



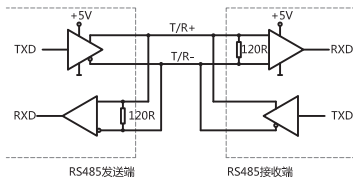
JDDS58S Series	
Sensing method	Optical
Housing size	Φ58 mm
Shaft diameter	Φ6、Φ8、Φ10 mm
Measurement range	0~360°
Max. resolution	65536 (16 bit)
Supply voltage	5VDC, 10-30VDC
Protection	IP65/IP67

Mechanical characteristics

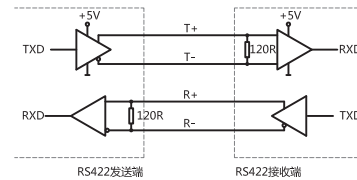
Shaft diameter	Φ6、Φ8、Φ10mm
Protection	IP65/IP67
Materials	Flange : Aluminum alloy Housing: Aluminum alloy
Starting torque	≤0.05Nm
Shaft loading	max. 40 N Axial max. 80 N Radial
Rotor moment of inertia	approx. $1.8 \times 10^{-6} \text{ kgm}^2$
Bearing life	10^9 turns
Speed	max. 6000 min ⁻¹
Shock resistance	100g, 6ms
Vibration resistance	10g, 10...2000Hz
Working temperature	-40 C...+80 C
Storage temperature	-40 C...+80 C approx. 400g
Weight	approx. 400g
Exit position	Radial

Electrical characteristics

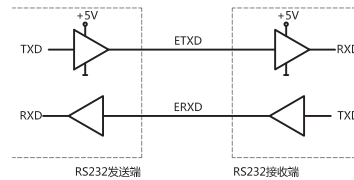
RS485 Interface electronics



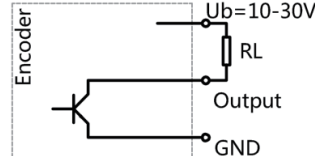
RS422/SSI Interface electronics



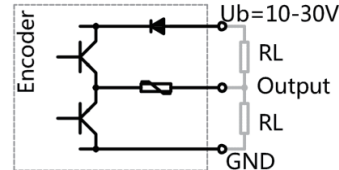
RS232 Interface electronics



NPN Open Collector



Push-Pull



Interface	Serial: SSI、RS422、RS485、RS232、Modbus-RTU	
	Parallel: Push-pull、NPN Open Collector	Optional
Resolution	max. 16bit (65536) Optional (ST≤16 bit)	
Code	Binary Gray	Optional
Supply voltage	5V、10-30V	Optional
Power consumption(no load)	max. 200mA	

Electrical characteristics

Refresh time	100Hz (9600bps) 200Hz (19.2Kbps)	
	400Hz (57.6Kbps) 500Hz (115.2Kbps)	Factory preset
Transfer rate	≤250K bit/s (SSI)	
Monoflop time	20±10µs (SSI)	
Output signal voltage	High: operating voltage minus voltage drop ; Low: ≤2.8V (Parallel)	
Input current	<6mA (Parallel)	
Accuracy	±40" (16bit)	
Counting direction	Clockwise, increasing	Factory preset

Terminal assignment

(一) RS485/RS232 Wiring Guide

Signal		GND	+Ub	TXD+	TXD-	Function 1	Function 1	Function 1	Function 1
Colour		WH	BN	YE	GN	GY	PK	RD	BK

(二) SSI/RS422 Wiring Guide

Signal		GND	+Ub	CLK+	CLK-	DATA+	DATA-	Reserved	V/R	PRESET1	Reserved	Reserved	Reserved
Colour		WH	BN	GN	YE	GY	PK		RD	BK			
Flange Connector M23, 12-pin, (9223)		1	2	3	4	5	6	7	8	9	10	11	12

(三) SSI/RS422 Wiring Guide

Signal		GND	+Ub	Bit0	Bit1	Bit2	Bit3	Bit4	Bit5	Bit6	Bit7
Colour		WH	BN	GN	YE	GY	PK	BU	RD	BK	PE
Signal		GND	+Ub	Bit0	Bit1	Bit2	Bit3	Bit4	Bit5	Bit6	Bit7
Colour		Bit8 WH/GN	Bit9 BN/GN	Bit10 WH/YE	Bit11 BN/YE	Bit12 WH/GY	Bit13 BN/GY	Latch YE/BK	V/R RD/BU	SET GN/BU	

Ordering information

JDDS58	XX	S	10	B	16	Y	C	S3	1	B	N	10-30	R	0.5	/	A	XXXX
	①	②	③	④	⑤	⑥	⑦	⑧	⑨	⑩	⑪	⑫	⑬	⑭	⑮	⑯	

① Extended No. XX	② Shaft type S: Solid shaft	③ Shaft diameter 6: Φ6 8: Φ8 10: Φ10	④ Output Code B: Binary G: Gray	⑤ Resolution ^{ST1)} 12: 12 bit 13: 13 bit 14: 14 bit 15: 15 bit 16: 16 bit	⑥ Counting direction Empty: Clockwise, increasing Y: Counterclockwise, increasing	⑦ Zero setting options Empty: no C: Zero setting K: Zero setting(key) F: Zero setting(order)
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⑧ Serial interface ³⁾ S1: SSI S2: RS422 S3: RS485 S4: RS232 S6: Modbus-RTU	Parallel interface P2: NPN Open Collector P5: Push-Pull	⑨ Baud rate 0: 230400 1: 115200 2: 57600 3: 38400 4: 19200 5: 9600	⑩ Communication mode B: Timer mode T: Answer mode	⑪ Output logic (Parallel) Empty: Positive logic N: Negative logic
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⑫ Supply voltage 5: 5VDC 10-30: 10-30VDC	⑬ Exit position R: Radial C: Axial	⑭ Connection type ²⁾ Figure: Cable length(m)	⑮ Protection Empty: IP65 A: IP67	⑯ Special code XXXX
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Note : Printed in bold=standard items

Notes : 1, ¹⁾ Resolution available at a short notice (12bit,13bit,14bit,15bit,16bit) , other resolution on request.

2, ²⁾ While supply voltage is 5V DC , cable length ≤ 8m.

3, ³⁾ If SSI is used as output interface, the maximum clock frequency will reach 500K bit/s (125K bit/s is recommended) , with answer communication mode.

4, Please chose the ordering information : Extended No., Shaft diameter, Output code, Singleturn resolution, Counting direction, Zero setting options, Output interface, Baud rate, Communication mode, Supply voltage, Exit position and Cable length.

5, Please contact us for further electrical parameter Settings and requirements.

Ordering example : JDDS58S10B16CS31B5R0.5 , Counting direction of the factory is set to clockwise increasing.

Explanation : JDDS58S Series , Shaft diameter 10mm , Output Binary , Singleturn resolution 16 bit , Clockwise , increasing , Zero setting , RS485 Serial interface , Baud rate 115200 , Timer mode , 5VDC , Radial Output 0.5m. Data refresh time of the factory is set to 500Hz.

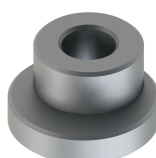
Accessories (sold separately) Note : Further coupling can be found in the coupling selection table.

Coupling

Model (common) : 8215 10-10

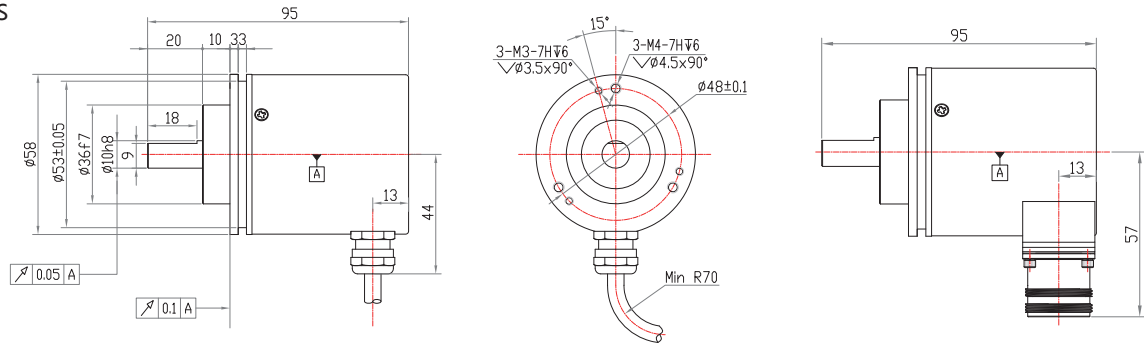
Synchro clamping elements (set of 3)

Model (common) : 8531



Dimensions

JDDS58S



JDDS5801S

