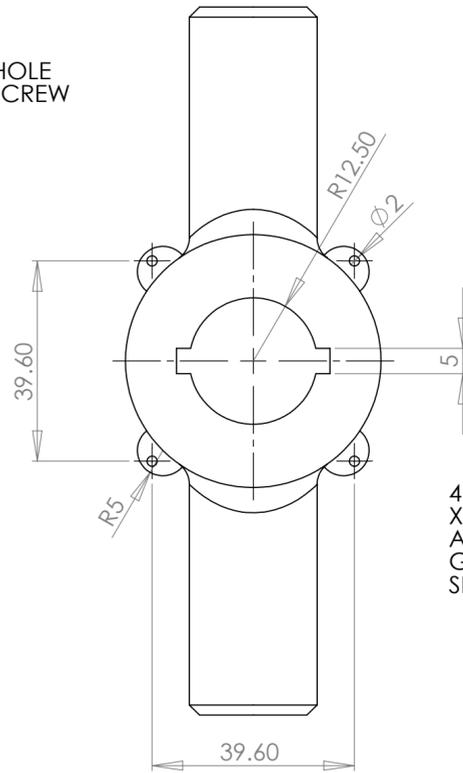


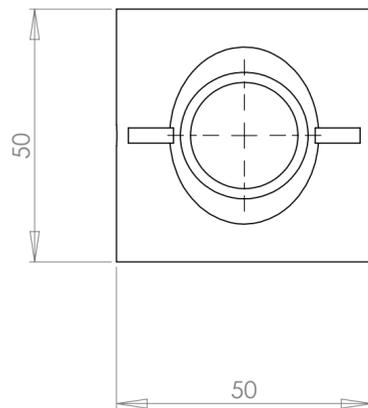
SIDE VIEW

M5 THREADED HOLE FOR M5 GRUB SCREW



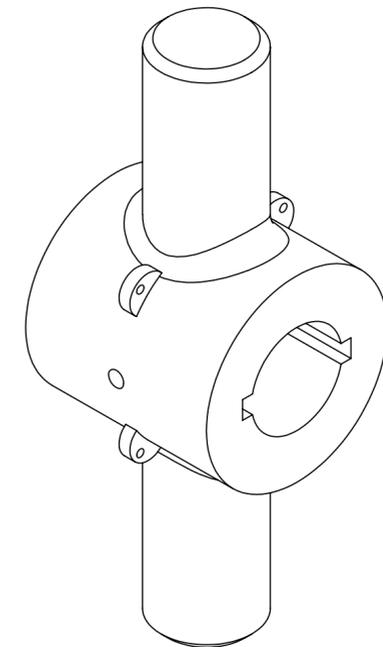
FRONT VIEW

4 LUGS @ 45° TO THE X AND Y AXIS ACT AS ANCHOR POINTS FOR GOVERNING TENSION SPRINGS



TOP VIEW

THE BRAKE HUB ACTS AS THE ROTATION CENTRE OF THE BRAKE ASSEMBLY AND THE ANCHOR POINTS FOR THE BRAKE SHOES AND GOVERNING TENSION SPRINGS. THE BUSH AT THE CENTRE OF THE HUB RUNS CONCENTRICALLY WITH THE GENERATOR ROTOR SHAFT AND IS CONSTRAINED BY TWO 5mm KEYWAYS. THE 4 LUGS ON THE OUTER SURFACE OF THE BUSH ACT AS ANCHOR POINTS FOR THE GOVERNING TENSION SPRINGS WHICH ARE RESPONSIBLE FOR INITIATING BRAKING AT HIGH SPEEDS (1000 RPM). THE TWO 25mm  $\varnothing$  PINS FIXED OPPOSITE EACH OTHER ON THE OUTER SURFACE OF THE CENTRAL BUSH ACT AS THE LOCATION POINTS FOR THE BRAKE SHOES. THE BRAKE SHOES HAVE A MATING FEMALE BUSH WHICH MATE ONTO THE PINS WITH A SLIGHT CLEARANCE FIT ALLOWING THEM TO SLIDE FREELY ON THE PINS. THE MOTION OF THE BRAKE SHOES ARE GOVERNED BY TENSION SPRINGS WHICH ARE ANCHORED TO THE LUGS ON THE CENTRAL BUSH AND SIMILAR LUGS ON THE BRAKE SHOES.



**PROPRIETARY AND CONFIDENTIAL**  
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UNIVERSITY OF SOUTHERN QUEENSLAN	UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL $\pm$ ANGULAR: MATCH $\pm$ BEND $\pm$ TWO PLACE DECIMAL $\pm$ THREE PLACE DECIMAL $\pm$	DRAWN J.KIRSCH 6/10/09	NAME DATE	KH3- 500 WIND TURBINE
	INTERPRET GEOMETRIC TOLERANCING PER: MATERIAL	CHECKED		
	FINISH	ENG APPR.		BRAKE HUB
NEXT ASSY	USED ON	MFG APPR.		
APPLICATION	DO NOT SCALE DRAWING	Q.A.		C 22
		COMMENTS:		