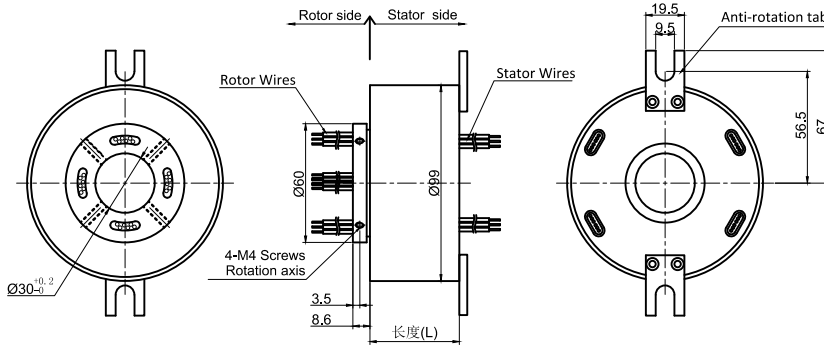
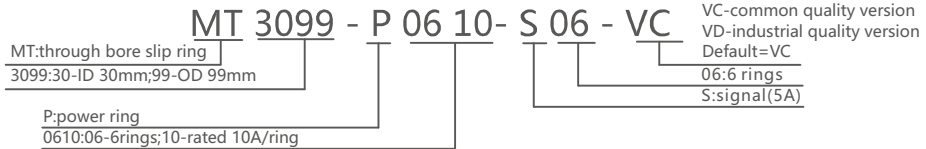


# MT3099 Series

MT3099 series provides a 30mm through-bore for routing of hydraulic or pneumatic lines or hydraulic or pneumatic rotating shaft installation, and a compact 99mm outside diameter, features long life, fiber brush contact technology for ultimate performance in many challenging applications. MT3099 series are standard, off-the-shelf products, Color-coded lead wires are used on both the stator and rotor for simplified electrical connections. It can transmit signal(2A), 10A, multiple 10A current when 360° degree free rotating.



## Part# Explanation



## Part# List

MT3099 Series Parts# List							
Part#	10A	Signal or 5A	Length-L (mm)	Part#	10A	Signal or 5A	Length-L (mm)
MT3099-S02	0	2	31.6	MT3099-P1210-S12	12	12	106.4
MT3099-P0210	2	0	31.6	MT3099-P1810-S06	18	6	106.4
MT3099-S03	0	3	35	MT3099-P2410	24	0	106.4
MT3099-P0310	3	0	35	MT3099-S30	0	30	126.8
MT3099-S06	0	6	45.2	MT3099-P0610-S24	6	24	126.8
MT3099-P0210-S04	2	4	45.2	MT3099-P1210-S18	12	18	126.8
MT3099-P0410-S02	4	2	45.2	MT3099-P1810-S12	18	12	126.8
MT3099-P0610	6	0	45.2	MT3099-P2410-S06	24	6	126.8
MT3099-S12	0	12	65.6	MT3099-P3010	30	0	126.8
MT3099-P0210-S10	2	10	65.6	MT3099-S36	0	36	150.2
MT3099-P0310-S09	3	9	65.6	MT3099-P0610-S30	6	30	150.2
MT3099-P0610-S06	6	6	65.6	MT3099-P1210-S24	12	24	150.2
MT3099-P0810-S04	8	4	65.6	MT3099-P3610	36	0	150.2
MT3099-P1010-S02	10	2	65.6	MT3099-S42	0	42	170.6
MT3099-P1210	12	0	65.6	MT3099-P0610-S36	6	36	170.6
MT3099-S18	0	18	86	MT3099-P1210-S30	12	30	170.6
MT3099-P0210-S16	2	16	86	MT3099-S48	0	48	193.2
MT3099-P0410-S14	4	14	86	MT3099-P0610-S42	6	42	193.2
MT3099-P0610-S12	6	12	86	MT3099-P0910-S39	9	39	193.2
MT3099-P0810-S10	8	10	86	MT3099-P1210-S36	12	36	193.2
MT3099-P1010-S08	10	8	86	MT3099-P1810-S30	18	30	193.2
MT3099-P1210-S06	12	6	86	MT3099-P2410-S24	24	24	193.2
MT3099-P1410-S04	14	4	86	MT3099-S60	0	60	234
MT3099-P1610-S02	16	2	86	MT3099-P0610-S54	6	54	234
MT3099-S24	0	24	106.4	MT3099-P0910-S51	9	51	234
MT3099-P0410-S20	4	20	106.4	MT3099-P1210-S48	12	48	234
MT3099-P0610-S18	6	18	106.4	MT3099-S72	0	72	277.8

Note: N channels 10A rings parallel can be used as 1 channel N\*10A current. For example: 2 rings 10A parallel could be used as 1 wires 20A. 10A,5A (signal) can combine freely in any way.It can be customized based on standard slip ring,please contact customer service for more detmalls.

## Specifications

Electrical Data		
Parameter	Value	
	Power	Signal
Rated Voltage	0~690VAC/VDC	0~440VAC/VDC
Insulation Resistance	≥1000MΩ/1000VDC	≥1000MΩ/500VDC
Lead Wires	AWG16#Teflon	AWG22#Teflon
Lead Length	Standard 300mm(adjustable)	
Insulation Strength	1000VAC@50Hz, 60s	
Electrical Noise	<0.01Ω	
Mechanical Data		
Parameter	Value	
Working Life	See Product Quality Level Table	
Rotating Speed	See Product Quality Level Table	
Working Temperature	-30°C~80°C	
Operating Humidity	0~85% RH	
Contact Material	See Product Quality Level Table	
Housing Material	Aluminium Alloy	
Torque	0.1N.m; +0.03N.m/6rings	
Protection Grade	IP51	

## Product Quality Level Table

Products Level Code	Max Rotating Speed	Working Life	Contact Material
VC	250RPM	20 Million Revs	Precious Metal
VD	600RPM	80 Million Revs	Gold-plated
VH	1000RPM	150 Million Revs	Gold-Gold

## 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)

## Options For Custom Slip Ring

Note: Below special demands can be customized. According, the delivery date will be extended 3 to 15 days; also the cost will be increased 30% to 50%. Most of our basic parts are standard and modular, which can save the cost and lead time.

- ① Cable exit way and cable length can be customized for both rotor and stator.
- ② Because of the structure limitation, length/height/OD can be customized on your request.
- ③ Support current or signal up to 200 rings.
- ④ Aviation plug, terminal and heat-shrink tube are optional.
- ⑤ Hybrid slip ring for Yaskawa/Panasonic/Siemens servo control signal, power line and encoder line.
- ⑥ Support mixed high speed data transmission (including Ethernet, USB, RS232, RS485, Profibus, CanBUS, CANOPEN, DeviceNET, CC-LINK, ProfiNET, EtherCAT, etc.)
- ⑦ Can combine temperature control signal with thermocouple signal.
- ⑧ Special environment can be customized, such as quakeproof, high temperature, etc.
- ⑨ Hybrid Pneumatic/hydraulic and electric slip ring can be mixed.
- ⑩ High temperature can up to 500 degrees.
- ⑪ High pressure can up to 110KV
- ⑫ Rotating speed can up to 10000RPM
- ⑬ Maximum current can up to 5000 amperes.
- ⑭ Military grade
- ⑮ Optional for underwater IP65, IP68.
- ⑯ Optional for stainless steel housing

Technical support: [technical@moflon.com](mailto:technical@moflon.com)