

PSC Series

Wheel type encoder

- Wheel type detection structure which is suitable for the measurement of length and speed
- Various measuring range (6 kinds)
- Economical price
- Simple installation structure



Suffix code

Model	Code				Description	
PSC-	☐	☐	☐	☐	Wheel type encoder	
Min length measurement	MA				1 m	Please refer to the length measurement code chart
	MB				1 cm	
	MC				1 mm	
	YA				1 YARD	
	YB				0,1 YARD	
	YC				0,01 YARD	
Output signal		AB			A, B phase output PSC-MA and PSC-YA are A, B phase output. Rests are A, B, Z Phase output	
Output circuit			N		NPN voltage output	
			O		NPN open collector	
			T		Totem pole output	
Power supply voltage			12	12 V DC (5 – 12 V DC)		
			24	24 V DC (12 – 24 V DC)		

Length measurement code chart

Model	Code	Min measuring length	Gear ratio	Circumference of wheel	Number of pulse per 1 revolution
PSC	MA	1 m	4:1	250 mm	1 pulse
	MB	1 cm	4:1		100 pulse
	MC	1 mm	2:1		500 pulse
	YA	1 YARD	4:1	228,6 mm (0.25/Yd)	1 pulse
	YB	0.1 YARD	4:1		10 pulse
	YC	0.01 YARD	4:1		100 pulse

Specification

Electrical specification

Phase difference on output	Phase difference between the A and B : $T/4 \pm T/8$ (1 cycle of A phase = T)	
Response frequency	100 KHz max.	
Rated voltage	5 – 12 V DC ($\pm 5\%$), 12 – 24 V DC ($\pm 5\%$)	
Current consumption	60 mA max	
Connection type	Cable extended type	
Control output	Voltage and open collector	Load voltage : max 30 V/load current : max 30 mA/Remaining voltage : max 0.4 V
	Totem pole	LOW (Load current : max 30 mA/Remaining voltage : max 0.4 V) HIGH (Load current : max 10 mA/Remaining voltage : Rated voltage above -1.5 V DC)
Response speed	Max 1 μ s (Wire length : 1.5 m lv sink = 30 mA)	

Mechanical specification

Starting torque	Base on wheel friction coefficient
Max permissible revolution	Gear ratio 4:1 – 1,250 r/min, gear ratio 2:1 – 2,500 r/min (※)

(※) Mechanical endurable maximum revolution.

H
Rotary
Encoder

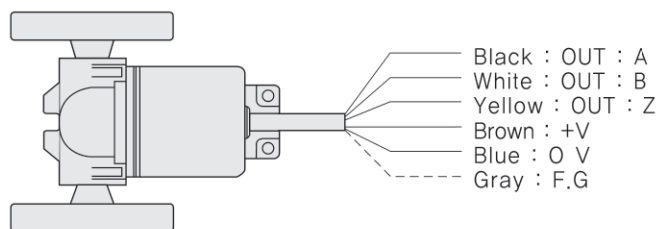
Environmental specification

Insulation resistance	Min 500 M Ω (Between the terminal and case)
Dielectric strength	500 V AC (For 1 min in 60 Hz between the terminal and case)
Vibration resistance	10 – 55 Hz (Period for 1 min), Double amplitude : 1.5 mm, for 2 hour each in X, Y and Z directions
Shock resistance	735 % max
Ambient temperature	-10 ~ 70 °C (No icing allowed), When storing : -25 ~ 85 °C
Ambient humidity	35 ~ 70 % RH
Wire specification	Number of strips : 5 P, Thickness : $\varnothing$ 6.0 mm, Length : 1.5 m, Shield cable
Weight	Approx. 625 g

The technical drawing shows two views of the M-1000 cable reel:

- Front View (Top):** Shows the circular face of the reel with a central hub. Dimensions include a total width of 98, a mounting flange diameter of 70, a central hub diameter of 54, and a central hole diameter of 5. The main body has a diameter of 106.
- Side View (Bottom):** Shows the profile of the reel. It features a top flange with a diameter of $\varnothing A$. The main body has a height of 78 and a base height of 84. The cable outlet at the bottom has a diameter of $\varnothing 1.50$ and a length of 3.5. Two mounting holes are shown with a diameter of 1.3 and a center-to-center distance of 2.4. Labels indicate "2 - $\varnothing 6.0$ HOLES" and " $\varnothing 6.0$ CABLE (L:1500)".

 Connection diagram



- 704

Input/output circuit

NPN voltage output		NPN open collector output	
Encoder internal circuit	Example of external connection	Encoder internal circuit	Example of external connection
Totem pole output			
NPN voltage output	NPN open collector output	NPN voltage output	NPN open collector output
Encoder internal circuit	Example of external connection	Encoder internal circuit	Example of external connection

Output wave form

■ NPN voltage output, NPN open collector output, Totem pole output

Output	Clockwise(CW)	Counter clockwise(CCW)
OUT A		
OUT B		
OUT Z		

* Clockwise (CW) : Turning to the clockwise direction when looking at from the shaft of the product.

* Counter clockwise (CCW) : Turning to the counter clockwise direction when looking at from the shaft of the product.

کانون ابزار

تلفن:

۰۲۱ ۶۶ ۳۹ ۳۹ ۰۰

۰۹۱۲ ۱۴۷ ۳۰۲۳

ali5.ir