

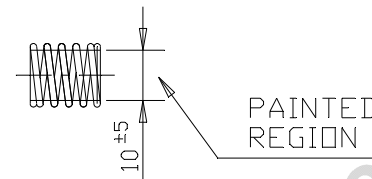
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DRG. NO. 3 517 10 01011

SPRING PARAMETERS :

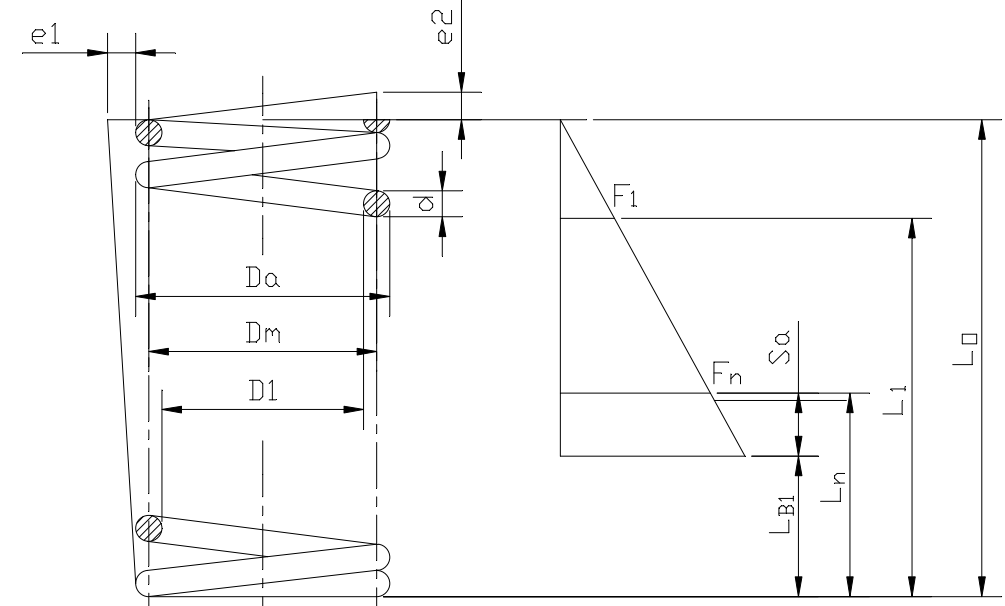
1	WIRE DIAMETER	$d = 7 \pm 0.06$ mm.
2	WIRE MATERIAL CONFIRMS TO STANDARD	IS 4454 : 1981 (PART-I) GRADE 3 PATENTED COLD DRAWN SPRING STEEL WIRE MADE OF UNALLOYED STEEL
3	MEAN WINDING DIA. OUTSIDE WINDING DIA.	$D_m = 38.5$ mm. * $D_o = 45.5 \pm 0.5$ mm.
4	DIRECTION OF WINDING	RIGHT HAND
5	MODULUS OF RIGIDITY	$G = 8400$ KG./mm. ²
6	FREE LENGTH	$L_0 = 106$ mm.
7	LENGTH SPRING LOAD AT L_1	$L_1 = 88$ mm. $F_1 = 105.8 \pm 8$ Kg. **
8	LENGTH SPRING LOAD AT L_n	$L_n = 72$ mm. $F_n = 200.0 \pm 9.0$ Kg. **
9	SOLID LENGTH	$L_{BL} = 63$ mm. *
10	NO. OF ACTIVE TURNS TOTAL NO. OF TURNS	$i_f = 7.5$ * $i_g = 9$
11	SPRING ENDS	CLOSED AND GROUND
12	DEBURRING OF THE SPRING ENDS	OUTSIDE
13	SPRING TEMPERING	REQUIRED
14	SHEAR STRESS AT LOAD F_n ($T_{zul} =$ PERMISSIBLE SHEAR STRESS)	$TK_n = 72.3$ Kg./mm. ² $\leq T_{zul}$

15	SPRING SCALE	$C = 5.89$ Kg./mm. *
16	PERMISSIBLE DEVIATIONS	$e_1 =$ mm. $e_2 =$ mm.
17	BALANCE OF MANUFACTURING EFFORTS	BY i_f, L_0 AND d
18	SURFACE FINISH	PHOSPHATING TO AA 0673616
19	ADDITIONAL INFORMATION:- MARKING : RED COLOUR PAINT	



* F_1 & F_n AS PER QUALITY GRADE 1

* ONLY CALCULATED VALUES



ENDS CLOSED AND GROUND

- NOTE :-
- 1) WIRE DIA ACCURACY SHALL CONFIRM TO CLASS 'C' AS PER DIN 2076.
 - 2) MATERIAL TO GRADE 'C' DIN 17223 MAY BE USED AS AN ALTERNATIVE.
 - 3) PERMISSIBLE DEVIATIONS AS PER QUALITY GRADE 2 OF DIN 2095.
 - 4) REFER PROD. STD. SG12712 FOR MANUFACTURING TESTING AND ACCEPTANCE INSTRUCTIONS.
 - 5) REQUIRED QUANTITY IS 003 NOS PER BREAKER.

FINISH :- BLACK POWDER COATING

REMARKS	VAR. NO.	ITEM NO	DESCRIPTION	UNIT(S)	DRAWING NO.	IT.ND	MATL. CODE	A/C	UNIT	UNIT WT.	G.S.	ZONE
		001	7 DIA x 1090 LG. PATENTED COLD DRAWN SPG. STEEL WIRE	2			BP 10398			0.169	-	-
						VAR	MATL. SPECN.			QTY.		

ADDITIONAL INFORMATION

STATUS OF DRAWING B

DISTRIBUTION OF PRINTS

□	C	-	1.
□	SWM	-	3.
□	TCX	-	1.

उत्पाद का प्रकार या ग्राहक/परियोजना का नाम
TYPE OF PRODUCT OR NAME OF CUSTOMER/PROJECT

GVM 36



भारत हेवी इलेक्ट्रिकल्स लिमिटेड
भोपाल
BHARAT HEAVY ELECTRICALS LTD.
BHOPAL

क्रमांक/DRN	नाम/NAME	हस्ता/ SIGN	दिनांक/DATE	वे. र. की संख्या/NO. OF VAR
जे. च. क. ड. उजुमोदित/APPD	AKN	Sd/-	21.04.15	-
	RRR	Sd/-	21.04.15	-
	HRP	Sd/-	21.04.15	-

विभाग DEPT SWE	उत्प. टोल. नाप की त्रुटि UNTOLE.DIMS. GR.	उजुपात SCALE NTS	भार. कि.ग्रा. WEIGHT (K.G.)	उत्प. ड्राईंग का संदर्भ REF. TO ASSY. DRG.	मद. क्र. ITEM NO.	मद. संख्या/NO. OF ITEM
कोड CODE 409						001
शीर्षक/TITLE				आरेख क्र./DRAWING NO.	पुन./REV	
COMPRESSION SPRING				3 517 10 01011	00	
				पृष्ठ क्र./SHT. No. 01	पृष्ठों की संख्या/NO. OF SHT. 01	