

## INCREMENTAL SHAFT ENCODER (Heavy Duty)

Type	HTR – $\Lambda$ - $\Lambda$	
Power Supply	DC5V (fixed) or DC8~26V	
Current Consumption	< 60 mA	
Detection System	Incremental	
Pulse/Rev.	10 100 200 500 1024 2048 20 120 250 600 1200 40 125 300 720 1500 50 150 360 800 1800 60 180 400 1000 2000	
Output Phase	A / A,B / A,B,Z Phase	
Output Wave	Square Wave	
Output Capacity	Sync. Current: 20mA Residual Voltage: 0,5V or Less	
Max. Response	50 kHz ~ 100 kHz	
Phase Different	A,B Phase diff. $90^{\circ} \pm 45^{\circ}$ T/4 $\pm$ T/8 Z Phase T $\pm$ T/2	
Wave form Rise/Fall	2 s or Less	
Starting Torque	250 gf-cm or Less	
	Axial	4 kg
	Radial	8 kg
Max. Speed	6.000 rpm	
Operating Temp./Humidity	-10° C ~ 60° C RH 35% ~ 90% (No Condensation)	
Storage Temp.	-20° C ~ 80° C	
Vibration	10 G (10 $\pm$ 1500 Hz)	
Protection	Dust & Dripping Proof (IP64)	
Polarity	Against Reverse Protection	
Shock	20G per 11ms	
Cable	$\varnothing$ 5,4 and 500 mm long	
Weight	< 320 g.	

