TOFI

Motion control sensor
Absolute Encoder
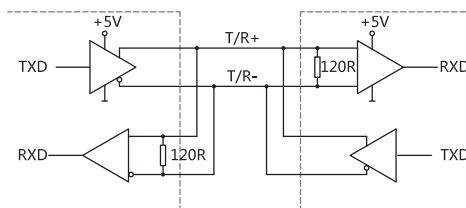
Absolute encoders – multiturn

JDCA58 SSI Series

SSI

JDCA58 series

Sensing method   Magnetic

Functional principle Multiturn

Mltiturn technology Mechanical gears without batteries

Housing size Φ58mm

Shaft diameter   Solid shaftΦ6mm、Φ10mm

Blind hollow shaft Φ10、Φ12、Φ14mm

Max. resolution 25Bit

Steps per turn 8192/13Bit

Number of turn 4096/12Bit

Interface SSI

Supply voltage DC5V、DC10-30V

Protection IP65/IP67

Mechanical characteristics

Shaft diameter	Solid shaft Φ6mm、Φ10mm，Blind hollow shaft Φ10、Φ12、Φ14mm
Material	Aluminum alloy
Shell material	Aluminium alloy
Shaft loading	Max. 40N Axial
Radial load	Max. 80N Axial
Bearing life	10^9 turn
Rotatinal speed	Max. 6000 min
Impact resistance	100g，6ms
Seismic resistance	10g，10...2000Hz
Protection grade	IP65/IP67
Working temperature	-40℃...+85℃
Storage temperature	-40℃...+85℃
Weight	≈350g
Wiring method	Radial direction

Electrical characteristics

Interface type	Synchronous serial interface
Transmission rate	0.1...1M/bit
Output code systm	Gray code or binary
Communicate standard	RS422
Operating voltage	10...30VDC
Non-load current	≤100mA
Linearity	±2LSB
Count direction	Settable (factory default face axis data increase clockwise)
External position	Settable switch on delay > 100ms
Anti-interference	EN61000-6-2
Emission interference	EN61000-6-4
Circuit protection	Surge protection（1KV）、reverse power protection、ESD protection（8KV）

Terminal assignment

(一) SSI

Signal	⎍⎍	GND	+Ub	CLOCK+	CLOCK-	DATA+	DATA	PRESET	DIR
Color		WH	BN	GN	YE	GY	PK	BK	RD
12-pin M23 Socket CW (9223))		1	2	3	4	5	7	8	6

1) PRESET External position line： Single turn zero position： When a short contact is made with a high level, the current position output is the zero position of the entire data;

Multi-turn midpoint positioning： When a short touch is made with a high level, the current position output is the midpoint position of the whole data;

2) DIR Counting direction line： When the current is low level, the data of the rotating shaft is increased clockwise (factory default) when the current is high level,the data increase counterclockwise when face the encoder end (pin)

3) The internal is suspended by default

Ordering information

JDCA58	XX	S	10	B	12	12	OCS1T	10-30	R	1	/	XXXX
	①	②	③	④	⑤	⑥		⑦	⑧	⑨		⑩

① Extended No.	② Shaft type	③Shaft diameter	④ Output code	⑤ Resolution MT	⑥ Resolution ST
XX	B： Blind hollow shaft	S： Solid shaft	**B： Binary**	**12： 4096**	**12： 4096**
	S： Solid shaft	6： 6mm	**G： Gray**		13： 8192
		10： 10mm			
		B： Blind hollow shaft			
		10： 10mm			
		12： 12mm			
		14： 14mm			

⑦Supply voltage	⑧Exit position	⑨Connection type	⑩ Special code
10-30： DC 10-30V	R： radial direction	**Figure： Cable length(m)**	XXXX
		9223： 12-pin M23 Socket CW	

Note： Printed in bold=standard items

Notes： 1，Turns and steps are commonly used data， turns ≤12bit， steps per turn ≤13bit， other datas should be depends.

2，Please choose the ordering information: model series、shaft diameter、output code、multiturn resolution、singleturn resolution、exit position and cable length。

3，If other electrical parameter is required, please fill in the instructions

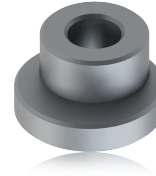Ordering example： JDCA58S10B1212OCS1T10-30R1 Counting direction of the factory is set to clockwise increasing

Explanation： JDCA58 series, solid shaft 10mm, binary code, turns 12 bits（4096 turn）, single turn resolution 12bits（Single turn resolution 4096）, data increse clockwise, Zero setting,

Accessories（sold separately） Note： Further stator coupling can be found in the accessories selection table.
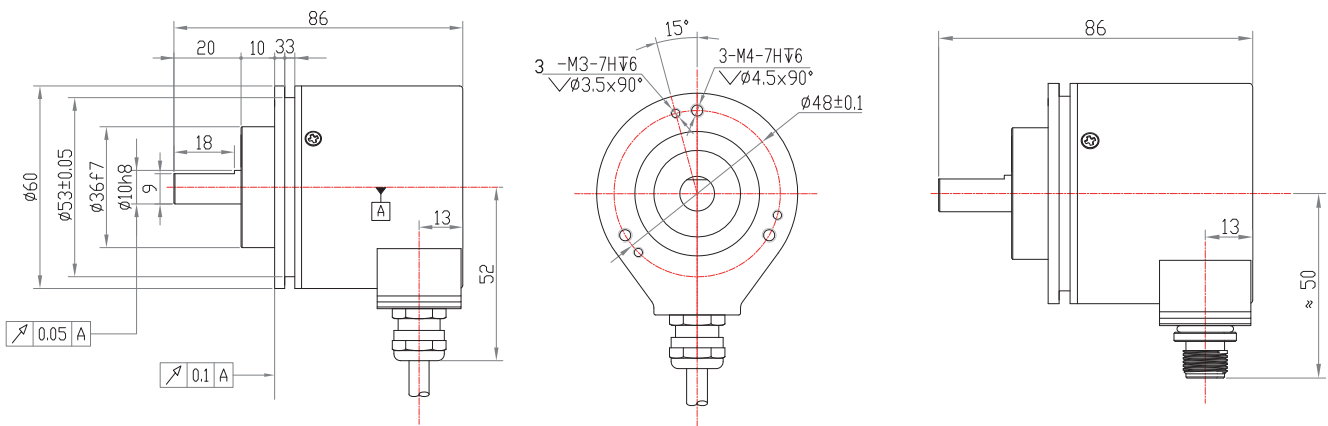
Stator coupling, double-winged
Model（common）： 8138A

Coupling
Model（common）： 8215 10-10

Synchro clamping elements （set of 3）
Model（common）： 8531

Dimensions

JDCA58S

JDCA58B