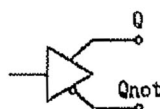


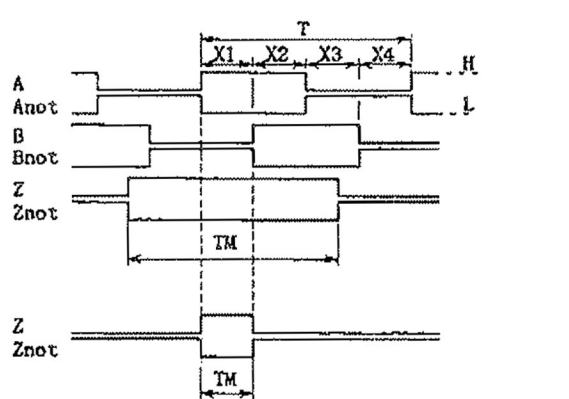
Specifications of incremental Shaft Encoder		Note	Output Pulse [P/R]
IRS620-XXXX-011		With Flange(φ68)	100,200,300,500,512,600,900,1000 1024,1200,1500,2000,2048,2500
Model-Output Pulse[P/R]-Functional number		Type1	4096,5000,6000
Mechanical Specifications		Type2	
Shaft Diameter	15 mm	Termination	
Mechanical Perm. Speed	6000 min ⁻¹	[Connector Output]	
Starting Torque	≤0.05 N·m	Receptacle MS3102E20-29P (Equivalent)	
Maximum Accel. Speed	40000 rad/s ²	Plug MS3106B20-29S (Non-appending) (Equivalent)	
Moment of Inertia	9.0×10 ⁻⁶ kg·m ²	Cable clamp MS3057-12A (Non-appending) (Equivalent)	
Shaft Load (Radial)	≤50 N		
Shaft Load (Axial)	≤50 N		
Mass	0.7 kg	Expect Flange	

Environmental Specifications		Wire Connection	
Operating Temperature [*1]	-20~+70 °C	No.	Signal
Storage Temperature	-20~+85 °C	A	:A
Vibration [*2]	100 m/s ²	B	:Z
Schock [*2]	1000 m/s ²	C	:B
Protection Grade	IP66 Equivalent	H	:+5V
		K	:0V
		M	:0V
		N	:Anot
		P	:Znot
		R	:Bnot
		T	:Body

[*1] The operating temperature range is limited by rotation speed.
[*2] Test condition

Electrical Specifications		Output Circuit	
Output	Linedriver	 RS422A	
Supply Voltage (Vcc)	DC5±0.5 V		
Supply Current	≤70 mA		
Output Voltage (H)	≈2.4 V		
Output Voltage (L)	≤0.5 V		
Output Current [*3]	±10 mA		
Rise & Fall time	≤100,100 ns		
Response Frequency	0~300 kHz		
Insulation resistance	≥20 MΩ		
By-pass Capacitor	0.22 μF		
By-pass Capacitor	0.22 μF		
Determine Time of ABZ signals	30 ms		

[*3] Output current is limited by the operating temperature.

 Encoder	<p>In case of Type1</p> <p>Symmetry of "A" & "B" signals</p> $X1+X2=0.5T\pm0.1T$ $X2+X3=0.5T\pm0.1T$ <p>Edge Separation</p> $Xn\geq0.15T(n=1,2,3,4)$ <p>Width of "Z" signal</p> $TM=1.0T\pm0.5T$ <p>Positional relationship of A&B signals</p> <p>Not specified</p>	<p>In case of Type2</p> <p>Symmetry of "A" & "B" signals</p> $X1+X2=0.5P\pm0.15P$ $X2+X3=0.5P\pm0.15P$ <p>Edge Separation</p> $Xn\geq0.1P(n=1,2,3,4)$ <p>Width of "Z" signal</p> $TM=0.25P\pm0.15P$ <p>Positional relationship of A&B signals</p> <p>As shown in left chart(=X1)</p>
	<p>Signal Accuracy</p> <p>Accumulative Angle Error : ≤0.2T Accumulative Angle Error : ≤0.1T</p> <p>Pitch Error : ±0.01T Pitch Error : ±0.01T</p> <p>Adjacent Pitch Error : ±0.005T [P=1.0T±0.1T]</p> <p>[T=360°/N] [T=360°/N]</p> <p>[N: Output pulse of A,B(P/R)] [N: Output pulse of A,B(P/R)]</p>	

Limited Warranty
SUMTAK warrants its products against defects in materials and workmanship under normal use and service for a period of ONE(1) year from the date of original shipment.

RECEPTACLE
MS3102E20-29P
(Equivalent)

