

# Z Series Servo Motor/Encode Slip Ring

Specially desinged for servo motor/encoder of SIMEMS, YASKAWA,Panasonic,Mitsubishi, suitable for all kinds of foreign & domesitc servo mortor / stepper motor.More than 10years operating experiences in SIMEMS/HEIDENHAIN control system, high reliability.



## Main Features

- Can combine with other switch signal/power channels , CanBus and Profibus...
- Can combine with pneumatic/hydraulic rotary unions;
- Special inner wiring and shielding design to avoid encoder errors,loss rate<0.02%;
- contact materials( precious metal + hard gold plating) assures wear resistant and antioxidative for long working life.

## Part No. Description

Z	Dimensions	Servo motor No.	Power circuits	Signal circuits	Grade code
z:servo motor encode slip ring					C : Standardf D : Industrial H: high quality
For example: M056: solid,OD 56mm H30119: ID30mm,OD119mm					For example: 06S: 6 circuits signal@5A 12S: 12 circuits signal@5A
For example: 1pcs servo motor(two cables,1*4cores@10A cable for power+1* 6 cores sheilded cable for encorder signal) 02: 2pcs servo motor 03: 3pcs servo motor , and so on					For example: 0610:6circuits@10A 1230:12circuits@30A

## Mode List

Model	Hole size	OD	Servo motor No.	Max circuits
ZM056	without hole(solid)	56mm	1~4pcs	24circuits
ZM099	without hole(solid)	99mm	1~8pcs	120circuits
ZH30119	30mm	119mm	1~8pcs	96circuits
ZH70158	70mm	158mm	1~6pcs	72circuits

## Example

ZM056-01-0610:support 1pcs servo motor+6 circuits@10A,without hole(solid),OD 56mm.

ZH30119-01-0610:support 1pcs servo motor+6 circuits@10A cable for power,hole size 30mm,Body Diameter 119mm.

ZH70158-04-1210-12S:support 4 pcs servo motor+12 circuits@10A cable for power+12circuits signal@5A,hole size 70mm,OD 158mm.

Remark: More details or ask for customized solution, pls contact us,E-mail: info@senring.com senring.us@gmail.com

## Color Code of Lead Wire

ring#	1	2	3	4	5	6	7	8	9	10	11	12
color	BLK	BRN	RED	ORG	YEL	GRN	BLU	PUR	GRY	WHT	PINK	LGT BLU
ring#	13	14	15	16	17	18	19	20	21	22	23	24
color	WHT/BLK	WHT/BRN	WHT/RED	WHT/ORG	WHT/YEL	WHT/GRN	WHT/BLU	WHT/PUR	WHT/GRY	BLK/RED	BLK/BRN	Transparent

Remark: "1" : the first wire from rotor side , M056-01 wire color sequence: BLK/BRN/RED/ORG/WHT/GRN/BLU/PUR/GRY/WHT , 24 color wires as one group , if more than 24wires, repeat as sequence , use number tube to tell group 1#, 2#....

# ZM056 Series Servo Motor/Encode Slip Ring

Solid, OD 56mm, support 1~4pcs servo motor+1~24 circuits power/signal



Specially desinged for servo motor/encoder of SIMEMMS, YASKAWA, Panasonic, Mitsubishi, suitable for all kinds of foreign & domesitc servo mortor / stepper motor. More than 10years operating experiences in SIMEMMS/HEIDENHAIN

## Part No. Description

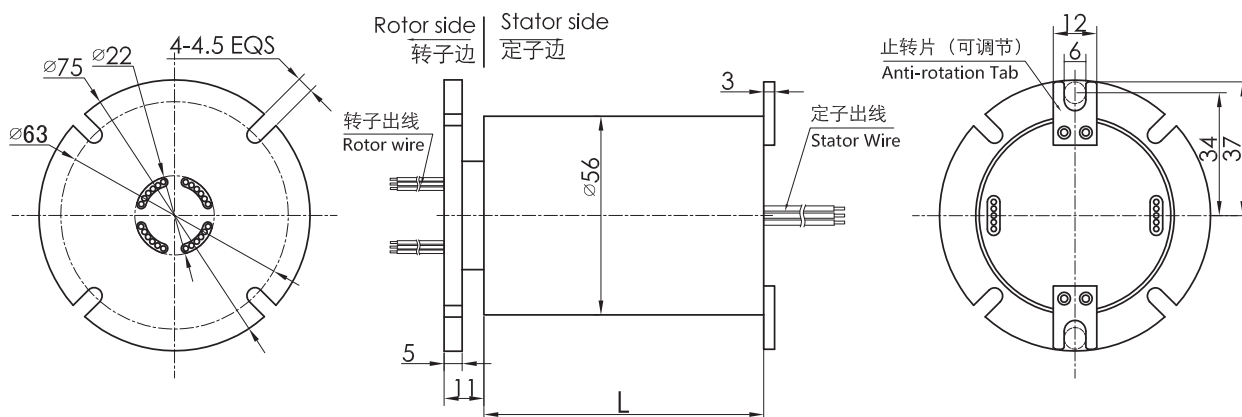
ZM056	Servo motor No.	Power circuits	Signal circuits	Grade code
servo motor encode slip ring solid, OD 56mm				C: Standardf D: Industrial H: high quality
For example: 1pcs servo motor(two cables, 1*4cores@10A cable for power+1* 6 cores sheilded cable for encorder signal)				For example: 06S: 6 circuits signal@5A 12S: 12 circuits signal@5A
02: 2pcs servo motor 03: 3pcs servo motor , and so on				For example: 0610:6circuits@10A 1230:12circuits@30A

## Example

ZM056-01-0610:support 1pcs servo motor+6 circuits@10A, without hole(solid), OD 56mm.

ZM056-04-1210-12S:support 4pcs servo motor+6 circuits@10A cable for power, hole size 30mm, Body Diameter 119mm.

Remark: More details or ask for customized solution, pls contact us, E-mail: info@senring.com senring.us@gmail.com



## Standard Model List

Part no.	Servo motor No.	Power circuits (10A)	Signal circuits (5A)	Length L(mm)	Part no.	Servo motor No.	Power circuits (10A)	Signal circuits (5A)	Length L(mm)
ZM056-01	1	0	0	55	ZM056-03	3	0	0	127
ZM056-01-06S	1	0	6	71.5	ZM056-03-06S	3	0	6	143.5
ZM056-01-12S	1	0	12	88.5	ZM056-03-12S	3	0	12	160.5
ZM056-01-24S	1	0	24	122	ZM056-03-24S	3	0	24	194
ZM056-01-1210-12S	1	12	12	122	ZM056-03-1210-12S	3	12	12	194
ZM056-02	2	0	0	88.5	ZM056-04	4	0	0	160.5
ZM056-02-06S	2	0	6	104	ZM056-04-06S	4	0	6	176
ZM056-02-12S	2	0	12	122	ZM056-04-12S	4	0	12	194
ZM056-02-24S	2	0	24	156	ZM056-04-24S	4	0	24	228
ZM056-02-1210-12S	2	12	12	156	ZM056-04-1210-12S	4	12	12	228

\*Remark: 1pcs servo motor(two cables, 1\*4 cores@10A cable for power+1\*6 cores sheilded cable for encode signal).

## Technical Specification

Mechanical		Electrical		
Spec.	Data	Spec.	Data	
			Power	Signal
Working Life	pls refer to product grade table	Voltage Range	0~440VAC/VDC	0~440VAC/VDC
Rotating Speed	pls refer to product grade table		Insulation Resistance	$\geq 1000M\Omega / 500VDC$
Working Temp.	-30°C~80°C	Lead Wire Spec.		power cable or AWG #17 teflon wire
Work Humidity	0~85% RH		Lead Wire Length	standard 300mm(can be customized)
Contact Material	refer to slip ring grade table	Dielectric Strength		500VAC@50Hz, 60s
Housing Material	aluminum alloy		Electrical Noise	<0.01Ω
Torque	0.1N.m+0.03N.m/6circuits	Loss Rate		<0.02%
Mechanical Vibration	MIL-STD-810E		CE Certification	YES
Material	RoHS certification			

## Product Grade Table

Grade code	Max rotating speed	Working life	Contact material
C:standard	400RPM	20millisons revolutions	precious metal
D:industrial	800RPM	60millisons revolutions	precious metal
H:high quality	1200RPM	150millisons revolutions	gold alloy

## Color Code of Lead Wire

ring#	1	2	3	4	5	6	7	8	9	10	11	12
color	BLK	BRN	RED	ORG	YEL	GRN	BLU	PUR	GRY	WHT	PINK	LGT BLU
ring#	13	14	15	16	17	18	19	20	21	22	23	24
color	WHT/BLK	WHT/BRN	WHT/RED	WHT/ORG	WHT/YEL	WHT/GRN	WHT/BLU	WHT/PUR	WHT/GRY	BLK/RED	BLK/BRN	Transparent

Remark: "1" : the first wire from rotor side ,ZM056-01 wire color sequence: BLK/BRN/RED/ORG/YEL/GRN/BLU/PUR/GRY /WHT , 24 color wires as one group , if more than 24wires, repeat as sequence , use number tube to tell group 1#, 2#....

# ZM099 Series Servo Motor/Encode Slip Ring

Solid, OD 99mm, support 1~8pcs servo motor+1~120circuits power/signal

Specially desinged for servo motor/encoder of SIMEMMS, YASKAWA, Panasonic, Mitsubishi, suitable for all kinds of foreign & domesitc servo mortor / stepper motor. More than 10years operating experiences in SIMEMMS/HEIDENHAIN control system, high reliability.

## Part No. Description

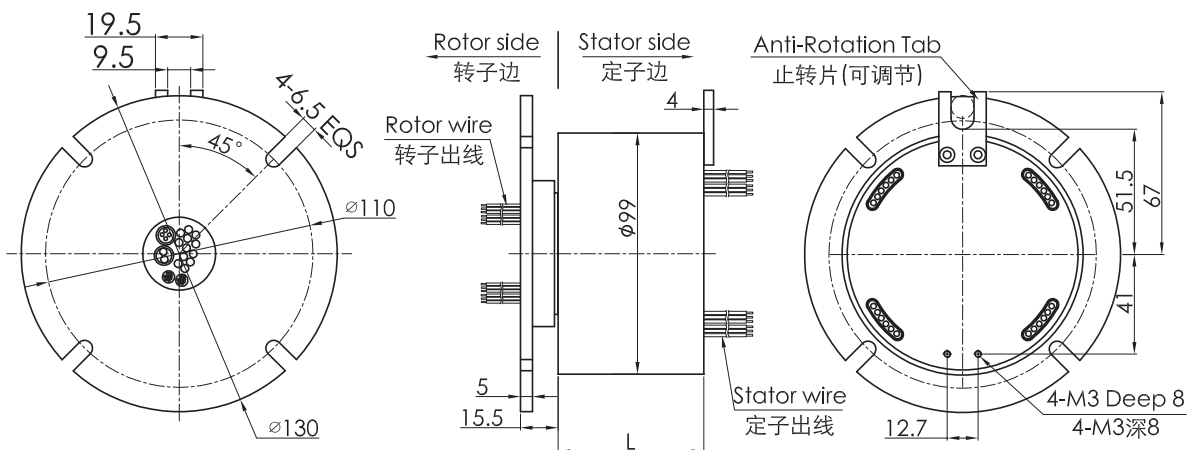
ZM099 Servo motor No.	Power circuits	Signal circuits	Grade code
servo motor encode slip ring solid, OD 99mm			C : Standardf D : Industrial H : high quality
For example: 1pcs servo motor(two cables, 1*4cores@10A cable for power+1* 6 cores sheilded cable for encorder signal) 02: 2pcs servo motor 03: 3pcs servo motor , and so on			For example: 06S: 6 circuits signal@5A 12S: 12 circuits signal@5A  For example: 0610:6circuits@10A 1230:12circuits@30A

## Example

ZM099-01-0610:support 1pcs servo motor+6 circuits@10A,without hole(solid),OD 99mm.

ZM099-04-1210-12S:support 4pcs servo motor+6 circuits@10A cable for power,without hole(solid),OD 119mm.

\* Remark: More details or ask for customized solution, pls contact us,E-mail: info@senring.com senring.us@gmail.com



## Standard Model List

Part no.	Servo motor No.	Power circuits (10A)	Signal circuits (5A)	Length L(mm)	Part no.	Servo motor No.	Power circuits (10A)	Signal circuits (5A)	Length L(mm)
ZM099-01	1	0	0	72	ZM099-04	4	0	0	216
ZM099-01-06S	1	0	6	96	ZM099-04-06S	4	0	6	240
ZM099-01-12S	1	0	12	120	ZM099-04-12S	4	0	12	264
ZM099-01-24S	1	0	24	168	ZM099-04-24S	4	0	24	312
ZM099-01-1210-12S	1	12	12	168	ZM099-04-1210-12S	4	12	12	312
ZM099-01-0610-30S	1	6	30	264	ZM099-04-0610-30S	4	6	30	408
ZM099-01-36S	1	0	36	264	ZM099-04-36S	4	0	36	408
ZM099-01-1210-36S	1	12	36	312	ZM099-04-1210-36S	4	12	36	456
ZM099-01-48S	1	0	48	312	ZM099-04-48S	4	0	48	456
ZM099-01-2410-48S	1	24	48	408	ZM099-04-2410-48S	4	24	48	552
ZM099-01-72S	1	0	72	408	ZM099-04-72S	4	0	72	552
ZM099-01-96S	1	0	96	504	ZM099-04-96S	4	0	96	648
ZM099-01-120S	1	0	120	600	ZM099-04-120S	4	0	120	744

Part no.	Servo motor No.	Power circuits (10A)	Signal circuits (5A)	Length L(mm)	Part no.	Servo motor No.	Power circuits (10A)	Signal circuits (5A)	Length L(mm)
ZM099-02	1	0	0	120	ZM099-08	8	0	0	408
ZM099-02-06S	2	0	6	144	ZM099-08-06S	8	0	6	432
ZM099-02-12S	2	0	12	168	ZM099-08-12S	8	0	12	456
ZM099-02-24S	2	0	24	216	ZM099-08-24S	8	0	24	504
ZM099-02-1210-12S	2	12	12	216	ZM099-08-1210-12S	8	12	12	504
ZM099-02-0610-30S	2	6	30	312	ZM099-08-0610-30S	8	6	30	600
ZM099-02-36S	2	0	36	312	ZM099-08-36S	8	0	36	600
ZM099-021210-36S	2	12	36	360	ZM099-08-1210-36S	8	12	36	648
ZM099-02-48S	2	0	48	360	ZM099-08-48S	8	0	48	648
ZM099-02-2410-48S	2	24	48	456	ZM099-08-2410-48S	8	24	48	744
ZM099-02-72S	2	0	72	456	ZM099-08-72S	8	0	72	744
ZM099-02-96S	2	0	96	552	ZM099-08-96S	8	0	96	840
ZM099-02-120S	2	0	120	648	ZM099-08-120S	8	0	120	936

\*Remark: 1pcs servo motor(two cables,1\*4 cores@10A cable for power+1\*6 cores shielded cable for encode signal).

### Technical Specification

Mechanical		Electrical		
Spec.	Data	Spec.	Data	
Working Life	pls refer to product grade table	Voltage Range	Power	Signal
Rotating Speed	pls refer to product grade table		0~440VAC/VDC	0~440VAC/VDC
Working Temp.	-30°C~80°C	Insulation Resistance	≥ 1000MΩ/500VDC	≥ 1000MΩ/500VDC
Work Humidity	0~85% RH	Lead Wire Spec.	power cable or AWG#17 teflon wire	6 cores shielded cable or AWG#22 teflon wire
Contact Material	refer to slip ring grade table	Lead Wire Length	standard 300mm(can be customized)	
Housing Material	aluminum alloy	Dielectric Strength	500VAC@50Hz, 60s	
Torque	0.1N.m+0.03N.m/6circuits	Electrical Noise	<0.01Ω	
Mechanical Vibration	MIL-STD-810E	Loss Rate	<0.02%	
Material	RoHS certification	CE Certification	YES	

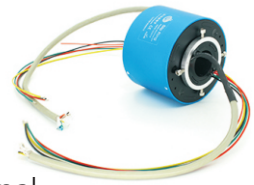
### Product Grade Table

Grade code	Max rotating speed	Working life	Contact material
C:standard	400RPM	20millisons revolutions	precious metal
D:industrial	800RPM	60millisons revolutions	precious metal
H:high quality	1200RPM	150millisons revolutions	gold alloy

### Color Code of Lead Wire

ring#	1	2	3	4	5	6	7	8	9	10	11	12
color	BLK	BRN	RED	ORG	YEL	GRN	BLU	PUR	GRY	WHT	PINK	LGT BLU
ring#	13	14	15	16	17	18	19	20	21	22	23	24
color	WHT/BLK	WHT/BRN	WHT/RED	WHT/ORG	WHT/YEL	WHT/GRN	WHT/BLU	WHT/PUR	WHT/GRY	BLK/RED	BLK/BRN	Transparent

Remark: "1" : the first wire from rotor side ,ZM099-01 wire color sequence: BLK/BRN/RED/ORG/YEL/GRN/BLU/PUR/GRY/WHT , 24 color wires as one group , if more than 24wires, repeat as sequence , use number tube to tell group 1#, 2#....



## ZH30119 Series Servo Motor/Encode Slip Ring

Hole 30mm, OD 119mm, support 1~8pcs servo motor+1~96circuits power/signal

Specially desinged for servo motor/encoder of SIMEMS, YASKAWA, Panasonic, Mitsubishi, suitable for all kinds of foreign & domesitc servo mortor / stepper motor. More than 10years operating experiences in SIMEMS/HEIDENHAIN control system, high reliability.

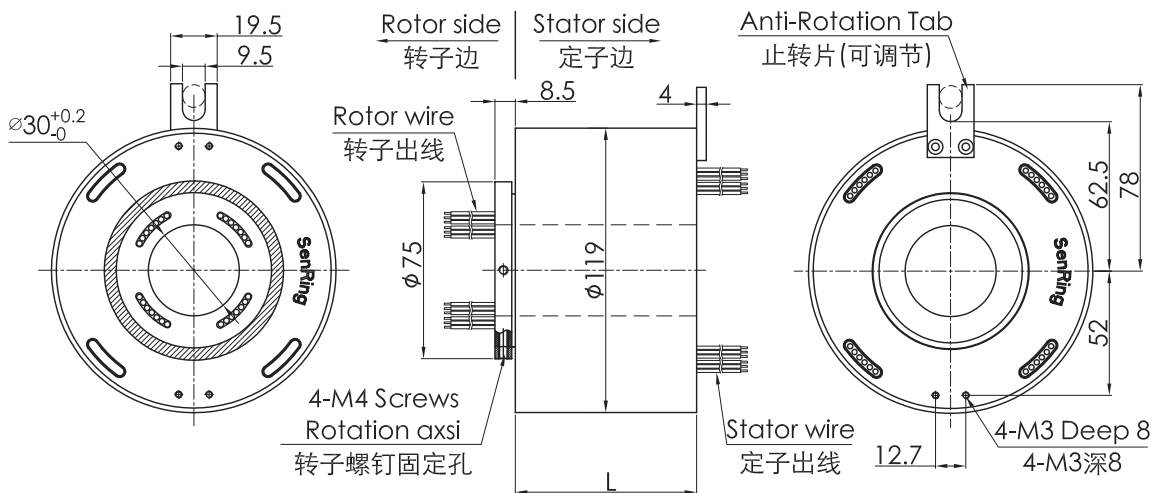
### Part No. Description

ZH30119	Servo motor No.	Power circuits	Signal circuits	Grade code
servo motor encode slip ring hole size 30mm, OD 119mm				C : Standardf D : Industrial H : high quality
For example: 1pcs servo motor(two cables, 1*4cores@10A cable for power+1* 6 cores sheilded cable for encorder signal) 02: 2pcs servo motor 03: 3pcs servo motor , and so on				For example: 06S: 6 circuits signal@5A 12S: 12 circuits signal@5A For example: 0610:6circuits@10A 1230:12circuits@30A

### Example

ZH30119-01-0610: support 1pcs servo motor+6 circuits@10A cable for power, hole size 30mm, Body Diameter 119mm  
ZH30119-04-1210-12S: support 4 pcs servo motor+12 circuits@10A cable for power+12 circuits@5A cable for signal, hole size 30mm, OD 119mm.

Remark: More details or ask for customized solution, pls contact us, E-mail: info@senring.com senring.us@gmail.com



### Standard Model List

Part no.	Servo motor No.	Power circuits (10A)	Signal circuits (5A)	Length L(mm)	Part no.	Servo motor No.	Power circuits (10A)	Signal circuits (5A)	Length L(mm)
ZH30119-01	1	0	0	76	ZH30119-04	4	0	0	220
ZH30119-01-06S	1	0	6	100	ZH30119-04-06S	4	0	6	244
ZH30119-01-12S	1	0	12	124	ZH30119-04-12S	4	0	12	268
ZH30119-01-24S	1	0	24	172	ZH30119-04-24S	4	0	24	316
ZH30119-01-1210-12S	1	12	12	172	ZH30119-04-1210-12S	4	12	12	316
ZH30119-01-0610-30S	1	6	30	268	ZH30119-04-0610-30S	4	6	30	412
ZH30119-01-36S	1	0	36	268	ZH30119-04-36S	4	0	36	412
ZH30119-01-1210-36S	1	12	36	316	ZH30119-04-1210-36S	4	12	36	460
ZH30119-01-48S	1	0	48	316	ZH30119-04-48S	4	0	48	460
ZH30119-01-2410-48S	1	24	48	412	ZH30119-04-2410-48S	4	24	48	556
ZH30119-01-72S	1	0	72	412	ZH30119-04-72S	4	0	72	556

Part no.	Servo motor No.	Power circuits (10A)	Signal circuits (5A)	Length L(mm)	Part no.	Servo motor No.	Power circuits (10A)	Signal circuits (5A)	Length L(mm)
ZH30119-01-96S	1	0	96	508	ZH30119-04-96S	4	0	96	652
ZH30119-01-120S	1	0	120	604	ZH30119-04-120S	4	0	120	748
ZH30119-02	2	0	0	124	ZH30119-08	8	0	0	412
ZH30119-02-06S	2	0	6	148	ZH30119-08-06S	8	0	6	436
ZH30119-02-12S	2	0	12	172	ZH30119-08-12S	8	0	12	460
ZH30119-02-24S	2	0	24	220	ZH30119-08-24S	8	0	24	508
ZH30119-02-1210-12S	2	12	12	220	ZH30119-08-1210-12S	8	12	12	508
ZH30119-02-0610-30S	2	6	30	316	ZH30119-08-0610-30S	8	6	30	604
ZH30119-02-36S	2	0	36	316	ZH30119-08-36S	8	0	36	604
ZH30119-021210-36S	2	12	36	364	ZH30119-08-1210-36S	8	12	36	652
ZH30119-02-48S	2	0	48	364	ZH30119-08-48S	8	0	48	652
ZH30119-02-2410-48S	2	24	48	460	ZH30119-08-2410-48S	8	24	48	748
ZH30119-02-72S	2	0	72	460	ZH30119-08-72S	8	0	72	748
ZH30119-02-96S	2	0	96	556	ZH30119-08-96S	8	0	96	844
ZH30119-02-120S	2	0	120	652	ZH30119-08-120S	8	0	120	940

\*Remark: 1pcs servo motor(two cables,1\*4 cores@10A cable for power+1\*6 cores shielded cable for encode signal).

### Technical Specification

Mechanical		Electrical		
Spec.	Data	Spec.	Data	
			Power	Signal
Working Life	pls refer to product grade table	Voltage Range	0~440VAC/VDC	0~440VAC/VDC
Rotating Speed	pls refer to product grade table		Insulation Resistance	≥ 1000M /500VDC
Working Temp.	-30C ~80C	Lead Wire Spec.		power cable or AWG#17 teflon wire
Work Humidity	0~85% RH		Lead Wire Length	standard 300mm(can be customized)
Contact Material	refer to slip ring grade table	Dielectric Strength		500VAC@50Hz, 60s
Housing Material	aluminum alloy		Electrical Noise	<0.01
Torque	0.1N.m+0.03N.m/6circuits	Loss Rate		<0.02%
Mechanical Vibration	MIL-STD-810E		CE Certification	YES
Material	RoHS certification			

### Product Grade Table

Grade code	Max rotating speed	Working life	Contact material
C:standard	400RPM	20millisons revolutions	precious metal
D:industrial	800RPM	60millisons revolutions	precious metal
H:high quality	1200RPM	150millisons revolutions	gold alloy

### Color Code of Lead Wire

ring#	1	2	3	4	5	6	7	8	9	10	11	12
color	BLK	BRN	RED	ORG	YEL	GRN	BLU	PUR	GRY	WHT	PINK	LGT BLU
ring#	13	14	15	16	17	18	19	20	21	22	23	24
color	WHT/BLK	WHT/BRN	WHT/RED	WHT/ORG	WHT/YEL	WHT/GRN	WHT/BLU	WHT/PUR	WHT/GRY	BLK/RED	BLK/BRN	Transparent

Remark: "1" : the first wire from rotor side ,ZH30119-01 wire color sequence: BLK/BRN/RED/ORG/YEL/GRN/BLU/PUR/GRY/WHT , 24 color wires as one group , if more than 24wires, repeat as sequence , use number tube to tell group 1#, 2#....

# ZH70158 Series Servo Motor/Encode Slip Ring



Hole 70mm, OD 158mm, support 1~6pcs servo motor+1~72circuits power/signal

Specially desinged for servo motor/encoder of SIMEMMS, YASKAWA, Panasonic, Mitsubishi, suitable for all kinds of foreign & domesitc servo mourtor / stepper motor. More than 10years operating experiences in SIMEMMS/HEIDENHAIN control system, high reliability.

## Part No. Description

### ZH70158 Servo motor No. Power circuits Signal circuits Grade code

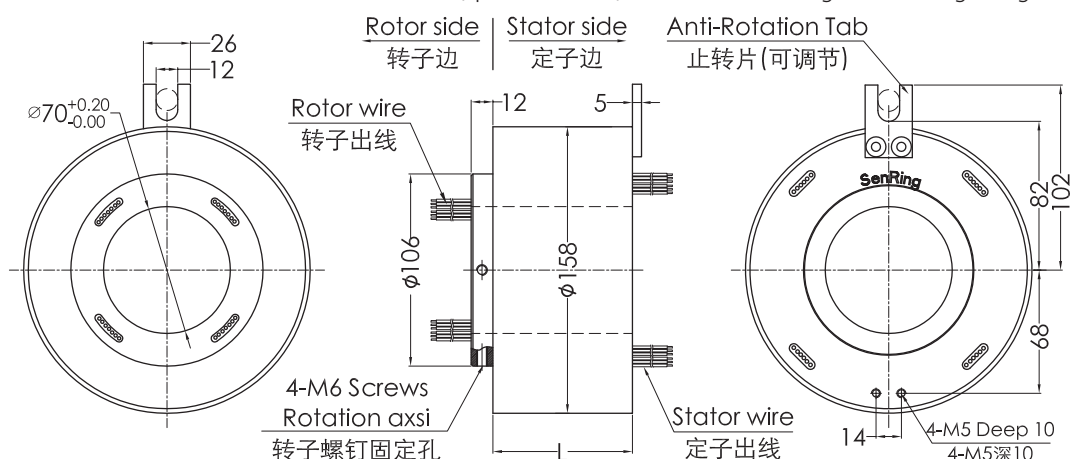
servo motor encode slip ring hole size 70mm, OD 158mm					C: Standardf D: Industrial H: high quality
					For example: 06S: 6 circuits signal@5A 12S: 12 circuits signal@5A
For example: 1pcs servo motor(two cables, 1*4cores@10A cable for power+1* 6 cores sheilded cable for encorder signal) 02: 2pcs servo motor 03: 3pcs servo motor , and so on					For example: 0610:6circuits@10A 1230:12circuits@30A

## Example

ZH70158-01-0610: support 1 pcs servo motor+6 circuits@10A cable for power, hole size 70mm, OD 158mm.

ZH70158-04-1210-12S: support 4 pcs servo motor+12 circuits@10A cable for power+12circuits signal@5A, hole size 70mm, OD 158mm.

Remark: More details or ask for customized solution, pls contact us, E-mail: info@sening.com senring.us@gmail.com



## Standard Model List

Part no.	Servo motor No.	Power circuits (10A)	Signal circuits (5A)	Length L(mm)	Part no.	Servo motor No.	Power circuits (10A)	Signal circuits (5A)	Length L(mm)
ZH70158-01	1	0	0	82	ZH70158-04	4	0	0	226
ZH70158-01-06S	1	0	6	106	ZH70158-04-06S	4	0	6	250
ZH70158-01-12S	1	0	12	130	ZH70158-04-12S	4	0	12	274
ZH70158-01-24S	1	0	24	178	ZH70158-04-24S	4	0	24	322
ZH70158-01-1210-12S	1	12	12	178	ZH70158-04-1210-12S	4	12	12	322
ZH70158-01-0610-30S	1	6	30	274	ZH70158-04-0610-30S	4	6	30	418
ZH70158-01-36S	1	0	36	274	ZH70158-04-36S	4	0	36	418
ZH70158-01-1210-36S	1	12	36	322	ZH70158-04-1210-36S	4	12	36	466
ZH70158-01-48S	1	0	48	322	ZH70158-04-48S	4	0	48	466
ZH70158-01-2410-48S	1	24	48	418	ZH70158-04-2410-48S	4	24	48	562
ZH70158-01-72S	1	0	72	418	ZH70158-04-72S	4	0	72	562
ZH70158-01-96S	1	0	96	514	ZH70158-04-96S	4	0	96	658



Part no.	Servo motor No.	Power circuits (10A)	Signal circuits (5A)	Length L(mm)	Part no.	Servo motor No.	Power circuits (10A)	Signal circuits (5A)	Length L(mm)
ZH70158-01-120S	1	0	120	610	ZH70158-04-120S	4	0	120	754
ZH70158-02	1	0	0	130	ZH70158-06	6	0	0	322
ZH70158-02-06S	2	0	6	154	ZH70158-06-06S	6	0	6	346
ZH70158-02-12S	2	0	12	178	ZH70158-06-12S	6	0	12	370
ZH70158-02-24S	2	0	24	226	ZH70158-06-24S	6	0	24	418
ZH70158-02-1210-12S	2	12	12	226	ZH70158-06-1210-12S	6	12	12	418
ZH70158-02-0610-30S	2	6	30	322	ZH70158-06-0610-30S	6	6	30	514
ZH70158-02-36S	2	0	36	322	ZH70158-06-36S	6	0	36	514
ZH70158-021210-36S	2	12	36	370	ZH70158-06-1210-36S	6	12	36	562
ZH70158-02-48S	2	0	48	370	ZH70158-06-48S	6	0	48	562
ZH70158-02-2410-48S	2	24	48	466	ZH70158-06-2410-48S	6	24	48	658
ZH70158-02-72S	2	0	72	466	ZH70158-06-72S	6	0	72	658
ZH70158-02-96S	2	0	96	562	ZH70158-06-96S	6	0	96	754
ZH70158-02-120S	2	0	120	658	ZH70158-06-120S	6	0	120	850

\*Remark: 1pcs servo motor(two cables,1\*4 cores@10A cable for power+1\*6 cores shielded cable for encode signal).

### Technical Specification

Mechanical		Electrical		
Spec.	Data	Spec.	Data	
Working Life	pls refer to product grade table		Power	Signal
Rotating Speed	pls refer to product grade table	Voltage Range	0~440VAC/VDC	0~440VAC/VDC
Working Temp.	-30°C~80°C	Insulation Resistance	≥ 1000MΩ/500VDC	≥ 1000MΩ/500VDC
Work Humidity	0~85% RH	Lead Wire Spec.	power cable or AWG#17 teflon wire	6 cores shielded cable or AWG#22 teflon wire
Contact Material	refer to slip ring grade table	Lead Wire Length	standard 300mm(can be customized)	
Housing Material	aluminum alloy	Dielectric Strength	500VAC@50Hz, 60s	
Torque	0.1N.m+0.03N.m/6circuits	Electrical Noise	<0.01Ω	
Mechanical Vibration	MIL-STD-810E	Loss Rate	<0.02%	
Material	RoHS certification	CE Certification	YES	

### Product Grade Table

Grade code	Max rotating speed	Working life	Contact material
C:standard	400RPM	20millisons revolutions	precious metal
D:industrial	800RPM	60millisons revolutions	precious metal
H:high quality	1200RPM	150millisons revolutions	gold alloy

### Color Code of Lead Wire

ring#	1	2	3	4	5	6	7	8	9	10	11	12
color	BLK	BRN	RED	ORG	YEL	GRN	BLU	PUR	GRY	WHT	PINK	LGT BLU
ring#	13	14	15	16	17	18	19	20	21	22	23	24
color	WHT/BLK	WHT/BRN	WHT/RED	WHT/ORG	WHT/YEL	WHT/GRN	WHT/BLU	WHT/PUR	WHT/GRY	BLK/RED	BLK/BRN	Transparent

Remark: "1" : the first wire from rotor side ,ZH70158-01 wire color sequence: BLK/BRN/RED/ORG/YEL/GRN/BLU/PUR/GRY/WHT , 24 color wires as one group , if more than 24wires, repeat as sequence , use number tube to tell group 1#, 2#....