



JR55



JR205

Magnetic Rotary Encoder - Solution for harsh environment.
Compact, flat design, easy direct mounting on a shaft.

Magnetic Rotary Encoder

AB Digital Signals
JR 55 SERIES

Refer to JR205 brochure for ABZ signals.



IEC



Features

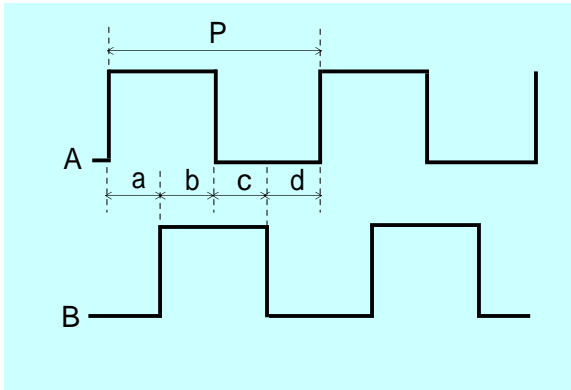
- Easy direct mounting on motor shaft without coupling.
- No adjustment like difficult shaft alignment is required for mounting.
- Magnetic encoder exceeds optical encoder in resistance against harsh environment.
- Strong resistance against vibration and shock..
- Extended line-up JR55 and JR205 series to meet wide range applications.
- Conforming to EC Directive to be accepted in European market also.

TAIHO PRODUCT CO., LTD.

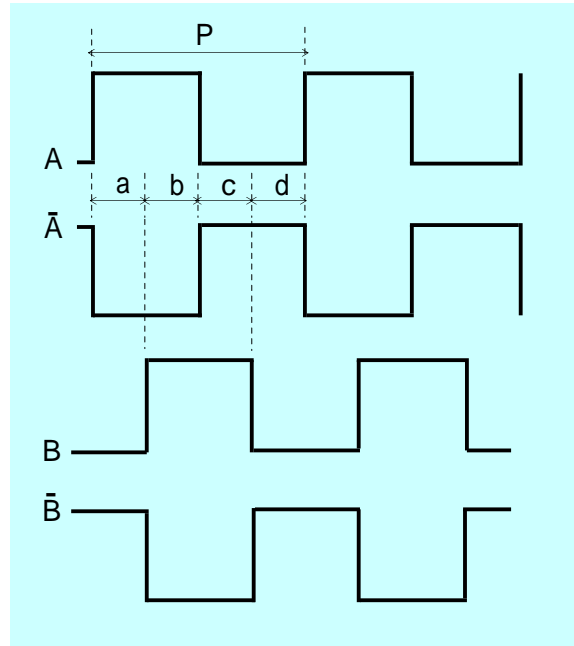
**High reliability, that's a must for an encoder.
You asked for it.....now you got it.**

Output waveforms

JR55A/JR55C



JR55D



Output specification

$a, b, c, d = P/4 \pm P/8$

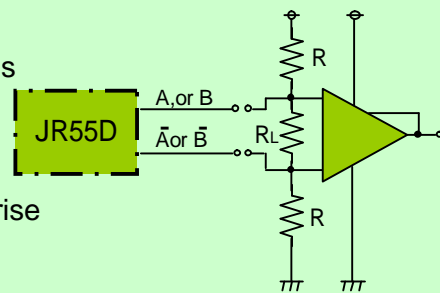
$0.4 \leq (a+b)/(a+b+c+d) \leq 0.6$

$P = 1 \text{ pulse (elec. } 360^\circ) = 1/\text{pulse number per } \dots$

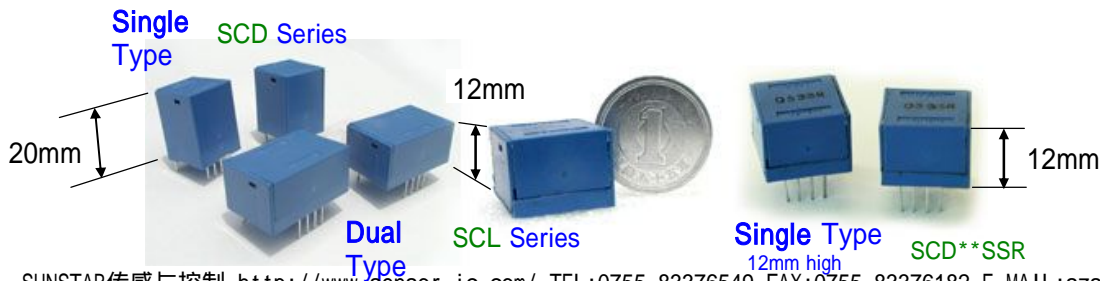
Absolute pitch error $P/10$

Clockwise direction viewed from mounting bracket side is supposed to be the ordinary revolution.

In the case of D type, current consumption and "signal rise and fall times" are measured with the receiving circuitry shown at the right.



Related products, **Current Sensor SCL Series** and others, for motion controls are available.
Open Loop Type for 1.5A - 30A

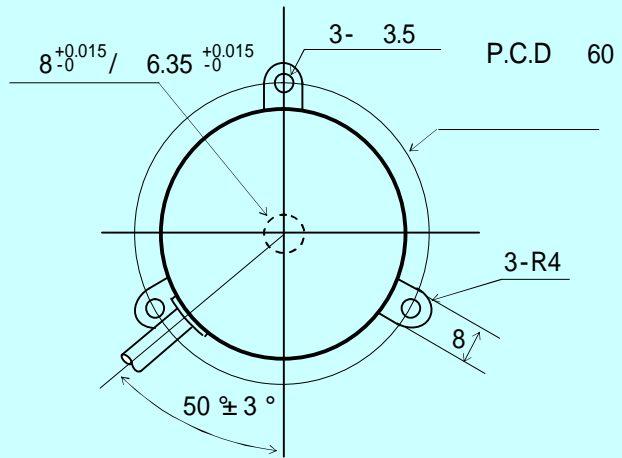
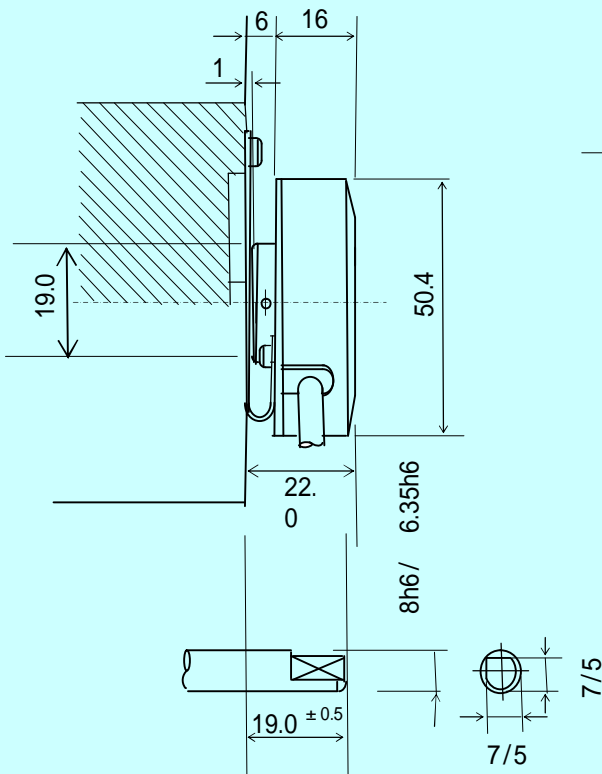


**Line-up to meet wide range applications.
High temperature resistance, fast response speed.**

Specification

Model	JR55A	JR55C	JR55D
Resolution pulse per revolution	300, 360, 500, 600 ppr		
Input voltage	DC4.75V - 26.4V at the end of standard cable	JR55C : DC 4.75V - 5.25V JR55-12C: DC 4.75 - 13.2V JR55-24C: DC21.6 - 26.4V at the end of standard cable	DC4.75V-5.25V at the end of standard cable
Current consumption	DC13.2V, 30mA max. DC26.4V, 60mA max.		DC5.25V, 90mA max. refer to the left page bottom
Output signals	A, B phases		A, \bar{A} , B, \bar{B} phases
Output types	Open collector (positive logic)	Voltage output (positive logic) (output pull-up resistance: 2k Ω)	Line driver output
Circuitry withstanding voltage	+30 V max.	—	—
Sink current	20 mV	—	—
Frequency response	Electric Circuitry 0 ~ 100kHz, Actual max. is 60kHz in the case of 600ppr x 6000rpm.		
Signal rise and fall	1 μ sec. max.		0.1 μ sec. max. refer to the left page bottom
Operating temperature	-10 ~ +80 No dew condensation permit		
Storage temperature	-30 ~ +85		
Permissible vibration	1 hour each in X,Y, and Z directions under 50Hz/10G's		
Permissible shock	3 times in X,Y and Z directions under 100G/11msec.		
Starting torque	30g·cm max.		
Permissible shaft load	Radial direction : 1Kg, Axial direction : 0.5N		
Moment of inertia	40g·cm ² max.		
Slew speed	6000rpm		
Hollow shaft bore	8.00mm ^{+0.015} ₀ / 6.35mm ^{+0.015} ₀		
Standard cable length	500mm		
Weight	100g (including mounting bracket, dust cap and standard cable)		

JR55 Drawing for Installation (unit: mm)

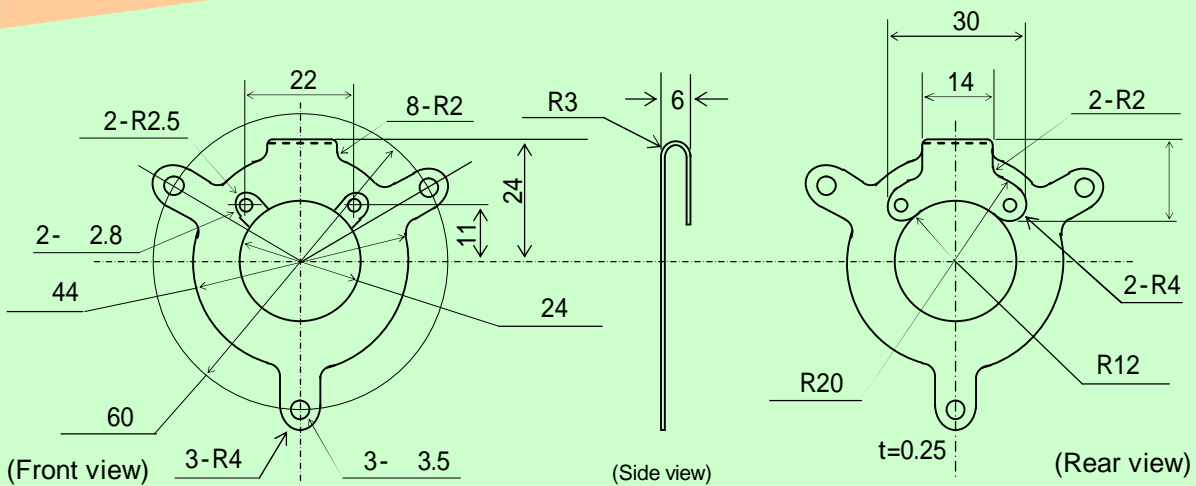


Mounting shaft specification

- (1) Shaft diameter: 8mm h6/ 6.35mm h6
- (2) Shaft length: 19⁰/₀ mm
- (3) Shaft deflections: 0.05mm max
- (4) Shaft end play: Recommended: ±0.1mm
Permissible: ±1.0mm
- (5) Perpendicularity between shaft and mounting surface: 0.1mm max

JR55

Standard bracket dimensions (unit: mm)



Marketed by
ASTEC Co., LTD.

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