THIRD ANGLE OF PROJECTION | ALL DIMENSIONS ARE IN mm | DO NOT SCALE

S2HT52107O

TABLE 1

Sr.No.	Characteristics	Symbol	Specifications	Parameter
1	Wire Dia	Φ d	8.00 mm	I
2	Mean Coil Dia	Φ Dm	48.00 mm ref	
3	Inside Dia At centre	Φ Di	40.00 +0.5 mm	
4	Inside Dia	Φ D1	37.5 +0.5 mm	I
5	Inside Dia	Φ D2	30.7 +0.5 mm	I
6	Outside Dia	Φ D0	56.50 mm max	I
7	1st Rate	K1	3.67 ± 5% kgf/mm	I
8	2nd Rate	K2	5.61 ±7% kgf/mm	I
9	3rd Rate	K3	Nil	
10	1st Rate Change over	--	40.00 mm	
11	2nd Rate Change over	--	Nil	
12	Stroke	--	82.00 mm	
13	Free Length	Lo	217.00 ±2.0 mm	I
14	Squarness	e1	4.34 mm Max	I
15	Parallelism	e2	1.5 Max XE	I
16	TIR	--	3.3 Max At scragging ht	I
17	Solid Height Max	Ls	101.6 mm	I
18	Scragging Ht.	--	135 mm	
19	End (Condition)	--	Squared & Ground(250° min) XE	I
20	Active Coils	na	10.5 Ref	I
21	Total Coils	nt	12.2 ± 0.25	I
22	Shot Peened	--	90% Coverage Min	I
23	Shots size and material	--	0.3 mm MIN round spring steel shots	
24	Coil Direction	--	Right	I
25	UTS of Wire	--	194.69 Kgf/mm^2 MIN	I
26	No. of Taper Coils at D1	--	2 Ref	I
27	No. of Taper Coils at D2	--	4 Max	I
28	Closer Pitch Towards	--	D1	I
29	Finish	--	NH-1, Black as per HES-D2016 Class-1, Grade-2	I
30	Thickness	--	50 µ MIN	I
31	Corrosion Life	--	700 Hrs NSS	I
32	Fatigue Life Cycles	--	2,00,000	I
33	Fatigue Test Stroke	--	64	
34	Preload for fatigue test		9	
35	Fatigue Test Frequency		1~4 Hz	
36	Weight	--	721 gm	
37	Surface Area	--	46190.3 mm^2	
38	Stress in %	--	58.74	
39	No. of coils for K1	--	3.6	
40	No. of coils for K2		6.9	
41	No. of coils for K3		Nil	
42	Gap between adjacent coils for K1		3.82 mm	
43	Gap between adjacent coils for K2		9.95 mm	
44	Gap between adjacent coils for K3		Nil	
45	Almen Strip Arc Height		0.3 ~ 0.4 mm	
46	Tip thickness (mm)	--	2 min XE	

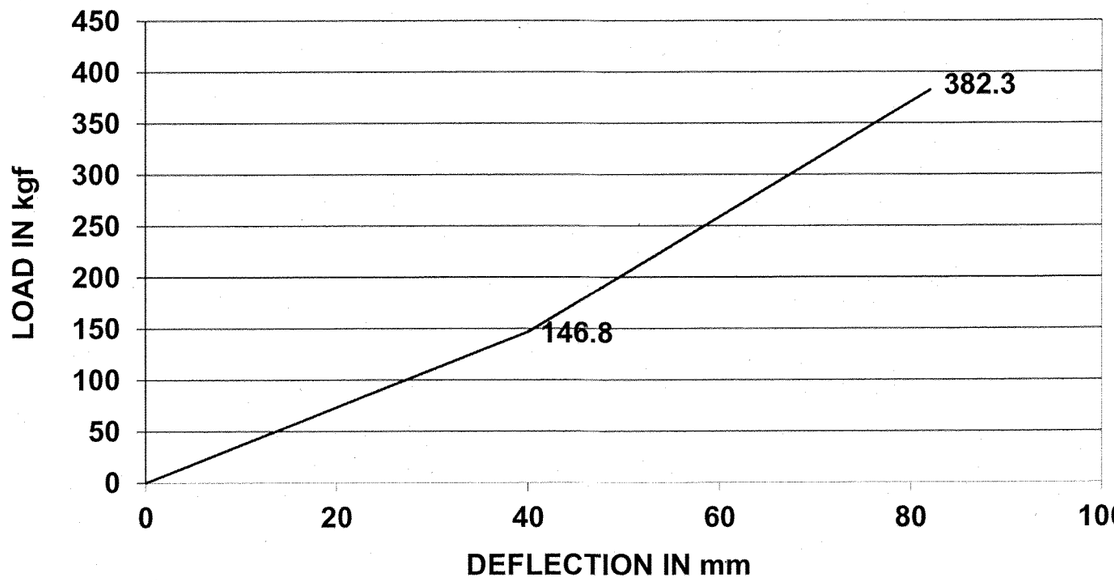

TABLE 2

Sr.No	Deflection, mm	Load ± 7%, kgf	
1	9	33.0 ± 5%	I
2	19	69.7 ± 5%	I
3	25	91.7 ± 5%	I
4	45	174.8 ± 7%	I
5	55	230.9 ± 7%	I
6	65	287.0 ± 7%	I
7	82	382.3 ± 7%	I

NOTE:

1. "I" is inspection parameter at ETL in supplies
2. Supplier inspection report to consist all above parameters. QA to confirm in sample and first pilot stage.
3. Outer Spring before Plating / Powder coating Part No. S2HT52102O

◑ SIGNIFICANT | ● SAFETY | ◑ = 1 | ● = 0

DATE	REV	ALTERATION	ECN	CR/CA
08.08.22	XE	1] Parallelism 1.5 max was 1 max 2] Grinding angle 250 min was 270 min 3] Tip thk 2 min was 2.4 Min As per QA meeting with supplier on 29.07.22		4734
11.09.21	XD	1] TOTAL COILS 12.2±0.25 WAS 12.5±0.25 WEIGHT AND SURFACE AREA UPDATED ACCORDINGLY. THIS DRAWING REVSED AS PER SUPPLIER FEASIBILITY (MAIL FROM SOURCING ON 10.09.2021)		2882
19.08.21	XC	1] TIP THK 2.4 MIN WAS 2 - 2.67 2] SHOT SIZE 0.3 MIN WAS 0.7		2713
07.10.20	XB	DETAIL X AND Y ADDED		889
22.07.20	XA	RELEASE FOR DEVELOPMENT		315

SCALE NTS | DRAWN | CHECKED | APPROVED

MATERIAL: SAE 9254

DESCRIPTION: OUTER SPRING (K0PG)

PART NO. S2HT52107O | REV XE

Endurance Technologies Ltd
E-93, MIDC WALUJ, AURANGABAD