

Motortronics®

ROTARY ENCODERS

FA-CODER®



OIH35

SmartAbs®



ABSOLUTE

APPLICATION

Machine Tools,
For devising

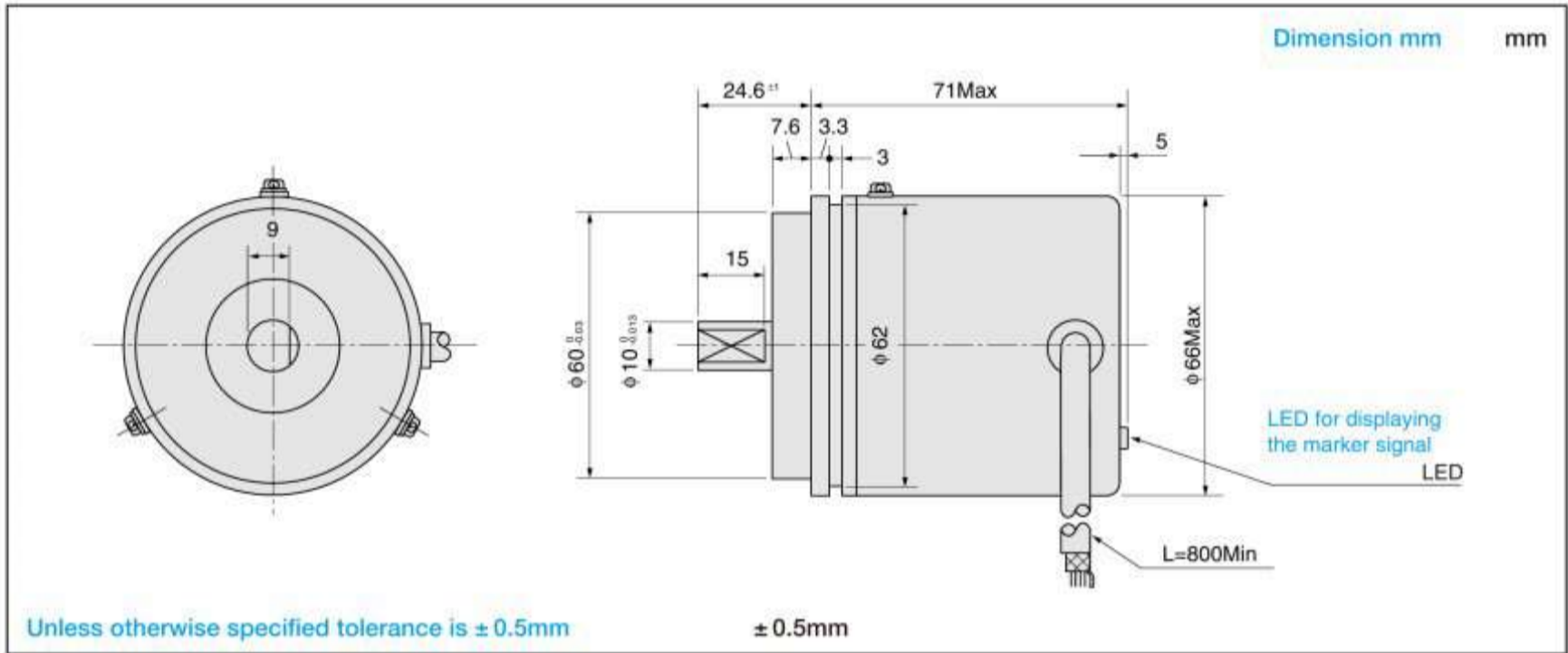
FEATURES

Specially divided
Rigid type

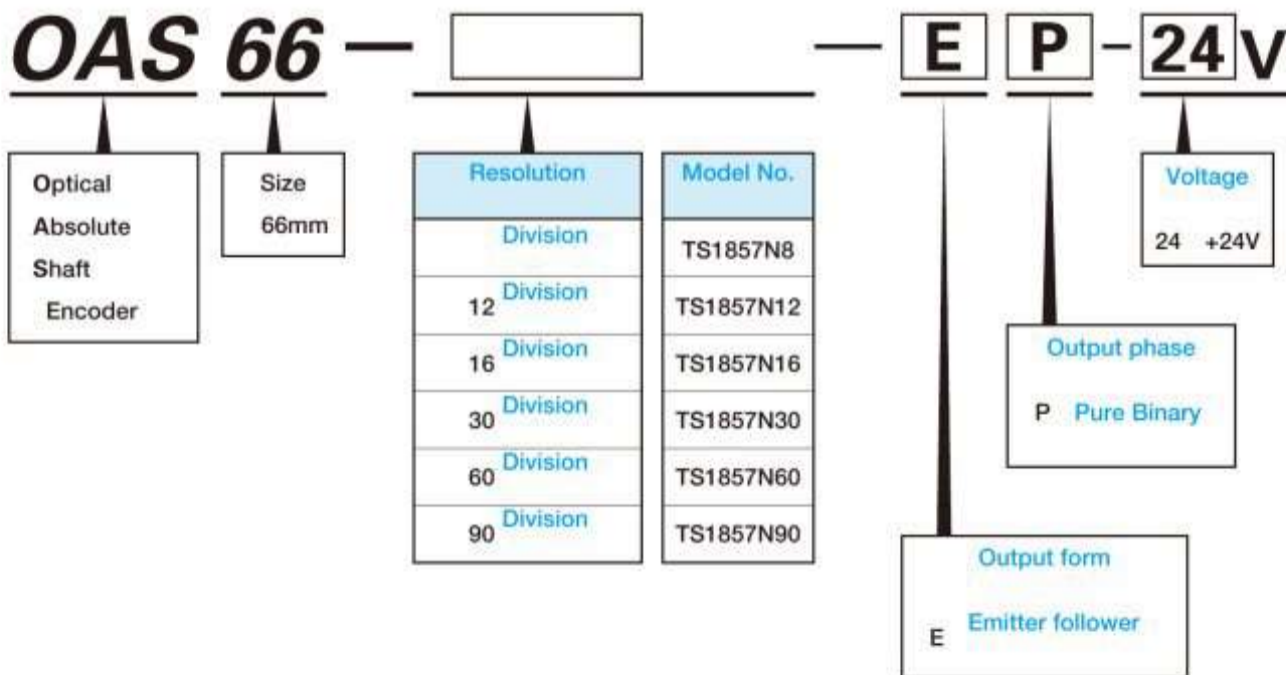


TS1857

OAS66Series



DESIGNATE THE NAME OF FUNCTION WHEN ORDERING



For special cases, please consult us.

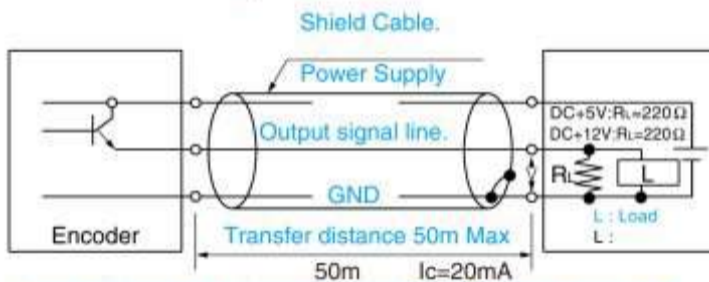
SPECIFICATIONS

Electrical Spec.	
Resolution	8 90 Division
Output Phase	Pure Binary Code
Supply Voltage	DC + 24V ± 5%
Consumption Current	150mA Max
Output Form	Emitter follower
	Maximum Allowable Output Voltage 50V Maximum Allowable Sink Current 200mA
Maximum Response Frequency	20kHz
Rise time, Fall time	

Mechanical Spec.	
Starting Torque	$2.0 \times 10^{-2} \text{ N} \cdot \text{m}$ 200gf · cm Max
Moment of Inertia	$3.0 \times 10^{-6} \text{ kg} \cdot \text{m}^2$ 30g · cm ² Max
Maximum Rotating Speed	$5,000 \text{ min}^{-1}$ 5,000rpm
Allowable Shaft Load	Radial 98N 10kgf Max
	Axial 49N 5kgf Max
Operating Temp. Range	-10 + 60°C
Storage Temp. Range	-20 + 85°C
Protective Construction	IP = 53
Vibration	176 m/s^2 18G
Shock	980 m/s^2 100G
Mass	0.6kg Max

CIRCUIT AT OUTPUT STAGE (EXAMPLE)

Emitter Follower Output



Note that transfer distance depends much on ambient condition.

Use transmission cable after verifying effects of impedance characteristics, etc.

CONNECTION TABLE (EXAMPLE)

Lead color	Function	Lead color	Function
VIOLET	DC+24V	RED	2 ⁰
WHITE	GND	ORANGE	2 ¹
GRAY	GND	YELLOW	2 ²
BLACK	Parity Sig.	GREEN	2 ³
BROWN	Strobe Sig.		

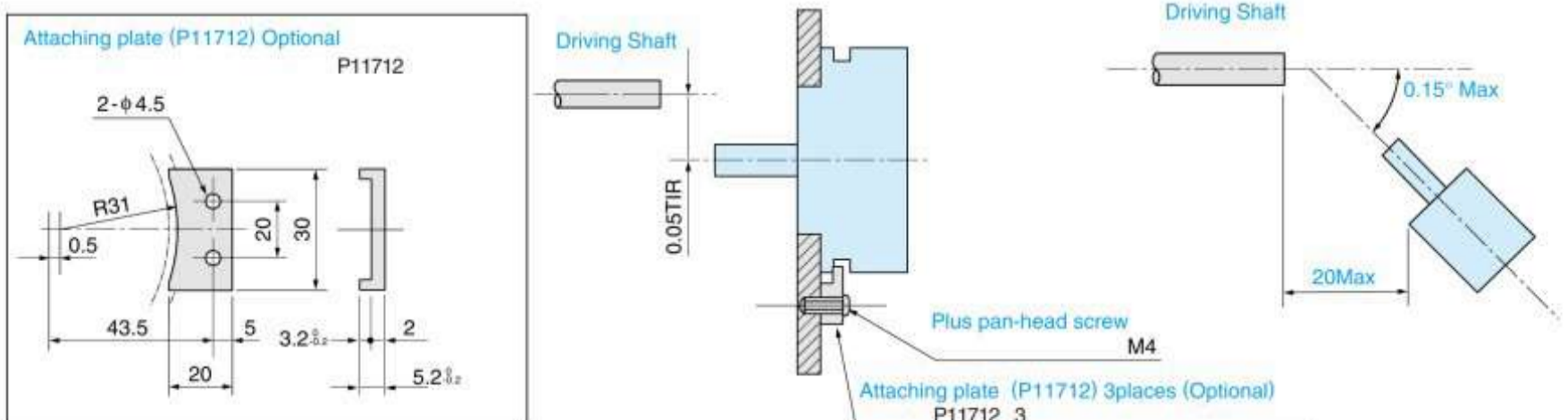
Marker signal shall be used for displaying LED only and no output signal generation.

LED

ATTACHING WAY (EXAMPLE)

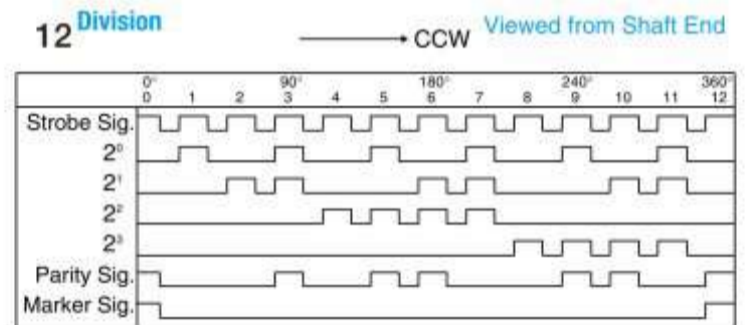
Note that attaching alignment can be changed by the couplings when coupled to the driving shaft.

Dimension mm mm

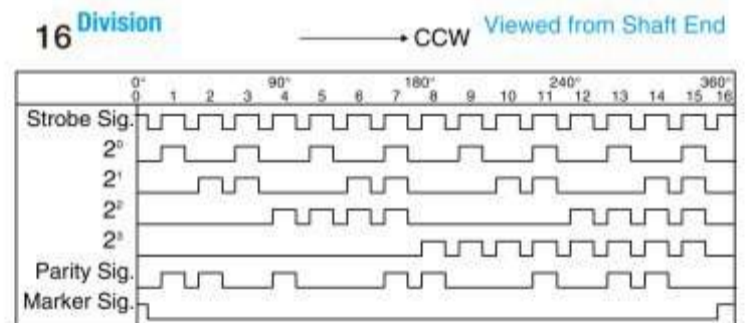


OUTPUT PHASE SHIFT (EXAMPLE)

12 Division



16 Division



The logic shall be negative and above figures shall show voltage wave-forms.

For other details, please refer to individual Specification.

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Digital techniques in business industry have been greatly advanced. Among these, necessity for converting analog like rotating value, shaft angle position, etc. to digital has been increased as measurement for physical value and automation for control system are advanced. Encoders, at present, have been widely used for factory automations, measurements, office automation devices, medical equipment, aviations and universal fields.

Various kinds of encoders (FA-CODER® as trade mark) from small to high resolution are available to meet all of the requirements. High performance encoders supported by these high disk producing techniques are available.

