



Form no.2038

उत्पाद मानक  
परिणामित्रPRODUCT STANDARD  
TRANSFORMER

TR 200410

शाप / अभि. निर्देश SHOP / ENGG. INSTRUCTIONS

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शीर्षक :  
TITLE : **MAGNETIC OIL GAUGE FOR CONSERVATOR HAVING AIR CELL****1. APPLICATION :**

IT IS USED TO GET CONTINUOUS INDICATION OF OIL LEVEL IN CONSERVATOR HAVING AIR CELL (RUBBER BAG) MOUNTED ON TRANSFORMER IT GIVES ALARM WHEN OIL LEVEL FALLS TO MINIMUM LEVEL. MOG SHOULD BE SUITABLE FOR OUTDOOR MOUNTING AND FOR OPERATION IN TRANSFORMER OIL TO IS : 335 AT 0-100°C.

**2. DIAL SIZE & MARKING :**

250 DIA OF ANODISED ALUMINIUM/SCREEN PRINTED DIAL HAVING WHITE BACKGROUND WITH BLACK FIGURES SHALL BE USED. MARKING ON THE DIAL SHALL BE SPREAD OVER TO 150°. LETTERS & FIGURES SHALL BE OF 16MM. HEIGHT.

**3. CONSTRUCTION & OPERATION :**

- i. FLOT CONNECTED TO GAUGE BY AN ARM IS USED AS A SENSOR OF OIL LEVEL IN THE CONSERVATOR. FLOAT MOVEMENT DUE TO RISE & FALL OF OIL LEVEL IS TRANSMITTED THROUGH TWO MAGNETIC COUPLINGS & BEVEL GEAR TO THE POINTER TO INDICATE OIL LEVEL ON CALIBRATED DIAL AND TO OPERATE AN ALARM SWITCH AT PREDETERMINELEVEL.
- ii. FLOAT WITH ITS ARM IS KEPT SUSPENDED INSIDE THE CONSERVATOR ON A SHAFT CARRYING A BEVEL GEAR.
- iii. USE OF MAGNETIC COUPLING IN THE GAUGE ACHIEVES COMPLETE SEALING OF OIL INSIDE THE CONSERVATOR.
- iv. FLOAT USED SHALL BE OF ROLLER TYPE & SHALL HAVE SMOOTH FINISH SO THAT IT DOES NOT DAMAGE THE AIR CELL. ARM USED SHALL BE PLUGGED AT BOTH ENDS TO AVOID OIL ENTERING INSIDE THE TUBE. LOCKING OF FLOAT TO FLOAT ARM SHALL BE SUCH THAT IT REMAINS IN HORIZONTAL POSITION DURING MOVEMENT.
- v. MOVEMENT OF THE FLOAT/FLOAT ARM SHALL BE IN VERTICAL PLANE ONLY & NOT SIDE WAYS.
- vi. MATERIAL USED FOR DIFFERENT COMPONENTS SHALL BE AS GIVEN IN TABLE (PAGE 3).

REF.

COMP.DRG.

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पुनः Rev. 08 दिनांक Date 19-08-2011	ITEM NO. 04 ADDED. <i>PRC A.D.</i>	वितरण DISTRIBUTION	सं.	स्वीकृत किया : APPROVED : sd/SRR,SNA	
पुनः Rev. 07 दिनांक Date 18.08.09	TYPE OF SWITCH CHANGED FROM MURCURY TO MICRO. ललित LALIT	TRE/TRM/FTM TRX/TTG QC-TCB/QA-TCB JHANSI		जारी किया : ISSUED : टीआरई मानक / TRE STD. तैयार किया : PREPD. : sd/-AKG	दिनांक : DATE : 25.06.85



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शीर्षक :  
TITLE : **MAGNETIC OIL GAUGE FOR CONSERVATOR HAVING AIR CELL**

REF.

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**4. MOUNTING :**

GAUGE SHALL BE SUITABLE FOR MOUNTING AT 30°. MOUNTING FLANGE SHALL HAVE 8 HOLES OF 12 DIA ON 225 PCD. HOLES TO BE OFF CENTRE.

**5. SWITCH :**

ONE MICRO SWITCH HAVING CONTACT RATING OF 5A, 240V, AC, 50HZ/0.25A 240V DC. SHALL BE PROVIDED. SWITCH SHALL BE NORMALLY OPEN &amp; SHALL CLOSE WHEN OIL LEVEL INSIDE THE CONSERVATOR FALLS TO 'EMPTY' LEVEL.

**6. CALIBRATION:**

DIAL IS TO BE CALIBRATED FOR 'EMPTY' 1/4, 35°C, 3/4 &amp; FULL LEVELS AS PER THE TABLE GIVEN BELOW.

STYLE NO OF M.O.G. WITH FLOAT ARM	CONSERVATOR DIA.(mm.)	DISTANCE/OIL LEVELS FROM BOTTOM OF THE CONSERVATOR (mm.)					FLOAT ARM LENGTH INCLUDING FLOAT (mm.)
		EMPTY	1/4	35°C	3/4	FULL	
BP9036048990	800	100	252	325	505	650	816
BP9036048150	1000	100	310	407	650	850	1100
BP9036048168	1300	100	400	533	865	1150	1523
BP9036057523	1600	100	487	656	1077	1450	1909

**7. ACCURACY :**

TOLERANCE ON THE LEVELS i.e. DISTANCE FROM CENTRE LINE OF THE CONSERVATOR GIVEN IN THE TABLE SHALL BE AS UNDER.

- (i) AT 1/4, 35°C AND 3/4 LEVELS :- ±3% OF CONSERVATOR DIA.  
(ii) AT EMPTY AND FULL LEVELS :- ±2% OF CONSERVATOR DIA.

**8. TESTING :**

T.C. FOR CALIBRATION, SWITCH OPERATION AND 2.5 KV. TEST SHALL BE FURNISHED FOR EACH GAUGE.

पुनः Rev.

दिनांक Date  
19-08-2011वितरण  
DISTRIBUTION

सं.

स्वीकृत किया :

APPROVED : sd/SRR,SNA

TRE/TRM/FTM  
TRX/TTG  
QC-TCB/QA-TCB  
JHANSIजारी किया : ISSUED :  
टीआरई मानक / TRE STD.

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पुनः Rev.  
07दिनांक Date  
23.08.09

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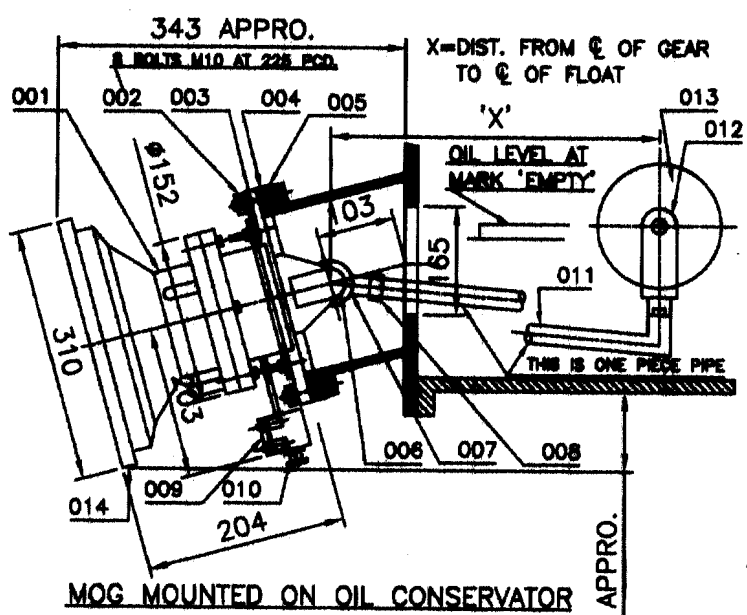
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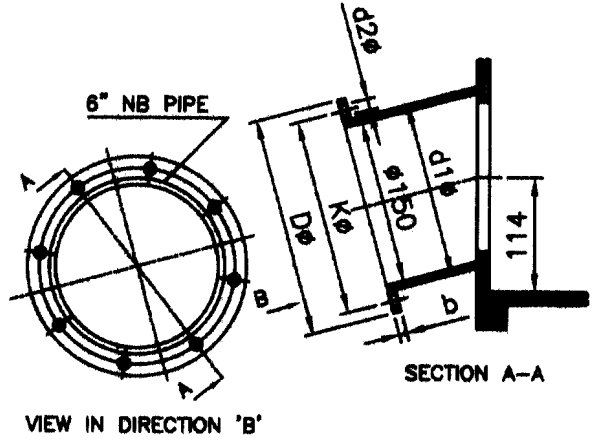
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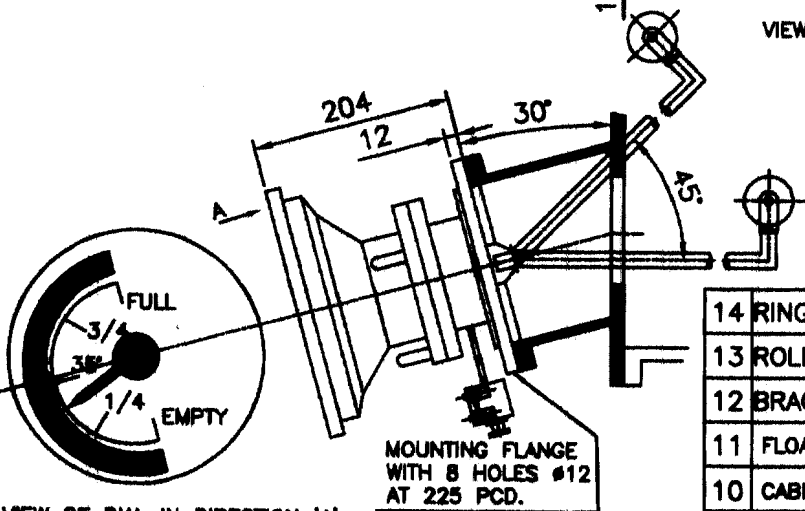


NOM. SIZE	PIPE OD d1	FLANGE		NO.	DRILLING	
		D	b		d2	K
150	168.3	265	14	8	12	225

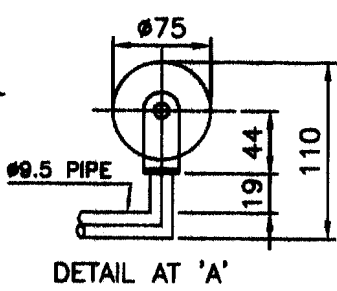
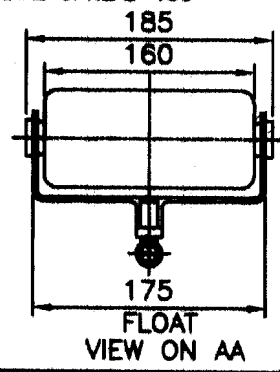
USE 'M'10 BOLTS x 50 LONG WITH NUTS & WASHERS. 8 NOS.



ITEM 2,4,5 & 10 NOT IN SCOPE OF SUPPLY



VIEW OF DIAL IN DIRECTION 'A'  
DIAL SIZE: 250mm DIA.  
DIAL SPREAD 150'



14	RING FOR GLASS	S.S.	1	
13	ROLLING FLOAT	BRASS	1	
12	BRACKET FOR FLOAT	S.S.	1	
11	FLOAT ARM(#9.5 PIPE)	S.S.	1	
10	CABLE GLAND (3/4" BSC)	BRASS	1	YOUR SUPPLY
9	TERMINAL BOX	CAST.AL.	1	
8	SPLIT PIN	M.S.	1	
7	LEVER WITH GEAR	BRASS	1	
6	BRACKET	CAST.AL.	1	
5	MOUNTING PAD	M.S.	1	YOUR SUPPLY
4	GASKET (NEOPRENE) 6mm THK	RUBBER	1	YOUR SUPPLY
3	BASE WITH FLANGE	CAST.AL./M.S.	1	
2	BOLT M10 AND HARDWARE	M.S.	8	YOUR SUPPLY
1	HOUSING	CAST.AL.	1	
NO.	DESCRIPTION	MATERIAL	QTY.	

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पुनः Rev. 08  
दिनांक Date 19-08-2011  
पुनः Rev. 07  
दिनांक Date 13.03.09

वितरण  
DISTRIBUTION  
TRE/TRM/FTM  
TRX/TTG  
QC-TCB/QA-TCB  
JHANSI

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