

MX Slip Ring Series





Motion Index Drives offers many standard rotary slip rings with a variety of options for communication, power and air requirements for rotary index table applications.

Our MX series Slip Ring Rotary Union assembly can be manufactured to our customer's specification. These can be delivered complete with our index drives, to allow for a simpler installation.

*May vary between series

AIR UNION SPECIFICATIONS						
Air Pressure	150 PSI					
Air Temp	250 F					
Hydraulic Temp	250 F					
Max Speed	1500 RPM					
Vacuum Pressure	28 InHG					
Vacuum Temp	250 F					



GENERAL SPECIFICATIONS						
Rings	2~96(see next page)	Current	Signal(2A),10A			
Voltage	600 VDC/VAC	Max speed	1000RPM			
Through Bore Size	38.1mm(1.5")	Overall diameter	99mm(3.9")			
Housing Material	Aluminium Alloy	Torque	0.05N.m;+0.03N.m/6rings			
Working Life	Depends on speed	Contact material	Precious Metal:Gold-Gold			
Electrical Noise	<5 m0hm	Contact Resistance	<2m0hm			
Dielectric Strength	800VDC@50Hz	Lead Wire	UL Teflon® Awg22,Awg16			
Insulation Resistance	1000MΩ@600VDC	Lead Lengths	300mm(12")			
Operating Temp.	-40°C to 80°C	Protection	IP51			
Mechanical Vibratio	MIL-SID-810E	Humidity	10% to 85% RH			
Materials	Lead Free, RoHS compliant	Certified	YES			



MX150

MX150 series provides a long life, fiber brush contact technology for ultimate performance in many challenging applications. MX150 series are standard, color-coded lead wires are used on both the stator and rotor for simplified electrical connections. It can transmit signal (2A), 10A current at max 600 VAC/VDC.

Air unions are available in 1/2 inch 3/4 inch and 1 inch, please specify when ordering. Please verify indexer model for correct mounting bracket which is included.

PARTS LIST

Please note: 10A rings parallel can be used as multiple 10A current.

For Example: 2 rings parallel could be used as 1 wire 20A.

MX150-02-0200						
Parts # Power 10A Signal/2A Parts # Power 10A Signal/2					Signal/2A	
MX150-02-0200	2	0	MX150-02-0002	0	2	

MX150-03-0300						
Parts # Power 10A Signal/2A Parts # Power 10A Signal/2A						
MX150-03-0300	3	0	MX150-03-0003	0	3	
MX150-03-0102	1	2	MX150-03-0201	2	1	

MX150-06-0600						
Parts # Power 10A Signal/2A Parts # Power 10A Signal/2A					Signal/2A	
MX150-06-0600	6	0	MX150-06-0006	0	6	
MX150-06-0204	2	4	MX150-06-0402	4	2	

MX150-12-1200						
Parts #	Power 10A	Signal/2A	Parts #	Power 10A	Signal/2A	
MX150-12-1200	12	0	MX150-12-0012	0	12	
MX150-12-0210	2	10	MX150-12-0408	4	8	
MX150-12-0606	6	6	MX150-12-0804	8	4	
MX150-12-1002	10	2				

MX150-18-1800						
Parts #	Power 10A	Signal/2A	Parts #	Power 10A	Signal/2A	
MX150-18-1800	18	0	MX150-18-0018	0	18	
MX150-18-0216	2	16	MX150-18-0414	4	14	
MX150-18-0612	6	12	MX150-18-0810	8	10	
MX150-18-1008	10	8	MX150-18-1206	12	6	
MX150-18-1404	14	4	MX150-18-1602	16	2	





MX150-42-4200						
Parts #	Power 10A	Signal/2A	Parts #	Power 10A	Signal/2A	
MX150-42-4200	42	0	MX150-42-0042	0	42	
MX150-42-0636	6	36	MX150-42-1230	12	30	
MX150-42-1824	18	24	MX150-42-2418	24	18	
MX150-42-3012	30	12	MX150-42-3606	36	6	

MX150-36-3600						
Parts #	Power 10A	Signal/2A	Parts #	Power 10A	Signal/2A	
MX150-36-3600	36	0	MX150-36-0036	0	36	
MX150-36-0630	6	30	MX150-36-1224	12	24	
MX150-36-1818	18	18	MX150-36-2412	24	12	
MX150-36-3006	30	6				

MX150-48-4800						
Parts #	Power 10A	Signal/2A	Parts #	Power 10A	Signal/2A	
MX150-48-4800	48	0	MX150-48-0048	0	48	
MX150-48-0642	6	42	MX150-48-1236	12	36	
MX150-48-1830	18	30	MX150-48-2424	24	24	
MX150-48-3018	30	18	MX150-48-3612	36	12	
MX150-48-4206	42	6				

MX150-56-5600						
Parts #	Power 10A	Signal/2A	Parts #	Power 10A	Signal/2A	
MX150-56-5600	56	0	MX150-56-0056	0	56	
MX150-56-0650	6	50	MX150-56-1244	12	44	
MX150-36-1838	18	38	MX150-56-2432	24	32	
MX150-36-3620	36	20	MX150-56-4808	48	8	

MX150-72-7200						
Parts #	Power 10A	Signal/2A	Parts #	Power 10A	Signal/2A	
MX150-72-7200	72	0	MX150-72-0072	0	72	
MX150-72-1260	12	60	MX150-72-2448	24	48	
MX150-72-3042	30	42	MX150-72-3636	36	36	
MX150-72-4824	48	24	MX150-72-6012	60	12	

MX150-96-9600							
Parts #	Power 10A	Signal/2A	Parts #	Power 10A	Signal/2A		
MX150-96-9600	96	0	MX150-96-0096	0	96		
MX150-96-1284	12	84	MX150-96-2472	24	72		
MX150-96-3660	36	60	MX150-96-4848	48	48		
MX150-96-6036	60	36	MX150-96-7224	72	24		



MX230

MX230 series provides a long life, fiber brush contact technology for ultimate performance in many challenging applications. Dedicated flying leads with specific communication connectors for easy install. MX230 series are standard with flying leads of 72 inches. Color-coded lead wires are used on both the stator and rotor for simplified electrical connections. It can transmit signal (2A), 10A current at max 600VAC/VDC.

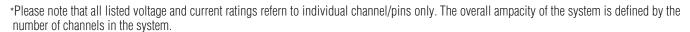
PARTS LIST

ETHERNET CONNECTOR					
Part #	#Circuits	AMP	Comm. Ports	Communication	
MX230-02	6	10	1	Ethernet RJ45	
MX230-03	12	10	1	Ethernet RJ45	
MX230-04	18	10	1	Ethernet RJ45	
MX230-05	24	10	1	Ethernet RJ45	

DEVICE NET						
Part #	#Circuits	AMP	Comm. Ports	Connector		
MX230-12	6	10	1	Device Net 5 pin Micro		
MX230-13	12	10	1	Device Net 5 pin Micro		
MX230-14	18	10	1	Device Net 5 pin Micro		
MX230-15	24	10	1	Device Net 5 pin Micro		

CANBUS						
Part # #Circuits AMP Comm. Ports Connector						
MX230-17	6	10	1	Canbus 9 pin D-sub		
MX230-18	12	10	1	Canbus 9 pin D-sub		
MX230-19	18	10	1	Canbus 9 pin D-sub		
MX230-20	24	10	1	Canbus 9 pin D-sub		

PROFIBUS						
Part # #Circuits AMP Comm. Ports Connector						
MX230-07	6	10	1	Profibus 9 pin D-sub		
MX230-08	12	10	1	Profibus 9 pin D Sub		
MX230-09	18	10	1	Profibus 9 pin D Sub		
MX230-10	24	10	1	Profibus 9 pin D Sub		



^{*}As a rule of thumb a 10 channel system has a conversion factor of about 0.5, meaning while each channel can handle for example 10A, the total amperage on all channel should not exceed 50A to prevent overheating. On a 20 channel system the conversion factor reduces to about 0.4, meaning the total amerage should not exceed 20 (channel) x 10A (per channel x 0.4 (conversion factor) = 80A. The mentioned convertion factor are worst case estimates when operating the slip ring above 50 deg C (122 deg F) and in a closed and tight environment without any airflow and no chance for the heat to escape.



MX470

MX470 series provides easy installation with plug in connectors. Each unit is tested for communication response times and connectivity. With ratings of IP56 on most units you will be getting maximum protection level for most applications. High quality gold plated internal components offer high conductivity. Standard air unions are also, available in 1/2 inch 3/4 inch and 1 inch, please specify when ordering. Please verify indexer model for correct mounting bracket which is included.

PARTS LIST

MX470-01						
Connectors	Stator	Rotor	Communication	Power Rating		
Turck RSF578	1	1	Device Net	N/A		
Turck RSFL56	0	1	N/A	600 V 9 AMP		
Turck RKFL56	1	0	N/A	600 V 9 AMP		

MX470-02							
Connectors Stator Rotor Communication Power Rating							
Turck FKW5L	1	1	Profinet	N/A			
Turck RSFL56	0	1	N/A	600 V 9 AMP			
Turck RKFL56	1	0	N/A	600 V 9 AMP			

MX470-03						
Connectors	Stator	Rotor	Communication	Power Rating		
Turck FKF DDV-440	2	2	Ethernet	N/A		
Turck RSF461	0	1	N/A	600 V 10 AMP		
Turck RKFL461	1	0	N/A	600 V 10 AMP		

MX470-04						
Connectors	Stator	Rotor	Communication	Power Rating		
Turck FKF DDV-440	1	1	Ethernet	N/A		
Turck RSF34	0	1	N/A	600 V 10 AMP		
Turck RKF34	1	0	N/A	600 V 10 AMP		
Turck RSF44	0	1	N/A	600 V 15 AMP		
Turck RKF44	1	0	N/A	600 V 10 AMP		





MX470-05					
Connectors	Stator	Rotor	Communication	Power Rating	
Hirschmann J224TPESTP	1	1	Ethernet	N/A	
Turck RSF126	0	1	N/A	600V 7 AMP	
Turck 126	1	0	N/A	600V 7 AMP	

MX470-06						
Connectors	Stator	Rotor	Communication	Power Rating		
Hirschmann J224TPESTP	1	1	Ethernet	N/A		
Turck RSF34	0	1	N/A	600 V 10 AMP		
Turck RKF34	1	0	N/A	600 V 10 AMP		
Turck RSF44	0	1	N/A	600 V 15 AMP		
Turck RKF44	1	0	N/A	600 V 15 AMP		

MX470-07					
Connectors	Stator	Rotor	Communication	Power Rating	
Turck RSF578	4	4	Device Net	N/A	
Turck CSFD-64-6	0	1	N/A	300 V 15 AMP	
Turck CKFD-64-6	1	0	N/A	300 V 15 AMP	



^{*}Please note that all listed voltage and current ratings refern to individual channel/pins only. The overall ampacity of the system is defined by the number of channels in the system.

^{*}As a rule of thumb a 10 channel system has a conversion factor of about 0.5, meaning while each channel can handle for example 10A, the total amperage on all channel should not exceed 50A to prevent overheating. On a 20 channel system the conversion factor reduces to about 0.4, meaning the total amerage should not exceed 20 (channel) x 10A (per channel x 0.4 (conversion factor) = 80A. The mentioned convertion factor are worst case estimates when operating the slip ring above 50 deg C (122 deg F) and in a closed and tight environment without any airflow and zhno chance for the heat to escape.



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