

PLANGE FILLET

WALL FILLET

WALL FILLET

DETAIL E
SCALE 3: 1

PICOT CHAMPER

WALL THICKNESS

CORNER LENGTH

CORNER FILLET DIAMETER

WALL THICKNESS

It is essential that the adapters match the recomended guidelines. This will ensure the 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 above.

The "HUB THICKNESS" can vary but should not be less than 0.450 in (11.430 mm).

Detail C shows geometry that reduces the material stresses to increase the adapter fatigue life. The "CORNER ANGLE" should be between 115-145 degrees.

Michigan Scientific Corporation (MSC) 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 LW12.8-60 transducer has a SAE J328 static load rating of 2700 lb (1225 kg). This should never be exceeded.

WALL ANGLE

HUB FACE FILLET

PILOT THICKNESS

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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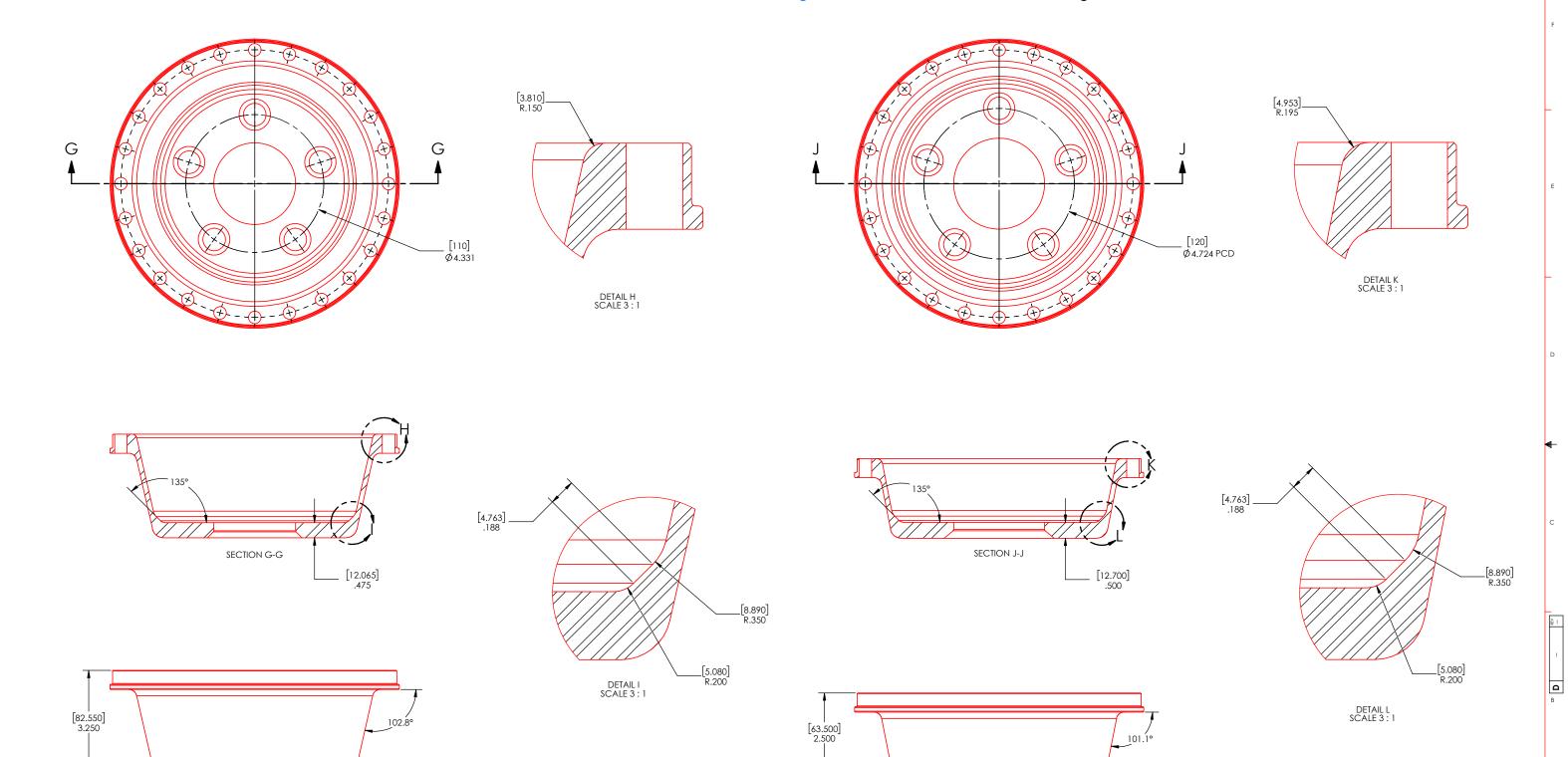
HEEL FORCE TRANSDUCER PILO

FLANGE THICKNESS

UNLESS OTHERWISE SPECIFIED:		DATE	NAME	MICHIGAN SCIENTIFIC CORPORAT					RATION
DIMENSIONS ARE IN INCHES [mm] TOLERANCES:	DRAWN	3/20/2020	JPBailey	8500 ANCE ROAD CHARLEVOIX, MICHIGAN 4972 www.michsci.com				0720	
XXXX ±0010 XXX ±005 XX ±01 FRACTIONAL± ANGULAR: MACH± BEND ±	CHECKED	3/20/2020	SKRHUDY					7720	
	ENG APPR.	03/13/20	SKRHUDY	PRODUCT LINE: LW12.8-60					
	MFG APPR.	03/13/20	SKRHUDY	CUSTOMER CODE:		PROJECT CODE:			
WEIGHT				DESCRIPTION: LW12.8-60 Hub Adapter Design Gui					
MATERIAL 17-4 H1100	PROPRIETARY AND CONFIDENTIAL THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF				DWG	6. NO.			REV
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DETAIL F SCALE 3 : CORNER FILLET 2

LW12.8-60 Hub Adapter Design Guide Note: Blue dimensions are CRITICAL and CANNOT change. Black dimensions can be changed.



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WEIGHT				DESCRIPT	ION:				
	PROPR	CONFIDENTIAL	LW12.8-60 Hub Adapter Design Guide					Juide	
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