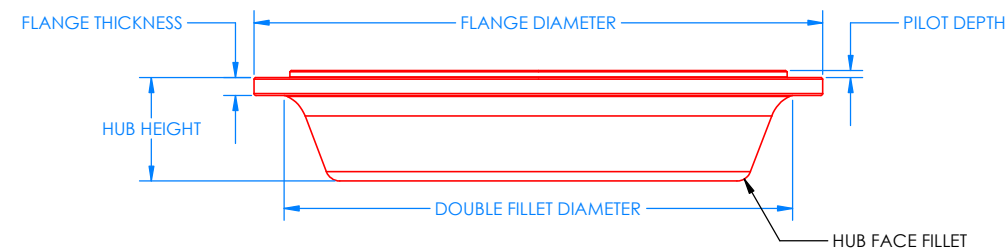
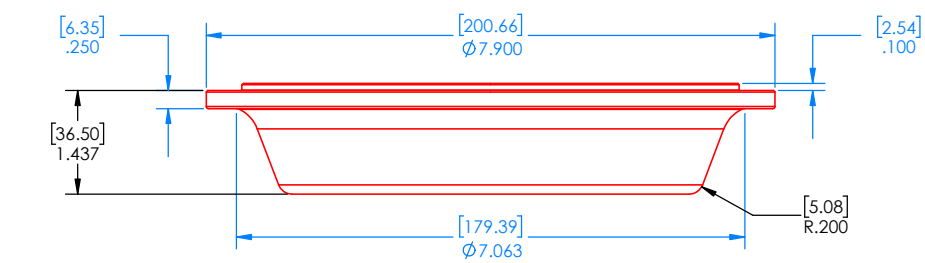
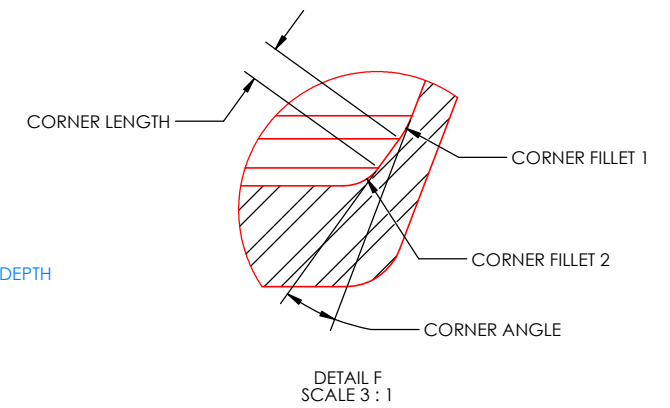
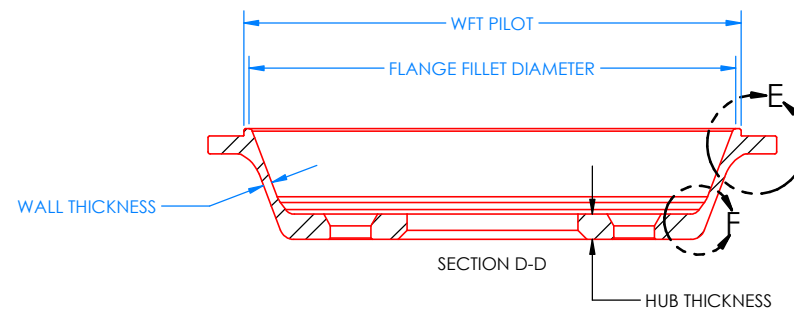
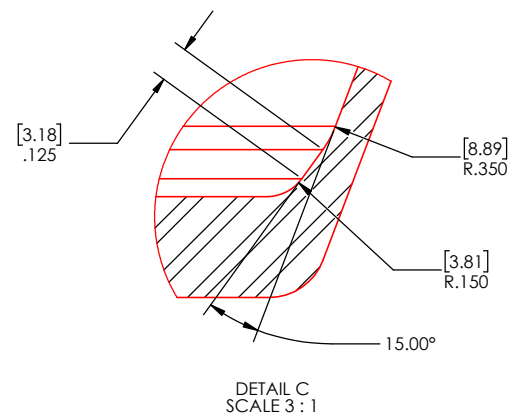
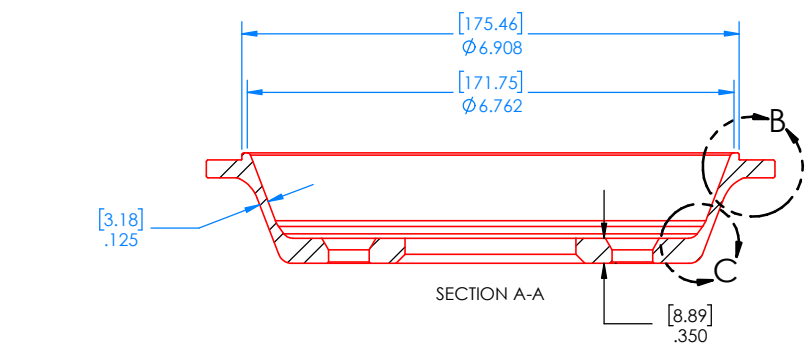
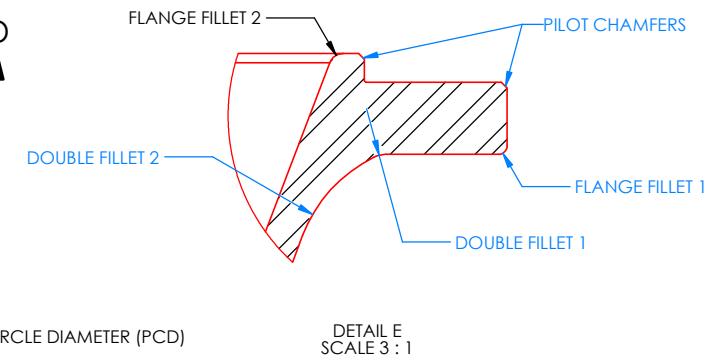
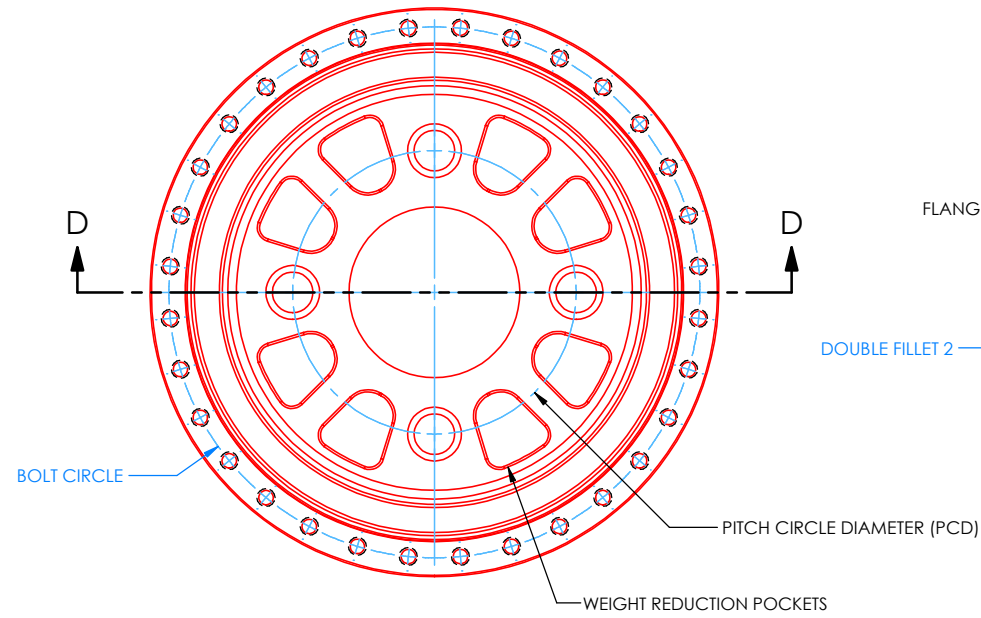
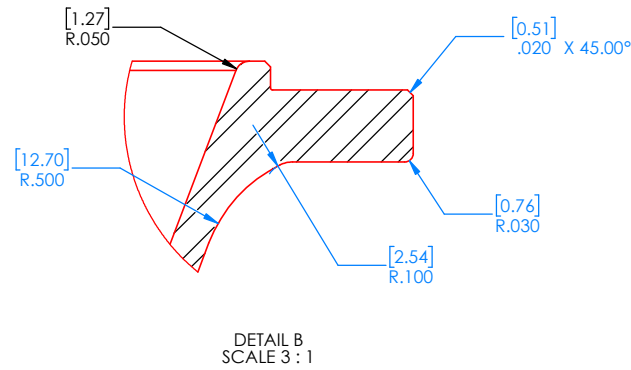
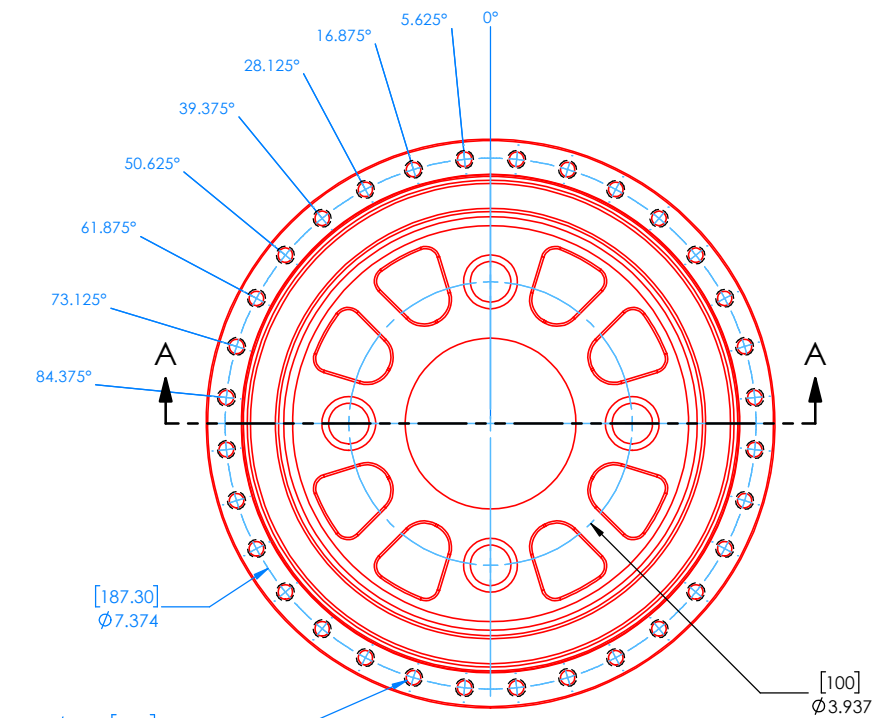


LW9.5 Hub Adapter Design Guide

Note: Blue Dimensions are CRITICAL and CANNOT change. Black Dimensions can change.



It is essential that the adapters match the recommended guidelines. This will ensure system can withstand the rated loads and provide the most accurate results. The critical features are shown in blue. Customers may change all other geometry. Examples of permitted changes are shown on the second sheet,

The "HUB THICKNESS" should not be less than 0.350 in (8.890 mm).

Detail C shows geometry that reduces the material stresses to increase the adapter fatigue life. The "CORNER ANGLE" should be between 15-25 degrees.

"WEIGHT REDUCTION POCKETS" can be added. Michigan Scientific Corporation (MSC) typically uses FEA to validate the specific pocket design.

MMSC machines hub adapters from 17-4 H1100 stainless steel. This material provides good insulation from brake heat. Alloy steels can be used but they will conduct brake heat more than the stainless steel. The material should have a yield strength of at least 890 MPa (130 ksi) and a hardness between 32 and 45 HRC.

MSC verifies all rim and hub adapter assemblies using FEA to simulate the SAE J328 wheel durability standard. This should be done with all adapter systems to verify the load ratings and fatigue life of the adapters. A LW9.5 transducer has a SAE J328 static load rating of 2240 lb (1015 kg). This should never be exceeded.

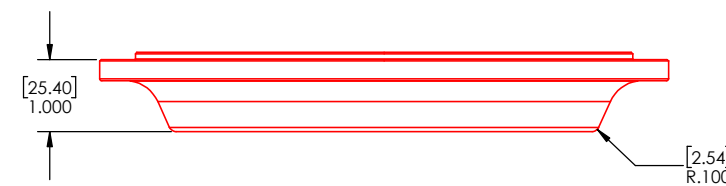
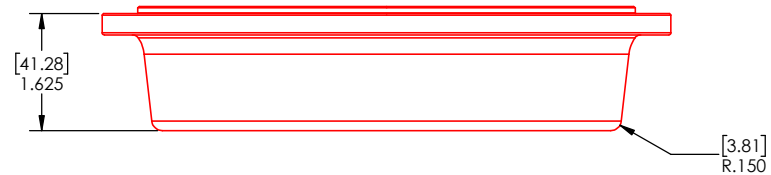
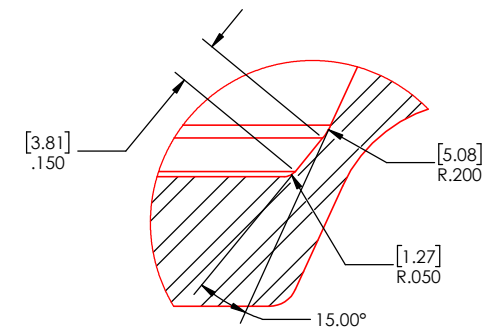
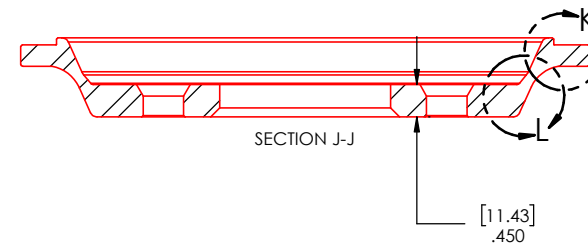
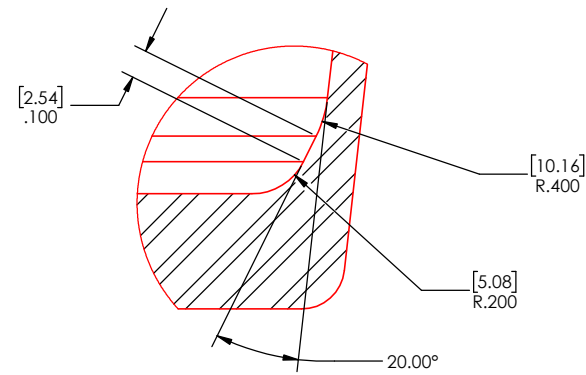
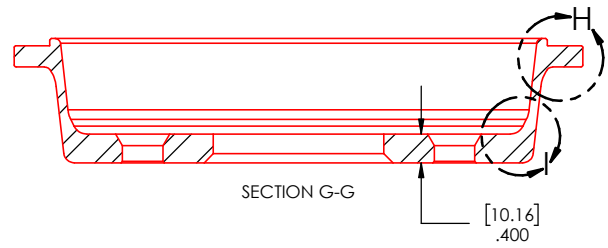
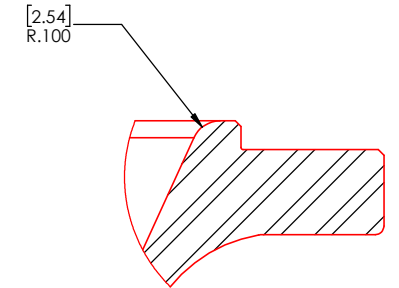
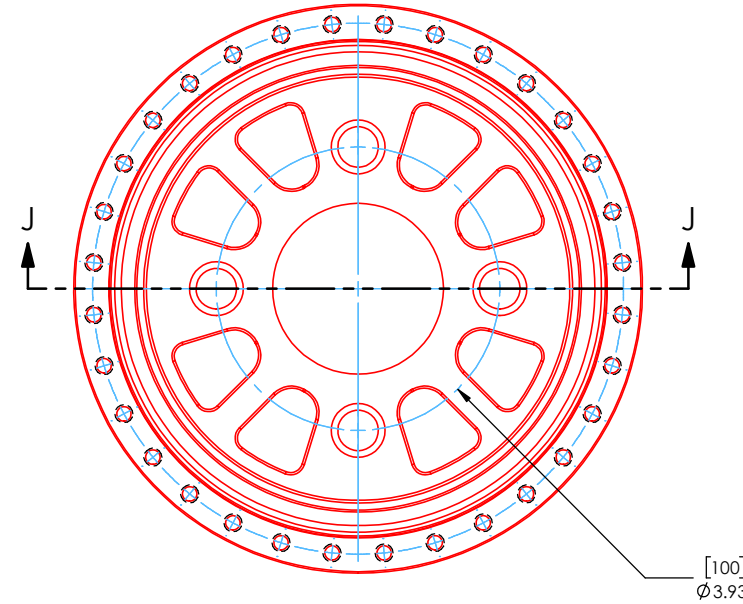
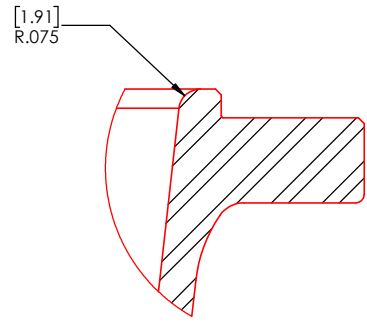
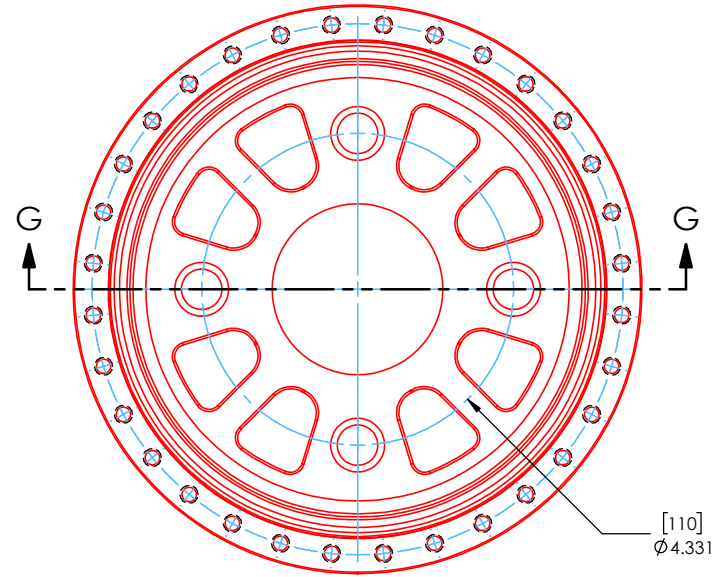
MSC can check your adapter designs at no cost. Contact MSC online at michsci.com/contact-us or via phone at 1-231-547-5511.

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DIMENSIONS ARE IN INCHES		03/15/22	JFB	
TOLERANCES:	XXX ±.0010	CHECKED	04/15/22	PROJECT LINE LW9.5
XXX ±.005		ENG APPR	04/15/22	
XX ±.01		FRAC TIONAL		
ANGULAR: MACH		MFG APPR	04/15/22	
BEND				CUSTOMER CODE
WEIGHT				PROJECT CODE
MATERIAL	PROPRIETARY AND CONFIDENTIAL			DESCRIPTION
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				SIZE DWG. NO.
				D LW9.5 Hub Adapter Design Guide
				SCALE: 3:4
				REV A
				SHEET 1 OF 2

LW9.5 Hub Adapter Design Guide

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TOLERANCES:		CHECKED	04/15/22	
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XX ±.01		PROJECT LINE		LW9.5
ANGULAR: MATCH		CUSTOMER CODE		
BEND: 2		PROJECT CODE		
WEIGHT		DESCRIPTION		LW9.5 - Hub Adapter 1
MATERIAL		SIZE		DW.G. NO.
FINISH		REV		D LW9.5 Hub Adapter Design Guide A
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