

高轉速及位置傳感器

相位 頻率 振幅 增益 燒錄功能 自動調整

◎ Features

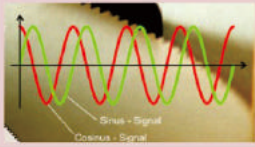
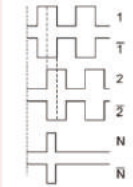
- Modules for different tooth pitch
- Resolution up to 400 flanks per pitch
- Sine/Cosine output 1 V_{SS} (analogue type)
- Full differential output signal
- FIXPITCH[®] sensor
- Temperature range from -25 °C to +100 °C

◎ Advantages

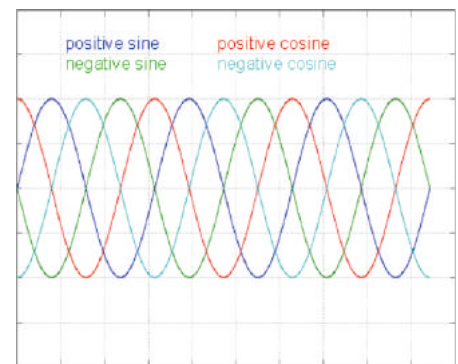
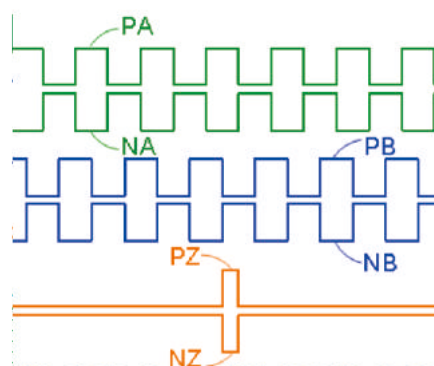
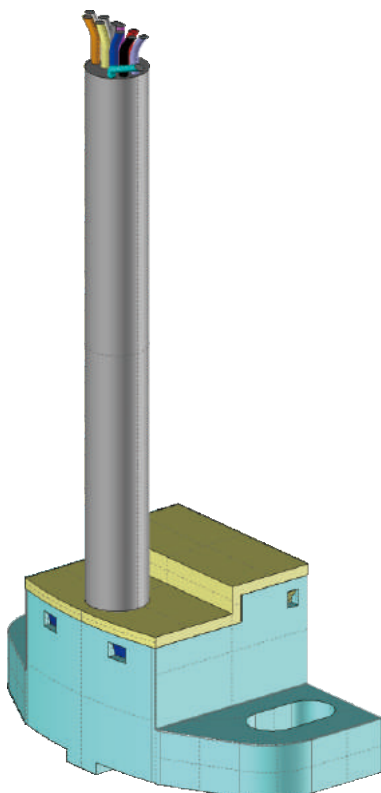
- Small size
- Adjustable hysteresis (digital type)
- Error detection (amplitude and frequency)

◎ Applications

- Incremental encoder for linear or rotary mo-vements in various industrial applications
 - Motor integrated encoder
 - Motor feedback system
 - Linear position measurement

Signal Pattern	Module			Output
	0.3	0.4	0.5	1V _{pp} 0-200 kHz
	0.3	0.4	0.5	TTL/RS422 0-500 kHz

Module	Wheel tooth (Ferromagnetic steel)				
0.3	64	128	256	384	512
0.4	64	128	256	384	512
0.5	64	128	256	384	512

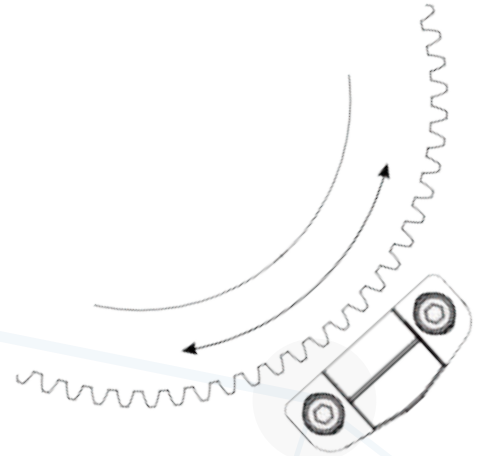


Symbol	Parameter	Min.	Typ.	Max.	Unit
V _{CC}	Supply voltage	4.5	5.0	5.5	V
I _C	Current consumption	-	26	-	mA
F	Flanks per pitch ¹⁾	4.0	-	400	-
V _{cut}	Output voltage ²⁾	0.8	1.0	1.2	V _{SS}
T _{amb}	Ambient temperature	-25	-	+100	°C

Absolute maximum Ratings

In accordance with the absolute maximum rating system (IEC60134).

Symbol	Parameter	Min.	Max.	Unit
V_{CC}	Supply voltage	-0.3	+6.0	V
T_{amb}	Ambient temperature	-25	+100	°C
T_{stg}	Storage temperature	-25	+100	°C



Electrical Data

Digital Output Type, $T_{amb} = 25\text{ °C}$; $V_{CC} = 5\text{ V}$; unless otherwise specified.

Symbol	Parameter	Conditions	Min.	Typ.	Max.	Unit
V_{CC}	Supply voltage		4.5	5.0	5.5	V
I_C	Current consumption	No load	-	26	400	mA
F	Flanks per pitch ¹⁾		4	-	400	-
T_{amb}	Ambient temperature		-25	-	+100	°C
f_{in}	Maximum input frequency ¹⁾		10	-	500	kHz
Hys	Hysteresis ²⁾		0	2.7	11.7	Deg
$I_{out, pin}$	Current per output (source and sink)		-50	-	50	mA
V_{outH}	Output high level	$I_{source} = 20\text{ mA}$	4.6	-	5.0	V
V_{outL}	Output low level	$I_{sink} = 20\text{ mA}$	0.0	-	0.4	V

¹⁾ Depends on programmed resolution.

²⁾ Programmable feature.

Electrical Data

Analogue Output Type, $T_{amb} = 25\text{ °C}$; $V_{CC} = 5\text{ V}$; unless otherwise specified.

Symbol	Parameter	Conditions	Min.	Typ.	Max.	Unit
V_{CC}	Supply voltage		4.5	5.0	5.5	V
I_C	Current consumption	No load	-	22	100	mA
T_{amb}	Ambient temperature		-25	-	+100	°C
f_g	Cut-off frequency	$C_L = 250\text{ pF}$	500	-	-	kHz
R_{load}	Load on output	differential	100	-	-	Ω
V_{out}	Output voltage		0.8	1.0	1.2	VSS

Environmental Data

Parameter	Conditions	Min.	Typ.	Max.	Unit
Vibration resistance (IEC 60068-2-6)	10...2.000 Hz	-	-	400	m/s ²
Shock resistance (IEC 60086-2-27)	4 ms	-	-	1.500	m/s ²
Electromagnetic compatibility	5 kHz	-	-	2	kV
Humidity	85 °C	-	-	85	%