

**PART NUMBER:** JR205D**DESCRIPTION:** incremental hollow-shaft encoder**ELECTRICAL SPECIFICATIONS**

output waveform	Square wave
output signals	A, B, Z phase
current consumption	140 mA max.
output voltage	H: ≥ 4.2 V at 20 mA, L: ≤ 0.5 V
supply voltage	4.75 ~ 5.25 V dc
output resolution (ppr)	300, 360, 500, 1000, 1024, 2000, 2048
frequency response	200 kHz max.

MECHANICAL SPECIFICATIONS

max shaft load,	axial: 0.5 kgf radial: 1.0 kgf
moment of inertia	35 g·cm ²
angular acceleration	1 x 10 ⁵ rad/S ²
slewing speed	6000 RPM max.
starting torque	30 gf·cm max.
rotational life	1 x 10 ⁸ rpm hours
weight	120 g
cable length	500mm (no connector)

ENVIRONMENTAL SPECIFICATIONS

operating temp	-20° (-30° if no dew condensation) to +90° C
storage temp	-30° to +90° C
humidity	85% RH, no condensation
vibration	10 G @ 55 Hz., 2 hours, 3 axes
shock	100 G, 11 ms, 3 axes, 3 rep.

ORDERING INSTRUCTIONS

JR205DXXXXXXXX

Output type:
Line driver output

Bore ϕ :
S = 6.35mm (.25")
C = 8mm (.315")

Braid shield:
F = Grounded frame
N = Non-grounded frame

Resolution:

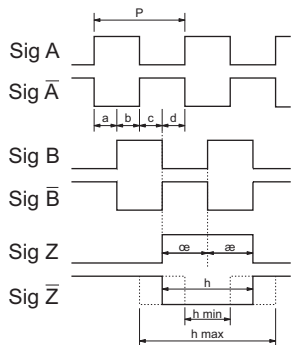
0300 = 300PPR	1024 = 1024PPR
0360 = 360PPR	2000 = 2000PPR
0500 = 500PPR	2048 = 2048PPR
1000 = 1000PPR	

Bracket type:
(A, C, or D)

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OUTPUT WAVEFORM



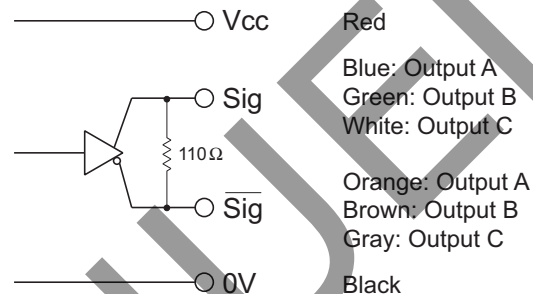
Absolute value of pitch error - $P/20$

$$P = \frac{1}{P/R} \quad \frac{P}{2} \leq h < \frac{3P}{2}$$

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

$$0.4 \leq \frac{(a+b)}{(a+b+c+d)} \leq 0.6$$

OUTPUT CIRCUIT



MECHANICAL DRAWING

