Electrical Rotating Connectors

AOOD rotating electrical connectors (also called mercury slip rings) use a unique design principle unlike the sliding, brush contact slip rings, the connection is made through a pool of liquid metal molecularly bonded to the contact, which provides a low-resistance and stable connection. During rotation the fluid maintains the electrical connection between the contacts without any wear. Just because of the no wear contacting, it can provide superior performance than electrical slip rings in some special applications, such as require up to thousands of amps high current transfer welding machines or require extremely low electrical noise applications or high speed applications.

Features

- Nearly zero electrical noise
- Very low contact resistance (< 1mΩ)
- No maintenance and high reliability
- Single pole current can up to 7500A
- Speeds up to 3600RPM
- Through bore type optional
- Suitable for high speed or low noise applications

Typical Applications

- Welding machines
- Cutting machines
- Textile machines
- Strain gages
- sanitary towel machines

Specification

Model 型　號	Conductor Poles 極　數	Current Amp. 電　流	Voltage AC/DC V 耐　壓	Max. Freq. MHZ 頻　率	Max. RPM 最大轉速	Operating Temp. Max/Min ˚C 使用溫度	Rotating Torque (gm-cm) 轉　矩	Insulation Resistance 絕緣阻抗
A1M	**1**	**10**		200	3600	60/-30	35	
A1MT	**1**	**10**		200	3600	60/-30	35	
A1M2	**1**	**20**		200	2000	60/-30	50	
A1M5	**1**	**50**		200	1800	60/-30	70	
A1HH	**1**	**250**		200	1200	60/-30	250	
A1H25S	**1**	**250**		200	1200	60/-30	250	
A1H25PS	**1**	**250**		200	1200	60/-30	250	
A1H35S	**1**	**350**		200	800	60/-30	300	
A1H50PS	**1**	**500**		200	300	60/-30	700	
A1H65S	**1**	**650**		200	200	60/-30	1000	
A1H65PS	**1**	**650**		200	200	60/-30	1000	
A1H90PS	**1**	**900**		200	200	60/-30	1100	
A1H150PS	**1**	**1500**		200	100	60/-30	2000	
A1H300PS	**1**	**3000**		200	60	60/-30	3000	

Specification

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A1H500FS	**1**	**5000**		200	50	60/-30	4000	
A1H750FS	**1**	**7500**		200	50	60/-30	6000	
A2S	**2**	**4**	250	200	2000	60/-30	75	> 25MΩ
A3S	**3**	**4**	250	200	1800	60/-30	100	> 25MΩ
A3S-W	**3**	**4**	250	200	1800	60/-30	100	> 25MΩ
A4S-W	**4**	**4**	250	200	1200	60/-30	150	> 25MΩ
A2H	**2**	**30**	250	200	1800	60/-30	200	> 25MΩ
A3M	**3**	**30/4**	250	200	1800	60/-30	200	> 25MΩ
A3M-W	**3**	**4**	250	200	1800	60/-30	200	> 25MΩ
A3H	**3**	**30**	250	200	1200	60/-30	400	> 25MΩ
A4H	**4**	**30/4**	250	200	1200	60/-30	400	> 25MΩ
A6H	**6**	**30/4**	250	100	300	60/-30	700	> 25MΩ
A8H	**8**	**30/4**	250	100	200	60/-30	1000	> 25MΩ
A1030	**10**	**30/4**	250	100	100	60/-30	1500	> 25MΩ
A1230	**12**	**30/4**	250	100	60	60/-30	2000	> 25MΩ
A1430	**14**	**30/4**	250	100	60	60/-30	2000	> 25MΩ
A2H6	**2**	**60**	250	200	600	60/-30	400	> 25MΩ
21005W	**7**	**100/4**	250	100	100	60/-30	1500	> 25MΩ
A2HV	**2**	**30**	500	100	400	60/-30	400	> 50MΩ
A3HV	**3**	**30**	500	100	300	60/-30	700	> 50MΩ
A4HV	**4**	**30**	500	100	200	60/-30	1000	> 50MΩ
A5HV	**5**	**30**	500	100	100	60/-30	1500	> 50MΩ
A6HV	**6**	**30**	500	100	60	60/-30	2000	> 50MΩ
A7HV	**7**	**30**	500	100	60	60/-30	2000	> 50MΩ

Through-bore-type

Model 型 號	Through-bore ψ 中空孔徑	Conductor Poles 極 數	Current Amp. 電 流	Voltage AC/DC V 耐 壓	Max. Freq. MHZ 頻 率	Max. RPM 最大轉速	Operating Temp. Max/Min ˚C 使用溫度	Rotating Torque (gm-cm) 轉 矩	Insulation Resistance 絕緣阻抗
H23016	**16.2mm**	**2**	**30**	250	100	100	60/-30	1000	> 25MΩ
H43016	**16.2mm**	**4**	**30**	250	100	60	60/-30	1500	> 25MΩ
H63016	**16.2mm**	**6**	**30**	250	100	40	60/-30	2000	> 25MΩ
H83016	**16.2mm**	**6**	**30**	250	100	40	60/-30	2000	> 25MΩ
H23010	**10.2mm**	**2**	**30**	250	100	150	60/-30	2000	> 25MΩ
H43010	**10.2mm**	**4**	**30**	250	100	100	60/-30	2000	> 25MΩ
H63010	**10.2mm**	**6**	**30**	250	100	60	60/-30	2000	> 25MΩ
H83010	**10.2mm**	**8**	**30**	250	100	40	60/-30	2000	> 25MΩ
H103010	**10.2mm**	**10**	**30**	250	100	40	60/-30	2000	> 25MΩ