CE

Instruction Manual / 使用手冊

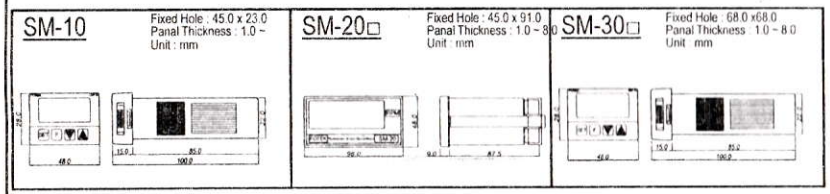
F-6

SM Series RPM & Tachometer

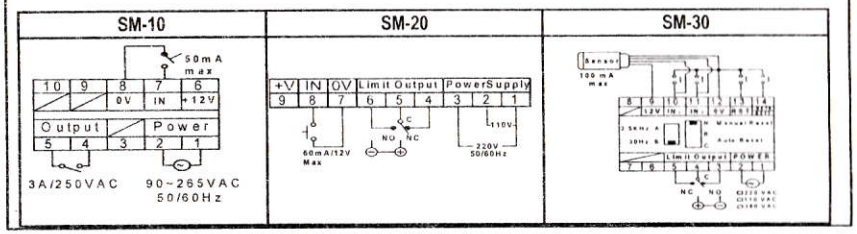
◆ General data / 共同規格

Outline 外型	24 x 48	96 x 48		72 x 72	
Model 型號	SM-10	SM-20	SM-20S	SM-30	SM-30S
Transmitter 再傳送	Non	Non	4~20mA	Non	4~20mA
Alarm output 警報輸出	Relay	Relay	Non	Relay	Non
Output control 輸出控制	Hi / Lo	Hi / Lo	Non	Hi / Lo	Non
Digits 位數	4 digits				
Power supply 工作電壓	90 ~ 265 VAC 50/60 Hz				
Current consumption 耗電流	5VA max.				
DC output 直流輸出	12 V / 100 mA max.				
Input method 輸入方式	NPN				
Response time 應答時間	Ton = 0.1 ms ~ 99.9 ms settable				
Pulses per revolution (PPR)	1~999 PPR settable				
Diameter 轉軸直徑	1 ~ 999mm settable (Line speed meter available only)				
Memory method 記憶方式	EEPROM				
ESD strength 耐靜電	Over 8 KV				
Dielectric strength 電介強度	Over 2.5 KV / 1 min., Between power and each other terminal				
Isolation strength 絕緣強度	Over 100 MΩ / 500 VDC, Between power and each other terminal				
Operating Circums. 工作環境	- 20 ℃ ~ + 80℃ ; 35% ~ 85% RH				

◆ Outline dimension / 外形尺寸圖



◆ Connection diagram / 接線圖

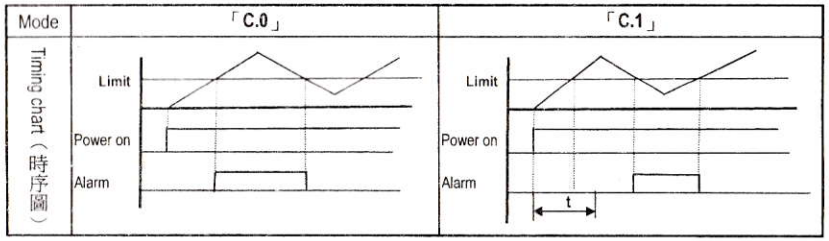


陽明電機股份有限公司
FOTEK CONTROL CO., LTD

◆ Selection of meter / 轉速表或線速表選擇

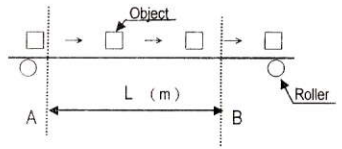
nod	Type of meter		Method of measuring
「0」	Tachometer	(RPM)	「RPM」: Revolutions per minute 每分鐘幾轉
「1」	Tachometer	(RPS)	「RPS」: Revolutions per second 每秒幾轉
「2」	Tachometer	(RPH)	「RPH」: Revolutions per hour 每小時幾轉
「3」	Line speed meter	(M/min.)	「M/min.」: Meter per minute.
「4」	Line speed meter	(Yd/min.)	「Yd/min.」: Meter per minute.
「5」	Duty meter	(SEC)	「SEC」: Time of duty

◆ Alarm output / 警報輸出



◆ Duty meter : To measure the passing time (T) from "A" to B"

Passing time : 「T」(sec)
「T」(sec) = 「L」/ Line speed
「d」mm = Diameter of rolle
「L」m = Distance from "A" to B"



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Specification may be modified without notice in advance
規格變更恕不事先通知

◆ Data setting / 參數設定（SM-□□-S）

Status / 狀態	Symb./ 顯示符號	Description / 說明
Running status 運轉狀態	100.0	1> Running status / 運轉狀態
Press SET key 3 sec		
Setting of lock 鎖住設定	Lck.0	1>「Lck = 0」: Unlock / 可設定 2>「Lck =1」: All lock / 鎖定
Press SET key		
Setting of PPR 每轉信號數設定	P.001	1>「PPR」: Pulses per revolution 2> Range : 1 ~ 999
Press SET key		
Setting of diameter 輪軸直徑設定	d.100	1>Diameter of roller : 1 ~ 999 mm 2>Disappeared at tachometer mode
Press SET key	L.00.0	1> Angle of transmitter : 0 ~ 9999 「0 ~ 1000」is transmittered to「4 ~ 20 mA」
Limit of transmitter 傳送範圍設定	1000	2> Range : 0 ~ 9999
Press SET key		
Setting of distance 通過時間行程設定		1> Distance of measuring : Unit = m 2> Passing time T (sec) = 「L」/ Line speed 3>「L」appeared at 「nod.5」only
Press SET key		

◆ Function setting / 功能設定（SM-□□-S）

Status / 狀態	Symb / 顯示符號	Description / 說明
Running status 運轉狀態	100.0	1> Running status / 運轉狀態
Press DN key 3 sec		
Selection of meter 轉速表或線速表選擇	nod.0	1>「nod.0」= RPM ; 2>「nod.1」= RPS 3>「nod.2」= RPH ; 4>「nod.3」= M / min. 5>「nod.4」= Yd/min ; 6>「nod.5」= T sec
Press SET key		
Setting of response time 反應時間設定	r.00.1	1> Response time (r) : Response frequency = (500 / r) Hz 2> Range : 0.1 ~ 99.9 ms
Press SET key		
Setting of decimal point 小數點選擇	dP.A	1>「dP.A」= Decimal point auto shift 2>「dP.n」= Without decimal point 3>「dP.1」= One decimal point
Press SET key		
Offset of 4 mA 4 mA 偏差值設定	□.000	1> Range : -99 ~ 999 2> Offset of transmitter (4 mA)
Press SET key 3 sec		
Offset of 20 mA 20 mA 偏差值設定	□ .000	1> Range : -99 ~ 999 2> Offset of transmitter (20 mA)
Press SET key		

◆ Data setting / 參數設定（SM-□□）

Status / 狀態	Symb./ 顯示符號	Description / 說明
Running status 運轉狀態	100.0	1> Running status / 運轉狀態
Press SET key 3 sec		
Setting of lock 鎖住設定	Lck.0	1>「Lck = 0」: Unlock / 可設定 2>「Lck =1」: All lock / 鎖定
Press SET key		
Setting of PPR 每轉信號數設定	P.001	1>「PPR」: Pulses per revolution 2> Range : 1 ~ 999
Press SET key		
Setting of diameter 輪軸直徑設定	d.100	1>「d..100」: Diameter of roller=100 mm (Range=1~999mm) 2>Disappeared at tachometer mode
Press SET key		
Setting of Limit 警報值設定	1000	1> Range : 0 ~ 9999 2> Range : 0 ~ 9999
Press SET key		
Setting of alarm status 警報輸出狀態設定	C.0	1>「C.0」: PV>「Limit value」→ Relay ON 2>「C.1」: PV<「Limit value」→ Relay ON
Press SET key		
Power on delay time 送電延遲時間	t.0	1>「t」: 0 ~ 999s 2> Delay time of power on alarm output
Press SET key		
Setting of distance 通過行程設定	L.000	1>Distance of measuring : Unit = 1 Meter 2>Passing time T (sec) = 「L」/ Line speed 3>「L」appeared at 「nod.5」only
Press SET key		

◆Function setting / 功能設定（SM-□□）

Status / 狀態	Symb / 顯示符號	Description / 說明
Running status 運轉狀態	100.0	1> Running status / 運轉狀態 2> SM-10 /SM-30 : ▼ key ; SM-20 : DN key
Press DN key 3 sec		
Selection of meter 轉速表或線速表選擇	nod.0	1>「nod.0」= RPM ; 2>「nod.1」= RPS 3>「nod.2」= RPH ; 4>「nod.3」= M / min. 5>「nod.4」= Yd/min ; 6>「nod.5」= T sec
Press SET key		
Setting of response time 反應時間設定	r.00.1	1> Response time (r) : Response frequency = (500 / r) Hz 2> Range : 0.1 ~ 99.9 ms
Press SET key		
Setting of decimal point 小數點選擇	dP.A	1>「dP.A」= Decimal point auto shift 2>「dP.n」= Without decimal point 3>「dP.1」= One decimal point
Press SET key		