 1mADC 4 to 20mADC	*Power factor meter 4 to 20mADC
Max. display range	1999(Fixing decimal point)	-999 to 9999	-0.50 to 100 to +0.50cos φ
Setting type	—	Font S/W key adjustment type (Scale setting)	—
Power supply	5VDC 12 to 24VDC	12 to 24VDC	110/220VAC 50/60Hz

SELECTION GUIDE

DIGITAL PANEL METER

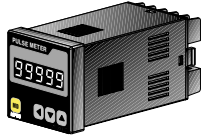


Series	M4Y	M4W / M4W1P / M4W2P	M5W	M4M / M4M1P / M4M2P
Appearances & Dimensions	 [W72×H36×L93mm]	 [W96×H48×L99.6mm]	 [W96×H48×L99.6mm]	 [W72×H72×L113mm]
Indication	●	●	●	●
Single preset	—	●	—	●
Double preset	—	●	—	●
Max. measurement input	Volt Meter Max. 300VDC, Max. 400VAC			
	Ampere Meter <ul style="list-style-type: none"> • 2ADC(SHUNT for 50mVDC output type only is used to the measuring input value of over 2ADC) • 5AAC(C.T for 5AAC output type only is used to the measuring input value of over 5AAC) 			
	Watt Meter Max. 10VDC(Output specification of power converter)			
	Tacho/Speed Meter 0 to 10VDC, 0 to 10VAC(Output of Tachogenerator)			
	Scaling Meter 4 to 20mADC, 1 to 5VDC(Option)			
Max. display range	1999(Fixed decimal point)		19999(Fixed decimal point)	1999(Fixed decimal point)
Power supply	100 to 240VAC 50/60Hz (Option:5VDC ±10% 24 to 70VDC ±10%)	110/220VAC 50/60Hz (Option:100 to 240VAC 50/60Hz, 24 to 70VDC ±10%)		
Max. allowable input	150% per each range, but 400VAC is 120%			
Contact capacity	• Single preset : 250VAC 3A 1c • Double preset : 250VAC 3A 1c×2			

LCD TACHOMETER

Series	LR7N SERIES	
Digit	7	
Type	rps	rpm
Model	LR7N-S1	LR7N-M60
Appearances & Dimensions	 [W48×H24×L48mm]	
Operation mode	UP mode	
Power supply	3VDC (Battery built-in 7years)	
Input frequency	7kHz(at non-contact input)	
Measuring range	7000rps	7000rpm
Application for the encoder resolution	1Pulse/1revolution	60Pulse/1revolution
Input specification	• Non-voltage input : Impedance at short-circuit:Max.10kΩ Impedance at open circuit:Min.500kΩ	

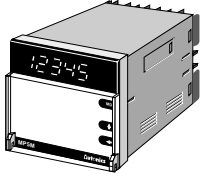
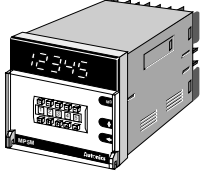
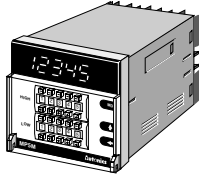
SELECTION GUIDE

TACHO/ SPEED/ PULSE METER

Model	MP5S	MP5Y	MP5W
Appearances & Dimensions	 [W48×H48×L90mm]	 [W72×H36×L102mm]	 [W96×H48×L102mm]
Power supply	100 to 240VAC 50/60Hz(Allowable operation voltage:90 to 110% of rated voltage)		
Power consumption	MP5S-4N : Max. 7.5VA MP5S-42 : Max. 8VA	Max. 3.5VA	Max. 6VA
Power for external sensor	12VDC ±10%, 80mA		
Max. display range	0.0001 to 99999		
Display method	7 Segment LED(Zero Blanking)		
Display cycle	Selectable 0.05 / 0.5 / 1 / 2 / 4 / 8sec.(The same as update output cycle)		
Input specification	[Voltage input] High : 4.5-24VDC, Low : 0-1VDC, Input impedance : 4.5kΩ [No-voltage input] Short-circuit impedance : Max. 300Ω, Residual voltage : Max. 1V, Open-circuit impedance : Min. 100kΩ		
Input frequency	• Solid state input:Max. 50kHz(ON/OFF pulse width:Each over 10μs) • Contact input:Max. 45Hz(ON/OFF pulse width:Each over 11ms)		
Operation mode	Number of revolution/Speed/Frequency(F1), Passing time(F2), Cycle(F3), Passing speed(F4), Time width(F5), Time difference(F6), Absolute rate(F7), Error rate(F8), Density(F9), Error(F10), Measurement(F11), Interval(F12), Integration(F13)		
Various display unit	V, V, mV, mV, kV, A, A, mA, mA, W, VA, kVA, Var, kVar, kW, cm ² , m ² , mm ² , cm ³ , m ³ , mm, cm, m, km, μm, mg, g, kg, g/cm ³ , kg/m ³ , sec, min, hour, min ⁻¹ , h ⁻¹ , sec.1/100s, sec.1/10s, min.1/100m, min.1/10m, min.s.1/10s, h.s.1/10s, h.min.s, h.min,rps, rpm, m/min, m ² /min, mm/s, m/s ² , rPh, r/s, r/min, r/h, kg/h, l, kl, l/s, l/min, l/h, l/x, lx, Hz, kHz, t, °C, °F, Ω, kΩ, MΩ, Pa, kPa, MPa, kgf/mm ² , kgf-cm, gf-cm, mmHg, mmH ₂ O, TON, G, O, K, S, S, s, rad, cal, kcal, L, kL, L/s, L/min, L/h, N, mN, KN, N m, mN-m, KN-m, J, kJ, m/s, ms, t/h, kg/s, PS, hP, dB, %, cPs, cP, cst, deg, φ-mm, sccm, x10, x100, x1000, PH, PPM, counts		
Prescale function	0.0001 × 10 ⁻⁹ to 9.9999 × 10 ⁹		
Hysteresis	0 to 9999		
Other functions	<ul style="list-style-type: none"> • Lock setting function • Monitoring delay function • Auto-Zero time setting function • Time unit selection function • Display value monitoring function • Memory retention function (Mode F13 only) • Comparative output function(H, L) • Output mode selection function (S, H, L, B, I, F) • Deviation memory function (Mode F only) 	<ul style="list-style-type: none"> • Lock setting function • Monitoring delay function • Auto-Zero time setting function • Monitoring function : Memorize Max. value or Min. value • Current output range selection (Current output type only) • Remote/Local switching function (Communication output type only) • Comparative output function (HH, H, GO, L, LL) • Time unit selection function • Memory retention function (Mode F13 only) • Deviation memory function (Mode F only) 	<ul style="list-style-type: none"> • Lock setting function • Auto-Zero time setting function • Monitoring delay function • Monitoring function : Memorize Max. value or Min. value • Current output range selection (Current output type only) • Remote/Local switching function (Communication output type only) • Comparative output function (HH, H, GO, L, LL) • Data Bank switching function • Time unit selection function • Memory retention function (Mode F13 only) • Deviation memory function (Mode F only)
Output form	_____	<ul style="list-style-type: none"> • NPN/PNP open collector output • BCD output • PV transmission output(4-20mADC) • RS485 communication output 	<ul style="list-style-type: none"> • Three-stage Relay output • Five-stage Relay output • NPN Open Collector five-stage output+ BCD output • PNP Open Collector five-stage output+ BCD output • NPN Open Collector five-stage output+ Low speed serial output • PNP Open Collector five-stage output+ Low speed serial output • NPN Open Collector five-stage output+ PV transmission output(4-20mADC) • PNP Open Collector Five-stage output+ PV transmission output(4-20mADC) • NPN Open Collector Five-stage output+ RS485 communication output • PNP Open Collector Five-stage output+ RS485 communication output


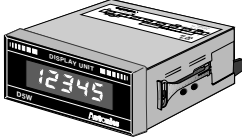
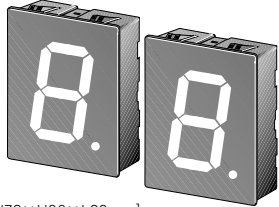
SELECTION GUIDE

TACHO/ SPEED/ PULSE METER

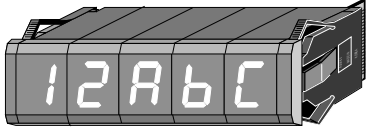
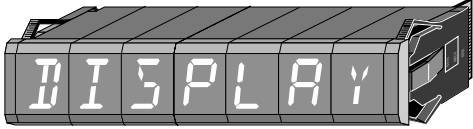
Model	MP5M-4N	MP5M-41	MP5M-42
Appearances & Dimensions	 [W72×H72×L113mm]	 [W72×H72×L113mm]	 [W72×H72×L113mm]
Power supply	100–240VAC 50/60Hz(Allowable operation voltage : 90 to 110% of rated voltage)		
Power consumption	Max. 7.5VA(240VAC)	Max. 8VA(240VAC)	
Power for external sensor	12VDC ±10%, 80mA		
Max. display range	0.0001 to 99999		
Display method	7 Segment LED(Zero Blanking)		
Display cycle	Selectable 0.05 / 0.5 / 1 / 2 / 4 / 8sec.(The same as update output cycle)		
Input specification	[Voltage input] High : 4.5–24VDC, Low : 0–1VDC, Input impedance : 4.5kΩ [No–voltage input] Short–circuit impedance : Max. 300Ω, Residual voltage : Max. 1V, Open–circuit impedance : Min. 100kΩ		
Input frequency	<ul style="list-style-type: none"> • Solid state input:Max. 50kHz(ON/OFF pulse width:Each over 10μs) • Contact input:Max. 45Hz(ON/OFF pulse width:Each over 11ms) 		
Operation mode	Number of revolution/Speed/Frequency(F1), Passing time(F2), Cycle(F3), Passing speed(F4), Time width(F5), Time difference(F6), Absolute rate(F7), Density(F8), Length measurement(F9), Interval(F10), Integration(F11)		
Various display unit	V, \bar{V} , mV, \bar{mV} , kV, \bar{kV} , A, \bar{A} , mA, \bar{mA} , W, VA, kVA, Var, kVar, kW, \bar{kW} , cm ³ , m ³ , mm ³ , cm ³ , m ³ , mm, cm, m, km, μm, mg, g, kg, g/cm ³ , kg/m ³ , sec, min, hour, min ⁻¹ , h ⁻¹ , sec.1/100s, sec.1/10s, min.1/100m, min.1/10m, min.s.1/10s, h.s.1/10s, h.min.s, h.min,rps, rpm, m/min, m ³ /min, mm/s, m/s ² , rPh, r/s, r/min, r/h, kg/h, \bar{l} , \bar{kl} , \bar{l}/s , \bar{l}/min , \bar{l}/h , $\bar{l} \times l$, lx, Hz, kHz, t, °C, °F, Ω, kΩ, MΩ, Pa, kPa, MPa, kgf/mm ² , kgf–cm, gf–cm, mmHg, mmH ₂ O, TON, G, O, K, S, S ⁻¹ , s, rad, cal, kcal, L, kL, L/s, L/min, L/h, N, mN, KN, N m, mN-m, KN-m, J, kJ, m/s, ms, t/h, kg/s, PS, hP, dB, %, cPs, cP, cst, deg, φ–mm, sccm, x10, x100, x1000, PH, PPM,counts		
Prescale function	0.0001 × 10 ⁻⁹ to 9.9999 × 10 ⁹		
Hysteresis	0 to 9999		
Other functions	<ul style="list-style-type: none"> • Lock setting function • Auto–Zero time setting function • Time unit selection function • Display value monitoring function • Memory retention function (Mode F11 only) 	<ul style="list-style-type: none"> • Lock setting function • Monitoring delay function • Auto–Zero time setting function • Time unit selection function • Display value monitoring function • Memory retention function (Mode F11 only) • Comparative output function(H) 	<ul style="list-style-type: none"> • Lock setting function • Monitoring delay function • Auto–Zero time setting function • Time unit selection function • Display value monitoring function • Memory retention function (Mode F11 only) • Comparative output function(H, L) • Output mode selection function (S, H, L, B, I, F) • Deviation memory function (Mode F)
Main output	—————	<ul style="list-style-type: none"> • Relay output : 250VAC 3A resistive load 1c • NPN Open Collector output : 30VDC 100mA max. 	<ul style="list-style-type: none"> • Relay output : 250VAC 3A resistive load 1a×2 • NPN Open Collector output : 30VDC 100mA max. ×2

SELECTION GUIDE

DISPLAY UNIT

Model	D5Y-M	D5W-M	D5W-MX	D1SC-N
Appearances & Dimensions	 [W72×H36×L93mm]	 [W96×H48×L99.6mm]		 [W72×H96×L28mm]
Digit size	W8×H14.1mm			W31.9×H56.9mm
Power supply	12 to 24VDC ±10%	12 to 24VDC ±10%	110/220VAC 50/60Hz	12 to 24VDC ±10%
Display character	0 to 9, decimal point			Decimal code:0 to 9, decimal point, Hexa-decimal code:0 to F, decimal point
Max. clock speed	Max. 100Hz~5kHz In case of duty rate (ON:OFF)1:1			Max. 3kHz In case of duty rate (ON:OFF)1:1
Input method	BCD input ⇨ Static 100ms, Dynamic, Serial(4/ 5/ 16/ 20/ 25Bit)type [by inner DIP switch]			BCD input ⇨ Selectable Parallel or Serial mode [by back DIP switch(SW2)]
Input logic	Selectable positive or negative logic [internal DIP switch(SW6)]			Selectable positive or negative logic [by back DIP switch(SW1)]
Input level	HI:5 to 24VDC, LOW:0 to 2VDC		HI:4.5 to 24VDC, LOW:0 to 1.2VDC	
Input resistance	22kΩ		12kΩ	

DISPLAY UNIT

Display FND	Red LED(7 Segment)	Green LED(7 Segment)	Red LED(16 Segment)	Green LED(16 Segment)
Model	D1SA-RN	D1SA-GN	D1AA-RN	D1AA-GN
Appearances & Dimensions	 [W20×N+12×H33×L49mm]		 [W20×N+12×H33×L49mm]	
Digit size	W11×H20mm			
Power supply	12 to 24VDC ±10%			
Display character	Decimal code:0 to 9, decimal point, Hexa-decimal code:0 to F, decimal point		0 to 9 , A to Z, decimal point, 24 kinds of symbols	
Max. response frequency	Max. 3kHz <But, Duty rate(ON:OFF)1:1 only>			
Input method	BCD input ⇨ Parallel:Parallel 4 bit binary data, Zero blank, Latch, Decimal point Serial:Serial 4 bit or 5 bit (Including decimal point), Clock, Zero blank, Latch, Decimal point(without serial DOT)		BCD input ⇨ Parallel:Parallel 6 bit binary data, Latch, Decimal point Serial:Serial 6 bit or 7 bit(including decimal point), Data, Clock, Latch, Decimal point(without serial DOT)	
Output	Data out(In case of serial input), Zero blank out			
Input logic	Selectable positive or negative logic by soldering on PCB			
Input level	HI:4.5 to 24VDC, LOW:0 to 1.2VDC Max.			
Input resistance	20kΩ			