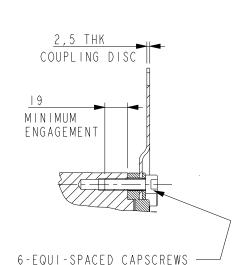


DW 14/08/09 CORRECTED SHAFT DIMS, MASS AND STIFFNESS

DW 02/05/09 ORIGINAL ISSUE



MOD. ISSUE DRAWN DATE MODIFICATION

MIO X I.5 PITCH ON

42 P.C.D.

Α

5-0223-03

COMPONENT	MASS (kg)	WR ² (kgm ²)
SHAFT	7.310	0.0029
FAN	0.976	0.0067
MAIN ROTOR	20.508	0.0982
EXCITOR ROTOR	4.300	0.0170
TOTAL WITHOUT EBG ROTOR	33.094	0.1248
EBG ROTOR	1.701	0.0017
TOTAL WITH EBG ROTOR	34.795	0.1265

NOTES: -

SHAFT STIFFNESS: -

THE STIFFNESS OF THE SHAFT BETWEEN THE MAIN ROTOR CORE &

AND THE SHAFT FACE 'A' IS 4.5723 X 10⁶ kgcm/radian

(STIFFENING EFFECT OF MAIN ROTOR CORE IS NOT INCLUDED IN THIS FIGURE)

SHAFT MATERIAL: -

STEEL - C40E TO BSEN 10083-2 2006 (APPROVED BY MARINE AUTHORITIES WHEN APPROPRIATE) MAXIMUM RECOMMENDED VIBRATORY STRESS LEVEL IN THE SHAFT IS 34.47 X 10⁶ N/m² FOR SPEED RANGE OF 0.95 TO 1.1 X NOMINAL SPEED AND 68.94 X 10⁶ N/m² FOR RUN THROUGH CONDITIONS, FOR INDUSTRIAL MACHINES.

FOR MARINE AUTHORITIES, THEIR APPROPRIATE RULES WILL APPLY.

CUMM LAS GENERATOR TECHNOLOGIES LTD SHOULD BE NOTIFIED OF ANY ROTORS NOT COMPLYING WITH

THESE RULES. CUMMINS GENERATOR TECHNOLOGIES LTD BALANCE ROTORS TO COMPLY WITH INTERNATIONAL

STD (BS) ISO 1940 PARTS I AND 2 . BALANCE GRADE 2.5

FOR UNBALANCED MAGNETIC PULL (U.M.P.) REFER BACK TO THE FACTORY.

ADAPTOR SAE No.	COUPLING SAE No. (DISHED)	MASS OF DISC (kg) (lx2.5mm THICK)	MASS OF SHAFT SPACER (kg)	MASS OF PRESSURE PLATE (kg)	TOTAL MASS OF COUPLING ASSEMBLY (kg)	COUPLING STIFFNESS (kgcm/rad)	COUPLING DISC WR ² (kgm ²)
4	7 / 2	0.892	0.233	0.069	1.194	II.529 X 10 ⁶	0.0065

CONVERSION FACTORS						
TO CONVERT	ТО	DIVIDE BY				
k g	Ιb	0.453592				
k gm ²	lbft ²	0.04214				
kgcm/rad	lbin/rad	1.1521246				
N/m^2	lbf/in ²	6894.76				

(NOTE SHAFT 6mm SHORT THAN STANDARD)

CONFIDENTIAL PROPERTY OF CUMMINS GENERATOR TECHNOLOGIES LTD.					PO4G (SHORT SHAFT) I BEARING MOMENTS OF INERTIA			
MATERIAL PROPS	-	DIMENSIONS IN MILLIMETRES (MM) AT 20°C	PROJECTION		AND SHAFT DETAILS			
FINISH SPEC	-			-		SCALE 3 · 1 ()	MATERIAL	
GEOMETRY SPEC	=	SURFACE FINISH VALUES IN MICRO METRES	WEIGHT	Ξ		DRG. SIZE		
ASSEMBLY SPEC	-		DRAWN	DW	02/06/09	C	CASTING No -	
PERFORMANCE SPEC	-	UNLIMITED DIMS ±	CHECKED	DSG	14/08/09	REL. PHASE P Pro/ENGINEER		3
QUALITY SPEC	-		APPROVED	JB	14/08/09		SHEET I OF I SHEETS	