

SHAFT TYPE

OVW-2 Model



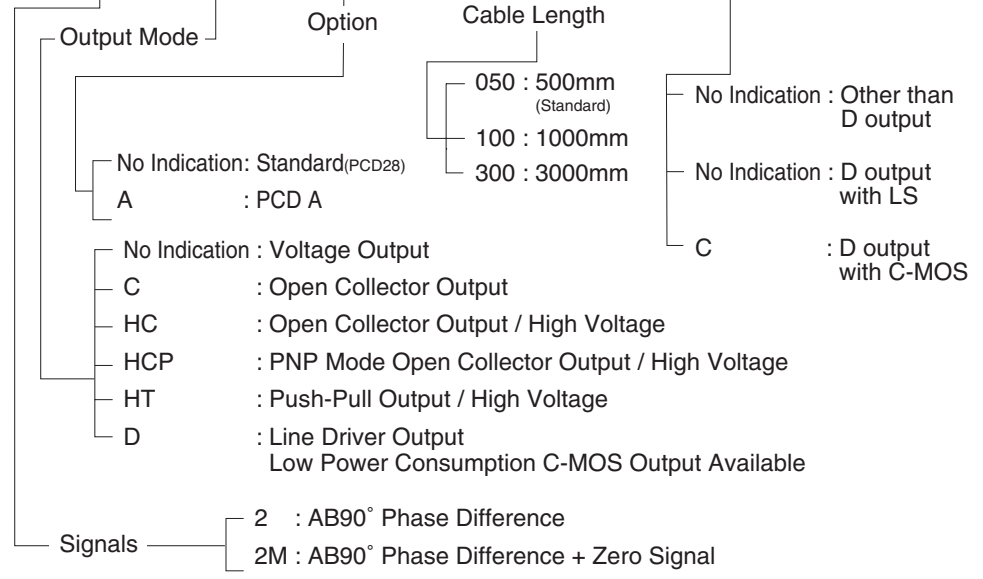
Economical Model

- Practical Length Reduction from 38mm to 30mm.

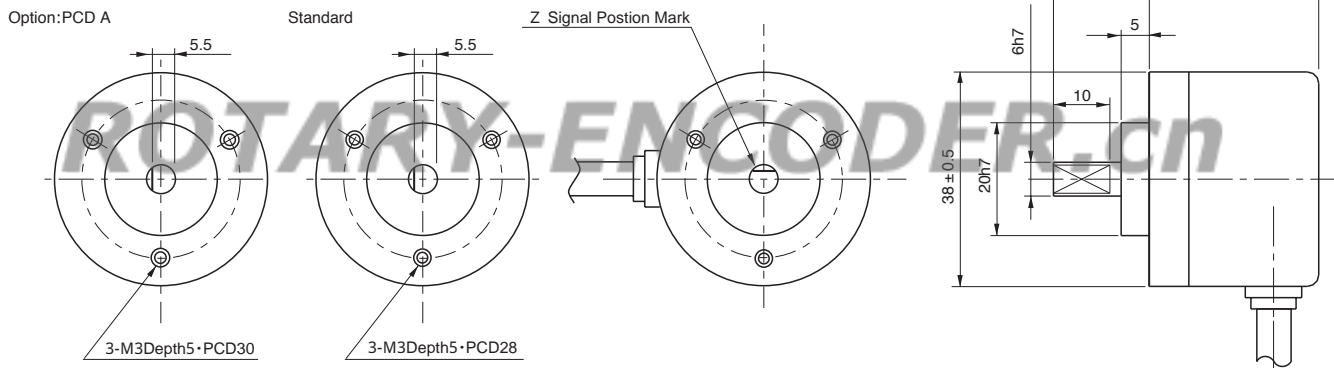
Model

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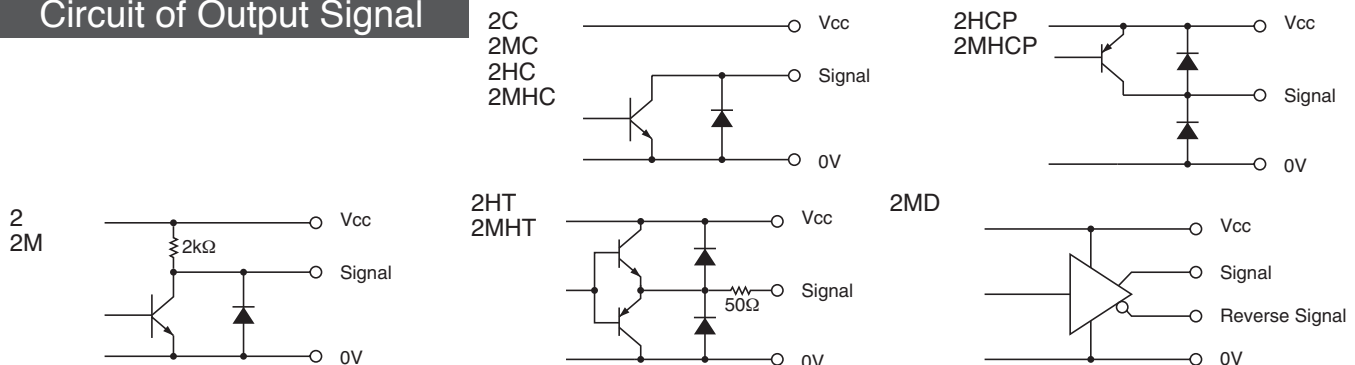
| | | | |
|------------|--------|------|---------|
| Resolution | | | |
| 002 | 20P/R | 05 | 500P/R |
| 003 | 30P/R | 0512 | 512P/R |
| 0032 | 32P/R | 06 | 600P/R |
| 004 | 40P/R | 08 | 800P/R |
| 005 | 50P/R | 09 | 900P/R |
| 006 | 60P/R | 10 | 1000P/R |
| 01 | 100P/R | 1024 | 1024P/R |
| 0125 | 125P/R | 12 | 1200P/R |
| 02 | 200P/R | 15 | 1500P/R |
| 0250 | 250P/R | 18 | 1800P/R |
| 0256 | 256P/R | 20 | 2000P/R |
| 03 | 300P/R | 2048 | 2048P/R |
| 036 | 360P/R | 25 | 2500P/R |
| 04 | 400P/R | 36 | 3600P/R |



External Dimension



Circuit of Output Signal



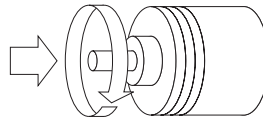
Electrical Spec.

※1) at Maximum Output Current ※2) Maximum Source Current

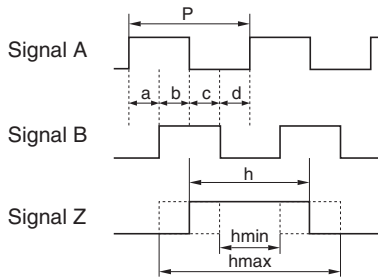
| TYPE | | 2•2M | 2C•2MC | 2HC•2MHC | 2HCP•2MHCP | 2HT•2MHT | 2MD |
|------------------------------------|--------|----------------------|-----------|----------|-----------------------------------|----------------------|--------------------------------------|
| Supply Voltage | | DC4.5 ~ 13.2 V | | | DC10.8 ~ 26.4 V | | DC4.75 ~ 5.25V C-MOS DC4.5 ~ 5.5V |
| Requirement | | 80 mA Max | 60 mA Max | | 100 mA Max | 90 mA Max | 150 mA Max C-MOS60 mA Max |
| Output Voltage | “H” | Within -1 Power Volt | ————— | | Within -1 ² Power Volt | Within -3 Power Volt | 2.5 V or More |
| | “L” ※1 | 0.5 V Max | | | ————— | 3 V Max | 0.5 V Max |
| Maximum Output Current | | 20 mA MAX | | | | 40 mA MAX | 20 mA MAX |
| Rise & Fall Time | | 1 μs Max | | | | | 200 ns Max |
| Maximum Frequency Response | | 200 kHz | | | 50 kHz | 200 kHz | |
| Withstanding Voltage of Output Tr. | | ————— | 50 V MAX. | | ————— | | |

Wave Form.

CW → Rotating Toward Clockwise Viewed from an Arrow



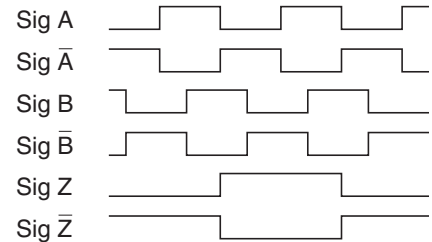
Rising point of A-Signal is always at one point while Z-Signal is at H-Level in CW.



$$P = \frac{1}{1\text{Resolution}}$$

$$a, b, c, d = \frac{P}{4} \pm \frac{P}{8} \quad \frac{P}{2} \leq h \leq \frac{3P}{2}$$

Wave Ratio (Duty); 50 ± 25 (%)



Electrical Connections

| | Color of Lead Wire | Description |
|-------|--------------------|--------------|
| 2 | Red | Power Source |
| 2M | Black | 0V Common |
| 2C | Green or Blue | Signal A |
| 2MC | White | Signal B |
| 2HC | Yellow | Signal Z |
| 2MHC | Shielding Braid | NC |
| 2HCP | | |
| 2MHCP | | |
| 2HT | | |
| 2MHT | | |

| 2MD | Color of Lead Wire | Description | Color of Lead Wire | Description |
|-----|--------------------|--------------|--------------------|-------------|
| | Red | Power Source | White | Signal B |
| | Black | 0V Common | Gray | Signal B |
| | Green | Signal A | Yellow | Signal Z |
| | Blue | Signal A | Orange | Signal Z |
| | Shielding Braid | NC | | |

Mechanical Spec.

| | | |
|----------------------|--------------|--|
| Starting Torque | | 9.8×10 ⁻⁴ N • m Max |
| Angular Acceleration | | 1×10 ⁵ rad/s ² |
| Shaft Loading | Thrust axial | 19.6N |
| | Radial | 29.4N |
| Moment of Inertia | | 8×10 ⁻⁷ kg • m ² |
| Maximum RPM | | 6000r/min |
| Net Weight | | 100g Max |

Environmental Spec.

| | |
|-----------------------|---|
| Operating Temperature | -10°C ~ +70°C |
| Storage Temperature | -30°C ~ +80°C |
| Humidity | RH 85% Max No Condensation |
| Vibration | 10~55 Hz / 1.5mm 2 h |
| Shock | 490m/s ² , 11ms X, Y, Z Each 3 times |
| Degree of Protection | IP50 |