



**IMAJ TEKNİK**  
ELEKTRİK ELEKTRONİK MALZ. SAN. VE TİC. LTD. ŞTİ.

# Smart Abs®

## APPLICATION

- Large Wattage Motors
- Robots
- Machine Tools
- Injection Machines

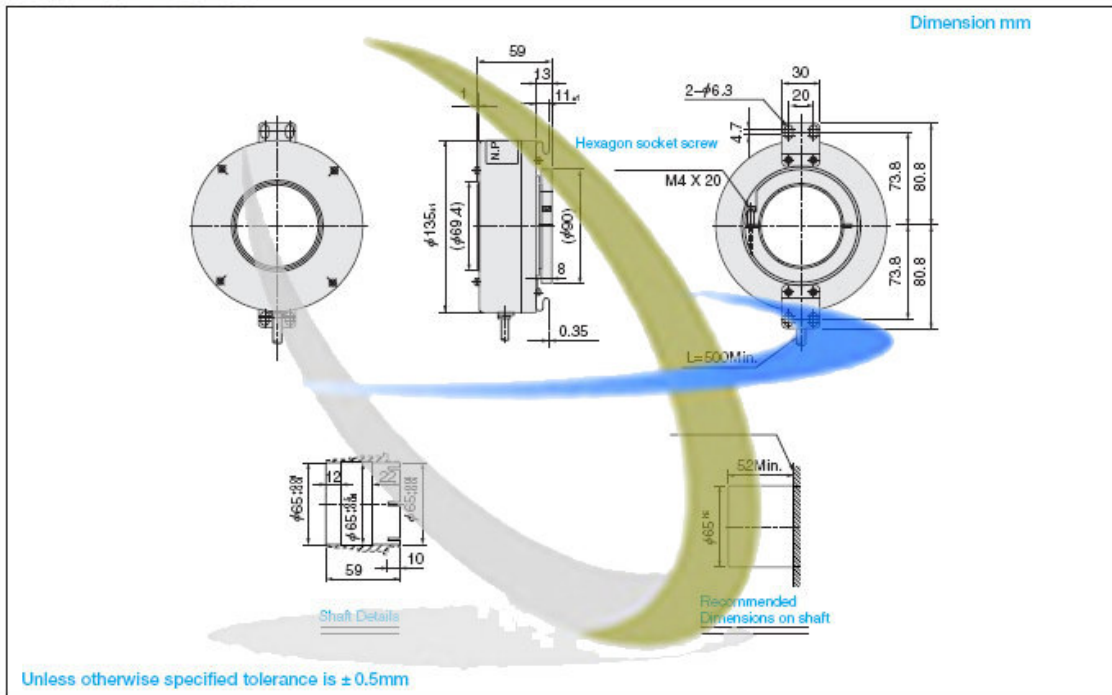
## FEATURES

- Full Absolute Signal Output
- 17bit/Tum, 16bit Tums (At 1,500rpm Max)
- Bi-direction Serial Communication Type(NRZ)
- Fail-Check Operation
- Even during power outage, Multi-Tum data are backed up by external battery

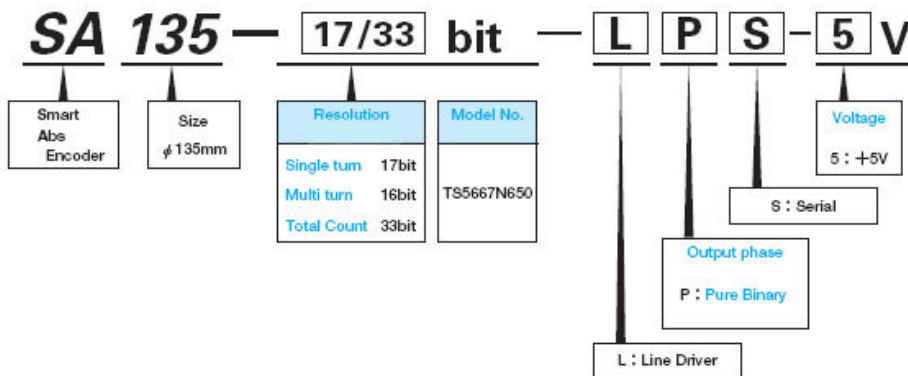


TS5667N650

# SA 135



## DESIGNATE THE NAME OF FUNCTION WHEN ORDERING



© For special cases, please consult us.

## SPECIFICATIONS

Electrical Spec.			Mechanical Spec.		
Resolution	Absolute Signal	17bit/turn and 16bit multiturns Total 33bit	Starting Torque	98 x 10 <sup>-3</sup> N · m (1,000gf · cm) Max	
	Output Phase	Pure Binary Code	Moment of Inertia	1.21 x 10 <sup>-3</sup> kg · m <sup>2</sup> Typ	
Supply Voltage	DC +5V ± 5%		Maximum Rotating Speed	1,500min <sup>-1</sup> Max (1,500rpm)	
Consumption Current	(Typ) Normal Operation 70mA (Typ) Battery Operation 100µA		Mounting Tolerances	Radial Play	0.05mm TIR Max
	Output Form	Line Driver		ADM485 or compatible / 20mA ADM 485 20mA	Axial End Play
Shaft Inclination					0.1° Max
Maximum Rotating Speed	1,500 min <sup>-1</sup> Max (1,500rpm)		Operating Temp. Range	-10~+85°C	
Serial Data Transfer Cycle	35µs ~ 63µs (Note) Including time for a request. Time depends on the ID Codes. 2.5Mbit/sec Start-Stop communication.		Storage Temp. Range	-20~+90°C	
Data Code	Base Band NRZ (Bi-direction)		Protective Construction	IP = 40	
E <sup>2</sup> PROM Accessible Address	8bit X 0-79 Address		Vibration	49m/s <sup>2</sup> (5G) (5 - 2,000Hz) for 2hours/axis 49m/s <sup>2</sup> (5G) (5 - 200Hz)	
			Shock	1,960m/s <sup>2</sup> (200G) 11msec, 3times/direction 294m/s <sup>2</sup> (30G) 11msec,	
			Mass	1.5kg Max Without Cable	

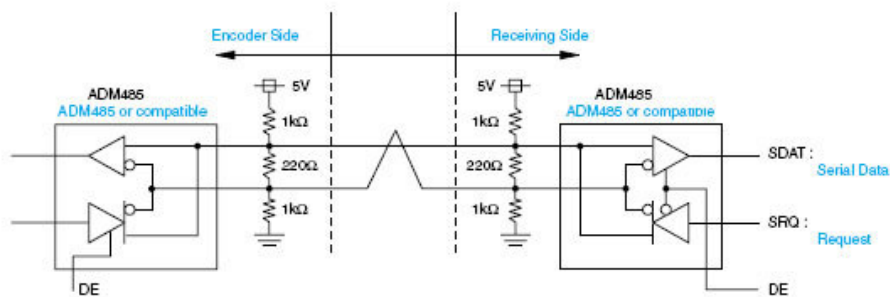
● External Battery (VB) recommended: TOSHIBA Lithium Battery ER6V

## CONNECTION TABLE

Lead Wire	Function	Remark
Red	Vcc	Main Power DC + 5V ± 5%
Black	GND	---
Brown	VB	Battery (Notice1)
Brown/Black	GND	---
Blue	SD	Serial Data
Blue/Black	SD	
Gray	CASE GND	---

Notice 1 : Battery Power is necessary during Power Outage.

## RECEIVING AND TRANSMITTING INTERFACE



www.imajteknik.com

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