

Large Diameter Slip Rings and High Speed Data Links

Large Diameter Slip Ring

Description

Large bore slip rings represent the union of manufacturing processes and technologies that enable Moog to offer large, high volume slip rings with advanced features that are cost effective. The manufacturing processes allow the slip ring to be built in an assembly line fashion that significantly reduces delivery time and price.

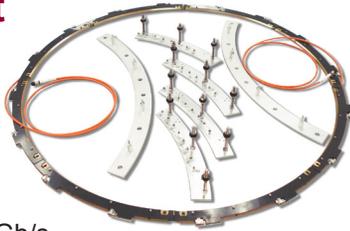
Features

- Platter or drum configuration
- Diameters exceeding 70 inches (1.7 m)
- Rotational speeds to 300 rpm
- Power rings rated up to 1000 V
- Power rings rated up to 300 amp
- Quiet mechanical system operation
- Low maintenance requirements
- Multiple brush tip options with minimal debris
- Capability of adding integral encoder, multiplexer, fiber optic rotary joint and non-contacting data link
- Multiplexing: multiple bidirectional signals to minimize ring count
- Encoder: capable of >15,000 counts

Fiber Optic Rotary Joint (FORJ)

Description

Large bore optical rotary joints for high speed optical communications with aggregate data rates exceeding 40 Gb/s. This patented technology also has the capability to transfer multiple data signals per optical channel.



Features

- Integrated directly into slip ring or can stand alone
- Inherent EMI immunity
- Multiple electronics options (single channel, multi-channel, FPGA)
- Significant system health diagnostics
- Bidirectional channel support

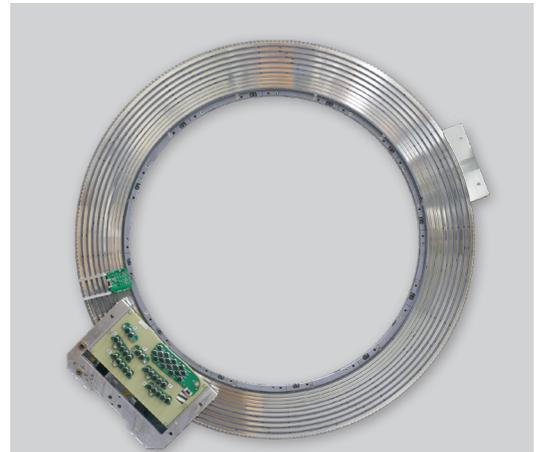
Non-Contacting Data Link (NCDL)

Description

Large bore non-contacting data link for high speed data communications with aggregate data rates exceeding 5 Gb/s.

Features

- Integrate directly into slip ring or can stand alone
- Bidirectional channel support
- Requires less footprint than FORJ option
- Modules packaged within footprint of slip ring



Typical Applications

- Medical CT scanners
- Luggage scanners
- Amusement rides
- Cranes
- Offshore mooring
- Non-destructive test equipment
- Industrial 3D imaging equipment



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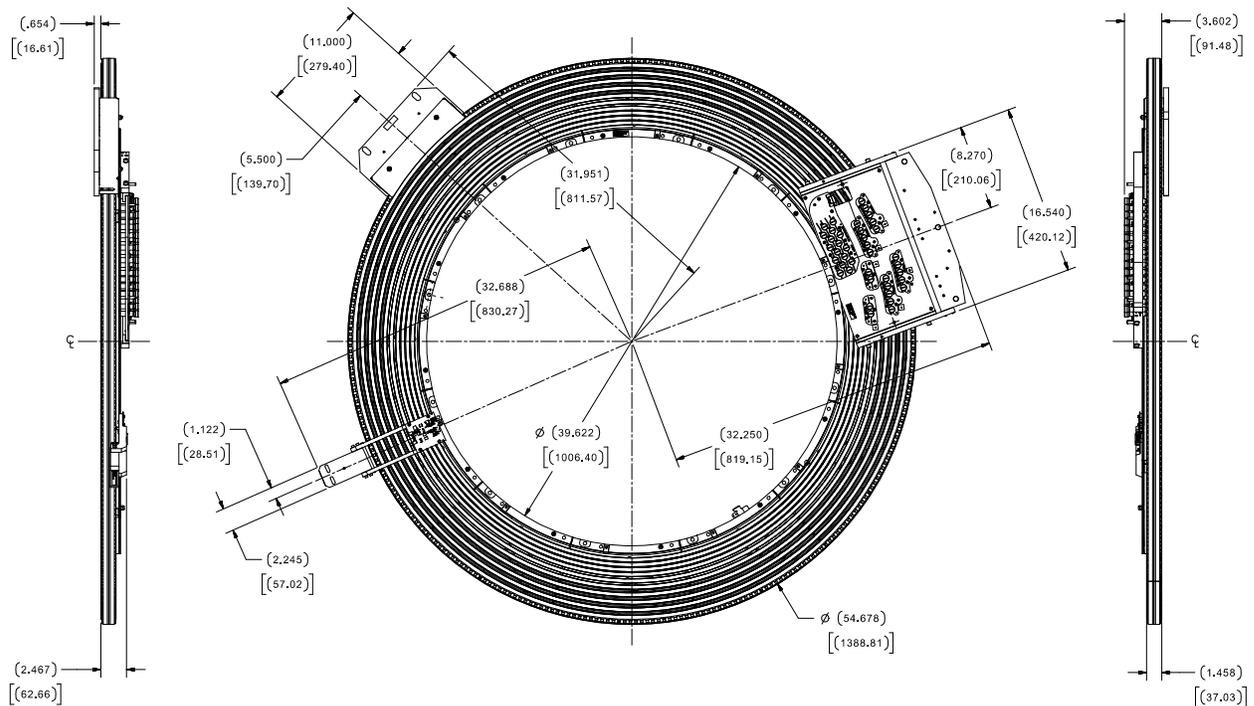
Specifications												
Part Number	Type	ID*	OD*	High Power Qty	Mid Power Qty	Signal Qty	High Power Voltage	High Power Current (cont.)	Speed	Integrated Encoder	Integrated Data Link	Data Link Options
CT6455	Drum	31.952	35.044	4	2	8	480 VAC	100 A	120 rpm	No	No	
CT6764	Drum	37.400	39.984	4	2	0	480 VAC	100 A	120 rpm	No	No	
CT7013	Platter	38.590	56.194	4	2	4	400 VAC	100 A	180 rpm	No	No	
CT7311	Platter	39.622	54.818	4	2	4	380 VAC	100 A	180 rpm	Yes	NCDL	- Single Ch 5 Gbps R->S
CT7093	Platter	42.520	54.100	3	2	4	500 VAC	100 A	180 rpm	No	FORJ	- Single Ch 2.5 Gbps* R->S - 4 Ch 2.5 Gbps* R->S
CT7138	Platter	42.047	54.094	5	0	4	400 VAC	100 A	120 rpm	No	FORJ	
CT6970	Platter	44.291	59.916	3	2	6	600 VAC	100 A	180 rpm	Yes	FORJ	- Single Ch 2.5 Gbps* R->S - 4 Ch 2.5 Gbps* R->S - 4 Ch R->S with 1.25 Gbps* S->R path - Bidirectional Gigabit Ethernet (1000Base - SX)
CT6536	FORJ ONLY	39.624	43.040						300 rpm	No		

* OD, ID dimension does not include brush block, fiber optic hardware, or non-contacting data link mounting dimension

- All designs are RoHS compliant
- Design to customer specifications

Note: Slip ring designs within these general specifications may be for either military or commercial applications. Slip rings specifically designed for military applications may require licensing for export. Contact factory for export classification.

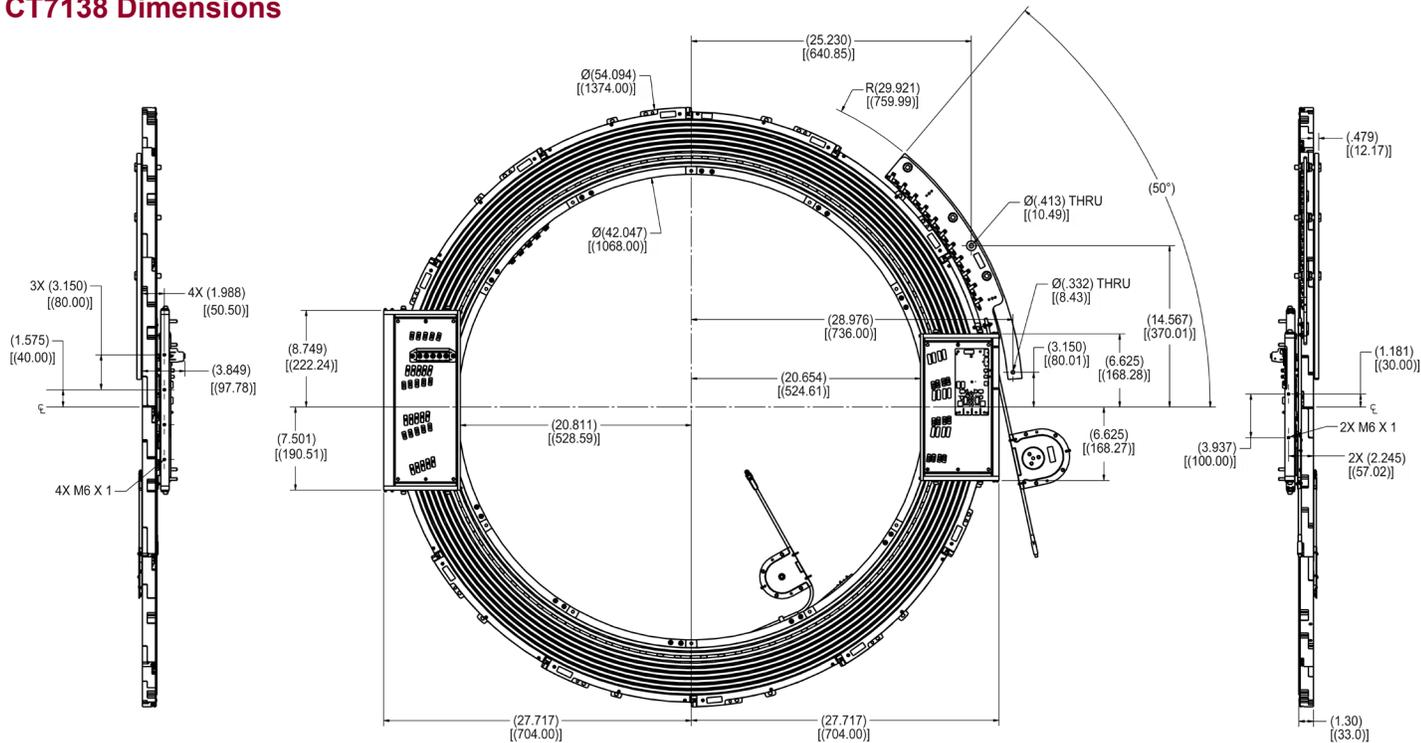
CT7311 Dimensions



Dimensions in inches [millimeters]

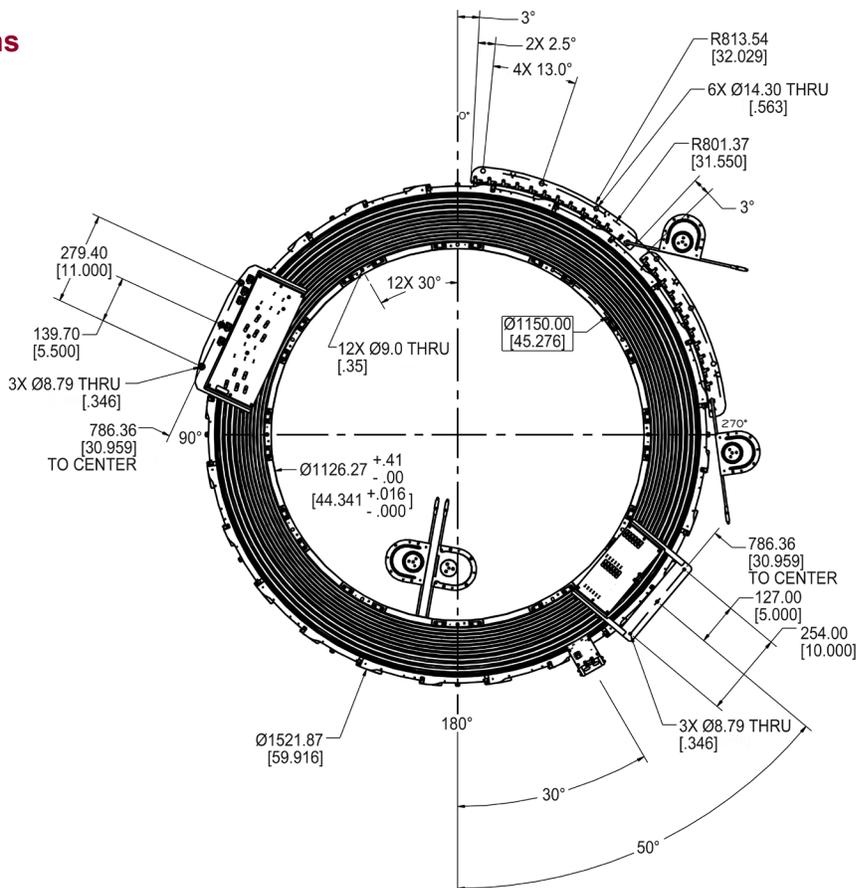
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CT7138 Dimensions



Dimensions in inches [millimeters]

CT6970 Dimensions



Dimensions in millimeters [inches]

