

PSC series

- 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				Information	
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, YA), Rests are A, B, Z Phase output	
Output Circuit			N		NPN voltage output	
			O		NPN open collector	
			T		Totempole 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 measurement 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

Model			PSC
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 speed		100 KHz max.
	Rated voltage		5 - 12 V DC ($\pm 5\%$), 12 - 24 V DC ($\pm 5\%$)
	Current consumption		Max 70 mA
	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/Output voltage : above rated voltage - 1.5 V DC)
Mechanical specification	Response time		Max 1 μ s (Wire length : 1.5 m I_v sink = 30 mA)
	Starting torque		Max 200 gf·cm (19.600 u N·m)
	Moment of inertia		Max 800 g·cm ² (8X10-6kg·m ²)
	Permissible shaft loading		Radial : 0.1 mm within, Thrust : 0.2 mm within
	Max permissible revolution		5,000 rpm
	Bearing life		1.2 X 10 ⁶ (r/min) : time
Mechanical 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		Max 75 G
	Ambient temperature		-10 ~ 60 °C (No icing allowed), When storing : -25 ~ 85 °C
	Ambient humidity		35 ~ 70 % R.H
	Wire specification		Number of strips : 5 P, Thickness : $\varnothing$ 6.0 mm, Length : 1.5 m, Shield cable
		Weight	Approx. 625 g