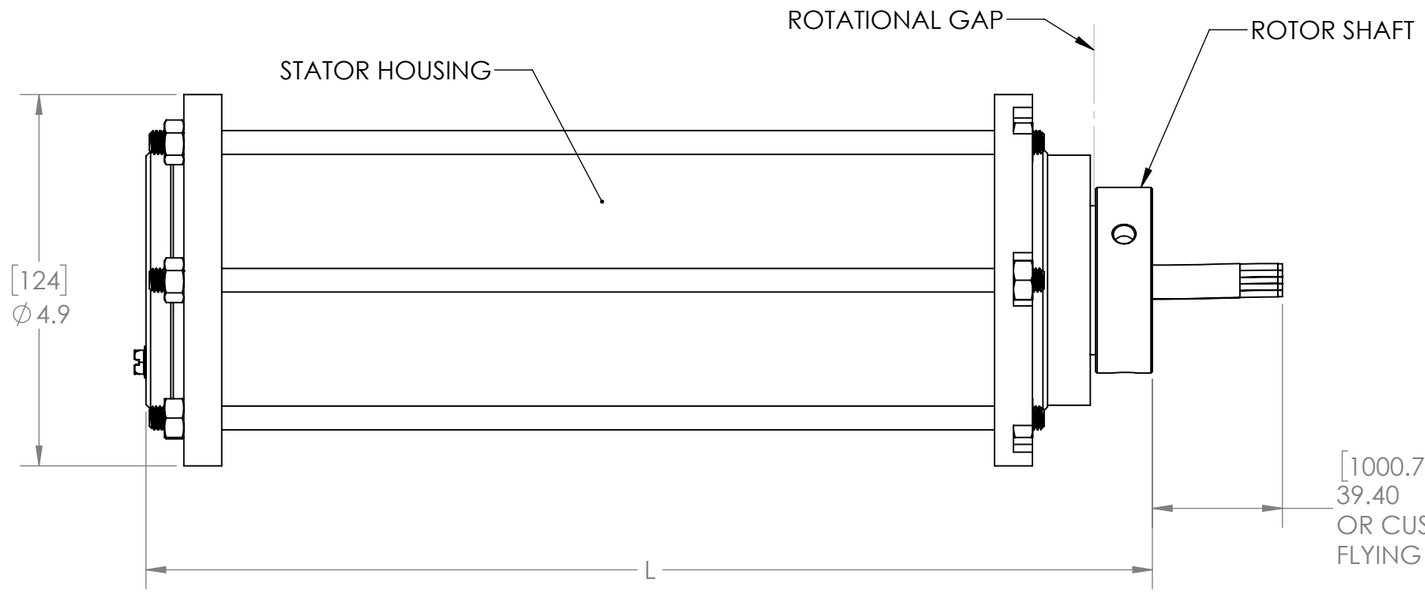
HAZARDOUS LOCATION APPLICATIONS:

- AVAILABLE MARKED AS: **Ex db IIC T6 Gb** OR **II 2G db T6 Gb**
- 3/4 NPT CABLE GLANDS MUST BE PROVIDED AND INSTALLED BY END USER. GLANDS MUST BE EX D OR E SUITABLE FOR ZONE 1 IIC INSTALLED PER IEC 60079-14
- UNUSED 3/4 NPT PORTS MUST BE BLOCKED WITH SUITABLE NPT PLUGS MEETING IEC 60079-1 REQUIREMENTS FOR BLANKING ELEMENTS
- CAUTION - REPLACEMENT FASTENERS MUST HAVE YIELD STRENGTH OF 136 KSI / 940 MPa MINIMUM
- WARNING:
  - DO NOT OPEN OR SEPARATE WHEN ENERGIZED
  - DO NOT OPEN WHEN AN EXPLOSIVE GAS ATMOSPHERE IS PRESENT
- SEE HLMX SERIES PRODUCT MANUAL M004590

FEATURES:

- UP TO 30 CHANNELS
- POWER, DATA, AND MIXED SIGNAL OPTIONS
- EXCEPTIONALLY STABLE CONNECTION - VIRTUALLY ZERO ELECTRICAL NOISE
- BRUSHLESS CONTACTS ARE NON-WEARING AND LONG LIFE
- INTRINSICALLY IMMUNE TO INTERNAL ARCING
- OPERATES IN ANY ORIENTATION
- ZERO MAINTENANCE REQUIRED
- 304 STAINLESS HOUSING, NICKEL-PLATED HARDWARE

ELECTRICAL SPECIFICATIONS	
VOLTAGE (MAX)	600 VDC/VAC
CURRENT (MAX CONTINUOUS)	UP TO 16A / CH
TOTAL DEVICE CURRENT CAPACITY	SEE AMPACITY CHART
ELECTRICAL PERFORMANCE	
MIN. INSUL. RESISTANCE	>50MΩ at 1kVDC
DYNAMIC RESISTANCE	<0.1mΩ
DATA SPEED	UP TO 1 Gbps
MECHANICAL SPECIFICATIONS	
ROTATIONAL SPEED (MAX CONTINUOUS)	500 RPM
ROTATIONAL SPEED (ABSOLUTE MAXIMUM, INTERMITTENT ONLY)	1000 RPM
DYNAMIC TORQUE AT SPEED ABOVE (APPROX)	8 IN-LB
OPERATING TEMPERATURE	-20 TO 50 °C
INGRESS PROTECTION	IP66
DIMENSIONS ARE IN INCHES, DIMENSIONS IN [ ] ARE IN mm.	





CONFIGURATION VARIABLES			
CHANNEL COUNT OPTIONS	OVERALL LENGTH "L"	BODY LENGTH "B" (SHEET 3)	WEIGHT (APPROXIMATE)
2 - 8	10.9 [278]	8.85 [224.8]	19 lb / 8.6 kg
10 - 15	13.3 [337]	11.20 [284.5]	22 lb / 10 kg
16 - 23	16.0 [704]	13.95 [354.3]	25 lb / 11.4 kg
27 - 30	17.7 [450]	15.60 [396.3]	28 lb / 12.7 kg

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MIDDLETON, WI
800-837-6010
MERIDIANLAB.COM

DRAWN	WRC	2/17/2026
APPROVED	JCE	2/17/2026

INTERNAL PART NO. **M004681** REV **A**

ROTOCON | BRUSHLESS SLIP RINGS

MODEL NUMBER

HLMX SERIES

DESCRIPTION

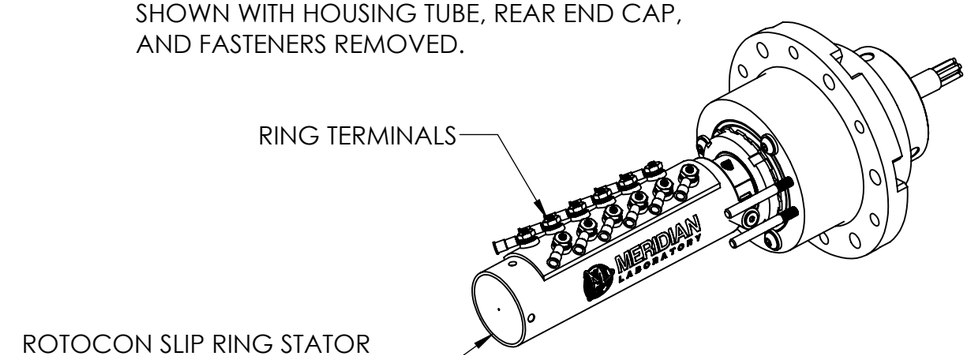
ROTOCON ROTARY ELECTRICAL CONNECTOR FOR HAZARDOUS LOCATIONS

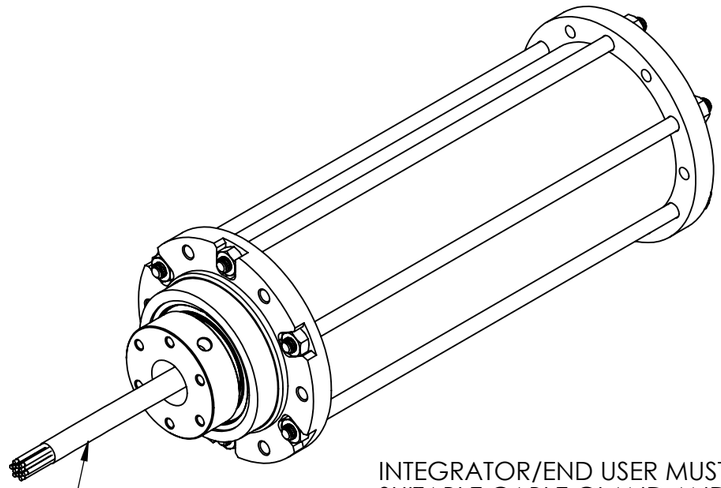
GEOMETRIC TOLERANCES PER ASME Y14.5 2009 | STANDARD DESIGN |

OPERATION AND STORAGE NOTES:

- FOR BEST LONG-TERM STORAGE, STORE VERTICALLY, SHAFT END UP, AND ROTATE BY HAND EVERY SIX MONTHS
- PRODUCT DIMENSIONS AND SPECIFICATIONS ARE NOT GUARANTEED AND ARE SUBJECT TO CHANGE WITHOUT NOTICE
- PRODUCT PERFORMANCE IS NOT GUARANTEED OUTSIDE OF SPECIFIED LIMITS, NOR WHEN OPERATED AT MULTIPLE SPECIFICATION LIMITS FOR EXTENDED PERIODS
- SPECIFICATIONS ARE BASED ON OPERATION AS PART OF STATIONARY EQUIPMENT IN TYPICAL INDUSTRIAL ENVIRONMENTS. APPLICATIONS THAT SUBJECT THE PRODUCT TO HIGH OR LOW TEMPERATURES, HIGH VIBRATION, EXCESSIVE DEBRIS, OR OTHER HARSH CONDITIONS MAY REDUCE THE SPECIFICATIONS, PERFORMANCE, OR LIFE OF THE PRODUCT. CONTACT MERIDIAN LABORATORY REGARDING THESE APPLICATIONS.
- DO NOT OPEN OR ATTEMPT TO SERVICE THE INTERNAL SLIP RING - IT IS MAINTENANCE FREE.

ACCESS FOR STATOR ELECTRICAL TERMINATION.
SHOWN WITH HOUSING TUBE, REAR END CAP,
AND FASTENERS REMOVED.





INTEGRATOR/END USER MUST INSTALL
SUITABLE CABLE GLAND AND
TERMINATE ROTOR FLYING LEADS.

MAXIMUM TOTAL ALLOWABLE AMPACITY CALCULATION:

FOR EACH CURRENT-CARRYING CHANNEL, USE THE LOOKUP TABLE BELOW TO FIND THE POWER DISSIPATION FACTOR BASED ON EXPECTED APPLICATION CURRENT AND WIRE GAUGE. IF THE APPLICATION CURRENT FALLS BETWEEN LISTED CHART VALUES, SELECT THE NEXT HIGHEST CURRENT VALUE. THE SUM OF THESE POWER DISSIPATION FACTORS FOR ALL CHANNELS **MUST BE NO GREATER THAN 1024**. THESE VALUES ASSUME OPERATION WITHIN THE STATED ENVIRONMENTAL TEMPERATURE RANGE, SPEED RANGE, AND 100% DUTY CYCLE.

	14 AWG	16 AWG	18 AWG	20 AWG	22 AWG
SIGNAL (<1A)	1	1.6	2.5	4	6.4
2A	4	6.4	10.2	16.2	25.8
4A	16	25.6	41	64.6	103
6A	36	57.6	92.2	145.4	
8A	64	102.4	163.8		
10A	100	160			
12A	144				
14A	196				
16A	256				

FOR HIGH AMBIENT TEMPERATURE (>35°C), CONTINUOUS DUTY, OR OTHER DEMANDING CONDITIONS, IT IS RECOMMENDED TO MONITOR THE INTERNAL TEMPERATURE OF THE DEVICE - CONTACT MERIDIAN LABORATORY FOR ADDITIONAL INFORMATION.
TO MAINTAIN SPECIFIED AMPACITY, WIRING TO RING TERMINALS MUST BE THE SAME OR LARGER GAUGE THAN THE ROTOR FLYING LEADS.

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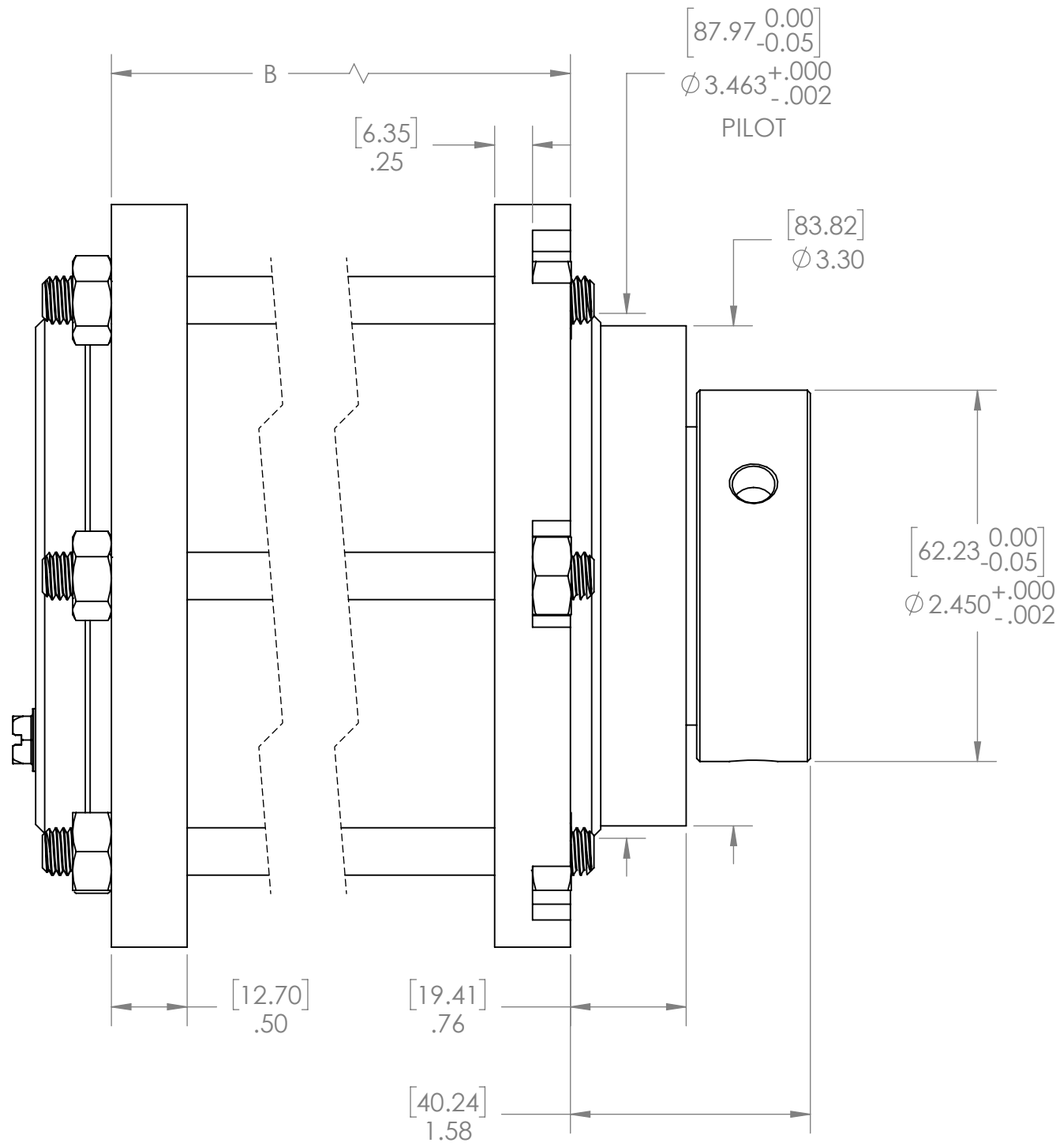
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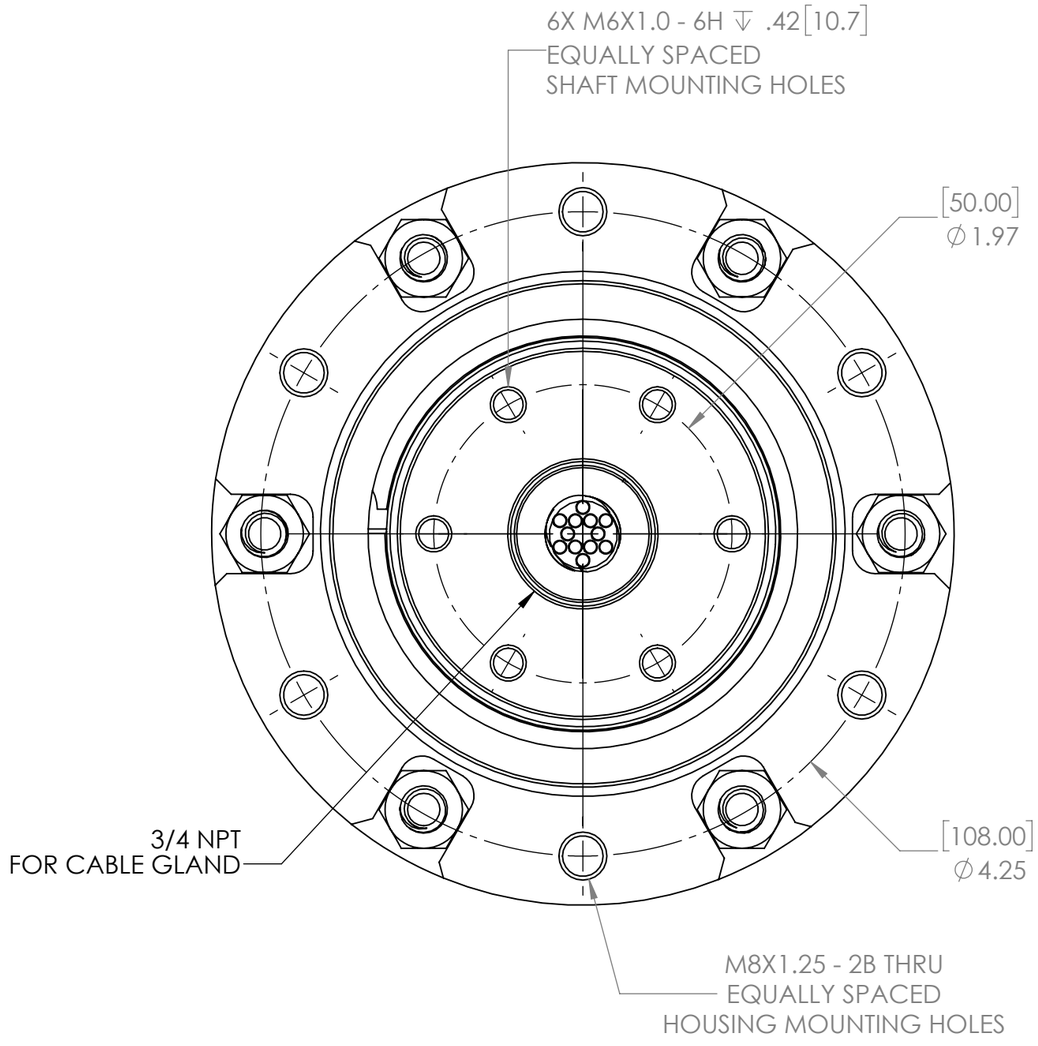
ROTOCON BRUSHLESS SLIP RINGS

MODEL NUMBER
HLMX SERIES

DESCRIPTION
ROTOCON ROTARY ELECTRICAL CONNECTOR FOR HAZARDOUS LOCATIONS

GEOMETRIC TOLERANCES PER ASME Y14.5 2009 | STANDARD DESIGN |





CONFIGURATION VARIABLES	
CHANNEL COUNT OPTIONS	BODY LENGTH "B"
2 - 8	8.85 [224.8]
10 - 15	11.20 [284.5]
16 - 23	13.95 [354.3]
27 - 30	15.60 [396.3]

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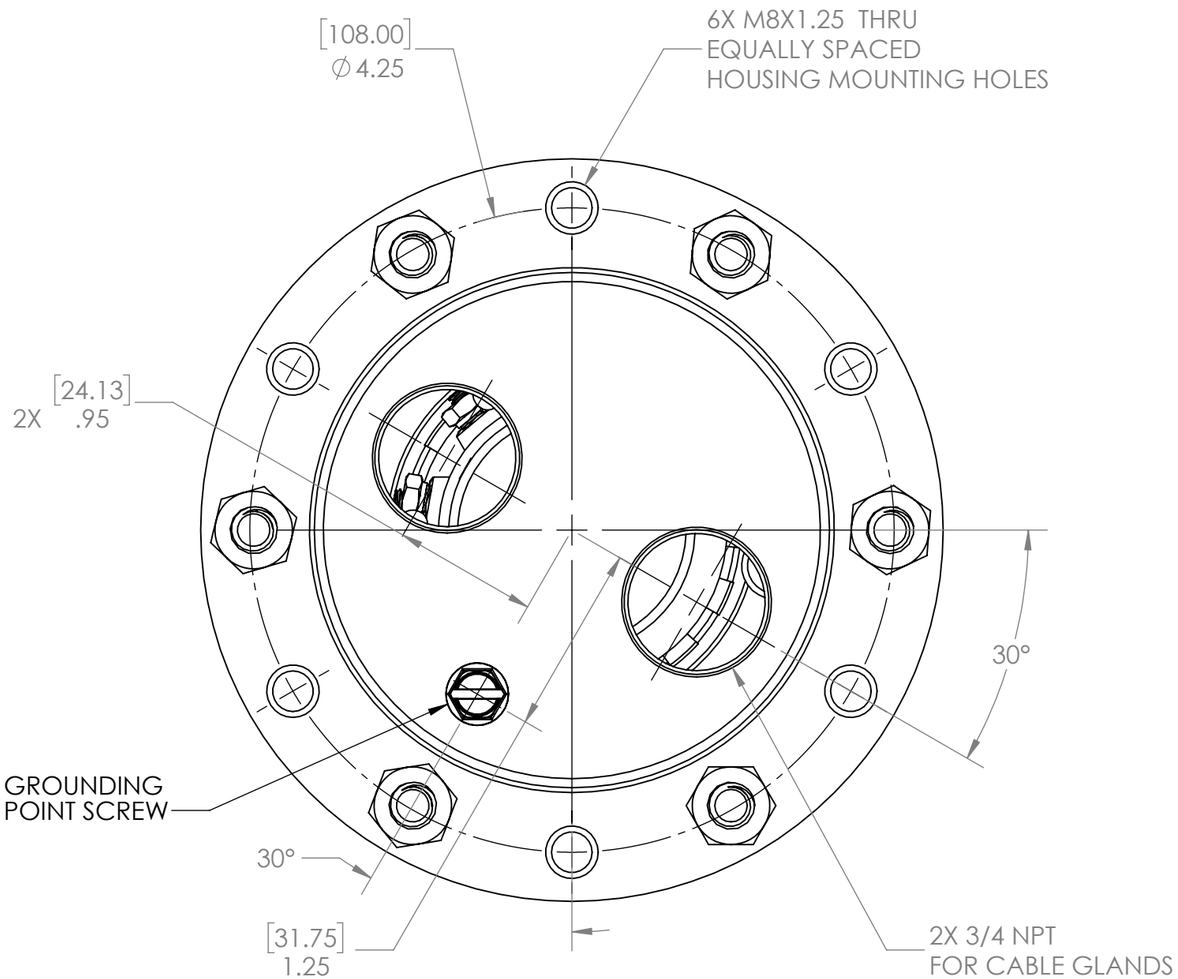
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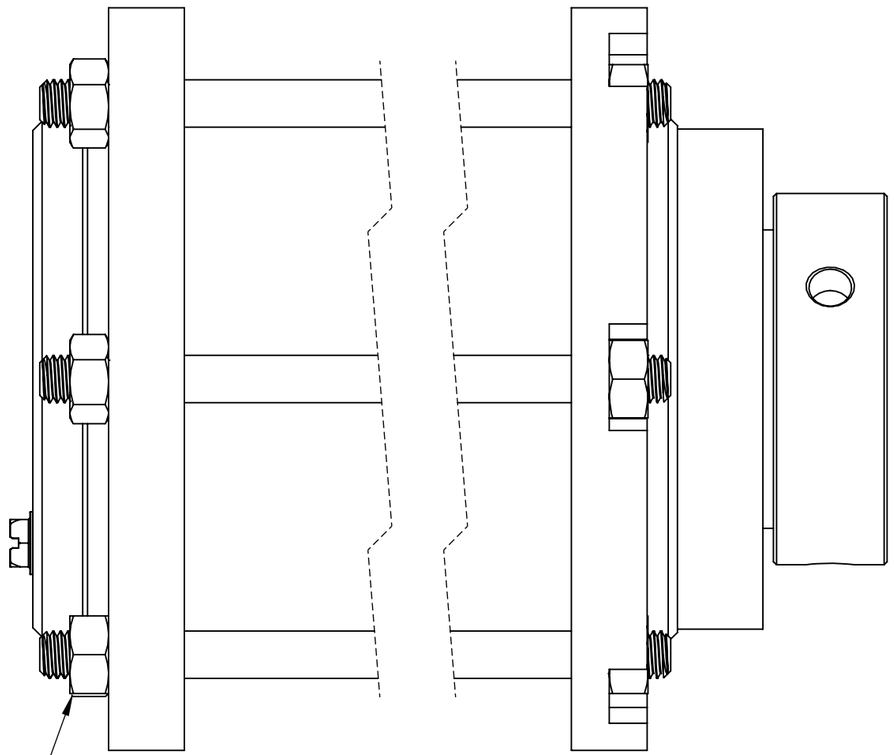
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WHEN REASSEMBLING HOUSING, TIGHTEN TENSION ROD NUTS IN STAR PATTERN. INITIAL TORQUE: **60 IN-LB / 7 Nm**, FINAL TORQUE: **180 IN-LB / 20 Nm**

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