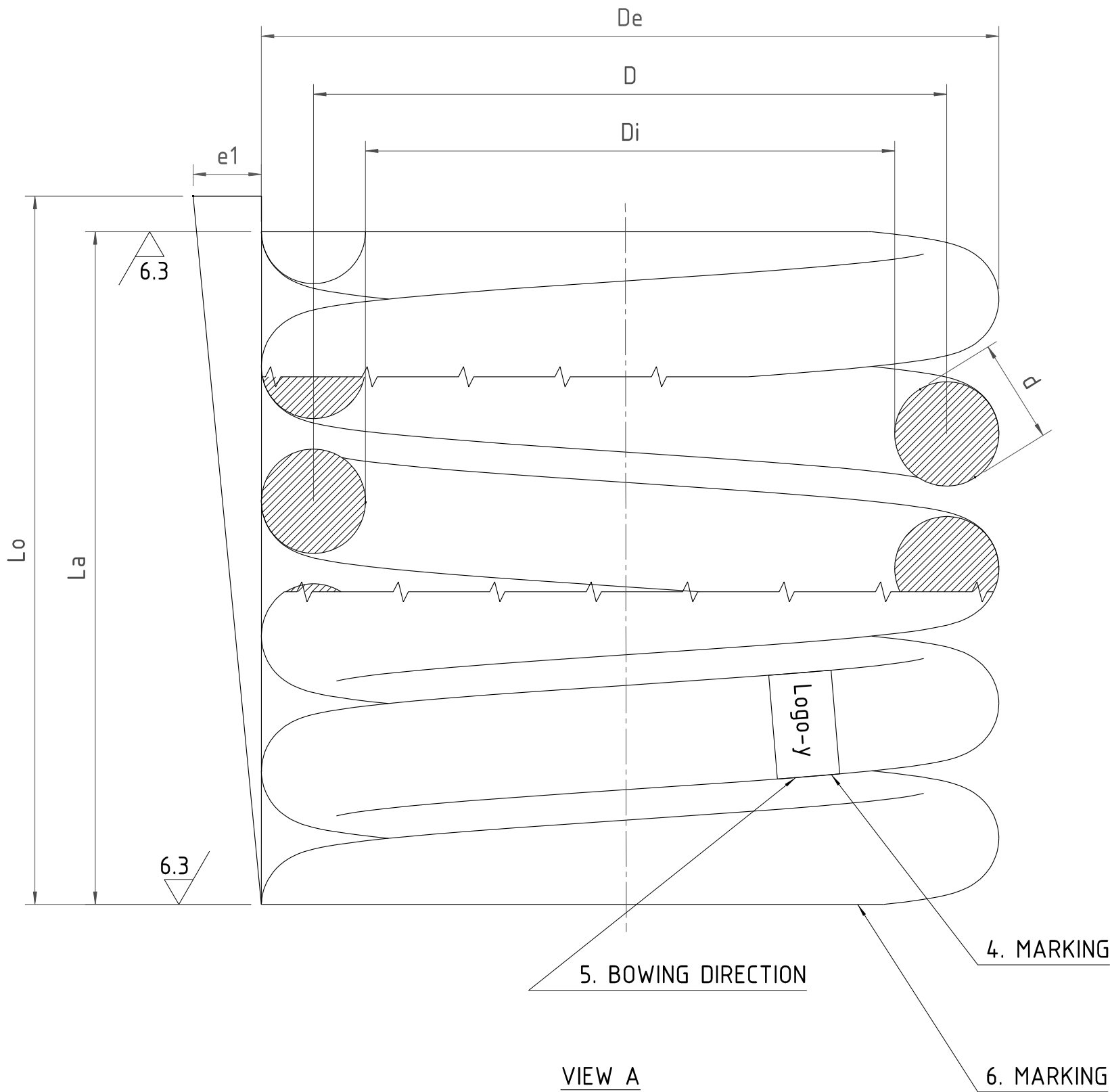








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GRADE No.	N12	N11	N10	N9	N8	N7	N6	N5	N4	N3	N2	N1
VALUE	50	25	12.5	6.3	3.2	1.6	0.8	0.4	0.2	0.1	0.05	0.025
SYMBOL												
ROUGHNESS												

SPECIFICATIONS		
EN 13298 CAT. B		
MANUFACTURING DATA		
WIRE DIAMETER	d (mm)	42.5
MEAN DIAMETER	D (mm)	267
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)	(716.6)±15%
AXIAL STIFFNESS BETWEEN "FU:FV"	Ks= $\frac{F_v - F_u}{L_u - L_v}$	(562)

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)	
									MATERIAL			
						PRODUCT	MUMBAI METRO CARS L2 & L7					
						REF DRG						
						MATERIAL	52CrMoV4 as per EN10089					
						HEAT TREAT.			APPD	MS		
						SURFACE TREAT.			REVD	SSB		
		ECN: 52510123 REVISED AND REDRAWN		29.02.2020	VSE	RSS	MS	CHKD		RSS		
		ECN No.: 52510087 Unloaded Length Lo changed to 310mm		28.12.2019	BY VSE	CHKD RSS	APPD MS	DRWN		VSE		
								SCALE			SHEET	Wt.
								1:2			1 OF 1	36.5kg
ALT.NO.		ECN NO/CHANGES		DATE	BY VSE	CHKD	APPD	DRG No.				ALT
								BEML LIMITED		525-81106		