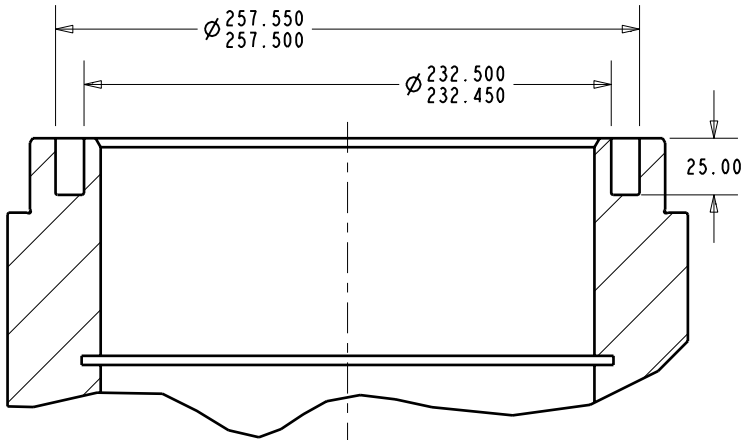
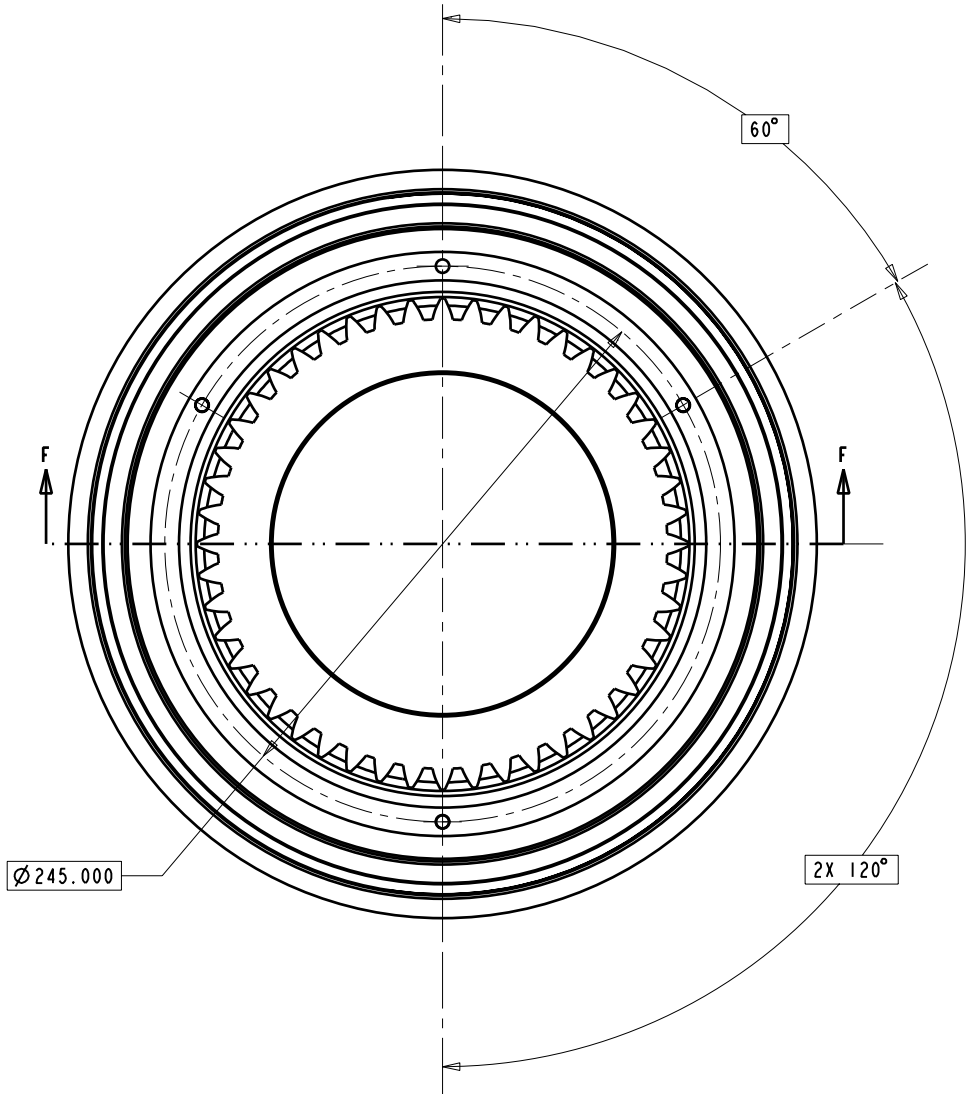


NOTES:

1. MATERIAL: 34CrNiMo 6; ALT. 4140H, 4340H, STEEL BAR OR FORGING. NORMALIZE OR ANNEAL TO 231 BHN MAX HARDNESS.
2. HEAT TREAT: QUENCH AND TEMPER, AFTER ROUGH MACHINING TO 35 - 38 Rc. NITRIDE SPLINES .25 MIN. DEPTH, REMAINDER OPTIONAL.
3. IDENTIFY WITH PART NUMBER, SUPPLIER CODE NUMBER, MANUFACTURERS LOT NUMBER, AND REV. LEVEL.
4. REMOVE SHARP EDGES AND BURRS, BEFORE NITRIDING.
5. RADIAL ALIGNMENT OF TEETH TO OTHER FEATURES NOT REQUIRED. RADIAL ALIGNMENT OF KEYWAYS TO OTHER FEATURES NOT REQUIRED.

REV	CHANGED FROM	BY	DATE	APVD	REPORT ERRORS & CHANGES REMOVE ALL SHARP EDGES DIMENSIONS ARE IN MM UNSPECIFIED TOLERANCES: DECIMALS: FINISH: ANGLES:	Powertrain Engineers Inc W293 N3819 Round Hill Circle Pewaukee Wi, 53072			
A	RELEASED	PEI	10/16/07			TITLE HOLLOW SHAFT			
B	RELEASED FOR DESIGN REVIEW	PEI	11/30/07						
C	REVISED PER MARK-UPS FROM DESIGN REVIEW	PEI	12/17/07			SIZE B			
D	DIM 135.00 WAS 140.00	PEI	1/18/08						
E	ADDED PRECISION SLIP FIT FOR OUTER BEARING	PEI	10/16/08			FIRST USED ON DWG NO. 251249			
						SCALE: 0.200 WEIGHT: 133.039 Kgs SHEET 1 OF 2			

INTERNAL INVOLUTE SPLINE DATA	
Number of Teeth	48
Normal Module	4.2333
Normal Pressure Angle	20.0000
Whole depth Constant (REF)	2.250
Oper pitch diameter (mm)	203.2000
Gen Pitch diameter (mm)	203.2000
Profile shift coefficient	-0.250
Base diameter (mm)	190.9455
Minor Diameter min (mm)	198.120
Form Diameter (mm)	213.793
Root Diameter (REF) (mm)	216.583
Tool Tip Radius min (mm)	0.015
Number of teeth in Mate	48
Center Distance (mm)	0.000
Normal cir backlash with Mate (min/max) (mm)	0.35 / 0.3
Quality per AGMA 2015-1, Datum Surface	A-B
Grade	8
Trans Cir TT on Gen Dia, Min (mm)	5.704
Trans Cir TT on Gen Dia, Max (mm)	5.729
Size between 7.2 pins (max/min) (mm)	195.746 / 195.815



REPORT ERRORS & CHANGES REMOVE ALL SHARP EDGES DIMENSIONS ARE IN MM. UNSPECIFIED TOLERANCES: DECIMALS: FINISH: ANGLES: X, ±1.0 Ra 6,3 µm < ±0.5 ,X ±.5 ,XX ±.25	Powertrain Engineers Inc W293 N3819 Round Hill Circle Pewaukee Wi, 53072			
	TITLE HOLLOW SHAFT			
COPYRIGHT © NOT TO BE REPRODUCED OR USED TO MAKE OTHER DRAWINGS OR MACHINERY.		SIZE B	FIRST USED ON	DWG NO. 251249
DRAWN CHECKED	PEI	DATE 10/16/07	SCALE: 0.300	WEIGHT: 133.039 kgs
SHEET 2 OF 2				REV E