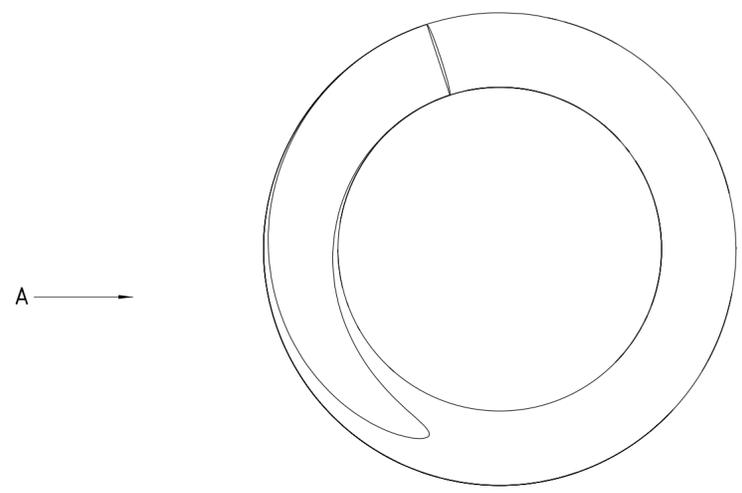
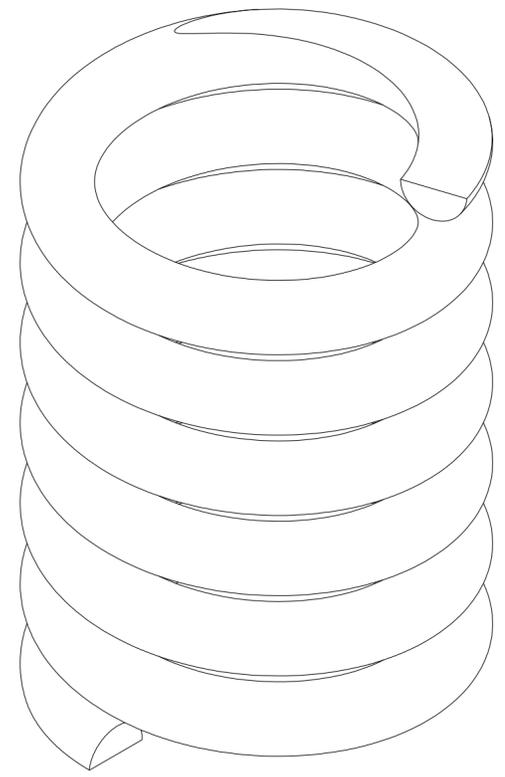
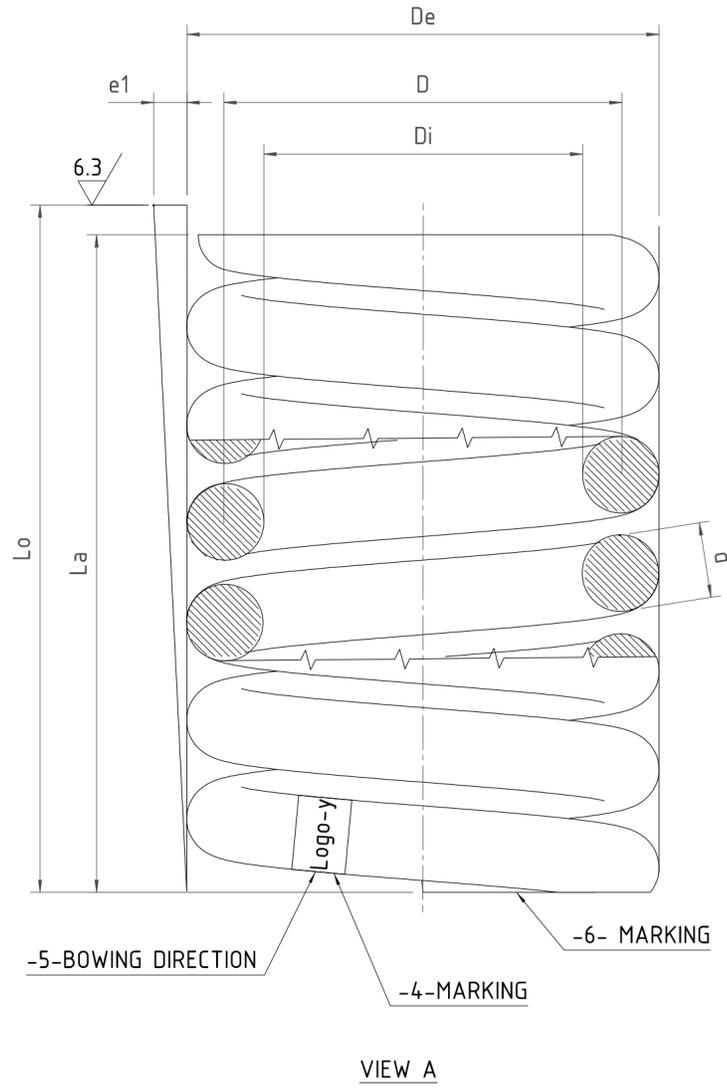


MACHINING DEVIATIONS FOR LINEAR DIMENSIONS	RANGE	1									
		0 - 6	6 - 30	30 - 120	120 - 315	315-1000	1000-2000	2000-4000	ABOVE 4000	RA	
TOLERANCE		±0.1	±0.2	±0.3	±0.5	±0.8	±1.2	±2	±3	~	
FOR DIMENSIONAL TOLERANCES OF SHEET METAL PARTS AND WELDED STRUCTURES, REFER STD. RD-227											
UNSPECIFIED TOLERANCE FOR LINEAR AND ANGULAR DIMENSIONS REF. IS 2102 (PT-1) (MEDIUM)											
VALUES OF SURFACE TEXTURE SHALL BE AS PER COMPANY STD DS. 1012.C											
WELDING SHALL BE CARRIED OUT AS PER IS: 9595-96											
STATUS:									PROTO		



SPECIFICATIONS		
EN 13298 CATEGORY B		
MANUFACTURING DATA		
WIRE DIAMETER	d (mm)	31.5
MEAN DIAMETER	D (mm)	173
UNLOADED LENGTH	L <sub>0</sub> (mm)	310
HEAT TREATMENT - HARDNESS		(45/51) HRC 426/507 HB
DIRECTION OF HELIX		RIGHT
ACCEPTANCE DATA OF THE SPRING		
PERPENDICULARITY OF SPRING	e1 (mm)	<4.7
LATERAL STIFFNESS AT F <sub>A</sub> =AW0 [N]	(N/mm)	(266.7)±15%
AXIAL STIFFNESS BETWEEN "FU:FV"	Ks= $\frac{Fv - Fu}{Lu - Lv}$	(396)



ISOMETRIC VIEW

SPECIFIC MANUFACTURING INSTRUCTIONS	
1.	THE SPRINGS TO BE ACC. TO "EN 13298 CATEGORY B".
2.	ENDS OF THE SPRING TO BE CLOSED AND GROUND ACC. TO "ISO 2162-2 TAB 2.D".
3.	SHOT PEENING 0.4/0.6 mm ALMEN A.
4.	MARKING : HEIGHT OF SPRING SET L <sub>A</sub> - NO SPRING SET - GROUP OF SPRING SET TO BE MARKED ON OUTER SPRING BY Cu LABEL. ON INNER SPRING NO. SPRING SET BY Cu LABEL - GROUP I = L (F <sub>A</sub> ) = 263.5/265.5 mm (for information only, will be finalized in detail design stage) - GROUP II = L (F <sub>A</sub> ) = 265.5/267.5 mm (for information only, will be finalized in detail design stage)
5.	BOWING DIRECTION TO BE MEASURED AT F <sub>A0</sub> (SEPERATE SPRING). MARKED BY WHITE PAINT STRIPE ON THE FIRST BOTTOM ACTIVE COIL.
6.	MARKING : LOGO - YEAR/MONTH BT HOT STAMP ON INACTIVE COIL
7.	ANTICORROSION PROTECTION : ROKOPOX MASTIC. RK301 NCS 8500N SEMI GLOSS. TOTAL THICKNESS MIN. = 80μm.

SL.No.	QTY	PART / STOCK No.	DESCRIPTION	SIZE	COMPANY STD./I/S	Wt. (Kg)
			PRODUCT	MUMBAI METRO CARS L2 & L7		
			REF DRG			
			MATERIAL	51CrV4 as per EN 10089		
			HEAT TREAT.	APPD	MS	
			SURFACE TREAT.	REVD	SSB	
			TITLE	CHKD	RSS	
				DRWN	VSE	
				SCALE	1:2	
				SHEET	1 OF 1	18.4kg
				DRG No.	525-81107	
				BEM BEML LIMITED		
				1		

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GRADE No.	VALUE	SYMBOL
N1	0.025	▽
N2	0.05	▽
N3	0.1	▽
N4	0.2	▽
N5	0.4	▽
N6	0.8	▽
N7	1.6	▽
N8	3.2	▽
N9	6.3	▽
N10	12.5	▽
N11	25	▽
N12	50	▽

ROUGHNESS