



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

## ABSOLUTE

### APPLICATION

- Machine Tools

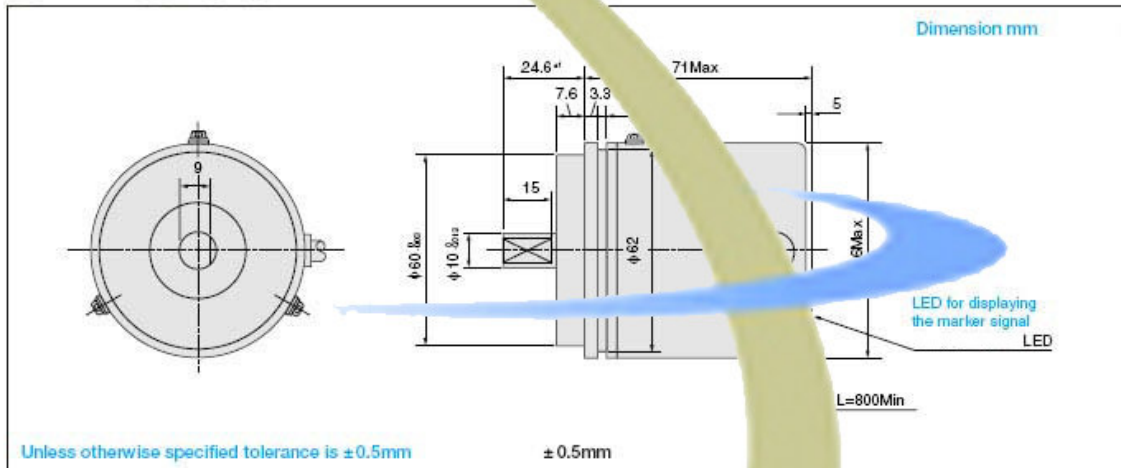
### FEATURES

- Specially divided
- Rigid type

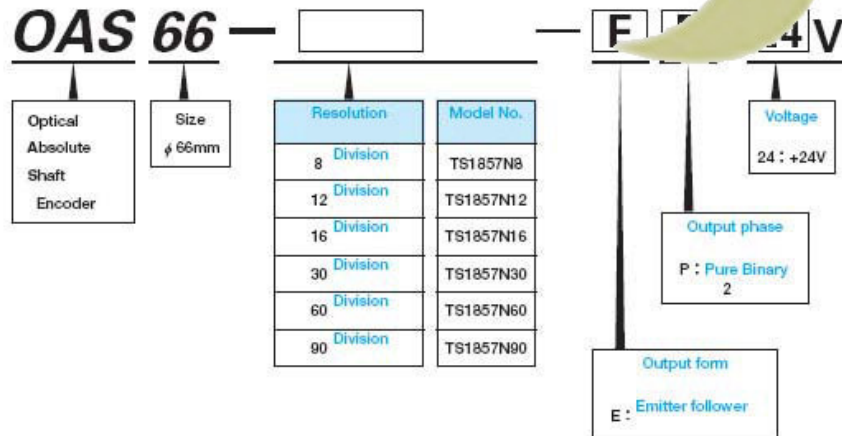


TS1857

## OAS66 Series



- DESIGNATE THE NAME OF FUNCTION WHEN ORDERING



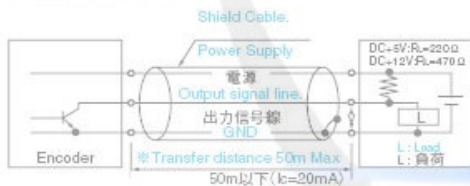
© For special cases, please consult us.

## SPECIFICATIONS

Electrical Spec.		Mechanical Spec.	
Resolution	10bit, 11bit, 12bit, 360C/T	Starting Torque	$9.8 \times 10^{-2} \text{ N} \cdot \text{m}$ (1kgf-cm Max)
Output Phase	Pure Binary Code, Gray Code	Moment of Inertia	$3.0 \times 10^{-6} \text{ kg} \cdot \text{m}^2$ (30g-cm <sup>2</sup> Max)
Supply Voltage	DC +5V ± 5%      DC +12V ± 5%	Maximum Rotating Speed	$5,000 \text{ min}^{-1}$ (5,000rpm)
Consumption Current	250mA Max.	Allowable Shaft Load	Radial      98N (10kgf Max)
Output Form	Open Collector		Axial      49N (5kgf Max)
		Operating Temp. Range	-10~+70°C
Maximum Response Frequency	10kHz	Storage Temp. Range	-20~+85°C
Rise time, Fall time	—	Protective Construction	IP = 52
		Vibration	$98 \text{ m/s}^2$ (10G)
		Shock	$980 \text{ m/s}^2$ (100G)
		Mass	1.5kg Max

## CIRCUIT AT OUTPUT STAGE (EXAMPLE)

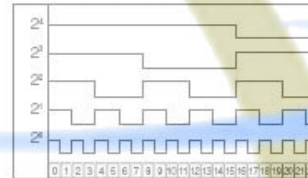
### ● Open Collector Output



※Note that transfer distance depends much on ambient condition.

### ● Pure Binary Code

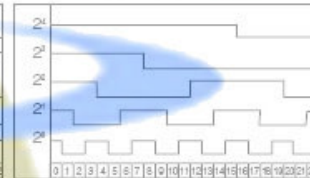
→ CW Viewed from Shaft End  
(Reverse "Open", "5V")



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

### ● Gray Code

→ CCW Viewed from Shaft End



## CONNECTION TABLE (EXAMPLE)

(Confirm the function for output signals listed on the output signal table.)

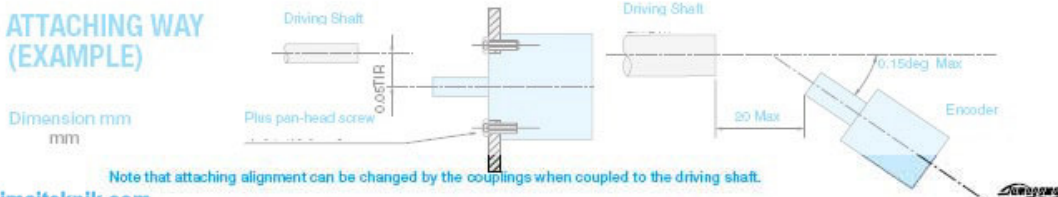
Pin	Function	Pin	Function	Pin	Function
1	1 ST Digit (MSB)	9	9 TH Digit (LSB)	17	—
2	2 ND Digit	10	10TH Digit (LSB)	18	DC+ 5 V
3	3 RD Digit	11	(11TH Digit) (LSB)	19	—
4	4 TH Digit	12	(12TH Digit) (LSB)	20	—
5	5 TH Digit	13	—	21	—
6	6 TH Digit	14	—	22	Case GND
7	7 TH Digit	15	GND	23	—
8	8 TH Digit	16	GND	24 Note 4	Reverse Count

Note) In case of pure binary code, Count increasing direction Can be changed by applying 5V or 0V.

## OUTPUT SIGNAL TABLE (EXAMPLE)

Resolution	Digit												
	1ST	2ND	3RD	4TH	5TH	6TH	7TH	8TH	9TH	10TH	11TH	12TH	13TH
10 bit	2 <sup>9</sup>	2 <sup>8</sup>	2 <sup>7</sup>	2 <sup>6</sup>	2 <sup>5</sup>	2 <sup>4</sup>	2 <sup>3</sup>	2 <sup>2</sup>	2 <sup>1</sup>	2 <sup>0</sup>			
11 bit	2 <sup>10</sup>	2 <sup>9</sup>	2 <sup>8</sup>	2 <sup>7</sup>	2 <sup>6</sup>	2 <sup>5</sup>	2 <sup>4</sup>	2 <sup>3</sup>	2 <sup>2</sup>	2 <sup>1</sup>	2 <sup>0</sup>		
12 bit	2 <sup>11</sup>	2 <sup>10</sup>	2 <sup>9</sup>	2 <sup>8</sup>	2 <sup>7</sup>	2 <sup>6</sup>	2 <sup>5</sup>	2 <sup>4</sup>	2 <sup>3</sup>	2 <sup>2</sup>	2 <sup>1</sup>	2 <sup>0</sup>	

## ATTACHING WAY (EXAMPLE)



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İmaj Teknik Elektrik Elektronik San. ve Tic. Ltd. Şti.

EMEKYEMEZ MAH.TUTSAK SOK. NO: 16/13-14-15

KARAKOY/İSTANBUL  
TURKEY

Telefon : +90 212 235 9535 / 36  
Fax : +90 212 235 9537

www.imajteknik.com  
www.imajteknik.com.tr