

# MSDI Series HD-SDI Slip Ring

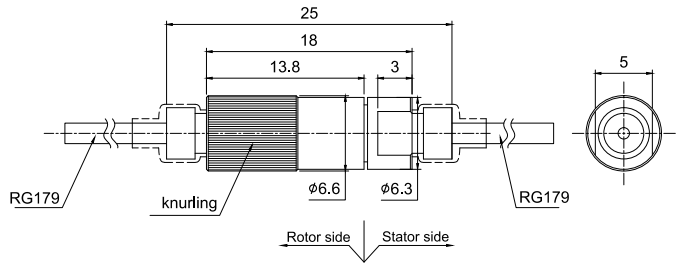
## Single channel HD-SDI + 12~30 circuit signal (2A)

MSDI212 high-definition slip ring supports 1 channel HD-SDI signal (coaxial-cable) + 12~30 circuits Signal (2A). MSDI series slip rings are high-end products, specially designed to support high definition video signal 1080P. This series slip ring can support max rate 3GHZ, also can combine with 1~30 circuits signal and weak current. This series product brings in and adopts military-grade surface treatment process in USA. It deals with brushes for hard gold plating, which guarantees the low resistance fluctuation and long working life. This product is mainly used for transmitting weak controlling signal for small and medium application, such as video, control, sensor, power, Ethernet, etc. Typical application: HD security monitor, photographic camera, HD camera.

High-definition Core



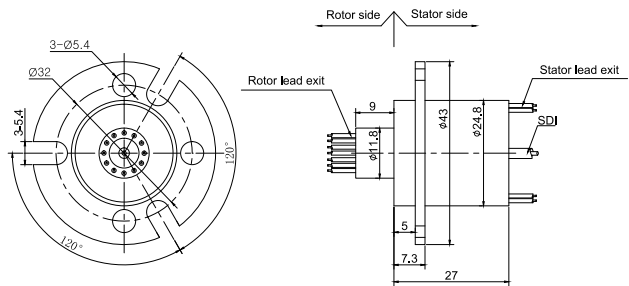
MSDI200 Dimensions



MSDI212



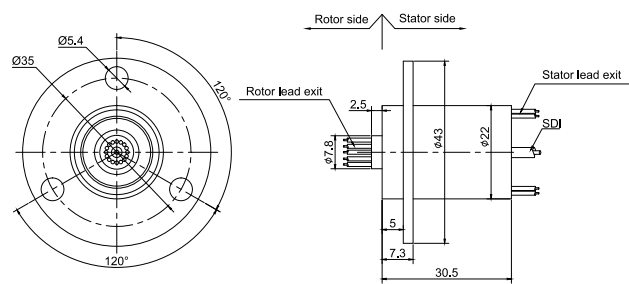
MSDI212 Dimensions



MSDI216



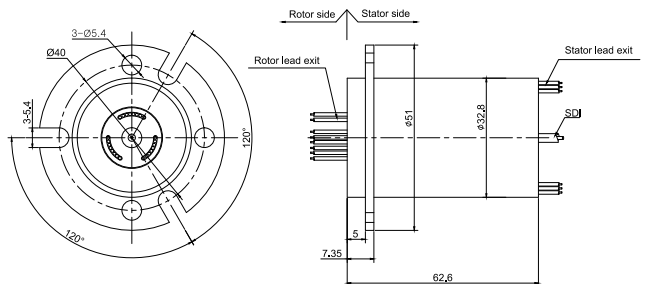
MSDI216 Dimensions



MSDI224

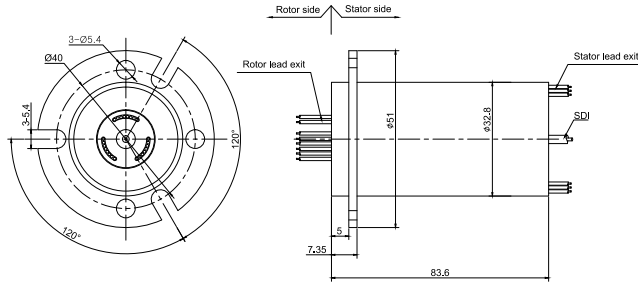


MSDI224 Dimensions



### MSDI230

### MSDI230 Dimensions



### Parts# List

MSDI High-definition slip ring part list

Parts#	HD-SDI	Communication Rate	signal ( 2A )	OD*L
MSDI200	1 channel RG-179(75Ω)	DC-3GHz	0	Φ6.6mm*18mm
MSDI212	1 channel RG-179(75Ω)	DC-3GHz	12	Φ24.8mm*29.6mm
MSDI216	1 channel RG-179(75Ω)	DC-3GHz	16	Φ22.0mm*28.8mm
MSDI224	1 channel RG-179(75Ω)	DC-3GHz	24	Φ32.8mm*62.6mm
MSDI230	1 channel RG-179(75Ω)	DC-3GHz	30	Φ32.8mm*83.6mm

Note: N rings 2A in parallel can be used as 1 channel N\*2A current. For example: 2 rings 2A in parallel can be used as 1 channel 4A

### Specifications

RF Rotary Joint Specifications			
Frequency Rate	DC-3GHz	Insertion Loss	0.65dB/1GHz Max
Insertion Loss Typical	+/-0.05dB	Return Loss	-18 dB/1GHz Max
Input And Output	RG-179/U	Max Speed	50RPM
Volt Standing Wave Ratio	VSWR≤1.3	Wave Ratio Typical	+/-0.05
Working Life	200million revolutions	Connector Types	BNC/F
Impedance	75 ohms	Rating Current	DC 1A Max
Electrical data			
Parameter	Power		Signal
Rated Voltage	0~440VAC/VDC		0~440VAC/VDC
Insulation Resistance	≥1000MΩ/500VDC		≥1000MΩ/500VDC
Lead Wire	AWG28#Teflon		AWG28#Teflon
Lead Length	standard length 300mm ( adjustable )		
Insulation Strength	500VAC@50Hz , 60s		
Electrical Noise	<0.01Ω		
Mechanical data			
Parameter	Value		
Working Life	50 million revs		
Rotating Speed	250RPM		
Working Temperature	-30°C~80°C		
Operating Humidity	0~85% RH		
Contact Material	gold-gold		
Housing Material	aluminum alloy		
Torque	0.05N.m ; +0.01N.m/6 rings		
Protection Grade	IP51		

### Lead Wires Color Code

Ring	1	2	3	4	5	6	7	8	9	10	11	12
Color	BLK	RED	YEL	GRN	BLU	WHT	BLK	RED	YEL	GRN	BLU	WHT

(6 wires for 1 group color, from 7-12, repeat the same color as 1...6, indicated with number code pipe.)