

## O Series 1080P HD-SDI slip ring

Senring's SHD HD-SDI slip ring is a new generation product which integrates SDI signal transmission into standard capsule slip ring and widely used in HD camera and security industry. it can be transmit 1-24 circuits power of data signal



### Features

- Provides plastic shell and MMCX.SMA.coaxial connector
- Transmit 24 circuits signal current
- can combine with power or pneumatic/hydraulic slip ring
- Contact materials:precious metal +gold plating which ensures abrasion resistant and anti-Oxidant for long working life
- The flange of dimension,outside diameter,direction can be customized as per request

### Part No. Description

O	ID	OD	- power circuits	- signal circuits
O:HD-SDI(1080P) slip ring				
solid,OD 22mm~56mm				
Examples: 022:OD 22mm; 032:OD 32.8mm; 056:OD 56mm				
				Examples: 06S:6 circuits signal@2A(5A options) 12S:12 circuits signal@2A(5A options)
				Examples: 0610:6 circuits@10A; 1220:12 circuits@20A

### Examples

O022-08: O022 means HD-SDI HD slip ring(OD 22mm),08 means can mix 8 circuits signal(0~2A);  
O056-0810-04S: O056 means HD-SDI HD slip ring(OD 56mm),0810 means 8 circuits 10A power/signal(10A each)04 means 4 circuits signal;

### Model List

Model	1080P HD-SDI channels no.	signal circuits (0~2A)	power circuits (10A)	Frequency rate	OD(mm)	Length(mm)
O022-08	1 channel	8	0	DC-3GHz	22	25.5
O022-12	1 channel	12	0	DC-3GHz	22	25.5
O032-24	1 channel	24	0	DC-3GHz	32.8	46.7
O056	1 channel	2~48	2~24	DC-3GHz	56	26.8~155.6

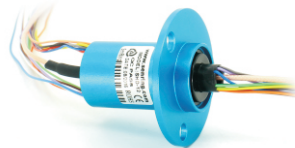
### Color Code of Lead Wire

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

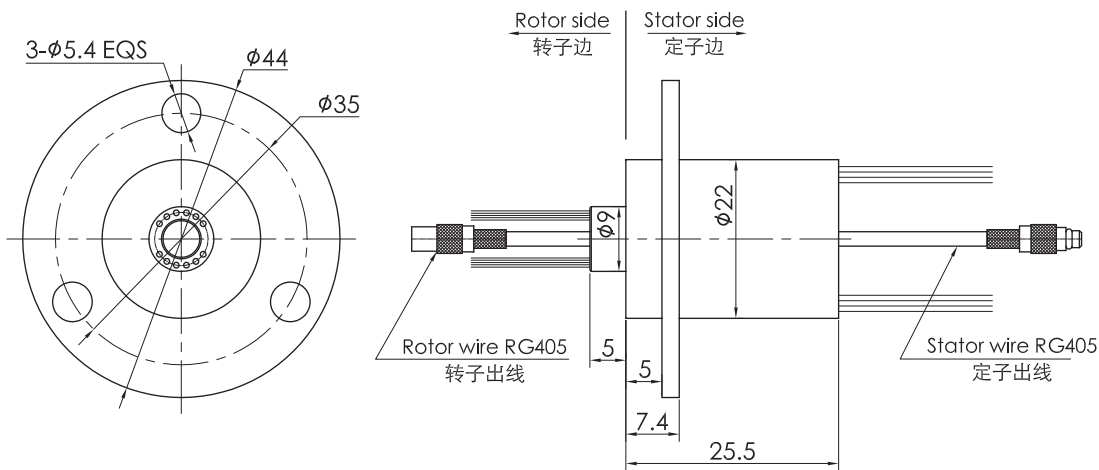
Remark: "1" : the first wire from rotor side , O056-06S wire color sequence:BLK/BRN/RED/ORG/YEL/GRN , 24 color wires as one group , if more than 24wires, repeat as sequence , use number tube to tell group 1#, 2#....

# O022-08 series HD-SDI(1080P) HD slip ring

## 1 channel (1080P) HD+8 circuits(0~2A) signal



Adopting USA imported components and high frequency signal processing technology, 1 channel DC~3GHz high speed data, used for transmitting 1080P HD signals (downward compatibility), can be combined to transmit 8 circuits signal. Advantages: Stable transmission HD video signal, no delay, no frame loss and no attenuation compared with similar products.



### Technical Specification of the slip ring

Frequency rate	DC-3GHz	Insertion loss	0.65dB/1GHz Max
Insertion loss fluctuation	+/-0.05dB	return loss	-18 dB/1GHz Max
Specification	RG405	Max speed	50RPM
VSWR	≤ 1.3	VSWR fluctuation	+/-0.05
impedance	50Ω	Style	BNC/F (Options)
Mechanical Data		Electrical Data	
spec	data	spec	data
working life	10millions for ref(depends on working conditions)	voltage range	0~440VAC/VDC
Rotating speed	250RPM continously	insulation resistance	≥ 1000MΩ/500VDC
working temp.	-30℃ ~80℃	lead wire spec.	AWG26# Silver-plated teflon
work humidity	0~85% RH	lead wire length	standard 250mm(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/6 circuits	CE certificate	Yes
		material	RoHS compliant

### Color Code of Lead Wire

ring #	1	2	3	4	5	6	7	8
color	BLK	BRN	RED	ORG	YEL	GRN	BLU	PUR

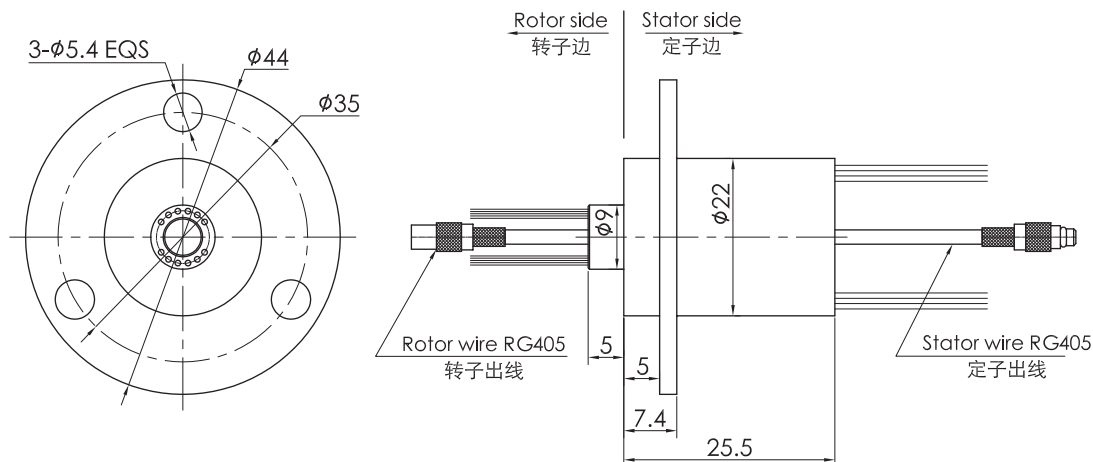
Remark: "1" : the first wire from rotor side , O022-08 wire color sequence:BLK/BRN/RED/ORG/YEL/GRN/BLU/PUR , 24 color wires as one group.

## O022-12 seires HD slip ring

1 channel (1080P) HD @12 circuits (0~2A) signal



SenRing O022-12 seires HD video slip ring ,can transmit 1 channel HD video signal ,DC~3GHz coaxial HD signal or 12 circuits 2A signal when 360° roating,rated speed:100RPM.SHD-12 series HD slip ring,OD 22mm, length 25.5,MMCX、 SMA coaxial connector optional. Adopting US military surface treatment, ultra - hard gold plating treatment to ensure extremely low resistance fluctuation and long working life.Used to transmit weak control signal and weak current of small and medium-sized systems. For example, video signal, control signal, sensor signal and other signals.



### Technical Specification of the slip ring

Frequency rate	DC-3GHz	Insertion loss	0.65dB/1GHz Max
Insertion loss fluctuation	+/-0.05dB	return loss	-18 dB/1GHz Max
Specification	RG405	Max speed	50RPM
VSWR	≤ 1.3	VSWR fluctuation	+/-0.05
impedance	50Ω	Style	BNC/F (Options)
Mechanical Data		Electrical Data	
spec	data	spec	data
working life	10millions for ref(depends on working conditions)	voltage range	0~440VAC/VDC
Rotating speed	250RPM continously	insulation resistance	≥ 1000MΩ/500VDC
working temp.	-30℃ ~80℃	lead wire spec.	AWG26# Silver-plated teflon
work humidity	0~85% RH	lead wire length	standard 250mm(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/6 circuits	CE certificate	Yes
		material	RoHS compliant

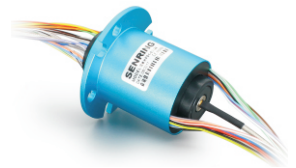
### Color Code of Lead Wire

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

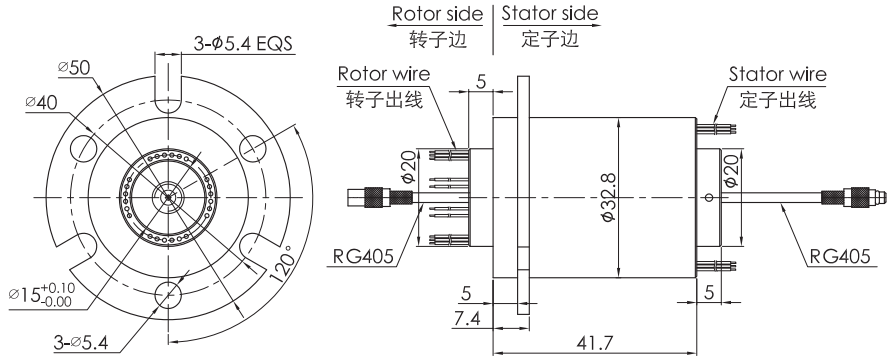
Remark: "1" : the first wire from rotor side , O022-12 wire color sequence:BLK/BRN/RED/ORG/YEL/GRN/BLU/PUR/PINK/LGT BLU , 24 color wires as one group.

# O032-24 series HD slip ring

1 channel (1080P)HD @ 24 circuits(0~2A)signal



SenRing O032-24 series HD video slip ring,can transmit 1 channel HD video signal ,DC~3GHz coaxial HD signal or 12 circuits 2A signal when 360° roating,rated speed:100RPM.SHD-24 series HD slip ring,OD 32.8mm, length 47,MMCX、 SMA coaxial connector optional. Adopting US military surface treatment, ultra - hard gold plating treatment to ensure extremely low resistance fluctuation and long working life.Used to transmit weak control signal and weak current of small and medium-sized systems. For example, video signal, control signal, sensor signal and other signals.



## Technical Specification of the slip ring

Frequency rate	DC-3GHz	Insertion loss	0.65dB/1GHz Max
Insertion loss fluctuation	+/-0.05dB	return loss	-18 dB/1GHz Max
Specification	RG405	Max speed	50RPM
VSWR	≤ 1.3	VSWR fluctuation	+/-0.05
impedance	50Ω	Style	BNC/F (Options)
Mechanical Data		Electrical Data	
spec	data	spec	data
working life	10millions for ref(depends on working conditions)	voltage range	0~440VAC/VDC
Rotating speed	250RPM continously	insulation resistance	≥ 1000MΩ/500VDC
working temp.	-30℃ ~80℃	lead wire spec.	AWG26# Silver-plated teflon
work humidity	0~85% RH	lead wire length	standard 250mm(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/6 circuits	CE certificate	Yes
		material	RoHS compliant

## 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 , O032-24-06S wire color sequence:BLK/BRN/RED/ORG/YEL/GRN , 24 color wires as one group , if more than 24wires, repeat as sequence , use number tube to tell group 1#, 2#....

# O056 series HD-SDI(1080P) HD slip ring

1 channel (1080P) HD+1~48 circuits(0~2A) signal



Adopting USA imported components and high frequency signal processing technology, 1 channel of DC~3GHz high speed data, used for transmitting 1080P HD signals(downward compatibility), can be combined to transmit 0~48 circuits power/signal. Advantages: Stable transmitting HD video signal ,no delay, no frame loss and no attenuation compared with similar products.

## Part No. Description

O056 - power circuits - signal circuits

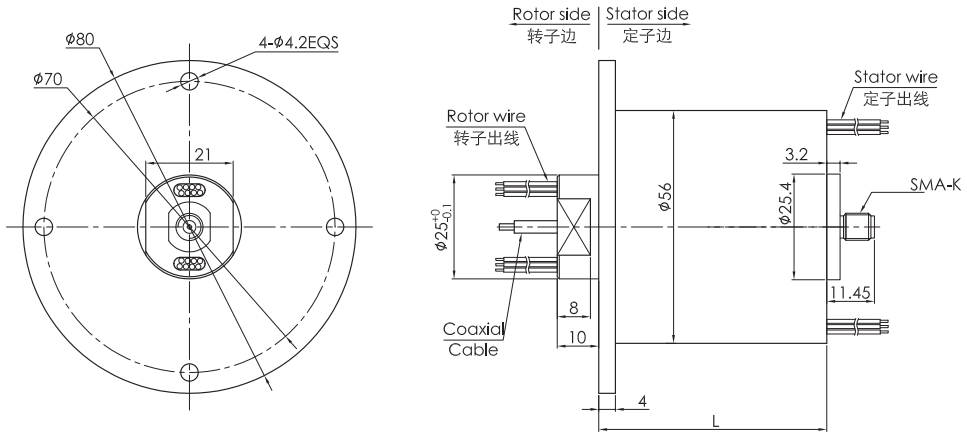
O056:HD-SDI(1080P) slip ring solid, OD 56mm

Examples:  
0610:6 circuits@10A; 1220:12 circuits@20A

Examples:  
06S:6 circuits signal@2A(5A options)  
12S:12 circuits signal@2A(5A options)

## Examples

O056-08: O056 means HD-SDI HD slip ring(OD 56mm), 08 means can mix 8 circuits signal(0~2A);  
O056-0810-04S: O056 means HD-SDI HD slip ring(OD 56mm), 0810 means 8 circuits 10A power/signal(10A each) 04 means 4 circuits signal;



## Model List

Model	HD-SDI	10A	signal/5A	length	Model	HD-SDI	10A	signal/5A	length
O056-02S	1 channel	0	2	26.8	O056-1010-08S	1 channel	10	8	71.5
O056-0210	1 channel	2	0	26.8	O056-1210-06S	1 channel	12	6	71.5
O056-03S	1 channel	0	3	29.6	O056-1410-04S	1 channel	14	4	71.5
O056-0310	1 channel	3	0	29.6	O056-1610-02S	1 channel	16	2	71.5
O056-06S	1 channel	0	6	38	O056-24S	1 channel	0	24	88.4
O056-0210-04S	1 channel	2	4	38	O056-0410-20S	1 channel	4	20	88.4
O056-0410-02S	1 channel	4	2	38	O056-0610-18S	1 channel	6	18	88.4
O056-0610	1 channel	6	0	38	O056-1210-12S	1 channel	12	12	88.4
O056-12S	1 channel	0	12	54.8	O056-1810-06S	1 channel	18	6	88.4
O056-0210-10S	1 channel	2	10	54.8	O056-2410	1 channel	24	0	88.4
O056-0310-09S	1 channel	3	9	54.8	O056-30S	1 channel	0	30	105.2
O056-0610-06S	1 channel	6	6	54.8	O056-0210-28S	1 channel	2	28	105.2
O056-0810-04S	1 channel	8	4	54.8	O056-0410-26S	1 channel	4	26	105.2
O056-1010-02S	1 channel	10	2	54.8	O056-0610-24S	1 channel	6	24	105.2
O056-1210	1 channel	12	0	54.8	O056-36S	1 channel	0	36	122

Model	HD-SDI	10A	signal/5A	length	Model	HD-SDI	10A	signal/5A	length
O056-18S	1 channel	0	18	71.5	O056-0410-32S	1 channel	4	32	122
O056-0210-16S	1 channel	2	16	71.5	O056-0610-30S	1 channel	6	30	122
O056-0410-14S	1 channel	4	14	71.5	O056-42S	1 channel	0	42	138.8
O056-0610-12S	1 channel	6	12	71.5	O056-0410-38S	1 channel	4	38	138.8
O056-0810-10S	1 channel	8	10	71.5	O056-48S	1 channel	0	48	155.6

### Technical Specification of the slip ring

Frequency rate	DC-3GHz	Insertion loss	0.65dB/1GHz Max	
Insertion loss fluctuation	+/-0.05dB	return loss	-18 dB/1GHz Max	
Specification	RG405	Max speed	50RPM	
VSWR	≤1.3	VSWR fluctuation	+/-0.05	
impedance	50Ω	Style	BNC/F (Options)	
Mechanical Data		Electrical Data		
spec	data	spec	data	
working life	10millions for ref(depends on working conditions)	voltage range	0~440VAC/DC	
Rotating speed	250RPM continously	insulation resistance	≥1000MΩ/500VDC	
working temp.	-30℃~80℃	lead wire spec.	AWG17# Silver -plated teflon	AWG26# Silver -plated teflon
work humidity	0~85% RH	lead wire length	standard 250mm(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/6 circuits	CE certificate	Yes	
material	RoHS compliant			

### 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 , O056-06S wire color sequence:BLK/BRN/RED/ORG/YEL/GRN , 24 color wires as one group , if more than 24wires, repeat as sequence , use number tube to tell group 1#, 2#....