

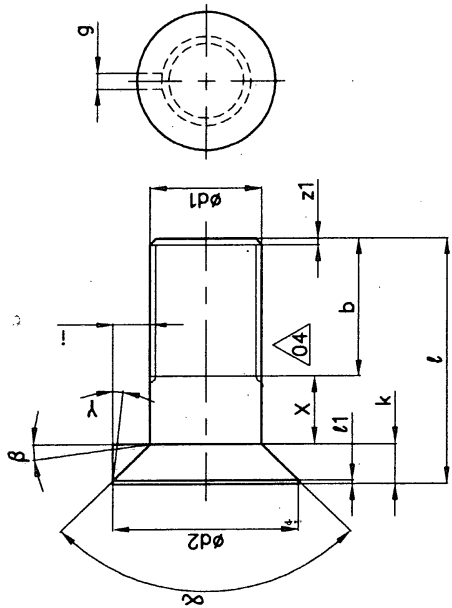
14920-000-95-2  
DRAWING NO.

ALL DIMENSIONS ARE IN MILLIMETRES  
FOR PRODUCTION  
REF. PR:QA:590 FOR PAINTING  
REF. PR:QA:500 FOR UNTOL DIMS.  
REF. APPLICABLE QMS FOR MATCODE&SPEC.

NOMINAL SIZE	d1	l	e1	b	∞	β	Y	d2	g	i (min)	z1	X	k	WEIGHT (kg)	1000 NOS	MATERIAL FOR BOLT	MATERIAL HARDNESS IN BHN FOR BOLT & NUT
M12 30	1	~19	90°	15°	5'	24	3.6	5.7	AS PER DIN 76	2X45°	3.5	6.5	31.4	7	208		
M16 40	1	30	90°	0°	5'	32	4.2	7.5	2X45°	2X45°	3.5	6.5	104.0	7	208		
M16 50	1	40	90°	0°	5'	32	4.2	7.5	2X45°	2X45°	3.5	6.5	130.0	7	208		
M20 50	1	36	60°	0°	5'	32	5.4	5.7	2X45°	2X45°	4.5	9.5	185.0	7	208		

ALLOWABLE DIMENSIONAL TOLERANCES:

d2	e1	k	g	l	∞	ALLOWABLE CONCENTRICITY DEVIATION WITH HEAD DIA	MATL. CODE
M12X30	+0.25 0	0	-0.2	-	-	IT 13 AS PER DIN 7151	961600860000
M16X40	+0.2 0	0	±0.15	0	+5° 0	IT 13 AS PER DIN 7151	961600900000
M16X50	+0.2 0	0	±0.15	0	+5° 0	IT 13 AS PER DIN 7151	961600870000
M20X50	+0.2 0	0	±0.15	0	+5° 0	IT 13 AS PER DIN 7151	961600880000



DIMN: AS PER IS 1364(PART 3)  
MECH.PROPERTIES  
AS PER CL.8.0/IS:1367

REV	DATE	ALTERED AM. REDDY	REV	DATE	ALTERED AM. REDDY
04	30.10.13	CHECKED A.V.N	03	29.05.13	CHECKED RSGK
ZONE	'X' DIMN LOCATION ALTD. 'X' DIMN 6.3 IS ALTD AS 4.5 MARKED AREAS ARE ALTD.		ZONE	'b' VALUE 30 IS ALTD AS 36 FOR M20 BOLT SIZE. MATL.CODES ARE ADDED.	
REV	DATE	ALTERED RSGK	REV	DATE	ALTERED M.NANDHA KUMAR
02	25.04.13	CHECKED RSGK	01	06.09.99	CHECKED KAR
ZONE	MATERIAL SPEC. ASTM A193B7 IS ADDED		ZONE	MATERIAL SPEC. ALTD AS SHOWN	

TYPE OF PRODUCT  
OR NAME OF  
CUSTOMER/PROJECT

RETRACED ON P.SHAKI.Q/L DT.29.04.2013  
CHD/ZAPPD. BY RSGK



BHARAT HEAVY ELECTRICALS LTD.,  
UNIT: BOILER AUXILIARIES PLANT,  
RANIPET - 632 406.

DEPT	FANS	GRADE OF UNTOL.DIM	SCALE	WEIGHT (KG)	REF TABLE	DRN	NAME	SIGN	DATE	NO. OF VAR.
864	864	PR:QA:500	NTS			APPD	KAR			
TITLE				CARD CODE		DRAWING NO.		REV		
CSK FLAT NIB BOLT WITH NUT (DIN 604)				U 01		3-56-000-02641		04		

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